REPORT NUMBER: 120-MGA-2011-005

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

IC CORPORATION
2012 CE SCHOOL BUS
NHTSA NO.: CC0900

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

FINAL REPORT DATE: NOVEMBER 28, 2011

FINAL REPORT

PREPARED FOR:
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

This publication is distributed by the U.S. Department of Transportation, National Highway Traffic Safety Administration, in the interest of information exchange. The opinions, findings and conclusions expressed in this publication are those of the author(s) and not necessarily those of the Department of Transportation or the National Highway Traffic Safety Administration. The United States Government assumes no liability for its contents or use thereof. If trade or manufacturers' names or products are mentioned it is only because they are considered essential to the object of the publication and should not be construed as an endorsement. The United States Government does not endorse products or manufacturers.

Prepared by: _____ Date: November 28, 2011
Eric Peschman, Project Engineer

Reviewed by: _____ Date: November 28, 2011
Michael Janovicz, Program Manager

FINAL REPORT ACCEPTED BY:

_____

11/22/11
Date of Acceptance

Technical Report Documentation Page

1. Report No. 120-MGA-2011-005	*2. Government Accession No.*	*3. Recipient's Catalog No.*
4. Title and Subtitle Final Report of FMVSS 120 Compliance Testing of a 2012 IC Corp. CE School Bus NHTSA No.: CC0900		*5. Report Date* November 28, 2011 *6. Performing Organization Code* MGA
7. Author(s) Eric Peschman, Project Engineer Michael Janovicz, Program Manager		*8. Performing Organization Report No.* 120-MGA-2011-005
9. Performing Organization Name and Address MGA Research Corporation 5000 Warren Road Burlington, WI 53105		*10. Work Unit No.* *11. Contract or Grant No.* DTNH22-08-D-00075
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 August 3 – 4, 2011 *14. Sponsoring Agency Code* NVS-220
15. Supplementary Notes		

16. Abstract

A compliance test was conducted on the subject 2012 IC Corp. CE School Bus, NHTSA No.: CC0900, 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	
19. Security Classif. (of this report) Unclassified	*20. Security Classif. (of this page)* Unclassified	*21. No. of Pages* 30	22. Price

Form DOT F1700.7 (8-72)

TABLE OF CONTENTS

SECTION 1

PURPOSE OF COMPLIANCE TEST

The purpose of this test report is to document the results of tests performed on a MY 2012 IC Corp. CE School Bus, NHTSA No.: CC0900, 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 2012 IC Corp. CE School Bus, NHTSA No.: CC0900, 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 sixty-eight passengers (one adult driver and sixty-seven students).
Condition 3 – Vehicle in Condition 2 state plus the addition of ballast to simulate cargo loading. Target vehicle load is the vehicle loaded to the certified gross vehicle weight rating (GVWR).

The vehicle mounted tires inflated to the inflation pressure labeled on the tire sidewall and the vehicle labeled tires inflated to the recommended cold inflation pressures have load ratings 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

TEST PROCEDURE AND DISCUSSION OF RESULTS

Model Year / Mfr. / Model	2012 IC Corp. CE	
Incomplete Vehicle Make	N/A	
NHTSA No.	CC0900	
GVWR	13,517 kg / 29,800 lbs	
Build Date for Bus	09/2010	
VIN	4DRBUSKP6CB392585	
Designated Seating Capacity	(1 Driver, 67 Passengers)	
Vehicle Type	School Bus	
Tire Pressure from certification label (at capacity)	Front: 758 KPa	Rear: 689 KPa
Odometer Reading	2,336 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: **2012 IC Corp. CE School Bus** NHTSA No.: **CC0900**
Test Lab: **MGA Research Corporation** Test Dates: **8/3/11 – 8/4/11**

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)	No*
Number of axles	2
Dual tires on rear axle(s)	Yes

***** Vehicle fitted with 11R22.5 size tires. Certification label recommends 265/75R22.5G for the front axle and 295/75R22.5G for the rear axle.

TIRE DATA FROM SIDEWALL

	Right Front
Manufacturer	Continental
Brand	HSR2
Tire Size	11R22.5
Maximum Tire Load Rating (kg)	Single: 2,800 kg / Dual: 2,650 kg
De-rated Tire Load Rating (kg)	N/A
Maximum Inflation Pressure (KPa)	720
Tire has DOT symbol (Yes/No)	Yes
DOT serial number	DOT A33T 2A5 1610

MOUNTED TIRE VS. AXLE RATING COMPARISON

(AT SIDEWALL MAXIMUM INFLATION PRESSURE)

	Front Axle	Rear Axle
A. GAWR (kg) from certification label	4,536	9,525
B. (No. of tires) x (tire load rating (kg) from above table)	5,600	10,600
C. Is “B” equal to or greater than “A”? (Yes/No)	Yes	Yes

DATA SHEET 1

GENERAL TIRE AND RIM DATA

Test Vehicle: **2012 IC Corp. CE School Bus** NHTSA No.: **CC0900**
Test Lab: **MGA Research Corporation** Test Dates: **8/3/11 – 8/4/11**

RIM MARKINGS

	Right Front
A. Source of published dimensions (letter designation)	T
B. Rim Size	22.5 x 8.25
C. Does rim contain DOT symbol? (Yes/No)	Yes
D. Manufacturer's name, symbol or trademark (copy format)	Accuride
E. Date of manufacture or symbol	08 19 10
Do items A-C appear on weather side of rim? (Yes/No)	Yes
Letter height (not less than 3 mm)	Yes – 5 mm
Lettering (impressed or embossed)	Impressed
Are all rim markings legible? (Yes/No)	Yes
Do all markings comply with requirements? (Yes/No)	Yes
Rims are suitable for tires on vehicles? (Yes/No)	Yes

RIM MEASUREMENTS

	Right Front
Rim width	216 mm
Rim diameter	572 mm
Rim measurements same as rim markings? (Yes/No)	Yes

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**

Remarks: None

Tested By: _____

Approved By: _____

Date: August 3, 2011

DATA SHEET 2

CERTIFICATION AND TIRE LABEL INFORMATION

Test Vehicle: **2012 IC Corp. CE School Bus** NHTSA No.: **CC0900**
Test Lab: **MGA Research Corporation** Test Dates: **8/3/11 – 8/4/11**

LABEL INFORMATION

Label Design (Combined Certification and Tire Label)	Combined
Label Design (Separate Tire Information Label)	-
Label in English? (Yes/No)	Yes
Block capital letter and numbers are not less than 2.4 mm in height (yes/no)	Yes – 2.4
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	Interior Bulkhead Above Driver

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

GVWR: **13,517** kg	Front Axle	Rear Axle
Tire Size	265/75R22.5G	295/75R22.5G
Rim Size (in)	22.5 x 7.5	22.5 x 8.25
Recommended inflation pressure (KPa)	758	689
Are labeled rims suitable for labeled tires (Yes/No)[1]	Yes	Yes
Referenced load rating at label recommended inflation pressure (kg)[1]	2,360	2,390

[1] Referenced source for tire/rim match and load rating data: 2011 Tire and Rim Association Yearbook

CERTIFICATION/TIRE LABEL MAXIMUM CAPACITY COMPARISON

GVWR: **13,517** kg	Front axle	Rear Axle
A.GAWR (kg) FROM CERTIFICATION LABEL	(C) 4,536	(D) 9,525
B.(No. of tires) x (Tire load rating (kg))	4,720	9,560
Is “B” equal or greater than “A”? (Yes/No)	Yes	Yes
Is (C) plus (D) equal to or greater than GVWR? (Yes/No)	Yes – 14,061	

DATA SHEET 2

CERTIFICATION AND TIRE LABEL INFORMATION

Test Vehicle: **2012 IC Corp. CE School Bus** NHTSA No.: **CC0900**
Test Lab: **MGA Research Corporation** Test Dates: **8/3/11 – 8/4/11**

Requirements	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: August 3, 2011

DATA SHEET 3

WEIGHT DISTRIBUTION

Test Vehicle:	**2012 IC Corp. CE School Bus**	NHTSA No.:	**CC0900**
Test Lab:	**MGA Research Corporation**	Test Dates:	**8/3/11 – 8/4/11**

FLUID LEVELS

Fuel	FULL
Coolant	FULL
Other Fluids: Washer fluid, brake fluid, etc.	FULL

TIRE PRESSURES

Tire	Left Front	Right Front	Left Rear	Right Rear
Tire Pressure (kPa)	758	758	689	689

*Tires were inflated to recommended inflation pressure on tire label. Mounted tires did not match tires listed on label. Mounted tires have a maximum sidewall pressure of 720 kPa.

OCCUPANT AND CARGO LOADS

Total Occupant Load (kg) [# of designated seating positions x 68 kg per adult or 54 kg per student]	3,686 (1 driver, 67 students)
Manufacturer's Rated Cargo Load (kg) [If not stated on vehicle or provided in owner's manual leave blank]	
Certified GVWR – Measured UVW – Total Occupant = Rated Cargo Load 13,517 kg – 8,180 kg – 3,686 kg = 1,651 kg (must be positive)	
Describe Placement of Cargo	Placed on Floor Down Center Aisle of Bus

DATA SHEET 3

WEIGHT DISTRIBUTION

Test Vehicle: **2012 IC Corp. CE School Bus** NHTSA No.: **CC0900**
Test Lab: **MGA Research Corporation** Test Dates: **8/3/11 – 8/4/11**

WEIGHT DISTRIBUTION

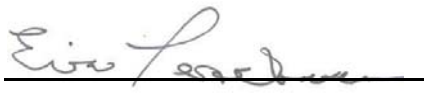
ITEM	Tire or Vehicle Rating* (kg)	CONDITION 1 UVW (kg)		CONDITION 2 Cond. 1 + occupants (kg)		CONDITION 3 Cond. 2 + cargo (kg)	
		Measured	Overload	Measured	Overload	Measured	Overload
Left Front Tire	2,800 / 2,360	1,604	No	1,972	No	2,242	No
Right Front Tire	2,800 / 2,360	1,604	No	1,990	No	2,214	No
Front Axle	4,536	3,208	No	3,962	No	4,456	No
Left Rear Tire	5,300 / 4,780	2,280	No	3,718	No	4,268	No
Right Rear Tire	5,300 / 4,780	2,692	No	4,180	No	4,792	Yes**
Rear Axle	9,525	4,972	No	7,898	No	9,060	No
Total Vehicle	13,517	8,180	No	11,860	No	13,516	No

* Vehicle and axle weight ratings (GVWR & GAWR) are located on the vehicle certification label plate. Vehicle tire load ratings are based on both the installed tires at the max sidewall inflation pressure and the labeled tires at the recommended inflation pressure for each respective axle, as determined from the appropriate tire manufacturer's specification table.

** Under this simulated load condition, the actual load on the right rear tire was 12 kg above the load rating of the labeled tire size at the labeled recommended inflation pressure. This condition does not represent a test failure.

Requirements	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: August 4, 2011

SECTION 4

INSTRUMENTATION AND EQUIPMENT LIST

Test Vehicle: **2012 IC Corp. CE School Bus** NHTSA No.: **CC0900**
Test Lab: **MGA Research Corporation** Test Dates: **8/3/11 – 8/4/11**

	Digital Caliper	Vehicle Scale	Vehicle Scale	Tape Measure	Pressure Gauge
Make	Mitutoyo	GSE	GSE	Stanley	Measurement Ltd, Inc.
Model	6" 500-171-20	465	465	Powerlock 3M	MS-5520
Serial No.	05389443	004804&212091R	004804&212092R	588	R012007
Range	0 to 150 mm	0 to 20,000 lb	0 to 20,000 lb	0 to 8 m	0 to 150 psi
Accuracy	0.01 mm	0.25% static	0.25% static	1 mm	0.1 psi
Cal. Date	03/05/11	10/01/10	10/01/10	03/24/11	02/25/11
Cal. Due Date	09/05/11	09/29/11	09/29/11	09/24/11	08/28/11

SECTION 4

INSTRUMENTATION AND EQUIPMENT LIST

Test Vehicle: **2012 IC Corp. CE School Bus** NHTSA No.: **CC0900**
Test Lab: **MGA Research Corporation** Test Dates: **8/3/11 – 8/4/11**

SCALE CALIBRATION SHEET

Confidential — REPORT OF INSPECTION AND CALIBRATION — Trade Secret

Operating Under A2LA Accreditation #2006.01; Performed by **Certified Scale Inc.** N57 W13640 Carmen Avenue, Menomonee Falls, WI 53051. As Directed by **MGA RESEARCH CORPORATION**

TYPE	DIGITAL FLOOR	SERIAL #	004804	ID #	NONE	CLASS	IIIL
MANUFACTURER	GSE	CAPACITY	20,000	MAX. LOAD	15,000	UNITS	LBS
MODEL	465	MIN. DIV.	5	LOCATION	BUS AND TRUCK BAY 1		

TEST AND UNCERTAINTY PROCEDURE JUSTIFICATION

PLEASE REFER TO TEST STANDARD TRACEABILITY DOCUMENTS MADE PART OF SCALE MAINTENANCE AND CALIBRATION PROCEDURE MANUAL; SERIAL # MGA-804-L1

☑ THERE WAS NO DEVIATION IN PROCEDURE AS WRITTEN

☐ DEVIATION FROM PROCEDURE IS NOTED HEREUPON

NIST TRACEABLE TEST STANDARDS USED THIS CALIBRATION

50# NUMBER(S): C600-619

500# NUMBER(S): B01 – B06

1000# NUMBER(S): NSI-A100 – NSI-A115

TEST WEIGHT CERTIFICATION

PLEASE REFER TO TEST STANDARD TRACEABILITY DOCUMENTS MADE PART OF SCALE MAINTENANCE AND CALIBRATION PROCEDURE MANUAL; SERIAL # MGA-804-L1

ESTIMATE OF ENVIRONMENTAL CONDITIONS

Temperature 70 ° Humidity 39 % Air Movement NV

Vibration none Other NDT

VISUAL INSPECTION	ACCEPT	REJECT
FUNCTIONALITY; as left	✓	
REPEATABILITY/SENSITIVITY; as left	✓	
PHYSICAL CONDITION; as left	✓	
SUITABILITY FOR INTENDED USE	✓	

LOCATION OF TEST/NOTICE OF SUB-CONTRACTOR

☐ This test was conducted at Certified Scale Inc. facility, Menomonee Falls, WI.

☑ This test was conducted within the customer facility; located at:

5000 WARREN ROAD / BURLINGTON, WI 53105

☐ Subcontracted to:

*** FINAL TEST RESULTS ***

TEST POINT	AS FOUND EXPECTED VALUE	AS FOUND MEASURED VALUE	AS FOUND ERROR	AS FOUND ACCEPT	AS FOUND REJECT	AS LEFT MEASURED VALUE	AS LEFT ERROR	AS LEFT ACCEPT	AS LEFT REJECT	TOLERANCES LOW LIMIT	TOLERANCES HIGH LIMIT
SCALE #1											
DISTRIBUTION	1000	1000	0	✓		1000	0	✓		995	1005
DISTRIBUTION	2000	2000	0	✓		2000	0	✓		1995	2005
DISTRIBUTION	3000	3000	0	✓		3000	0	✓		2990	3010
DISTRIBUTION	4000	4000	0	✓		4000	0	✓		3990	4010
DISTRIBUTION	5000	5000	0	✓		5000	0	✓		4990	5010
DISTRIBUTION	10,000	9995	(5)	✓		10000	0	✓		9980	10,020
DISTRIBUTION	15,000	14990	(10)	✓		15000	0	✓		14,970	15,030
DISTRIBUTION	18,000	17985	(15)	✓		18000	0	✓		17,960	18,040

PAGE (1) OF (2)

*** FINAL CONCLUSIONS ***

AS FOUND: ACCEPT ☑ REJECT ☐ AS LEFT: ACCEPT ☑ REJECT ☐ ACTION PENDING: ☐

*** STATEMENT OF ESTIMATED UNCERTAINTY AND CONFIDENCE ***

☐ ESTIMATED UNCERTAINTY OF THIS CALIBRATION IS _____; BY CSI TYPE EVALUATION DEFAULT; WITH A CONFIDENCE LEVEL OF 95%.

☑ UNCERTAINTY OF THIS CALIBRATION IS UNKNOWN BY STATISTICAL CALCULATION; ASSUMED EQUAL TO ± 50% OF THE MINIMUM VALID DIVISION.

Technician's Comments/Observations/Opinions: Adjusted Calibration

APPROVED M. W. D.

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

"The report may not be duplicated without written consent of Certified Scale Inc."

The serial number of this report is 100110MGA01.

This report, page (1) of (2) was completed on 10/1/2010 (Date) by _____ (Certified Scale Inc. Representative)

Next scheduled Full Calibration is due 9/2011 (Date) Next Preventive Maintenance visit is due N/A (Date)

Revision #R0306 ANS/ISO/IEC 17025 - QUALITY PROCEDURE MANUAL - CONTROLLED DOCUMENT R-510L1RIC (File #5.10.c)

The calibration interval for this instrument is 12 months. The next scheduled full calibration is due September 30, 2011.

SECTION 4

INSTRUMENTATION AND EQUIPMENT LIST

Test Vehicle: **2012 IC Corp. CE School Bus** NHTSA No.: **CC0900**
Test Lab: **MGA Research Corporation** Test Dates: **8/3/11 – 8/4/11**

SCALE CALIBRATION SHEET

Confidential — REPORT OF INSPECTION AND CALIBRATION — Trade Secret

Operating Under A2LA Accreditation #2006.01; Performed by **Certified Scale Inc.** N57 W13640 Carmen Avenue, Menomonee Falls, WI 53051. As Directed by **MGA RESEARCH CORPORATION**

TYPE	DIGITAL FLOOR	SERIAL #	004804	ID #	NONE	CLASS	IIIL
MANUFACTURER	GSE	CAPACITY	20,000	MAX. LOAD	15,000	UNITS	LBS
MODEL	465	MIN. DIV.	5	LOCATION	BUS AND TRUCK BAY 1		

TEST AND UNCERTAINTY PROCEDURE JUSTIFICATION

PLEASE REFER TO TEST STANDARD TRACEABILITY DOCUMENTS MADE PART OF SCALE MAINTENANCE AND CALIBRATION PROCEDURE MANUAL; SERIAL # MGA-804-L1

☑ THERE WAS NO DEVIATION IN PROCEDURE AS WRITTEN

☐ DEVIATION FROM PROCEDURE IS NOTED HEREUPON

NIST TRACEABLE TEST STANDARDS USED THIS CALIBRATION

50# NUMBER(S): C680 - 689
500# NUMBER(S): B01 - B06
1000# NUMBER(S): NSI-A100 thru NSI-A115

TEST WEIGHT CERTIFICATION

PLEASE REFER TO TEST STANDARD TRACEABILITY DOCUMENTS MADE PART OF SCALE MAINTENANCE AND CALIBRATION PROCEDURE MANUAL; SERIAL # MGA-804-L1

ESTIMATE OF ENVIRONMENTAL CONDITIONS

Temperature 70 ° Humidity 39 % Air Movement Minimal
Vibration none Other non

VISUAL INSPECTION	ACCEPT	REJECT
FUNCTIONALITY; as left	✓	
REPEATABILITY/SENSITIVITY; as left	✓	
PHYSICAL CONDITION; as left	✓	
SUITABILITY FOR INTENDED USE	✓	

LOCATION OF TEST/NOTICE OF SUB-CONTRACTOR

☐ This test was conducted at Certified Scale Inc. facility, Menomonee Falls, WI.
☑ This test was conducted within the customer facility; located at:
5000 WARREN ROAD / BURLINGTON, WI 53105
☐ Subcontracted to:

*** FINAL TEST RESULTS ***

TEST POINT	AS FOUND EXPECTED VALUE	AS FOUND MEASURED VALUE	AS FOUND ERROR	AS FOUND ACCEPT	AS FOUND REJECT	AS LEFT MEASURED VALUE	AS LEFT ERROR	AS LEFT ACCEPT	AS LEFT REJECT	TOLERANCES LOW LIMIT	TOLERANCES HIGH LIMIT
SCALE #2											
DISTRIBUTION	1000	1000	0	✓		1000	0	✓		995	1005
DISTRIBUTION	2000	1995	<5>	✓		2000	0	✓		1995	2005
DISTRIBUTION	3000	2985	<15>		✓	3000	0	✓		2990	3010
DISTRIBUTION	4000	3980	<20>		✓	4000	0	✓		3990	4010
DISTRIBUTION	5000	4980	<20>		✓	5000	0	✓		4990	5010
DISTRIBUTION	10,000	9965	<35>		✓	10,000	0	✓		9980	10,020
DISTRIBUTION	15,000	14960	<40>		✓	15000	0	✓		14,970	15,030
DISTRIBUTION	18,000	17955	<45>		✓	18000	0	✓		17,960	18,040

PAGE (2) OF (2)

*** FINAL CONCLUSIONS ***

AS FOUND: ACCEPT ☐ REJECT ☑ AS LEFT: ACCEPT ☑ REJECT ☐ ACTION PENDING: ☐

*** STATEMENT OF ESTIMATED UNCERTAINTY AND CONFIDENCE ***

☐ ESTIMATED UNCERTAINTY OF THIS CALIBRATION IS _____; BY CSI TYPE EVALUATION DEFAULT; WITH A CONFIDENCE LEVEL OF 95%.
☑ UNCERTAINTY OF THIS CALIBRATION IS UNKNOWN BY STATISTICAL CALCULATION; ASSUMED EQUAL TO ± 50% OF THE MINIMUM VALID DIVISION.

Technician's Comments/Observations/Opinions: Normal Adjustments

APPROVED
M. W. D.

** 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 100110MGA01 "The report may not be duplicated without written consent of Certified Scale Inc."

This report, page (1 of 2) was completed on 10/1/2010 (Date) by _____ (Certified Scale Inc. Representative)

Next scheduled Full Calibration is due 9/2011 (Date) Next Preventive Maintenance visit is due N/A (Date)

Revision #R0306 ANS/ISO/IEC 17025 - QUALITY PROCEDURE MANUAL - CONTROLLED DOCUMENT R-510L1RIC (File #5.10.c)

The calibration interval for this instrument is 12 months. The next scheduled full calibration is due September 30, 2011.

SECTION 5

PHOTOGRAPHS

TABLE OF PHOTOGRAPHS

Test Vehicle: **2012 IC Corp. CE School Bus**
Test Lab: **MGA Research Corporation**

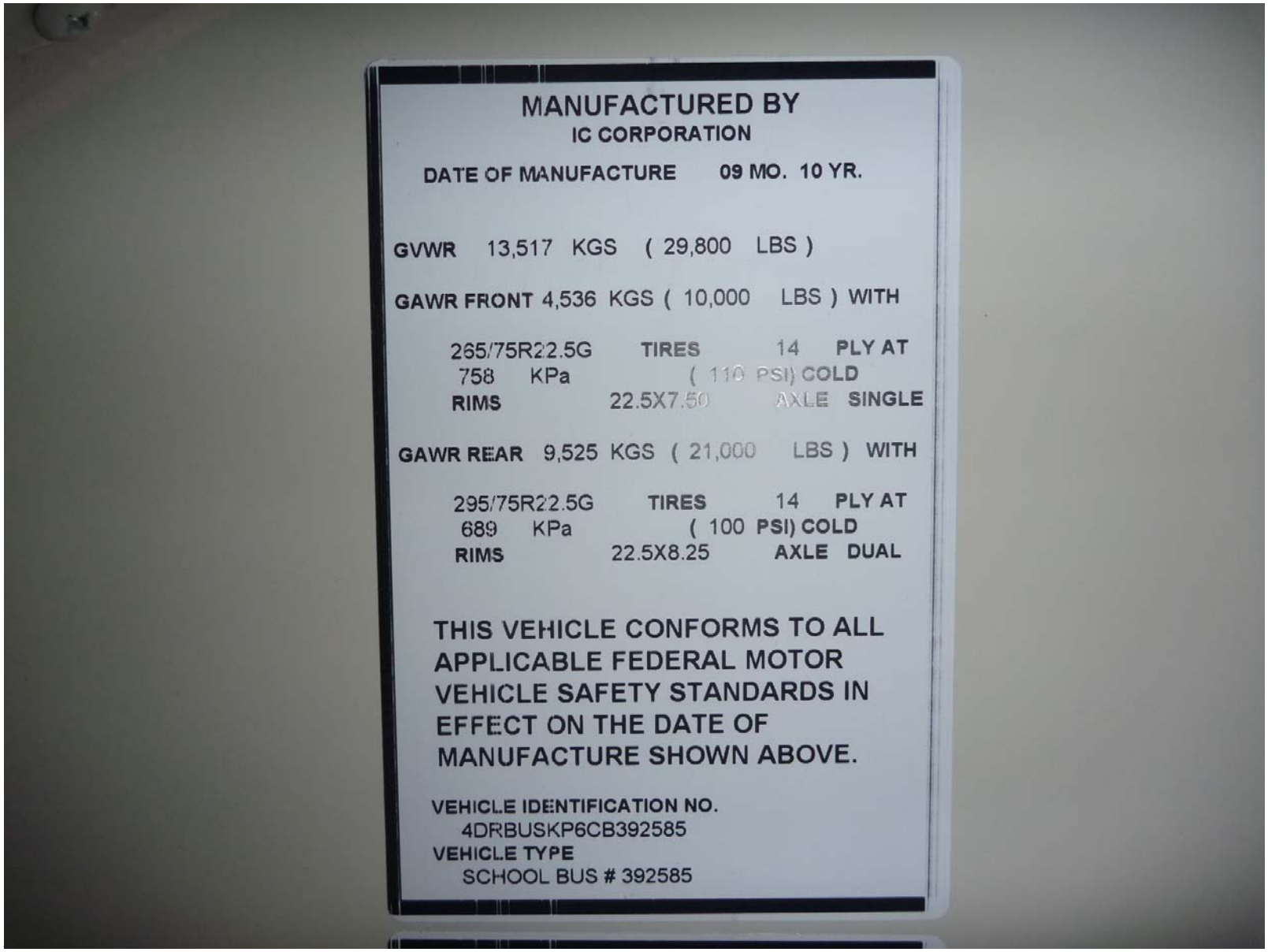
NHTSA No.: **CC0900**
Test Dates: **8/3/11 – 8/4/11**

Three-Quarter Frontal View of Left Side of Vehicle

Test Vehicle: **2012 IC Corp. CE School Bus**
Test Lab: **MGA Research Corporation**

NHTSA No.: **CC0900**
Test Dates: **8/3/11 – 8/4/11**

Three-Quarter Rear View of Left Side of Vehicle



Certification Label and Tire Information Label

Tire Manufacturer

Test Vehicle: **2012 IC Corp. CE School Bus**
Test Lab: **MGA Research Corporation**

NHTSA No.: **CC0900**
Test Dates: **8/3/11 – 8/4/11**

Tire Model Number

Tire DOT Serial Number

Tire Load Ratings and Tire Size Designation

Rim Manufacturer, Size, and DOT Symbol

Rim Date of Manufacture Markings

Vehicle on Scales Doing Measurement of Front Axle Loads

Test Vehicle: **2012 IC Corp. CE School Bus**
Test Lab: **MGA Research Corporation**

NHTSA No.: **CC0900**
Test Dates: **8/3/11 – 8/4/11**

Vehicle on Scales Doing Measurement of Rear Axle Loads

Simulated Occupant Loading