

SECTION 307-01: Automatic Transaxle/Transmission — 6R80
IN-VEHICLE REPAIR

2014 F-150 Workshop Manual
Procedure revision date: 11/13/2013

Main Control

Special Tool(s)

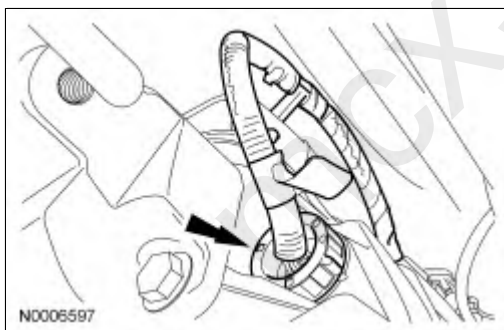
 E173280	Remover, Koastal Sleeve 307-717
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Removal

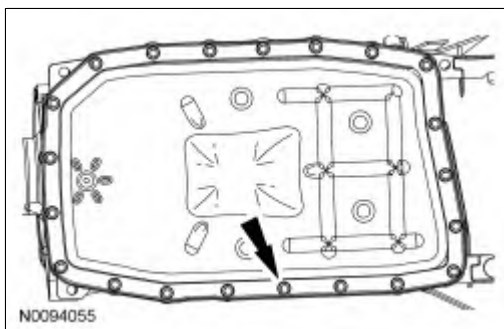
NOTE: The Solenoid Body Strategy Data Download procedure must be performed if a new main control assembly is installed.

1. With the vehicle in NEUTRAL, position it on a hoist. Refer to [Section 100-02](#).
2. **NOTICE:** Do not pull on the wire harness to disconnect the connector or damage to the connector will occur.

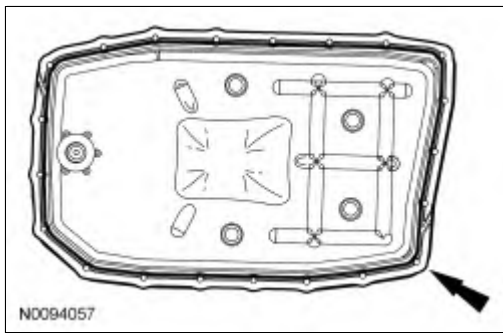
Disconnect the transmission vehicle harness connector by twisting the outer shell and pulling back on the connector.



3. Remove the transmission fluid pan and allow the transmission fluid to drain.

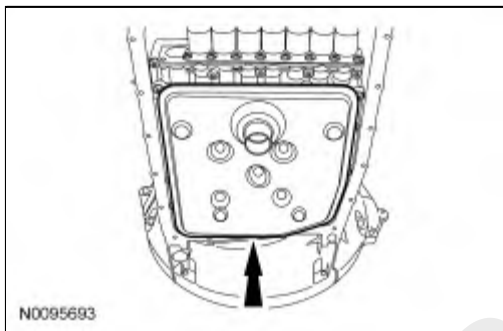


4. Remove the transmission fluid pan gasket.

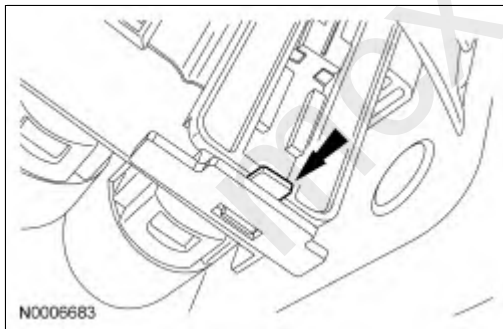


5. **NOTE:** The transmission fluid filter may be reused if no excessive contamination is indicated.

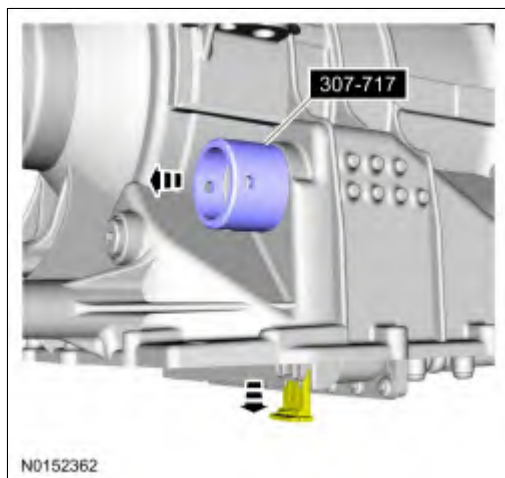
Remove and discard the transmission fluid filter.



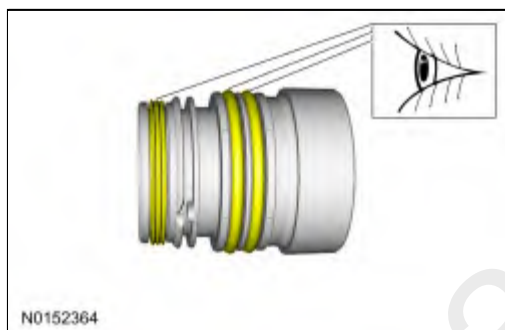
6. Pull the release tab and pull down on the bulkhead connector sleeve retainer.



7. With the transmission bulkhead connector sleeve retainer released, use the Koastal Sleeve Remover to pull the outer shell of the bulkhead connector sleeve out of the transmission.

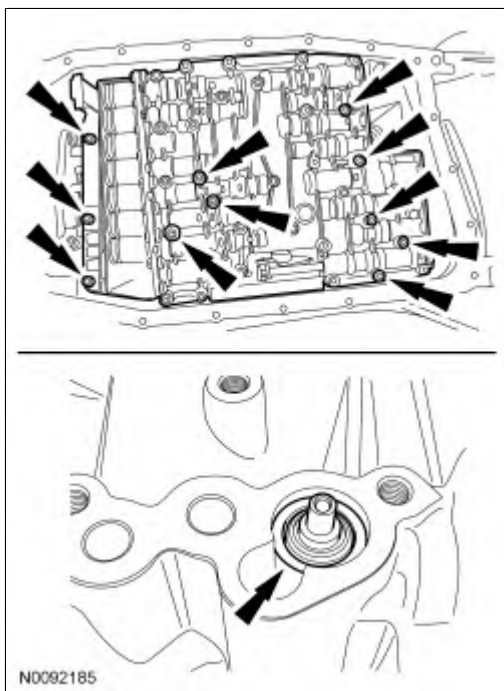


8. Inspect the bulkhead connector sleeve seals.
 - If necessary, replace the seals.



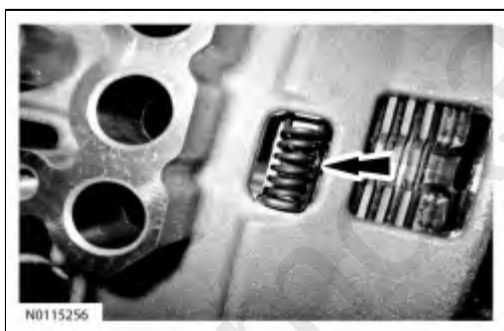
9. **NOTICE:** During removal of the main control assembly, the thermal bypass valve may fall out of the transmission case. Damage to the valve may occur if the valve falls out.

Remove the 11 bolts from the main control assembly and remove the main control assembly and the bypass valve.



Installation

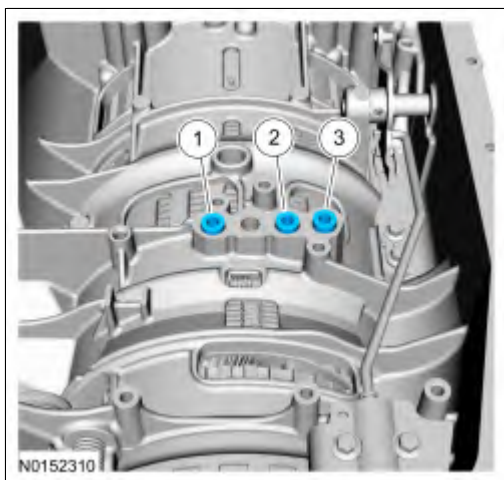
1. Inspect the bias spring to make sure it is positioned correctly in the transmission case.



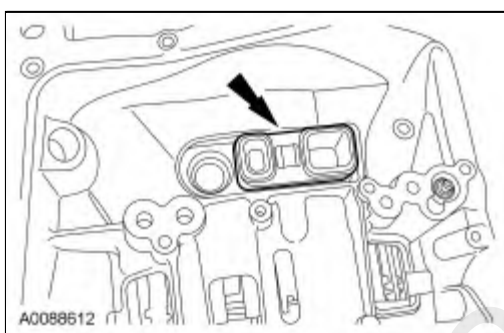
2. **NOTE:** Before installing the main control assembly into the transmission case, verify the presence and orientation of the thermal bypass valve, pump adapter seal and center support feed tube seals. Also note that one or more of the center support feed tube seals may have remained in the main control assembly during removal and should be installed into the transmission case at this time.

Verify the 3 center support feed tube seals are in place.

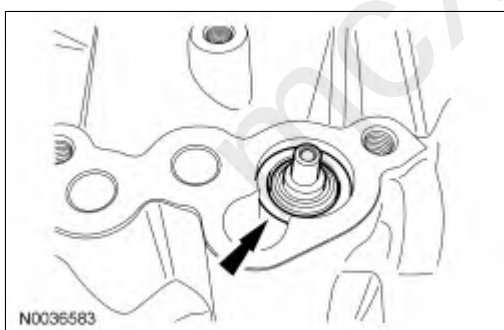
1. Center support feed tube seal (7G199 Black)
2. Center support feed tube seal (7G087 Green)
3. Center support feed tube seal (7G084 Blue)



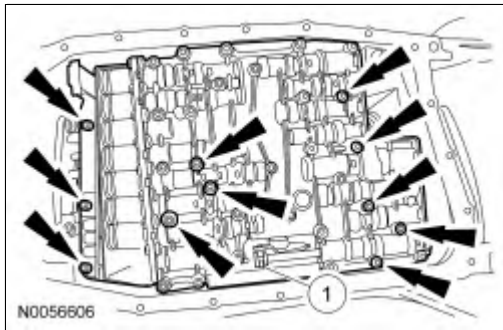
3. Verify the rubber adapter is in place.



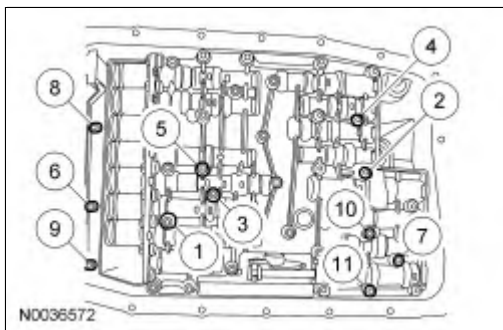
4. Coat the thermal bypass valve with petroleum jelly to hold it in place and install the thermal bypass valve into the transmission case.



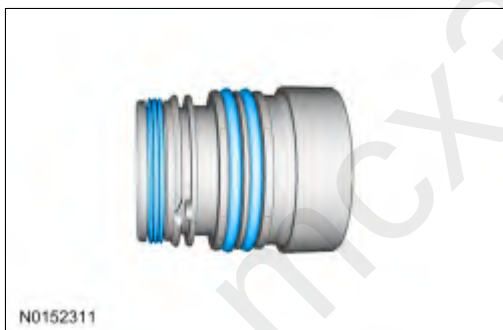
5. Position the main control assembly in place and loosely install the 11 bolts.
 1. Align the manual valve and control lever linkage.



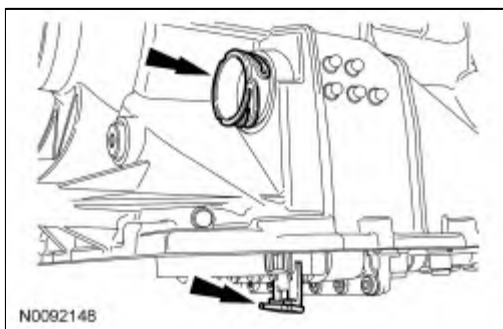
6. Tighten the main control bolts in the sequence shown.
 - Tighten to 8 Nm (71 lb-in).



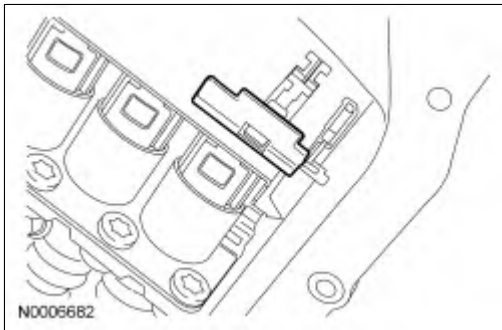
7. If removed, install the bulkhead connector sleeve seals.



8. With the release tab down and unlocked, push the outer shell of the bulkhead connector sleeve into the transmission. Make sure the bulkhead connector sleeve is fully seated into the molded leadframe.

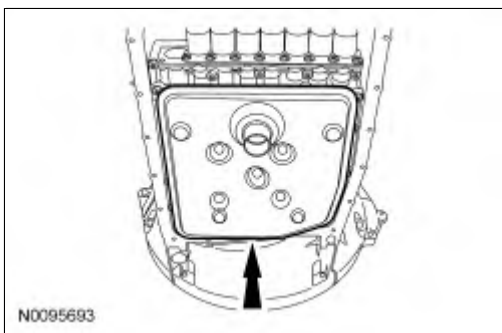


9. Press up on the tab and lock the outer shell of the bulkhead connector sleeve in place. Make sure that the locking tab is securely locked.



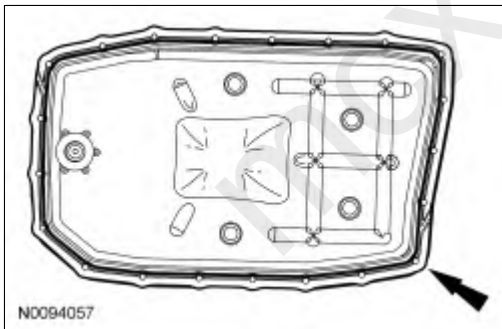
10. **NOTE:** The transmission fluid filter may be reused if no excessive contamination is indicated.

If required, install a new transmission fluid filter.

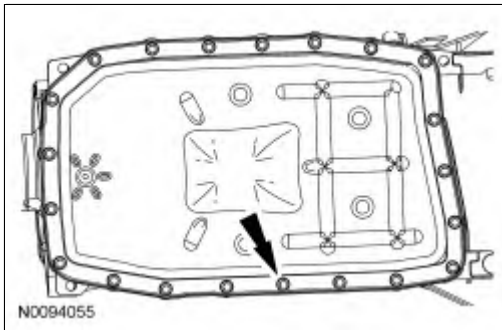


11. **NOTE:** The transmission fluid pan gasket can be reused if not damaged.

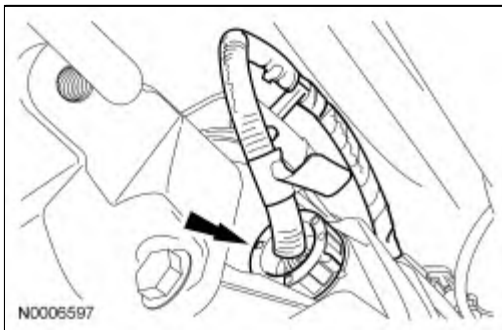
Install a new transmission fluid pan gasket, if required.



12. Install the transmission fluid pan and tighten the transmission fluid pan bolts in a crisscross pattern.
- Tighten to 9 Nm (80 lb-in).



13. Connect the transmission vehicle harness connector by pushing it in and twisting the outer shell to lock it in place.



14. Make sure the transmission fluid is at the correct level. Refer to [Transmission Fluid Drain and Refill](#).
15. **NOTE:** If an individual solenoid was replaced clear the adaptive strategy.

Perform a Road Test — Adaptive Drive Cycle after the adaptive strategy is cleared. Refer to [Shift Point Road Test](#).

16. **NOTE:** If the main control assembly was replaced, perform the Solenoid Body Strategy Data Download. Refer to [Solenoid Body Strategy](#).

Perform a Road Test — Adaptive Drive Cycle after the Solenoid Body Strategy Data Download. Refer to [Shift Point Road Test](#).

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