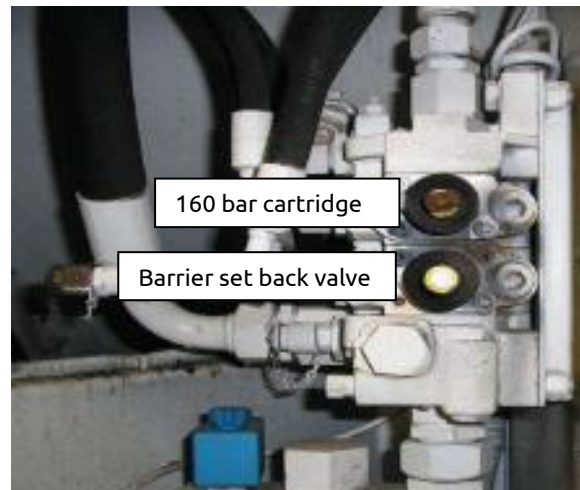


## Eject barrier operation

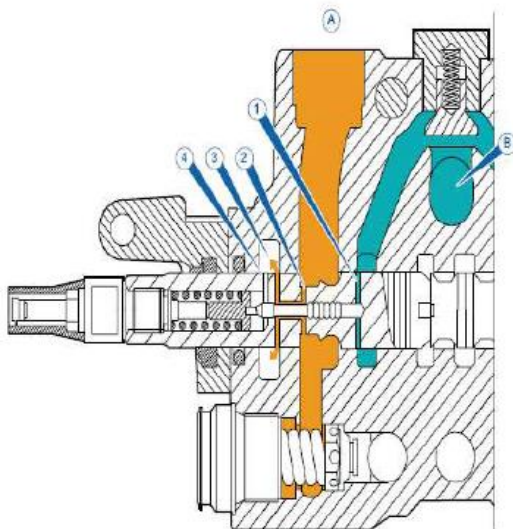
When the body is at 70% of load, the barrier is now released by the Barrier Set Back Valve (inner part of the eject spool fitted in the two-spool block at the operation of the packer acts on the barrier set back valve, as pressure reaches the setting of the barrier set back valve, oil from the eject cylinder now returns to tank through this valve.

This valve is adjustable, it has a 10 mm lock nut and a three mm Allen grub screw which is covered with a plastic cone shaped cap. Screwing the valve in increases the setting and screwing the valve out decreases the setting.

If the valve has been adjusted up to the same, or a higher pressure than the system pressure created on a pack stroke, then loading will only get to 70% and the ejection barrier will no longer move forward.



## The principles of the valve



A. (eject line) is backed onto the reduced diameter of poppet spool via bleed No 2

2. The spring chamber is open to the tank gallery via bleed No 4

3. As pressure increases in the pack line, the pressure is transmitted through the pressure gallery B poppet spool via bleed No1

4. As pilot pressure reaches the bias spring value and the poppet moves across to service port A (eject line). Bleed No 2 is now connected to bleed No 3 the tank return gallery.

## How to set and test the ejector pressure

Attach gauges to both test points (min 200 bar).

### Low pressure check

To carry out the low pressure check you need to bottom out the eject ram, to do this you will need to partially raise the hopper to enable the eject facility. When the hopper is partially raised, push the eject button and hold, this will give a reading on the system pressure gauge. The reading given on the system gauge (2) is the low-pressure setting.

To adjust, screw the low-pressure adjuster (4) clockwise for more pressure, and anti-clockwise for less pressure.

### High pressure check

To do this you will need to bottom out the hopper lift rams, push the hopper raise until the rams bottom out, read the pressure on the system gauge (2). This will be the high-pressure setting.



To adjust, screw the high-pressure adjuster (3) clockwise for more pressure, and anti-clockwise for less pressure.

### Barrier set back valve, checks and adjustment

Raise the hopper until fully raised, keep the raise button pushed, reduce the pressure on the high-pressure adjuster (3) to 100 Bars. Now push the eject button, you will see pressure readings on both gauges, let go of the eject button and you should see the pressure reading stay on the eject line gauge (1). Now press and hold the hopper raise button, slowly increase the high pressure setting until you see the pressure on the eject line gauge begin to drop, at this point take note of the reading on the system gauge (2). The reading given on the system gauge (2) is the setting of the barrier set back valve. To increase the setting of the barrier set back valve (5) screw the adjuster clockwise, and to reduce the setting screw the valve anti clockwise.

### EI 106 pressure settings (Bars)

Body size	Main relief (Dual flow valve)		Hopper raise	Barrier eject	Barrier retract	Barrier set back	Pack	Un pack	Sweep	Un sweep
	Low	High								
23	145-150	165-170	As high pressure relief	(80)	As low pressure relief (160)	105-110	As high pressure relief (175)	(100)	As low pressure relief (300)	(100)
All other sizes						150-155				