

## Using the PCM-F Power Cannelure Machine Carousel Feed Support

The carousel feeder is placed over the drive shaft of the PCM-2 machine AFTER removing the retaining collar, wheel, and the rotating carrier disk under the wheel. All of the usual components are first removed from the drive shaft, and then the carousel wheel is placed on the shaft with the pins pointed up. A light film of lithium grease or motor oil, wiped on the bottom of the carousel plate where it rotates over the top plate of the tool, will provide sufficient lubrication for a day's production run.



The purpose of the pins are to support a specific diameter of bullet, which just fits between two adjacent pins. Other spaces (which are wider than the caliber) should NOT be used to support multiple bullets at once! Only one bullet should ever be placed between any two pins. You can fill as many such spaces as you wish, but all bullets must have at least one support pin between them and the next bullet.

Because each wheel is designed for a specific bullet diameter, the spacing and number of pins will vary from one caliber to another. If you have more than one caliber of feed carousel, be sure to each one ONLY with the proper caliber of bullet, so that every bullet being supported is between two pins that touch it on both sides.



If a bullet that is too small to just fit between two pins is placed in the unit and run through the cannellure track, it will probably tip and may damage or destroy the carousel unit. At best, the cannellure may be angled rather than perfectly straight around the bullet, because of the lack of proper support.

Never place a number of bullets in the wider gaps, so that the bullets rub against each other as they are moved through the gap. Each bullet will act as a friction gear against the next, trying to change the rate of rotation to match its own movement, so that errors caused by minor misalignment are multiplied.

The pins are press fit into the steel rotating plate and should be tight and solid feeling. If a pin wobbles or is loose, it cannot provide stable support to the bullet. Do not use the carousel feed support until it has been repaired.

The carousel feed turns with the shaft only by friction. Without a bullet in the process of being cannellured, it should stop easily when touched lightly with the fingers. The bullet engaging the embossing wheel and pressing against the backing plate is what drives the wheel around. Once a bullet enters the gap and is embossed by the embossing wheel, the carousel pins are pushed by the rotating bullet, moving the entire device. Do not attempt to stop the device by hand when a bullet is being processed. Although you can load a bullet between all the pins which are properly spaced for the caliber, it is usually better if only one or two bullets is actually being cannellured at a given moment. It is much easier to load if you can stop the carousel.