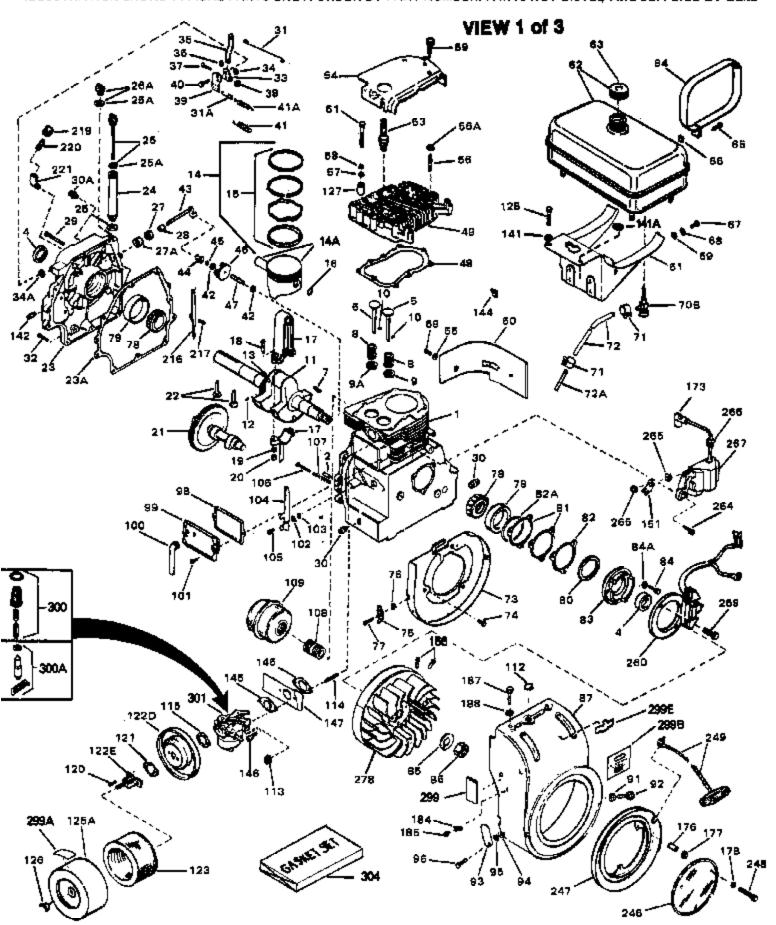
ILLUSTRATION SHOWS TYPICAL PARTS ONLY, ORDER BY PART NUMBER, PARTS NOT LISTED ARE SUPPLIED BY DEM.

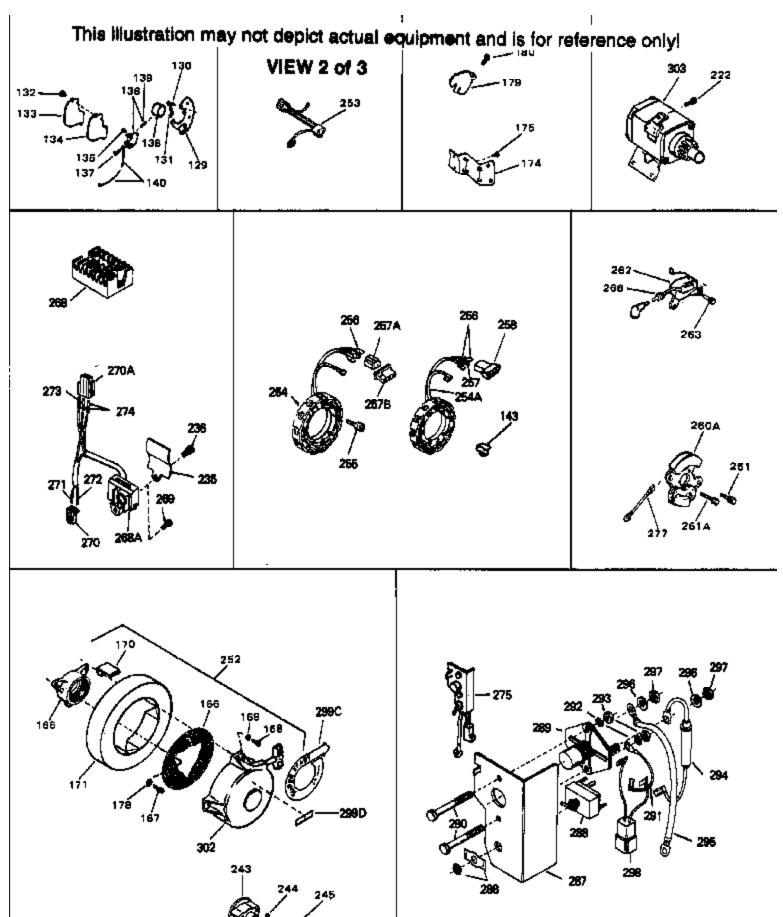


| Ref # | Part Number Qt | y Description |
|-------|----------------|---|
| 1 | | Cylinder (Incl. 2, 4, 30 & 47) (3-1/2 " Bore) |
| • | 27652 | Pin, Dowel |
| | 31950 | Seal, Oil |
| | 31940 | Intake Valve (Std.) |
| | 31941 | Intake Valve (3.0.) Intake Valve (1/32" OS) (Incl. 9) |
| | 31942 | Exhaust Valve (Std.) |
| | 31943 | Exhaust Valve (3ld.) Exhaust Valve (1/32" OS) (Incl. 9) |
| | 650592 | , , , |
| | | Key, Flywheel |
| | 31944 | Spring, Valve |
| | 31946 | Cap, Lower valve spring (1/32" OS) |
| | 31945 | Cap, Lower valve spring (Std.) |
| | 31945 | Cap, Lower valve spring (Std.) |
| | 31946 | Cap, Lower valve spring (1/32" OS) |
| | 20810 | Pin, Valve spring retainer |
| | 32358B | Crankshaft (Incl. 12, 13, 17, 78 & 79) |
| | 29783 | Pin, Crankshaft gear |
| | 31931 | Gear, Crankshaft |
| | 34511 | Piston, Pin & Ring Set (Std.) (3-1/2" Bore) |
| | 34512 | Piston, Pin & Ring Set (.010" OS) |
| | 34513 | Piston, Pin & Ring Set (.020" OS) |
| | 34524 | Piston, Pin & Ring Set (.030" OS) |
| | 34525 | Piston, Pin & Ring Set (.040" OS) |
| | 32238B | Piston & Pin Ass'y. (Std.)(Incl.16)(3 -1/2") |
| | 32239B | Piston & Pin Ass'y. (.010" OS) (Incl. 16) |
| | 32240B | Piston & Pin Ass'y. (.020" OS) (Incl. 16) |
| | 32621B | Piston & Pin Ass'y. (.030" OS) (Incl. 16) |
| | 32622B | Piston & Pin Ass'y. (.040" OS) (Incl. 16) |
| | 32241 | Ring Set (Std.) (3-1/2" Bore) |
| | 32242 | Ring Set (.010" OS) |
| | 32243 | Ring Set (.020" OS) |
| | 32625 | Ring Set (.030" OS) |
| 15 | 32626 | Ring Set (.040" OS) |
| | 32336 | Re-Ringing Set, Piston |
| 16 | 31919 | Ring, Piston pin retaining |
| | 33093A | Connecting Rod Ass'y.(Std.)(Incl.18, 19 & 20) |
| 17 | 34383 | Connecting Rod Assy.(.010" US)(Incl.1 8,19,20) |
| | 34384 | Connecting Rod Assy.(.020" US)(Incl.1 8,19,20) |
| 18 | 32077 | Bolt, Connecting rod |
| 19 | 26073 | Washer, Connecting rod |
| 20 | 28264 | Nut Assy., Lock |
| 21 | 32150 | Camshaft (MCR) |
| 22 | 31939 | Lifter, Valve |
| 23 | 32685 | Cylinder Cover (Incl.4,25,26A,28,30,3 4 & 43) |
| 23A | 31956A | * Gasket, Cylinder cover |
| 24 | 31985 | Oil Fill Tube |
| 25A | 29673 | * Gasket, Oil fill |
| 25 | 29673 | * Gasket, Oil fill tube |
| | 33070 | Dipstick (Incl. 25A) |
| 28 | 32426 | Spacer, Governor rod |
| | 650588 | Screw, 1/4-20 x 2" |
| | 31927 | Oil Drain Plug |
| | 31968 | Link, Governor |
| | 650451 | Screw, 1/4-20 x 1" |
| | 31964 | Clamp, Governor lever |
| | 29193 | Ring, Retaining |
| | 31963 | Lever, Governor adjusting |
| | 650518 | Lockwasher |
| | 650544 | Screw, 10-24 x 7/8" |
| 31 | 300011 | 55.5m, 10 2 1 X 1/6 |

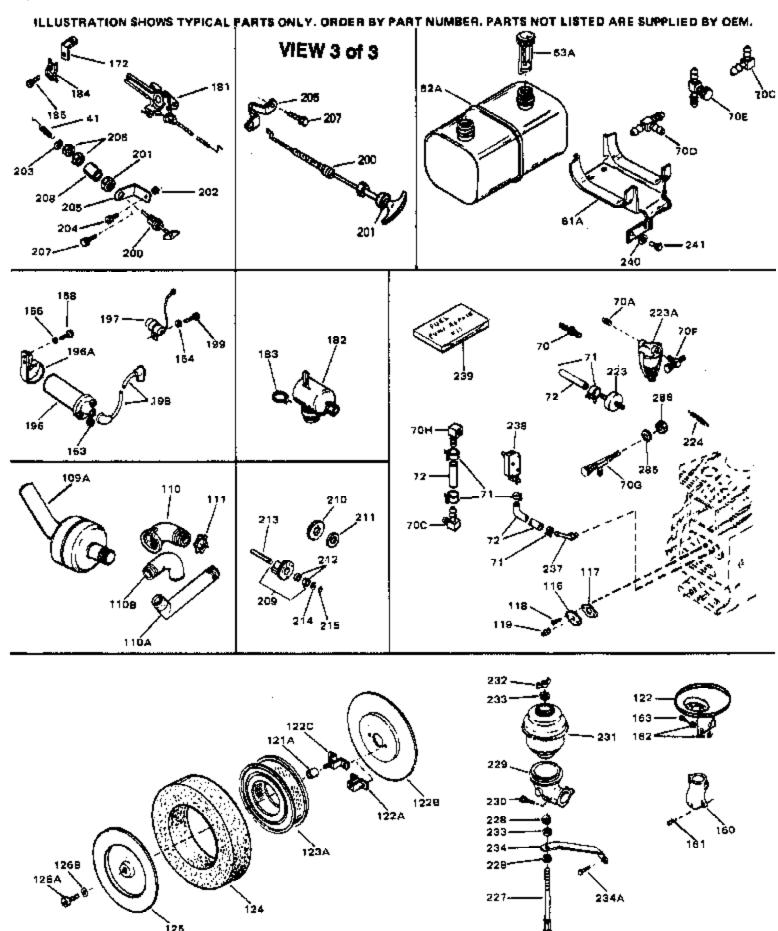
| Ref# | Part Number Qty | Description |
|------|-----------------|--|
| | 7975 | Nut, 10-24 |
| | 31965 | Plate, Governor spring |
| | 30312 | |
| | | Screw, 10-32 x 1/2" |
| | 31967 | Spring, Governor |
| | 30590A | Washer, Flat |
| | 32425 | Rod Assy., Governor |
| 44 | 31948 | Spool, Governor |
| 45 | 29193 | Ring, Retaining |
| 46 | 31947 | Gear Assy., Governor |
| | 31930 | Shaft, Mechanical Governor |
| | 32246A | * Gasket, Cylinder head |
| | 33034 | Head, Cylinder |
| | | |
| | 650694A | Screw, 5/16-18 x 2" (Use as required) |
| | 650711 | Screw, 5/16-18 x 1-5/8" (Use as requi red) |
| | 650628A | Screw, 5/16-18 x 2-3/8" (Use as requi red) |
| | 650695A | Screw, 5/16-18 x 2-1/4" (Use as requi red) |
| 51 | 650714 | Screw, 5/16-18 x 1-5/8" (Use as requi red) |
| 51 | 650697A | Screw, 5/16-18 x 2-1/2" (Use as requi red) |
| 51 | 650692 | Screw, 5/16-18 x 1-3/4" (Use as requi red) |
| 51 | 650603 | Screw, 5/16-18 x 5/8" (Use as require d) |
| | 33636 | Resistor Spark Plug (RJ-8C) |
| | 34251 | Resistor Spark Plug (RJ-17LM) |
| | 33035 | |
| | | Cover, Cylinder head |
| | 28537 | Washer, Plain |
| | 650691 | Washer, Flat (Use as required) |
| | 650690 | Washer, Belleville (Use as required) |
| | 8274 | Washer, Lock (Use as required) |
| 59 | 650128 | Screw, 10-24 x 1/2" |
| 60 | 31976 | Extension, Blower housing |
| 61 | 31978 | Bracket, Fuel tank |
| 63 | 410144B | Fuel Cap (White Plastic)(Std.)(As req uired) |
| | 34210 | Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as |
| 00 | 0.12.10 | required) |
| | | |
| | 31979 | Strap, Fuel tank |
| 65 | 650451 | Screw, 1/4-20 x 1" |
| 66 | 650456 | Nut, Flange whiz-lock, 1/4-20 |
| 67 | 650517 | Screw, 1/4-20 x 27/32" (Use as requir ed) |
| | 650561 | Screw, 1/4-20 x 5/8" (Use as required) |
| | 30063 | Screw, 1/4-20 x 1/2" (Use as required) |
| | 792028 | Screw, 5/16-18 x 7/8" (Use as require d) |
| | 8345 | Washer, Flat |
| | 8303 | Lockwasher |
| | | |
| | 29683 | Strainer & Shut-off, Fuel |
| | 26460 | Clamp, Fuel line (Use as required) |
| | 29774 | Fuel Line (Braided) (8.25") (Use as r equired) |
| | 30705 | Fuel Line (Braided) (16") (Use as req uired) |
| 72 | 30962 | Fuel Line (Braided) (32") (Use as req uired) |
| | 30965 | Fuel Line (Braided) (48") (Use as req uired) |
| | 31975 | Baffle, Blower housing |
| | 650561 | Screw, 1/4-20 x 5/8" |
| | 33356 | Terminal |
| | | |
| | 28545 | Grommet, Plastic |
| | 650760 | Screw, 8-32 x 3/8" |
| | 31932 | Bearing, Tapered roller |
| 79 | 31928 | Cup, Bearing |
| | | |

| \$0 \$2031 \$5pacer, Steel (1010* hink) NOTE: Determine the gap between the cover and the machined surbe limited to a combined total of .010* thick. Steel spacersmust be used as required 81 31971 \$1 31971 \$2 3484, \$5\text{im} (.004/.005 thick) NOTE: Determine the gap between the cover and the machined surface on the volimider which can be from .001* up to .007* in which case no shim gaskets will be required. Use of gasket must be limited to a combined total of .010* thick. Steel spacersmust be used as required 82A 32599 \$2 31972 \$3 32677 \$3 32677 \$4 650679 \$4 650688 \$4 650679 \$4 650688 \$5 crew, 10-32 x 1* \$5 650666 \$6 650594 \$7 30337 \$9 18274 \$4 650699 \$5 26073 \$6 860624 \$7 30337 \$6 860624 \$7 30337 \$7 806064 \$7 30337 \$7 806064 \$7 30337 \$7 806064 \$7 30337 \$7 806064 \$7 30407 \$7 806064 \$7 30407 \$7 806064 \$7 30507 \$7 806066 \$7 807064 \$7 30507 \$7 806066 \$7 80707 \$7 80706 | Ref # | Part Number | Qty | Description |
|--|--|--|-----|---|
| between the cover and the machined surface on the cylinder which can be from .001*up to .007" in which case no shim gaskets will be required. Use of gasket must be limited to a combined total of .010* thick. Steel spacersmust be used as req 82A 32599 "O" Ring 82 31972 "Casket, Shim (.005/.007 thick) NOTE: Determine the gap between the cover and the machined surface on the cylinder which can be from .001*up to .007" in which case no shim gaskets will be required. Use of gasket must be limited to a combined total of .010" thick. Steel spacersmust be used as req 83 32677 Cover, Cylinder NOTE: Determine the gap between the cover and the machined surface on the cylinder which can be from .001*up to .007" in which case no shim gaskets will be required. Use of gasket must be limited to a combined total of .010 thick. Steel spacersmust be used as required. Use of gasket must be limited to a combined total of .010 thick. Steel spacersmust be used as required to eliminat 84A 650679 Lockwasher, 5/16" (Use as required) 84B 650668 Screw, 10-32 x 1" 85B 650666 Washer, Lock 86 650594 Nut, Flywheel, 3/4-16 87 33037 Blower Housing 874 Washer, Lock 96 650595 Screw, 5/16-24 x 38" 93 32039 Switch, Stop 93 31957 Breather Assy. 100 35350 Tube, Breather 101 650128 Screw, 10-24 x 1/2" 102 28558 Washer, 124 x 1/2" 103 3399 Soring 106 650591 Screw, 10-24 x 5/8" 107 33099 Soring 108 32042 Nipple, Exhaust pipe 109 Muffler 109 32043B Muffler 109 32043B Hullfer | 80 | | | Spacer, Steel (.010" thick) NOTE: Determine the gap between the cover and the machined surface on the cylinder which can be from .001"up to .007" in which case no shim gaskets will be required. Use of gasket must be limited to a combined total of .010" thick. Steel spacersmust be used |
| **Gasket*, Shirn (005/.007 thick) NOTE: Determine the gap between the cover and the machined surface on the cylinder which can be from .001"up to .007" in which case no shirn gaskets will be required. Use of gasket must be limited to a combined total of .010" thick. Steel spacersmust be used as req 83 32677 | 81 | 31971 | | between the cover and the machined surface on the cylinder which can be from .001"up to .007" in which case no shim gaskets will be required. Use of gasket must be limited to a combined total of .010" thick. Steel spacersmust be used |
| and the machined surface on the cylinder which can be from .001*up to .007" in which case no shim gaskets will be required. Use of gasket must be limited to a combined total of .010" thick. Steel spacersmust be used as required to eliminat 84A 650679 84 650688 85 650666 86 650594 87 33037 88 Blower Housing 91 8274 92 650595 93 32039 94 650890 94 650890 95 26073 96 650624 98 31958 99 31957 100 35350 101 650128 102 28558 103 31966 104 31984A 105 2042 106 50597 107 33099 108 32042 109 32043B 100 Blower Housing 101 Control Use as required) 102 Basker First 103 Gasket, Breather 104 Screw, 5/16-24 x 9/16" 105 Screw, 10-24 x 1/2" 106 650597 107 33099 108 32042 109 32043B 109 Mipple, Exhaust pipe Muffler Nut, Flywheel, 3/4-16 105 Housans required) 107 Screw, 10-24 x 5/8" 108 Button (Use as required) | | | | * Gasket, Shim (.005/.007 thick) NOTE: Determine the gap between the cover and the machined surface on the cylinder which can be from .001"up to .007" in which case no shim gaskets will be required. Use of gasket must be limited to a combined total of .010" thick. Steel spacersmust be used |
| 84 650668 85 650666 Washer, Lock 86 650594 Nut, Flywheel, 3/4-16 87 33037 Blower Housing 91 8274 Washer, Lock 92 650595 Screw, 5/16-24 x 3/8" 93 32039 Switch, Stop 94 650890 Washer, Flat 96 650624 Screw, 5/16-24 x 9/16" 98 31958 "Gasket, Breather 99 31957 Breather Assy. 100 35350 Tube, Breather 101 650128 Screw, 10-24 x 1/2" 102 28558 Washer, Wave 103 31966 Bushing, Control lever 104 31984A Lever, Control 105 650597 Screw, 10-24 x 5/8" 106 650591 Screw, 10-24 x 5/8" 107 33099 Spring 108 32042 Nipple, Exhaust pipe Muffler 112 33038 Plug, Button (Use as required) | 83 | 32677 | | .001"up to .007" in which case no shim gaskets will be required. Use of gasket must be limited to a combined total of .010" thick. Steel spacersmust be used as required to |
| 114 650587 Stud, Carburetor 115 27272 * Gasket, Air cleaner 120 650399 Screw, 10-32 x 5/8" 121 30767 Spacer, Air cleaner 122D 32378 Bracket, Air cleaner | 84 85 86 87 91 92 93 94 95 96 98 99 100 101 102 103 104 105 106 107 108 109 112 113 114 115 120 121 | 650668 650594 33037 8274 650595 32039 650890 26073 650624 31958 31957 35350 650128 28558 31966 31984A 650597 650591 33099 32042 32043B 33038 29752 650587 27272 650399 30767 | | Screw, 10-32 x 1" Washer, Lock Nut, Flywheel, 3/4-16 Blower Housing Washer, Lock Screw, 5/16-24 x 3/8" Switch, Stop Washer, Shakeproof Washer, Flat Screw, 5/16-24 x 9/16" * Gasket, Breather Breather Assy. Tube, Breather Screw, 10-24 x 1/2" Washer, Wave Bushing, Control lever Lever, Control Screw, 10-24 x 5/8" Screw, 10-24 x 2" Spring Nipple, Exhaust pipe Muffler Plug, Button (Use as required) Nut & Lockwasher Assy. Stud, Carburetor * Gasket, Air cleaner Screw, 10-32 x 5/8" Spacer, Air cleaner |

| Ref # | Part Number | Qty | Description |
|-------|-------------|-----|--|
| 125A | 32009 | | Cover, Air cleaner |
| 126 | 650513 | | Nut, Wing |
| 128 | 650713 | | Screw, 5/16-18 x 5/8" (Use as require d) |
| 128 | 650429 | | Screw, 5/16-18 x 3/4" (Use as require d) |
| 128 | 792028 | | Screw, 5/16-18 x 7/8" (Use as require d) |
| 141 | 26073 | | Washer, Flat (Use as required) |
| 141A | 8274 | | Lockwasher, Split (Use as required) |
| 145 | 31960 | | * Gasket, Carburetor |
| 147 | 31959 | | Baffle, Air |
| 156 | 730201 | | Trigger Pin Kit (Use as required) |
| 173 | 610118 | | Cover, Spark plug (Use as required) |
| 177 | 8345 | | Washer, 1/4 plain (Use as required) |
| 178 | 27070 | | Washer, Lock 1/4 E.T. (Use as require d) |
| 178 | 650675 | | Washer, Flat 1/4 (Use as required) |
| 187 | 650713 | | Screw, 5/16-18 x 5/8" |
| 188 | 26073 | | Washer, Flat |
| 249 | 32046 | | Rope Assy., Starter (Use as required) |
| | 610750 | | Grommet, Lead wire |
| | 610758 | | Flywheel |
| | 34346 | | Decal, Instruction |
| | 31752 | | Decal, Air cleaner |
| | 550223 | | Decal, Name |
| | 32676 | | Decal, Solid State |
| | 32255A | | Valve, Seat, Spring & Gasket Assy. |
| 301 | 631533 | | Carburetor (Incl. 145) (Refer to Division 5, Section A, page 94 for breakdown) |
| 304 | 33237A | | * Gasket Set (Incl. items marked *) |



| Ref # | Part Number | Qty | Description |
|-------|-------------|-----|--|
| 165 | 32048 | | Hub, Starter |
| 166 | 32049 | | Screen, Starter hub |
| 167 | 650516 | | Screw, 1/4-20 x 1-1/8" |
| 168 | 650598 | | Screw, 1/4-28 x 3/4" |
| 169 | 8345 | | Washer, Flat |
| | 27070 | | Washer, Lock 1/4 E.T. (Use as require d) |
| | 650675 | | Washer, Flat 1/4 (Use as required) |
| | 650701 | | Screw, 8-18 x 7/16" (Use as required) |
| | 792028 | | Screw, 5/16-18 x 7/8" (Use w/32817 st r.motor) |
| | 650781 | | Screw,5/16-18 x 11/16"(Use w/33835 st r.motor) |
| 235 | 34276 | | Plate, Cover (Use as required to cover regulator mounting |
| | | | hole in blower housing) |
| 236 | 650736 | | Screw, 10-16 x 3/8" (Use as required) |
| 252 | 730134 | | Rewind Starter Kit (Incl. 165, 166, 167, 168, 169 & 291) (Use |
| | | | as required) |
| 253 | 33018 | | Harness Assy., Adapter (Use as requir ed) |
| | 610824 | | Flat Connector (Female terminals) (As req.) |
| | 610759 | | Solid State Magneto |
| | 650489 | | Screw, 1/4-20 x 5/8" |
| 261A | 650669 | | Screw, 5/16-18 x 1-1/4" |
| 262 | 610760 | | Solid State Transformer Ass'y.(Incl.1 73,266) |
| 263 | 650561 | | Screw, 1/4-20 x 5/8" |
| 266 | 610750 | | Grommet, Lead wire |
| 275 | 730198 | | Starter Switch Kit(Incl. 287-298) (As req.) |
| | 30831 | | Ground Wire (Incl. 75) |
| 302 | 590405 | | Rewind Starter (Refer to Division 5, Section C, page 24 for breakdown) |



| Ref # | Part Number | Qty | Description |
|-------|-------------|-----|--|
| 41 | 31967 | | Spring, Governor |
| 62A | 31977 | | Fuel Tank (Incl. 63) |
| 70 | 29634 | | Fitting, Fuel line |
| 71 | 26460 | | Clamp, Fuel line (Use as required) |
| 72 | 29774 | | Fuel Line (Braided) (8.25") (Use as r equired) |
| 72 | 30705 | | Fuel Line (Braided) (16") (Use as req uired) |
| 72 | 30962 | | Fuel Line (Braided) (32") (Use as req uired) |
| 72 | 30965 | | Fuel Line (Braided) (48") (Use as req uired) |
| 119 | 28534 | | Pipe Plug, 1/8-27 (Use as required) |
| 119 | 9556 | | Plug, Pipe, 1/8-27 (Use as required) |
| 123A | 32008 | | Element, Air cleaner |