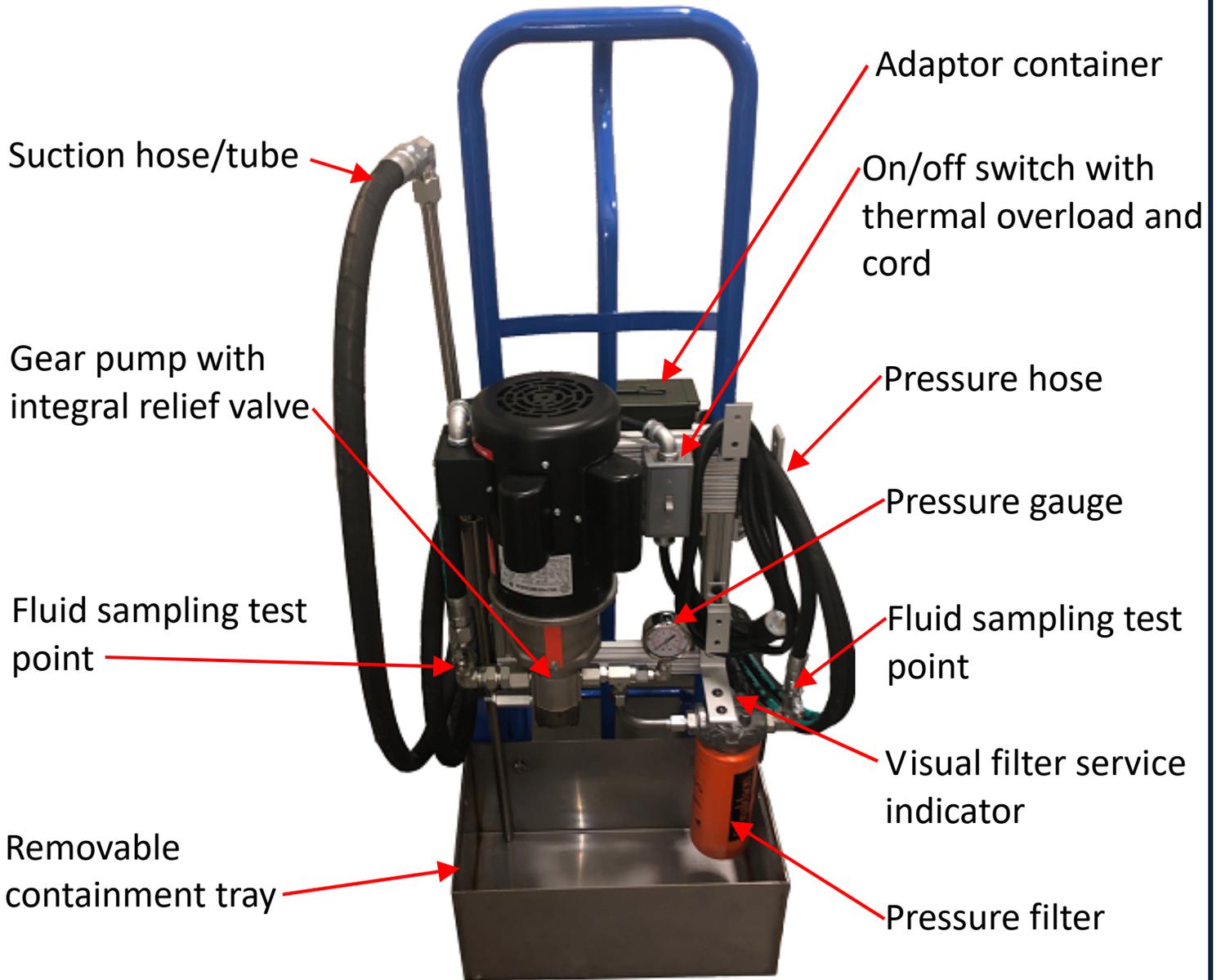




# HYDROSTATIC LOOP PREFILL FILTER CART MANUAL

(PART NUMBER: HYDRO LOOP PREFILL CART)



## General information:

- The SunSource hydro loop prefill filter cart is designed to be used with most standard grades of petroleum based hydraulic fluids. Typical grades of oil would be AW32, AW46 and AW68.
- The filter cart is provided with a 1.5 HP 120 VAC electric motor and is recommended that a 20 Amp electrical receptacle be used for the system.
- Due to potential heat and voltage drop issues, the use of an extension cord is not recommended.
- The motor starter has built in overload protection. In the event that the overload is tripped, unplug the unit, allow for cooling if needed, and push in the ON/OFF toggle switch to reset.
- Test points have been provided on the unit and can be used to connect to an oil contamination monitor or to take an oil sample. Fluid sample kit hose assembly part numbers are: Dynamic DHA-HSP-36-4M and Dynamic JP-NV-1/4NPT. Please contact your local SunSource office for more information on these products and services.
- The system is designed with a non-bypass filter head in an effort to not allow dirty oil downstream of the filter.
- A visual filter service indicator is incorporated in the filter head assembly.
- Use of aftermarket filter elements other than the Donaldson elements listed below is not recommended. Some aftermarket elements contain a cellulose media that is not as efficient at removing contamination and the media will swell when water is present in the fluid. This will cause premature clogging of the element which would require frequent element replacement.
- The gear pump incorporates an integral relief valve preset to 500 psi. Do not adjust.
- A 0-1000 PSI gauge can be used to monitor the pressure being generated as the oil is being forced into the system.
- The drip pan is designed to be removed by loosening the two star knobs and sliding the pan out.
- **Unplug the unit prior to servicing the filter cart.**

Filter Element Model Codes		
<4 micron	9.4" element	P165185
6 micron	9.4" element	P165332 (supplied as standard)
11 micron	9.4" element	P164375

NOTE: Lubricate filter-to-head threads when installing new filter element to prevent thread damage. Heavyweight gear lube is recommended.

## Operational instruction for prefilling hydrostatic systems:

- Connect pressure hose to hydrostatic pump charge pressure gauge port. If pump has integral or remote charge pressure filtration make connection on inlet side of filter.
  - JIC and o-ring boss adaptors are included and stored in adaptor container on filter cart.
  - Consult your SunSource representative, SunSource Hydrostatic Troubleshooting Manual, machine or pump manufactures manual for charge pressure port location.
- Install the suction tube assembly in new oil container.
  - This filter cart can be used to fill the oil cooler and reservoir through the charge pressure port connection.
    - **Warning: Do not overfill the reservoir.**
- Plug electrical cord into 120VAC, 20 Amp receptacle.
- Turn filter cart electrical switch on.
  - It is normal to hear a chattering noise during initial startup due to air.
  - Monitor pressure gauge, as main loop lines fill the pressure will climb. When the pressure levels off, the hoses are full and the charge relief valve in the pump opened limiting the pressure. Once the charge pressure relief valve opened oil is forced into the case of the pump and out case drain line to the oil cooler, return filter then to the reservoir.
  - Inspect all hose and fitting connections for leaks.
- Turn filter cart off, “A” & “B” loop lines will stay pressurized.
  - Loosen high pressure gauge port plugs purging air from main loop lines and retighten.
    - **Warning: Do not completely remove plugs.**
  - If gauge ports are not accessible, loosen main loop hoses, purge air and retighten.
    - **Warning: Do not completely remove hoses.**
  - Continue to turn filter cart on & off and purge air as many times as nessecary until no air is present.
- After repeated purging of air from both “A” & “B” loop lines, disconnect filter cart from charge pressure port and verify reservoir is full.
- If multiple systems were removed and reinstalled repeat process for each individual system.
- Hydraulic motor cases will require filling manually through the upper most case drain port.
- The hydrostatic system is full and ready for prime mover to be started.
  - Start prime mover.
  - Monitor charge pressure.
  - Verify pressure settings are correct.
  - Verify reservoir is full.
  - Operate machine forward and reverse.
  - Observe connections for leaks.
  - Allow time for air to dissipate from oil in reservoir.
  - Put machine to work.

## Operational instruction for use as oil transfer cart:

- Install suction tube assembly in container of unfiltered oil.
- Install pressure hose in clean container.
- Plug electrical cord into 120VAC, 20 Amp receptacle.
- Turn filter cart electrical switch on transferring and filtering oil.
- Turn filter cart electrical switch off after all oil has been filtered or clean container is full.

## Operational instruction for off-line kidney loop filtration:

- Connect suction hose to machine reservoir drain port.
- Install pressure hose in filler breather on top of reservoir.
- Plug electrical cord into 120VAC, 20 Amp receptacle.
- Turn filter cart electrical switch on turning over and filtering oil.
- Turn filter cart electrical switch off after adequate time allowing for multiple passes across the filter based on the amount of oil contained in the reservoir.

## Filter element service indicator:

Green = Clean element

Yellow = Element is doing its job

Red = Replace element

