

TERRY
CRIPPIN

cta

Operations Training/Instruction **oti**



**OPERATOR'S
GUIDE TO
EQUIPMENT
TROUBLE**

Introduction

CTA is in the business of providing safe, dependable and efficient service to our customers. It is our livelihood and we have an important obligation to those people who need and are willing to pay to ride buses and trains.

Unfortunately, when the equipment fails, delays occur which are costly to both the CTA and our passengers in terms of money and inconvenience. Operating employees provide the greatest service by performing simple troubleshooting procedures that eliminate expensive and unnecessary roadcalls.

A new and expanded Operator's Guide to Equipment Trouble has been developed to include all buses, from the 3700 series to the newest 9800 series buses. Operators can develop a higher level of awareness and troubleshooting proficiency which can only result in improved service.

About the Guide

Whenever you have equipment trouble, refer to this guide and follow the instructions. If the problem is not covered in this book, call the controller for instructions. If unable to call by bus radio, a public or CTA telephone can be used. (664-7200, ext. 2345)

When the guide states "call controller for instructions," do so immediately. If it says to "call controller at earliest opportunity," do so when there will be no delay to service or inconvenience to passengers.

All equipment defects, no matter how minor, must be logged with the repairman at the vault island and entered on the Operator's Daily Report when turning in for the day. If the guide gives you no other instruction than to "continue in service," you are also expected to report the problem when returning to the garage. It is very important to document these defects consistently, so a record can be made available to the Maintenance Section.

TABLE OF CONTENTS

	Page
Accelerator Pedal Sticks to Floor	1
Air Conditioning	
Not Cooling.....	1
Too Cold.....	2
Air Pressure	
Too Low.....	3
Too High.....	3
Body	
Broken Window/Window Falls Out.....	4
Loose or Broken Grab Bars, Seats, Floor-Mounted Housings or Steps.....	4
Roof Escape Hatch is Open.....	4
Roof Leaks.....	5
Defective Latches on Exterior or Interior Compartment Doors.....	5
Brakes	
Pedal Sticks to Floor.....	6
Brakes Won't Release (all doors are closed).....	6
Brakes are Spongy, Grabbing, Noisy or not Stopping the Bus Effectively.....	7
Air-Operated Parking Brake Fails to Release.....	7
Hand-Operated Parking Brake Fails to Release.....	7
Defroster Motors Are Not Working	7
Destination Sign Will Not Turn	8
Doors	
Front Door Won't Open or Close.....	8
One of the Front Door Panels Won't Open.....	8
Rear Door Fails to Open.....	9
Rear Door Fails to Close.....	9
Rear Door is "Pumping" Open and Closed.....	10
Door Control Handle Does Not Work.....	10
Rear Door Bell Won't Shut Off (emergency knob pulled or door open).....	11
Rear Door Hung Up on Curb.....	11
Engine	
Won't Start.....	11
Won't Shut Off.....	12
Excessive Smoke Coming From Engine Compartment.....	13
Excessive Smoke Coming From Exhaust.....	13
Loud Noises Coming From Engine Compartment.....	13

Table of Contents

	Page
Fuel Leak	14
Fumes in Bus	14
Heat	
No Heat in Bus.....	14
Horn	
Does Not Work.....	15
Sounds Continuously.....	15
Interlock	
Rear Door Interlock Not Working.....	15
Bus Cannot Be Accelerated After Rear Door Closes.....	16
Lights	
Dome Lights Don't Work.....	16
Headlights Don't Work (after dark).....	17
Marker Lights, Rear Brake Lights or Taillights Are Not Working.....	17
Turn Signals Don't Work.....	18
Mirrors	
Left Side Mirror is Broken.....	18
Rear View or Right Side Mirror is Broken.....	18
Passenger Signal Buzzer	
Won't Shut Off.....	18
Doesn't Work.....	19
Radio	
Volume Too Loud on PA System.....	19
Channel Lights Are Out When Ignition is On.....	19
Control Head Antenna, Handset or Thumbwheels are Damaged.....	19
False Call Signals Are Received.....	19
Blue Transmit Light Remains On.....	19
Handset is Hot or Smoke is Coming from Radio.....	19
Suspension	
Body Tilts or Rubs on Tires.....	20
Defective Shocks.....	20
Tires	
Flat Tire(s).....	21

Table of Contents

	Page
Transmission	
Bus Pulls Slowly.....	21
Bus Won't Pull.....	21
Bus Won't Shift Into High Gear.....	21
Bus Won't Go In Gear.....	22
Bus Jumps Out of Gear.....	22
Bus Is Stuck In Gear (won't go in neutral or reverse).....	23
Trouble Lights/Alarms	
Hot Engine Light Comes On.....	23
Low Oil Light Comes On.....	24
Low Air Pressure Light Comes On.....	24
Generator Light Comes On.....	24
Rear Door/Alarm Light On.....	25
Trouble Alarm on Panel with No Indicating Light.....	25
Windshield Wipers	
Don't Work.....	25
Move Slowly.....	26
Special Instructions	
If a Jumper Wire is Attached to your Bus.....	26

Problem	Series	Procedure
Accelerator Pedal Sticks To Floor	All	<ul style="list-style-type: none"> • curb bus • place shift selector in neutral • apply parking brake • clear any debris from around pedal • attempt to work pedal loose by hand
	1000-1524 3700-3875 7400-7944 (40-51)	<ul style="list-style-type: none"> • move door control lever to rear door position; accelerator pedal should pop up as interlock is engaged • procedure cannot be done if passengers are leaning against rear doors
	All	<ul style="list-style-type: none"> • if, after trouble-shooting, pedal cannot be worked loose or if pedal sticks repeatedly, <ul style="list-style-type: none"> - shut off engine, lights and accessories - call controller for instructions - keep master switch off except when using radio
Air Conditioning Not Cooling	7000-7019 7100-7224 7400-7944 (40-51) 9000-9799 (52-64)	<ul style="list-style-type: none"> • make sure fast idle switch is off • make sure all windows and air intakes are closed • make sure defroster/heater temperature control knob is in off or down position • if a/c still not cooling, <ul style="list-style-type: none"> - open roof vents and air intakes - continue in service - call controller at earliest opportunity <p>(continued)</p>

Problem	Series	Procedure
Not Cooling	7000-7019 7100-7224	<ul style="list-style-type: none"> • make sure a/c start switch has been pushed
	7100-7224	<ul style="list-style-type: none"> • open roof vent fans • activate roof vent switch on side console • call controller at earliest opportunity
	1000-1524	<ul style="list-style-type: none"> • make sure air conditioning/heat switch is in correct position • make sure fast idle switch is off • make sure vent/auto switch is in vent position • make sure all windows and air intakes are closed • make sure defroster/heater temperature control knob is in the off or down position • if a/c still not cooling, <ul style="list-style-type: none"> - turn air conditioning/heat switch to off position - leave vent/auto switch in vent position and open all air intakes - continue in service - call controller at earliest opportunity
Too Cold	7000-7019 9000-9799 (52-64)	<ul style="list-style-type: none"> • open roof vents and all air intakes
	7100-7224	<ul style="list-style-type: none"> • open roof vent fans • activate roof vent switch on side console
	1000-1524 7000-7019 7100-7224 7400-7944 (40-51)	<ul style="list-style-type: none"> • move air conditioning/heat switch to off position • open all air intakes • to turn a/c back on again, <ul style="list-style-type: none"> - close all air intakes - make sure a/c was off at least 5 minutes before turning back on

Problem	Series	Procedure
Air Pressure Too Low	All	<ul style="list-style-type: none"> • attempt to raise air pressure <ul style="list-style-type: none"> - curb bus - place shift selector in neutral - apply parking brake - open door control air shutoff valve - turn off all auxiliary air systems (wipers, etc.) - advance engine speed to approximately 1/3 throttle DO NOT RACE ENGINE! • if pressure builds up to 105 lbs., <ul style="list-style-type: none"> - continue in service • if pressure does not build up to 105 lbs., <ul style="list-style-type: none"> - call controller for instructions
Too High Over 135 lbs.	All	<ul style="list-style-type: none"> • listen for the sound of air releasing from the safety valve • if air continues to release, <ul style="list-style-type: none"> - continue in service - call controller at earliest opportunity • if air is not releasing, <ul style="list-style-type: none"> - curb bus - depress brake pedal repeatedly to reduce air pressure to 120 lbs. - continue in service - repeat above steps as needed - call controller at earliest opportunity

Problem	Series	Procedure
Body Broken Window Window Falls Out	All	<ul style="list-style-type: none"> • if due to a 10-83, move to a place of safety • curb bus • place shift selector in neutral • apply parking brake • make sure no pieces of glass are on or near seats • attempt to secure window, if possible • warn passengers away from area • call controller for instructions
Loose or Broken Grab Bars, Seats, Floor-Mounted Housings or Steps	All	<ul style="list-style-type: none"> • if condition presents no danger of injury to passengers, <ul style="list-style-type: none"> - continue in service - call controller at earliest opportunity • if condition presents a danger of injury to passengers, <ul style="list-style-type: none"> - curb bus - place shift selector in neutral - apply parking brake - call controller for instructions
Roof Escape Hatch is Open	7000-7019 7100-7224 7400-7944 (40-51) 9000-9799 (52-64) 9800-9974 1600-1624	<ul style="list-style-type: none"> • while using grab bar for support, stand on passenger seat, reach through roof to hatch door; close it and secure hatch • if hatch is missing and weather is bad, <ul style="list-style-type: none"> - inform passengers that seats are wet and floor is slippery - call controller for instructions • if hatch is missing and weather is good, <ul style="list-style-type: none"> - continue in service

Problem	Series	Procedure
Roof Leaks	All	<ul style="list-style-type: none"> • if leak is minor and there is little inconvenience to passengers, <ul style="list-style-type: none"> - continue in service - warn passengers away from wet areas - call controller at earliest opportunity • if leak is severe, resulting in great inconvenience and a possible safety hazard to passengers, <ul style="list-style-type: none"> - curb bus - place shift selector in neutral - apply parking brake - call controller for instructions
Defective Latches on Exterior or Interior Compartment Doors	All	<ul style="list-style-type: none"> • if the compartment door will not latch correctly but presents little or no hazard to traffic or passengers, <ul style="list-style-type: none"> - continue in service - call controller at earliest opportunity • if a swinging door may result in the possibility of accident or injury to traffic or passengers, <ul style="list-style-type: none"> - curb bus - place shift selector in neutral - apply parking brake - attempt to secure door with materials that may be available such as wire or rope • if this is unsuccessful, <ul style="list-style-type: none"> - call controller for instructions

Problem	Series	Procedure
Brakes Pedal Sticks to Floor	All	<ul style="list-style-type: none"> • curb bus • place shift selector in neutral • apply parking brake • clear debris around pedal and attempt to work loose by hand • if pedal cannot be worked loose or if it sticks repeatedly, <ul style="list-style-type: none"> - call controller for instructions
Brakes Won't Release (all doors are closed)	All	<ul style="list-style-type: none"> • place shift selector in neutral • if parking brake is air-operated, apply and release several times • make sure air pressure is adequate • make sure door control lever is in center position • make sure door master switch is on (series 7000-7019, 7100-7224: door master switch is located in destination sign compartment on right side) • pull rear door emergency knob down and push it back up (series 9300-9799, 9800-9949, 1600-1624: rear door emergency is reset by placing door control handle in rear door position) • make sure rear doors have closed; pull them closed • shut off door master switch and see if brakes release; if they don't, <ul style="list-style-type: none"> - call controller for instructions

Problem	Series	Procedure
Brakes Are Spongy, Grabbing, Noisy or Not Stopping the Bus Effectively	All	<ul style="list-style-type: none"> • curb bus • place shift selector in neutral • apply parking brake • call controller for instructions
Air-Operated Parking Brake Fails to Release	All	<ul style="list-style-type: none"> • make sure door control handle is in center position • make sure air pressure is at least 105 lbs.
	7000-7019 7100-7224 9000-9799 (52-64) 9800-9974 1600-1624	<ul style="list-style-type: none"> • depress brake pedal to the floor and release • locate the metal nut under the black knob on the parking brake housing; if this nut is loose, hand tighten • attempt to release brakes
	9800-9974 1600-1624	<ul style="list-style-type: none"> • if parking brakes apply automatically, push down emergency release and pull up normal release at the same time <ul style="list-style-type: none"> - call controller for instructions
	7000-7019 7100-7224 9000-9799 (52-64) 9800-9974 1600-1624	<ul style="list-style-type: none"> • if brakes still fail to release, <ul style="list-style-type: none"> - call controller for instructions
Hand-Operated Parking Brake Fails to Release	1000-1524 3700-3875 7400-7944 (40-51)	<ul style="list-style-type: none"> • pull handbrake back approximately ½ inch and attempt to squeeze closed • if this fails, <ul style="list-style-type: none"> - call controller for instructions
Defroster Motors Are Not Working	All	<ul style="list-style-type: none"> • make sure defroster switch is on • if visibility is sufficient or if windshield can be cleared by wiping, (continued)

Problem	Series	Procedure
Defroster Motors Are Not Working		<ul style="list-style-type: none"> - continue in service - call controller at earliest opportunity • if visibility is poor and windshield cannot be cleared by wiping, as in frost conditions, <ul style="list-style-type: none"> - curb 'bus - call controller for instructions
Destination Sign Will Not Turn	All	<ul style="list-style-type: none"> • continue in service • announce destination to all boarding passengers • call controller at earliest opportunity
Doors Front Door Won't Open or Close	All	<ul style="list-style-type: none"> • place shift selector in neutral • apply parking brake • make sure door control air shutoff valve is closed • check for required air pressure • check if door control handle is secure and working properly • pull emergency knob down and push it back up • check for an obstruction in the doorway • check if door is binding on bottom step; if so, attempt to free it • check if door can be pushed open or closed by hand • check if door is on track • if door still doesn't work, <ul style="list-style-type: none"> - call controller for instructions
One of the Front Door Panels Won't Open	All	<ul style="list-style-type: none"> • place shift selector in neutral • apply parking brake
	7000-7019 7100-7224	<ul style="list-style-type: none"> • make sure door panel selector is on for panel that won't open <p>(continued)</p>

Problem	Series	Procedure
One of the Front Door Panels Won't Open	All	<ul style="list-style-type: none"> • if door still doesn't work, <ul style="list-style-type: none"> - call controller for instructions
Rear Door Fails to Open	All	<ul style="list-style-type: none"> • check if door control handle is secure and working properly • make sure door master switch is on (series 7000-7019, 7100-7224: door master switch is located in destination sign compartment on right side) • if door still fails to open, <ul style="list-style-type: none"> - continue in service - advise passengers to exit from front door - call controller at earliest opportunity
Rear Door Fails to Close	All	<ul style="list-style-type: none"> • place shift selector in neutral • apply parking brake • turn off door master switch and turn back on again • pull emergency knob down and push it back up (series 9300-9799, 9800-9949, 1600-1624: rear door emergency is reset by placing door control handle in rear door position) • make sure rear door is closed; pull it closed • shut off door master switch and see if brakes release (series 7000-7019, 7100-7224: door master switch is located in destination sign compartment on right side) • if brakes don't release, <ul style="list-style-type: none"> - call controller for instructions

Problem	Series	Procedure
Rear Door Is “Pumping” Open and Closed	7000-7019 7100-7224 9000-9799 (52-64) 9800-9974 1600-1624	<ul style="list-style-type: none"> • place shift selector in neutral • apply parking brake • turn off door master switch (series 7000-7019, 7100-7224: door master switch is located in destination sign compartment on right side) • rotate each touch bar back and forth several times • turn door master switch back on • if problem does not clear, <ul style="list-style-type: none"> - turn door master switch off - push on rear door to ensure that it is locked - if locked, continue in service - instruct passengers to exit from front door - call controller at earliest opportunity - if door does not lock, remain standing and call controller for instructions
Door Control Handle Does Not Work	All	<ul style="list-style-type: none"> • place shift selector in neutral • apply parking brake • check if lever is seated firmly • if there is too much play or if lever can be pulled up, <ul style="list-style-type: none"> - attempt to push handle back down and seat it • if handle still fails to work, <ul style="list-style-type: none"> - call controller for instructions

Problem	Series	Procedure
Rear Door Bell Won't Shut Off (emergency knob pulled or door open)	All	<ul style="list-style-type: none"> • curb bus • place shift selector in neutral • apply parking brake • check for an obstruction in the rear door • pull emergency knob down and push it back up (series 9300-9799, 9800-9949, 1600-1624: rear door emergency is reset by placing door control handle in rear door position) • make sure rear door is closed; pull it closed • turn off door master switch and turn it back on again (series 7000-7019, 7100-7224: door master switch is located in destination sign compartment on right side) • if problem clears with door master switch off, leave it off <ul style="list-style-type: none"> - instruct passengers to exit from the front door - call controller at earliest opportunity • if problem does not clear, <ul style="list-style-type: none"> - call controller for instructions
Rear Door Hung Up on Curb	All	<ul style="list-style-type: none"> • place shift selector in neutral • apply parking brake • call controller for instructions
Engine Won't Start	All	<ul style="list-style-type: none"> • make sure all lights and accessories are off before attempting to start • if so equipped, make sure ignition key is on <p>(continued)</p>

Problem	Series	Procedure
Engine Won't Start		<ul style="list-style-type: none"> • make sure master control switch is in run position • make sure shift selector is in neutral
	7000-7019 7100-7224	<ul style="list-style-type: none"> • in cold weather, activate the cold starting unit
	7000-7019 7100-7224 9800-9974 1600-1624	<ul style="list-style-type: none"> • if necessary, activate the five minute fuel heater
	All	<ul style="list-style-type: none"> • do not engage starter for more than 15 seconds; wait one minute between attempts to start engine • if this is unsuccessful, check for signs of a weak or dead battery, <ul style="list-style-type: none"> - turn on headlights and check for a weak beam - listen for a loud humming sound coming from the radio • call controller for instructions; report your findings
Engine Won't Shut Off	1000-1524 3700-3875 7000-7019 7100-7224 7400-7944 (40-51) 9000-9799 (52-64)	<ul style="list-style-type: none"> • if it is necessary to shut off engine (overheat, low oil, fire) and you are unable to shut down normally, <ul style="list-style-type: none"> - curb bus - place shift selector in neutral - apply parking brake - activate emergency stop switch (series 1600-1624, 9800-9974 have no emergency stop switch; supervisor must shut engine off from the rear of bus) - call controller for instructions

Problem	Series	Procedure
Excessive Smoke Coming From Engine Compartment	1000-1524 3700-3875 7400-7944 (40-51) 9000-9799 (52-64) 9800-9974 1600-1624	<ul style="list-style-type: none"> • curb bus • place shift selector in neutral • apply parking brake • shut off engine, lights and accessories • if rear engine compartment door is not too hot to touch, open it and check for a fire; if one exists, follow procedures in S.O.P. 428, <i>Fire Protection, Bus</i> • if there is no fire, <ul style="list-style-type: none"> - call controller for instructions - keep master switch off except when using radio
	7000-7019 7100-7224	<ul style="list-style-type: none"> • curb bus • place shift selector in neutral • apply parking brake • shut off engine, lights and accessories • call controller for instructions <ul style="list-style-type: none"> - keep master switch off except when using radio • if smoke fills bus, stand outside and wait for assistance
Excessive Smoke Coming From Exhaust	All	<ul style="list-style-type: none"> • continue in service • call controller at earliest opportunity
Loud Noises Coming From Engine Compartment	All	<ul style="list-style-type: none"> • curb bus • place shift selector in neutral • apply parking brake
		(continued)

Problem	Series	Procedure
Loud Noises Coming From Engine Compartment		<ul style="list-style-type: none"> • shut off engine, lights and accessories • call controller for instructions <ul style="list-style-type: none"> - keep master switch off except when using radio
Fuel Leak	All	<ul style="list-style-type: none"> • curb bus • place shift selector in neutral • apply parking brake • check if fuel cap is loose or missing; if necessary, adjust cap • if problem still exists, call controller for instructions
Fumes In Bus	All	<ul style="list-style-type: none"> • curb bus • place shift selector in neutral • apply parking brake • shut off engine, lights and accessories • place passengers on follower's bus • call controller for instructions <ul style="list-style-type: none"> - keep master switch off except when using radio • WAIT OUTSIDE OF BUS UNTIL SUPERVISOR ARRIVES • CAUTION! BATTERY FUMES ARE TOXIC AND EXTREMELY FLAMMABLE!
Heat No Heat in Bus	3700-3875	<ul style="list-style-type: none"> • make sure blower switch is in heat position (continued)

Problem	Series	Procedure
No Heat in Bus	1000-1524 7400-7944 (40-51)	<ul style="list-style-type: none"> • make sure vent/auto switch is in auto position • make sure air conditioning/heat switch is in heat position
	7000-7019 7100-7224	<ul style="list-style-type: none"> • make sure engine fan switch is off
	7000-7019 7100-7224 9800-9974 1600-1624	<ul style="list-style-type: none"> • make sure temperature control levers are in warm position and that recirculated air is being used • make sure all windows and air intakes are closed • make sure defroster/heater temperature control knob is in up or warm position • if bus is still cold after making one trip, <ul style="list-style-type: none"> - call controller at earliest opportunity
Horn Does Not Work	All	<ul style="list-style-type: none"> • continue in service
Sounds Continuously	All	<ul style="list-style-type: none"> • curb bus at a suitable location (not a hospital or school zone) • place shift selector in neutral • apply parking brake • call controller for instructions
Interlock Rear Door Interlock Not Working	All	<ul style="list-style-type: none"> • remain standing • place shift selector in neutral • apply parking brake (continued)

Problem	Series	Procedure
Rear Door Interlock Not Working		<ul style="list-style-type: none"> • make sure door master switch is on or in normal position (series 7000-7019, 7100-7224: door master switch is located in the destination sign compartment on the right side) • if door master switch is on and problem still exists, <ul style="list-style-type: none"> - shut door master switch off - push on rear door to ensure that it is locked - if locked, continue in service - instruct passengers to exit from front door - call controller at earliest opportunity - if door does not lock, remain standing and call controller for instructions
Bus Cannot Be Accelerated After Rear Door Closes		<ul style="list-style-type: none"> • see Brakes Won't Release, page 6
Lights Dome Lights Don't Work	All	<ul style="list-style-type: none"> • in buses so equipped, make sure dome lights switch is on or the master switch is in the lights or night position • to ensure contact, turn master switch from run to lights or night several times • if interior lights are not required, continue in service <p>(continued)</p>

Problem	Series	Procedure
Dome Lights Don't Work		<ul style="list-style-type: none"> • if interior lights are not required but bus will be out after dark, <ul style="list-style-type: none"> - continue in service - call controller at earliest opportunity • if interior lights are required, <ul style="list-style-type: none"> - curb bus - place shift selector in neutral - apply parking brake - call controller for instructions
Headlights Don't Work (after dark)	All	<ul style="list-style-type: none"> • to ensure contact, turn master switch from run to lights or night several times • if this doesn't work, step on headlight dimmer switch <ul style="list-style-type: none"> - if headlights come on, continue in service - call controller at earliest opportunity • if headlights don't come on, <ul style="list-style-type: none"> - curb bus - place shift selector in neutral - apply parking brake - turn on emergency flashers - call controller for instructions
Marker Lights, Rear Brake Lights or Tail- lights Are Not Working	All	<ul style="list-style-type: none"> • to ensure contact, turn master switch from run to lights or night several times <p>(continued)</p>

Problem	Series	Procedure
Marker Lights, etc. Not Working		<ul style="list-style-type: none"> • if this doesn't work, activate emergency flashers • continue in service during daylight hours • if possible, use hand signals to indicate braking • call controller at earliest opportunity • if after dark, <ul style="list-style-type: none"> - curb bus - place shift selector in neutral - apply parking brake - call controller for instructions
Turn Signals Don't Work	All	<ul style="list-style-type: none"> • continue in service • if possible, use hand signals
Mirrors Left Side Mirror is Broken	All	<ul style="list-style-type: none"> • curb bus • place shift selector in neutral • apply parking brake • call controller for instructions
Rear View or Right Side Mirror is Broken	All	<ul style="list-style-type: none"> • continue in service • call controller at earliest opportunity
Passenger Signal Buzzer Won't Shut Off	All	<ul style="list-style-type: none"> • attempt to release cord or button • locate bell cord switch behind operator's seat <ul style="list-style-type: none"> - attempt to push switch back to normal position • if you are not successful, <ul style="list-style-type: none"> - with buses so equipped, turn off buzzer switch and continue in service - make announcements that buzzer is out of order, call all stops as usual and watch for passengers wanting to alight <p>(continued)</p>

Problem	Series	Procedure
Won't Shut Off		<ul style="list-style-type: none"> - if bus is not pulling in, call controller at earliest opportunity • if there is no switch to turn buzzer off, <ul style="list-style-type: none"> - continue in service - call controller at earliest opportunity
Doesn't Work	All	<ul style="list-style-type: none"> • in buses so equipped, make sure switch is on • continue in service, making announcements that buzzer is out of order, calling all stops and watching for passengers wanting to alight • if bus is not pulling in, call controller at earliest opportunity
Radio Volume is Too Loud on PA System Channel Lights Are Out When Ignition is On	All	<ul style="list-style-type: none"> • continue in service
Control Head Antenna, Handset or Thumbwheels Are Damaged False Call Signals Are Received Blue Transmit Light Remains On	All	<ul style="list-style-type: none"> • continue in service • call controller at earliest opportunity
Handset is Hot or Smoke is Coming From Radio	All	<ul style="list-style-type: none"> • curb bus • place shift selector in neutral (continued)

Problem	Series	Procedure
Handset is Hot or Smoke is Coming From Radio		<ul style="list-style-type: none"> • apply parking brake • shut off engine, lights and accessories • remove ignition key and take with you • call controller from another bus, a CTA or public telephone for instructions
Suspension Body Tilts or Rubs on Tires	All	<ul style="list-style-type: none"> • curb bus • place shift selector in neutral • apply parking brake • make sure air pressure is adequate • open door control air shutoff valve • advance engine speed to approximately 1/3 throttle; DO NOT RACE ENGINE! • if bus body levels off, close door control air shutoff valve and continue in service • if bus body does not level off, <ul style="list-style-type: none"> - estimate if there is 3-4 inches of clearance between the body and the tires - call controller for instructions and report your findings
Defective Shocks	All	<ul style="list-style-type: none"> • continue in service • call controller at earliest opportunity

Problem	Series	Procedure
Tires Flat Tire(s)	All	<ul style="list-style-type: none"> • curb bus • place shift selector in neutral • apply parking brake • make visual inspection to determine which tire is flat • call controller for instructions
Transmission Bus Pulls Slowly	All	<ul style="list-style-type: none"> • make sure parking brake is released • make sure fast idle switch is off • continue in service • call controller at earliest opportunity
Bus Won't Pull	All	<ul style="list-style-type: none"> • make sure bus is in gear • make sure parking brake is released • make sure door control handle is in center position • if all of the above are okay, <ul style="list-style-type: none"> - place shift selector in neutral - apply parking brake - call controller for instructions
Bus Won't Shift Into High Gear	All	<ul style="list-style-type: none"> • make sure master switch is in full run, lights or night position • check for adequate air pressure • make sure fast idle switch is off • if all of the above are okay, <ul style="list-style-type: none"> - continue in LOCAL service only (express and expressway runs must call controller for permission to run local) - all other runs, call controller at earliest opportunity

Problem	Series	Procedure
Bus Won't Go In Gear	All	<ul style="list-style-type: none"> • check for adequate air pressure • make sure fast idle switch is off • check for signs of a weak battery (see Engine Won't Start, pages 11 and 12) • move the selector switch from forward to reverse several times
	7100-7224 7400-7944 (40-51) 9000-9799 (52-64)	<ul style="list-style-type: none"> • brake pedal must be depressed to the floor to put these buses in gear • if bus still won't go in gear, <ul style="list-style-type: none"> - apply parking brake - call controller for instructions
Bus Jumps Out of Gear	All	<ul style="list-style-type: none"> • check for adequate air pressure • if air pressure is okay, put back in gear and continue in service • call controller at earliest opportunity • if bus jumps out of gear every few feet, <ul style="list-style-type: none"> - check if generator light is on (if light is not on, turn on defrosters or heater; if they don't run, generator is not charging) - if generator is not charging, turn off all lights and auxiliary electrical systems - apply parking brake - call controller for instructions

Problem	Series	Procedure
Bus Is Stuck in Gear (won't go in neutral or reverse)	All	<ul style="list-style-type: none"> • apply parking brake • keep foot on brake • call controller for instructions • if you must leave bus in an emergency, <ul style="list-style-type: none"> - shut off engine, lights and accessories - remove ignition key and take with you - keep master switch off except when using radio
Trouble Lights/Alarms Hot Engine Light Comes On	All	<ul style="list-style-type: none"> • curb bus • place shift selector in neutral • apply parking brake • shut off engine, lights and accessories • series 7000-7019, 7100-7224: turn on engine fan and leave it on • call controller for instructions <ul style="list-style-type: none"> - keep master switch off except when using radio
	7000-7019	<ul style="list-style-type: none"> • when engine temp light and alarm come on, operator has 60 seconds to park or curb bus before engine shuts off automatically. Override switch must be activated to restart engine allowing 60 more seconds to move bus from traffic. See S.O.P. 8008, <i>Automatic Engine Shutdown System</i>. <p>THIS IS TO BE USED ONLY IN AN EMERGENCY TO CURB BUS OR CLEAR INTERSECTION!</p>

Problem	Series	Procedure
Low Oil Light Comes On	All	<ul style="list-style-type: none"> • curb bus • place shift selector in neutral • apply parking brake • shut off engine, lights and accessories • call controller for instructions <ul style="list-style-type: none"> - keep master switch off except when using radio
	7000-7019	<ul style="list-style-type: none"> • when engine temp light and alarm come on, operator has 60 seconds to park or curb bus before engine shuts off automatically. Override switch must be activated to restart engine allowing 60 more seconds to move bus from traffic. See S.O.P. 8008, <i>Automatic Engine Shutdown System</i> THIS IS TO BE USED ONLY IN AN EMERGENCY TO CURB BUS OR CLEAR INTERSECTION!
Low Air Pressure Light Comes On		<ul style="list-style-type: none"> • see Air Pressure Too Low, page 3
Generator Light Comes On	All	<ul style="list-style-type: none"> • curb bus • apply parking brake • keep foot on brake - do not take bus out of gear or shut engine off unless operator must leave in an emergency • turn off all lights and accessories • call controller for instructions

Problem	Series	Procedure
Rear Door Alarm/ Light On		<ul style="list-style-type: none"> • see Rear Door Bell Won't Shut Off, page 11
Trouble Alarm on Panel With No Indicating Light	All	<ul style="list-style-type: none"> • curb bus • place shift selector in neutral • apply parking brake • check for adequate air pressure • pull rear door emergency knob down and push it back up (series 9300-9799, 9800-9949, 1600-1624: rear door emergency is reset by placing door control handle in rear door position) • if problem still exists, <ul style="list-style-type: none"> - shut off engine, lights and accessories - call controller for instructions - keep master switch off except when using radio
Windshield Wipers Don't Work	All	<ul style="list-style-type: none"> • with wiper control in off position, attempt to loosen wipers by moving them back and forth by hand • if this is unsuccessful and visibility is sufficient, <ul style="list-style-type: none"> - continue in service - call controller at earliest opportunity • if visibility is poor, <ul style="list-style-type: none"> - curb bus - place shift selector in neutral - apply parking brake - call controller for instructions

Problem	Series	Procedure
Move Slowly	All	<ul style="list-style-type: none"> • with wiper control in the off position, attempt to loosen wipers by moving them back and forth by hand • turn off right wiper and left side pressure will increase • if this is unsuccessful and if visibility is sufficient, <ul style="list-style-type: none"> - continue in service - call controller at earliest opportunity • if visibility is poor, <ul style="list-style-type: none"> - curb bus - place shift selector in neutral - apply parking brake - call controller for instructions
Special Instructions If a Jumper Wire Is Attached to Your Bus	1000-1524 3700-3875 7400-7944 (40-51) 9000-9799 (52-64)	<ul style="list-style-type: none"> • pull directly in to the garage • vault the bus • if the bus is not met at the vaults by a repairman who must personally drive the bus from the vault area, <ul style="list-style-type: none"> - notify the supervisor or box puller that you have a jumper wire on your bus and - park the bus as instructed • turn the engine off and remove the key • paste a "jumper wire attached" sign on the windshield directly above the steering wheel (continued)

Problem	Series	Procedure
If a Jumper Wire Is Attached to Your Bus		<ul style="list-style-type: none"> •take the key to the foreman's office to report the location and condition of the bus <p>WARNING: a bus with a jumper wire attached remains in gear at all times. It must never be left unattended with the engine running!</p>

