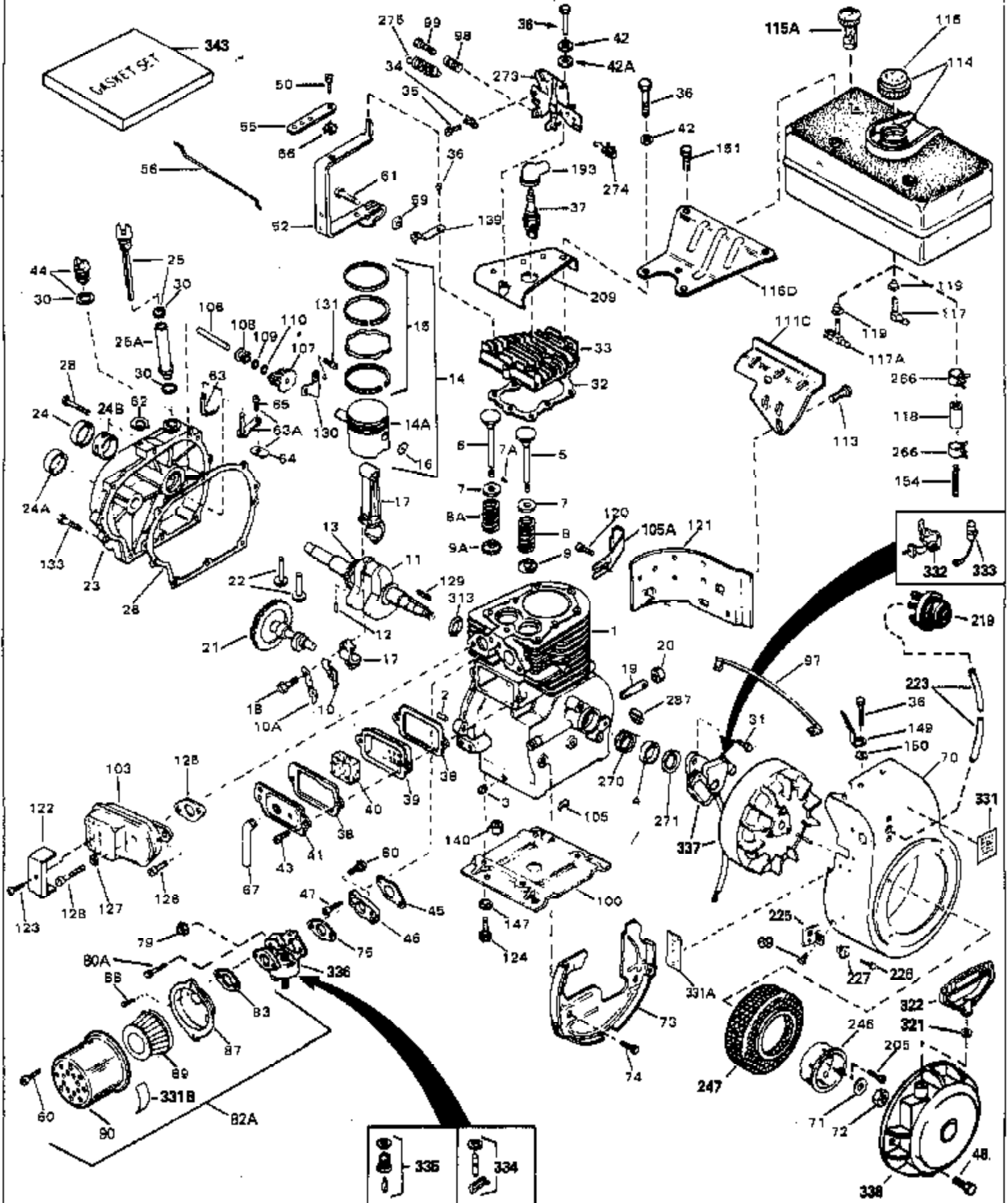


ILLUSTRATION SHOWS TYPICAL PARTS ONLY. ORDER BY PART NUMBER. PARTS NOT LISTED ARE SUPPLIED BY OEM.



## Engine Parts List #1

| Ref # | Part Number | Qty | Description                                                                                                  |
|-------|-------------|-----|--------------------------------------------------------------------------------------------------------------|
| 1     | 32586C      |     | Cylinder (Incl. 2, 3, 4 & 76) (2-3/4" Bore)                                                                  |
| 2     | 27652       |     | Pin, Dowel                                                                                                   |
| 3     | 27642       |     | Plug, Oil drain                                                                                              |
| 4     | 32630       |     | Seal, Oil                                                                                                    |
| 5     | 32783       |     | Intake Valve (Std.) (Incl. 9)                                                                                |
| 5     | 32784       |     | Intake Valve (1/32" OS) (Incl. 9)                                                                            |
| 6     | 27878A      |     | Exhaust Valve (Std.) (Incl. 9)                                                                               |
| 6     | 27880A      |     | Exhaust Valve (1/32" OS) (Incl. 9)                                                                           |
| 7A    | 20810       |     | Pin, Valve spring retainer (Use as required)                                                                 |
| 7     | 27882       |     | Cap, Upper valve spring                                                                                      |
| 8     | 27881       |     | Spring, Valve                                                                                                |
| 8A    | 27881       |     | Spring, Valve                                                                                                |
| 9A    | 32581       |     | Cap, Lower valve spring                                                                                      |
| 9     | 32581       |     | Cap, Lower valve spring                                                                                      |
| 10    | 34242       |     | Dipper, Oil                                                                                                  |
| 10A   | 32590       |     | Plate, Lock & Oil dipper (This plate may be replaced by 34242 oil dipper but 650662C screw must be used.)    |
| 11    | 32680A      |     | Crankshaft (Incl. 12 & 13)                                                                                   |
| 12    | 29783       |     | Crankshaft Gear Pin (Early production )                                                                      |
| 13    | 27884       |     | Gear, Crankshaft (Used in early production) This gear is servicable onlywhen it is pinned to the crankshaft. |
| 14    | 34517       |     | Piston, Pin & Ring Set (Std.) (2-3/4" Bore)                                                                  |
| 14    | 34518       |     | Piston, Pin & Ring Set (.010" OS)                                                                            |
| 14    | 34519       |     | Piston, Pin & Ring Set (.020" OS)                                                                            |
| 14A   | 32592B      |     | Piston & Pin Ass'y. (Std.)(2-3/4")(In cl.16)                                                                 |
| 14A   | 32593B      |     | Piston & Pin Ass'y. (.010" OS) (Incl. 16)                                                                    |
| 14A   | 32594B      |     | Piston & Pin Ass'y. (.020" OS) (Incl. 16)                                                                    |
| 15    | 32595       |     | Ring Set (Std.) (2-3/4" Bore)                                                                                |
| 15    | 32596       |     | Ring Set (.010" OS)                                                                                          |
| 15    | 32597       |     | Ring Set (.020" OS)                                                                                          |
| 16    | 27888       |     | Ring, Piston pin retaining                                                                                   |
| 17    | 32591C      |     | Rod Assy., Connecting (Incl. 10 & 18)                                                                        |
| 18    | 650662C     |     | Screw, Connecting rod (2 each)                                                                               |
| 21    | 32115       |     | Camshaft (MCR)                                                                                               |
| 22    | 34034       |     | Lifter, Valve                                                                                                |
| 23    | 31303B      |     | Cover, Cylinder (Incl. 24, 106 & 279)                                                                        |
| 24    | 28427       |     | Seal, Oil                                                                                                    |
| 24B   | 31546       |     | Bushing, Crankshaft (Use as required)                                                                        |
| 25    | 31297       |     | Dipstick, Oil (Incl. 30)                                                                                     |
| 26    | 30684       |     | * Gasket, Cylinder cover                                                                                     |
| 28    | 650488      |     | Screw, 1/4-20 x 1-1/4"                                                                                       |
| 30    | 29673       |     | * Gasket, Oil filler                                                                                         |
| 31    | 650516      |     | Screw, 1/4-20 x 1-1/8"                                                                                       |
| 32    | 32631A      |     | * Gasket, Cylinder head                                                                                      |
| 33    | 30938A      |     | Head, Cylinder                                                                                               |
| 34    | 27793       |     | Clip, Conduit (Use as required)                                                                              |
| 35    | 28942       |     | Screw, 10-32 x 3/8" (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    | 33636       |     | Resistor Spark Plug (RJ-8C)                                                                                  |
| 37    | 34251       |     | Resistor Spark Plug                                                                                          |
| 38    | 27896A      |     | * Gasket, Breather cover                                                                                     |
| 39    | 28423       |     | Body, Breather                                                                                               |
| 40    | 28424       |     | Element, Breather                                                                                            |
| 41    | 28425       |     | Cover, Valve spring                                                                                          |
| 42    | 26073       |     | Washer (Use as required)                                                                                     |

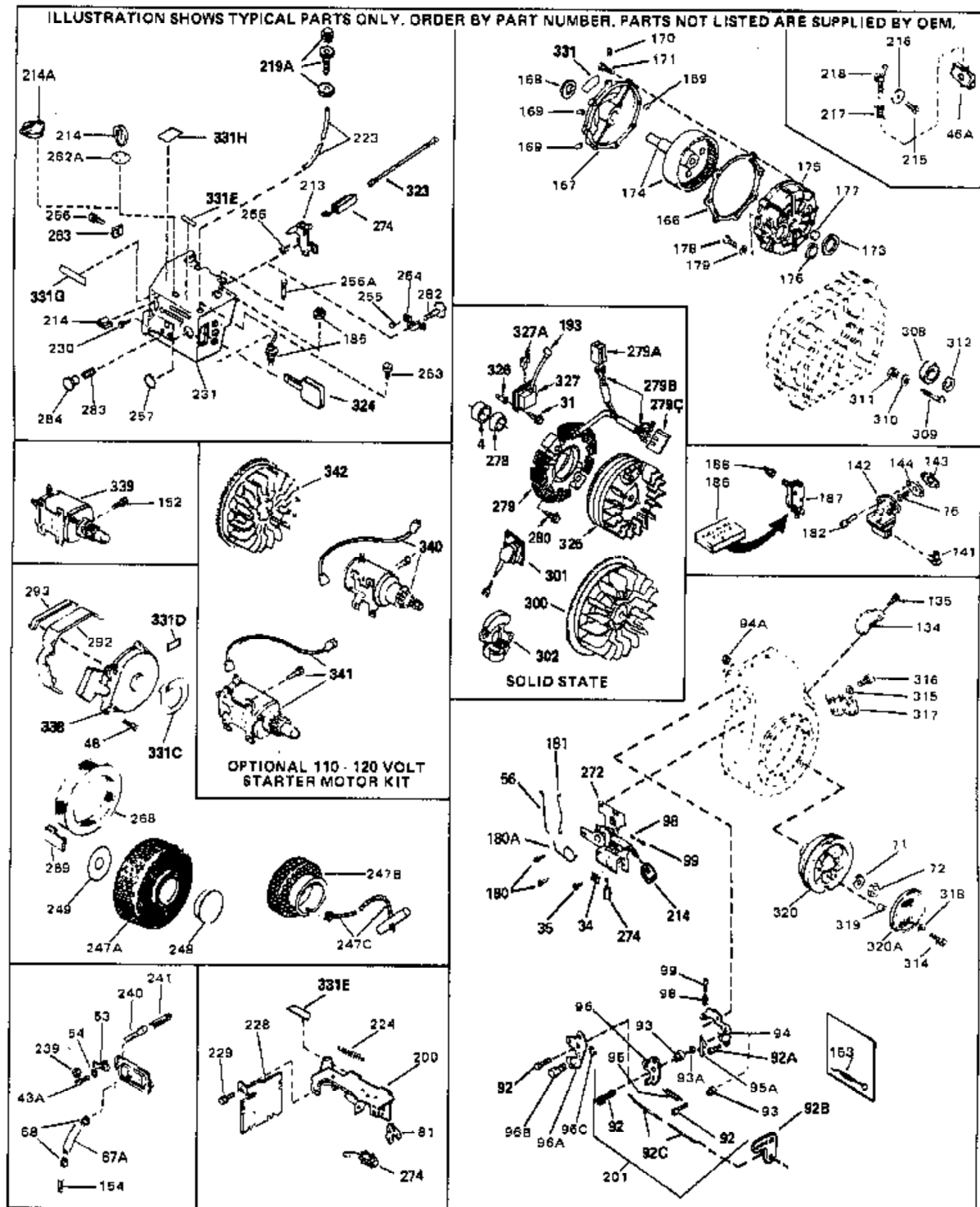
## Engine Parts List #1

| Ref # | Part Number | Qty | Description                                                                                                        |
|-------|-------------|-----|--------------------------------------------------------------------------------------------------------------------|
| 42    | 650691      |     | Washer, Flat (Use as required)                                                                                     |
| 42A   | 650690      |     | Washer, Belleville (Use as required)                                                                               |
| 43    | 650128      |     | Screw, 10-24 x 1/2"                                                                                                |
| 45    | 27915A      |     | * Gasket, Intake                                                                                                   |
| 46    | 34712       |     | Flange Carburetor                                                                                                  |
| 47    | 30196       |     | Screw, 5/16-18 x 3/4"                                                                                              |
| 48    | 29716       |     | Screw, 1/4-28 x 7/16"                                                                                              |
| 50    | 650548      |     | Screw, 8-32 x 5/16"                                                                                                |
| 52    | 32326A      |     | Lever, Governor (New lever does not need 1 of 51,66,132,164,165,207)                                               |
| 55    | 30205       |     | Bracket, Adjusting                                                                                                 |
| 56    | 32327       |     | Link, Throttle                                                                                                     |
| 59    | 29216       |     | Nut, Lock, 10-32                                                                                                   |
| 60    | 650152      |     | Screw, 8-32 x 3/8"                                                                                                 |
| 61    | 29826       |     | Screw, 10-32 x 3/4"                                                                                                |
| 62    | 29642       |     | Ring, Retaining                                                                                                    |
| 63    | 30699B      |     | Governor Rod Ass'y. (This one-piece governor rod is no longer used. It is replaced by 30699C ass'y., Ref. no. 63A) |
| 63A   | 30699C      |     | Rod Assy., Governor (Incl. 64 & 65)                                                                                |
| 64    | 30700       |     | Yoke, Governor                                                                                                     |
| 65    | 650494      |     | Screw, 6-40 x 5/16"                                                                                                |
| 66    | 29918       |     | Lockwasher, #8 E.T.                                                                                                |
| 67    | 35350       |     | Tube, Breather                                                                                                     |
| 69    | 29747B      |     | Screw, 5/16-24 x 21/32"                                                                                            |
| 70    | 32158E      |     | Blower Housing (For elec.star.)(Incl. 134,135)                                                                     |
| 71    | 650815      |     | Washer, Belleville                                                                                                 |
| 72    | 8116        |     | Nut, Hex                                                                                                           |
| 73    | 29536       |     | Blower Housing Baffle (without electric starter knock-out) (Use as required)                                       |
| 73    | 35256A      |     | Blower Housing Baffle (with electric starter knock-out) (Use as required) (Point Ignition)                         |
| 74    | 650561      |     | Screw, 1/4-20 x 5/8"                                                                                               |
| 75    | 31688A      |     | * Gasket, Carburetor                                                                                               |
| 80A   | 650517      |     | Screw, 1/4-20 x 27/32"                                                                                             |
| 82A   | 730164      |     | Air Cleaner Ass'y. (Incl. 60, 83, 87, 88, 89, 90A & 331B) (Use as required)                                        |
| 83    | 27272A      |     | * Gasket, Air cleaner                                                                                              |
| 87    | 31691       |     | Bracket, Air cleaner NOTE: 130010 thru 10C & 11 used in early production only.                                     |
| 88    | 28820       |     | Screw, 10-32 x 1/2"                                                                                                |
| 89    | 30727       |     | Element, Air cleaner                                                                                               |
| 90    | 31715       |     | Body, Air cleaner                                                                                                  |
| 97    | 30831       |     | Ground Wire (Incl. 137)                                                                                            |
| 100   | 29538       |     | Base, Engine mounting                                                                                              |
| 103   | 32401       |     | Muffler                                                                                                            |
| 106   | 31845       |     | Shaft, Mechanical governor                                                                                         |
| 107   | 30591       |     | Gear Assy., Governor (Incl. 109)                                                                                   |
| 108   | 30588A      |     | Spool, Governor                                                                                                    |
| 109   | 30590A      |     | Washer, Flat                                                                                                       |
| 110   | 29193       |     | Ring, Retaining                                                                                                    |
| 111C  | 34158       |     | Bracket, Fuel tank                                                                                                 |
| 113   | 650561      |     | Screw, 1/4-20 x 5/8"                                                                                               |

## Engine Parts List #1

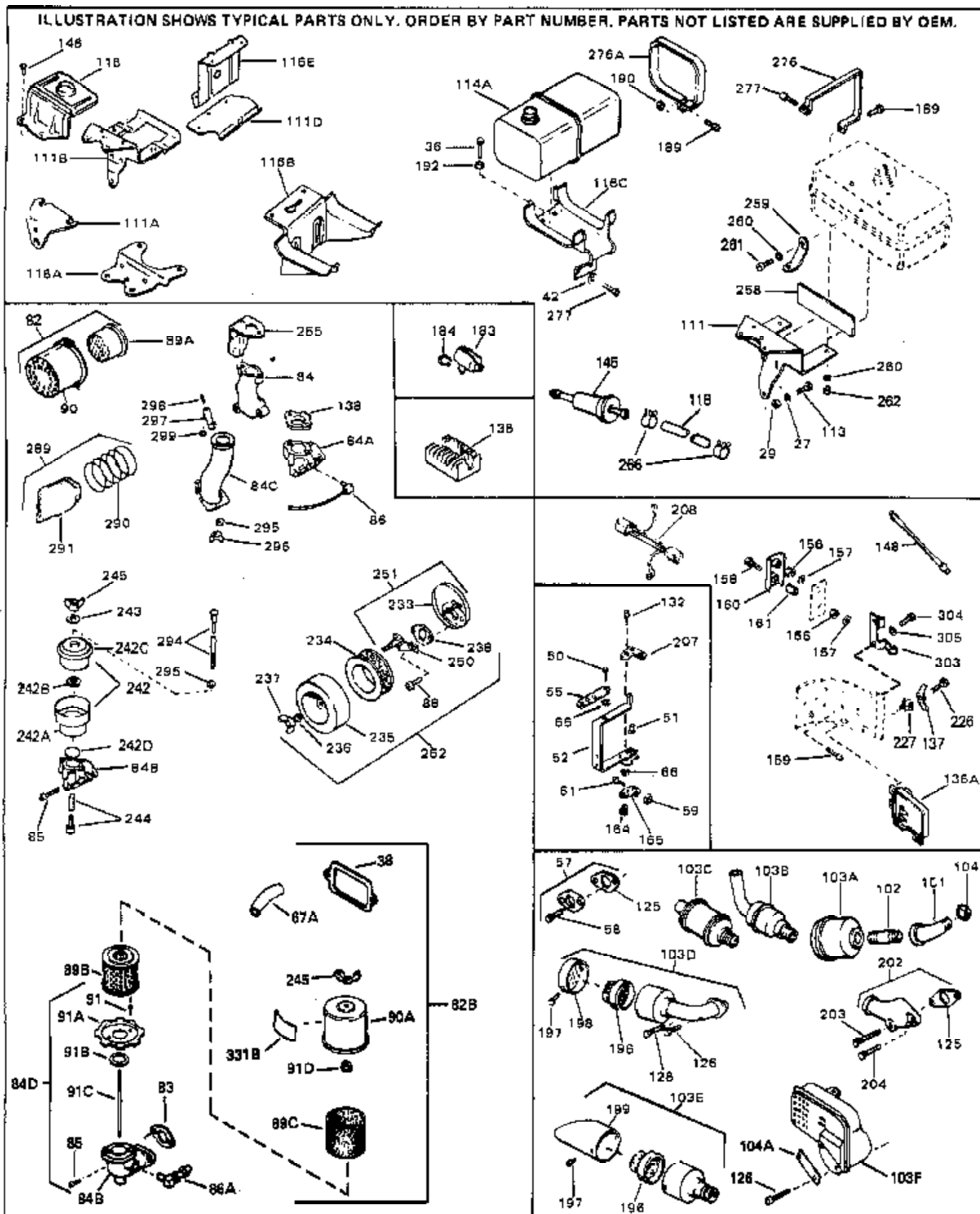
| Ref # | Part Number | Qty | Description                                                                                                                                                                                                                                                                      |
|-------|-------------|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 114   | 34186A      |     | Fuel Tank (Incl. 115 & 266) NOTE: These tanks were built with different size fuel inlet openings. Tanks with the 1-3/16" I.D. opening use fuel cap 33032 or 34210. Tanks with the 1-1/2" I.D. opening use fuel cap 35355 or 35650.                                               |
| 115   | 410144B     |     | Fuel Cap (White Plastic)(Std)(As required)                                                                                                                                                                                                                                       |
| 115   | 33032       |     | Fuel Cap (Charcoal Plastic) (Spurt resistant, Low profile) (Use as required)                                                                                                                                                                                                     |
| 115   | 34210       |     | Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as required)                                                                                                                                                                                                         |
| 115   | 35355       |     | Fuel Cap (Use as required)                                                                                                                                                                                                                                                       |
| 116D  | 34159       |     | Plate, Fuel tank mounting                                                                                                                                                                                                                                                        |
| 117A  | 32961       |     | Valve, Shut-off                                                                                                                                                                                                                                                                  |
| 118   | 29774       |     | Fuel Line (Braided 8-1/4" 21 cm)(Use as req.)                                                                                                                                                                                                                                    |
| 118   | 30705       |     | Fuel Line (Braided 16") (41 cm) (Use as req.)                                                                                                                                                                                                                                    |
| 118   | 30962       |     | Fuel Line (Braided 32") (81 cm) (Use as req.)                                                                                                                                                                                                                                    |
| 120   | 650128      |     | Screw, 10-24 x 1/2" (Use as required)                                                                                                                                                                                                                                            |
| 121   | 30622A      |     | Extension, Blower housing                                                                                                                                                                                                                                                        |
| 122   | 34174       |     | Deflector, Exhaust                                                                                                                                                                                                                                                               |
| 123   | 650665      |     | Screw, 1/4-15 x 7/8"                                                                                                                                                                                                                                                             |
| 124   | 650542      |     | Screw, 5/16-18 x 3/4"                                                                                                                                                                                                                                                            |
| 125   | 27930A      |     | Gasket, Exhaust                                                                                                                                                                                                                                                                  |
| 126   | 30196       |     | Screw, 5/16-18 x 3/4"                                                                                                                                                                                                                                                            |
| 127   | 26073       |     | Washer (Use as required)                                                                                                                                                                                                                                                         |
| 128   | 650694A     |     | Screw, 5/16-18 x 2" (Use as required)                                                                                                                                                                                                                                            |
| 129   | 32589       |     | Key, Flywheel                                                                                                                                                                                                                                                                    |
| 130   | 31843A      |     | Bracket, Governor gear                                                                                                                                                                                                                                                           |
| 131   | 650836      |     | Screw, 10-24 x 1/2"                                                                                                                                                                                                                                                              |
| 133   | 650493      |     | Screw, 1/4-20 x 1-3/4"                                                                                                                                                                                                                                                           |
| 149   | 30747       |     | Clip, Shorting                                                                                                                                                                                                                                                                   |
| 151   | 650665      |     | Screw, 1/4-15 x 7/8"                                                                                                                                                                                                                                                             |
| 193   | 610118      |     | Cover, Spark plug (Use as required)                                                                                                                                                                                                                                              |
| 205   | 650561      |     | Screw, 1/4-20 x 5/8" (Use as required )                                                                                                                                                                                                                                          |
| 209   | 30939A      |     | Cover, Cylinder head                                                                                                                                                                                                                                                             |
| 246   | 32125       |     | Cup, Starter                                                                                                                                                                                                                                                                     |
| 247   | 590417      |     | Screen, Starter cup                                                                                                                                                                                                                                                              |
| 266   | 26460       |     | Clamp, Fuel line                                                                                                                                                                                                                                                                 |
| 270   | 31461       |     | Bushing, Crankshaft (Use as required)                                                                                                                                                                                                                                            |
| 271   | 33876       |     | Gasket, Stator                                                                                                                                                                                                                                                                   |
| 274   | 610973      |     | Terminal Assy. (As req. on late production)                                                                                                                                                                                                                                      |
| 287   | 27275       |     | Clip, Hi-tension wire (Use as required)                                                                                                                                                                                                                                          |
| 287   | 34246       |     | Clip, Ground wire (Use as required)                                                                                                                                                                                                                                              |
| 331A  | 34346       |     | Decal, Instruction                                                                                                                                                                                                                                                               |
| 331   | 550223      |     | Decal, Name                                                                                                                                                                                                                                                                      |
| 332   | 30547A      |     | Contact Assy., Breaker                                                                                                                                                                                                                                                           |
| 333   | 30548B      |     | Condenser                                                                                                                                                                                                                                                                        |
| 334   | 631021      |     | Inlet Needle, Seat & Clip Assy.                                                                                                                                                                                                                                                  |
| 336   | 631453      |     | Carburetor (Incl. 75) (Refer to Division 5, Section A, page 100 for breakdown)                                                                                                                                                                                                   |
| 337   | 610976      |     | Magneto (w/ring gear) (12 Volt) (7 Am p) NOTE: The complete magneto is not available as an assembly. The magneto number is shown for reference purposes only. Order component parts individually, as show in parts list. (Refer to Division 5, Section B, page 36 for breakdown) |
| 338   | 590420      |     | Rewind Starter (Refer to Division 5, Section C, page 25 for breakdown)                                                                                                                                                                                                           |

| Ref # | Part Number | Qty | Description                      |
|-------|-------------|-----|----------------------------------|
| 343   | 33239A      |     | Gasket Set (Incl. items marked*) |



## Engine Parts List #2

| Ref # | Part Number | Qty | Description                                                                                                                                                                                                                                                                                                         |
|-------|-------------|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 31    | 650516      |     | Screw, 1/4-20 x 1-1/8"                                                                                                                                                                                                                                                                                              |
| 34    | 27793       |     | Clip, Conduit (Use as required)                                                                                                                                                                                                                                                                                     |
| 35    | 28942       |     | Screw, 10-32 x 3/8" (Use as required)                                                                                                                                                                                                                                                                               |
| 43A   | 650597      |     | Screw, 10-24 x 5/8"                                                                                                                                                                                                                                                                                                 |
| 48    | 29716       |     | Screw, 1/4-28 x 7/16"                                                                                                                                                                                                                                                                                               |
| 53    | 32328       |     | Bracket, Speed adjusting (Incl. 239)                                                                                                                                                                                                                                                                                |
| 54    | 8269        |     | Washer, Lock (Can be purchased locally)                                                                                                                                                                                                                                                                             |
| 56    | 32327       |     | Link, Throttle                                                                                                                                                                                                                                                                                                      |
| 71    | 650815      |     | Washer, Belleville                                                                                                                                                                                                                                                                                                  |
| 72    | 8116        |     | Nut, Hex                                                                                                                                                                                                                                                                                                            |
| 152   | 30063       |     | Screw, 1/4-20 x 1/2"                                                                                                                                                                                                                                                                                                |
| 193   | 610118      |     | Cover, Spark plug (Use as required)                                                                                                                                                                                                                                                                                 |
| 239   | 33450       |     | Nut, Lock                                                                                                                                                                                                                                                                                                           |
| 240   | 30845A      |     | Bolt, Governor adjusting                                                                                                                                                                                                                                                                                            |
| 241   | 30886A      |     | Spring, Governor bolt                                                                                                                                                                                                                                                                                               |
| 263   | 650764      |     | Nut, "U" Type (Use as required)                                                                                                                                                                                                                                                                                     |
| 274   | 610973      |     | Terminal Assy. (As req. on late production)                                                                                                                                                                                                                                                                         |
| 331   | 550223      |     | Decal, Name                                                                                                                                                                                                                                                                                                         |
| 338   | 590420      |     | Rewind Starter (Refer to Division 5, Section C, page 25 for breakdown)                                                                                                                                                                                                                                              |
| 339   | 35765A      |     | Electric Starter Motor (12 Volt) NOTE: The 29965, 32468, 32468B, 33606, 35765 and 35765A startermotors are used interchangeably on these models. Refer to service number stamped on end cap of motor, or on decal, for identification. Refer to Division 5, Section D for breakdown.                                |
| 340   | 33328D      |     | Starter Motor Kit (110-120 Volt) This 110-120 volt starter motor kit may have been added to this engine. It can be added only if cylinder has drilled and tapped starter mounting bosses and a ring gear flywheel (see #342). Refer to service number stamped on end cap of motor, or on decal, for identification. |
| 342   | 30811A      |     | Flywheel (Ring gear flywheel required on engines using 110-120 volt starter kits listed above)                                                                                                                                                                                                                      |
| 342   | 611042      |     | Flywheel (Used on Type letters H and above) (Std. Point ignition) (Ring gear flywheel required on engines using 110-120 volt starter kits listed above)                                                                                                                                                             |
| 342   | 611085      |     | Flywheel (Minimum ring gear flywheel required on engines using 110-120 volt starter kits listed above) (Use with Solid State ignition)                                                                                                                                                                              |





| Ref # | Part Number | Qty | Description                                                                                                                                                                |
|-------|-------------|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 27    | 27513       |     | Lockwasher, 1/4" (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                                                                                                                                                   |
| 42    | 26073       |     | Washer (Use as required)                                                                                                                                                   |
| 42    | 650691      |     | Washer, Flat (Use as required)                                                                                                                                             |
| 50    | 650548      |     | Screw, 8-32 x 5/16"                                                                                                                                                        |
| 51    | 30319       |     | Rivet, Split (Used in early production)                                                                                                                                    |
| 52    | 32326A      |     | Lever, Governor (New lever does not need 1 of 51,66,132,164,165,207)                                                                                                       |
| 55    | 30205       |     | Bracket, Adjusting                                                                                                                                                         |
| 57    | 730130      |     | Exh.Adap.Kit (Incl. 58 & 125) (Use as req.)                                                                                                                                |
| 58    | 30196       |     | Screw, 5/16-18 x 3/4" (Use as required)                                                                                                                                    |
| 59    | 29216       |     | Nut, Lock, 10-32                                                                                                                                                           |
| 61    | 29826       |     | Screw, 10-32 x 3/4"                                                                                                                                                        |
| 66    | 29918       |     | Lockwasher, #8 E.T.                                                                                                                                                        |
| 82B   | 730561      |     | Air cleaner kit (Incl. 38, 67A, 83, 84B, 85,89B, 89C, 90A, 91, 91A, 91B, 91C, 91D, 245 & 331B) (Use only on engines with an externally vented fully adjustable carburetor) |
| 82    | 730127      |     | Air Cleaner Ass'y. (Incl. 60, 83, 87, 88, 89A, 90, 238 & 331B) (Use as required)                                                                                           |
| 83    | 27272A      |     | * Gasket, Air cleaner                                                                                                                                                      |
| 84D   | 34819       |     | Air Cleaner Elbow (Incl. 84B, 86A, 91, 91A, 91B & 91C) (Use in 730561 assembly only)                                                                                       |
| 88    | 28820       |     | Screw, 10-32 x 1/2"                                                                                                                                                        |
| 90    | 31715       |     | Body, Air cleaner                                                                                                                                                          |
| 103E  | 391026      |     | Opt. Spark Arrest Muffler (Incl.196,1 97,199)                                                                                                                              |
| 113   | 650561      |     | Screw, 1/4-20 x 5/8"                                                                                                                                                       |
| 118   | 29774       |     | Fuel Line (Braided 8-1/4" 21 cm)(Use as req.)                                                                                                                              |
| 118   | 30705       |     | Fuel Line (Braided 16") (41 cm) (Use as req.)                                                                                                                              |
| 118   | 30962       |     | Fuel Line (Braided 32") (81 cm) (Use as req.)                                                                                                                              |
| 125   | 27930A      |     | Gasket, Exhaust                                                                                                                                                            |
| 126   | 30196       |     | Screw, 5/16-18 x 3/4"                                                                                                                                                      |
| 128   | 650694A     |     | Screw, 5/16-18 x 2" (Use as required)                                                                                                                                      |
| 132   | 650548      |     | Screw, 8-32 x 5/16" (Early production )                                                                                                                                    |
| 136A  | 610938      |     | Regulator, Rectifier (7Amp)                                                                                                                                                |
| 148   | 34067       |     | Wire Assy., Alternator adapter (4-1/4 ")                                                                                                                                   |
| 148   | 34069       |     | Wire Assy., Alternator adapter (6-3/4 ")                                                                                                                                   |
| 202   | 31288       |     | Exh. Adaptor Kit (Incl.125,203,204) ( As req.)                                                                                                                             |
| 203   | 650697A     |     | Screw, 5/16-18 x 2-1/2" (Use as required)                                                                                                                                  |
| 204   | 6021A       |     | Screw, 5/16-18 x 1-1/2" (Use as required)                                                                                                                                  |
| 266   | 26460       |     | Clamp, Fuel line                                                                                                                                                           |
| 303   | 32765       |     | Clamp, Blower housing extension                                                                                                                                            |
| 304   | 28820       |     | Screw, 10-32 x 1/2"                                                                                                                                                        |