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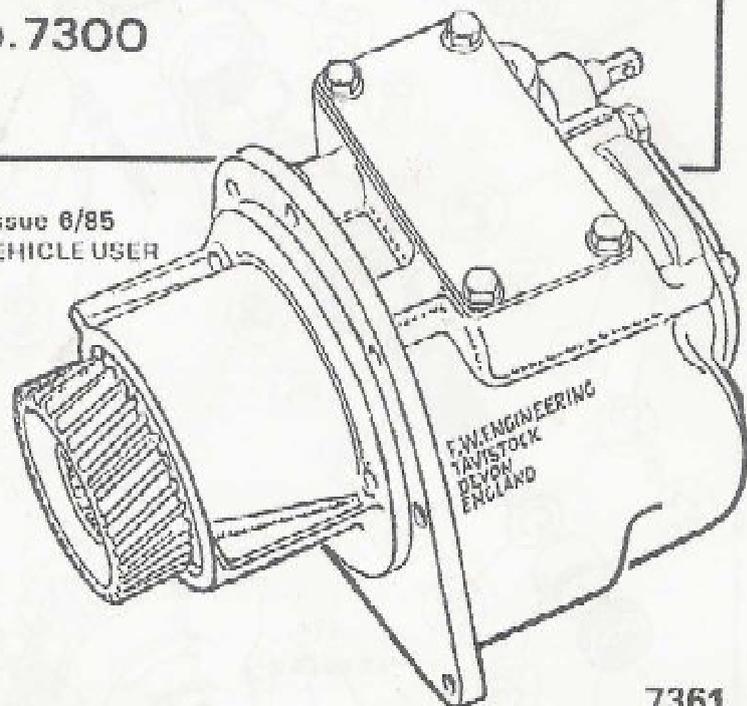


# LAND ROVER V8

SERIES III (STAGE 1) & 110 V8

# OVERDRIVE

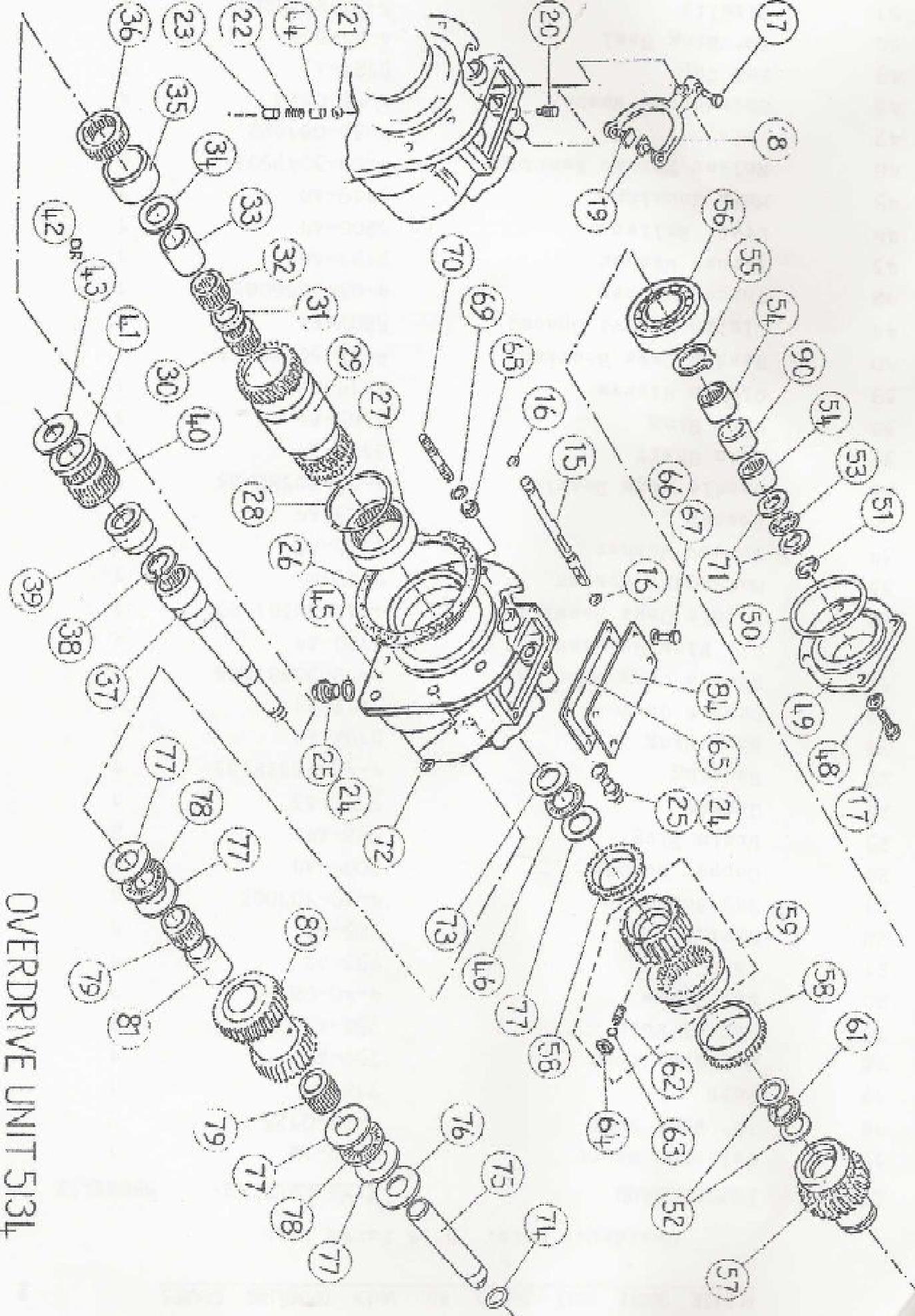
KIT No. 7300



7361

**FITTING INSTRUCTIONS** Issue 6/85  
PLEASE PASS ON THESE INSTRUCTIONS TO VEHICLE USER

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OVERDRIVE UNIT 513L

## Overdrive Unit. 5134 Parts List

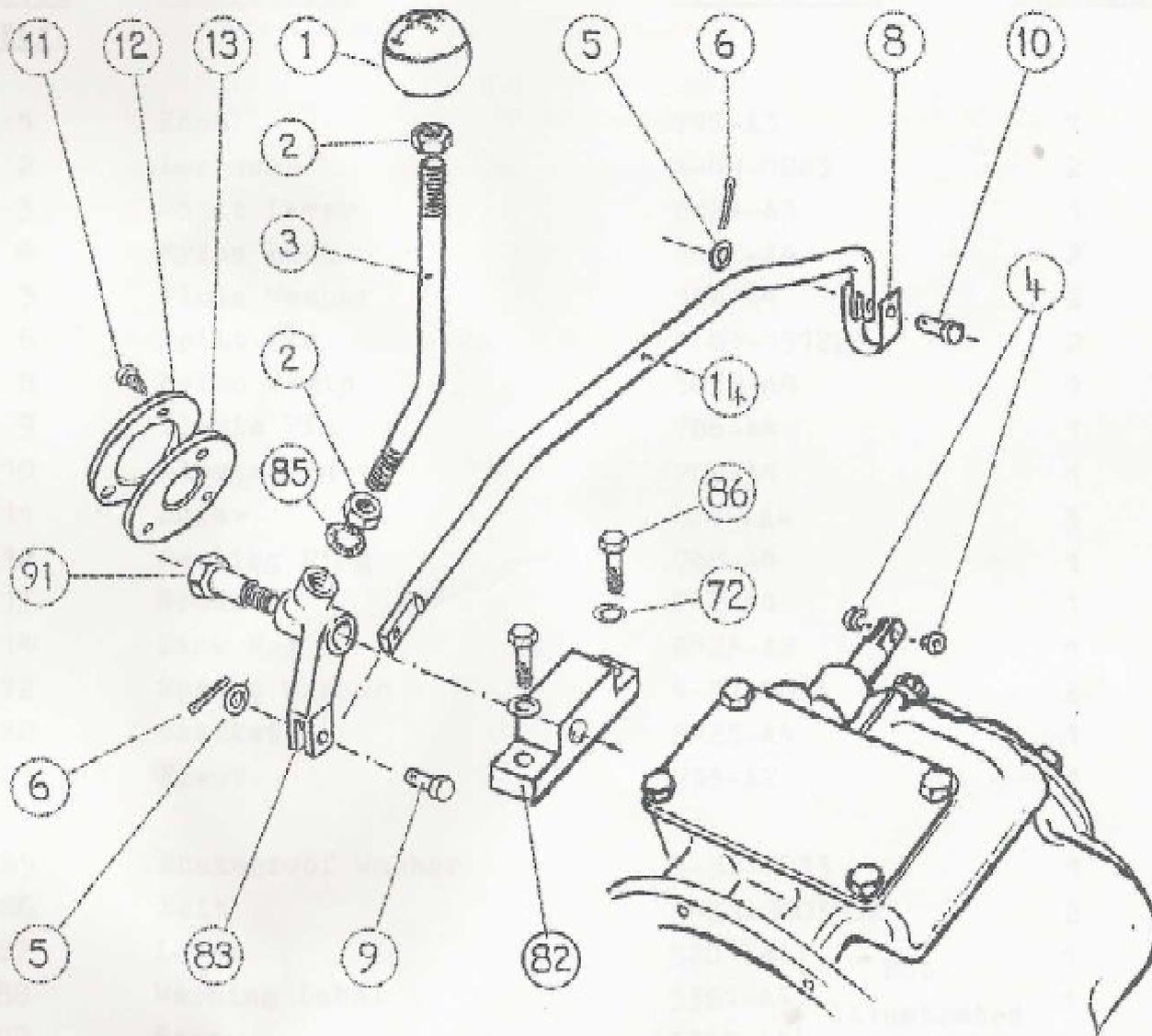
<u>Item</u>	<u>Description</u>	<u>F.W. Part No.</u>	<u>Quantity</u>
15	Selector Shaft	5130-A2	1
16	'O' Ring Seal	4-21-0123	2
17	Bolt	718-A4	1
18	Selector Fork	757-A2	1
19	Swivel Pads	758-A3	2
20	Set Screw	4-46-08123	1
21	Ball	753-A4	1
22	Spring	725-A3	1
23	Set Screw	4-39-101003	1
24	Copper Washer	5004-A4	2
25	Drain Plug	992-A4	2
26	Gasket	5193-A3	1
27	Bearing	4-12-75922533	1
28	Snap Ring	5192-A4	1
29	Output Gear	5117-A1	1
30	Needle Cage Bearing	4-12-30361423	1
31	Oil Flow Regulator	5160-A4	1
32	Needle Cage Bearing	4-12-30361423	1
33	Mainshaft Spacer	5127-A4	1
34	Thrust Washer	5820-A3	1
35	Spacer	5129-A4	1
36	Needle Cage Bearing	4-12-50582023	1
37	Main Shaft	5125-A1	1
38	Snap Ring	5185-A4	1
39	Clutch Sleeve	5114-A2	1
40	Needle Cage Bearing	4-12-50582023	1
41	Clutch Sleeve Spacer	5207-A4	1
42	Thrust Washer	4-03-3856083	1
43	Thrust Washer	5191-A4	1
44	Steel Roller	5206-A4	1
45	Main Housing	5119-A0	1
46	Roller Thrust Bearing	4-09-3047503	2
47	Bolt	4-33-081822	4
48	Shakeproof Washer	4-53-0823	4
49	End Cap	5124-A3	1
50	'O' Ring Seal	4-21-5363	1
51	Circlip	4-24-2535203	1

## Overdrive Unit. 5134 Parts List

<u>Item</u>	<u>Description</u>	<u>F.W. Part No.</u>	<u>Quantity</u>
52	Thrust Washer	4-03-2542303	2
53	Thrust Bearing	4-07-2542203	1
54	Bearing	4-12-25322013	2
55	Circlip	4-24-4053183	1
56	Bearing	4-13-040090233	1
57	Input Gear	5116-A1	1
58	Synchro Cone	737-A1	2
59	Synchro Assembly	740-A2	1
61	Thrust Bearing	4-07-2542203	1
62	Spring	726-A3	3
63	Ball	741-A4	3
64	Block	743-A3	3
65	Gasket	724-A4	1
66	Plain Washer	4-50-0823	1
67	Bolt	4-33-081822	4
68	Nut	4-47-0813	1
69	Spring Washer	4-51-0823	4
70	Stud	765-A4	1
71	Thrust Washer	3.175 mm 5662-A3	} 2
		3.226 mm 5663-A3	
	Select to give	3.327 mm 5664-A3	
	.05 mm to	3.429 mm 5665-A3	
	.10 mm end	3.531 mm 5666-A3	
	float	3.632 mm 5667-A3	
		3.683 mm 5668-A3	
72	Spring Washer	4-51-0823	7
73	Thrust Washer	4-09-3247503	1
74	'O' Ring Seal	4-21-2133	1
75	Layshaft	5126-A3	1
76	Shim	4-01-3047133 } 4-01-3047053 }	As reqd.
77	Thrust Washer	4-03-3047103	6
78	Thrust Bearing	4-07-3047203	2
79	Bearing	4-12-30362623	2
80	Laygear	5115-A2	1
81	Spacer	5128-A4	1
84	Top Cover	5135-A4	1
90	Spacer	5491-A4	1

LINKAGE KIT PARTS LIST 7303

FOR LAND ROVER SERIES III V8 & 110 V8



82 Bolt  
 83 Bolt  
 84 Bolt  
 85 Bolt  
 86 Bolt  
 87 Bolt  
 88 Bolt  
 89 Bolt  
 90 Bolt  
 91 Bolt

**LINKAGE KIT 7303**  
 For Land Rover Series III V8 & 110 V8

## LINKAGE KIT PARTS LIST 7303

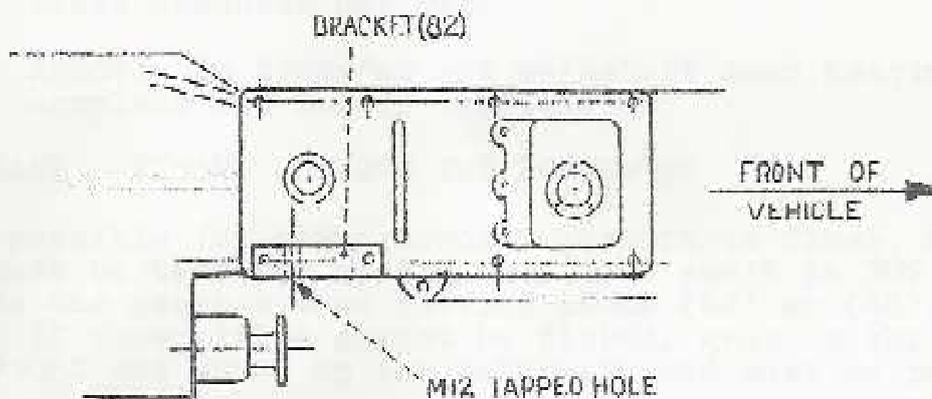
(FOR LAND ROVER SERIES III V8 &amp; 110 V8)

<u>Item</u> <u>Ref.</u>	<u>Description</u>	<u>F.W. Part No.</u>	<u>Quantity</u>	
1	Knob	746-A3	1	
2	Locknut	4-49-1223	2	
3	Shift Lever	6124-A3	1	
4	Nylon Bush	5190-A4	2	
5	Plain Washer	156-A4	2	
6	Split Pin	4-63-151223	2	
8	Nylon Strip	5058-A4	1	
9	Clevis Pin	786-A4	1	
10	Clevis Pin	785-A4	1	
11	Screw	1049-A4	3	
12	Sealing Ring	748-A4	1	
13	Grommet	742-A4	1	
14	Link Rod	6123-A2	1	
72	Spring Washer	4-51-0823	2	
82	Bracket	6125-A4	1	
83	Pivot	733-A2	1	
85	Shakeproof Washer	4-52-1213	1	
86	Bolt	4-33-0803512	2	
87	Label	5201-A4	} Not Illustrated	1
88	Warning Label	5361-A4		1
89	Screw	5363-A4		4
91	Shoulder Bolt	766-A4	1	

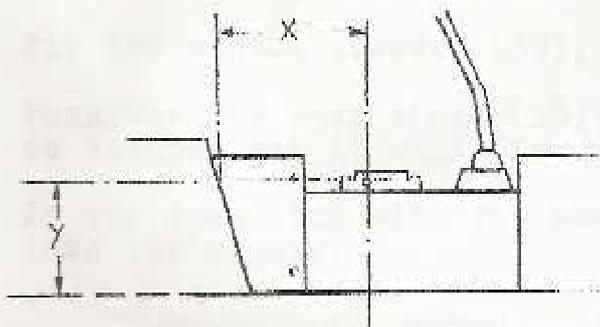
P I T T I N G   I N S T R U C T I O N S

NOTE: Where parts are numbered ( ) etc. refer to Parts List.

1. Disconnect the battery terminals.
2. From inside the vehicle remove the floor covering (carpet), if fitted, to expose the transmission tunnel.
3. Remove the transmission tunnel to expose the top of transmission.
4. Remove 2 bolts from right hand side of gearbox top cover, fit bracket, (82), using 35 mm long bolts and spring washers, (72), (86) with the M12 tapped hole towards the rear of the vehicle, Fig 1.

FIG. 1

5. Measure distances X and Y and make a note of the measurements, Fig 2.

FIG. 2

6. Replace the transmission tunnel.
7. Remove centre seat panel.

- 8. Remove handbrake cable bracket at speedometer drive housing and modify as shown, Fig 3.

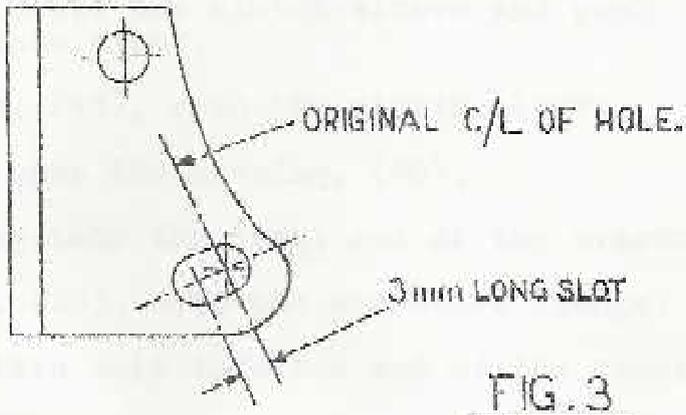


FIG. 3

- 9. Drain transfer box oil.
- 10. Remove the transfer box mainshaft rear bearing housing complete and roller bearing.

IMPORTANT - PLEASE OBSERVE THE FOLLOWING

It is possible for the gearbox mainshaft to float, therefore care must be taken to ensure that this shaft is NOT pushed towards the gearbox when fitting items (42) or (43), (39) and (38). If these items cannot be fitted, gearbox thrust bearing no. 571064 has moved on the mainshaft and must be repositioned.

- 11. Remove the snap ring, shim and mainshaft transfer gear from the end of the mainshaft.
- 12. Refit the shim onto the mainshaft.
- 13. Fit the thicker of the two thrust washers, (42) onto the mainshaft. See Fig 4.
- 14. Fit the clutch sleeve, (39), onto the mainshaft.
- 15. Push the new snap ring, (38), edge on into the groove to ensure that it will fit.
- 16. If the snap ring will fit push it onto the shaft and into its groove.

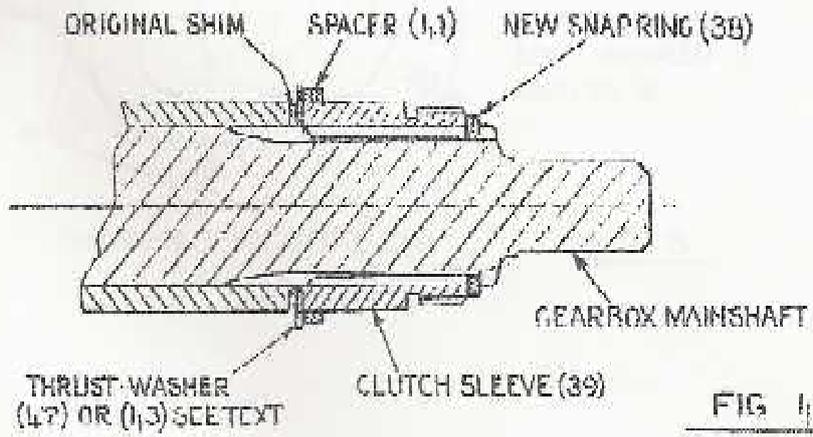
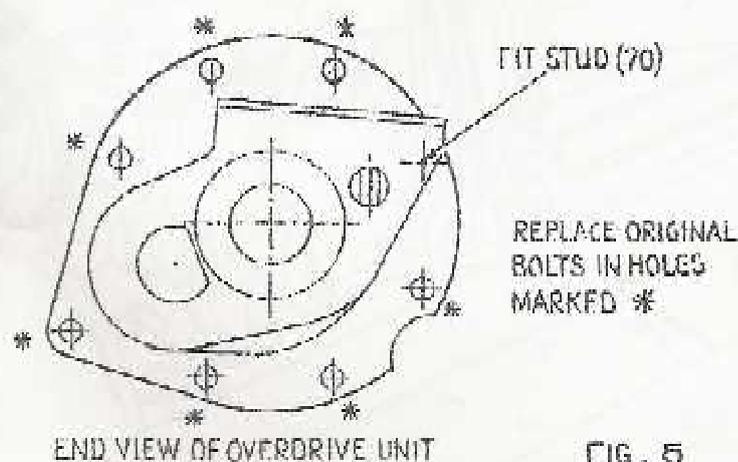
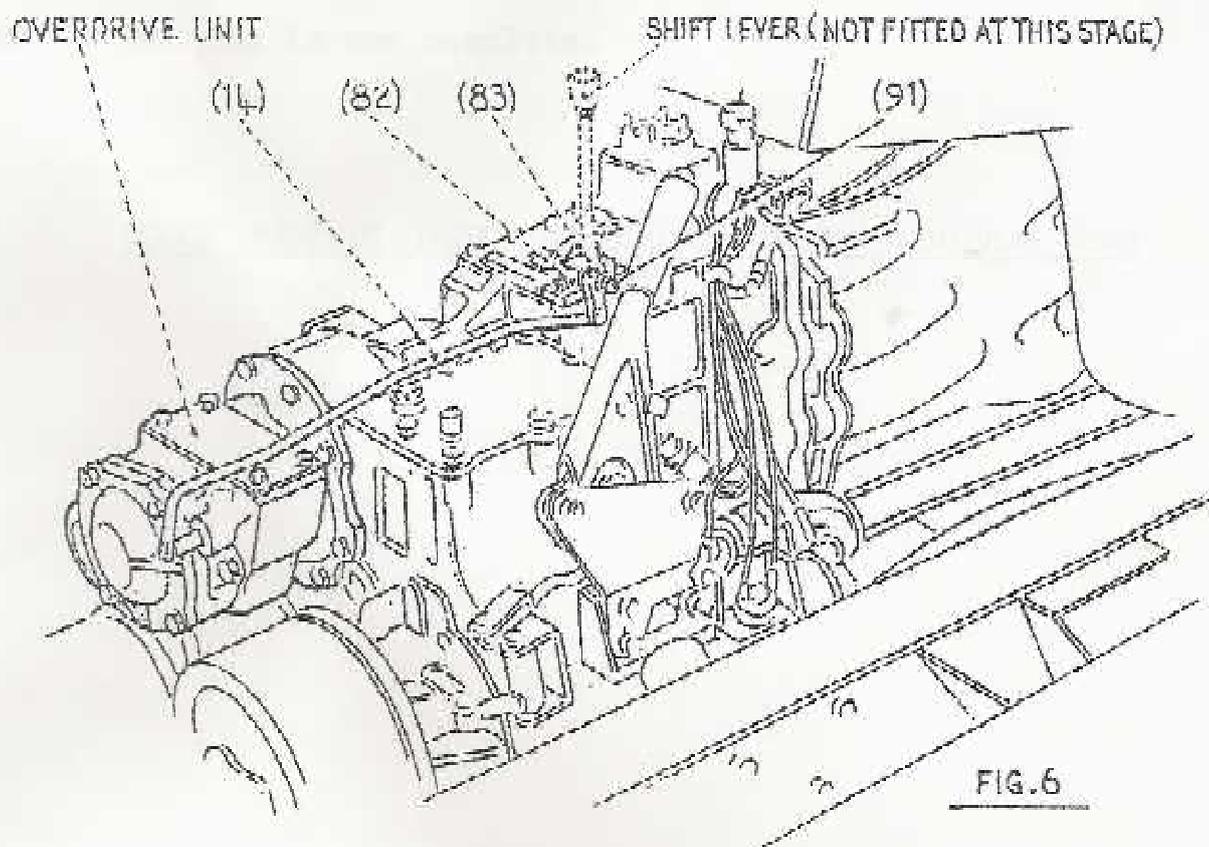


FIG. 4

17. If the snap ring will not fit, remove the clutch sleeve and thrust washer. Fit the other thinner thrust washer, (43). Refit the clutch sleeve and push the snap ring into place.
18. Push the spacer, (41), onto the clutch sleeve.
19. Smear some oil onto the bearing, (40).
20. Push the bearing into the large end of the overdrive.
21. Fit the gasket, (26), onto the overdrive flange.
22. Lift the overdrive unit into the end of the transfer box.
23. The overdrive unit will slide forward to within about 12 mm ( $\frac{1}{2}$ " ) of the transfer box face.
24. Rotate the unit slightly from side to side until it slides fully into place (making sure that the cutaway in the cast flange coincides with the end of the gear shaft in the transfer box).
25. If the unit will still not slide fully forward adopt the following procedure:-
26. Engage first gear in the main gearbox.  
Shift the high-low ratio lever to neutral.  
Whilst pushing the overdrive, spin the engine a few times until the overdrive slides into position.
27. Fit the stud, (70), into the one hole shown.
28. Refit 7 original bolts into the flange holes as shown in Fig 5.



29. Refit the handbrake cable bracket to speedometer housing.
30. Fill the transfer box with clean oil and leave out the level plug.
31. Remove overdrive filler plug, check that the drain plug is tight. Add oil to overdrive unit until it starts to flow from the transfer box level.
32. Replace the filler plug in the transfer box and overdrive.
33. Using previously obtained measurements X and Y, drill a 51 mm (2") diameter hole in the side of the transmission tunnel.
34. Assemble Link Rod (14) to Pivot (83), using items (5), (6), (8) and (9) with a smear of grease on the moving surfaces.
35. Feed pivot, (83) through centre seat access hole and between gearbox/transfer box and transmission tunnel into position on bracket, (82).
36. Smear grease on main diameter of Shoulder Bolt (91).
37. Fit pivot, (83) to bracket, (82), with Bolt (91) through 51 mm diameter hole in transmission tunnel. This assembly is shown with bodywork removed for clarity, Fig 6.



38. Connect the linkage onto the overdrive selector shaft (15) using (4), (5), (6), (8), (10).
39. Position the rubber grommet, (13), and retaining ring, (12) - over the end of pivot, (83).
40. Drill three holes 3 mm diameter to accept the self tapping screws, (11).
41. Screw the three screws, (11), into position to hold the retaining ring and rubber grommet.
42. Cut a hole in the floor covering (carpet) to clear the pivot.
43. Fit floor covering (carpet).
44. Fit shift lever (3) to pivot using Locknut (2) and Shakeproof Washer (85).
45. Fix the knob, (1) and locknut, (2) onto the shift lever, (3).
46. Check that all nuts and bolts are tight.
47. Reconnect the battery.
48. Fit warning label to Dashboard.
49. Fit overdrive label to rear of vehicle.
50. Fitting is now complete.

PLEASE PASS ON THESE INSTRUCTIONS TO THE VEHICULAR USER

## OPERATING INSTRUCTIONS

The overdrive is fitted with a synchromesh/Gear Selector and should be treated as an extra gearbox.

Since the overdrive gearchange is mechanical, the clutch must be used when changing into or out of overdrive just the same as when changing gear in the gearbox. There are three lever positions, overdrive in, neutral, and overdrive out.

### To engage

Simultaneously press the clutch and release the accelerator pedal. Move the overdrive lever forward. Simultaneously release the clutch and press the accelerator.

### To disengage

Simultaneously press the clutch and release the accelerator pedal. Move the overdrive operating lever rearward. Simultaneously release the clutch and press the accelerator.

Only use the overdrive in 3rd and 4th gear.

### Running In

To allow the overdrive unit to bed in correctly, it is most important that for the first 500 miles the Range Rover should be driven conservatively. After 500 miles drain and refill the transferbox and overdrive.

## MAINTENANCE

The overdrive oil is integral with the transfer box. When changing the transfer box oil also remove the overdrive drain plug. When refilling the overdrive always make sure that the transfer box level plug is removed to obtain the correct oil level.