



## Sportsman Series Steel Rocker Arms Installation Guide

Sportsman	
Item	Quantity
<i>Sportsman Series Rocker Arms</i>	<i>16 each</i>
<i>Pivot Balls &amp; RockerLocs</i>	<i>16 each</i>
<i>Installation Guide</i>	<i>1 each</i>

### Installation

#### Step 1

After removing the rockers and other components from the package thoroughly wash each piece, and then blow dry.

#### Step 2

Prior to installation, submerge the rockers in engine oil for approximately 30 minutes to insure the roller tip and fulcrum are properly lubricated.

#### Step 3

Install the push rods. Make sure the pushrod is properly seated in the lifter. Fill each pushrod with engine oil, one at a time, as you install each rocker arm. This is to assure immediate lubrication when the engine is started and helps prevent any galling.

#### Step 4

During installation, apply Extreme Pressure Lube #3 sparingly; to each push rod tip, rocker arm push rod seat, the top of the valve stem where it comes in contact with the roller tip, and at the curved side of each pivot ball. Install the rocker arm on the rocker studs. Check to make certain that each pushrod is seated properly in the rocker seat and in the valve lifter. Install pivot ball flat side up. Thread the RockerLocs onto the rocker arm stud but do not tighten.

#### Step 5

**Solid Lifter Cams:** Following OEM rocker arm installation guidelines and/or detailed instructions provided by your camshaft manufacturer, adjust the valve lash with a feeler gage to the specifications provided.

**Hydraulic Lifter Cams:** Following OEM rocker arm installation guidelines and/or detailed instructions provided by your camshaft manufacturer, adjust the valve lash at the Top Dead Center of each cylinder or at the "base circle" of the intake/exhaust valve cycle. Tighten each adjuster nut until all of the "slack" between the rocker arm and pushrod is gone. Turn the pushrod with your fingers as you tighten the adjuster nut. Do that until you feel a slight resistance when turning the pushrod; indicating that you have reached "zero" lash. At this point turn the adjuster nut another ½ turn.

#### Step 6

**Adjusting Intake Valves:** Follow this procedure for all of the intake valves. Generally the procedure is to hand turn crankshaft in the running rotation, checking each cylinder to identify when the exhaust pushrod begins to move upwards. This will indicate that the intake valve lifter is at the "base circle" of

the camshaft for that particular cylinder. That is the point in the firing order of each cylinder where the intake valve lash may be adjusted as detailed in **Step 5**.

#### **Step 7**

**Adjusting Exhaust Valves:** Hand turn the crankshaft until the intake pushrod has reached maximum lift and is between one half and two thirds of the way back down. This will indicate that the exhaust valve lifter is at the "base circle" for that particular cylinder. That is the point in the firing order of each cylinder where the exhaust valve lash may be adjusted as detailed in **Step 5**.

#### **Step 8**

Check for clearances. Always make certain that the rocker does not come in contact the lower portion of the rocker arm stud, guide plate, or the stud boss of every cylinder. Also, check the clearance between the spring and the body of the rocker. This should be a minimum of 0.040". Normally, the smallest amount of clearance occurs when the valve is closed and the lifter is at "base circle". Always hand turn the crank to verify there is proper clearance of the rocker arm throughout the entire travel of the valve.

#### **Step 9**

Before installing the valve covers for the final time, check for proper clearance between rockers and valve covers. Finally, install or reinstall the valve covers on the cylinder heads.