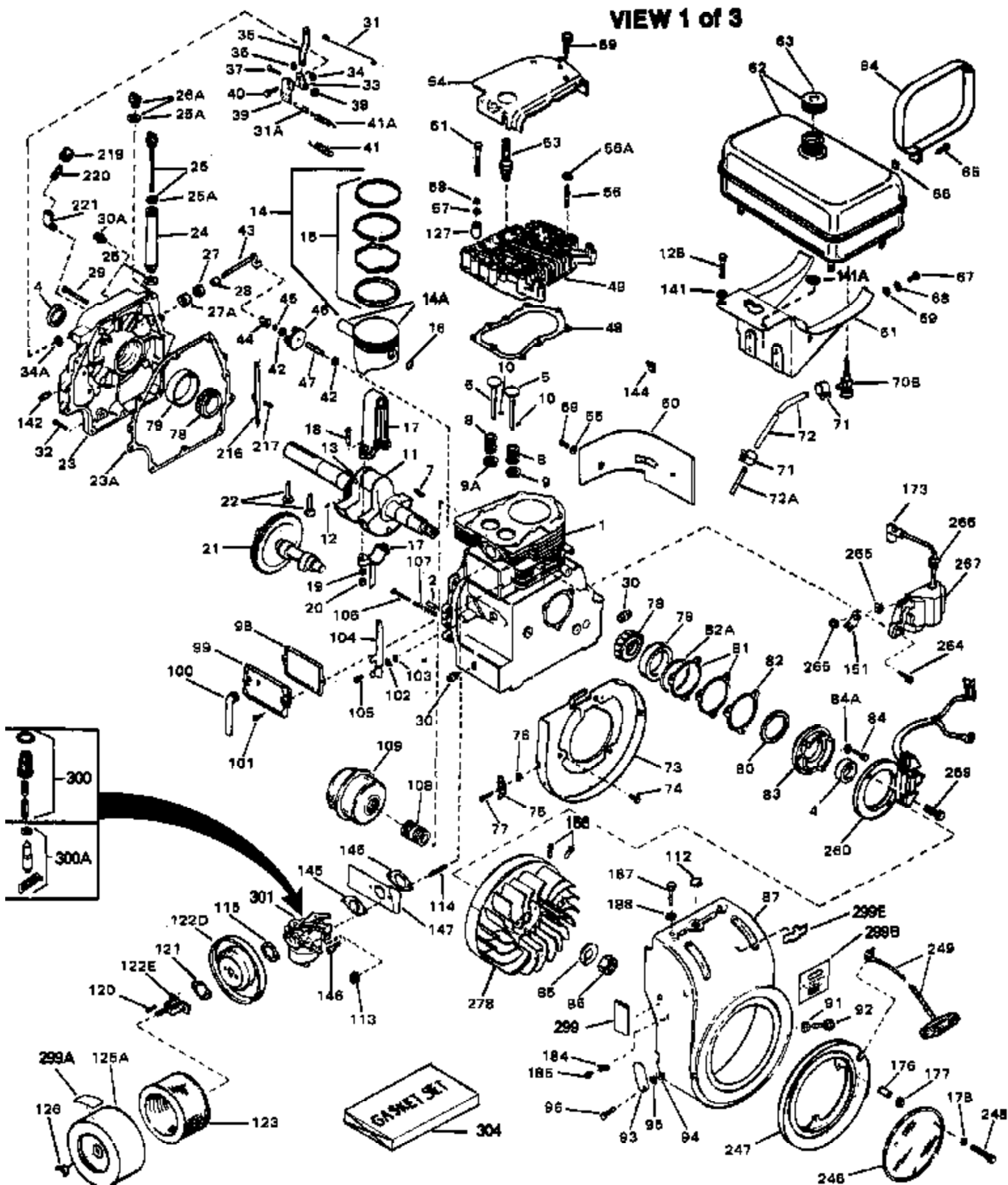


ILLUSTRATION SHOWS TYPICAL PARTS ONLY. ORDER BY PART NUMBER. PARTS NOT LISTED ARE SUPPLIED BY OEM.



| Ref # | Part Number | Qty | Description                                    |
|-------|-------------|-----|------------------------------------------------|
| 1     | 33039       |     | Cylinder (Incl.2,4,30,47,119) (3-5/16 ")       |
| 2     | 27652       |     | Pin, Dowel                                     |
| 4     | 31950       |     | Seal, Oil                                      |
| 5     | 31940       |     | Intake Valve (Std.)                            |
| 5     | 31941       |     | Intake Valve (1/32" OS) (Incl. 9)              |
| 6     | 31942       |     | Exhaust Valve (Std.)                           |
| 6     | 31943       |     | Exhaust Valve (1/32" OS) (Incl. 9)             |
| 7     | 650592      |     | Key, Flywheel                                  |
| 8     | 31944       |     | Spring, Valve                                  |
| 9     | 31946       |     | Cap, Lower valve spring (1/32" OS)             |
| 9     | 31945       |     | Cap, Lower valve spring (Std.)                 |
| 9A    | 31945       |     | Cap, Lower valve spring (Std.)                 |
| 9A    | 31946       |     | Cap, Lower valve spring (1/32" OS)             |
| 10    | 20810       |     | Pin, Valve spring retainer                     |
| 11    | 33397A      |     | Crankshaft (Incl. 12, 13, 78 & 79)             |
| 12    | 29783       |     | Pin, Crankshaft gear                           |
| 13    | 31931       |     | Gear, Crankshaft                               |
| 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)      |
| 14    | 34508       |     | Piston, Pin & Ring Set (Std.) (3-5/16 " Bore)  |
| 14    | 34509       |     | Piston, Pin & Ring Set (.010" OS)              |
| 14    | 34510       |     | Piston, Pin & Ring Set (.020" OS)              |
| 14    | 34850       |     | Piston, Pin & Ring Set (.030" OS)              |
| 14    | 34523       |     | Piston, Pin & Ring Set (.040" OS)              |
| 14    | 32620B      |     | Piston & Pin Ass'y. (.040" OS) (Incl. 16)      |
| 15    | 32004       |     | Ring Set (Std.) (3-5/16" Bore)                 |
| 15    | 32005       |     | Ring Set (.010" OS)                            |
| 15    | 32006       |     | Ring Set (.020" OS)                            |
| 15    | 32623       |     | Ring Set (.030" OS)                            |
| 15    | 32624       |     | Ring Set (.040" OS)                            |
| 15    | 32321       |     | Re-Ringing Set, Piston                         |
| 16    | 31919       |     | Ring, Piston pin retaining                     |
| 17    | 33093A      |     | Connecting Rod Ass'y.(Std.)(Incl.18, 19 & 20)  |
| 17    | 34383       |     | Connecting Rod Assy.(.010" US)(Incl.1 8,19,20) |
| 17    | 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                       |
| 25A   | 29673       |     | * Gasket, Oil fill                             |
| 25A   | 35499       |     | "O" Ring                                       |
| 26    | 33069       |     | Dipstick (Incl. 25A)                           |
| 28    | 32426       |     | Spacer, Governor rod                           |
| 29    | 650588      |     | Screw, 1/4-20 x 2"                             |
| 30    | 31927       |     | Oil Drain Plug                                 |
| 31    | 31968       |     | Link, Governor                                 |
| 32    | 650451      |     | Screw, 1/4-20 x 1"                             |
| 33    | 31964       |     | Clamp, Governor lever                          |
| 34    | 29193       |     | Ring, Retaining                                |
| 35    | 31963       |     | Lever, Governor adjusting                      |
| 36    | 650518      |     | Lockwasher                                     |
| 37    | 650544      |     | Screw, 10-24 x 7/8"                            |
| 38    | 7975        |     | Nut, 10-24                                     |

| Ref # | Part Number | Qty | Description                                                                                                                                                                                                                                                                                                 |
|-------|-------------|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 39    | 31965       |     | Plate, Governor spring                                                                                                                                                                                                                                                                                      |
| 40    | 30312       |     | Screw, 10-32 x 1/2"                                                                                                                                                                                                                                                                                         |
| 41    | 31967       |     | Spring, Governor                                                                                                                                                                                                                                                                                            |
| 42    | 30590A      |     | Washer, Flat                                                                                                                                                                                                                                                                                                |
| 43    | 32425       |     | Rod Assy., Governor                                                                                                                                                                                                                                                                                         |
| 44    | 31948       |     | Spool, Governor                                                                                                                                                                                                                                                                                             |
| 45    | 29193       |     | Ring, Retaining                                                                                                                                                                                                                                                                                             |
| 46    | 31947       |     | Gear Assy., Governor                                                                                                                                                                                                                                                                                        |
| 47    | 31930       |     | Shaft, Mechanical Governor                                                                                                                                                                                                                                                                                  |
| 48    | 32000A      |     | * Gasket, Cylinder head                                                                                                                                                                                                                                                                                     |
| 49    | 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 required)                                                                                                                                                                                                                                                                   |
| 51    | 650628A     |     | Screw, 5/16-18 x 2-3/8" (Use as required)                                                                                                                                                                                                                                                                   |
| 51    | 650695A     |     | Screw, 5/16-18 x 2-1/4" (Use as required)                                                                                                                                                                                                                                                                   |
| 51    | 650714      |     | Screw, 5/16-18 x 1-5/8" (Use as required)                                                                                                                                                                                                                                                                   |
| 51    | 650697A     |     | Screw, 5/16-18 x 2-1/2" (Use as required)                                                                                                                                                                                                                                                                   |
| 51    | 650692      |     | Screw, 5/16-18 x 1-3/4" (Use as required)                                                                                                                                                                                                                                                                   |
| 51    | 650603      |     | Screw, 5/16-18 x 5/8" (Use as required)                                                                                                                                                                                                                                                                     |
| 53    | 33636       |     | Resistor Spark Plug (RJ-8C)                                                                                                                                                                                                                                                                                 |
| 53    | 34251       |     | Resistor Spark Plug (RJ-17LM)                                                                                                                                                                                                                                                                               |
| 54    | 33035       |     | Cover, Cylinder head                                                                                                                                                                                                                                                                                        |
| 55    | 28537       |     | Washer, Plain                                                                                                                                                                                                                                                                                               |
| 57    | 650691      |     | Washer, Flat (Use as required)                                                                                                                                                                                                                                                                              |
| 58    | 650690      |     | Washer, Belleville (Use as required)                                                                                                                                                                                                                                                                        |
| 58    | 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 required)                                                                                                                                                                                                                                                                 |
| 63    | 34210       |     | Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as required)                                                                                                                                                                                                                                    |
| 64    | 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 required)                                                                                                                                                                                                                                                                    |
| 67    | 650561      |     | Screw, 1/4-20 x 5/8" (Use as required)                                                                                                                                                                                                                                                                      |
| 67    | 30063       |     | Screw, 1/4-20 x 1/2" (Use as required)                                                                                                                                                                                                                                                                      |
| 67    | 792028      |     | Screw, 5/16-18 x 7/8" (Use as required)                                                                                                                                                                                                                                                                     |
| 70B   | 29683       |     | Strainer & Shut-off, Fuel                                                                                                                                                                                                                                                                                   |
| 71    | 26460       |     | Clamp, Fuel line (Use as required)                                                                                                                                                                                                                                                                          |
| 72    | 29774       |     | Fuel Line (Braided) (8.25") (Use as required)                                                                                                                                                                                                                                                               |
| 72    | 30705       |     | Fuel Line (Braided) (16") (Use as required)                                                                                                                                                                                                                                                                 |
| 72    | 30962       |     | Fuel Line (Braided) (32") (Use as required)                                                                                                                                                                                                                                                                 |
| 72    | 30965       |     | Fuel Line (Braided) (48") (Use as required)                                                                                                                                                                                                                                                                 |
| 73    | 32579       |     | Baffle, Blower housing                                                                                                                                                                                                                                                                                      |
| 74    | 650561      |     | Screw, 1/4-20 x 5/8"                                                                                                                                                                                                                                                                                        |
| 78    | 31932       |     | Bearing, Tapered roller                                                                                                                                                                                                                                                                                     |
| 79    | 31928       |     | Cup, Bearing                                                                                                                                                                                                                                                                                                |
| 80    | 32031       |     | 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 spacers must be used as required |

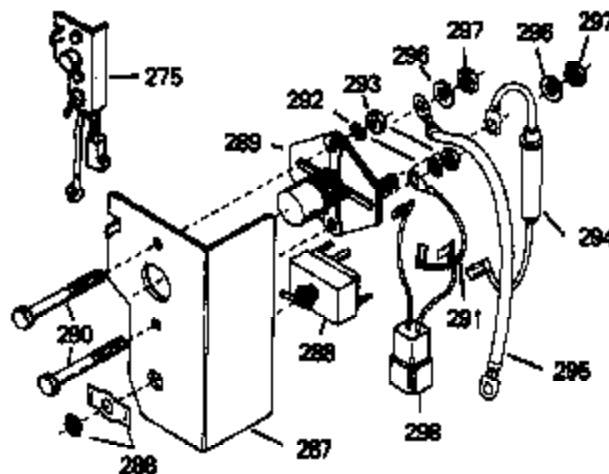
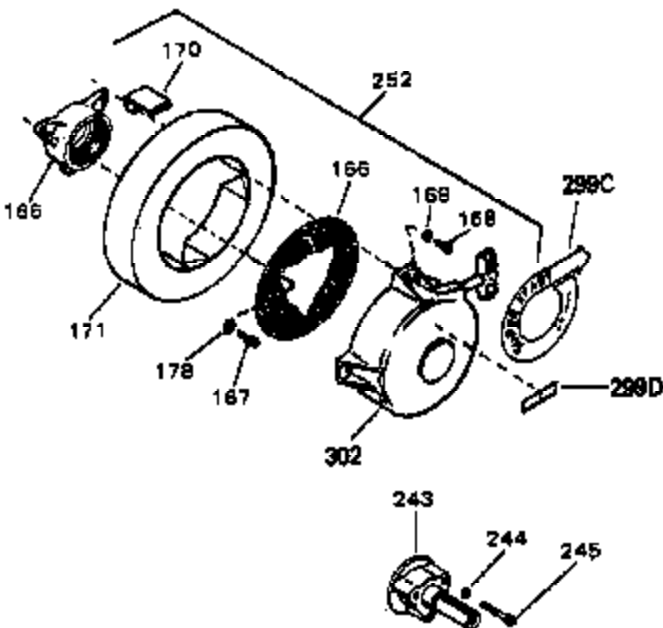
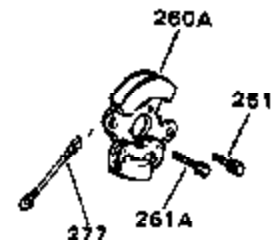
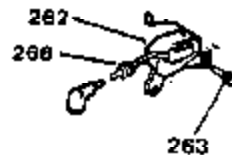
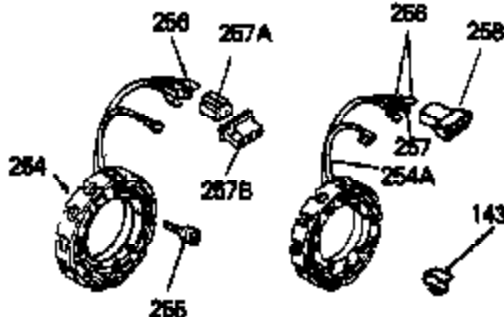
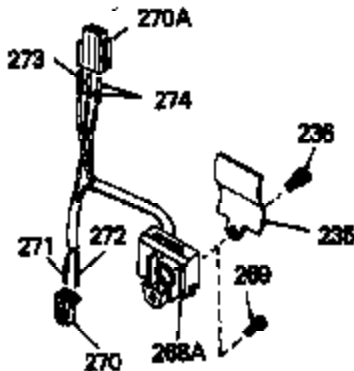
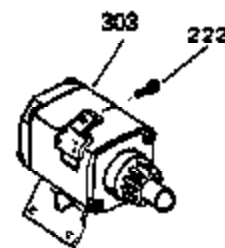
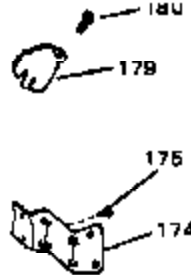
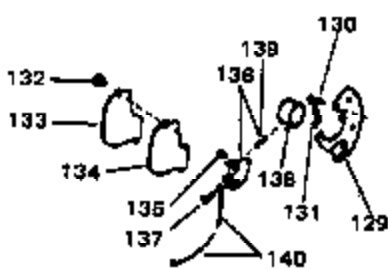
| Ref # | Part Number | Qty | Description                                                                                                                                                                                                                                                                                                |
|-------|-------------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 81    | 31971       |     | * 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 spacers must 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 spacers must be used as req |
| 82A   | 32599       |     | "O" Ring                                                                                                                                                                                                                                                                                                   |
| 83    | 32577       |     | 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 spacers must be used as required to eliminat |
| 84    | 792028      |     | Screw, 5/16-18 x 7/8"                                                                                                                                                                                                                                                                                      |
| 84A   | 650679      |     | Lockwasher, 5/16" (Use as required)                                                                                                                                                                                                                                                                        |
| 85    | 650666      |     | Washer, Lock                                                                                                                                                                                                                                                                                               |
| 86    | 650594      |     | Nut, Flywheel, 3/4-16                                                                                                                                                                                                                                                                                      |
| 87    | 33044A      |     | Blower Hsg. (Incl.73) (For electric s tarter)                                                                                                                                                                                                                                                              |
| 91    | 8274        |     | Washer, Lock                                                                                                                                                                                                                                                                                               |
| 92    | 650595      |     | Screw, 5/16-24 x 3/8"                                                                                                                                                                                                                                                                                      |
| 95    | 8274        |     | Washer, Lock                                                                                                                                                                                                                                                                                               |
| 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 2"                                                                                                                                                                                                                                                                                          |
| 107   | 33099       |     | Spring                                                                                                                                                                                                                                                                                                     |
| 112   | 33038       |     | Plug, Button (Use as required)                                                                                                                                                                                                                                                                             |
| 113   | 29752       |     | Nut & Lockwasher Assy.                                                                                                                                                                                                                                                                                     |
| 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                                                                                                                                                                                                                                                                                       |
| 122E  | 32376       |     | Bracket, Air cleaner                                                                                                                                                                                                                                                                                       |
| 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)                                                                                                                                                                                                                                                                   |
| 141A  | 8274        |     | Lockwasher, Split (Use as required)                                                                                                                                                                                                                                                                        |
| 141   | 26073       |     | Washer, Flat (Use as required)                                                                                                                                                                                                                                                                             |
| 145   | 31960       |     | * Gasket, Carburetor                                                                                                                                                                                                                                                                                       |
| 147   | 31959       |     | Baffle, Air                                                                                                                                                                                                                                                                                                |
| 151   | 33356       |     | Terminal, Ground                                                                                                                                                                                                                                                                                           |

## Engine Parts List #1

| Ref # | Part Number | Qty | Description                                                                    |
|-------|-------------|-----|--------------------------------------------------------------------------------|
| 156   | 730201      |     | Trigger Pin Kit (Use as required)                                              |
| 173   | 610118      |     | Cover, Spark plug (Use as required)                                            |
| 176   | 31992       |     | Spacer, Screen                                                                 |
| 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                                                                   |
| 246   | 33776       |     | Screen, Starter pulley                                                         |
| 247   | 31980       |     | Pulley, Starter                                                                |
| 248   | 650680      |     | Screw, 1/4-20 x 1-1/2"                                                         |
| 249   | 32046       |     | Rope Assy., Starter (Use as required)                                          |
| 264   | 650661      |     | Screw, 1/4-20 x 3/4"                                                           |
| 265   | 610408      |     | Nut, Hex                                                                       |
| 266   | 610750      |     | Grommet, Lead wire                                                             |
| 267   | 610748      |     | Solid State Magneto (Incl.151,173,265 ,266)                                    |
| 278   | 610746      |     | Solid State 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 *)                                            |

This illustration may not depict actual equipment and is for reference only!

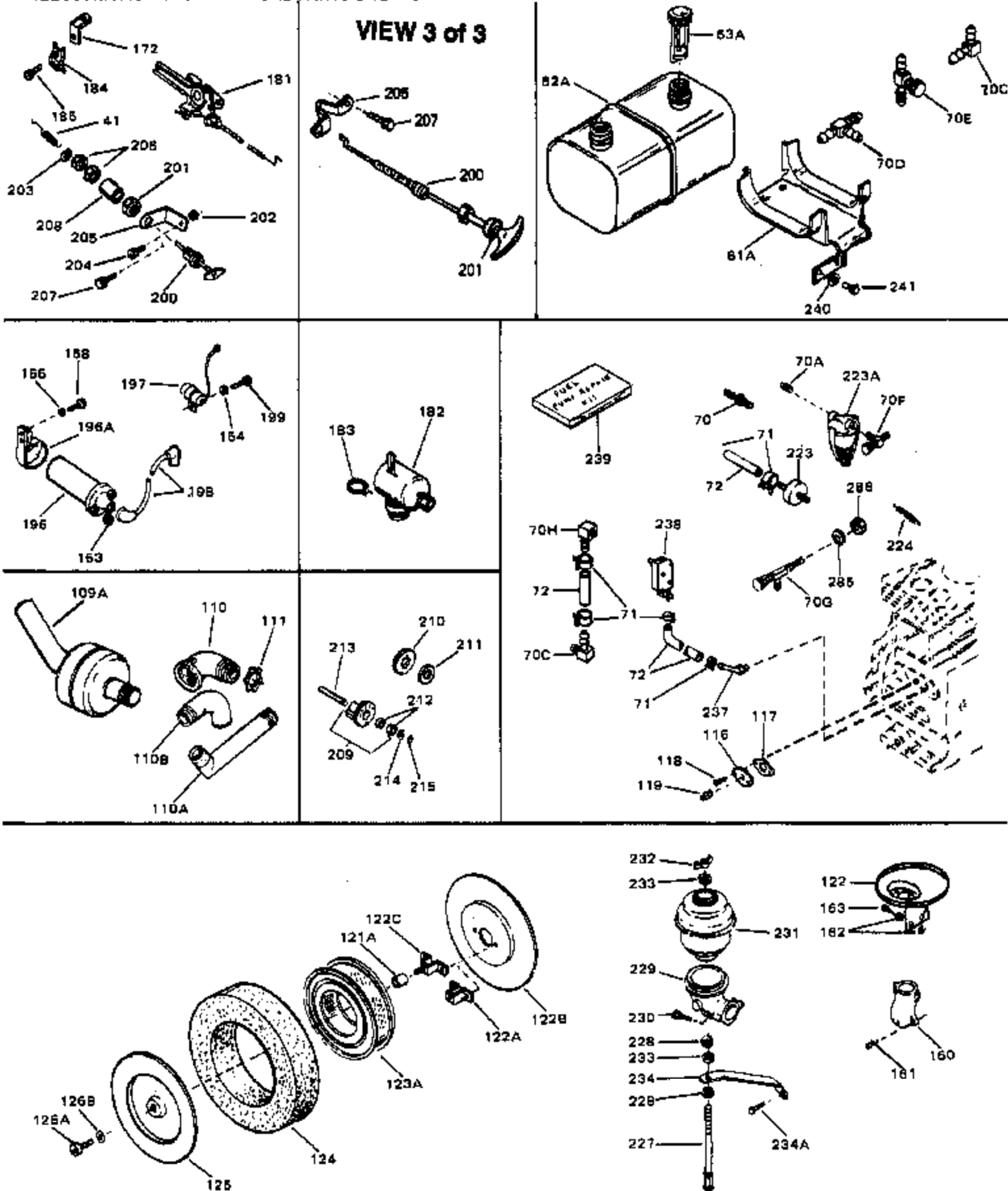
VIEW 2 of 3



## Engine Parts List #2

| Ref # | Part Number | Qty | Description                                                                                                                                                                                                                                             |
|-------|-------------|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 143   | 27275       |     | Clip, Wire retaining                                                                                                                                                                                                                                    |
| 178   | 27070       |     | Washer, Lock 1/4 E.T. (Use as required)                                                                                                                                                                                                                 |
| 178   | 650675      |     | Washer, Flat 1/4 (Use as required)                                                                                                                                                                                                                      |
| 180   | 650701      |     | Screw, 8-18 x 7/16" (Use as required)                                                                                                                                                                                                                   |
| 222   | 792028      |     | Screw, 5/16-18 x 7/8" (Use w/32817 st r.motor)                                                                                                                                                                                                          |
| 222   | 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 required)                                                                                                                                                                                                                |
| 254   | 610761      |     | Alternator Coil (Solid State) (10 Amp) (Incl. Nos. 253, 256 & 257A)                                                                                                                                                                                     |
| 255   | 650416      |     | Screw, 10-32 x 1"                                                                                                                                                                                                                                       |
| 257B  | 610824      |     | Flat Connector (Female terminals) (As req.)                                                                                                                                                                                                             |
| 257A  | 610819      |     | Connector, Pyramid (For female terminals)                                                                                                                                                                                                               |
| 266   | 610750      |     | Grommet, Lead wire                                                                                                                                                                                                                                      |
| 268   | 610749      |     | Solid State Regulator (10 Amp)                                                                                                                                                                                                                          |
| 275   | 730198      |     | Starter Switch Kit (Incl. 287-298) (As req.)                                                                                                                                                                                                            |
| 303   | 33835       |     | Electric Starter Motor (12 Volt) NOTE: The 32817 and 33835 starter motors are used interchangeably on the se models. Refer to service number stamped on end cap of motor, or on decal for identification. Refer to Division 5, Section D for breakdown. |

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



## Engine Parts List #3

| 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 required) |
| 72    | 30705       |     | Fuel Line (Braided) (16") (Use as required)   |
| 72    | 30962       |     | Fuel Line (Braided) (32") (Use as required)   |
| 72    | 30965       |     | Fuel Line (Braided) (48") (Use as required)   |
| 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                          |
| 184   | 27793       |     | Clip, Conduit                                 |
| 185   | 28942       |     | Screw, 10-32 x 3/8"                           |