

# **User Assembly & Install Guide**



Safe-T-Pull Inc.

# Safety Information

Please read the following safety notes carefully before working with the Safe-T-Pull PRO. These notes include important safety information about installation, usage, and maintenance.

All personnel working on, with, or near a Safe-T-Pull PRO must wear safety toed shoes, safety glasses, reflective safety vest, protective gloves, and hard hat.

The Safe-T-Pull PRO may raise or lower unexpectedly. When servicing the Safe-T-Pull PRO be sure the pulling vehicle is OFF and the Puller Arm is in the lowered position.

When traveling on public roads or during extended periods of storage, install the Manual Cylinder Lock. This will prevent the Puller Arm from accidentally lowering.

## Rules for safe hydraulic operation

- Park hydraulic machinery where children cannot reach it.
- If your pulling vehicle has hydraulic flow control capabilities, (usually measured in GPM) decrease the flow to the minimum amount required to operate the Safe-T-Pull PRO (2 GPM)
- Block the Safe-T-Pull PRO when you must work on the system while raised; DO NOT rely solely on the hydraulic lift.
- Avoid servicing the hydraulic system while the machine engine is running.
- Do not remove cylinders until the Safe-T-Pull PRO is resting securely on the ground or safety stands or blocks; shut off engine.
- Before disconnecting hydraulic hoses, relieve all hydraulic pressure.
- Be sure all hose connections are tight and hoses are not damaged.
- Use a non-volatile cleaning solvent to wash parts.

## Three common hydraulic system hazards

- 1. Burns from very hot, high pressure fluid.
- 2. Injuries and illness from flailing hydraulic lines.
- 3. Hydraulic fluid injection into the body.

## Ways to prevent hazards from occurring

- When attempting to detect pinhole leaks in hydraulic hoses run a piece of cardboard or wood along the hose.
- NEVER touch hydraulic hoses when they are under pressure.
- NEVER connect a low pressure hose, cylinder, or ANY aftermarket equipment to the Safe-T-Pull PRO.
- Ensure all hydraulic components are in proper working condition on the pulling vehicle.
- Periodically check for oil leaks and worn hoses.
- Keep contaminants from hydraulic oil and replace filters regularly.
- Lubricate cylinder rods with protective lubricant to avoid rusting.

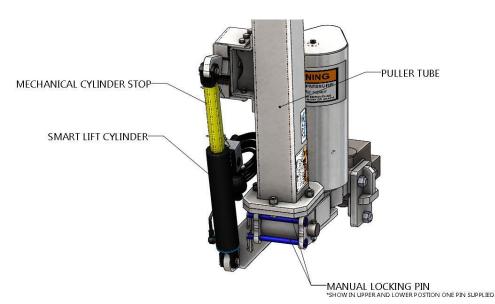
# Safety Locks

As a safety feature, 2014 and newer Safe-T-Pull PRO's come equipped with Manual Puller Arm Locks. The Safe-T-Pull PRO may be locked up in the raised positon to prevent "settling" or lowering.

## **Raised Position**

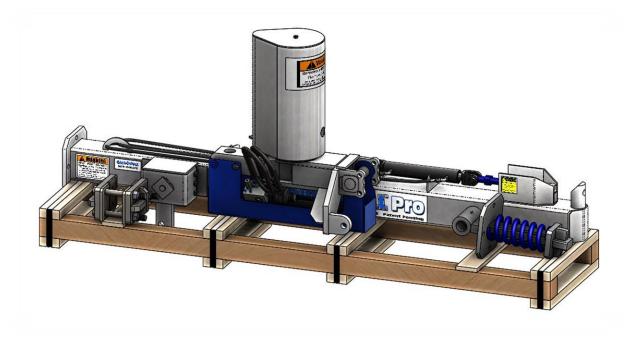
When the Puller Arm is raised all of the way up, a pin may be installed into the top hole position to keep it from lowering. Also us the Manual Cylinder Lock to choke the rod of the cylinder.

WARNING: These pins will NOT stop the puller arm from being raised or lowered hydraulically.



# **Unpacking Instructions**

Before discarding any packaging, be sure all included parts are accounted for. Remove all strapping and/or banding on the package. For claims please visit section 1 of this document.



# Assembly

If your Safe-T-Pull PRO has been palletized for shipping, assembly is required. After unpacking, follow these steps to assemble your Safe-T-Pull PRO.

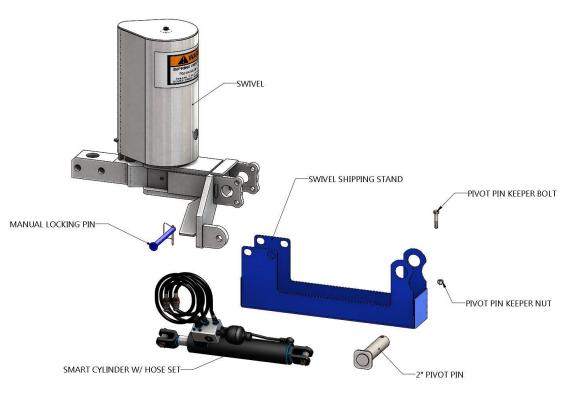
#### **Recommended Tools:**

- Lifting device (fork lift, skid-steer, cherry picker)
- Chain or lifting strap
- Two ¾" wrenches or sockets
- Two 11/16" wrenches
- Two 1 1/8" wrenches or sockets
- One 1 1/2" wrench or socket
- One 1 7/16" wrench or socket

## WARNING: All lifting equipment must be rated for 1,000 pounds (453.5kg) or more!

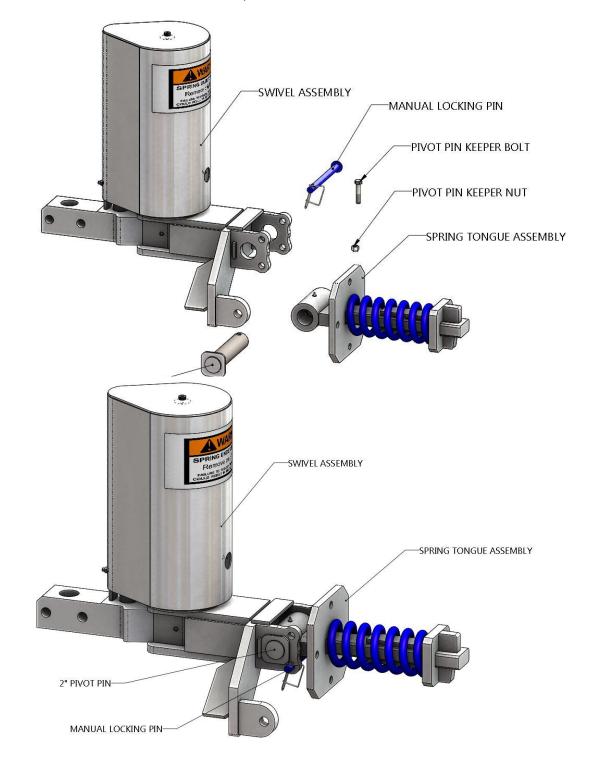
**Step 1:** Remove the swivel assembly by lifting it out of its stand using a lifting strap or chain. It works best to remove the "Dust Cover" first to "choke" a lifting strap around the large compression spring.

Note: Two ¾" wrenches or sockets required.



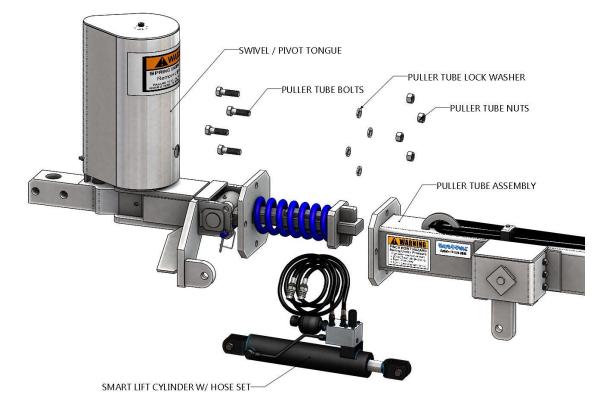
**Step 2:** Pin the Spring Tongue onto the Swivel Assembly. Bolt the pin into place with the included ½" bolt and nylock nut.

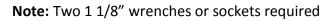
**Note:** Two ¾" wrenches or sockets required.



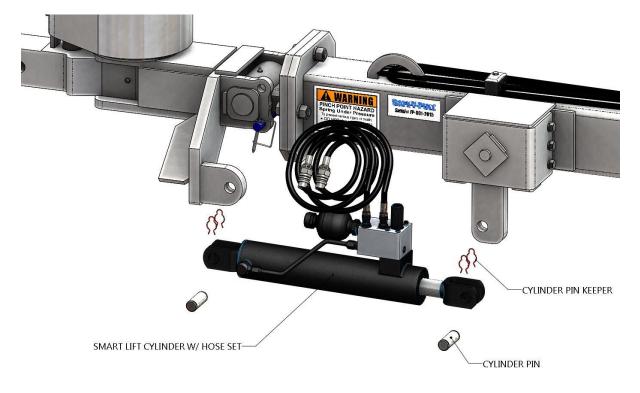
**Step 3:** Align the puller tube assembly and swivel assemblies as shown below. Slide the Spring Tongue into the Puller Tube Assembly.

**Step 4**: Bolt the Puller Tube and Swivel assemblies together with the four included ¾" bolts, lock washers, and nuts.





**Step 5**: Using the provided pins, attach the *Smart Lift Cylinder* as shown below.



**Step 6:** Attach the hydraulic hoses to the *Smart Lift Cylinder*. Note: Two 11/16" wrenches required

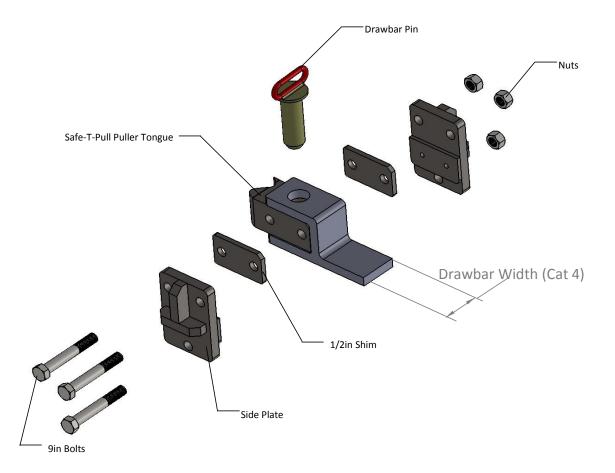


#### Installation

After assembling your Safe-T-Pull PRO, follow these steps to install the puller to your pulling vehicle.

#### Installation Instructions

**Step 1:** Use a lifting device to align the tongue of the Safe-T-Pull PRO into your tractor's drawbar.



**Step 2:** Slide your tractor's pin into the drawbar. Be sure to use the correct bushings according to your drawbar width and pin size.

Note: Category 3 drawbar requires a bushing for the puller tongue

Category 4 drawbar requires no bushings

Category 5 drawbar requires two bushings for the tractor drawbar

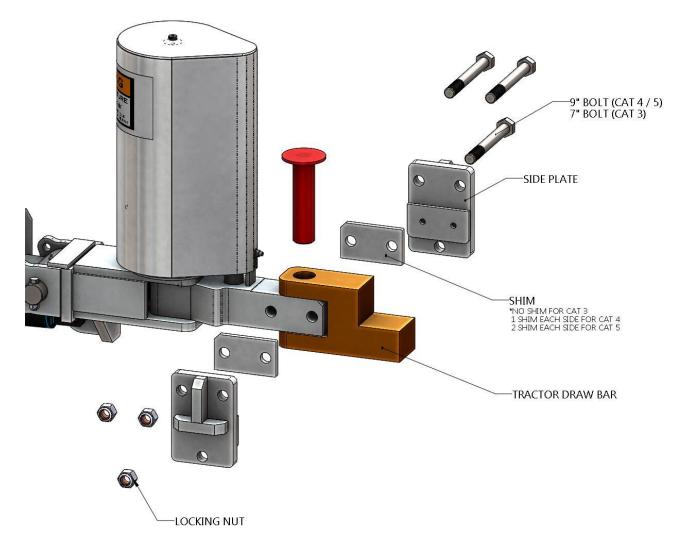
**Step 3:** Tighten the three Drawbar Side-Clamp bolts to lock the Safe-T-Pull PRO into place. Be sure to use the correct shims according to your drawbar width.

Note: Category 3 drawbar requires no shims

Category 4 drawbar requires one 1/2" shim per side

Category 5 drawbar requires two 1/2" shims per side

# (Picture on Next Page)



**Step 4:** Push your four hydraulic hoses into your tractor's ports.

**CAUTION**: Ensure that all hydraulic equipment is in proper working order. Visit the *Safety Information* section in this document for more information.

**Step 5:** Extend and retract both the Lift Cylinder and the Pin Cylinder several times to fill the lines with hydraulic fluid.

*NOTE:* If this step is missed your Safe-T-Pull PRO may not work properly. This may take up to several minutes.