

- CHAPTER 14 -

EXPORT SHIPMENT - UNCRATING AND ASSEMBLING

14.1 General

Each aircraft is protected against damage and corrosion during transit by thorough inhibiting and crating. Instructions for unpacking and reassembly of the aircraft are given in this chapter of the Manual. Included in the crate are all necessary drawings, and a packing list for checking contents.

In certain cases the inhibiting agents, paints, oils or greases may cause damage to moving parts unless carefully removed, and instructions regarding the cleaning or draining of inhibited parts should be followed scrupulously.

14.2 Dimensions

As an aid in estimating shipping costs, the following approximate crate dimensions and weights are given:

14.2.1 One Aircraft in One Case

<u>Dimensions of Case</u>	<u>English</u>	<u>Metric</u>
Width	5' 6"	1,68 m.
Height	7' 6"	2,29 m.
Length	23'	7,01 m.
Volume	949 cu.ft.	27 cu.m.
Gross Weight	4150 lb.	1882 kg.

14.2.2 Two Aircraft in Two Cases14.2.2.1 Case No. 1 - containing 2 fuselages, 2 engines, 2 tailplanes, 2 sets of undercarriage units and miscellaneous small components.

<u>Dimensions of Case</u>	<u>English</u>	<u>Metric</u>
Width	7' 6"	2,29 m.
Height	5' 9"	1,75 m.
Length	23' 1"	7,04 m.
Volume	993 cu.ft.	28,1 cu.m.
Gross Weight, Approximate	4379 lb.	1982 kg.

14.2.2.2 Case No. 2 - containing 4 wing panels, fairings and miscellaneous small components.

<u>Dimensions of Case</u>	<u>English</u>	<u>Metric</u>
Width	5' 5"	1,65 m.
Height	7' 6"	2,29 m.
Length	16' 9"	5,11 m.
Volume	682 cu.ft.	19,3 cu.m.
Gross Weight, Approximate	2520 lb.	1143 kg.

14.3 Uncrating the Aircraft

Remove the boards from both ends of the crate and from the roof, then take away sides and remove smaller items. Sling or trestle fuselage and remove crate floor. Place fuselage in flying position (Plate No. 10.1).

Remove protective waterproof paper or covering from metal surfaces and inspect parts for signs of corrosion. All sheet metal parts should then be polished and/or waxed according to the methods outlined in Chapter 6. Wipe protective oil or grease film from all bright metal parts and check for corrosion.

14.4 Undercarriage (See also Chapter 8)

Main Wheels 01460&61, Installation Drawing 006

Replace	Washer	AGS 160 H
	Slotted Nut	A16YLS
	Split Pin	AGS 166 12
	Cover Plate	01496

Connect hydraulic brake line. Replace leg fairings 02798&9 and Clips AGS 605 3, when required.

Tail Wheel Assembly, 007 or 0071, Installation Drawings 00411 and 004, Sheets 1 & 2. (To be installed after tailplane and before tailcone). Tailwheel yoke to fin rear spar.

Replace	Bolt	004-2
	Washer	AGS 160 E
	Nut	A16YGS
	Split Pin	AGS 784 3A

Tailwheel compression leg to tailplane front spar fitting.

Replace	Bolt	6A1 10 G
	Washer	AGS 160 E
	Nut	A16YGS
	Split Pin	AGS 784 3A

Check tire inflation

14.5 Wings, 002 or 00210

Trestle wings in position.

Front spar attachment, replace	Bolt	AGS 10 J
	Washer	AGS 160F
	Slotted Nut	A16YJS
	Split Pin	AGS 166 3

Main spar top attachment, replace	Bolt	0609 or 05178
	Washer	AGS 160 H
	Slotted Nut	A16YNS
	Split Pin	AGS 166 12

14.5 (cont'd)

Main spar bottom attachment, replace bolt	0611 or 05179
Washer	AGS 160 H
Slotted Nut	AL6YNS
Split Pin	AGS 166 12

Connect aileron cables at wing root, replace pin	SP 4 B4
Washer	AGS 160 C
Split pin	AGS 166 2

Connect flap cable turnbuckles at wing root.
 Connect pitot and static lines at wing root.
 Connect electric wiring at wing root junction strip.
 Connect hydraulic brake lines at wing root, fill reservoirs and bleed brake system in accordance with instructions in Chapter 9. Check brakes.
 Connect fuel line banjo fitting at wing root.
 Replace pitot-static mast on port wing.
 Attach bracket assembly to rib with Washers AGS 160 B
 Bolts 6A1 1B

Check lines for leaks.
 Check rigging of ailerons, flaps, undercarriage and wings to instructions in Chapter 10 and Plate No. 10.1.
 Wire-lock all fittings where applicable.
 Replace Wing root fillets 01120 & 30
 Screws AS1885-1-B (4BA)
 Screws C-2-SS2590 (2BA)
 Close inspection panels, cover with tape and dope as applicable.

14.6 Fin and Rudder - 0042 & 0043, Installation Drawing No. 00411 and 004, Sheets 1 & 2 and No. 070.

Attach fin post to fuselage rear bulkhead.

At top of bulkhead, replace	Bolts	6A1 1C
	Washers	AGS 160 C
	Nuts	CA 1

At bottom of bulkhead, replace	Bolts	6A1 2C
	Washers	AGS 160 C
	Nuts	CA 1

Attach fin leading edge to fuselage, replace	Bolts	6A1 1C
	Washers	AGS 160 C
	Nuts	CA 1

Connect rudder cables to control horn, replace	Bolt	6A1 7C and 7E
	Spacer	03743 and 02576
	Nut	AL6YCS and ES
	Split Pin	AGS 166 3

14.7 Tailplane and Elevator, 0041, 0048 and 0049, Installation
Drawings No.s 00411, 004, Sheets 1 & 2 and No. 070.

Attach tailplane front spar to bulkhead

Replace Bolt	01618
Washer	AGS 160 D
Nut	A16YES
Split Pin	AGS 784 3A

Attach tailplane struts to bottom bulkhead fitting,

Replace Bolt	01617
Washer	AGS 160 D
Nut	A16YES
Split Pin	AGS 784 3A

Attach elevator connecting rod to layshaft,

Replace Bolt	6A1 7 E
Washer	AGS 160 D
Nut	A16YES
Split Pin	AGS 784 3A

Connect elevator trim tab cables to Bowden cables.

Insert Bowden inner cables through fitting on fin spar and slide into slot in nuts. Tighten lock nuts on Bowden outer cable ends against slotted nuts in fin spar fitting. Slide Bowden inner cable ends in slots in fuselage cable end fittings and lock by pulling Bowden cable end fittings through enlarged holes at bottom of slots.

Check rigging of fin, rudder, elevator, elevator trim tab and tailplane to instructions in Chapter 10 and Plate No. 10.1.

Attach wiring for tail navigation light to connector on rear fuselage bulkhead and install tailcone 0046, 03893 or 00412.

Install front fin fairing 01721, front rudder fairing 03762 and 03762-1, centre rudder fairing 03761, end section rudder fairing 03686 and side fin fairings 01722&3.

Screws used are AS1885-1C for tailcone and AS1885-1B for fairings.

14.8 Engine

For instructions regarding removal of inhibiting oils, greases and silica gel bags, etc. and restoration to running order, see Engine Handbook.

14.9 Propeller and Spinner

See Propeller and Spinner Assembly Drawings No.s 0052, 0053 and Chapter 12.7.

14.10 Fuselage

Interior - Clean grease off exposed bright metal parts. Check all controls for ease and correct sense of operation (Chap.10). Check instruments, radio, etc.

14.10 (cont'd)

Exterior - Clean and polish.

14.11 Miscellaneous

Batteries - Check acid level and specific gravity, recharge if necessary, remove excess grease from terminals.