GILLIG PHANTOM

Central Puget Sound RTA

Chassis Numbers: 111748 – 111749
Coach Numbers: 9090 – 9091

DRIVER'S HANDBOOK

Table of Contents

INTRODUCTION

WELCOME TO THE GILLIG PHANTOM

This handbook was written to acquaint you, the driver, with the various features and operating techniques of this vehicle. Keep in mind that this manual is intended as a supplement to your employer's driver training program, not as a substitute for it.

Study this manual thoroughly before you try to drive the bus. Some of the features and procedures described here may not be your direct responsibility, but you will need to have a complete understanding of the bus and all its systems in order to drive it safely.

Some of the special equipment installed in your bus (such as audiovisual devices, P.A. systems, 2-way radios, etc.) may not be covered by this manual. Any questions about this equipment should be directed to your supervisor or your company's driver training expert.

This manual consists of four chapters, each devoted to a specific area of vehicle operation. Chapter 1 – *Driver's Compartment* covers the driver's controls and accessories. Chapter 2 – *Passenger Area* deals with emergency exits and equipment, wheelchair seating, and other features of the Phantom's interior. Chapter 3 – *Bus Operation* describes the procedures used during bus startup and operation. Chapter 4 – *Lift Operation* covers the operation of the special Lift-U wheelchair lift used to ease access for disabled passengers.

The Gillig Phantom is the result of Gillig's century of transportation and coachbuilding expertise. The Phantom is a tough and reliable workhorse, designed to meet your transit needs of today and beyond.

NOTICES, CAUTIONS, AND WARNINGS

When reading this manual, be sure to pay careful attention to the **WARNING**, ***CAUTION***, and *NOTICE* boxes, which can be found in all sections (see below for examples). It is your responsibility to learn the instructions found in these boxes; failure to do so may result in damage to the bus or even serious injury to you and your passengers.

NOTICE

Describes an essential procedure for proper bus operation.

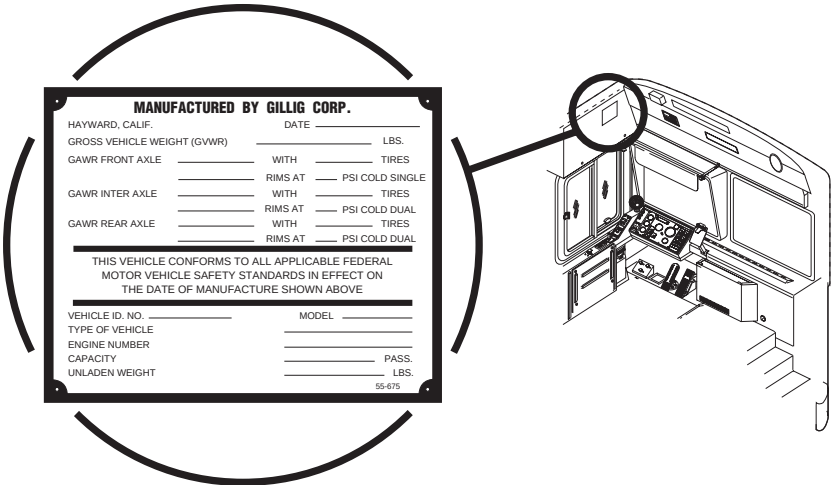
CAUTION

Cautions the driver of hazards which could damage or destroy the bus or its components.

WARNING

Warns the driver of dangers which could cause injury or death to the driver, passengers, or others.

MAXIMUM WEIGHTS



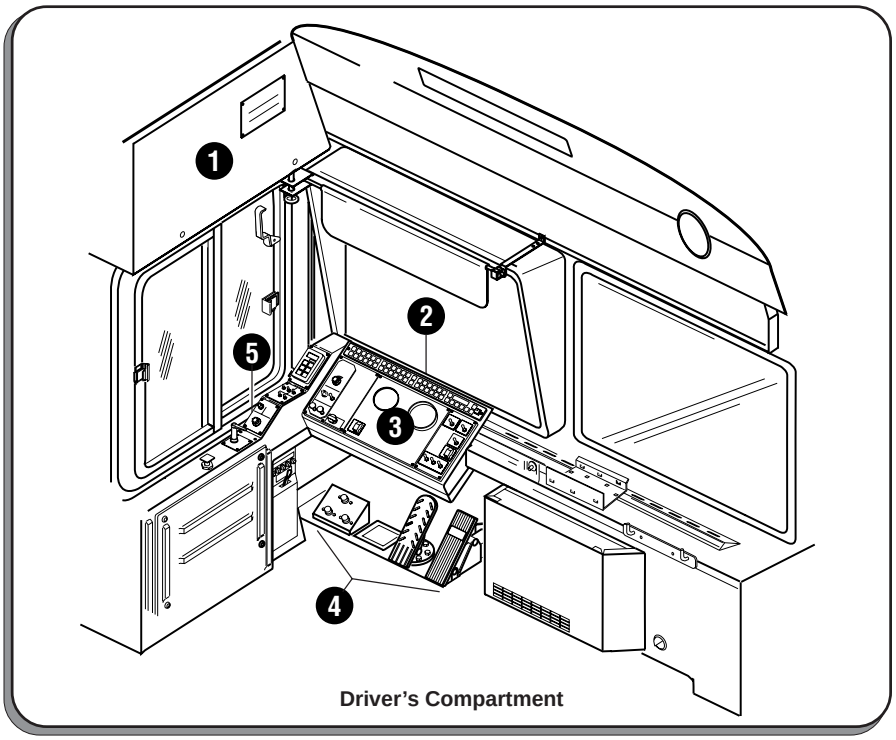
VIN Tag Location

The Gillig Phantom is designed to operate safely at or below specific gross vehicle weight (GVW) figures. GVW figures are displayed on the VIN tag, which can be found on the Electrical Component Compartment door above the driver's seat. Do not operate the bus if gross weight exceeds these figures.

Any changes or modifications to this vehicle without the written permission of Gillig Corporation, regardless of the intended purpose, void Gillig Corporation's warranty obligation. This Driver's Handbook and the accompanying Service Manual specifically cover permissible and recommended adjustments to the vehicle's equipment.

NOTES

CHAPTER 1– DRIVER'S COMPARTMENT



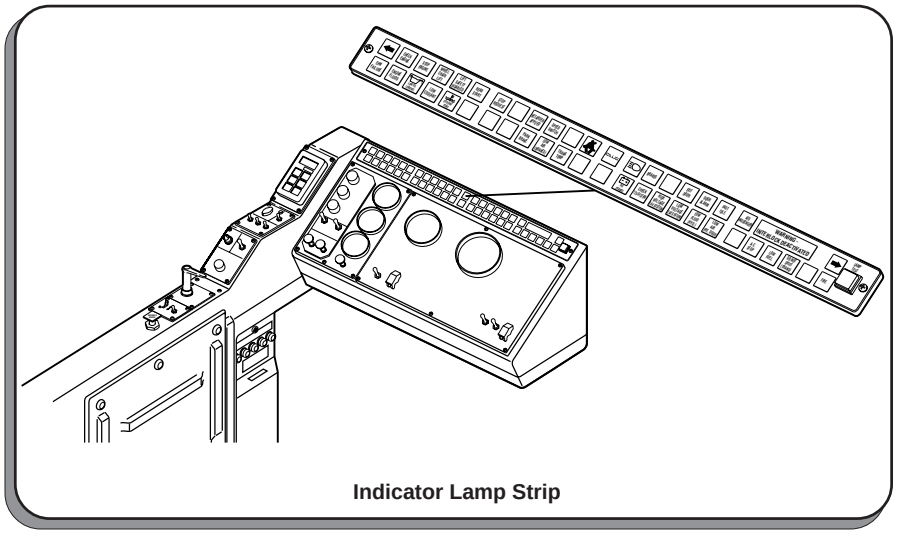
Driver's Compartment

Welcome to your new "office" – the Phantom bus driver's compartment. Take a look around and familiarize yourself with its features, including:

1. **Electrical Component Compartment**
2. **Indicator Lamp Strip**
3. **Dash Panels**
4. **Floor Mounted Controls**
5. **Driver's Console**

Continue reading this chapter for detailed descriptions of these and other features.

INDICATOR LAMP STRIP



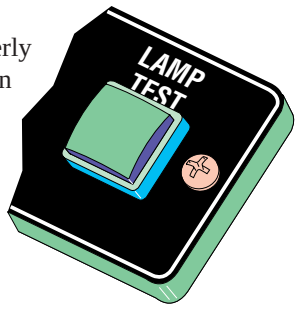
Indicator Lamp Strip

Located at the top of the instrument panel and easily visible from the driver's seat, the Indicator Lamp Strip features two rows of lights which inform the driver of important vehicle conditions.

Each indicator lamp has a colored plastic lens and an identifying symbol or words which become visible when the bulb lights. Some indicator lights have buzzers, alarms, or other audible signals connected to them.

Some indicator lamps come on during normal bus operation; others indicate mechanical problems. A few lights warn you about dangerous situations. For this reason, all drivers *must* learn the meaning of each of the indicator lamps before driving the bus. ***Never*** ignore an indicator lamp.

Indicator Lamp Test



Make sure that all the indicator lamps are working properly by using the "Lamp Test" button. The ignition must be on to use this button. To test the lamps, push and hold the "Lamp Test" button (located on the far right side of the Indicator Lamp Strip). All indicator lamps should light; any that remain dark require immediate service. Keep in mind that some lights may come on as a test for a few seconds after the ignition is turned on.

WARNING

Failure to detect a problem or malfunction because of a bad indicator lamp bulb could result in damage to the bus or injury to the passengers! Always test the indicator lamps before driving.

Alarms

Some indicator lamps are connected to buzzers or alarms. In some cases, alarms alert the driver to extremely dangerous situations; in others they serve as reminders during normal operation.

Individual Indicator Lamps

Some of the following indicator lamps are active only with certain optional features which your bus may or may not have. Check with your supervisor to learn which lamps are functional on your bus.

A/C STOP A/C Stop

Indicates an air conditioning problem. This lamp should blink a few times when starting the air conditioning system. If the A/C Stop lamp stays on, turn off the air conditioning and report the problem to your supervisor.

AID PASSENGER Aid Passenger

This lamp indicates that a passenger in the wheelchair seating area has requested a stop using the touch tape and will require assistance in exiting the bus.

ANTILOCK (ABS) Antilock (ABS)

The Anti-Lock Braking System (ABS) prevents wheel lockup and skidding on slippery road surfaces. The "Antilock" lamp indicates a problem with the ABS system. This light should come on briefly when the ignition is switched on; if you see it at any other time, contact your supervisor. This light is also used by service technicians to indicate blink codes.

BIKE RACK DEPLOYED Bike Rack Deployed

This lamp indicates that a bicycle or bicycles are loaded in the bicycle rack.

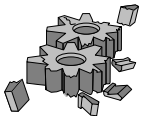
BRAKES Brakes

The "Brakes" indicator lamp lights when the service brakes are used or when the brake interlock system is activated (by opening the door, kneeling the bus, or operating the passenger ramp).

CHECK (12V SYSTEM)

Check (12V System)

This lamp indicates a problem with the 12-volt electrical system. The bus should be checked by mechanics as soon as possible if this lamp comes on.



CAUTION

Continued operation of the bus after the "Check (12V System)" lamp comes on can cause serious damage to the electrical system.

CHECK ENGINE

Check Engine

This lamp indicates that the engine's computer has detected a serious problem. Notify your supervisor immediately if this lamp comes on.

CHECK TRANS

Check Trans

This lamp comes on when the transmission's computer detects a serious problem. Shifts may be restricted if this happens. For example, the transmission might not shift from a forward gear to reverse, or from a low gear to a high one. If this lamp appears and stays lit while driving, the bus should be checked by service personnel immediately. *Note: This lamp should come on for a few seconds at startup; this test indicates that the transmission's computer is working properly.*

COMM FAULT

Comm Fault

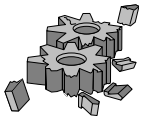
This lamp indicates a communication problem exists between the I/O multiplexing modules, which control various functions on the bus, such as doors, signal lights, etc.

WARNING

If you see this light, stop the bus and call maintenance immediately.

Coolant Temp

This lamp indicates that the engine coolant is dangerously hot. If this lamp comes on, safely park the bus, shut down the engine, and contact service personnel.



CAUTION

Continued operation of the bus after the "Coolant Temp" lamp comes on can result in severe engine damage.

WARNING

High coolant temperature may cause the engine to automatically shut down. Refer to the "Automatic Engine Shutdown" section of Chapter 3– *Bus Operation* for emergency shutdown procedures.

Door Alarm

This lamp warns the driver if someone pushes or pulls on the closed bus door, or gets caught between the closing door edges.

WARNING

Stop the bus *immediately* if the "Door Alarm" lamp lights when pulling away from a stop. This could indicate that a passenger is caught in the door and may be injured or killed!

Engine Maintenance

This light, functional on buses with Cummins engines, indicates that a pre-programmed period of time has elapsed and that the engine is due for maintenance. Notify your supervisor if this lamp lights.

Exit Door

The "Exit Door" lamp comes on when the door is open or unlocked.

Fasten Seat Belts

This lamp serves as a safety reminder by lighting for a few seconds after engine startup .

Fast Idle

This lamp indicates that Fast Idle engine speed has been selected using the switch on the Driver's Console. The bus cannot be driven with Fast Idle activated.

Fire

When sensors detect dangerous temperatures in the engine compartment, the "Fire" warning lamp activates and the fire alarm bell sounds.

WARNING

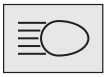
If the Fire warning lamp and bell activate, you must IMMEDIATELY

1. **Stop the bus in a safe place.**
2. **Shut down the engine and apply the parking brake.**
3. **Open the door. Side windows can also be used as emergency exits. DO NOT TRY TO OPERATE THE PASSENGER RAMP!**
4. **Evacuate all passengers. Physically disabled passengers should be carried off.**
5. **Extinguish the fire (if possible) with the fire extinguisher. Be very careful when opening engine compartment doors.**
6. **Shut off electrical power using the Battery Disconnect Switch, located in the battery compartment (see Chapter 3– *Bus Operation*).**

HEATED MIRROR

Heated Mirror

This lamp indicates that the heating elements in the outside mirrors are on. The mirror heaters will turn off automatically after a factory preset period of time.



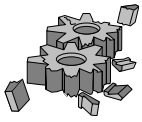
High Beams

This lamp indicates that the high beam headlights, controlled by the floor-mounted dimmer switch, are on.

HIGH VOLTAGE (24V SYSTEM)

High Voltage (24V System)

This lamp warns of problems involving the 24-volt electrical system. If this lamp comes on, park and shut down the bus immediately and have the electrical system checked by qualified service personnel.



CAUTION

Continued operation of the vehicle after the "High Voltage (24V System)" lamp is lit can cause battery fluid boiling, electrical system damage, and fires.

KNEEL

Kneel

This lamp comes on with activation of the kneeling system (in buses equipped with this option). It remains on until the bus has been returned to normal ride height and the kneeling system has been deactivated.

LIFT SAFETY DISABLED

Lift Safety Disabled

When this lamp is lit, it indicates that the Lift-U Sensitive Edge switch is in the "OVERRIDE" position, which disables the sensitive-edge safety feature of the wheelchair lift.

WARNING

The Sensitive Edge Override Switch should NEVER be placed in the "OVERRIDE" position when a passenger is on the lift!

LOW AIR (BRAKES)

Low Air (Brakes)

This lamp is activated whenever air service brake pressure drops below 65 psi. Park the bus **immediately** if this lamp appears.

WARNING

The bus must be parked IMMEDIATELY if the "Low Air (Brakes)" lamp lights or the Low Air Pressure Alarm sounds. Brake failure may occur if you ignore these warnings!

LOW AIR (FRT. DOOR)

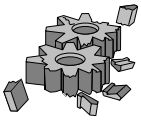
Low Air (Frt. Door)

This lamp indicates that the front door mechanism is not receiving enough compressed air. If this lamp comes on, make sure the Door Air switch (located to your left on the Driver's Console) is in the "NORMAL" position; contact service personnel if this does not solve the problem.

LOW COOLANT

Low Coolant

This lamp indicates a dangerously low engine coolant level. If you see this lamp come on, safely park the bus, shut down the engine, and contact service personnel.



CAUTION

Continued operation of the bus after the "Low Coolant" lamp comes on can result in severe engine damage.

LOW FLUID (HYD)

Low Fluid (Hyd)

This lamp indicates a low fluid level in the hydraulic system. If this lamp comes on while the engine is running, **immediately** park the bus and shut down the engine.

WARNING

Loss of hydraulic fluid can result in steering failure or engine overheating; leaking fluid is very flammable and can cause a fire. DO NOT operate a bus with low hydraulic fluid– park and shut it down immediately and contact service personnel for assistance.

LOW FLUID (TRANS.)

Low Fluid (Trans)

This lamp indicates a low fluid level in the transmission. If this light comes on, contact service personnel immediately.

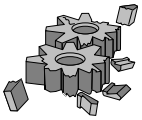
LOW FUEL

Low Fuel

This lamp indicates that the fuel tank is less than 10% full.

Low Oil (Engine)

If the engine's oil pressure drops too low, this lamp will come on and a buzzer will sound. If this happens, pull the bus over to a safe parking spot and shut down the engine *immediately!*

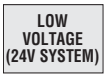


CAUTION

Continued operation of the bus after the "Low Oil (Engine)" lamp comes on can result in severe engine damage.

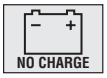
WARNING

Low oil pressure may cause the engine to automatically shut down. Refer to the "Automatic Engine Shutdown" section of Chapter 3–*Bus Operation* for emergency shutdown procedures.



Low Voltage (24V System)

This lamp indicates that less than a 25% charge remains in the batteries. If the "No Charge" lamp on the indicator strip is also on, a charging failure has occurred. At that point the bus is running on battery power only and should be returned to the service facility for repairs.



No Charge

This lamp is activated when the alternator fails to charge, which means the bus will soon have dead batteries. Call your supervisor for instructions if you see the "No Charge" lamp.

NOTICE

Continued operation of the bus after the "Low Voltage (24V System)" and "No Charge" indicator lamps are lit may result in the complete discharge of batteries and engine failure.

PARK BRAKE

Park Brake

This lamp indicates that the parking brake is applied.

REAR IGNIITION

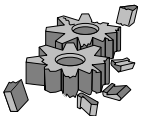
Rear Ignition

This lamp indicates that the engine was started from the rear engine compartment. The bus cannot be driven when started in this way; to drive the bus, shut it down from the rear and restart it from the driver's seat.

RETARDER APPLIED

Retarder Applied

The "Retarder Applied" lamp comes on when the Retarder is in operation. If this lamp does not come on when slowing down or if it remains on during acceleration, a malfunction which requires service has occurred.



CAUTION

The Retarder should be switched off when slippery or hazardous road conditions are encountered.

RETARDER DISABLED

Retarder Disabled

The "Retarder Disabled" lamp remains lit whenever the retarder has been switched off.

SPEED SWITCH

Speed Switch

This lamp comes on when bus slows to 3 mph or below. Speeds above 3 mph automatically disable the kneeling and brake interlock systems, door control, fast idle, and passenger ramp functions.

STARTER

Starter

This lamp should light **only** when the starter motor is actually cranking. A "Starter" lamp which remains lit after the "Engine Start" button is released may indicate a "runaway" starter motor. If this happens, you should **immediately** shut down the engine and disconnect the batteries using the Battery Cutoff Switch. This switch can be found by opening the battery access door (see Chapter 3 – *Bus Operation*) using a "T"-handle key tool. The switch is located in the front part of the battery compartment.

WARNING

A runaway starter motor can overheat and start a fire. Power to the starter motor must be turned off using the Battery Cutoff Switch if the "Starter" lamp indicates a problem.

STEPWELL HEATER

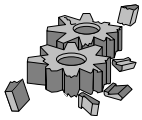
Stepwell Heater

The "Stepwell Heater" lamp comes on when the stepwell heater is in operation.

STOP ENGINE

Stop Engine

The "Stop Engine" lamp comes on whenever the engine's computer finds a very serious problem (low oil pressure, high coolant temperature, low coolant level, etc.). When this happens, you have only 30 seconds to park the bus before automatic engine shutdown. Refer to the "Automatic Engine Shutdown" section of Chapter 3– *Bus Operation* for instructions on postponing automatic shutdown using the Stop Engine Override Switch.



CAUTION

Using the Stop Engine Override switch to postpone an automatic engine shutdown should be done only when necessary to get the bus off the road and into a safe parking location. Serious engine damage may result from overriding an engine shutdown.

Stop Request

This lamp indicates that a passenger has requested a stop using the stop request cable or touch tape.

Threshold Heater

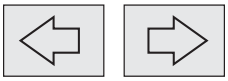
This lamp indicates that the Warm Welcome heated mat is turned on.

Traction Control

This lamp indicates that the Traction Control system, an option that works with the ABS (automatic braking system), is working. When you take off on a slippery surface, the Traction Control system takes over the throttle or sends power to whichever rear wheel is not spinning. When the rear wheels slip or lose traction during acceleration, gently back off on the throttle.

Trans Temp

This lamp warns the driver when the transmission overheats. If this happens, park the bus immediately and contact your supervisor. *Note: In some cases, using the retarder to slow the bus on long downhill grades can cause the transmission to overheat. If this happens, switch off the retarder and use the brakes to slow the bus. If this does not solve the transmission overheating problem, safely park the bus and contact your supervisor.*



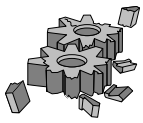
Turn Indicators

Separate indicators show activation of left or right turn signals; both lamps flash when the hazard lights are used.

VOLTAGE BALANCE

Voltage Balance

This lamp indicates a problem with the 12-volt electrical system. The bus should be checked by mechanics as soon as possible if this lamp comes on.



CAUTION

Continued operation of the bus after the "Voltage Balance" lamp comes on can cause serious damage to the electrical system.

WAIT TO START

Wait To Start

This lamp indicates that the engine's pre-starting sequence is underway. Wait until this lamp goes out before you try to start the engine.

WARNING

INTERLOCK DEACTIVATED

Warning- Interlock Deactivated

This lamp warns that the Door/Master Interlock Switch (located in the overhead Electrical Component Compartment) is in the "OVERRIDE" position, which means that the safety interlock system is turned off. In this situation, the bus can move unexpectedly, even if a door is open or the ramp is operating. Do not operate the bus with this indicator lamp on unless you have permission to do so from your supervisor!

WARNING

Bus operation is much more dangerous with the Interlock System deactivated! Always get your supervisor's permission before touching the Override switch in the Electrical Component Compartment.

WHEEL CHAIR LIFT

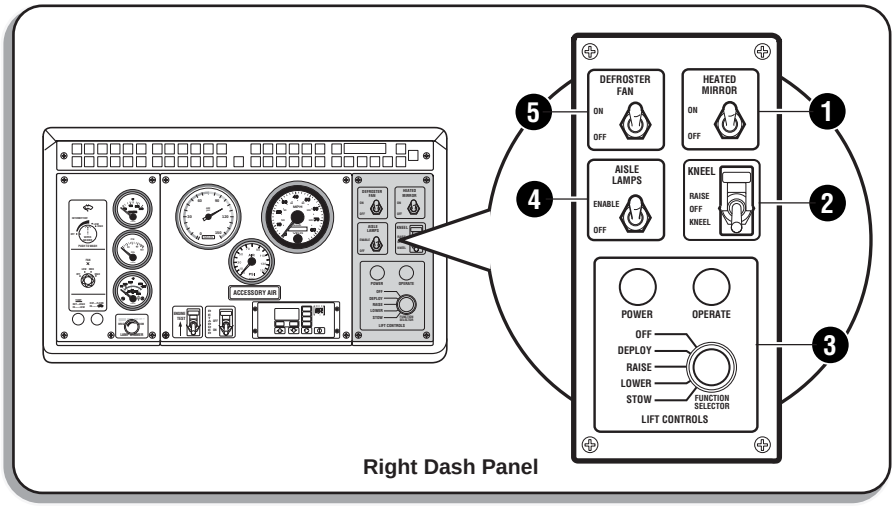
Wheelchair Lift

This lamp indicates that the Lift Control "POWER" Switch (located on the Right Dash Panel) has been activated. The bus cannot be moved when this lamp is on (unless the Door/Master Interlock Override Switch is in the "OVERRIDE" position).

DASH PANELS

The dash panels are located in front of the driver and contain switches and gauges designed to aid the driver in controlling the vehicle. There are three individual dash panels. Read the following sections for detailed descriptions of the switches, gauges, and controls found on these panels.

Right Dash Panel

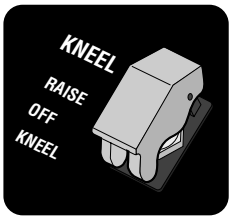


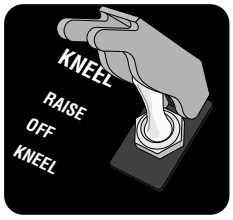
Right Dash Panel

❶ Heated Mirror

The heating element in the outside rearview mirror can be switched on to reduce icing and fogging in cold weather conditions. A timer shuts off the heating element after a set time period.

❷ Kneel

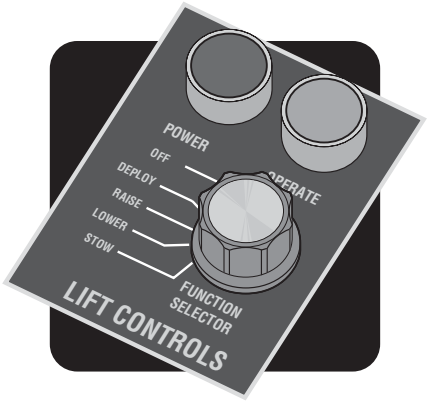




The kneeling system lowers the front of the bus about 3" below normal ride height to make passenger loading easier. In addition, an "over-raise" feature lets you raise the front of the bus to clear obstacles or speed bumps. To make the bus kneel, raise the toggle guard on the switch and hold the toggle in the "KNEEL" position until the bus drops to the correct height. When the bus kneels, the interlock system disables the throttle and applies the brakes. To raise the bus back to its normal ride height, push the toggle switch to the "RAISE" position and release it immediately. To use the over-raise feature, push and hold the toggle in the "RAISE" position until the bus reaches the desired height. Once the toggle is released, the front end will slowly drop back down to the normal ride height.

❸ Lift Controls

These switches control the operation of the wheelchair lift. Refer to Chapter 4 – *Lift Operation* for lift instructions. The "Power" switch and the "Function Selector" switch should be turned "OFF" when the lift is not in use.

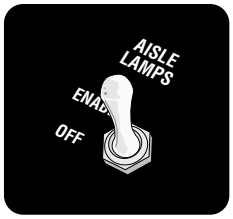


WARNING

NEVER turn the "Function Selector" switch to "Stow" when a passenger is on the lift platform! Stowage of an occupied lift could injure or kill your passenger!

❹ Aisle Lamps

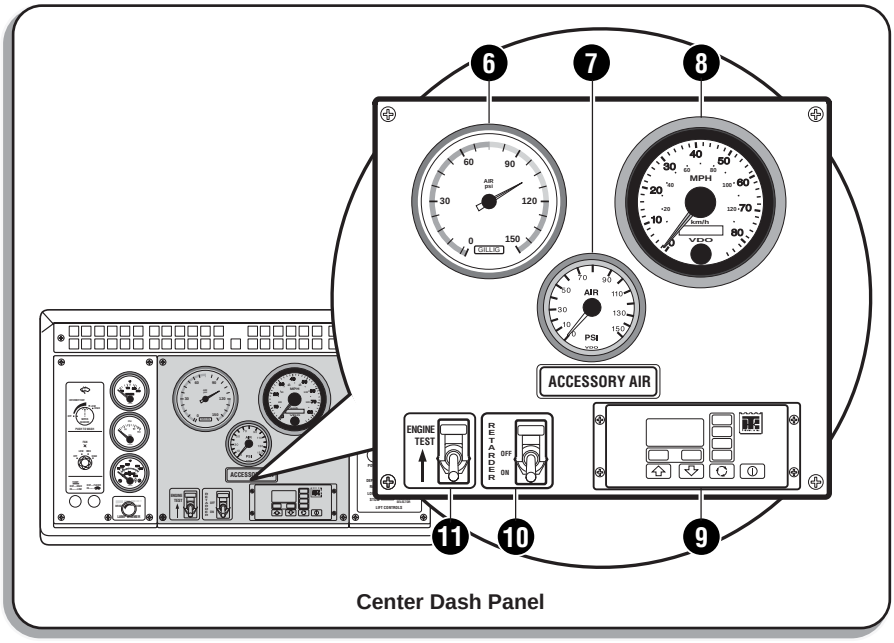
Put the toggle of this switch to the "ENABLE" position to turn on the lights which illuminate the aisle in the passenger area of the bus.



❺ Defroster Fan

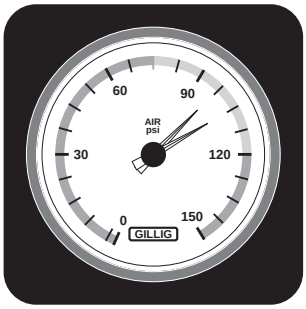
This switch activates the auxiliary defroster fan mounted near the windshield. The defroster fan can be used for ventilation or window defogging.

Center Dash Panel



Center Dash Panel

6 Air Pressure Gauge



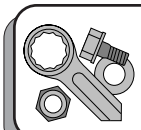
The green needle shows the air pressure in the primary (rear) air brake supply tank and the red needle shows the air pressure in the secondary (front) air brake supply tank. Air pressure at full operation must be **at least 85 psi** in both air tanks. Both needles on this gauge should show readings in the 100 to 120 psi range during normal driving.

WARNING

Safe operation of the bus requires air pressure of at least 85 psi. Do not move the bus if either of the needles on the air pressure gauge shows a level below 85 psi. Recommended operating range is 100 to 120 psi.

❼ Accessory Air Gauge

This gauge shows the air pressure in the accessory air tank, which provides compressed air to the suspension and door systems. Do not move the bus until this gauge indicates at least 85 PSI. If the needle of this gauge drops to 70 PSI or below and remains there, safely park the bus and contact service personnel.



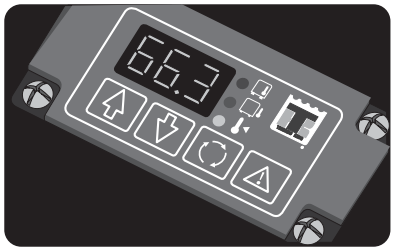
NOTICE

Use of the kneeling system may temporarily cause a low pressure reading on the Accessory Air Gauge.

❽ Speedometer

The needle indicates bus speed from zero to 80 miles per hour (mph). The odometer records total distance traveled up to 999,999.9 miles.

❾ Temperature Control



This panel is used to control the interior temperature. Your supervisor will provied detailed instructions on its use.

Increase Temperature Button. Raises the set temperature.

Decrease Temperature Button. Decreases the set temperature.

Readout Selector Button. Selects the temperature you want displayed on the LED readout.

Warning Code Button. Used by mechanics while servicing the air conditioner. Do not touch this button unless instructed to do so by your supervisor.

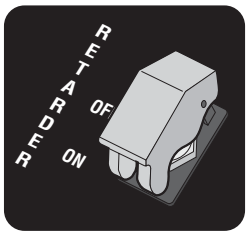
Bus Interior Temperature Light. Indicates that the LED readout shows the temperature inside the bus.

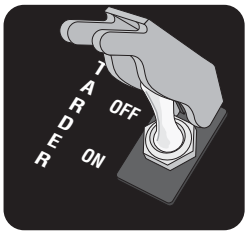
Bus Exterior Temperature Light. Indicates that the LED readout shows the temperature outside the bus.

Set Temperature Light. Indicates that the LED readout shows the set temperature. This light should be lit when you use the ▲ and ▼ buttons.

⑩ Retarder

The retarder uses the transmission to help slow the bus, saving wear and tear on the brakes. Lifting the switch guard and moving the toggle to the "OFF" position disables the retarder.





CAUTION

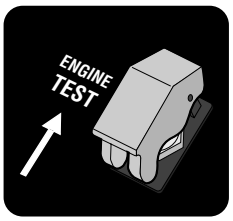
The retarder may cause the transmission fluid to overheat when driving on long downhill grades. If this happens, switch off the retarder and use the brakes to slow the bus until the transmission cools off.

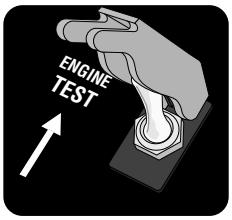
CAUTION

The Retarder should be switched off when slippery or hazardous road conditions are encountered.

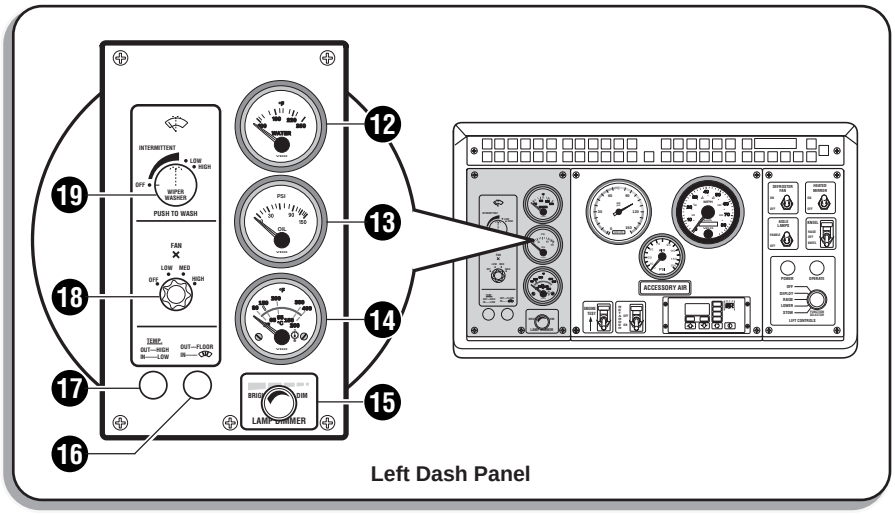
⑪ Engine Test

Mechanics use this switch to get information from the engine's computer. Do not use this switch unless you have specific instructions to do so from qualified service personnel.





Left Dash Panel

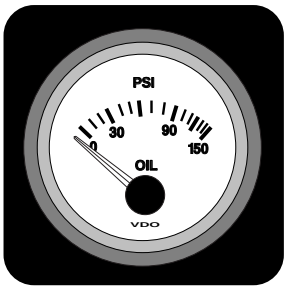


Left Dash Panel

⓬ Water Temperature Gauge

Indicates the engine coolant temperature in Fahrenheit (°F). The temperature will vary depending on bus load, speed, and outside temperature. Allow the engine coolant temperature to reach at least 140°F before shifting the transmission out of Neutral.

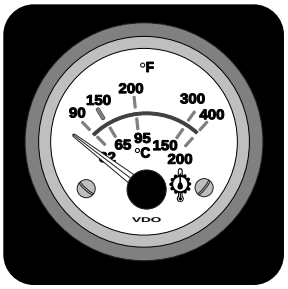
⓭ Oil Pressure Gauge



Shows engine oil pressure in PSI. This gauge should be checked frequently.

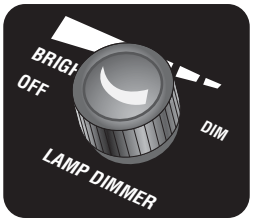
⓮ Transmission Temperature Gauge

Indicates the temperature of the transmission fluid. If the transmission temperature rises over 250°, safely park the bus, shift the transmission into Neutral, and run the engine at Fast Idle for a few minutes. If this does not solve the overheating problem, shut down the engine and contact service personnel.



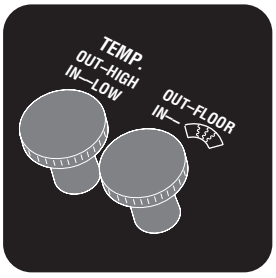
⓯ Lamp Dimmer

This knob controls the brightness of the gauges and dash panel lights when the headlights or marker lights are on. To dim the panel lamps, turn the knob clockwise.



⓰ Heat/Defrost Airflow Select

This knob directs the air to the driver's heater and defroster. For more air from the defroster vents, push the knob in. For more air from the floor vents, pull the knob out.

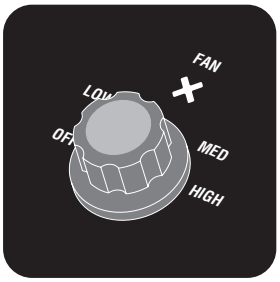


⓱ Driver's Heater Temperature

Use this knob to control the temperature of the air blowing from the driver's heater or defroster vents. Pulling the knob out makes the air hotter; pushing it back in makes the air cooler.

⓲ Fan

This switch ensures that you get comfort and clear visibility by controlling the heating/cooling and defrosting fan for the driver's area and windshield. Turning this switch to the "LOW," "MED," or "HIGH" positions will direct cooled or heated air to the driver's area or windshield, depending on the settings of the two knobs directly below this control.

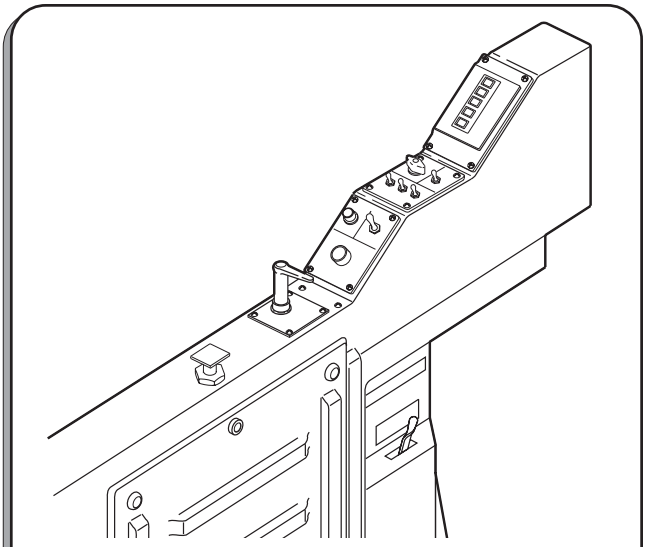


⓳ Washer/Wiper

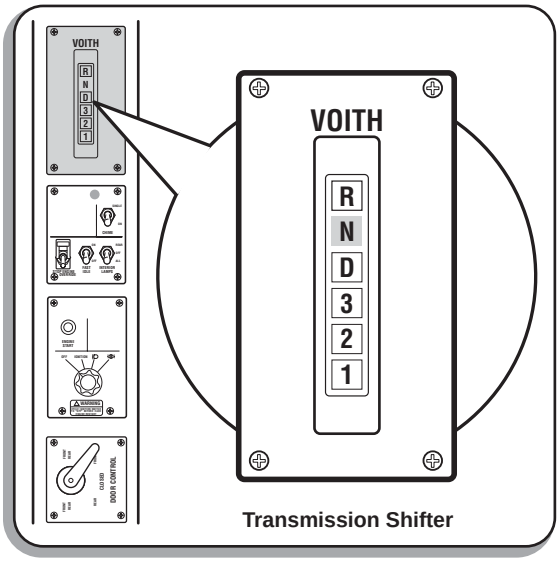
This knob controls the windshield wipers and windshield washer. To activate the wipers, turn the knob clockwise until the desired wiper speed is reached. To wash the windshield, push the knob in while the wipers are running.

DRIVER'S CONSOLE

The Driver's Console is located to the driver's left. Shifting, engine starting, door operation, and parking brake activation are all controlled from its panels.



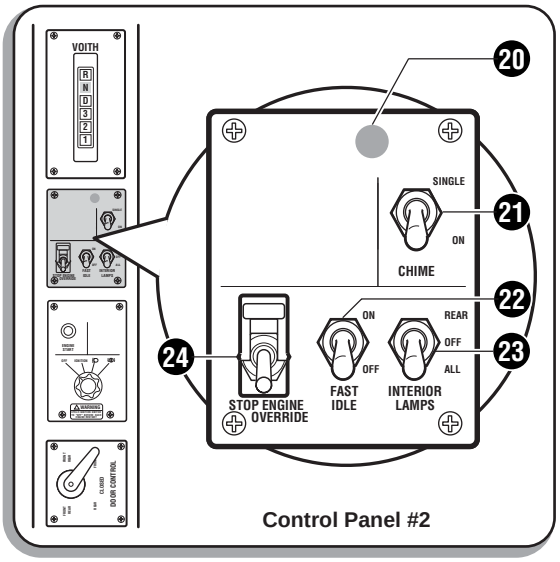
Driver's Console



Transmission Shifter

Transmission Shifter

The electronic shifter features touch-sensitive selector pads. For complete instructions on using the shifter, please see Chapter 3– *Bus Operation*.



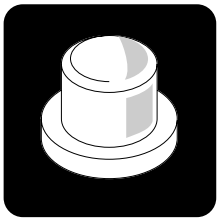
Control Panel #2

Console Panel #2

This panel, located just to the rear of the shifter, contains many important controls that you will be using frequently.

20 Post Lamp

This lamp provides shielded illumination of the dash panels. The lamp's brightness is controlled by the "Panel Lamp" knob located in the dash panel.



21 Chime

This switch controls the chime which sounds when a passenger requests a stop. Placing the toggle in the "ON" position causes the chime to ring every time a passenger requests a stop. Placing the toggle in the "SINGLE" position causes the chime to ring only once per stop, when the first passenger requests a stop; the chime will not ring again until you open and close a door.

㉒ Fast Idle

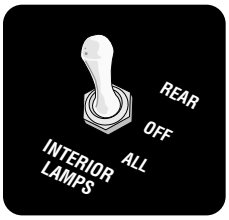
The Fast Idle switch raises the engine idle speed, which is useful for quickly warming up the engine and building air pressure at initial startup.

NOTICE

You must turn off the Fast Idle switch before moving the bus.

㉓ Interior Lamps

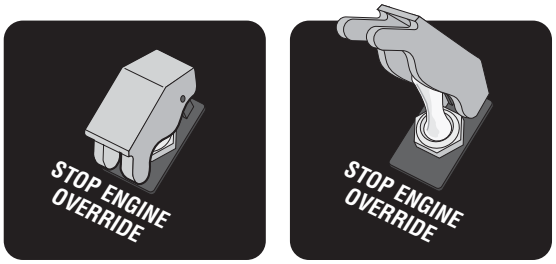
The interior lamps in the back of the bus can be switched on separately using the "REAR" toggle position. To turn on all the interior lamps in the bus, select the "ALL" toggle position.



NOTICE

Leaving the interior lamps on for long periods with the engine shut down will drain the batteries.

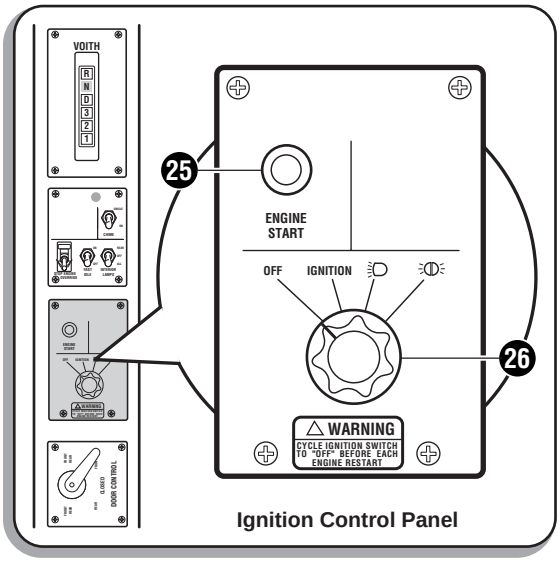
㉔ Stop Engine Override



The engine in your bus will shut down automatically if the engine's computer detects a dangerous condition (such as high temperature or low oil pressure). This switch can be used to postpone automatic engine shutdown long enough to get the bus safely parked. See the "Automatic Engine Shutdown" section of Chapter 3– *Bus Operation* for instructions on using this control.

CAUTION

Using the Stop Engine Override switch to postpone an automatic engine shutdown should be done only when necessary to get the bus off the road and into a safe parking location. Serious engine damage may result from overriding an engine shutdown.



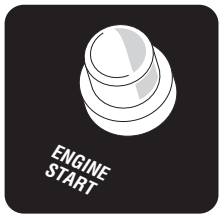
Ignition Control Panel

Ignition Panel

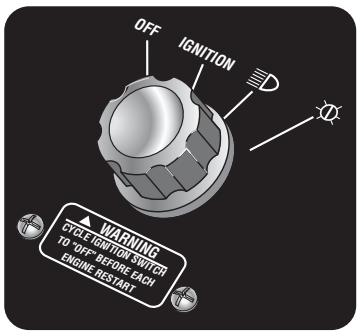
This panel, located just to the rear of Console Panel #2, contains the controls for ignition and starting.

㉕ Engine Start

Once the proper "RUN" position has been selected on the Ignition Select Switch, the starter can be activated using this button. (See Chapter 3 – *Bus Operation* for starting instructions.)



㉖ Ignition Select Switch



This is the Phantom's master switch, controlling the ignition and exterior lights.

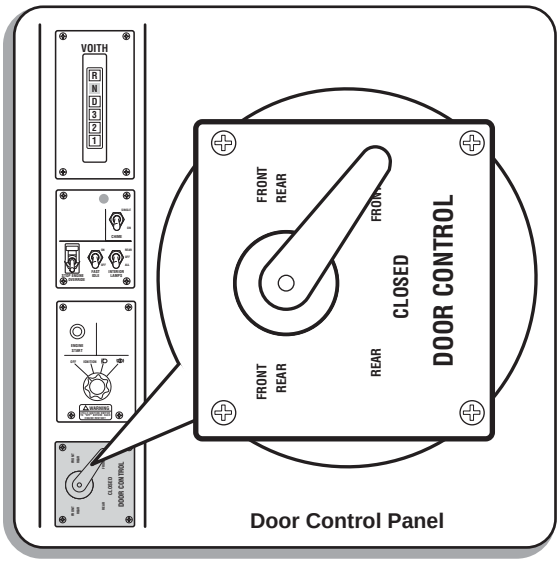
For daytime operation, turn the selector knob to the "IGNITION" position.

For night driving, choose the ≡D (Night Run) switch position. This mode turns on the headlights and other exterior lights, in addition to the ignition.

When parked at night and the bus must be visible to traffic, set the Ignition Select Switch to the ☼ (Marker Lights) position. This mode turns on the exterior lights but not the ignition.

NOTICE

It is OK to change the setting of the Ignition Select Switch from "IGNITION" to ≡D (Night Run) while the engine is running, but you should ***NEVER*** *change the setting to "OFF" or ☼ (Marker Lights) during operation, as the engine will immediately shut down. Any mode changes using the Ignition Select Switch should be made with the bus completely stopped, the transmission in Neutral, and the parking brake applied.*



Door Control Panel

Door Control Panel

The handle which controls the entrance and exit door can be found on this panel, immediately to the rear of the Ignition Panel.

Door Control

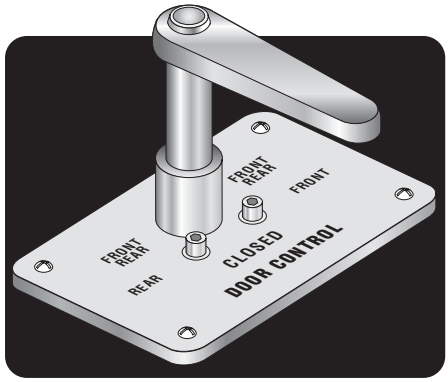
The door control handle can be moved to any one of the following positions:

Front/Rear: Front and rear doors open.

Front: Front door open, rear door closed.

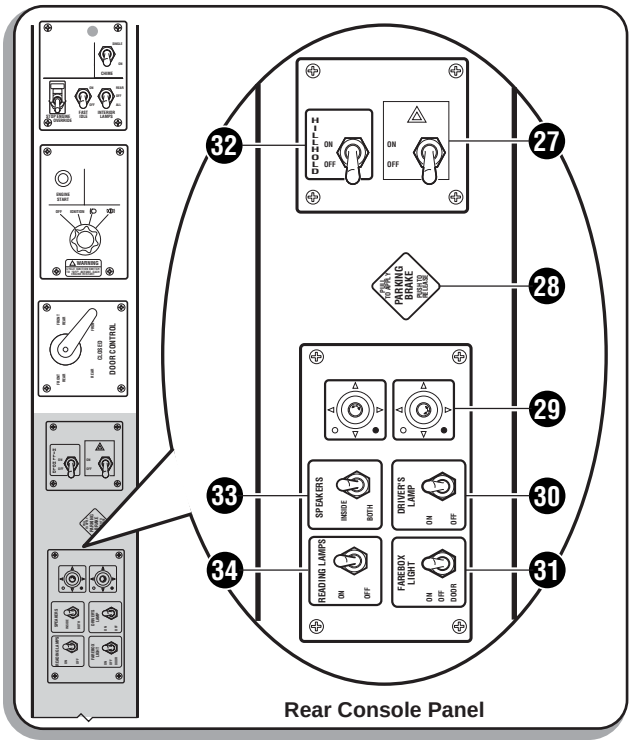
Closed: Front and rear doors closed.

Rear: Rear door open, front door closed.



WARNING

Stop the bus *immediately* if you see the "Door Alarm" indicator lamp or hear the Door Warning buzzer when pulling away from a stop. This could indicate that a passenger is caught in the door!



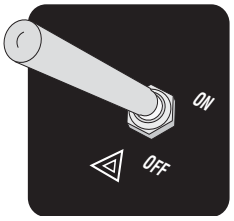
Rear Console Panel

Rear Console

The parking brake and other important controls are mounted on the rear area of the driver's console.

27 Hazard Lights

The hazard lights flash continuously when this switch is in the "ON" position. There may be a short delay before the hazard lights begin flashing when this switch is used.

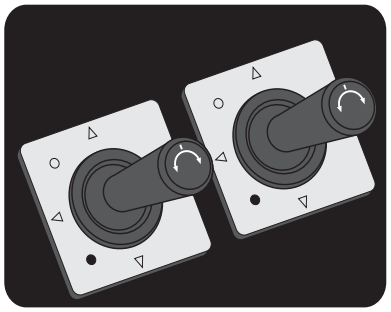


㉘ Parking Brake

The yellow knob next to the door control is the parking brake. To apply the parking brake, pull up on the knob; to release the parking brake, push the knob back down.

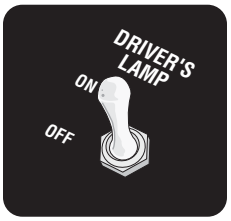
㉙ Power Mirror(s)

The outside mirrors can be adjusted from the driver's seat using this controller. First, choose the left-hand knob to adjust the left (road) side mirror or the right-hand knob to adjust the right (curb) side mirror. Twist the knob to select the upper or lower mirror panel, then use the knob as a joystick to adjust the mirror for the best view.



㉚ Driver's Lamp

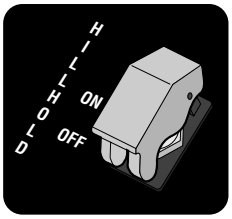
This switch controls the driver's lamp, which is mounted above the driver's console and is useful for map reading and paperwork.

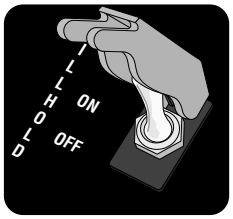


31 Farebox Light

Use this switch to control the light mounted above the farebox. The "ON" position keeps the farebox lamp on at all times, and the "OFF" position keeps the lamp off at all times. Placing the toggle in the "DOOR" position causes the farebox lamp to come on whenever the front door is opened.

32 Hill Hold



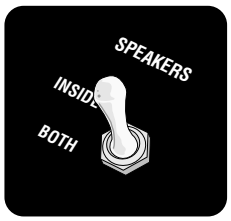


The Hill Hold feature applies the service brakes (without having to use the brake pedal) when this momentary switch toggle is held in the "ON" position. The Hill Hold feature is meant to be used ***only*** for short periods with the engine running. Because the Hill Hold only works with the engine running and the switch held in the "ON" position, it does not take the place of the parking brake! When you let go of the switch, the brakes are released. To prevent the brakes from locking up accidentally, always close the red toggle guard when the Hill Hold feature is not in use.

WARNING

NEVER use the Hill Hold as a parking brake!

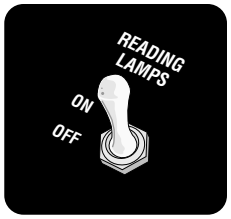
33 Speakers



Use this switch to select the speakers you want the P.A. system to use. To make announcements to your passengers, use the "INSIDE" switch position. Selecting "BOTH" activates both the inside and outside P.A. speakers.

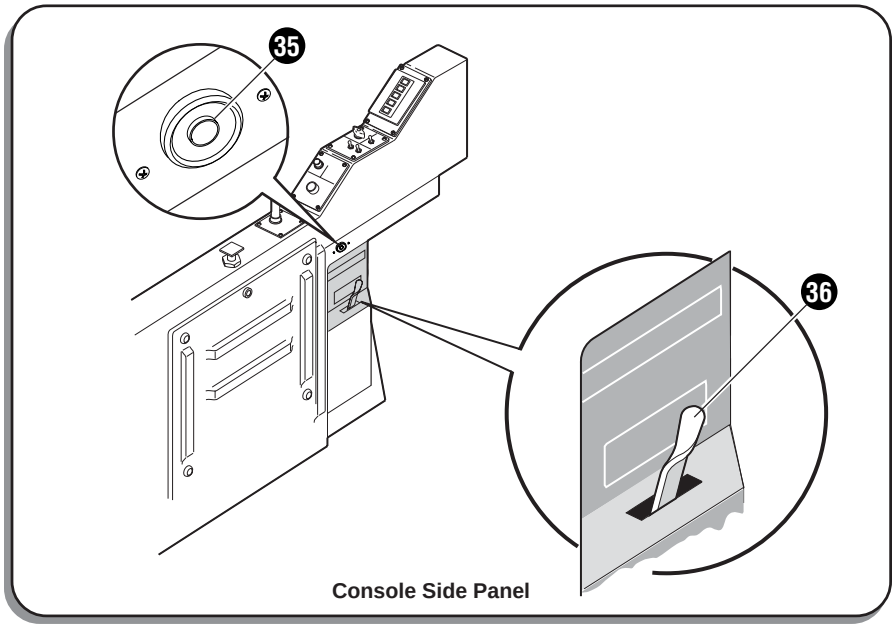
34 Reading Lamps

This switch provides power to the reading lamps located over the passenger seats.



Console Side Panel

This panel, located on the side of the driver's console (near your left front knee as you sit in the driver's seat) contains the Silent Alarm button and Front Door Air Power lever.

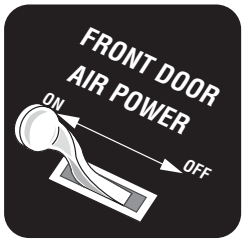


Console Side Panel

35 Silent Alarm Button

This inconspicuous black button, located on the console side panel just above the circuit breakers (very close to your left knee when seated) is to be used in emergency situations. Activation may cause the destination sign on the outside of the bus to flash an emergency "Call Police" message. On some buses, an emergency signal may also be transmitted by radio; no sign of the alert will show inside the bus. Buses equipped with digital video cameras may write-protect the videotape for a period of time before and after the activation of the silent alarm button. Ask your supervisor what alarm features are included on your bus. Always follow your employer's guidelines for dealing with emergency situations on the job.

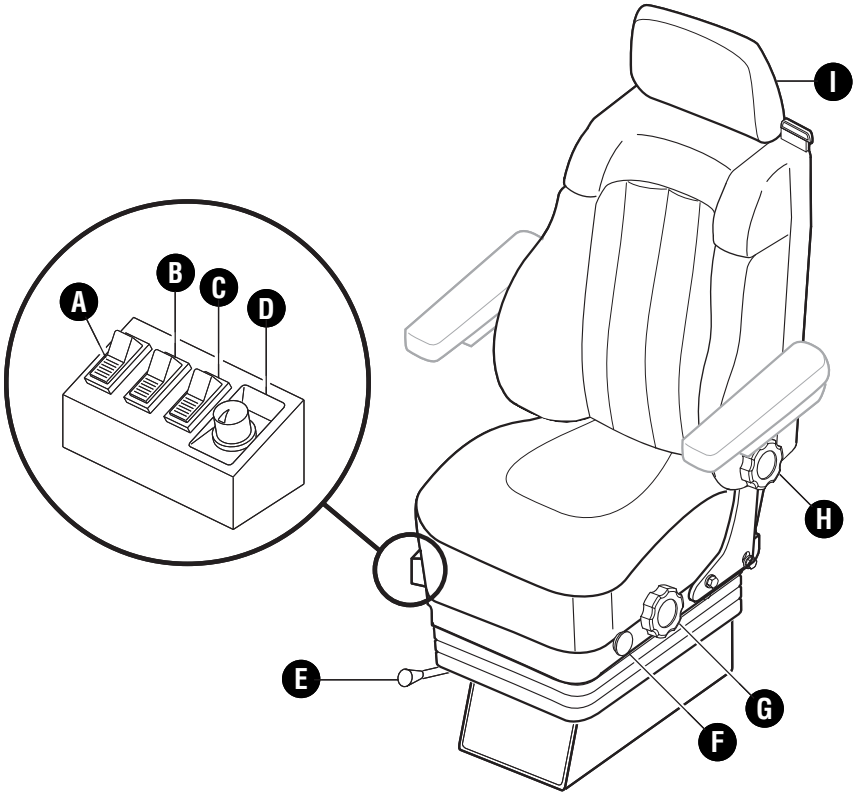
㊱ Front Door Air Power Lever



This small metal lever controls the air pressure to the front door. When the lever is in the "ON" position, the front door operates normally and can be opened and closed by using the Door Control on the Driver's Console. With the lever in the "OFF" position, the front door can be opened and closed by hand. This lever should be the first thing you check if the "Low Air–Frt. Door" indicator lamp is lit.

DRIVER'S SEAT

Your Gillig Phantom bus comes equipped with a comfortable U.S.S.C. driver's seat which can be adjusted to fit the needs of nearly every driver.



U.S.S.C. Driver's Seat

WARNING

The seat should be adjusted ONLY when the bus is stopped, with the transmission in Neutral and the parking brake applied.

A The upper lumbar back support cushion may be adjusted using this switch. Pushing the rocker switch increases or decreases the upper lumbar support.

B The middle lumbar back support cushion may be adjusted using this switch. Pushing the rocker switch increases or decreases the middle lumbar support.

C The lower lumbar back support cushion may be adjusted using this switch. Pushing the rocker switch increases or decreases the lower lumbar back support.

D Pressing and holding this button allows you to slide the seat forward or backward. Release the button when the seat is in the desired position.

E The small handle located under the seat base can be used as a substitute for button **D** when sliding the seat fore and aft. Release the button when the seat is in the desired position.

F The knob located near the front of the seat cushion's left side controls the seat height. To adjust the height of the seat, twist the knob until the seat reaches the desired level. To make it easier to leave the seat, push the knob in to lower the seat all the way down; pull the knob back out to restore the seat to its driving height.

G Seat tilt is adjusted using the large knobs located on the sides of the seat cushion. Turning these knobs causes the entire seat to lean forward or backward.

H The recline angle between the back and seat cushion may be adjusted using the large knobs located at the intersection of the back and seat cushions. Adjusting the seat tilt with knob **G** also affects the recline angle of the seat back.

I The headrest (optional) may be manually positioned by pulling it up or down to the desired height. Pull forward or push backward to adjust headrest tilt.

STEERING WHEEL

The Gillig Phantom features a fully adjustable steering wheel which, in combination with the adjustable driver's seat, permits drivers of all shapes and sizes to comfortably operate the bus.

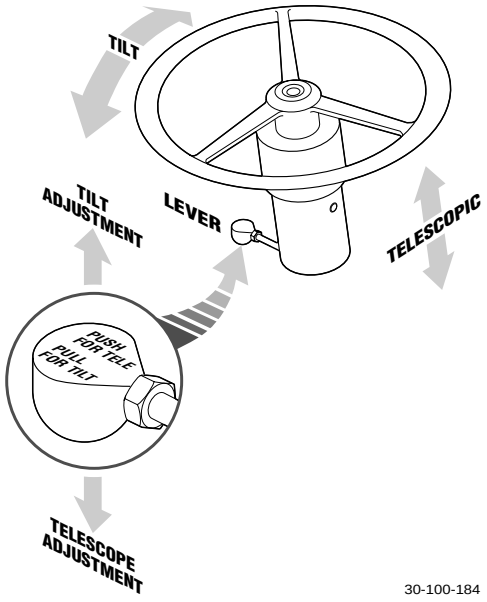
WARNING

The steering wheel should be adjusted only when the bus is stopped, with the transmission in Neutral and the parking brake applied. Never adjust the steering wheel while the bus is moving!

Both the angle (or tilt) of the steering wheel and the length of the steering column (telescope) can be adjusted. The Steering Column Adjustment Lever, located on the left side of the steering column, controls both of these adjustments.

To adjust the tilt of the steering wheel, pull up on the lever and, while holding the lever up, move the steering wheel to the most comfortable angle. Release the lever to lock the wheel tilt into place.

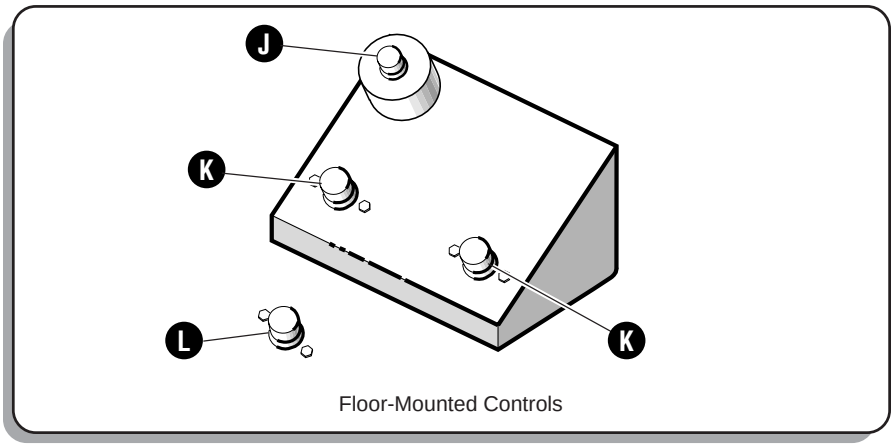
To adjust the length of the telescoping steering column, push down on the lever and, while holding the lever down, lift or push the steering wheel to the proper height. Release the lever to lock the steering column length.



Steering Wheel Adjustments

FLOOR-MOUNTED CONTROLS

The controls for the service brakes, throttle, turn signals, silent alarm, and headlight dimmer are all located at the driver's feet.



Floor-Mounted Controls

J Silent Alarm Button

This button causes the front destination sign to flash an emergency "Call Police" message. No sign of this will be visible inside the bus. Always follow your employer's guidelines for dealing with emergency situations on the job.

K Turn Signal Switches

The turn signal will flash only as long as your foot holds the switch down. The left switch activates the left signal and the right switch activates the right signal.

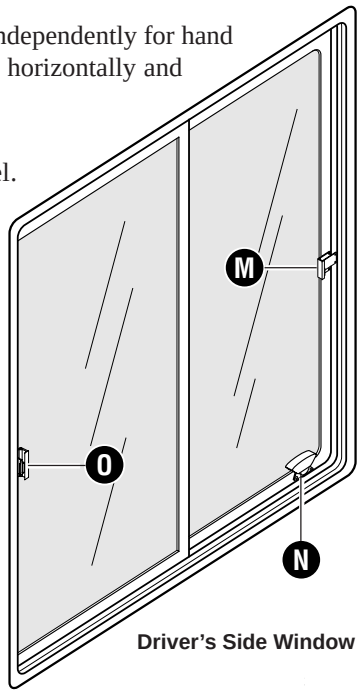
L Dimmer Switch

This switch, mounted on the floor close to the base of your seat, is used to choose between low beam and high beam headlights. Press the switch with your heel once to activate the high beams; press it once more to switch back to normal low beams.

DRIVER'S SIDE WINDOW AND SUN SCREENS

Driver's Side Window

Each half of the driver's window can be opened independently for hand signaling and fresh air. The window panels slide horizontally and are opened using three latches:



Driver's Side Window

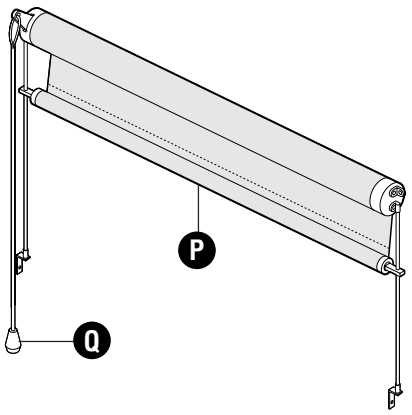
M The forward latch releases the front panel. Once released, the panel can be slid open. There are two locking positions available once the window is open; to lock it into an open position, pull the window all the way back using the forward latch, then push forward until the lock engages.

N The lower slider releases the front window panel from the locked position, enabling the driver to move the window panel. To use the slider, push the handle in the proper direction and slide the panel to the desired position.

O The rear latch releases the rear panel. There are no open locking positions for this panel; to open the window, simply release the latch and slide the panel forward.

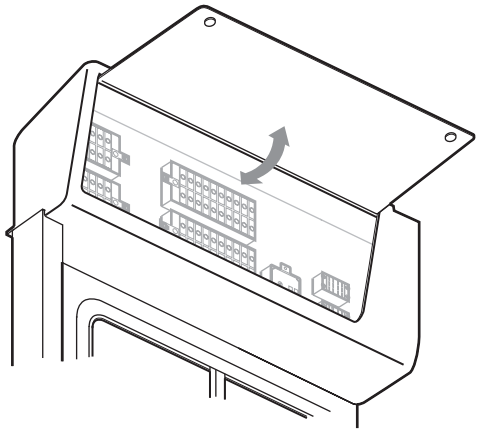
Sun Screens

The Phantom is equipped with pull-down screens to protect the driver from sun glare. To use one of the screens, gently pull down at point **P** to the desired level. A ratchet mechanism will keep the shade at the chosen level. To retract the screen, pull down on the knob located on the left side of the screen assembly (point **Q**).



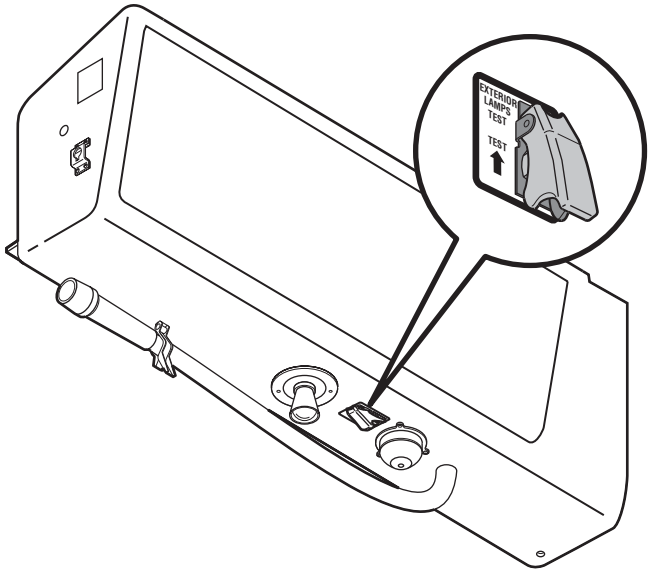
ELECTRICAL COMPONENT COMPARTMENT

Located directly above the driver's side window, this compartment houses diagnostic components. Do not open this compartment unless unless you have specific instructions to do so from qualified service personnel.



Electrical Component Compartment

OVERHEAD CONSOLE



Overhead Console

Exterior Lamps Test Switch

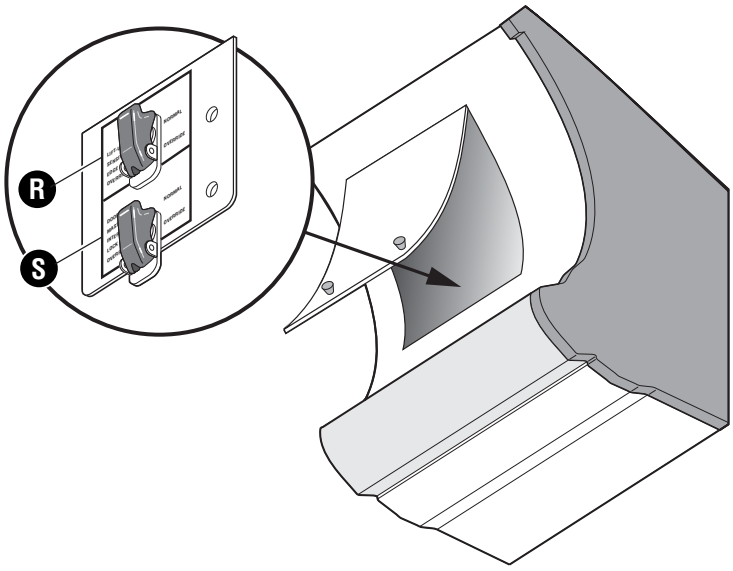
The condition of the exterior lamps can be tested quickly and easily using this switch, which uses the main control computer to activate all the exterior lamps on the coach (except the backup lights). To test the exterior lamps using this switch, flip the switch toggle to the "TEST" position with the ignition on, then walk around the outside of the coach and check all the lamps. *Note: This switch tests the condition of the bulbs* ***only*** *and does not take the place of a complete lighting systems inspection using an operator in the bus and an outside observer.*

NOTICE

The systems which activate the exterior lamps are not tested; for example, the turn signal lights may come on when using the Exterior Lamps Test Switch even if the turn signal switches are broken.

DRIVER'S STORAGE BOX

Located behind the driver's seat, this compartment houses the Override Switches. To open the door, twist the two knobs at the lower corners and lift the door up. Pull out the prop to hold the door open.



Driver's Storage Box

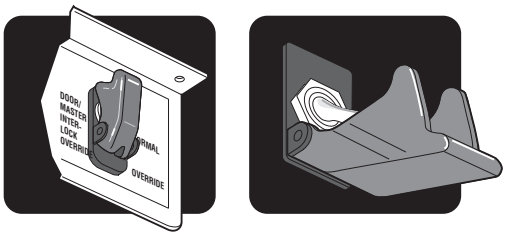
(R) Lift-U Sensitive Edge Override

Refer to the "Lift Controls" section of Chapter 4 – *Lift Operation* for information on this switch and other safety-related wheelchair lift features.

WARNING

The Sensitive Edge Override Switch should NEVER be placed in the "OVERRIDE" position when a passenger is on the lift!

Door/Master Interlock Override



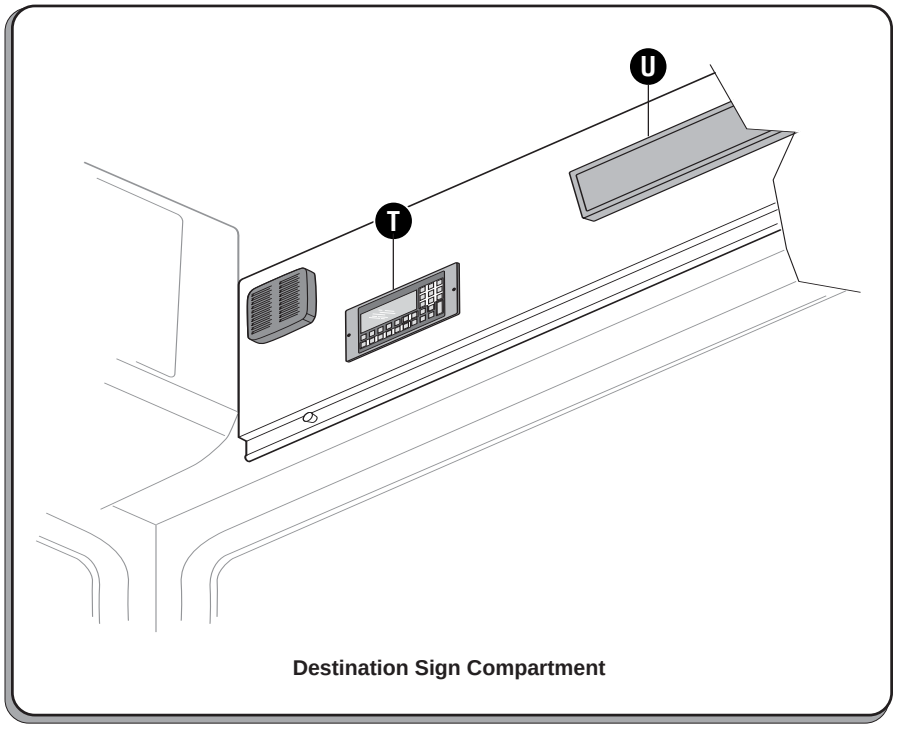
Certain operating conditions are interlocked to prevent accidental bus movement. These interlocked conditions include an open door, ramp or lift is not stowed, bus is in kneeled position, or "Fast Idle" switch is activated. In the event of a "false alarm," placing this switch in the "OVERRIDE" position deactivates the interlock system. **Always** get permission from your supervisor before touching this switch!

WARNING

Bus operation is very dangerous with the Interlock System deactivated! Always get permission from your supervisor before touching the Override switch. Above all, NEVER load or unload passengers using the ramp when the Override toggle switch is in the "OVERRIDE" position!

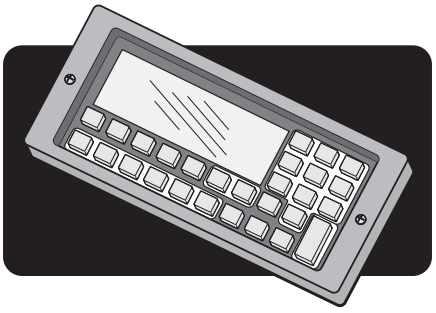
DESTINATION SIGN COMPARTMENT

Located directly above the windshield, this compartment houses the Destination Sign Control and Stop Requested sign.



Destination Sign Compartment

T Destination Sign Control



Use this panel for inputting route information that will display on the bus destination signs. This panel may control other features as well, such as audible route and destination information. Your supervisor will provide detailed instructions on using this panel.

U Stop Requested

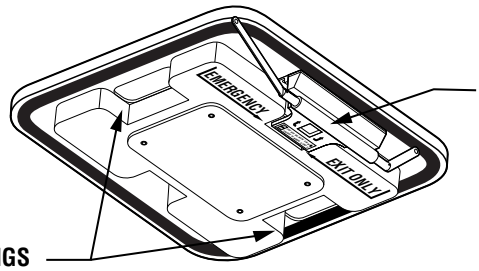
This sign in the overhead Destination Sign Compartment door will light to indicate a passenger has requested a stop.

NOTES

CHAPTER 2 – PASSENGER AREA

EMERGENCY EXITS

Roof Vents/Escape Hatches



The Roof Vents, located along the center of the roof, function as ventilation sources as well as emergency exits in the event of a bus rollover.

Pushing up the handle moldings pops the hatch up for ventilation. To close the hatch, pull down on the handle moldings.

Emergency Exiting

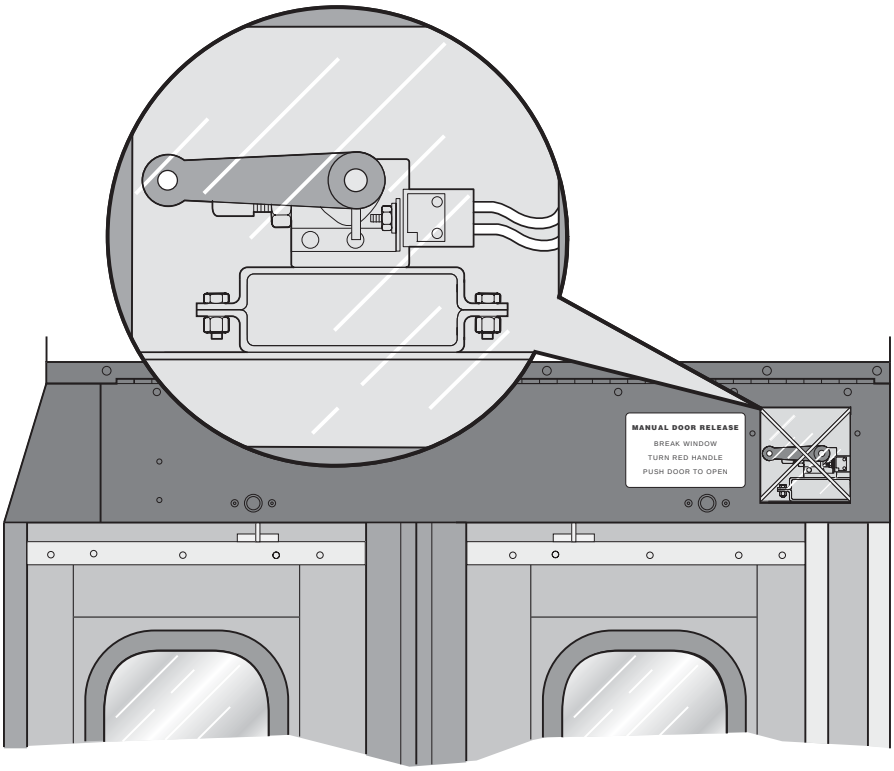
1. Push the black tab towards the rear of the bus.
2. Push the paddle handle up towards the roof. Notice that the notch on the tab appears. This will release the lock and allow the hatch to swing open towards the front of the bus.

Resetting the Escape Hatch

1. Push up on both hatch springs.
2. Center the hatch over the opening.
3. Push the tab back towards the rear of the bus.
4. Pull the paddle down and over the tab's notch.
5. Pull the handle moldings straight down until the trigger snaps into the notch of the paddle handle.

Manual Door Releases

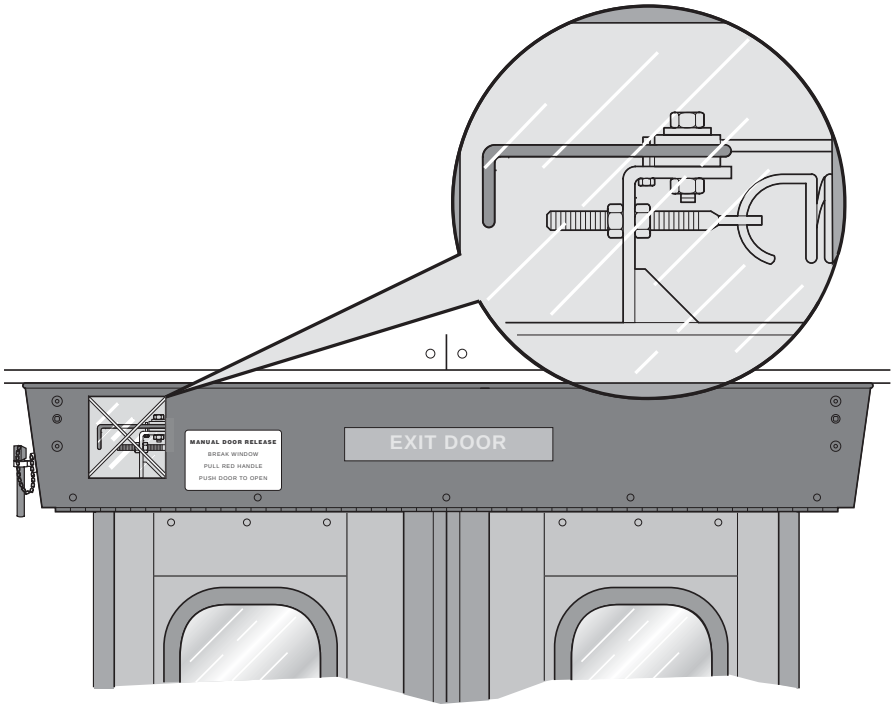
In an emergency, it may be necessary to open the bus doors by hand. To do this, the doors must be unlocked using the release valve or lever.



Front Door Manual Release Valve

Front Door

The manual air dump valve can be found on the right side of the panel, directly above the doors. To use the valve, either break the glass or open the panel (using the two latches found on the front of the panel) and turn the red handle 90° upward. The doors will then push open easily.



Rear Door Manual Release Lever

Rear Door

The manual door release lever can be found on the left side of the panel directly above the doors. To use the valve, break the glass or open the panel (using the two latches found in the panel's corners) and pull the red handle toward you. The doors will then push open easily.

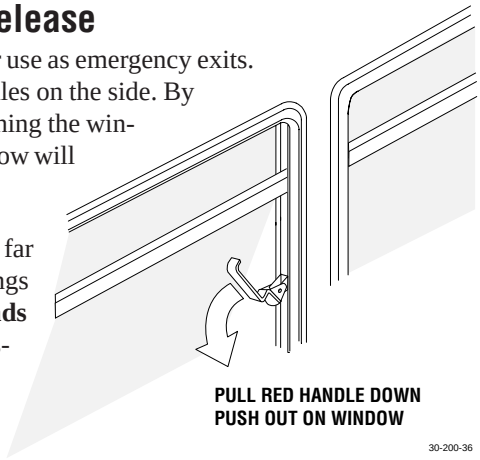
NOTICE

Using the Manual Door Release Lever (when the ignition is on) will automatically disable the throttle and apply the service brakes.

Side Window Emergency Release

Some side windows can swing open for use as emergency exits. These can be identified by the red handles on the side. By pulling the red handle out and then pushing the window outward from the bottom, the window will swing out an open as far as necessary.

To close the window, push it outward far enough so that, when released, it swings back into place on its own. **Keep hands clear** and push out only as far as necessary for the window to shut securely. Make sure that the window is tightly shut and all the latches are properly secured.



EMERGENCY EQUIPMENT

Fire Extinguisher

The Phantom comes equipped with a chemical fire extinguisher. In case of fire, remove the safety pin from the trigger, aim the extinguisher at the base of the flames, and pull the trigger.

Safety Triangle Reflector Kit

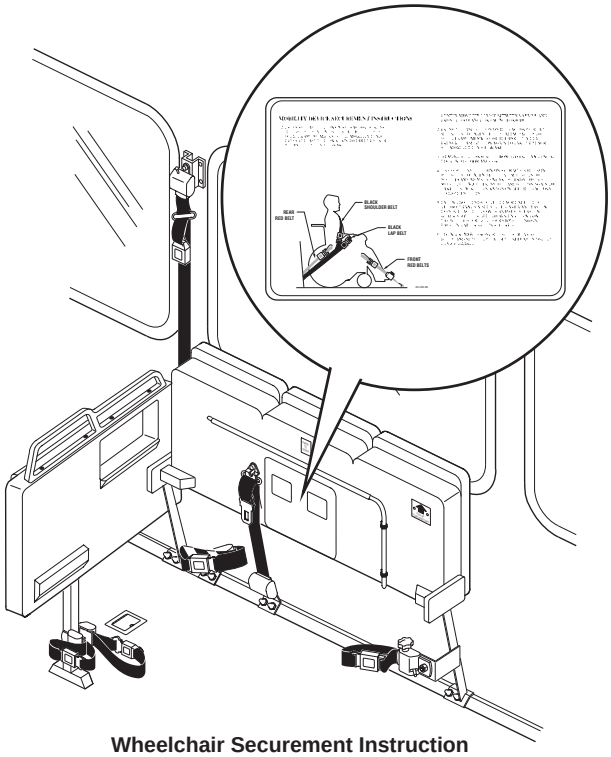
Each bus is equipped with a Safety Triangle Reflector Kit. In the event of an emergency, the triangles should be set at the front, side, and rear of the bus. When setting safety triangles, place the amber triangle in front of the bus and the red triangle to the rear.

Wheel Chocks

Wheel chocks are used to keep the bus from moving during emergency, breakdown, or maintenance situations. Be sure that wheel chocks are placed firmly against the tires to prevent movement of the bus.

WHEELCHAIR SECUREMENT SYSTEM

For the safety of disabled passengers, the Phantom is equipped with securement systems designed to secure wheelchairs and other mobility devices (such as 3-wheeled scooters) in two seating locations near the front of the bus.



Wheelchair Securement Instruction Decal Location

Instructions in the use of the wheelchair securement system are located on plaques mounted on the undersides of the folding seats in the wheelchair seating areas. To fold up the seat, pull toward you on the release latch (located on the underside of the seat and identified with a “RELEASE” decal) and lift up on the seat.

NOTES

CHAPTER 3 - BUS OPERATION

ENTERING THE BUS

Under normal circumstances, follow these instructions for entering the bus:

1. Push the front doors open by hand.
2. Push the lever of the Door Air lever (located to the left of the driver's seat on the Driver's Console) to the "NORMAL" position.

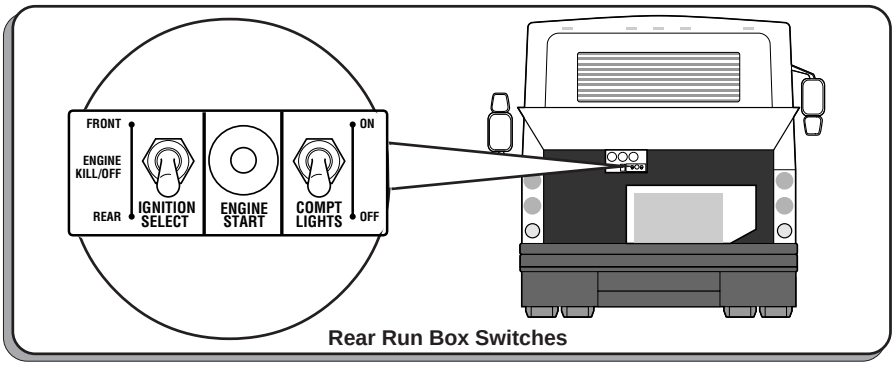
In Case of Lockout

WARNING

The engine compartment can be very dangerous! Do not open the engine door without permission from your supervisor.

If the engine was shut down by reaching through the driver's side window (and the window was then closed and latched) with the Door Air lever in the "NORMAL" position, you will need to follow these instructions to get back in:

1. Go around to the rear of the bus and open the rear engine door by lifting up on the handle cutout in the bottom center of the door.
2. Locate the Ignition Select switch on the rear run box (see illustration, below, for location). Put the switch toggle in the "REAR" position. The front door should open. If it does not open, you will need to call service personnel to drain the air from the air tanks.
3. Once the front door has opened, put the Ignition Select switch toggle in the "FRONT" position. Close the rear engine door.



Rear Run Box Switches

PRE-START CHECK

Before operating the Phantom bus, conduct a pre-start check in accordance with the official inspection procedures of your employer. The checklist below is provided as a **supplement** to your employer's pre-start inspection procedures. Some of the checks listed may be the responsibility of your company's mechanics or other service personnel. Review this checklist with your driver trainer or supervisor to determine which areas are your responsibilty.

Exterior

- ☐ Tires and wheels in good condition.
- ☐ All access doors closed and locked.
- ☐ Mirrors intact and firmly attached.
- ☐ Windows secured and in good condition.

Engine Compartment

WARNING

The engine compartment is very dangerous! Only properly trained and qualified personnel should check fluids, inspect belts, etc.

- ☐ No fluid leakage in compartment or under the bus.
- ☐ Engine belts in good condition.
- ☐ Proper fluid levels.
- ☐ Air cleaner restriction indicator at acceptable level.
- ☐ Proper pressure in fire suppression system bottles.

Lights

- ☐ Headlights.
- ☐ Brake lights.
- ☐ Tail lights.
- ☐ Backup lights.
- ☐ Marker and identification lights.
- ☐ Turn signals.
- ☐ Hazard lights.
- ☐ Interior lights.

Interior

- ☐ Wheelchair securement system intact and functional.
- ☐ Interior clean and free of debris.
- ☐ Roof hatches functional.
- ☐ Emergency window releases working.
- ☐ Access panels closed and latched.
- ☐ Wheelchair Ramp functioning normally.
- ☐ Fire suppression system LED’s displaying correctly.

Driver's Controls

- ☐ Fast Idle switch off.
- ☐ All wheelchair ramp control switches off.
- ☐ Interlock Override Switch in "NORMAL" position.
- ☐ Kneel Switch in "OFF" position.
- ☐ All indicator lamps working.
- ☐ Mirrors properly adjusted.
- ☐ Seat and steering wheel properly adjusted.
- ☐ Doors working properly.
- ☐ Horn working.
- ☐ Seat belt fastened.

STARTING THE ENGINE

Before Starting the Engine

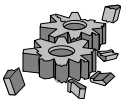
1. Close and lock all exterior access doors, making sure that all personnel remain safely clear of the bus.
2. Be sure the parking brake is applied and the transmission is in Neutral.
3. Make sure the Fast Idle switch is in the "OFF" position.

Starting the Engine

1. Set the Ignition Select Switch to DAY RUN or IGNITION for daytime operation, or (Night Run) for nighttime operation. Some indicator lamps will light up for a few seconds.
2. Test the indicator lamps using the Indicator Lamp Test Button (see Chapter 1– *Driver's Compartment*).
3. Observe the "Wait To Start" lamp on the Indicator Lamp Strip. Do not try to start the engine until this lamp goes out. This should take about 25 seconds.

WARNING

NEVER use starting fluid of any type on the Cummins ISL engine. This engine has an intake air heating grid element which may cause starter fluid to explode!



CAUTION

Do not crank the starter motor for more than 30 seconds at a time. Let the starter cool off for at least 2 minutes between starting attempts. If the engine does not start and must be re-cranked, always wait for 2–3 seconds, to allow the pinion and ring gear to stop. Re-engaging the starter immediately can mill the pinion or twist the armature. The starter should NOT be used to "bump" the engine. If the engine will not start after 3 tries, have it checked by mechanics.

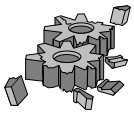
NOTICE

The starter is equipped with an overcrank protection system. A temperature sensor in the starter prevents cranking when the starter overheats. If this occurs, allow the starter to cool.

4. After the "Wait To Start" lamp goes out, press the starter button until the engine starts. **Do not press the throttle pedal during starting.**

WARNING

A runaway starter can overheat and start a fire. Power to the starter must be shut off using the Battery Cutoff Switch if the "Starter" indicator lamp stays on after you release the starter button.



CAUTION

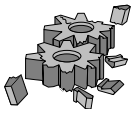
If the oil pressure gauge reads zero after 15 seconds, or "Check Engine" and/or "Stop Engine" indicator lamps remain lit after startup, shut the engine down and check with service personnel.

5. Check the oil pressure gauge immediately after the engine starts. The gauge should show oil pressure within 15 seconds of starting. If the oil pressure gauge still reads zero after 15 seconds, shut the engine down **immediately** and have it checked by mechanics.

WARNING

Sufficient air pressure is needed for the brakes to work properly. The recommended operating pressure range is 100 to 120 psi. Ensure both needles on the air pressure gauge are above 100 psi before starting to drive the bus.

6. Run the engine at Fast Idle or part throttle until the air pressure gauge shows at least 100 psi and the Engine Coolant Temperature gauge indicates a temperature of at least 140° F. It is best to let the engine idle for 3 to 5 minutes before moving the bus.



CAUTION

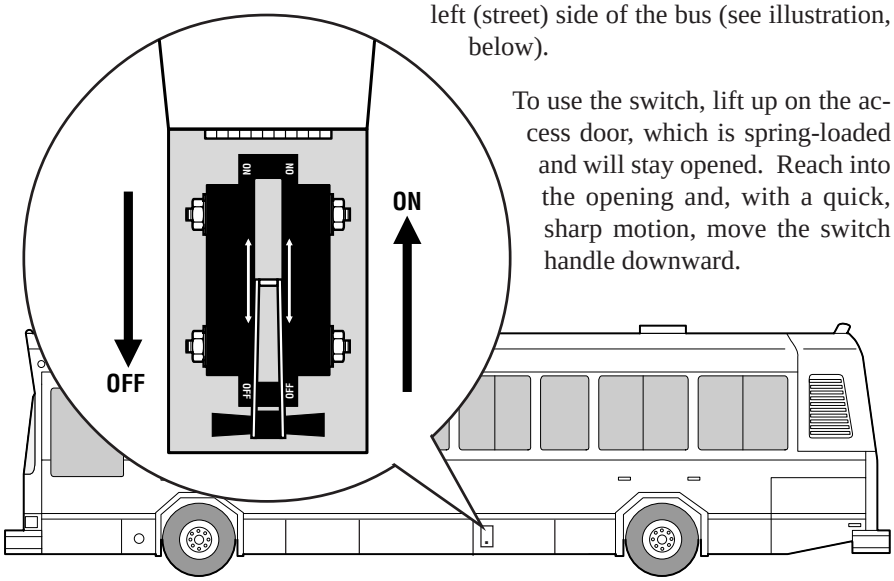
Do not idle the engine for very long periods (10 minutes or more). This can cause engine damage. If prolonged idling is necessary, use the Fast Idle setting.

BATTERY CUTOFF SWITCH

Shutting Off Electrical Power During Emergencies

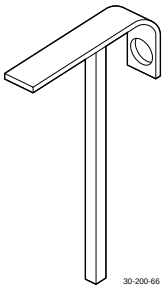
In an emergency, especially an electrical short or fire, you may need to shut off the flow of power to the electrical system of the bus. This is done using the Battery Cutoff Switch, which can be found behind the small rectangular door located on the left (street) side of the bus (see illustration, below).

To use the switch, lift up on the access door, which is spring-loaded and will stay opened. Reach into the opening and, with a quick, sharp motion, move the switch handle downward.



Battery Cutoff Switch

The small access door is located in the larger Battery Access Panel. If you cannot properly reach the switch through the small access door, you will need to open the Battery Access Panel using the "T" handle key tool, which should always be kept where you can reach it quickly. To use the "T" handle key tool, insert the square end into each of the access door's key openings and turn 90°. The door can then be lifted open.



"T" Handle Key Tool

WARNING

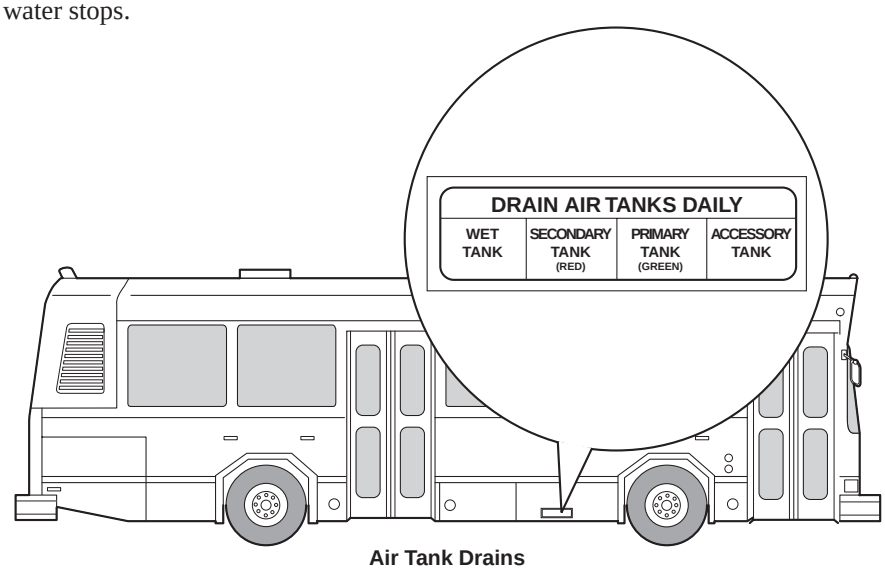
Be careful not to touch any electrical cables or connections when shutting off the Battery Cutoff Switch. These can get very hot.

AIR TANK DRAIN VALVES

Draining Water From the Air Tanks

To prevent a harmful buildup of water in the compressed air system, your coach is equipped with four small valves or pull cords which make it easy to drain water from the air tanks. The valves or pull cords are located below the center skirt area on the right (curb) side of the bus (see illustration, below). Water should be drained from the air system every day before operating the bus.

To drain water using the drain valves, turn the valve handles counterclockwise (CCW) one-quarter turn and leave the valves open until the flow of water stops. To drain water using the pull cords, grasp each pull cord and pull outward until the flow of water stops.



Air Tank Drains

WARNING

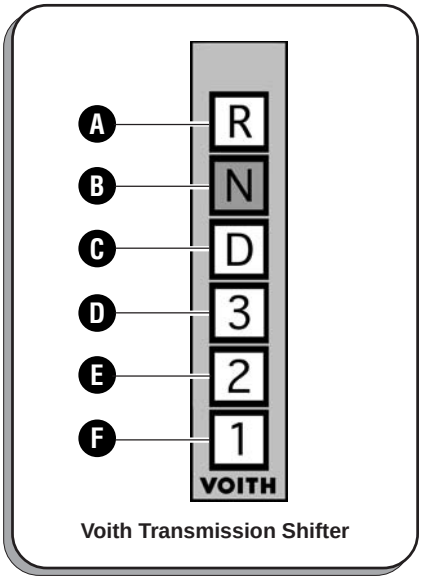
Compressed air can be dangerous. Do not touch the air drain valves or pull cords unless you have been trained to use them safely.

SHIFTING THE TRANSMISSION

Shifter Controls

Transmission gear ranges are selected using the shifter control, located in the console at the driver's left. The Voith shifter uses pushbuttons to control the transmission.

Be sure to read the "Gear Selection" section of this chapter before driving the bus.



Voith Transmission Shifter

A Reverse Button

This button selects the transmission's reverse gear.

B Neutral Button

The red button selects Neutral. Always press this button before starting the bus.

C Drive Button

Pushing down this button selects the automatic forward gear ranges.

D Button 3

Pressing this button prevents the transmission from shifting into 4th gear. This is useful when descending mild grades.

E Button 2

This button limits the transmission to the 1st and 2nd gear ranges. This is useful when descending moderate grades.

F Button 1

This button is used to limit the transmission to the 1st gear range only. This is useful for descending very steep grades.

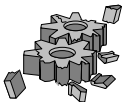
Gear Selection

NOTICE

Do not shift into gear when the engine is at Fast Idle. Make sure the Fast Idle Switch is in the "OFF" position before shifting out of Neutral.

NOTICE

Some Voith transmissions will allow the engine to start with a shifter button other than "N" selected; however, the transmission will not shift into a forward or reverse gear until "N" has been selected first.



CAUTION

Do not let the bus coast in Neutral. This can cause severe transmission damage.

WARNING

Always apply the service (pedal) brakes when shifting out of Neutral. Never touch the throttle pedal when shifting out of Neutral. Always shift to Neutral first when changing from Reverse to a forward gear or from a forward gear to Reverse.

Reversing

To back the bus, select the "R" button while pushing down on the service brake pedal. You must ***always*** bring the bus to a complete stop and select Neutral ("N") before selecting "R" or shifting from "R" to a forward gear. Wait a few seconds after selecting Reverse before pressing the throttle pedal.

Moving Forward

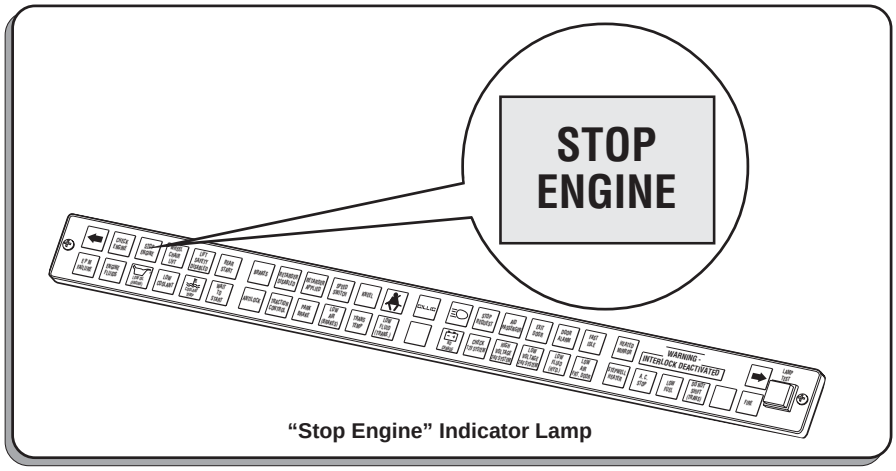
With the engine at idle and your foot firmly on the service brake pedal, press the "D" button on the shifter. The bus will now be ready for normal driving. You must ***always*** bring the bus to a complete stop and select Neutral ("N") before selecting a forward gear or shifting from a forward gear to "R". Wait a few seconds after selecting a forward gear before pressing the throttle pedal.

Selecting a Lower Gear Range

You can choose to restrict the transmission to the lower gear ranges for improved engine braking when descending steep grades, or to prevent the transmission from "hunting" (shifting rapidly between two gears).

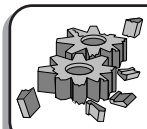
AUTOMATIC ENGINE SHUTDOWN

The Cummins ISL engine in your coach comes equipped with an automatic shutdown system which protects the engine from damage. When the engine's computer detects a very serious problem, such as low oil pressure or high temperature, it will automatically shut down the engine. You must be prepared for this by recognizing the warning signs and knowing what to do to keep you and your passengers safe from harm.



"Stop Engine" Indicator Lamp

The "Stop Engine" indicator lamp, along with an alarm sound, will activate when the automatic shutdown sequence has started. Other lamps, such as "Low Oil (Engine)" or "Low Coolant" may also come on. **When the "Stop Engine" lamp comes on, you have only 30 seconds before the engine shuts down!** This means you must *immediately* get the bus off the road and safely parked. If you need more than 30 seconds to get the bus to a safe parking place, you can use the Stop Engine Override Switch (located to your left on the Driver's Console) to postpone engine shutdown. To use this control, lift the red safety cover, push on the Stop Engine Override switch, and then drive the bus to a safe location. Pressing the switch again during that 30 second interval will result in an additional 30 second override delay.



CAUTION

The Stop Engine Override Switch should be used only when you need to get the bus off the road and into a safe parking spot.

SHUTDOWN AND PARKING PROCEDURE

Before Leaving the Driver's Seat

WARNING
Do not leave an idling bus unattended!

WARNING
Do not use the Interlock System as a parking brake!

WARNING
The transmission must be in neutral and the parking brake must be applied before leaving the driver's seat!

1. Apply the parking brake.
2. Shift the transmission into Neutral.
3. If parked on a grade, be sure to curb or block the wheels.

Shutting Down the Engine

NOTICE
Allow the engine to idle for at least 3 minutes before shutting the engine down. This allows the engine parts to cool properly.

1. Make sure the parking brake is applied, that the transmission is in Neutral, and that the bus is parked properly (see the instructions in the "Before Leaving the Driver's Seat" section, above).
2. Turn off all electrical accessories.
3. Allow the engine to idle for 3 to 5 minutes.
4. Select "OFF" using the Ignition Select Switch.

CHAPTER 4 – LIFT OPERATION

The Gillig Phantom features the Lift-U® powered wheelchair lift for the assistance of passengers who could not otherwise board or exit the bus. The lift fits under the front stepwell of the bus and replaces the bottom step.

Although the Lift-U® wheelchair lift is equipped with many safeguards and overrides, the safety of passengers using the lift depends on you, the driver. It is *your* responsibility to make sure that all of your passengers remain safe from harm during lift operation. You must observe all lift passengers during the entry, operation, and exit of the wheelchair lift and instruct the passenger regarding the proper use of the lift. Lift passengers may not be able to react to a hazardous situation during lift operations. Stop lift operations *immediately* if a hazardous situation develops.

To ensure passenger safety, you *must* read and follow all of the operation information provided in this manual, as well as the Operator Instructions in the Lift-U® *Technical Reference Manual*. Pay particular attention to the **Warning**, ***CAUTION***, and **NOTICE** boxes found in this chapter. Failure to comply with operating instructions can result in passenger injury or death. Your supervisor will provide additional training regarding the proper use of the wheelchair lift.

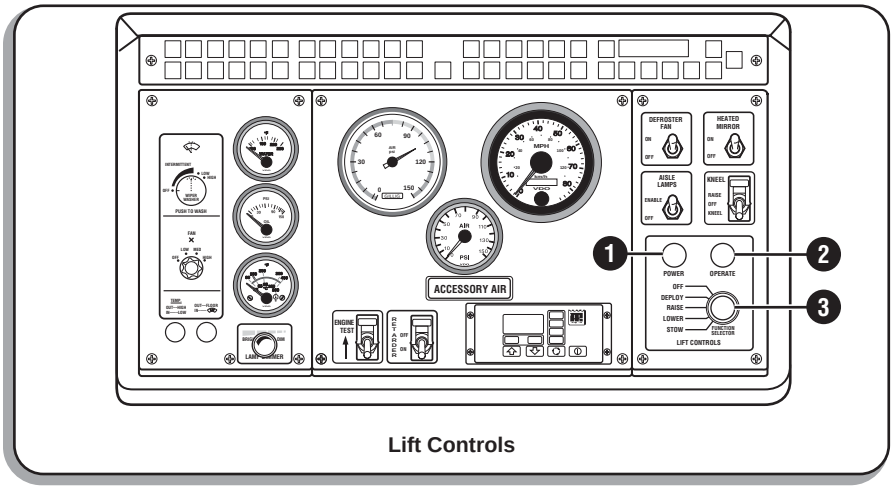
WARNING

If you have questions about any of the instructions in this chapter, contact your supervisor before trying to use the lift.

LIFT CONTROLS

The lift control switches are located on the lower Right Dash Panel. Be sure to watch your passengers at all time while operating the lift control switches.

The Sensitive Edge Override Switch is located overhead, inside the Electrical Component Compartment.



Lift Controls

❶ Power Switch

Located on the left side of the Lift Controls panel, this switch enables and disables the lift controls. The transmission must be in Neutral and the parking brake must be applied before the "POWER" switch can be activated. The lift interlock system automatically applies the service brakes, disables the throttle, and the indicator will light when the lift controls are activated. This switch must be "OFF" when the lift is not in use.

❷ Operate Switch

Located on the right side of the Lift Controls panel, this momentary switch is used to activate lift movement. Releasing this switch stops all lift motion. The direction of movement is determined by the "FUNCTION SELECTOR" switch.

❸ Function Selector Switch

Located on the lower Lift Controls panel, this rotary switch determines the direction of lift movement. This switch should be in the "OFF" position when the lift is not in use. The "DEPLOY" position extends the lift outward to its curbside limit. The "RAISE" position moves the platform upward toward the vehicle floor. The "LOWER" position moves the platform downward toward the ground. The "STOW" position returns the lift to its stowed location for normal vehicle travel.

WARNING

Lift passengers may not be able to react to a hazardous situation during lift operation. You must observe passengers during the entry, operation, and exit of the lift. You must also instruct the passenger as to the proper use of the lift. Be prepared to halt lift operation IMMEDIATELY if a hazardous situation develops!

Sensitive Edge Override Switch

This switch can be found inside the Electrical Component Compartment, located above and to the left of the driver. To open the access door, twist the two knobs, pull the door open, and pull out the prop rod to hold the door in place. The Sensitive Edge Override switch is located in the upper right-hand area of the compartment.

WARNING

The Sensitive Edge Override Switch should NEVER be placed in the "OVERRIDE" position when a passenger is on the lift.

Lift Safety Features

The wheelchair lift has two types of safety sensors to detect the presence of passengers in unsafe locations during a potentially dangerous operation. Each of these safety sensors provides protection only during specific times in the lift operation cycle. If a safety sensor gives a "false alarm," refer to the "In Case of Lift Malfunction" section later in this chapter.

WARNING

Lift passengers may not be able to react to a hazardous situation during lift operation. You must observe passengers during the entry, operation, and exit of the lift. You must also instruct the passenger as to the proper use of the lift. Be prepared to halt lift operation IMMEDIATELY if a hazardous situation develops!

WARNING

NEVER put the Sensitive Edge Override Switch into the "OVERRIDE" position when a passenger is on the wheelchair lift! This disables the lift's safety features and can result in serious injury or death to the passenger.

Pressure-Sensitive Strips

To prevent injury to the passenger from pinch points in the lift mechanism, pressure-sensitive strips are installed on either side of the lift platform. If either of these pressure-sensitive strips detects an obstruction during the raise sequence, lift operation will stop immediately and the lift will begin to lower until the "OPERATE" button is released or the lift platform rests on the ground.

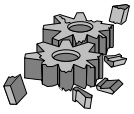
Pressure-Sensitive Mats

The lift platform features pressure-sensitive mats which detect the presence of passengers on the lift during lift stowage. If these pressure-sensitive mats detect an object on the lift platform at any time before the curbside barrier reaches the stowed (step) position, lift stowage will immediately halt. The lift will not function until the passenger or object is removed from the lift platform. After the object or passenger has been removed, you must momentarily lower the lift to reactivate the control system.

USING THE LIFT

Loading Passengers Into the Bus

1. Bring the bus to a complete stop in an approved lift loading zone (a flat area 1 to 3 feet from the curb where the lift can be lowered onto a level, debris-free, unobstructed spot).
2. Set the parking brake and shift the transmission into Neutral.
3. Open the front door and instruct passengers to stand clear.
4. Depress the "POWER" switch on the Lift Controls panel. This should activate the Lift Interlock System, which applies the service brakes, disables the throttle, and increases the engine idle speed.
5. Turn the rotary "FUNCTION SELECTOR" knob to the "DEPLOY" position. Observe the lift platform and lift loading zone to make sure that all persons are standing safely clear, and then push and hold the "OPERATE" switch to deploy the lift.
6. Hold the "OPERATE" switch until the lift platform reaches ground level and the curbside barrier has lowered to form a ramp. Release the "OPERATE" button. If a person attempts to enter or exit the bus while the lift is being lowered, release the "OPERATE" button to stop lift operation **immediately** and do not resume operation until all persons are clear of the lift.



CAUTION

If the lift hits something while lowering to pick up a passenger, have the passenger move clear of the lift landing area, stow the lift, and move the bus to a more suitable location.

WARNING

The distance between the second step and the lift platform may be more than 22 inches when the platform is at ground level. Persons attempting to step down or up across this distance could slip or trip. Do not allow walking passengers to use the lift entrance while the lift is deployed. Use caution to avoid a fall if you need to step down to assist a passenger during loading.

7. If the lift platform is not at the proper height for passenger loading, rotate the "FUNCTION SELECTOR" switch to "RAISE" (if platform is too low) or "LOWER" (if platform is too high) and then press "OPERATE" to adjust platform height. Release the "OPERATE" button when the lift is at the desired loading height.
8. Instruct the passenger to enter the lift platform as follows:

   Wheelchair Passenger: Instruct the passenger to carefully enter the lift platform, center the wheelchair on the platform, lock the wheelchair's wheels, and firmly grasp the handrails.

   Standee Passenger: Instruct the passenger to carefully enter the lift platform, stand within the area outlined in yellow, and firmly grasp the handrails. Warn the passenger of the possibility of low overhead clearance.

WARNING

NEVER turn the "FUNCTION SELECTOR" switch to the "STOW" position when a passenger is on the lift platform! Stowage of an occupied lift could result in serious injury or death.

9. Observe the passenger to be sure that he or she is clear of all moving parts and potential pinch points.

WARNING

ALWAYS check to be sure that the lift platform barriers are positioned properly when operating the lift. The curbside barrier should always be in barrier position except when the lift platform is at ground level; the roadside barrier should always be in barrier position except when the lift platform is at bus floor level. Passengers could fall from the lift if barriers do not deploy properly.

10. While continuing to observe the passenger for any potential hazards, rotate the "FUNCTION SELECTOR" switch to the "RAISE" position. Depress and hold the "OPERATE" button to raise the lift platform. Make sure the passenger stays clear of any pinch points and remains stable on the platform during lift motion. If any difficulty develops, *no matter how minor*, release the "OPERATE" button to stop lift operation **immediately** and correct the problem before continuing.

11. Release the "OPERATE" switch when the lift platform stops at bus floor level and the roadside barrier lowers, forming a bridge between the lift platform and the bus floor.
12. Instruct the passenger to leave the platform and proceed to the appropriate seating area. Instruct nearby passengers to stand clear of the lift area.

Stowing the Lift

WARNING

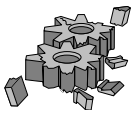
ALWAYS be sure that there are no passengers on the lift platform before you try to stow the lift. Serious injury or death could result if stowage of an occupied lift is attempted.

1. Clear the lift platform of all persons and objects. Instruct passengers to stay clear of the lift until it is stowed.
2. Rotate the "FUNCTION SELECTOR" switch to the "STOW" position. Depress the "OPERATE" button and observe the stow operation to make sure that no one attempts to enter or exit the bus while the lift is being stowed. Release the "OPERATE" button. Verify that the lift is properly stowed.
3. Rotate the "FUNCTION SELECTOR" switch to "OFF," and then depress the "POWER" switch to turn off power to the lift.

Unloading Passengers From the Bus

1. Bring the bus to a complete stop in an approved lift loading zone (a flat area 1 to 3 feet from the curb where the lift can be lowered onto a level, debris-free, unobstructed spot).
2. Set the parking brake and shift the transmission into Neutral.
3. Open the front door and instruct passengers to stand clear.
4. Depress the "POWER" switch on the Lift Controls panel. This should activate the Lift Interlock System, which applies the service brakes, disables the throttle, and increases the engine idle speed.
5. Turn the rotary "FUNCTION SELECTOR" knob to the "DEPLOY" position. Observe the lift platform and lift loading zone to make sure that all persons are standing safely clear, and then push and hold the "OPERATE" switch to deploy the lift.

6. Hold the "OPERATE" switch until the lift platform reaches ground level and the curbside barrier has lowered to form a ramp. Release the "OPERATE" button. If a person attempts to enter or exit the bus while the lift is being lowered, release the "OPERATE" button to stop lift operation **immediately** and do not resume operation until all persons are clear of the lift.



CAUTION

If the lift hits something while lowering to pick up a passenger, have the passenger move clear of the lift landing area, stow the lift, and move the bus to more suitable location.

WARNING

The distance between the second step and the lift platform may be more than 22 inches when the platform is at ground level. Persons attempting to step down or up across this distance could slip or trip. Do not allow walking passengers to use the lift entrance while the lift is deployed. Use caution to avoid a fall if you need to step down to assist a passenger during loading.

7. If the lift platform is not at the proper height for passenger loading, rotate the "FUNCTION SELECTOR" switch to "RAISE" (if platform is too low) or "LOWER" (if platform is too high) and then press "OPERATE" to adjust platform height. Release the "OPERATE" button when the lift is at the desired loading height.
8. Instruct the passenger to enter the lift platform as follows:

   Wheelchair Passenger: Instruct the passenger to carefully enter the lift platform, center the wheelchair on the platform, lock the wheelchair's wheels, and firmly grasp the handrails.

   Standee Passenger: Instruct the passenger to carefully enter the lift platform, stand within the area outlined in yellow, and firmly grasp the handrails. Warn the passenger of the possibility of low overhead clearance.

WARNING

NEVER turn the "FUNCTION SELECTOR" switch to the "STOW" position when a passenger is on the lift platform! Stowage of an occupied lift could result in serious injury or death.

9. Observe the passenger to be sure that he or she is clear of all moving parts and potential pinch points.

WARNING

ALWAYS check to be sure that the lift platform barriers are positioned properly when operating the lift. The curbside barrier should always be in barrier position except when the lift platform is at ground level; the roadside barrier should always be in barrier position except when the lift platform is at bus floor level. Passengers could fall from the lift if barriers do not deploy properly.

10. While continuing to observe the passenger for any potential hazards, rotate the "FUNCTION SELECTOR" switch to the "RAISE" position. Depress and hold the "OPERATE" button to raise the lift platform. Make sure the passenger stays clear of any pinch points and remains stable on the platform during lift motion. If any difficulty develops, *no matter how minor*, release the "OPERATE" button to stop lift operation **immediately** and correct the problem before continuing.
11. Release the "OPERATE" switch when the lift platform stops at bus floor level and the roadside barrier lowers, forming a bridge between the lift platform and the bus floor.
12. Instruct the passenger to leave the platform and proceed to the appropriate seating area. Instruct nearby passengers to stand clear of the lift area.
13. Rotate the "FUNCTION SELECTOR" switch to the "STOW" position. Depress the "OPERATE" button and observe the stow operation to make sure that no one attempts to enter or exit the bus while the lift is being stowed. Release the "OPERATE" button. Verify that the lift is properly stowed.
14. Rotate the "FUNCTION SELECTOR" switch to "OFF," and then depress the "POWER" switch to turn off power to the lift.

WARNING

ALWAYS be sure that there are no passengers on the lift platform before you try to stow the lift. Serious injury or death could result if stowage of an occupied lift is attempted.

IN CASE OF LIFT MALFUNCTION

The wheelchair lift is a complex piece of machinery, and may sometimes develop problems. In order to keep your passengers safe from harm, you should be prepared to respond to unexpected situations. You should study this section so you will be ready, in the unlikely event of a malfunction. In addition, you *must* learn and follow your employer's official guidelines regarding driver responsibilities in the event of wheelchair lift malfunction.

WARNING

ALWAYS contact your supervisor immediately if the lift malfunctions in any way. Do not take any of the actions listed in this section unless specifically authorized by your supervisor.

Safety Sensor "False Alarms"

Refer to the "Lift Safety Features" section earlier in this chapter for descriptions of the pressure-sensitive strips and mats installed on the wheelchair lift. If one of these safety sensors detects a problem on the lift when none is actually present, it may be necessary to override the sensors using the Sensitive Edge Override Switch.

Lift Will Not Raise Properly

If an unoccupied lift does not raise when the "FUNCTION SELECTOR" is in the "RAISE" position and the "OPERATE" switch is depressed, or if it begins to raise and then stops or drops back to ground level, there may be a problem with the pressure-sensitive strips on the lift platform. To override the pressure-sensitive strips, do the following (if authorized by your employer):

WARNING

The Sensitive Edge Override Switch should NEVER be placed in the "OVERRIDE" position when a passenger is on the lift.

1. Make sure there are no persons or objects on or near the lift platform.
2. Open the Electrical Component Compartment door (located above the driver's side window) and move the Sensitive Edge Override Switch to the "OVERRIDE" position.

3. Verify that no persons are on or near the lift platform. Rotate the "FUNCTION SELECTOR" switch to the "LOWER" position, and momentarily depress the "OPERATE" button to reset the lift controller.
4. Rotate the "FUNCTION SELECTOR" switch to the "RAISE" position, and then depress and hold the "OPERATE" button.
5. Closely observe the lift platform as it raises to ensure that everything is working properly.
6. Once the lift has been fully raised, reset the Sensitive Edge Override Switch to the "NORMAL" position. Close the Electrical Component Compartment Door.

Lift Will Not Stow Properly

If an unoccupied lift does not stow when the "FUNCTION SELECTOR" is in the "STOW" position and the "OPERATE" switch is depressed, there may be a problem with the pressure-sensitive mats on the lift platform. To override the pressure-sensitive mats, do the following (if authorized by your employer):

WARNING

NEVER turn the "FUNCTION SELECTOR" to the "STOW" position when a passenger is on the lift platform! Stowage of an occupied lift could result in serious injury or death.

1. Make sure there are no persons or objects on or near the lift platform.
2. Open the Electrical Component Compartment door (located above the driver's side window) and move the Sensitive Edge Override Switch to the "OVERRIDE" position.
3. Verify that no persons are on or near the lift platform. Rotate the "FUNCTION SELECTOR" switch to the "STOW" position, and then depress and hold the "OPERATE" button.
4. Closely observe the lift platform to ensure that everything is working properly and that no one attempts to enter or exit the bus while the lift is being stowed. Release the "OPERATE" button.
5. Rotate the "FUNCTION SELECTOR" switch to the "OFF" position, and then depress the "POWER" switch to turn off power to the lift.
6. Reset the Sensitive Edge Override Switch to the "NORMAL" position. Close the Electrical Component Compartment Door.

Manual Lift Operation

If the lift cannot be operated electrically, a hand pump and a series of valves can be used to operate the lift manually. Use the following procedure, if you are authorized by your supervisor to manually operate the lift in an emergency:

NOTICE

Lift-U recommends that manual lift operation be done only as a temporary measure for removing passengers and not for passenger loading.

NOTICE

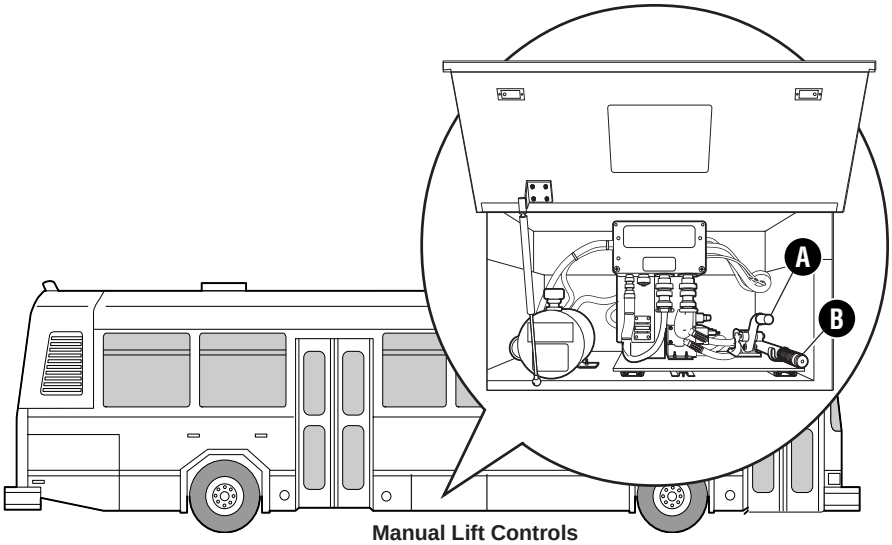
Do not exceed 75 ft-lbs of force against the pump handle.

Manually Operating the Lift

WARNING

During manual operation, all normal safety features and mechanical limits are bypassed. The lift platform and barriers will not position themselves and the lift will not stop when a passenger contacts the pressure-sensitive mats or strips. Use extreme caution when operating the lift manually– the danger of passenger injury or equipment damage is much greater than during normal operation.

1. Bring the bus to a complete stop in an approved lift loading zone (a flat area 1 to 3 feet from the curb where the lift can be lowered onto a level, debris-free, unobstructed spot).
2. Set the parking brake and shift the transmission into Neutral.
3. Open the front door. Instruct passengers to stand clear.
4. Depress the “POWER” switch on the Lift Controls panel.
5. Locate the Lift Controls Access Door (see illustration below) on the center skirt area on the right (curb) side of the bus. Using the T-handle key tool, open the access door. Remove the hand pump handle **B** from its clip and install it on the pump **A**.
6. Instruct passengers to stand clear.



Manual Lift Controls

CAUTION

Activating the lift "POWER" switch during manual operation is necessary to preserve the lift electrical logic.

Manually Deploying the Lift Platform

1. Refer to the decal on the inside of the Lift Controls Access Door to locate Valve **1B**. Push and hold the button on valve **1B** while pumping the handle of the manual pump. This extends the platform toward the curb.
2. When the lift platform is fully deployed, release valve **1B** and stop pumping.

Manually Operating the Curbside Barrier

To move the curbside (outer) barrier from the stowed position to the barrier or ramp positions, follow these instructions:

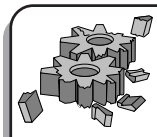
1. Locate valve **3B** using the decal on the Lift Controls Access Door.
2. While depressing the button on valve **3B**, operate the hand pump and observe the position of the curbside barrier.

3. For barrier position, release valve **3B** and stop pumping when the curbside barrier reaches a 90° angle relative to the lift platform. For ramp position, release valve **3B** and stop pumping when the curbside barrier is properly positioned.

To move the curbside barrier from the ramp position to the barrier position, or from the ramp or barrier position to the stowed position, follow these instructions:

1. Locate valve **3A** using the decal on the Lift Controls Access Door.
2. While depressing the button on valve **3A**, operate the hand pump and observe the position of the curbside barrier.
3. For barrier position, release valve **3A** and stop pumping when the curbside barrier reaches a 90° angle relative to the lift platform. For stowed position, release valve **3A** and stop pumping when the curbside barrier is properly stowed.

Manually Operating the Roadside Barrier



CAUTION

Always fully deploy the lift platform before attempting to operate the roadside barrier. The lift or the bus may be damaged if the roadside barrier is opened before the lift platform is fully deployed.

To move the roadside (inner) barrier from the bridge position to the barrier position, follow these instructions:

1. Locate valve **4A** using the decal on the Lift Controls Access Door.
2. While depressing the button on valve **4A**, operate the hand pump and observe the position of the roadside barrier. Continue pumping until the roadside barrier cannot move any further.

To move the roadside barrier from the deployed or barrier position to the bridge position, follow these instructions:

1. Locate valve **4B** using the decal on the Lift Controls Access Door.
2. While depressing the button on valve **4B**, operate the hand pump and observe the position of the roadside barrier. Continue pumping until the roadside barrier cannot move any further.

Raising or Lowering the Lift Platform

CAUTION

Always fully deploy the lift platform before attempting to raise or lower the lift platform. The lift or the bus may be damaged if the lift is raised or lowered before the lift platform is fully deployed.

WARNING

Lift passengers could roll or fall off the platform if both barriers are not raised to the barrier position before raising or lowering the lift. Do not use the lift to transfer passengers if the barriers cannot be properly positioned.

To raise the lift platform, use the following steps:

1. Locate valve **2A** using the decal on the Lift Controls Access Door.
2. While depressing the button on valve **2A**, operate the hand pump and observe the position of the lift platform. Continue pumping until the lift platform is at the desired level.

To lower the lift platform, use the following steps :

1. Locate valve **2B** using the decal on the Lift Controls Access Door.
2. While depressing the button on valve **2B**, operate the hand pump and observe the position of the roadside barrier. The lift may not begin to lower immediately due to hydraulic system design; continue holding the valve and pumping until the lift lowers to the desired level.

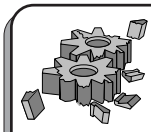
NOTICE

The lift platform may be raised or lowered as many times as necessary to load and unload passengers without stowing the lift between each cycle.

Manually Stowing the Lift

WARNING

Persons or objects on the lift platform can be pushed off during the stow operation. During manual operation, the sensitive mat will not stop the stow mode if persons or objects are on the platform. Do not attempt to stow the lift while anything (passenger or object) is on the platform. Passengers on the lift during stow operation could be seriously injured or killed if they fall or are pushed off the platform!



CAUTION

The lift may be damaged if the lift platform is not correctly aligned for the stow operation. Be sure that the guide blocks on the lift platform line up with the slide channels before stowing.

To stow the lift manually, use the following steps:

1. Clear the lift platform of all persons and objects.
2. Warn all persons to stay clear of the lift area.
3. Move the curbside barrier into the step position (valve **3A**).
4. Move the roadside barrier into the bridge position (valve **4B**).
5. Bring the lift platform to stow height. Raise (valve **2A**) or lower (valve **2B**) the platform, as required. Stow height is the height at which the guide blocks on the lift platform will line up with the slide channels.
6. When the platform reaches the stow height, retract the platform by depressing the button on valve **1A** and operating the hand pump.
7. When the platform is within 12-18 inches from the fully stowed position, check guide block alignment and realign the lift platform, as necessary.
8. Continue pumping until the platform cannot retract any further. Discontinue pumping when desired stow distance is achieved. For fully stowed position, stop pumping when the lift mechanism is fully bottomed within the slide channels. The curbside portion of the lift platform should be flush with the end of the slide channels while in the fully stowed position.

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