

# *AMERICAN TORCH TIP* **ATTC**®

ALL GUNS ARE MADE BY ATTC TO OUR  
HIGHEST QUALITY STANDARDS AND ARE GUARANTEED  
AGAINST ALL MATERIAL OR MANUFACTURING DEFECTS



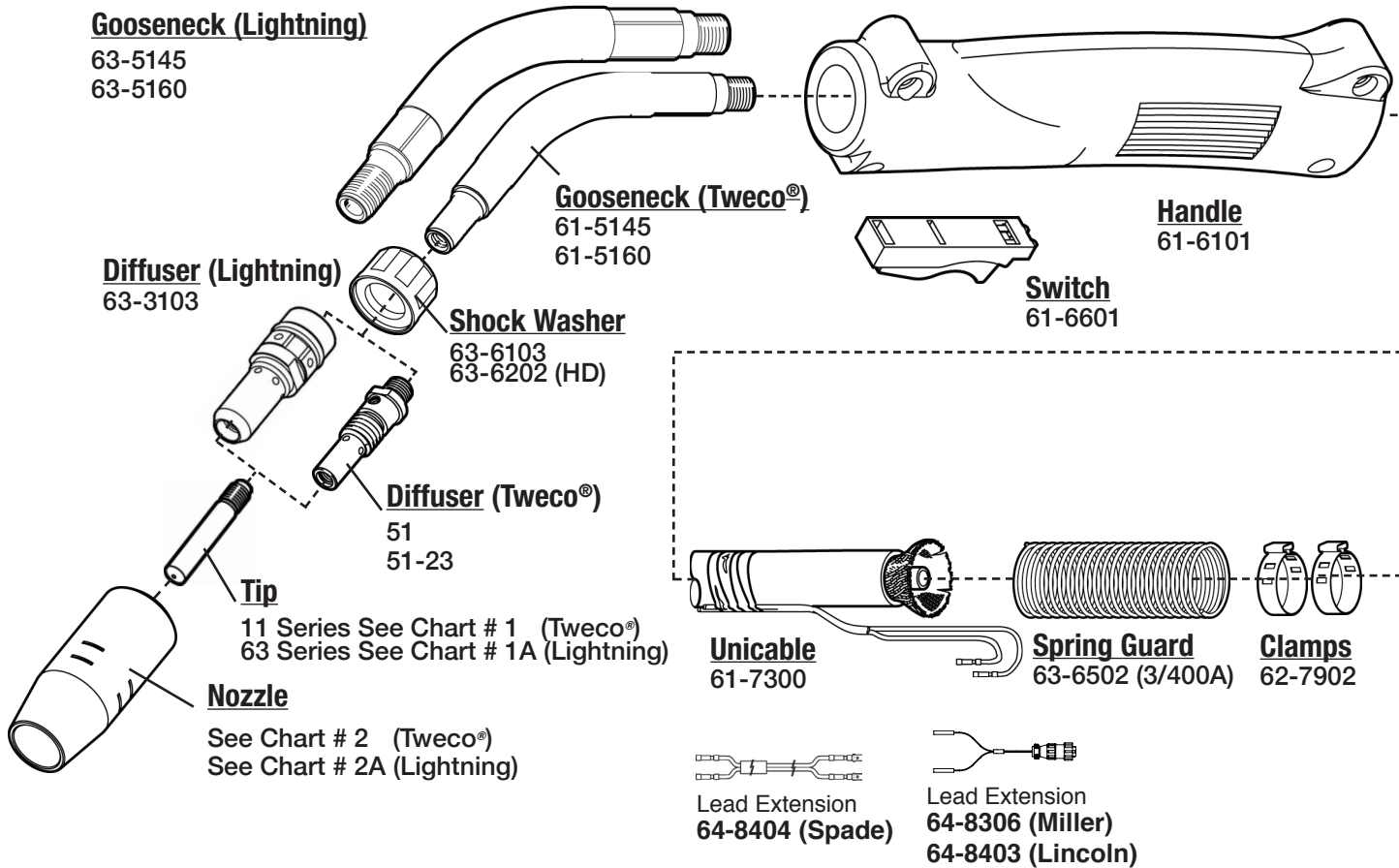
## **BANTAM** 180 AMP LIGHT WEIGHT MIG GUN



**PARTS MANUAL**

# LIGHTNING®

## BANTAM 180 AMP LIGHT WEIGHT GUN



### 1. CONTACT TIPS

### ID

11-23	Contact Tip	.023	(0.6mm)
11-30	Contact Tip	.030	(0.8mm)
11-35	Contact Tip	.035	(0.9mm)
11-40	Contact Tip	.040	(1.0mm)
11-45	Contact Tip	.045	(1.2mm)
11H-35	Contact Tip H.D.	.035	(0.9mm)
11H-45	Contact Tip H.D.	.045	(1.2mm)
11AH-364	Contact Tip H.D.	3/64" Al.	(1.2mm)
11T-23	Contact Tip H.D. Tapered	.023	(0.6mm)
11T-30	Contact Tip H.D. Tapered	.030	(0.8mm)
11T-35	Contact Tip H.D. Tapered	.035	(0.9mm)
11T-40	Contact Tip H.D. Tapered	.040	(1.0mm)
11T-45	Contact Tip H.D. Tapered	.045	(1.2mm)

### 1A. CONTACT TIPS (LIGHTNING) ID

63-1130	Contact Tip	.030"	(0.8mm)
63-1135	Contact Tip	.035"	(0.9mm)
63-1140	Contact Tip	.040"	(1.0mm)
63-1145	Contact Tip	.045"	(1.2mm)
63-1147	Contact Tip	3/64"	(1.2mm) Al.
63-1152	Contact Tip	.052"	(1.3mm)
63-1162	Contact Tip	1/16"	(1.6mm)

### 2. NOZZLES

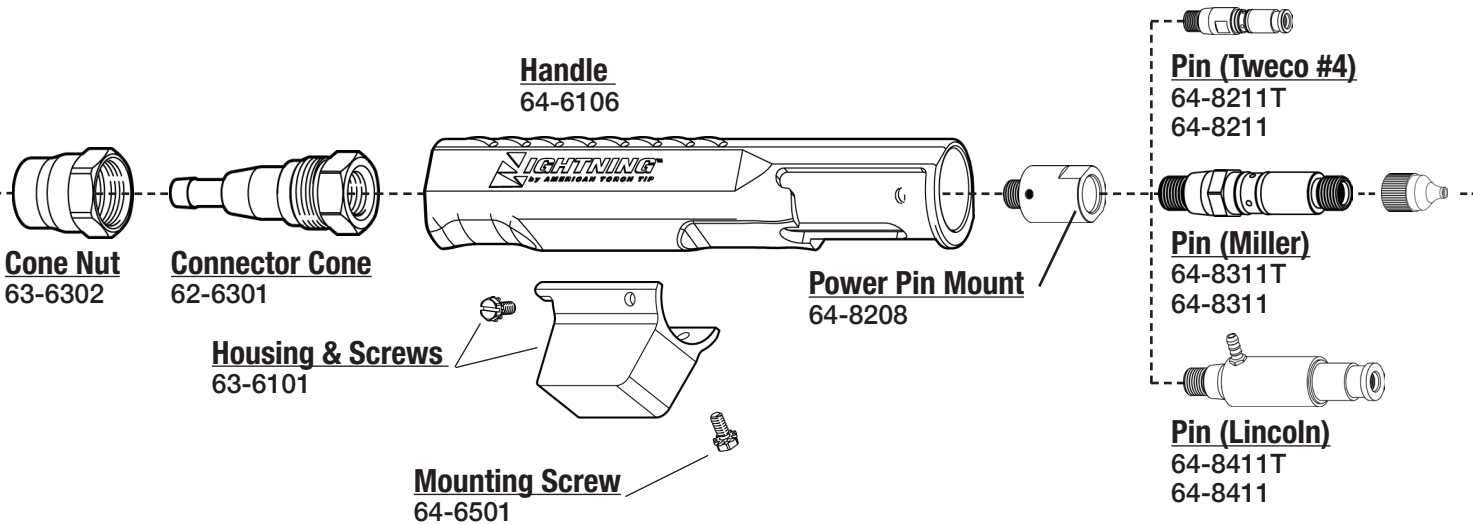
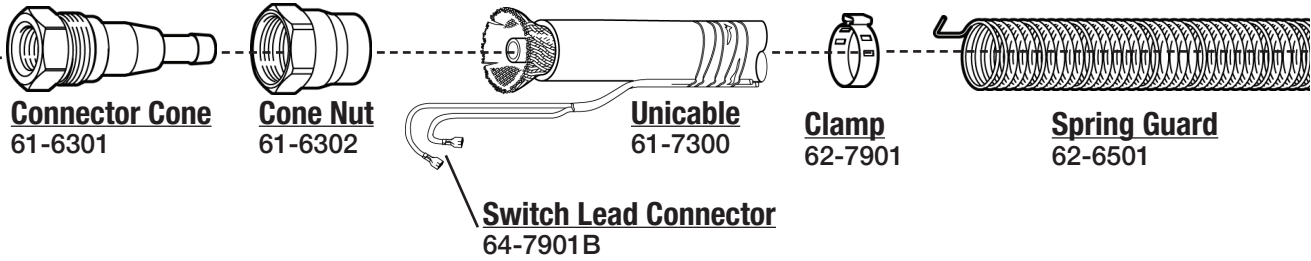
### ID

21-37	Nozzle Insul. 1/8" Recess	3/8"	(9.5mm)
21-50	Nozzle Insul. 1/8" Recess	1/2"	(12.7mm)
21-62	Nozzle Insul. 1/8" Recess	5/8"	(15.9mm)
21-37-F	Nozzle Insulated Flush	3/8"	(9.5mm)
21-50-F	Nozzle Insulated Flush	1/2"	(12.7mm)
21-62-F	Nozzle Insulated Flush	5/8"	(15.9mm)
21T-37	Nozzle Tapered 1/8" Recess	3/8"	(9.5mm)

### 2A. NOZZLES (LIGHTNING) ID

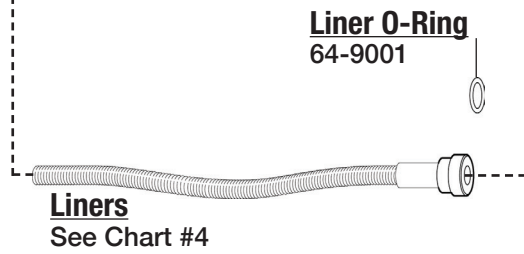
63-2138	1/8" Recess	3/8"	
63-2150	1/8" Recess	1/2"	
63-2162	1/8" Recess	5/8"	
63-2175	1/8" Recess	3/4"	

**BANTAM 180 AMP LIGHT WEIGHT GUN**



<b>4 LINERS</b>		<b>I.D.</b>	<b>O.D.</b>
64-4115	15'	.023" (.6mm)	0.150
62-4315	15'	.035" (.9mm)	0.156
62-4325	25'	.035" (.9mm)	0.156
62-4515	15'	.045" (1.6mm)	0.156
62-4525	25'	.045" (1.6mm)	0.156

<b>4A. LINERS (TWEKO)</b>		<b>I.D.</b>	<b>O.D.</b>
42-23-12	15'	.023" (.6mm)	0.150
42-3035-15	15'	.035" (.9mm)	0.156
42-3035-25	25'	.035" (.9mm)	0.156
42-4045-15	15'	.045" (1.6mm)	0.156
42-4045-25	25'	.045" (1.6mm)	0.156
42N-3545-15	25' (Nylon)	.045" (1.6mm)	0.156



Please note: Power Pins are also available for Bernard EZ Feed (64-8501), Tweco #5 (64-8204), Hitachi (64-8426), Daiden (64-8601), Panasonic (64-8701) and Thermal Arc 2410 (64-8901).

# GENERAL SAFETY

1. Disconnect all power before servicing or changing welding gun components. Failure to disconnect power can lead to dangerous electrical shock which can kill.
2. Smoke, fumes and gases can be dangerous to your health. Keep smoke, fumes and gases from the breathing area. Fumes from welding are of various types and strengths, depending on the kind of base metal being welded.
3. Arc welding produces dangerous light radiation. Adequate eye protection must be worn.
4. All exposed skin must be covered with flame resistant, protective clothing. Do not wear clothing made from flammable synthetic fibers.
5. Protective screens or barriers should be used to protect others from spatter, flash and glare while welding.

# TROUBLESHOOTING

## 1. Poor Wire Feed

- Conduit liner clogged or kinked
- Incorrect liner size or contact tip
- Line cut too short and not seating properly in gas diffuser
- Drive rolls too tight resulting in scoring of welding wire
- Welding wire dirty, rusty and/or too much cast

## 2. Short Tip Life

- Drive rolls too tight resulting in scoring of the welding wire
- Welding wire dirty, rusty and/or too much cast
- Uncoated wire being used, increasing usage
- Wrong tip size
- Over torch rated duty cycle
- Loose contact tip and/or retaining head

## 3. Gun Overheating

- Loose retaining screw on quick connect block
- Insufficient gauge power cable and/or ground cable
- Loose connector cone and/or cone nut
- Gun being run beyond its amperage range
- Electrical malfunction in power source

## 4. Switch Malfunctioning

- Bad connection of leads to switch terminals
- Spatter built up between lever and switch housing
- Contacts dirty in switch
- Switch housing screws loose
- Broken or worn switch lead

## 5. Weld Porosity

- Spatter built up in nozzle blocking gas
- Leaks in gas hose or improper connection
- O-rings on power pin are cut or damaged
- Inner tube loose from connector cone
- Improper shielding gas or welding wire
- Rusty or poor quality welding wire
- Parent metal rusty or contaminated or high in Sulfur content
- Flow improperly set

## 6. Contact Tip Burn Back

- Improper voltage and/or wire feed speed
- Erratic wire feeding
- Improper tip stick-out
- Improper electrode stick-out
- Faulty ground

## 7. Erratic Arc

- Worn contact tip
- Buildup inside of line
- Wrong tip size
- Not enough bend in neck

## 8. Extreme Spatter

- Improper machine parameters
- Improper tip installation
- Improper tip shielding
- Contaminated wire or work piece

# CONTACT US

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## The LIGHTNING Family of MIG Guns



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Robotic MIG Gun



Small Curve MIG Gun



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