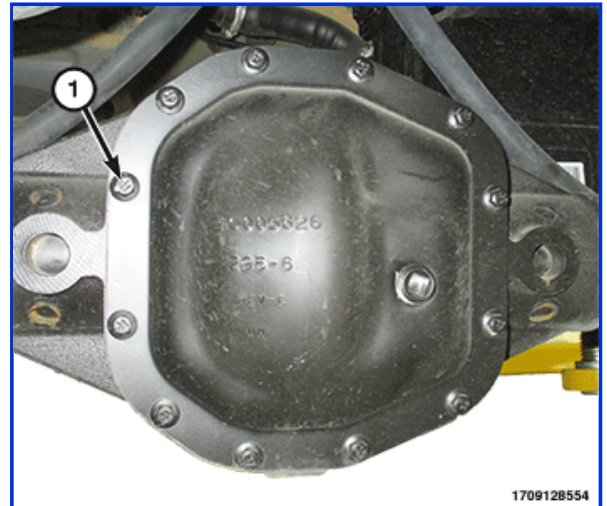


AXLE LOCKER POSITION SENSOR - M220

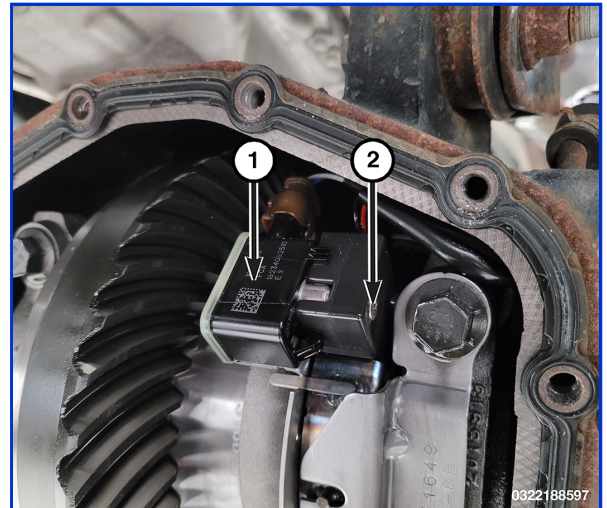
REMOVAL

1. Raise and support the vehicle ([Refer to 04 - Vehicle Quick Reference/Hoisting/Standard Procedure](#)).
2. Loosen the differential cover bolts and allow the fluid to drain.
3. Remove the differential cover.



1 - Differential Cover Bolts

4. Remove the axle locker sensor screw.



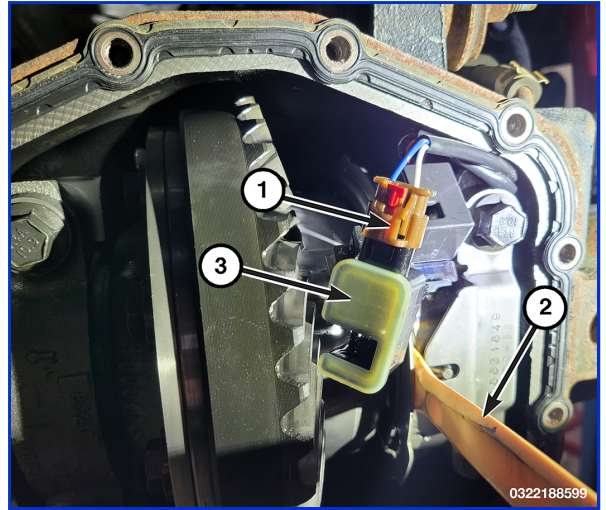
1 - Axle Locker Sensor
2 - Axle Locker Sensor Screw

5. Using a trim stick, carefully move magnet plate towards the ring gear while removing the axle locker sensor away from the differential carrier.

NOTE:

Do not bend or damage the magnet plate.

6. Disconnect the axle locker sensor wire harness connector and remove the sensor.



1 - Axle Locker Sensor Harness Connector

2 - Axle Locker Sensor

AXLE LOCKER SENSOR SELECTION

NOTE:

When replacing the sensor, there 5 possible sensors to select from. The new axle locker sensors are marked #1 through #5. Use the axle locker sensor selection process to determine the correct sensor to install. Begin the process with the sensor marked #1. Sensor #1 is the most used variant and will be the correct sensor in most cases.

NOTE:

Super Lube® Silicone Dielectric Grease is required due to known resistance of the temperatures and fluid properties encountered inside of the axles.

1. Apply Super Lube® Silicone Dielectric Grease into the axle locker sensor wire harness connector cavity.
2. Connect the axle locker sensor marked #1 to the harness connector.

NOTE:

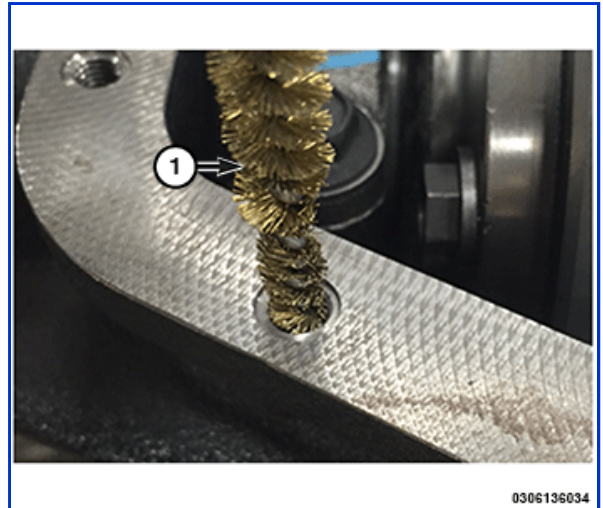
Do not bend or damage the magnet plate.

3. Using a trim stick, carefully move magnet plate towards the ring gear while installing the axle locker sensor into position.
4. Install the axle locker sensor mounting screw and tighten securely.
5. Lower the vehicle.
6. Turn the ignition to the ON position and check for Service Axle Locker message:
 - The Service Axle Locker message is **NOT** present, turn the ignition OFF and continue with Installation.
 - The Service Axle Locker message is present, turn the ignition OFF and replace the axle locker sensor as necessary in consecutive order from #2 - #5. Retest for the Service Axle Locker message after each sensor is installed until message is **NOT** present when the ignition is turned ON and then continue with Installation.

CLEANING

- Do not use Scotch-Brite™ or other abrasive surface preparation methods. Clean the differential cover sealing surfaces with brake clean or equivalent alcohol based cleaners.
- Use a copper brush to remove any Loctite™ out of the carrier bolt holes, then use brake cleaner to clean the bores. Use

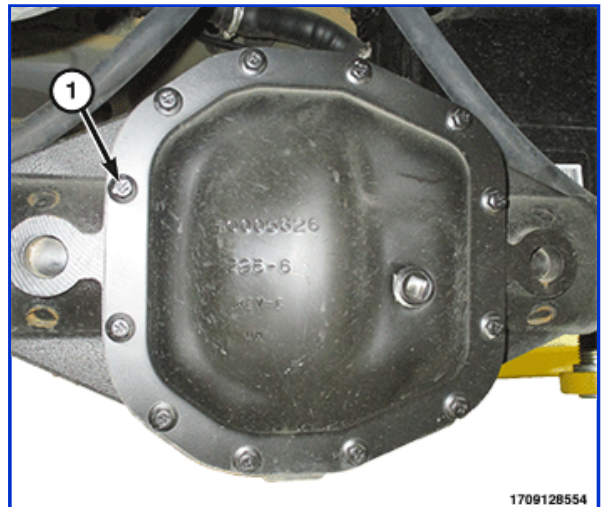
compressed air to ensure each bolt hole is dry and no brake clean remains.



1 - Copper Brush

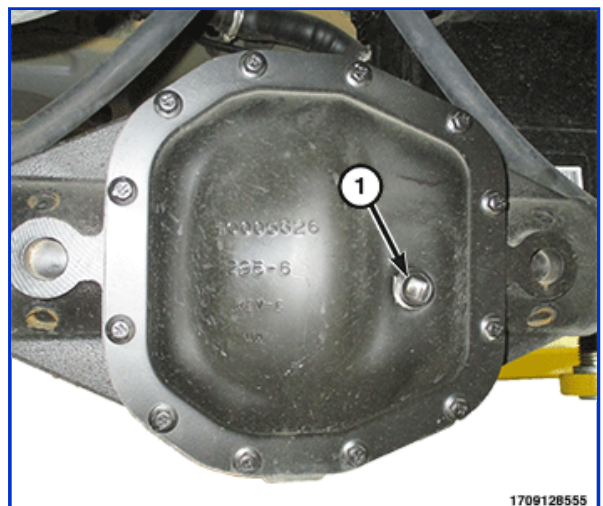
INSTALLATION

1. Install the differential cover with the gasket and hand start all of the bolts.
2. The differential cover bolts must be tightened in the sequence shown in the torque table below.



1 - Differential Cover Bolts

3. Remove the differential fill plug.
4. Fill the differential with the specified fluid ([Refer to 04 - Vehicle Quick Reference/Capacities and Recommended Fluids/Specifications](#)).
5. Install the differential fill plug and torque to specification.



+ TORQUE SPECIFICATIONS - REAR AXLE - M220