



# ADJUSTABLE ROCKER SYSTEM GENERAL INSTALLATION SHEET TECHNICAL INFORMATION

## 1. INSTALLATION TIPS

- Moly coat the roller tips and the ball tip on the adjuster.
- Rocker adjuster screw should have two (2) threads out of the bottom of the rocker arm.
- Make sure threads in the cylinder head are clean

## 2. VALVE COVER CLEARANCE

- **Some applications will not clear the stock valve covers.**

Follow this procedure before installing the valve covers and starting the engine.

- Disconnect the coil
- Place the valve cover in position without gaskets
- Hold it in place with your hand
- Have your assistant turn over the engine several times by engaging the starter motor.
- If you feel the cover move, aftermarket valve covers will need to be used to achieve the necessary rocker clearance.

## 3. ROCKER ARM GEOMETRY

- The rocker arm geometry is very important to the stability and durability of the valve train, and **must** be checked and set-up prior to determining the push rod length.
- The vertical location of the rocker shaft is a significant factor in valve train geometry.
- The correct shaft centerline position will locate the roller tip at the same position on the valve stem tip when the valve is closed and when it is at full lift.
- At the valve closed position, the roller should be slightly inside the valve stem centerline.
- The roller tip should sweep across the tip slightly outside the stem centerline as the valve opens to mid-lift position, sweeping back to its starting point behind the centerline at full lift.
- Incorrect stem heights will result in improper geometry.
- **The YELLA TERRA Shaft Rocker System is designed so the geometry is correct when the valve stem heights are within factory specs**
- **Higher stem heights will require additional shims and will require the whole mounting system to be lifted enough to achieve the proper Geometry.**
- **Valve tip heights must be checked prior to installation**

## 4. LENGTH OF PUSHROD

- The pushrod length is determined by several factors and should be established for each specific application. EXAMPLES:
  1. Smaller circumference cam with higher lift lobes = longer pushrod.
  2. Resurfaced head or decked block = shorter pushrod
  3. Angle milling head = longer pushrod.
  4. Taller than stock valve stems = shorter pushrod.

## 5. VALVE LASH SETTINGS

- Follow cam manufacturer guidelines. Each application will vary.
- Do not forget any changes in rocker ratio!!
- Roller rocker arms should be tightened no more than ½ turn from zero lash.



## BMC "B" Series YELLA TERRA Roller Rockers Instructions Part Number YT 6644

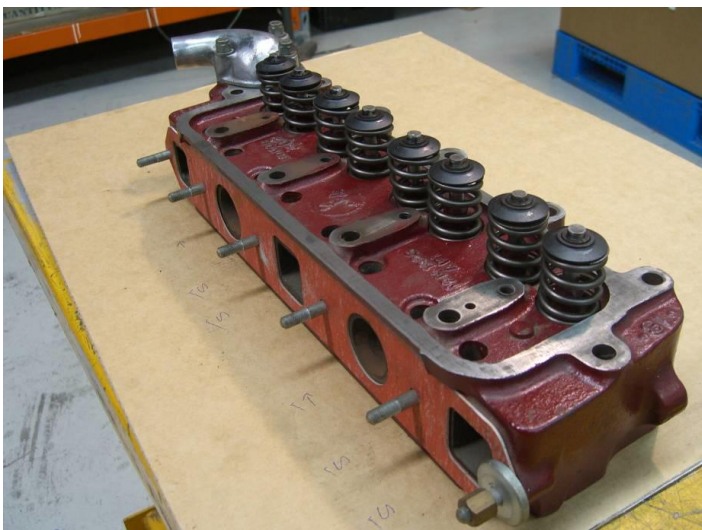
### Step 1

Remove old rockers from cylinder head and clean cylinder head. Note: the YT rockers are design to suit factory heads (which have two outer studs to bolt down rocker cover)



### Step 2

Remove the four standard head studs from manifold side



### Step 3 NOTE

*Check cylinder head oil feed hole (rear rocker pedestal)*

*Early model cylinder heads have central feed. Later models have offset (to the rear) feed hole.*

*Check mounting plate - ensure grub screw is blocking the oil feed hole not being used.*

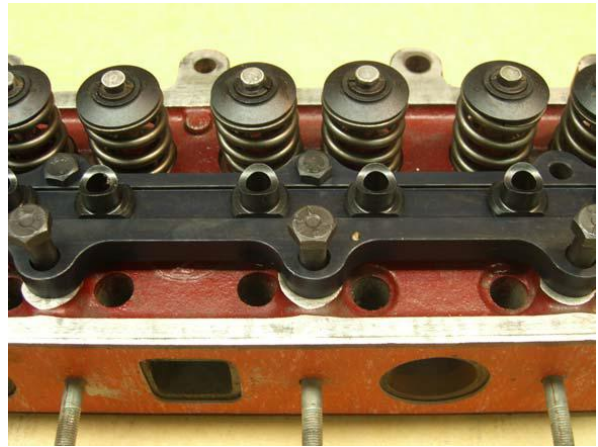
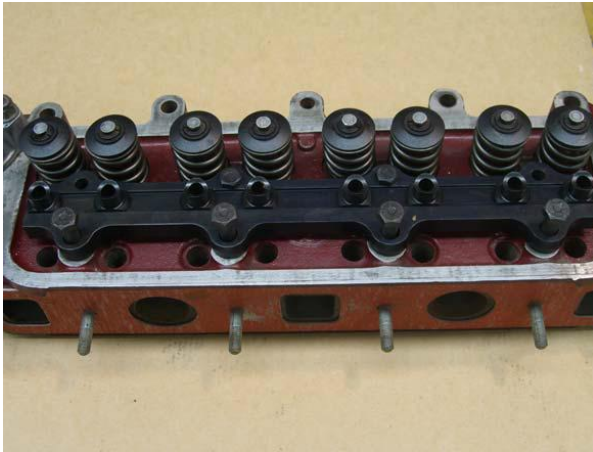
### Step 3

Fit mounting plate with two 5/16" UNC x 1" bolts



**Step 4**

Fit four 3/8" UNC 4 1/4" through mounting plate and head into block and tighten.  
Place 8 supplied pedestals in position.



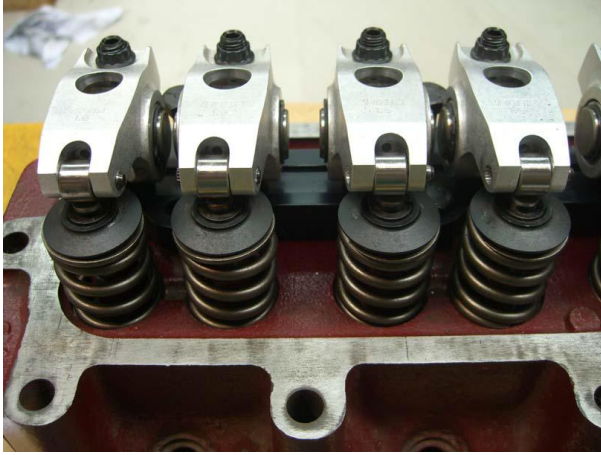
**Step 5**

Fit rockers ensuring correct sequence...

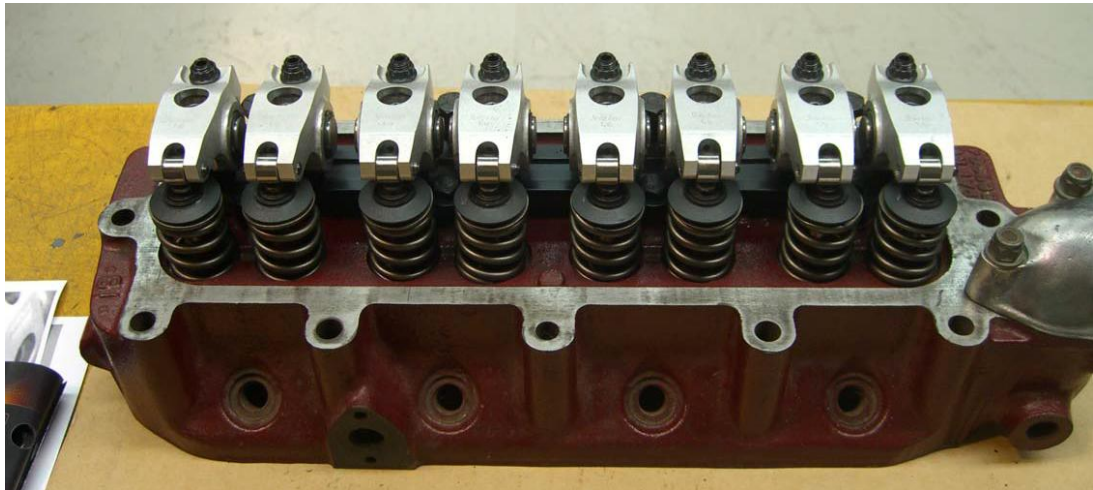


**Correct sequence**

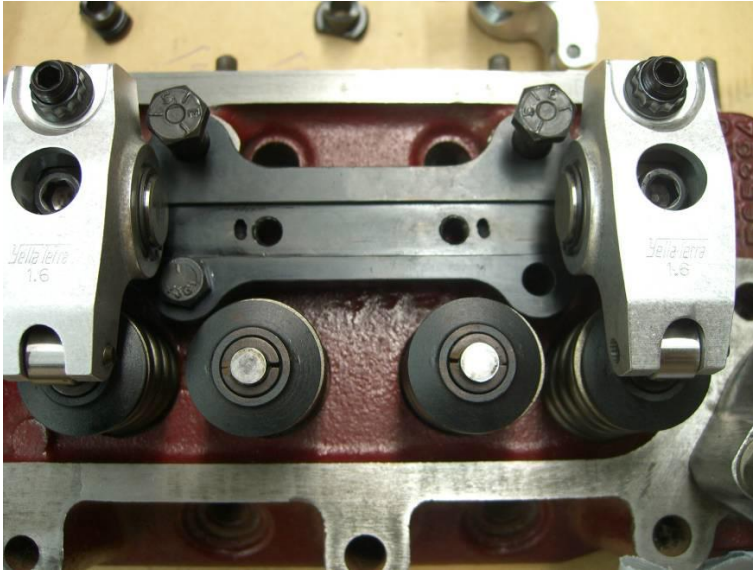
| Optimum sequence of Installation<br>Rear of Cylinder Head Firewall end |              |              |                | Thermostat housing end |              |              |                |
|--|--------------|--------------|----------------|------------------------|--------------|--------------|----------------|
| (A)<br>Exhaust   | (B)<br>Inlet | (C)<br>Inlet | (D)<br>Exhaust | (E)<br>Exhaust         | (F)<br>Inlet | (G)<br>Inlet | (H)<br>Exhaust |
| Straight   | Left Offset  | Right Offset | Right Offset   | Straight               | Straight     | Right Offset | Right Offset   |



**FINISHED INSTALLATIONS**



## OILING PATHS OF YOUR BMC ROCKERS



Your rockers are oiled by various passages that have been design in the rocker system. With oil pressure the Oil travels thru the oiling hole of the cylinder head and travels thru the oiling holes on the mounting plate.

### Oiling Holes



Then the oil travels up thru the Pedestal oiling gallery splashing the Trunnion/Bearing. The Trunnion has an oiling channel that directs the oil towards the bearings and fills the rocker with splashes of oil



### Oiling Galleries

All Rocker arms have an internal oiling channel to oil the roller tip