

SERVICE INSTRUCTIONS

OILGEAR TYPE "RS" AND "RY" SOLENOID OPERATED CONTROLS FOR "PVWH" AND "PVW" PUMPS

PURPOSE OF INSTRUCTIONS

These instructions have been prepared to simplify and minimize your work of operating Oilgear type "RS" and "RY" controlled units. This material will inform you as to basic construction, principle of operation and service parts listings. Some controls may be modified for specific applications from those described and other changes may be made without notice.

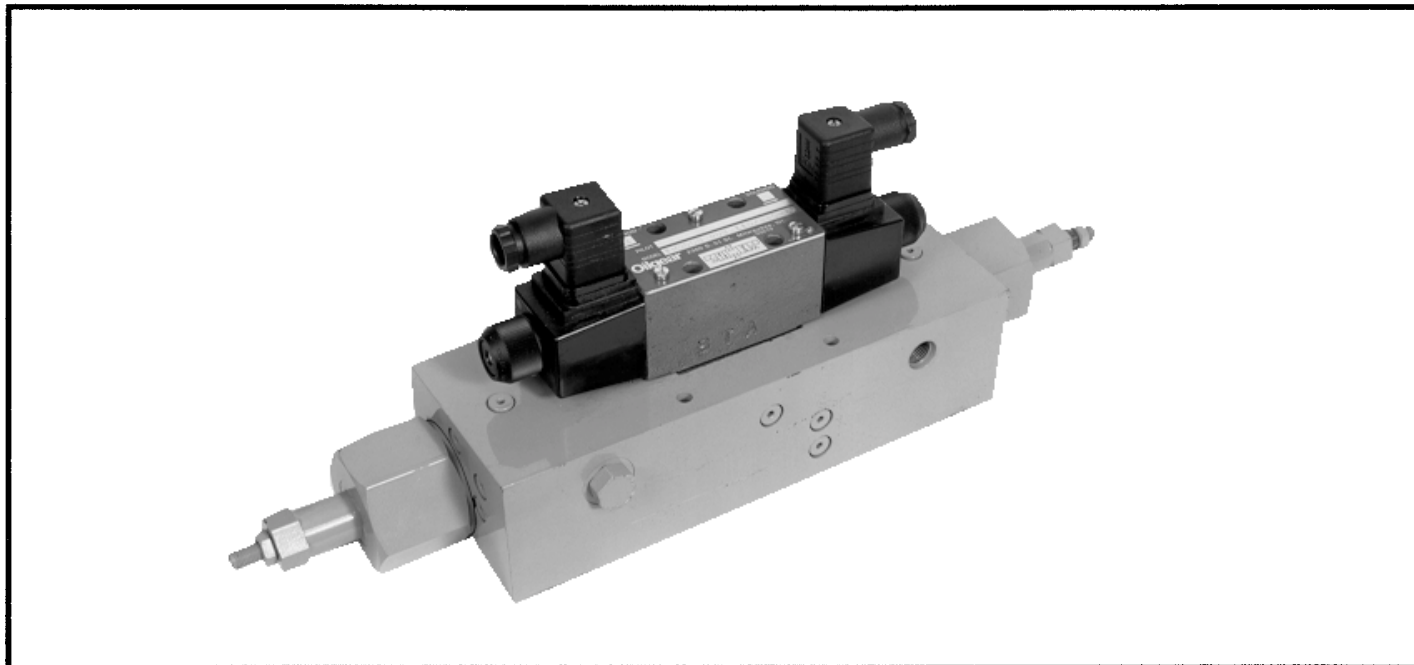


Figure 1. Typical "RS" or "RY" Control for Oilgear "PVWH" and "PVW" Pumps (95003).

REFERENCE MATERIAL

Fluid Recommendations	Bulletin 90000
Filtration Recommendations	Bulletin 90007
"PVWH" and "PVW" Open-Loop Pumps	Bulletin 947015
"PVWC" Closed-Loop Pumps	Bulletin 947018

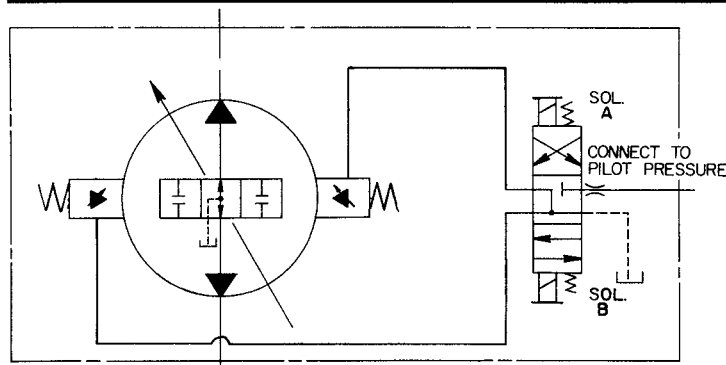


Figure 2. ASA diagram for "RS" Control with typical Pump (E51240).

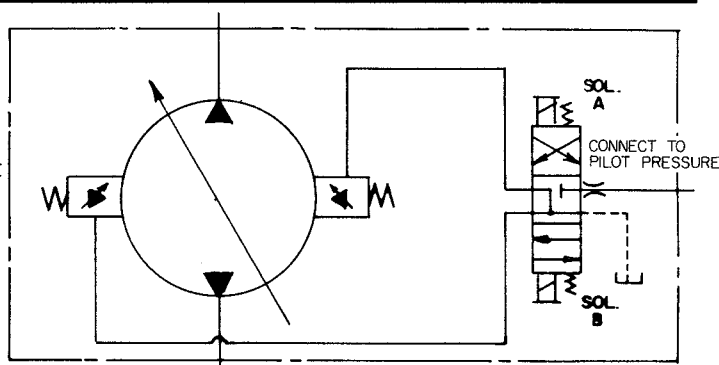


Figure 3. ASA diagram for "RY" Control with typical Pump (E51240).

THE OILGEAR COMPANY

2300 So. 51st. Street
Milwaukee, Wisconsin 53219

PRINCIPLE OF OPERATION

The pilot valve must be connected to a 350 to 800 psi (24 to 55 bar) pilot source. A SYSTEM relief valve must be used to protect pump and system.

CAUTION

The "RS" and "RY" controls are designed for use ONLY on TWO-WAY "PVWC" or "PVW" closed-loop (hydrostatic) PUMPS.

The "RS" and "RY" control provide one adjustable control (volume) setting from either port, as selected by an integral solenoid operated three position four-way valve, plus a spring centered position when selector valve is de-energized. The "RS" control (only) is equipped with a "neutral bypass" to prevent "creep".

In operation (left hand driven pump described) when solenoid "A" is energized, pilot pressure is directed through the four-way valve (342) to the chamber at one end of the control piston (362).

The chamber at the other end of the control piston is connected to drain. The control piston moves (and compresses the "centering" spring) until it is stopped by the port "A" maximum volume stop screw (393).

Energizing solenoid "B" reverses the four-way valve and pilot pressure is directed through the valve to the chamber at the other (from the aforementioned) end of the control piston while the other (previous) chamber is connected to drain. The control piston moves (and compress the "centering" spring) across the center (neutral) position until it is stopped by the port "B" maximum volume stop screw (393).

De-energizing (both) solenoids, centers the four-way valve and connects the chambers at either end of the control piston to drain. The centering springs move the control piston spring sleeve (382) - which moves the control piston (362) - until the "seat" bottoms at the larger chamber bore. Thus, the springs force the control piston into the center (or neutral) position. On "RS" units a valving action is provided (in this position) to connect ports "A" and "B" thus bypassing any "creep" volume.

PARTS LIST

Parts used in this assembly are per Oilgear specifications. Use Oilgear parts to ensure compatibility with assembly requirements. When ordering replacement parts, be sure to include pump type designation and serial number stamped on nameplate, bulletin and item number. To assure seal and packing compatibility, specify type of hydraulic fluid used.

ITEM NO.	DESCRIPTION	ITEM NO.	DESCRIPTION
303	Screw, Hex. Hd.	362	Piston, Control
342	Valve, Sol. Oper. Spr. Ctr.	367C	Orifice
342A	Solenoid, Side A	368	Housing, "RS" or "RY" Control
342B	Solenoid, Side B	369	Gasket, Control Housing
342C	Screw, S.H.C.	370	Spring, Control Piston Centering
342D	Seal, O'ring	372	Cap, Control End
342E	Screw, Connector	373	Pin, Control Piston
342F	Connector, Electric	375	Seal, O'ring
352	Seal, O'ring	382	Sleeve, Control Piston Spring
353	Seal, O'ring	385	Seal, O'ring
354	Plug, Hex. Hd.	390	Nut, Jam
356	Seal, O'ring	392	Housing, Stem
361	Plug, Hollow Hex.	393	Stem, Max. Volume Stop
		394	Seal, O'ring

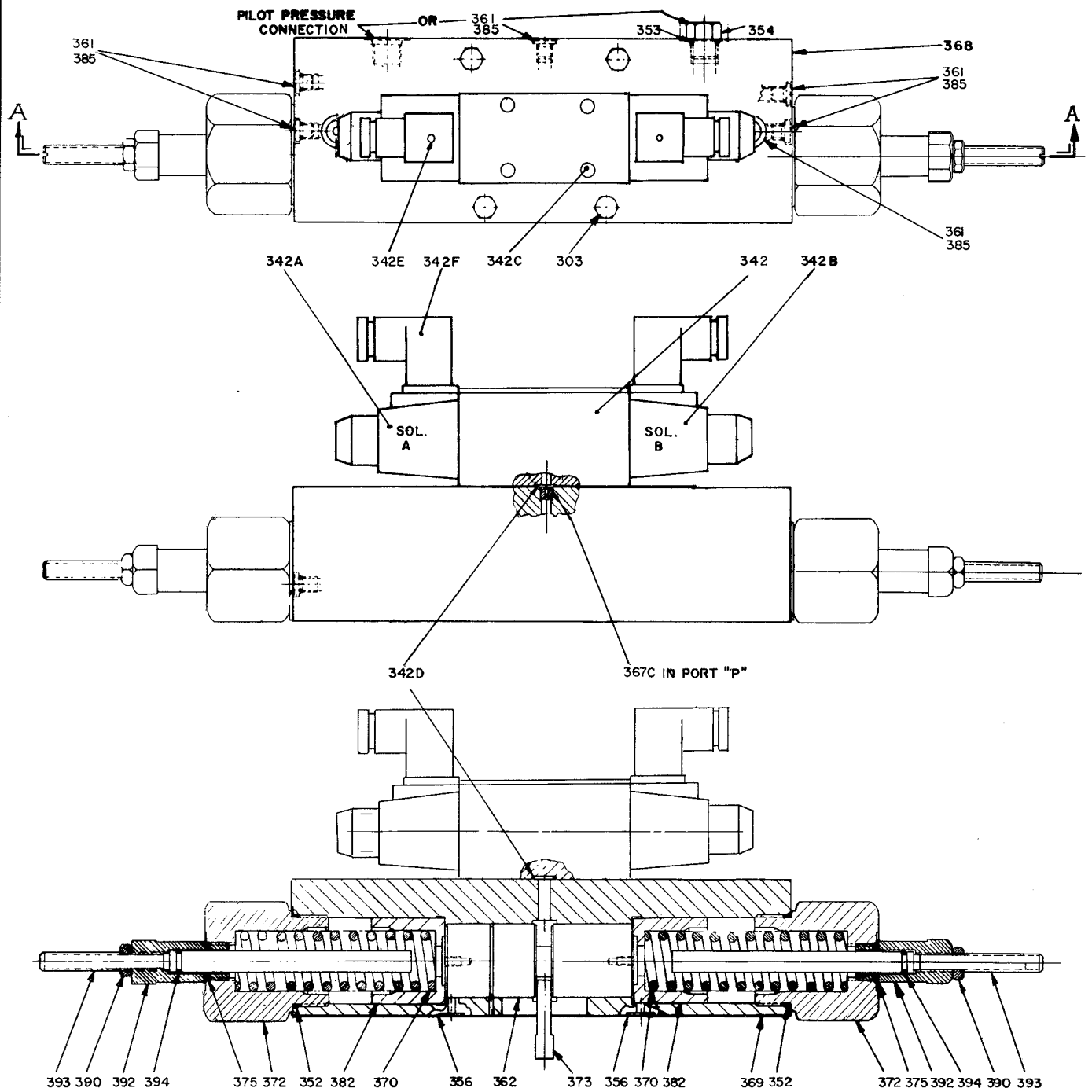


Figure 4. Parts Drawing, Oilgear Type "RS" and "RY" Controls (E51240 sht. 2).



THE OILGEAR COMPANY

2300 So. 51st. Street
Milwaukee, WI 53219

BULLETIN 947816

Litho in USA