

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

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| Ref # | Part Number | Qty | Description  |
|-------|-------------|-----|--|
| 1     | 33707A      |     | Cylinder (Incl. 2, 4 & 33) (3-1/2" Bo re)  |
| 2     | 31927       |     | Pipe Plug, 3/8-18 sq. head (Use as re quired)  |
| 2     | 28483       |     | Pipe Plug (3/8-18 hex countersunk) (A s req.)  |
| 2     |             |     | Pipe Plug (3/4-14 sq.hd.)(As req.)(Bu y local)   |
| 2     | 9556        |     | Pipe Plug (1/8-27 sq. hd.) (Use as re quired)  |
| 2     | 28534       |     | Pipe Plug(1/8-27 hex c/sunk headless) (As req)   |
| 4     | 27652       |     | Pin, Dowel   |
| 5     | 33497C      |     | Crankshaft (Incl. 6 thru 9, 140 & 141 ) NOTE: When using this crankshaft to repair older units equippedwith straight cut cam and governor gears,it will be necessary to order 34751 helical governor gear assembly and 34752 helical camshaft in order to the complete the repair. |
| 6     | 29783       |     | Pin, Crankshaft gear   |
| 7     | 34692       |     | Gear Crankshaft (Helical)  |
| 8     | 31932       |     | Bearing, Tapered roller  |
| 9     | 31928       |     | Cup, Bearing   |
| 11    | 34511       |     | Piston, Pin & Ring Set (Std.) (3-1/2" Bore)  |
| 11    | 34512       |     | Piston, Pin & Ring Set (.010" OS)  |
| 11    | 34513       |     | Piston, Pin & Ring Set (.020" OS)  |
| 11A   | 32238B      |     | Piston & Pin Ass'y. (Std.)(3-1/2")(In cl.12)   |
| 11A   | 32239B      |     | Piston & Pin Ass'y. (.010" OS) (Incl. 12)  |
| 11A   | 32240B      |     | Piston & Pin Ass'y. (.020 " OS) (Incl . 12)  |
| 12    | 31919       |     | Ring, Piston pin retaining   |
| 13    | 32241       |     | Ring Set (Std.) (3-1/2" Bore)  |
| 13    | 32242       |     | Ring Set (.010" OS)  |
| 13    | 32243       |     | Ring Set (.020" OS)  |
| 14    | 33093A      |     | Connecting Rod Assy.(Std.)(Incl.15, 1 6 & 17)  |
| 14    | 34383       |     | Connecting Rod Assy.(.010" US)(Incl.1 5,16,17)   |
| 14    | 34384       |     | Connecting Rod Assy.(.020" US)(Incl.1 5,16.17)   |
| 15    | 32077       |     | Bolt, Connecting rod   |
| 16    | 26073       |     | Washer, Connecting rod   |
| 17    | 28264       |     | Nut Assy.  |
| 18    | 34752       |     | Camshaft (MCR) (Helical)   |
| 19    | 33472       |     | Lifter, Valve  |
| 20    | 33471       |     | Rod, Push  |
| 21    | 33505       |     | Intake Valve (Std.)  |
| 21    | 33645       |     | Intake Valve (1/32" OS)  |
| 22    | 33506       |     | Exhaust Valve (Std.)   |
| 22    | 33646       |     | Exhaust Valve (1/32" OS)   |
| 23    | 33507       |     | Spring, Valve  |
| 24    | 33508       |     | Retainer & Cap Set, Keeper valve   |
| 25A   | 34410       |     | * "O" Ring (Exhaust only) (Also Incl. i n 251)   |
| 25    | 33509       |     | * "O" Ring (Intake only) (Also Incl. in 251)   |
| 26    | 33510       |     | Cap, Valve   |
| 27    | 34751       |     | Governor Gear Ass'y. (Helical)   |
| 28    | 650745      |     | Washer, Flat   |
| 29    | 35479       |     | Washer, Flat (Use with 35322 spool)  |
| 29    | 30590A      |     | Washer, Flat   |
| 30    | 31948       |     | Spool, Governor  |
| 31    | 31956B      |     | * Gasket, Cylinder cover   |
| 32    | 34758       |     | Cover Assy., Cylinder (Incl. 2, 33 & 134)  |
| 33    | 31950       |     | * Seal, Oil  |
| 34    | 650451      |     | Screw, 1/4-20 x 1"   |
| 35    | 650492      |     | Screw, 1/4-20 x 2-1/4"   |
| 36    | 32425       |     | Rod Assy., Governor  |
| 37    | 32426       |     | Spacer, Governor rod   |
| 38    | 29193       |     | Ring, Retaining  |

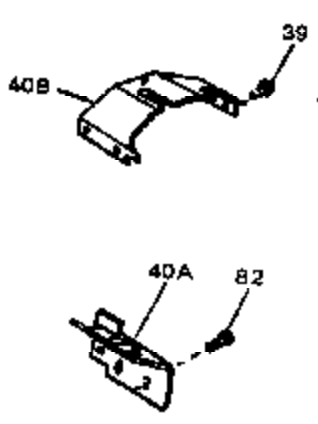
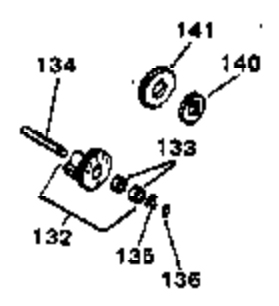
| Ref # | Part Number | Qty | Description                                   |
|-------|-------------|-----|---|
| 39    | 650736      |     | Screw, 10-16 x 3/8"                           |
| 40    | 33495       |     | Cover, Cylinder head                          |
| 41    | 34225A      |     | * Gasket, Cylinder head                       |
| 42    | 34753       |     | Head, Cylinder                                |
| 44    | 32046       |     | Rope Assy., Starter                           |
| 45    | 35552       |     | Spark Plug (RL-82C)                           |
| 46A   | 650691      |     | Washer, Flat                                  |
| 46    | 650690      |     | Washer, Belleville                            |
| 47A   | 650746      |     | Screw, 5/16-18 x 1-3/8"                       |
| 47    | 650692      |     | Screw, 5/16-18 x 1-3/4"                       |
| 48    | 730218      |     | Valve Guide Kit (Incl. 49)                    |
| 49    | 792035      |     | Ring, Retaining                               |
| 50    | 33515A      |     | * Gasket, Intake pipe                         |
| 51    | 33475       |     | Pipe, Intake                                  |
| 52    | 650378      |     | Screw, Torx T-30, 5/16-18 x 1-1/8"            |
| 53    | 792028      |     | Screw, 5/16-18 x 7/8"                         |
| 54    | 33476A      |     | * Gasket, Carburetor                          |
| 55    | 33477A      |     | Baffle, Air cleaner                           |
| 56    | 792075      |     | Nut, Lock 5/16-24 (Used in early production)  |
| 57    | 33478       |     | Link, Governor lever-to-throttle lever        |
| 58    | 31963       |     | Lever, Governor                               |
| 59    | 31964       |     | Clamp, Governor lever                         |
| 60    | 650518      |     | Lockwasher, No. 10 E.T.                       |
| 61    | 30312       |     | Screw, 10-32 x 1/2"                           |
| 62    | 650544      |     | Screw, Torx T-25, 10-24 x 7/8"                |
| 63    | 7975        |     | Nut, 10-24                                    |
| 64    | 31965       |     | Plate, Governor spring                        |
| 65    | 31984A      |     | Lever Assy., Control                          |
| 66    | 28558       |     | Washer, Wave                                  |
| 67    | 31966       |     | Bushing, Governor lever                       |
| 68    | 650597      |     | Screw, 10-24 x 5/8"                           |
| 69    | 31967       |     | Spring, Governor                              |
| 70    | 650591      |     | Screw, 10-24 x 2"                             |
| 71    | 33099       |     | Spring  |
| 72    | 32599       |     | "O" Ring (Incl. in 251)                       |
| 73    | 650666      |     | Washer, Lock                                  |
| 74    | 32579       |     | Baffle, Blower housing                        |
| 75    | 650561      |     | Screw, 1/4-20 x 5/8"                          |
| 76    | 650592      |     | Key, Flywheel                                 |
| 77    | 610909      |     | Flywheel                                      |
| 77A   | 730201      |     | Trigger Pin Kit (Use as required)             |
| 78    | 650594      |     | Nut, Flywheel                                 |
| 79    | 610906      |     | Solid State Magneto (Incl. 158 thru 1 61)     |
| 80    | 650661      |     | Screw, 1/4-20 x 3/4"                          |
| 81    | 33479       |     | Extension, Blower housing                     |
| 83    | 650751      |     | Screw, 1/4-20 x 7/16"                         |
| 84    | 34314B      |     | Blower Hsg.(Incl.218A,219)(For elec.s tarter) |
| 85    | 8274        |     | Washer, Lock                                  |
| 85A   | 8274        |     | Washer, Lock                                  |
| 86    | 650595      |     | Screw, 5/16-24 x 3/8"                         |
| 86A   | 650595      |     | Screw, 5/16-24 x 3/8"                         |
| 87    | 650752      |     | Screw, 1/4-20 x 7/16"                         |
| 88    | 35475       |     | Tube, Push rod                                |
| 89    | 33481       |     | * "O" Ring (Also Incl. in 251)                |
| 90    | 34754       |     | Housing, Rocker arm                           |
| 94    | 33484       |     | * "O" Ring (Also Incl. in 251)                |
| 95    | 650168      |     | Washer, Flat                                  |
| 96    | 32610A      |     | Screw, 1/4-20 x 29/32"                        |

| Ref # | Part Number | Qty | Description   |
|-------|-------------|-----|---|
| 97    | 33485       |     | Arm, Rocker   |
| 98    | 33486       |     | Ring, Retaining   |
| 99    | 650755      |     | Screw, 1/4-20 x 3/4"  |
| 100   | 650864      |     | Nut, Hex, 1/4-20  |
| 101   | 650756      |     | Stud, Rocker arm  |
| 102   | 33487       |     | * "O" Ring (Also Incl. in 251)  |
| 103   | 33488       |     | Cover, Rocker arm   |
| 104   | 31958A      |     | * Gasket, Breather (Also Incl. in 251)  |
| 105   | 33489       |     | Body Assy., Breather  |
| 106   | 33490       |     | Tube, Breather  |
| 107   | 30102       |     | * Screw, 10-32 x 5/8" (Also Incl. in 25 1)  |
| 108   | 650738      |     | Screw, 1/4-20 x 5/8"  |
| 111   | 35471       |     | * Gasket, Air cleaner   |
| 112   | 35472       |     | Bracket, Air cleaner  |
| 114   | 650399      |     | Screw, 10-32 x 5/8"   |
| 115   | 32008       |     | Element, Air cleaner  |
| 116A  | 32810       |     | Cover, Air cleaner  |
| 117   | 650513      |     | Nut, Wing   |
| 119   | 32426       |     | Spacer, Screen  |
| 120   | 33776       |     | Screen, Pulley  |
| 122   | 650670      |     | Screw, 1/4-20 x 3/4"  |
| 123   | 27070       |     | Washer, Lock  |
| 123   | 650675      |     | Washer, Flat  |
| 125   | 650590      |     | Nut, Conduit  |
| 126   | 32043B      |     | Muffler   |
| 127   | 32143       |     | Nipple, Exhaust   |
| 137   | 650744      |     | Screw, 10-24 x 7/8"   |
| 138   | 34650       |     | Tube extension, Oil fill  |
| 146   | 32577       |     | Cover, Cylinder NOTE: Determine the gap between the cover and the machined surface on the cylinder, which can be from .001" up to .007", in which case no shim gaskets will be required. Use of gaskets must be limited to a combined total of .010" thick. Steel spacers must be used as required to eli |
| 147   | 792028      |     | Screw, 5/16-18 x 7/8"   |
| 155   | 31971       |     | * Gasket, Shim (.004/.005 thick) NOTE: Determine the gap between the cover and the machined surface on the cylinder, which can be from .001" up to .007", in which case no shim gaskets will be required. Use of gaskets must be limited to a combined total of .010" thick. Steel spacers must be used a |
| 156   | 31972       |     | * Gasket, Shim (.005/.007 thick) NOTE: Determine the gap between the cover and the machined surface on the cylinder, which can be from .001" up to .007", in which case no shim gaskets will be required. Use of gaskets must be limited to a combined total of .010" thick. Steel spacers must be used a |
| 157   | 32031       |     | * Spacer, Steel (.010 thick) NOTE: Determine the gap between the cover and the machined surface on the cylinder, which can be from .001" up to .007", in which case no shim gaskets will be required. Use of gaskets must be limited to a combined total of .010" thick. Steel spacers must be used as re |
| 158   | 610118      |     | Cover, Spark plug   |
| 159   | 610750      |     | Grommet, Lead wire  |
| 160   | 610408      |     | Nut, 8-32   |
| 161   | 610908      |     | Terminal, Female  |

| Ref # | Part Number | Qty | Description  |
|-------|-------------|-----|--|
| 169A  | 27793       |     | Clip, Conduit  |
| 170   | 28942       |     | Screw, 10-32 x 3/8"  |
| 189   | 33993A      |     | Dipstick (Incl. 190)   |
| 190   | 33590       |     | "O" Ring   |
| 191   | 33992A      |     | Tube, Oil filler   |
| 244   | 34346       |     | Decal, Instruction   |
| 244B  | 31752       |     | Decal, Air cleaner   |
| 244A  | 34768       |     | Decal, Name  |
| 246   | 631687      |     | Valve, Seat & Spring Assy.   |
| 247   | 632197      |     | Carburetor (Incl. 54 & 246) (Refer to Division 5, Section A, page 160 for breakdown) |
| 250   | 33516G      |     | * Gasket Set (Incl. items marked *)  |
| 251   | 35075       |     | "O" Ring Kit (Incl. Nos. items marked +)   |

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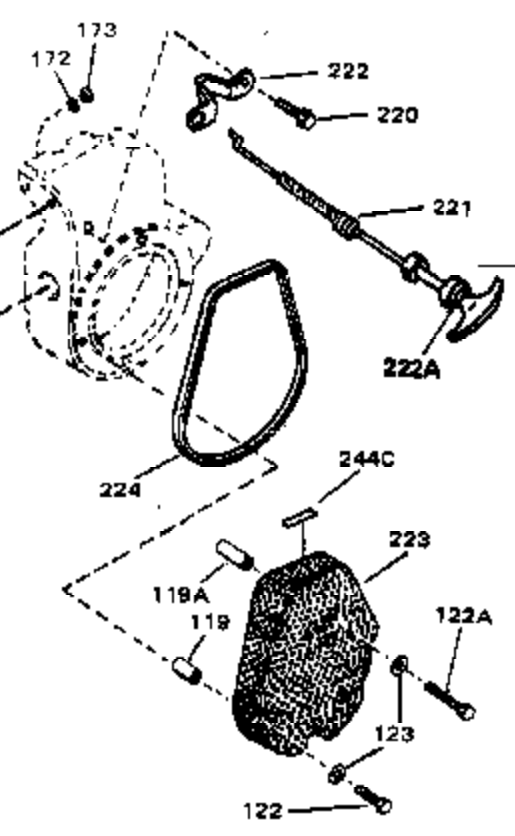
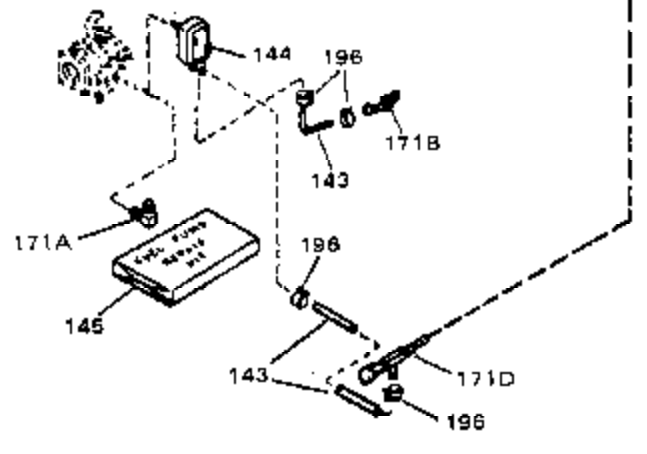
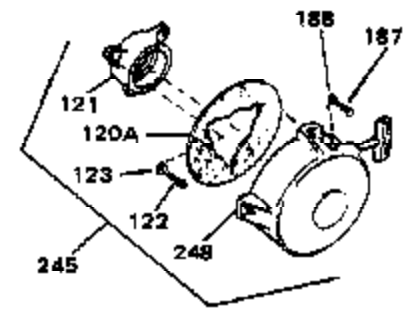
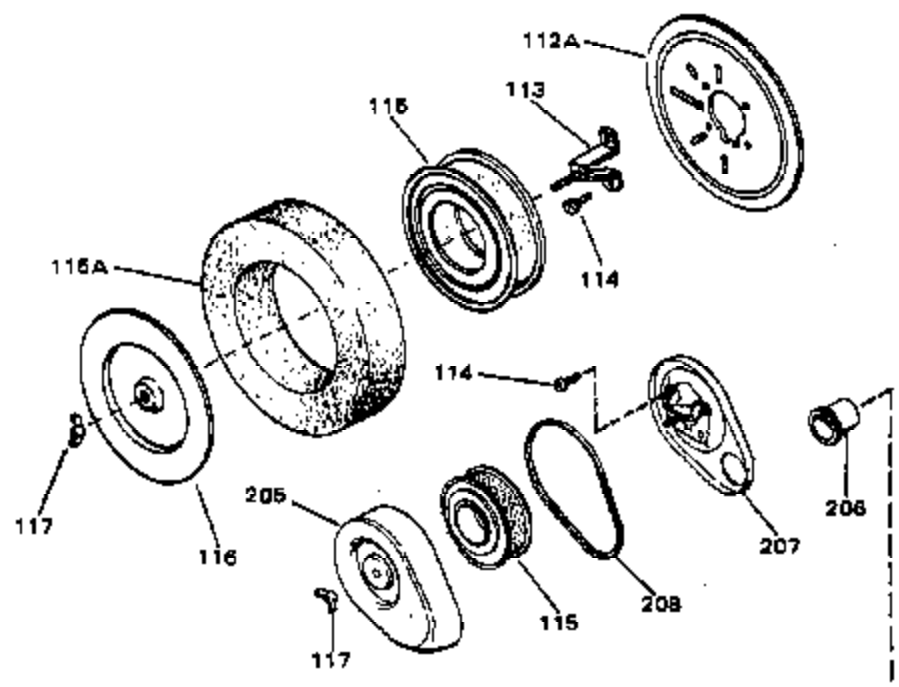
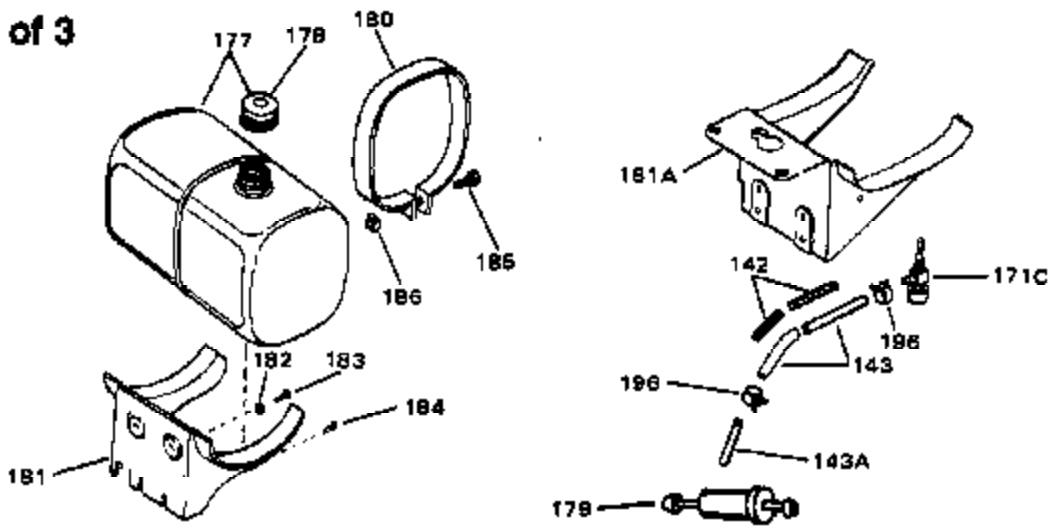
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| Ref # | Part Number | Qty | Description   |
|-------|-------------|-----|---|
|       | 39 650736   |     | Screw, 10-16 x 3/8"   |
| 126A  | 35731       |     | Muffler (Incl. 126B)  |
| 132   | 34651       |     | Weight Assy., Counterbalance  |
| 133   | 33501       |     | Bearing, Needle   |
| 134   | 33502       |     | Shaft, Counterbalance   |
| 135   | 33503       |     | Washer, Thrust  |
| 136   | 792017      |     | Ring, Retaining   |
| 140   | 33499       |     | Spacer  |
| 141   | 33963       |     | Gear, Counterbalance weight (Helical teeth)   |
| 141   |             |     | Gear, Counterbalance weight (Straight teeth) (For replacement see Ref. 132. Order correct kit for your enginemodel number.)   |
| 148   | 610902      |     | Alt.Coil Ass'y. (Incl.162,163,163A) ( 20 amp)   |
| 149   | 650521      |     | Screw, 10-32 x 1-1/8"   |
| 151A  | 610996      |     | Regulator (20 Amp) (Incl. 212 thru 21 8)  |
| 153   | 792028      |     | Screw, 5/16-18 x 7/8"(Use w/32817 str .motor)   |
| 153   | 650781      |     | Screw,5/16-18 x 11/16"(Use w/33835 st r.motor)  |
| 162A  | 610903      |     | Connector, Flat   |
| 163A  | 610905      |     | Terminal  |
| 163   | 610904      |     | Terminal  |
| 209   | 730178      |     | Ech.Adapter Kit (Incl.210 & 211)(As r equired)  |
| 210   | 34102B      |     | Gasket, Exhaust (Use as required)   |
| 211   | 30196       |     | Screw, 5/16-18 x 3/4" (Use as require d)  |
| 212   | 610990      |     | Connector, Male   |
| 213   | 610921      |     | Connector   |
| 214   | 610922      |     | Terminal  |
| 215   | 610989      |     | Terminal  |
| 216   | 610992      |     | Terminal, Female  |
| 217   | 610991      |     | Terminal, Female  |
| 218   | 30063       |     | Screw, 1/4-20 x 1/2"  |
| 238   | 730212      |     | Adapter Plate Kit (Optional) NOTE: If you are having mounting problems in using a HH100 thru0H180 in place of a large frame competitivebrand, we would like to call your attention to 730212 adapter plate kit. The kit converts the bottom mounting system found on HH100 thru 0H180 to a top mounting sys |
| 249   | 33835       |     | Electric Starter Motor (12-Volt) (Refer to Division 5, Section D for breakdown)   |

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| Ref # | Part Number | Qty | Description   |
|-------|-------------|-----|---|
| 114   | 650399      |     | Screw, 10-32 x 5/8"   |
| 115   | 32008       |     | Element, Air cleaner  |
| 117   | 650513      |     | Nut, Wing   |
| 119   | 32426       |     | Spacer, Screen  |
| 122   | 650670      |     | Screw, 1/4-20 x 3/4"  |
| 123   | 27070       |     | Washer, Lock  |
| 123   | 650675      |     | Washer, Flat  |
| 143   | 29774       |     | Fuel Line (Braided 8.25")(21 cm)(As required)                                 |
| 143   | 30705       |     | Fuel Line (Braided 16")(41 cm)(As required)                                   |
| 143   | 30962       |     | Fuel Line (Braided 32")(81 cm)(As required)                                   |
| 144   | 34392A      |     | Pump, Impulse fuel  |
| 145   | 33010       |     | Repair Kit, Impulse fuel pump   |
| 171C  | 29683       |     | Valve, Fuel strainer & shut-off   |
| 171A  | 28566       |     | Fitting, Fuel line  |
| 177   | 33979       |     | Fuel Tank (Incl. 178)   |
| 178   | 410144B     |     | Fuel Cap (White Plastic)(Std)(As required)                                    |
| 178   | 34210       |     | Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as required)      |
| 180   | 33980       |     | Strap, Fuel tank  |
| 181   | 33978       |     | Bracket, Fuel tank  |
| 182   | 650787      |     | Washer, Belleville  |
| 183   | 650786      |     | Screw, 1/4-20 x 5/8"  |
| 184   | 650785      |     | Screw, 5/16-18 x 5/8"   |
| 185   | 650488      |     | Screw, 1/4-20 x 1-1/4"  |
| 186   | 650456      |     | Nut, Lock   |
| 196   | 26460       |     | Clamp, Fuel line (Use as required)  |
| 245   | 730134      |     | Rewind Starter Kit (Incl.120A, 121, 122, 187, 188 & 248)<br>(Use as required) |