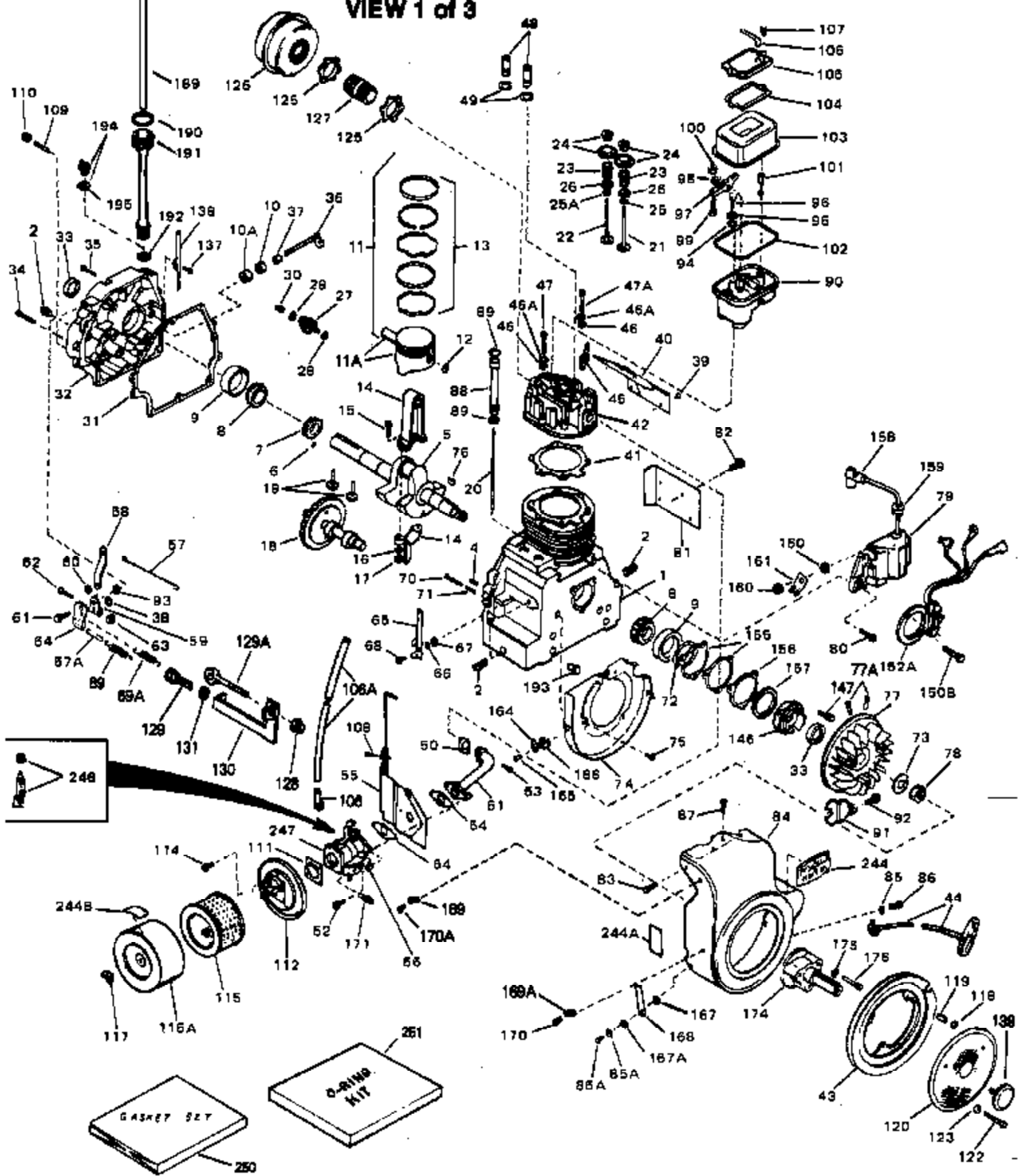


ILLUSTRATION SHOWS TYPICAL PARTS ONLY. ORDER BY PART NUMBER. PARTS NOT LISTED ARE SUPPLIED BY OEM.

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## Engine Parts List #1

| Ref # | Part Number | Qty | Description                                    |
|-------|-------------|-----|--|
| 1     | 34648A      |     | Cylinder (Incl. 2, 4 & 33) (3-5/8" Bore)       |
| 2     | 31927       |     | Pipe Plug, 3/8-18 sq. head (Use as required)   |
| 2     | 28483       |     | Pipe Plug (3/8-18 hex countersunk) (As req.)   |
| 2     |             |     | Pipe Plug (3/4-14 sq.hd.)(As req.)(Buy local)  |
| 2     | 9556        |     | Pipe Plug (1/8-27 sq. hd.) (Use as required)   |
| 2     | 28534       |     | Pipe Plug(1/8-27 hex c/sunk headless) (As req) |
| 4     | 27652       |     | Pin, Dowel                                     |
| 5     | 34820       |     | Crankshaft (Incl. 6 thru 9, 140 & 141 )        |
| 6     | 29783       |     | Pin, Crankshaft gear                           |
| 7     | 34692       |     | Gear Crankshaft (Helical)                      |
| 8     | 31932       |     | Bearing, Tapered roller                        |
| 9     | 31928       |     | Cup, Bearing                                   |
| 11A   | 34629       |     | Piston & Pin Ass'y. (Std.)(3-5/8")(Incl. 12)   |
| 11A   | 34630       |     | Piston & Pin Ass'y. (.010" OS) (Incl. 12)      |
| 11A   | 34631       |     | Piston & Pin Ass'y. (.020" OS) (Incl. 12)      |
| 11    | 34624       |     | Piston, Pin & Ring Set (Std.) (3-5/8" Bore)    |
| 11    | 34625       |     | Piston, Pin & Ring Set (.010" OS)              |
| 11    | 34626       |     | Piston, Pin & Ring Set (.020" OS)              |
| 12    | 34634       |     | Ring, Piston pin retaining                     |
| 13    | 34635       |     | Ring Set (Std.) (3-5/8" Bore)                  |
| 13    | 34636       |     | Ring Set (.010" OS)                            |
| 13    | 34637       |     | Ring Set (.020" OS)                            |
| 14    | 34640       |     | Connecting Rod Assy. (Incl. 15, 16 & 17)       |
| 14    | 35243       |     | Connecting Rod Assy.(.010" US)(Incl.1 5,16,17) |
| 14    | 35244       |     | Connecting Rod Assy.(.020" US)(Incl.1 5,16,17) |
| 15    | 32077       |     | Bolt, Connecting rod                           |
| 16    | 26073       |     | Washer, Connecting rod                         |
| 17    | 28264       |     | Nut Assy.                                      |
| 18    | 34752       |     | Camshaft (MCR) (Helical)                       |
| 19    | 33472       |     | Lifter, Valve                                  |
| 20    | 33471       |     | Rod, Push                                      |
| 21    | 34643       |     | Intake Valve (Std.)                            |
| 21    | 34644       |     | Intake Valve (1/32" OS)                        |
| 22    | 33506       |     | Exhaust Valve (Std.)                           |
| 22    | 33646       |     | Exhaust Valve (1/32" OS)                       |
| 23    | 33507       |     | Spring, Valve                                  |
| 24    | 33508       |     | Retainer & Cap Set, Keeper valve               |
| 25A   | 34410       |     | * "O" Ring (Exhaust only) (Also Incl. in 251)  |
| 25    | 33509       |     | * "O" Ring (Intake only) (Also Incl. in 251)   |
| 26    | 33510       |     | Cap, Valve                                     |
| 27    | 34751       |     | Governor Gear Ass'y. (Helical)                 |
| 28    | 650745      |     | Washer, Flat                                   |
| 29    | 35479       |     | Washer, Flat (Use with 35322 spool)            |
| 29    | 30590A      |     | Washer, Flat                                   |
| 30    | 31948       |     | Spool, Governor                                |
| 31    | 31956B      |     | * Gasket, Cylinder cover                       |
| 32    | 34649       |     | Cover Assy., Cylinder (Incl. 2, 33 & 134)      |
| 33    | 31950       |     | * Seal, Oil                                    |
| 34    | 650451      |     | Screw, 1/4-20 x 1"                             |
| 35    | 650492      |     | Screw, 1/4-20 x 2-1/4"                         |
| 36    | 32425       |     | Rod Assy., Governor                            |
| 37    | 32426       |     | Spacer, Governor rod                           |
| 38    | 29193       |     | Ring, Retaining                                |
| 39    | 650736      |     | Screw, 10-16 x 3/8"                            |
| 40    | 33495       |     | Cover, Cylinder head                           |
| 41    | 34641A      |     | * Gasket, Cylinder head                        |
| 42    | 34771       |     | Head, Cylinder                                 |
| 43    | 31980       |     | Pulley, Starter                                |

## Engine Parts List #1

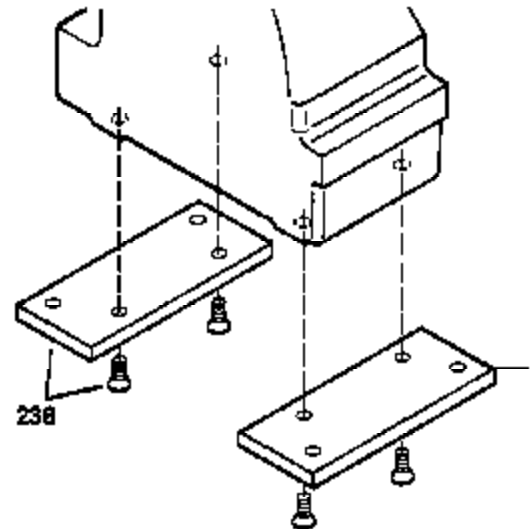
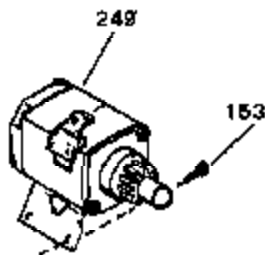
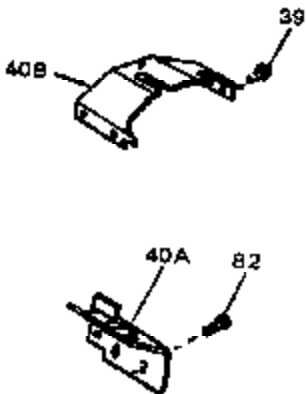
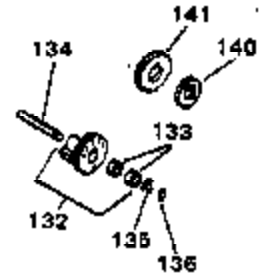
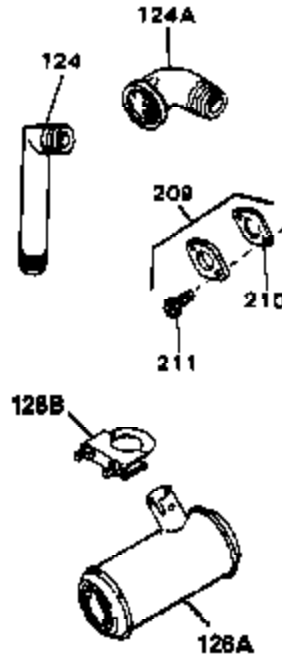
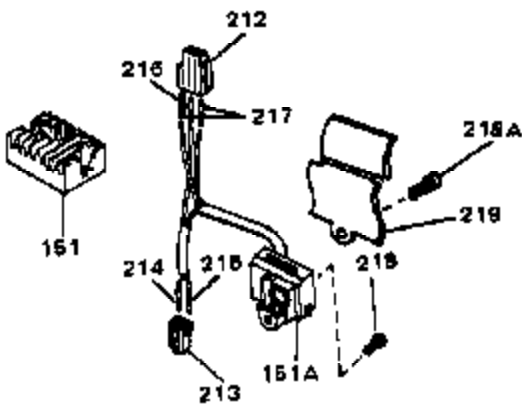
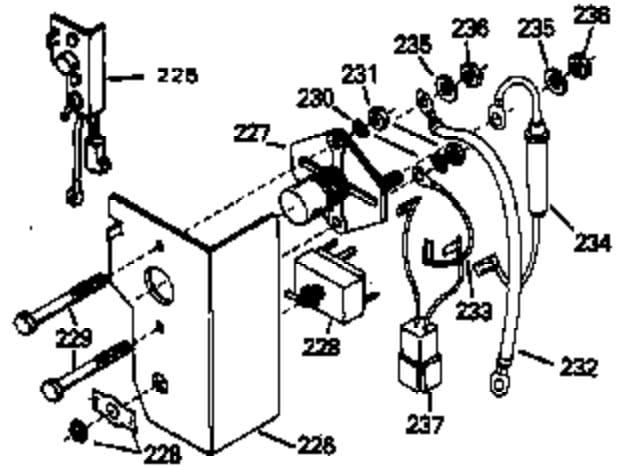
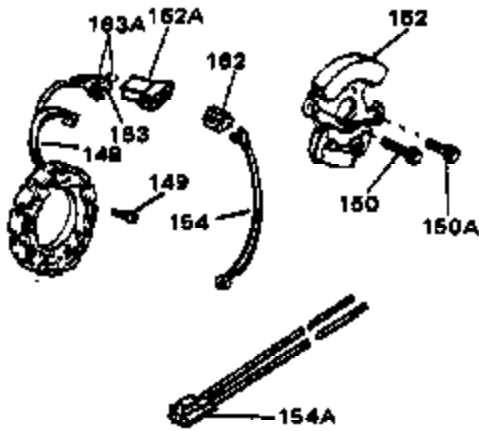
| Ref # | Part Number | Qty | Description                                   |
|-------|-------------|-----|---|
| 44    | 32046       |     | Rope Assy., Starter                           |
| 45    | 34645       |     | Resistor Spark Plug (RN-4C)                   |
| 46    | 650690      |     | Washer, Belleville                            |
| 46A   | 650691      |     | Washer, Flat                                  |
| 47A   | 650746      |     | Screw, 5/16-18 x 1-3/8"                       |
| 47    | 650692      |     | Screw, 5/16-18 x 1-3/4"                       |
| 48    | 730218      |     | Valve Guide Kit (Incl. 49)                    |
| 49    | 792035      |     | Ring, Retaining                               |
| 50    | 33515A      |     | * Gasket, Intake pipe                         |
| 51    | 33475       |     | Pipe, Intake                                  |
| 52    | 650378      |     | Screw, Torx T-30, 5/16-18 x 1-1/8"            |
| 53    | 792028      |     | Screw, 5/16-18 x 7/8"                         |
| 54    | 33476A      |     | * Gasket, Carburetor                          |
| 55    | 33477A      |     | Baffle, Air cleaner                           |
| 56    | 792075      |     | Nut, Lock 5/16-24 (Used in early production)  |
| 57    | 33478       |     | Link, Governor lever-to-throttle lever        |
| 58    | 31963       |     | Lever, Governor                               |
| 59    | 31964       |     | Clamp, Governor lever                         |
| 60    | 650518      |     | Lockwasher, No. 10 E.T.                       |
| 61    | 30312       |     | Screw, 10-32 x 1/2"                           |
| 62    | 650544      |     | Screw, Torx T-25, 10-24 x 7/8"                |
| 63    | 7975        |     | Nut, 10-24                                    |
| 64    | 31965       |     | Plate, Governor spring                        |
| 65    | 31984A      |     | Lever Assy., Control                          |
| 66    | 28558       |     | Washer, Wave                                  |
| 67    | 31966       |     | Bushing, Governor lever                       |
| 68    | 650597      |     | Screw, 10-24 x 5/8"                           |
| 69    | 34021       |     | Spring, Governor                              |
| 70    | 650591      |     | Screw, 10-24 x 2"                             |
| 71    | 33099       |     | Spring  |
| 72    | 32599       |     | "O" Ring (Incl. in 251)                       |
| 73    | 650666      |     | Washer, Lock                                  |
| 74    | 32579       |     | Baffle, Blower housing                        |
| 75    | 650561      |     | Screw, 1/4-20 x 5/8"                          |
| 76    | 650592      |     | Key, Flywheel                                 |
| 77    | 610967      |     | Flywheel (w/ring gear)                        |
| 77A   | 730201      |     | Trigger Pin Kit (Use as required)             |
| 78    | 650594      |     | Nut, Flywheel                                 |
| 79    | 610906      |     | Solid State Magneto (Incl. 158 thru 1 61)     |
| 80    | 650661      |     | Screw, 1/4-20 x 3/4"                          |
| 81    | 33479       |     | Extension, Blower housing                     |
| 82    | 30063       |     | Screw, 1/4-20 x 1/2"                          |
| 83    | 650751      |     | Screw, 1/4-20 x 7/16"                         |
| 84    | 33775A      |     | Blower Hsg.(Incl.218A,219)(For elec.s tarter) |
| 85    | 8274        |     | Washer, Lock                                  |
| 86A   | 650624      |     | Screw, 5/16-24 x 9/16"                        |
| 86    | 650595      |     | Screw, 5/16-24 x 3/8"                         |
| 87    | 650752      |     | Screw, 1/4-20 x 7/16"                         |
| 88    | 35475       |     | Tube, Push rod                                |
| 89    | 33481       |     | * "O" Ring (Also Incl. in 251)                |
| 90    | 34754       |     | Housing, Rocker arm                           |
| 94    | 33484       |     | * "O" Ring (Also Incl. in 251)                |
| 95    | 650168      |     | Washer, Flat                                  |
| 96    | 32610A      |     | Screw, 1/4-20 x 29/32"                        |
| 97    | 33485       |     | Arm, Rocker                                   |
| 98    | 33486       |     | Ring, Retaining                               |
| 99    | 650755      |     | Screw, 1/4-20 x 3/4"                          |
| 100   | 650864      |     | Nut, Hex, 1/4-20                              |

| Ref # | Part Number | Qty | Description   |
|-------|-------------|-----|---|
| 101   | 650756      |     | Stud, Rocker arm  |
| 102   | 33487       |     | * "O" Ring (Also Incl. in 251)  |
| 103   | 33488       |     | Cover, Rocker arm   |
| 104   | 31958A      |     | * Gasket, Breather (Also Incl. in 251)  |
| 105   | 33489       |     | Body Assy., Breather  |
| 106   | 33490       |     | Tube, Breather  |
| 107   | 30102       |     | * Screw, 10-32 x 5/8" (Also Incl. in 25 1)  |
| 108   | 650738      |     | Screw, 1/4-20 x 5/8"  |
| 111   | 35471       |     | * Gasket, Air cleaner   |
| 112   | 35472       |     | Bracket, Air cleaner  |
| 114   | 650399      |     | Screw, 10-32 x 5/8"   |
| 115   | 32008       |     | Element, Air cleaner  |
| 116A  | 32810       |     | Cover, Air cleaner  |
| 117   | 650513      |     | Nut, Wing   |
| 119   | 31992       |     | Spacer, Screen  |
| 120   | 33776       |     | Screen, Pulley  |
| 122   | 650680      |     | Screw, 1/4-20 x 1-1/2"  |
| 123   | 27070       |     | Washer, Lock  |
| 137   | 650744      |     | Screw, 10-24 x 7/8"   |
| 138   | 34650       |     | Tube extension, Oil fill  |
| 146   | 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 gaskets must be limited to a combined total of .010" thick. Steel spacers must be used as required to eli |
| 147   | 792028      |     | Screw, 5/16-18 x 7/8"   |
| 150B  | 650399      |     | Screw, 10-32 x 5/8"   |
| 152A  | 610965      |     | Stator Plate Assy.  |
| 155   | 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 gaskets must be limited to a combined total of .010" thick. Steel spacers must be used a |
| 156   | 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 gaskets must be limited to a combined total of .010" thick. Steel spacers must be used a |
| 157   | 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 gaskets must be limited to a combined total of .010" thick. Steel spacers must be used as re |
| 158   | 610118      |     | Cover, Spark plug   |
| 159   | 610750      |     | Grommet, Lead wire  |
| 160   | 610408      |     | Nut, 8-32   |
| 161   | 610908      |     | Terminal, Female  |
| 164   | 33356       |     | Terminal  |
| 165   | 650760      |     | Screw, 8-32 x 3/8"  |
| 166   | 28545       |     | Grommet, Plastic  |
| 167A  | 26073       |     | Washer, Flat  |
| 167   | 650890      |     | Washer, Lock  |
| 168   | 32039       |     | Switch, Stop  |

| Ref # | Part Number | Qty | Description  |
|-------|-------------|-----|--|
| 169   | 27793       |     | Clip, Conduit  |
| 169A  | 27793       |     | Clip, Conduit  |
| 170   | 28942       |     | Screw, 10-32 x 3/8"  |
| 170A  | 28942       |     | Screw, 10-32 x 3/8"  |
| 189   | 33984A      |     | Dipstick (Incl. 190)   |
| 190   | 33590       |     | "O" Ring   |
| 191   | 33893A      |     | Tube, Oil filler   |
| 244B  | 31752       |     | Decal, Air cleaner   |
| 244   | 34346       |     | Decal, Instruction   |
| 244A  | 34768       |     | Decal, Name  |
| 246   | 631687      |     | Valve, Seat & Spring Assy.   |
| 247   | 632159      |     | Carburetor (Incl. 54 & 246) (Refer to Division 5, Section A, page 160 for breakdown) |
| 250   | 33516F      |     | * Gasket Set (Incl. items marked *)  |
| 251   | 35075       |     | "O" Ring Kit (Incl. Nos. items marked +)   |

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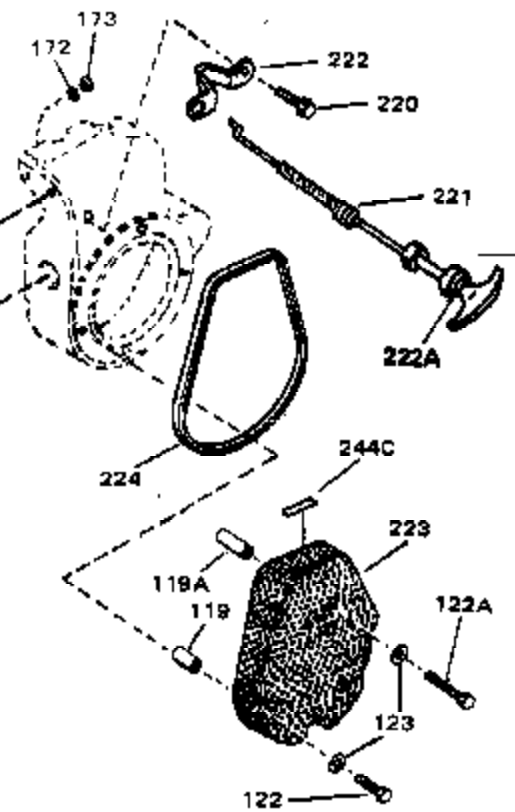
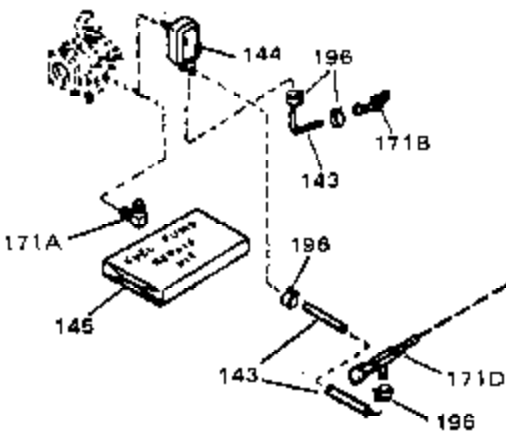
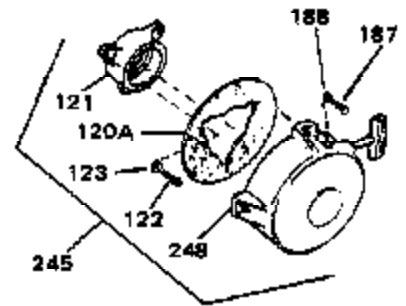
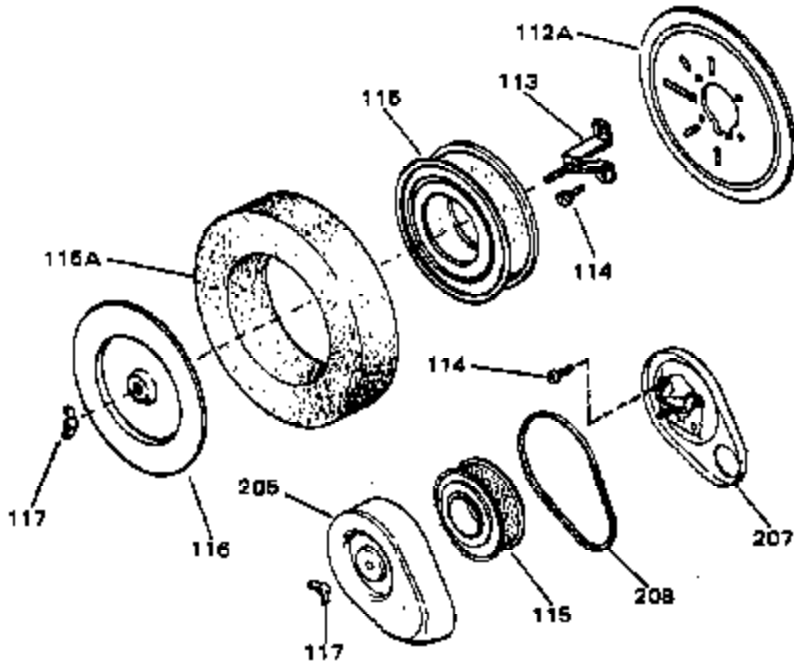
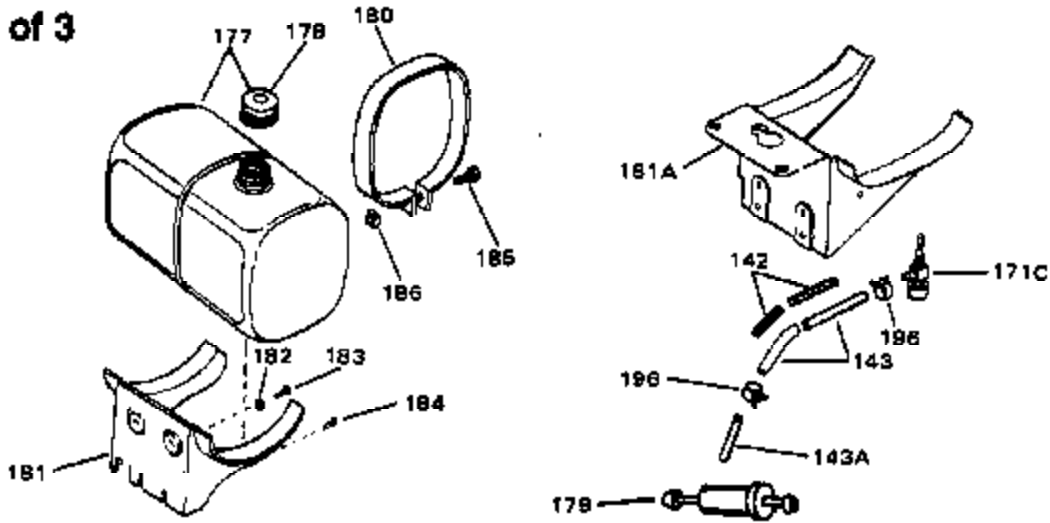
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| Ref # | Part Number | Qty | Description  |
|-------|-------------|-----|--|
|       | 39 650736   |     | Screw, 10-16 x 3/8"  |
|       | 82 30063    |     | Screw, 1/4-20 x 1/2"   |
|       | 126A 35731  |     | Muffler (Incl. 126B)   |
|       | 132 34651   |     | Weight Assy., Counterbalance   |
|       | 133 33501   |     | Bearing, Needle  |
|       | 134 33502   |     | Shaft, Counterbalance  |
|       | 135 33503   |     | Washer, Thrust   |
|       | 136 792017  |     | Ring, Retaining  |
|       | 140 33499   |     | Spacer   |
|       | 141 33963   |     | Gear, Counterbalance weight (Helical teeth)  |
|       | 141         |     | Gear, Counterbalance weight (Straight teeth) (For replacement see Ref. 132. Order correct kit for your enginemodel number.)  |
|       | 153 792028  |     | Screw, 5/16-18 x 7/8"(Use w/32817 str .motor)  |
|       | 153 650781  |     | Screw,5/16-18 x 11/16"(Use w/33835 st r.motor)   |
|       | 209 730178  |     | Ech.Adapter Kit (Incl.210 & 211)(As r equired)   |
|       | 210 34102B  |     | Gasket, Exhaust (Use as required)  |
|       | 211 30196   |     | Screw, 5/16-18 x 3/4" (Use as require d)   |
|       | 238 730212  |     | Adapter Plate Kit (Optional) NOTE: If you are having mounting problems in using a HH100 thruOH180 inplace of a large frame competitivebrand, we would like to call your attention to 730212 adapter plate kit. The kit converts the bottom mounting system found on HH100 thru OH180 to a top mounting sys |
|       | 249 33835   |     | Electric Starter Motor (12-Volt) (Refer to Division 5, Section D for breakdown)  |

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

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| Ref # | Part Number | Qty | Description   |
|-------|-------------|-----|---|
| 114   | 650399      |     | Screw, 10-32 x 5/8"   |
| 115   | 32008       |     | Element, Air cleaner  |
| 117   | 650513      |     | Nut, Wing   |
| 119   | 31992       |     | Spacer, Screen  |
| 122   | 650680      |     | Screw, 1/4-20 x 1-1/2"  |
| 123   | 27070       |     | Washer, Lock  |
| 143   | 29774       |     | Fuel Line (Braided 8.25")(21 cm)(As required)                                 |
| 143   | 30705       |     | Fuel Line (Braided 16")(41 cm)(As required)                                   |
| 143   | 30962       |     | Fuel Line (Braided 32")(81 cm)(As required)                                   |
| 144   | 35018       |     | Pump, Impulse fuel  |
| 145   | 33010       |     | Repair Kit, Impulse fuel pump   |
| 171A  | 28566       |     | Fitting, Fuel line  |
| 178   | 410144B     |     | Fuel Cap (White Plastic)(Std)(As required)                                    |
| 178   | 34210       |     | Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as required)      |
| 196   | 26460       |     | Clamp, Fuel line (Use as required)  |
| 245   | 730134      |     | Rewind Starter Kit (Incl.120A, 121, 122, 187, 188 & 248)<br>(Use as required) |