

Angle Broom Hydraulic Angle Installation Instructions

- The following part numbers reference the parts lists in the Virnig Manufacturing Angle Broom Owners/Operators Manual.
- Take note which lead hose and coupler corresponds to which motor port location. Normal plumbing connects the lead hose with the female coupler to the upper motor port and the lead hose with the male coupler to the lower motor port.
- Remove clamp and hardware (Part #'s 7726PP, 6140PP and 7729PP) that secure the lead hoses to the broom. These parts will no longer be used.
- Disconnect the hoses from the 90° elbows (Part # 8460PP) over an oil pan to minimize the amount of oil spillage. These elbows will no longer be used.
- Install the Hydraulic Manifold (Part # 8518PP) to the mounting bracket on the Angle Broom using the 3/8" hardware provided (Part #'s 1075PP, 1083PP and 7849PP). See Figure 1.

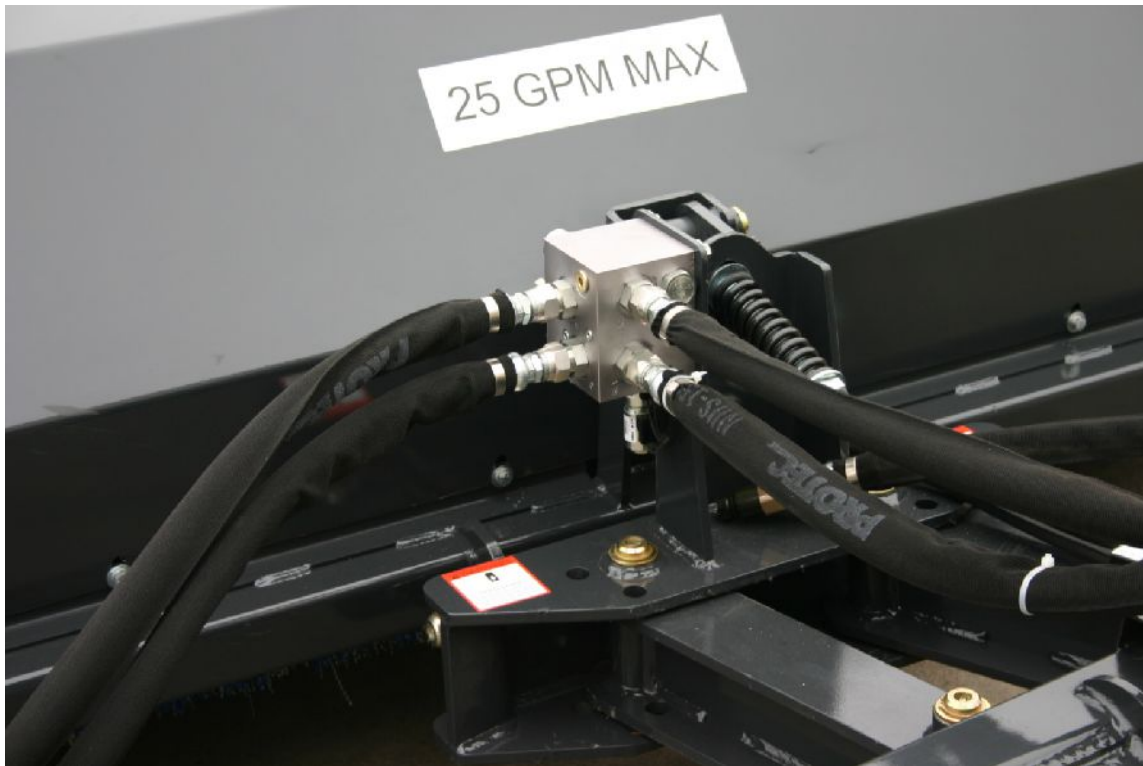


Figure 1: Hydraulic Manifold Mounting

- Connect the hose installed in the motor's upper port to port M1 on the manifold and the hose installed in the motor's lower port to port M2 on the manifold.
- Under normal conditions, the lead hose with the female coupler should be connected to port FWD on the manifold and the lead hose with the male coupler should be connected to port REV on the manifold.
- Install the hydraulic cylinder (Part # 6682PP) using the pins, washers and snap rings provided (Part #'s 2137VP, 1094PP and 1095PP). The hydraulic cylinder should be orientated so that the fittings are facing forward, away from the operator. See Figure 2.
- Connect the 64" hydraulic hose (Part # 1125PP) to the barrel end of the cylinder and to port C1 on the manifold. Connect the 72" hydraulic hose (Part # 1127PP) to the rod end of the cylinder and to

port C2 on the manifold. Route the hoses as shown in Figure 2 and secure with clamps (Part # 1067PP) and 5/16" bolts (Part # 1117PP).

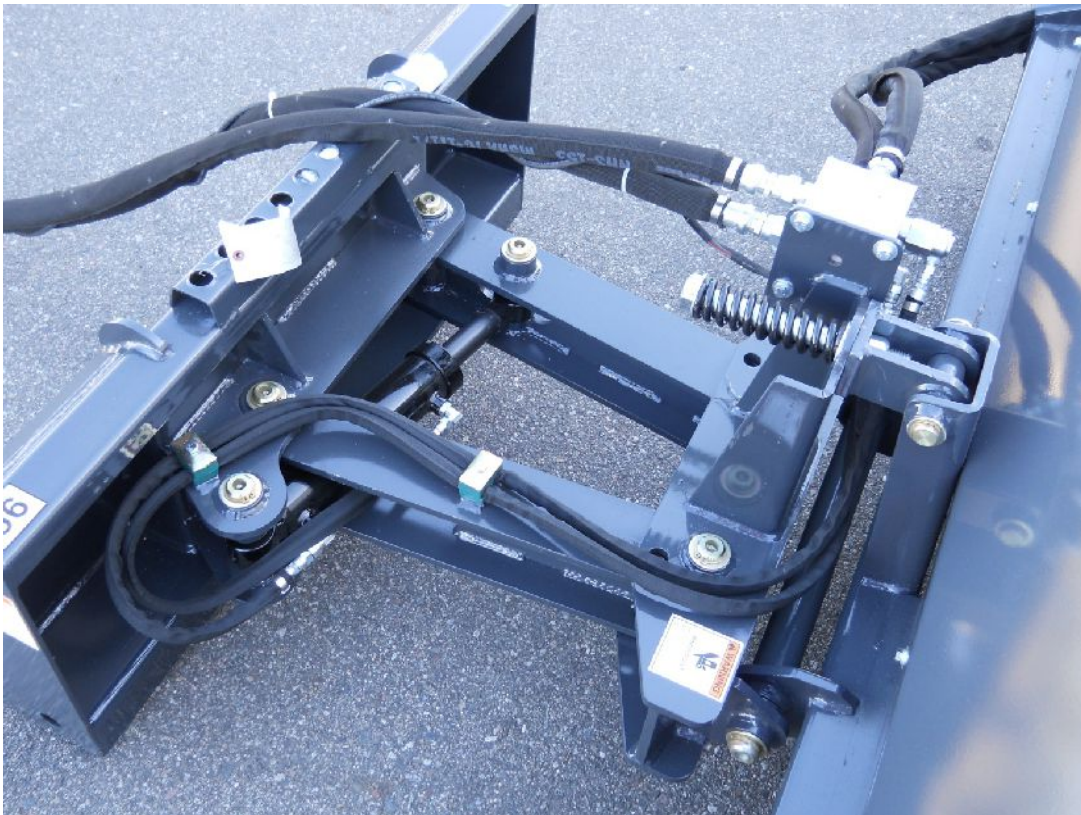


Figure 2: Cylinder Mounting and Hose Routing

- Double check and make sure all hydraulic fittings are tight before operating.
- Zip tie the electrical lead wire on the manifold to one of the lead hydraulic hoses with the zip ties provided.
- Connect the hydraulic couplers to the machines couplers. Connect the lead electrical wire to either the machines electrical connector with the correct plug or to the control box which needs to be mounted in the machines cab.
- Before operating, remove the 7/8" hitch pin (Part # 7968PP) that is used for manual angle. This pin is no longer used.

- Check operation of the hydraulic angle function. Engage the machines hydraulics in the detent position. The angle broom should be sweeping away from the operator in this configuration. With the broom spinning, use either the machines electrical functions or the supplied control box and engage the electrical switch. This should angle the broom in one direction. Engaging the switch in the other direction should angle the broom in the opposite direction. If the switch is engaged and nothing happens, the broom may be spinning in the wrong direction. The angling feature only works when the broom is sweeping away from the operator. Initial operation may be somewhat jerky. This is probably caused by air in the system. If the functions seem to work correctly, cycle the broom back and forth a few times to purge the air from the lines.
- If you have any questions or need further assistance, please call Virnig Manufacturing at 1-800-648-2408.