

2012 - Mazda6 - Transmission/ Transaxle

SHIFT SOLENOID A REMOVAL/ INSTALLATION [AY6A-EL]

WARNING:

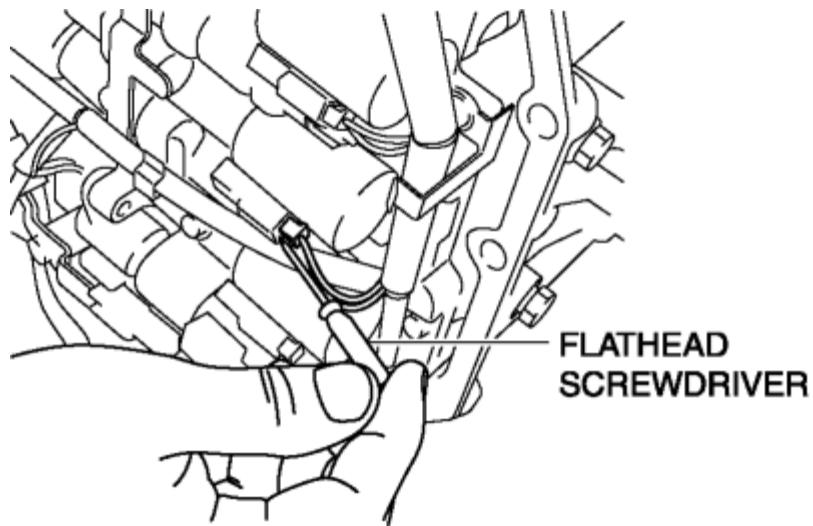
- A hot transaxle and ATF can cause severe burns. Turn off the engine and wait until they are cool.
- Using compressed air can cause dirt and other particles to fly out, causing injury to the eyes. Wear protective eyeglasses whenever using compressed air.

CAUTION:

- Water or foreign objects entering the connector can cause a poor connection or corrosion. Be sure not to drop water or foreign objects on the connector when disconnecting it.
1. Disconnect the negative battery cable.
 2. Remove the fresh-air duct and air cleaner component as a single unit. (See [INTAKE-AIR SYSTEM REMOVAL/ INSTALLATION \[MZI 3.7 V6\]](#).)
 3. Remove the air cleaner bracket. (See [INTAKE-AIR SYSTEM REMOVAL/ INSTALLATION \[MZI 3.7 V6\]](#).)
 4. Clean the transaxle exterior throughout with a steam cleaner or cleaning solvents.
 5. Drain the ATF. (See [AUTOMATIC TRANSAXLE FLUID \(ATF\) REPLACEMENT \[AY6A-EL\]](#).)
 6. Disconnect the oil hose from the oil pipe component (transaxle side). (See [OIL COOLER REMOVAL/ INSTALLATION \[AY6A-EL\]](#).)
 7. Remove the oil pipe component (transaxle side). (See [OIL COOLER REMOVAL/ INSTALLATION \[AY6A-EL\]](#).)
 8. Remove the control valve body cover. (See [CONTROL VALVE BODY COVER REPLACEMENT \[AY6A-EL\]](#).)

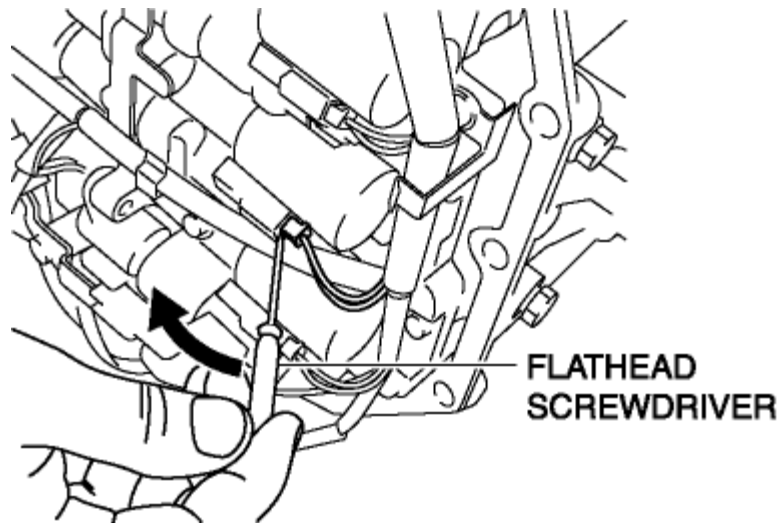
NOTE:

- Disconnect the solenoid connector according to the following procedure:
 - Insert a precision flathead screwdriver from the backside into the connector as shown in the figure.



CAUTION:

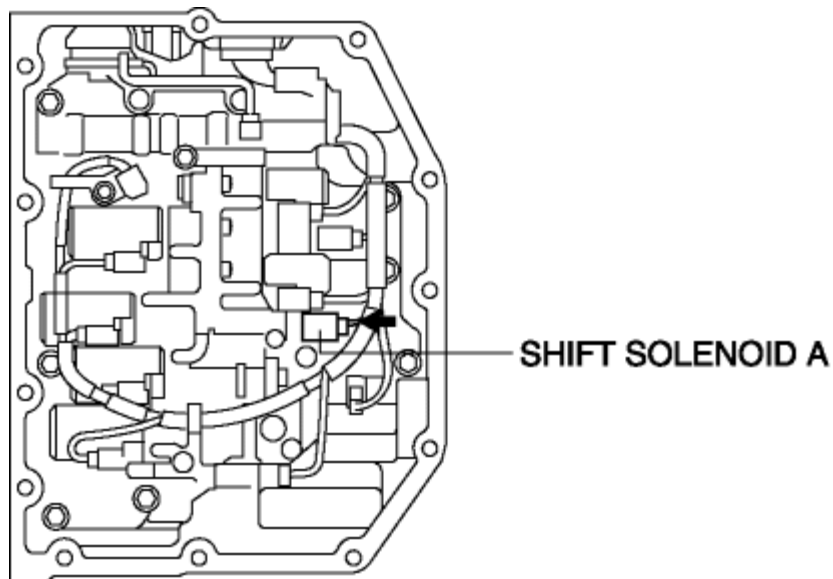
- Do not damage the solenoid valves and connectors with the flathead screwdriver.
- Pry the flathead screwdriver in the direction of the arrow and disconnect the connector.



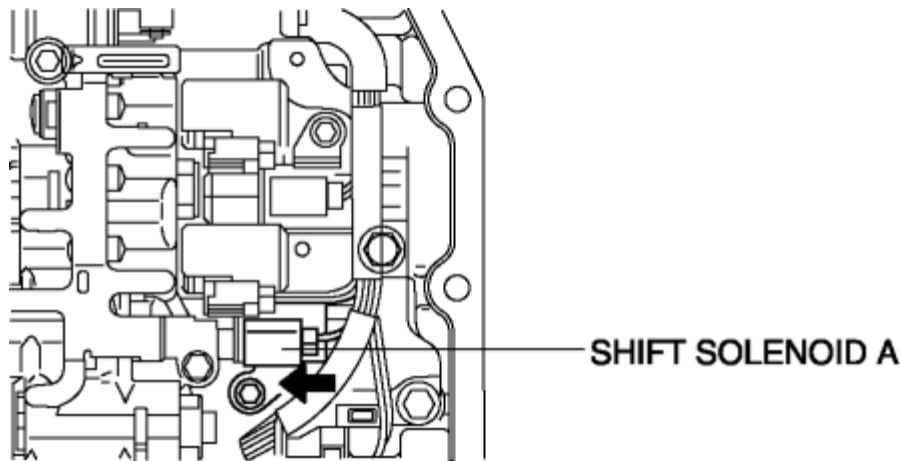
CAUTION:

- When disconnecting connectors, grasp the connectors, not the wiring harnesses. Otherwise, the wiring harnesses may be pulled out of the connector causing poor contact.

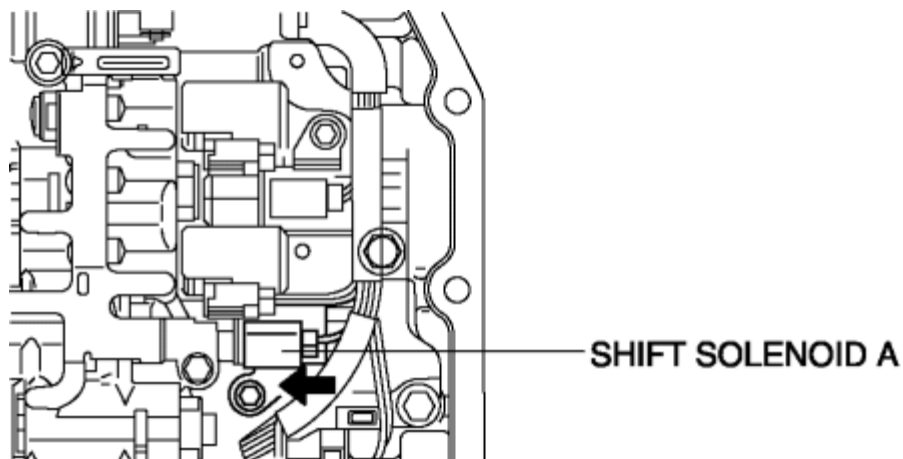
9. Disconnect the shift solenoid A connector.



10. Remove the shift solenoid A from the control valve body.



11. Install the shift solenoid A to the control valve body.



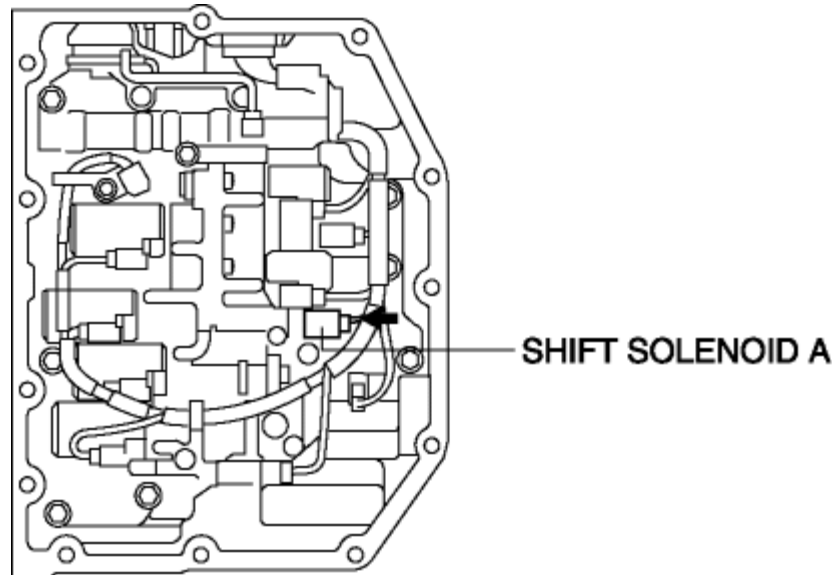
CAUTION:

- Do not damage the shift solenoid A.

Tightening torque

- 6.0—8.0 N·m {62—81 kgf·cm, 54—70 in·lbf}

12. Connect the shift solenoid A connector.



13. Install the new control valve body cover. (See [CONTROL VALVE BODY COVER REPLACEMENT \[AY6A-EL\]](#).)

14. Install the oil pipe component (transaxle side). (See [OIL COOLER REMOVAL/ INSTALLATION \[AY6A-EL\]](#).)

15. Connect the oil hose to the oil pipe component (transaxle side). (See [OIL COOLER REMOVAL/ INSTALLATION \[AY6A-EL\]](#).)

16. Install the air cleaner bracket. (See [INTAKE-AIR SYSTEM REMOVAL/ INSTALLATION \[MZI 3.7 V6\]](#).)

17. Add ATF. (See [AUTOMATIC TRANSAXLE FLUID \(ATF\) LEVEL ADJUSTMENT \[AY6A-EL\]](#).)

18. Install the fresh-air duct and air cleaner component as a single unit. (See [INTAKE-AIR SYSTEM REMOVAL/ INSTALLATION \[MZI 3.7 V6\]](#).)

19. Connect the negative battery cable.

20. Adjust the ATF level. (See [AUTOMATIC TRANSAXLE FLUID \(ATF\) LEVEL ADJUSTMENT \[AY6A-EL\]](#).)

21. Perform the "Mechanical System Test". (See [MECHANICAL SYSTEM TEST \[AY6A-EL\]](#).)

22. Perform the "Road Test". (See [ROAD TEST \[AY6A-EL\]](#).)

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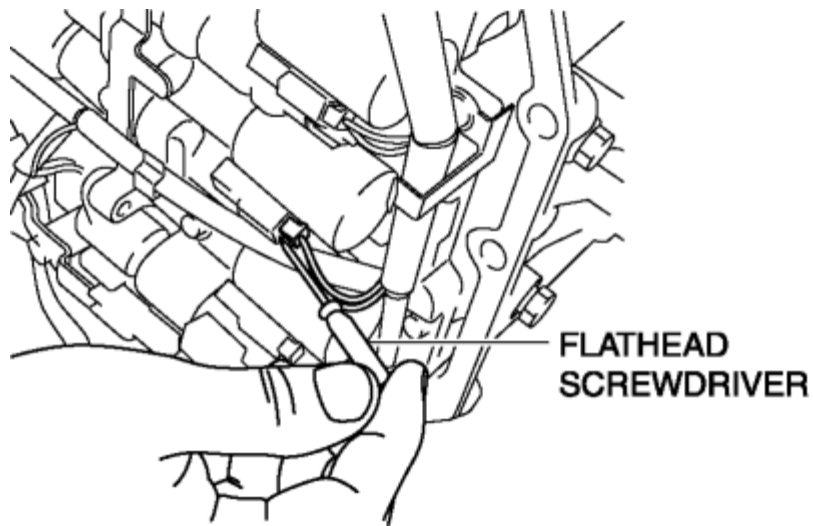
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CAUTION:

- Water or foreign objects entering the connector can cause a poor connection or corrosion. Be sure not to drop water or foreign objects on the connector when disconnecting it.
1. Disconnect the negative battery cable.
 2. Remove the fresh-air duct and air cleaner component as a single unit. (See [INTAKE-AIR SYSTEM REMOVAL/ INSTALLATION \[MZI 3.7 V6\]](#).)
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 4. Clean the transaxle exterior throughout with a steam cleaner or cleaning solvents.
 5. Drain the ATF. (See [AUTOMATIC TRANSAXLE FLUID \(ATF\) REPLACEMENT \[AY6A-EL\]](#).)
 6. Disconnect the oil hose from the oil pipe component (transaxle side). (See [OIL COOLER REMOVAL/ INSTALLATION \[AY6A-EL\]](#).)
 7. Remove the oil pipe component (transaxle side). (See [OIL COOLER REMOVAL/ INSTALLATION \[AY6A-EL\]](#).)
 8. Remove the control valve body cover. (See [CONTROL VALVE BODY COVER REPLACEMENT \[AY6A-EL\]](#).)

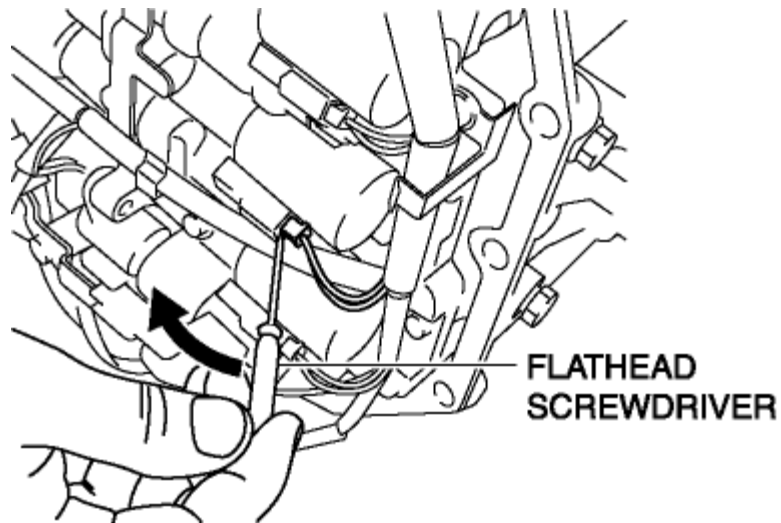
NOTE:

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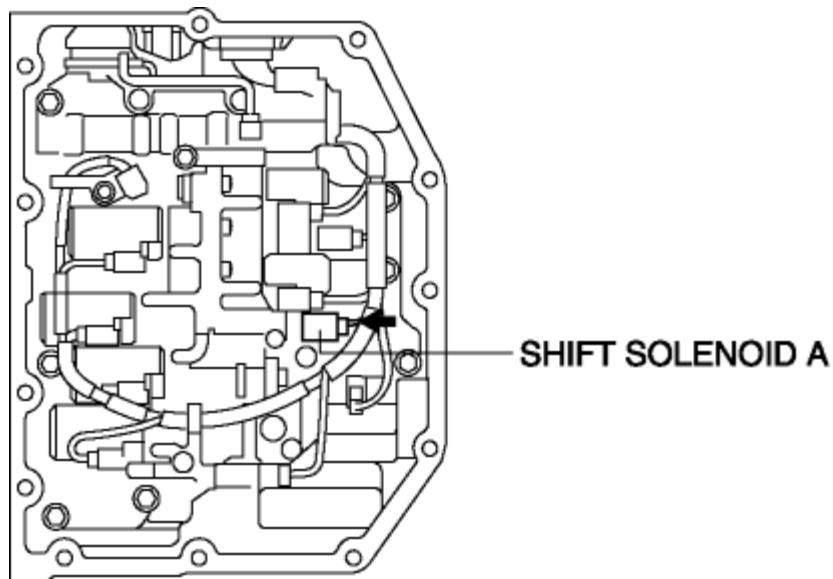
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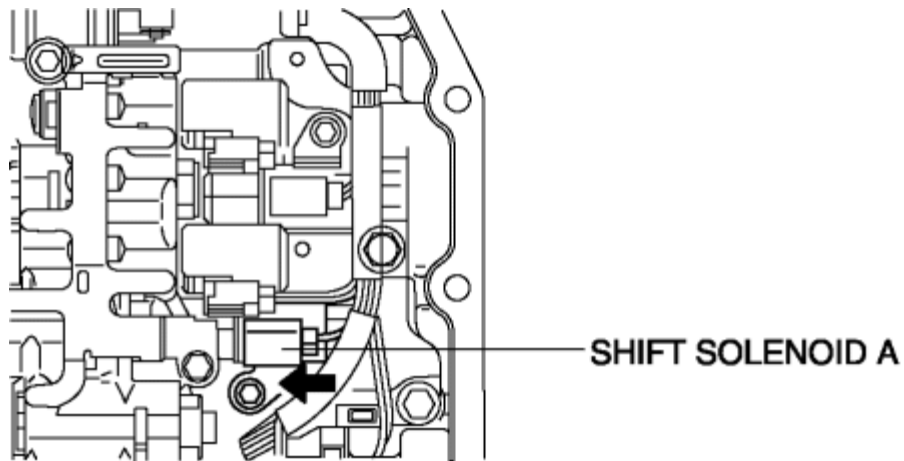
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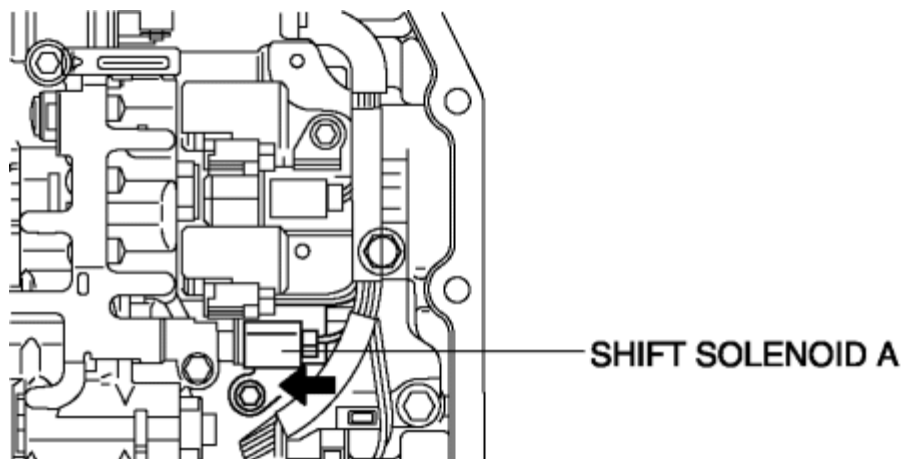
9. Disconnect the shift solenoid A connector.



10. Remove the shift solenoid A from the control valve body.



11. Install the shift solenoid A to the control valve body.



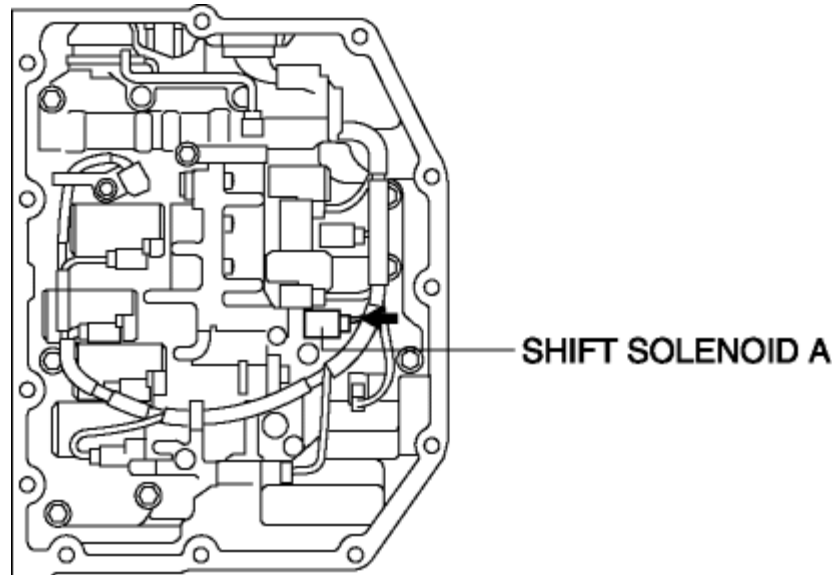
CAUTION:

- Do not damage the shift solenoid A.

Tightening torque

- 6.0—8.0 N·m {62—81 kgf·cm, 54—70 in·lbf}

12. Connect the shift solenoid A connector.



13. Install the new control valve body cover. (See [CONTROL VALVE BODY COVER REPLACEMENT \[AY6A-EL\]](#).)

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