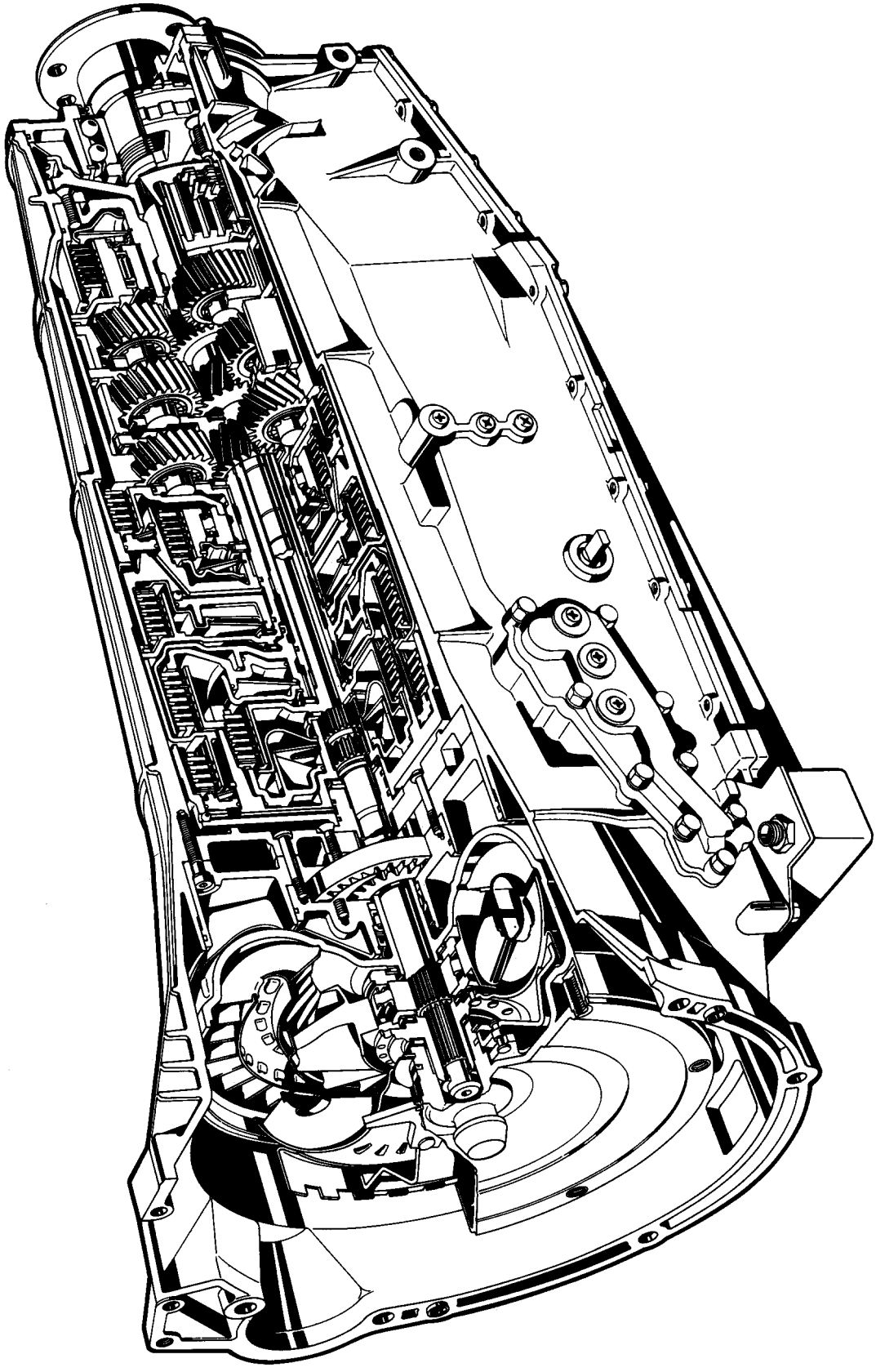
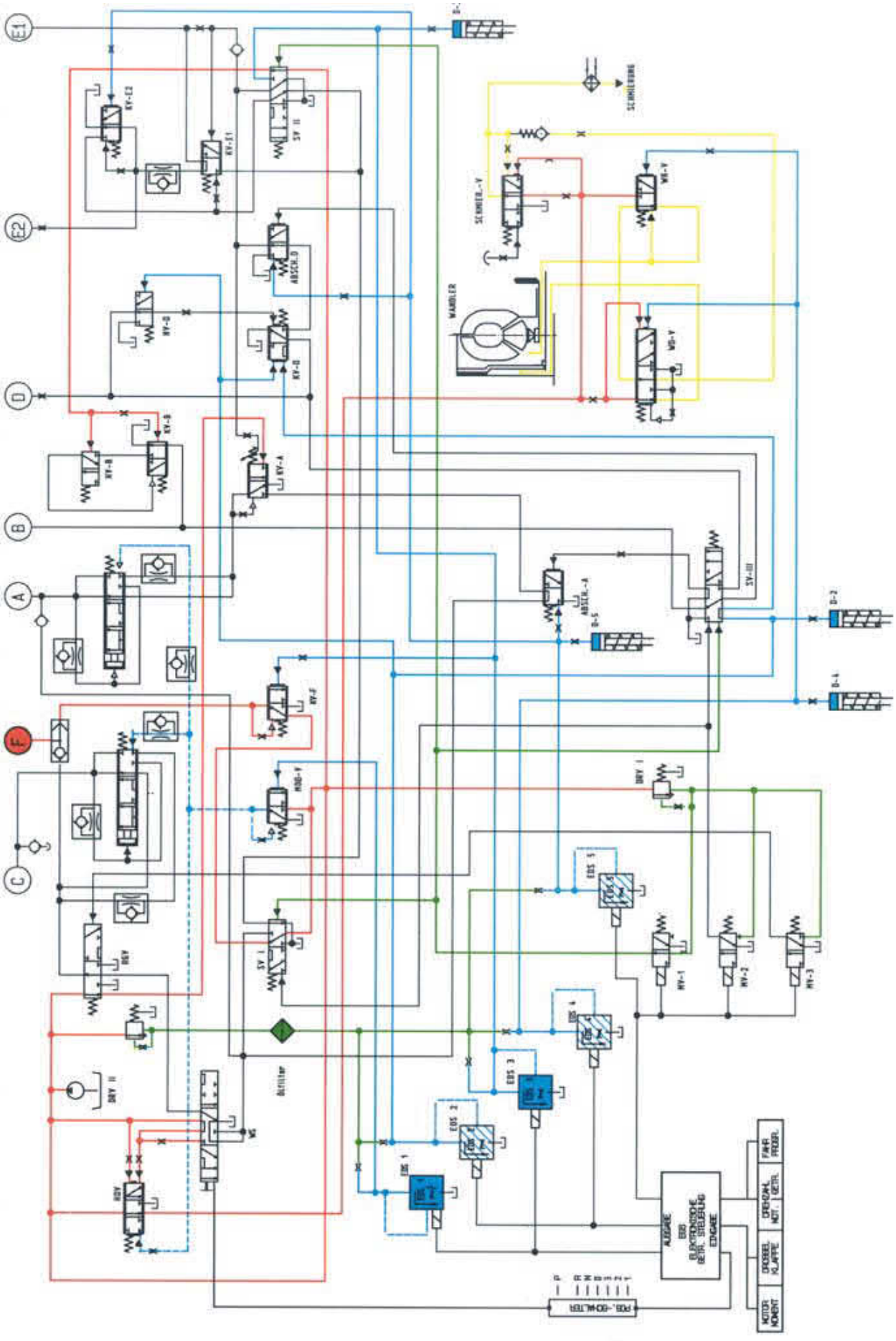
CONTENTS

1. General information

1.1 Drawing of transmission



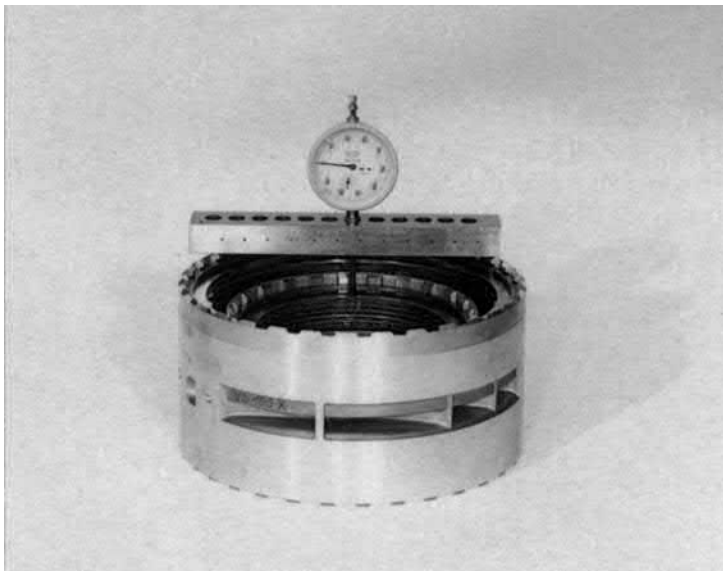
Position N	Neutral (DIN Symb.)	Neutre	Neutral	Neutra



1.4.4 Release clearance at brake El (snap ring)

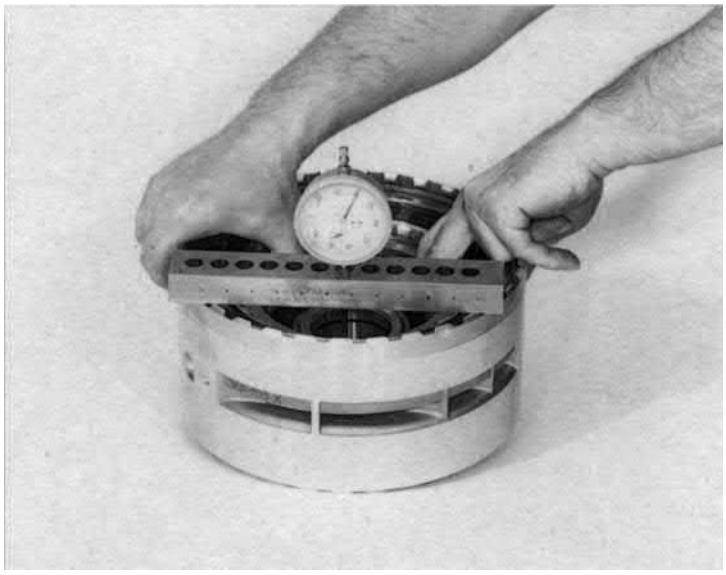
92 133

Insert snap ring 74.090.
(selected thickness = 3.2 mm)
Place dial gauge with bar in position.
Extend the dial gauge pointer as far as the final disc and set the dial gauge to „0“.



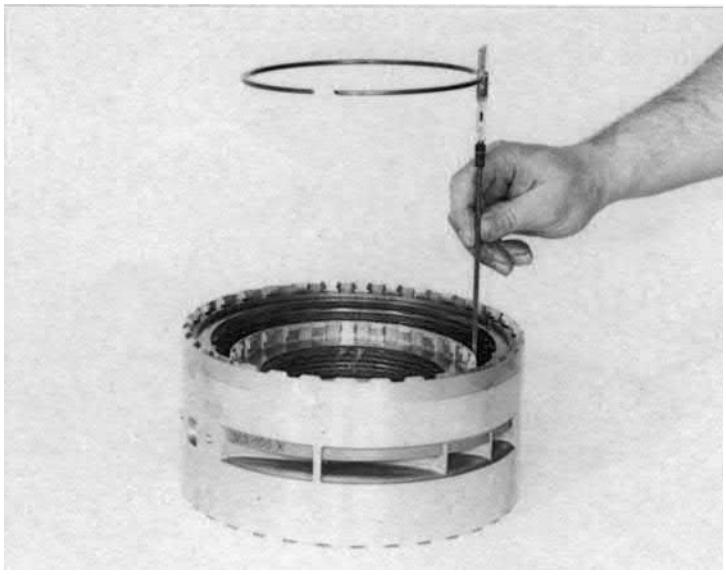
92 134

Raise the complete disc set and read off play at the dial gauge.
Release clearance should be:
with 5 lined discs 1.60 - 1.90 mm



92 135

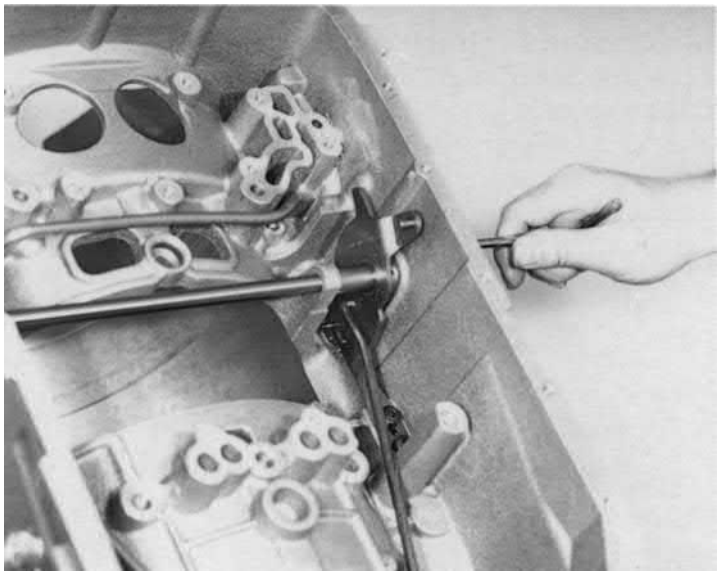
If a different reading is obtained, select a thicker or thinner snap ring.



1.4.10 Adjustment of switches (detent springs)

92 233

Position detent disc in setting N (Neutral) using suitable tool or by hand.



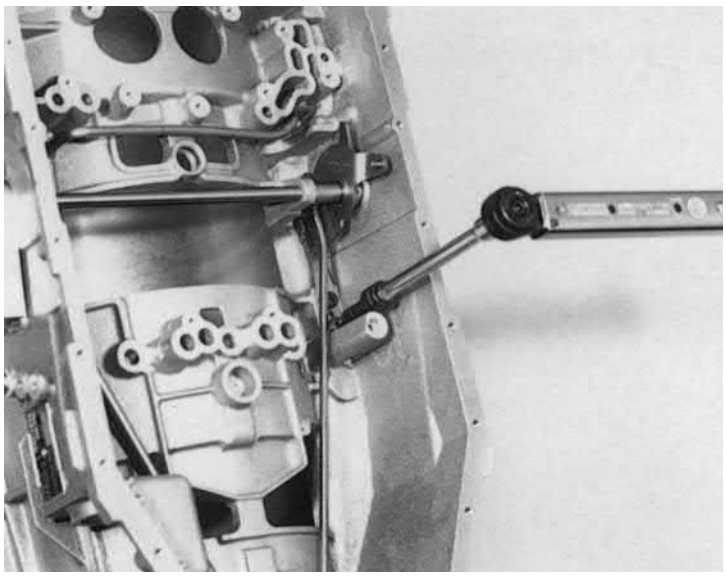
92 234

Attach position gage 5 P 01 002 368 to the selector shaft and eliminate clearance by rotating knurled screw. Rotate position gauge in such a way that the locating bolts (dowels) in the transmission housing mate with the groove in the gauge.

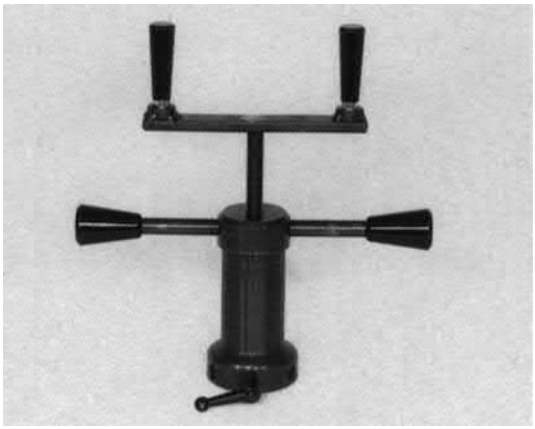
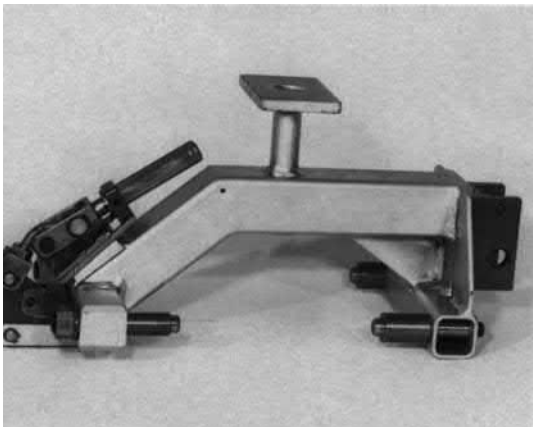
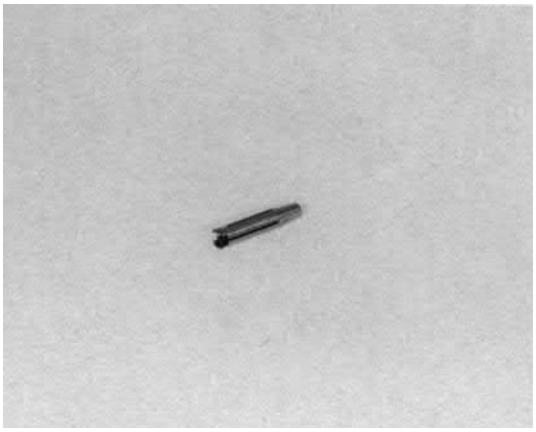
92 235

Secure detent spring in this position. (Wrench size = Torx - TX 27) (tightening torque = 10 Nm)

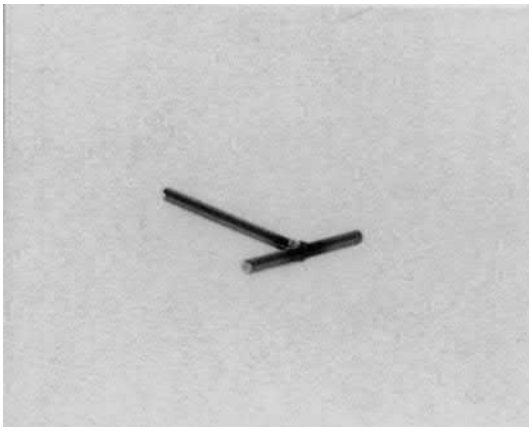
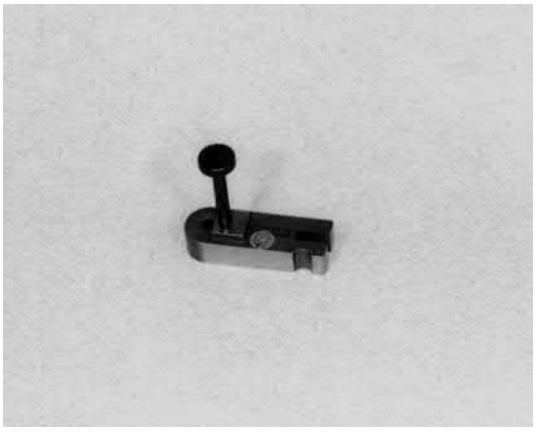
Release position gauge and move selector shaft from N to P and back to setting N.
When fitted correctly, the position gauge locates flush with the selector shaft and the transmission housing.



1.8 Special tools 5 HP 30

Illustr. No.		Order No. / Purpose	Remarks
4	91 190 	5 X 46 000 563 - Assembly fixture for oil supply unit (complete)	Identical to 5 HP 18
5	91 194 	5 X 46 000 635 - Assembly bracket for complete transmission	Identical to 5 HP 18
6	92 207 	5 X 46 000 688 - Assembly sleeve, - selector shaft	

1.8 Special tools 5 HP 30

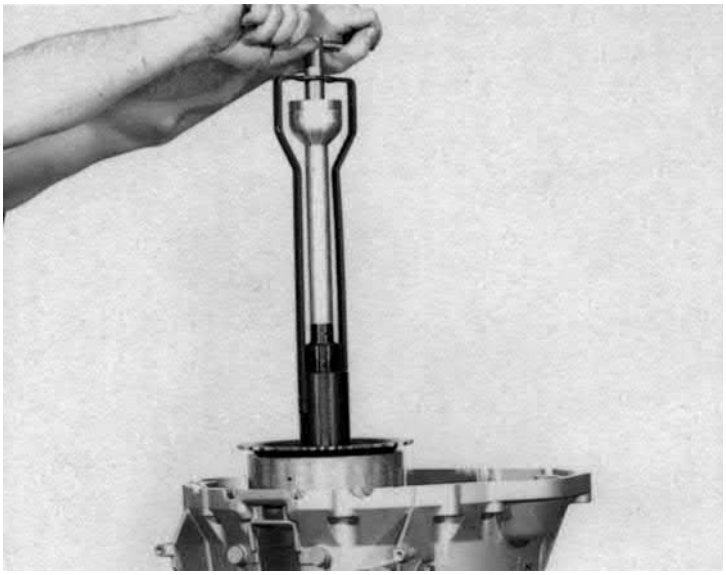
Illustr. No.		Order No. / Purpose	Remarks
28	92 224 	5 X 46 001 064 - Assembly hoop for pressing down plate springs E2 and C	
29	92 239 	5 X 46 001 084 - Disassembly tool for pot in tower II	
30	92 240 	5 P 01 002 368 - Position gauge	

92 016

Rotate transmission through 90 degrees and insert lifter 5 X 46 000 83 1 in cylinder F by lifting bracket handle. The fixture is locked by releasing the bracket handle. Rotate fixture until it locates.

Caution!

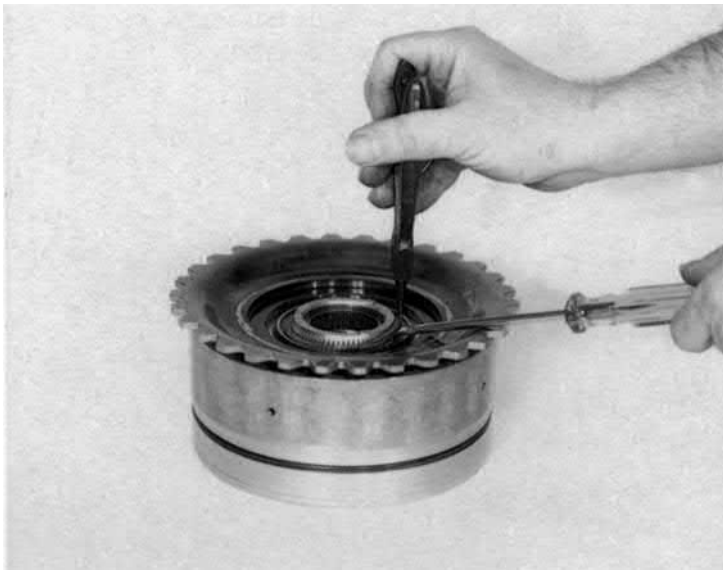
Do not lift using bracket handle! Lift out using hand grip on cylinder F.



92 017

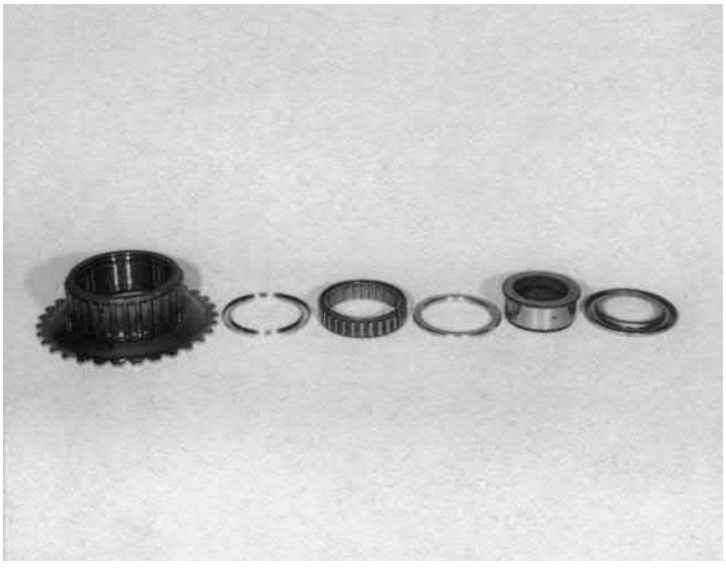
2.2 Brake F + freewheel, 1st gear

The freewheel unit can be completely detached from cylinder F.
For this, extract snap ring using suitable pliers and a screwdriver.



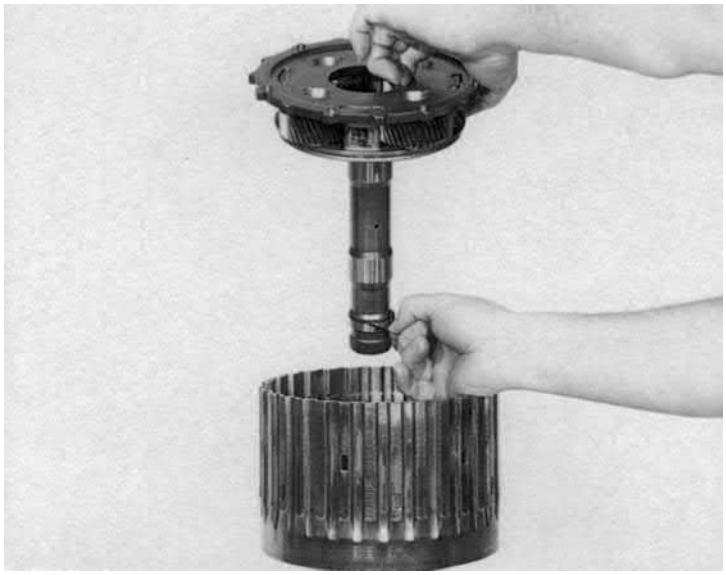
92 018

Extract snap ring and dismantle freewheel into retaining disc, freewheel inner race, complete freewheel unit (cage and 2 washers) and complete freewheel race F.



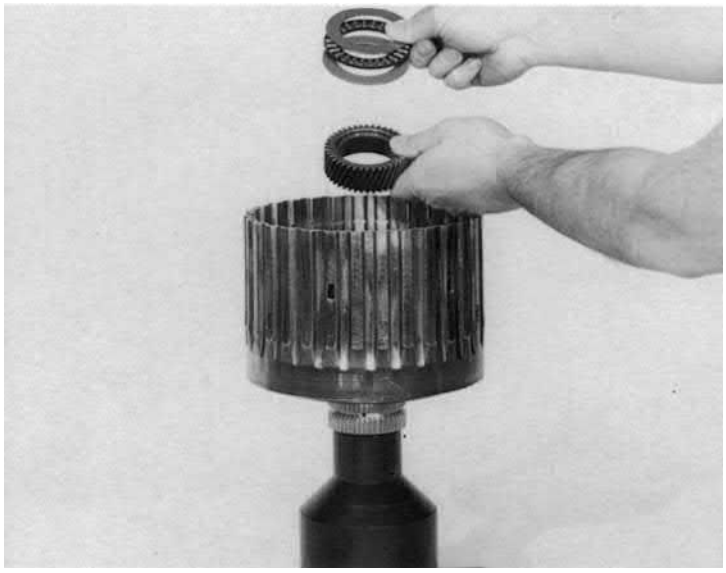
92 040

Remove planet carrier II and extract round seal from shaft.



92 041

Remove axial thrust washer, axial needle cage and angled disc. Lift out sun gear.

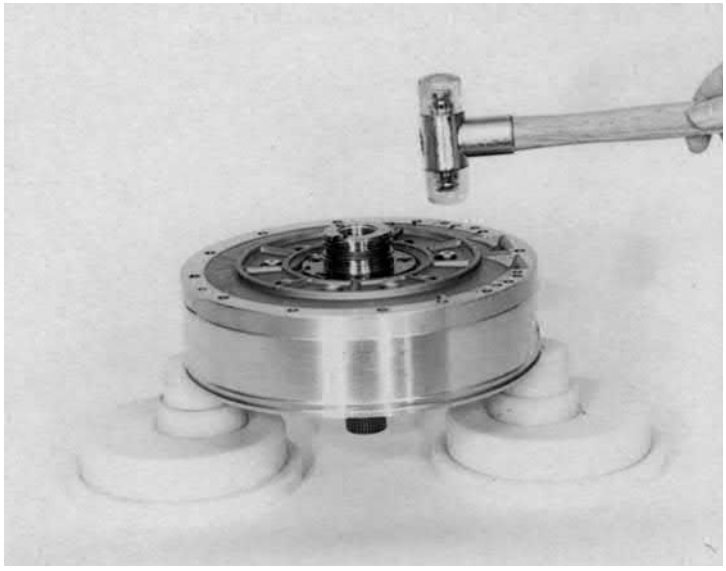


92 042

Extract snap ring and separate planet carrier I and ring gear II from ring gear I.

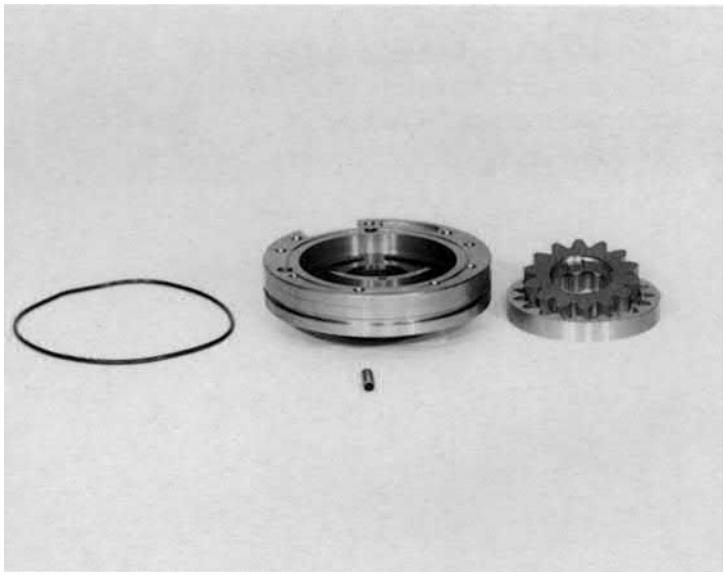
92 064

Remove 10 machine screws. Do not completely remove 2 opposing machine screws. Drive pump off along these screws by striking with plastic mallet.



92 065

Remove O-ring. The pump can be dismantled by removing the impeller and ring gear. Extract sleeve (locating dowel).

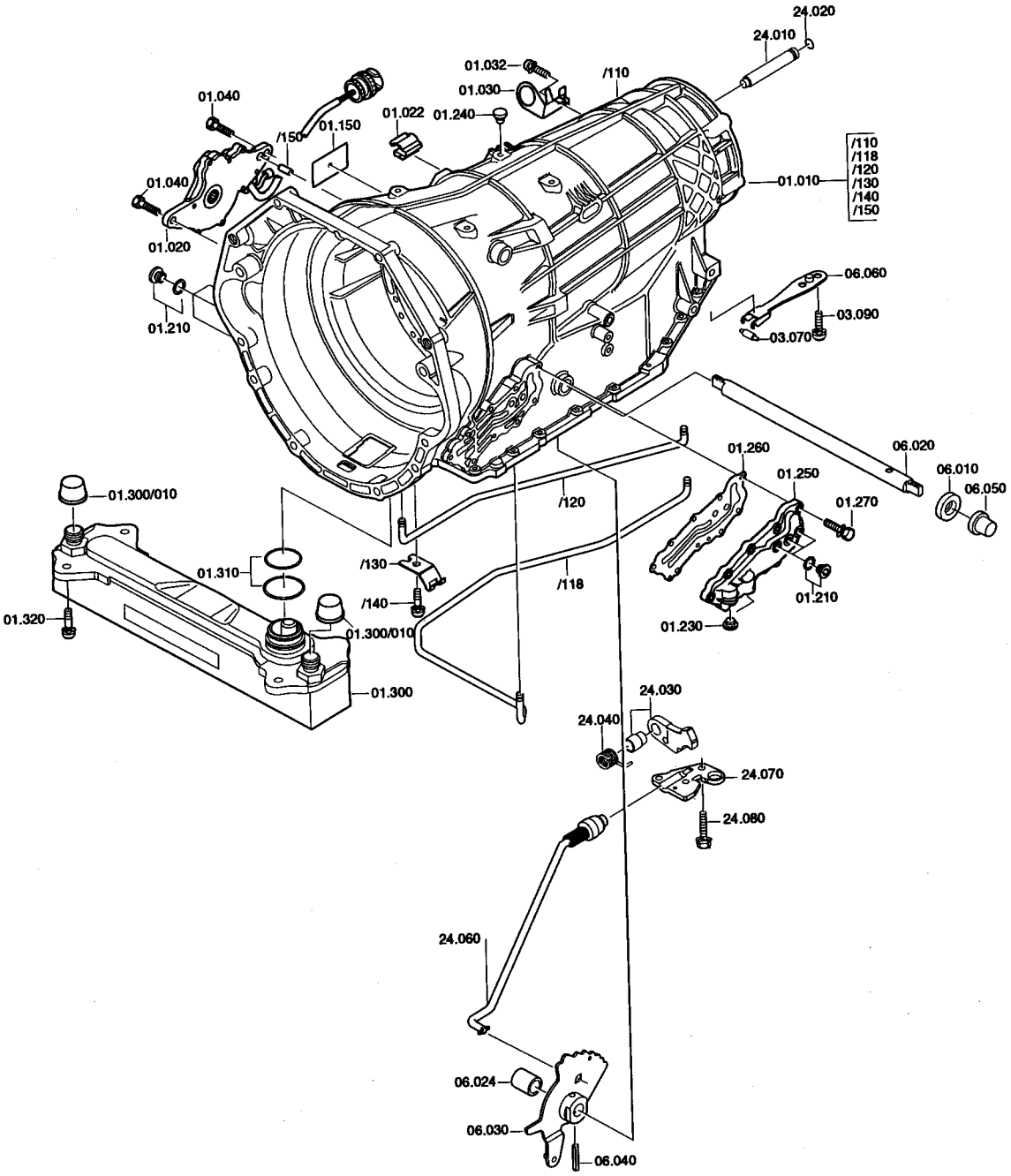


92 066

Extract snap ring and lever out shaft seat using suitable screwdriver. Remove corrugated disc.

3. Assembly

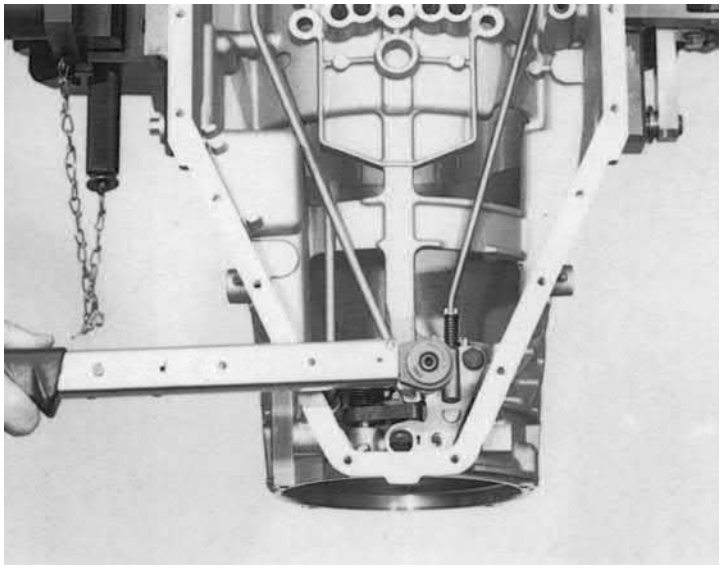
3.1 Housing with shift assembly and parking detent



92 087

Press down pawl: connecting rod must be pressed backwards by rotating the detent disc, and guide plate 24.070 must initially be secured by 2 hex screws 24.080.

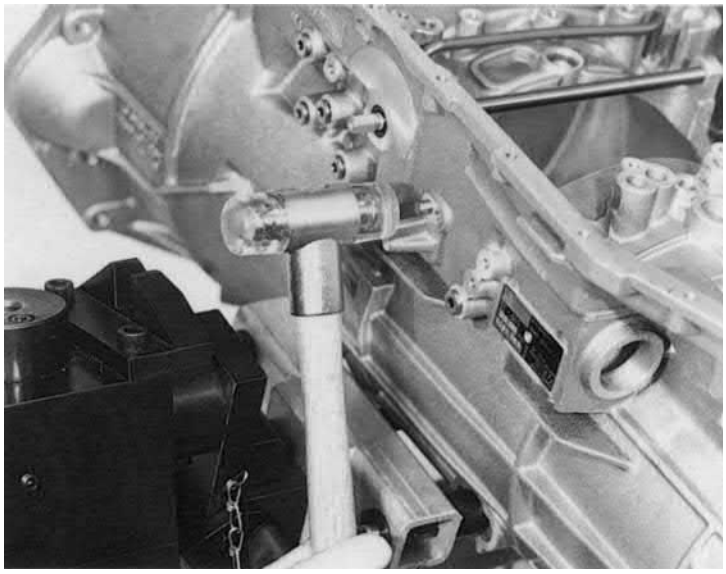
(Width across flats = 13 mm)
(Tightening torque = 23 Nm)



92 232

Caution!

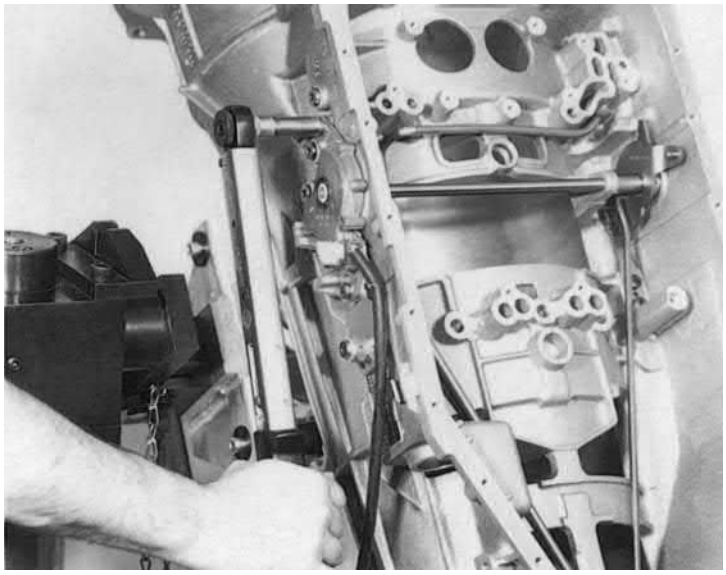
If the transmission housing, detent spring, detent disc or selector shaft were replaced, or if the detent springs were unfastened, the switch (detent spring) must be reset. (see Pt. 1.4.10, Page 5/11).
Drive dowel pin 01.060 into transmission housing with plastic mallet until it protrudes by no more than 5.0 - 5.5 mm.



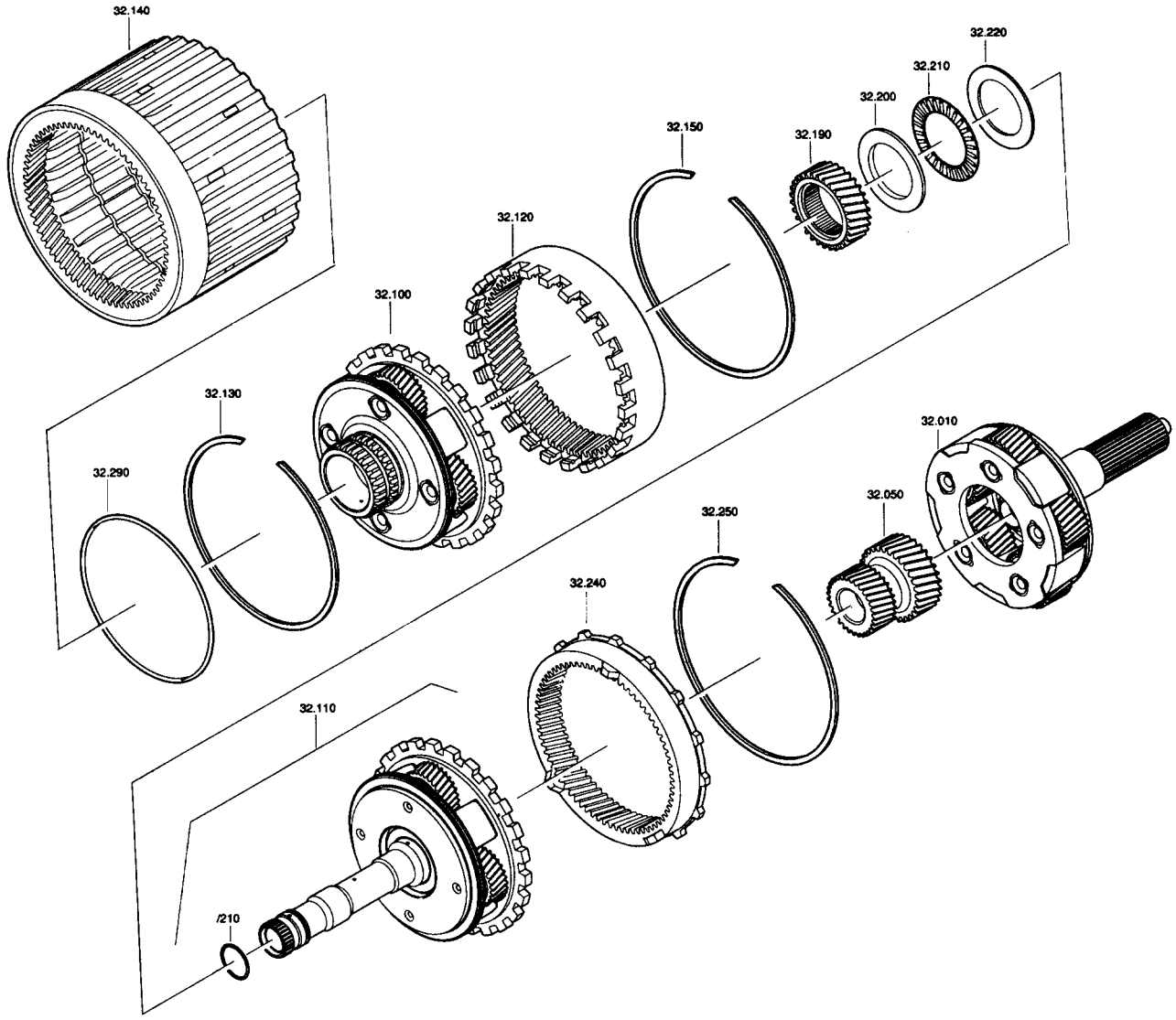
92 236

Fit switch 01.020 to selector shaft and secure with 2 hex screws on transmission housing.

(Width across flats = 10 mm)
(Tightening torque = 8 Nm)

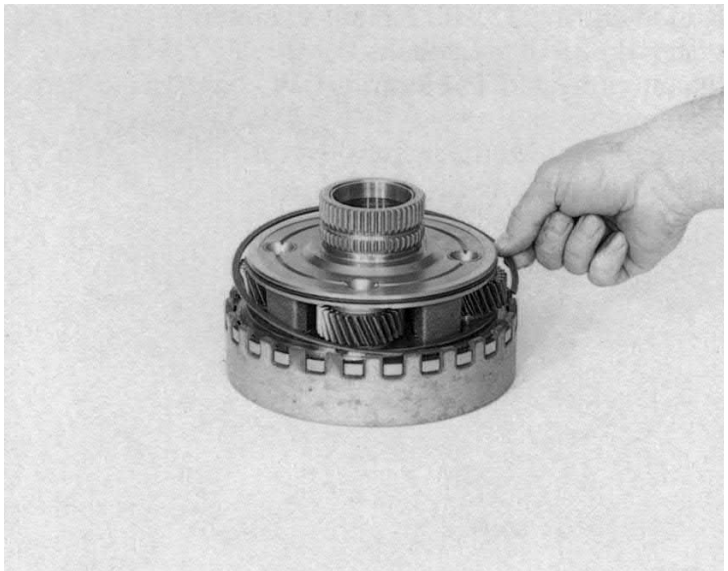


3.3 Tower I
3.3.1 Planetary drives (I,II and III)



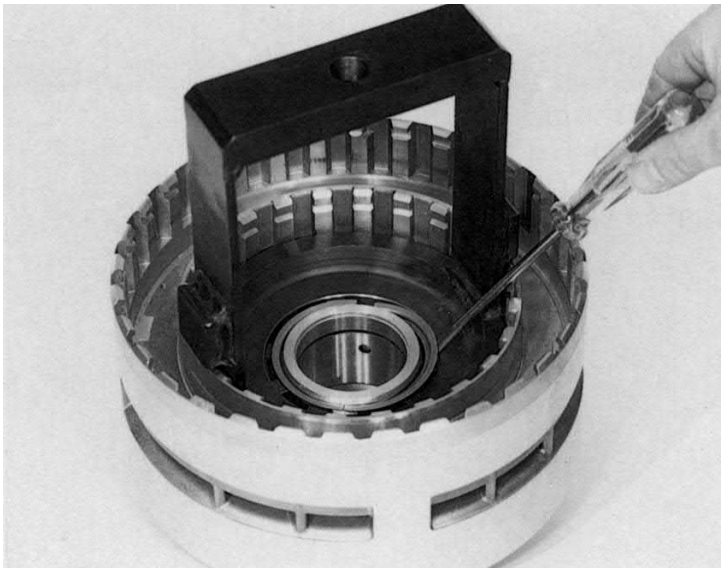
92 105

Fit new O-ring 32.290 to planet carrier I 32.100. Install planet carrier in ring gear II 32.120 and secure with snap ring 32.130.



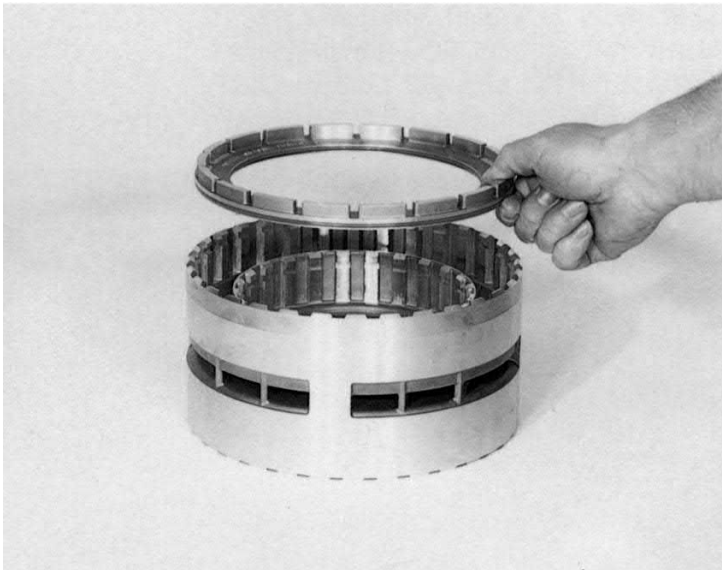
92 119

Insert plate spring 74.020.
Using assembly bracket
5 X 46 000 928, press down plate spring under mandrel press and secure with split retaining ring 74.030.



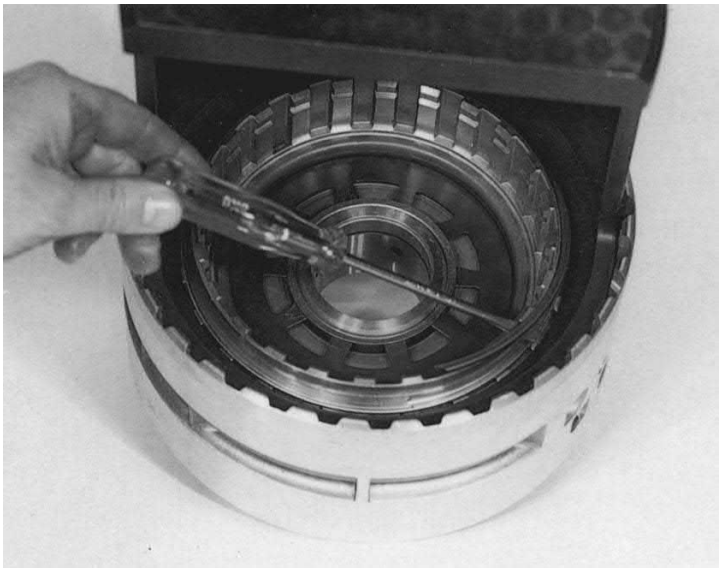
92 120

Fit new O-rings 75.020 and 75.030 to piston E2 75.010 and apply a light coating of grease (Vaseline).
Press piston E2 into cylinder DE.

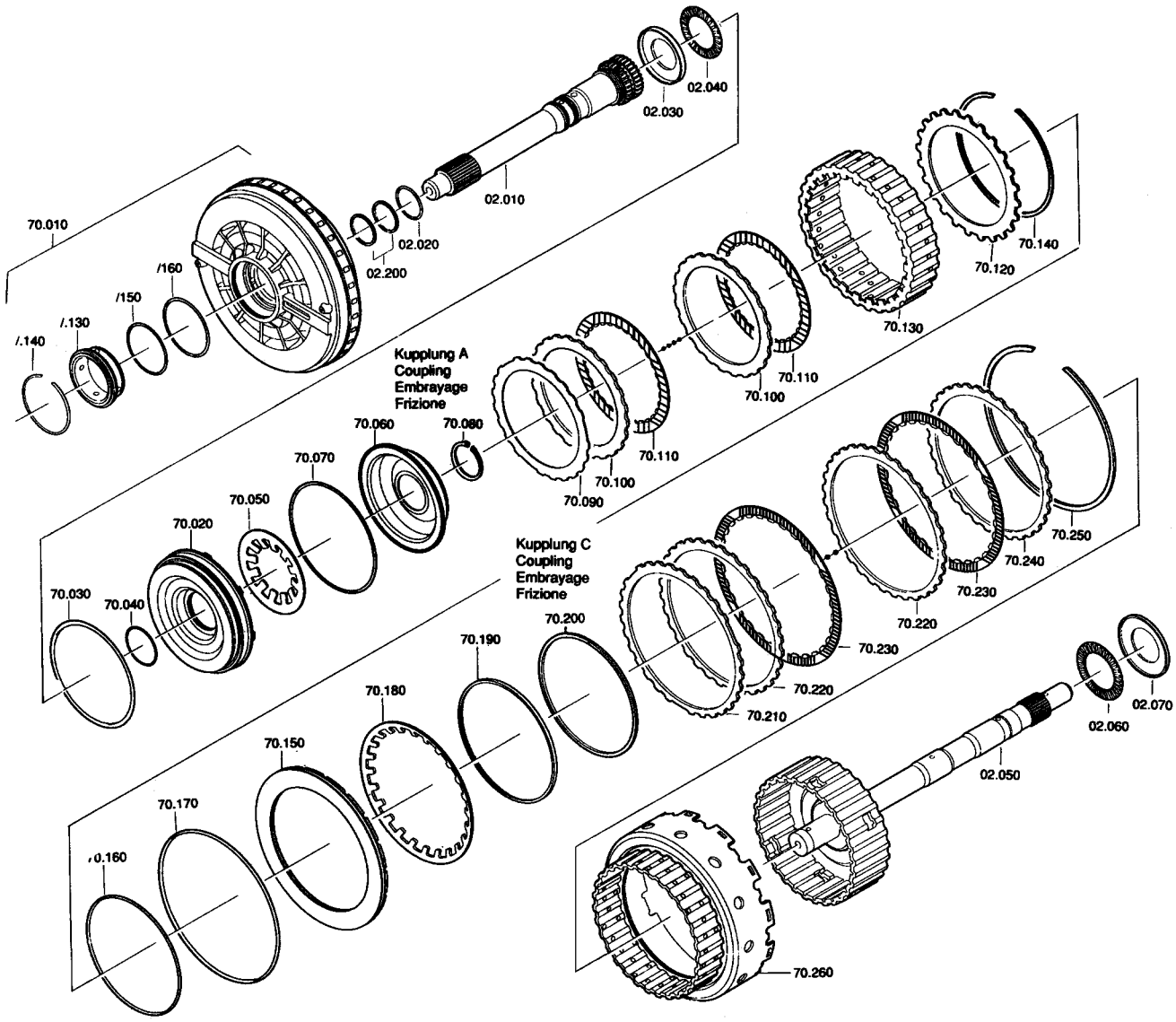


92 121

Insert plate spring E2 75.040.
Install retaining disc 75.050, press down plate spring under mandrel press using assembly bracket 5 X 46 001 064 and secure with snap ring 75.060.



3.5 Tower II (input with clutches A, C and B)
3.5.1 Clutches A, C (input)



92 148

Complete assembly of cylinders A + C 70.010. For this, fit two O-rings 70.010/150 and 70.010/160 to bush 70.010/130 and apply light coating of grease (Vaseline).
Press bush into cylinder A + C and secure using snap ring 70.010/140.