

Adjusting / Testing Line Rupture Valve (LRV) When Interfaced With GMV 3010 Control Valve

- Contract Speed Normal operating up & down speed of car.
- Tripping Speed Speed at which the LRV will trip to stop the car.
- #5 Adjuster on Adjuster used to test LRV
3010 control valve
- #9 Adjuster on Down speed adjuster set in factory and should not be readjusted in the field.
3010 Control Valve

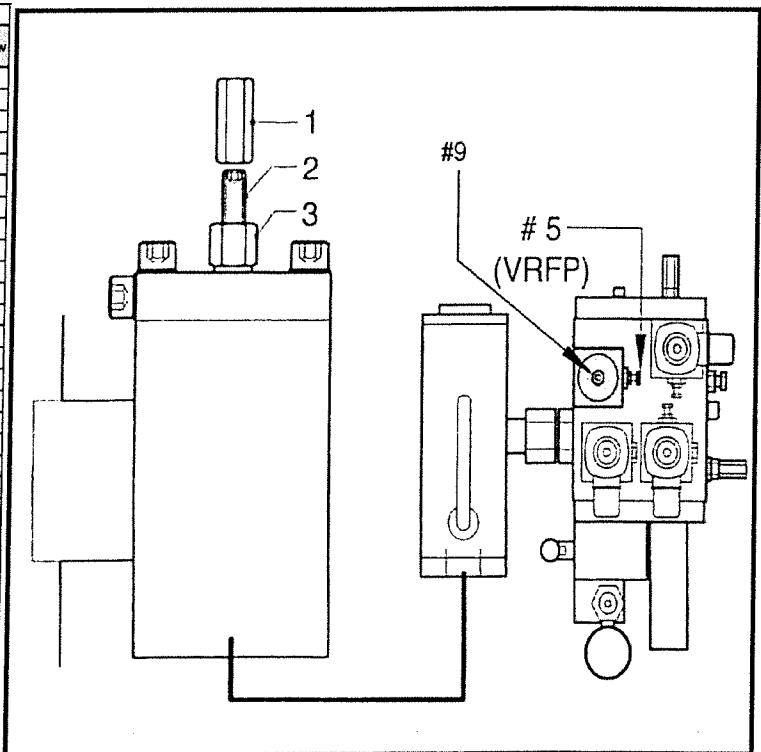
Under normal operating conditions the #5 adjuster must be screwed all the way out (CCW) to stop and lock nut set.

Under normal operating conditions the down speed will be the same at full load and no load because the 3010 control valve is pressure compensated.

When #5 is screwed in (CW) all the way to test the LRV, the pressure compensation becomes non-functional. Therefore when testing the LRV with #5 screwed in (CW) all the way the car needs to be loaded with test weights equal to the capacity of the elevator. With the #5 adjuster in (CW) all the way and full capacity test weights on the car, the down speed will be a maximum of 60FPM above contract speed.

Note: This adjustment must be made carried out by a licensed mechanic trained to perform this work.

Valve size	50 Hz		60 Hz	
	Pump flow rate [l/min]	No. of turn on screw	Pump flow rate [l/min]	No. of turn on screw
3/4" B	8	3 1/4	10	3 3/4
	12	4	15	4 1/2
	15	4 1/2	18	5
	20	5 1/4	24	5 3/4
	23	5 1/2	***	***
1" B	25	3 1/2	***	***
	30	4	30	4
	35	4 1/2	36	4 1/2
	43	4 3/4	42	4 3/4
	55	5 1/2	52	5 1/4
	75	6 1/2	66	6
	100	7 1/2	90	6 3/4
1 1/4 B-R-G	55	4 1/2	52	4 1/2
	75	5 1/2	66	5 1/4
	100	6 1/2	90	6
	125	7 1/4	120	7 1/4
	150	8	150	8
1 1/2 B-R-G	180	8 3/4	180	8 3/4
	210	9 1/2	216	9 1/2
	180	7 1/2	180	7 1/2
	210	8 1/2	216	8 1/2
	250	9 1/2	252	9 1/2
2" B-R-G	300	10 1/2	300	10 1/2
	360	11 1/2	360	11 1/4
	430	12 1/2	432	12 1/2
	430	11 1/4	432	11 1/4
2 1/2 B	500	12 1/2	516	12 3/4
	600	14 3/4	600	14 3/4
	600	14 3/4	600	14 3/4
2 1/2 B	720	16 1/4	720	16 1/4
	860	17 3/4	864	17 3/4
	1000	18 1/4	1032	18 1/4



LRV test procedure

1. Place test weights on the car equal to the rated capacity of the elevator.
2. Before entering pit to pre-set the LRV, engage any safety devices required by the local code authority and take all necessary safety precautions to prevent car descending while under the car.
3. Remove cap from adjuster screw on LRV. (Item 1)
4. Loosen the lock nut (Item 3), hold lock nut with 13mm wrench and screw the adjuster (Item 2, 4mm Allen) all the way in (CW) to stop.
5. Hold the lock nut and screw the adjuster (Item 2) out (CCW) to the number of complete turns shown on the chart. Hold set screw and tighten lock nut.
Please note – lock nut is also a seal nut. Do not over-tighten.
6. Screw #5 adjuster all the way in (CW) and call the car down.
7. If LRV trips and stops the car, adjusting / testing is complete. If LRV does not trip, screw LRV adjuster ½ turn in (CW) and repeat test. Repeat step seven until the LRV trips.
8. Screw #5 all the way out (CCW) and tighten lock nut to return the car to normal operating speed.
9. Place cap back on LRV Adjuster screw.