READING THE PRESSURE SETTING FROM AN X-RAY IMAGE

Adjustments of the *proGAV 2.0* shunt can be verified by using the *proGAV 2.0 Compass* and may be confirmed by radiograph (X-ray).
The position of the rotor determines and indicates the pressure setting in the X-ray.
The rotor includes four magnets, arranged in pairs and face to face on top of the rotor, which are recognizable in the X-ray as four white dots. Two additional drill holes on one side of the rotor, arranged on the left respectively right side of the magnets, serve as an additional support for orientation: the two drill holes are recognizable as black dots in the X-ray.
The rotor side with the two drill holes can be described as the back side of the rotor. The gap of the two magnets opposite to those on the back side of the rotor is regarded as the triangle tip. A triangle is formed by visually connecting the magnets and the drill holes. The sharp corner of the triangle indicates the position of the triangle tip. The direction of the triangle tip indicates the pressure setting of the valve (see fig. 16).

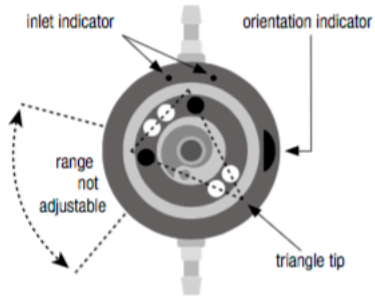

Fig. 16: Schematic X-ray image

The tringle tip can occupy any position outside the region ‚range not adjustable' (fig. 16). Thus, the opening pressure of the *proGAV 2.0* can be adjusted in increments of 1 cmH_2O between 0 and 20 cmH_2O.
In order to avoid misidentification of the adjusted opening pressure in the X-ray image, the valve is marked with a orientation indicator on one side (recognizable as a black cut-out in the X-ray see fig. 17). On the schematic top view as in fig. 16 the valve indication is visible on the right hand side of the valve's housing.

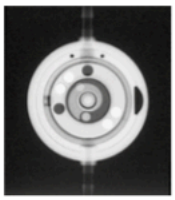

Fig. 17: Radiograph pressure setting 13 cmH_2O

The following opening pressure ranges for the gravitational unit are possible, the pressure range selected can be checked postoperatively on X-ray image:

Opening pressure for vertical posture	**Coding of gravitational unit**
10 cmH_2O	small, no ring
15 cmH_2O	large, no ring
20 cmH_2O	large, 1 ring
25 cmH_2O	large, 2 rings
30 cmH_2O	large, 3 rings
35 cmH_2O	large, 4 rings

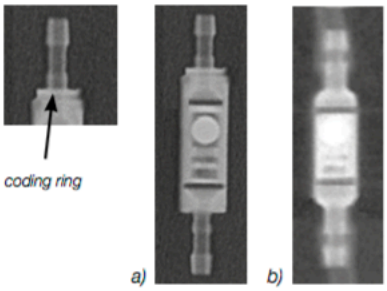

Fig. 18: X-ray image of the gravitational unit
a) large, 1 ring = 20 cmH_2O,
b) small, no ring = 10 cmH_2O