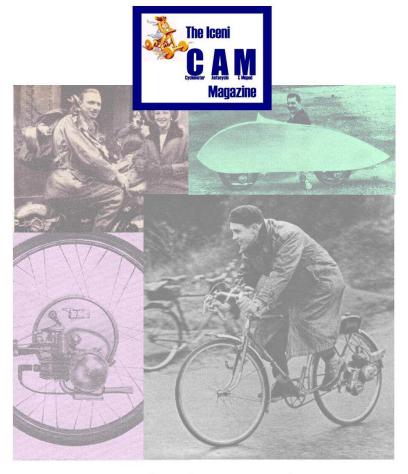
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## CLUTCH CONVERSION SET

The following items removed from the original fixed gear bottom bracket assembly will also be required to supplement the conversion kit.

4020003	Spacer	1
4020004	Final Drive Sprocket	1
4020007	Axle-Bottom Bracket	1
4020019	Location Pin	1
4020038	Cable Clip	1
4020046	L.H. Crank	 1
4020047	R.H. Crank and 32T Chainwheel	1 assy.
4020052	44" R.I. Pedals	1 pair.
2930172	Cotters	2
2660070	3" Plain Washer	2
2920015	Cotter Nut	2
4512194	Grease Nipple	1
3490432	1" Shakeproof Washer	1

## Clutch Fitting Instructions

- Remove both fairings and completely dismantle the fixed gear bottom bracket assembly, as described on Page 26 of the Raleigh Moped Service Manual. Retain the parts listed above for incorporation in the clutch assembly.
- 2. Slide the clutch assembly into the bottom bracket, locate with the location pin (4020019) and ½" shakeproof washer (3490432) not forgetting the cable clip (4020038) and grease nipple (4512194), exactly as a fixed gear bottom bracket assembly.
- 3. Fit the spacer (4020003) over the offside end of the driving shaft, then the driving sprocket (4020004), using the better of the two sprockets removed from the original bottom bracket assembly. Now fit the remaining spring ring with special tool MS.20.

4. Screw the release ring out as far as it will go i.e. until it is about to pull the release plate and pins back. Position the release

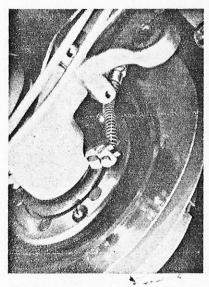


FIG. I. Release ring clamp shown in position with ofutch cable.

clamp so that the cable anchor plate is facing forward and in the horizontal position (See fig. 1). Tighten the  $\frac{3}{16}$ " bolt until the clamp ring is firmly gripping the release ring and then lock with the locknut underneath the cable anchor plate. The face of the clamp ring assembly should be flush with the innerface of the release ring. (Care should be taken to ensure that it fits squarely and is flush with the face of the release ring over the whole diameter.)

5. Remove the two lower clamp bolts from the engine mounting bracket, supporting the engine while the bolts are out. Fit the clutch cable stop (4020063) with the offset towards the clutch and facing forward (See fig. 1). Replace the mounting bracket bolts and

spring washers (the plain washers are not now required) and tighten evenly.

- 6. Remove the rear brake cable from the left-hand handlebar lever. Alter the position of the lever fulcrum bolt to the inner position, if not already there.
- 7. Fit the clutch cable assembly.

The clutch return spring locates between the lower cable stop (one cable stop fits above the cable stop plate and one below) and the cable anchor plate of the clamp assembly (See Fig. 1). The cable runs up the bottom diagonal tube and through the petrol tank mounting bracket. Fit the nipple into the clutch lever (See Fig. 2).

With the cable adjuster, adjust to give approximately 18" play on the lever before the clutch commences to release. Lock up adjuster. The locking plate pin assembly on the clutch cable fits on the flats of the cable adjuster adaptor and when not in use, springs over the adaptor to prevent any rattle etc.

8. Fit bottom bracket axle, cranks and pedals etc., as on the original bottom bracket assembly, the only difference being

that the two smaller diameter thrust washers (4020081) replacing the originals must be fitted adjacent to the driving shaft ends. Fill the bottom bracket assembly with a recommended grease, until grease appears at the thrust washer faces.

9. Fit both chains and adjust, if necessary.

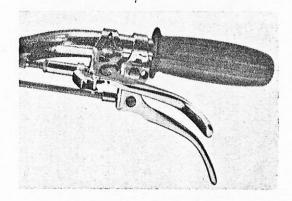
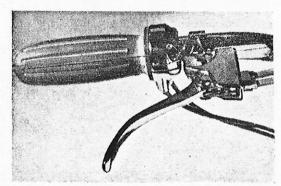


FIG. 2. Clutch lever lockingplate and adjuster.

- 10. Remove the right hand brake lever and refit just outboard of the clutch lever and facing downwards, then couple up the rear brake cable (See Fig. 2). Alter the position of the lever fulcrum bolt to the inner position, if not already there.
- 11. Fit the new dual cable brake lever assembly on the right-hand handlebar. Pull the lever back to the bar, exposing the link plate. Having disconnected the brake cable at the front brake arm, feed the nipple into the link plate through the slot nearest the handlebar Having fitted the new rear brake cable to run to the back wheel, clipping under the bottom bracket, fit the nipple into the outermost slot of the lever link plate. Now release the lever to its normal position and fit the cable ferrules

FIG. 3. Dual brake lever and two cables.



into the holes of the brake fulcrum. Front brake cable should be nearest the handlebar (See fig 3). Refit the front brake cable to the front brake arm and adjust normally.

- 12. Remove the brake arm from the rear brake and fit the new dual brake arm (3900008), if not already fitted, its position to be as the original.
- 13. Remove the nearside rear spindle nut and washer, and also the lower torque arm clip bolt. Fit the new dual brake anchor plate (4010153) over the rear spindle and lock with the spindle nut, (the plain washer is not now required) and replace the torque arm clip bolt (See Fig. 4).

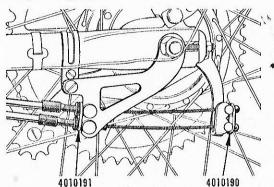


FIG. 4. Rear brake plate conversion with two cables.

- 14. Fit adjuster security plate (4010191) between adjuster lock nut and wire guide adjuster and security plate (4010190) between swivel pin and ball head nipple on both cable assemblies.
  - Then fit the two cable adjusters to the dual brake anchor plate, the top adjuster being from the dual right hand brake lever, the bottom taking the left hand lever's independent cable; fit the nipples to the rear brake arm.
- 15. Adjust the top adjuster (from the dual brake lever) normally. Now adjust the bottom independent cable until the free play has been removed from the left-hand handlebar brake lever.
- 16. Tension driving belt as detailed on Page 9 of Raleigh Moped Service Manual, refit fairings and tighten nuts.
- N.B. Identification of part numbers mentioned in the Clutch Fitting Instructions may be found in the Clutch Spare Parts List.