

70 Series Swingarc™

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**Boom-Mounted
Wire Feeder**



Quick Specs

Heavy Industrial Applications

Heavy Manufacturing
Metal Fabrication
Construction
Light Manufacturing

Processes

MIG (GMAW)
Flux Cored (FCAW)
(Gas- and Self-Shielded)
Submerged Arc (SAW)

Input Power 24 VAC, 10 A, 50/60 Hz

Electrode Wire Diameter Capacity .023–5/64 in (0.6–2 mm)

Wire Speed 50–780 IPM (1.3–19.8 m/min)

Weight 160–280 lb (73–127 kg) depending upon feeder and boom

The Power of Blue.®

Available in single- and dual-wire models with 12 or 16 ft booms to accommodate a wide variety of semiautomatic wire feed applications, including large weldments and hard to reach areas.

360° rotation and 60° lift angle maximizes your work area (24 or 32 ft diameter work area).

Unique counterbalanced boom makes it easy to raise and lower boom and automatically holds its position.

Additional 10 ft, 14-pin interconnecting cord, 10 ft gas hose and 10 ft weld cable provided for the operator to hook up.

Control features on page 2.

In-boom cable routing organizes hoses and cables, preventing damage and maintaining an orderly work cell.

Bernard® Q-Gun™ and drive rolls included. One set of each .035 in (0.9 mm) and .045 in (1.1/1.2 mm) "V" groove drive rolls.

One of the following is required for mounting the boom:

- Swingpak base and pipe post with base plate (for 12 or 16 ft Swingarcs).
 - 4 or 6 ft (1.2 or 1.8 m) pipe post with base plate (for 12 or 16 ft Swingarcs). Pipe post base plates allow post to be bolted to Swingpak base or floor.
- See page 4 for details.**

Single-wire Swingarc shown with pipe post, power source, welding gun, and optional Swingpak™ base.



Wire feeder and boom are warranted for 3 years, parts and labor.

MADE IN **USA**
APPLETON, WI **USA**



Miller Electric Mfg. Co.
An Illinois Tool Works Company
1635 West Spencer Street
Appleton, WI 54914 USA

International Headquarters
Phone: 920-735-4505
USA FAX: 920-735-4134
Canadian FAX: 920-735-4169
International FAX: 920-735-4125

Web Site
www.MillerWelds.com

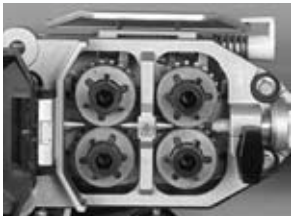


70 Series Control Features



All the features of the 60 Series controls, plus enhanced flexibility and additional features.

- Models: **74S:** Standard, basic design
74D: Digital meters
74DX: Deluxe — digital, full-feature



Dual tension control adds flexibility for the operator to fine-tune the pressure on the wire independently when feeding a variety of wires.

Trigger receptacle oriented in a downward position to reduce potential damage.

Trigger hold reduces operator fatigue by allowing the operator to make long welds without having to energize the trigger continuously.

Automatic run-in control significantly improves arc starting performance.

10 ft, 14-pin interconnecting cord, 10 ft gas hose and 10 ft weld cable provided for the operator to hook up.

Posifeed™ Wire Drive Assembly Features

- 24 VDC high-torque, permanent-magnet motor.
- Quick-change drive rolls.
- Quick-release, calibrated drive-roll pressure adjustment arm allows drive roll change without losing spring preload setting.
- **Four sealed ball bearing all-gear-driven drive-roll carriers** for smooth, positive and accurate wire feed with long uninterrupted service life.
- Easy loading and threading of welding wire without having to release the drive-roll pressure arm.
- **Solid-state speed control and brake circuit** eliminates the need for electrical/ mechanical relays and increases service life.
- Uses Miller standard 1-5/8 in (41 mm) diameter drive rolls.
- Quick-connect for all Miller guns.
- Covered drive rolls — easy access, heavy-duty, molded composite cover over drive assembly.
- Floating positive drive systems provide trouble-free feeding on a variety of wires.

DX Models Additional Features

Dual schedule allows operator to switch between two welding parameters without readjusting machine, eliminating downtime and enhancing quality.

Adjustable weld sequence control gives operator complete control of the welding parameters: preflow, run-in, weld time, crater, burnback and postflow.

Welding process range control locks parameters at a set percentage of welding parameters to ensure welding procedures and quality standards are maintained on the shop floor.

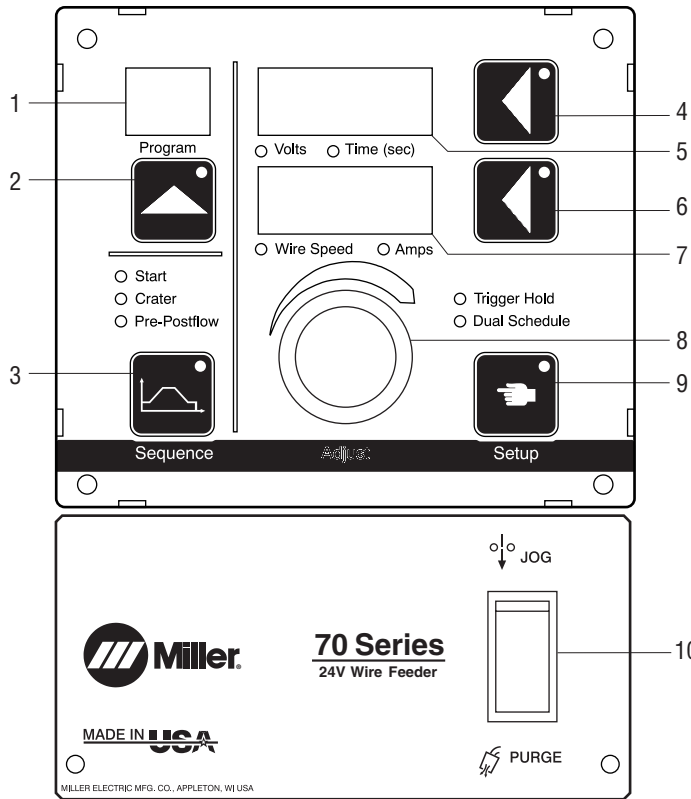
Four weld programs allow the operators to store four independent welding parameters reducing welding setup time. (Four programs available per side on dual model.)

Specifications (Subject to change without notice.)

CV (Use with CV Power Sources.)

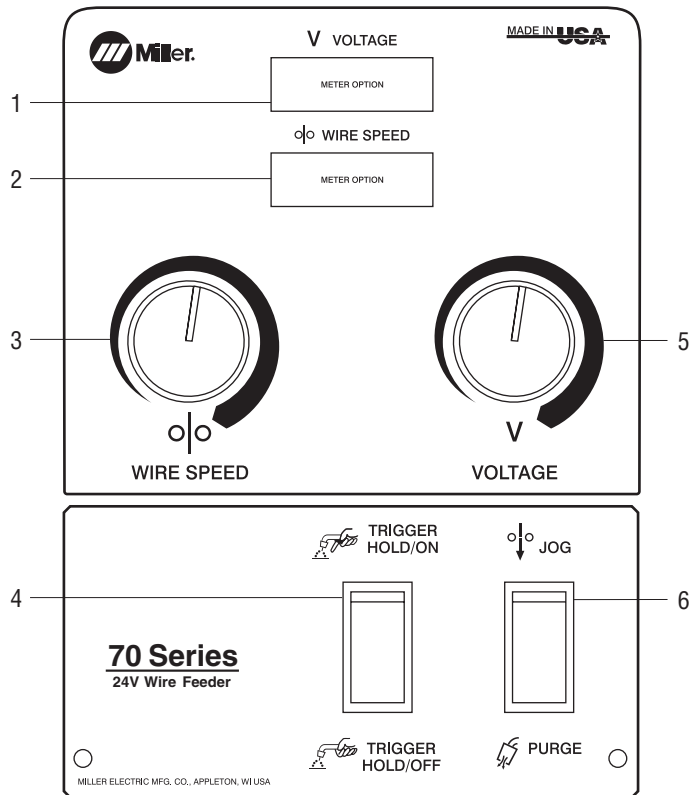
Model	Input Power	Electrode Wire Diameter Capacity	Wire Speed	12 ft Boom Net Weight	16 ft Boom Net Weight
SS-74	24 VAC, 10 A, 50/60 Hz	.023–5/64 in (0.6–2 mm)	50–780 IPM (1.3–19.8 m/min)	160 lb (73 kg)	210 lb (95 kg)
DS-74			Optional High Speed Motor: 90–1440 IPM (2.3–36.6 m/min)	207 lb (94 kg)	280 lb (127 kg)

Control Panels



S-74DX Model

1. Program Display
2. Program # Select
3. Weld Sequence
4. Voltage/Time Select
5. Voltage/Time Display Meter
6. Wire Feed/Amperage Select
7. Wire Speed/Amperage Display Meter
8. Control Knob
9. Trigger Hold/Dual Schedule Control
10. Jog/Purge



S-74S and S-74D Model

1. Voltage Display Meter*
2. Wire Speed Display Meter*
3. Wire Feed Speed Select
4. Trigger Hold
5. Voltage Select
6. Jog/Purge

**S-74D model only*

Drive Roll Kits and Guides (Order from Miller Service Parts.)

Select drive roll kits from chart below according to type and wire size being used. Drive roll kits include 4 drive rolls, the necessary guides and feature an anti-wear sleeve for inlet guide.

Wire Size	"V" groove for hard wire 	"U" groove for soft wire or soft-shelled cored wires 	"V" knurled for hard-shelled cored wires 	"U" clogged for extremely soft wire or soft-shelled cored wires (i.e., hard facing types) 
.023/.025 in (0.6 mm)	#151 024	—	—	—
.030 in (0.8 mm)	#151 025	—	—	—
.035 in (0.9 mm)	#151 026	#151 036	#151 052	—
.040 in (1.0 mm)	#161 190	—	—	—
.045 in (1.1/1.2 mm)	#151 027	#151 037*	#151 053	#151 070
.052 in (1.3/1.4 mm)	#151 028	#151 038	#151 054	#151 071
1/16 in (1.6 mm)	#151 029	#151 039	#151 055	#151 072
.068/.072 in (1.8 mm)	—	—	#151 056	—
5/64 in (2.0 mm)	—	#151 040	#151 057	#151 073
3/32 in (2.4 mm)	—	#151 041	#151 058	#151 074
7/64 in (2.8 mm)	—	#151 042	#151 059	#151 075
1/8 in (3.2 mm)	—	#151 043**	#151 060**	#151 076**

*Accommodates .045 and .047 (3/64 in) wire. ** May require a low-speed, wire-feed drive-roll option.

Nylon Wire Guides for Feeding Aluminum Wire

Wire Size	Inlet Guide	Intermediate Guide
.047 in (1.2 mm)	#151 203	#151 204
1/16 in (1.6 mm)	#151 205	#151 206
3/32 in (2.4 mm)	#151 207	#151 208

Note: "U" groove drive rolls are recommended when feeding aluminum wire.

Wire Guides

Wire Size	Inlet Guide	Intermediate Guide
.023-.040 in (0.6-1.0 mm)	#150 993	#149 518
.045-.052 in (1.1-1.4 mm)	#150 994	#149 519
1/16-5/64 in (1.6-2 mm)	#150 995	#149 520
3/32-7/64 in (2.4-2.8 mm)	#150 996	#149 521
1/8 in (3.2 mm)	#150 997	#149 522

Mounting Equipment for Swingarc™ Booms

Specifications and Usage (Subject to change without notice.)

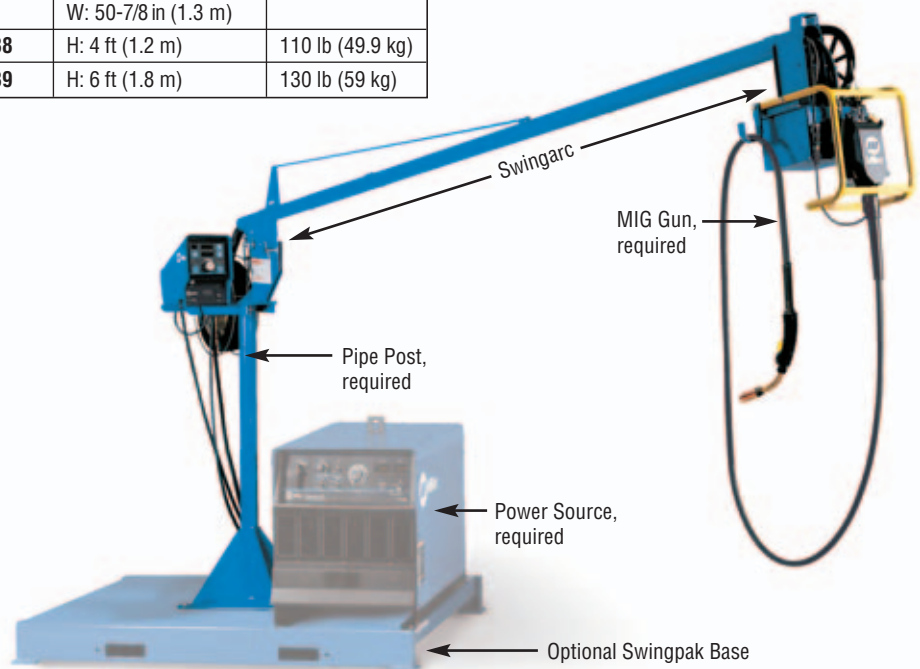
Usage	Model	Stock No.	Dimensions	Net Weight
For 12 ft or 16 ft Swingarc	Swingpak Base	#183 997	L: 65 in (1.7 m) W: 50-7/8 in (1.3 m)	285 lb (129 kg)
	4 ft Pipe Post with Base	#149 838	H: 4 ft (1.2 m)	110 lb (49.9 kg)
	6 ft Pipe Post with Base	#149 839	H: 6 ft (1.8 m)	130 lb (59 kg)

The Swingpak™ Base

For use with 12 ft (3.7 m) and 16 ft (4.9 m) Swingarcs.

Each base accommodates a power source, Swingarc feeder system, water coolant system, and gas cylinder. The base plate is solid to help better organize components and cables. The entire unit can be moved with a forklift truck.

Note: Base must be mounted to floor with 16 ft Swingarc.



Genuine Miller Options and Accessories

Remote Voltage Control

#194 988 Field Non-digital for S-74S

#194 991 Field Non-digital for D-74S

Conversion Kit

#194 989 Field S-74S to S-74D

#194 992 Field D-74S to D-74D

#195 010 Field S-74S to S-74DX

#195 041 Field D-74S to D-74DX



Spool Covers

#057 607 For S-74 and left side of D-74 models

#090 389 For right side of D-74 models
For 12 in (305 mm) spool.



Wire Reel Assembly #108 008

For 60 lb (27 kg) coil of wire.

Reel Covers

#195 412 For S-74 and left side of D-74 models

#091 668 For right side of D-74 models
For 60 lb (27 kg) coil. Helps to protect the welding wire from dust and other contaminants.

Note: Reel and Spool Covers cannot be installed if the wire drive assembly is in a rotated position.

Spool Adapter #047 141

For use with 14 lb (6.4 kg) spool of Lincoln self-shielding wire.

2/0 MIG Welding Accessory Kit #173 856

25 ft (7.6 m). Includes gas hose, weld cable and ground cable with clamp.

Extension Cords

#122 973 25 ft (7.6 m)

#122 974 50 ft (15 m)

#122 975 75 ft (23 m)

Provides 14-pin, 24 VAC, contactor and voltage control. Add to the standard 10 ft (3 m) feeder cord to extend feeder farther from power source.

Dual Schedule Switches



DSS-8 #079 693

A two-position trigger switch which attaches to the gun handle and is used in place of the standard trigger for dual scheduling. *(For 74DX models only.)*

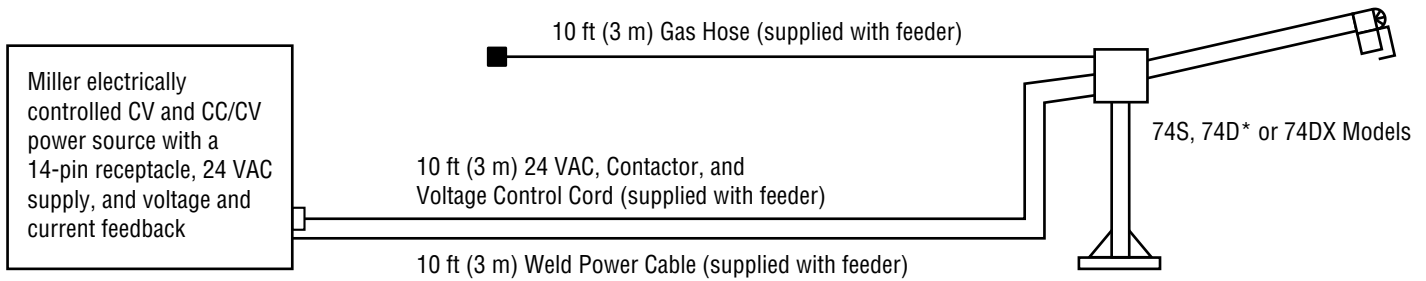
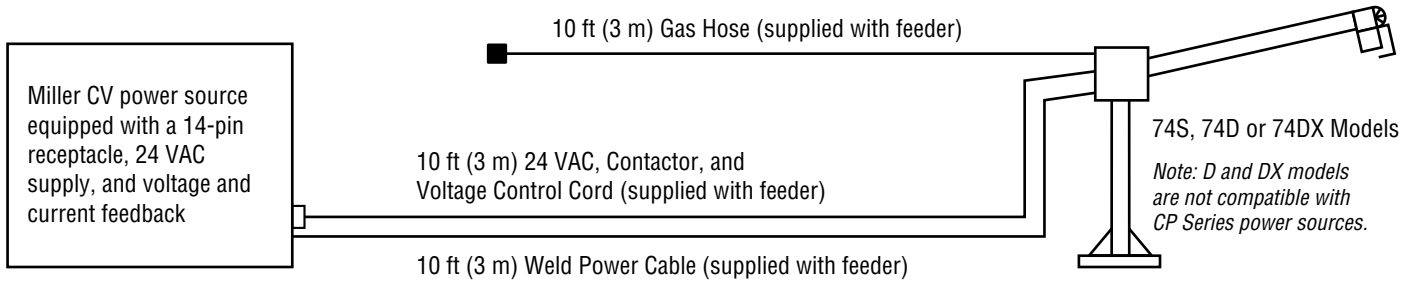


DSS-9 #071 833

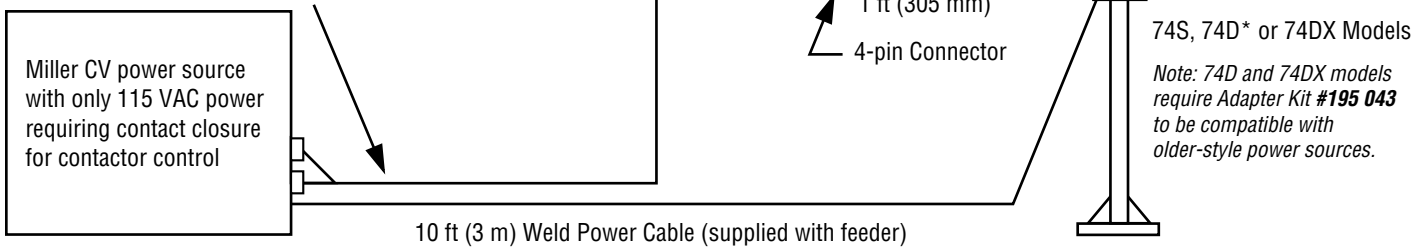
A two-position slide switch which attaches to the gun handle and is used to select the desired welding condition for dual schedule purposes. The gun trigger operates as a standard gun trigger. *(For 74DX models only.)*

Typical Installations

Models: **74S:** Standard, basic design
74D: Digital meters
74DX: Deluxe — digital, full-feature



10 ft (3 m) interconnecting cord included with PSA-2 control. Includes a 4-pin connector for connecting to PSA-2 control and Hubbell connectors on older-style Miller CV power sources.

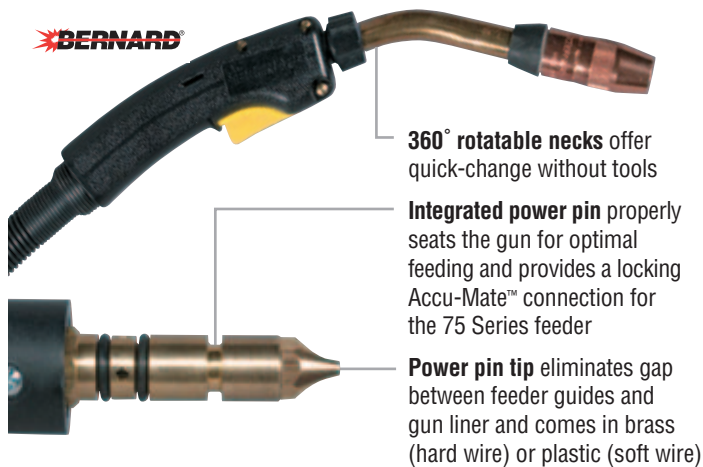


*When using the D model with Miller power sources that DO NOT have remote voltage control capabilities, i.e., CP type, the voltage control in the feeder IS NOT functional. See Operator's Manual for operating instructions.

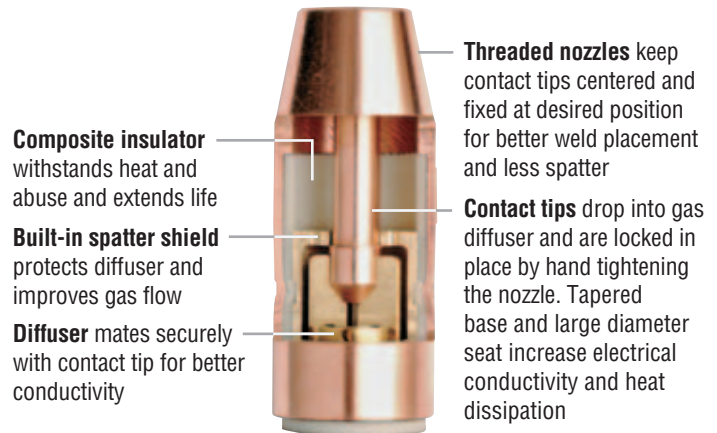
**If using the 70 Series feeders with a power source having only 115 VAC supply, the PSA-2 (Power Source Adapter) is required. When using the PSA control, optional remote voltage is not functional. See Operator's Manual for operating instructions.

Bernard® Q™-Series MIG Guns and Centerfire™ Consumables

Q-Series guns increase productivity, reduce downtime, and lower maintenance and inventory costs.



Patent-pending Centerfire™ consumables improve weld quality, reduce downtime and boost gun performance.



Q-Series MIG Guns

- #Q3010AE8QM**
300 A, 10 ft (3 m),
.035 in (0.9 mm) aluminum
- #Q4015AE8RM**
400 A, 15 ft (4.6 m),
3/64 in (1.19 mm) aluminum
- #Q4015AE8SM**
400 A, 15 ft (4.6 m),
1/16 in (1.6 mm) aluminum
- #Q4015AE8EM**
400 A, 15 ft (4.6 m),
.045 in (1.2 mm) steel

Power Pin Tips

- #2200105** Plastic, .030–.035 in (0.8–0.9 mm), for aluminum (red)
- #2200106** Plastic, .040–3/64 in (1.02–1.19 mm), for aluminum (white)
- #2200107** Plastic, .052–1/16 in (1.4–1.6 mm), for aluminum (blue)
- #4477*** Brass, .023–.045 in (0.6–1.2 mm), for steel
- #4477-564** Brass, .052–5/64 in (1.01–2.0 mm), for steel

Liners

- #44115*** 15 ft (4.6 m), .035–.045 in (0.9–1.2 mm), steel
- #44215** 15 ft (4.6 m), .045–1/16 in (1.2–1.6 mm), steel

- #43010X** 10 ft (3 m), .035 in (0.9 mm), aluminum (red)
- 1920344** 15 ft (4.6 m), 3/64 in (1.19 mm), aluminum (white)
- 1920345** 15 ft (4.6 m), 1/16 in (1.6 mm), aluminum (blue)

T Series Centerfire™

- Contact Tips** 1.5 in (38.1 mm)
- #T-023** .023 in (0.6 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 Centerfire™

- Contact Tips** 2 in (50.8 mm)
- #TT-023** .023 in (0.6 mm)
- #TT-030** .030 in (0.8 mm)
- #TT-035** .035 in (0.9 mm)
- #TT-039** .039 in (1.0 mm)
- #TT-045** .045 in (1.2 mm)
- #TT-052** .052 in (1.4 mm)
- #TT-062** 1/16 in (1.6 mm)

Centerfire™ Large Nozzles

- #N-3400C** Copper, 3/4 in I.D., flush tip
- #N-3418C** Copper, 3/4 in I.D., 1/8 in tip recess
- #N-3414C** Copper, 3/4 in I.D., 1/4 in tip recess
- #N-3418B** Brass, 3/4 in I.D., 1/8 in tip recess
- #N-3414B** Brass, 3/4 in I.D., 1/4 in tip recess
- #N-5800C** Copper, 5/8 in I.D., flush tip
- #N-5818C** Copper, 5/8 in I.D., 1/8 in tip recess
- #N-5814C*** Copper, 5/8 in I.D., 1/4 in tip recess
- #N-5818B** Brass, 5/8 in I.D., 1/8 in tip recess
- #N-5814B** Brass, 5/8 in I.D., 1/4 in tip recess

Diffuser #D-1*

Insulator #10012*

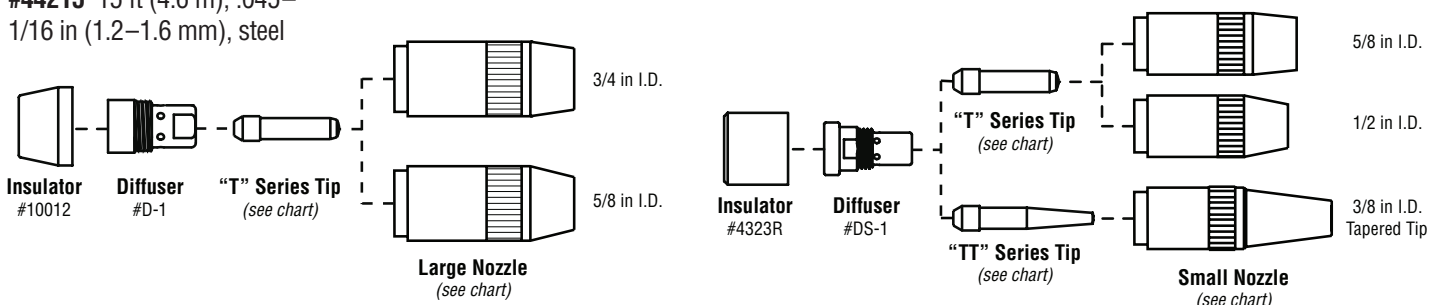
Centerfire™ Small Nozzles

- #NS-5818C** Copper, 5/8 in I.D., 1/8 in tip recess
- #NS-5800B** Brass, 5/8 in I.D., flush tip
- #NS-5818B** Brass, 5/8 in I.D., 1/8 in tip recess
- #NS-1218C** Copper, 1/2 in I.D., 1/8 in tip recess
- #NS-1200B** Brass, 1/2 in I.D., flush tip
- #NS-1218B** Brass, 1/2 in I.D., 1/8 in tip recess
- #NST-3800B** Brass, tapered, 3/8 in I.D., flush tip
- #NST-3818B** Brass, tapered, 3/8 in I.D., 1/8 in tip recess
- #NST-38XTB** Brass, tapered, 3/8 in I.D., 1/8 in tip extension

Diffuser #DS-1

Insulator #4323R

**Comes standard with Q400 15 ft steel gun.*



Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
Single-Wire Models				
SS-74S12	#195 063	12 ft. With S-74S model wire feeder, 15 ft (4.6 m) Bernard Q400 gun and drive rolls		
SS-74S16	#195 064	16 ft. With S-74S model wire feeder, 15 ft (4.6 m) Bernard Q400 gun and drive rolls		
SS-74D12	#195 065	12 ft. With S-74D model wire feeder, 15 ft (4.6 m) Bernard Q400 gun and drive rolls		
SS-74D16	#195 066	16 ft. With S-74D model wire feeder, 15 ft (4.6 m) Bernard Q400 gun and drive rolls		
SS-74DX12	#195 067	12 ft. With S-74DX model wire feeder, 15 ft (4.6 m) Bernard Q400 gun and drive rolls		
SS-74DX16	#195 068	16 ft. With S-74DX model wire feeder, 15 ft (4.6 m) Bernard Q400 gun and drive rolls		
Dual-Wire Models				
DS-74S12	#195 069	12 ft. With D-74S model wire feeder, 15 ft (4.6 m) Bernard Q400 gun and drive rolls		
DS-74S16	#195 070	16 ft. With D-74S model wire feeder, 15 ft (4.6 m) Bernard Q400 gun and drive rolls		
DS-74D12	#195 071	12 ft. With D-74D model wire feeder, 15 ft (4.6 m) Bernard Q400 gun and drive rolls		
DS-74D16	#195 072	16 ft. With D-74D model wire feeder, 15 ft (4.6 m) Bernard Q400 gun and drive rolls		
DS-74DX12	#195 073	12 ft. With D-74DX model wire feeder, 15 ft (4.6 m) Bernard Q400 gun and drive rolls		
DS-74DX16	#195 074	16 ft. With D-74DX model wire feeder, 15 ft (4.6 m) Bernard Q400 gun and drive rolls		
Control Options				
Remote Voltage Control	#194 988	Field. Non-digital control (<i>S-74S model only</i>)		
	#194 991	Field. Non-digital control (<i>D-74S model only</i>)		
Conversion Kit	#194 989	Field. S-74S to S-74D		
	#194 992	Field. D-74S to D-74D		
	#195 010	Field. S-74S to S-74DX		
	#195 041	Field. D-74S to D-74DX		
Control Detachment Kit	#194 914	Field. 10 ft (3 m) (<i>S-74S model only</i>)		
	#194 913	Field. 25 ft (7.6 m) (<i>S-74S model only</i>)		
	#194 995	Field. 25 ft (7.6 m) (<i>D-74S model only</i>)		
Replacement Gun and Consumables				
Bernard® Q400	#Q4015AE8EM	400 A, 15 ft (4.6 m)		
Centerfire™ consumables		See page 7		
Power Sources				
Invision™ 354 MP and 456MP		See Lit. Index No. DC/23		
Invision™ 456P		See Lit. Index No. DC/20		
Deltaweld® Series		See Lit. Index No. DC/16.2		
XMT® Series		See Lit. Index No. DC/18.8		
Dimension™ Series		See Lit. Index No. DC/19.2		
Mounting Equipment				
Swingpak™ Base	#183 997	For 12 or 16 ft booms		
Pipe Posts	#149 838	4 ft with base, for 12 ft or 16 ft boom		
	#149 839	6 ft with base, for 12 ft or 16 ft boom		
Accessories				
Adapter Kit	#195 043	Makes 70 Series feeder compatible with older-style power sources		
Spool Covers	#057 607	For S-74 and left side of D-74 models		
	#090 389	For right side of D-74 models		
Wire Reel Assembly	#108 008			
Reel Covers	#195 412	For S-74 and left side of D-74 models		
	#091 668	For right side of D-74 models		
Spool Adapter	#047 141			
2/0 MIG Welding Accessory Kit	#173 856			
Extension Cords		See page 5		
Dual Schedule Switches	#079 693	DSS-8 (<i>74DX models only</i>)		
	#071 833	DSS-9 (<i>74DX models only</i>)		

Date:

Total Quoted Price:

Distributed by:

