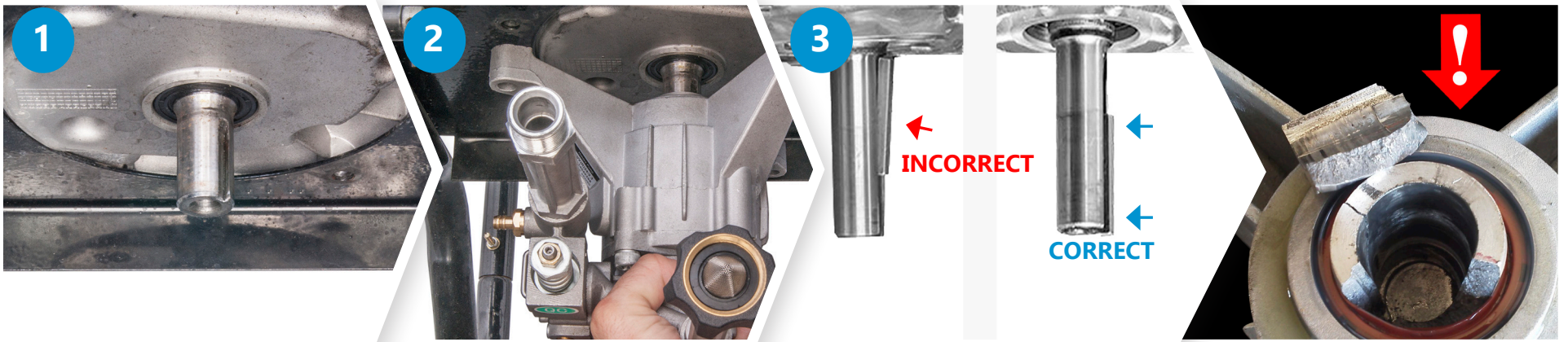


VERTICAL PUMP INSTALLATION INSTRUCTIONS



TOOLS NEEDED: 1/2" line wrench, 1/2" socket, ratchet, nuts and bolts from old pump, spacers and shaft key (provided).

Turn off unit and remove the old pump. Clean the shaft of any debris.

TEST INSTALL: Slide your new pump onto the shaft **without** the shaft key, all the way up to be flush with the frame (no gap). **If the pump arms do not lay flat against the frame, then spacers are required (provided).**

INSTALL: Remove the pump and install the shaft key. **The shaft key must remain positioned correctly** while mounting the pump. Incorrect positioning will damage your pump (next image) and is not covered by warranty.

Forcing the pump onto the shaft when the shaft key is improperly seated will result in pump damage not covered by warranty.



Line up the pump arms with the mounting holes on the frame/engine. Use an object (brick, wood, etc) to support the pump and install nuts and bolts one at a time. **Do not tighten yet.**

Use spacers if the arms do not touch the frame. Longer bolts may be required and are available at your local hardware store.

Hand tighten each nut/bolt and **make sure there is no gap** between the pump arms and the frame. Pull recoil to make sure the engine is not binding. Then tighten the bolts. **Tightening if the pump arms are not flush can cause the arms to break. This is not covered under warranty.**

With the pump snug, pull engine recoil slowly to ensure engine is not binding. If recoil is hard to pull, loosen bolts 1 turn and try again. If recoil is still hard to pull, contact us for assistance.