

1. Remove oil feed pump. (The narrower one mounted toward the front of the plate) and disassemble. Pump plates may be separated by tapping the drive gear shaft on a wood bench or block.
2. Clean and inspect for wear, scoring or damaged gears. Minor wear or scoring on inside of end plates may be corrected by lapping on a flat plat. Be sure the contact surfaces of the inner, outer and middle plates are smooth, as no gaskets are used between them.
3. Counterbore end plates on the inside per the attached drawing. No O-ring is needed on inner plate driven gear as the bore is covered by the pump-to-plate gasket.

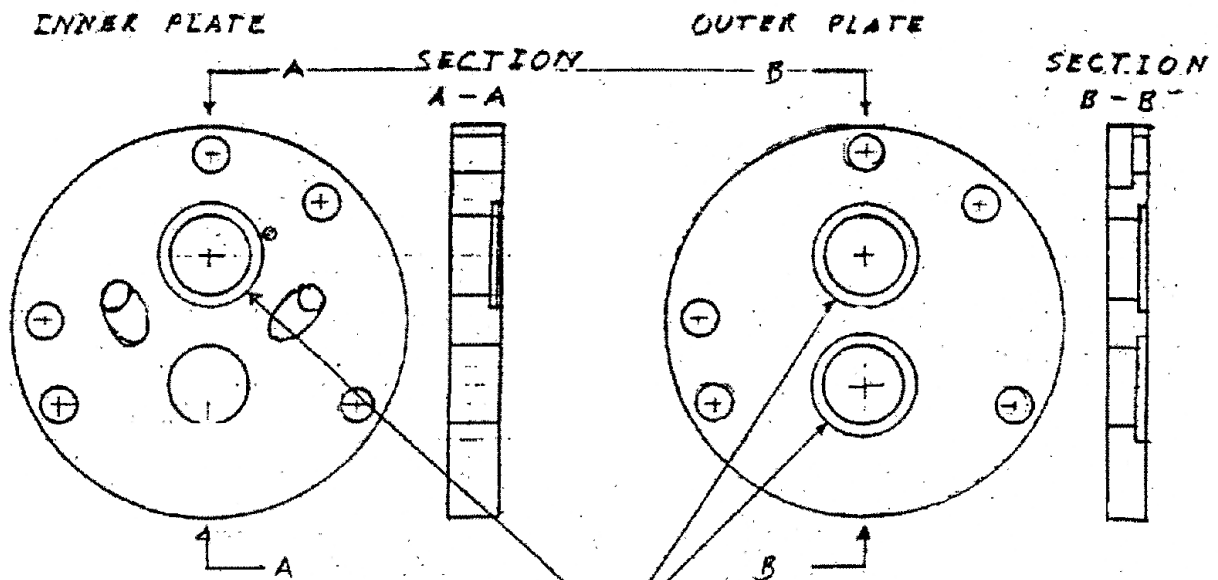
Use a 9/16 Counterbore with a 7/16 pilot. This a common machine shop tool and is readily available (note: Most have separate pilots, 9/16 counterbore uses 3/8 shank with 7/16 diameter pilot, available at McMaster-Carr if you are in the US). A drill press will be the best choice, and be sure to set the vertical travel stop to prevent the tool from cutting too deep. It should be approximately the same depth to fit the O-Ring.

Remove any burrs or sharp edges to prevent damage to the O-Ring.

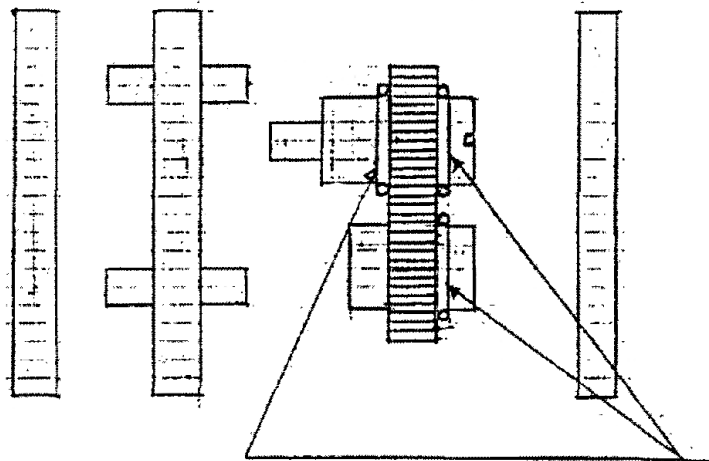
4. Install 3 O-Rings as shown in the drawing. This is Honda part number 91301-200-000. It fits very well and is still readily available. They are used to seal valve guides to the head on several Honda engines including the CB350F Four Cylinder machines.
5. Lubricate and re-assemble the oil pump and re-fit to the engine.
6. Another source of oil seepage on the 1960-63 engines is the oil pressure relieve valve located slightly in front of the oil pump. This is the spring loaded piston assembly which is located inside of the timing side of the oil filter tunnel. When the valve is opened by excess oil pressure, it passes oil from the filter tunnel to the timing chest. Many engines will also let oil seep past when the valve is closed.

To check the valve, remove the timing cover and wipe down the pumps and the end of the valve, which is the 1/8 in button projecting from the case and retained by a snap ring and flat washer. If oil seepage is seen, it is easy to fit an O-Ring.

7. Remove oil filter, cut and fit a length of wood long enough to fully depress the valve when the filter is replaced with a few turns.
8. With the valve now depressed, remove the snap ring and washer on the timing chest side. Slide a 1/8 in bore o-ring on the shaft and replace the washer and snap ring. The thickness of the o-ring is not important, but it is common to use 1/16 in.
9. Remove the wood block from inside the filter tunnel and replace the filter and timing cover.

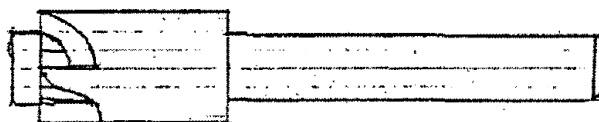


COUNTERBORE  
0.563 IN. DIA TO  
0.040 ± 0.005 DEEP  
3 PLCS ON INSIDE  
SURFACES



5/8 IN X 1/2 IN O-RING  
3 PLCS.

HONDA PART NO:  
91301-200-000



9/16 (0.5625 IN) COUNTERBORE  
WITH 7/16 (0.4375 IN) PILOT