



TM-225 716G

2010-06

**Processes**



MIG (GMAW) Welding

Flux Cored (FCAW) Welding

**Description**



Arc Welding Power Source And Wire Feeder

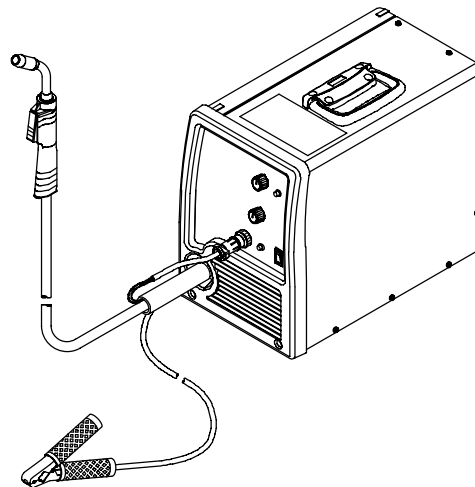
# Millermatic<sup>®</sup> 140 Auto-Set<sup>™</sup> And 180 Auto-Set<sup>™</sup> And M-100 Gun

**Millermatic 140 Auto-Set<sup>™</sup> Eff w/  
LG320643N And Following**

For OM-225 311 Revision A And Following

**Millermatic 180 Auto-Set<sup>™</sup> Eff w/  
LH440001N And Following**

For OM-225 311 Revision E And Following



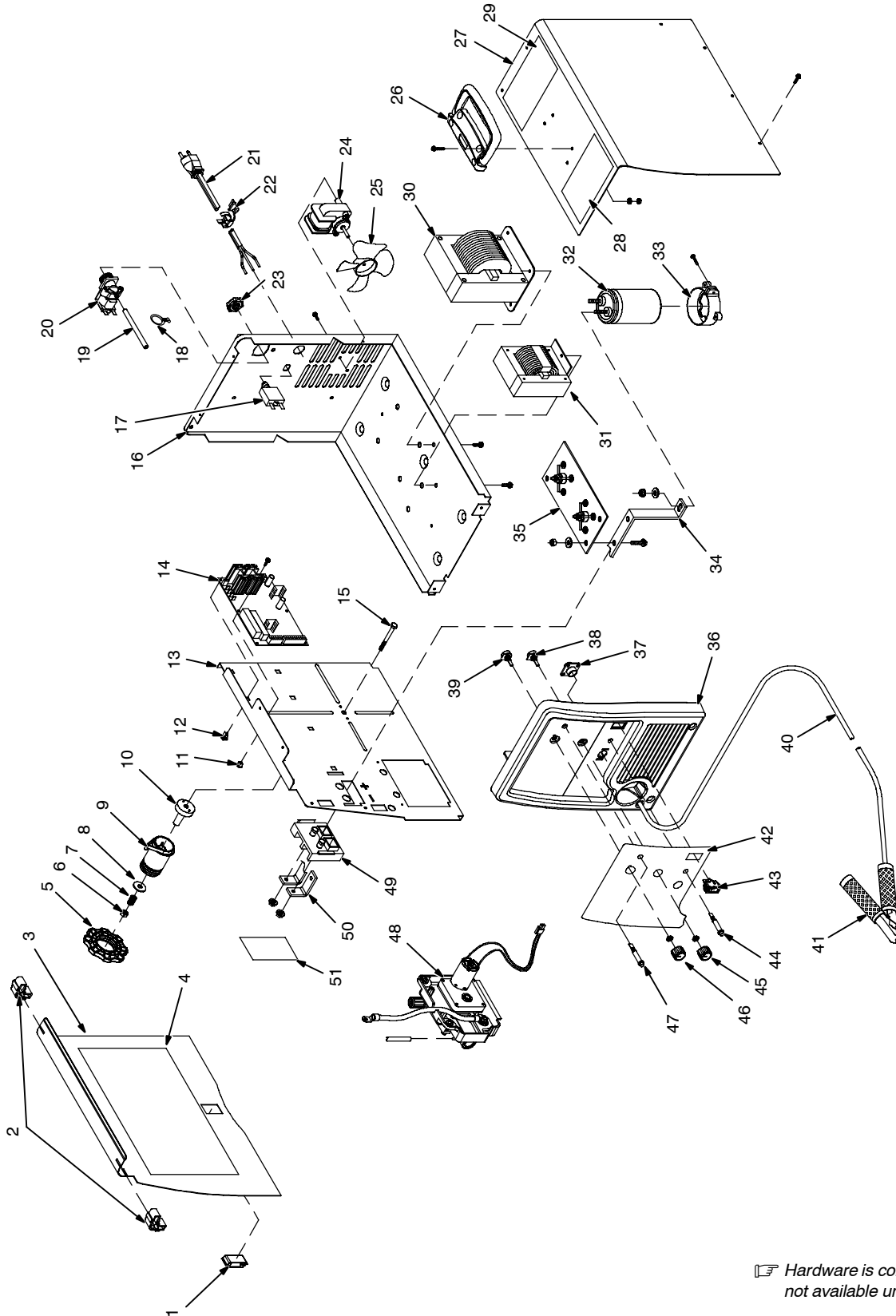
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
## PARTS LIST

File: MIG (GMAW)



# SECTION 1 - PARTS LIST



 Hardware is common and not available unless listed.

804 683-C

Figure 1-1. Main Assembly

| Item No.                         | Dia. Mkgs. | Part No.    | Description  | Quantity |
|----------------------------------|------------|-------------|--|----------|
| <b>Figure 1-1. Main Assembly</b> |            |             |  |          |
| ...                              | 1          | 204 711     | .. LATCH, slide flush snap lock                                | 1        |
| ...                              | 2          | 202 412     | .. HINGE, door   | 2        |
| ...                              | 3          | 202 584     | .. DOOR, access  | 1        |
| ...                              | 4          | 227 931     | .. LABEL, parameter (115 VAC model w/Auto-Set™)                | 1        |
| ...                              | 4          | 233 622     | .. LABEL, parameter (230 VAC model w/Auto-Set™)                | 1        |
| ...                              | 5          | 211 887     | .. NUT, hub  | 1        |
| ...                              | 6          | 204 608     | .. NUT   | 1        |
| ...                              | 7          | 225 257     | .. SPRING, cprsn   | 1        |
| ...                              | 8          | 203 072     | .. WASHER, flat  | 1        |
| ...                              | 9          | 211 339     | .. HUB, spool  | 1        |
| ...                              | 10         | 202 726     | .. ADAPTER, spool hub  | 1        |
| ...                              | 11         | 228 165     | .. GROMMET, SCR no.8   | 1        |
| ...                              | 12         | 134 201     | .. STAND-OFF support PC board                                  | 7        |
| ...                              | 13         | 202 582     | .. BAFFLE, center  | 1        |
| ...                              | 14         | PC1 238 907 | .. CIRCUIT CARD ASSY, control (115 VAC model w/Auto-Set™)      | 1        |
| ...                              | 14         | PC1 238 912 | .. CIRCUIT CARD ASSY, control (230 VAC model w/Auto-Set™)      | 1        |
| ...                              | 15         | 203 071     | .. SCREW   | 1        |
| ...                              | 16         | 202 581     | .. BASE, lower (Prior to LJ440170N)                            | 1        |
| ...                              | 16         | 239 579     | .. BASE, lower Eff w/LJ440170N)                                | 1        |
| ...                              | 17         | CB1 210 109 | .. SUPPLEMENTARY PROTECTOR, 25 amp                             | 1        |
| ...                              | 18         | 197 198     | .. CABLE TIE   | 2        |
| ...                              | 19         | 196 467     | .. TUBING, pvc   | 1        |
| ...                              | 20         | GS1 216 397 | .. VALVE, 2 way (115 VAC model)                                | 1        |
| ...                              | 20         | GS1 216 398 | .. VALVE, 2 way (230 VAC model)                                | 1        |
| ...                              | 21         | 147 545     | .. CORD SET, 125V 5-15P 14GA 3/C 7ft SPT-3 jkt (115 VAC model) | 1        |
| ...                              | 21         | 152 118     | .. CORD SET, 250V 6-50P 12GA 3/C 7ft SPT-3 jkt (230 VAC model) | 1        |
| ...                              | 22         | 111 443     | .. BUSHING, strain relief                                      | 1        |
| ...                              | 23         | 137 761     | .. NUT   | 1        |
| ...                              | 24         | FM 196 063  | .. MOTOR, fan (115 VAC model)                                  | 1        |
| ...                              | 24         | FM 196 064  | .. MOTOR, fan (230 VAC model)                                  | 1        |
| ...                              | 25         | 409 953-001 | .. BLADE, fan cooling  | 1        |
| ...                              | 26         | 208 015     | .. HANDLE, carrying  | 1        |
| ...                              | 27         | 202 583     | .. WRAPPER, cover  | 1        |
| ...                              | 28         | 226 510     | .. LABEL, warning general precautionary                        | 1        |
| ...                              | 29         | 235 247     | .. LABEL, warning general precautionary (sp) (Eff w/LH351002N) | 1        |
| ...                              | 30         | T1 203 445  | .. TRANSFORMER (115 VAC model)                                 | 1        |
| ...                              | 30         | T1 222 848  | .. TRANSFORMER (230 VAC model)                                 | 1        |
| ...                              |            | TP1 196 685 | .. THERMOSTAT, NC open 140C, close 100C                        | 1        |
| ...                              | 31         | Z1 221 100  | .. STABILIZER, 90A (115 VAC model)                             | 1        |
| ...                              | 31         | Z1 221 102  | .. STABILIZER, 130A (230 VAC model) (Prior to MA220944N)       | 1        |
| ...                              | 31         | Z1 239 591  | .. STABILIZER, 150A (230 VAC model) (Eff w/MA220944N)          | 1        |
| ...                              | 32         | C1 228 176  | .. CAPACITOR, elctl 100,000 uf                                 | 1        |
| ...                              | 33         | 203 491     | .. CLAMP, capacitor  | 1        |
| ...                              | 34         | 204 215     | .. BUS BAR (positive)  | 1        |

+When ordering a component originally displaying a precautionary label, the label should also be ordered.

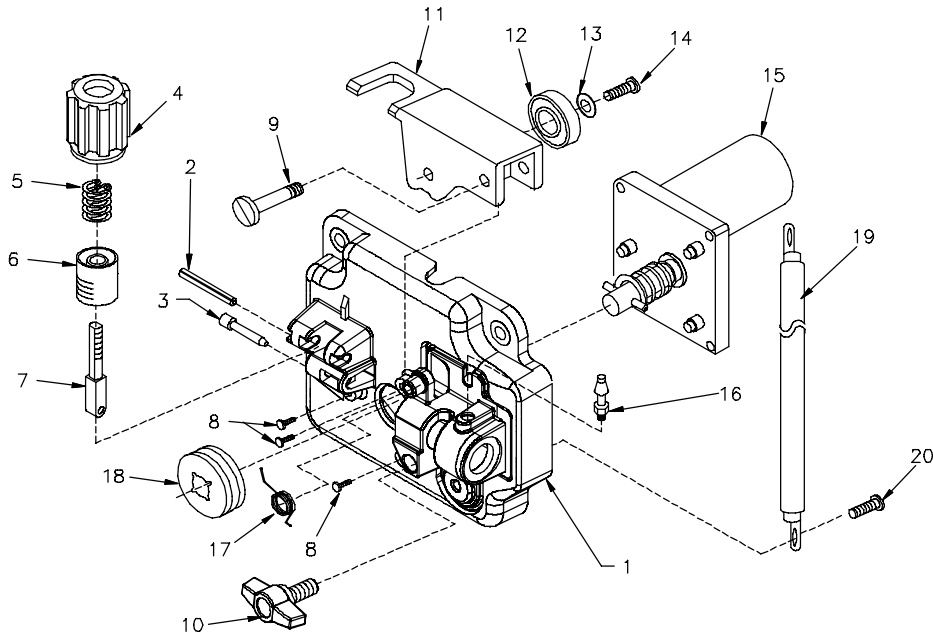
**To maintain the factory original performance of your equipment, use only Manufacturer's Suggested Replacement Parts. Model and serial number required when ordering parts from your local distributor.**

| Item No.                                     | Dia. Mkgs. | Part No. | Description  | Quantity |
|--|------------|----------|--|----------|
| <b>Figure 1-1. Main Assembly (Continued)</b> |            |          |  |          |
| ... 35                                       | SR1        | 193 191  | RECTIFIER ASSY (115 VAC model)                           | 1        |
| ... 35                                       | SR1        | 193 316  | RECTIFIER ASSY (230 VAC model) (Prior to LJ440170N)      | 1        |
| ... 35                                       | SR1        | 243 242  | RECTIFIER ASSY (230 VAC model) (Eff w/LJ440170N)         | 1        |
| ... 36                                       |            | 228 172  | PANEL, front (Prior to LJ440170N)                        | 1        |
| ... 36                                       |            | 239 580  | PANEL, front (Eff w/LJ440170N)                           | 1        |
| ... 37                                       | RC1        | 048 282  | RCPT W/SKTS (service kit)                                | 1        |
| ... 38                                       | R1         | 202 663  | POTENTIOMETER, cp flat 1T .50W 50k (voltage control)     | 1        |
| ... 39                                       | R2         | 207 415  | POTENTIOMETER, cp flat 1T .50W 50k (wire speed control)  | 1        |
|  |            | 229 955  | CABLE, work 11 ft w/clamp (including)                    | 1        |
| ... 40                                       |            | 196 619  | WORK CABLE   | 1        |
| ... 41                                       |            | 208 820  | CLAMP, work  | 1        |
| ... 42                                       |            | 227 748  | LABEL, nameplate (115 VAC model w/Auto-Set™)             | 1        |
| ... 42                                       |            | 233 619  | LABEL, nameplate (230 VAC model w/Auto-Set™)             | 1        |
| ... 43                                       | S1         | 196 575  | SWITCH, rocker SPST (115 VAC model)                      | 1        |
| ... 43                                       | S1         | 196 574  | SWITCH, rocker DPDT (230 VAC model)                      | 1        |
| ... 44                                       | LED1       | 202 661  | LED, yellow  | 1        |
| ... 45                                       |            | 228 230  | KNOB, pointer w/detent (Auto-Set™)                       | 2        |
|  |            | 229 929  | BALL PLUNGER, push fit (Auto-Set™)                       | 1        |
| ... 46                                       |            | 207 078  | KNOB, pointer (115 VAC model and 230 VAC model)          | 2        |
| ... 47                                       | LED2       | 228 223  | LED, blue (Auto-Set™)                                    | 1        |
| ... 48                                       |            | Fig. 1-2 | WIRE FEED DRIVE ASSY                                     | 1        |
| ... 49                                       |            | 193 144  | INSULATOR, output stud                                   | 1        |
| ... 50                                       |            | 193 194  | BUS BAR (negative)                                       | 1        |
| ... 51                                       |            | 231 985  | LABEL, warning electric shock                            | 1        |
|  |            | 221 037  | REGULATOR/FLOWMETER, 10-50 CFH ARGON/CO <sub>2</sub>     | 1        |
|  |            | 183 581  | HOSE, gas 5ft  | 1        |
|  |            | ◆212 492 | REGULATOR/FLOWMETER, 0-50 CFH CO <sub>2</sub>            | 1        |
|  |            | ◆144 108 | HOSE, gas 5ft (for use with regulator/flowmeter 212 492) | 1        |

◆OPTIONAL

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804 095-A

**Figure 1-2. Wire Feed Drive Assembly**

| Item No.   | Dia. Mkgs. | Part No. | Description                                 | Quantity |
|--|------------|----------|---|----------|
| <b>223 655      Figure 1-2. Wire Feed Drive Assembly</b> |            |          |   |          |
| .....  |            | 225 717  | .. DRIVE HEAD ASSY (does not include motor) | 1        |
| ... 1  |            | 202 500  | .. HOUSING, plastic drive motor             | 1        |
| ... 2  |            | 203 424  | .. PIN, spring                              | 1        |
| ... 3  |            | 058 549  | .. GUIDE, wire inlet                        | 1        |
| ... 4  |            | 196 895  | .. KNOB, tension                            | 1        |
| ... 5  |            | 090 415  | .. SPRING, compression                      | 1        |
| ... 6  |            | 198 080  | .. CUP, spring tension                      | 1        |
| ... 7  |            | 225 718  | .. FASTENER, pinned                         | 1        |
| ... 8  |            | 197 172  | .. SCREW, motor                             | 3        |
| ... 9  |            | 203 567  | .. SCREW,shld                               | 1        |
| ... 10   |            | 222 035  | .. KNOB, tee                                | 1        |
| ... 11   |            | 203 301  | .. LEVER, pressure                          | 1        |
| ... 12   |            | 189 915  | .. BEARING, ball                            | 1        |
| ... 13   |            | 602 238  | .. WASHER, flat                             | 1        |
| ... 14   |            | 122 210  | .. SCREW, 010-32 x 0.62                     | 1        |
| ... 15   | DM         | 202 708  | .. MOTOR, gear                              | 1        |
| ... 16   |            | 196 009  | .. FITTING, gas                             | 1        |
| ... 17   |            | 203 418  | .. SPRING, torsion                          | 1        |
| ... 18   |            | 220 179  | .. ROLL, feed .024, .030/.035               | 1        |
| ... 19   |            | 203 667  | .. CABLE                                    | 1        |
| ... 20   |            | 053 300  | .. SCREW, 250-20 x 0.62                     | 1        |

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