



**STARTING CONDITIONS**

Turret closed - the motor brake is energized and the mobile ring gear 003 is engaged with stationary toothed ring gear 002 and the short-circuiting gear 004.

**NEW POSITION RESEARCH**

The motor brake is de - energized - power is feed to the motor 150, driving pinion 015, which rotates gear wheel and spiders 007 causing planetary gears to rotate the roller carrier 006. When the rollers engage in cam detents in short circuiting ring gear 004, at this stage spring 034 pushes short circuiting ring 004 backwards, disengaging the Hirth coupling. At this point the indexing head 005 rotates through the gear 008.

The encoder 160 feeds back to the NC control system the indexing head absolute position - once the NC system receives the falling strobe signal of the previous to the required indexing position - the electromagnet 200 is energized, this pushes lock 017 into the next indexing head 005 detent allowing preindexing proximity switch 301 signal to be made - the motor is reversed, driving pinion 015 which rotates gear wheel and spiders 007 causing planetary gears 456 to rotate driving rollers to push short circuiting ring 004 into, mobile ring gear 003 and stationary toothed ring gear 002 firmly locking Hirth coupling together at which time the stop proximity switch 313 signal is made, signaling motor 150 to stop and the motor brake to be energized. This compleats the indexing cycle.

Note: please refer to pages 13, 14, 15 for the part numbers.

