

DRUM



Heirars /



Fitting Instructions

Please follow these instructions carefully. The fitting of your winch will be made easier if a vehicle hoist or pit is available.

Please take careful note of your drawings—these have been compiled with all components in their relative position. When ordering new parts—specify part numbers on the drawings and list—this may save valuable time.

FRONT DRUM ASSEMBLY

- 1. Remove front bumper bar and retain the 4 fixing bolts, nuts and washers. (See sketch No. 1 for standard bumper bar modification).
- 2. Remove valance at base of radiator grill-this is not used again.
- 3. Loosen 4 bolts (307) on your winch drum assembly.
- 4. Place the assembly between front chassis members and insert 2-115mm (4·1/2in.) long bolts (383), one each side, through side plates and existing holes in chassis.
- 5. Replace bumper bar and put back the 4 original fixing bolts through winch frame, bumper bar and chassis. Replace washers and nuts but do not tighten.
- 6. Ensure that your winch frame side plates (359-347) are tight against the inside of chassis members using clamps if necessary.
- 7. On the top plate of the winch side frames are 3—threaded holes, these are used only to screw on your drill jig (supplied on loan). Using this jig (see sketch No. 2) drill one hole through each chassis member 9.5mm (3/8in.) dia. remove jig and insert 127mm (5in.) bolts part (363).
- 8. Place underneath each side of your chassis stiffener (361/362) put on washers (306) and nuts (375). Note 2 chassis stiffeners are supplied—one of which has the fixing hole off centre (361) this is arranged to clear the steering damper bracket fitted to some vehicles.
- 9. Insert packing plate (358) equally on each side of your frame that is between (356) and (359) L/H side-(356) and (347) R/H side.
- 10. Tighten all bolts throughout the unit.
- 11. Drill 2 holes 9.5mm (3/8in.) dia. through bumper bar using cross member (356) as template insert bolt and spacer (348-377) with nut (375) and washer under top flange of bumper-tighten.
- 12. Drill 2 holes using side plates (347-359) as templates and insert bolts (346) nuts and washers-tighten.

POWER TAKE-OFF

Rear Mainshaft Housing Assembly (Rover Part No. 230696) must be removed from the gear box transfer case, please take care not to damage threads on 6 studs and retain nuts and spring washers. In this housing assembly (Rover Part No. 230696) are three components which must be transferred to your new P.T.O. shaft (239) in sequence as shown on the illustration, these are, Bearing (Rover Part No. 217478), Retaining Plate Outer (Rover Part No. 217523), and Circlip (Rover Part No. 217525).

Remove Cover Plate (Rover Part No. 217970) and Joint Washer (Rover Part No. 230140) taking care not to damage threads on 4 studs, retain nuts and spring washers.

The Housing assembly and cover plate, refered to above, are not required again but should be retained in case of vehicle being sold and your winch unit being removed.

On your new Power Take-off chain case (243), (already factory assembled), check that the dog clutch (235) is fitted with the relieved teeth outwards, and fit gasket (242) onto housing (243), with a smear of grease on both sides, making sure the holes are in line to avoid subsequent gasket damage.

Locate P.T.O. Chain case assembly (243) onto the 6 transfer case studs, making sure the flat portion on the casting flange is lined up with the top of the Rover transfer casing, hold in position with 3 existing nuts and tighten temporarily.

DRIVE SHAFT ASSEMBLY. Jack up vehicle and remove left front wheel. Position and lightly clamp your drill jig (supplied on loan) to chassis (see sketch No. 3) and insert shaft (261) into the universal joint (244) approx. 1in. Now bolt on your plummer block assembly (268, 267 and 261) to drill jig.

Engage your inclined shaft (273) female spline on to the P.T.O. male spline (247) until the back end face of the spline is flush with the end of socket (this will give correct clearance to allow for any engine movement). Maintain this position and offer front end of shaft to the universal joint (267), on plummer block, mark off to allow approximately 25mm (1in.) depth into universal, and cut shaft to length.

Loosen P.T.O. chain case, which is temporarily positioned with 3 nuts, and withdraw enough to assemble the inclined shaft into universal (267) and male P.T.O., spline. IMPORTANT. Make sure your universal joint yokes (244, 267 and 244) are in line (see sketch No. 5). Put back your P.T.O. chain case, bolt up securely and recheck end clearance on spline, if satisfactory, tighten up all grub screws in universal joints.

NOTE:- Your shaft assembly should now be complete, but before drilling the chassis adjust Plummer Block and drill jig (if necessary) to give rear inclined shaft maximum clearance between vehicle clutch housing and chassis cross member, also front engine support. Clamp drill jig firmly into this final position, remove studs securing plummer block (see sketch No. 3) and drill chassis, using drill guide tubes to give correct horizontal alignment.

Remove drill jig and assemble bolts (264), chassis stiffeners (262, 263), and firmly bolt on plummer block, using illustration as guide for assembly sequence. 1.5mm (1/16in.), shims are provided (269) for use if necessary.

SELECTOR

Install the selector assembly part (215) to the top of vehicle transfer case, making sure the selector fork (218) engages in the dog clutch (235) groove. Check operation before fitting cover plate and gasket (204, 205).

LUBRICATION

Due to carriage difficulties, the worm box is not filled with oil. It should be filled and run on load for approximately 3 hours—emptied and finally filled for permanent use.

When filling, top up to the level of the plug between finns on end of gear box cover. Oil to be used—Esso GX.90/140 or equivalent. Fill the P.T.O. box to the level of the plug (219) with S.A.E. 90 oil. Regularly lubricate all nipples with Lithium base E.P. grease.





Sketch Nº 3

Sketch Nº 4



Sketch №5

Sketch Nº6

WINCH (Front Assembly)

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361

Port	Description No
301	Kev 3/16 sa
302	Frame Rear Angle
303	Grease Nipole (Angled)
304	Grease Nipole
305	Nut 3/8' BSW
306	Spring Washer 3/8 1/D
30.7	Bolt 1/2 8\$W
308	Spring Washer 1/2" 1/D
309	Nut 1/2 BSW
310	Dog Selector
.3.1.1	Spacer
312	Collar
333	Winch Shaft
314	Key 6/36 sq
315	Grub Screw
	5/16 BSW x 5/8 lg.
316	Drum
317	Brake Shoe
33.8	Stud 3/8' BSW x 2 lg
319	Spacer
320	Brake Spring
321	Collar
322	Warm Box
323	Adaptor
324	Relief Valve
325	Ball Bearing
326	Worm Wheel
::3:2:7::	Warm Wheel Hub
328	Collar
329	Packing Shim
330	Gasker
331	Worm Box Cover
:332	Filler Flug

Na: Off Part Description O Bing 333 1 Linread Setscrew 334 5/16 BSW x 15 Ig. Linread Setscrew 5/16" BSW x 3/4" lg: 6 335 Worm Shaft Cover 336 337 Gasket 338 Ball Bearing 339 Adjustment Nut Ball Bearing 340 341 Lock Washer Worm Shaft 342 Key 3/16' sq. 343 344 Roller Bearing 345 Oil Seal 346 Bolt 3/8" BSW x 14' lg. 347 R.H. Frame Bolt 3/8'' BSF x 3'' lg. 348 349 Top Plate Setscrevv 3/8 350 BSF x 12 lg. .4 Setscrew 5/16 351 UNF x 3/4 lg. Pivot Retaining Plate 352 4 353 Grease Nipple 354 Roller Pivot 4 355 Horizontal Roller Main Frame 356357 Vertical Roller 368 Packing Plate 359 L.H. Frame 360 Bolt 3/8 UNF Chassis Suffener, SD Side

Part Description No: Off

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No: Off

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- 362 Chassis Stiffener
- 363
- Bolt 3/8' BSF x 5 lg: \$tud 3/8' BSW x 34' lg: 364
- Circlip 3/4" dia. 365
- Clutch Housing 366
- 367 Ball Bearing 368:
 - Grub Screw 4-2 BSW x 3/8' lg:
- 369 Spring

8

- 370 Ball 3.71
- Clutch Dog 372 Circlip 1, dta
- 373 Spring Washer
- 5/16 1/D 374 Allen Screw
 - 3/8 BSF x 14
 - 375
 - Nut 3/8' BSF Washer 3/8'' I/D 376
 - Spacing Tube: 377
 - 378 Washer (Plate)
 - 3/8 1/D x 1 0/D
 - 379 Selector Shaft
 - Pay: on Lever 380 (Optional Extra)
 - 381 Lever Prvot
 - (Optional Extra): Pay-On Lever Top Plate 382
 - (Optional Extra)
 - 383 Bolt 3/8 BSF x 41 Ig
 - 384 Nyloc Nut
 - 385 Drain Plug Nut 3/8" UNF 386

Part	Description	No Off	Part	Description	Vo. Of
201	Spring	3	226	Cover Plate	
202	Prvot Screw	3	227	Linread Set Screw 5/1	6
203	Selector Shaft	1		BSW x 1 ⁺ , lg.	
204	Gasket	1	228	Oilseal	
205	Cover Plate	1	229	Collar	
206	Set Screw 1/4"		230	Spring Washer	
	BSW x 5/8' lg.			5/16 i/d	- 18
207	Sprocket	2	. 231	Linread Set Screw 5/1	6
208	Spring Washer 1/4"	i/d 5		85W x 3/4 lg.	· · · · · · ·
209	Spring	1		Washer 5/8.1/0	
210	Ball	1	233	Splitpin	
217	Grammet		234	Locknut	
212	Link Rod	1	235	Dog Clutch	
213	Lock Nut	1	236	Circlip (Internal)	
214	Control Knob	1	237	Roller Beanng	
215	Selector Housing	1	238	Retaining Plate	
216	Gasket		239	P.T.O. Shaft	
217	Ser Screw 5/16		240	Woodruff Key	
	B\$F x 1 lg		241	Ball Bearing	
218	Selector Fork	1	247	Gasket	
219	Plug	1	シオウ	Chain Caca	
	Chain (Endless)	1		Chain Croc	
221	Gasket	1	244	Oniversal Julia	
222	Chain Case Cover	t	243	Grub Screw 1/4 BSF	
223	Scacer	1	246	.Key.3/16".sq	
224	Ball Bearing	3	247	Splined Stub Shaft	
226	G asket	4	248	Grease Nipple	

Parts List

- Part Description
 - 249 Inner Shaft
- 250 Thrust Washer:
- 251 Oilseal
- Key 1/4 sq. 252
- 253 Outer Shaft
- 254 Bush
- Shear Pin 255
- 266 Circlip (External)
- 257 Roller Bearing
- 258 Spacer
- 259 Spacer (Recessed)
- 260 Circlip:
- Honzontal Shaft 261
- 262 Inner Chassis Stiffener.
- Outer Chassis Stiffenet 263
- Bott 3/8 BSF x 4 264
- Washer 3/8 i/d 265
- Nylock Nut 266 Universal Joint 267
- 268 Plumber Block:
- 269 Packing Plate
- 270 Shear Pin Clip
- 271 Spring
- 27.2
 - Shoulder Screw
- 273 Inclined Shaft:
- 274 Operating Level

226 Gaşket



FAIREY WINCHES *

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