

REPORT NUMBER: 111SB-MGA-2011-002

**SAFETY COMPLIANCE TESTING FOR
FMVSS NO. 111SB
SCHOOL BUS REARVIEW MIRRORS**

**2011 GIRARDIN MICRO BIRD SCHOOL BUS
NHTSA NO.: CB0903**

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



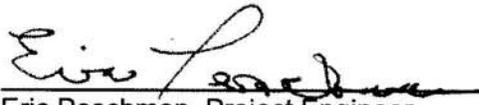
TEST DATES: JANUARY 12, 2011 – FEBRUARY 7, 2011

FINAL REPORT DATE: FEBRUARY 16, 2011

FINAL REPORT

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Prepared by: 
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Date: February 16, 2011

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Date: February 16, 2011

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2/16/11
Date of Acceptance

Technical Report Documentation Page

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16. Abstract Compliance tests were conducted on the subject 2011 Girardin Micro Bird School Bus, NHTSA No.: CB0903, in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP-111SB-00 for the determination of FMVSS 111 compliance. Test failures identified were as follows: None					
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SECTION 1
PURPOSE OF COMPLIANCE TEST

Tests were conducted on a 2011 Girardin Micro Bird School Bus, NHTSA No.: CB0903, in accordance with the specifications of the Office of Vehicle Safety Compliance (OVSC) Test Procedure TP-111SB-00 to determine compliance to the requirements of Federal Motor Vehicle Safety Standard (FMVSS) 111SB, "School Bus Rearview Mirrors."

This program is sponsored by the National Highway Traffic Safety Administration (NHTSA), under Contract No. DTNH22-08-D-00075.

SECTION 2
TEST DATA SUMMARY

Based on the tests performed, the 2011 Girardin Micro Bird School Bus, NHTSA No.: CB0903, appears to meet all of the requirements of FMVSS 111SB. See Test Summary Data Sheets on the following pages.

SECTION 3
COMPLIANCE TEST DATA
FMVSS 111SB – SCHOOL BUS REARVIEW MIRRORS
TEST SUMMARY DATA SHEET

Test Vehicle: **2011 Girardin Micro Bird School Bus**
 Test Lab: **MGA Research Corporation**

NHTSA No.: **CB0903**
 Test Dates: **01/12/2011 – 02/07/2011**

SYSTEM A MIRRORS

A. DRIVER SIDE MIRROR NO. 3 – UNIT MAGNIFICATION

	Pass/Fail	Comments
Mounting	PASS	--
Field of View	PASS	--
Surface Area	PASS	--
Reflectance	PASS	--
Unit Magnification	PASS	--

B. PASSENGER SIDE MIRROR NO. 4 – UNIT MAGNIFICATION

	Pass/Fail	Comments
Mounting	PASS	--
Field of View	PASS	--
Surface Area	PASS	--
Reflectance	PASS	--
Unit Magnification	PASS	--

C. DRIVER SIDE MIRROR NO. 5 – CONVEX

	Pass/Fail	Comments
Mounting	PASS	--
Field of View	PASS	--
Reflectance	PASS	--

D. PASSENGER SIDE MIRROR NO. 6 – CONVEX

	Pass/Fail	Comments
Mounting	PASS	--
Field of View	PASS	--
Reflectance	PASS	--

SECTION 3
COMPLIANCE TEST DATA
FMVSS 111SB – SCHOOL BUS REARVIEW MIRRORS
TEST SUMMARY DATA SHEET

Test Vehicle: **2011 Girardin Micro Bird School Bus**
 Test Lab: **MGA Research Corporation**

NHTSA No.: **CB0903**
 Test Dates: **01/12/2011 – 02/07/2011**

SYSTEM B MIRRORS

E. DRIVER SIDE FRONT MIRROR NO. 1 – CONVEX

	Pass/Fail	Comments
Mounting	PASS	--
Field of View	PASS	--
Overlap with System A	PASS	--
Distance to Eye Point	PASS	--
No Surface Discontinuities	PASS	--
Surface Area	PASS	--
If Convex – Radius of Curvature	PASS	--
Radius of Curvature Label	PASS	--
Arc Separation	PASS	--
Reflectance	PASS	--

F. PASSENGER SIDE FRONT MIRROR NO. 2 – CONVEX

	Pass/Fail	Comments
Mounting	PASS	--
Field of View	PASS	--
Overlap with System A	PASS	--
Distance to Eye Point	PASS	--
No Surface Discontinuities	PASS	--
Surface Area	PASS	--
If Convex – Radius of Curvature	PASS	--
Radius of Curvature Label	PASS	--
Arc Separation	PASS	--
Reflectance	PASS	--

FMVSS 111SB – DATA SHEET 1
SCHOOL BUS INSPECTION AND IDENTIFICATION

Test Vehicle: **2011 Girardin Micro Bird School Bus**
 Test Lab: **MGA Research Corporation**

NHTSA No.: **CB0903**
 Test Dates: **01/12/2011 – 02/07/2011**

GENERAL VEHICLE IDENTIFICATION

School Bus Manufacturer	Corp. Micro Bird Inc.	Date of Mfg.	11/2010
Chassis Manufacturer	Ford Motor Company	Date of Mfg.	09/2010
GVWR (kg)	5,216	GAWR Front (kg)	1,837
VIN	1FDEE3FLXBDA10617	GAWR Rear (kg)	3,538

DESCRIPTION OF MIRRORS

Mirror No.	Type			Description	Manufacturer
	Unit Mag.	Convex	Cross View		
1		X		Driver Side	Rosco Mirror
2		X		Passenger Side	
3	X			Driver Side	
4	X			Passenger Side	
5		X		Driver Side	
6		X		Passenger Side	

Recorded By: 

Approved By: 

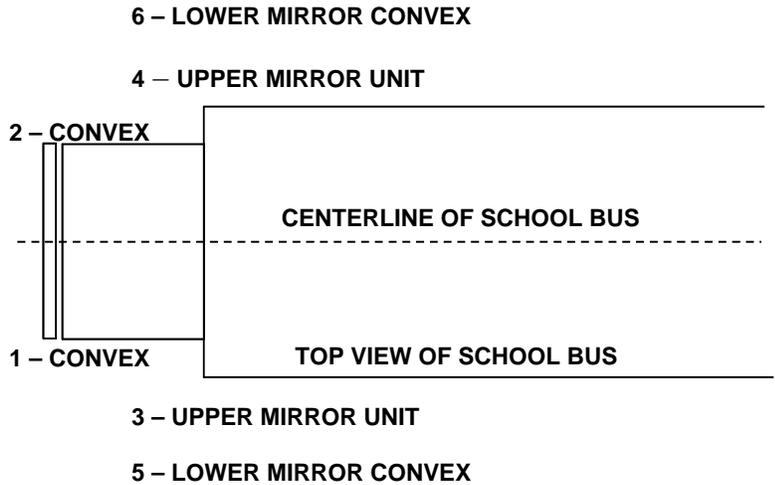
Date: January 12, 2011

FMVSS 111SB – DATA SHEET 2
MIRROR LOCATION AND FIELD OF VIEW

Test Vehicle: **2011 Girardin Micro Bird School Bus**
 Test Lab: **MGA Research Corporation**

NHTSA No.: **CB0903**
 Test Dates: **01/12/2011 – 02/07/2011**

MIRROR DIAGRAM



Mirror No.	Type	Mirror System	Cylinders Viewed (Entire Top Surface)
1	CONVEX	B	B, C, E, F, G, H, I, J, L, M
2	CONVEX	B	A, D, E, F, G, H, I, K, N*, O, P
3	UNIT MAGNIFICATION	A	61 Meter Indicator
4	UNIT MAGNIFICATION	A	61 Meter Indicator
5	UNIT MAGNIFICATION	A	L, M
6	UNIT MAGNIFICATION	A	N, O

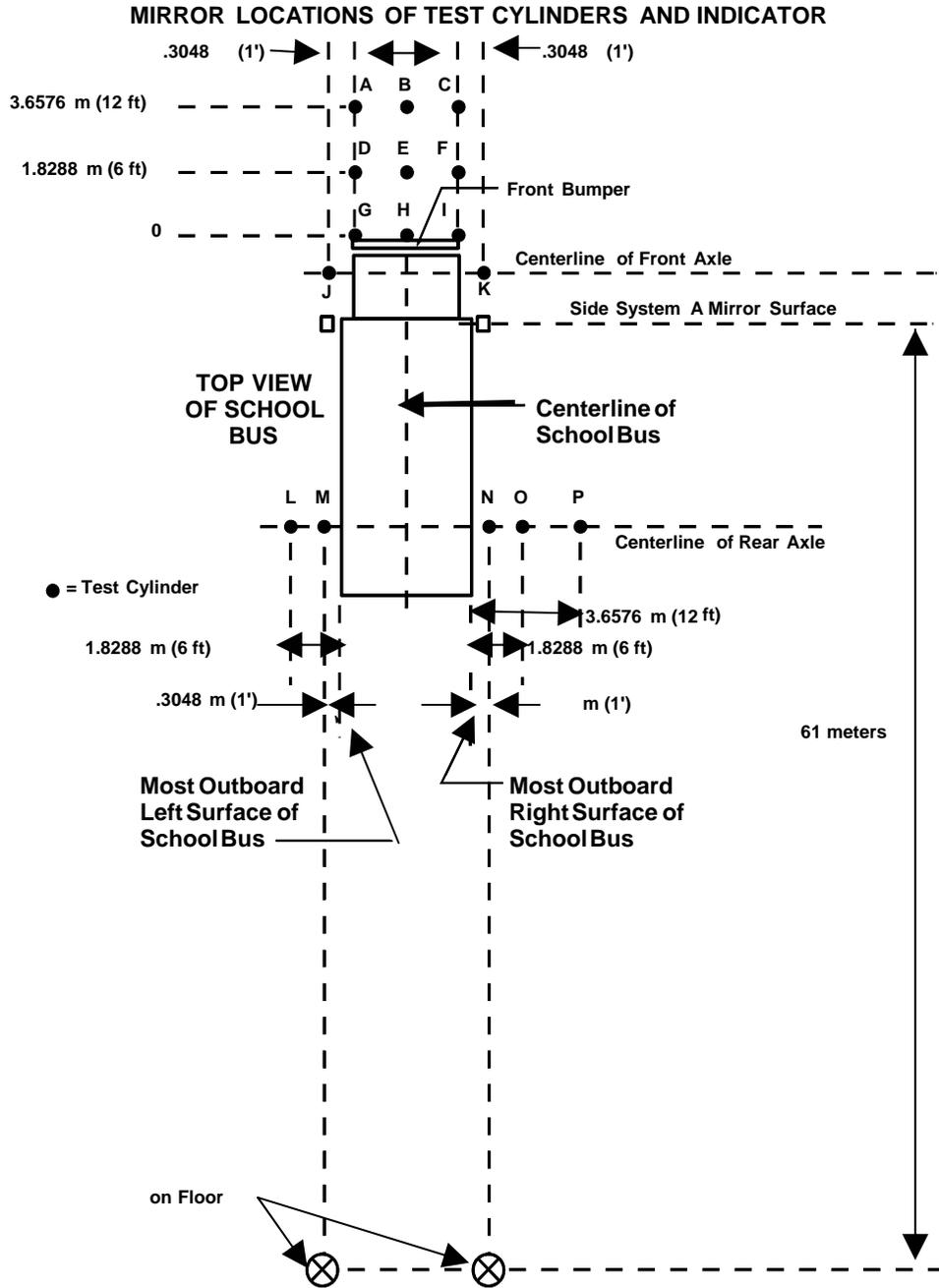
*Cylinder N top surface is partially obscured by System A mounting bracket. Slight fore or aft adjustment of bracket should allow cylinder to be viewed. System A required view should not be affected by this slight adjustment.

SEE FIGURE ON NEXT PAGE

FMVSS 111SB – DATA SHEET 2
MIRROR LOCATION AND FIELD OF VIEW

Test Vehicle: **2011 Girardin Micro Bird School Bus**
 Test Lab: **MGA Research Corporation**

NHTSA No.: **CB0903**
 Test Dates: **01/12/2011 – 02/07/2011**



- NOTES:
1. The cylinders shall be a color which provides a high contrast with the surface on which the bus is parked (S13.1).
 2. The cylinders are 0.3048 m high and 0.3048 m in diameter, except for cylinder P which is 0.9144 m high and 0.3048 m in diameter.

FMVSS 111SB – DATA SHEET 2
MIRROR LOCATION AND FIELD OF VIEW

Test Vehicle: **2011 Girardin Micro Bird School Bus**
 Test Lab: **MGA Research Corporation**

NHTSA No.: **CB0903**
 Test Dates: **01/12/2011 – 02/07/2011**

SYSTEM A AND DIRECT VISION

System A Mirrors	PASS/FAIL
Entire top surface of cylinder N and the indicator 61 meters (200 feet) rearward of the mirror surface can be viewed in the photograph:	PASS
Entire top surface of cylinder M and indicator 61 meters (200 feet) rearward of the mirror surface can be viewed in the photograph:	PASS
Which test cylinders, A through P, can not be photographed directly from the driver's eye location within the semi-circle viewing area using no mirror system?	A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P

Recorded By: 

Approved By: 

Date: January 13, 2011

FMVSS 111SB – DATA SHEET 3
ARCS AND DISTANCE OF SYSTEM B

Test Vehicle: **2011 Girardin Micro Bird School Bus**
 Test Lab: **MGA Research Corporation**

NHTSA No.: **CB0903**
 Test Dates: **01/12/2011 – 02/07/2011**

SYSTEM B ARC'S AND DISTANCE

Mirror No. (from data sheet 2)	Mirror Location	Distance from the Driver's Eye Point to the Center of the Mirror (cm)	3 Minutes of Arc (mm)	9 Minutes of Arc (mm)
No. 1	1	215.3	1.88	--
No. 2	2	280.1	2.45	7.33

Distance determined in column 3 multiplied by 0.000873 yield 3 minutes of arc, for column 4, for that mirror as viewed from the driver's eye point; the distances determined in column 3 multiplied by 0.002618 yield 9 minutes of arc, for column 5, for that mirror as viewed from the driver's eye point. The minimum distance for any system B mirror between the driver's eye point and the center of the mirror is more than 95 centimeters (37.5 inches):

	Distance	PASS/FAIL
Distance between center of System B mirror No. 1 and driver's eye point > 95 cm Yes = PASS; No = FAIL	215.3 cm	PASS
Distance between center of System B mirror No. 2 and driver's eye point > 95 cm Yes = PASS; No = FAIL	280.1 cm	PASS

Recorded By: 

Approved By: 

Date: January 13, 2011

FMVSS 111SB – DATA SHEET 4
FIELD OF VIEW TEST FOR SYSTEM B

Test Vehicle: **2011 Girardin Micro Bird School Bus**
 Test Lab: **MGA Research Corporation**

NHTSA No.: **CB0903**
 Test Dates: **01/12/2011 – 02/07/2011**

		PASS/FAIL
All test cylinders with entire top surface not directly visible from the driver's semi-circle eye location are able to be viewed with System B mirrors from the driver's semi-circle location:		PASS
All test cylinders with entire top surface not directly visible from the driver's semi-circle eye location but the image can be viewed with System B mirrors. The image is separated for the edge of the effective mirror surface of the mirror providing that image by a distance of not less than 3 minutes of arc:		PASS
If the entire top surface of test cylinder P is not directly visible from the driver's semi-circle eye location, the image can be viewed with System B mirrors from the driver's semi-circle eye location, where the angular size of the shortest dimension of that cylinder's image is not less than 3 minutes of arc, and the angular size of the longest dimension of that cylinder's image is not less than 9 minutes of arc:		PASS
Shortest arc length dimension	2.12 mm	
Longest arc length dimension	8.58 mm	
For each of the test cylinders whose entire top surface is not directly visible from the driver's eye location, System B provides a view of the ground that overlaps with the view of the ground provided by System A.		PASS

Recorded By: *Eric Leachman*

Approved By: *Michael Janoy*

Date: January 12, 2011

FMVSS 111SB – DATA SHEET 5
MOUNTING ADEQUACY TEST – ALL MIRRORS

Test Vehicle: **2011 Girardin Micro Bird School Bus**
 Test Lab: **MGA Research Corporation**

NHTSA No.: **CB0903**
 Test Dates: **01/12/2011 – 02/07/2011**

MOUNTING SUPPORT OF ALL MIRRORS

Mirror No. (from data sheet 2)	Type	System	Stable Support
			YES/NO
1	Convex	B	Yes
2	Convex	B	Yes
3	Unit Magnification	A	Yes
4	Unit Magnification	A	Yes
5	Convex	A	Yes
6	Convex	A	Yes

	PASS/FAIL
Outside mirrors free of sharp points or edges that could contribute to pedestrian injury.	PASS
System B mirrors have no discontinuities in the slope of the surface of the mirror.	PASS

Recorded By: 

Approved By: 

Date: January 12, 2011

FMVSS 111SB – DATA SHEET 6
REFLECTANCE TEST – ALL MIRRORS

Test Vehicle: **2011 Girardin Micro Bird School Bus**
 Test Lab: **MGA Research Corporation**

NHTSA No.: **CB0903**
 Test Dates: **01/12/2011 – 02/07/2011**

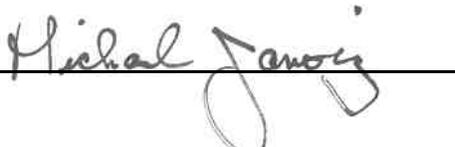
Mirror No.	Type	Light meter reading from calibration (FC)	Light meter reading from light reflected by mirror (FC)	PASS/FAIL	Observations
1	Convex	1,693.6	1,287.6	PASS	None
2	Convex	1,663.8	1,282.2	PASS	None
3	Unit Magnification	1,644.6	1,121.0	PASS	None
4	Unit Magnification	1,637.0	1,226.0	PASS	None
5	Convex	1,632.0	1,211.8	PASS	None
6	Convex	1,624.6	1,213.4	PASS	None

Note: Reflectance % = [Reflectance Reading / Calibration reading] x 100

Minimum Requirement = 35 percent

Mirror No.	Type	Reflectance	Requirement
1	Convex	76%	>35%
2	Convex	77%	>35%
3	Unit Magnification	68%	>35%
4	Unit Magnification	75%	>35%
5	Convex	74%	>35%
6	Convex	75%	>35%

Recorded By: 

Approved By: 

Date: February 7, 2011

FMVSS 111SB – DATA SHEET 7

UNIT MAGNIFICATION/CONVEX MIRROR TEST – ALL MIRRORS

Test Vehicle: **2011 Girardin Micro Bird School Bus**
 Test Lab: **MGA Research Corporation**

NHTSA No.: **CB0903**
 Test Dates: **01/12/2011 – 02/07/2011**

**CONVERSION DATA TABLE FROM SPHEROMETER DIAL
 READING TO RADIUS OF CURVATURE**

MIRROR NO. 1 (CONVEX)

Test Position	Dial Reading (inches)	Radius of Curvature (mm)	Deviation between the Average Radius of Curvature and the Test Position Radius of Curvature (mm)	Percent Deviation from the Average Radius of Curvature
1	0.05405	132.86	48.97	26.9%
2	0.03490	205.14	-23.31	-12.8%
3	0.02615	273.52	-91.69	-50.4%
4	0.04910	146.12	35.71	19.6%
5	0.05070	141.55	40.28	22.2%
6	0.03550	201.68	-19.85	-10.9%
7	0.04995	143.65	38.18	21.0%
8	0.03025	236.54	-54.71	-30.1%
9	0.05400	132.98	48.85	26.9%
10	0.03505	204.26	-22.43	-12.3%
Avg. Radius of Curvature – The summation of column 3 divided by 10: 181.83 mm			Greatest Percent Deviation from the Average Radius of Curvature, Column 5: -50.4%	

Derived values are rounded for reporting purposes.

MIRROR NO. 2 (CONVEX)

Test Position	Dial Reading (inches)	Radius of Curvature (mm)	Deviation between the Average Radius of Curvature and the Test Position Radius of Curvature (mm)	Percent Deviation from the Average Radius of Curvature
1	0.05310	135.21	46.31	25.5%
2	0.03490	205.14	-23.62	-13.0%
3	0.02625	272.48	-90.96	-50.1%
4	0.05045	142.24	39.28	21.6%
5	0.05080	141.27	40.25	22.2%
6	0.03570	200.56	-19.04	-10.5%
7	0.04925	145.68	35.84	19.7%
8	0.03080	232.33	-50.81	-28.0%
9	0.05335	134.58	46.94	25.9%
10	0.03480	205.72	-24.20	-13.3%
Avg. Radius of Curvature – The summation of column 3 divided by 10: 181.52 mm			Greatest Percent Deviation from the Average Radius of Curvature, Column 5: -50.1%	

Derived values are rounded for reporting purposes.

FMVSS 111SB – DATA SHEET 7

UNIT MAGNIFICATION/CONVEX MIRROR TEST – ALL MIRRORS

Test Vehicle: **2011 Girardin Micro Bird School Bus**
 Test Lab: **MGA Research Corporation**

NHTSA No.: **CB0903**
 Test Dates: **01/12/2011 – 02/07/2011**

**CONVERSION DATA TABLE FROM SPHEROMETER DIAL
 READING TO RADIUS OF CURVATURE**

MIRROR NO. 3 (UNIT MAGNIFICATION)

Test Position	Dial Reading (inches)	Radius of Curvature (mm)	Deviation between the Average Radius of Curvature and the Test Position Radius of Curvature (mm)	Percent Deviation from the Average Radius of Curvature
1	0.00000	N/A	N/A	N/A
2	0.00000	N/A	N/A	N/A
3	0.00000	N/A	N/A	N/A
4	0.00000	N/A	N/A	N/A
5	0.00000	N/A	N/A	N/A
6	0.00000	N/A	N/A	N/A
7	0.00000	N/A	N/A	N/A
8	0.00000	N/A	N/A	N/A
9	0.00000	N/A	N/A	N/A
10	0.00000	N/A	N/A	N/A
Avg. Radius of Curvature – the Summation of Column 3 divided by 10: N/A			Greatest Percent Deviation from the Average Radius of Curvature, Column 5: N/A	

MIRROR NO. 4 (UNIT MAGNIFICATION)

Test Position	Dial Reading (inches)	Radius of Curvature (mm)	Deviation between the Average Radius of Curvature and the Test Position Radius of Curvature (mm)	Percent Deviation from the Average Radius of Curvature
1	0.00000	N/A	N/A	N/A
2	0.00000	N/A	N/A	N/A
3	0.00000	N/A	N/A	N/A
4	0.00000	N/A	N/A	N/A
5	0.00000	N/A	N/A	N/A
6	0.00000	N/A	N/A	N/A
7	0.00000	N/A	N/A	N/A
8	0.00000	N/A	N/A	N/A
9	0.00000	N/A	N/A	N/A
10	0.00000	N/A	N/A	N/A
Avg. Radius of Curvature – the Summation of Column 3 divided by 10: N/A			Greatest Percent Deviation from the Average Radius of Curvature, Column 5: N/A	

FMVSS 111SB – DATA SHEET 7

UNIT MAGNIFICATION/CONVEX MIRROR TEST – ALL MIRRORS

Test Vehicle: **2011 Girardin Micro Bird School Bus**
 Test Lab: **MGA Research Corporation**

NHTSA No.: **CB0903**
 Test Dates: **01/12/2011 – 02/07/2011**

**CONVERSION DATA TABLE FROM SPHEROMETER DIAL
 READING TO RADIUS OF CURVATURE**

MIRROR NO. 5 (CONVEX)

Test Position	Dial Reading (inches)	Radius of Curvature (mm)	Deviation between the Average Radius of Curvature and the Test Position Radius of Curvature (mm)	Percent Deviation from the Average Radius of Curvature
1	0.01395	512.27	8.07	1.6%
2	0.01360	525.45	-5.11	-1.0%
3	0.01325	539.32	-18.98	-3.6%
4	0.01385	515.97	4.37	0.8%
5	0.01305	547.58	-27.24	-5.2%
6	0.01340	533.29	-12.95	-2.5%
7	0.01445	494.56	25.78	5.0%
8	0.01400	510.45	9.89	1.9%
9	0.01395	512.27	8.07	1.6%
10	0.01395	512.27	8.07	1.6%
Avg. Radius of Curvature – the Summation of Column 3 divided by 10: 520.34 mm			Greatest Percent Deviation from the Average Radius of Curvature, Column 5: -5.2%	

Derived values are rounded for reporting purposes.

MIRROR NO. 6 (CONVEX)

Test Position	Dial Reading (inches)	Radius of Curvature (mm)	Deviation between the Average Radius of Curvature and the Test Position Radius of Curvature (mm)	Percent Deviation from the Average Radius of Curvature
1	0.01355	527.39	6.13	1.1%
2	0.01325	539.32	-5.80	-1.1%
3	0.01330	537.29	-3.77	-0.7%
4	0.01330	537.29	-3.77	-0.7%
5	0.01335	535.28	-1.76	-0.3%
6	0.01355	527.39	6.13	1.1%
7	0.01335	535.28	-1.76	-0.3%
8	0.01350	529.34	4.18	0.8%
9	0.01345	531.30	2.22	0.4%
10	0.01335	535.28	-1.76	-0.3%
Avg. Radius of Curvature – the Summation of Column 3 divided by 10: 533.52 mm			Greatest Percent Deviation from the Average Radius of Curvature, Column 5: 1.1%	

Derived values are rounded for reporting purposes.

FMVSS 111SB – DATA SHEET 7

UNIT MAGNIFICATION/CONVEX MIRROR TEST – ALL MIRRORS

Test Vehicle: **2011 Girardin Micro Bird School Bus**
 Test Lab: **MGA Research Corporation**

NHTSA No.: **CB0903**
 Test Dates: **01/12/2011 – 02/07/2011**

UNIT MAGNIFICATION IN SYSTEM A

	PASS/FAIL
At least one System A Mirror on the left and right sides of the bus is unit magnification - (0 Radius of Curvature)	PASS

**AVERAGE RADIUS OF CURVATURE
OF CONVEX MIRRORS USED IN SYSTEM B**

Mirror No.	Radius of Curvature	If needed, wording printed properly* PASS/FAIL
1	181.8 mm	PASS
2	181.5 mm	PASS

* If any of the Convex Mirrors in System B have an average radius of curvature less than 889 mm, then the following words must be printed on a label in type face and colors that are clear and conspicuous to the driver:

“USE CROSS VIEW MIRRORS TO VIEW PEDESTRIANS WHILE BUS IS STOPPED. DO NOT USE THESE MIRRORS TO VIEW TRAFFIC WHILE BUS IS MOVING, IMAGES IN SUCH MIRRORS DO NOT ACCURATELY SHOW ANOTHER VEHICLE’S LOCATION.”

Location of label: Front interior bulkhead above driver.

Recorded By: 

Approved By: 

Date: February 7, 2011

FMVSS 111SB – DATA SHEET 8

MIRROR REFLECTIVE SURFACE AREA TEST – SYSTEMS A AND B

Test Vehicle: **2011 Girardin Micro Bird School Bus**
 Test Lab: **MGA Research Corporation**

NHTSA No.: **CB0903**
 Test Dates: **01/12/2011 – 02/07/2011**

DATA TABLE FOR SURFACE AREA

System A Mirrors Mirror No.	Area	Requirement Min. 323 cm ²	PASS/FAIL
3	380.4 cm ²	323 cm ²	PASS
4	390.5 cm ²	323 cm ²	PASS
System B Mirrors Mirror No.	Area	Requirement Min. 258 cm ²	PASS/FAIL
1	567.6 cm ²	258 cm ²	PASS
2	574.7 cm ²	258 cm ²	PASS

Recorded By: 

Approved By: 

Date: February 7, 2011

SECTION 4
INSTRUMENTATION AND EQUIPMENT LIST

Test Vehicle: **2011 Girardin Micro Bird School Bus**
Test Lab: **MGA Research Corporation**

NHTSA No.: **CB0903**
Test Dates: **01/12/2011 – 02/07/2011**

	Digital Caliper	Light Meter	Tape Measure	Spherometer
Make	Starrett	AEMC	Stanley	MGA
Model	F2730-0	CA813	Powerlock 3M	001
Serial No.	021484579	04L1017Y	573	001
Range	0-50.8 mm	2000fc, 2000lux	0 to 8 m	2.25×10^{13} $(\text{cm} * \text{Hz}^{1/2}) \div W$
Accuracy	.001 mm	0.0 fc or 0.01 lux	1 mm	1.1×10^{-13} $W/H^{1/2}$
Cal. Date	01/31/2011	08/16/2010	12/06/2010	01/31/2011
Cal. Due Date	07/31/2011	02/16/2011	06/06/2011	07/31/2011

**SECTION 5
PHOTOGRAPHS**

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Test Vehicle: 2011 Girardin Micro Bird School Bus NHTSA No.: CB0903
Test Lab: MGA Research Corporation Test Dates: 01/12/2011 – 02/07/2011



Three-Quarter Left Front View of School Bus

Test Vehicle: 2011 Girardin Micro Bird School Bus NHTSA No.: CB0903
Test Lab: MGA Research Corporation Test Dates: 01/12/2011 – 02/07/2011



Three-Quarter Left Rear View of School Bus

Test Vehicle: 2011 Girardin Micro Bird School Bus NHTSA No.: CB0903
Test Lab: MGA Research Corporation Test Dates: 01/12/2011 – 02/07/2011



MICRO BIRD
by GIRARDIN

MFD BY: CORP. MICRO BIRD INC.
DATE OF MANUFACTURE NOVEMBER 2010

BODY NUMBER 11-24020 WI

GVWR 5,216 KG (11,500 LB)

GAWR FRONT 1,837 KG (4,050 LB)
WITH LT225/75R16E TIRES

16X6.0K RIMS AT 450 KPA(65 PSI) COLD SINGLE
GAWR REAR 3,545 KG (7,800 LB)
WITH LT225/75R16E TIRES

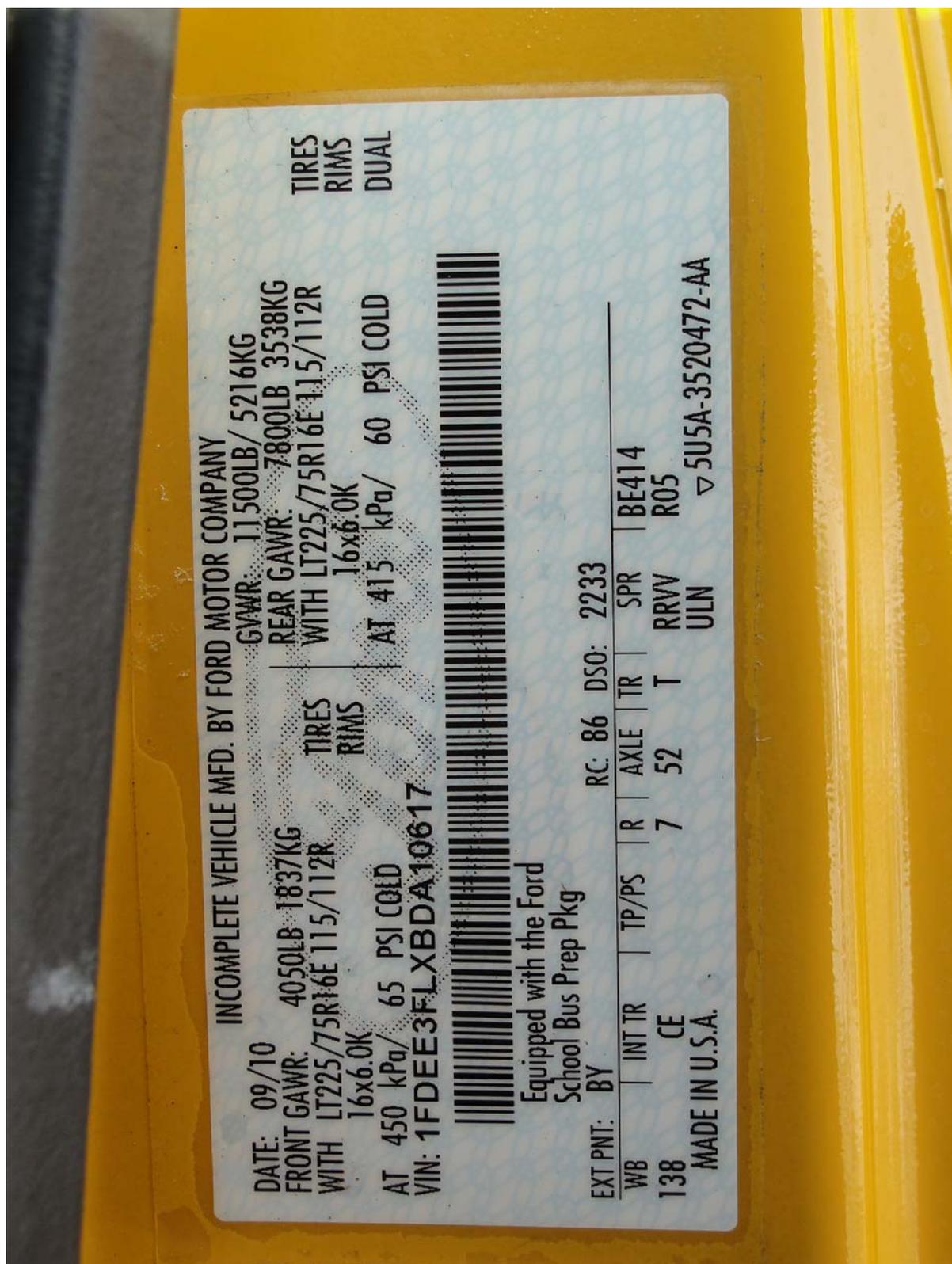
16X6.0K RIMS AT 450 KPA(65 PSI) COLD DUAL
THIS VEHICLE HAS BEEN COMPLETED IN ACCORDANCE
WITH THE PRIOR MANUFACTURERS' IVD, WHERE APPLICABLE
THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL
MOTOR VEHICLE SAFETY STANDARDS, AND THEFT PROTEC-
TION STANDARD, IF APPLICABLE IN EFFECT IN 11/10 .

VIN: 1FDEE3FLXBDA10617

TYPE CLASSIFICATION: SCHOOL BUS



Test Vehicle: 2011 Girardin Micro Bird School Bus NHTSA No.: CB0903
 Test Lab: MGA Research Corporation Test Dates: 01/12/2011 – 02/07/2011



Vehicle Information Label

Test Vehicle: 2011 Girardin Micro Bird School Bus
Test Lab: MGA Research Corporation
NHTSA No.: CB0903
Test Dates: 01/12/2011 – 02/07/2011



Driver's Side Rearview Mirror and Left Front Convex Mirror and Mountings

Test Vehicle: 2011 Girardin Micro Bird School Bus NHTSA No.: CB0903
Test Lab: MGA Research Corporation Test Dates: 01/12/2011 – 02/07/2011



Passenger's Side Rearview Mirror and Right Front Convex Mirror and Mountings

Test Vehicle:
Test Lab:

2011 Girardin Micro Bird School Bus
MGA Research Corporation

NHTSA No.: CB0903
Test Dates: 01/12/2011 – 02/07/2011



Field of View Instrument Setup

Test Vehicle:
Test Lab:

2011 Girardin Micro Bird School Bus
MGA Research Corporation

NHTSA No.:
Test Dates:

CB0903
01/12/2011 – 02/07/2011



Field of View Instrument Setup (Side View)

Test Vehicle: 2011 Girardin Micro Bird School Bus NHTSA No.: CB0903
Test Lab: MGA Research Corporation Test Dates: 01/12/2011 – 02/07/2011



Mirror No. 1 System B Field of View

Test Vehicle:
Test Lab:

2011 Girardin Micro Bird School Bus
MGA Research Corporation

NHTSA No.:
Test Dates:

CB0903
01/12/2011 – 02/07/2011



Mirror No. 2 System B Field of View

Test Vehicle: 2011 Girardin Micro Bird School Bus NHTSA No.: CB0903
Test Lab: MGA Research Corporation Test Dates: 01/12/2011 – 02/07/2011



Mirror No. 3 and No. 5 System A Field of View

Test Vehicle: 2011 Girardin Micro Bird School Bus NHTSA No.: CB0903
Test Lab: MGA Research Corporation Test Dates: 01/12/2011 – 02/07/2011



Mirror No. 4 and No. 6 System A Field of View

Test Vehicle: 2011 Girardin Micro Bird School Bus NHTSA No.: CB0903
Test Lab: MGA Research Corporation Test Dates: 01/12/2011 – 02/07/2011



View of Cylinder Setup from Front

Test Vehicle: 2011 Girardin Micro Bird School Bus NHTSA No.: CB0903
Test Lab: MGA Research Corporation Test Dates: 01/12/2011 – 02/07/2011



Three-Quarter Right Front View of Cylinder Setup

Test Vehicle: 2011 Girardin Micro Bird School Bus NHTSA No.: CB0903
Test Lab: MGA Research Corporation Test Dates: 01/12/2011 – 02/07/2011



Front View Looking Thru the Windshield View of Cylinder Setup

Test Vehicle:

2011 Girardin Micro Bird School Bus

NHTSA No.: CB0903

Test Lab:

MGA Research Corporation

Test Dates:

01/12/2011 – 02/07/2011



Reflectance Test Set-up

Test Vehicle: 2011 Girardin Micro Bird School Bus NHTSA No.: CB0903
Test Lab: MGA Research Corporation Test Dates: 01/12/2011 – 02/07/2011



Label for Cross View Mirror Warning