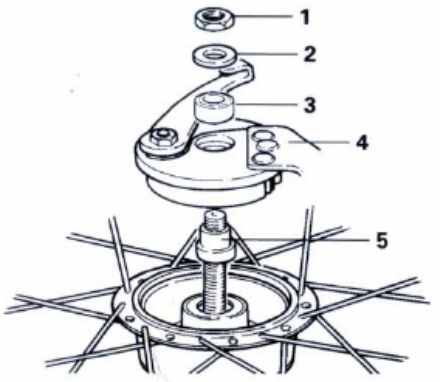
Bearings Replacement – X-FD/ XL-FD/ X-RD/ X-SD/ XL-SD Brake Hubs

Part 1 DISASSEMBLY

1. Remove the axle nuts and washers from both ends of the axle. Clamp R.H. end of axle in vice.
2. Remove L.H. locknut (1), washer (2), spacer (3), brake plate (4) and bush (5).



3. Clamp L.H. end of axle in vice and remove R.H. locknut and spacers (you may also have to remove the freewheel screwed on X-RD).

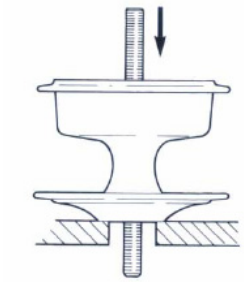
Part 2 AXLE & BEARING REMOVAL

XL-FD, X-FD, X-RD, X-RDC

The bearings in the hub brakes have precision deep groove ball races which are permanently sealed and lubricated. Under normal operating conditions they should fast for the life of the hub. If the axle or bearings require replacement for any reason an axle replacement unit is available. Ideally a bench press should be used for this operation.

1. Using a suitable drift, drive the axle and R.H. bearing out of the hub shell. When applying pressure to the L.H. axle end ensure that the hub shell is supported by the R.H. bearing housing and not by the flange.

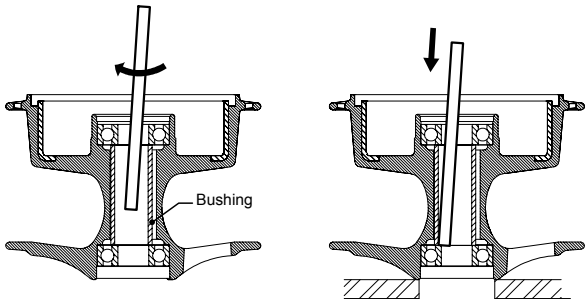
NB. Take careful note of the 'left-right' orientation of the axle since the replacement axle must be fitted in the hub the same way around.



2. With the axle removed, invert the hub shell and drive out the L.H. bearing using an 11-12mm drift (or old axle).

XL-SD, X-SD

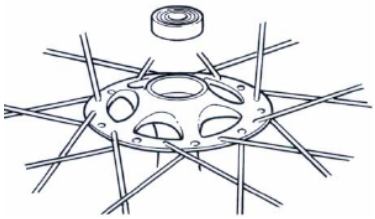
1. Using a suitable rod or screw driver, push the bushing in the hub shell away from the center.
2. Put the rod/screw driver against the bearing in the flange side (opposite to the drum brake side) and apply pressure to push the bearing out. When applying pressure to the rod/screw driver ensure that the hub shell is supported by the bearing housing and not by the flange.
3. With the bearing and bushing removed, invert the hub shell and drive out the other side bearing using a 14-16mm drift.



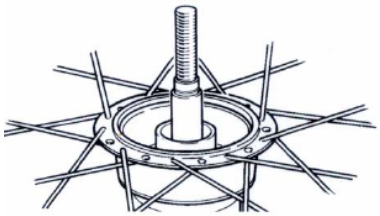
Part 3 BEARING & AXLE REPLACEMENT

XL-FD, X-FD, X-RD

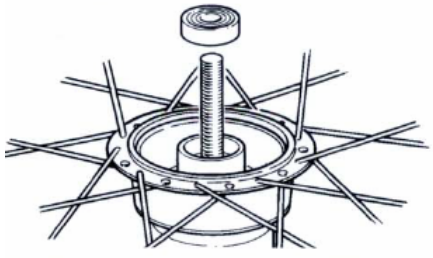
1. Thoroughly clean the bearing unit housings and brake drum with a clean, dry cloth.
2. Using a suitable cylindrical punch, (or in the absence of a suitable punch use the old bearing unit) press a new bearing unit into right hand bearing housing. Pressure should he exerted across the full face of the unit.



3. Having noted the correct orientation of the axle, insert it in place from the left hand side of the hub until the axle's 'shoulder' butts up against the bearing unit.



4. Slide the left hand bearing unit into place and press home using a suitable punch exerting pressure across the full face of the bearing unit whilst supporting the right hand bearing across the full face.



XL-SD, X-SD

See part 3, but

step3: insert the bushing instead, axle is not necessary at this stage.

step4: insert the axle for guide and then slide the bearing into place and press home.

NB. Do not attempt to refit used bearings once they have been removed from the hub.