Early model 1978 MX-250 engines were produced with a hollow crankpin. Premature connecting rod failure may occur with some hollow crankpin equipped engines. This failure is a result of shifting of the crankpin in the flywheels because of a lack of adequate press fit. Shifting causes misalignment of the crankpin which creates a bending stress on the connecting rod exceeding the fatigue limit.

The V.I.N. range of affected vehicles is 7D 10000 H8 thru 7D 10781 H8.

MX-250 engines in motorcycles with V.I.N. of 10782 and above were produced with a solid crankpin. This latest configuration is a significant improvement as it has adequate crankpin press fit and resistance to shifting. All MX-250 parts order Dirt Track Engines were produced with the hollow crankpin.

We recommend the replacement of the complete flywheel assembly in affected vehicles and parts order Dirt Track Engines. The improved flywheel assembly can be ordered under part No. 23702-77MA. Follow the repair procedure listed in the 175/250 service manual for crankshaft replacement.

Caution: Crankshaft end play must be checked and readjusted if necessary to within .002 to .006 in.

At the time of engine disassembly, inspect the left and right main bearing oil seals for wear and replace if necessary.

After the above service has been performed, please fill out and return a properly completed warranty claim form. Upon approval, you will receive credit for the total net price of parts used. In addition, your account will be credited 2.8 hours labor for each flywheel assembly replaced within the affected motorcycle V.I.N. range. No labor credit will be provided for crankshaft replacement in MX-250 dirt track engines.

Operating Recommendations

The MX-250 engine requires a gasoline-oil mixture for proper performance and lubrication in order to avoid possible engine damage. The recommended lubrication and fuel requirements are as follows: Use Castrol R-30 racing oil at a mixture of 20:1 (64 oz. oil to 1 U.S. gallon of gasoline). Use premium grade (high octane) leaded gasoline. If the proper grade of fuel cannot be obtained in your immediate area, use the highest octane rated leaded fuel available.

The ignition timing should be adjusted to 2.5mm (0.100 in.) B.T.C. as specified in the original Owner's Manual, Part No. 99470-77, when using high octane leaded fuel (94 pump octane or above). If this fuel is not available and a lower octane fuel is used, adjust timing to 2.0mm. (0.080 in.) B.T.C. as specified in Owner's Manual Supplement, Part No. 99470-77S.
Carburetor jetting selections for proper performance, particularly main jet size, must be determined under operating conditions at the elevation the motorcycle is used. The motorcycles were originally supplied with a No. 155 main jet.

HARLEY-DAVIDSON MOTOR CO., INC.