

## Quick Disconnect System High-Pressure Hydraulic

Part No. 7799-00-00-000075, 7799-00-00-000073  
and 7799-00-00-000074



### General Specifications

- Maximum pressure – 5,000 psi (344 bar)
- Minimum positive latching pressure – 2,500 psi (172 bar)
- Disconnect handle, standard manifold or manifold with check valve, pump and control valve required (each sold separately)
- Accumulator required for system using check valve option (sold separately)

### General Safety:

- Use only fittings, hoses, manifolds or other components rated for use at 5000 psi (344 bar).
- Before operating pump, all connections must be tightened with the proper tools. Do not over tighten. Connections should only be tightened securely and leak-free. Over tightening can cause premature thread failure or high-pressure fittings to split at lower than their rated capacities.
- Do not exceed maximum operating pressure.

**CAUTION:** Should a hydraulic component ever rupture or burst or need to be disconnected, immediately shut off the pump and shift the control valve twice to release all pressure.

**WARNING:** Never attempt to grasp a leaking pressurized hose with your hands. The force of escaping hydraulic fluid can cause serious injury.

## Quick Disconnect Handle High-Pressure Hydraulic

Part No. 7799-00-00-000075

### Application:

The hydraulic disconnect handle is used to conveniently and quickly connect and disconnect both hydraulic hoses of a double-acting pallet system. It is used in conjunction with a pallet mounted manifold receiver (part no. 7799-00-00-000073 Std., or part no. 7799-00-00-000074 manifold with built-in check valve). The handle is equipped with an orientation pin so that the hoses cannot be reversed.

Care should be taken when planning the position of the pallet mounted receiver. Placement should be such that the hoses connected to the disconnect handle are not put into a bind when the handle is connected to the pallet in the load station of the machining center. The area around the receiver and handle should be free of all sharp objects to avoid injury to the operator while connecting and disconnecting the system.

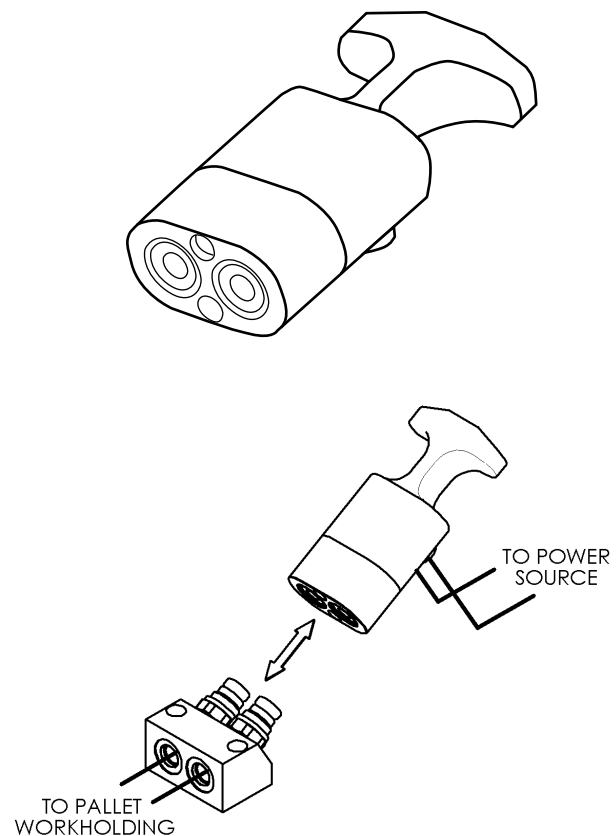
### Handle Installation:

Install a 5000 psi (344 bar) rated  $\frac{1}{4}$ " ID hydraulic hose to each of the  $\frac{1}{4}$ " NPT ports that exit the bottom of the disconnect handle. The hoses should have at least one swivel fitting on each hose and be of sufficient length that they can be connected without placing undue strain on the fittings. **CAUTION: Be careful to plumb disconnect handle so that it matches the receiver when the two are mated.**

### Operation:

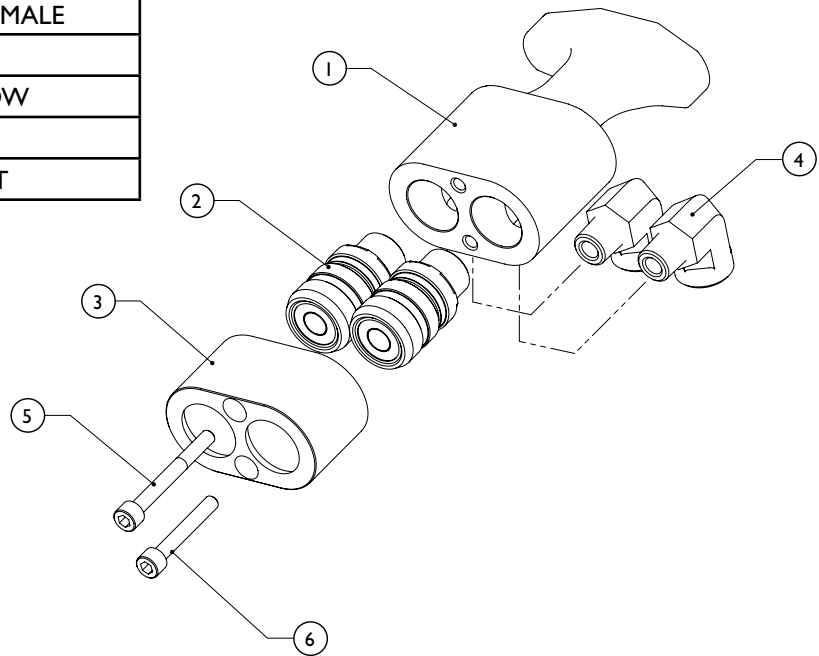
Be sure that all pressure has been relieved from the disconnect handle.

**CAUTION: Attempting to connect or disconnect the system while pressurized will result in damage to the coupling seals.** Blow any debris from the receiver fittings with compressed air. With the pallet secured in the load station of the machining center, align the disconnect handle axially with the receiver and push on the back of the tee handle with the palm of the hand. Continue to push until both couplings have fully engaged. Two audible clicks can be heard when this occurs.



**Quick Disconnect Handle Parts:**

ITEM No.	QTY.	DESCRIPTION
1	1	TEE HANDLE
2	2	COUPLING, FEMALE
3	1	NOSE
4	2	FITTING, ELBOW
5	1	SCREW, LONG
6	1	SCREW, SHORT


**Quick Disconnect Standard Manifold  
High-Pressure Hydraulic**

Part No. 7799-00-00-000073

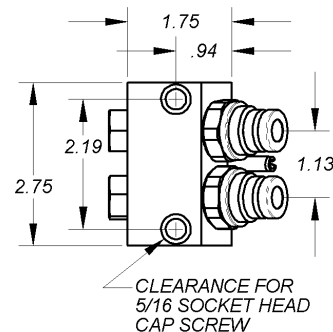
**Application:**

The pallet mounted hydraulic disconnect manifold is used to conveniently and quickly connect and disconnect both hydraulic hoses of a double-acting pallet system. It is used in conjunction with a disconnect handle (part no. 7799-00-00-000075). The manifold receiver is equipped with an orientation pin so that the hoses cannot be reversed.

Care should be taken when planning the position of the pallet mounted receiver. Placement should be such that the hoses connected to the disconnect handle are not kinked when the handle is connected to the pallet in the load station of the machining center. **CAUTION:** The area around the receiver and handle should be free of all sharp objects to avoid injury to the operator while connecting and disconnecting the system.

**Receiver Installation:**

Plumb the receiver with 5000 psi (344 bar) rated 3/8" OD steel tubing from the back SAE-6 (straight thread o-ring) ports. The receiver is secured in place by two 5/16 socket head cap screws. **Be careful to plumb the receiver so that it matches the remaining components on the pallet system.**



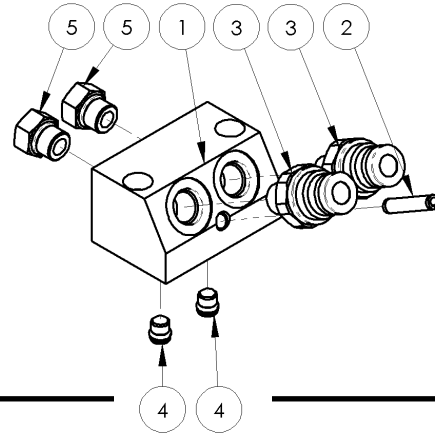
## Operation:

Be sure that all pressure has been relieved from the disconnect handle.

**WARNING:** Attempting to connect or disconnect the system while pressurized will result in damage to the coupling seals. Blow any debris from the receiver fittings with compressed air. With the pallet secured in the load station of the machining center, align the disconnect handle axially with the receiver and push on the back of the tee handle with the palm of the hand. Continue to push until both couplings have fully engaged. Two audible clicks can be heard when this occurs.

## Parts:

ITEM No.	QTY.	DESCRIPTION
1	1	BODY
2	1	ORIENTATION PIN
3	2	COUPLING, MALE
4	2	MANIFOLD PLUG included with Body
5	2	MANIFOLD PLUG included with Body



## Quick Disconnect Manifold with Check Valve High-Pressure Hydraulic

Part No. 7799-00-00-000074

## Application:

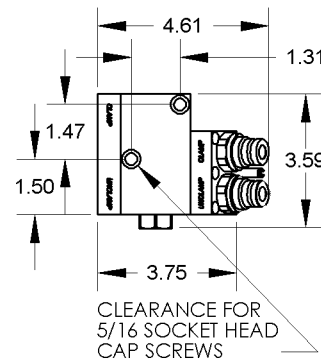
The pallet mounted hydraulic disconnect manifold with check valve is used to conveniently and quickly connect and disconnect both hydraulic hoses of a double-acting pallet system. It is used in conjunction with a disconnect handle (Part no. 7799-00-00-000075). The built in check valve allows the user to hold the clamp position when preloading, loading and unloading pallets. The manifold receiver is equipped with an orientation pin so that the hoses cannot be reversed.

Care should be taken when planning the position of the pallet mounted receiver. Placement should be such that the hoses connected to the disconnect handle are not kinked when the handle is connected to the pallet in the load station of the machining center. The area around the receiver and handle should be free of all sharp objects to avoid injury to the operator while connecting and disconnecting the system.

## Receiver Installation:

Plumb the receiver with 5000 psi (344 bar) rated 3/8" OD steel tubing from the back SAE-6 (straight thread o-ring) ports. The receiver is secured in place by two 5/16 socket head cap screws.

**CAUTION:** Be careful to plumb receiver so that it matches the remaining components on the pallet system.

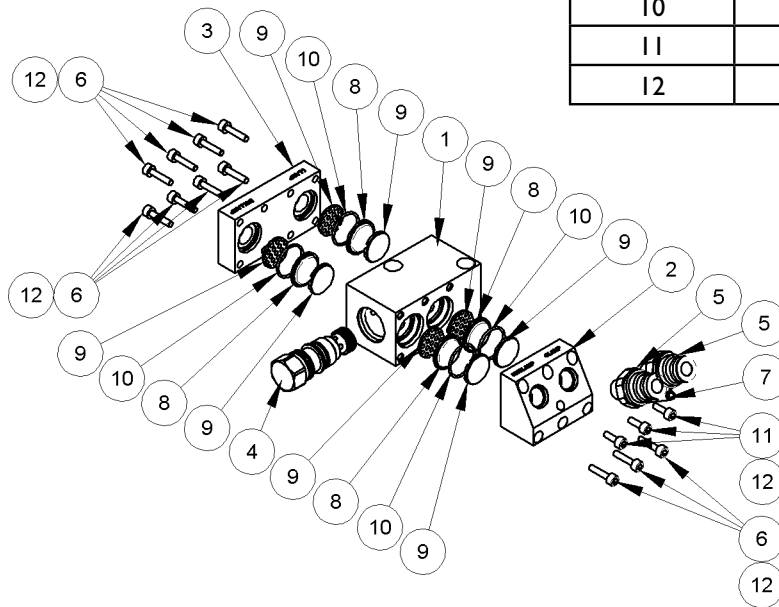


## Operation:

Be sure that all pressure has been relieved from the disconnect handle. **CAUTION: Attempting to connect or disconnect the system while pressurized may result in damage to the coupling seals.** Blow any debris from the receiver fittings with compressed air. With the pallet secured in the load station of the machining center, align the disconnect handle axially with the receiver and push on the back of the tee handle with the palm of the hand. Continue to push until both couplings have fully engaged. Two audible clicks can be heard when this occurs.

ITEM No.	QTY	DESCRIPTION
1	1	BODY
2	1	FRONT
3	1	BACK
4	1	VAVLE, PO CHECK
5	2	DISCONNECT, MALE
6	11	SCREW, SHC, 10- 24 X 1.5
7	1	PIN
8	4	FILTER
9	8	SUPPORT, FILTER
10	4	O-RING, #117
11	3	SCREW, SHC, 10-24 X 3/4
12	14	WASHER, LOCK, #10

## Parts:



## General Maintenance:

Visually inspect couplings, hoses, and other components for leakage or worn parts. Any worn parts should be replaced immediately.

## General Warranty

The products furnished hereunder are guaranteed by Hardinge Inc. against any defect in material or workmanship for a period of one (1) year from date of shipment when owned by original buyer or first user, and maintained and operated under normal conditions. Any products hereunder not manufactured by Hardinge Inc. are warranted only to the extent of the original manufacturer's warranty. Parts found to be defective in material or workmanship under this guaranty shall be repaired or replaced without charge, F.O.B., original point of shipment provided prompt notice of the defect is given and compliance with the terms of this guaranty are established. HARDINGE INC. SHALL BE LIMITED STRICTLY AND WHOLLY TO THE FOREGOING.

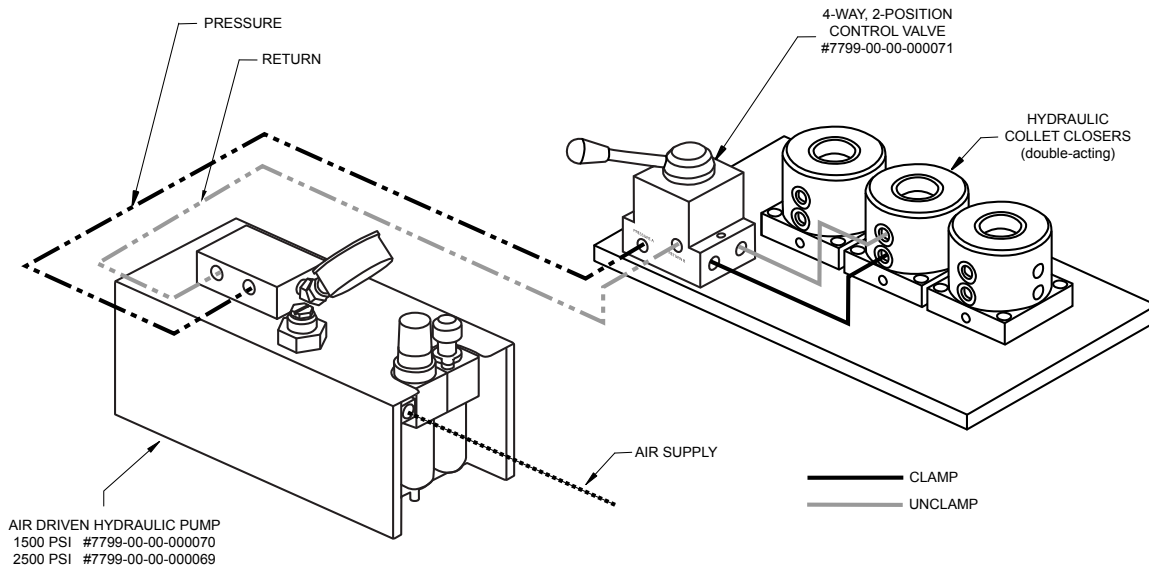
In no event shall Hardinge Inc. be liable for consequential or incidental damages or for other costs, expenses, or damages incurred by you attributed to any item sold hereunder.

# Hydraulic Quick Disconnect Handle / Manifolds Instructions B-148

## Example of a typical hydraulic configuration

Components include a pump, control valve and three hydraulic collet blocks supplied by Hardinge mounted on a customer machined fixture plate. (schematic shown in clamp position) 5000 psi (344 bar) rated hose/tubing is recommended.

Dimensions for mounting holes are available on the installation instructions online at [www.hardingetooling.com](http://www.hardingetooling.com)



## Example of a quick disconnect hydraulic configuration

Components include a pump, control valve, accumulator; quick disconnect handle, manifold with check valve and three hydraulic collet blocks supplied by Hardinge on a customer machined fixture plate. The control valve should mount outside of the machine with the pump or on the outside wall of the machine. The quick disconnect with check valve allows you to remove the hydraulics while in the clamp mode – ideal for preloading pallets. An accumulator is required when using the quick disconnect product. (Schematic shown in the clamp position) 5000 psi (344 bar) rated hose/tubing is recommended.

Dimensions for mounting holes are available on the installation instructions online at [www.hardingetooling.com](http://www.hardingetooling.com)

