

## CHECKING AND SETTING OF THE GMV RUPTURE VALVE (VC 3006 – TYPE B) WHEN FITTED IN COMBINATION WITH A GMV GEV VALVE BLOCK.

The rupture valve consists of a valve which stops the oil flow when the downward speed exceeds the preset value. It ensures a deceleration lower than  $g_n$  ( $9.81\text{m/s}^2$ ).

### CHECKING AN EXISTING RUPTURE VALVE SETTING:

- Load the lift car with full load and call it to the top floor.
- Remove the PV coil from the valve block.
- Place a call to the bottom floor.
  - If the lift does not stop within 2 m, then switch the lift off to prevent it crashing onto the buffers.

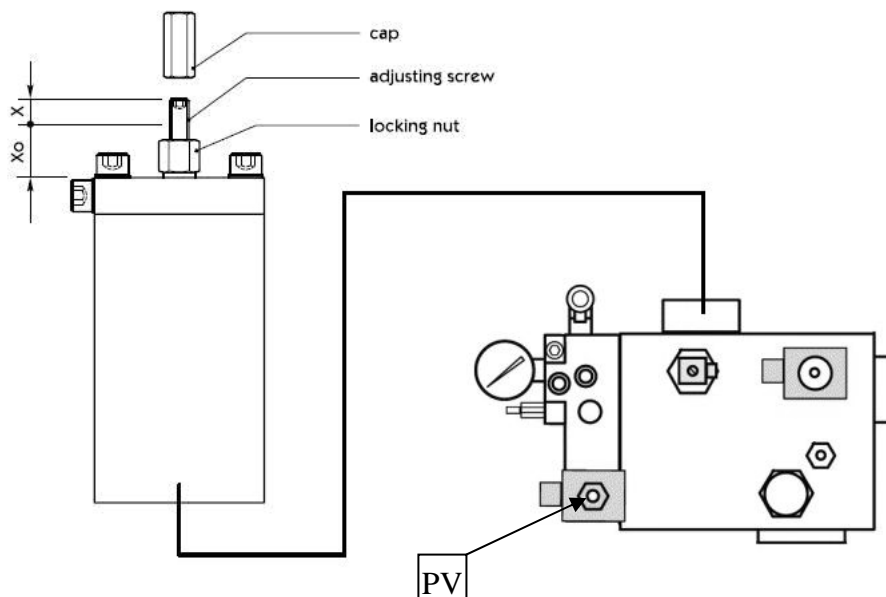
In this case it is necessary to re-adjust the rupture valve as follows:

- ◆ Remove the cap, untighten the locking nut and screw in the adjustment screw, one turn.
  - ◆ Call the lift to the top floor and then place a call to the bottom floor.
  - ◆ Repeat this operation until the valve closes and the following nominal dimensions are achieved.
    - 1000 mm for speeds 0.3 m/s
    - 1200 mm for speeds 0.63 m/s
    - 1500 mm for speeds 0.80 m/s
    - Dimensions for intermediate speeds can be by interpolation.
  - If the lift does stop, check the distance that the lift has travelled.
- If the distance is less than those stated above:
- ◆ Remove the cap, untighten the locking nut and screw out the adjustment screw, one turn.
  - ◆ Repeat this operation until the valve closes and the nominal dimensions are achieved.

- After the correct stopping distance has been achieved, reassemble the PV coil on the valve block and run the lift several times to ensure that the rupture valve does not operate during normal down travel.

### IMPORTANT!!!

Once the check is done re-assemble the cap on the adjusting screw.



## SETTING A NEW RUPTURE VALUE FOR THE FIRST TIME:

- Remove the cap from the adjusting screw and loosen the locking nut.
- Tighten the rupture valve adjustment screw in fully and measure and record the distance  $X_0$  (This is the distance from the top of the adjusting screw with the valve completely closed). Refer to diagram on page 1.
- Screw out the adjustment screw by a distance equal to the value  $X$ .  
The distance from the top of the adjusting screw will now be  $X + X_0$ .  
 $X$  can be determined from the table below, using the following data:
  - rupture valve size (this will be identified on the rupture valve data plate)
  - pump flow rate (this will be identified on the power unit data plate).
- Carry out the test procedure detailed on page 1

Value of distance  $X$ , as a function of pump flow rate and rupture valve size.

Rupture Valve Size	Pump flow rate (l/min)	Distance $X$ (mm)	No of turns on screw
1"	25	4.5	3 ½
	30	5.0	4
	35	5.5	4 ½
	43	6.0	4 ¾
	55	7.0	5 ½
	75	8.0	6 ½
	100	9.5	7 ½
1" ¼	75	7.0	5 ½
	100	8.0	6 ½
	125	9.0	7 ¼
	150	10.0	8
	180	11.0	8 ¾
	210	12.0	9 ½
1" ½	180	9.5	7 ½
	210	10.5	8 ½
	250	12.0	9 ½
	300	13.0	10 ½
	360	14.5	11 ½
	430	15.5	12 ½
2"	430	14.0	11 ¼
	500	15.5	12 ½
	600	18.5	14 ¾
2" ½	720	24.5	16 ¼
	860	26.5	17 ¾
	1000	27.5	18 ¼

### NOTE:

Down travel flow rate is assumed to be equal to up travel rate.