



## Engine Parts List #1

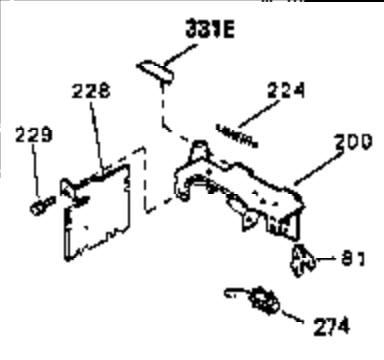
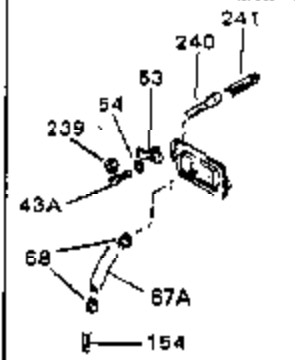
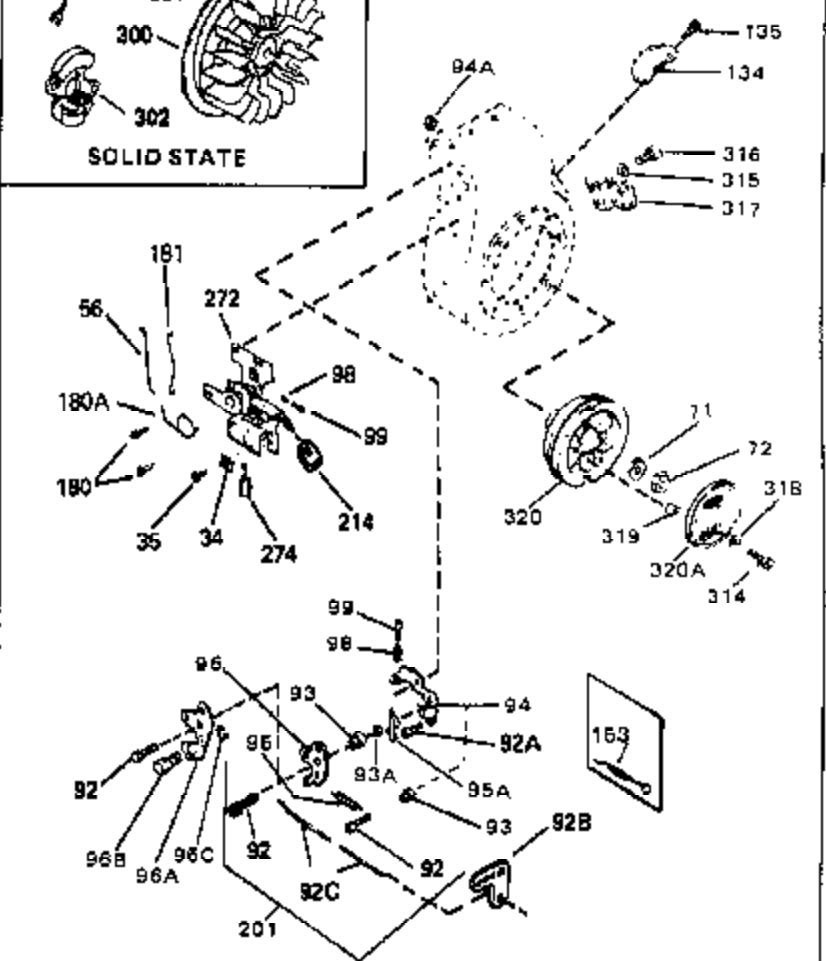
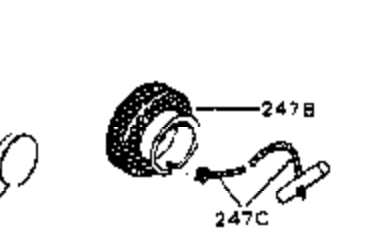
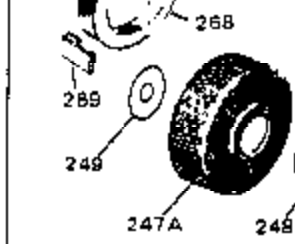
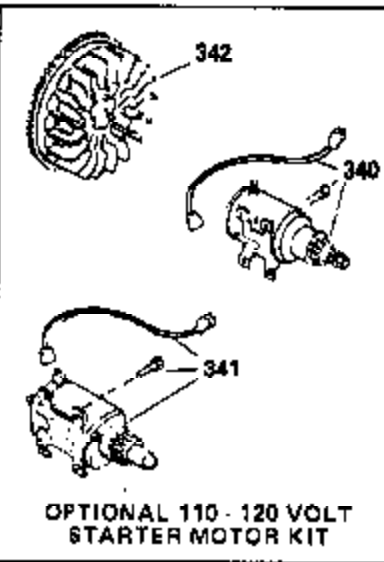
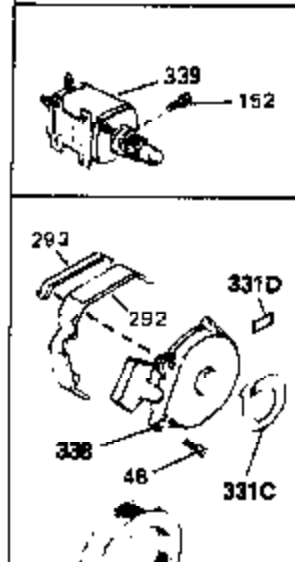
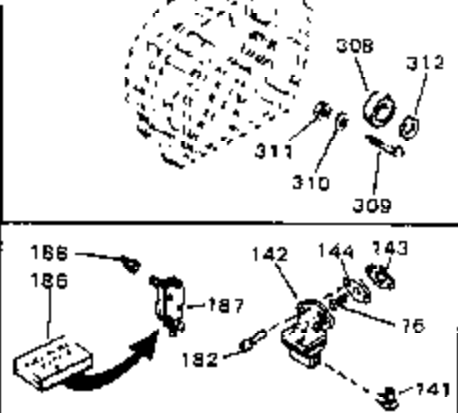
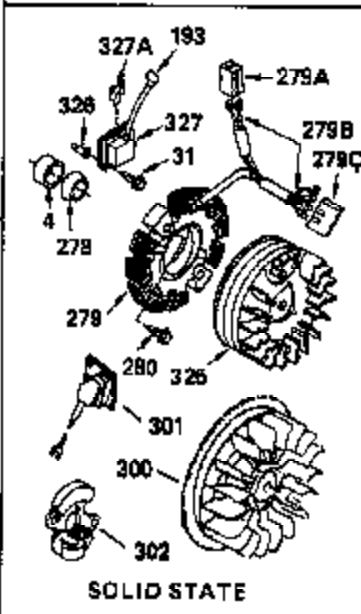
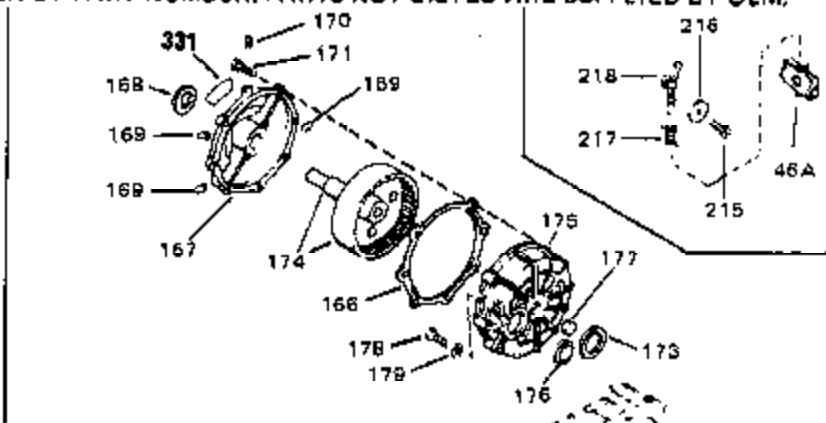
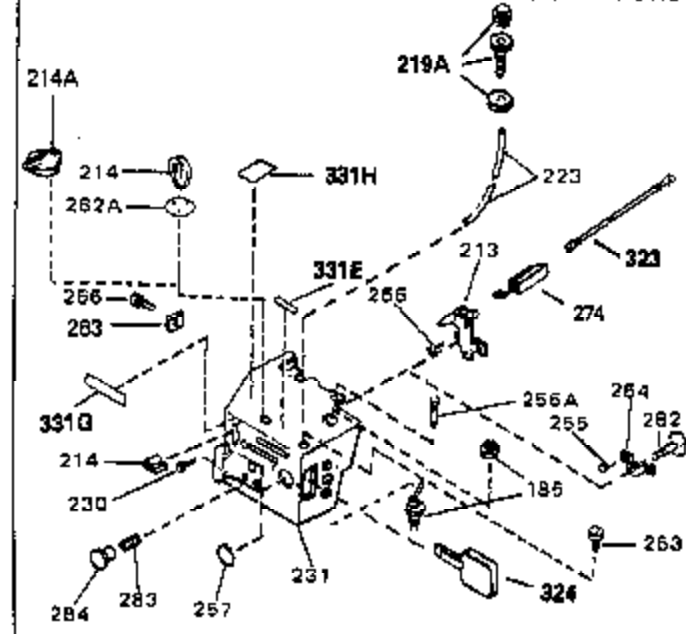
| Ref # | Part Number | Qty | Description   |
|-------|-------------|-----|---|
|       | 1 32586C    |     | Cylinder (Incl. 2, 3, 4 & 76) (2-3/4" Bore)   |
|       | 2 27652     |     | Pin, Dowel  |
|       | 3 27642     |     | Plug, Oil drain   |
|       | 4 32630     |     | Seal, Oil   |
|       | 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 re quired)   |
|       | 7 27882     |     | Cap, Upper valve spring   |
|       | 8A 27881    |     | Spring, Valve   |
|       | 8 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 32587    |     | Crankshaft (Incl. 12 & 13)  |
|       | 12 29783    |     | Crankshaft Gear Pin (Early production )   |
|       | 13 27884    |     | Gear, Crankshaft (Used in early produ ction) This gear is servicable onlywhen it is pinned to the crankshaft. |
|       | 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)   |
|       | 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)   |
|       | 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 34011A   |     | Dipstick, Oil (Incl. 30)  |
|       | 25A 33893A  |     | Tube, Oil filler  |
|       | 26 30684    |     | * Gasket, Cylinder cover  |
|       | 28 650488   |     | Screw, 1/4-20 x 1-1/4"  |
|       | 30 33590    |     | "O" Ring  |
|       | 31 650489   |     | Screw, 1/4-20 x 5/8"  |
|       | 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 requi red)  |
|       | 36 650695A  |     | Screw, 5/16-18 x 2-1/4" (Use as requi red)  |
|       | 36 650694A  |     | Screw, 5/16-18 x 2" (Use as required)   |
|       | 37 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   |

## Engine Parts List #1

| Ref # | Part Number | Qty | Description  |
|-------|-------------|-----|--|
| 42A   | 650690      |     | Washer, Belleville (Use as required)   |
| 42    | 26073       |     | Washer (Use as required)   |
| 42    | 650691      |     | Washer, Flat (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    | 33454       |     | Lever Assy., Governor  |
| 56    | 34662       |     | Link, Throttle   |
| 59    | 29216       |     | Nut, Lock, 10-32   |
| 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    | 35260       |     | Blower Housing (For electric starter)  |
| 71    | 650815      |     | Washer, Belleville   |
| 72    | 8116        |     | Nut, Hex   |
| 73    | 29536       |     | Blower Housing Baffle (without electric starter knock-out)<br>(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)<br>(Use as required)                                     |
| 97    | 34240       |     | Ground Wire  |
| 98    | 31342       |     | Spring, Compression  |
| 99    | 650549      |     | Screw, 5-40 x 7/16"  |
| 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"   |
| 115   | 410144B     |     | Fuel Cap (White Plastic)(Std)(As required)   |
| 115   | 33032       |     | Fuel Cap (Charcoal Plastic) (Spurt resistant, Low profile)<br>(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  |
| 118   | 29774       |     | Fuel Line (Braided 8-1/4" 21 cm)(Use as req.)  |
| 118   | 30705       |     | Fuel Line (Braided 16") (41 cm) (Use as req.)  |

| Ref # | Part Number | Qty | Description   |
|-------|-------------|-----|---|
| 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   |
| 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  |
| 219   | 34814       |     | Primer Assy.  |
| 223   | 32180C      |     | Line, Primer  |
| 225   | 34126       |     | Bracket, Grommet mounting   |
| 226   | 650760      |     | Screw, 8-32 x 3/8"  |
| 227   | 28545       |     | Grommet   |
| 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 Ass'y. (As req. on late prod uction)   |
| 287   | 27275       |     | Clip, Hi-tension wire (Use as require d)  |
| 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   | 631920      |     | Carburetor (Incl. 75) (Refer to Division 5, Section A, page 138 for breakdown)  |
| 337   | 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 show in parts list. (Refer to Division 5, Section B, page 24 for breakdown) |
| 338   | 590473      |     | Rewind Starter (Refer to Division 5, Section C, page 29 for breakdown)  |
| 343   | 33239A      |     | Gasket Set (Incl. items marked*)  |

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| Ref # | Part Number | Qty | Description   |
|-------|-------------|-----|---|
| 31    | 650489      |     | Screw, 1/4-20 x 5/8"  |
| 34    | 27793       |     | Clip, Conduit (Use as required)   |
| 35    | 28942       |     | Screw, 10-32 x 3/8" (Use as required)   |
| 43A   | 650128      |     | Screw, 10-24 x 1/2"   |
| 48    | 29716       |     | Screw, 1/4-28 x 7/16"   |
| 56    | 34662       |     | Link, Throttle  |
| 71    | 650815      |     | Washer, Belleville  |
| 72    | 8116        |     | Nut, Hex  |
| 98    | 31342       |     | Spring, Compression   |
| 99    | 650549      |     | Screw, 5-40 x 7/16"   |
| 180   | 650821      |     | Screw, 10-32 x 1/2"   |
| 180A  | 34663       |     | Spring, Speed control   |
| 181   | 34661       |     | Link, Governor  |
| 193   | 610118      |     | Cover, Spark plug (Use as required)   |
| 214A  | 35438       |     | Knob, Control   |
| 223   | 32180C      |     | Line, Primer  |
| 230   | 650257      |     | Screw, 8-32 x 5/16"   |
| 231   | 34672       |     | Cover, Carburetor   |
| 254   | 32398       |     | Bracket, Choke  |
| 255   | 28820       |     | Screw, 10-32 x 1/2"   |
| 256   | 650760      |     | Screw, 8-32 x 3/8"  |
| 256A  | 650765      |     | Screw, 10-32 x 1/2"   |
| 263   | 650764      |     | Nut, "U" Type (Use as required)   |
| 272   | 34664       |     | Control Bracket (Incl. 98, 99, 180A & 274)  |
| 274   | 610973      |     | Terminal Ass'y. (As req. on late production)  |
| 292   | 34127       |     | Guard Starter   |
| 293   | 32576       |     | Seal, Snow guard  |
| 331H  | 34414       |     | Decal, Warning  |
| 331G  | 34416       |     | Decal, Choke  |
| 331E  | 34144       |     | Decal, Primer   |
| 331   | 550223      |     | Decal, Name   |
| 338   | 590473      |     | Rewind Starter (Refer to Division 5, Section C, page 29 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)  |

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| 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    | 33454       |     | Lever Assy., Governor   |
| 57    | 730130      |     | Exh.Adap.Kit (Incl. 58 & 125) (Use as required)   |
| 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)  |
| 84D   | 34819       |     | Air Cleaner Elbow (Incl. 84B, 86A, 91, 91A, 91B & 91C) (Use in 730561 assembly only) NOTE: 130010 thru 10C & 11 used in early production only.                              |
| 103E  | 391026      |     | Opt. Spark Arrest Muffler (Incl. 196, 197, 199)   |
| 113   | 650561      |     | Screw, 1/4-20 x 5/8"  |
| 118   | 29774       |     | Fuel Line (Braided 8-1/4" 21 cm)(Use as required)   |
| 118   | 30705       |     | Fuel Line (Braided 16") (41 cm) (Use as required)   |
| 118   | 30962       |     | Fuel Line (Braided 32") (81 cm) (Use as required)   |
| 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)  |
| 148   | 34067       |     | Wire Assy., Alternator adapter (4-1/4")   |
| 148   | 34069       |     | Wire Assy., Alternator adapter (6-3/4")   |
| 164   | 30322       |     | Nut & Lockwasher (Early Prod. Only)   |
| 165   | 29916       |     | Clamp, Governor lever (Early Prod. Only)  |
| 202   | 31288       |     | Exh. Adaptor Kit (Incl. 125, 203, 204) (As required)  |
| 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)   |
| 226   | 650760      |     | Screw, 8-32 x 3/8"  |
| 227   | 28545       |     | Grommet   |
| 266   | 26460       |     | Clamp, Fuel line  |