

FUEL TRANSFER PUMP AUTOMATIC SHUTOFF FOR TANK OVERFLOW PREVENTION

1. Pressure switches

- Mounted in vent line at tank level or in top of tank.
- Normally Closed Switch will open when pressure reaches 0.25 PSI = approx 100 mm (4") of head.

2. Operation (Filling)

- Fuel Alarm System Switch **ON**. Fuel Transfer Pump Switch **OFF**. Target Selector Switch set to tank being filled.
- When tank is full, fuel is pumped up the vent line; pressure switch opens almost immediately.
- Alarm sounds when target tank is full. Select new target tank or turn system **OFF** to stop alarm.

3. Operation (Fuel Transfer)

- Fuel Alarm System Switch **ON**. Fuel Transfer Pump Switch **ON**. Target Selector Switch set to tank receiving the fuel.
- When tank is full, fuel is pumped up the vent line; pressure switch opens almost immediately.
- Alarm sounds when target tanks is full and the Fuel Transfer Pump is disabled.
- Alarm Relay is latched in activated position to keep pump disabled.
- Pump will not restart until Target Selector Switch is set to a another, non-full tank & FTP or System Switch is reset.

4. Operation (Polishing or Pumping to External)

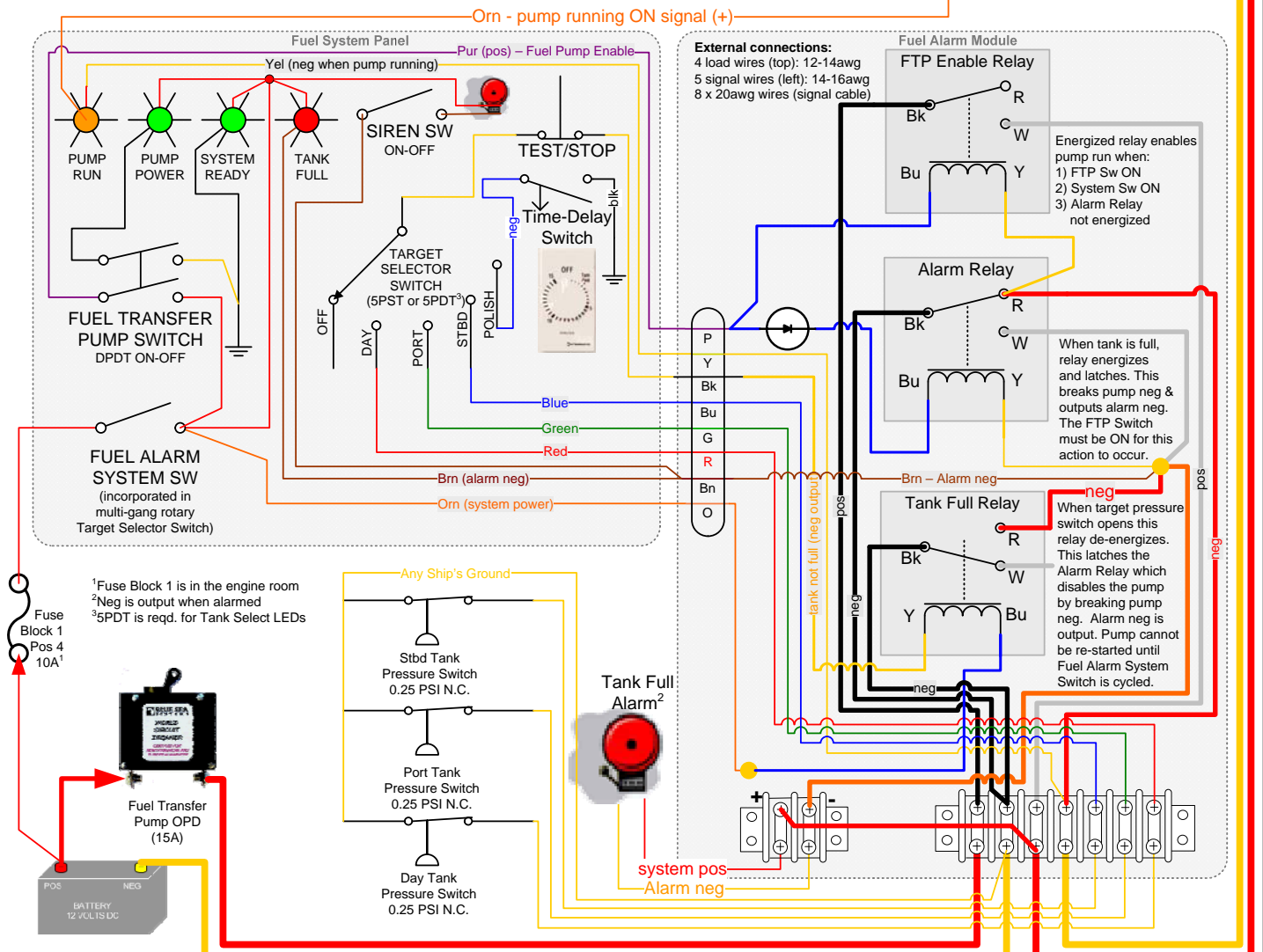
- Fuel Alarm System Switch **ON**. Fuel Transfer Pump Switch **ON**. Target Selector Switch set to **POLISH**.
- The Fuel Transfer Pump can now be run regardless of tank level.
- Turn Time-Delay Switch to start pump and set polishing time (or to allow for external pumping out of the boat).
- Never** leave the Target Selector Switch in **POLISH** mode when polishing is finished.
- Always leave the switch set to **OFF** (best) or to the **DAY** target tank.

5. Failure Mode

- This is a fail-safe circuit; if a pressure switch has a disconnected wire, the pump will not run.
- The Fuel Transfer Pump will not run unless both the Fuel Alarm System Switch and the FTP Switch is **ON**.

6. Target Selector Switch

- Pump will not run unless a not-full target tank is selected: **DAY**, **STBD**, or **PORT**; or in **POLISH** mode.
- If target tank **DAY**, **STBD**, or **PORT** is not full the pump will automatically shut down when that tank is full.
- Note that if pumping to **EXT**, then Target Selector Switch can be set to any non-full tank or **POLISH**
- Selector switch should normally be set to **OFF** or **DAY** when system not in use.



TITLE	PAGE	REV.	DESCRIPTION	DATE	BY
S/V BEATRIX - KELLY-PETERSON 44 #276 (1980) DC Wiring Schematics - Fuel Tank Overflow Prevention Circuit (Failsafe Version)	19 OF 27	L	Set alarm & stop pump at Tank Full	29/10/13	JMS