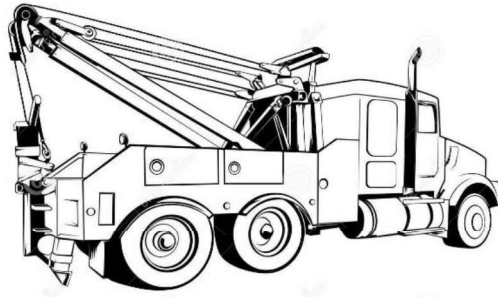


Towing Instructions



Warning: Shutdown the HV system before towing electric commercial vehicles for ANY distance. HV Shutdown should never be performed by anyone that has not been trained and certified.



Warning: After an accident, follow the first responder's manual special instructions for towing.



Warning: Both axle shafts must be removed from the drive axle housing to ensure the propulsion motor will not rotor during the towing process. Otherwise, it may generate unsafe voltage even with the HV bus shutdown.



Note: Only follow the shutdown procedures found in Dana's manuals for this electric chassis.

Towing Procedure

1. **Remove the key from the ignition and turn the 12V disconnect to the "OFF" position then wait for 2 minutes.**
2. Block the front and back of at least one of the vehicles tires so the truck cannot move during this procedure.
3. Starting on the driver's side, place a drip pan under the end of the drive axle wheel hub to catch the lube.
4. With an impact gun, remove the axle shaft nuts, washers and tapered dowels if used.
5. Remove the axle shaft from the drive axle housing.



Note: Do not use a chisel or any other wedge device to loosen the shaft. Chisels and wedges will damage the flange of the wheel hub.

6. Wipe the end of the wheel hub to remove any oil.
7. Install a wheel end cover over the axle shaft studs.
8. Reinstall the wheel end fasteners and tighten in a crisscross pattern. Do not over tighten.
9. Repeat steps 2-7 on the passenger's side of the drive axle.

Chapter 2 - Emergency

Emergency Operation

- Proper techniques and standard protocols are essential for safety during an emergency operation involving an electric vehicle (EV).
- Shut down procedures will vary between OEM's and even vehicle models.
- Because EV's can move with little or no sound, conventional methods of determining if a vehicle can be moved under its own power will be difficult to do. Making assumptions that the vehicle is not powered up can be dangerous.
- Always be prepared to deal with hazardous conditions when working with EV's by wearing the proper safety equipment. Failure to follow this warning could result in severe personal injury or death.

After a Crash or Impact


1. Turn off the vehicle key switch.
2. Exit the vehicle.
3. Turn off the 12V disconnect switch if it can be safely accessed.
4. If there is not a fire, check for visible battery damage while maintaining a distance of 6 feet (2 meters) or more.

Turn-On Procedure for No HV Battery Pack Damage (including the enclosure):

1. Turn the 12V disconnect switch back to ON.
2. Turn the key to the START position.

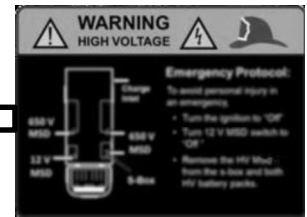
Safety Procedures for HV Battery Pack Damage or Nearby Fire

1. Contact firefighters.
2. Provide fire fighters a copy of the first responders field guide and direct them to the first responders label under the hood (see image below). Create a safety perimeter of at least 100 feet (31 meters) around the vehicle, per NFPA guidelines.
3. Move to an area upwind and far enough away from the accident site to avoid breathing any hazardous smoke or gases.

 Note: Always assume that the HV battery packs could be damaged after an accident and have it inspected by a service technician.



Warning: Do not enter the vehicle or touch the chassis until receiving approval from first responders.



First Responders Label Location