OM PIMESPO

TRANSMISSION TXL 30/S

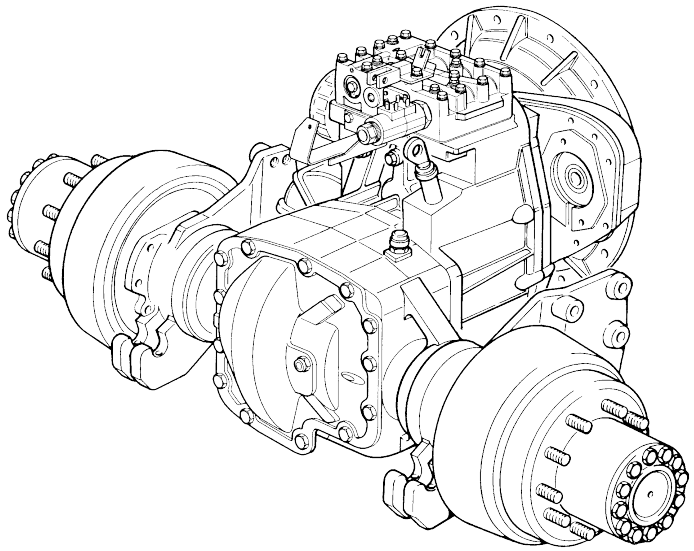
FOR FORKLIFT TRUCKS

D 25 - D 30 - G 25 - G 30

1ª EDITION 06/2001

ST. N° 604.24.113

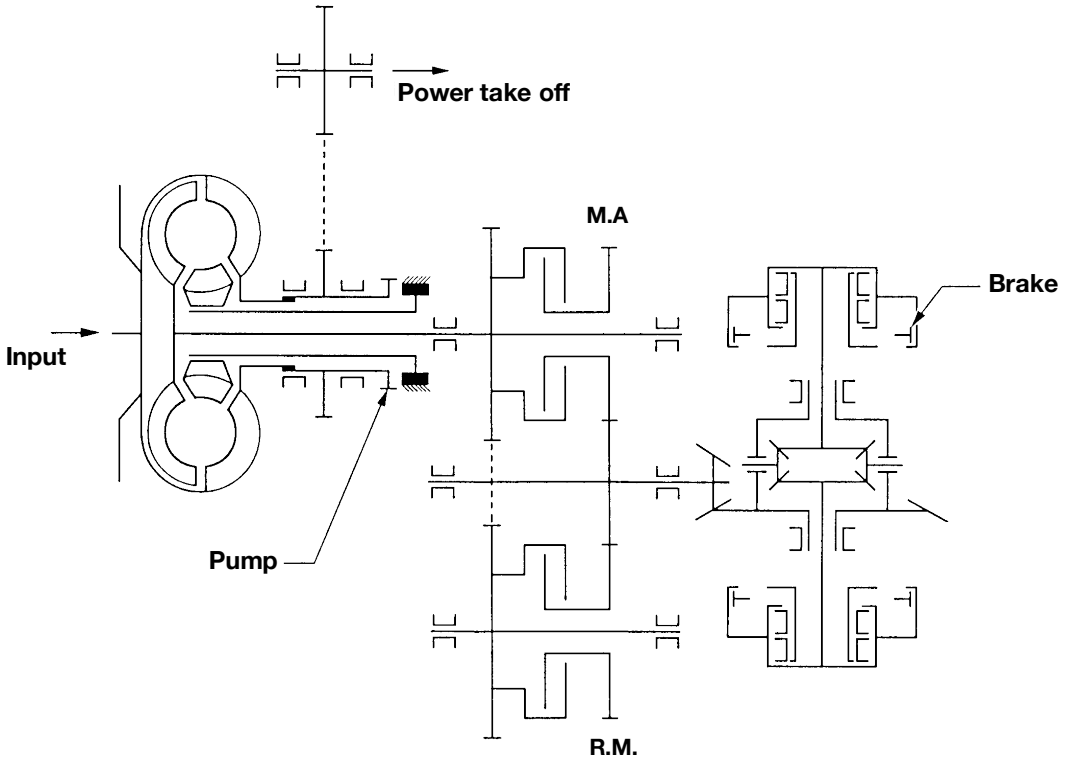
REPAIR INSTRUCTIONS



06/2001

FIAT OM CARRELLI ELEVATORI S.P.A.

Kinematic diagram of the transmission

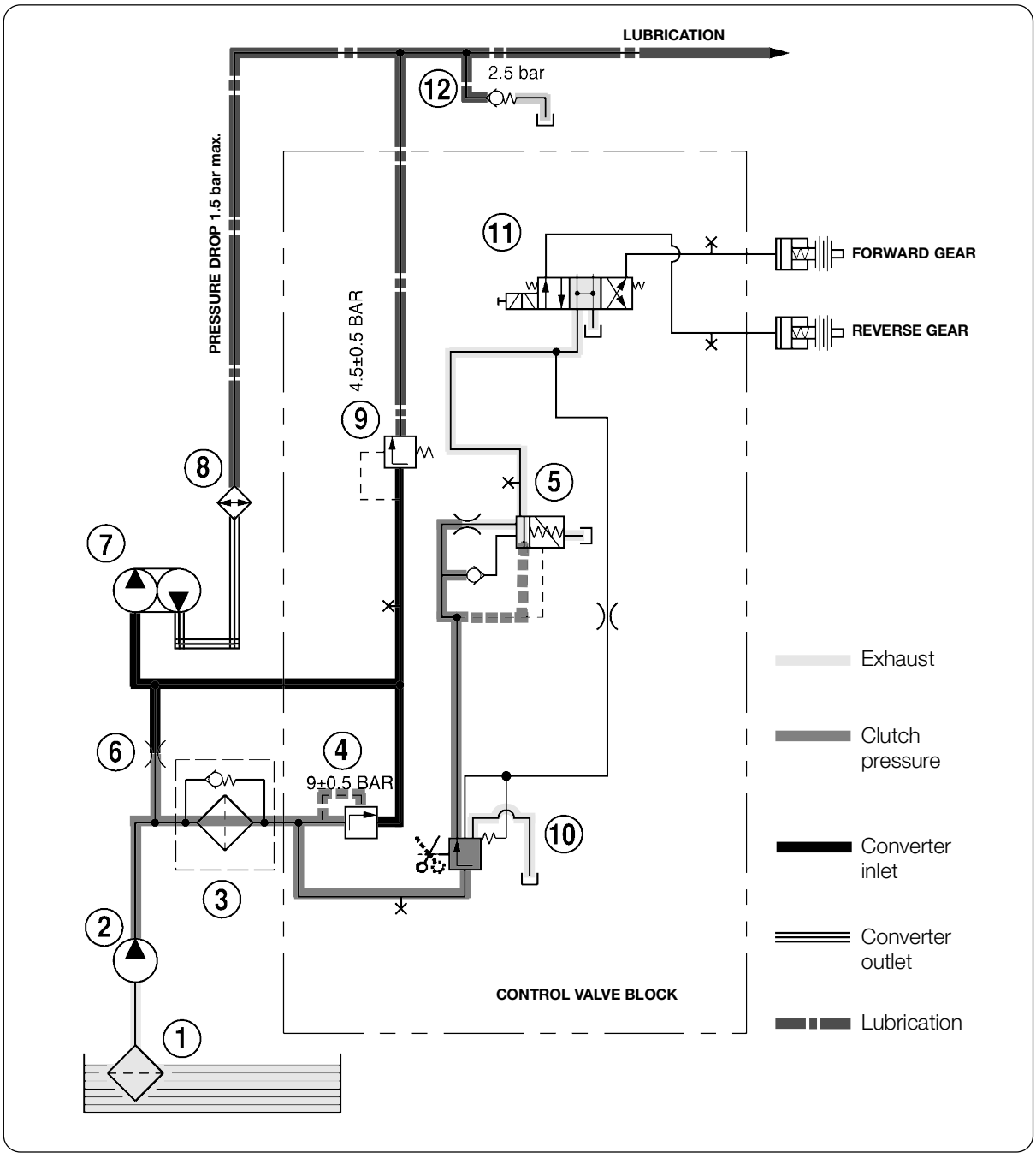


Drive ratio

		Gearbox	Bevel drive	Total
Forward Gear (MA)	8045 I 05.00	$\frac{25}{49} = \frac{1}{1.96}$	$\frac{7}{40} = \frac{1}{5.714}$	$\frac{1}{11.20}$
	TM 27	$\frac{25}{49} = \frac{1}{1.96}$	$\frac{6}{43} = \frac{1}{7.167}$	$\frac{1}{14.05}$
Reverse Gear (RM)	8045 I 05.00	$\frac{57}{57} \times \frac{25}{49} = \frac{1}{1.96}$	$\frac{7}{40} = \frac{1}{5.714}$	$\frac{1}{11.20}$
	TM 27	$\frac{57}{57} \times \frac{25}{49} = \frac{1}{1.96}$	$\frac{6}{43} = \frac{1}{7.167}$	$\frac{1}{14.05}$

Converter	Type	Mpa 2000	Gearing	
8045 I 05.00	W 280	224 Nm	2.87	Free wheel
TM 27	W 280	165 Nm	3.06	

SCHEME A - Gear in neutral position

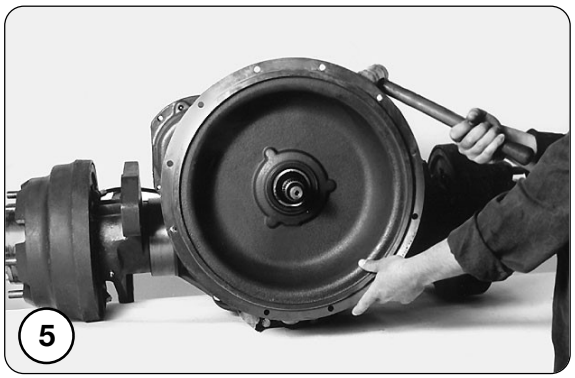


Neutral position

The oil suction by the pump, after filtration, is conducted to the pressure control valve and the, by way of the throttle valve (**6**), to the converter. From there, after having passed through cooler, the oil reaches the clutch for **forward** and **reverse** gear through the lubrification circuit and then oil sump.

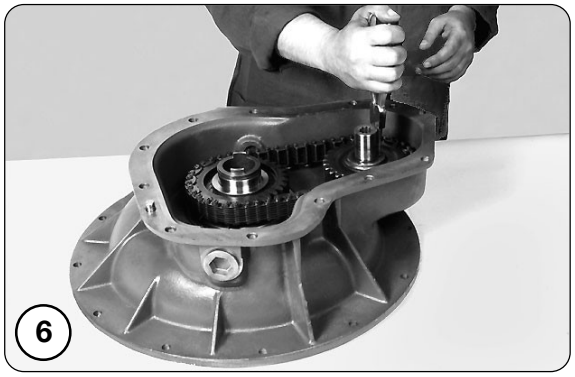
The oil flow, regulated by the main valve, is conveyed to exhaust by the selection valve.

The exceeding oil reaching the main valve feeds the converter. The converter pressure is regulated by the converter pressure control valve that diverts the exceeding flow to the lubrication circuit.



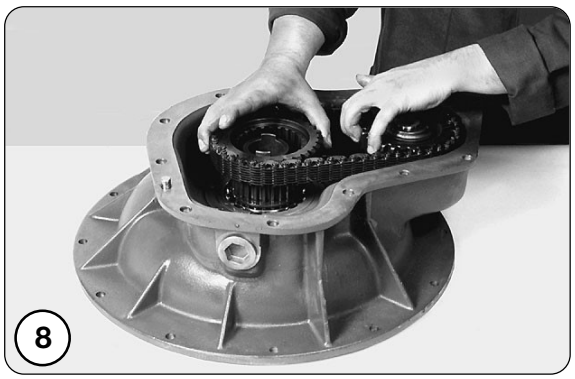
Remove the converter case.

Converter case overhauling - “A” Version

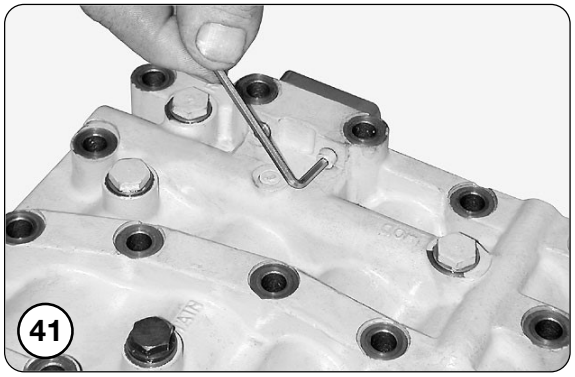


Remove lock rings shouldering gear on driving shaft and retaining bearing on driven shaft.

Lift up gear and chain assembly using proper levers.

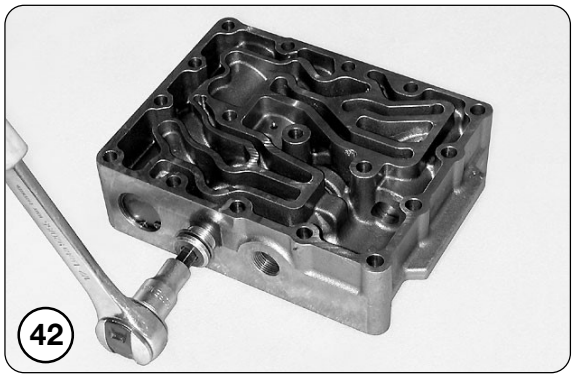


Lift gears holding them assembled as a set.

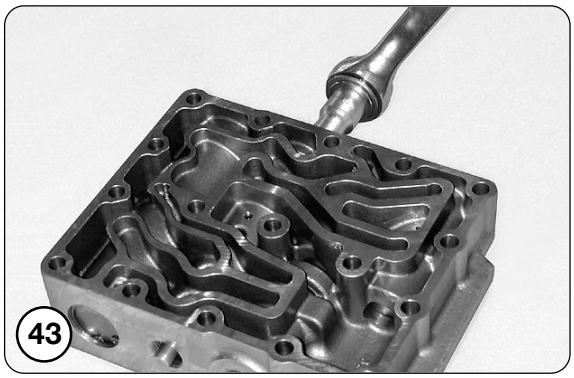


Smear the four screws with Loctite 242 and lock the cover with a torque of 0.5 daNm.

Dismantling of Main Valve - Converter Valve Axle

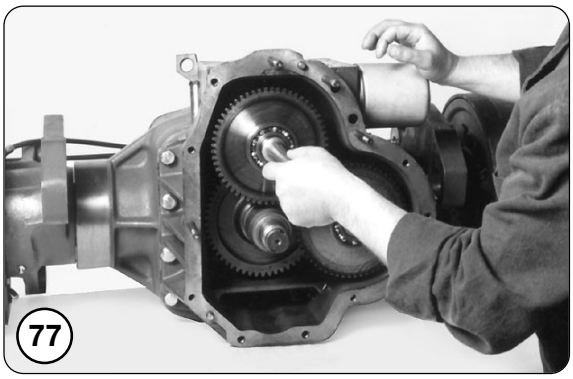


Unscrew plug and remove small piston of converter pressure regulating valve with relevant spring and possible thicknesses.

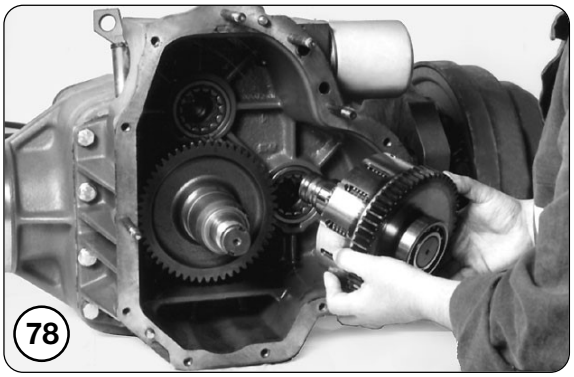


Undo rear plug, extract small piston from main pressure valve with relevant spring and probable thicknesses.

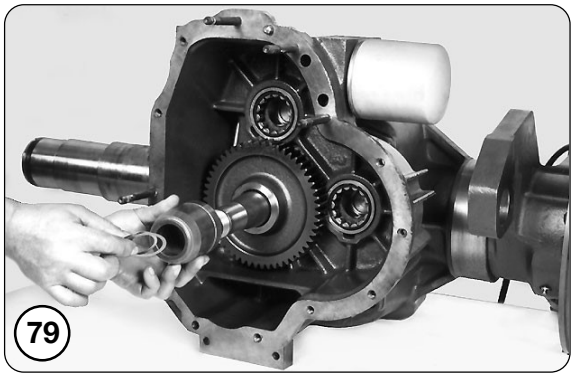
DISASSEMBLY CLUTCHES



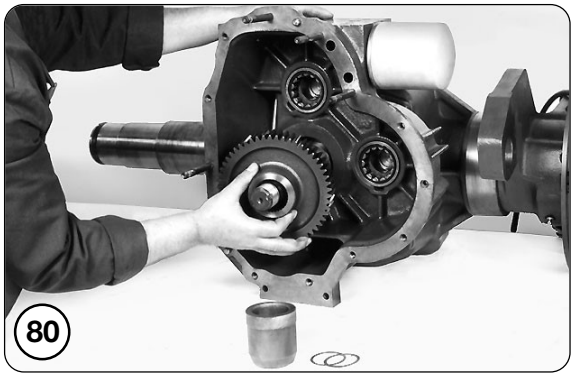
Pull out the upper clutch unit complete.



Pull out the lower clutch unit complete.

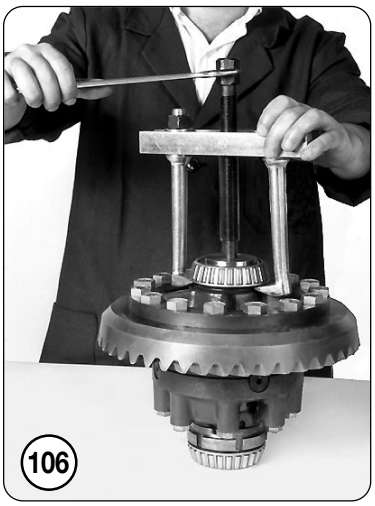


Remove the spacer and bearing pre-load adjustment shims of bevel pinion.

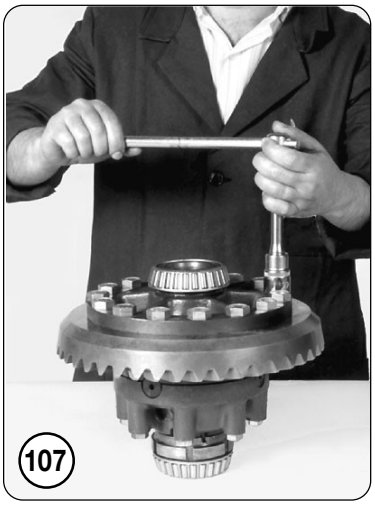


Pull out the driven gear on bevel pinion.

DIFFERENTIAL UNIT DISASSEMBLY AND OVERHAULING



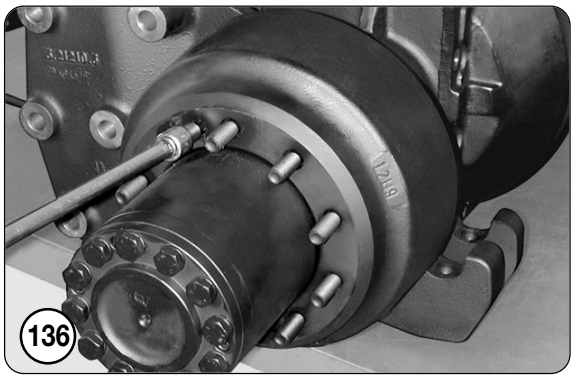
Roller cages of differential bearing can be taken off by a proper puller.



Undo and remove screws securing the ring gear and pull it out from casing

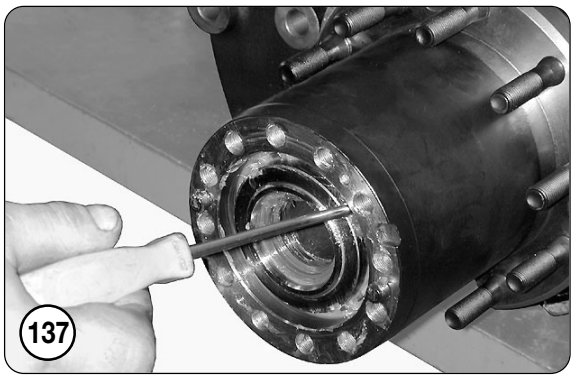
Mark both half-casings for reference at reassembly.

WHEEL HUB DISMANTLY

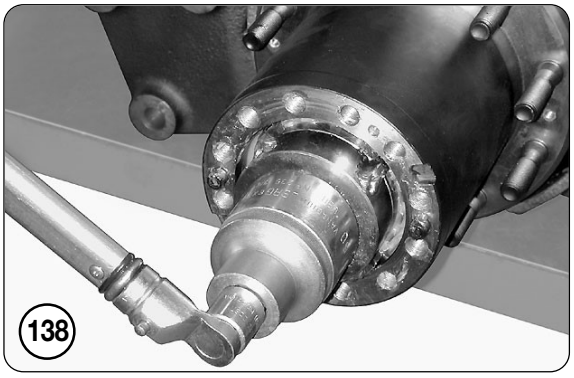


Undo screws securing brake drum to wheel hub.

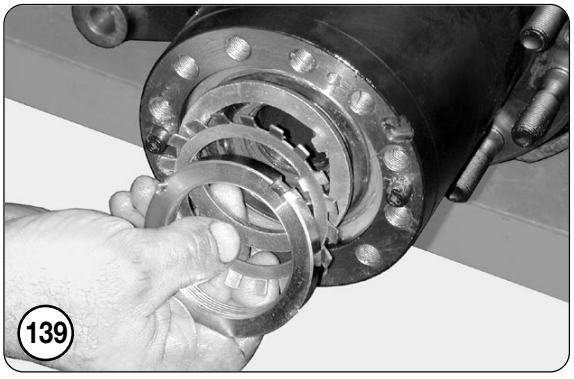
Remove brake.



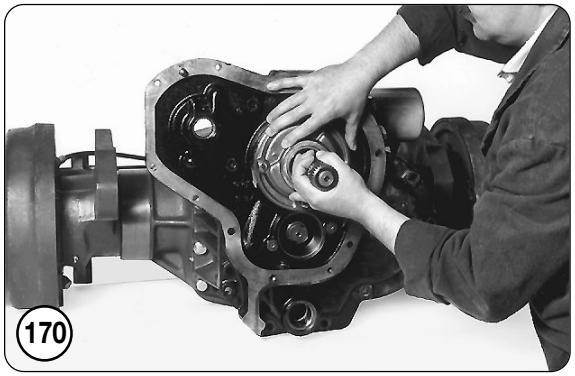
Lift up notches on wheel hub locking ring nut.



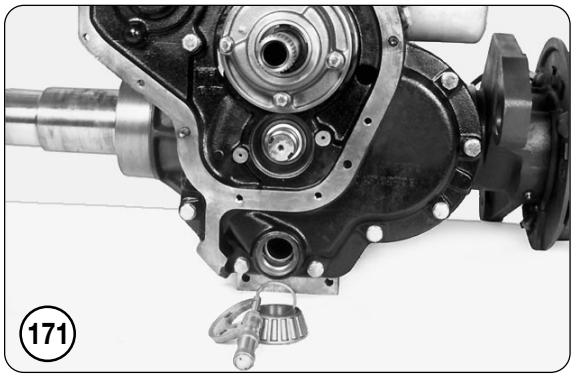
Undo and unscrew completely ring nut securing wheel hub (with special tool no. 8 pag.28).



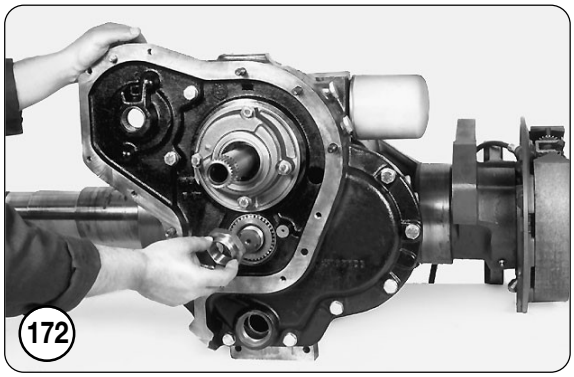
Remove the tab washer, distance washer, bearing and hub.



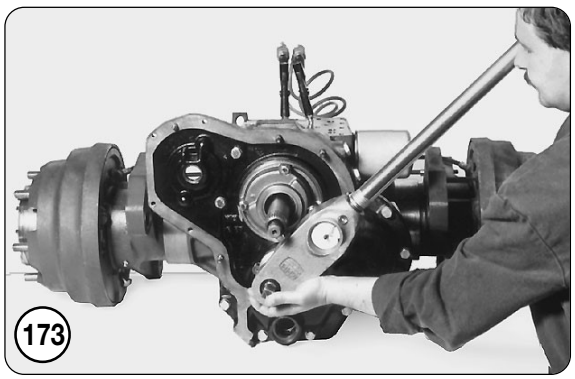
Smear sealing compound on contact surface and reassembly transmission cover complete with oil pump, smear medium screw locking compound and lock with a tightening torque of 6.2 to 6.9 daNm.



Measure shim thickness for pre-load of pinion bearings, said value should be suitably increased so as to have no pre-load.



Insert spacers, then, fit bearing inner race on pinion shaft and screw in ring nut.



Pack up clutches by compressed air. Lock nut with a torque of 66,5 to 73,5 Nm.