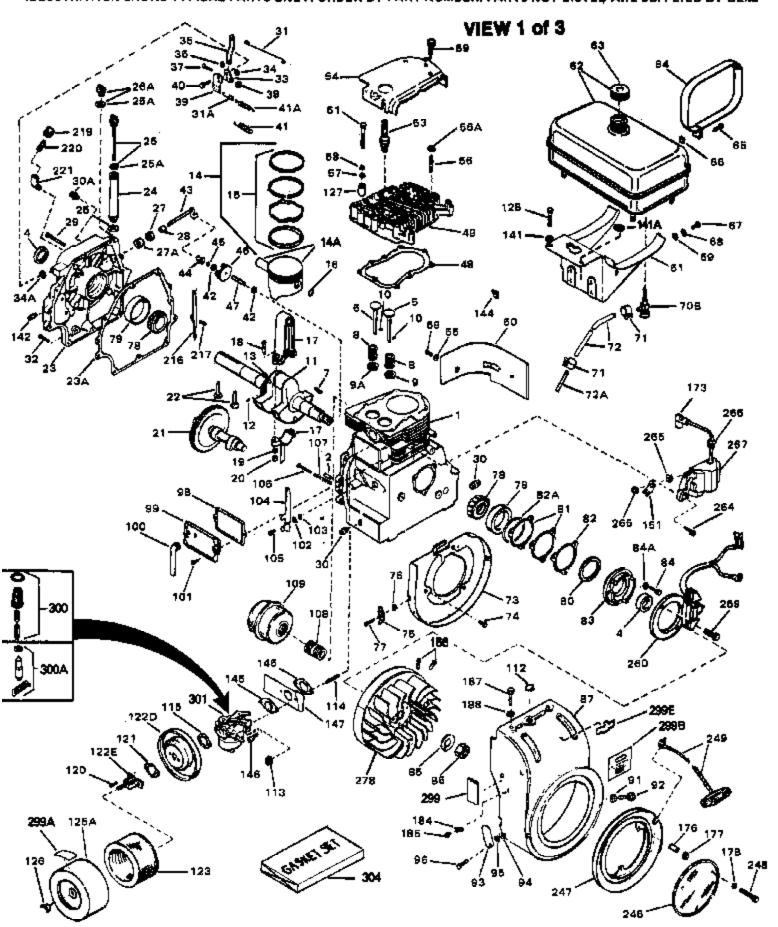
## ILLUSTRATION SHOWS TYPICAL PARTS ONLY, ORDER BY PART NUMBER, PARTS NOT LISTED ARE SUPPLIED BY DEM.

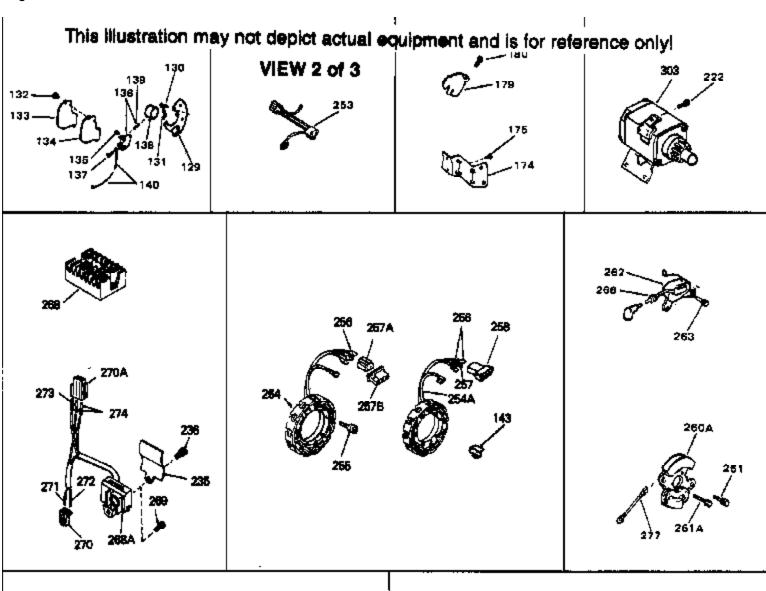


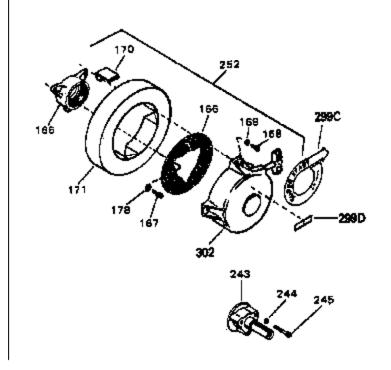
| Ref # | Part Number Q    | ty Description                                    |
|-------|------------------|---|
|       | 33039            | Cylinder (Incl.2,4,30,47,119) (3-5/16 ")          |
|       | 27652            | Pin, Dowel  |
|       | 31950            | Seal, Oil   |
|       |                  |   |
|       | 31940            | Intake Valve (Std.)                               |
|       | 31941            | Intake Valve (1/32" OS) (Incl. 9)                 |
|       | 31942            | Exhaust Valve (Std.)                              |
|       | 31943            | Exhaust Valve (1/32" OS) (Incl. 9)                |
|       | 650592           | Key, Flywheel                                     |
| 8     | 31944            | Spring, Valve                                     |
| 9A    | 31945            | Cap, Lower valve spring (Std.)                    |
| 9A    | 31946            | Cap, Lower valve spring (1/32" OS)                |
| 9     | 31946            | Cap, Lower valve spring (1/32" OS)                |
|       | 31945            | Cap, Lower valve spring (Std.)                    |
|       | 20810            | Pin, Valve spring retainer                        |
|       | 32331B           | Crankshaft (Incl. 12, 13, 17, 78 & 79 )           |
|       | 29783            | Pin, Crankshaft gear                              |
|       | 31931            | Gear, Crankshaft                                  |
|       |                  |   |
|       | 34508            | Piston, Pin & Ring Set (Std.) (3-5/16 " Bore)     |
|       | 34509            | Piston, Pin & Ring Set (.010" OS)                 |
|       | 34510            | Piston, Pin & Ring Set (.020" OS)                 |
|       | 34850            | Piston, Pin & Ring Set (.030" OS)                 |
|       | 34523            | Piston, Pin & Ring Set (.040" OS)                 |
| 14    | 32620B           | Piston & Pin Ass'y. (.040" OS) (Incl. 16)         |
| 14A   | 32001C           | Piston & Pin Ass'y. (Std.)(Incl.16)(3 -5/16")     |
| 14A   | 32002B           | Piston & Pin Ass'y. (.010" OS) (Incl. 16)         |
| 14A   | 32003B           | Piston & Pin Ass'y. (.020" OS) (Incl. 16)         |
| 14A   | 32619B           | Piston & Pin Ass'y. (.030" OS) (Incl. 16)         |
|       | 32004            | Ring Set (Std.) (3-5/16" Bore)                    |
|       | 32005            | Ring Set (.010" OS)                               |
|       | 32006            | Ring Set (.020" OS)                               |
|       | 32623            | Ring Set (.030" OS)                               |
|       | 32624            | Ring Set (.040" OS)                               |
|       | 32321            | Re-Ringing Set, Piston                            |
|       | 31919            | Ring, Piston pin retaining                        |
|       | 33093A           | Connecting Rod Ass'y.(Std.)(Incl.18, 19 & 20)     |
|       | 34383            |   |
|       |                  | Connecting Rod Assy. (.010" US) (Incl. 1 8,19,20) |
|       | 34384            | Connecting Rod Assy.(.020" US)(Incl.1 8,19,20)    |
|       | 32077            | Bolt, Connecting rod                              |
|       | 26073            | Washer, Connecting rod                            |
|       | 28264            | Nut Assy., Lock                                   |
|       | 32150            | Camshaft (MCR)                                    |
|       | 31939            | Lifter, Valve                                     |
|       | 31956A           | * Gasket, Cylinder cover                          |
| 23    | 32580A           | Cover, Cylinder (Incl. 4, 28, 30, 34, & 43)       |
| 25A   | 29673            | * Gasket, Oil fill                                |
| 25A   | 35499            | "O" Ring  |
| 26    | 33069            | 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<br>650544 | Lockwasher  |
|       | 650544           | Screw, 10-24 x 7/8"                               |
| 38    | 7975             | Nut, 10-24  |

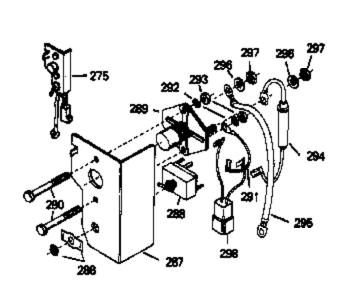
| Ref # | Part Number      | Otv | Description  |
|-------|------------------|-----|--|
|       | 31965            | Qıy | Plate, Governor spring   |
|       | 30312            |     | Screw, 10-32 x 1/2"  |
|       | 31967            |     | Spring, Governor   |
|       | 30590A           |     | Washer, Flat   |
|       | 32425            |     |  |
|       |                  |     | Rod Assy., Governor  |
|       | 31948            |     | Spool, Governor  |
|       | 29193            |     | Ring, Retaining  |
|       | 31947            |     | Gear Assy., Governor   |
|       | 31930            |     | Shaft, Mechanical Governor                                     |
|       | 32000A           |     | * Gasket, Cylinder head  |
|       | 33034            |     | Head, Cylinder   |
| 51    | 650694A          |     | Screw, 5/16-18 x 2" (Use as required)                          |
| 51    | 650711           |     | Screw, 5/16-18 x 1-5/8" (Use as requi red)                     |
| 51    | 650628A          |     | Screw, 5/16-18 x 2-3/8" (Use as requi red)                     |
| 51    | 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 required)                      |
|       | 650697A          |     | Screw, 5/16-18 x 2-1/2" (Use as requi red)                     |
|       | 650692           |     | Screw, 5/16-18 x 1-3/4" (Use as requi red)                     |
|       | 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)                                 |
|       | 650128           |     | Screw, 10-24 x 1/2"  |
|       | 31976            |     | Extension, Blower housing                                      |
|       | 410144B          |     | Fuel Cap (White Plastic)(Std.)(As req uired)                   |
| 63    | 34210            |     | Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as |
|       |                  |     | required)  |
| 64    | 31979            |     | Strap, Fuel tank   |
|       |                  |     | Screw, 1/4-20 x 1"   |
|       | 650451<br>650456 |     |  |
|       | 650456           |     | Nut, Flange whiz-lock, 1/4-20                                  |
|       | 650517           |     | Screw, 1/4-20 x 27/32" (Use as required)                       |
|       | 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)                       |
|       | 26460            |     | Clamp, Fuel line (Use as required)                             |
|       | 30965            |     | Fuel Line (Braided) (48") (Use as req uired)                   |
|       | 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)                   |
| 73    | 31975            |     | Baffle, Blower housing   |
| 74    | 650561           |     | Screw, 1/4-20 x 5/8"   |
| 75    | 33356            |     | Terminal   |
| 76    | 28545            |     | Grommet, Plastic   |
|       | 650760           |     | Screw, 8-32 x 3/8"   |
|       | 31932            |     | Bearing, Tapered roller  |
|       | 31928            |     | Cup, Bearing   |
|       | 32031            |     | Spacer, Steel (.010" thick) NOTE: Determine the gap            |
| 50    |                  |     | 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  |

| Ref #  | Part Number Qty  | Description   |
|--|--|---|
|  | 31971 Gty  | * Gasket, Shim (.004/.005 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   |
| 82   | 31972  | * 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 as req   |
|  | 32599<br>32677   | "O" Ring 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 to eliminat  |
| 84<br>85<br>86<br>87<br>91<br>92<br>93<br>94<br>95<br>96<br>98<br>99<br>100<br>101<br>105<br>108<br>109<br>112<br>113<br>114<br>115<br>120<br>121<br>122E<br>122D<br>125A<br>126<br>128<br>128 | 650679 650668 650666 650594 33037 8274 650595 32039 650890 26073 650624 31958 31957 35350 650128 650597 32143 32043B 33038 29752 650587 27272 650399 30767 32376 32378 32009 650513 650713 650429 792028 26073 | Lockwasher, 5/16" (Use as required) 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" Screw, 10-24 x 5/8" 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 Bracket, Air cleaner Bracket, Air cleaner Cover, Air cleaner Nut, Wing Screw, 5/16-18 x 5/8" (Use as require d) Screw, 5/16-18 x 3/4" (Use as require d) Screw, 5/16-18 x 7/8" (Use as require d) Screw, 5/16-18 x 7/8" (Use as require d) Washer, Flat (Use as required) |
| 145<br>147<br>156  | 8274<br>31960<br>31959<br>730201<br>610118   | Lockwasher, Split (Use as required)  * Gasket, Carburetor  Baffle, Air  Trigger Pin Kit (Use as required)  Cover, Spark plug (Use as required)  |

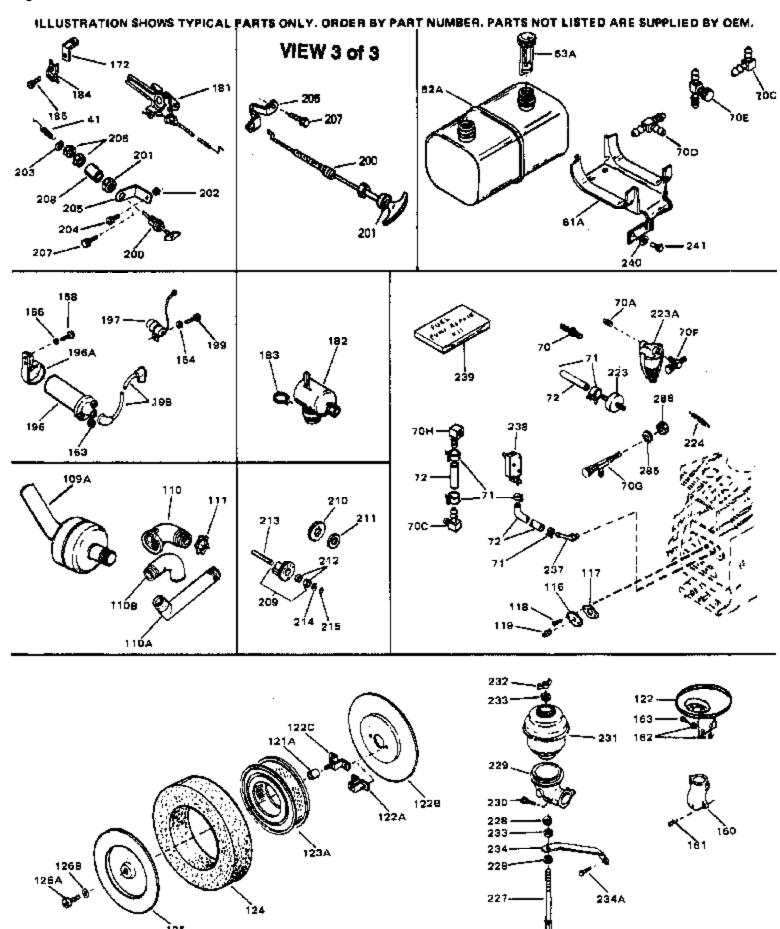
| Ref # | Part Number | Qty | Description  |
|-------|-------------|-----|--|
| 177   | 8345        |     | Washer, 1/4 plain (Use as required)  |
| 178   | 27070       |     | Washer, Lock 1/4 E.T. (Use as require d)                                       |
| 178   | 650675      |     | Washer, Flat 1/4 (Use as required)   |
| 184   | 27793       |     | Clip, Conduit  |
| 185   | 28942       |     | Screw, 10-32 x 3/8"  |
| 187   | 650713      |     | Screw, 5/16-18 x 5/8"  |
| 188   | 26073       |     | Washer, Flat   |
| 249   | 32046       |     | Rope Assy., Starter (Use as required)  |
| 266   | 610750      |     | Grommet, Lead wire   |
| 278   | 610758      |     | Flywheel   |
| 299A  | 31752       |     | Decal, Air cleaner   |
| 299   | 34346       |     | Decal, Instruction   |
| 299B  | 550223      |     | Decal, Name  |
| 299B  | 32676       |     | Decal, Solid State   |
| 300   | 32255A      |     | Valve, Seat, Spring & Gasket Assy.   |
| 301   | 631564      |     | 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   |
| 178   | 27070         |     | Washer, Lock 1/4 E.T. (Use as require d)                               |
| 178   | 650675        |     | Washer, Flat 1/4 (Use as required)                                     |
| 180   | 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"   |
|       | 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.)                            |
| 277   | 30831         |     | Ground Wire (Incl. 75)   |
| 302   | 590405        |     | Rewind Starter (Refer to Division 5, Section C, page 24 for breakdown) |



| Ref # | Part Number C | Oty Description                                |
|-------|---------------|--|
| 41    | 31967         | Spring, Governor                               |
| 70    | 29634         | Fitting, Fuel line                             |
| 71    | 26460         | Clamp, Fuel line (Use as required)             |
| 72    | 30965         | Fuel Line (Braided) (48") (Use as req uired)   |
| 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)   |
| 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                           |
| 172   | 31990         | Bracket, Choke control                         |
| 184   | 27793         | Clip, Conduit                                  |
| 185   | 28942         | Screw, 10-32 x 3/8"                            |
| 200   | 32421         | Control Assy., Speed (Incl. 206)               |
| 201   | 650641        | Nut, Jam                                       |
| 202   | 27070         | Lockwasher                                     |
| 203   | 32420         | Retainer, Control rod                          |
|       | 29716         | Screw, 1/4-28 x 7/16"                          |
| 205   | 32419         | Bracket, Speed control                         |
| 206   | 650456        | Nut, Flanged whiz-lock                         |