

SP Series Vane Pumps

Installation, Operation, and Maintenance



SPO-N
Vane Pump



SPO-R
Reversing Vane Pump
Toggle Switch Control



SPO-RT
Reversing Vane Pump
Touchpad Control

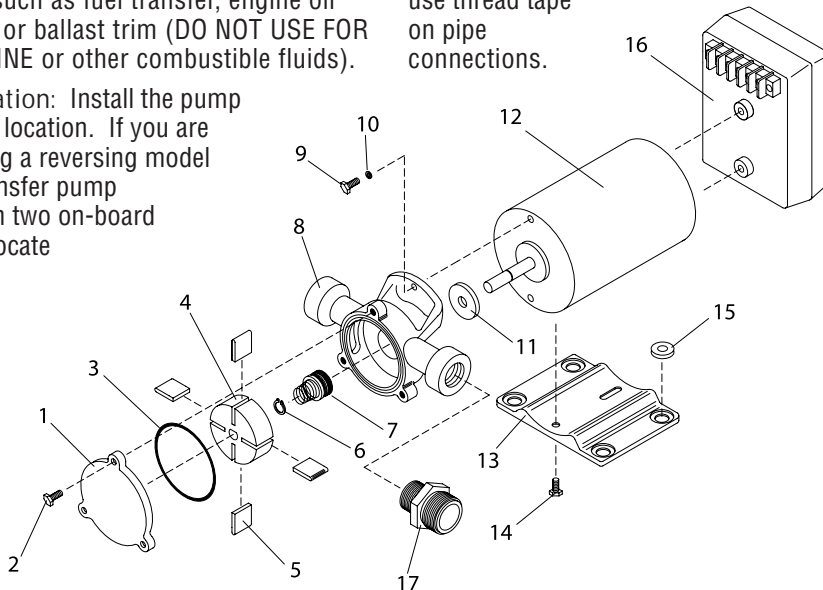


SPO-RR
Reversing Vane Pump
Remote Location Control

Concept: GROCO vane pumps are positive displacement pumps, capable of operation in either direction. They may be used to perform a variety of on-board duties such as fuel transfer, engine oil change or ballast trim (DO NOT USE FOR GASOLINE or other combustible fluids).

Installation: Install the pump in a dry location. If you are installing a reversing model as a transfer pump between two on-board tanks, locate the

pump centrally between the two liquid sources, not more than 24" higher than the lowest of the two liquid sources. Double clamp hose connections or use thread tape on pipe connections.



Mount the pump securely with (4) 1/4" screws and flat washers. Any pump orientation is OK.

If the pump is at or below the liquid source level, in-line valves (GROCO IBV-500 or FV-500) may be installed at both pump ports to prevent fluid spills during pump service.

Installation, SPO-RR: Drill 1/2" hole for the panel switch, and use 18-gauge or larger 3-conductor marine grade wire between pump and switch. Use crimp-on ring terminals at the pump terminal block. Orient the switch to match your pumping direction (port/starboard or fore/aft).

Operation, SPO-N: No pump control is provided. The installer must provide switching.

Operation, SPO-R: Pump-mounted On-Off-On toggle switch is provided.

Operation, SPO-RT: Pump-mounted Touchpad Control is provided. Touchpad switching is momentary.

Operation, SPO-RR: On-Off-On momentary panel switch is supplied for control from a remote location.

Electrical: The pump should be powered and protected by a dedicated circuit breaker of the proper capacity. Refer to the wire size selection chart included with this pump. Use the proper wire size for connections between the breaker to the pump.

Model	Voltage	Breaker (For Water or Oil)
SPO	12V	30
	24V	15

Maintenance: No regular maintenance is required. Annual inspection of plumbing and electrical connections should be made.

Winterization: If the pump is installed above the liquid level, no winterization is required. If the pump is installed at or below the liquid level, drain the pump body by removing the cover plate.

Item	Part Number	Part Name	Qty	P-10 Service Kit	P-10 Master Service Kit
1	SP-91	COVER	1		
2	1024X12HB	SCREW	3		
3	2-034	O-RING	1	*	*
4	SP-94	ROTOR, 4 SLOT (until 090430)	1		
	SP-99-A	ROTOR, 8 SLOT (after 090501)	1		*
5	SP-99	BLADES SET (4) (until 090430)	1		
	SP-98	BLADES SET (8) (after 090501)	1		*
6	SNAP RING-1	SNAP RING	1	*	*
7	69089	SEAL ASSY	1	*	*
8	SP-49-C	HOUSING	1		
9	1032X12HS	SCREW	2		
10	10SS	LOCKWASHER	2		
11	SP-95	SLINGER	1		
12	(VOLTAGE)-F	MOTOR (SPO-60 SERIES)	1		
	(VOLTAGE)-R	MOTOR (SPO-80 SERIES)	1		
13	B-200-P	BASE	1		
14	1032X12HST	SCREW	2		
15	B-200-G	GROMMETS SET (4)	1		
16	REV-B ASSY (VOLTAGE)	REVERSING CONTROL (R MODELS)	1		
	REV-D ASSY	REVERSING CONTROL (RT MODELS)	1		
	REV-E ASSY	REVERSING CONTROL (RR MODELS)	1		
17	GHM500M	ADAPTOR, 1/2" NPT TO GARDEN HOSE	2		
NS	SWITCH-8	CONTROL SWITCH (RR MODELS)	1		