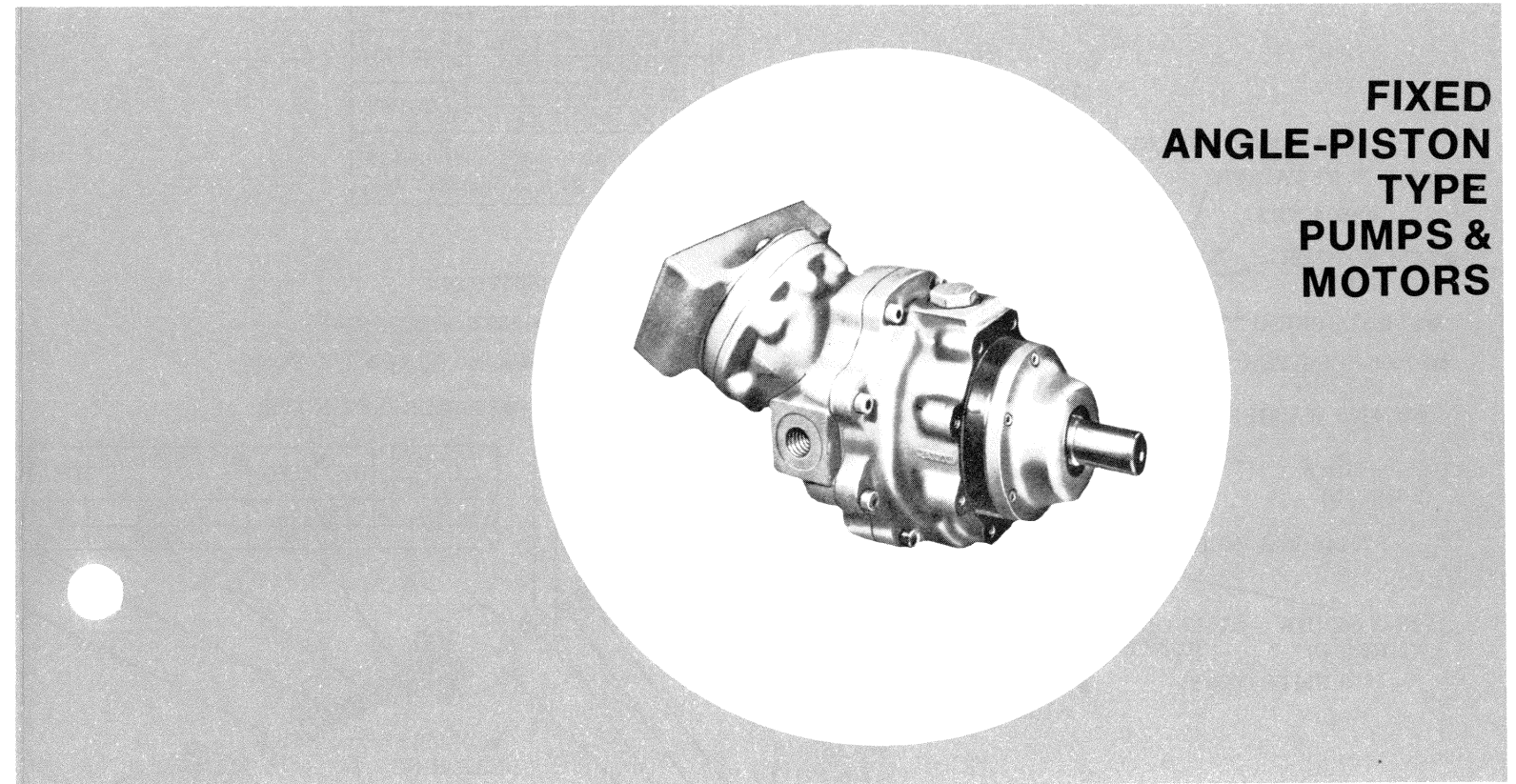
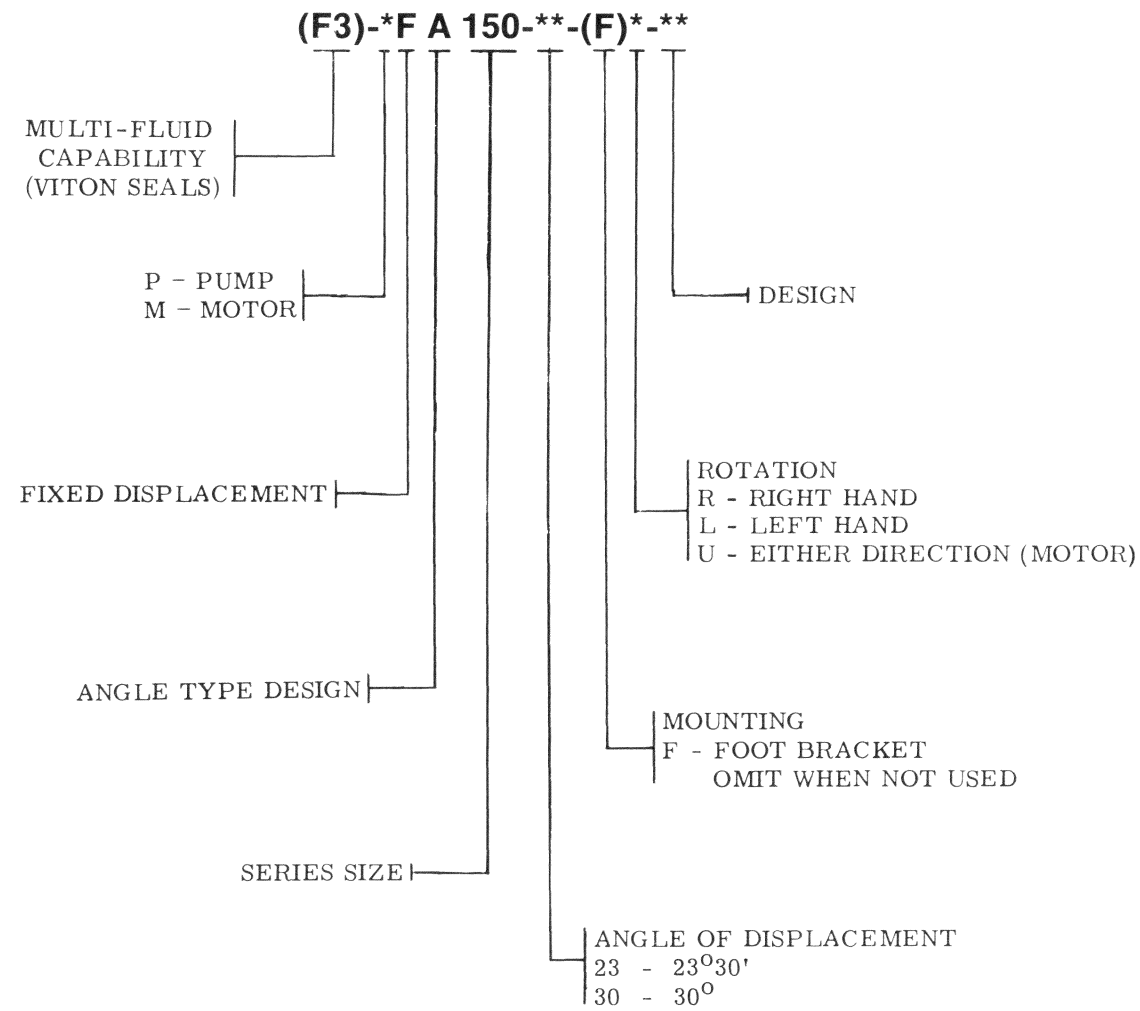


**MODEL CODE BREAKDOWN**



**FIXED  
ANGLE-PISTON  
TYPE  
PUMPS &  
MOTORS**

**SERVICE  
PARTS  
INFORMATION**

**PFA150-\*\*-\*(F)\*-10/11/12/13**  
**MFA150-\*\*-\*(F)\*-10/11/12/13**

To insure sustained efficiency and maximum trouble-free life of this precision equipment, initial and continuous filtration of the fluid medium to 25 microns absolute or less is essential. (For information pertaining to Sperry Vickers economical 3 or 10 micron filters, see installation drawing 522140.)

LITHO IN U. S. A.

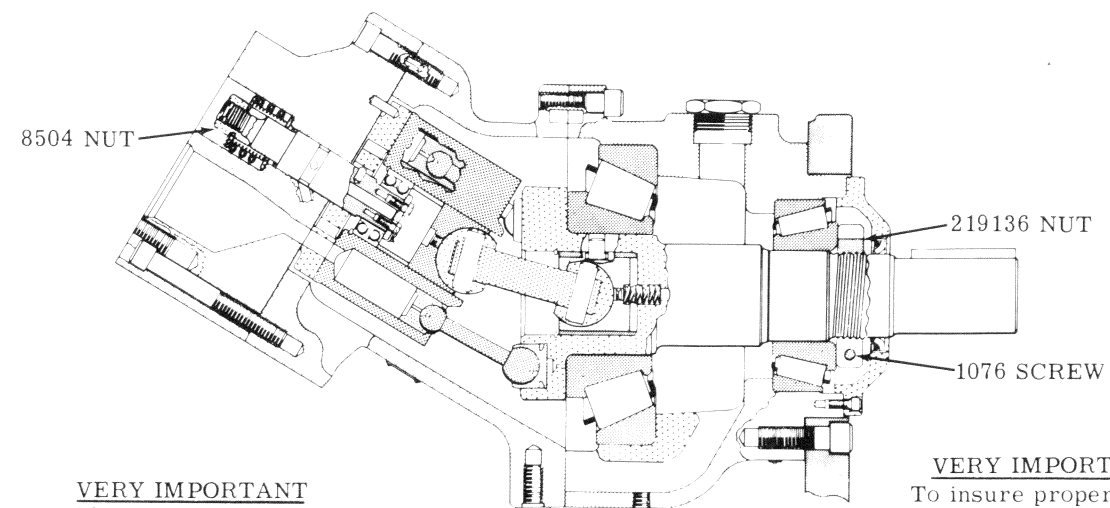
SPERRY VICKERS  
TROY, MI. 48084

Revised 6-1-77

I-3222-S

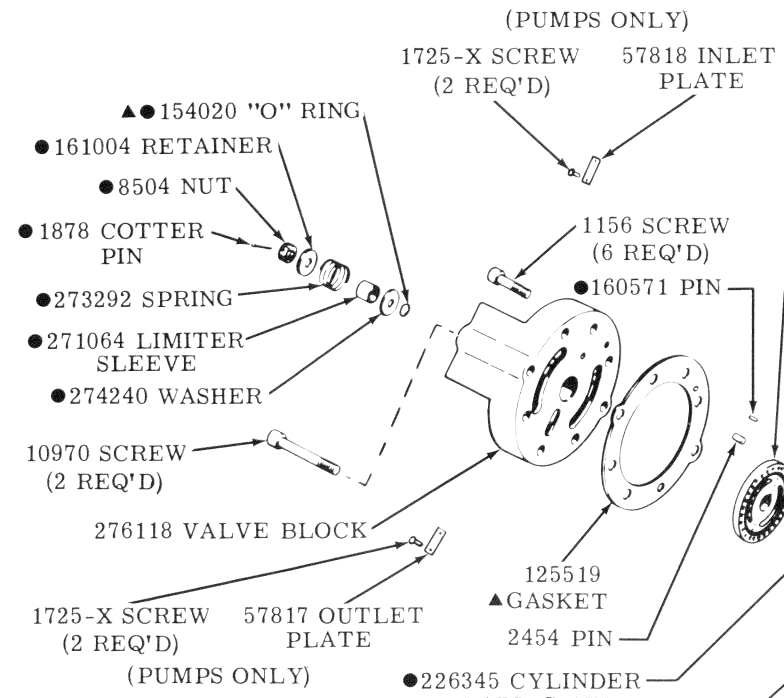
MODEL	VALVE PLATE
PFA150-23-(F)R-1*	261526
PFA150-30-(F)R-1*	
PFA150-23-(F)L-1*	261527
PFA150-30-(F)L-1*	
MFA150-23-(F)U-1*	261529
MFA150-30-(F)U-1*	

Valve plate **NOT** included in rotating group subassembly.



**VERY IMPORTANT**  
To provide proper running clearance of cylinder block, tighten 8504 nut so valve block, valve plate and cylinder block are clamped snugly together. Then turn the nut off from 1/6 to 1/4 turn to align the slot with the key hole in the pin.

**VERY IMPORTANT**  
To insure proper running clearance of front and rear bearings, tighten nut 219136 so drive shaft sub-assembly and front bearing are clamped snugly together. Then back off nut until there is .003 to .005 clearance between nut and bearing. Insert screw 1076 in nut and tighten. Recheck clearance. Tap end of shaft until nut is flush with front bearing.



DESIGN NUMBER	BEARING	UNIVERSAL LINK & PIN	BEARING	RETAINER	SHAFT SUB-ASSY	ROTATING GROUP
10, 11, 12	220162	220161	220162	220163	*255145	938071
13	350756	349456	341841	341842	350750	938071

**\* NOTE**  
IF A NEW SHAFT AND PISTON SUBASSEMBLY IS REQUIRED USE -13 DESIGN ROTATING GROUP

**DRAIN CONNECTION INSTRUCTIONS**  
Any one of three drain connections may be used. A full size unrestricted case drain line must be connected from the drain port directly to reservoir in such a manner that the housing remains filled with fluid. Drain line loop must extend above top of case to prevent syphoning action.

181822 PLUG (2 REQ'D)  
154133 SEAL (2 REQ'D) For unused drain ports

**NOTE**  
227705 spacer in -10 design replaced by 292179 spacer and 288391 washer used in -11, -12, and -13 designs.

227359 BEARING  
(Must be assembled with filling notches on side opposite the valve plate and must seat against retainer 226344)

CONNECTION FLANGE MODEL NUMBERS		PIPING SIZE	FLANGE DESIGN
WELDED	THREADED		
FL-20-WS-20	FL-20-PS-20	2-1/2"	STRAIGHT
FL-20-WL-20	FL-20-PL-20		
FL-24-WS-20	FL-24-PS-20	3"	STRAIGHT
FL-24-WL-30	FL-24-PL-20		

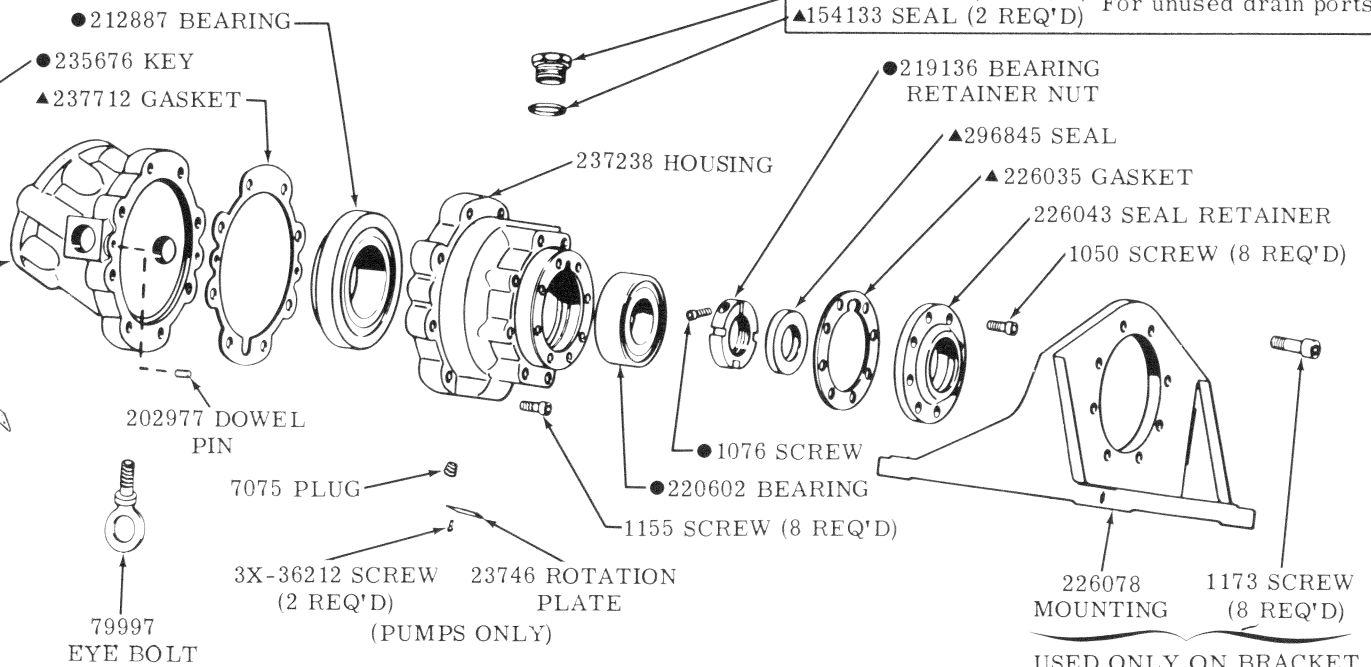
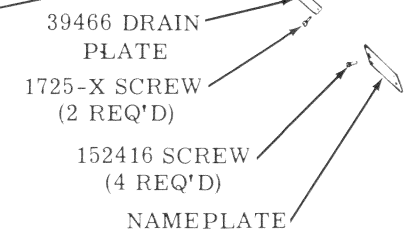
FLANGE ASSEMBLY INCLUDES: FLANGE (1), "O" RING (1), SCREWS (4) AND WASHERS (4)

Flanges tabulated above are rated for 3000 PSI. Straight flanges with SAE Grade 8 screws for use to 5000 PSI can be supplied. Specify by adding "HP" to model number. Example: FL-20-WS-HP-20. Torque "HP" flange screws to 175-200 lbf. ft.

MODEL	ANGLE HOUSING
PFA150-23-(F)R-1*	249839
PFA150-23-(F)L-1*	
MFA150-23-(F)U-1*	237237
PFA150-30-(F)R-1*	
PFA150-30-(F)L-1*	
MFA150-30-(F)U-1*	

▲ INCLUDED IN 919189 GASKET KIT

● INCLUDED IN ROTATING GROUP SUBASSEMBLY



USED ONLY ON BRACKET MOUNTED MODELS \*FA-\*\*\*-\*\*\*-F-1\*