

OPERATION AND
MAINTENANCE GUIDE



MAY 2015

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First edition released on February 3rd 2014.

Second edition revised and corrected released May 1st 2015.

Prepared by: Chantal Blanchette, Supervisor – After Sales Service and Warranty

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CORPORATION MICRO BIRD INC. will be defined as Micro Bird throughout this document.



*Congratulations on your recent purchase of a
Blue Bird Micro Bird by Girardin.*



*We are confident this new acquisition will be a
pleasurable and long lasting experience.*

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INTRODUCTION

This manual is intended to help you become familiar with your new Blue Bird Micro Bird by Girardin bus and to act as a reference document for its operation and maintenance throughout the life of the vehicle. It is designed for use in conjunction with the original chassis manufacturer's owner literature and wiring diagrams that were or will be handed to you. These manuals will help you in case of malfunction of components, and give information to easily get service covered by warranty.

It is very important that you get familiar with bus operation and all emergency items present in the vehicle before your first trip. Proper operation, maintenance and service will ensure safety and reliability of your new Micro Bird.

Your Micro Bird may not have all the equipment mentioned in this manual. All information is accurate on the date this manual was published. It is possible you may have an option which is not listed in this manual. For any question on equipment or maintenance, please contact your Blue Bird Micro Bird dealer.

Should you have any questions regarding the operation of the engine controls, dashboard controls, seat controls and other original equipment please refer to your Ford or GM owner's literature.

To ensure quick reference when you need help, please fill in the contact information page at the end of this manual.

REPORTING SAFETY DEFECTS

UNITED STATES ONLY

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Micro Bird.

If NHTSA receives similar complaints, it may open an investigation and, if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Micro Bird.

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at:
1-888-327-4236 (TTY: 1-800-424-9153)

Or go to:

<http://www.safercar.gov>

Or write to:

Administrator, NHTSA,
400 Seventh Street SW.
Washington, DC 20590

You can also obtain other information about motor vehicle safety from:

<http://safercar.gov>

CANADA ONLY

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform Transport Canada, using their toll-free number:
1-800-333-0510 or online at: <http://www.tc.gc.ca/eng/roadsafety/menu.htm>

VEHICLE INFORMATION

CERTIFICATION PLATE

 MICRO BIRD <i>by GIARDIN</i>	
MFD BY: CORP.MICRO BIRD INC. DATE OF MANUFACTURE: JANUARY 2014 BODY NUMBER: 14-28410	
GVWR 5,579 KG (12,300 LB) GAWR FRONT 1,951 KG (4,300 LB) WITH LT225/75R16E TIRES 16X6.5J RIMS AT 450 KPA(65 PSI) COLD SINGLE GAWR REAR 3,901 KG (8,600 LB) WITH LT225/75R16E TIRES 16X6.5J 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 PROTECTION STANDARD, IF APPLICABLE IN EFFECT IN 01/14.	
VIN: 1GB3G3BG1E1141038 TYPE CLASSIFICATION: SCHOOL BUS CAPACITY (INCL DRIVER): 24 PSG.	

The certification plate is fixed above the driver in front of the bus. This plate certifies the vehicle conforms to all applicable Federal Motor Vehicle Safety Standards in effect at date of manufacture.

This is where you will find the VIN and the body number of the bus which is needed to order parts or receive guidance for repairs.

This sticker also provides tire pressures and seating capacity details.

**** Do not remove this plate under any circumstance.**

TIRE INFLATION PRESSURE INFORMATION

TIRE AND LOADING INFORMATION RENSEIGNEMENTS SUR LES PNEUS ET LE CHARGEMENT			
SEATING CAPACITY NOMBRE DE PLACES	TOTAL	FRONT AVANT	REAR ARRIERE
	10	1	09
The combined weight of occupants and cargo should never exceed 1 464 kg or 3 227 lbs. Le poids total des occupants et du chargement ne doit jamais dépasser 1 464 kg ou 3 227 lb.			
TIRE PNEU	SIZE DIMENSIONS	COLD TIRE PRESSURE PRESSION DES PNEUS À FROID	SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION VOIR LE MANUEL DE L'USAGER POUR PLUS DE RENSEIGNEMENTS
FRONT AVANT	LT245/75R16E340	KPA(50PSI)	
REAR ARRIERE	LT245/75R16E550	KPA(80 PSI)	
SPARE DE SECOURS	NONE	NONE	

The tire pressures can always be found on our certification plate located above the driver (refer to certification plate mentioned above). These pressures can also be available on the Tire and Load sticker located on the driver door post for vehicles of less than 10,500 lbs (MBII and T-Series).

PARTICULARITIES OF PROPANE POWERED VEHICLES

How to start the engine:

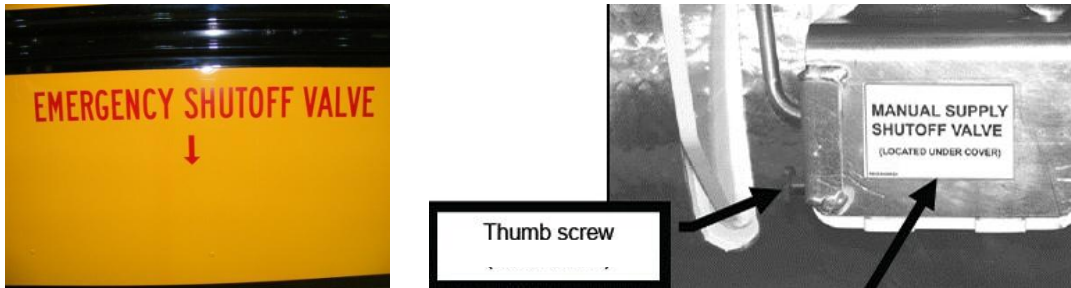


A propane vehicle engine cannot be started the same way as a vehicle with gas or diesel fuel. This process is clearly identified on a green card fixed to the key ring when the bus is delivered to you. One side indicates the customer service phone number at Roush if you have issues, and the instructions to start the bus are written on the back of the card.

If you do not have this card handy or if it has been lost, follow these simple instructions.

Put key in ignition, turn completely to the end and then slightly back to the ON position. Your propane vehicle will start after a short delay (approximately 10 seconds).

Emergency shut off valve:



In case of emergency, there is a shut off valve underneath the bus. It is on the left side of the vehicle, behind the rear wheels. A decal is also installed to quickly find its location.

Use the thumb screw to the left of the box to remove cover.

FEATURES AND OPTIONS

DRIVER CONTROL SWITCH PANEL



The quantity of switches in the console will vary with the options ordered for your bus. Their position can also be different from one bus to the other depending on the switches installed.

The standard switches which will most always be found in a school bus are:






- **|| OPEN / CLOSE ||**: Used to open or close the electric passenger entrance doors. Make sure to hold the switch until the door is completely opened or closed.
- **≡/ MASTER**: Used to activate school package. Pressing on the master switch will arm the system.
- **≡ / START**: Pressing the start switch will activate the amber lights. When the passenger entrance door is opened, the red lights will flash, the stop arm and the crossing arm will deploy. When the entrance door is closed, the lights will turn off and the stop arm and crossing arm will retract.

**** Note that in some states, the wiring will be non-sequential.** This means that you do not need to depress the start switch to get the red lights to flash. Simply open the passenger door to activate the red flashers.

- **FLASHER INDICATOR**: These two lights indicate if the amber or red lights are working.
- **☰/ DOME LIGHTS**: Turns the dome lights ON or OFF.
- **|| HIGH / LOW ||**: This is a three way switch that controls the REAR HEATER and can be set on low, high or turned off.
- **☑/ MIRRORS DEFROST**: Turns the heated mirrors ON or OFF.

Depending on the customer needs and states requirements, some school buses will be equipped with more switches. Here are other switches that can be found on the console.



-  / **STROBE LAMP:** Activation of the strobe light located on the roof.
- **STROBE ON:** Indicator showing strobe lamp is flashing.
- **X-ARM:** This switch is used to cancel the crossing arm while school lights are activated and this option is not needed.
- **STEP DE-ICER:** Activates an electric de-icer system located on the lower step of the entrance door.
- **ROOF FAN:** Activates the electric fan of the roof hatch or the electric static vent to control the moisture and help air circulation in the vehicle.
-  **HIGH / LOW**  Activates the two speed windshield electric fan located in the driver's area.
-  / **FAST IDLE:** Motor's revolution control system to increase the slow idle time and helps maintain the battery charge. Available on Ford chassis only.
- **HEATER VALVE:** This switch controls the electric heater valve installed underneath the bus.
- **EMER. EXIT:** Pilot light indicates if the rear emergency door or any push out windows are not securely latched.
- **DOOR LOCKED:** The pilot light will warn the driver that the rear emergency door is locked thus preventing the engine from starting.
-  **NOISE SUPP:** This switch will turn off the accessories that could make noise while approaching a railroad track. (Example: Heater, A/C, Fan, and Radio)
- **LIFT DOOR:** The pilot light will be activated if the lift door is not securely closed thus preventing the transmission to be changed from park to drive. Depending on the option chosen, a red light or a pilot light will be installed.

- **CANCEL:** This switch stops the cycle of the 8 way flashing lights which was activated by pressing the **START** switch.
- **OVERRIDE:** Emergency override switch used to activate red warning lights without going through the complete sequence usually necessary.
- **2 INCH RED LIGHT:** This light will be activated if the lift door is not closed securely thus preventing the transmission to be changed from park to drive. Depending on the option chosen, this red light or the pilot light will be installed.
- **EXT. SPEAKER:** Used with PA system integrated to the CD player. The switch allows you to choose between interior and exterior speaker.

Control switch buttons may also be present on the bus for additional options.



INDEPENDANT LIGHTING CONTROL: Used to set desired lighting of the switches located on the console.



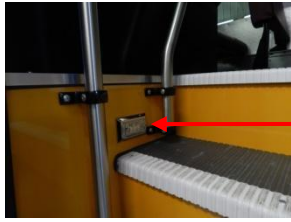
A/C CONTROLS: A/C button controls are located on the console to the right of the driver. With MCC systems, the left button controls the fan setting and the right one is for temperature control. On vehicles equipped with an ACC system there is be only one button for fan/temperature control.



HEATER VALVE: Located under the dash next to the engine cover, it is used to control the liquid flow for the rear heater from inside the vehicle.

LIGHTS (INTERIOR AND EXTERIOR)

Interior lights: The interior lights can be activated differently as per the options chosen by the customer. The most common operation is as follows: vehicles rear dome lights will be activated by a switch in the console. If present, the driver dome light will come on when the driver door is opened. The dome light above the entrance door as well as the step well light will activate when the entrance door is opened. In some cases, the dome lights will also come on when the rear door is opened or when the child detection system is disarmed.



Step well light

Exterior lights: On GM vehicles, the front and rear clearance lights as well as the parking lights are activated by the ignition. Note that on Ford vehicles, these lights will come on as soon as you open the driver's door. All these lights will stay for a short period of time after the ignition has been turned off.

The 8 way lights of the vehicle will be controlled by the switches in the console. To activate, press the start switch. If the vehicle is equipped with a master switch, it will need to be depressed before activating the start switch. To deactivate the warning lights, simply close the passenger entrance door.



Side directional led light armored



Exterior light side lift door



Strobe light

Exterior light entrance door

MIRRORS (INTERIOR AND EXTERIOR)

Interior mirrors:



Passenger mirror



Rear view mirror with integrated back up camera

Located above the driver, a rear view mirror will allow a quick look at the passengers without turning around.

Some vehicles do not have the original OEM rear view mirror which is replaced by a special rear view mirror with an integrated back up camera.

Exterior mirrors:



Rear view mirrors

Elliptical crossview mirrors



The outside rear view mirrors are designed to provide the seated driver a view of the roadway to the rear and to the sides of the bus.

The elliptical cross view mirrors are designed to allow a seated driver to view all areas around the front of the bus not otherwise visible. The cross view mirrors are designed to be used to view pedestrian while the bus is stopped. **They must not be used to view traffic while the bus is moving. Image, road vibrations and shape of mirror will give a distorted image and would not accurately show another vehicle location.**

As the buses can be used by different drivers, these mirrors should be verified and adjusted each morning if needed, to make sure the driver has a clear view of these areas.

The heated mirrors are controlled by a switch in the console and the remote mirrors are controlled by 2 movable buttons above driver.



Heated mirror defrost switch: Allows the driver to activate heat in mirrors.



Remote mirror control: Allows the driver to adjust the exterior mirror positions.

STOP ARM AND CROSSING ARM



To activate the stop arm or the crossing arm, the warning lights must first be activated by the start switch and the entrance door must be opened. If you have a master switch, first press the master and then the start switch.

To deactivate the stop arm or the crossing arm, simply close the passenger entrance door.

If your bus is equipped with an x-arm switch, you can deactivate the crossing arm when the 8 way lights have been activated if the crossing arm is not required.

If you have issues with the stop arm or crossing arm, please refer to the troubleshooting guide on pages 41 of this manual.

EMERGENCY EXITS

In case of emergency, passengers can leave the bus quickly by any exit depending which one is operational at the time it is needed.

Passenger door emergency exit:



Regular handle



Vandal lock



To use the passenger entrance door emergency exit, simply pull on the red handle located over the entrance door. Some buses will be equipped with additional interior and exterior emergency handles.

If your bus is equipped with a locking emergency exit for the entrance door, it needs to be unlocked because if it stays locked, the bus will not start. This is a vandal lock and if it is not unlocked before picking up children, it will prevent the kids from being able to exit in case of an emergency.

If one of the emergency handles has been used to exit the bus, follow these simple instructions to close the doors. From inside the bus, push on the right side of the handle with your left hand, and at the same time, pull slowly on the right leaf of the entrance door towards you. When gear is in place, the lock will engage. You will then be able to push the handle in place and use the switch in the console to open and close doors.

Other emergency exits:



Vehicles can also be equipped with a roof hatch and push out windows. Follow opening instructions written on decals.

A rear door emergency exit is present on each bus. Simply lift the red handle bar to open the door. **** An interlock may be installed** on this emergency door. Make sure it is unlocked at all times while the bus is in use. If you forget to unlock the door, it will prevent the bus from starting.

PASSENGER ENTRANCE DOOR



The design of Micro Bird passenger entrance doors and more-view window allows a maximum visibility of loading zone.



The manual doors are opened and closed using a handle with a thumb lock. To open and close the main entrance door:

- Grab door control handle placing your thumb on the top button.
- Pull handle up while rotating the lever toward the passenger entrance door.
- To close, simply repeat steps 1 and 2 while rotating away from the passenger entrance doors.

Adjustment of door leaves: See troubleshooting guide on page 38 of this manual.

The electrical doors are activated by a switch in the console. These are controlled by a mechanism on top of the entrance door, behind the head pad. The closing or opening of the doors is determined by two micro switches that will stop the open/close movement. The micro switch closer to you will be the one that controls the closing of the doors. The one in the back is controlling the door opening motion.

When closing the doors, always make sure to press on the switch as long as the doors are in movement to ensure proper tightness with the body of the bus. Same operation applies when the doors are open. As the switch is momentary, the doors will stop moving as soon as the switch is released.

REAR EMERGENCY DOOR



To open the rear door from outside, simply rotate the handle counter clockwise. To open the rear door from inside, simply lift red handle clockwise.



The rear door is equipped with a telescopic retainer. This mechanism locks the door in the open position at 100 degrees. The mechanism is located on the upper interior portion of the door.

**** ATTENTION: To release mechanism, open the door past the locking point and close. Failure to unlock mechanism before closing the door will break the telescopic retainer.**

WINDOWS



Latch and plunger



Passenger windows are split-sash type. They can be opened or closed by releasing the plungers located at each side of the top window frame. When closing, both sides of the upper bar needs to be pushed in an upward movement to touch the top window frame and allow the side latches to engage correctly in the cavities on each side of the window frame rails.

Push-out windows: These windows are located each sides of the bus. Their location is clearly identified by an "EMERGENCY EXIT" sticker directly in the window. To use, lift the handle to unlock and push window outward.

Note: Some states will require a certain window opening. To achieve this, some window bumpers are installed outside the bottom window to stop the course of the top window. If the window does not open fully, do not use force to push window down.

Please refer to the troubleshooting guide on pages 43-44 of this manual for repair tips.

CLIMATE SYSTEMS

A/C SYSTEMS



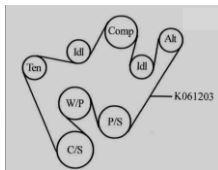
MCC



ACC

The A/C buttons are located on the console and control the rear air conditioning system. When vehicle is equipped with MCC systems, the left button is for the power setting and the right one is for temperature control. Those with ACC systems will only have one button for the power setting.

For reference, the quantity of oil and refrigerant are mentioned on an AC sticker behind the electrical compartment's door. These quantities include the chassis portion when the system is a tie-in. When the system is an add-on with its separate compressor, the quantities mentioned on the electrical compartment's door will only show the content of the add-on system. The chassis quantity is indicated on a sticker placed under the hood. GM sticker is on the left side at the rear of the engine components and on Ford model chassis, the sticker is fixed on the left side of the hood release latch.

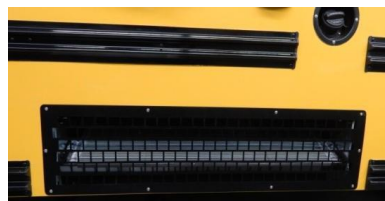


You can also find a sticker with the belt routing of the AC system under the hood. When the system installed is an add-on, we need to replace the belt by a longer one. The belt part number will also be written on this sticker.

For reference purposes, there are many kinds of evaporator: ceiling, side, front and rear. You can also find types of condensers: Roof top and skirt mounted.



Ceiling evaporator



Skirt condenser

Please refer to the A/C system preventive maintenance schedule on pages 29-30 of this manual for warranty repair instructions.

HEATERS



The bus may also have a step heater. This heat is controlled by the FORD or GM controls on the dash.

The rear heaters are usually located under a passenger seat, on the back or side wall and are controlled by a switch located on the console switch panel. For maintenance purposes, the shut off valves need to be closed and wiring disconnected before proceeding to any verification.



Manual valves



Mechanical valve



Electric valve

Valve heaters can be opened and closed manually from underneath the bus. The vehicle can also be equipped with a mechanical valve activated from the inside of the vehicle to the left of the console, underneath the dash (go to page 7 for location of release cable) or with an electrical control valve activated by a switch in the console.



Bleeder valve

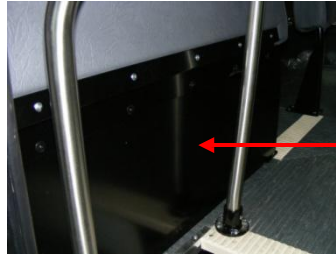
Another option which might be present under the bus is a bleeder valve. If your vehicle has such equipment, it will be located towards the rear of the vehicle right after the manual valves.

SEATING

BARRIER AND KICK PANEL



Barrier



Kick panel

Every school bus will be equipped with barriers located in front of the first seat on each side of the bus.

These barriers should always be the same width as the first seat of the bus or larger.

Some states will require a kick panel underneath the barriers to prevent kids to slide under the barrier and fall into the steps if an accident should occur.

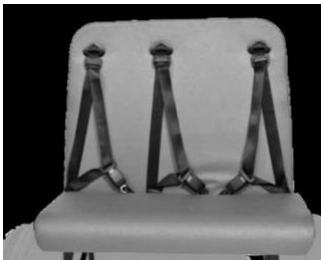
SEATS AND SEATBELTS FOR AMBULATORY PASSENGERS

Small children and infants should have the proper protection provided by the appropriate restraint. Restraints must meet all applicable federal motor vehicle safety standards.

Your bus may be equipped with different seats:



Regular seats



3 pts seats



ICS integrated child seat

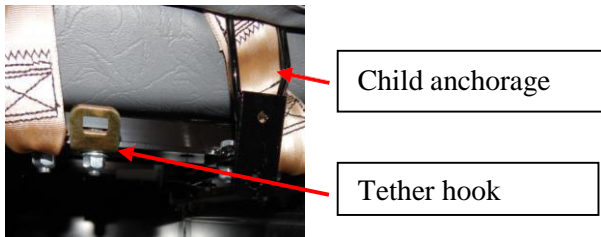
- Regular seats with or without added standard non retractable seat belts.
- Individual lap belts for passengers may be retractable or non-retractable. Insert the catch into the buckle, test for assurance of latch fit and pull loose end of strap until belt fits snugly across the lower hips. The buckle can be released by pushing the button in its center. The adjustable end can be moved outward on its strap by turning 90 degree to the strap and pulling.

- Seats with built in 3 pts seat belt.
 - Insert the catch into the buckle, test for assurance of latch fit and pull loose end of strap until belt fits snugly across the lower hips. The seat belt also needs to be adjusted with the belt clip, which allows the shoulder belt to be adjusted higher for taller children and lower for shorter children. The belts should be adjusted so their shoulder height is lower than the shoulder belt clip.
- 3 pts seats with integrated child seat (ICS).
 - The booster seat and special harness is rated for children 20-85 lbs. The seat also has two separate shoulder belt adjustment slots which allow the shoulder belts to be adjusted higher for taller children and lower for shorter children. The belts should be adjusted so their shoulder height is lower than the shoulder belt slots at the top of the seat. Only children who can sit upright by themselves should use this integrated children's seat.

First release all seat belts from buckles and add slack to the shoulder belts. After the child is placed in the child restraint seat, insert the shoulder belt tongues into the buckle and attach the crotch strap. Adjust the belts so they fit snugly to the child. Fasten the two halves of the shoulder belt clip together and slide it within three inches of the child's chin. This will help hold the shoulder belts in place.

SEAT ANCHORAGES AND TETHER HOOKS









Some buses may be equipped with child anchorage systems and may also have tether hooks to secure infant seats.



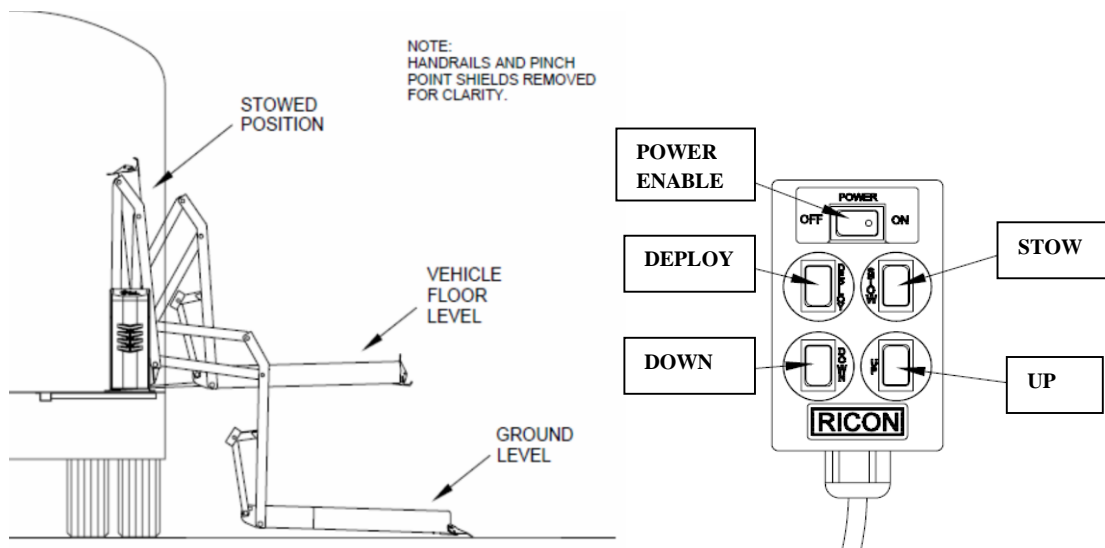
WHEELCHAIR EQUIPMENT

WHEELCHAIR LIFT

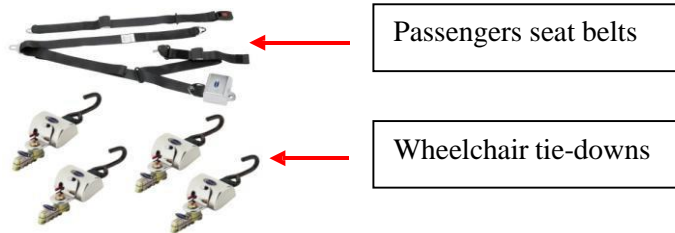
Refer to the DVDs supplied in your bus to get familiar with the wheelchair lift operation and particularities.

TABLE 2-1: PLATFORM MOTIONS		
MOVEMENT		DESCRIPTION
S-Series	K-Series	
		D E P L O Y Platform unfolds, or deploys, out of vehicle from stowed position from vehicle floor level position.
		D O W N Platform lowers from vehicle floor level towards ground level. The front roll stop automatically lowers (opens) when platform reaches ground level.
		U P Platform rises from ground level towards vehicle floor level. The front roll stop automatically rises (closes) when platform leaves ground level.
		S T O W Platform folds, or stows, from vehicle floor level to the stowed position.

NOTE: The up and down functions do not operate if platform is in stowed position.



WHEELCHAIR PASSENGERS SEAT BELTS AND TIE-DOWNS



The shoulder belt can either be a fixed shoulder belt or a tracked shoulder belt.



Track to fix shoulder belt



Fixed shoulder belt

**** To ensure safety of passengers, do not attempt to install any shoulder belt, track or any other accessory above the windows. Please contact your Micro Bird dealer for help.**

Your bus may be equipped with different kinds of tie downs and seat belts. You will see below a few models of retractors which may be present in your vehicle.



This retractor is semi-automatic with a single tensioning knob on the side. There is no left and right retractor. They can be used to secure any of the wheels. The red pin is a foot release lever eliminating the need to bend down.



This is the original self-locking and self-tensioning retractable system. It has two tightening knobs. It is usually the industry standard. The red pin is a foot release lever eliminating the need to bend down.



This retractor is the latest generation of self-locking, self-tensioning retractable wheelchair securement systems. This retractor is fully automatic and knobless which maximizes ease of use. The red pin is a foot release lever eliminating the need to bend down.

When you install the seat belts and wheel chair retractors, make sure the straps are tight and show no sign of slack. The safety of the passengers depends on every part being securely tied down. For more information, please refer to the manual supplied with your vehicle.

SAFETY EQUIPMENT

FIRE BLANKET



Although not a replacement to a traditional fire extinguisher, a fire blanket can be a very useful as they work by smothering the fire. They work very well on small fires, and they are particularly useful when a person's clothing has caught on fire.

FIRE EXTINGUISHER



Every bus should be equipped with a fire extinguisher which will be located at the front of the vehicle, near the dash or behind the driver. Operation instructions are on the fire extinguisher. It would be safe to get familiar with those instructions to quickly react in case of fire.

FIRE SUPPRESSION SYSTEM



This system is designed to detect and suppress any potential fire in the engine compartment. In case of fire, follow instructions on the sticker located above the driver. The fire extinguisher will be located near the dash or behind the driver. This fire extinguisher will activate by itself in case of fire. **Do not attempt to use for other kinds of fire.** Use the regular fire extinguisher supplied in your bus.

FIRST AID KIT AND BODY FLUID KIT



These will always be located in the front section of the vehicle. They can be installed either behind the driver, or fixed to the front panel above windshield.

SEAT BELT CUTTER



This tool will be needed to rapidly cut the driver's seat belt so he can quickly address safety of children in case of emergency and to cut the passenger's seat belts if they are not working correctly. It is located on the left side of the console to the right of the driver's knee.

TRIANGULAR WARNING DEVICE



These 3 collapsible 17" triangular reflective warning devices are packaged in a red storage container usually located behind the driver. Use to protect the area behind the traffic that the bus is not moving.

MISCELLANEOUS ACCESSORIES

BACK UP ALARM



The back-up alarm is located on the frame of the bus behind the rear wheels.

ANTI-COLLISION RADAR AND REAR VIEW BACK UP CAMERA



Anti-collision radar



If your vehicle is equipped with a detection system for the objects in the rear of the vehicle, you will either have an integrated back up camera inside the rear view mirror of the chassis or be equipped with an anti-collision radar in the dash. If you should have issues with these, as they are aftermarket installations, please contact your

BATTERY BOX

The optional skirt mounted battery box is designed to install chassis battery or batteries in a side skirt mounted compartment. The batteries are mounted on a standard sliding tray or on ball bearings when required by state specification standards.



This compartment can hold two batteries, one behind the other. If only one battery is present, it will be installed at the rear of the sliding tray. To slide tray out, raise latching handle up and pull tray towards you.

Note: Make sure the latch is correctly inserted and will not allow tray to slide out before closing the battery box door.



A locked battery box could be installed on the side of the bus. This compartment will not have any sliding tray nor any battery as this box will serve as exterior storage space.

CHILD DETECTION SYSTEM - DORAN



The monitor is located on the electrical compartment door and will indicate if the child detection system is armed and working correctly. After the key is turned off, the “check bus” light should come up. After the deactivation button on the back wall has been depressed, the lights will shut off.

There are many kinds of options using the Doran modules. The systems can be armed as soon as the key is in the ignition and the passenger doors opened or 10 min. after the engine has been started.

FAN, TWO SPEED



Two-speed electric fan located in front of the bus. It is activated by a switch located in the driver's area.

LIGHT HOODS



Some states will require that each individual warning light be shaded from sunlight with black hoods.

LIGHT MONITOR



The 8 lights monitor allows the driver to see from the inside of bus if the 8 way flashing lights system works properly.

The 16 lights monitor allows the driver to visualize the 8-way flashing lights, the 2 upper brake lights, 2 lower parking brake lights, 2 back-up lights and 2 rear flashing lights system.

LUGGAGE NET



Your bus may be equipped with a rear corner stretchable cargo net attached from the rear wall to the side-late. The net is 30 inches wide by 12 inches high.

PARCEL RACKS



Aluminium parcel racks are made with grey padding and have a clearance of 12 inches and a minimum depth of 17 inches.

RADIO (AFTERMARKET)



The Jensen radios are aftermarket radios. If you should encounter an issue with its operation, see troubleshooting guide on page 41.

ROOF VENT WITH ELECTRIC FAN



An electric static roof vent can be installed to improve inside air flow, control the degree of humidity and, in the long run, prevent corrosion. It is controlled by a switch located on the console.

SOLAR PANEL



If this control is installed above the electrical compartment, it means the bus is equipped with a solar panel on the roof. The module contains a small charger connected to the battery to avoid drainage.

ROOF DEFLECTOR



A Roof deflector may be installed to reduce snow and dirt accumulation on vehicle's rear wall, especially on 8 way flashers.

TIRE CHAINS



Tire chains



activation switch



deactivation switch

The OnSpot Automatic tire chains system offers the traction of a single set of conventional snow chains quickly, using the red lever on the switch board. **Make sure**

you read the operating instructions on the label located near the driver for safe use of the system. The chains should always be engaged and disengaged while the vehicle is moving. Other important information concerning your vehicle's necessary speed to use these chains is very important.

When out of season, the system can be deactivated with a switch in the electrical compartment. The cylinder and chain system can be removed and reinstalled when needed. Contact your dealer for help.

TV-DVD SYSTEM



If your vehicle is equipped with an entertainment system, the flat screen tv will be located on the ceiling. Simply unlock the front of the casing and flip down the tv.

CHECK UP AND MAINTENANCE

DAILY PRE-TRIP INSPECTION

Daily inspection of the bus should be done to make sure all safety equipment is available, in good condition and will operate adequately if needed. Following inspection procedures recommended by your chassis manufacturer should also be done before the next trip.

Outside the bus:

- Make sure the windshield, side and rear window as well as mirrors are clean to provide clear vision.
- Wipe clean all school bus stop sign and lights, as well as brake lights.
- Check tire pressure and threads. Ensure all lug nuts are in place and screwed.
- Adjust mirrors if needed
- Ensure the tail pipe is not obstructed by snow or mud.

Inside the bus:

- Make sure the aisle and steps are clear.
- Make sure seats and floors are clean.
- Make sure that all seat belts are fastened.
- Make sure the first aid kit is in place.
- Make sure the fire extinguisher is in place and check pressure.
- Make sure all emergency exits (windows, doors and roof hatch) open and close properly and buzzers activate when they are not fully closed.
- Check passenger entrance door for proper operation.

Start the engine and check the following:

- Ensure parking brake is on.
- Check fuel gauge.
- Open the hood, check and listen for trouble signs.
- Check fluid levels.
- Release the parking brake pedal to check for proper operation.
- Check wipers, horn and defroster/heater blower to make sure they are working properly.
- Check right and left turn signals in front and rear, make sure tail lights are working.
- Make sure hazard flashers are working
- Check for correct operation of 8 way flashers, stop sign and crossing arm.
- If the bus is equipped with a wheelchair lift, do a complete cycle to make sure it will operate correctly if needed.

Final check while driving the bus away:

- Make sure your seat belt is fastened.
- Test the brakes and make sure they stop and hold.
- Make sure the steering wheel feels ok and does not make any unusual noise.
- Brake to a stop, check gauges.

Always remember the safety of passengers is your responsibility. Immediately report any problem with your mechanic and have it repaired before you leave with the bus.

Doing daily inspections will ensure the bus is safe and ready for any unfortunate incident. Make sure you are physically and mentally alert at all times and take the time you need before driving away to make sure all paths are clear.

*****NOTE: This check list is suggested to help you keep your vehicle operational and safe at all times. It does not supersede local or state required driver inspection procedures.**

INSIDE CLEANING

Always make sure your floors are clean of debris by sweeping. Additional precaution needs to be taken to keep step well clean and washed on a regular basis. All dirt, calcium chloride and other ice melting agents needs to be washed away quickly to avoid any accumulation that could affect the flooring or items installed near the stairs.

OUTSIDE CLEANING

To help preserve the finish of your bus, frequent washings should be done to eliminate any dirt, calcium chloride and other ice melting agents, road oil and tar, tree sap, bird droppings etc. If any product other than regular dirt is present on your vehicle, it should be promptly washed to keep the paint finish of your vehicle.

Sometimes regular soap and water will not be sufficient, additional cleaners may be needed. When using chemical cleaners, make sure they are safe to use on painted surfaces.

Polishing with nonabrasive wax is recommended to remove accumulated residue and make sure your vehicle will resist to the weather conditions.

- Use mild detergent and cool water.
- Make sure your brush is clean of any debris and is in good condition.
- **DO NOT USE** abrasive or chemical products or go to any truck wash which uses such products.
- Fuel, antifreeze or any other liquid should be cleaned off immediately after the spill with mild detergent and cool water.

PERIODIC CHECK-UP AND MAINTENANCE ON BODY

Quarterly inspection:

Inside the bus:

- Check the adjustment of the passenger entrance door leaves and the condition of the system main components: bearings gears, ball and socket joints, motor and sensors. Make sure they are not loose or damaged. Adjust the doors if needed
- Make sure all bolts on the door frames are in place and correctly tightened.
- Test all emergency release handles inside and outside the bus. Repair immediately if needed.
- Check seat belt buckles for adjustability and correct operation. If necessary lubricate with a graphite lubricant. If buckle is found to be defective or straps found to be torn or frayed, replace immediately.
- Make sure the fire extinguisher is fully charged and first aid kit complete as per the list mentioned behind the box.
- Clean roof hatch with mild soap and spray silicone lubricant on moving parts.
- Oil all hinges and window latches, lubricate window channels with silicone.
- Clean all rubber door seals and lubricate with rubber lubricant.
- Lubricate all door latches and door hinges with light grease.
- Remove any foreign material and dirt that accumulates in wheelchair tracks if the vehicle has such equipment.
- Remove dirt and debris from the fans and heater using compressed air.

Outside the bus

- Secure bolts on outside mirrors to minimize road vibrations and ensure correct visibility.
- Visually check all exterior seams of bus for signs of separation from body or pin holes which may cause water infiltration. If needed, repair with urethane base caulking.
- Make sure wheel nuts are well tightened.
- Look inside the battery box and make sure the holding brackets for the battery are tight and battery cables secure. Remove any verdigris corrosion from battery post with sand paper and apply corrosion preventive compound

Under the hood

- Check condition and tension of drive belts.
- Inspect the battery. Make sure it is secure and battery cables are tight. Remove any verdigris corrosion from battery post with sand paper and apply corrosion preventive compound

Underneath the bus

- Check for leaks at manual heater valves by rubbing your finger around the fittings.
- Open bus heater valves (in fall). Close bus heater valves (in spring)
- Check for leaks at A/C skirt condenser (if vehicle has such equipment) by rubbing your finger around the fittings.
- Visually inspect floor cross members for signs of cracking.
- Visually inspect all seats and barriers bolts are well tightened. Use tool to check if you are in doubt.
- Visually inspect undercoating and add if needed.

Yearly inspection:

- Complete quarterly inspection.
- Clean all seat covers.
- Check and tighten any connections at the electrical board and at the battery. Clean if needed.
- Thoroughly clean all front and rear heater cores.
- Bleed all air from heater if vehicle is equipped with a bleeder valve.
- Check all hoses connections, tighten and/or secure as necessary.

A/C SYSTEMS PREVENTIVE MAINTENANCE SCHEDULE

If your vehicle is equipped with an A/C system, please find below the recommendations from the manufacturers. Some of these points can be inspected by your regular mechanic. However, make sure to visit an A/C repair center to perform all other inspections and maintenance.

**** Always remember that while your vehicle is covered by warranty, your Micro Bird dealer needs to be contacted first to obtain guidance or pre-authorization.**

Daily pre-trip inspection and maintenance:

- Check for sufficient air flow at evaporator air outlet. If air flow is less than usual, inspect return air filter.
- Check set point temperature on digital thermostat to ensure proper cooling.
- Confirm all evaporator and condenser fans are operating.
- Check for water dripping from the evaporator or air ducts.
- Check for unusual noises at the engine, evaporator and condenser.
- Check tension and condition of drive belts.

Weekly inspections:

- Perform daily inspection.
- Check condenser, evaporator coils and return air filters for cleanliness, clean if necessary.

Monthly inspections:

- Perform weekly inspection.
- Run system for 5 minutes and check battery voltage.
- Clean or replaced evaporator return air filters.
- Inspect refrigerant hoses and fitting connections.
- Inspect electrical harness and connections.

Quarterly inspections:

- Perform monthly inspection.
- Check and clean evaporator and condenser coil and fins.
- Check blower operation.
- Inspect all components including evaporator and condenser motors.
- Check hoses, under hood harness as well as those under vehicle for proper support and protection.
- Check evaporator drain lines.
- Make sure all compressor mounting brackets and hardware are tight.

Semi-Annual Inspection and Maintenance:

- Perform quarterly inspection.
- Check system pressures.
- Check refrigerant in sight glass.
- Check element in the sight glass.
- Inspect condenser fan blades.
- Remove or install optional condenser winter guard kit.

Annual inspection and maintenance:

- Perform semi-annual inspection.
- Clean evaporator and drain pan.
- Check and tighten any connections at the electrical boards and at the battery. If needed, clean with a high-grade cleaner specifically formulated for this purpose.
- Check pressure switch operation.
- Check condenser roof mounting and sealing.
- Perform manifold gauge check.

Note: A/C relays can be located in different areas in your vehicle. You will find the name of the manufacturer on the evaporator in your vehicle.

- **ACC (Climate Control):** For all vehicle models, relays are located inside the evaporator, except when it is located in the front or the rear cap. Then, the relays will be installed in the electrical panel of our G5 model and behind a grey pad on the wall at the rear of the driver on MBII model buses. ** Location of relays on our T-series with front or rear cap is not determined as of the date of printing this document.
- **MCC (Mobile Climate Control):** In our G5 model, the relays are located in the electrical panel. On MBII they will be located behind a grey pad on the wall at the rear of the driver. On the T-Series vehicles (simple roue ou double roues) les relais will be located behind the evaporator and is not part of the original evaporator as it is in the ACC systems.

A/C repairs need to be done at an authorized repair center. If you cannot find one close to you, call the following numbers for technical help:

ACC: 1-800-462-6322

MCC: 1-800-450-2211

**** Always remember that while your vehicle is covered by warranty, your Micro Bird dealer needs to be contacted prior to any repair to obtain guidance or pre-authorization.**

WHEELCHAIR LIFT MAINTENANCE SCHEDULE

Please refer to the DVDs supplied with your vehicle to get familiar with your wheelchair lift operation and learn about technical data for maintenance and service.

Cleaning: Regular cleaning with mild soap (i.e. hand soap, car wash liquid) and drying thoroughly will protect lift painted surfaces. Cleaning is especially important in areas where roads are salted in winter. Make sure that lift pivot points remain clear and clean prior to lubrication.

 **WARNING**

THE TROUBLESHOOTING GUIDES DO NOT INCORPORATE ROUTINE SAFETY PRECAUTIONS OR PRELIMINARY PROCEDURES. DURING THE RICON WARRANTY PERIOD ONLY A TRAINED, AUTHORIZED RICON SERVICE TECHNICIAN CAN PERFORM TROUBLESHOOTING. AFTER THE WARRANTY PERIOD, IT IS RECOMMENDED THAT TROUBLESHOOTING CONTINUE TO BE PERFORMED BY AN AUTHORIZED RICON SERVICE TECHNICIAN.

Maintenance: Under normal operating conditions, maintenance inspections are required at 750, 1500, 1750 and 4500 cycles. Or at least every six months (1750 cycles) and a thorough inspection should be performed at service intervals. Service should be increased under conditions of heavy use (more than 10 cycles per day.)

 **WARNING**

THIS PRODUCT HAS BEEN DESIGNED AND MANUFACTURED TO EXACT SPECIFICATIONS. MODIFICATION OF THIS PRODUCT IN ANY RESPECT CAN BE DANGEROUS.

The warranty will be void if:

- The product has been installed or maintained by someone other than an authorized dealer or a qualified service technician approved by the wheelchair lift manufacturer.
- The product has been modified or altered in any respect from its original design without written authorization from the wheelchair lift manufacturer.

USEFUL INFORMATION FOR REPAIRS

ELECTRICAL PANEL

The electrical panel is installed in a closed compartment above the driver. The wires are coded by number and by color. In this compartment, depending on the options present in your bus, you will find some or all of the following components. For more information, please refer to the wiring schematic of each component supplied with your bus.



Solenoid or power relay: feeds all components of electrical box.

Fuse boxes: labeled IFH for Ignition fuse holder, BFH for Battery fuse holder and NFH for noise suppression fuse holder. A sticker listing fuse locations is installed behind the electrical compartment's door.

Relays for different options: Relays for all body options are installed in the electrical compartment. Additional relays for the noise suppression switch and rear door interlock will be located under the hood. Noise relay will be on the left side near the HVAC and the interlock relay will be tied in our body harness on the right side in front of the driver.

Bus scan module (child detection system). This module is always disconnected on delivery to the dealers to make sure the driver picking up the bus does not have to deactivate the system while getting to his destination. It needs to be plugged in during bus preparation.

In power module: controls the school bus package (8 way lights, stop arm, crossing arm).

See relay positions for the Air Climate control on page 33 of this manual.

For any question or repairs to the electrical system, please refer to the wiring schematic supplied with your vehicle and contact your Micro Bird dealer for further help.

WIRING SCHEMATICS

Many buses have standard wiring. In order to meet all states requirements and additional options ordered for each vehicle, the wiring schematics may differ from one bus to the other. This is why no wiring schematics are included in this manual.

All wiring schematics are supplied with your bus. Please make sure to keep them in the bus and handy at all times.

If you have lost these documents, contact your Micro Bird dealer as they also have these available to help you.

Note that fuse positions and relays for all body options are written on a sticker behind the electrical compartment's door. Additional relays for the noise suppression switch and rear door interlock will be located under the hood. Noise relay will be on the left side near the HVAC and the interlock relay will be tied in our body harness on the right side.

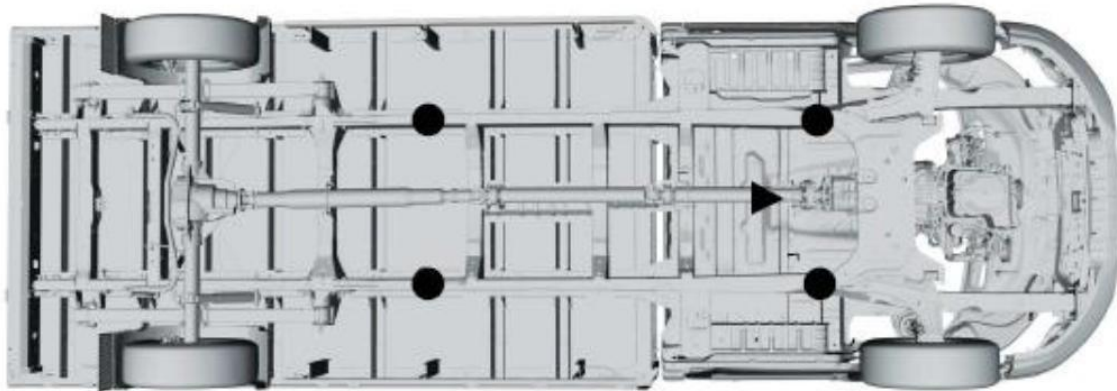
Note: A/C relays can be located in different areas in your vehicle. You will find the name of the manufacturer on the evaporator in your vehicle.

- ACC (Climate Control): For all vehicle models, relays are located inside the evaporator, except when it is located in the front or the rear cap. Then, the relays will be installed in the electrical panel of our G5 model and behind a grey pad on the wall at the rear of the driver on MBII model buses. ** Location of relays on our T-series with front or rear cap is not determined as of the date of printing this document.
- MCC (Mobile Climate Control): In our G5 model, the relays are located in the electrical panel. On MBII they will be located behind a grey pad on the wall at the rear of the driver. On the T-Series vehicles (single or double rear wheels) the relays will be located behind the evaporator and is not part of the original evaporator as it is in the ACC systems.

LIFTING POINTS

If you need to have the bus raised for maintenance or repairs using the chassis frame, see picture below for specific areas.

Note: It is very important, if you are using a two post lift, that the vehicle lift arm adapters are used under the lifting points. You should also make sure the vehicle does not exceed the maximum kerb weight before lifting it.



TROUBLESHOOTING GUIDE

In the next pages, you will find helpful information on diagnosis or repair with the most common situations you may encounter.

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A/C systems

I- Tie-in systems (tied-in to the chassis and uses its compressor)

Dash fan blows warm air: If your AC system is tied into the OEM compressor, and you do not have a condenser, the issue will be on the chassis side. If your vehicle is equipped with a condenser, listen to see if it is working correctly. If not check fuses and relays.

When you take readings for the add-on AC, the thermometer must be in front of the evaporator's air vent. Blown air should be ± 20 degrees lower than outside temperature.

Dash fan blows cold air, evaporator blows warm: If your bus is equipped with a condenser, you should go outside the bus to listen if the condenser is engaging when you put your AC vent button on High, check if the evaporator is working as well. If one of them does not work, check fuses and relays. If components are working, you need to bring the bus to an authorized repair center as the issue may also be caused by a malfunction of the compressor, a clogged condenser or an electrical issue in the parts.

II- Add-on systems (Second compressor giving a separate AC system to the chassis)

Evaporator blowing warm: If your bus is equipped with a condenser, standing outside the bus, listen to confirm if the condenser is engaging when you put your AC vent button on High. Check if the evaporator is working as well. If one of them does not work, check fuses and relays. If components are working, you need to bring the bus to an authorized repair center to check for leaks. The issue may also be caused by a malfunction of the compressor, a clogged condenser or an electrical issue in the parts.

For your information, fuses and relays for these systems are located in the following areas.

For location of climate control relays, refer to page 33 of this manual.

Battery drainage:

To ensure the vehicle will not suffer from battery drainage, make sure all systems powered by the battery are deactivated at all times when leaving the bus. Check to see if entrance door step well light stays on after door is closed, if so, adjust entrance doors as shown on page 38 of this manual. Disconnect big options that are connected directly to the battery such as the wheelchair lift and A/C system to see if it helps.

To help determine if the problem is on the chassis or the body side, the blue Micro Bird accessory cable fixed to the positive post of the battery will need to be disconnected. If no diagnosis can be made, contact your Micro bird dealer for instructions.

Emergency buzzer stays on, or does not work:

If you hear a continuous buzzer when the key is turned ON, check to ensure all emergency exits are closed properly (windows, roof hatch) and the rear door is unlocked.

If your vehicle is equipped with a wheelchair lift, make sure the lift is fully stowed and lift doors are tightly closed. If the issue is with the lift doors, start by pressing on the switch tab in the door header to see if buzzer stops. If it does, the switch needs to be adjusted. If everything has been checked and the buzzer is still on, refer to the wiring schematics supplied with your bus or contact your Micro Bird dealer for help. It may be bad connection or a defective buzzer.

If the issue is the buzzer will not work, check wiring or buzzer itself. If the issue is happening with interlock options for rear door or passenger entrance doors this buzzer is located in the electrical compartment. The buzzer for all emergency exits is installed under the switch panel in the console.

Child detection system not arming or deactivating:

If it is not arming: first, make sure the white connector inside the electrical compartment is plugged in and fuse is correctly inserted in its location. This module is never connected at the factory for transportation purpose. Refer to the fuse sticker behind the electrical compartment's door for locations.

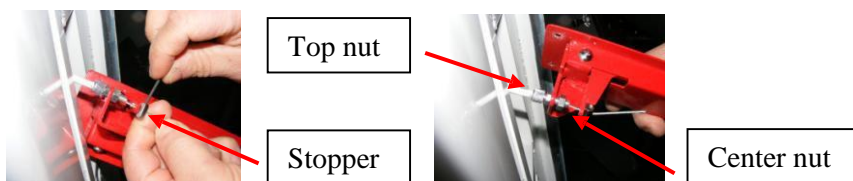
If it is not deactivating: first make sure all doors are closed. If the step well light is still on, the entrance doors need to be adjusted. If they are tight against the body of the bus, adjust the front micro switch by bending it a little bit (take extra care so the tab does not brake). When doors are closed, the switch will send the signal to the bus scan that the doors are fully closed. If issue still is present, check if all connections are secure behind the deactivation button.

Emergency passenger door release handles not working:

Remove red handle and see if there is some slack in the cable or if the cable is broken.

You have two solutions to pick up the slack from the cable:

- a) Pull on the end of the wire to pick up the slack. Using an Allen key, unscrew the inside of the stopper. Slide it upwards and tighten securely.
- b) If there isn't enough slack to move the stopper, the cable can be adjusted by loosening the center nut, bringing the top nut to sit on the side of the handle and securely moving the center nut tightly against the handle.
- c) Make sure it does not require more than 10 lbs of force to pull the handle open.



Engine will not start:

If the engine will not start and you hear a continuous buzzer, this may be caused by an interlock installed on the rear door or the passenger doors. Make sure the doors are unlocked.

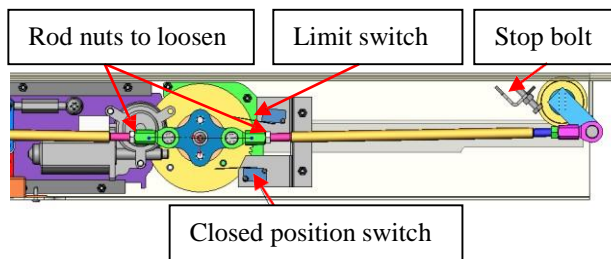
If situation persists after the rear door has been unlocked, make sure the switch is releasing properly from mechanism by pushing on it and releasing it a few times. The buzzer should stop when plunger is released. If situation happens with the passenger entrance doors, the issue might be with the switch fixed behind the red handle which releases mechanism when unlocked.

In any of these situations, if you are on the road when this happens, you can bypass the system by removing the interlock fuse. Refer to the sticker behind the electrical compartment door for location or refer to the wiring diagrams supplied with your bus. You will then be able to drive back to the garage to have this checked.

Entrance doors adjustment:

The mechanism is made of a single assembly with oppositely threaded spherical bearing rod end connectors on each end providing simple link length adjustment without disassembly. Simply loosen the lock nut, turn the rod and retighten the nut when the adjustment is satisfactory. You may also want to adjust the micro switches to allow a longer course of the doors and make them sit tighter against the body.

**Attention, if you misadjust the micro switch, the motor will keep running trying to shut the doors even closer as they are already sitting on the body. If door leaves are tightly shut, the step well light will turn off when doors reach the closed position.



If the doors stop opening or closing while they are moving, check the condition of the system main components: bearings gears, ball and socket joints, motor and sensors. See if there is any foreign object struck underneath the sprocket or motor preventing the system to complete its motion.

Entrance door motor running constantly:

It is possible the front micro switch could be misadjusted. Simply bend the micro switch tab a little to give the closed signal sooner. If door leaves are tightly shut, the step well light will turn off when doors reach the closed position.

Entrance door not working or working intermittently:

While activating the switch in the console, push tab of limit switch in the door header and see if there is a ground at P1-5. Then, push tab of micro switch completely onto the closed door position and see if there is a ground at P1-2. If there is no ground at either position, the micro switch is faulty and needs to be replaced. If you get ground signal on both positions, the fuse block may be defective.

Heater does not blow warm air:

Make sure the valves underneath the bus are open. Check if you hear the fan when the switch in the console is activated. If fan is not working, it would be an electrical issue. If fans are blowing and no warm air is coming from the heater, check for coolant leaks underneath the body or around the heater in the bus. If there is no leak, make sure there is no air in the system. Use the valve bleeder if your vehicle is equipped with this option. You can also drive around a little bit to make an eventual air bubble come to surface in the coolant tank. If you cannot get it to blow warm air, the part could be defective.

Horn constantly activated:

If the chassis horn is activated before or after you leave the bus, the vehicle must be equipped with a child detection system. The engine needs to be started and the deactivation button on the rear wall needs to be depressed. This is to make sure the driver goes all the way to the back to check if kids are still in the bus before he leaves. If you cannot disarm the child detection system, please refer to our troubleshooting information on page 37 of this manual.

Light in step well or entrance dome light stay on:

The micro switch used to stop the closing of the door needs to be adjusted as it stops the motor before the door leaves sit tightly against the bus. Slightly bend the tip of the micro switch to allow the doors to shut tighter.

Light monitor not showing accurate information:

If the light monitor is not showing the accurate data about the outside lights performance, the first thing that should be done is recalibration of the module.

1. Start the vehicle and let the motor run for 2-3 minutes to allow system voltage to stabilize.
2. Make sure all lights are turned off and proceed with the following steps.
3. Momentarily press the PROGRAM SWITCH located on the back of the Bus Light Monitor. To ensure proper programming, **make sure nobody depresses the brake pedal** while program switch is activated.

4. Progressively activate lights as follows until they turn off on the light monitor: 4 yellow flashers / 4 red flashers / left flasher / brake lights / right flasher / parking lights and end the process with the back-up lights.
5. Turn off the engine.
6. Repeat step 4 and this time, check to make sure that the indicator lights on the monitor turn on when the corresponding lamp is on and the indicator light is off when the corresponding lamp is off.

Mirrors (outside) not heating:

If the heated mirror does not get hot, first check if the red light is activated on the switch. If it is, it means there is current from fuse block to switch. Then check if there is current on the wire going to the mirror and check the grounds. If everything has been checked, the problem might be with the element in the back of the mirror glass. It is possible to replace the glass portion of the mirror only.

Propane fueling issue:

The vehicles will be fast or slow to fill depending on the weather and the equipment of the propane dispenser. The propane goes through the engine and returns back into the tank, heats it up and causes pressure to build. If the dispenser used to fill up is old, it will not be able to fight the pressure and easily fill up. If there is more than 20 lbs difference in pressure between the dispenser and the tank, the vehicle will allow fuel to fill the tank, however, very slowly. You should make sure to find a fuel location with pumps that are allowing the pressure differential to open the check valve and fill the fuel system easily.

Radio not working correctly:

If you have the original radio from GM or Ford, contact your Micro Bird dealer for instructions. If it is an aftermarket radio: First, press the reset button on the front of radio to check if it solves the issue. If not, contact your Micro Bird dealer for instructions.

School bus illuminated sign has burned light bulbs:

The light bulbs are located behind the access panel in front and in rear of the vehicle. On G5 model vehicles, they are visible when access door is lifted. On MBII models, the lights will be lower behind the panel and fixed to the structure of the bus. The light bulbs need to be replaced by the same amperage (use #105 light 12.8V) to ensure there is no overheating.



School bus package not opening or closing (stop arm, x-arm or 8 way flashers)

If the yellow flashers are working, and when the entrance door is opened the red flashers do not work as well as the stop arm or crossing arm not deploying. See wiring schematic... and make sure the diode is on tab 9 (with a sequential system) or 10 (with a non sequential system) of the in power module in the electrical compartment. Please refer to the wiring diagrams supplied with your bus.

If you are having an issue with either of these components activating on the road or not shutting off, you may want to check the adjustment of the micro switches above the entrance door as these control the opening and closing of the doors and will tell the motor when to stop. If your doors are not closed tightly, you may adjust the entrance door and its switches as shown on page 38 of this manual. If the stop arm or crossing arm still activate and the 8 way flashers are off, check wiring of stop arm or crossing arm. If you cannot find the issue, the part itself may be defective. Contact your dealer for help.

Stop arm or crossing arm motor constantly running:

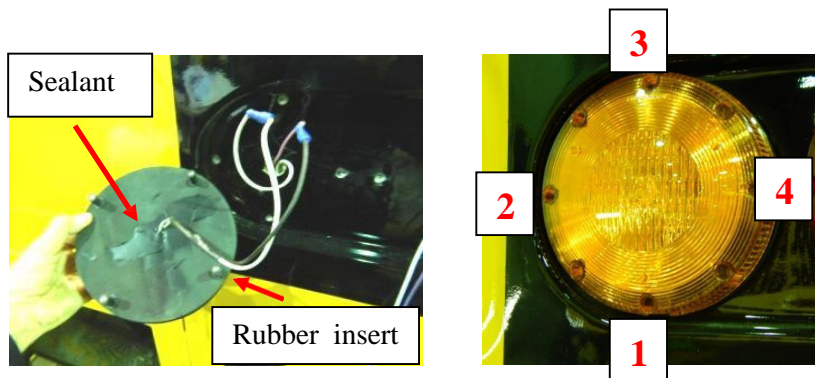
This might be happening because the stop arm does not shut close enough to the body in order to give it the signal to stop. Open stop sign and loosen the nut holding it to the assembly. Position the sign a bit inward and tighten nut.

Light replacement:

All 4 and 7 inch lights as well as markers and clearance lights are fixed with screws and rubber inserts to ensure optimal installation in the fibreglass and prevent water infiltration.

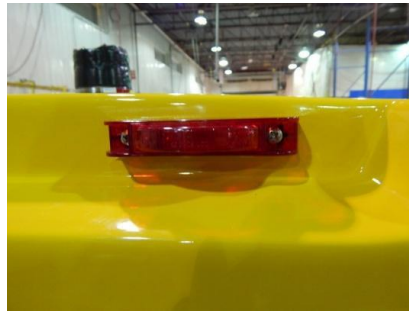
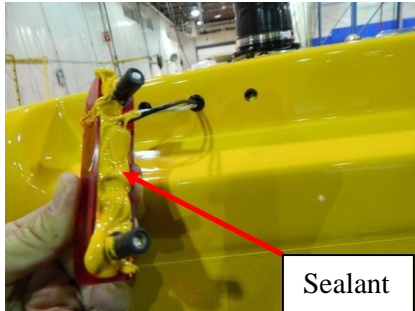
4 and 7 inches lights:

- 1- Position wires in the center of the light. Apply sealant around the base of the wires and in the areas where the foam is cut to avoid water infiltration.
- 2- Connect the light.
- 3- For easy installation, insert the screws/inserts clock wise starting at the bottom of the light.
- 4- Make sure the rubber inserts have been fixed in place correctly.



For markers and clearance lights:

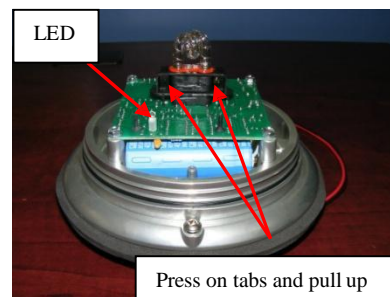
- 1- Make new connections.
- 2- Apply sealant inside inside the light to avoid water infiltration.
- 3- Install the light making sure that the rubber inserts has been fixed in place correctly.



Strobe light not working:

Before replacing the strobe light, you should first check the fuse in the electrical compartment and make sure it is not burned. Then, while key is in the ON position, and switch for strobe light activated, look at the LED on the Strobe circuit board through the lens and see if it is flashing. If the LED is flashing and the flashtube is not, the strobe light is not defective only the flashtube (bulb) will need to be replaced. In some cases, if the strobe is very hot, thermal shutdown takes place. During the time of thermal shutdown, the led will still blink, yet the flashtube becomes inoperative. Allow the strobe to cool down for fifteen minutes to see if that remedies the problem before replacing any component.

To replace flashtube, remove top lens by twisting counter clockwise. Remove the flashtube by squeezing the tabs on each side of the tube holder and pull it off. **Do not touch the glass with your fingers.** Use gloves or a soft cloth. Note: The connector is keyed to ensure proper orientation. Do not force.



If the LED is out, remove screws and lift strobe away from roof top. Check for current coming from body to ensure that it is reaching the strobe light. If the wiring is good, then the strobe is defective and will need to be replaced.

Transmission cannot be put out of park:

If the bus is equipped with a wheelchair lift for disabled passengers, there will be a system that prevents the bus from being driven if the lift is not completely stowed and the doors are not correctly closed and securely locked.

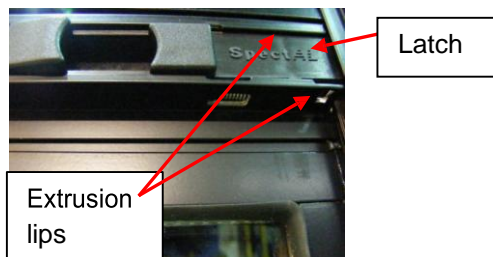
After these points have been checked, if the issue is still not solved and you are stopped while you are doing your route, follow these instructions: on a Ford vehicle, remove the 10 amp fuse on wire 16LGN117 and on a GM vehicle, remove the 3 amp fuse on wire 16BLK398. This will allow you to drive back to the garage.

If the wheel chair lift is correctly stowed and the doors are fully closed, remove head pad above door and make sure the interlock micro switch is not broken or pushed away from the rods. If your vehicle is equipped with a second door switch, you may check this switch as well by pressing on both switches at the same time. If the second door switch works when you push on it but does not work with door closed, maybe the switch is too far from the edge of the door to make proper contact. If it still does not work, maybe you need to check the wiring on this switch as well.

Window not closing correctly:

When a window does not close tightly on one side, and causes the window to open with road vibrations, the first thing that needs to be done is to verify the latch mechanism.

- Is the latch surface popping out of the extrusion ? If so, push the latch back into the rail and gently close the extrusion lips over the latch. Try it a few times to make sure it slides perfectly.



- Is the latch hard to slide back and forth in the extrusion? The spring in the mechanism needs to be removed and replaced by a block and spring assy : part # SP- 24001. If you choose to replace the whole latch system : part # SP-68008



Spring to remove



Block and spring



Position assembly

- You can also slightly push in the aluminium tab inside the insertion hole in the side rail to help the latch engage farther.



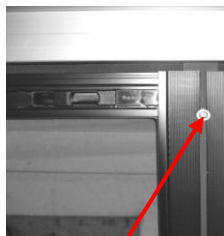
Slightly push the tab towards the top of the rail to give a bit more space for the latch to engage.

Window side glass replacement

When you replace any window glass, always make sure you replace it by an identical one. Micro Bird windows are installed from inside of the bus and pushed in their locations.



Sealant



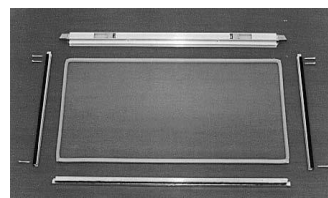
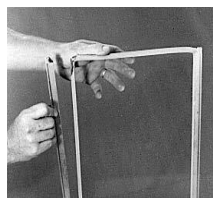
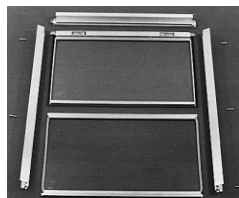
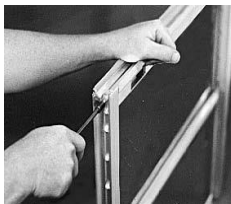
Screw on bow or on between



Remove window

Cut and remove outside sealant around the frame to allow the window to be released when pulling from inside the bus.

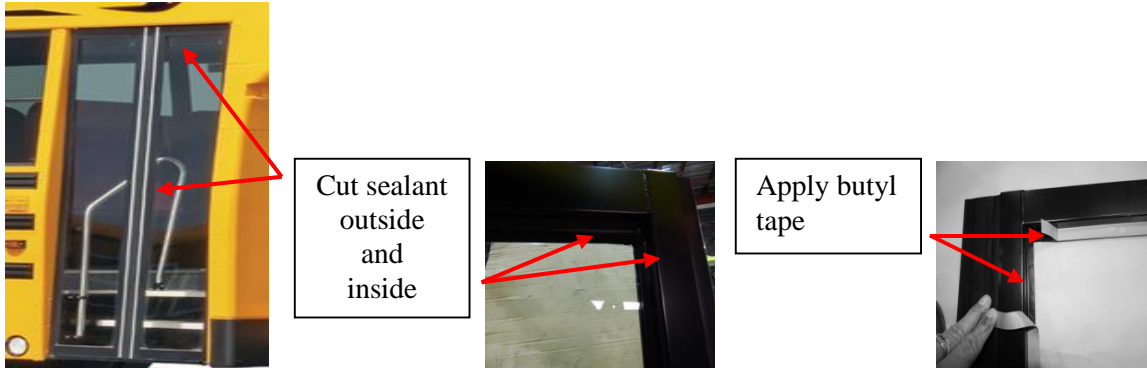
On G5 models, simply remove the 6 screws fixing the window frame to the bows. On MBII models, the 6 screws are holding a held in place by a piece called a between which once removed, will allow the window to be pulled off the bus.



Once the window has been removed, disassemble window by removing the screws which hold the frame pieces together.

After the glass has been replaced, reassemble window, install in its location and apply weather seal caulking around the window frame on outside of body to prevent leaking.

Entrance door or lift door glass replacement



**** The same procedure will be needed to replace rear door glass on MBII and T-Series high models (74 in.)**

Start by removing the glass from door using a cutting knife to remove sealant (outside and inside). Take off all extra tape and sealant. Clean off with alcohol to remove any dirt or grease and provide good adhesion of new glass.

1. Install butyl tape all around the interior of lift door.
2. Stick glass onto butyl tape and press in place.
3. Seal all around the interior of the door glass. (bottom, top and both sides)
4. Seal corners and bottom of outside door glass only.

Back windows and more-view glass replacement

Many of our bus models have glasses which are glued to the body following a specific process. On some other types, they will be installed in a rubber band.

If needed, contact your Micro Bird dealer for guidance.

WARRANTY

SCHOOL BUS STANDARD LIMITED BODY WARRANTY

Micro Bird warrants that each new school bus body will be free of defects in factory-supplied materials and/or workmanship under normal use and service within the limits described below.

- ◆ For a period of five (5) years/160,000 kilometers or 100,000 miles, whichever occurs first from date of delivery of the vehicle to the original user, Micro Bird warrants the:
 - a. Body structure (those structural metal components welded or riveted together forming floor, side walls, roof, front and rear sections) to be free from defects in structural integrity (i.e. breakage or cracking) including rust-through.
 - b. School bus seat frames and barrier frames to be free from defects in structural integrity (i.e. breaking or cracking).
- ❖ For a period of one (1) year/20,000 kilometers or 12,000 miles, whichever occurs first from date of delivery of the vehicle to the original user, Micro Bird warrants the:
 - a. Parts on a Micro Bird other than chassis parts.
 - b. Accessories, or components, except those having their own separate warranty, and/or those accessories or components listed under the section Exclusions.

Micro Bird obligation covered in this limited warranty is limited to the repair or replacement (parts and labor) of such parts as shall, under normal use and service, appear to have been defective in workmanship or material. Without restricting the generality of this limitation, loss of use, commercial loss, and maintenance are specifically not covered.

Micro Bird cannot and will not assume any responsibility in connection with any of its bodies that have been altered outside the factory or without the written approval of Micro Bird Service and Warranty Department. Overloading beyond the normal seated and standee capacity voids all warranties. **This limited warranty is expressly in lieu of all other warranties exposed or implied and all other obligations or liabilities. No person, including salesmen, dealers, distributors, or factory representatives of Micro Bird, is authorized to make any representation or warranty concerning Micro Bird products except to refer purchasers to this limited warranty. Micro Bird makes no warranty of merchantability of fitness for a particular purpose. It shall not be liable for incidental or consequential damages. This warranty is to be governed by and interpreted in accordance with the existing laws, trade practices and uses of the province of Quebec.**

Micro Bird reserves the right to make changes in design or improvements upon its products without imposing any obligations upon itself to install the same on products theretofore manufactured.

EXCLUSIONS

This limited warranty does not cover maintenance, wear or impact on Micro Bird products, including, but not limited to, flexible and rigid hoses, electric wiring and harnesses and any other item that may show evidence of negligent use, overloading, abuse, accident, lack of or improper maintenance or storage, improper use, or unauthorized alterations. The following factors are beyond Micro Bird control and do not qualify for a refund pursuant to the warranty.

- a) Vehicle or parts damaged during shipping or storage ;**
- b) Cost of missing options to meet state or province regulations. The minibus is built according to the distributor's signed purchase order ;**
- c) Paint damage caused by road debris, including stone chipping, environmental and industrial fallout ;**
- d) Transportation of vehicle for inspection and/or repair purposes ;**
- e) Costs incurred by overtime work ;**
- f) Troubleshooting and diagnosis time due to a lack of product knowledge ;**
- g) Cost of replacement vehicle (similar product) during repairs under warranty ;**
- h) Cost of transportation and communications during repairs under warranty ;**
- i) Failure on chassis (cut away) or chassis parts ;**
- j) Failure caused by Non-Micro Bird parts or components;**
- k) Normal noises, vibration, deterioration, discoloration, distortion, deformation and fading are not considered defects and not covered by any warranty.**

CLAIMS

All warranty repairs must originate within the warranty period as stated herein and must be submitted through an authorized Micro Bird dealer and through Micro Bird Service and Warranty Department. A warranty repair estimate (parts and labor) over \$200.00 must be submitted in writing for approval by Micro Bird Service and Warranty Department. (Include a detailed description and pictures of the problem in question). The estimate, and all required information, may be submitted via e-mail to speed up processing. **Approval must be obtained prior to any repairs over \$200.00.** Repairs must be completed no later than ninety (90) days following receipt of an approval from the Micro Bird Service and Warranty Department. Sublet repairs will be credited at Micro Bird warranty labor rate.

INSTRUCTIONS TO GET REIMBURSED FOR WARRANTY WORK

Your Micro Bird dealer needs to be contacted before making any changes to your vehicle while it is still covered by warranty. If you attempt to modify the bus yourself it will void the warranty.

Micro Bird buses are covered by a 1 year limited warranty 12,000 miles / 20,000 km. To benefit from this warranty, here are some guidelines which need to be followed for the repairs and claims to be handled quickly.

***** If you find a missing component in your vehicle, or the location of an item to be unsatisfactory, the Micro Bird dealer needs to call Micro Bird for parts and/or instructions before proceeding with any modification.*****

- 1- The final user of a Micro Bird bus is NOT AUTHORIZED to have work performed under warranty without authorization from their Micro Bird dealer.
 - a) The buses need to be repaired at a Micro Bird dealer. If, for some reason you cannot get to a Micro Bird dealer, they will authorise the repair at a garage near you. An estimate will be requested and the detailed invoice will need to be sent to Micro Bird to be evaluated. The sublet garage needs to contact the Micro Bird dealer if he is not sure how to handle repairs. **Troubleshooting and diagnosis time due to a lack of product knowledge is not reimbursed.**
 - b) If the issue is electrical, **the dealer is allowed 1 hour of diagnosis** before contacting Micro Bird for help.
 - c) **In any situation**, if repair is expected to be over 200\$ (parts and labour), the dealership will need to call Micro Bird to get a pre-authorization before repairs. This will give Micro Bird the opportunity to provide instructions or repair procedures that will enable the bus to go back on the road quickly and keep repair costs down.
 - d) When a claim is submitted by a dealership, they need to provide a detailed explanation of the complaint, cause and correction as well as pictures if needed to evaluate and issue a quick reimbursement. Please make sure you have these available to accelerate process.
- 2- In such cases where parts have to be replaced, defective parts need to be kept on hand until the claim has been paid as we might request them back for expertise.
- 3- If the issue is aesthetic or needs to be seen to evaluate and answer a claim, even if the amount of repairs is very small, pictures will need to be supplied so Micro Bird can evaluate and advise production or manufacturers of these defect possibilities.

- 4- For Air conditioning issues the Micro Bird dealer will help you with diagnosis issue and if needed, will direct you to an ACC or MCC authorized repair center which will honour the warranties on their systems.
- 5- For chassis related issues, same guidelines apply. **The Micro Bird dealer needs to be contacted FIRST. The issue might not be a FORD or GM issue.** It might be related to one of the options installed by Micro Bird which are connected to the chassis. If it is determined the repair needed concerns the chassis only, the Micro Bird dealer will authorise the bus to be taken to a FORD or a GM service center.

IMPORTANT CONTACT INFORMATION

OWNER INFORMATION

Vehicle information number (VIN): _____

Micro Bird body number: _____

In service date: Mileage at delivery: _____

Owner name: _____

Address: _____

City: _____ Zip Code: _____

Phone number: _____

MICRO BIRD DEALER INFORMATION

New York Bus Sales, LLC.
7765 Lakeport Road Chittenango, New York 13037
Daryl Wallace/Brian Lamaitis 315-687-3969



GM ROADSIDE ASSISTANCE

United States: 1-800-243-8872

Canada: 1-800-268-6800

GM CUSTOMER ASSISTANCE

United States: 1-800-222-1020

Canada: 1-800-263-3777

FORD ROADSIDE ASSISTANCE

United States: 1-800-665-2006

Canada: 1-800-665-2006

FORD CUSTOMER ASSISTANCE

United States: 1-800-241-3673

Canada: 1-800-241-3673

