



ZZPERFORMANCE

Installation Instructions

ZZP 1.9 Rocker Arms

ZZ-19RA



Estimated Installation Time: 4 Hours

Installation Difficulty: 3/5

Some procedures will not be described in full detail. If you run into any installation issues or have trouble comprehending any of the procedures, please contact customerservice@zzperformance.com

Kit Contents:

12 – 1.9 Rocket Bolt (Shorter) - Single

12 – 1.9 Ratio Rocker - Single

6 – 1.9 Rocker Arm Pedestal - Single

1 – 7.00-5/16-12 ZP Custom Pushrods

1 – M8 Hex Flange Nylon Lock Nut

Tools Needed:

- 3/8" and 1/4" ratchets
- Extension for 3/8" ratchet
- 10mm, 12mm, 13mm, and 15mm 3/8 drive sockets
- 15mm deep well 3/8 drive socket
- 9/32 1/4" drive ratchet
- 8mm open end wrench
- 15mm open end wrench
- 1/4" Allen socket

STEP ONE:

1. Disconnect negative battery terminal using 8mm open-end wrench
2. Remove oil fill tube by twisting it to the left
3. Remove engine cover
4. Replace oil fill tube
5. Remove S/C and accessory belts
6. Remove front engine mount bolts and loosen rears all using 15mm tools
7. Move dog bones up and tighten front bolts
8. Remove harness to ignition module with 9/32 or 7mm socket.
9. Remove all plug wires from coil pack

Front Bank:

1. Use a 15mm socket to remove the 3 bolts (tensioner bolt is a 13mm) in the large black cast iron ignition module bracket that holds it to the head. Then remove the idler pulley. Take your time and remember the orientation and placement of everything so when you are reinstalling everything it will save you time, it would not be a bad idea to take some pictures.
2. Next remove the dipstick tube out of the way by loosening the 13mm bolt.
3. The sparkplug wiring channel piece needs to be removed. Simply pull the two round tabs at the bottom up a little and it should pop right out.
4. Unbolt the valve cover using the 10mm socket and extension. Remove the orange rubber valve cover gasket. Loosen the 6 rocker bolts using a 10mm socket and set all the old stuff aside. We leave the bolts in, and pick up on the aluminum pedestal; this will remove the 6 rockers, the bolts and the pedestal as one piece.
5. You must also replace the pushrods, so this is the time to remove the stock ones and drop the new 5/16" ones provided in place. (The stock ones are too large of a diameter) Make sure when you drop them in place that each one is sitting in the middle of the lifter pushrod cup.
6. Now it is time to install the new rockers/pedestals/bolt assemblies. We recommend assembling each rocker/bolt/pedestal set (make sure to rotate the rocker trunion until you find the counter bored spot, that is the surface that the rocker bolt will tighten onto.) then set each assembly on the head, and finger tighten each socket cap rocker bolt. Make sure each pushrod is seated in the pushrod cup of each of the new rocker bodies. We recommend putting a dot of cam assembly lube on the valve to avoid startup friction from starting the engine with them not having any lube on them.
7. Now it is time to torque the socket cap rocker bolts to 23 ft/lbs using a 1/4" Allen socket.
8. Clean and dry the valve cover.
9. **Installing the valve cover gasket:** Find the tab on the valve gasket and line it up with the notch in the valve cover. Position the valve cover gasket in the valve cover and make sure it stays there until it is on the head. We recommend using a dot of RTV in a couple spots to hold the gasket in place. Carefully install the valve cover and tighten the 10mm bolts to snug. Not too tight as you might damage the cover or the rubber gaskets.

Rear Bank:

1. Rotate the engine forward by placing transmission in park and pushing car forward. Then put on the parking brake when the engine rocks forward. Remove the fuel purge unit that is mounted to the S/C with 2 bolts (10 or 12mm).
2. Remove the coolant bottle if you have a '99 or newer style reservoir to loosen the tensioner. There are 3 15mm bolts on the alternator bracket that you will need to remove so you can move the alt/bracket out of your way of the rear valve cover. You also may have to remove the alternator as well depending on how tight of a space you are comfortable working in. If you decide to remove the alternator you will need a 15mm socket.
3. Remove the valve cover, and stock rocker/rocker pedestal assembly just like you just did on the front bank. Now install the new rockers/pedestals/bolt assemblies as instructed in step #6 above followed by the valve cover.

Now it is just a matter of replacing the various parts you removed. If you made good mental notes, actual notes, and took pictures this should be the easy part. Make sure you remember the vacuum lines and electrical connectors. Start the engine and check the oil level, also check for oil leaks. Since your engine has just been apart, we recommend changing your oil in 200-500 miles. After these steps you are complete with your installation. Enjoy!