

***CM INDUSTRIES***  
**INC.**

# BNZ 501W

500 AMP Semi-Automatic, Water-Cooled, MIG Welding Gun



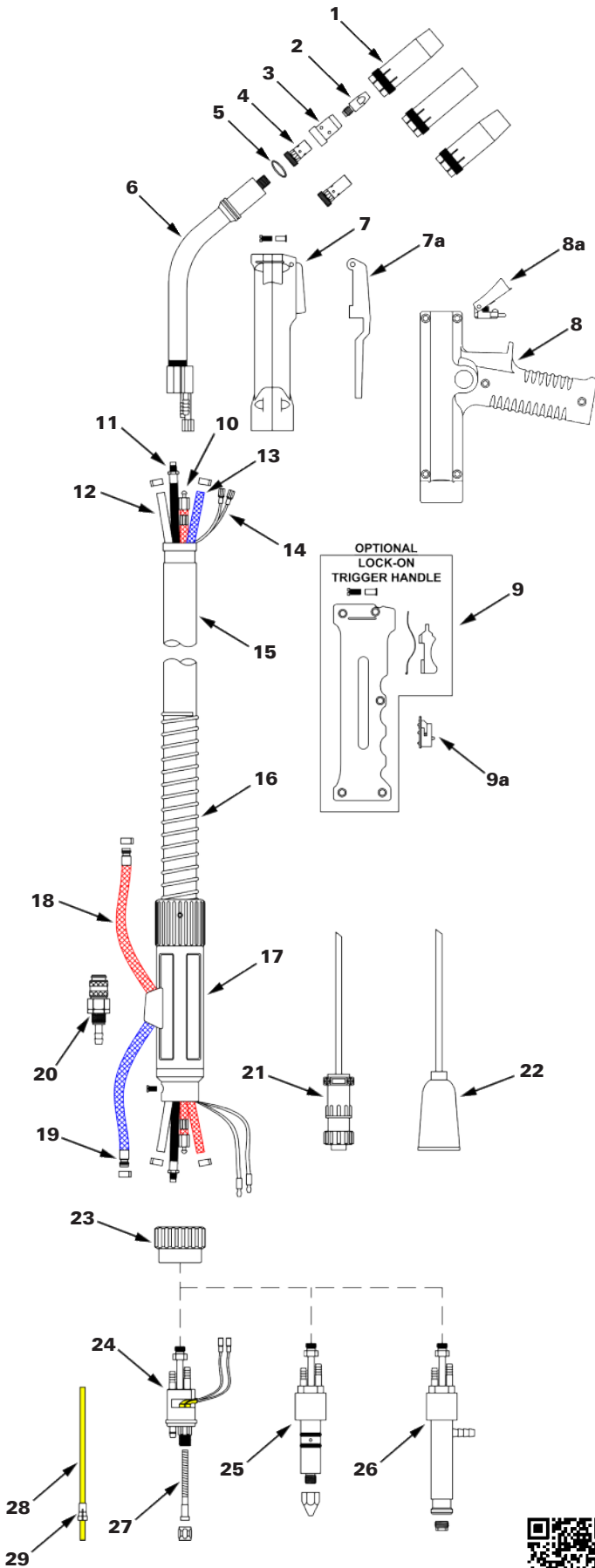
## PARTS LIST

MADE IN USA

April 2020 v1

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# PARTS LIST - Replacement Parts for BNZ 501W - 500 AMP CO2 @ 100%



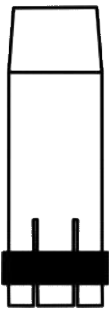
ITEM #	PART #	DESCRIPTION
<b>501W</b>		
1	165-52-001	Nozzle, Conical, 5/8"
	<i>See Nozzle Selection</i>	
2	<i>See Contact Tip Selection</i>	Contact Tip
3	046-52-002	Insulator / Gas Diffuser
	046-52-003	Insulator / Gas Diffuser - High Temp.
4	160-08-402	Contact Tip Holder, M8
	160-06-402	Contact Tip Holder, M6
	160-08-404	Contact Tip Holder, M8 - Flush
	160-06-404	Contact Tip Holder, M6 - Flush
5	064-52-002	Insulating Washer
6	051-52-250	Neck, 50°
	051-52-260	Neck, 60°
	051-53-250	Neck + 2", 50°
	051-53-260	Neck + 2", 60°
7	170-66-002	EZ GRIP Handle - Complete
7a	170-66-032 170-63-006	Handle - Complete w/ Extension Trigger Extension Only
8	170-66-404	Handle - Pistol Grip
8a	170-14-100	Trigger Switch for Pistol Grip
9	170-66-102	Handle w/ Locking Trigger (Optional)
9a	185-66-023	Micro Switch for Locking Trigger
Items 10-15 are available in lengths of 10, 12, 15, 20, and 25 feet		
10	225-52-0xx	Power Cable
11	235-52-0xx	Wire Conduit
12	310-55-0xx	Gas Hose
13	310-52-0xx	Water Hose, IN, Blue
14	300-05-0xx	Trigger Wire
15	216-52-0xx	Outer Cable Cover
	215-52-0xx	Complete Assembly (includes Items 10-15)
16	185-52-001	Cable Support Spring
17	260-52-202	Adaptor Support
18	310-53-002	Water Hose, OUT, Red, 2'
19	350-52-001	Male Water Fitting
20	350-65-002	Female Quick Disconnect
21	300-05-001	Electrical Plug, Miller®
22	300-05-002	Electrical Plug, Lincoln®
23	401-00-001	Adaptor Nut
24	401-02-052	Adaptor Block, Euro
	401-01-001	Liner Retaining Nut
25	401-02-054	Connector Plug, Miller®
	401-01-002	Liner Retaining Nut, Miller®
26	402-02-056	Connector Plug, Lincoln®
	401-01-004	Liner Retaining Nut, Lincoln®
27	<i>See Liner Selection</i>	<i>See Liner Selection</i>
28	<i>See Liner Selection</i>	<i>See Liner Selection</i>
29	259-05-001	Repl. Collet, Teflon Liner #5
	259-10-001	Repl. Collet, Teflon Liner #10
	285-00-003	Repl. O-Ring



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# Consumable Selection

## Nozzles (Optional Available)



165-52-305 Conical Heavy Duty 5/8"

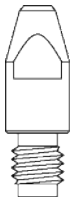


165-52-002 Cylindrical 3/4"



165-52-011 Conical Small 9/16"  
165-52-111 Conical Super Small 7/16"

## Contact Tips



### M8

150-08-130	.030" 0.8mm
150-09-130	.035" 0.9mm
150-10-130	.040" 1.0mm
150-12-130	.045" 1.2mm
150-14-130	.052" 1.4mm
150-16-130	1/16" 1.6mm
150-20-130	5/64" 2.0mm
150-24-130	3/32" 2.4mm



### M6

150-08-120	.030" 0.8mm
150-09-120	.035" 0.9mm
150-10-120	.040" 1.0mm
150-12-120	.045" 1.2mm
150-14-120	.052" 1.4mm
150-16-120	1/16" 1.6mm

## Liners

### 15'

241-02-016	#2, .035"-.045"
241-03-016	#3, .052"-1/16"
241-04-016	#4, 5/64"-3/32"

### 25'

241-02-027	#2, .035"-.045"
241-03-027	#3, .052"-1/16"
241-04-027	#4, 5/64"-3/32"

### Teflon for Aluminum

255-10-010	#10, 10' .035"-.045"
255-10-012	#10, 12' .035"-.045"
255-10-015	#10, 15' .035"-.045"

255-05-010 #5, 10' .045"-1/16"

255-05-012 #5, 12' .045"-1/16"

255-05-015 #5, 15' .045"-1/16"

## Ordering Information

**BZ5 15 - 5 62 - M Z B**

### Gun Model & Amperage

**BZ5** CM Industries 501W  
500 Amp Water-Cooled MIG Gun

### Length

10	10'
12	12'
15	15'
20	20'
25	25'

### Neck

1	180°
5	50°
6	60°

### Wire Size

35	.035"
45	.045"
52	.052"
62	.062"

### Back End

E	Euro DP
L	Lincoln® "LN" DP
N	Lincoln® "LF" DP
T	Tweco® DP
M	Miller® DP
V	Lincoln® Power MIG DP

### Custom Options

2	+2" Longer Neck
3	+3" Longer Neck
4	+4" Longer Neck
S	Short Neck

### Options

B	Bottom Trigger
T	Top Trigger

### Handle Options

L	Locking Handle
P	Pistol Grip Handle
R	ERGO Handle
T	EZ Grip Handle w/ Trig Ext.
Z	EZ Grip Handle

# **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.



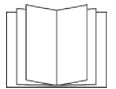
### **NOISE can damage hearing.**

- 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)