Traction Front Suspension Tools

CCOCA Spare Parts Officer, Peter Boyle is as you might expect, a "man of many parts", and he demonstrated his knowledge and versatility once again at the April CCOCA General Meeting.

Peter gave a rather impromptu talk on the subject of: Special Tools for the Traction Front Suspension. We were fortunate to also have present Gerald Propsting, well-known for his meticulous work in restoring and maintaining Tractions, and the approaches and comments of these two experienced and knowledgable experts made for an entertaining and valuable evening. New member, Graham Barton, also provided valuable input to the evening.

For those not 100 percent familiar with the topic, the illustrations herewith (adapted from Front Drive 10 (1) May/June 1986) will help to make matters clear.

The special tools which Peter demonstrated have been made up for CCOCA by marine engineer, Dennis Walton, and incorporate improvements from the original factory designs, based on experience and refinement. As such, they may differ in detail appearance from the tools illustrated.

The individual tools shown were: hub remover; inner locking ring remover; lower suspension ball pin extractor; and upper suspension ball pin extractor (the latter is not illustrated, but consists of a shallow threaded body which carries a threaded extractor bolt and which screws into the ball-joint eye in the upper suspension arm). An adaptor is being developed for the hub remover so that it can function as an outer bearing remover as well. This full kit of tools is available from CCOCA Spare Parts for an all-up price of $250 approx., but individual tools can be ordered separately.

Also displayed for examination during the evening was an example of the "modernised" version of the Traction driveshaft (Outer) assembly (item 19 in the illustration), manufactured as a new item by Peacock Engineering in the UK. This particular shaft is one of a pair brought in by Graham Barton, by the simple expedient of phoning John Gillard at "The Arches" in London and quoting his credit card number. Delivery by air was completed in a fortnight from ordering at an all-up price of about $A 1050 for the pair.

Gerry Propsting notes that standard CV crosses at $250 each, and hence it is really more economic to replace with the modern shafts

The Peacock shafts are of all-new materials and incorporate the rubber-boot sealed Rzeppa (6 ball) constant velocity joint from the front axle of the Range Rover, and are a direct bolt-up replacement for the Traction outer driveshaft assembly (item 19 in the illustration). It was commented that wear in the cardan sliding splines may largely occur in the outer (male or shaft) section, since replacing the shaft section (eg. with Peacock outer shaft) seems to remove any play.

For people with concerns about the state of the cardan joint assembly (item 21 in the illustration), it should be noted that an alternative complete shaft replacement is available in the UK (ie. equivalent to items 19 and 21 together). This also incorporates the Range Rover joint (very long life), but its modern cardan joint is not interchangeable with the original Traction item. I think these complete shafts are being produced by Roger Williams.

Gerald Propsting notes that standard CV crosses (as at 20 in illustration) are now selling at $A 250 each (four per pair of shafts), and hence it is really more economic to replace with the modern shafts when they can be landed here for just over $1000 per pair.

Overall, a very successful technical evening.

Bill Graham.

Technical Notes..and so on

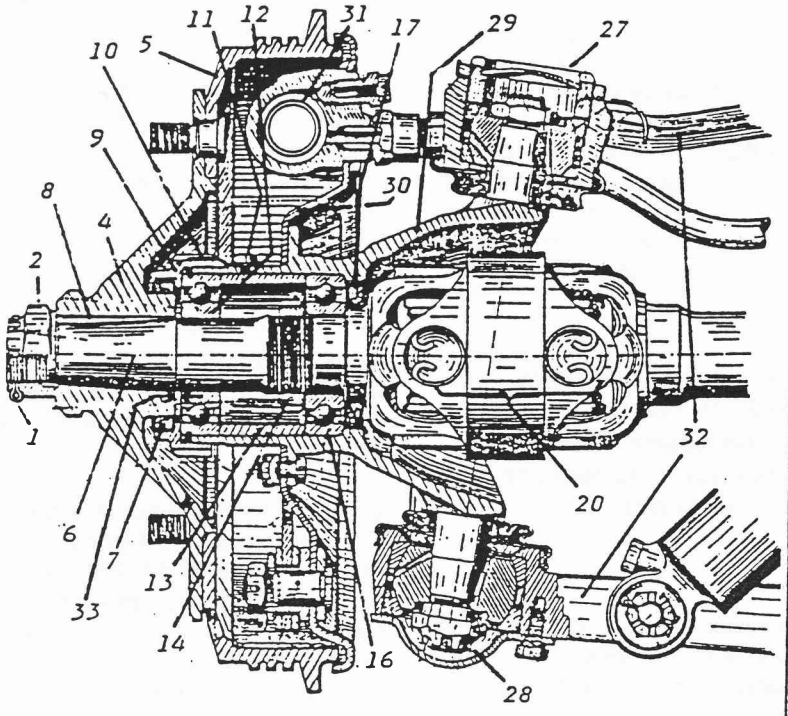
Elsewhere we have observed on the positive clamouring from members of CCOCA for more technical info in the pages of FRONT DRIVE. Custodian of archival material (and now President), Leigh Miles, reports that one of the most frequently requested reprints is of the Austin 1800 driveshaft conversion for Tractions, published some years back as a contribution from Warren Seidel.

While by no means wanting to deter the contribution and publishing of completely new material, we recognise that members may have variously failed to retain previously published notes which they now want, or may be so "new to the game" that they have not seen some of the valuable tech info residing in back issues of Front Drive. In response to reader needs and requests, we have therefore decided to publish from time to time, a selection of technical notes from earlier Front Drives.

To kick off this project, we will be approaching Warren to give us his comments on how the conversion has performed over the several years of day-to-day use that it has had, and we will incorporate these comments and republish the 1800 driveshaft article, hopefully in the next issue of FRONT DRIVE. However, people contemplating such a conversion should note the availability of completely new "bolt-on" Traction shafts, using the Range Rover constant velocity joint as described elsewhere in this issue.

Ed.

Traction Front Suspension Tools

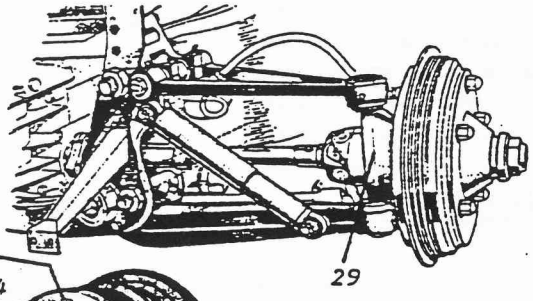


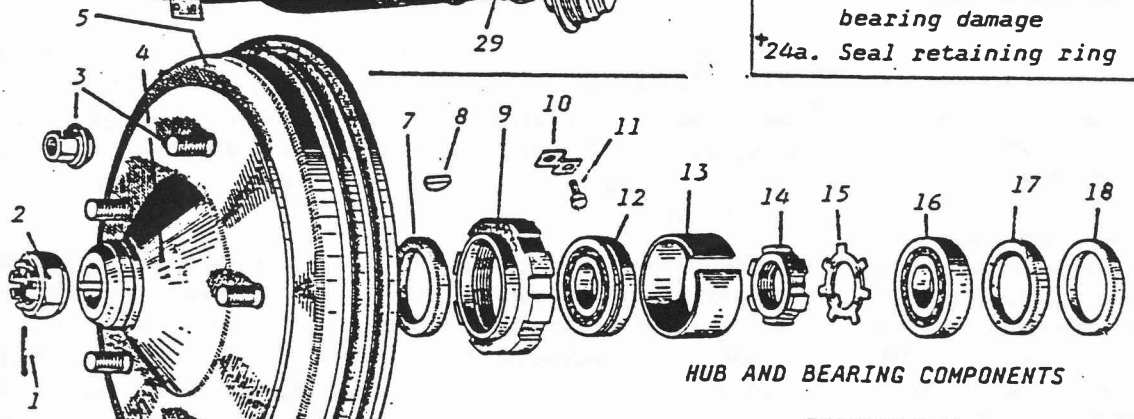
VERTICAL SECTION THROUGH R.H. FRONT HUB

1. Split pin
2. Hub nut 25 mm (38 mm across flats)
3. Wheel nut and stud
4. Hub } assembly
5. Brake drum }
6. Stub axle (L&R)
7. Outer oil seal
8. Woodruff key
9. Outer locking ring
10. Locking tab
11. Locking screw
12. Outer bearing 32x72x17/19
13. Spacer to suit (36 or 34)
14. Inner locking ring
15. Locking tab washer
16. Inner bearing 35x72x17
17. Inner oil seal
18. Seal adapter-ring (pre-1938)
19. Driveshaft (outer) assembly
20. Outer (constant velocity) joint
21. Inner (cardan) joint
22. Grease nipples
23. Felt seal
24. Split seal retaining ring (fit both sides of felt)
25. Drive flange bolt
26. Grease retaining welsh plug
27. Upper suspension ball joint
28. Lower suspension ball joint
29. Swivel housing/hub carrier
30. Brake backing plate
31. Brake wheel cylinder
32. Suspension arms
33. Essential clearance to avoid bearing damage

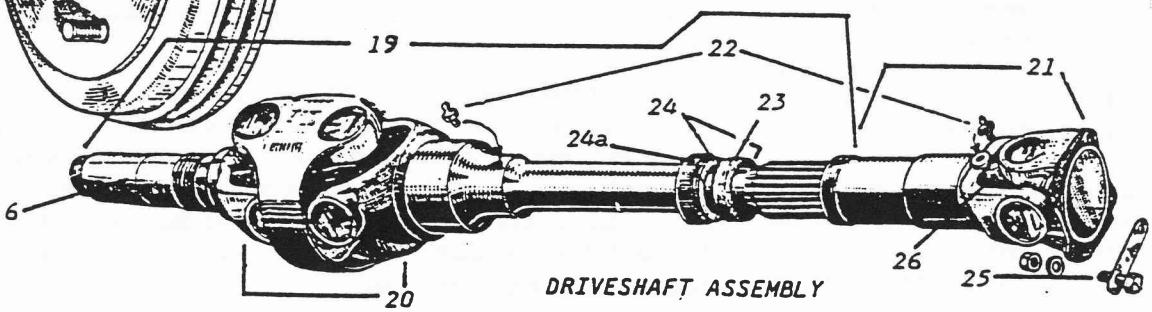
†24a. Seal retaining ring

LEFT-HAND FRONT SUSPENSION AND DRIVE





HUB AND BEARING COMPONENTS

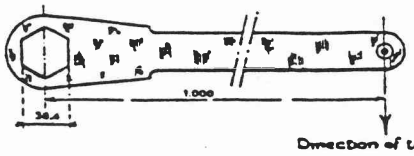


DRIVESHAFT ASSEMBLY

Traction Front Suspension Tools

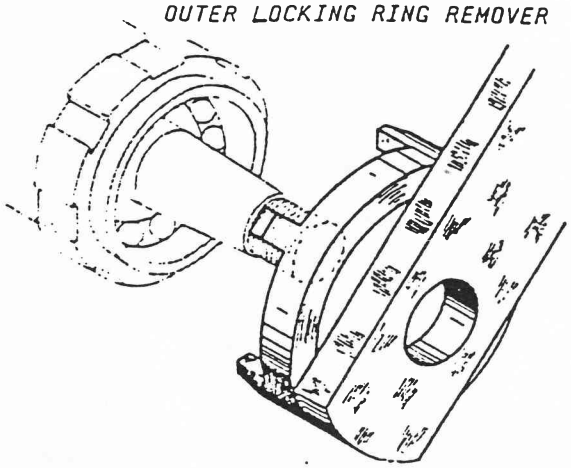
SPANNER (1810.T)

THIS SPANNER IS USED WITH TORSION WRENCH 2472.T.

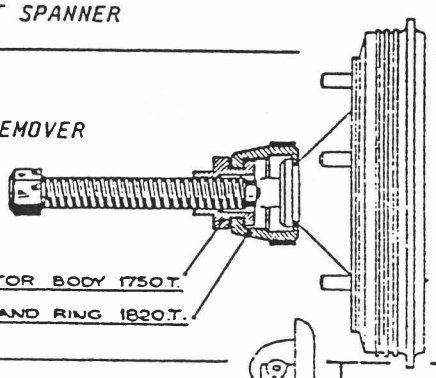


HUB NUT SPANNER

OUTER LOCKING RING REMOVER



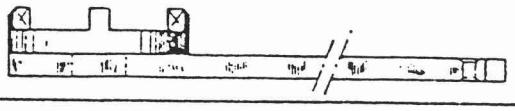
HUB REMOVER



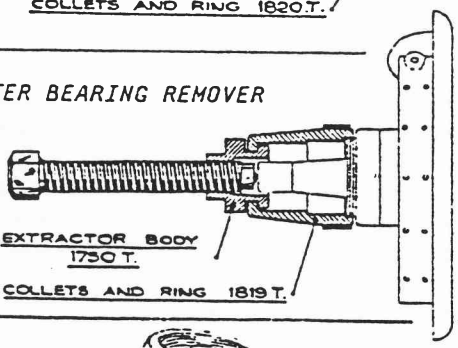
EXTRACTOR BODY 1750.T.

COLLETS AND RING 1820.T.

SPANNER 1825.T.



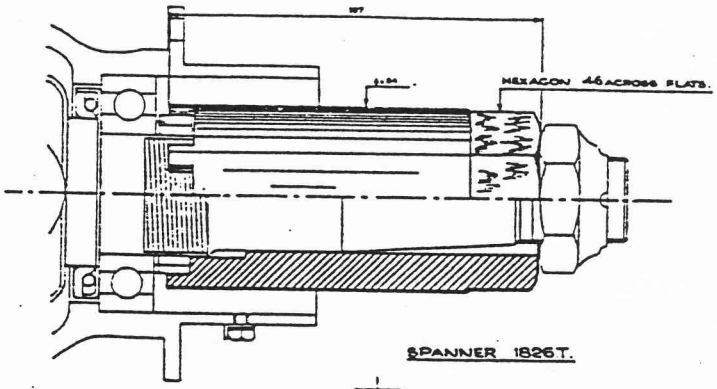
OUTER BEARING REMOVER



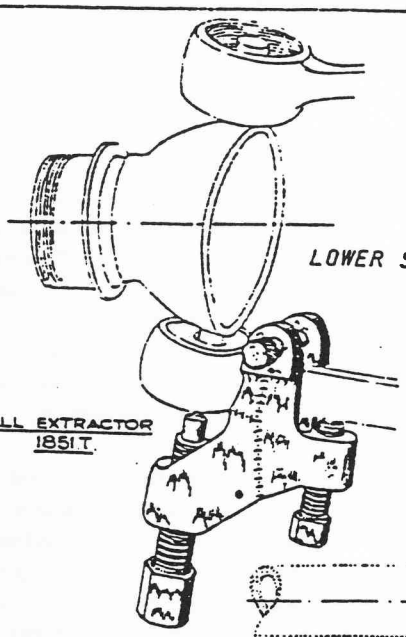
EXTRACTOR BODY 1750.T.

COLLETS AND RING 1819.T.

INNER LOCKING RING REMOVER



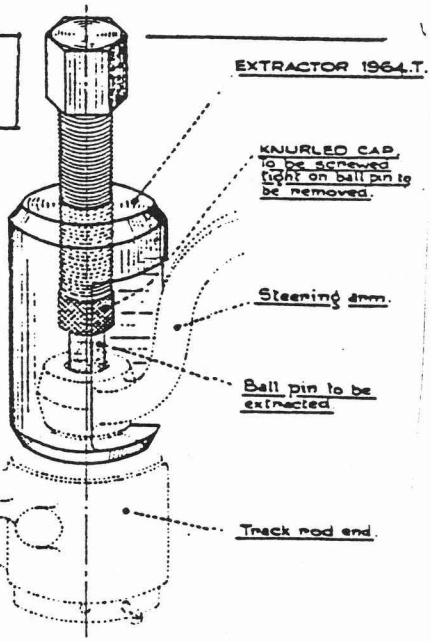
SPANNER 1826.T.



LOWER SUSPENSION BALL PIN EXTRACTOR

BALL EXTRACTOR 1851.T.

STEERING BALL PIN EXTRACTOR



IMPORTANT: DO NOT OMIT TO SCREW KNURLED CAP ON BALL PIN THREAD BEFORE PLACING EXTRACTOR. THIS IS TO AVOID DAMAGE TO THREADED END THROUGH PRESSURE OF EXTRACTOR STUD.