

## APPENDIX 5

## ARRESTER HOOK LANDING WITH ONE ABNORMAL MAIN UNDERCARRIAGE

The aircraft should be examined as specified in this Appendix whenever a landing has been made using the arrester hook with one main undercarriage in an abnormal condition, as detailed in the following cases:—

- CASE 1.** Hooked landing with one main undercarriage tyre burst. Aircraft weight and speed within limitations for arrester gear in Aircrew Manual A.P.101B-1309-15, Part 2, Chap.2, para.16.
- CASE 2.** Hooked landing with one main undercarriage tyre burst. Aircraft weight and speed in excess of limitations for arrester gear in Aircrew Manual A.P.101B-1309-15, Part 2, Chap.2, para.16.
- CASE 3.** Hooked landing with one main undercarriage not lowered and underwing fuel tanks fitted on inboard or outboard pylons. Aircraft weight and speed within or in excess of the limitations in Aircrew Manual A.P.101B-1309-15, Part 2, Chap.2, para.16.

## CASE 1

Hooked landing with one main undercarriage tyre burst. Aircraft weight and speed within limitations for arrester gear in Aircrew Manual A.P.101B-1309-15, Part 2, Chap.2, para.16.

Item No.	Item	Operation
1.	Arrester hook fulcrum bracket below fuselage at frame 51.	Examine for damage, particularly distortion.
2.	Arrester hook tube.	Examine for damage, particularly distortion. Critical section is at holes for $\frac{1}{4}$ in. dia. bolt to leaf springs.
3.	Leaf springs on arrester hook tube.	Examine for damage, particularly distortion.
<b>Note . . .</b>		<i>If damage is found in items 1, 2 or 3 the examination must be continued as for CASE 2</i>
4.	Rear fuselage and arrester hook uplock.	Examine for damage due to hook bounce.

## CASE 2

Hooked landing with one main undercarriage tyre burst. Aircraft weight and speed in excess of limitations in Aircrew Manual A.P.101B-1309-15, Part 2, Chap.2, para.16.

Item No.	Item	Operation
1.	Arrester hook fulcrum bracket below fuselage at frame 51.	Examine for damage, particularly distortion.
2.	Arrester hook tube.	Examine for damage, particularly distortion. Critical section is at holes for $\frac{1}{4}$ in. dia. bolt to leaf springs.
3.	Leaf springs on arrester hook tube.	Examine for damage, particularly distortion.
4.	Bottom fuselage skin between frames 49 and 52.	Examine for damage, particularly distortion, and for cracks at cut-out for air-brake jack.
5.	Rear fuselage and arrester hook uplock.	Examine for damage due to hook bounce.
6.	Arrester hook operation.	Check $55\frac{1}{2}$ deg. angular travel into lowered position and correct re-engagement into up position.

### Note . . .

*Continue with examination in items 7 and 8 only if damage has been found in items 1 to 5.*

7.	Arrester hook damper attachment fittings within fuselage, frames 50 to 51.	Examine for damage, particularly security of bolts.
8.	Side members for arrester hook and damper attachment, between frames 50 and 52.	Examine for damage.

### Note . . .

*Damage found in item 7 will require the examination of frames as in a category 3 aircraft.*

## CASE 3

Hooked landing with one main undercarriage not lowered and underwing fuel tanks fitted on inboard or outboard pylons. Aircraft weight and speed within or in excess of the limitations in Aircrew Manual A.P.101B-1309-15, Part 2, Chap.2, para.16.

Item No.	Item	Operation
1.	Arrester hook fulcrum bracket below fuselage at frame 51.	Examine for damage, particularly distortion.
2.	Arrester hook tube.	Examine for damage, particularly distortion. Critical section is at holes for $\frac{1}{4}$ in. dia. bolt to leaf springs.
3.	Leaf springs on arrester hook tube.	Examine for damage, particularly distortion.
4.	Bottom fuselage skin between frames 49 and 52.	Examine for damage, particularly distortion, and for cracks at cut-out for air-brake jack.
5.	Rear fuselage and arrester hook uplock.	Examine for damage due to hook bounce.
6.	Arrester hook operation.	Check $55\frac{1}{2}$ deg. angular travel into lowered position and correct re-engagement into up position.

## Note . . .

*Continue with examination in items 7 and 8 only if damage has been found in items 1 to 5.*

7.	Arrester hook damper attachment fittings within fuselage, frames 50 to 51.	Examine for damage, particularly security of bolts.
8.	Side members for arrester hook and damper attachment between fuselage frames 50 and 52.	Examine for damage.

## Note . . .

*Damage found in item 7 will require examination of frames as in a category 3 aircraft.*

9.	Aircraft complete	Examine to requirements of Appendix 1 <i>Heavy landing</i> .
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CASE 3 (cont'd.)

Item No.	Item	Operation
10.	Pylon attachment points on wings.	<p>(1) Remove all drop tanks and pylons.</p> <p>(2) Examine:—</p> <ul style="list-style-type: none"><li>(i) Holes for pylon attachment bolts and spigots</li><li>(ii) Surrounding area of skin including skin riveting</li><li>(iii) Internal wing structure including ribs, brackets inter-rib supports and attachments.</li></ul>
11.	Aircraft complete	<p>Examine to requirements of Appendix 2, Stage 1, <i>After excessive 'G' loading.</i></p> <p>If defects are found, proceed to Appendix 2, Stage 2.</p>

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