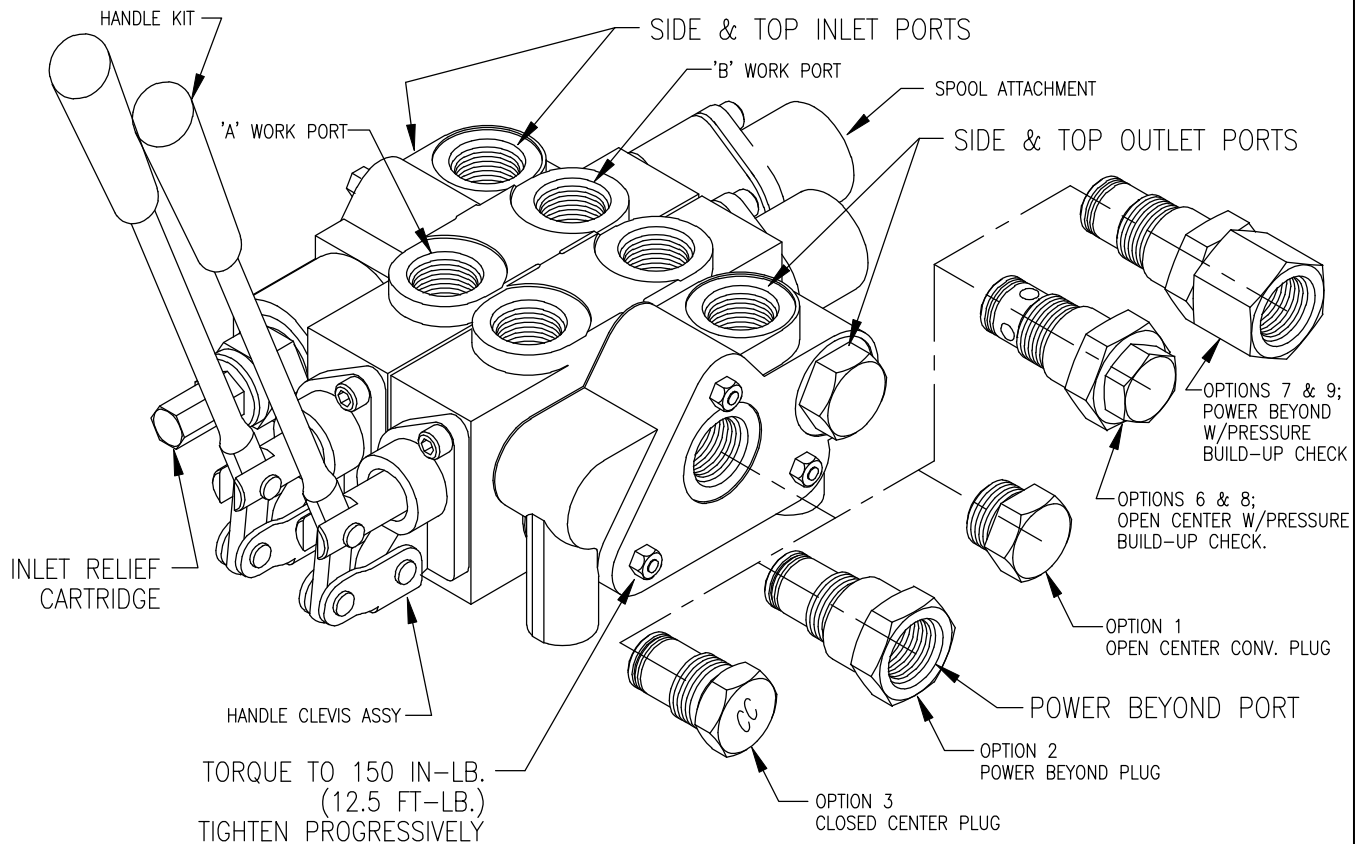


TYPICAL MODEL SV STACK VALVE ASSEMBLY



NOTE: FEATURES MAY VARY WITH MODEL NO., CONSULT CATALOG

STACK VALVE ASSEMBLY INSTRUCTIONS

1. INSTALL NUTS AND LOCKWASHERS ON ONE END OF EACH TIEROD.
2. INSERT TIERODS THROUGH HOLES IN THE INLET SECTION.
3. POSITION THE INLET SECTION WITH TIERODS INSTALLED ON ITS SIDE SO TIERODS ARE VERTICAL. PLACE FOUR O-RINGS INTO FOUR GROOVES ON SIDE OF INLET.
4. SLIDE THE WORK SECTION DOWN THE TIERODS AND POSITION OVER THE INLET SECTION. PLACE FOUR O-RINGS INTO FOUR GROOVES ON SIDE OF WORK SECTION.
5. REPEAT FOR REMAINING WORK SECTIONS AND OUTLET. MAKE CERTAIN O-RINGS STAY IN GROOVES DURING ASSEMBLY.
6. INSTALL NUTS AND LOCKWASHERS ON TIERODS. PROGRESSIVELY TIGHTEN TIERODS TO 150 IN-LB \pm 6 IN-LB (12.5 FT-LB \pm 5 FT-LB).
7. INSTALL HANDLES AND OPERATE SPOOLS. MAKE CERTAIN THAT SPOOLS DO NOT BIND AND THAT SPOOLS WITH SPRING CENTER ACTION RETURN TO NEUTRAL.
8. IF A SPOOL BINDS, LOOSEN TIEROD NUTS. RETORQUE ALL NUTS TO 8, THEN 10, AND FINALLY 12.5 FT-LB.
9. IF A SPOOL STILL BINDS CHECK FOR A SMASHED O-RING OR CONTAMINATION BETWEEN THE SECTIONS.

PLEASE NOTE:

BE VERY CAREFUL NOT TO NICK OR SCRATCH THE PRECISION GROUND SURFACES ON THE SECTIONS. ALSO TAKE CARE TO KEEP THESE SURFACES CLEAN DURING ASSEMBLY.

CLOSED CENTER PLUG, OPTION 3:

This option provides for closed center operation. This is typically used with a variable displacement pressure compensated pump or in a system with an unloading valve. When the spools are in neutral the inlet port is blocked. The power beyond plugs can be used for closed center conversion by plugging the power beyond port. PLEASE NOTE: it may be necessary to increase relief pressure above pump compensator setting.

POWER BEYOND PLUG WITH #8 SAE ORB PORT, OPTION 2:

This option provides for a high pressure power beyond port. This would be used if a valve is to be added downstream. PLEASE NOTE: The outlet must be connected to tank. When spools are in neutral the inlet is connected to power beyond port.

PRESSURE BUILD-UP CARTRIDGE, OPTION 6:

MEDIUM PRESSURE BUILD-UP CARTRIDGE, OPTION 8:
Open center pressure build-up cartridge. Pressure build-up is required for solenoid operated sections. Option 8 same as opt 6 but provides a higher build-up pressure, well suited for low flow circuits.

PRESSURE BUILD-UP w/ POWER BEYOND CARTRIDGE, OPTION 7:

MEDIUM PRESSURE BUILD-UP w/ POWER BEYOND CARTRIDGE, OPTION 9:
Open center pressure build-up cartridge w/ #8 SAE/ORB power beyond port. Pressure build-up is required for solenoid operated sections. Option 9 same as option 7 but provides a higher build-up pressure, well suited for low flow circuits.

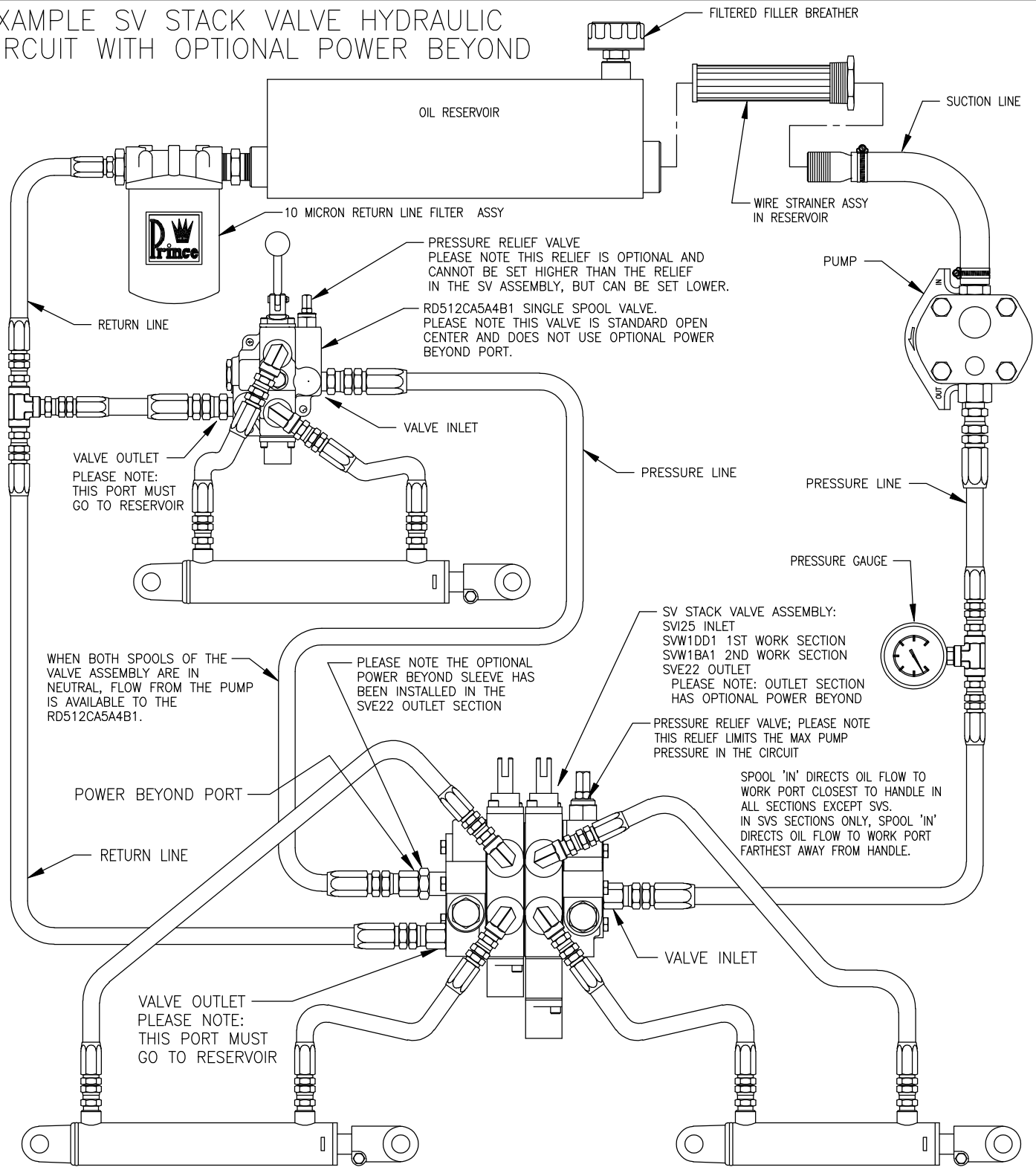
3 WAY SPOOL, OPTION 'A':

The 'A' work port is plugged. Connect 'B' work port to cylinder.

LOAD CHECK:

The load check feature is standard on all SV series valves. Each spool has a separate load check. The load check will prevent the fall of a cylinder as the spool is shifted. It also prevents the backflow of oil from the work port to the inlet. The pump must build up enough pressure to overcome the pressure on the work port caused by the weight of the load before the cylinder can move. PLEASE NOTE: The load check has nothing to do with how well the valve will hold up a cylinder with the spool in neutral. The load check is functional only while the spool is shifted.

EXAMPLE SV STACK VALVE HYDRAULIC CIRCUIT WITH OPTIONAL POWER BEYOND



MODEL SV KITS AND CARTRIDGES:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
660580002	INLET SECTION SEAL KIT	660180036	SPRING CENTER W/DETENT IN (OPT M)	660250006	INLET RELIEF (OPT. 1) NO-RELIEF PLUG
660580003	OUTLET SECTION SEAL KIT	660180037	SPRING CENTER W/DETENT OUT (OPT N)	RV-0L	INLET RELIEF (OPT. 4) ADJ. RELIEF CART 500-1500 PSI
660580001	SVW/SVM SECTION SEAL KIT	660180015	SPR CNTR W/MICROSWITCH BRACKET (J)	RV-0H	INLET RELIEF (OPT. 5) ADJ. RELIEF CART 1500-3000 PSI
660580010	SVH/SVR SECTION SEAL KIT	660180033	COMPLETE JOYSTICK w/ BENT HANDLE	200400030	OPEN CENTER CONVERSION PLUG
660580009	SVL SECTION SEAL KIT	660180017	COMPLETE JOYSTICK w/ STRAIGHT HANDLE	660280001	POWER BEYOND PLUG, #8 SAE PORT (OPTION 2)
660580011	SVS SECTION SEAL KIT	660180018	COMPLETE JOYSTICK w/ OFFSET HANDLE	660280002	CLOSED CENTER PLUG (OPTION 3)
660580004	BETWEEN SECTIONS SEAL KIT	660180005	COMPLETE STANDARD HANDLE KIT (OPT 1)	660280093	PRESSURE BUILD-UP CART, OPEN CENTER (OPTION 6)
660180052	LOAD CHECK KIT	660180007	COMPLETE ADJUST. HANDLE KIT (OPT 4)	660280092	PRESSURE BUILD-UP CART, POWER BEYOND (OPTION 7)
660180001	SPRING CENTER CONV. KIT	660180146	COMPLETE VERTICAL HANDLE KIT (OPT 7)	660280090	MEDIUM PRESS BUILD-UP CART, OPEN CENTER (OPT 8)
660180002	3 POS DETENT CONV. KIT	660180011	HANDLE KIT (STD HANDLE, KNOB & PINS)	660280089	MEDIUM PRESS BUILD-UP CART, POWER BEYOND (OPT 9)
660180003	1 POS FRICTION DET CONV. KIT	660180031	PIN KIT (FOR STD. HANDLE)		INLET RELIEF STANDARD SETTING: OPTION 4: 1000 PSI OPTION 5: 2000 PSI
660180051	SPR CENTER FLOAT KIT (OPT D)				

REV 2; 4/21/97 | REV C, ECN-21623 1/25/12 | REV D, ECN-23926 3/23/20 | REV E, ECN-23940 4/15/20