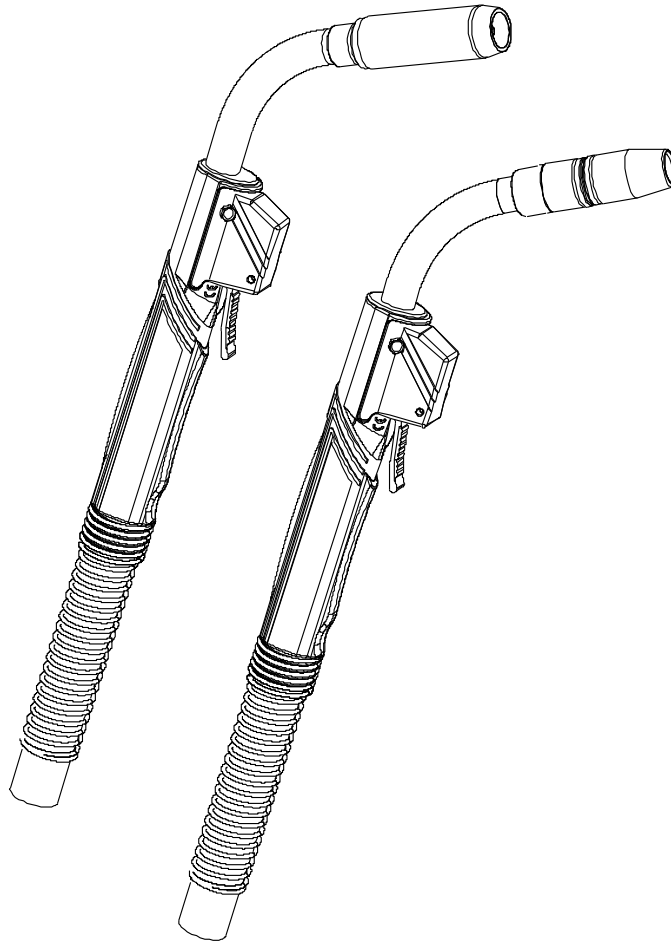




## SPEC SHEET

For 450 amp and 600 amp  
**T-Gun™ Semi-Automatic  
Water-Cooled MIG Guns**



### AMPERAGE RATINGS

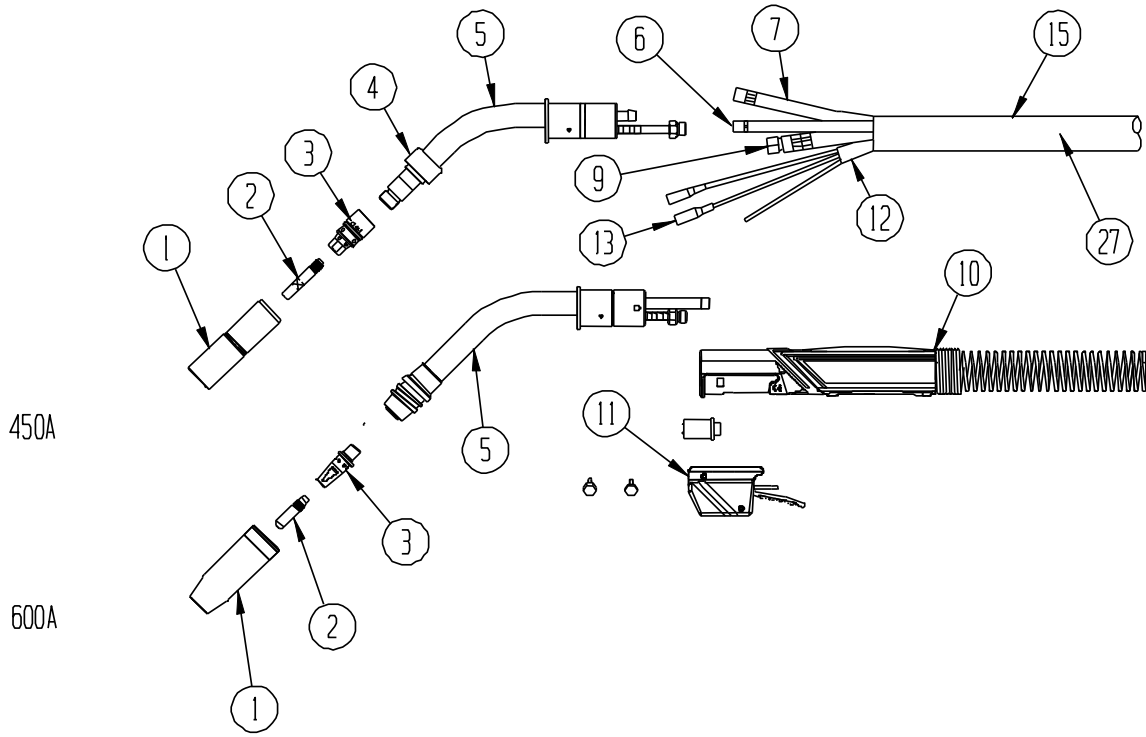
GUN MODEL	60% DUTY CYCLE – MIXED GASES OR 100% DUTY CYCLE – CO <sub>2</sub>
450 amp	450
600 amp	600

*NOTE: Ratings are based on tests that comply with IEC 60974-4 standards.*

### STANDARD PARTS

GUN MODEL	NECK	NOZZLE	RETAINING HEAD	NECK INSULATOR	CONTACT TIPS
450 amp	455-45	451-6-62	454-1	452-1	403-1
600 amp	595-60	601-6-62	404-38	452-1	403-20

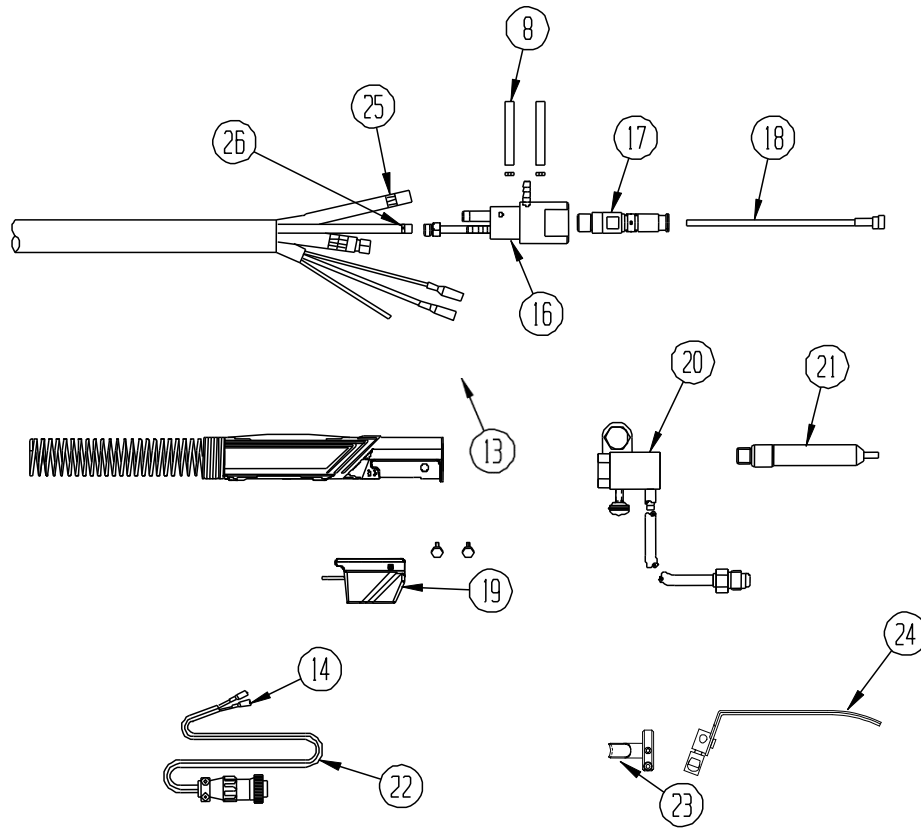
# EXPLODED VIEW AND PARTS LIST



Numbers in this column correspond to the exploded view images above.

PART #	PART #		DESCRIPTION
	450 AMP	600 AMP	
1			<b>STANDARD NOZZLES</b> 3/8" (10 mm) BORE - FLUSH TIP 1/2" (16 mm) BORE - 1/8" (3 mm) TIP RECESS 5/8" (16 mm) BORE - 1/4" (6 mm) TIP RECESS 3/4" (19 mm) BORE - 1/4" (6 mm) TIP RECESS 5/8" (16 mm) BORE - 1/8" (3 mm) TIP RECESS (STD) 3/4" (19 mm) BORE - 1/8" (3 mm) TIP RECESS 5/8" (16 mm) BORE - 1/8" (3 mm) TIP STICK-OUT NOZZLE INSULATOR (CERAMIC) ALL 601 NOZZLE'S ABOVE <b>HEAVY DUTY NOZZLES</b> 5/8" (16 mm) BORE - 1/4" (6 mm) TIP RECESS 3/4" (19 mm) BORE - 1/4" (6 mm) TIP RECESS
2			<b>HEAVY DUTY TREGASKISS™ TOUGH LOCK™ CONTACT TIPS - 5/16" (7.9 mm) O.D.</b> 403-20-30 403-20-30 FOR .030" (0.8 mm) WIRE 403-20-35 403-20-35 FOR .035" (0.9 mm) WIRE 403-20-1.0 403-20-1.0 FOR 1 mm WIRE 403-20-45 403-20-45 FOR .045" (1.2 mm) WIRE 403-20-364 403-20-364 FOR 3/64" (1.2 mm) WIRE 403-20-1.4 403-20-1.4 FOR 1.4 mm WIRE 403-20-52 403-20-52 FOR .052" (1.3 mm) WIRE 403-20-116 403-20-116 FOR 1/16" (1.6 mm) WIRE 403-20-1.8 403-20-1.8 FOR 1.8" (1.8 mm) WIRE 403-20-564 403-20-564 FOR 5/64" (2.0 mm) WIRE 403-20-332 403-20-332 FOR 3/32" (2.4 mm) WIRE HEAVY DUTY CONVENTIONAL CONTACT TIPS - 5/16" O.D. 403-1-35 FOR .035" (0.8 mm) WIRE 403-1-1.0 FOR 1 mm WIRE 403-1-45 FOR .045" (1.2 mm) WIRE 403-1-52 FOR .052" (1.3 mm) WIRE 403-1-116 FOR 1/16" (1.6 mm) WIRE 403-1-564 FOR 5/64" (2.0 mm) WIRE 403-1-332 FOR 3/32" (2.4 mm) WIRE 403-1-364 FOR 3/64" (1.2 mm) ALUMINUM WIRE 403-1-1.8 FOR 1/16" (1.8 mm) ALUMINUM WIRE
3	454-1		CONVENTIONAL RETAINING HEAD - FOR HD TIPS (STD) 404-20 TREGASKISS TOUGH LOCK RETAINING HEAD - FOR HD TIPS 404-3 HEAVY DUTY CONVENTIONAL RETAINING HEAD 454-1-2 RETAINING RING 404-38 DIFFUSER - FOR HD TREGASKISS TOUGH LOCK (STD) 402-6 O-RING FOR TREGASKISS TOUGH LOCK RETAINING HEAD

PART #	PART #		DESCRIPTION
	450 AMP	600 AMP	
4	452-1 452-3		NECK INSULATOR (CONVENTIONAL) NECK INSULATOR (not shown TREGASKISS TOUGH LOCK)
5	455-45 455-60 455-180	595-45 595-60 595-180	<b>NECKS (C/W (1) 656-1 AND (1) 657-1 CLAMP)</b> NECK - 45° NECK - 60° NECK - 180° STRAIGHT 652-8 O-RING (SMALL, quantity 2) 495-7 O-RING (LARGE, quantity 4) 652-5 O-RINGS (3)
6	656-15	656-15	<b>INTERNAL WATER LINE (C/W (2) 656-1 CLAMPS)</b> 15' SERVICE (CUT TO SIZE FOR OTHER LENGTHS)
7	657-15	657-15	<b>CONDUIT (C/W (2) 657-1 CLAMPS)</b> 15' SERVICE (CUT TO SIZE FOR OTHER LENGTHS)
8	658 658-1	658 658-1	RED WATER LINE - OUT (c/w (1) 656-1 clamp) BLUE WATER LINE - IN (c/w (1) 656-1 clamp) (Located at quick connect power block assembly).
9	659-10 659-12 659-15	659-10 659-12 659-15	<b>POWER CABLE ASSEMBLY</b> 10' SERVICE (ACTUAL LENGTH - 9.5') 12' SERVICE (ACTUAL LENGTH - 11.5') 15' SERVICE (ACTUAL LENGTH - 14.5')
10	610 610	610 610	HANDLE - FRONT (c/w mounting screws) HANDLE - REAR
11	411-1 411-2 411-3M 411-4 411-12 411-13 411-23 411-11	411-1 411-2 411-3M 411-4 411-12 411-13 411-23 411-11	SWITCH ONLY SWITCH HOUSING (c/w mounting screws) MOUNTING SCREW LOCK-ON TRIGGER HOUSING DUAL SCHEDULE SWITCH HOUSING LOCK-ON TRIGGER HOUSING EXTENDED LEVER TWO POSITION SWITCH - HOUSING ONLY



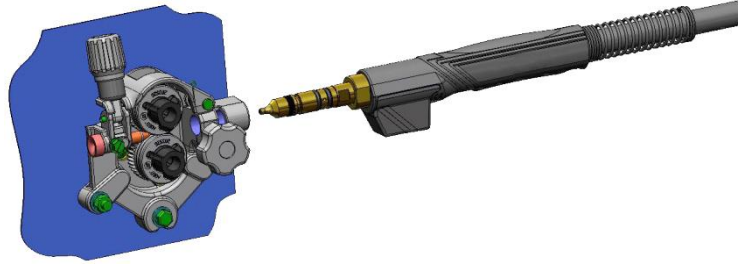
PART #	DESCRIPTION	
	450 AMP	600 AMP
12	662-10	662-10
	662-15	662-15
	662-15	662-15
	662-210	662-210
	662-212	662-212
	662-215	662-215
13	412-1	412-1
14	412-5	412-5
15	663-1-15	663-1-15
16	664-400	664-400
17	214	214
	214-2	214-2
	214-4	214-4
	214-6-116	214-6-116
	214-7	214-7
	214-12	214-12
	214-13	214-13
	414-1	414-1
	414-2	414-2
	414-11-2	414-11-2
18	415-26	415-26
	415-35-10Q	415-35-10Q
	415-35-15Q	415-35-15Q
	415-35-25Q	415-35-25Q
	415-116-10Q	415-116-10Q
	415-116-15Q	415-116-15Q
	415-116-25Q	415-116-25Q

PART #	DESCRIPTION	
	450 AMP	600 AMP
	415-23-15	415-23-15
	415-30-15	415-30-15
	415-35-10	415-35-10
	415-35-15	415-35-15
	415-35-25	415-35-25
	415-35-2	415-35-2
	415-116-10	415-116-10
	415-116-15	415-116-15
	415-116-25	415-116-25
	415-116-22	415-116-22
	*415-25	*415-25
	415-332-15	415-332-15
	415-332-153	415-332-153
	415-332-251	415-332-251
	415-564-15	415-564-15
	415-332-15	415-332-15
19	416-5	416-5
	411-3M	411-3M
20	417	417
21		
22		
23	422	
24	421	
	421-1	
25	657-1	657-1
26	656-1	656-1
27	661-XX	661-XX

# INSTALLING MIG GUN INTO A FEEDER

## For most power pins

1. Insert power pin to shoulder and secure.
2. Insert control plug to control housing of gun.
3. Insert control plug into feeder.
4. Feed welding wire into power pin by hand and tighten drive rolls.



Note: On Lincoln® feeders it is necessary to connect the gas hose to the barbed fitting on the power pin.

## GENERAL SAFETY

Before installation or operation of T-Gun MIG Guns, please read the safety precautions listed below.

1. Always wear a properly fitted welding helmet with the proper grade of filter plate and suitable welding gloves.
2. All exposed skin should be covered with flame resistant, protective clothing. **DO NOT WEAR CLOTHING MADE FROM FLAMMABLE SYNTHETIC FIBERS.**
3. Protective screens or barriers should be used to protect others from spatter, flash and glare while welding.
4. Prevent fires by ensuring that hot slag or sparks do not contact combustible solids, liquids or gases.
5. Ensure that operator's head is not too close to the arc and that adequate ventilation is available.
6. Constant repetitive motion may lead to cumulative trauma disorders.
7. Do not touch live electrical parts. The following should be checked to prevent electrical shock:
  - Equipment is adequate for the job, properly grounded and installed according to code.
  - Faulty or damaged equipment is repaired or replaced.
  - Proper operator maintenance is performed to prevent excess spatter accumulation in the nozzle, or the contact tip or other areas of the gun.
  - Electrical insulating components are in place and not damaged. Repair or replace if necessary.
  - Operator and surroundings are not wet.
  - Cables are not wrapped around operator's body.
  - Equipment is off when not in use.
8. CSA Standard W117.2 CODE FOR SAFETY IN WELDING AND CUTTING obtainable from the Canadian Standards Association, Standards Sales, 178 Rexdale Boulevard, Rexdale, Ontario, Canada M9W 1R3.
9. ANSI Standard Z49.1 CODE FOR SAFETY IN WELDING AND CUTTING obtainable from the American National Standards Institute, 1430 Broadway, New York, NY 10018.

### **CALIFORNIA PROPOSITION 65 WARNING**

This product, when used for welding or cutting, produces fumes or gases which contain chemicals known to the State of California to cause birth defects and, in some cases, cancer.

This product contains chemicals, including lead, known to the State of California to cause cancer, and birth defects or other reproductive harm. *Wash hands after use.*

(California Health & Safety Code Section 25249.5 at seq.)



## FOR ADDITIONAL TECHNICAL DATA:

For additional Technical Data, including installation, maintenance, neck dimensions, options, accessories and troubleshooting, please visit the Technical Support section of the Bernard website at [Tregaskiss.com](http://Tregaskiss.com).



### For Customer Support

U.S.A. 800-946-2281  
International 708-946-2281  
[Tregaskiss.com](http://Tregaskiss.com)