

Technical Tips

Grinding Rol-Lift Valve Pins

Series T and E Manual Pallet Jack Hydraulic Units

Rol-Lift valve pins we sell are slightly longer than the matching OEM pins. Our new lower valve pins are approximately 1.75 inches and upper valve pins are 1.25 inches. The reason for this is Rol-Lift does not drill their valves with a consistent depth. Therefore, new pins need to be custom ground to fit each individual hydraulic unit.

1. To custom grind valve pins build your hydraulic unit to the point where you insert the new valve pins.
2. Place each valve pin in its correct valve hole.
3. On the upper round valve pin measure to a point that is .375 inches above the valve opening and mark it with a permanent pen.
4. On the lower square valve pin measure to .3125 inches above the valve opening and mark it.
5. Take each valve pin out one at a time and, using a pair of vice grips to hold them, grind the pins to the mark you made. Use a grinding wheel on a bench grinder to grind the pins.

Now the pins are ground to fit your Rol-Lift.

The average overall length of ground valve pins is .975 inches for the upper and 1.625 inches for the lower. This may vary for different Rol-Lift hydraulic units. These measurements work as long as there is no other damage to the hydraulic unit and the unit has not been modified. OEM valve pins do not need to be ground and may be reused as long as they are not damaged and are used in the same hydraulic unit.

GPS Lower Valve Pin
1.75"



GPS Upper Valve Pin
1.25"



OEM Lower Valve Pin
1.625"



OEM Upper Valve Pin
0.975"



Upper Valve Pin: part number RL 4-00084

Lower Valve Pin: part number RL 4-00086