Florida School Bus Safety Inspection Manual

{2008 Edition}

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PREFACE

The purpose of this manual is to standardize school bus vehicle inspection criteria for school bus inspectors, technicians, maintenance supervisors, and transportation directors. This manual must be used in conjunction with the school bus inspection form as required by Rule 6A-3.0171, Florida Administrative Code (FAC). A copy of this form is included on pages ix and x of this section. The goal is to ensure that all inspections in Florida are conducted using the same standards and that all maintenance personnel know which items are to be inspected, how they are to be inspected, which items are to be considered in need of repair, and which defects constitute an "out of service" condition (causing a bus to be removed from service until the item is repaired).

This manual was prepared to clarify many of the gray areas pertaining to school bus inspections. This manual will not answer all technical or interpretive questions and will not eliminate the need for trained personnel to exercise professional judgment. The emphasis of this manual is on "SAFETY," which should be the foremost consideration when inspecting school buses in Florida.

Resources used in preparing this manual include Florida School Bus Specifications, National School Transportation Specifications and Procedures, Federal Motor Vehicle Safety Standards (FMVSS), manufacturers' maintenance and shop service manuals, other states' inspection standards, and other industry standards for maintenance and repair procedures.

Appreciation is extended to the past and present members of the Florida Association for Pupil Transportation (FAPT) School Bus Inspection Committee, Florida Department of Education (DOE) staff, and many others who contributed.

EXCERPT FROM FLORIDA STATUTES CHAPTER 1006, Part I. e.
TRANSPORTATION OF SCHOOL CHILDREN

1006.22 Safety and Health of Pupils - Maximum regard for safety and adequate protection of health are primary requirements that must be observed by school boards in routing buses, appointing drivers, and providing and operating equipment, in accordance with all requirements of law and rules of the State Board of Education in providing transportation pursuant to s. 1006.21:

(10) Each district school board shall designate and adopt a specific plan for adequate examination, maintenance, and repair of transportation equipment. Examination of the mechanical and safety condition of each school bus must be made as required pursuant to rule of the State Board of Education. The State Board of Education shall base the rule on student safety considerations.

(11) The district school superintendent shall notify the district school board of any school bus which does not meet all requirements of law and rules of the State Board of Education and the district school board shall, if such school bus is in an unsafe condition, withdraw it from use as a school bus until the bus meets the requirements. The department may inspect or have inspected any school bus to determine whether the bus meets requirements of law and rules of the State Board of Education. The department may, after due notice to a district school board that any school bus does not meet certain requirements of law and rules of the State Board of Education, rule that the bus must be withdrawn from use as a school bus, this ruling to be effective immediately or upon a date specified in the ruling, whereupon the district school board shall withdraw same from use as a school bus until it meets requirements of law and rules of the State Board of Education and until the department has officially revoked the pertinent ruling. Notwithstanding any other provisions of this chapter, general-purpose urban transit systems are declared qualified to transport children to and from school.

EXCERPT FROM FLORIDA ADMINISTRATIVE CODE (FAC)
CHAPTER 6A-3 TRANSPORTATION

6A-3.0171 Responsibilities of School Boards for Student Transportation.
Each school board shall exercise specific powers and responsibilities, as follows:

(8) Inspection and maintenance of school buses.

(a) To provide, after considering recommendations of the superintendent, adequate storage, maintenance and inspection procedures for all buses owned by the school board, and to assure that all contract buses in use in the district are properly inspected and maintained in accordance with law and rules of the State Board.

(b) The inspection shall be conducted in accordance with procedures and include all items listed in the State of Florida School Bus Safety Inspection Manual, 2008 Edition which is hereby incorporated by reference and made a part of this rule. This document may be obtained from the Bureau of Career Development, Department of Education, 325 West Gaines Street, Tallahassee, Florida 32399, at a cost not to exceed actual production and distribution cost.

(c) Inspection of buses shall be scheduled and performed at a maximum interval of thirty (30) school days. Any bus that is removed from service or deadlined so as to disrupt the safety inspection schedule shall be inspected prior to being returned to service. All deficiencies discovered during the safety inspection shall be noted on the inspection form. Follow-up repairs of all safety related items shall be made before the bus is returned to service and shall be documented.

(d) School bus inspections shall be conducted by technicians certified as school bus inspectors in accordance with the State of Florida School Bus Safety Inspection Manual, 2008 Edition. The requirement that inspections be performed by a certified school bus inspector may be waived for a period not to exceed six (6) months when an emergency condition exists, upon written notification to the Commissioner by the district superintendent.

(e) No person shall knowingly render inoperative or reduce compliance of any school bus equipment required to meet Federal Motor Vehicle Safety Standards applicable at the time of manufacture.

SPECIFICATIONS NOTES

1. School buses may be updated to current specifications (i.e., specifications in effect at the time of the update) if the district so desires. The applicable inspection procedure would be revised accordingly (per the applicable specifications).

2. Pilot test items approved by the Florida Department of Education and the Florida Association for Pupil Transportation (FAPT) School Bus Specifications Subcommittee may vary from specifications listed in this manual.

3. All Florida Specifications dates that appear in this manual correspond to the date the vehicle was ordered or to the procurement (bid) under which the vehicle was purchased. Actual production dates cannot always be used to determine applicable specifications due to lead-time between ordering and build dates.

4. All Federal Motor Vehicle Safety Standards (FMVSS) dates listed in this manual refer to the chassis build date.

5. Section 1006.25, Florida Statutes, requires that all school buses transporting public school students meet specifications applicable for the year of manufacture. Any public school bus not meeting all applicable specifications must be immediately removed from service until all specification(s) non-compliance items are corrected.

NOTE:

The inspection form and manual were first approved by the FAPT and adopted by reference and made part of the State Board of Education rules in November 1994. The manual is to be used by all school transportation providers regulated under Section 1006.22, Florida Statutes, and Rule 6A-3.0171, FAC. We encourage comments regarding improvements to this manual and ask that they be sent to the following address:

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INSTRUCTIONS

This manual must be used in conjunction with the state school bus inspection form (pages ix and x) when inspecting school buses as required by Rule 6A-3.0171, FAC. Districts are encouraged to ensure that copies of all applicable Florida School Bus Specifications manuals are available for use by inspectors during their inspections. Instructions on proper use of the state inspection form and the Florida School Bus Safety Inspection Manual are as follows:

The Florida School Bus Safety Inspection Form

1. *Heading:*

   Fill in completely; including the Local Bus Number, Mileage, Repair Order Number (RO#), Date of Inspection, Chassis/Body Manufacturer, Seating Capacity, Model Year of Bus, and Shop Location (if district has more than one shop).

2. *Status Code Indicators:*

   a) A "√" (check) indicates the item inspected meets all requirements of this manual and is in proper working order.

   b) An "X" denotes a type of defect that does not affect the safe operation of the bus. This item could be repaired before returning the bus to service (if in district policy) or a note could be put on the form for the item to be repaired in a reasonable amount of time.

   c) The letter "O" indicates defects of those items of a safety nature. The bus shall be removed from service until such items are repaired.

3. *Status Code Column:*

   As each numbered item in the "Inspection Items" column is inspected, a √, X, or O pertaining to the results of the inspection shall be placed in this column. Examples for specific items (see Sample Form pages xi through xii) are as follows:

   a) Item "2., Section A-Inside Bus" is okay; therefore a "√" must be put in the Status Column.

   b) Item "2., Section B-Outside Bus" is marked with an "X" for a nonfunctional clearance light. To help in identifying which clearance light is nonfunctional, a circle shall be put around the words "clearance light," and a brief description put in the "Comment" column; i.e., L.F. (left front) corner. This description will also help if a technician other than the person inspecting the bus will be repairing the deficiency.

   c) Item "13. Section D-Wheels and Tires", Low air pressure in the R/F tire. Since this is an "out of service" item, the letter "O" shall be placed in the "Status Code" column.

4. *Inspection Items:*

   All items on the form are to be inspected. Items in **bold** print are the main areas to be inspected. All other items pertain to the main areas.

   Example: "**Section A-Inside Bus", Item "1. Emergency Equipment**" would cover such items to be inspected as the fire extinguisher, first aid kit, body fluid cleanup kit, and roadside reflectors. Inspection procedures for A-1 are found in the inspection manual.

5. *Comments:*

   This column must indicate the nature of the problem with the item circled in the “Inspection Items” column. For example, if the left front clearance light was not in accordance with the written instructions in the manual, it would be noted in the “Comments” column (see sample form pages xi and xii).

6. *Technician’s Initials:*

   This column must be used by the technician who actually made the repair to show the correction was made on that particular item (see sample form, pages xi and xii). Service managers or delegates who decide not to correct “Out of Service” items identified during an inspection shall initial in the corresponding "Tech. Init.” box.

7. Section E, “Lubrication and Maintenance” is optional and is provided for the district’s convenience.

8. The additional space for “Comments” on the back page of the form must be used to provide additional information related to the inspection. When using the comments section, you should identify the comments by section letter and number, when possible. This area is also used to denote any deficiency not covered on the form.

9. The “Tire Section” must be completed on each inspection. The tread depth must be measured according to this manual and recorded. The air pressure shall be recorded as is and then the pressure shall be adjusted (if necessary).

10. The “Inspector’s Signature” must be completed on each inspection form.

11. The “Certification Number” must be the inspector’s assigned certification number as shown on his/her certificate or certification letter.

12. Confirmation of “Bus Returned To Service Date” provides the date that the school bus was returned to use.

13. The inspection form must be initialed by the service manager or his/her delegate.

Sample Repair Order

1. Repair of all deficiencies noted on the inspection form must be verified on a repair order, including complete parts information and labor descriptions (see sample repair order forms, pages xiii and xiv).

2. The technician who makes the correction should initial the repair order in the “Tech. Init.” box corresponding to the item corrected.

3. It is recommended that the inspection form is also attached to a repair order and both documents placed in the vehicle record.

Manual

The Florida School Bus Safety Inspection Manual provides detailed information and instructions corresponding to the individual items listed on the state inspection form.

In the upper left-hand corner of each page the subject matter is listed by section and subsection, such as "Section A-Inside Bus, 1. Emergency Equipment; Fire Extinguisher; First Aid Kit; Body Fluid Cleanup Kit; and Reflectors." There are three columns on each page with the headings left to right; "Inspection Procedures," "Repair (or note) If," and "Out of Service If." Their descriptions are as follows:

1. *Inspection Procedures:* Describes the checks inspectors must perform and what inspectors must observe, such as the presence, condition, operation, mounting, specifications, and other pertinent information related to the particular item being inspected.

2. *Repair (or note) If:* This column describes deficiencies that, if found, would be considered non-safety-related. Deficiencies found meeting the "Repair" failure criteria in this column must be repaired in a reasonable period. If "Note" is the appropriate failure criterion, the item is okay currently but may need repair soon.

3. *Out of Service If:* This column describes deficiencies that, if found, would be considered safety related. Deficiencies discovered during the inspection that meet the failure criteria in this column shall cause the bus to be removed from service until those deficiencies are repaired.

Role of the School Bus Inspector

The role of the school bus inspector is to identify and document deficiencies on buses according to the procedures and criteria within this manual. Results of those inspections are to be reviewed by the district service manager, who shall make the final determination regarding whether buses are safe or unsafe to operate, unless this authority has been specifically delegated.

Florida School Bus Safety Inspection Form

_____ **District School Board**

Status Code
√ = Item OK
X = Needs Repair (or as noted)
O = Out of Service
N/A = Not Applicable

Bus # _____ Mileage _____ RO # _____ Date _____

Chassis/Body _____/_____ Capacity _____ Model Year _____

Shop Location _____

Status Code	INSPECTION ITEMS	COMMENTS (Note Specific Deficiencies)	Tech Init.
A. INSIDE BUS (REQUIRED)			
	1. **Emergency Equipment -** Fire Ext. (press., tag, mount), First Aid Kit, Body Fluid Cleanup Kit, and Reflectors		
	2. **Registration, and Insurance Card**		
	3. **Neutral Safety Switch, Shifter, and Noise Abatement Switch**		
	4. **Engine Controls** - Key Switch, Choke, Accelerator, and Engine Shutdown		
	5. **Gauges, Indicators & Dash Lights, Engine Warning Lights, and Buzzers, and ABS Warning Light**		
	6. **Air Brake System-** Gauge(s), Build-Up, Governor, Park Brake, Adjustment, Air Leaks, Low Air Warning, PP-1 Pop-Off, and Pedal		
	7. **Hydraulic Brake System -** Warning Light, Gauge, Pedal, Travel & Fade, Power Assist, and Park Brake		
	8. **Windshield Wipers & Washers -** Operation, Park, and Blades		
	9. **Heaters, Defrosters, and External Dash Fan(s)**		
	10. **Dome, and Step Well Lights**		
	11. **Service Door -** Operation, Control, and Overhead Pad		
	12. **Horn(s)**		
	13. **Mirror Adjustment, Condition -** Rearview, Convex, and Interior		
	14. **Driver's Seat and Seat Belt**		
	15. **Passenger Seats -** Frames, Mounting, Pads, Cuts, Bottoms, Modesty Panels, Stanchions, Passenger Securement Devices, and Webbing Cutter		
	16. **Emergency Door(s)/Windows/Hatch(es)** Operation, Buzzers, Labeling, Overhead Pad(s), and Passenger Check System		
	17. **Windshield, Side & Rear Windows** Cracks, Fogging, Latches, and Visor		
	18. **Wheelchair Lift, Door, and Securement System -** (if equipped)		
	19. **2 Way Radio Operation -** (if equipped)		
	20. **Interior Wiring, Cab Hoses, and Fire Wall Seals**		
	21. **General Condition, Bus Interior -** Floor, Step well, Grab Rail(s), Paneling, Broom Mounting, Loose Objects Secured, and Engine Cover		
B. OUTSIDE BUS (REQUIRED)			
	1. **Headlights, Turn Signals, Hazard, Side Marker, Brake, Tail, Backup Lights, Backup Alarm & Dash Sticker (if equipped), and Park Lights**		
	2. **Clearance & ID Lights, Reflectors, and Strobe Light** (if equipped)		
	3. **Pupil Warning Lights -** (see eight light warning system chart)		
	4. **Stop Arm(s), and Student Crossing Arm -** Wiring, Air or Vacuum Leak, and Decal		
	5. **General Condition, Bus Exterior** Mirrors, Bumpers, Body Damage, Paint Reflective Marking, Lettering, Emergency Door, Engine Hood, and Cleanliness		
C. ENGINE COMPARTMENT (REQUIRED)			
	1. **Steering -** Play, Column, Steering Gear Box Mounting, Pitman Arm, Drag Link, Steering Arm, Tie Rod & Ends, and Idler Arm		
	2. **Batteries -** Hold Down, Terminals, Cables, Cleanliness, Slide Tray, & Load Test		
	3. **Fluid Levels and Condition -** Brake, Power Steering, Oil, Transmission, Windshield Washer, Coolant, and (Antifreeze _____°F)		
	4. **Belts & Hoses -** Tightness, Condition, Routing, and Belt Alignment		
	5. **Accessory Mounting & Condition -** Air Cleaner (Restriction ____"H20), P.S., Pump, Air Compressor & Filter, Water Pump, Fan and Alternator		
	6. **Wiring -** Routing and Condition		

Status Code	INSPECTION ITEMS	COMMENTS (Note Specific Deficiencies)	Tech Init.
	7. **Fuel System and Lines**		
	8. **Radiator -** Mounting, Cap, Reservoir, and Fan Shroud		
D. UNDERNEATH BUS (REQUIRED)			
	1. **Front Suspension -** Wheel Bearings, I-Beam (King Pins, Shackles, Spring Mounts, Pins & Bushings), A-Frames and Bushings (Ball Joints), U-Bolts, Shocks, Springs, and Seals		
	2. **Front Brakes -** Hoses, Lines, Chambers, Slack Adjusters, Pushrods, Linings, Drums, Rotors, Wheel Cylinders or Calipers. Check and Adjust MSA Equipped Brakes. Do Not Adjust ASA Equipped Brakes		
	3. **Engine/Transmission Mounts, Starter Mounting**		
	4. **Transmission -** Bolts, Linkage, Lines, Filter and Cooler, & Clutch (if equipped)		
	5. **Fluid Leaks -** Oil, Coolant, Transmission, P.S., etc.		
	6. **Fuel Tank -** Leaks, Mounting, Hoses, and Wiring		
	7. **Brake Equipment –** ABS, Lines, Valves, Reservoir Mounting, and Bleed Reservoirs		
	8. **Driveline -** Shafts, U-Joints, Yokes, Hanger Bearings, Guards, and Driveshaft Park brake		
	9. **Rear Suspension -** Axle Housing, Vent, Differential, Springs, U-Bolts, Shocks, Spring Shackles, Pins and Bushings, Hangers, Seals, and Wheel Bearings		
	10. **Rear Brakes -** Hoses, Lines, Chambers, Slack Adjusters, Pushrods, Linings, Drums, Rotors, Wheel Cylinders or Calipers. Check and Adjust MSA Equipped Brakes. Do Not Adjust ASA Equipped Brakes		
	11. **Body Securement & Structure -** Hold Downs, Floor, Outriggers, Braces, Skirts, and Chassis Frame Rails		
	12. **Exhaust Systems -** Leaks, Mounting, Muffler and Tailpipe		
	13. **Wheels and Tires -** Tread Depth, Pressure, Damage, Matching, Alignment, and Wheel Hardware		
E. LUBRICATION & MAINTENANCE (OPTIONAL)			
	1. **Change Oil and Replace Oil Filter(s) qts. _____**		
	2. **Replace Fuel Filter(s) Primary/Secondary and Drain Separator.**		
	3. **Replace Transmission Filter(s) qts. _____**		
	4. **Replace Air Compressor Filter (if applicable)**		
	5. **Replace P/S Filter pts. _____**		
	6. **Replace Engine Air Cleaner Filter**		
	7. **Replace Coolant Filter (if applicable)**		
	8. **Test Starting and Charging System Amps _____) Volts _____)**		
	9. **Lubricate Chassis and Body Lbs. _____**		
	10. **Air Conditioning** Perform A/C system preventive maintenance (if equipped) according to district procedure.		
F. ROAD TEST (REQUIRED)			
	1. **Brake Performance -** Park Brake, Stopping Distance and Equalization		
	2. **Engine, Transmission, Driveline -** Engine Performance, Governor, & Shifting		
	3. **Steering & Handling -** Free Play, Power Assist, Column, and Tracking		

Comments: _____

_____

_____

_____

_____

Depth / Pressure	Depth / Pressure
RF _____/_____	**RRO** _____/_____
	RRI _____/_____
	LRI _____/_____
LF _____/_____	**LRO** _____/_____

NOTE: If bus is equipped with equipment not noted on this form, follow the manufacturer's inspection and maintenance procedures for that equipment.

Inspector's Signature: _____ **Inspector's Certification #:** _____-_____

Service Manager's or Delegate's Initials: _____ **Bus Returned To Service Date:** _____/_____/_____

Florida School Bus Safety Inspection Form

Sunshine District School Board

Status Code
√ = Item OK
X = Needs Repair (or as noted)
o = Out of Service
N/A = Not Applicable

Bus # 6945 **Mileage** 12,000 **RO #** Y43219-I-R **Date** 8/20/03

Chassis/Body Navistar/Thomas **Capacity** 65 **Model Year** 1969

Shop Location Busville

Sample

Status Code	INSPECTION ITEMS	COMMENTS (Note Specific Deficiencies)	Tech Init.
A. INSIDE BUS (REQUIRED)			
✓	1. E**mergency Equipment -** Fire Ext. (press., tag, mount), First Aid Kit, Body Fluid Cleanup Kit, Reflectors.		
✓	2. **Registration, Insurance Card**		
✓	3. **Neutral Safety Switch, Shifter, and Noise Abatement Switch**		
✓	4. **Engine Controls** - Key Switch, Choke, Accelerator, Engine Shutdown.		
✓	5. **Gauges, Indicators & Dash Lights, Engine Warning Lights, and Buzzers, ABS Warning Light.**		
✓	6. **Air Brake System-** Gauge(s), Build-Up, Governor, Park Brake, Adjustment, Air Leaks, Low Air Warning, PP-1 Pop-Off, Pedal.		
N/A	7. **Hydraulic Brake System -** Warning Light, Gauge, Pedal, Travel & Fade, Power Assist, Park Brake.		
✓	8. **Windshield Wipers & Washers -** Operation, Park, Blades.		
✓	9. **Heaters, Defrosters, External Dash Fan(s)**.		
✓	10. **Dome & Step Well Lights**		
✓	11. **Service Door -** Operation, Control, and Overhead Pad.		
✓	12. **Horn(s)**		
✓	13. **Mirror Adjustment, Condition -** Rearview, Convex, Interior.		
✓	14. **Driver's Seat and Seat Belt**		
✓	15. **Passenger Seats -** Frames, Mounting, Pads, Cuts, Bottoms, Modesty Panels, Stanchions, Passenger Securement Devices, and Webbing Cutter.		
✓	16. **Emergency Door(s)/Windows/Hatches -** Operation, Buzzers, Labeling, Overhead Pad, and Passenger Check System.		
✓	17. **Windshield, Side & Rear Windows -**Cracks, Fogging, Latches, Visor.		
N/A	18. **Wheelchair Lift, Door, Securement System -** (if equipped).		
N/A	19. **2 Way Radio Operation -** (if equipped).		
✓	20. **Interior Wiring, Cab Hoses, and Fire Wall Seals**		
✓	21. **General Condition, Bus Interior -** (Including floor, step well, grab rail(s), paneling, broom mounting, loose objects secured, and engine cover).		
B. OUTSIDE BUS (REQUIRED)			
✓	1. **Headlights, Turn Signals, Hazard, Side Marker, Brake, Tail, Backup Lights, Backup Alarm & Dash Sticker (if equipped), and Park Lights.**		
X	2. **Clearance & ID Lights, Reflectors, Strobe Light** (if equipped).	LF Corner Not Working	RM
✓	3. **Pupil Warning Lights -** (see eight light warning system chart).		
✓	4. **Stop Arm(s), Student Crossing Arm -** Wiring, Air or Vacuum Leak, & Decal		
✓	5. **General Condition, Bus Exterior -** Mirrors, Bumpers, Body Damage, Paint, Reflective Marking, Lettering, Emergency Door, Engine Hood, Cleanliness.		
C. ENGINE COMPARTMENT (REQUIRED)			
✓	1. **Steering -** Play, Column, Steering Gear Box Mounting, Pitman Arm, Drag Link, Steering Arm, Tie Rod & Ends, and Idler Arm.		
✓	2. **Batteries -** Hold Down, Terminals, Cables, Cleanliness, Slide Tray, Load Test.		
✓	3. **Fluid Levels and Condition -** Brake, Power Steering, Oil, Transmission, Windshield Washer, Coolant, (Antifreeze _____°F).		
X	4. **Belts & Hoses -** Tightness, Condition, Routing, Belt Alignment.	P/S Very Loose	RM
✓	5. **Accessory Mounting & Condition -** Air Cleaner (Restriction ____"H20), P.S., Pump, Air Compressor & Filter, Water Pump, Fan and Alternator.		

Status Code	INSPECTION ITEMS	COMMENTS (Note Specific Deficiencies)	Tech Int.
✓	6. **Wiring -** Routing and Condition.		
✓	7. **Fuel System and Lines**		
✓	8. **Radiator -** Mounting, Cap, Reservoir, Fan Shroud.		
D. UNDERNEATH BUS (REQUIRED)			
✓	1. **Front Suspension -** Wheel Bearings, I-Beam (King Pins, Shackles, Spring Mounts, Pins & Bushings), A-Frames and Bushings (Ball Joints), U-Bolts, Shocks, Springs, and Seals.		
X	2. **Front Brakes -** Hoses, Lines, Chambers, Slack Adjusters, Pushrods, Linings, Drums, Rotors, Wheel Cylinders or Calipers. Check and Adjust MSA Equipped Brakes. Do Not Adjust ASA Equipped Brakes	Adjust MSA	BS
✓	3. **Engine/Transmission Mounts, Starter Mounting.**		
✓	4. **Transmission -** Bolts, Linkage, Lines, Filter and Cooler, Clutch (if equipped).		
✓	5. **Fluid Leaks -** Oil, Coolant, Transmission, P.S., etc..		
✓	6. **Fuel Tank -** Leaks, Mounting, Hoses, Wiring.		
X	7. **Brake Equipment –** ABS, Lines, Valves, Reservoir Mounting, Bleed Reservoirs.	Bleed Tank	BS
✓	8. **Driveline -** Shafts, U-Joints, Yokes, Hanger Bearings, Guards, Driveshaft Park Brake.		
✓	9. **Rear Suspension -** Axle Housing, Vent, Differential, Springs, U-Bolts, Shocks, Spring Shackles, Pins and Bushings, Hangers, Seals, Wheel Bearings.		
X	10. **Rear Brakes -** Hoses, Lines, Chambers, Slack Adjusters, Pushrods, Linings, Drums, Rotors, Wheel Cylinders or Calipers. Check and Adjust MSA Equipped Brakes. Do Not Adjust ASA Equipped Brakes	Adjust MSA	BS
✓	11. **Body Securement & Structure -** Hold Downs, Floor, Outriggers, Braces, Skirts, Chassis Frame Rails.		
✓	12. **Exhaust Systems -** Leaks, Mounting, Muffler and Tailpipe.		
O	13. **Wheels and Tires** - Tread Depth, Pressure, Damage, Matching, Alignment, Wheel Hardware.	RF 1/32" and Low Air Pressure	RM
E. LUBRICATION & MAINTENANCE (OPTIONAL)			
X	1. **Change Oil and Replace Oil Filter(s) qts. ____14_____**		BS
X	2. **Replace Fuel Filter(s) Primary/Secondary and Drain Separator.**		BS
N/A	3. **Replace Transmission Filter(s) qts. _____**		
N/A	4. **Replace Air Compressor Filter (if applicable)**		
N/A	5. **Replace P/S Filter pts. _____**		
N/A	6. **Replace Engine Air Cleaner Filter**		
X	7. **Replace Coolant Filter (if applicable)**		BS
X	8. **Test Starting and Charging System Amps ___105___) Volts ___15.2___)**		RM
X	9. **Lubricate Chassis and Body Lbs. ____1/2_____**		BS
✓	10. **Air Conditioning** – Perform A/C System Preventive Maintenance (if equipped) according to district procedure.		
F. ROAD TEST (REQUIRED)			
✓	1. **Brake Performance -** Park Brake, Stopping Distance & Equalization.		
✓	2. **Engine, Transmission, Driveline -** Engine Performance & Governor, Shifting.		
✓	3. **Steering & Handling -** Free Play, Power Assist, Column, Tracking.		

Comments: Needs rear brakes soon.

Brake blocks 5/16" thick.

	Depth / Pressure		Depth / Pressure
RF	**1/32 / 50**	**RRO**	**6/32 / 85**
		RR I	**6/32 / 85**
		LR I	**6/32 / 85**
LF	**8/32 / 90**	**LRO**	**6/32 / 85**

NOTE: If bus is equipped with optional equipment not noted on this form, follow the manufacturer's inspection and maintenance procedures.

Inspector's Signature: Bill Smith **Inspector's Certification #:** 099-0039

Service Manager's or Delegate's Initials: CH **Date Bus Returned To Service:** August 21 2006

Sample Repair Order

Vehicle Number	Mileage	Description of Vehicle					Repair Order #
		Make	Year	Reg.	Lift	A/C	
Date:		District Name:					Safety Inspection Yes ( ) No ( )
Route / Driver:		_____ School District					Inspected By:
Repairs Needed:							Out of Service Date: In Service Date:

Quantity	Parts	Est. Cost		Tech Init.	Repairs	Time	
						Hrs	1/10
	Cost Sub Total				Total Man-Hours		

Quantity	Tires and Batteries			Filters	Mileage	Yes	No	Tune/Up-Frt/Wheels-Oil	Mileage	Yes	No
				Fuel/Oil				Tune/Up			
				Air				Frt Wheels			
				Coolant				Oil Change			
				Trans							
	Total										

Sample Repair Order (Completed)

Vehicle Number	Mileage	Description of Vehicle					Repair Order #
		Make	Year	Reg.	Lift	A/C	
6945	**12,000**	**Thomas**	2006	x		x	**Y13219-I-R**

Date: **08/20/2008**	District Name: Sunshine School District	Safety Inspection Yes (**X**) No ( )
Route / Driver: 15 / Betty Bus Driver		Inspected By: Bill Smith
Repairs Needed: See inspection form dated 08/20/2003		Out of Service Date: 08/20/2008
		In Service Date: 08/21/2008

Quantity	Parts	Est. Cost		Tech. Init.	Repairs	Time	
						Hrs	1/10
1	1157 Bulb		67	RM	Replaced Bulb	0	1
1	187439CI oil filter	8	50	RM	Replaced Filter	0	1
1	LF 3949 oil filter	14	50	RM	Replaced Filter	0	1
1	1872526CI fuel filter	7	82	RM	Replaced Filter	0	1
1	PH79 fuel filter	5	32	RM	Replaced Filter	0	1
1	1875921CI fuel filter	4	90	RM	Replaced Filter	0	1
14	Qts. Oil	11	40	RM	Changed Oil	0	2
1/2	Lb. grease	1	50	RM	Lubricated Chassis	0	1
1.0	Labor, Technician (@16/hr)	16	00	BS	Inspection Adjustments and Repairs	1	0
1.0	Labor, Helper (@10/hr)	10	00	RM	Inspection Adjustments and Repairs	1	0
1.0	Tire (see cost below)			RM	Change R/F Tire	0	3
	Cost Sub Total	77	66		Total Man-Hours	2	3

Quantity	Tires and Batteries			Filters	Mileage	Yes	No	Tune/Up-Frt/Wheels-Oil	Mileage	Yes	No
1	10Rx22.5 new tire	197	00	Fuel/Oil	12,000	X		Tune/Up			X
				Air				Frt Wheels			X
				Coolant				Oil Change	12,000	X	
				Trans		X					
	Cost Total	274	66			X					

School Bus Inspection Certification Program

This program shall meet the requirements of Rule 6A-3.0171(8)(d), FAC, that technicians who perform school bus inspections must be certified as School Bus Inspectors. Certification shall be in effect until the end of the fifth calendar year from the certification date stated on the certificate or certification letter, and person(s) must re-certify every five (5) years thereafter to maintain certification (see Re-certification Program for details). The qualifications, training, and testing requirements for certification are as follows:

A. Level 1. Certified School Bus Inspector

1. *Qualifications Requirements:*
   a) Candidates must be able to document a minimum of two years of journeyman level mechanical experience in the repair and maintenance of motor vehicles in the areas of automotive, truck, heavy equipment, or bus; or successful completion of a course in vehicle maintenance and repair, with a minimum two-year curriculum from an accredited school. The required mechanical experience is defined as "hands-on" or "wrench-turning" experience.
   b) Candidates must submit a completed "Application for State of Florida School Bus Safety Inspector Certification" to the inspection-trainer and test administrator prior to online and hands-on testing.
   c) Candidates must be or have been classified by their current employers as journeyman level mechanics/technicians. This classification must be in the form of an official job description. Alternatively, in cases where candidates are working as journeyman level mechanics/technicians without being classified as such by their employer, the employer may submit a letter to the School Transportation Management Section of the Florida Department of Education requesting a waiver of the job description requirement. Acceptable job descriptions cannot contain language indicating candidates are expected to perform primarily mechanic's assistant or equivalent duties.

2. *Training Requirements:*
   a) Candidates shall attend a minimum two-day school bus inspection training program conducted by a certified school bus inspection trainer.
   b) Candidates should be thoroughly familiar with the current edition of the State of Florida School Bus Safety Inspection Manual prior to attending a training class.
   c) Candidates shall train/practice performing school bus inspections on several school buses prior to hands-on testing using the procedures and information learned in the training class.

3. *Testing Requirements:*
   a) Testing consists of two parts, a 100 question written online test and a hands-on application test.
   b) Online testing will be conducted by district test administrators. Test administrators shall either be qualified school district driver trainers, or third parties who are not employed by the school district transportation department or by contracted providers of transportation to the school district. Test administrators may also be "third-party testers" working for other private or non-school district government entities.
   c) Test administrators must complete and submit a form titled "Application to be a School Bus Inspector Test Administrator" to the DOE for approval. Each school district's transportation director and service manager receive this form along with applicable information/instructions. The DOE will provide test administrators with additional instructions and assistance regarding the online test.
   d) Online test candidates must be tested by an approved district test administrator.
   e) Hands-on testing will be administered in the field by the Department of Education, School Transportation Management Section.
   f) Only those candidates who pass both tests can be certified as school bus safety inspectors.

4. *Written (online) Test:*

a) All written test questions are related to material in the inspection manual.
b) Candidates will be allowed 90 minutes to take the test.
c) The minimum passing grade is 80 percent.
d) This test is an **open book** test. Candidates will be allowed to use the State of Florida School Bus Safety Inspection Manual during the 100 question online test.

5. Hands-on Test:

a) Hands-on testing sessions will be scheduled regionally. School district transportation departments will be notified by DOE of the locations, times, etc.
b) Candidates will be required to perform actual physical inspections of school buses and should dress accordingly. All equipment (except pen or pencil) needed to take the test will be provided at the test site.
c) Candidates must bring a current copy of the inspection manual, a driver's license, job description, and a completed "Application for State of Florida School Bus Safety Inspector Certification" to the test site.
d) Candidates should use the information learned in their training class, the inspection manual, and their professional knowledge while taking their hands-on inspection test.
e) Candidates will be allowed 90 minutes to take the test.
f) The bus will have a minimum of nine specific and pre-determined deficiencies that the candidate must identify and properly describe on the inspection form. The specific deficiencies may be either existing or ones created by the DOE.
g) Each of the nine deficiencies counts as ten points.
h) A properly completed inspection form counts as ten points. The candidate will be allowed to make a maximum of three mistakes on the form. Examples of the types of mistakes are: odometer reading not recorded; a blank in the Status Code column; and any of the nine specific deficiencies discovered are not clearly identified or described on the form.
i) The minimum passing grade is 90 percent. The district or employer will be notified in a timely manner regarding the certification status of each test candidate.

B. Level 2. Certified School Bus Inspector / Trainer

1. *Qualifications Requirements*
   All the requirements listed in **Section A**, plus the following additional items:
   a) Candidates should be thoroughly knowledgeable of the contents of the current edition of the State of Florida School Bus Safety Inspection Manual.
   b) Candidates must possess skills and abilities required to present school bus inspection training material in a manner that facilitates learning and must exhibit leadership qualities and above average professionalism in the performance of their duties.
   c) Candidates must submit a copy of their completed "Application for State of Florida School Bus Safety Inspector Certification" to the DOE trainer at the time of the train-the-trainer class.

2. *Training Requirements*
   a) Trainer candidates must attend a two-day DOE sponsored train-the-trainer class and testing session, and periodic update training sessions.
   b) Candidates will receive intense training and detailed inspection program information from the DOE trainer in the following specific areas:
      1) Training techniques;
      2) Purpose of the program and applicable laws and State Board of Education rules;
      3) How to use the inspection manual and the inspection form;
      4) Recertification program;
      5) Inspection, repair or note, and out-of-service criteria;
      6) Information in additional areas where class participants may need additional training

3. *Testing Requirements*
   a) See: Section A. Trainers must meet the same testing requirements as an inspector.
   b) Additional testing requirements include performance-based scoring at the two-day train-the-trainer class in which trainer candidates will be required to conduct simulated training classes.
   c) Periodic train-the-trainer update classes will be scheduled by DOE.

4. *Duties*
   a) Trainers must ensure that inspector testing candidates meet requirements. Trainers must sign the "Application for State of Florida School Bus Safety Inspector Certification" to verify that inspector candidates have received appropriate training and are prepared to be tested.
   b) Occasionally, trainers may be asked to conduct inspection training for school districts, charter schools, and private transportation providers that do not otherwise have trainers available to them. This may entail travel to another district or organization.

C. Level 3. Supervisor I

Same requirements as: A. Level 1. Certified School Bus Inspector.

D. Level 4. Supervisor II Certificate

This classification is made available to supervisors who manage a district's school bus inspection process, but do not perform actual bus inspections. NOTE: The School Bus Inspection Program Manager Certificate will not qualify the holder to perform school bus safety inspections. The qualifications, eligibility, and testing requirements for this certificate are:

1. *Qualifications Requirements*
   a) Supervisor II candidates must have a minimum of one (1) year experience in school transportation management, or:
   b) Successful completion of a course in vehicle maintenance management with a minimum of two years from an accredited school may be substituted for the required one year of experience.

2. *Eligibility Requirements*
   a) Any shop foreman, service manager, or other transportation management position in the field related to the maintenance, repair, and inspection of school buses.
   b) Must have general knowledge of basic transportation management principles.

3. *Testing Requirements*
   a) Candidates must pass the 100 question online test.
   b) Candidates will be allowed 90 minutes to complete the test.
   c) The minimum passing grade is 80 percent. The district or employer will be notified in a timely manner regarding the certification status of each test candidate.
   d) No hands-on test is required.

Requirements for each Inspection Classification are summarized in the following table:

Classification Levels	Min. 2 years Technical Experience	Classified as Journeyman	Written Test Passed	Hands-on Test Passed	Update Course Attended
1. Inspector	X	X (1)	X (3)	X	(5)
2. Trainer	X	X (1)	X (3), (4)	X	(5)
3. Supervisor I	X	X (2)	X (3)	X	(5)
4. Supervisor II **Note:** Supervisor II level not qualified to perform School Bus Safety Inspections	One (1) yr. in transportation management position or 2 yr. degree	NA	X (3)	NA	(5)

(1) Requirements specified in section A.

(2) Supervisors with two years of journeyman level experience are not required to have job descriptions containing mechanic and/or technician classification language.

(3) 100 question online test

(4) For trainer endorsement, no written “trainer” test required. Candidates will be scored during the two-day train-the-trainer class. Trainers must also be classified as inspectors.

(5) 30 question online re-certification test.
Note: A Trainer must provide candidate with inspection manual update/revision information and sign candidate’s re-certification form prior to re-certification testing.

School Bus Inspection Re-certification Program

School bus Inspectors, Inspection-trainers, Supervisors I, and Supervisors II must re-certify during the fifth calendar year of certification. The following are qualifications, eligibility, and testing requirements for re-certification:

1. *Qualifications Requirements:*
   a) Re-certification must take place sometime between January 1st and December 31st of the fifth full calendar year following the calendar year of original certification or subsequent re-certification. For example: if an inspector became certified in January, 2008, he/she would need to re-certify anytime between January 1, 2013, and December 31, 2013. If an inspector became certified in December, 2008, re-certification would still be required during calendar year 2013. **Recertification candidates are encouraged to begin re-certification study and testing as early as possible in the calendar year during which re-certification is required.**
   b) Candidates are required to obtain inspection manual update/revision information. An inspection-trainer must ensure this and sign the re-certification form prior to testing. NOTE: The re-certification form should be kept on file within the school district transportation department.

2. *Eligibility Requirements:*
   Inspectors who fail to re-certify by the deadline must not inspect buses until being re-certified (see g) and h) below).

3. *Testing Requirements:*
   a) Testing consist of a 30-question online written test.
   b) The test consists of questions on revised and non-revised inspection criteria in the Florida School Bus Safety Inspection Manual.
   c) Online testing will be conducted by district test administrators.
   d) This test is an **open book** test. Candidates will be allowed to use the State of Florida School Bus Safety Inspection Manual during the 30-question online test.
   e) The candidate must provide the test administrator with a valid driver's license and a completed re-certification form. An e-mail address is recommended.
   f) Re-certification candidates will be allowed 30 minutes to take the test.
   g) Re-certification candidates can take the test as many times as necessary to pass the test. If a candidate fails the test twice, additional training is recommended before retaking the test.
   h) If an inspector does not pass the test by the deadline date, the certification will expire. The candidate can become certified again up to one year after expiration by passing the 30-question test; however, the candidate must not inspect buses until that time. After one year of expiration the candidate must complete the whole certification process to become certified again.
   i) The minimum passing grade for this test is 80 percent.
   j) The online test program will grade all tests taken and provide the candidate with pass/fail information immediately after the test is completed. Inspector re-certification certificates will be sent to applicable school district transportation directors in a timely manner.

Certification #: _____ - _____ (For Official Use Only) Written ___ -- _____

H.O. _____

APPLICATION FOR STATE OF FLORIDA SCHOOL BUS SAFETY INSPECTOR CERTIFICATION

(Please Type or Print)

_____ _____ _____

First Name M.I. Last Name

_____

Email Address

_____ _____ Florida _____

Home Street Address, Apt. # City Zip

_____ _____ / _____ / _____ Education: (Check Highest Level Achieved)

Driver License Number Birth Date ___ High School or GED ___ 2 yr. College

_____ ___4 yr. College ___ Post graduate

The School District or Employer You Work For

APPLICATION LEVEL - CHECK ONE:

___ 1. INSPECTOR ___ 2. TRAINER ___ 3. SUPERVISOR I ___ 4. SUPERVISOR II

MECHANICAL WORK EXPERIENCE or SUPERVISORY EXPERIENCE:

Candidate must be able to document a minimum of 2 years journeyman level mechanical experience for certification level #1, #2, or #3 above (wrench turning or 2 yrs. Vo-Tech degree) in any of the following areas: a) Automotive; b) Truck; c) Heavy Equipment; or d) Buses (transit or school) <u>or</u> minimum one year supervisory experience in school transportation management for Level #4.

List employers where you gained applicable experience:

1. Employer (Current or most recent): _____

_____ _____ _____ _____

Street Address City State Zip

Your Position or Job Title: _____

Supervisor's Name: _____ Title: _____

Tel. #: (_____) _____ - _____ Employed From: _____/_____/_____ To: _____/_____/_____

----------2.

Employer (Previous): _____

_____ _____ _____ _____

Street Address City State Zip

Your Position or Job Title: _____

Supervisor's Name: _____ Title: _____

Tel. #: (_____) _____ - _____ Employed From: _____/_____/_____ To: _____/_____/_____

Note: If needed to demonstrate compliance with requirements, list additional employers, mechanical experience, or Vo-Tech degree information on a separate piece of paper and attach to this application.

EMPLOYER INFORMATION

_____
Name of Employer or District Where Applicant is Employed

_____ _____, Florida _____
Work or Mailing Address City Zip

Supervisor's Name: _____ Title: _____

NOTE: All signatures are required. Candidate must bring a driver's license, this completed application, and a copy of his/her current job description or waiver letter to the hands-on test site. Trainers and/or test administrators must ensure that a copy of this completed application is filed within the district transportation department.

Applicant's Signature: _____ Date: _____/_____/_____

The Applicant meets all training requirements:

Trainer's Signature: _____ Cert. # _____ Date: _____/_____/_____

The Applicant meets all applicable qualifications and requirements:

Trans. Director's Signature: _____ Date: _____/_____/_____

THIS SECTION FOR DOE USE ONLY

Inspector: _____ Trainer: _____ Supervisor I: _____ Supervisor II: _____

Applicant is denied or no number issued due to:

Insufficient Data _____ Does Not Qualify ___ Insufficient Experience _____

Classified as a Mechanic's Helper ___ No Training Received ___

Written (online) Test Date: _____/_____/_____ Passed_____Failed_____

* Retest Date: 1. _____/_____/_____ Passed_____Failed_____
* Retest Date: 2. _____/_____/_____ Passed_____Failed_____
* Retest Date: 3. _____/_____/_____ Passed_____Failed_____

Hands-On Test Date: _____/_____/_____ Passed_____Failed_____

* Retest Date: 1. _____/_____/_____ Passed_____Failed_____
* Retest Date: 2. _____/_____/_____ Passed_____Failed_____
* Retest Date: 3. _____/_____/_____ Passed_____Failed_____

* If Applicable

Certified By: _____ Date: _____/_____/_____
Name of DOE Official

2008

Scores: #1) _____ - _____ **#2** _____ - _____

RE-CERTIFICATION FORM FOR STATE OF FLORIDA SCHOOL BUS SAFETY INSPECTOR

(Please Type or Print)

Name:_____ _____ _____ _____
First M.I. Last

Certification #: _____ - _____ Email Address: _____

_____ _____, Florida_____
Home Street Address, (Apt. #) City Zip

_____ _____ / _____ / _____ Education: Check Highest Level Achieved
Driver License Number Birth Date ___ High School or GED ___ 2 yr. College

_____ ___ 4 yr. College ___ Post graduate
The District or Employer You Work For

Application Level (Check One): ___ Inspector ___ Trainer ___ Supervisor ___ Supervisor II.

MECHANICAL WORK EXPERIENCE or SUPERVISORY EXPERIENCE:

Must be able to document a minimum of 2 years journeyman level mechanical experience for Certification Level #1, #2, or #3 above (wrench turning or 2 yrs. Vo-Tech degree) in any of the following areas: a) Automotive, b) Truck, c) Heavy Equipment, or d) Buses (transit or school), or minimum one year supervisory experience in school transportation management for Level #4.

List only employers where you gained applicable experience:

1. Employer (Current or Most Recent): _____

_____ _____ _____, _____
Street Address City State Zip

Your Position or Job Title:_____

Supervisor's Name: _____ Title:_____

Tel. #: (____) _____ - _____ Employed From: _____/_____/_____ To: _____/_____/_____

2. Employer (Previous): _____

_____ _____, _____ _____
Street Address City State Zip

Your Position or Job Title: _____

Supervisor's Name: _____ Title:_____

Tel. #: (____) _____ - _____ Employed From: _____/_____/_____ To:_____/_____/_____

Note: If needed to demonstrate compliance with requirements; list additional employers, mechanical experience, or Vo-Tech degree information on a separate piece of paper and attach to this application.

RE-CERTIFICATION INFORMATION

_____
Name of Employer or District Where Applicant is Employed:

_____ _____, Florida _____
Work or Mailing Address City Zip

Supervisor's Name: _____ Title: _____

NOTE: All signatures are required. Candidate must bring a driver's license, this completed form, and a copy of his/her current job description or waiver letter to the online testing site. Trainers and/or test administrators must ensure that this form is filed within the district transportation department.

Applicant's Signature: _____ Cert. # _____ Date: _____/_____/_____

The Applicant has received Florida School Bus Safety Inspection Manual update training:

Trainer's Signature: _____ Cert. # _____ Date: _____/_____/_____

The Applicant meets all qualifications and requirements:

Trans. Director's Signature: _____ Date:_____/_____/_____

A. INSIDE BUS
Emergency Equipment

1. Inspection Procedures:	Repair (or note) if:	Out of Service if:
a. Fire Extinguisher		
Check for the presence of a fire extinguisher and for the following:		No fire extinguisher is on bus.
1) Pressure: Check gauge.		Pressure is above or below the green zone.
2) Tag (Inspection Date): Check for the presence of inspection sticker or tag and inspection date.	Inspection will expire before next scheduled inspection.	Tag or sticker is missing or doesn't verify inspection was performed within the previous twelve (12) months. **Exception: Buses less than one year old with original fire extinguisher do not need a tag or sticker.**
3) Mounting: Check for accessibility and secure mounting.	Bracket mount is loose (repair).	Fire extinguisher is not accessible to driver or is not secured in a mounting bracket. Also "out of service" if fire extinguisher is mounted in any lockable compartment that is not equipped with an operational ignition warning buzzer or ignition interlock.
4) Rating: Check for proper UL (Underwriters Laboratory) rating.		Rating is less than: 1) 2 1/2lb. minimum, and 10BC rating for buses purchased before November 1980.
	(Continued on Next Page)	2) Minimum 2A-10BC for buses purchased after November 1980.

A. INSIDE BUS
Emergency Equipment

1. Inspection Procedures:	Repair (or note) if:	Out of Service if:
5) Nozzle/hose: Check for loose or damaged parts.		Hose or nozzle is loose, missing, or there is excessive damage to any parts of the extinguisher.
6) Safety Pin: Check for presence of safety pin and tamper-proof seal.		Safety pin is missing or the seal is broken. Tamper-proof seal material cannot be broken, or seal can be opened and resealed without destroying the seal.
b. First Aid Kit		
1) Check box and condition: Buses purchased before September 1985 should have Grade A moisture and dust-proofed kits that are clearly marked. From September 1985 to present buses must meet the same requirements, but have a clear cover. Check for the presence of a tamper-proof seal (starting September 1995).	Not labeled (for box without clear cover) (repair). Tamper-proof seal is broken or missing. Tamper-proof seal material cannot be broken, or seal can be opened and resealed without destroying the seal (repair).	Box is not moisture and dust-proof, won't seal, won't stay latched, or contents are inaccessible due to condition of the box. Not equipped with clear cover (only required for buses purchased after September 1985).
2) Mounting: Check accessibility and mounting of kit. Should be placed in the driver's area in such a manner that it can be easily detached and made portable.	**NOTE: Must check kit contents if tamper-proof seal is broken or missing (also see the NOTE on page 3).** **(Continued on Page 4)**	Kit is loosely mounted, not mounted, not mounted in the driver's compartment, or is not easily detached and made portable. Kit is mounted in any lockable compartment, which is not equipped with operational ignition warning buzzer or ignition interlock.

CHART 1: FIRST AID KITS

BUSES MANUFACTURED FROM 1969 TO 1984

DESCRIPTION	QUANTITY
4” bandage compress	2 pkgs.
2” bandage compress	1 pkg.
1” bandage compress (e.g., Band-Aid)	2 pkgs.
40” triangular bandage with 2 safety pins	1 pkg.
Eye dressing packet	1 pkg.
Wire splint	1 pkg.
Tourniquet	1 pkg.

BUSES MANUFACTURED FROM 1985 TO PRESENT

DESCRIPTION	QUANTITY
1” bandage compress (e.g., Band-Aid)	2 pkgs.
40” triangular bandage with 2 safety pins	1 pkg.
4” X 4” sterile gauze pads	6 pkgs. of 2 each
2” rolled curlex bandage 6 yards in length	2 pkgs.
1” roll adhesive tape 2 1/2 yards in length	1 roll
Eye dressing packet	2 pkgs.

CHART 1a: BODY FLUID CLEANUP KIT

DESCRIPTION	QUANTITY
An EPA registered germicide (tuberculicidal) disinfectant	1
A fully disposable wiping cloth	1
A water resistant spatula	1
Step-by-step directions	1
Absorbent material with odor counteractant	1
Latex gloves	2 pairs
Towelettes	1 pkg.
A discard bag (non-labeled paper bag with plastic liner and twist tie). This bag shall be approximately 4” x 6” x 14” and be of a non-safety color (i.e., not red, orange, or yellow).	1

NOTE: All first aid and body fluid cleanup kits should be opened and inspected *annually* to check the condition and presence of contents. Contents should be checked for any signs of deterioration or contamination. All incorrect, missing, deteriorated, or contaminated contents should be replaced and the boxes resealed.

A. INSIDE BUS
Emergency Equipment

1.

Inspection Procedures:	Repair (or note) if:	Out of Service if:
3) Contents: Check that all contents are intact, have not deteriorated, and are sterile. (For contents list, see Chart 1, page 3.)	Band-Aids are missing or incomplete (repair).	Contents are not sealed or sterile. Contents have deteriorated, are not of the proper type, or are incomplete (except Band-Aids) for date/year of bus (exception: kit may be updated to meet later spec).
c. Body Fluid Cleanup Kit	Tamper-proof seal is broken or missing.. Tamper-proof seal material cannot be broken, or seal can be opened and resealed without destroying the seal (repair).	
Check kit container for condition, mounting, and contents (starting November 1992). Check for the presence of a tamper-proof seal (starting September 1995). See Chart 1a, page 3, for list of required contents.	**NOTE: Must check kit contents if tamper-proof seal is broken or missing (also see the NOTE on page 3).**	Body Fluid Cleanup kit is not present. Kit is not secured, is loosely mounted or is not removable without the use of tools. Contents not of the proper type, incomplete, or missing.
d. Reflectors		
1) Check for proper type and condition of emergency roadside reflectors.		Unauthorized ignitable road fuses are present. Bus manufactured prior to January 1975 is not equipped with self-standing dual three (3) inch diameter reflectors or later type. Bus manufactured starting January 1975 is not equipped with self-standing, triangular, 17″ tall reflectors. Any of the reflectors are broken, deformed or unusable.

(Continued on Next Page)

A. INSIDE BUS
Emergency Equipment

1.

Inspection Procedures:	Repair (or note) if:	Out of Service if:
2) Check quantity: three (3) required.		Fewer than three (3) reflectors are present.
3) Check accessibility, mounting and condition of box. Must be securely mounted in driver's area.		Storage box is broken or will not remain closed. Box is not accessible or is not securely mounted forward of the passenger compartment. Reflectors are mounted in any lockable compartment, which is not equipped with an operational warning buzzer, or ignition inter-lock.
4) Check for presence of a tamper-proof seal (starting September 1995).	Tamper-proof seal is broken or missing (repair). NOTE: Must check contents if tamper-proof seal is broken or missing.	

A. INSIDE BUS
2. Registration, Insurance Card

Inspection Procedures:	Repair (or note) if:	Out of Service if:
a. Registration Check for a valid Florida registration certificate.		Registration certificate is not on the bus, has expired, or is not legible.
b. Insurance Card Check for presence of insurance card (if required by local school board policy).	Insurance card is invalid or missing (note).	

A. INSIDE BUS
3. Neutral Safety Switch

Inspection Procedures:	Repair (or note) if:	Out of Service if:
Neutral Safety Switch Check to determine that automatic transmission bus has a functional neutral safety switch that will allow the starter to operate only in park or neutral.	**(Continued on Next Page)**	The starter will engage when automatic transmission is in any gear other than park or neutral.

A. INSIDE BUS
3. Shifter and Noise Abatement

Inspection Procedures:	Repair (or note) if:	Out of Service if:
a. Shifter - Automatic Transmission		
1) Check that shifter operates easily.	Cannot easily select all gear ranges (repair).	Will not select all gear ranges.
2) Check that shifter correctly indicates the gear range that the transmission is in.	Slightly misaligned, but correctly indicates the gear range that has been selected (repair).	Indicates the wrong gear range is selected.
3) Check that shifter has a functional detent mechanism with a ball, knob (handle) on end of shift lever.	Loose ball or knob (handle), (repair).	Detent is non-functional. Ball or knob (handle) missing from end of shifter lever.
b. Shifter - With Park Brake Shifter Option (if equipped)		
1) Check that shifter operates in each gear range.	Does not shift easily into all gear ranges (repair).	Will not select all gear ranges.
2) Check that rear spring brake applies when shifter is placed in "P" (Park) position.		Rear spring brake does not apply when shifter is placed in the "P" (Park) position. Rear spring brake applies automatically in any gear range except the "P" (Park) position.
c. Shifter-Standard Transmission		
1) Check that shifter operates easily in each gear.	Does not shift easily into all gears (repair).	Will not shift into any gear.

(Continued on Next Page)

A. INSIDE BUS
3. Shifter and Noise Abatement

Inspection Procedures:	Repair (or note) if:	Out of Service if:
2) Has a ball or knob on end of shifter lever.	Loose ball or knob (repair).	Missing ball or knob.
3) Check that shifter (floor) boot is intact and not damaged.	Loose boot (repair).	Boot is torn, damaged, missing, or not attached to floor.
d. Noise Abatement Switch / System (if equipped).		
1) Inspect for proper operation.	Switch is not clearly labeled (repair).	Switch / System is not working.

A. INSIDE BUS
Engine Controls

4.

Inspection Procedures:	Repair (or note) if:	Out of Service if:
a. Key Switch		
1) Check that Ignition switch only operates with a key.		Key sticks in the switch. Switch operates without a key. Bus is equipped with a push button or device other than a key-type switch.
2) Should be mounted securely in the Original Equipment Manufacturer (OEM) location.		Switch is loose or not mounted in the OEM location.
3) Should freely select all positions; i.e., start, run, off, and accessory position.		Engine will not crank or start. Switch sticks in or between any position; or does not function properly in start, run, off, or accessory position, or is intermittent in any position.
b. Choke (if cable equipped)		
Check that cable moves freely and check for normal operation of choke.	Cable is sticking or hard to operate (repair).	Control knob or entire manual choke assembly is missing. Cable is disconnected or broken. Choke does not operate.
c. Accelerator		
1) Check that accelerator pedal, control design, and mounting securement are OEM.	Pedal cover (as originally equipped) is worn out (repair).	Pedal and assembly are not mounted securely. control design, and mounting not OEM. Pedal

(Continued on Next Page)

A. INSIDE BUS
Engine Controls

4.

Inspection Procedures:	Repair (or note) if:	Out of Service if:
2) Inspect pedal assembly and linkage for loose or missing hardware. External type must have dual (two) return springs.		Loose or missing hardware. Missing one spring or not equipped with dual return springs (external type).
3) Check for smooth operation of pedal assembly and linkage in the accelerating and coast position.		Accelerator control and/or linkage sticks or does not operate freely.
4) Inspect for unauthorized built-up pedal, e.g., wooden blocks installed on pedal**.**		Pedal is built up with extender block(s) or not of OEM design.
d. Engine Shutdown		
1) Only OEM approved ignition-controlled shutdown is acceptable on all buses.		Shutdown is not OEM or OEM approved.
2) Check for free operation of shutdown over full range with minimum effort (if equipped with manual type shutdown on diesel buses, pre-November 1989).		Engine cannot be started or shut down, or operation is difficult. Engine shutdown decal missing or unreadable (Bowden Cable type).
3) Check operation of key-switch shutdown (if equipped with electrically operated shutdown on diesel buses, required starting November 1989).		Bus was originally equipped with ignition switch controlled shutdown, but has been retrofitted with Bowden Cable (manual) type shutdown.

A. INSIDE BUS
5. Gauges, Indicators & Dash Lights, Engine Warning Lights, and Buzzers

Inspection Procedures:	Repair (or note) if:	Out of Service if:
a. Gauges		
From the driver's position, check the visibility, OEM location, readability, operation, accuracy, and condition of the following gauges:	Oil pressure, temperature, fuel, voltmeter or ammeter gauge is inaccurate, damaged or difficult to read (repair).	Oil pressure or engine / transmission temperature gauge does not function or is unreadable.
1) Speedometer and odometer.	Odometer does not work or is not working properly (repair).	Speedometer does not work or is confirmed to be inaccurate.
Oil pressure.		
2) 3) Temperature (engine / transmission).	Odometer is unreadable (repair).	Speedometer is unreadable or damaged.
Fuel.		
4) 5) Voltmeter or ammeter (voltmeter only required starting September 1985).	Not equipped with voltmeter for bus purchased starting September 1985 (repair).	Voltmeter or ammeter does not work or does not indicate that alternator is charging. Refer to C-5, f. on page 111.
6) Air pressure or vacuum.		Air pressure or vacuum gauge(s) are inaccurate, unreadable, or not working. Air pressure gauge must read within plus or minus seven (7) psi (single gauge) at 100 psi.
	(Continued on Next Page)	

A. INSIDE BUS
5. Gauges, Indicators & Dash Lights, Engine Warning Lights, and Buzzers

Inspection Procedures:	Repair (or note) if:	Out of Service if:
b. Indicators and Dash Lights Check for presence and operation of the following indicators:		
1) Air pressure or vacuum gauge or warning light.	Light bulb for the following gauge or control is inoperative (repair): 1) Oil pressure 2) Temperature (engine / transmission) 3) Fuel 4) Voltmeter 5) Ammeter 6) Engine Shutdown (Bowden Cable) 7) Strobe light	Light bulb for the following gauge or indicators is inoperative: 1) Air pressure or vacuum.
2) High beam light.		2) High beam.
3) Left and right turn signal and 4-way hazard.		3) Left or right turn signal or 4-way hazard.
4) Check all dash and control panel lights for illumination at gauges and switches. Check operation of dimmer control (if equipped).	One or more lights for control switches are inoperative. One or more panel lights are inoperative. Dimmer control (if equipped) does not function properly (repair).	All dash or control panel lights are inoperative. Speedometer light is inoperative. Shift Indicator light is inoperative.

(Continued on Next Page)

A. INSIDE BUS
5. Gauges, Indicators & Dash Lights, Engine Warning Lights, and Buzzers, ABS Warning Light

Inspection Procedures:	Repair (or note) if:	Out of Service if:
c. Engine / Transmission Warning Lights and Buzzer		
Check for presence and operation of the following warning lights and buzzer (or bell).		
1) High coolant temperature dash warning light and buzzer (or bell) on diesel buses manufactured starting November 1982.		High coolant temperature dash warning light or buzzer (or bell) is inoperative (either constant or momentary system).
2) Low oil pressure dash warning light and buzzer (or bell) on diesel buses manufactured starting November 1982.		Low oil pressure dash warning light or buzzer (or bell) is inoperative (either constant or momentary system).
3) High transmission temperature dash warning light or buzzer.		Transmission high temperature light or buzzer is inoperative.
d. ABS Warning Light		
Check condition of ABS warning lamp and system (if equipped). Refer to applicable vehicle service publication for test procedures and diagnostic information.		Lamp stays on or fails to turn off. Lamp fails to turn on during initial startup sequence. System fails to operate per manufacturer's specifications.

A. INSIDE BUS
6. Air Brake System

NOTE: Several inspection procedures outlined in this manual require the service, parking, and/or emergency brakes to be released. Bus wheels must be chocked to prevent the bus from moving when performing these procedures.

Inspection Procedures:	Repair (or note) if:	Out of Service if:
a. Gauge(s) 1) For buses built prior to March 1975, check for presence of minimum one air pressure gauge, accurately showing system air pressure within ± 7% (at 100 psi × 7%= 7 psi). 2) For buses built after March 1975, check for presence of two (2) air pressure gauges (or single gauge with dual needles). One (1) gauge or needle should indicate air pressure available to the front air brake system, and the other should indicate air pressure available to the rear air brake system. Both gauges must be accurate to within ± 7 psi.	**(Continued on Next Page)**	Any gauge is missing or cannot be read. Gauge is not accurate to within plus or minus seven (7) percent (%). Any gauge is not in OEM location. More than a 15 psi difference in dual air brake system (dual gauges) with system built up to full pressure (100-125 psi).

A. INSIDE BUS
6. Air Brake System

Inspection Procedures:	Repair (or note) if:	Out of Service if:
b. Buildup Air reservoir must be drained thoroughly before making this check. Check time required for system air pressure to buildup from 85 to 100 psi with engine at fast idle (approximately 1,200 R.P.M.). **NOTE: If air brake gauge(s) failed previous check for accuracy, do not perform this check until gauge(s) are repaired.**		Air pressure buildup time from 85 to 100 psi at fast idle is greater than 40 seconds.
c. Governor Check air brake system governor operation. While building up system air pressure, note pressure at which governor cuts out (compressor quits compressing). With engine still running, pump brakes to lower air pressure until compressor cuts-in (starts compressing again). Note pressure. **NOTE: If gauge(s) failed previous check for accuracy, do not perform this check until gauge(s) are repaired.**	Cut-out pressure is below 120 psi (for buses equipped with air dryer) (repair). **(Continued on Next Page)**	Cut-out pressure is too low (below 100 psi) or too high (above 130 psi). Difference between governor cut-out and cut-in pressure exceeds 30 psi.

A. INSIDE BUS
6. Air Brake System

Inspection Procedures:	Repair (or note) if:	Out of Service if:
d. Park Brake Check for proper operation of parking brake as follows: With vehicle stopped, release service brake and apply parking brake. When engine torque is applied by partially engaging clutch in second gear (manual transmission) or by placing transmission selector in "Drive" (automatic transmission) and accelerating the engine to a fast idle (approximately 1,200 RPMs), vehicle should not move forward.	**NOTE: Buses equipped with Rear Diesel Engine and Allison World Transmission should be checked at 900 RPM.**	Vehicle moves forward after speeding up the engine (transmission in gear) with service brake released and park brake applied.
e. Adjustment Drain water from air reservoir(s). With engine shut off, wheels chocked, service and park brakes released, and system air pressure at 100 psi or above: 1) Note air pressure. 2) Apply service brakes firmly and release immediately. 3) Note air pressure drop resulting from brake application.		System pressure drop upon service brake application is greater than 15 psi. **Note: If pressure drop exceeds 15 psi, mark item A. 6. "Out of Service" and follow the inspection procedures in sections D. 2., "Front Brake," pages 123 through 129; and D. 10, "Rear Brake," pages 150 through 157 in this manual.**
SEE NOTES ON PAGE 18	**(Continued on Next Page)**	

A. INSIDE BUS
6. Air Brake System

Inspection Procedures:	Repair (or note) if:	Out of Service if:
NOTE: Pressure drop exceeding 15 psi indicates brakes may be out of adjustment, foundation hardware may be worn-out or damaged, and/or there is excessive water in the air reservoir(s). Water must be drained from reservoir(s) before performing the brake adjustment check on page 17.	**NOTE: For all Manual Slack Adjuster (MSA) equipped brakes, at every required inspection, brake chamber pushrod travel must be measured and brakes must be adjusted at all wheel positions. Automatic Slack Adjuster (ASA) equipped brakes should *not* be manually adjusted during inspections. See sections D. 2., "Front Brake," pages 123 through 129; and D. 10., "Rear Brake," pages 150 through 157, for additional information.**	
f. Air Leaks		
1) Fully charge air system (pressure at least 100 psi).		
2) Shut off engine, chock wheels, and release the emergency brake.		
3) With service and emergency brakes in released position, check for air pressure leak (pressure drop) for at least one (1) minute. Note pressure drop, if any.	Air is leaking, but rate is less than two (2) psi per minute (service brakes released), or less than three (3) psi per minute (with service brakes applied) (repair).	Pressure leaks more than two (2) psi per minute (service brakes released) or more than three (3) psi per minute (with service brakes applied).
4) Firmly apply the service brake. Do not release. Check for air pressure leak (pressure drop) for at least one (1) minute. Note pressure drop, if any.	**(Continued on Next Page)**	

A. INSIDE BUS
6. Air Brake System

Inspection Procedures:	Repair (or note) if:	Out of Service if:
5) During both checks (brakes released and applied) listen for any audible air leaks.		There is any audible air leak in the air brake system.
NOTE: If air brake gauge(s) failed previous check for accuracy, do not perform this test until gauge(s) are repaired.		
g. Low Air Warning		
Check operation of low air warning buzzer and light by building air pressure up to 100-125 psi and perform the following procedure: with ignition key switch in run position, pump air brake pedal to drop air pressure. Low air warning buzzer and light should activate by the time pressure drops to 50 psi		Light or buzzer is inoperative. Light or buzzer fails to operate by 50 psi or continues to operate above 70 psi.
Start engine and build up air pressure. Warning buzzer and light should deactivate by 70 psi.		
NOTE: If air brake gauge(s) failed previous check for accuracy, do not perform this check until gauge(s) are repaired.	**(Continued on Next Page)**	

A. INSIDE BUS
6. Air Brake System

Inspection Procedures:	Repair (or note) if:	Out of Service if:
h. PP-1		
Check for presence (on all buses built since March 1975) of a PP-1 (pop-off style) parking/emergency brake control valve. Check condition, location, mounting, and type of valve and knob. With pressure above 45 psi, apply and release valve to check operation.	Label identifying valve is missing or unreadable (repair).	Valve not mounted securely (in original position). Knob is missing, broken, or cracked.
i. Pop-Off		
For buses equipped with pop-off type (PP-1) parking brake control valve, check for emergency activation of valve by: chocking wheels, pumping down brakes (starting with at least 60 psi in air system), and noting air pressure at which valve "pops out."		Parking brake pop-off valve automatically "pops out" (activating parking brake) above 50 psi or fails to "pop out" between 15 and 50 psi.
j. Pedal		
Check air brake pedal assembly for adjustment, mounting, condition, operation, and rubber cover pad (if originally equipped). Check for presence of prohibited extender block.	Rubber cover pad is worn (repair).	Rubber cover pad is missing (if originally equipped) or worn through. Any part of pedal and assembly is damaged, loose, missing, or has been modified. Pedal is equipped with any type of extender block.

A. INSIDE BUS
Hydraulic Brakes

7.

NOTE: Several inspection procedures outlined in this manual require the service, parking, and/or emergency brakes to be released. When performing these checks bus wheels must be chocked to prevent the bus from moving.

Inspection Procedures:	Repair (or note) if:	Out of Service if:
NOTE: If bus is not equipped with hydraulic brakes, proceed to page 35. **NOTE: See page 136 for definitions of fluid "seepage" and "leaks."**	**(Continued on Next Page)**	

Since there are four (4) distinct types of hydraulic brake systems in use on Florida school buses, this manual will cover each system individually. It is imperative that you know the type of system you will be inspecting to ensure that the proper inspection procedure is used.

The four (4) types of systems are:

a. Standard Vacuum Assisted Hydraulic Brakes. See page 22.
b. Hydraulic Power Assisted Hydraulic Brake with Accumulator Backup. See page 25.
c. Hydraulic Power Assisted Hydraulic Brakes with Electric Pump Backup and Driveshaft Park Brake Systems. See page 28.
d. Hydraulic Power Assisted Hydraulic Brakes with Spring Set (hydraulically released) Parking Brakes (Ford Maxibrake). See page 30.

A. INSIDE BUS
Hydraulic Brakes

7.

Inspection Procedures:	Repair (or note) if:	Out of Service if:
a. Standard Vacuum Assisted Hydraulic Brakes; Inspect for:		
1) Any visible seepage or leaks in the hydraulic brake system.	**NOTE: See page 136 for definitions of fluid "seepage" and "leaks."**	Any seepage or leaks are found.
2) a) Check brake pedal reserve (distance from floor) upon firm brake application (engine running).		Brake pedal (reserve) is less than one inch (1") from floor.
b) Check brake pedal fade (pedal falls to floor when held down with engine running and with engine off) indicating brake system leak.		There is any brake pedal fade.
3) a) Check vacuum gauge operation (if equipped) and low vacuum indicator light and buzzer (if equipped) with full vacuum below eight (8) inches of mercury (hg).		Vacuum gauge (if equipped) is inoperative, inaccurate, or not clearly visible. Low vacuum indicator light and buzzer do not come on below eight (8) inches of mercury (hg).

(Continued on Next Page)

A. INSIDE BUS
Hydraulic Brakes

7.

Inspection Procedures:	Repair (or note) if:	Out of Service if:
b) Check for brake warning light illumination with ignition key in "Start" position. Check to ensure brake failure warning light is not on during normal operation (with and without brakes applied).		Brake failure warning light does not activate when key is moved to the start position. Brake failure warning light comes on (or stays on) during normal operation (with or without brakes applied).
c) Check for vacuum drop while engine is off and brakes are not applied.		Vacuum reserve drops while engine is off.
4) Check vacuum assist (booster) operation. With engine off apply brakes several times to exhaust vacuum. Depress and hold the brake pedal down while starting the engine. Pedal should "fall away" slightly, indicating increased pressure being applied by the assist unit.		Vacuum assist system malfunctions (pedal does not "fall away" slightly when engine is started).
5) Turn engine off, and apply the brakes. There should be enough reserve in the vacuum system to allow at least one (1) power-assisted brake application.		Vacuum reserve is insufficient to allow at least one (1) brake application.

(Continued on Next Page)

A. INSIDE BUS
Hydraulic Brakes

7.

Inspection Procedures:	Repair (or note) if:	Out of Service if:
6) Check all brake hardware components inside bus for secure mounting, routing, and condition, including:	Brake system components are not routed properly (repair).	Brake pedal assembly, pushrod, and clevis, or emergency brake control assembly, is insecurely mounted; has loose, missing, or worn hardware; or is damaged.
a) Pushrod and clevis assembly.		
b) Brake pedal assembly and rubber cover (if originally equipped).	Rubber cover is worn (repair).	Rubber pedal cover is missing (if originally equipped) or worn through. Pedal is equipped with any type of "extender block."
c) Emergency brake control assembly.		Emergency brake control is hard to operate or doesn't latch and release properly.
7) Parking Brake Operation		
With vehicle stopped (engine running), apply parking brake. When engine torque is applied by partially engaging clutch in second gear (manual transmission) or by placing transmission selector in gear (automatic transmission) and accelerating the engine to a fast idle (approximately 1,200 R.P.M.'s), vehicle should not move forward.	**(Continued on Next Page)**	Parking brake doesn't hold or functions improperly.

A. INSIDE BUS
Hydraulic Brakes

7.

Inspection Procedures:	Repair (or note) if:	Out of Service if:
b. Hydraulic Power Assisted Hydraulic Brakes with Accumulator Backup; Inspect for:		
1) Any visible seepage or leaks in the brake or hydraulic assist systems.	**NOTE: See page 136 for definitions of fluid "seepage" and "leaks."**	Any brake or hydraulic assist fluid seepage or leaks are found.
2) a) Check brake pedal reserve (distance from floor) upon one (1) firm brake application (engine off, accumulator depleted).		Brake pedal does not have at least 1 1/2 inch reserve (distance from floor).
b) Check brake pedal fade (test minimum 1 1/2 minutes, engine off). Firmly apply brake pedal and hold.		Pedal falls to floor (fades) when held down (engine off), indicating brake system leak.
3) Check for brake warning light illumination with ignition key in "Start" position. Check to ensure brake failure warning light is not on during normal operation (with and without brakes applied).		Brake failure warning light does not light when key is moved to the start position or stays on during normal operation.

(Continued on Next Page)

A. INSIDE BUS
Hydraulic Brakes

7.

Inspection Procedures:	Repair (or note) if:	Out of Service if:
4) Power assist check:		
a) With engine off apply the foot brake several times, then hold down.		
Start the engine.		
b) c) The pedal should fall, then push back against your foot.		Power assist unit is malfunctioning (pedal doesn't fall or push back).
d) Listen for engine drive belt squeal.		Engine drive belt is squealing.
Release brake pedal.		
e) Turn engine off.		
f) g) Depress brake pedal. Accumulator should hold enough pressure to allow two (2) assisted brake applications.		Accumulator will not hold enough pressure for two (2) brake applications.
5) Check all brake hardware components inside bus for secure mounting, routing, and condition, including:	Brake system components are not routed properly (repair).	Brake pedal assembly, pushrod, clevis, or emergency brake control assembly is insecurely mounted; has loose, missing, or worn hardware; or is damaged.

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A. INSIDE BUS
Hydraulic Brakes

7.

Inspection Procedures:	Repair (or note) if:	Out of Service if:
a) Pushrod and clevis assembly.		
b) Brake pedal assembly and rubber cover pad (if originally equipped).	Rubber cover pad is worn (repair).	Rubber pedal cover pad is missing (if originally equipped) or worn through. Pedal is equipped with any type of "extender block."
c) Emergency brake control assembly.		Emergency brake control is hard to operate or doesn't latch and release properly.
6) Parking Brake Operation With vehicle stopped (engine running), apply parking brake. When engine torque is applied by partially engaging clutch in second gear (manual transmission) or by placing transmission selector in "Drive" (automatic transmission) and accelerating the engine to a fast idle (approximately 1,200 R.P.M.'s), vehicle should not move forward.		Parking brake doesn't hold or functions improperly.

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A. INSIDE BUS
Hydraulic Brakes

7.

Inspection Procedures:	Repair (or note) if:	Out of Service if:
c. Hydraulic Power Assisted Hydraulic Brakes with electric pump backup and driveshaft parking brake system. Inspect for:		
1) Any visible seepage or leaks in the brake or hydraulic assist system.	**NOTE: See page 136 for definitions of fluid "seepage" and "leaks."**	Any seepage or leaks are found in the brake or hydraulic assist system.
2) Check brake warning and backup systems using the appropriate chassis manufacturer's procedure in Chart 2, page 33.		The brake system does not pass entire test in Chart 2, page 33.
3) a) Check brake pedal reserve (distance from floor) upon one (1) firm brake application (engine off, hydraulic boost depleted).		Brake pedal reserve is less than one (1) inch from floor.
b) Check brake pedal fade (continues to fall to floor after initial firm application) with engine off.		There is any brake pedal fade (falling away) after initial firm application.
4) Check all brake hardware and components inside the bus for secure mounting, routing, and condition, including:		

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A. INSIDE BUS
Hydraulic Brakes

7.

Inspection Procedures:	Repair (or note) if:	Out of Service if:
a) Brake pedal assembly and rubber cover pad (if originally equipped).	Brake pedal rubber cover pad is loose or worn (repair).	Rubber pedal cover pad is missing (if originally equipped) or worn through. Pedal is equipped with any "extender block."
b) Brake pedal pushrod and clevis assembly.		Brake pedal assembly, pushrod, clevis, or emergency brake control assembly is insecurely mounted; has loose, missing, or worn hardware; or is damaged.
c) Emergency brake control assembly.		Emergency brake control is hard to operate or doesn't latch and release properly.
5) Check Parking Brake		
With vehicle stopped (engine running), apply parking brake. When engine torque is applied by partially engaging clutch in second gear (manual transmission) or by placing transmission selector in "Drive" (automatic transmission) and accelerating the engine to a fast idle (approximately 1,200 R.P.M.s), vehicle should not move forward.		Parking brake doesn't hold or functions improperly.

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A. INSIDE BUS
Hydraulic Brakes

7.

Inspection Procedures:	Repair (or note) if:	Out of Service if:
d. Hydraulic Power Assisted Hydraulic Brakes with Spring Set (hydraulically released) Parking Brakes (Ford Maxibrake). Inspect for:		
1) Any visible seepage or leaks in the brake or power assist system.	**NOTE: See page 136 for definitions of fluid "seepage" and "leaks."**	Any seepage or leaks are found.
2) Check brake warning and backup system using Chart 3, page 34.		The brake systems do not pass all tests in Chart 3, page 34.
3) Check brake pedal travel: Push brake pedal down as far as possible.		Brake pedal travels more than halfway down.
4) Check for brake pedal fade. (Pedal falls away to floor when held down with engine running and with engine off, indicating brake system leaks.		There is any brake pedal fade.
5) Check Parking Brake System:		
a) With engine running, release the parking brake.		
b) Check to be sure brakes are released (bus will move).		
Turn engine off.	**(Continued on Next Page)**	

c)

A. INSIDE BUS
Hydraulic Brakes

7.

Inspection Procedures:	Repair (or note) if:	Out of Service if:
d) System must maintain pressure (keep parking brake released) for at least five (5) minutes.		Parking brake system will not hold pressure (i.e., release brakes) for at least five (5) minutes.
e) With vehicle stopped (engine running), apply parking brake. When engine torque is applied by partially engaging clutch in second gear (manual transmission) or by placing transmission selector in "Drive" (automatic transmission) and accelerating the engine to a fast idle (approximately 1,200 R.P.M.'s), vehicle should not move forward.		Vehicle will move with parking brakes applied.
6) Check all brake hardware and components inside the bus for secure mounting, routing, and condition, including:		
a) Brake pedal assembly and rubber cover pad (if originally equipped).	Brake pedal rubber cover pad is loose or worn (repair).	Rubber pedal cover pad is missing (if originally equipped) or worn out. Pedal is equipped with any "extender block."

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A. INSIDE BUS
Hydraulic Brakes

7.

Inspection Procedures:	Repair (or note) if:	Out of Service if:
b) Brake pedal pushrod and clevis assembly. c) Emergency brake control assembly.		Brake pedal assembly, pushrod and clevis, or emergency brake control assembly, is insecurely mounted; has loose, missing, or worn hardware; or is damaged.

FORD

WARNING LIGHTS/BUZZER Normal Operation			
MODE	**Indicator**		
	Brake Lamp	Brk. Elec. Mtr. Lamp	Buzzer
1a. Engine Off/Ignition Off no brake applied	Off	Off	Off
1b. Engine Off/Ignition Off brake applied	Off	On	On
2. Engine Off/Ignition On or START with or without brake applied	On	On	On
3. Engine On with or without brake applied	Off	Off	Off

GMC

MODE	Normal Operation		
	Brake Warning Light	Brk. Elec. Hyd. Boost Warning Light	Tone Alarm
1. Engine off-ignition off A. No brake applied B. Brake apply	 Off On	 Off Off	 Off Off
2. Engine off-ignition on with or without brake applied (bulb check).	On	On	On
3. Engine off-ignition on start with or w/out brake applied.	On	Off	On
4. Engine on with or without brake applied.	Off	Off	Off

CHART 2 - Brake Failure Warning System Checks INTERNATIONAL/NAVISTAR	
CONDITION	**NORMAL OPERATION**
PARK BRAKE LIGHT	
Key switch in START position w/park brake released - (Bulb check).	Light ON
Key switch ON w/park brake applied.	Light ON
BRAKE PRESSURE LIGHT	
Key switch OFF.	Light OFF, electric hydraulic pump operates when service brakes are applied.
Key switch in ON position. Engine not operating (pump and bulb check).	Light ON and electric hydraulic pump operation (some vehicles) SEE NAVISTAR MANUAL
	Light ON and electric hydraulic pump operates when service brakes are applied.
Key switch in ON position and Engine operating with service brakes applied.	Light OFF
Key switch in START position.	Light ON momentarily and electric hydraulic pump operates.
Key switch in ON position and engine operating with service brakes applied.	Light OFF

CHART 3

FORD HYDRAULIC, MAXI BRAKE SYSTEM

NORMAL BRAKE SYSTEM CONDITIONS

Controls											Controls									
Engine		Ignition			Service Brake		Parking Brake				Service Brake		Electric* Pump				ParkingBrake			
							Off		On		Light		Light		Buzzer		Light		Buzzer**	
Off	On	Off	On	Start	Off	On	Part Rel	Full Rel	Part Set	Full Set	Off	On	Off	On	Off	On	Off	On	Off	On
X		X			X			X	OR	X	X		X		X		X		X	
X		X				X		X	OR	X	X			X		X	X		X	
X					X or X															
					X or X						X								X	
	X		X		X or X		X		X		X		X		X		X		X	
X		X			X or X				X			X		X			X			
					X or X															
X		X			X or X		X			X	X	X		X		X		X		
X		X						X		X		X								X

* Whenever the ignition switch is in the START position, the Hydro-Max electric pump will cycle momentarily.

** Parking brake buzzer will sound momentarily during application of the parking brake in cold ambient conditions.

A. INSIDE BUS
8. Windshield Wipers & Washers

Inspection Procedures:	Repair (or note) if:	Out of Service if:
a. Operation		
Inspect both wipers for:		
1) Swept area field of view and effectiveness of wiping.		Either wiper does not effectively clear driver's field of vision.
2) Proper operation of both wipers on high and low speeds, intermittent operation (if equipped), and condition and mounting of switch(es) and knob(s).	Either wiper does not operate on low speed, or intermittent function (if equipped) does not work properly (repair).	Either wiper does not operate properly at high speed. Switch(es) mounting loose or knob(s) missing or loose.
3) Condition and mounting of wiper motors and linkage.	Wiper goes past perimeter of glass (repair).	Either wiper motor or linkage is visibly damaged or loose.
4) Inspect for proper washer operation.	Washer does not operate or is misadjusted (repair).	
b. Park		
Inspect for parked position of wipers when turned off (electric) or when manually parked (air).		Electric wipers do not automatically return to parked position out of driver's line of sight when turned off. Air wipers cannot be manually parked out of the driver's line of sight using the wiper control switch.
c. Blades		
Inspect blades for condition, mounting, and tension.	Poor cleaning of windshield (repair).	Either blade is missing, damaged, deteriorated, loose, or does not hold proper tension against windshield.

A. INSIDE BUS
9. Heaters, Defrosters, External Dash Fan(s)

Inspection Procedures:	Repair (or note) if:	Out of Service if:
a. Heaters Inspect heater system for:	**NOTE: See page 136 for definitions of fluid "seepage" and "leaks."**	
1) Heating performance and coolant control valve (interior).	Not producing adequate heat (including any auxiliary heat; repair). Coolant control valve hard to operate (repair).	Heater cores, hoses, or valve leaks (including any auxiliary heater).
2) Blower operation, condition, and control switches.	Heater blowers do not work on all speeds, are noisy, or vibrate (repair). Blower switches are damaged, loose, or blower operates intermittently (repair).	
3) System leakage, condition, and hose shielding (shielding required starting November 1980).		Heater hoses are cracked, swollen, or badly chafed. Shielding is missing (starting November 1980) or does not completely cover hoses.
4) Condition of ductwork and heater box.	Heater ductwork or heater box components are missing, damaged, loose, or obstructed (repair).	Any portion of heating system within passenger area creates sharp edges, projections, or other hazards to passengers.

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A. INSIDE BUS
9. Heaters, Defrosters, External Dash Fan(s)

Inspection Procedures:	Repair (or note) if:	Out of Service if:
b. Defrosters Inspect windshield defroster system for:		
1) Airflow, heat, and coverage area.	Any defroster blower does not work on low speed, is noisy, or vibrates (repair).	Airflow is not present at all defroster outlets.
2) Blower operation, condition, and control switches.	Blower switches are damaged or loose (repair).	Any defroster blower does not work on high speed.
3) Condition of ductwork, diffusers, and fresh air control (if equipped).	Any ductwork or diffusers are loose or damaged (repair). Fresh air control (if equipped) does not function (repair). **(Continued on Next Page)**	

A. INSIDE BUS
9. Heaters, Defrosters, External Dash Fan(s)

Inspection Procedures:	Repair (or note) if:	Out of Service if:
c. External Dash Fan(s)		
Inspect external dash fan(s) for:		
1) Presence of fan, mounting and condition (Type B, C, and D only).	Fan mounting is loose or fan won't stay in adjustment (repair).	Fan is not present.
NOTE: Dash fan may be mounted inside front header panel on some buses.		
2) Blade condition.	Fan blade is damaged (repair).	
3) Protective cage mounting and condition.		Protective cage is missing, loose, or damaged.
4) Operation and switch.	One (1) speed does not function, or fan is noisy or vibrates (repair). Switch is loose or damaged (repair).	Fan does not operate.