



## Head Torquing & Valve Setting (Jabiru Engines)

**Reference:** Photos & Drawing

**Parts Required:** Nill

### **Tools Required:**

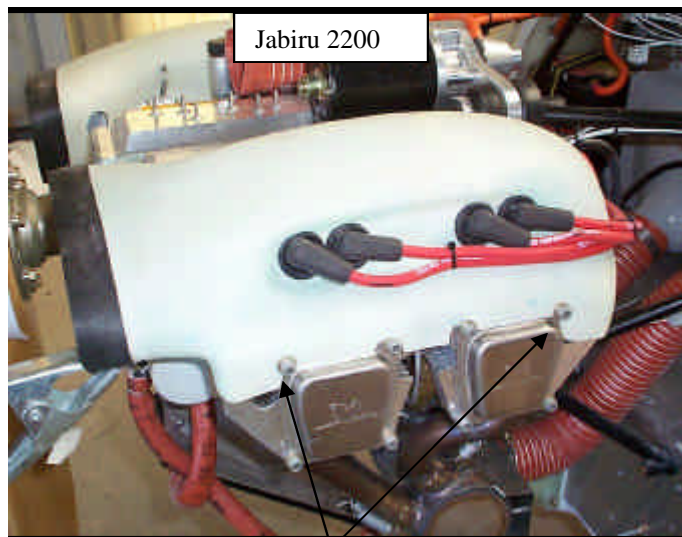
- 1/4" Allen Key 3/8" drive (Long type 80mm, 3" in length)
- 9/16" Ring Spanner – (Note that ring spanner needs to be ground down to fit in valve chamber)
- Blade Screw Driver
- 3/16" Allen Key
- Torque Wrench 3/8" drive

*(Your tension wrench should be accurate. It should have had some method of calibration. They can vary to manufacturers claims.)*

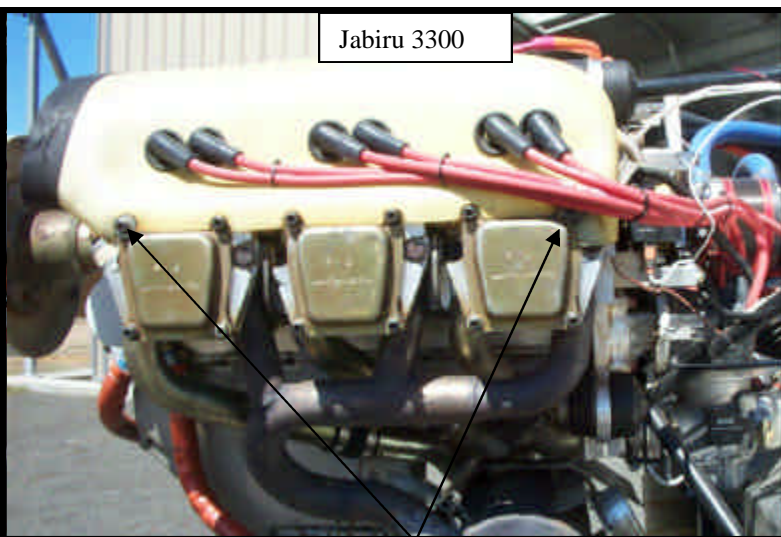
- 1/2" socket 3/8 drive

### **Procedure:**

1. Remove Air-ducts by unscrewing the two x cap screws on rocker covers forward & Rear. Refer to Photo.
2. Remove 1/8" Cap screw plug over bottom head stud. Refer to photo

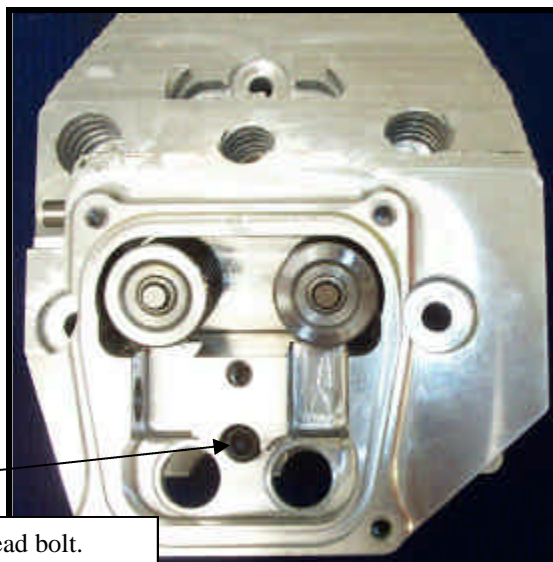
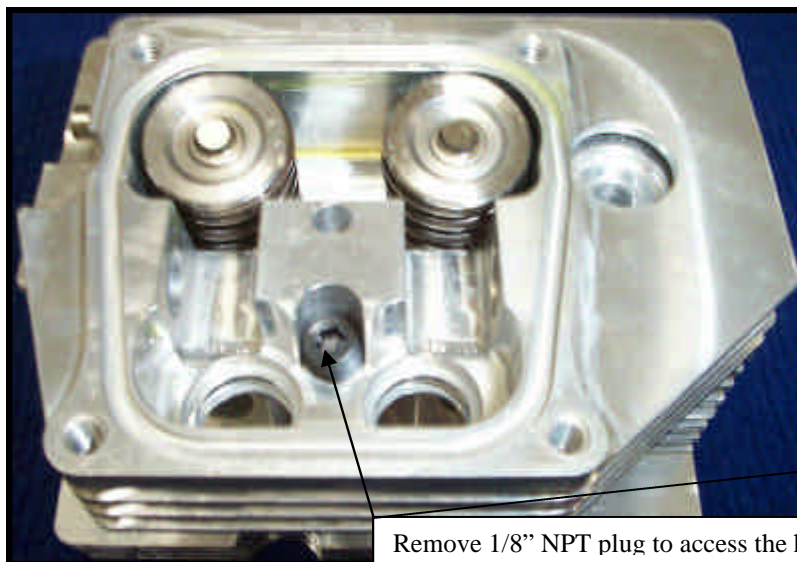


Jabiru 2200



Jabiru 3300

Remove Cap Screws that hold Ram Air Cooling Ducts onto heads.



Remove 1/8" NPT plug to access the head bolt.

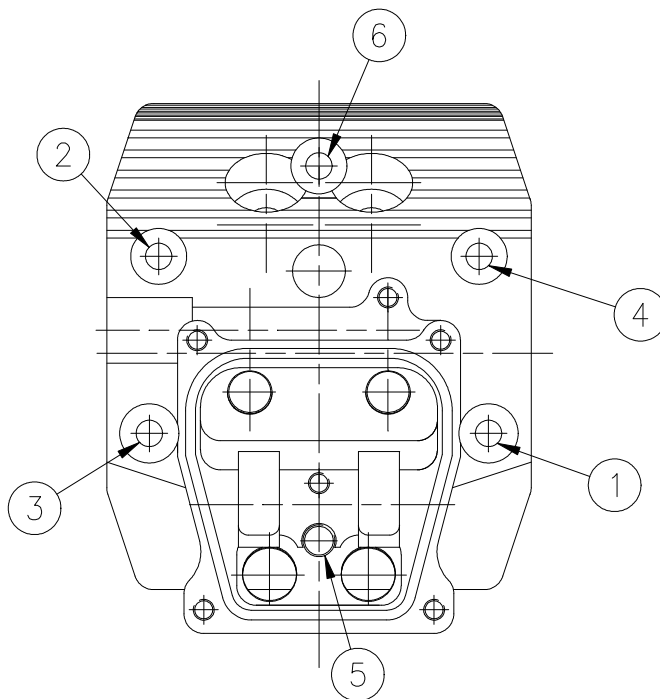


3. Check tension of all 6 head studs in a diagonal pattern to 24 ft lb on head bolts. See drawing. There is no need to loosen.
4. Replace 1/8" NPT plug at hand tightness only (No Loctite).

### ***Tappet Adjustment***

1. Easiest method of setting valves requires you to pull the prop until exhaust valve on No1 cylinder in fully depressed. Note: the O'clock position. Rotate prop 360deg and adjust the valve. (This puts the cam and lifter at 180deg to the peak lift). Repeat for each valve.
2. Heads and Valves should be done at least twice at 5 hours and 10 hours on a new engine.
3. Tappets must be adjusted to:

Inlet	0.254mm (.010")
Exhaust	0.254mm (.010")
4. Adjust the tappets when the engine is cold. Head torqued to 24 ft lb. when cold. Carry out this adjustment after five hours of operation and again after ten hours of operation. At the 25 hour inspection this is done again.

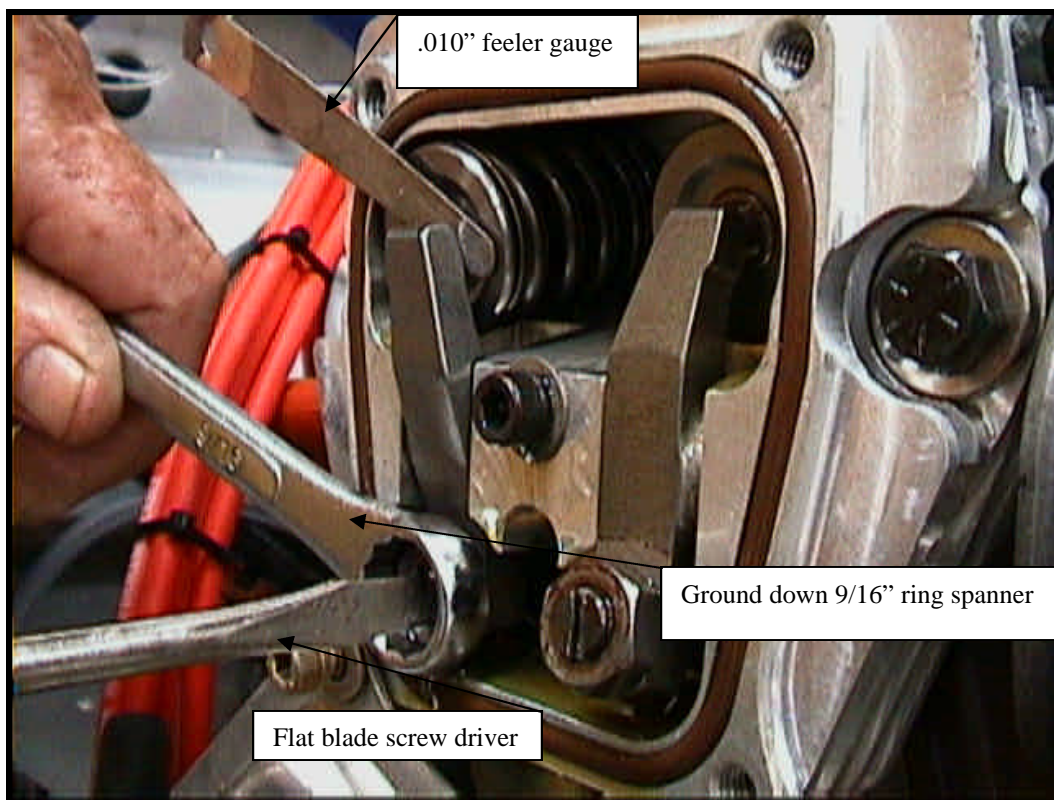


### **CAUTION**

Continued operation with incorrectly adjusted tappets will result in damage to valves, valve seats, valve guides & overhead gear.

5. **Alternate method:**  
Adjust valve clearance on the firing stroke at Top Dead Centre.

***Remember to go over the exhaust cap screws, they are fitted with shake proof washers to prevent loosening.***



At each 5 hours for first 15 hours check tappet clearances (0.010" cold) and cylinder head bolt torque (24 ft.lbs/32nm).

***Note:*** New style heads have a 1/8 NPT plug to be unscrewed to uncover head bolt No. 5.