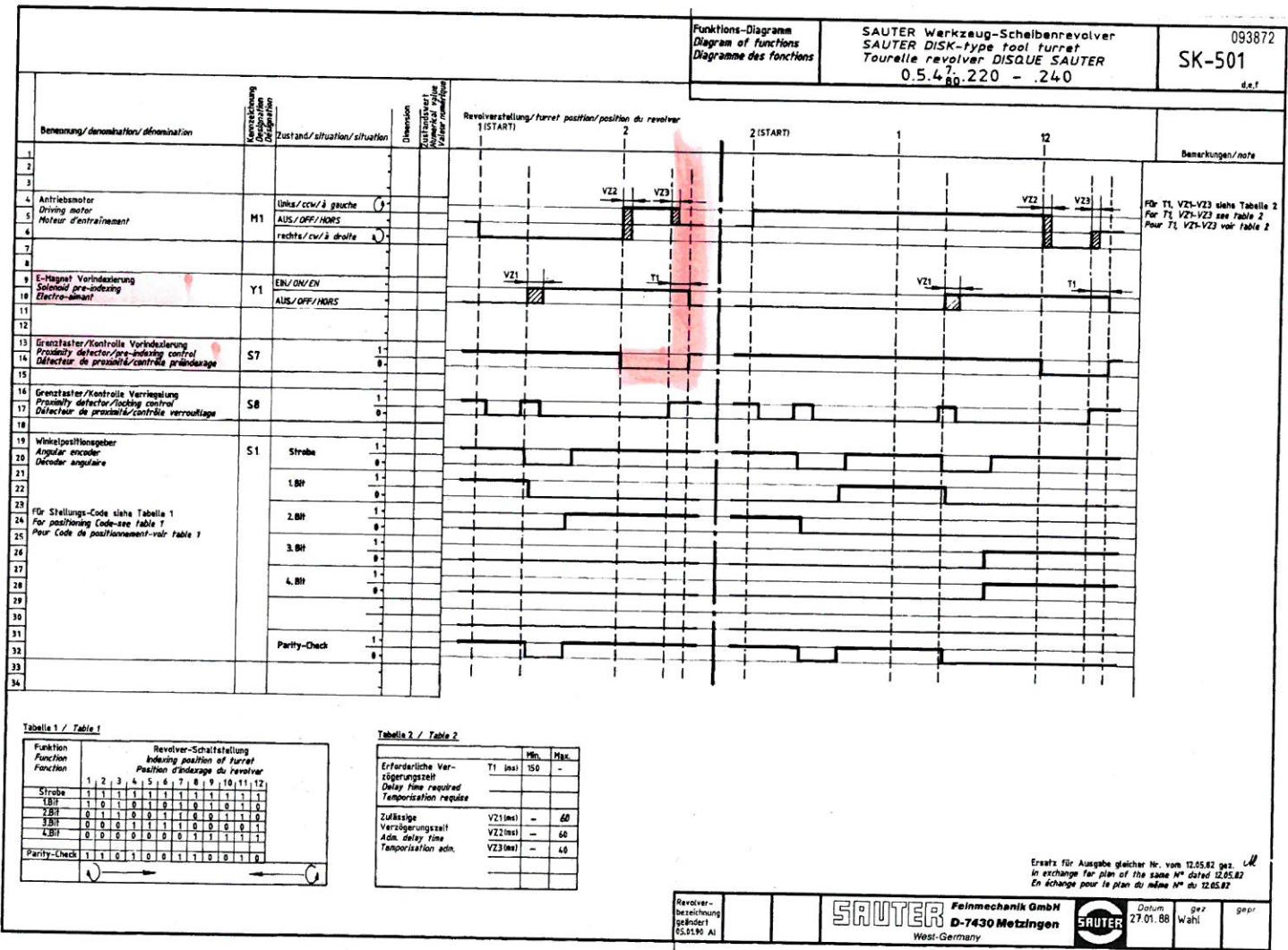


## 2. Working Principle of the Components

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The motor 23 drives, via a planetary gear and the shaft 7, a radial hub 13 to which the roller 14 is fastened. In the first part of the rotation movement, the roller 14 moves to the right or left against the locking cam of the component 12 and pulls the Hirth spur toothing apart (Fig. 2). Then the radial hub 13 rotates the location disk 3 by contacting bush 10 (Fig. 3). This rotation is synchronously transmitted to the angular encoder 52, which signals the current position. Upon reaching the selected position, the solenoid 55 presses the pre-indexing bolt 25 into the recesses of the damping ring 5. The pre-indexing bolt 25 actuates a proximity detector 56, which gives the signal for motor direction change. The roller 14 runs onto the locking cam (Fig. 2) and presses together the Hirth spur gearing above the plate spring 51. Shortly before it reaches the centre of the cam, the b8 proximity detector 57 is actuated by the cam disk, which signals that the turret is locked. The bolt 29 engages in disk 11. Roller 14 is held. When the solenoid 55 is switched off, the compression spring 58 pushes back the pre-indexing bolt 25 and engaging bolt 29, thus actuating the b7 proximity detector 56.

The signal of the b8 proximity detector 57 can be used to initiate further machine operations. For commencing further indexing movements, the signal of s7 has to be used.



*Locked*

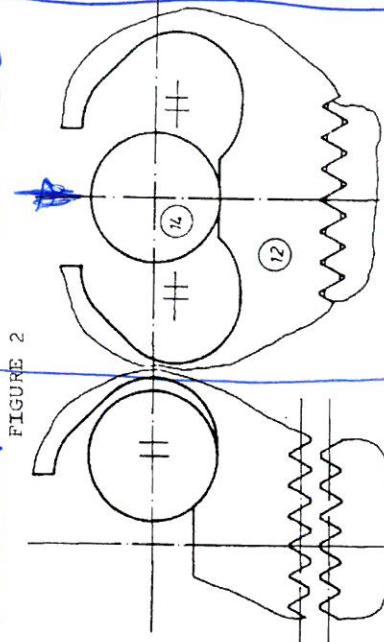


FIGURE 2

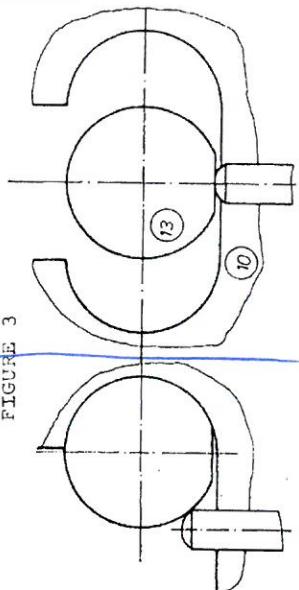


FIGURE 3

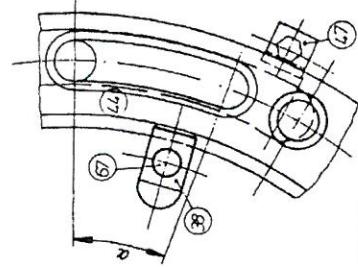
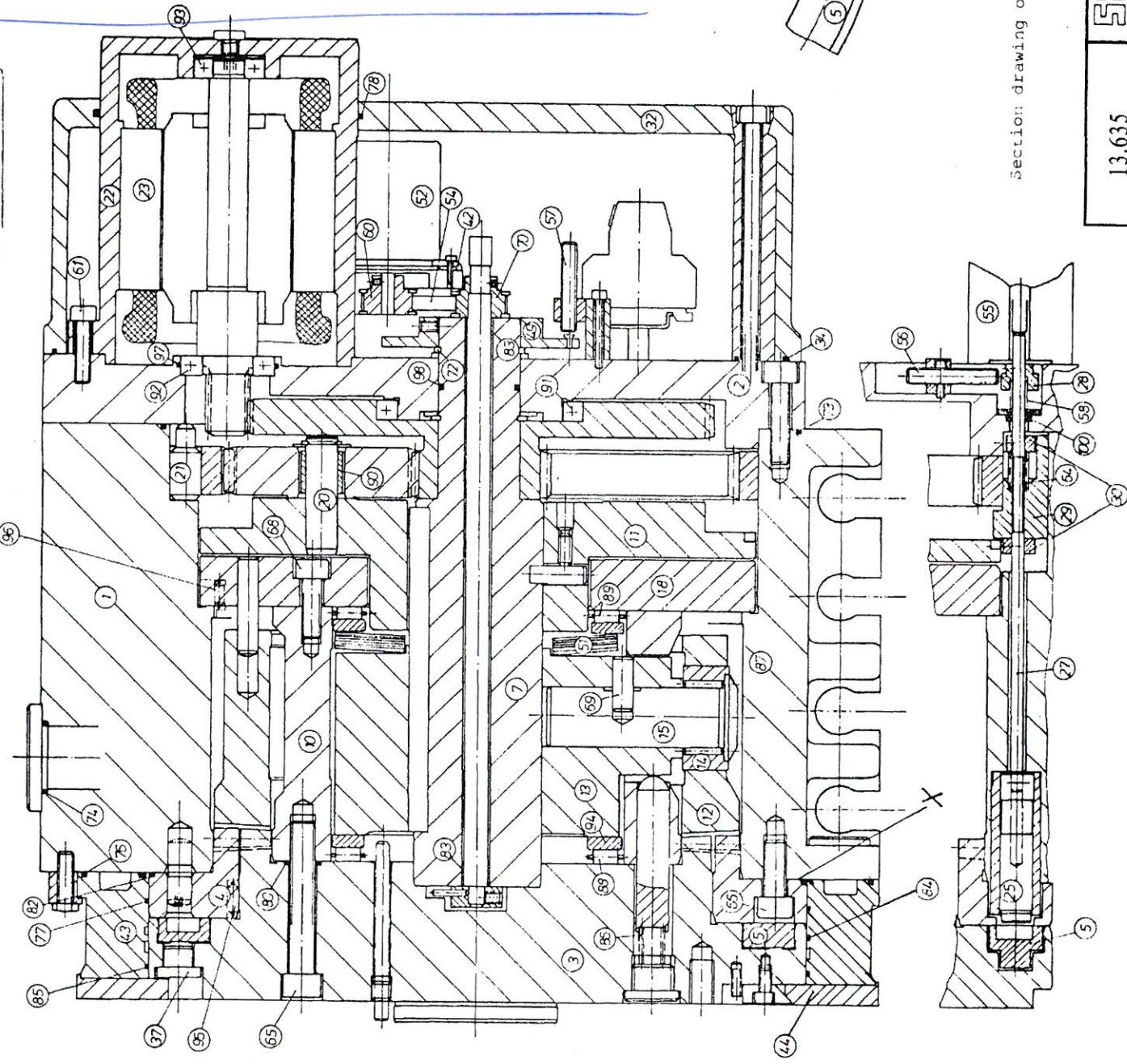


FIGURE 5

11. Section drawing



Section drawing of coolant valve - see sheet 10

13.635

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