400 Seventh Street, S.W.
Washington, D.C. 20590

U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

Dear Crash Data Researchers/Users:

Thank you for choosing crash data from the National Highway Traffic Safety Administration (NHTSA) for your research or other use. The information contained in this motor vehicle crash report is collected, maintained and distributed in accordance with Public Law 89-564. In accordance with this Public Law, NHTSA is required not to release any case information until completion of quality control procedures. These procedures include a review of the case material to extract all names, licenses and registration numbers, non-coded interview material, non-research related researcher comments in the margins, non-factual data, and the production number portion of the vehicle identification number (VIN).

If you requested NHTSA to query its database files in order to identify a specific crash, then that query was made using non-personal descriptors you provided for use in our search. This motor vehicle crash may have been identified from a data search and matches the general, non-personal descriptors you provided, but we cannot confirm that this is the specific crash report you requested.

If you have any questions with regard to the above procedures, please contact the Field Operations Branch, Crash Investigation Division, National Center for Statistics and Analysis at 202-366-4820. Again, please be advised that we cannot confirm that this is the case that you have specifically requested nor can we certify the information to be correct.

*** *** ***

DYNAMIC SCIENCE, INC.
In-Depth Accident Investigation

Case Number: DSI-95-AB-011

[redacted] 1996

TECHNICAL SUMMARY

CONTRACTOR: Dynamic Science, Inc.
CASE NUMBER: DSI-95-AB-011

This case was selected for investigation based on a report of a possible defect that caused the non-deployment of the supplemental restraint system (passenger's side air bag). The driver's side air bag did deploy from a front end impact with a deer.

This single vehicle collision occurred in [redacted] 1995, a spring weekday, on an undivided rural roadway in [redacted] Colorado. The collision occurred when Vehicle 1, traveling westbound, struck a deer as it ran out onto the roadway.

Vehicle 1, a 1995 Plymouth Neon 4-door, was being driven westbound. It was reported that the driver was restrained by a lap and shoulder restraint. The 35 year old male driver's height is 183.0 cm (72.0 in) and his weight is 86 kg (190 lbs). Vehicle 1 was traveling at a speed estimated as 89 KPH (55 MPH). The driver of Vehicle 1 stated the cruise control was set at 89 KPH (55 MPH).

This single vehicle collision occurred when the driver of Vehicle 1 did not see a deer come from the right side of the road onto the roadway as Vehicle 1 was traveling westbound. Once the deer ran onto the roadway Vehicle 1 struck it with the front end of the vehicle. This impact deployed the supplemental restraint system (driver's side air bag); however, the passenger's side air bag did not deploy.

The Delta V for Vehicle 1 was not computed because the impact is beyond the scope of SMASH (yielding object). Vehicle 1 was assigned a CDC of 12FZEW1 (photographs).

After the impact, the driver of Vehicle 1 [redacted]ied the vehicle's brakes and came to a controlled stop on the right shoulder of the roadway, 472 feet west of the point of impact. The deer was located 146 feet west of the point of impact and 30 feet south, on the left side of the roadway.

Vehicle 1's damage consisted of moderate frontal damage based on the photographs.

The driver of Vehicle 1 sustained minor injuries consisting of a fractured left hand with limited movement and pain in two fingers. This injury was described by the driver of Vehicle 1 as a "busted up" left hand. The traffic accident report indicated that the driver had no injuries.

Vehicle 1 was towed from the collision scene due to the damage sustained from this collision.

Based on the information reported in this case, and not having the opportunity to inspect the case vehicle and/or the supplemental restraint system's components our opinion is as follows: The impact with the yielding object (the deer) could have been a marginal speed change, and have produced a short pulse interval from the sensors to the diagnostic module sensor. In this type

of occurrence, however infrequent, it could be possible that only one air bag would deploy. In this case it was the driver's side air bag.

The following information is from the Chrysler Corporation (appendix A):

"An engineering review of the returned air bag module, front sensors and diagnostic module determined that no faults existed with any of the components.

We are aware of some rare threshold level impact situations that produce deceleration characteristics that may cause an extremely short duration time overlap condition between the front bumper mounted sensor(s) and the diagnostic module (safeing) sensor. This situation may precipitate deployment of only one of the two airbags in the vehicle. In the absence of any evidence to the contrary we conclude that is the cause of the unusual event experienced by this vehicle."

This research was supported by the National Highway Traffic Safety Administration (NHTSA), U.S. Department of Transportation. The opinions, findings, and recommendations contained herein are those of the authors, and do not necessarily represent those of NHTSA.

The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points be coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the pre-crash, crash, and post-crash movements of involved vehicles and occupants.

Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crashworthiness performance of the involved vehicle(s) or their safety systems.

DYNAMIC SCIENCE, INC.
ACCIDENT INVESTIGATION
CASE NUMBER: DSI-95-AB-011

TABLE OF CONTENTS

Appendices:

Case Number: DSI-95-AB-011

ACCIDENT DATA:

Location:	[redacted] Colorado
Area/Type:	Rural
Date/Time:	Spring / Weekday
Accident Type:	Car/Animal (Deer)

INJURY SEVERITY:

Vehicle 1:	Driver, AIS-2

AMBIENCE:

Viewing Conditions:	No viewing restriction
Cloud Cover:	Clear
Precipitation:	None
Road Surface:	Dry

ROADWAY:

	VEHICLE 1
Type:	2-lane undivided roadway
Width:	7.0 m (23.0 ft)
Traffic Density:	Light
Median:	None
Edge:	Shoulders, unknown type of surface
Surface:	Asphalt
Reported Defects:	None
Co-efficient of Friction (est.):	Unknown (not inspected)
Vertical Alignment:	Reportedly slight up grade
Horizontal Alignment:	Reportedly straight

TRAFFIC CONTROLS:

	VEHICLE 1
Signals:	None
Signs:	None
Speed Limit:	89 KPH (55 MPH)
Markings:	Standard lane markings

VEHICLES:

	VEHICLE 1
Description:	1995 Plymouth Neon, 4-door
Odometer:	Unknown (not inspected)
Engine:	2.0 L / I4, per V.I.N.
Vehicle Modifications:	None known
Tire Condition:	Unknown (not inspected)
Manual Restraints:	Data sheet shows 3-point lap and shoulder restraints at the front seating positions, unknown restraints in rear seat positions
Automatic Restraints:	Supplemental restraint systems (driver's and passenger's side air bags)
Reported Defects:	None
Cargo:	Unknown
Windshield Damage:	None (photographs)
Fleet:	None
Tow Status:	Towed due to damage

VEHICLE DAMAGE:

	VEHICLE 1
Object Struck:	Animal (Deer)
Event Number:	01
CDC:	12FZEW1 (by photographs)
Maximum Crush:	Zone 1

VEHICLE VELOCITY ESTIMATES:

	VEHICLE 1
Impact Speed:	81 - 97 KPH (50 - 60 MPH)
Total Delta V:	
Longitudinal Delta V:	Not computed, collision is beyond the scope of SMASH (yielding object)
Lateral Delta V:	
Energy Dissipation:	

COLLISION SEQUENCE:

PRE-CRASH:

This single vehicle collision occurred on a spring weekday, on an east/west undivided roadway in [redacted] Colorado. There is a posted speed limit of 89 kilometers per hour (55 MPH). The collision occurred when Vehicle 1 was traveling westbound and it struck a deer with the front end of the vehicle.

Vehicle 1, a 1995 Plymouth Neon 4-door, was being driven westbound on the east/west roadway. The driver was a 35 year old male. It was reported that the driver was restrained by a lap and shoulder restraint. Vehicle 1 was traveling at a speed estimated as 89 kilometers per hour (55 MPH). The driver of Vehicle 1 stated that the cruise control was set at 89 KPH (55 MPH).

This single vehicle collision occurred when the driver of Vehicle 1 did not see the deer coming from the right side of the road onto the roadway as Vehicle 1 was traveling westbound. As the deer ran onto the roadway, Vehicle 1 struck it with the front end of the vehicle. This impact deployed the supplemental restraint system (driver's side air bag); however, the passenger's side air bag did not deploy.

CRASH:

The Delta V for Vehicle 1 was not computed because the collision is beyond the scope of SMASH (yielding object). Vehicle 1 was assigned a Collision Deformation Classification (CDC) of 12FZEW1 from photographs.

POST CRASH:

After the impact, the driver of Vehicle 1 applied the vehicle's brakes and came to a controlled stop on the right shoulder of the roadway, 472 feet west of the point of impact. The deer was located 146 feet west of the point of impact and 30 feet south, on the left side of the roadway.

SUPPLEMENTAL RESTRAINT SYSTEM:

Vehicle 1 was equipped with a Supplemental Restraint Systems (driver's and passenger's side air bags). The driver's side air bag deployed during the collision with Vehicle 1; however, the passenger's side air bag did not deploy.

For a 1995 Plymouth Neon, TRW reports that the driver's side air bag has been measured as 49.7 liters at 0.36 psi internal pressure. The basic dimensions are 67.0 cm (26.5 in) in diameter with 25.0 cm (10.0 in) effective length tethers.

SCENE CLEARANCE:

The driver of Vehicle 1 was reportedly not injured and there was no transport indicated from the collision scene.

Vehicle 1 was towed from the collision scene due to the damage sustained from this collision.

SAFETY STANDARDS:

It is unknown if there were any violations of the Federal Motor Vehicle Safety Standards.

The case vehicle was not inspected by Dynamic Science, Inc. and information and results in this case came from the Chrysler Corporation. The reader should refer to their letter (appendix A) for the inspection results and the initial investigation report.

DRIVER AND OTHER OCCUPANTS:

VEHICLE 1

	DRIVER
Age/Sex:	35 Yrs. / Male
Seated Position:	Left Front
Seat Type:	Bucket Seat
Height:	183.0 cm (72.0 in)
Weight:	86 kg (190 lbs)
Pre-existing Medical Condition:	None
Body Posture:	Upright seated position
Hand Position:	Right hand on steering wheel, unknown location, left hand - driver reportedly was taking a drag from a cigarette (hand was between waist height and mouth)
Foot Position:	Reportedly the right foot resting on floor between gas and brake pedals, left foot in normal floor pan area.
Restraint Usage:	Reportedly wearing a manual 3-point lap and shoulder restraint; supplemental restraint system (driver's side air bag)
Additional Occupants:	None

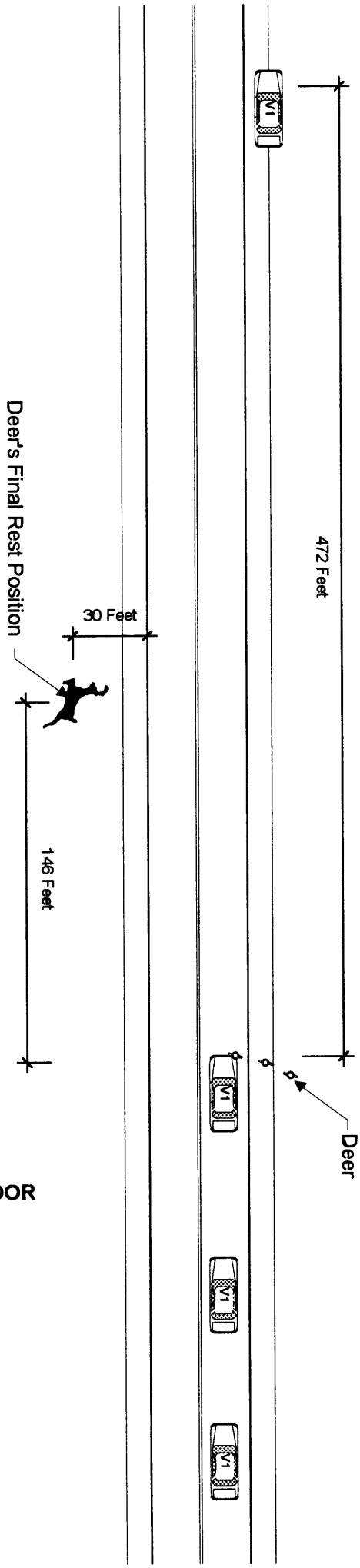
INJURIES:

Vehicle 1

	INJURY	AIS/OIC Code	ICD-9	Source	Confidence Level
DRIVER	Fracture, left hand	751800.2	915.09	Air bag compartment cover	2

List of Abbreviations

FT	Feet
IN	Inches
AME	After Market Equipment
AIS	Abbreviated Injury Scale
CCW	Counterclockwise
CDC	Collision Deformation Classification
C/F	Center Front
CG	Center of Gravity
CM	Centimeter
C/R	Center Rear
CW	Clockwise
E, EB	East, Eastbound
FRP	Final Rest Position
KG	Kilogram
KM/H	Kilometers per Hour
L/F	Left Front
L/R	Left Rear
M	Meter
N, NB	North, Northbound
NE	Northeast
NW	Northwest
OEM	Original Equipment Manufacture
PDOF	Principal Direction Of Force
POI	Point of Impact
R	Radius of Curvature
R/F	Right Front
RL	Reference Line
RP	Reference Point
R/R	Right Rear
S, SB	South, Southbound
SE	Southeast
SW	Southwest
V1	Vehicle 1
W, WB	West, Westbound



DYNAMIC SCIENCE, INC
DSI-95-AB-011
NOT TO SCALE

N

V1 - 1995 PLYMOUTH NEON 4-DOOR

PHOTO INDEX

Case Number: DSI-95-AB-011

PHOTO NO.	VEHICLE NO.	DIRECTION OF PICTURE	SUBJECT MATTER
N/A	V1	N/A	Photo copies of Vehicle 1 (Appendix A)

CHRYSLER CORPORATION

Chrysler Corporation

Dynamic Science, Inc.

[redacted] 1995

RE: 1995 Plymouth Neon, VIN 1P3ES47C5SD.

Dear

Please accept this response to your [redacted] 1995 letter about the subject vehicle.

Please find attached the Preliminary Vehicle Investigation Report, pictures of the subject vehicle and a field concern report which document Chrysler's involvement with this vehicle.

An engineering review of the returned air bag module, front sensors and diagnostic module determined that no faults existed with any of the components.

We are aware of some rare threshold level impact situations that produce deceleration characteristics that may cause an extremely short duration time overlap condition between the front bumper mounted sensor(s) and the diagnostic module (safeing) sensor. This situation may precipitate deployment of only one of the two airbags in the vehicle. In the absence of any evidence to the contrary we conclude that is the cause of the unusual event experienced by this vehicle.

Sincerely

From:
To:

Date and time

From: CUSTOMER ADVOCATE Small Car Platform
Subject: CUSTOMER ADVOCATE GROUP - FIELD CONCERN REPORT

Please instruct dealer to continue with repairs of subject vehicle.
Engineering would like the Passenger side air bag (Undeployed) both front sensors, and the diagnostic module returned for inspection.
Please ship parts to :
Subject:

Chrysler Corporation
Chrysler Technology Center

If the dealer or customer is asks why? Please let them know, This is bei done as a discretionary measure.
Please authorize the above parts for replacement and return.

*** Forwarding note from 05/ ***
To:

From:
Subject: CUSTOMER ADVOCATE GROUP - FIELD CONCERN REPORT
MODEL: PL

***** FOR NON-POWERTRAIN ISSUES ONLY *******

Zone: Dealer Code:

VIN #1:	S	D		MILEAGE	3400__	MDH:	12	-	02	-
*VIN #2:	_	_	_____	MILEAGE	_____	MDH:	__	-	__	-
*VIN #3:	_	_	_____	MILEAGE	_____	MDH:	__	-	__	-
*VIN #4:	_	_	_____	MILEAGE	_____	MDH:	__	-	__	-

* = Multiple VIN for same customer concern.

ENGINE (EX: 4.0): _ . _ LITER OR SALES CODE: ___
TRANS. TYPE (A OR M): _ OR SALES CODE: ___

CATEGORY: A) Pre-Delivery Quality _ B) Reliability X

Customer Concern:
1) CUSTOMERS CONCERN IS WITH DRIVER SIDE AIRBAG DEPLOYING AND PASSENGER SIDE AIRBAG NOT DEPLOYING WHEN VEHICLE WAS ENVOLVED IN COLLISION_____ WITH DEER._____

LOP/TSB Grp:

2)

LOP/TSB Grp:

3)

LOP/TSB Grp:

Repair Action:

1) D.M. INSPECTED VEHICLE AT DEALERSHIP AND FOUND THAT VEHICLE HAD SUSTAINED CONSIDERABLE FRONT END DAMAGE BY HITTING DEER.D.M. RETRIEVED DRB CODES OF ACTIVE: DRIVER SQUIB CIRCUIT OPEN 1 OF 1

2) STORED: DRIVER SQUIB CIRCUIT OPEN
20 MINUTES
IGN COUNTS 1

3) PLEASE PROVIDE ME WITH FEEDBACK AS TO WHETHER THIS SYSTEM IS DESIGNED TO ONLY DEPLOY DRIVERS SIDE AIRBAG IN THIS TYPE OF COLLISION.

Repair Attempt Successful (Y or N): #1 #2 #3
Reported By: Phone:
Photo or diagram avaliable (Y or N): Y Tie Line:

CHRYSLER CORPORATION

BEST AVAILABLE COPY

Preliminary Vehicle Investigation Report

YEAR	MODEL	VEHICLE IDENTIFICATION NUMBER	ODOMETER	MDH	DELIVERY DATE
95	NEON	1P3ES47C5SD.	3487	[redacted]	[redacted]-9

NAME OF OWNER	ADDRESS/LOCATION

CITY	STATE	ZIP	BUSINESS PHONE	HOME PHONE
[redacted]				

SELLING DEALER NAME	ZONE	DLR CODE	CITY	STATE

CHRYSLER REPRESENTATIVE — PRINT	ZONE	PHONE	☐ MINOR ☒ MODERATE ☐ MAJOR	REPAIR ESTIMATE
			MODERATE	$ 3800.00

INTERVIEW

INTERVIEW WITH: ☒ DRIVER ☐ OWNER ☐ OTHER	NAME	INTERVIEW DATE	DATE OF INCIDENT	TIME OF INCIDENT	INSPECTION DATE
☒ DRIVER		[redacted] 95	[redacted] 95	AM / (PM)	[redacted] 9

DESCRIPTION OF EVENT (INCLUDING WEATHER CONDITIONS AND ROAD SURFACE)

CUSTOMER STATED THAT HE WAS TRAVELING WEST ON , AT APPROX.

☒ Driver's and/or occupant's description of incident
☐ What? When? Where? How?
☐ Exact order of events
☐ Did this happen before?

55 MPH. THE ROAD CONDITIONS WERE SUNNY, DRY & CLEAR
CUSTOMER STATED THAT HE WAS MANEUVERING AROUND
A CORNER AND STRUCK A DEER THAT WAS
STANDING IN THE HIGHWAY

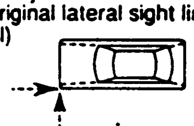
Personal Injury: Were there Personal Injuries? ☐ Yes ☒ No If yes, complete section "L."

RECEIVED [redacted] 1995 ZONE SERVICE

IMPORTANT: SHOW TO NO ONE & DRAW NO CONCLUSIONS

DIRECTIONS:
- FILL OUT UPPER PART OF FORM.
- FOR "FIRE" USE FORM 84-130-6950.
- FOLLOW INSTRUCTIONS FOR SECTION "A" ON ALL VE...
- FOLLOW INSTRUCTIONS FOR SPECIFIC ALLEGATIONS FOR THIS VEHICLE.
- ATTACH ANY ADDENDUMS TO REPORT AND STATE SECTION IT PERTAINS TO.

COMMENTS:
- NOTE ANY MISSING COMPONENTS AND WHO REMOVED THEM.
- NOTE ANY AFTERMARKET EQUIPMENT INSTALLED AND BY WHOM.

ALLEG.	PHOTOGRAPH REQUIRED	INFORMATION		EVALUATION
General **A**	☐ From center of vehicle front every 45 degrees (8 total) ☐ **If crash damaged** — perspective from every corner of vehicle down both original lateral sight lines. (8 total)  ☐ Send neg. & 2 sets of prints	☐ Police report ☐ Vehicle service file ☐ Any reports/photos by others ☐ Location of inspection	☐ Driver's and/or occupant's description of incident ☐ What? When? Where? How? ☐ Exact order of events ☐ Did this happen before?	☐ Complete exterior damage diagram and measurements on la[st] page.
Airbag(s) **B**	☒ Steering Wheel ☒ Airbag(s) ☒ Knee Blockers ☒ All posible body contact areas ☒ All code readings using DRB II	☐ Record: ☒ Was Airbag deployed? Driver ☒ Yes ☐ No Passenger ☐ Yes ☒ No ☒ Type of Steering Wheel: ☒ Tilt ☐ Std. ☒ Condition of Steering Wheel NORMAL ☐ Condition of Steering Area Mounting ...	☒ Use DRB II ☒ Record Existing Readings 1 DRIVER SQUIB CIRCUIT OPEN 1 OF 1 2 ☒ Record Stored Readings 1 1 OF 1 DRIVERS SQUIB CIRCUIT OPEN 2 MINUTES 20 3 IGN CNTS 1 ☒ Important: DO NOT ERASE DRB II READINGS	☒ Evidence of tampering or disassembly? ☐ Yes ☒ No

NOTE: BATTERY WAS DISCONNECTED PRIOR TO INSPECTION

REF # _____

ALLEG.	PHOTOGRAPH REQUIRED	INFORMATION	EVALUATION
Seat/ Shoulder Belts **H**	☐ Overall of seat belts I/B and O/B ☐ Close ups of any irregularities on belts. ☐ Shoulder Belt Pendulum ☐ Latchplate wear ☐ Close up of D-ring to show belt loading.	☐ Locate seat belt labels and record **ALL** information (Some labels are sewn to webbing, other labels are on retractor frame. Inboard seat belt labels are near floor.) _____ _____ ☐ Record **ALL** information stamped on latchplate. _____ _____	If allowed, function belts to insure they **FUNCTION PROPERLY**, note results: Do they latch? ☐ Yes ☐ No Do they release? ☐ Yes ☐ No Do they retract? ☐ Yes ☐ No ☐ Does Inertia Pendulum System run freely? ☐ Yes ☐ No
Seat **I**	☐ Overall of seat ☐ Close ups of damage	☐ Existing location of recliner - number of teeth from rear of sector gear to rear edge of Pawl (crayon mark location). _____ ☐ Existing location of seat adjuster (window or tooth location from rear of adjuster). _____ ☐ Existing location of head restraint (measure gap under head restraint). _____	☐ If allowed, adjust all functions of seat and return to original location ☐ Describe functions _____ _____ ☐ Note any irregular orientations _____ _____

Tires **J**

☐ Each Tire with visible location label, insuring all Tire identification and Tread wear is documented.
☐ All damaged Wheel and Rim area including impacted foreign material.

Record:	Front Left	Front Right	Rear Left	Rear Right
☐ Tire Size				
☐ Brand				
☐ Ratings				
☐ DOT No.(I/B Side)				
☐ Rim Size				
☐ Tread Depth				

Axle Lockup **K**

☐ Entire Axle and close up of Leaks

While on hoist:
☐ Rear Wheel Drive
Record amount of Lateral Axle Movement on each side and will Wheels turn
_____
_____
_____
☐ Trans. Axle - rotate Wheels
☐ Note function
_____
_____

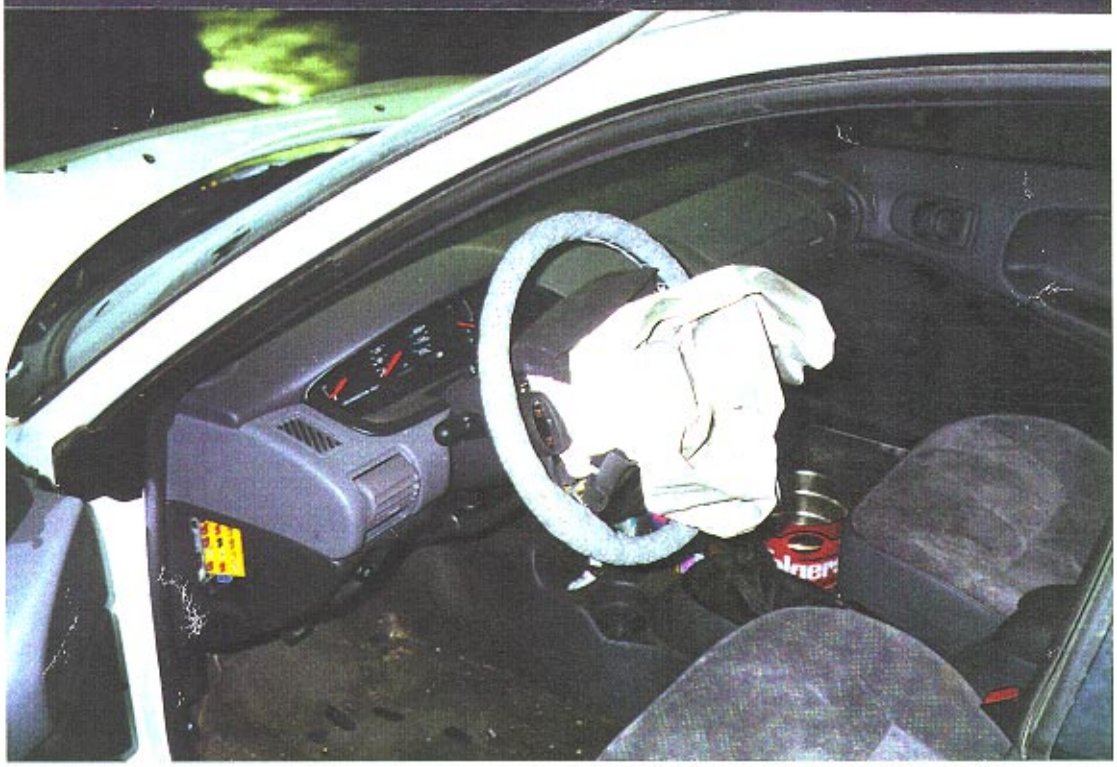
Occupant Contact **L**

☐ Windshield
☐ All areas of occupant contact on interior and exterior.
☐ Close ups of stains, skin, hair, cloth
☐ Exterior and interior damage

☐ See Seat Belt/Seats if applicable
☐ Occupant contact description
_____
_____
_____
_____
_____

ADDITIONAL COMMENTS

P.M. INSPECTED VEHICLE ON [redacted] 95 FOR CUSTOMERS PRIMARY COMPLAINT OF PRIVER SIDE AIRBAG DEPLOYING AND PASSENGER SIDE NOT DEPLOYING. INSPECTION REVEALED THAT ONLY THE PRIVER SIDE AIRBAG HAD DEPLOYED. P.M. REPORTED FINDINGS VIA QUALITY REPORT TO [redacted] THE [redacted] REQUESTED THAT 2 CRASH SENSORS, DIAGNOSTIC MODULE AND AIRBAG MODULE BE REMOVED AND SENT TO [redacted] FOR FURTHER TESTING TO DETERMINE CAUSE FOR PASSENGER AIRBAG NOT DEPLOYING.



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Michigan Department of Revenue ACCIDENT RECORDS

SHEET 1 OF 1 SHEETS

INVESTIGATOR'S TRAFFIC ACCIDENT REPORT

OR-447 (1/90)

CITY SERIAL NUMBER

STATE SERIAL NUMBER

A 1 ROAD CODE

DATE OF ACCIDENT | TIME | DAY OF WEEK: Thurs | CITY | COUNTY: [redacted] | CO CODE: 49

TIA | INVESTIGATED AT SCENE: X | LAW ENFORCEMENT AGENCY

B 17 | TIME | OFFICER NUMBER

LOCATION ROUTE, STREET, ROAD | OF ROUTE ST RD MILEPOST

0.3 MILES ____ FEET ____ N ____ S ____ E X W

NUMBER KILLED: 0 | NUMBER INJURED: 0

____ AT THE INTERSECTION WITH

B | PUBLIC PROPERTY | PUBLIC EMPLOYEE: X | TOTAL VEHICLES: 1 | DISTRICT NUMBER | PHOTO TAKEN | RAILROAD CROSSING | CONST ZONE | WILD GAME: X | PRIVATE PROPERTY | INCOMPLETE REPORT

B | VEH #1 OR ____ PARKED ____ UNATTENDED ____ PEDESTRIAN # ____

LAST NAME | FIRST | MI

STREET ADDRESS | RES PHONE

CITY | STATE | ZIP CODE | BUS PHONE

C

DRIVER LIC NO | STATE | SEX | DATE OF BIRTH

SEX: M | BTH: -58

C 1 VIOLATION(S) | AGE: 37

VIOLATION CODE(S) | CITATION NUMBER(S) | COMMON CODE(S)

YEAR: 95 | MAKE: Plymouth | MODEL: Neon

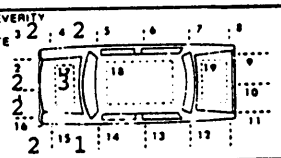
D 6 | BODY TYPE: 4dr | COLOR: white

VEH IDENT NO: 1P3ES47C5SD

E 2 VEH OWNER LAST NAME: Same | FIRST | MI

ADDRESS | CITY | STATE ZIP CODE

F 2 DAMAGE SEVERITY 1-SLIGHT 2-MODERATE 3-EXTREME



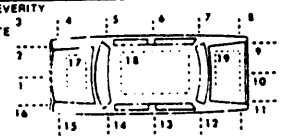
G 1 20 Undercarriage ____

VEH # ____ TOWED BY/TO

OWNER OF DAMAGED PRO | FIRST | MI

INS. CO | POLICY # | EXP DATE

DAMAGE SEVERITY 1-SLIGHT 2-MODERATE 3-EXTREME



20 Undercarriage ____

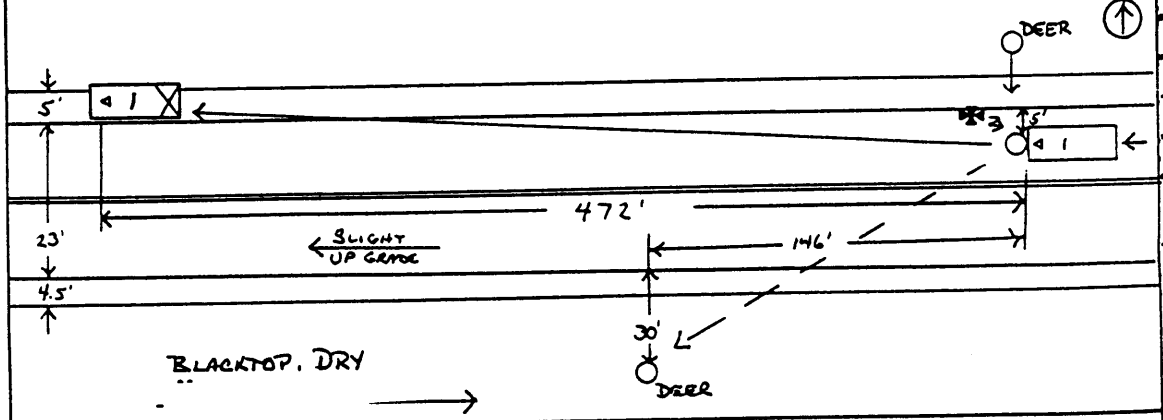
VEH # ____ TOWED BY/TO

CODE

H 1 DESCRIBE ACCIDE: Veh#1 was west bound on (when it struck and killed a deer that ran onto the road from the right. Veh#1 drove onto the right

J 1 shoulder where it came to a controlled stop on its wheels facing west.

INDICATE NORTH BY ARROW



VEH # (1)	Pos (2)	Res (3)	Ejct (4)	Inj Sev (5)	Phy Inj (6)	Stat (7)	Trp Rpt (8)	Age (9)	Sex (10)	Name Add (11)
1	1	1	2	1						same as driver

TRW

Telecopy Cover Page

Date:
Number of pages (including cover page): 2
To: Dynamic Science Inc. *Fax:* *Phone:*
cc: *Fax:*
Subject: 95 Neon Driver & Passenger Bags
From: *Phone:*

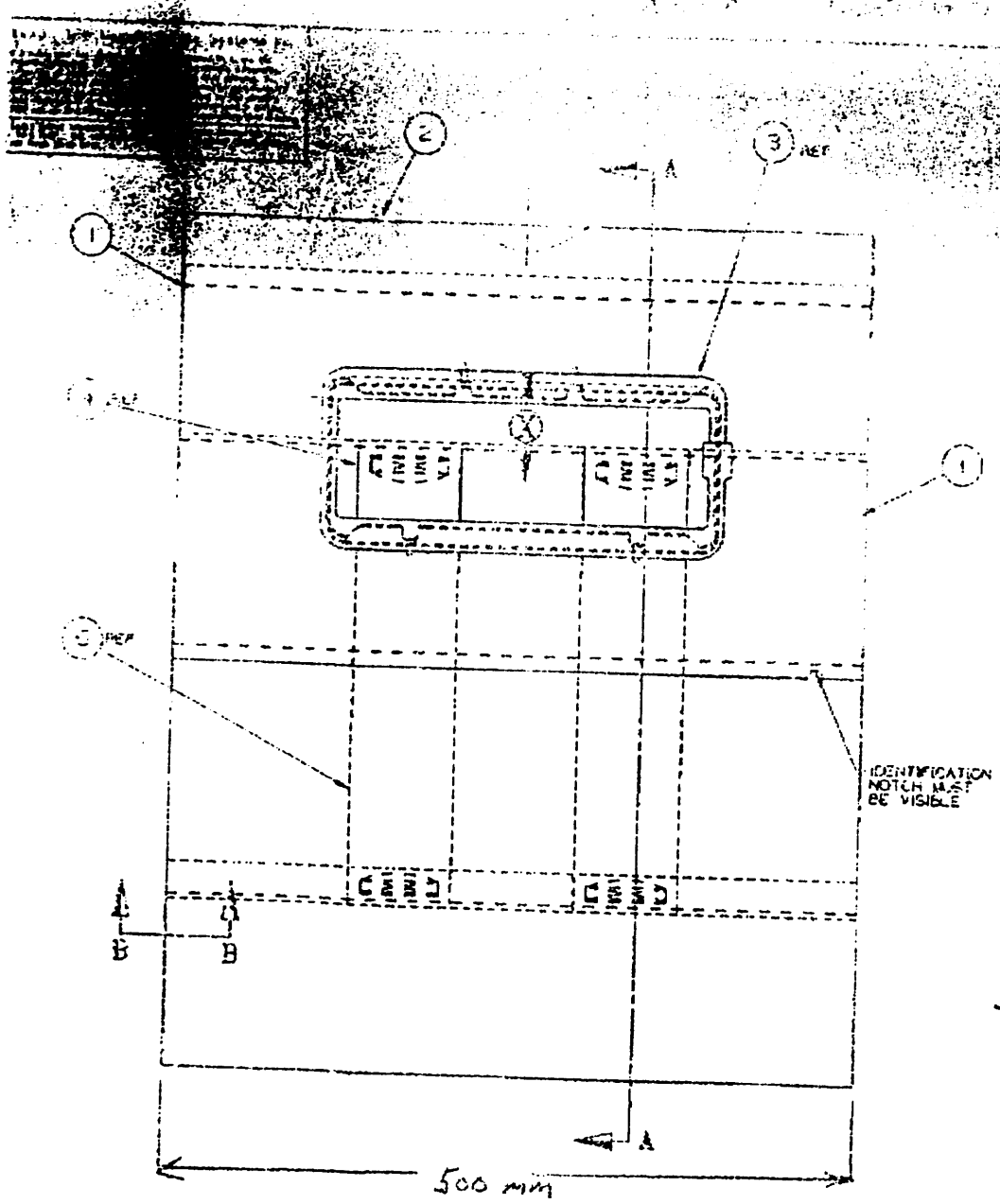
Message:

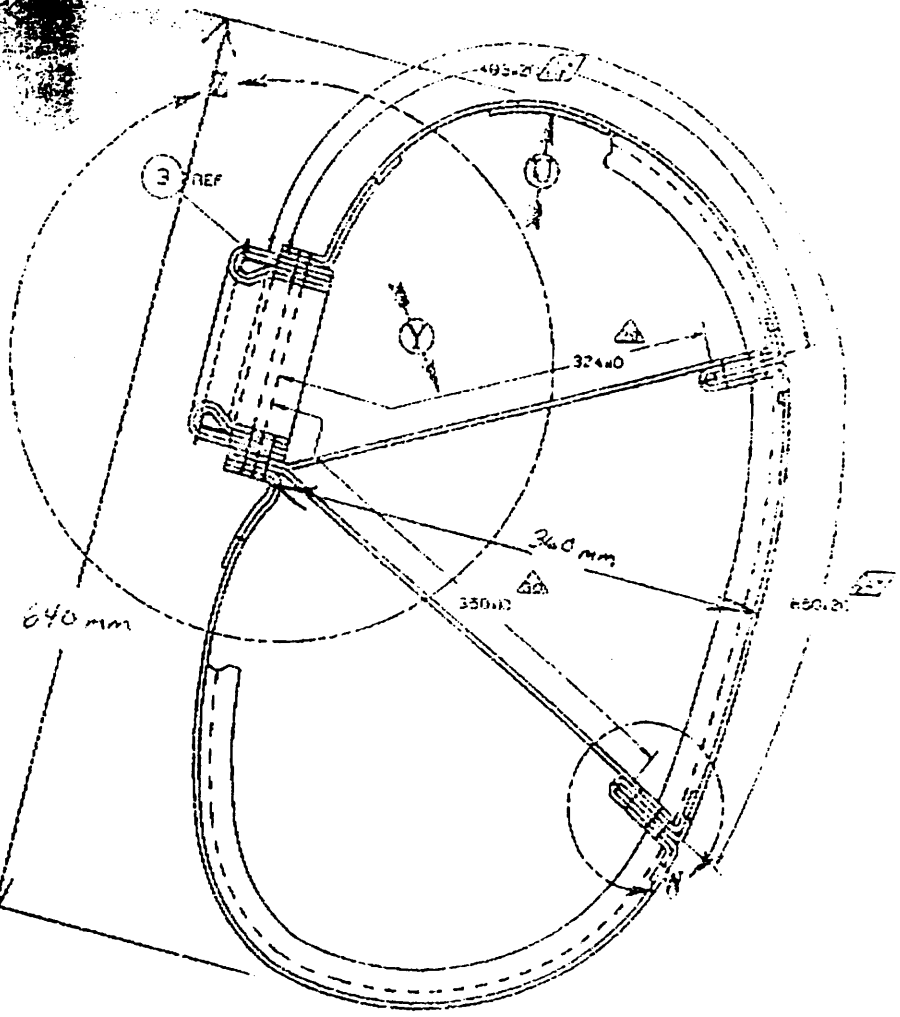
Per your request for information on the 95 Dodge Neon driver and passenger air bag dimensions and volumes pursuant to a NHTSA sponsored investigation.

The driver side air bag has been measured at 49.7 liters at 0.36 psi internal pressure. The basic sewn dimensions are 26.5 inch diameter with 10 inch effective length tethers.

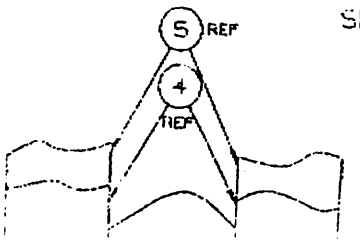
The passenger side air bag is calculated to be approximately 100 liters and the basic dimensions are shown in the attached sketch.

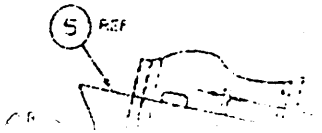
Please call me if you have any questions or require additional information.





SECTION A-A

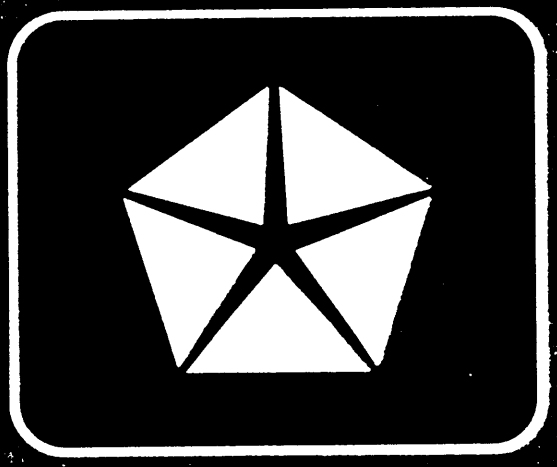




1995

SERVICE MANUAL SUPPLEMENT

NEON



CHRYSLER CORPORATION

RESTRAINT SYSTEMS

AIRBAG CONTROL MODULE (ACM) REMOVAL

WARNING: THE ACM CONTAINS A SAFING SENSOR WHICH ENABLES THE SYSTEM TO DEPLOY THE AIRBAGS. TO AVOID ACCIDENTAL DEPLOYMENT, NEVER CONNECT ACM ELECTRICALLY TO THE SYSTEM WHILE VEHICLE BATTERY IS CONNECTED. DISCONNECT AND ISOLATE THE BATTERY NEGATIVE (GROUND) CABLE BEFORE BEGINNING ANY AIRBAG SYSTEM COMPONENT REMOVAL OR INSTALLATION PROCEDURE. THIS WILL DISABLE THE AIRBAG SYSTEM. FAILURE TO DISCONNECT BATTERY COULD RESULT IN ACCIDENTAL AIRBAG DEPLOYMENT AND POSSIBLE PERSONAL INJURY. ALLOW SYSTEM CAPACITOR TO DISCHARGE FOR 2 MINUTES BEFORE REMOVING ANY AIRBAG COMPONENTS.

CAUTION: Failure to follow the parking brake service procedures can result in damage to the parking brake mechanism.

WARNING: THE AUTO ADJUSTING FEATURE OF THIS PARKING BRAKE LEVER ASSEMBLY CONTAINS A CLOCK SPRING LOADED TO APPROXIMATELY 20 POUNDS. DO NOT RELEASE THE AUTO ADJUSTER LOCKOUT DEVICE BEFORE INSTALLING CABLES INTO THE EQUALIZER. KEEP HANDS OUT OF AUTO ADJUSTER SECTOR AND PAWL AREA. FAILURE TO OBSERVE CAUTION IN HANDLING THIS MECHANISM COULD LEAD TO SERIOUS INJURY.

(1) Disconnect and isolate the battery negative cable.

(2) Automatic transaxle only, remove shifter knob fastener and remove shifter knob.

(3) Remove screws attaching rear of center console assembly to console bracket (Fig. 1 or 2).

(4) Remove the 2 screws located in cup holders (Fig. 3), attaching front of center console assembly to console bracket.

(5) Raise park brake hand lever assembly as high as it will go for required clearance to remove center console.

(6) Remove center console assembly from vehicle.

WARNING: WHEN REPAIRS TO THE PARK BRAKE HAND LEVER ASSEMBLY OR CABLES IS REQUIRED, THE AUTO ADJUSTER MUST BE RELOADED AND LOCKED OUT.

(7) Lower park brake lever handle.

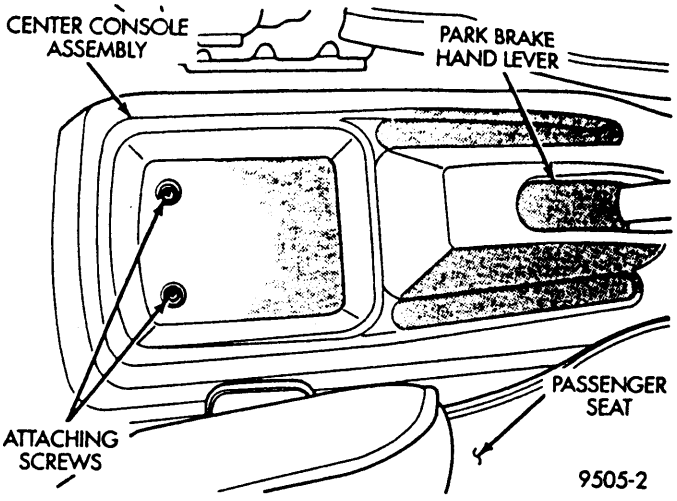


Fig. 1 Attaching Screws At Rear Of Center Console W/O Arm Rest

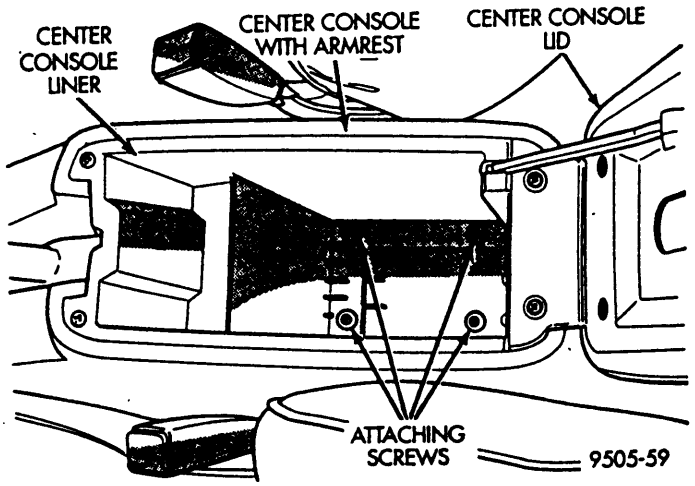


Fig. 2 Attaching Screws At Rear Of Center Console With Arm Rest

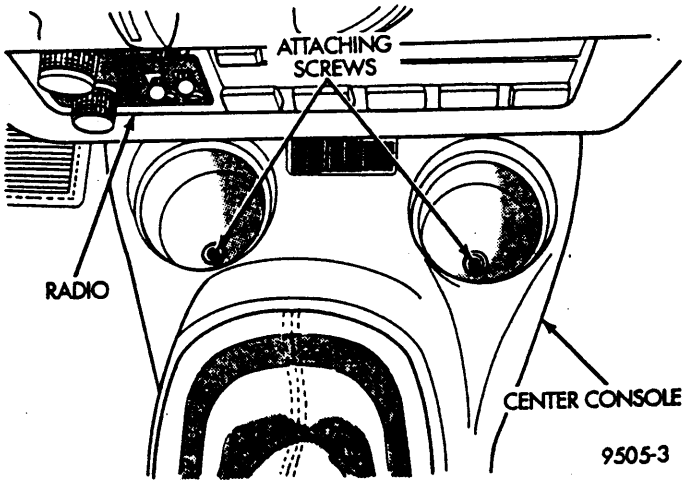


Fig. 3 Attaching Screws At Front Of Center Console

(8) Grasp park brake lever output cable by hand and pull upward (Fig. 6). Continue pulling on cable until a 3/16 in. drill bit can be inserted into handle and sector gear of park brake mechanism (Fig. 4). This will lock the park brake mechanism and take tension off park brake cables.

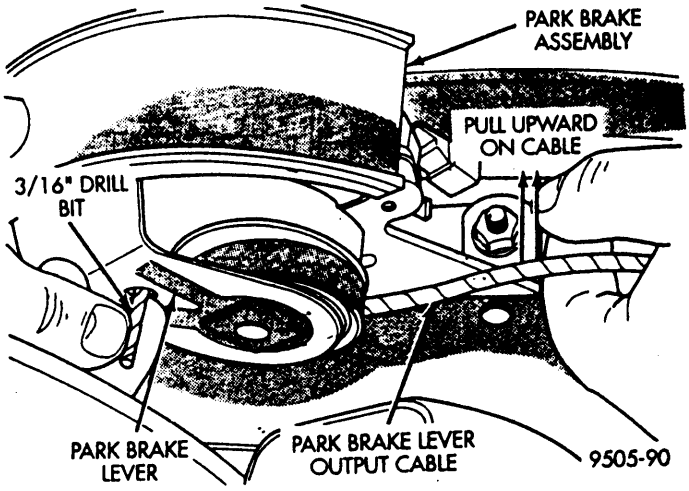


Fig. 4 Locking Pin Installed In Park Brake Mechanism

(9) Remove both rear park brake cables from the park brake cable equalizer (Fig. 5)

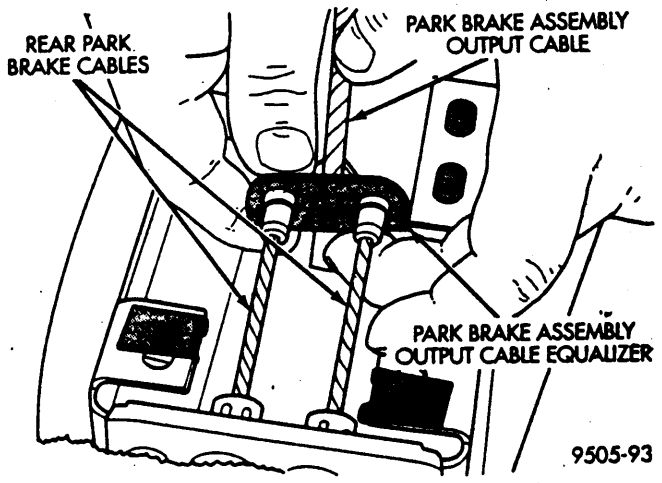


Fig. 5 Removing Park Brake Cables From Equalizer

(10) Remove wiring harness electrical connector for brake warning light from park brake lever (Fig. 6).

(11) Remove the two nuts (Fig. 7) attaching park brake lever to console bracket. Remove park brake lever mechanism from vehicle.

(12) Remove module mounting nuts and remove module (Fig. 8).

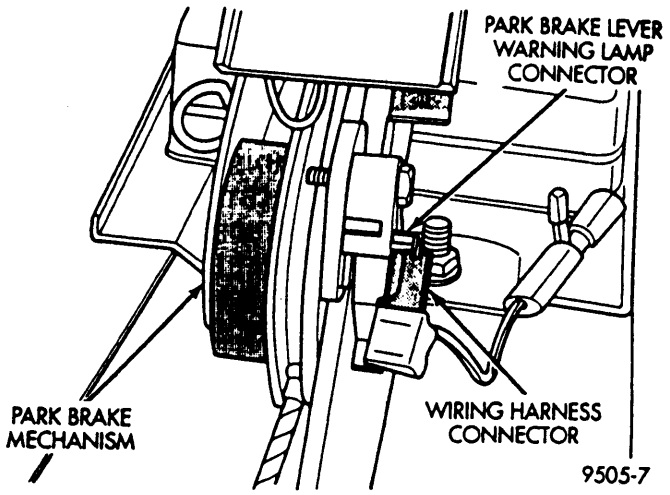


Fig. 6 Brake Warning Lamp Connection To Park Brake Lever

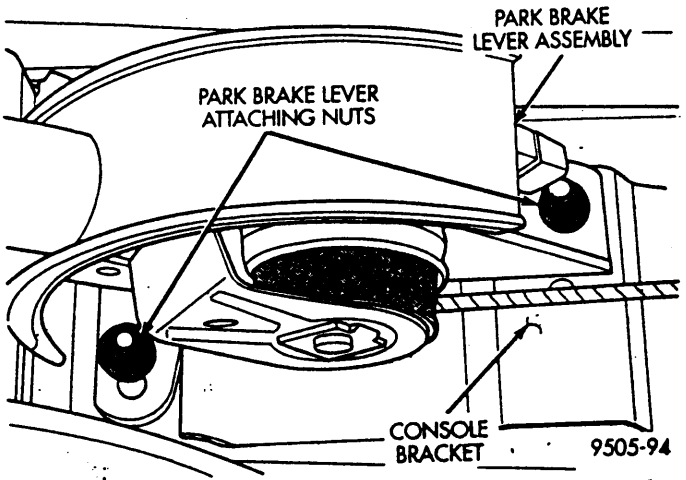


Fig. 7 Park Brake Lever Attachment To Console Bracket

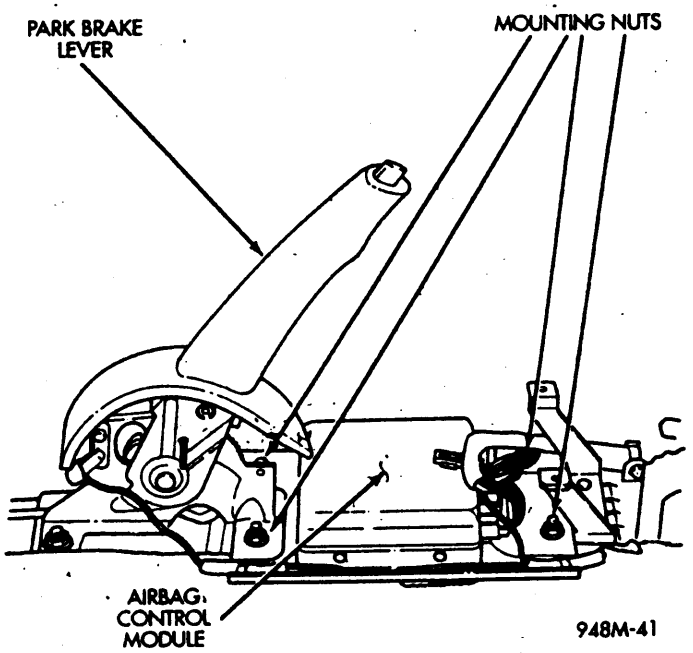


Fig. 8 Airbag Control Module

(13) Disconnect ACM 4-way and 13-way connectors (Fig. 9).

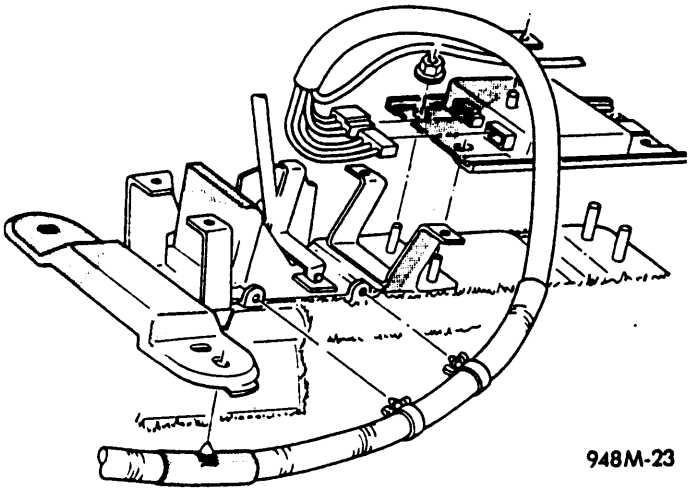


Fig. 9 Airbag Control Module

(14) Remove Airbag Control Module.

INSTALLATION

(1) Connect both ACM connectors and ensure both connectors and all locking tabs are engaged.

CAUTION: USE SUPPLIED SCREWS ONLY

(2) Position ACM (arrow pointing forward) in the console floor bracket, attach the nuts and tighten to 11 to 14 N·m (105 to 125 in. lbs.) torque.

NOTE: The park brake lever can be in any position when releasing the auto adjuster. To ease installation of center console, it is advisable to pull park brake lever handle all the way up before removing lockout pin.

(3) Place park brake lever on console bracket. Install and securely tighten the 2 attaching nuts.

(4) Install both rear park brake cables into equalizer on park brake lever output cable (Fig. 10 and 11).

(5) Ensure that park brake cable is correctly installed and aligned with cable track on park brake lever.

(6) Pull park brake lever handle all the way up.

(7) Firmly grasp park brake lever locking pin (Fig. 12), and quickly remove it from the park brake lever mechanism. This will allow the park brake lever mechanism to correctly adjust the park brake cables.

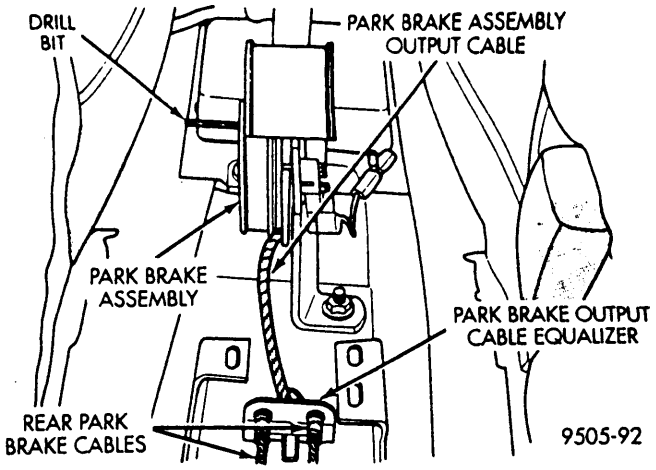


Fig. 10 Park Brake Cables Properly Installed In Equalizer

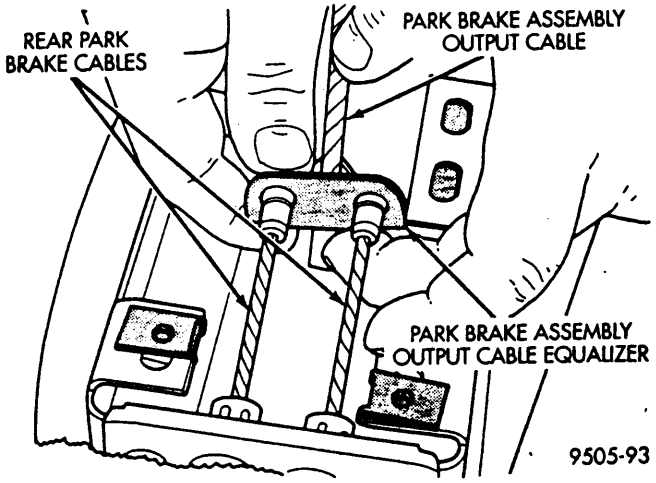


Fig. 11 Rear Park Brake Cable Installation On Equalizer

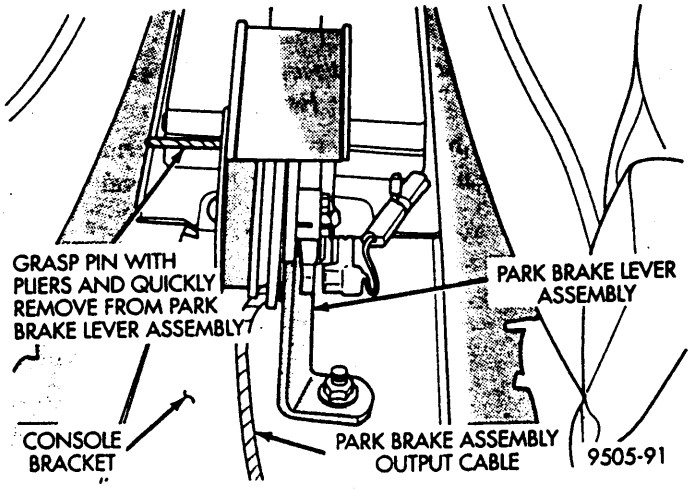


Fig. 12 Removing Lockout Pin From Park Brake Lever Assembly

(8) Connect electrical connector for brake warning lamp onto terminal on park brake lever assembly (Fig. 13).

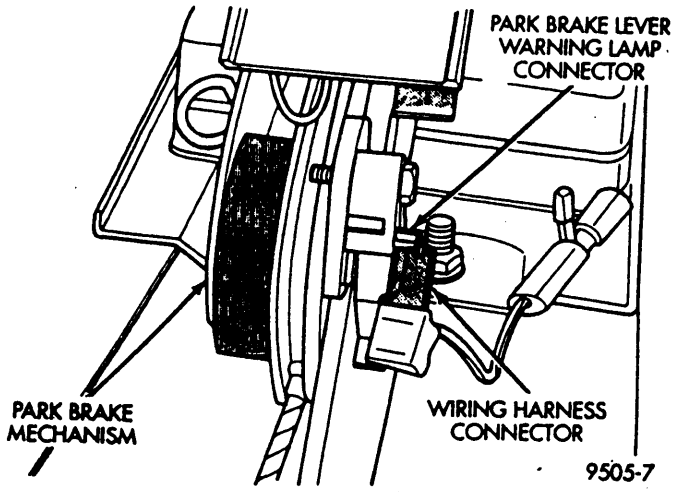


Fig. 13 Brake Warning Lamp Connection To Park Brake Lever

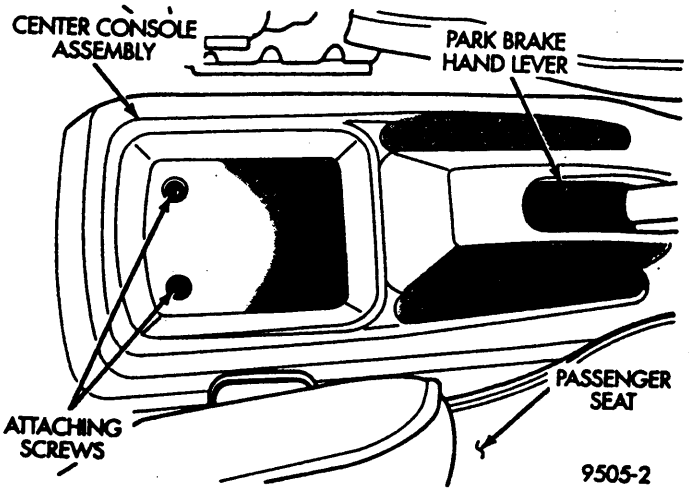


Fig. 14 Attaching Screws At Rear Of Center Console W/O Arm Rest

(9) Cycle park brake lever once to position park brake cables. Then return the park brake lever its released position. Check the rear wheels of the vehicle. They should rotate freely without dragging.

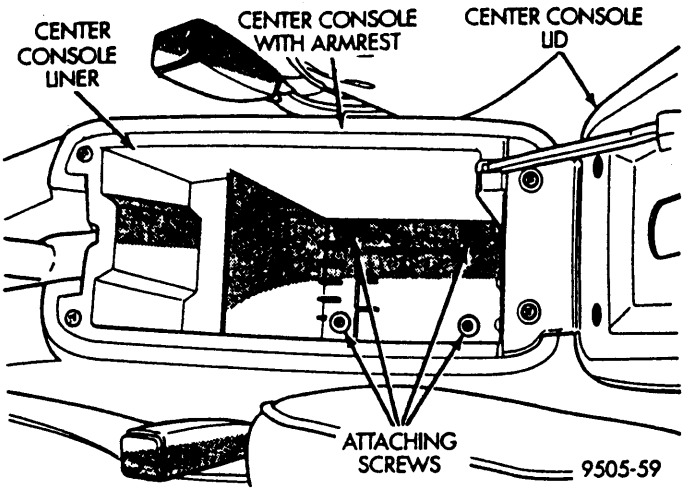


Fig. 15 Attaching Screws At Rear Of Center Console With Arm Rest

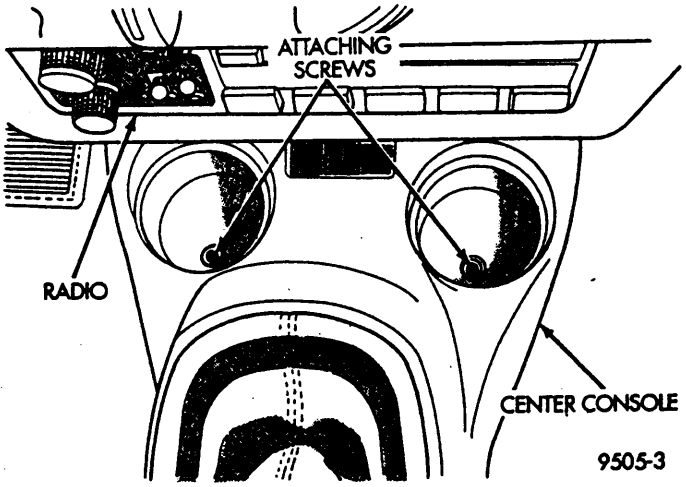


Fig. 16 Attaching Screws At Front Of Center Console

(10) Raise park brake lever to its fully engaged position. This is necessary to allow installation of the center console.

(11) Install center console assembly.

(12) Install the four center console assembly attaching screws (Fig. 14, 15 and 16).

(13) Replace shifter knob and fastener.

(14) Do not connect battery negative cable. Refer to Airbag System Check for proper procedure.

AIRBAG SYSTEM

INDEX

AIRBAG CONTROL MODULE (ACM)

Two different circuits supply battery voltage from the fuse block to the Airbag Control Module (ACM), F15 and F25. The F15 and F25 circuits are connected to separate bus bars internal to the fuse block. Different circuits from the Power Distribution Center and the ignition switch supply battery voltage to the fuse block bus bars.

The F25 circuit supplies battery voltage to the ACM only when the ignition switch is in the RUN position. The F15 circuit powers the ACM when the ignition switch is in either the START or RUN position.

An internal bus bar in the ignition switch connects the A1 circuit from the PDC to the A21 circuit when the switch is in either the START or RUN position. The A21 circuit supplies battery voltage to the fuse block bus bar that feeds the F15 circuit. A 30 amp maxi fuse in the PDC protects the A1 and A21 circuits. A 10 amp fuse in the fuse block, cavity 9, protects the F15 circuit.

When the ignition switch is in the RUN position, it connects the A2 circuit from the PDC to the A22 circuit. The A22 circuit supplies battery voltage to the fuse block bus bar that feeds the F25 circuit. A 30 amp maxi fuse in the PDC protects the A2 and A22 circuits. A 10 amp fuse in the fuse block, cavity 5, protects the F25 circuit.

The ACM has a case ground and an external dedicated ground, circuit Z6. The dedicated ground connects to the instrument panel right center support.

AIRBAG IMPACT SENSORS

Two airbag impact sensors provide input to the Airbag Control Module (ACM). Each sensor has two circuits that connect to the ACM.

From the left impact sensor, Circuit R47 connects to the ACM at cavity 2 of the 13-way connector. Circuit R49 connects to cavity 1 of the 13-way connector.

From the right impact sensor, Circuit R46 connects to the ACM at cavity 12 of the 13-way connector. Circuit R48 connects to cavity 13 of the 13-way connector.

AIRBAG SQUIB (AIRBAG IGNITER)

DRIVER'S SIDE AIRBAG

Two circuits, R43 and R45, connect the ACM to the driver's side airbag squib (igniter) after passing through the clock spring connector. Circuit R43 from cavity 3 of the ACM 4-way connector connects to the squib. Circuit R45 from cavity 4 of the ACM 4-way connector connects to the squib. R43 and R45 are a twisted pair of wires.

PASSENGER'S SIDE AIRBAG

Two circuits, R42 and R44, connect the ACM to the passenger's side airbag squib (igniter). Circuit R42 from cavity 1 of the ACM 4-way connector connects to the squib. Circuit R44 from cavity 2 of the ACM 4-way connector connects to the squib. R42 and R44 are a twisted pair of wires.

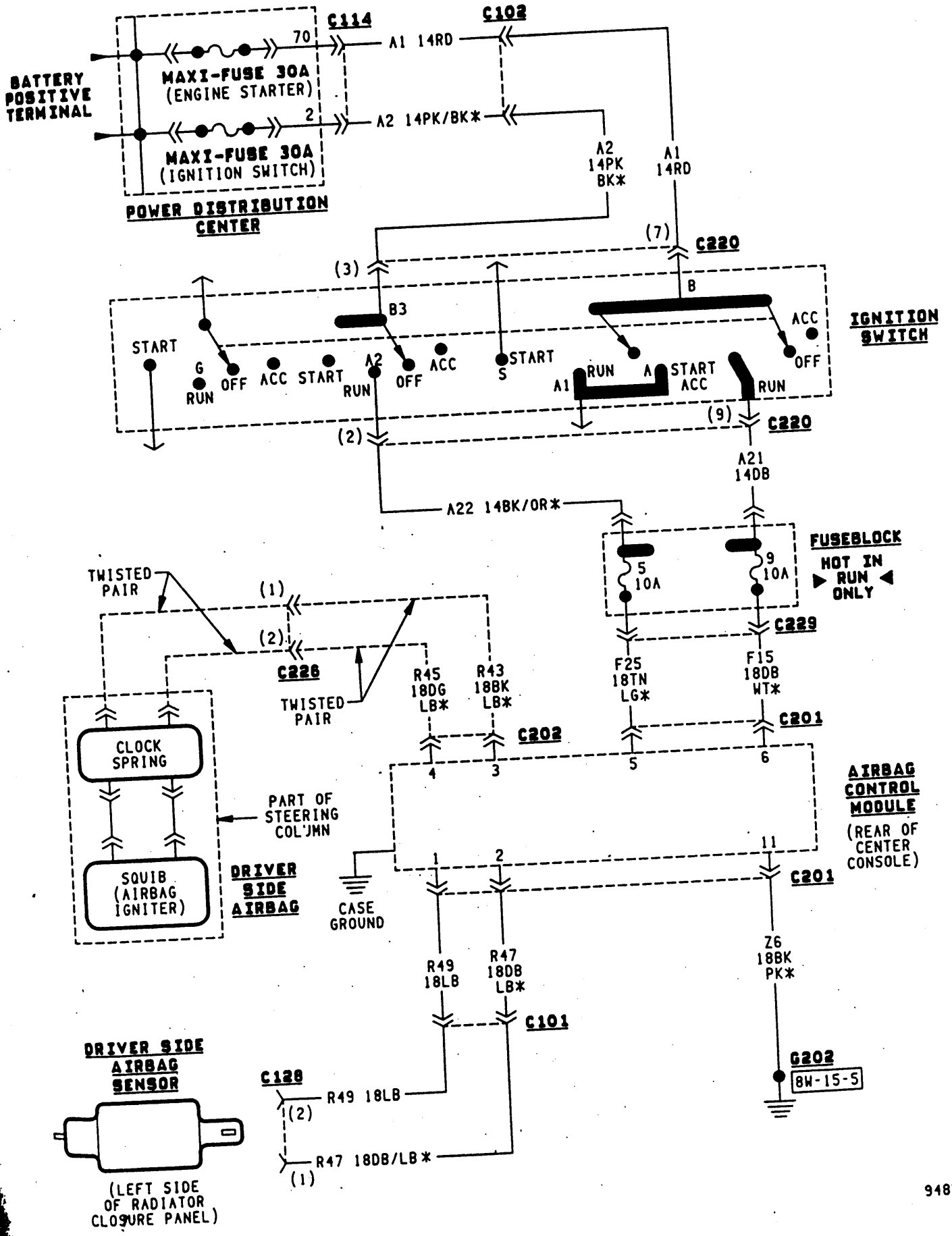
AIRBAG WARNING LAMP

Circuit R41 connects the airbag warning lamp to cavity 7 of the ACM 13-way connector. The airbag warning lamp is part of the instrument cluster.

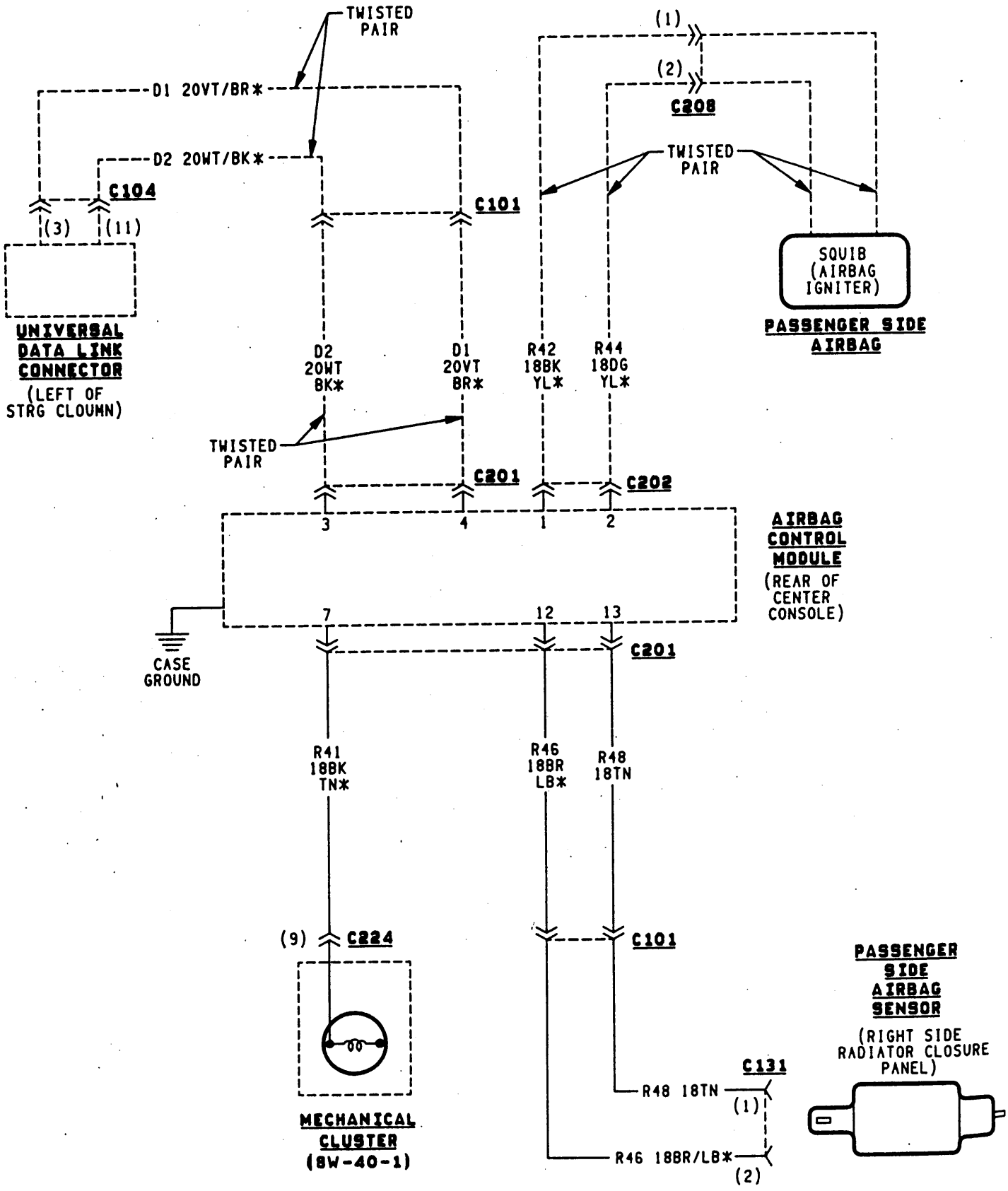
HELPFUL INFORMATION

- Check for blown fuses in the circuits that connect to the ignition switch and in those that connect to the ACM.
- While the bus bars in the fuse block power the ACM, they also feed additional components on separate fuse-protected circuits.
- The ACM has a case ground and an external dedicated ground. The dedicated ground connects to the instrument panel right center support.

DIAGRAM INDEX


BATTERY POSITIVE TERMINAL
C114
C102
70
A1 14RD
MAXI-FUSE 30A (ENGINE STARTER)
2
A2 14PK/BK*
MAXI-FUSE 30A (IGNITION SWITCH)
POWER DISTRIBUTION CENTER
A2 14PK BK*
A1 14RD
(7)
C220
(3)
B
B3
ACC
IGNITION SWITCH
START
G
RUN
OFF
ACC
START
A2
RUN
OFF
ACC
S
START
A1
RUN
A
START ACC
OFF
RUN
(9)
C220
(2)
A21 14DB
A22 14BK/OR*
FUSEBLOCK
HOT IN ▶ RUN ◀ ONLY
5 10A
9 10A
TWISTED PAIR
(1)
(2)
C229
C226
TWISTED PAIR
R45 18DG LB*
R43 18BK LB*
F25 18TN LG*
F15 18DB WT*
C202
C201
CLOCK SPRING
PART OF STEERING COL'JMN
4
3
5
6
AIRBAG CONTROL MODULE
(REAR OF CENTER CONSOLE)
SQUIB (AIRBAG IGNITER)
DRIVER SIDE AIRBAG
CASE GROUND
1
2
11
C201
R49 18LB
R47 18DB LB*
Z6 18BK PK*
C101
G202
8W-15-5
DRIVER SIDE AIRBAG SENSOR
C128
R49 18LB
(2)
R47 18DB/LB*
(1)
(LEFT SIDE OF RADIATOR CLOSURE PANEL)

948W-14


TWISTED PAIR
D1 20VT/BR*
D2 20WT/BK*
C104
(3)
(11)
UNIVERSAL DATA LINK CONNECTOR
(LEFT OF STRG CLOUMN)
C101
(1)
(2)
C208
TWISTED PAIR
SQUIB (AIRBAG IGNITER)
PASSENGER SIDE AIRBAG
D2 20WT BK*
D1 20VT BR*
R42 18BK YL*
R44 18DG YL*
TWISTED PAIR
C201
C202
3
4
1
2
AIRBAG CONTROL MODULE
(REAR OF CENTER CONSOLE)
7
12
13
C201
CASE GROUND
R41 18BK TN*
R46 18BR LB*
R48 18TN
(9)
C224
C101
MECHANICAL CLUSTER (8W-40-1)
C131
R48 18TN
(1)
R46 18BR/LB*
(2)
PASSENGER SIDE AIRBAG SENSOR
(RIGHT SIDE RADIATOR CLOSURE PANEL)