# AP 104F-1031-13

(Formerly AP 104F-1031-1
and AP 4515C, Vol. 3,
Part 1, Sect. 2, Chap. 48)

26/8/88 2

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# MAIN WHEELS
# DUNLOP PART No. AH 51338
# AND AH 50701

## GENERAL AND TECHNICAL INFORMATION (-1)

## PARTS CATALOGUE AND RELATED INFORMATION (-3)

BY COMMAND OF THE DEFENCE COUNCIL

Ministry of Defence

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Service users should send their comments through
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# MAIN WHEELS

## DUNLOP PART NO. AH51338 AND AH50701

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| AP 119A-0601-1C | Aircraft Painting, Pre-Treatment of Metal Surfaces |
| AP 2337, Vol.6 | Aircraft Wheels, Tyres and Brakes, Repair and Reconditioning Instructions |
| AP 104H-1003-1 | Fitting and Removal of Tyres (Tyre and Tube Combinations) |

## LEADING PARTICULARS

| | |
|---|---|
| Hub material | Magnesium alloy |
| Tyre size (in.) | 29 x 6·25-16 |
| Weight of wheel (with tube base support) | |
| AH51338 | 55·75 lb. |
| AH50701 | 56·5 lb. |

This Air Publication includes all Dunlop modifications and amendments up to and including Amendment 33556.

DESCRIPTION (refer to fig.1)

1. The wheels described in this publication are similar and differ slightly in respect of hub design. Both wheels are of the loose flange type and are designed for use with a tyre and tube combination. A steel sleeve, bolted to the hub is splined to accommodate the inner tenons of a brake plate. The outer periphery of the wheel brake housing is lined by a series of interlocked shrouds to prevent excessive heat reaching the tyre when the aircraft brakes are applied.

2. A tube base support consisting of a moulded rubber strip is located around the tyre seat to provide a continuous support for the base of the inner tube. This safeguard prevents blistering at the base of the tube.

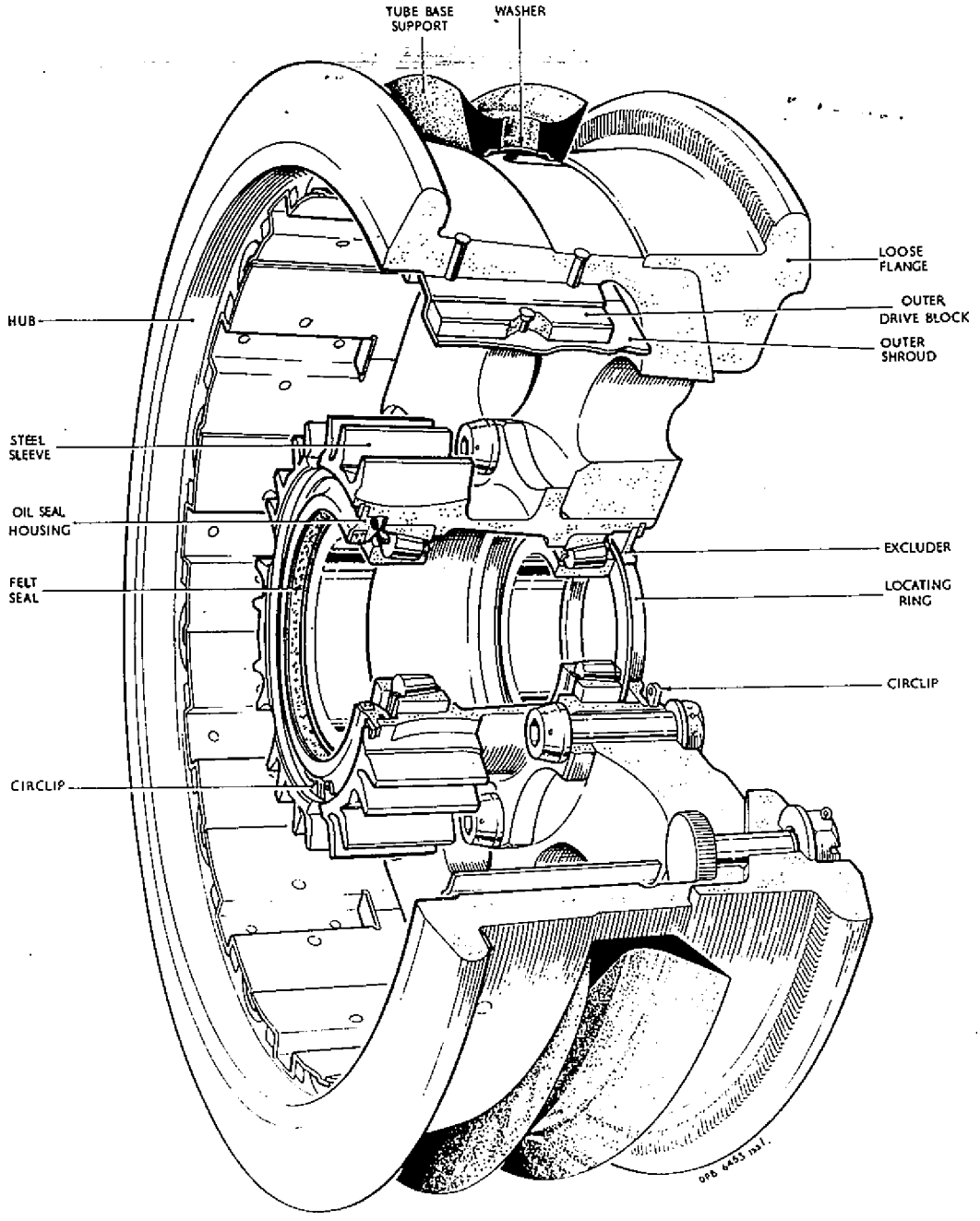


Fig.1 Sectional view of wheel AH51338

## SERVICING

### SPECIAL TOOLS

3. The following special tools are required.

#### Bearing pressing tools

| | |
|---|---|
| AQ42700<br>(Ref. No. 27A/3306) | Mandrel and base assembly |
| A0101017<br>(Ref. No. 27A/4328) | Sleeve |
| A055535<br>(Ref. No. 27A/4329) | Sleeve |
| A0100844<br>(Ref. No. 27A/4289) | Collar |

#### Bearing pressing out tools

| | |
|---|---|
| AM10254<br>(Ref. No. 27A/3335) | Pressing out mandrel |
| AM20159<br>(Ref. No. 27A/4326) | Bearing extractor (for large bearing) |
| A0102359<br>(Ref. No. 27A/4327) | Bearing extractor (for small bearing) |

#### Other tools

| | |
|---|---|
| A10054 | Wheel extractor |
| AM10969<br>(Ref. No. 27A/3311) | Bearing aligment mandrel and locating ring gap gauge |
| AM11293<br>(Ref. No. 27A/3285) | Circlip pliers |
| DSR3728/2<br>Nor-bar SL2 | Torque spanner ½ in. square drive |
| EB920<br>Britool | Torque spanner adapter (to torque load flange bolts to 55 lbf.ft., used with DSR3728/2) |
| Schrader<br>4400 | Screw on deflator |
| A0106115<br>(Ref. No. 27A/4462) | Torque spanner (to torque load valve core to 30/34 ozf. in.) |
| A10444<br>(Ref. No. 4G/6269) | Tyre removal machine |
| AM20753 | Tyre removal rings, 2 off (use with A10444) |

DISMANTLING

Removing the tyre

4. Check the tyre for creep before deflation, this instruction applies at tyre change and overhaul periods.

5. It is recommended that during dismantling the wheel be placed on a rubber or felt mat to protect it from damage.

WARNING...

(1) BEFORE DISMANTLING A WHEEL, ENSURE THAT THE TYRE IS FULLY DEFLATED AND THAT THE VALVE CORE IS REMOVED. FAILURE TO OBSERVE THESE PRECAUTIONS MAY RESULT IN INJURY TO THE OPERATOR.

(2) DURING DEFLATION, TEMPORARY BLOCKAGE OF THE VALVE DUE TO ICE FORMATION MAY OCCUR SEVERAL TIMES BEFORE DEFLATION IS COMPLETE. IT IS THEREFORE IMPORTANT TO ALLOW SUFFICIENT TIME TO ELAPSE TO ENSURE FULL DEFLATION (DO NOT PROBE) BEFORE REMOVING THE VALVE CORE AND ▶ COMMENCING DISMANTLING. ◀

6. Remove the cap from the inflation valve. Fit the special deflator to the inflation valve to fully deflate the tyre. Unscrew and remove the valve core

7. Free the beads of the tyre from adhesion to the bead seats of the wheel using the tyre removal machine and the tyre removal rings (refer to AP 119F-3203-1).

Note...

Sharp tools or tyre levers must not be used to unseat the beads of tyres.

8. Remove the tyre as follows:-

(1) Place the wheel, loose flange uppermost, on a suitable mat.

(2) Remove and discard the split pins from the nuts on the loose flange bolts. Remove the nuts and washers and withdraw the loose flange from the wheel.

(3) Remove the tyre and tube and base support. Seperate the tube from the tyre.

Dismantling the wheel

9. Dismantle the wheel as follows:-

(1) Using the special circlip pliers, remove the circlips from each side of the hub.

(2) Remove the oil seal housing complete with the felt seal and the sealing ring from the brake side of the hub.

(3) Remove the excluder and the locating ring from the loose flange side of the hub.



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(4) Using the special tools, extract the bearing inner races from the outer races.

Note...

Each inner and outer race should be retained as a mated pair until the inner or outer race is renewed.

CLEANING

10. Clean all metallic components using trichloroethane. Ensure that the tyre bead seat areas are entirely free from grease, oil or any other foreign matter.

▶ CAUTION...

Hubs which have been repaired in accordance with Repair Scheme RP.710 (Repair to Worn or Oversize Maxaret Track), i.e., hubs with 'RP.710' vibro-etched adjacent to the part numbers, must not be cleaned with a chlorinated hydrocarbon solution, e.g. trichloroethane (Inhibisol). These agents will attack the adhesive bond of the repair. Titanine brush wash thinners or equivalent cellulose based thinners cleaning agent may be used to clean the filled Maxaret track if applied sparingly by hand and wiped dry.◀

11. Clean the roller bearing components using trichloroethane or any solvent recommended by the bearing manufacturer.

CAUTION...

Bearings will corrode rapidly if left ungreased; ensure that cleaning, examination and regreasing are completed within one hour.

EXAMINATION

12. The following comprehensive procedure for wheel components is based on complete overhaul. Interim servicing operations involving partial dismantling may necessitate the compilation of modified schedules which omit irrelevant examination.

(1) Examine the hub and flange for damage and corrosion particularly in the vicinity of the flanges and tyre bead seats. Excessive damage in these areas will render the wheel unserviceable. Repairable damage therefore, is limited to superficial cuts and abrasions. Carefully dress out superficial cuts and abrasions and slight surface corrosion with a smooth file and emery cloth blending the sharp edges to maintain the essential curvature (where applicable) as far as possible. The maximum permitted depth of dressing is 0·020 in. After dressing, restore the protective treatment in accordance with AP 119A-0601-1C Chap.5.

(2) Carefully examine the hub and loose flange for cracks. Cracks are not permitted. An examination for cracks must be made particularly on wheels which have been repaired in accordance with RP214. Such wheels may be identified by the code RP214 stamped in close proximity to the wheel part number. RP214 carried out on earlier wheels only has since been cancelled. This scheme renews the Maxaret track on wheels which have been damaged. Instances have occurred of cracks appearing in the inner radius at the junction of the fixed flange and the main hub body.

(3) Check for cracking in the area shown in fig.2, using the ultrasonic and /or eddy current method of crack detection.

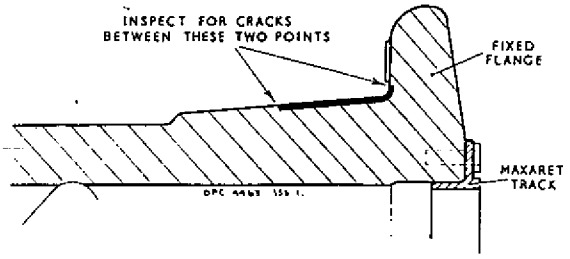


Fig.2 Crack examination area

(4) Examine the steel sleeve for security and corrosion. Check the steel sleeve securing bolts for looseness; if any bolt is found to be loose proceed as detailed in para.14, Repairs.

(5) Check that the heads of the steel sleeve retaining bolts and nuts are lockwired together in pairs (refer to fig.3). The pairs of nuts which should be wired together are those on the pairs of bolts with their heads wired together.

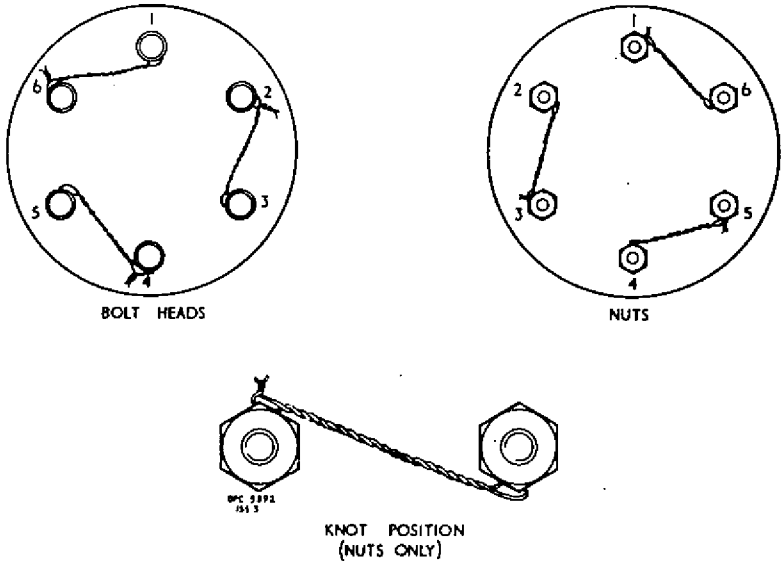


Fig.3 Lockwiring of sleeve bolt heads and nuts

CAUTION...

If this lockwiring is not correct, one failed wire will allow the remaining wires to slacken. The lockwire must be knotted in a position similar to that shown.

(6) Check the shrouds and drive blocks for insecurity, damage and corrosion. Examine the shrouds for wear in the brake plate location channels. The width of the channel must not exceed 0·890 in.

(7) Check that the threads of the nuts and bolts are in good condition.

(8) Check the circlips for distortion and loss of resilience.

(9) Examine the oil seal housing for damage; renew a defective housing. Renew the felt seal at each overhaul.

(10) Examine the sealing ring for deformation, permanent set, ageing and general damage.

(11) Examine the excluder for damage and corrosion. An excluder must be renewed if there is excessive wear in the bore, this will be indicated by partial or complete effacement of the oil groove.

(12) Examine the taper roller bearings for tempering discoloration. This condition is frequently present and is not detrimental providing that the colour is yellow, brown or purple but not blue and there is no discoloration on the ends of the rollers. If an inner or outer race shows tempering discoloration beyond these limits the complete bearing assembly must be renewed. It is recommended that a discoloured bearing be dismantled and a hardness test applied to the rollers. The minimum hardness for serviceable rollers is Rockwell 58C. As a result of this test the bearing will be unserviceable but it should be retained for purposes of comparison.

(13) Examine the inner and outer races and the rollers for corrosion, flaking, scuffing, brinelling or indentations. Cages must be free from damage, distortion and undue wear in the roller pockets. If such damage is present the relative inner or outer race must be renewed (inner and outer races must be of the same manufacture).

(14) Examine the bearings for evidence of fouling. This will be in the form of high spots on the cage denoted by a relatively highly polished area, general distortion of the cage or in an extreme case, distortion or mutilation of the cage bars in the direction of rotation. Where evidence of fouling exists the complete bearing assembly must be renewed.

(15) Check the wheel for radial distortion by fitting a suitable mandrel and setting up between centres or alternatively by mounting the hub in a lathe. If the latter method is employed the setting must be such that the bearing housing is concentric within 0·002 in. dial indicator reading. Apply an indicator to the tyre bead seat of the wheel and make a radial check throughout 360 deg. If the radial check is in excess of ± 0·030 in. the wheel must be rejected.

(16) Examine the tube base support for surface splits and mould blemishes. A tube base support is unserviceable if it has:-

(a) Surface splits deeper than $^{1}/_{32}$ in. (0·8 mm).

(b) Mould blemishes exceeding $^{1}/_{2}$ in. in length and $^{1}/_{16}$ (1·6 mm) in depth.

◀ (17) Examine the tube base support for fretting particularly in the vicinity of the valve stem hole. Excessive fretting will render the tube base support unserviceable. Early issue tube base supports have radial vent lines on the sides and base to prevent air being trapped between the tube and early issue tyres where the awl venting did not completely penetrate the casing and treads. Later issue tube base supports do not have radial vent lines since the tyre awl venting now completely penetrates the casing and treads. ▶

(18) Examine the tyre and tube for wear and damage. Refer to AP 2337, Vol.6, Sect.2, Chap.1.

REPAIRS

Removal and renewal of bearing outer races

13. Inner and outer races of different manufacture must not be mixed in one bearing assembly.

(1) Using the special tools press out the old outer race.

(2) Check that the bearing housing diameter at the brake side of the wheel does not exceed 4·562 in. and at the loose flange side of the wheel 4·2495 in. If either diameter exceeds the limit the hub must be withdrawn from service.

(3) Coat the bearing liner bore with jointing compound Ref. No.33H/2202110.

(4) Degrease the outer race and freeze it to minus 60 deg.C. by immersion in a solid carbon dioxide trichloroethylene bath.

(5) Ensure that the outer race is as dry as possible then position it in the bearing housing within two minutes of removal. Use a light press to ensure final location.

(6) After the assembly has regained normal room temperature ensure that a 0·0015 in. feeler gauge will not enter between the back face of the outer race and the abutment face of the liner.

Note...

The repair is not complete until the bearing alignment and the distance over the bearings has been checked as detailed in assembling.

Renewal of steel sleeve retaining bolts

14. Renew the steel sleeve retaining bolts as follows:-

(1) Unlock and remove the complete set of steel sleeve retaining bolts. Discard the bolts and nuts, retain the washers.

(2) Ensure that a 0·0015 in. feeler gauge cannot be inserted between the sleeve shoulder and the hub abutment face. If a gap exists the wheel must be returned to 4th Line for possible repair. If the check is satisfactory proceed as detailed in sub-para.(c).



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(c) Coat the heads and shanks of a new set of bolts with pigmented varnish jointing compound and fit the bolts in the sleeve and hub. Coat the hub mating face of the washers with jointing compound and fit them on the bolts. Grease the bolt threads and the mating face of the nuts with grease XG-277, fit and tighten the nuts to a torque load of 35 lbf.ft. (greased).

## ASSEMBLING

### Lubricants and compounds

15. The following lubricants and compounds are required:-

| | |
|---|---|
| XG-277<br>Ref. No. 34B/9100514 | Bearings, threads of bolts and bottom of nuts |
| Jointing Compound<br>Ref. No. 33H/2202110 | Bolt shanks, underside of bolt heads, and washers |
| Titanine LR.4871<br>Ref. No. 34B/1481 | Loose flange and hub mating faces |

### Assembly procedure

16. Assemble the wheel as follows:-

(1) Pack the bearings with the relevant grease.

(2) Fit the mating inner race complete with bearing to the outer race at the loose flange side of the wheel. Position the locating ring and the excluder plate and secure with the retaining circlip. To ensure that the circlip fully engages the groove use a light alloy drift to tap the exposed upper face and the end of each leg.

(3) Fit the mating inner race complete with bearing to the outer race at the brake side of the wheel.

(4) Accommodate the sealing ring and the felt seal in the oil seal housing and position the assembly in the hub, fit the retaining circlip.

(5) Check the bearing alignment and the overall length from the edge of the locating ring to the outer face of the bearing at the brake side of the wheel with the alignment mandrel and gap gauge. The measured length must be within the limits 4·5/4·48in. In service a minimum dimension of 0·020in. below that quoted may be accepted after bedding-in.

(6) If the loose flange retaining bolts have been removed proceed as follows:-

(a) Ensure that the head of each bolt, the shank and both sides of each washer is free of old jointing compound.

(b) Smear the underside of the bolt head and the shank with jointing compound. Ensure that the bolt threads do not become contaminated with jointing compound.

(c) Position the bolts in the wheel so that the bolt heads are on the brake side.

(7) Assemble the tube and the tube base support to the tyre and position the assembly on the wheel (refer to AP 104H-1001-1, para.36). Screw in the valve core and tighten to a torque load of 30/34 ozf.in.

(8) Smear the mating faces of the hub and loose flange with the specified lubricant. Position the loose flange over the bolts. Lubricate both faces of the washers and the bolt threads with the specified grease. Fit the washers and nuts, tighten the nuts in diametrically opposed sequence to a torque load of 50/60 lbf.ft. (greased) ensuring that the split pin holes are aligned.

Note...

When renewing a loose flange, record the new component serial number and the date of mating with the wheel in the appropriate servicing record.

(9) Fit new split pins and lock each nut by bending each leg of the split pin around the nut. Do not bend a leg of the split pin over the end of the bolt.

(10) Inflate the tyre and tube assembly (refer to AP 104H-1003-1, para.30). Fit the valve cap and check with a straight edge that the cap lies within the confines of the wheel.

(11) Test the assembled wheel as detailed in para.17.

TESTING

17. After all servicing operations which involve tyre deflation, the tyre must be tested as detailed in AP 104H-1003-1, para.31.

# PARTS CATALOGUE AND RELATED INFORMATION (-3)

## MODIFICATION RECORD

| Mod. No. | AL No. | Mod. No. | AL No. | Mod. No. | AL No. | Mod. No. | AL No. | Mod. No. | AL No. | Mod. No. | AL No. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2544 | * | | | | | | | | | | |
| 3247 | * | | | | | | | | | | |
| 3300 | * | | | | | | | | | | |
| M.10395 (0) Amdt. | * | | | | | | | | | | |
| 34067 | * | | | | | | | | | | |
| 34375 Amdt | * | | | | | | | | | | |
| 35983 Amdt | 9 | | | | | | | | | | |
| ▶ 37650 | 10 | ◀ | | | | | | | | | |

* Incorporated in initial issue of catalogue
NA Mod. not applicable to this catalogue
C Mod. cancelled
AS Amendment Sheet

PREFACE

Demands

1 Requirements for demands are:

1.1 The demand must quote the appropriate Vocabulary Section and Reference/Stock Number for each item. Unreferenced parts are not normally provisioned as spares and demands for such items must quote the Vocabulary Section, Maker's Part Number, and the name and type of the equipment. The location of each part within the equipment should be clearly indicated.

1.2 Demands are to be prepared in accordance with the procedure laid down in AP 830 Volume 1 or BR4.

Local manufacture

2 Parts annotated 'LM' are to be manufactured from local resources. If the manufacture of such items is beyond the capacity of the Unit, the demand is to be endorsed 'Unable to manufacture locally'.

Major repair

3 'MR' indicates that an item is required for major repair purposes only and will not normally be held in store by Units other than those authorised to undertake major repair of the equipment.

Units per assembly

4 The number quoted is the quantity required per next higher assembly in the position shown except 'attaching parts' which quote the quantity required to attach one item. The letters 'AR' in the 'Units per Assy' column indicate that the quantity is 'as required'. Where applicable the quantity normally fitted is shown as a nominal figure, e.g. (Nom 3). Where an item is listed only for reference purposes the letters 'RF' are quoted.

Classification of equipment

5 The Class of Store is indicated by a single letter as laid down in AP 830 Volume 1 or BR4.

Condition of Supply (Interchangeability Code)

6 Condition of Supply is indicated by one of the following letters and is only quoted against parts which are not directly interchangeable:

V Open up holes on assembly
W Partially assembled
X Ream or machine on assembly
Y Drill or drill and tap on assembly
Z Trim on assembly

Obsolescent stock

7 An asterisk in the 'Part No.' column indicates that no further purchases of the item will be made but the part is to be used until stocks are exhausted.

Modifications

8 When items are affected by a modification the 'Mod No.' is quoted in the Nomenclature. Modifications incorporated in the catalogue are listed in the Modification Record.

Usage code

9 The usage code indicates the applicability of an assembly item to other assemblies. Where no code is detailed against an item, that item is applicable to all the main assemblies. The code used in this publication is:-

A - Main undercarriage wheel assembly, Dunlop Part No. AH 50701.

B - Main undercarriage wheel assembly, Dunlop Part No. AH 51338.

INDEX OF NATO STOCK NUMBERS

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| | | DSR 234-9 | | 1/1 | | C |
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| 27A | 1620-99-149-5093 | AHM 2248 | | 1/9 | | C |
| ▶ 27A | 3110-99-198-3674 | DSR4629-1024 | | 1/15 | | C ◀ |
| 28N | 5340-99-200-1704 | AGS 2030-66 | | 1/12 | | C |
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| | | DSR 358-7 | | 1/2 | | C |
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| 27A | 1630-99-456-0512 | AHO 36392 | | 1/18 | | C |
| 27A | 3120-99-456-0513 | DAS 2062-46 | | 1/15 | | C |
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| 27A | 5310-99-456-0542 | AHO 36038 | | 1/24 | | C |
| 27A | 5315-99-456-0583 | AHO 27647 | | 1/10 | | C |
| 27A | 5330-99-456-0618 | AHO 36478 | | 1/19 | | C |
| 27A | 5310-99-456-0621 | AHO 39406 | | 1/23 | | C |
| 27A | 1630-99-456-0642 | AHO 27994 | | 1/11 | | C |
| 27A | 5120-99-456-0668 | AM 20159 | | 1/29 | | L |
| 27G | 5120-99-456-0669 | AO 102359 | | 1/30 | | C |
| 27A | 5120-99-456-0670 | AO 101017 | | 1/34 | | C |
| 27A | 5120-99-456-0671 | AO 55535 | | 1/35 | | C |
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| 27A | 3120-99-456-0929 | DAS 2062-166 | | 1/20 | | C |
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| | | SP81-415 | | 1/7 | | C |
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| DAS 2062-56 | 28A | 3120-99-456-0514 | | 1/20 |
| DAS 2062-156 | 27G | 3110-99-770-3207 | | 1/15 |
| DAS 2062-166 | 27A | 3120-99-456-0929 | | 1/20 |
| DSR 234-9 | 28P | 5315-99-120-2577 | | 1/1 |
| DSR 358-7 | 28M | 5310-99-409-5918 | | 1/2 |

INDEX OF PART NUMBERS

| Part Number | Vocab Sect. | NATO Stock No., Ref. No. or LM | Chap. No. | Fig./ Index No. |
|---|---|---|---|---|
| DSR 4230-101 | | | | 1/12 |
| ▶ DSR 4629-1024 | 27A | 3110-99-198-3674 | | 1/15 |
| DSR 4629-1027 | 27A | 3110-99-967-9427 | | 1/20 ◀ |
| DSR 51651-1101 | | | | 1/12 |
| DSR 918-10 | 28Q | 5320-99-467-0429 | | 1/8 |
| DSR 918-13 | 28Q | 5320-99-467-0421 | | 1/7 |
| DTD 189A | 30A | 9505-99-943-7135 | | 1/22 |
| SP81-412 | 28Q | 5320-99-467-0429 | | 1/8 |
| SP81-415 | 28Q | 5320-99-467-0421 | | 1/7 |
| SP90-G11 | 28P | 5315-99-120-2577 | | 1/1 |
| ▶ 29585-4-024/29520-4-024 | 27G | 3110-99-770-3207 | | 1/15 ◀ |

DETAILED PARTS LIST

MAIN UNDERCARRIAGE WHEEL ASSSEMBLY

| Fig./ Index No. | Part Number | Nomenclature 1 2 3 4 5 6 | Usage Code | Units Per Assy |
|---|---|---|---|---|
| 1- | AH 50701 | Wheel, main undercarriage, (Dunlop Mod. 2544, Pre-Dunlop Mod. 3247) | A | |
| | AH51338 | Wheel, main undercarriage (Dunlop Mod. 3247) | B | 12 |
| -1 | SP90-G11 | . Pin, split (DSR 234-9) | | 12 |
| -2 | A27-PS | . Nut, slotted, 9/16 in BSF (DSR 358-7) | | 12 |
| -3 | AHO 27989 | . Washer | | 12 |
| -4 | AHO 27988 | . Bolt, hub | | 1 |
| -5 | AH 40456 | . Flange | | 1 |
| -6 | AEM 1815 | . Support, tube base | | 1 |
| -7 | SP81-415 | . Rivet (DSR 918-13) | | 12 |
| -8 | SP81-412 | . Rivet (DSR 918-10) | | 12 |
| -9 | AHM 2248 | . Shroud, outer drive block | | 12 |
| -10 | AHO 27647 | . Peg, outer drive block | | 24 |
| -11 | AHO 27994 | . Block, drive, outer | | 24 |
| -12 | AGS 2030-66 | . Circlip, internal, retaining excluder (Pre-Amdt. 34067) | A | 1 |
| | DSR 4230-101 | . Circlip, internal, retaining excluder (Amdt. 34067) (Pre-Amdt. 34375) | A | 1 |
| | DSR 51651-1101 | . Circlip, internal, retaining excluder (Amdt 34375) | | 1 |
| -13 | AHO 28057 | . Excluder | | 1 |
| -14 | AHO 28056 | . Ring, locating | | 1 |
| -15 | DAS 2062-46 | . Bearing, taper roller (Pre-Dunlop Amdt. 35983) | | 1 |
| | DAS 2062-156 | . Bearing taper roller (29585-4-024/ 29520-4-024) (Dunlop Amdt. 35983) (Pre-Amdt. 37650) | | 1 |
| ▶ | DSR 4629-1024 | . Bearing 29585 Code 629 29520 Code 629 (Amdt. 37650) | | 1 ◀ |
| -16 | AHO 27992 | . Circlip, internal, retaining oil seal housing (Pre-Mod. M.10395 (0)) | A | 1 |
| | AHO 86989 | . Circlip, internal, retaining oil seal housing (Mod.M. 10395 (0)) | A | 1 |
| | AHO 86989 | . Circlip, internal, retaining oil seal | B | 1 |
| -17 | AHO 36393 | . Seal, oil | | 1 |
| -18 | AHO 36392 | . Housing, oil seal | | 1 |
| -19 | AHO 36478 | . Ring sealing | | 1 |
| -20 | DAS 2062-56 | . Bearing, taper roller (Pre Dunlop Amdt 35983) | | 1 |

+ Item not illustrated

MAIN UNDERCARRIAGE WHEEL ASSSEMBLY

| Fig./ Index No. | Part Number | Nomeclature 1 2 3 4 5 6 . . . . . | Usage Code | Units Per Assy |
|---|---|---|---|---|
| | DAS 2062-166 | . Bearing, taper roller (Dunlop Amdt 35983) (Pre-Amdt 37650) | | 1 |
| | DSR 4629-1027 | . Bearing LM 114848 Code 629 LM 114811 Code 629 (Amdt 37650) | | 1 |
| -21 | AHM 4664 | . Hub and sleeve, assembly | A | 1 |
| | AHM 5086 | . Hub and sleeve, assembly | B | 1 |
| -22+ | DTD 189A | . . Wire, locking, 22 s.w.g. | | AR |
| -23* | AHO 38697 | . . Nut (Pre-Mod.3300) | A | 6 |
| | AHO 39406 | . . Nut (Mod.3300) | A | 6 |
| | AHO 38697 | . . Nut | B | 6 |
| -24* | AHO 36038 | . . Washer | | 6 |
| -25* | AHO 37861 | . . Bolt | A | 6 |
| | AHO 39314 | . . Bolt | B | 6 |
| | | TOOLS REQUIRED | | |
| -26+ | AO 106115 | Spanner, torque, valve cores | | 1 |
| -27+ | AM 11293 | Pliers, circlip | | 1 |
| -28+ | AM 10969 | Mandrel, bearing alignment and locating ring gap gauge | | 1 |
| -29+ | AM 20159 | Extractor (large) ) Pressing | | 1 |
| -30+ | AO 102359 | Extractor (small) ) out | | 1 |
| -31+ | AM 10254 | Mandrel ) bearings | | 1 |
| -32+ | AO 100844 | Collar | | 1 |
| -33+ | AO 42700 | Mandrel and base, assembly ) Pressing | | 1 |
| -34+ | AO 101017 | Sleeve ) in | | 1 |
| -35+ | AO 55535 | Sleeve ) bearings | | 1 |

+ Item not illustrated
* Item required in conjunction with repair scheme RP168



BDC 22551 8350571 AUG 93 2630

# DETAILED PARTS LIST

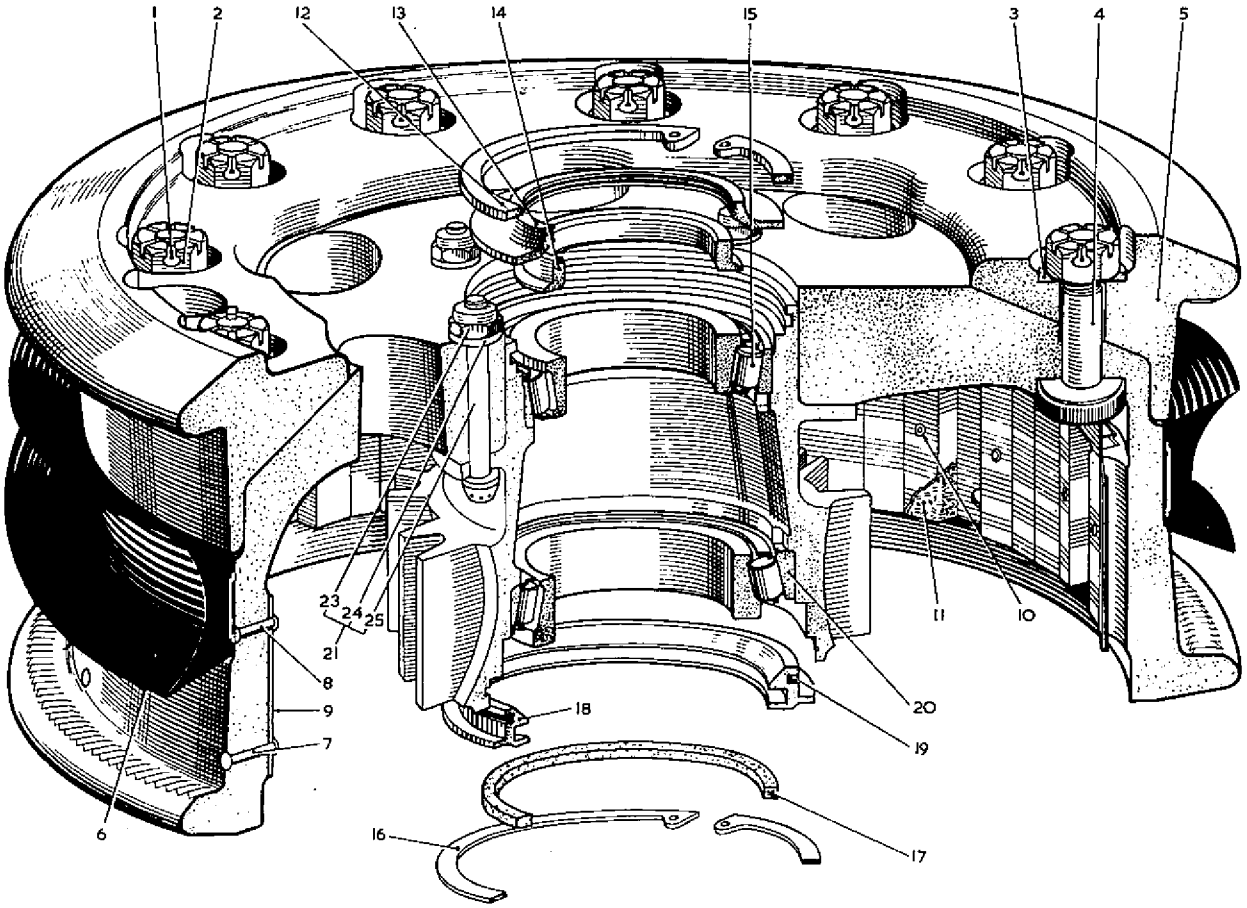


Fig. 1 Main undercarriage wheel assembly

## MAIN UNDERCARRIAGE WHEEL ASSEMBLY

| Fig./ Index No. | Part No. | Nomenclature 1 2 3 4 5 6 | Usage Code | Units per Assy. |
|---|---|---|---|---|
| 1- | AH 50701 | Wheel, main undercarriage, (Dunlop Mod. 2544, Pre-Dunlop Mod. 3247) | A | |
| | AH 51338 | Wheel, main undercarriage, (Dunlop Mod. 3247) | B | |
| -1 | SP90-G11 | . Pin, split (DSR 234-9) | | 12 |
| -2 | A27-PS | . Nut, slotted, 9/16 in BSF (DSR 358-7) | | 12 |
| -3 | AHO 27989 | . Washer | | 12 |
| -4 | AHO 27988 | . Bolt, hub | | 12 |
| -5 | AH 40456 | . Flange | | 1 |
| -6 | AEM 1815 | . Support, tube base | | 1 |
| -7 | SP81-415 | . Rivet (DSR 918-13) | | 12 |
| -8 | SP81-412 | . Rivet (DSR 918-10) | | 12 |
| -9 | AHM 2248 | . Shroud, outer drive block | | 12 |
| -10 | AHO 27647 | . Peg, outer drive block | | 24 |
| -11 | AHO 27994 | . Block, drive, outer | | 24 |
| -12 | AGS 2030-66 | . Circlip, internal, retaining excluder (Pre-Amdt. 34067) | A | 1 |
| | DSR 4230-101 | . Circlip, internal, retaining excluder (Amdt. 34067) (Pre-Amdt. 34375) | A | 1 |
| | DSR 51651-1101 | . Circlip, internal, retaining excluder (Amdt. 34375) | | 1 |
| -13 | AHO 28057 | . Excluder | | 1 |
| -14 | AHO 28056 | . Ring, locating | | 1 |
| ▶ -15 | DAS 2062-46 | . Bearing, taper roller (Pre-Dunlop Amdt 35983) | | 1 |
| | DAS 2062-156 | . Bearing taper roller (Dunlop Amdt 35983) | | 1 ◀ |
| -16 | AHO 27992 | . Circlip, internal, retaining oil seal housing (Pre-Mod. M.10395 (0)) | A | 1 |
| | AHO 86989 | . Circlip, internal, retaining oil seal housing (Mod.M. 10395 (0)) | A | 1 |
| | AHO 86989 | . Circlip, internal, retaining oil seal | B | 1 |
| -17 | AHO 36393 | . Seal, oil | | 1 |
| -18 | AHO 36392 | . Housing, oil seal | | 1 |
| -19 | AHO 36478 | . Ring, sealing | | 1 |
| ▶ -20 | DAS 2062-56 | . Bearing, taper roller (Pre Dunlop Amdt 35983) | | 1 |
| | DAS 2062-166 | . Bearing, taper roller (Dunlop Amdt 35983) | | 1 ◀ |

\+ Item not illustrated
* Item required in conjunction with repair scheme RP168

MAIN UNDERCARRIAGE WHEEL ASSEMBLY

| Fig./ Index No. | Part No. | Nomenclature 1 2 3 4 5 6 . . . . . | Usage Code | Units per Assy. |
|---|---|---|---|---|
| -21 | AHM 4664 | . Hub and sleeve, assembly | A | 1 |
| | AHM 5086 | . Hub and sleeve, assembly | B | 1 |
| -22 + | DTD 189A | . . Wire, locking, 22 s.w.g. | | AR |
| -23* | AHO 38697 | . . Nut (Pre-Mod.3300) | A | 6 |
| | AHO 39406 | . . Nut (Mod.3300) | A | 6 |
| | AHO 38697 | . . Nut | B | 6 |
| 1-24* | AHO 36038 | . . Washer | | 6 |
| -25* | AHO 37861 | . . Bolt | A | 6 |
| | AHO 39314 | . . Bolt | B | 6 |
| | | TOOLS REQUIRED | | |
| -26 + | AO 106115 | Spanner, torque, valve cores | | 1 |
| -27 + | AM 11293 | Pliers, circlip | | 1 |
| -28 + | AM 10969 | Mandrel, bearing alignment and locating ring gap gauge | | 1 |
| -29 + | AM 20159 | Extractor (large) ) Pressing | | 1 |
| -30 + | AO 102359 | Extractor (small) ) out | | 1 |
| -31 + | AM 10254 | Mandrel ) bearings | | 1 |
| -32 + | AO 100844 | Collar | | 1 |
| -33 + | AO 42700 | Mandrel and base, assembly ) Pressing | | 1 |
| -34 + | AO 101017 | Sleeve ) in | | 1 |
| -35 + | AO 55535 | Sleeve ) bearings | | 1 |

\+ Item not illustrated
* Item required in conjunction with repair scheme RP168