

MOPAR PERFORMANCE PARTS INSTRUCTION SHEET
Race Rocker Arm Assembly P5007049
1996-2000 Dodge Viper GTS
1997-2000 Dodge Viper RT/10

Proper installation of this kit requires removing the cylinder heads. Mopar Performance Parts recommends that a trained (certified) Viper technician perform the installation. This kit will not fit 1996 and earlier Viper RT/10s with the "heavyweight" engine. Read instructions completely before working on the vehicle.

Required Tool List: Viper Service Manual
Standard mechanic's hand tools
Stand Height Gage (included in kit)
Adjustable Checking Pushrod (Crane Cams P/N 997262 or equivalent)

1. Disconnect battery power source at under hood Power Distribution Center (PDC)
2. Disconnect wires from spark plugs, being careful not to bend the wires excessively. This can cause the carbon core to break and make the engine misfire.
3. Remove the valve covers from the engine.
4. Remove the sheet metal baffle from inside the valve covers. It will not clear the new rocker arms.
5. Remove cylinder heads from engine.
6. Determine Correct Stand Height. **Note: must be done to all stands.**
 - a. Remove stock rocker arms, valve spring retainers & locks and valve springs.
 - b. Install the Mopar Performance rocker stands on the cylinder head using the 3/8-16 attaching bolts. The stands should be positioned so the stamped letters face the valve stem.
 - c. Remove a Mopar Performance rocker arm from one of the shafts and place that shaft on a stand.
 - d. Place the supplied Stand Height Gage on the valve stem, as shown in figure 1. The gage should contact the top of the valve and the rocker shaft, as shown in figure 1.

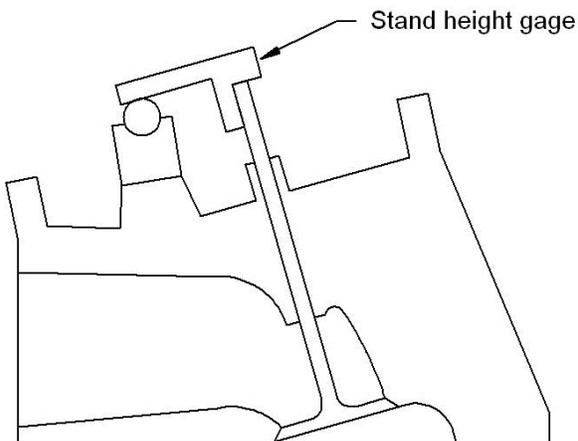


Figure 1

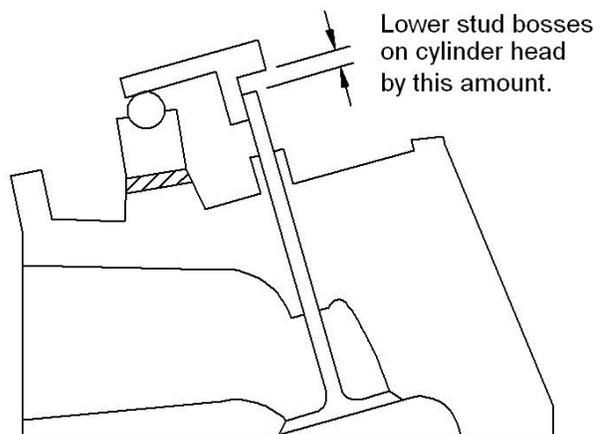


Figure 2

- e. If the gage contacts the shaft before touching the top of the valve stem, as shown in figure 2, a corresponding amount of material should be machined from the stud bosses on the cylinder head, which will lower the rocker stand. Alternately, a lash cap (Crane Cams P/N 99421-20 or equivalent) can be installed on the valve tip, to extend its length, but machining the boss is preferred.

- f. If the gage contacts the top of the valve stem and does not touch the rocker shaft, as shown in figure 3, add a corresponding amount of shims between the stand and the cylinder head, which will raise the rocker stand and shaft to the correct height.

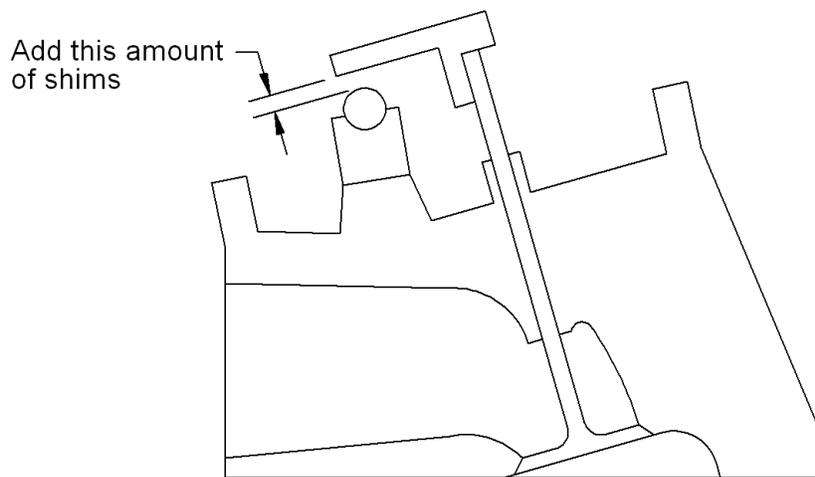


Figure 3

7. Determine Correct Pushrod Length

- Replace the cylinder head, with new head gaskets, and torque to specifications.
- Starting with the #1 cylinder, and with the lifter on the heel, or base circle, of the camshaft, install an adjustable checking pushrod into a lifter and install a rocker arm assembly.
- Seat the bottom of the checking pushrod adjuster screw up against the pushrod recess in the rocker arm and turn the adjuster screw clockwise one full turn down. This is the initial adjuster position.
- Adjust the checking pushrod to zero clearance to determine the proper length.

Remove the pushrod from the engine and measure its overall length. NOTE: If using hydraulic lifters, add an additional 0.050" to the overall pushrod length to properly preload the lifter.

REMEMBER: the rocker arm should not be operated with the adjuster screw more than one turn up or down from the initial adjuster position. Doing so can cut off the flow of oil to the rocker arm.

8. Final Assembly. **Note: repeat for each set of rocker arm, shaft and stand assemblies.**

- After all of the stand heights have been set, torque the stand attaching bolts to 35-40 lbs. ft.
- Place an individual rocker arm and shaft assembly on the stand and tighten the shaft hold down nuts to 25 lbs. ft.
- Set the valve lash to the cam manufacturer's specifications and tighten the adjuster screw jam nut to 15-20 lbs. ft.

9. Start Up

- Reinstall the valve covers (without sheet metal baffle), spark plug wires and reconnect the battery to the Power Distribution Center.
- Start the engine and let it idle until operating temperature is reached.
- Excessive noise in the valve train can indicate that one or more valves have been adjusted with too much clearance. Recheck the adjustment.
- If the engine doesn't start it could indicate that the valve clearance is too tight, holding the valves off their seats. Recheck the adjustment.