

Multi Use Pin Puller

CAT 7495



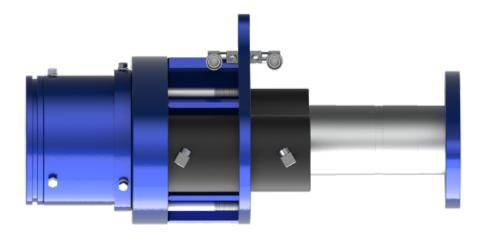
Installation and Operating Manual



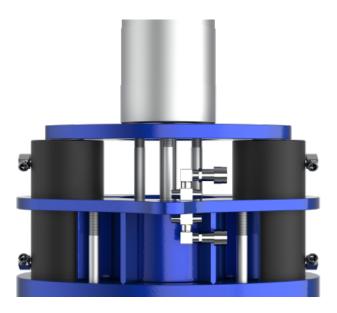
Overview

Compact and versatile design to pull pins up to 9" diameter and 22.5" long pins. An easy to install extension tube enables pulling pins up to 30" long. This pin puller contains back plates compatible with the bolt patterns of the CAT 7495 - Hoist Pedestal Pin, Gantry Pin, and Stick Pin.

The back plate is designed to rotate within the pin puller frame to easily align with the bolt pattern on the pin. With two 100 ton cylinders at a max 10,000 psi, this pin puller can remove even the most difficult pins.









Package Contents

ITEM	QTY	UNIT WEIGHT
Pin puller assembly (without back plate)	1	232 kg (510 lb.)
Back plate for pedestal/stick pin	1	26.0 kg (57.3 lb.)
Back plate for gantry pin	1	28.4 kg (62.7 lb.)
Extension tube	1	27.5 kg (60.6 lb.)
Hydraulic pump	1	60 kg (132 lb.)
Hydraulic hoses		
Tension Bolts:		
Socket Head Screw 1-1/2"-6 x 20" Long	1	5.21 kg (11.5 lb.)
Socket Head Screw 1-1/2"-6 x 12" Long	1	3.39 kg (7.48 lb.)
Socket Head Screw 1-1/2"-6 x 4-1/2" Long	1	1.69 kg (3.72 lb.)
Socket Head Screw 1"-8 x 18" Long	3	2.00 kg (4.42 lb.)
Socket Head Screw 1"-8 x 10" Long	3	1.20 kg (2.64 lb.)
Socket Head Screw 1"-8 x 3" Long	3	0.49 kg (1.08 lb.)
Socket Head Screw 5/8"-11 x 18" Long	6	0.75 kg (1.66 lb.)
Socket Head Screw 5/8"-11 x 10" Long	6	0.44 kg (0.97 lb.)
Socket Head Screw 5/8"-11 x 3" Long	6	0.16 kg (0.36 lb.)
Beam clamp with 2,000 lb. capacity, 3" to 9" jaw	1	4.5 kg (10 lb.)
Hand operated chain lever hoist with 1,500 lb. capacity, and 20 ft. chain	1	11.3 kg (25 lb.)

All components are securely located inside the box as shown in the picture.

Packaged in metal box GRWT: 712 kg (1,570 lb.)
Packaged in wooden box GRWT: 485 kg (1,070 lb.)







User Instructions

Use a crane or erect a gantry with an I-beam that can handle min. 1 ton load and position it in line with the pin to be pulled.

- If necessary, connect the hydraulic pump to the pin puller and fully retract the cylinders.
- Install the appropriate back tension plate to the pin puller to match the bolt pattern on the pin.
- Use a 3/4" screw pin shackle and attach it at the main lifting point on the pin puller.
- Install the beam clamp and hand operated lever hoist on the gantry.
 - Position the pin puller under the gantry and lift up to line with the pin. Use a short chain connected to the balancing lifting point to balance the pin puller.
 - Using the bolts appropriate for the pin, install the long tension bolts through the back tension plate on the pin puller and screw them into the pin.
 - The pedestal and stick pins use one 1-1/2" bolt in the center and three 1" bolts
 - The gantry pin uses one 1" bolt in the center and six 5/8" bolts
- Torque the 1-1/2" and 1" tension bolts to 150 ft. lbs. and the 5/8" tension bolts to 50 ft. lbs.
- Position the hydraulic pump close to the pin puller and connect the hydraulic hoses.
- Power up the hydraulic pump and apply a small initial load of 500 psi
 - The Hydraulic pump has a manual switch at the top of the pump motor that can run and stop the unit. For remote operation, use the remote pendant to run and stop the unit.
 - Use the manual control valve to operate the double-acting cylinders.



User Instructions

Check the pin puller positioning and alignment. If the pin puller is aligned properly, continue to apply load until the pin is extracted about 8" (maximum stroke of the hydraulic cylinders). The pump is pre-set to a max of 6,000 psi, which will provide over 246,000 lbs. of force.

Note that the proof load for all four tension bolts is 386,000 lbs. for the pedestal and stick pin, and 235,000 lbs. for the gantry pin.

- 1-1/2" bolt proof load is 168,600 lbs.
- 1" bolt proof load is 72,700 lbs.
- 5/8" bolt proof load is 27,100 lbs.
- Retract the cylinders and remove the long tension bolts.
 - Repeat the previous steps with the medium length tension bolts, then again with the short tension bolts to remove the pin.
 - For pins longer than 22.5", after pulling with the short tension bolts, remove the tension bolts and back plate and install the extension tube. Reinstall the back plate and short tension bolts to make the final pull to remove the pin.
- Lower the pin puller to the ground and remove the extracted pin by removing the tension bolts.
- Repeat the above procedure for any additional pins as required.

The hydraulic cylinders should be **fully retracted when storing the pin puller** to avoid dirt build up or scratches on the cylinder rods.