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


| 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 |
| 7 A | 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 |
| 10A | 32590 | Plate, Lock \& Oil dipper (This plate may be replaced by 34242 oil dipper but 650662 C 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, 310 \& 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 5 5/8" |
| 32 | 32631A | * Gasket, Cylinder head |
| 33 | 30938A | Head, Cylinder |
| 34 | 27793 | Clip, Conduit (Use as required) |
| 35 | 28942 | Screw, 10-32 $\times 3 / 8$ " (Use as required) |
| 36 | 650697A | Screw, 5/16-18 $\times$ 2-1/2" (Use as requi red) |
| 36 | 650695A | Screw, 5/16-18 $\times$ 2-1/4" (Use as requi red) |
| 36 | 650694A | Screw, 5/16-18 $\times 2$ 2" (Use as required) |
| 37 | 33636 | Resistor Spark Plug (RJ-8C) |
| 37 | 34251 | Resistor Spark Plug |


| Ref \# | Part Number | Qty Description |
| :---: | :---: | :---: |
| 38 | 27896A | * Gasket, Breather cover |
| 39 | 28423 | Body, Breather |
| 40 | 28424 | Element, Breather |
| 41 | 28425 | Cover, Valve spring |
| 42A | 650690 | Washer, Belleville (Use as required) |
| 42 | 26073 | Washer (Use as required) |
| 42 | 650691 | Washer, Flat (Use as required) |
| 43 | 650128 | Screw, $10-24 \times 1 / 2^{\prime \prime}$ |
| 45 | 27915A | * Gasket, Intake |
| 46 | 30195A | Flange, Carburetor (Incl. 79 \& 80) |
| 47 | 30196 | Screw, 5/16-18 x 3/4" |
| 50 | 650548 | Screw, 8-32 5 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 |
| 63 | 30699B | Governor Rod Ass'y. (This one-piece governor rodis no longer used. It is replaced by 30699C ass'y.,Ref. no. 63A) |
| 63A | 30699 C | Rod Assy., Governor (Incl. 64 \& 65) |
| 64 | 30700 | Yoke, Governor |
| 65 | 650494 | Screw, 6-40 5 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" |
| 90 | 31715 | Body, Air cleaner |
| 98 | 28569 | Spring, Compression |
| 99 | 29500 | Screw, 8-32 x 3/4" |
| 100 | 29538 | Base, Engine mounting |
| 106 | 31845 | Shaft, Mechanical governor |
| 107 | 30591 | Gear Assy., Governor (Incl. 109) |


| Ref \# | Part Number | Qty Description |
| :---: | :---: | :---: |
| 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) |
| 115 | 410144B | Fuel Cap (White Plastic)(Std)(As requ ired) |
| 115 | 33032 | Fuel Cap (Charcoal Plastic) (Spurt resistant, Low profile) (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, $10-24 \times 1 / 2^{\prime \prime}$ (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 $\times 2$ " (Use as required) |
| 129 | 32589 | Key, Flywheel |
| 130 | 31843A | Bracket, Governor gear |
| 131 | 650836 | Screw, $10-24 \times 1 / 2^{\prime \prime}$ |
| 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) |
| 205 | 650561 | Screw, 1/4-20 $\times 5 / 8$ " (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 prod uction) |
| 275 | 34043 | Spring, Control lever |
| 287 | 27275 | Clip, Hi-tension wire (Use as require d) |
| 287 | 34246 | Clip, Ground wire (Use as required) |
| 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 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 show in parts list. (Refer to Division 5, Section B, page 24 for breakdown) |
| 343 | 33239A | Gasket Set (Incl. items marked*) |

Page 5 of 8 Engine Parts List \#2


| Ref \# | Part Number |
| ---: | :--- |
| 31 | 650489 |
| 34 | 27793 |
| 35 | 28942 |
| $43 A$ | 650128 |
| 56 | 31710 |
| 71 | 650815 |
| 72 | 8116 |
| 98 | 28569 |
| 99 | 29500 |
| 193 | 610118 |
| 247 C | 590343 |
| 247 B | 28301 |
| 263 | 650764 |
| 274 | 610973 |
| 308 | 31793 |
| 309 | 31855 |
| 310 | 650778 |
| 311 | 650580 |
| 312 | 31792 |
| 331 | 550223 |
| 340 | 33328 |

## Qty

Description
Screw, 1/4-20 x 5/8"
Clip, Conduit (Use as required)
Screw, 10-32 x 3/8" (Use as required)
Screw, 10-24 x 1/2"
Link, Throttle
Washer, Belleville
Nut, Hex
Spring, Compression
Screw, 8-32 x 3/4"
Cover, Spark plug (Use as required)
Rope Assy., Starter
Pulley, Rope starter
Nut, "U" Type (Use as required)
Terminal Ass'y. (As req. on late prod uction)
Bearing, Ball
Retainer, Bearing
Washer, Lock
Nut, Lock
Washer, Thrust
Decal, Name
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
Flywheel (Ring gear flywheel requiredon engines using 110-120 volt starter kits listed above)
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)
Flywheel (Minimum ring gear flywheel required on engines using 110-120 volt starter kits listed above) (Use withSolid State ignition)

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Qty Description
Lockwasher, 1/4" (Use as required)
Screw, $5 / 16-18 \times 2-1 / 2 "$ (Use as requi red)
Screw, $5 / 16-18 \times 2-1 / 4 "$ (Use as requi red)
Screw, $5 / 16-18 \times 2$ (Use as required)

* Gasket, Breather cover

Washer (Use as required)
Washer, Flat (Use as required)
Screw, 8-32 x 5/16"
Rivet, Split (Used in early productio $n$ ) Lever, Governor (New lever does not need 1 of 51,66,132,164,165,207)
Bracket, Adjusting
Exh.Adap.Kit (Incl. 58 \& 125) (Use as req.)
Screw, $5 / 16-18 \times 3 / 4 "$ (Use as require d)
Nut, Lock, 10-32
Screw, 10-32 x 3/4"
Lockwasher, \#8 E.T.
Air Cleaner Ass'y. (Incl. 60, 83, 87, 88, 89A, 90, 238 \& 331B) (Use as required)
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)

* Gasket, Air cleaner

Air Cleaner Elbow (Incl. 84B, 86A, 91, 91A, 91B \& 91C) (Use in 730561 assembly only)
Screw, 10-32 x 1/2"
Element, Air cleaner
Body, Air cleaner
Elbow, Exhaust (45 degree)
Muffler Nipple
Muffler
Opt. Spark Arrest Muffler (Incl. 196,1 97,199)
Conduit Nut
Bracket, Fuel tank
Screw, 1/4-20 x 5/8"
Fuel Line (Braided 8-1/4" 21 cm )(Use as req.)
Fuel Line (Braided 16") ( 41 cm ) (Use as req.)
Fuel Line (Braided 32") ( 81 cm ) (Use as req.)
Screw, 5/16-18 x 2" (Use as required)
Screw, 8-32 x 5/16" (Early production )
Wire Assy., Alternator adapter (4-1/4 ")
Wire Assy., Alternator adapter (6-3/4 ")
Screw, 1/4-28 x 7/8"
Exh. Adaptor Kit (Incl.125,203,204) ( As req.)
Screw, 5/16-18 x 2-1/2" (Use as requi red)
Screw, $5 / 16-18 \times 1-1 / 2 "$ (Use as requi red)
Nut, Lock
Clamp, Fuel line
Strap, Fuel tank
Screw, Hex hd. Sems, 1/4-28 x 7/16

