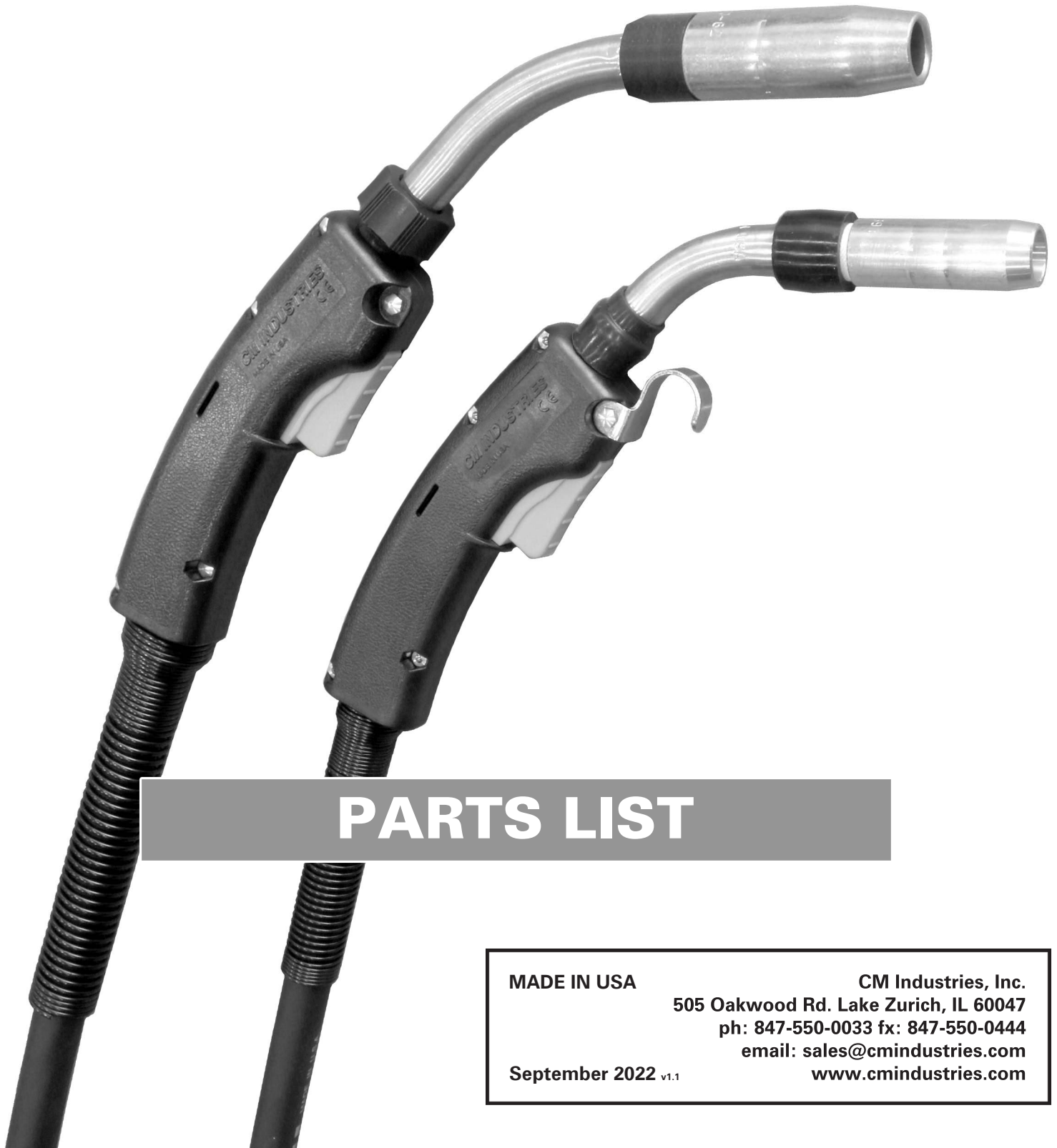


**CM INDUSTRIES**  
INC.

# B-Series MIG Guns

Semi-Automatic, Air-Cooled, MIG Welding Gun



## PARTS LIST

MADE IN USA

CM Industries, Inc.  
505 Oakwood Rd. Lake Zurich, IL 60047

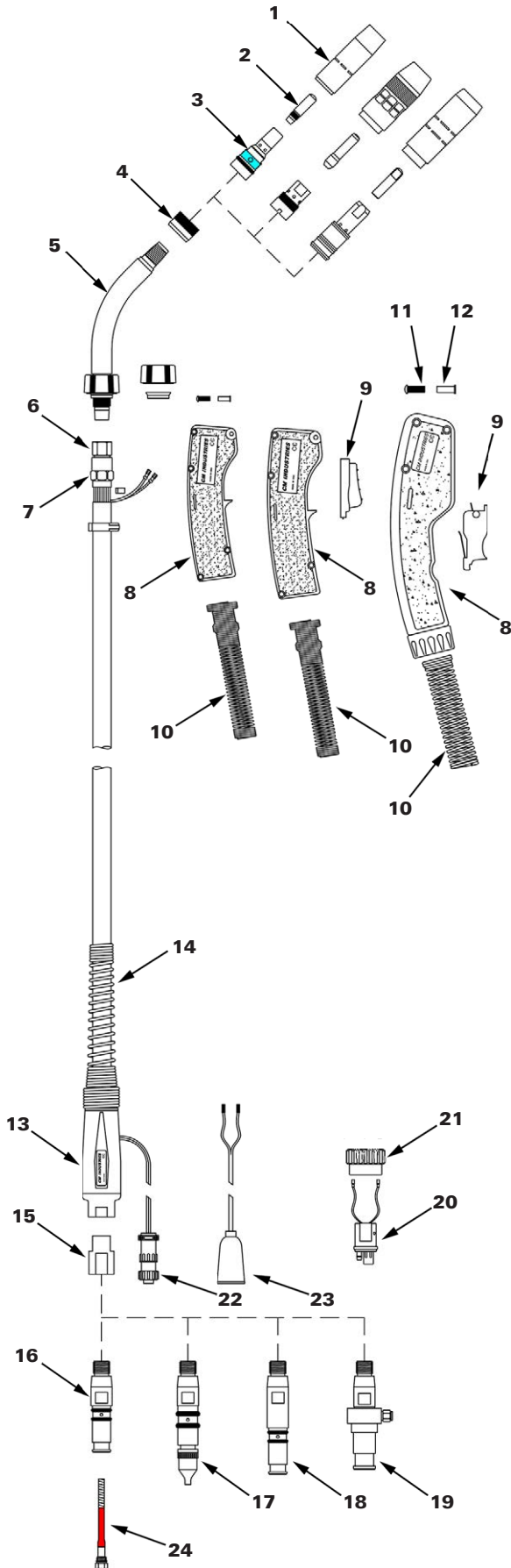
ph: 847-550-0033 fx: 847-550-0444

email: [sales@cmindustries.com](mailto:sales@cmindustries.com)

September 2022 v1.1

[www.cmindustries.com](http://www.cmindustries.com)

# PARTS LIST - B-Series Replacement Parts for 200, 300, 400 & 500 Amps



ITEM #	PART #				DESCRIPTION
	Q20	Q30	Q40	Q50	
1	152-10-62C		152-30-62C		Nozzle, CMI Taper-LOCK™
	R401-5-62		R401-6-62		Nozzle, Tregaskiss™ Comparable
	B4391		B4491	B4591	Nozzle, Bernard™ Comparable
	See Nozzle Selection				Nozzle, Optional Available
2	See Contact Tip Selection				Contact Tip
3	154-R505				Diffuser, CMI Taper-LOCK™
	R404-20				Diffuser, Tough Lock™ Comparable
	DS-1		D-1		Diffuser, Centerfire™ Comparable
	B4335		B4435		Diffuser, Short Elliptical Tip
	B4235		B4635		Diffuser, Long Elliptical Tip
4	B10012				Neck Insulator, CMI Taper-LOCK™/Tough Lock™
	B4323R		B4423R		Neck Insulator, Elliptical
5	See Neck in Ordering Information				Neck
6	B4213B	B4313B		B4513B	End Fitting
7	B4305		B1540003	B4416	Cone Nut
8	B1880155		N/A		Handle Kit, Small
	N/A		B1880198	N/A	Handle Kit, Medium
	N/A			B4408	Handle Kit, Large
9	B5662		B4422		Trigger Assembly
10	B2520074		N/A		Spring for Small Handle
	N/A		B2520042	N/A	Spring for Medium Handle
	N/A			185-40-001	Spring for Large Handle
11	B4209		B4409		Handle Screw
12	B4207		B4407		Post Fastener
	B1880004		B4426		Screw/Post Kit
13	B2520066				Strain Relief Kit
14	B2520041S		B2520041		Strain Relief Spring
15	B1010027R				Adapter Block
16	214				Power Pin, Tweco® #4
17	214-1				Power Pin, Miller®
	214-116				Power Pin Cap, .023"-1/16"
	214-332				Power Pin Cap, 5/64"-3/32"
18	214-25				Power Pin, Lincoln® PM & LF
19	214-7				Power Pin, Lincoln® LN
20	B5060CM				Euro Connector Plug
21	B4816				Euro Connector Nut
22	BGN2021				Control Plug, Miller® / Lincoln® PM
23	B4719				Control Plug, Lincoln® LN & LF
24	See Liner Selection				Liner



Scan this QR Code to take you directly to the Technical Info page of [cmindustries.com](http://cmindustries.com)

# Consumable Selection

## Nozzles (Optional Available)

### CM Industries Taper-LOCK™



<b>Light Duty</b>	
152-10-50C	1/2", 1/8" Recess
152-10-62C	5/8", 1/8" Recess
152-11-50C	1/2", 1/4" Recess
152-12-50C	1/2", Flush
152-13-50C	1/2", 1/8" Stickout
152-13-62C	5/8", 1/8" Stickout
<b>Heavy Duty</b>	
152-30-50C	1/2", 1/8" Recess
152-30-62C	5/8", 1/8" Recess
152-31-562	5/8", 1/4" Recess
152-32-62C	5/8", Flush
152-33-62C	5/8", 1/8" Stickout
152-34-62C	5/8", 1/4" Stickout

### Comparable to Tregaskiss™



<b>Light Duty</b>	
R401-4-38	3/8", Flush
R401-4-50	1/2", 1/8" Recess
R401-4-62	5/8", 1/8" Recess
R401-4-75	3/4", 1/8" Recess
R401-8-62	5/8", 1/8" Stickout
<b>Heavy Duty</b>	
R401-5-50	1/2", 1/4" Recess
R401-5-62	5/8", 1/4" Recess
R401-5-75	3/4", 1/4" Recess
R401-6-50	1/2", 1/8" Recess
R401-6-62	5/8", 1/8" Recess
R401-6-75	3/4", 1/8" Recess

### Comparable to Bernard™



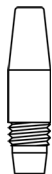
<b>Nozzles for DS-1 Diffuser</b>	
NS-1218C	1/2", 1/8" Recess, Copper
NS-1200B	1/2", Flush, Brass
NS-1218B	1/2", 1/8" Recess, Brass
NS-5800C	5/8", Flush, Copper
NS-5818C	5/8", 1/8" Recess, Copper
NS-5800B	5/8", Flush, Brass
NS-5818B	5/8", 1/8" Recess, Brass
<b>Nozzles for D-1 Diffuser</b>	
N-5800C	5/8", Flush, Copper
N-5818C	5/8", 1/8" Recess, Copper
N-5814C	5/8", 1/4" Recess, Copper
N-5818B	5/8", 1/8" Recess, Brass
N-5814B	5/8", 1/4" Recess, Brass
N-3400C	3/4", Flush, Copper
N-3418C	3/4", 1/8" Recess, Copper
N-3414C	3/4", 1/4" Recess, Copper
N-3418B	3/4", 1/8" Recess, Brass
N-3414B	3/4", 1/4" Recess, Brass

## Contact Tips

### CM Industries Taper-LOCK™ Contact Tips

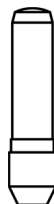


<b>Heavy Duty</b>	
155-1-030	0.030" (0.8mm)
155-1-035	0.035" (0.9mm)
155-1-040	0.040" (1.0mm)
155-1-045	.045" (1.2mm)
155-1-364	3/64" (1.2mm)
155-1-052	0.052" (1.4mm)
155-1-062	0.062" (1.6mm)
155-1-1.8	0.071" (1.8mm)
155-1-564	5/64" (2.0mm)
155-1-332	3/32" (2.4mm)
155-1-764	7/64" (2.8mm)

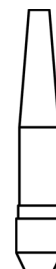


<b>Heavy Duty - Tapered</b>	
155-2-030	0.030" (0.8mm)
155-2-035	0.035" (0.9mm)
155-2-040	0.040" (1.0mm)
155-2-045	0.045" (1.2mm)
155-2-364	3/64" (1.2mm)
155-2-052	0.052" (1.4mm)
155-2-062	0.062" (1.6mm)
155-2-1.8	0.071" (1.8mm)

### Comparable to Bernard™ Centerfire™ Contact Tips



<b>Heavy Duty</b>	
T-030	0.030" (0.8mm)
T-035	0.035" (0.9mm)
T-045	0.045" (1.2mm)
T-052	0.052" (1.4mm)
T-062	0.062" (1.6mm)
T-078	5/64" (2.0mm)
T-094	3/32" (2.4mm)

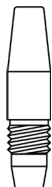


<b>Tapered</b>	
TT-030	0.030" (0.8mm)
TT-035	0.035" (0.9mm)
TT-045	0.045" (1.2mm)
TT-052	0.052" (1.4mm)
TT-062	0.062" (1.6mm)

### Comparable to Tregaskiss™ Tough Lock™ Contact Tips



<b>Heavy Duty</b>	
R403-20-30	0.030" (0.8mm)
R403-20-35	0.035" (0.9mm)
R403-20-1.0	0.040" (1.0mm)
R403-20-45	0.045" (1.2mm)
R403-20-364	3/64" (1.2mm)
R403-20-52	0.052" (1.4mm)
R403-20-116	1/16" (1.6mm)
R403-20-1.8	0.071" (1.8mm)
R403-20-564	5/64" (2.0mm)
R403-20-332	3/32" (2.4mm)



<b>Heavy Duty - Tapered</b>	
R403-21-30	0.030" (0.8mm)
R403-21-35	0.035" (0.9mm)
R403-21-1.0	0.040" (1.0mm)
R403-21-45	0.045" (1.2mm)
R403-21-52	0.052" (1.4mm)
R403-21-116	1/16" (1.6mm)



<b>Extra Heavy Duty</b>	
R603-20-45	0.045" (1.2mm)
R603-20-52	0.052" (1.4mm)
R603-20-116	1/16" (1.6mm)
R603-20-564	5/64" (2.0mm)
R603-20-332	3/32" (2.4mm)

## Liners

### Universal Conventional Liners

<b>10' (3.05m) Gun Lengths</b>	
L3A-10	for 0.035" - 0.045" wire
L4A-10	for 0.045" - 1/16" wire

<b>15' (4.57m) Gun Lengths</b>	
L1A-15	for 0.023" - 0.030" wire
L2A-15	for 0.030" - 0.035" wire
L3A-15	for 0.035" - 0.045" wire
L4A-15	for 0.045" - 1/16" wire
L6A-15	for 5/64" wire
L7A-15	for 3/32" wire
L8A-15	for 7/64" - 1/8" wire

<b>25' (7.62m) Gun Lengths</b>	
L1A-25	for 0.023" - 0.030" wire
L2A-25	for 0.030" - 0.035" wire
L3A-25	for 0.035" - 0.045" wire
L4A-25	for 0.045" - 1/16" wire
L6A-25	for 5/64" wire
L7A-25	for 3/32" wire
L8A-25	for 7/64" - 1/8" wire

### Conventional Liners for Aluminum

<b>10' (3.05m) Gun Lengths</b>	
415-45-02	for 0.035" - 3/64" wire Polymer Liner
415-116-22	for 3/64" - 1/16" wire Polymer Liner

<b>15' (4.57m) Gun Lengths</b>	
415-45-03	for 0.035" - 3/64" wire Polymer Liner
415-35-22	for 0.035" - 0.045" wire Steel Wrapped Nylon
415-116-2	for 0.045" - 1/16" wire Steel Wrapped Nylon
415-116-23	for 0.045" - 1/16" wire Polymer Liner

<b>25' (7.62m) Gun Lengths</b>	
415-45-04	for 0.035" - 3/64" wire Polymer Liner

# Ordering Information

## Amperage

BQ20	200 Amps
BQ30	300 Amps
BQ40	400 Amps
BQ50	500 Amps

## Gun Length

08	8 ft. (2.44m)
10	10 ft. (3.05m)
12	12 ft. (3.66m)
15	15 ft. (4.57m)
20	20 ft. (6.16m)
25	25 ft. (7.63m)

## Handle and Trigger

200, 300 Amp	A	Standard Trigger
Small Handle		
400 Amp	A	Standard Trigger
Medium Handle		
500 Amp	A	Standard Trigger
Large Handle		

# BQ40 15 A E 4E M C\*

## Neck

A	Rotatable, Short	30°	BQT2-30
B	Rotatable, Short	45°	BQT2-45
C	Rotatable, Short	60°	BQT2-60
J	Rotatable, Short	80°	BQT2-80
D	Rotatable, Medium	30°	BQT3-30
E	Rotatable, Medium	45°	BQT3-45
F	Rotatable, Medium	60°	BQT3-60
K	Rotatable, Medium	80°	BQT3-80
G	Rotatable, Long	30°	BQT5-30
H	Rotatable, Long	45°	BQT5-45
I	Rotatable, Long	60°	BQT5-60
N	Fixed, Short	30°	BQT2-30
O	Fixed, Short	45°	BQT2-45
P	Fixed, Short	60°	BQT2-60
W	Fixed, Short	80°	BQT2-80
Q	Fixed, Medium	30°	BQT3-30
R	Fixed, Medium	45°	BQT3-45
S	Fixed, Medium	60°	BQT3-60
X	Fixed, Medium	80°	BQT3-80
T	Fixed, Long	30°	BQT5-30
U	Fixed, Long	45°	BQT5-45
V	Fixed, Long	60°	BQT5-60

## Contact Tip

<b>CMI Taper-LOCK™</b>		
4B	0.030" (0.8mm)	155-1-030
4C	0.035" (0.9mm)	155-1-035
4D	0.040" (1.0mm)	155-1-040
4E	0.045" (1.2mm)	155-1-045
4R	3/64" (1.3mm)	155-1-364
4H	0.052" (1.4mm)	155-1-052
4I	1/16" (1.6mm)	155-1-062
4K	5/64" (2.0mm)	155-1-564
4L	3/32" (2.4mm)	155-1-332

**Compar. to Tregaskiss™ Tough Lock™**  
 3\_ 0.xxx" (x.xmm) R403-20-xx

**Compar. to Bernard™ Centerfire™**  
 8\_ 0.xxx" (x.xmm) T1xxx

**Compar. to Bernard™ Quik Tip™**  
 5\_ 0.xxx" (x.xmm) T1xxx

**Compar. to Bernard™ 7-Series Elliptical**  
 7\_ 0.xxx" (x.xmm) B74xx

**Compar. to Bernard™ 1-Series Elliptical**  
 1\_ 0.xxx" (x.xmm) B15xx


## Power Pin



B	Bernard™
E	Euro
H	Hobart®
L	Lincoln® LN
S	Lincoln® LF/Power Feed
R	Lincoln® Power MIG
M	Miller®
O	OXO®
P	Panasonic®
T	Tweco® 4 (Standard Lead)
W	Tweco® 5 (Standard Lead)
X	Tweco® 5 (Miller Lead)


**\*Universal Conventional Liner**

CM Industries, Inc. is in no way affiliated with above-named manufacturers. References to above-named parts, feeders, and part numbers are for your reference only.

# SAFETY WARNINGS! READ BEFORE USE

 The symbols shown below are used throughout this manual to call attention to and identify possible hazards. When you see the symbol, watch out, and follow the related instructions to avoid the hazard. The safety information given below is only a summary of the more complete safety information found in the welding power source Owner's Manual.

 Read and follow all Safety Standards.  
 Only qualified persons should install, operate, maintain, and repair this equipment. A qualified person is defined as one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, has successfully demonstrated ability to solve or resolve problems relating to the subject matter, the work, or the project and has received safety training to recognize and avoid the hazards involved.

 During operation, keep everybody, especially children, away.

### **ELECTRIC SHOCK can kill.**

- Always wear dry insulating gloves.
- Insulate yourself from work and ground.
- Do not touch live electrode or electrical parts.
- Replace worn, damaged, or cracked guns or cables.
- Turn off welding power source before changing contact tip or gun parts.
- Keep all covers and handle securely in place.

### **FUMES AND GASES can be hazardous.**

- Keep your head out of the fumes.
- Ventilate area, or use breathing device. The recommended way to determine adequate ventilation is to sample for the composition and quantity of fumes and gases to which personnel are exposed.
- Read and understand the Safety Data Sheets (SDSs) and the manufacturer's instructions for adhesives, coatings, cleaners, consumables, coolants, degreasers, fluxes, and metals.

### **WELDING can cause fire or explosion.**

- Do not weld near flammable material.
- Do not weld on containers that have held combustibles, or on closed containers such as tanks, drums, or pipes unless they are properly prepared according to AWS F4.1 and AWS A6.0 (see Safety Standards).
- Watch for fire; keep extinguisher nearby.
- Read and understand the Safety Data Sheets (SDSs) and the manufacturer's instructions for adhesives, coatings, cleaners, consumables, coolants, degreasers, fluxes, and metals.

### **HOT PARTS can burn.**

- Allow gun to cool before touching.
- Do not touch hot metal.
- Protect hot metal from contact by others.



### **MOVING PARTS can injure.**

- Keep away from moving parts.
- Keep away from pinch points such as drive rolls.



### **ARC RAYS can burn eyes and skin.**

- Arc rays from the welding process produce intense visible and invisible (ultraviolet and infrared) rays that can burn eyes and skin. Sparks fly off from the weld.
- Wear an approved welding helmet fitted with a proper shade of filter lenses to protect your face and eyes from arc rays and sparks when welding or watching (see ANSI Z49.1 and Z87.1 listed in Safety Standards).
  - Wear approved safety glasses with side shields under your helmet.
  - Use protective screens or barriers to protect others from flash, glare and sparks; warn others not to watch the arc.
  - Wear body protection made from durable, flame-resistant material (leather, heavy cotton, wool). Body protection includes oil-free clothing such as leather gloves, heavy shirt, cuffless trousers, high shoes, and a cap.



### **BUILDUP OF GAS can injure or kill.**

- Shut off compressed gas supply when not in use.
- Always ventilate confined spaces or use approved air-supplied respirator.



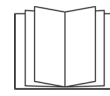
### **NOISE can damage hearing.**

- Noise from some processes or equipment can damage hearing.
- Check for noise level limits exceeding those specified by OSHA.
  - Use approved ear plugs or ear muffs if noise level is high.
  - Warn others nearby about noise hazard.



### **WELDING WIRE can injure.**

- Keep hands and body away from gun tip when trigger is pressed.



### **READ INSTRUCTIONS.**

- Read and follow all labels and the Owner's Manual carefully before installing, operating, or servicing unit.
- Read the safety information at the beginning of the manual and in each section.
- Use only genuine replacement parts from the manufacturer.
- Perform installation, maintenance, and service according to the Owner's Manuals, industry standards, and national, state, and local codes.

### **CALIFORNIA PROPOSITION 65 WARNING**

This product contains chemicals, including lead, known to the State of California to cause cancer, birth defects, or other reproductive harm. Wash hands after use. (California Health & Safety Code Section 25249.5)