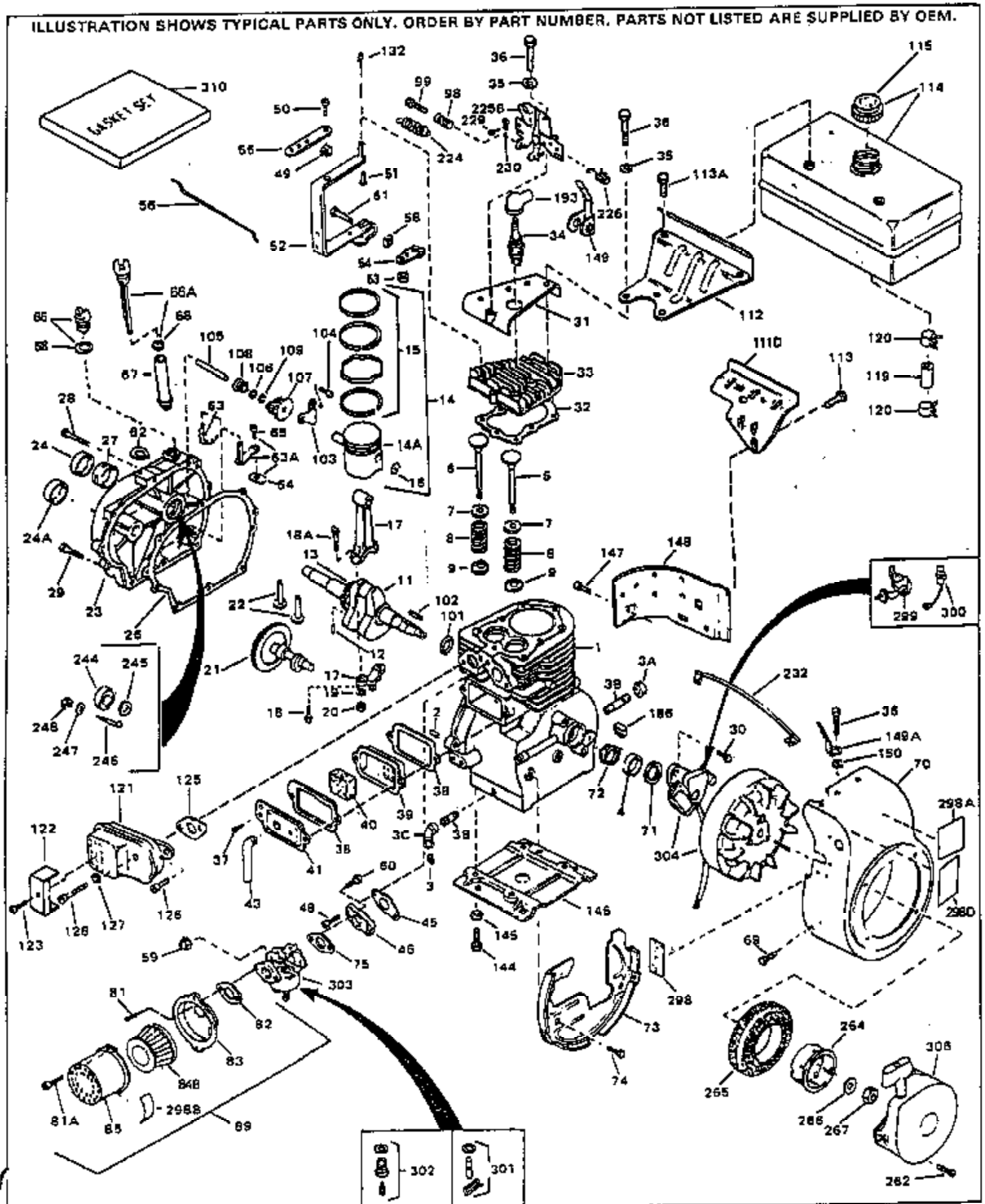




## Engine Parts List #1

| Ref # | Part Number | Qty | Description                                                                                                       |
|-------|-------------|-----|-------------------------------------------------------------------------------------------------------------------|
| 1     | 34761       |     | Cylinder (C I liner)(Incl.2,3,4,184)( 2-5/8")                                                                     |
| 2     | 27652       |     | Pin, Dowel                                                                                                        |
| 3     | 27642       |     | Plug, Oil drain, 1/4-18                                                                                           |
| 4     | 27876B      |     | Seal, Oil                                                                                                         |
| 5     | 32783       |     | Intake Valve (Std.) (Incl. 9)                                                                                     |
| 5     | 32784       |     | Intake 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    | 31826       |     | Crankshaft (Incl. 12 & 13)                                                                                        |
| 12    | 29783       |     | Pin, Crankshaft gear Used in early production. This gear is serviceable ONLY when it is pinned to the crankshaft. |
| 13    | 27884       |     | Gear, Crankshaft Used in early production. This gear is serviceable ONLY when it is pinned to the crankshaft.     |
| 14A   | 31797B      |     | Piston & Pin Ass'y. (Std.)(2-5/8")(In cl.16)                                                                      |
| 14A   | 31798B      |     | Piston & Pin Ass'y. (.010" OS) (Incl. 16)                                                                         |
| 14A   | 31799B      |     | Piston & Pin Ass'y. (.020" OS) (Incl. 16)                                                                         |
| 14    | 34503       |     | Piston, Pin & Ring Set (Std.) (2-5/8" Bore)                                                                       |
| 14    | 34504       |     | Piston, Pin & Ring Set (.010" OS)                                                                                 |
| 14    | 34505       |     | Piston, Pin & Ring Set (.020" OS)                                                                                 |
| 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    | 31295C      |     | Rod Assy., Connecting (Incl. 18)                                                                                  |
| 18    | 650662C     |     | Screw, Connecting rod (Late production)                                                                           |
| 18A   | 30682       |     | Bolt, Connecting rod (Early production)                                                                           |
| 19    | 26073       |     | Connecting rod bolt washer (Early production)                                                                     |
| 20    | 28264       |     | Connecting rod nut (Used on early production)                                                                     |
| 21    | 33156       |     | Camshaft                                                                                                          |
| 22    | 34034       |     | Lifter, Valve                                                                                                     |
| 23    | 31451A      |     | Cylinder Cover (Incl.24, 105, 246, 247 & 248)                                                                     |
| 24    | 28460       |     | Seal, Oil                                                                                                         |
| 26    | 30684       |     | * Gasket, Cylinder cover                                                                                          |
| 28    | 650451      |     | Screw, 1/4-20 x 1"                                                                                                |
| 29    | 650599      |     | Screw, 1/4-20 x 1-1/2"                                                                                            |
| 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 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)                                                                             |
| 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)                                                                                |

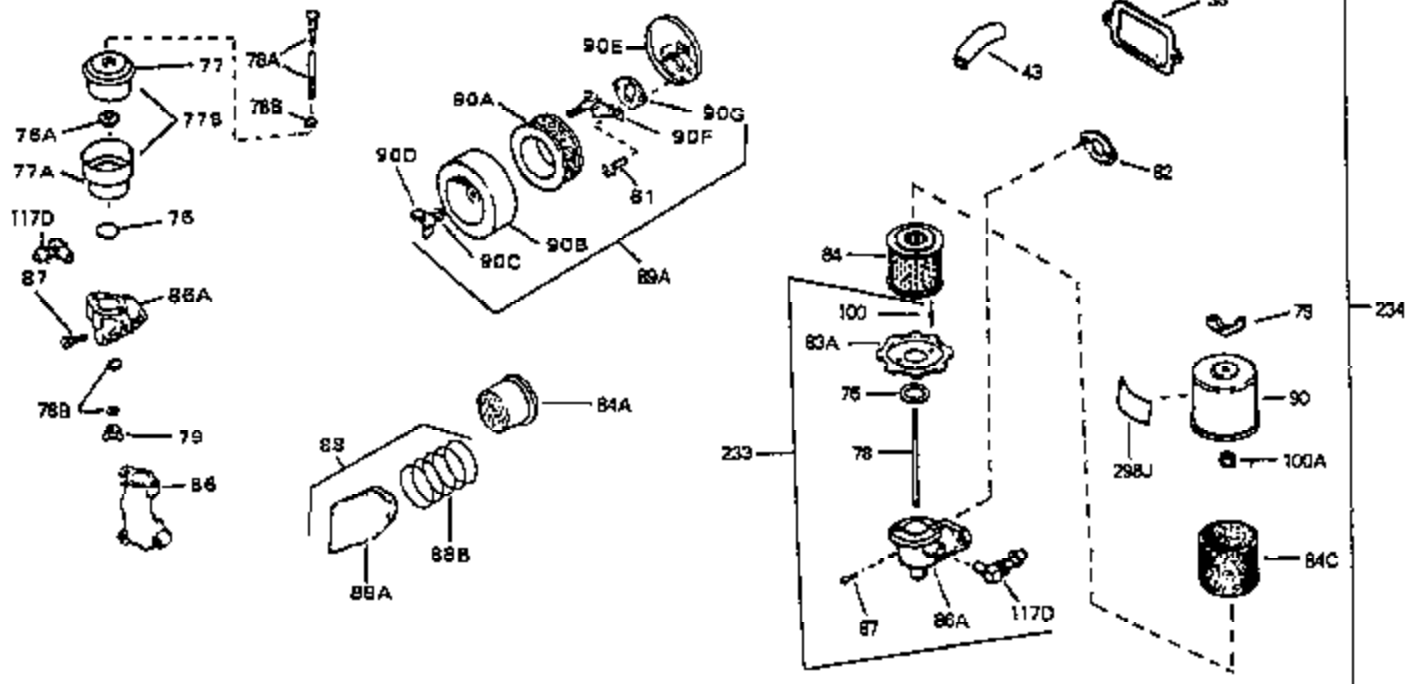
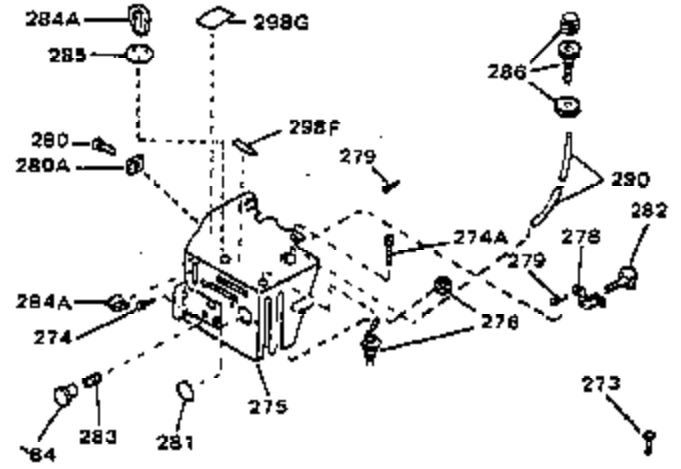
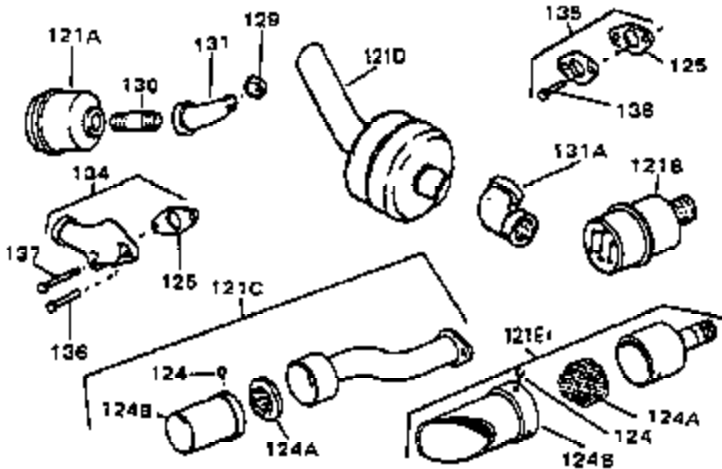
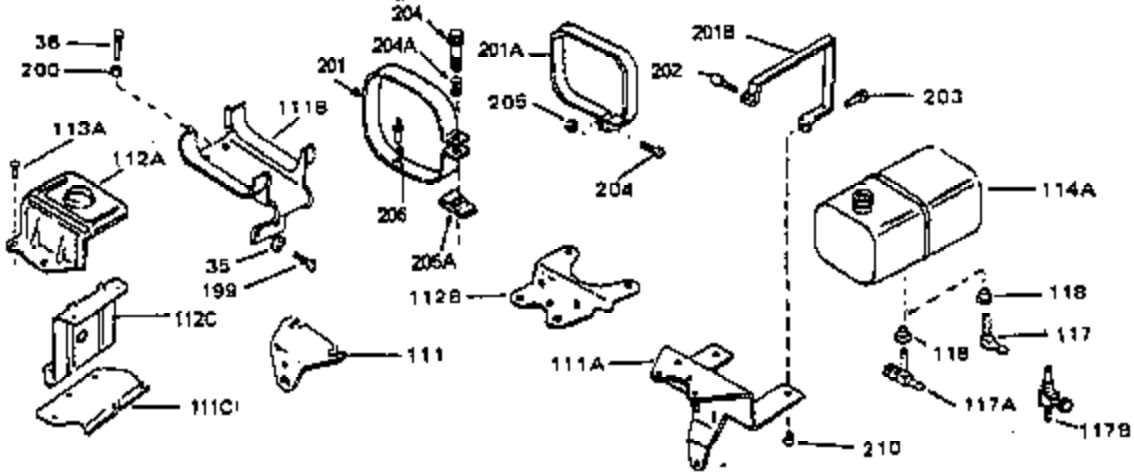
| Ref # | Part Number | Qty | Description                                                                                               |
|-------|-------------|-----|-----------------------------------------------------------------------------------------------------------|
| 48    | 30196       |     | 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)                                                                   |
| 56    | 31710       |     | 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                                                                                           |
| 63A   | 30699C      |     | Rod Assy., Governor (Incl. 64 & 65)                                                                       |
| 63    | 30699B      |     | Rod Assy., Governor (This one piece gov. rod is no longer used. It is replaced by 30699C assy., Ref.#63A) |
| 64    | 30700       |     | Yoke, Governor                                                                                            |
| 65    | 650494      |     | Screw, 6-40 x 5/16"                                                                                       |
| 66A   | 31297       |     | Dipstick (Incl. 68)                                                                                       |
| 68    | 29673       |     | * Gasket, Dipstick                                                                                        |
| 69    | 29747B      |     | Screw, 5/16-24 x 21/32"                                                                                   |
| 70    | 32158E      |     | Blower Hsg. (For elec.starters)(Incl. 1 89,190)                                                           |
| 71    | 33876       |     | Gasket, Stator                                                                                            |
| 72    | 31461       |     | Bushing, Crankshaft                                                                                       |
| 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                                                                                     |
| 84B   | 30727       |     | Element, 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)                                                                        |
| 101   | 650625      |     | Washer, Thrust                                                                                            |
| 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                                                                                           |

## Engine Parts List #1

| Ref # | Part Number | Qty | Description                                                                                                                                                                                                                                      |
|-------|-------------|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 111D  | 34158       |     | Bracket, Lower fuel tank                                                                                                                                                                                                                         |
| 112   | 34159       |     | Plate, Upper fuel tank mtg.                                                                                                                                                                                                                      |
| 113   | 650561      |     | Screw, 1/4-20 x 5/8"                                                                                                                                                                                                                             |
| 114   | 34186A      |     | Fuel Tank (Incl. 115 & 120)                                                                                                                                                                                                                      |
| 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)                                                                                                                                                                                                               |
| 125   | 27930A      |     | * Gasket, Exhaust                                                                                                                                                                                                                                |
| 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                                                                                                                                                                                                                        |
| 149A  | 30747       |     | Clip, Shorting                                                                                                                                                                                                                                   |
| 150   | 650890      |     | Lockwasher                                                                                                                                                                                                                                       |
| 186   | 27275       |     | Clip, Wire (Use as required)                                                                                                                                                                                                                     |
| 186   | 29443       |     | Clip, Fuel line (Use as required)                                                                                                                                                                                                                |
| 224   | 31386       |     | Spring, Extension                                                                                                                                                                                                                                |
| 225B  | 31726B      |     | Control Bracket (Incl. 98, 99, 226 & 284A)                                                                                                                                                                                                       |
| 226   | 610973      |     | Terminal Assy.                                                                                                                                                                                                                                   |
| 229   | 28942       |     | Screw, 10-32 x 3/8"                                                                                                                                                                                                                              |
| 230   | 27793       |     | Clip, Conduit                                                                                                                                                                                                                                    |
| 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   | 631828      |     | Carburetor (Incl. 75 & 301) (Refer to Division 5, Section A, page 144 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) |

| Ref # | Part Number | Qty | Description                                                            |
|-------|-------------|-----|------------------------------------------------------------------------|
| 306   | 590420      |     | Rewind Starter (Refer to Division 5, Section C, page 25 for breakdown) |
| 310   | 33235A      |     | * Gasket Set (Incl. items marked *)                                    |

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



| 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                                                                                                                                           |
| 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.)                                                                                      |
| 121E  | 391026      |     | Muffler (Incl. 124, 124A & 124B) (This spark arrester muffler can be used on any model)                                                                         |
| 121B  | 31287       |     | Muffler                                                                                                                                                         |
| 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                                                                                                                                               |
| 129   | 32862       |     | Nut, Conduit (1/4" thick)                                                                                                                                       |
| 129   | 28443       |     | Nut, Conduit (1/8" thick)                                                                                                                                       |
| 131   | 30209       |     | Elbow, Exhaust (45 degree)                                                                                                                                      |
| 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)                                                                                                                         |
| 233   | 34819       |     | Air Cleaner Elbow (Incl.44,76,78,83A,86A,100)(Use in 730561 ass'y. only)                                                                                        |
| 234   | 730561      |     | Air Cleaner Kit<br>(Incl.38,43,44,76,78,79,82,83A,84,84C,86A,87,90,100A,233,29)<br>(Use only on engines with an externally vented fully adjustable carburetor.) |
| 273   | 650687      |     | Screw, 10-32 x 5/16" (Use as required)                                                                                                                          |



## Engine Parts List #3

| 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    | 31710       |     | 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)                                                                                                                                                                                                                                                                    |
| 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                                                                                                                                                                                                                                                                                             |
| 262   | 29716       |     | Screw, 1/4-28 x 7/16"                                                                                                                                                                                                                                                                                     |
| 266   | 650815      |     | Washer, Belleville                                                                                                                                                                                                                                                                                        |
| 267   | 8116        |     | Nut, Hex                                                                                                                                                                                                                                                                                                  |
| 305   | 33018       |     | Harness Assy., Adapter (Use as required)                                                                                                                                                                                                                                                                  |
| 306   | 590420      |     | Rewind Starter (Refer to Division 5, Section C, page 25 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.)                                                                                                                                                                                                     |