

## OWNER'S MANUAL

# W603 POWER BEYOND KIT FOR 6-1/2, 7-1/2, 8-1/2 FOOT BACKHOES AND TRACTORS WITH OPEN-CENTER HYDRAULIC SYSTEMS

### General Description

The W603 Power Beyond Kit consists of those parts required to convert the 6-1/2, 7-1/2, or 8-1/2 foot backhoe valve so that pressurized hydraulic oil can be directed to another "open center" valve. This allows the backhoe valve and a loader or other accessory valve to be connected to the tractor hydraulic system simultaneously, without the inconvenience of using a flow diverting valve.

Since this kit is used with "open center" hydraulic systems, oil will be constantly flowing from the pump, through the backhoe valve and the loader or other accessory valve, and then to the reservoir. "Open center" refers to this constant flow through the open center core of the valves.

This kit does not include a hose or all fittings to connect from the backhoe "power beyond" port to the loader or other accessory valve "inlet" port. The proper length of hose and fittings required must be determined for each specific application. These parts must be supplied by the customer.

### Tractor Preparation

Stop tractor, lower all attachments to the ground, and relieve pressure in all hydraulic lines by moving all control handles back-and-forth or side-to-side several times.

### Backhoe Preparation

1. Remove shroud covering valve hydraulic fittings.

*Note: The terms RIGHT and LEFT for all adapter parts are determined from the position of the operator when seated in the operating position on the backhoe.*

2. Carefully clean the top and right side of the backhoe control valve and remove the "conversion" plug located in the center of the right side of the valve.

*Note: If there are two plugs in this area, the conversion plug is the larger plug located lower on the right side of the valve.*

### Assembly

**IMPORTANT:** *Improper hydraulic hook-up can cause serious damage to backhoe control valve or other hydraulic components.*

1. Install power beyond sleeve (1) into valve cavity, as shown, making sure that O-rings and back-up ring on sleeve are positioned properly and are not pinched or damaged.

2. **6600 and 7600** - Assemble 90 degree O-ring adapter union (4) to power beyond sleeve (1) and direct fitting down through notch in Right Hand foot pad.

**8600** - Assemble straight O-ring adapter union (2) to power beyond sleeve (1). Install 90 degree pipe threaded adapter union (3) into adapter union (2).

3. Assemble hydraulic hose (supplied by customer) to adapter union (3 or 4) as shown. Hose should have same pressure rating as original pressure hose to loader or other accessory valve.

4. Install hose sleeve (6) onto hose assembled in step 3. Position hose sleeve to completely cover adapter union (3 or 4) and secure with plastic tie (5) as shown.



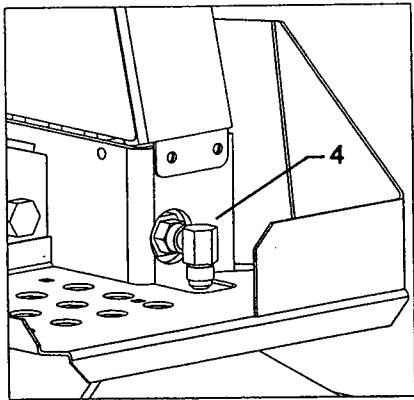
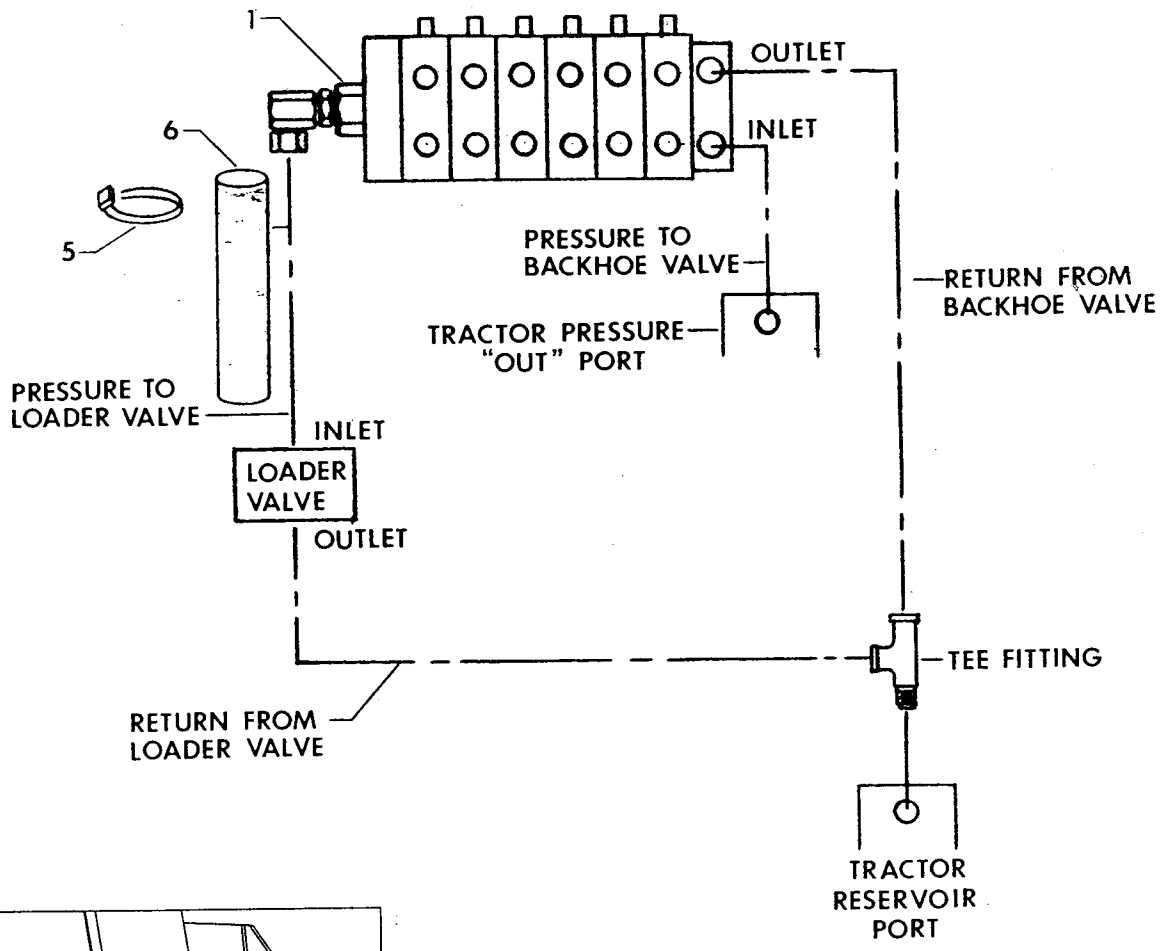
**Hose sleeve (6) is installed to help protect the backhoe operator from escaping fluid under pressure. If it becomes damaged or lost, replace hose sleeve (6) and plastic ties (5) immediately.**

5. Assemble hydraulic hose (see step 3) from backhoe power beyond port to loader or accessory valve inlet port using fittings (supplied by customer) as needed.

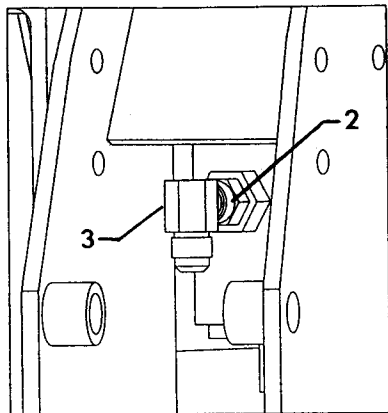
6. Complete assembly of backhoe "pressure" and "return" hoses as shown using hoses and tee fitting (supplied by customer).

7. Complete assembly of loader "return" hose to tee fitting as shown.

8. Replace shroud using hardware removed in step 1 of "Backhoe Preparation" section.



6600 & 7600 BACKHOES



8600 BACKHOE

**Parts List**

Index	Description	Part No.
1	Power Beyond Sleeve .....	10111
2	Adapter Union, 7/8-14 M x 1/2 NPT F x Straight .....	11120
3	Adapter Union, 1/2 NPT M x 1/2 NPT F x 90 Deg .....	11129
4	Adapter Union, 7/8-14 M x 1/2 NPT F x 90 Deg .....	11142
5	Plastic Tie .....	14121
6	Hose Sleeve, 1-9/16 ID x 18" .....	14127