

Installation Instructions for Tap-It-Right by O.F. Performance

1. Mount motorcycle on a lift and secure with straps. Remove the battery ground cable.

NOTE— If you wish to reuse the stock pushrods, follow the procedure outlined in the factory service manual for pushrod removal. However, due to the amount of labor involved in that procedure, we recommend that the stock pushrods be cut out and replaced with Quickie adjustable pushrods. If removing the pushrods per the factory procedure skip, to step 7.

2. Remove the spark plugs, and Jack the rear end of the motorcycle up so the rear wheel is off the work surface. Shift the transmission into high gear. The rear wheel will be used to turn the engine.

3. Remove the pushrod cover keepers, and slide the pushrod covers up so the pushrods are visible.

4. Turn the rear wheel until either cylinder is at TDC compression. Both valves will be closed, and both tappets will be at the lowest point of travel. There should be no valve spring force on the pushrods, and it should be possible to turn them with your fingers.

5. Use a bolt cutter to cut the pushrods and remove them from the engine.

CAUTION

Do not cut pushrods with a saw or grinder. Metal particles will be generated which may cause serious engine damage that is not covered under warranty.

WARNING

Do not attempt to cut pushrods while they are under compression from the valve springs. Pushrod segments may be forcibly ejected from the engine, possibly causing personal injury.

6. Repeat steps 4 and 5 for the other cylinder.

7. Using a 3/16" Allen driver, remove the four screws holding the tappet covers, and remove the covers. Use caution when removing the factory tappet cover screws, they are secured with thread locker. New screws and gaskets are provided in the kit.

8. Using a 3/8" hex socket, remove the screws securing the stock tappet anti rotation brackets and remove the brackets. Use caution when removing the stock bolts they are secured with thread locker, but if bolt brakes off the tappet plate can be placed over broken bolt without extracting.

NOTE – Tappets may easily be replaced at this time if desired.

9. Place red O-ring that is provided in the cut groove on the bottom of the anti rotation plate. Picture 1 Using a small amount of assembly lube will help hold O-ring in place during install.

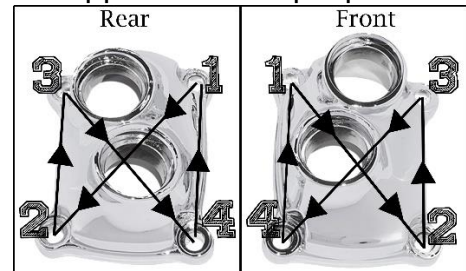
10. Revolution Tappet plate are marked F and R for front and rear. Install tappet plate in the correct position.

11. Now install tappet cover and gasket over anti rotation plate installing all 4 bolts without tightening.

12. Starting with the rear cylinder, insert a .002" feeler gauge through tappet block between the tappet and plate on the flat surface face to prevent the plate from rotating and binding on the tappet plate when the screws are tightened.

13. Tighten all 4 tappet cover bolts starting at 60 in-lb then to 80 in-lb finally to 120 in-lb following torque pattern in image 1 above.

Picture 1. Tappet cover torque pattern.



1. starting torque of 60 in-lb.
2. starting torque of 80 in-lb.
3. starting torque of 120 in-lb.

Picture 2. O-ring installs in cut groove on bottom of anti-rotation plate.



14. Turn engine two complete rotations to ensure that the tappets move freely and do not contact the anti-rotation plate or bind at any point.

15. If reusing stock pushrods, reinstall pushrods and covers, and reassemble pushrods tubes and rocker covers per factory procedure. If using Quickie pushrods, skip to the next step.

16. If necessary, turn the rear wheel until either of the cylinders is at TDC compression. Both tappets will be at the lowest point of travel.

NOTE - tappet covers on M8 engines are quite tall and it can be difficult to see position of the tappets. Placing the short ends of cut off stock pushrods in tappet cover holes makes it easy to observe tappet movement.

17. Install new O-ring seals in tappet cover and rocker cover. Assemble pushrod covers using stock pushrod cover caps, springs, and washers, and the O-ring provided in kit.

18. Install Quickie pushrods and pushrod covers according to instructions provided in the kit.

NOTE

• The tappet covers on Milwaukee-Eight engines are quite tall, and care should be taken not to allow the lock-nut to drop to the bottom of the adjuster when installing Quickie pushrods. It is suggested that the 1/4" wrench be applied to the adjuster screw with the nut above it until the adjuster is screwed out of the pushrod, and the nut can be threaded onto the adjuster screw.

19. Adjust pushrods according to the instructions provided with the pushrod kit. Close the pushrod covers and install the pushrod cover keepers.

20. Repeat steps 16 through 21 for the other cylinder.

21. Reattach battery ground cable and reinstall spark plugs.