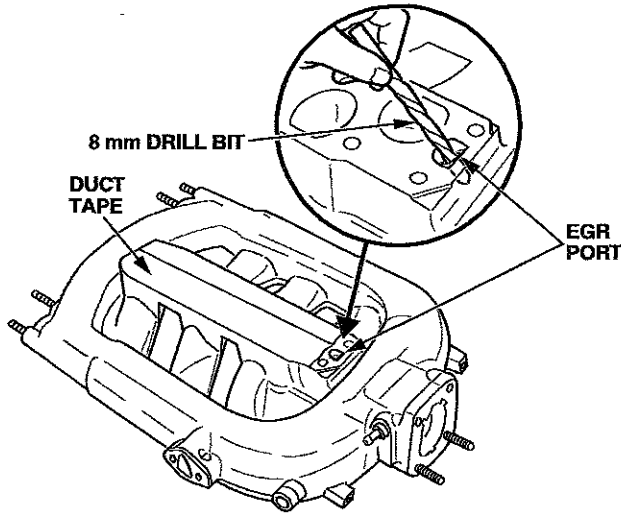


13. Cover the six ports on the bottom of the manifold with duct tape.

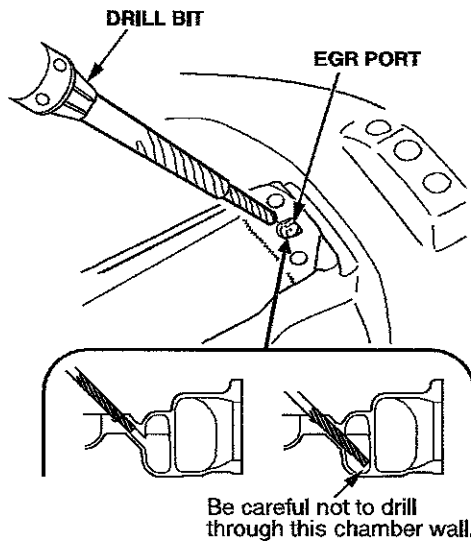


14. Use an 8 mm drill bit and carburetor cleaner to clean the EGR port in the intake manifold. Turn the drill bit only by hand. Do not use a power drill.

15. Put the special drill bit from the EGR pipe installation kit in your power drill. Coat the drill bit completely with clean engine oil.

NOTE: The oil coating is critical to drilling the hole accurately, and it contributes to drill bit life.

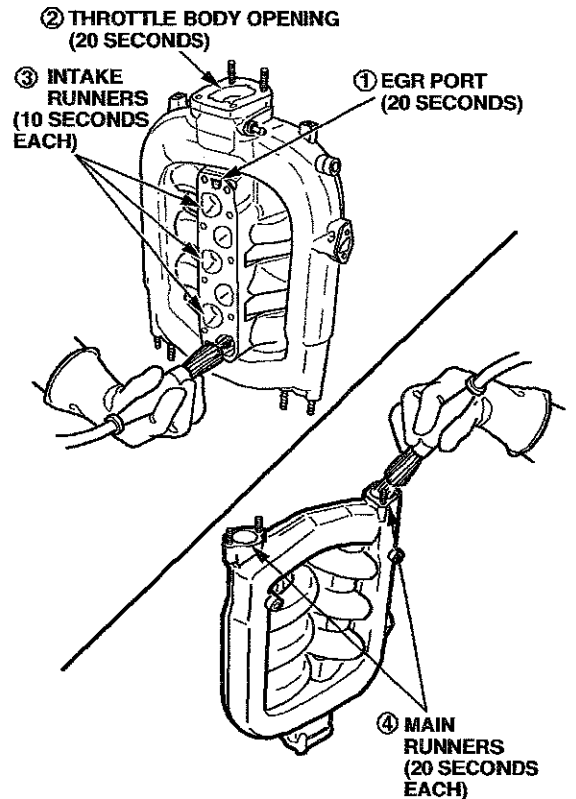
16. Insert the guide part of the drill bit into the EGR port. Make sure it is inserted fully. Then drill out the EGR port using steady pressure on the drill. Make sure the port is drilled through completely.



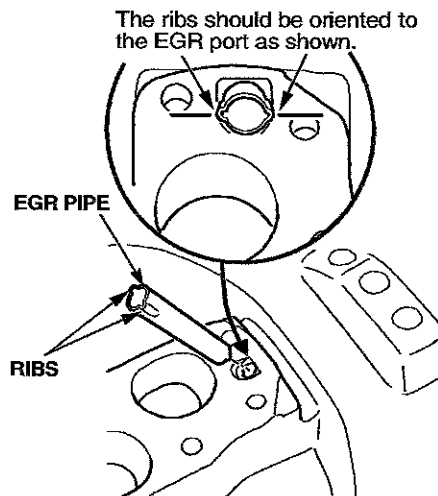
Clean up the aluminum chips from drilling, then remove the duct tape.

17. Put the manifold in a parts washer (solvent or soap and water), and clean it thoroughly.

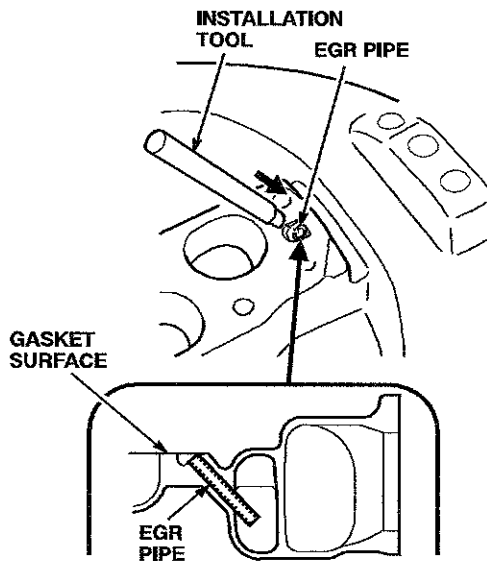
- Flush out the EGR port for **20 seconds**.
- Flush out the manifold from the throttle body opening. Run cleaner down each side for **20 seconds**.
- Flush each intake runner for **10 seconds**. Start at the throttle body end, and work toward the back.
- Turn the manifold so the throttle body opening is facing down. Flush each main runner for **20 seconds**.
- Dry the manifold with compressed air and clean shop towels.



18. Place the EGR pipe from the kit into the EGR port.



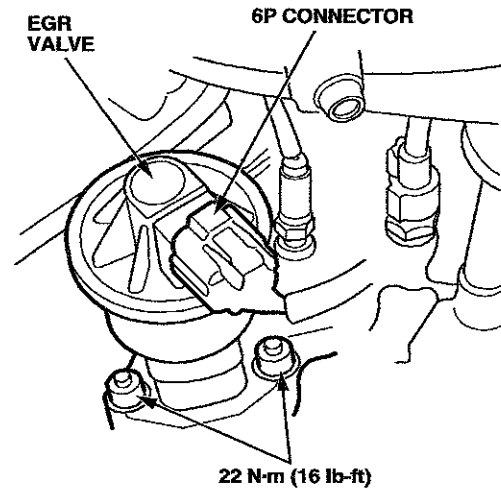
19. Use the installation tool and a small hammer to drive the EGR pipe into the port until it is flush with the port. Make sure the pipe will not contact the gasket after installation.



20. Install the end plates, and torque the nuts to 12 N·m (8.7 lb-ft). Install the IAT sensor with the original O-ring, and torque it to 18 N·m (13 lb-ft). Install the boost plate with the original gasket, and torque the bolts to 12 N·m (8.7 lb-ft). If necessary, install the PCV hose.

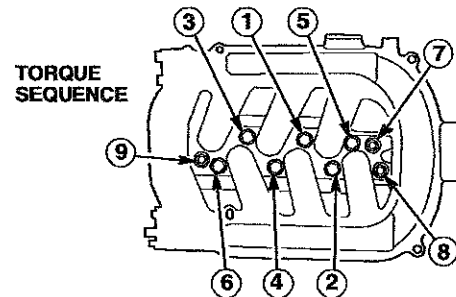
21. Inspect the EGR port in the front of the injector base on the engine. If it is partially or fully clogged, clean the port.

22. Disconnect the 6P connector from the EGR valve. Remove the EGR valve.



23. Install the new EGR valve with a new gasket. Torque the mounting nuts to 22 N·m (16 lb-ft). Reconnect the 6P connector.

24. Install the intake manifold with the original gasket. Torque the mounting nuts and bolts to 22 N·m (16 lb-ft) sequentially in two or three steps. Route the PCV hose so it does not get pinched under the intake manifold.



25. Install the PCV valve in the cylinder head cover.

26. Install the throttle body with a new gasket. Torque the mounting nuts and bolts to 22 N·m (16 lb-ft).

27. Reinstall the brake booster vacuum hose and the vacuum hose. Connect the 3P ignition coil connectors, and install the covers.