MCP-5 Manual Drive Cylinder Press

Air-Over-Oil Powered Manually Assisted Short-Stroke Press

> Ideal Press For Any Sheet Metal Fabrication Shop!

> Force Output of 5 Tons [45kN]!

> Runs on 80PSI shop air!


www.btmcomp.com
810-364-4567
SAFETY NOTE

It is the customer and/or user’s responsibility to provide proper safety controls and/or guarding when a pinch point is present.

BTM’s Manual Drive Cylinder Press offers you an affordable solution for your clinching, piercing, or short stroke pressing needs. Designed with sheet metal fabrication companies in mind, this press offers an economical alternative to more traditional, and expensive bench, floor, and tooling presses.

THIS PRESS CAN BE USED WITH SHEET METAL CLINCHING!

BTM Tog-L-Loc® and related clinching tools economically join sheet metal without the expense of welding or purchased fasteners by simply joining the part’s own material! Assembly cost is significantly reduced by drawing and forming the part material into an interlock. Join galvanized, pre-painted, or even dissimilar metal combinations using an environmentally friendly process that does not produce sparks, fumes or harmful heat!

By combining Tog-L-Loc clinching with this hand-assisted press, BTM delivers a high-value package which is well-suited for small to mid-size sheet metal fabricators, and manufacturing plants.

HOW A TYPICAL BTM CLINCH JOINT IS MADE:

Step 1: Clamp
The stripper clamps the materials to be joined.

Step 2: Draw
The punch draws the material into the die.

Step 3: Lock
As the material flows into the die, the sides of the die expand, allowing the material to flow into an interlock.

TO LEARN MORE ABOUT BTM’S CLINCHING TECHNOLOGY, VISIT US ONLINE AT

www.btmcomp.com/clinching-solutions.html

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BTM reserves the right to make changes to its literature without any prior notice. Go to www.btmcomp.com for latest version.
PRESS FEATURES

- Only requires one single air line supply of 80 PSI!
- Hydro/Pneumatic Cylinder Provides 5 Ton [45kN] Force
- Precision Linear Slide
- Tooling End Of Stroke Adjustment
- 9.5mm Power Stroke
- Reversible Tooling Shown with BTM Tog-L-Loc Clinch Tools
- Quick Change Tooling System
- Highly Visible External Oil Tank
- Manual Drive 100mm Stroke Advance with Spring Return

SEQUENCE OF OPERATIONS

1. Rotate crank handle counterclockwise until part contact.
2. Continue rotation through safe compression travel.
3. Press cylinder actuates.

A GREAT SHOP PRESS FOR
- Clinching
- Piercing
- Short Stroke Pressing

Contact BTM for your pressing application!
Phone: 810-364-4567
Email: sales@btmcorp.com

 Scan the QR code to call BTM!
MCP-5 MANUAL DRIVE CYLINDER PRESS

PRESS DIMENSIONS

INSTALL BALL LOCK PIN IN ONE OF [8] HOLE LOCATIONS TO LIMIT RETRACT STROKE. FROM 3.0 TO 100mm LENGTH (IN 12.5mm INCREMENTS).

PLACE PIN IN STORAGE LOCATION (AS SHOWN) WHEN PRESS OPERATES AT FULL STROKE.

3.0 STROKE

TOOLING ADJUSTMENT

M16X2.0-6H TAP FOR LIFTING

45.0 [1.77] 45.0 [1.77] 360.0 [14.17] 200.0 [7.87] 182.5 [7.19] 4X M12x1.75 x 75mm S.H.C.S. PROVIDED WITH ASSEMBLY FOR MOUNTING

INSTALL RETRACT PORT

INSTALL INTESTIFY PORT

601.1 [23.67] 407.6 [16.06] 101.6 [4.00] ~ FULL STROKE

Rc 1/4 PORT AIR IN

1321.9 [52.04] 680.0 [27.17] 614.0 [24.17] 3.5 [0.14] 120.7 [4.75]

MANUAL ACTUATOR HANDLE ASSEMBLY

R228.0 [8.98] TO END OF HANDLE & APPROX 210° ROTATION FOR MANUAL RAM TRAVEL

TOP OF DIE 153.0 [6.02] 6.0 [0.24] 0

75.0 [2.95] 147.0 [5.79] - UPPER TOOLING STACK-UP HEIGHT

147.0 [5.79] - LOWER TOOLING STACK-UP HEIGHT

1396.8 [54.99] REF.

BTM Company, LLC. • 300 DAVIS ROAD • MARYSVILLE, MI 48040 • Tel: 810-364-4567 • Fax: 810-364-6178 • www.BTMcorp.com
PRESS OPTIONS & ACCESSORIES

OPTIONAL MOUNTING

BENCH LEG
(BTM No. PD307211A)
Convert your press into a bench-top unit with this support leg.

USE ORDER CODE: BL

RISER BASE
(BTM No. PD307212A)
The Riser Base effectively converts your press into a floor press.

USE ORDER CODE: RB

OPTIONAL NESTING / LOCATING

ADJUSTABLE FENCE ASSEMBLY
(BTM No. PD307200F)
This Adjustable Fence Assembly helps you to nest/locate the parts being joined.

USE ORDER CODE: FA

HARDWARE

BALL RELEASE TOOL
(BTM No. 044514)
This tool allows you to release ball-lock retention.

USE ORDER CODE: BRT
HOW TO ORDER
Ordering your new Hand-Assisted Clinching Press is easy! Just follow the 3 steps below!

STEP 1
BEFORE YOU PLACE AN ORDER - Please contact BTM to determine the correct tooling for your application.
To contact us, please email us at sales@btmcorp.com or call us at 810-364-4567!

STEP 2
Fill in the blanks below. You must specify at least the PRESS AND TOOLING sections as a minimum order.
OPTIONS are a great way to add value to your press, but are not required.

<table>
<thead>
<tr>
<th>PRESS</th>
<th>TOOLING (REQUIRED)</th>
<th>OPTIONS (LEAVE BLANK IF NOT DESIRED)</th>
</tr>
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<tr>
<td>PD307200A</td>
<td>Punch Holder</td>
<td>Mounting</td>
</tr>
<tr>
<td>MCP-5 PRESS</td>
<td>Die Assembly</td>
<td>Nesting/Locating</td>
</tr>
<tr>
<td>ASSEMBLY</td>
<td>Contact BTM</td>
<td>Hardware</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BL = Bench Leg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FA = Adjustable Fence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RB = Riser Base</td>
</tr>
<tr>
<td></td>
<td></td>
<td>See p.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>See p.5</td>
</tr>
</tbody>
</table>

EXAMPLE
PRESS TOOLING OPTIONS

PD307200A - PD263900G - 716000GE - BL - FA - BRT

STEP 3
Email your order to sales@btmcorp.com, call us at 810-364-4567, or fax a copy of this page to 810-364-6178. Please fill out the blanks below if faxing or emailing this page & a BTM Sales Representative will contact you to complete your order.

Your Name
Company
Phone
Email
**BEFORE YOU ORDER TOOLING**

Contact BTM to determine the correct clinch tooling for your application.

Email us at sales@btmcorp.com or call us at 810-364-4567!

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**TOG-L-LOC SS20 PUNCH HOLDER ASSEMBLY**

<table>
<thead>
<tr>
<th>JOINT SIZE</th>
<th>ØA</th>
<th>PUNCH TIP RADIUS</th>
<th>PUNCH HOLDER ASSEMBLY NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>Ø12</td>
<td>0.25 [0.010]</td>
<td>PD264000G</td>
</tr>
<tr>
<td>Tog-L-Loc (TL-3.0)</td>
<td></td>
<td>0.51 [0.020]</td>
<td>PD264000H</td>
</tr>
<tr>
<td>3.8</td>
<td>Ø14</td>
<td>0.25 [0.010]</td>
<td>PD264100G</td>
</tr>
<tr>
<td>Tog-L-Loc (TL-3.8)</td>
<td></td>
<td>0.51 [0.020]</td>
<td>PD264100H</td>
</tr>
<tr>
<td>4.6</td>
<td>Ø16</td>
<td>0.25 [0.010]</td>
<td>PD263900G</td>
</tr>
<tr>
<td>Tog-L-Loc (TL-4.6)</td>
<td></td>
<td>0.51 [0.020]</td>
<td>PD263900H</td>
</tr>
</tbody>
</table>

**TOG-L-LOC 940 STYLE “A” DIE ASSEMBLY**

<table>
<thead>
<tr>
<th>JOINT SIZE</th>
<th>ØB</th>
<th>ANVIL DEPTH</th>
<th>DIE ASSEMBLY NO.</th>
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<tbody>
<tr>
<td>3.0</td>
<td>Ø12</td>
<td>0.51 [0.020]</td>
<td>718200BE</td>
</tr>
<tr>
<td>Tog-L-Loc (TL-3.0)</td>
<td></td>
<td>0.64 [0.025]</td>
<td>718200CE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.76 [0.030]</td>
<td>718200DE</td>
</tr>
<tr>
<td>3.8</td>
<td>Ø13.5</td>
<td>0.89 [0.035]</td>
<td>718200EE</td>
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<tr>
<td>Tog-L-Loc (TL-3.8)</td>
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<td>1.02 [0.040]</td>
<td>718200FE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.14 [0.045]</td>
<td>718200GE</td>
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<tr>
<td>4.6</td>
<td>Ø16</td>
<td>1.27 [0.050]</td>
<td>716000BE</td>
</tr>
<tr>
<td>Tog-L-Loc (TL-4.6)</td>
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<td>1.40 [0.055]</td>
<td>716000DE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.52 [0.060]</td>
<td>716000EE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.65 [0.065]</td>
<td>716000KE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.78 [0.070]</td>
<td>716000ME</td>
</tr>
</tbody>
</table>

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**CLINCH TOOLING REFERENCE**

- PD308500A ~ TL-BL-PH20 HOLDER ASSY (INCLUDED WITH PD307200A MCP-5)
- 025972 ~ M5x0.8 x 6mm CUP PT S.S. (INCLUDED WITH PD307200A MCP-5)
- PD307208A MCP-5 TL-940-BL20-DHA DIE HOLDER, 147 OAL (INCLUDED WITH PD307200A MCP-5)
- 737400L ~ PP-BL-MPH20 HOLDER ASSY (INCLUDED WITH PD307200A MCP-5)

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**Before You Order Tooling**

Contact BTM to determine the correct clinch tooling for your application.

Email us at sales@btmcorp.com or call us at 810-364-4567!
**OTHER PRODUCTS FOR AUTOMATION**

<table>
<thead>
<tr>
<th>Clamps</th>
<th>Grippers</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Clamp Image" /></td>
<td><img src="image2" alt="Gripper Image" /></td>
</tr>
<tr>
<td>From heavy duty precision sealed locking power clamps to simple light duty OMNI models, BTM manufactures clamps in a range of styles and sizes for a wide variety of applications.</td>
<td>BTM manufactures a high quality line of grippers ranging from heavy duty models to light duty models in a variety of styles and sizes.</td>
</tr>
</tbody>
</table>

**OTHER QUALITY BTM PRODUCTS TO CONSIDER**

<table>
<thead>
<tr>
<th>Pin Locator Clamps</th>
<th>Rod-Locking Pin Locator Clamps</th>
<th>Precision Shot Pin Cylinders</th>
</tr>
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<tbody>
<tr>
<td><img src="image3" alt="Pin Locator Image" /></td>
<td>These clamps employ a rod locking feature which allows the clamp to retain the part when air pressure is removed/lost.</td>
<td>BTM’s Precision Shot Pin Cylinders are ideal for locating production material through precisely pierced holes - including clamping and fixturing.</td>
</tr>
<tr>
<td>BTM’s Locator Clamps are ideal for locating &amp; holding production material and are used in a variety of manufacturing areas including automotive &amp; refrigeration.</td>
<td>Pin Sizes range from as small as 6mm (PLC-25 Light Duty Clamp) to as large as 40mm (PLC-63 &amp; LPLC-38 locking clamp).</td>
<td></td>
</tr>
<tr>
<td>Single Finger Hook Models (without the locating pin) are also available in both locking and non-locking configurations.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For more information, or to view our other products, please visit: [www.BTMcomp.com](http://www.BTMcomp.com)