



AJ/AM (Shipped Loose) Assembly and Purge Instructions

This product is shipped with the pump assembly unattached from the leg assembly. The purge process is best performed without any load on the jack; therefore it is recommended that these instructions be fully read prior to starting assembly/installation. The failure to properly purge the leg will result in the jack not being able to extend or retract when under load (trailer weight on jack).

Assembly for units to have the pump mounted to the leg.

Attach the Pump Assembly to the Leg Assembly

1. Lay the leg assembly on the work surface with the pump mounting bracket facing up.
2. The pump is shipped with studs installed in the base of the port plate (center section that separates the motor from the reservoir). Remove the flange nuts (2) from these studs.
3. Set the pump onto the pump mounting bracket of the leg assembly so the studs (item 2 above) pass thru the slots in the pump mounting bracket of the leg assembly. Note that the reservoir goes toward the bottom (Foot) of the leg assembly.
4. Install the Flange nuts onto the studs from the inside of the pump mount bracket. Position the pump off center of the leg assembly prior to tightening the nuts (this is done so that the center of the motor is off center of the jack leg to allow the use of a drill on the end of the motor for manual override). Tighten the nuts to 15 lb/ft.

Assembly/Mounting pump for units with pump mounted remotely from jack.

The pump should be located/mounted in an area so that the following items can be addressed:

1. The manual override motor screw or the hand pump/override valve is accessible.
2. The reservoir fill is accessible.
3. Future maintenance items can be addressed.
4. Some units may be mounted vertical or horizontal. The fill cap will need to be up. When mounting vertically the motor will always need to be up (above the reservoir). Pump #s 3040, 3041, 3200 and 3201 (these #s are located on the tag on motor or port plate) must be mounted vertical. Failure to do so will result in the reservoir not having enough volume to handle the fluid required to run the jack(s).
5. Adequate space/routing of Hose assemblies (2) will need to be routed from the pump assembly to the Jack. Wire harness from the pump to the mounting location of the control switch box and power and ground connections from the battery to the pump assembly.
6. The mounting is done using the 2 studs or tapped holes (3/8-16) located in the bottom of the port plate. Tighten these nuts/bolts to 15 lb/ft.

Hose Connections for Single Leg Jacks

There are 2 hose assemblies to connect the pump to the leg assembly. Hose assemblies and adaptor fittings are shipped with caps or plugs to prevent debris from entering the system. These caps and plugs need to be removed prior to attaching hose assemblies.

For pump mounted to leg type systems.

1. The short hose is for the upper (motor end) pump to leg connection. Connect the hose from the upper leg port to the extend fitting at the pump assembly. On the AJ series, the pump port for the upper hose (extend) is stamped 'T' on the aluminum port plate near the reservoir. On other units it is the port nearest to the motor.
2. The long hose is for the lower connection. Generally it will have a 90 degree end on the one end of the hose. Connect the 90 degree hose end to the lower leg port. The opposite end of the hose goes to the remaining port at the pump assembly. On the AJ series the lower (retract) pump port will be stamped 'B' on the aluminum port plate near the reservoir. On other units it will be the port nearest to the reservoir.

For remote mounted pump assembly.

1. Connect a hose from the upper leg port to the extend fitting at the pump assembly. On Bi-Rotational pumps, the pump port for the upper hose (extend) is stamped 'T' on the aluminum port plate near the reservoir. On other units it is the port nearest to the motor.
2. Connect a hose from the lower leg port to the retract fitting at the pump assembly. On Bi-Rotational pumps, the pump port for the lower hose (retract) is stamped 'B' on the aluminum port plate near the reservoir. On other units it is the port nearest to the reservoir.

Notes:

Some adaptor fittings used on the pump/jack assembly may be 90 degree. Some of these 90 degree adaptor fittings will have a jam nut that allows the adaptor fitting to be orientated for proper connection of the hose. To rotate the adaptors, loosen the jam nut then turn the fitting. Retighten the jam nut after the hose is connected and properly orientated. Other 90 degree adaptors only need to be properly orientated prior to tightening.

Hydraulic adaptors and hose connections should be tightened to 15 lb/ft.

When working with hydraulic fittings and hose connections, cleanliness is very important. All fittings and hose assemblies are shipped plugged or capped to prevent debris from entering system. Do not allow dirt, sand, water, or other foreign matter to enter the system through dirty hose or adaptor fitting connections.

Purging For Single Leg Jacks

This is the process of filling the system with oil and expelling air from the components of the hydraulic system. This process may be done before mounting it to the trailer. The system must be cycled at least 3 times to fully expel air from the jack. It is best done with no load (weight) on the jack. This process can be done mounted on the trailer ONLY if the trailer is blocked or supported high enough to allow full extension of the jack without lifting the trailer. This is especially important on the units with the Bi-Rotational pumps. Failure to properly purge the system will result in the jack not being able to lift the trailer or that the jack won't retract with weight on it.

1. Connect power and ground to the pump assembly. See the owner's manual for the correct connection points. Jumper cables may be used as a temporary connection to a battery if the unit is being purged prior to being installed on the trailer.
2. Connect the switch and harness assembly to the plug connector on the jack.
3. Fill the reservoir to full using Automatic Transmission fluid multi-purpose or one that meets a Dexron requirement.
4. Operate the switch to extend the jack (Trailer UP). Run the jack to full extension. Add fluid if needed to keep at least 2 inches of fluid in the reservoir. Do not fill more than ½ way during extension. Do not allow reservoir to run out of fluid.
5. If the fluid is foamy or aerated, leave it sit until the foam leaves.
6. Add fluid so that there is at least 2 inches in the reservoir. Do not fill past ½ way.
7. Retract the jack fully.
8. Refill reservoir to full. Allow foam (air) to dissipate.
9. Extend and retract the jack at least 3 times -allowing for foam and air to dissipate from the fluid in the reservoir.
10. The reservoir should be filled to the full line- or about 1 inch below the fill hole.

Notes:

Be patient. It does no good to run the jack when the fluid is foamed up. You will only be moving the foamed up fluid (air) to the other side of the hydraulic system.

During the process, look for leaks at the adaptor fittings and hose connections. Tighten where needed.

This is a high pressure hydraulic system. Do not loosen adaptor fittings or hose connections without proper safety precautions.

All manuals, instructions, and service support can be found on the service page of our website:

www.equalizersystems.com

Please call Equalizer Systems if you have any questions
(800) 846-9659