



CSY-15R1

Parts List

- Cam Gear w/Carrier 2

Adjustable Cam Sprocket Set Yamaha R1 2015

<<<<<< IT IS RECOMMENDED THAT THIS PRODUCT BE INSTALLED BY A QUALIFIED TECHNICIAN >>>>>>

- 1) Remove the cam shafts referring to the service manual making sure you understand all the timing marks and the timing of this engine. Once you have found the $\frac{1}{2}$ mark on cylinder #1 compression stroke, feel free to make any other marks using a paint pen, to help you on reinstallation of the cams.

TIP: Using a paint pen, make timing marks on the #4 intake and exhaust camshafts and cam caps. See photo 1.

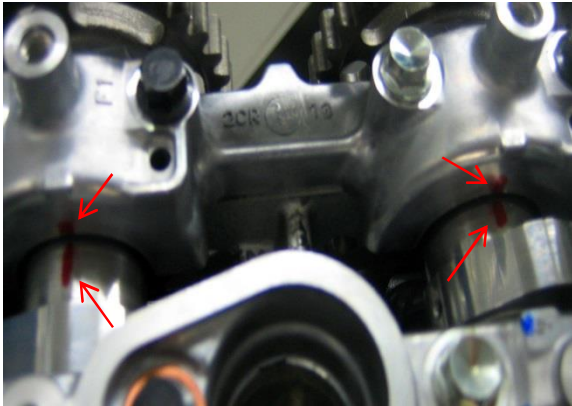


Photo 1

- 2) Once all your timing marks are in place, follow the service manual instructions to remove the camshafts in the proper order. When removing the cam sprockets, find a tool that fits the outer edge of the cam without interfering with the inner diameter of the cam sprocket. Make sure the tool pushes through the stock cam sprocket to prevent the camshaft from getting bent.

NOTE: DO NOT press on the center of the camshaft. That is just a cam end plug.

- 3) When pressing on the Graves adjustable cam sprockets, make sure the 3 torx-head bolts are facing out. Press the new sprockets on carefully until the cam shaft is flush with the end of the sprocket carrier.

- 4) Install the exhaust cam into the engine in reverse order of removal. Before installing the intake cam, check the clearance on the exhaust cam sprocket bolts to the inside of the cam chain tunnel at the area marked red. (see **Photo 2**).

Using a feeler gauge, the clearance should be .020 inch (0.51mm). If clearance needs to be made and you will not be removing the head, we recommend using paper towels and tape to protect the engine while clearancing the area marked in red. This procedure will not take much clearancing. We recommend using a file for this procedure. (see **Photo 3**) Watch out for the valve cover gasket surface with the file and make sure the paper towel is catching all the file shavings. Once you have gained the recommended clearance the engine can be cleaned up and the camshaft installed. Check your service manual for installation procedures.

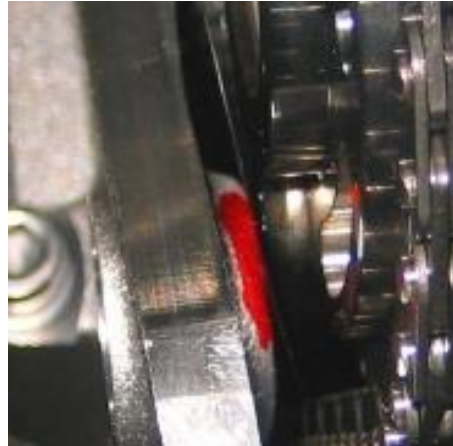


Photo 2



Photo 3

- 5) Now that the cam shafts are installed, rotate the engine checking for any clearance issues. Once clearances have been checked you are ready to degree your cams. After the cams are degreed, remove one bolt at a time and apply Red Loctite and torque the bolt to 16 Nm/12 ft-lb_r. Repeat this procedure for all six bolts.

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