ABSTRACT

The present invention relates to the field of unscrewing mechanism within the mold in order to facilitate ease of ejecting threaded molded parts in a typical injection molding process, especially after the part is cooled and prior to ejection. More particularly, the invention comprises of a main transmission drive shaft that is in alignment with the fixed planetary gears which are housed or encased within the inline annular sleeve. On the other side of the annular sleeve, it consists of the inline secondary drive connected to a rotating breakaway slide insert. After part cooling, the main drive shaft acts as a drive unit to drive the unit in one direction (either clockwise or anti-clockwise depending on settings) and with the fixed planetary gears moving opposite direction simultaneously. This action results in the breakaway insert to simultaneously rotate and slide out to unfasten the cavity thread features, resulting in quick part release.

Use Figure 1