

## TAPPET GUIDE AND CYLINDER MODIFICATION KIT

## General

New cylinder bases and tappet guides do not have holes for tappet guide oil scavenge lines, seen in Figure 1. Latest lubrication system design eliminates the need for these scavenge lines. In the earlier system, when pistons are on their upstroke, the piston skirt opens a hole in the cylinder flange allowing crankcase vacuum to scavenge excess oil from the tappet guides into the crankcase. New tappet guides use small internal drain holes to allow excess oil passage into the crankcase.

Installation of a new tappet guide and/or cylinder requires modification of any tappet guide (s) and/or cylinder (s) not replaced. To update the lubrication system, the scavenge lines should be removed and the holes plugged. If two new tappet guides are not being installed, remaining early style tappet guides need drain holes drilled.

This kit is for use on all 1340cc model motorcycles and contains the following:

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QTY DESCRIPTION
    3 1/16 in. pipe plug
    2 1/8 in. pipe plug
```



Figure 1. Early Style Tappet Guides

## Tappet Guide Modification

1. Remove oil hose and oil fitting tube from tappet guide.
2. Remove tappet guide from engine.
3. Tap tube hole $1 / 8 \mathrm{in}$. deep with $1 / 16 \mathrm{in}$. National Pipe Thread.
4. Install $1 / 16 \mathrm{in}$. pipe plug into tapped hole using LOCTITE WICK * N LOCK.

5. Select the proper drill bit for each drain hole. It is important that the diameter of each hole is not enlarged. Drill out the existing holes in the tappet guide. The holes must exit the bottom as shown in Figure 2.
6. Be sure tappet guide is free of all drilling chips and filings, then reinstall to engine.

## Cylinder Modification

1. Remove oil hose and oil fitting from cylinder.
2. Install $1 / 8 \mathrm{in}$. pipe plug into cylinder fitting hole using LOCKTITE WICK 'N LOCK.
