

# **AMERICAN TORCH TIP ATTC®**

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



## **T-300 MIG GUN**

**Compatible with Tweco • 300 AMP**

### **RATING:**

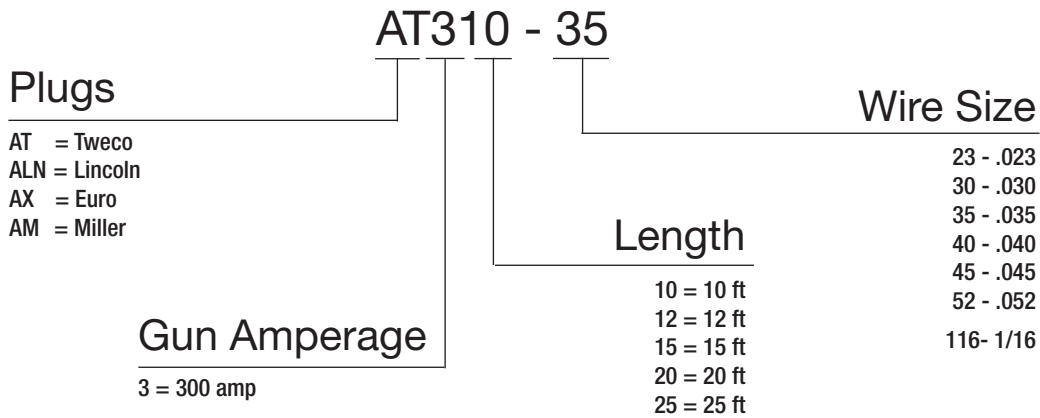
**300A C02 225A MIXED GAS**

**@ 100% DUTY CYCLE**

**.023" 0.6mm TO 5/64" 2.0mm WIRE**

## **PARTS MANUAL**

# MIG Gun Part Numbering System 300 AMP

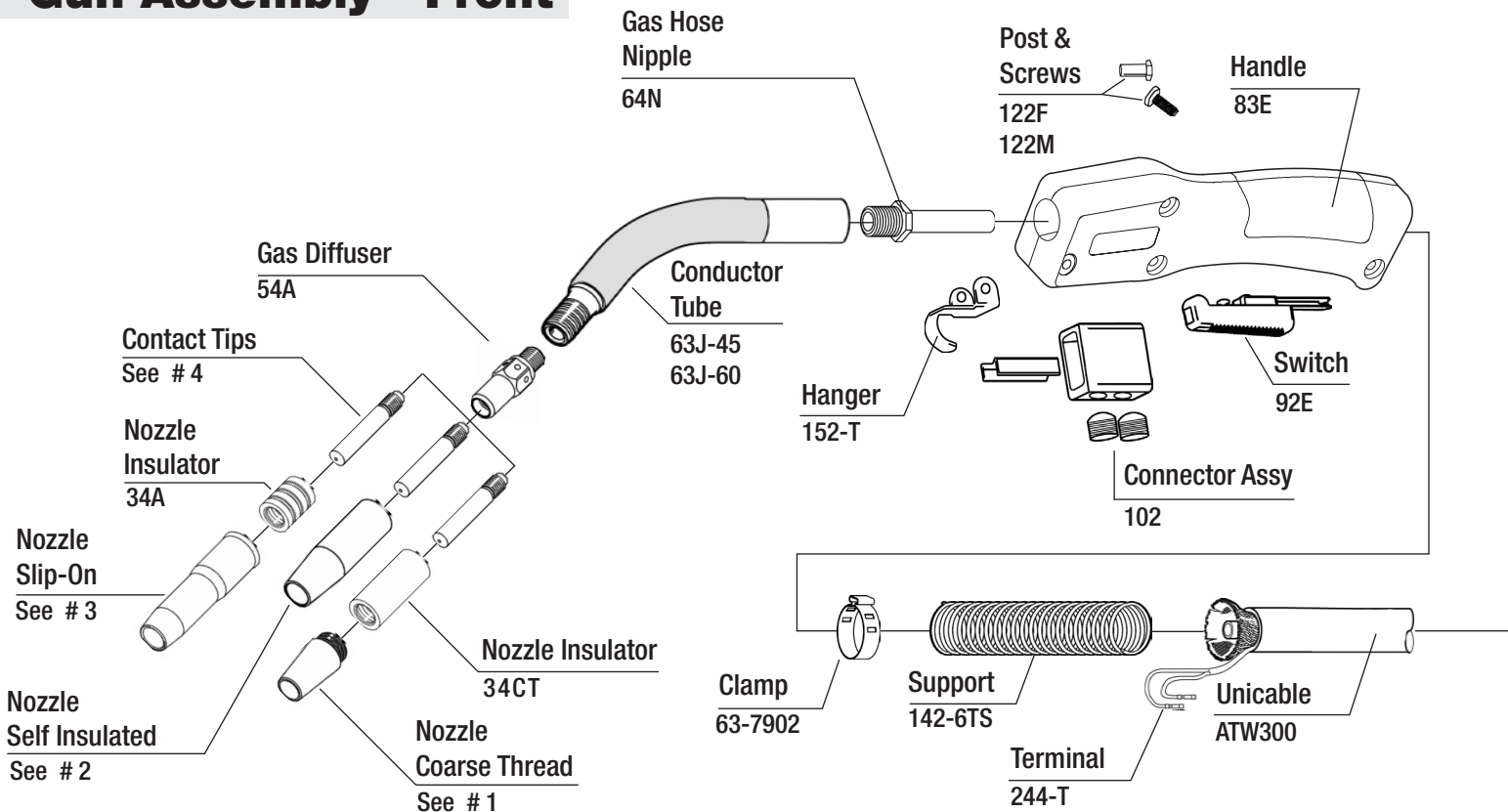


## Special Part Numbering System

**AT310 - 35 - X**

Special Set Up  
If Required

## Gun Assembly - Front



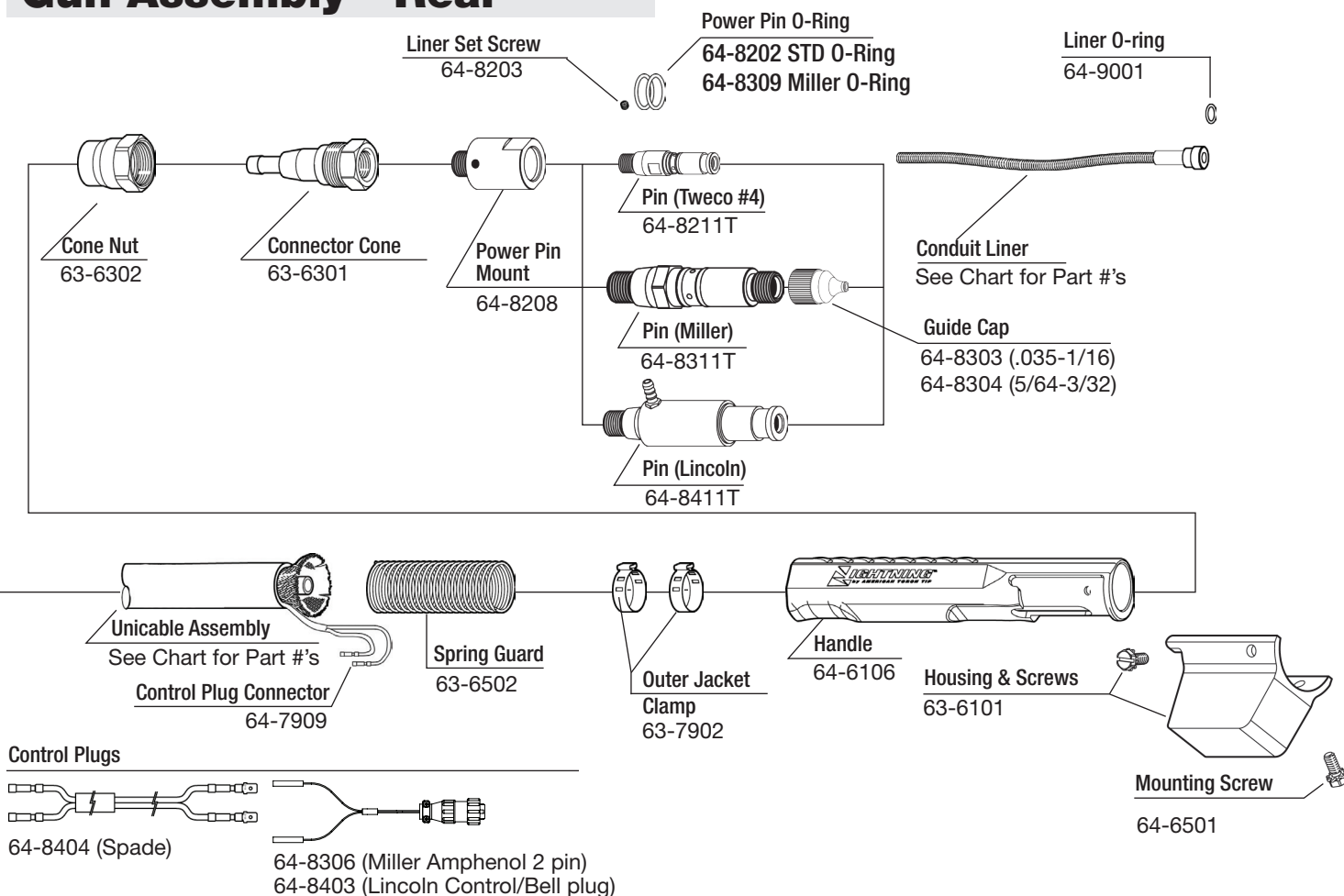
No.	Part No.	Description
1	24CT-37-S	Nozzle, Coarse Thread, 3/8" I.D.
	24CT-50-S	Nozzle, Coarse Thread, 1/2" I.D.
	24CT-62-S	Nozzle, Coarse Thread, 5/8" I.D.
	24CT-75-S	Nozzle, Coarse Thread, 3/4" I.D.

No.	Part No.	Description
2	23-37	Nozzle, Self Insulated, 3/8" I.D.
	23-50	Nozzle, Self Insulated, 1/2" I.D.
	*23-62	Nozzle, Self Insulated, 5/8" I.D.
	23-75	Nozzle, Self Insulated, 3/4" I.D.
	23T-37	Nozzle, Tapered Self Ins. 3/8" I.D.
3	24A-50	Nozzle, Adjustable, 1/2" I.D.
	24A-62	Nozzle, Adjustable, 5/8" I.D.
	24A-75	Nozzle, Adjustable, 3/4" I.D.
	24A-37-SS	Nozzle, Short Stop, 3/8" I.D.
	24A-50-SS	Nozzle, Short Stop, 1/2" I.D.
	24A-62-SS	Nozzle, Short Stop, 5/8" I.D.
	* Standard Nozzle with gun	

No.	Part No.	Description
4	14-23	Contact Tip .023" 0.6mm
	14-30	Contact Tip .030" 0.8mm
	14-35	Contact Tip .035" 0.9mm
	14-40	Contact Tip .040" 1.0mm
	14-45	Contact Tip .045" 1.2mm
	14-52	Contact Tip .052" 1.3mm
	14-116	Contact Tip .062" 1.5mm

No.	Part No.	Description
5	44-3545-15	Liner Assy., 15' .035-.045"
	44-116-15	Liner Assy., 15' .062"
	44-564-15	Liner Assy., 15' 5/64"
	44-3545-25	Liner Assy., 25' .035-.045"
	44-116-25	Liner Assy., 25' .062"
	44-564-25	Liner Assy., 25' 5/64"
	44N-3545-1	Nylon Liner Assy., 15' .035-.045"
	44N-116-15	Nylon Liner Assy., 15' .062"

## Gun Assembly - Rear



## 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

## The Family of MIG Guns

## Contact Us

AMERICAN TORCH TIP CO.  
800.342.8477  
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AmericanTorchTip.com

ZZ-MAR-TECH-MIG -007 1023



Large Curve MIG Gun



Robotic MIG Gun



Small Curve MIG Gun



Semi-Auto MIG Gun



Automatic MIG Gun