

# **AIRCRAFT CRASH RECOVERY**

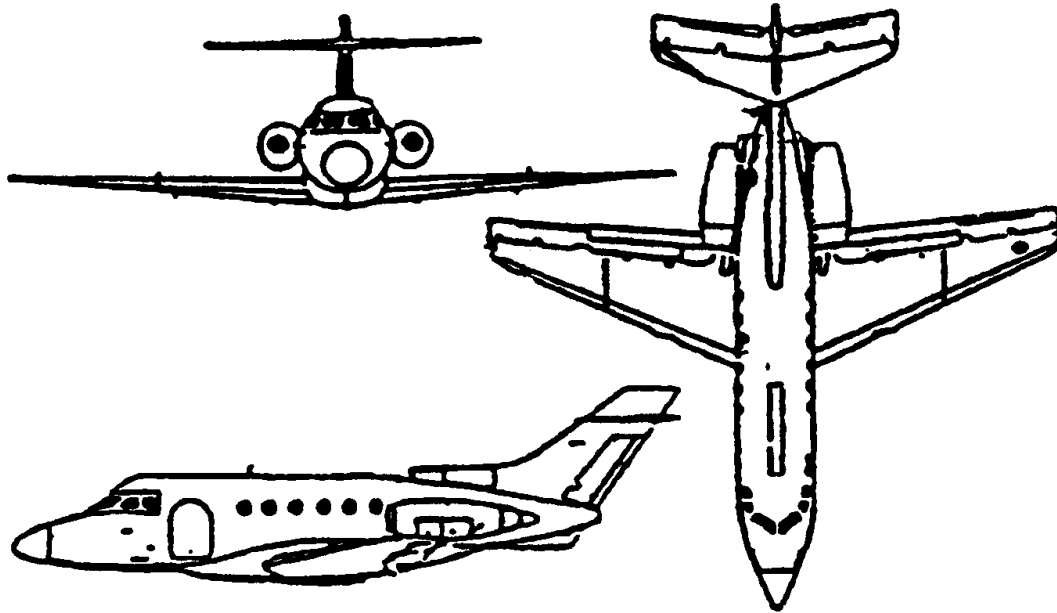
## **HAWKER 700**

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## RAYTHEON HAWKER 700



### AIRCRAFT SPECIFICATIONS

Fuel: Jet A - Capacity: 1,417 US Gal. (5,364 L)

Tire Pressure: Nitrogen or Dry Air - Nose: 80 PSI Main: 128 PSI

Ground Power: 24 VDC

Performance: Cruise (max) - 502 mph (808 km)  
Ceiling - 41,900 ft (12,495 m)  
Range - 2,785 mi (4,482 km)  
Seating - 400

Weights: Empty - 13,854 lbs ( 6,284 kg)  
Take-Off - 24,800 lbs (11,249 kg)  
Landing - 22,000 lbs ( 9,997 kg)

Dimensions: Span - 47 ft 00 in (14.33 m)  
Length - 50 ft 09 in (15.46 m)  
Height - 17 ft 07 in (05.36 m)

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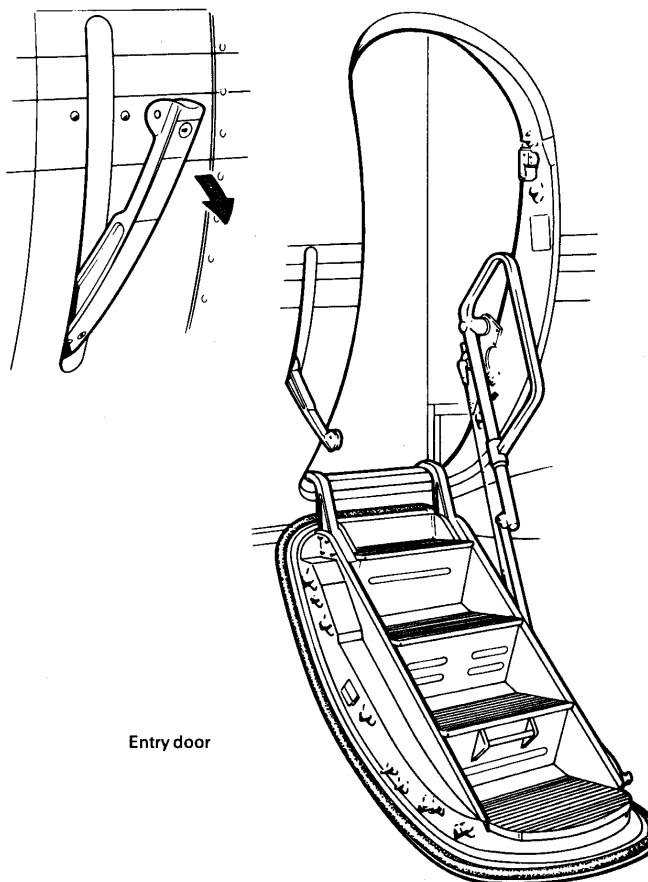
## DOOR OPERATION

The aircraft has an outward-opening door with integral airstairs and a handrail.

Operation of the door is by levers inside and outside the aircraft, immediately forward of the door aperture.

The lever on the outside (mounted flush with the fuselage skin), when pulled outwards, unlocks the door by lifting it clear of its locating lugs. This allows the door to open outwards and downwards. The corresponding unlocking action from the inside is to lift the lever provided on the bulkhead to the right of the doorway. The door is counterbalanced by a spring-operated motor, and locked down by the over-centring action of the handrail.

To close the door the handrail is pulled inwards and the door located in the aperture before being locked behind the securing lugs by either lever. The external door lever is provided with a key lock.



Entry door

Operators are advised to follow the door operating instructions, and observe the warning notices. If in doubt seek the advice of a crew member before operating the door.

## Baggage handling

Baggage is normally loaded through the main entry door. The main baggage compartment is located immediately opposite the main entry door. Baggage is retained by a mesh blind which in turn is covered by a decorative curtain.

In addition to the baggage compartment a hanging space is provided for coats. This compartment is located in the entrance vestibule on the left-hand side just aft of the refreshment cabinet.

The Table shows the maximum total and intensity loadings for the different compartments. These might vary slightly according to the interior layout of each particular aircraft; however a placard is displayed in each compartment summarising the limitations. The figures are for an 8-seat aircraft.

Compartment	Maximum permissible total load		Maximum permissible intensity of floor loading	
	lb	kg	lb/sq ft	kg/sq ft
Main baggage compartment	310	141	100	45
Coat hanging compartment	30	13.6	—	—
Passenger cabin				
i) Side floors	—	—	50	22
ii) Centre floor	—	—	60	27

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## EMERGENCY PROCEDURES

There are two exits which can be used quickly in an emergency. The main entry door allows the quickest exit (see page 5) but it must not be used if the aircraft is floating on water. In this case the emergency exit over the right wing should be used. This hatch can be released from the outside by a PRESS button, which allows it to drop into the aircraft, or by a hand lever from inside the cabin.

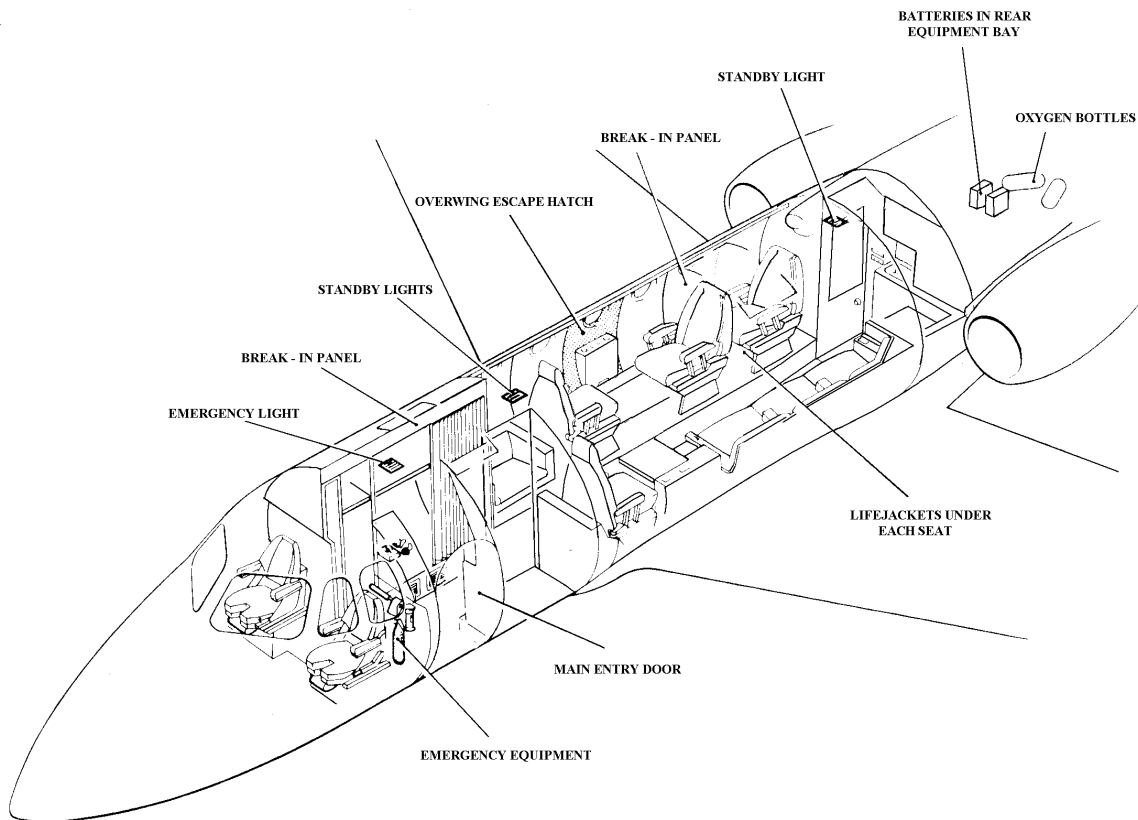
### Emergency equipment

The emergency equipment that may be found on the aircraft includes:

Hand fire extinguishers	Smoke goggles
Crash axe	First-aid kit
Lifejackets	Portable oxygen

### Emergency lighting

When fitted, this includes one light illuminating the flight compartment and the vestibule and one in the cabin to illuminate the overwing exit. These are controlled by a 1½g inertia switch in the nose. A switch in the flight compartment allows the emergency lights to be switched on independently of the inertia switch.



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## ELECTRICAL SYSTEM

The 125's electrical systems are designed to provide complete independence of ground services under normal operational circumstances. D.C. power for the various electrical services is supplied through three busbars :— PE (essential services), PS1 and PS2 (non essential services). Busbars PS1 and PS2 are normally connected by a bus tie contactor.

Three static inverters supply A.C. power to XE (essential services), XS1 and XS2 (non essential services) busbars. A.C. power is only obtainable when D.C. power is available.

An Auxiliary Power Unit further extends the aircraft's independence by providing full electrical services under even the most demanding conditions, and by maintaining the state of charge of the aircraft's batteries.

Full provision is made for the use of an external ground power unit for electrical power during prolonged servicing, engine starts or "in situ" charging of aircraft batteries.

Cabin and vestibule lighting as well as some toilet facilities are available direct from the batteries. Care should be taken to ensure they are switched off after use to avoid accidental discharge of the aircraft batteries. Power for the rear equipment bay servicing light is available with Battery Selector switch ON.

The three possible methods of obtaining electrical power on the 125 on the ground are summarized as follows :—

### 1. Internal power

In this condition power is supplied by the aircraft batteries to the PE busbar by selecting the Battery Selector switch in the overhead panel to ON.

From this condition power is available for starting main engines and APU through further selector switches.

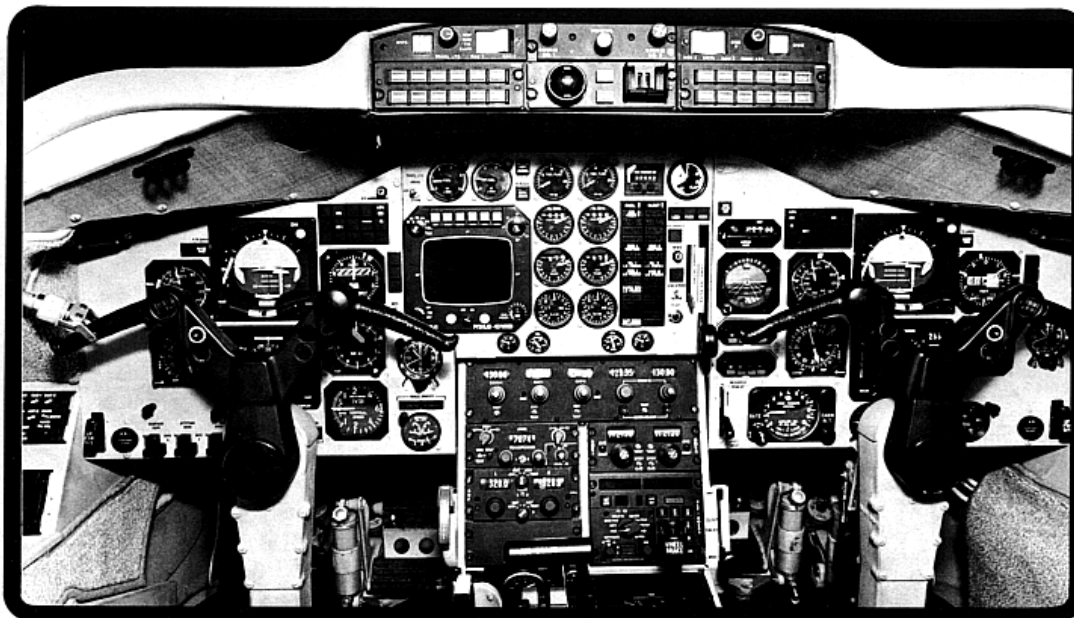
The batteries are located in the rear equipment bay aft of the access door. Later production aircraft may not have a third battery.

	Nos. 1 & 2 batteries	No. 3 battery
Manufacturer	Saft	Marathon
Part number	23491	27518
Type	Nickel-Cadmium	Nickel-Cadmium
Capacity amp/hour	23	4
Weight lb (kg)	55 (25)	11 (5)

The aircraft batteries must be removed to a warmer environment if temperatures below  $-10^{\circ}\text{C}$  are expected for more than 12 hours.

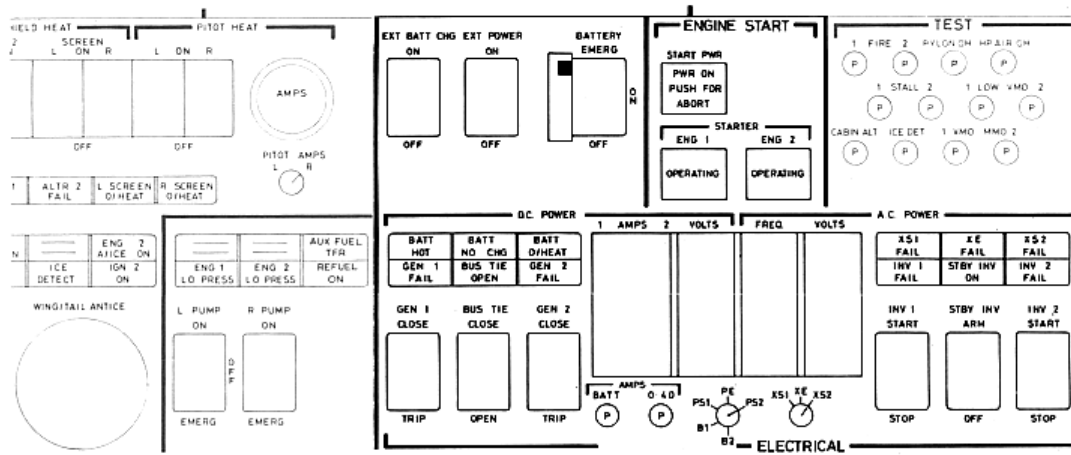
### 2. APU

Power for full electrical services and battery charging is available from the APU. It is not however used for starting main engines, this being accomplished by power from the aircraft batteries or GPU. Power is supplied from the APU generator direct to PS2 and on to PE; and to PS1 only after the bus tie is closed. The APU generator comes on line automatically except when ground power is ON when the generator is kept OFF line. Switch positions are Battery switch ON and Bus tie closed.



# AIRCRAFT CRASH RECOVERY

## ELECTRICAL SYSTEM



### 3. Ground power

A standard NATO 3 pin 28 volt D.C. ground power plug is located on the right hand side rear fuselage. The ground power unit (GPU) when used for engine starting must be capable of supplying 28 volts D.C. at up to 1000 amps with negligible voltage drop. The GPU must have overvoltage protection and be fitted with a current limiter operating at 1100 amps.

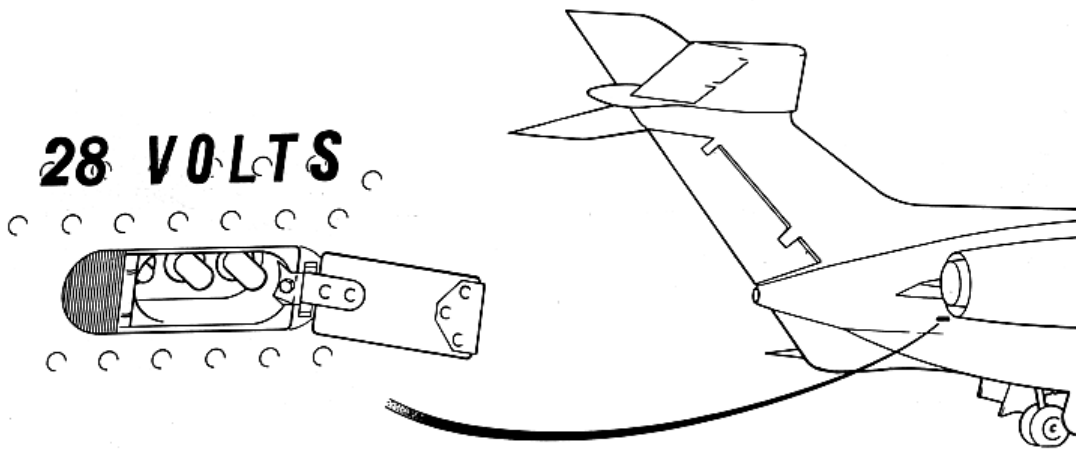
A 24-28 volt battery truck may be used for general servicing but should not be used for engine starting.

Electrical socket – Cannon Electric GCB 3LV  
14GB 183

Electrical plug – Cannon Electric GC 3LV-  
11-2½B

Switch position – External power ON

To charge aircraft main batteries "in situ" the external battery charging switch must also be ON.



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## AUXILIARY POWER UNIT (APU)

The AiResearch GTCP-30-92c Auxiliary Power Unit (APU) is standard fit on the 125-700B. As installed in the 125 the unit is for ground operation only, providing full electrics and air-conditioning. The unit is not intended or designed as a means for starting the Main engines: these have their own internal start capability off the aircraft batteries or GPU.

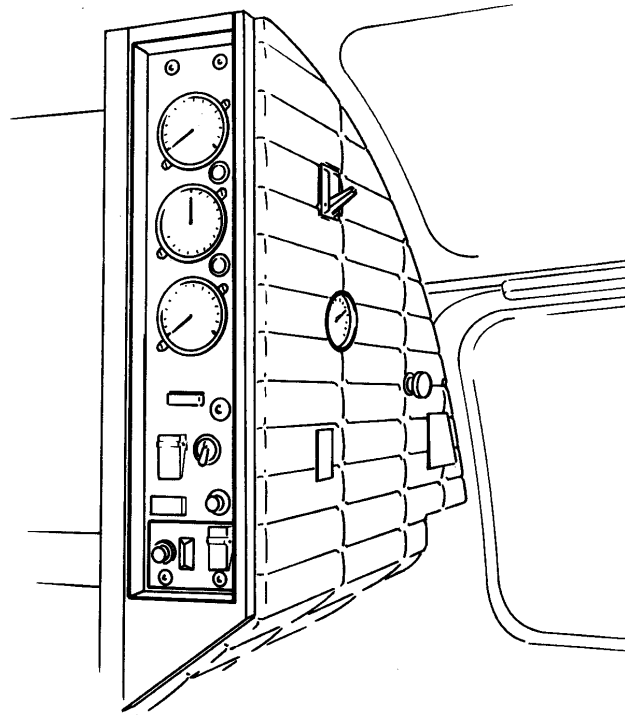
The APU's fire protection system is self-contained with a single fire bottle.

The APU controls are contained on a small panel on the bulkhead behind the first pilot. This panel contains all the controls necessary for APU starting, monitoring its running conditions and switching in the electrical supply. The air bleed valve is opened by a switch on the overhead panel. The intake for the APU is on the fuselage above the left-hand engine, and the exhaust in the corresponding position above the right-hand engine. The efflux is of low velocity so that the unit can be run close to airport buildings without causing any disturbance.

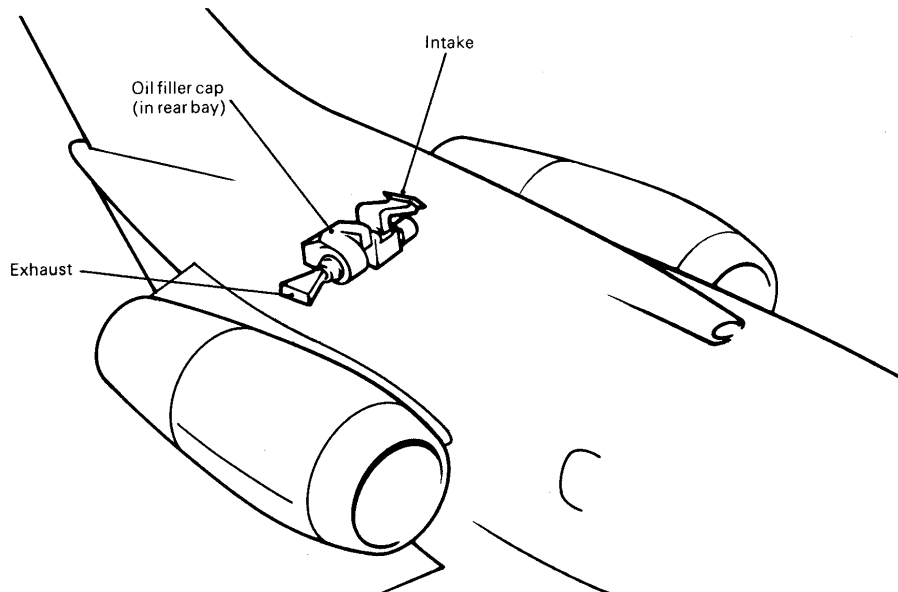
Usable capacity of the APU oil reservoir is 3.3 Imp pints (4 US pints, 1.87 litres) with the level indicated on a dipstick which is integral with the filler cap. For accurate assessment the oil level should be checked within 30 minutes of APU shut down. The maximum permissible oil consumption per hour is 0.133 Imp pints (0.159 US pints, 0.075 litres).

To date 30 oils have been approved for use in the 125 APU including Mobil Jet Oil 11. A full list appears in the Maintenance Manual. Mixing of APU oils is not approved.

Fuel for the APU is taken from the aircraft main system and the fuel consumption is about 75lb per hour (34kg per hour). The unit has its own fuel pump and is, therefore, independent of the main aircraft system.



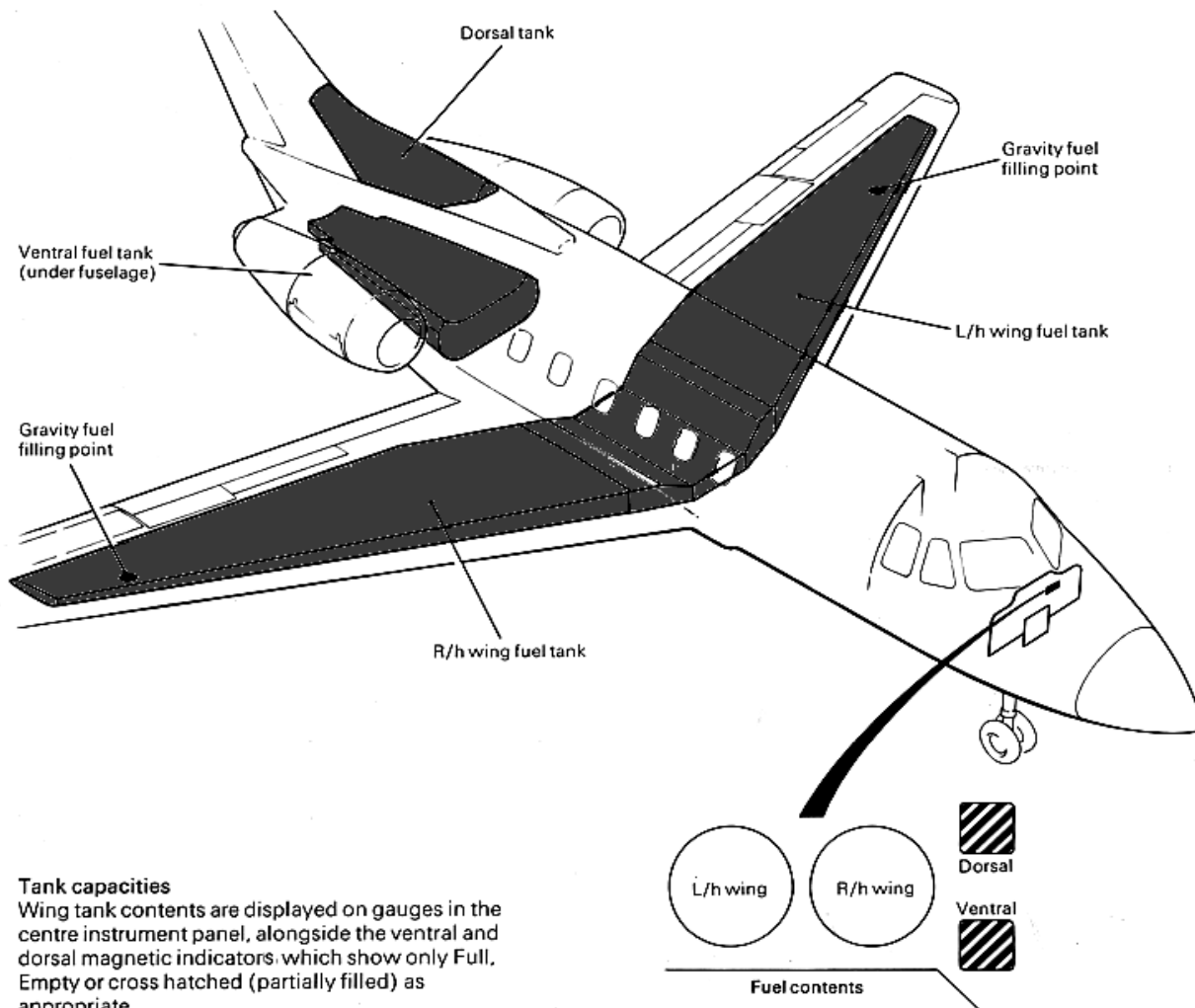
APU control panel



# AIRCRAFT CRASH RECOVERY

## FUEL SYSTEM

The 125.700 has an integral fuel tank in each wing, a ventral tank under the rear fuselage and a dorsal tank forward of the fin on top of the fuselage. The aircraft can be refuelled through the pressure refuelling system or, if this equipment is not available, through gravity refuelling points in the wings and ventral tank. When refuelling the aircraft should be parked on level ground, but if this is not possible then the aircraft should be positioned nose down the slope.



### Tank capacities

Wing tank contents are displayed on gauges in the centre instrument panel, alongside the ventral and dorsal magnetic indicators which show only Full, Empty or cross hatched (partially filled) as appropriate.

Tank	Imp gal		US gall		Litres		lbs (0.8 sg)
	Usable	Unusable	Usable	Unusable	Usable	Unusable	Usable
WING LEFT	510	4.75	612.5	6	2318.5	21	4080
WING RIGHT	510	4.75	612.5	6	2318.5	21	4080
Ventral	109	0.50	131	1	495	3	872
Dorsal	51	0	61	0	232	0	408
Totals	1180	10	1417	13	5364	45	9440



# AIRCRAFT CRASH RECOVERY

## FUEL SYSTEM (cont.)

### Fuels

The fuels listed may be used for the 125.700 after verification with the Flight Manual. Mixing of fuels is permitted, but the TFE 731 engine fuel electronic computers are set for one type of fuel and it is important that the flight crew are advised and engine computers adjusted if alternative fuels are introduced.

### Fuel additives

Certain additives may already be present in some fuels or may be added as required.

Anti-static additive Shell ASA3 may be used in concentrations not exceeding 0.75 ppm (parts per million) and at a conductivity maximum of 36 picohms per meter at point and time of delivery into the aircraft.

Fuel anti-ice additive is required for fuel temperatures below  $-40^{\circ}\text{C}$  and additives to specifications D.Eng R.D.2451 (Issues 1 and 2) or MIL-1-27686 are approved in concentrations not exceeding 0.15% by volume for anti-icing; with the added bonus of preventative biocidal treatment when used continuously.

*Note* These additives are already present in fuels to specifications D.Eng R.D.2453 and MIL-T-5624.

For biocidal shock treatment additives to specifications D.Eng R.D.2451 (Issue 2) or MIL-1-27686 may be used in concentrations not exceeding 0.25% by volume. Biobor JF may be used at concentrations not exceeding 270 ppm (20 ppm elemental boron).

HITEC E515 (MIL-T-25017) may be used as an anti-corrosive additive in concentrations not exceeding 4 lbs per 35000 Imp galls, and phosphorous content of 0.06 ppm in fuel supplied from the installation. Please note that fuel to specification D.Eng R.D.2453 already includes HITEC E515.

FUEL SPECIFICATION				
Fuel	British	U.S.A.	Canadian	I.A.T.A.
KEROSENE FUELS (AVTUR)		ASTM D1655 JET A		
	D.Eng.R.D.2453	ASTM D1655 JET A1	3-GP-23	Kerosene
	D.Eng.R.D.2494			

# AIRCRAFT CRASH RECOVERY

## FUEL SYSTEM (cont.)

### Refuelling

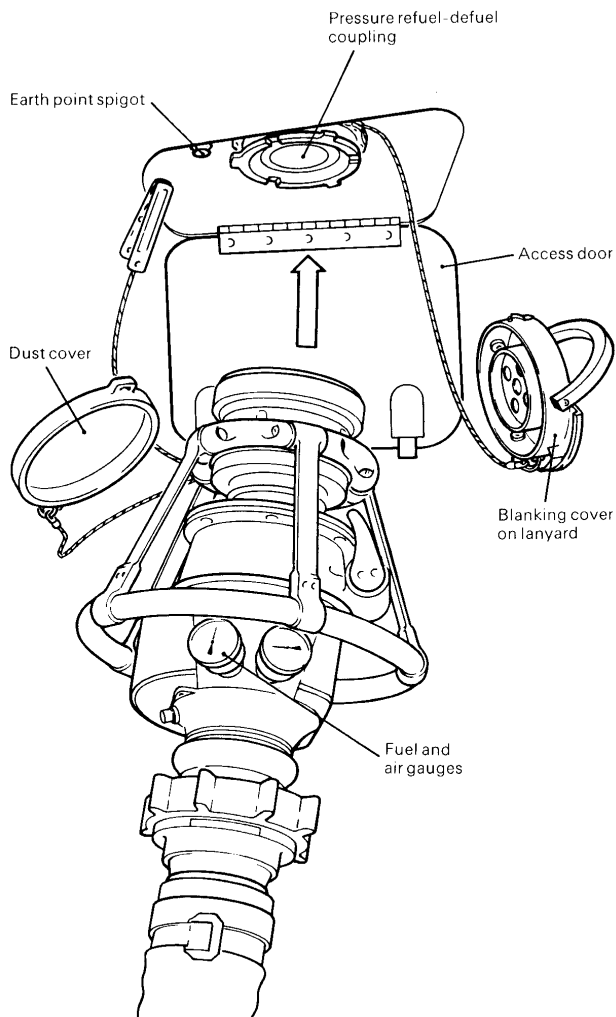
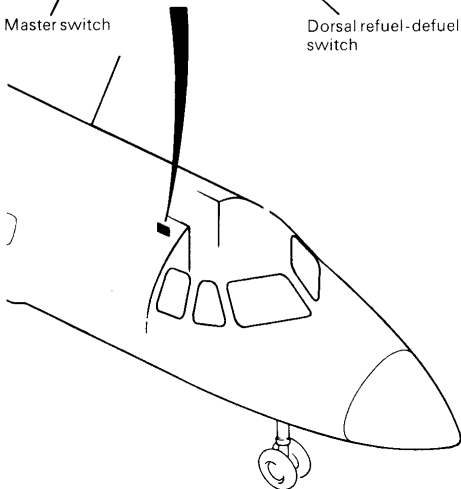
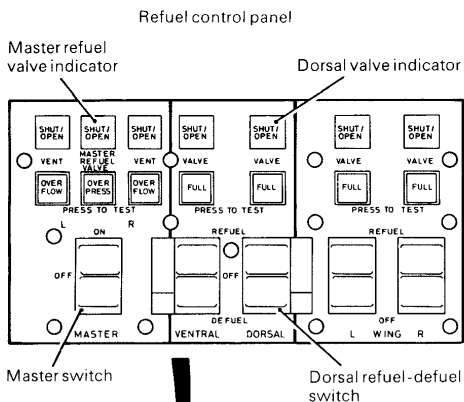
The 125.700 provides for pressure refuelling through a coupling in the right hand side of the ventral tank, or alternatively by gravity refuelling through filler caps in each wing and the ventral tank. When gravity refuelling, the dorsal tank is refuelled by transferring fuel from the wing tanks.

### Pressure refuelling

Pressure refuelling is controlled from a refuel control panel located in the vestibule just aft of the forward bulkhead on the right hand side. The control panel incorporates the tanks refuel valve switches and indicates the valves position and full condition of all tanks.

External electrical power is preferred during pressure refuelling, since any internal battery voltage reduction will affect quantity indicator readings. The APU must not be used during pressure refuelling.

Detailed instructions for pressure refuelling are contained in document 25-7PF83, which is carried on all 125.700 series aircraft. Pressure refuelling is controlled from the flight deck and should be carried out only by operators trained for the purpose.



### Pressure refuelling limitations

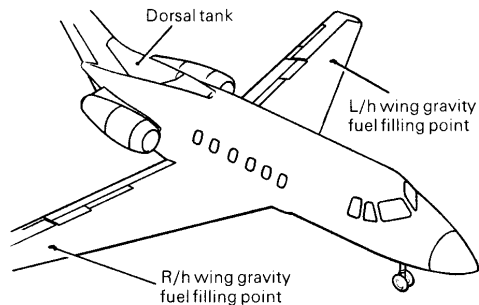
maximum refuel pressure (gauge)	– 50 lb/sq in (3.515 kg/sq cm)
Maximum refuel rate	– 120 Imp gal/min (144 US), (545 Litres)
Maximum defuel suction	– 11.0 lb/sq in (0.773 kg/sq cm)
Minimum wing tank fuel load with full ventral and dorsal tanks	– 1000 lb each wing

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## FUEL SYSTEM (cont.)

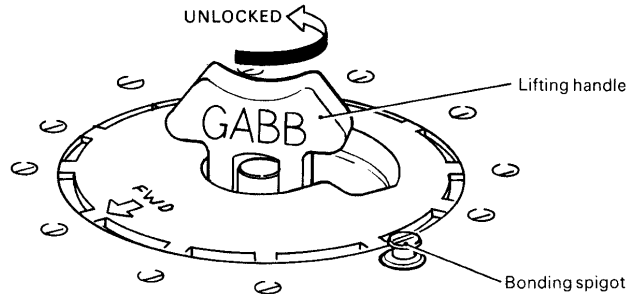
### Gravity refuelling

Refuel both wing tanks simultaneously if possible ; if a single hose is used ensure that an out of balance condition of approximately 2000 lbs is not exceeded. Maximum refuel rate per tank :— 70 Imp gal/min (84 US gal/min, 318 litres/min).



The dorsal tank is refuelled by transferring fuel from the wing tanks as detailed in Pressure Refuelling Document 25-7PF83, which is carried on all 125.700 aircraft. For dorsal tank filling each wing tank must contain at least 1000 lbs of fuel. The dorsal tank must be filled to maximum capacity for flight, and the contents of the wing tanks adjusted accordingly.

The ventral tank filler is on the right hand side and if the ventral tank is to be used in flight it must be filled to maximum capacity and each wing tank must contain more than 3600 lbs of fuel.

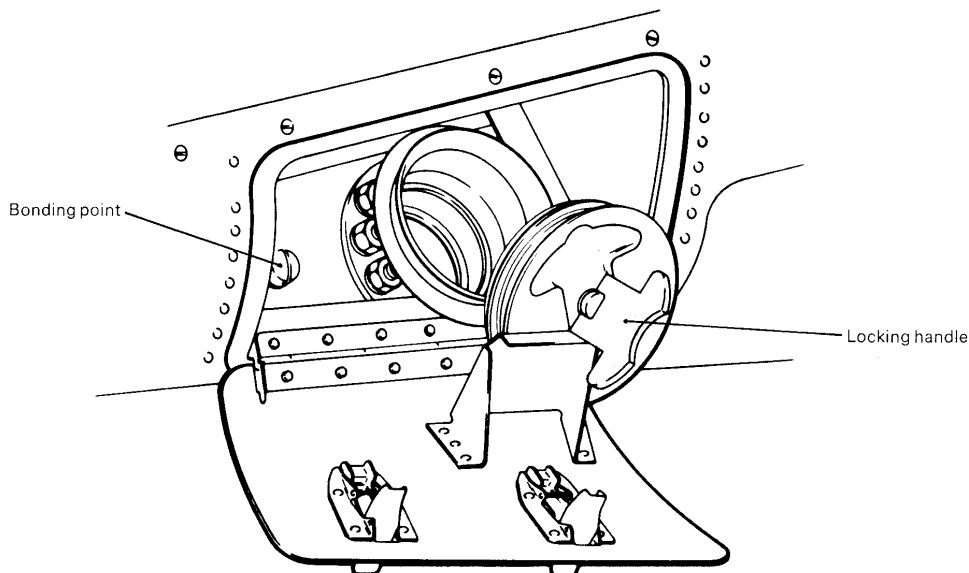


### To remove and refit wing filler cap

- 1 Lift handle from recess
- 2 Rotate handle to release cap
- 3 Withdraw cap from skin adapter
- 4 Insert cap into skin adapter with the arrow on cap facing forward
- 5 Rotate handle to lock and seal cap
- 6 Lower handle into recess

### To remove and fit ventral filler cap

- Remove : Lift handle from its recess  
turn handle anti-clockwise to release cap  
withdraw cap from adapter neck
- Fit : Install cap in adapter neck  
turn handle clockwise to lock  
return handle to recess



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## FUEL SYSTEM (CONT.)

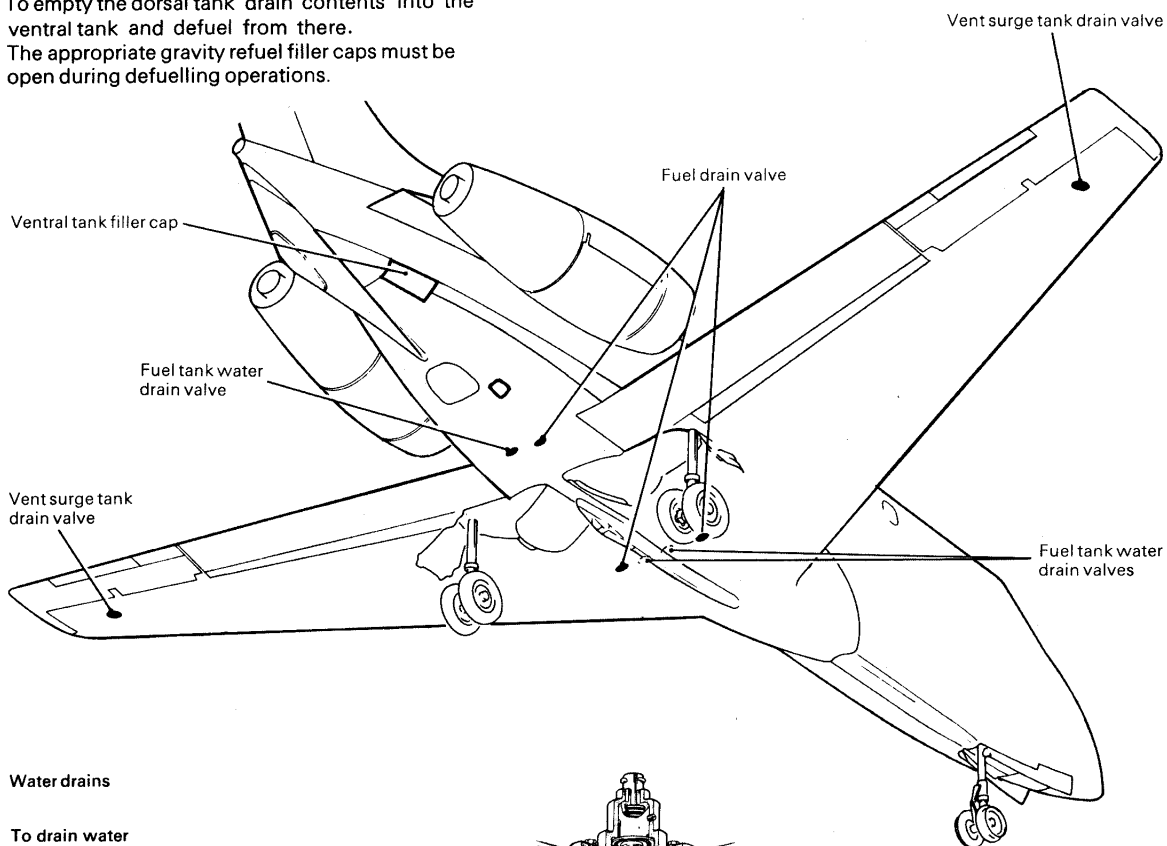
### Defuelling

The 125.700 may be defuelled through either the pressure system or gravity drains. The ventral and dorsal tanks must be defuelled completely with any precise load adjustments being made in the wing tanks. Full details for pressure defuelling are included in the Crew Manual (usually carried on the aircraft) and the Maintenance Manual.

Gravity defuelling is accomplished through three drain points ; one on each wing booster pump manhole cover and one on the ventral tank. Defuel adaptors are available from British Aerospace ; 25Y867A for single point gravity defuelling into a container or 25Y635A for suction defuelling at both wing defuel points into a tanker. 25Y867A is a sub assembly of 25Y635A and is available separately.

To empty the dorsal tank drain contents into the ventral tank and defuel from there.

The appropriate gravity refuel filler caps must be open during defuelling operations.



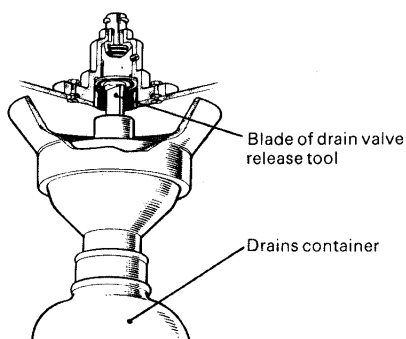
### Water drains

#### To drain water

- 1 Insert blade of release tool in slot of drain valve spindle
- 2 Turn tool & valve anti-clockwise  $\frac{1}{2}$  turn & push up
- 3 Drain, until drains container is seen to be full
- 4 Release pressure on drains tool & allow drain valve to move downwards to closed position
- 5 Turn tool & valve clockwise to lock drain valve in position
- 6 Check sample & repeat drain procedure if necessary

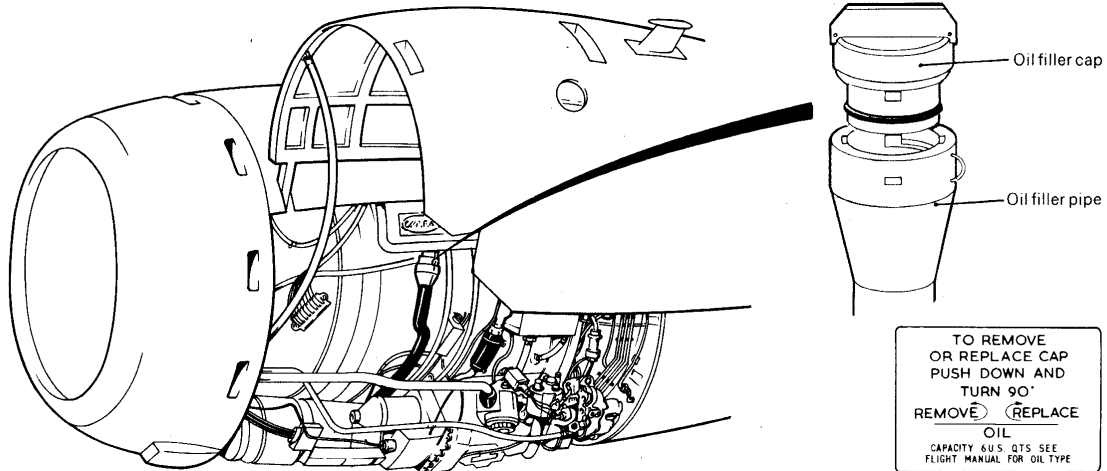
#### Note

This tool may also be used to drain the vent surge tank



# AIRCRAFT CRASH RECOVERY

## ENGINE OIL



Left hand engine

It is recommended that engine oil level is checked and adjusted after each flight within 15 mins. of shut down.

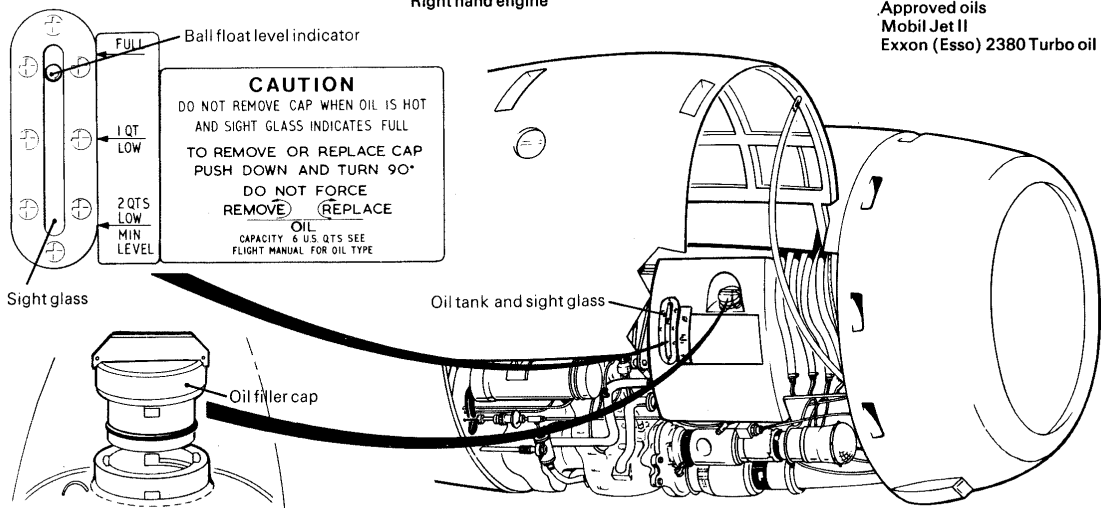
The oil tank level sightglass is located on the right hand side of each engine, and can be viewed through an open slot in the R/H cowling; and by pressing in a spring loaded panel in the L/H cowling. The oil level is regarded as being at the bottom of the sightglass ball float.

To top up the oil system the lower cowling is opened to gain access to the oil tank filler cap. Add oil until the sight glass registers FULL. DO NOT MIX OILS.

*Note* The L/H engine incorporates an oil filler pipe from the tank to the outboard side of the engine to facilitate replenishment.

Capacities	US qts	Imp qts	Litres
Total capacity of oil system	12	10	11.4
Capacity of oil tank	6	5	5.7
Usable oil	2	1.7	1.9
Maximum Consumption/hr	0.2	0.17	0.19

Right hand engine



# AIRCRAFT CRASH RECOVERY

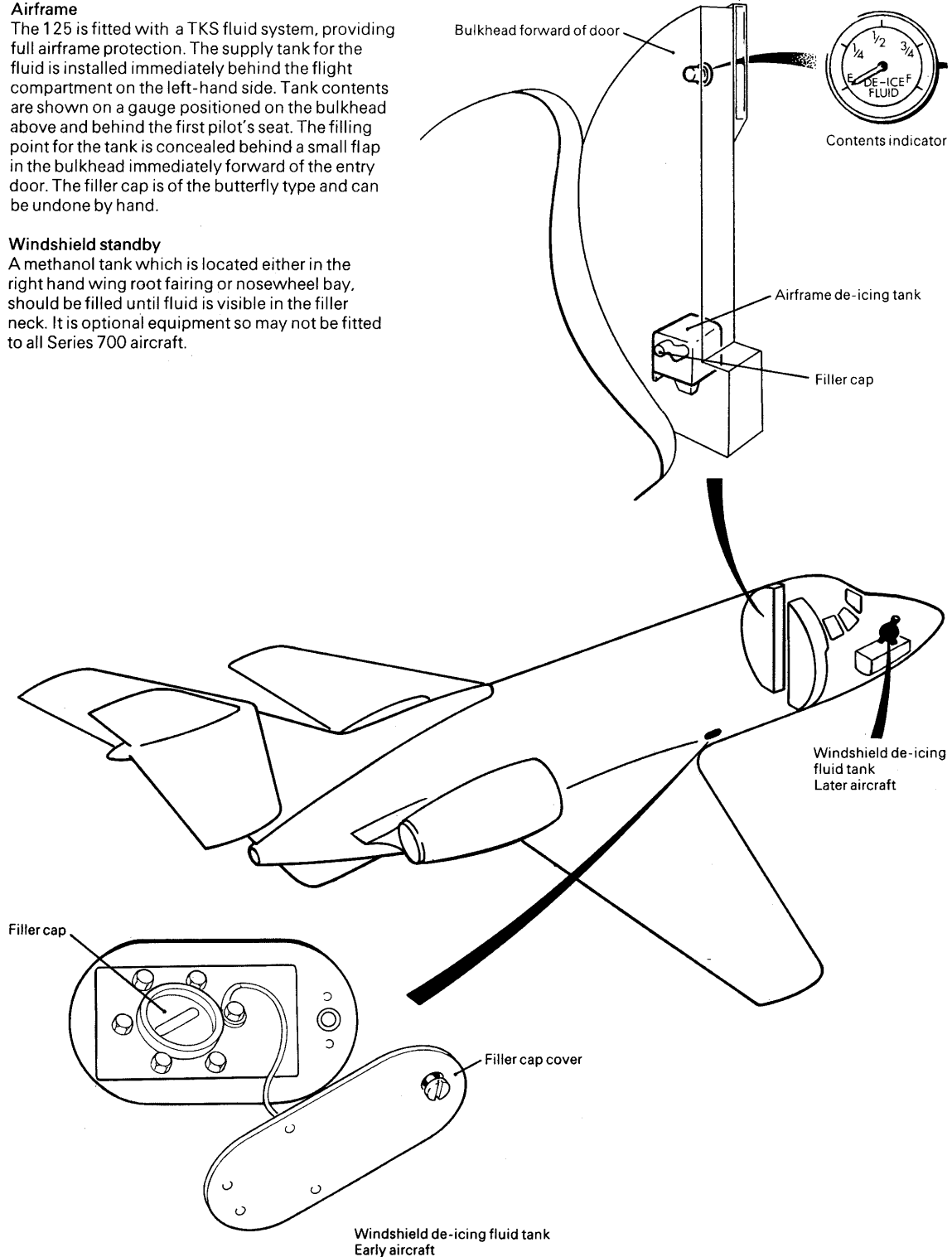
## DE-ICING SYSTEM

### Airframe

The 125 is fitted with a TKS fluid system, providing full airframe protection. The supply tank for the fluid is installed immediately behind the flight compartment on the left-hand side. Tank contents are shown on a gauge positioned on the bulkhead above and behind the first pilot's seat. The filling point for the tank is concealed behind a small flap in the bulkhead immediately forward of the entry door. The filler cap is of the butterfly type and can be undone by hand.

### Windshield standby

A methanol tank which is located either in the right hand wing root fairing or nosewheel bay, should be filled until fluid is visible in the filler neck. It is optional equipment so may not be fitted to all Series 700 aircraft.



# AIRCRAFT CRASH RECOVERY

## HYDRAULIC SYSTEM

There are two separate hydraulic systems on the 125.700. The main system is operated at 3000 lb/sq in (211 kg/sq cm) by two engine-driven pumps in parallel. The auxiliary system is operated by a handpump in the flight compartment. All hydraulic components are located outside the pressurised fuselage, the majority in the rear equipment bay.

A servicing handpump in the rear equipment bay enables a main system check to be carried out without running the engines. The handpump in the flight compartment for the auxiliary hydraulic system cannot be used for main system checks.

### Servicing points

The hydraulic accumulators, located in the rear equipment bay are charged with dry air or nitrogen through the connections shown below :

Connector 0.303 in (0.77cm) dia  
32 tpi UNS

Aircraft part No. Damic Controls DC 630C

The air charging pressure is 950 to 1000 lb/sq in (67 to 70.5kg/sq cm) when the hydraulic fluid pressure is zero. Fluid pressure may be reduced to zero by repeated application of the wheel brakes with the brake lever in both the normal and emergency positions.

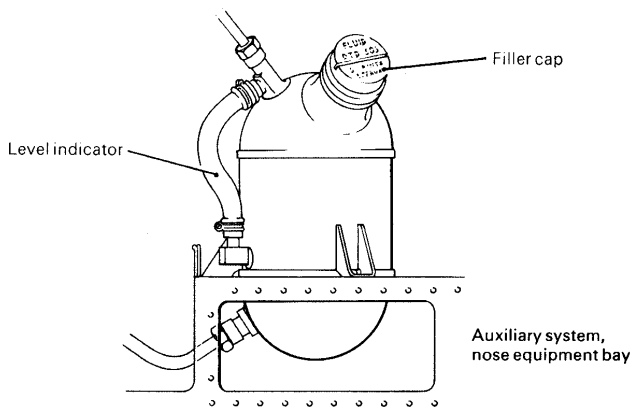
The main system reservoir is located above the servicing handpump in the rear equipment bay and has a level indicator. A special spanner (25Y189A) stowed in the locker by the main entry door is provided to remove the filler cap. The auxiliary system reservoir is in the nosewheel bay with its filling point and level indicator.

### Hydraulic fluid

For the hydraulic systems and landing gear struts use DTD. 585B or proprietary brand (see below) to Mil-H-5606.

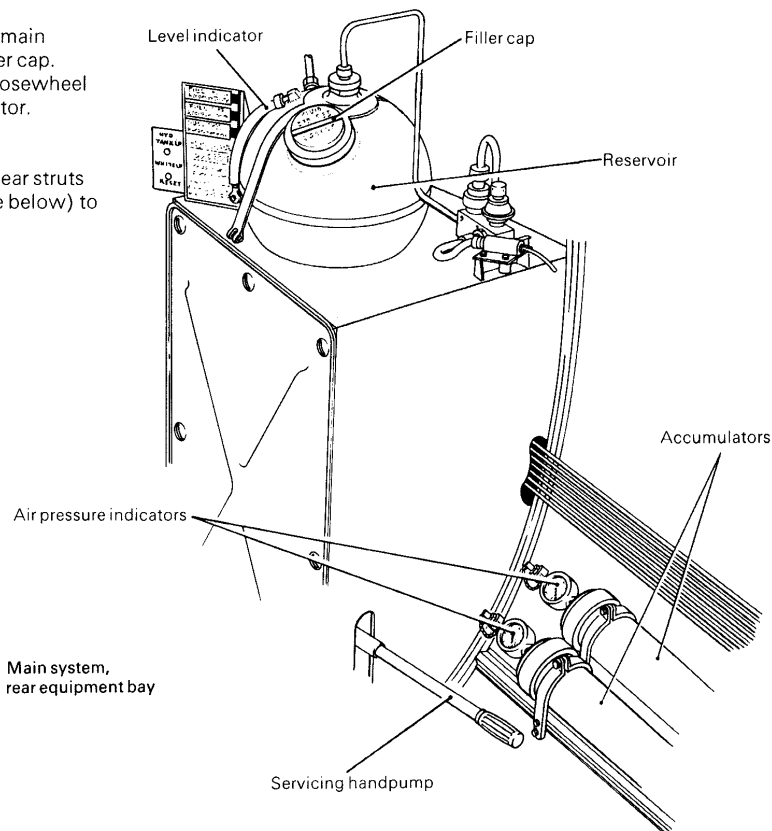
Aeroshell fluid No. 4  
Mobil Aero Hydraulic oil HFA  
Hydraulic Oil AA  
Univis J-43

Mixing of these fluids is permitted.



### Systems contents

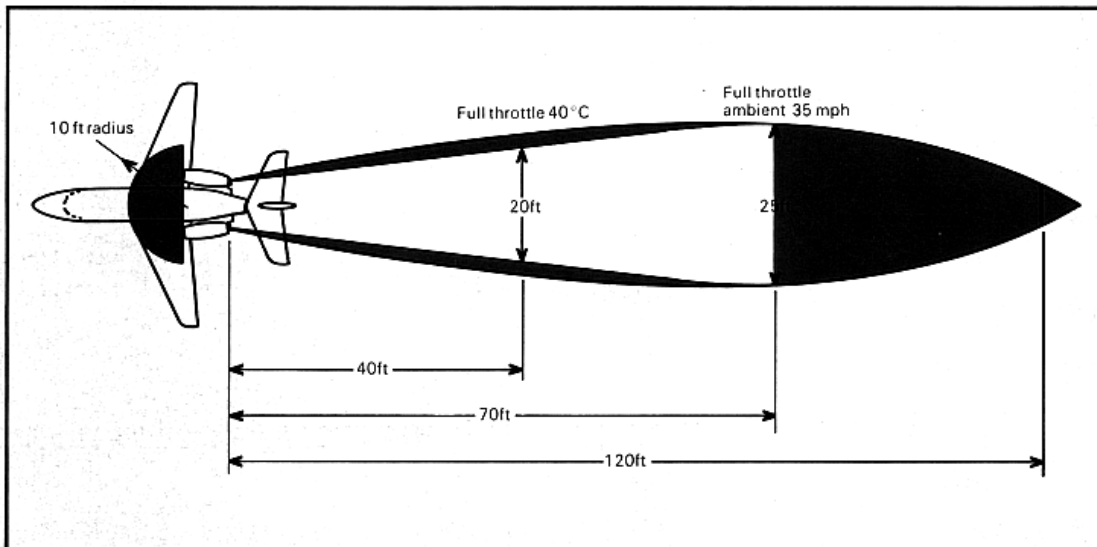
		Imp Gal	US Gal	Litres
Main system	Tank capacity	2.0	2.4	9.1
	System capacity	3.80	4.5	16.8
Auxiliary system	Tank capacity	0.62	0.75	2.84
	System capacity	0.64	0.77	2.96



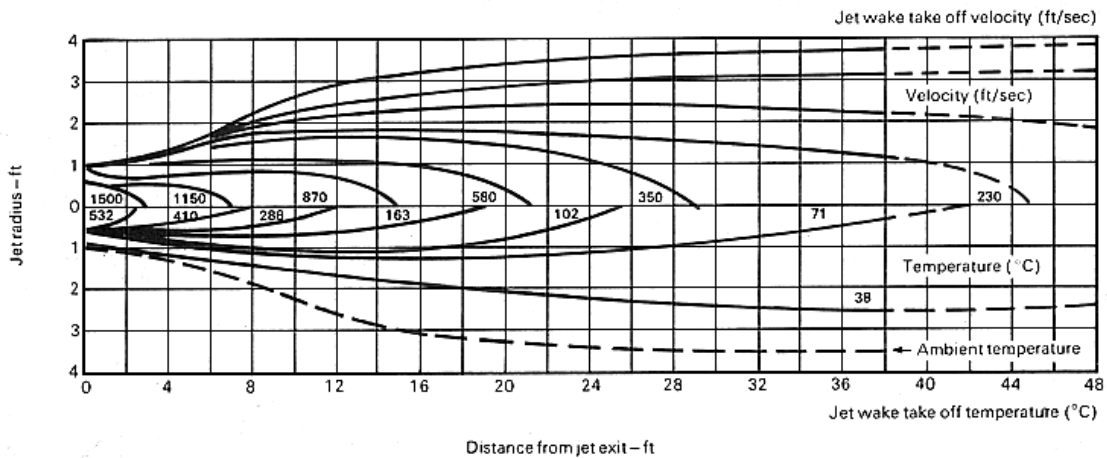
# AIRCRAFT CRASH RECOVERY

## JET BLAST

Before starting up the engines it should be remembered that around the aircraft danger areas exist resulting from jet intake and efflux. These areas are shown in the diagram and care should be taken in positioning the 125 in relation to adjacent buildings and other aircraft. On aircraft fitted with an APU a jet efflux will exist above the right engine and an intake above the left engine.



Estimated jet patterns  
100% rpm 1300ft static ISA





# AIRCRAFT CRASH RECOVERY

## COCKPIT CONTROL LOCKS

These control locks in the flight compartment should not be disturbed unless a control check is being carried out and should be replaced immediately after the check has been completed.

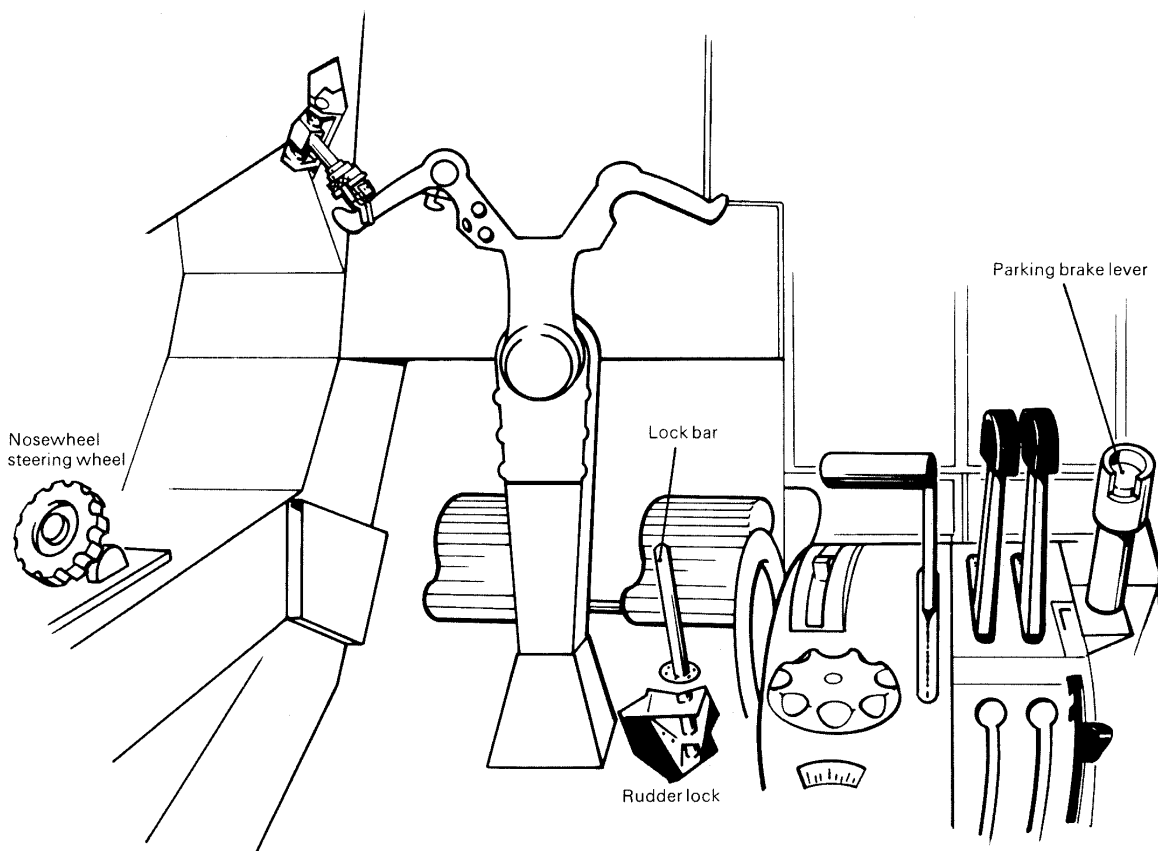
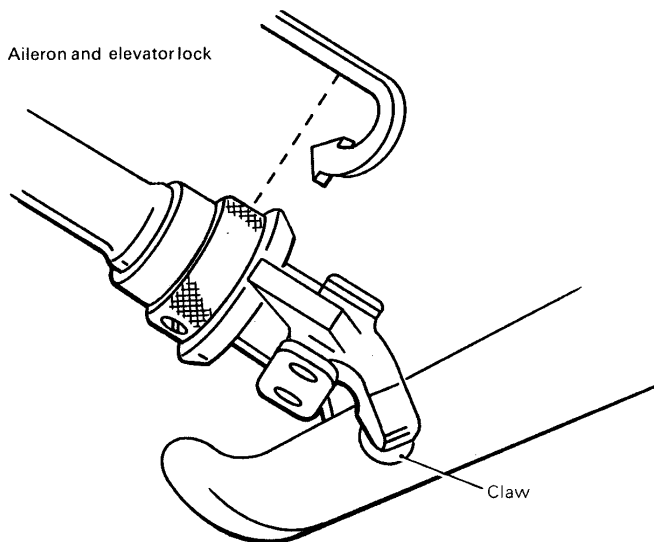
### Ailerons and elevator

Release gust lock from its stowage clip beside the control column and close jaws around the control column handwheel as shown, ensuring that the claw spigots engage in the bushes. Lock as shown by turning ring.

When these locks are applied the throttle levers are baulked to prevent more than 60% N1 rpm being selected simultaneously on both engines. However, each engine may be run up to 100% rpm independently.

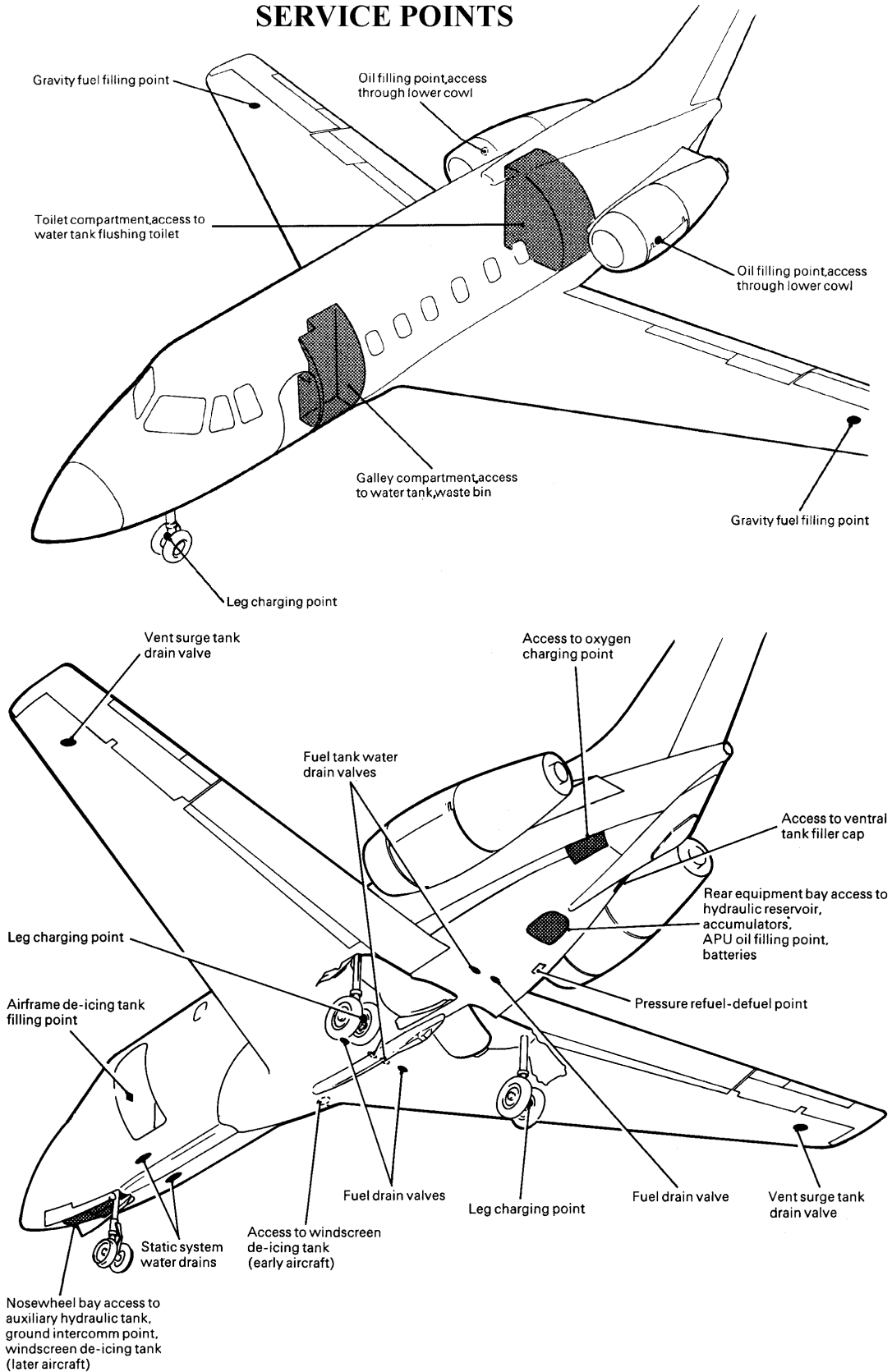
### Rudder

With the pedals in the neutral position, insert the lock bar stowed under the second crew seat, through the hole in the floor aft of the pilot's right rudder pedal until rudder is locked.



# AIRCRAFT CRASH RECOVERY

## SERVICE POINTS



# AIRCRAFT CRASH RECOVERY

## LANDING GEAR

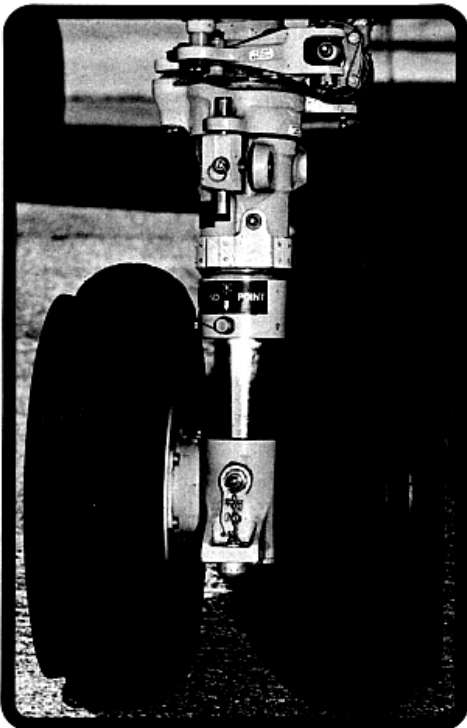
The 125 has a rugged twin-wheeled tricycle landing gear designed for operation from paved and unpaved runways, including grass. Due to the twin wheels, the runway strength requirements are also very low – on a rigid runway, the Equivalent Single Wheel Load (ESWL) and the Load Classification Number (LCN) are 9500lb (4310kg) and 9.05 respectively at maximum aircraft weight.

### Tyres

It is recommended that only nitrogen or dry air be used for tyre inflation. While it is recommended that tyre pressure be maintained at the values shown in the tables, nevertheless the mainwheel tyre pressure may be reduced to 80lb/sq in (5.62kg/sq cm) for operation off unpaved, grass or 'thin' paved runways when and if required. It may be necessary to adjust the take-off weight when operating at reduced tyre pressure. For full information refer to the Crew Manual.

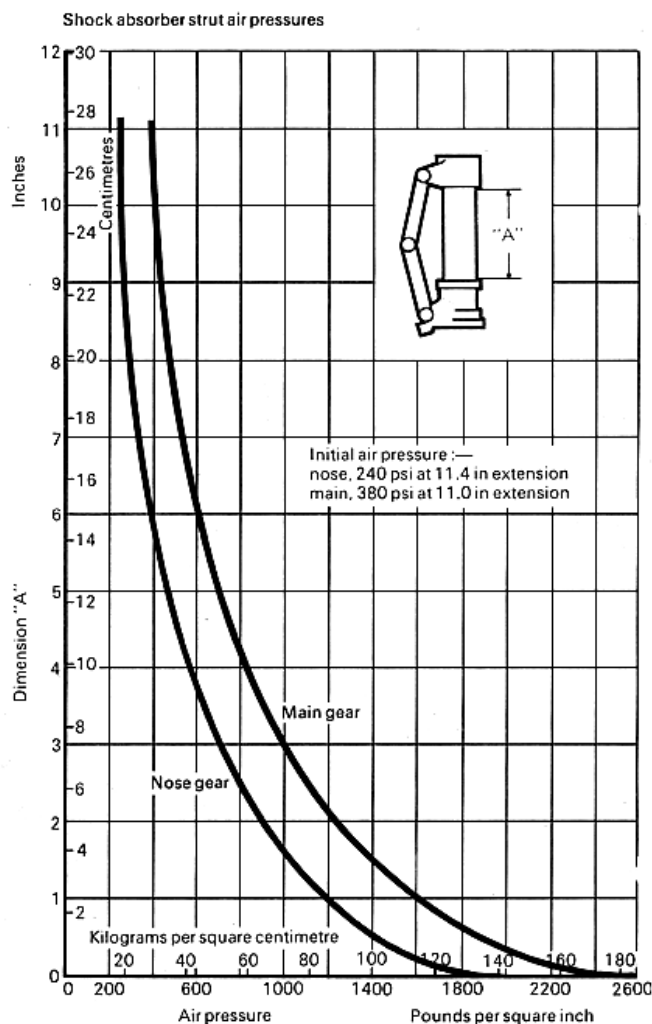
### Shock struts

The valves for air or nitrogen charging which are the same type as those for the hydraulic accumulators, are located at the bottom of each strut on the front of the nose leg and on the rear of the main legs. The correct shock strut pressure is indicated in the graph. This graph assumes that the quantity of oil in the strut is correct. If repeated air replenishment is necessary the oil quantity should be checked. For this operation, refer to the approved Maintenance Manual.



	Nose	Main
Manufacturer	Dunlop	Dunlop
Part number	DR 6384T	DR 14626T
Size	Two 18 × 4½-10 Tubeless and chined	Four 23 × 7-12 Tubeless
Recommended* Pressure—lb/sq in (kg/sq cm)	80+6 (5.62) -0	128+6 (9.00) -0

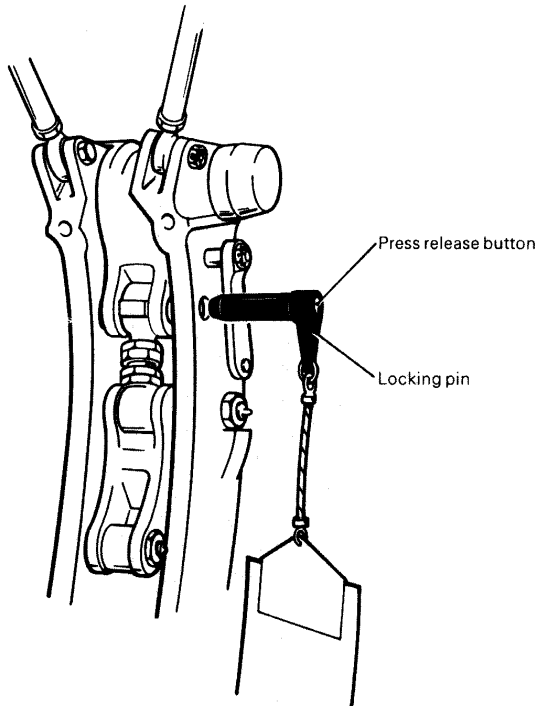
\*with aircraft standing on its wheels.



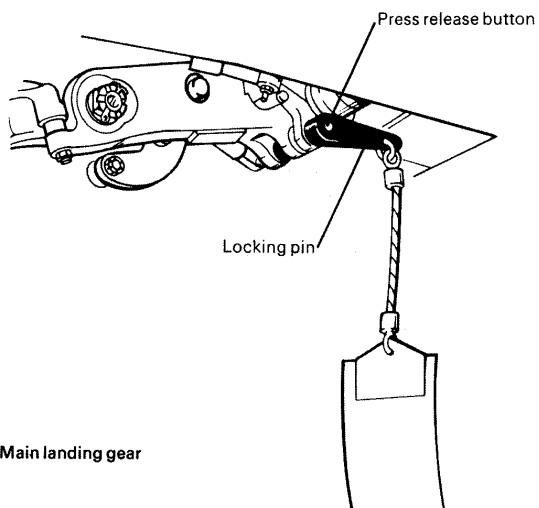
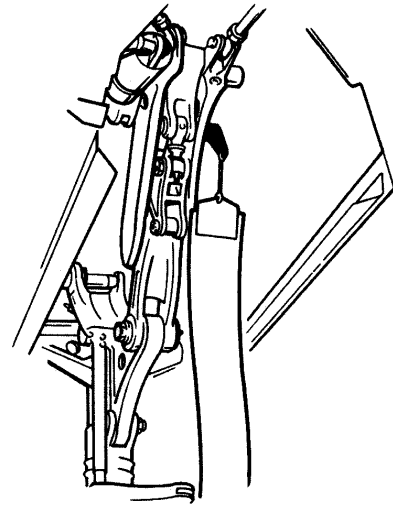
# AIRCRAFT CRASH RECOVERY

## LANDING GEAR (cont.)

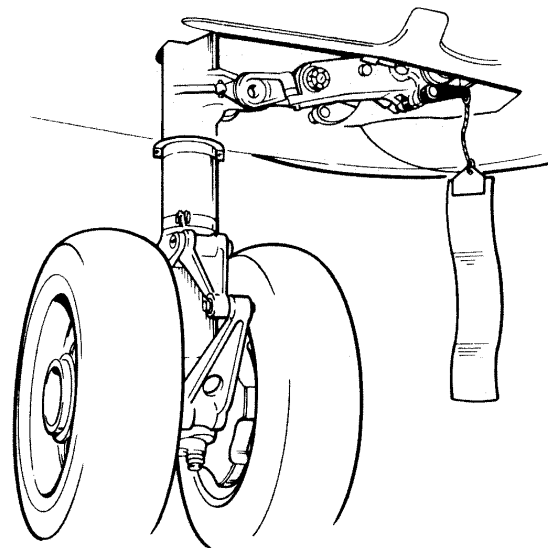
These should be inserted as soon as the aircraft has parked. The pins are stowed in a locker in the bulkhead by the main entry door.



Nose landing gear



Main landing gear



# AIRCRAFT CRASH RECOVERY

## AIRCRAFT JACKING

The 125 is jacked at three points, two at the wing leading edge roots and one at the rear of the fuselage as shown. A 5-ton, three- or four-leg jack is used at each wing root and a 3 to 4-ton, three- or four-leg jack at the rear; international standard jack pad adapters are used at all three points. Before jacking, it is essential to ensure that the fuel loads in each wing are equal and that weight of the aircraft is below 23 000lb (10 433kg). While jacking, care should be taken to avoid excessive fore and aft loads applied to the rear jack. This should be done by levelling the aircraft on the main jacks first. For wheel changes each landing gear may be lifted individually. A 6-ton bottle jack can be used up to the maximum take-off weight. If, however, a suitable jack is not available, the aircraft may be run up on a wedge lifting the wheel to be changed clear of the ground. Also as the nose leg is raked, a forward wheel can be changed without a jack by turning the wheels at right angles to the aircraft.

If aircraft is being jacked in the open it must be headed into wind; but aircraft should not be jacked outside if wind strength is greater than 20 knots.

### Jack specifications

#### Wheel change jack

(No adapter or pad is required)  
Closed height: 4.5in (0.14m)  
Extended height: 10in (0.25m)  
Capacity: 6 tons (2960kg)

#### Tail jack – jack pad 25Y13A

Closed height: 39in (0.99m) to top of socket  
Extended height: 60in (1.52m) to top of socket  
Capacity: 3 to 4 tons (1480–1974kg).

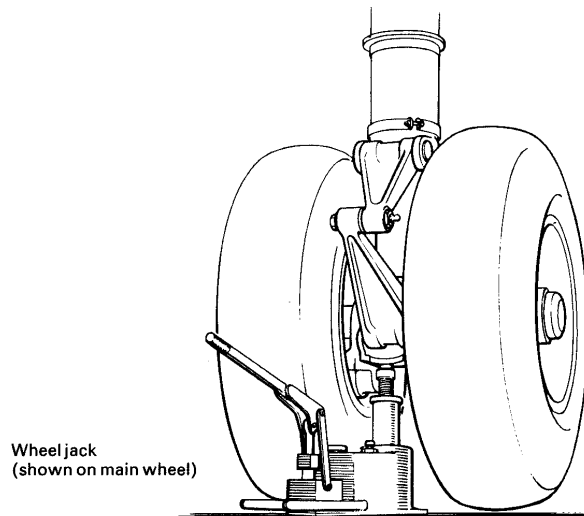
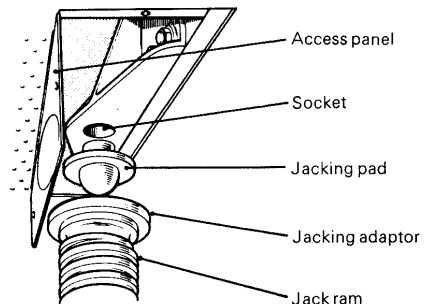
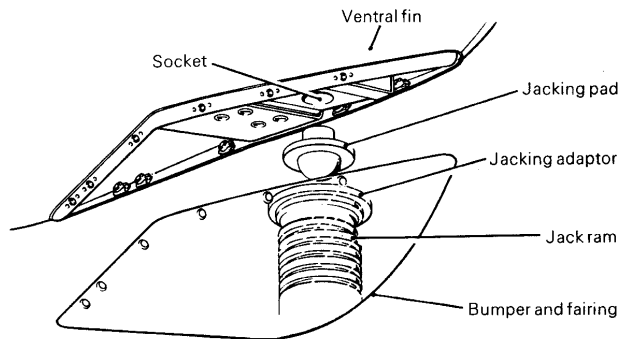
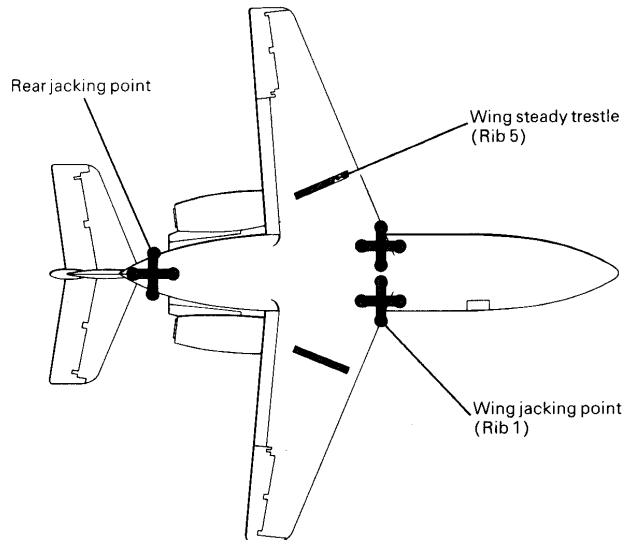
#### Wing jacks – jack pads 25Y67A

Closed height: 23in (0.58m) to top of socket  
Extended height: 44in (1.12m) to top of socket  
Capacity: 5 tons (2465kg).

#### Wing trestle profile boards

25Y 331A & 25Y 332A

These are supplied undrilled for use with any suitable trestle.



# AIRCRAFT CRASH RECOVERY

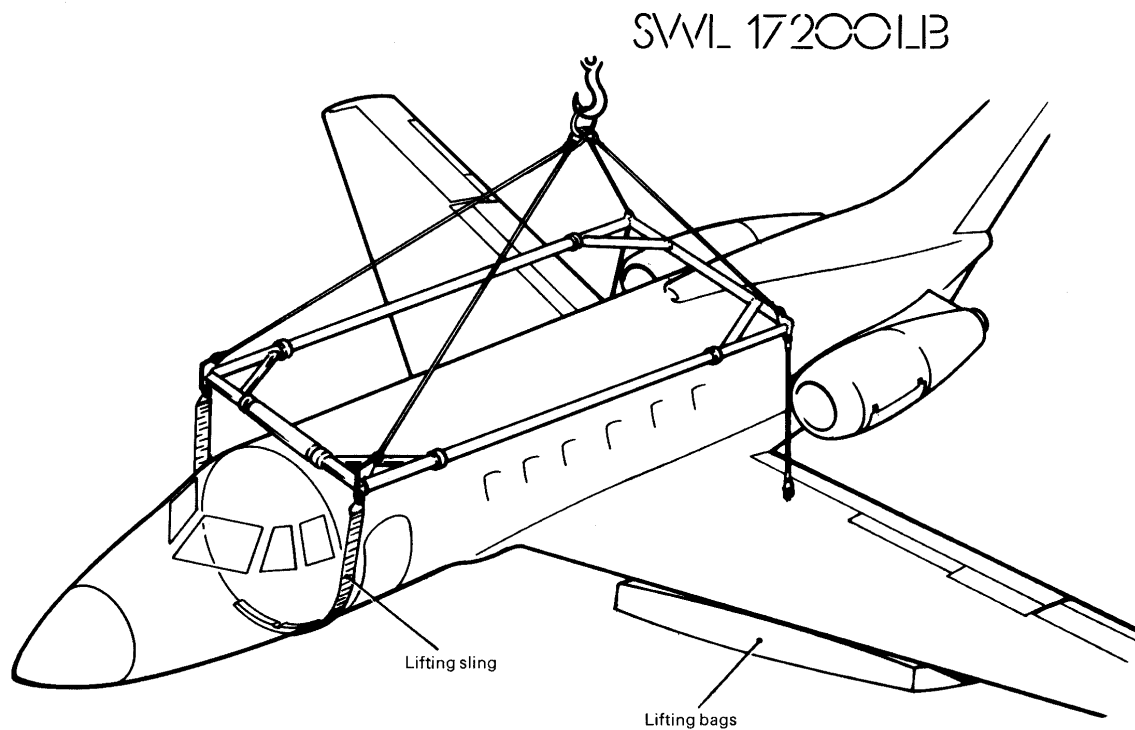
## AIRCRAFT LIFTING

The 125 may be lifted by sling 25-6Y 1601A or lifting bags.

The sling consists of a spreader bar with a lifting band at the forward end and two cables at the rear. The forward lifting band with blocks is taken around the fuselage immediately forward of the entry door (at frame 8). Each rear cable is attached to a lifting eye screwed into the top surface of the wing spar (at the intersection with rib 4).

Alternatively, lifting bags may be used to raise the aircraft, providing there is sufficient clearance to insert them beneath the approved lifting areas (see diagram). During the lifting operation the aircraft must be secured to prevent any lateral movement on the bags.

Before commencing any lifting operation, whether by sling or on bags, the aircraft should be unloaded, fuel removed if possible and the aircraft generally made safe.



# AIRCRAFT CRASH RECOVERY

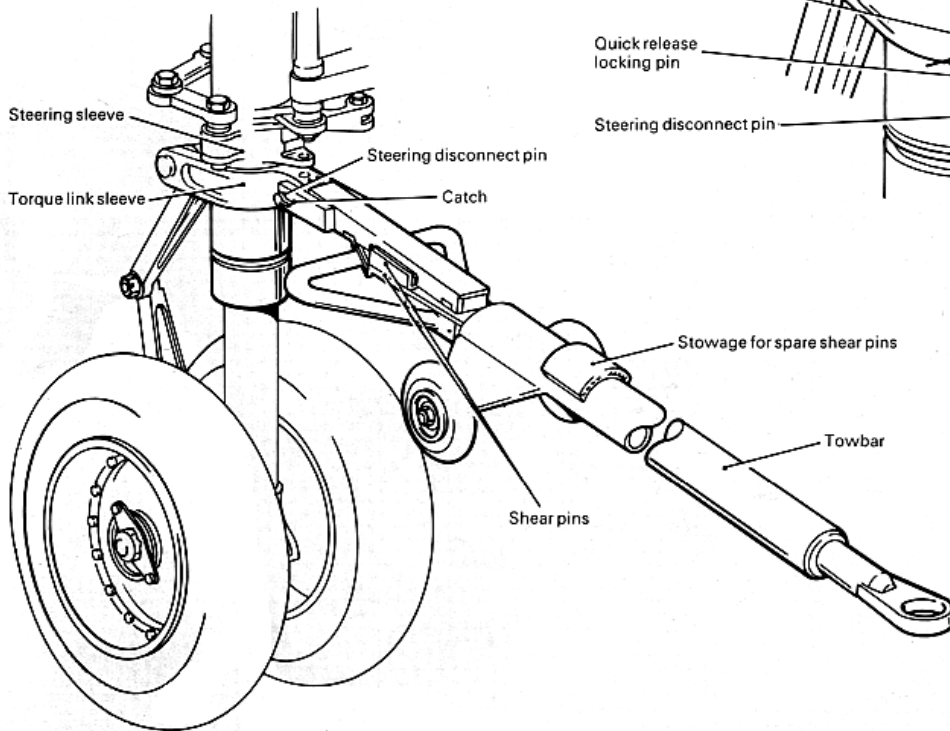
## TOWING

The towbar cannot be connected without first disconnecting the aircraft steering mechanism. To do this, remove the quick-release locking pin and withdraw the steering disconnect pin downwards. The towbar or steering arm can then be attached by inserting the steering disconnect pin horizontally through the corresponding towbar and nose gear towing lugs.

To reconnect the aircraft nosewheel steering mechanism the wheels must be turned so that the steering disconnect pin vertical holes in the steering sleeve and torque link sleeve are aligned as closely as possible before disconnecting the towbar. Final alignment can then be made by hand. It is essential that the quick-release locking pin is inserted to retain the steering disconnect pin. The gradient up which the 125 may be towed should not be steeper than 1 in 6 (see page 9 for turn radii).

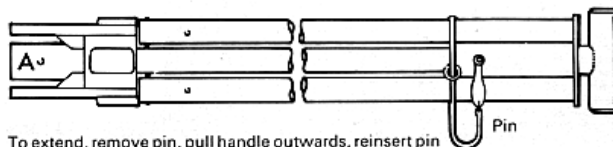
### Tow bar

Manufacturer	British Aerospace	
Part Number	25-6Y-1647A	
Length	10 ft 6 in (3.20m)	
Weight	105 lb (47.6 kg)	
Shear Pins	Tension	Bending
Part Numbers	25-6Y-1661	25-6Y-1659
No. of Spare Pins stowed on bar	4	4



### Steering arm

Manufacturer	British Aerospace
Part Number	25Y513A
Length	6 ft 2 in (1.98m)
Collapsed length	3 ft 5 in (1.04m)
Weight	18 lb (8.26 kg)



To extend, remove pin, pull handle outwards, reinsert pin when hole A is aligned with pin-hole.

# AIRCRAFT CRASH RECOVERY

## OXYGEN SYSTEM

The oxygen bottles and the replenishing point are at the rear of the aircraft (see illustration). The standard system consists of two 26.5cu ft (750 litres) bottles in the rear equipment bay.

The replenishing point and contents gauge are both concealed behind an access hatch located towards the rear of the ventral tank fairing on the left-hand side of the aircraft. The hatch is secured by quick release fasteners.

Fully charged pressure	1800lb/sq in (126kg/sq cm)
Capacity	Two bottles each of 26.5cu ft (750 litres)
Connector	$\frac{3}{8}$ in (0.95cm) dia x 24 tpi UNF
Aircraft part number	Damic Controls DC 550

### Warning

Oil or grease in contact with oxygen forms an explosive mixture. All recharging must be carried out with de-greased tools and clean hands.

