

**Report on
The Automobile .
Industry
1956**



**TARIFF COMMISSION
GOVERNMENT OF INDIA**

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PERSONNEL OF THE COMITION

SHRI K. R. DAMLE, I. C. S.....*Chairman*

SHRI B. N. ADARKAR, M.A. (CANTAB.)*Member*

SHRI C. RAMASUBBAN.....*Member*

DR. S. K. MURANJAN, D.Sc. (LONDON).....*Member*

SECRETARY

SHRI S. K. BOSE, M.A., I.A.S.



MINISTRY OF COMMERCE AND INDUSTRY

RESOLUTION

New Delhi, the 8th April 1959

No. AE, Ind. 1(11)/59.—The progress of the automobile industry in the country reviewed by the Tariff Commission in 1953 and in 1956. A fresh review is considered desirable not only to assess the progress made by the industry to cover a wider field so as to enable Government to take a view on long term problems such as the role which the automobile industry should play in the Third Plan and the possibility of producing a more economic car for the common man.

2. Accordingly, the Government have decided, in consultation with the Planning Commission and the Tariff Commission, to set up a Committee constituted as follows:—

1. Shri L. K. Jha, I.C.S., Addl. Secretary, Ministry of Commerce & Industry—*Chairman.*
2. Rear Admiral D. Shankar, Director-General of Ordnance Factories—*Member.*
3. Dr. S. K. Muranjan, Member, Tariff Commission—*Member.*
4. Prof. B. N. Das Gupta, Chartered Accountant—*Member.*
5. Dr. B. D. Kalelkar, Senior Industrial Adviser (Engineering), Ministry of Commerce & Industry—*Member.*
6. Shri D. D. Suri, Ministry of Transport and Communications—*Member.*
7. A representative of a State Transport Undertaking—*Member.*

3 The terms of reference of the Committee will be as follows:—

- (a) To review the progress of the automobile industry and automobile ancillary industries and recommend measures to increase the indigenous content of the different vehicles in the shortest possible time, keeping in view the targets and schedules envisaged in 1956, when the manufacturing programmes of the different producers were approved;
- (b) To recommend measures to be taken to reduce the cost to the consumer of different vehicles (car, jeep and truck) under manufacture by the automobile industry and suggest the most appropriate pattern of organisation for the future expansion of the industry to ensure low-cost production;
- (c) To examine the feasibility of producing a low-cost passenger car within the price range of Rs. 5,000 to Rs. 7,000 including within the scope of such examination not only schemes previously presented to Government, but also other models of cars that have been developed in different countries and suggest ways and means of manufacturing such a car in the country;
- (d) To recommend targets of production of different types of vehicles for the Third Five Year Plan; and
- (e) To indicate the financial implications, including foreign exchange, of development programmes that might be suggested under (a), (b) and (c) above.

4. Shri V. P. S. Menon, Industrial Adviser, Development Wing, Ministry of Commerce & Industry will be the Secretary of the Committee in addition to his other duties.

5. The Government of India trust that the automobile industry and the automobile ancillary industry, associations, trade and the members of the public who may be interested in the subject of the Committee's enquiry will afford the Committee all the assistance in their power and supply it with such information as it may require. All communications may be addressed to the Secretary of the Committee.

6 The Committee is expected to submit its report to Government by the 31st August, 1959.

ORDER

Ordered that a copy of the Resolution be communicated to all concerned and that it be published in the Gazette of India for general information.

S. RANGANATHA Secy.

GOVERNMENT OF INDIA
MINISTRY OF HEAVY INDUSTRIES

RESOLUTION

TARIFFS

New Delhi, the 23rd January, 1957.

No. 21(4)-TB/56.—By a Resolution, dated the 6th August 1955, the Government of India in the Ministry of Commerce & Industry had asked the Tariff Commission to enquire into and recommend the fair *ex-works* and selling prices of the automobiles under indigenous development and to indicate how such prices should be revised as the different phased manufacturing programmes made progress. The Commission has taken the opportunity to make a comprehensive review of the industry since the time of its first report in 1953. It was assisted in its task by an automobile expert from the U.K., whose services were secured by the Government under the Colombo Plan. The Commission submitted its report on the 6th October, 1956.

2. On the main question of automobile prices, the Commission has found that the margins between the current net dealer prices and the *ex-works* costs of the vehicles produced by the approved manufacturers are not unreasonable in the case of any model of car or truck, except diesel trucks produced by Premier Automobiles. The Hindustan Landmaster car is actually being sold at a loss. After a full examination of the problem, the Commission feels that a rigid system of price control is likely to have adverse repercussions on the development of the industry. It has, therefore, recommended that the interests of the consumer can be adequately safeguarded by replacing the present system of price control by a more flexible system under which no maximum prices are fixed, but, subject to a general obligation not to charge excessive prices, the manufacturers are left free to vary prices at their discretion and periodic investigations are held into their costs and profits to ensure that the obligation is actually fulfilled by them. The Commission has also suggested that a careful watch should be maintained over the rates of dividend declared by the manufacturing firms with a view to ensuring that the maximum proportion of their profits is ploughed back into reserves.

3. Government are broadly in agreement with these recommendations. They have decided to leave the automobile manufacturers free to revise their prices from time to time according to changes in costs, subject to the following conditions :—

- (a) A month's notice of any variation will be given to Government so that, if the change proposed is *prima facie* unreasonable, Government may intervene in the matter ;

(ii)

- (b) The net dealer prices (i.e., the ex-factory price charged to the dealer) should not exceed the ex-works costs by more than 10 per cent. M/s. Premier Automobiles should reduce the price of their diesel trucks accordingly;
- (c) The approved manufacturers will, as recommended by the Commission, maintain their cost data in sufficient detail to enable the costs of production of individual assemblies as of complete vehicles to be easily ascertained.

4. The Commission has further examined the question of dealers commission, which is an important element in the price paid by ultimate consumer. The Commission has recommended that the maximum 'mark up' on the ex-factory price to cover dealer's commission should be Rs. 1,000 per vehicle, or 10 per cent. of the ex-factory price, whichever is less, for passenger cars and jeeps, and Rs. 1,000 per vehicle, or 7½ per cent. of the ex-factory price whichever is less, for trucks, buses and other commercial vehicles.

5. Government have received representations from the dealers urging that there should be no reduction in their margins and emphasising the importance of the service facilities, which they have to maintain. After consideration of the matter Government have come to the conclusion that the dealers' commission should be fixed at 10 per cent. of the ex-factory price for passenger cars and jeeps and 7½ per cent. of the ex-factory price for trucks, buses and other commercial vehicles as recommended by the Commission, but without the monetary ceiling of Rs. 1,000 per vehicle.

6. Reviewing the progress made by the industry so far, the Commission has summarised its findings in the following words:—

“Hindustan Motors have made notable progress in regard to the Landmaster car. They are now producing almost all the major components of this car and their dependence on their foreign associates is reduced to the minimum. The company's progress in regard to the Studebaker car and truck is slow. Premier Automobiles have made satisfactory progress in regard to Dodge trucks. They are, however, still depending on imports for the necessary rough finished forgings and castings, which account for a large proportion of the total cost. Their progress in regard to the Dodge car is limited to the engine, which is common to the truck also. No significant progress has been made in regard to Fiat 1100. Standard Motors have made some progress in regard to Standard Vanguard, but Standard 10 is still a largely assembled vehicle. The remaining three units Telco, Ashok-Leyland and Mahindra & Mahindra have not yet completed the first phase of their manufacturing programme. Simpson & Co. have made satisfactory progress in the manufacture of Perkins P-6 engine, but Automobile Products of India, whose manufacturing programme for Meadows diesel engines was approved in December 1955, have not yet commenced manufacture.”

7. The Commission has estimated that the annual demand for motor vehicles is likely to increase by 1960-61 to 40,000 commercial vehicles, 20,000 passenger cars and 5,000 jeep type vehicles, making up a total of 65,000 vehicles. About 70 to 80 per cent. of the demand

(iii)

for commercial vehicles is expected to be for the diesel driven type. The Commission has observed that the number of additional commercial vehicles required for the effective implementation of the Second Five Year Plan would be much higher, provided appropriate steps are taken to remove the various factors hampering the demand for commercial vehicles, in particular, the following :—

- (i) inadequate road development and bad conditions of roads;
- (ii) heavy and varying rates of taxation of commercial vehicles; and
- (iii) restrictions on inter-State movement of commercial vehicles and their permissible laden weights.

For purposes of present planning of capacity, however, the Commission recommends acceptance of the above estimates.

The Government of India agree generally with the Commission's view regarding the growth of demand and trust that, with the amendment of the Motor Vehicles Act, 1939, and the co-operation of the State Governments, the automobile industry will play an increasingly important role in the transport system of the country.

8. As against the estimates of demand set out above, the total production of all types of vehicles has increased from 6,302 in 1953, to 12,146 in 1954, 22,153 in 1955, and over 31,000 in 1956. The Commission has examined at some length the manner in which the automobile industry should develop to meet the country's requirements. It has made the following main recommendations in this connection :—

- (a) We should give priority to the manufacture of commercial vehicles rather than passenger cars;
- (b) In the case of commercial vehicles, the maximum demand will be for diesel vehicles and, instead of trying to discourage this trend, every effort should be made to meet the demand;
- (c) It would be definitely undesirable to introduce any more passenger cars for manufacture in the country;
- (d) additional capacity required for commercial vehicles should be installed in existing units rather than new ones.

These recommendations of the Commission are acceptable in principle to Government and it is proposed to settle the manufacturing programme of each firm with due regard to the views expressed by the Tariff Commission.

9. The Commission has also dealt with the question of tariffs. Government accept the Commission's recommendation that the industry should be given protection for a period of 10 years. The Commission is of the view that, in order that suitable priority is given to the manufacture of essential components like the engine, transmission and axle, import duties on them should be raised, while those on the less important items should be lowered. Government recognise the force of the point made by the Commission that the existing rates of duty are inadequate for protecting the industry. They feel, however, that a change in tariffs as recommended by the Commission is not particularly necessary at this stage having regard

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to the fact that the domestic industry is sheltered to a very considerable extent by restrictions on imports. It is Government's intention, and the Tariff Commission also has recommended such a course, that in the grant of import licences for components special weightage should be given to firms, which show the maximum progress in indigenous manufacture, while firms, who lag behind the programmes, which they given to Government, should be penalised. Government, therefore, propose instead of making any changes in the tariff at this stage to convert the existing revenue duties into protective duties and this will enable them to change the tariffs on these components if at any time such a course appears to be essential, by recourse to the powers under Section 4(1) of the Indian Tariff Act.

10. Apart from the main recommendations discussed above, the Commission has also made a few other suggestions and recommendations for consideration of the Government, such as the introduction of uniformity between civilian and military vehicle specifications, the appointment of Field Officers, etc. The Government are generally in agreement with these recommendations in principle, and action will be taken to implement them in due course as far as possible.

11. The Commission has also made a number of recommendations relating to the automobile industry as such, prominent among which are the following :—

- (i) The manufacturers should give warranties to guarantee all the parts fitted into their vehicles, irrespective of the origin of such parts and they should form an association with the special object of ensuring quality production and performance ;
- (ii) Each manufacturer should set up adequate training and designing facilities ;
- (iii) Each firm should establish sufficient capacity for manufacture of individual components and should be under an obligation to use indigenous materials within a specified time-limit ;
- (iv) Efforts to advance the programme of manufacture of such essential components as engine, transmission, axles, etc. should be made by the manufacturers and they should endeavour to set up common production facilities.

The attention of the industry is invited to these recommendations for very early implementation.

ORDER

ORDERED that a copy of the Resolution be communicated to all concerned and that it be published in the Gazette of India.

L. K. JHA,
Secretary to the Government of India.

ERRATA

Page (iv)	7th line	After "they" insert "have".
Page 1	5th line	For "520" read "52".
Page 4	Para 6.1.5., line 4	For "on" read "no".
Page 4	5th line from bottom	For "tarest" read "turret".
Page 4	2nd line from bottom	For "mot" read "motor".
Page 6	Para 6.2.3., last line	For "7.1" read "7.2".
Page 7	Para 6.4.2., 5th line	For "tandarSds" read "Standards".
Page 7	6th line from bottom	For "facture" read "facturer".
Page 9	Para 7.3., 11th line	For "Engineering and Locomotive Co." read "Locomotive and Engineering Co."
Page 12	Para 8.3.1., 9th line	After "was" add "Rs."
Page 17	Against First "Total" Col.	For "684.66" read "664.66".
Page 17	Against (a) "Imported with bodies"	For "385" read "358".
Page 24	Statement, 7th line	For "frigs" read "jigs".
Page 26	1st line	For "bulbs" read "hubs".
Page 29	2nd Statement, Item 5	For "950.00" read "949.00".
Page 35	2nd Statement, last line within brackets.	For "1955" read "1956".
Page 39	Statement, 2nd line	For "51.41" read "51.40".
Page 43	Statement, Col. "Total estimated capital outlay", 8th line.	For "115.65" read "115.56".
Page 44	Statement, last item, 2nd line	For "1956" read "1959".
Page 49	Eighth line	For "ration" read "ratio".
Page 56	17th line from bottom	For "me" read "be".
Page 68	Para 18.5.1., 5th line	For "except" read "expect".
Page 69	Para 18.8.1., 1st line	For "B. M. V." read "B. M. W."
Page 81	Item C(2)	For "18,099" read "19,099".
Page 81	Item C(6)	For "17" read "171".
Page 82	Statement, 1st line	For "Difference as percentage(2)" read "Difference as percentage of (2)".
Page 86	Statement, Serial No. 1	For "343.5 343.5" read "343.57 343.57".
Page 86	Statement, Serial No. 10	For "203.08 203.08" read "203.06 203.06".
Page 87	Statement, Serial No. 11(b)	For "as" read "on".
Page 89	Statement, Serial No. 7	For "(+21,23" read "(+1,223".
Page 89	Statement, Serial No. 15	For "(-510)" read "(-510)".
Page 90	Statement, Serial No. 13(b)(i)	For "2,529" read "325" and For "(-)2,529" read "(-)325".
Page 90	Statement, Serial No. 13(d)	For "(-318)" read "(-)318".
Page 91	Statement, Serial No. 8	For "32,41" read "3,241".
Page 91	Statement, Serial No. 13(b)(ii)	For "(-)12" read "(-)125".
Page 92	Statement, Serial No. 11(e), under last column.	For "81.60" read "(-)81.60".
Page 92	Statement, Serial No. 12, under last column.	For "735.09" read "(-)735.09".
Page 93	5th line	For "395" read "39.5".
Page 95	Under Column 10	Delete "Rs."
Page 95	Under Column 2, last figure	For "358.37" read "258.37".
Page 96	23rd line from bottom	For "for" read "of".
Page 102	Sub-para (10), 8th line from bottom.	For "vehicles" read "vehicle".
Page 107	Sub-para 30, 5th line	After "Volume" insert "of".
Page 108	Para 25, 6th line	For "greatly" read "greatly".
Page 123	Heading, 1956 (Jan.-Apl.), Col. 6	For "Machined" read "Manufactured".
Page 123	Serial No. 4, Col. 4	For "3,448" read "3,848".
Page 123	Serial No. 10, Col. 6	For "1,378" read "1,373".
Page 128	Item 3, Studebaker truck : Against 1956 (Jan.-Apl.)	For "1,584" read "733".
Page 130	Serial No. 3, Col. 7, under Power Train.	For "1,289" read "1,280".
Page 136	ENGINE, Serial No. 2, Col. 5	For "1,408" read "408".
Page 140	Item II (iii), Col. 4	For "42.60" read "420.60".
Page 142	Col. 3	For "3 1/2 per cent" read "31 1/2 per cent".
Page 150	Col. 5, 4(ii)	For "7 1/2 or cent" read "7 1/2 per cent".

REPORT ON THE AUTOMOBILE INDUSTRY

1. The question of the grant of protection to the automobile industry was first referred to the Tariff Commission for inquiry and report by the Government of India, Ministry of Commerce and Industry, Resolution No. 1-T(5)/520 dated 29th March,

Previous inquiry

1952. By their subsequent Resolution No. 1-T(5)/52, dated 27th May, 1952, Government indicated some of the more important points which they desired the Commission to consider. The Commission conducted necessary inquiries and submitted its Report to Government on 25th April, 1953.

2. The Government of India in the Ministry of Commerce and Industry announced their decisions on the recommendations of the Commission by their Resolution No. 21(1)-TB/52, dated 31st May, 1953.

Origin of the present inquiry

Government agreed with the Commission that for the quick development of the automobile industry, it was essential to encourage the greater use of vehicles by lowering prices. With this object, the rates of duties on several components were reduced, so as to bring down the incidence of customs duty on a complete c.k.d. pack to approximately 40 per cent. *ad valorem* on the average. The net consumer prices of automobiles, however, did not show a significant decline. In 1955, representations were received by Government from the manufacturers asking for increases in the selling prices of vehicles on the following grounds:—

- (i) that an all round increase had taken place in prices of automobiles in other countries and the manufacturers had to pay higher prices for the raw materials and components imported by them;
- (ii) that the manufacturing costs of components made in the country were often higher than the landed costs of the components which they replaced; and
- (iii) that on account of the small turnover, the incidence of overheads was high.

Though Government allowed *ad hoc* increases in the prices of vehicles where they were satisfied that a *prima facie* case had been made out by the manufacturers, they considered that the issue was of sufficient importance to merit a detailed inquiry by the Commission. Accordingly, under Section 12 (d) of the Tariff Commission Act, 1951, the Government of India in the Ministry of Commerce and Industry by their Resolution No. 3-T(5)/55, dated 6th August, 1955 (Appendix I) referred the matter to the Commission for investigation and report.

3. In their Resolution, dated 6th August, 1955, mentioned in paragraph 2 above, the Government of India requested the Commission to make recommendations on the following matters:—

Terms of reference

- (1) What should be the fair ex-works and selling prices of the various types of motor vehicles manufactured in the country, taking into account the present state of their manufacture;

- (2) how the prices should be revised from time to time as more and more components begin to be produced in the country in accordance with the approved manufacturing programmes of the several units.

In conducting the inquiry the Commission was requested to pay special attention to—

- (a) the extent to which and the manner in which the obligations of the several units under their approved manufacturing programmes have been discharged;
- (b) the further steps that would be necessary to implement them fully; and
- (c) the difficulties, if any, in the way of the full discharge of such obligations in the future and how they should be removed.

4. After the issue of the Resolution, dated 6th August, 1955, the Government of India in the Ministry of Commerce and Industry informed the Commission

Scope of the inquiry

that although the import duties on automobiles and automobile components were not shown as 'protective' in the Indian Customs Tariff Schedule, the automobile industry was to be treated as a protected industry and that the Commission was empowered to keep a watch over this industry and to review the working of protection as in the case of other protected industries. Accordingly, the present inquiry includes a review of the protection granted to the automobile industry. The ancillary industries, however, are excluded from the scope of this inquiry.

5.1. On 9th February, 1956, questionnaires were issued to the automobile manufacturing units in the country to obtain information on various points arising out of the inquiry. In April, 1956, special questionnaires were issued to fleet owners,

Method of inquiry

dealers, State Governments and Automobile Associations and other bodies. The Ministry of Transport and the Ministry of Commerce and Industry (Development Wing) were requested to send memoranda on the present position and problems of the automobile industry. Questionnaires were also issued to the manufacturers of diesel engines. A list of those to whom questionnaires were issued and those from whom replies or memoranda were received is given in Appendix II.

5.2. Shri K. R. Damle, Chairman, Shri B. N. Adarkar, Shri C. Ramasubban and Dr. S. K. Muranjan, Members and Shri S. K. Bose, Secretary, visited the factories of Hindustan Motors Ltd., Calcutta, Tata Locomotive & Engineering Co., Ltd., Tatanagar, Premier Automobiles Ltd., Bombay and Mahindra & Mahindra Ltd., Bombay, in March, 1956. The Chairman and Members visited the factories of Ashok-Leyland Ltd. and Standard Motor Products of India Ltd. in Madras in April, 1956. Dr. S. K. Muranjan, Member, also visited Motor Industries Co., Ltd., and the Indian Institute of Science, Bangalore, in June, 1956.

5.3. Shri C. Ramasubban, Member, visited several automobile factories and ancillary units in Italy, West Germany and the Unit-

ed Kingdom during November and December, 1955. He had discussions with the manufacturers, traders and their associations in West Germany and the United Kingdom.

5.4. Mr. A. J. Romer, Managing Director of the Associated Equipment Co. Ltd., (U. K.) and Director of Associated Commercial Vehicles Ltd., (U. K.), whose services were obtained by the Government of India under the Colombo Plan, served as the Technical Adviser to the Commission in this inquiry, from 21st April to 16th June, 1956. He visited all the manufacturing units and held discussions with their representatives. He was accompanied by Dr. Rama Varma, Director (Investigation) during his visit to Madras. Mr. Romer submitted a report, a copy of which is being forwarded to Government as an enclosure to this Report.

5.5. The Cost Accounts Officers examined the data relating to the costs of production of vehicles produced by Hindustan Motors Ltd., Tata Locomotive & Engineering Co., Ltd., Premier Automobiles Ltd., Mahindra & Mahindra Ltd., Ashok-Leyland Ltd., and Standard Motor Products of India Ltd., and of diesel engines produced by Simpson & Co., Ltd.

5.6. A public inquiry into the industry was held on 28th and 29th June, 1956 at the Commission's office in Bombay. Discussions were subsequently held with the representatives of the manufacturers, the Ministry of Transport, Motor Manufacturers and Importers Associations, the Federation of Motor Transport Association, and the Indian Road & Transport Development Association. A list of persons who attended the public inquiry and the subsequent discussions referred to above is given in Appendix III.

6. The principal recommendations made by the Commission in its last Report (1953) are dealt with below:—

Principal recommendation of the Tariff Commission in 1953 and the extent to which they were implemented.

6.1.1. Both for developing the transport system of the country and for encouraging the automobile industry, it was considered desirable to stimulate the demand for vehicles. For this purpose, the Commission suggested that Government should implement the recommendations of the Motor Vehicles Taxation Enquiry Committee. The Commission also reached the conclusion that the then prevalent high rates of import duty—94½% on certain components manufactured or expected to be shortly manufactured in the country 63% on some others and 31½% on the rest,—far from helping the automobile industry, had the effect of raising the prices of motor vehicles to the consumer. The Commission, therefore, recommended that the import duty on all components should be reduced to a flat rate of 40 per cent. *ad valorem*.

6.1.2. The Commission also recommended that, simultaneously with steps to increase demand, the existing demand should be concentrated on the five firms who had manufacturing programmes, and recommended that there should be four types of passenger cars and four types of commercial vehicles for civilian requirements. From the point of view of economic production, the Commission considered it essential that the army demand should be combined with the civilian demand.

6.1.3. The Commission recommended a scheme of progressive manufacture of components during the next five years, and also suggested the actual scale of manufacture of each model from year to year, and the allocation of foreign exchange in accordance with that scale.

6.1.4. The Commission did not think that it would be advisable to establish a separate unit for the manufacture of jeep type vehicles as the market for them was limited.

6.1.5. Regarding diesel vehicles, the Commission reached the conclusion that, on balance, they were more suitable for heavy transport and that the manufacture of a five-ton diesel vehicle should be encouraged, but that on diesel vehicle of lower tonnage should be allowed to be manufactured.

6.2. Government's decisions on the above recommendations and the developments that have taken place since 1953 are summarised below:—

6.2.1. Government agreed that for the quick development of the automobile industry, it was essential to encourage the greater use of vehicles by bringing prices down. Government accepted the view that the high rates of duty did not help the industry but had, on the other hand, inhibited demand. Government, therefore, agreed with the Commission that the rates of import duty should be lowered. They considered, however, that a flat rate of duty on all components might not be conducive to the manufacture of new components. After careful consideration Government reached the conclusion that the best course would be to aim at an average level of approximately 40 per cent. on a complete c. k. d. pack as recommended by the Commission, but to maintain at a somewhat higher level the rates on components within the manufacturing programme. Accordingly the rates of duty were fixed as follows:—

Name of article	Standard rate of duty	Preferential rate of duty if the article is the manufacture of the United Kingdom
Articles and parts thereof adapted for use as parts and accessories of motor vehicles other than motor cycles and motor scooters, falling, under:—		
I. C. T. Item No. 75(9)	50 per cent. <i>ad valorem</i>	42½ per cent. <i>ad valorem</i>
I. C. T. Item No. 75,(10)	50 per cent. <i>ad valorem</i>	42½ per cent. <i>ad valorem</i>
I. C. T. Item 75(11)(except body panels including turret tops and sides for passenger cars)	25 per cent. <i>ad valorem</i>	17½ per cent. <i>ad valorem</i>
I. C. T. Item 75(12)	25 per cent. <i>ad valorem</i>	17½ per cent. <i>ad valorem</i>
Body panels including turret tops and sides for passenger cars leviable under I. C. T. Item No. 75(11)	40 per cent. <i>ad valorem</i>	37 per cent. <i>ad valorem</i>

NOTES —1. By the Indian Tariff (Second Amendment) Act 1953, a separate item 75(14) was introduced in the I. C. T. Schedule for "Body panels including turest tops and sides for passengers motor cars including taxi cabs.

2. In terms of the Finance Act, 1954, the preferential duty was made not applicable to parts and accessories of mot vehicles adapted for use in motor cars including taxi cabs.

6.2.2. Government agreed with the Commission that the system of taxation of road transport by different authorities at different rates—sometimes very high—had been a powerful factor in reducing the demand for vehicles, particularly for transport vehicles. As any changes in that system required discussion with the State Governments, Government proposed to examine it further in consultation with those Governments in order to evolve a system of taxation which would be conducive to the development of motor transport. A draft Motor Vehicles (Principles of Taxation) Bill was considered by the Transport Advisory Council in 1953 and referred for scrutiny to a special "Policy Committee". This Committee's report was placed before the Council in November, 1954, and it was decided that its consideration should be deferred till the report of the Taxation Enquiry Commission was available, as, it was expected that it would enunciate certain principles in regard to taxation of motor vehicles. The Taxation Enquiry Commission did not favour laying down principles of taxation and the maximum incidence thereof but suggested further discussion in the Transport Advisory Council with a view to securing co-ordination between State taxation and Union policies. The Commission also suggested that any matters which could not be resolved by such discussion should go before an Inter-State Taxation Council. It also favoured the gradual elimination of levies like octroi, tolls and taxes on goods and passengers. The recommendations of the Commission were placed before the conference of State Transport Commissioners/Controllers held in August, 1955, when it was suggested that the Central Government should undertake legislation laying down the principles of taxation on motor vehicles and ceilings for such taxation. On account of certain technical difficulties which were disclosed after further examination, it was not considered advisable to proceed with the proposed legislation. At the meetings of the Transport Advisory Council held in February, 1956, it was agreed that the basis of taxation on motor vehicles should, as far as possible, be uniform and that a ceiling should be fixed for the total incidence thereof. A positive decision on these lines was however not taken as the representatives of State Governments required more time for consideration of the proposals. As regards restrictions on inter-State movements of commercial motor vehicles, we are informed by the Transport Ministry that they have been consistently making efforts to persuade the States to remove all such restrictions so as to allow free flow of traffic. It was decided at the meeting of the Transport Advisory Council held in November, 1954, that private carrier vehicles should be given greater freedom of movement. Accordingly, a provision has been included in the Motor Vehicles (Amendment) Bill, 1955, whereby a private carrier permit granted by the Regional Transport Authority, with the approval of the State Transport Authority, will be valid throughout the State. The question of extending this concession to public carrier permits is reported to be under consideration. The transport Advisory Council has also approved certain principles for drawing up reciprocal arrangements for regulation of transport on inter-State routes. A provision has also been made in the Motor Vehicles (Amendment) Bill empowering the Central Government to set up inter-State Transport Authorities for regulating inter-State movement of transport vehicles. The above Bill was introduced in Parliament in November, 1955.

6.2.3. Government accepted the recommendation of the Commission that the demand for vehicles in the country should be concentrated on firms with a manufacturing programme. This meant that there would be no scope for pure assembling work being conducted on an economic scale for any length of time. Government proposed, after consulting the firms concerned, to formulate a programme for them in the light of the new developments and to examine what arrangements could be made for finding alternative employment for the labour and, if possible, for the capital equipment, utilised by the assembling plants. The intention was that within a period of three years, these firms would cease their assembly operations and concentrate on other activities still open to them—not the least important of which was the maintenance and servicing of the vehicles on the road. Government also drew the attention of the firms with a manufacturing programme to the importance of providing adequate servicing facilities. Government generally accepted the recommendations of the Commission regarding the types of vehicles to be manufactured and the firms which should undertake such manufacture. They considered, however, that the manufacture of baby cars need not necessarily be confined to one of the five manufacturers. They were prepared to consider a programme of manufacture from any of the five firms, if such a programme was submitted before September, 1953. In regard to diesel vehicles, Government doubted whether any firm would find it economical to manufacture five-ton vehicles only. They were, therefore, prepared to consider on merits any concrete plan of manufacture which would include besides the five-ton diesel trucks, engines for lighter vehicles and, possibly, a light or medium vehicle of a type not included in the manufacturing programme of the five units. In regard to the detailed programme of progressive manufacture of each of the five firms and the allocations of foreign exchange for specified numbers of vehicles for each of the next five years recommended by the Commission, Government considered that there should be some degree of flexibility, both as regards the pace of progress and as regards the number of vehicles for which components could be imported every year. This was also necessary in order to ensure a fair degree of competition among the manufacturers themselves. The further developments that took place in regard to the above matters during the years 1954 to 1956 are described in paragraphs 7.1 and 7.3 of this Report.

6.3. Apart from the major recommendations dealt with in the preceding paragraphs the Commission had made a number of ancillary recommendations for the development of the automobile industry. Government stated that they were in general agreement with the basic ideas underlying these recommendations and that they would take necessary action to implement them as far as possible. Government also considered it necessary to make standing arrangements to deal with the problems of this important industry. Accordingly, an *ad hoc* committee consisting of Secretaries to the Government of India in the Ministries of Commerce and Industry, Transport, Finance and Defence was established to guide the development of the automobile industry in all aspects on the basis of the Report of the Tariff Commission. This committee has been giving its attention to all matters concerning the manufacturing programmes of the different units, licences for imports of machinery,

raw materials and tools and regulatory action required to achieve effective implementation of the manufacturing programmes.

6.4. A few other ancillary recommendations of the Commission and the steps that have been taken to implement them are given below:—

6.4.1. "The Department of Internal Combustion Engineering at the Indian Institute of Science, Bangalore, should be developed as a centre for automobile research."

The Institute has informed us that at the instance of the Ministry of Commerce and Industry, it had sent up to the Ministry of Education certain proposals for establishing an automobile research centre, and that a decision thereon was awaited.

6.4.2. "An Association of Manufacturers of Motor Vehicles and Ancillary Parts should be formed for considering the common problems of the industry, securing co-operation among the members and for bringing their difficulties to the notice of Government. The Association should set up an Automobile tandarSds Committee for formulating standards for motor vehicle components."

No such association has so far been formed.

6.4.3. "A special railway freight rate not exceeding one-half of the present rate should be fixed for the transport of new motor vehicles produced by the recognised manufacturers in India to places where they are sold."

The Railway authorities do not consider it feasible to effect any substantial reduction in the freight rates on motor vehicles.

6.4.4. "The automobile manufacturers should as far as possible purchase the products of ancillary industries in India for use as original equipment."

We understand from the manufacturers that they are purchasing their requirements from the ancillary industries to the maximum possible extent.

6.4.5. "Import licences for importing tools, machinery, plant and equipment and sample vehicles for development purposes should be issued expeditiously to the manufacturers of automobiles subject to the necessary safeguards."

The manufacturers are being granted blanket licences for importing machinery, tools and raw materials. Originally each manufacture was permitted a blanket licence up to a value of Rs. 10 lakhs for imports of machinery. But this figure has recently been raised to Rs. 30 lakhs. The manufacturers have also been permitted blanket licences up to a value of Rs. 10,000 for imports of spare parts of machine tools not on the banned list, Rs. 20,000 for tools not indigenously produced and Rs. 5,000 per year for small cutting

tools (including such as are normally banned for import). In addition, each manufacturer is permitted to import 2 sets of cutting tools with each machine tool which he imports. Blanket licences up to Rs. 20 lakhs are also available to each manufacturer for imports of alloy steel.

6.4.6. "Steps should be taken to increase the number of covered wagons so as to meet the full requirements of all the automobile manufacturers."

The Ministry of Railways has agreed to consider representations from individual manufacturers about their difficulties in securing covered wagons.

6.4.7. "Applications for refund of import duty on tools required for the manufacture of automobiles should be considered sympathetically by Government."

This was not found feasible, as, in Government's opinion, it would amount to discriminatory treatment. Special cases are, however, being considered *ad hoc*.

6.5. We are advised that the powers conferred on Government by the Industries (Development and Regulation) Act, 1951, are being used to promote the growth of ancillary industries. The ancillary industries which are already in existence include pistons and piston assembly, diesel fuel injection equipment, tyre inflators, thin wall bearings, sparking plugs, leaf springs, chassis components and automobile diesel engines. New units have been licenced for the production of valves and tappets, gaskets, clutch discs, radiators, shock absorbers, brake assemblies, etc.

7.1. In 1953, there were twelve manufacturers/assemblers of motor vehicles in the country. They were

Developments since the last enquiry,

1. Hindustan Motors Ltd., Calcutta ;
2. Premier Automobiles Ltd., Bombay ;
3. Automobile Products of India Ltd., Bombay ;
4. Standard Motor Products of India Ltd., Madras ;
5. Ashok Motors (India) Ltd., Madras ;
6. General Motors (India) Ltd., Bombay ;
7. Ford Motor Co. of India Ltd., Bombay ;
8. Addison & Co., Ltd., Madras ;
9. Mahindra & Mahindra Ltd., Bombay ;
10. Dewar's Garage & Engineering Works, Calcutta;
11. Peninsular Motor Corporation Ltd., Calcutta; and
12. French Motor Car Co., Ltd., Bombay.

7.2. Of these, only the first five had manufacturing programmes. Hindustan Motors had taken effective steps for the manufacture of a light car known as Hindustan 14 and Premier Automobiles had started the manufacture of a few ancillary parts for Dodge vehicles. Others were assembling vehicles imported in c.k.d. condition. The Commission in its Report of 1953 recommended that only

those firms which had a manufacturing programme should be allowed to assemble vehicles in the country except in the case of the jeep type vehicles. As stated in para 6.2.3. above, Government accepted this recommendation and recognised the following five firms as manufacturers :—

1. Hindustan Motors Ltd., Calcutta ;
2. Premier Automobiles Ltd., Bombay ;
3. Standard Motor Products of India Ltd., Madras ;
4. Automobile Products of India Ltd., Bombay; and
5. Ashok Motors Ltd., Madras.

Mahindra & Mahindra Ltd. and Dewar's Garage & Engineering Works were allowed to function as assemblers of jeeps and Land Rovers respectively, although they had at that time no manufacturing programme. The remaining units which were pure assemblers curtailed their operations by stages and eventually closed down their assembly shops.

7.3. Of the five firms which were approved as manufacturers, Automobile Products of India Ltd. could not proceed with their programme of manufacture and consequently the approval was withdrawn. Ashok Motors Ltd. also had difficulties with their manufacturing programme, but they subsequently entered into an agreement with Leyland Motors Ltd., England and converted themselves into a new company known as Ashok-Leyland Ltd. for the manufacture of commercial vehicles of 5 tons and above. Mahindra & Mahindra Ltd. submitted a programme for the manufacture of jeeps which was approved by Government. Approval was also granted to a new unit, viz. Tata Engineering & Locomotive Co., Ltd., for the manufacture of diesel commercial vehicles in collaboration with Daimler-Benz A.G. of West Germany. For automobile diesel engines, Government recognised Simpson & Co., Ltd., Madras, and the Automobile Products of India Ltd., Bombay, as approved manufacturers.

8. The present position of each of the eight approved manufacturers of automobiles is briefly as follows:—

Present positions of the approved manufacturers

8.1. Hindustan Motors Ltd., Calcutta.

8.1.1. This is a public limited company with an authorised capital of Rs. 20 crores and a paid-up capital of Rs. 496.13 lakhs as on 31st March, 1955. Birla Brothers (Private) Ltd., Calcutta, are the managing agents of the Company. The capital employed in the Company in 1955 was Rs. 557.03 lakhs and the sales during the year amounted to Rs. 708.74 lakhs. The ratio of capital employed to sales turnover was 1 : 1.27. The original value of the fixed assets of the company was Rs. 356.35 lakhs excluding Rs. 13.56 lakhs which represented the cost of land belonging to Hindustan Motor Corporation leased to the Company. Against these fixed assets, the actual provision made by the Company for depreciation up to 31st March, 1955 was Rs. 94.53 lakhs only. The Company has declared no dividend since its inception in 1942. The Company has recently received permission to issue additional capital to the extent of Rs. 7.5 crores, of which Rs. 5 crores has been issued.

8.1.2. In 1953, the Commission recommended that Hindustan Motors should be permitted to undertake the progressive manufacture of a light car, a big car and a medium petrol truck. The Company has agreements with Morris Motors Ltd., (U.K.) for the manufacture of Hindustan cars and with Studebaker Corporation, U.S.A., for the manufacture of Studebaker cars and trucks. In view of the substantial progress already made by the Company in the manufacture of Hindustan 14, Government did not insist on its submitting a programme for the manufacture of the light car. The Company has since replaced the Hindustan 14 by the Hindustan Landmaster. The Company's programme for the manufacture of Studebaker car and truck (the big car and the medium truck) was approved by Government in November, 1953. Government also allowed the Company to undertake the manufacture of Baby car and the programme submitted by the Company for the manufacture of the Baby Hindustan was approved in November, 1953.

8.1.3. The factory is situated in the district of Hooghly, eight miles from Calcutta. It started with a body shop, paint shop, assembly shop, machine shop, tool room, heat treatment shop, electroplating shop and a laboratory; a foundry and a forge shop were subsequently added. Considerable additions to the tool room and machine shop have been also made. The Company has made appreciable progress in the manufacture of engines for the Landmaster car. It now makes most of the important components of the engine, with the exception of electrical accessories, fuel pump, carburettor, air cleaner, gaskets, main bearings, radiator assembly, exhaust muffler, fuel tank, fuel lines and ventilator. It makes all the components of gear boxes except oil seal and synchroniser parts. The rear axle including differential and the front suspension are also made, the only two items imported for their assemblies being oil seals and bearings. In regard to Baby Hindustan, the Company deferred its programme of manufacture, as its foreign associates proposed to introduce a completely new model of that engine, transmission etc. As a consequence, no fresh licences have been issued to the Company for the import of Baby Hindustan cars since January, 1956.

8.1.4. As regards the Studebaker car and truck, the Company is making only fly wheel, starter gear wheel, water pump body, fan drive pulley, and piston pins for its V-8 engine. It is also machining imported semi-finished components, viz., connecting rods, timing gears, rocker shafts, rocker levers, exhaust and in-take manifolds and piston assembly.

8.1.5. The average number of employees on the Company's rolls during April-November, 1955 was 3,454 made up of 2,677 workers, 328 subordinate staff and 61 officers on the production side and 22 officers and 366 subordinate staff on the administrative and sales side.

8.2. Premier Automobiles Ltd., Bombay.

8.2.1. This is a public limited company with Aero-Auto Ltd., as its managing agents. Its authorised capital is Rs. 10 crores and paid-up capital as on 30th June, 1955 was Rs. 2.17 crores. It has

obtained a loan of Rs. 50 lakhs from the Industrial Finance Corporation. In 1955, the Company's employed capital was Rs. 438.87 lakhs and its sales turnover was Rs. 1,237.57 lakhs. The ratio of capital employed to sales turnover was 1 : 2.82. The original value of the fixed assets of the Company was Rs. 287.33 lakhs on 30th June, 1955. The depreciation provided by the Company up to 30th June, 1955 was Rs. 125.90 lakhs. The Company paid dividends to its shareholders at 3 per cent. per annum for the years ended June, 1948 and 1949, but no dividend has been paid subsequently. The Company has obtained the permission of the Controller of Capital Issues to issue debentures for Rs. 2 crores.

8.2.2. In 1953, the Commission recommended that this Company should be allowed to manufacture one big car and a medium petrol truck. Accordingly, the Company's manufacturing programme for Dodge car and truck was approved by Government in September, 1953. In November, 1953, permission to manufacture the Fiat 1100 car was granted to the Company. It has agreements with Chrysler Corporation Ltd., U.S.A. for the manufacture of Chrysler/Dodge/DeSoto/Plymouth cars and Dodge/DeSoto/Fargo trucks, with Dodge Brothers (Britain) Ltd. of U. K. for manufacture of Dodge/DeSoto/Fargo diesel trucks, and with Fiat Societa Per Azini, Italy, for the manufacture of Fiat cars. It has also agreements with Monroe Auto Equipment Co., U.S.A., for the manufacture of shock absorbers and with Rockwell Spring & Axle Co. of America for Timken axles.

8.2.3. The factory is located on the Bombay-Agra Road at Kurla in Bombay. It has got an assembly line, paint shop, body building department, radiator department, press shop, machine shop, tube manufacturing plant, heat treatment department, transmission department, shock absorber department, forge shop, heavy press shop and pickling department. The Company has also a foundry at Vadala, six miles from the main factory.

8.2.4. The Company has made satisfactory progress in the manufacture of Dodge engines for which the cylinder heads and cylinder blocks are machined in its machine shop, while certain important forgings also are made in the factory. It has not yet started making castings for cylinder heads or cylinder blocks. It has developed important components for Dodge engines with the exception of electrical accessories, fuel pump, carburettors, gaskets, bearings and H. T. nuts and bolts. It makes all the components for gear box except oil seals and synchroniser parts, as also propellor shafts, universal joints and chassis frame (including side members) for its trucks. In the case of some of the assemblies mentioned above, the Company supplements its production by imports as and when required. It makes its own radiators, leaf springs, mufflers and exhaust pipes. Of late, as the demand for diesel commercial vehicles is steadily increasing, the Company is converting its petrol trucks into diesel driven vehicles by fitting Perkins P-6 diesel engines supplied by Simpson & Co. Ltd., Madras. Recently, the Company has imported a few Deutz air-cooled diesel engines also. The Company has not made any great progress in the manufacture of Fiat 1100. Recently it has submitted a revised programme of manufacture, which is under the consideration of Government.

8.2.5. The average number of employees on the Company's rolls during the year ended 30th June, 1955 was 3,884 made up of 3,115 workers, 35 officers and 316 subordinate staff in the production departments and 44 officers and 374 subordinate staff in the administrative and sales departments.

8.3. *Standard Motor Products of India Ltd., Madras.*

8.3.1. This is a public limited company registered in Madras. The Standard Motor Co. (India) Ltd. are the managing agents of this Company. The authorised capital of the Company is Rs. 1 crore and the paid-up capital Rs. 34.42 lakhs on 31st December, 1955. The capital employed in the Company in 1955 was Rs. 75.96 lakhs and the sales turnover Rs. 205.52 lakhs. The ratio of capital employed to sales turnover was 1 : 2.71. The original value of the fixed assets of the Company as on 31st December, 1955 was Rs. 45.45 lakhs and the amount of depreciation provided up to that date was 10.19 lakhs. The Company has been declaring dividends on ordinary shares at 6 per cent. per annum from 1952 onwards. In 1954, the Company obtained permission from the Controller of Capital Issues to raise fresh capital up to Rs. 25 lakhs. It has so far issued Rs. 10 lakhs only. It has now approached Government for permission to issue the remaining Rs. 15 lakhs and also an additional amount of Rs. 40 lakhs.

8.3.2. In 1953, the Commission recommended that this Company should be permitted to manufacture a medium car. Accordingly, Government approved the Company's manufacturing programme for Standard Vanguard. Subsequently, it received permission to undertake the manufacture of Standard 8, which was later replaced by Standard 10.

8.3.3. The Company has a factory at Vandalur 18 miles south of Madras. It has a machine shop and an assembly shop. A gear cutting shed is under erection and some machinery has arrived. A heat treatment section also is nearing completion. Its sister concern, Uicon Ltd., is putting up a foundry in Madras, which is expected to supply all the castings. The Company has started machining several important components. It is planning to manufacture 3,000 engines a year.

8.3.4. The average number of employees on the Company's rolls in 1955 was 706, made up of 625 workers, 13 officers and 18 subordinate staff on the production side and 7 officers and 43 subordinate staff on the administrative and sales side.

8.4. *Ashok-Leyland Ltd., Madras.*

8.4.1. This Company was formerly known as Ashok Motors Ltd. and it had Car Builders Ltd. as its managing agents. At the Annual General Meeting of the share-holders in March, 1955, it was resolved to terminate the managing agency agreement and to bring the Company under the management of a Director. It was also decided to change the name of the Company to Ashok-Leyland Ltd. The paid-up capital of the Company as on 31st December, 1954 was Rs. 54.56 lakhs. The capital employed by the Company in 1954 was Rs. 66.35 lakhs and the sales turnover Rs. 97.37 lakhs. The ratio of capital employed to sales turnover was 1 : 1.47. The original value of the block as on 31st December, 1954 was Rs. 14.87 lakhs.

8.4.2. The average number of employees which the Company had on its rolls during 1955 was 252, made up of 125 workers, 13 officers and 65 persons in the subordinate cadre in the production departments and 7 officers and 42 persons in the subordinate cadre in the administrative and sales departments.

8.4.3. The Company has an agreement with Leyland Motors Ltd., England, for the manufacture of Leyland heavy duty trucks. Its foreign associates have taken up 2,80,000 shares of the face value of Rs. 14 lakhs. There is provision in the agreement for further participation in the share capital. The Company has its factory in Madras and its programme for the manufacture of Leyland Comet trucks has been approved by Government. The programme commenced in January, 1956.

8.5. *Mahindra & Mahindra Ltd., Bombay.*

8.5.1. This was a private limited company till 15th June, 1955 when it was converted into a public limited company. The authorised capital of the Company is Rs. 150 lakhs and the paid-up capital Rs. 80 lakhs. The original value of the fixed assets of the automobile section was Rs. 8.44 lakhs as on 31st October, 1955 and the depreciated value Rs. 6.13 lakhs.

8.5.2. The Company employed, during the year ended October, 1955, 287 workers, 8 officers and 113 persons in the subordinate cadre on the production side, and 28 officers and 84 persons in the subordinate cadre on the administrative and sales side.

8.5.3. The Company has entered into an agreement with Willys Motors Inc., U.S.A., for the manufacture of Willys jeeps in the country. Its manufacturing programme as approved by Government commenced in July, 1955.

8.6. *Tata Locomotive & Engineering Co., Ltd., Bombay.*

8.6.1. This is a public limited company registered in 1945 for the manufacture of locomotives, boilers and other engineering products. The automobile division of the Company started functioning in October, 1954. The authorised capital of the Company is Rs. 700 lakhs and the paid-up capital Rs. 650 lakhs. The original value of the fixed assets of the automobile division as on 31st March, 1955 was Rs. 23 lakhs (excluding common services) and the depreciated value, Rs. 19.97 lakhs.

8.6.2. The average number of employees in the Company's works during 1955 was 1,181 made up of 276 workers, 75 officers and 772 persons in the subordinate cadre in the production departments, and 21 officers and 37 persons in the subordinate cadre in the administrative and sales departments.

8.6.3. The Company is permitted to manufacture 3 to 5 ton class diesel vehicles. The Company has entered into an agreement with Daimler-Benz A. G., West Germany, for the manufacture of diesel vehicles to be called "Tata-Mercedes". The foreign associates have also agreed to subscribe Rs. 80 lakhs to the ordinary share capital of the Company in instalments. The Company's programme includes the manufacture of frames, front axles, springs, fuel tanks, pedals, control system, brakes, exhaust system, sheet metal parts and other related work in the first stage of manufacture which

started on 1st November, 1955. The Company proposes to take up the manufacture of engines at the last stage which will be completed in October, 1959.

8.7. *Simpson & Co., Ltd., Madras.*

8.7.1. This is a public limited company established in 1924 with an authorised capital of Rs. 1 crore and paid-up capital of Rs. 55 lakhs. The manufacture of diesel engines was started only in 1954. Till then the Company's main business was the manufacture of coaches and light engineering equipment like portable cranes, storage tanks, heavy duty jacks, trolleys, wheel-barrows, etc. The original value of the fixed assets of the Company for all its activities as on 31st May, 1955 was Rs. 58 lakhs and the depreciated value Rs. 38 lakhs.

8.7.2. The Company has entered into an agreement with F. Perkins Ltd., London, for the manufacture of P-6 light automobile diesel engine in the country. It expects to complete the machining and assembly of all the components except the proprietary parts before the end of 1956. No plans have yet been made for the manufacture of castings and forgings.

8.8. *Automobile Products of India Ltd., Bombay.*

This is a public limited company with an authorised capital of Rs. 1 crore and paid-up capital of Rs. 35 lakhs. The Company was formed for the purpose of manufacturing automobiles, but had to give up that project. It later obtained permission from Government to manufacture Lambretta motor scooters, Lockheed brake equipment, Borg & Beck clutches and Firestone Brake linings. In December, 1955, its programme for the manufacture of a vehicular type diesel engine was approved by Government. The Company has entered into an agreement with Henry Meadows Ltd., England, for the manufacture of 4 D. C.—330 diesel engines in the country. It has imported a few engines and has taken up the manufacture of conversion kits.

9.1. The following statement shows the annual assembling capacity, on single shift basis, of the six approved **Assembling Capacity** manufacturers of vehicles, as declared by them in their memoranda to the Commission:—

Hindustan Motors Ltd.	18,000
Premier Automobiles Ltd.	12,000
Standard Motor Products of India Ltd.	6,000
Tata Locomotive and Engineering Co., Ltd.	7,500
Ashok-Leyland Ltd.	1,500
Mahindra & Mahindra Ltd.	4,800
TOTAL	49,800

Premier Automobiles have recently taken steps to increase their assembling capacity to 18,000 units per annum. During the course of our discussions, the representatives of some of the manufacturers gave estimates of capacity which differed from those given above. We would point out, however, that the assembling capacity of a unit is generally more flexible than its manufacturing capacity the nature of assembling operations being such that the capacity can

be stepped up at short notice and without incurring substantial additional expenditure. It is sufficient to observe that the present assembling capacity in the country is adequate to meet the demand as estimated by us.

9.2. We have also to take into account the assembling capacity of the two approved manufacturers of automobile diesel engines. The capacity of Simpson and Co., Ltd., is 850 Perkins engines per month, i.e., about 10,000 engines per annum, on single shift basis. Automobile Products of India Ltd. claim to have a capacity for assembling 3,000 Meadows engines per annum on double shift basis.

10.1. The following statement shows the number of vehicles produced by the approved manufacturers since 1953 :—

Production	1953	1954	1955	1956 (Jan.- June)
I. CARS—				
<i>(a) Light Cars:</i>				
Standard 8/Standard 10		449	909	654
Fiat 1100	37	574	2,178	1,922
Baby Hindustan		21	373	194
Hindustan Landmaster	1,640	2,330	3,878	2,507
TOTAL	1,677	3,374	7,338	5,277
<i>(b) Big Cars:</i>				
Standard—Vanguard	301	527	637	123
Dodge/DeSoto/Plymouth	307	774	1,403	567
Studebaker	207	277	617	285
TOTAL	815	1,578	2,657	975
<i>(c) Jeeps</i>	1,094	2,157	2,777	2,210
TOTAL OF ALL CARS	3,586	7,109	12,772	8,462

	1953	1954	1955	1956 (Jan.- June.)
II. COMMERCIAL VEHICLES—				
(a) Petrol:				
<i>Light (less than 3 tons)</i>				
Dodge/DeSoto/Fargo	1,023	447	616	460
Studebaker	47	429	1,525	408
<i>Medium (3 to 5 tons)</i>				
Dodge/DeSoto/Fargo	407	2,648	1,856	653
Studebaker	987	689	835	783
TOTAL	2,464	4,213	4,832	2,304
(b) Diesel:				
<i>Medium (3 to 5 tons)</i>				
Tata-Mercedes-Benz . . . . .	...	120	2,338	2,198
Dodge/DeSoto/Fargo	93	399	1,415	1,265
<i>Heavy (above 5 tons)</i>				
Leyland	159	305	796	428
TOTAL	252	824	4,549	3,891
TOTAL OF ALL COMMERCIAL VEHICLES	2,716	5,037	9,381	6,195
GRAND TOTAL	6,302	12,146	22,153	14,657

10.2. It will be seen from the above statement that production of automobiles has been steadily increasing since 1953. The total production of all types of vehicles increased from 6,302 in 1953 to 12,146 in 1954, 22,153 in 1955 and 14,657 in the first six months of 1956. The number of cars produced increased from 3,586 to 12,772 between 1953 and 1955 and is at present running at the annual rate of about 17,000. The output of commercial vehicles amounted to 9,381 in 1955 and 6,195 in the first six months of 1956, as compared with only 2,716 in 1953 and 5,037 in 1954. The production of light cars has increased more than that of big cars, and among trucks the demand for diesel trucks has outstripped that for petrol vehicles. The production of diesel trucks which was only 15 per cent. of the total production of medium and heavy trucks in 1953 increased to 20 per cent. in 1954, 63 per cent. in 1955 and 73 per cent. in the first half of 1956.

11.1. The following statement shows the quantity and value of **Imports and import** automobiles imported into India since 1953-54—**control policy**

	1953-1954		1954-55		1955-56		1956-57 (2 months)	
	No.	Value Rs. lakhs	No.	Value Rs. lakhs	No.	Value Rs. lakhs	No.	Value Rs. lakhs
<i>Motor Cars (including taxi cabs)—</i>								
(a) Imported complete	1,424	86.45	1,247	72.71	1,582	109.24	59	6.30
(b) Imported in c.k.d. or s.k.d. condition	4,392	196.50	9,299	591.95	8,980	479.98	1,490	74.55
TOTAL	5,816	282.95	10,546	684.66	10,562	589.22	1,549	80.85
<i>Motor Omnibuses, Motor Vans and Motor Lorries—</i>								
(a) Imported with bodies	1,783	111.74	385	31.89	195	24.53	19	1.60
(b) Chassis	2,406	215.13	4,158	326.51	8,696	732.14	1,153	109.38
TOTAL	4,189	326.87	4,516	358.40	8,891	756.67	1,172	110.98
GRAND TOTAL	10,005	609.82	15,062	1,023.06	19,453	1,345.89	2,721	191.83

Source : Accounts relating to Foreign Trade and Navigation of India.

It will be seen from the above statement that in 1955-56, the import of completely assembled cars amounted to 1,582 i.e., 15 per cent. of total imports of cars. In the case of commercial vehicles, imports of completely assembled vehicles were small.

11.2. *Import Control Policy*.—A brief summary of the current import licensing policy with regard to (a) built-up motor vehicles, and (b) c.k.d. packs is given below :—

(a) Approved manufacturers are given allocations for imports of built-up motor cars (including taxi cabs), motor vans and motor lorries. Licences for imports of built-up vehicles by others are granted on an *ad hoc* basis.

(b) We understand from the Development Wing that the general practice is to give approved manufacturers licences for as many units of c.k.d. packs for each type and make of vehicles as are required by them, "provided they adhere to their manufacturing programme or give sufficient reasons for delays". With every licence are attached 3 lists; one for parts for which the licence will not be valid, another for semi-finished components which are allowed to be imported and the third for raw materials. Licences for vehicles cover requirements for six months only. Recently, licences for complete c.k.d. packs with conventional deletions like rubber parts and batteries have been given to firms to step up their production so as to meet the increased demand in the country. Certain recognised assemblers are granted licences for imports of chassis of motor omnibuses, motor vans and motor lorries on an *ad hoc* basis.

11.3. We have received representations from certain transport undertakings, including the West Bengal State Transport and the B.E.S.T., regarding the current import restrictions on vehicles and spare parts. The question of spare parts is outside the scope of this inquiry, while the points raised regarding imports of vehicles are covered by our general recommendation with regard to the principles to be followed in future in regulating such imports. (Paragraph 22.8.)

12.1. We have received varying estimates of demand for motor vehicles for the Second Five Year Plan period. The Planning Commission and the Development Wing of the Ministry of Commerce and Industry have estimated that the annual demand will increase to 65,000 vehicles (made up of 40,000 commercial vehicles, 20,000 cars and 5,000 jeeps) by 1960-61. The Ministry of Transport has estimated that the annual requirements of automobiles including replacements will amount to 15,000 commercial vehicles, 12,000 cars and 4,000 jeep type vehicles by 1960. The estimates received from certain associations, on the other hand, are relatively higher. The Motor Manufacturers and Importers Association, Bombay, expects the total demand during the next four years to be of the order of 2,40,000 vehicles made up of 1,60,000 commercial vehicles and 80,000 passenger cars. The Indian Roads and Transport Development Association, Bombay, has expressed the view that about 3,00,000 additional commercial vehicles are needed to meet the transport requirements of the country during the period 1951-52 to 1960-61. In arriving at this estimate, the Association has taken into

account the increase in traffic resulting from the various development projects, the probable deficiencies in other forms of transport and the normal replacement needs. Among the manufacturers, Hindustan Motors and Premier Automobiles expressed their inability to submit any estimates of demand, whereas the estimates submitted by the other manufacturers related to the types of vehicles manufactured by them. According to the Tata Locomotive and Engineering Company, the demand for commercial vehicles is likely to increase from 14,500 in 1956 to 21,500 in 1959. Ashok Leyland have estimated that the annual demand for trucks over five tons will not exceed 5,000. Standard Motor Products of India have estimated the demand for passenger cars at 12,500 in 1956 and 21,500 in 1959 with steady increases in between. The demand for jeeps has been estimated by Mahindra & Mahindra to increase to 5,000 by the end of four years. These estimates were discussed by us at the public inquiry. The wide divergences disclosed in them spring very largely from certain basic differences of approach. Some of these estimates have been framed by assessing the replacement demand and the probable increase in demand on the basis of the existing conditions. The other estimates have proceeded from assessments of transport requirements likely to develop under the Second Five Year Plan and involve an assumption that the various obstacles to transport development will be substantially removed or eliminated in the near future. Either approach is valid to a limited extent only.

12.2. So far as the replacement demand is concerned, we have to take into account the total number of vehicles in use in the country, which was 3,34,938 as at the end of 1954-55. Of these, 1,67,072 were private cars and the rest, namely, 1,67,866 were commercial vehicles, including taxis. The Commission in its Report of 1953 had assessed the life of a commercial vehicle at ten years and that of a passenger car at twelve years. On this basis, the replacement requirements per annum should be of the order of 14,000 passenger cars and 17,000 commercial vehicles. Judging from the annual sales of vehicles in recent years, however, it is clear that replacements have not materialised at this rate. This may be due partly to the non-utilisation of vehicles to the fullest extent, and partly to the tendency of users to keep the vehicles in use beyond their normal lives despite increased costs of repairs and maintenance. Hence, estimates of replacement requirements based on the theoretical life of vehicles do not help in assessing the future demand. Nevertheless, it is broadly true that owing to inadequate absorption of new vehicles over long periods in the past, over-age vehicles constitute at present an appreciable proportion of the number of vehicles on the road. Consequently, given favourable conditions for development of transport, it is reasonable to expect that the demand for new vehicles would increase progressively in the future.

12.3. Apart from replacement needs, account has also to be taken of the current trends of demand. In 1954, the combined sales of locally assembled vehicles and imported vehicles amounted to 13,067. The corresponding figures for 1955 and for the first quarter of 1956 were 25,048 and 7,772 respectively. (See Appendix No. IV). The figures of production by approved manufacturers reveal a simi-

lar trend, as may be seen from the following statement and the detailed figures given in paragraph 10.1.

	1954	1955	1956 (Jan-June)
Cars & jeeps	7,109	12,772	8,462
Trucks	5,037	9,381	6,195
	<hr/>	<hr/>	<hr/>
TOTAL	12,146	22,153	14,657

The demand for motor vehicles went up considerably in 1955 as compared with 1954, and the increase is likely to be even greater in 1956, as is evident from the figures for the first half of the year. The current demand for vehicles is at the rate of about 30,000 per annum: about 17,000 cars and jeeps and 13,000 commercial vehicles. So far as commercial vehicles are concerned, however, the actual demand is probably much higher than is indicated by the figures of sales or production, because a large proportion of the demand for diesel driven vehicles is not being met at present, owing to non-availability of supplies. This increase in demand for motor vehicles generally is accounted for by two main factors. Firstly, there has been a marked increase in the level of economic activity and the purchasing power of the people. Secondly, the recent announcement by Government of their decision not to extend nationalisation of goods transport for the next five years has encouraged purchase of trucks by private operators who were hitherto keeping off the market. We expect both these factors to continue to operate during the next five years; they are likely to result in a much steeper increase in the demand for commercial vehicles than that for passenger cars and jeeps.

12.4. We are of opinion that the demand for motor vehicles would be much higher than is indicated by the current trends, if effective action were taken to eliminate the various factors which are hampering such demand. Having regard to past history, however, it is hardly realistic to expect these factors to disappear in the near future and hence the estimates of demand suggested by the Development Wing and the Planning Commission seem to us to be reasonable *under present conditions*. Accordingly, we estimate the annual demand for motor vehicles to increase by 1960-61 to 40,000 commercial vehicles, 20,000 passenger cars and 5,000 jeep type vehicles, making up a total of 65,000 vehicles. We expect that about 70 to 80 per cent. of the demand for commercial vehicles would be for the diesel-driven type.

12.5. The above estimate is subject to an important qualification which arises from the alternative approach referred to in paragraph 12.1 above. The evidence received by us leaves no doubt that if the expansion of road transport facilities is only of the order indicated by this estimate, it will not be sufficient to cope with the very considerable increase in the requirements of goods traffic likely to develop under the Second Five Year Plan and that any serious deficiency in this respect is bound to react adversely on the effective implementation of the Plan. The transport requirements of the Plan could be estimated in various ways, one of which would be by taking into account the possible relationship between an increase in the national income and the corresponding increase in transport requirements. During the period of the First Five Year Plan,

against an increase of 18 per cent in the national income, the demand for rail transport is estimated to have increased by 35 per cent. On this basis, the demand for rail transport may be expected to rise by 50 per cent during the period of the Second Plan (from 120 million tons to 180 million tons), corresponding to a planned increase of 25 per cent. in the national income. Similar figures for other forms of transport are not available, but the demands on them also may be expected to increase more or less in the same proportion. Actually, the Railways do not expect to be able to carry more than 160 million tons by 1960-61, and it is also not likely that the capacity of coastal and inland shipping and bullock carts will increase so much as to make good this short-fall to any significant extent. Consequently, commercial vehicles will have to fill the gap left by other forms of transport, in addition to meeting the 50 per cent increase in demand which would have taken place in any event. Hence, allowing for replacement needs, the number of additional commercial vehicles which are required to be placed on the road during the period of the Second Five Year Plan would be very much higher than the cumulative figure of approximately 1,30,000 indicated by the estimates given in paragraph 12.4, (13,000 per annum at present rising to 40,000 per annum in five years). A similar conclusion is reached, even if the transport requirements of the Second Five Year Plan are estimated on the basis of traffic likely to develop under specific development projects. We are, therefore, convinced that if the implementation of the Second Five Year Plan is not to suffer, positive measures have to be taken to foster the demand for commercial vehicles so as to increase it substantially above the target figure of 40,000 vehicles indicated by the Planning Commission for 1960-61.

12.6. It is hardly necessary for us to discuss these measures in detail, because most of them have been dealt with at length in the Commission's Report of 1953 as well as in the Reports of other bodies like the Motor Vehicles Taxation Enquiry Committee. We have obtained from the Ministry of Transport a memorandum on the progress made by Government in implementing the recommendations made by the Commission and by the M. V. T. E. Committee on this subject. We find that except for the recent decision not to extend nationalisation of goods transport for five years and the introduction of the Motor Vehicles (Amendment) Bill in Parliament empowering the Central Government to set up inter-State transport authorities, the progress in other matters is disappointing. In matters like taxation and restrictions on inter-State movements, adequate progress is impossible without the co-operation of the State Governments and such co-operation has not been forthcoming in adequate measure. We recommend that the attention of the State Governments should be drawn to the fact that the degree of expansion in road transport capacity which is essential for the effective implementation of the Second Five Year Plan will not take place unless they co-operate in removing the various factors which are today hampering the demand for commercial vehicles, in particular, the following:—

- (i) inadequate road development and bad conditions of roads;
- (ii) heavy and varying rates of taxation of commercial vehicles; and

- (iii) restrictions on inter-State movement of commercial vehicles.

12.7. Lack of credit facilities has been an additional factor inhibiting the expansion of the road transport industry. The evidence received by us shows that commercial banks are reluctant to grant advances to transport operations and to recognise the transport industry as a good risk. This is an obstacle which must be overcome if a larger and speedier expansion of road transport is to be achieved. We recommend that the Reserve Bank of India, in consultation with commercial banks, should evolve a suitable scheme for extending credit facilities to transport operators for purchase of vehicles.

12.8. The disparate levels of taxation applying to diesel oil and motor spirit have recently attracted considerable attention and a tendency is noticeable, particularly on the part of the State Governments, to levy additional taxes on diesel oil. Since from the point of view of foreign exchange and fuel economy, diesel operation of medium and heavy commercial vehicles is distinctly more economical and, therefore, deserves to be promoted in the larger interests of the country, as has been fully explained in Part II(D) of Mr. W. R. Vorwig's Report of 1953, we strongly recommend that no taxation or other measures should be adopted which are likely to discourage the current trend towards dieselisation of such vehicles.

12.9 In view of the practical difficulties in securing a quick expansion in road transport facilities, it becomes necessary to consider measures which would enable the available capacity to be more fully utilised. Two such measures deserve special mention, viz., an increase in the limit of permissible laden weights of vehicles, and the use of trailers. The maximum permissible laden weight in many States is at present too low to allow medium and heavy duty trucks to be utilised to their full capacity. Apart from under utilisation of capacity, this factor also affects the economical operation of vehicles. Similarly, the use of trailers attached to trucks would reduce very substantially the cost of their operation and would permit greater loads being carried without increasing the individual axle loads of such trucks. The problem of carrying heavier loads on bridges and culverts which may not be intended for higher axle loads will thus be solved, although we admit that this would depend largely on local conditions. We recommend that a fresh examination should be undertaken by all State Governments to see how far the restrictions on permissible laden weights could be relaxed, and the use of trailers with goods vehicles allowed.

12.10. Our conclusion above that the number of additional vehicles required for the effective implementation of the Second Five Year Plan will be very much larger than the estimated demand given in paragraph 12.4 should not be interpreted to mean that either the imports of vehicles or the assembling or manufacturing capacity of the domestic industry should be straightaway planned on the basis of the higher figure, because the latter will be realised only if and when adequate progress is made in dealing with the restrictive factors mentioned earlier. Otherwise, both the immediate interests of the domestic industry and its long-term development may suffer. In our view, the estimate of demand given by us on the basis of our present assessment of possibilities should be adopted

for the purpose of planning the capacity of the domestic industry and steps should be taken later to meet any increase in demand above the estimate, as and when it develops.

13.1. In the following section, we shall discuss the manufacturing capacity of each of the units, the progress made by it in the manufacture of components, and the corresponding deletion allowances obtained, for each vehicle. In Appendix V we have given for each unit and each type of vehicle, the number of vehicles assembled and the number of major components produced for them in 1955 and in January-April, 1956, together with the phased programme as approved by Government.

**Manufacturing
progress**

13.2. Hindustan Motors have made notable progress in regard to the Landmaster car. They are now producing almost all the major components of this car and their dependence on their foreign associates is reduced to the minimum. Though there were some complaints in regard to the quality of the vehicle, the Company is trying to get over them. Its progress in regard to the Studebaker car and truck is slow. Its attempt in trying to develop three vehicles simultaneously has not met with success. The company has informed us that it has completed its arrangements for the manufacture of V-8 engine for the medium truck and the big car.

13.3. Premier Automobiles have made satisfactory progress in regard to Dodge trucks. They have established the manufacture of the engine and certain components of the power train for the Dodge truck. They are, however, still dependent on imports for the necessary rough finished forgings and castings which account for a large proportion of the total cost. Their progress in regard to the Dodge car is limited to the engine which is common for the truck also. No significant progress has been made in regard to Fiat 1100. As in the case of Hindustan Motors, the Company's attempt to develop three vehicles simultaneously has not succeeded.

13.4. Standard Motors have made little progress in regard to Standard 10, but some progress in regard to Standard Vanguard. The Company is making some components of the engine and is machining cylinder block and cylinder heads from imported castings. The recent change of model has, to some extent, delayed the implementation of the firm's manufacturing programme.

13.5. The remaining three units, Telco, Ashok-Leyland and Mahindra & Mahindra have not yet completed the first phase of their manufacturing programme and it is too early to assess their progress. These three units have got the advantage of having only one vehicle each to develop. In the case of Telco and Ashok-Leyland, the foreign associates have undertaken financial commitments in the ventures besides assistance in technical matters. Mahindra & Mahindra is licensed to manufacture jeeps and proposes to utilise the facilities of the ancillary industries for some of the major components to supplement its own manufacture. Of the two automobile diesel engine manufacturers, Simpson & Co. has made satisfactory progress in the manufacture of Perkins P-6 engine. Automobile Products of India, whose manufacturing programme for Meadows Diesel Engines was approved only in December 1955, has not yet commenced manufacture.

14. Details of manufacturing programmes and assessment of progress of each unit are given below :—

Details of manufacturing programmes and assessment of progress.

14.1. *Hindustan Motors Ltd.*

14.1.1. The manufacturing programme of Hindustan Motors included a small car (Baby Hindustan), a light car (Hindustan Landmaster), a big car (Studebaker) and a medium petrol truck (Studebaker). This Company has invested Rs. 263.28 lakhs in plant and machinery, the break-up of which is given below:

	Rs. in lakhs
Foundry	11.30
Forge shop	14.46
Press shop	2.41
Hardening and Metal Treatment	1.01
Vehicle assembly including paint shop	21.18
Tool-making shop	21.78
Dies, frigs, fixtures, patterns and tools	10.83
Machine shop	170.05
Others	10.26
TOTAL	263.28

The Company is planning an additional investment of Rs. 106.48 lakhs in plant and machinery during 1956-57. It has taken steps to raise additional capital to the extent of Rs. 5 crores.

14.1.2. The Company claims to have a capacity for manufacturing 8 vehicles an hour; its foundry, forge shop and paint shop each have been stated to have a capacity for this output. It has not been possible for us to arrange for a technical investigation into the capacity of any of the manufacturing units. Actual production has also been far below capacity in the case of most units, with the result that the claims made by them in regard to their rated capacity have not yet been verified. An indirect method of verifying the capacity of individual shops would be by examining the record of peak output, but even this is of limited assistance in determining the capacity of a factory for complete vehicles, because further technical investigation is required to ascertain whether or not the individual shops are in proper balance with each other. Moreover, in an automobile factory there are several machines which are common to more than one type of vehicle, and consequently, if a firm which is engaged in the production of more than one type claims to have a rated capacity for a certain number of vehicles, it does not follow that it will be able to produce the same number of each type simultaneously. Determination of capacity, therefore, presents a difficult technical problem. In the case of Hindustan Motors, we have found it extremely difficult to verify the Company's claim to a capacity for the production of 8 vehicles per hour.

Such investigation as our Technical Adviser was able to carry out within the limited time at his disposal has also not produced definite results. In support of its claims, the Company has stated that its machine shop has been planned by experts from Morris Motors, England, and is equipped with machinery which produces in U.K. the same type of engines as the Hindustan at the rate of 200 sets per day. The peak output attained by Hindustan Motors for its principal sub-assemblies is as follows:—

	Per day
Engine	45
Gear	36
Front suspension	64
Rear axle	55
Power unit	45

Even the above figures are of limited help in verifying the capacity claimed by the Company, since, except in the case of front suspension, the peak output recorded is less than 8 sets per hour.

14.1.3. *The Hindustan Landmaster.*—The Company had made substantial progress in the manufacture of Hindustan cars even in 1953 and Government, therefore, did not insist on its submitting a manufacturing programme for this vehicle. By the end of 1955, the Company had deleted most of the components of the engine, front suspension, transmission and rear axle from the c.k.d. packs. At present, the Company is manufacturing the following components from its own forgings and castings :—

Engine—Cylinder head, cylinder block, crankshaft, camshaft, connecting rod and bolts, flywheel, starter gear ring, timing gear, tappets, valve guides, intake and exhaust manifolds, water pump, piston pin and valves.

Power train—Clutch housing, clutch lever, transmission case (gear box), gear box cover, main transmission pinion, secondary shafts (main shaft), shifting shafts, gear forks, crown wheel and pinion, differential gears and rear side shafts.

Certain engine components viz., oil sumps, crankshaft, timing gear and pistons are machined from locally purchased semi-finished materials. The Company's production of the above components is sufficient for the number of cars produced by it. As against a production of 3,878 Landmaster cars in 1955, the production of each of the above components was more than 3,800. The corresponding figures for the first four months of 1956 were 1,485 and 1,300 respectively.

14.1.4. The Company has plans to complete the manufacture of certain other components of engine, chassis and power train by the end of 1956 and bodies by the end of 1958 as given below:—

By the end of 1956—

Engine—Radiator assembly, exhaust muffler and valve springs

Chassis—Frame brackets, wheel bulbs, brake shoe, brake shoe holders, brake drum cover, hand and foot brake lever, steering gear, steering column, steering arm, steering knuckle, shock absorbers, hydraulic brakes and tie rods.

Power train—Universal joints, propeller shaft and synchroniser parts.

By the end of 1958—Bodies.

14.1.5. Regarding electrical components, the Company had a programme to manufacture most of them by the end of 1956, but the programme has not yet been implemented. The Company has no plan for the manufacture of the following proprietary components :—

Engine—Carburettor and fuel filter.

Chassis—Disc wheels, torsion bars, brake cables, steering wheels and ball and socket joints.

Power train—Clutch and gear shift lever.

14.1.6. The following statement gives the total cost of the c.k.d. pack and the deletion allowances obtained by the company for the items either manufactured or locally purchased by it.

1. Total cost (ex-factory, U. K.) of a complete car	391 6 0
2. Cost of banned items, tyres and tubes, batteries, etc. and paint and non-assembly allowances	90 19 6
3. Cost of items which are normally allowed to be imported in the c. k. d. pack (1-2)	300 6 6
4. Amount charged to Hindustan Motors for items imported in the c.k.d. pack	169 3 0
5. Deletion allowance obtained for deleting engine, rear axle, gear box, front suspension and other items (3-4)	131 3 6
6. Value of 5 as percentage of 3 above	per cent 43.7
7. Total deletion allowance inclusive of allowances obtained for banned items as percentage of cost of the complete car(1)	56.8

14.1.7. It will be seen from the above statement that the Company is obtained a total deletion allowance of £ 222-3-0 or 56.8 per cent. of the total value of the car, ex-factory, U.K.; and, excluding items normally deleted from the c.k.d. pack, the deletions amount to £ 131-3-6 or 43.7 per cent. of the corresponding value of the c.k.d. pack. Except for £ 3-19-6 worth of rough or semi-finished components imported by the Company, the entire amount of £ 131-3-6 represents value indigenously manufactured. The deletion allowances shown above are probably lower than the prices charged for the components concerned when they are imported as part of the c.k.d. pack and to that extent the Company's achievement is larger than what the deletion allowances indicate. Reference is invited to paragraphs 22.2.1 to 22.2.3.

14.1.8. *Studebaker car and truck.*—The programme of manufacture of the Studebaker car and truck was approved by Government in November, 1953. It was divided into five phases as shown below :—

Phase	Components of Engine	Components of chassis	Components of power train
Phase I— (January-June, 1954)	Camshaft, timing gears, water pump assembly, rocker shaft, rocker lever piston and piston pin, connecting rods and bolts ventilator pulley, fly-wheel, starter gear ring, and intake and exhaust manifolds.	Nil.	Clutch housing, and clutch release assembly.
Phase II— (July—December, 1954)	Cylinder block, cylinder head, main bearings, valve, valve guide, and crankshaft.	Nil.	Nil.
Phase III— (January-June, 1954)	Oil sump.	Nil.	Nil.
Phase IV— (July-December, 1955)	Nil	Nil.	Gear box, gear box cover, shifting shafts, shifting levers, main shaft, lay shaft, secondary shaft, gears and synchroniser parts.
Phase V— (January-December, 1956)	Nil	Axle housing, brake drums and brake drum cover.	Differential housing, axle side shaft, differential gears, crown wheel and pinion and universal joints.

14.1.9. According to the programme, the car and the truck are to be fitted with the same type of V-8 engine. The Company is making, at present, flywheel, starter gear ring, timing crankshaft gear, water pump body and piston pin from its own castings and is machining connecting rods, timing camshaft gear, rocker shaft, rocker levers, exhaust and intake manifolds and piston assembly from imported semi-finished castings and forgings. In 1955, the above components were fitted into trucks alone, as the Company was then assembling cars imported in c.k.d. condition. As against 2,360 Studebakers trucks produced by the Company in 1955 and 733 in the first four months of 1956, it made the above components for 308 and 616 engines respectively. No indigenous engines components were used for the remaining trucks which were fitted with wholly imported engines. Similarly, all the cars were fitted with imported engines. It can be seen from this that though the Company was to complete the manufacture of engine for its Studebaker vehicles by the end of June, 1955, the progress made was far behind the schedule. The Company claims that it has so far machined over 80 components

out of a total of 200 components of the V-8 engine and that production of other components will be taken up soon. As regards the components of the chassis and power train, these are at present wholly imported for cars. In the case of trucks, the Company has completed the manufacture of clutch housing and clutch release assembly, the former from its own castings and the latter from semi-finished imported castings. In 1955, the Company produced 1,308 clutch housings and 616 clutch release assemblies. The corresponding figures for the first four months of 1956 are 640 and 1,280 respectively. Preliminary arrangements like designing of gear box, axles and chassis have been completed. The Company has informed us that its truck will not be a replica of the Studebaker truck, but a Hindustan truck with a V-8 engine and a specially designed gear box, transmission and chassis.

14.1.10. The reason given by the Company for the slow progress in the manufacture of Studebaker vehicles is that the change over from Hindustan 14 to Hindustan Landmaster involved modifications in a number of sub-assemblies of the car like front suspension, rear axles, engine parts, gear box and body, and consequently the common equipment in the factory could not be used for the development of the Studebaker components. The Company has now submitted a revised programme of manufacture to Government, which is as follows :—

Studebaker cars

Period	Components of engine	Components of Chassis	Components of power train
July-December, 1956	Cylinder block, cylinder head, crankshaft, camshaft, tappet valve, valve guide, piston assembly, exhaust muffler and exhaust pipe.	Hub cap and suspension spring.	Nil.
January-June, 1957	Nil.	Nil.	Clutch housing and clutch lever.
July-December, 1957	Valve spring, air cleaner, intake silencer and main bearing.	Nil.	Nil.
1958	...	Bumpers.	
1959	...	Wheel bolt and nut, front brake lever and brake drums.	Nil.
1960	Nil.	Rear axle housing, brake drum (rear) and front axle.	Transmission case, transmission cover, secondary shaft, main transmission gear, propellor shaft, spline shaft, crown wheel and pinion, differential housing and gears and rear axle.

Studebaker trucks

Period	Components of engine	Components of Chassis	Components of power train
July-December 1956	Same programme as in the case of car.	Bumpers' spring chassis and suspension leaf spring (rear).	Nil.
1957	Do.	Frame bracket, foot brake lever and suspension leaf spring.	Secondary shaft gears, synchroniser parts, shifting shafts and gear fork.
1958	...	Chasis, brake drums and king pin.	Transmission case and transmission cover.
1959	...	Rear axle housing, brake drums (rear) and wheels, bolts and nuts.	Main transmission pinion, spline shaft, crown wheel and pinion, differential gears, rear axle shafts and front axle shafts.

14.1.11. In 1955, Studebaker cars were only assembled, and only banned items *viz.*, tyres, tubes, batteries and rubber materials were deleted. The total deletion allowance obtained by the Company for Studebaker Commander Regal car in respect of banned items and trim materials was \$ 147.50, which was only 10.7 per cent. of the total c.k.d. value of \$1,374.40. In the current year, Hindustan Motors have deleted the engine from the Studebaker car and the deletion allowance obtained by them is \$ 133.36 for banned and other items normally deleted from the c.k.d. pack and \$ 190.31 for other deletions. Further particulars regarding the Studebaker engine are given in paragraph 14.1.13.

14.1.12. As regards Studebaker trucks, the Company has been importing some chassis with engine and some without. In 1955, four types of trucks were imported. The following statement shows the total cost of the c.k.d. pack for trucks imported without engine and the deletion allowance obtained by the Company.

		Studebaker E-7-truck 112" W. B.	Studebaker E-12-truck 122" W. B.	Studebaker E-28-truck 155" W. B.	Studebaker E-38-truck 155" W. B.
		\$	\$	\$	\$
1. Value of the complete c.k.d. pack (ex-works unpacked).		954.56	1053.62	1,369.57	1,605.94
2. Value of banned items--tyres, tubes, batteries and rubber materials.		54.66	61.46	181.71	245.31
3. Value of c.k.d. pack for items normally allowed.		899.90	992.16	1,187.86	1,360.63
4. Deletion allowance obtained by the Company for other items deleted from the c.k.d. pack.		225.13	170.13	238.86	245.08
5. Cost of net c.k.d. pack		674.77	822.03	950.00	1,115.55
6. Deletion allowance in (4) as percentage of value of c.k.d. pack in (3).		25.02%	17.15%	20.11%	18.01%
7. Deletion allowance including banned items (2) plus (4), as percentage of the value of complete c.k.d. pack (1).		29.31%	21.98%	30.71%	30.54%

14.1.13 It may be pointed out that though the Company is deleting the engine, it is importing semi-finished components worth \$ 53.7 (ex-plant) and *finished components* worth \$ 228.8 (ex-plant), whereas the deletion allowance obtained by it varies from \$ 170.13 to \$ 245.08. This shows that in the case of Studebaker trucks, the deletion allowance does not represent the true manufacturing progress. A large part of the engine produced by the Company consists of imported finished components, and the deletion allowance obtained by it is also too low in relation to the original equipment price of the components concerned. Both these factors have to be taken into account in assessing the manufacturing progress made by the Company.

14.1.14. For a comparison of the cost of production of components deleted from the Studebaker vehicles with the corresponding deletion allowances, reference is invited to paragraphs 22.2.1 to 22.2.3.

14.1.15. *Baby Hindustan*.—According to the programme of manufacture approved by Government, the Company was to complete most of the essential components of power train by the end of 1955 and those of engine by the end of 1956. The Company did not, however, proceed with the manufacturing programme, as it was informed by its associates in U.K. that a new model of the baby car involving a complete change of engine, gear box, front and rear axles and of the body was being developed. The Company expects to complete the manufacture of the major components of the new model by the end of 1958. We are informed that the new engine will have 95 per cent. of its parts common with the Landmaster engine, the main difference being in the bores of the cylinder block. There will be common parts in axles, gear box and front suspension also. At present the Company is only assembling Baby cars.

14.2. Premier Automobiles Ltd.

14.2.1. The manufacturing programme of Premier Automobiles for the Dodge car and truck was approved by Government in September, 1953. Permission to manufacture Fiat 1100 was granted to the Company in November, 1953. As the demand for diesel commercial vehicles is steadily increasing, the Company is converting its petrol trucks into diesel driven vehicles by fitting Perkins P-6 diesel engines supplied by Simpson & Co. The Company has invested Rs. 192.77 lakhs on plant and machinery, the break-up of which is given below. The projected investment of the Company on plant and machinery till 1958 is Rs. 149.89 lakhs, details of which are also indicated below :—

(Rs. in lakhs)

	Original cost	Projected investment
Foundry	2.54	11.11
Forge shop	19.21	43.85
Press shop	10.57	1.15
Plant shop	1.50	...

(Rs. in lakhs).

	Original cost	Projected investment
Hardeniog and metal treatment	5.51	2.97
Vehicle assembly	2.04	...
Tool-making shop	15.75	6.50
Dies, jigs, fixtures, patterns and tools	17.55	...
<i>Machine Shop—</i>		
(a) Engine	36.56	18.60
(b) Gears, transmission, other than gears and suspension	20.83	57.49
(c) Frame and Body components . . . . .	...	6.25
(d) Others including G. P. machinery	38.24	1.97
Trainee or apprentice shop	0.17	...
Research and development	0.39	...
Other fixed capital	21.91	...
TOTAL	192.77	149.89

14.2.2. In its replies to the Commission's questionnaire, the Company claimed to have a capacity for manufacturing 250 engines and 200 to 250 units of gear box and complete transmission assembly per month. These figures were subsequently revised; during the course of their discussions with the Commission, the representatives of the Company stated that they had taken steps to increase the capacity for manufacturing engines to 350 a month and that the capacity for gear box was expected to be raised soon to 500 a month. The Company also claims a capacity for manufacturing 200 units each of crankshaft, camshaft and connecting rods per month. Its foundry has a capacity to manufacture 350 sets of castings per month (excepting cylinder block and cylinder head). The Company is making some additions to its foundry to enable it to produce castings for cylinder block and cylinder head. Its forge shop and presses have sufficient capacity to meet its requirements of forgings and pressings. Its paint shop is adequate for 20 cars and trucks a day. The Company has planned to install machinery to produce 30 units a day of front and rear axle assemblies.

14.2.3. The programme of manufacture for the Dodge group of cars and trucks as approved by Government in September, 1953 was as follows :—

Phase	Components of engine	Components of Chassis	Components of power train
<i>Dodge|DeSoto|Plymouth cars</i>			
Phase I— (January-June, 1954).	Cylinder block, cylinder head, connecting rods, flywheel, exhaust and intake manifolds, ventilator, water pumps, fan pulley and connecting rod bolts.	Nil.	Clutch housing and clutch lever.

Phase	Components of engine	Components of Chassis	Components of power train
Phase II— (July-December, 1954).	Starter gear ring, oil sump, timing gears, tappets, valve guides, crankshaft, camshaft and fuel tank.	Nil.	Universal joints and propellor shafts.
Phase III— (January-June, 1955).	Nil.	Suspension leaf spring.	Nil.
Phase IV— (July-December, 1955).	Nil.	Chassis frame (long and short members) and frame brackets.	Transmission case and cover, main transmission, secondary shafts, gears, spline shafts, synchroniser parts, shifting shafts, gear shift lever and shift fork.
Phase V— (January-June, 1956).	Nil.	Rear axle housing, front axle, wheel hubs, brake drums, hand and foot brake levers, steering arm, steering knuckle, and king pin.	Crown wheel and pinion, differential housing, differential gear and rear axle side shafts.
<i>Dodge/DeSoto/Fargo trucks</i>			
Phase I— (January-June, 1954).	Cylinder block, cylinder head, connecting rods, flywheel, exhaust and intake manifolds, ventilator and water pump assembly.	Frame brackets.	Clutch housing, clutch ever (pedal), transmission case and transmission case cover.
Phase II— (July-December, 1954).	Crankshaft, camshaft, starter gear ring, oil sump, timing gears, tappets and valve guides.	Chassis frame (long and short member), front axle, hand and foot brake levers, steering arm, steering knuckle and king pin.	Clutch, main transmission pinion, secondary shaft, gears, spline shafts, shifting shafts, gear shift lever and shift fork.
Phase III— (January-June, 1955).	Nil.	Nil.	Nil.
Phase IV— (July-December, 1955).	Nil.	Rear axle housing, wheel hubs and hand brake drums.	Crown wheel and pinion, differential housing, differential gears and rear axle side shafts.

14.2.4. The manufacture of the engine, which is to be used in both the car and the truck, was to be completed by 1954. The Company is at present making connecting rods, flywheel, valve guides,

water pump assembly, exhaust muffler and exhaust pipe, and is machining cylinder block, cylinder head and manifolds imported in rough finished condition. The Company's production of these components was sufficient only for a small proportion of the number of cars and trucks assembled by it in 1955, though the position has improved in the current year. The following statement shows the production of petrol vehicles and the number of engine components produced by the Company :—

	1955		1956 (Jan.—April)	
	Production (Nos.)	Production of each compo- nent as a percentage of the number of vehicles produced (%)	Production (Nos.)	Production of each compo- nent as a percentage of the number of vehicles produced (%)
<i>Cars and Trucks (Petrol)</i>	3,875	...	1,369	...
<i>From own castings and forgings—</i>				
Connecting rods	408	10.53	861	63
Flywheel	445	11.48	937	68
Valve guides	31	0.80	464	34
Water pump assembly	2,571	66.35	908	66
Exhaust muffler	1,856	47.90	800	58
Exhaust pipe	1,335	34.45	565	41
<i>From semi-finished imported castings and forgings.—</i>				
Cylinder block	1,812	46.76	859	63
Cylinder head	1,563	40.33	1,133	83
Crankshaft	94	2.43	...	...
Camshaft	170	4.39	686	50

14.2.5 In the case of the car, the chassis and the power train were to be completed by the end of 1956, but the Company has not yet started the manufacture of any important item in these groups.

14.2.6. According to the approved programme, the chassis and power train for trucks were to be completed by the end of 1954. The Company's production of the various components in these groups in 1955 and January-April 1956 is shown in the following table together with the number of petrol and diesel trucks assembled in these periods.

	1955		1956 (Jan.-April)	
	Production	Production of each component as a percentage of the production of vehicles	Production	Production of each component as a percentage of the production of vehicles
	Nos.	%	Nos.	%
<i>Trucks</i> (diesel and petrol)	3,887	...	1,584	...
Long and short members	900	23.15	411	25.95
Clutch housing . . .	1,149	29.56	513	32.39
Transmission case . .	1,025	26.37	424	26.77
Transmission case cover	803	20.66	732	46.21
Main transmission pinion	400	10.29	738	46.59
Secondary shaft . . .	790	20.32	665	41.98
Gears	661	17.01	539	34.03

14.2.7. From the above statement it will be seen that the Company's production of the components mentioned above is far below its requirements. The Company is, however, making universal joint, propellor shaft, spline shaft, shifting shafts and gear fork in sufficient numbers to meet its requirements for trucks.

14.2.8. The following statement gives the c.k.d. values of, and the deletion allowances obtained by the Company in 1955 for, representative models of (a) Dodge/Plymouth/DeSoto cars, (b) Dodgcs/DeSoto/Fargo petrol trucks, and (c) Dodge/DeSoto/Fargo diesel trucks:—

	D 54-1 Suburban car	C3 G6- 153" W.B. truck (petrol)	C3 6-H 193" W.B. truck (petrol)	87AP6 truck (diesel)
	\$	\$	\$	£
1. C.k.d. pack (ex-factory)	1,458	1,391	1,637	935.0
2. Cost of banned items, tyres and tubes, bat- teries and trim materials.	95	170	225	115.4
3. Cost of items which are normally allowed to be imported in the c.k.d. pack (1-2).	1,363	1,221	1,412	819.6
4. Deletion allowance obtained for items other than those in (2).	236	451	485	67.2
5. Cost of items imported in c.k.d. pack . . .	1,127	770	927	752.4
	%	%	%	%
6. (4) as percentage of (3)	17.31	36.94	34.35	8.20
7. Total deletion allowance inclusive of allow- ance obtained for banned items (4 plus 2) as percentage of c.k.d. pack (1).	22.70	44.64	43.37	19.53

14.2.9. The value of materials imported by the Company for the items deleted by it is as follows :—

	D 54-1 Suburban car	C3 G6 -153" W.B. truck (petrol)	C3 H6 -193" W. B. truck (petrol)	87A P6 truck (diesel)
	\$	\$	\$	£
Finished components	201.8	179.8	179.6	0.9
Semi-finished components	85.5	84.8	84.8	...
Other materials	1.2	134.0	159.0	30.8
TOTAL	288.5	398.6	423.4	31.7

It will be seen that in the case of the car, the deletion allowance obtained by the Company is less than the value of the finished, semi-finished and other materials which the Company imports for the manufacture of the components concerned. Here again, as in the case of the Studebaker engine, the deletion allowance does not represent the true manufacturing progress. In the case of trucks, the value of imported materials uses up a high proportion of the corresponding deletion allowance.

14.2.10. For a comparison of the cost of production of items deleted from the Dodge group of vehicles with the corresponding deletion allowances reference is invited to paragraphs 22.2.1 to 22.2.3.

14.2.11. *Fiat-1100*.—The programme as approved by Government in November, 1953 for the manufacture of Fiat 1100 was as follows:—

Phase	Components of Engine	Components of Chassis	Components of power train
Phase I— (January to June, 1954).	Nil.	Nil.	Nil.
Phase II— (July to December 1954).	Fuel tank.	Suspension leaf spring.	Nil.
Phase III— (January to June, 1955).	Connecting rods fly-wheels, ventilator, water pump, ventilator pulley, starter gear ring and oil sump.	Chassis frame (long and short members) and frame brackets.	Clutch housing, clutch lever and propellor shafts.
Phase IV— (July to December, 1955).	Cylinder head, exhaust and intake manifolds, timing gears and taps.	Shock absorbers and tie rods.	Transmission case, transmission case cover, main transmission pinion, secondary shaft and spline shaft.
Phase V— (January to June, 1956).	Cylinder block, crankshaft, valve guides and camshaft.	Front axle, wheel hubs, brake drums and brake lever, steering arms, front brake lever, steering knuckle and king pin.	Gears.
Phase VI— (July to December, 1955).	Nil.	Rear axle housing.	Differential housing, rear axle side shaft, differential gears and universal joints.

14.2.12. The Company has made very little progress in the manufacture of Fiat 1100. It assembled 2,178 cars in 1955 and 1,148 in the first three months of 1956. During these periods, it made only four components, viz., fuel tank, radiator assembly, exhaust muffler and exhaust pipe for the engine. Only 9 radiator assemblies in 1955 and 300 in the first three months of 1956 were manufactured. The production of fuel tanks, exhaust mufflers, exhaust pipes and leaf springs, however, was sufficient to meet its entire requirements. The Company produced only 25 sets of chassis frame and frame brackets in January-April, 1956. The reasons given by the Company for the delay in implementing the manufacturing programme are mainly two. Firstly, owing to delay in translation from Italian into English, the final drawings and specifications became available only in February, 1955. Secondly, there was also considerable delay in completing the general lay-out of the factory and the machining departments, and the orders for machine tools, fixtures etc. could be placed only in July 1955. The machines for cylinder block, cylinder head, etc. are expected during the second half of 1956. The Company has now submitted a revised programme for the manufacture of Fiat car, which is as follows:—

Period	Components of engine	Components of Chassis	Components of power train
July to December, 1956.	Cylinder block, fly-wheel, valve guide, water pump assembly and oil sump.	Bumper.	Clutch housing, clutch lever, universal joints and propeller shaft.
January to June, 1957.	Cylinder head, exhaust and intake manifold, connecting rod, crankshaft, camshaft, timing gear, rocker shaft and rocker arms.	Nil.	Nil.
July to December, 1957.	...	Hand and foot brake lever.	Transmission case and cover, main transmission pinion, secondary shaft, gears, spline shaft, shifting shaft, gear shift, lever and shift fork.
January to June, 1958.	...	Rear axle housing, wheel hub and brake drum.	Rear axle side shaft.
July to December, 1958.	...	...	Crown wheel and pinion, differential gears and differential housing.

14.2.13. The following statement gives the c.k.d. value of, and deletion allowance obtained by the Company in 1955 for, Fiat 1100 cars:—

1. C.k.d. pack (ex-factory, Italy.)	£ 286.5
2. Cost of bonned items, tyres and tubes, batteries, and trim materials	£ 29.7

3. Cost of items which are normally allowed to be imported in the c.k.d. pack (1 — 2)	£ 256.8
4. Deletion allowance obtained for items other than those mentioned in (2)	£ 32.9
5. Cost of items imported in the c.k.d. pack	£ 223.9
6. (4) as percentage of (3)	12.81%
7. Total deletion allowance inclusive of allowance obtained for banned items (2 plus 4) as percentage of cost of c.k.d. pack (1)	21.85%

The value of materials imported by the Company for the parts deleted by it is negligible.

14.3. Standard Motor Products of India Ltd.

14.3.1 Standard Motor Products of India was permitted to manufacture Standard Vanguard. Subsequently, the Company received permission to undertake the manufacture of Standard 8 and this has since been replaced by Standard 10. The Company has invested Rs. 30-34 lakhs in plant and machinery, the break-down of which is given below :—

	Rs. in lakhs
Paint shop	0.74
Hardening & metal treatment	1.00
Vehicle assembly (including spot welding)	5.40
Tool making shop	2.80
Dies, jigs, fixtures, patterns and tools	1.98
<i>Machine shop—</i>	
(i) Engine including cooling system	11.22
(ii) Gears	5.38
(iii) Others including general purpose machinery	1.82
TOTAL	30.34

The projected investment on plant and machinery for 1956-1959 is Rs. 45 lakhs.

14.3.2. The Company claims to have a manufacturing capacity of 10 cars a day on single shift. According to it, it has capacity to machine 10 units each of cylinder block, cylinder head, crankshaft and camshaft for Standard Vanguard and Standard 10. It has no capacity for the manufacture of connecting rods and expects to obtain them from Praga Tools Corporation, Secunderabad. Machinery and equipment for gear box and heat treatment are under installation. It has no foundry of its own, and has been obtaining castings from Binny's Engineering Works, Madras. These were not found satisfactory and a new foundry with a capacity of 16 tons a day is being set up by Unicon Ltd., a sister concern of Standard Motor Products of India. The Company has placed orders for a 800 ton press to produce front suspension units for Vanguard and Standard 10. This will also be capable of pressing some body components like doors, bumpers, etc. for both the cars. Its paint shop is equipped to paint 10 cars a day.

14.3.3. *Standard Vanguard*.—The manufacturing programme for Standard Vanguard as approved by Government in September, 1953 is given below :—

Period	Components of engine	Components of Chassis	Components of power train
2nd half of 1953	Exhaust manifold, water pump assembly less shaft, cylinder head and cylinder block.	Nil.	Nil.
1st half of 1954	Fan blade assembly, rocker, cover crankshaft pulley, flywheel and inlet manifold.	Brake drums and stabiliser bar.	Nil.
2nd half of 1954	Valve guides, piston assembly tappets, crankshafts and cylinder liners.	King pin and shock absorbers.	Nil.
1st half of 1955	Main bearings and rocker arms.	Suspension rear springs and hand and foot brake assembly.	Nil.
2nd half of 1955	Tappets	Spring cap, steering arms and tie rods.	Gear box housing and gear box cover.
1st half of 1956	...	Front hubs and rear axle housing.	Propellor shafts.
2nd half of 1956	...	...	Gears, main shafts, spline shafts, differential crown wheel and pinion, lay shafts and counter shafts.

14.3.4. According to the approved programme, the Company should have completed the manufacture of the engine and chassis by the end of 1955 and should complete the manufacture of power train by the end of 1956. The Company, however, is making only fuel tank, exhaust muffler, exhaust pipe, flywheel, tappets, valve guides, exhaust and intake manifolds and water pump body assembly in sufficient numbers to meet its requirements. In 1955, it machined only 283 cylinder heads from imported castings and another 125 from castings obtained locally. During January-April, 1956, it machined only 38 cylinder heads. During the same period it machined 53 cylinder blocks of which 49 were from imported castings and 4 from locally purchased castings. As against these, the production of Vanguard cars was 637 in 1955 and 106 in Jan-April, 1956. In regard to chassis, it is making only brake drums at present. The production of brake drums was 600 in 1955 and 132 during January-April, 1956.

14.3.5. The reasons given by the Company for the delay in completing its programme are: (1) the introduction of a new model involving changes in designs of certain components, and (2) delay in receipt of special steel for the development of certain components.

14.3.6. The following statement shows the value of the c.k.d. pack and the deletion allowance obtained by the Company in 1955 for Standard Vanguard cars :—

	£
1 Value of complete c.k.d. pack (ex-works unpacked)	349.11
2. Value of banned items—tyres, tubes, batteries and rubber material	51.41
3. Value of c.k.d. pack for items normally included	297.71
4. Deletion allowance obtained by the Company for items other than those in (2).	13.59
5. Cost of net c.k.d. pack	284.12
6. Deletion allowance (4) as a percentage of c.k.d. pack (3)	4.57%
7. Deletion allowance including banned items (2 plus 4) as percentage of the value of complete c.k.d. pack (1).	18.62
Value of imported finished and sime-finished components (corresponding to 4).	Nil.

14.3.7. For a comparison of the cost of production of deleted items with the corresponding deletion allowances, reference is invited to paragraphs 22.2.1. to 22.2.3.

14.3.8. *Standard 10*.—The programme of manufacture for *Standard 10* as approved by Government in October, 1954 is given below :—

Period	Components of engine	Components of chassis	Components of power train
1955	Cylinder block, cylinder head, main bearing, connecting rods, piston rings and pins, exhaust pipe assembly, valves valve guides, flywheel, rocker arm and rocker lever, water pump body, fan pulley, fan assembly and petrol tank assembly.	Brake drum, hub cover, springs, shock absorbers and hand brake assembly.	Nil.
1956	Crankshaft, camshaft and radiator.	Tie rods, front hubs, and king pins.	Gear box and clutch housing, propellor shaft, gear box cover, main shafts, counter shafts, gears, gear lever, clutch lever, crown wheel and pinion and rear axle side shafts.

The Company has not yet made any of the above components for *Standard 10* nor has it submitted any revised programme of manufacture. The Company has attributed the delay to the changeover from 8 H.P. to 10 H.P. and the non-receipt of special tools and machines.

14.3.9. The deletion allowance obtained by the Company for Standard 10 in respect of banned item (tyres, tubes, battery, etc.) and rubber parts is £ 22.0 which is only 7.7 per cent. of the total c.k.d. value of £ 287.

14.4. Ashok-Leyland Ltd.

14.4.1. The Company's programme for the manufacture of the Leyland Comet trucks was approved by Government in March, 1954. The Company has so far invested only Rs. 10.77 lakhs in plant and machinery. The following table gives a break-down of the Company's present investment and its proposed future investment in plant and machinery till 1959 :

(In lakhs of rupees.)

	Original cost	1956	1957	1958	1959	Total for 4 years
Foundry . . . . .	...	...	...	...	...	...
Forging shop, press shop.	...	...	1.00	...	1.00	2.00
Paint shop	0.81	...	...	...	...	...
Hardening and metal treatment department.	...	1.00	2.00	1.00	...	4.00
Vehicle assembly	2.01	...	...	...	...	...
Tool-making shop . . . . .	...	...	2.00	3.00	...	5.00
Dies, jigs, fixtures, patterns and tools.	0.72	4.00	4.00	4.00	4.00	16.00
<i>Machine shop (pertainings to)</i>						
(i) Engine including cooling system.	...	...	...	...	...	...
(ii) Gears . . . . .	...	...	...	...	...	...
(iii) Transmission (other than gears) and suspension.	...	12.00	12.00	12.00	12.00	48.00
(iv) Others including general purpose machinery.	4.94	...	...	...	...	...
Trainee shop . . . . .	...	...	0.40	...	...	0.40
Research, development and laboratory.	...	...	...	...	...	...
Other fixed capital	2.29	...	...	...	...	...
TOTAL	10.77	17.00	21.40	20.00	17.00	75.40

14.4.2. The Company will have an annual capacity for 1200 Comet chassis initially, increasing to 2500 chassis within 4 years.

14.4.3. The manufacturing programme for Leyland Comet was to commence from 1st January, 1955 and is to be completed in 5 years. Owing to its reorganisation, however, the Company had to postpone the implementation of this by one year. The details of the manufacturing programme, as furnished by the Company, are as follows :—

Period	Components of engine	Components of Chassis	Components of power train
1956	Fuel tank, fuel lines, exhaust muffler, and exhaust pipe.	Chassis frame, frame bracket, rear and front axle, wheel hubs, brake drums, foot brake lever, tie rods, ball and socket joints and bumpers.	Clutch and clutch housing.
1957	Cylinder block, cylinder head, camshaft, connecting rods and bolts, flywheel, starter gear ring, oil sump, timing gears, rocker shafts, rocker levers, exhaust and intake manifolds, water pump assembly, ventilator and ventilator pulley, piston pins and assembly, cylinder liners, fuel filter, oil filter and radiator assembly.	brake drum cover, steering column, steering knuckle, steering arm, king pins and hub caps.	Nil.
1958	...	Nil.	Clutch levers, transmission case, transmission cover, main transmission pinion, secondary shafts, gears and spline shaft.
1959	...	Front axle.	Shifting shafts, gear shift levers, gear fork, crown wheel and pinion, differential housing, differential gear and rear axle side shafts.

As the Company has not completed the first year of its programme, it is too early to assess its progress of manufacture.

14.5. Mahindra & Mahindra Ltd.

14.5.1. The Company's programme of manufacture for Jeeps was approved by Government in June, 1954. The Company has so far invested Rs. 6.12 lakhs in plant and machinery, and its projected capital expenditure for 1956 and 1957 is Rs. 54.00 lakhs, the details of which are given below :—

(Rs. in lakhs.)

	Original cost	Projected investment	
		1956	1957
<i>Plant and machinery for :</i>			
Foundry . . . . .	...	3.00	3.00
Forging shop . . . . .	...	...	...
Press shop	0.75	1.50	2.50
Paint shop	0.03	0.50	...
Hardening and metal treatment shop	0.18	0.50	1.50
Vehicle assembly	1.72	0.50	0.50
Tool-making shop	0.70	3.00	1.00
Dies, jigs, fixtures, patterns and tools	0.61	4.50	...
<i>Machine shop equipment for :</i>			
Engine (including cooling system) . . . . .	...	...	...
Gears . . . . .	...	8.00	10.00
Transmission (other than gears) and suspension . . . . .	...	3.00	2.00
Frame and body components	1.83	...	...
Others including general purpose machinery	0.21	5.00	3.00
Trainee shop	0.09	0.50	0.50
Research, development and laboratory . . . . .	...	...	...
Other fixed capital . . . . .	...	...	...
TOTAL	6.12	30.00	24.00

14.5.2. The manufacturing programme for jeeps was to commence in the second half of 1955 and be completed in three years, as may be seen from the following statement :—

Period	Components of engine	Components of chassis	Components of power train
1st year	Exhaust pipe.	Hub caps and bumpers	Nil.
2nd year	Oil filter, fuel tank, fuel lines, air cleaners, exhaust muffler, fan assembly and radiator assembly.	Steering column, steering arms, hand and foot brake levers, brake drums, cross members for frame, shock absorbers, frame brackets and spring assembly.	Clutch lever assembly.
3rd year	Flywheel, starter gear ring, piston and pin, connecting rods and bolts, rocker arm, valve springs, rocker lever, inlet valve, valves and tappets, oil sump and timing gear.	Steering knuckle arm, tie rods and rear axle housing.	Clutch, lay shaft, counter shafts, gears transfer case, shifting forks differential assembly differential crown and pinion and rear axle side shaft.

14.5.3. Cylinder blocks, cylinder heads, crankshaft and camshaft were not included in the original programme. The Company has now made arrangements for its cylinder blocks to be machined at the Ordnance Factory, Katni, by the end of 1956 and for the manufacture of cylinder heads in 1957.

14.5.4. The Company has not completed the manufacture of any of the items mentioned in its manufacturing programme. We have been informed that the items scheduled for the first year are either under planning or under test.

14.6. Tata Locomotive & Engineering Co. Ltd.

14.6.1. Government approved the manufacturing programme of the Company for 3 to 5 ton diesel vehicles called "Tata-Mercedes-Benz" on 1st May, 1954 and production started in October, 1954. The following statement shows the Company's present and projected investment in plant and machinery for assembly/manufacture of trucks :—

(In lakhs of rupees.)

	Original cost	Estimated capital outlay for				Total estimated capital outlay
		1955-56	1956-57	1957-58	1958-59	
<i>Plant and machinery relating to:</i>						
Foundry (including buildings, plant and equipment).	...	...	60.00	13.00	...	73.00
Forge shop . . .	...	...	21.68	21.68	...	43.36
Press shop . . .	0.59	...	52.69	1.45	...	54.14
Paint shop . . .	...	...	...	...	...	...
Hardening and metal treatment.	...	...	5.06	6.51	...	11.57
Vehicle assembly . . .	0.90	...	...	...	...	...
Tool-making shop . . .	...	...	7.22	7.22	...	14.44
Dies, jigs, fixtures, patterns and tools.	2.45	34.63	24.57	17.34	39.02	115.65
<i>Machine shop:</i>						
(i) Engine including cooling system.	...	...	...	...	164.77	164.77
(ii) Gears—	...	...	...	...	...	...
(a) Differential crown wheel and pinion.	...	...	15.63	...	...	15.63
(b) Gear box . . .	...	...	...	30.92	...	30.92
Transmission . . .	...	...	35.30	19.90	...	55.20
Suspension . . .	...	2.86	3.73	...	...	6.59
Frame body components.	...	2.15	3.62	3.62	...	9.39
Others including general purpose machinery.	4.81	6.68	33.83	15.67	...	56.18
Trainee or apprentice shop Research development etc.	0.24	5.00	9.94	...	...	14.94
Other assets	4.18	...	...	...	...	...
TOTAL	13.17	51.32	264.27	137.31	203.79	665.69

14.6.2. The planned capacity of the Company for its foundry, forge shops and paint shop is 6,000 units per annum on single shift basis, while the capacity to be set up for gear box and complete-transmission assembly, front axle, rear axle, engine, crankshaft, camshaft and connecting rods will be 6,000 units per annum on double shift basis. The capacity for chassis long and cross members is expected to be 6,000 units per shift per annum.

14.6.3. The details of the four-year manufacturing programme are given below :—

Period	Components of engine	Components of chassis	Components of power train
1st year (Nov. 1955 to Oct. 1956.)	Fuel tank and exhaust pipes.	Side (long and short members) frame brackets, spring chassis, suspension, bumpers, steering arms, king pins, stub axles, break peddals, suspension leaf springs, brake drums, brake shoes, brake shoe holders, hand and foot brake levers and break drum covers.	Clutch lever.
2nd year (Nov. 1956 to Oct. 1957)	Nil.	Rear axle housing.	Crown wheel and pinion, differential gears, and rear axle side shafts.
3rd year (Nov. 1957 to Oct. 1958).	Nil.	Nil.	Transmission case and cover, main transmission pinion, secondary shafts, gears, spline shafts, shifting shafts, gear shift lever and shifting forks.
4th year (Nov. 1958 to Oct. 1959)	Cylinder block, cylinder head, crankshaft, camshaft connecting rods, flywheel, starter gear ring, tappets, timing rear, rocker shafts, rocker arms, valve guides, exhaust and intake manifolds and water pump assembly.	Nil.	Nil.

The first stage of the Company's manufacturing programme commenced on 1st November, 1955 and ends on 31st October, 1956. It is, therefore, too early to assess the progress made by the Company.

14.7. *Simpson & Co. Ltd.*

14.7.1. The Company started the manufacture of diesel engines in 1954. It has invested Rs. 58.20 lakhs in plant and machinery, the details of which are given below :—

	In lakhs of Rs.
Machine shop	45.02
Press section	2.51
Tinker section	0.61
Perkins assembly section	2.19
Perkins service section	0.92
Other production departments	3.82
Works service departments	0.21
Workshop electric installations	2.92
TOTAL	58.20

In addition, machinery worth Rs. 6.10 lakhs was received in June, 1956 and orders for additional machinery worth Rs. 18.17 lakhs have been placed.

14.7.2. The Company does not expect to incur further expenditure on plant and machinery to any appreciable extent for its present programme for 3,000 engines per year in single shift. It will, however, need additional machinery worth about Rs. 12.5 lakhs, if it is to increase its output to 6,000 engines per year by working double shift.

14.7.3 The manufacturing programme of Simpson & Co. for Perkins's diesel engines, as approved by Government in June, 1955 is given below :—

Phase I—

(Up to June, 1955) Manifold, water inlet, and piston assembly.

Phase II—

(July to December, 1955) Inlet and exhaust valves, starter gear ring, manifold (exhaust), and thin wall bearings.

Phase III—

(January to June, 1956) Crankshaft, camshaft and cylinder head.

Phase IV—

(July-December, 1956) Connecting rods, cylinder block, cylinder liners and water pump assembly.

14.7.4. The Company claims to have made progress ahead of schedule in respect of certain items like water pump components (minus seal), thrust ring and bearing (roller) which were advanced from phase 4 to phase 2. Most of the components covered by phase 1 and 2, with the exception of thin wall bearings, have been deleted from the c.k.d. pack. As regards thin wall bearings, the Company is awaiting proper samples from Kirloskar Oil Engines, Ltd. In respect of the items covered by Phase 3, most of the items have been developed and their manufacture is expected to be completed,

except in the case of crankshaft and camshaft where the manufacture has been delayed. The programme in respect of crankshaft could not be implemented earlier, owing to delay in the installation of induction hardening and grinding machines and a new 750 KVA transformer. Similarly, the work in respect of camshaft has been retarded by the delayed shipment of cam-o-matic machine from U.K.

14.8. Automobile Products of India Ltd.

14.8.1. The Company's programme for the manufacture of Meadow's vehicular type diesel engine was approved by Government in December, 1955. The present investment of the Company in fixed capital is as follows :—

	Rs. in lakhs
Plant and machinery	4.75
Other fixed capital	1.58
TOTAL	6.33

The projected capital expenditure for the next five years is shown below :—

	(Rs. in lakhs.)				
—	1st year	2nd year	3rd year	4th year	5th year
Plant and machinery	11.84	8.83	5.07	3.00	3.00
Trainee shop	1.00	...	...	...	...
Research and development	1.00	1.00	1.00	1.00	1.00
TOTAL	13.84	9.83	6.07	4.00	4.00

Total for 5 years : Rs. 37.74 lakhs.

14.8.2. The Company will have a capacity for 3,000 engines per annum. This capacity will, however, be attained in the following stages :—

- (a) First year : assembly 1,000 engines (approximate)
- (b) Second year : assembly and manufacture of components 2,500 engines
- (c) Third year : assembly and further manufacture of components 3,000 engines

The manufacture of the engine is to be completed in four years. The following components only will be manufactured in the first two years :—

1st year (1956)—

Piston assembly, crankshaft pulley, cylinder liners, tappet, valve guide, valve spring, rocker shaft and rocker lever, water pump body, fan blade, ventilator pipe, manifolds and flywheel.

2nd year (1957)—

Machining of crank case and cylinder block, main bearings, timing gears, cylinder head, connecting rods and starter gear ring.

As the Company has not completed the first year of its programme, it is too early to assess its manufacturing progress.

15.1. We now propose to examine the reasons for the delay on the part of most of the manufacturers in implementing their manufacturing programmes. We shall confine our analysis only to the factors responsible for the delay in the progress of manufacture, as distinct from those which may have affected the progress and development of the industry as a whole.

15.2. To start with, we may refer to one general cause of the failure of most of the manufacturers to keep to the time schedule originally adopted by them. Under the scheme of protection introduced in 1953, the manufacturers were expected to so devise their manufacturing programmes as to establish indigenous manufacture to the extent of at least 50 per cent. of the value of their vehicles within a period of three years. This by itself was an ambitious target. While preparing their manufacturing programmes in conformity with this target, most of the manufacturers did not make adequate allowance for delays in the delivery of machinery and raw materials and the period required for training the necessary personnel and developing the technique of manufacture. They also seem to have seriously underrated the difficulties involved in implementing manufacturing programmes for two or three types of vehicles simultaneously. Thus, their failure to attain the target is at least partly due to the ambitious nature of the target itself.

15.3. Due allowance must also be made for certain basic handicaps which an industry of this kind suffers from under the conditions prevailing in this country. The automobile industry in India does not enjoy the advantage available to the industry in other countries of being able to draw on the resources of ancillary manufacturers for the supply of a variety of finished and semi-finished components. The disadvantage is particularly serious in the case of castings and forgings. Secondly, manufacture of automobile components requires heavy financial investment, and the necessary capital resources can be built up, whether out of ploughed profits or through investment from outside, only by stages and over a period of time. Thirdly, while it is easy to develop the machining of components from imported forgings and castings, the production of the forgings and castings themselves to the high standard of quality required in this industry takes time to be established. In the initial stages, the percentage of rejections is so high that the resulting increase in cost does not encourage rapid progress. The manufacturers have also experienced difficulties in obtaining raw materials of the right quality, e.g. pig iron required for castings. Fourthly, most of the manufacturers have had to cope with frequent changes in specifications introduced by their foreign associates. Some of these changes were connected with changes of models, whereas in some cases, while the models themselves had remained unchanged, the specifications of important components had undergone modifications. In many cases, the Indian manufacturers have no option but to adopt any changes in specifications which their foreign associates may introduce, because at this stage they are wholly dependent on them for supply of the complementary parts. The changes in specifications not only

interrupted the production plans in India, but also involved additional expense. In the case of the Studebaker car and truck, there was a change of design from 233 cc engine (for which Hindustan Motors had prepared the necessary drawings and obtained the required tools) to 259 cc engine and the Company had consequently, to scrap its arrangements for the manufacture of the former type of engine. The changeover from Hindustan 14 to Hindustan Landmaster involved several changes in the design of the principal assemblies, and consequently, some of its plant and machinery which the Company had earlier planned to use for developing the Studebaker engine had to be employed in implementing these changes. The implementation of the manufacturing programme in respect of Baby Hindustan was also held up because of the projected change of model by the foreign associate. In the case of Standard Vanguard, there has been no change of model for 7 or 8 years, but each new series has involved changes in specifications of important sub-assemblies and this has added to the difficulties of the Indian firm in implementing its manufacturing programme. Most of these difficulties were due to factors beyond the control of the Indian industry. Some of these are inherent in the present stage of the country's industrial development, while others arise from the inevitable dependence of the Indian industry on foreign firms.

15.4. While recognising that the inadequate progress of the automobile manufacture in India was partly due to circumstances beyond the control of the industry, we cannot help feeling that the progress could have been more rapid if the system of protection which was introduced in 1953 had offered the industry more positive incentives towards this end. Under this system, each approved manufacturer is given the privilege to import a vehicle on condition that he will implement an approved programme of manufacture with respect to that vehicle. Experience has shown, however, that the domestic costs of production of automobile components are very much higher than their import costs, with the result that in most cases each important step towards implementation of the manufacturing programme results in increasing the overall cost of the domestic producer and reducing his overall profit margin. The reduction in the import duties on automobile components which was effected in 1953 has further widened the disparity between the domestic cost of production and import cost. The result is that at the present level of duties, it is distinctly more profitable for a manufacturer to import and assemble a foreign vehicle than to manufacture its essential components locally. If, in spite of the sacrifices involved, the firms concerned have made some progress in manufacture, it is because of their desire to fulfil the obligations undertaken by them, and also because, where the progress of manufacture has been small, the sacrifice involved is more than counterbalanced by the profits available on imports. The amount of capital required for setting up manufacturing facilities is very high and at the present stage earns little or no return, whereas a very considerable turnover in purely assembled vehicles can be built up on comparatively small capital and with handsome profits. Generally speaking, the yield on investment depends on the ratio of turnover to capital employed. Although it was originally intended to so administer the import policy with respect to automobiles as to confer a relative advantage on manufacturers as against assemblers, in practice the import policy

has so operated that firms which have made less progress in manufacture have been able to build up a bigger turnover in relation to their capital employed. For example, in 1954-55, whereas Hindustan Motors who have made the greatest progress in manufacture had a turnover of Rs. 709 lakhs as against an employed capital of Rs. 557 lakhs, a ratio of 1.27 to 1, Premier Automobiles in their corresponding financial year had a turnover of Rs. 1,237 lakhs on an employed capital of Rs. 439 lakhs, a ratio of 2.82 to 1. In 1955, Standard Motor Products had a turnover of Rs. 205 lakhs on an employed capital of Rs. 76 lakhs, a ratio of 2.71 to 1. This shows that, by and large, the opportunities of business available to different manufacturing firms as a result of the import control policy have not been in proportion to their respective progress in manufacture. In one instance, viz. Simpson & Co., where import facilities were restricted for some time with a view to compelling the firm to speed up the implementation of its manufacturing programme, the measure has had the desired effect. On the whole, however, the present system of protection, whether in the matter of import duties or of import control, has not provided adequate incentive to manufacturing progress. We would also invite attention to our remarks in paragraphs 20.5 and 21.10.

15.5. As stated above, the lack of incentive to domestice manufacturers is primarily due to the fact that it is more profitable to import automobile components than to manufacture them. A detailed analysis of cost of production will be furnished later (paragraph 22), but at this stage it would be relevant to point out that in the case of passenger cars, the small volume of demand available to Indian manufacturers has been primarily responsible for their high costs. In passenger cars, as many as seven makes of vehicles (excluding Jeeps) had to participate in a total demand of 10,000 in 1955, and even by 1960-61 the demand is not expected to be more than 20,000 vehicles. Since the economic volume of production for any model of passenger car cannot possibly be lower than 5,000, it is obvious that the volume available for at least some of the approved passenger cars is inadequate and is bound to make the relative projects uneconomical in the long run. In these circumstances, it would be unrealistic to expect even progress in the case of all the approved manufacturers of passenger cars.

16.1. We give below a summary of the information received by us regarding the complaints made by purchasers concerning the quality of automobiles assembled in India.

Quality.

16.1.1. *Hindustan Landmaster cars.*—Several complaints were made about the quality of the pistons and rings used in the engines. It was alleged that oil consumption was high and that sparking plugs got fouled by oil. Complaints were also made about the gears and gear change levers. Shock absorbers were found to be unsatisfactory. The paint on the cars developed patches and was seen to fade within the first few months. Generally speaking, fittings on the cars were defectively assembled indicating that inspection was insufficient.

16.1.2. *Studebaker passenger cars.*—There were complaints of breakage in the door glasses and of the poor performance of shock absorbers.

16.1.3. *Studebaker commercial vehicle*.—Complaints were made regarding rear spring failure, steering post and cam failure, failure of rear axle, bevel pinion and gear, failure of wheels and rims, etc.

16.1.4. *Dodge Group passenger cars*.—Complaints were made about excessive dust entry, flooding of carburettor, rattles in the body and paint work.

16.1.5. *Fiat cars*.—It was alleged that hair line cracks developed on plastic parts such as steering wheels and instrument control knobs, that batteries exhausted themselves quickly, that fan belts became elongated, that the radiator top hose failed, and that paint work displayed early discolouration.

16.1.6. *Dodge Group petrol trucks*.—There were a few complaints about breakage of springs.

16.1.7. *Dodge Group diesel trucks*.—Complaints were made about the cracking of fuel tanks and development of noise in the propeller shaft centre bearing.

16.1.8. *Standard Vanguard cars*.—Failure of flywheel ring gear, fan belts and silencer rubber mounting was reported in some cases, as also leakage through steering oil seal. Rear rod springs were noisy, and there was deterioration of rubber matting.

16.1.9. *Standard 8 cars*.—Complaints were made about failure of the clutch, deterioration of rubber mats and of paint work.

16.1.10. *Willy's Jeeps*.—The major complaints were about cracks in cylinder blocks, failure of connecting rod bearings, cracks in cylinder head and failure of transmission due to broken gear. Minor complaints about speedometers, assemblies for electric horns and other proprietary parts were also made.

16.1.11. *Comet trucks*.—Complaints were made about the cracking of cylinder blocks, fracture of rear axle driving shafts, breakage of rear axle, tooth failure in gear boxes, leakage of radiator and failure of propeller shafts.

16.1.12. *Tata-Mercedes-Benz trucks*.—Complaints were made about excessive tyre wear, breakage of speedometer cables, high fuel consumption, breakage of springs and stiffness of the steering.

16.2. We have indicated only the general nature of the complaints without going into details. These complaints applied only to a small percentage of vehicles sold. In several cases, the complaints arose out of failure of inspection at the works. The matter was discussed at the public inquiry and we were assured that the manufacturers had made arrangements for attending to such complaints and had taken steps to remove the defects complained of. We have reason to believe that there has been gradual improvement in the quality of automobiles assembled in India since 1954.

16.3. Among all the vehicles assembled in India, complaints against the Hindustan Landmaster were the most frequent during the year 1955. This was a period immediately following the introduction of the Landmaster Model which included several changes in design as compared with the old Hindustan 14. It was also during this period that the Company had begun to make fuller use of castings from its own foundry. (No other firm has yet come to the

stage of using indigenous castings.) The complaints are unfortunate, especially as this Company has been the pioneer in automobile manufacture in India and has established the largest measure of indigenous manufacture in a passenger vehicle. However, we are now assured by Hindustan Motors that many of the defects in Hindustan Landmaster which were complained of during the last eighteen months or so have since been removed and that the current series is of satisfactory quality. We recommend that Hindustan Motors should tighten up inspection in their machining and assembling shops, arrange for more careful scrutiny of the purchased components and take further steps to improve the quality of their castings.

16.4. Under instructions from the Development Wing of the Ministry of Commerce and Industry, the manufacturers of automobiles have been maintaining a complaint book at each service station of their dealers to enable customers to record their complaints. The complaints are attended to by the dealer concerned and, where necessary, by the manufacturer also. A vehicle defect card is also handed to each customer at the time of the purchase of a vehicle. This card is to be forwarded to the Development Wing in case any defect is noticed during the warranty period. The action taken by the Development Wing on receipt of a complaint is to draw the attention of the manufacturer and maintain a close watch on the action taken to remedy the defect. If the manufacturer concerned does not pay sufficient attention to the complaint, the Development Wing pursues the matter further. This system, however, has not been found entirely satisfactory and is defective in two respects, firstly, it makes Government partly responsible for matters for which the manufacturers must assume full responsibility, and secondly, it tends to encourage frivolous complaints by users.

16.5. The warranties furnished by manufacturers to purchasers are almost identical in all cases. Dealers are usually authorised to examine and set right complaints received from customers. Parts complained of are either replaced free of cost, or the expenses incurred in repairing them are reimbursed to dealers in all cases where the defects are found to be due to defective workmanship or defective material.

16.6 One special aspect of the guarantees given by some of the manufacturers is that it does not include accessories or proprietary parts like electrical equipments, tyres, tubes, batteries, etc. In such cases, owners are asked to approach the manufacturers of such ancillary parts direct for settlement of complaints. We were informed that at least one manufacturer had refused to replace certain proprietary electrical components during the warranty period. We recommend that the manufacturers should undertake full responsibility for all the parts fitted to their vehicles, without making any distinction, for the purpose of their warranties, between the parts manufactured by them and those purchased by them from other sources.

16.7. The Development Wing has observed (a) that some manufacturers replaced defective parts and asked dealers to meet the labour charges, while others paid labour charges to a limited extent; and (b) that, as a result, the incentive to give satisfaction to the customer during the warranty period is lost to most dealers. We suggest that this is a matter which should be settled by mutual arrangement between manufacturers and dealers.

16.8. There remains the question of setting up a satisfactory organisation for ensuring the maintenance of proper quality standards in this industry. We feel that an organisation set up by the industry itself for this purpose is preferable to the present arrangement whereby consumers are asked to lodge their complaints with Government.

16.9. The automobile manufacturing industry (which consists of eight manufacturers of vehicles and diesel engines) has no association at present to fulfill the following functions :—

- (i) to make joint representations to Government on matters of policy concerning protection to the industry, its control, regulation and development;
- (ii) to make joint representations to Government on the needs and requirements of manufacturers in regard to machinery, tools and raw materials, foreign collaboration, technical assistance, etc;
- (iii) to promote research and development, maintain testing laboratories, proving grounds, etc;
- (iv) to promote the establishment of standards and evolve suitable principles for standardisation;
- (v) to collect and maintain statistical information, organise publicity, periodical shows, exhibitions, etc.; and
- (vi) to promote satisfactory relations between the industry and the consumer and between the producers of vehicles and those of ancillary parts, and with this object, to establish an organisation for the settlement of all disputes concerning quality, deliveries and after-sales service.

16.10. In the context of the main theme of this section, we are most interested in the last function, namely, the maintenance of satisfactory manufacturer-consumer relationship and the establishment of an organisation for investigation into complaints regarding quality, warranty claims and after-sales service. In our view, the creation of such an organisation is incumbent on the industry in consideration of the assistance given to it by Government and the sacrifices which the consumer is called upon to make for its development. The organisation should have offices at all important centres (similar to those maintained by the rubber tyre companies to settle claims for replacement of defective tyres). We do not propose to make detailed suggestions about the structure of the organisation, which may be settled by the manufacturers themselves.

16.11 We recommend that the manufacturers should take early steps to establish an association on the lines indicated above, with the special object of ensuring the maintenance of proper quality standards and making improved arrangements for the settlement of all disputes concerning quality.

17.1. In this section, we propose to set forth briefly certain general principles which, in our view, should be observed to ensure that the future development of the automobile industry is on sound lines. We wish it to be clearly understood that no criticism of past policies or actions is meant in any of these observations; we have only recorded certain general conclusions which have emerged from our review of the development of the industry to the present stage.

17.2. The development of the automobile industry calls for heavy capital investment, and since the capital resources available in the country are not sufficient to meet the competing demands from various essential projects, it is necessary to keep certain priorities in mind while considering the development projects relating to this industry. We consider that in the automobile industry, the first priority should be accorded to commercial vehicles, and this for several reasons. With the increased tempo of economic activity which is expected under the Second Five Year Plan, the demand for commercial vehicles is likely to increase progressively. By 1960-61, the annual requirements of commercial vehicles are expected to be as high as 40,000, whereas the demand for passenger cars is estimated at only 25,000, including 5,000 Jeep type vehicles. Secondly, from the strategic standpoint, speedy attainment of self-sufficiency is of far greater importance in the case of commercial vehicles than in the case of passenger cars. Thirdly, since commercial vehicles have a high value per unit, the volume required for economic manufacture is much smaller for commercial vehicles than for passenger cars. This is a material consideration in this country where the total demand for vehicles is relatively small. Fourthly, the changes in designs are far less frequent in the case of commercial vehicles. A change in design becomes worthwhile only if it can result in a material reduction in the capital cost or the running cost, and such changes are relatively few and take place at fairly long intervals in the case of commercial vehicles because of their high cost per unit. Fifthly, under the existing conditions, the manufacturing programme for commercial vehicles could be far more complete than that for passenger cars, and could in fact cover 100 per cent. of the vehicle excluding proprietary components. In the case of cars, body panels have to be excluded from any manufacturing programme for the present. For these reasons, we are of opinion that the achievements of the automobile industry in this country should primarily be judged by its progress towards establishing the manufacture of commercial vehicles. We would not have considered it necessary to stress this obvious consideration but for the fact that two firms which are already heavily committed to the manufacture of commercial vehicles have put up new projects for passenger cars involving considerable additional capital expenditure. Sanctioning these projects obviously involves risk of interfering with the speedy implementation of the commercial vehicle projects, unless it is assumed that financial and technical resources are available in the country in such plentiful supply as to require no priority allocation. We would also like to add that although the need for granting priority to commercial vehicles is generally accepted, in the actual development of the automobile industry so far, commercial vehicles have lagged behind.

passenger cars, the greatest manufacturing progress so far recorded being in the case of a passenger car, namely, Hindustan Landmaster. The manufacturing cost of components (other than those conventionally deleted from the c.k.d. pack) required for the American cars, Dodge and Studebaker, and the medium car, Standard Vanguard, has also been found to be very high in relation to the corresponding deletion allowances (more than twice or three times such allowances). (Paragraph 22.2.2.) We are of opinion that it would not be desirable at this stage to sanction any new project involving heavy capital expenditure for the manufacture of passenger cars.

17.3. Among commercial vehicles, the manufacture of diesel vehicles obviously needs greater attention because of the rapidly increasing demand for such vehicles. This development, however, was not foreseen in 1953 and hence the manufacturing programmes adopted at that time related almost exclusively to petrol vehicles, though subsequently two projects for diesel vehicles were approved. It is obvious that in view of the decline in the demand for petrol vehicles, a review of the manufacturing programmes in respect of petrol engines for commercial vehicles is urgently necessary. Moreover, the manufacturing project with respect to one of the petrol engines, namely, Studebaker, has come into difficulties as result of frequent changes in design on the part of the foreign manufacturer. The sales of these vehicles have also not come up to expectations. As will be seen later from paragraph 22.2.2, Hindustan Motors' cost of production of components (excluding those normally deleted from the c.k.d. pack) for Studebaker trucks is more than two and a half times the corresponding deletion allowances. It is a matter for serious consideration whether it is at all prudent to continue to adhere to a model which has undergone frequent changes in design in the recent past, especially as the completion of the manufacturing programme relating to this model will involve further capital expenditure. It is, of course, primarily for Hindustan Motors themselves to make their choice between a petrol truck and a diesel truck, and it is not suggested that the approval already granted to their manufacturing programme for the petrol engine should be withdrawn if they still choose to implement it. Since, however, the outlook for petrol engines has become uncertain, a decision has to be taken whether the obligation to manufacture this type of engine (apart from freedom to manufacture it, if the manufacturers so choose) should continue to be imposed on Hindustan Motors as well as Premier Automobiles. Premier Automobiles have made relatively greater progress in the manufacture of petrol engines and, although their present capacity is only 3,000 engines a year, they would probably find it necessary, in course of time, to expand this capacity further to achieve economic production. The capacity of this firm, therefore, should be adequate for such demand for petrol engines as exists today or may be reasonably expected in the near future. We, therefore, consider that it would be advisable to relieve Hindustan Motors of their obligation to implement their manufacturing programme with respect to the Studebaker engines. This, however, should not affect their right to continue as approved manufacturers of trucks. The manufacturing proposals relating to the diesel engines to be fitted into such trucks are discussed in paragraph 18.4.1.

17.4. Public opinion in India would like to see the manufacture of a baby car established in the country in preference to light, medium or big cars. At the present level of prices, a car is still beyond the means of the common man, and the sales of no model of passenger car exceed 5 or 6 thousand per year. On the principle of the greatest good of the greatest number, there is no doubt that the investment of crores of rupees which is required for the manufacture of any passenger car model would serve a socially more desirable purpose, if it were to result in the production of a baby car rather than a light, medium or big car. In this respect, the development of the automobile industry in India has been in the reverse direction to that favoured by public opinion, because the one passenger car in the case of which substantial manufacturing progress has been made, namely, Hindustan Landmaster, is a light car and no manufacturing progress has so far been achieved in the corresponding baby car model, namely Baby Hindustan. Similarly, the manufacturing progress so far made by Standard Motor Products is confined to the medium car, Standard Vanguard, of which the maximum sales so far recorded are not more than 650 per year, whereas Standard 10 which is classed as a baby car still remains a wholly assembled vehicle. The problem of manufacture of a baby car, however, is a complex one and needs to be examined from various angles. In the first place, a car should not be classed as a baby car just because it has an engine of 1.2 litre capacity or of 10 or 11 H. P., unless its price is also maintained at an appropriately low level. The consensus of opinion at the public inquiry was that a baby car, properly so called, should not cost more than Rs. 7,000 to the consumer. In our opinion, even a price of Rs. 7,000 is a little too high. By this standard, none of the three small cars at present sold in India, namely, Fiat 1100, Standard 10 or Baby Hindustan, could really be classed as a baby car. Each of these cars is sold at a price far above Rs. 7,000 and this is not because their cost is inflated by the inclusion of any indigenous components (apart from those which are always excluded from a c.k.d. pack), but because their import cost itself, at the present inadequate level of duties, is high. If, therefore, a baby car, in the sense in which the common man understands the term is to be produced, the first obvious conclusion which emerges is that an entirely new model which is produced abroad at a price much lower than that of any of these small cars already approved for manufacture has to be introduced. It is the search for such models that has given rise to the proposals for Fiat 600 or the B.M.W. car. The two seater B.M.W. "Isetta" is a poor substitute for a baby car, because of its disadvantages in the matter of seating capacity and unsuitability for road conditions outside big cities. In view of these disadvantages, the demand for this type of car is not likely to be large under Indian conditions. In any case, since it is unsuitable for the use of families, it should rank low in our social priorities. Should a large demand for such cars develop, this would only represent an avoidable, and, therefore, wasteful use of savings on the part of the class of consumers for whom they are meant. So far as their commercial use as a substitute for "rickshaw" is concerned, the priority to be accorded to this type of vehicles should be considered *vis-a-vis* other types of commercial vehicles, and due consideration should also be given to the desirability of avoiding a sudden impact on the volume of employment in other forms of transport which are likely to be affected. We consider that the investment

required for the development of this type of car, or for that matter, Fiat 600, could be put to better use, if it were devoted to the manufacture of some of the essential components of trucks and buses.

17.5. Apart from the debatable point as to what should be the target price for a baby car and whether any of the existing small cars is likely to attain that target, one basic principle should be generally acceptable, namely, that the manufacture of a baby car should be so planned as to aim at the lowest possible cost. It follows, as a corollary, that in order to attain the lowest possible cost, the entire demand for a baby car should be concentrated on a single unit, and further, the production of such cars should be combined with some other type or types of vehicles in order to enable the overheads to be spread. A large volume is more essential for a baby car than for any other type of vehicle, because the demand for a baby car is more sensitive to price and secondly, because a baby car project is more vulnerable to changes in designs and specifications and speedy amortisation is, therefore, essential for at least a part of the equipment. Changes in designs are likely to be more frequent in the case of baby cars, because the competition is keener, and both the price and the running cost being low, even inventions which yield comparatively small economies become worthwhile. In West Germany, the prices of 'Opel' and 'Volkswagen' cars have been maintained at a low level, because their annual output (according to 1954 statistics) is as high as 1,30,000 and 2,10,000 respectively. In Italy, production of Fiat 600 was 1,50,000 in 1955. The automobile industry in India, however, has so developed that it is impracticable at this stage to plan the production of a baby car on the basis of the largest possible volume. Approval has already been given to manufacturing programmes in respect of four models of light and small cars to be produced by three units with entirely independent production facilities, when the total demand expected to develop by 1960-61 is only 20,000 for all light, medium or big cars (excluding jeeps). We do not rule out the possibility of one or two of these models capturing a large slice of the available demand, but in so far as they succeed in doing so, the other projects will suffer, and the effort and investment which will have been devoted to their implementation will be partially or wholly wasted. This would be unfortunate, because each approved project is believed to be part of an overall plan which Government is determined to implement successfully, and consequently, the grant of Government approval to any project should carry the implied assurance that no difficulties will arise, as a result of Government policies themselves, in the way of its successful implementation. In our view, the development of the automobile industry should not be allowed to follow the law of the survival of the fittest, but should be so planned as to avoid, as far as possible, any difficulties in the way of the smooth implementation of the projects already approved. We consider that it would be inconsistent with this principle to grant approval to any new project for the manufacture of a baby car, because it is bound to react adversely on the other small car projects under implementation, and will thereby aggravate the competitive situation described above. We are, therefore, of the opinion that the commitments already undertaken with respect to small cars preclude any prospect of a baby car being produced in India in the near future at the low

production cost desired by the consumer unless, of course, one of the existing small cars shows potentialities (hitherto unexpected) for achieving such cost.

17.6. Some of the considerations stressed above are relevant in the case of other types of vehicles also. In particular, it is necessary to ensure that the number of models approved in any class of vehicles is not so large as to reduce the volume of demand available to each below the minimum necessary for economic production. This important principle is sometimes overshadowed by the desire to maintain internal competition as a safeguard against undue increases in cost or deterioration in quality. It is often suggested that in each class of vehicles, there should be at least two units competing with each other, and in order to establish the need for an additional unit in accordance with this principle, a class of vehicle is sometimes so narrowly defined (*e.g.* 10-11 H.P. car) that there would appear to be no internal competition at present. We consider this approach to be wholly unsound. If planned development is the objective, it would be an admission of failure if, for the purpose of keeping costs and prices under control, it was found necessary to promote internal competition at the expense of economic volume, since this would involve a waste or uneconomic use of resources which it is the very object of planning to avoid. Sometimes the analogy of certain recent decisions to establish additional units for production of spare parts (*e.g.* pistons and piston rings) is cited in support of claims for additional units for certain types of vehicles. This analogy, however, is inapplicable, because the market for spare parts is much larger than that for vehicles and the need for restricting the number of manufacturing units is to that extent less. Judged by the desirability of assuring the existing units of an economic volume, there would appear to be no case for a diesel car project, for a Land Rover in addition to a Jeep or for an additional competitor for Fiat 1100 in the 10-11 H.P. car group (the need for which has been referred to by an Association).

17.7. Besides assuring all units of an economic volume, it is also desirable in some cases to see that the approved units obtain a large enough volume to achieve the economies of mass production. This, however, is a consideration which may reasonably be weighed against the desirability of maintaining internal competition; in other words, the claims of internal competition could be considered only after an economic volume is assured to all the units. In the case of commercial vehicles, for example, the minimum volume required for economic production is small (say 5,000) in relation to the total demand and the question, therefore, arises as to whether there should be a number of manufacturing units each having a volume of 5,000 or thereabout, or whether the available demand should be concentrated on fewer units in order to achieve the economies of mass production. No general principles can be laid down as to the relative importance to be attached to these conflicting considerations; the choice must depend on the merits of each case. However, in the case of commercial vehicles, the desirability of achieving the lowest possible cost is obvious, since commercial vehicles are going to play an increasingly important role in the transport system of the country and an increase in their costs may not only increase the cost of transport but may also have the effect of retarding the development of motor transport in general. From this point of view, it would be

desirable to instal any additional capacity required for commercial vehicles in existing units instead of setting up new units. Our approach to the proposals for a Commer Truck or additional Diesel Trucks (to be manufactured by the diesel engine manufacturers) is guided by this consideration. We view the proposals for additional diesel engine manufacturing units in the same light. If this high cost product of growing use in the transport system of the country is to be produced at the minimum cost, its production should be planned on the largest possible scale in a few units. We, therefore, see no merit in restricting the expansion of production of Perkins or Meadows engines (the two engines already approved) and sanctioning the installation of capacity for manufacturing new types of diesel engines in Hindustan Motors or Premier Automobiles. The manufacture of automobiles, as distinct from their assembly, is recognised to be a risky and costly venture, and multiplication of units does not help to minimise either the risk or the cost of this venture.

17.8. Sometimes a case is sought to be made out for an additional unit on the ground that an existing unit does not have enough capacity at present to meet the demand for its products, or that its foreign associates may not be in a position to increase their supplies immediately, or that it may not be able to raise the financial resources required to expand its capacity. We do not think that the advantages of large-scale production should be sacrificed on any of these grounds. Just because the demand for commercial vehicles is expected to increase to 40,000 by 1960-61, it does not mean that facilities should be laid out immediately for production of all these vehicles, if this involves setting up a larger number of units than would be warranted in the long run by the objective of achieving the lowest cost of production. Any unnecessary duplication of capacity resulting from multiplication of models would be a permanent handicap to the industry, while the disadvantages, if any, in postponing the attainment of complete self-sufficiency for some time and importing a part of our requirements could at worst be only temporary. If the foreign associates of any approved manufacturer are not able to step up their supplies (say of diesel engines or diesel vehicles) immediately, this would justify making temporary arrangements for imports of other models, but it is not necessary to start production of such models immediately, merely on this ground. Further, it is reasonable to assume that at the time of granting approval, due consideration was given to the ability of the various manufacturers to raise the required resources; if in any instance the assumptions on which the approval was given are subsequently found to be wrong, the project concerned should be reviewed and necessary arrangements made to place it on a sound basis. In any case, priority should be given to expansion of the existing units over establishment of new units, even though this may mean slower development. This will also be fair to the existing units, since none of them have had so much prosperity that it needs to be shared with new units.

17.9. In this connection, we would like to point out that since the manufacture of commercial vehicles is still in an early stage and considerable progress, calling for heavy capital investment, is yet to be made, it would be far better to direct investment to the manufacture of the essential components of commercial vehicles than to the setting up of additional factories for the production of

new models. Development of the latter kind creates an illusion of self-sufficiency by reducing imports of built-up vehicles, but it conceals the continued dependence of the industry on imports of finished and semi-finished components which is really its principal weakness. Except Hindustan Motors, (in respect of the Landmaster), all other manufacturers are still dependent on imports for several important castings and their production of various components merely consists of machining of imported rough-finished castings. A similar position obtains in the case of forged parts, because except Hindustan Motors and Premiers, others do not have forge shops of their own. Inadequate progress in this respect is largely because of the heavy capital investment required. It will place this industry on a sounder footing if investment were directed to setting up common production facilities for forgings, castings and certain items like the rear axle and chassis members, than to establishing manufacturing units for new models. The establishment of common production facilities for the purposes mentioned above will lighten the financial burden of individual manufacturers, avoid duplication of capacity and make for lower cost. This, of course, presupposes willingness on the part of the various units to collaborate with each other. Hitherto, the manufacturers in India have shown little inclination in this direction and much duplication of capacity has already taken place. The manufacturers have defended this on the ground that it gives them more effective control over cost and quality. We consider, however, that the problem of control over cost and quality is one which has to be tackled for the industry as a whole and duplication of capacity, which involves additional cost to the consumer, is no answer to that problem. We understand that Hindustan Motors and Premier Automobiles have plans to produce rear axles for their respective truck models separately, although the foreign firm which is going to collaborate with them in this venture is one and the same, namely, Rockwell Spring and Axle Co. of America. We are unable to see why a common arrangement cannot be made for production of this component. We feel that in future, manufacturers should be encouraged to explore the possibilities of mutual collaboration to the fullest extent and no avoidable duplication of facilities should be permitted merely on the ground of enabling a manufacturer to have effective control over his cost and quality. The request of Premier Automobiles for permission to manufacture diesel engines is partly based on this ground, and we are unable to support it, because, apart from other reasons given earlier, supply of diesel engines is one important field in which collaboration is taking place between different manufacturers and we do not wish to see this desirable trend reversed.

17.10. While the setting up of common production facilities will help considerably to keep down costs, it should not be assumed that this would permit the introduction of new models without adverse repercussions on cost. A considerable part of the investment required for production of components for any model consists of the value of patterns, dies, tools, jigs, fixtures, etc. and this investment has to be separately incurred for each model, although the basic equipment may be common for several models. Consequently, even when common production arrangements are made for any components, it is necessary to keep the number of types produced to the minimum in order to minimise the incidence of capital charges.

Limitation of types saves production time which is otherwise lost in frequent changes of tools, and by promoting specialisation, generally helps output and efficiency. During the course of our discussions, some manufacturers have hinted at the possibility of setting up a common foundry, a forge and a rear axle factory. If and when these arrangements materialise, they should not by themselves be considered to have paved the way for the introduction of new models of vehicles.

17.11. While we do not approve of additional projects being sanctioned at this stage for manufacture of diesel engines, we would like to see effective steps taken to meet the growing requirements of these engines during the next few years, if necessary, through imports of built-up engines. As far as we are able to gather, there is a world-wide shortage of diesel engines, and it has not been denied that owing to difficulties in the supply of raw materials and the unforeseen increase in world demand, some measure of rationing of supplies to the export markets is in existence in the United Kingdom. The position regarding Perkins Diesel engines is that production has to be scheduled about twelve months ahead of deliveries, and assurances of off-take are required from indentors to ensure production according to schedule. It would appear that "extraordinary efforts" are required (and being made) to maintain supplies at 1,000 engines per month subject to the above reservations. As regards Meadows Diesel engines, we are informed that Henry Meadows' own production of 300 c.c. type of engine (which has been licensed for progressive manufacture in India) was only at the rate of 25 engines per week in 1955, and is 45 per week in 1956. In 1957, the English Company expects to increase production to 250 engines per month. Its agreement with Automobile Products of India guarantees a supply of 75 per cent. of its production to the Indian market. Under these circumstances, while the Indian manufacturers of diesel engines may give assurances of their ability to meet the domestic demand, they may, in fact, find it difficult to do so. It may not be prudent to rely too much on any scheme which involves setting up of substantial additional capacity at the factory of the foreign manufacturer in order to meet Indian demand, especially when the policy is to meet the demand from domestic production within a short period. We, therefore, recommend that the position regarding the future supply of diesel engines should be kept under constant review, and that if the domestic production of these engines cannot be stepped up in the immediate future, measures should be taken temporarily to obtain additional imports of built-up engines to avoid scarcity.

17.12. While analysing the causes of the delay in the implementation of the various manufacturing programmes, we had occasion to point out that the manufacturers in India have generally tended to underrate the difficulties involved in implementing manufacturing programmes in respect of several vehicles simultaneously. Although Hindustan Motors, Premier Automobiles and Standard Motors had each undertaken to carry out more than one project, none of them was able to show appreciable progress in respect of more than one project during the last three years. Except in the case of Hindustan Landmaster, all other manufacturing programmes undertaken by these firms are in arrears. And yet every one of them has asked for permission to take up new projects and is promising to carry

out the old and the new projects simultaneously. Apart from the merits of these new projects which we have discussed separately, we consider it very necessary to emphasise, on practical grounds, that the task assigned to each manufacturer should be kept within manageable limits, and while considering each application for a new project, due consideration should be given to any arrears which the applicant may have on his existing projects.

17.13. We would like to record a few observations on the manufacturing programmes approved by Government and the manner of their implementation. In the programmes relating to some vehicles, e.g. Tata-Mercedes-Benz, Jeeps and Leyland Comet, the manufacture of certain important assemblies like the engine or the rear axle is to be undertaken after the production of the simpler components has been established. Since a firm cannot be said to be manufacturing a vehicle unless and until it has begun to produce the engine, transmission, rear axle, suspension and chassis members, it would be very desirable if these firms would endeavour to advance such of these assemblies as have been assigned to a late phase in their manufacturing programme to an earlier phase. Further, while the various manufacturing programmes specify the components to be produced in each phase, there is very often no stipulation as to whether the components are to be produced from indigenous materials or by machining imported semi-fabricated material. So long as a manufacturer is doing nothing more than machining an imported forging or casting, he remains wholly dependent on the foreign supplier and cannot be said to have established the manufacture of that component in the country. It is, therefore, very necessary that the approved manufacturing programmes should impose a definite obligation on the manufacturer to start production from indigenous materials within a specified time limit. In their memorandum to the Commission, Ashok Leyland have stated that "machining constitutes far too little of local manufacture and makes a very small contribution to India's balance of payments as the raw materials and semi-fabricated materials have to be imported from abroad". Since the Company's own production of vehicles is too small to enable it to produce its own forgings and castings, its programme of manufacture could be of real value to the country only when some arrangement is made to produce the forgings and castings required by it; and yet the programme, as approved, is not linked with any such arrangement. In some cases, while an engine is deleted from a c.k.d. pack, practically all its components are imported separately in finished form and assembled into an engine, and in this way more foreign exchange is spent than would have been required if the engine had not been deleted. This was the case with the Studebaker engine produced by Hindustan Motors for some time. We see no material advantage to the country in a manufacturing activity of this kind. The position with regard to the Studebaker engine has recently improved, but even now imported finished components constitute a very large proportion of the total materials used. We suggest that a firm's manufacturing progress should not be assessed merely from the assemblies deleted by it from the c.k.d. pack, but that due account should be taken of what the firm continues to import for the "production" of the assemblies concerned in spite of their deletion. In this connection, a reference may be made to the figures given by us in paragraphs 14.1.7., 14.1.13. and 14.2.9.

17.14. The procedure of assessing the manufacturing progress of a company from its deletions from the c.k.d. pack has proved very misleading in the past. In 1955, Hindustan Motors deleted from their import applications for Studebaker trucks all the assemblies which they had undertaken to delete from the beginning of the year, and yet later in that year import licences were obtained precisely for the same assemblies. A change in the design of the engine had completely upset the Company's production programme. Standard Motors were understood to have deleted cylinder blocks from their c.k.d. packs for Standard Vanguard by the middle of 1955, but their production of cylinder blocks is still on a small scale and only 53 blocks were machined during January-April, 1956. (For the effect of small volume on cost, see paragraphs 22.2.2. and 22.2.3.) We are of opinion that a manufacturer should not be deemed to have fulfilled his obligations with respect to the manufacture of a component until his production of that component is sufficient for the number of vehicles assembled by him. In paragraphs 14.2.4, 14.2.6. and 14.3.4. above, we have given figures to show that although some firms (e.g., Premier and Standard) have claimed to have developed certain components, their actual production of such components has fallen short of their requirements. We suggest that the manufacturers should be required to inform Government of the capacity proposed to be installed by them for the components on their manufacturing programme and to give satisfactory reasons for any marked differences between the proposed capacity and their requirements.

17.15. While the need for a phased programme for individual units is generally recognised, we find that the importance of phasing the development of the industry as a whole is not always appreciated. A phased programme serves a two-fold purpose; it enables the necessary effort to be spread over time and it also helps to avoid an excessive increase in cost. The latter consideration is of very great importance in the planning of the automobile industry. As each major component is manufactured locally, the cost of the vehicle goes up, with the result that if the production of too many components is started simultaneously, the cumulative increase in cost is likely to place an excessive burden on the consumer. On the other hand, if the development of the industry is suitably phased, the burden on the consumer is likely to be much smaller, because, by the time any new components are taken up for development, the production of some of the components taken up earlier is likely to have been established and their cost of production reduced. A cumulative increase in costs will thus be avoided or kept to the minimum. In the planning of the automobile industry, there is risk of this important principle being lost sight of. It is true that each individual manufacturer has adopted a phased programme, but since there is no co-ordination between the different programmes and each has been phased differently, it is possible that at some stage, taking all of them together, too many components may be found to be included in the same phase. The situation is further complicated by the various ancillary projects outside the manufacturing programmes of the major producers. In so far as several projects affect the cost of one and the same vehicle, while the burden of financing and executing them is divided among several producers, the burden on the user of the vehicle cannot be divided and the cumulative impact of all the projects on the total cost of the vehicle may strain his capacity.

Phasing should be designed not only to ease the difficulties of the producer but also those of the consumer. The wind has to be tempered to the shorn lamb, especially when the lamb is one and the sharers are many.

17.16. It may appear that the cost of each vehicle is affected only by the projects which specifically relate to that vehicle and not by those with which other vehicles are primarily concerned, or by those primarily designed to cater to the replacement market. This, however, is not always the case. The products of ancillary industries are used as original equipment in different types of vehicles and their cost of production, therefore, affects the cost of several vehicles. Secondly, any Governmental assistance intended to encourage the production of any component has to be granted, as a matter of administrative necessity, without distinction as to type or make of the component. Such assistance may take the form of import duties or import control; but, in either case, assistance given to any project will affect the cost of several vehicles irrespective of whether the project is specifically designed for one or all of them. In so far as such assistance is withheld from any project, by avoiding the necessary increase in import duties or restrictions on imports, the producers concerned have difficulties (or inadequate incentive) in implementing the project. We have given elsewhere (Paragraph 22.2) figures to show how, at the current levels of import duties, the implementation of some of the manufacturing programmes results in reducing the profit margins of the producers concerned. Simpson & Co. have complained that continued cheaper imports of some of the components of Perkins Diesel engine which they have developed make it impossible for them to compete in the replacement market for those components. Thus, inadequate appreciation of the need for phasing the development of the industry as a whole, resulting in lack of co-ordination between the manufacturing programmes of major producers, and between those of the major producers and the ancillary industries, entails the risk that either the burden on the consumer may be unduly increased or, since no distinction as to types or makes can be made in the administration of import duties or import control, assistance in these forms may be denied even when needed and this may adversely affect the proper implementation of the various projects. We have found it necessary to elaborate the point at this length, because we wish to avoid the danger of approval being given to too many ancillary projects simultaneously or to risky and costly ventures like the manufacture of body panels for passenger cars, without adequate consideration of the cumulative effect of such projects on the cost of vehicles. We do not rule out the manufacture of any component, but wish to see each project assigned to the appropriate phase of development, the more costly projects being undertaken after the cost of some of the projects already in hand have been brought under control. The desire for a 100 per cent. Swadeshi car is understandable, but since this involves expensive projects like the manufacture of body panels, it must be treated as a somewhat distant goal, unless, of course, no Government assistance is claimed for carrying out such projects.

17.17. We have scrutinised the agreements concluded by the approved manufacturers with their foreign associates. Many of these have been evolved out of the kind of agreement which normally

exists between an assembler and his principal, and the modifications made in it to provide for progressive manufacture in India are often not such as would guarantee the fullest backing and collaboration of the foreign firm in carrying out a programme of manufacture. Since the privileges granted to the approved manufacturers are of direct benefit to their foreign associates also, it is important to ensure that the agreements provide necessary safeguards for the consumer in the matter of prices and supplies, and clearly define the obligations of the foreign firms with regard to the establishment of manufacture in this country. In both these respects the existing agreements, with one or two exceptions, leave much to be desired, and this is at least partly responsible for the difficulties experienced by the Indian manufacturers in carrying out their manufacturing programmes. One of the objectives of the agreements is to assure the Indian manufacturer of the availability of the components needed by him to supplement his own production, but this is subject to any changes in designs and specifications which the foreign firm may introduce. We recognise that no foreign firm catering to a large world market would agree to any restrictions on its liberty to introduce changes in designs and specifications, but we see no reason why the agreements should not provide for some general undertaking on the part of the foreign firm to have due regard to the repercussions which such changes may have on the production programmes of its associate in India, and to make suitable transitional arrangements to the extent practicable to cushion the impact of such changes. The absence of any provision against this contingency in the existing agreements becomes all the more regrettable, because many of the difficulties of Indian manufacturers during the past three years have been due to changes in designs and specifications. Secondly, the deletion allowances obtained by the Indian manufacturer have an important bearing on his cost, and it is very necessary that a detailed schedule showing the allowance to be received as each component is deleted should be established at the time of the agreement. Some agreements do not contain even the obvious provision that deletion allowances granted for individual components should be such that their sum total would be equal to the value of the c.k.d. pack. Even this provision does not, of course, safeguard the Indian manufacturer against large divergences between the deletion allowances and the prices charged in the c.k.d. pack for individual assemblies, especially the more important ones. The existing agreements, with one exception, contain no indication whatever as to the conditions under which deletion allowances may be varied, i.e., whether such variations may be made only in the event of variations in cost, or also in the event of changes in the prices of the c.k.d. pack according to market conditions, or without either of these reasons, at the discretion of the foreign associate. An important safeguard against increases in the costs of the c.k.d. packs is thus lacking. Thirdly, although we recognise that the extent of co-operation between any two firms depends more on the kind of relationship which exists between them than on the terms of their formal agreement, we feel that since these agreements are of interest to the economy as a whole, there is advantage in spelling out, in as great a detail as possible, the commitments of the foreign firm with regard to the facilities required for manufacture in India. These facilities include the provision of technical assistance and foreign technical personnel, arrangements for the training of Indian personnel abroad, assistance

in procuring machinery, equipment and scarce raw materials and in securing the necessary collaboration from manufacturers of proprietary components and holders of foreign patents. Where the foreign firm has a financial stake in the success of the Indian venture, there would be little possibility of any lack of co-operation on its part, but, in all other cases, it is necessary to obtain from the foreign associates definite commitments in order to ensure due implementation of the manufacturing programmes.

17.18. We suggest that the above considerations should be borne in mind whenever there are opportunities for revising the existing agreements. We have refrained from giving specific examples, because the manufacturers desire that the terms of their agreements should be kept confidential.

17.19. Having regard to the very high standard of technical competence required of workers in an automobile factory, and the measure of reliance which the manufacturer has to place on the efficiency and thoroughness of the workmen for strict maintenance of standards, considerable emphasis has to be laid on adequate provision being made for properly equipped 'trainee shops'. We regret to observe that no trainee shops as such have been established in the factories of any of the approved manufacturers, except Telco. The trainee shop in Telco provides for training the workers *before* they are admitted to the factory and is equipped with excellent facilities for the purpose. We strongly recommend that all other manufacturers should set up similar trainee shops and the training programmes should include construction and design of auto engines, training in various workshop operations, handling of automatic and precision machines, and the use of gauges, instruments and testing apparatus. The trainee shops should be in charge of competent technical personnel, and should be liberally financed by the factory.

17.20. If the automobile industry in India is to become independent of foreign collaboration, it is necessary for each manufacturing unit to develop its own facilities for designing of jigs and tools. It will be long before the Indian industry is able to attain complete self-sufficiency in this matter, but a beginning should be made without delay.

18.1. In the light of the general principles discussed by us in the preceding section we intend to deal in this section with proposals concerning the manufacture of new vehicles and new models or types of vehicles which have been made to us in the course of this inquiry.

Fresh proposals for manufacturing programmes

18.2.1. *Manufacture of Baby Hindustan with a common overhead valve engine with Landmaster.*—The present engine fitted to Hindustan Landmaster cars is a side valve engine. We are informed by Hindustan Motors that to secure maximum economy and efficiency of production, their associates, the British Motor Corporation have developed a new engine which will be used in a number of models ranging from the baby to light and medium cars, with about 95 per cent. of common parts. Hindustan Motors propose to adopt this

engine in place of the existing side valve engine. The Landmaster version of the new engine will have a cubic capacity of 1485 c.c., and the same engine, fitted to a baby car, will have a reduced bore of 1150 c.c., with correspondingly smaller pistons and gudgeon pins. In all respects, the engine of the baby car will be similar to the Landmaster version, which means that all casting, forging and machining operations will be common to the two engines which will differ from each other only in the size of the bore. Machining of such major components as cylinder head, crankshaft, camshaft, oil sump and valves will be common. The gear box used with the present Landmaster engine will be used both in the future Landmaster as well as Baby car. The existing front suspension (with some slight modifications) and rear axle will be used in the future Landmaster and Baby cars. Hindustan Motors are taking steps to obtain the necessary tools and machinery for the manufacture of the new overhead valve engine. Hindustan Motors have informed us that they have no option but to fall in line with the changes proposed by their associates, the British Motor Car Corporation, as otherwise the latter will be unable to supply them with certain essential components and parts required for the manufacture of Landmaster cars.

18.2.2 As the change in model referred to above has been in the offing for some time, Hindustan Motors were unable to implement their manufacturing programme for Baby Hindustan. As a consequence, Government suspended the issue of further Licences for this model. The final decision regarding the manufacture of one type of engine for both Landmaster and Baby Hindustan was taken only recently and Hindustan Motors have now asked for renewal of permission to manufacture Baby Hindustan cars.

18.2.3. We consider that the proposal put forward by Hindustan Motors with regard to Baby Hindustan has the advantage that two important assemblies, *viz.*, rear axle and front suspension are proposed to be deleted straightaway from the c.k.d. packs. In this sense, the manufacture of this vehicle would appear to have progressed much farther than that of the other two small cars already approved. We, therefore, recommend that the permission granted to Hindustan Motors to manufacture Baby Hindustan cars should not be withdrawn. This would also be in accordance with our suggestion in paragraph 22.8 below that the import facilities granted to various manufacturers should be in fair relation to their manufacturing progress. Although for various reasons, Hindustan Motors have not been able to implement their programme in respect of Baby Hindustan, they have made enough manufacturing progress generally to deserve this facility. Moreover, our recommendation does not involve the introduction of a new model but only the continuance of a model already approved.

18.2.4. The above recommendation is independent of the desirability and timing of introducing a common engine for both Landmaster and Baby Hindustan which, if successful, will bring about a reduction in the cost of both models. On this question, a technical examination is required which we have not been able to carry out to ascertain whether Hindustan Motors can avoid or postpone the introduction of the new engine after it has been adopted by their associates in the United Kingdom.

18.3.1. *Land Rover cars*.—Hindustan Motors have submitted manufacturing programmes for the following types of Land Rovers :—

- (a) 86" wheel base—two-wheel drive which will be fitted with Landmaster engine and gear boxes;
- (b) 107" wheel base—four-wheel drive which will be fitted with a V-8 engine and Land Rover gear boxes.

It is expected that both the front and rear axles for the above vehicles will be manufactured in 1957-58. The engine and gear boxes for the two wheel drive have already been developed, but the engine and gear boxes of the V-8 engine are expected to be completed by the end of 1958 or early in 1959. Hindustan Motors claim that it is essential to develop the manufacture of these additional types of vehicles in order to utilise the excess capacity in their factory.

18.3.2. While we have sympathy with the Company's desire to diversify its manufacturing activities, we are not convinced that its capacity will not be fully occupied in implementing the programmes it has already in hand, namely, those concerning the Landmaster, the Baby Hindustan and the Studebaker car and truck. We have drawn attention elsewhere (paragraph 17.12) to the difficulties involved (and experienced by this very firm) in implementing several projects simultaneously. As regards the two-wheel drive version of the Land Rover, it represents substantially an adaptation of an existing vehicle, *viz.* Hindustan Landmaster and we see no objection to it, provided no technical difficulties are involved. It is not likely to create serious difficulties for any other project, and may be of some help to the Landmaster car on which the firm is making a substantial loss at present (Paragraph 21.10). With regard to the four-wheel drive Land Rover, however, which belongs to the Jeep class, we are unable to support the Company's request, because the demand for Jeep type vehicles is expected to be no more than 5,000 per annum even by 1960-61; and, apart from temporary spurts caused by electioneering or other activities, the current demand is below that level. We do not think that there will be scope for more than one manufacturer for this type of vehicle at present. Hindustan Motors have claimed that the manufacture of Land Rover would provide an expanded volume for some of the assemblies already developed by them, but while we appreciate this objective, we do not think that it should be promoted by adopting a proposal which is likely to have serious repercussions on an existing approved project. (See paragraph 17.5 also.)

18.4.1. *Diesel engines for trucks*.—Hindustan Motors have asked for sanction for the progressive manufacture of the British Motor Corporation 5.1 litre Diesel engine for fitment (with conversion kits) into their Studebaker trucks. Premier Automobiles have also applied for permission to manufacture the Deutz air-cooled Diesel engine. Both the companies are at present fitting Perkins P-6 Diesel engines to their trucks. They have based their requests on the following grounds : (a) that the small number of petrol engines (for trucks) for which there is demand at present does not afford sufficient volume for economic manufacture, (b) that a truck producer should not be wholly dependent on diesel engines of other people's manufacture when the volume of demand for diesel trucks is continuously on the increase, and (c) that the two approved manufacturers, namely,

Simpson & Co. Ltd., (Perkins engines) and Automobile Products of India Ltd., (Meadows engines) will not be in a position to satisfy the country's demand for diesel engines during the years to come.

18.4.2. We do not support this proposal for the reasons given in paragraphs 17.7 and 17.9 above.

18.5.1. *Fiat 600 (Baby) cars.*—Premier Automobiles have requested that we should recommend their programme for the manufacture of Fiat 600, which is a 633 c.c. car giving more than 50 miles per gallon of petrol and is comparatively low priced. Premier Automobiles expect to be able to market this car round about Rs. 7,300. It is a four seater car with a rear mounted engine, and is reported to be very popular in Europe. Premier Automobiles have stated that additional investment of Rs. 1 crore will be required for the manufacture of this car and that they hope to have an annual volume of 3,000 cars.

18.5.2. We have already given our views in paragraphs 17.2, 17.4 and 17.5 on the prospects of manufacturing a baby car and the general question of sanctioning any new project for the manufacture of passenger cars. Moreover, Premier Automobiles have still a great deal to do to fulfil their existing commitments which are already in arrears. (See paragraphs 14.2.4, 14.2.5, 14.2.6, 14.2.11 and 17.12.) For these reasons, we do not recommend acceptance of this proposal.

18.6.1. *O.M. 636 Mercedes-Benz Diesel Engine and related vehicles.*—Telco have submitted a proposal that they should be allowed to undertake the progressive manufacture of the Mercedes-Benz O.M. 636 diesel engine which is a small 1.8 litre four cylinder engine capable of developing 46 B.H.P. at 3,500 R.P.M. with very low fuel consumption and a multiplicity of applications. This engine is fitted as original equipment on the following vehicles of Daimler-Benz manufacture: The 180 D diesel passenger car, the type 319 light truck, bus and other road vehicles, the Unimog tractor, fork-lift trucks, excavators, cranes, hoists, road rollers, drilling units, compressors and pumps, stationary and mobile industrial machines, fishing boats and marine units. The engine may, in an emergency, be run on vegetable oils such as coconut or castor seed oil.

18.6.2. The Mercedes-Benz type 319 light trucks with wheel base of 112½" and gross laden weight of 7,900 lbs. are reported to be 1 to 1½ ton vehicles consuming one gallon of diesel oil for 30 miles; the buses have been designed to carry 16 passengers, and are suited for police patrols, office transport and long distance tourist transportation. They can operate on narrow roads and hilly areas. The 180 D four cylinder car has accommodation for six passengers and has considerable fuel economy. There are also 180 D ambulances and station wagons.

18.6.3. If Telco is permitted to undertake progressive manufacture of the O.M. 636 diesel engine and to use it for the various purposes mentioned above, there are bound to be adverse effects on the manufacturing programmes already approved for light trucks (one sector where petrol trucks are still in demand), passenger cars (where

too many models have already been approved) and jeeps (for which the total demand is expected to be only 5,000). In this connection, we invite attention to our comments in paragraph 17.2 with regard to the low priority to be attached to new projects for manufacture of passenger cars and those in paragraph 17.5 with regard to the principle of avoiding adverse repercussions on projects already approved. Further, we do not think that it would be advisable for Telco to undertake additional commitments in relation to the manufacture of a new multi-purpose engine before they have completed their undertakings in regard to the truck project in hand. We, therefore, recommend that the Telco proposal should not be approved.

18.7.1. *Manufacture of 112" wheel-base chassis by Standard Motor Products of India, Ltd.*—Standard Motor Products have been permitted to undertake the progressive manufacture of a diesel engine suitable for the Fergusson tractor—Type T.E. 35. They propose to develop a 112" wheel base chassis for a truck capable of carrying a load of 25 cwts. and fitting it with the above mentioned diesel engine. They have applied to Government for an expansion licence covering this proposal.

18.7.2. We would normally see no difficulties in proposals involving only adaptations of existing models which entail neither additional capital expenditure nor serious adverse effects on other projects. In the present instance, however, Standard Motors have furnished no details as to the extent of commonalty between the proposed truck chassis and their Standard Vanguard Car, and it is, therefore, not clear to us as to how far the proposal constitutes an additional undertaking on their part. We are of the view that having regard to the projects which the Company has already on hand and to its resources, it would be advisable for it not to increase its commitments for the present.

18.8.1. *B.M.V. Motocoupe "ISETTA" cars.*—The Chief Secretary of the Saurashtra State Government has forwarded to us a proposal from Bayerische Motoren Werke, Munchen, for establishing a motor cycle and small car factory at Bhavnagar for the progressive manufacture of the B.M.W. Motocoupe 'ISETTA' cars. The Isetta is reported to be a four wheel convertible vehicle accommodating three passengers with a maximum speed of 52 miles per hour, petrol consumption of 85 miles per gallon, and powered by a 300 c.c. single cylinder 4 stroke engine. We are informed that over 25,000 of these cars have been sold in Europe at the equivalent of about Rs. 3,000 each ex-plant. The Saurashtra State Government state that they have agreed to provide the B.M.W. with the facilities usually provided for other industries in the State, and the Chief Secretary has requested us to consider the proposition along with other similar ones.

18.8.2. The principle involved in this proposal has already been discussed in paragraphs 17.2, 17.4 and 17.5 to which attention is invited. In our view, the investment required, which has been estimated at Rs. 2 crores, would not be justified by any priority which could reasonably be attached to this vehicle of limited utility. We are, therefore, unable to support this project.

18.9.1. *Proposal to manufacture Commer 3 and 5 ton commercial vehicles.*—The Automobile Products of India Ltd. wrote to us in May last that if we were satisfied that a case existed for sanctioning another programme of progressive manufacture of commercial vehicles, an opportunity should be given to them to submit a scheme for the manufacture of Commer 3 and 5 ton commercial vehicles for passenger and goods transport. The Company has been approved as progressive manufacturers of Meadows diesel engines, 'Borg and Beck' clutches, 'Lockhead' brake systems and 'Firestons' brake linings, and claims that it enjoys certain advantages in regard to manufacture of commercial vehicles through having undertaken the manufacture of the engine and the components referred to above. Subsequently, in July 1956, the Company wrote to us that, if in our view, the existing manufacturers of commercial vehicles would be able to meet the demand for the next few years, the Company would not press its case for consideration.

18.9.2. In the circumstances stated and for the reasons given in paragraph 17.7, we do not recommend this proposal.

19.1. With the exception of sales to Government, all sales of automobile vehicles are effected by manufacturers only through their accredited dealers. The final price of a vehicle to the consumer, therefore, necessarily includes a commission to the dealer. In accordance with an understanding accepted by the manufacturers at a meeting convened by the Ministry of Commerce and Industry on 10th January 1955, the 'mark up' on ex-factory prices of vehicles representing dealers' profit has been subject, since April 1955, to a maximum of 17½ per cent. Prior to that date, the 'mark up' was between 20 and 25 per cent. of the ex-factory price. From the replies received from manufacturers to our questionnaires, we understand that the 'mark up' at present, in the case of all vehicles ranges from about 15 per cent. to 17½ per cent. except in the case of jeeps for which the commission is a fixed amount of Rs. 1,569 per vehicle.

19.2. In June 1956, the Ministry of Commerce and Industry suggested to manufacturers that, instead of a 'mark up' on a percentage basis on the ex-factory prices of vehicles, they should adopt a fixed amount for each type of vehicle depending upon its size. This suggestion did not find favour with the manufacturers.

19.3. From the evidence received by us from several large dealers all over the country, we find that almost all of them surrender a percentage of their commission to purchasers of vehicles, the percentages so surrendered ranging from 5 to 10 depending on the bargaining capacity of the purchaser. Generally speaking, the explanation given for surrendering a portion of the commission is that buyers in India are 'discount minded' and are rarely satisfied unless dealers share their profits with them. Two conclusions suggest themselves. One is that the commission available from the 'mark up' of 17½ per cent. is not fully retained by the dealer, and that the amount so retained is normally somewhere between 7½ to 12 per cent. The other is that a purchaser with stronger bargaining capacity is able to recover a larger amount by way of rebate. The present arrangement does not, therefore, result in equality of treatment being meted out to all purchasers of vehicles.

19.4. Briefly, the duties and responsibilities of dealers in automobiles are as follows :

- (a) to promote the sales of the vehicles concerned;
- (b) to arrange for after-sales service and technical advice;
- (c) to arrange for the stocking of spare parts; and
- (d) to arrange for periodical servicing, repairs and maintenance.

Normally, in order to carry out the above duties, a dealer has to invest substantial funds to maintain vehicles for demonstration and ready delivery, to stock spare parts, and to run a repair and maintenance shop with requisite equipment and facilities. Most dealers, however, do not hold a large number of vehicles in stock while as regards spare parts, only fast moving items offering large and assured profits are stocked. Only a few workshops in the country—and these are largely in big cities—have high class technical equipment involving some capital outlay. Most of the work done in these workshops relates to passenger cars, while in the case of trucks and commercial vehicles the demands on dealers for after-sales service, technical advice or maintenance, are small. We see no justification for maintaining the commission to dealers at the existing rate of 17½ per cent., and are convinced that there is a good case for reducing it in respect of both passenger cars and commercial vehicles.

19.5. We recommend that the maximum 'mark-up' on the ex-factory price to cover dealers' commission should be Rs. 1,000 per vehicle or 10% of the ex-factory price, whichever is less, for passenger cars and jeeps, and Rs. 1,000 per vehicle or 7½% of the ex-factory price, whichever is less, for trucks, buses and other commercial vehicles.

20.1. In accordance with the terms of reference, we are required

Fixation of fair prices (a) to determine the fair ex-works and selling prices of the various types of motor vehicles manufactured in the country, and (b) to state how the prices should be revised from time to time as more and more components begin to be produced in the country under the approved manufacturing programmes of the several units.

20.2. We invited the views of the manufacturers as to the procedure to be adopted for revising the prices of automobiles from time to time. In reply, all manufacturers emphasised the difficulties and risks involved in periodical fixation of prices by Government. Some manufacturers expressed themselves in favour of a suitable formula being evolved for this purpose, while others considered it impracticable to devise such a formula and suggested that the manufacturers should be left free to vary their prices in fair relation to their costs.

20.3. The present system of price control is a by-product of the system of protection introduced in 1953. The system involved granting of exclusive privileges of import and manufacture to a few selected units and a reduction in the import duties of automobile components with the avowed object of bringing down the prices of automobiles. Price control was introduced with a twofold purpose : (1) to safeguard the consumer against any possible abuse by the

manufacturers of privileges granted to them, and (2) to ensure that the benefit of the reduction in import duties would be passed on to the consumer, thereby fostering an increase in the demand for automobiles. The system of price control, however, was introduced by a gentlemen's agreement with the firms concerned and the prices adopted for the purpose were only those voluntarily suggested by the manufacturers themselves. No cost investigation was undertaken by Government and no question arose as to whether or not the prices agreed to by Government were fair or otherwise, having regard to the actual costs of production of the firms concerned and the rates of profit which could be considered fair in each case. In fact, the prices fixed for some of the vehicles did not include an adequate margin of profit. After the system had been in operation for a few months, however, the firms applied to Government for revision of prices and Government sanctioned *ad hoc* increases after departmental examination of the data submitted by the firms. In most cases these *ad hoc* increases were on account of increases in the landed costs of the vehicles concerned. In some instances, however, price increases were claimed not only on the ground of higher landed costs but also on the ground of the higher costs of production of indigenously produced components. It was at this stage that the question of price fixation was referred to this Commission, because it became clear that the question of price control could no longer be considered independently of the whole series of question concerning the development of the industry as a whole. The conflict of objectives involved in having to concede increases in prices under a system of price control which was introduced with a view to bringing down prices came into sharp focus.

20.4. We have found it necessary to refer to the background of this issue in order to put the problem in its correct perspective. It will be appreciated that although a system of price control has been in operation in relation to the automobile industry for some time, the problem of fair prices of indigenously produced automobiles, with all its attendant difficulties, is being faced for the first time in this inquiry, since the control prices hitherto in force were largely those which were voluntarily fixed by the manufacturers themselves. The problem is rendered particularly difficult by the two conflicting considerations which are required to be taken into account, namely, the need for encouraging the progressive manufacture of automobiles by so safeguarding the position of manufacturers that despite the increase in costs involved, there will be no losses or undue reduction of profits, and on the other hand, the desirability of maintaining prices as low as possible in order to foster the demand for automobiles, which was, historically, the original objective of price control.

20.5. Our terms of reference require us to determine "fair prices" and not "maximum prices". "Fair prices" are normally understood to mean prices which cover the cost of production and leave a fair margin of profit. "Maximum prices" may be equal to or above fair prices. In the present context however, the intention is to adopt fair prices themselves as maximum prices, thus requiring the manufacturers to maintain their prices equal to or below fair prices. Under this arrangement, if the actual prices happen to be

lower than fair prices, the manufacturer will have no chance to make up the consequential loss or short-fall in the fair profits due to him so long as price control continues to operate on this basis. Obviously, the adoption of fair prices as control prices is feasible only where the conditions are such that there is no risk of the manufacturer receiving less than fair prices. This, for example, is the position in the case of steel and cement, because of shortage of these commodities, and also in the case of rubber tyres and tubes, because of the way that industry is organised. In the automobile industry, however, despite the elimination of foreign assemblers, there is still a considerable amount of internal competition (some of it deliberately maintained as a desirable feature of the development programme for this industry) and this has its effect on the level of prices. Under the present system of protection, this internal competition assumes a somewhat queer form. On the one hand, no manufacturer, as a necessary condition of survival, can afford to fall behind in the race for maximising his business, and his prices have, therefore, to be maintained at a strictly competitive level; on the other hand, each manufacturer is expected to place an increasing handicap on himself by pushing forward his programme of manufacture and thereby increasing his costs. There are, moreover, significant differences in the competitive positions of different manufacturers at present: under the manufacturing programmes as approved by Government, some have undertaken, and/or implemented, less onerous obligations than others; those who are importing a larger proportion of their vehicle, and whose costs are consequently lower, are able to quote more competitive prices than others who have deleted a larger proportion of their c.k.d. pack; and the current import control policy also, with regard to the volume of imports permitted to approved manufacturers, allows full scope for competition between them in spite of the differences in their competitive position in the above respects. (See paragraph 21.10. Also, 15.4.) Under these circumstances, it is inevitable that the prices of the various competing vehicles in India should be influenced more by the conditions of demand than by their respective supply costs and it is, therefore, not possible to ensure that the prices actually recovered by the manufacturers will not be lower than any fair prices that may be determined by us. For example, the present competitive position of Hindustan Landmaster is such that although it is currently sold below its fair price, no appreciable increase in price is possible in the immediate future without adverse effects on sales. As stated above, if the control prices are to be always equal to current fair prices, a manufacturer in this position will have no chance to recoup any losses he may incur as a result of having to reduce his prices temporarily below fair prices. In such a situation, it is obviously not equitable to adopt fair prices as the maximum prices. As the other manufacturers proceed with the implementation of their manufacturing programmes, they may find themselves in the same position in which Hindustan is today and may not be able to recover the full increase in their cost of production. If any of them are today receiving prices in excess of fair prices, the resulting profits, provided they are not frittered away, will help to absorb the increase in costs which will inevitably occur in future as their manufacturing programme is implemented. Prices will thus be kept stable over a period, and it is normally the policy of automobile manufacturers all over the world to avoid frequent changes in prices. However, no such evening out

of costs and prices over a period will be possible, if the manufacturers are always subject to a system of price control which fixes maximum prices at no higher than fair prices. It is also not practicable to widen the concept of fair prices to include an adjustment for past profits or losses, because, for one thing, this will make for wide variations in prices, and secondly, there is no certainty that the manufacturer will actually be able to recover the prices determined to be fair by us. For these reasons, we are convinced that the fixation of "fair prices" as maximum prices in the case of this industry will not be in accord with the realities of the situation and that it is likely to militate against the maintenance of stable prices and the smooth development of the industry.

20.6. Apart from the desirability or otherwise of fixing fair prices, several practical difficulties arise in determining fair prices themselves. The industry is in a growing stage, and the obligations imposed on the several units for implementing their progressive manufacturing programmes are such as to produce almost day to day changes in the structure of their costs. The usual method of estimating future cost is by taking the actuals for a past period as the basis and allowing for variations in the level of output and individual elements of cost. In this case, however, the variations to be allowed for are so many that the actuals cease to be a reliable basis of estimation. The manufacturers' own plans with regard to the production of components cannot be taken for granted, in view of the fact that in the past their performance has fallen short of their plans. The actual costs often relate either to experimental production or to a level of output which is far below the total requirements of the firm. In the former case, the percentage of rejections, the production time taken, etc. are so high that they cannot be taken as representative of the future and no basis exists for estimating future improvement, either. Even in the case of Telco where production planning is carried out in meticulous detail under the care of foreign technicians, no data are available at this stage with regard to such basic matters as the quantities of raw materials and the production time required (under Indian conditions) for the manufacture of individual components. In some cases, e.g., the new 259 c.c. engine for the Studebaker truck, fresh tooling is required and it is difficult to estimate the capital charges to be provided on this account. Similar difficulty arises in the case of other units such as Telco, Premier, Standard etc. which are proposing to instal and bring into operation fresh equipment within the next six or twelve months. In the case of all vehicles except Hindustan Landmaster, indigenous production of components has been sufficient only for a proportion of the number of vehicles assembled, and in some cases, the proportion has been negligible, (see paragraphs 14.2.4, 14.2.6, and 14.3.4); since, however, the manufacturers are expected to fulfil their obligations, no other assumption can be made than that they will increase their production of components to the full extent of their requirements. Yet, it is obvious that an estimate of future costs made on this basis may go wide of the mark and result in awarding the manufacturers excessive profits. In the case of some vehicles, e.g., petrol trucks, considerable uncertainty exists with regard to future demand, while the demand for certain other vehicles, e.g., diesel trucks, is so rapidly expanding that the proportion of purely assembled vehicles in the total output may turn out to be larger

than is now assumed (see paragraph 10.2) and this will influence the distribution of over heads and the entire structure of costs of the firms concerned. Variations in the landed costs of c.k.d. packs are even more unpredictable, and imported components and materials still constitute the major portion of the total costs of most of the vehicles. These are only a few examples of the numerous practical difficulties which arise in the determination of even the basic costs in the case of this industry. These difficulties are likely to operate more or less throughout the development period, so that there is no reason to hope that the element of guess work required will be smaller in the future price periods.

20.7. When the increases in costs during the course of a price period are expected to be of substantial magnitude, the normal method of providing a contingency allowance is not adequate to safeguard the interests of the producer. The contingency allowance has to be at a uniform rate for all the producers, whereas their costs may go up to varying extent. Nor would it be always practicable to leave the necessary adjustments to be carried out at fixed intervals, because the adjustments may accumulate to a large figure in the meanwhile and the trading conditions at the particular point of time which Government may choose for price revision may not permit a large increase in prices. Under these circumstances, there will be no option but to provide for revisions of prices as and when needed, but such frequent revisions may have an unsettling effect on trade.

20.8 Price revisions which are necessary on account of significant increases in cost must take place expeditiously in order to avoid losses to the producer. If on every occasion such revisions are to be preceded by a cost investigation, they are likely to take time. If, on the other hand, the manufacturers are given the freedom to vary their prices in the first instance subject to subsequent review by Government, the position may be worse, because every time a price revision is called for, there may be two revisions instead of one, and this will give rise to considerable uncertainty. We have considered whether provision could be made for automatic revisions by the application of some simple formula based on the average percentage increase in cost resulting from the substitution of an imported component by an indigenous one. No such formula, however, seems practicable, since the cost increases vary widely from one firm to another (see paragraphs 22.2.1 to 22.2.3 and Appendix VI) depending on various factors such as whether the component is a major or an ancillary one, whether it is made out of imported or indigenous forging or casting, the percentage rejections, the volume of output, etc. Since no automatic revisions seem practicable, and provisional revisions by manufacturers followed by review by Government create uncertainty, the industry has reason to feel apprehensive that the procedure of price revision may in practice be very dilatory. Such apprehensions are not conducive to the healthy growth of the industry.

20.9. In the light of the above analysis of the cost problem, we have come to the conclusion that at the present stage the cost structure of this industry is liable to changes of such nature and magnitude that having regard to the trading conditions affecting different

vehicles, the choice as regards the timing of the necessary price adjustments is best left to the manufacturers themselves. This may lead to vehicles being sold above or below their fair prices at different times, but such deviations should not be necessarily open to objection, provided they are no more than necessary to even out costs over a period and thus maintain greater stability of prices.

20.10 While, as explained above, the determination of costs is fraught with practical difficulties, important questions of principle arise while determining the appropriate rate of profits. An infant industry makes losses, or has to be content with low profits, during the period of development and if, in spite of this, it is able to attract the necessary investment and to induce the necessary effort for its development, this is only because of the prospect of making up the losses or short-fall in profits before and after the development period. If, however, an industry in this position were to be put in the strait-jacket of price control, restricting its profits to such level as Government may deem fair from time to time, the whole basis on which investors come forward to put their money in an infant industry would be taken away, because investors could then have no assurance that they would ever be able to recoup the losses made by them in the development period. The automobile industry is precisely in this position. Most of the units have made inadequate profits in the past and some have made substantial losses. Even if the standards of "fair prices" and "fair profits" were so relaxed as to take account of the losses or inadequate profits of the past period, the element of uncertainty inherent in the very system of price control may act as a deterrent to investment in an infant industry. Secondly, price control necessarily involves the application of a *uniform* set of principles to all the units in an industry and consequently, the rate of return, whether it is based on the gross block, capital employed or turnover, has to be at a uniform rate for all the units. The various units, however, are not at the same stage of development; some have just started manufacture, while others have made good progress in that direction. Hence, the ratio of turnover to the gross block or capital employed (see paragraph 15.4) and the ratio of fixed capital to working capital vary widely from one unit to another. Moreover, some units have made heavy losses in the past and have large arrears of depreciation, while others are currently making good profits. In such a situation, it is obviously inequitable to allow the same rate of profit to all units. And yet the system precludes any differential treatment. Nor is it possible to determine a rate of profit which is adequate for a representative unit and apply it to all in spite of its varying incidence in the case of individual units, because this developing industry has not yet reached a stage at which any single unit can be selected as representative from the point of view of either the level of investment required or the manufacturing equipment or methods used. Thirdly, every automobile manufacturer has to make sufficient provision for obsolescence which is a normal feature of this industry, but none of the manufacturers in India have so far been able to build up any appreciable reserves. This places them in an extremely vulnerable position, particularly in view of the rapid technological changes which are taking place in the automobile industry in other countries with which the Indian industry is closely tied up. The automobile industry cannot be said to have attained financial stability until it

has been able to build up adequate reserves to meet all unforeseen contingencies. Fourthly, some of the units are trying to attract foreign investment to supplement their resources and a rigid system of price control may be a serious handicap to them. It is hardly necessary to point out that there is nothing comparable to our system of price control and particularly, our system of regulating the return on investment, in countries like U.K., U.S.A., West Germany or Italy, on which we are partially dependent for establishing this industry.

20.11. The above enumeration of the difficulties involved in determining the appropriate rate of profit should further reinforce the conclusion reached earlier that at the present stage, a system of price control is likely to have adverse repercussions on the development of the automobile industry. The question, however, still remains to be considered from another angle, namely, the desirability of maintaining the prices of automobiles as low as possible and the need for safeguarding the interests of the consumer against any possible exploitation by the manufacturer. As regards the first consideration, it is necessary to point out that the progressive manufacture of components inevitably leads to higher costs. Apart from any other factor, the fact that the deletion allowance for a component is normally much less than the price charged for it in the c.k.d. pack results in an increase in costs, as imported components are replaced by indigenous ones. In the face of this rising trend of costs, it is quite unrealistic to expect the manufacturer to reduce his prices or to avoid increasing them, unless, of course, a scheme of subsidies is introduced to bridge the gap between costs and prices. We are not in favour of any subsidies being granted at this stage, since, in our view, the cost increases have not yet become too onerous to be absorbed in prices. This is particularly so in the case of commercial vehicles for which subsidies may be more appropriate than for passenger cars. In the absence of subsidies, the progressive use of indigenously produced components will result in increase in the prices of vehicles, and such increases cannot be avoided by any system of price control. They should really be accepted as the necessary price which the community has to pay for the establishment of this essential industry. As regards the second consideration, namely, that of safeguarding the interests of the consumer against any possible exploitation by the manufacturer, the manufacturers have generally shown no such tendency hitherto and most of them have actually made losses for several years. So far as this objective is concerned, therefore, price control is intended to deal with a possible contingency rather than with an actual situation. It might appear that in the absence of price control, the current shortage of commercial vehicles, particularly diesel vehicles, may lead to an excessive rise in prices. We are of opinion, however, that even this possibility does not justify the present system of price control which operates only at the ex-factory stage. It is the shortage which creates opportunities for an excessive rise in prices, and the correct remedy is to take measures to relieve the shortage. So long as the shortage persists, a system of price control which prevents only the manufacturer from charging excessive prices cannot protect the consumer against exploitation by dealers and middlemen. It is true that large fleet-owners and State transport organisations deal directly with the manufacturers, but they are in a strong position to negotiate prices and price control, is, therefore, of limited significance to them.

20.12. We consider that the interests of the consumer can be adequately safeguarded by replacing the present system of price control by a more flexible system under which no maximum prices are fixed, but subject to a general obligation not to charge excessive prices, the manufacturers are left free to vary prices at their discretion and periodic investigations are held into their costs and profits to ensure that the obligation is actually fulfilled by them. Whenever a shortage develops with respect to any classes of vehicles, speedy and effective action should be taken to relieve the shortage by arranging for imports through the manufacturers concerned, or where appropriate, as recommended in paragraph 22.8, through or on account of the State Trading Corporation. Careful watch should be maintained over the rates of dividend declared by the manufacturing firms, with a view to ensuring that a reasonable proportion of their profits is ploughed back into reserves.

20.13. In the following section, we give the results of our investigation into the costs of production of different vehicles produced by the approved manufacturers. For the reasons given in this section, we have found it well-nigh impossible to determine "fair prices" on the basis of the costs as ascertained by us. However, we consider that the purpose of this inquiry will be adequately served by comparing the costs of production ascertained by us with the net dealer prices received by the manufacturers and by examining whether or not the margins between costs and prices are justified in the light of all the relevant circumstances. We think that such examination should be sufficient to establish the reasonableness or otherwise of the price policies followed by the different manufacturers.

21.1. Our Cost Accounts Officers have examined the costs of production of the vehicles manufactured by the following units for the periods specified against each :—

Hindustan Motors	8 months ended 30th November, 1955.
Premier Automobiles	Year ended 30th June, 1955 and the following two quarters.
Standard Motors	Year ended 31st December, 1955.
Ashok-Leyland	Year ended 31st December, 1955.
Mahindra & Mahindra	Year ended 31st October, 1955.
Tata Locomotive & Engineering Co. Ltd.	Half year ended 31st March, 1955.

The costs of production of P-6 Diesel engines produced by Simpson & Co. were also examined for the year ended 31st May, 1956.

21.2. None of the units mentioned above, except Simpson & Co., has arrangements to record its costs of production in sufficient detail and we have, therefore, had considerable difficulties in determining the costs of individual components or sub-assemblies. The costing problems have been particularly acute in the case of those units which have attained an advanced stage of manufacture. In the case of Hindustan Motors, while adequate production and statistical records are available, they are not co-ordinated in such manner as to enable the costs of production of the various vehicles to be easily

determined. The Company relies on a system of budgeting for controlling its expenditure in the different departments. Although standard labour hours for the various components manufactured in the machine shop are available, no reconciliation is made of the standard hours with the actual performance. The Cost Accounts Officer, however, has made use of the standard hours for each sub-assembly to work out the costs of the components manufactured in the machine shop. It is only in the case of forgings and castings that Hindustan Motors were able to furnish fairly accurate cost data.

21.3. Premier Automobiles maintain cost data showing the costs of materials and direct wages for the various components manufactured, as also for the assembly of the different models of vehicles. For the purpose of determining the costs of production of the various components and the assembly cost, the Company follows the method of applying *ad hoc* rates of overheads. No reconciliation is made between cost accounts and financial accounts. Our Cost Accounts Officer, for the purpose of his calculations, has not adopted the *ad hoc* rates of overheads used by the Company, but has determined them independently for the various sections of the factory. The overheads so determined have been absorbed on the basis of direct wages. The overheads for the quarter ended December, 1955, were based on the figures for the quarter ended September, 1955 with suitable adjustments.

21.4. Standard Motors are still in an early stage of manufacture and consequently the problem of ascertaining their costs was found to be relatively less complex. The data collected for Ashok Leyland, Mahindra & Mahindra and Telco relate mainly to assembly operations and no costing difficulties similar to those experienced in the case of Hindustan Motors or Premier Automobiles arise in their cases.

21.5. We recommend that the manufacturers should maintain their cost data in sufficient detail to enable the costs of production of individual assemblies as well as of complete vehicles to be easily ascertained.

21.6. In the case of most of the units, substantial changes are expected both in the level of output and the range of manufacture. These make it exceedingly difficult to attempt anything like a realistic estimate of their costs of production for the immediate future. Our Cost Accounts Officers, therefore, have been able to ascertain only the actual costs of production of the different vehicles during the periods mentioned in paragraph 21.1 above, except in the case of Telco where adjustments have been made in the actual costs for the expected increase in output to 5,000 vehicles.

21.7. We give below a statement showing the ex-works costs of production of the different vehicles and of Perkins P-6 engine as ascertained by us. The statement also shows the 'net dealer prices' currently charged by the manufacturers and the difference between the net dealer prices and the ex-works costs. The cost of production of indigenous components and the disadvantage of the various units in this respect are discussed in paragraphs 22.2.1, 22.2.2, 22.2.3 and 22.4.

Statement showing ex-works costs and net dealer prices of vehicles produced by the approved manufacturers

Make	Ex-works costs	Net dealer prices	Difference (3 — 2)	4 as per-
				centage of 2
1	2	3	4	5
	Rs.	Rs.	Rs.	%
1. HINDUSTAN MOTERS LTD.—				
(a) Cars :				
(1) Hindustan Landmaster	9,213	8,380	—833	—9·04
(2) Studebaker Commander, 4 doors	14,719	15,492	773	5·25
(3) Studebaker President Classic	16,706	17,430	724	4·33
(4) Studebaker Park View Standard wagon.	15,553	17,262	1,709	11·00
(b) Trucks (imported without engines):				
(1) E-7-112" W. B.	10,285	10,967	682	6·63
(2) E-13-131" W. B.	11,384	12,049	665	5·84
(3) E-28-B-155" W. B.	13,777	14,511	734	5·33
(4) E-38-B-131" W. B.	15,054	*15,643	589	3·91
(5) E38-B-155" W. B.	15,178	15,827	649	4·28
(6) E-38-B-171" W. B.	15,427	16,000	573	3·71
(7) E-38-B-212" W. B.	15,677	*16,243	566	3·61
2. PREMIER AUTOMOBILES LTD.—				
(a) Cars (Dodge/Desoto/Plymouth):				
(1) 4 door Sub-cars P-26-1	15,247	17,030	1,783	11·69
(2) 4 door Sub-cars SP-26-	15,403	17,230	1,827	11·90
(3) 4 door Sub cars D-54-1	15,317	17,150	1,833	11·90
(4) 4 door Seden cars P-26	14,696	15,699	1,003	6·82
(5) 4 door Seden car SP-26-2	14,913	15,945	1,032	6·92
(6) 4 door Seden car D-54-2	14,770	15,792	1,022	6·92
(7) Fiat 1100	7,731	8,043	312	4·04
(b) Trucks (Petrol) Dodge/Desoto/Fargo):				
(1) CPW 6-126" W. B. (Cowl & Windshield)	15,500	16,720	1,220	7·87
(2) C3D6 116" W. B.	10,272	10,805	533	5·19
(3) C3D6 126" W. B.	10,209	10,820	611	5·98
(4) C3G6 171" W. B.	14,478	15,776	1,298	8·97
(5) C3G6 153" W. B.	14,229	15,203	974	6·85

*These prices are inclusive of the recent increases in the prices of the C. K. D. packs.

	1	2	3	4	5
		Rs.	Rs.	Rs.	%
(6) C ₃ G6 129" W. B.		13,985	15,185	1,200	8.58
(7) C ₃ H6 193" W. B. (Cowl only).		15,460	16,807	1,347	8.71
(8) C ₃ H6 193" W. B.		15,719	17,145	1,426	9.07
(9) C ₃ H6 171" W. B.		15,302	16,968	1,666	10.89
(10) C ₃ H6 153" W. B.		15,093	16,430	1,337	8.86
<i>(c) Diesel conversion Trucks* and Diesel Trucks:</i>					
(1) C ₃ H6 153" W. B.		19,019	21,701	2,682	14.10
(2) C ₃ B6 171" W. B.		18,099	21,103	2,004	10.49
(3) C ₃ B6 153" W. B.		17,853	20,885	3,032	16.98
(4) C ₃ H6 193" W. B. (Cowl only)		19,390	22,706	3,316	17.10
(5) C ₃ H6 193" W. B.		19,650	22,986	3,336	16.98
(6) C ₃ H6 17" W. B.		19,224	22,229	3,005	15.63
(7) 87P6 190" W. B.		20,131	23,002	2,871	14.26
(8) 87AP6 190" W. B.		20,801	23,680	2,879	13.84
(9) 105P6 163" W. B.		18,510	21,660	3,150	17.02
(10) 105AP6 165" W. B.		19,188	22,338	3,150	16.42
3. STANDARD MOTOR PRODUCTS OF INDIA LTD.—					
<i>Cars:</i>					
(1) Standard Vanguard III		11,769	12,506	737	6.26
(2) Standard V. Estate Car		11,369	11,942	573	5.04
(3) Standard Super ten		7,643	8,043	400	5.30
4. ASHOK-LEYLAND LTD.—					
<i>Trucks:</i>					
(1) Comet passenger 203" W. B.		31,855	33,500	1,645	5.16
(2) World Master passenger 195" W. B.		52,533	55,000	2,467	4.70
(3) Comet Goods 163" W. B.		30,648	32,465	1,817	5.93
(4) Comet Goods 176" W. B.		31,199	32,985	1,786	5.72
5. MAHINDRA & MAHINDRA LTD.—					
(1) CJ-3. B Jeeps		9,668	10,591	923	9.55
(2) 4 × 475 Station wagon		14,815	16,500	1,685	11.37
6. TATA LOCOMOTIVE & ENGINEERING CO. LTD.—					
(1) Trucks chassis L-312/42"		21,898	23,275	1,377	6.29
(2) Bus chassis L-P-12/48"		23,174	25,210	2,036	8.79

*Fitted with Perkins engines.

Perkins P6 engines	Ex-works cost	Original equipment price	Net dealer price	Difference		Difference as percentage (2)	
				Original equipment price	Net dealer price	Original equipment price	Net dealer price
1	2	3	4	5	6	7	8
SIMPSON & CO. LTD	Rs.	Rs.	Rs.	Rs.	Rs.	%	%
(a) Exhauster Type.	5,269	5,255	5,622	(-)-14	353	(-)-0.27	6.70
(b) Non-Exhauster Type.	4,937	4,955	5,301	18	364	0.36	7.37

21.8. Details of the costs given above are given in the Cost Reports which are being forwarded separately as confidential enclosures to the Report.

21.9. As stated in paragraph 20.13 above and for the reasons given in the preceding section, we propose to use the above data to decide whether or not the existing prices for the various vehicles are reasonable. The answer to this question depends principally on how far the margins between net dealer prices and costs revealed by the above statement are justified, taking into account all the relevant circumstances concerning each project. As explained earlier, we have found it both impracticable and unrealistic to fix "fair prices" (as normally understood) in the case of this industry and had, therefore, to carry out this scrutiny of prices on certain broad and fundamental considerations.

21.10. In the case of Hindustan Landmaster, the question of reasonableness or otherwise of the price currently charged does not arise, because Hindustan Motors are at present making a loss of Rs. 833 on this car. This is primarily due to (a) the substantial progress in manufacture which has been achieved in respect of this car which has given rise to difficulties with regard to quality as well as cost (see also paragraph 16.3), and (b) the Company's inability to increase the price owing to the keen competition which this car meets with from a hitherto largely assembled car, viz., Fiat 1100. The case of Hindustan Landmaster further illustrates the difficulties of principle involved in the fixation of a "fair price", because a fair price based only on cost calculations without regard to the consumer's own valuation of the product may easily be ineffective and, therefore, unrealistic.

21.11. It would be seen that the margins between the net dealer prices and ex-works costs of all other models of cars and trucks except diesel trucks (including diesel conversion trucks) produced by Premier Automobiles, vary from 4 to 12 per cent. of the ex-works costs. We do not consider these margins to be excessive, for the reasons given below :—

(i) The figures of ex-works costs shown in the above statement include no allowance for increases which have taken place on account of progressive manufacture of components since the period adopted for costing nor has it been possible to make any estimate for the further increases which will occur for the same reason in the immediate future.

(ii) The costs of production shown in the above statement are subject to adjustments for changes in the import duties recommended by us in paragraph 22.6. The direction and magnitude of the changes will naturally vary from one vehicle to another and this will affect the margins shown.

(iii) The provision for depreciation included in the above estimates of costs does not allow for the high incidence of obsolescence in this industry. No account has been taken of the heavy arrears of depreciation in the case of some firms, as well as of the additional depreciation which will become due as further equipment is installed. The arrears in the case of Hindustan Motors amount to Rs. 150 lakhs and those in the case of Premier Automobiles to Rs. 73 lakhs.

(iv) Hindustan Motors have not declared any dividend on their ordinary shares since inception. Premier Automobiles have not declared any dividend on ordinary shares since 1949. Standard Motor Products have declared small dividends, but this is because they have not yet gone into large scale production of important components. The other units started their manufacturing programmes only recently.

(v) The financial results of the past working of these Companies being so unsatisfactory, it is difficult for them to attract from outside the large amount of fresh investment which is necessary for further expansion. These Companies have, therefore, to rely on internal sources to a relatively greater extent for their future financial needs. We have given a statement in Appendix VIII showing the capital investment projected by the various manufacturing firms and the figures given therein add up to about Rs. 15 crores. This is in addition to the large amount of funds which the industry will have to raise by way of working capital. The total amount of working capital employed in the industry in 1955 has been estimated at about Rs. 12 crores, and the requirements in the next few years are expected to be much higher.

21.12. Having regard to the above considerations and also the need for evening out future increases in costs, we do not consider that the margins currently recovered by the manufacturers over their costs are unreasonable in the case of any model of car or truck mentioned in the above statement except diesel trucks produced by the Premier Automobiles which are dealt with in the following paragraph.

21.13. In the case of diesel trucks (including diesel conversion trucks) produced by Premier Automobiles, the current margin between net dealer prices and ex-works costs varies from 11 per cent. to 17 per cent. We recognise that in assessing the prices charged by this Company for this class of vehicles, due regard must be had to the inadequate profits made by it in the past, the progress made by it in manufacture and the contraction in demand for petrol trucks for which it has incurred considerable investment. We have taken due account of these special features of this case, but considering the growing importance of diesel trucks (including diesel conversion trucks) to the transport economy of the country, we recommend that the Company should be asked to reduce its net dealer prices for this class of trucks to no more than 10 per cent. above their ex-works costs after adjustment for the revised duties recommended by us in paragraph 22.6 (see also our recommendation in paragraph 17.11).

21.14. The current net dealer prices for P-6 Diesel engines produced by Simpson & Company show a margin of 7 per cent. over their ex-works costs during the year ended 31st May, 1956, in the case of both the exhauster and the non-exhauster types. The net original equipment prices for these engines show a small loss in the case of the exhauster type and a small margin in the case of the non-exhauster type. These figures will, however, undergo substantial changes, as the Company increases its imports of built-up engine, because the cost of such engines is lower and the incidence of overheads on both manufactured and imported engines will come down as a result of the larger volume of production. Simpson & Company are expected to import 9,000 complete engines during the next twelve months as compared with their projected output of 3,000 partially manufactured engines. On this basis their weighted average cost will work out to Rs. 4,785 for the exhauster type and Rs. 4,461 for the non-exhauster type, and if the current net dealer and original equipment prices are maintained, the margin over costs will increase. (There may, of course, be simultaneous increases in costs on account of further manufacture of components, for which no allowance has been made in our estimates.) We, however, do not recommend any immediate reduction in prices, since the increased volume of imports and domestic production is yet to materialise. We expect the Company to effect the necessary adjustments in prices as its production and imports increase.

21.15. The mere fact that we have found it necessary to recommend a reduction in the margins on one group of vehicles does not, in any way, vitiate the conclusions reached by us earlier on the subject of price control. If anything, our recommendation only illustrates the utility of a system of flexible control based on periodical

cost investigations for bringing about reductions in prices, wherever necessary.

22.1. *Modifications in import duties.*—One of the principal recommendations made by the Tariff Commission after the last inquiry was that the then existing system of varying rates of import duties on automobile components should be replaced by a uniform rate of duty on all components. The Commission's recommendation involved a reduction in duties from an average of 54 to 60 per cent. depending on the type of vehicles, to a uniform rate of 40 per cent. (standard). Government accepted the principle of the reduction in duty but, in order to encourage the manufacture of components, decided to levy a duty of 50 per cent. *ad valorem* on I.C.T. items 75 (9) and 75 (10) and a duty of 25 per cent. *ad valorem* on items 75 (11) and 75 (12). The average incidence of these duties worked out to 40 per cent. *ad valorem* on a complete c.k.d. pack as recommended by the Commission. Subsequently, body panels for passenger cars were separately specified in the Customs Tariff with a rate of duty of 40 per cent. *ad valorem*. A statement showing the current rates of duties on motor vehicles and their components is given in Appendix VII.

22.2.1. In recommending a reduction in the import duties, the Commission was mainly influenced by the desirability of bringing down the prices of vehicles. The Commission was no doubt aware of the possibility that the progressive manufacture of components might result in higher costs of vehicles, but, it took the view that this tendency might be neutralised by the larger volume of demand which was expected to result from its recommendations regarding import arrangements. Experience has shown, however, that although the volume of demand available to the domestic industry has increased since the grant of protection, its costs of production have gone up *pari passu* with the implementation of its manufacturing programme. As a consequence, the current rates of import duties have become inadequate as a means of encouraging the manufacture of components. Our examination of the cost data for the various manufacturing units shows that, in every case, an extension of manufacturing activity has had the effect of reducing the manufacturer's profits below what they would have been if it had not undertaken the extension and imported the entire c. k. d. pack, at the current rates of duties. This is not conducive to progressive manufacture of components. We give below a few statements to show how the manufacturing progress made by different manufacturers has affected their overall costs. In these statements we have shown, side by side, what the overall cost of a vehicle would be if it were wholly imported (with deletions of only banned items) and what it is, at the present stage of manufacture. The statements are based on the latest cost data available. It will be obvious that unless the rates of duties are at least such as to equalise the overall cost of a vehicle under either set of conditions, a manufacturer will not have the incentive to proceed with his manufacturing programme.

Statement showing the overall cost of a vehicle (i) if it is fully assembled and (ii) at the present stage of partial Manufacture

(i) Hindustan Landmaster

Sl. No.	Details	Fully assembled	Partly manufactured	Advantage (+) Disadvantage (-)
		£	£	£
1	C.K.D. pack (ex-works unpacked)	343·5	343·5	..
2	Less deletions of tyres, tubes, battery and other items normally excluded from C.K.D. pack	43·25	43·25	..
3	Other deletions	..	131·37	..
4	Net C.K.D. pack (ex-works unpacked)	300·32	168·95	..
		Rs.	Rs.	Rs.
5	Landed cost without duty	5,298·43	2,980·72	(+)2,317·71
6	Customs duty	2,044·10	1,149·94	(+)894·16
7	Landed cost with duty	7,342·53	4,130·66	(+)3,211·87
8	Tyres, battery and assembly materials	931·33	931·33	..
9	(a) Assembly-labour and overheads	653·38	653·38	..
	(b) Assembly-depreciation	60·17	60·17	..
10	Other expenses including selling expenses	203·08	203·08	..
11	Cost of components other than those normally deleted from C.K.D. pack:			
	(a) Materials and components	..	1,746·27	(-)1,746·27
	(b) Duty on above	..	164·14	(-)164·14
	(c) Labour and over heads	..	1,013·57	(-)1,013·57
	(d) Depreciation—non-assembly	..	310·12	(-)310·12
12	Total of item (11)	..	3,234·10	(-)3,234·10
13	Total cost excluding interest and profit	9,190·49	9,212·70	(-)22·21

NOTE.—The figures of c.k.d. pack values and deletion allowances shown above are the latest available, whereas those given in the relevant sections of paragraph 14 (manufacturing progress) relate to 1955.

Statement showing the overall cost of a vehicle (i) if it is fully assembled and (ii) at the present stage of partial manufacture.

(ii) Studebaker Car (commander—4 doors)

Sl. No.	Details	Fully assembled	Partly manufactured	Advantage (+) Disadvantage(—)
		\$	\$	\$
1	C.K.D. pack (ex-works unpacked)	1,295'03	1,295'03	..
2	Less deletions of tyres, tubes, battery and other items normally excluded from C.K.D. pack	133'36	133'36	..
3	Other deletions	..	190.31	..
4	Net C.K.D. pack (ex-works unpacked)	1,161.67	971.36	
		Rs.	Rs.	Rs.
5	Landed cost without duty	7,393'17	6,180'27	(+)1,212'90
6	Customs duty	2,902'50	2,427'00	(+)475'50
7	Landed cost with duty	10,295'67	8,607'27	(+)1,688.40
8	Tyres, battery and assembly materials	1,542'55	1,542'55	..
9	(a) Assembly—labour and overheads	1,191'86	1,191'86	..
	(b) Assembly—depreciation	127'51	127'51	..
10	Other expenses including selling expenses	127'86	127'86	..
11	Cost of components other than those normally deleted from C.K.D. pack :			
	(a) Materials and components	..	1,668'37	(—)1668'37
	(b) Duty as above	..	604'00	(—)604'00
	(c) Labour and overheads	..	650'00	(—)650'00
	(d) Depreciation—non—assembly	..	200'00	(—)200'00
12	Total of item (11)	..	3,122'37	—3,122'37
13	Total cost excluding interest and profit	13,285'45	14,719'42	—1,433'97

NOTE.—The figures of c.k.d. pack values and deletion allowances shown above are the latest available, whereas those given in the relevant sections of paragraph 14 (manufacturing progress) relate to 1955.

*Statement showing the overall cost of a vehicle (i) if it is fully assembled and
(ii) at the present stage of partial manufacture*

(iii) Studebaker Truck (E 28-155" wheel base)

Sl. No.	Details	Fully assembled	Partly manufactured	Advantage (+) Disadvantage (-)
		\$	\$	\$
1	C.K.D. pack (ex-works unpacked)	1,436'41	1,436'41	..
2	Less deletion of tyres, tubes, battery and other items normally excluded from C.K.D. pack	179'96	179'96	..
3	Other deletions	..	229'20	..
4	Net C.K.D. pack (ex-works unpacked)	1,256'45	1,027'25	
		Rs.	Rs.	Rs.
5	Landed cost without duty	7,200'07	5,881'61	(+) 1,318'46
6	Customs duty	2,945'95	2,408'55	(+)537'40
7	Landed cost with duty	10,146'02	8,290'16	(+) 1,855'86
8	Tyres, battery and assembly materials	1,759'28	1,759'28	..
9	(a) Assembly-labour and overheads	447'04	447'04	..
	(b) Assembly-depreciation	42'38	42'38	..
10	Other expenses including selling expenses	115'67	115'67	..
11	Cost of components other than those normally deleted from C.K.D. pack:			
	(a) Materials and components	..	1,668'37	(-)1668'37
	(b) Duty on above	..	604'00	(-)604'00
	(c) Labour and overheads	..	650'00	(-)650'00
	(d) Depreciation-non-assembly	..	200'00	(-)200'00
12	Total of item (11)		3,122'37	(-)3,122'37
13	Total cost excluding interest and profit	12,510'39	13,776'90	(-)1266'51

NOTE.—The figures of c.k.d. pack values and deletion allowances shown above are the latest available, whereas those given in the relevant sections of paragraph 14 (manufacturing progress) relate to 1955.

Statement showing the overall cost of a vehicle (i) if it is fully assembled and
(ii) at the present stage of partial manufacture.

(iv) Dodge Car (Sedan D54-2)

Sl. No.	Details	Fully assembled	Partly manufactured	Advantage (+) Disadvantage (-)
		\$	\$	\$
1	C.K.D. pack (ex-works unpacked)	1,339	1,339	..
2	Less deletions of tyres, tubes, battery, tool kit and other items normally excluded from c.k.d. pack	130	130	..
3	Other deletions	..	192	..
4	Net C. K.D. pack	1,209	1,017	
5	Extra items	122	122	
6	Total (ex-works unpacked)	1,331	1139	
		Rs.	Rs.	Rs.
7	Landed cost without duty	8,480	7,257	(+)21,23
8	Customs duty	3,392*	2,505	(+)887
9	Landed cost without duty	11872	9,762	(+)2,110
10	(a) Tyres, battery and assembly materials	1,403	1,403	..
	(b) Springs, pads and waffles	100	100	..
11	Assembly—Labour and overheads	727	727	..
12	Other expenses including selling expenses	158	158	..
13	Cost of components other than those normally deleted from C.K.D. pack:			
	(a) Materials and components	..	1,556	(-)1556
	(b) Duty on above:			
	(i) Duty on components	..	358	(-)358
	(ii) Duty on semi-finished materials	..	126	(-)126
	(iii) Duty on other materials	..	1	(-) 1
	(c) Labour & overheads	..	456	(-)456
	(d) Depreciation	..	123	(-)123
14	Total of item (13)	..	2620	(-)2620
15	Total cost excluding interest and profit	14,260	14,770	(-510)

*Duty applied at 40% of landed cost (ex-duty).

Statement showing the overall cost of a vehicle (i) if it is fully assembled and
(ii) at the present stage of partial manufacture.

(v) Dodge Petrol Truck (C 3 H 6-193*)

Sl. No.	Details	Fully assembled	Partly manufactured	Advantage (+) Disadvantage (-)
		\$	\$	\$
1	C.K.D. pack (ex-works unpacked)	1,637	1,637	..
2	Less deletions of Tyers, tubes, battery and other items normally excluded from c.k.d. pac	225	225	..
3	Other deletions	..	485	..
4	Net C.K.D. pack	1,412	927	
5	Extra items	57.5	57.5	
6	Total (ex-works unpacked)	1,469.5	984.5	
		Rs.	Rs.	Rs
7	Landed cost without duty	9,116	6,107	(+)3,009
8	Customs duty	3,646*	2,333	(+)1,313
9	Landed cost with duty	12,762	8,440	(+)4,322
10	Tyres, battery and assembly materials	2,107	2,107	..
11	Assembly—Labour and overheads	334	334	..
12	Other expenses including selling expenses	177	177	..
13	Cost of components other than those normally deleted from C.K.D. pack :			
	(a) Materials and components	..	2,592	(-)2,592
	(b) Duty on above.			
	(i) Components	..	2,529	(-)2,529
	(ii) Semi-finished materials	..	125	(-)125
	(iii) Other materials	..	104	(-)104
	(c) Labour & overheads	..	1,197	(-)1,197
	(d) Depreciation	..	318	(-)318
14	Total of item (13)	..	4,661	(-)4,661
15	Total cost excluding interest and profit	15,380	15,719	(-)339

*Duty applied at 40% of landed cost (ex-duty).

Statement showing the overall cost of a vehicle (i) if it is fully assembled and
(ii) at the present stage of partial manufacture

(vi) Dodge Petrol Truck (C 3G6-153")

Sl. No.	Details	Fully assembled	Partly manufactured	Advantage(+) Disadvantage(-)
		\$	\$	\$
1	C.K.D. pack (ex-works unpacked)	1,391	1,397	..
2	Less deletions of tyres, tubes, battery and other items normally excluded from c.k.d. pack	170	170	..
3	Other deletions	..	451	..
4	Net c.k.d. pack	1,221	770	
5	Extra items	35	35	
6	Total (ex-works unpacked)	1,256	805	
		Rs.	Rs.	Rs.
7	Landed cost without duty	8,102	5,193	(+)2,909
8	Customs duty	*32,41	1,913	(+)1,328
9	Landed cost with duty	11,343	7,106	(+)4,237
10	Tyres, battery and assembly materials	2,107	2,107	..
11	Assembly—Labour and overheads	312	312	..
12	Other expenses including selling expences	177	177	..
13	Cost of components other than those normally deleted from c.k.d. pack:			
	(a) Materials and components	..	2,466	(-)2,466
	(b) Duty on above:	..		
	(i) Componets	..	325	(-)325
	(ii) Semi-finished materials	..	125	(-)12
	(iii) Other materials	..	96	(-)96
	(c) Labour and overheads	..	1,197	(-)1,197
	(d) Depreciation	..	318	(-)318
14	Total of item (13)		4,527	(-)4,527
15	Total cost excluding interest and profit	13,939	14,229	(-)290

* This only Duty applied at 40% of landed cost (ex-duty)

Statement showing the overall cost of a vehicle (i) if it is fully assembled and
(ii) at the present Stage of partial manufacture

(vii) Standard Vanguard Car.

Sl. No.	Details	Fully assembled	Partly manufactured	Advantage(+) Disadvantage(-)
		£	£	£
1	C.K.D. pack (ex-works unpacked)	422'00	422'00	..
2	Less deletions of tyres, tubes, battery and other items normally excluded from c.k.d. pack	64'70	64'70	..
3	Other deletions	..	14'33	..
4	Net c.k.d. pack	357'30	342'97	..
		Rs.	Rs.	Rs.
5	Landed cost without duty	6,060'91	5,817'83	(+)243'08
6	Customs duty	2,423'42	2,326'23	(+)97'19
7	Landed cost with duty	8,484'33	8,144'06	(+)340'27
8	Tyres, battery and assembly materials	1,734'23	1,734'23	..
9	(a) Assembly, labour and overhead	943'84	943'84	..
	(b) Depreciation	126'81	126'81	..
10	Other expenses including selling expenses	85'24	85'24	..
11	Cost of components other than those normally deleted from c.k.d. pack:			
	(a) Materials and components	..	502'70	-502'70
	(b) Duty on above	..	..	..
	(c) Labour and overheads	..	112'50	-112'50
	(d) Depreciation	..	38'29	(-)38'29
	(e) Royalty	..	81'60	81'60
12	Total of item (11)	..	735'09	735'09
13	Total cost excluding interest and profit	11,374'45	11,769'27	(-)394'82

NOTE.—The figures of c.k.d. pack values and deletion allowances shown above are the latest available, whereas those given in the relevant sections of paragraph 14 (manufacturing progress) relate to 1955.

22.2.2. It will be seen that the total cost of production, excluding interest and profit, of indigenous components (other than those normally excluded from the c. k. d. pack) exceeds the total reduction in the c. k. d. pack cost (without duty) due to the deletion of such components by 395 per cent. in the case of Hindustan Landmaster, 157.4 per cent. in the case of Studebaker car and 136.9 per cent. in the case of Studebaker truck E-28-155". The corresponding percentages for other vehicles are 114.2 per cent. for Dodge car, 54.9 per cent. for Dodge truck C3-H6-193", 55.6 per cent. for Dodge truck C3-G6-153" and 202.5 per cent. for Standard Vanguard.

22.2.3. The above percentages provide a broad measure of the cost disadvantage resulting from the substitution of indigenous components for imported ones in the case of different vehicles. The cost of production of components for both the approved models of American cars, namely, Studebaker and Dodge, and for the medium car, Standard Vanguard, has been found to be very high in relation to the corresponding deletion allowances, and the same is the case with the Studebaker trucks. The contrast between the figures relating to Hindustan Landmaster and Standard Vanguard shows that when manufacture is more complete and production is organised on a substantial scale, the cost of production of components comes down to a comparatively reasonable level.

22.3. In the light of the data presented above, we have come to the conclusion that some adjustment of the import duties is called for in order to afford due incentive to the manufacture of components. At the present stage of the development of the domestic industry, it is possible to carry out such adjustment of duties without bringing about an undue increase in their overall incidence. While each manufacturer should be expected to carry out the manufacturing programme adopted by him, the long-term interests of this industry require priority to be given, for the purpose of protection, to certain groups of components such as engine, transmission, rear axle, suspension and chassis members without the production of which the manufacture of automobiles cannot be said to have been established on a sound footing. We are of opinion that higher duties should be levied on these groups of components, but that their incidence should be offset by reducing the duties on other groups of components. In this way, it would be possible to encourage the development of the domestic industry in the directions considered most desirable, without unduly increasing the overall cost of the vehicles. We recognise that this recommendation may appear to be inconsistent with the general desire to bring about a reduction in the prices of vehicles. However, as pointed out elsewhere (paragraph 20.11), the desirability of encouraging progressive manufacture of components and the increase in cost which is inevitable in the process preclude any prospect of a substantial reduction in the prices of vehicles. If, at a future date, the domestic costs of production show an excessive increase, the desirability of granting subsidies could be considered. We do not think, however, that it is necessary to think of this expedient at the present stage (Paragraph 20.11).

22.4. In considering the rates of duties to be levied on different groups of components, we have taken into account the available data regarding the cost of production of components in different

manufacturing units. For this purpose, data regarding Telco, Mahindra and Mahindra and Ashok Leyland are of little help, since these units have not yet established any substantial manufacture in the groups selected by us for the levy of higher duties. Among the remaining units, Hindustan Motors manufacture their Landmaster components from indigenous materials and have, consequently, been able to attain a relatively lower cost as compared with others. Their cost data regarding the Studebaker engine are based on too small a volume to be of much use. Standard Motor Products, on the other hand, are still in the phase of experimental production with respect to some of the key components included in the selected groups and their costs are, consequently, high. Neither Hindustan Motors nor Standard Motor Products could be regarded as representative Paragraphs 22.2.2 and 22.2.3). This leaves us with Premier Automobiles who manufacture the engine components from imported semi-finished materials and their costs could, therefore, be regarded as representative of a stage of manufacture through which most of the units would have to pass in the immediate future. We give below details of costs of certain selected components and assemblies manufactured by Premier Automobiles and the estimated c.i.f. prices and landed costs of such components and assemblies [based on the available data regarding deletion allowances and the normal spreads between (a) the ex-factory price, and (b) the c.i.f. price and landed cost]. The difference between the domestic cost of production and the landed cost has been expressed as a percentage of the c.i.f. price to indicate the extent of the disadvantage of the domestic producer. The actual disadvantage is much higher than is indicated by the figures given below because the domestic costs of production are exclusive of selling expenses, interest and profit. The selected components relate to typical petrol truck G.6-153", W.B.



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Statement showing details of costs of certain selected components manufactured by Premier Automobiles during the quarter ended 31.12.1955 and the Estimated Landed Cost (Ex-duty) of those components

Part name	Cost			Deletion allowance	Converted at an average rate of landed cost ex-customs duty	Difference Col. 5 Col. 7	Col. 6 converted at an average c.i.f. price	Percentage of Col. 8 on Col. 9	
	Material	Labour	Overhead						Total
	2	3	4	5	6	7	8	9	10
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Fuel tank	28.41	6.78	35.04	70.23	6.62	42.70	27.53	42.20	65.24
Radiator	136.40	10.11	52.31	198.82	23.12	149.13	49.69	147.36	33.72
Front prop. shaft	22.53	9.58	52.58	84.69	10.58	68.25	16.44	67.44	24.38
Rear prop. shaft	15.99	10.17	55.24	81.40	8.53	55.02	26.38	54.37	48.52
Engine	1600.38	92.06	479.05	2171.49	207.46	1338.20	833.29	1322.32	63.02
Transmission	420.60	56.78	298.21	775.59	82.10	529.58	246.01	523.29	47.01
Chassis side members	358.37	27.41	141.75	427.53	36.21	233.57	193.96	230.80	84.04

22.5. We have examined similar data with respect to various other components and other models of commercial vehicles and passenger cars and would invite attention to the statement given in Appendix VI. In many cases, the extent of disadvantage is higher than that indicated above after allowing for a reasonable addition for selling expenses, interest and profit due to the manufacturers. A further addition is also called for on account of special depreciation which is very necessary in the case of this industry in view of the high risk of obsolescence. Figures in paragraph 22.2.2 may also be seen. After a careful consideration of all these factors, we consider that a standard rate of 75 per cent. *ad valorem* on I. C. T. item Nos. 75(10)(i), 75(10)(iii) and on short and long members of chassis frame included in item Nos. 75(10)(iv) and 75(11)(iv) respectively is necessary in order to afford due incentive to manufacture. Even this rate may not be adequate for some high cost units which suffer from a small volume of demand, but it must be left to the units themselves to remedy the situation. In order to offset, to some extent, the incidence of the higher duties recommended on the above components, we suggest that the duties on sub-items (ii), (iv) (excluding short members) and (v) of item No. 75(10) should be reduced to 25 per cent. *ad valorem* (standard) and those on all sub-items of item No. 75(11) [excluding long members specified in sub-item (iv)] and item Nos. 75(12) and 75(14) to 10 per cent. *ad valorem* (standard). We do not think that the reduced duties recommended by us will affect the manufacturing progress of this industry in any vital respect, since the components concerned are of a lower order of priority as compared with those on which increased duties are recommended by us. For instance, although Hindustan Motors have installed equipment for the manufacture of body panels, we do not think that the other manufacturers of passenger cars also should do likewise at this stage. The manufacture of body panels requires expensive dies and the available volume in India is not large enough to permit amortisation within a reasonable time, having regard to the possibility for frequent changes in designs. If a case is made out for a higher duty in respect of any individual component included in the groups on which reduced duties have been recommended, the matter may be referred to the Tariff Commission for examination, and interim assistance may be given to the section of the industry concerned through import control. We have given due consideration to the likely effect of the revised duties recommended by us on the replacement trade. We consider that the higher duties on certain components should help the major manufacturers to increase their sales in the replacement market. For example, Simpson & Co. who are, at present, unable to sell the components of diesel engines manufactured by them in competition with imported products, and who cannot be given any assistance in this respect through import control on account of administrative difficulties, should find the higher duties of help to them. It may appear that the reduction in duties on some components may affect the profits of dealers who have large stocks; but we do not consider this to be a serious matter, since the profits earned in the replacement trade are very high, the higher duties on some components may provide partial compensation for the reduction in duties on others, and, in any case, some repercussions on the profits of middlemen are unavoidable when any readjustment of duties takes place.

22.6. We, therefore, recommend the following schedule of revised duties on the various groups of automobile components:

Item No.	Name of article	Nature of duty	Standard rate of duty
1	2	3	4
75(10)	The following articles, and parts thereof, adapted for use as parts and accessories of motor-vehicles other than motor cycles and motor scooters: (i) the following electrical components; lamps, other than head lamps wire harness, battery and other cables made to size and horns; (ii) the following frame and body components: seat runners and brackets; and (iii) the following other components: brake hose pipes, bushings separately imported (excluding oil impregnated bushings) and bumpers.	Protective.	25 per cent. <i>ad valorem.</i>
75(10A)	The following articles, and parts thereof adapted for use as parts and accessories of motor vehicles other than motor cycles and motor scooters: (i) the following engine components: crank shafts, cam shafts, connecting rods, cylinder blocks and heads, manifolds, valves, valve springs, valve tappets, fly wheels, petrol tanks, radiators, fans, piston assembly, pistons, piston rings and gudgeon pins, other than those specified in Item No. 75(12A), water pumps, timing gears and sprockets; (ii) the following transmission and suspension components: king pins, shackle pins, shock absorbers, spring hanger brackets, shackles, transmission gear and gear box, clutch housings, propeller shafts, universal joints including needle bearings therefor, rear axle assembly (axle housing, axle shaft, ring gear pinion and carrier differential) front axles, hubs and brake drums and front suspension, excluding coil springs; and (iii) the following frame and body components; short and long members of chassis frame.	Protective.	75 per cent. <i>ad valorem.</i>
75(11)	The following articles and parts thereof, adapted for use as parts and accessories of motor vehicles other than motor cycles and motor scooters, namely: (i) the following engine components; thin wall bearings, cylinder liners, carburettors, oil pumps, air cleaners, oil filters, fuel pumps and fuel line hoses with connections; (ii) the following electrical components; distributors, sparking plugs, not otherwise specified, direction indicators, electrical	Protective.	10 per cent. <i>ad valorem.</i>

1	2	3	4
	panel instruments, wind shield wipers, starting motors, generators, head lamps including sealed beams, fuses, switches, ignition coils, and voltage and current regulators;		
	(iii) the following transmission and suspension components: steering mechanisms, pressed wheel clutches and suspension coil springs;		
	(iv) the following frame and body component: toughened glass sheets; and		
	(v) the following other components: roller bearings, bushings (oil impregnated), panel instruments other than electrical and brake cylinders.		
75(12)	Articles other than rubber tyres, tubes, batteries and such other components as are specified in Items Nos. 75(9), 75(10), 75(10A), 75(11), 75(14), 75(15), 75(16) and 75(18) (b) adapted for use as parts and accessories of motor vehicles other than motor cycles and motor scooters.	Protective.	10 per cent. <i>ad valorem.</i>
75(14)	Body panels including turret tops and sides for passenger motor cars including taxi cabs.	Protective.	10 per cent. <i>ad valorem.</i>

NOTE.—The preferential rates of duty, wherever applicable, may be fixed in accordance with the terms of the India-U. K. Trade Agreement, 1939.

22.7.1. The incidence of the revised duties will naturally vary from one vehicle to another. We find that the percentage of the total duty payable to the c. i. f. price of the c. k. d. pack will vary from 26 per cent. in the case of Hindustan Landmaster to about 52 per cent. in the case of Studebaker trucks. In most cases the percentage will be between 40 and 45 per cent. which is not excessive. The changes in the amounts of duty payable on different vehicles are also expected to be small enough to have no appreciable effect on revenue. The consumers also should have no cause to complain particularly in view of the recommendation made by us in paragraph 19.5 for reduction in commissions to dealers. Even if the revised duties recommended by us result, in some instances, in a rise in the price to the consumer, it should be borne in mind that, with the progressive manufacture of the vehicles concerned, there will, in any case, be a rise in costs and, therefore, in prices.

22.7.2. We recommend that the industry should be granted protection for a period of ten years, but that the rates of protective duties should be reviewed at reasonable intervals. The duration of the protective duties recommended by us in paragraph 22.6 should be upto 31st December, 1958.

22.8. *Import Control.*—The revised duties recommended in paragraph 22.6 will have the effect of equalising the fair ex-works prices of domestically produced components with the landed costs (including duty) of the corresponding imported components, thereby providing an incentive to manufacture, so far as components are concerned. Protective duties are, however, intended to serve another purpose besides equalising fair ex-works prices with landed

costs, namely, to bring about a transference of demand from the imported to the indigenous product. The duties recommended by us for components cannot have this effect because, whereas the output of components depends on the demand for vehicles, the changes resulting from the proposed revision of duties in the overall cost of, say, a fully assembled vehicle, as against that of a partially manufactured vehicle, will not be of such magnitude as to influence their relative competitive position. We do not think, however, that protective duties offer a suitable device for protecting a partially manufactured vehicle against a fully assembled one. The consumer's preference in India for imported vehicles is so strong that even a substantial difference in price will not be sufficient to overcome it. At the same time, it is neither fair nor desirable that a purely assembled vehicle should be allowed freely to compete with a partially manufactured one, since this will take away all incentive for the genuine manufacturers to proceed with their manufacturing programmes. We, therefore, recommend that import control with respect to automobiles should be so administered that the volume of imports allowed to different manufacturers is in fair relation to their manufacturing progress. We do not propose to suggest any hard and fast rules as to how the volume of imports should be varied according to the rate of progress achieved, since we feel that this matter is best left to executive discretion. Situations may arise in which although, in accordance with the above principle, there would be justification for curtailing the volume of imports allowed to a particular manufacturer, the country's requirements of the vehicle assembled by him cannot be allowed to suffer. In such a case, arrangements should be made for imports through (or on account of) the State Trading Corporation of the vehicle concerned (or a suitable substitute for it), in order to meet the country's requirements. Such a policy will not only safeguard the interests of manufacturers against assemblers, but will also give the latter a strong incentive to expedite their manufacturing programmes.

22.9. We would like to emphasise that any scheme of protection to be effective under the special conditions of this industry must include a combination of protective duties and import control as recommended above: protective duties to provide due incentive to manufacture of components and import control to secure the dual objective of ensuring the necessary off-take for the vehicles in which the components are to be used, and deterring any slackness on the part of the manufacturing firms in carrying out their programmes. These forms of protection have been hitherto used only *alternatively* and have, therefore, failed to have the desired effect, the former prior to 1953, with results described in paragraph 14(c) of the Commission's 1953 Report and the latter since 1953 and that too without adequate consideration of the manufacturing progress made by different firms as pointed out in paragraphs 15.4, 20.5 and 21.10. [See also paragraph 11.2(b).]

23.1. *Import licences for raw materials.*—We are informed that the present practice of issuing import licences for raw materials for six months causes considerable inconvenience to manufacturers, as foreign producers of such material require longer time for

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delivery, and an even flow of raw materials cannot be maintained, if licences have to be renewed at six monthly intervals. We recommend that Government may examine the possibility of issuing import licences for raw materials which will remain valid for one year.

23.2. *Raw materials required for experimental and developmental purposes.*—Representations have been made to the effect that the requirements of raw materials for developing new components are assessed on a somewhat stringent basis, and due allowance is not given for the extra quantities which have to be provided for experimental and developmental purposes. We recommend that the manufacturers should be granted adequate import licences to cover their requirements of raw materials for experimental and developmental purposes.

23.3. *Rates of duties on materials and semi-finished components.*—Telco have drawn attention to certain cases in which a finished component is assessed to duty at a lower rate than that applicable to the material from which it is made. For example, materials falling under I.C.T. item 63(30)—Special steels—are assessed at 44 1/10 per cent. *ad valorem* (standard) and those falling under item 63(28)—iron and steel n.o.s.—at 31 1/4 per cent. *ad valorem*, whereas some of the components made from them are assessed at 25 per cent. *ad valorem* under item 75(12). The duties on special steels under I.C.T. item 63(30) have recently been abolished by an executive notification and this should be of substantial assistance to this industry. However, if, in respect of any particular component, the industry needs protection by way of a reduction in the duty on the raw materials or an increase in the duty on the finished product, it should apply to Government with full details regarding its cost of production and the application may then be referred to the Tariff Commission in accordance with the normal procedure. (C.f. paragraph 22.5.)

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23.4. *Co-ordination between civilian and defence requirements.*—We are informed that Rule 120 of the Motor Vehicles Act restricts the overall width of every transport vehicle for civilian use in India to 90 inches, while the overall width of defence vehicle is about 93 inches. The Rule regarding 90 inches is also not observed rigidly throughout India, some buses in Bombay State being allowed to be 96 inches in width. Army vehicles which are about 93 inches wide ply freely throughout India. Since uniformity between civilian and army vehicles will help standardisation, we recommend that the transport authorities should examine the possibility of amending Rule 120 of the Motor Vehicles Act so as to prescribe the same maximum width for civilian vehicles as is adopted for army vehicles.

23.5. *Improved arrangements for developmental assistance.*—With a view to making improved arrangements for maintaining a close watch over the implementation of the various manufacturing programmes and attending expeditiously to the problems arising in that connection, we recommend that Government should consider the desirability of appointing Field Officers under the Development Officer (Automobiles) for the three regions where the industry is located.

24. We give below a summary of our conclusions and recommendations.
Summary of conclusions and recommendations

(1) The present inquiry includes a review of the protection granted to the automobile industry. The ancillary industries are excluded from the scope of this inquiry.

[Paragraph 4]

(2) The annual assembling capacity of the six approved manufacturers of vehicles is 49,800 vehicles on single shift basis. This capacity is adequate to meet the estimated demand. The assembling capacity of the two approved manufacturers of automobile diesel engines, namely, Simpson & Co., Ltd., and Automobile Products of India, Ltd., is 10,000 engines per annum on single shift basis and 3,000 engines per annum on double shift basis respectively.

[Paragraphs 9.1 and 9.2]

(3) The total production of all types of vehicles increased from 6,302 in 1953 to 12,146 in 1954, 22,153 in 1955 and 14,657 in the first six months of 1956. The number of cars produced increased from 3,586 to 12,772 between 1953, and 1955 and is at present running at the annual rate of about 17,000. The output of commercial vehicles amounted to 9,381 in 1955 and 6,195 in the first six months of 1956 as compared with only 2,716 in 1953 and 5,037 in 1954. The production of diesel trucks which was only 15 per cent. of the total production of medium and heavy trucks in 1953 increased to 20 per cent. in 1954, 63 per cent. in 1955 and 73 per cent. in the first half of 1956.

[Paragraph 10.2]

(4) The annual demand for motor vehicles is likely to increase by 1960-61 to 40,000 commercial vehicles, 20,000 passenger cars and 5,000 jeep type vehicles, making up a total of 65,000 vehicles. About 70 to 80 per cent. of the demand for commercial vehicles is expected to be for the diesel driven type.

[Paragraph 12.4]

(5) However, the number of additional commercial vehicles required for the effective implementation of the Second Five Year Plan is estimated to be much higher than is indicated by the above estimate of demand, but in order that a substantially higher demand for such vehicles may actually develop, certain positive measures have to be taken to encourage road transport. In particular, the attention of the State Governments should be drawn to the fact that the necessary expansion in road transport capacity will not take place unless they co-operate in removing the various factors which are today hampering the demand for commercial vehicles, in particular, the following:

- (i) inadequate road development and bad conditions of roads;
- (ii) heavy and varying rates of taxation of commercial vehicles; and
- (iii) restrictions on inter-State movement of commercial vehicles.

[Paragraphs 12.5 and 12.6]

(6) The Reserve Bank of India, in consultation with the commercial banks, should evolve a suitable scheme for extending credit facilities to transport operators for purchase of vehicles.

[Paragraph 12.7]

(7) Since, from the point of view of foreign exchange and fuel economy, diesel operation of medium and heavy commercial vehicles is distinctly more economical and, therefore, deserves to be promoted in the larger interests of the country, as has been explained in Part II (D) of Mr. W. R. Vorwig's Report of 1953, no taxation or other measures should be adopted which are likely to discourage the current trend towards dieselisation of such vehicles.

[Paragraph 12.8]

(8) A fresh examination should be undertaken by all State Government to see how far the restrictions on permissible laden weights can be relaxed and the use of trailers with goods vehicles allowed.

[Paragraph 12.9]

(9) The estimate of demand given in (4) above on the basis of the present assessment of possibilities should be adopted for the purpose of planning the capacity of the domestic industry and steps should be taken later to meet any increase in demand above the estimate, as and when it develops.

[Paragraph 12.10.]

(10) Hindustan Motors have made notable progress in regard to the Landmaster car. They are now producing almost all the major components of this car and their dependence on their foreign associates is reduced to the minimum. The Company's progress in regard to the Studebaker car and truck is slow. Premier Automobiles have made satisfactory progress in regard to Dodge trucks. They are, however, still depending on imports for the necessary rough finished forgings and castings which account for a large proportion of the total cost. Their progress in regard to the Dodge car is limited to the engine which is common to the truck also. No significant progress has been made in regard to Fiat 1100. Standard Motors have made some progress in regard to Standard Vanguard, but Standard 10 is still a largely assembled vehicles. The remaining three units, Telco, Ashok-Leyland and Mahindra and Mahindra have not yet completed the first phase of their manufacturing programme. Simpson & Co. have made satisfactory progress in the manufacture of Perkins P-6 engine, but Automobile Products of India, whose manufacturing programme for Meadows diesel engines was approved in December, 1955, have not yet commenced manufacture.

[Paragraphs 13.2-13.5]

(11) An assessment of the progress made by the manufacturers in the implementation of their programmes and the reasons for the delay in such implementation are given in paragraphs 14.1 to 15.5.

(12) There has been gradual improvement in the quality of automobiles assembled in India since 1954. Hindustan Motors, however, should tighten up inspection their machining and assembling.

shops, arrange for more careful scrutiny of the purchased components and take further steps to improve the quality of their castings.

[Paragraphs 16.2 and 16.3]

(13) The manufacturers should undertake full responsibility for all the parts fitted to their vehicles, without making any distinction, for the purpose of their warranties, between the parts manufactured by them and those purchased by them from other sources.

[Paragraph 16.6]

(14) The manufacturers should take early steps to establish an association on the lines indicated in paragraphs 16.9 and 16.10, with the special object of ensuring the maintenance of proper quality standards and making improved arrangements for the settlement of all disputes concerning quality.

[Paragraph 16.11]

(15) Certain general principles to be observed in regulating the future development of the industry have been suggested in paragraphs 17.1 to 17.12.

(16) The position regarding the future supply of diesel engines should be kept under constant review and if the domestic production of these engines cannot be stepped up in the immediate future, measures should be taken temporarily to obtain additional imports of built-up engines to avoid scarcity.

[Paragraph 17.11]

(17) The following observations have been made in regard to the existing manufacturing programmes and the manner of their implementation :

- (i) Since a firm cannot be said to be manufacturing a vehicle unless and until it has begun to produce the engine, transmission, rear axle, suspension and chassis members, the approved manufacturers should endeavour to advance such of these assemblies as have been assigned to a late phase in their manufacturing programme to an earlier phase.
- (ii) Each approved manufacturing programme should impose a definite obligation on the manufacturer to start production from indigenous materials within a specified time limit.
- (iii) A firm's manufacturing progress should not be assessed merely from the assemblies deleted by it from the c.k.d. pack, but due account should be taken of what the firm continues to import for the "production" of the assemblies concerned in spite of their deletion.
- (iv) A manufacturer should not be deemed to have fulfilled his obligations with respect to the manufacture of a component until his production of that component is sufficient for the number of vehicles assembled by him. The manufacturers should be required to inform Government of the capacity proposed to be installed by them for the components on their manufacturing programme and to give satisfactory reasons for any marked difference between the proposed capacity and their requirements.

- (v) In order to avoid an excessive increase in the cost of vehicles, it is essential to have a suitably phased manufacturing programme for the industry as a whole as well as for individual units. Since there is at present no co-ordination between the programmes of individual units and each has been phased differently, it is possible that at some stage, taking all of them together, too many components may be found to be included in the same phase. The situation is further complicated by the various ancillary projects outside the manufacturing programmes of the major producers. Government should avoid giving approval to too many ancillary projects simultaneously or to risky and costly ventures like the manufacture of body panels for passenger cars.
- (vi) The considerations mentioned in paragraph 17.17 should be borne in mind whenever there are opportunities for revising the existing agreements between the approved manufacturers and their foreign associates.
- (vii) Each approved manufacturer should set up a trainee shop, similar to the one at the Telco works, for training the workers before they are admitted to the factory. The trainee shops should be in charge of competent technical personnel and should be liberally financed by the manufacturers.
- (viii) Each manufacturing unit should develop its own facilities for designing of jigs and tools.

[Paragraphs 17.13 to 17.20]

(18) In the light of the principles referred to in (15) above, the Commission does not support the following proposals:

- (i) The manufacture of 4 wheel drive Land Rover cars by Hindustan Motors ;
- (ii) The manufacture of automobile diesel engines by Hindustan Motors and Premier Automobiles ;
- (iii) The manufacture of Fiat 600 cars by Premier Automobiles ;
- (iv) The manufacture of O. M. 636 Mercedes-Benz diesel engine and related vehicles by Telco ;
- (v) The manufacture of 112" wheel base chassis by Standard Motor Products ;
- (vi) The manufacture of B.M.W. Motocoupe 'Isetta' cars sponsored by the Saurashtra Government ; and
- (vii) The manufacture of Commer 3 to 5 ton commercial vehicles by the Automobile Products of India.

The permission granted to Hindustan Motors to manufacture Baby Hindustan cars should not be withdrawn. This recommendation is independent of the desirability and timing of introducing a common engine for both Landmaster and Baby Hindustan. On this question, a technical examination is required which the Commission has not been able to carry out to ascertain whether Hindustan Motors can avoid or postpone the introduction of the new engine after it has been adopted by their associates in the United Kingdom.

The Commission sees no objection to the proposal of Hindustan Motors to take up the manufacture of the two-wheel drive version of the Land Rover, provided no technical difficulties are involved.

[Paragraphs 18.1 to 18.9.2]

(19) The maximum 'mark up' on the ex-factory price to cover dealers' commission should be Rs. 1,000 per vehicle, or 10 per cent. of the ex-factory price, whichever is less, for passenger cars and jeeps and Rs. 1,000 per vehicle, or 7½ per cent. of the ex-factory price, whichever is less, for trucks, buses and other commercial vehicles.

[Paragraph 19.5]

(20) A rigid system of price control is likely to have adverse repercussions on the development of the automobile industry. Under present conditions, it would not be equitable to adopt "fair prices" as the maximum prices. The difficulties involved in determining fair prices are explained in paragraphs 20.1 to 20.11.

(21) The interests of the consumer can be adequately safeguarded by replacing the present system of price control by a more flexible system under which no maximum prices are fixed, but subject to a general obligation not to charge excessive prices, the manufacturers are left free to vary prices at their discretion and periodic investigations are held into their costs and profits to ensure that the obligation is actually fulfilled by them. Whenever a shortage develops with respect to any class of vehicles, speedy and effective action should be taken to relieve the shortage. Careful watch should be maintained over the rates of dividend declared by the manufacturing firms with a view to ensuring that a reasonable proportion of their profits is ploughed back into reserves.

[Paragraph 20.12]

(22) The approved manufacturers should maintain their cost data in sufficient detail to enable the costs of production of individual assemblies as well as of complete vehicles to be easily ascertained.

[Paragraph 21.5]

(23) The margins between the current net dealer prices and the ex-works costs of the vehicles produced by the approved manufacturers are examined in paragraphs 21.7 to 21.15. The margins are not considered unreasonable in the case of any model of car or truck, except diesel trucks (including diesel conversion trucks) produced by Premier Automobiles, the margins in respect of which vary from 11 per cent. to 17 per cent. of the ex-works costs. Having regard to the special features of this case, it is recommended that Premier Automobiles should be asked to reduce their net dealer prices for diesel trucks (including diesel conversion trucks) to no more than 10 per cent. above their ex-works costs after adjustment for the revised duties recommended in paragraph 22.6.

[Paragraphs 21.12 and 21.13]

(24) The current net dealer prices of P-6 diesel engines (of both the exhauster and the non-exhauster types) produced by Simpson & Co., show a margin of 7 per cent. over their ex-works costs, which

is considered reasonable. The net original equipment price for these engines shows a small loss in the case of the exhauster type and a small margin in the case of the non-exhauster type. These figures, however, will undergo substantial changes as the Company increases its imports of built-up engines and also expands its manufacture of components. The Company should effect the necessary adjustments in its prices as its production and imports increase.

[Paragraph 21.14]

(25) The cost disadvantage resulting from the substitution of indigenous components for imported ones in the case of different vehicles is analysed in paragraphs 22.1 to 22.4. The total cost of production, excluding interest and profit, of indigenous components (other than those normally excluded from the c.k.d. pack) exceeds the total reduction in the c.k.d. cost (without duty) due to the deletion of such components by 39.5 per cent. in the case of Hindustan Landmaster, 157.4 per cent. in the case of Studebaker car and 136.9 per cent. in the case of Studebaker truck E-28-155". The corresponding percentages for other vehicles are 114.2 per cent. for the Dodge car, 54.9 per cent. for the Dodge truck C-3-H6-193", 55.6 per cent. for the Dodge truck C-3-G6-153" and 202.5 per cent. for Standard Vanguard.

[Paragraph 22.2.2]

(26) The costs of production of components for both the approved models of American cars, namely, Studebaker and Dodge, and for the medium car, Standard Vanguard, have been found to be very high in relation to the corresponding deletion allowances, and the same is the case with the Studebaker trucks. The contrast between the figures given in the preceding sub-paragraph for Hindustan Landmaster and Standard Vanguard shows that when manufacture is more complete and production is organized on a substantial scale, the costs of production of components comes down to a comparatively reasonable level.

[Paragraph 22.2.3]

(27) The following modifications are recommended in the rates of import duties on parts and accessories of motor vehicles:

- (i) A duty at the standard rate of 75 per cent. *ad valorem* on I.C.T. item Nos. 75(10)(i), 75(10)(iii) and on short and long members of chassis frame included in item Nos. 75(10)(iv) and 75(11)(iv) respectively.
- (ii) A duty at the standard rate of 25 per cent. *ad valorem* on sub-items (ii), (iv) (excluding short members) and (v) of item No. 75(10).
- (iii) A duty at the standard rate of 10 per cent. *ad valorem* on all sub-items of item No. 75(11) [excluding long members specified in sub-item (iv)] and item Nos. 75(12) and 75(14).

[Paragraph 22.5]

(28) If a case is made out for a higher duty in respect of any individual component included in the groups on which reduced duties have been recommended, the matter may be referred to the

Tariff Commission for examination and interim assistance may be given to the section of the industry concerned through import control.

[Paragraph 22.5]

(29) The industry should be granted protection for a period of ten years, but the rates of protective duties should be reviewed at reasonable intervals. The duration of the protective duties recommended in (27) above should be up to 31st December, 1958.

[Paragraph 22.7.2]

(30) Import control with respect to automobiles should be so administered that the volume of imports allowed to different manufacturers is in fair relation to their manufacturing progress. Situations may arise in which although, in accordance with this principle, there would be justification for curtailing the volume imports allowed to a particular manufacturer, the country's requirements of the vehicle assembled by him cannot be allowed to suffer. In such cases, arrangements should be made for imports through (or on account of) the State Trading Corporation of the vehicle concerned (or a suitable substitute for it), in order to meet the country's requirements.

[Paragraph 22.8]

(31) Any scheme of protection to be effective under the special conditions of this industry must include a combination of protective duties and import control as recommended above: protective duties to provide due incentive to manufacture of components and import control to secure the dual objective of ensuring the necessary off-take for the vehicles in which the components are to be used and deterring any slackness on the part of the manufacturing firms in carrying out their programmes. These forms of protection have hitherto been used only alternatively and have, therefore, failed to have the desired effect.

[Paragraph 22.9]

(32) Government may examine the possibility of issuing import licences of one year's validity for the raw materials required by this industry.

[Paragraph 23.1]

(33) The manufacturers should be granted adequate import licences to cover their requirements of raw materials for experimental and developmental purposes.

[Paragraph 23.2]

(34) Since uniformity between civilian and army vehicles will help standardisation, the transport authorities may examine the possibility of amending Rule 120 of the Motor Vehicles Act so as to prescribe the same maximum width for civilian vehicles as is adopted for army vehicles.

[Paragraph 23.4]

(35) Government may consider the desirability of appointing Field Officers under the Development Officer (Automobiles) for the three regions where the industry is located.

[Paragraph 23.5]

25. We wish to acknowledge the valuable assistance received by us from Mr. A. J. Romer, our Technical Adviser. Mr. Romer could not stay long enough in India to participate in the later stages of this inquiry, but his technical investigations have greatly helped our consideration of this complex problem. We have also received much useful advice and information from Lt. Col. V. P. S. Menon, Development Officer, Automobiles, Ministry of Heavy Industries. Our thanks are due to him and also to the representatives of the industry, various associations and Government Departments who have co-operated with us in carrying out this inquiry.

K. R. DAMLE,
Chairman.

B. N. ADARKAR,
Member.

C. RAMASUBBAN,
Member.

S. K. MURANJAN,
Member.



S. K. BOSE,
Secretary.
BOMBAY;

Dated 6th October, 1956.

APPENDIX I

[Vide Paragraph 2]

GOVERNMENT OF INDIA
MINISTRY OF COMMERCE & INDUSTRY

New Delhi, the 6th August, 1955.

RESOLUTION

TARIFFS

Prices of Automobiles

No. 3-T(5)/55.—In their Resolution No. 21(1)-TB/52, dated the 31st May, 1953, the Government of India stated that, for the quick development of the Automobile Industry, it was essential to encourage the greater use of vehicles by bringing prices down. As one measure directed towards this end, they reduced the customs duty on several components so that the incidence of duty on a complete C. K. D. pack did not exceed 40 per cent *ad valorem*. Since then other steps have also been taken. For example, the margin allowed by the manufacturers to their dealers and the mark-up on spare parts prices over the landed cost have, in consultation with the industry, been reduced.

2. In spite of the steps hitherto taken, the net consumer price for automobiles shows no significant decrease. On the contrary, representations have been received from the manufacturers asking for an increase in the selling price of the vehicles on the following grounds:—

- (a) there has been an all-round increase in prices of automobiles in other countries and the manufacturers have to pay a higher price for the raw materials and components which they still have to import;
- (b) the manufacturing costs of components made in the country are often higher than the landed cost of the components which they replace; and
- (c) on account of their small turn-over, their over-heads are high.

3. While Government recognise the force of these points and have allowed an *ad hoc* increase in price where they have been satisfied that a *prima facie* case has been made out, they consider the issue to be of sufficient importance to merit an enquiry by the Tariff Commission under Section 12(d) of the Tariff Commission Act, 1951 (No. L of 1951). The Tariff Commission is accordingly requested to conduct the necessary enquiries and submit its recommendations on:—

- (1) What should be the fair ex-works and selling prices of the various types of motor vehicles manufactured in the country, taking into account the present stage of their manufacture;
- (2) how the prices should be revised from time to time as more and more components begin to be produced in the country in accordance with the approved manufacturing programme of the several units.

In conducting the enquiry the Tariff Commission is requested to pay special attention to:—

- (a) the extent to which and the manner in which the obligations of the several units under their approved manufacturing programmes have been discharged;
- (b) the further steps that would be necessary to implement them fully; and
- (c) the difficulties, if any, in the way of the full discharge of such obligations in the future and how they should be removed.

ORDER

Ordered that a copy of the Resolution be communicated to all concerned and that it be published in the Gazette of India.

L. K. JHA,

Joint Secretary to the Government of India.

APPENDIX II

[*Vide* paragraph 5.1]

List of firms or bodies to whom the Commission's questionnaires were issued and from whom replies or memoranda were received

(*Indicates those who sent replies or memoranda.)

A. MANUFACTURES :

- *1. M/s. Hindustan Motors Ltd., 8, Royal Exchange Place, Calcutta-1.
 - *2. The Premier Automobiles Ltd., Agra Road, Kurla Bombay-37.
 - *3. The Tata Locomotive & Engineering Co. Ltd., (Automobiles Division), Bombay House, Bruce Street, Bombay-1.
 - *4. M/s. Mahindra & Mahindra Ltd., Gateway Building, Apollo Bunder, Bombay-1.
 - *5. M/s. Ashok-Leyland Ltd., 38, Mount Road, Madras-6.
 - *6. The Standard Motor Products of India Ltd., 29, Mount Road, Madras-2.
 - *7. The Automobile Products of India Ltd., Agra Road, Bhandup, Bombay-40.
 - *8. M/s. Simpson & Co. Ltd., Mount Road, Madras-2.
- (Sl. Nos. 7 and 8 are manufacturers of automobile diesel engines.)

B. FLEET OWNERS (Private):

1. Nav Bharat Automobiles, Agra.
2. Punjab Montgomery Transport Co., Daresi No. 2, Agra.
3. Vijay Goods Transport Co., Jamna Road, Agra.
4. New Moga Transport Co., Jamna Road, Agra.
5. Sethi Transport Co., Jamna Road, Agra.
6. Rama Goods Transport Co., Daresi No. 2, Agra.
7. U. P. Rajasthan Transport Co., Jamna Road, Agra.
8. Rana Goods Transport Co., Jamna Road, Agra.
9. Amar Transport Co., Jamna Road, Agra.
10. Jaibharat Transport Co., Jamna Road, Agra.
11. American Transport Co., Jamna Road, Agra.
12. Bawa Goods Transport, Co., Jamna Road, Agra.
13. Mainpuri Goods Transport Co., Jamna Road, Agra.
14. B. P. Sharma Transport Co., Jamna Road, Agra.
15. Green Goods Transport Co., Jamna Road, Agra.
16. Taj Goods Transport Co., Jamna Road, Agra.
17. Union Transport Co., Jamna Road, Agra.
18. Kela Goods Transport Co., Daresi No. 3, Agra.
19. Katra Goods Transport Co., Daresi No. 3, Agra.
20. Bhadawar Goods Transport Co., Daresi No. 3, Agra.
21. Amritsar Goods Transport Co., Motimatra, Agra.
22. Kapoor Goods Transport Co., Motikatra, Agra.
23. Sri Nathdass Fiasiram, Bharatpur Gate, Mathura.
24. Krishna Gopal Sher Singh, Bharatpur Gate, Mathura.
25. Motilal Nanumal, Bharatpur, Mathura.
26. Bhagwan Transport Co., Holigate, Mathura.
27. Jain Transport Co., Holigate, Mathura.
28. Chhittarmal Roshanlal, Holigate, Mathura.
29. B. H. Motor Transport Co., Hathras, Aligarh.

30. Khalsa Transport Co., Aligarh.
31. Akal Transport Co., G. T. Road, Aligarh.
32. Victory Transport Co., Railway Road, Aligarh.
33. Aligarh Transport Co., Baradwari, Aligarh.
34. Aligarh Khalsa Transport Co., Kasganj, Dt. Etah.
35. Mainpuri Transport Co., Mainpuri.
36. Subahas Mainpuri Goods Carrier, Mainpuri.
37. Naranajan Singh Mukhtira Singh, New City, Etawah.
38. Kulathunkal Motor Corporation, Trivandrum.
39. Pioneer Motor Service, Nagercoil.
40. R. K. V. Motor Service, Trivandrum.
41. Swaraj Motor Ltd., Kottayam.
42. Standard Motor Union Ltd., Ettumanoor.
43. Bharat Motors, Ettumanoor.
- *44. P. S. N. Motors Ltd., Trichur.
- *45. G. B. Transport, Guruvayoor.
46. P. N. Krishna Iyer & Sons Ltd., Trichur.
47. Mr. Katari Satyanarayana Rao, Venkateswara Motor Service, Gudivada Krishna District.
48. Orissa Road Transport Co., Ltd., Berhampur, Ganjam.
- *49. Dy. Commissioner, Board of Revenue, Hirakud Land Organisation, Sambalpur.
50. The Sambalpur Cutchi Motor Transport Co., Ltd., P. O. Bargarh, Sambalpur.
51. Sirajuddin & Co., Borbil Koonjhar.
52. H. N. Thakur & Co., Rairangpur, Mayurbhanj.
- *53. Jaidka Motors Co. Ltd., 129, Park Street, Calcutta-16.
54. R. Sen & Co., 'Ajana', 10/1, Elgin Road, Calcutta-20.
55. M. Tilak & Co., 67, Ballygunge Circular Road, Calcutta.
56. Salkia Transport Agency, 67, Harogunge Road, Salkia, Hawrah.
57. The Calcutta Corporation, Central Municipal Office, 5 Surendra Banerji Road, Calcutta-13.
- *58. The Burmah-Shell Oil Storage & Distributing Co. of India Ltd., Ballard Estate, Bombay-1.
- *59. Standard Vacuum-Oil Company, 6, Church Lane, Calcutta.
60. Sanghi Brothers (Indore) Ltd., Indore City.
61. Dewas Motor Service, Dewas.
62. Indra Motors, Rugar.
63. The Ambala Bus Syndicate Ltd., Rugar.
64. The Patiala Bus Service Ltd., Sirhind.
65. Punjab Roadways, Ambala City.
66. Himachal Government Transport, Simla.
67. The United Progressive Transport Operators Ltd., Rugar.
68. Patiala Roadways, Pepsu.
69. Arvind Motors Ltd., Mangalore-1.
70. The Shankar Vittal Motor Co. Ltd., Attavar, Nandigudde Road, Mangalore.
- *71. The Hanuman Transport Co. Ltd., Udipi.
- *72. The Canara Public Conveyance Co. Ltd., Kodialbail, Mangalore.
- *73. The Shri Durga Parameshwari Motor Service, Kadri, Mangalore-2.
74. Shri Ramdas Motor Transport Ltd., Kakinada.
75. Ramakrishna Bus Service, Visakhapatanam, Dt. Anakapalli.
- *76. M. G. Brothers, Kurnool.
- *77. Rayalaseema Passenger & Goods Transport Ltd., Hindupur.

- *78. Shri P. Shouriah Brothers, Narasaraopet, Guntur, Dt. Andhra.
 79. The Gounder & Co. Ltd., Coimbatore.
 80. Anamallais Bus Transport Ltd., Pollachi.
 81. City Transport Ltd., Avanashi Road, Coimbatore.
 82. Gobald Motor Service Ltd., Mettupalayam.
 83. Mettupalayam Conoor Service Ltd., Mettupalayam.
 84. Webb's Sales & Service Ltd., Bangalore.
 *85. Bangalore Transport Co. Ltd., Wilson Gardens, Bangalore.
 86. B. G. P. Co., Russel Market Square, Bangalore-1.
 87. M. B. T. Co., New Tharagupet, Bangalore-2.
 88. Mysore Iron and Steel Works, Bhadrawathi.
 *89. Mysore Sugar Co., Ltd., Mandya.
 90. The Chief Electrical Engineer, Government of Mysore, Bangalore.
 91. The Chief Engineer in Mysore, P. W. D., Bangalore.
 92. M. G. Brothers, Bellary.
 93. C. P. C. Motors Service, Clock Tower Square, Mysore.
 *94. Central Karnataka Motor Service Ltd., B. H. Road, Shimoga.
 *95. Gajanana Motor Transport Ltd., Sagar, Simoga.
 96. Tiwary Bechar & Co. Ltd., Jamshedpur.
 *97. Rai Bahadur Rattan Lal Surajmull, Ranchi.
 *98. United Motor Works & Co. Ltd., Hurulia.
 99. Radhashyam Motor Co., Ranchi.
 100. Rai Shaheb Baldeo Sahu, Lahargada.
 101. Ganga Motor Service, Muzzaffarpur.
 102. V. S. T. Motors Ltd., Madras.
 103. Shri K. Balasubramania Nair, Shri Kamakshiamman Motor Service, Vridhachalam.
 104. Mr. S. Khadar Shariff, M/s. B. B. D. Motor Service, Arcot.
 105. Shri R. V. Manickam Chettiar, Managing Proprietor, Shri Lakshmi Saraswathi Motor Transport Co., Katpadi Road, Vellore.
 106. Shri C. Vijayaranga Mudaliar, Shri Lakshmi Saraswathi Bus Service, Vellore.
 *107. Shri A. Mudaliyanda Muadliar, Shri Bharathi Bus Service, Sholinghur.
 108. Mr. A. K. Bashu Sahib, V. M. Motor Service, Chetpet N. A. Dt.
 109. Shri A. Subramania Mudaliar, Shri Karthikeyan Bus Service, Arni.
 *110. Shri Lakshmi Saraswathi Motor Service, Gudiyatham.
 111. R. P. David & Co., Omalur Road, Salem.
 112. Shri R. Rathinaswami Pillai, Swaranambigai Motor Service, Salem.
 113. Shri V. Kesavalu Naidu, Sreedharan Motor Service, Attur.
 *114. Raman & Raman Ltd., Nageswaran North Street, Kumbakonam.
 115. Shri Rama Vilas Service Ltd., Kumbakonam.
 116. Mr. O. Veerappa Pillai, Sakthi Vilas Bus Service, Porayar.
 *117. Swami Motor Transport Ltd., Ranjere, Karunthattamkudi P. O.
 118. Mr. S. Mahaboob Kha, Nazeeria Motor Service, Nellore.
 *119. L. G. Balakrishnan, & Bros., Transport House, Karur.
 *120. Southern Roadways Private Ltd., W. V. Street, Madurai.
 121. Sundaram Transport, Trichy.
 122. Western Indian States Motor Ltd. Jodhpur.
 *123. Laxmi Motor Co., Jodhpur.
 124. Sainiks Motors, Jodhpur.
 125. Ranvir Motors, Jodhpur.
 126. M. B. K. & Co., Sumerpur.
 *127. Bundi Electric Supply Co., Ltd., Bundi.

128. Automobile Transport (Raj) Ltd., Ajmer.
129. Kotah Transport Ltd., Kotah.
130. P. S. Jain Motor Co. (Public) Ltd., Jullunder, Amritsar.
131. Amritsar Transport Co., Ghee Mandi, Amritsar.
132. Amritsar Transport Co. Ltd., Shivala Virbhan, Amritsar.
133. Bharat Transport Co., Shivala Virbhan, Amritsar.
134. District Transport Cooperative Society Ltd., O/s Hall Gate, Amritsar.
135. Express Goods Co., Queen's Statue, Amritsar.
136. Frontier Motor Transport, Ghee Mandi, Amritsar.
137. Gujranwala Transport Co., Queen's Statue, Amritsar.
138. New Sutiej Transport Co. Ltd., O/s Gandhi Gate, Amritsar.
139. Jullunder Motor Agency, O/s Gandhi Gate, Amritsar.
140. The Amritsar Majha Frontier Transport Coop. Society Ltd., Amritsar.
141. The Amritsar National Motor, Transport Coop. Society Ltd., Amritsar.
- *142. The New Suraj Transport Co. Ltd., Amritsar.
143. New Jolly Transport Co. Ltd., Amritsar.
144. The Payar Motor Bus Service Ltd., Amritsar.
145. The Express Goods Service Ltd., Amritsar.
- *146. The Jullunder Ex-Servicemen Motor Transport Society Ltd., Jullunder.
147. Bijlli Pahalwan, Ghee Mandi, Amritsar.
148. Ludhiana Transport Co. Ltd., Ludhiana.
149. Nankana Sahib Transport Co. Ltd., Ludhiana.
150. National Transport Co. Ltd., Ludhiana.
151. Chandha Transport Co. Ltd., Ludhiana.
152. Khalsa Nirbhai Transport Co., Ludhiana.
153. Prince Bus Service, Kapurthala.
154. Sewak Transport Co., Moga.
155. Central Goods Transport Co., Moga.
156. Malwa Bus Service Ltd., Moga.
157. New Samundari Transport Co. Ltd., Ferozepur.
158. Doaba Transport Co., Hoshiarpur.
- *159. Bassi Foaju Cooperative Multipurposes society Ltd., Hoshiarpur.
160. East Punjab Traders Ltd. Loading Transport, Hoshiarpur.
161. The Hoshiarpore Dassya Bus Co. Ltd., Hoshiarpore.
162. The Hoshiarpore Express Transport Co., Hoshiarpore.
163. Shivalak Transport Co., Hoshiarpore.
164. Bahadur Motors, Saharanpur.
165. India Motor Transport Co., Ltd., Ambala Road, Saharanpur.
166. Punjab Transport Co., Ambala Road, Saharanpur.
167. Ex-Soldiers Transport Co., Rajpur Road, Dehradun.
168. Rajdhani Co-operative Transport Society, Bulandshahr.
- *169. The B. E. S. & T. Undertaking, Bombay Municipality, Bombay.
- *170. T. N. Venkatasubba Reddy & Co., Madanapalle.

C. STATE TRANSPORT SERVICES:

- *1. Chairman, Bombay State Road Transport Corporation Central Office, 80-81, Dr. Annie Beasant Road, Bombay-18.
2. Manager, Kashmir State Transport, Srinagar.
- *3. Manager, Rajya Transport, Bihar, Patna.
- *4. Director of Transport Services, Madhya Pradesh, Nagpur.
- *5. Secretary, State Transport Department Rajkot, (Saurashtra).

- *6. Chairman, Board of Control, State Transport, Shillong.
- *7. Director Transport, Travancore-Cochin State Transport, Travancore-Cochin.
- 8. General Manager, Orissa Road Transport Services Ltd., Behrampur, Ganjam Distt.
- 9. Manager, Orissa State Transport, Cuttack.
- *10. General Manager, Madhya Bharat Roadways, Gwalior.
- 11. General Manager, Himachal Government Transport Service, Simla.
- *12. Dy. Road Transport Superintendent, Road Transport Department Mushirabad, Hyderabad (Dn.)
- *13. Deputy Transport Commissioner (Workshops), Uttar Pradesh, Lucknow.
- *14. Transport Manager, Poona Municipal Transport, Poona-2.
- *15. Director General Directorate of Transportation, Government of West Bengal, 5, Nilgunge Road, 24-Parganas, West Bengal.
- *16. General Manager, Punjab Roadways, Amritsar.
- *17. Honorary Director of Government Transport Transport House, Mount Road, Madras.
- *18. General Manager, Mysore Government Road Transport Department, Bangalore.

D. DEALERS :

- *1. Motor Sales & Services, Lal Darwaja, Ahmedabad.
- 2. Agarwal Automobilies 2A, Sardar Patel Marg, Allahabad.
- 3. Md. Akram Khan & Sons, Akram Building, Banaras.
- 4. Southern Motors, 18, St. Marks Road, Bangalore.
- 5. Kumar Motors, Nainital Road, Bareilly.
- 6. French Motor Car Co. Ltd., 9-11, Hughes Road, Bombay.
- 7. Sanghi Motors (Bombay) Ltd., Hughes Road Bombay.
- 8. India Automobilies, 12, Government Place East, Calcutta.
- 9. Walford Transport Ltd., 71, Park Street, Calcutta.
- *10. G. Mckenzie & Co. (1919) Ltd., 71, Park Street, Calcutta.
- 11. French Motor Car Co. Ltd., 234/3, Lower Circular Road, Calcutta.
- *12. Stanes Motors (S. I.) Ltd., Coimbatore.
- 13. Commercial Motors Ltd., Rajpur Road, Dehra Dun.
- 14. Bagai Motor Service, 82-84, Queensway, New Delhi.
- 15. Delhi Motor & Cycle Co., 48, Queensway, New Delhi.
- 16. Saligram Rai Chunilal Bahadur & Co., Dibrugarh.
- 17. Central India Motors, 49, Maharani Road, Indore.
- 18. Karwa Bros. Ltd., Truck Road, Jorhat.
- 19. Western Indian States Motors, Mirza Ismail Road, Jaipur.
- 20. United Motors of Rajasthan, Sanghi Building, Jaipur.
- 21. National Motors, Jodhpur.
- 22. Jamshedpur Automobilies Ltd., P. O. Box No. 5, Jamshedpur.
- 23. Northern Motors Ltd., Jullunder.
- *24. National Automobilies, 129, The Mall, Kanpur.
- *25. National Automobilies, Hazartganj, Lucknow.
- *26. Reliance Motor Car Ltd., 160, Mount Road, Madras.
- *27. Rane (Madras) Ltd., 5, Patullos Road, Mount Road, Madras.
- *28. Southern Automotive Corpn. Ltd., 24, White Road, Madras.
- *29. Provincial Automobilies Co., Kingsway, Nagpur.
- *30. Poddar Automobilies, Exhibition Road, Patna.
- 31. Assam Automobilies, Tozpur.
- 32. Marikar (Motors) Ltd., Trivendrum.
- 33. S. M. Abdul Huq Sahib & Bros., Ramgayyappa Rao Street, Vijayawada.

- *34. Motor Vehicles & Allied Merchants Association, Madras.
 35. Gounder & Co., Ltd., Coimbatore.
 36. Pandyan Automobiles, Madura.
 37. Kulathunkal Motor Corporation, Trivendrum.
 38. Arvind Motors, Mangalore.
 *39. Webb's Sales & Service Private Ltd., Bangalore.
 40. M. G. Brothers, Karnool.
 41. Sri Ramdas Motor Transport Kakinada.
 42. Jayalaxmi Automobiles, Vijayawada.
 *43. Maduri Motors, Secunderabad.
 44. Dadajee Dhackjee & Co. Ltd., Bombay.
 45. Hershah Automobiles, Rajkot.
 46. Sanghi Brothers (Indore) Ltd., Indore.
 *47. Jaika Motors, Nagpur.
 48. Pathak Brothers Jabalpur.
 49. Western Indian States Motors, Jodhpur.
 50. Supreme Motors Ltd., Delhi.
 *51. P. S. Jain Motor Co. (PB) Ltd., Jullunder.
 52. National Garage, Jammu.
 53. Indra Motors, Rupar.
 56. Bahadur Motors, Saharanpur.
 55. Balwant Motor Works, Bareilly.
 56. Motor & General Sales, Lucknow.
 57. Nav Bharat Automobiles, Agra.
 58. Tiwary Bechar & Co. Ltd., Jamshedpur.
 59. Utkal Automobiles, Cuttack.
 60. French Motor Car Co. Ltd., Calcutta.
 *61. Automotive Manufacturers Private Ltd., 108, Bazar Ward, Kurla, Bombay.
 62. James Finlay & Co. Ltd., 76, Lower Circular Road, Calcutta.
 63. Speed Motors Limited, Lucknow.
 64. George Oaes Ltd., Madras.
 *65. Narbheram & Co. Ltd., Jamshedpur.
 66. Globe Motors Ltd., New Delhi.
 *67. The Union Co. (Motors) Ltd., Madras.
 *68. Metro Motors, Hughes Road, Bombay-7.
 69. Sikand & Co., New Delhi.
 *70. Auto Chenoy, Secunderabad (Dn.).
 *71. R. I. Works, Nagpur.
 72. The Ahmedabad Motors Ltd., Ahmedabad.
 73. Rajputana Motor Car Co., Ajmer.
 *74. Vikram Motors, Kanpur.
 75. General Automobiles & Agencies Ltd., Ajmer.
 *76. New India Motors Ltd., Cannaught Circus, New Delhi.
 *77. Universal Motors, 46-B, Peddar Road, Bombay.
 *78. Narain Automobiles, 4, Shahjahan Road, Lucknow.
 79. Metro Motors (Kathiawar) Ltd., Gondal Road, Rajkot.
 80. Speedway Ltd., Mount Road, Madras.
 81. Motors India Ltd., Indore.
 82. Sing Automobiles, Jaipur.
 83. United Motors of Rajasthan, Opp. Khasa Kothi, Jaipur.
 84. Addision & Co., Ltd., Mount Road, Madras.

85. Anil Motors, Tholia Circle, Mirza Ismail Road, Jaipur.
86. Auto Distributors Ltd., 36, Chowringhee, Calcutta.
87. Bombay Cycle & Motor Agency Ltd., 534, Sandhurst Bridge, Bombay-7.
88. Bombay Garage Ltd., Mehar Building, Bombay-7.
89. Commercial Motors Ltd., Mahatma Gandhi Road, Bazaaratganj, Lucknow.
90. Commercial Carrying Co. (India) Ltd., Ulbari, Gauhati.
- *91. C. Eduljee & Co., Kampte Road, Nagpur.
92. V. S. Dempo & Co., Ltd., Dempo Estate Novagoo.
93. General Automobiles & Agencies Ltd., Imperial Road, Ajmer.
94. Hind Auto Engineering Co., Kingsway, Secunderabad.
95. Ideal Motors Ltd., Lal Darwaja, Ahmedabad.
- *96. International Motor Co., Sandhurst Bridge, Bombay-7.
- *97. Jupiter Motors, Yeshawant Nivas Road, Indore.
98. Jammu & Kashmir Motor Corporation, Residency Road, Srinagar.
99. Kalyanji Dhanji & Co., Kalyan Bhavan, Mandvi, Kutch.
100. Kamal & Co., Mirza Ismail Road, Jaipur.
101. Kishore Transport, Cantonment Road, Cuttack.
102. Lawlys Sen & Ltd., Lawlys Building, Exhibition Road, Patna.
103. Malviya Bros., Rajkot.
104. Masand Motors Ltd., Jullunder City.
- *105. Metro Motors (Private) Ltd., S. B. Road, Ambala Cantonment.
- *107. Motor India Ltd., Mahatma Gandhi Road, Indore.
108. Nav Bharat Motor Agency, Railway Lines, Sholapur.
109. National Garage, Mount Road, Nagpur.
110. New India Motors Ltd., H-12, Cannought Circus, New Delhi.
111. Niranjnlal Ramchandra, Pratabpur, Agra.
112. Noshirwan & Co. Ltd., Maharani Road, Indore.
113. Patnaik & Co., Cantonment Road, Cuttack.
114. Poddar Automobiles, 36, Chowringhee, Calcutta.
115. Premier Motors Ltd., Post Box No. 57, Lucknow.
116. Premier Garage, Lloyds Bridge, Poona-5.
117. Premnath Motors Ltd., Scindia House, Curzon Road, New Delhi.
118. Sikand & Co., 50, Queen's way, New Delhi.
119. Walford Transport Ltd. I Mankatta Road, P. O. Rehabari, Dibrugarh.
- *120. T. V. Sundram Iyengar & Sons Private Ltd., Madurai.
- *121. Sundram Motors Private Ltd., Mount Road, Madras-6.

E. ASSOCIATIONS:

1. Secretary, All India Motor Union Congress, 5192, Lahori Gate, Delhi-6.
2. Secretary, Automobile Association of Bengal, 40, Chowringhee Road, Calcutta.
- *3. Secretary, Automobile Association of Southern India, 38-A, Mount Road, Madras.
4. Secretary, Automobile Association of Upper India, 83/84, Theatre Communication Building, Cannought Circus, New Delhi.
5. Secretary, Automobile Manufacturers' Association of India, 23-B, Netaji Subhas Road, Calcutta.
- *6. Secretary, Indian Road, & Transport Development Association Ltd., 27-Bastion Road, Bombay-1.
7. Secretary, United Provinces Automobile Association, 32/A, Canning Road, Allahabad.
- *8. Secretary, Western India Automobile Association, Lalji Naranji Memorial Building Backbay Reclamation, Churchgate, Bombay-1.
- *9. Secretary, West Bengal Lorry Syndicate, 6-3, Madam Street, Calcutta.
- *10. Automotive Manufacturers Association of India, India Exchange, Calcutta-1.

- *11. Federation of Motor Transport Associations, Mehar Building, Chowpaty, Bombay.
- 12. Secretary, Ambala Motor Dealers' Association, Ellahic Building, S. B. Road, Ambala Cantonment.
- *13. Secretary, Automobile Traders' Association, 12-Scindia House, Curzon Road, New Delhi.
- *14. Secretary, Bombay Motor Merchants' Association Ltd., Sandhurst Building (Top Floor), Near Sandhurst Bridge, Bombay-7.
- 15. Secretary, Calcutta Motor Dealers' Association, P-6, Mission Row Extension, Calcutta-1.
- 16. Secretary, Delhi Motor Traders' Association, Post Box 1098, Kashmere Gate, Delhi-6.
- *17. Secretary, Motor Industries Association, 60/3, Dharamtala Street, Calcutta-1.
- *18. Secretary, Motor Manufacturers' and Importers' Association, Bank of Baroda Building, Fort, Bombay-1.
- 19. Secretary, Society of Motor Manufacturers' and Traders' Ltd., P. O. Box 173, New Delhi.
- 20. Secretary, Motor Vehicles and Allied Merchants' Association, 38-A, Mount Road, Madras-6.
- 21. Secretary, Indian Institute of Road Transport, Worli, Bombay.

F. STATE GOVERNMENTS :

- *1. The Chief Secretary to the Government of Assam, Shillong.
- *2. The Chief Secretary to the Government of West Bengal, Calcutta.
- *3. The Chief Secretary to the Government of Bombay, Bombay.
- *4. The Chief Secretary to the Government of Madras, Madras.
- *5. The Chief Secretary to the Government of East Punjab, Chandigarh.
- *6. The Chief Secretary to the Government of Saurashtra, Rajkot.
- *7. The Chief Secretary to the Government of Vindhya Pradesh, Rewa.
- *8. The Chief Secretary to the Government of Madhya Bharat, Gwalior.
- *9. The Chief Secretary to the Government of P.E.P.S.U., Patiala.
- *10. The Chief Secretary to the Government of Travancore-Cochin, Trivandrum.
- *11. The Chief Secretary to the Government of Jammu and Kashmir, Srinagar.
- *12. The Chief Secretary to the Government of Bihar, Patna.
- *13. The Chief Secretary to the Government of Madhya Pradesh, Nagpur.
- *14. The Chief Secretary to the Government of Orissa, Cuttack.
- *15. The Chief Secretary to the Government of Uttar Pradesh, Lucknow.
- *16. The Chief Secretary to the Government of Rajasthan, Jaipur.
- *17. The Chief Secretary to the Government of Mysore, Bangalore.
- *18. The Chief Secretary to the Government of Hyderabad (Dn.), Hyderabad (Dn.).
- *19. The Chief Secretary to the Government of Andhra, Kurnool.
- *20. The Chief Commissioner, Himachal Pradesh, Simla.
- *21. The Chief Commissioner, Delhi.

APPENDIX III
[Vide paragraph 5.6]

I. List of persons who attended the Commission's Public Inquiry on 28th and 29th June, 1956

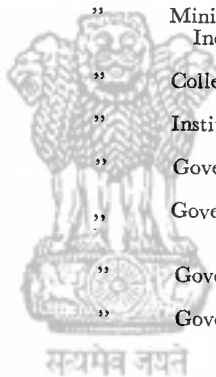
Name of the representative	Name of the firm
A. MANUFACTURERS:	
1. Shri L. P. Misra } 2. Shri S.R. Bhise }	Representing M/s. Hindustan Motors Ltd., 8, Royal Exchange Place, Calcutta.
3. Shri Lalchand Hirachand } 4. Shri Chinubhai Kilachand } 5. Shri V. M. Meswani } 6. Dr. S. Gricciolli. }	" The Premier Automobiles Ltd., [Agra Road, Kurla, Bombay-37.
7. Shri S. Moolgaokar } 8. Shri A. B. Parakh } 9. Shri V. Srinivasan } 10. Shri N. Annaswamy } 11. Shri A. Natarajan }	" Tata Locomotive and Engineering Co. Ltd., Bombay House, Bruce St., Fort, Bombay.
12. Shri K. C. Mahindra } 13. Shri Keshub Mahindra } 14. Shri I. Chatterji } 15. Shri S. K. Bose }	" Mahindra & Mahindra Ltd., Gateway Building, Apollo Bunder, Fort, Bombay.
16. Mr. A. E. L. Collins	" Ashok-Leyland Ltd., 38, Mount Road, Madras-6.
17. Shri K. Gopalakrishna	" The Standard Motor Products of India Ltd., 29, Mount Road, Madras-2.
18. Mr. A. J. Lund } 19. Shri S. Anantharamkrishnan } 20. Shri S. Anantharam } 21. Mr. E. O. Austin }	" M/s. Simpson & Co. Ltd., Mount Road, Madras-2.
22. Shri P. Matthen } 23. Shri A. R. Sundaresan } 24. Mr. H. D. Jones }	" Automobile Products of India Ltd., Agra Road, Bhandup, Bombay-40.
B. STATE TRANSPORT SERVICES:	
1. Shri N. Balakrishna	B. E. S. & T. Undertaking, Electric House, Bombay-1.
2. Shri N. D. Daftary } 3. Shri S. N. Chawla }	" Bombay State Road Transport Corporation, Worli, Bombay.
4. Shri J. N. Talukdar } 5. Shri B. Roy Chowdhury }	" Directorate of Transportation, Government of West Bengal, 5, Nilgunge Road, Belghoria, 24 Parganas.
6. Shri J. N. Ugra	" Transport Commissioner, Government of Uttar Pradesh, Lucknow.
C. FLEET OWNERS:	
1. Shri T. S. Rajam	" Southern Roadways Private Ltd., T. V. S. Building, West Veli St., Madurai.
2. Shri Gopalakrishna Kudwa	" The Canara Public Conveyance Co. Ltd., Post Box No. 85, Mangalore, South Kanara.

Name of the representative	Name of the firm
D. ASSOCIATIONS:	
1. Shri B. V. Vagh } 2. Shri C. S. Nair }	Representing The Indian Roads and Transport Development Association Ltd., 27, Bastion Road, Bombay-1.
3. Shri N. Balakrishna	" Indian Institute of Road Transport, BEST House, Fort, Bombay-1.
4. Shri L. L. Narayanan	" Motor Vehicles and Allied Merchants, Association, 38/A, Mount Road, Madras-6.
5. Shri K. N. Talwar } 6. Shri K. N. Menon }	" The Automobile Traders Association, Delhi, 12, Scindia House, Curzon Road, New Delhi.
7. Shri Ajit Singh Dhamrait	" West Bengal Lorry Syndicate, 6-3, Madan Street, Calcutta.
8. Shri M. B. Madgavkar	" The Western India Automobile Association, Lalji Naranji Memorial Bldg., Veer Nariman Road, Bombay-1.
9. Dr. J. N. Rane } 10. Shri Habib N. Chinoy }	" The Motor Manufacturers and Importers Association Ltd., Bank of Baroda Building, Apollo Street, Bombay.
11. Shri B. M. Shaw } 12. Shri M. G. Kapadia }	" The Bombay Motor Merchants Association Ltd., Sandhurst Building, Near Sandhurst Bridge, Bombay-4.
13. Shri C. S. Pande	" Automotive Manufacturers' Association of India, India Exchange, Calcutta-1.
14. Mr. Shorbridge	" Motor Industries Association, 60/3, Dharamtala Street, Calcutta-13.
E. OTHERS:	
1. Shri S. H. Bhedwar } 2. Shri H. D. Karaka }	" Metro Motors, The Motor House, Hughes Road, Bombay-7.
3. Shri Harendra R. Aslot } 4. Shri S. D. Priolkar }	" The Malleable Iron and Steel Co. Ltd., Mathuradas Mills Compound, Lower Parel, Bombay-13.
5. Shri P. Saran Gupta	" P. Sharan and Co., Kashmere Gate, Delhi-6.
6. Shri Bipin Vakil	" Automobile & Agricultural Industries Corporation, 497/3, Banji Nivas, Sardar Vallabhbai Patel Rd., Bombay-4.
7. Mr. G. W. Stone	" George. Oakes Private Ltd., P. O. Box No. 499, Bombay-1.
8. Shri B. D. Garg	" Automobile India, P. & O. Bldg., Post Box No. 1400, Delhi-6.
9. Shri Kirti Krishna Ladia	" Post Box No. 1140, Bombay-1.
10. Shri N. K. Limji	" Bombay Cycle & Motor Agency Ltd., 534, Sandhurst Bridge, Bombay-7.

Name of the representative	Name of the firm
11. Mr. A. R. Denholm	Representing M/s. F. Perkins Ltd., Peterborough, England, C/o. George Oakes Private Ltd., P. O. Box No. 499, Bombay-1.
12. Shri Kishu Gidwaney	„ Automobile News, AMA House, 1, Arthur Bunder, Colaba, Bombay-5.
13. Mr. A. G. Whitney	„ French Motor Car Co. Ltd., 9-11, Hughes Road, Bombay-26.
14. Shri N. D. Chinoy	„ The Bombay Garage Private Ltd., Meher Building, Chowpatty, Bombay-7.

F. CENTRAL & STATE GOVERNMENT DEPARTMENTS:

1. Lt. Col. V. P. S. Menon	„	Development Wing, Ministry of Commerce and Industry, New Delhi.
2. Lt. Col. W. S. Ahluwalia	„	Ministry of Defence, Government of India.
3. Shri B. K. Baam	„	Collector of Customs, Bombay.
4. Lt. Col. T. B. Poduwal	„	Institute of Armament Studies, Kirkee.
5. Shri N. D. Daftary	„	Government of Bombay, Bombay.
6. Shri J. N. Talukdar	}	Government of West Bengal, Calcutta.
7. Shri B. Roy Chowdhury		
8. Shri J. N. Ugra	„	Government of Uttar Pradesh, Lucknow.
9. Shri J. Devasahayam	„	Government of Madras, Madras.



II. List of persons who attended the discussions with the Commission

Date	Name of the firm/Association	Name of the representatives
2-7-56 and 4-7-56 (Afternoon)	M/s. Hindustan Motors Ltd., Calcutta	Shri B. M. Birla. Shri G. D. Thirani, M. P. Shri S. R. Bhise.
3-7-56 (Forenoon)	M/s. Ashok-Leyland Ltd., Madras	Mr. A. E. L. Collins. Mr. J. Fairclough.
3-7-56 (Afternoon)	M/s. Simpson & Co., Madras	Shri S. Anantharamakrishnan. Mr. A. J. Lund. Shri S. Anantharam. Mr. E. O. Austin. Shri P. S. V. Nathan.
4-7-56 (Forenoon)	The Standard Motor Products of India, Ltd., Madras.	Shri K. Gopalankrishnan. Shri K. V. Srinivasan.

Date	Name of the firm/Association	Name of the representatives
5-7-56	The Tata Locomotives and Engineering Co. Ltd., Bombay.	Shri S. Moolgaokar. Shri A. B. Parakh. Shri V. Srinivasan. Shri N. Annaswami. Shri A. Natarajan.
6-7-56	The Premier Automobiles Ltd., Bombay.	Shri Lalchand Hirachand. Shri Chinubhai Kilachand. Shri V. M. Meswani.
7-7-56	M/s. Mahindra & Mahindra Ltd., Bombay.	Shri K. C. Mahindra. Shri Keshub Mahindra. Shri I. Chatterji. Shri C. B. Saran. Shri S. K. Bose.
9-7-56 (Forenoon)	The Automobile Products of India Ltd., Bombay.	Shri M. A. Chidambaran. Shri P. Mathen. Shri A. R. Sundaresan. Mr. R. Jenks. Mr. H. D. Jones. Mr. B. J. Newbery.
9-7-56 (Afternoon)	The Motor Manufacturers and Importers Association, Bombay.	Dr. J. M. Rane.
20-7-56	The Federation of Motor Transport Association, Bombay.	Dr. J. M. Rane. Shri B. V. Vagh. Shri S. K. Swaminathan.
21-7-56	The Indian Road and Transport Development Association, Bombay.	Shri E. A. Nadirshah. Shri B. V. Vagh. Shri C. S. Nair.
24-7-56	Ministry of Transport, New Delhi.	Shri D. D. Suri, Dy. Secretary to the Government of India,

APPENDIX IV

[Vide Paragraph 12.3]

Statement showing sales of locally assembled and imported vehicles for 1954, 1955 and January-March, 1956

Year		Sales by approved manu- facturers	Sales by other assem- blers	Imports	Total
1954	Cars	6,163	713	1,451	8,327
	Trucks	4,304	194	242	4,740
	TOTAL	10,467	907	1,693	13,067
1955	Cars	12,289	240	1,729	14,258
	Trucks	9,501	953	336	10,790
	TOTAL	21,790	1,193	2,065	25,048
1956 (Jan-March)	Cars	3,102	173	115	3,390
	Trucks	4,282	70	30	4,382
	TOTAL	7,384	243	145	7,772

APPENDIX V

[Vide Paragraph 13.1]

Statement giving the number of each type of vehicle manufactured by approved manufacturers, the phased programme as approved by Government and the number of each of the major components produced in 1955 and in January-April, 1956

(* denotes not planned)

Sl. No.	Name of component	Approved programme of manufacturer (Year & phase)	Number of components produced			
			1955		1956 (Jan-April)	
			Manufactured from raw material	Machined from semi-finished components	Machined from raw material	Machined from semi-finished components
1	2	3	4	5	6	7
1. Hindustan Landmaster car:						
		Production—1955			3,878	
		—1956 (January-April)			1,485	
	ENGINE :					
1	Cylinder block	1953	3,848	..	1,373	..
2	Cylinder head	52-53	3,848	..	1,373	..
3	Crankshaft	52-53	3,848	..	1,373	..
4	Camshaft	52-53	3,448	..	1,373	..
5	Connecting rods	52-53	15,392	..	5,492	
6	Connecting rod bolts	52-53	30,784	..	10,984	..
7	Flywheel	52-53	3,848	..	1,373	..
8	Starter gear ring	53-53	3,848	..	1,373	..
9	Oil sump.	52-53	..	3,848	..	1,373
10	Timing gears	52-53	3,848	..	1,378	..
11	Tappets	52-53	30,784	..	10,984	..
12	Valve guides	52-53	30,784	..	10,984	..
13	Exhaust manifold	52-53	3,848	..	1,373	..
14	Intake manifolds	52-53	3,848	..	1,373	..
15	Water pump assembly	52-53	3,848	..	1,373	..
16	Ventilator	55(II)	..	..	..	..

1	2	3	4	5	6	7
17	Ventilator pulley . . .	52-53	..	3,848	..	1,373
18	Fuel tank . . .	56(II)	..	..	..	..
19	Piston pins . . .	52-53	15,892	..	5,492	..
20	Piston assembly . . .	52-53	..	15,892	..	5,492
21	Crankshaft bearings . . .	55(II)	..	..	..	..
22	Valves	52-53	30,784	..	10,984	..
23	Valve Springs	56(II)	..	..	..	..
24	Carburettor* . . . . .	..	..	..	..	..
25	Fuel pump* . . . . .	..	..	..	..	..
26	Fuel filter	55(II)	..	..	..	..
27	Fuel lines	55(II)	..	..	..	..
28	Air cleaner and intake silencer	56(II)	..	..	..	..
29	Oil filter	56(II)	..	..	..	..
30	Radiator assembly	56(II)	..	..	..	..
31	Exhaust muffler	54(I)	..	..	..	..
32	Exhaust pipe	54(I)	..	..	..	..
CHASSIS :						
1	Frame brackets	56(II)	..	..	..	..
2	Wheel hubs	56(II)	..	..	..	..
3	Brake drums	52	..	15,584	..	6,772
4	Brake shoe	56(II)	..	..	..	..
5	Brake shoe holder	56(II)	..	..	..	..
6	Brake drum cover	56(II)	..	..	..	..
7	Hand brake lever	56(II)	..	..	..	..
8	Foot brake lever	56(II)	..	..	..	..
9	Steering gear	56(III)	..	..	..	..
10	Steering column	56(II)	..	..	..	..
11	Steering arm	56(II)	..	..	..	..
12	Steering knuckle	56(II)	..	..	..	..
13	Disc wheels* . . . . .	..	..	..	..	..
14	Wheel, bolts & nuts	52	1,55,840	..	67,720	..
15	Hub cups	54	..	..	..	..

1	2	3	4	5	6	7
16	Suspension leaf spring . . .	54	..	..	..	..
17	Torsion bars* . . .	..	..	..	..	..
18	Shock absorbers . . .	56(II)	..	..	..	..
19	Hydraulic brake . . .	56(II)	..	..	..	..
20	Brake cables* . . .	..	..	..	..	..
21	Brake fluid* . . .	..	..	..	..	..
22	Tie rods . . .	55(II)	..	..	..	..
23	Steering wheel . . .	..	..	..	..	..
24	Ball & Socket joints* . . .	..	..	..	..	..
25	Bumpers . . .	55(II)	..	..	..	..
POWER TRAIN :						
1	Clutch* . . .	..	..	..	..	..
2	Clutch housing . . .	52-53	3,801	..	1,349	..
3	Clutch lever . . .	52-53	3,801	..	1,349	..
4	Transmission case . . .	52-53	3,801	..	1,349	..
5	Transmission case cover . . .	52-53	3,801	..	1,349	..
6	Main transmission pinion . . .	52-53	3,801	..	1,349	..
7	Secondary shaft . . .	52-53	3,801	..	1,349	..
8	Gears . . .	52-53	3,801	..	1,349	..
9	Synchroniser parts . . .	52-53	..	10,403	..	4,047
10	Universal joints . . .	56(II)	..	..	..	..
11	Propellor shaft . . .	56(II)	..	..	..	..
12	Spline shaft . . .	52-53	3,801	..	1,349	..
13	Shifting shafts . . .	..	..	..	..	..
14	Gear shift lever . . .	..	..	..	..	..
15	Gear Fork* . . .	..	..	..	..	..
16	Crown wheel & pinion . . .	52-53	7,678	..	3,218	..
17	Differential housing . . .	52(II)	..	3,839	..	1,609
18	Differential gears . . .	52(II)	7,678	..	..	3,218
19	Rear axle side shafts . . .	52(II)	7,678	..	..	3,218
ELECTRICAL EQUIPMENT :						
1	Dynamo . . .	56(II)	..	..	..	..

1	2	3	4	5	6	7
2	Starter motor	56(II)	..	..	..	..
3	Battery* . . . .	..	..	..	..	..
4	Starter cables	55(II)	..	..	..	..
5	Ignition coil* . . . .	..	..	..	..	..
6	Distributor with interruptor* . . . .	..	..	..	..	..
7	Voltage regulator* . . . .	..	..	..	..	..
8	Ignition cables	55(II)	..	..	..	..
9	Sparking plugs	55(II)	..	..	..	..
10	Ignition switch* . . . .	..	..	..	..	..
11	Head lamps	56(II)	..	..	..	..
12	Tail lamps	56(II)	..	..	..	..
13	Side lamps	55(II)	..	..	..	..
14	Stop lamps	55(II)	..	..	..	..
15	Direction indicators* . . . .	..	..	..	..	..
16	Horns electrical* . . . .	..	..	..	..	..
17	Horn buttons* . . . .	..	..	..	..	..
18	Windshield wipers . . . .	..	..	..	..	..
19	Wiring harness	55(II)	..	..	..	..

2. Studebaker Car:

ENGINE:

Production—1955
—1956 (January April)617
172

(Engine is the same as that for Studebaker truck and hence the production figures for components are included in the statement for the trucks.)

CHASSIS :

1	Chassis (Frame long) . . . .	..	..	..	..	..
2	Frame brackets . . . .	..	..	..	..	..
3	Rear axle housing	56(II)	..	..	..	..
4	Brake drums . . . .	..	..	..	..	..
5	Brake shoe* . . . .	..	..	..	..	..
6	Brake Shoe Holder* . . . .	..	..	..	..	..
7	Brake drum cover . . . .	..	..	..	..	..
8	Hand brake lever* . . . .	..	..	..	..	..
9	Foot brake lever* . . . .	..	..	..	..	..
10	Steering gear* . . . .	..	..	..	..	..

1	2	3	4	5	6	7
11	Steering column*	..	..	..	..	..
12	Steering knuckle*	..	..	..	..	..
13	Disc wheel*	..	..	..	..	..
14	Wheel, bolts & nuts .	..	..	..	..	..
15	Hub cups .	..	..	..	..	..
16	Suspension leaf spring .	..	..	..	..	..
17	Suspension coil spring*	..	..	..	..	..
18	Shock absorbers (Front) .	..	..	..	..	..
19	Hydraulic brake*	..	..	..	..	..
20	Vacuum serve brake .	..	..	..	..	..
21	Brake fluid* .	..	..	..	..	..
22	Tie rods* .	..	..	..	..	..
23	Steering wheel*	..	..	..	..	..
24	Ball & socket joints*	..	..	..	..	..
25	Bumpers* .	..	..	..	..	..
POWER TRAIN :						
1	Clutch* .	..	..	..	..	..
2	Clutch housing .	54(I)	..	..	..	..
3	Clutch lever .	54(I)	..	..	..	..
4	Transmission case .	55(II)	..	..	..	..
5	Transmission case cover .	55(II)	..	..	..	..
6	Main transmission pinion .	55(II)	..	..	..	..
7	Secondary shaft .	55(II)	..	..	..	..
8	Gears .	55(II)	..	..	..	..
9	Synchroniser parts .	55(II)	..	..	..	..
10	Universal joints*	..	..	..	..	..
11	Propeller shaft*	..	..	..	..	..
12	Spline shaft .	55(II)	..	..	..	..
13	Shifting shafts .	56(II)	..	..	..	..
14	Gear shift lever .	55(II)	..	..	..	..
15	Gear fork .	55(II)	..	..	..	..
16	Crown wheel and pinion .	56(II)	..	..	..	..

1	2	3	4	5	6	7
17	Differential housing	56(II)	..	..	..	..
18	Differential gears	56(II)	..	..	..	..
19	Rear axle side shafts	56(II)	..	..	..	..
ELECTRICAL EQUIPMENT :						
1	Dynamo*	..	..	..	..	..
2	Starter motor*	..	..	..	..	..
3	Battery*	..	..	..	..	..
4	Starter cables	..	..	..	..	..
5	Ignition coil*	..	..	..	..	..
6	Distributor with interruptor*	..	..	..	..	..
7	Voltage regulator*	..	..	..	..	..
8	Ignition cables	..	..	..	..	..
9	Sparking plugs	..	..	..	..	..
10	Ignition switch*	..	..	..	..	..
11	Head lamps	..	..	..	..	..
12	Tail lamps	..	..	..	..	..
13	Side lamps	..	..	..	..	..
14	Stop lamps	..	..	..	..	..
18	Horn electrical.	..	..	..	..	..
16	Horn buttons*	..	..	..	..	..
17	Windshield wipers*	..	..	..	..	..
15	Wiring harness	..	..	..	..	..
3. Studebaker trucks:						
Production— 1955					2,360	
— 1956 (January April)					1,584	
ENGINE :						
1	Cylinder block	54(II)	..	..	..	..
2	Cylinder head	54(II)	..	..	..	..
3	Crankshaft	54(II)	..	..	..	..
4	Camshaft	54(I)	..	..	..	..
5	Connecting rods	54(I)	..	2,464	..	5,120

1	2	3	4	5	6	7
6	Connecting rod bolts.	54(I)	..	..	..	..
7	Fly wheel	54(I)	308	..	640	..
8	Starter gear ring	54(I)	308	..	640	..
9	Oil sump.	54(I)	..	..	..	..
10	Timing gears	54(I)	308	..	640	..
11	Tappets	..	..	..	..	..
12	Rocker shafts	54(I)	..	616	..	1,280
13	Rocker levers	54(I)	..	4,928	..	10,240
14	Valve guides	54(I)	..	..	..	..
15	Exhaust manifolds	54(I)	..	616	..	1,230
16	Intake manifolds	54(I)	..	308	..	640
17	Water pump assembly	54(I)	..	308	..	640
18	Ventilator*	..	..	..	..	..
19	Ventilator pulley*	..	..	..	..	..
20	Fuel tank*	..	..	..	..	..
21	Piston pins	54(I)	2,164	..	5,120	..
22	Piston assembly	54(I)	..	2,464	..	5,120
23	Crankshaft bearings	..	..	..	..	..
24	Valves	55(II)	..	..	..	..
25	Valve springs	..	..	..	..	..
26	Carburetor*	..	..	..	..	..
27	Fuel pump*	..	..	..	..	..
28	Fuel lines*	..	..	..	..	..
29	Air cleaner & intake silencer	57(II)	..	..	..	..
30	Oil filter*	..	..	..	..	..
31	Radiator assembly*	..	..	..	..	..
32	Exhaust muffler	56(II)	..	..	..	..
33	Exhaust pipe	56(II)	..	..	..	..

CHASSIS :

Manufacture of components for chassis was not included in the approved programme. The Company has not manufactured any of the components.

1	2	3	4	5	6	7
POWER TRAIN :						
1	Clutch*	..	..	..	..	..
2	Clutch housing . . .	54(I)	1,308	..	640	..
3	Clutch lever . . .	54(I)	..	616	..	1,289
4	Transmission case . . .	55(II)	..	..	..	..
5	Transmission case cover . . .	55(II)	..	..	..	..
6	Main transmission pinion . . .	55(II)	..	..	..	..
7	Secondary shaft . . .	55(II)	..	..	..	..
8	Gears	55(II)	..	..	..	..
9	Synchroniser parts . . .	55(II)	..	..	..	..
10	Universal joints* . . .	..	..	..	..	..
11	Propeller shaft* . . .	..	..	..	..	..
12	Spline shaft* . . .	..	..	..	..	..
13	Shifting shafts . . .	55(II)	..	..	..	..
14	Gear shift lever . . .	..	..	..	..	..
15	Gear fork	55(II)	..	..	..	..
16	Crown wheel and pinion . . .	56(II)	..	..	..	..
17	Differential housing . . .	55(II)	..	..	..	..
18	Differential gears . . .	56(II)	..	..	..	..
19	Rear axle side shafts . . .	56(II)	..	..	..	..
<i>Dodge/Desto/Plymouth Car:</i>						
Production— 1955						1,403
— 1956 (January April)						526
ENGINE						
1	Cylinder block . . .	54(I)	..	207	..	505
2	Cylinder head . . .	54(I)	..	31	..	464
3	Cranskahft	54(II)	..	..	..	..
4	Camshaft	54(II)	..	..	..	..
5	Connecting rods . . .	54(I)	186	..	2,784	..
5	Connecting rod bolts* . . .	..	..	..	..	..
7	Flywheel	54(II)	83	..	537	..
8	Starter gear ring . . .	54(II)	..	..	..	..

1	2	3	4	5	6	7
9	Oil sump	54(II)	..	..	..	..
10	Timing gears	54(II)	..	..	..	..
11	Tappets*. . . . .	..	..	..	..	..
12	Valve guides	54(II)	372	..	5,568	..
13	Exhaust manifold	54(I)	..	..	..	..
14	Intake manifold	54(I)	..	31	..	464
15	Water pump assembly	45(I)	31	31	464	..
16	Ventilator	54(I)	..	..	..	..
17	Ventilator pulley	54(I)	..	..	..	..
18	Fuel tank	54(I)	..	..	..	..
19	Piston pins . . . . .	..	..	..	..	..
20	Piston assembly . . . . .	..	..	..	..	..
21	Crankshaft bearings . . . . .	..	..	..	..	..
22	Roller chains . . . . .	..	..	..	..	..
23	Valves . . . . .	..	..	..	..	..
24	Valve springs . . . . .	..	..	..	..	..
25	Valve seat inserts . . . . .	..	..	..	..	..
26	Carburetor . . . . .	..	..	..	..	..
27	Fuel pump . . . . .	..	..	..	..	..
28	Fuel filter . . . . .	..	..	..	..	..
29	Fuel lines . . . . .	..	..	..	..	..
30	Air cleaner and intake silencer . . . . .	..	..	..	..	..
31	Oil filter . . . . .	..	..	..	..	..
32	Radiator assembly . . . . .	..	..	..	..	..
33	Exhaust muffler . . . . .	..	1,856	..	800	..
34	Exhaust pipe . . . . .	..	1,335	..	565	..
CHASSIS:						
1	Chassis (Frame long)	55(II)	..	..	..	..
2	Frame brackets	55(II)	..	..	..	..
3	Rear axle housing	56(I)	..	..	..	..
4	Front axle housing	56(I)	..	..	..	..
5	Front axle	56(I)	..	..	..	..

1	2	3	4	5	6	7
6	Wheel hubs	56(I)	..	..	..	..
7	Brake drums	56(I)	..	..	..	..
8	Brake shoes . . . . .	..	..	..	..	..
9	Brake shoe holder . . . . .	..	..	..	..	..
10	Brake drum cover . . . . .	..	..	..	..	..
11	Hand brake lever	55(II)	..	..	..	..
12	Foot brake lever	55(II)	..	..	..	..
13	Steering gear . . . . .	..	..	..	..	..
14	Steering column . . . . .	..	..	..	..	..
15	Steering arm	56(I)	..	..	..	..
16	Steering knuckle	56(I)	..	..	..	..
17	King pin	56(I)	..	..	..	..
18	Disc wheels . . . . .	..	..	..	..	..
19	Wheel, bolts and nuts . . . . .	..	..	..	..	..
20	Hub caps . . . . .	..	..	..	..	..
21	Suspension leafspring	55(I)	..	..	..	..
22	Suspension coil spring . . . . .	..	..	..	..	..
23	Torsion bars . . . . .	..	..	..	..	..
24	Shock absorbers	55(II)	..	..	..	..
25	Hydraulic brake . . . . .	..	..	..	..	..
26	Brake cables . . . . .	..	..	..	..	..
27	Brake fluid . . . . .	..	..	..	..	..
28	Tie rods . . . . .	..	..	..	..	..
29	Steering wheel . . . . .	..	..	..	..	..
30	Ball and Socket joints . . . . .	..	..	..	..	..
31	Bumpers . . . . .	..	..	..	..	..

POWER TRAIN:

1	Clutch* . . . . .	..	..	..	..	..
2	Clutch housing	54(I)	..	..	..	..
3	Clutch lever	55(II)	..	..	..	..
4	Transmission case	55(II)	..	..	..	..
5	Transmission case cover	55(II)	..	..	..	..

1	2	3	4	5	6	7
6	Main transmission pinion .	55(II)	..	..	..	..
7	Secondary shaft . .	55(II)	..	..	..	..
8	Gears	55(II)	..	..	..	..
9	Synchroniser parts . .	55(II)	..	..	..	..
10	Universal joints . .	54(II)	..	..	..	..
11	Propeller shafts . .	54(II)	..	..	..	..
12	Spline shafts	55(II)	..	..	..	..
13	Shifting shafts . . .	55(II)	..	..	..	..
14	Gear shift lever . . .	55(II)	..	..	..	..
15	Gear fork	55(II)	..	..	..	..
16	Crown wheel and pinion .	56(II)	..	..	..	..
17	Differential housing . .	56(I)	..	..	..	..
18	Differential gears . . .	56(I)	..	..	..	..
19	Rear axle side shafts . .	56(I)	..	..	..	..
20	Front axle side shafts . .	56(I)	..	..	..	..

5. Dodge/Desoto/Fargo trucks :

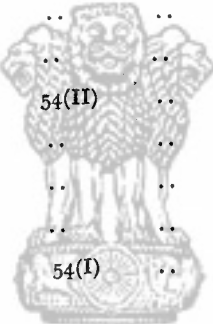
Production—1955 3,887

—1956 (January-April) 1,584

ENGINE:

1	Cylinder block . . .	54(I)	..	1,605	..	264
2	Cylinder head . . .	54(I)	..	1,532	42	669
3	Crankshaft	54(II)	..	94	..	538
4	Camshaft	54(II)	..	170	..	686
5	Connecting rods . . .	54(I)	2,262	..	2,381	..
6	Connecting rod bolts*	..	..	..	..	..
7	Flywheel	54(II)	362	..	400	..
8	Starter gear ring . . .	54(II)	..	..	..	..
9	Oil sump	55(I)	..	..	..	..
10	Timing gears	54(II)	235	..	..	..
11	Tappets	54(II)	..	..	..	..
12	Valve guides . . . . .	..	..	..	..	..
13	Exhaust manifold . . .	54(I)	692	875	317	144

1	2	3	4	5	6	7
14	Intake manifold . . .	54(I)	839	238	1,031	133
15	Water pump assembly . . .	54(I)	2,540	..	444	..
16	Ventilator	54(I)	..	..	..	..
17	Ventilator pulley* . . . . .	..	..	..	..	..
18	Fuel tank . . . . .	..	4,290	..	1,388	..
19	Piston pins* . . . . .	..	..	..	..	..
20	Piston assembly* . . . . .	..	..	..	..	..
21	Crankshaft bearings* . . . . .	..	..	..	..	..
22	Roller chain* . . . . .	..	..	..	..	..
23	Valves* . . . . .	..	..	..	..	..
24	Valve springs* . . . . .	..	..	..	..	..
25	Carburetor* . . . . .	..	..	..	..	..
26	Fuel pump* . . . . .	..	..	..	..	..
27	Fuel filter* . . . . .	..	..	..	..	..
28	Fuel lines* . . . . .	..	545	..	170	..
29	Air cleaner and intake silencer* . . . . .	..	..	..	..	..
30	Oil filter* . . . . .	..	..	..	..	..
31	Radiator assembly . . . . .	..	3,717	..	1,404	..
32	Exhaust muffler . . . . .	..	5,821	..	958	..
33	Exhaust pipe . . . . .	..	3,351	..	1,276	..
CHASSIS:						
1	Chassis (Frame long)	54(II)	900	..	411	..
2	Frame brackets* . . . . .	..	..	..	..	..
3	Rear axle housing	55(II)	..	..	..	..
4	Front axle housing	55(II)	..	..	..	..
5	Front axle	55(II)	..	..	..	..
6	Wheel hubs	55(II)	..	..	..	..
7	Brake drums	55(II)	..	..	..	..
8	Brake shoes* . . . . .	..	..	..	..	..
9	Brake shoe holder* . . . . .	..	..	..	..	..
10	Brake drum cover	55(II)	..	..	..	..
11	Hand brake lever	54(II)	..	..	..	..
12	Foot brake lever* . . . . .	..	..	..	..	..

1	2	3	4	5	6	7
13	Steering gear*	..	..	..	..	..
14	Steering column*	..	..	..	..	..
15	Steering arm*	..	..	..	..	..
16	Steering knuckle*	..	..	..	..	..
17	King pin*	..	..	..	..	..
18	Disc wheels*	..	..	..	..	..
19	Wheel, bolts and nuts*	..	..	..	..	..
20	Suspension leaf spring*	..	17,675	..	6,325	..
21	Shock absorbers (Front)*	..	..	..	..	..
22	Hydraulic brake*	..	..	..	..	..
23	Vacuum serve brake*	..	..	..	..	..
24	Compressed air brake*	..	..	..	..	..
25	Brake cables*	..	..	..	..	..
26	Brake fluid	..	54(II)
27	Tie rods
28	Steering wheel
29	Ball and Socket joints
30	Bumpers.	..	54(I)
						
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POWER TRAIN:						
1	Clutch	..	54(II)
2	Clutch housing	..	54(II)	1,149	977	513
3	Clutch lever	..	54(I)
4	Transmission case	..	54(I)	1,025	..	424
5	Transmission case cover*	..	54(I)	803	..	732
6	Main transmission pinion	..	54(II)	400	..	738
7	Secondary shaft	..	54(II)	790	..	665
8	Gears	..	54(II)	3,962	..	3,234
9	Synchroniser parts	..	..	..	..	..
10	Universal joints	..	..	20,065	..	2,699
11	Propeller shaft	..	..	6,933	..	2,342
12	Spline shaft	..	54(I)	6,475	..	1,925
13	Shifting shafts	..	54(II)	2,462	..	2,779

1	2	3	4	5	6	7
14	Gear shift lever . . .	..	..	..	..	..
15	Gear fork . . .	54(II)	3,256	..	3,131	..
16	Crown wheel and pinion .	55(II)	..	..	..	..
17	Differential housing . .	55(II)	..	..	..	..
18	Differential gears . . .	55(II)	..	..	..	..
19	Rear axle side shafts .	55(II)	..	..	..	..
20	Front axle side shafts .	55(II)	..	..	..	..

6. *Standard Vanguard Cars:*

Production—1955	637
—1956 (January-April)	106

ENGINE:

1	Cylinder block . . .	54(I)	..	13	..	53
2	Cylinder head . . .	54(I)	..	1,408	..	38
3	Crankshaft	55(II)	..	..	..	..
4	Camshaft	55(I)	..	..	..	..
5	Connecting rods* . . .	..	..	..	..	..
6	Connecting rod bolts .	54(I)	..	..	..	..
7	Flywheel	54(II)	..	..	..	..
3	Starter gear ring . . .	56(II)	..	..	..	..
9	Oil sump	54(I)	..	..	..	..
10	Timing gears	56(II)	..	..	..	..
11	Tappets	54(I)	..	..	..	315
12	Rocker shafts	55(II)	..	..	..	..
13	Rocker levers	54(II)	..	..	..	..
14	Valve guides	54(I)	..	..	..	884
15	Exhaust manifold . . .	54(I)	..	644	..	101
16	Intake manifold	54(I)	..	305	..	11
17	Water pump assembly .	54(I)	..	655	..	150
18	Fuel tank	54(I)	475	..	100	..
19	Piston pins	54(II)	..	..	..	..
20	Piston assembly	54(I)	..	..	..	..
21	Cylinder liners	55(II)	..	..	..	..

1	2	3	4	5	6	7
22	Crankshaft bearings*	..	..	..	..	..
23	Valves	55(I)	..	..	..	..
24	Valve springs	55(I)	..	..	..	..
25	Carburetor* . . . . .	..	..	..	..	..
26	Injection nozzle* . . . . .	..	..	..	..	..
27	Fuel pump* . . . . .	..	..	..	..	..
28	Fuel filter* . . . . .	..	..	..	..	..
29	Fuel lines* . . . . .	..	..	..	..	..
30	Air cleaner and intake silencer	55(I)	..	..	..	..
31	Oil filter* . . . . .	..	..	..	..	..
32	Radiator assembly	56(I)	..	..	..	..
33	Exhaust muffler	54(I)	684	..	36	..
34	Exhaust pipe	54(I)	674	..	109	..
CHASSIS:						
1	Rear axle housing*	..	..	..	..	..
2	Front axle housing*	..	..	..	..	..
3	Front axle* . . . . .	..	..	..	..	..
4	Wheel hubs	56(I)	..	..	..	..
5	Brake drums	56(I)	2,401	..	528	..
6	Brake shoes* . . . . .	..	..	..	..	..
7	Brake shoe holder* . . . . .	..	..	..	..	..
8	Hand brake lever	56(I)	..	..	..	..
9	Foot brake lever . . . . .	..	..	..	..	..
10	Steering gear* . . . . .	..	..	..	..	..
11	Steering column* . . . . .	..	..	..	..	..
12	Steering arm*	56(I)	..	..	..	..
13	King pin*	56(I)	..	..	..	..
14	Disc wheels* . . . . .	..	..	..	..	..
15	Wheel, bolts and nuts*	..	..	..	..	..
16	Hub caps	54(I)	..	..	..	..
17	Suspension leaf spring	55(I)	..	..	..	..
18	Suspension coil spring	55(I)	..	..	..	..

1	2	3	4	5	6	7
19	Shock absorbers . . .	54(I)	..	..	..	..
20	Hydraulic brake* . . .	..	..	..	..	..
21	Brake cables* . . .	..	..	..	..	..
22	Brake fluid* . . .	..	..	..	..	..
23	Tie rods* . . .	55(II)	..	..	..	..
24	Steering wheel* . . .	..	..	..	..	..
25	Ball and Socket joints . . .	..	..	..	..	..
26	Bumpers . . .	55(II)	..	..	..	..
POWER TRAIN:						
1	Clutch* . . .	..	..	..	..	..
2	Clutch housing . . .	55(II)	..	..	..	..
3	Clutch lever* . . .	..	..	..	..	..
4	Transmission case . . .	55(II)	..	..	..	..
5	Transmission case cover . . .	55(II)	..	..	..	..
6	Main transmission pinion . . .	56(II)	..	..	..	..
7	Secondary shaft . . .	56(I)	..	..	..	..
8	Gears . . .	56(II)	..	..	..	..
9	Synchroniser parts . . .	56(II)	..	..	..	..
10	Universal joints . . .	..	..	..	..	..
11	Propeller shafts . . .	56(I)	..	..	..	..
12	Spline shafts . . .	56(I)	..	..	..	..
13	Shifting shafts . . .	56(II)	..	..	..	..
14	Gear shift lever . . .	56(II)	..	..	..	..
15	Gear fork . . .	56(II)	..	..	..	..
16	Crown wheel and pinion . . .	56(II)	..	..	..	..
17	Differential housing . . .	56(II)	..	..	..	..
18	Differential gears . . .	56(II)	..	..	..	..
19	Rear axle side shafts . . .	56(II)	..	..	..	..
20	Front axle side shafts . . .	56(II)	..	..	..	..

7. *Fiat-1100 Car:*

For this car only the following components are produced :

1. Fuel tank,
2. Radiator assembly,
3. Exhaust muffler,
4. Exhaust pipe,
5. Suspension leaf spring, and
6. Chassis frame (long and short members).

8. *Standard-10 Car:*

For this car, only two components *viz.*, exhaust muffler and exhaust pipe are produced.

9. *Baby Hindustan Car.*
10. *Leyland trucks.*
11. *Tata-Mercedes-Benz trucks.*
12. *Willy's Jeeps.*

} In the case of these vehicles manufacture has not been completed in any of the components.



APPENDIX VI

[Vide Paragraph 20·8]

Statement showing details of manufacturing costs of certain selected components for various models of commercial vehicles and passenger cars

Name of the unit	Type of vehicle	Nomenclature of components or sub-assembly	Breakup of the indigenous replacement cost						Naked ex-works deletion allowance.	C. I. F. cost of deletion allowance	Calculated landed cost ex-cus-toms duty of deletion allowc.	Difference between indigenous cost and landed cost ex-duty of del. allowc.	Difference as a per-centage on the c.i.f. of deletion allowc.
			Material	Labour	Over-heads	Total	Rs.	Rs.					
1	2	3	4	5	6	7	8	9	10	11	12		
I. Hindustan Motors.	Landmaster	(i) Rear Axle	Rs. 316·48	Rs. 17·34	Rs. 174·06	Rs. 507·88	£ 20·33	Rs. 350·56	Rs. 357·57	Rs. 150·31	42·9		
		(ii) Front Suspension	Rs. 155·98	Rs. 12·05	Rs. 120·92	Rs. 288·95	Rs. 10·92	Rs. 188·16	Rs. 191·92	Rs. 97·03	51·6		
		(iii) Engine	Rs. 802·92	Rs. 54·82	Rs. 550·35	Rs. 1,408·09	Rs. 58·82	Rs. 1,014·32	Rs. 1,034·61	Rs. 373·48	36·8		
		(iv) Gear Box	Rs. 223·55	Rs. 32·26	Rs. 323·89	Rs. 579·70	Rs. 20·35	Rs. 351·00	Rs. 358·02	Rs. 221·68	63·2		
II. Premier Automobiles.	Studebaker Trucks	V8 Engine (estimated)	Rs. 2,272·23	Rs. 50·31	Rs. 799·69	Rs. 3,122·23	\$ 239·00	Rs. 1,344·32	Rs. 1,364·63	Rs. 1,757·60	130·7		
		(i) Radiator	Rs. 136·40	Rs. 10·11	Rs. 52·31	Rs. 198·82	Rs. 23·12	Rs. 147·36	Rs. 149·13	Rs. 49·69	33·72		
		(ii) Engine	Rs. 1,600·38	Rs. 92·06	Rs. 479·05	Rs. 2,171·49	Rs. 207·46	Rs. 1,322·32	Rs. 1,338·20	Rs. 833·29	63·02		
		(iii) Transmission	Rs. 42·60	Rs. 56·78	Rs. 298·21	Rs. 775·59	Rs. 82·10	Rs. 523·29	Rs. 529·58	Rs. 246·01	47·01		
		(iv) Chassis side members	Rs. 258·37	Rs. 27·41	Rs. 141·75	Rs. 427·53	Rs. 36·21	Rs. 230·80	Rs. 233·57	Rs. 193·96	84·04		

C3H6-193" American Petrol Trucks.	(i) Radiator	136.40	10.11	52.31	198.82	23.19	142.13	143.84	54.98	38.68
	(ii) Rear spring	229.18	9.36	64.51	303.05	32.32	198.09	200.47	102.58	51.78
	(iii) Engine	1,600.38	92.06	479.05	2,171.49	211.12	1,293.99	1,309.52	861.97	66.61
	(iv) Transmission	420.60	56.78	298.21	775.59	83.29	510.50	516.63	258.96	50.73
American Suburban Cars.	(v) Chassis side members	346.52	31.13	161.05	538.70	59.55	364.99	369.37	169.33	46.39
	Engine	1,937.97	83.59	435.00	2,456.56	227.24	1,410.19	1,431.17	1,025.39	72.71
	(i) Fuel Tank	32.85	6.86	35.46	75.17	22.78	49.53	50.31	24.86	50.12
	(ii) Rear Spring	50.85	3.88	26.24	80.97	2.36	41.96	42.62	38.35	91.39
III. Standard Motor Pro- ducts of India Ltd.	(i) Cylinder Head	174.20	13.42	41.73	229.35	2.62	44.65	45.52	183.83	411.71
	(ii) Fly wheel	30.75	2.42	7.51	40.68	0.57	9.78	9.79	30.89	315.85
	(iii) Inlet Manifold	34.65	1.47	4.59	40.71	0.68	11.48	11.71	29.00	252.61
	(iv) Brake Drums	62.68	3.16	9.79	75.63	1.62	27.84	28.18	47.45	171.67
IV. Tata Loco- motive and Engineering Co. Ltd.	(v) Rear Road Spring (purchased)	91.63	..	..	91.63	2.85	48.48	49.43	42.20	87.05
	(i) Springs	840.00	..	..	840.00	DMS 291.18	388.71	396.51	443.49	114.09
	(ii) Other components	738.00	81.00	917.00	1,736.00	641.78	856.74	873.93	862.07	100.62
	(i) Springs	840.00	..	..	840.00	366.14	486.75	496.47	343.53	70.58
Bus Chassis.	(ii) Other components	1,373.00	123.00	1,407.00	2,903.00	1,268.97	1,686.99	1,720.68	1,182.32	70.08

Note.—The total indigenous replacement cost does not include any provision for selling expenses, interest and profit.

APPENDIX VII

[Vide Paragraph 22.1]

Statement showing the current rates of import duties on motor vehicles and their components

Item No.	Name of article	Standard rate of duty	Preferential rate of duty if the article is the produce or manufacture of U.K.	Remarks
1	2	3	4	5

75 Conveyances, not otherwise specified and component parts and accessories thereof other than parts and accessories of motor vehicles and batteries, also motor vans and motor lorries imported completely assembled.

3 1/2 per cent
ad
valorem



Under Government of India, Ministry of Finance (Revenue Division), Notification No. 167-Customs dated the 15th October, 1955, articles specified in the Schedule noted below are exempt from the payment of so much of the Customs Duty leviable thereon as is in excess of 20 per cent *ad valorem* and also from the additional duty of Customs leviable thereon under any other law for the time being in force.

SCHEDULE

1. Trucks, propelled by self-contained power, designed principally for loading, unloading, stacking, or tiering of goods, and counter-weighted or designed to be counter-weighted at the steering axle end to enable loads to be handled on forks or other attachments to elevating masts at the driving axle end, including any of the following equipment or attachments imported with and for use with such trucks, *viz.*, special forks, crane attachment, boom attachment, scoop attachment, roll-over or revolving head attachment, drum carrying attachment, side shifting attachment, squeeze gripping attachment, steady attachment, or clamp lift, brick forks, bale carrying attachment, platform attachment, drum handling attachment, coal grab attachment, push pull attachment, pusher attachment, case grab attachment and end or side dumping skip.

2. Trucks, elevating platform, propelled by self-contained power, and with platform elevation not exceeding 12 inches.

Under Government of India, Ministry of Finance (Revenue Division), Notification No. 144-Customs, dated the 3rd September, 1955: three-wheeled motor vehicles as mentioned below are exempt from the payment of so much of the Customs duty leviable thereon as is in excess of 75 per cent *ad valorem*:—

- (1) Auto Rickshaw;
- (2) Reliant 'Regent' and Reliant Auto-4 Seater Rickshaw;
- (3) Bond Minicar;
- (4) Fend's Motor Cart;
- (5) Fend Ricksha; and
- (6) Fend Kabinenroller.

...

Motor cars, including taxi cabs, imported completely assembled. 75 per cent *ad valorem* or Rs. 6,000 per car or cab, whichever is higher.

31 1/2 per cent *ad valorem* 23 5/8 per cent *ad valorem*

75 (3) Motor omnibuses imported completely assembled.

Note:—Motor vehicles, other than motor cycles and motor scooters, when imported otherwise than in a completely assembled condition, shall be dutiable as articles or parts of articles under Item No. 75(9), 75(10), 75(11), 75(12), 75(12 (A)), 75(14), 75(15), 75(16), or 75(18) (b), as the case may be.

The following articles and parts thereof, adapted for use as parts and accessories or motor vehicles other than motor cycles and motor scooters.

- (i) The following engine components: rubber mountings, hose-pipes (other than fuel line hoses) with connections, fuel pump diaphragms, fan belts, mufflers, exhaust pipes and tail pipes;
- (ii) The following frame and body components: carpets (made to size or shape), cushion springs, door and window fittings, excluding glasses, trim materials (leather, plastic, jute canvas and leather cloth), made to size or shape, bus bodies, station wagon bodies, truck bodies, steel cabs for lorries, pick up bodies and parcel van bodies; and

75 (9) (GATT Item)

63 per cent *ad valorem*

(1) Under Government of India, Ministry of Finance (Revenue Division) Notification No. 41-Customs, dated the 31st May, 1953, has subsequently amended by Notification No. 25-Customs, dated the 27th February, 1954, articles and parts thereof adapted for use as parts and accessories of motor vehicles, other than motor cycles and motor scooters are exempt from the payment of—

- (a) so much of the Customs duty leviable thereon as is in excess of 50 per cent *ad valorem* where the standard rate of duty is leviable, and
- (b) the whole of the additional duty of Customs leviable thereon under any law for the time being in force where such additional duty is in addition to the duty of Customs leviable thereon.



(iii) The following other components: gaskets all sorts, rubber components, not otherwise specified and horns, not otherwise specified.

(2) Under Government of India, Ministry of Finance (Revenue Division) Notification No. 42-Customs dated the 31st May, 1953, articles and parts thereof adapted for use as parts and accessories of motor vehicles, *other than* motor cycles and motor scooters, if of the U. K. manufacture, are exempt from the payment of so much of the Customs duty leviable thereon as is in excess of 42 1/2 per cent *ad valorem*, provided that the said articles are not also adapted for use as parts and accessories of motor cars including taxi cabs.

(3) Under Government of India, Ministry of Finance (Revenue Division), Notification No. 169-Customs, dated the 14th October, 1955, component parts of three-wheeled vehicles (other than frames, petrol tanks, silencers and pistons), in C.K.D. packs for assembly, are exempt from the payment of so much of the Customs Duty leviable thereon as is in excess of—

- (i) 15 per cent *ad valorem*, where the standard rate of duty is leviable; and
- (ii) 7 1/2 per cent *ad valorem*, where the preferential rate of duty is leviable; and in either case also from the additional duty of Customs leviable thereon under any law for the time being in force.

(4) Under Government of India, Ministry of Finance (Revenue Division), Notification No. 64-Customs, dated the 2nd April, 1955, as subsequently amended by Notification No. 170-Customs, dated the 14th October, 1955, component parts of motor cycles (other than frames, petrol tanks, silencers and pistons), but including such component parts as are also adapted for use as parts and accessories of other motor vehicles in C.K.D. packs for assembly, are exempt from the payment of so much of the Customs duty leviable thereon as is in excess of—

- (i) 15 per cent *ad valorem*, where the standard rate of duty is leviable; and



(ii) 7 1/2 per cent *ad valorem*, where the preferential rate of duty is leviable; and in either case also from the additional duty of Customs leviable thereon under any law for the time being in force.

(5) Under Government of India, Ministry of Finance (Revenue Division), Notification No. 49-Customs, dated the 17th March, 1955, as subsequently amended by Notification No. 171-Customs, dated the 14th October, 1955, articles specified in the first column of the Schedule noted below are exempt from the payment of—
(a) so much of the Customs duty leviable thereon under the Indian Tariff Act, 1934, as is in excess of—

(i) where the standard rate of duty is leviable, the rates specified in the corresponding entry in the second column of the said Schedule;

(ii) where the preferential rate of duty is leviable, the rates specified in the corresponding entry in the third column of the said Schedule; and

(b) the whole of the additional duty of Customs leviable thereon under any law for the time being in force.

SCHEDULE

Name of the article	Standard rate of duty if the article is the manufacture of the United Kingdom.	Preferential rate of duty if the article is the manufacture of the United Kingdom.
Motor cycles and scooters imported whole and parts thereof.	35 per cent <i>ad valorem</i>	27 1/2 per cent <i>ad valorem</i>
Component parts of scooters (other than wheels, handle bars and saddles), but including such component parts as are also adapted for use as parts and accessories of othermotor vehicles imported in C. K. D. packs for assembly.	15 per cent <i>ad valorem</i> .	7 1/2 per cent <i>ad valorem</i> .



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75(10) The following articles, and parts thereof, adapted for use as parts and accessories of motor vehicles other than motor cycles and motor scooters:

(i) the following engine components: crank shafts, cam shafts, connecting rods, cylinder blocks and heads, manifolds, valves, valve springs, valve tappets, fly wheels, petrol tanks, radiators, fans, piston assembly, pistons, piston rings and gudgeon pins, other than those specified in Item No. 75(12)(A), water pumps, timing gears and sprockets;

(ii) the following electrical components: lamps other than head lamps, wire harness, battery and other cables made to size and horns;

94 1/2 per cent
ad valorem

.. 75(10)
and
75(11)

(1) Under Government of India, Ministry of Finance (Revenue Division), Notification No. 41-Customs dated the 31st May, 1953, as subsequently amended by Notification No. 25-Customs, dated the 27th February, 1954, articles and parts thereof adapted for use as parts and accessories of motor vehicles, *other than* motor cycles and motor scooters falling under Item Nos. 75(10) and 75(11) are exempt from the payment of—
(a) so much of the Customs duty leviable thereon under the said Items as is in excess of the rates specified in column 2 of the Schedule hereto annexed; and
(b) the whole of the additional duty of Customs leviable thereon under any law for the time being in force where such additional duty is in addition to the duty of Customs leviable thereon.

SCHEDULE

(iii) the following transmission and suspension components: king pins, shackle pins, shock absorbers, spring hanger brackets, shackles, transmission gear and gear box, clutch housings, propeller shafts, universal joints including needle bearings, therefor, rear axle assembly (axle housing, axle shaft, ring gear pinion and carrier differential), front axles, hubs and brake drums and front suspension excluding coil springs;

(iv) the following frame and body components: seat runners, short members of chassis frame and brackets; and

(v) the following other components: brake hose pipes, bushings separately imported (excluding oil impregnated bushings) and bumpers.

Item No.	Standard rate of duty
75(10)	50 per cent <i>ad valorem</i>
75(11)	25 per cent <i>ad valorem</i>

(1)	(2)

(2) Under Government of India, Ministry of Finance (Revenue Division) Notification No. 42-Customs, dated the 31st May, 1953, articles and parts thereof adapted for use as parts and accessories of motor vehicles, *other than* motor cycles and motor scooters, falling under Item Nos. 75(10) and 75(11) if of the U. K. manufacture, are exempt from the payment of so much of the Customs duty leviable under the said items as is in excess of the rates specified in column 2 of the Schedule below:
Provided that the said articles are not also adapted for use as parts and accessories of motor cars including taxi cabs.



SCHEDULE

Item No.	Reduced	preferential	rate
(1)		(2)	
75(10)	42 1/2 per cent	<i>ad valorem</i>	
75(11)	17 1/2 per cent	<i>ad valorem</i>	

31 1/2 per cent
ad valorem

The following articles and parts thereof, adapted for use as parts and accessories of motor vehicles other than motor cycles and motor scooters, namely:

- (i) the following engine components: thin wall bearings, cylinder liners, carburettors, oil pumps, air cleaners, oil filters, fuel pumps and fuel line hoses with connections;
- (ii) the following electrical components: distributors, sparking plugs, not otherwise specified, direction indicators, electrical panel instruments, wind shield wipers, starting motors, generators, head lamps including sealed beams, fuses, switches, ignition coils and voltage and current regulators;
- (iii) the following transmission and suspension components: steering mechanisms, pressed wheel clutches and suspension coil springs;
- (iv) the following frame and body components: toughened glass sheets, and long members of chassis frames; and
- (v) the following other components: roller bearings, bushings (oil impregnated), panel instruments other than electrical and brake cylinders.

(3) Under Government of India, Ministry of Finance, (Revenue Division), Notification No. 169-Customs, dated the 14th October, 1955, component parts of three-wheeled vehicles (other than frames, petrol tanks, silencers and pistons), in C.K.D. packs for assembly, are exempt from the payment of so much of the Customs duty leviable thereon as is in excess of—

- (i) 15 per cent *ad valorem*, where the standard rate of duty is leviable; and
- (ii) 7 1/2 per cent *ad valorem*, where the preferential rate of duty is leviable;

and in either case also from the additional duty of Customs leviable thereon under any law for the time being in force

(4) Under Government of India, Ministry of Finance (Revenue Division), Notification No. 64-Customs, dated the 2nd April, 1955, as subsequently amended by Notification No. 170-Customs, dated the 14th October, 1955, component parts of motor cycles (other than frames, petrol tanks, silencers and pistons), but including such component parts as are also adapted for use as parts and accessories of other motor vehicles in C.K.D. packs for assembly, are exempt from the payment of so much of the Customs duty leviable thereon as is in excess of—

- (i) 15 per cent *ad valorem*, where the standard rate of duty is leviable; and
 - (ii) 7 1/2 per cent *ad valorem*, where the preferential rate of duty is leviable;
- and in either case also from the additional duty of Customs leviable thereon under any law for the time being in force.



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- (5) Under Government of India, Ministry of Finance (Revenue Division), Notification No. 49-Customs, dated the 17th March, 1955, as subsequently amended by Notification No. 171-Customs, dated the 14th October, 1955, articles specified in the first column of the Schedule noted below are exempt from the payment of—
- (a) so much of the Customs duty leviable thereon under the Indian Tariff Act, 1934, as is in excess of—
- (i) where the standard rate of duty is leviable, the rates specified in the corresponding entry in the second column of the said Schedule;
- (ii) where the preferential rate of duty is leviable, the rates specified in the corresponding entry in the third column of the said Schedule; and
- (b) the whole of the additional duty of Customs leviable thereon under any law for the time being in force.

SCHEDULE

Name of article	Standard rate of duty	Preferential rate of duty if the article is the manufacture of the United Kingdom.
Motor cycles and scooters imported whole and parts thereof.	35 per cent <i>ad valorem</i>	27 1/2 per cent <i>ad valorem</i>
Component parts of scooters (other than wheels, handle bars and saddles), but including such component parts as are also adapted for use as parts and accessories of other motor.	15 per cent <i>ad valorem</i>	7 1/2 per cent <i>ad valorem</i> .



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75 (12) Articles other than rubber tyres, tubes, batteries
(GATT and such other components as are specified
Item) in Items No. 75 (9), 75 (10), 75 (11), 75 (14),
75(15), 75(16) and 75(18) (b) adapted for
use as parts and accessories of motor vehicles
other than motor cycles and motor scooters.

vehicles, imported in
C.K.D. packs for assembly.

- (1) Under Government of India, Ministry of Finance (Revenue Division), Notification No. 41-Customs, dated the 31st May 1953 as subsequently amended by Notification No. 25-Customs, dated the 27th February, 1954, articles and parts thereof adapted for use as parts and accessories of motor vehicles *other than* motor cycles and motor scooters are exempt from the payment of—
(a) so much of the Customs duty leviable thereon under the said item as is in excess of 25 per cent *ad valorem* where the standard rate of duty is leviable; and
(b) the whole of the additional duty of Customs leviable thereon under any law for the time being in force where such additional duty is in addition to the duty of Customs leviable thereon.

- (2) Under Government of India, Ministry of Finance (Revenue Division), Notification No. 42-Customs, dated the 31st May, 1953, articles and parts thereof adapted for use as parts and accessories of motor vehicles, *other than* motor cycles and motor scooters, falling under Item No. 75(12), if of the U. K. manufacture, are exempt from the payment of so much of the Customs duty leviable under the said items as is in excess of 17 1/2 per cent *ad valorem*.

Provided that the said articles are not also adapted for use as parts and accessories of motor cars including taxi cabs.

- (3) Under Government of India, Ministry of Finance (Revenue Division), Notification No. 169-Customs, dated the 14th October, 1955, component parts and three-wheeled vehicles (other than frames, petrol tanks, silencers and pistons), in C.K.D. packs for assembly, are exempt from the payment of so much of the Customs duty leviable thereon as is in excess of—
(i) 15 per cent *ad valorem*, where the standard rate of duty is leviable; and



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(ii) 7 1/2 per cent *ad valorem*, where the preferential rate of duty is leviable; and in either case also from the additional duty of Customs leviable thereon under any law for the time being in force.

(4) Under Government of India, Ministry of Finance (Revenue Division), Notification No. 64-Customs, dated the 2nd April, 1955, as subsequently amended by Notification No. 170-Customs, dated the 14th October, 1955, component parts of motor cycles (other than frames, petrol tanks, silencers and pistons), but including such component parts as are also adapted for use as parts and accessories of other motor vehicles in C. K. D. packs for assembly, are exempt from the payment of so much of the Customs duty leviable thereon as is in excess of—

(i) 15 per cent *ad valorem*, where the standard rate of duty is leviable; and

(ii) 7 1/2 per cent *ad valorem*, where the preferential rate of duty is leviable; and in either case also from the additional duty of Customs leviable thereon under any law for the time being in force.

(4) Under Government of India, Ministry of Finance (Revenue Division), Notification No. 49-Customs, dated the 17th March, 1955, as subsequently amended by Notification No. 171-Customs, dated the 14th October, 1955, articles specified in the first column of the Schedule noted below are exempt from the payment of—

(a) so much of the Customs duty leviable thereon under the Indian Tariff Act, 1934, as is in excess of—

(i) where the standard rate of duty is leviable; the rates specified in the corresponding entry in the second column of the said Schedule;



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(ii) where the preferential rate of duty is leviable; the rates specified in the corresponding entry in the third column of the said Schedule; and

(b) the whole of the additional duty of Customs leviable thereon under any law for the time being in force

SCHEDULE

Name of Article	Standard rate of duty	Preferential rate of duty if the article is the manufacture of the United Kingdom
Motor cycles and scooters imported whole and parts thereof.	35 per cent <i>ad valorem</i>	27 1/2 per cent <i>ad valorem</i> .
Component parts of scooters (other than wheels, handle bars and saddles), but including such component parts as are also adapted for use as parts and accessories of other motor vehicles, imported in C. K. D. packs for assembly.	15 per cent <i>ad valorem</i> .	7 1/2 per cent <i>ad valorem</i> .



75(12-A) The following articles adapted for use as parts and accessories of internal combustion engines of all kinds but excluding such articles as are adapted for use exclusively as parts and accessories of internal combustion engines of agricultural tractors and aeroplanes, namely: Trunk piston assembly of diameter 6 inches and below, trunk pistons of diameter 6 inches and below, trunk piston rings (excluding chromium plated rings) of diameter 6 inches and below and gudgeon pins for trunk pistons of diameter 6 inches and below.

Under Government of India, Ministry of Finance (Revenue Division), Notification No. 198-Customs, dated the 24th December, 1955, articles falling under this item, if of the United Kingdom manufacture, are exempt from the payment of so much of the Customs duty leviable thereon as is in excess of 42 1/2 per cent *ad valorem*. Provided that the said articles are adapted for use exclusively as parts and accessories of motor vehicles other than motor cars including taxi cabs.

75 (14) Body panels including turret tops and sides for 40 per cent
passenger motor cars including taxi cabs. *ad valorem.* ..

75 (15) Leaf springs and parts thereof, adapted for use 50 per cent
as parts and accessories of motor vehicles other *ad valorem.* ..
than motor cycles and motor scooters.

Under Government of India, Ministry of Finance (Revenue Division), Notification No. 42-Customs, dated the 31st May, 1953, as subsequently amended by Notification No. 172-Customs, dated the 23rd December, 1954, leaf springs and parts thereof adapted for use as parts and accessories of motor vehicles *other than* motor cycles and motor scooters, if of the U. K. manufacture, are exempt from the payment of so much of the Customs duty leviable thereon, as is in excess of 42 1/2 per cent *ad valorem*, provided that the said articles are not also adapted for use as parts and accessories of motor cars including taxi cabs.



75 (16) The following articles and parts thereof, adapted for use as parts and accessories of motor vehicles but excluding such articles and parts thereof as are adapted for use exclusively as parts and accessories of agricultural tractors, namely:—

Sparking plugs of 14 mm. and 18 mm. sizes, including the resistor types but excluding integrally screened types,

(1) Under Government of India, Ministry of Finance (Revenue Division), Notification No. 196-Customs, dated the 24th December, 1955, sparking plugs of the kind falling under this Item, if of the United Kingdom manufacture, are exempt from the payment of so much of the Customs duty leviable thereon as is in excess of 85 per cent *ad valorem*.

Provided that the said articles are not also adapted for use as parts and accessories of motor cars including taxi cabs.

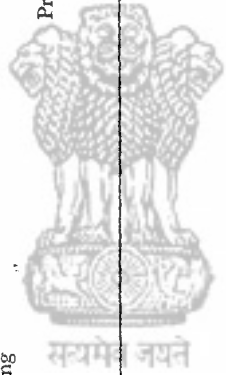
(2) Under Government of India, Ministry of Finance (Revenue Division), Notification No. 188-Customs, dated the 30th November, 1955, insulators (not fitted with Central electrodes) imported for use in the manufacture of sparking plugs and falling under this Item are exempt from the payment of the whole of the Customs duty leviable thereon.

This Notification is in force only up to and inclusive of the 29th November, 1956.

- 75 (17) Hand operated tyre inflators and connections and parts thereof adapted for use as accessories of motor vehicles. 45 per cent *ad valorem*.
- 75 (18) (a) Single cylinder fuel injection pumps for stationary diesel engines and component parts thereof excluding elements and delivery valves. 60 per cent *ad valorem*.
- (b) Nozzle holders with a clamping capacity upto 1 inch clamping diameter for nozzles (automisers) for use on stationary or automobile diesel engines, and component parts (excluding nozzles) thereof.

Under Government of India, Ministry of Finance (Revenue Division), Notification No. 146-Customs, dated the 7th September, 1955, as subsequently amended by Notification No. 194-Customs, dated the 24th December, 1955, articles falling under this Item, if of the U. K. manufacture, are exempt from the payment of so much of the Customs duty leviable thereon as is in excess of 52 1/2 per cent *ad valorem*.

Provided that the said articles are not also adapted for use as parts and accessories of motor cars including taxi cabs.



APPENDIX VIII

[Vide Paragraph 21.11]

Statement showing projected capital investment by various automobile manufacturing units

(In Lakhs of Rupees)

Serial Num- ber.	Name of the unit	Period	Land	Factory Buildings	Non- Factory Buildings	Plant and Machinery	Research & Development	Other Fixed Capital	Total
1	2	3	4	5	6	7	8	9	10
1	Hindustan Motors Ltd.	For 1956/57	..	13.46	..	106.48	0.75	..	120.69
2	Premier Automobiles Ltd.	Till 1958	..	3.16	..	149.89	5.00	23.70 100.00*	281.75
3	Standard Motor of India Ltd.	Till 1959	..	4.75	3.45	45.00	5.50	..	58.70
4	Ashok-Leyland Ltd.	Till 1959	..	20.86	2.32	75.40	0.90	4.00	103.48
5	Mahindra and Mahindra Ltd.	1956 & 1957	..	25.00	..	54.00	1.25	5.00	85.25
6	Tata Locomotive and Engi- neering Co. Ltd.	Till 1956/59	..	99.30	82.53	665.69	6.52	8.67	862.71

*Further capital expenditure—Details not furnished.