## FUEL TRANSFER PUMP AUTOMATIC SHUTOFF FOR TANK OVERFLOW PREVENTION

- 1. Pressure switches
  - a. Mounted in vent line at tank level or in top of tank.
  - b. Normally Closed Switch will open when pressure reaches 0.5 PSI = approx 200 mm (8") of head.
- 2. Operation (Filling)
  - a. Fuel Alarm System Switch ON. Fuel Transfer Pump Switch OFF. Target Selector Switch set to tank being filled.
  - b. When tank is full, fuel is pumped up the vent line; pressure switch opens almost immediately.
  - c. Alarm goes off. Stop filling. Select new target tank. Reset Fuel Alarm Switch to unlatch the Tank Full relay.

## 2. Operation (Fuel Transfer)

- a. Fuel Alarm System Switch ON. Fuel Transfer Pump Switch ON. Target Selector Switch set to tank receiving the fuel.
- b. When tank is full, fuel is pumped up the vent line; pressure switch opens almost immediately.
- c. Alarm goes off and Fuel Transfer Pump is disabled.
- d. Alarm Relay is latched in activated position to keep pump disabled.
- e. Pump will not restart until Target Selector Switch is re-set to a new, non-full tank and the System Switch is reset.

Relay Socket 0.5 PSI N.C. ure-switches/lf20.html

LF20-121210-1

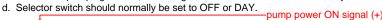
Pressure Switch

Auto Relay

3. Operation (Polishing or Pumping to External)

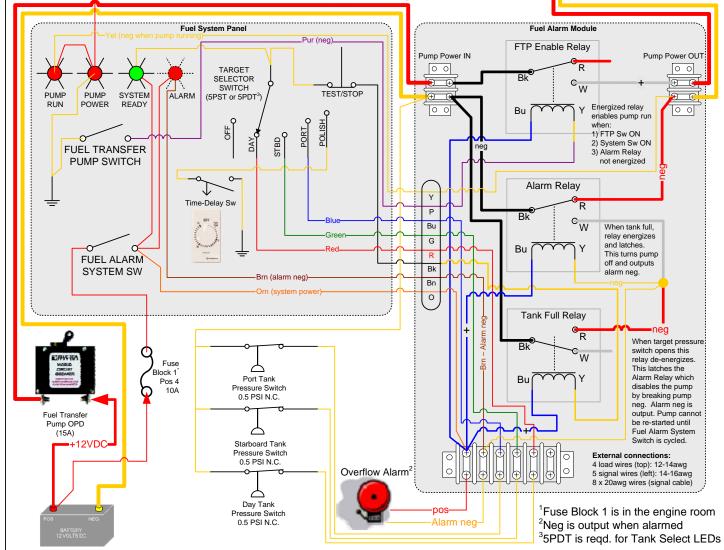
a. Fuel Alarm System Switch ON. Fuel Transfer Pump Switch ON. Target Selector Switch set to POLISH.

- b. The Fuel Transfer Pump can now be run regardless of tank level.
- c. Turn Time-Delay Switch to set polishing time.
- d. Never leave the Target Selector Switch in POLISH mode when done polishing.
- e. Always leave the switch set to OFF (best) or to the DAY target tank.
- 3. Failure Mode
  - a. This is a fail-safe circuit; if a pressure switch has a disconnected wire, the pump will not run.
  - b. The Fuel Transfer Pump will not run unless both the Fuel Alarm System Switch and the FTP Switch is ON.
- 4. Target Selector Switch
  - a. Pump will not run unless the target tank is selected: DAY, STBD, or PORT; or if in POLISH mode.
  - b. If target is DAY, STBD, or PORT the pump will automatically shut down when that tank is full.
  - c. Note that if pumping to EXT, then Target Selector Switch can be set to any non-full tank or POLISH





Fuel Transfer Pump Oberdorfer Bronze Gear Pump OB 991-43 C82



TITLE	PAGE	REV.	DESCRIPTION	DATE	ву
S/V BEATRIX - KELLY-PETERSON 44 #286 (1980)					
DC Wiring Schematics - Fuel Tank Overflow Prevention Circuit (Failsafe Version)	17 OF 24	1	Set alarm & stop Pump at Tank Full	4/14/2011	JMS