

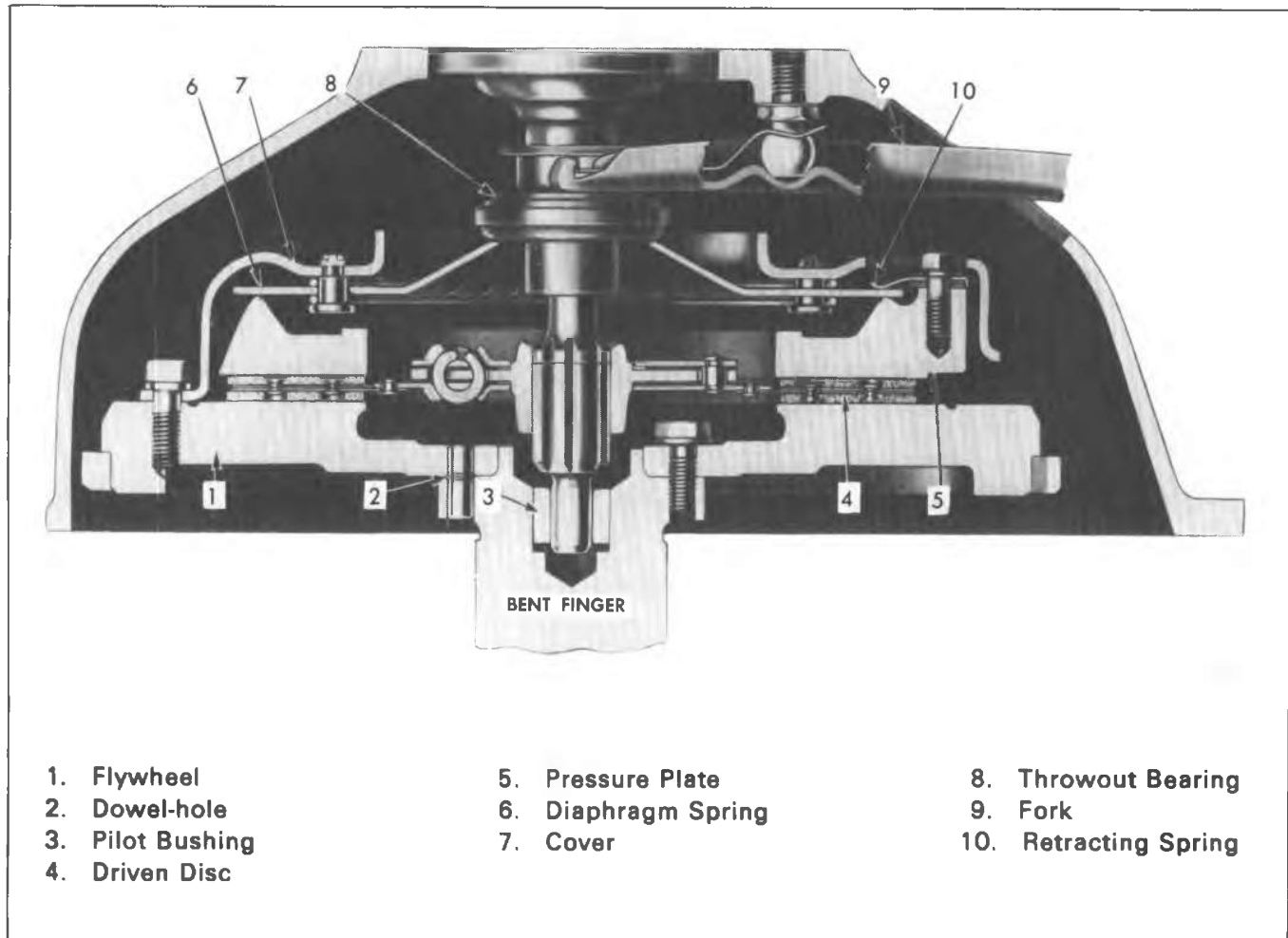


Fig. 7C-2A--Bent Finger Clutch Cross-Section (Typical)

4. Check throwout bearing for roughness and free fit on the sleeve of the transmission clutch gear bearing retainer. Replace retainer if rough.

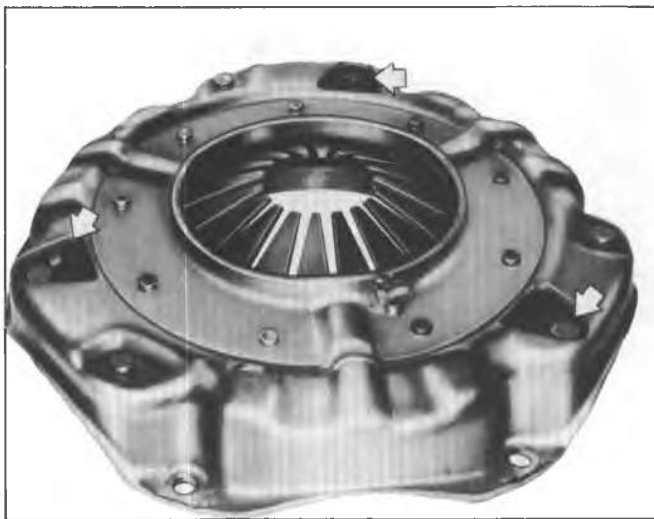


Fig. 7C-3A--Retracting Spring Location (Typical)

5. Inspect clutch disc for worn, loose or oil soaked facings, broken springs, loose rivets, etc. Replace if necessary.

6. Examine splines in hub and make sure they slide freely on splines of transmission clutch shaft. If splines are worn, the clutch disc or clutch gear should be replaced as necessary.

7. Inspect clutch fork ball socket and fingers for wear and ball retaining spring for damage. Spring should hold fork tightly to ball stud.

NOTE: Ball spring on fork may be bent in toward fork if necessary.

8. Inspect ball stud for wear. Replace if scored.

9. Check run out of transmission pilot hole in clutch housing by removing a flywheel bolt and installing a dial indicator. The run out should be within .000-.015".

10. Lubricate ball stud before reassembly.

ASSEMBLY

1. Install the pressure plate in the cover assembly, lining up the punch marks on the edge of the pressure plate with the punch marks on the edge of the cover.

2. Install pressure plate retracting springs and drivestrap to pressure plate bolts and lock washers and tighten to 11 ft. lbs. torque. The clutch is now ready to be installed.

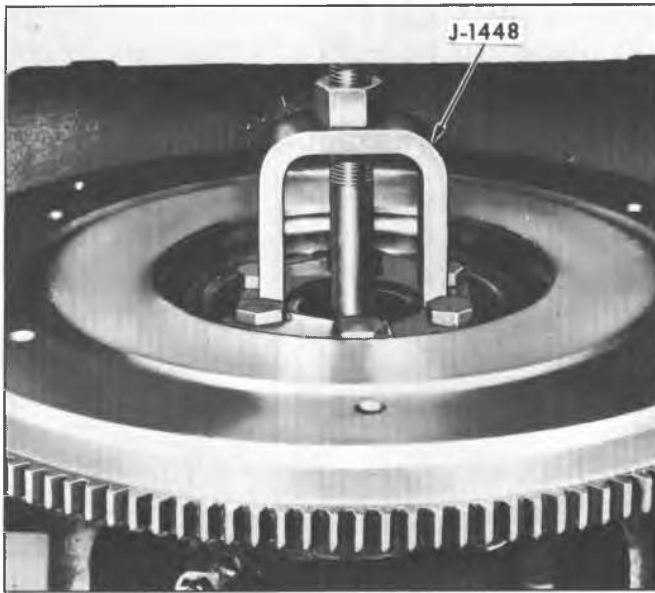


Fig. 7C-4A--Clutch Pilot Bearing Removal (Typical)

PILOT BEARING REPLACEMENT

The clutch pilot bearing is an oil impregnated type bearing pressed into the crankshaft. This bearing requires attention when the clutch is removed from the vehicle, at which time it should be cleaned and inspected for excessive wear or damage and should be replaced if necessary.

To remove, install Tool J-1448 and remove bearing from crankshaft, as shown in (Fig. 7C-4A). In replacing this bearing, use Tool J-1522. Place bearing on pilot of tool with radius in bore of bearing next to shoulder on tool and drive into crankshaft. Lubricate with several drops of machine oil.

SINGLE PLATE COIL SPRING CLUTCH INDEX

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DISASSEMBLY

1. Place the cover assembly on the bed of an arbor or drill press with a block under the pressure plate so arranged that the cover is left free to move down.

2. Place a block or bar across the top of the cover with the spindle. Hold compressed while the adjusting nuts are removed, as shown in Fig. 7C-2E. Then slowly release pressure to prevent springs flying out.

3. Lift off cover and all parts will be available for inspection. Note carefully the location of all parts including arrangement of springs. See Fig. 7C-3E.

4. To remove levers grasp lever and eyebolt between thumb and fingers as shown in Figure 7C-4E, so that inner end of lever and upper end of eyebolt are close together, keeping eyebolt pin seated in its socket in lever.



Fig. 7C-2E--Compressing Clutch

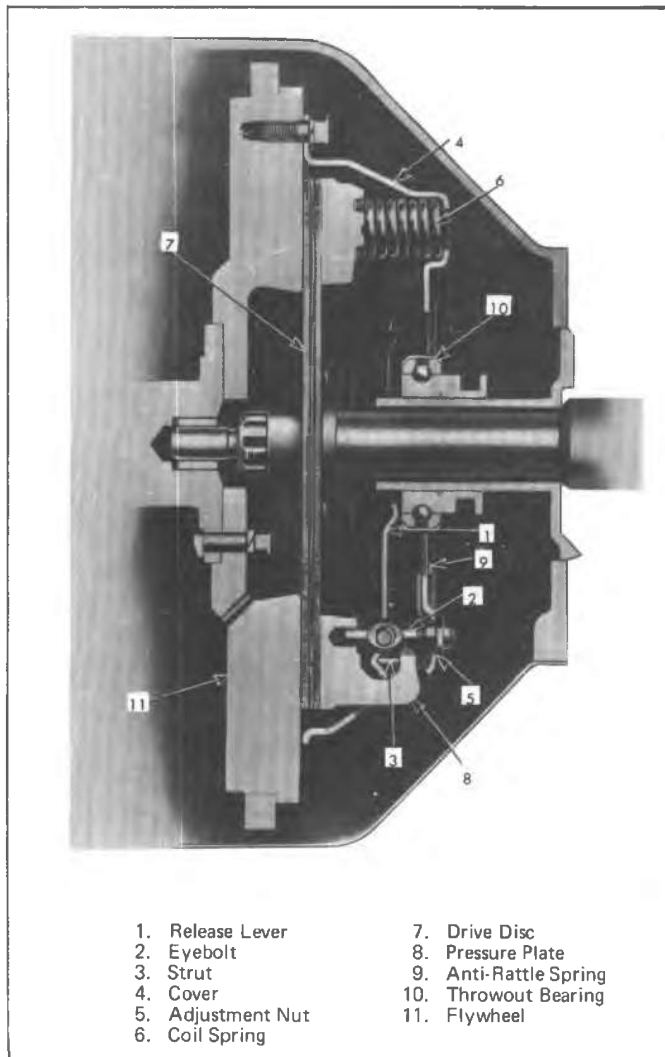


Fig. 7C-1E--Coil Spring Clutch Cross-Section (Single Plate)

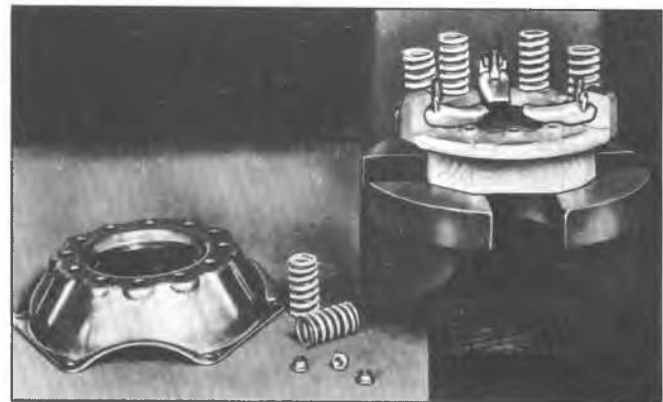


Fig. 7C-3E--Disassembly of Clutch

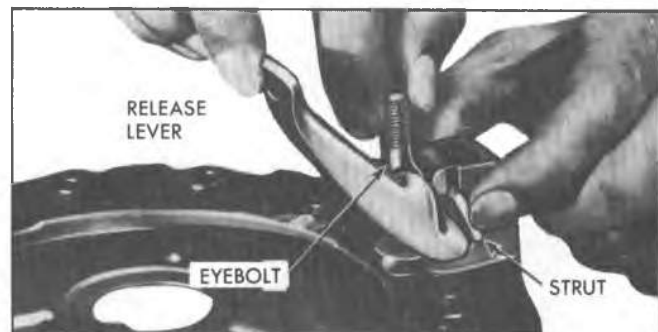


Fig. 7C-4E--Grasping Lever and Strut

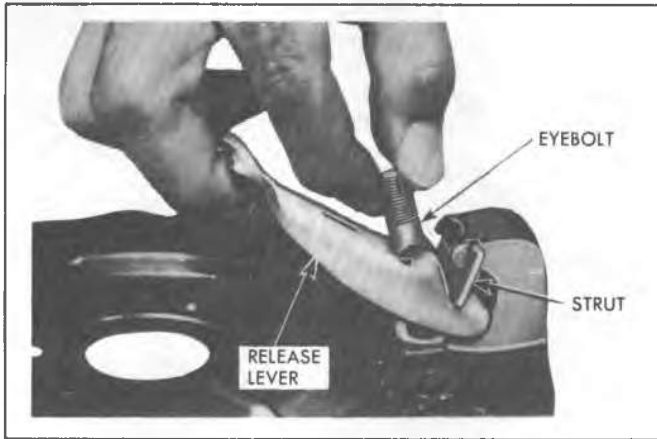


Fig. 7C-5E--Removing or Installing Lever

5. Lift strut over ridge on end of lever, as in Fig. 7C-5E.
6. Lift lever and eyebolt off pressure plate.

NOTE: It is important to replace all parts which show wear.

INSPECTION

In addition to applicable items listed under Diaphragm Clutch Inspection, check the following items.

1. Check driving lugs for wear.
2. Check clutch cover for distortion or cracks.
3. Check release levers for wear or cracks.

ASSEMBLY

1. Lay the pressure plate on the block in the press and coat the lugs with a thin film of approved lubricant such as lubriplate. See Fig. 7C-6E.
2. Assemble lever, eyebolt and pin, holding eyebolt and lever as close together as possible and with the other hand grasp strut as shown in Fig. 7C-7E.
3. Insert strut in the slots in the pressure plate lug, drop slightly and tilt the lower edge until it touches vertical milled surface of lug.
4. Insert lower end of eyebolt in hole in pressure plate. The short end of the lever will then be under the hook of the pressure plate and near the strut, as in Fig. 7C-5E.
5. Slide the strut upward in the slots of the lug, lifting it over the ridge on the short end of the lever and drop it into the groove in the lever, as shown in Fig. 7C-4E.
6. Assemble the pressure springs, on the small bosses of the pressure plate in accordance with Fig. 7C-8E in order to retain original balance.



Fig. 7C-6E--Greasing Lug

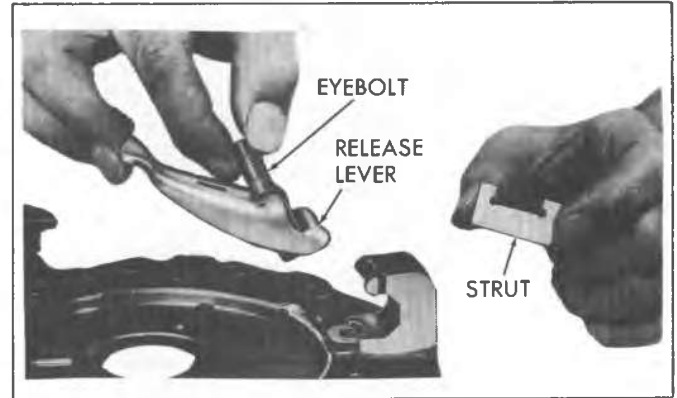


Fig. 7C-7E--Installing Lever

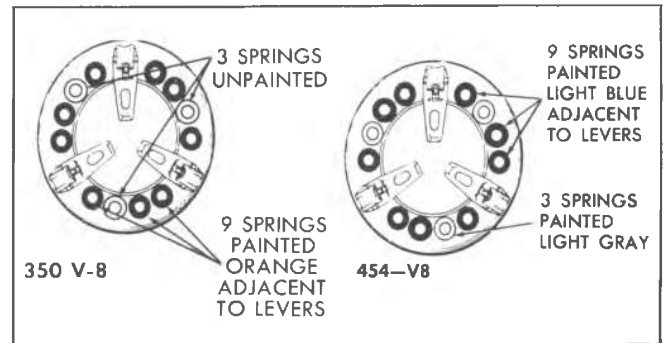


Fig. 7C-8E--Spring Arrangement Diagram

NOTE: If there are spaces for more springs than specified for the particular assembly, or if two different colors of springs are used, Fig. 7C-8E shows the proper sequence. It is very important that each group be arranged in like sequence.

7. Assemble anti-rattle springs in cover. See Fig. 7C-9E. The spring to the left is in operating position.

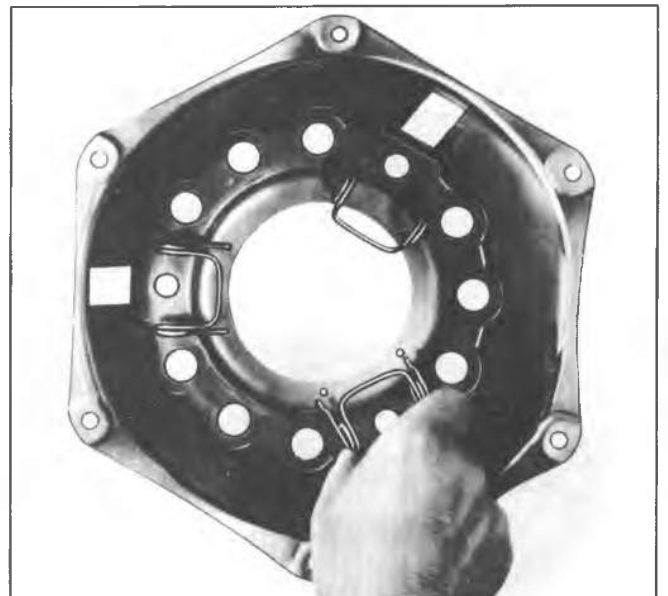


Fig. 7C-9E--Installing Anti-Rattle Spring



Fig. 7C-10E--Assembling Cover and Pressure Plate

8. Lower the cover on top of the assembled parts, as in Fig. 7C-10E. Be sure that the anti-rattle springs are in correct position and also that the punch marks made before dismantling are matched to insure retaining the original balance.

9. Place a bar across the cover and slowly compress, guiding the holes in the cover over the pressure plate lugs and all springs into their spring seats in the cover.

10. Assemble adjusting nuts on the eyebolts and screw them down until their tops are flush with the tops of the eyebolts. Slowly release pressure of spindle and remove cover assembly from press.

ADJUSTING LEVERS

While no wear adjustment is needed because of the coil spring design, it is imperative that the clutch release levers are each set to exactly the same height at the time of rebuild to insure uniform clutch application. To obtain exactly the same adjustment at each release lever, use gauge plate J-1048 and release lever height gauge J-6456 as follows:

1. Place gauge plate J-1048 on the flywheel in position normally occupied by driven plate. See Fig. 7C-11E.

NOTE: It is recommended that a spare flywheel be obtained so that this operation may be performed at the bench.

2. Bolt cover on flywheel with gauge plate center.



Fig. 7C-11E--Gauge Plate Position



Fig. 7C-12E--Depressing Lever

NOTE: On assemblies with three levers, the three flat machined lands of the gauge plate must be located directly under the levers.

3. Depress each lever several times with a hammer handle to settle all parts into working position, as shown in Fig. 7C-12E.

4. Position height gauge J-6456-01 on the hub of the gauge plate and the bearing surface of one lever. Refer to Fig. 7C-13E. Turn adjusting nut until lever is flush with the 12" step of J-6456-01. Adjust remaining levers in same manner.

5. Stake adjusting nut, as shown in Fig. 7C-14E, to eyebolt with a dull punch to lock adjustment.

6. Loosen the cover to flywheel bolts a turn or two at a time and in rotation until spring pressure is relieved to allow clutch and gauge plate to be removed.

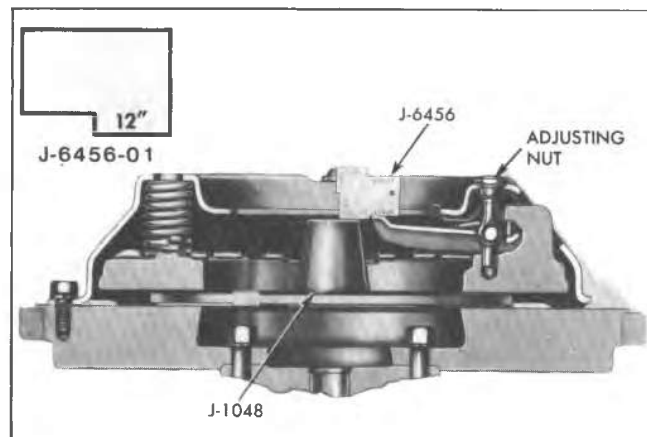


Fig. 7C-13E--Coil Spring Clutch Adjustment

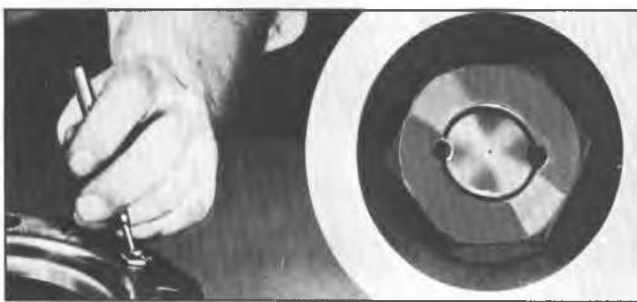


Fig. 7C-14E--Staking Nut

SPECIAL TOOLS

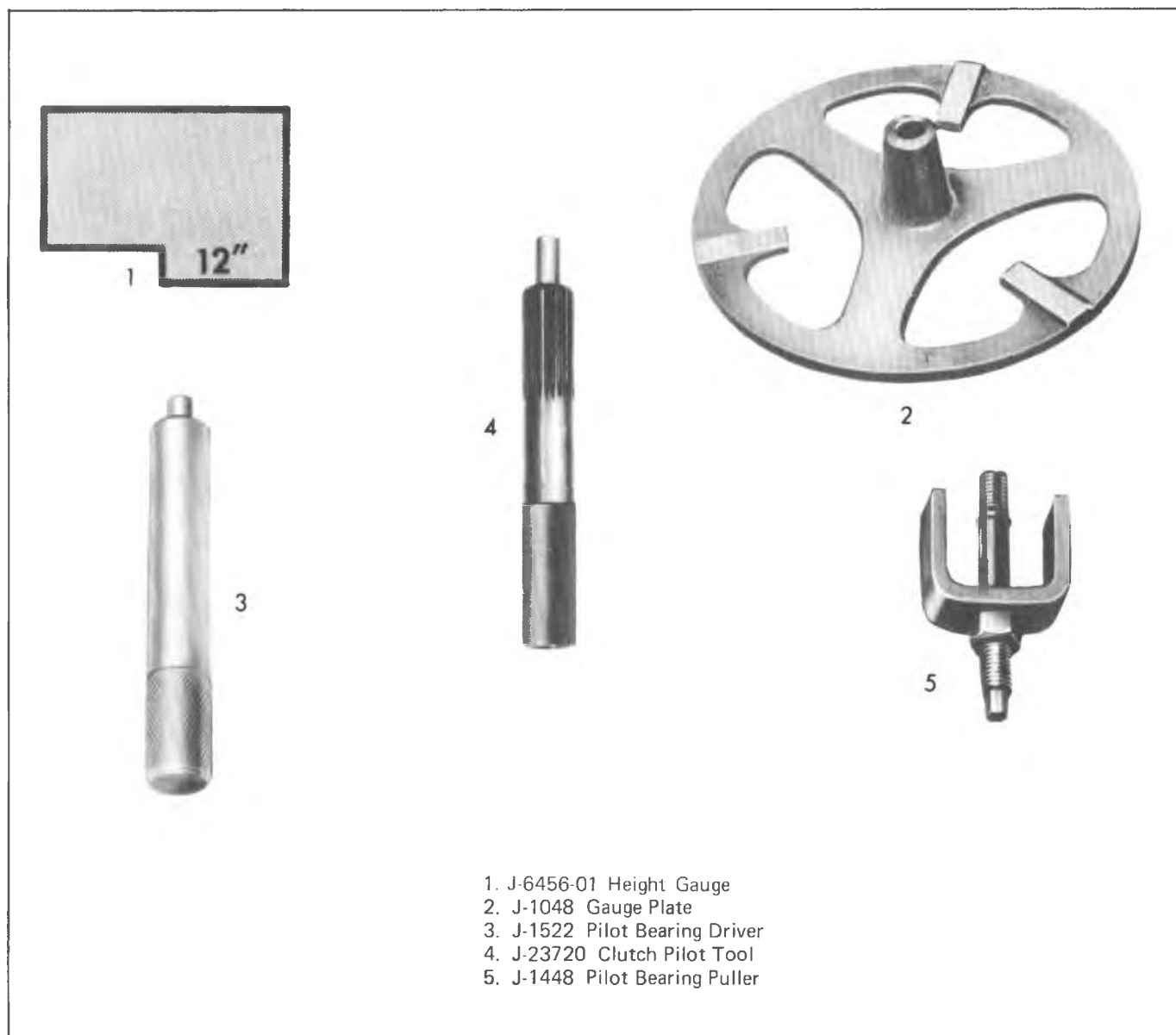


Fig. 7C-1ST--Clutch Special Tools