

# Your Ultimate Source for OEM Repair Manuals

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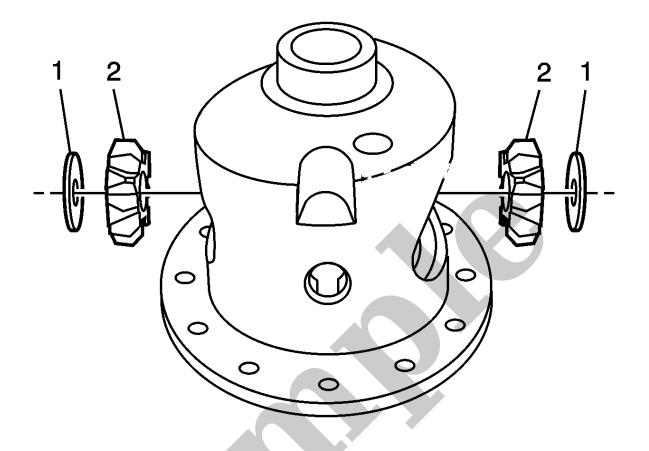
2022 Chevrolet Tahoe - 4WD Service and Repair Manual

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| DTC   | Diagnostic Procedure   |
|-------|--|
| P0464 | Displays and Gauges - DTC P0461-P0464, P2066, P2067, or P2068  |
| P0480 | Engine Heating and Cooling - DTC P0480, P0691, or P0692 - Cooling Fan Malfunction  |
| P0496 | Engine Controls and Fuel - 5.3L (L83) or 6.2L (L86) - DTC P0496  |
| P0498 | Engine Controls and Fuel - 5.3L (L83) or 6.2L (L86) - DTC P0449, P0498, or P0499   |
| P0499 | Engine Controls and Fuel - 5.3L (L83) or 6.2L (L86) - DTC P0449, P0498, or P0499   |
| P0506 | Engine Controls and Fuel - 5.3L (L83) or 6.2L (L86) - DTC P0506 or P0507   |
| P0507 | Engine Controls and Fuel - 5.3L (L83) or 6.2L (L86) - DTC P0506 or P0507   |
| P050D | Engine Controls and Fuel - 5.3L (L83) or 6.2L (L86) - DTC P050D  |
| P0513 | Immobilizer - DTC P0513  |
| P0521 | Displays and Gauges - DTC P0521, P0522, or P0523   |
| P0522 | Displays and Gauges - DTC P0521, P0522, or P0523   |
| P0523 | Displays and Gauges - DTC P0521, P0522, or P0523   |
| P0532 | HVAC - Automatic - DTC P0532 or P0533  |
| P0533 | HVAC - Automatic - DTC P0532 or P0533  |
| P0560 | 12 V Starting and Charging - DTC P0560-P0563   |
| P0561 | 12 V Starting and Charging - DTC P0560-P0563   |
| P0562 | 12 V Starting and Charging - DTC P0560-P0563   |
| P0563 | 12 V Starting and Charging - DTC P0560-P0563   |
| P0564 | Cruise Control - DTC B3623, B3794, P0564, P0565, P0567, P0568, P056C, P0580, P0581, P0589, P0592, P0593, P155A-P155C, or P162C |

| Parameter   | System<br>State | Expected Value         | Description  |
|---|-----------------|------------------------|--|
| DPF Soot Mass<br>Correction                                     | _               | g                      | This parameter contains the total correction to the soot mass caused by CRT (Continuous Regeneration Trap) effect.   |
| Drag control Status   | _               | Active/Inactive        | EDC Active (Drag Active) control mode is indicated when the requested torque signal is above the driver requested value while the traction control system signal input is active.  |
| Driver Demanded<br>Engine Torque                                | _               | %                      | This parameter displays the requested torque output of the engine by the driver.   |
| Drop Throttle Detected while Traction Control Active            | _               | No                     | Drop Throttle Control Mode is indicated when this parameter displays Yes.  |
| Drop Throttle Status  | _               | Inactive               | This parameter provides an indication when the controller software determines a condition is present where the vehicle operator has abruptly released the accelerator pedal (dropthrottle) after a period of acceleration.     |
| ECM Authentication<br>Status                                    | _               | Valid                  | Authentication Status indicates the result of the comparison between the last received immobilizer response and the expected response calculated by the engine control module (ECM).   |
| ECM Challenge Status  |                 | Valid                  | This parameter displays the condition of the ECM code challenge to the BCM.  |
| ECM Requested Particulate Matter Mass Concentration Measurement | 0               | No                     | This parameter indicates the ECM has requested a measurement of particulate matter mass from the particulate matter sensor.  |
| ECM Requested Particulate Matter Sensor Initialization          | _               | No                     | This parameter displays Yes when the particulate matter sensor is initialized by the ECM.  |
| ECM Response Source   | _               | Normal Start           | This parameter displays ECM response source.   |
| ECT Sensor  | _               | 85–105°C/185–<br>220°F | This parameter displays the temperature of the engine coolant based on the input from the engine coolant temperature (ECT) sensor. When the coolant temperature is low, the scan tool will display a low temperature. When the |

| 8.25 Inch Axle      | 9.25 Inch Axle        |
|---------------------|-----------------------|
| 0.914 mm (0.036 in) | 0.9195 mm (0.0362 in) |
| 0.940 mm (0.037 in) | 0.9449 mm (0.0372 in) |
| 0.965 mm (0.038 in) | _                     |
| 0.991 mm (0.039 in) | _                     |
| 1.016 mm (0.040 in) | _                     |
| 1.041 mm (0.041 in) | _                     |
| 1.067 mm (0.042 in) | _                     |
| 1.092 mm (0.043 in) | _                     |
| 1.118 mm (0.044 in) | _                     |
| 1.143 mm (0.045 in) | _                     |
| 1.168 mm (0.046 in) | -                     |
| 1.194 mm (0.047 in) |                       |
| 1.219 mm (0.048 in) | - ()                  |
| 1.245 mm (0.049 in) |                       |
| 1.270 mm (0.050 in) | _                     |



3.

Install the NEW differential pinion gears (2) by performing the following steps:

- 1. Position both pinion gears between the differential side gears directly opposite of each other.
- 2. Rotate the differential side gears until the pinion gears are opposite the opening in the differential case in line with the pinion shaft opening.
- 4. Install the thrust washers (1).

Rotate the pinion gears toward the differential case opening in order to permit the sliding in of the thrust washers.

| Part Name | Metric Width | Tolerance  | English Width | Tolerance  |
|-----------|--------------|------------|---------------|------------|
|           |              | Plus/Minus |               | Plus/Minus |
| Shim      | 1.524 mm     | 0.013 mm   | 0.060 in      | 0.0005 in  |
| Shim      | 1.575 mm     | 0.013 mm   | 0.062 in      | 0.0005 in  |
| Shim      | 1.626 mm     | 0.013 mm   | 0.064 in      | 0.0005 in  |
| Shim      | 1.676 mm     | 0.013 mm   | 0.066 in      | 0.0005 in  |
| Shim      | 1.727 mm     | 0.013 mm   | 0.068 in      | 0.0005 in  |
| Shim      | 1.778 mm     | 0.013 mm   | 0.070 in      | 0.0005 in  |
| Shim      | 1.829 mm     | 0.013 mm   | 0.072 in      | 0.0005 in  |
| Shim      | 1.88 mm      | 0.013 mm   | 0.074 in      | 0.0005 in  |
| Shim      | 1.93 mm      | 0.013 mm   | 0.076 in      | 0.0005 in  |

#### YOUR CURRENT VEHICLE

# **Differential Oil Replacement**

#### **Differential Oil Replacement (8.6 Inch Axle)**

#### **Removal Procedure**

- 1. Raise the vehicle. Refer to Lifting and Jacking the Vehicle.
- 2. Clean the area around the rear axle fill plug.
- 3. Remove the rear axle fill plug.
- 4. Remove the rear axle cover. Refer to Rear Axle Housing Cover Replacement.

#### 5. NOTE

#### Note

The axle lube, refer to Adhesives, Fluids, Lubricants, and Sealers, that is used may appear dark in color and may leave a dark film on the internal components. This darkened color does not affect the durability of the lube nor will it adversely affect the oil from providing the necessary lubrication it was designed to do. This darkened oil does not need to be replaced unless there is a strong burnt oil smell to the lube. If the oil has a strong burnt oil smell, then all components would need to be visually inspected and any parts that are damaged would then need to be replaced along with the oil.

Drain the lubricant into a suitable container.

#### **Installation Procedure**

- 1. Install the rear axle cover. Refer to Rear Axle Housing Cover Replacement.
- 2. Fill the rear axle with axle lubricant. Use the proper fluid. Refer to Approximate Fluid Capacities and Adhesives, Fluids, Lubricants, and Sealers.

• If none of the buttons operate normally

Refer to Circuit/System Testing

o If some, but not all, of the buttons operate normally

Test or replace the A10 Inside Rearview Mirror

- If all of the buttons operate normally
- 3. All OK.

## **Circuit/System Testing**

- 1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the A10 Inside Rearview Mirror. It may take up to 2 min for all vehicle systems to power down.
- 2. Test for less than 10  $\Omega$  between the ground circuit terminal 5 and ground.
  - $\circ$  If 10  $\Omega$  or greater
  - 1. Ignition OFF.
  - 2. Test for less than  $2\Omega$  in the ground circuit end to end.
    - If  $2\Omega$  or greater, repair the open/high resistance in the circuit.
    - If less than  $2 \Omega$ , repair the open/high resistance in the ground connection.
  - $\circ$  If less than 10  $\Omega$
- 3. Ignition ON.
- 4. Test for 8.0–10.5 V between the 10 V reference circuit terminal 4 and ground.
  - If less than 8.0 V
  - 1. Ignition OFF, disconnect the harness connector at the K73 Telematics Communication Interface Control Module.
  - 2. Test for infinite resistance between the 10 V reference circuit and ground.
    - If less than infinite resistance, repair the short to ground on the circuit.
    - If infinite resistance
  - 3. Test for less than 2  $\Omega$  in the 10 V reference circuit end to end.
    - If  $2\Omega$  or greater, repair the open/high resistance in the circuit.
    - If less than 2  $\Omega$ , replace the K73 Telematics Communication Interface Control Module.

## YOUR CURRENT VEHICLE

# **DTC B125A**

## **DTC B125A**

## **Diagnostic Instructions**

- Perform the Diagnostic System Check Vehicle prior to using this diagnostic procedure.
- Review Strategy Based Diagnosis for an overview of the diagnostic approach.
- Diagnostic Procedure Instructions provides an overview of each diagnostic category.

## **DTC Descriptors**

| DTC B125A 02 | Antenna Signal Circuit Short to Ground |
|--------------|--|
| DTC B125A 04 | Antenna Signal Circuit Open Circuit    |

## **Diagnostic Fault Information**

| Circuit                  | Short to<br>Ground | Open/High<br>Resistance | Short to<br>Voltage | Signal<br>Performance |
|--------------------------|--------------------|-------------------------|---------------------|-----------------------|
| Radio Antenna Coax       | B125A 02           | B125A 04                | 1                   | _                     |
| Antenna Module<br>Ground | _                  | 1                       | _                   | _                     |

1. May exhibit possible AM/FM interference.