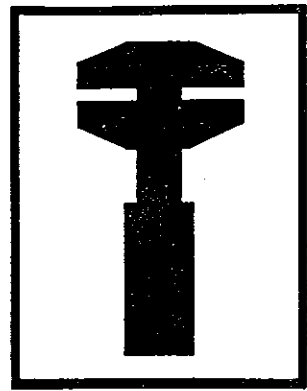
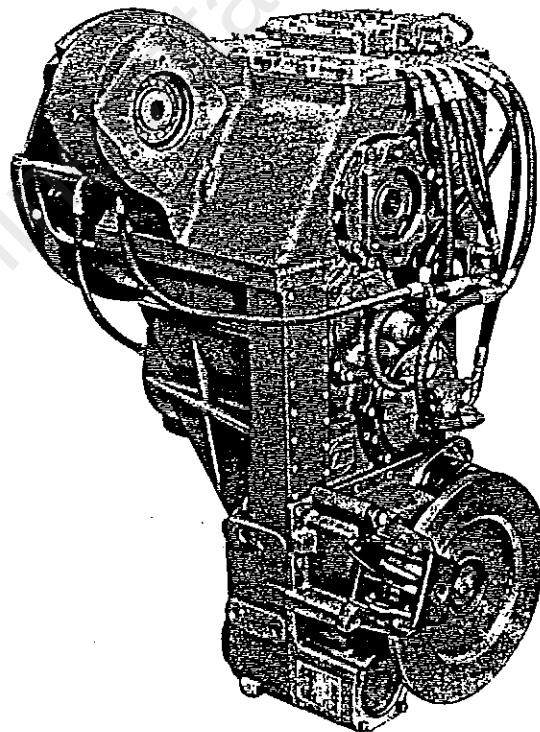




WG - 250

(Two piece Design)

Order-No. 5871 168 002 E



ZAHNRADFABRIK PASSAU GMBH

Postfach 2640 · D-8390 Passau 1



TEST BOX II 5870 221 02o

For pressure measurements on the hydraulic gearbox control
Time measurements of the hydr. and el. gearbox control

- Pump pressure
- Control pressure
- Clutch pressure
- Lubricating pressure

Pressure measuring ranges:

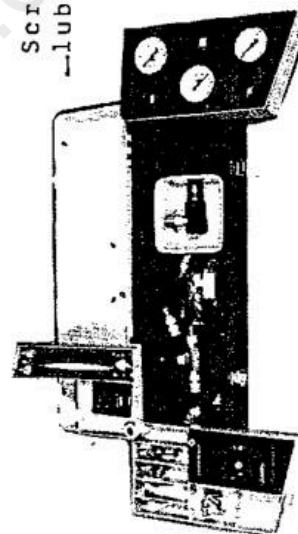
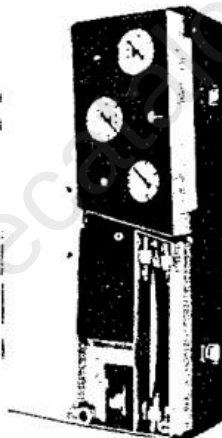
- 1 x 0 - 6 bar
- 1 x 0 - 25 bar
- 1 x 0 - 25 bar

Parts list for test box II 5870 221 028

- 1 Glycerin manometer NG63 0 - 6 bar
5870 511 006 complete with manometer connection and closing nipple.
- 2 Glycerin manometer NG63 0 - 25 bar
5870 511 005 complete with manometer connection and closing nipple.
- 3 Low-pressure hose 2000 mm complete
with shutter coupling on both sides.
Pressure range up to 60 bar.
5870 286 004
- 3 Measuring connection 180 mm complete
with eye nipple and closing nipple.
5870 286 005.
- 3 Hollow screw M 10 x 1 0637 835 001
- 2 Hollow screw M 16 x 1,5/M 10 x 1
0737 835 017
- 2 Screw coupling M 12 x 1,5/M 10 x 1
5870 286 006
- 2 Screw coupling M 14 x 1,5/M 10 x 1
5870 286 007
- 1 Closing nipple M 10 x 1 5870 286 013

Dimension: 550 x 150 x 170 mm

Weight: 5,300 kg



Type: 1 WG 80
4 WG 65
3-4-6 WG 120-181
3-4 PW 18-45
T - 6600

Micro-chronometer

5870 221 012
Gearshift-time measurement
combined with pressure switch 5870 221 013

Change-back resting time

Reversing delay

Clutch crossover

Converter clutch switch-on delay

Stop watch performance

Cable set 5870 221 014

Screw coupling M 16 x 1,5/M 10 x 1
0736 304 043

Screw coupling M 30 x 1,5/M 10 x 1
0736 304 099

Screw coupling M 10 x 1/M 10 x 1
0637 852 014

Screw coupling M 26 x 1,5/M 26x1,5/M 10x1
-lubricating pressure

Zahnradfabrik Passau G. m. b. H.

LIST OF SPECIAL TOOLS FOR THE DISASSEMBLY AND REASSEMBLY

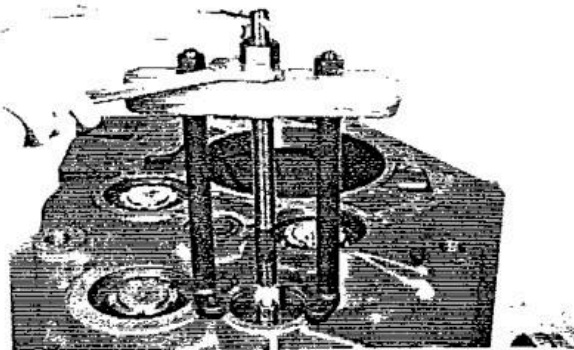
3. FINAL DRIVE WITH CRAWLER

3.1 DISASSEMBLY

DISASSEMBLY	REASSEMBLY	DENOMINATION/APPLICATION SPECIAL TOOL (S)	SUBJECT-NO.
Fig. 379		<u>Back-up tool #</u> to pull off the oil supply cover - 4646 352 083 - from the clutches. Combined with : <u>Threaded insert M 26 x 1,5 #</u> <u>Threaded insert M 22 x 1,5 #</u>	5870 300 020 5870 204 042 5870 204 043
Fig. 380		<u>Back-off screws M 10 (set of 2)</u> to back off the housing cover - 4646 301 104 - from the gear case. Combined with : <u>Set of eye bolts</u>	5870 204 005 5870 204 002
Fig. 404		<u>Back-up tool</u> to pull the ball bearing - 0750 116 206 - out of the gear case.	5870 300 020
Fig. 406	Fig. 436	<u>Hoist #</u> for different lifting operations. Complete clutch pack.	5870 281 042
Fig. 415		<u>Pry bar (set of 2)</u> to back off shaft seals and housing components. Universal use.	5870 345 036
		# Very important Special Tools for partial repair (wearing part repair) !	

Pull layshaft out of the housing bore, using pul-
ler.

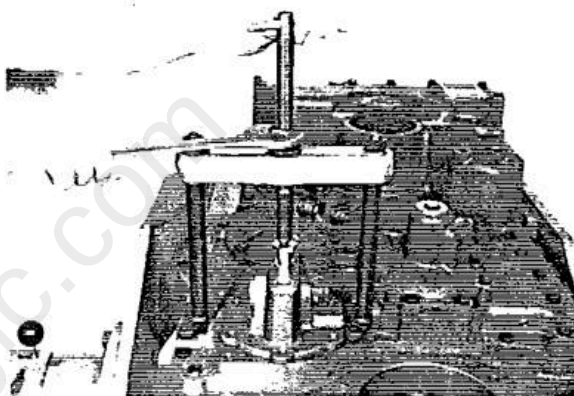
(S) Back-up tool	5870 300 020
(S) Set screw	5870 204 048



124

Loosen hex. head screws and pull bearing cap
out of the housing bore.

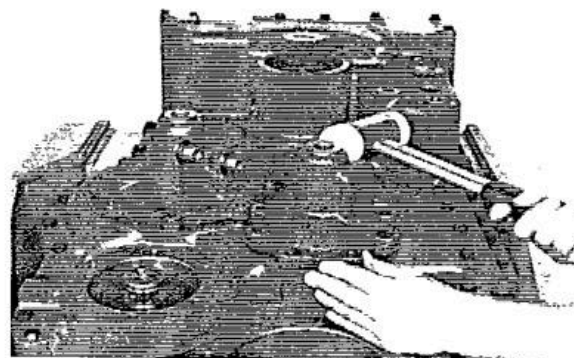
(S) Back-up tool	5870 300 020
(S) Threaded insert	5870 204 042



125

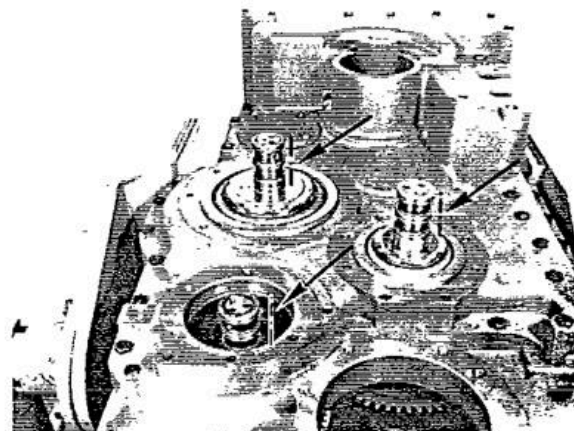
Loosen, tap loose and remove hex. head screws
of the bearing caps K3/K2 and K3/K4.

(S) Back-up tool	5870 300 020
(S) Threaded insert	5870 204 043



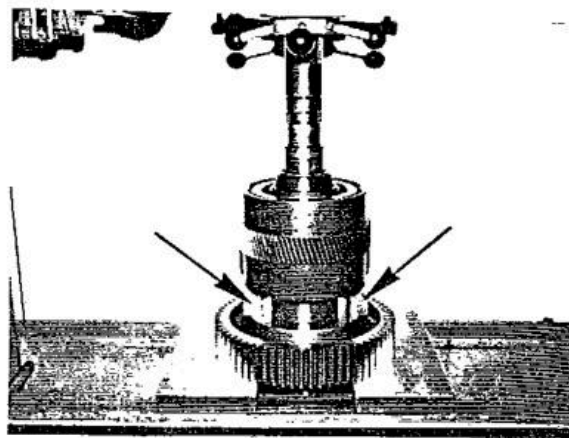
126

Squeeze out rectangular rings (3 pieces/axle),
see Arrows !



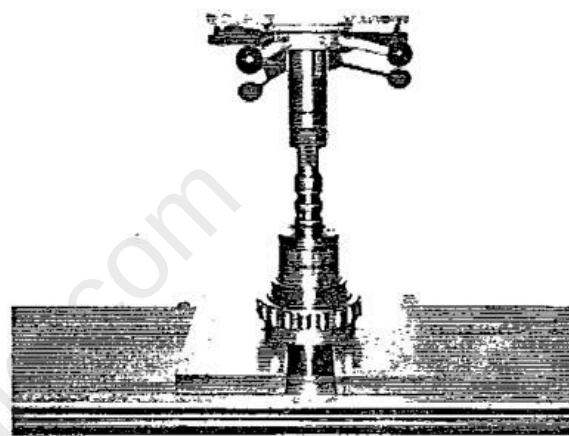
127

Back up plate carrier, see Arrows and press shaft out of the plate carrier.



148

Press roller bearing from the shaft.



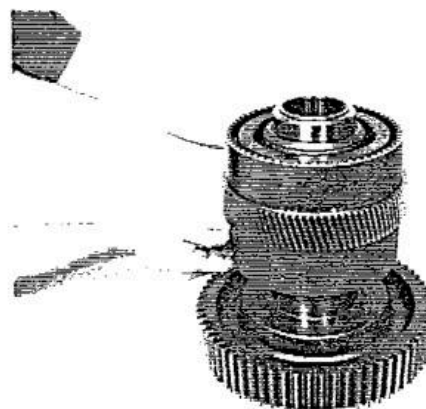
149

Squeeze out rectangular ring.



150

Separate plate carrier from spur gear.



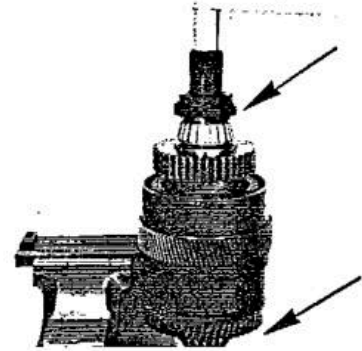
151

Tighten the two slotted nuts.

Torque limit

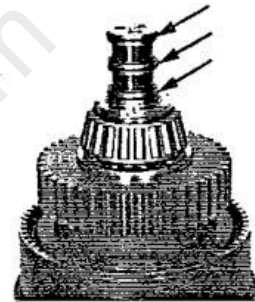
550 Nm

(S) Clamping ring	5870 654 022
(S) Hook spanner	5870 401 099
(S) Hook spanner	5870 401 118
(S) Hook spanner	5870 401 115



251

Squeeze in and engage rectangular rings (3x see Arrows).



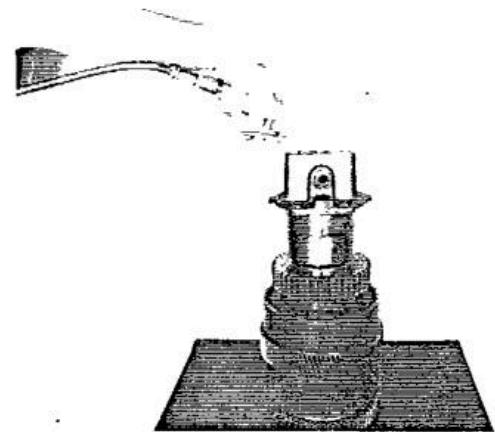
252

Assemble bearing cap and check function of clutches by means of compressed air !

Note :

With correctly installed components, the closing and opening of the clutches will be clearly audible !

Now, remove bearing cap again.

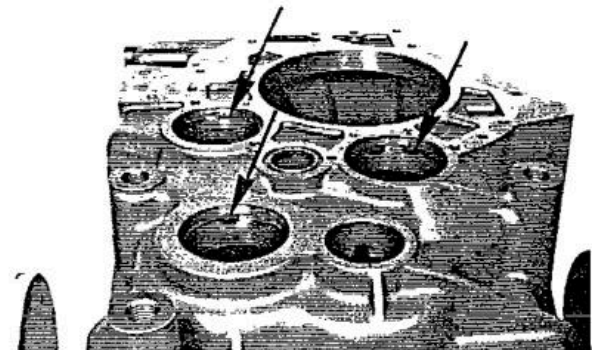


253

2.2.4 Install multi-disk clutches, countershaft and output gear

Squeeze in circlip, see Arrows !

(S) Set of external snap ring pliers	5870 900 015
--	--------------



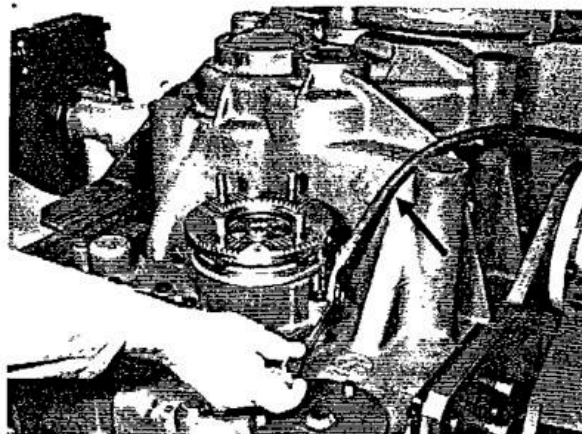
254

3. FINAL DRIVE WITH CRAWLER

3.1 DISASSEMBLY

3.1.1 Axle declutch

Remove lubricating line.

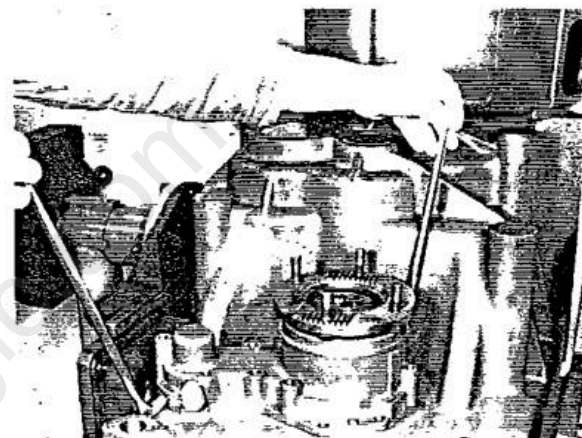


361

Loosen fastening screws and separate complete axle declutch from the gear case.

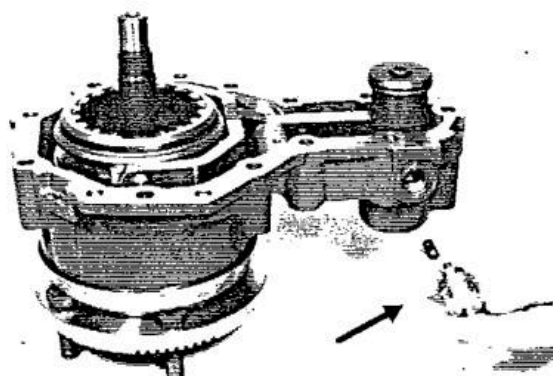
(S) Pry bar

5870 345 071



362

Remove switch and catch.

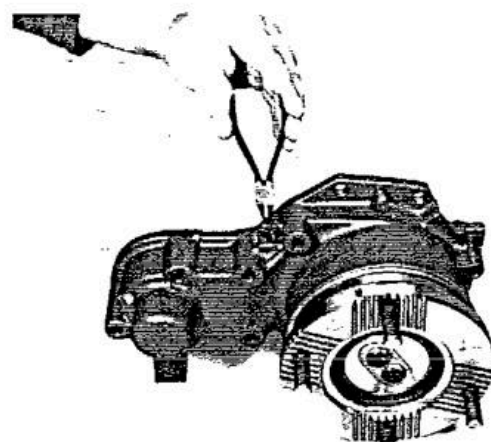


363

Pry closing cover out of the bore and squeeze out circlip.

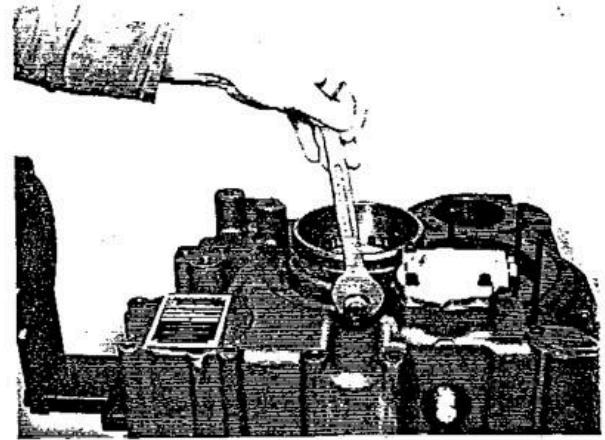
(S) Set of snap ring pliers

5870 900 013



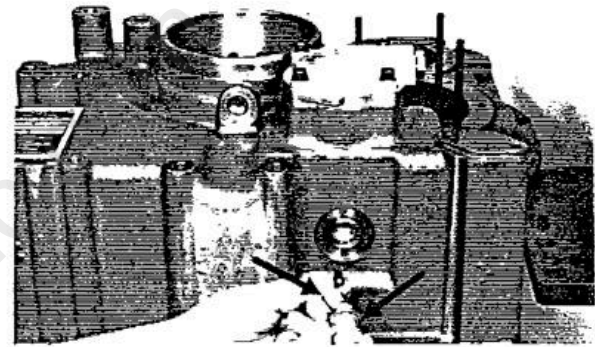
364

Remove impulse sender.



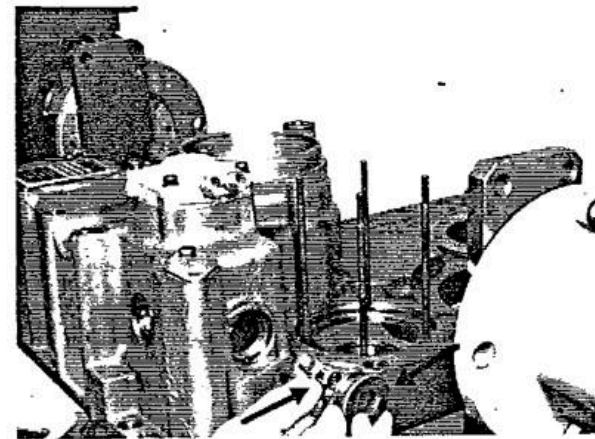
393

Remove catch and switch (Arrows).



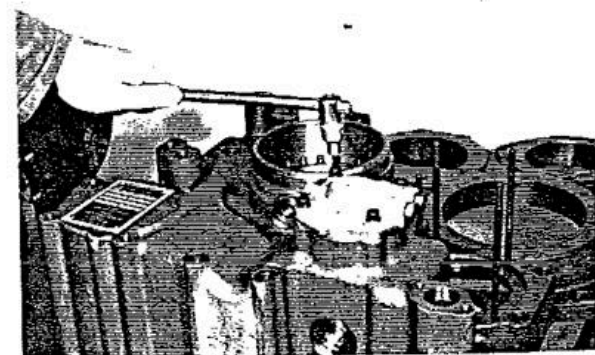
394

Remove screw plug and gearshift fixing (Arrows).



395

Loosen socket head screws and remove connecting plate.



396

machinecatalogic.com

Full Version Available

ZF WG-250 Transmission Service Manual

ZF WG-250 transmission service manual with exploded views, tools and disassembly procedures for in-house repair. 182-page English PDF. Instant PDF download.

VIEW THE FULL MANUAL

<https://machinecatalogic.com/zf-wg-250-transmission-service-manual/>

Book No: 5871 168 002 E · File Pages: 182 · File Count: 1 · File Language: English