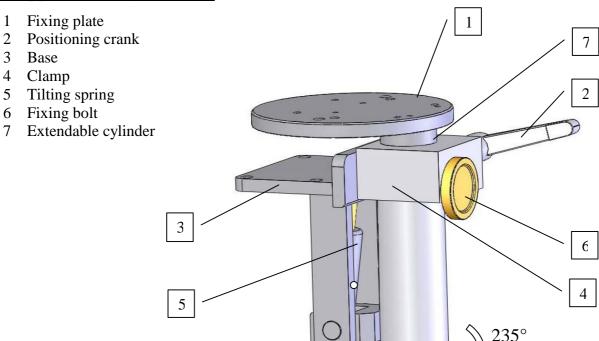
### **PTP User Manual**

# **PTP Tipper Assembly** (see Fig. 1):



The design concept of the PTP Tipper for vices is based on tipping the vice under the table surface, while also providing for height adjustment of the fixing plate (1) to which the vice is bolted. The span of base fixing bolts corresponds to the span of vice bases holes. The tipper base (3) is fixed (bolted) to the working surface.

#### 2 Vice tipping

1 General

Prior to tipping it is essential to check that the positioning crank (2) is locked. After releasing the fixing bolt (6) of the extendable cylinder (7), the vice can be tipped to the fixing plate under the working table. The vice weight is counterbalanced by the tipping spring. After the vice is positioned back to the vertical working position the cylinder must be locked with bolt (6).

# 3 Height adjustment of fixing plate

Disengagement of the positioning crank (2) releases the extending spring which raises the fixing plate to the required height. The height can be reduced by pressing the extendable cylinder (7). The required position is locked by the positioning crank (2).

#### 4 Maintenance

To ensure reliable function the extendable cylinder surfaces must be thoroughly lubricated.

#### 5 Caution !!!

Even though the tipper design prevents the cylinder from becoming fully extended, handling in the end-limit positions must be done carefully. When tipping the vice, enough clearance must be maintained to prevent an injury during the vice movement. Particularly the strength of the tipping spring must be taken into account.