

REPORT NUMBER: 120-MGA-07-002

**SAFETY COMPLIANCE TESTING FOR
FMVSS NO. 120
TIRE SELECTION AND RIMS
FOR MOTOR VEHICLES WITH A GVWR OF MORE THAN 4,536 KG**

**THOMAS BUILT BUSES INC.
2007 THOMAS SAF-T-LINER
NHTSA NO.: C70900**

**PREPARED BY:
MGA RESEARCH CORPORATION
5000 WARREN ROAD
BURLINGTON, WI 53105**



FINAL REPORT DATE: JUNE 27, 2007

FINAL REPORT

**PREPARED FOR:
U.S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
ENFORCEMENT
OFFICE OF VEHICLE SAFETY COMPLIANCE
MAIL CODE: NVS-220
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Prepared by:  Date: June 27, 2007
James Hansen, Project Engineer

Reviewed by:  Date: June 27, 2007
Michael Janovicz, Program Manager

FINAL REPORT ACCEPTED BY OVSC:



June 27, 2007
Date of Acceptance

Technical Report Documentation Page

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7. Author(s) James Hansen, Project Engineer Michael Janovicz, Program Manager				8. Performing Organization Report No. MGA-DOT-120-07-002	
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12. Sponsoring Agency Name and Address U.S. Department of Transportation National Highway Traffic Safety Administration Enforcement Office of Vehicle Safety Compliance Mail Code: NVS-220 1200 New Jersey Avenue, S.E. Washington, D.C. 20590				13. Type of Report and Period Covered Final Report 03/21/2007 - 06/27/2007	
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15. Supplementary Notes					
16. Abstract A compliance test was conducted on the subject 2007 Thomas Saf-T Liner C2 School Bus, NHTSA No. C70900, in accordance with FMVSS 120, "Tire selection and rims for motor vehicles with a GVWR of more than 4,536 kilograms," and TP-120-03. The vehicle was weighed in the unloaded and fully loaded conditions and its tires, rims, and related information were checked. Test failures: None					
17. Key Words Compliance Testing Safety Engineering FMVSS 120				18. Distribution Statement Copies of this report are available from: NHTSA Technical Information Services (NPO-411) 1200 New Jersey Ave., S.E. Washington, DC 20590 Email: tis@nhtsa.dot.gov FAX: 202-493-2833	
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SECTION 1
PURPOSE OF COMPLIANCE TEST

The purpose of this test report is to document the results of tests performed on a MY 2007 Thomas SAF-T-Liner C2 School Bus, NHTSA No.: C70900, in accordance with the requirements stated in Federal Motor Vehicle Safety Standard (FMVSS) No. 120, "Tire selection and rims for motor vehicles with a GVWR of more than 4,536 kilograms."

This standard establishes requirements to ensure that applicable vehicles are equipped with tires of adequate size and load rating and rims of appropriate size and type designation.

SECTION 2

TEST PROCEDURE AND DISCUSSION OF RESULTS

Testing of the 2007 Thomas SAF-T-Liner C2 School Bus, NHTSA No. C70900, was conducted at MGA Research Corporation in accordance with NHTSA TP-120-03, dated April 10, 2000 and MGA-TP-120-03 dated November 20, 2002. The vehicle mounted tires and rims were surveyed to ensure that the rims were suitable for the tires and that the tires inflated to the maximum inflation pressure stated on the tire sidewall were appropriate for the vehicle's certified Gross Axle Weight Ratings (GAWR). The vehicle certification and tire information labeling was surveyed to ensure that the vehicle manufacturer's recommended rims were suitable for the recommended tires, and that the recommended tires inflated to the recommended inflation pressures stated on the labeling were appropriate for the vehicle's certified GAWRs. The vehicle was ballasted and weighed in three different loading conditions to determine if axle or tire overloading could occur. The three loading conditions were:

Condition 1 – Unloaded Vehicle Weight (UVW).

Condition 2 – Vehicle in Condition 1 state plus the addition of ballast to simulate fifty passengers (one adult driver and forty nine students).

Condition 3 – Vehicle in Condition 2 state plus the addition of ballast to simulate cargo loading. Target vehicle load is the certified gross weight rating (GVWR).

The vehicle mounted tires inflated to the inflation pressure labeled on the tire sidewall have a load rating appropriate to carry the maximum loads as required by FMVSS No. 120. The vehicle rims are suitable for the vehicle tires and contain the required markings.

SECTION 2...continued
TEST PROCEDURE AND DISCUSSION OF RESULTS

Model Year/Mfr. /Make/Model:	2007 Thomas SAF-T-Liner C2	
Incomplete Vehicle Make/Model:	Freightliner	
NHTSA No.:	C70900	
GVWR:	11, 569 kg / 25,500 lbs	
Build Date for Bus Chassis:	07/06	
VIN:	4UZABPDG27CY03914	
Chassis VIN:	4UZABPDG27CY03914	
Designated Seating Capacity:	(1 Driver, 48 Passengers, 1 Wheelchair)	
Vehicle Type:	School Bus	
Tire Pressure from certification label (at capacity):	Front: 690 KPa	Rear: 689 KPa
Odometer Reading:	1729 Miles	
Dealer Installed Optional Accessories	None Noted	

SUMMARY

Requirements	PASS/FAIL
TIRE AND RIM SELECTION (S5.1) Installed tires and rims are suitable for vehicle	PASS
Rim Marking (S5.2) Rims contain all required markings of proper dimensions	PASS
LABEL INFORMATION (S5.3) Vehicle has proper certification/tire information label. Label tires at recommended inflation pressure and rims are suitable for vehicle.	PASS
Weight Distribution (49 CFR 567 Certification) Vehicle loaded with occupants and cargo does not exceed GVWR	PASS
Results: Test data indicates compliance with FMVSS 120	PASS

SECTION 3
COMPLIANCE TEST DATA
DATA SHEET 1
GENERAL TIRE AND RIM DATA

Test Vehicle: **2007 THOMAS SAF-T-LINER C2 SCHOOL BUS** NHTSA No.: **C70900**
 Test Lab: **MGA RESEARCH CORPORATION** Test Date: **03/22/2007**

GENERAL DATA

Tire Type: (Passenger car or other)	Truck/Bus
Are the tire and rim sizes the same for all axles, including the spare?	Yes
Does the tire size fitted to the axles appear on the Certification or Tire label? (If NO, describe)	Yes
Number of axles	2
Dual tires on rear axle(s)	Yes

TIRE DATA FROM SIDEWALL

	Right Front	Spare
Manufacturer	Goodyear	N/A
Brand	G149 RSA	N/A
Tire Size	10R 22.5	N/A
Maximum Tire Load Rating (KG)	Single: 2360 Dual: 2240	N/A
De-rated Tire Load Rating (KG)	N/A	N/A
Maximum Inflation Pressure (KPA)	690	N/A
Tire has DOT symbol (Yes/No)	Yes	N/A
DOT serial number	DOT MC3N 2HOW 2406	N/A

MOUNTED TIRE VS. AXLE RATING COMPARISON
 (AT SIDEWALL MAXIMUM INFLATION PRESSURE)

	Front Axle	Rear Axle
A. GAWR (KG) from certification label	3630	7940
B. (No. of tires) x (tire load rating (KG) from above table)	4720	8960
C. Is "B" equal to or greater than "A"? (Yes/No)	Yes	Yes

**DATA SHEET 1...continued
GENERAL TIRE AND RIM DATA**

Test Vehicle: **2007 THOMAS SAF-T-LINER C2 SCHOOL BUS** NHTSA No.: **C70900**
 Test Lab: **MGA RESEARCH CORPORATION** Test Date: **03/2/2007**

RIM MARKINGS

	Right Front	Spare
A. Source of published dimensions (letter designation)	T	N/A
B. Rim Size	22.5 x 7.50	N/A
C. Does rim contain DOT symbol? (Yes/No)	Yes	N/A
D. Manufacturer's name, symbol or trademark (copy format)	Accuride	N/A
E. Date of manufacture or symbol	05 24 06	N/A
Do items A-C appear on weather side of rim? (Yes/No)	Yes	N/A
Letter height (not less than 3mm)	4 mm	N/A
Lettering (impressed or embossed)	Impressed	N/A
Are all rim markings legible? (Yes/No)	Yes	N/A
Do all markings comply with requirements? (Yes/No)	Yes	N/A
Rims are suitable for tires on vehicles? (Yes/No)	Yes	N/A

RIM MEASUREMENTS

	Right Front	Spare
Rim width	190.5 mm	N/A
Rim diameter	571.5 mm	N/A
Rim measurements same as rim markings? (Yes/No)	Yes	N/A

Results	Pass/Fail
TIRE AND RIM SELECTION (S5.1) Installed tires and rims are suitable for vehicle	PASS
Rim Marking (S5.2) Rims contain all required markings of proper dimensions	PASS

Remarks: None

Tested : _____ Approved By: Michael Janoy
 Date: 03/22/2007

**DATA SHEET 2
CERTIFICATION AND TIRE LABEL INFORMATION**

Test Vehicle: **2007 THOMAS SAF-T-LINER C2 SCHOOL BUS** NHTSA No.: **C70900**
 Test Lab: **MGA RESEARCH CORPORATION** Test Date: **03/22/2007**

LABEL INFORMATION

Label Design (Combined Certification and Tire Label):	Yes
Label Design (Separate Tire Information Label):	No
Label in English? (Yes/No)	Yes
Block capital letter and numbers are not less than 2.4 mm in height (yes/no):	Yes
Label is permanently affixed; describe method of affixing (rivets, glue, etc.)	Yes/ Glue
Does label text color contrast with background? (yes/no)	Yes
Location of Label(s) on the vehicle:	Right Side A-Post

TIRE AND RIM DATA FROM LABEL (FOR EACH GAWR/GVWR)

GVWR: 11569 kg	Front Axle	Rear Axle
Tire Size	10R22.5	10R22.5
Rim Size	W/22.5 x 7.5	W/22.5 x 7.5
Recommended inflation pressure (KPa)	690	689
Are labeled rims suitable for labeled tires (Yes/No) ¹	Yes	Yes
Referenced load rating at label recommended inflation pressure (KG) ¹	2360	2240

¹ Referenced source for tire/rim match and load rating data: 2007 Year Book Tire & Rim Assoc.

CERTIFICATION/TIRE LABEL MAXIMUM CAPACITY COMPARISON

GVWR: 11569 kg	Front axle	Rear Axle
A.GAWR (kg) FROM CERTIFICATION LABEL	(C) 3630	(D) 7940
B.(No. of tires) x (Tire load rating (KG))	4720	8960
Is "B" equal or greater than "A"? (Yes/No)	Yes	Yes
Is (C) plus (D) equal to or greater than GVWR? (Yes/No)	Yes	

RESULTS	PASS/FAIL
LABEL INFORMATION (S5.3) Vehicle has proper certification/tire information label. Label tires at recommended inflation pressure and rims are suitable for vehicle.	PASS

Tested By:  Approved By: 
 Date: 03/22/2007

**DATA SHEET 3
WEIGHT DISTRIBUTION**

Test Vehicle: **2007 THOMAS SAF-T-LINER C2 SCHOOL BUS** NHTSA No.: **C70900**
 Test Lab: **MGA RESEARCH CORPORATION** Test Date: **03/22/2007**

FLUID LEVELS				
Fuel:	FULL			
Coolant:	FULL			
Other Fluids: <u>Washer fluid, brake fluid, etc.</u>	FULL			
TIRE PRESSURES				
Tire	Left Front	Right Front	Left Rear	Right Rear
Tire Pressure (KPa)	690	690	690	690
OCCUPANT AND CARGO LOADS				
Total Occupant Load (kg): [# of designated seating positions x 68 KG per adult or 54 KG per student]	2714 (1-driver, 49-students)			
Manufacturer's Rated Cargo Load (kg): [If not stated on vehicle or provided in owner's manual leave blank]	N/A			
Certified GVWR - Measured UVW - Total Occupant Load = Rated Cargo Load <u>11,569</u> KG - <u>7448</u> KG - <u>2714</u> KG = <u>1407</u> KG (must be positive)				
Describe Placement of Cargo:	Down aisle and in the rear of the school bus			

WEIGHT DISTRIBUTION

ITEM	Tire or Vehicle Rating* (KG)	CONDITION 1 UVW (KG)		CONDITION 2 Cond. 1 + occupants (KG)		CONDITION 3 Cond. 2 + cargo (KG)	
		Measured	Overload	Measured	Overload	Measured	Overload
Left Front Tire	2360	1256	No	1560	No	1474	No
Right Front Tire	2360	1359	No	1710	No	1474	No
Front Axle	3630	2615	No	3270	No	2948	No
Left Rear Tire	4480	2361	No	3461	No	4309	No
Right Rear Tire	4480	2472	No	3497	No	4309	No
Rear Axle	7940	4833	No	6958	No	8618	Yes
Total Vehicle	11569	7448	No	10228	No	11566	No

*- Vehicle and axle weight ratings (GVWR & GAWR) are located on the vehicle certification label plate. Vehicle tire load ratings are based upon the inflation pressure specified on the certification label plate for each respective axle, as determined from the appropriate tire manufacturer's specification table.

**DATA SHEET 3...continued
WEIGHT DISTRIBUTION**

Test Vehicle: **2007 THOMAS SAF-T-LINER C2 SCHOOL BUS** NHTSA No.: **C70900**
Test Lab: **MGA RESEARCH CORPORATION** Test Date: **03/22/2007**

RESULTS	PASS/FAIL
Weight Distribution (49 CFR 567 Certification) Vehicle loaded with occupants and cargo does not exceed GVWR	PASS

Remarks: None

Tested By:  Approved By: 
Date: 03/22/2007

SECTION 4
INSTRUMENTATION AND EQUIPMENT LIST

Test Vehicle: **2007 THOMAS SAF-T-LINER C2 SCHOOL BUS** NHTSA No.: **C70900**
 Test Lab: **MGA RESEARCH CORPORATION** Test Date: **03/22/2007**

	Digital Caliper	Vehicle Scale	Tape Measure
Make	Mitutoyo	GSE	Stanley
Model	CD-6" CS	Pro-Weigh 84	Powerlock
Serial # (s)	0441288	004804	SN 278
Range	0-150mm	0 to 20,000 lb	0-8 m
Accuracy	.01mm	0.25% static	1 mm
Cal. Date	09/11/06	09/11/06	09/26/07
Cal. Due Date	09/11/07	09/11/07	03/26/07

SECTION 4...continued

INSTRUMENTATION AND EQUIPMENT LIST

Test Vehicle: **2007 THOMAS SAF-T-LINER C2 SCHOOL BUS** NHTSA No.: **C70900**
 Test Lab: **MGA RESEARCH CORPORATION** Test Date: **03/22/2007**

SCALE CALIBRATION SHEET

VISUAL INSPECTION		ACCEPT	REJECT	LOCATION OF TEST/NOTICE OF SUB-CONTRACTOR					
FUNCTIONALITY; as left		✓		<input type="checkbox"/> This test was conducted at Certified Scale Inc. facility, Menomonee Falls, WI <input checked="" type="checkbox"/> This test was conducted within the customer facility; located at : 5000 Warren Road, Burlington, WI 53105 <input type="checkbox"/> Subcontracted to:					
REPEATABILITY/SENSITIVITY; as left		✓							
PHYSICAL CONDITION; as left		✓							
SUITABILITY FOR INTENDED USE		✓							

TEST POINT	AS FOUND			A C C E P T	R E J E C T	AS LEFT		A C C E P T	R E J E C T	TOLERANCES	
	EXPECTED VALUE	MEASURED VALUE	ERROR			MEASURED VALUE	ERROR			LOW LIMIT	HIGH LIMIT
SCALE #1											
DISTRIBUTION	1000	1000	0	✓		1000	0	✓		995	1005
DISTRIBUTION	2000	2005	5	✓		2000	0	✓		1995	2005
DISTRIBUTION	3000	3010	10	✓		3000	0	✓		2990	3010
DISTRIBUTION	4000	4015	15	✓		4000	0	✓		3990	4010
DISTRIBUTION	5000	5020	20	✓		5000	0	✓		4990	5010
DISTRIBUTION	10,000	10,040	40	✓		10,000	0	✓		9980	10,020
DISTRIBUTION	15,000	15,060	60	✓		15,000	0	✓		14,970	15,030
DISTRIBUTION	18,000	18,075	75	✓		18,000	0	✓		17,960	18,040
M.W.D.											
PAGE (1) OF (2) APPROVED											

*** FINAL CONCLUSIONS ***		
As FOUND: ACCEPT	<input type="checkbox"/> REJECT	<input checked="" type="checkbox"/>
As LEFT: ACCEPT	<input checked="" type="checkbox"/> REJECT	<input type="checkbox"/>
ACTION PENDING: <input type="checkbox"/>		

*** STATEMENT OF ESTIMATED UNCERTAINTY AND CONFIDENCE ***	
<input type="checkbox"/>	ESTIMATED UNCERTAINTY OF THIS CALIBRATION IS _____; BY CSI TYPE EVALUATION DEFAULT; WITH A CONFIDENCE LEVEL OF 99%.
<input checked="" type="checkbox"/>	UNCERTAINTY OF THIS CALIBRATION IS UNKNOWN BY STATISTICAL CALCULATION; ASSUMED EQUAL TO ±50% OF THE MINIMUM VALID DIVISION.
Technician's Comments/Observations/Opinions: <i>tested, cleaned pit of debris, adjusted calibration, tested for as left results. 5# front to back shift error</i>	

MGA2 - NM-695

** THIS REPORT IS APPLICABLE ONLY TO THE DEVICE IDENTIFIED IN THE LOCATION SPECIFIED AS PART OF THIS REPORT. **

The serial number of this report is 091106MGA01. This report may not be duplicated without written consent of Certified Scale Inc.

This report, page (1) of (2) was completed on 09-11-2006 by [Signature] Certified Scale Inc. Representative

Next scheduled Full Calibration is due 09-2007 Date. Next Preventive Maintenance visit is due none Date

Revision - 0 Certified Scale Inc. - Quality Procedure Manual - Controlled Document R-510L1RIC (File #5.10.c)

SECTION 4...continued
INSTRUMENTATION AND EQUIPMENT LIST

Test Vehicle: **2007 THOMAS SAF-T-LINER C2 SCHOOL BUS** NHTSA No.: **C70900**
 Test Lab: **MGA RESEARCH CORPORATION** Test Date: **03/22/2007**

SCALE CALIBRATION SHEET

TEST AND UNCERTAINTY PROCEDURE JUSTIFICATION		NIST TRACEABLE TEST STANDARDS USED THIS CALIBRATION									
PLEASE REFER TO TEST JUSTIFICATION AND UNCERTAINTY POLICY MADE PART OF SCALE MAINTENANCE AND CALIBRATION PROCEDURE MANUAL; SERIAL # MGA-704-L1		50# NUMBERS <u>CRD/NSC 01</u> THRU <u>819 NSC 34</u>									
<input checked="" type="checkbox"/> THERE WAS NO DEVIATION IN PROCEDURE AS WRITTEN		500# NUMBERS <u>B05</u> THRU <u>06</u>									
<input type="checkbox"/> DEVIATION FROM PROCEDURE IS NOTED HEREUPON		1000# NUMBERS <u>NSIA 100</u> THRU <u>NSIA 114</u>									
TEST WEIGHT CERTIFICATION		ESTIMATE OF ENVIRONMENTAL CONDITIONS									
PLEASE REFER TO TEST STANDARD TRACEABILITY DOCUMENTS MADE PART OF SCALE MAINTENANCE AND CALIBRATION PROCEDURE MANUAL; SERIAL # MGA-704-L1		Temperature <u>65°</u> Humidity <u>70%</u> Air Movement <u>minimal</u>									
Vibration <u>minimal</u> Other <u>none</u>											
VISUAL INSPECTION				Accept	Reject	LOCATION OF TEST/NOTICE OF SUB-CONTRACTOR					
FUNCTIONALITY; as left				<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> This test was conducted at Certified Scale Inc. facility, Menomonee Falls, WI					
REPEATABILITY/SENSITIVITY; as left				<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> This test was conducted within the customer facility; located at:					
PHYSICAL CONDITION; as left				<input checked="" type="checkbox"/>	<input type="checkbox"/>	5000 Warren Road, Burlington, WI 53105					
SUITABILITY FOR INTENDED USE				<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Subcontracted to:					
*** FINAL TEST RESULTS ***											
TEST POINT	As Found			A C C E P T	R E J E C T	As Left		A C C E P T	R E J E C T	TOLERANCES	
	EXPECTED VALUE	MEASURED VALUE	ERROR			MEASURED VALUE	ERROR			LOW LIMIT	HIGH LIMIT
SCALE #2											
DISTRIBUTION	1000	<u>1020</u>	<u>0</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>1000</u>	<u>0</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	995	1005
DISTRIBUTION	2000	<u>2000</u>	<u>0</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>2000</u>	<u>0</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1995	2005
DISTRIBUTION	3000	<u>3005</u>	<u>5</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>3000</u>	<u>0</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2990	3010
DISTRIBUTION	4000	<u>4005</u>	<u>5</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>4000</u>	<u>0</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3990	4010
DISTRIBUTION	5000	<u>5000</u>	<u>0</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>5000</u>	<u>0</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4990	5010
DISTRIBUTION	10,000	<u>10020</u>	<u>20</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>10000</u>	<u>0</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9980	10,020
DISTRIBUTION	15,000	<u>15030</u>	<u>30</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>15000</u>	<u>0</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	14,970	15,030
DISTRIBUTION	18,000	<u>18035</u>	<u>35</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>18000</u>	<u>0</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17,960	18,040
										M.I.W.D.	
PAGE (2) OF (2)											
*** FINAL CONCLUSIONS ***											
As Found: ACCEPT <input checked="" type="checkbox"/> REJECT <input type="checkbox"/> As Left: ACCEPT <input checked="" type="checkbox"/> REJECT <input type="checkbox"/> ACTION PENDING: <input type="checkbox"/>											
*** STATEMENT OF ESTIMATED UNCERTAINTY AND CONFIDENCE ***											
<input type="checkbox"/> ESTIMATED UNCERTAINTY OF THIS CALIBRATION IS _____ BY CSI TYPE EVALUATION DEFAULT; WITH A CONFIDENCE LEVEL OF 99%.											
<input checked="" type="checkbox"/> UNCERTAINTY OF THIS CALIBRATION IS UNKNOWN BY STATISTICAL CALCULATION; ASSUMED EQUAL TO ±50% OF THE MINIMUM VALID DIVISION.											
Technician's Comments/Observations/Opinions: <u>tested, cleaned pit, adjusted calibration, noted for as left results</u>											

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The serial number of this report is 091106MGA01. This report may not be duplicated without written consent of Certified Scale Inc.
 This report, page (2) of (2) was completed on 09-11-2006 by [Signature] Certified Scale Inc. Representative
 Next scheduled Full Calibration is due 09-2007 Date. Next Preventive Maintenance visit is due 2006 Date.

Revision - 0 Certified Scale Inc. - Quality Procedure Manual - Controlled Document R-510L1RIC (File #5.10.c)

**SECTION 5
PHOTOGRAPHS**

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Test Vehicle: **2007 THOMAS SAF-T-LINER C2 SCHOOL BUS** NHTSA No.: **C70900**
Test Lab: **MGA RESEARCH CORPORATION** Test Date: **03/22/2007**



Three-Quarter Frontal View of Left Side of Test Vehicle

Test Vehicle: **2007 THOMAS SAF-T-LINER C2 SCHOOL BUS**
Test Lab: **MGA RESEARCH CORPORATION**

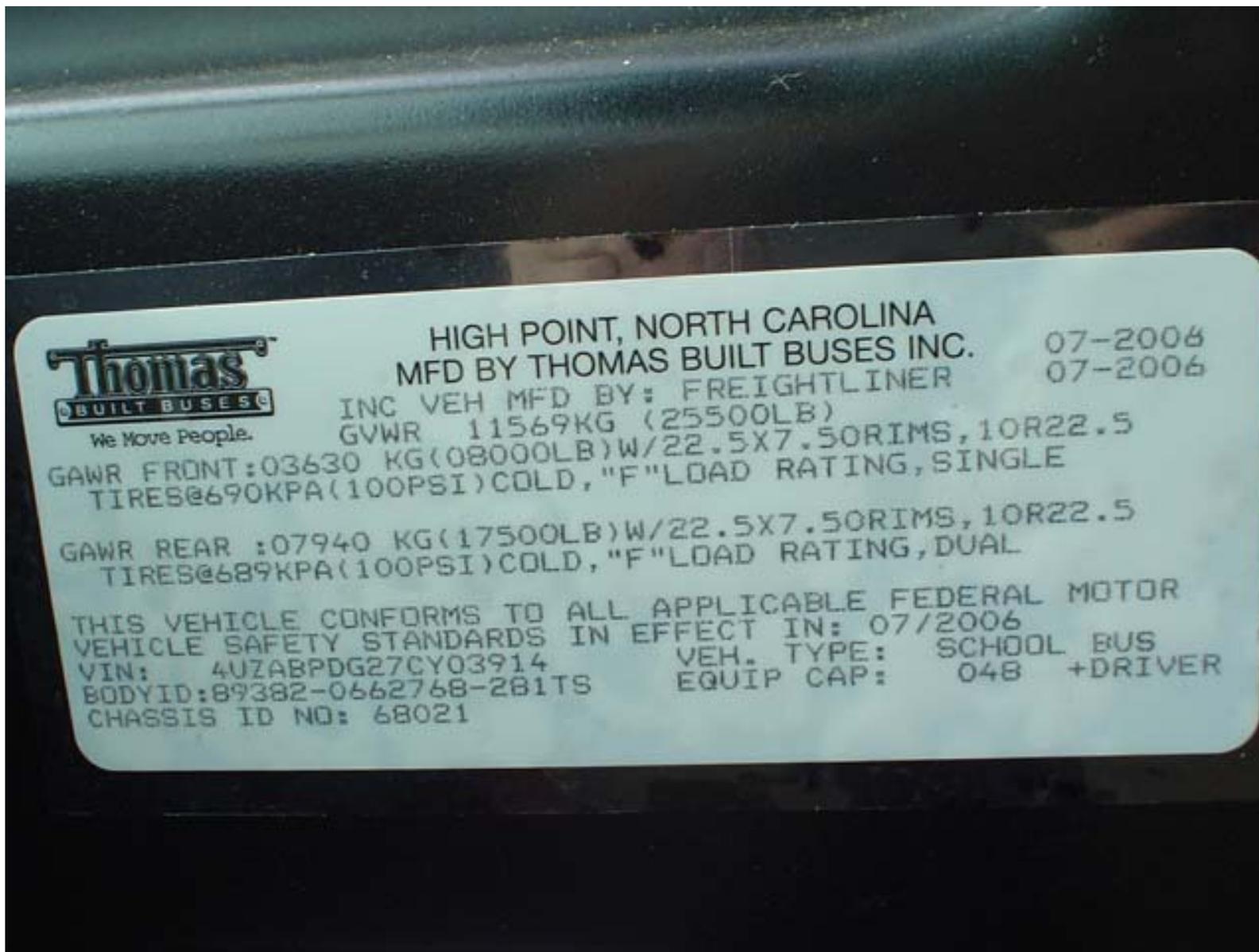
NHTSA No.: **C70900**
Test Date: **03/22/2007**



Three-Quarter Rear View of Left Side of Vehicle

Test Vehicle: 2007 THOMAS SAF-T-LINER C2 SCHOOL BUS
Test Lab: MGA RESEARCH CORPORATION

NHTSA No.: C70900
Test Date: 03/22/2007



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Certification Label

Test Vehicle: 2007 THOMAS SAF-T-LINER C2 SCHOOL BUS
Test Lab: MGA RESEARCH CORPORATION

NHTSA No.: C70900
Test Date: 03/22/2007



Tire Manufacturer

Test Vehicle: 2007 THOMAS SAF-T-LINER C2 SCHOOL BUS
Test Lab: MGA RESEARCH CORPORATION

NHTSA No.: C70900
Test Date: 03/22/2007



Tire Model Number

Test Vehicle: 2007 THOMAS SAF-T-LINER C2 SCHOOL BUS
Test Lab: MGA RESEARCH CORPORATION

NHTSA No.: C70900
Test Date: 03/22/2007



Tire DOT Serial Number

Test Vehicle: 2007 THOMAS SAF-T-LINER C2 SCHOOL BUS
Test Lab: MGA RESEARCH CORPORATION

NHTSA No.: C70900
Test Date: 03/22/2007



Test Vehicle: 2007 THOMAS SAF-T-LINER C2 SCHOOL BUS
Test Lab: MGA RESEARCH CORPORATION

NHTSA No.: C70900
Test Date: 03/22/2007



Test Vehicle: 2007 THOMAS SAF-T-LINER C2 SCHOOL BUS
Test Lab: MGA RESEARCH CORPORATION

NHTSA No.: C70900
Test Date: 03/22/2007



Right Front Rim DOT, and Source of Published Information, Date of Manufacture Markings and Right Front Rim Size

Test Vehicle: **2007 THOMAS SAF-T-LINER C2 SCHOOL BUS**
Test Lab: **MGA RESEARCH CORPORATION**

NHTSA No.: **C70900**
Test Date: **03/22/2007**



Vehicle on Scales Doing Measurement of Front Axle Loads

Test Vehicle: **2007 THOMAS SAF-T-LINER C2 SCHOOL BUS**
Test Lab: **MGA RESEARCH CORPORATION**

NHTSA No.: **C70900**
Test Date: **03/22/2007**



Vehicle on Scales Doing Measurement of Rear Axle Loads

Test Vehicle: 2007 THOMAS SAF-T-LINER C2 SCHOOL BUS
Test Lab: MGA RESEARCH CORPORATION

NHTSA No.: C70900
Test Date: 03/22/2007



Simulated Occupant Loading

Test Vehicle: 2007 THOMAS SAF-T-LINER C2 SCHOOL BUS
Test Lab: MGA RESEARCH CORPORATION

NHTSA No.: C70900
Test Date: 03/22/2007



Simulated Cargo Loading