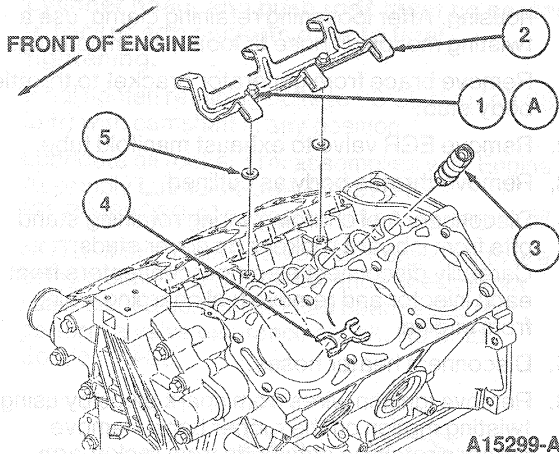


IN-VEHICLE SERVICE (Continued)

25. Remove tappet guide plate(s) from tappets by lifting straight up.
- NOTE: If the tappet(s) are stuck in the bore(s) due to excessive varnish or gum deposits, it may be necessary to use a claw-type tool to aid removal. Rotate the tappet back and forth to loosen it from the deposits.
26. To remove, grasp tappet and pull in line with bore.



A15299-A

Item	Part Number	Description
1A	—	Bolt (2 Req'd)
2	6K564	Guide Plate Retainer Assembly
3	6500	Tappet (12 Req'd)
4	6K512	Guide Plate (6 Req'd)
5	—	Washer (2 Req'd)
A		Tighten to 10-14 N-m (8-10 Lb-Ft)

TA15299A

Installation

NOTE: Lightly oil all retaining bolt and stud bolt threads before installation.

CAUTION: Aluminum components gouge easily which may cause gasket leaks. Always use care when scraping aluminum gasket surfaces.

- Clean mating gasket surfaces of intake manifold and cylinder head. Lay a clean cloth or shop cloth in the tappet valley to catch any gasket material. After scraping, carefully lift cloth from tappet valley to prevent any particles from entering oil drain holes or cylinder head. Use a suitable solvent to remove old rubber sealant.
- Lubricate tappet(s) and bore with Engine Assembly Lubricant D9AZ-19579-D (ESR-M99C80-A) or equivalent.
- Install tappet into bore.
- Aligning tappet flats, install tappet guide plate. Install plate with word "UP" and or button visible.

- Install guide plate retainer assembly over guide plates. Retainer orientation is not important. Loosely install two retaining bolts. Tighten bolts to 10-14 N-m (8-10 lb-ft).
 - Apply a 6 mm (1/4 inch) drop of Rubber Sealer D6AZ-19562-AA or BA (ESB-M4G92-A and ESE-M4G195-A) or equivalent to intersection of cylinder block and cylinder head assembly at four corners.
 - Position intake gaskets onto cylinder heads. Align intake gasket locking tabs to provisions on cylinder head gaskets.
 - Install front and rear intake manifold seals. Secure with retaining features.
 - Carefully lower intake manifold into position aligning manifold bolt holes to those in cylinder head. Use care to prevent distributing rubber sealer which can cause sealing voids. Install bolts No. one, two, three, and four and hand tighten. Install remaining bolts and tighten in a two step process. Tighten in numerical sequence to 20-30 N-m (15-22 lb-ft), then again in sequence to 26-32 N-m (19-24 lb-ft).
 - On unleaded gasoline only, coat distributor gear teeth with Engine Assembly Lubricant D9AZ-19579-D (ESR-M99C80-A) or equivalent. Install distributor and align to premarked location on cylinder block and rotor position. Install retaining bolt and washer and hand tighten.
- NOTE: Fulcrum must be fully seated into cylinder head and push rod must be fully seated in rocker arm and lifter sockets prior to final tightening.
- Lubricate removed push rods and rocker arms with Engine Assembly Lubricant D9AZ-19579-D (ESR-M99C80-A) or equivalent heavy engine oil. Move rocker arms into position with push rods and snug retaining bolt. Rotate crankshaft to position camshaft lobes straight down and away from valve tappet. Tighten retaining bolt to 7-15 N-m (5-11 lb-ft) to seat rocker arm fulcrum into cylinder head. Final tighten bolt to 26-38 N-m (19-28 lb-ft) in any position.
 - Install rocker arm covers as outlined.
 - Install fuel charging wiring to each injector. Secure with stand offs to inboard rocker arm cover studs.
 - Install ignition coil to rear of LH cylinder head. Tighten retaining bolts to 40-55 N-m (29-41 lb-ft).
 - Install distributor cap and ignition wires (unleaded gasoline only). Install wire harness stand offs to rocker arm cover studs and connect wires to spark plugs and ignition coil.
 - Install throttle body assembly and new intake manifold upper gasket as outlined in this section.
 - Install EGR valve to exhaust manifold tube from intake manifold to EGR valve. Tighten retaining nuts to 35-65 N-m (26-48 lb-ft).
 - Install fuel lines. Refer to Section 03-04A.
 - Install fuel line safety clips.