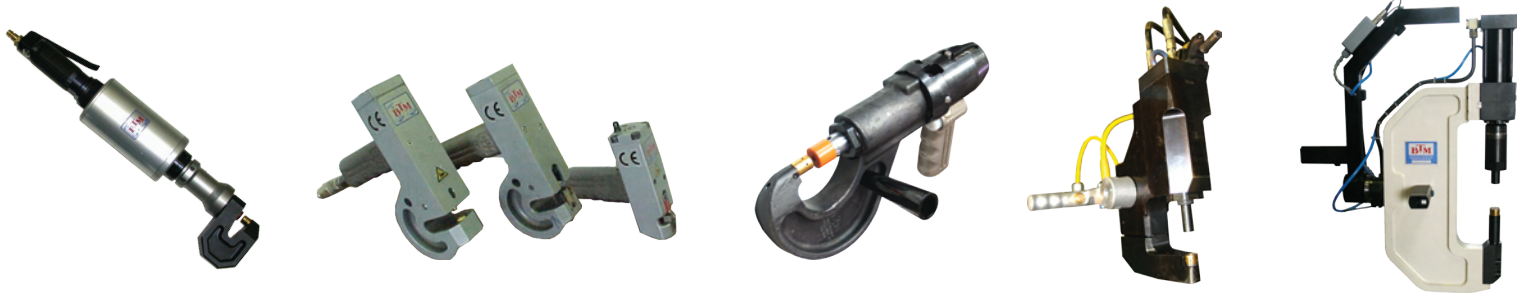


Hand Held **Tog-L-Loc**[®] Units

Self-Contained, Air/Oil, and Hydraulic units for clinching sheet metal.



An economical solution to Tog-L-Loc[®] sheet metal assemblies

Well-suited for low volume production and/or prototyping

Can be set up to join one metal thickness, or a range

BTM[®]
CORPORATION

www.BTMcorp.com

810-364-4567

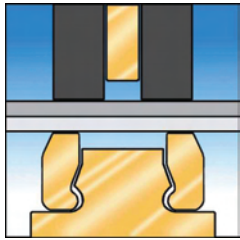


INTRODUCTION

BTM's patented Tog-L-Loc® sheet metal joining system is the simple solution for fastening plain or coated sheet metals. Tog-L-Loc® forms a strong, leakproof 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.

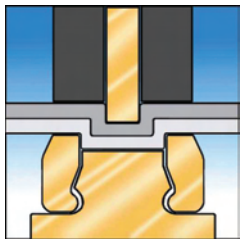
Available in a range of sizes and styles, BTM's easy to use hand held Tog-L-Loc® systems are an economical approach to fastening sheet metal assemblies. Standard units include Self-contained, Air/Oil, and Hydraulic units.

TOG-L-LOC® PROCESS



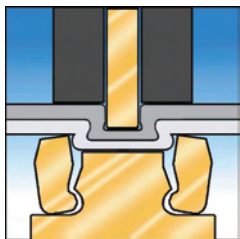
The first step in the Tog-L-Loc® process involves clamping of the material with a punch side stripper.

CLAMPS



Next, the punch draws the material into the die.

DRAWS



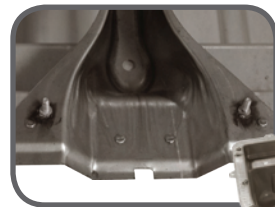
As the material flows into the die, the die blades expand, allowing the metal to flow into a strong circular interlock.

LOCKS

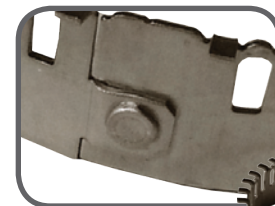
A few examples of parts clinched using the Tog-L-Loc® sheet metal joining system.



Aluminized Steel
Exhaust Shield



Laminated
Quiet Steel Component





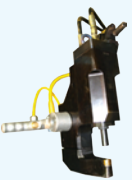



Garbage Disposal
Component



Pre-Painted Cabinet

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UNIT FEATURE COMPARISON

Self-Contained Units (Internal Air/Oil Power Source)



UniClinch Unit (p. 6-7)



UniClinch Crocodile Unit (p. 8-9)

Air/Oil Units (Uses Remote Booster)



Lit-L-Loc Units (p.10-11)

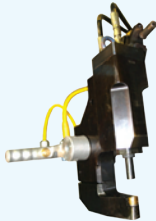


Bayonet Unit (p. 12-13)



Adaptable Bayonet Unit (p. 14-15)

Hydraulic Units (Uses Remote Hydraulic Pump)



7006 Units (p. 17-19)



Fully Adaptable Unit (p. 22-23)

		Unit Weight	Force Output	Opening	Stroke	
Self-Contained	UniClinch Unit	With Anvil "A" = 2.85kg [6.28 lbs] "BA" = 3.05kg [6.72 lbs] "BS" = 4.2kg [9.26 lbs] "BL" = 4.05kg [8.93 lbs]	34 kN [3.82 Tons]	6.4mm [.25"]	7.5mm [.30"]	
	UniClinch Crocodile Unit	Contact BTM	34 kN [3.82 Tons]	6.4mm [.25"]	10mm [.39"]	
Air/Oil	Lit-L-Loc Units	Standard = 3.0kg [6.7 lbs] Deep Throat #1 = 4.6 kg [10 lbs] Deep Throat #2 = 10.6 kg [23.4 lbs]	26.7 kN [3 Tons]	6.4mm [.25"]	9.6mm [.38"]	
	Bayonet Unit	6 kg [13.2 lbs]	26.7 kN [3 Tons]	Unlocked: 37.8mm [1.5"] Locked: 6mm [.24"]	9.6mm [.38"]	
	Adaptable Bayonet Unit	Per Application	26.7 kN [3 Tons]	Unlocked: 37.8mm [1.5"] Locked: 6mm [.24"]	9.6mm [.38"]	
Hydraulic	7006 Unit	10.4 kg [23 lbs]	35 kN [3.9 Tons]	"M" Anvil: 33.5mm [1.32"] "N" Anvil: 29.8mm [1.17"]	"M" Anvil: 35.6mm [1.40"] "N" Anvil: 32.0mm [1.26"] Peck: 6mm [.25"]	
	7006 Heavy Duty Unit	w/ "A" Anvil: 22.7 kg [50 lbs] w/ "B" Anvil: 23.8 kg [52.5 lbs]	54.6 kN [6.1 Tons]	33.8mm [1.33"]	35.0mm [1.38"] Peck: 6mm [.25"]	
	Fully Adaptable Unit	Per Application	Per Application	Per Application	Per Application	

POWER UNITS

Air/Oil Booster			
Booster Ratio		61:1	
Force Output (approx.)		3 tons @ 80 PSI air input	
Weight (without hose)		18 lbs [8.2kg]	
Recommended Oil		Mobil DTE -24 to DTE -26	
Power Ratio			
Air Pressure In		Hyd. Pressure Out	
PSI	BAR	PSI	BAR
40	2.8	2440	168
50	3.4	3050	210
60	4.1	3660	252
70	4.8	4270	294
80	5.5	4880	336
90	6.2	5490	379



See p. 16 for more information.

Hydraulic Pump (HydroPak 1)	
Electrical Supply: 115 volt 60 HZ single phase 20 amp <i>Contact BTM Corporation if a larger supply is required.</i>	
Power Consumption	2300 watts
Maximum Pressure	2800 PSI [193 BAR]
Maximum Working Pressure	2500 PSI [160 BAR]
Tank Capacity	15 Gallons [56.8 Liters]
Recommended Oil	Mobil DTE -24
Weight Without Oil	267 lbs. [121 kg]
Dimensions	
20.5" x 17" x 48" [53cm x 44cm x 123cm]	



See p. 21 for more information.

Throat Depth	Min. Flange Size	Operating Pressure	Cycle Time	Combined Material Max.
Anvil "A" = 13.0mm [.51"] Anvil "B" = 38.0mm [1.50"] Anvil "BL" = 38.0mm [1.50"]	3.0 Tog-L-Loc = 9.4mm [.39"] 4.6 Tog-L-Loc = 12.7mm [.53"]	6 BAR [87 PSI]	1 sec.	3.0mm [.12"]
28.8mm [1.13"]	3.8 Tog-L-Loc = 11.3mm [.45"] 4.6 Tog-L-Loc = 12.7mm [.53"]	6 BAR [87 PSI]	1.5 sec.	2.0mm [.08"]
Standard = 7.0mm [.28"] Deep Throat #1 = 38.1mm [1.50"] Deep Throat #2 = 76.2mm [3.00"]	3.0 Tog-L-Loc = 8.8mm [.35"] 4.6 Tog-L-Loc = 10.4mm [.41"]	See p. 10	1 sec.	2.0mm [.08"]
50mm [2.00"]	14.8mm [.58"]	5.5 BAR [80 PSI]	1 sec.	3.0mm [.12"]
Per Application	14.8mm [.58"]	5.5 BAR [80 PSI]	1 sec.	3.0mm [.12"]
50mm [1.97"]	3.0 Tog-L-Loc = 11.1mm [.44"] 4.6 Tog-L-Loc = 14.8mm [.58"]	175 BAR [2500 PSI]	2 sec.	4.0mm [.160"]
75mm [2.95"]	15.8mm [.62"]	175 BAR [2500 PSI]	2 sec.	4.0mm [.160"]
Per Application	Per Application	Per Application	—	4.0mm [.160"]





Self-Contained Units (No external Booster or Pump required)

UNICLINCH UNIT

The UniCinch unit is a self-contained air hydraulic clinch joining tool. The design allows the user to work using rapid strokes and considerable force. Tog-L-Loc® can be used for sheet metal up to 2 x 1.5 mm thick. The tool is both light-weight and well-balanced to minimize the strain on the user. The air hydraulics also mean that the tool runs silently and is completely vibration-free. The tool has few moving parts and has an extremely high level of operational reliability.



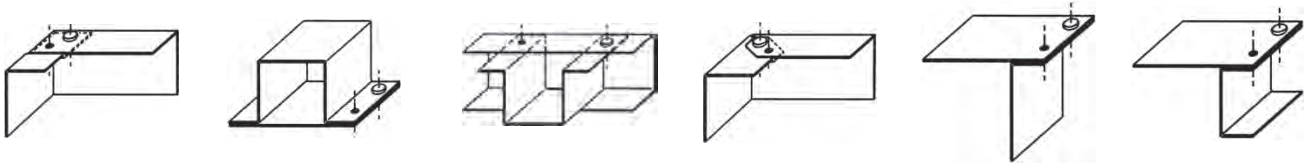
UniCinch units may be suitable for your application if:

- An edge of a part is being joined.
- Rapid strokes are required.
- A light weight and well-balanced tool is required.
- A high degree of mobility is required

Tooling Compatibility		
Tool Size	Tog-L-Loc®	
	3.0	4.6

Max. Combined Material Thickness*
3mm [.12"]
<small>*Values based on Mild Steel. Contact BTM for more info.</small>

Typical cross sections joined with a UniCinch Unit:



ORDERING INFORMATION

It is recommended that you contact a BTM sales engineer prior to purchasing a handheld unit to determine the optimal Tog-L-Loc® tooling configuration for your application.

Complete Unit

Individual Unit

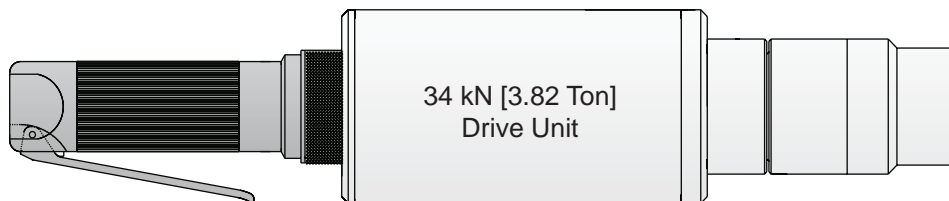
Contact BTM.



STANDARD UNICLINCH UNIT

Unit Specifications	
Opening	6.4mm [.25"]
Stroke	7.5mm [.30"]
Throat Depth	see anvils
Trigger Type	Single
Min. Flange Size	3.0 Tooling: 9.8mm [.39"] 4.6 Tooling: 14.8mm [.58"]
Operating Pressure	6 BAR [87 PSI]
Cycle Time	1 sec.

3.82 Ton (34 kN) Drive Unit	
Drive Unit Weight	2.4 kg [5.29 lbs]
Force Output	28 kN [2.8 Tons]



STANDARD UNICLINCH ANVILS

Anvil "A"	
Material	Aluminum
Joint Size	3.0
Weight	.45kg [1lb]

Anvil "B" (BA & BS)	
Material	BA = Aluminum BS = Steel
Joint Size	BA = 3.0, BS = 3.0/4.6
Weight	BA = .65kg [1.43lb] BS = 1.8kg [3.97lb]

Anvil "BL"	
Material	Steel
Joint Size	3.0
Weight	1.65kg [3.64lb]



UNICLINCH CROCODILE UNIT

The Crocodile Unit provides access to standing flanges on larger areas by mounting the Tog-L-Loc® tooling away from the drive cylinder. The unit also provides a more ergonomically correct manual positioning of the tool to the joint location on the work piece in certain conditions. This unit facilitates faster production through better vision of the joint location and ease of positioning.

Crocodile units may be suitable for your application if:

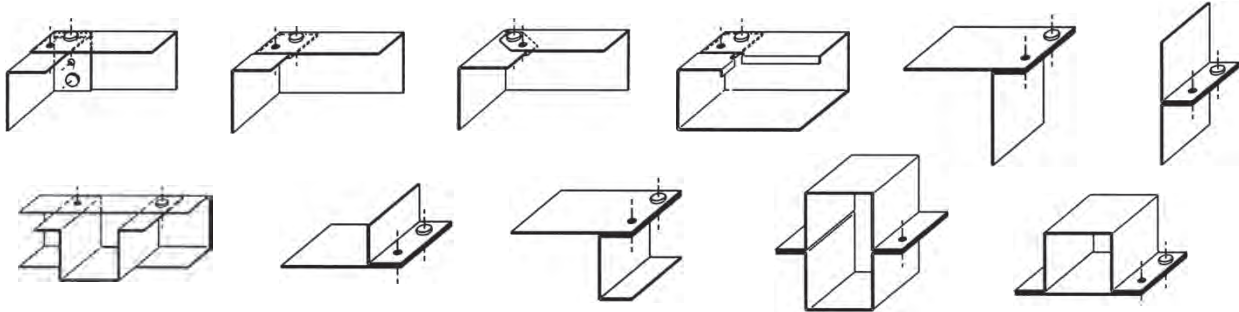
- A standing flange is in the middle of a panel.
- Ergonomic operation of the unit is a requirement.
- Better vision of the joint location is required.



Tooling Compatibility	
	Tog-L-Loc®
Tool Size	3.8

Max. Combined Material Thickness*
2mm [.08"]
<small>*Values based on Mild Steel. Contact BTM for more info.</small>

Typical cross sections joined with a Crocodile Unit:



ORDERING INFORMATION

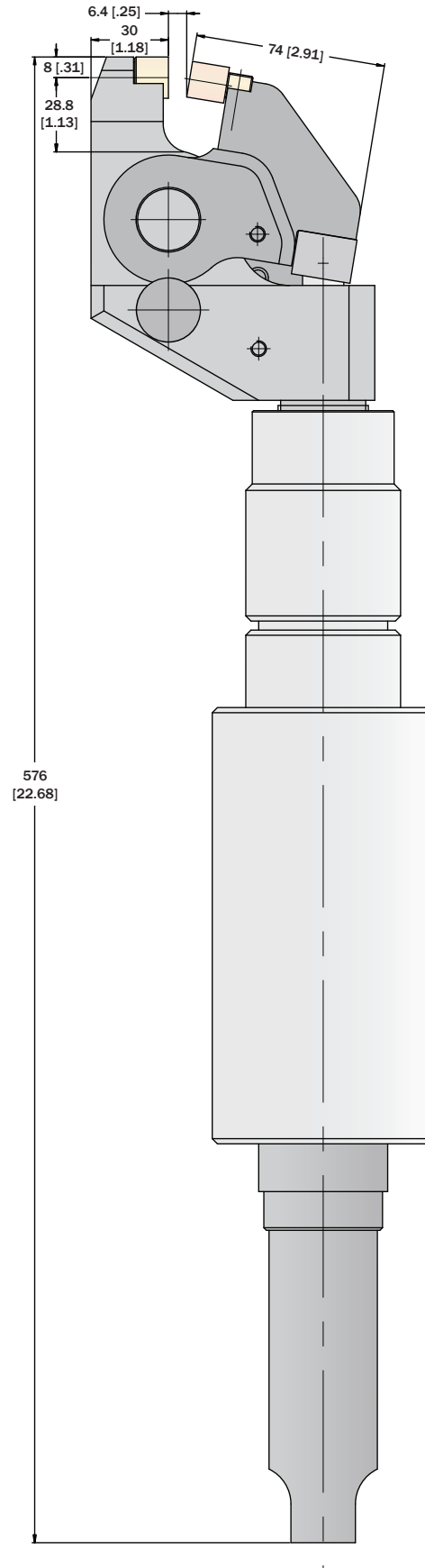
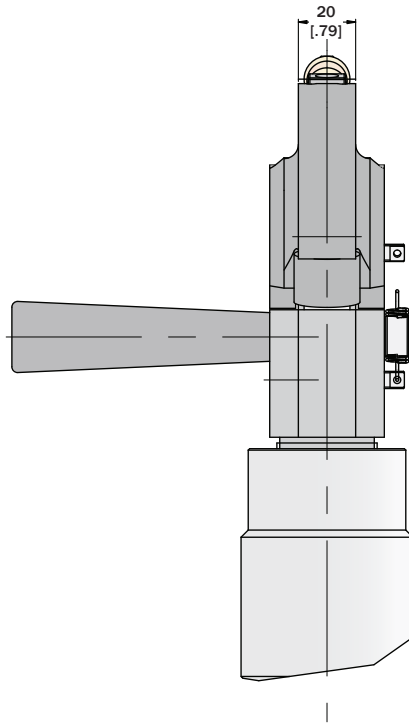
It is recommended that you contact a BTM sales engineer prior to purchasing a handheld unit to determine the optimal Tog-L-Loc® tooling configuration for your application.

Complete Unit

Individual Unit

BTM No. **PD242300A**





Unit Specifications	
Unit Weight	Contact BTM
Force Output	28 kN [2.8 Tons]
Opening	6.4mm [.25"]
Stroke	10mm [.39"]
Throat Depth	28.8mm [1.13"]
Trigger Type	Single
Min. Flange Size	11.3mm [.45"]
Operating Pressure	6 BAR [87 PSI]
Cycle Time	1.5 second

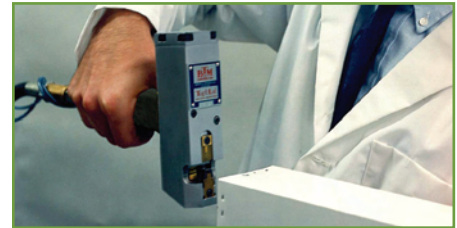


LIT-L-LOC UNITS

BTM's Lit-L-Loc units are an economical approach to fastening sheet metal assemblies with a small upstanding flange. BTM can configure Lit-L-Loc units to join a range of metal thicknesses or optimize them for a specific thickness. For increased flexibility, the punch and die can be reversed in these units, allowing the Tog-L-Loc® "button" to form in either direction. Lit-L-Loc units can be ordered individually, or as part of a complete kit which includes a pressure booster which converts shop air into hydraulic forces, and a 2 meter [80 inch] hose assembly.

Lit-L-Loc may be suitable for your application if:

- You are trying to join an upstanding flange.
- You are doing low production or prototyping.
- You are looking for an economical sheet metal joining solution.



Tooling Compatibility

	Tog-L-Loc®		Lance-N-Loc™	
Tool Size	3.0	4.6	3.0	4.6
Max A.D.	.035	.040	.035	.040

A.D. = Anvil Depth

Max. Combined Material Thickness*

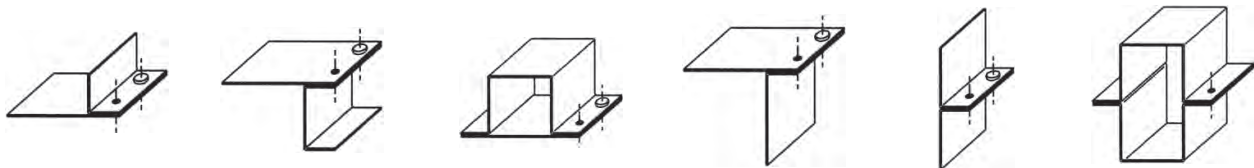
2mm [.08"]

*Values based on Mild Steel. Contact BTM for more info.

Operating Pressure w/ Booster 711100E

Tool Size	3.0	4.6
Air Input	2.8-4.1 BAR [40-60 PSI]	4.1-6.2 BAR [60-90 PSI]

Typical cross sections joined with Lit-L-Loc Units:



ORDERING INFORMATION

It is recommended that you contact a BTM sales engineer prior to purchasing a handheld unit to determine the optimal Tog-L-Loc® tooling configuration for your application.

Individual Components (sold separately)

Individual Unit

See p. 11 for BTM No.



Booster Option (see p. 16)

BTM No. 711100E



Hose Options (see p. 16)

-Standard 2 Meter [80"]: BTM No. 711100B

-Optional 3 Meter [120"]: BTM No. 711100C



Complete Kit

Complete Standard Kit

See p.11 for BTM No.

A Complete Standard Kit includes the following:



One (1)
Lit-L-Loc Unit

+



One (1)
Air/Oil Booster

+

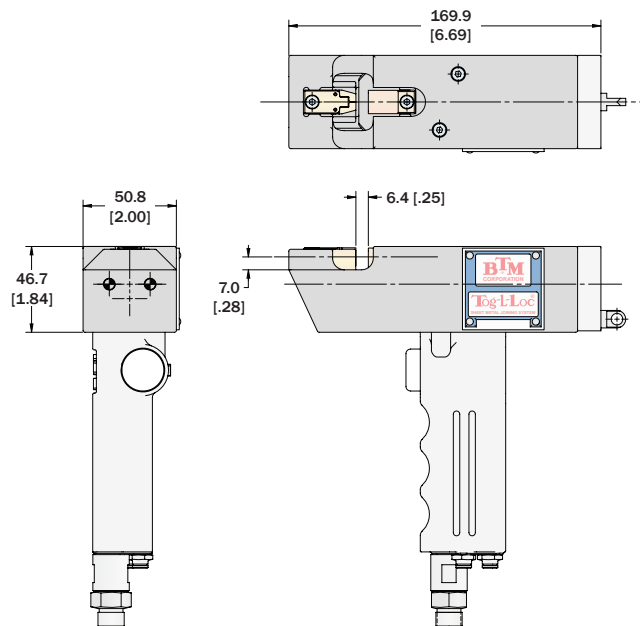


One (1)
2 meter [80"]
Hose Assembly

STANDARD LIT-L-LOC UNIT

Unit Specifications	
Unit Weight	3.0 kg [6.7 lbs]
Force Output	26.7 kN [3 Tons]
Opening	6.4mm [.25"]
Stroke	9.6mm [.38"]
Throat Depth	7.0mm [.28"]
Trigger Type	Single
Min. Flange Size	3.0 Tooling: 8.8mm [.35"] 4.6 Tooling: 10.4mm [.41"]
Operating Pressure	See p. 10
Cycle Time	1 sec.

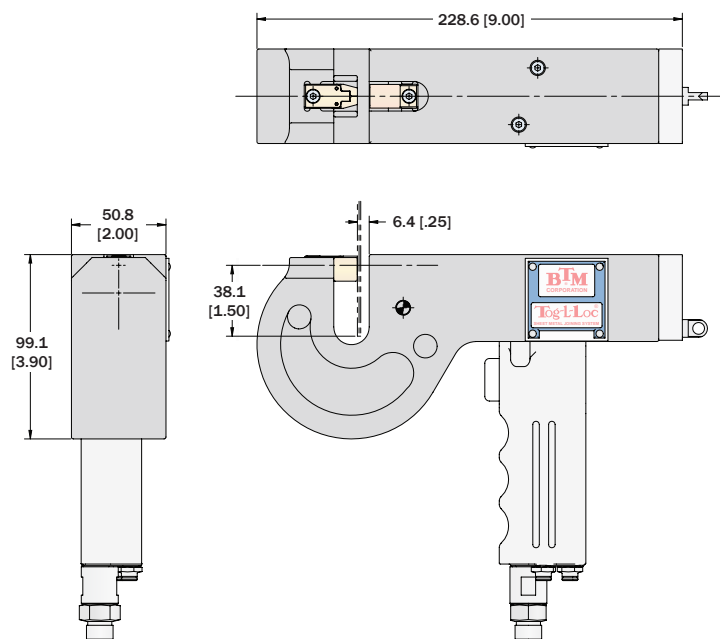
Ordering Information	
Unit Only	PD224500A
Complete Kit	PD227100A



DEEP THROAT LIT-L-LOC UNITS

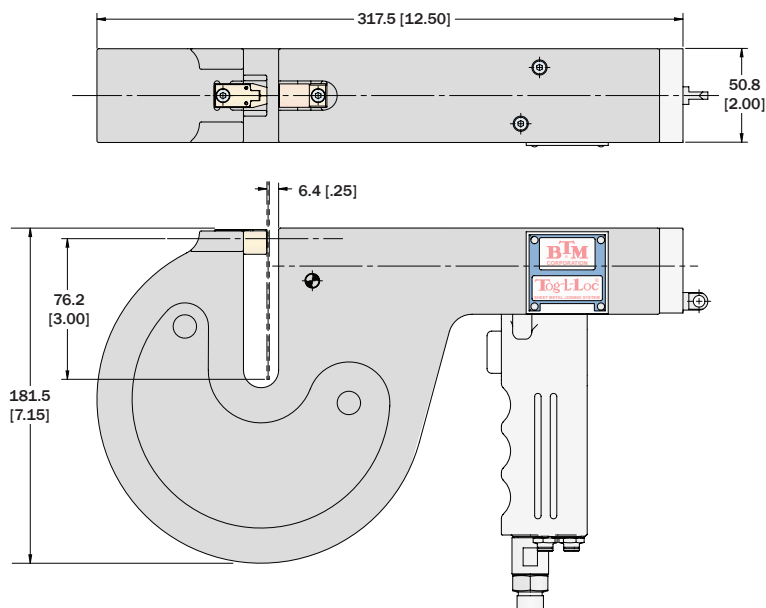
Unit Specifications	
Unit Weight	4.6 kg [10 lbs]
Force Output	26.7 kN [3 Tons]
Opening	6.4mm [.25"]
Stroke	9.6mm [.38"]
Throat Depth	38.1mm [1.50"]
Trigger Type	Single
Min. Flange Size	3.0 Tooling: 8.8mm [.35"] 4.6 Tooling: 10.4mm [.41"]
Operating Pressure	See p. 10
Cycle Time	1 sec.

Ordering Information	
Unit Only	PD224600A
Complete Kit	PD227200A



Unit Specifications	
Unit Weight	10.6 kg [23.4 lbs]
Force Output	26.7 kN [3 Tons]
Opening	6.4mm [.25"]
Stroke	9.6mm [.38"]
Throat Depth	76.2mm [3.00"]
Trigger Type	Single
Min. Flange Size	3.0 Tooling: 8.8mm [.35"] 4.6 Tooling: 10.4mm [.41"]
Operating Pressure	See p. 10
Cycle Time	1 sec.

Ordering Information	
Unit Only	PD224700A
Complete Kit	PD227300A





BAYONET UNIT

BTM's bayonet units operate on compressed air, are very robust, and feature a high degree of maneuverability. The unit's name is derived from its handy bayonet action which allows an operator to unlock the unit and expand the opening to 37.8mm [1.5"] in order to clear a lip on a part. The unit will not operate unless it is in the closed (working) position, which maintains an OSHA compliant 6.4mm [.25"] opening for operator safety. BTM can configure the unit to join a range of thicknesses or optimize it for a specific metal thickness. For increased flexibility, the punch and die are reversible within the unit allowing the Tog-L-Loc® "button" to form in either direction. Units can be ordered individually or as part of a complete kit which includes a booster, and 2 meter [80"] hose assembly.



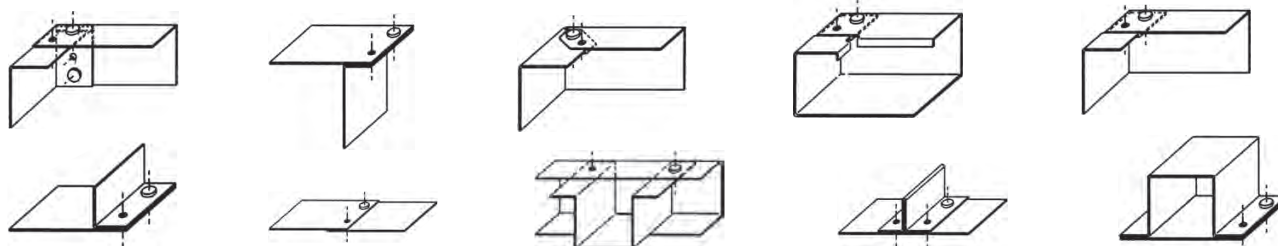
Bayonet units may be suitable for your application if:

- You are looking for an economical sheet metal joining solution.
- You require more throat depth than Lit-L-Loc units can offer.

Tooling Compatibility	
	Tog-L-Loc®
Tool Size	4.6

Max. Combined Material Thickness*	
	3mm [.12"]
*Values based on Mild Steel. Contact BTM for more info.	

Typical cross sections joined with a Bayonet Unit:



ORDERING INFORMATION

It is recommended that you contact a BTM sales engineer prior to purchasing a handheld unit to determine the optimal Tog-L-Loc® tooling configuration for your application.

Individual Components (sold separately)

Individual Unit

BTM No. **711200A**



Booster Option (see p. 16)

BTM No. **711100E**



Hose Options (see p. 16)

-Standard 2 Meter [80"]: BTM No. **711100B**

-Optional 3 Meter [120"]: BTM No. **711100C**



Complete Kit

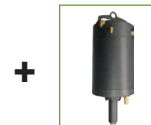
Complete Standard Kit

BTM No. **711200C**

A Complete Standard Kit includes the following:



One (1)
Bayonet Unit

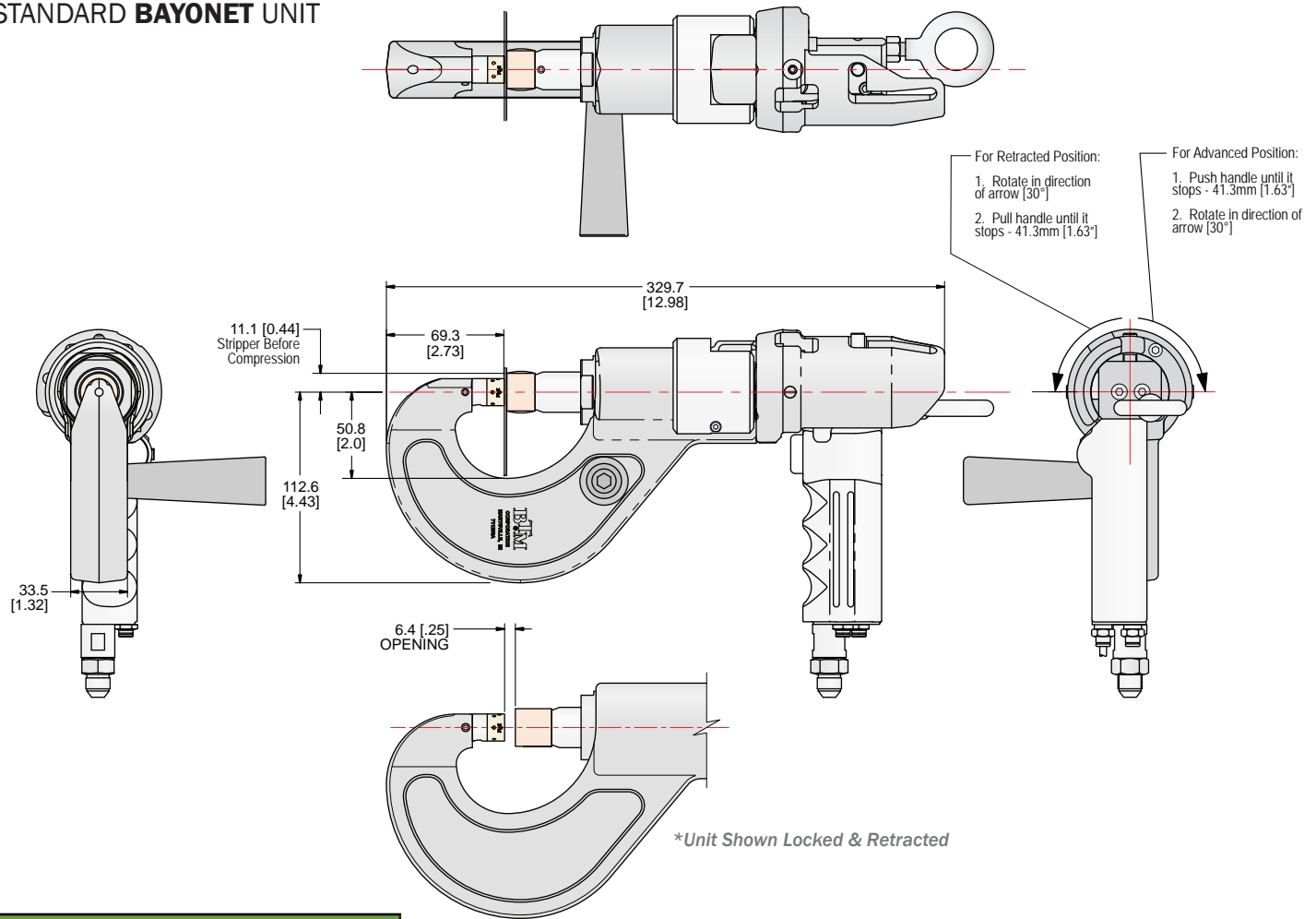


One (1)
Air/Oil Booster



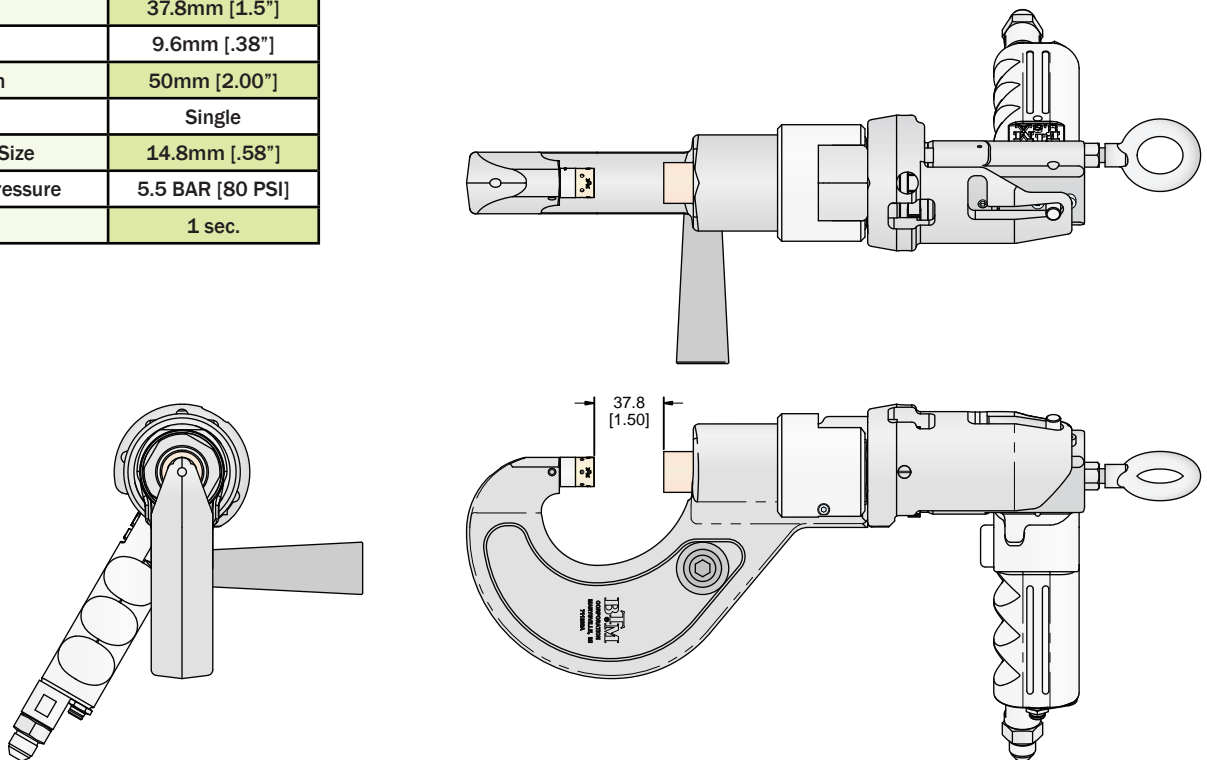
One (1)
2 meter [80"]
Hose Assembly

STANDARD BAYONET UNIT



Unit Specifications	
Unit Weight	6 kg [13.2 lbs]
Force Output	26.7 kN [3 Tons]
Opening	6.4mm [.25"] / 37.8mm [1.5"]
Stroke	9.6mm [.38"]
Throat Depth	50mm [2.00"]
Trigger Type	Single
Min. Flange Size	14.8mm [.58"]
Operating Pressure	5.5 BAR [80 PSI]
Cycle Time	1 sec.

BAYONET UNIT IN THE OPEN (UNLOCKED) POSITION



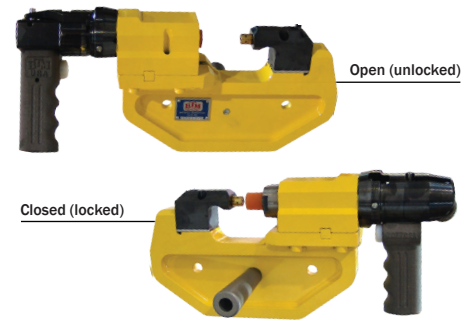


ADAPTABLE BAYONET UNIT

BTM's bayonet units operate on compressed air, are very robust, and feature a high degree of maneuverability. The unit's name is derived from it's handy bayonet action which allows an operator to unlock the unit and expand the opening to 37.8mm [1.5"] in order to clear a lip on a part. The unit will not operate unless it is in the closed (working) position, which maintains an OSHA complaint 6.4mm [.25"] opening for operator safety. Like the standard bayonet unit, BTM can configure the unit to join a range of thicknesses or optimize it for a specific metal thickness, and for increased flexibility, the punch and die are reversible within the unit allowing the Tog-L-Loc® "button" to form in either direction. The adaptable bayonet unit allows the customer to specify the desired throat depth for the unit when ordering.

Adaptable Bayonet units may be suitable for your application if:

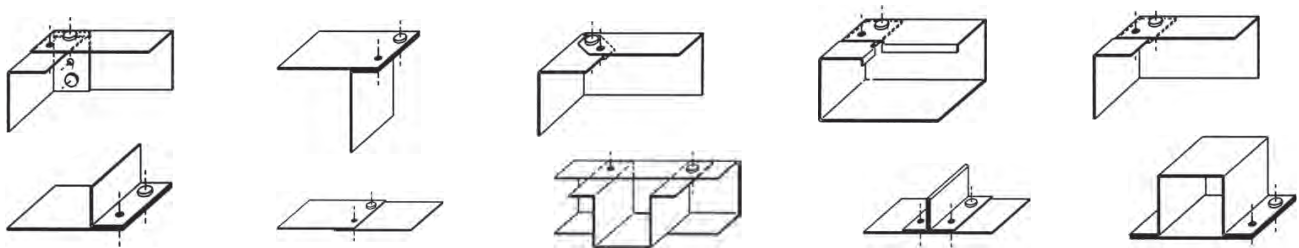
- Standard units cannot clear the part.
- A joint is required in a location inaccessible by standard units.



Tooling Compatibility	
	Tog-L-Loc®
Tool Size	4.6

Max. Combined Material Thickness*
3mm [.12"]
<small>*Values based on Mild Steel. Contact BTM for more info.</small>

Typical cross sections joined with an Adaptable Bayonet Unit:



ORDERING INFORMATION

Since Adaptable Bayonet units offer limitless configuration possibilities, you must contact BTM Corporation to place an order. A Sales Engineer will assist you in configuring an adaptable bayonet unit for your application.

Individual Components (sold separately)

Individual Unit

Contact BTM



Booster Option (see p. 16)

BTM No. 711100E



Hose Options (see p. 16)

-Standard 2 Meter [80"]: BTM No. 711100B

-Optional 3 Meter [120"]: BTM No. 711100C

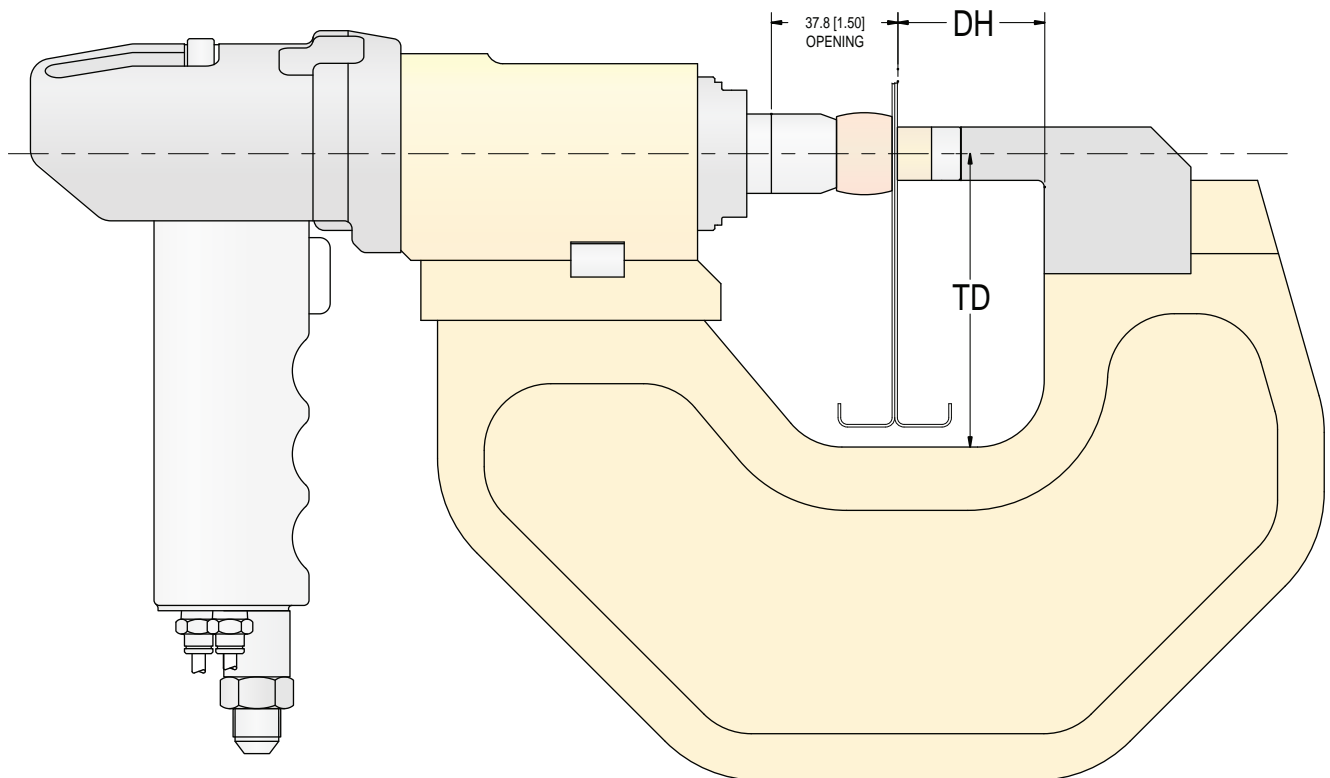


ADAPTABLE **BAYONET** UNIT

Unit Specifications	
Unit Weight	Per Application
Force Output	26.7 kN [3 Tons]
Opening	6.4 mm [.25"] / 37.8 mm [1.5"]
Stroke	9.6 mm [.38"]
Throat Depth	"A"
Trigger Type	Single
Min. Flange Size	14.8 mm [.58"]
Pressure Required to Operate	5.5 BAR [80 PSI]
Cycle Time	1 sec.

You can configure an adaptable bayonet unit to suit the accessibility requirements of your parts. The drawing below indicates the basic dimensions required. There are limitless configuration possibilities. Please provide a copy of this catalog page with the dimensions you require and we will provide you with a price quote. You may also provide a drawing of the parts you want to join indicating the joint locations.

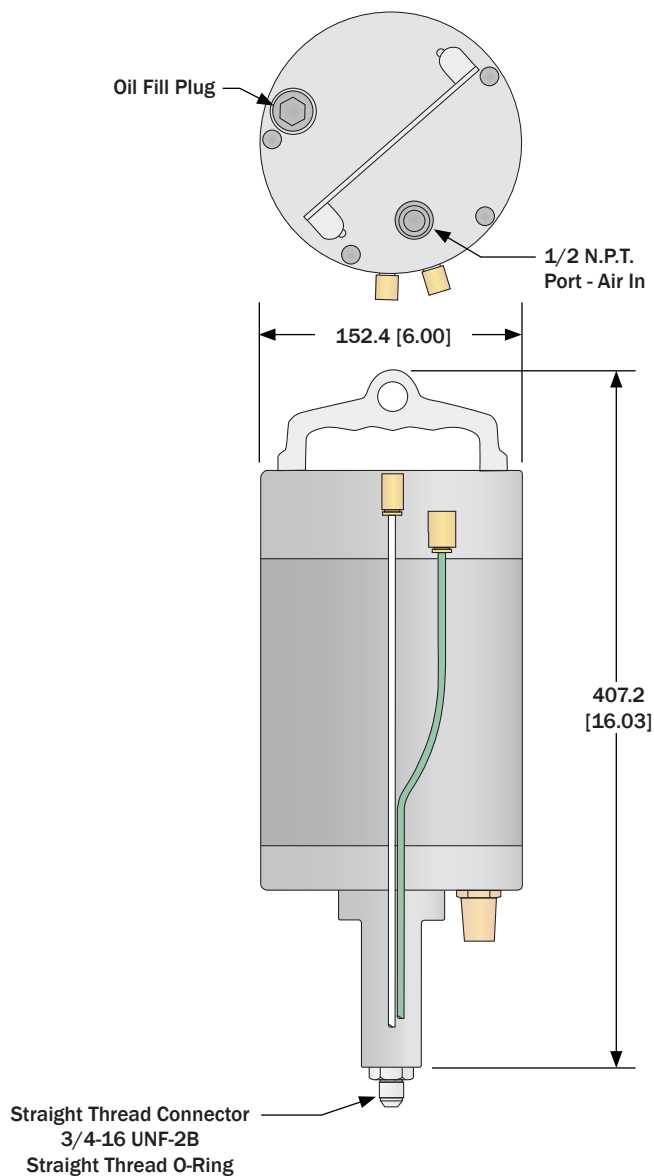
Adaptable Bayonet Configuration	
Throat Depth (TD) =	_____
Die Height (DH) =	_____
(Standard: 40, 60, 80, or 100mm)	





Air/Oil Booster			
Booster Ratio		61:1	
Force Output (approx.)		3 tons @ 80 PSI air input	
Weight (without hose)		8.2kg [18 lbs]	
Recommended Oil		Mobil DTE -24 to DTE -26	
Power Ratio			
Air Pressure In		Hyd. Pressure Out	
PSI	BAR	PSI	BAR
40	2.8	2440	168
50	3.4	3050	210
60	4.1	3660	252
70	4.8	4270	294
80	5.5	4880	336
90	6.2	5490	379

Ordering Information	
Standard Booster: BTM No. 711100E <i>Does NOT Include Hose Assembly</i>	
Replacement Seal Kit: BTM No. 711100F	



AIR/OIL BOOSTER HOSE ASSEMBLY

Air/Oil Booster Hose Assemblies include a supply tube, a signal tube, and a hydraulic hose wrapped in heat shrink tubing.

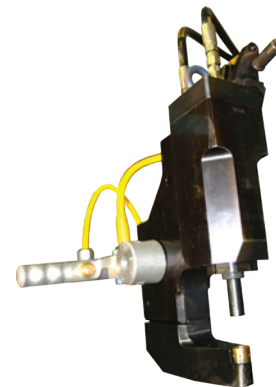
Ordering Information	
2 Meter [80 Inch] Hose: BTM No. 711100B	
3 Meter [120 Inch] Hose: BTM No. 711100C	





7006 HYDRAULIC UNITS

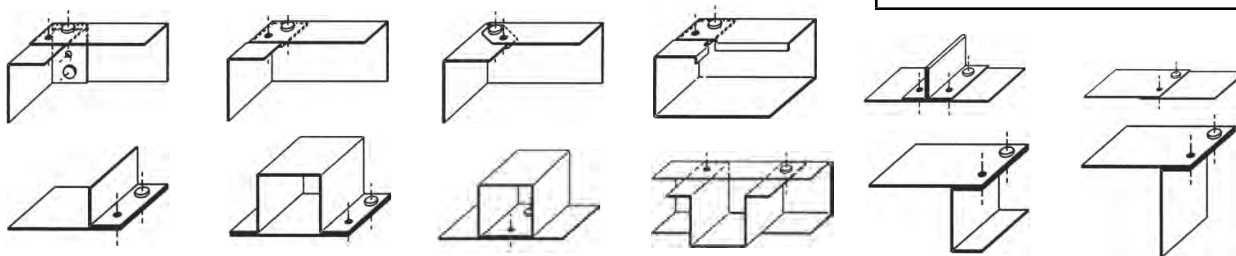
These hydraulic hand operated units are most commonly used for prototyping and small production runs. There are two basic units in the 7006 style, a standard unit which can utilize 3.0 or 4.6 size Tog-L-Loc® tooling, or a heavy duty unit which can utilize 5.5 Tog-L-Loc® tooling. Each unit is available in one of two (2) different anvil styles, the style of anvil required depends on the design of part being joined. A hydraulic pump and a spring or air balancer (sold separately) is required to operate the unit. For increased flexibility, an optional gyro ring can be purchased from BTM which will allow the unit to rotate 360° on 3 axes.



7006 units may be suitable if your application requires:

- A compact unit for easier operator control of manual positioning.
- More force than a pneumo-hydraulic or self-contained unit can offer.

Typical cross sections joined with an Adaptable Bayonet Unit:



Standard 7006 Tooling Compatibility

Tool Size	Tog-L-Loc®	
	3.0	4.6

Heavy Duty 7006 Tooling Compatibility

Tool Size	Tog-L-Loc®	
	5.5	

Max. Combined Material Thickness*

4mm [.16"]

*Values based on Mild Steel. Contact BTM for more info.

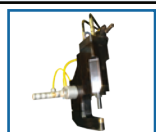
ORDERING INFORMATION

It is recommended that you contact a BTM sales engineer prior to purchasing a handheld unit to determine the optimal Tog-L-Loc® tooling configuration for your application.

Individual Components (sold separately)

Unit Only

- Standard Unit: [See p. 18](#)
- Heavy Duty Unit: [See p. 19](#)



Hydraulic Pump Option (see p. 21)

BTM No. [3001800A](#)



Hose Options (see p. 21)

- 3.7 Meter [12 foot]: BTM No. [015444A](#)
- 6.1 Meter [20 foot]: BTM No. [030542A](#)
- 7.3 Meter [24 foot]: BTM No. [030543A](#)



Optional Accessories

Gyro Ring [Gimbal Mount] (see p. 20)

- 7006 Unit: BTM No. [700600G](#)
- Heavy Duty 7006: BTM No. [792100G](#)



Spring Balancer (see p. 20)

9-14 kg [20-30 lb.] Spring Balance Unit: [024049](#)
For standard 7006 unit

13-17 kg [29-37 lb.] Spring Balance Unit: [024050](#)
For standard 7006 unit + the Gyro Ring

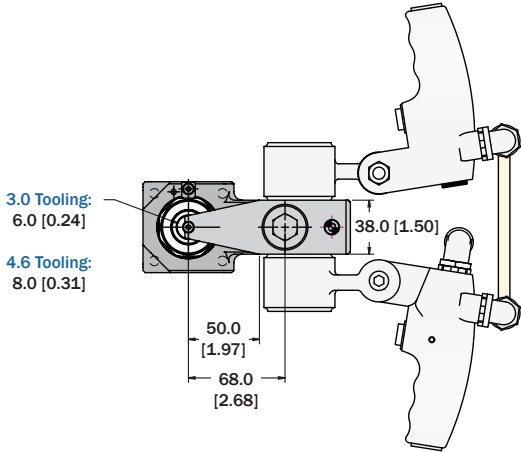
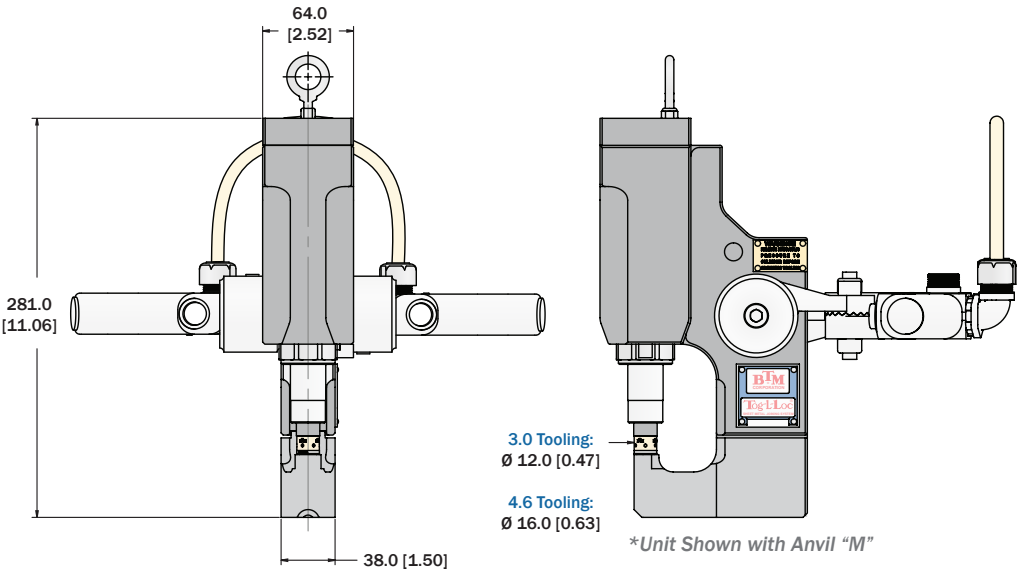
20-30 kg [44-66 lb.] Spring Balance Unit: [025900](#)
For Heavy Duty 7006 unit

30-45 kg [66-99 lb.] Spring Balance Unit: [034426](#)
For Heavy Duty 7006 unit + the Gyro Ring



7006 UNIT

Unit Specifications	
Unit Weight	10.4 kg [23 lbs]
Force Output	35 kN [3.9 Tons]
Peck Stroke	6mm [.25"]
Throat Depth	50mm [1.97"]
Trigger Type	Dual
Operating Pressure	175 BAR [2500 PSI]
Cycle Time	2 sec.
3.0 Tog-L-Loc® Tooling	
Min. Flange Size	11.1mm [.44"]
4.6 Tog-L-Loc® Tooling	
Min. Flange Size	14.8mm [.58"]



7006 UNIT ANVILS

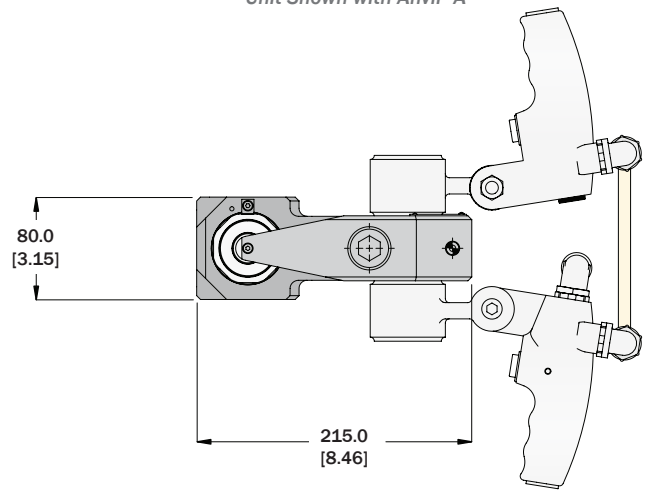
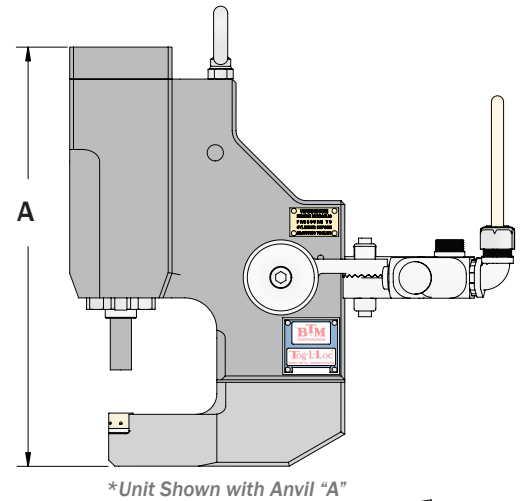
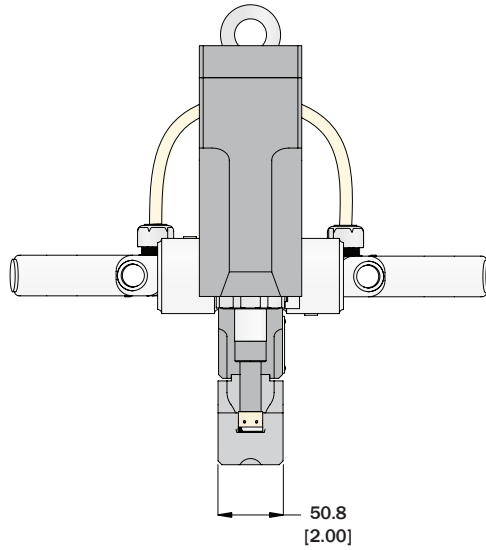
Anvil "M"	
Opening	33.5mm [1.32"]
Stroke	35.6mm [1.40"]
Ordering Information	
7006 Unit with "M" Anvil	700600M

Anvil "N"	
Opening	29.8mm [1.17"]
Stroke	32.0mm [1.26"]
Ordering Information	
7006 Unit with "N" Anvil	700600N

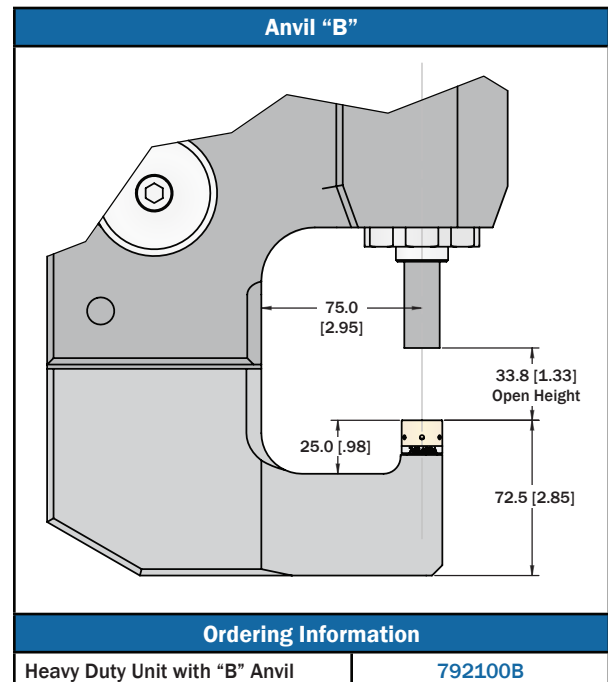
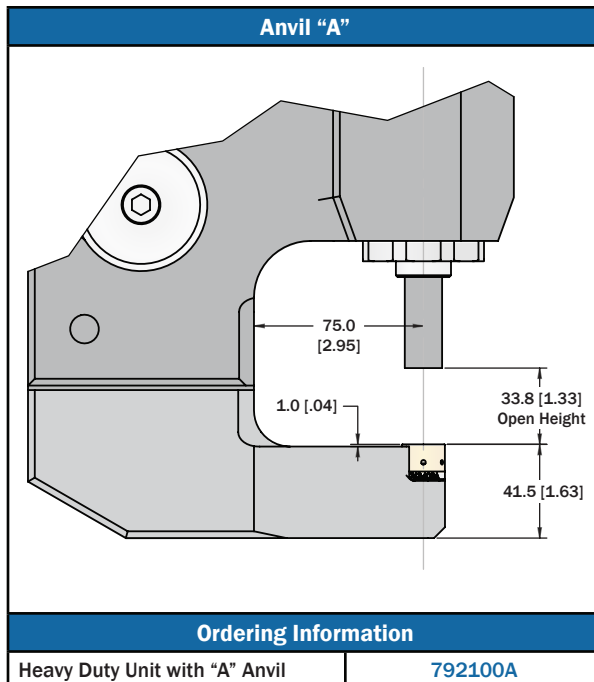
7006 “HEAVY DUTY” UNIT

Unit Specifications	
Unit Weight	w/ “A” anvil: 22.7kg [50lbs] w/ “B” anvil: 23.8kg [52.5lbs]
Force Output	54.6kN [6.1 Tons]
Opening	33.7mm [1.33”]
Stroke	35.0mm [1.38”]
Peck Stroke	6mm [.25”]
Throat Depth	75mm [2.95”]
Trigger Type	Dual
Operating Pressure	175 BAR [2500 PSI]
Cycle Time	2.5 sec.
5.5 Tog-L-Loc® Tooling	
Min. Flange Size	15.8mm [.62”]

“A”	
Anvil “A”	327.5 [12.89]
Anvil “B”	358.5 [14.11]



7006 “HEAVY DUTY” UNIT ANVILS





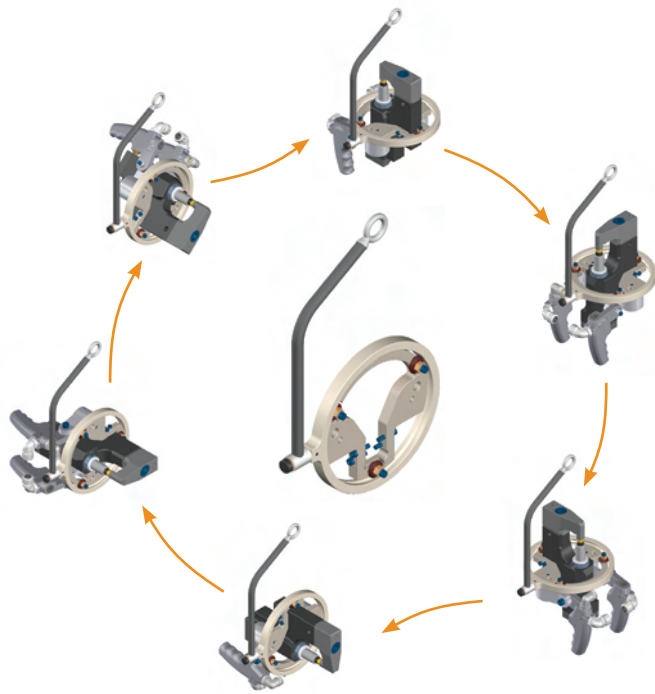
7006 UNIT ACCESSORIES

GIMBAL MOUNT

The Gimbal Mount allows the 7006 Unit (sold separately) to rotate a full 360° on three axes, offering an operator easy positioning and a high degree of flexibility when clinching hard-to-reach locations on a part.

Gimbal Mount for Standard 7006 Unit	
Unit Compatibility	700600M & 700600N
Weight (without unit)	3.3 kg [7.2 lbs]
Ordering Information	
700600G	

Gimbal Mount for Heavy Duty 7006 Unit	
Unit Compatibility	792100A & 792100B
Weight (without unit)	5.3 kg [11.8 lbs]
Ordering Information	
792100G	

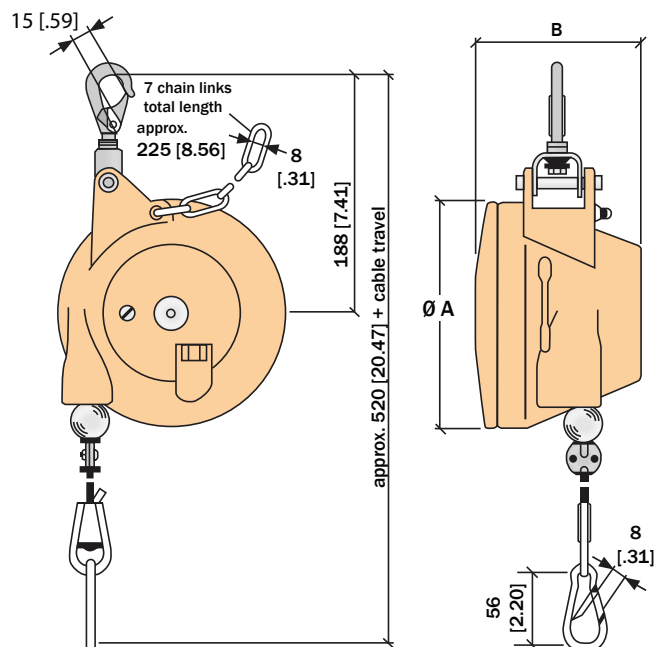


SPRING BALANCER UNIT

A spring-actuated balancer with an external adjustment to quickly and easily set the correct tension. Each balancer includes a mounting hook that rotates 360°.

Balancer	"A"	"B"
024049	178 mm [7"]	127 mm [5"]
024050	178 mm [7"]	127 mm [5"]
025900	249 mm [9.8"]	178 mm [7"]
034426	249 mm [9.8"]	178 mm [7"]

Ordering Information	
9-14 kg [20-30 lb.] Spring Balance Unit: 024049	For 700600M or 700600N unit only
13-17 kg [29-37 lb.] Spring Balance Unit: 024050	For 700600M or 700600N unit + the Gyro Ring
20-30 kg [44-66 lb.] Spring Balance Unit: 025900	For 792100A or 792100B unit only
30-45 kg [66-99 lb.] Spring Balance Unit: 034426	For 792100A or 792100B unit + the Gyro Ring





HYDROPAK1 HYDRAULIC PUMP

BTM's HydroPak1 Hydraulic Power Unit contains a tank, pump/motor, filter, and valves. The tank holds up to 56.8 Liters [15 gallons] of hydraulic oil. The pump is a 2-stage type capable of moving 9.5 LPM [2.5 GPM] at a pressure up to 172 BAR [2500 PSI] driven by a 1 HP motor. A directional valve and pressure regulator is also included.

The hydraulic pump is turned on and off from the main display. The PLC controls the hydraulic valves and has several timers that can be adjusted on the Panel View Display.

HydroPak 1 Specs	
Electrical Supply: 115 volt 60 HZ single phase 20 amp <i>Contact BTM Corporation if a larger supply is required.</i>	
Power Consumption	2300 watts
Maximum Pressure	193 BAR [2800 PSI]
Maximum Working Pressure	172 BAR [2500 PSI]
Tank Capacity	56.8 Liters [15 Gallons]
Recommended Oil	Mobil DTE -24
Weight Without Oil	121 kg [267 lbs.]

Ordering Information
HydroPak1: BTM No. 3001800A <i>Hose Assembly Not Included.</i>



HYDROPAK1 HOSE ASSEMBLIES

Ordering Information
3.7 Meter [12 Foot] Assembly: BTM No. 015444A <i>Includes Four fittings, One 12ft electrical cord, and Two 12ft hydraulic hoses</i>
6.1 Meter [20 Foot] Assembly: BTM No. 030542A <i>Includes Four fittings, One 20ft electrical cord, and Two 20ft hydraulic hoses</i>
7.3 Meter [24 Foot] Assembly: BTM No. 030543A <i>Includes Four fittings, Two 12ft electrical cords, One electrical adapter, and Two 24ft hydraulic hoses</i>



FULLY ADAPTABLE UNIT

The Fully Adaptable Unit is all about flexibility due to its customizable features. Joint size, punch and die accessibility, throat depth, opening, force requirement and ergonomics can all be adapted to your requirements to make the perfect combination for maximum productivity.



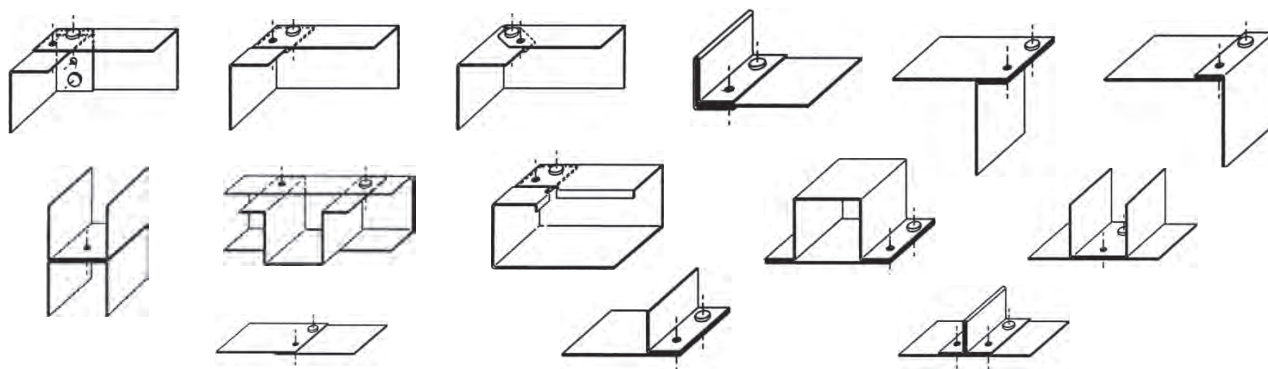
Fully Adaptable units may be suitable if your application requires:

- A high degree of flexibility and power.
- A customized solution for complicated joining locations.

Tooling Compatibility				
Tool Size	Tog-L-Loc®			
	3.0	3.8	4.6	5.5

Max. Combined Material Thickness*
4mm [.16"]
<small>*Values based on Mild Steel. Contact BTM for more info.</small>

Typical cross sections joined with a Fully Adaptable Unit:



ORDERING INFORMATION

Since Fully Adaptable Units offer limitless configuration possibilities, you must contact BTM Corporation to place an order. A Sales Engineer will assist you in configuring the unit for your application.

Individual Components (sold separately)

Unit Only
Contact BTM Corporation



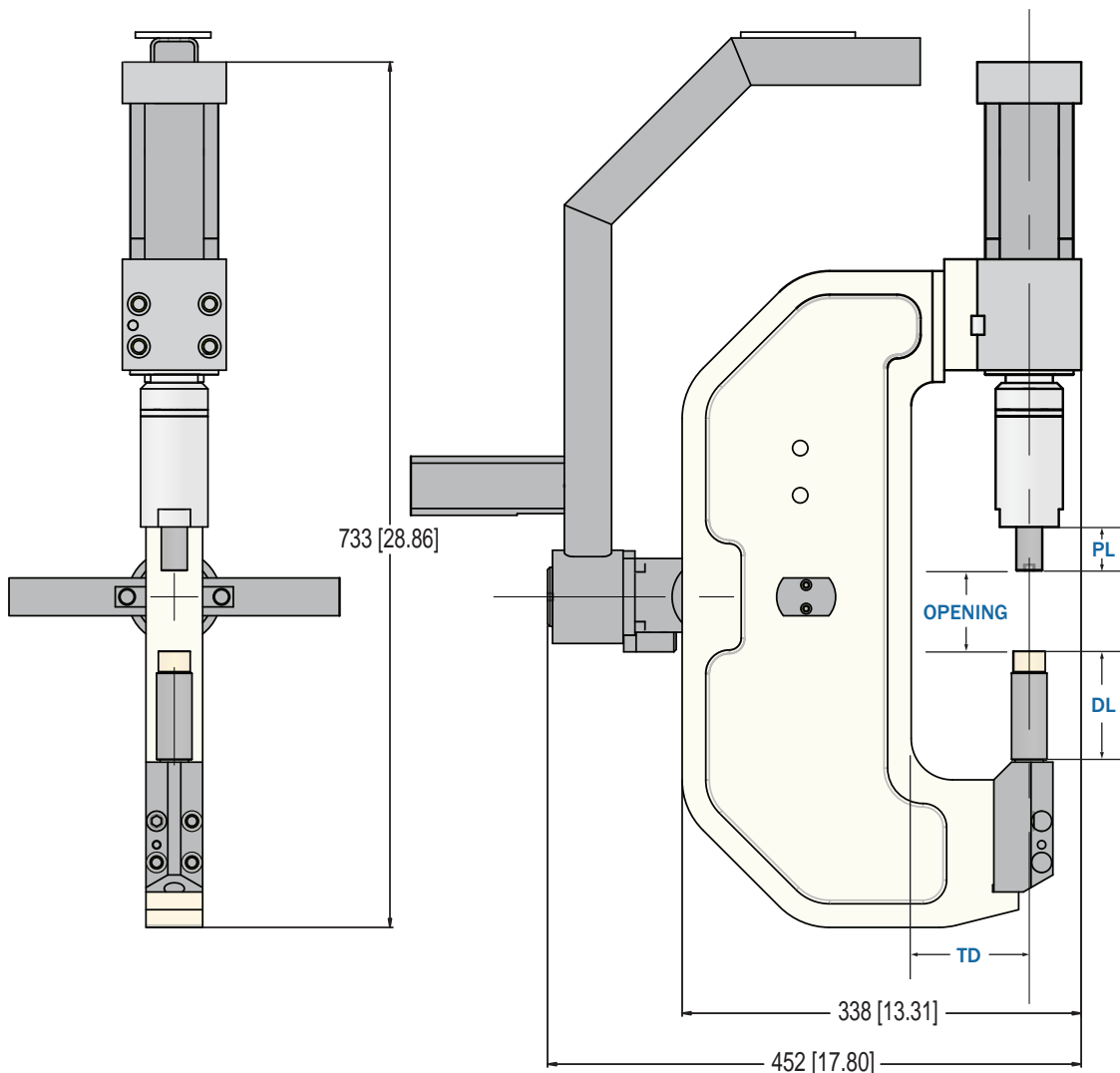
Hydraulic Pump Option
May Require Custom Pump
Contact BTM Corporation

FULLY ADAPTABLE UNIT

Unit Specifications	
Unit Weight	Per Application
Force Output	Per Application
Opening	Per Application
Peck Stroke	Per Application
Throat Depth	Per Application
Trigger Type	Per Application
Operating Pressure	Per Application
Cycle Time	Per Application
3.0 Tog-L-Loc® Tooling	
Min. Flange Size	11.1mm [.44"]
4.6 Tog-L-Loc® Tooling	
Min. Flange Size	14.8mm [.58"]

A fully adaptable unit may be configured to suit the accessibility requirements of your parts. The drawing below indicates the basic dimensions required. There are limitless configuration possibilities. Please provide a copy of this catalog page with the dimensions you require and we will provide you with a price quote. You may also provide a drawing of the parts you want to join indicating the joint locations.

Fully Adaptable Unit Configuration
Throat Depth (TD) = _____
Die Length (DL) = _____ (40mm [1.57"], 60mm [2.36"], 80mm [3.15"], or 100mm [3.94"])
Punch Length (PL) = _____ (71mm [2.80"], 80mm [3.15"], 90mm [3.54"], or 100mm [3.94"])
Opening = _____
Tool Size: 3.0, 3.8, 4.6, or 5.5
<i>Note: Unit may require a custom Hydraulic Pump. Contact BTM for more information.</i>





BTM has a wide range of products for applying Tog-L-Loc® tooling including:

Press Brakes



BTM's unitized press brake tooling is a low cost way to utilize the patented Tog-L-Loc® sheet metal joining system and is available with a wide range of throat depths. The units are set up for a specified metal combination, and are ready to install into your brake.

Die Sets



Tog-L-Loc® tooling can be inexpensively designed into single or compound motion die set packages.

Handheld Units



BTM's handheld units are an economical approach to fastening sheet metal assemblies. Pneumatic, Hydraulic, and Self-Contained Units in a variety of styles are available. The units can be set up to join a range of thicknesses or optimized for a specific metal thickness.

Special Fixtures



Manually loaded and unloaded dedicated tooling can be built for a single part or a family of parts.

Universal Presses



Universal presses are hydraulically operated presses that easily adapt to join a variety of parts.

Special Systems



Achieve faster cycle times with automatic parts handling and/or by combining processes.

Specialized Units



BTM provides pneumatic, hydraulic, air/oil, and electrically driven units with single or dual motions for both stationary and robotic applications.

For more information, or to see our full line of products, please visit:

www.BTMcorp.com