



## 20-ton Rincon Hydraulic Press Set-up and Instructions (Manual & Electric)

Congratulations! You have purchased a Rincon 20-ton hydraulic press designed, manufactured, and assembled by Potter USA. Named after one of the mountain ranges that surround Potter USA, the Rincon Press is our newest, most compact, and most economical jewelry hydraulic press. This bench-top press has been designed to form metal safely and efficiently in a jewelry studio environment. The press has been tested to far exceed the 20-ton rating.

*Manual Rincon Press*



*Electric Rincon Press*



**Electric version:** The electric Rincon press is great if you are looking to increase your productivity or are just tired of pumping by hand. We've used the largest motor possible for the electric pump, while also keeping it accessible by only requiring a 110-volt outlet. The cylinder and electric pump are built with off-the-shelf components; if needed, they can be repaired anywhere, saving you time and money. We will always keep parts available. If you already own a standard electric press from Potter USA, you'll be able to attach that pump to this press. If this is something you're interested in, please send an email to [sales@potterusa.com](mailto:sales@potterusa.com) c/o Adolfo and include a photo of your current press setup.

**INTERNATIONAL CUSTOMERS:** Please email us at [sales@potterusa.com](mailto:sales@potterusa.com) for a freight quote BEFORE PURCHASING an electric press. The motor we sell is wired to 110v. To ensure you do not damage the motor, you are responsible for either ensuring you have 110v power, purchasing a converter, or having a professional electrician re-wire the motor. Potter USA is not responsible for motor issues due to incompatible power sources or modifications.

## **About the Rincon Press**

- Height: 18-7/16"
- Width: 12"
- Depth: 13"
- Height and Width of Working Area: 4-11/16" (H) x 6" (W)
- Upper and Lower Platen Measurements: 6" x 4"
- Weight of Press Frame with Cylinder: 115 lbs.
- Manual-Total Weight of Press Frame and Manual Hand Pump: ~126 lbs.
- Electric-Total Weight of Press Frame and Electric Pump: ~225lbs.
- Approx. Space Needed on Workbench for Press: 22" x 20"
- 5000 psi gauge included (will only need 3000 psi for any tools we sell). Watch Kevin discuss psi here: (40:25 mark)  
<https://www.facebook.com/kevin.potter.12935/videos/545339920881737/?id=1253577991351417>
- Cylinder: 2" stroke (you WILL need spacers, 3-4 qty)
- Current aluminum spacers work with this press. Insert them lengthwise into the press, rather than horizontally.
- Parts are zinc plated to prevent rust. The base will be powder-coated black. Cylinder and pump colors may vary. The handle/pump/electric cylinder may be different than what appears in photos. You cannot choose a color.
- The press does NOT need to be bolted down but can be if desired.
- The lower platen is bolted to the cylinder to prevent tipping.
- The press frame DOES NOT flex.
- Lifetime warranty on press frame, 2-year warranty on the cylinder and other parts.
- Manual press CAN be upgraded to electric at a later date.
- The purchase of this press also includes a \$250 shipping allowance. (Final shipping cost will be determined before your press ships and will vary by location. You will be invoiced for excess shipping charges if freight fees exceed \$250.) This allowance has no cash value, and the price of the press will not be adjusted if you pick up locally.
- Includes 15% OFF impression dies for 3 months AFTER the press is paid in full. To begin receiving this discount, complete your order for the Rincon Press first, then place a separate order for the impression dies. REMEMBER: To receive this discount you MUST be logged in to your account when purchasing the press and for subsequent impression die orders.
- \$950 (Manual). \$2950 (Electric). (2023)

## **Shipping**

All Potter USA presses and electric upgrades ship freight. The truck will deliver the press to your home—to your door. When ordering, if you request the driver to bring the press inside, you will be assessed an additional fee of at least \$100. Any additional requests have fees attached by the shipping company. We will then bill you for the additional fees.



**Read ALL instructions before assembling or operating the hydraulic press. This will familiarize you with the parts, the tools required, and the order in which things are required to be done in order to properly use the press.**

## **General Safety: DOs and DO NOTs**

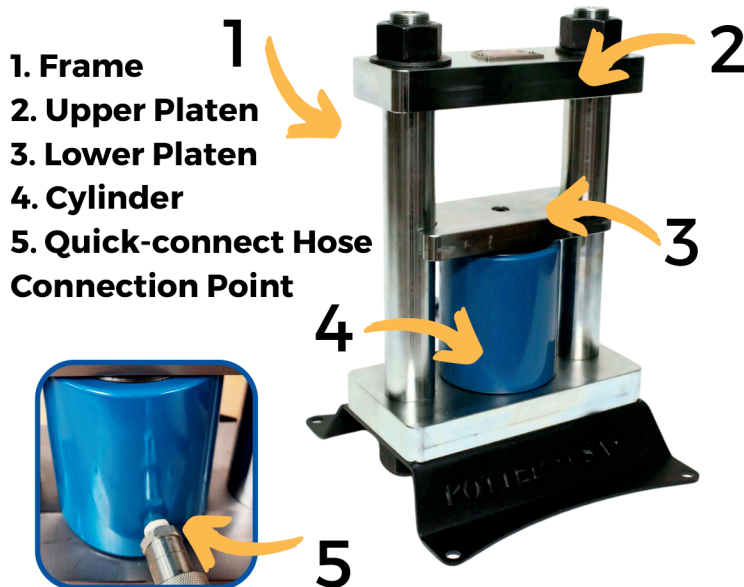
### **✓ DO ...**

- keep your work area clean.
- keep children away from the press.
- keep fingers away from moving parts.
- tie back long hair.
- wear ANSI-approved impact safety eye and face protection when using the press.
- only use replacement parts from Potter USA.
- ALWAYS center your work on the lower platen.
- ALWAYS use spacers to avoid overextending the ram of the jack.
- lower the ram completely at the end of the day to prevent dust and debris from sticking to the ram, which will cause wear on the seals.

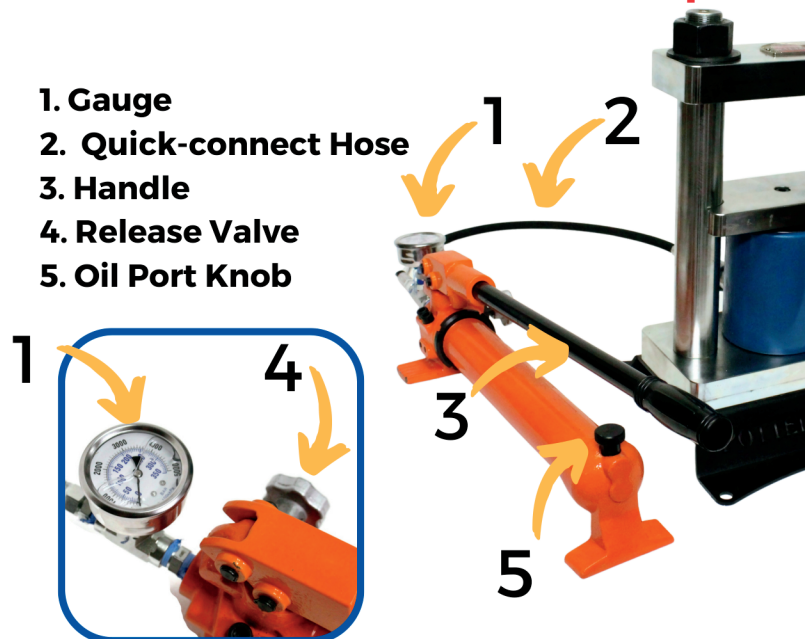
### **⊘ DO NOT ...**

- assemble or operate the press when you're tired or under the influence of alcohol or drugs.
- wear loose clothing or jewelry.
- operate the press beyond its rated capacity.
- place cast iron, springs, wood, plastic, glass, fragile or brittle objects, or any item that could disengage from or crack in the press.
- put heat-treated tool-steel dies or bench blocks in the press unless you know they have been properly heat tempered. They can shatter like glass.
- use cheap bronze impression dies purchased elsewhere in the press. They can shatter or explode under pressure.
- use the press for hot forging.

## **Parts of the Rincon press frame**



## **Parts of the Manual Hand Pump**



## **General Use Instructions**

**The Rincon press is extremely versatile and can be used for a variety of applications. While each accessory, tool, and application requires a specific technique, there are a few general rules that apply no matter how you're using the press.**

- **ALWAYS make sure your work and tooling is centered front-to-back and left-to-right in the press. Working off-center is dangerous and can potentially damage the press.**
- Do NOT overextend the ram of your cylinder. Use more spacers to reduce the distance the ram must travel.
- Don't stand directly in front of the press when using it. In the unlikely event that something you put in it were to disengage, standing off to one side of the press is safer.
- Fully lower the ram at the end of the day to prevent dust and debris from prematurely wearing out the seals and damaging the jack.

## **Set Up the Manual Rincon Hydraulic Press**

### **Tools and Materials Needed (NOT INCLUDED)**

- Sturdy Work Surface
- Rags/paper towels (keep on hand for oil cleanup)

### **Manual Rincon Press Assembly and Setup**

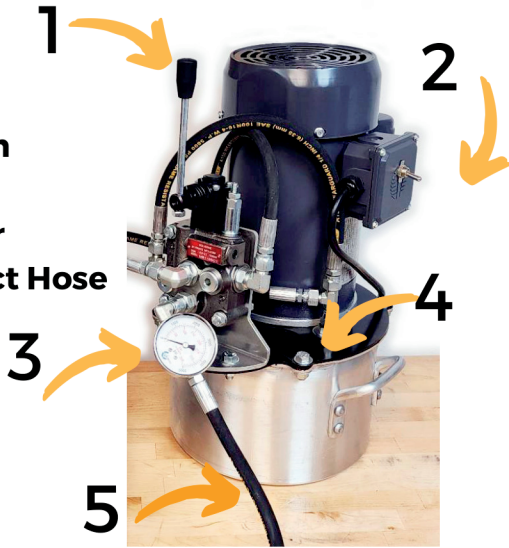
1. Place the press frame onto a sturdy work surface. (We prefer the Quick-connect Hose Connection Point on the Cylinder faces toward the back, rather than the front of the press, but this is entirely up to you.)
2. Place the Hand Pump on the work surface next to the frame.
3. Remove the black plastic plug from the Quick-connect Hose Connection Point on the cylinder. (You can remove it entirely, but we suggest leaving it looped on to the connection for future transport.)
4. The hand pump uses a Quick-connect mechanism to connect to the cylinder.
5. Press the nipple on the end of the pump hose into the opening of the cylinder until you hear a quiet "pop." This pop occurs when the hose pushes through the cylinder gasket, ensuring a secure connection.
6. Twist the freely moving knurled piece (on the cylinder) onto the hose. Tighten as much as you can by hand; there's no need to use a wrench for this.
7. Make sure the Release Knob on the hand pump is tight.
8. Pump the Handle. The lower platen of the press should begin to rise. If it doesn't, see "Troubleshooting."

**Please Note:** Store and use the press at room temperature for best results. Temperature variation will make oil leak from the hand pump. If kept in a hot location, things expand and any air bubble can push oil out. And, if kept in a very cold location, the seals will shrink and allow oil to come out.

# Set Up the Electric Rincon Hydraulic Press

## Parts of the Electric Pump

1. Handle
2. On/Off Switch
3. Gauge
4. Oil Port Cover
5. Quick-connect Hose



## Tools and Materials Needed (NOT INCLUDED)

- Sturdy work surface.
- 1-1/2 to 1-3/4 gallons hydraulic oil, viscosity of ISO 32 (SAE 10WT) (NOT hydraulic jack oil or brake fluid!) (Available from hardware or automotive centers)
- Adjustable wrench
- Open-end, box-end, or combination wrench: 3/4" and 9/16"
- Funnel
- 110-volt outlet (do NOT use an extension cord!)
- Rags/paper towels (keep on hand for oil cleanup)

## Electric Rincon Press Assembly and Setup (applies to Electric Upgrade, as well)

1. Place the press frame onto a sturdy work surface. (We prefer the Quick-connect Hose Connection Point on the Cylinder faces toward the back, rather than the front of the press, but this is entirely up to you.)
2. Place the Electric Pump on the work surface next to the frame. Release the free end of the hose from where it was placed during shipping, and make sure it extends toward the frame.
3. The electric pump uses a Quick-connect mechanism to connect to the cylinder.
4. Remove the black plastic plug from the Quick-connect Hose Connection Point on the cylinder. (You can remove it entirely, but we suggest leaving it looped on to the connection for future transport.)
5. Press the nipple on the end of the pump hose into the opening of the cylinder until you hear a quiet "pop." This pop occurs when the hose pushes through the cylinder gasket, ensuring a secure connection.
6. Twist the freely moving knurled piece (on the cylinder) onto the hose. Tighten as much as you can by hand; there's no need to use a wrench for this.

**Please Note:** Store and use the press at room temperature for best results. Temperature variation will make oil leak from the electric pump. If kept in a hot location (approx. 90°F) things expand and any air bubble can push oil out. And, if kept in a very cold location (approx. 40°F), the seals will shrink and allow oil to come out.

## Add Oil

1. Locate the Oil Port on the electric pump. It's to right of the hose fittings and is covered with a piece of metal shaped somewhat like a paddle.
2. Use a 9/16" wrench and an adjustable wrench to loosen the bolt and remove the cover. Set these aside.
3. Insert a funnel into the port and begin filling the pump with 1-1/2 to 1-3/4 gallons of hydraulic oil.
4. Replace the oil port cover and clean up any spilled oil.

**\*\*Note:** The hydraulic oil should last the life of the machine and does not need to be changed. Some oil leakage around the pump and cylinder is normal with use. You should not have big puddles, but a little dampness is normal. It is not a completely sealed system.

## Turn on the Pump

1. Plug the pump into a 110-volt outlet; do NOT use an extension cord!
2. There is an on-off toggle/button in a housing on the back of the pump; turn it on.
3. The handle at the front of the pump is what raises and lowers the cylinder. Pull toward you to raise it; push away from you to lower it. You can raise and lower the platen quickly or slowly, and can park it at a specific height, if needed.
4. Pay attention to the sounds you hear. It's normal for the seals of the cylinder to be squeaky and jumpy when they're brand new; over time, these sounds and movements will dissipate. The hand pump will continue to make sounds.
5. When the pump reaches max pressure, the sound will change. This is the bypass valve, and it prevents you from damaging your press frame.

## **Troubleshooting**

### **My pump is leaking oil. Is this normal?**

Yes! Hydraulic pumps (manual and electric) are not completely sealed systems, so some oil leakage is normal. Oil residue around the pump and cylinder is normal. If you're regularly finding large puddles of oil (more than a couple tablespoons), please contact us. It's good practice to always keep rags or paper towels on hand. Store and use the press at room temperature for best results. Temperature variation will make oil leak from the hand pump or electric pump. If kept in a hot location, things expand and any air bubble can push oil out. And, if kept in a very cold location, the seals will shrink and allow oil to come out.

### **My lower platen isn't raising. Why?**

**Manual Rincon press:** First, make sure that the pressure Release Knob is tightened fully. If the Release Knob is tight, there may be an air bubble trapped inside the hand pump. To expel this air, slightly loosen the Oil Port knob at the front of the hand pump (less than ¼ turn). Slowly pump the handle until oil begins to leak out around the knob. Tighten the Oil Port knob.

**Electric Rincon press:** First, make sure you've added enough oil to the electric pump. If you've followed the instructions and the oil level is correct, make sure you're pushing/pulling the handle in the correct directions.

**Please see our videos and/or contact us at [sales@potterusa](mailto:sales@potterusa) for more information.**

### **There's oil in my gauge!**

Don't worry...that's completely normal! To prevent damage in shipping, gauges are filled with oil. Over time, this oil may leak out partially or completely.

### **My gauge isn't showing any pressure. What's wrong?**

The pressure gauge only registers pressure when in use. For pancake dies, the gauge needle won't move until the moment before it cuts through your metal. For other tools/accessories, you can use the gauge readings to make repetitive actions. Most often, the gauge is not necessary, as every tool, metal type, metal temper, etc. will require different amounts of pressure. It's all about experimentation!

### **I bought the manual Rincon press, but now I want to upgrade to electric.**

#### **Can I do this?**

Yes! Upgrading to electric is easy, as the cylinder is the same for both the manual and electric versions. Please contact us at [sales@potterusa.com](mailto:sales@potterusa.com) and we'll be happy to help.

### **Why can't I plug the electric pump into an extension cord?**

We have used the largest motor possible for the pump, while also keeping it accessible by making it 110-volt. The 1hp motor draws 15 amps and reaches a max pressure of 2,200psi; plugging it into anything but directly into the wall would cause it to lose amperage, therefore decreasing the amount of power you have.

### **Why do I have to add the oil to the electric press myself?**

It is illegal to ship because it is considered a hazardous material (but is safe in your press), so the pump must be shipped empty. We test it at our shop first, and then empty the oil out of the pump before shipping. You can find hydraulic oil at automotive and/or hardware stores.

### **What type of oil do I need for the electric pump, and how much do I need?**

You will need approximately 1-1/2 to 1-3/4 gallons of hydraulic oil [viscosity of ISO 32 (SAE 10WT)]. Do NOT use hydraulic jack oil or brake fluid! This is available from most hardware and automotive stores.

*Side view, Summer 2020 model*



**Potter USA**  
**PotterUSA.com**

### **Contact Us**

**1934 E. 18th St. Tucson, AZ 85719**  
**sales@potterusa.com 520.777.6032**