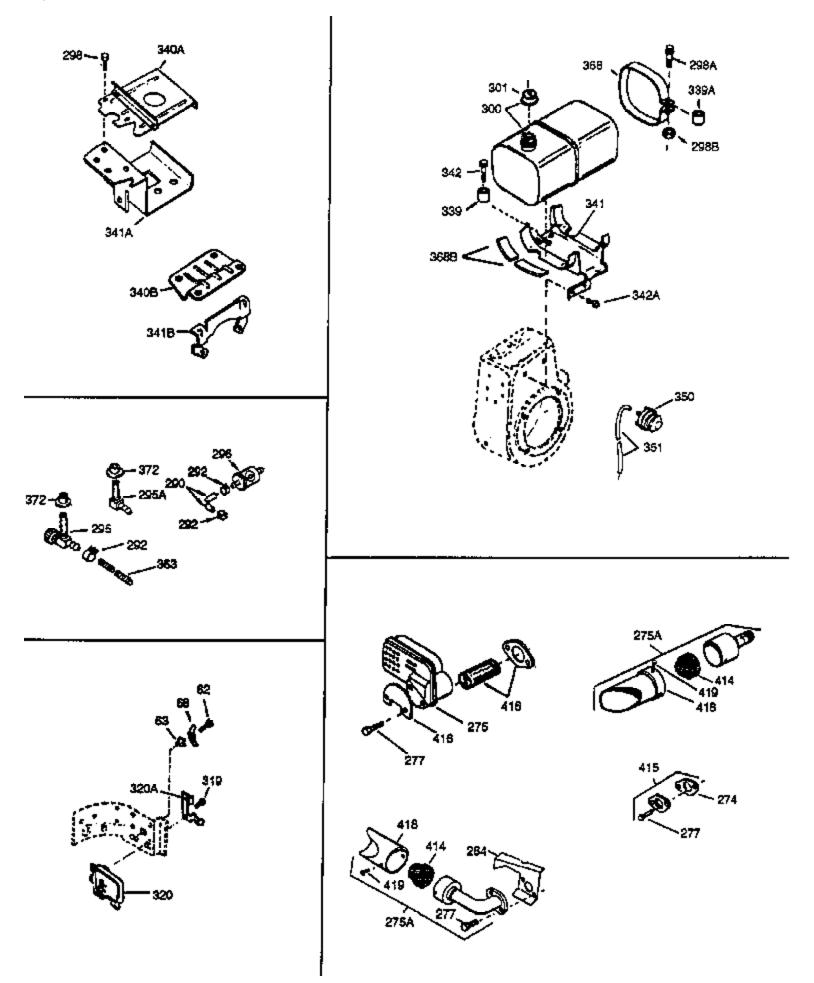


| Ref # | Part Number Q | ty Description |
|-------|---------------|---|
| 1 | 34922A | Cylinder (Cl liner)(3-5/16")(Incl.2,2 0 & 72) |
| 2 | 27652 | Pin, Dowel |
| | 650494 | Screw, 6-40 x 5/16" |
| | 30700 | Yoke, Governor |
| | 30699C | Rod Assy., Governor (Incl. 15A & 15B) |
| | 33454 | |
| | | Governor Lever Assy. |
| | 29916 | Clamp, Governor lever |
| | 650548 | Screw, 8-32 x 5/16" |
| | 32630 | Seal, Oil |
| 25 | 35256A | Blower Housing Baffle (With electric starter knockout) (Use |
| | | as required) |
| 25 | 29536 | Blower Housing Baffle (Without electric starter knockout) |
| 25 | 29000 | Blower Housing Baffle (Without electric starter knockout) |
| | | (Use as required) |
| 26 | 650561 | Screw, 1/4-20 x 5/8" |
| | 35198 | Crankshaft (Incl. 108 & 109) |
| | 29826 | Screw, 10-32 x 3/4" |
| | 29918 | Lockwasher, #8 E.T. |
| | 29216 | Locknut, 10-32 |
| | | |
| | 30322 | Nut & Lockwasher, 8-32 |
| | 29642 | |
| | 34860A | Piston, Pin & Ring Set (Std.)(3-5/16") |
| | 34861A | Piston, Pin & Ring Set (.010" OS) |
| | 34862A | Piston, Pin & Ring Set (.020" OS) |
| 41 | 34863 | Piston & Pin Ass'y. (Std.)(3-5/16")(I ncl.43) |
| 41 | 34864 | Piston & Pin Ass'y. (.010" OS) (Incl. 43) |
| 41 | 34865 | Piston & Pin Ass'y. (.020" OS) (Incl. 43) |
| 42 | 34866A | Ring Set (Std.) (3-5/16" Bore) |
| | 34867A | Ring Set (.010" OS) |
| | 34868A | Ring Set (.020" OS) |
| | 27888 | Ring, Piston Pin retaining |
| | 32591C | Rod Assy., Connecting (Incl. 46, 47 & 49) |
| | 650662C | |
| | | Bolt, Connecting rod (2 pieces) |
| | 650662C | Bolt, Connecting rod (2 pieces) |
| | 34034 | Lifter, Valve |
| | 34242 | Dipper, Oil |
| | 34143 | Camshaft (MCR) |
| | 33273A | Extension, Blower housing |
| | 650128 | Screw, 10-24 x 1/2" |
| | 35262 | * Gasket, Flange |
| 70 | 33367B | Cover, Cylinder (Incl. 71, 75 & 80) |
| 71 | 33368 | Bushing, Crankshaft |
| 72 | 27642 | Plug, Oil drain |
| 75 | 31950 | Seal, Oil |
| | 31845 | Shaft, Mechanical governor |
| | 30590A | Washer, Flat |
| | 30591 | Gear Assy., Governor (Incl. 81) |
| | 30588A | Spool, Governor |
| | 29193 | Ring, Retaining |
| | | |
| | 650833 | Screw, 1/4-20 x 1-3/16 (Use as required) |
| | 650832 | Screw, 1/4-20 x 1-11/16" (Use as required) |
| | 32589 | Key, Flywheel |
| | 611090 | Flywheel |
| | 650815 | Washer, Belleville |
| 93 | 8116 | Nut, Hex |
| 100 | 35135 | Solid State Assy. |
| 102 | 650872 | Stud, Solid state mounting |
| | 650814 | Screw, Torx T-15, 10-24 x 1" |
| | | ,, - |

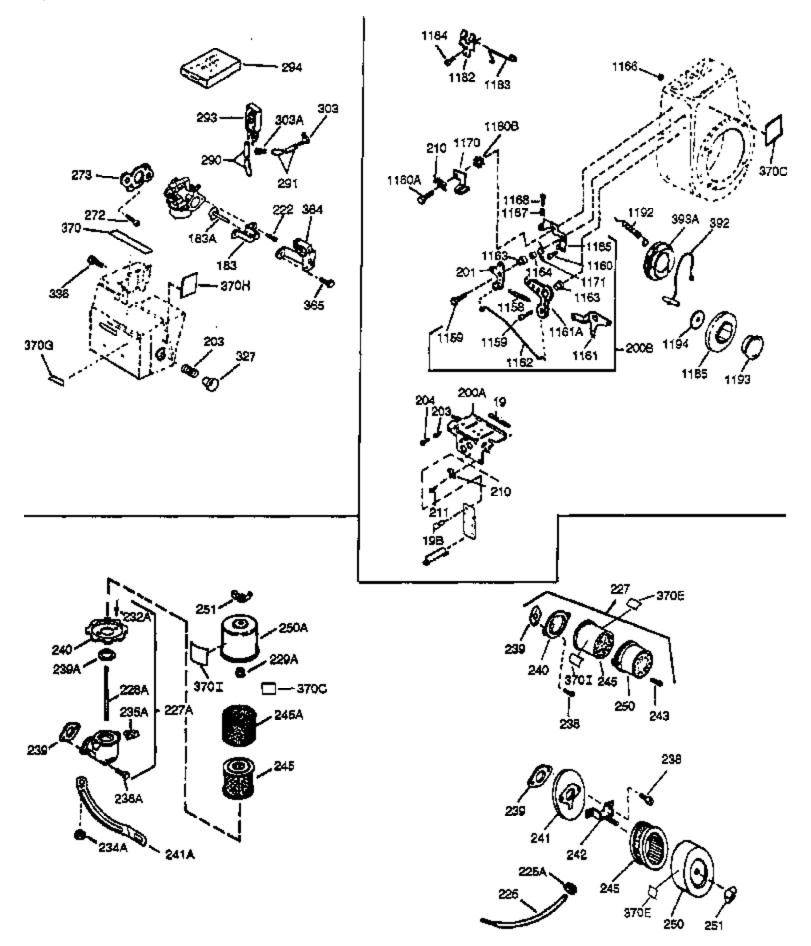
| | | y Description |
|------|---------|---|
| 108 | 29783 | Pin, Crankshaft gear (Only serviceable when gear is pinned to crank.) |
| 109 | 33245 | Gear, Crankshaft |
| | 34923A | * Gasket, Cylinder head |
| | 34030A | Head, Cylinder |
| | | |
| | 27878A | Exhaust Valve (Std.) (Incl. 151) |
| | 27880A | Exhaust Valve (1/32" OS) (Incl. 151) |
| 126 | 34035 | Intake Valve (Std.) (Incl. 151) |
| 126 | 34036 | Intake Valve (1/32" OS) (Incl. 151) |
| 127 | 650691 | Washer (Do not use with No. 6021A scr ew.) |
| 128 | 650690 | Washer, Belleville (Use as required) |
| | 650727 | Screw, 5/16-18 x 1-3/4 (Use as required) |
| | 6021A | Screw, $5/16-18 \times 1-1/2$ " (Use as required, but do notuse No |
| 130 | 0021A | 650691 washer.) |
| 130 | 650711 | Screw, 5/16-18 x 1-5/8 " (Use as required) (Can use 6021A |
| | | but discard 650691 washer.) |
| | 650694A | Screw, 5/16-18 x 2" (Use as required) |
| 131 | 650737 | Screw, 1/4-20 x 1/2" (Use as required) |
| 131 | 650738 | Screw, 1/4-20 x 5/8 (Use as required) |
| | 650713 | Screw, 5/16-18 x 5/8" |
| | 650890 | Washer, Internal Lock |
| | 30747 | |
| | | Clip, Spark plug shorting |
| | 33636 | Resistor Spark Plug |
| | 33369 | Bracket, Governor gear |
| 140 | 650836 | Screw, 10-24 x 1/2" |
| 149A | 35862 | Seal Assy., Intake valve |
| 150 | 27881 | Spring, Valve |
| | 32581 | Cap, Lower valve spring |
| | 27896A | * Gasket, Breather |
| | 28423 | Body, Breather |
| | | • |
| | 28424 | Element, Breather |
| | 28425 | Cover, Breather |
| 173 | 35350 | Tube, Breather |
| 174 | 650128 | Screw, 10-24 x 1/2" |
| 178 | 29752 | Nut & Lockwasher, 1/4-28 |
| | 30088A | Screw, 1/4-28 x 1" |
| | 33263 | * Gasket, Carburetor |
| | 34707 | |
| | | Pipe, Intake |
| | 34664 | Control Bracket (Incl.19,203, 204, 20 6 & 209) |
| | 31342 | Spring, Compression |
| | 650549 | Screw, 5-40 x 7/16" |
| 207 | 33878 | Link, Governor lever-to-throttle |
| | 650821 | Screw, 10-32 x 1/2" |
| | 27793 | Clip, Conduit |
| | 28942 | Screw, 10-32 x 3/8" |
| 222A | | |
| | 050070 | Pop Rivet (Can be purchased locally) |
| | 650378 | Screw, Torx T-30, 5/16-18 x 1-1/8" |
| | 27915A | * Gasket, Intake pipe |
| 250B | 33269A | Cover, Air cleaner |
| 260 | 33375D | Blower Housing (For electric starter) |
| | 650788 | Screw, 5/16-18 x 3/4" |
| | 29747B | Screw, 5/16-24 x 21/32" |
| | 33272B | |
| | | Cover, Cylinder head |
| | 33280A | Muffler |
| | 31588 | Plate, Muffler locking |
| | 35741 | Plate, Muffler locking |

HM100-159000D Engine Parts List #1

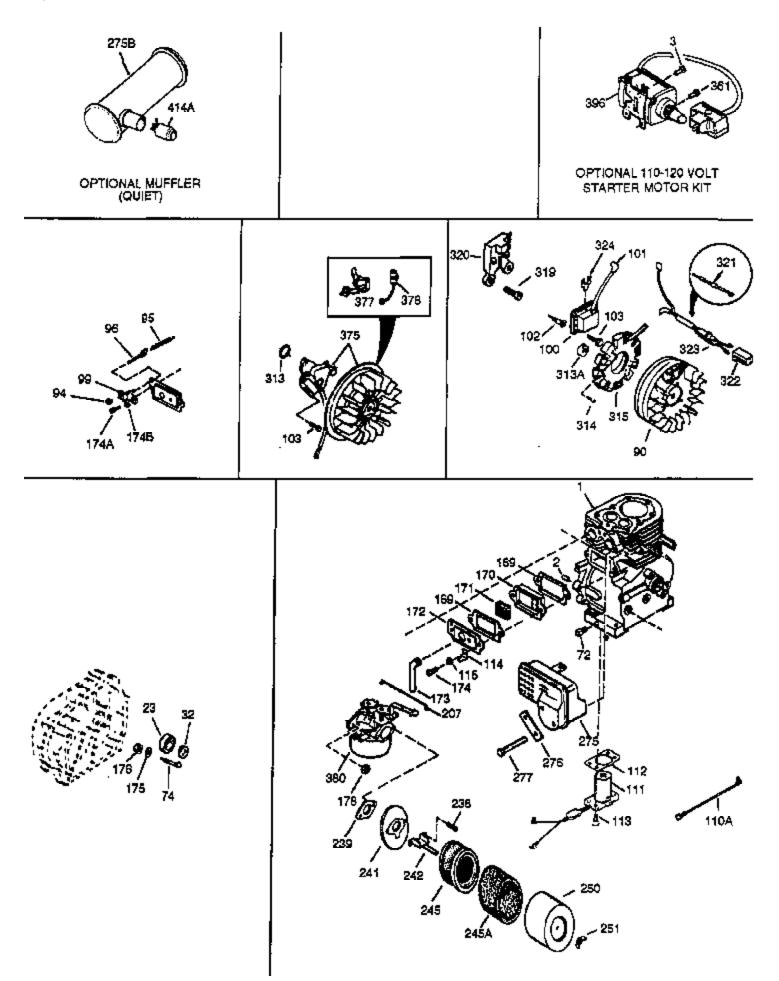
| | Part Number | Qty Description |
|------|-------------|--|
| | 650729 | Screw, 5/16-18 x 3-3/16" (Use as requ ired) |
| | 651002 | Screw, 5/16-18 x 4-1/4" (Use as requi red) |
| | 33013 | Cover, Starter bubble |
| | 650760 | Screw, 8-32 x 7/16" |
| | 32125 | Cup, Starter |
| | 35194 | Screen, Starter |
| | 29752 | Nut, 1/4-28 |
| | 29774 | Fuel Line (Braided 8-1/4")(21cm)(As r equired) |
| | 30962 | Fuel Line (Braided 32")(80cm)(As required) |
| | 30705 | Fuel Line (Braided 16")(40cm)(As requ ired) |
| | 26460 | Fuel Line Clamp (Use as required) |
| | 650665 | Screw, 1/4-15 x 7/8" |
| 300 | 34156A | Fuel Tank (Incl. 292 & 301) NOTE: These tanks were builtwith different size fuel inlet openings. Tanks with the 1-3/16" I.D. opening use fuel cap 34210. Tanks with the 1-1/2" I.D. opening use fuel cap 35355. |
| 301A | 410144B | Fuel Cap (White Plastic)(Standard) (Use as required) (1.5" I.D.) |
| 301A | 33032 | Fuel Cap (Red Plastic) (Spurt Resistant, Low Profile) (Use required) (1.5" I.D.) |
| 301A | 34210 | Fuel Cap (Red Plastic) (Spurt Resistant, High Profile) (Use as required) (1.5" I.D.) |
| 301A | 35355 | Fuel Cap (Red Plastic)(1.75" I.D.) |
| | 29673 | * Gasket, Oil filler |
| | 31297 | Dipstick (Incl. 307) |
| | 31291 | Plug, Cover |
| 340 | 34154 | Plate, Upper fuel tank mtg. |
| 341 | 34155 | Bracket, Lower fuel tank mtg. |
| 342 | 650561 | Screw, 1/4-20 x 5/8" |
| 370A | 34686 | Decal, Name |
| 370 | 34346 | Decal, Instruction |
| 370 | 35274 | Decal, Instruction |
| | 631021 | Inlet Needle, Seat & Clip Assy. |
| 380 | 632242 | Carburetor (Incl. 184 & 379) (Refer to Division 5, Section A, page A4-4 for breakdown or Fiche 18B, Grid D-3) |
| 400 | 33279G | * Gasket Set (Incl. items marked *) |
| | 730225 | SAE 30 4-Cycle Engine Oil (Quart) |
| | 730226 | SAE 5W30 4-Cycle Engine Oil (Quart) |
| | | |



| Ref # | Part Number Qty | Description |
|-------------|-----------------|---|
| | 30322 | Nut & Lockwasher, 8-32 |
| | 650727 | Screw, 5/16-18 x 1-3/4 (Use as requir ed) |
| | 650713 | Screw, 5/16-18 x 5/8" |
| | 650737 | Screw, 1/4-20 x 1/2" (Use as required) |
| 131 | 650738 | Screw, 1/4-20 x 5/8 (Use as required) |
| 222A | | Pop Rivet (Can be purchased locally) |
| | 33269A | Cover, Air cleaner |
| | 35865 | Gasket, Exhaust |
| | 33280A | Muffler |
| | 650729 | Screw, 5/16-18 x 3-3/16" (Use as requ ired) |
| | 651002 | Screw, 5/16-18 x 4-1/4" (Use as requi red) |
| | 29774 | Fuel Line (Braided 8-1/4")(21cm)(As r equired) |
| | 30962 | Fuel Line (Braided 32")(80cm)(As requ ired) |
| | 26460 | Fuel Line Clamp (Use as required) |
| | 650665 | Screw, 1/4-15 x 7/8" |
| 300 | 34156A | Fuel Tank (Incl. 292 & 301) NOTE: These tanks were |
| | | builtwith different size fuel inlet openings. Tanks with the |
| | | 1-3/16" I.D. opening use fuel cap 34210. Tanks with the |
| | | 1-1/2" I.D. opening use fuel cap 35355. |
| 301A | 410144B | Fuel Cap (White Plastic)(Standard) (Use as required) (1.5" |
| | | I.D.) |
| 2010 | 33032 | Fuel Can (Red Directio) (Spurt Desigtant Law Profile) (Lise on |
| 301A | 33032 | Fuel Cap (Red Plastic) (Spurt Resistant, Low Profile) (Use as required) (1.5" I.D.) |
| | | required) (1.5 1.D.) |
| 301A | 34210 | Fuel Cap (Red Plastic) (Spurt Resistant, High Profile) (Use |
| | | as required) (1.5" I.D.) |
| २∩1∆ | 35355 | Fuel Cap (Red Plastic)(1.75" I.D.) |
| | 29673 | * Gasket, Oil filler |
| | 31291 | Plug, Cover |
| | 34155 | Bracket, Lower fuel tank mtg. |
| | 650561 | Screw, 1/4-20 x 5/8" |
| | 33323 | Opt.Muffler Screen (Mini-Bike applica tion) |
| | 730130 | Kit, Exhaust adapter (Incl. 274 & 277) |
| | 33700 | Cover & Tube, Muffler (use as require d) |
| | 650578 | Screw, 8-18 x 3/8" (use as required) |
| | 730226 | SAE 5W30 4-Cycle Engine Oil (Quart) |
| | 35824 | Muffler Optional |
| | | |



| Ref # Part Num | |
|--|--|
| 37A 30322 | Nut & Lockwasher, 8-32 |
| 129 650727 | Screw, 5/16-18 x 1-3/4 (Use as requir ed) |
| 131 650737 | Screw, 1/4-20 x 1/2" (Use as required) |
| 131 650738 | Screw, 1/4-20 x 5/8 (Use as required) |
| 131A 650713 | Screw, 5/16-18 x 5/8" |
| 200B 730152 | Control Bracket (Incl.1158-1171)(As r eq.) |
| 203 31342 | Spring, Compression |
| 204 650549 | Screw, 5-40 x 7/16" |
| 210 27793 | Clip, Conduit |
| 210 27793 | Screw, 10-32 x 3/8" |
| | • |
| 222A | Pop Rivet (Can be purchased locally) |
| 227 730127 | Air Cleaner Ass'y. (Incl. 238, 239, 242, 246, 250) (Use as required) |
| 238 28820 | Screw, 10-32 x 1/2" |
| 239 27272A | * Gasket, Air cleaner |
| 241 33266 | Bracket, Air cleaner |
| 242 33267 | Bracket, Air cleaner |
| 245 33268 | Element, Air cleaner |
| 250B 33269A | Cover, Air cleaner |
| 251 650513 | Nut, Wing 1/4-20 |
| 290 29774 | Fuel Line (Braided 8-1/4")(21cm)(As r equired) |
| 290 30962 | Fuel Line (Braided 32")(80cm)(As required) |
| 291 30705 | Fuel Line (Braided 32)(60011)(As required) |
| | |
| 293 33715 | Impulse Fuel Pump NOTE: 34385 and 33715 (WIP)pumps |
| | are replaced by 35813 and 35800 (WIP) pumps. The 33010 |
| | (3000 series) repair kit is still available. The 35791 repair kit |
| | is used with the 35813 and 35800 fuel pumps. |
| 294 35791 | Fuel Pump Repair Kit NOTE: 34385 and 33715 (WIP)pumps |
| 201 00101 | are replaced by 35813 and 35800 (WIP) pumps. The 33010 |
| | (3000 series) repair kit is still available. The 35791 repair kit |
| | \cdot i i |
| | is used with the 35813 and 35800 fuel pumps. |
| 301A 410144B | Fuel Cap (White Plastic)(Standard) (Use as required) (1.5" |
| | I.D.) |
| | |
| 301A 33032 | Fuel Cap (Red Plastic) (Spurt Resistant, Low Profile) (Use as |
| | required) (1.5" I.D.) |
| 301A 34210 | Fuel Cap (Red Plastic) (Spurt Resistant, High Profile) (Use |
| 301A 34210 | as required) (1.5" I.D.) |
| | as required) (1.5 1.D.) |
| 301A 35355 | Fuel Cap (Red Plastic)(1.75" I.D.) |
| 303 32958 | Fitting, Fuel |
| 306 29673 | * Gasket, Oil filler |
| 338A 31291 | Plug, Cover |
| 370 34346 | Decal, Instruction |
| 370 34540 | Decal, Instruction |
| | |
| 421 730226 | SAE 5W30 4-Cycle Engine Oil (Quart) |
| 422 35824 | Muffler Optional |
| 1159 30312 | Screw, 10-32 x 1/2" |
| 1160 20020 | Screw, 10-32 x 1/2" |
| 1160 28820 | |
| 1160 28820 1160 27070 1185 33816 | Lockwasher |



| Ref # Part Number | Qty Description |
|-------------------|---|
| 1 34922A | Cylinder (CI liner)(3-5/16")(Incl.2,2 0 & 72) |
| 2 27652 | Pin, Dowel |
| 37A 30322 | Nut & Lockwasher, 8-32 |
| 72 27642 | Plug, Oil drain |
| 90 611090 | Flywheel |
| 100 35135 | Solid State Assy. |
| 102 650872 | Stud, Solid state mounting |
| 103 650814 | Screw, Torx T-15, 10-24 x 1" |
| | |
| 129 650727 | Screw, $5/16-18 \times 1-3/4$ (Use as required) |
| 131 650737 | Screw, 1/4-20 x 1/2" (Use as required) |
| 131 650738 | Screw, 1/4-20 x 5/8 (Use as required) |
| 131A 650713 | Screw, 5/16-18 x 5/8" |
| 169 27896A | * Gasket, Breather |
| 170 28423 | Body, Breather |
| 171 28424 | Element, Breather |
| 172 28425 | Cover, Breather |
| 173 35350 | Tube, Breather |
| 174 650128 | Screw, 10-24 x 1/2" |
| 178 29752 | Nut & Lockwasher, 1/4-28 |
| 207 33878 | Link, Governor lever-to-throttle |
| 222A | Pop Rivet (Can be purchased locally) |
| 238 28820 | Screw, 10-32 x 1/2" |
| 239 27272A | |
| | * Gasket, Air cleaner |
| 241 33266 | Bracket, Air cleaner |
| 242 33267 | Bracket, Air cleaner |
| 245 33268 | Element, Air cleaner |
| 250B 33269A | Cover, Air cleaner |
| 251 650513 | Nut, Wing 1/4-20 |
| 275B 391026 | Muffler (Incl. 284, 284A & 416) (This spark arrester |
| | mufflercan be used on any model.) |
| 07E 22200A | Muffler |
| 275 33280A | |
| 276 31588 | Plate, Muffler locking |
| 276 35741 | Plate, Muffler locking |
| 277 650729 | Screw, 5/16-18 x 3-3/16" (Use as requ ired) |
| 277 651002 | Screw, 5/16-18 x 4-1/4" (Use as requi red) |
| 301A 410144B | Fuel Cap (White Plastic)(Standard) (Use as required) (1.5" |
| | I.D.) |
| 201 / 22022 | Fuel Can (Dad Diastia) (Spurt Desistant Law Profile) (Las as |
| 301A 33032 | Fuel Cap (Red Plastic) (Spurt Resistant, Low Profile) (Use as |
| | required) (1.5" I.D.) |
| 301A 34210 | Fuel Cap (Red Plastic) (Spurt Resistant, High Profile) (Use |
| 00117 01210 | as required) (1.5" I.D.) |
| | |
| 301A 35355 | Fuel Cap (Red Plastic)(1.75" I.D.) |
| 306 29673 | * Gasket, Oil filler |
| 313A 33876 | Gasket, Stator (Used only on Std. poi nt ign.) |
| 338A 31291 | Plug, Cover |
| 377 30547A | Breaker Points (Use with Std. point i gn.) |
| 380 632242 | Carburetor (Incl. 184 & 379) (Refer to Division 5, Section A, |
| | page A4-4 for breakdown or Fiche 18B, Grid D-3) |
| | page A^{++} ior dicardowing or holde rod, Gliu D-3) |
| 421 730226 | SAE 5W30 4-Cycle Engine Oil (Quart) |
| | |