

### MOTOR CYCLE, GENERAL PURPOSE, HARLEY - DAVIDSON MT350 TECHNICAL DESCRIPTION

### OIL CHANGE



This is intended as a walk through & Guide only to the Oil Change on a MT350 / Rotax 348 engine

Approx Procedure Time 1.5 Hours

This is a guide only please refer to the relevant manuals for full details or ask professional advice if in doubt.

This is the writer(s) interpretation of the required steps only and does not take any liability for the accuracy of the information supplied in this publication and it is supplied as is.



### **Amendment Record** Amendment Amendment By Date No. DRAFT N/A 27 April 2012 Joth Wirralman Note 2 Added, Item 15 & 19 Updated, 1 Mutzy & 29 April 2012 Page Numbers Updated Joth 2 Various Enhancements and Amendments 29 April 2012 Bunker

Before carrying out the Procedure ensure you have the current amendment.

File Location file: http://www.peakriders.org/files/mt350/tutorial/mt350oilchange.pdf



#### **General Tools**

17mm Spanner 13 mm Spanner 13 mm Socket 5mm Allen Key (120 mm Long) 6mm Allen Key (130 mm Long) 8mm Allen Key (140 mm Long)

NOTE: If you use long Allen Keys that are (120—150mm Long) then you will not have to remove the foot rest and brake pedal.

#### Fluids

Oil (3.2 Litres or 3.4 qt US 15W-40 or 15W-50 <u>Mineral</u> Oil) See Page 1-10 and 1-11 of the Operators Manual



#### **Specialist Tools**

None

#### **Required Parts**

Oil Filter 256-185 \* 2 x Gasket Ring C (Sump Gaskets Copper Compression) 250-010 \*

 Sump O Ring
 13.3mm-2.4mm
 230-880

 Sump Seal O Ring
 145mm-2.5mm
 831-762

 Filter Cover O Ring
 60mm-2.5mm
 230-920

The parts marked \* are the parts that you will need for this procedure. Other Parts were changed as general maintenance.



#### **General Torque Values**

Where Torque settings are not detailed the following are a guide.

М5	7-8 Nm
M6	11-14 Nm
M8	24-27 Nm
M10	51-54 Nm

#### Notes

1. Before Changing the oil ride the bike so the engine oil is hot and the dirt particles have had time to be suspended in the old oil.

2. Refer to the Maintenance schedule 2340-H-200-601 Table 7 for maintenance periods.

Generally the Oil needs changing every 2500 miles (4000km) or 6 months which ever occurs first.





1. Remove the Oil Filler Cap.



3. Take the right bolt out and loosen the left bolt to drop the Right Foot Rest. The Brake Pedal will need removing if you use short Allen keys.



5. Remove the Oil Drain Plug with a 6mm Allen Key and drain out the oil. Run some fresh oil through to clean out the bottom of the frame. Clean the magnet plug of metal fillings. (Note: You can tuck a rag in below the plug to catch the oil from dripping down into the sump plate.)



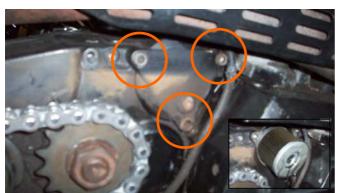
2. Remove the Sump Guard and Clean.



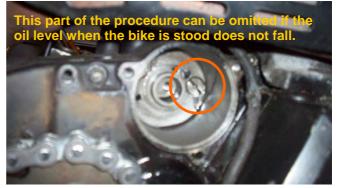
4. Remove the Chain & Sprocket Guard with a 5mm Allen Key.



6. Remove the Sump drain plug and drain out the oil into the bucket.

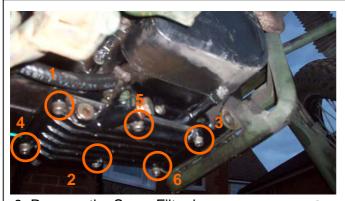


7. Remove the Oil Filter by removing the 3 oil filter cover screws with a 5mm Allen Key and pull out the filter. Clean inside the Filter Housing.



8. The non return oil valve is located behind the oil filter. This can be replaced while the filter is out if the oil level is falling in the reservoir when the bike is stood. (Use Correct Size Screwdriver).





9. Remove the Sump Filter by removing the 6 bolts, and Clean the gauze and the metal filings from the magnet. Replace the Two Rubber O Rings if damaged or worn. Refit after Cleaning and tighten bolts in opposing order.



10. Refit the Sump Plug with a new 20 Nm tighten to 20Nm.



11. Insert a New Oil Filter.



13. Re Fit the Plastic Chain / Sprocket Guard.



15. Refit the Brake Pedal if Removed.



12. Replace the cover seal and Refit  $\operatorname{Sec}_{8 \mathrm{Nm}}$ 



14. Refit the Foot Rest and tighten the 2 bolts to 24 - 27 Nm. 24-27 Nm.



16. Replace the Drain Plug & Copper Compression Washer. Torque 20 Nm.





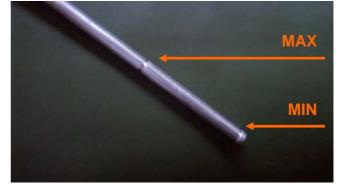
17. Remove the Primary Oil Filter clean and replace. This is very difficult to replace so I don't do this often. Remove necessary parts of the bike and replace as required.



18. Fill With Oil, Ensure you do not over fill.



19. Turn over the bike without starting to allow oil to circulate around the Engine Parts.



20. Run the Bike, Then Stop the bike, check the oil level and fill to the correct level. Repeat as required until oil level is constant.



21. While running the bike ensure the oil is circulating by looking in the oil filler hole ensuring oil is returning through the return pipe.

if the oil doesn't circulate after the service loosen the 90 Degree oil union to the rear of the cylinders by 2-3 turns and crank over until oil appears then re tighten and check circulation.



22. Replace the Filler Cap and check for any oil leaks on the parts and plugs removed and where the oil hoses connect to the engine / frame are tight fitting.

### END OF PROCEDURE