



Operating Instructions and Parts Manual

Arbor Press

Model AP-3R



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2.0 Safety Instructions

⚠ WARNING

Failure to follow these rules may result in serious personal injury

1. FOR YOUR OWN SAFETY, READ INSTRUCTION MANUAL BEFORE OPERATING THE MACHINE. Learn the machine's application and limitations as well as the specific hazards.
2. Only trained and qualified personnel can operate this machine.
3. Make sure guards are in place and in proper working order before operating machinery.
4. Remove any adjusting tools. Before operating the machine, make sure any adjusting tools have been removed.
5. Keep work area clean. Cluttered areas invite injuries.
6. Overloading machine. By overloading the machine you may cause injury from flying parts. DO NOT exceed the specified machine capacities.
7. Dressing material edges. Always chamfer and deburr all sharp edges.
8. Do not force tool. Your machine will do a better and safer job if used as intended. DO NOT use inappropriate attachments in an attempt to exceed the machines rated capacity.
9. Use the right tool for the job. DO NOT attempt to force a small tool or attachment to do the work of a large industrial tool. DO NOT use a tool for a purpose for which it was not intended.
10. Dress appropriate. DO NOT wear loose fitting clothing or jewelry as they can be caught in moving machine parts. Protective clothing and steel toe shoes are recommended when using machinery. Wear a restrictive hair covering to contain long hair.
11. Use eye protection. Always wear ISO approved protective eye wear when operating machinery. Wear a full-face shield if you are producing metal filings. Eye wear shall be impact resistant, protective safety glasses with side shields which comply with ANSI Z87.1 specification. Use of eye wear which does not comply with ANSI Z87.1 specification could result in severe injury from breakage of eye protection.
12. Do not overreach. Maintain proper footing and balance at all times. DO NOT reach over or across a running machine.
13. Stay alert. Watch what you are doing and use common sense. DO NOT operate any tool or machine when you are tired.
14. Check for damaged parts. Before using any tool or machine, carefully check any part that appears damaged. Check for alignment and binding of moving parts that may affect proper machine operation.
15. Observe work area conditions. DO NOT use machines or power tools in damp or wet locations. Do not expose to rain. Keep work area well lighted.
16. Keep children away. Children must never be allowed in the work area. DO NOT let them handle machines, tools, or extension cords.
17. Store idle equipment. When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep them out of reach of children.
18. DO NOT operate machine if under the influence of alcohol or drugs. Read warning labels on prescriptions. If there is any doubt, DO NOT operate the machine.
19. Keep visitors a safe distance from the work area.

Familiarize yourself with the following safety notices used in this manual:

⚠ CAUTION

This means that if precautions are not heeded, it may result in minor injury and/or machine damage.

⚠ WARNING

This means that if precautions are not heeded, it may result in serious injury or death.

⚠ DANGER

This means that if precautions are not heeded, it will result in serious or fatal, injury.

Save the Instructions

3.0 About This Manual

This manual is provided by Baileigh Industrial, covering the safe operation and maintenance procedures for a Baileigh Model AP-3R Arbor Press. This manual contains instructions on installation, safety precautions, general operating procedures, maintenance instructions and parts breakdown. Your machine has been designed and constructed to provide consistent, long-term operation if used in accordance with the instructions as set forth in this document.

Technical Support handles questions on setup, operation, schematics, warranty issues, and individual parts needed. Our Technical Support department can be reached at 920-684-4990.

If there are questions or comments, please contact your local supplier or Baileigh Industrial. We can also be reached at our web site: www.baileigh.com.

Retain this manual for future reference. If the machine transfers ownership, the manual should accompany it.

WARNING

Read and understand the entire contents of this manual before attempting assembly or operation! Failure to comply may cause serious injury!

Register your product online -

<https://baileigh.com/product-registration>



4.0 Specifications

Table 4-1

Model Number	AP-3R
Stock Number	BA9-1000260
Electrical	
Power	Manual
General Specifications	
Capacity (ton)	3.0 tons (2.7 ton)
Ram Size	1.5" (38mm)
Throat Depth	5" (127mm)
Maximum Material Height	11" (279mm)
Ram Travel per Revolution	6" (152mm)
Weights and Dimensions	
Shipping Dimensions (L x W x H)	18" x 9" x 25" (457 x 229 x 635mm)
Shipping Weight	132 lbs. (60kgs.)
Based on a material tensile strength of *64000 PSI – mild steel **100000 PSI – stainless steel	

⚠ WARNING

Read and understand the entire contents of this manual before attempting assembly or operation. Failure to comply may cause serious injury.

5.0 Setup and Assembly

5.1 Unpacking and Checking Contents

Your Baileigh machine is shipped complete. Separate all parts from the packing material and check each item carefully. Make certain all items are accounted for before discarding any packing material.

⚠ WARNING

SUFFOCATION HAZARD! Immediately discard any plastic bags and packing materials to eliminate choking and suffocation hazards to children and animals.

⚠ WARNING

If any parts are missing, **DO NOT** place the machine into service until the missing parts are obtained and installed correctly.

5.2 Cleaning

⚠ WARNING

DO NOT USE gasoline or other petroleum products to clean the machine. They have low flash points and can explode or cause fire.

⚠ CAUTION

When using cleaning solvents work in a well-ventilated area. Many cleaning solvents are toxic if inhaled.

Your machine may be shipped with a rustproof waxy coating and/or grease on the exposed unpainted metal surfaces. Fully and completely remove this protective coating using a degreaser or solvent cleaner. Moving items will need to be moved along their travel path to allow for cleaning the entire surface. For a more thorough cleaning, some parts will occasionally have to be removed. **DO NOT USE** acetone or brake cleaner as they may damage painted surfaces.

Follow manufacturer's label instructions when using any type of cleaning product. After cleaning, wipe unpainted metal surfaces with a light coating of quality oil or grease for protection.

IMPORTANT: This waxy coating is NOT a lubricant and will cause the machine to stick and lose performance as the coating continues to dry.

5.3 Transporting and Lifting

NOTICE

Lifting and carrying operations should be carried out by skilled workers, such as a truck operator, crane operator, etc. If a crane is used to lift the machine, attach the lifting chain carefully, making sure the machine is well balanced.

Follow these guidelines when lifting with truck or trolley:

- The lift truck must be able to lift at least 1.5 – 2 times the machines gross weight.
- Make sure the machine is balanced. While transporting, avoid rough or jerky motion, and maintain a safe clearance zone around the transport area.



Figure 5-1

- Use a fork lift with sufficient lifting capacity and forks that are long enough to reach the complete width of the machine.
- Remove the securing bolts that attach the machine to the pallet.
- Approaching the machine from the side, lift the machine on the frame taking care that there are no cables or pipes in the area of the forks.
- Move the machine to the required position and lower gently to the floor.
- Level the machine so that all the supporting feet are taking the weight of the machine and no rocking is taking place.

5.4 Installation

IMPORTANT:

Consider the following when looking for a suitable location to place the machine:

- Overall weight of the machine.
- Weight of material being processed.
- Sizes of material to be processed through the machine.
- Space needed for auxiliary stands, work tables, or other machinery.
- Clearance from walls and other obstacles.

- Maintain an adequate working area around the machine for safety.
- Have the work area well illuminated with proper lighting.
- Keep the floor free of oil and make sure it is not slippery.
- Remove scrap and waste materials regularly, and make sure the work area is free from obstructing objects.
- If long lengths of material are to be fed into the machine, make sure that they will not extend into any aisles.
- **LEVELING:** The machine should be sited on a level, concrete floor. Provisions for securing it should be in position prior to placing the machine. The accuracy of any machine depends on the precise placement of it to the mounting surface.
- **FLOOR:** This tool distributes a large amount of weight over a small area. Make certain that the floor is capable of supporting the weight of the machine, work stock, and the operator. The floor should also be a level surface. If the unit wobbles or rocks once in place, be sure to eliminate by using shims.
- **WORKING CLEARANCES:** Take into consideration the size of the material to be processed. Make sure that you allow enough space for you to operate the machine freely.

5.4.1 Anchoring the Machine

- Once positioned, anchor the machine to the floor, as shown in the diagram. Use bolts and expansion plugs or sunken tie rods that connect through and are sized for the holes in the base of the stand.
- This machine requires a solid floor such as concrete at a minimum of 4" (102mm) thick. 6" (153mm) minimum is preferred.

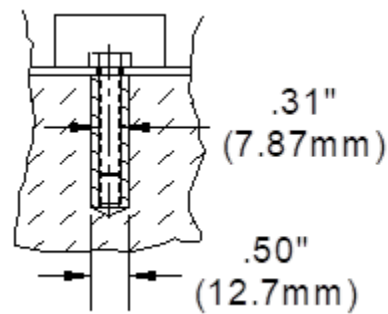


Figure 5-2

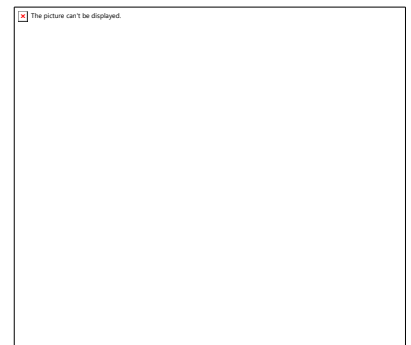
If you intend to mount the Baileigh machine on a workbench be aware of the following:

- Overall weight of the machine.
- Weight of material being processed.
- Make sure the workbench is properly reinforced to support the weight.
- The strongest mounting option is where the holes are drilled all the way through the workbench and the machine is secured with bolts, washers, and nuts.

5.5 Assembly

Your Baileigh **AP-3R** Arbor Press consists of the following loose parts.

1. Press Base
2. Gear Shaft
3. Long Handle
4. Hand Wheel
5. Ratchet Arm



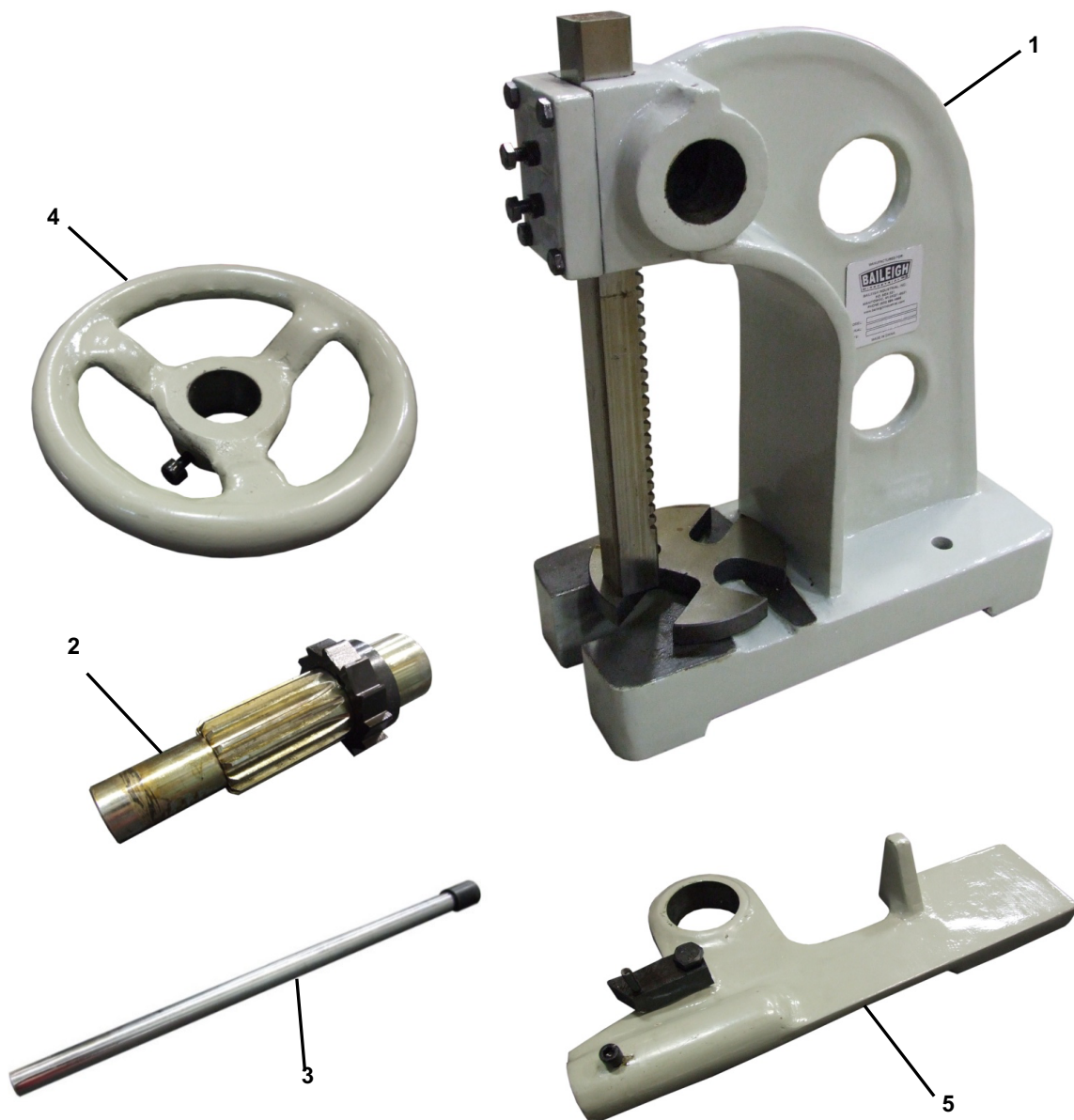


Figure 5-3

6. Assemble the gear shaft (#2) into the hole in the base as shown in (fig.5-4). The steel ram may have to slide up or down slightly to mesh with the spline of the shaft.

Note: Locking collar has been removed from shaft and will be re-installed in step 3.

7. Slide the hand wheel (#4) onto the stub of the gear shaft and secure with the socket head cap screw.

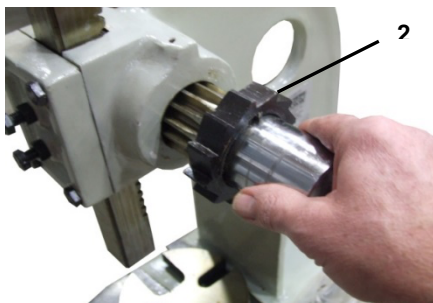


Figure 5-4



Figure 5-5

8. Slide the ratchet arm (#5) onto the gear shaft and secure with the locking collar (#12) by tightening the setscrew.

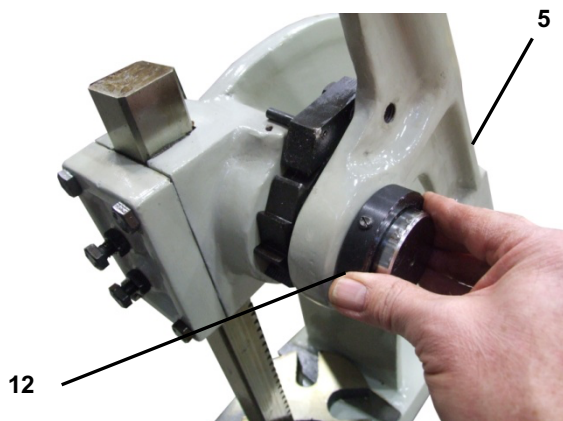


Figure 5-6

9. To complete the assembly, insert the long handle (#3) into the hole of the ratchet arm (#5).

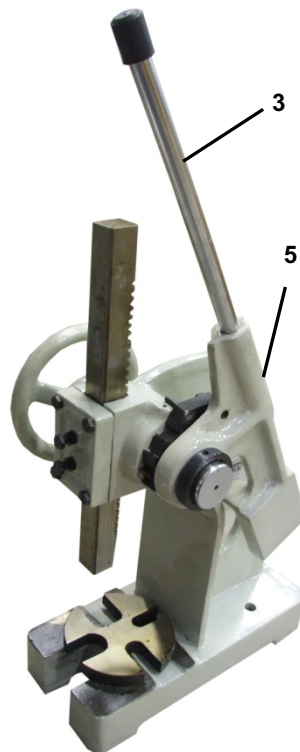


Figure 5-7

6.0 Adjustments

1. Bolts (A) can be used to control side play. When properly adjusted use the jam nuts to hold in place. **DO NOT OVERTIGHTEN.**
2. Bolts (B) are used to set pressure against the ram to accommodate your particular press application. (fig. 6-2) shows the cover plate removed revealing the pressure plate (#7). **Keep well-greased.**

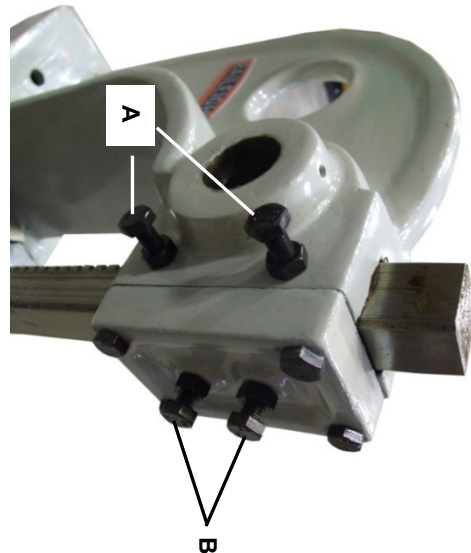


Figure 6-1

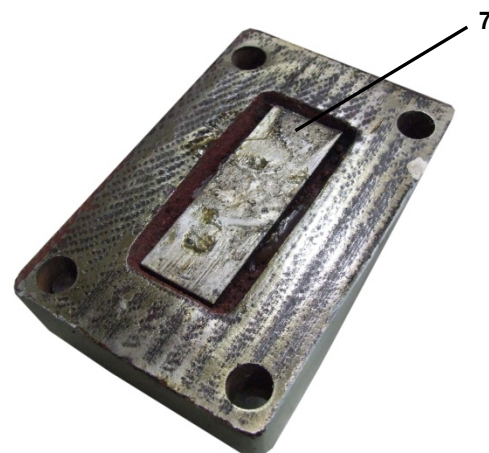


Figure 6-2

7.0 Operation and Maintenance

⚠ CAUTION

Always wear proper eye protection with side shields, safety footwear, and leather gloves to protect from burrs and sharp edges.

⚠ CAUTION

When handling large heavy material make sure they are properly supported.

1. To raise the ram, lift up the ratchet dog (#16) shown in (fig.7-1) to disengage from the ratchet gear, and rotate the hand wheel (#4) counterclockwise (ccw).

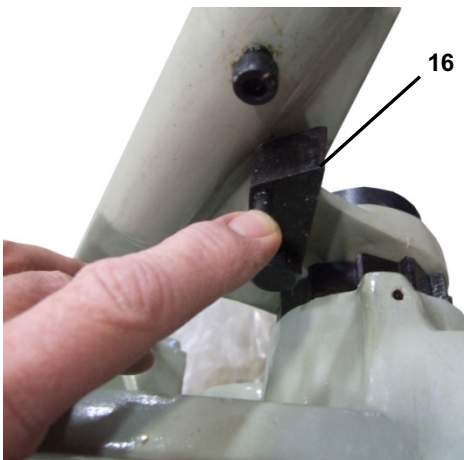


Figure 7-1

2. To lower the ram, make sure the ratchet dog engages the ratchet gear. Pull down on the handle. Raise the handle to re-engage the ratchet gear and lower the ram further.
3. Rotate the 4-position die plate (#9) to choose a suitable width slot to accommodate your application.
4. Lubricate the Baileigh **AP-3R** Arbor Press daily with a good quality EP grease. This will help ensure the press has a long life in your shop.

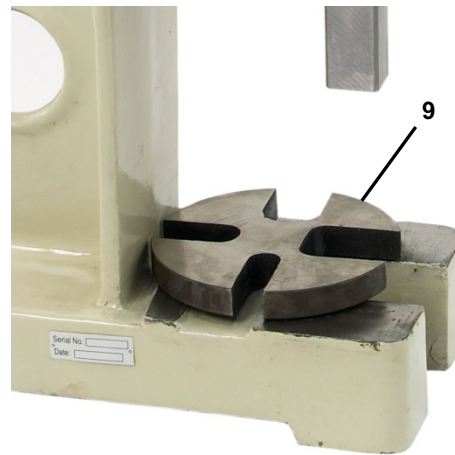
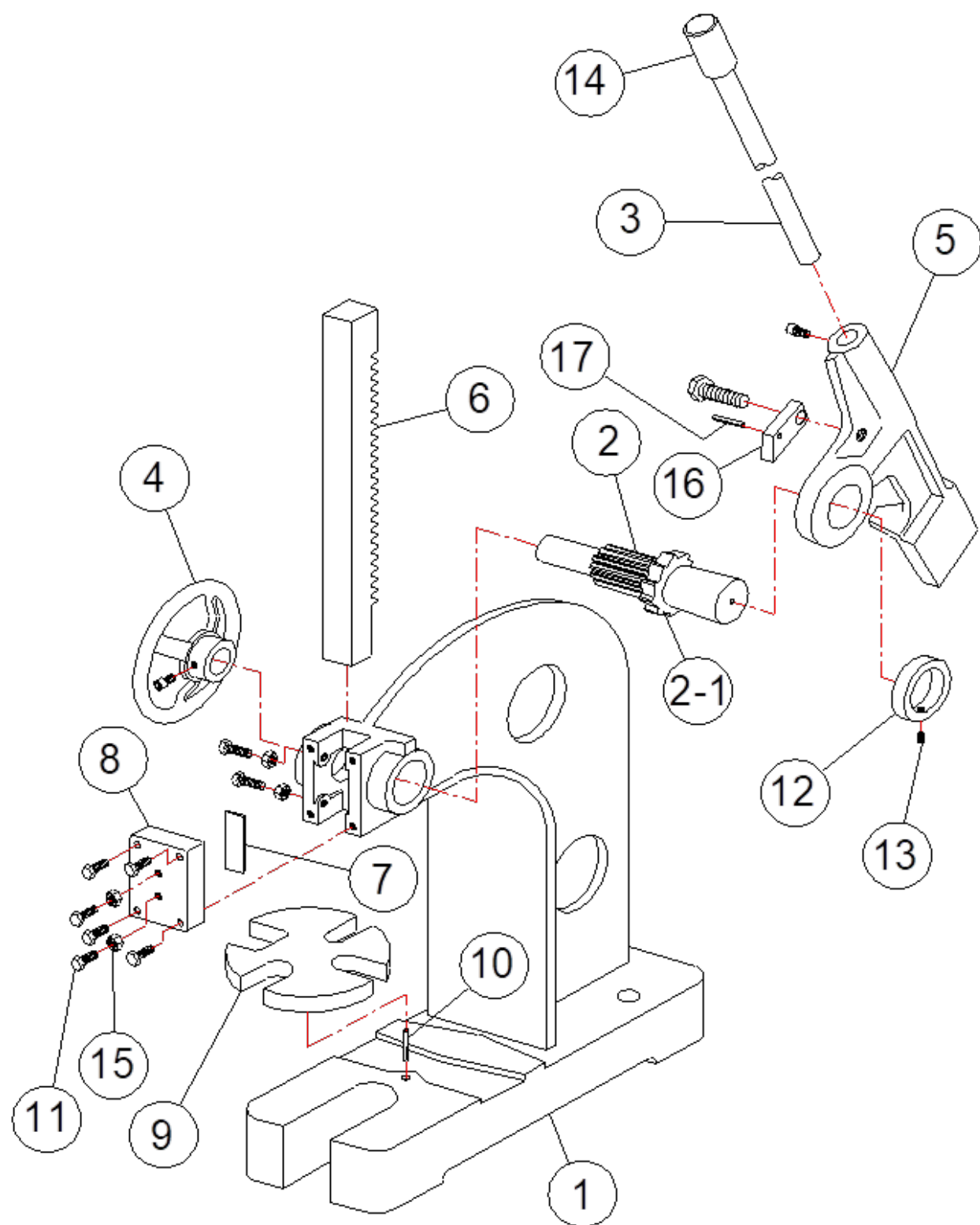


Figure 7-2

8.0 Replacement Parts

8.1.1 Arbor Press Assembly – Exploded View



8.1.2 Arbor Press Assembly – Parts List

Index No	Part No	Description	Size	Qty
1	BA9-1017182	Press Base		1
2	BA9-1017183	Gear Shaft		1
2-1	BA9-1226385	Ratchet Gear		1
3	BA9-1017184	Long Handle		1
4	BA9-1017185	Hand Wheel		1
5	BA9-1012796	Ratchet Arm		1
6	BA9-1014635	Ram 1.5" x 1.5" (38mm x 38mm)		1
7	BA9-1017186	Pressure Plate		1
8	BA9-1017187	Cover		1
9	BA9-1017195	4 Position Bottom Die Plate		1
10	BA9-1017188	Spring Pin	6X40	1
11	BA9-1017189	Hex Cap Screw	M10X40	8
12	BA9-1017190	Locking Collar		1
13	BA9-1017191	Socket Set Screw, Flat Point	M8X10	1
14	BA9-1017192	Cap		1
15	BA9-1017193	Hex Nut	M10P1.5	4
16	BA9-1012700	Ratchet Dog		1
17	BA9-1017194	Spring Pin	Φ 6X40	1