



4859 Convair Drive
Carson City, NV 89706
Phone (775) 884-2292
Fax (775) 884-3363

INSTALLATION INSTRUCTIONS

Please follow these instructions to ensure the proper operation of your T & D MACHINE PRODUCTS FE Ford Rocker Arm Assembly.

1. CYLINDER HEAD MODIFICATIONS

The pads that the original rocker gear mounted to must be cut down to the level of the counter bore surface of the head bolt holes on the back of the head. (intake manifold side) For Medium Riser heads, cut the pads down to 0.125" (1/8") above the head bolt counter bores. This will provide a flat surface for the rocker stand sub-plate to be bolt to. (For Medium Risers, a 0.125" thick spacer must be used between the head bolt counter bores and the sub-plate) See Figure 1 A&B. Be sure that this machined area is parallel to the deck surface of the cylinder head, otherwise, improper cylinder head torquing will occur.

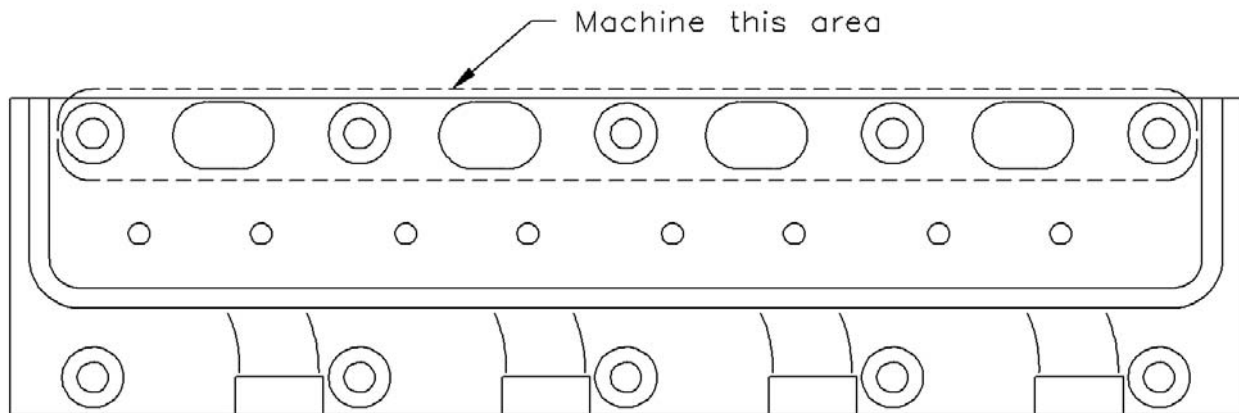


Figure 1A

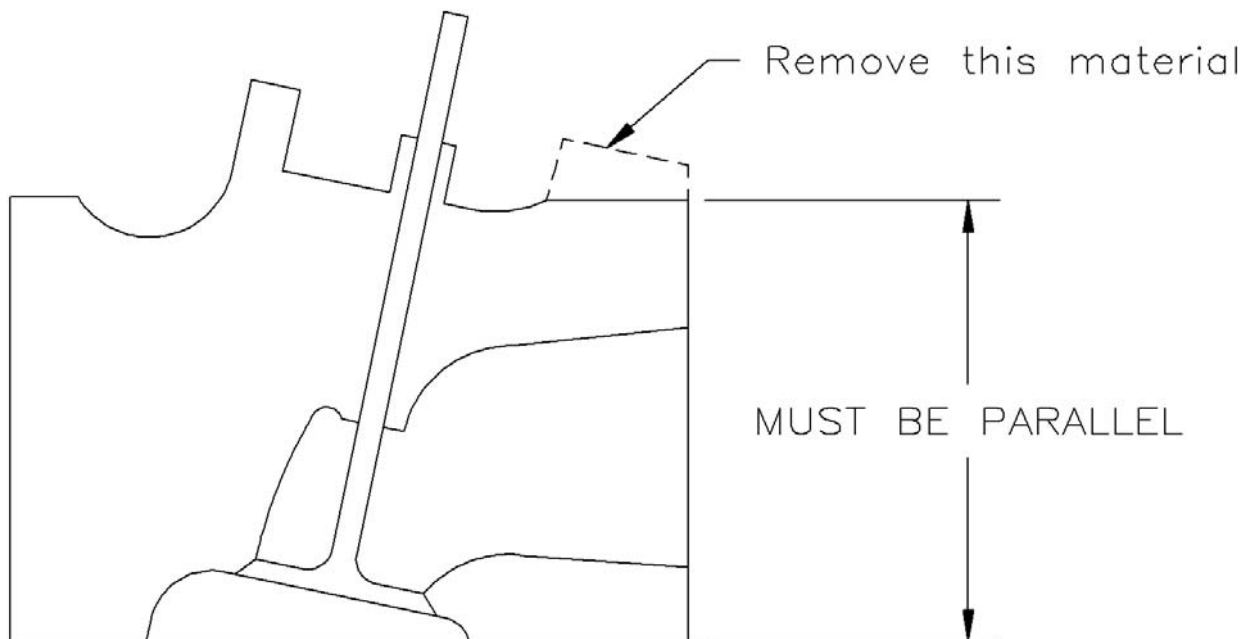


Figure 1B

P/N 05865

Also, the lifters must be converted over to provide pushrod oiling. This can be accomplished by using small block Ford lifters if the lifter bores have oil galleries to them. If not, the block must be drilled to allow oil to flow to the lifter bores.

2. DETERMINE CORRECT STAND HEIGHT

Install the rocker sub-plate on the cylinder head using the supplied head bolts and torque to factory specs. Install the rocker stands on the sub-plate using the 7/16-20, 12 point attaching bolts. The stands should be placed on the head so that the stamped letters in the lower left hand corner face the valve stem. Remove a rocker arm from one of the shafts and place that shaft on a stand. Take the shaft height gage supplied with the kit and place it on the valve stem as shown in Figure 2.

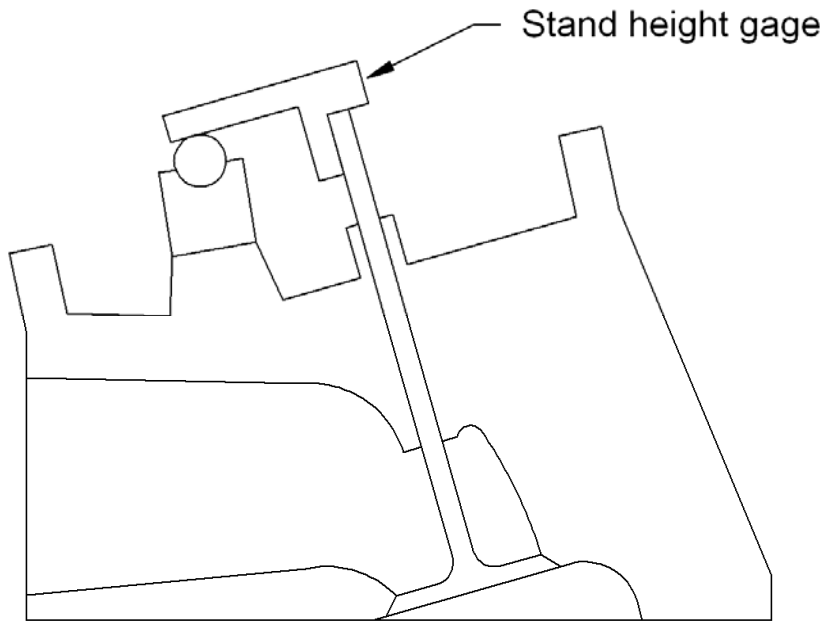


Figure 2

The gage should contact the top of the valve and the rocker shaft as shown in Figure 2.

If the gage contacts the shaft before touching the top of the valve stem, as shown in Figure 3, remove a corresponding amount of material from the head bolt and rocker arm bosses previously machined. This will lower the rocker stand on the cylinder head.

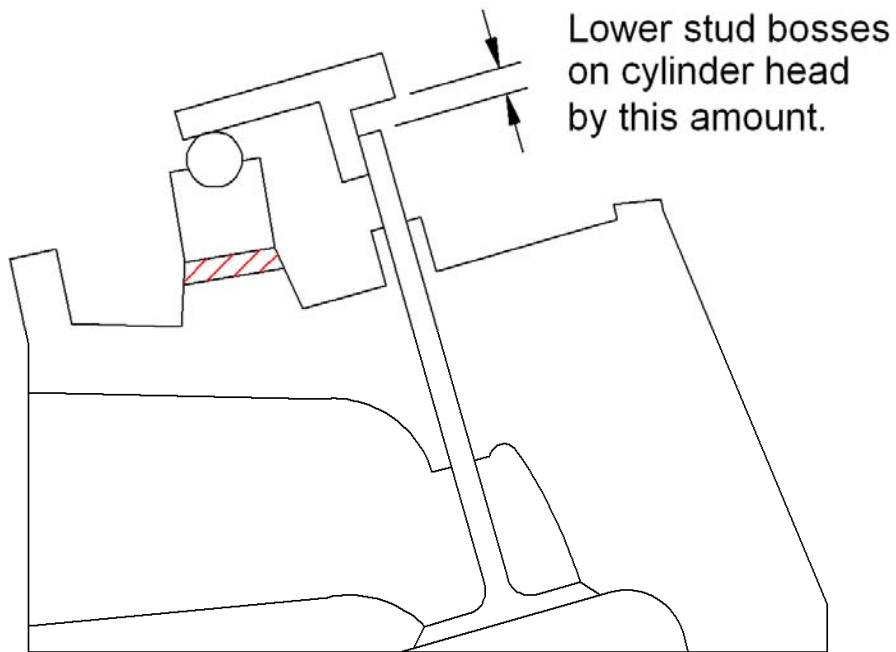


Figure 3

If the gage contacts the top of the valve stem and does not touch the rocker shaft, as shown in Figure 4, add a corresponding amount of shims between the stand and the cylinder head. This will raise the rocker stand and shaft to the correct height.

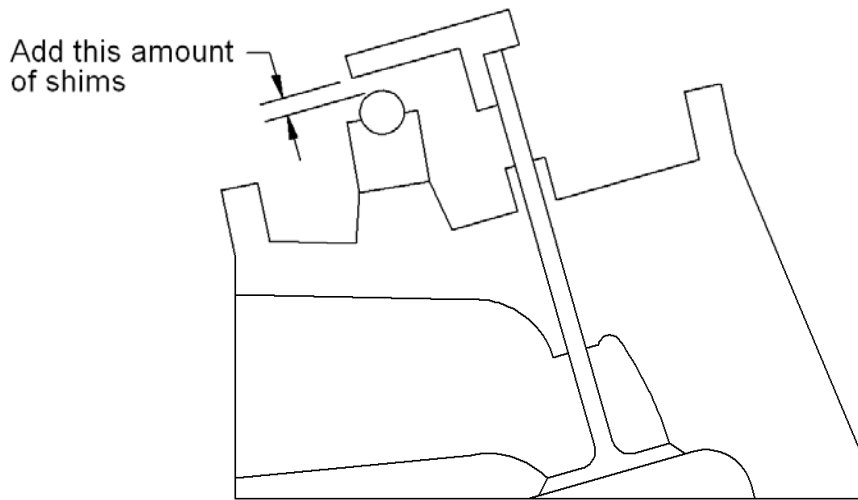


Figure 4

3. DETERMINE CORRECT PUSHROD LENGTH

Place a pushrod length checker into a lifter and install a rocker arm assembly. Be sure the cam is rotated to the base circle. Seat the bottom of the adjuster screw up against the recess in the rocker arm and turn the adjuster screw clockwise one full turn down. This is the initial adjuster position. Adjust the pushrod length tool to the proper length, remove from the engine, and measure its overall length.

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.

4. FINAL ASSEMBLY

After all of the stand heights have been set; check the head bolt torque to be sure it is set to factory specifications. Put the rocker stand back on and place a rocker and shaft back on the stand to assure good rocker to valve alignment and torque the stand attaching bolts to 55/65 ft-lbs. When the stands are aligned and tightened down, place the rocker arm and shaft assemblies on the stands and tighten the shaft hold down nuts to 25 ft-lbs. After all of the rockers have been tightened down, set valve lash and torque the adjuster screw jam nut to 5/20 ft-lbs.