ISSUED JULY 2012 • INDEX NO. DC/18.83

XMT® 350/450 Series

Quick Specs

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<th>Processes</th>
<th>Input Power</th>
<th>Rated Output</th>
<th>Net Weight</th>
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<td>Construction</td>
<td>MIG (GMAW)/Pulsed MIG (GMAW-P)*</td>
<td>350: Requires 3- or 1-Phase Power</td>
<td>350: 10–38 V, 15–425 A</td>
<td>350: 80 lb. (36.3 kg)</td>
</tr>
<tr>
<td>Shipbuilding</td>
<td>Stick (SMAW)</td>
<td>450: Requires 3-Phase Power</td>
<td>450: 10–38 V, 15–600 A</td>
<td>450: 122 lb. (55.3 kg)</td>
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<td>Railroad</td>
<td>TIG (GTAW)</td>
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<tr>
<td>Repair Shops</td>
<td>*XMT 350 CC/CV and 450 CC/CV with required optional control; not available with XMT 350 VS model.</td>
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<td>Rental Fleets</td>
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<tr>
<td>Power Generation Plants</td>
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</tbody>
</table>

Power source is warranted for 3 years, parts and labor. Original main power rectified parts are warranted for 5 years. Gun warranted for 90 days, parts and labor.

Wind Tunnel Technology™ protects electrical components and PC boards from contamination.

Fan-On-Demand™ cooling system operates only when needed, reducing noise, energy use and the amount of contaminants pulled through machine.

Lift-Arc™ allows TIG starting without the use of high-frequency. Starts the arc without contaminating the weld with tungsten.

Adaptive Hot Start™ increases the output amperage at the start of a weld if necessary, eliminating electrode sticking.

Lightweight, aerospace-grade aluminum case offers protection with the benefit of reduced weight.

Inverter arc control technology provides greater puddle control for superior 6010 Stick electrode performance, and outstanding MIG weld performance.

Line voltage compensation keeps welding output constant even if input power varies by +/-10 percent. Line voltage compensation further expands to an amazing +37/-59 percent when operating on 460 VAC.

Process selector switch reduces the number of control setup combinations without reducing any features.

Large, dual digital meters are easy to view and are presettable to ease setting weld output.

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An ITW Company
1635 West Spencer Street
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Appleton, WI 54912-1079 USA

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MillerWelds.com

ISO 9001 REGISTERED QUALITY SYSTEM
XMT 350/450 Specifications

Certified by Canadian Standards Association to both the Canadian and U.S. Standards.

<table>
<thead>
<tr>
<th>Model</th>
<th>Input Power</th>
<th>Rated Output</th>
<th>Voltage Range in CC Mode</th>
<th>Amperage Range in CV Mode</th>
<th>Max. Open-Circuit Voltage</th>
<th>Amps Input at Rated Load Output, 60 Hz</th>
<th>Dimensions</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>XMT 350 CC/CV and VS</td>
<td>Three-Phase</td>
<td>350 A at 34 VDC, 60% Duty Cycle</td>
<td>10–38 V</td>
<td>5–425 A</td>
<td>75 VDC</td>
<td>40.4 36.1 20.6 17.8 14.1 14.2 13.6</td>
<td>H: 17 in. (432 mm) W: 12.5 in. (318 mm) D: 24 in. (610 mm)</td>
<td>80 lb. (36.3 kg)</td>
</tr>
<tr>
<td></td>
<td>Single-Phase</td>
<td>300 A at 32 VDC, 60% Duty Cycle</td>
<td>10–38 V</td>
<td>5–425 A</td>
<td>75 VDC</td>
<td>60.8 54.6 29.7 24.5 19.9 11.7 11.2</td>
<td>H: 17.25 in. (438 mm) W: 14.5 in. (368 mm) D: 27.125 in. (689 mm)</td>
<td>122 lb. (55.3 kg)</td>
</tr>
<tr>
<td>XMT 450 CC/CV</td>
<td>Three-Phase</td>
<td>450 A at 38 VDC, 100% Duty Cycle</td>
<td>10–38 V</td>
<td>15–600 A</td>
<td>90 VDC</td>
<td>— 51 32.1 27.6 24.4 22 18.9</td>
<td>H: 17 in. (432 mm) W: 12.5 in. (318 mm) D: 24 in. (610 mm)</td>
<td>80 lb. (36.3 kg)</td>
</tr>
</tbody>
</table>

XMT 350/450 Performance Data

XMT 350 CC/CV and VS DUTY CYCLE CHART

XMT 450 CC/CV DUTY CYCLE CHART
XMT® 350 VS Control Panel

Additional Features

Low OCV Stick. A built-in, selectable feature, that reduces the Stick mode open-circuit voltage (OCV) to nearly 15 volts when the welding power source is not in use. Eliminates the need for add-on voltage reducers.

Note: VS model is available only with Tweco-style weld cable disconnects. Tweco cable connectors are not supplied with the unit and must be ordered separately.

Optional 115 VAC auxiliary power is not available on VS model.

Pulsed MIG (GMAW-P) capability is not available on VS model.

Additional Features

Auto Remote Sense™ enables unit to automatically use remote control if connected to remote control receptacle.

Low OCV Stick. A built-in, selectable feature, that reduces the Stick mode open-circuit voltage (OCV) to nearly 15 volts when the welding power source is not in use. Eliminates the need for add-on voltage reducers.

Dinse- or Tweco-style weld disconnects provide high-quality weld cable connections.

Optional 115-VAC auxiliary power provides 10 amps of circuit-breaker-protected power for water circulators, etc.

Pulsed MIG (GMAW-P) capabilities with optional Optima™ control reduces spatter and distortion, allows better out-of-position puddle control, and provides potential reduction of fume particle emission.
**XMT® 350 CC/CV Control Panel**

1. Voltmeter
2. Remote Control Receptacle
3. Process Selector Switch (Rotary Switch)
4. Ammeter
5. Voltage/Amperage Adjustment Control
6. Power On/Off Switch
7. Arc Control
8. Optional Gas Valve

*Note: 450 model is equipped with studs for ring-lug output connections.*

**Additional Features**

*Primary voltage display* shows what primary voltage the power source is linked for without removing the side panels. Saves time and assures you that the power source has been correctly linked for available input voltage.

*Unique case design* helps protect internal components from dirt and dust.

To connect input power cord and/or set unit up for correct input power, remove the easy-to-handle panel (1/3 case). The remaining two-thirds of the case never needs to be removed!

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**XMT® 350 Wire Feeder Packages**

**SuitCase® X-TREME™ 8VS with XMT® 350 VS and Bernard® Q300 gun #951 306**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Pulse MIG</th>
<th>Stick MIG</th>
<th>Remote Control Cable</th>
<th>Feeder Remote Control</th>
<th>Weight w/steel wire</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>32 lb.</td>
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</tbody>
</table>

**SuitCase® X-TREME™ 12VS with XMT® 350 CC/CV and Bernard® Q300 gun #951 305**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Pulse MIG</th>
<th>Stick MIG</th>
<th>Remote Control Cable</th>
<th>Feeder Remote Control</th>
<th>Weight w/steel wire</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>66 lb.</td>
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</tbody>
</table>

**XMT® 350 CC/CV, 22A, MIGRunner™ #951 327**
**XMT® 350 CC/CV S-74D MIGRunner™ #951 314 (not shown)**

Comes complete with:
- XMT 350 CC/CV power source
- 22A or S-74D wire feeder
- Bernard® Q™-Gun
- Consumables
- .035/.045-in. drive roll kit
- Regulator/flow gauge with gas hose
- MIGRunner Cart with cylinder rack
- Bottom tray will hold optional Coolmate™ 3 (sold separately)
Genuine Miller® Accessories

**Optima™ #043 389**
A multipurpose, microprocessor-based pulse control for both synergic MIG (wire welding or GMAW) or manual MIG pulsing. Use this control with the XMT CC/CV power sources and any Miller wire feeder, including automatic feeders and spool guns. Includes a 25-foot (7.6 m) cord with 14-pin plug. (Not for use with XMT VS model.)

**Extension Cables for Optima**
- #242 205 025 25 ft. (7.6 m)
- #242 205 050 50 ft. (15 m)
- #242 205 080 80 ft. (24.3 m)

**WC-24 Weld Control #137 549**
Designed for use with Miller CV power sources supplying 24 VAC and 14-pin receptacles. For use with Spoolmatic 30A spool gun.

**HF-251D-1 High-Frequency Arc Starter and Stabilizer #042 388**
Portable 250-amp, 60-percent duty cycle unit adds high frequency to the welding circuit to help start the arc when using the DC TIG (GTAW) process. Operates on 115 VAC, 50/60 Hz. See Lit. Index No. AY/5.1.

**Wireless Remote Hand Control #300 430**
For remote current and contactor control. Receiver plugs directly into the 14-pin receptacle of Miller machine. 300-foot (91.4 m) operating range.

**RFCS-14 Foot Control #043 554**
Foot current and contactor control. Includes 20-foot (6 m) cord and 14-pin plug.

**RHC-14 Hand Control* #242 211 020**
20-foot (6 m) cord
**#242 211 100**
100-foot (30.5 m) cord
Miniature hand control for remote current and contactor control. Dimensions: 4 x 4 x 3.25 inches (102 x 102 x 82 mm). Includes cord and 14-pin plug.
*Custom lengths available in 5-foot increments up to 50 feet and 10-foot increments up to 100 feet.

**RMLS-14 #129 337**
14-pin plug
Momentary- and maintained-contact rocker switch for contactor control. Push forward for maintained contact and back for momentary contact. Includes 20-foot (6 m) cord.

**RCC-14 Remote Contactor and Current Control #151 086**
14-pin plug
Rotary-motion fingertip control fastens to TIG torch using two Velcro® straps. Includes 26.5 foot (8 m) control cord.

**RCCS-14 Remote Contactor and Current Control #043 688**
14-pin plug
Up-and-down rotary-motion fingertip control. Great for applications that require a finer amperage control. Includes 26.5-foot (8 m) control cord.

**Extension Cables for Remote Controls and 24 VAC Wire Feeders**
- #242 208 025 25 ft. (7.6 m)
- #242 208 050 50 ft. (15 m)
- #242 208 080 80 ft. (24.3 m)
14-pin plug to 14-pin socket. Not for use with Optima or XR-AlumaFeed feeder.
*Custom lengths available in 5-foot increments up to 50 feet and 10-foot increments up to 100 feet.

**Running Gear**

**MIGRunner™ Cart #195 445**
- #300 408 Running Gear Cylinder Rack

**Universal Carrying Cart and Cylinder Rack #042 934**
Holds power source, and gas cylinder up to 56 inches (142.2 cm) high measuring 6 to 9 inches (15.2 to 22.8 cm) in diameter.

**XMT Cylinder Cart #042 537**
Carries two 160-pound (72.6 kg) gas cylinders, or one gas cylinder and one coolant system for TIG (GTAW) welding. Feeder mounts to tray above power source.
Protective Cover

#195 478 Mildew and water resistant, odor-free cover protects your machine’s finish. For 300/350 A inverters: XMT, Maxstar and Dynasty.

Inverter Racks

Four or Six-Arc Welding System

The Inverter Rack conveniently houses multiple XMT power sources for multiple welders. Both 4-pack and 6-pack models are available.

Features include:

- Provision to parallel power sources or common work connections
- Two lifting eyes for transportation
- Rugged skids for dragging or pushing
- Customer can install up to a maximum of four XMT 450 CC/CV power sources

For detailed information on customized Inverter Rack systems see Lit. Index No. DC/18.81.

Wire Feeders/Guns

SuitCase® X-TREME™ 8VS #951 181
SuitCase® X-TREME™ 12VS #951 184
Lightweight, portable wire feeder for a variety of wires up to .062 inch. Holds up to an 8-inch (8VS) or 12-inch (12VS) spool of wire. Operates on open-circuit voltage eliminating the need for a control/power cord. See Lit. Index No. M/6.41.

SuitCase® 8RC #951 186
SuitCase® 12RC #951 188
Lightweight, portable wire feeder for a variety of wires up to .062 inch. Holds up to an 8-inch (8RC) or 12-inch (12RC) spool of wire. Operates using 14-pin control receptacle. See Lit. Index No. M/6.5.

XR™-S Control #300 601
XR™-D Control #300 678
The updated XR Controls offer unsurpassed performance and reliability for feeding aluminum and other difficult-to-feed wire types. Models include .035-inch and factory-installed 3/64-inch drive rolls. See Lit. Index No. M/1.7.

XR-AlumaFeed™ #300 509
Advanced push-pull wire feeder designed for high-volume, high-production aluminum MIG welding where quality and consistency is a high priority. See Lit. Index No. DC/34.

70 Series

S-74S #951 196
S-74D #951 198
S-74DX #951 200
Features Posifeed™ wire drive assembly and handles a variety of wires up to 1/8 inch. Comes with FREE Bernard® Q™-Gun. Dual-wire models also available. See Lit. Index No. M/3.0.

Extension Cables*

#247 831 025 25 ft. (7.6 m)
#247 831 050 50 ft. (15.2 m)
#247 831 080 80 ft. (24.4 m)

Eleven conductors to support contactor control and remote voltage control on all Miller electronic CV 14-pin power sources.

*Custom lengths available in 5-foot increments up to 50 feet and 10-foot increments up to 100 feet.

Spoolmatic® 30A #130 831
A one-pound, air-cooled spool gun that extends the weld process range by adding a handy portable system for small wire MIG. Rated 200 amps at 100% duty cycle. Includes 30-foot (9.1 m) cable assembly. WC-24 (#137 549) required for use with 14-pin receptacles, order separately.

Ironmate™ Flux Cored Guns

See Lit. Index No. AY/16.0.

FC-1260
#195 732 10 ft. (3 m)
#195 729 15 ft. (4.6 m)

FC-1260LM
#194 912 10 ft. (3 m)
#194 911 15 ft. (4.6 m)

FC-1150
#194 864 10 ft. (3 m)
#194 863 15 ft. (4.6 m)
**Coolant Systems**

For more information, see the Miller Coolant Systems literature sheet, Index No. AY/7.2.

**Coolmate™ 3**  
#043 007 115 VAC  
#043 008 230 VAC  
For use with water-cooled torches rated up to 600 amps. Unique paddle-wheel indicator, external filter and easy-fill spout.

**Coolmate™ V3**  
#043 009 115 VAC  
For use with water-cooled torches rated up to 500 amps. Vertical design conveniently mounts to Miller cylinder rack in place of one cylinder.

**Coolmate™ 4**  
#042 288 115 VAC  
For use with water-cooled torches rated up to 600 amps. Tough molded polyethylene case with carrying handle.

**Coolant**  
#043 810  
Sold in cases of four one-gallon recyclable plastic bottles. Miller coolants contain a base of ethylene glycol and deionized water to protect against freezing to -37 degrees Fahrenheit (-38° C) or boiling to 227 degrees Fahrenheit (108° C). Also contains a compound that resists algae growth.

**Cable Connectors and Adapters**

Note: XMT 350 power sources are equipped with Dinse- or Tweco-style connectors for secondary connections.

**Dinse-Style Connectors**

#042 418  
Accepts #4 AWG to #1/0 cable size.

#042 533  
Accepts #1/0 to #2/0 AWG cable size.  
Kit includes one Dinse-style male plug which attaches to the work and/or weld cables and plugs into the Dinse-style receptacles on the power source.

**Extension Kit for Dinse-Style Cable Connectors**

#042 419  
Accepts #4 AWG to #1/0 cable size.  
#042 534  
Accepts #1/0 to #2/0 AWG cable size.  
Used to adapt or extend weld and/or work cables. Kit includes one male Dinse-style plug and one in-line female Dinse-style receptacle.

**Dinse/Tweco® Adapter**  
#042 465  
**Dinse/Cam-Lok Adapter**  
#042 466  
One-piece adapter with Dinse-style male plug (to power source) on one end and female receptacle (Tweco or Cam-Lok for weld cable connection) on other end.
## Ordering Information

<table>
<thead>
<tr>
<th>Power Source and Options</th>
<th>Stock No.</th>
<th>Description</th>
<th>Qty.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>XMT® 350 CC/CV</td>
<td>#907 161</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>#907 161-01-1</td>
<td>208 – 575 VAC with Auto-Line®</td>
<td></td>
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<tr>
<td></td>
<td>#907 161-01-2</td>
<td>230 – 460 VAC with Auto-Line® and Auxiliary Power and CE</td>
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<tr>
<td></td>
<td>#907 161-01-4</td>
<td>208 – 575 VAC with Auto-Line® and Tweco connectors</td>
<td></td>
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<tr>
<td>XMT® 350 VS</td>
<td>#907 224</td>
<td>208 – 575 VAC with Auto-Line® (without 14-pin, Tweco connectors)</td>
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<td></td>
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<td>XMT® 350 Wire Feeder Packages</td>
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<td></td>
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<tr>
<td>XMT® 450 CC/CV</td>
<td>#907 481</td>
<td></td>
<td></td>
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<td></td>
<td>#907 482</td>
<td>230 – 460 VAC</td>
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<td></td>
<td>#907 525</td>
<td>575 VAC with Auxiliary Power and CE</td>
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<tr>
<td>Inverter Racks (full or empty)</td>
<td>See Lit. Index No. DC/18.81</td>
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<tr>
<td>Gas Valve Kit</td>
<td>#195 286</td>
<td>For XMT 350</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>#300 928</td>
<td>For XMT 450</td>
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### Accessories

<table>
<thead>
<tr>
<th>Description</th>
<th>Stock No.</th>
<th>Notes</th>
</tr>
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<tbody>
<tr>
<td>Optima™ MIG Pulse Control</td>
<td>#043 389</td>
<td>For CC/CV models only. Not for use with XMT 350 VS</td>
</tr>
<tr>
<td>Extension Cables for Optima™</td>
<td>See page 5</td>
<td></td>
</tr>
<tr>
<td>WC-24 Weld Control</td>
<td>#137 549</td>
<td>For use with Spoolmatic® 30A and power sources with 14-pin</td>
</tr>
<tr>
<td>HF-251D-1 HF Starter/Stabilizer</td>
<td>#042 388</td>
<td>See Lit. Index No. AY/5.1</td>
</tr>
<tr>
<td>Wireless Remote Foot Control</td>
<td>#300 429</td>
<td>Foot control with wireless 90-ft. (27.4 m) operating range</td>
</tr>
<tr>
<td>Wireless Remote Hand Control</td>
<td>#300 430</td>
<td>Hand control with wireless 300-ft. (91.4 m) operating range</td>
</tr>
<tr>
<td>RFCS-14</td>
<td>#043 554</td>
<td>Foot control</td>
</tr>
<tr>
<td>RHC-14</td>
<td>#242 211 020</td>
<td>Hand control with 20-ft. (6 m) cord</td>
</tr>
<tr>
<td></td>
<td>#242 211 100</td>
<td>Hand control with 100-ft. (30.5 m) cord</td>
</tr>
<tr>
<td>RMLS-14</td>
<td>#129 337</td>
<td>Rocker switch</td>
</tr>
<tr>
<td>RCC-14</td>
<td>#151 086</td>
<td>Fingertip control</td>
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<tr>
<td>RCCS-14</td>
<td>#043 688</td>
<td>Fingertip control</td>
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<tr>
<td>Extension Cables</td>
<td>See page 5</td>
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### Running Gear

<table>
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<tr>
<th>Description</th>
<th>Stock No.</th>
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<tr>
<td>MIGRunner™ Cart</td>
<td>#195 445</td>
<td></td>
</tr>
<tr>
<td>Running Gear Cylinder Rack</td>
<td>#300 408</td>
<td>For dual feeders</td>
</tr>
<tr>
<td>XMT Cylinder Cart</td>
<td>#042 537</td>
<td></td>
</tr>
<tr>
<td>Universal Carrying Cart and Cylinder Rack</td>
<td>#042 934</td>
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### Protective Cover

<table>
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<tr>
<td>#195 478</td>
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### Wire Feeders/Guns

<table>
<thead>
<tr>
<th>Description</th>
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<tbody>
<tr>
<td>SuitCase® X-TREME 8VS/X-TREME™ 12VS</td>
<td>#951 181/#951 184</td>
</tr>
<tr>
<td>SuitCase® 8RC/12RC</td>
<td>#951 186/#951 188</td>
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<tr>
<td>XR™-S Control</td>
<td>#300 601</td>
</tr>
<tr>
<td>XR™-D Control</td>
<td>#300 687</td>
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<tr>
<td>XR-AlumaFeed™</td>
<td>#300 509</td>
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<td>70 Series</td>
<td>#951 196</td>
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<td></td>
<td>#951 198</td>
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<td></td>
<td>#951 200</td>
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<tr>
<td>Spoolmatic® 30A Spool Gun</td>
<td>#130 831</td>
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<tr>
<td>Ironmate™ Flux-Cored Guns</td>
<td>See Lit. Index No. AY/16.0</td>
</tr>
</tbody>
</table>

### Coolant Systems

| Description | See page 7. See Lit. Index No. AY/7.2 |

### Cable Connectors and Adapters

| Description | See page 7 |

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