



| Ref # | Part Number | Qty | Description |
|-------|-------------|-----|--|
| 1 | 33311B | | Cylinder (Incl. 2,3,4,5,184) (2-5/8" Bore) |
| 2 | 27652 | | Pin, Dowel |
| 3 | 27642 | | Plug, Oil drain, 1/4-18 |
| 4 | 27876B | | Seal, Oil |
| 5 | 27877A | | Intake Valve (Std.) (Incl. 9) |
| 5 | 27880A | | Inake Valve (1/32" OS) (Incl. 9) |
| 6 | 27878A | | Exhaust Valve (Std.) |
| 6 | 27880A | | Exhaust Valve (1/32" OS) (Incl. 9) |
| 7 | 27882 | | Cap, Upper valve spring |
| 8 | 27881 | | Spring, Valve |
| 9 | 32581 | | Cap, Lower valve spring |
| 11 | 31827 | | Crankshaft (Incl. 12 & 13) |
| 12 | 29783 | | Pin, Crankshaft gear Used in early production. This gear is serviceable ONLY when itis pinned to the crankshaft. |
| 13 | 27884 | | Gear, Crankshaft Used in early production. This gear is serviceable ONLY when itis pinned to the crankshaft. |
| 14 | 34531 | | Piston, Pin & Ring Set (Std.) (2-5/8" Bore) |
| 14 | 34532 | | Piston, Pin & Ring Set (.010" OS) |
| 14 | 34533 | | Piston, Pin & Ring Set (.020" OS) |
| 14A | 33312B | | Piston & Pin Ass'y. (Std.)(2-5/8")(In cl.16) |
| 14A | 33313B | | Piston & Pin Ass'y. (.010" OS) (Incl. 16) |
| 14A | 33314B | | Piston & Pin Ass'y. (.020" OS) (Incl. 16) |
| 15 | 34854 | | Ring Set (Std.) (2-5/8" Bore) |
| 15 | 34855 | | Ring Set (.010" OS) |
| 15 | 34856 | | Ring Set (.020" OS) |
| 16 | 27888 | | Ring, Piston pin retaining |
| 17 | 31380C | | Rod Assy., Connecting (Incl. 18) |
| 18 | 650662C | | Screw, Connecting rod (Late productio n) |
| 18A | 30682 | | Bolt, Connecting rod (Early productio n) |
| 19 | 26073 | | Connecting rod bolt washer (Early pro duction) |
| 20 | 28264 | | Connecting rod nut (Used on early pro duction) |
| 21 | 33156 | | Camshaft |
| 22 | 34034 | | Lifter, Valve |
| 23 | 31451A | | Cylinder Cover (Incl.24, 105, 246, 24 7 & 248) |
| 24 | 28460 | | Seal, Oil |
| 26 | 30684 | | * Gasket, Cylinder cover |
| 28 | 650488 | | Screw, 1/4-20 x 1-1/4" |
| 29 | 650493 | | Screw, 1/4-20 x 1-3/4" |
| 30 | 650489 | | Screw, 1/4-20 x 5/8" |
| 31 | 30939A | | Cover, Cylinder head |
| 32 | 28938C | | * Gasket, Cylinder head |
| 33 | 30938A | | Head, Cylinder (Incl. 3 of 36) |
| 34 | 33636 | | Resistor Spark Plug |
| 35 | 26073 | | Washer, Flat (Use as required) |
| 35 | 650570 | | Washer, Flat (Use as required) |
| 35 | 650691 | | Washer, Flat (Use as required) |
| 36 | 650697A | | Screw, 5/16-18 x 2-1/2" (Use as requi red) |
| 36 | 650695A | | Screw, 5/16-18 x 2-1/4" (Use as requi red) |
| 36 | 650694A | | Screw, 5/16-18 x 2" (Use as required) |
| 37 | 650128 | | Screw, 10-24 x 1/2" (Use as required) |
| 37 | 650597 | | Screw, 10-24 x 5/8" (Use as required) |
| 38 | 27896A | | * Gasket, Breather cover |
| 39 | 28423 | | Body, Breather |
| 40 | 28424 | | Element, Breather |
| 41 | 28425 | | Cover, Valve spring |
| 45 | 27915A | | * Gasket, Intake |
| 46 | 30195A | | Flange, Carburetor (Incl. 79 & 80) |

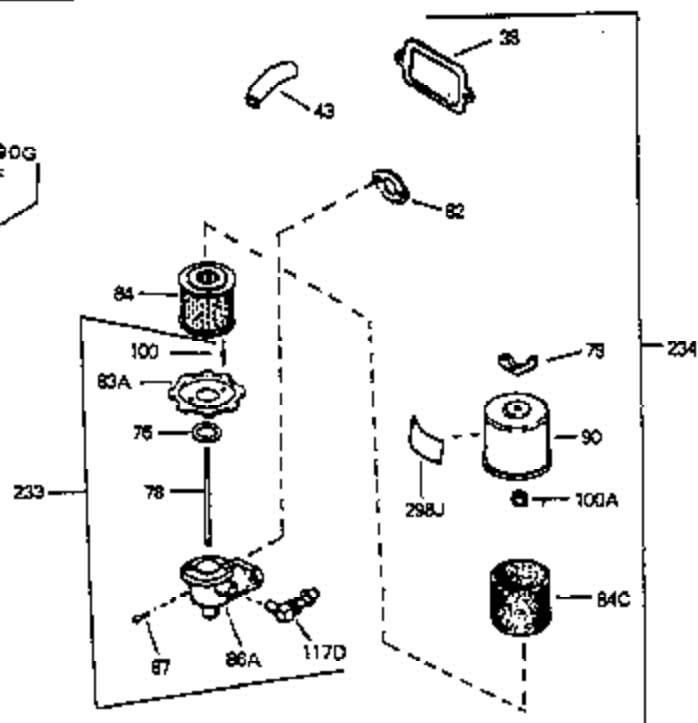
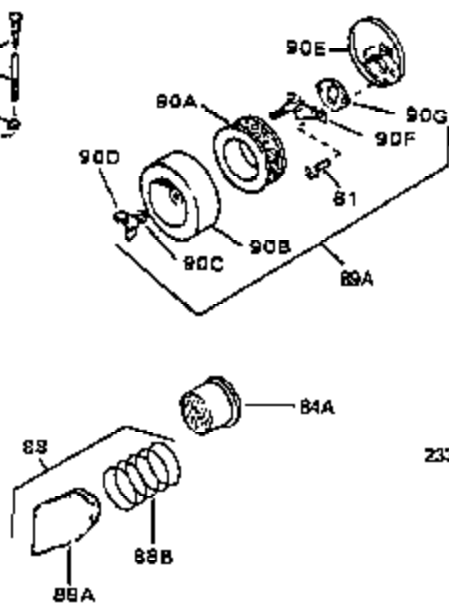
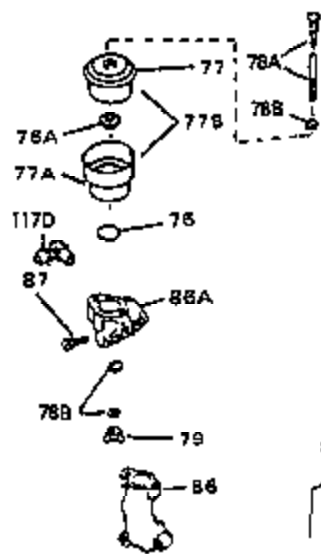
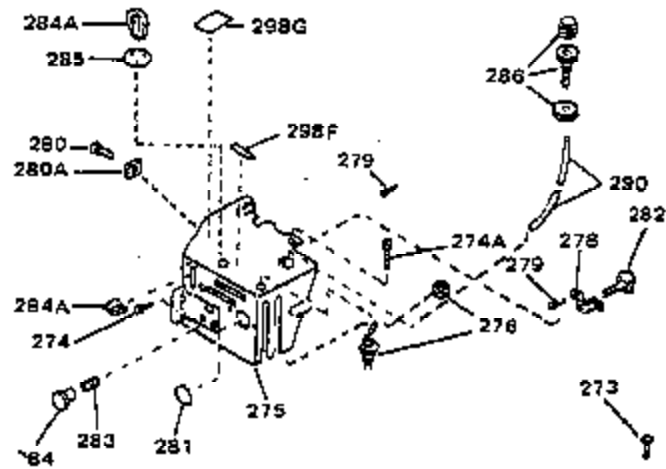
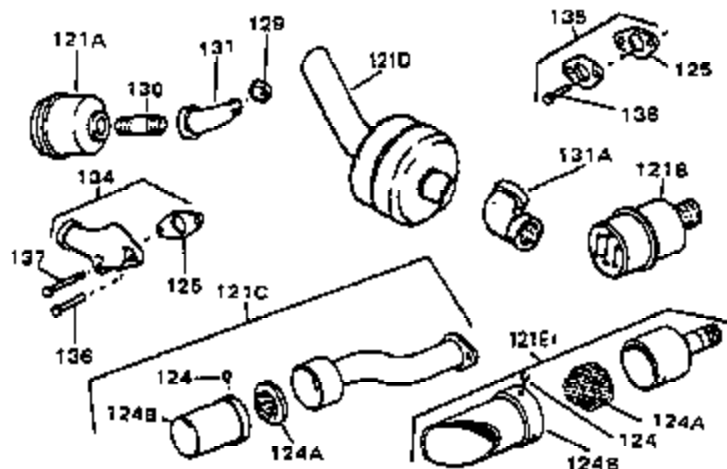
| Ref # | Part Number | Qty | Description |
|-------|-------------|-----|---|
| 48 | 30196 | | Screw, 5/16-18 x 3/4" |
| 49 | 29918 | | Lockwasher |
| 50 | 650548 | | Screw, 8-32 x 5/16" |
| 51 | 30319 | | Rivet, Split (Used on early production) |
| 52 | 32326A | | Lever, Governor (New lever does not need 1 of Ref #49,51,53,54,132,133) |
| 53 | 30322 | | Lock Nut, 8-32 (Use as required) |
| 54 | 29916 | | Clamp, Governor lever (Use as required) |
| 55 | 30205 | | Bracket, Adjusting |
| 56 | 30824 | | Link, Throttle |
| 58 | 29216 | | Locknut, 10-32 |
| 59 | 29752 | | Nut & Lockwasher, 1/4-28 |
| 60 | 650572 | | Screw, 1/4-28 x 1-1/8" |
| 61 | 29826 | | Screw, 10-32 x 3/4" |
| 62 | 29642 | | Ring, Retaining |
| 63 | 30699B | | Rod Assy., Governor (This one piece gov. rod is no longer used. It is replaced by 30699C assy., Ref.#63A) |
| 63A | 30699C | | Rod Assy., Governor (Incl. 64 & 65) |
| 64 | 30700 | | Yoke, Governor |
| 65 | 650494 | | Screw, 6-40 x 5/16" |
| 66A | 34011A | | Dipstick (Incl. 68) |
| 67 | 33893A | | Oil Fill Tube |
| 68 | 33590 | | "O" Ring |
| 69 | 29747B | | Screw, 5/16-24 x 21/32" |
| 70 | 32158E | | Blower Hsg. (For elec.starters)(Incl. 1 89,190) |
| 73 | 29536 | | Baffle, Blower housing |
| 74 | 650561 | | Screw, 1/4-20 x 5/8" |
| 75 | 31688A | | * Gasket, Carburetor |
| 81A | 650152 | | Screw, 8-32 x 3/8" |
| 81 | 30196 | | Screw, 5/16-18 x 3/4" (Use as required) |
| 81 | 28820 | | Screw, 10-32 x 1/2" (Use as required) |
| 81 | 650521 | | Screw, 10-32 x 1-1/8" (Use as required) |
| 82 | 27272A | | * Gasket, Air cleaner |
| 83 | 31691 | | Bracket, Air cleaner |
| 85 | 31715 | | Body, Air cleaner |
| 89 | 730127 | | Air Cleaner Assy. (Incl. 81,81A,82,83,84,85,90G & 298B) (Use as required) |
| 98 | 28569 | | Compression Spring (Used with 29500 screw)(Use as required) |
| 98 | 32924 | | Compression Spring (Used with 650688 screw) (Use as required) |
| 98 | 31342 | | Compression Spring (Used with 650549 screw) (Use as required) |
| 99 | 650549 | | Screw, 5-40 x 7/16" (Use as required) |
| 99 | 29500 | | Screw, 8-32 x 3/4" (Use as required) |
| 99 | 650688 | | Screw, 10-32 x 1 (Use as required) |
| 102 | 30884 | | Key, Flywheel |
| 103 | 31843A | | Bracket, Governor gear |
| 104 | 650836 | | Screw, 10-24 x 1/2" |
| 105 | 31845 | | Shaft, Mechanical governor |
| 106 | 30590A | | Washer, Flat |
| 107 | 30591 | | Gear Assy., Governor (Incl. 106) |
| 108 | 30588A | | Spool, Governor |
| 109 | 29193 | | Ring, Retaining |
| 113 | 650561 | | Screw, 1/4-20 x 5/8" |

| Ref # | Part Number | Qty | Description |
|-------|-------------|-----|--|
| 114 | 31301 | | Fuel Tank (Incl. 115) |
| 115 | 410144B | | Fuel Cap (White Plastic)(Standard)(As req.) |
| 115 | 33032 | | Fuel Cap (Red Plastic) (Spurt Resistant, Low Profile) (Use as required) |
| 115 | 34210 | | Fuel Cap (Red Plastic) (Spurt Resistant, High Profile) (Use as required) |
| 119 | 29774 | | Fuel Line (Braided 8.25") (Use as required) |
| 119 | 30705 | | Fuel Line (Braided 16") (Use as required) |
| 119 | 30962 | | Fuel Line (Braided 32") (Use as required) |
| 120 | 26460 | | Clamp, Fuel line (Use as required) |
| 121 | 32401 | | Muffler |
| 125 | 27930A | | * Gasket, Exhaust |
| 126 | 30196 | | Screw, 5/16-18 x 3/4" |
| 127 | 26073 | | Washer, Flat |
| 128 | 650694A | | Screw, 5/16-18 x 2" |
| 132 | 650548 | | Screw, 8-32 x 5/16" (Early production) |
| 132 | 650139 | | Screw, 8-32 x 1/2" (Early production) |
| 144 | 650542 | | Screw, 5/16-18 x 3/4" |
| 146 | 29538 | | Base, Engine mounting |
| 147 | 650128 | | Screw, 10-24 x 1/2" |
| 148 | 30622A | | Extension, Blower housing |
| 186 | 27275 | | Clip, Wire (Use as required) |
| 186 | 29443 | | Clip, Fuel line (Use as required) |
| 193 | 610118 | | Cover, Spark plug |
| 226 | 610973 | | Terminal Assy. |
| 229 | 28942 | | Screw, 10-32 x 3/8" |
| 230 | 27793 | | Clip, Conduit |
| 232 | 35349 | | Ground Wire |
| 244 | 31793 | | Bearing, Ball |
| 245 | 31792 | | Washer, Thrust |
| 246 | 31855 | | Retainer, Bearing |
| 247 | 650778 | | Washer, Lock |
| 248 | 650580 | | Nut, Lock |
| 262 | 29716 | | Screw, 1/4-28 x 7/16" |
| 264 | 32125 | | Cup, Starter |
| 265 | 590417 | | Screen, Starter cup |
| 266 | 650815 | | Washer, Belleville |
| 267 | 8116 | | Nut, Hex |
| 298A | 550223 | | Decal, Name |
| 298A | 33310 | | Decal, 5 HP Mini-Bike (Use as required) |
| 298A | 31517 | | Decal, H.P. (5 H.P.) (Use as required) |
| 298A | 32173 | | Decal, H.P. (6 H.P.) (Use as required) |
| 298 | 34346 | | Decal, Instruction |
| 299 | 30547A | | Contact Assy., Breaker |
| 300 | 30548B | | Condenser |
| 301 | 631021 | | Inlet Needle, Seat & Clip Assy. |
| 303 | 631827 | | Carburetor (Incl. 75 & 301) (Refer to Division 5, Section A, page 206 for breakdown) |
| 304 | 610689A | | Magneto NOTE: The complete magneto is not available as an assembly. The magneto number is shown for reference purposes only. Order component parts individually, as shown in parts list. (Refer to Division 5, Section B, page 24 for breakdown) |
| 306 | 590473 | | Rewind Starter (Refer to Division 5, Section C, page 29 for breakdown) |

| Ref # | Part Number | Qty | Description |
|-------|-------------|-----|-------------------------------------|
| 310 | 33235A | | * Gasket Set (Incl. items marked *) |

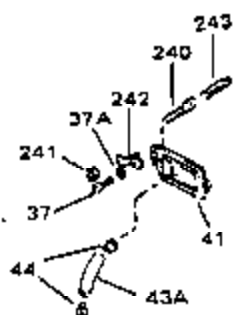
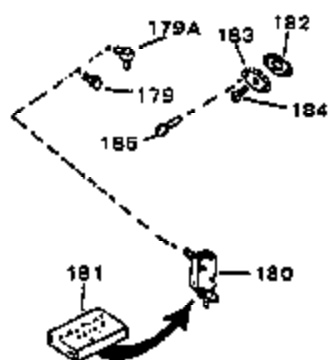
This exploded view diagram illustrates the assembly of a mechanical component, likely a bracket or housing. The components are labeled with reference numerals:

- 36**: A small pin or screw.
- 200**: A small circular component, possibly a washer or gasket.
- 113A**, **112A**, **111B**: Various mounting brackets and plates.
- 35**, **199**: Small pins or screws.
- 112C**, **111C**: Additional mounting brackets and plates.
- 111**: A small triangular component.
- 201**, **204A**, **201A**, **205**, **204**: A large circular component with associated mounting hardware.
- 206**, **206A**: Small pins or screws.
- 112B**, **111A**: Mounting brackets and plates.
- 210**: A small pin or screw.
- 202**, **203**: A long bracket with associated hardware.
- 114A**: A rectangular component, possibly a battery or a sensor module.
- 118**, **117**, **117A**, **117B**: Various small pins, screws, and mounting hardware.



| Ref # | Part Number | Qty | Description |
|-------|-------------|-----|--|
| 35 | 26073 | | Washer, Flat (Use as required) |
| 35 | 650570 | | Washer, Flat (Use as required) |
| 35 | 650691 | | Washer, Flat (Use as required) |
| 36 | 650697A | | Screw, 5/16-18 x 2-1/2" (Use as required) |
| 36 | 650695A | | Screw, 5/16-18 x 2-1/4" (Use as required) |
| 36 | 650694A | | Screw, 5/16-18 x 2" (Use as required) |
| 38 | 27896A | | * Gasket, Breather cover |
| 81 | 30196 | | Screw, 5/16-18 x 3/4" (Use as required) |
| 81 | 28820 | | Screw, 10-32 x 1/2" (Use as required) |
| 81 | 650521 | | Screw, 10-32 x 1-1/8" (Use as required) |
| 82 | 27272A | | * Gasket, Air cleaner |
| 84A | 31700 | | Element, Air cleaner |
| 86A | 34697 | | Air Cleaner Elbow Assy.(Use in 730561 only.) |
| 89A | 730128 | | Air Cleaner Ass'y. (Incl. 82,90A,90B,90D thru 90G,97 & 298B) (Use as req.) |
| 111A | 31694 | | Bracket, Lower fuel tank |
| 121E | 391026 | | Muffler (Incl. 124, 124A & 124B) (This spark arrester muffler can be used on any model) |
| 124A | 33171 | | Muffler Screen (Use as required) |
| 124B | 33185 | | Cover & Tube, Muffler (Use as required) |
| 124 | 650578 | | Screw, 8-18 x 3/8" |
| 125 | 27930A | | * Gasket, Exhaust |
| 134 | 31288 | | Muf.Adapter Kit(Incl.125,136,137)(As req.) |
| 135 | 730130 | | Muf.Adapter Kit(Incl.125 & 138)(As required) |
| 136 | 6021A | | Screw, 5/16-18 x 1-1/2" (Use as required) |
| 137 | 650697A | | Screw, 5/16-18 x 2-1/2" (Use as required) |
| 138 | 30196 | | Screw, 5/16-18 x 3/4" (Use as required) |
| 201B | 31697 | | Strap, Fuel tank |
| 202 | 29212 | | Screw, 1/4-28 x 7/16" |
| 203 | 6201 | | Screw, Hex hd. cap, 1/4-28 x 7/8 |
| 210 | 29752 | | Nut & Lockwasher, 1/4-28 |
| 233 | 34819 | | Air Cleaner Elbow (Incl.44,76,78,83A,86A,100)(Use in 730561 ass'y. only) |
| 234 | 730561 | | Air Cleaner Kit (Incl.38,43,44,76,78,79,82,83A,84,84C,86A,87,90,100A,233,29 (Use only on engines with an externally vented fully adjustable carburetor.) |
| 273 | 650687 | | Screw, 10-32 x 5/16" (Use as required) |
| 274 | 650257 | | Screw, 8-32 x 5/16" |
| 274A | 650765 | | Screw, 10-32 x 1/2" |
| 275 | 32395 | | Cover, Carburetor |
| 278 | 32398 | | Bracket, Choke |
| 279 | 28820 | | Screw, 10-32 x 1/2" |
| 280 | 650760 | | Screw, 8-32 x 3/8" |
| 280A | 650764 | | "U" Clip Nut |
| 281 | 31291 | | Plug, Cover |
| 282 | 32397 | | Plate Assy., Choke |
| 283 | 32399 | | Spring, Choke knob |
| 284 | 32400 | | Knob, Choke |
| 298F | 31682 | | Decal, Operating |

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



| Ref # | Part Number | Qty | Description |
|-------|-------------|-----|---|
| 37 | 650128 | | Screw, 10-24 x 1/2" (Use as required) |
| 37 | 650597 | | Screw, 10-24 x 5/8" (Use as required) |
| 37A | 27261 | | Washer, Flat (Use as required) |
| 41 | 28425 | | Cover, Valve spring |
| 43A | 35350 | | Tube, Breather |
| 56 | 30824 | | Link, Throttle |
| 69 | 29747B | | Screw, 5/16-24 x 21/32" |
| 98 | 28569 | | Compression Spring (Used with 29500 screw)(Use as required) |
| 98 | 32924 | | Compression Spring (Used with 650688 screw) (Use as required) |
| 98 | 31342 | | Compression Spring (Used with 650549 screw) (Use as required) |
| 99 | 650549 | | Screw, 5-40 x 7/16" (Use as required) |
| 99 | 29500 | | Screw, 8-32 x 3/4" (Use as required) |
| 99 | 650688 | | Screw, 10-32 x 1 (Use as required) |
| 182 | 32683A | | Gasket, Fuel pump cover (Use as required) |
| 183 | 32955 | | Cover, Fuel pump pad (Use as required) |
| 184 | 9556 | | Plug, Pipe 1/8-27 (Use as required) |
| 185 | 30063 | | Screw, 1/4-20 x 1/2" (Use as required) |
| 224A | 30826 | | Spring, Extension |
| 225A | 33108A | | Control Bracket (Incl. 224A & 226) |
| 225 | 730152 | | Control Bracket(Incl.91 thru 97)(As required) |
| 226 | 610973 | | Terminal Assy. |
| 227 | 33177 | | Terminal (Use as required) |
| 229 | 28942 | | Screw, 10-32 x 3/8" |
| 230 | 27793 | | Clip, Conduit |
| 238 | 32576 | | Seal, Snow guard |
| 239 | 31680 | | Guard, Starter |
| 262 | 29716 | | Screw, 1/4-28 x 7/16" |
| 266 | 650815 | | Washer, Belleville |
| 267 | 8116 | | Nut, Hex |
| 298E | 31718 | | Decal, Choke |
| 305 | 33018 | | Harness Assy., Adapter (Use as required) |
| 306 | 590473 | | Rewind Starter (Refer to Division 5, Section C, page 29 for breakdown) |
| 308 | 33328D | | Starter Motor Kit (110-120 Volt) NOTE: This 110-120 volt starter motor kit may have been added to this engine. This can be added only if cylinder has drilled and tapped starter mounting bosses and a ring gear flywheel has been added (see #309). Refer to service number stamped on end cap of motor, |
| 309 | 30811A | | Flywheel (Ring gear flywheel required on engines using 110-120 volt starter motor kits listed above.) |