



## 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)  |
|       | 7 27882     |     | Cap, Upper valve spring   |
|       | 7A 20810    |     | Pin, Valve spring retainer (Use as re quired)   |
|       | 8A 27881    |     | Spring, Valve   |
|       | 8 27881     |     | Spring, Valve   |
|       | 9A 32581    |     | Cap, Lower valve spring   |
|       | 9 32581     |     | Cap, Lower valve spring   |
|       | 10 34242    |     | Dipper, Oil   |
|       | 10A 32590   |     | Plate, Lock & Oil dipper (This plate may be replaced by 34242 oil dipper but 650662C screw must be used.)     |
|       | 11 32782    |     | 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. |
|       | 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)   |
|       | 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)   |
|       | 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)  |
|       | 24 28460    |     | Seal, Oil   |
|       | 24B 31546   |     | Bushing, Crankshaft (Use as required)   |
|       | 25 29668    |     | 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"  |
|       | 31 650516   |     | Screw, 1/4-20 x 1-1/8"  |
|       | 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   |

| Ref # | Part Number | Qty | Description  |
|-------|-------------|-----|--|
| 42    | 26073       |     | Washer (Use as required)   |
| 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    | 30206       |     | 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    | 31914       |     | 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  |
| 98    | 32924       |     | Spring, Compression  |
| 99    | 650688      |     | Screw, 10-32 x 1"  |
| 100   | 29538       |     | Base, Engine mounting  |
| 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   | 30063       |     | Screw, 1/4-20 x 1/2"   |
| 114   | 31301       |     | Fuel Tank (Incl. 115)  |
| 115   | 410144B     |     | Fuel Cap (White Plastic)(Std)(As required)   |

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|-------|-------------|-----|---|
| 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<br>required)   |
| 115   | 35355       |     | Fuel Cap (Use as required)  |
| 117A  | 29683       |     | Valve, Fuel shut-off  |
| 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"   |
| 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  |
| 150   | 650890      |     | Lockwasher  |
| 193   | 610118      |     | Cover, Spark plug (Use as required)   |
| 193   | 27276       |     | Cover, Spark plug   |
| 205   | 650561      |     | Screw, 1/4-20 x 5/8" (Use as required )   |
| 209   | 30939A      |     | Cover, Cylinder head  |
| 226   | 650760      |     | Screw, 8-32 x 3/8"  |
| 227   | 28545       |     | Grommet   |
| 246   | 32125       |     | Cup, Starter  |
| 247   | 590417      |     | Screen, Starter cup   |
| 266   | 26460       |     | Clamp, Fuel line  |
| 270   | 31461       |     | Bushing, Crankshaft (Use as required)   |
| 274   | 610973      |     | Terminal Ass'y. (As req. on late prod uction)   |
| 287   | 27275       |     | Clip, Hi-tension wire (Use as require d)  |
| 287   | 34246       |     | Clip, Ground wire (Use as required)   |
| 331B  | 31752       |     | Decal, Air cleaner  |
| 331   | 550223      |     | Decal, Name   |
| 331A  | 34346       |     | Decal, Instruction  |
| 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<br>for breakdown)   |
| 337   | 610826      |     | Magneto (w/ring gear)(12 Vt/3 Amp)(2 NOTE: The complete<br>magneto is not available as an assembly. The magneto<br>number is shown for reference purposes only. Order<br>component parts individually, as show in parts list. Circuit)<br>(Refer to Division 5, Section B, page 27 for breakdown) |
| 338   | 590473      |     | Rewind Starter (Refer to Division 5, Section C, page 29 for<br>breakdown)   |
| 343   | 33239A      |     | Gasket Set (Incl. items marked*)  |

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



| Ref # | Part Number | Qty | Description   |
|-------|-------------|-----|---|
| 31    | 650489      |     | Screw, 1/4-20 x 5/8"  |
| 31    | 650516      |     | Screw, 1/4-20 x 1-1/8"  |
| 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    | 30206       |     | Link, Throttle  |
| 71    | 650815      |     | Washer, Belleville  |
| 72    | 8116        |     | Nut, Hex  |
| 92C   | 31879       |     | Link, Governor lever-to-bellcrank   |
| 92A   | 650399      |     | Screw, 10-32 x 5/8" (Supplied by OEM)   |
| 92    | 30312       |     | Screw, 10-32 x 1/2"   |
| 92B   | 30712       |     | Lever, Bellcrank  |
| 93A   | 28562       |     | Bushing, RPM adjusting lever  |
| 93    | 29530       |     | Bushing, Bellcrank  |
| 94A   | 33450       |     | Nut, Lock   |
| 94    | 30199A      |     | Bracket, Speed control (Incl. 98 & 99 )   |
| 95A   | 32977       |     | Spring, Torsion   |
| 95    | 30202       |     | Spring, Extension   |
| 96    | 30201A      |     | Lever, Speed control  |
| 98    | 32924       |     | Spring, Compression   |
| 99    | 650688      |     | Screw, 10-32 x 1"   |
| 193   | 610118      |     | Cover, Spark plug (Use as required)   |
| 193   | 27276       |     | Cover, Spark plug   |
| 201   | 730152      |     | Control Bracket (Incl. 92, 92A, 92B,93, 93A,94, 95, 95A & 96)   |
| 263   | 650764      |     | Nut, "U" Type (Use as required)   |
| 274   | 610973      |     | Terminal Ass'y. (As req. on late production)  |
| 292   | 31680       |     | Guard, Starter  |
| 293   | 32576       |     | Seal, Snow guard  |
| 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   | 590473      |     | Rewind Starter (Refer to Division 5, Section C, page 29 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 has drilled 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 identification |
| 342   | 30811A      |     | Flywheel (Ring gear flywheel required on 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 with Solid 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 req.)  |
| 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.  |
| 82    | 730127      |     | Air Cleaner Ass'y. (Incl. 60, 83, 87, 88, 89A, 90, 238 & 331B) (Use as required)   |
| 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) |
| 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  |
| 101   | 32394       |     | Muffler Elbow  |
| 102   | 30244       |     | Muffler Nipple   |
| 103E  | 391026      |     | Opt. Spark Arrest Muffler (Incl.196,1 97,199)  |
| 103C  | 32985       |     | Muffler  |
| 104   | 28443       |     | Conduit Nut  |
| 104   | 32862       |     | Conduit Nut  |
| 113   | 30063       |     | Screw, 1/4-20 x 1/2"   |
| 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.)  |
| 128   | 650694A     |     | Screw, 5/16-18 x 2" (Use as required)  |
| 132   | 650548      |     | Screw, 8-32 x 5/16" (Early production )  |
| 137   | 33356       |     | Terminal   |
| 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 req.)   |
| 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)  |
| 226   | 650760      |     | Screw, 8-32 x 3/8"   |
| 227   | 28545       |     | Grommet  |
| 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   |