

TECHNICAL INFORMATION AND PARTS LIST

FIVE SPEED HUB MODIFICATION

SS/2 AND AT5 HUBS

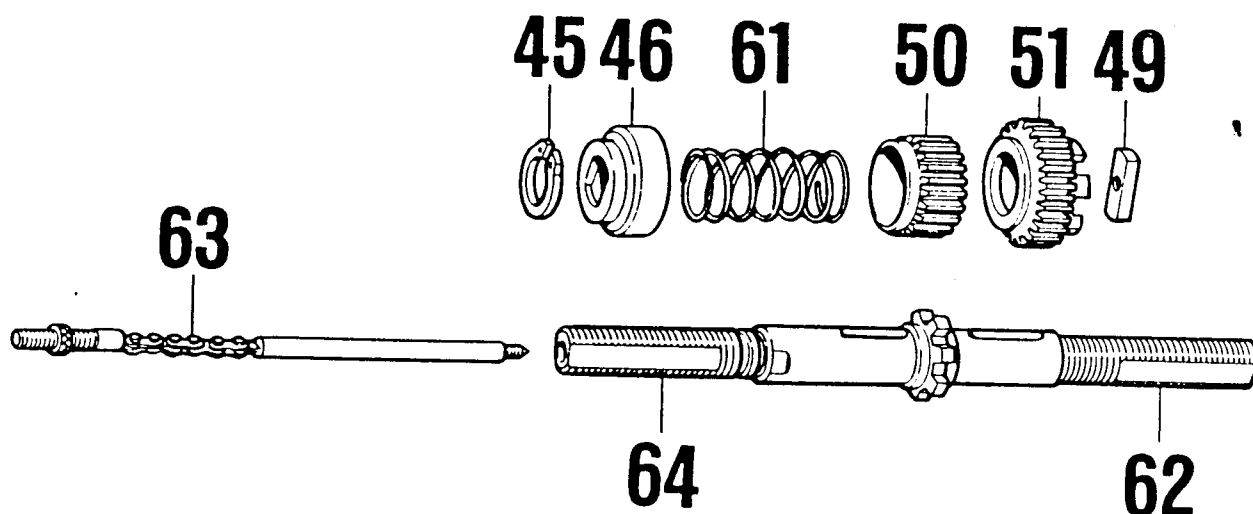
1. GENERAL INFORMATION

This leaflet is to be read in conjunction with Technical Information and Parts List - Five Speed Hubs and Controls (ref. LTE 112 (1)). It should be referred to when servicing all Five Speed Hubs. These modifications are incorporated in all hubs with shells marked 8-88 or later. The modifications result in much easier gear changing, as well as a reduced number of parts and easier servicing.

2. GEAR ADJUSTMENT

See section 2.1 in the Technical Information and Parts List. Note that it is important that 3rd gear is selected from 5th gear to ensure that the gear indicators are positively located by the cable tension. It is also advisable to rotate the pedals slightly to allow the internal parts to align themselves correctly.

3. EXPLODED VIEW (Axle Assembly and LH Indicator)



4. PARTS LIST

Existing Parts

New Parts

<u>Item No.</u>	<u>Sales No.</u>	<u>Description</u>	<u>Item No.</u>	<u>Sales No.</u>	<u>Description</u>
45	HSL 729	Circlip Retainer.	46	HSA 343	Dog Ring.
50	HSA 344	Secondary Sun Pinion.	61	HSA 422	Pinion Return Spring.
51	HSA 345	Primary Sun Pinion.	62	HSA 423	Axle 155.6mm (6 1/8").
				HSA 424	Axle 161.9mm (6 3/8").

49 HSA 342 Low Gear Axle Key.

63	HSA 420	Gear Indicator(5 mark) LH for 155.6mm Axle (6 1/8").
	HSA 421	Gear Indicator(7 mark) LH for 161.9mm Axle (6 3/8").
64	HSA 425	Axle Assembly (6 1/8") complete with LH Indicator.
	HSA 426	Axle Assembly (6 3/8") complete with LH Indicator.

5. DISASSEMBLY INSTRUCTIONS

It is recommended that the axle assembly is not disassembled but replaced with a new axle and LH indicator assembly (Item 64 on Exploded View). If however, disassembly is considered necessary, the following procedure should be adopted.

- (1) Using circlip pliers, remove and discard the circlip. (45)
- (2) Lift off the dog ring (46), pinion return spring (61), secondary sun pinion (50) and primary sun pinion (51), noting the order and orientation of these parts. Remove the axle key (49).

6. INSPECTION AND REPLACEMENT OF AXLE COMPONENTS (Hubs marked 8-88 or earlier)

If the axle needs replacement, it is essential to replace the dog ring and left hand indicator at the same time. Both springs (Items 47 and 52) together with the washer (48) should be discarded and replaced with the new spring (61).

7. ASSEMBLY INSTRUCTIONS

- (1) Hold the axle vertically, clamped by its right hand end (i.e. with circlip groove uppermost). Fit the axle key (49) in the slot such that the threaded hole runs parallel to the slot.
- (2) Fit the primary sun pinion (51), ensuring that it engages with the axle dogs.
- (3) Fit the secondary sun pinion (50), with the spring recess uppermost.
- (4) Fit the pinion return spring (61) and locate the dog ring (46) on the axle flats.
- (5) Take a new circlip. Locate it in the circlip groove, such that the flat is uppermost. Take care not to overstress the circlip.

N.B. Ensure that the circlip is fitted in the groove adjacent to the dog ring flats, and not in the undercut behind the axle threads.