



Screw Replacement for a Large Vincent Screw Press



Lock Out/Tag Out on all power sources.

Do not forget to lock out the plant air used to actuate the air cylinders.

Remove the air lines.



Cover the liquid drain under the screens to prevent lost hardware.



**If these angles
(used to support
screen covers)
are on your
press, remove
them for easier
screen removal.**

**Remove the
screen halves.**



The Resistor Bars are sandwiched between the two screen halves. After removing the screens, remove these Resistor Bars.



**Unbolt the gearbox
from the bedframe
of press.**



Disconnect the coupling that connects the screw shaft to the gearbox stub shaft.



**Move the
gearbox and
motor out of
the way.**



A gear puller will facilitate removal of the coupling half on the screw.



Oct 23
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Heat the hub evenly to 300° - 500°F (150° - 260°C) with a rosebud torch while applying pressure till the hub clears the shaft.

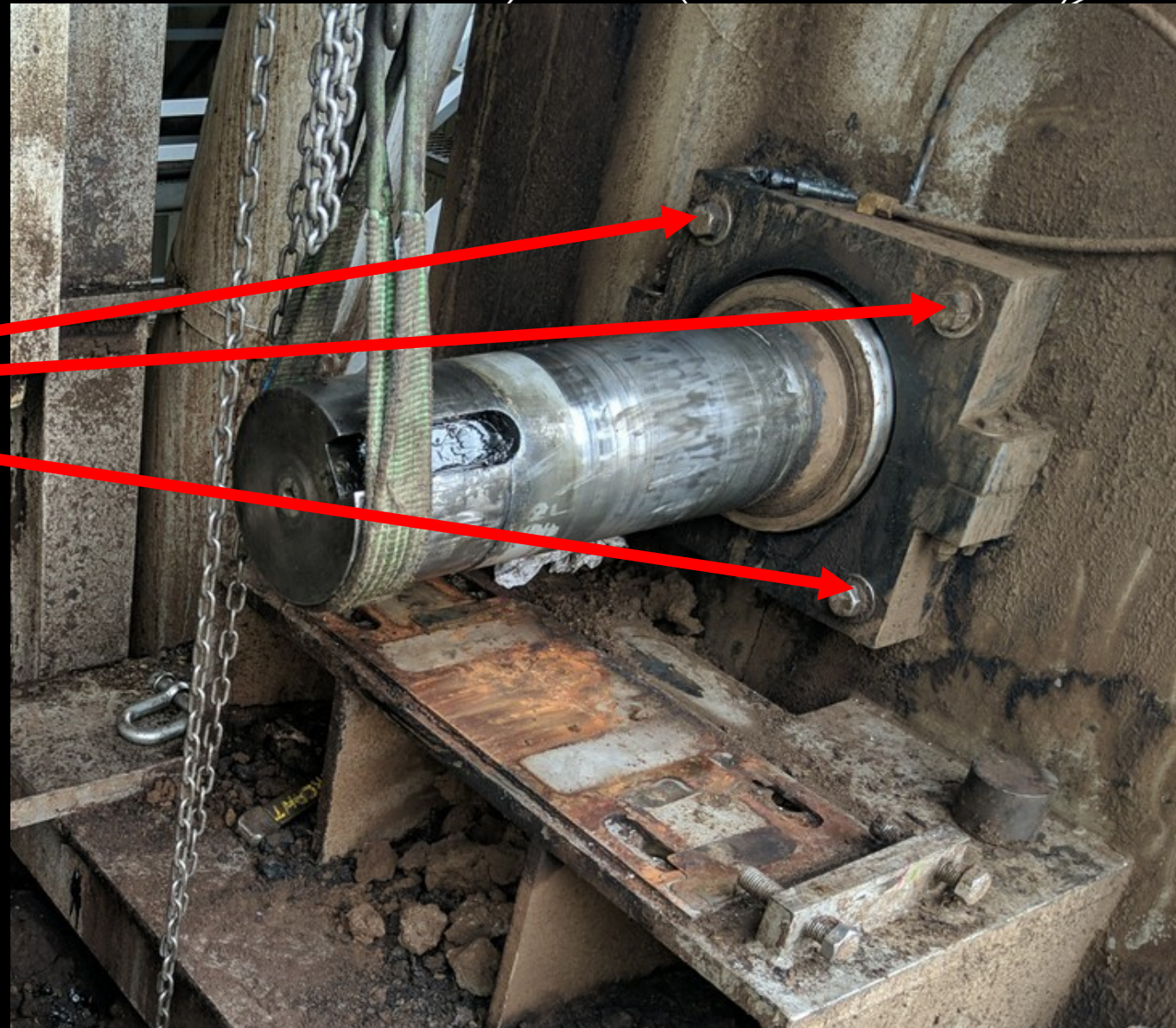


Remove the pillow block bearing. (This press had a split PB bearing.) If it is a standard bearing (not split), pull it off the shaft.



**Loosen and
remove the four
bolts on the seal
assembly.**

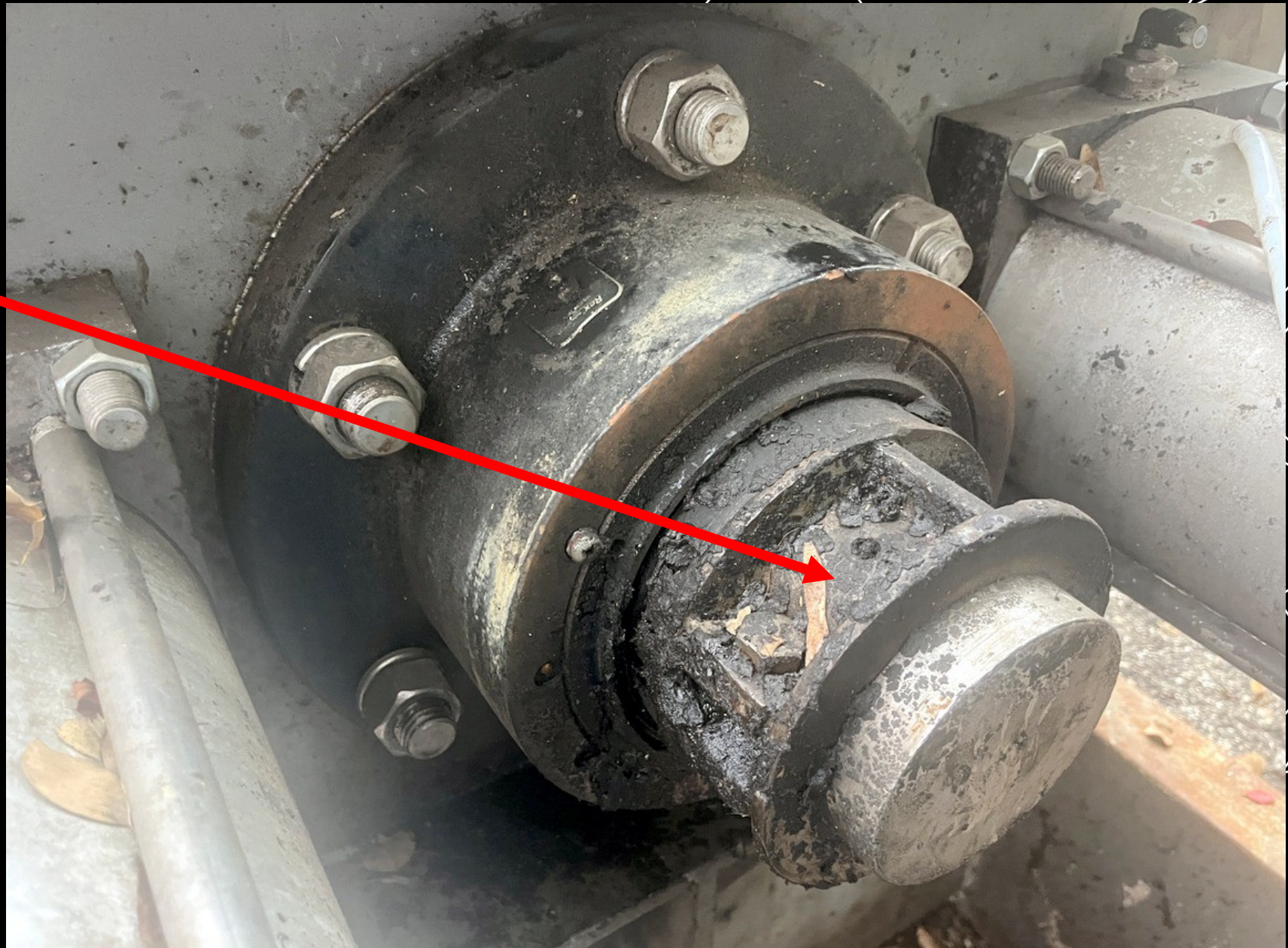
**Note that this
end of the screw
is being
supported.**



**At the
discharge end,
disconnect the
air cylinders.**



**Remove the
split collar.**



Remove the tailstock/thrust plate assembly (with the air cylinders and thrust bearing still attached).



**Slide the discharge
cone off the screw
shaft to remove.**



Remove the screw from the discharge end of the press, supporting the screw from above as it goes through the vertical plates.



Oct 23, 2023 5:28:42 PM
42.00279N 4.54241W
Altitude:799.3m
Speed:0.0km/h

Screw Removal



**Proper
material
handling
equipment
makes the job
much easier.**

**Here a crane
is lifting the
new screw
into position.**



With the new screw in place, the coupling hub is heated and installed.



Feeler gauges are used to center the screw where it goes through the B-Plate.

The B-Plate is the vertical plate between the inlet and screened area.



With the screw in place and centered, install the gearbox and align it to the screw. Not the other way around!



Next, center the discharge end of the screw shaft with the ID of the C-Plate. The tailstock will then be aligned with the screw shaft.



Reinstall the discharge cone, tail-stock, and air lines. The tailstock should be shimmed to align it with the screw shaft. Again, not the other way around!



To reinstall the screens, bolt on only one side at a time and measure the gap between it and the screw.

A tight fit ($\leq 1/16"$) without rubbing is ideal.



Spin the screw by hand to check for screw-to-screen interference.



In order to prevent rubbing, shims can be installed between the resistor bar and screen flanges.



**Use Anti-Seize on all
stainless hardware.**



Follow the recommended torque specs for the size/pitch of grade 18-8/304 stainless bolts (Vincent's std. fitment) used on the screens and resistor bars.



**Consider using
double nuts on
the screens if
high vibration is
present.**

