

| VEHICLE MODEL | | MX-6 125 8044 | QUALIFIER 3 175 8055 | MX-6 250 8064/8401 | QUALIFIER 3 250 8065 | QUALIFIER 3 350 8075 | MX-6 400 8084/8402 | QUALIFIER 3 400 8085 |
|--|--|--|--|------------------------------|--|--------------------------------|--|---------------------------|
| Bombardier Rotax type | | 124 | 174 Rotary valve, 2 stroke, single cylinder, air cooled | | | 281 | 406 Reed valve, 2 stroke, single cylinder, air cooled | |
| Bore | mm (in.) | 54 (2.125) | 62 (2.441) | 72 (2.834) | | 76 (2.992) | 84 (3.307) | |
| Stroke | mm (in.) | 54 (2.125) | 57.5 (2.260) | 61 (2.402) | | 61 (2.402) | 72 (2.834) | |
| Displacement | cm ³ (in. ³) | 123.7 (7.56) | 173.6 (10.6) | 248.4 (15.13) | | 276.7 (16.88) | 399 (24.35) | |
| Compression ratio (uncorrected) | | 15.5:1 ± 0.5 | 13.8:1 | 13.5:1 ± 0.5 | 12.5:1 ± 0.5 | | 11.9:1 ± 0.5 | 10.8:1 ± 0.5 |
| Squish area | mm (in.) | N.A. | 1.2 - 1.6 (0.047 - 0.062) | 1.4 - 1.8 (0.055 - 0.070) | 1.8 - 2.2 (0.070 - 0.086) | 1.7 - 2.1 (0.066 - 0.082) | N.A. | |
| Power at R.P.M. (rear wheel) | | 17.5 kW (23 Hp) @ 9500 | 18 kW (24 Hp) @ 8500 | 27.3 kW (36.5 Hp) @ 8000 | 25.5 kW (34 Hp) @ 8000 | 26.2 kW (35 Hp) @ 7750 | 32.3 kW (43 Hp) @ 6500 | 31.6 kW (42 Hp) @ 5000 |
| Maximum recommended R.P.M. | | 11,000 | 9500 | | 8700 | 8500 | | |
| Lubrication | | Pre-mix (32 to 1 ratio) | | | | | Pre-mix (20 to 1 ratio) | |
| Starter | | Foot operated L.H., in gear starting | | | | | | |
| Connecting rod big end side play/wear limit | mm (in.) | 0.20 - 0.53/1.0 (0.008 - 0.020/0.039) | | | | | 0.60 - 0.93/1.4 (0.023 - 0.036/0.055) | |
| Piston ring type ② | | 1 rectangular ring | 1 "L" semi-trapez ring 1 rectangular ring | 1 "L" semi-trapez ring | 1 "L" semi-trapez ring 1 rectangular ring | | 1 "L" semi-trapez ring 1 rectangular ring | |
| Ring end gap ① | mm (in.) | 0.15 - 0.30 (0.006 - 0.011) | 0.20 - 0.35 (0.008 - 0.014) | | | 0.25 - 0.40 (0.010 - 0.016) | | |
| Piston/cylinder wall clearance ① | mm (in.) | 0.06 - 0.08 (0.002 - 0.003) | | | 0.07 - 0.09 (0.003 - 0.0035) | | | |
| Piston cylinder wear limit | mm (in.) | 0.14 (.006) | | | 0.16 (0.0065) | 0.18 (0.007) | | |
| Crankshaft end play | mm (in.) | 0.1 - 0.3 (0.004 - 0.011) | | | | | | |
| Rotary disc valve | open BTDC | 140° | 137° | 140° | 137° | | N.A. | |
| | close ATDC | 85° | 75° | 85° | 75° | | N.A. | |
| Torque (cold) | Cylinder | N•m (ft-lbs) | 15-16 (11-12) | | 18-24 (13-17) | | 38-42 (28-30) | |
| | Magneto | N•m (ft-lbs) | 75-80 (55-59) | | 90 (65) | | | |
| | Engine sprocket | N•m (ft-lbs) | 90 - 100 (66 - 73) | | | | | |

① When fitting new parts

N.A.: not applicable

② Ring types

"L" TRAPEZ



"SEMI" TRAPEZ

