

ILLUSTRATION SHOWS TYPICAL PARTS ONLY. ORDER BY PART NUMBER. PARTS NOT LISTED ARE SUPPLIED BY OEM.



| Ref # | Part Number | Qty | Description  |
|-------|-------------|-----|--|
| 1     | 33311B      |     | Cylinder (Incl. 2, 3, 4 & 41)(2-5/8" Bore)   |
| 2     | 27652       |     | Pin, Dowel   |
| 3     | 27642       |     | Pipe plug, 1/4-18  |
| 4     | 27876B      |     | Seal, Oil  |
| 5     | 29536       |     | Blower Housing Baffle (Without electric starter knock out) (Use as required)                                   |
| 5     | 35256A      |     | Blower Housing Baffle (With electric starter knockout) (As req.)(point ign.)                                   |
| 6     | 650561      |     | Screw, 1/4-20 x 5/8"   |
| 7     | 29538       |     | Base, Engine mounting  |
| 8     | 650542      |     | Screw, 5/16-18 x 3/4"  |
| 9     | 34081       |     | Crankshaft   |
| 10    | 29783       |     | Pin, Crankshaft gear (Used on early p rod.)  |
| 11    | 27884       |     | Gear, Crankshaft (Used on early production) This gear is serviceable ONLY when it is pinned to the crankshaft. |
| 13    | 34531       |     | Piston, Pin & Ring Set (Std.) (2-5/8" Bore)  |
| 13    | 34532       |     | Piston, Pin & Ring Set (.010" OS)  |
| 13    | 34533       |     | Piston, Pin & Ring Set (.020" OS)  |
| 13A   | 33312B      |     | Piston & Pin Ass'y. (Std.)(2-5/8")(In cl.14)   |
| 13A   | 33313B      |     | Piston & Pin Ass'y. (.010" OS) (Incl. 14)  |
| 13A   | 33314B      |     | Piston & Pin Ass'y. (.020" OS) (Incl. 14)  |
| 14    | 27888       |     | Ring, Piston pin retaining   |
| 15    | 34854       |     | Ring Set (Std.) (2-5/8" Bore)  |
| 15    | 34855       |     | Ring Set (.010" OS)  |
| 15    | 34856       |     | Ring Set (.020" OS)  |
| 16    | 31380C      |     | Rod Assy., Connecting (Incl. 17)   |
| 17    | 650662C     |     | Bolt, Connecting rod (Incl. 2 pieces)  |
| 18    | 34034       |     | Lifter, Valve  |
| 20    | 30622A      |     | Extension, Blower housing  |
| 21    | 650128      |     | Screw, 10-24 x 1/2"  |
| 22    | 650561      |     | Screw, 1/4-20 x 5/8" (Use as required )  |
| 22    | 30063       |     | Screw, 1/4-20 x 1/2" (Use as required )  |
| 23    | 30684       |     | Gasket Cylinder Cover  |
| 24    | 31303B      |     | Cover, Cylinder (Incl. 26 & 34)  |
| 25    | 31546       |     | Bushing, Crankshaft  |
| 26    | 28427       |     | Seal, Oil  |
| 27    | 650488      |     | Screw, 1/4-20 x 1-1/4"   |
| 28    | 650493      |     | Screw, 1/4-20 x 1-3/4"   |
| 29    | 30699C      |     | Rod Assy., Governor (Incl. 30 & 31)  |
| 30    | 30700       |     | Yoke, Governor   |
| 31    | 650494      |     | Screw, 6-40 x 5/16"  |
| 33    | 29642       |     | Ring, Retaining  |
| 34    | 31845       |     | Shaft, Mechanical governor   |
| 35    | 30588A      |     | Spool, Governor  |
| 36    | 35479       |     | Washer, Flat   |
| 37    | 29193       |     | Ring, Retaining  |
| 38    | 30591       |     | Gear Assy., Governor   |
| 39    | 31843A      |     | Bracket, Governor gear   |
| 40    | 650836      |     | Screw, 10-24 x 1/2"  |
| 41    | 32783       |     | Intake Valve (Std.)  |
| 41    | 32784       |     | Intake Valve (1/32" OS)  |
| 42    | 27878A      |     | Exhaust Valve (Std.)   |
| 42    | 27880A      |     | Exhaust Valve (1/32" OS)   |

| Ref # | Part Number | Qty | Description   |
|-------|-------------|-----|---|
| 43    | 27882       |     | Cap, Upper valve spring   |
| 44    | 27881       |     | Spring, valve   |
| 45    | 32581       |     | Cap, Lower valve spring   |
| 46    | 33876       |     | Gasket, Stator  |
| 47    | 650489      |     | Screw, 1/4-20 x 5/8"  |
| 48    | 34240       |     | Ground Wire   |
| 49    | 30884       |     | Key, Flywheel   |
| 51    | 28938C      |     | Gasket, Cylinder head   |
| 52    | 30938A      |     | Head, Cylinder  |
| 53    | 33636       |     | Resistor Spark Plug (RJ-8C)   |
| 54    | 610118      |     | Cover, Spark plug (Use as required)   |
| 55    | 30939A      |     | Cover Assy., Cylinder head  |
| 56A   | 650691      |     | Washer, Flat (Use as required)  |
| 56    | 650697A     |     | Screw, 5/16-18 x 2-1/2" (Use as required)   |
| 56    | 650694A     |     | Screw, 5/16-18 x 2" (Use as required)   |
| 56    | 650695A     |     | Screw, 5/16-18 x 2-1/4" (Use as required)   |
| 56B   | 650690      |     | Washer, Belleville (Use as required)  |
| 57A   | 30322       |     | Locknut, 8-32   |
| 57    | 29916       |     | Clamp, Governor lever (Use as required)   |
| 58A   | 32326A      |     | Lever, Governor   |
| 59    | 29918       |     | Washer, Lock, No. 8 E.T.  |
| 60    | 30205       |     | Bracket, Governor adjusting   |
| 61    | 650548      |     | Screw, 8-32 x 5/16"   |
| 62    | 29216       |     | Locknut, 10-32  |
| 63    | 29826       |     | Screw, 10-32 x 3/4"   |
| 64    | 31386       |     | Spring, Extension   |
| 65    | 30824       |     | Link, Throttle  |
| 67    | 33109A      |     | Control Bracket (Incl. 64 & 72)   |
| 72    | 610973      |     | Terminal Assy. (Use as required)  |
| 74    | 27896A      |     | Gasket, Valve chamber cover   |
| 75    | 28423       |     | Breather Assy., Valve   |
| 76    | 28424       |     | Element, Breather   |
| 77    | 28425       |     | Cover, Valve spring box   |
| 78    | 650128      |     | Screw, 10-24 x 1/2"   |
| 79    | 35350       |     | Tube Breather   |
| 81    | 29752       |     | Nut & Lockwasher, 1/4-28  |
| 82    | 27915A      |     | * Gasket, Intake pipe to cylinder   |
| 83    | 30195A      |     | Flange, Carburetor (Incl. 81 & 86)  |
| 84    | 30196       |     | Screw, 5/16-18 x 3/4"   |
| 85    | 31688A      |     | * Gasket, Carburetor  |
| 86    | 650572      |     | Screw, 1/4-28 x 1-1/8"  |
| 87    | 27272A      |     | * Air Cleaner Gasket (Use as required)  |
| 87    | 30767       |     | Spacer, Cleaner (Use as required)   |
| 94A   | 34819       |     | Elbow Assy., Air cleaner (Incl. 90,91,92,93,94,96)<br>(Use in 730561 assembly only)   |
| 101   | 34158       |     | Bracket, Fuel tank  |
| 102   | 650665      |     | Screw, 1/4-14 x 7/8"  |
| 103   | 34159       |     | Plate, Fuel tank mounting   |
| 104   | 34186A      |     | Fuel Tank (Incl. 105 & 107) NOTE: These tanks were built with different size fuel inlet openings. Tanks with the 1-3/16" I.D. opening use fuel cap 33032 or 34210. Tanks with the 1-1/2" I.D. opening use fuel cap 35355. |

| Ref # | Part Number | Qty | Description   |
|-------|-------------|-----|---|
| 105   | 34210       |     | Fuel Cap (Red Plastic) (Spurt resistant, High profile)<br>(Use as required) |
| 105   | 35355       |     | Fuel Cap (Red plastic) (Use as required)                                    |
| 105   | 410144B     |     | Fuel Cap (White Plastic)(Std.)(As required)                                 |
| 105   | 33032       |     | Fuel Cap (Red Plastic) (Spurt resistant, Low profile)<br>(Use as required)  |
| 106   | 29774       |     | Fuel Line (Braided, 8 1/4") (Use as required)                               |
| 106   | 30962       |     | Fuel Line (Braided, 32") (Use as required)                                  |
| 107   | 26460       |     | Clamp, Fuel line (Use as required)  |
| 108   | 32158E      |     | Blower Housing (For electric starter)                                       |
| 109   | 29747B      |     | Screw, 5/16-24 x 21/32"   |
| 110   | 27930A      |     | * Gasket, Exhaust flange  |
| 111C  | 391026      |     | Opt.Spark Arrest Muf.(Incl.143,143A,1 43B)                                  |
| 111D  | 33714       |     | Opt.Spark Arrest Muf.(Incl.112,143,14 4,144A)                               |
| 111E  | 34390       |     | Deflector, Exhaust (Optional)   |
| 111   | 32401       |     | Muffler   |
| 112   | 30196       |     | Screw, 5/16-18 x 3/4"   |
| 113   | 26073       |     | Washer, Flat  |
| 114   | 650694A     |     | Screw, 5/16 - 18 x 2"   |
| 115   | 32125       |     | Cup, Starter  |
| 116   | 590417      |     | Screen, Starter cup   |
| 117   | 650815      |     | Washer, Belleville  |
| 118   | 8116        |     | Nut, Hex  |
| 119   | 29716       |     | Screw, 1/4-28 x 7/16"   |
| 137   | 32410       |     | Knob, Speed control   |
| 143B  | 33185       |     | Cover & tube, Muffler (Use as required)                                     |
| 143   | 650578      |     | Screw, 8-18 x 3/8" (Use as required)  |
| 143A  | 33171       |     | Screen, Muffler (Use as required)   |
| 144   | 33700       |     | Cover & Tube, Muffler (Use as required)                                     |
| 144A  | 33323       |     | Screen, Muffler (Use as required)   |
| 145   | 31297       |     | Dipstick (Incl. 146A)   |
| 146A  | 29673       |     | * Gasket, Oil fill  |
| 148A  | 570629A     |     | Primer Assy.  |
| 149   | 32180C      |     | Line, Primer  |
| 151   | 33723       |     | Cover, Carburetor   |
| 153   | 650764      |     | Nut, "U" Clip   |
| 154   | 650760      |     | Screw, 8-32 x 3/8"  |
| 155   | 34126       |     | Bracket, Grommet mounting   |
| 156   | 650257      |     | Screw, 8-32 x 5/16"   |
| 157   | 650765      |     | Screw, 10-32 x 1/2"   |
| 158   | 28820       |     | Screw, 10-32 x 1/2"   |
| 159   | 32398       |     | Bracket, Choke  |
| 160   | 650760      |     | Screw, 8-32 x 3/8"  |
| 161   | 28545       |     | Grommet, Plastic  |
| 162   | 31680       |     | Guard, Starter  |
| 163   | 32576       |     | Seal, Snow Guard  |
| 164   | 33013       |     | Cover, Starter bubble   |
| 165   | 650736      |     | Screw, 10-16 x 3/8"   |
| 167   | 34174       |     | Deflector, Exhaust  |
| 168   | 650665      |     | Screw, 1/4-15 x 7/8"  |
| 201A  | 730130      |     | Muffler Adapter Kit (Incl.110,112)(As req.)                                 |

| Ref # | Part Number | Qty | Description   |
|-------|-------------|-----|---|
| 201B  | 730561      |     | Air Cleaner Kit<br>(Incl.74,79,80,87,88,89,90,91,92,94,95,96,97,99,100 & 230C) (Used only on engine with an externally vented fully adjustable carburetor)  |
| 201   | 730164      |     | Air Cleaner Ass'y. (Red Poly)(Incl.87,120,121,122,123,124 & 230)(As req.)   |
| 201   | 730164      |     | Air Cleaner Kit, Mini bike (Incl.87,120,121,122,123 & 124) (Use as required)  |
| 230   | 34346       |     | Decal, Instruction  |
| 230F  | 34414       |     | Decal, Warning  |
| 230C  | 33722       |     | Decal, Operating  |
| 230G  | 34150       |     | Decal, Choke  |
| 230G  | 34151       |     | Decal, Choke  |
| 231A  | 30548B      |     | Condenser   |
| 231   | 30547A      |     | Breaker Assy (Used on Std. Point ignition)  |
| 232A  | 631021      |     | Inlet, Needle Seat & Clip Assy.   |
| 240   | 611077      |     | Alternator (Optional)   |
| 241   | 650868      |     | Screw, 8-18 x 1-1/8" (3 required)(Opt .)  |
| 242   | 611078      |     | Connector, A.C. Lighting (Optional)   |
| 242   | 611079      |     | Connector, D.C. Charging (Optional)   |
| 243   | 590610      |     | Tube, Centering (Optional)  |
| 244   | 590613      |     | Alternator Shaft (Optional)   |
| 250   | 631816      |     | Carburetor (Incl. 85) (Refer to Division 5, Section A, page 132 for breakdown)  |
| 251   | 610964A     |     | Magneto (w/ring gear for 120 volt starter) NOTE: The complete magneto is not available as an assembly. The magneto number is shown for reference purposes only. Order component parts individually, as shown in parts list. (Refer to Division 5, Section B, page 24 for breakdown)                             |
| 252   | 590473      |     | Rewind Starter (Refer to Division 5, Section C, page 29 for breakdown)  |
| 254   | 33328D      |     | Starter Motor Kit (110-120 volt) This 110-120 volt starter motor kit may have been added to this engine. It can be added only if cylinder has drilled and tapped starter mounting bosses and a ring gear flywheel (see#255). Refer to service number stamped on end cap of motor or on decal for identification |
| 255   | 30811A      |     | Flywheel (Ring gear flywheel required on engines using 110-120 volt starter motor kits listed above) (Used on Std. point ignition before 1982)  |
| 255   | 611042      |     | Flywheel (Ring gear flywheel required on engines using 110-120 volt starter motor kits listed above) (Used on Std. point ignition 1982 or later)  |
| 255   | 611085      |     | Flywheel (Minimum ring gear flywheel required on engines using 110-120 volt starter motor kits listed above) (Used on solid state external ignition)  |
| 256   | 33235A      |     | Gasket Set (Incl. items marked*)  |