

**TOOL REQUIRE TO REBUILD GEAR REDUCTION DRIVES**



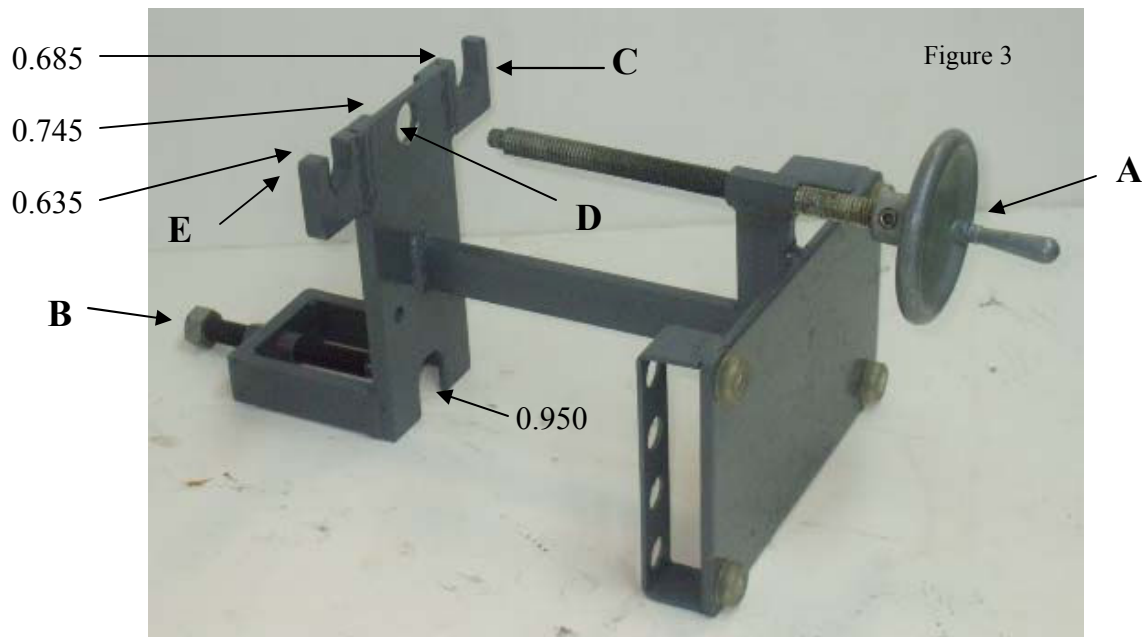
**K108-0700**



Nippondenso drives which can be fully rebuilt including removing ball bearings and replace the inside rollers and springs.



Mitsubishi drives which can replace the gear.



Tool for rebuilding gear reduction drives. Tool can be utilized in a vertical or horizontal position for operating convenience.

Figure 2



K108-0700-1 Fixture to press drive



Figure 8

K108-0700-9 Tool to open the snap ring



Figure 9

K108-0700-10 Tool to release the snap ring from the snap ring retainer



Figure 11

Pliers to insert the rollers and the springs. (Optional) 4" Long



Figure 12

Additional tools required with the tooling to repair the drives. Hammer, 3/4 wrench and a flat screwdriver



Figure 5

Adapters to remove ball bearings.  
K108-0700-2 0.635    K108-0700-3 0.655  
K108-0700-4 0.695    K108-0700-5 0.710



Figure 6

K108-0700-07 Tool to insert the reusable snap ring.



Figure 7

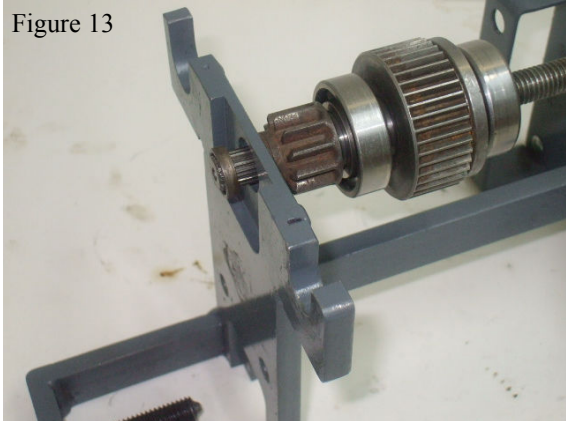


Figure 10

K108-0700-11 Tool to insert the snap ring in the snap ring retainer

## How to disassemble a drive

Figure 13



Mount drive on tool and press it

Figure 15



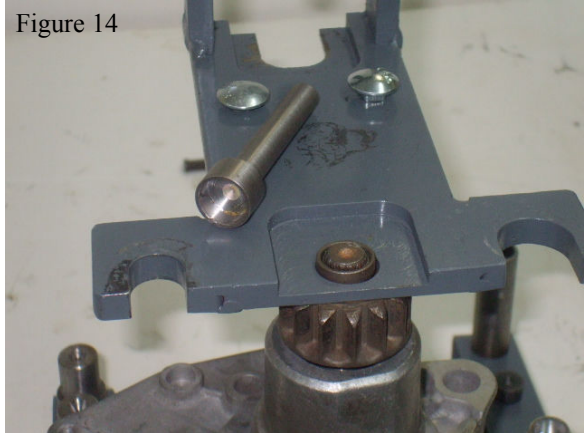
Hit firmly with a hammer.

Figure 17



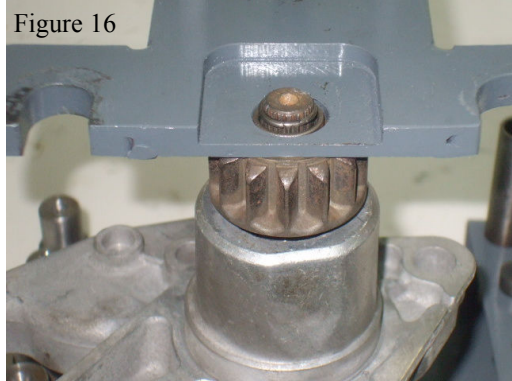
With tool # 2 and a hammer release snap ring.

Figure 14



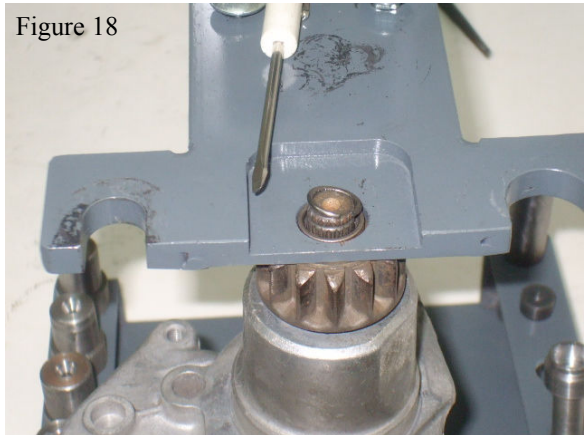
With tool # 5, release the cup that protect the snap ring

Figure 16



Sample of how the snap ring looks

Figure 18



Once the snap ring is removed, the drive is ready for disassembly

Figure 19



All parts from sample drive.

Figure 20

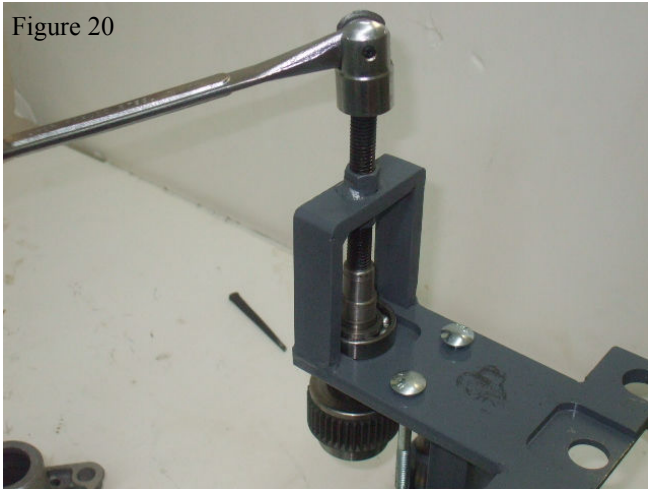


Figure 21



Using adapters # 2, remove ball bearings. Adapters should fit the shaft, if not shaft may be damaged.

Figure 22



All parts after full disassembly.



Figure 23

Pliers to insert the rollers and the springs.  
(Optional)

## Assemble the drive

Figure 24



Insert the ball bearings using a 5 ton arbor press.

Figure 25



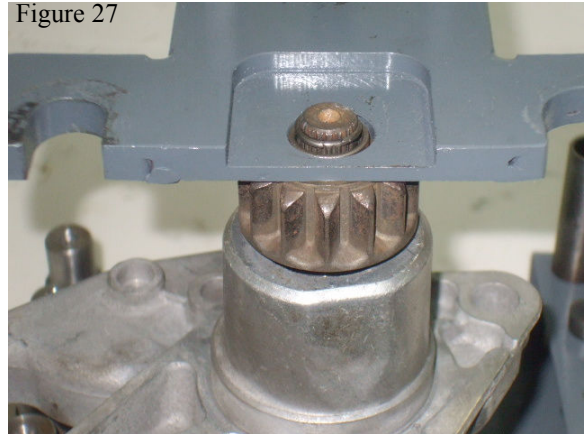
Assemble the unit, insert the shaft with the spring, insert the washer with the splines, then insert into the casting, then the gear with the spring and the cup, press it to insert the snap ring.

Figure 26



Tool to insert the snap ring, center it on the drive and hit firmly with a hammer

Figure 27



Once snap ring is in position remove the drive from the tool..

Figure 28



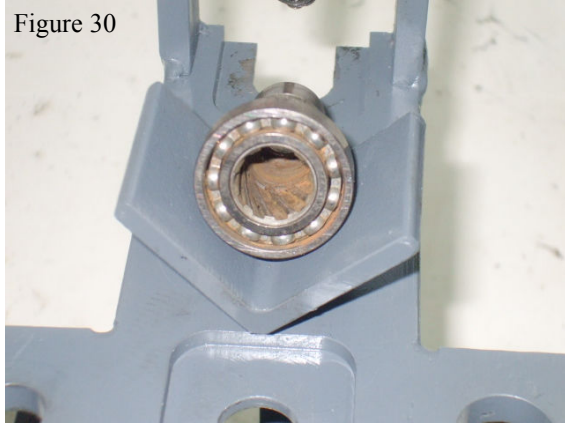
Remove drive from press mount and insert to right or left finish mount. Using tool # 6 place over snap ring and hit firmly with hammer to lock snap ring into cup



Figure 29

Complete rebuilt drive. Starter Lester 16896 or similar

Figure 30



V block for easy clutch loading.

Figure 31



K108-0700-14 V block for easy clutch

Figure 32



K108-0700-15

Figure 33



Figure 34



Figure 35

