Use these instructions for straight-blade and MVP[®] snowplows. Use Lit. No. 44323 for MVP PLUS™ snowplows.

INSTALLATION & ADJUSTMENT

A WARNING

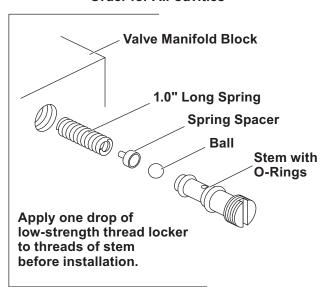
The driver shall keep bystanders clear of the blade when it is being raised, lowered, or angled. Do not stand between the vehicle and the blade or within 8 feet of a moving blade. A moving or falling blade could cause personal injury.

 If pressure is trapped in the hydraulic system, remove by electrically isolating the brown/red wire from the motor relay and operating the control in all positions with the power ON.

NOTE: Remove the fill plug slowly to relieve any pressure in the reservoir.

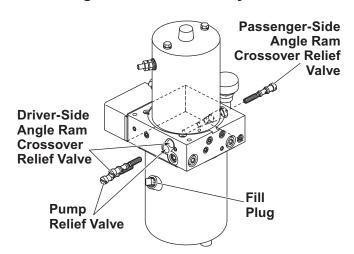
- 2. Remove existing valve components.
- 3. Oil O-ring, assemble parts as shown below, and tighten relief (cushion) valve stems until spring is fully compressed.

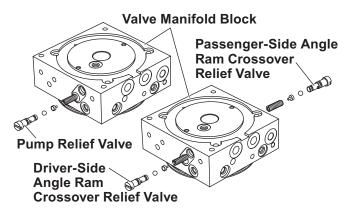
Relief Valve Assembly Order for All Cavities



4. Back off valve stem (rotate counterclockwise) the number of turns indicated in the following chart for your particular type of hydraulic unit.

For Straight Blade FloStat® Hydraulic Unit:





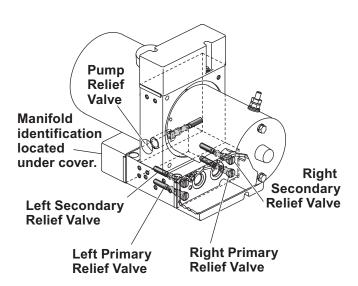
Relief Valve	No. of Turns Off (CCW) from Fully Seated	Approximate Relief Valve Pressure (psi)
Pump Relief	2-1/4 - 2-1/2	2250*
DS or PS Angle Ram Crossover Relief, except PRO PLUS® HD snowplows	1 – 1-1/4	4000
DS or PS Angle Ram Crossover Relief, PRO PLUS HD snowplows	1-3/4	3000

* Install a tee in line with the passenger-side hydraulic hose and attach a 3000 psi gauge. Read the pressure at pump relief when holding the angle left function button. Adjust pump relief valve to obtain 2250 ± 50 psi. Relieve pressure before adjusting.

Lit. No. 13390. Rev. 07 1 April 15, 2018

For MVP® FloStat® Hydraulic Unit:

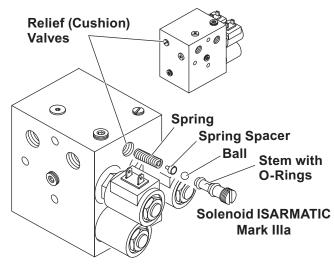
NOTE: Secondary manifolds with E2 markings must use 66797 Relief Valve Repair Kit in the left and right secondary relief valve cavities.

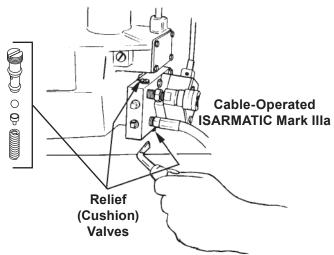


Relief Valve	No. of Turns Off (CCW) from Fully Seated	Approximate Relief Valve Pressure (psi)
Pump Relief	2-1/2 - 2-3/4	1750*
Right or Left Ram Primary Relief	1-1/4 — 1-1/2**	3500
Right or Left Ram Secondary Relief	1 – 1-1/4**	4000

- * Install a tee in line with the passenger-side rod-end hydraulic hose and attach a 3000 psi gauge. Read the pressure at pump relief when holding the right retract function button. Adjust pump relief valve to obtain 1750 ± 50 psi. Relieve pressure before adjusting.
- ** Be certain the ram primary relief valve stem is backed out 1/4 turn farther than the secondary relief valve stem.

For Solenoid and Cable-Operated ISARMATIC® Hydraulic Units:





Hydra-Turn™ Ram (Dia. x Stroke)	No. of Turns Off (CCW) from Fully Seated	Approximate Relief Valve Pressure (psi)
1-1/2" x 6"	1-3/4	2500
1-1/2" x 10"	1-3/8	3500
2" x 16"	1-3/8	3500

Western Products reserves the right under its product improvement policy to change construction or design details and furnish equipment when so altered without reference to illustrations or specifications used. The following are registered (®) or unregistered (™) trademarks of Douglas Dynamics, LLC: FloStat®, Hydra-Turn™, ISARMATIC®, MVP®, MVP PLUS™, PRO PLUS® HD.