

**APPENDIX 1 - LOADING 230 GAL. DROP TANK ON  
INBOARD PYLONS (AIRCRAFT POST MOD. 829 ONLY)**

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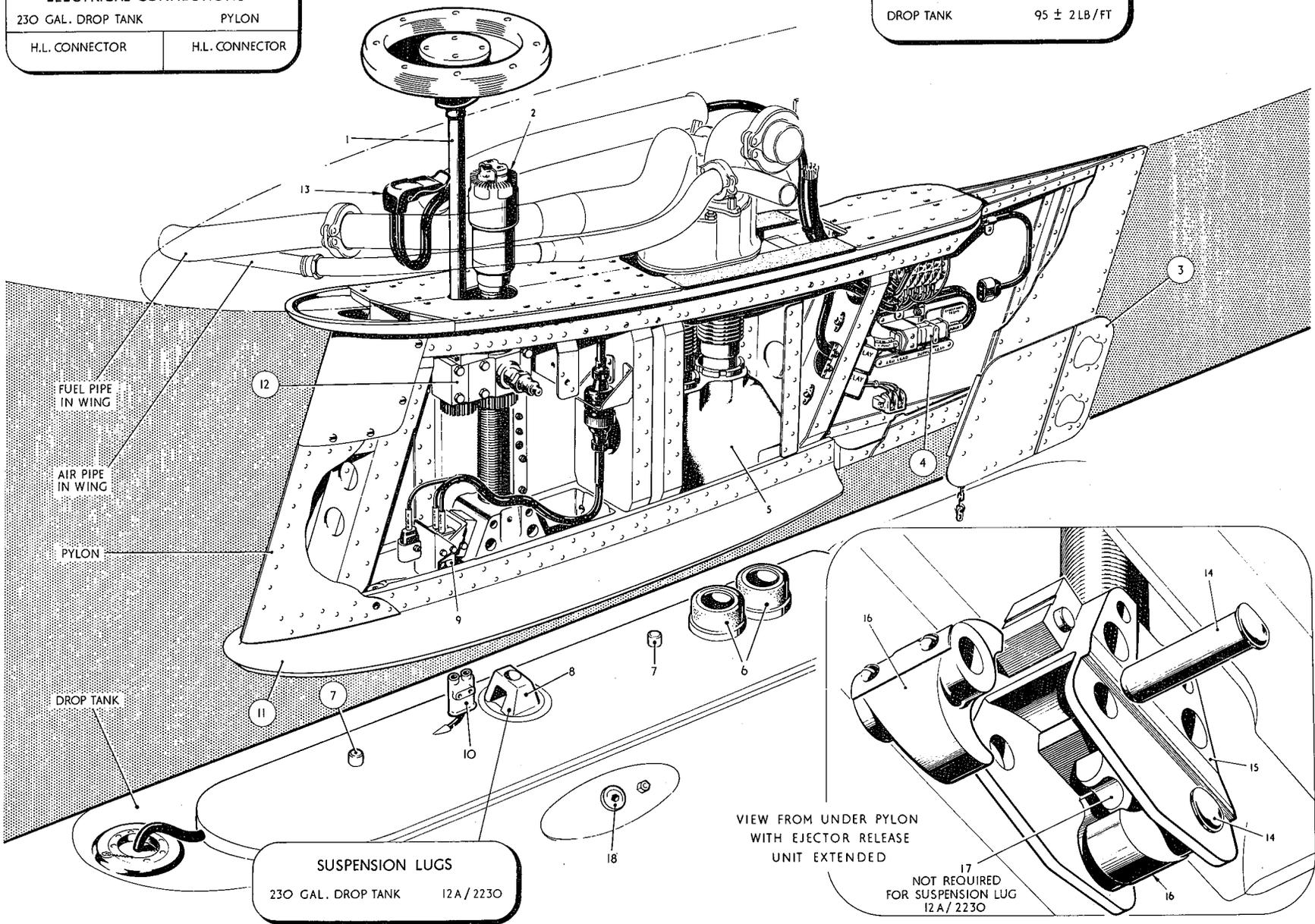
**Introduction**

1. This appendix details the procedure for fitting and removing 230 gal. drop tanks on the inboard pylons, when authorized, on aircraft embodying Modification Hunter 829.

*(Continued overleaf)*

ELECTRICAL CONNECTIONS	
230 GAL. DROP TANK	PYLON
H.L. CONNECTOR	H.L. CONNECTOR

TORQUE WRENCH LOADINGS	
DROP TANK	95 ± 2 LB/FT



SUSPENSION LUGS  
230 GAL. DROP TANK 12A / 2230

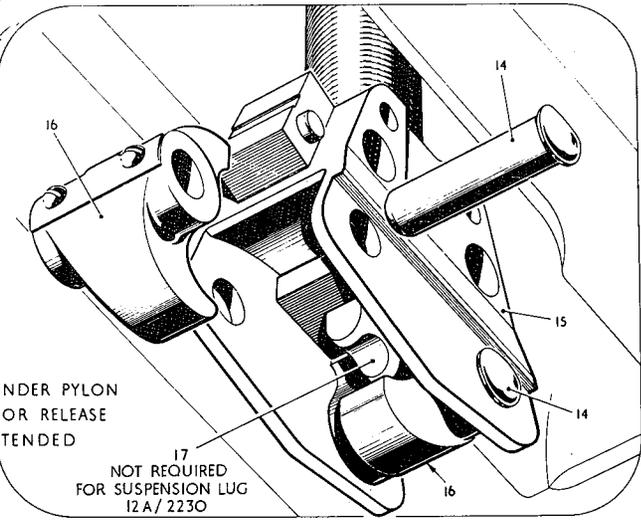


Fig.1 Loading of 230 gal. drop tank on inboard pylon

### Fitting and removal of 230 gal drop tank on inboard pylon (Fig.1)

#### WARNING . . .

Personnel handling explosive release and ejector units, as fitted to the inboard pylons on this aircraft, should be conversant with the safety precautions detailed in AP1664E, Vol.1, Part 1, Chap.1. During loading/unloading the radio installations must not be operated.

2. Prior to fitting the 230 gal drop tanks, the spigot bushes on the pylon must be checked for excessive wear. If the measurement across the worn portion of the rear bush or across the minor axis of the front bush exceeds 0.525 in. the bush should be replaced.

#### Note . . .

230 gallon drop tanks held in store should be inhibited and when this is completed a warning label fixed to the tank, adjacent to the filler cap, with transparent adhesive tape. Before fitting a tank from store, therefore, all traces of inhibiting oil must be removed by washing out the tank with lead free gasoline (Ref 34A/9100447 or 34C/9100454) and the warning label removed. Care must be taken to ensure that scrupulous cleanliness is observed and that no foreign matter is introduced into the tank.

The procedure for fitting the drop fuel tanks to the inboard pylons is as follows:

- (1) Disconnect the armament safety break in the port wing, remove the rear doors (3) and disconnect the pylon safety breaks (4) at all pylons, ie inner and outer port and starboard.

#### ► Note . . .

Post Mod.1037, 230 gallon drop tanks are fitted with solid rear locating spigots Part No.F250022. ◀

- (2) Wheel the drop tank into position under the pylon and lubricate the front and rear locating spigots (7) with anti-sieze compound ZX-28G. Inspect the sealing rings at (6) for

serviceability and smear the outer surface of the rings with ZX-36 (Ref 34B/1459).

- (3) Remove the access panel (26FX/10085) in the wing top skin. Attach a crutching tool shaft (1), (ML Aviation Ltd Pt.No.DL617-41B or DL617-113B) complete with handle (ML Aviation Ltd Pt.No.DL617-348C) into the socket of the crutching mechanism (12) of the ejector release unit (2) and turn in an anti-clockwise direction to lower the unit sufficiently to enable the jaw pins (14) in the bottom of the housing (15) to be removed.

#### Note . . .

The threads of the ejector release unit must be greased with ZX-28G before each loading.

- (4) With the ejector release unit lowered, a firm pressure on the end of the jaw pins will release the spring lock in the jaws and allow the pins to be withdrawn and the jaws (16) to be removed. Remove adapter (17), in the bottom of the housing.

#### Notes . . .

1) The adapter (17) is only used on ERUs pre ML Mod.DL94 for 100 gallon drop tanks and other stores fitted with suspension lugs No.29.

2) It is important that the top of the suspension lug should not be forced up against the adapter (17), as the use of undue force imparts a shear load to the rivet securing the plunger wedge to the piston tube assembly. If this rivet is sheared, any store subsequently carried with the ejector release unit in this condition will be inadvertently released.

3) When loading a store on ERUs post ML Mod.94, a check must be made with a 0.125 in. dia rod through the inspection hole in the housing to ensure that the piston is fully home and the split pin undamaged.

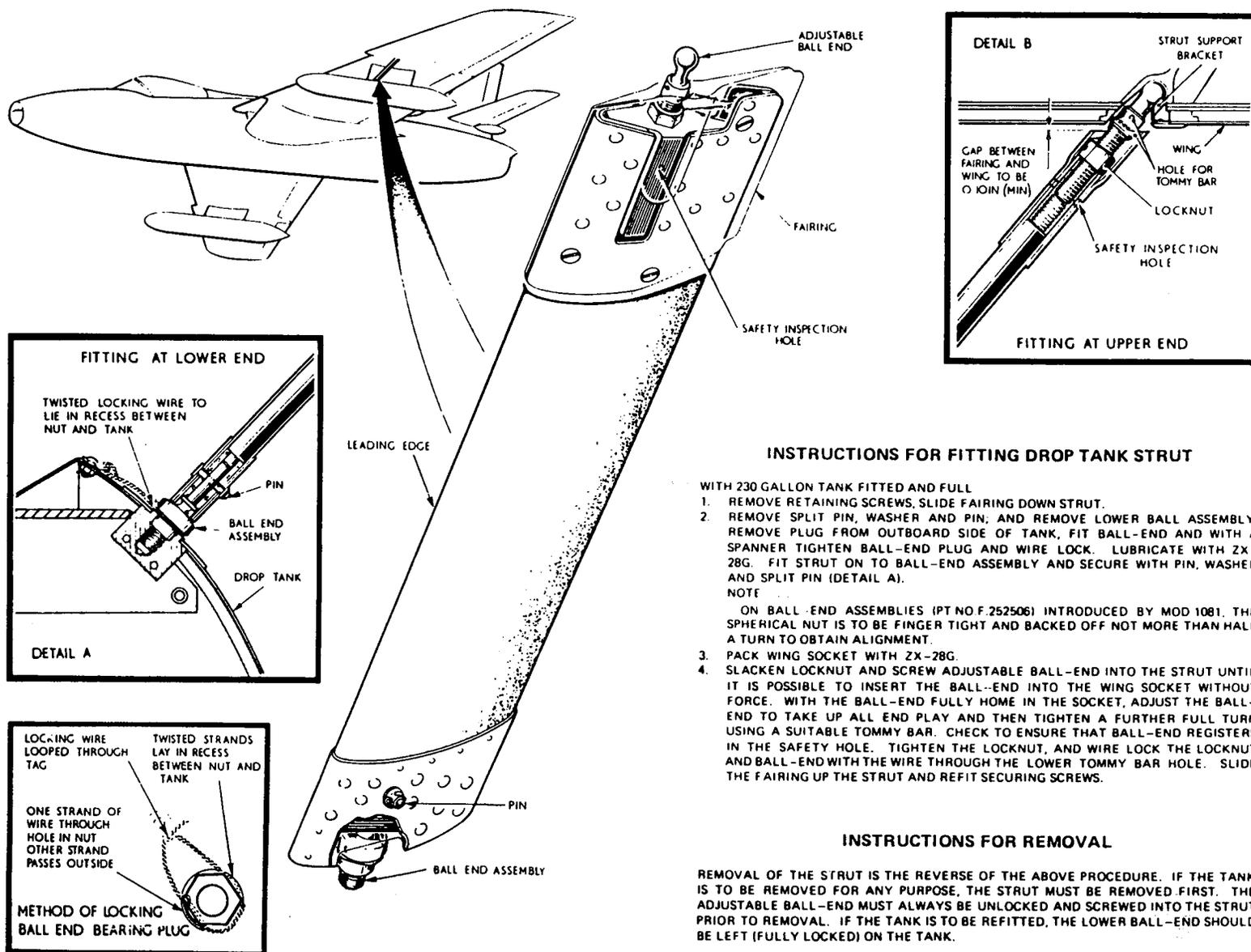
- (5) Carefully raise the drop tank using hoists and a sling so that one jaw, hooked in the suspension lug, can be secured to the jaw housing with a jaw pin. Then hook the other jaw in the suspension lug and secure to the jaw housing with the remaining jaw pin.

Ensure that the flat on the head of each jaw pin is engaged with the shoulder on the jaw housing.

- (6) Plug in the unsleeved connector (10) on the drop tank to the sleeved connector (9) on the pylon.
  - (7) By means of the crutching tool raise the tank until the fore and aft spigots (7) are engaged in the holes provided in the sole plate (11) of the pylon, and the tank adapters (6) are making contact with the fuel and air valves in the valve body (5). Check that the electrical cables from the tank to the plugs are not trapped between the tank and the sole plate.
  - (8) Apply the final crutching load by using a torque wrench set to  $95 \pm 2$  lb ft, attached to the adapter on the crutching tool.
  - (9) Remove the torque wrench and crutching tool, connect socket (13) to the breech cap and replace the access panel into the wing.
  - (10) Reconnect the safety breaks (4) and replace the rear doors (3) on all pylons.
  - ▶ (11) If Mod.896 is embodied, fit the special ◀ bracing strut between the drop tank and the wing as described on Fig.2 after filling the drop tank with fuel.
  - (12) Immediately before flight replace the armament safety break.
3. The removal of the inboard drop fuel tanks is a reversal of the above procedure.

#### Note . . .

To prevent swinging of the release unit when the pylon is installed with no stores fitted, cover plate (Pt.No.B235438) with suspension lug (Ref. 12A/2230) must be fitted on the underside of the pylon and crutched up with the torque wrench set to 20 lb ft.



**INSTRUCTIONS FOR FITTING DROP TANK STRUT**

- WITH 230 GALLON TANK FITTED AND FULL
1. REMOVE RETAINING SCREWS, SLIDE FAIRING DOWN STRUT.
  2. REMOVE SPLIT PIN, WASHER AND PIN; AND REMOVE LOWER BALL ASSEMBLY. REMOVE PLUG FROM OUTBOARD SIDE OF TANK, FIT BALL-END AND WITH A SPANNER TIGHTEN BALL-END PLUG AND WIRE LOCK. LUBRICATE WITH ZX-28G. FIT STRUT ON TO BALL-END ASSEMBLY AND SECURE WITH PIN, WASHER AND SPLIT PIN (DETAIL A).

**NOTE**

ON BALL END ASSEMBLIES (PT NO F.252506) INTRODUCED BY MOD 1081, THE SPHERICAL NUT IS TO BE FINGER TIGHT AND BACKED OFF NOT MORE THAN HALF A TURN TO OBTAIN ALIGNMENT.

3. PACK WING SOCKET WITH ZX-28G.
4. SLACKEN LOCKNUT AND SCREW ADJUSTABLE BALL-END INTO THE STRUT UNTIL IT IS POSSIBLE TO INSERT THE BALL-END INTO THE WING SOCKET WITHOUT FORCE. WITH THE BALL-END FULLY HOME IN THE SOCKET, ADJUST THE BALL-END TO TAKE UP ALL END PLAY AND THEN TIGHTEN A FURTHER FULL TURN USING A SUITABLE TOMMY BAR. CHECK TO ENSURE THAT BALL-END REGISTERS IN THE SAFETY HOLE. TIGHTEN THE LOCKNUT, AND WIRE LOCK THE LOCKNUT AND BALL-END WITH THE WIRE THROUGH THE LOWER TOMMY BAR HOLE. SLIDE THE FAIRING UP THE STRUT AND REFIT SECURING SCREWS.

**INSTRUCTIONS FOR REMOVAL**

REMOVAL OF THE STRUT IS THE REVERSE OF THE ABOVE PROCEDURE. IF THE TANK IS TO BE REMOVED FOR ANY PURPOSE, THE STRUT MUST BE REMOVED FIRST. THE ADJUSTABLE BALL-END MUST ALWAYS BE UNLOCKED AND SCREWED INTO THE STRUT PRIOR TO REMOVAL. IF THE TANK IS TO BE REFITTED, THE LOWER BALL-END SHOULD BE LEFT (FULLY LOCKED) ON THE TANK.

Fig.2 Fitting drop tank strut

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