

Race-1
604 New Engine Check List (Race Prep for **SHOP**)

- ☐ Inspect Intake manifold installation---straight and square
- ☐ Check factory seals for damage and correct installation
- ☐ Leak Test Cylinders 15% is acceptable (if rings are leaking 25% is acceptable)
- ☐ Inspect Cylinders for Debris and proper cross hatch (Bore Scope)
- ☐ Inspect lifter bores for proper clearance
- ☐ Inspect fuel pump pushrod; bore for debris and burrs
- ☐ Place paper covers over valve cover stickers
- ☐ Remove Rockers and push rods
- ☐ ****CHECK Posi lock threads and studs for low percentage of thread****
- ☐ Back the set screw out on posi-lock
- ☐ Check torque on head bolts—65 ft/lbs. (No specific order is necessary)
- ☐ Check Torque on Rocker Studs –55 to 58 ft/lbs.
- ☐ Check rear galley plugs above camshaft (1/4” square).
- ☐ Check head plugs on the side of the heads in between ex. Ports (5/16 square)
- ☐ Locate Exact TDC
- ☐ Stamp desired Timing Marks –Paint Balancer and Highlight Marks
- ☐ Install Qualified Valve Springs-- Checking installed heights (1.785 MIN.)
- ☐ Install oil pressure fitting
- ☐ Check oil pan bolts for tightness-** (Seal Left Side Pan Bolts)**
- ☐ Check rear seal housing fasteners for tightness
- ☐ Remove long t-cover bolt (fuel pump side) remove 80% of the head and reinstall
- ☐ Check remaining Timing cover bolts for tightness
- ☐ Check oil drain plug for tightness
- ☐ Add silicone sealer to the factory dipstick hole
- ☐ Remove Thermostat---never seeze bolts and re-install housing
- ☐ Remove oil filter adapter gasket and reinstall adapter (bypass out)
- ☐ Fill and install filter—fill oil to proper level
- ☐ Lube roller on rocker and put in place pushrods and rockers
- ☐ Prime Oil system until oil is flowing from **ALL** pushrods
- ☐ Adjust Valves **with primer running** to ensure proper flow and volume
- ☐ Glue the gaskets in the covers and install valve covers
- ☐ Turn the Breathers—shield should be towards the front of the engine.
- ☐ Completely Wipe the engine down of any external oil