Technical Bulletin

Number: 2050002

Installation of Push Rod Guide Plate

This bulletin covers the following Champion Power Equipment models:

C42412	1200/1500w. Generator
C46535	3500/4450w. Generator
C46565	6.5HP Stand Alone Engine
C41155	5500/6800w. Generator

Note: Read instructions completely before performing service.

1. Remove Engine cover with OHV logo stamped in the cover. (4 – 6mm bolts with 10mm head size) Remove cover carefully and slide breather hose away.

2. Remove the spark plug at this time and position the piston at its highest point (TDC) (top dead center position). At this point you will notice the intake rocker arm will have a free side to side movement. Now rotate the engine a little further and you will feel the exhaust rocker arm becoming free to move side to side.

3. Loosen the lock nuts holding the stud bolts used to retain the rocker arms. First by holding the Large nut and turning the 6mm (small) nut Counterclockwise to remove. Do the same with both stud bolts. When the nuts are removed, you can slide the rocker arm off the stud bolt. Both rocker arms are identical so you don't have to worry about mixing them up.

4. Remove the pushrods upward and out of the engines. (They are small tubes of metal with special socket on each end. Now you can also remove the stud bolts holding the Pushrod Guide Plate on. When the last stud is removed (only 2 of them) you can install the new plates with the same bolts. This time install 2 of these plates for extra durability. Lock the stud bolts firmly and the plates will hold together.

5. Reinstall the pushrods and then the rocker arms over the shafts. Place the large nut on first and then the small locknut. We will adjust the nuts after noting that the flat side of the rocker arm is on the valve spring end and the pushrod is fitting in the dimple in the opposite end of the pushrod.

6. Adjusting the valves. Be sure the engine position has not changed, otherwise go back until the engine is just past TDC (clockwise direction) where the valves will be fully relaxed with the rocker arm. Tighten the large nut down while retaining a small amount of side to side freedom of the rocker arm. Then tighten down the lock nut until both nuts have been tightened against each other. Check for side to side freedom of the rocker arm after locking the nuts together to prevent the adjustment from changing. This procedure is the same for both valves and is done at the same position of the piston (TDC). Readjust if necessary to get the right movement.

7. Using the recoil rope assy. turn the engine slowly. Watch the intake valve go down (open position) , then return back to the highest position (closed) of the valve, and continue to top dead center of the piston. The Intake valve rocker arm should move easily side to side, but not have excessive vertical clearance. (recommended clearance on the intake valve is about .004 of an inch.) After this is confirmed rotate the engine only about 1/10 of a rotation and confirm that the exhaust valve has a similar feel. (recommended clearance on the exhaust valve is about .006 of an inch). Double check your adjustments and readjust if the side to side movement isn't happening. (no side to side movement indicates that the valve adjustment is too tight)

8. If you feel solid compression at the spark plug hole by placing your finger over the hole and pulling the rope, then you have a good adjustment and the engine should start.

9. Now you can replace the OHV cover and secure the breather hose in place inside the cover. Inspect the gasket for any damage and use a light silicone sealer on the sealer area if it has any damage spots.

If you have any questions, please contact Champion Power Equipment:

Champion Power Equipment, Inc.
10006 Santa Fe Springs Rd.
Santa Fe Springs, CA 90670

Phone: 1-877-338-0999

Email: tech@championpowerequipment.com