

## REASSEMBLY

1. In a normal reassembly, you would be honing cylinders, installing cam bearings, expansion plugs, install oil plugs, and installing timing sprockets (or gears) and chain. Because of time constraints, we cannot do all of these procedures.
2. Reinstall camshaft sprocket and chain ensuring timing marks are aligned correctly. Torque sprocket bolts to specification.
3. **INSTRUCTOR'S INITIALS** \_\_\_\_\_
4. Install timing cover and torque bolts to specification.
5. Install harmonic balancer, using appropriate tool, **as per demonstration.** Torque bolt to specification.
6. Check crankshaft endplay and record in specification sheet, **as per demonstration.**
7. Remove the **thrust** main cap, and plastigage. Be ready to explain to instructor what thrust cap does.
8. **INSTRUCTOR'S INITIALS** \_\_\_\_\_
9. Remove plastigage, lube bearing, install cap, and torque bolts to specification.
10. **INSTRUCTOR'S INITIALS** \_\_\_\_\_
11. Each student is to install the piston they removed, **as per demonstration.** **Note: Any mistake here and the engine may not run.**

### **PISTON INSTALLATION:**

- a. Place crankshaft for cylinder #1 at BDC.
  - b. Install guides.
  - c. Lube rings, cylinder, and rod bearing (only). (Do **not** lube cap bearing).
  - d. Install ring compressor (note position) and carefully install piston.
  - e. Plastigage as per demonstration and record reading on your specification sheet.
  - f. Remove plastigage, lube bearing and install cap. (**Make sure numbers line up**)
  - g. Torque bolts to specification.
12. Repeat installation of pistons for each team member and get initials.
  13. **INSTRUCTOR'S INITIALS** \_\_\_\_\_
  14. Install oil pump drive, install pump and torque to specification.