

INTERNATIONAL EMV

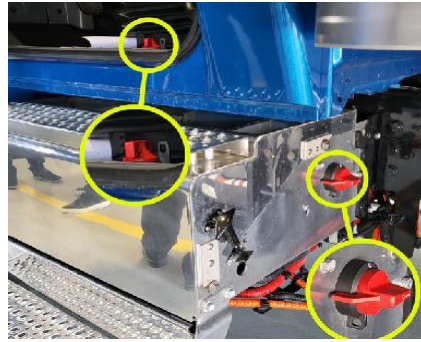
DRIVER'S QUICK REFERENCE



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OPERATING YOUR EMV POWERING UP

The International EMV has a 12V battery system just like internal combustion vehicles have. This battery must be in good health to allow start-up of the HV system. If the 12V is low, you may encounter a “no start” condition that can be rectified by jump-starting.



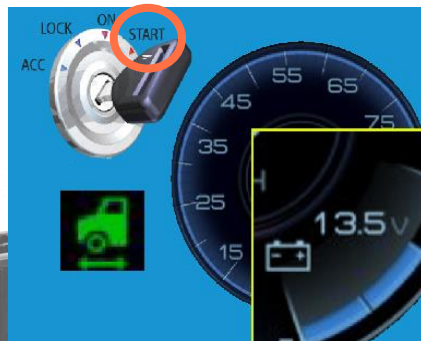
Ensure the Low and High Voltage disconnect switches are in the “ON” position.



Turn the key to “ON”

Wait 10 seconds for gauges to sweep.

Depress brake pedal.



Turn the IGN key to “START”.

Cluster will display “GREEN” “OK to Drive” symbol.



Select desired gear.



Release parking brake.

OPERATING YOUR EMV REGENERATIVE BRAKING



Regenerative brake switches are located in the dash center stack.

The RBS switch turns the system on/off

The 1-2-3 rocker switch adjusts the performance of the regen braking system.

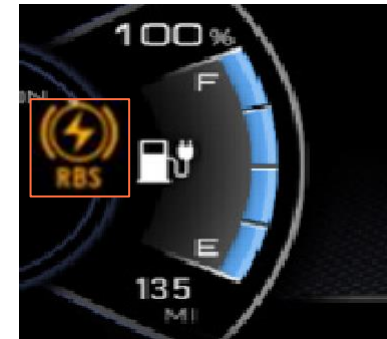
Mode 1 = lowest level

Mode 3 = highest level

MODE 3 WILL AFFORD THE HIGHEST USABLE RANGE.



The selected mode will be shown in **GREEN** on the dash cluster



Regen braking can be limited if the State of Charge is high, or the battery is cold.

An **AMBER RBS** icon will appear when these conditions exist but does not indicate an issue with the vehicle.



During regenerative braking, the drive motor converts the momentum of the moving vehicle into electrical energy, which is stored in the high-voltage batteries.

This process helps charge the HV batteries extending mileage between charging and extends service brake life.

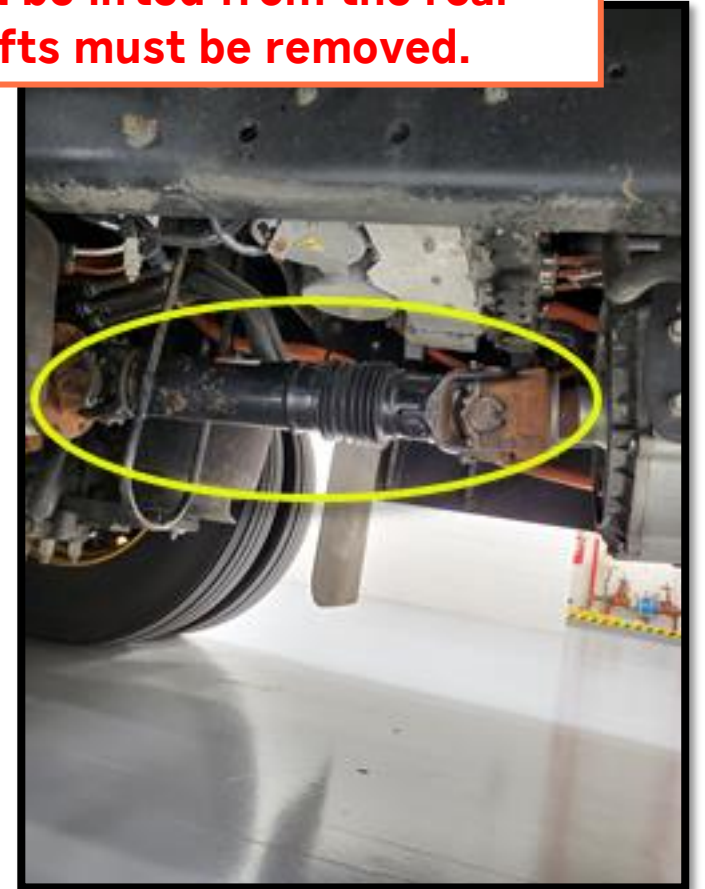
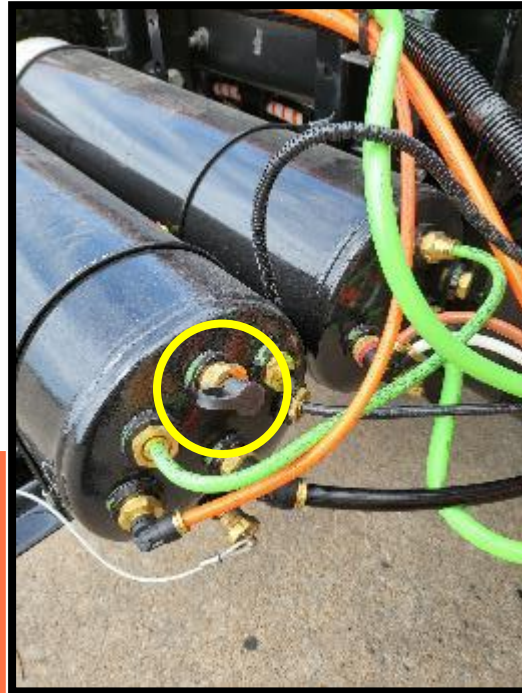
OPERATING YOUR EMV TOWING



**When towed, the vehicle must be lifted from the rear
OR the drive shaft or axle shafts must be removed.**

**Air Tanks can be filled through adapter
port found on air tank.**

**Brakes can be caged using the supplied
Cage bolt. This holds them in a released
condition.**



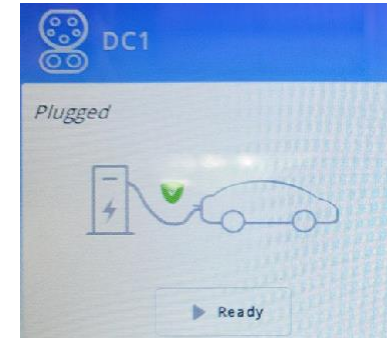
OPERATING YOUR EMV CHARGING



THE EMV HAS A LOCKING CHARGE PORT THAT DOES NOT ALLOW THE PLUG TO BE REMOVED DURING A SESSION. THE PULL-CORD AT THE TOP LEFT SIDE OF THE RECEPTACLE IS AN EMERGENCY RELEASE FOR THIS LOCK AND SHOULD ONLY BE USED IN EMERGENCIES.



TO START A CHARGING SESSION THE PARK BRAKE MUST BE SET.

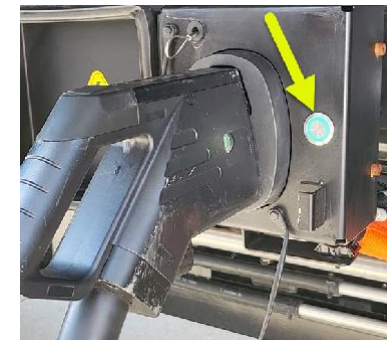


SOME CHARGERS HAVE A "READY" OR "START" BUTTON, CLICK THIS NOW IF EQUIPPED.

ALWAYS KEEP THE DUST CAPS IN PLACE WHEN NOT CHARGING.



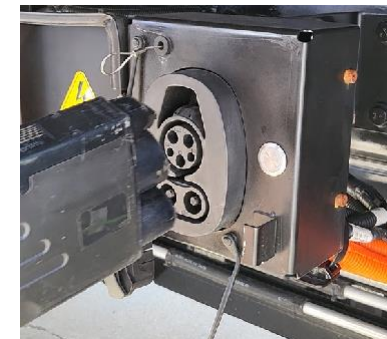
TURN OFF THE IGN KEY AND WAIT 90 SECONDS



WHEN THE SESSION STARTS YOU WILL NOTICE **FLASHING GREEN** LIGHT AT THE CHARGE PORT BUTTON. YOU CAN ALSO VIEW CHARGING STATUS ON THE GAUGE CLUSTER.



INSERT THE CHARGE PLUG UNTIL YOU HEAR THE "CLICK". THE LIGHTED BUTTON SHOULD TURN **BLUE**.



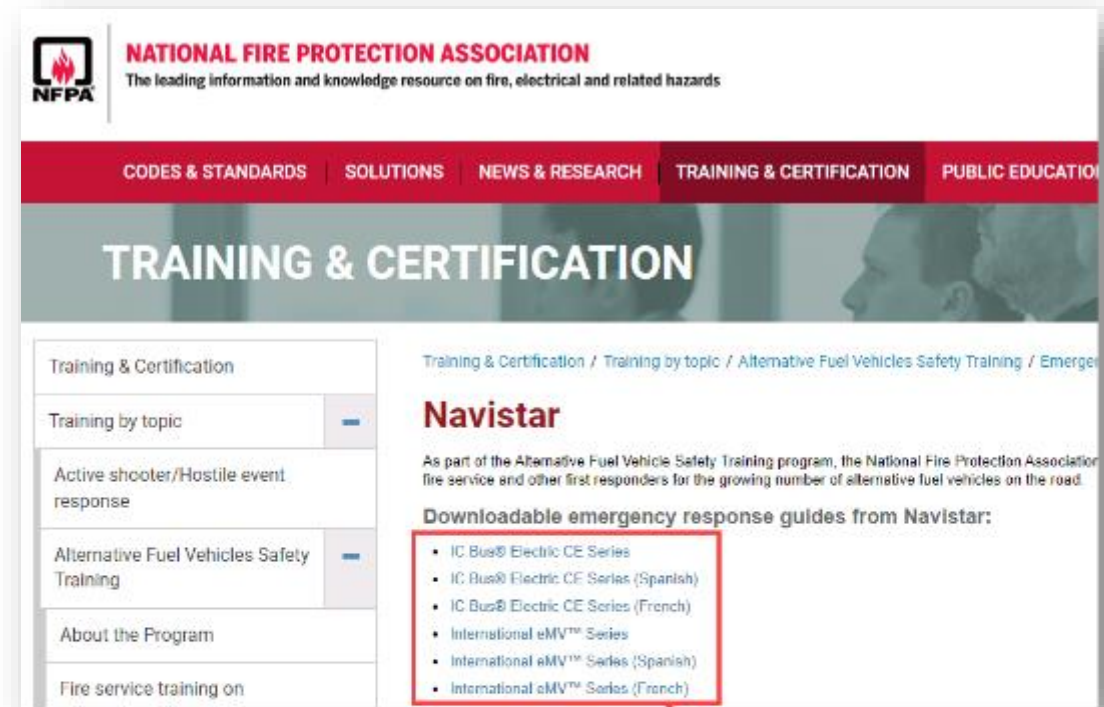
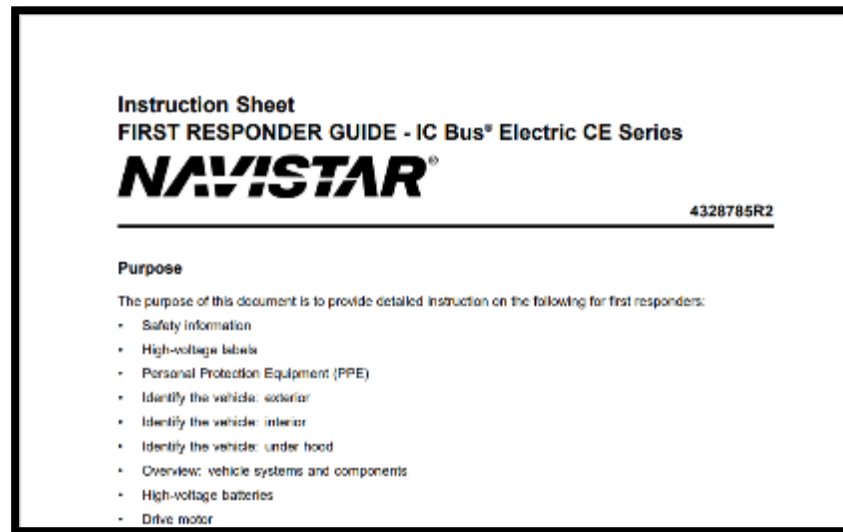
TO **STOP** A SESSION, PRESS THE LIGHTED BUTTON AT THE CHARGE PORT, WAIT 5 SECONDS AND PRESS A SECOND TIME TO UNLOCK THE PLUG.

FIRST/SECOND RESPONDER INFORMATION – NFPA WEBSITE



- First responder guides for IC Bus and eMV can be found on the NFPA site.
- English, Spanish, and French versions available.

[Navistar Emergency Response Guides \(nfpa.org\)](https://www.nfpa.org)





OPERATING YOUR EMV EXTERIOR WASHING

THE EMV CAN BE WASHED FOLLOWING THESE GUIDELINES:

- ✓ AVOID USING HIGH PRESSURE EQUIPMENT ON AND AROUND HV COMPONENTS.
- ✓ AVOID SPRAYING WATER INTO THE CHARGE PORT.
- ✓ IF CHARGE PORT GETS WET DURING WASHING, USE COMPRESSED AIR TO GENTLY BLOW IT OUT.
- ✓ MILD SOAP AND WARM WATER AT LOW PRESSURE CAN BE USED ON THE ENTIRE VEHICLE.
- ✓ ADDITIONAL VEHICLE CARE INSTRUCTIONS ARE INCLUDED IN THE OPERATORS' MANUAL.



DASH CLUSTER ICONS



Item	Icon	Description
1		Illuminates YELLOW when the high-voltage battery charge level is 20% or less. Charge the high-voltage batteries as soon as possible.
2		Electronic Stability Control (if equipped) - Flashes YELLOW to indicate that electronic stability control is taking some action to maintain vehicle stability. Illuminates solid to indicate a fault in the system.
3		Illuminates YELLOW when the traction control system is turned OFF. It also illuminates momentarily when the traction control system is on and is limiting wheel spin. Blinks on if slippery road conditions may exist. If this happens, adjust your driving accordingly. Refer to the Driving section for more information.
4		Illuminates YELLOW when the Regenerative Braking System (RBS) is not available due to a vehicle malfunction. If the Regenerative Braking System indicator stays illuminated, have the system serviced immediately.



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Item	Icon	Description
14		Optional indicator illuminates RED immediately after ignition is turned on to remind operator to fasten seat belt. This applies to only the driver's seat. Optional Seat Belt Reminder with Seat Belt Monitoring causes initial visual indication, then flashes with audible alarm when ignition is on, parking brake is released, and seat belt is not fastened.
15		Flashes GREEN when the right-side turn signal or the hazard lights are turned ON.
16		Illuminates YELLOW when an antilock brake system malfunction has been detected. If the ABS indicator stays illuminated or continues to flash, have the system serviced immediately.
17		Trailer Antilock Brakes.

Item	Icon	Description
5		Illuminates YELLOW when a defect has been detected in the vehicle's drive or charging system and will be accompanied by an audible alarm to indicate an alert condition. Limited and adapted driving possible.
6		Flashes GREEN when the left-side turn signal or the hazard lights are turned ON.
7		Illuminates RED when the voltage in the 12V batteries is too low or too high.
8		Brake Failure (English Cluster) Illuminates RED when a failure in the service brake system has occurred. If the Brake Pressure warning indicator illuminates, safely stop the vehicle as soon as possible and seek service immediately.
8		Brake Failure (Metric Cluster) Illuminates RED when a failure in the service brake system has occurred. If the Brake Pressure warning indicator illuminates, safely stop the vehicle as soon as possible and seek service immediately.

Item	Icon	Description
9		Drive Enable Indicator. Illuminates GREEN when the Vehicle is ready to drive.
10		Illuminates BLUE when the high beam head lamps are turned ON.
11		The AMBER Warning Lamp (AWL) illuminates when the vehicle needs to be serviced at the first available opportunity.

Item	Icon	Description
12		Illuminates RED when a critical defect has been detected in the Electric Vehicle System and will be accompanied by an audible alarm to indicate an alert condition to the operator. If the Electric Vehicle System Stop Lamp illuminates, immediately pull the vehicle safely off the roadway, turn on the flashers, set the parking brake, place warning devices, turn the key to the OFF position, and remove the charging plug (if connected). The vehicle should not be restarted prior to being serviced.
13		Parking Brake (English Cluster). Illuminates RED when the parking brake is applied. If the brake warning indicator does not illuminate, or if it stays on with the parking brake not engaged, seek service immediately.
13		Parking Brake (Metric Cluster). Illuminates RED when the parking brake is applied. If the brake warning indicator does not illuminate, or if it stays on with the parking brake not engaged, seek service immediately.

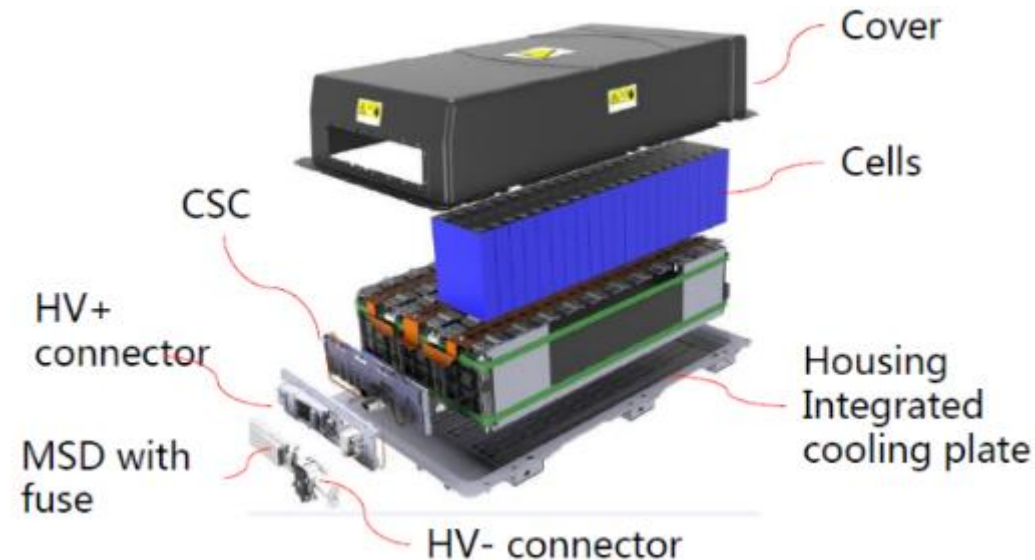
Item	Icon	Description
18		Power Take-Off.
19		Differential Lock.
20		Illuminates YELLOW when the steering system could be faulty. Limited and adapted driving possible.
21		Illuminates YELLOW when the drive power is restricted. Typical causes for this condition include the high-voltage batteries not being sufficiently charged or being at its operating temperature limits, such as in very cold outdoor temperatures.

STORAGE RECOMMENDATIONS



To ensure optimal operations of Customer's Electric Vehicle ("EV"), IC Bus / International and CATL for current production vehicles, provide the following storage and operational recommendations:

- Maintain State of Charge ("SOC") between 40% and approximately 90% to maintain battery life during extended storage periods.
- Charge the vehicle to 100% SOC at minimum every three (3) months.
- Recommend storage at ambient temperatures of less than 34 degree C (95-degree F)
 - Avoid storage at ambient temperatures greater than 50 degree C (122-degree F)
- Temporary energy losses may result following long periods of storage without operation of the EV. Self-discharge rate can increase when stored at higher ambient temperatures.
- Recommend driving at least once per month.





WARNING

To prevent personal injury and / or death, or damage to property, when stopping your vehicle on a grade during normal operation, **ALWAYS** apply the service brake to prevent vehicle from rolling rearward.

- ◆ Roll back can occur whenever the vehicle is positioned on an incline or a surface with sufficient grade, and during transition from the service brake pedal to the accelerator pedal, the vehicle may exhibit a tendency to roll.
- ◆ This can also occur when the emergency brake is released while parking on a grade. Vehicle size, weight, facing direction, intended direction of travel and grade of incline can all contribute to the roll forward or roll back characteristic.
- ◆ It is important the vehicle operator is aware of this characteristic and the operator is applying the service brake pedal during normal operation appropriately whenever these, or similar scenarios can occur.