BERNARD TGX SERIES

WEBSITE QUICKLINK: BernardWelds.com/TGX



FOR LIGHT TO MEDIUM DUTY WELDING APPLICATIONS

The Bernard[™] TGX[™] Series (formerly the Tregaskiss[™] TGX Series) is perfect for low volume, light to medium duty welding and is a durable, attractively priced choice. Ideally suited for lower amperage welding applications and shorter arc-on times, TGX MIG Guns are available in XS Series (180, 260, 300 amp) and XL Series (300, 400 amp) models and are compatible with Tregaskiss TOUGH LOCK[™] and Tregaskiss TOUGH ACCESS[™] Consumables.



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

BERNARD TGX SERIES

BERNARD TGX[™] EASY AS 1-2-3! PROGRAM

The TGX Easy as 1-2-3! Program is a unique retail system that allows a TGX MIG Gun to be assembled to your exact specifications in your welding distributor's retail store. Distributors benefit from the program by being able to offer 150 different MIG gun combinations while reducing inventory by up to 75 percent.

Answer the following quick and easy questions to determine which part numbers are required for your gun.

OUESTION 1

What amperage and cable length do you need? Your answer determines the gun chassis you require.

	GUN LENGTHS			
AMPERAGES	10'	12'	15'	
180 amp (XS)	XS1810	XS1812	XS1815	
260 amp (XS)	XS2610	XS2612	XS2615	
300 amp (XS)	XS3210	XS3212	XS3215	
300 amp (XL)	XL3010	XL3012	XL3015	
400 amp (XL)	XL4010	XL4012	XL4015	

QUESTION 3

What wire size are you using? Your answer determines the contact tip and liner you require.

WIRE SIZE *	TOUGH LOCK [™] SD CONTACT TIP PART # **	TOUGH LOCK HD CONTACT TIP PART # ***	LINER PART #
0.030" (0.8 mm)	403-14-30-05	403-20-30-05	L1A-15
0.035" (0.9 mm)	403-14-35-05	403-20-35-05	L2A-15
0.045" (1.2 mm)	403-14-45-05	403-20-45-05	L3A-15
1/16" (1.6 mm)	N/A	403-20-116-05	L4A-15

* 0.030" compatible with 180 amp only. 0.045" not compatible with 180 or 260 amp guns. 1/16" compatible with 400 amp only

** Standard-duty contact tips only compatible with 180 and 260 amp guns.

*** Heavy-duty contact tips not compatible with 180 or 260 amp guns.

BERNARD TGX READY TO WELD PROGRAM

If you prefer a factory-built gun, the TGX Ready to Weld Program is the perfect solution. This program offers a variety of factoryassembled TGX MIG Guns that are ready to weld right out of the box. Just order the part number best suited to your welding application using our online configurator at BernardWelds.com/ConfigureMyGun or visit BernardWelds.com/ReadyToWeld to refer to the part number chart.

WEBSITE QUICKLINK:

BernardWelds.com/TGX



	eder model are you determines the feed you require.		n and
FEEDER BRAND	POWER PIN PART # /NAME	REQUIRED Adaptor	REQUIRED Control Plu
Miller®	214-1 Miller	N/A	419-4
Lincoln®	214-2 Lincoln	N/A	419-6
Hobart®	214 Tweco #4 (Standard Lead)	N/A	419-8
Euro (various)	214-1 Miller	417-64	419-4
	214 Tweco #4 (Standard Lead)	417-65	419-8

by phone at 1-855-MIGWELD (644-9353).

CONFIGURE ONLINE AT

ConfigureMyGun



SPEC SHEET For TGX[™] Air-Cooled MIG Guns XS180, XS260, XS300, XL300 and XL400 amp

GENERAL SAFETY

Before installation or operation of TGX[™] 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:
 - a) Equipment is adequate for the job, properly grounded and installed according to code.
 - b) Faulty or damaged equipment is repaired or replaced.
 - c) Proper operator maintenance is performed to prevent excess spatter accumulation in the nozzle, or the contact tip or other areas of the gun.
 - d) Electrical insulating components are in place and not damaged. Repair or replace if necessary.
 - e) Operator and surroundings are not wet.
 - f) Cables are not wrapped around operator's body.
 - g) Equipment is off when not in use.
- 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.)



TTO

GUN MODEL	NOZZLE	CONTACT TIP	RETAINING HEAD	NECK INSULATOR	NECK	LENGTH (FT)	CHASSIS
						10	XS1810
180 amp (XS)	401-42-50	403-14-xx	404-18	402-7	205-60X	12	XS1812
					15	XS1815	
260 amp (XS)						10	XS2610
	401-4-50	403-20-xx	404-26	402-7	205-60X	12	XS2612
						15	XS2615
			404-26	402-7	205-60X	10	XS3210
300 amp (XS)	401-4-50	403-20-xx				12	XS3212
						15	XS3215
		403-20-xx	404-26	402-7	405-60X	10	XL3010
300 amp (XL)	401-4-62					12	XL3012
						15	XL3015
400 amp (XL)						10	XL4010
	(L) 401-4-62	1-4-62 403-20-xx	404-26	402-7	405-60X	12	XL4012
						15	XL4015

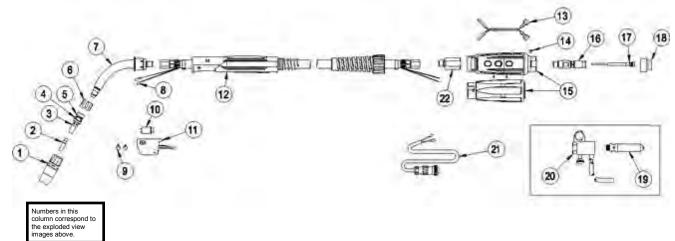
STANDARD PARTS

AMPERAGE RATINGS

CHASSIS MODEL	60% DUTY CYCLE - MIXED GASES OR 100% DUTY CYCLE - CO ₂
180 amp XS	180 amp
260 amp XS	260 amp
300 amp XS	300 amp
300 amp XL	300 amp
400 amp XL	400 amp

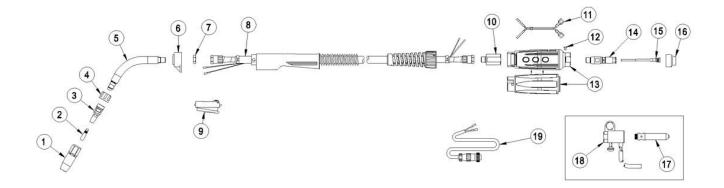
NOTE: Ratings are based on tests that comply with IEC 60974-4 standards.

EXPLODED VIEW AND PARTS LIST – XL GUNS



	PART #	DESCRIPTION
1		STANDARD DUTY NOZZLE (SELF-INSULATED)
2	403-14-xx	STANDARD DUTY TREGASKISS™ TOUGH LOCK™ CONTACT TIP
	403-20-xx	HEAVY DUTY TREGASKISS TOUGH LOCK CONTACT TIP
3	404-26	HEAVY DUTY TREGASKISS TOUGH LOCK RETAINING HEAD
4	454-1-2	RETAINING RING ONLY
5	402-6	O-RING ONLY
6	402-7	NECK INSULATOR
7	405-60X	NECK 60 DEGREE 400 AMP
8	412-1	SWITCH LEAD CONNECTOR
9	411-3M	MOUNTING SCREW (METRIC M5)
10	411-1	SWITCH ONLY
11	411-2X	SWITCH HOUSING WITH SCREWS
12		CHASSIS
13	419-21	TGX JUMPER CABLE (SAME FOR ALL AMPERAGES)
14		S.B.H.C.S M4 x .7 x 6 LG
15	510X	REAR HANDLE ASSEMBLY
16	214-xx	POWER PIN
17	415-xx-xx	LINER (CHOOSE CONVENTIONAL OR TREGASKISS QUICK LOAD™ LINER)
18	414-400-xx	POWER PIN INSULATOR
19	418-xx	FEEDER ADAPTOR
20		FEEDER ADAPTOR REQUIREMENTS (SOLD SEPARATELY)
	417	QUICK CONNECT BLOCK ASSEMBLY (TWECO® #4)
	417-60	QUICK CONNECT BLOCK ASSEMBLY (TWECO #5)
	417-64	QUICK CONNECT BLOCK ASSEMBLY (MILLER® TO EURO – DOES NOT
		REQUIRE FEEDER ADAPTOR ITEM 19 ABOVE)
	417-65	QUICK CONNECT BLOCK ASSEMBLY (TWECO #4 TO EURO – DOES NOT
		REQUIRE FEEDER ADAPTOR ITEM 19 ABOVE)
21	419-xx	CONTROL PLUG
22	414-400X	POWER PIN BLOCK

EXPLODED VIEW AND PARTS LIST – XS GUNS



	PART #	DESCRIPTION
1		STANDARD DUTY NOZZLE (SELF-INSULATED)
2	403-14-xx	STANDARD DUTY TREGASKISS TOUGH LOCK [™] CONTACT TIP FOR 180 AMP (XS18xx)
	403-20-xx	HEAVY DUTY TREGASKISS TOUGH LOCK CONTACT TIP FOR 260 AMP (XS26xx) & 300 AMP (XS32xx)
3	404-18	STANDARD DUTY TREGASKISS TOUGH LOCK RETAINING HEAD FOR 180 AMP (XS18xx)
	404-26	HEAVY DUTY TREGASKISS TOUGH LOCK RETAINING HEAD FOR 260 AMP (XS26xx) & 300
		AMP (XS32xx)
4	402-7	NECK INSULATOR
5	205-60X	NECK 60 DEGREE 200 AMP
6	210-6	HANDLE LOCK NUT
7	208-2	JAM NUT
8		CHASSIS
9	211-5	SWITCH ASSEMBLY
10	414-400x	POWER PIN BLOCK
11	419-21	TGX JUMPER CABLE (SAME FOR ALL AMPERAGES)
12		S.B.H.C.S M4 x .7 x 6 LG
13	510X	REAR HANDLE ASSEMBLY
14	214-xx	POWER PIN
15	415-xx-xx	LINER (CHOOSE CONVENTIONAL STYLE OR TREGASKISS QUICK LOAD™ LINER)
16	414-400-xx	POWER PIN INSULATOR
17	418-xx	FEEDER ADAPTOR
18		FEEDER ADAPTOR REQUIREMENTS (SOLD SEPARATELY)
	417	QUICK CONNECT BLOCK ASSEMBLY (TWECO #4)
	417-60	QUICK CONNECT BLOCK ASSEMBLY (TWECO #5)
	417-64	QUICK CONNECT BLOCK ASSEMBLY (MILLER TO EURO – DOES NOT REQUIRE FEEDER ADAPTOR ITEM 17 ABOVE)
	417-65	QUICK CONNECT BLOCK ASSEMBLY (TWECO #4 TO EURO – DOES NOT REQUIRE FEEDER ADAPTOR ITEM 17 ABOVE)
19	419-xx	CONTROL PLUG

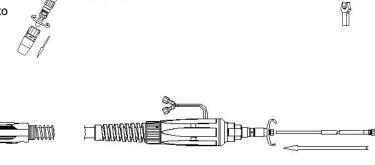
1.0 ASSEMBLY INSTRUCTIONS - EASY AS 1-2-3! GUNS ONLY

STEP #1

STEP #2

NOTE: Applies to all TGX[™] XS and XL gun models

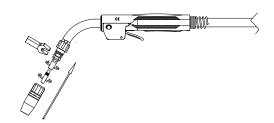
- Remove gun from box and extend to full length.
- Slide nozzle off of front end of gun.
- Thread retaining head off of front end of gun.
- Remove power pin from package and thread on to rear of gun using a 3/4" (19 mm) wrench on the rear block and a 5/8" (16 mm) or 3/4" (19 mm) wrench on power pin. Torque to 18 ft.-lbs. Install power pin / block insulator.



- Remove liner from package end extend to full length. Feed liner into the back end of the gun using short strokes to avoid kinking. Twist liner counter clockwise if necessary, to ease insertion.
- Seat liner retainer to end of power pin and using a 10 mm wrench, turn retainer in a clockwise direction and tighten into power pin.
- Measure the proper liner stick-out at the front end of the gun using liner gauge (provided). Before cutting, push liner into gun to compress liner then cut the liner and remove any burrs that may obstruct wire feed.

STEP #3

- Thread Tregaskiss TOUGH LOCK[™] Retaining Head onto neck and securely tighten using a wrench.
- Remove Tregaskiss TOUGH LOCK Contact Tip from package and thread securely into retaining head.
- Slip nozzle fully onto head.



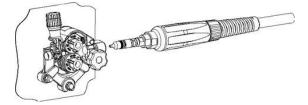
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2.0 INSERTING MIG GUN INTO A WIRE FEEDER

For most power pins:

- 1. Insert power pin to shoulder and secure.
- 2. Insert control plug to control housing of MIG 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.



For Customer Support:

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