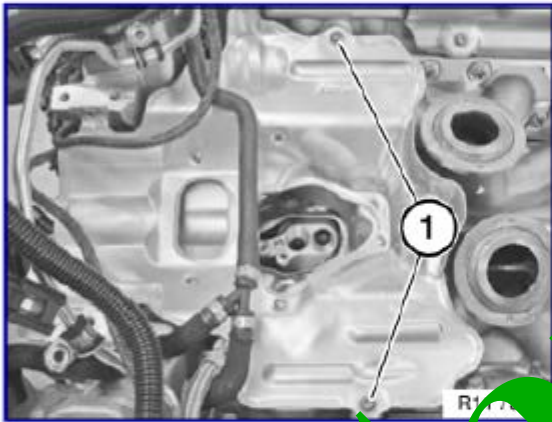




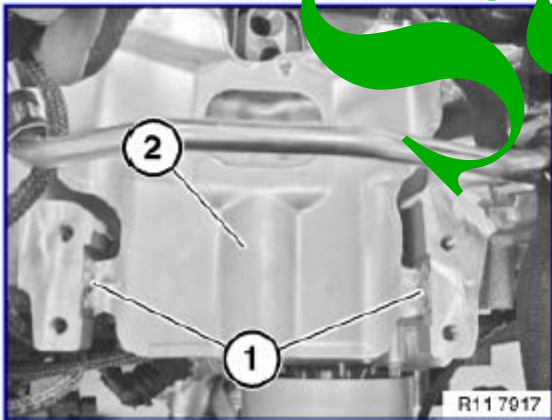
Necessary preliminary work:

- Disconnect the [battery cable from the negative terminal](#).
- Remove [fan cowl](#) with electric fan.
- Remove the [alternator](#) (not F04).
- Remove both [exhaust turbochargers](#).
- Remove both [exhaust manifolds](#).



Release screws (1).

Tightening torque [11 65 3AZ](#).



Release screws (1).

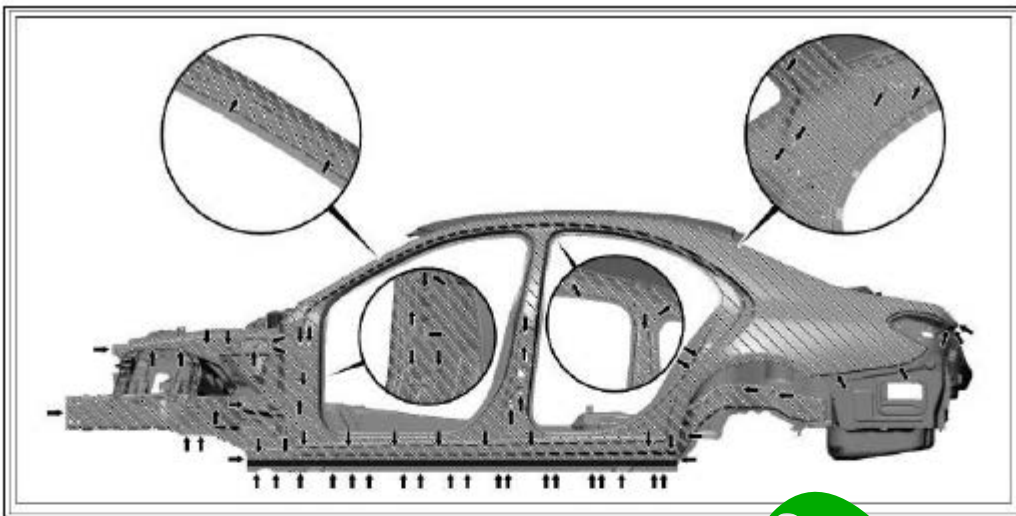
Tightening torque [11 65 3AZ](#).

Remove heat shield (2) towards top.

Release screws (1).

Tightening torque [11 65 3AZ](#).

Important!

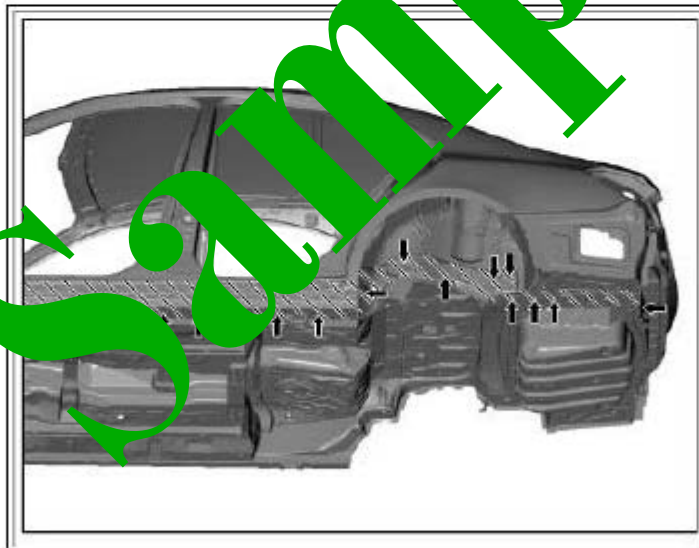


P97.20-2645-09

Fig. 8: Longitudinal Members (Upper Front/Bottom Side), Pillars (A/B/C), and Side Wall Paneling - Shown On Model 222.0

Courtesy of MERCEDES-BENZ USA

Rear longitudinal member, shown on model 222.0

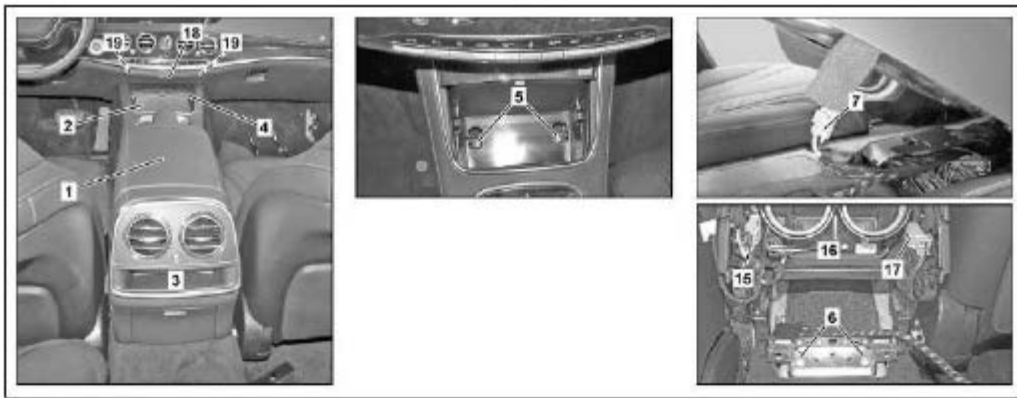


P97.20-2643-11

Fig. 9: Rear Longitudinal Member - Shown On Model 222.0

Courtesy of MERCEDES-BENZ USA

Rear area, shown on model 222.0

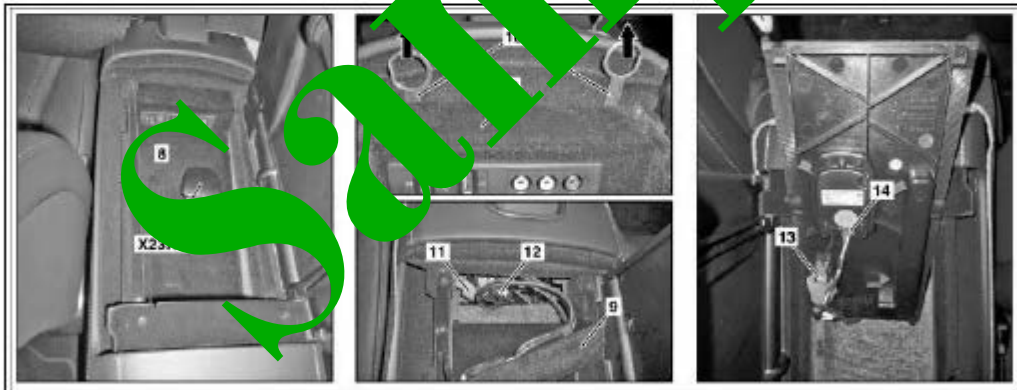


P68.20-4645-06

- | | | | |
|---|---------------------|----|----------------------|
| 1 | Center console | 7 | Electrical connector |
| 2 | Storage compartment | 15 | Electrical connector |
| 3 | Cover | 16 | Electrical connector |
| 4 | Cover | 17 | Electrical connector |
| 5 | Bolts | 18 | Storage compartment |
| 6 | Bolts | 19 | Bolts |

Fig. 14: Center Console Remove/Install Components - Shown On Model 222 Except Code 582
 Courtesy of MERCEDES-BENZ USA

Shown on model 222 up to model year 2018 with code 386 (Conductance telephony) and code 582 (Air conditioning system in rear)

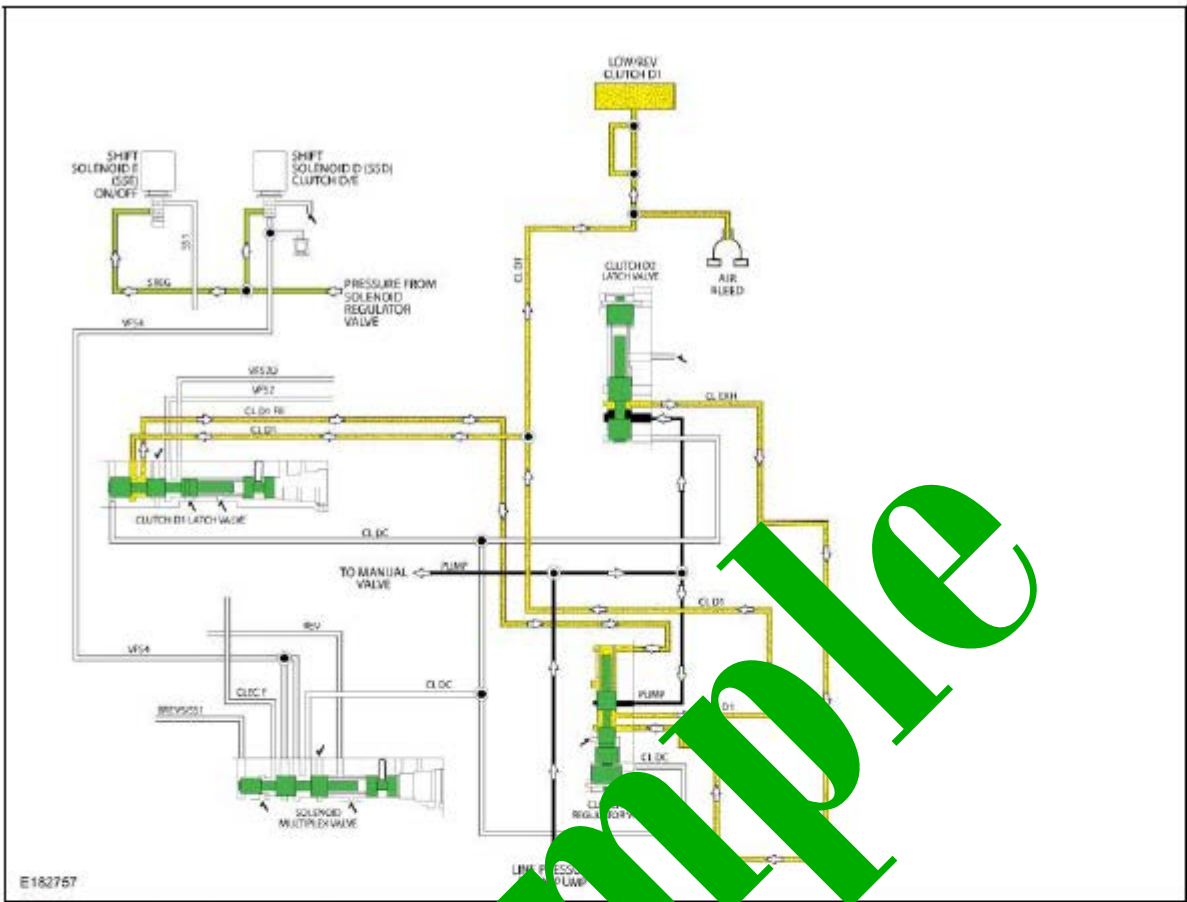


P68.20-4646-06

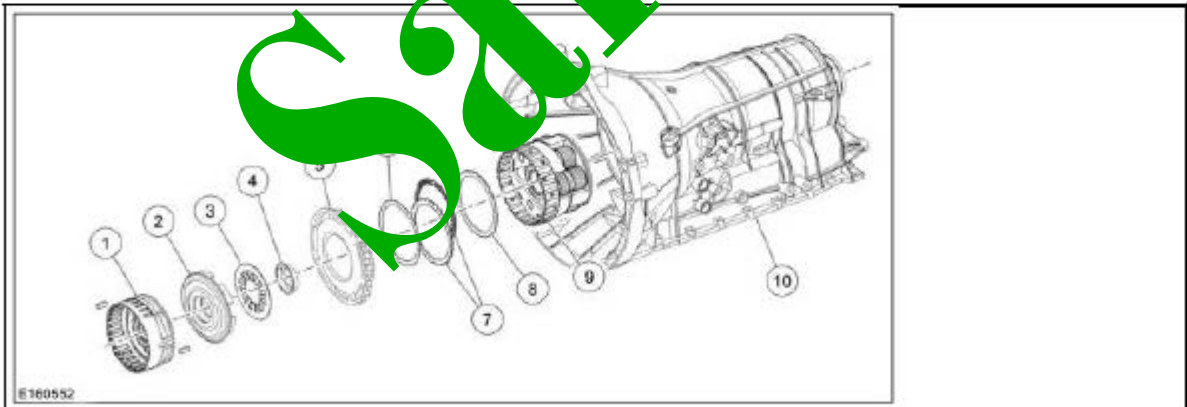
- | | | | |
|----|----------------------|--------|----------------------------|
| 8 | Cover | 12 | Electrical connector |
| 9 | Cover | 13 | Electrical connector |
| 10 | Removal assembly | 14 | Electrical connector |
| 11 | Electrical connector | X237/1 | Mobile phone contact plate |

Fig. 15: Center Console Remove/Install Components - Shown On Model 222 With Code 386 And 582
 Courtesy of MERCEDES-BENZ USA

Shown on MODEL 222.1 with code 224 (Design individual rear seat system)

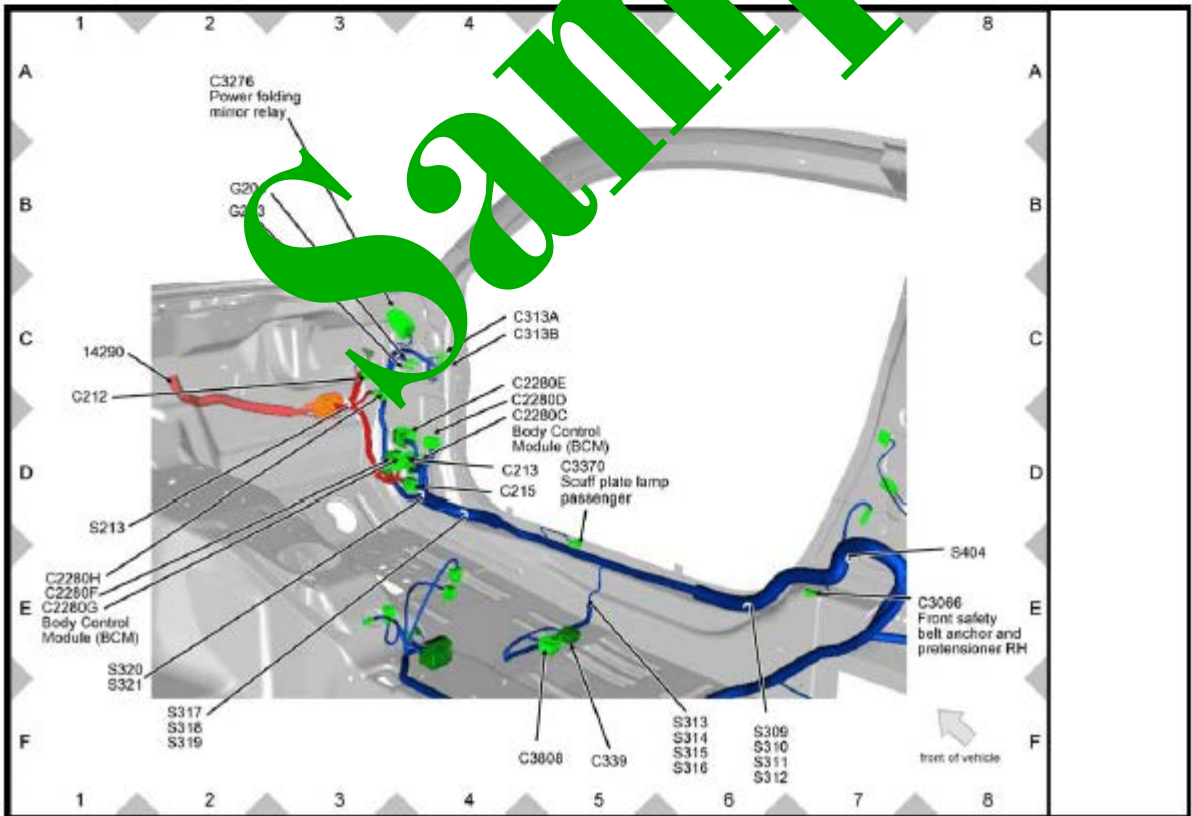
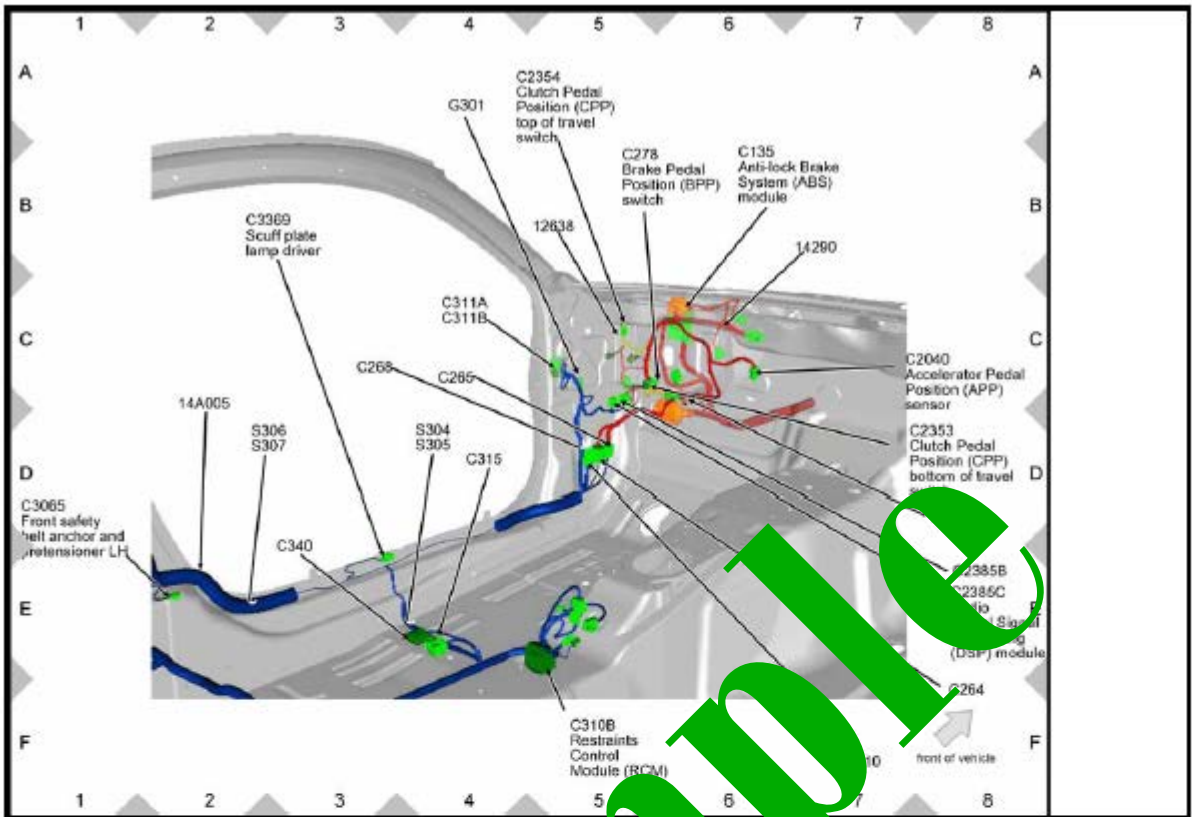


LOW ONE-WAY CLUTCH ASSEMBLY



Low One-Way Clutch Exploded View

Item	Description
1	Center support assembly
2	Low/reverse clutch piston
3	Low/reverse clutch piston return spring
4	Low/reverse clutch piston retainer



The hard wired circuits between components related to the Park Assist Module (PAM) (also known as the ParkTronic System/PTS module) may be diagnosed using conventional diagnostic tools and procedures. Refer to the appropriate SYSTEM WIRING DIAGRAMS article. The wiring information includes wiring diagrams, proper wire and connector repair procedures, details of wire harness routing and retention, connector pin out information and location views for the various wire harness connectors, splices and grounds.

However, conventional diagnostic methods will not prove conclusive in the diagnosis of the PAM or the electronic controls or communication between modules and other devices that provide some features of the park assist system. The most reliable, efficient and accurate means to diagnose the PAM or the electronic controls and communication related to park assist system operation requires the use of a diagnostic scan tool. Refer to the appropriate diagnostic information.

REMOVAL

REMOVAL

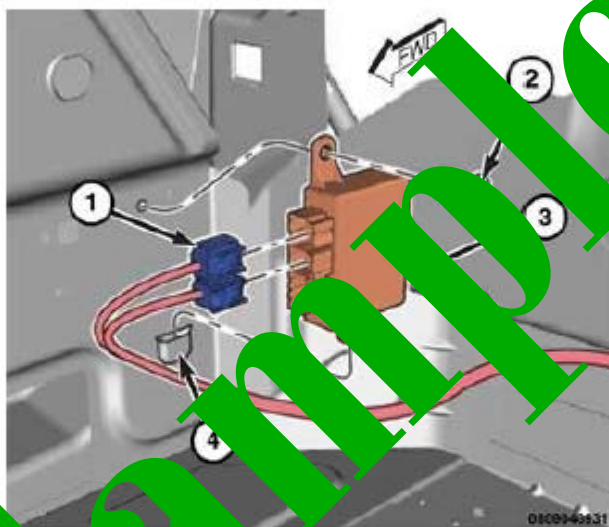


Fig. 4: Park Assist Module (PAM), Wire Harness Connectors, Stamped Pocket & Retainer

Courtesy of CHRYSLER GROUP LLC

1. Disconnect and isolate the negative cable from the battery. If equipped with an Intelligent Battery Sensor (IBS), disconnect the IBS connector before disconnecting the negative cable from the battery.
2. Remove the trim from the right quarter inner panel to access the Park Assist Module (PAM) (3), which is located just behind the right rear wheel house. Refer to [CARPET, REMOVAL](#).
3. Disconnect the body wire harness connectors (1) from the PAM connector receptacles.
4. Remove the push-pin type retainer (2) that secures the PAM to the quarter inner panel.
5. Slide the PAM upward far enough to disengage the lower mounting tab from the stamped pocket (4) in the right quarter inner panel.
6. Remove the PAM from the vehicle.

INSTALLATION

INSTALLATION



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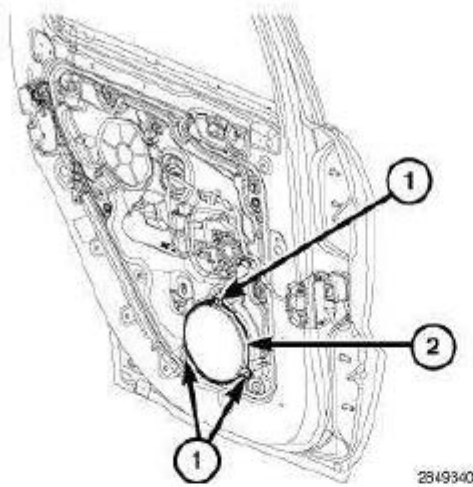
Fig. 372: Drain Tubes, Harness Connector & Bolts
 Courtesy of CHRYSLER GROUP LLC

HEADLINER, REMOVAL.

1. Lower the headliner in the vehicle.
2. Detach the rear drain tube (2) from the sunroof.
3. Detach the front drain tube (3) from the sunroof.
4. Disconnect the sunroof harness connector (4).
5. With the help of an assistant holding the sunroof, remove all the sunroof bolts (2).
6. With the help of an assistant, carefully remove the sunroof through the front door opening.
7. Check the sunroof's guide tracks for any excessive dirt and debris. If necessary, clean the guide tracks and lubricate with Mopar® White Lithium Grease or equivalent.

INSTALLATION

INSTALLATION



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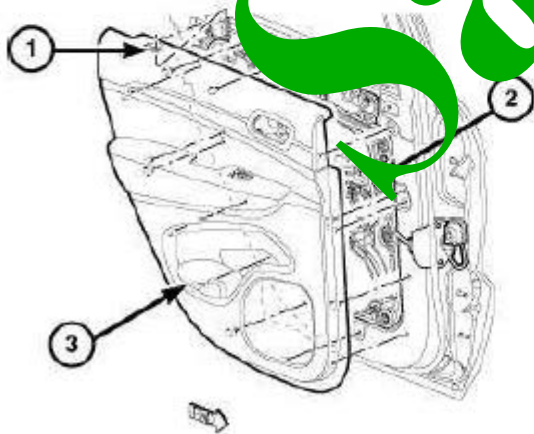
Fig. 480: Door Weatherstrip
 Courtesy of CHRYSLER GROUP, LLC

12. Position the door weatherstrip (1) back and seat fully.
13. Install the rear door scuff plate. Refer to PLATE, SCUFF, DOOR GATE, INSTALLATION.
14. Install the D-pillar trim. Refer to PANEL, D-PILLAR TRIM, INSTALLATION.
15. Install the load floor. Refer to LOAD FLOOR, TRUNGO, INSTALLATION.

PLATE, SCUFF, DOOR

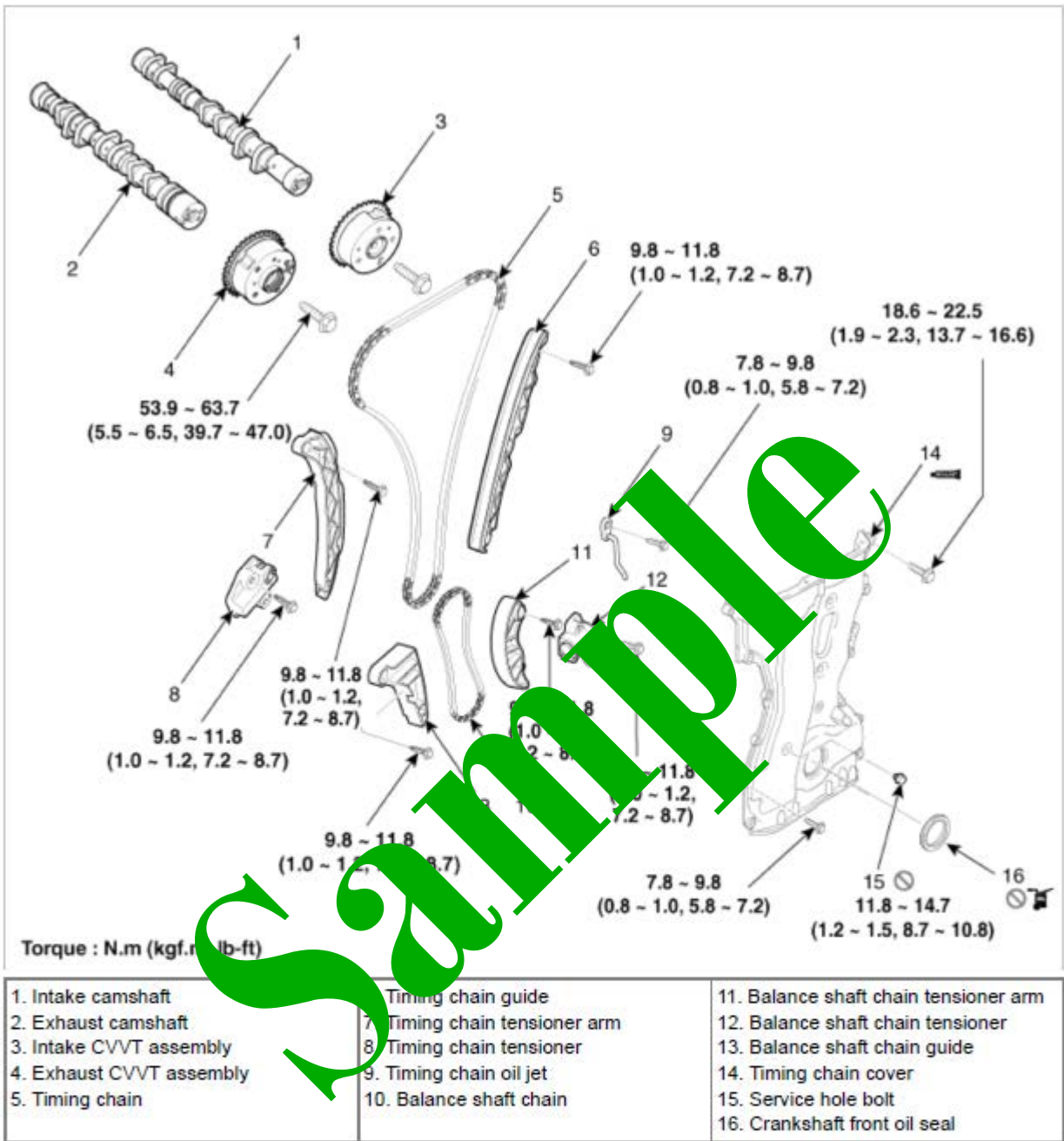
REMOVAL

REMOVAL



2828881

Fig. 481: Side Scuff Plate
 Courtesy of CHRYSLER GROUP, LLC



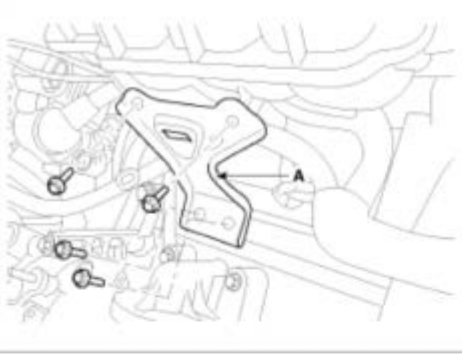
Engine Mechanical System > Timing System > Timing Chain > Repair procedures

Removal

CAUTION

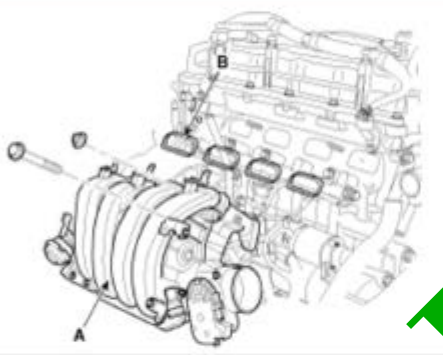
- Use fender covers to avoid damaging painted surfaces.
- To avoid damage, unplug the wiring connectors carefully while holding the connector portion.

Tightening torque :
18.6 ~ 23.5N.m (1.9 ~ 2.4kgf.m, 13.7 ~ 17.4lb-ft)



14. Remove the intake manifold (A) with the gasket (B).

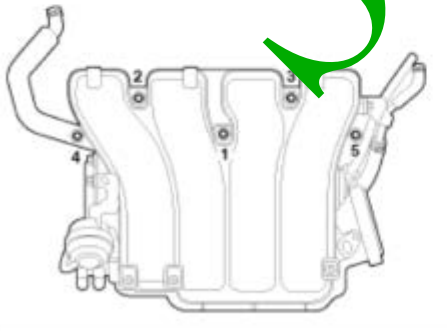
Tightening torque :
18.6 ~ 23.5N.m (1.9 ~ 2.4kgf.m, 13.7 ~ 17.4lb-ft)



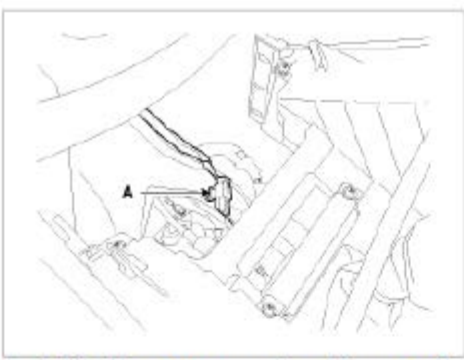
NOTE

When installing, replace with new gaskets.

When installing the intake manifold, tighten the bolts and nuts with pre-torque first, and then tighten the bolts and nuts with specified torque.



15. Installation is reverse order of removal.



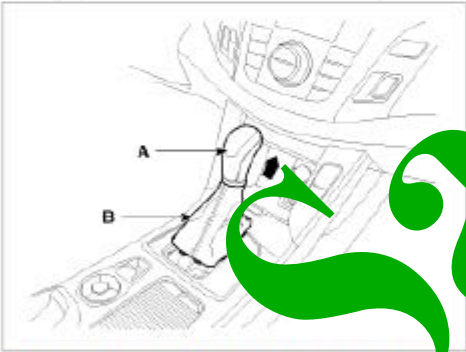
11. Install in the reverse order of removal.

- Make sure the connectors are connected in properly.
- Replace any damage clips.

[A/T]

- When prying with a flat-tip screwdriver, wrap it with protective tape and apply protective tape around the related parts, to prevent damage.
- Put on gloves to protect your hands.

1. Using a screwdriver or remover, remove the gear knob (B) and gear knob (A).



2. Using a screwdriver or remover, remove the console upper cover (A).



HOW TO INFORMATION

HOW TO TROUBLESHOOT THE FUEL AND EMISSIONS SYSTEMS

Intermittent Failures

The term intermittent failure means a system may have had a failure, but it checks OK now. If the malfunction indicator lamp (MIL) on the dash does not come on, check for poor connections or loose terminals at all connectors related to the circuit that you are troubleshooting. If the MIL was on but then went off, the original problem may have been intermittent.

Service Information

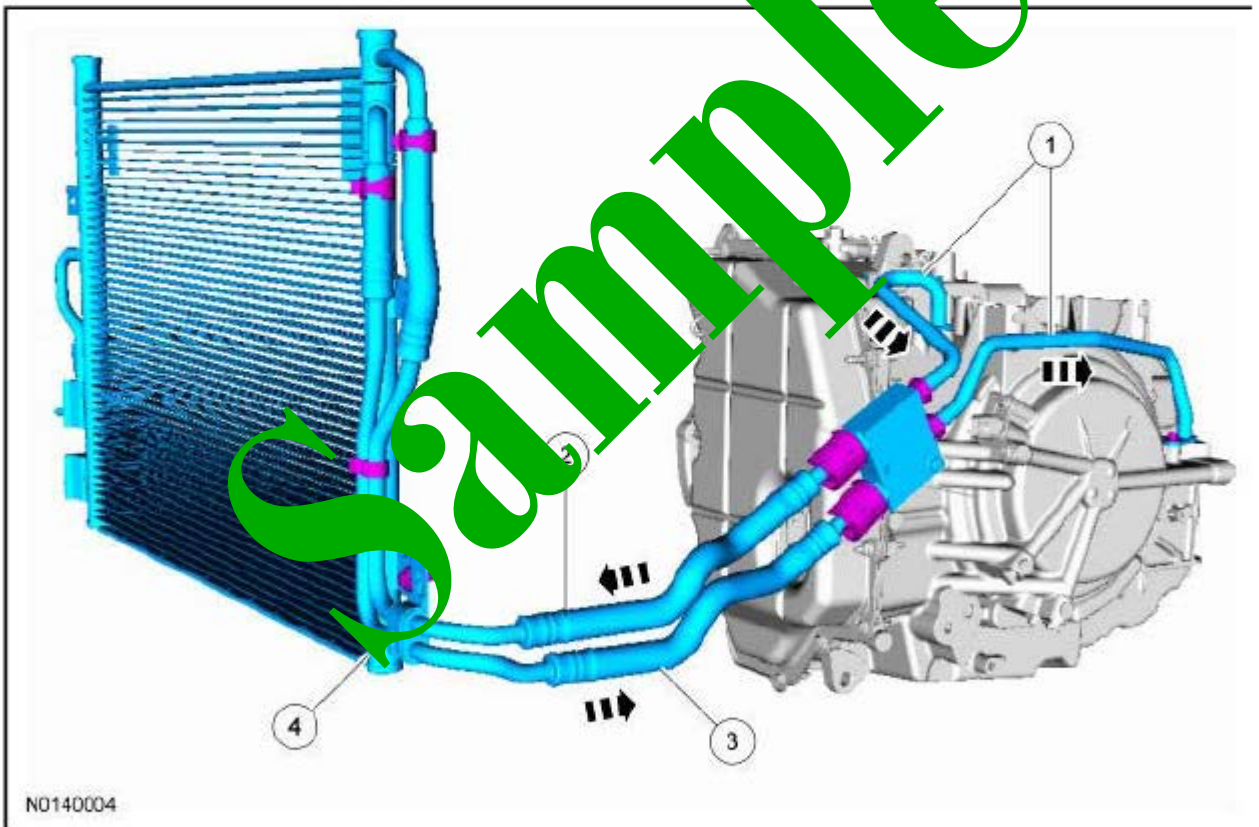
Periodically, new PCM software or new service procedures may become available. Always check online for the latest software or service information related to the DTCs or symptoms you are troubleshooting.

Opens and Shorts

- Transmission fluid cooler outlet tube
- Transmission fluid cooler inlet tube

This vehicle is equipped with an external transmission fluid cooler. The transmission fluid cooler is part of the A/C condenser and cannot be serviced separately. The transmission fluid cooler is mounted in front of the engine radiator. The cooling system also consists of a transmission fluid cooler thermal bypass valve which is mounted on the transaxle main control cover. When the transmission fluid is below normal operating temperature, transmission fluid travels from the transaxle to the transmission fluid cooler thermal bypass valve and back to the transaxle. When the transmission fluid is at or above normal operating temperature, the transmission fluid cooler thermal bypass valve opens allowing transmission fluid to travel from the transaxle through the cooler and back to the transaxle. The transmission fluid cooler transfers heat from the transmission fluid to the outside air.

Transaxle Cooling - 2.0L GTDI Engine



Item	Part Number	Description
1	7R081	Transmission mounted transmission fluid cooler tube assembly
2	7W063	Transmission fluid cooler inlet hose
3	7W064	Transmission fluid cooler outlet hose

- Using a 5-pound or larger dead blow hammer, install the seal deflector immediately after heating using the PTU Linkshaft Seal Dust Shield Installer and Driver Handle.

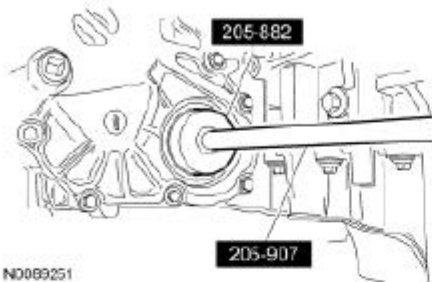


Fig. 29: Identifying Special Tools (205-907) And (205-882)
Courtesy of FORD MOTOR CO.

- Make sure the deflector is completely seated all the way around and there are no checks on the face. The deflector is correctly installed when the face of the deflector is recessed 5 mm (0.12-0.20 in) into the pocket all the way around.

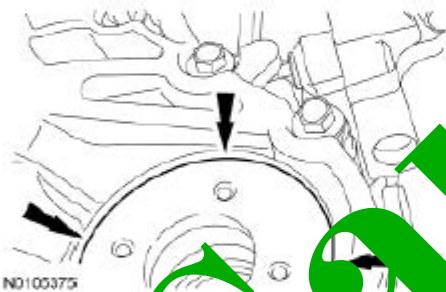


Fig. 30: Locating Deflector
Courtesy of FORD MOTOR CO.

- Once the deflector is fully seated, insert the seal protector into the PTU deflector ID.



Fig. 31: Inserting Seal Protector Into PTU Deflector ID
Courtesy of FORD MOTOR CO.

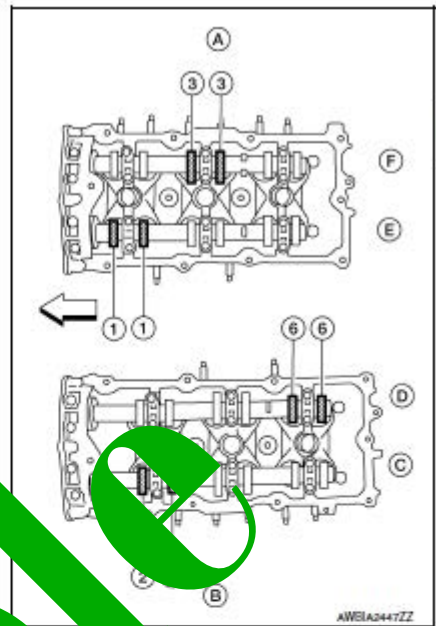
CAMSHAFT VALVE CLEARANCE

< PERIODIC MAINTENANCE >

6. Check only the valves as shown.

Crank Position	Valve No. 1	Valve No. 2	Valve No. 3	Valve No. 6
No. 1 TDC	Intake	Exhaust	Exhaust	Intake

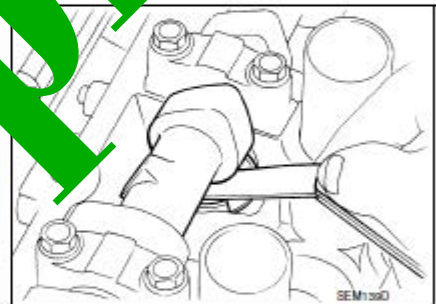
- (A). : Bank 1 cylinder head
- (B). : Bank 2 cylinder head
- (C). : Bank 2 exhaust camshaft
- (D). : Bank 2 intake camshaft
- (E). : Bank 1 intake camshaft
- (F). : Bank 1 exhaust camshaft
- ⇐ : Engine front



a. Using a feeler gauge, measure the clearance between the valve lifter and camshaft.

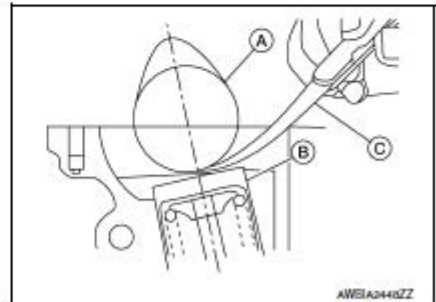
Valve clearance : Refer to [EM-139](#),
["General Specifications"](#)

b. Record any valve clearance measurements that are out of specification. They will be used later to determine the required replacement lifter size.



- (A). : Camshaft
- (B). : Valve lifter
- (C). : Suitable tool

7. Turn crankshaft 240°.
 8. Set No.3 cylinder at TDC of its compression stroke.



A
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