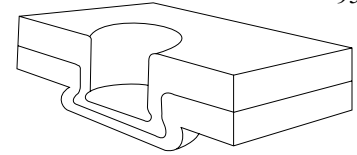


Tog-L-Loc®

Sheet Metal Joining System

95-HH



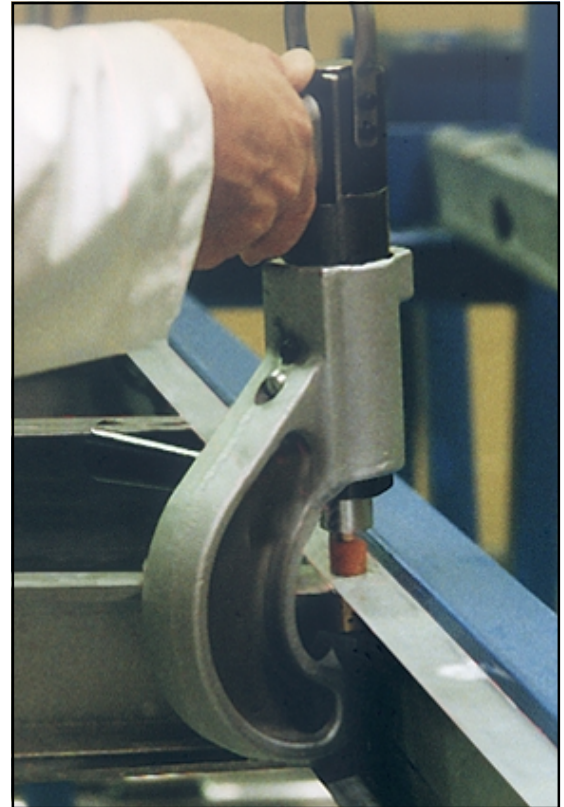
Hand Manipulated Clinching Units

Patented

BTM's patented Tog-L-Loc® sheet metal joining system is the simple solution to fastening plain or coated metals. Tog-L-Loc forms a strong, leakproof "button" headed joint without welding or riveting in almost any combination of ductile sheet metals. The Tog-L-Loc system is widely used in the manufacture of automobiles, appliances, furniture, electrical products, building supplies and more.

BTM's simple hand held Tog-L-Loc systems are an economical approach to fastening sheet metal assemblies. Compressed air at 80 psi (5.5 bar) is all that is required for operation. The complete system consists of a pressure booster which converts shop air into hydraulic forces, a 2 meter (80") hose assembly and hand unit with two sets of Tog-L-Loc tools. The punch and die tools are reversible within the unit to form the "button" in either direction. The guns can be set up to join a range of thicknesses or optimized for a specific metal thickness.

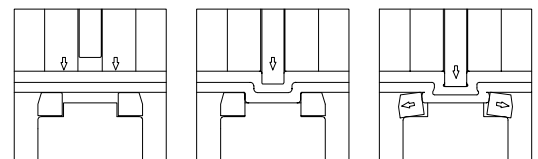
In addition to our standard hand held systems, BTM has a complete line of Tog-L-Loc tooling for high and low volume production and we have many years experience in building special production machines for Tog-L-Loc assembly.



Bayonet Style Tog-L-Loc hand operated gun for easy part clearance in difficult joining situations.



BTM Hand Manipulated Hydraulic Portable Unit



Clamps

Locks

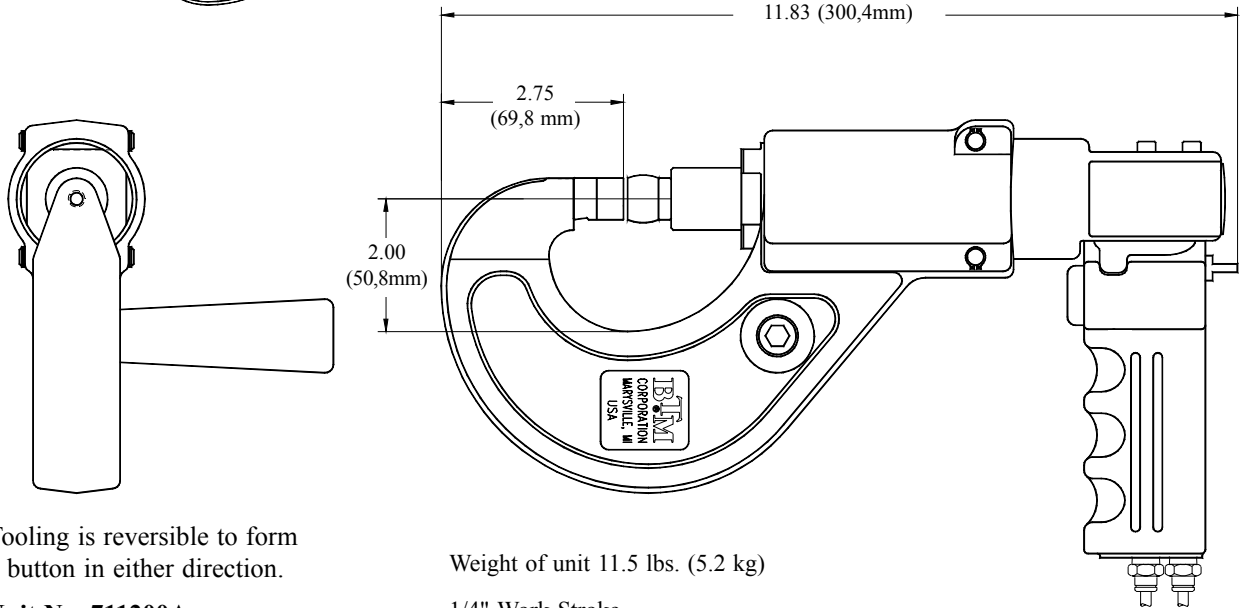
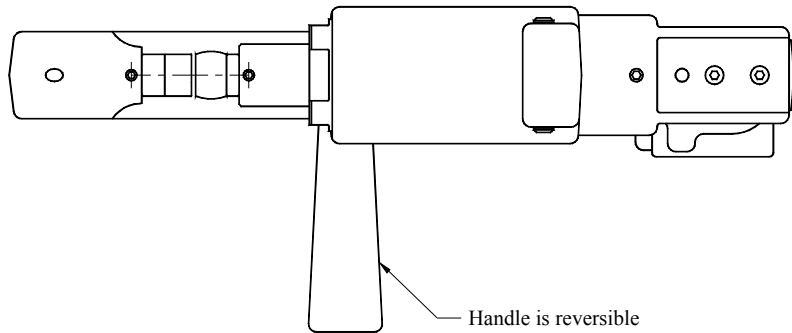
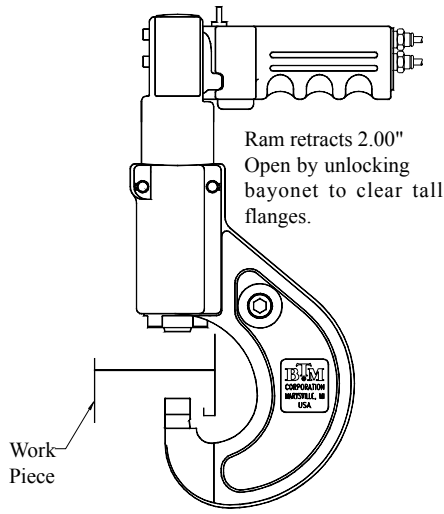
Draws

The stripper clamps the metals to the die as the punch advances. The punch draws the metals into the die and squeezes them against the anvil. The metals flow outward and the die blades move away, allowing the diameter of the lock to expand.



300 Davis Road Marysville, Michigan 48040
Phone 810-364-4567 • Fax 810-364-6178

Tog-L-Loc Bayonet Hand Operated Gun

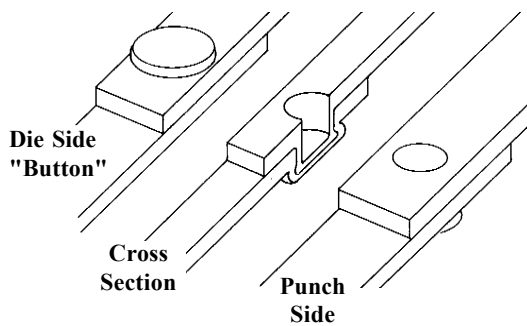


Tooling is reversible to form a button in either direction.

Unit No. 711200A

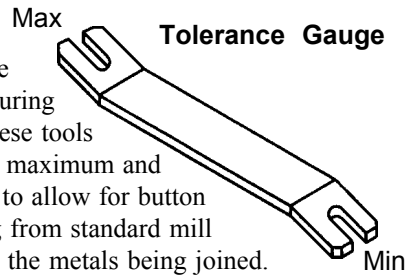
Weight of unit 11.5 lbs. (5.2 kg)

1/4" Work Stroke

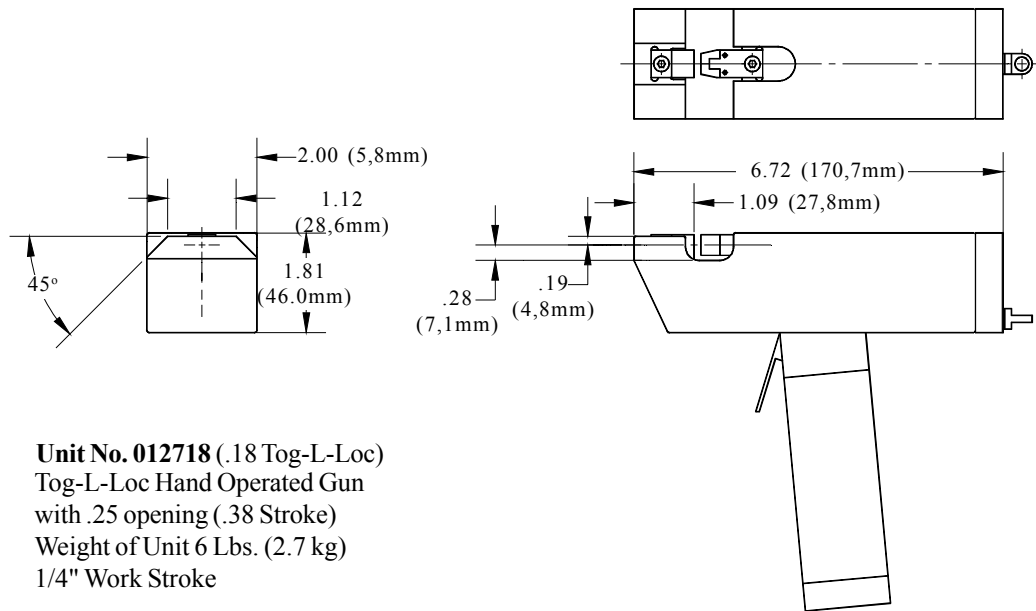


The Tog-L-Loc joints are characterized by a "button" formed on the die side layer of metal and a recess formed in the punch side layer

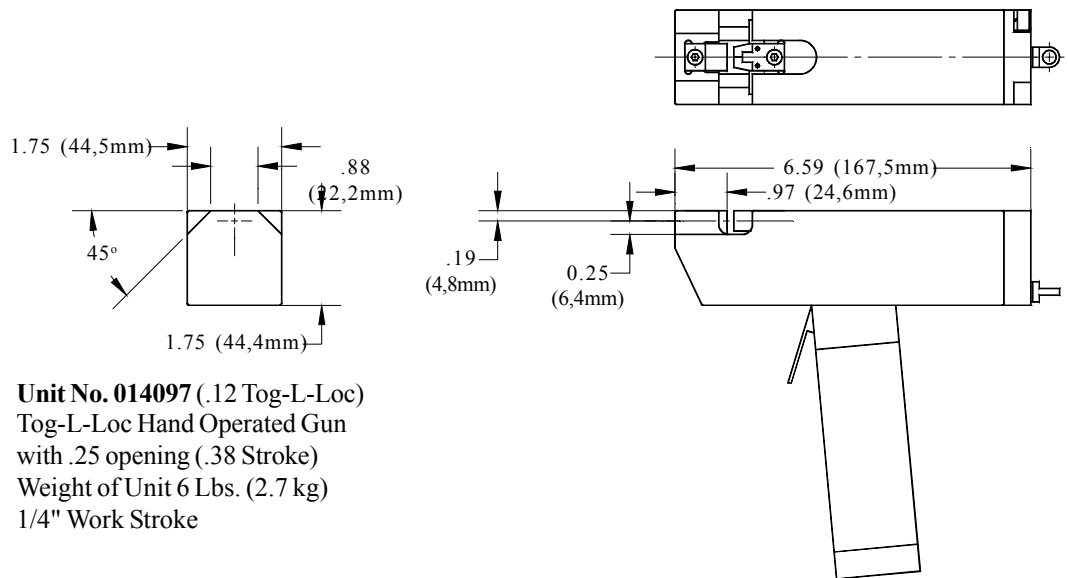
The tolerance gage is a reliable method of measuring joint quality. These tools are made with a maximum and minimum gage to allow for button growth resulting from standard mill tolerance within the metals being joined.



Good Joint	Not Acceptable	Good Joint	Not Acceptable
MAX.	MAX.	MIN.	MIN.



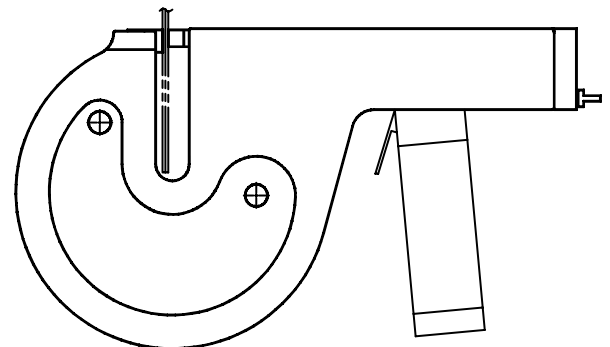
Unit No. 012718 (.18 Tog-L-Loc)
 Tog-L-Loc Hand Operated Gun
 with .25 opening (.38 Stroke)
 Weight of Unit 6 Lbs. (2.7 kg)
 1/4" Work Stroke



Unit No. 014097 (.12 Tog-L-Loc)
 Tog-L-Loc Hand Operated Gun
 with .25 opening (.38 Stroke)
 Weight of Unit 6 Lbs. (2.7 kg)
 1/4" Work Stroke

This BTM hand operated gun features a deeper throat for hard to reach joining areas on work pieces. For more information on this gun contact BTM sales department. BTM can design special guns to suit your joining needs.

Unit No. 013864



Lit-L-Loc Booster Assembly

Air Pressure In		Hyd. Pressure Out	
PSI	Bar	PSI	Bar
60	4,1	3685	254
70	4,8	4299	297
80	5,5	4912	339
90	6,2	5490	379

Booster Ratio 61:1

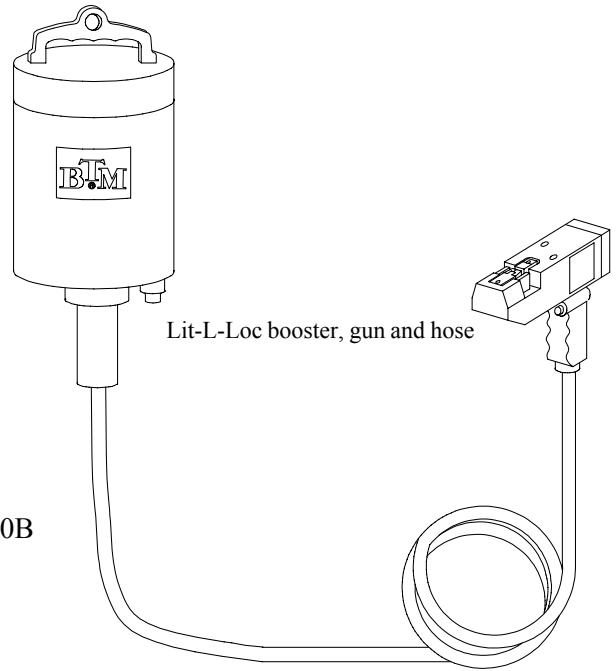
Produces approximately 3 tons @ 80 psi air input.

Approximate weight of booster (Without Hose) = 18 lbs. (8,2 kg)

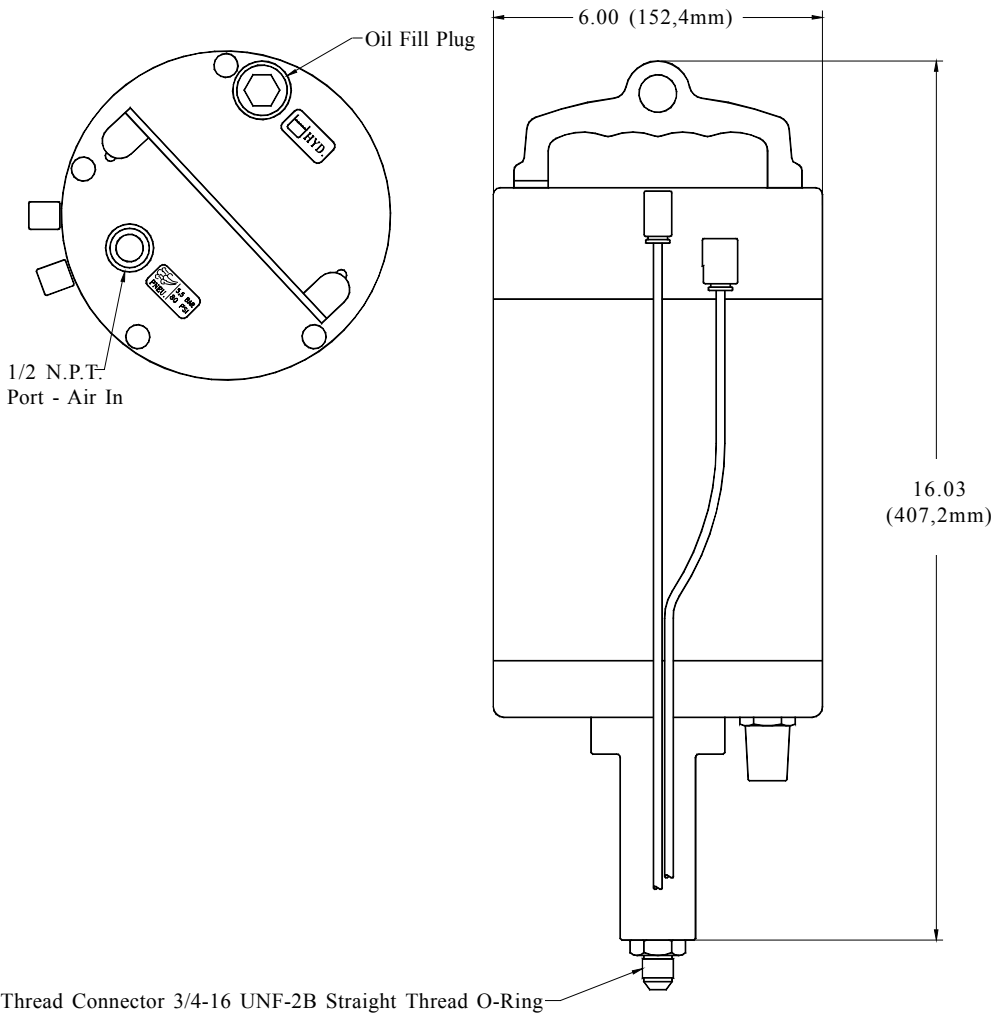
Recommended Oil: Mobil DTE 24 to DTE 26
(or any non-foaming oil)

Use with BTM standard 2 Meter (80") Hose assembly No. 711100B
or optional 3 Meter (120") hose assembly No. 711100C.

Assembly No. 711100A



Lit-L-Loc booster, gun and hose



1/2 N.P.T.
Port - Air In

Oil Fill Plug

6.00 (152,4mm)

16.03
(407,2mm)

Straight Thread Connector 3/4-16 UNF-2B Straight Thread O-Ring Port