

Tregaskiss® MA1 Fixed Automatic Air-Cooled MIG Guns

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Automatic Air-Cooled
MIG Welding Guns



Quick Specs

Duty Cycle Rating

100%: 385 amp
CO₂ gas and mixed gases

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

Processes

MIG (GMAW) Welding

Industry

Heavy Equipment
Heavy Fabrication

Welding Applications

Fixed/hard automation
Long repeatable seams
Fixed orbital

Ensure consistent high-quality welds while reducing downtime for maintenance and repairs

Fixed automatic MIG guns that you fabricate yourself can cause downtime and rework. Get Tregaskiss® fixed automatic MIG guns for the dependable performance, productivity and weld quality you need.

Tregaskiss MA1 fixed automatic air-cooled MIG guns are engineered for hard tooling automation applications requiring a simple, durable and repeatable MIG gun. These MIG welding guns are available in 385 amp models, and are compatible with TOUGH GUN I.C.E.® technology.

AccuLock™

Now Available!

AccuLock™ R consumables are designed for increased tip life and replacement accuracy, which can reduce your replacement frequency and related downtime.



**MINIMAL
REPLACEMENT
PARTS**

Few replacement parts results in low inventory costs



**QUICK
AND
EASY
MAINTENANCE**

Simple design makes maintenance easy and quick



**CABLE
LENGTH
FLEXIBILITY**

Choose from cable lengths ranging from 3' to 15'



Tregaskiss

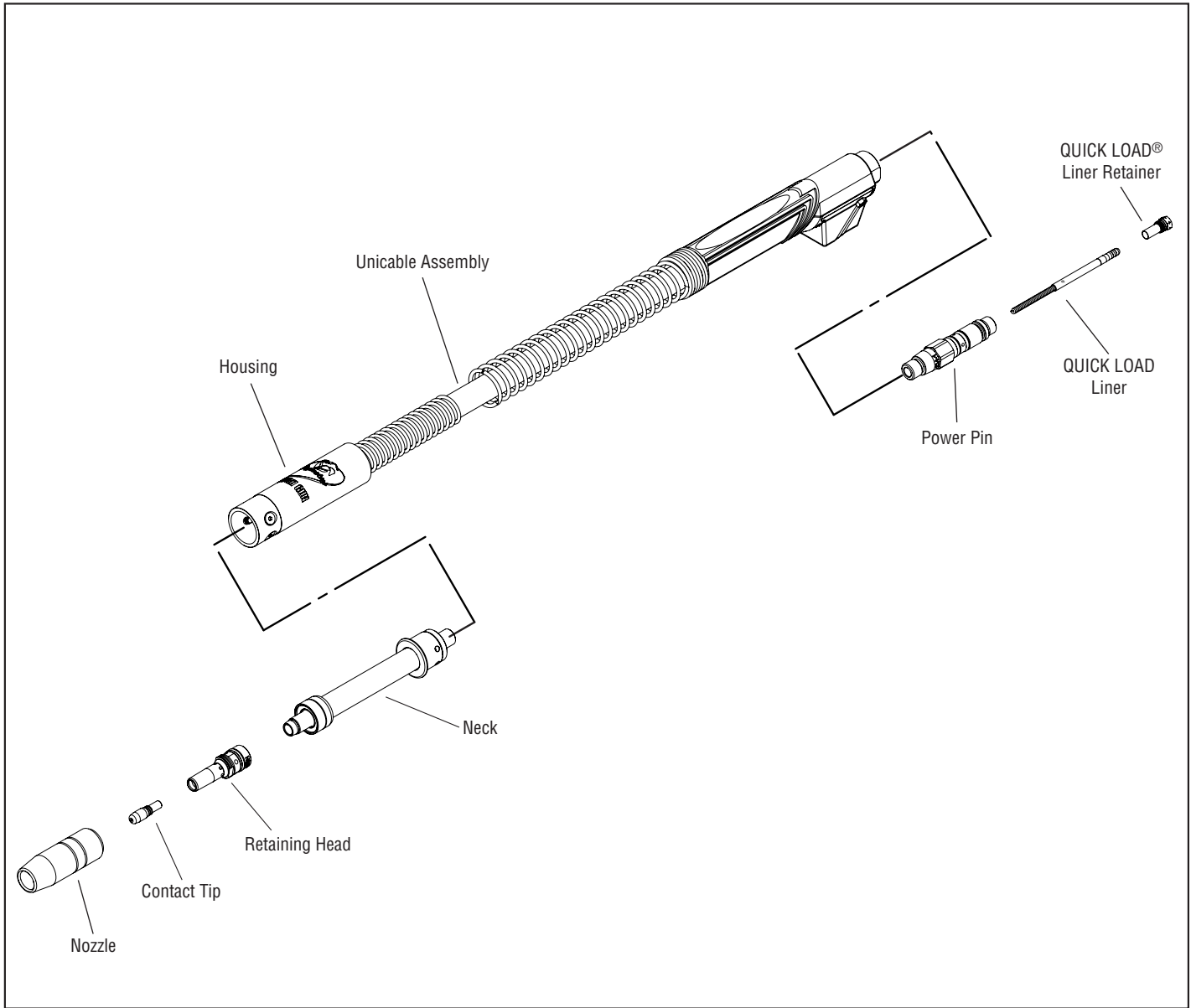
2570 North Talbot Road
Windsor, Ontario N0R 1L0
Canada

Phone: 1-855-MIGWELD (644-9353) (US & Canada)
+1-519-737-3000 (International)

Fax: 519-737-1530

For more information, visit us at Tregaskiss.com

System Components



Know Your Options

AccuLock™ R Consumables

Eliminate contact tip cross-threading issues with new AccuLock R consumables. These new consumables are designed for increased tip life, which can reduce replacement frequency and related downtime.

AccuLock HDP contact tips can increase life by an additional 10x or more in pulse welding applications. And in most cases, your current tip and diffuser can be replaced with no impact to Tool Center Point (TCP), making this upgrade low effort, low risk, and high payoff.



TOUGH GUN I.C.E.® Technology

This technology boosts the duty cycle of our already highly robust air-cooled MIG guns by providing water-cooled benefits through our I.C.E. (Integrated Cooling Enhancer) component. This component circulates water at the nozzle, keeping the consumables running cooler and lasting longer.

QUICK LOAD® Liners

The QUICK LOAD liner system loads from the front of the MIG gun, and requires less than half the time and effort for replacement when compared with conventional liners. These liners interface with a QUICK LOAD liner retainer that is seated within the power pin of the gun on first use. QUICK LOAD liners come standard on Tregaskiss fixed automatic MIG guns unless aluminum is selected as an option. Available for wire sizes between 0.023" and 3/32" and in lengths of up to 15 feet for robotic applications.



Consumables Options

AccuLock™ Heavy Duty (HD) Copper Contact Tips

[^]Compatible with Tregaskiss auto head fixed automatic MIG guns

T-A030CH[^] for 0.030" (0.8 mm) wire; qty. 10
T-A035CH[^] for 0.035" (0.9 mm) wire; qty. 10
T-A039CH[^] for 0.039" (1.0 mm) wire; qty. 10
T-A045CH[^] for 0.045" (1.2 mm) wire; qty. 10
T-A052CH[^] for 0.052" (1.3 mm) wire; qty. 10

T-A062CH[^] for 1/16" (1.6 mm) wire; qty. 10
T-A072CH for 0.070" (1.8 mm) wire; qty. 10
T-A078CH[^] for 5/64" (2.0 mm) wire; qty. 10
T-A094CH[^] for 3/32" (2.4 mm) wire; qty. 10
T-ALTOOL AccuLock tip tool



NOTE: add "-100" to the end of the above HD copper contact tip part numbers for quantities of 100.

* add "-1000" to the end of the above part numbers for quantities of 1000.

AccuLock R Gas Diffusers

[^]Compatible with Tregaskiss auto head fixed automatic MIG guns

D-ATTH Gas diffuser, thread-on, AccuLock R

D-ATSH[^] Gas diffuser, slip-on, AccuLock R

NOTE: add "-100" to the end of the above gas diffuser part numbers for quantities of 100.

TOUGH LOCK® Heavy Duty (HD) Contact Tips

[^]Compatible with Tregaskiss auto head fixed automatic MIG guns

403-20-30[^] for 0.030" (0.8 mm) wire
403-20-35[^] for 0.035" (0.9 mm) wire
403-20-1.0[^] for 0.040" (1.0 mm) wire
403-20-45[^] for 0.045" (1.2 mm) wire
403-20-364[^] for 3/64" (1.2 mm) wire
403-20-52[^] for 0.052" (1.3 mm) wire

403-20-1.4 for 0.055" (1.4 mm) wire
403-20-116[^] for 1/16" (1.6 mm) wire
403-20-1.8 for 0.070" (1.8 mm) wire
403-20-78 for 0.078" (2.0 mm) wire
403-20-564[^] for 5/64" (2.0 mm) wire
403-20-332[^] for 3/32" (2.4 mm) wire

TOUGH LOCK Heavy Duty Tapered Contact Tips (comes with 1/2" bore)

403-21-30 for 0.030" (0.8 mm) wire
403-21-35 for 0.035" (0.9 mm) wire
403-21-1.0 for 0.040" (1.0 mm) wire

403-21-45 for 0.045" (1.2 mm) wire
403-21-52 for 0.052" (1.3 mm) wire
403-21-116 for 1/16" (1.6 mm) wire

TOUGH LOCK Retaining Heads

[^]Compatible with Tregaskiss auto head fixed automatic MIG guns

404-52 HD – retaining head for thread-on nozzles

404-32[^] HD – retaining head for slip-on nozzles

Nozzles

[^]Compatible with Tregaskiss auto head fixed automatic MIG guns

Part Number	Description	Style	O.D.	Compatible Consumables Series	
				TOUGH LOCK	AccuLock R
401-6-62	HD - 5/8" bore, 1/8" recess (copper)	Slip-on	1.062"	X	X
401-5-62[^]	HD - 5/8" bore, 1/4" recess (copper)	Slip-on	1.062"	X	X
401-6-50[^]	HD - 1/2" bore, 1/8" recess (copper)	Slip-on	1.062"	X	
401-42-50[^]	SD - 1/2" bore, 1/8" recess (bottleneck, brass)	Slip-on	0.938"	X	
401-7-62	HD - 5/8" bore, 1/4" recess (copper)	Slip-on	1.106"	X	X
401-7-75	HD - 3/4" bore, 1/8" recess (brass)	Slip-on	1.106"	X	X
401-4-50	SD - 1/2" bore, 1/8" recess (copper)	Slip-on	0.938"	X	
401-7-87	HD - 3/4" bore, 1/8" recess (brass)	Slip-on	1.106"	X	X
401-30-62[^]	SD - 5/8" bore, 1/8" stick out (brass)	Slip-on	0.938"	X	X
401-30-62T	SD - 5/8" bore, 1/8" stick out (bottleneck, brass)	Thread-on	0.938"	X	X

Consumables Options (Continued)

QUICK LOAD® Liners

415-35-6Q	for 0.035" (0.9 mm) - 0.045" (1.2 mm) wire; 6' (1.8 m)
415-35-10Q	for 0.035" (0.9 mm) - 0.045" (1.2 mm) wire; 10' (3.05 m)
415-35-15Q	for 0.035" (0.9 mm) - 0.045" (1.2 mm) wire; 15' (5.0 m)
415-116-6Q	for 0.052" (1.3 mm) - 1/16" (1.6 mm) wire; 6' (1.8 m)
415-116-10Q	for 0.052" (1.3 mm) - 1/16" (1.6 mm) wire; 10' (3.05 m)
415-116-15Q	for 0.052" (1.3 mm) - 1/16" (1.6 mm) wire; 15' (5.0 m)
415-26	Liner retainer, for 0.030" (0.8 mm) - 5/64" (2.0 mm) wire
415-24	Liner retainer, for 0.078" (2.0 mm) - 3/32" (2.4 mm) wire

Conventional Liners for Solid Wire

415-30-6	for 0.030" (0.8 mm) 6' (1.8 m)
415-30-15	for 0.030" (0.8 mm) 15' (5.0 m)
415-564-6	for 1/16" (1.6 mm) - 5/64" (2.0 mm) wire; 6' (1.8 m)
415-564-15	for 1/16" (1.6 mm) - 5/64" (2.0 mm) wire; 15' (5.0 m)
415-332-6	for 0.078" (2.0 mm) - 3/32" (2.4 mm) wire; 3' (1.8 m)
415-332-15	for 0.078" (2.0 mm) - 3/32" (2.4 mm) wire; 15' (5.0 m)

Conventional Liners for Aluminum *(Jump Liner required)*

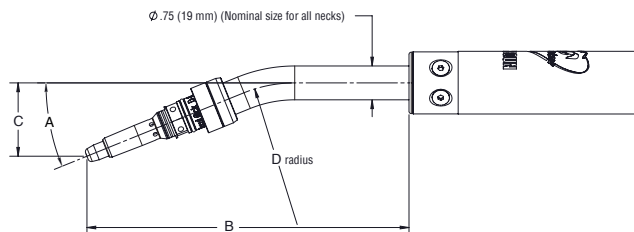
415-45-01	for 0.035" (0.9 mm) - 3/64" (1.2 mm) wire; 6' (1.8 m) – aluminum
415-45-02	for 0.035" (0.9 mm) - 3/64" (1.2 mm) wire; 10' (3.05 m) – aluminum
415-45-03	for 0.035" (0.9 mm) - 3/64" (1.2 mm) wire; 15' (5.0 m) – aluminum
415-116-21	for 3/64" (1.2 mm) - 1/16" (1.6 mm) wire; 6' (1.8 m) – aluminum
415-116-22	for 3/64" (1.2 mm) - 1/16" (1.6 mm) wire; 10' (3.05 m) – aluminum
415-116-23	for 3/64" (1.2 mm) - 1/16" (1.6 mm) wire; 15' (5.0 m) – aluminum

Jump Liners *(required with liners for aluminum)*

415-25	for 0.030" (0.8 mm) - 3/32" (2.4 mm) wire; Bronze; 8"
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Components

Air-Cooled Necks



Neck	Angle	B		C		D	
		inches	mm	inches	mm	inches	mm
405-22	22°	7.10	180	1.63	41	3.00	76
405-45	45°	5.19	132	3.55	90	3.00	76
305-60	60°	4.10	105	4.00	103	2.00	51
405-60	60°	4.98	127	4.78	121	3.00	76
405-180	180°	7.38	187	---	---	---	---
505-22	22°	8.29	211	1.72	44	4.00	102
505-45	45°	7.23	184	3.87	98	4.00	102
505-60	60°	6.04	153	5.30	135	4.00	102
505-180	180°	8.63	219	---	---	---	---
405-45LL	45°	8.69	221	7.78	121	3.00	76
405-60LL	60°	8.48	216	7.78	121	3.00	76

Components (Continued)

TOUGH GUN I.C.E.® Necks

591-22-X.XXX	22 degree neck
591-45-X.XXX	45 degree neck
591-60-X.XXX	60 degree neck
591-180-X.XXX	180 degree neck

NOTE: X.XXX in the part numbers above represent nozzle O.D.; i.e. 591-22-1.062 = 1.062" O.D., 591-45-1.106 = 1.106" O.D. (refer to the O.D. column in the Nozzle section on page 4)

Unicable

613-103	3' (0.9 m)	616-107	7' (2.1 m)
613-103.5	3.5' (1.1 m)	613-107.5	7.5' (2.3 m)
613-104	4' (1.2 m)	613-108	8' (2.4 m)
613-104.5	4.5' (1.4 m)	613-108.5	8.5' (2.6 m)
613-105	5' (1.5 m)	613-109	9' (2.7 m)
613-105.5	5.5' (1.7 m)	613-109.5	9.5' (2.9 m)
613-106	6' (1.8 m)	613-110	10' (3.06 m)
613-106.5	6.5' (2.0 m)	613-112	12' (3.66 m)
		613-115	15' (4.6 m)

Power Pins

Power Pins

214-1	Miller®	214-30	Panasonic®	214-1-9	Miller - For aluminum only
214-17	Fronius®	214	Tweco® #4		
214-7	Lincoln®	214-12	Tweco #5		
214-40	Lincoln (short)	425-20E	Euro		

AutoLength™ Pins*

214-X1	Miller	214-X30	Panasonic
214-X17	Fronius	214-X0	Tweco #4
214-X7	Lincoln	214-X12	Tweco #5

* For use with QUICK LOAD liners only.

NOTE: For wire sizes between 0.035" and 0.045", X="8"; For wire sizes between 0.052" and 3/32", X="9". AutoLength™ pin not compatible with wire size selections for aluminum wire.

Accessories

TOUGH GARD® Anti-Spatter Liquid



This ready-to-use water-soluble, non-toxic product creates a sacrificial surface that reduces spatter adhesion. This prolongs the life of your consumables and minimizes downtime due to nozzle cleaning which can help reduce your operating and maintenance costs.

TOUGH GARD Anti-Spatter Liquid

TG-101-05	5.28 U.S. Gallon / 20 L
TG-101-55	55 U.S. Gallon / 208 L
TG-101-01	1 U.S. Gallon / 3.78 L
TG-101-32SP	32 fl. oz. / 946 mL (spray bottle)
TG-101-14S	16.9 fl. oz. / 500 mL

Tregaskiss® Auto Head Fixed Automatic Air-Cooled MIG Guns



Tregaskiss auto heads are designed for direct connection to a wire feeder in automatic applications, and incorporate the same robust features as Tregaskiss fixed automatic MIG guns. Tregaskiss auto heads are available in air-cooled models and models enhanced with TOUGH GUN I.C.E.® technology

Replacement Parts (See Page 4 for consumables options)

Air-Cooled Auto Head

405-180NB	180 degree neck
405-45NB	45 degree neck
405-60NB	60 degree neck
505-60NB	60 degree neck

TOUGH GUN I.C.E Auto Head

592-180-1.062	180 degree neck, 1.062" O.D.
591-15	Jump line assembly, 15'

Conventional Liner

415-116-1	for 0.035" (0.9 mm) - 1/16" (1.6 mm) wire
415-332-1	for 5/64" (2.0 mm) - 3/32" (2.4 mm) wire

Power Pins

414-110-116	Miller® power pin (includes Control Plug)
414-10	Tweco® #4 power pin (includes Control Plug)

Conventional Liner for Aluminum

415-45-01	for 0.035" (0.9 mm) - 3/64" (1.2 mm) wire
415-116-21	for 3/64" (1.2 mm) - 1/16" (1.6 mm) wire

Jump Liner

415-25	for 0.030" (0.8 mm) - 3/32" (2.4 mm) wire; bronze; 8"
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Ordering Information (Tregaskiss Auto Head Fixed Automatic MIG Gun)

Denotes TOUGH GUN I.C.E.® Setup	Power Pin*	Gun Model	Length	Wire Size	Nozzle**	Neck***	Liner****
I^	M	52	06	-A45	-5	-460	-9
	M Miller® TW Tweco® #5	52 550 amp	06 6"	AccuLock™ R Consumables	Air-Cooled	60 Degree	-9 for Aluminum Wire
				-A30 0.030"	-5 401-5-62	-460*	
				-A35 0.035"	-9 401-30-62	-560*	
				-A39 1.0 mm	TOUGH GUN I.C.E.® Setup	45 Degree	
				-A45 0.045"	-5 401-5-62	-445*	
				-A52 0.052"	-9 401-30-62	22 Degree	
				-A16 1/16"		-422	
				-A64 5/64"			
				-A32 3/32"			

^ "I" will only appear in the part number when I.C.E. is configured

* Air-cooled only

• Tregaskiss auto head fixed automatic MIG guns come standard with the Tweco® #4 power pin when "Power Pin" option is left blank in the configured part number

** Tregaskiss auto head fixed automatic MIG guns come standard with the 401-6-62 nozzle when the "Nozzle" option is left blank in the configured part number

*** Tregaskiss auto head fixed automatic MIG guns come standard with the 405-180NB neck when the "Neck" option is left blank in the configured part number

**** Tregaskiss auto head fixed automatic MIG guns come standard with the 415-116 liner when the "Liner" option is left blank in the configured part number

Ordering Information *(Tregaskiss MA1 Fixed Automatic MIG Gun)*

Air-Cooled Automatic Series			Gun Style	Neck	Option #1	Gas Diffuser & Contact Tip	Unicable Length	Nozzle	Option #2	Wire Size	Power Pin
M	A	1	6	A	0	1	A	B	0	C	M
			6 385 amp	<i>Air-Cooled</i> <i>Short Length</i> L 60 degrees 305-60 <i>Medium Length</i> A 22 degrees 405-22 B 45 degrees 405-45 C 60 degrees 405-60 D 180 degrees 405-180 <i>Long Length</i> E 22 degrees 505-22 F 45 degrees 505-45 G 60 degrees 505-60 H 180 degrees 505-180 <i>Extended Length</i> J 45 degrees 405-45LL K 60 degrees 405-60LL <i>TOUGH GUN I.C.E.⁺</i> M 22 degrees 591-22-X.XXX N 45 degrees 591-45-X.XXX P 60 degrees 591-60-X.XXX Q 180 degrees 591-180-X.XXX	0 [^] No consumables 5 AccuLock™ (slip-on) 6 AccuLock (thread-on)	A 3' B 3.5' C 4' D 4.5' E 5' F 5.5' G 6' H 6.5' J 7' K 7.5' L 8' M 8.5' N 9' P 9.5' R 10' S 12' T 15'	A 401-6-62 B 401-5-62 E 401-7-62 F 401-7-75 J 401-7-87 K 401-30-62 L 401-30-62T <i>No Consumables</i> 0 [^] N/A	B 0.030" C 0.035" D 0.040" E 0.045" G 0.052" J 1/16" K 0.070" L 5/64" M 3/32" <i>Aluminum</i> R 0.035" T 1/16" U 0.045" W 0.052" <i>No Consumables</i> 0 [^] N/A	B Benard® C L-Tech® E Euro F Fronius® L Lincoln® M Miller® P Panasonic® T Tweco® #4 W Tweco® #5		

+ TOUGH GUN I.C.E. neck options are not available if configuring your gun without consumables.

[^] If configuring gun without consumables, "0" must be for Gas Diffuser and Contact Tip, Nozzle and Wire Size Option; TOUGH GUN I.C.E. configurations not available when selecting No Consumables Option.

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Subject to Change – The information presented in this spec sheet is accurate to the best of our knowledge at the time of printing. Please visit Tregaskiss.com for the most up-to-date information.

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