



Introduction

This kit includes two different types of cylinder dowel pins. The six o-rings included are all identical. There are two dowels which go between the cylinder and the cylinder head, that have o-ring grooves in both ends. There are two dowels that go between the crankcase and the cylinder, which have only one o-ring groove. The dowel pins in this kit with o-ring grooves go in the front most and rear most positions of the crankcase and cylinders: the rear of the rear cylinder and the front of the front cylinder.

Installation Procedure

1. If crankcases or cylinders have stock dowels installed in these positions, they must be removed. Leave the existing inner crankcase to cylinder and cylinder to head dowel pins in place. See #1 in **Figure 1**,
2. Lightly lubricate the crankcase to cylinder dowels (one o-ring groove) #2 with engine oil, and install in the front-most and rear-most dowel holes of the crankcase with the plain end of the dowel in the crankcase. The o-ring groove will be about .100" above the base gasket surface.
3. Install one o-ring #3, on each of the cylinder to head dowels (two o-ring grooves) #4, and lubricate lightly with engine oil.
4. Insert one dowel into the outer dowel hole in the top of each cylinder with the o-ring in the hole. Clean off any excess oil.

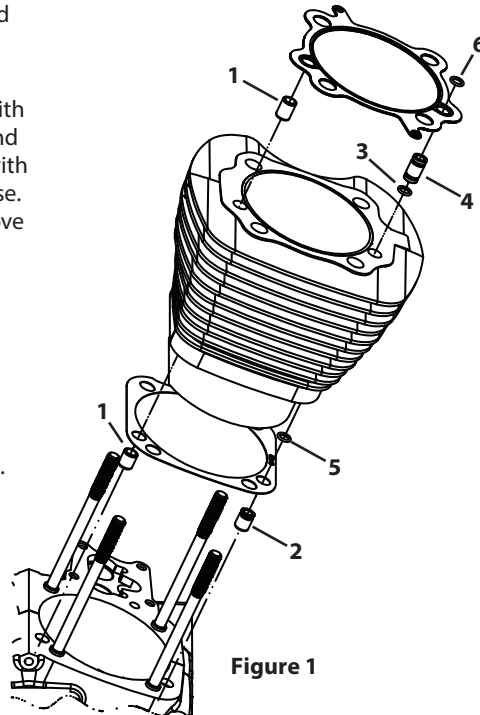


Figure 1

5. During engine assembly, install the base gaskets first. Install one o-ring #5 on each of the crankcase to cylinder dowels after the base gaskets are in place.
7. Install the cylinders in the crankcase. The o-rings on the dowel pins will be inside the cylinder oil return holes.
8. Install the head gaskets. Then install the remaining o-rings #6 on the outer cylinder to head dowels #4.
9. Install the cylinder heads and tighten head bolts to specified torque. O-rings will be inside cylinder head oil return holes.



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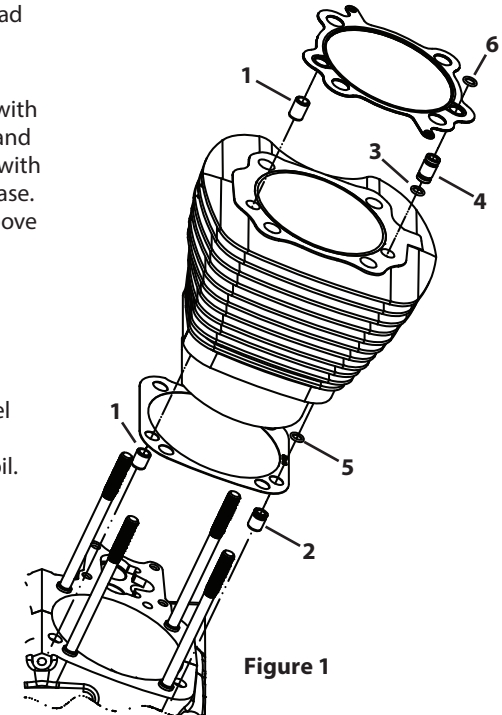


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