

MODEL 7143
NON-DRAIN BACK
VALVE

This valve is intended to be used in power steering systems. Its purpose is to retain all of the hydraulic fluid in the steering system itself when the power-driven hydraulic pumps are not operational, to allow the use of the helm pump without loss of hydraulic fluid.

All hydraulic valves, because of their mechanical fit, lose fluid in various amounts and this would consequently cause the hydraulic fluid to drain from the highest level to the lowest level. In most cases, the helm pump is located in the wheelhouse which is above the main hydraulic tank, the oil will eventually drain back to the main tank and leave the system dry. The 7143 valve, however, will retain all of the fluid in the system and will therefore, in an emergency condition, allow the helm pump to be used almost indefinitely. If this unit is used on a 7147 or 7148 Kobelt Power Assist Unit, it is important to have a buffer system in order to get these units to shift to manual mode.

If the 7143 is installed on the servo steering system, all helm pumps must have a non-vented plug. The header tank must also be sealed (non-vented). The return line from the header tank must go directly to the main tank. The flow controls supplying oil to the header tank must be open far enough to allow all the pressure from the hydraulic system to vent via the header tank back to the main tank. If flow control is too widely open the header tank will be pressurized and could cause possible damage to side glass and cause leakage between the tank and the cover. A minimum of oil should pass through the flow controls, but sufficient enough to allow the pressure to drop off in the system.

Weight:

3.3 lbs. 1.5 Kg

Capacity"

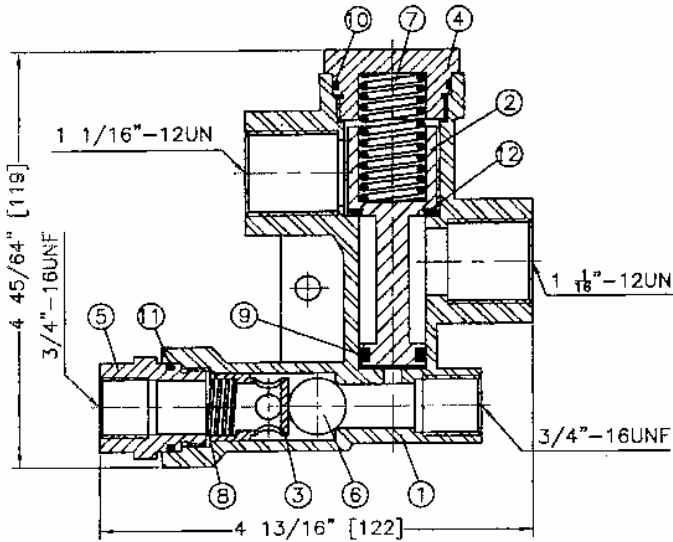
15 GPM

1500 PSI Maximum

Teflon tape should not be used on pipe fittings. A liquid pipe sealant, applied at the end of the fitting is preferable. Pipe fittings should not be over-torqued since the tapered thread can cause splitting of the control components. The table below indicates torque required for tightening tapered pipe fittings.

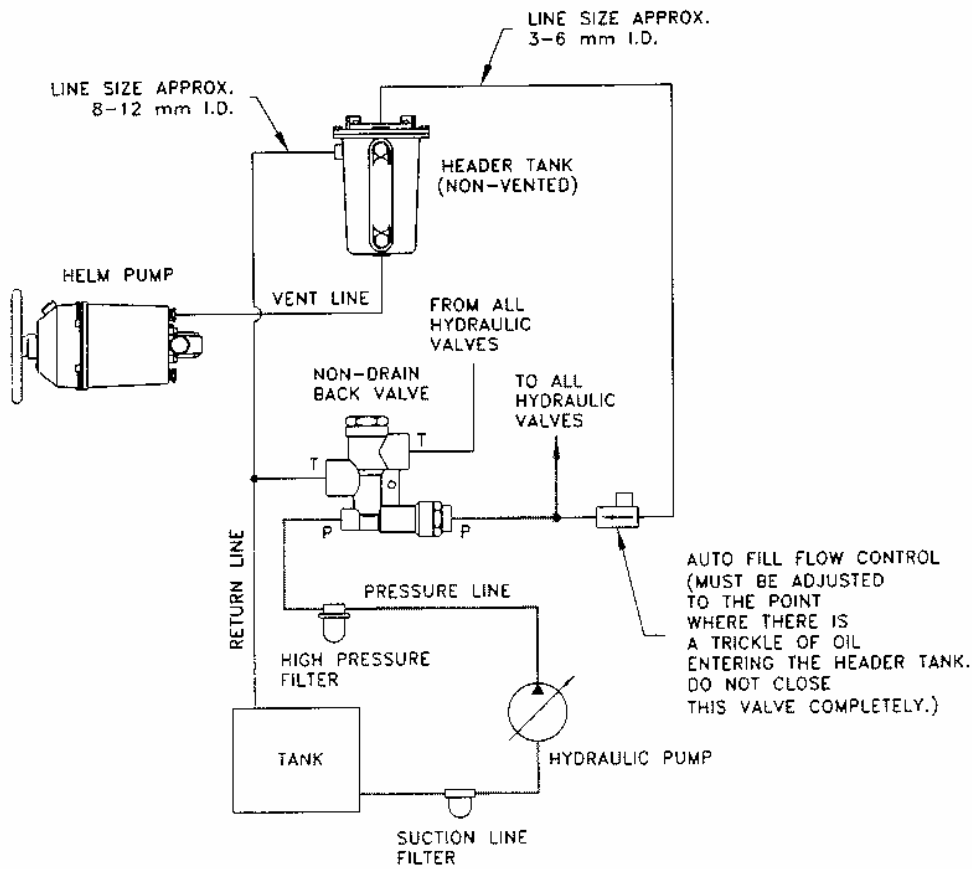
1/8" N.P.T.	10 ft.lbs.
1/4" N.P.T.	20 ft.lbs.
3/8" N.P.T.	30 ft.lbs.
1/2" N.P.T.	40 ft.lbs.
3/4" N.P.T.	60 ft.lbs.

DIMENSIONS AND PARTS LIST

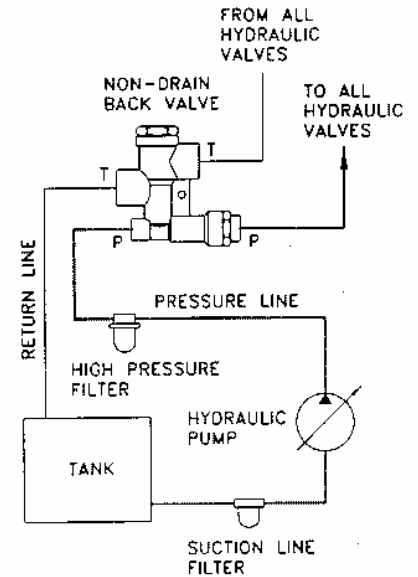


ITEM	QUANTITY	PART NUMBER	DESCRIPTION
1	1	7143-0001	Body
2	1	7143-0002	Valve Spool
3	1	7143-0003	Ball Retainer
4	1	7143-0004	Return Cap
5	1	7143-0005	Pressure End Cap
6	1	1301-0118	Ball 1
7	1	1201-0194	Spring
8	1	1201-0195	Spring
9	1	1101-0206	"O" Ring
10	1	1101-0026	"O" Ring
11	1	1101-0020	"O" Ring
12	1	-	"O" Ring

ALL DIMENSIONS IN INCHES (MM)



SYSTEM FOR SERVO VALVES



SYSTEM FOR STANDARD VALVES