

Instructions



# Dyna-Star<sup>®</sup> HF and HP Outlet Adapter Kit

333392A

EN

Used with the Dyna-Star HP or HF Pump to convert an injector-based system to a series progressive system. For professional use only.

**Part No.:**

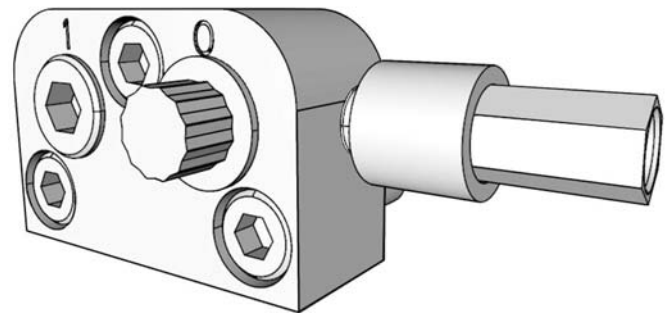
77X543 - HF Models: 4000 psi (275.8 bar, 27.58 MPa)

77X544 - HP Models: 5000 psi (344.7 bar, 34.47 MPa)



**Important Safety Instructions**

Read all warnings and instructions in this manual and the Dyna-Star HP and HF Pump instruction manual included with your unit. Save all instructions.







# Instructions

## Warnings

The following warnings are for the setup, use, grounding, maintenance, and repair of this equipment. The exclamation point symbol alerts you to a general warning and the hazard symbols refer to procedure-specific risks. When these symbols appear in the body of this manual or on warning labels, refer back to these Warnings. Product-specific hazard symbols and warnings not covered in this section may appear throughout the body of this manual where applicable

See the Dyna-Star HF and HP Pump Instruction manual for additional warnings.

					
<p><b>SKIN INJECTION HAZARD</b></p> <p>High-pressure fluid from dispense device, hose leaks, or ruptured components will pierce skin. This may look like just a cut, but it is a serious injury that can result in amputation. <b>Get immediate surgical treatment.</b></p> <p>Follow <b>Pressure Relief Procedure</b> in this manual, when you stop dispensing and before cleaning, checking, or servicing equipment.</p>					
<p><b>PRESSURIZED EQUIPMENT HAZARD</b></p> <p>Over-pressurization can result in equipment rupture and serious injury.</p> <ul style="list-style-type: none"> <li>• A pressure relief valve is required at each pump outlet.</li> <li>• Follow <b>Pressure Relief Procedure</b> in this manual before servicing.</li> </ul>					
<p><b>PRESSURIZED ALUMINUM PARTS HAZARD</b></p> <p>Use of fluids that are incompatible with aluminum in pressurized equipment can cause serious chemical reaction and equipment rupture. Failure to follow this warning can result in death, serious injury, or property damage.</p> <ul style="list-style-type: none"> <li>• Do not use 1,1,1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents.</li> <li>• Many other fluids may contain chemicals that can react with aluminum. Contact your material supplier for compatibility.</li> </ul>					

## Installation

### Pressure Relief



Follow the Pressure Relief Procedure whenever you see this symbol.



This equipment stays pressurized until pressure is manually relieved. To help prevent serious injury from pressurized fluid, such as skin injection, splashing fluid and moving parts, follow the Pressure Relief Procedure when you stop dispensing and before cleaning, checking, or servicing the equipment.

To relieve pressure in the system, use two wrenches working in opposite directions on pump outlet fitting to **slowly loosen fitting only** until fitting is loose and no more lubricant or air is leaking from fitting as shown in FIG. 1.

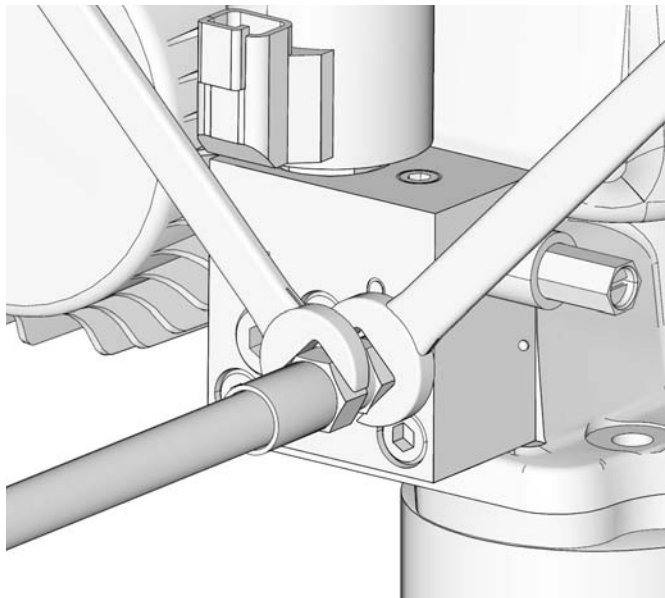


FIG. 1

## Adapter Block Installation



Reference numbers used in these instructions correspond to Parts included in Kit and are provided on page 5. Parts identified with an alpha character are user provided or already installed components.

To ensure the correct pressure relief valve is used and pressure settings are correct, always use new parts included in your Outlet Adapter Kit for reassembly.

The instructions assume the pump has been in service and was previously equipped with a Vent Valve.

### Remove Vent Valve

1. **Relieve pressure** (see Pressure Relief procedure, page 2).



### ELECTRIC SHOCK HAZARD

- Turn off and disconnect power at main switch before disconnecting any cables and before servicing or installing equipment.
- All electrical wiring must be done by a qualified electrician and comply with all local codes and regulations.

2. Disconnect Dyna-Star HP or HF pump from main power source.
3. Disconnect end of cable (a) from solenoid control device (FIG. 2).

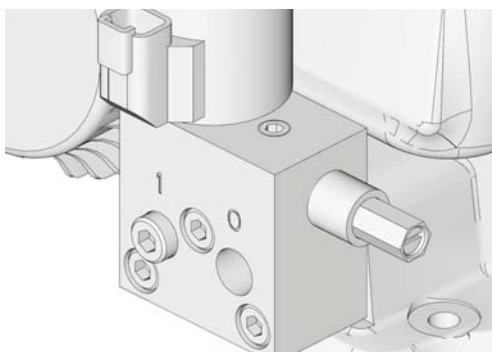


FIG. 2

4. Remove lubrication lines (b) to vent valve pump outlet port marked "0" and from the inlet port marked "1" (FIG. 3).

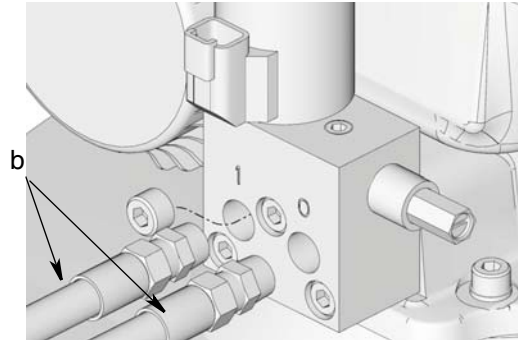


FIG. 3

5. Remove the 3 cap screws (c) securing the vent valve to the surface of the pump (FIG. 4).
6. Remove the vent valve from the pump.

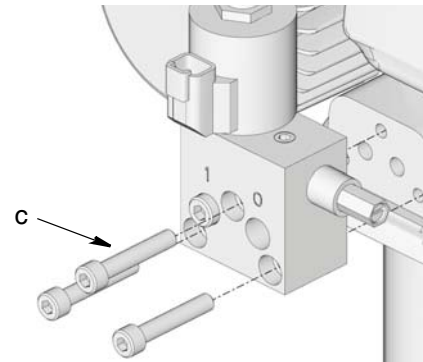


FIG. 4

7. Verify o-rings (d) were removed with the vent valve block as shown in FIG. 5.

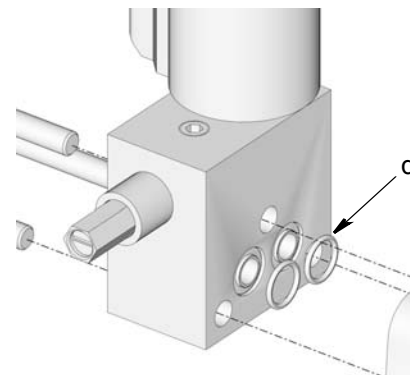
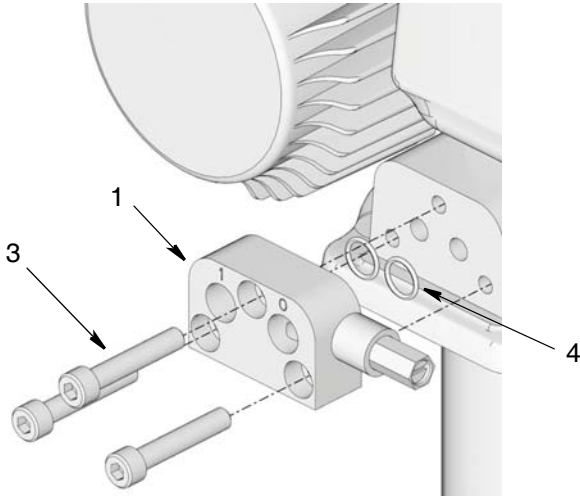


FIG. 5

**Install Adapter Block**

1. Grease o-rings (4) and install them in o-ring groove in the adapter block.

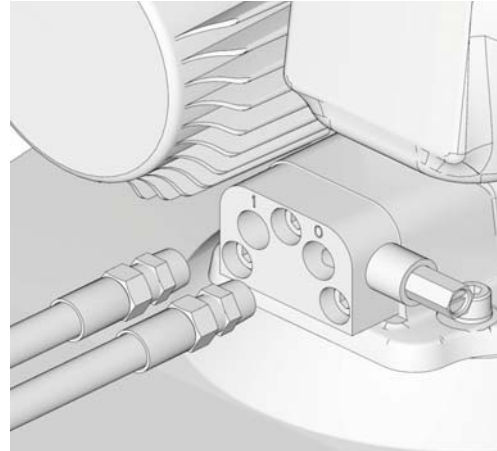


**FIG. 6**

2. Clean surface of the Dyna-Star pump outlet with a clean dry cloth. Inspect pump surface for scratches or nicks. A scratched surface can result in fluid leakage.
3. Install outlet adapter block (1) to pump surface using the 3 cap screws (3) included in the kit (FIG. 6). Hold the outlet adapter tight to the surface of the

pump to ensure o-rings stay in place during installation. Wrench tighten screws securely.

4. Install lubrication line to outlet adapter block port marked "0" (FIG. 7).

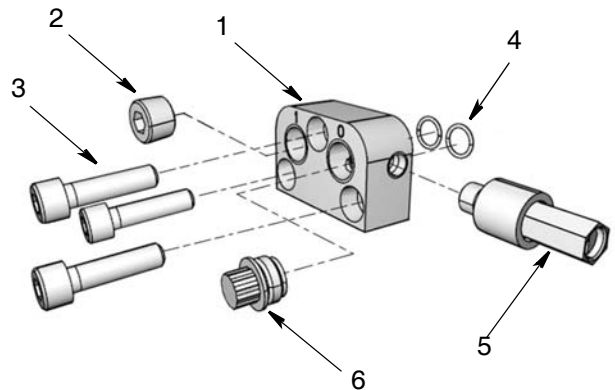


**FIG. 7**

5. In the inlet port marked "1" (FIG. 7) install either:
  - a plug and cap (2/6), or
  - inlet plumbing necessary to attach a fill pump.
6. Reconnect pump to main power supply.
7. Test system to ensure proper operation.

## Parts: 77X543, 77X544

Ref	Description	Qty
1	ADAPTER, outlet	1
2	PLUG, pipe	1
3	SCREW, cap	3
4	O-RING, 014 FKM, A-7	2
5	VALVE, pressure relief	1
6	CAP, plug	1



## Technical Data

Outlet Adapter for Dyna-Star HF or HP Pumps		
	US	Metric
<b>Maximum Working Pressure</b>		
HF Models	4000 psi	275.8 bar, 27.58 MPa
HP Models	5000 psi	344.7 bar, 34.47 MPa
<b>Inlet/Outlet Sizes</b>		
Outlet (marked "0")		3/8 in. npt(f)
Inlet (refill - marked "1")		3/8 in. npt(f)
<b>Pressure Relief Valve</b>		
Factory Set Pressure		
HF Models	4000 psi $\pm$ 250 psi	275.8 bar, 27.58 MPa $\pm$ 10%
HP Models	5000 psi $\pm$ 250 psi	344.7 bar, 34.47 MPa $\pm$ 10%
Reset Pressure	80% of set pressure	
Relief Rate**	0.13 gallons/minute @4000 psi	0.5 liters/minute @24.1 MPa. 241 bar
<b>Wetted Parts</b>		
All Models	Zinc plated steel, FKM	

\*\*Flow capability depends on viscosity, type of fluid, temperature, etc.

## Graco Information

For the latest information about Graco products, visit [www.graco.com](http://www.graco.com).

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**Graco Headquarters:** Minneapolis

**International Offices:** Belgium, China, Japan, Korea

**GRACO INC. AND SUBSIDIARIES • P.O. BOX 1441 • MINNEAPOLIS MN 55440-1441 • USA**

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