

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



## Engine Parts List #1

| Ref # | Part Number | Qty | Description   |
|-------|-------------|-----|---|
|       | 1 32586C    |     | Cylinder (Incl. 2, 3, 4 & 76) (2-3/4" Bore)   |
|       | 2 27652     |     | Pin, Dowel  |
|       | 3 27642     |     | Plug, Oil drain   |
|       | 4 32630     |     | Seal, Oil   |
|       | 5 32783     |     | Intake Valve (Std.) (Incl. 9)   |
|       | 5 32784     |     | Intake Valve (1/32" OS) (Incl. 9)   |
|       | 6 27878A    |     | Exhaust Valve (Std.) (Incl. 9)  |
|       | 6 27880A    |     | Exhaust Valve (1/32" OS) (Incl. 9)  |
|       | 7A 20810    |     | Pin, Valve spring retainer (Use as re quired)   |
|       | 7 27882     |     | Cap, Upper valve spring   |
|       | 8 27881     |     | Spring, Valve   |
|       | 8A 27881    |     | Spring, Valve   |
|       | 9A 32581    |     | Cap, Lower valve spring   |
|       | 9 32581     |     | Cap, Lower valve spring   |
|       | 10A 32590   |     | Plate, Lock & Oil dipper (This plate may be replaced by 34242 oil dipper but 650662C screw must be used.)     |
|       | 10 34242    |     | Dipper, Oil   |
|       | 11 32773    |     | Crankshaft (Incl. 12 & 13)  |
|       | 12 29783    |     | Crankshaft Gear Pin (Early production )   |
|       | 13 27884    |     | Gear, Crankshaft (Used in early produ ction) This gear is servicable onlywhen it is pinned to the crankshaft. |
|       | 14A 32592B  |     | Piston & Pin Ass'y. (Std.)(2-3/4")(In cl.16)  |
|       | 14A 32593B  |     | Piston & Pin Ass'y. (.010" OS) (Incl. 16)   |
|       | 14A 32594B  |     | Piston & Pin Ass'y. (.020" OS) (Incl. 16)   |
|       | 14 34517    |     | Piston, Pin & Ring Set (Std.) (2-3/4" Bore)   |
|       | 14 34518    |     | Piston, Pin & Ring Set (.010" OS)   |
|       | 14 34519    |     | Piston, Pin & Ring Set (.020" OS)   |
|       | 15 32595    |     | Ring Set (Std.) (2-3/4" Bore)   |
|       | 15 32596    |     | Ring Set (.010" OS)   |
|       | 15 32597    |     | Ring Set (.020" OS)   |
|       | 16 27888    |     | Ring, Piston pin retaining  |
|       | 17 32591C   |     | Rod Assy., Connecting (Incl. 10 & 18)   |
|       | 18 650662C  |     | Screw, Connecting rod (2 each)  |
|       | 21 32115    |     | Camshaft (MCR)  |
|       | 22 34034    |     | Lifter, Valve   |
|       | 23 31451A   |     | Cylinder Cover (Incl.24, 106, 309, 31 0 & 311)  |
|       | 24B 31546   |     | Bushing, Crankshaft (Use as required)   |
|       | 24 28460    |     | Seal, Oil   |
|       | 25 31297    |     | Dipstick, Oil (Incl. 30)  |
|       | 26 30684    |     | * Gasket, Cylinder cover  |
|       | 28 650488   |     | Screw, 1/4-20 x 1-1/4"  |
|       | 30 29673    |     | * Gasket, Oil filler  |
|       | 31 650489   |     | Screw, 1/4-20 x 5/8"  |
|       | 32 32631A   |     | * Gasket, Cylinder head   |
|       | 33 30938A   |     | Head, Cylinder  |
|       | 34 27793    |     | Clip, Conduit (Use as required)   |
|       | 35 28942    |     | Screw, 10-32 x 3/8" (Use as required)   |
|       | 36 650697A  |     | Screw, 5/16-18 x 2-1/2" (Use as requi red)  |
|       | 36 650695A  |     | Screw, 5/16-18 x 2-1/4" (Use as requi red)  |
|       | 36 650694A  |     | Screw, 5/16-18 x 2" (Use as required)   |
|       | 37 33636    |     | Resistor Spark Plug (RJ-8C)   |
|       | 37 34251    |     | Resistor Spark Plug   |
|       | 38 27896A   |     | * Gasket, Breather cover  |
|       | 39 28423    |     | Body, Breather  |
|       | 40 28424    |     | Element, Breather   |
|       | 41 28425    |     | Cover, Valve spring   |
|       | 42 26073    |     | Washer (Use as required)  |

## Engine Parts List #1

| Ref # | Part Number | Qty | Description  |
|-------|-------------|-----|--|
| 42    | 650691      |     | Washer, Flat (Use as required)   |
| 42A   | 650690      |     | Washer, Belleville (Use as required)   |
| 43    | 650128      |     | Screw, 10-24 x 1/2"  |
| 45    | 27915A      |     | * Gasket, Intake   |
| 46    | 30195A      |     | Flange, Carburetor (Incl. 79 & 80)   |
| 47    | 30196       |     | Screw, 5/16-18 x 3/4"  |
| 48    | 29716       |     | Screw, 1/4-28 x 7/16"  |
| 50    | 650548      |     | Screw, 8-32 x 5/16"  |
| 52    | 32326A      |     | Lever, Governor (New lever does not need 1 of 51,66,132,164,165,207)   |
| 55    | 30205       |     | Bracket, Adjusting   |
| 56    | 31710       |     | Link, Throttle   |
| 59    | 29216       |     | Nut, Lock, 10-32   |
| 60    | 650152      |     | Screw, 8-32 x 3/8"   |
| 61    | 29826       |     | Screw, 10-32 x 3/4"  |
| 62    | 29642       |     | Ring, Retaining  |
| 63A   | 30699C      |     | Rod Assy., Governor (Incl. 64 & 65)  |
| 63    | 30699B      |     | Governor Rod Ass'y. (This one-piece governor rod is no longer used. It is replaced by 30699C ass'y., Ref. no. 63A) |
| 64    | 30700       |     | Yoke, Governor   |
| 65    | 650494      |     | Screw, 6-40 x 5/16"  |
| 66    | 29918       |     | Lockwasher, #8 E.T.  |
| 67    | 35350       |     | Tube, Breather   |
| 69    | 29747B      |     | Screw, 5/16-24 x 21/32"  |
| 70    | 32158E      |     | Blower Housing (For elec.star.)(Incl. 134,135)   |
| 71    | 650815      |     | Washer, Belleville   |
| 72    | 8116        |     | Nut, Hex   |
| 73    | 29536       |     | Blower Housing Baffle (without electric starter knock-out) (Use as required)                                       |
| 73    | 35256A      |     | Blower Housing Baffle (with electric starter knock-out) (Use as required) (Point Ignition)                         |
| 74    | 650561      |     | Screw, 1/4-20 x 5/8"   |
| 75    | 31688A      |     | * Gasket, Carburetor   |
| 79    | 29752       |     | Nut & Lockwasher Assy., 1/4-28   |
| 80    | 650572      |     | Screw, 1/4-28 x 1-1/8"   |
| 82A   | 730164      |     | Air Cleaner Ass'y. (Incl. 60, 83, 87, 88, 89, 90A & 331B) (Use as required)  |
| 83    | 27272A      |     | * Gasket, Air cleaner  |
| 87    | 31691       |     | Bracket, Air cleaner NOTE: 130010 thru 10C & 11 used in early production only.                                     |
| 88    | 28820       |     | Screw, 10-32 x 1/2"  |
| 89    | 30727       |     | Element, Air cleaner   |
| 90    | 31715       |     | Body, Air cleaner  |
| 97    | 35349       |     | Ground Wire  |
| 98    | 28569       |     | Spring, Compression  |
| 99    | 29500       |     | Screw, 8-32 x 3/4"   |
| 100   | 29538       |     | Base, Engine mounting  |
| 103   | 32401       |     | Muffler  |
| 106   | 31845       |     | Shaft, Mechanical governor   |
| 107   | 30591       |     | Gear Assy., Governor (Incl. 109)   |
| 108   | 30588A      |     | Spool, Governor  |
| 109   | 30590A      |     | Washer, Flat   |
| 110   | 29193       |     | Ring, Retaining  |
| 113   | 650561      |     | Screw, 1/4-20 x 5/8"   |
| 114   | 31301       |     | Fuel Tank (Incl. 115)  |

| Ref # | Part Number | Qty | Description  |
|-------|-------------|-----|--|
| 115   | 410144B     |     | Fuel Cap (White Plastic)(Std)(As required)   |
| 115   | 33032       |     | Fuel Cap (Charcoal Plastic) (Spurt resistant, Low profile)<br>(Use as required)  |
| 115   | 34210       |     | Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as required)   |
| 115   | 35355       |     | Fuel Cap (Use as required)   |
| 117   | 28584       |     | Fitting, Fuel strainer & elbow   |
| 118   | 29774       |     | Fuel Line (Braided 8-1/4" 21 cm)(Use as req.)  |
| 118   | 30705       |     | Fuel Line (Braided 16") (41 cm) (Use as req.)  |
| 118   | 30962       |     | Fuel Line (Braided 32") (81 cm) (Use as req.)  |
| 120   | 650128      |     | Screw, 10-24 x 1/2" (Use as required)  |
| 121   | 30622A      |     | Extension, Blower housing  |
| 124   | 650542      |     | Screw, 5/16-18 x 3/4"  |
| 125   | 27930A      |     | Gasket, Exhaust  |
| 126   | 30196       |     | Screw, 5/16-18 x 3/4"  |
| 127   | 26073       |     | Washer (Use as required)   |
| 128   | 650694A     |     | Screw, 5/16-18 x 2" (Use as required)  |
| 129   | 32589       |     | Key, Flywheel  |
| 130   | 31843A      |     | Bracket, Governor gear   |
| 131   | 650836      |     | Screw, 10-24 x 1/2"  |
| 133   | 650493      |     | Screw, 1/4-20 x 1-3/4"   |
| 149   | 30747       |     | Clip, Shorting   |
| 193   | 610118      |     | Cover, Spark plug (Use as required)  |
| 205   | 650561      |     | Screw, 1/4-20 x 5/8" (Use as required)   |
| 209   | 30939A      |     | Cover, Cylinder head   |
| 246   | 32125       |     | Cup, Starter   |
| 247   | 590417      |     | Screen, Starter cup  |
| 266   | 26460       |     | Clamp, Fuel line   |
| 270   | 31461       |     | Bushing, Crankshaft (Use as required)  |
| 273   | 31726B      |     | Control Bracket (Incl. 98, 99, 214 & 274)  |
| 274   | 610973      |     | Terminal Ass'y. (As req. on late production)   |
| 275   | 34043       |     | Spring, Control lever  |
| 287   | 27275       |     | Clip, Hi-tension wire (Use as required)  |
| 287   | 34246       |     | Clip, Ground wire (Use as required)  |
| 331   | 550223      |     | Decal, Name  |
| 331A  | 34346       |     | Decal, Instruction   |
| 331B  | 31752       |     | Decal, Air cleaner   |
| 332   | 30547A      |     | Contact Assy., Breaker   |
| 333   | 30548B      |     | Condenser  |
| 334   | 631021      |     | Inlet Needle, Seat & Clip Assy.  |
| 336   | 631453      |     | Carburetor (Incl. 75) (Refer to Division 5, Section A, page 100 for breakdown)   |
| 337   | 610689A     |     | Magneto 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) |
| 338   | 590420      |     | Rewind Starter (Refer to Division 5, Section C, page 25 for breakdown)   |
| 343   | 33239A      |     | Gasket Set (Incl. items marked*)   |

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OPTIONAL 110 - 120 VOLT  
STARTER MOTOR KIT

SOLID STATE

| Ref # | Part Number | Qty | Description  |
|-------|-------------|-----|--|
|       | 31 650489   |     | Screw, 1/4-20 x 5/8"   |
|       | 34 27793    |     | Clip, Conduit (Use as required)  |
|       | 35 28942    |     | Screw, 10-32 x 3/8" (Use as required)  |
|       | 43A 650128  |     | Screw, 10-24 x 1/2"  |
|       | 48 29716    |     | Screw, 1/4-28 x 7/16"  |
|       | 56 31710    |     | Link, Throttle   |
|       | 71 650815   |     | Washer, Belleville   |
|       | 72 8116     |     | Nut, Hex   |
|       | 98 28569    |     | Spring, Compression  |
|       | 99 29500    |     | Screw, 8-32 x 3/4"   |
|       | 193 610118  |     | Cover, Spark plug (Use as required)  |
|       | 263 650764  |     | Nut, "U" Type (Use as required)  |
|       | 274 610973  |     | Terminal Ass'y. (As req. on late prod uction)  |
|       | 308 31793   |     | Bearing, Ball  |
|       | 309 31855   |     | Retainer, Bearing  |
|       | 310 650778  |     | Washer, Lock   |
|       | 311 650580  |     | Nut, Lock  |
|       | 312 31792   |     | Washer, Thrust   |
|       | 331 550223  |     | Decal, Name  |
|       | 338 590420  |     | Rewind Starter (Refer to Division 5, Section C, page 25 for breakdown)   |
|       | 340 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 hasdrilled and tapped starter mounting bosses and a ring gear flywheel (see#342). Refer to service number stamped on end cap of motor, or on decal, for identifica |
|       | 342 30811A  |     | Flywheel (Ring gear flywheel requiredon engines using 110-120 volt starter kits listed above)  |
|       | 342 611042  |     | Flywheel (Used on Type letters H and above) (Std. Point ignition) (Ring gear flywheel required on engines using 110-120 volt starter kits listed above)  |
|       | 342 611085  |     | Flywheel (Minimum ring gear flywheel required on engines using 110-120 volt starter kits listed above) (Use withSolid State ignition)  |

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| Ref # | Part Number | Qty | Description  |
|-------|-------------|-----|--|
| 27    | 27513       |     | Lockwasher, 1/4" (Use as required)   |
| 36    | 650697A     |     | Screw, 5/16-18 x 2-1/2" (Use as required)  |
| 36    | 650695A     |     | Screw, 5/16-18 x 2-1/4" (Use as required)  |
| 36    | 650694A     |     | Screw, 5/16-18 x 2" (Use as required)  |
| 38    | 27896A      |     | * Gasket, Breather cover   |
| 42    | 26073       |     | Washer (Use as required)   |
| 42    | 650691      |     | Washer, Flat (Use as required)   |
| 50    | 650548      |     | Screw, 8-32 x 5/16"  |
| 51    | 30319       |     | Rivet, Split (Used in early production)  |
| 52    | 32326A      |     | Lever, Governor (New lever does not need 1 of 51,66,132,164,165,207)   |
| 55    | 30205       |     | Bracket, Adjusting   |
| 57    | 730130      |     | Exh.Adap.Kit (Incl. 58 & 125) (Use as required)  |
| 58    | 30196       |     | Screw, 5/16-18 x 3/4" (Use as required)  |
| 59    | 29216       |     | Nut, Lock, 10-32   |
| 61    | 29826       |     | Screw, 10-32 x 3/4"  |
| 66    | 29918       |     | Lockwasher, #8 E.T.  |
| 82B   | 730561      |     | Air cleaner kit (Incl. 38, 67A, 83, 84B, 85,89B, 89C, 90A, 91, 91A, 91B, 91C, 91D, 245 & 331B) (Use only on engines with an externally vented fully adjustable carburetor) |
| 82    | 730127      |     | Air Cleaner Ass'y. (Incl. 60, 83, 87, 88, 89A, 90, 238 & 331B) (Use as required)   |
| 83    | 27272A      |     | * Gasket, Air cleaner  |
| 84D   | 34819       |     | Air Cleaner Elbow (Incl. 84B, 86A, 91, 91A, 91B & 91C) (Use in 730561 assembly only)   |
| 88    | 28820       |     | Screw, 10-32 x 1/2"  |
| 90    | 31715       |     | Body, Air cleaner  |
| 103E  | 391026      |     | Opt. Spark Arrest Muffler (Incl.196,197,199)   |
| 111   | 31694       |     | Bracket, Fuel tank   |
| 113   | 650561      |     | Screw, 1/4-20 x 5/8"   |
| 118   | 29774       |     | Fuel Line (Braided 8-1/4" 21 cm)(Use as required)  |
| 118   | 30705       |     | Fuel Line (Braided 16") (41 cm) (Use as required)  |
| 118   | 30962       |     | Fuel Line (Braided 32") (81 cm) (Use as required)  |
| 125   | 27930A      |     | Gasket, Exhaust  |
| 126   | 30196       |     | Screw, 5/16-18 x 3/4"  |
| 128   | 650694A     |     | Screw, 5/16-18 x 2" (Use as required)  |
| 132   | 650548      |     | Screw, 8-32 x 5/16" (Early production )  |
| 148   | 34067       |     | Wire Assy., Alternator adapter (4-1/4 ")   |
| 148   | 34069       |     | Wire Assy., Alternator adapter (6-3/4 ")   |
| 189   | 6201        |     | Screw, 1/4-28 x 7/8"   |
| 202   | 31288       |     | Exh. Adaptor Kit (Incl.125,203,204) ( As required)   |
| 203   | 650697A     |     | Screw, 5/16-18 x 2-1/2" (Use as required)  |
| 204   | 6021A       |     | Screw, 5/16-18 x 1-1/2" (Use as required)  |
| 262   | 29752       |     | Nut, Lock  |
| 266   | 26460       |     | Clamp, Fuel line   |
| 276   | 31697       |     | Strap, Fuel tank   |
| 277   | 29212       |     | Screw, Hex hd. Sems, 1/4-28 x 7/16   |
| 331B  | 31752       |     | Decal, Air cleaner   |