

# Spool Guns and Controls

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## Spoolmate™ 3035, Spoolmate™ 3545, and Spoolmatic® 15A/30A

### Quick Specs

#### Light and Heavy Industrial Applications

Aluminum Fabrication  
Sign Manufacturing  
Trailer Fabrication  
Auto and Marine Repair

#### Processes

MIG (GMAW)  
with aluminum  
and other wires

#### Weight

Spoolmate 3035: 9 lb (4.1 kg) with cable assembly  
Spoolmate 3545: 10 lb (4.5 kg) with cable assembly  
Spoolmate 15A: 9 lb (4.1 kg) with cable assembly  
Spoolmatic 30A: 14 lb (6.4 kg) with cable assembly

## The Power of Blue.®



Spoolmate™ 3035

These reliable yet economical Spoolmate spool guns provide 20 ft cable reach and accessibility, with smooth feeding of aluminum wire.



Spoolmate™ 3545



Spoolmatic®  
15A/30A

Industrial, well-balanced Spoolmatic 15A/30A spool gun features a built-in gas valve, rotatable canister, all-wire dual groove drive roll and 15 ft (15A) or 30 ft (30A) cable reach. New barrels are Roughneck and Bernard Centerfire compatible. (See page 4 for optional consumables.)

### Selecting a Spool Gun

What wire sizes are you running?	What welding output?	Recommended gun
.023 – .035 in	150 A at 60% duty cycle — light industrial applications	Spoolmate 3035
.030 – .047 in	200 A at 60% duty cycle — light industrial applications	Spoolmate 3545
.030 – 1/16 in	200 A at 100% duty cycle — light and heavy industrial applications	Spoolmatic 15A/30A



Spoolmate guns warranted for 90 days, parts and labor. Spoolmatic guns warranted for 1 year, parts and labor.



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# Specifications (Subject to change without notice.)

(Spoolmate — use with CV, DC Power Sources.)  
(Spoolmatic — use with CC/CV, DC Power Sources.)



## Spool Gun Specifications

Model	Welding Output Rating	Electrode Wire Diameter Capacity	Wire Speed	Maximum Spool Size Capacity	Dimensions	Net Weight with Cable Assembly
Spoolmate 3035	150 A at 60% Duty Cycle	.023–.035 in (0.6–0.9 mm) aluminum, steel and stainless steel	115–715 IPM	4 in (102 mm)	H: 11-1/2 in (291 mm) W: 2-1/4 in (57 mm) L: 8 in (203 mm)	9 lb (4.1 kg)
Spoolmate 3545	200 A at 60% Duty Cycle	.030–.047 in (0.8–1.2 mm) aluminum, steel and stainless steel	200–1200 IPM			10 lb (4.5 kg)
Spoolmatic 15A	200 A at 100% Duty Cycle	.030–1/16 in (0.6–1.6 mm) aluminum and hard wires up to .045 in (1.1 mm)	70–875 IPM		H: 10-1/4 in (260 mm) W: 2-1/2 in (64 mm) L: 15-1/8 in (384 mm)	9 lb (4.1 kg)
Spoolmatic 30A						14 lb (6.4 kg)

## Spool Gun Control Specifications

Usage	Model	Input Power	Dimensions	Net Weight
For Spoolmate 3035 and 3545	SGA 100	115 VAC, 50/60 Hz	H: 4-1/4 in (108 mm) W: 6-3/8 in (162 mm) L: 10-1/2 in (267 mm)	9 lb (4.1 kg)
	SGA 100C	115 VAC, 50/60 Hz	H: 8-1/4 in (210 mm) W: 6-3/8 in (162 mm) L: 10-1/2 in (267 mm)	12 lb (5.4 kg)
For Spoolmatic 15A/30A	WC-24	24 VAC, 50/60 Hz	H: 7 in (178 mm) W: 5-1/2 in (140 mm) L: 2 in (51 mm)	2 lb (0.9 kg)
	WC-115A	115 VAC, 50/60 or 100 Hz	H: 10 in (254 mm) W: 9-1/2 in (241 mm) L: 13 in (330 mm)	20 lb (9 kg)

## Spool Gun Hook-Up Recommendations

Power Source	Effective Serial Number	Spoolmate 3035 #195 016 150 A, 60% Duty Cycle	Spoolmate 3545 #195 015 200 A, 60% Duty Cycle	Spoolmatic 15A #195 156/ Spoolmatic 30A #130 831 200 A, 100% Duty Cycle
Millermatic® 130 XP, 135	All	Limited to 14 gauge–1/8 in material SGA 100 required <b>#043 856</b>	Not recommended	Not recommended
Millermatic® Challenger 172, 175	All	SGA 100 required <b>#043 856</b>	Not recommended	Not recommended
Millermatic® 185	Prior to <b>#KH376829</b>	Retrofit Kit required <b>#186 871</b> and <b>#207 642</b>	Retrofit Kit required <b>#186 871</b>	Not recommended
	After <b>#KH376829</b>	Direct hook-up using toggle switch field kit <b>#207 642</b>	Direct hook-up using toggle switch field kit <b>#207 642</b>	Not recommended
Millermatic® 210	All	Direct hook-up, Gun-On-Demand™	Not recommended	Not recommended
Millermatic® Vintage, 250	All	Not recommended	SGA 100 required <b>#043 856</b>	Module required <b>#043 084</b>
Millermatic® 250X, 251	All	Not recommended	Not recommended	Direct hook-up
Millermatic® 350, 350P	All	Not recommended	Not recommended	Direct hook-up, Gun-On-Demand™

## Spoolmate 3035 and 3545 Spool Gun Controls



### SGA 100 #043 856

Required to connect Spoolmate spool gun to the Millermatic 135 or 175. Allows you to connect a Spoolmate gun to virtually any similar MIG welder—Miller or other brands.

Includes 10 ft (3 m) 115 VAC power cable and plug, 6 ft (1.8 m) interconnecting cable, and 5 ft (1.5 m) gas hose.

*Note: For CV engine drives like Miller Bobcat™, use the SGA 100C with contactor (#043 857).*



### SGA 100C #043 857

SGA with contactor required to connect Spoolmate spool gun to CV engine drives like Miller's Bobcat™.

Includes 10 ft (3 m) 115 VAC power cable and plug, 6 ft (1.8 m) interconnecting cable, and 5 ft (1.5 m) gas hose.

## Genuine Miller Spoolmate Consumables and Accessories (Order Consumables from Miller Service Parts.)

*Note: Spoolmate 3035 Gun shipped with 3—.030 in and 3—.035 in contact tips. Spoolmate 3545 Gun shipped with 3—.035 in and 3—.047 in contact tips.*

### Consumables For Spoolmate 3035



#### Contact Tips (5 per package)

- #199 730 For .023 in (0.6 mm) wire.
- #186 419 For .030 in (0.8 mm) wire.
- #186 406 For .035 in (0.9 mm) wire.



#### Nozzle #186 405



#### Drive Roll (1)

- #199 731 For .023 in (0.6 mm) wire.
- #186 413 For .030/.035 in (0.8/0.9 mm) wire.



#### Push Roll (1)

- #199 732 For .023 in (0.6 mm) wire.
- #186 414 For .030/.035 in (0.8/0.9 mm) wire.

### Consumables For Spoolmate 3545



#### Contact Tips (5 per package)

- #199 387 For .030 in (0.8 mm) wire.
- #199 388 For .035 in (0.9 mm) wire.
- #199 389 For .047 in (1.2 mm) wire.



#### Nozzle #199 386



#### Drive Roll (1)

- #186 413 For .030/.035 in (0.8/0.9 mm) wire.
- #199 396 For .047 in (1.2 mm) wire.



#### Push Roll (1)

- #186 414 For .030/.035 in (0.8/0.9 mm) wire.
- #199 397 For .047 in (1.2 mm) wire.

### Accessories

25 ft Extension Cable #194 996

#### Spoolmate 3035 Heavy-Duty Barrel #195 375

Ideal for demanding applications. Rated at 200 A, 60% duty cycle.

## Spoolmatic 30A Spool Gun Controls



### WC-24 Weld Control #137 549

Packaged in a compact, lightweight, non-metallic enclosure, the WC-24 easily mounts directly on the power source. It's designed for use with Miller CV power sources supplying 24 VAC and 14-pin receptacles. The control includes a board-mounted potentiometer which can alter the drive motor acceleration rate to optimize arc starting performance.



### WC-115A Weld Control

**#137 546** Without contactor  
**#137 546-01-1** With contactor  
 This control operates on 115 VAC, and is designed primarily for CC DC power sources. It can also be used with CV power sources or DC engine drives supplying 115 VAC. When used with a CC source, the control circuit functions in a voltage-sensing mode. When used with a CV source, it functions as a constant-speed circuit.

Standard features include a wire run-in control and a drive motor acceleration control which ensure optimum arc starting performance, regardless of the type of power source being used. The WC-115A comes with a 10 ft (3 m), wall-type plug power cord.

**WC-115 Contactor Kit #137 548** Field Recommended when using the Spoolmatic gun and WC-115A control with power sources that do not have a weld output contactor. (This is installed in the WC-115A.)

### Contactor Rating:

400 amps at 30% duty cycle  
 330 amps at 60% duty cycle  
 250 amps at 100% duty cycle

## Genuine Miller Spoolmatic 30A Accessories

### Cable Cover #118 678

Protects gun hose and cable assembly from wear and abrasion. Features a full-length zipper.



### Hose and Cable Extension Kits

**#132 228** 25 ft (7.6 m)

**#132 229** 50 ft (15 m)

Extends Spoolmatic 30A away from the control box. Convenient plug-in connections. Includes gas hose, control cord, and weld power cable with International-style insulated connector.

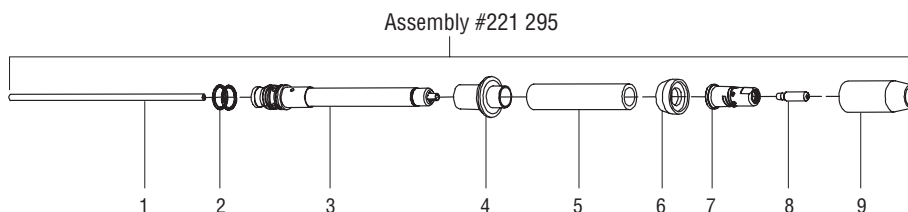
### Spare Spool Canister #132 230

Canister accommodates 4 in (102 mm) spools of wire. Can be loaded with other popular wires to save time in changeover.

## Genuine Miller Spoolmatic 30A Consumables (Order from Miller Service Parts.)

Wire Size	FasTip Contact Tip	Spoolmatic Drive Rolls	Spoolmatic All-Wire Dual Groove Drive Rolls
.030 in (0.8 mm)	.041 in ID #206 186	#183 357	#136 135
.035 in (0.9 mm)	.047 in ID #206 187	#183 357	#136 135
.040 in (1.0 mm)	.053 in ID #206 188	#183 357	#136 135
.047 in (1.2 mm)	.061 in ID #206 189	#183 358	#136 135
.062 in (1.6 mm)	.071 in ID #206 190	#183 358	#136 135

Each gun is shipped with .035 in and .047 in standard tips.



1. Head Tube Liner #212 156
2. O-Ring .614 ID #134 800
4. Head Tube (Air-cooled) #219 796
5. Barrel Pistol Insulator #219 795
5. Outer Insulating Jacket #219 794
6. Nozzle Insulator #198 856
7. Diffuser #206 195
8. Contact Tip (See consumables)
9. Nozzle (See optional consumables)

## XR Gun Genuine Miller Accessories

### XR-Pistol Gun Barrels (Air-Cooled)



**50 Degree Curved Barrel-A #222 462**  
6 in (152 mm). Used with .030–1/16 in (0.8–1.6 mm) wire. Kits supplied with liner that accommodates all wire sizes.



**10 in Flex Head-A #222 735**  
10 in (254 mm). For .030–1/16 in (0.8–1/6 mm) wire. Used in place of the standard straight barrel. Flexible head tube bends 60 degrees in any direction for easier joint access and improved operator comfort. Supplied with liners. Uses FasTip™ contact tips.



**10 in Head Tube-A #222 461**  
Ideal when a longer reach is required.

**Replacement Liners for Air-Cooled Barrels**  
(Order from Miller Service Parts.)

**For 6 in Curved Barrel**  
**#212 411** .030–1/16 in (0.8–1.6 mm) wire

**For 10 in Head Tube**  
**#212 401** .030–1/16 in (0.8–1.6 mm) wire

**For Flex Head**  
**#222 853** .030–.035 in (0.8–0.9 mm) wire  
**#222 854** .047–.062 in (1.2–1.6 mm) wire

**50 Degree Curved Nozzle Kit-A #147 174**  
Attaches to old-style gun barrel assembly for access to confined weld joint areas. Used with .030–1.16 in (0.8–1.6 mm) wire. Kit includes two of each size contact tips to accommodate all wire sizes, Nozzle Adapter Kit (#193 794) and curved nozzle. Uses standard straight barrel head tube liner.

*Note: Kit only works with old-style colleted multi-piece barrel #193 142 and can be ordered through Miller Service Parts. Kit will not work with new Roughneck-style one piece front end.*

**Replacement Contact Tips for Curved Nozzle**  
(Order from Miller Service Parts.)

**#148 155** .030 and .035 in (0.8 and 0.9 mm) wire

**#148 154** .047 (1.2 mm) wire

**#148 156** 1/16 in (1.6 mm) wire

### XR-Pistol Gun Barrels (Water-Cooled)



**50 Degree Curved Barrel-W #222 464**  
6 in (152 mm). Used with .030–1/16 in (0.8–1.6 mm) wire. Kits supplied with liner that accommodates all wire sizes.

**Replacement Liners for Air-Cooled Barrels**  
(Order from Miller Service Parts.)

**For 6 in Curved Barrel**  
**#212 411** .030–1/16 in (0.8–1.6 mm) wire

**For 10 in Straight Barrel**  
**#212 401** .030–1/16 in (0.8–1.6 mm) wire



**10 in Straight Barrel-W #222 463**  
Used with .030–1/16 in (0.8–1.6 mm) wire. Kits supplied with liner that accommodates all wire sizes.

# Genuine Miller Spoolmatic 30A Optional Consumables (Order from Miller Service Parts.)

## Nozzles

- #176 238\* Spot Flat
- #176 240\* Spot Inside Corner
- #176 242\* Spot Outside Corner
- #199 610 Screw-on brass, 1/2 in orifice
- #199 611 Screw-on brass, 3/4 in orifice straight
- #199 612 Screw-on brass, 3/4 in orifice straight heavy-duty
- #199 613 Screw-on brass, 5/8 in orifice
- #199 614 Screw-on brass, 5/8 in orifice heavy-duty
- #199 615 Screw-on copper, 1/2 in orifice
- #199 616 Screw-on copper, 3/4 in orifice
- #199 617 Screw-on copper, 3/4 in orifice heavy-duty
- #198 855 Screw-on copper, 5/8 in orifice
- #199 618 Screw-on copper, 5/8 in orifice heavy-duty
- #207 313 Screw-on copper, 5/8 in orifice 15/16 O.D.
- #209 035\*\* Screw-on copper, 3/8 in orifice tapered
- #209 036\*\* Screw-on copper, 1/2 in orifice tapered

\*Requires Diffuser #209 099, used with any heavy-duty FasTip™ contact tip.

\*\*Requires Diffuser #206 195, #206 196, or #210 664. Used with any tapered FasTip™ contact tip.

## FasTip™ Contact Tips (25 per package)

- Heavy-Duty**
- #206 186 .030/.035 in (0.8/0.9 mm) aluminum wire
- #206 187 .040/.035 in (0.9/1.0 mm) aluminum wire
- #206 188 .040/.045 in (1.0/1.2 mm) aluminum wire
- #206 189 .052 in (1.3 mm) or 3/64 in (1.2 mm) aluminum wire
- #206 190 1/16 in (1.6 mm)
- #206 191 .068 in (1.7 mm) or 1/16 in (1.6 mm) aluminum wire
- Tapered**
- #209 026 .030/.035 in (0.8/0.9 mm) aluminum wire
- #209 027 .035/.045 in (0.9/1.2 mm) aluminum wire
- #209 028 3/64 in (1.2 mm)
- #209 029 .052 in (1.3 mm)
- #209 030 1/16 in (1.6 mm)

## Gas Diffusers

- #206 195 Standard 1/8 in tip recess for heavy-duty FasTip contact tips.
- #210 664 1/4 in tip recess for heavy-duty FasTip contact tips.
- #206 196 Flush tip for heavy-duty FasTip contact tips.

# Centerfire® Series Consumables

## T Series Contact Tips 1.5 in (38.1 mm)

- T-030 .030 in (0.8 mm)
- T-035 .035 in (0.9 mm)
- T-039 .039 in (1.0 mm)
- T-045 .045 in (1.2 mm)
- T-052 .052 in (1.4 mm)
- T-062 1/16 in (1.6 mm)
- T-078 5/64 in (2.0 mm)
- T-094 3/32 in (2.4 mm)
- T-109 7/64 in (2.8 mm)
- T-125 1/8 in (3.2 mm)

## TT Series Contact Tips 2 in (50.8 mm)

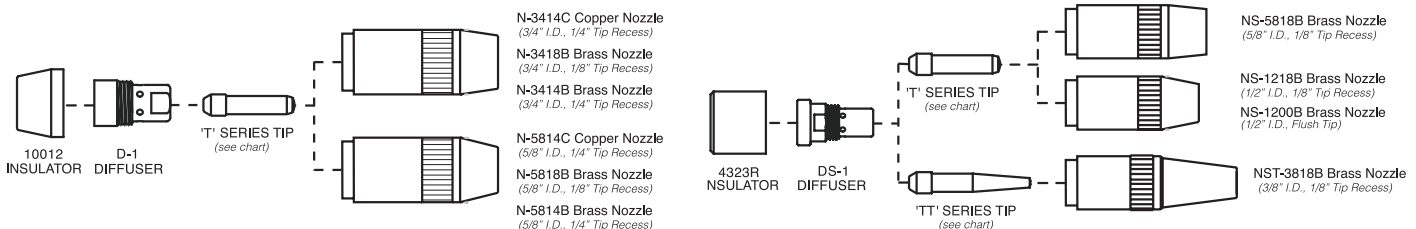
- TT-030 .030 in (0.8 mm)
- TT-035 .035 in (0.9 mm)
- TT-045 .045 in (1.2 mm)
- TT-052 .052 in (1.4 mm)
- TT-062 1/16 in (1.6 mm)

**Insulator 10012  
4323R**

**Diffuser D-1  
DS-1**

## Nozzles

- N-3414C Copper Nozzle (3/4" I.D., 1/4" Tip Recess)
- N-3418B Brass Nozzle (3/4" I.D., 1/8" Tip Recess)
- N-3414B Brass Nozzle (3/4" I.D., 1/4" Tip Recess)
- N-5814C Copper Nozzle (5/8" I.D., 1/4" Tip Recess)
- N-5818B Brass Nozzle (5/8" I.D., 1/8" Tip Recess)
- N-5814B Brass Nozzle (5/8" I.D., 1/4" Tip Recess)
- NS-5818B Brass Nozzle (5/8" I.D., 1/8" Tip Recess)
- NS-1218B Brass Nozzle (1/2" I.D., 1/8" Tip Recess)
- NS-1200B Brass Nozzle (1/2" I.D., Flush Tip)
- NST-3818B Brass Nozzle (3/8" I.D., 1/8" Tip Recess)



# Typical Installations

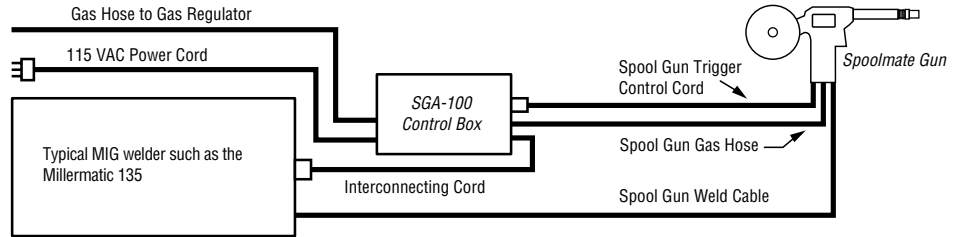
## Spoolmate Gun to Welder Requiring a SGA Spool Gun Adapter

Note: Refer to SGA Owner's Manual for complete installation instructions.

For Millermatic 135, combine Spoolmate 3035 with SGA 100 to weld 14 gauge to 1/8 in aluminum.

For Millermatic 175, combine Spoolmate 3035 with SGA 100 to weld 14 gauge to 1/4 in aluminum.

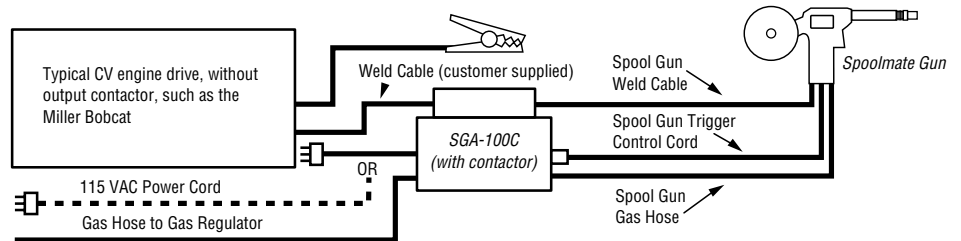
To weld aluminum with comparable, competitive power sources, the Spoolmate may also be used with one of the SGA units.



The SGA 100C is necessary when connecting Spoolmate spool guns to CV engine drive units. Thickness will depend on engine drive.

For Miller's Bobcat 225NT, combine Spoolmate 3545 with SGA 100C to weld 14 gauge to 3/16 in aluminum.

To weld aluminum with comparable, competitive power sources, the Spoolmate may also be used with one of the SGA units.

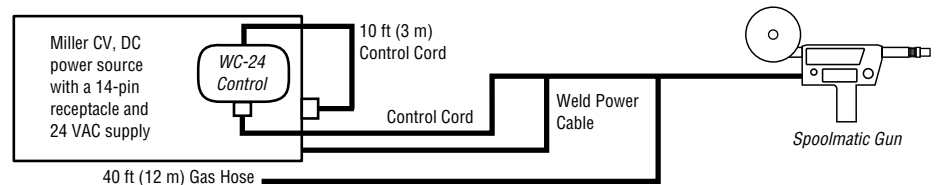


## Spoolmatic 15A/30A

Note: Cords and cables are supplied unless noted otherwise on drawings below. Refer to Owner's Manual for complete installation instructions.

To connect the Spoolmatic 15A/30A and WC-24 control to older-style Miller or competitive CV power sources that **do not** have a 24 VAC supply, the PSA-2 control #141 604 is required.

To connect Spoolmatic 15A/30A gun and WC-24 control to Millermatic® 200 and Spoolmate™ 200 power sources that have a 4-pin receptacle, order adapter cord #042 236.



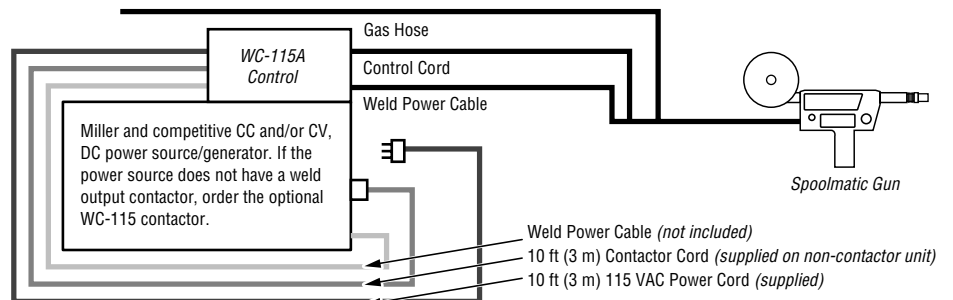
To connect the WC-115A control to older-style Miller power sources having Hubbell or 5-pin contactor control receptacles, the appropriate connector must be ordered **separately**:

To connect to older-style Miller CC power sources having a two-socket Hubbell connector, order plug #039 618.

If power source has a Miller 5-pin receptacle, order #039 273 and #039 685.

To connect to older-style Miller CV power sources having a two-prong Hubbell connector, order plug #039 635.

Note: These connectors are to replace the 14-pin connector on the 10 ft interconnect contactor cord. Internal wiring changes may be necessary.



# Ordering Information

Equipment	Stock No.	Description	Qty.	Price
<b>Spoolmate™ 3035 Spool Gun</b>	<b>#195 016</b>	Includes 20 ft (6 m) cable		
<b>Spoolmate™ 3545 Spool Gun</b>	<b>#195 015</b>	Includes 20 ft (6 m) cable		
<b>Spoolmatic® 15A Spool Gun</b>	<b>#195 156</b>	Includes 15 ft (4.6 m) cable		
<b>Spoolmatic® 30A Spool Gun</b>	<b>#130 831</b>	Includes 30 ft (9 m) cable		
<b>Spoolmate Controls</b>				
<b>SGA 100</b>	<b>#043 856</b>	For Spoolmate guns		
<b>SGA 100C</b>	<b>#043 857</b>	For Spoolmate guns		
<b>Spoolmate Consumables and Accessories</b>				
Consumables		See page 3		
25 ft Extension Cable	<b>#194 996</b>	Control cable extension for Spoolmate 3035 and 3545		
Spoolmate 3035 Heavy-Duty Barrel	<b>#195 375</b>	Rated at 200 A, 60% duty cycle		
<b>Spoolmatic 15A/30A Controls</b>				
<b>WC-24 Weld Control</b>	<b>#137 549</b>	For Spoolmatic guns		
<b>WC-115A Weld Control</b>	<b>#137 546</b>	Without contactor. For Spoolmatic guns		
	<b>#137 546-01-1</b>	With contactor. For Spoolmatic guns		
WC-115 Contactor Kit	<b>#137 548</b>	Field		
<b>Spoolmatic 15A/30A Consumables and Accessories</b>				
Consumables		See pages 4–6		
Cable Cover	<b>#118 678</b>			
Spare Spool Canister	<b>#132 230</b>			
Hose and Cable Extension Kits	<b>#132 228</b>	25 ft (7.6 m)		
	<b>#132 229</b>	50 ft (15 m)		
XR-Pistol Gun Barrels		See page 5		

Date:

Total Quoted Price:



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