



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, so as to allow the use of the helm pump without loss of hydraulic fluid.

All hydraulic valves, because of their mechanical fit tolerances, lose fluid in various amounts at some seals and joints. Consequently this would 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 well above the main hydraulic tank. The oil will eventually drain back to the main tank thus leaving the manual steering system run dry.

The 7143 valve, however, will retain all of the fluid in the system and will allow the helm pump to be used almost indefinitely in an emergency condition.

If this unit is used with 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 opened far enough to allow all the pressure from the hydraulic system to vent via the header tank back to the main tank. However, if the flow control is too widely opened the header tank will be pressurized and could cause possible damage to the sight glass or cause leakage between the tank and the cover. A minimum amount of oil should pass through the flow controls, yet has to be sufficient enough to allow the pressure to drop off in the system.

Material: Die cast silicon bronze

Weight: 3.3 lbs (1.5 kg)

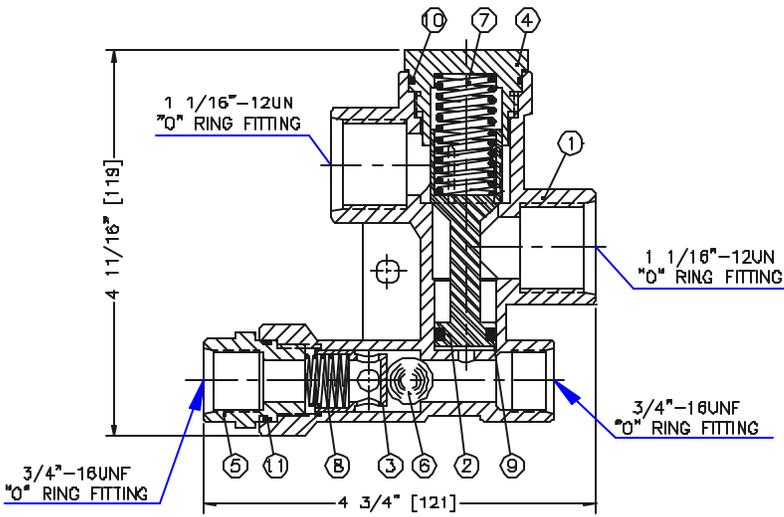
Capacity: 15 GPM

Maximum operating pressure: 1500 psi

Examples of system layout are illustrated at the back of this page.

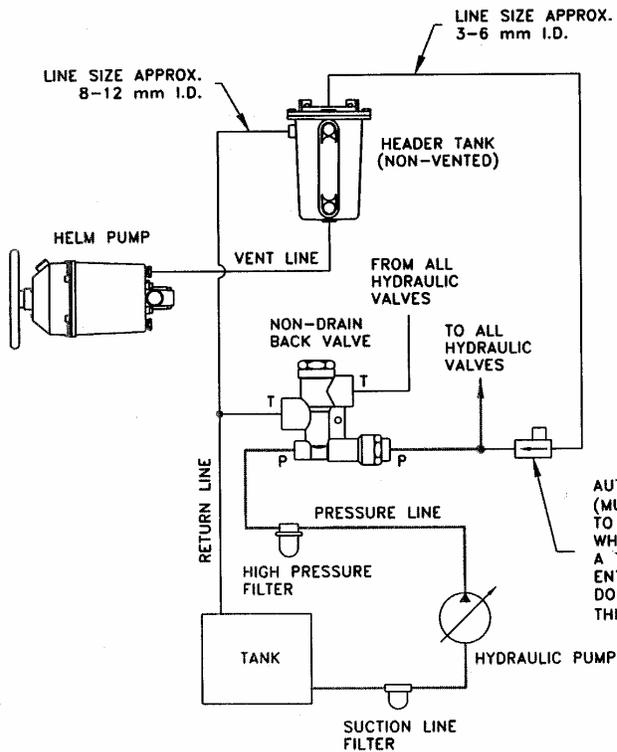
DIMENSIONS AND PARTS LIST

Model 7143

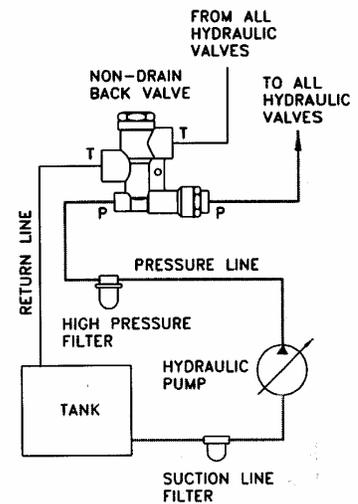


ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	7143-0001	Body
2	1	7143-0002	Valve spool
3	1	7143-0003	Ball Retainer
4	1	7143-0004	Return Cap
5	1	7143-0005	Pressure End Cap
6	1	1301-0118	Ball 9/16"
7	1	1201-0194	Spring
8	1	1201-0195	Spring
9	1	1101-0206	O-Ring
10	1	1101-0026	O-Ring
11	1	1101-0020	O-Ring

All Dimensions in inches (mm)



SYSTEM FOR SERVO VALVES



SYSTEM FOR STANDARD VALVES