Package Contents:
• Arbor Press
• Ram (Blade) Stop Collar
• Hardened Punches; 3 each: Round, Square and Pointed
• M5 Socket Cap Bolt with M5 Wing Nut Set
• Special Adaptor 3/8” and 3/16” Dia. Insert with Knurled Knob Screw
• Assorted Hex Wrenches

Assembly
Your Press comes with the parts shown in picture 1. Assembly begins by placing the Stop Collar over the upper section of the Ram as shown and securing it with the 2 front set screws. The side bolt and nut should be wound down through the collar a bit. It is this screw that acts as your “stop” of the ram movement when needed. Not the round shape of the collar. See picture 2.

The Gear (11) comes with the sleeve collar (2) secured on the left side. Remove it. Now, slide the gear as shown in picture 3, into and through the frame from the right side. Tip: You might need to manually raise or lower the Ram a bit in order to align the spines of the gear assembly. It should be passed through until you have the blank left side of the gear exposed fully on the left side of the frame and you can push it no further. Now, install the sleeve collar that you had removed back onto the assembly leaving a minor space between it and the side of the frame and tighten the set screw. See picture 4.

Next, loosen the Black Locking Knob (10) of the gear assembly enough to allow the handle (11) clearance to be installed. Once passed through half-way, turn the knob (10) to secure it. Now install the remaining end cap provided onto the handle.

The ram now will require “Gib” adjustment in order that it moves freely but without “slop” during its stroke within the frame up and down. Referring to picture 5, you will find the 4 bolts located around the ram movement. The 2 marked “A” when turned in and out apply pressure to a plate located under the frame cover (7). Adjust these while moving the ram to achieve the required action. Similarly, the bolts marked with the “B”, provide the side-to-side pressure on the ram to achieve its stability in that direction. Once adjustment is complete, tighten the locking nuts of each against the frame to hold your settings.

Provided with your Deluxe Arbor Press are 3 ea. 3/8” shank hardened punches of common punch shapes. We have modified the rear area of the base to allow them to be stored “on-board” in order to prevent their loss in a tool box or drawer when not in use. Currently, they are not replaceable components. Refer to picture 6 for reference. They are marked “PH” in the photo.

Also at the rear section, marked with “A” in picture 6, are two larger holes that are provided so that the base can be secured into a logical location area onto your bench or to a thick piece of material that can be C-Clamped to your bench. You should use large bolts with fender washers or carriage bolts with washers for secure attachment. In choosing, remember, that the force of pressure that you will be applying is at the opposite end of the tool. Your method of attachment must be sufficient at the rear end to withstand any force applied to the ram. Additionally, you want to mount the press, in such way, that the front “U” shape of the frame underneath the ram and swivel base overhangs your bench. This way you will have access to tooling that you may apply to the swivel base and for larger pressing applications.
The Unique Functions and Versatility of the Swivel Base

Every similar looking arbor press work table that is on the market today is allowed one type of movement. Simply: To spin around and present a landing area for the ram above. They also do not offer a locking feature for the swivel base, so the pressing application you will be performing could spin from where you need it.

Not so, with your new Micro Mark Deluxe Arbor Press. This unit was engineered with new versatility and usability for the home shop out-of-the-box! We have removed the old style pin and replaced it by boring an enlarged hole in the center of the swivel base that runs through the frame beneath and we have installed a socket head cap screw with wing nut beneath that allows for locking ability of the swivel base and most importantly, 360° of lateral movement along the “X” and “Y” planes of the base. “Jigging” of the press for special applications is easier than ever before providing the detail adjustment needed in order of “landing-the-ram” exactly and repeatably for your needs.

Approximately 3/16” lateral movement in any direction is available now when using the included accessory M5 center bolt and wing nut. See picture 7 and 8.

Picture 8 shows the wing nut where the “wing” comes into contact with the frame beneath allowing the base to be locked or unlocked from above with hex wrench provided. A set of M6 hardware comes installed on your press for the swivel base that will allow most lateral movement that you may require. But, for complete movement and use of the accessory pieces available from Micro Mark for punches, dies and tooling you will need to have the M5 set installed. See our website for #83708 and #83709 and their specification for use.

Additionally, we have pre-drilled and threaded a (7/16”-20) hole into one of the 4 landing pads of the swivel base. It can be used by you to mount fixtures or devices to the base for use by the ram. Its primary use is for mounting our optional #83709 Dies into the base. It is explained further in the instructions.

Accessory Installation and Use

The “business” side of the ram has been modified on the side that faces downward, with a 3/8” hole and a set screw has been installed that will accept the 3 pieces of tooling provided and a method of locking them into the ram of the Press. Of course, you can use the end of the ram without these tools for simple pressing of components. See picture 9. The square head punch attached is ideal for pressing components in or out within confined areas. The pointed and round shaped ones will perform pressing as well, but are also useful in creating impressions on softer metals for jewelry work.

The top end of the ram has not been pre-machined in any manner and the ram itself has not been hardened allowing machinability. You can use it to adapt the press for your specific needs by drilling it and forming it as required. You will need to remove the ram and reverse it. Understand that the set screw that we have had installed will need to be removed or screwed inward to allow the ram to be raised up and off the gear mechanism. You will also need to re-align your gib adjustments after re-engaging the ram onto the gear. The metal plate within the cover (7) might fall out during this process. If it does, you will need to feel inside and / or peer into the frame with a light to see the recess that it fits into for proper working of the front two bolts and gib adjustment described earlier.

Tip: Hold it in place from underneath with two fingers while you lower by your other hand the ram from the top. When the lower ends gets down to the top of inner plate remove your fingers so they do not get pinched accidentally.

Optional #83708 and #83709 Tooling Installation

Referring to picture 10, items within “A” are the #83709 Punch and Die Set, items in “B” are the M5 Hardware Set and Special Adaptor provided with your Press and items in “C” are the #83709 9 Piece Tooling Set.

#83709 9 piece tooling set pieces are used in combination with Special Insert Adaptor provided with the Press. Prior to the first use of the adaptor, it would be a good idea to take a cotton swab and clean out the main hole and threaded hole to remove any manufacturing debris or fouling’s. Now, insert the blank end of the adaptor up and into the ram fully and tighten the set screw in the front of the ram as shown in picture 11. The components of the tooling set that are 3/16” diameter install the same way as shown. The 1/2” outside diameter tooling piece is mounted as shown in picture 12 onto the outside of the adaptor.

#83709 Punch and Die Set are also used with the Special Insert Adaptor. Install it and then slide onto it as shown in picture 13 and 14 the adaptor that is provided within the #83709 set. Next, select the punch from the set that you wish to use and insert it up inside this second adaptor securing it with additional knurled cap screw into the relief area of the punch towards its top. When using the threaded hole in the swivel base for the first time you may need to clean out foulings or debris with a cotton swab that are on the threads. Loosen the base center screw. Attempt to insert the selected matching Die through the top of the base. If it gets jammed or is difficult to wind down by hand then remove it and insert it from the bottom of the base. The Dies have half slots cut into them allowing for a flat blade screw driver of appropriate size in order of winding it upward. Once your Die is up and at least even with the base top, should be sufficient for punching. If you wish to raise it higher, you can do so. Manually, move the base laterally in the direction necessary of mating the punch and die and leave the punch inserted into the die. Secure the swivel base movement with the hex key and raise the punch out of the die. Lower the punch back into the die. If it does enter with little force then re-align in the same manner until they are aligned. Once done, you ready to begin your punching application.

In setting up our instructional picture guide and available from Micro-Mark, we used our magnetic base #65594 Dual Power LED Work Light with Flexible Arm to provide the extra light right where we needed it for proper alignment.

Your Press should provide you years of service for your hobby requirements and we thank you for your purchase!