

2025

BOLLINGER B4 QUICK REFERENCE GUIDE

BOLLINGER MOTORS

Edition 2 Version 3

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1. SAFELY ENTERING & SITTING IN THE CAB

CAUTION: DO NOT use the steering wheel to pull yourself in, as doing so could result in wear and damage to the steering wheel and steering column.

1. Open the driver door.

2. Using the door assist handle, the cab assist handle, and the footstep as your 3-points of support, step up into the cab while pivoting to the seated position.



3. While sitting in the seat, pull up on the seat adjust handle and slide the seat forward or rearward so you can comfortably reach all controls. Release the bar once you have reached the desired position.

Note: The manual seat adjustment handle is located under the seat cushion at the front edge of the driver seat.

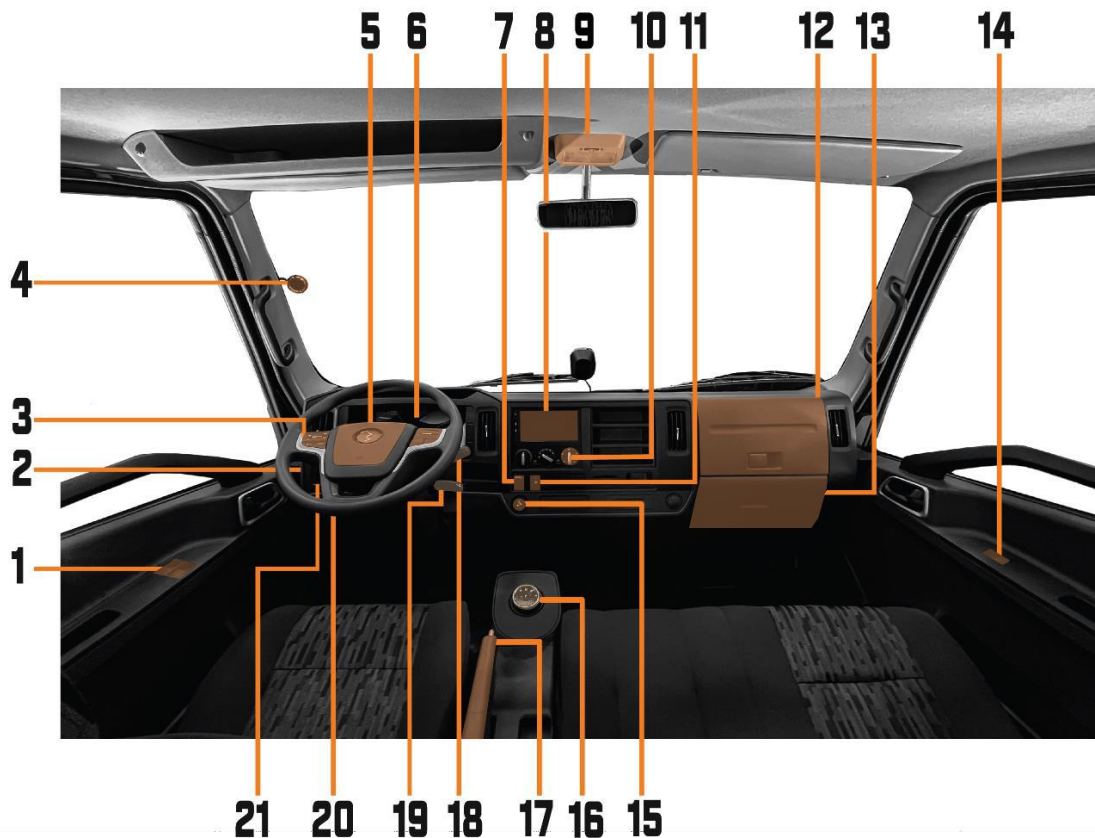
4. With the seat adjust handle released, attempt to move the seat forward and rearward to be sure that the seat adjusters have latched.



CAUTION: Adjusting a seat while driving is dangerous. Moving a seat while driving could result in loss of control which could cause a collision and serious injury or death.






















CAUTION: Seats should be adjusted before fastening the seat belts and while the vehicle is parked. Serious injury or death could result from a poorly adjusted seat belt and/or seat adjustment.

2. DRIVER CONTROLS OVERVIEW



1. Driver Power Window Switch	11. PTC Heater Switch
2. Interior Lights Switch	12. Upper Stowage Compartment
3. Steering Wheel Radio & Mode Control Switch	13. Lower Stowage Compartment
4. Mobileye (if equipped)	14. Passenger Power Window Switch
5. Horn Pad	15. Cigarette Lighter / 12V Accessory Outlet
6. Instrument Cluster	16. Drive Selector
7. Hazzard Flashers Switch	17. Parking Brake Lever
8. Center Display	18. Windshield Wiper & Washer Stalk
9. Dome Lamp	19. Ignition Switch
10. HVAC Controls	20. Tilt / Telescopic Steering Column Lever
	21. Multi-function Turn Signal Lever

3. INSTRUMENT PANEL TELLTALES

Indicator	Color	Description	Indicator	Color	Description
	YELLOW	Low battery. Battery charge is lower than 20%. Charge the Battery.		GREEN	ECO mode on (If Equipped).
	YELLOW	Battery power limited. Driving power is limited. Charge the Battery.		GREEN	Cruise control on.
	RED	Motor malfunction. <i>See your authorized Bollinger Motors Dealer or Service Provider.</i>		YELLOW	Electric Power Take Off (ePTO) active (If Equipped).
READY	GREEN	Vehicle ready to drive.		YELLOW	Vehicle speed limited (If Equipped).
	RED	Malfunction Indicator. <i>See your authorized Bollinger Motors Dealer or Service Provider.</i>		RED	Driver seat belt not buckled.
PARK	RED	Parking brake applied.		GREEN	Low beam head lamps on.
	RED	Battery Malfunction. <i>See your authorized Bollinger Motors Dealer or Service Provider.</i>		BLUE	High beam head lamps on.
BRAKE	RED	Brake System Malfunction. <i>See your authorized Bollinger Motors Dealer or Service Provider.</i>		GREEN	Running lights / parking lights on.
ABS	YELLOW	ABS System Malfunction. <i>See your authorized Bollinger Motors Dealer or Service Provider.</i>		GREEN	Left turn.
	GREEN	Charging. Vehicle is plugged in and charging.		GREEN	Right turn.
	RED	Electronic Brake System Malfunction (If Equipped). <i>See your authorized Bollinger Motors Dealer or Service Provider.</i>		GREEN	Front fog lamps on.
	YELLOW	Electric Power Steering Malfunction. <i>See your authorized Bollinger Motors Dealer or Service Provider.</i>	EBD	RED	Electronic Brake Distribution Malfunction. <i>See your authorized Bollinger Motors Dealer or Service Provider.</i>
	RED	Cab Ajar (If Equipped). Latch cab.		YELLOW	T-Box Failure (If Equipped).

4. VEHICLE OPERATION

Starting the Truck:

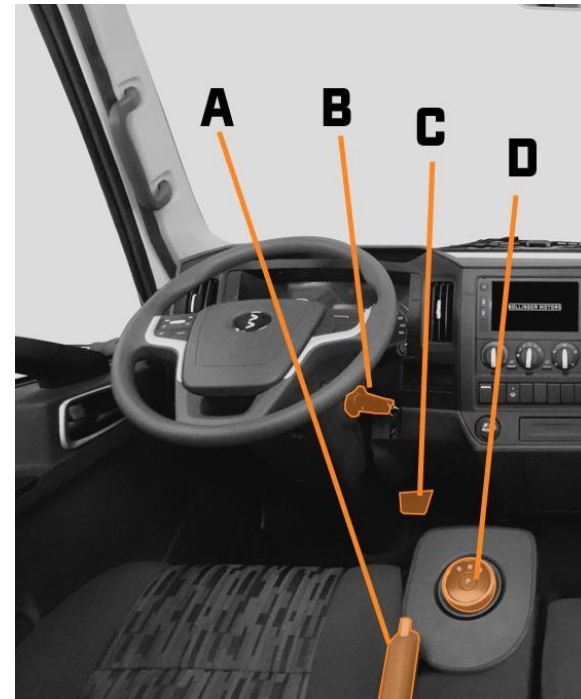
1. Fasten the seatbelt.
2. Verify parking brake (A) is engaged and the drive selector (D) is in PARK (P) or NEUTRAL (N). Depress the brake pedal (C).
3. Insert key into ignition (B), rotate it to the START position, hold for three to five seconds.
4. The **READY** indicator will illuminate indicating that the vehicle is operational.
5. Allow key to return to the RUN position.

Driving the Truck:

1. Adjust your seat and mirrors to allow for maximum visibility and comfort.
2. While keeping your foot on the brake pedal (C), depress the parking brake lock button and lower the parking brake lever (A).
3. Rotate the drive selector (D) to the DRIVE (D) or REVERSE (R) position. **Note:** The drive selector rotary dial will return to its starting position once released after selecting the drive state desired. To transition from drive to reverse, the drive selector must be rotated and held momentarily until it indicates REVERSE (R).
4. Check your surroundings and slowly let your foot off the brake pedal.

Returning to Park:

1. Bring the vehicle to a complete stop.
2. Apply the parking brake by pulling the parking brake lever (A) up.
3. Rotate the drive selector (D) to NEUTRAL (N).
4. Press the PARK (P) button in the drive selector (D).



5. CAB TILT

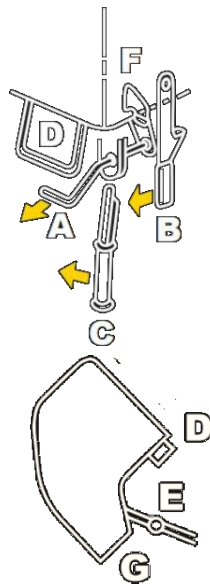
WARNING: To help avoid personal injury when tilting cab follow the directions below:

1. Park the vehicle on level ground and ensure ample space around the cab before commencing this operation.
2. Set the parking brake firmly and block the front wheels with proper wheel blocks.
3. Ensure "P" (Park mode) is engaged.
4. Remove all objects from the instrument panel, seat, and cab floor.
5. Be certain the cab doors are closed.
6. Always insert the lock pin into the cab support when the cab is in raised position.
7. Make sure the lock hood attached to the handle has been firmly engaged.

To Tilt Cab:

1. On the driver side, place your left hand, palm up, on the cab tilt handle (D) and pull the cab tilt lock safety release (A) toward you.
2. With the cab tilt lock safety release disengaged, with your right hand lift the cab tilt release lock (C) lever (rotating clockwise) to release it from the cab tilt latch receiver.
3. Stabilize the cab by grasping the cab tilt handle (D) with your left hand, grasp the cab tilt release (B) and pull the handle toward you to release the cab fully and tilt it forward.
4. Raise the cab to its full lift position and ensure the cab tilt support arm (E) is fully locked.
5. Insert the lock pin (G) into cab tilt support arm (E).

Note: To lower cab reverse procedure.



6. BATTERY CHARGING WARNINGS & CAUTIONS

WARNING: Follow the high voltage charger instructions provided by the charger manufacturer.

WARNING: Do not connect a low voltage charger while a high voltage charger is already connected. Disconnect the high voltage charger prior to connecting the low voltage charger.

WARNING: Electric shock occurs when the human body becomes a part of the electrical circuit, causing the current to enter at one point and leave at another. Contact with a current as low as 6mA can cause serious injury or death, and a 6mA current is likely to occur when both the high and low voltage chargers are plugged in at the same time.

WARNING: An arc flash is an uncontrolled release of incident energy typically lasting less than one (1) second where electricity travels across a circuit gap resulting in blinding light and extreme heat, which could cause serious injury or death.

WARNING: A concussive pressure wave is caused by an arc fault and is often loud and accompanied by ejected hot shrapnel and metallic vapors, which could cause serious injury or death.


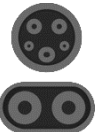

CAUTION: Arc flashes and arc faults are caused by the following: Material failure, loose connections and exposed live parts, dust, faulty installation, corrosion, condensation, intrusion from animals, and other possible causes.

CAUTION: Before charging the vehicle, the drive selector should be in the PARK position, with the park brake engaged, the ignition switch in the OFF position, and the key removed.

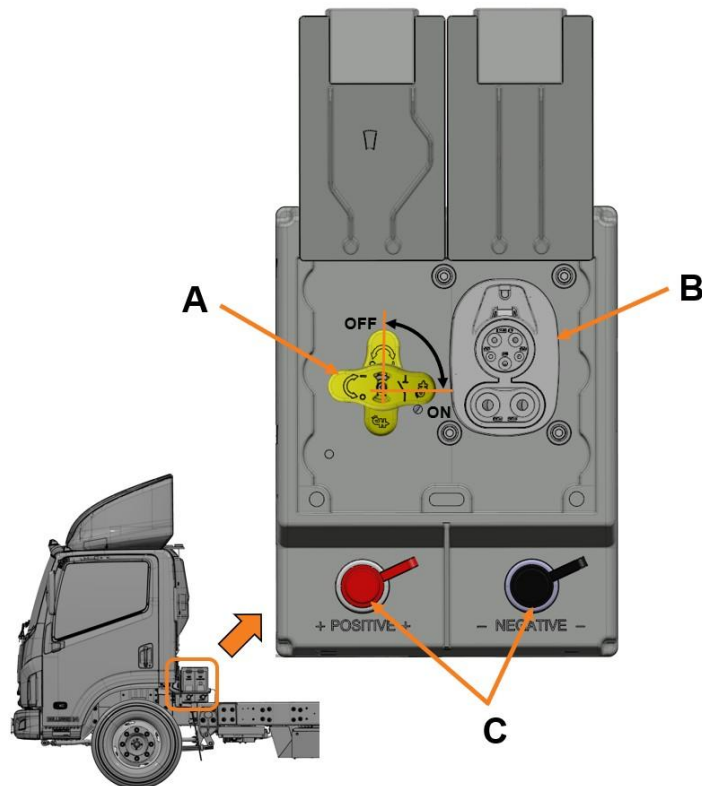
CAUTION: All chargers must comply with J1772 CCS AC & DC Plug requirements, as described by the charger manufacturer.

7. HIGH VOLTAGE BATTERY CHARGING CONNECTIONS & TIMES

Approximate Charge Duration	Voltage and Type of Current	0% State of Charge (SOC) To 100% SOC
Level 2	240V - AC	9 hours @ 19.2KW
DC FAST CHARGE	800+V - DC	2 hours @ 110KW

Charge Connection Types	
Charge Port	
IEC Type 1	
CCS 1	

- A. 12V SHUTOFF Switch
- B. High voltage vehicle charging port
- C. 12V positive and negative charge port posts




8. HIGH VOLTAGE BATTERY CHARGING

Note: If the vehicle is exposed to temperatures of 14°F (-10°C) or below for 8 hours or more, the vehicle must be connected to a charger to maintain vehicle performance.

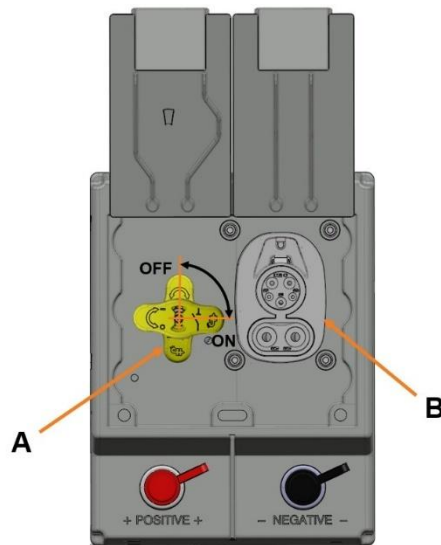
Note: If the vehicle is expected to be stored for an extended period, the high voltage system should be disabled by switching the 12V SHUTOFF Switch (A) to the OFF position.

Note: When used regularly, the battery must be charged to 100% at least once weekly, reference Bollinger Motors website for the Battery Health and Maximizing Range documents.

1. Turn the ignition to the OFF position.
2. Inspect the charging cable, connectors, and adaptor connector for wear or damage. Ensure that a positive connection can be made and the connector ports are free of corrosion, moisture, or debris. If using a Level 2 Adapter, ensure that the adapter is securely attached to charge handle.
3. Open the high voltage vehicle charging port door by gently raising it up and open.
4. Insert the charging plug assembly into the high voltage vehicle charging port (B) and ensure there is a good connection by feeling and hearing the 'click'.
5. Switch the charger on.

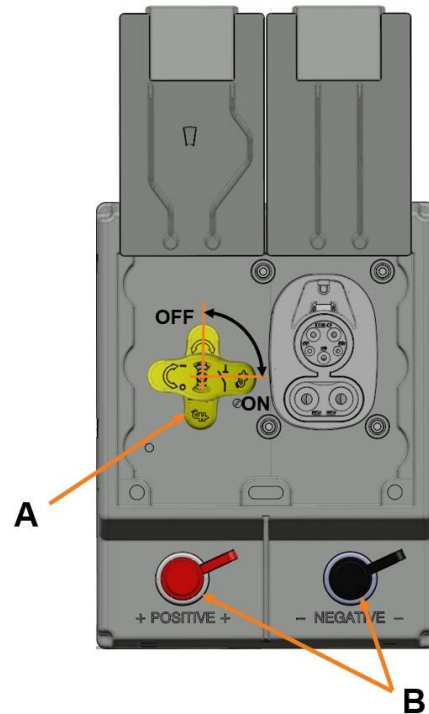
Note: The charging indicator located in the Instrument cluster should illuminate green. 

6. Charging will automatically stop once batteries reach optimal capacity.
7. Remove and stow cable and close vehicle charge port door once charging has completed.
8. Turn the 12V ON/OFF switch to the 'OFF' position for 30 to 60 seconds, then turn to the 'ON' position, close door.



9. LOW VOLTAGE BATTERY CHARGING

1. Turn the ignition to the OFF position.
2. Locate the 12V SHUTOFF Switch (A) located behind the cab on the driver side.
3. Turn the 12V SHUTOFF Switch(A) to the "OFF" position.
4. Connect the charger to the positive and negative charge port posts (B) and charge the battery.
5. Once fully charged, turn off and disconnect the low voltage battery charger.
6. To operate vehicle, turn the 12V SHUTOFF Switch (A) to the "ON" position.



10. CHECKING FLUIDS

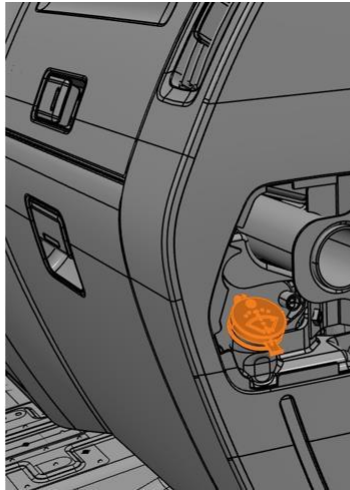
WARNING: Operating, servicing, and maintaining this vehicle can expose you to chemicals, which are known to cause cancer, birth defects, or other reproductive harm. For more information go to www.P65Warnings.ca.gov/passenger-vehicle.

1. Open the driver door.
2. Remove the brake fluid reservoir dash cover panel.
3. Inspect the fluid.



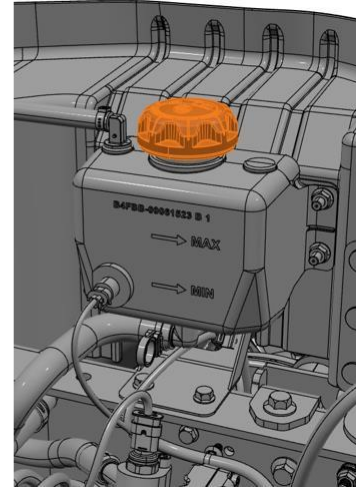
Brake Fluid

1. Open the passenger door.
2. Remove the washer fluid reservoir dash cover panel.
3. Inspect the fluid.



Windshield Washer Fluid

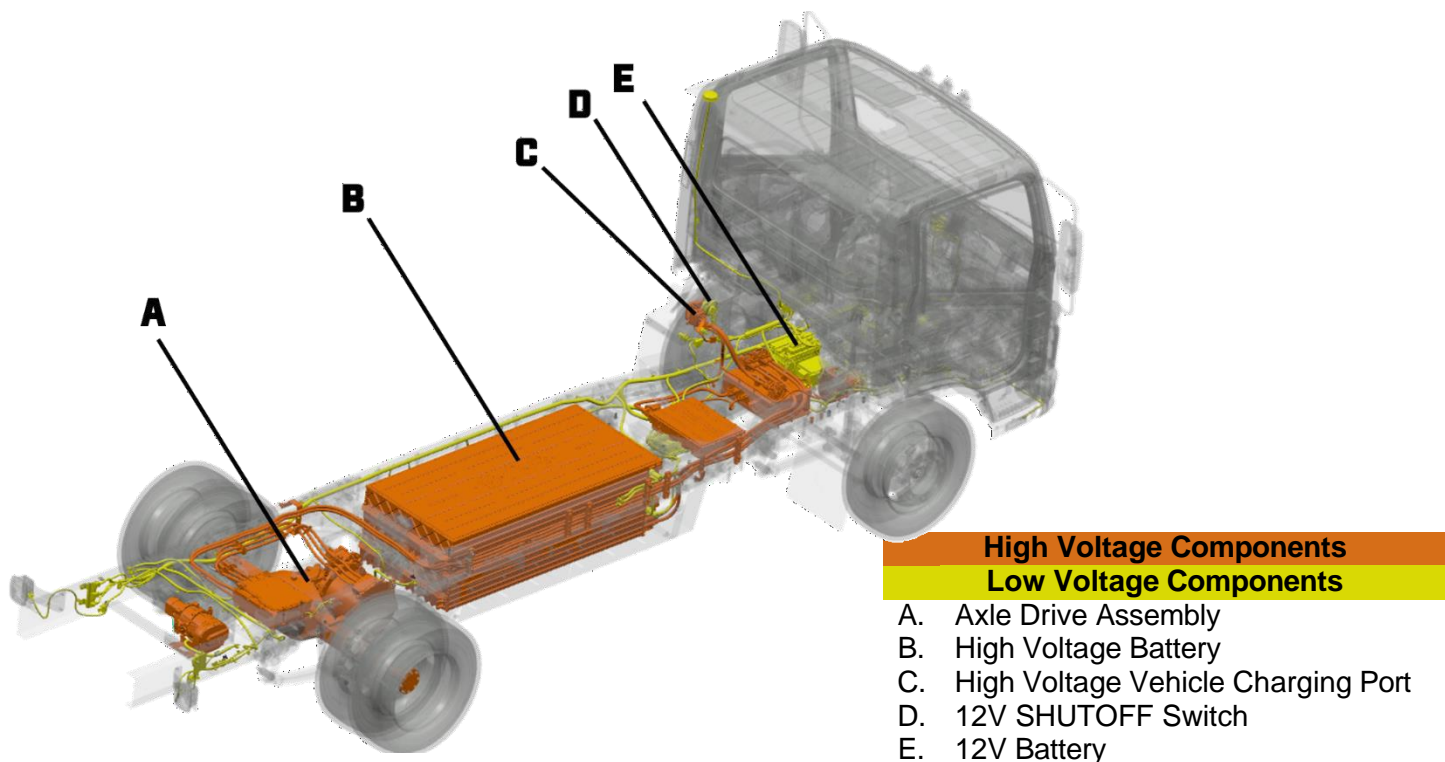
1. Tilt the Cab. See **CAB TILT**.
2. Inspect the fluid.



Coolant

11. HIGH VOLTAGE IDENTIFICATION

WARNING: To prevent the risk of high voltage shock, precisely follow all warnings, and instructions to disable the high voltage system. Failure to follow these instructions may result in serious injury or death.



12. DOOR LOCKS - LOCKING AND UNLOCKING

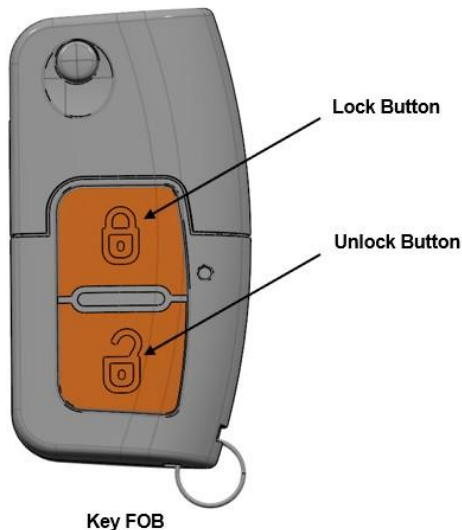
Locking and Unlocking with Key FOB

1. Press the lock button on the Key FOB to lock the doors.

Note: When the button is pressed, the vehicle's keyless entry system causes the right and left turn signals to flash to confirm the locking procedure has occurred.

2. Press the unlock button on the Key FOB to unlock the doors.

Note: When the button is pressed, the vehicle's keyless entry system causes the right and left turn signals to flash to confirm the unlocking procedure has occurred.

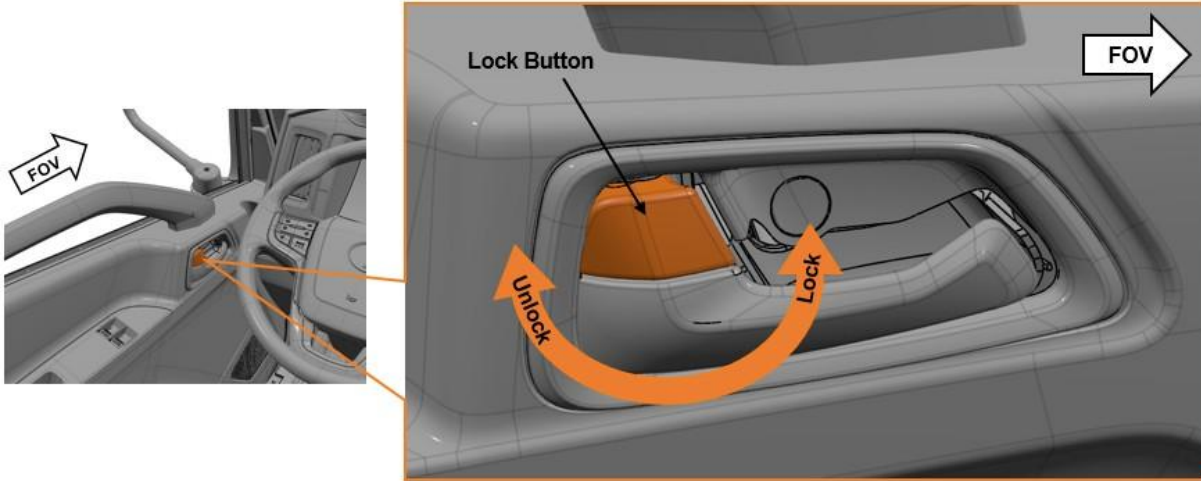


Locking and Unlocking with the Interior Lock Button

1. Rotate the lock button forward to lock the door.
2. Rotate the lock button rearward to unlock the door.

Note: After unlocking the door, open the door by pulling the inside door handle.

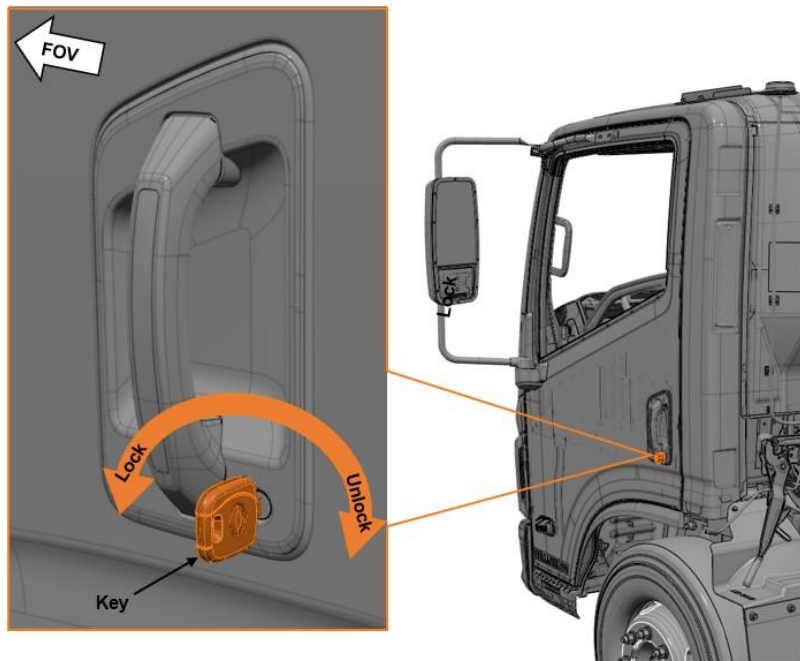
Note: If the door is locked, the door lock mechanism overrides operation of the door handle.



Locking and Unlocking Outside using the Key

1. Insert the key into the lock cylinder and rotate counterclockwise to lock the door.
2. Insert the key into the lock cylinder and rotate clockwise to unlock the door.

Note: The door can then be opened by pulling the outside door handle outward.



Locking Outside without using the Key

Note: Prior to attempting to lock the door, verify that you have the key in your possession.

1. First push the lock button on the inside door handle to the lock position.
2. Next close the door while holding the outside door handle in the raised outward position.
3. Once the door has been closed, release the door handle.

Note: Verify the door is locked by pulling the door handle outward, as attempting to open the door.



13. POWER WINDOWS - OPENING AND CLOSING

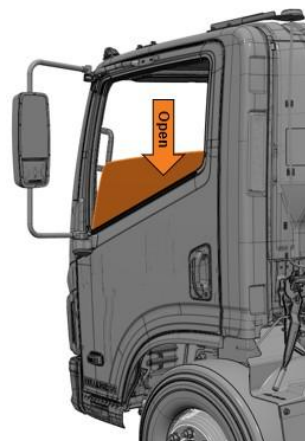
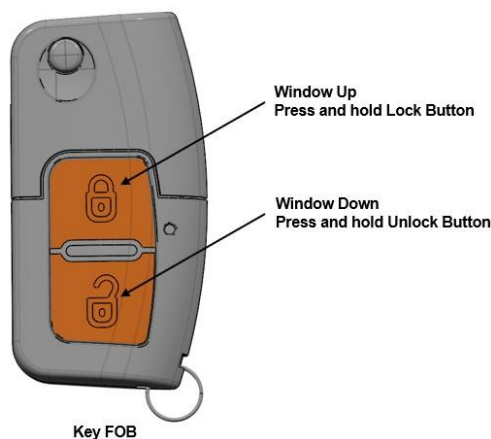
Opening and Closing the Windows with the Key FOB

1. Press and hold the Unlock button on the Key Fob.
2. The marker lights will briefly flash.
3. Continue holding until the window raises and stops, approximately 6 seconds total.

Note: *There is a slight delay in movement between the driver's window and passenger window.*

4. Press and hold the Lock button on the Key Fob.
5. The marker lights will briefly flash.
6. Continue holding until the window lowers fully and stops, approximately 6 seconds total.

Note: *There is a slight delay in movement between the driver's window and passenger window.*



Opening and Closing the windows using the Interior Window Switches.

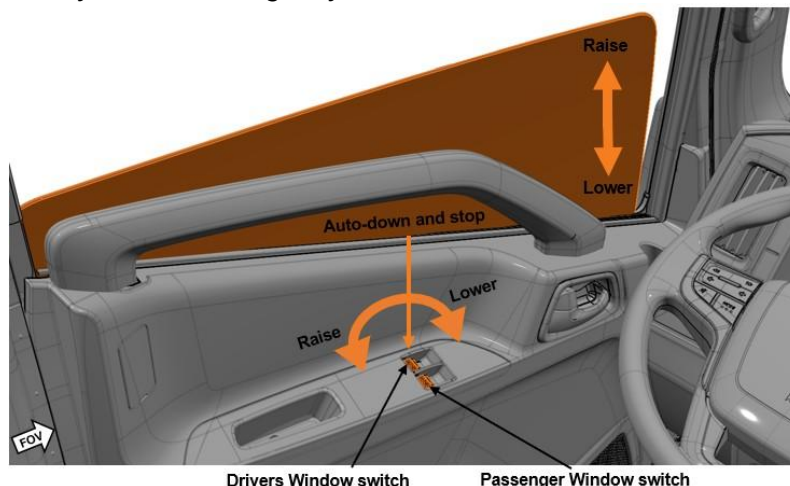
Note: The driver's door can control both windows, while the passenger door controls only the passenger window.

1. Press and hold down left switch to lower driver's window.
2. Pull back and hold back left switch to raise driver's window.
3. Press and hold down right switch to lower passenger window.
4. Pull back and hold back right switch to raise passenger window.

Auto-down functionality

5. Briefly press the momentary switch down to automatically lower the window.
6. Briefly press the momentary switch again to stop the window in the desired location.

Note: This automatic functionality is for lowering only, to raise the window the switch must be held back.



14. MAINTENANCE SCHEDULE

Service Action	Kilometer Interval											
	750†	7500††	25,000	50,000	75,000	100,000	125,000	150,000	175,000	200,000	225,000	250,000
	Mile Interval											
Service Action	500†	5000††	15,000	30,000	45,000	60,000	75,000	90,000	105,000	120,000	135,000	150,000
Inspect Tie Rod Ends, Retorque			x	x	x	x	x	x	x	x	x	x
Inspect Drag Link, Retorque				x		x		x		x		x
Lubricate Door Hinges	x		x	x	x	x	x	x	x	x	x	x
Lubricate Door Lock Cylinders	x		x	x	x	x	x	x	x	x	x	x
Retorque on HV Line Retention Bolts (Axle to Converter)			x	x	x	x	x	x	x	x	x	x
Inspect & Grease Kingpin			x	x	x	x	x	x	x	x	x	x
Inspect Brake Booster Vacuum Hoses				x		x		x		x		x
Inspect Brake Fluid		x										
Inspect Brake Lines/Hoses	x		x	x	x	x	x	x	x	x	x	x
Inspect Brake Pads		x	x	x	x	x	x	x	x	x	x	x
Inspect Cabin Air Screen		x	x	x	x	x	x	x	x	x	x	x
Inspect Coolant			x	x	x	x	x	x	x	x	x	x
Inspect Cooling Lines			x	x	x	x	x	x	x	x	x	x
Inspect Differential Gear Oil - Synthetic						x				x		
Inspect Front Brake Rotors				x		x		x		x		x
Inspect Front Leaf Springs & Bushings, & Retorque			x	x	x	x	x	x	x	x	x	x
Inspect Front Wheel Hub Fluid - Synthetic				x		x		x		x		x
Inspect HVAC A/C Charge Levels			x	x	x	x	x	x	x	x	x	x
Inspect Parking Brake Hold	x		x	x	x	x	x	x	x	x	x	x
Inspect Pitman Arm, Verify Torque			x	x	x	x	x	x	x	x	x	x
Inspect Radiator			x	x	x	x	x	x	x	x	x	x
Inspect Rear Brake Rotors				x		x		x		x		x
Inspect Rear Leaf Springs & Bushings & Retorque			x	x	x	x	x	x	x	x	x	x
Inspect Steering Gear			x	x	x	x	x	x	x	x	x	x
Inspect Sway Bar End Links, Retorque			x	x	x	x	x	x	x	x	x	x
Replace Brake Fluid				x		x		x		x		x
Replace Coolant												x
Replace Differential Gear Oil - Mineral						x				x		
Replace Differential Gear Oil - Synthetic												x
Replace Front Wheel Hub Fluid - Mineral				x		x		x		x		x
Replace Front Wheel Hub Fluid - Synthetic												x
Tire Rotation		x	x	x	x	x	x	x	x	x	x	x
Lug Nut Retorque		x	x	x	x	x	x	x	x	x	x	x
Axle U-Bolt Retorque	x	x	x	x	x	x	x	x	x	x	x	x

First Initial Inspection - †

Second Initial Inspection - ††

Service Action	Specifications
Inspect Tie Rod Ends, Retorque	Tie Rod 216.9 Nm (160 lb/ft)
Inspect Drag Link, Retorque	Draglink to Pitman Arm - 190 Nm (140 lb/ft), Draglink to Steer Axle - 245 Nm (180 lb/ft), Draglink Adjustment Nut M24x2.0 - 341.5 Nm (252 lb/ft), Draglink Adjustment Nut M30x20 - 404.5 Nm (298 lb/ft)
Lubricate Door Hinges	Door & Lock Cylinder Lubricant (industry standard/readily available)
Lubricate Door Lock Cylinders	Door & Lock Cylinder Lubricant (industry standard/readily available)
Retorque on HV Line Retention Bolts (Axle to Converter)	Line Retention Bolt 8 Nm (6 lb/ft)
Inspect & Grease Kingpin	High Temperature Grease/Chassis Lubricant
Inspect Brake Booster Vacuum Hoses	
Inspect Brake Fluid	DOT 4
Inspect Brake Lines/Hoses	
Inspect Brake Pads	
Inspect Cabin Air Screen	
Inspect Coolant	SDS5508 Prestone 50/50 Ready-to-Use Antifreeze Coolant - top off as needed
Inspect Cooling Lines	
Inspect Differential Gear Oil - Synthetic	Synthetic Equivalentt SHAES-256, rev.E SAE 75W90, SAE 75W-140, SAE75W-85
Inspect Front Brake Rotors	
Inspect Front Leaf Springs & Bushings, & Retorque	Front Eyelet - 264 Nm (195 lb/ft) Rear - 264 Nm (195 lb/ft)
Inspect Front Wheel Hub Fluid - Synthetic	Synthetic Equivalentt SHAES-256, rev.E SAE 75W90, SAE 75W-140, SAE75W-85
Inspect HVAC A/C Charge Levels	R134a @ 575 grams (1.27lbs)
Inspect Parking Brake Hold	
Inspect Pitman Arm, Verify Torque	Draglink to Pitman Arm - 190 Nm (140 lb/ft), Pitman to Steering Gear - 200 Nm (148 lb/ft)
Inspect Radiator	
Inspect Rear Brake Rotors	
Inspect Rear Leaf Springs & Bushings & Retorque	Front Eyelet - 264 Nm (195 lb/ft) Rear - 432 Nm (319 lb/ft)
Inspect Steering Gear	
Inspect Sway Bar End Links, Retorque	188 Nm (139 lb/ft)
Replace Brake Fluid	DOT 4. Flush & Fill 1200mL +/- 50mL
Replace Coolant	SDS5508 Prestone 50/50 Ready-to-Use Antifreeze Coolant - top off as needed
Replace Differential Gear Oil - Mineral	Mineral Equivalent MIL-L-2105E/J02360 - 75W, 75W-90 APIGL-5 Gear Oil - 75W-140, 80W-90 Mil-PRF-2105E - 85W-140
Replace Differential Gear Oil - Synthetic	Synthetic Equivalentt SHAES-256, rev.E SAE 75W90, SAE 75W-140, SAE75W-85
Replace Front Wheel Hub Fluid - Mineral	Mineral Equivalent MIL-L-2105E/J02360 - 75W, 75W-90 APIGL-5 Gear Oil - 75W-140, 80W-90 Mil-PRF-2105E - 85W-140
Replace Front Wheel Hub Fluid - Synthetic	Synthetic Equivalentt SHAES-256, rev.E SAE 75W90, SAE 75W-140, SAE75W-85
Tire Rotation	
Lug Nut Retorque	610-678 Nm (450-500 lb/ft)
Axle U-Bolt Retorque	Front - 230 Nm (170 lb/ft) Rear - 380 Nm (280 lb/ft)

SCAN FOR THE MOST UP-TO-DATE INFORMATION

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