

AccuLock™ S Consumables

Issued June 2023 • Index No. ALS/2.9

**MIG (GMAW) Welding
Consumables**



Quick Specs

Applications
Shipbuilding Heavy Equipment
Rail Truck and Trailer
Construction Manufacturing
Fabrication

System Components
Liners
Contact Tips
Nozzles
Diffusers
Power Pins
Power Pin Caps

Compatible With
BTB Series MIG Guns
Miller® MDX™-250 Series
MIG Guns

Wire Sizes
0.023" to 1/8"
(0.6 to 3.2 mm)

It all comes together with AccuLock™

Choosing equipment with fewer points of failure and simplified maintenance can reduce welder training and shorten your troubleshooting list leading to increased productivity.

AccuLock S Consumables are designed to **decrease liner trim length errors and erratic wire-feeding, while increasing contact tip life.**

Error-Proof Liner Replacement – With AccuLock S Dual-Locked Liner.
See page 5 for details.

Optimized Wire-Feeding – AccuLock S Liners are locked and concentrically aligned to both the contact tip and power pin to ensure smooth, uninterrupted delivery of the wire to the weld puddle. This means you'll benefit from **reduced troubleshooting and downtime caused by burnbacks, birdnests, and erratic arc.**

Enhanced contact tip-to-diffuser design – contact tip is 60% buried within the diffuser for less exposure to the heat of the weld and more cooling from shielding gas for 2-3x longer life.



AccuLock™



Keeps the liner perfectly aligned from the power pin to the contact tip



Eliminates measuring the liner - simply cut flush with the back of the power pin



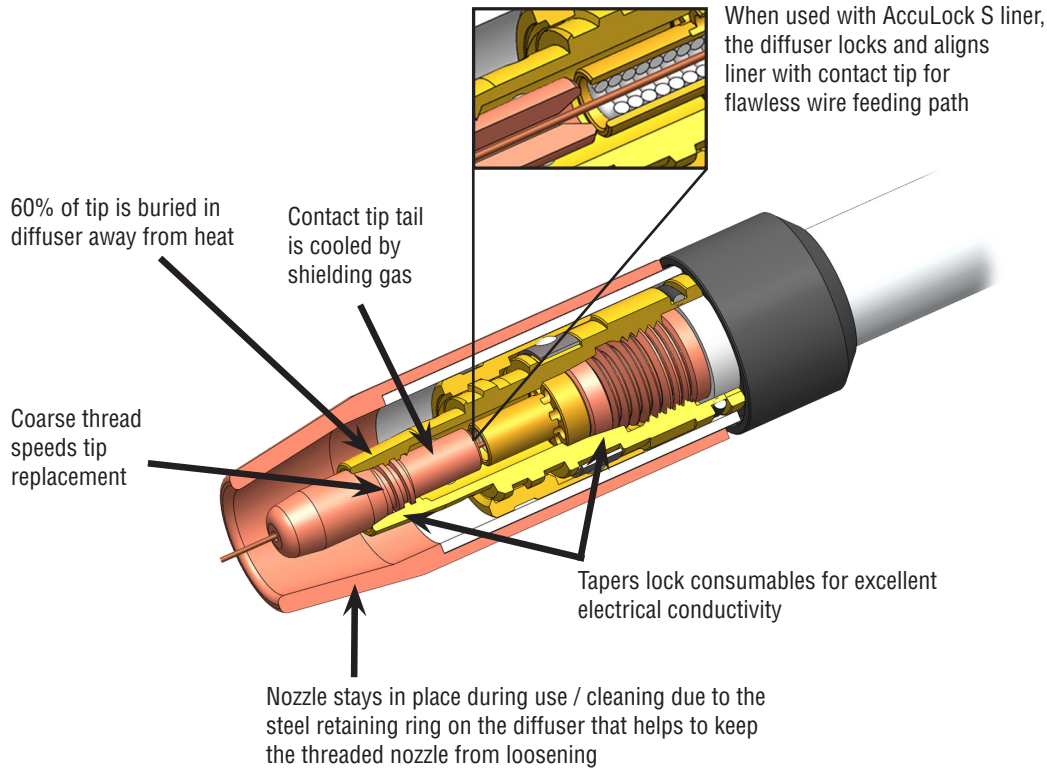
Contact tips can be used on robotic, semi-automatic and fixed automatic guns



Bernard
A Division of Miller Electric Mfg. LLC
449 West Corning Road
Beecher, Illinois 60401 USA

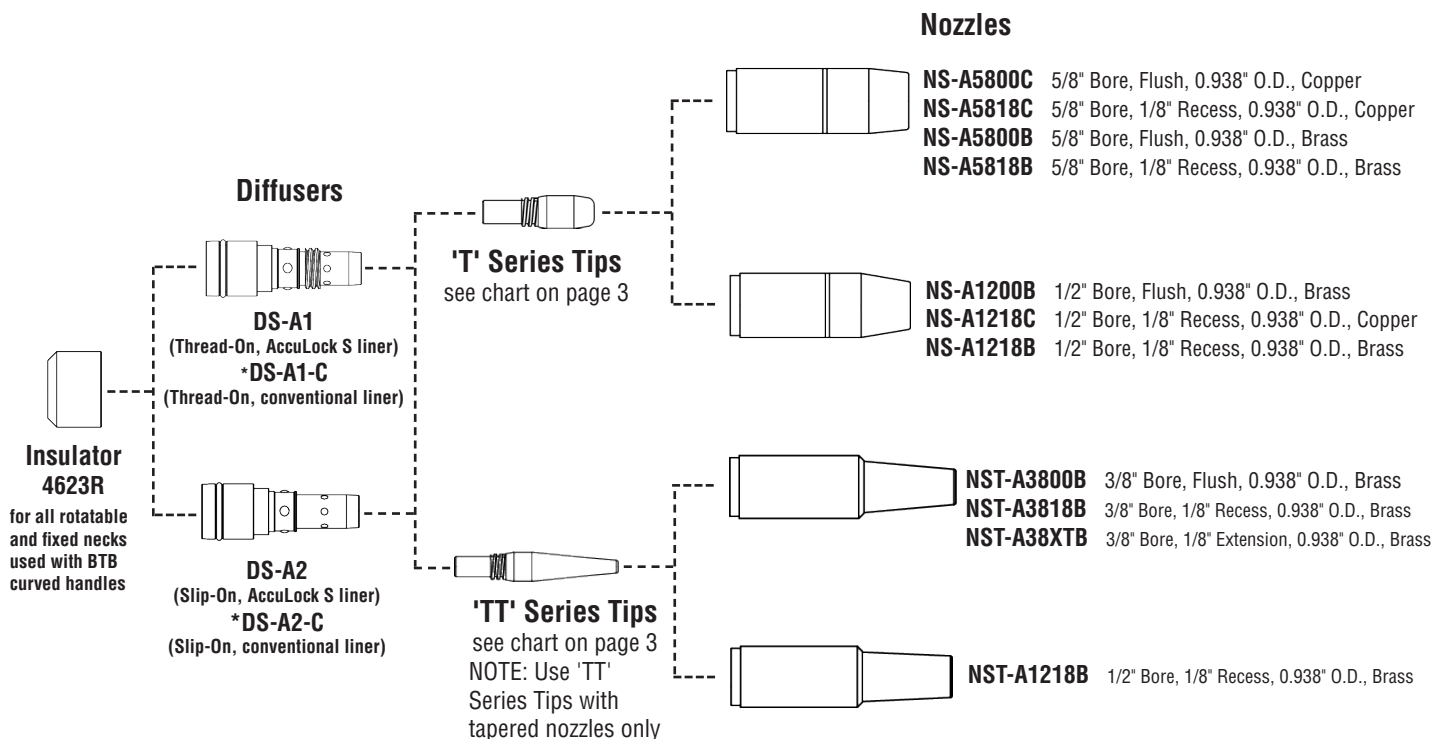
Phone: 1-855-MIGWELD (644-9353) (US & Canada Only)
+1-519-737-3000 (International)
Fax: 708-946-6726
For more information, visit us at Tregaskiss.com

AccuLock S Key Features



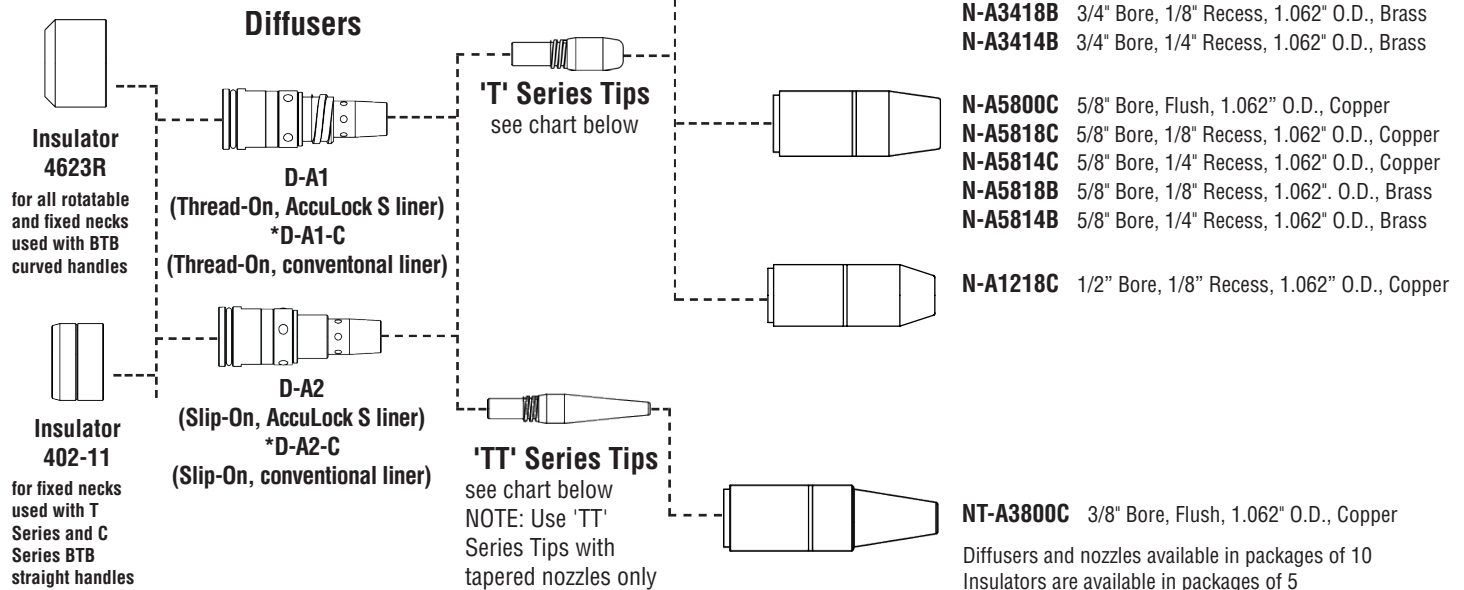
AccuLock S Consumables

Small AccuLock S Diffusers and Nozzles



NOTE: *Not engineered for error-proof liner replacement and flawless wire feeding. For use with Bernard conventional liners. Refer to spec sheet [SP-L](#) for more information.

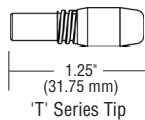
Large AccuLock S Diffusers and Nozzles



NOTE: *Not engineered for error-proof liner replacement and flawless wire feeding. For use with Bernard conventional liners. Refer to spec sheet [SP-L](#) for more information.

AccuLock Contact Tips

'T' Series Contact Tips (0.350" O.D.)

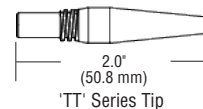


T-A023CH	0.023"	(0.6 mm)
T-A030CH^*	0.030"	(0.8 mm)
T-A035CH^*	0.035"	(0.9 mm)
T-A039CH^*	0.039"	(1.0 mm)
T-A045CH^*	0.045"	(1.2 mm)
T-A052CH^*	0.052"	(1.4 mm)
T-A062CH^	1/16"	(1.6 mm)
T-A072CH^	0.072"	(1.8 mm)
T-A078CH^	5/64"	(2.0 mm)
T-A094CH^	3/32"	(2.4 mm)
T-A109CH	7/64"	(2.8 mm)
T-A125CH	1/8"	(3.2 mm)

^ add "-100" to the end of the above 'T' series contact tip part numbers for quantities of 100.
 *add "-1000" to end of the above 'T' series contact tip part numbers listed for quantities of 1000.

- Torque to 30 in.-lbs. (3.5 Nm)
- Contact tips available in quantities of 10

'TT' Series Contact Tips (0.350" O.D.)



TT-A023CH	0.023"	(0.6 mm)
TT-A030CH	0.030"	(0.8 mm)
TT-A035CH	0.035"	(0.9 mm)
TT-A039CH	0.039"	(1.0 mm)
TT-A045CH	0.045"	(1.2 mm)
TT-A052CH	0.052"	(1.4 mm)
TT-A062CH	1/16"	(1.6 mm)

Bernard® AccuLock S and Tregaskiss® AccuLock R Consumables share a common contact tip. If you have a combination of robotic and semi-automatic guns in your facility, you'll benefit from reduced costs and simplified inventory.



AccuLock S Liners

Wire Size	Liner Color	Cable Length			
		10' (3.05m)	15' (4.57m)	20' (6.10m)	25' (7.62m)
0.023" (0.6 mm) - 0.030" (0.8 mm)	Yellow	LA1A-10	LA1A-15	LA1A-20	LA1A-25
0.030" (0.8 mm) - 0.035" (0.9 mm)	Green	LA2A-10	LA2A-15	LA2A-20	LA2A-25
0.035" (0.9 mm) - 0.045" (1.2 mm)	White	LAD3A-10	LAD3A-15	LAD3A-20	LAD3A-25
0.045" (1.2 mm) - 1/16" (1.6 mm)	Red	LAD4A-10	LAD4A-15	LAD4A-20	LAD4A-25
5/64" (2.0 mm)	Blue	LA6A-10	LA6A-15	LA6A-20	LA6A-25
3/32" (2.4 mm)	Grey	LA7A-10	LA7A-15	LA7A-20	LA7A-25
7/64" (2.8 mm) - 1/8" (3.2 mm)	Black	LA8A-10	LA8A-15	LA8A-20	LA8A-25

AccuLock S Power Pin and Power Pin Caps (for use with AccuLock S liners)

	Power Pin	Power Pin Cap	Cap Washer Color	Compatible Wire Size
Miller®	2200206	2200351	Yellow	0.023" (0.6 mm) - 0.030" (0.8 mm)
		2200352	Green	0.030" (0.8 mm) - 0.035" (0.9 mm)
		2200353	White	0.035" (0.9 mm) - 0.045" (1.2 mm)
		2200354	Red	0.045" (1.2 mm) - 1/16" (1.6 mm)
		2200355	Blue	5/64" (2.0 mm)
	2200207	2200356	Grey	3/32" (2.4 mm)
		2200357	Black	7/64" (2.8 mm) - 1/8" (3.2 mm)
Lincoln®	2200210	2200309	Yellow	0.023" (0.6 mm) - 0.030" (0.8 mm)
		2200310	Green	0.030" (0.8 mm) - 0.035" (0.9 mm)
		2200311	White	0.035" (0.9 mm) - 0.045" (1.2 mm)
		2200312	Red	0.045" (1.2 mm) - 1/16" (1.6 mm)
		2200313	Blue	5/64" (2.0 mm)
	2200211	2200314	Grey	3/32" (2.4 mm)
		2200315	Black	7/64" (2.8 mm) - 1/8" (3.2 mm)
Tweco® #4	2200150	2200281	Yellow	0.023" (0.6 mm) - 0.030" (0.8 mm)
		2200282	Green	0.030" (0.8 mm) - 0.035" (0.9 mm)
		2200283	White	0.035" (0.9 mm) - 0.045" (1.2 mm)
		2200284	Red	0.045" (1.2 mm) - 1/16" (1.6 mm)
		2200285	Blue	5/64" (2.0 mm)
	2200151	2200286	Grey	3/32" (2.4 mm)
		2200287	Black	7/64" (2.8 mm) - 1/8" (3.2 mm)
Tweco® #5	2200156	2200295	Yellow	0.023" (0.6 mm) - 0.030" (0.8 mm)
		2200296	Green	0.030" (0.8 mm) - 0.035" (0.9 mm)
		2200297	White	0.035" (0.9 mm) - 0.045" (1.2 mm)
		2200298	Red	0.045" (1.2 mm) - 1/16" (1.6 mm)
		2200299	Blue	5/64" (2.0 mm)
	2200157	2200300	Grey	3/32" (2.4 mm)
		2200301	Black	7/64" (2.8 mm) - 1/8" (3.2 mm)
Euro	2200359 / 2200273	2200337	Yellow	0.023" (0.6 mm) - 0.030" (0.8 mm)
		2200338	Green	0.030" (0.8 mm) - 0.035" (0.9 mm)
		2200339	White	0.035" (0.9 mm) - 0.045" (1.2 mm)
		2200340	Red	0.045" (1.2 mm) - 1/16" (1.6 mm)
		2200341	Blue	5/64" (2.0 mm)
		2200342	Grey	3/32" (2.4 mm)
		2200343	Black	7/64" (2.8 mm) - 1/8" (3.2 mm)
OXO™	2200358	2200323	Yellow	0.023" (0.6 mm) - 0.030" (0.8 mm)
		2200324	Green	0.030" (0.8 mm) - 0.035" (0.9 mm)
		2200325	White	0.035" (0.9 mm) - 0.045" (1.2 mm)
		2200326	Red	0.045" (1.2 mm) - 1/16" (1.6 mm)
		2200327	Blue	5/64" (2.0 mm)
		2200328	Grey	3/32" (2.4 mm)
		2200329	Black	7/64" (2.8 mm) - 1/8" (3.2 mm)

IMPORTANT NOTE: To convert any Bernard BTB MIG Gun to the AccuLock S liner system use the above chart to identify required power pin and power pin cap.
Need extra set screws? Order 2300023P for a package of (10) 1/4-20 x 3/16", long cup point set screws.

AccuLock™ S Conversion Series

Convert from your current consumables to our AccuLock S Consumables for your Bernard® BTB semi-automatic MIG gun or competitive style MIG guns. Find your MIG gun make and model on the left, then follow the chart to the right for parts needed to upgrade.

Gun Manufacturer	Gun Model	Desired Nozzle / Diffuser Style	Adapter	Insulator	Diffuser	Contact Tip	Nozzle
Bernard®	BTB Semi-Automatic MIG Gun	Small	Not Required	4623R	DS-A1-C (thread-on) DS-A2-C (slip-on)	Select from tips on page 3	Select from nozzles on pages 2-3 <i>Note: use small nozzles with small diffusers and large nozzles with large diffusers</i>
		Large			D-A1-C (thread-on) D-A2-C (slip-on)		
Tweco®	No. 1, No. 2	Small	1380030	10012	DS-A1-C (thread-on) DS-A2-C (slip-on)		
		Large			D-A1-C (thread-on) D-A2-C (slip-on)		
	No. 3, No. 4, Tuff-n-Lite, Supra® XT (HD consumables), Spray Master 450	Small	Not Required	10012	DS-A1-C (thread-on) DS-A2-C (slip-on)		
		Large			D-A1-C (thread-on) D-A2-C (slip-on)		
Lincoln®	Magnum® 250	Small	1380030	10012	DS-A1-C (thread-on) DS-A2-C (slip-on)		
		Large			D-A1-C (thread-on) D-A2-C (slip-on)		
	Magnum® 300, 400	Small	Not Required	10012	DS-A1-C (thread-on) DS-A2-C (slip-on)		
		Large			D-A1-C (thread-on) D-A2-C (slip-on)		

Above gun models are registered tradenames of their respective companies

AccuLock™ S for Conventional Liners Starter Kit



Part Number	Description
ALCSK-1	Conventional liner starter kit. Allows welders to convert their Bernard® BTB MIG gun consumables, or select competitor MIG gun consumables, to AccuLock S consumables. Swap current nozzle, diffuser and contact tip with AccuLock S consumables while still using a conventional liner.

With AccuLock S – the liner replacement process has been error-proofed. No more measuring means no more liners trimmed incorrectly.

Quick Reference for AccuLock™ S Liner Installation

The below liner installation instructions are not applicable for Bernard conventional liner diffusers (D-A1C, DS-A1C, D-A2C and DS-A2C).



Scan to view detailed AccuLock S liner installation instructions

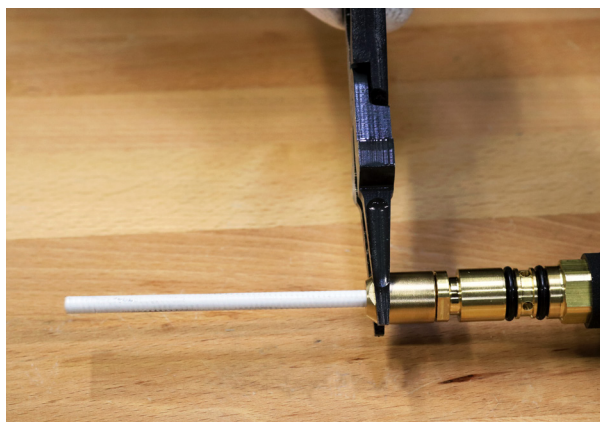
1. Loosen power pin cap set screw. Remove nozzle, gas diffuser, power pin cap, and liner.



2. Replace the new liner through the neck until brass liner lock bottoms on neck.



3. Lock and center liner by reinstalling the diffuser. Slide power pin cap over exposed liner and tighten the cap snug against power pin shoulder with welding pliers or appropriate wrench.



4. Holding a hex wrench as shown, tighten the screw "finger-tight" against the liner.



Quick Reference for AccuLock S Liner Installation (Continued)

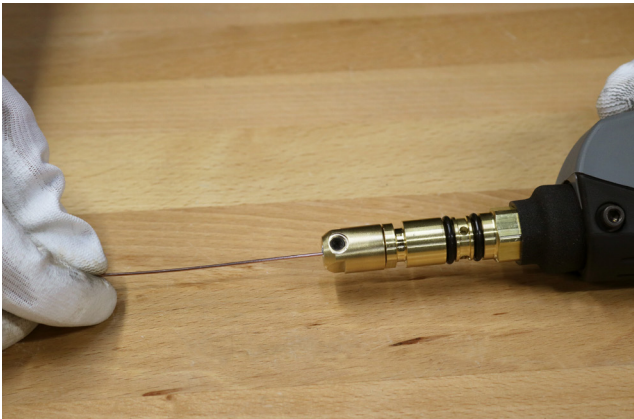
5. Next, hold the hex wrench by the handle and tighten the set screw and additional one-half turn to fully secure the liner.



6. Trim liner flush with end of power pin.



7. Insert a piece of welding wire into the liner to check for burrs or obstructions. If needed, loosen screw slightly until wire slides freely.



Quick Reference for Bernard Conventional Liner Installation

Refer to Bernard Conventional Liner spec sheet [SP-L](#) for liner installation instructions.

AccuLock™ contact tips, AccuLock S nozzles, diffusers and liners are manufactured by Bernard. Bernard®, Miller®, Tregaskiss® are trademarks of Illinois Tool Works, Inc. Other brands mentioned are for reference only and are the registered trademarks of their respective companies. Illinois Tool Works, Inc. is not affiliated with these other companies.

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.

Distributed By: