

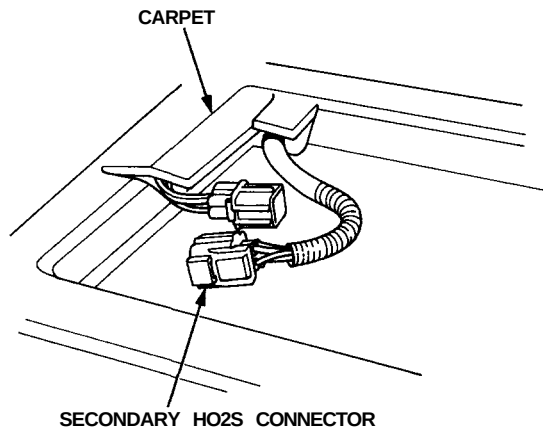
Mainshaft/Countershaft Speed Sensors

Replacement

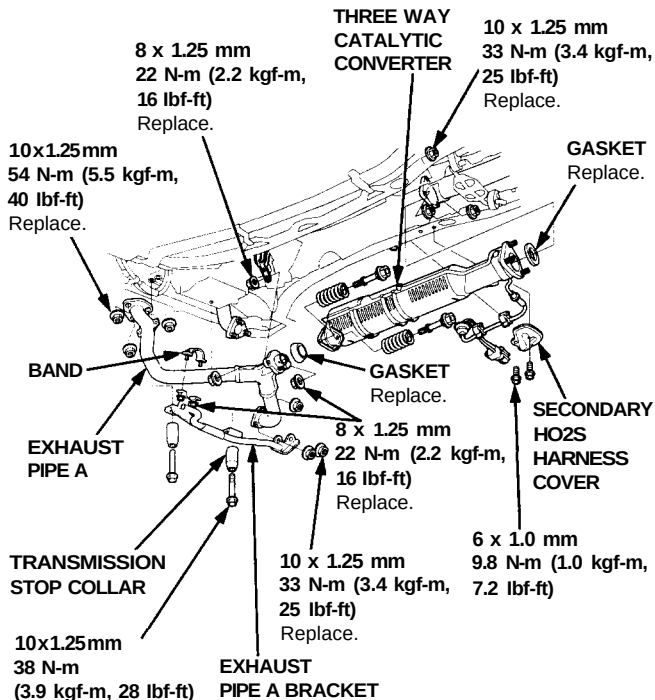
▲ WARNING Make sure lifts, jacks, and safety stands are placed properly (see [section 1](#)).

1. Pull the carpet back to expose the secondary heated oxygen sensor (secondary HO2S) connector. Disconnect the connector, then push it out under the vehicle.

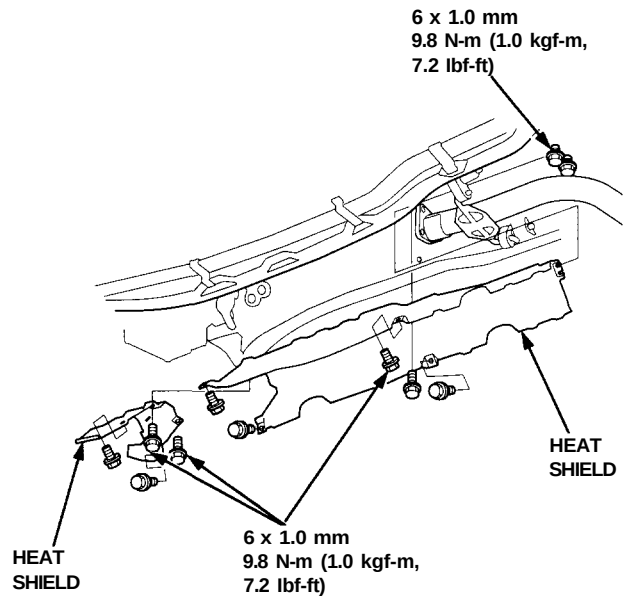
NOTE: The secondary HO2S connector is under the passenger's seat.



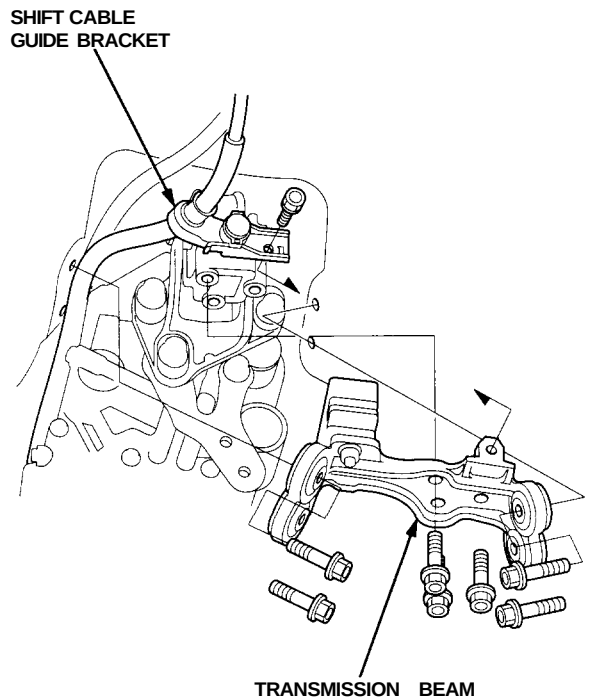
2. Remove the exhaust pipe A bracket, then remove exhaust pipe A.



4. Remove the heat shields.



5. Place a jack under the transmission, and raise the transmission just enough to take weight off of the mounts, then remove the bolt securing the shift cable guide bracket and the transmission beam.

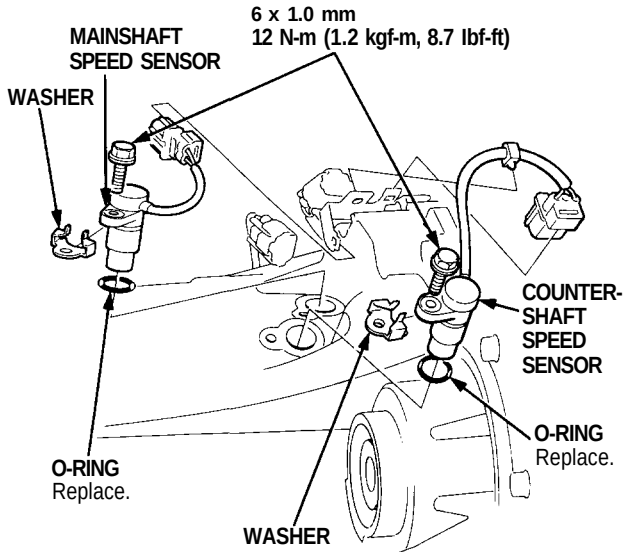


3. Remove the secondary HO2S harness cover, then remove the three way catalytic converter.



6. Lower the transmission.

7. Remove the 6 mm bolt from the transmission housing, and remove the mainshaft and countershaft speed sensors.

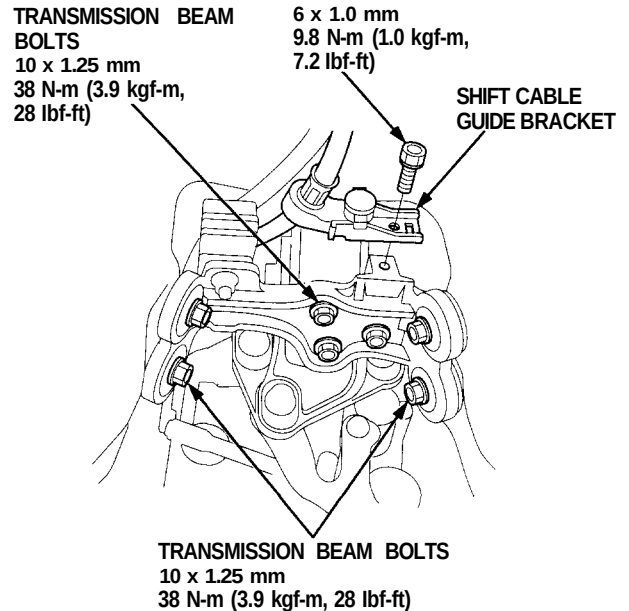


8. Replace the O-rings with new ones before reassembling the mainshaft and countershaft speed sensors.

9. Install washers on the mainshaft and countershaft speed sensors, then install the sensors on the transmission housing.

10. Raise the transmission with a jack.

11. Install the transmission beam on the rear transmission mount bracket/mount, then tighten the four bolts loosely.



12. Tighten the four beam bolts to the specified torque, then tighten the three inner bolts to the specified torque.

13. Install the shift cable guide bracket on the transmission beam.

14. Install the heat shields.

15. Install exhaust pipe A and the three way catalytic converter, then install the exhaust pipe A bracket.

16. Push the secondary HO2S connector into the vehicle, then secure it with the harness grommet.

17. Install the secondary HO2S harness cover.

18. Connect the secondary HO2S connector.