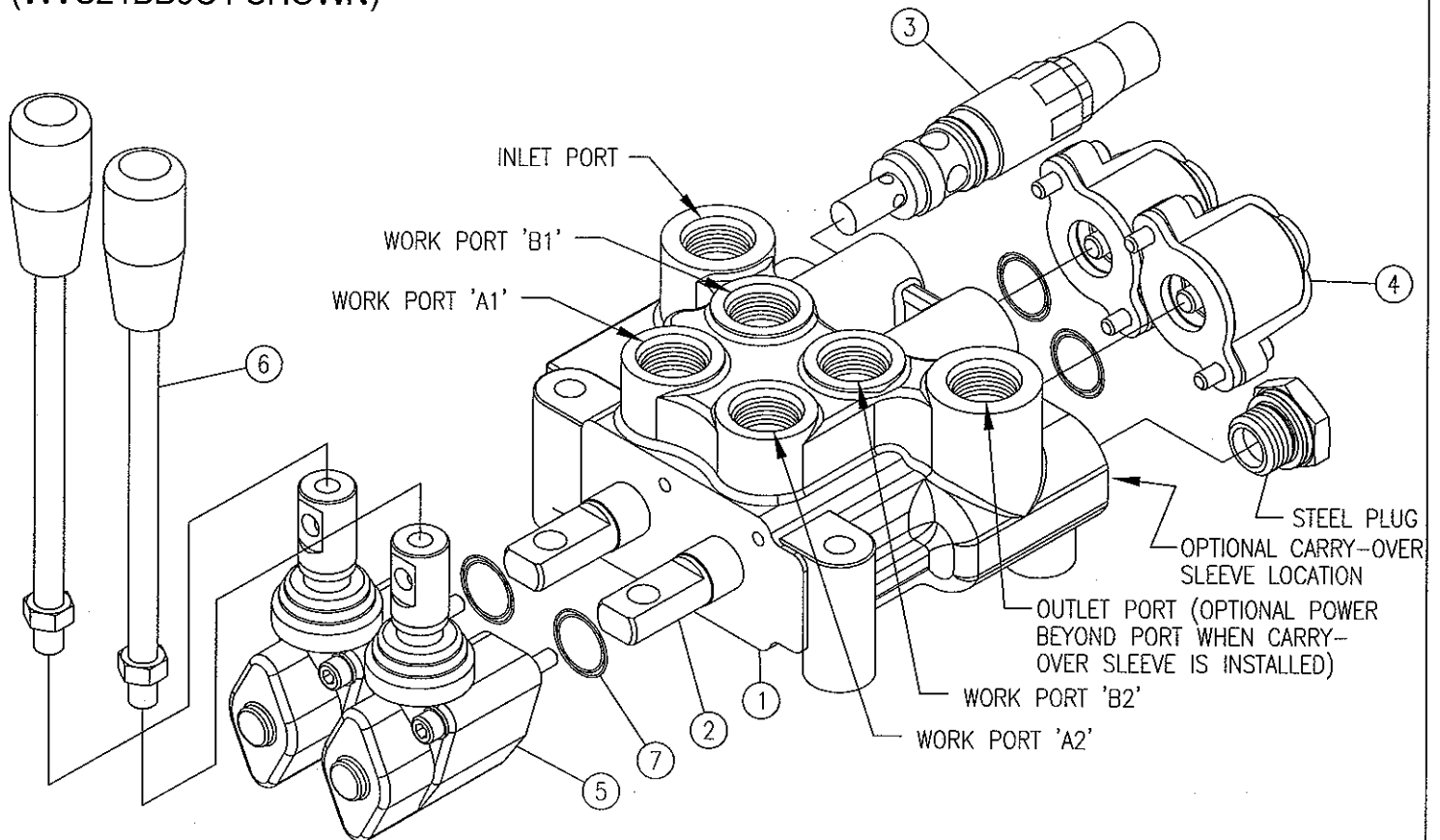


**PRINCE 'WVS' MODELS**  
(WVS21BB5C1 SHOWN)



PRINCE MODEL 'WVS' SPECIFICATIONS:

MAXIMUM OPERATING PRESSURE: 4000 PSI

MAXIMUM TANK PRESSURE: 300 PSI

NOMINAL FLOW RATING: 14 GPM

MAX. OPERATING TEMPERATURE: 180°F

FILTRATION RECOMMENDATIONS: ISO 4406 19/17/14

STD. PORT SIZE (INLET, OUTLET AND WORK PORTS):

#8 SAE ORB, 3/4-16UNF-2B

RECOMMENDED FLUID: HIGH QUALITY MINERAL BASED HYDRAULIC FLUID WITH VISCOSITY FROM 12 cSt TO 400 cSt.

RELIEF VALVE: AN ADJUSTABLE RELIEF VALVE CARTRIDGE IS STANDARD ON ALL 'WVS' MODELS. THE STANDARD FACTORY SETTING IS 2500 PSI @ CRACKING PRESSURE. STANDARD ADJUSTMENT RANGE IS 2200 PSI TO 3200 PSI.

THE RELIEF SETTING IS ADJUSTED BY LOOSENING THE JAM NUT, AND TURNING THE ADJUSTING SCREW. TURNING THE ADJUSTING SCREW CLOCKWISE INCREASES RELIEF PRESSURE AND COUNTERCLOCKWISE DECREASES RELIEF PRESSURE (A PRESSURE GAUGE MUST BE INSTALLED IN THE INLET LINE OR PORT WHENEVER THE RELIEF PRESSURE IS ADJUSTED).

**WARNING:** OVERPRESSURE MAY CAUSE SUDDEN AND UNEXPECTED FAILURE OF A COMPONENT IN THE HYDRAULIC SYSTEM RESULTING IN SERIOUS PERSONAL INJURY. ALWAYS USE A GAUGE WHEN ADJUSTING A RELIEF VALVE.

**TORQUE NOTES:**

RELIEF CARTRIDGE: 15-20 FT-LBS.

CONV./CARRY-OVER PLUG: 50-60 FT-LBS.

CAP SCREW, 5mm (GFN): 35-44 IN-LBS.

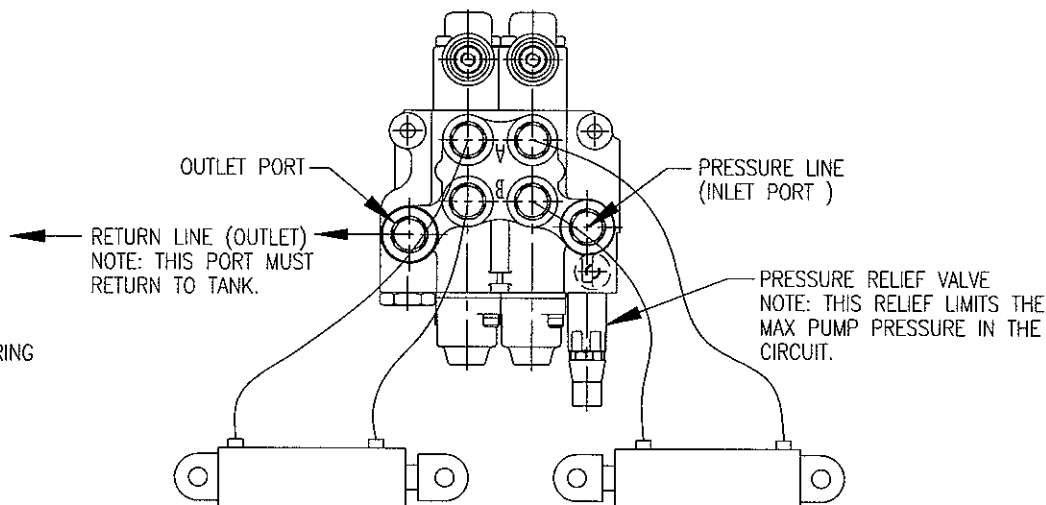
**FOR STANDARD MODELS AVAILABLE  
& ADDITIONAL INFORMATION GO TO:**

[www.princehyd.com](http://www.princehyd.com)

ITEM:	PART NO.:	DESCRIPTION:
1	*	VALVE BODY
2	612104080	SPOOL, CYLINDER
3	660270009	CARTRIDGE, RELIEF (2200-3200 PSI)
4	660170069	SPRING CENTER KIT, GFN
5	660370003	HANDLE HOUSING KIT, GFN
6	660170066	HANDLE KIT
7	660570005	SEAL KIT (1 THRU 6 SPOOLS)
		* - NOT SERVICED SEPERATELY

## EXAMPLE 'WVS' VALVE HYDRAULIC CIRCUIT, STANDARD OPEN CENTER:

MOVING HANDLE TOWARDS VALVE DIRECTS FLOW TO THE PORT CLOSEST TO THE SPRING ATTACHMENT END OF VALVE.  
MOVING THE HANDLE AWAY FROM VALVE DIRECTS FLOW TO THE PORT CLOSEST TO THE HANDLE.

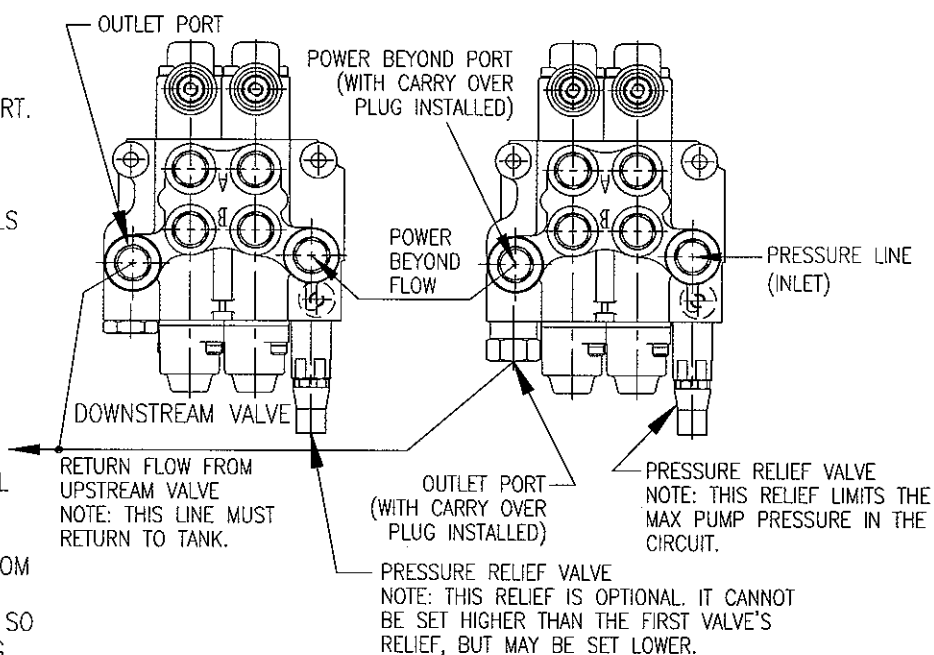


## EXAMPLE 'WVS' VALVE CIRCUIT USING OPTIONAL POWER BEYOND OPTION:

### OPTIONAL POWER BEYOND OPERATION:

REMOVE & DISCARD CONVERSION PLUG FROM UPSTREAM VALVE. INSTALL HIGH PRESSURE CARRY-OVER PLUG ASSY INTO CONVERSION PORT. CONNECT A HYDRAULIC LINE FROM THE TOP POWER BEYOND PORT TO A DOWN STREAM FUNCTION, AND ALSO A LINE FROM THE CARRY-OVER PORT TO TANK. WITH ALL SPOOLS CENTERED, OIL FLOW IS DIRECTED TO THE TOP POWER BEYOND PORT FOR USE BY THE DOWNSTREAM FUNCTION.

WHEN A SPOOL IS SHIFTED, OIL WILL BE DIRECTED TO A WORK PORT AND THE RETURN FLOW TO TANK.



### OPTIONAL CLOSED CENTER OPERATION:

REMOVE & DISCARD CONVERSION PLUG. INSTALL HIGH PRESSURE CARRY-OVER PLUG ASSY INTO CONVERSION PORT. INSTALL STEEL PLUG INTO TOP OUTLET PORT. ATTACH HYDRAULIC LINE FROM CARRY-OVER PORT TO TANK. RELIEF PRESSURE MAY NEED TO BE ADJUSTED SO IT IS NOT SET LOWER THAN THE PUMP SETTING.

FOR STANDARD MODELS AVAILABLE  
& ADDITIONAL INFORMATION GO TO:  
[www.princehyd.com](http://www.princehyd.com)

### ADDITIONAL SERVICE PARTS

PART NO.:	DESCRIPTION:
612100081	SPOOL, MOTOR
612100082	SPOOL, FLOAT, w/ FLOAT DETENT KIT
660370002	CARRY-OVER (POWER BEYOND/C.C.) PLUG ASSY
660270007	CARTRIDGE, RELIEF 750-1100 PSI
660270008	CARTRIDGE, RELIEF 1100-2200 PSI
660270010	CARTRIDGE, RELIEF 3200-4000 PSI
660170068	3-POSITION DETENT KIT, GFN
660170067	HANDLE, JOYSTICK, w/ KNOB
660370004	JOYSTICK KIT, LESS HANDLE

### REF. SCHEMATIC FOR WVS21BB5C1

