

TECHNICAL GUIDE

**For T-Gun™ Semi-Automatic
Air-Cooled MIG Guns –
200 amp Euro
300 amp Euro
350 amp Euro**

- SAFETY & WARRANTY INFORMATION
- INSTALLATION
- MAINTENANCE GUIDE
- TECHNICAL DATA
- OPTIONS
- EXPLODED VIEW & PARTS LIST
- TROUBLESHOOTING
- ORDERING INFORMATION

*Please read instructions prior to use.
Save this manual for future reference.*

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WARRANTY

Product is warranted to be free from defects in material and workmanship for the period specified below after the sale by an authorized Buyer. Should there be a defect please refer to our Return Merchandise Policy.

PRODUCT	WARRANTY PERIOD
T-Gun™ MIG Guns and Components	180 days
TGX™ Chassis and TGX Ready To Weld MIG Guns	90 days

Bernard reserves the right to repair, replace or refund the purchase price of non-conforming product. Product found not defective will be returned to the Buyer after notification by Customer Service.

Bernard makes no other warranty of any kind, expressed or implied, including, but not limited to the warranties of merchantability or fitness for any purpose. Bernard shall not be liable under any circumstances to Buyer, or to any person who shall purchase from Buyer, for damages of any kind, including, but not limited to any, direct, indirect incidental or consequential damages or loss of production or loss of profits resulting from any cause whatsoever, including, but not limited to, any delay, act, error or omission of Bernard.

Genuine Bernard and Tregaskiss parts must be used for safety and performance reasons or the warranty becomes invalid. Warranty shall not apply if accident, abuse, or misuse damages a product, or if a product is modified in any way except by authorized Bernard personnel.

THANK YOU...

...for selecting a Bernard T-Gun MIG Gun. The T-Gun MIG Gun is made from durable materials and components engineered to perform in a rugged, welding environment. Your T-Gun MIG Gun is completely assembled and ready to weld, and has undergone numerous quality checks to ensure high performance.

The instructions and illustrations in this technical guide make it easy for you to maintain your T-Gun MIG Gun. **Please read, understand, and follow all safety procedures.** Keep this Technical Guide booklet as a handy reference when ordering complete guns, parts and special options.

For customer support and special applications, please call the Bernard Customer Service Department at +1-708-946-2281 or fax +1-708-946-6726 (International) or call toll free (USA and Canada) at 1-800-946-2281. Our trained Customer Service Team is available between 8:00 a.m. and 4:30 p.m. CST, and will answer your product application or repair questions.

Bernard employees are always striving to improve our products and services, and would appreciate receiving your suggestions or comments. Please contact us immediately if you experience any safety or operating problems.

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, on 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 his/her 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.)

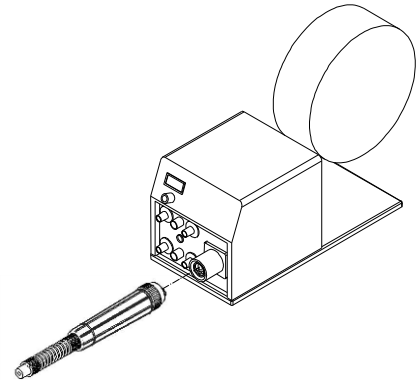


1.0 – INSTALLATION

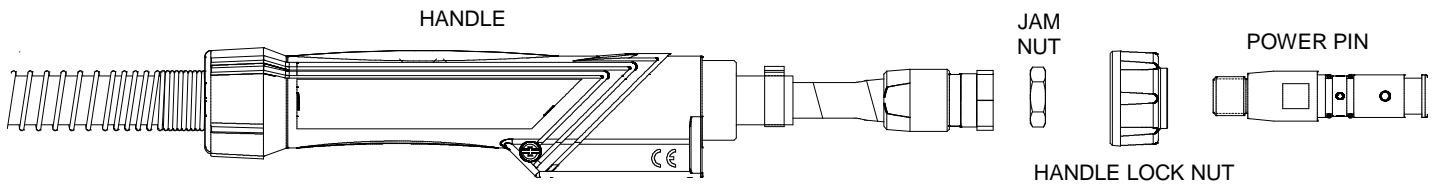
1.1 INSTALLING T-GUN EURO TO FEEDER

STEP #1

- Insert Euro gun to feeder.
- Thread Euro hand nut clockwise to tighten.
- Pull handle trigger, to feed.



1.2 INSTALLING NON-EURO POWER PIN TO T-GUN EURO – NEW STYLE



- Remove all Euro components, cut cable to remove old spring.
- Add new handle and spring.
- Add compression fit connection system (See **Section 2.5 UNICABLE REPLACEMENT**).
- Fully thread jam nut onto power pin.
- Thread power pin, with jam nut, into the rear connector cone.
- Torque the power pin connection by using two 19 mm wrenches, one on connector cone and one on the jam nut – tighten to 24 Nm.
- Tighten jam nut.
- Reposition handle halves, reinstall handle lock nuts and tighten Philips screw.
- Install liner (See **Section 2.2 LINER REPLACEMENT**).
- Install gun to feeder (See below).

1.3 INSTALLING NON-EURO T-GUN MIG GUN TO FEEDER

Miller®, Lincoln®, Hobart®, Tweco® #4 and #5 Style Power Pin

- Insert & secure non-Euro T-Gun MIG Gun into feeder receptacle.
- Connect gun control plug to feeder.
- Pull trigger to feed wire through torch

Bernard Style and ESAB® Style Euro-Connector

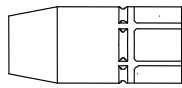
- Insert gun into feeder
- Thread hand nut clockwise to tighten
- Pull trigger to feed wire through torch.

NOTE: It is necessary to connect gas hose to barbed fitting on Lincoln style power pin.

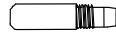
2.0 – MAINTENANCE

2.1 TREGASKISS™ NOZZLE AND TOUGH LOCK™ CONSUMABLES

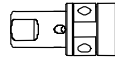
150/200 amp



STANDARD NOZZLE
VARIOUS LENGTHS
AVAILABLE



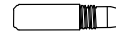
STANDARD DUTY
TREGASKISS
TOUGH LOCK
CONTACT TIP



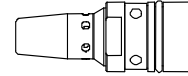
LIGHT DUTY
TREGASKISS
TOUGH LOCK
RETAINING HEAD



NECK
INSULATOR

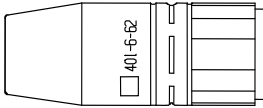


STANDARD DUTY
TREGASKISS
TOUGH LOCK
CONTACT TIP



STANDARD DUTY
TREGASKISS
TOUGH LOCK
RETAINING HEAD

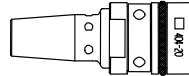
300/350 amp



HEAVY DUTY NOZZLE
VARIOUS LENGTHS
AVAILABLE



HEAVY DUTY
TREGASKISS
TOUGH LOCK
CONTACT TIP



HEAVY DUTY
TREGASKISS
TOUGH LOCK
RETAINING HEAD



NECK
INSULATOR

IMPORTANT:

- Neck insulator **MUST** be in place before welding to properly insulate neck armor.
- Check all parts to ensure that connections are tight before welding.
- The retaining head **MUST** be tightened with a 5/8" (16 mm) wrench to prevent the contact tip from overheating
- **DO NOT** use pliers to remove or tighten the retaining head or scoring may result.

Removal and Replacement

Nozzle

- Pull slip-on nozzles off with a twisting motion.
- When installing the nozzle, ensure that it is fully seated.

Contact Tip

- Thread the contact tip into the retaining head.
- Torque to 30 in.-lbs. (3.5 Nm).
- The Tregaskiss Tip Tool (Part # 450-18 – for heavy-duty tips) or a pair of weld pliers are the optimal tools for contact tip installation.

Retaining Head

- Thread retaining head onto neck with a 5/8" (16 mm) wrench.
- Torque to 80 in.-lbs. (9 Nm).
- **DO NOT** use pliers to remove or tighten the heavy duty retaining head or scoring may result.

Neck Insulator

- The neck insulator is pressed onto the neck by hand.

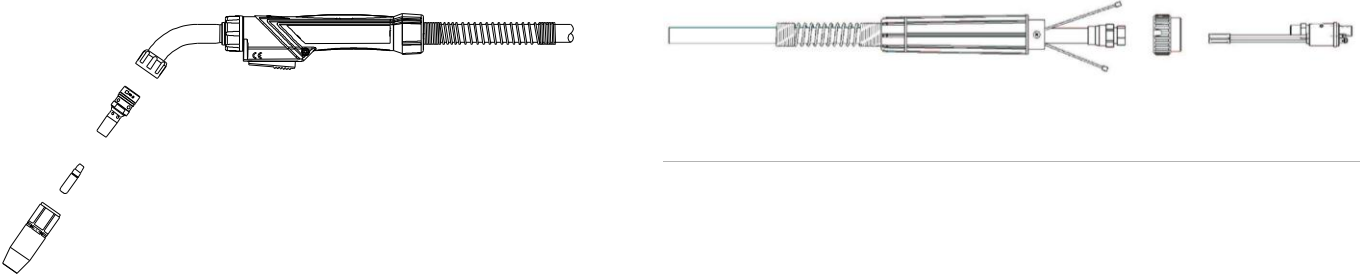
Thread-On Nozzles (Optional) - 300 and 350 amp Euro Models

- Thread-on nozzles do not require nozzle retainer and cannot be used with retaining head.
- Thread-on nozzle requires a neck insulator.
- External neck thread should be cleaned with a 9/16" - 18 die when changing the nozzle.

2.2 LINER REPLACEMENT

NOTE: With Miller style power pins, liner is held captive by a guide cap which must be removed and replaced when changing liner.

STEP #1



NOTE: Ensure power supply is off and gun is removed from feeder before proceeding.

- Remove nozzle, tip and gas diffuser.
- If power pin uses a liner set screw, loosen the set screw using a 5/64" Allen wrench, turning counterclockwise.
- If power pin is thread-in liner type, using a 10 mm wrench, turn thread-in liner collet counterclockwise until liner is free from the power pin.
- With gun straightened, remove liner.

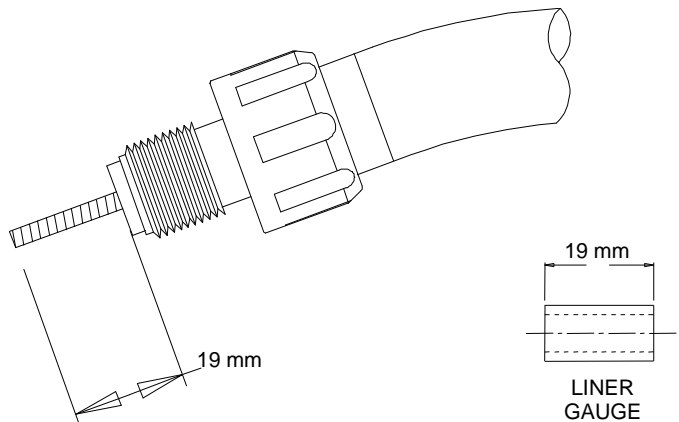
STEP #2



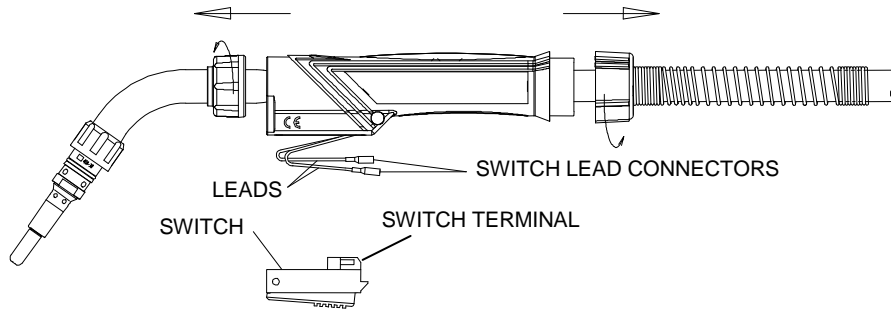
- Feed replacement liner through gun using short strokes to avoid kinking, twist liner clockwise if necessary.
- If power pin uses a liner set screw:
 - Seat liner retainer with o-ring to shoulder inside bore of power pin.
 - Secure by tightening liner set screw clockwise. Do not over-tighten.
- Thread-in liners and power pins require:
 - Using a 10 mm wrench, turn thread-in clockwise and tighten in power pin to 3.5 Nm.

STEP #3

- Load pressure on the liner from the front of the gun by pushing liner into the gun and holding in place.
- Using liner gauge, trim conduit liner with 19 mm stick-out.
- Remove any burr that may obstruct wire feed, especially on flat wire type conduit liner.
- Replace nozzle, tip and gas diffuser onto neck.



2.3 SWITCH REPLACEMENT



Remove:

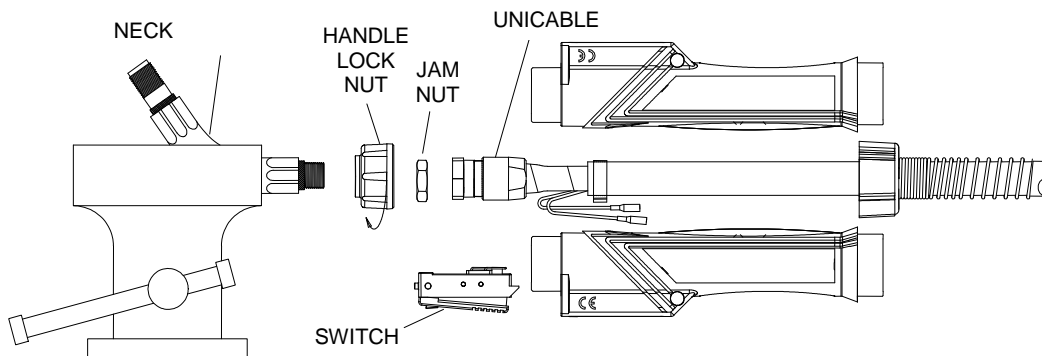
- Twist handle lock nuts counterclockwise.
- Slide handle lock nuts away from handle.
- Remove screw (Phillips) from handle and separate handle halves.
- Remove switch from switch lead connectors with needle nose pliers.

Replace:

- Connect switch lead connectors firmly onto switch terminals with needle nose pliers.
- Place gun assembly into handle half positioning neck in desired position.
- Fit switch into switch nest on handle, switch leads must lie parallel.
- Reinstall second handle half.
- Reinstall handle lock nuts on handle.
- Insert screw and tighten.

2.4 NECK REPLACEMENT

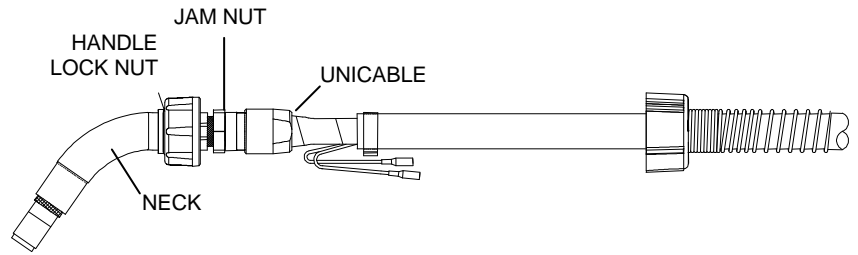
STEP #1



- Place old gun neck in vise.
- Twist handle lock nuts counterclockwise and pull away from handle.
- Remove screw from handle.
- To remove switch, refer to **Section 2.3 SWITCH REPLACEMENT** above.
- Remove handle halves, exposing jam nut and front of unicable.
- Loosen jam nut using two 19 mm wrenches and unthread neck.
- Remove from vise and unthread neck by hand.

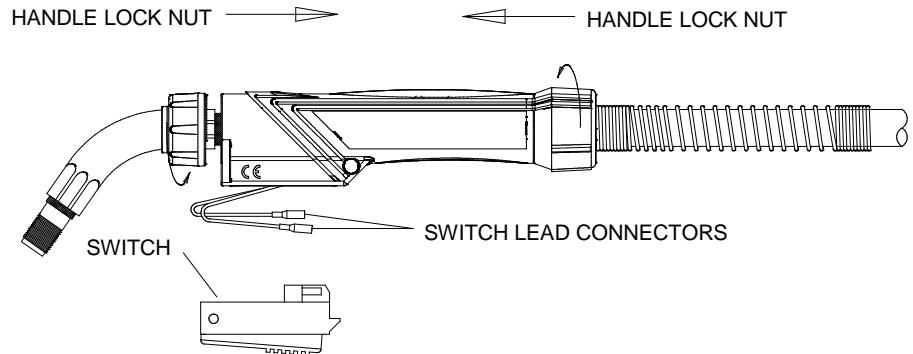
STEP #2

- Install handle lock nuts on neck.
- Thread jam nut onto new neck.
- Thread neck into uncable (hand tighten) to desired orientation.
- Place neck in vise and tighten uncable and jam nut.



STEP #3

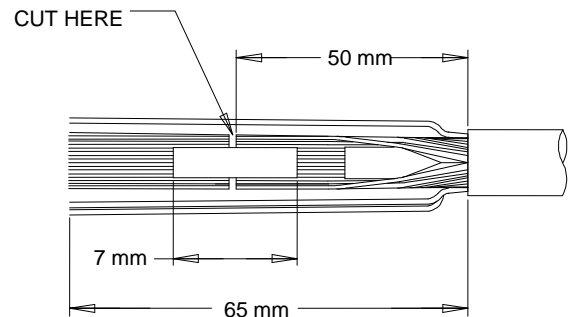
- Reposition switch and handle.
- Reinstall handle lock nuts.
- Reinstall screw.



2.5 UNICABLE REPLACEMENT

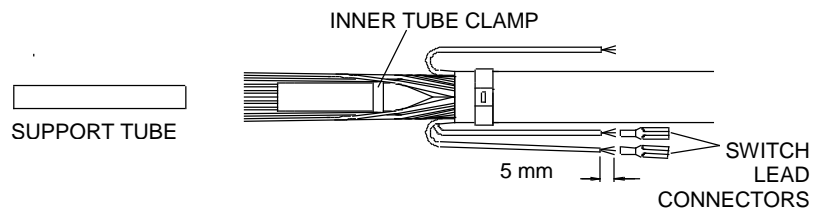
STEP #1

- Cut uncable to length.
- Install strain relief onto uncable, with locking nut.
- Cut outer casing 65 mm from end to ensure proper switch lead length.
- With switch leads pulled aside, cut uncable strands 50 mm from newly trimmed outer jacket edge, cut cleanly and evenly with sharp cable cutters. Spread uncable strands exposing inner tube, trim 7 mm from inner tube.



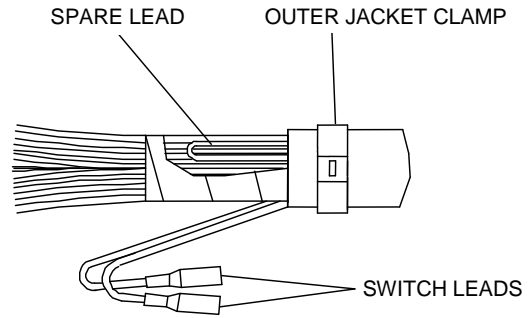
STEP #2

- Position the inner tube clamp on inner tube.
- Insert inner support tube.
- Position and clamp outer hose clamps.
- Clamp inner support hose.
- Assemble spring guard in proper position.
- Slightly squash outer jacket clamp ears.
- Assemble inner tube compression clip.
- Position cone nut and tighten until threads are not visible.



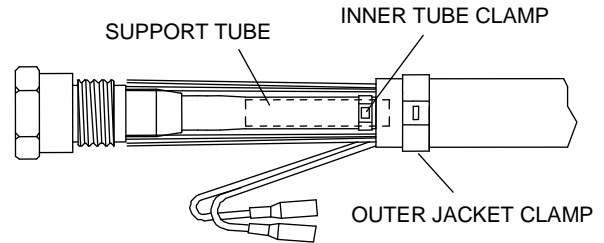
STEP #3

- Tape power cable and spare lead.
- Trim and strip control leads.
- Assemble control lead connectors.
- Position handle.



STEP #4

- FINAL ASSEMBLY - Follow identical procedure on rear of gun.



If assistance is required, please contact your authorized Bernard Distributor or the Customer Service Department at Bernard at 1-800-946-2281 (USA and Canada) or +1-708-946-2281 (International).

UNICABLE REPAIR KIT

PART #			DESCRIPTION
200 amp	300 amp	350 amp	
213-7	253-7	313-9	UNICABLE CLAMP KIT (COMPLETE)
INDIVIDUAL PARTS			
158	208	XXX	CONNECTOR CONE
158-2	208-2	XXX	JAM NUT
209	259	XXX	CONE NUT
213-1	253-1	313-3	OUTER JACKET CLAMPS (2)
656-1	656-1	413-5	INNER TUBE CLAMP
213-4	213-4	413-4	SUPPORT TUBE
412-1	412-1	412-1	SWITCH LEAD CONNECTORS (2)

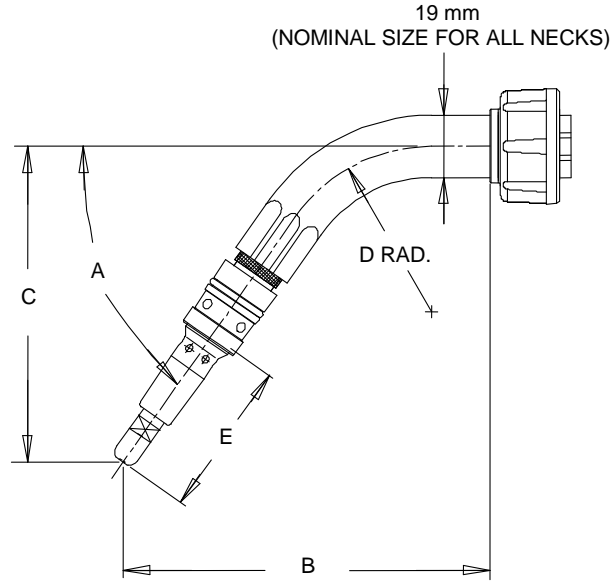
REPAIR TOOL KIT

PART #	DESCRIPTION
450	REPAIR TOOL KIT (COMPLETE)
INDIVIDUAL TOOLS	
450-1	CABLE CUTTER
450-2	CLAMP PLIERS - FOR CRIMPING OF OUTER JACKET AND INNER TUBE CLAMPS
450-3	CONNECTOR CRIMPING TOOL - FOR SWITCH LEAD TERMINALS
450-4	5/16" NUT DRIVER - FOR REMOVAL OF SWITCH HOUSING
450-5	KNIFE - FOR TRIMMING OF OUTER JACKET
450-6	5/64" ALLEN KEY - FOR LINER REMOVAL
450-7	1/8" ALLEN KEY - FOR BODY SET SCREWS

NOTE: 150 AMP IS NOT REPAIRABLE.

3.0 – TECHNICAL DATA

3.1 NECK DIMENSIONS



NECK	ANGLE	B mm	C mm	D mm	E mm
135-60	60°	112	78	51	50
155-60	60°	103	78	51	45
205-60	60°	112	97	51	48

3.2 GUN AMPERAGE RATINGS

MODEL	60% DUTY CYCLE	
	100% CO ₂	80% Ar, 20% CO ₂
150 amp EURO	150	130
200 amp EURO	200	150
300 amp EURO	300	250
350 amp EURO	350	300

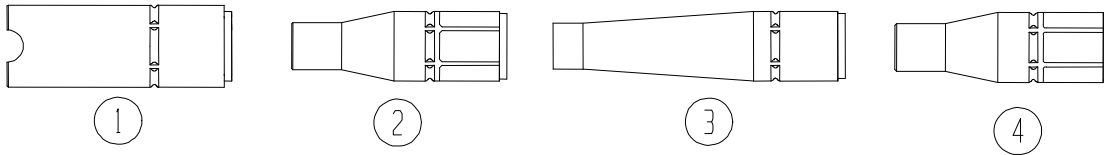
NOTE: Ratings are based on tests that comply with IEC 60974-7 standards.

4.0 – OPTIONS

4.1 DIRECT PLUG-INS

PART #	DESCRIPTION	USE ON FEEDERS
214	TREGASKISS™ POWER PIN	TREGASKISS QUICK CONNECT BLOCK HOBART 2000 SERIES FEEDERS, TWECO® #4 RECEPTACLE BODY PART # TAK-1
214-1	MILLER® POWER PIN - FOR .035 - 1/16" WIRE	MILLERMATIC 200 & 250, S22 SERIES, HOBART IRONMAN 210.
214-2	LINCOLN POWER PIN	LINCOLN LN7, 8, 90 LN 25, NA2, A-10
214-12	TWECO® #5 STYLE & MILLER POWER PINS	TWECO #5 QUICK CONNECT BLOCK & HOBART FEEDERS
414-11-2	O-RING FOR MILLER® POWER PINS	
414-12-2	O-RING FOR TWECO® #5 STYLE & MILLER POWER PINS	RECEPTACLE BODY PART #6TAK-1
214-116	GUIDE CAP ONLY (NEW STYLE)	
414-116	GUIDE CAP ONLY FOR 414-11-116 (OLD STYLE)	

4.2 SPECIALTY AND OPTIONAL ITEMS



ITEM	PART #	DESCRIPTION
1	401-10-87	SPOT NOZZLE (BRASS)
2	401-21	FLUX CORE NOZZLE (GASLESS)
3	401-41-50	EXTENDED REACH NOZZLE 3.5" (88.9 mm)
4	401-42-50	HIGH ACCESS NOZZLE (BOTTLENECK)

4.3 FEEDER ADAPTORS

To be used with 417 Quick-Connect Block

PART #	USE ON FEEDERS
418-3	ESAB® (NON EURO STYLE) & HOBART BETA MIG
418-4	HOBART® 27
418-5	LINCOLN® LN4, LN5, LINDE SWM 31, 3A & 32A
418-6	LINCOLN LN7, 8 & 9, LN 25 SUITCASE, LN22
418-7	LINDE® SWM-23
418-8	LINDE 35SWM-23
418-9	MILLER® 10A, 30A (MILLERMATIC 35S FEEDER)
418-10	MILLER 52E, 54E, S21, S22 SERIES & MILLERMATIC 200 & 250, 60 SERIES
418-14	OTC DAIHEN®
418-21	GILLILAND®
418-26	LINCOLN NA2
418-27	PANASONIC®
418-28	TWECO® #4
418-29	TWECO #5
418-35	KOBELCO®

4.4 CONNECTOR OPTIONS

Euro Connector option - for European style feeders and feeder adaptors for 300 amp T-Gun MIG Guns.

PART #	DESCRIPTION
425	EURO CONNECTOR ASSEMBLY – NEW STYLE
425-10	EURO CONNECTOR BODY – NEW STYLE
425-2	HAND NUT – OLD STYLE
425-11	HAND NUT – NEW STYLE
425-7	HANDLE ASSY WITH SCREWS
425-8	CONTROL PIN
425-9	O-RING

Bernard Style Connector Option - for Quick Connect feeder adaptors for 300 amp T-Gun MIG Guns.

***If switching from a new style Euro, a unicable repair is necessary!**

PART #	DESCRIPTION
426	BERNARD STYLE CONNECTOR ASSEMBLY
426-1	CONNECTOR BODY
426-2	LOCKING COLLAR
426-3	LOCK SPRING
426-4	CONNECTOR HOUSING
426-5	CONROL PINS
426-6	O-RINGS
425-5	MOUNTING SCREW

4.5 CONTROL PLUGS

(Complete with plug lead and female connectors)

PART#	DESCRIPTION
419-1	AIRCO®
419-2	HOBART
419-4	MILLER (52E, 54E)
419-5	WESTINGHOUSE®
419-6	LINCOLN (LN7, 8, 9), NA2
419-7	MILLER (10E, 30E) & LINDE (SWM-35)
419-8	DIPSTICK 160/200, HOBART HANDLER, LINCOLN SP-100
419-10	DUAL SCHEDULE MILLER

5.0 – TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE
Poor Wire Feed	<ul style="list-style-type: none"> conduit inner clogged or kinked incorrect liner size or contact tip liner cut too short and not seating properly in gas diffuser drive rolls too tight resulting in scoring of welding wire welding wire dirty rusty or too much cast
Short Tip Life	<ul style="list-style-type: none"> drive rolls too tight resulting in scoring of welding wire welding wire dirty, rusty or too much cast. uncoated wire being used, increasing usage wrong wire size gun being run beyond its amperage range.
Gun Overheating	<ul style="list-style-type: none"> loose retaining screw on quick connect block insufficient gauge power cable and/or ground cable loose connector cones and/or cone nuts guns being run beyond its amperage electrical malfunction in power source
Switch Malfunctioning	<ul style="list-style-type: none"> bad connection of leads to switch terminals spatter built up between lever and switch housing contacts dirty in switch broken or worn switch lead
Weld Porosity	<ul style="list-style-type: none"> 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 poor wire feed (see above) improper shielding gas or welding wire rusty or poor quality welding wire gas flow improperly set

6.0 – DAILY WELDING GUN INSPECTION

Taking just a few minutes a day to perform the following quick checks for your T-Gun MIG Welding Gun will help decrease weld problems, making your job easier and safer. It will also minimize downtime for maintenance and increase consumable life.

BEGINNING OF SHIFT

- Inspect the cable for deep cuts or nicks. If bare copper is visible, repair with electrical tape.
- Check the **Power Cable** from the power source to the wire feeder for loose connections. Tighten if necessary. A loose connection can cause poor electrical contact which will result in overheated cables and the loss of electrical output.
- Check for tight connection of welding gun to feeder adapter. Tighten if necessary.
- Check for tight connection of welding feeder adapter into wire feeder. Tighten if necessary.
- Inspect **Nozzle**. Clean weld spatter and inspect insulation in nozzle. If nozzle insulation is damaged - replace nozzle.
- Inspect **Neck insulator** on neck. If damaged, replace.
- Tighten **Nozzle Retaining Head/Gas Diffuser** on neck.
- Check gas holes in gas diffuser and clean if necessary.
- Tighten **Contact Tip**.

WHEN CLEANING NOZZLE

- Inspect insulation in nozzle. If damaged, replace.
- Inspect and clean gas holes in diffuser.
- Tighten nozzle retainer/gas diffuser to neck.
- Tighten contact tip.

7.0 – DECLARATION OF CONFORMITY

Manufacturer's Name: Bernard
Manufacturer's Address: 449 W. Corning Rd.
Beecher, IL 60401
USA

The manufacturer hereby declares that the product

Product Name: T-Gun™ EURO MIG Air-Cooled Welding MIG Guns
Model Numbers: 150 AMP, 200 AMP, 300 AMP, 350 AMP, 400 AMP,
500 AMP, 600 AMP
Product Options: All conforms to the following standards or
other normative documents:
Safety: EN 50078:1993, for Class L
(by Council Directive 89/392/EEC)

When and Where Issued
July 9, 1999
Oldcastle, Ontario, Canada

Julio Villafuerte
R & D Coordinator

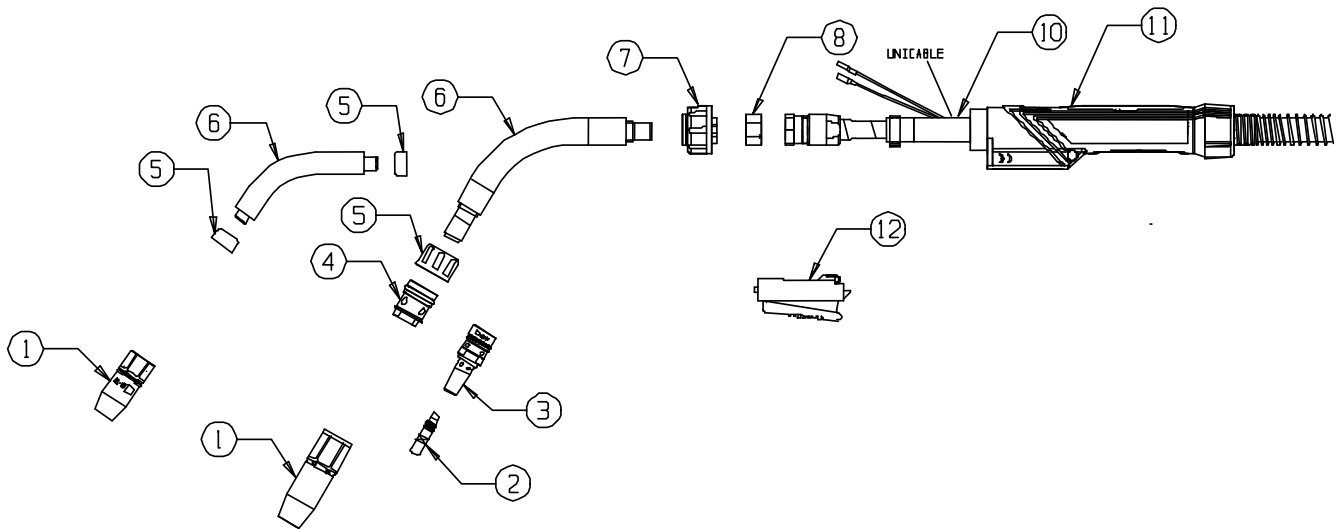
Marks of Compliance



European Contact

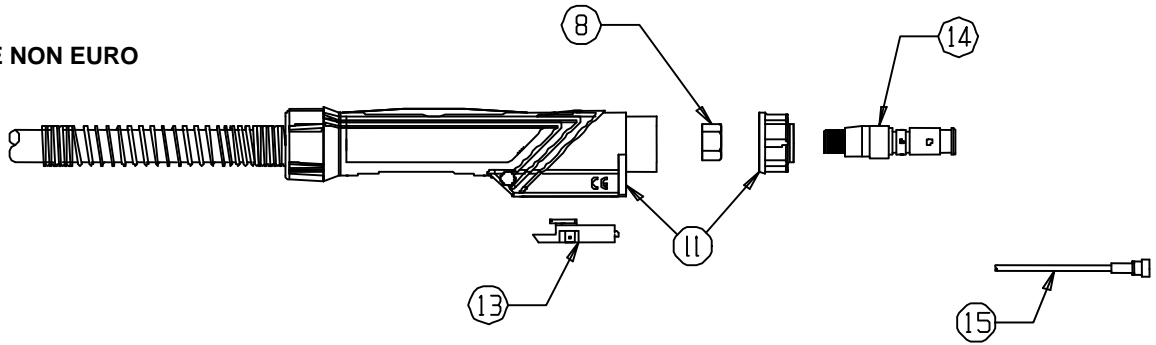
Tregaskiss International Sales Inc.
1556 Third Avenue
Suite 203
New York, NY 10128

8.0 – EXPLODED VIEW AND PARTS LIST

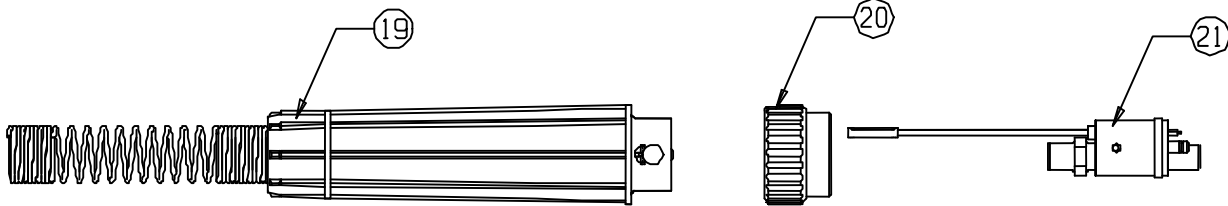


ITEM	PART #			DESCRIPTION
	200 amp	300 amp	350 amp	
1				LIGHT DUTY NOZZLES
	151-38			3/8" (10 mm) BORE - 1/8" (3 mm) TIP STICK OUT
	151-50			1/2" (13 mm) BORE - 1/8" (3 mm) TIP STICK OUT
	151-1-38			3/8" (10 mm) BORE - 1/8" (3 mm) TIP RECESS
	151-1-50			1/2" (13 mm) BORE - 1/8" (3 mm) TIP RECESS
				STANDARD NOZZLES
		401-4-38	401-4-38	3/8" (10mm) BORE - FLUSH
		401-4-50	401-4-50	1/2" (13mm) BORE - 1/2" (3mm) TIP RECESS
		401-4-62	401-4-62	5/8" (16mm) BORE - 1/8" (3mm) TIP RECESS
		401-4-75	401-4-75	3/4" (19mm) BORE - 1/8" (3mm) TIP RECESS
				HEAVY DUTY NOZZLES
		401-5-62	401-5-62	5/8" (16 mm) BORE - 1/4" TIP RECESS
		401-5-75	401-5-75	3/4" (19 mm) BORE - 1/4" TIP RECESS
		401-6-50	401-6-50	1/2" (13 mm) BORE - 1/8" TIP RECESS
		401-6-62	401-6-62	5/8" (16 mm) BORE - 1/8" TIP RECESS
		401-6-75	401-6-75	3/4" (19 mm) BORE - 1/8" TIP RECESS
2				STANDARD DUTY TREGASKISS™ TOUGH LOCK™ CONTACT TIPS
	403-14-23	403-14-23	403-14-23	FOR .023" (0.6 mm) WIRE
	403-14-30	403-14-30	403-14-30	FOR .030" (0.8 mm) WIRE
	403-14-35	403-14-35	403-14-35	FOR .035" (0.9 mm) WIRE
	403-14-1.0	403-14-1.0	403-14-1.0	FOR 1 mm WIRE
	403-14-45	403-14-45	403-14-45	FOR .045" (1.2 mm) WIRE
				HEAVY DUTY TREGASKISS TOUGH LOCK™ CONTACT TIPS
		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 1mm 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
	3	404-18	404-18	TREGASKISS TOUGH LOCK STANDARD DUTY RETAINING HEAD
		404-26	404-26	TREGASKISS TOUGH LOCK HEAVY DUTY RETAINING HEAD
		154-14	404-15	404-15 TREGASKISS TOUGH LOCK HEAVY DUTY GAS DIFFUSER
	4		402-3	402-3 NOZZLE RETAINER
154-1		402-4	402-4 RETAINING RING ONLY	
5	152	402-7	402-7 NECK INSULATOR	
6	155-60	205-60	205-60 STANDARD NECK - 60° OPTIONAL NECK - 45°	
7	320-2	320-2	320-2 HANDLE LOCK CAP - FRONT	
	320-3	320-3	320-3 HANDLE LOCK CAP - REAR	

NEW STYLE NON EURO



NEW STYLE EURO



ITEM	PART #			DESCRIPTION
	200 amp	300 amp	350 amp	
8	158-2	208-2	208-2	JAM NUT
10				UNICABLE ASSEMBLY
	213-10	250-10	321-10	10' (3.1 mm) SERVICE – NOT EURO ASSEMBLY
	213-12	250-12	321-12	12' (3.7 mm) SERVICE – NOT EURO ASSEMBLY
	213-15	250-15	321-15	15' (4.6 mm) SERVICE – NOT EURO ASSEMBLY
11	320	320	320	HANDLE (FRONT)
12	211-5	211-5	211-5	SWITCH ASSEMBLY
13	216-1	216-1	216-1	CONTROL WIRE ASSEMBLY
14				FEEDER CONNECTIONS
	214	214	214	QUICK CONNECT POWER PIN #4
	214-1	214-1	214-1	MILLER POWER PIN (ALL MODELS EXCEPT 10 & 30 FEEDERS)
	214-2	214-2	214-2	LINCOLN POWER PIN
	214-4	214-4	214-4	L-TEC®
	214-13	214-13	214-13	PANASONIC
	214-12	214-12	214-12	#5 POWER PIN
	414-1	414-1	414-1	O-RING - POWER PIN
15				LINERS
	415-23-15	415-23-15	415-23-15	FOR 0.6 mm - 5 m LENGTH
	415-30-15	415-30-15	415-30-15	FOR 0.8 mm - 5 m LENGTH
	415-35-10	415-35-10	415-35-10	FOR 0.9 mm - 1.2 mm - 3 m LENGTH
	415-35-15	415-35-15	415-35-15	FOR 0.9 mm - 1.2 mm - 5 m LENGTH
	415-35-2	415-35-2	415-35-2	FOR 0.9 mm ALUM. WIRE - 5 m LENGTH
	415-116-10	415-116-10	415-116-10	FOR 1.2 mm - 1.6mm WIRE - 3 m LENGTH
	415-116-15	415-116-15	415-116-15	FOR 1.2 mm - 1.6mm WIRE - 5 m LENGTH
NOT SHOWN	415-116-2	415-116-2	415-116-2	FOR 1.2mm - 1.6mm ALUM. WIRE - 5m LENGTH
	415-1M	415-1M	415-1M	LINER O-RING
16				FEED ADAPTORS (TO BE USED WITH 417 QUICK CONNECT BLOCK)
17				CONTROL PLUGS (C/W PLUGS LEAD & FEMALE CONNECTORS)
18	E213-7	E213-7	E313-7	UNICABLE REPAIR KIT – NOT SHOWN
19	425	425	425	COMPLETE EURO ASSEMBLY
20	425-11	425-11	425-11	HAND NUT – NEW STYLE
21	425-20	425-20	425-20	EURO BODY NEW STYLE NEW EURO ASSEMBLY COMPONENTS AND OLD COMPONENTS ARE NOT COMPATIBLE.

9.0 – ORDERING INFORMATION

EXAMPLE OF STANDARD MODEL NO.

SGB 3012-45



EXAMPLE OF CUSTOM BUILT GUN

SGB M 3010-35-9

Use these codes to order special gun features.

- B** - Bernard E-Z Connector
- M** - Miller Power Pin
- LN** - Lincoln Power Pin
- LT** - L-TEC
- MG** - Migatronic®

Option numbers should be added only if desired option is not included on standard gun model.

- 9 - Liner for Aluminum wire
- MS - Multi-schedule (not available on 32 series guns)

Wire Size

Standard Gun Model No.

9.1 GUN STANDARDS CHART

Standard models are shipped with the following components.

GUN MODEL	NECK	NOZZLE	RETAINER	DIFFUSER	NECK INSULATOR	CONTACT TIPS
150 amp EURO	135-60	151-50	154-14	---	152	403-14-xx
200 amp EURO	155-60	151-50	154-14	---	152	403-14-xx
300 amp EURO	205-60	401-4-50	404-26	---	402-5	403-20-xx
350 amp EURO	205-60	401-4-50	404-26	---	402-5	403-20-xx

Distributed by:



For Customer Support:

U.S.A 800-946-2281
International 708-946-2281
BernardWelds.com

09/12 REV E

TG017