



Operation Manual K108-0700

K108-0700

Drive Rebuilder Fixture with 10 Tools

Disassemble/Assemble

Nippondenso Drives in over 170 Lester Starter Numbers

Hitachi Drives in over 130 Lester Starter Drive Numbers



nippondenso - (reference numbers)

<i>Accurate</i>	<i>WAI</i>	<i>PIC</i>
4-676	54-8202	6190-2610
4-788	54-8210	6190-2611
4-1034	54-8224	6190-2616
4-1036	54-8235	6190-2618
4-1045	54-8226	6190-2614
4-1097	54-8218	6190-2620



**Hitachi - (reference numbers)
(not supplied for bearing removal)**

<i>Accurate</i>	<i>WAI</i>	<i>PIC</i>
4-751	54-8111	6104-2545
4-678	54-8194	6104-2557
4-798	54-8141	6104-2662
4-896	54-8132	6104-2576
4-899	54-8133	6104-2589
4-905	54-8125	6104-2660
4-910	54-8138	6104-2600
4-911	54-8139	6104-2814



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Parts List for K108-0700

K108-0700-1 Fixture Stand Only



K108-0700-2 Shaft Adapter for Brg Removal 0.635
 K108-0700-3 Shaft Adapter for Brg Removal 0.655
 K108-0700-4 Shaft Adapter for Brg Removal 0.695
 K108-0700-5 Shaft Adapter for Brg Removal 0.710



K108-0700-7 Snap Ring Installing Tool
 (2 pc. Bullet & Pusher)



K108-0700-8 Snap Ring Opener



K108-0700-9 Snap Ring Displacer
 K108-0700-11 Snap Ring Seater



K108-0700-15 2" Pusher, (silver round head)
 K108-0700-16 3" Pusher, (silver round head)



Options:

K107-0700-14 V-Block for Clutch Assembly
 K108-0700-12 Roller Installer-(0.250 to .0300)
 K108-0700-13 Spring Installer-(all applications)

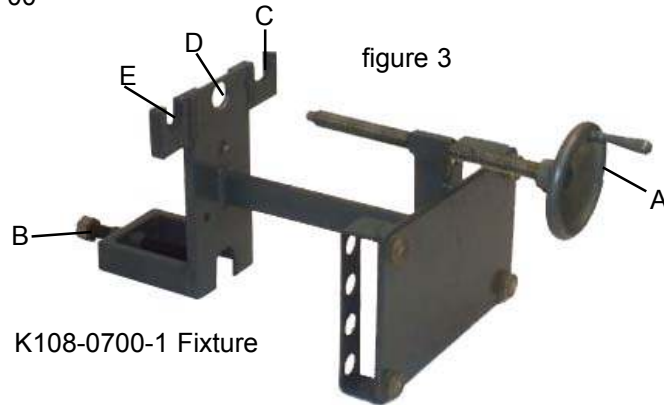




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Helpful Hints:

- The K108-0700 has two built in storage areas, one on either size, that are ideal for storing all ten tools. This will prevent loss of the tools when not in use.
- Use a magnet to hold the K108-0700-9 Snap Ring Opener to the top of the base to prevent loss.
- The available options listed in the parts list will speed up operation and give you a third hand. They are available piece by piece.
- An Arbor or Hydraulic Press, 3/4" box end wrench or ratchet with 3/4" socket, a hammer and a small screwdriver are required for bearing installation. This items are not supplied with the K108-0700



Control Functions and Locations: (figure 3)

- A Screw Control Wheel...for pressing on the shaft. Used in conjunction with Opening (D) for Snap Ring Removal and installation.
- B 3/4" Bolt Head...used for Bearing Removal
- C Slot for Snap Ring Seating, depending on shaft size behind the gear.
- D Slot for gear end of the drive for Snap Ring Removal and Installation
- E Slot for Snap Ring Seating, depending on shaft size behind the gear.

Actual Operation:

- 1 Lay the K108-0700-1 Fixture on its' side, as shown in figure 3. Turn Handle (A) CCW until it fits the drive you want to disassemble (see figure 18).
- 2 Center the gear end of the drive in opening (D) and tighten handle (A) CW until the Snap Ring Retainer is as far back as possible. (Do not over tighten)
- 3 Rotate K108-0700-1 Fixture on your workbench with the drive in place until the Handle (A) is pointed toward the floor. (See figure 2)
- 4 Center K108-0700-9 Snap Ring Retainer Remover, (see figure 9) over the retainer, (see figure 15) and tap with a hammer. The snap ring will be stripped out of the retainer.

figure 18



figure 2



figure 9



figure 15



figure 4



figure 8



- 5 Use K108-0700-8 Snap Ring Opener in the position shown in (figure 8), tap with a hammer on the closed side (see figure 4) and the ring will open enough to remove. Lift with a screw drive or C708-0409 Brush Hook on the opposite side of the snap ring opening to remove snap ring and retainer completely. Loosen Handle (A) and remove drive and gear.
- 6 Rotate the fixture until the Bolt (B) (see figure 2) is pointed toward the ceiling. Put the shaft with the bearings installed into the slot as seen in figure 6. Use the proper Bearing Removal Tool K108-0700-2, K108-0700-3, K108-0700-4 or K108-0700-5, (seen in figure 5), then tighten the 3/4" bolt and press out the shaft. Repeat this procedure for the other bearing. These must fit the shaft.

figure 6



B
figure 2



figure 5



- 7 Remove the Clutch Assembly from the Shaft and remove the rollers and springs. Clean and replace necessary parts.

figure 16

Optional Tooling for Roller & Spring Removal, (figure 16):

- K108-0700-13 Spring Removal Tool
- K108-0700-12 Roller Removal Tool
- K108-0700-14 Holding V-Block

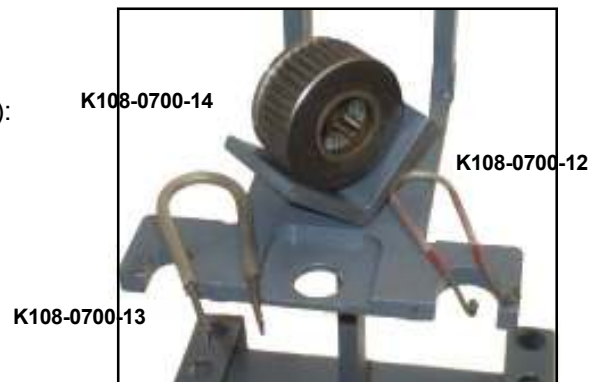
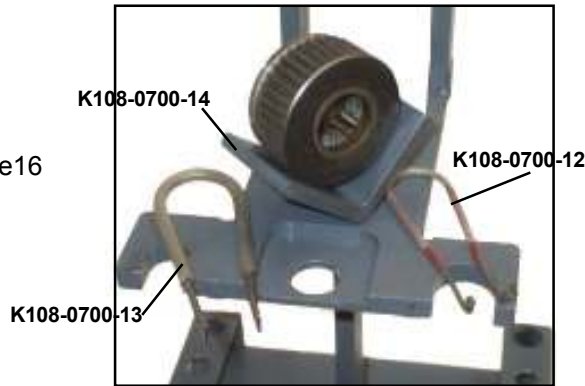


figure16



Drive Assembling Operation:

- 1 Reload and grease the Clutch Assembly using Optional Tools K108-0700-12 Roller Tool, K108-0700-13 Spring Tool and K108-0700-14 V-Block, (see figure 16). For easy Clutch Loading, place the assembled clutch on the shaft and install both bearings. Install springs and shaft as required.
- 2 Install Gear and Snap ring retainer on Shaft Assembly
- 3 Position K108-0700-1 as show in figure 17 and install assembly. Tighten Handle (A) to expose the snap ring groove as shown in figure 18. Reposition K108-0700-1 Fixture to Figure 2 position.

figure 17

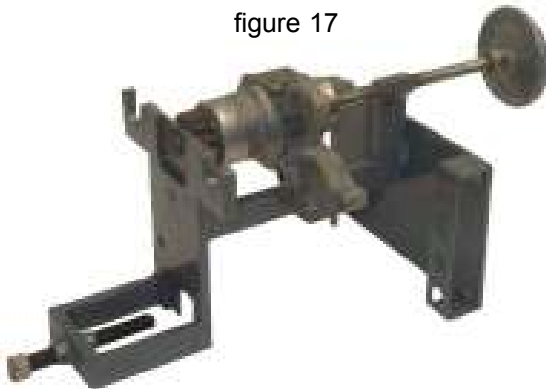


figure 18



- 4 Place the Snap Ring on the Bullet, then put on top of the shaft and using the K108-0700-7 Snap Ring Installing Tool, (figure 7), install the snap ring into the snap ring groove by tapping with a hammer. (See figure 19).

figure 7



figure 19





- 5 Push the gear all the way forward using either the K108-0700-15 or K108-0700-16 Silver Headed Shaft Pushers. (See figure 20 & 20A)
- 6 Depending on the shaft size behind the gear, move the assembly to either slot C or E shown in figure 2.
- 7 Use K108-0700-11 Snap Ring Seater, figure 10, along with a hammer to set the snap ring in place. See figure 21. Figure 22 shows the drive assembled.

