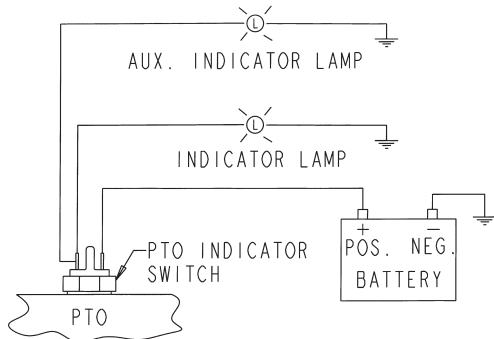
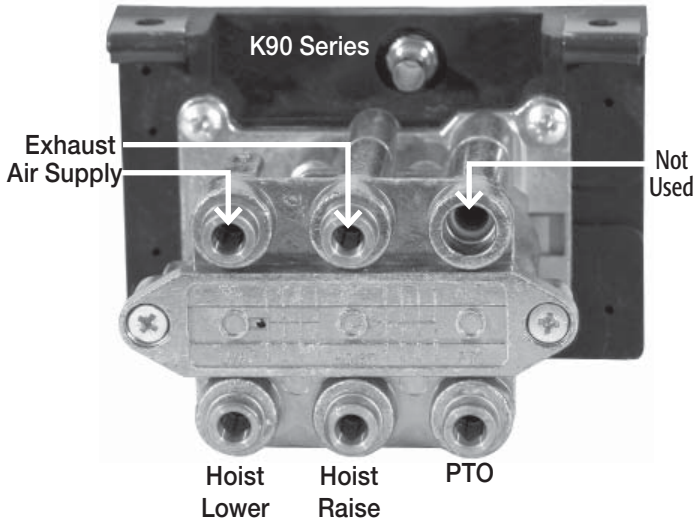


Installation Instructions

Air Valves for K80 Series, K90 Series, K1010 Series



PTO ENGAGED INDICATOR WIRING DIAGRAM

The PTO Indicator light must be installed so that it is visible to the operator of the vehicle while seated in the driver's seat. Additional indicator lights may need to be purchased to comply with this requirement.

Mounting Options

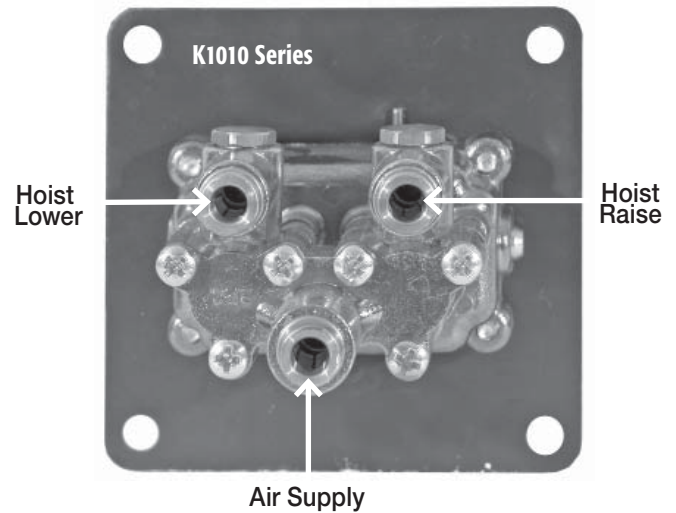
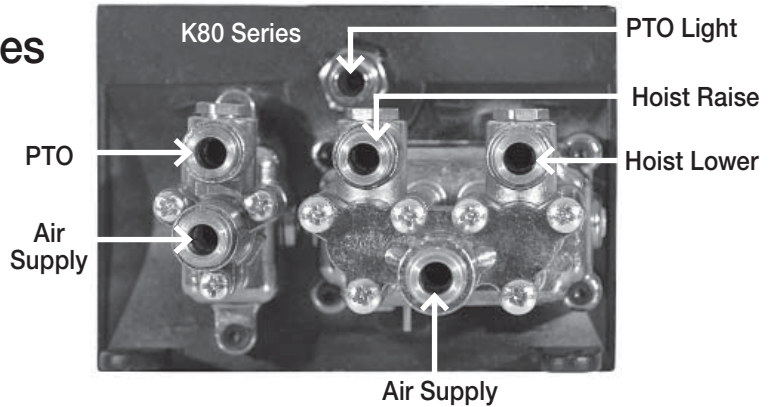
Several consoles are available for valve installations:

- K90C standard 8" high console
- K90TC optional 14" high console
- K90LC optional 14" high console with large 71/8" x 61/8" top
- K1010C console for K1010 series valves

The light that is supplied with the PTO should be wired in conjunction with the light supplied in the hoist/PTO valve. (Two lights should be used that indicate the PTO is engaged.)

Valve Mounting Location

All valves should be mounted where they are in the line of vision and easily accessible to driver. All valves should be mounted where they are protected from accidental damage. All valves should be mounted where they are least apt to be accidentally engaged.



Valve Maintenance

All valves and consoles should be inspected at the start of each work day to make sure they are in good working order. Any valves with any missing parts or broken parts should be replaced with new parts or new valves. All consoles must be secured rigidly to vehicle floor and valve must be mounted securely in console. All indicator lights should be connected and working. Any defective bulbs must be replaced. Any valves/ consoles that appear worn or modified in any way should be replaced. All air lines should be inspected and protected from chafing.

Safety

Do not transport vehicle with PTO engaged. Only engage PTO when vehicle is stopped. Only engage PTO just prior to the time flow and pressure are required. Disengage PTO as soon as work is completed. Failure to disengage the PTO from driving the Pump/Valve when in transit may allow the bed to rise unintentionally, which may lead to loss of vehicle control, accidental injury and/or damage. A body up switch should be installed on all dump vehicles to warn driver when the dump body is not down completely (Buyers Products # SK10).

Installer please forward this instruction sheet to vehicle owner/operator.

General Information:

These instructions are for your safety and the safety of the end user. Read them carefully until you understand them.

General Safety Information:

To prevent injury to yourself and/or damage to the equipment:

1. Read carefully all owners' manuals, service manuals, and/or other instructions.
2. Always follow proper procedures, and use proper tools and safety equipment.
3. Be sure to receive proper training.
4. Never work alone while under a vehicle or while repairing or maintaining equipment.
5. Always use proper components in applications for which they are approved.
6. Be sure to assemble components properly.
7. Never use worn-out or damaged components.
8. Always block any raised or moving device that may injure a person working on or under a vehicle.
9. When installing a Hydraulic Reservoir, always wear protective clothing and safety glasses.
10. Owner/Operator should periodically inspect reservoir, mounting brackets, and hardware as a routine maintenance procedure.

Polyethylene Tanks Information

WARNING

This tank is molded from polyethylene material. The black color provides for maximum ultra-violet resistance. The maximum operating temperature is 180 degrees Fahrenheit. Operating in hydraulic fluids above this temperature may result in tank deformation or sag and possible inner tank surface detachment. This reservoir is designed for dump trailer applications with a maximum hydraulic cycle time of less than 5 minutes. Longer running time may result in excessive heat build-up and subsequent damage.

Rotating Auxiliary Driveshafts

WARNING

- Rotating auxiliary driveshafts are dangerous. You can snag clothes, skin, hair, hands, etc.
- This can cause serious injury or death.
- Do not go under the vehicle when the engine is running.
- Do not work on or near an exposed shaft when the engine is running.
- Shut off the engine before working on the Power Take-Off or driven equipment.
- Exposed rotating driveshafts must be guarded.

Guarding Auxiliary Driveshafts

WARNING

We strongly recommend that a Power Take-Off and a directly mounted pump be used to eliminate the auxiliary driveshaft whenever possible. If an auxiliary driveshaft is used and remains exposed after installation, it is the responsibility of the vehicle designer and P.T.O. installer to install a guard.

Using Set Screws

WARNING

Auxiliary driveshafts may be installed with either recessed or protruding set screws. If you choose a square head set screw, you should be aware that it will protrude above the hub of the yoke and may be a point where clothes, skin, hair, hands, etc. could be snagged. A socket head set screw, which may not protrude above the hub of the yoke, does not permit the same amount of torquing as does a square head set screw. Also a square head set screw, if used with a lock wire, will prevent loosening of the screw caused by vibration. Regardless of the choice made with respect to a set screw, an exposed rotating auxiliary driveshaft must be guarded.

Pump Installation Precalculations

WARNING

- Use a bracket to support the pump to the transmission if:
- The pump weighs 40 pounds or more.
 - The combined length of the P.T.O. and pump is 18 inches or more from the P.T.O. centerline to the end of the pump.
- Increased torsional vibrations found in high torque low R.P.M. engines can lead to premature wear of the mating shafts and is accelerated if the shafts are not lubricated.