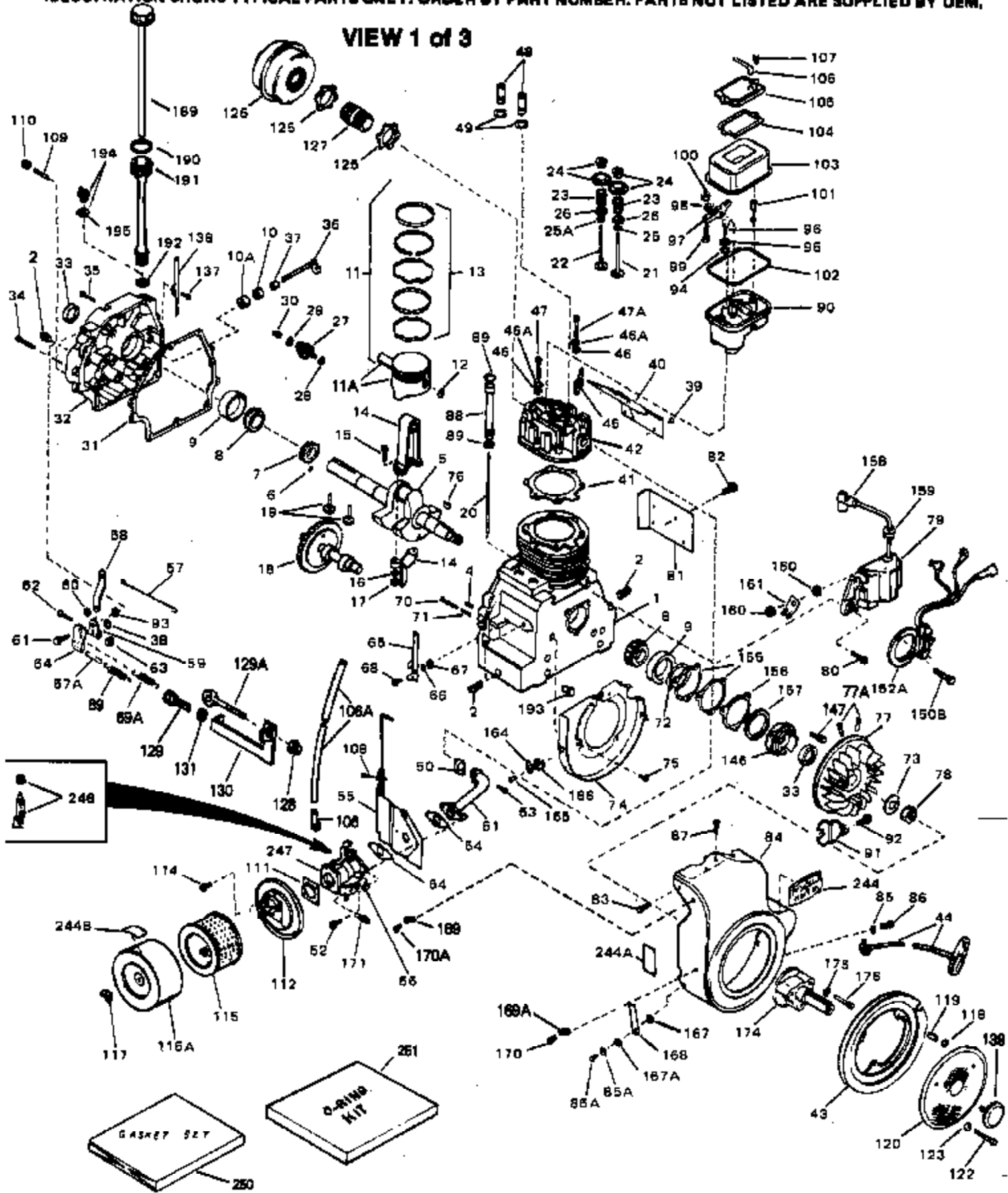


ILLUSTRATION SHOWS TYPICAL PARTS ONLY. ORDER BY PART NUMBER. PARTS NOT LISTED ARE SUPPLIED BY OEM.

VIEW 1 of 3



Engine Parts List #1

| Ref # | Part Number | Qty | Description |
|-------|-------------|-----|--|
| | 1 34599 | | Cylinder (Incl. 2, 4 & 33) (3-1/8" 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 34057A | | Crankshaft (Incl. 6 thru 9) |
| | 6 29783 | | Pin, Crankshaft gear |
| | 7 34692 | | Gear Crankshaft (Helical) |
| | 8 31932 | | Bearing, Tapered roller |
| | 9 31928 | | Cup, Bearing |
| | 11A 34292B | | Piston & Pin Ass'y. (Std.)(3-1/8")(Incl.12) |
| | 11A 34293B | | Piston & Pin Ass'y. (.010" OS) (Incl. 12) |
| | 11A 34294B | | Piston & Pin Ass'y. (.020" OS) (Incl. 12) |
| | 11 34546 | | Piston, Pin & Ring Set (Std.) (3-1/8" Bore) |
| | 11 34547 | | Piston, Pin & Ring Set (.010" OS) |
| | 11 34548 | | Piston, Pin & Ring Set (.020" OS) |
| | 12 31919 | | Ring, Piston pin retaining |
| | 13 34297 | | Ring Set (Std.) (3-1/8" Bore) |
| | 13 34298 | | Ring Set (.010" OS) |
| | 13 34299 | | Ring Set (.020" OS) |
| | 14 33093A | | Connecting Rod Assy.(Std.)(Incl.15, 16 & 17) |
| | 14 34383 | | Connecting Rod Assy.(.010" US)(Incl.15,16,17) |
| | 14 34384 | | Connecting Rod Assy.(.020" US)(Incl.15,16,17) |
| | 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 33505 | | Intake Valve (Std.) |
| | 21 33645 | | 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 34002A | | Cylinder Cover Ass'y. (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 34302A | | * Gasket, Cylinder head |
| | 42 34767 | | Head, Cylinder |
| | 45 35552 | | Spark Plug (RL-82C) |

Engine Parts List #1

| Ref # | Part Number | Qty | Description |
|-------|-------------|-----|---|
| 46 | 650690 | | Washer, Belleville |
| 46A | 650691 | | Washer, Flat |
| 47 | 650692 | | Screw, 5/16-18 x 1-3/4" |
| 47A | 650746 | | Screw, 5/16-18 x 1-3/8" |
| 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 | 31967 | | 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 |
| 77A | 730201 | | Trigger Pin Kit (Use as required) |
| 77 | 610909 | | Flywheel |
| 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 |
| 85A | 8274 | | Washer, Lock |
| 86A | 650595 | | Screw, 5/16-24 x 3/8" |
| 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 |
| 101 | 650756 | | Stud, Rocker arm |

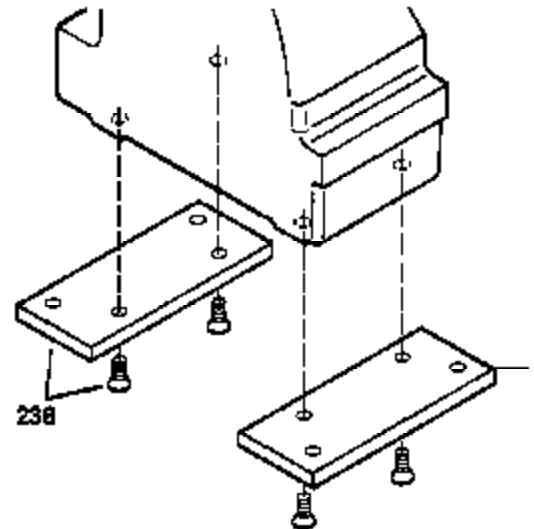
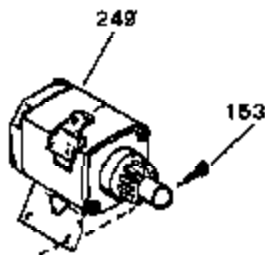
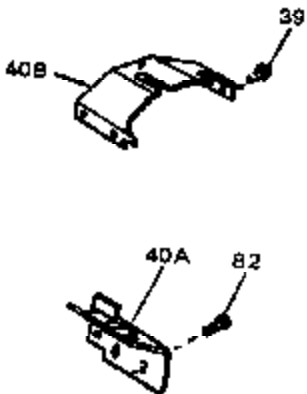
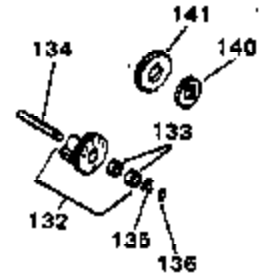
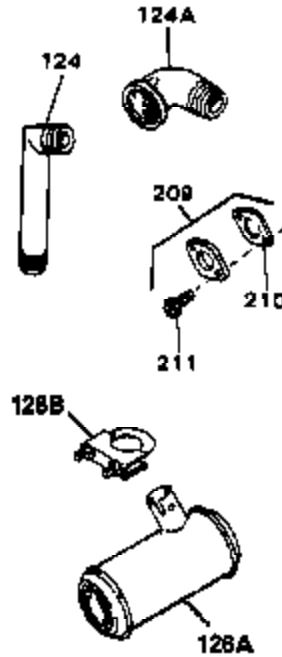
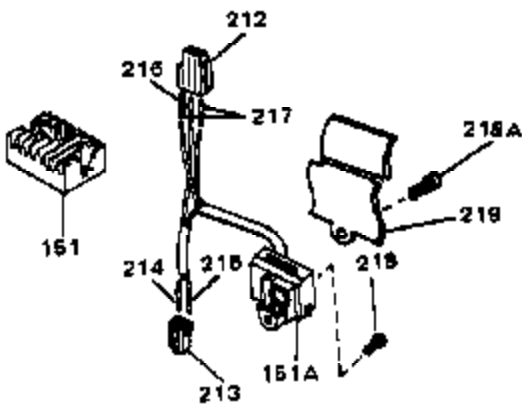
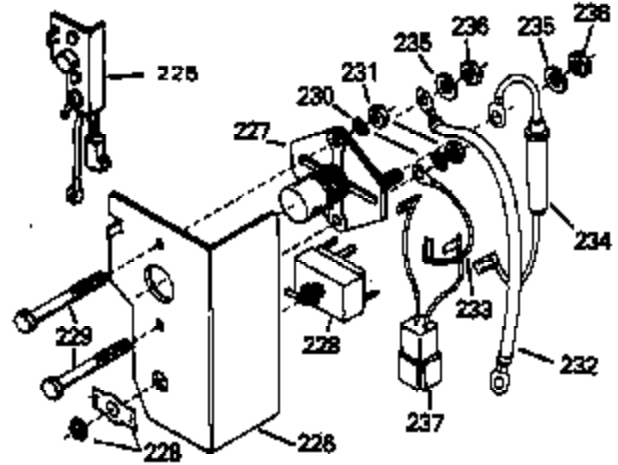
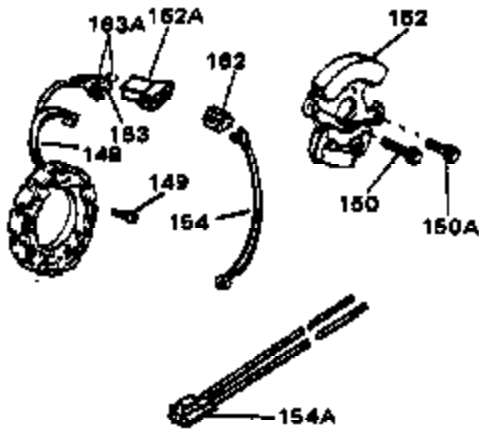
Engine Parts List #1

| Ref # | Part Number | Qty | Description |
|-------|-------------|-----|---|
| 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 | 32426 | | Spacer, Screen |
| 120 | 33776 | | Screen, Pulley |
| 122 | 650670 | | Screw, 1/4-20 x 3/4" |
| 123 | 27070 | | Washer, Lock |
| 123 | 650675 | | Washer, Flat |
| 137 | 650744 | | Screw, 10-24 x 7/8" |
| 138 | 33467 | | 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" |
| 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 |
| 169A | 27793 | | Clip, Conduit |
| 170 | 28942 | | Screw, 10-32 x 3/8" |
| 189 | 33069 | | Dipstick (Incl. 190) |
| 190 | 29673 | | * Gasket, Oil filler |
| 244 | 34346 | | Decal, Instruction |
| 244B | 31752 | | Decal, Air cleaner |
| 244A | 34768 | | Decal, Name |
| 246 | 631687 | | Valve, Seat & Spring Assy. |

| Ref # | Part Number | Qty | Description |
|-------|-------------|-----|--|
| 247 | 632193 | | Carburetor (Incl. 54 & 246) (Refer to Division 5, Section A, page 160 for breakdown) |
| 250 | 33516G | | * Gasket Set (Incl. items marked *) |
| 251 | 35075 | | "O" Ring Kit (Incl. Nos. items marked +) |

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

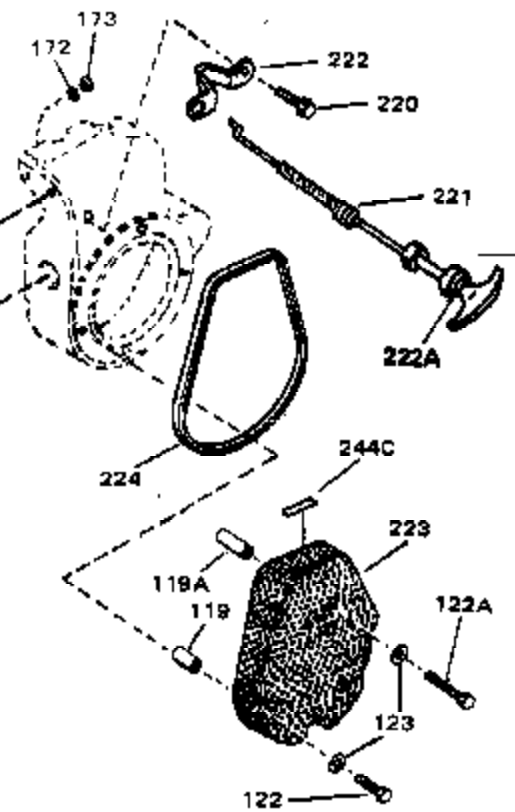
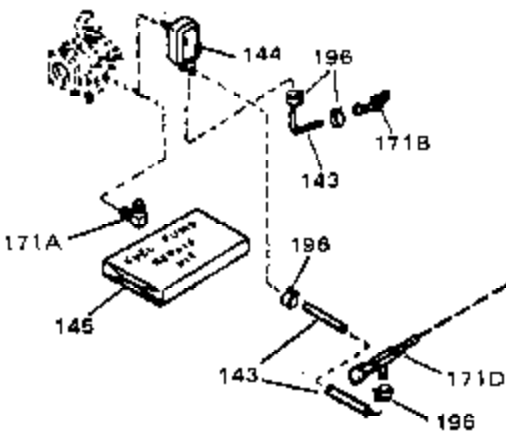
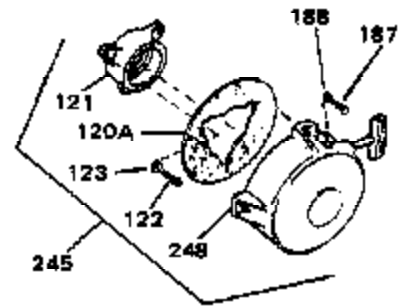
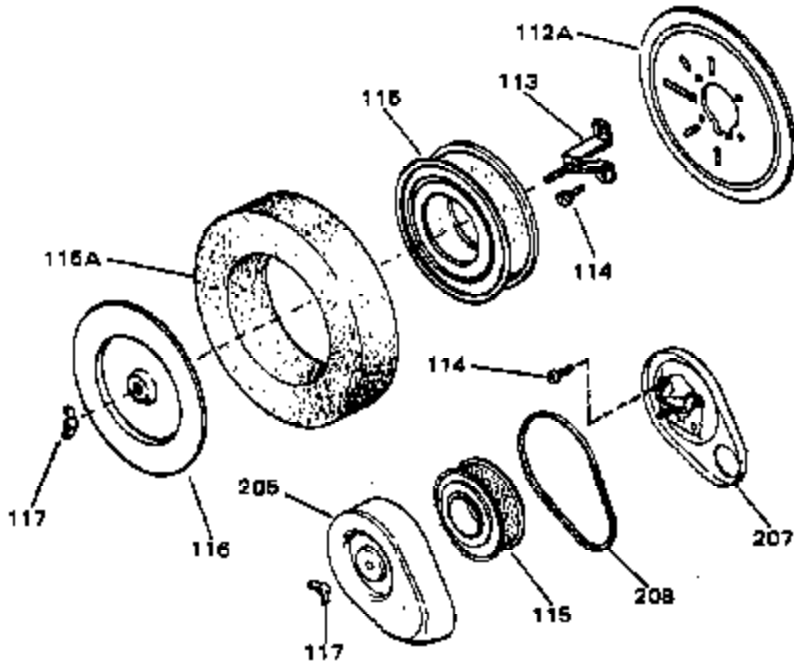
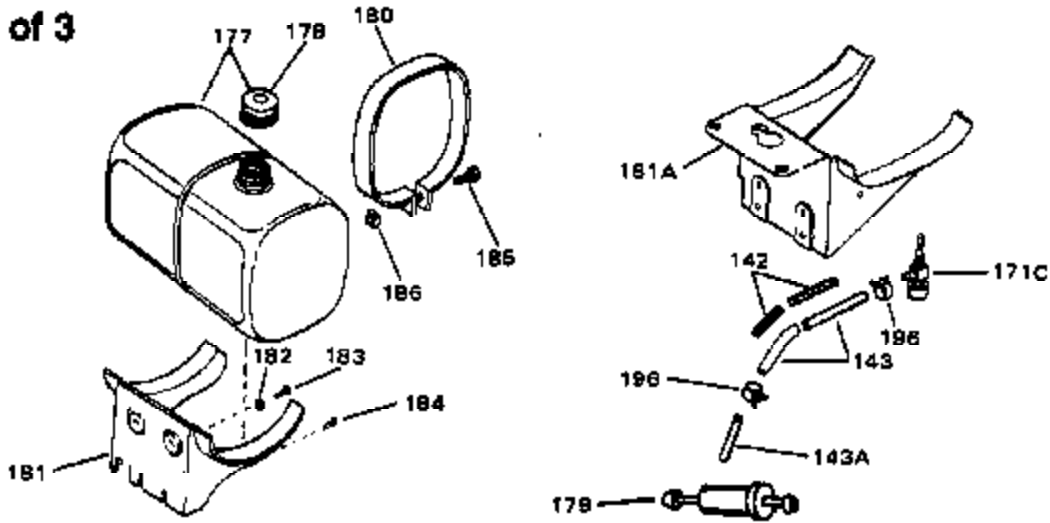
VIEW 2 of 3



| 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 33964 | | Counterbalance Weight Ass'y. (Helical teeth) (Incl. 2 of 133) |
| | 133 33501 | | Bearing, Needle |
| | 134 33502 | | Shaft, Counterbalance |
| | 135 33503 | | Washer, Thrust |
| | 136 792017 | | Ring, Retaining |
| | 141 | | Gear, Counterbalance weight (Straight teeth) (For replacement see Ref. 132. Order correct kit for your enginemodel number.) |
| | 148 610902 | | Alt.Coil Ass'y. (Incl.162,163,163A) (20 amp) |
| | 149 650521 | | Screw, 10-32 x 1-1/8" |
| | 151A 610996 | | Regulator (20 Amp) (Incl. 212 thru 21 8) |
| | 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) |
| | 162A 610903 | | Connector, Flat |
| | 163A 610905 | | Terminal |
| | 163 610904 | | Terminal |
| | 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) |
| | 212 610990 | | Connector, Male |
| | 213 610921 | | Connector |
| | 214 610922 | | Terminal |
| | 215 610989 | | Terminal |
| | 216 610992 | | Terminal, Female |
| | 217 610991 | | Terminal, Female |
| | 218 30063 | | Screw, 1/4-20 x 1/2" |
| | 238 730212 | | Adapter Plate Kit (Optional) NOTE: If you are having mounting problems in using a HH100 thru OH180 in place 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 32426 | | Spacer, Screen |
| | 122 650670 | | Screw, 1/4-20 x 3/4" |
| | 123 27070 | | Washer, Lock |
| | 123 650675 | | Washer, Flat |
| | 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 32959 | | Pump, Impulse fuel |
| | 145 33010 | | Repair Kit, Impulse fuel pump |
| | 171B 32958 | | Fitting, Fuel pump |
| | 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) (Use as required) |