



Engine Disassembly

Meets NATEF Task: (A1-C-1) Disassemble engine block; clean and prepare components for inspection and reassembly. (P-1)

Name _____ Date _____ Time on Task _____

Make/Model/Year _____ VIN _____ Evaluation: 4 3 2 1

This procedure is for overhead valve engines only. For overhead camshaft engines, consult the factory service information.

- _____ 1. Remove all coolant and engine oil from the engine.
- _____ 2. Clean the engine with degreaser and/or a pressure washer.
- _____ 3. Install the engine on an engine stand.
- _____ 4. Remove the exhaust and the intake manifolds.
- _____ 5. Remove the cylinder head(s) being certain to follow the torque table backwards starting with the highest number and working toward the lowest number to help prevent warping the cylinder head.
- _____ 6. Remove the harmonic balancer and timing chain cover.
- _____ 7. Remove the timing chain and camshaft.
- _____ 8. Remove the oil pan (replace all pan bolts back into the block rails to prevent loss if possible).
- _____ 9. Remove the oil pickup and pump (if in the oil pan).
- _____ 10. Mark the connecting rods if not already marked from the factory or during a previous service.
- _____ 11. Remove the ridge:
 - a. Install the tool into the cylinder and position the piston properly so that enough threads will be above the tool to cut the entire ridge.
 - b. Expand the tool to the proper bore size.
 - c. Locate the cutter blade slightly below the ridge and tighten the lock screw.
 - d. Apply the spring tension to the cutter blade.
 - e. Cut the ridge.
 - f. Stop cutting as soon as the ridge has been removed to avoid tapering the top of the bore.
 - g. Remove the chips from the cylinder.
- _____ 12. Remove the pistons and the rods (keep the rod caps together).