



FL-1000 START UP

FL-1000 STARTUP - Page 1

1. The FL-1000 is designed to provide filtration for gear-box and small hydraulic reservoirs.
2. If using the FL-1000 on a Hand-Carry unit (8), place the FL-1000 near the equipment reservoir to be filtered. If using a wall or equipment mounted application, attach the FL-1000 bracket (4) to the wall or equipment mount area.
3. Do not place the unit in a wet environment, as the unit is not wash-down rated.
4. Install selected filter on the threaded filter adapter (Photo 1). **DO NOT OVER TIGHTEN.**
5. If not already cut to length, cut inlet and outlet hoses to the desired length and attach the crimp hose end fittings. Fitting ends size/specs for the connection to the gear box or reservoir should be determined prior to installing the FL-1000.
6. Connect the inlet (3) and outlet (1) hoses of the FL-1000 (Photo 2) to the in/out port of the reservoir of the equipment being filtered
7. Insert/connect the In-Line strainer (Photo 3) to the inlet hose to protect the pump from large particulates coming from the gear box or reservoir. Fittings and crimp connectors are provided.
8. Plug the FL-1000 24V power supply into a standard 110V outlet, and then plug the barrel jack end (Photo 4) into the top of the control motor (2).

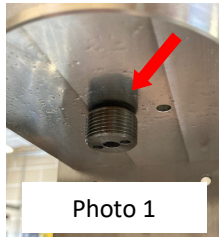


Photo 1

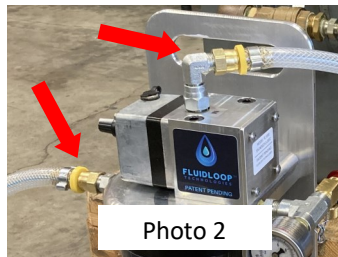


Photo 2

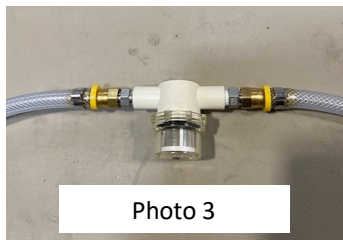


Photo 3

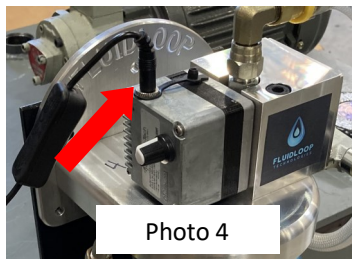
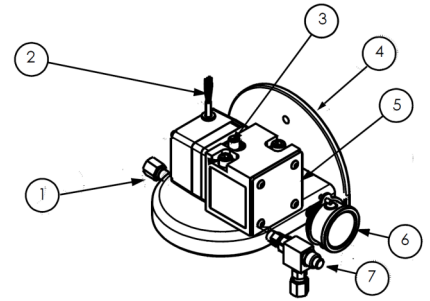


Photo 4

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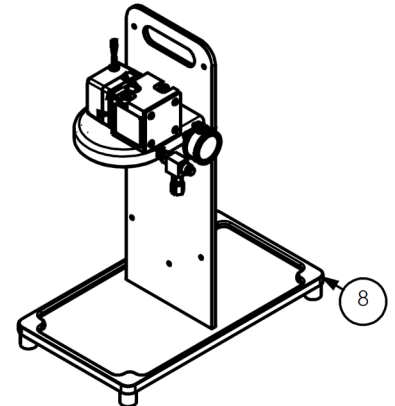
FL-1000W

Shown with Wall-Mount Bracket



FL-1000H

Shown with optional Hand-Carry Stand



| ITEM NO. | DESCRIPTION |
|----------|---------------------------|
| 1 | OUTLET |
| 2 | POWER |
| 3 | INLET |
| 4 | WAL MOUNT PLATE |
| 5 | PRESSURE ADJUSTMENT COVER |
| 6 | PSI GUAGE |
| 7 | OIL SAMPLE PORT |
| 8 | OPTIONAL HAND CARRY STAND |



FL-1000 START UP

FL-1000 STARTUP - Page 2

9. Ensure the proper filter is installed and snug - but not over-tight (see notes regarding filters on page 3).
10. **IMPORTANT - pre-fill the filter with oil used in the equipment being filtered.** This is especially important in small volume reservoir applications.

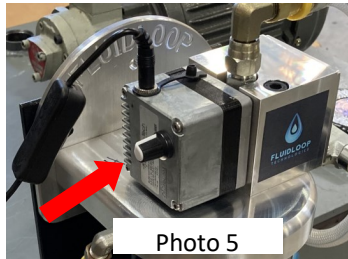


Photo 5

11. When first starting a unit, make sure the pump has pulled a prime. Only turn the speed control knob/rheostat (Photo 5) up all the way to pull a prime from the reservoir. Once prime is pulled, turn the speed control down.

12. The button on the Oil Sample Port (7) (Photo 6) may be depressed (to relieve bubbles in the system for a few seconds to aid in pulling a prime).

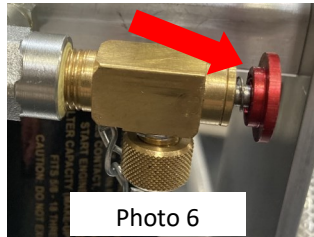


Photo 6

13. Normal speed should be about 50% or less, possibly slower for high viscosity or cold oil.
14. Leaving the pump at full speed for long periods of time will cause the pump to overheat and automatically shut off. If this happens, allow a few minutes to cool down, then turn the pump off, then back on.

15. The FL-1000 is equipped with a PSI gauge (6) to monitor pump pressure, and will vary depending on filter selection, oil viscosity, temperature and cleanliness of the filter.

16. Pump pressure is set at the factory, but can be fine-tuned by removing the pump housing cover plate (5). Use a small flat blade screwdriver to adjust the pressure, counter-clockwise to reduce (-), and clockwise to increase (+) (Photo7).

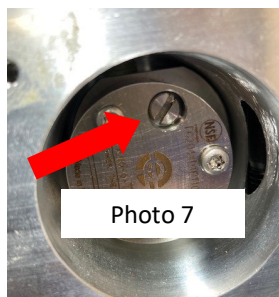
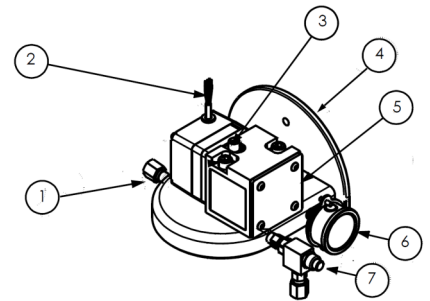


Photo 7

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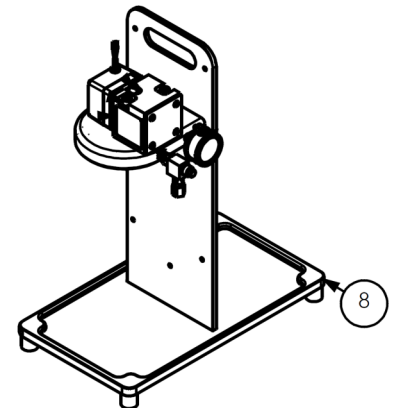
FL-1000W

Shown with Wall-Mount Bracket



FL-1000H

Shown with optional Hand-Carry Stand



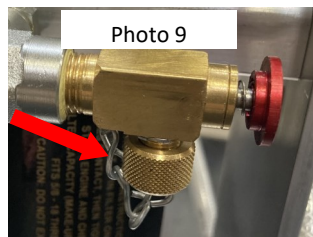
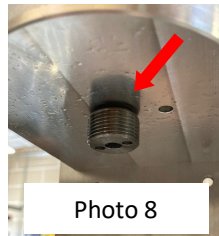
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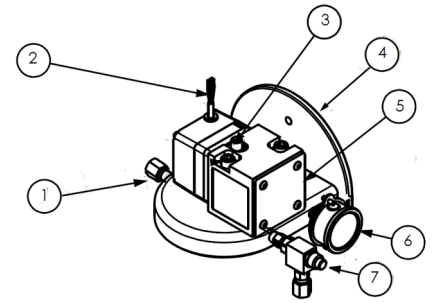
FL-1000 START UP

FL-1000 STARTUP – Page 3

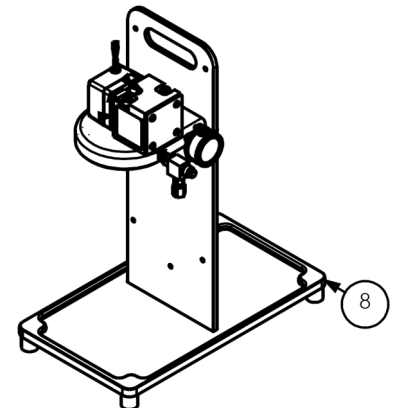
17. Filters can be factory supplied, or utilize the customers own spin-on filter of choice. Contact your distributor.
18. If utilizing gear oil, the pressure may be as high as 40 psi.
19. Psi for pleated or synthetic media filters will usually be lower, sometimes as low as 0 psi for new filters.
20. Generally, psi should not be set more than 40 psi.
21. Monitor the psi, rising psi may indicate its time to change the filter. Oil analysis is recommended in addition to filtration.
22. When using the FL-1000 on a gear box reservoir, oil flow may be very slow depending on the viscosity and temperature of the oil.
23. Depth filters will also have a very low flow rate.
24. If moisture is an issue, see your distributor for suggestions on water removal filters.
25. When changing filters, ensure that the threaded oil filter adapter located in the head (Photo 8) stays threaded in the housing. Check each time changing a filter.
26. Oil Analysis. The FL-1000 includes a push-button port (7) for oil sample analysis. Remove the protecting cap (Photo 9) and press the button to retrieve an oil sample.
27. It's important that oil samples are taken at initial installation of the FL-1000, and on a regular basis to monitor oil quality.



FL-1000W Shown with Wall-Mount Bracket



FL-1000H Shown with optional Hand-Carry Stand



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