

SECTION 6

AIRCRAFT SERVICING AND GROUND HANDLING EQUIPMENT

LIST OF ITEMS

	Now AP	119A-1000-	
	Book	Sect	Item
2 Cleaner, vacuum, aircraft, heavy duty, Mk 1A	1A	1	2
3 Rig, test, powered flying controls, Valiant (Boulton Paul)	1A	4	1
4 Gauge, aircraft tyre, high pressure (0-450 lbf/in ²)	1A	4	2
5 Trolley, oil system flushing	1A	6	9
6 Gauge, pressure, aircraft tyre (24-176 lbf/in ²)	1A	4	5
7 Gauge, pressure, aircraft tyre (20-120 lbf/in ²)	1A	4	6
9 Ladder, aircraft servicing, small	1A	7	3
12 Set, hydraulic test	1A	4	3
13 Rig, test, pressure, engine coolant	1A	4	24
14 Pump, undercarriage oleo, Type F	1A	4	7
15 Pump, undercarriage oleo, Type A	1A	4	8
16 Primer, oil, Mk 2	1A	6	10
19 Arm, tail towing	1C	3	5
21 Frame, front towing, Mk 1	1C	3	6
22 Adaptor, inflation, Mk 2	1A	4	23
23 Platform, aircraft servicing, mobile, adjustable, Mk 2	1A	7	16
27 Trolley, stowage, for engine and power plant cowlings	1B	1	16
29 Rig, test, tyre pressure gauge	1A	4	29
30 Platform, aircraft inspection, Type C	1A	7	19
31 Ladder, aircraft servicing, flat top, adjustable	1A	7	13
35 Sling, power plant, universal	1E	1	25
36 Pump, tyre inflating, foot operated, Type B	1A	4	25
39 Hoist, heavy aircraft components, 2½ cwt	1E	2	15
40 Hoist, heavy aircraft components, 5 cwt	1E	2	14
41 Cleaners, vacuum, aircraft, large	1A	1	4
43 Plant, spraying, defrosting fluid	1D	3	3
44 Transporter, wheel	1A	6	8
45 Trestle, tail, Type D	1A	7	23
47 Trolley, aircraft cleaning	1A	1	8
48 Deleted			
49 Trolley, salvage, main, Type C	1C	2	4
50 Handlers, aircraft, mechanical, Type B, Mk 3 and 4	1C	1	2
53 Hoist, heavy aircraft components, 10 cwt	1E	2	19
54 Separator, tyre, hydraulic	1B	1	15
55 Cleaner, vacuum, large electric	1A	1	5
60 Trestle, mainplane, steady	1A	7	24
62 Pickets, aircraft, screw	1D	3	4

64	Inflator, tyre, high pressure, Mk 1	1A	4	9
65	Chock, aircraft, metal, collapsible, small	1H	1	7
66	Trestles, jacking, universal	1A	7	25
68	Stand, engine erecting, Type A	1A	2	13
70	Gauge, pressure (2-20 lbf/in ²)	1A	4	4
71	Inflator, tyre, low pressure, Mk 1 (0-120 lbf/in ²)	1A	4	27
72	Inflator, tyre, medium-pressure, Mk 1 (0-250 lbf/in ²)	1A	4	26
73	Ladder, aircraft entrance	1H	2	14
76	Trolleys, coolant, water/methanol, de-icing fluid, and oil replenishment	1A	6	20
77	Platform, aircraft servicing, hydraulic	1A	7	18
78	Trolley, engine change unit servicing, Mk 2	1A	2	12
80	Trolleys, high pressure air Mk 2 and nitrogen charging, Mk 1	1F	4	9
81	Ladder, aircraft servicing "Giraffe", Type D4	1A	7	9
83	Deleted			
84	Ladder, aircraft servicing, "Giraffe". Type AA, Mk 2	1A	7	8
86	Skate, side tracking, Type F	1C	3	1
87	Rig, test, powered flying controls, Mk 2 (Fairey)	1A	4	10
88	Rig, test, powered flying controls, Victor (Hobson)	1A	4	11
89	Can, fluid replenishing, pressurised, 10 gallon, Mk 3	1A	6	6
90	Unit, oxygen charging	1F	4	8
91	Plant, spraying, defrosting fluid (power operated)	1D	3	2
92	Arm, steering, tailwheel, Type G	1C	3	7
95	Skate, side tracking, Type E	1C	3	2
102	Cleaner, vacuum, aircraft, large	1A	1	4
103	Stand, engine erecting, radial aircraft engines, Type C	1A	2	14
107	Platform, aircraft maintenance	1A	7	6
108	Computer, fuel weight	1A	6	21
112	Bridles, towing	1C	3	8
113	Can, fluid replenishing, pressurised, Mk 1	1A	6	1
116	Sling, propeller	1E	3	18
117	Deleted			
118	Cleaner, vacuum, aircraft, heavy duty, Mk 1B	1A	1	3
119	Rig, test, powered flying controls, Vulcan (Boulton Paul)	1A	4	30
122	Machines, weighing, hydrostatic (2, 10 and 25 tons)	1G	1	4
123	Platform, aircraft servicing, elevating (large)	1A	7	7
124	Cleaner, vacuum, aircraft, "Dustette" type	1A	1	1
125	Trolley, aircraft defrosting plant, power-operated	1D	3	1
127	Can, fluid replenishing, pressurised, Mk 2	1A	6	11
128	Trolley, can, fluid replenishing	1A	6	12

129	Hoist, heavy aircraft components, 250 lb.	1E	2	12
130	Trolley, oxygen charging, Mk 2	1F	4	7
131	Rig, test, hydraulic component and alternator (Earlier version)	1A	4	17
132	Base, adapter, for aircraft entrance ladder	1H	2	13
133	"Basix" pre-fabricated constructional equipment	1A	7	12
134	Gauge, pressure checking, 0-30 (lbf/in ²) for electronic containers	1A	4	12
135	Rig, test, hydraulic component	1A	4	13
136	Trolley, handling, multi-purpose (Naval)	1C	4	10
137	Rig, test, hydraulic component, 12 g.p.m.	1A	4	14
138	Trolley, nitrogen charging, Mk 1B	1F	4	6
139	Trolley, fire extinguisher, CO ₂ , aircraft servicing	1D	2	7
140	Hoist, servicing, multi-purpose	1E	2	13
▶ 141	Trolley, fuel replenishment	1A	6	28
143	Rig test (Hydraulic bench supply) 6664	1A	4	15
145	Rig, test, hydraulic component and alternator (Later version)	1A	4	16
146	Steps, passenger, for Transport Command aircraft	1H	2	15
147	Separator, tyre, screw type	1B	1	17
149	Steps, cabin access (Edghill Type 2832/HD)	1A	7	27
▶ 152	Trolley, high pressure air charging, Mk 2A, 2B and 2C	1F	4	20
154	Handler, aircraft, mechanical, Mk 5 and 5A	1C	1	1
155	Unit, pressure regulating	1F	4	13
156	Rigs, test, "Maxaret"	1A	4	31
157	Rig, inhibiting, Mk 3	1A	2	11
158	Trolley, nitrogen charging, single cylinder	1F	4	5
▶ 159	Trolley, air charging, single cylinder, Mk 1A	1F	4	21
160	Hoist, servicing, multi-purpose, Mk 2	1E	2	18
▶ 161	Deleted			
163	Trolley, air charging, single cylinder, Mk 2	1F	4	14
164	Hi-Way prefabricated constructional equipment	1A	7	29
165	Rig, turbine compressor washing	1A	6	22
166	Steps, aircraft servicing (Air transportable)	1A	7	28
▶ 167	Trolley, water/methanol replenishment, Mk 2	1A	6	29
168	Deleted			
170	Trolley, nitrogen charging, four-cylinder Mk 1A	1F	4	3
171	Stand, universal run-up, Mk 1	1A	2	3
172	Steps, passenger (Edghill)	1H	2	12
174	Trolley, nitrogen charging, Mk 2 and 2A	1F	4	4
175	Trolley, refrigerant replenishing	1F	4	16
176	Trolley, refrigerant replenishing - nitrogen pressurised	1F	4	17
177	Low lifting bags (RFD)	1C	2	5
178	Winch, M3 Skyclimber	1E	2	11
179	Hoist, heavy aircraft components, 2½ cwt. (45 ft cable)	1E	2	16

180	Hoist, heavy aircraft components, 18 cwt.	1E	2	17	
▶ 181	Kit, tyre inflation, high pressure	1A	4	32	◀
182	Tow bar, Mk 1A	1C	3	4	
183	Trolley, nitrogen charging, 2 cylinder, lightweight	1F	4	15	
184	Ladder, lightweight, flat top, 6 ft.	1A	7	21	

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AIRCRAFT SERVICING AND GROUND HANDLING EQUIPMENT

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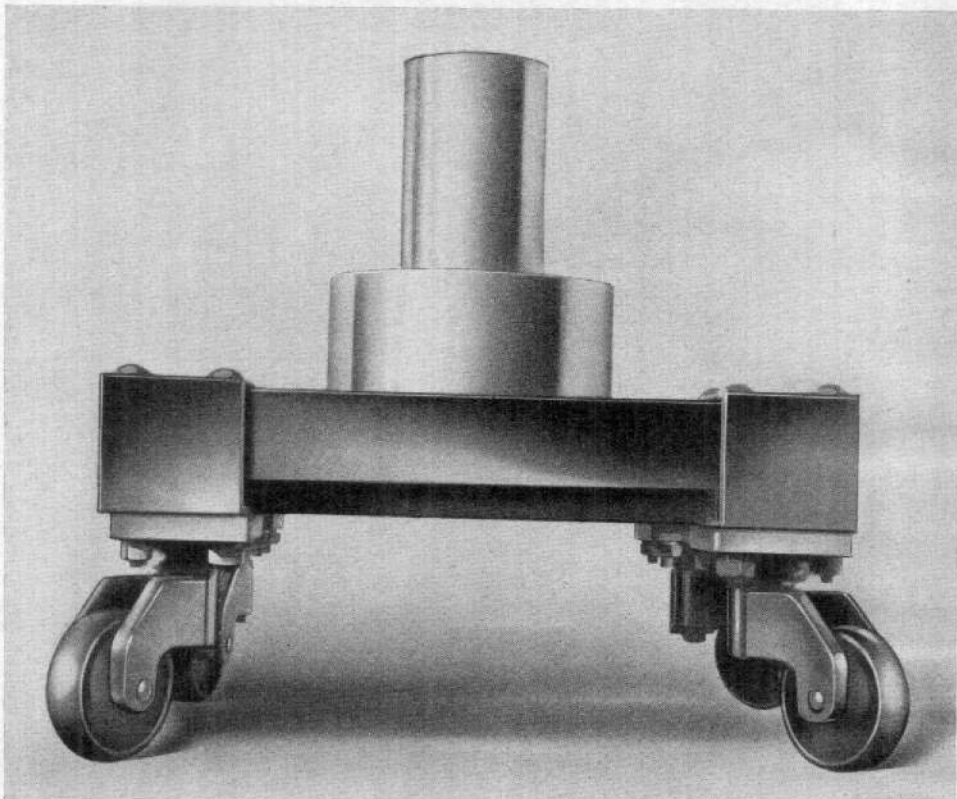
	Now AP Book	119A-1000- Sect	Item
1 Arbor, propeller supporting			
2 Cleaner, vacuum, aircraft, heavy duty, Mk 1A	1A	1	2
3 Rig, test, powered flying controls, Valiant (Boulton Paul)	1A	4	1
4 Gauge, aircraft tyre, high pressure (0-450 lb. per sq.in)	1A	4	2
5 Trolley, oil system flushing	1A	6	9
6 Gauge, pressure, aircraft tyre (24-176 lb. per sq.in)	1A	4	5
7 Gauge, pressure, aircraft tyre (20-120 lb. per sq.in)	1A	4	6
8 Stand, propeller erection and dismantling			
9 Ladder, aircraft servicing, small	1A	7	3
12 Set, hydraulic test	1A	4	3
13 Rig, test, pressure, engine coolant	1A	4	24
14 Pump, undercarriage oleo, Type F	1A	4	7
15 Pump, undercarriage oleo, Type A	1A	4	8
16 Primer, oil, Mk 2	1A	6	10
17 Arm, steering, and bar, tail towing			
19 Arm, tail towing	1C	3	5
21 Frame, front towing, Mk 1	1C	3	6
22 Adapter, inflation, Mk 2	1A	4	23
23 Platform, aircraft servicing, mobile, adjustable, Mk 2			
26 Stand, engine, jet (Goblin)			
27 Trolley, stowage, for engine and power plant cowlings	1B	1	16
29 Rig, test, tyre pressure gauge			
30 Platform, aircraft inspection, Type C	1A	7	19
31 Ladder, aircraft servicing, flat top, adjustable			
35 Sling, power plant, universal			
36 Pump, tyre inflating, foot operated, Type B	1A	4	25
38 Pump, oleo undercarriage, Type B			
39 Hoist, heavy aircraft components, 2½ cwt	1E	2	15
40 Hoist, heavy aircraft components, 5 cwt	1E	2	14
41 Cleaners, vacuum, aircraft, large	1A	1	4
43 Plant, spraying, defrosting fluid	1D	3	3
44 Transporter, wheel	1A	6	8
45 Trestle, tail, Type D	1A	7	23
47 Trolley, aircraft cleaning	1A	1	8
48 Rig, mobile testing, alternator and C.S.D., Type U1571			
49 Trolley, salvage, main, Type C	1C	2	4

50	Handlers, aircraft, mechanical, Type B, Mk 3 and 4	1C	1	2
53	Hoist, heavy aircraft components, 10 cwt	1E	2	19
54	Separator, tyre, hydraulic	1B	1	15
55	Cleaner, vacuum, large, electric	1A	1	5
59	Kit, checking, aircraft tyre pressure			
60	Trestle, mainplane, steady	1A	7	24
62	Pickets, aircraft, screw	1D	3	4
63	Trolley, oxygen cylinder, Type B			
64	Inflator, tyre, high pressure, Mk 1	1A	4	9
65	Chock, aircraft, metal, collapsible, small	1H	1	7
66	Trestles, jacking, universal	1A	7	25
68	Stand, engine erecting, Type A	1A	2	13
70	Gauge, pressure (2-20 lb. per sq.in)	1A	4	4
71	Inflator, tyre, low pressure, Mk 1 (0-120 lb. per sq.in)	1A	4	27
72	Inflator, tyre, medium-pressure, Mk 1 (0-250 lb. per sq.in)	1A	4	26
73	Ladder, aircraft entrance	1H	2	14
74	Trolley, aircraft tail, for compass swinging			
76	Trolleys, coolant, water/methanol, de-icing fluid, and oil replenishment			
77	Platform, aircraft servicing, hydraulic	1A	7	18
78	Trolley, engine change unit servicing, Mk 2	1A	2	12
79	Shoe, rotatable, for compass swinging			
80	Trolleys, high pressure air Mk 2 and nitrogen charging, Mk 1	1F	4	9
81	Ladder, aircraft servicing "Giraffe", Type D4	1A	7	9
83	Ladders, aircraft servicing, elevating and extending, Mk 2 and 3			
84	Ladder, aircraft servicing, "Giraffe", Type AA, Mk 2	1A	7	8
86	Skate, side tracking, Type F	1C	3	1
87	Rig, test, powered flying controls, Mk 2 (Fairey)	1A	4	10
88	Rig, test, powered flying controls, Victor (Hobson)	1A	4	11
89	Can, fluid replenishing, pressurised, 10 gallon, Mk 3	1A	6	6
90	Unit, oxygen charging	1F	4	8
91	Plant, spraying, defrosting fluid (power operated)	1D	3	2
92	Arm, steering, tailwheel, Type G	1C	3	7
93	Creeper, aircraft servicing			
94	DELETED			
95	Skate, side tracking, Type E	1C	3	2
102	Cleaner, vacuum, aircraft, large	1A	1	4
103	Stand, engine erecting, radial aircraft engines, Type C	1A	2	14

107	Platform, aircraft maintenance	1A	7	6
108	Computer, fuel weight			
112	Bridles, towing	1C	3	8
113	Can, fluid replenishing, pressurised, Mk 1	1A	6	1
114	Handler, aircraft, mechanical, Type A			
116	Sling, propeller			
117	Plant, aircraft washing, large, Type A			
118	Cleaner, vacuum, aircraft, heavy duty, Mk 1B	1A	1	3
119	Rig, test, powered flying controls, Vulcan (Boulton Paul)			
120	Sling, scanner			
122	Machines, weighing, hydrostatic (2, 10 and 25 tons)	1G	1	4
123	Platform, aircraft servicing, elevating (large)	1A	7	7
124	Cleaner, vacuum, aircraft "Dustette" type	1A	1	1
125	Trolley, aircraft defrosting plant, power- operated	1D	3	1
127	Can, fluid replenishing, pressurised, Mk 2	1A	6	11
128	Trolley, can, fluid replenishing	1A	6	12
129	Hoist, heavy aircraft components, 250 lb.	1E	2	12
130	Trolley, oxygen charging, Mk 2	1F	4	7
131	Rig, test, hydraulic component and alternator (Earlier version)	1A	4	17
132	Base, adapter, for aircraft entrance ladder	1H	2	13
133	"Basix" pre-fabricated constructional equipment	1A	7	12
134	Gauge, pressure checking, 0-30 p.s.i. for electronic containers	1A	4	12
135	Rig, test, hydraulic component	1A	4	13
136	Trolley, handling, multi-purpose (Naval)	1C	4	10
137	Rig, test, hydraulic component, 12 g.p.m.	1A	4	14
138	Trolley, nitrogen charging, Mk 1B	1F	4	6
139	Trolley, fire extinguisher, CO ₂ , aircraft servicing	1D	2	7
140	Hoist, servicing, multi-purpose	1E	2	13
141	Trolley, fuel replenishment			
143	Rig test (Hydraulic bench supply) 6664	1A	4	15
145	Rig, test, hydraulic component and alternator (Later version)	1A	4	16
146	Steps, passenger, for Transport Command aircraft	1H	2	15
147	Separator, tyre, screw type			
148	Arms, towing, hollow axle, universal, Mk 2			
149	Steps, cabin entrance (Edghill Type 2823/HD)			
150	Pumps, pressurising			
151	Trolley, refrigerant replenishment			
152	Trolley, high pressure air charging, Mk 2A, 2B and 2C			
153	Handler, aircraft, mechanical, lightweight			

154	Handler, aircraft, mechanical, Mk 5 and 5A	1C	1	1
155	Unit, pressure regulating			
156	Rigs, test, "Maxaret"			
157	Rig, inhibiting, Mk 3	1A	6	7
158	Trolley, nitrogen charging, single cylinder	1F	4	5
159	Trolley, air charging, single cylinder, Mk 1A			
160	Hoist, servicing, multi-purpose, Mk 2	1E	2	18
161	Handler, aircraft, mechanical, Mk 6			
162	Rig, oil filling, Type 11565			
163	Trolley, air charging, single cylinder, Mk 2			
164	Hi-Way prefabricated constructional equipment			
165	Rig, turbine compressor washing			
166	Steps, aircraft servicing (Air transportable)			
167	Trolley, water/methanol replenishment, Mk 2			
168	Adapter, inflation, Mk 6			
169	Trolley, air charging, two-cylinder			
170	Trolley, nitrogen charging, four-cylinder, Mk 1A	1F	4	3
171	Stand, universal run-up, Mk 1	1A	2	3
172	Steps, passenger (Edghill)	1H	2	12
174	Trolley, nitrogen charging, Mk 2 and 2A	1F	4	4
175	Trolley, refrigerant replenishing			
176	Trolley, refrigerant replenishing - nitrogen pressurised			
177	Low lifting bags (RFD)			
178	Winch, M3 Skyclimber	1E	2	11
179	Hoist, heavy aircraft components, 2½ cwt. (45 ft cable)			
180	Hoist, heavy aircraft components, 18 cwt.	1E	2	17
181	Kit, tyre inflation, high pressure			
182	Tow bar, Mk 14	1C	3	4
183	Trolley, nitrogen charging, 2 cylinder, lightweight			
184	Ladder, lightweight, flat top, 6ft.	1A	7	21

ITEM 1

ARBOR, PROPELLER SUPPORTING**A.P. Reference**

Ref. No. 4G/3593

Classification 3

Overall dimensions

Length 1 ft. 7 in.

Width 1 ft. 2½ in.

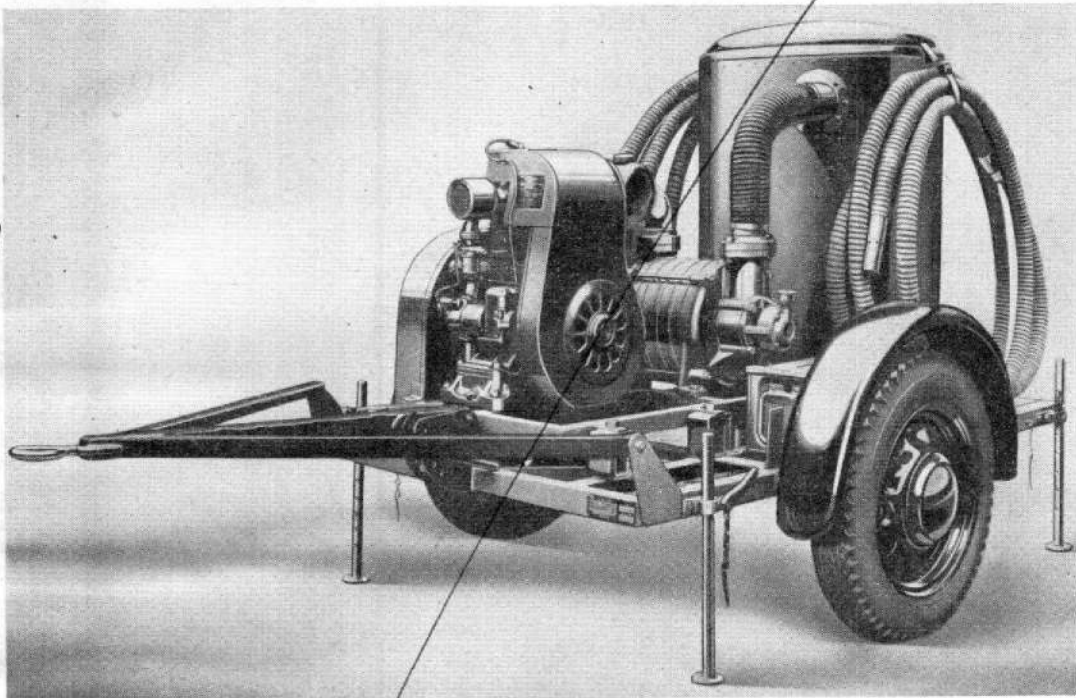
Height 10 in.

Weight 26¾ lb

Brief description Small wooden arbor fitted with castor wheels, used for supporting a propeller removed from an aircraft.**RESTRICTED**

ITEM 2

CLEANER, VACUUM, AIRCRAFT, HEAVY DUTY, Mk. 1A



A.P. Reference 4299A

Ref. No. 4G/4169

Classification 1

Overall dimensions

Length 9 ft. 10 in.

Width 5 ft. 4 in.

Height 5 ft. 0 in.

Weight 9 cwt. 2 qr.

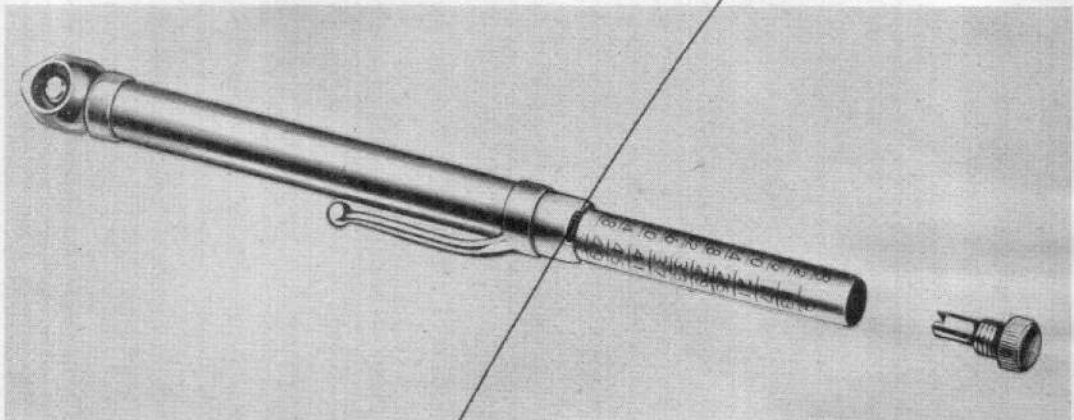
Brief description This is a mobile vacuum cleaner for cleaning the interior of aircraft. An engine-driven turbo-exhauster is mounted on the trolley, and two 30 ft. hoses and a set of cleaning tools are included.

RESTRICTED

ITEM 7

GAUGE, PRESSURE, AIRCRAFT TYRE (20-120 lb./sq. in.)

AC 76



A.P. Reference

Ref. No. 4G/2509

Classification 2

Overall dimensions

Length 5½ in.

Dia. 1 in.

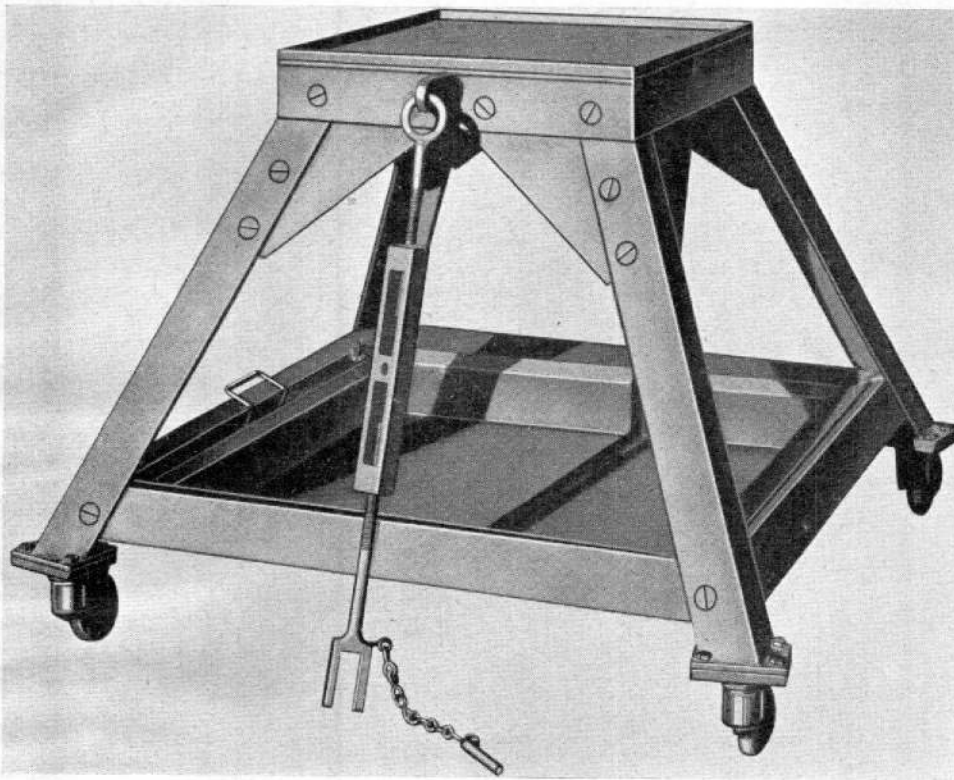
Weight 4 oz.

Brief description Suitable for testing the pressure in tyres fitted with the small type Schrader valve. Calibrated in 2 lb. divisions.

~~RESTRICTED~~

ITEM 8

STAND, PROPELLER ERECTION and DISMANTLING



A.P. Reference

Ref. No. 4G/3594

Classification 3

Overall dimensions

Length 3 ft. 0 in.

Width 3 ft. 0 in.

Height 2 ft. 4 in.

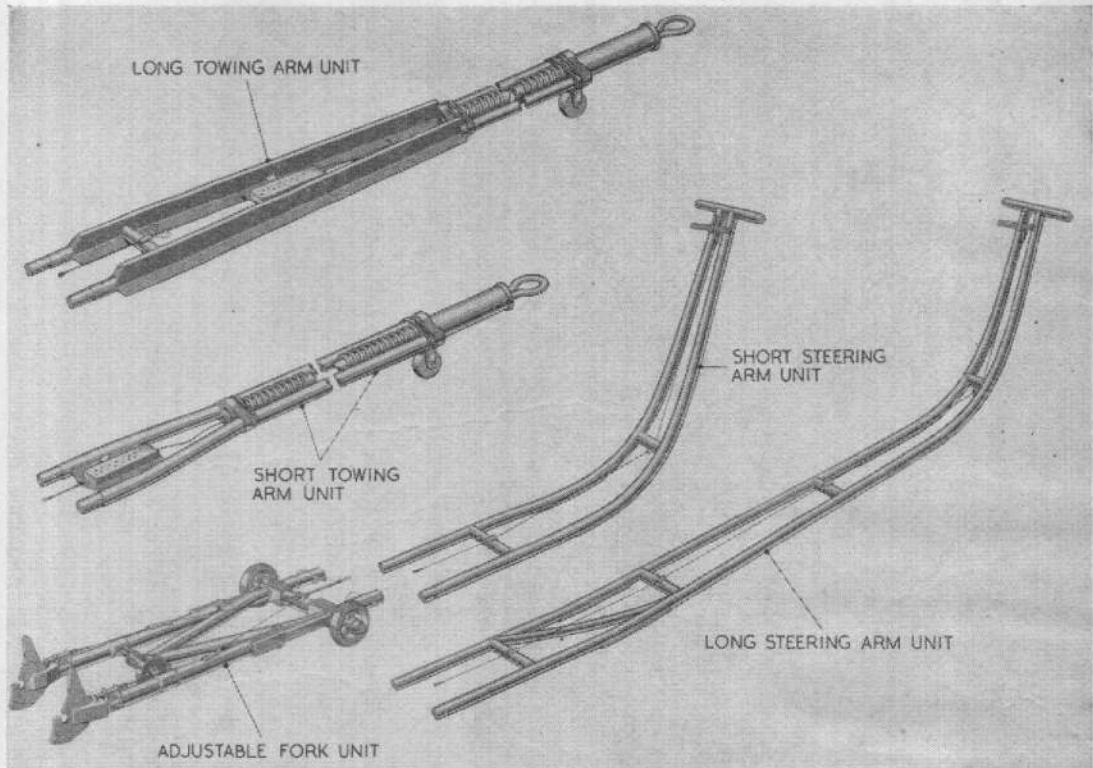
Weight 1 cwt. 2 qr.

Brief description Base on which the propeller assembly arbor is fitted.

RESTRICTED

ITEM 17

ARM, STEERING, and BAR, TAIL TOWING



A.P. Reference 2817A, Vol. 1, Sect. 9, Chap. 4

Stores Ref. 4G/3068

Classification 2

Overall dimensions and weight

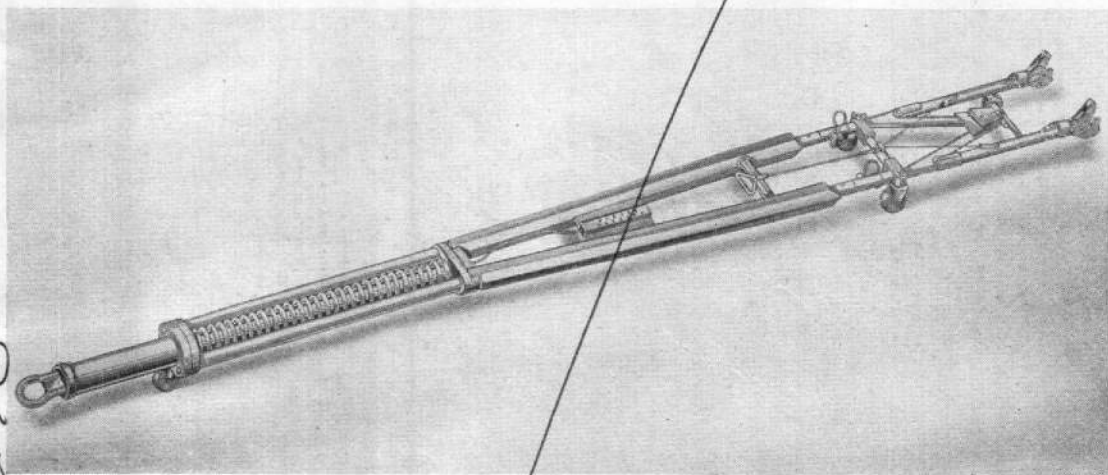
	Length	Width	Height	Weight
Long towing arm unit	9 ft. 8 $\frac{3}{4}$ in.	11 $\frac{1}{2}$ in.	8 $\frac{3}{4}$ in.	114 lb.
Short towing arm unit	6 ft. 10 in.	11 in.	8 $\frac{3}{4}$ in.	98 lb.
Long steering arm unit	8 ft. 8 $\frac{1}{4}$ in.	11 in.	2 ft. 8 $\frac{1}{2}$ in.	27 lb.
Short steering arm unit	4 ft. 2 $\frac{1}{4}$ in.	1 ft. 1 $\frac{1}{2}$ in.	2 ft. 8 $\frac{1}{2}$ in.	16 $\frac{1}{2}$ lb.
Adjustable fork unit	3 ft. 7 $\frac{3}{4}$ in.	1 ft. 6 $\frac{3}{4}$ in.	9 $\frac{3}{4}$ in.	47 lb.

Brief description The steering arm and tail towing assembly consists of an adjustable fork unit, two steering arm units, and two towing arm units. The fork unit is adjustable to give a range of widths between jaws of 5 $\frac{1}{4}$ in. to 11 in. and can be combined with any one of the steering or towing arm units to form a tail steering arm or a tail towing arm suitable for handling aircraft up to 20,000 lb. A.U.W. This equipment is for Naval use only.

~~RESTRICTED~~

ITEM 18

ARM, TAIL TOWING



AL 76

A.P. Reference 2817A, Vol. 1, Sect. 9, Chap. 4

Stores Ref. 4G/3132

Classification 2

Overall dimensions

Length 13 ft. 2 in.

Width 1 ft. 6 $\frac{3}{4}$ in.

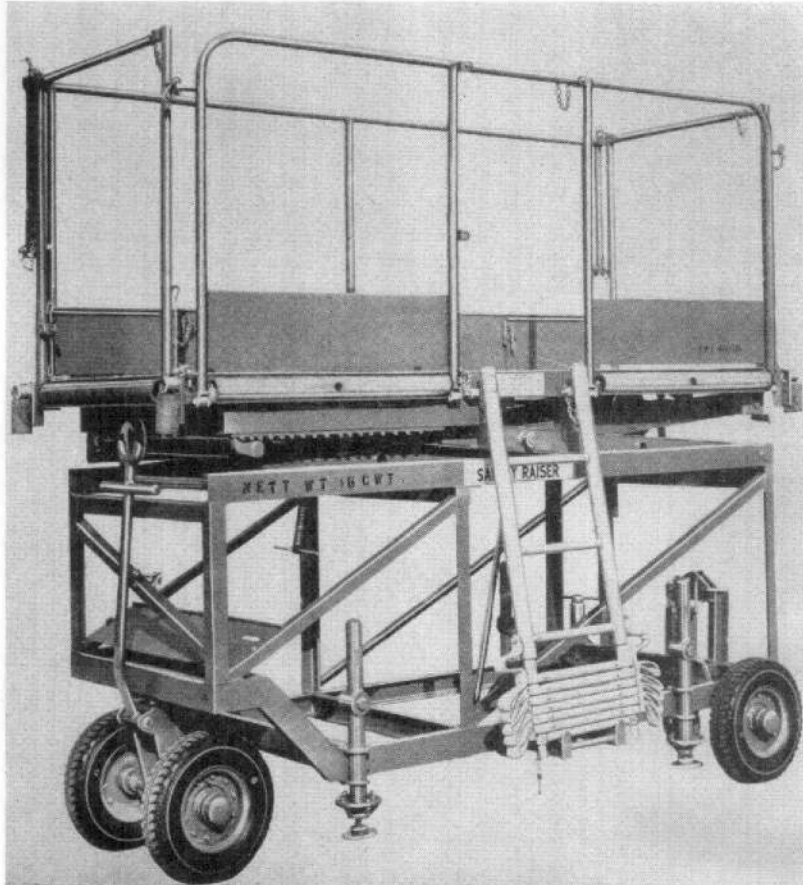
Height 9 $\frac{3}{4}$ in.

Weight 1 cwt. 1 qr. 20 lb.

Brief description The tail towing arm consists of a fork unit and a towing arm unit and is used for towing aircraft up to 20,000 lb. A.U.W. The fork unit is attached to the towing arm unit by two thumb-screws and can be adjusted to give a range of width between jaws of 5 $\frac{1}{4}$ in. to 11 in. The towing arm unit incorporates a shock absorber mechanism, and an overload release mechanism which automatically disengages the towing eye if any excessive resistance occurs during towing.

~~RESTRICTED~~

PLATFORM, AIRCRAFT SERVICING, MOBILE, ADJUSTABLE, Mk. 2



A.P. Reference 1464G, Vol. 1, Part 2, Sect. 5, Chap. 43

Ref. No. 4G/5628

Classification 2

Overall dimensions (with hand-rails folded down)

Length 8 ft. 10 in. **Width** 4 ft. 1 in. **Height** (min.) 4 ft. 6 in.

Weight

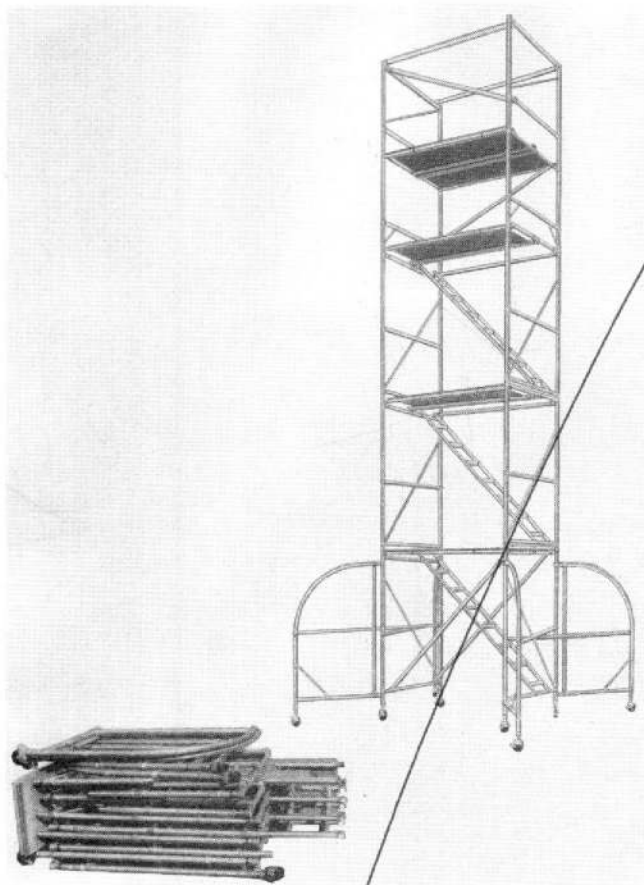
Platform (less extension) 16 cwt. **Extension** 72 lb. **Bridge piece** 151 lb.

Brief description This platform is used to provide access for servicing aircraft in hangars or at dispersal areas. It consists of a working platform 8 ft. long \times 3 ft. wide, which can be extended to 4 ft. 6 in. wide, mounted on a "scissors" support frame on a steel box-frame chassis. The platform can be raised between heights of 4 ft. 6 in. and 9 ft. 6 in. by a hydraulic ram actuated by a hand-operated pump which incorporates a release valve for lowering the platform; a locking device secures the platform in any raised position. The platform is fitted with 3 ft. high folding hand-rails and has rubber buffers to protect the aircraft; a telescopic ladder is provided for climbing to the platform. The chassis is mounted on four rubber tyred wheels and is fitted with four jacking feet; the two front wheels and a tow-bar are fitted to a steering bogie. The wheels on later models of the platform have solid-rubber tyres. A bridge piece, Mk. 2 (Ref. No. 4G/5682), 6 ft. long \times 3 ft. wide, can be connected between two platforms when a larger platform area is required. The safe working load of the platform is 600 lb., but when the bridge piece is connected between two platforms, the safe working load is 400 lb.

(A.L.38, Dec. 58)

ITEM 24

PLATFORM, AIRCRAFT SERVICING, "ZIP-UP", AIR TRANSPORTABLE



A.P. Reference

Ref. No. 4G/5658

Overall dimensions (dismantled and stacked)

Length 9 ft. 2 in. Width 4 ft. 11 in. Height 3 ft. 3 in.

Weight 483 lb.

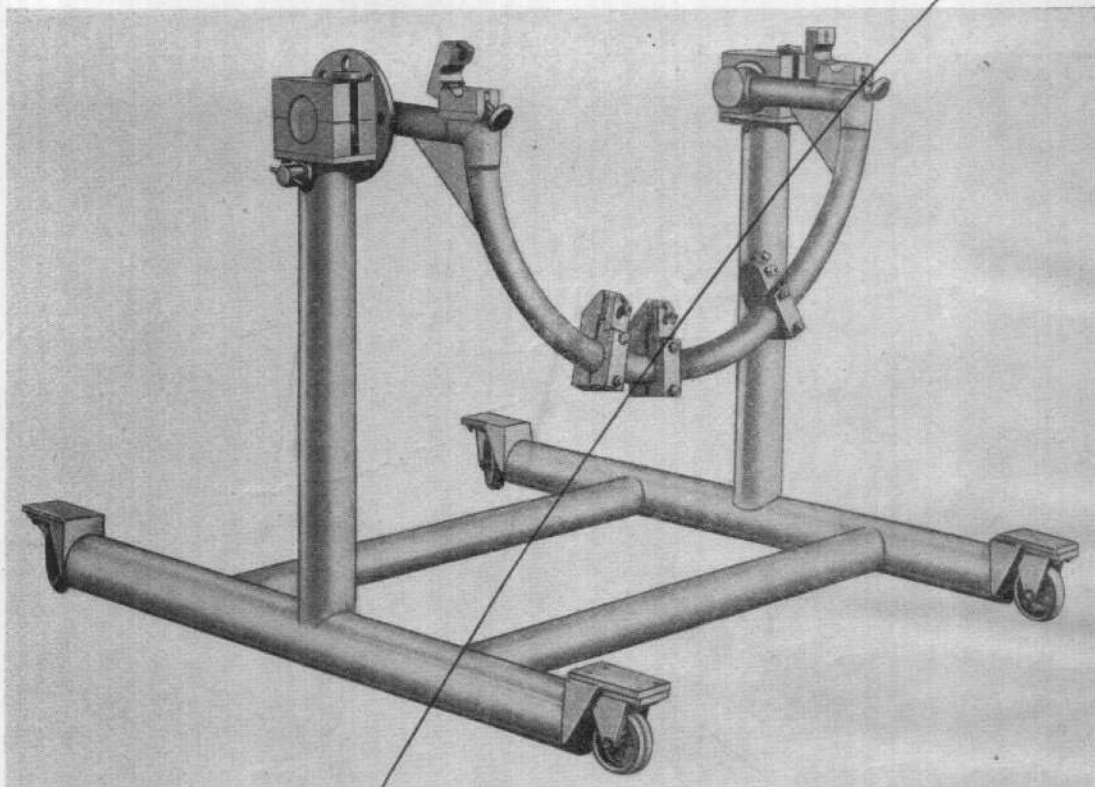
Brief description This air transportable platform is used to provide access for servicing large aircraft which are deployed away from base for long periods, or on flights deviating from the established staging posts, where the normal base servicing access equipment is not available. The equipment is of light alloy tubular construction and consists of folding sections which can be easily erected in 3 ft. or 6 ft. stages above the lower section to provide platforms at heights between 7 ft. and 22 ft. 6 in., and includes a guard rail for fitting to the top section. Each section is provided with a wooden platform floor and diagonal bracings; a step ladder acts as the bracing for the 6 ft. sections. Outriggers can be fitted to the bottom section to steady the erected structure. Solid rubber-tired castor wheels are fitted to the bottom section and to the outriggers to facilitate movement of the erected structure; each wheel mounting can be extended up to 2 ft. and adjusted to suit sloping, stepped or uneven ground surfaces, and the wheel can be locked by depressing a foot-operated brake lever. The structure can be erected or dismantled by two men in under three minutes; the bottom section, which is the heaviest single section, weighs approximately 90 lb. An 8 ft. long bridge can be connected between two erected platforms. The illustration above shows the platform both stacked and erected.

Classification 2

~~RESTRICTED~~

ITEM 25

STAND, ENGINE, JET (DERWENT), Mk. 1 and 2



AC 26

A.P. Reference

Stores Ref. 4G/3846 and 4266

Classification 2

Overall dimensions

Length 5 ft. 1 in.

Width 6 ft. 6 in.

Height 4 ft. 3 in.

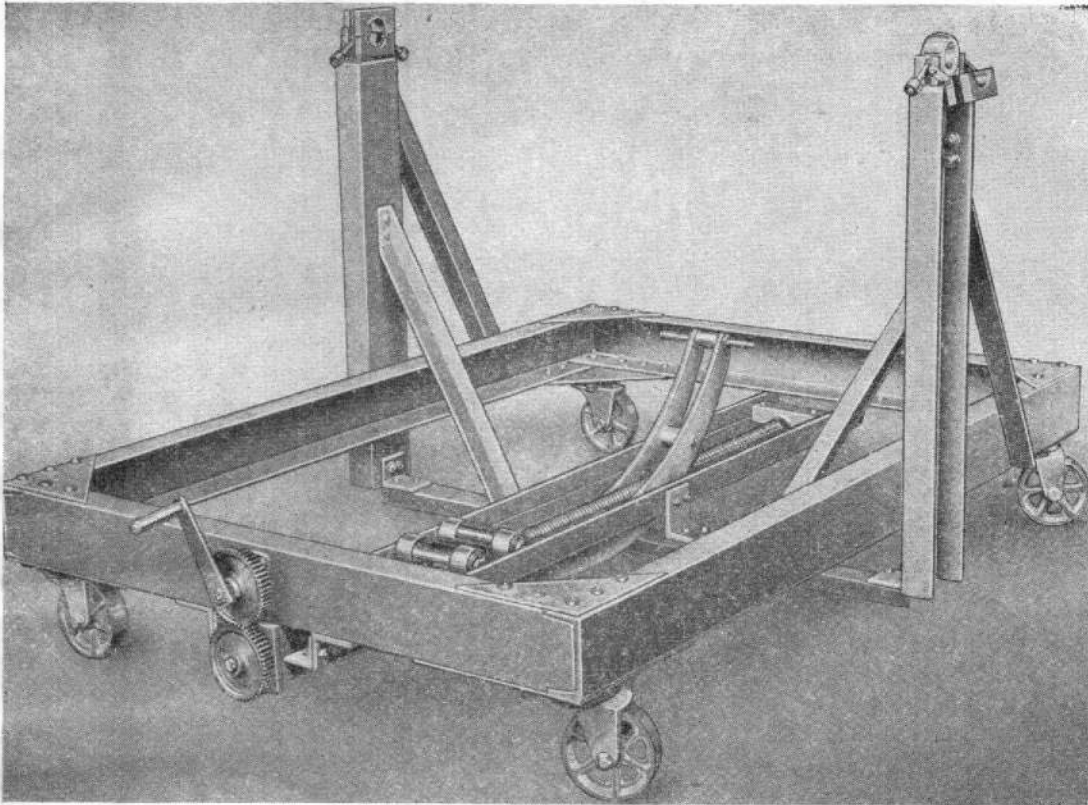
Weight 4 cwt. 2 qr.

Brief description This stand is for use when erecting or servicing Derwent jet engines. The stand is mobile on two fixed and two castoring wheels; the mounting frame can be positioned to allow the engine to be worked on in either a vertical or horizontal position. The wheels of the Mk. 2 stand are rubber-tyred, otherwise the two Marks of stand are identical.

~~RESTRICTED~~

ITEM 26

STAND, ENGINE, JET (GOBLIN)



A.P. Reference

Stores Reference 4G/3964

Classification 2

Overall dimensions

Length 4' 8"

Width 6' 8"

Height 3' 7"

Weight 2 CWT.

Brief description This stand is for use when erecting or servicing Goblin jet engines.

~~RESTRICTED~~

ITEM 31

LADDER, AIRCRAFT SERVICING, FLAT TOP, ADJUSTABLE**A.P. Reference**

Stores Ref. 4G/4517

Classification**Overall dimensions**

Length 8 ft. 9 in.

Width 3 ft. 10½ in.

Height 10 ft. 10 in.

Weight 2 cwt. 3 qr. 14 lb.

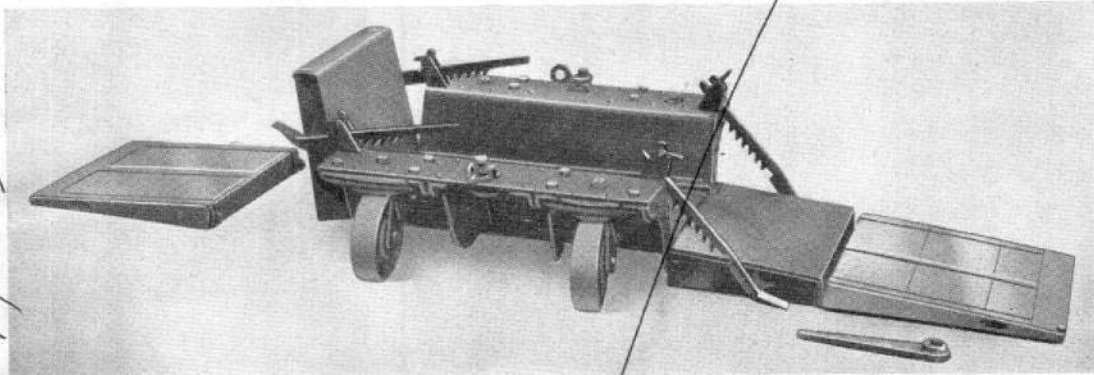
Brief description This portable ladder is fitted with a platform at the top, the height of which can be adjusted between 7 ft. 2½ in. and 8 ft. 5 in. Retractable handles at the foot of the ladder are used when wheeling the ladder into the required position. The ladder is used to facilitate the servicing of the tail units of Canberra aircraft.

(A.L.22, Aug. 54)

~~RESTRICTED~~

ITEM 32

SKATE, WHEEL, TYPE C



A.P. Reference

Stores Ref. 4G/1340

Classification 2

Overall dimensions

Length 3 ft. 10 in.

Width 3 ft. 3 in.

Height 1 ft. 5 in.

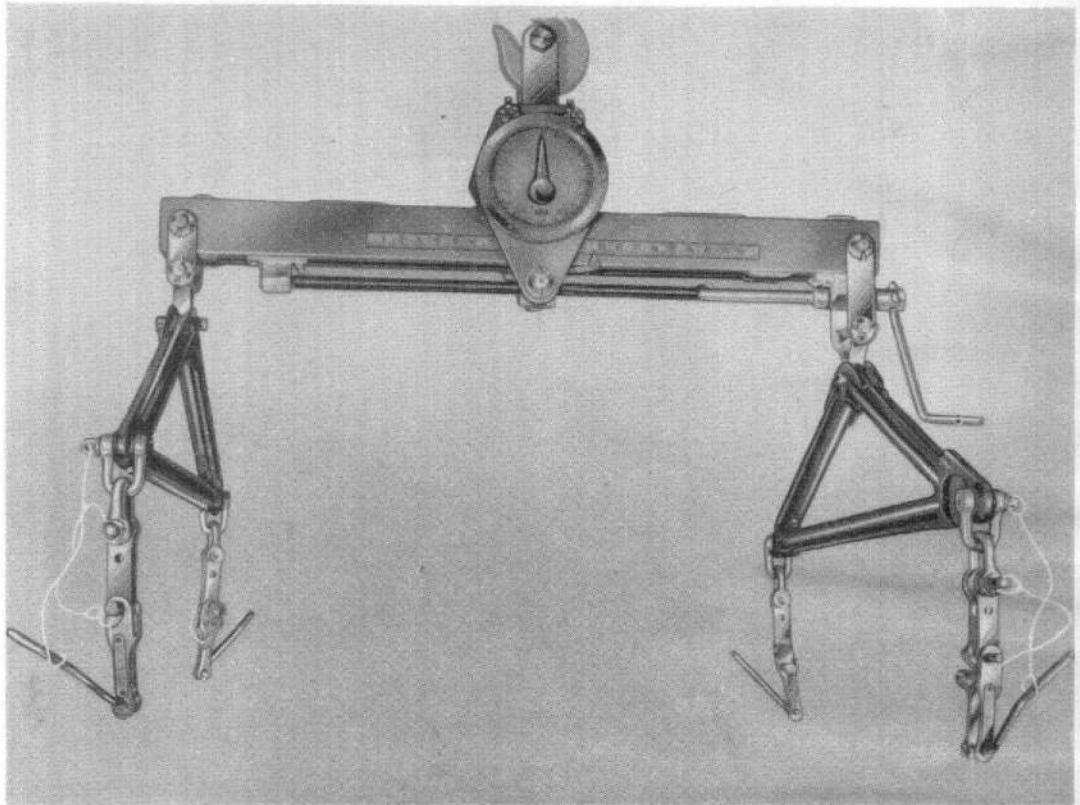
Weight 5 cwt. 1 qr.

Brief description These are used in pairs, in conjunction with a connecting bar (Stores Ref. 4G/1584) and a connecting cable (Stores Ref. 4G/1762), to enable aircraft of up to 28,000 lb. A.U.W. and with wheel sizes up to 59 in. \times 16 in., to be side tracked. Each skate incorporates two loading ramps, and two hinged ends which can be secured in the raised position to prevent the aircraft wheels from moving on the skate.

~~RESTRICTED~~

ITEM 35

SLING, POWER PLANT, UNIVERSAL



A.P. Reference 2817A, Vol. 1 and Vol. 6, Part 1, Sect. 10, Chap. 2

Stores Ref. 4GC/4170

Classification 2

Overall dimensions

Length 3 ft. 6½ in.

Width 1 ft.

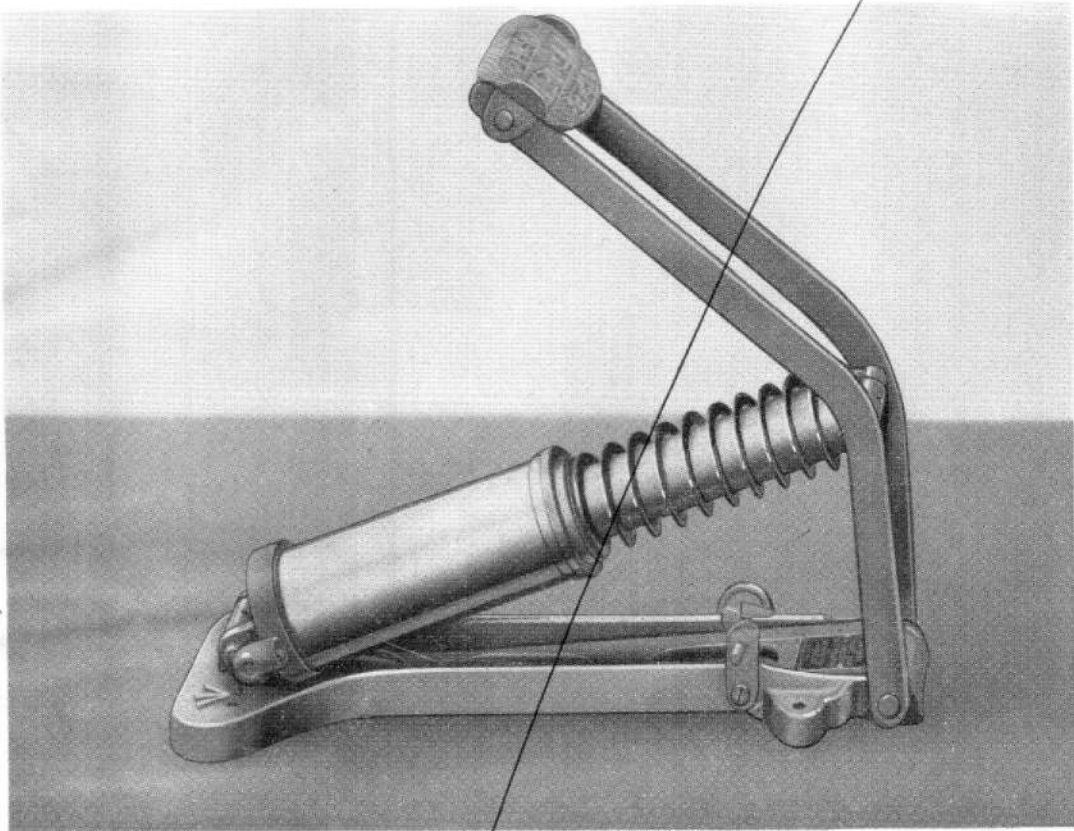
Height 1 ft. 2 in.

Weight 100 lb.

Brief description This consists essentially of a beam, two spreader bars, and an adjustable crane hook carriage, and is used for lifting Merlin and Griffon engines and power plants fitted with rocker box pick-up points.

ITEM 36

PUMP, TYRE INFLATING, FOOT OPERATED, TYPE B



AC76

A.P. Reference

Stores Ref. 4G/3743

Classification 2

Overall dimensions

Length 1 ft. 4 in.

Width 6 in.

Height 6 in.

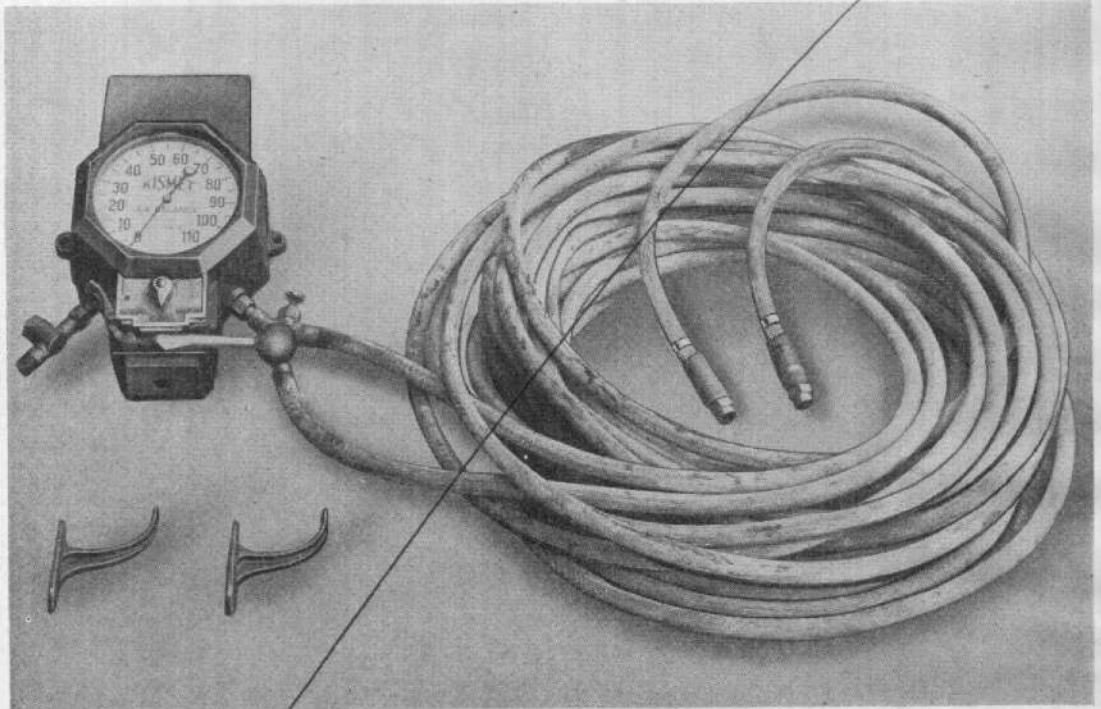
Weight 10½ lb.

Brief description This is used in conjunction with a length of tubing (Stores Ref. 4G/3745 or 3777) for inflating tyres and for charging aircraft air bottles.

RESTRICTED

ITEM 37

BALANCE, AIR, TYRE SERVICING



AC 28

A.P. Reference

Stores Ref. 4G/3433

Classification 2

Overall dimensions (crated)

Length 2 ft. 0 in.

Width 1 ft. 10 in.

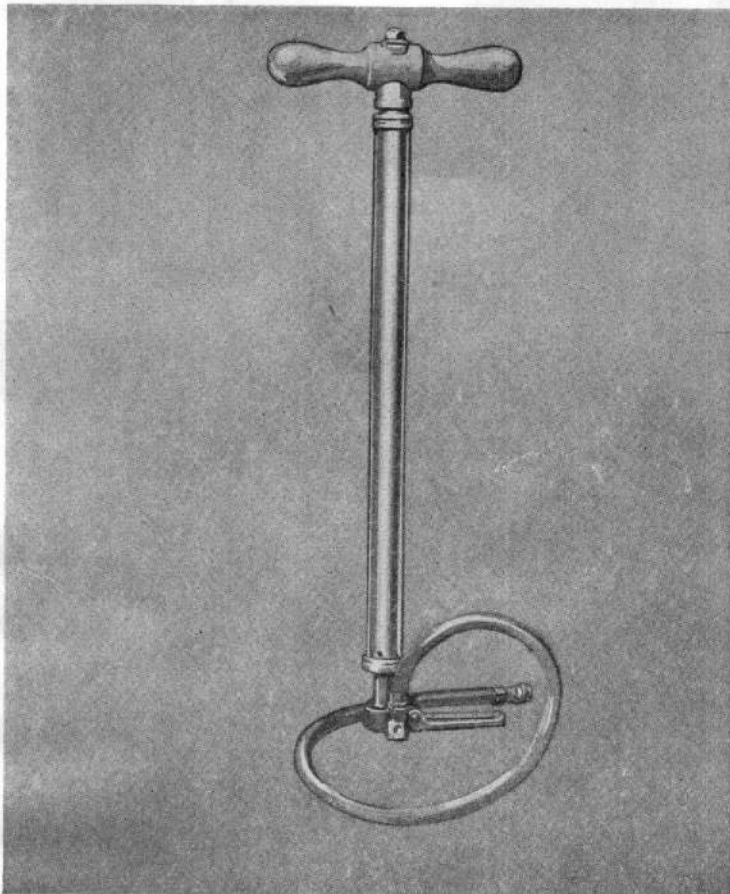
Height 8 in.

Weight 28 lb.

Brief description This is used, in conjunction with an air compressor, to inflate aircraft and M.T. tyres, and to check existing tyre pressures. Twin hoses enable two tyres to be inflated simultaneously. A reducing valve and a safety valve limit the pressure of the air supply to 150 lb. per sq. in.

ITEM 38

PUMP, OLEO UNDERCARRIAGE, TYPE B



A.P. Reference

Stores Ref. 4G/1356

Overall dimensions

Length 8 in.

Width 2 in.

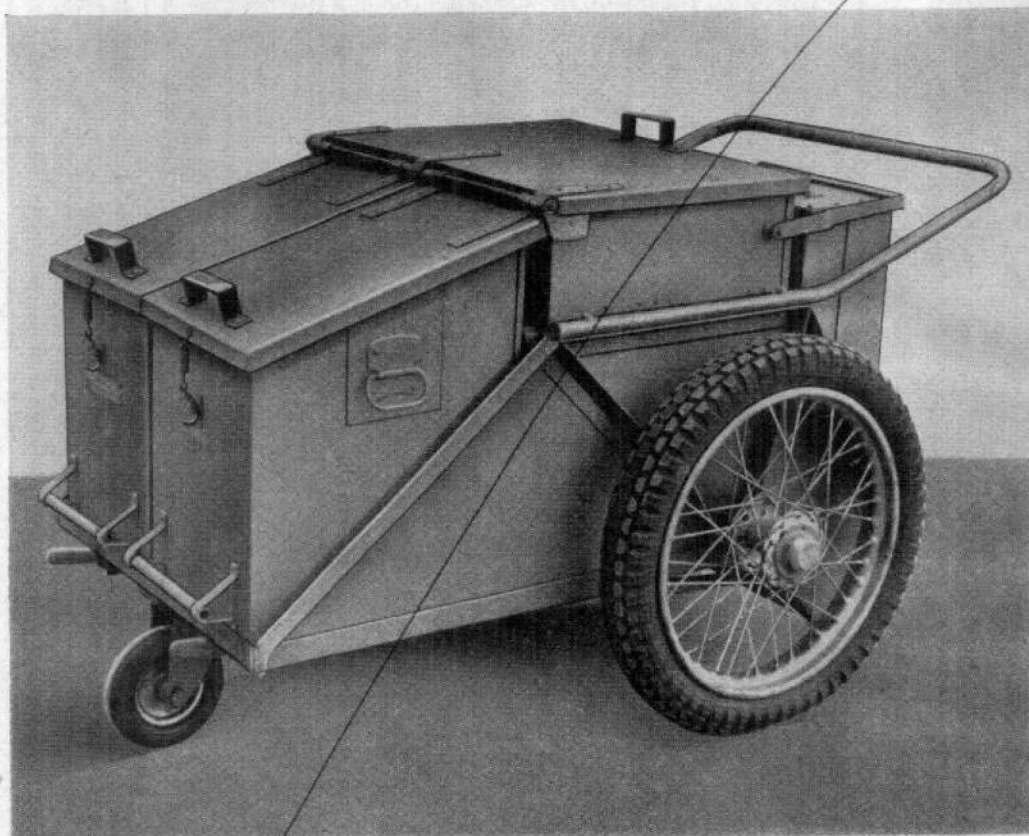
Height 1 ft. 9 in.

Weight 3½ lb.

Brief description This is a single cylinder hand pump and is used for air charging oleo legs of Master and Magister aircraft. It can also be used to inflate tyres on light aircraft and M.T. vehicles.

Classification 2

ITEM 47

TROLLEY, AIRCRAFT CLEANING**A.P. Reference**

Ref. No. 4G/3591

Classification 3

Overall dimensions

Length 5 ft 5 in

Width 3 ft 2 in

Height 3 ft 9 in

Weight 3 cwt 3 qr 10 lb

Brief description This trolley is used for cleaning W.C.'s installed in Transport Command aircraft, and is fitted with containers for disinfectant, water, closet waste and dry waste. A further container provides stowage for the following equipment which is supplied with the trolley:—

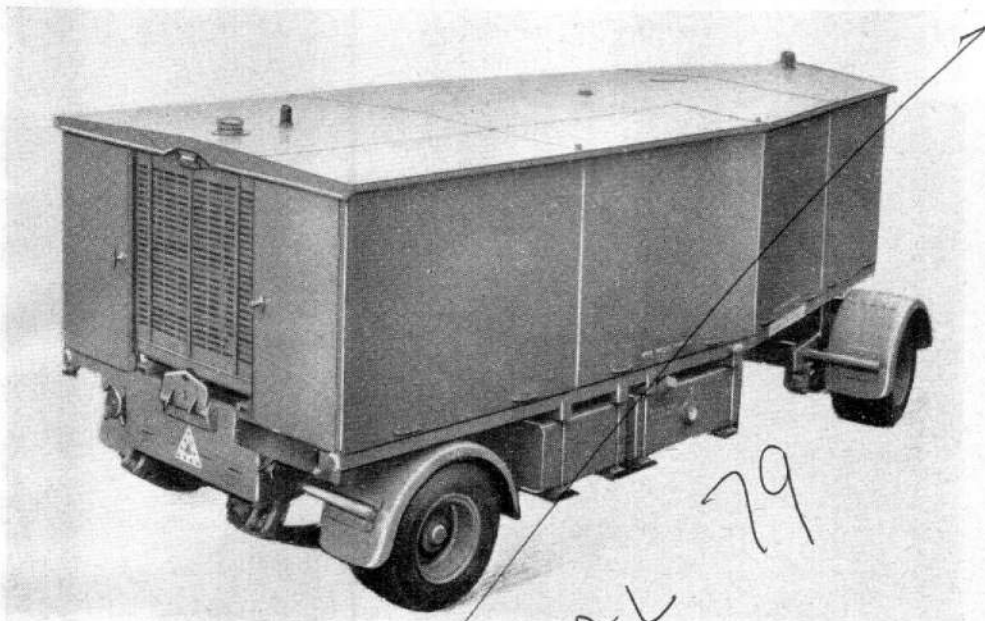
2 galvanised iron pails
2 scrubbing brushes
2 W.C. brushes

1 bannister brush
1 Flit sprayer
1 dust pan

Two fibre sweeping-brooms are stowed underneath the trolley.

ITEM 48

RIG, MOBILE TESTING, ALTERNATOR AND C.S.D., TYPE U1571



A.P. Reference 4343V, Vol. 1, Bk. 1, Sect. 1, Chap. 3

Ref. No. 4G/7242

Classification 1

Overall dimensions

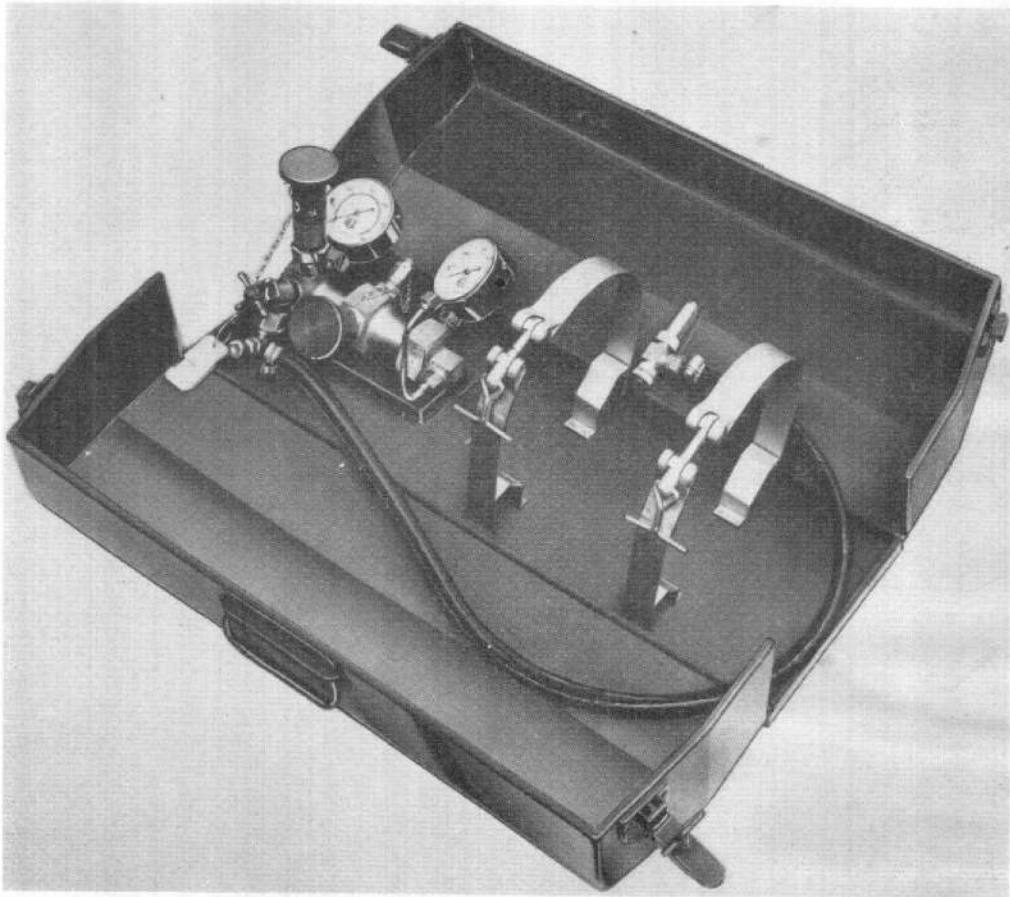
Length (including towing arm) 18 ft 6 in
Width 6 ft 6 in Height 6 ft 9 in

Weight 6 tons 3.5 cwt

Brief description This mobile test rig is designed for servicing the 40KVA, 400 c.p.s. alternators installed in the Vulcan B Mk. 2 aircraft. It provides a control and loading system for testing the units and can be connected to the aircraft to check the circuits in situ using the aircraft alternator unit installed on the rig. The rig comprises a 200 H.P. Dorman 6 KUD/AVR diesel engine and drive mounted on a trailer chassis, together with electrical controls, fault simulation equipment and auxiliary systems for constant speed drive operation. Two flexible cables are provided for connection of the test rig to the aircraft's system, or for inter-connection of two rigs for parallel operation. The aircraft alternator circuits can be checked individually using one rig or synchronised using two rigs. Power for the engine is supplied by two 12 volt batteries or from an external 28 volt source if required, and the rig is equipped with a power-on indicator and a lighting system. A 30 ft flexible exhaust extension pipe is supplied for operation of the rig in a confined space. Girling brakes are fitted to the front wheels only, operated by an override device when on tow or by a hand wheel when stationary.

ITEM 59

KIT, CHECKING, AIRCRAFT TYRE PRESSURE

**A.P. Reference**

Stores Ref. 4G/5615

Classification 2

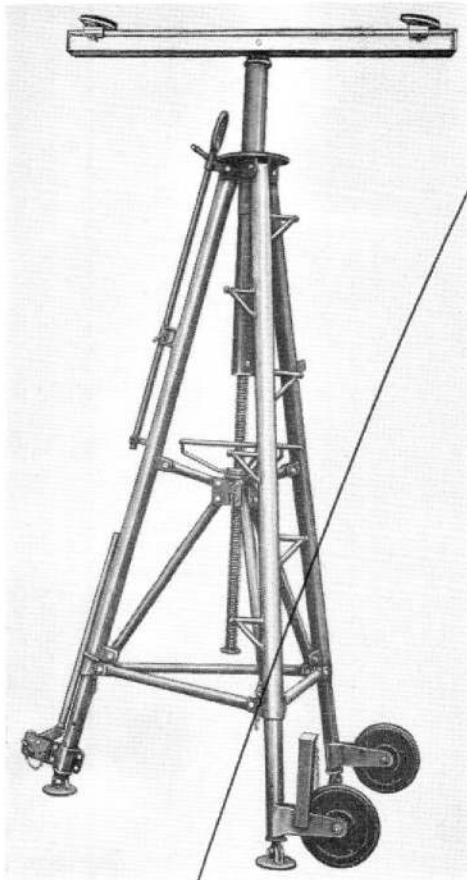
Overall dimensionsLength 1 ft. 10 $\frac{1}{2}$ in. Width 8 $\frac{1}{4}$ in. Height 8 $\frac{1}{4}$ in.Weight (less air cylinder) 15 $\frac{3}{4}$ lb.(with air cylinder) 33 $\frac{1}{2}$ lb.

Brief description This equipment is used for checking and topping up the pressure in aircraft tyres inflated to pressures up to 450 lb. per sq. in. It consists of a sheetmetal box with provision for holding a Mk. 5D air cylinder (Stores Ref. 6D/1405E) which is connected through a system of valves to a tyre connector. The valves include the cylinder valve, supply valve, pressure release valve, stop valve, and deflating valve. Two air pressure gauges are connected in the system to indicate the cylinder pressure and the tyre pressure; the capacity of these gauges is 3,000 and 600 lb. per sq. in. respectively. A connection is incorporated in the system for re-charging the cylinder from a compressor or high-pressure air line. Over-inflation is prevented by the pressure release valve which can be set to release the air when the tyre is topped up to the required pressure; the valve is set by inserting the appropriate shim(s) under the valve hand-wheel before it is screwed down. The shims, numbered 1 to 4, and an instruction plate for their use, are attached to the valve by a chain. The cylinder has a maximum working pressure of 1,800 lb. per sq. in. and its capacity is 750 litres (26 $\frac{1}{2}$ cu. ft.).

ITEM 60

TRESTLE, MAINPLANE, STEADY

AL70



A.P. Reference

Stores Ref. 4GB/3983

Classification 2

Overall dimensions

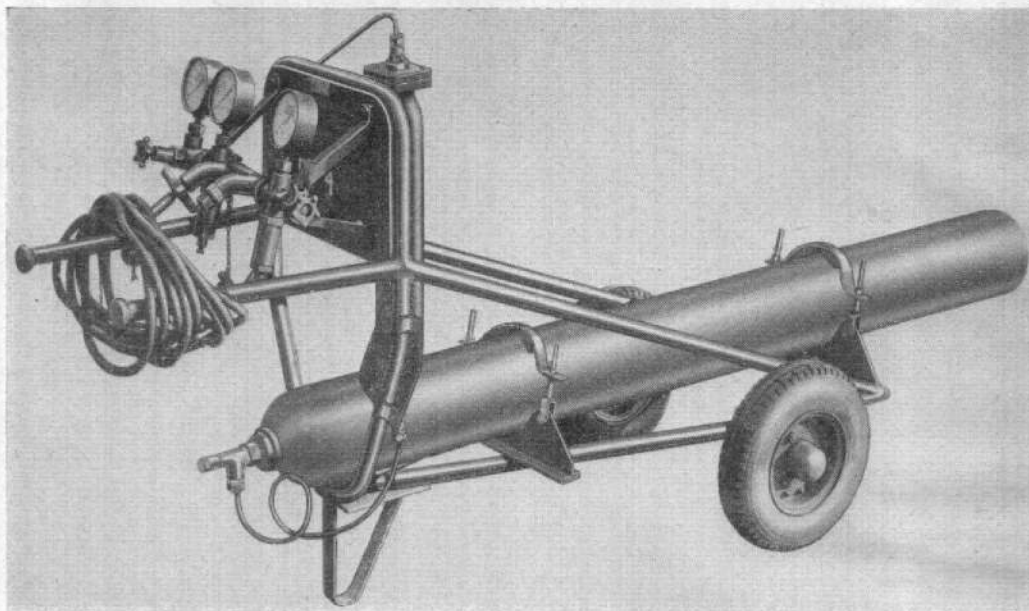
	Length	Width	Height
Fully closed	5 ft. 3 in.	4 ft. 4 in.	8 ft. 6 in.
Fully extended	6 ft. 2 in.	5 ft. 8 in.	15 ft. 0 in.

Weight 4 1/4 cwt. (each trestle)

Brief description These tripod trestles are used in pairs to provide steadying support under the mainplanes during the servicing of large aircraft, and can be adjusted in height between 8 ft. 6 in. and 15 ft. The trestle is of tubular steel construction and has three telescopic legs; a ram assembly is mounted in the top of the tripod and a sole plate is fitted to the bottom of each leg. The length of the legs can be extended in three stages of one foot each stage, and the ram assembly can be extended 3 ft. 6 in. by turning a hand-wheel fitted to a threaded shaft. A light alloy beam, 5 ft. 3 in. long, is mounted at the top of the ram and is fitted with two adjustable supports which are felt-padded to protect the underside of the mainplane. Two 12 in. dia. solid rubber-tired transportation wheels, a retractable tow-bar, and a lifting handle are fitted to the legs to facilitate movement of the trestle, the beam being removed from the ram for transit and attached to a bracket on the side of the trestle. A step and six rungs are welded to one leg for climbing the trestle.

RESTRICTED

ITEM 63

TROLLEY, OXYGEN CYLINDER, TYPE B

A.P. Reference 2306U

Ref. No. 4G/3138

Classification 2

Overall dimensions

Length 6 ft. 4 in. Width 2 ft. 9 in. Height 4 ft. 2 in.

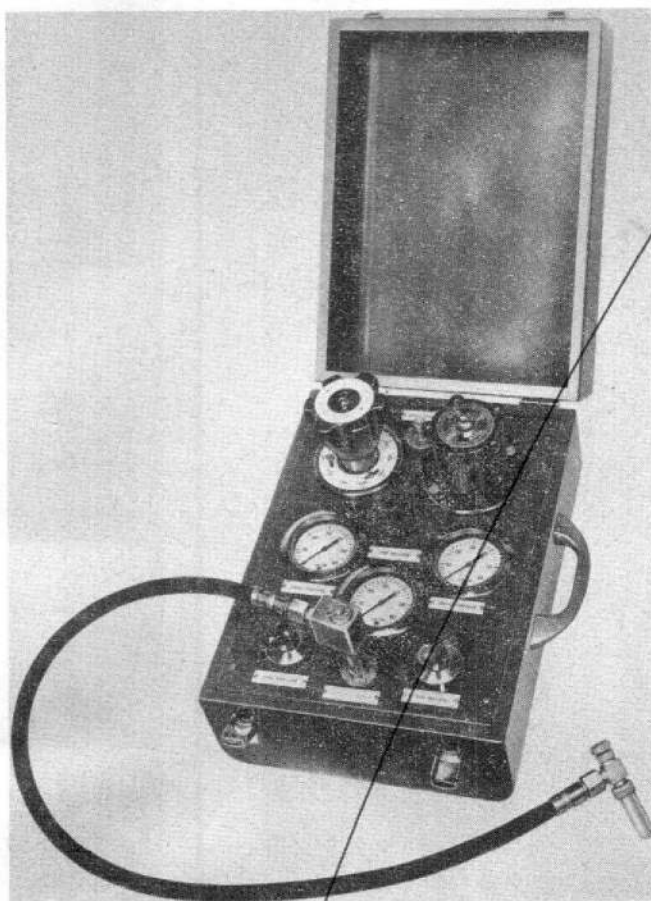
Weight 140 lb. (*less cylinder*)

Brief description This two-wheeled trolley is used in conjunction with a Mk. 7A or Mk. 12 gas cylinder for charging oxygen systems in aircraft. The trolley is of tubular steel construction and incorporates a cradle for carrying the oxygen cylinder. Mounted on the trolley is a Mk. 3 charging regulator (Ref. No. 6D/1702) and a de-odorising cylinder (Ref. No. 4G/5774). When the oxygen is discharged from the cylinder, it passes through the de-odorising cylinder, then through the regulator which controls the flow, and is delivered via high-pressure flexible hoses to the aircraft system. The trolley is painted red and is marked FOR USE WITH OXYGEN ONLY; it must under no circumstances be used with any other gases.

RESTRICTED

ITEM 64

INFLATOR, TYRE, HIGH-PRESSURE, Mk. 1



AC76

A.P. Reference 1464G, Vol. 1, Part 2, Sect. 5, Chap. 14

Ref. No. 4G/5970

Classification 2

Overall dimensions

Length 1 ft. 3½ in.

Width 1 ft. 0½ in.

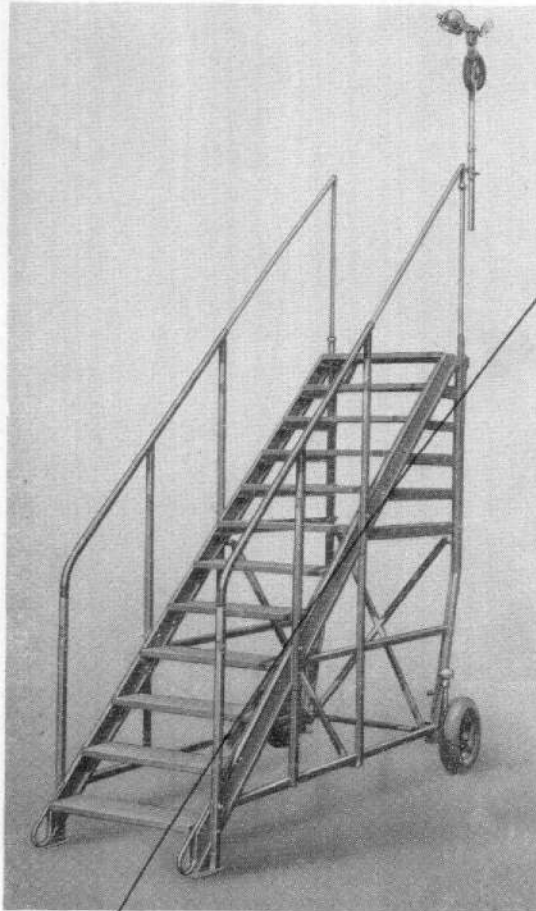
Height 9 1/8 in.

Weight 24¾ lb.

Brief description This equipment is used for inflating aircraft tyres to any predetermined pressure up to 400 lb. per sq. in. from air supplies providing a pressure output of between 500 and 4,500 lb. per sq. in. Safety devices are incorporated to prevent over-inflation, and tyre pressures can be controlled during inflation within critical limits. The main components of the inflator include a supply connection, pressure controller, supply pressure gauge, relief valve, control pressure gauge, tyre inflate and deflate valves, tyre pressure gauge, and a tyre hose and connector, which are interconnected by pipelines and mounted on a control panel in a metal case fitted with a hinged lid and carrying handle. When in use, the air supply hose is connected to the supply connection on the inflator, the tyre hose connector on the inflator is connected to the aircraft tyre valve, and inflation of the tyre is controlled by operating the valves.

~~RESTRICTED~~

ITEM 73

LADDER, AIRCRAFT ENTRANCE**A.P. Reference** 1464G, Vol. 1, Part 2, Sect. 5, Chap. 27**Stores Ref.** 4G/4229**Classification** 2**Overall dimensions****Length** (erected)
9 ft. 0 in.**Width of ladder**
2 ft. 9 in.**Height** (handrail)
7 ft. 6 in.**Weight** 3 cwt. 1 qr.

Brief description The ladder is designed to give access to the entrance doors of aircraft which have sill heights from the ground of between 4 ft. 4 in. and 7 ft. 6 in. Maximum and minimum height adjustment entails the movement of one or more of the top treads to form a platform at the required height. Hand-operated screw jacks enable the ladder to be raised at one end so that the wheels are off the ground when the ladder is in use, also for small height adjustments to align the platform with the sill of the aircraft. The ladder transportation case overall measurements are:— Length 9 ft. 6 in., Width 1 ft., Height 8 ft. 2 in. diminishing to 1 ft. 2 in.

ITEM 74

TROLLEY, AIRCRAFT TAIL, FOR COMPASS SWINGING



A.P. Reference 1464G, Vol. 1, Part 2, Sect. 5, Chap. 31

Stores Ref.

Classification 2

Overall dimensions

Length (less steering arm)
3 ft. 10 in.

Width
3 ft. 10 in.

Height
4 ft. (min.)
5 ft. 1 in. (max.)

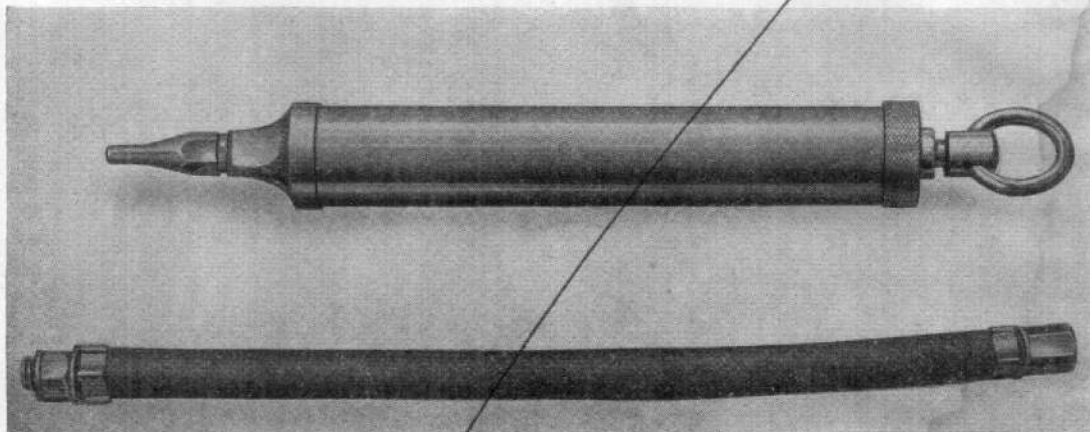
Weight 3 cwt. 2 qr. 17 lb.

Brief description This non-magnetic trolley is used to raise and carry the tail of an aircraft in the level flight attitude during compass swinging operations. The trolley can be steered in any direction by attaching the steering arm to any one of the four castor wheel spindle extensions. Compass swinging is facilitated if the trolley is used in conjunction with a portable rotatable shoe (Item 79).

RESTRICTED

ITEM 75

PUMP, AIR TESTING



A.P. Reference

Stores Ref. 4G/2333

Classification 2

Overall dimensions

Length (less extension) 9 in.

Dia. 1 in.

Weight 7 oz.

Brief description This hand pump can be used for blowing air through small i./d. metal pipes in aircraft to ensure freedom from obstruction. The flexible extension can be fitted to the pump when an increase in length is necessary, and when access must be made through small apertures in bulkheads, webs, and similar structural members.

~~RESTRICTED~~

ITEM 76

TROLLEY, COOLANT REPLENISHMENT
TROLLEY, WATER/METHANOL REPLENISHMENT
TROLLEY, DE-ICING FLUID REPLENISHMENT
TROLLEY, OIL REPLENISHMENT



A.P. Reference 2306P

Stores Ref. 4G/4200 (Coolant replenishment)
4G/4422 (Water methanol replenishment)
4G/4423 (De-icing fluid replenishment)
4G/4253 (Oil replenishment)

Classification I

Overall dimensions

Length 8 ft. 2 in.

Width 4 ft. 4 in.

Height 4 ft. 7 in.

Weight 12 cwt.

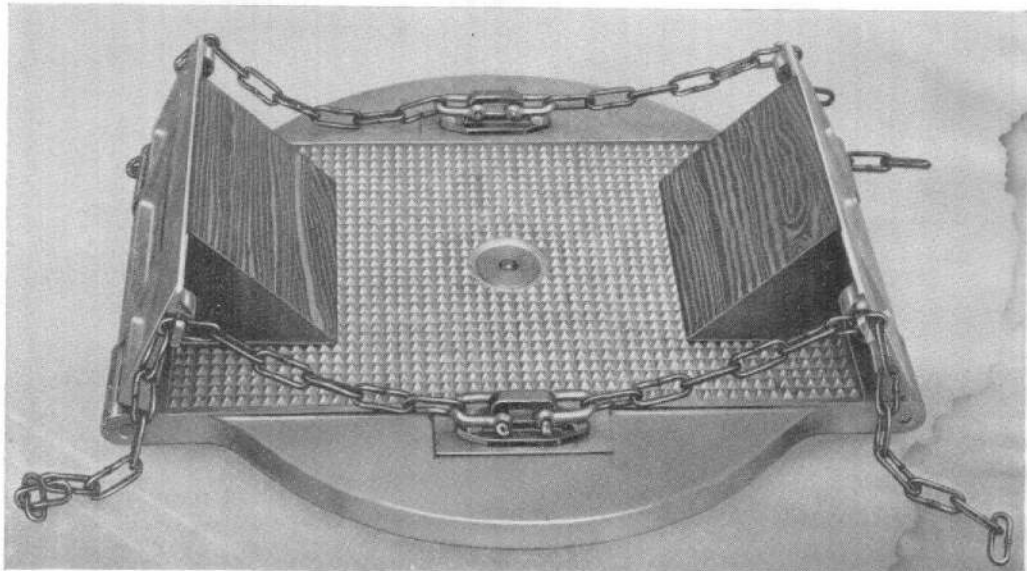
Brief description These trolleys are mobile, self-contained, hand-operated units used for the replenishment of aircraft tanks. A trolley can be used to pump fluid into an aircraft tank, either direct from a 100 gall. capacity tank on the trolley or from an outside source. The oil replenishment trolley differs from the other three trolleys in several design features, including the use of larger bore discharge pipes, hose and delivery nozzle. A 20 ft. long delivery hose and a 10 ft. long suction hose with standpipe are included in each trolley. ~~The oil replenishment trolley is for Naval use only.~~

(A423)

~~RESTRICTED~~

ITEM 79

SHOE, ROTATABLE, FOR COMPASS SWINGING



A.P. Reference 1464G, Vol. 1, Part 2, Sect. 5, Chap. 28

Stores Ref. 4GB/4254

Classification 2

Overall dimensions (*ramps lowered*)

Length 3 ft. 3½ in.

Width 2 ft. 1 in.

Height 3¼ in.

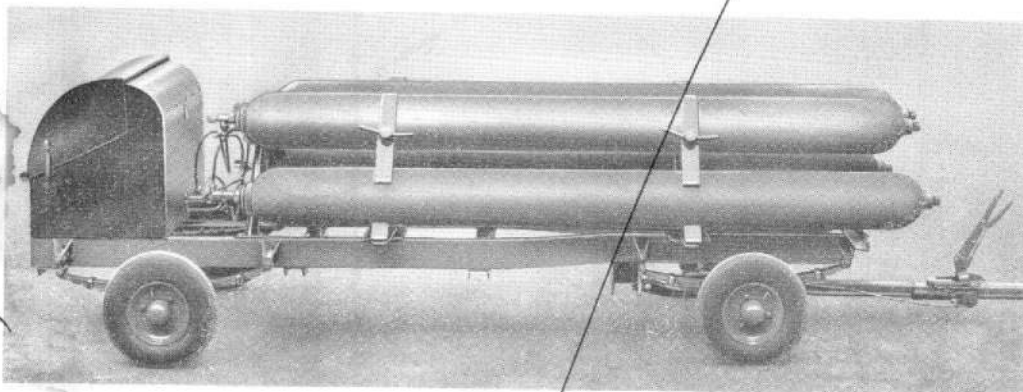
Weight 1 qr. 8 lb.

Brief description This shoe is used when manoeuvring aircraft during compass swinging operations. The metallic components of the shoe are non-magnetic and consists of a turntable, a baseplate, and two ramps. The shoe can accommodate aircraft main wheels up to 32 in. dia. and is equipped with two wooden chocks to prevent any fore-and-aft movement of small dia. wheels. Compass swinging is facilitated if the shoe is used in conjunction with a tail trolley of the type illustrated in Item 74.

~~RESTRICTED~~

ITEM 80

TROLLEYS, HIGH PRESSURE AIR Mk. 2 AND NITROGEN CHARGING Mk. 1



A.P. Reference 2306U

Stores Ref.

Classification 2

Trolley, H.P. air charging, Mk. 2 4G/4221

Trolley, nitrogen charging, Mk. 1 4G/4272

Overall dimensions

Length (including tow-bar) 16 ft. 0 in. Width 4 ft. 4 in. Height 3 ft. 2 in.

Weight (with 4 cylinders) 18 cwt.

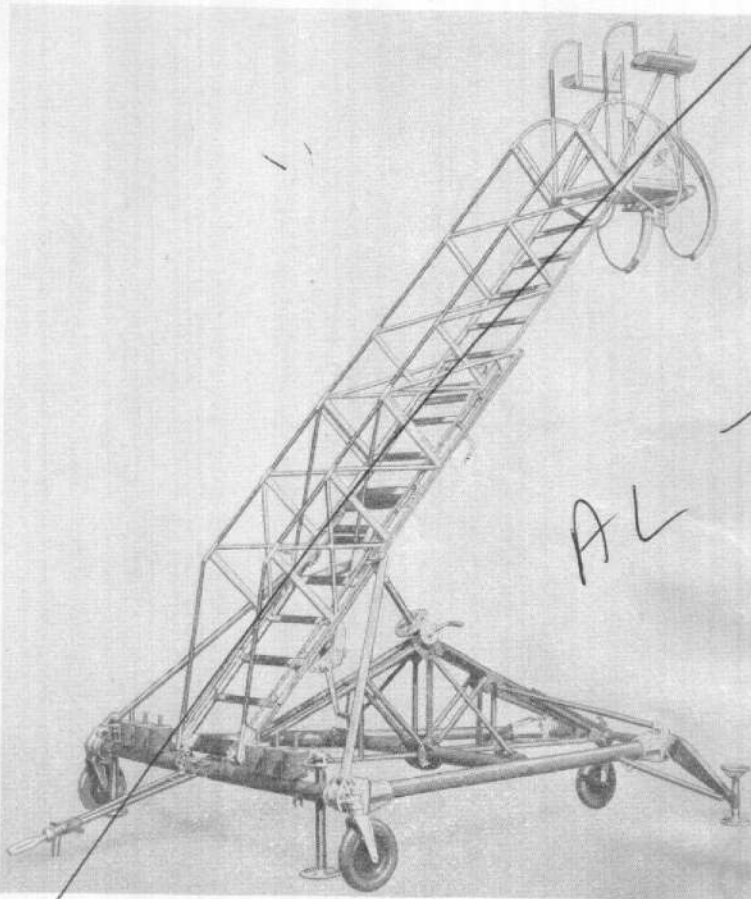
(less cylinders) 7 cwt. 1 qr. 14 lb.

Brief description These trolleys are used for charging the H.P. air and nitrogen systems in aircraft. Each trolley consists of a standard four-wheeled chassis adapted for carrying four transport gas cylinders and is fitted with a Type A charging regulator (*Ref. No. 6D/1334*); the cylinders should be demanded separately. The cylinders are connected by pipelines to a central manifold and the gas is fed via the regulator and a 30 ft. flexible hose to the aircraft system.

RESTRICTED

ITEM 83

LADDERS, AIRCRAFT SERVICING, ELEVATING AND EXTENDING, Mk. 2 and 3



A.P. Reference 1464G, Vol. 1, Part 2, Sect. 5, Chap. 33

Stores Ref. 4G/4243 (Mk. 2 ladder)
4G/4227 (Mk. 3 ladder)

Classification 2

Overall dimensions and weight (packed)

	Length	Width	Height	Weight (approx.)
Mk. 2	13 ft. 4 in.	2 ft. 11 in.	3 ft. 3 in.	16 cwt. 3 qr.
Mk. 3	19 ft. 6 in.	3 ft. 1 in.	3 ft. 4 in.	1 ton 2 cwt.

Brief description The ladders are used for servicing installed aero-engines and external parts of aircraft which would be otherwise inaccessible from the ground with normal types of servicing equipment. The Mk. 2 ladder is in two sections and can be extended and elevated to give a maximum platform height of 17 ft., and a maximum overhang of the platform over the trailing wheel of 4 ft. 6 in. The minimum platform height is 8 ft. The raising and elevating mechanism is hand-operated. The Mk. 3 ladder is similar in design to the Mk. 2 but has three ladder sections and can be extended and elevated to give a maximum platform height of 32 ft., a maximum overhang of 9 ft., and a minimum platform height of 17 ft.

ITEM 84

LADDER, AIRCRAFT SERVICING, "GIRAFFE", TYPE AA, Mk. 2



A.P. Reference 1464G, Vol. 1, Part 2, Sect. 5, Chap. 39

Stores Ref. 4G/5641

Classification 2

Overall dimensions (erected)

Length (base) 12 ft. 0 in.

Width (base) 6 ft. 0 in.

Height (max.) 20 ft. 6 in.
(min.) 10 ft. 6 in.

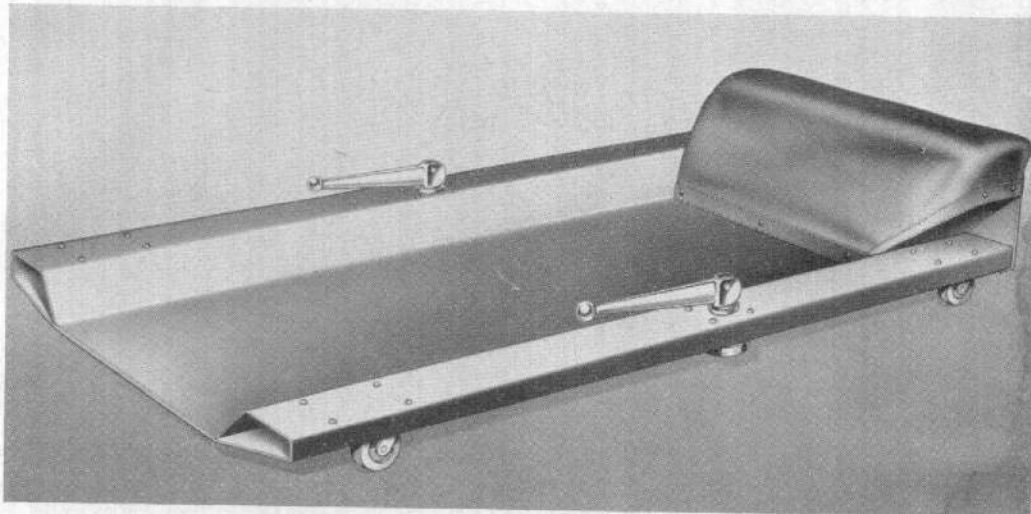
Weight 18 cwt.

Brief description This ladder is used during servicing operations on large types of aircraft to give access to the engines and external parts of the airframe. The equipment consists of a steel channel-section chassis, at the rear end of which is mounted an intermediate platform 3 ft. 10 in. high. A boom fitted with steel non-slip steps is connected by pivot pins at the bottom end to the intermediate platform and at the top end to a working platform which is supported on a hydraulic ram. The working platform, which is 4 ft. long and 3 ft. wide, will support a load of up to 600 lb. and can be elevated between heights of 7 ft. 6 in. and 17 ft. 6 in. by a hand-operated pump which is mounted in a hydraulic fluid reservoir on the side of the chassis and connected by a flexible hose to the ram; a release valve control is used to lower the platform. The ram can be locked by a latch mechanism to provide positive support for the platform at various heights. The chassis is mounted on four wheels, two of which are castoring, and is fitted with two jacking feet. Hand-rails are fitted to the boom and the working platform. The overhang beyond the front of the chassis is 8 ft. 6 $\frac{3}{4}$ in. when the platform is fully lowered and 8 $\frac{1}{2}$ in. when fully raised.

RESTRICTED

ITEM 93

CREEPER, AIRCRAFT SERVICING



A.P. Reference 4099C, Vol. 1, Sect. 12

Ref. No. 4G/4033

Classification 3

Overall dimensions

Length 6 ft. 9 in.

Width 3 ft. 3 in.

Height 1 ft. 0 in.

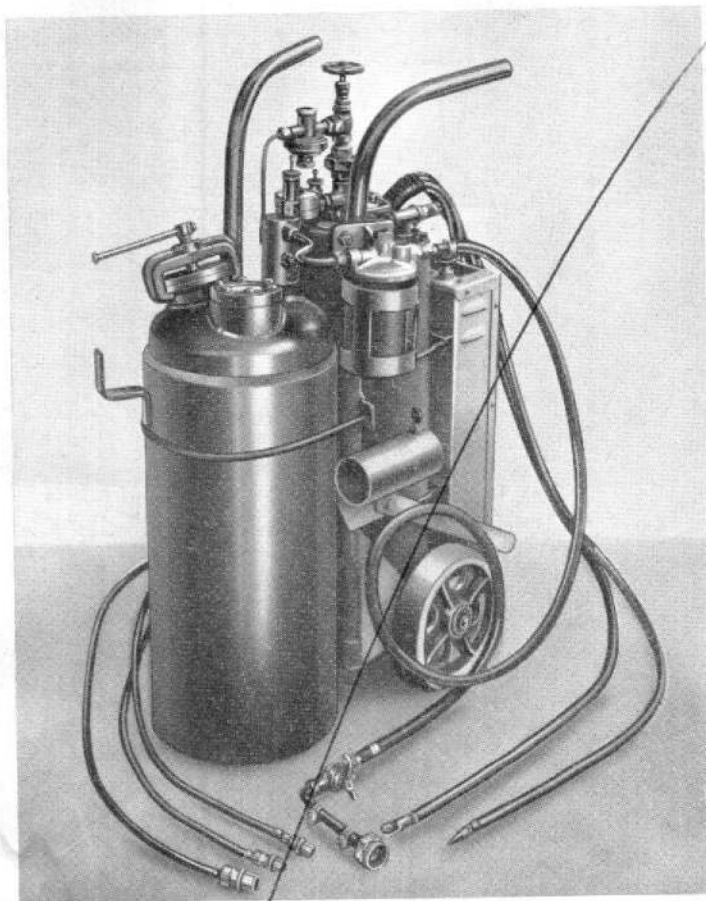
Weight 58 lb.

Brief description This equipment is for the use of personnel when lying in the prone position, to service the guns on Vampire aircraft. The creeper consists of a sheet metal carriage which is mounted on four 2 in. dia. castor wheels, and a headrest with a detachable leather-cloth cover. A spring-loaded hand brake lever is fitted on each side of the carriage, and when pulled backwards forces a plunger to make contact with the ground.

~~RESTRICTED~~

ITEM 94

RIG, INHIBITING, Mk. 1



A.P. Reference 4900A

Ref. No. 4G/4195

Overall dimensions

Length 2 ft. 0 in.

Width 1 ft. 4 in.

Height 3 ft. 0 in.

Weight (empty) 1 cwt. 3 qr. 26 lb.

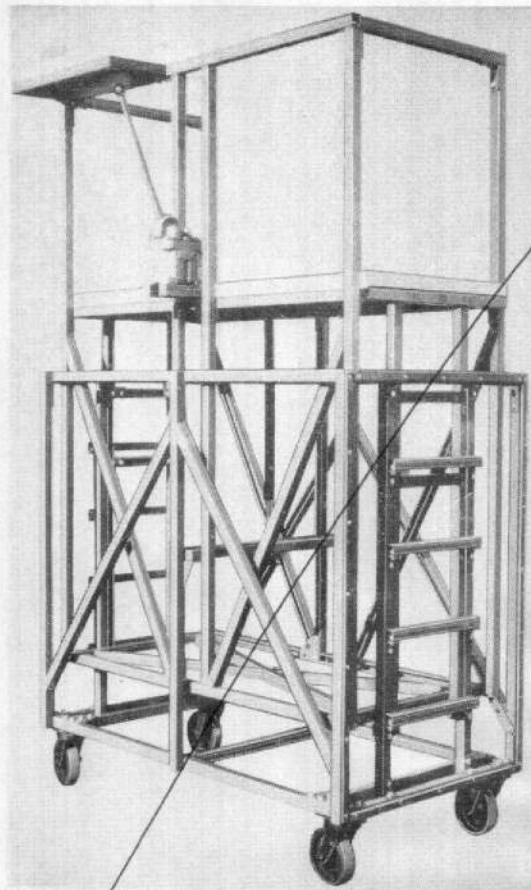
Classification 2

Brief description This rig is used to deliver inhibiting oil to the fuel systems of turbine engines. It is used in conjunction with a standard electric starting trolley. The equipment includes an oil container, two air vessels, and an electrical control box through which the starting trolley is connected to the engine. The capacity of the oil container is $4\frac{1}{2}$ galls.; the air vessels are charged by using either a high- or low-pressure servicing trolley, or a hand- or foot-operated pump.

~~RESTRICTED~~

ITEM 107

PLATFORM, AIRCRAFT MAINTENANCE



AC 26

A.P. Reference

Ref. No. 4G/6119

Classification 2

Overall dimensions

Length 6 ft. 1 in.

Width 3 ft. 4 $\frac{1}{4}$ in.

Height (min.) 8 ft. 11 in.

Weight 7 cwt. 2 qr. 20 lb.

Brief description The platform is for Naval use to facilitate the servicing of aircraft. The framework is made of bolted channel sections (Unistrut) and is mounted on four castors fitted with roller bearings; each castor is fitted with a combined swivel and wheel lock operated by a small lever. The working platform, 6 ft. long \times 2 ft. 6 in. wide \times 6 ft. 1 in. high, can be raised 2 ft. by a hydraulic ram actuated by a hand-operated pump which incorporates a release valve for lowering the platform; the pump capacity is 95 cu. in. (3 pints approx.). A ladder is fitted at each end. The leading edges on three sides are fitted with rubber strip to prevent damage to aircraft. The safe working load is 10 cwt.

ITEM 108

COMPUTER, FUEL WEIGHT



A.P. Reference

Ref. No. 53B/3739

Classification 2

Overall dimensions

Length 1 ft. 5 $\frac{1}{4}$ in. Width 5 $\frac{1}{4}$ in. Height 6 in.

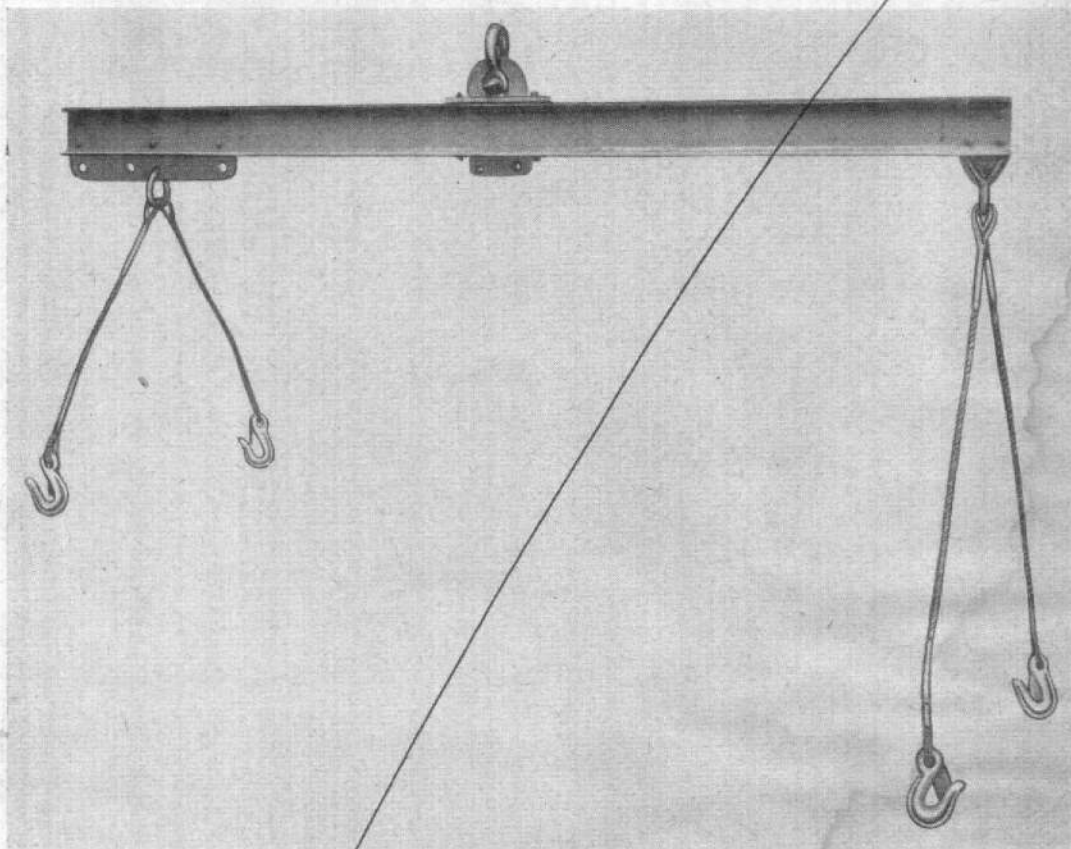
Weight 6 $\frac{1}{4}$ lb.

Brief description This equipment is normally fixed to the pumping compartment doors of refuelling vehicles, and is used to enable the fuel contents of aircraft to be computed in pounds (avoirdupois) instead of Imperial gallons, and is capable of indicating the rapid measurement of fuel by weight according to its specific gravity. The computer is constructed in the form of a calibrated drum rotating inside a metal box, a reading in pounds being readily ascertained by moving a sliding cursor to correspond with the pre-determined specific gravity of the fuel, and adjusting the drum by turning a handwheel to indicate the number of gallons to be converted. A panel, bearing the instructions for converting gallons to pounds and pounds to gallons, is fixed to the computer casing.

RESTRICTED

ITEM III

SLING, UNIVERSAL POWER PLANT



A.P. Reference

Stores Ref. 4G/4201

Classification 2

Overall dimensions

Length 8 ft. 0 in.

Width 6 in.

Height 1 ft. 3 in.

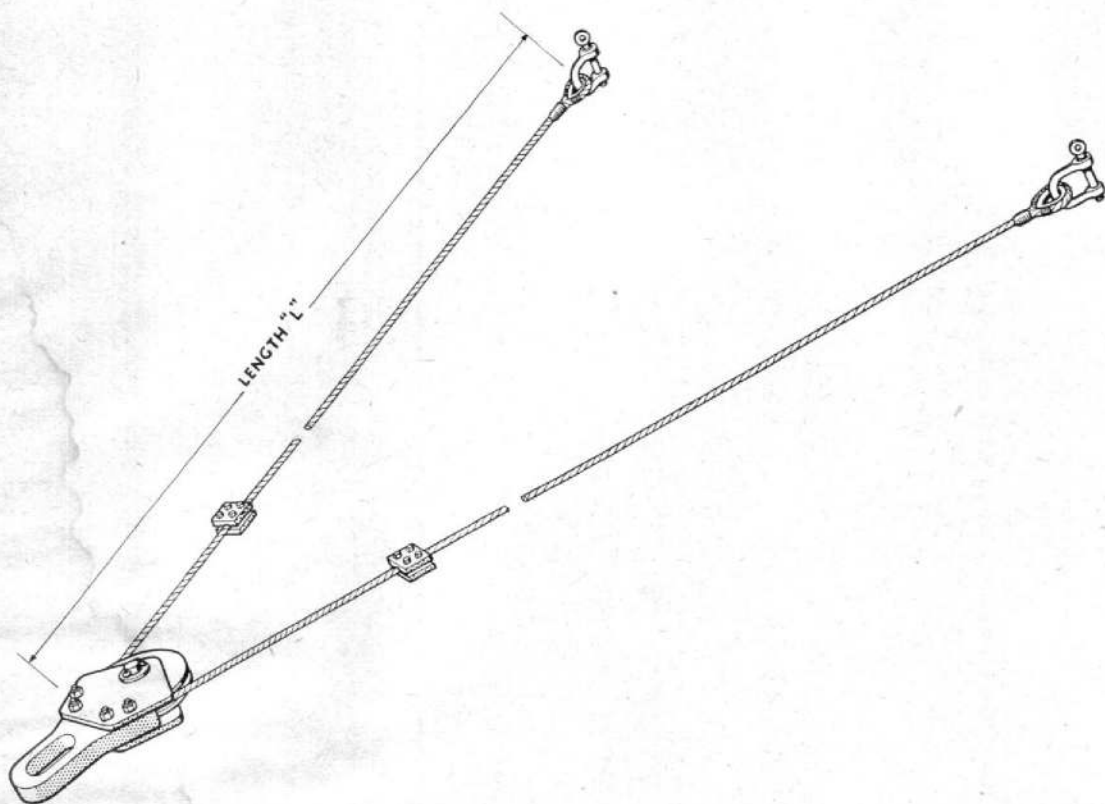
Weight $2\frac{1}{2}$ cwt.

Brief description This sling is issued for Naval use only and is used for lifting a power plant and stand. The sling consists of a steel beam of 5 in. channel section which is fitted with an adjustable supporting eye for attachment to a crane hook. Two steel wire strops with hooks attached, are fitted at each end of the beam, those at the front end are 4 ft. 2 in. long and those at the rear end are 2 ft. 6 in. long. The safe working load of the sling is 4,900 lb.

~~RESTRICTED~~

ITEM 112

BRIDLES, TOWING



A.P. Reference 2817A, Vol. 1, and Vol. 6, Part 1, Sect. 9, Chap. 2

Stores Ref. 4G/4137, 4138, 4139

Classification 2

Overall dimensions and weights

Length ('L' in the illustration)

25 ft.

35 ft.

50 ft.

Weight

2 qtr. 16 lb.

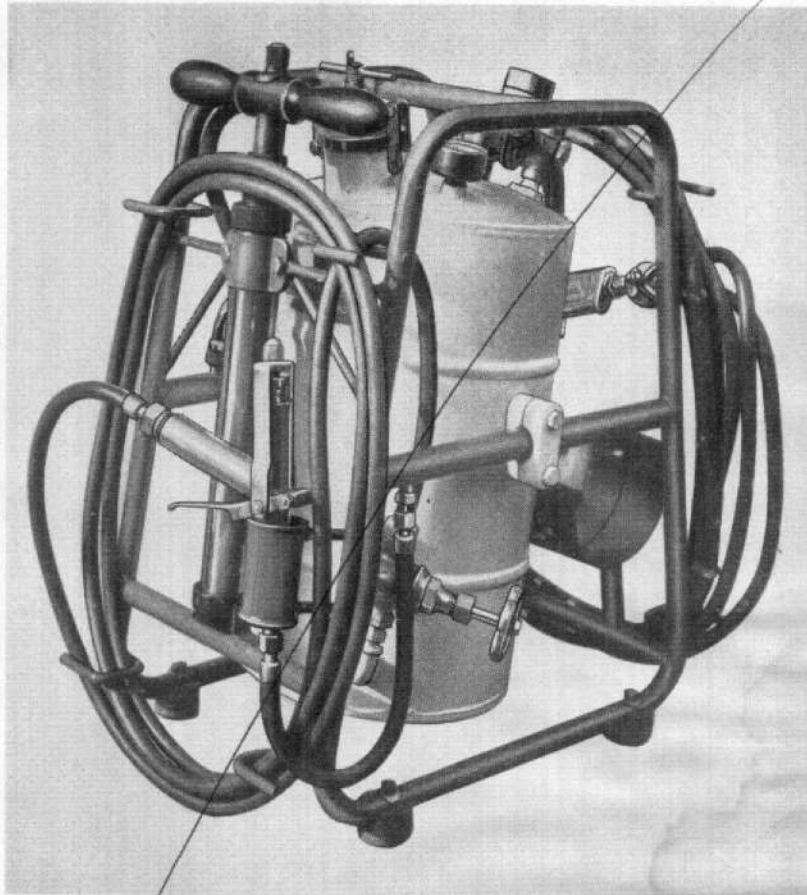
3 qtr. 0 lb.

3 qtr. 19 lb.

Brief description These towing bridles are used for connection between the towing lugs of an aircraft undercarriage and a towing vehicle, such as a tractor, and can be used for either the forward or rearward towing of aircraft, including those equipped with tricycle undercarriages. The bridle is supplied in three length sizes to suit the various type of aircraft. The bridles are made from flexible steel wire cable, and are, apart from their differences in length, identical in construction.

RESTRICTED

ITEM 113

CAN, FLUID REPLENISHING, PRESSURISED, Mk. I

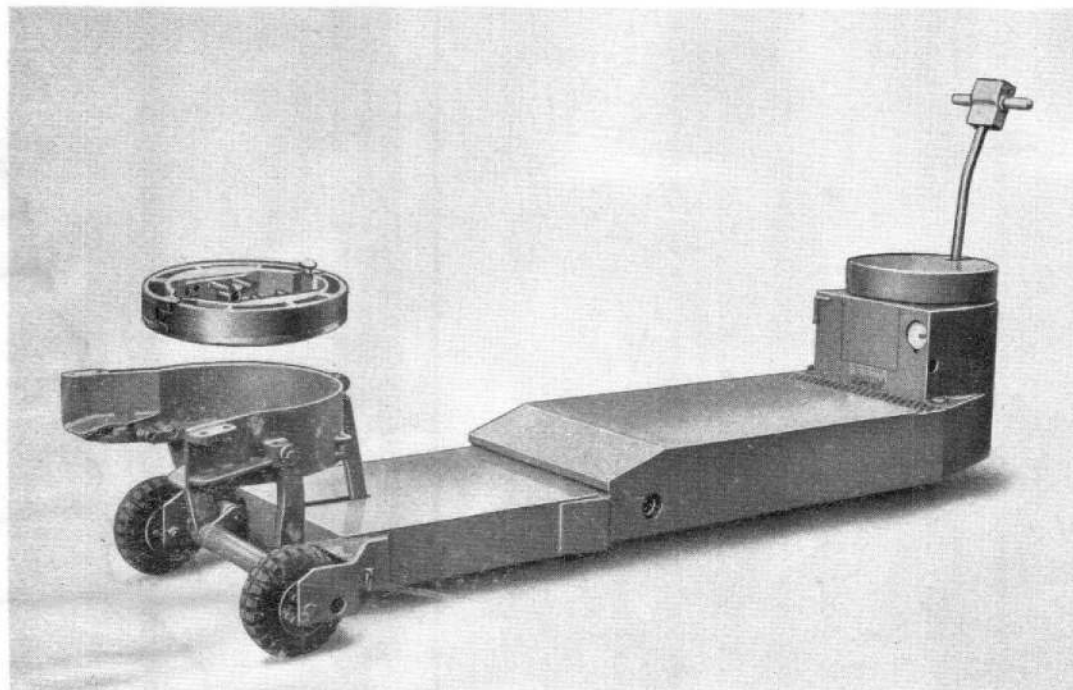
AC 26

A.P. Reference 1464G, Vol. 1, Part 2, Sect. 3, Chap. 2**Stores Ref.** 4G/4864**Classification** 2**Overall dimensions****Length** 1 ft. 7 $\frac{3}{4}$ in.**Width** 1 ft. 2 in.**Height** 1 ft. 9 in.**Weight (empty)** 41 $\frac{1}{2}$ lb.

Brief description This equipment is used for the pressure feed replenishment of aircraft hydraulic and de-icing fluid tanks and engine oil reservoirs which are inaccessible to other methods of replenishment. The container holds two gallons of fluid and is pressurised by a double-acting hand pump to feed fluid via flexible hoses to two delivery guns. One gun is capable of dispensing the whole contents of the container, the other gun is fitted with a measuring pot having a capacity of $\frac{1}{2}$ pint and calibrated in eighths of a pint, and is used for dispensing small predetermined quantities of fluid. A trolley (ITEM 128) is provided for carrying the can.

ITEM 114

HANDLER, AIRCRAFT, MECHANICAL, TYPE A



A.P. Reference 4494A

Stores Ref.

Classification I

Overall dimensions

Length 10 ft. 4 in.

Width 3 ft. 0½ in.

Height 2 ft. 3½ in.

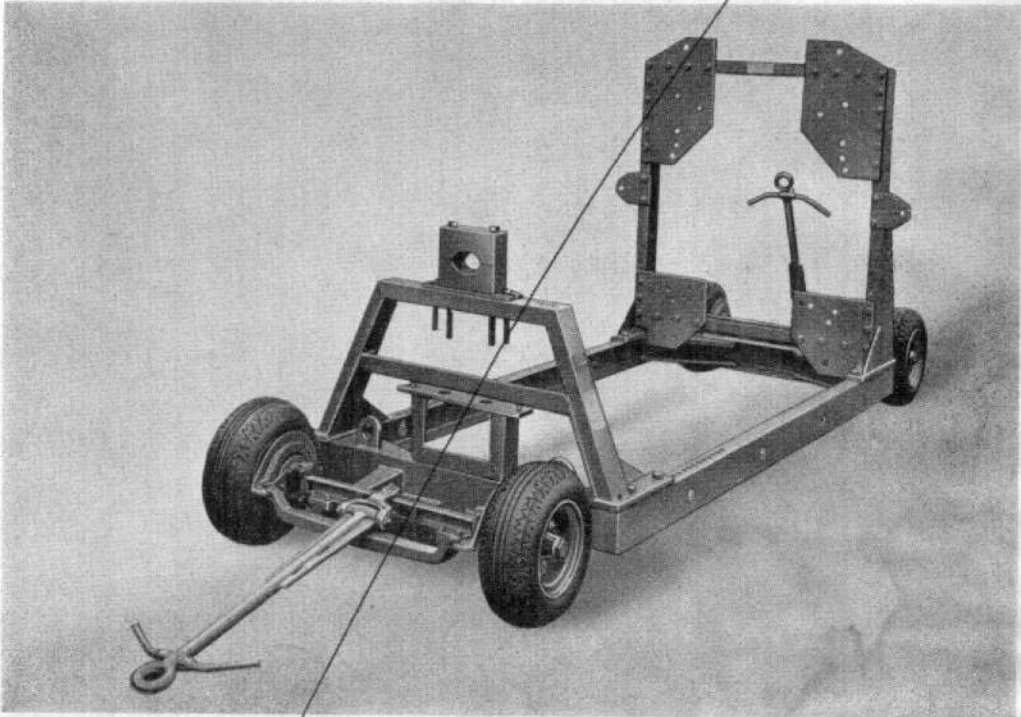
Weight 1 ton 2 qr.

Brief description The handler is designed on the same principles as the normal pedestrian-controlled electric truck and is used for the single-handed movement of aircraft on carrier flight decks and airfields. The handler is driven to the aircraft and positioned so that the hydraulically controlled elevating pan at its front end is directly beneath a connecting ring, or pallet, which is attached to the aircraft tail or nose wheel. The hydraulic control is then operated to raise the wheel from the ground; the maximum safe load is 3,200 lb. The pallet is supported on rollers on the elevating pan to facilitate the manoeuvring of the handler and thus allows the aircraft to be moved in any direction with precision. The maximum speed is 3 m.p.h. The handler is provided for Naval use only.

RESTRICTED

ITEM 115

TROLLEY, POWER PLANT, AIR TRANSPORTABLE, TYPE D



A.P. Reference

Ref. No. 4G/4305

Classification 2

Overall dimensions

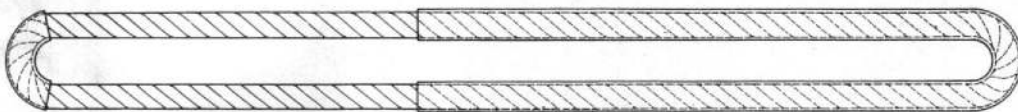
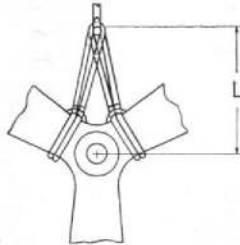
Length	Width	Height	Weight
12 ft. 2 in.	3 ft. 11½ in.	4 ft. 7½ in.	12 cwt.

Brief description This trolley is used for the ground and air transportation of power plants. It consists of a Type D power plant transit stand mounted on a four-wheeled double-steering chassis. The stand is of the universal type and its length can be adjusted to suit the power plant by altering the position of the front support on the chassis. The trolley can be steered at both ends and for this purpose is fitted with a combined towing and steering arm at each end. Brakes are fitted to the front and rear wheels and are operated by fully raising or lowering the towing arm. Tyre pressure, 60 lb. per sq. in.

~~RESTRICTED~~

ITEM 116

SLING, PROPELLER



A.P. Reference 2817A, Vol. 1 and Vol. 6, Part 1, Sect. 11

Ref. No. 4GC/5399

Classification 2

Drawing No. A.D.11472

Dimensions

Spliced length 7 ft. 3½ in.
Length 'L' 2 ft. 6 in. approx.

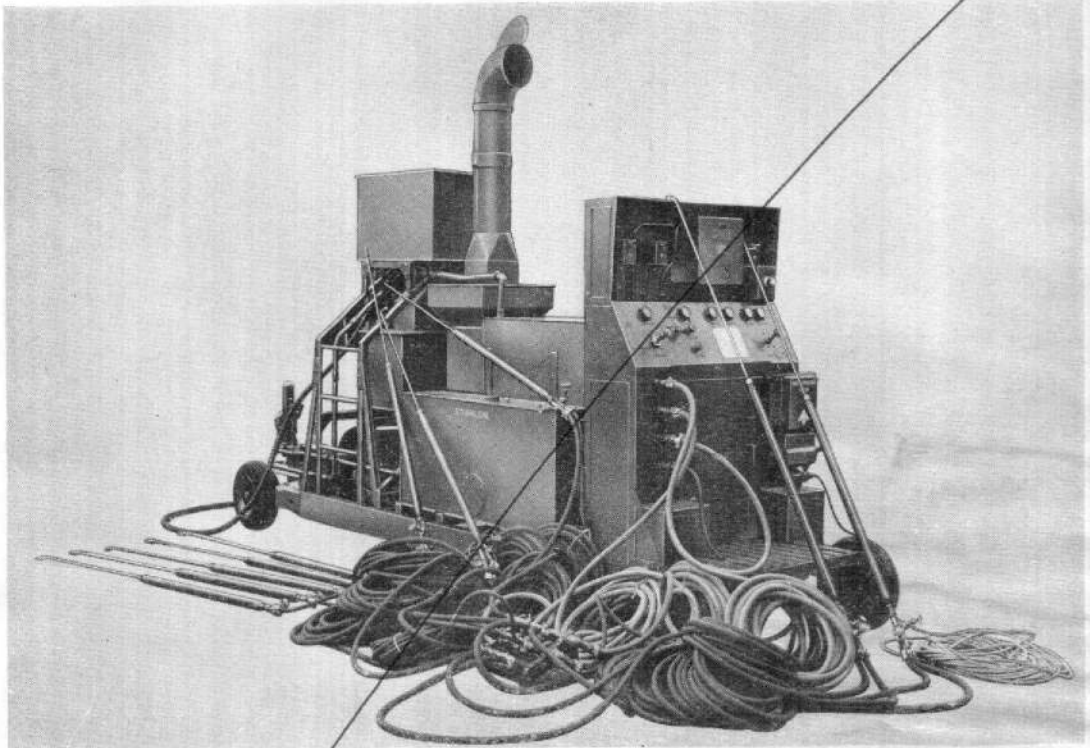
Rope circumference 2¼ in.

Weight 8 lb.

Brief description This sling is used for slinging 3-bladed metal propellers. It is made of nylon rope, spliced to form an endless sling, and is covered with leather on the parts which contact the propeller and the lifting hook. Two slings are required to sling a propeller. The maximum safe working load of the sling is 16 cwt.

~~RESTRICTED~~

ITEM 117

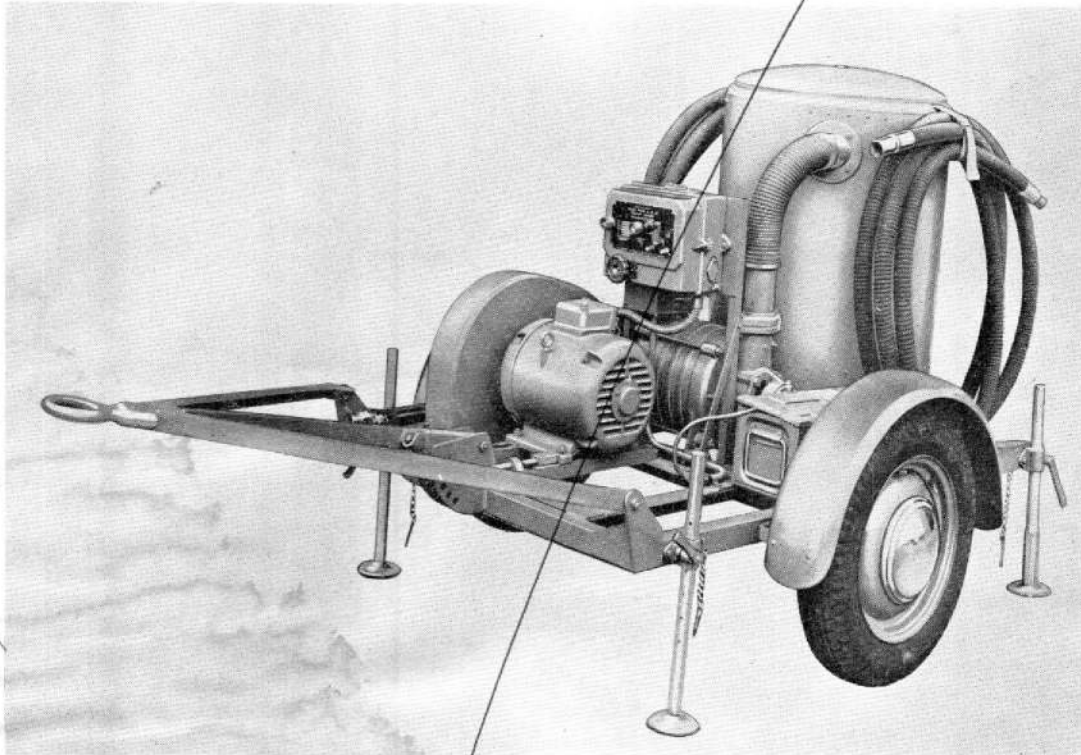
PLANT, AIRCRAFT WASHING, LARGE, TYPE A**A.P. Reference** 4537A**Stores Ref.** 4G/4343**Overall dimensions****Length** 15 ft. 9 in. **Width** 4 ft. 1 in. **Height** (chimney removed) 7 ft. 7 in.**Weight** 2 tons 13 cwt. 1 qr. 16 lb.**Classification** I

AL 79

Brief description This is an electrically-operated plant used for cleaning the external surfaces of aircraft by the successive application by pressure spraying of cleaning compound Type A, a heated solution of assistant to cleaning compound Type A and water, and finally with cold water; the pressure for spraying the fluids is provided by motor-driven pumps. The plant can be used only where it can be connected to a 400 V., a.c., electricity mains supply and a water main supplying at least 10 gallons per minute. The solution is heated to 95 deg. C. in a geyser fired by a kerosine burner. The plant is mounted on a four-wheeled chassis and can be towed at speeds not exceeding 15 m.p.h.

ITEM 118

CLEANER, VACUUM, AIRCRAFT, HEAVY DUTY, Mk. IB



A.P. Reference 4299A

Stores Ref. 4G/4519

Classification I

Overall dimensions

Length 9 ft. 10 in.

Width 5 ft. 4 in.

Height 5 ft. 0 in.

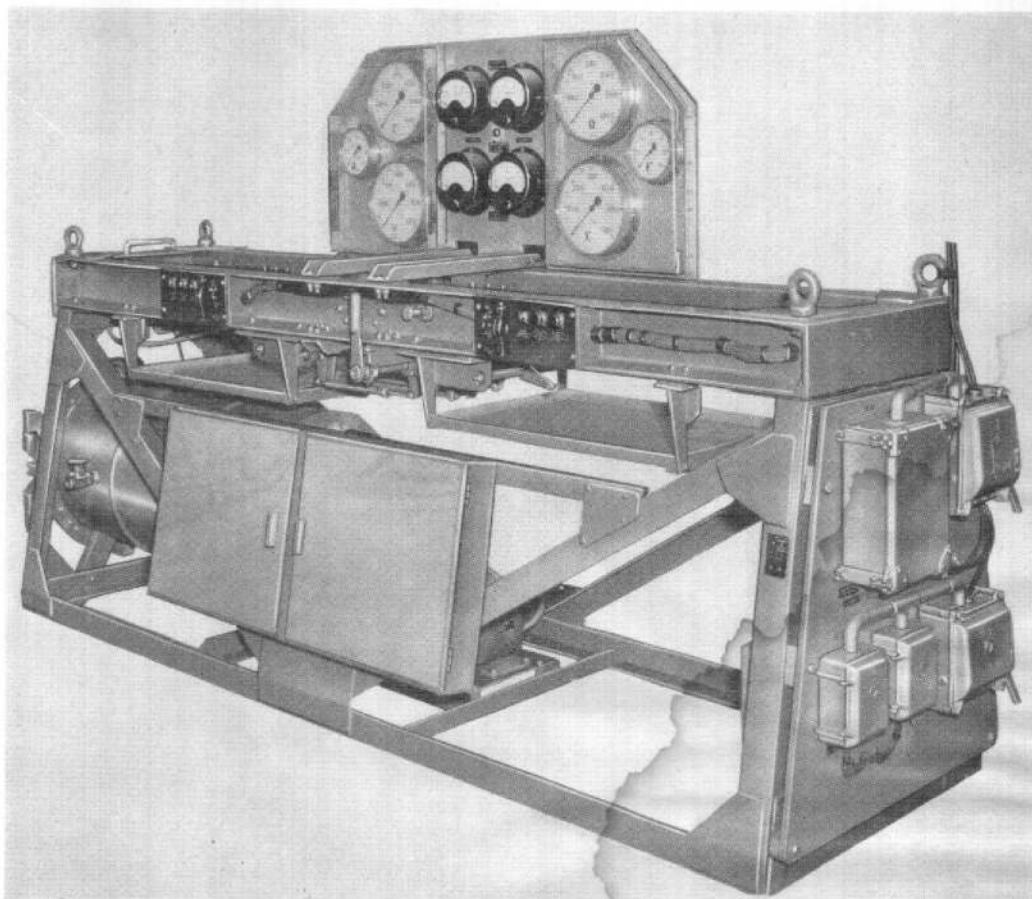
Weight 10½ cwt.

Brief description This mobile vacuum cleaner is for cleaning the interior of aircraft and may be used also for floor cleaning. The equipment is mounted on a two-wheeled chassis and consists of a turbo-exhauster driven by an electric motor, and a filter unit. The accessories include one 30 ft. suction hose, one 20 ft. suction hose, one 30 ft. hose extension, and various tools which can be fitted to the end of the hose to suit the cleaning operation being undertaken. The electric motor is of 6 h.p., 400/440 volts, a.c., 3-phase, 50 cycles.

RESTRICTED

ITEM 119

RIG, TEST, POWERED FLYING CONTROLS, VULCAN (BOULTON PAUL)



A.P. Reference 4638A

Ref. No. 27KC/1564

Classification I

Overall dimensions

Length 11 ft. 0½ in.

Width 3 ft. 0½ in.

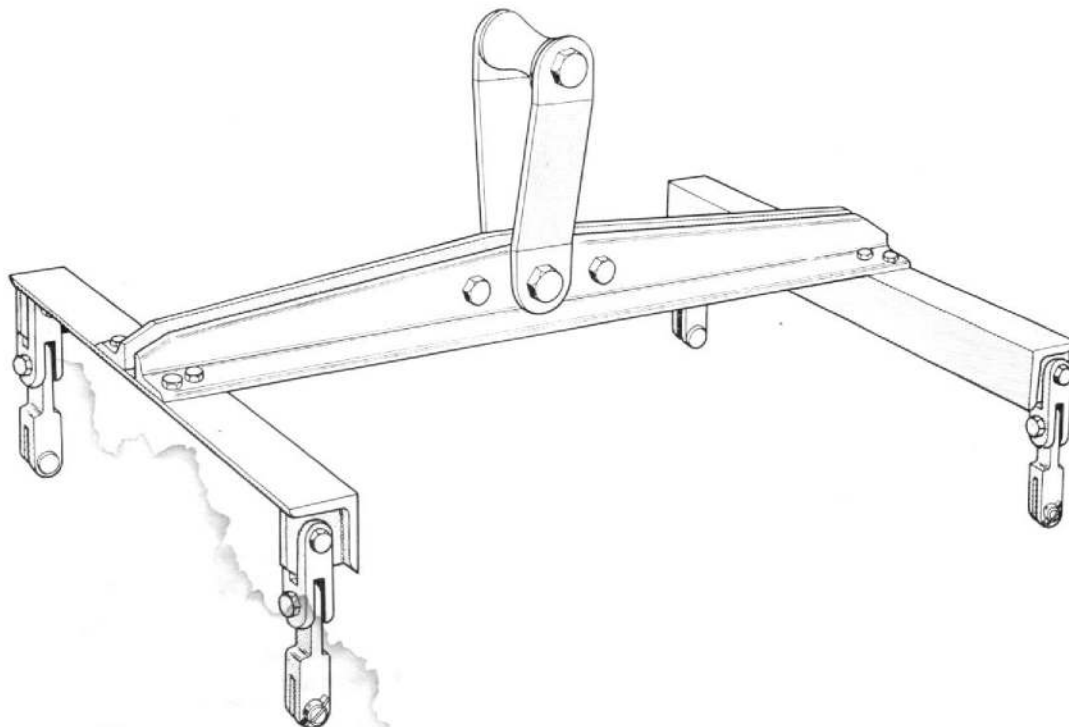
Height 5 ft. 10½ in.

Weight 3668 lb.

Brief description This test rig is used for the functional testing of Boulton Paul powered flying control units prior to their installation in Vulcan B. Mk. 1 and Vulcan B. Mk. 2 aircraft, and also for the detection of faults in suspected defective units. The rig consists of a heavy steel frame on which the units are mounted between two longitudinal members. The frame also carries an adjustable bridge piece, central linkage assembly, electrical supply panel, and a cylindrical vacuum chamber for topping-up the hydraulic fluid in the P.F.C.; the chamber operates in conjunction with a vacuum pump and vacuum gauge. A stowage box for loose equipment is provided on the front of the rig. On the electrical supply panel are mounted the switch boxes and fuse boxes for 110 volt, d.c.; 200 volt, a.c.; and 28 volt, d.c. supplies for the power control electric motors. A mains supply of 400 volts, a.c., 3-phase, 50 cycles, is required for the 1 h.p. motor which drives the vacuum pump.

ITEM 120

SLING, SCANNER



A.P. Reference

Ref. No. 4GC/6207

Classification 2

Overall dimensions

Length 2 ft. 3 in.

Width 1 ft. 9 in.

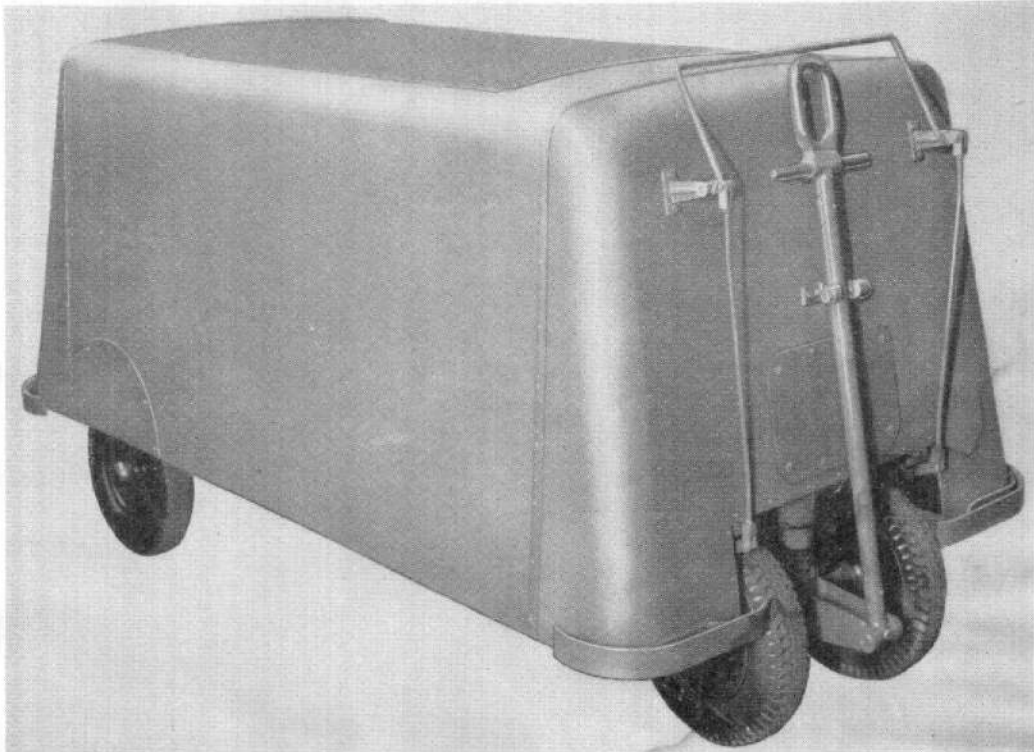
Height 1 ft. 2 $\frac{3}{4}$ in.

Weight 40 lb.

Brief description This sling is used for lifting the Type 121 scanner unit, and the H.2.S. Mk. 9 assemblies normally attached, during its installation and removal from aircraft, and also during servicing operations in the electronic servicing centre. The sling consists of an angle-section steel frame with a central lifting point and four linkage fittings, each of which is fitted with a pip pin for securing the scanner unit to the sling. The safe working load of the sling is 500 lb.

~~RESTRICTED~~

ITEM 141

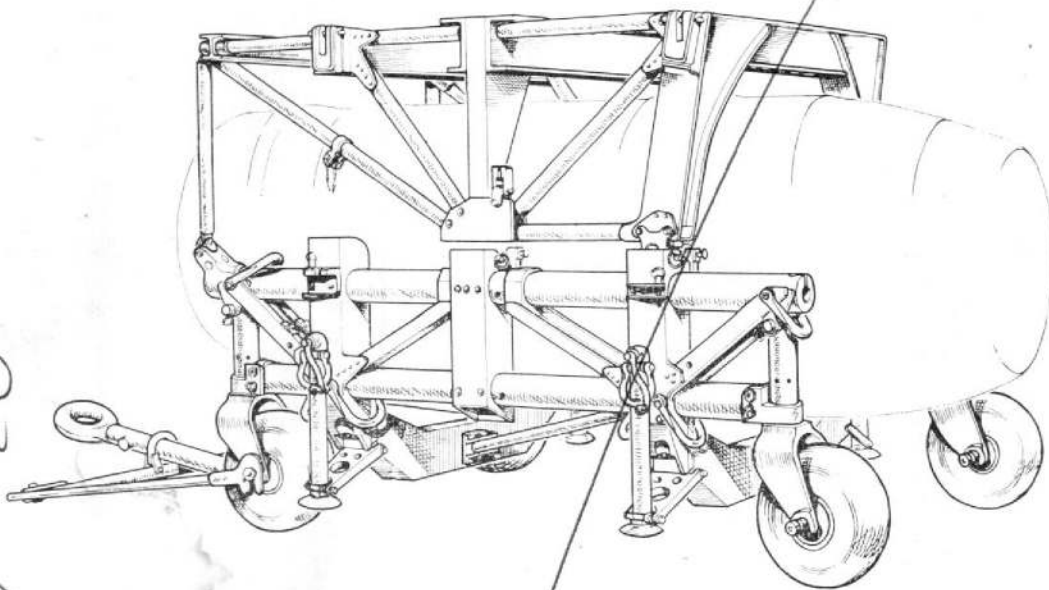
TROLLEY, FUEL REPLENISHMENT**A.P. Reference** 2306P**Ref. No.** 4G/6541**Classification** 1**Overall dimensions****Length** 8 ft. 2 in.**Width** 4 ft. 4 in.**Height** 4 ft. 3 in.**Weight** 12 cwt. 2 qr.

Brief description This trolley is used for replenishing the fuel tanks of engine-powered ground equipment, and incorporates a flowmeter for accurate recording of fuel issues. The trolley consists of a four-wheeled chassis carrying a 100-gallons capacity tank fitted with a filler cap, breather, and a dipstick with 5-gall. calibration markings. A 12 ft. \times 1 $\frac{1}{2}$ in. suction hose with standpipe, and a 12 ft. \times 1 in. delivery hose, are used with the trolley which also incorporates a hand pump used for both filling the trolley and delivering fuel from the trolley. The pump is of the reciprocating double-acting type and has a capacity of 6-7 gall. per min. A towing/steering arm is fitted to the front end of the chassis, and hand-lever-operated brakes are fitted to the rear wheels. The trolley is covered by a sheetmetal canopy fitted with compartments for stowing the hoses and standpipe and has a door at the rear to give access to the pumping equipment.

~~RESTRICTED~~

CARRIER, E.C.U., AIRBORNE

AC 26



A.P. Reference 1464G, Vol. 1, Part 2, Sect. 6, Chap. 4

Ref. No. 4G/5711 (Trolley section)
4G/5712 (Upper section)

Classification 2

Overall dimensions and weight

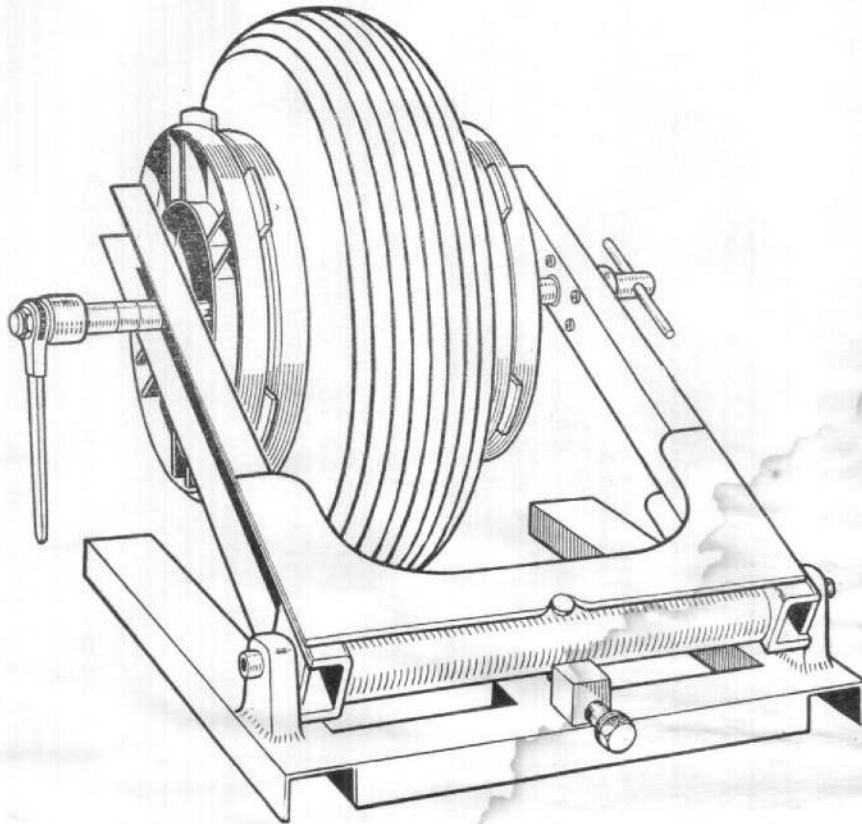
	Length	Width	Height	Weight
Trolley section	7 ft. 9 in.	5 ft. 9 in.	3 ft. 1 in.	700 lb.
Upper section	6 ft. 5 in.	4 ft. 5 in.	2 ft. 4 in.	450 lb.

Brief description This equipment is used for the airborne carriage of a range of engine change units and is adapted for transport in an aircraft bomb bay or on the floor in a freighter aircraft. The carrier consists of two main parts, the trolley section and the upper section, the latter being fitted to the top of the trolley and used for slinging purposes. The trolley is in the form of a cradle to accept the E.C.U. and is mounted on four pneumatic-tyred retractable castor wheels; also fitted to the trolley are four screw jacks, mooring shackles and a steering and towing bar. Adapters are provided for converting the carrier for use with different E.C.U's and for attaching the carrier to different types of aircraft.

RESTRICTED

ITEM 147

SEPARATOR, TYRE, SCREW TYPE



A.P. Reference 2337, Vol. 1, Book 1, Sect. 1, Chap. 9, App. 3

Ref. No. 4G/6269

Classification 3

Overall dimensions

Length 4 ft. 0 in.

Width 3 ft. 0 in.

Height 2 ft. 0 in.

Weight (approx.) 300 lb.

Brief description This separator is used for breaking the adhesion between the tyre bead and the inner side of the wheel flanges during the removal of tubeless tyres from aircraft wheels of up to 50 inches in diameter and with a minimum bearing bore diameter of $1\frac{1}{4}$ inches. The machine consists of a hinged steel frame adjustable to the centre height of the wheel assembly being dismantled, the frame being raised or lowered by an adjusting screw fitted in the base. Attached to each side member of the frame is a circular plate on which is mounted a pressure ring, a range of these rings being provided to enable selection to suit the size of the tyre and wheel. One circular plate is fixed and the other moves transversely across the frame along a threaded drawbar manually-operated by a ratchet spanner. The pressure rings must contact the rubber sidewalls of the tyre immediately outside the wheel flanges and must not foul any part of the wheel.

RESTRICTED

ITEM 149

STEPS, CABIN ACCESS (EDGHILL TYPE 2823/HD)

**A.P. Reference**

Ref. No. 4G/6962

Classification 2

Overall dimensions

Length 14 ft. 3 in.

Width 4 ft. 5½ in.

Height (min.) 9 ft. 2 in.

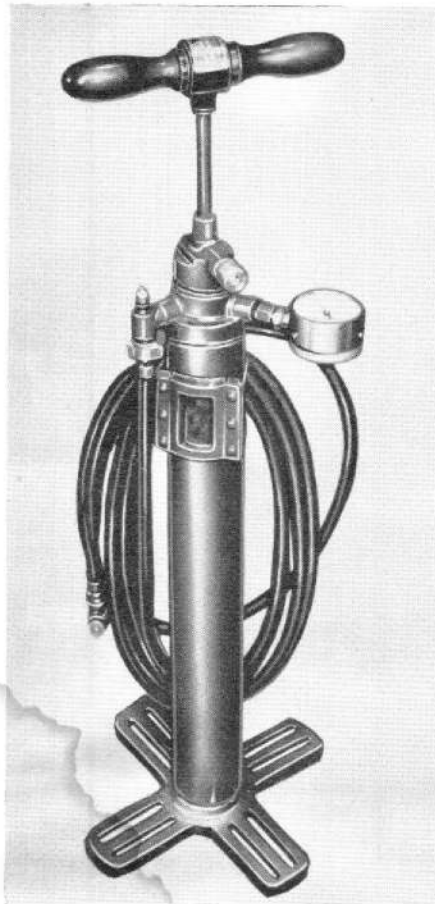
Weight 10 cwt.

Brief description These steps are used to provide access for servicing tasks on transport aircraft, and have a platform at the top which can be adjusted in height between 6 ft. 6 in. and 10 ft. 6 in. by operating a simple hydraulic ram. The equipment is of lightweight construction and consists of a 4-wheeled tubular steel base frame which carries two step assemblies. The lower section is fixed to the frame, and the upper section slides on the frame side members when being raised or lowered; a safety latch secures the steps in the raised position. Heavy duty castor wheels at the step end of the frame facilitate towing, the towbar being pushed clear, under the steps, when not in use. Two steady jacks operated by a single lever at the base of the steps, prevent movement of the steps when in use. Hand rails are fitted at each side of the steps and on the platform. The stairway is 3 ft. 8½ in. wide, the step treads are 9 in. and the risers 8 in., and the area of the platform is 4 ft. × 3 ft. 7 in.

RESTRICTED

ITEM 150

PUMPS, PRESSURISING



A.P. Reference 1464G, Vol. 1, Part 2, Sect. 5, Chap. 32.

Ref. No. 4G/5435 (20 lb. per sq. in.)
4G/6542 (60 lb. per sq. in.)

Classification 3

Overall dimensions

Base 10 in. \times 10 in.

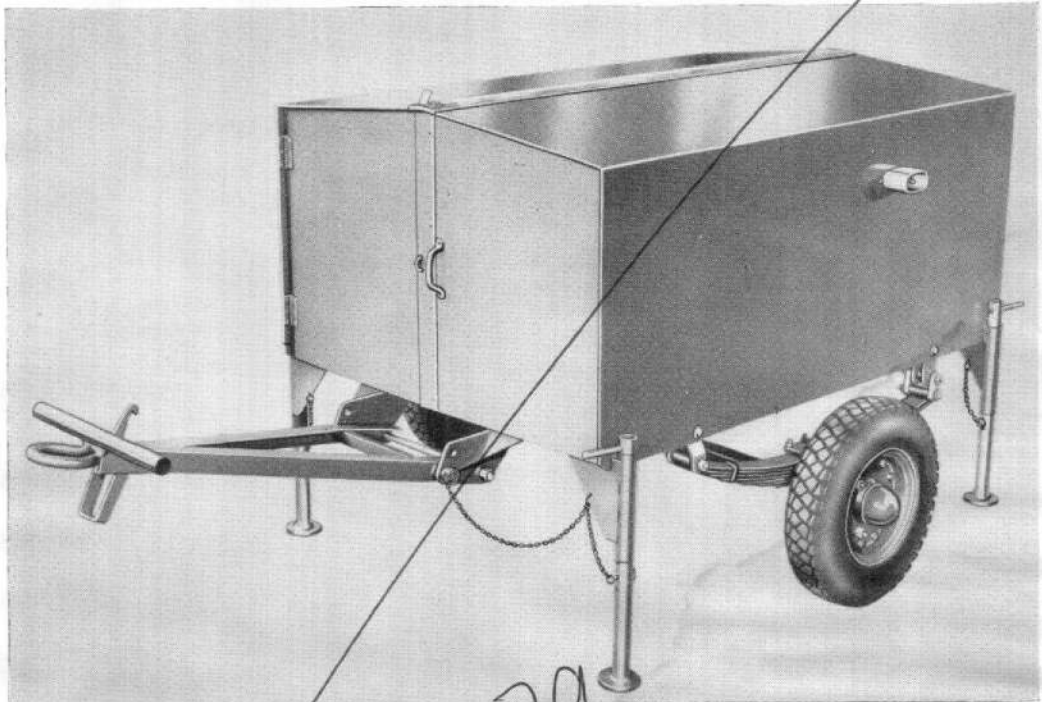
Height 2 ft. 2 in.

Weight 17½ lb.

Brief description These pumps are used to supply perfectly dry and dust-free air for pressurising radio and electronic assemblies operating in hermetically-sealed containers. Each pump consists of a vertically mounted hand pump, a pressure gauge and a 15 ft. length of delivery hose terminating in a quick-release Schrader valve connector. The body of the pump stands on four radially disposed feet and incorporates a silica-gel crystals pack for drying the pumped air. The pump (4G/5435) is fitted with a 20 lb. per sq. in. pressure gauge and the pump (4G/6542) is fitted with a 60 lb. per sq. in. gauge; the pumps are similar in all other respects.

~~RESTRICTED~~

ITEM 151

TROLLEY, REFRIGERANT REPLENISHMENT

A.P. Reference 4881A

Ref. No. 4G/6582

Classification 1

Overall dimensions

Length (less towbar) 4 ft. 7 in.
(with towbar) 6 ft. 11 in.

Width 4 ft. 0 in.

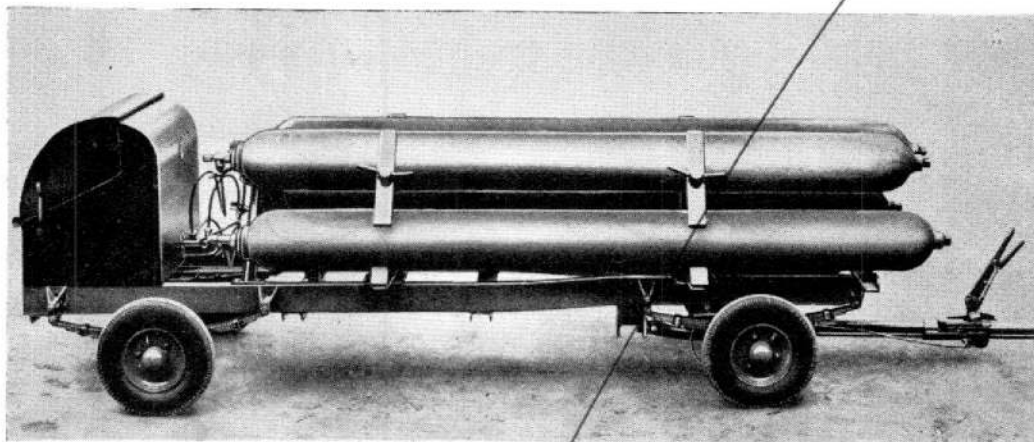
Height 3 ft. 1½ in.

Weight 7 cwt.

Brief description This two-wheeled trailer type trolley is used for replenishing the refrigerant during the servicing of vapour cycle cooling packs. The trolley is fitted with a vacuum pump for evacuating the refrigerant system prior to charging and carries seven cylinders of refrigerant and the ancillary equipment required for charging the packs. The trolley equipment is enclosed in a sheetmetal canopy containing two compartments fitted with access doors at the front and rear. The rear compartment contains the vacuum pump driven via a vee-belt by a ¼ h.p. 24-volt motor powered by two 12-volt batteries, and a starter switch. The front compartment is fitted with racks for carrying the refrigerant cylinders and stowage space for the vacuum hose and other equipment. The chassis has semi-elliptical springing and is fitted with four retractable legs to support the trolley when parked.

RESTRICTED

TROLLEYS, HIGH PRESSURE AIR CHARGING, Mk. 2A, 2B and 2C



A.P. Reference 2306U

Ref. No. 4G/5803 (Mk. 2A)
4G/5888 (Mk. 2B)
4G/6731 (Mk. 2C)

Classification 2

Overall dimensions

Length (with towbar) 16 ft. 0 in. Width 4 ft. 4 in. Height 3 ft. 2 in.
(less towbar) 11 ft. 0 in.

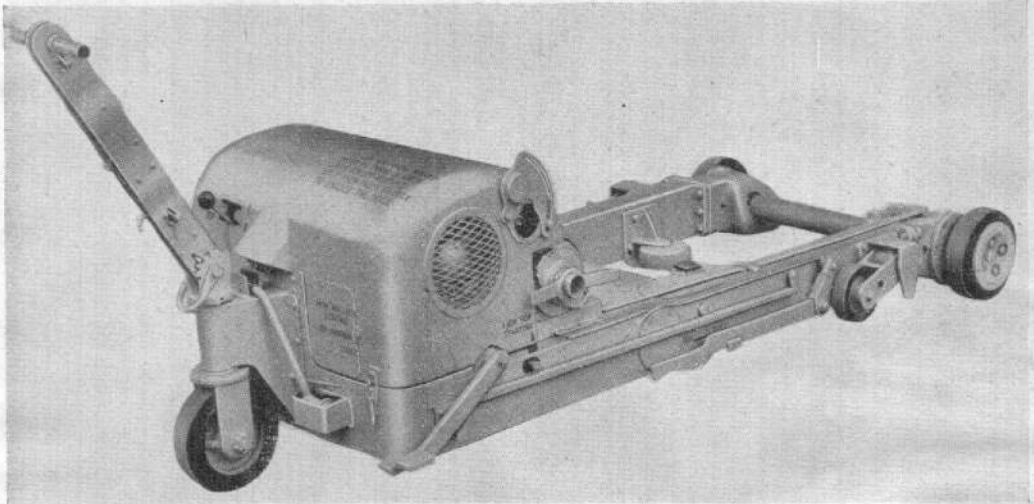
Weight (less cylinders) 7 cwt. 1 qr. 14 lb.
(with 4 cylinders) 18 cwt. (approx.)

Brief description These trolleys are used for charging high pressure air systems in aircraft and missiles. Each trolley consists of a four-wheeled chassis upon which is mounted a cradle for carrying four Mk. 7, Mk. 7A, Mk. 12 or Mk. 12A gas transport cylinders of 4000 lb. per sq. in. maximum working pressure. The cylinders are connected through a central manifold to a Mk. 5 charging regulator (6D/2141) mounted in the rear end of the trolley, and thence by high pressure hose to the charging point on the aircraft or missile. The Mk. 2A trolley is fitted with two "Porosint" 10-micron filters (6D/2254) and two charging hoses (6D/2057), the Mk. 2B trolley has no filters and is fitted with one charging hose (6D/2057), and the Mk. 2C trolley is fitted with two 10-micron filters (6D/2254), two charging hoses (6D/2057) and a valve for the *in situ* charging of the air cylinders. The trolleys are similar in all other respects. The air cylinders are supplied separately.

RESTRICTED

ITEM 153

HANDLER, AIRCRAFT, MECHANICAL, LIGHTWEIGHT



A.P. Reference 4494A

Ref. No. 4F/3978

Classification 1

Overall dimensions

Length 7 ft. 10 in.

Width 3 ft. 6½ in.

Height 2 ft. 2 in.

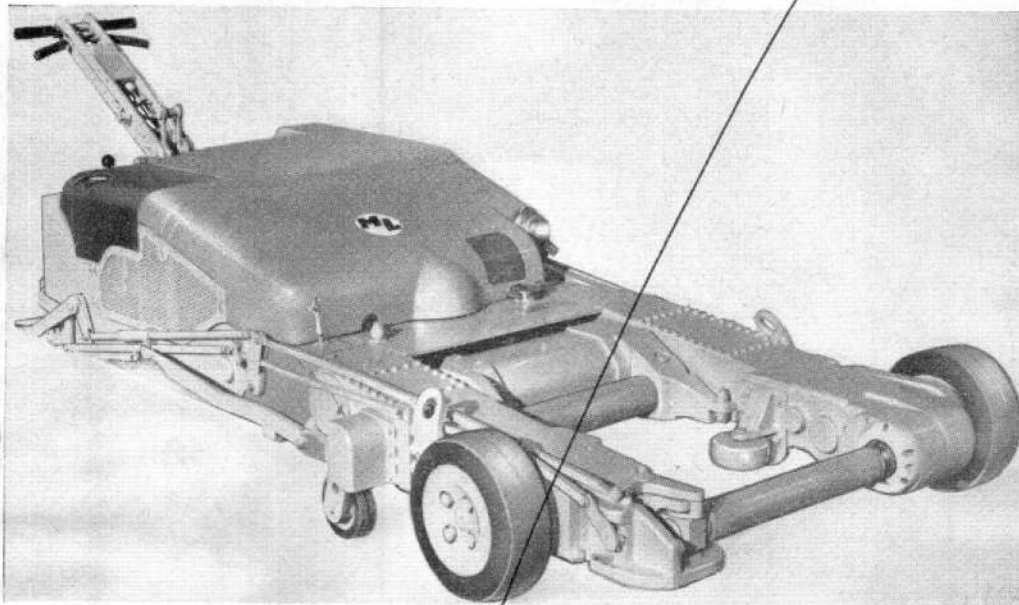
Weight 1250 lb.

Brief description This mechanical handler is used for the forward or rearward movement of aircraft on airfields and flight decks, and operates by applying a friction roller drive to the tread of the aircraft main wheel. The handler consists of a three-wheeled chassis on which is mounted a Drayton Type 35 diesel engine which drives the rollers and the two front wheels through a clutch, 3-speed and reverse gearbox, countershaft and roller chains. Steering of the handler is effected by a steering arm fitted to the rear wheel; a single control lever for the brake, clutch and throttle is fitted to the steering arm. Steering of the aircraft is effected by a separate steering arm attached to the nose or tail wheel. A gate mechanism allows the front roller to swing open for positioning the handler ready for operation, the rear driving roller then controls the forward movement of the aircraft, and the front roller controls the rearward movement. Auxiliary wheels are fitted to the chassis for raising the driving wheels off the ground to permit free movement of the handler when not engaged in moving aircraft. Two handlers are required when moving aircraft weighing over 45 000 lb.

RESTRICTED

ITEM 154

HANDLERS, AIRCRAFT, MECHANICAL, Mk. 5 and 5A



A.P. Reference 4494A

Ref. No. 4F/4934 (Mk. 5): 4F/4904 (Mk. 5A)

Classification 1

Overall dimensions

Length 9 ft. 4.7 in.

Width 4 ft. 6.4 in.

Height 2 ft. 0 in.

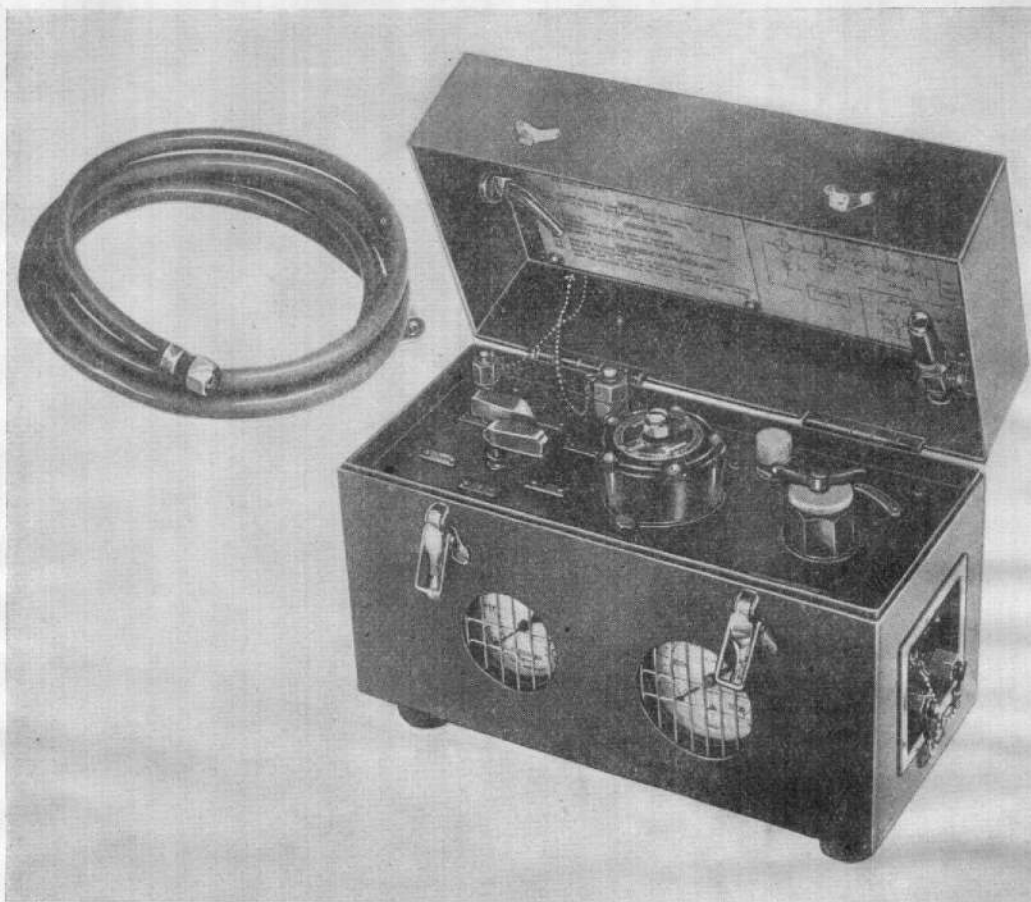
Weight 3640 lb.

Brief description These mechanical handlers are used for the forward and rearward movement of aircraft on airfields and flight decks, and operate by applying a friction roller drive to the tread of one of the aircraft main wheels. Each handler consists of a three-wheeled chassis on which is mounted a Coventry Victor H.D.A. Vixen 2-cylinder air-cooled diesel engine for driving the friction rollers and the two front wheels through a hydraulic transmission drive and roller chains. A control arm fitted to the rear wheel is used for steering the handler and carries the controls for the engine, hydraulic mechanism and brake. A separate steering arm attached to the nose or tail wheel is used for steering the aircraft. A gate mechanism swings open the front roller to permit the positioning of the handler at the aircraft wheel; the rear driving roller controls the forward movement of the aircraft, and the front roller controls the rearward movement. Auxiliary wheels are fitted to the chassis for raising the driving wheels off the ground to allow free movement of the handler when not engaged in moving aircraft. The handlers differ only in the engine starting system; the Mk. 5 has a 12V system and the Mk. 5A a 24/28V system.

RESTRICTED

ITEM 155

UNIT, PRESSURE REGULATING



A.P. Reference 2306U, Vol. 1 and Vol. 6, Sect. 2, Chap. 3
4881A, Vol. 1 and Vol. 6, Sect. 3, Chap. 2

Ref. No. 6D/2351

Classification 2

Overall dimensions

Length 1 ft. 2 in. **Width** 6 $\frac{3}{8}$ in. **Height** 1 ft. 0 $\frac{1}{2}$ in.

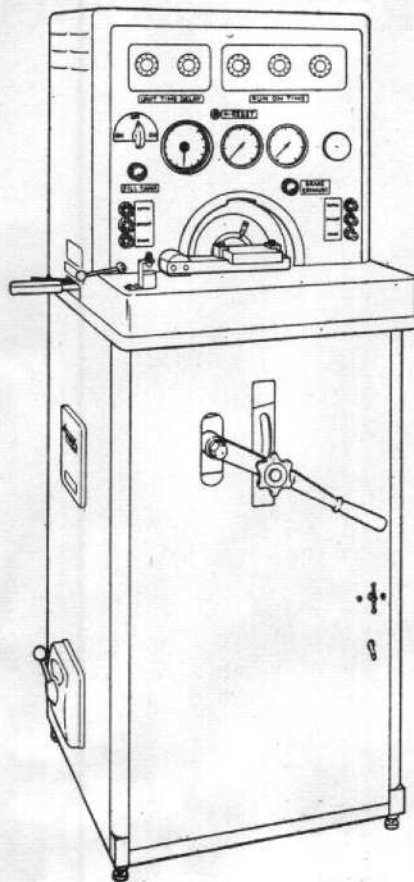
Weight 31 lb.

Brief description This portable unit is contained in a metal case fitted with a carrying handle, and is used when vapour cycle cooling packs are being pressurized with nitrogen or when electronic counter measure (ECM) containers are being pressurized with air or nitrogen from a charging trolley. The unit may be used also for checking the pressure of a charged container or for venting a pack or container to atmosphere. The unit is capable of handling input pressure up to 3000 lb. per sq. in. with a regulated output pressure up to 30 lb. per sq. in.

RESTRICTED

ITEM 156

RIGS, TEST, "MAXARET"



A.P. Reference 4895A

Ref. No. 27G/3162 and 3163

Classification 2

Overall dimensions

Depth 1 ft. 11 $\frac{1}{4}$ in.

Width 1 ft. 10 $\frac{3}{8}$ in.

Height 4 ft. 11 in.

Weight (approx.) 460 lb.

Brief description This portable test rig is used for testing aircraft hydraulically-operated Maxaret anti-skid units and provides the power for driving the Maxaret unit tyre through the medium of a revolving drum. The test rig hydraulic system comprises control valves, pressure gauges, filters, pressure switches, accumulator, pump and fluid tank. Hydraulic pressure is built up by the pump which is operated by compressed air fed into a connection on the side of the test rig. The pneumatic components are an on-off tap, air pressure regulating valve, relief valve and air filter. The drum is belt-driven by an electric motor of 1 $\frac{1}{2}$ h.p. 400/440 volts a.c. 3-phase 50 cycles, through the medium of a variable speed unit. There are two versions of the test rig and these differ only in the type of oil seals fitted in the system; the rig (27G/3162) has seals to suit mineral oil, OM-15, and the rig (27G/3163) has seals to suit castor oil, OF-4.

RESTRICTED

ITEM 159

TROLLEY, AIR CHARGING, SINGLE CYLINDER, Mk. 1A



A.P. Reference 2306U

Ref. No. 4G/6733

Classification 2

Overall dimensions

Length 6 ft. 11 in.

Width 2 ft. 8 in.

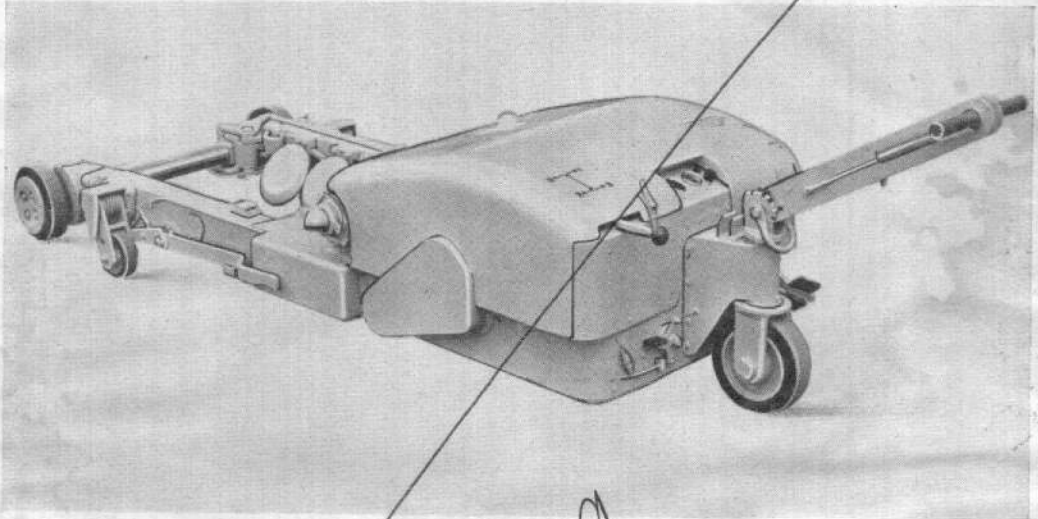
Height 4 ft. 6 in.

Weight (less cylinder) 257 lb.

Brief description This two-wheeled trolley is used in conjunction with a Mk. 6 gas transport cylinder for charging high-pressure air systems, and is designed for charging one system only at a time. The trolley is of tubular steel construction and incorporates a cradle for carrying the gas cylinder. The air output is controlled by a Mk. 5 charging regulator (6D/2141) which is housed in a sheetmetal box on the trolley handles. The controlled air output from the regulator passes through a 5-micron filter before being delivered through the 30 ft. flexible charging hose. The gas cylinder has a maximum working pressure of 6000 lb. per sq. in.

RESTRICTED

ITEM 161

HANDLER, AIRCRAFT, MECHANICAL, Mk. 6

A.P. Reference 4494A

Ref. No. 4F/4609

Classification 1

Overall dimensions

Length 9 ft. 3 in.

Width 3 ft. 7 $\frac{1}{4}$ in.

Height 2 ft. 0 in.

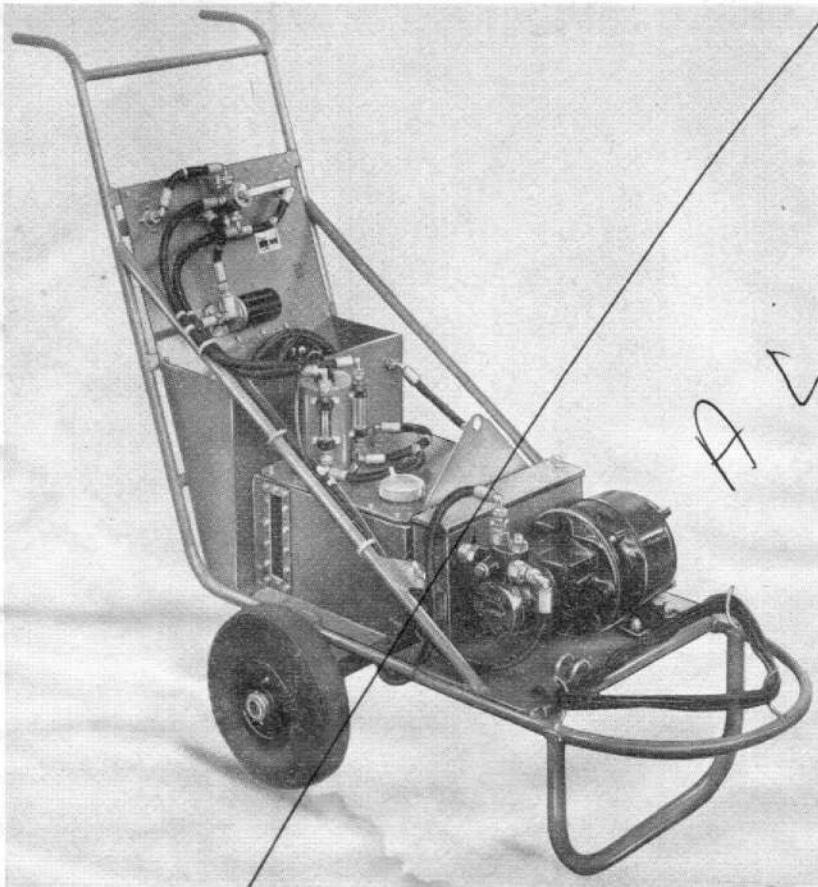
Weight 2016 lb.

Brief description This mechanical handler is used for moving aircraft of up to 45,000 lb. weight on aircraft carriers, and operates by applying a friction roller drive to the tread of one of the aircraft wheels; two handlers are required for heavier aircraft. The handler consists of a three-wheeled chassis on which is mounted a Coventry Victor H.D.A. Vixen 2-cylinder air-cooled diesel engine for driving the friction rollers and the two front wheels through a three-speed gearbox and roller chains and sprockets. A control arm fitted to the rear wheel is used for steering the handler and carries the controls for the engine speed, clutch and brake. For steering the aircraft, a separate steering arm is attached to the aircraft nose or tail wheel. A gate mechanism swings open the front roller to permit the positioning of the handler at aircraft wheels of up to 46 in. dia.; the rear roller is then used for forward movement of the aircraft and the front roller for rearward movement. Auxiliary wheels are fitted to the chassis so that its front wheels can be raised clear of the ground to permit free movement of the handler when not engaged in moving aircraft.

RESTRICTED

ITEM 162

RIG, OIL FILLING, TYPE 11565



A.P. Reference 1464G, Vol. 1, Part 2, Sect. 3, Chap. 8

Ref. No. 10S/17041

Classification 2

Overall dimensions

Length 4 ft. 6 in.

Width 2 ft. 1 in.

Height 3 ft. 4 in.

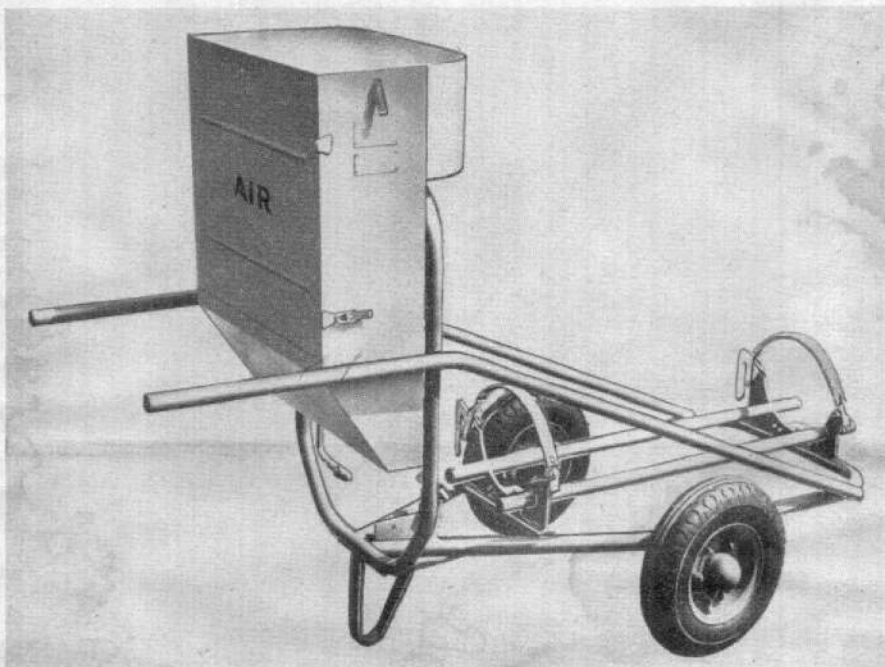
Weight 134 lb.

Brief description This rig is used for priming and draining various items of equipment which use silicon fluid or water glycol as a cooling medium. The main components of the rig include a silicon fluid tank, an electric motor driving a hydraulic pump, a filter, drain/prime valve, priming and draining hoses, and a detachable water glycol tank, which are mounted on a small two-wheeled trolley of tubular steel construction. The $\frac{1}{2}$ h.p. motor has a speed of 1425 r.p.m. and can be operated from either a 220/250 volt, 3-phase, 50 c.p.s. supply or a 380/400 volt supply. The hydraulic pump is of the annular piston type and its output pressure is controlled to 15 lb. per sq. in. by a pressure regulating valve.

RESTRICTED

ITEM 163

TROLLEY, AIR CHARGING, SINGLE CYLINDER, Mk. 2



A.P. Reference 2306U

Ref. No. 4G/6736

Classification 2

Overall dimensions

Length 6 ft. 11 in.

Width 2 ft. 8 in.

Height 4 ft. 6 in.

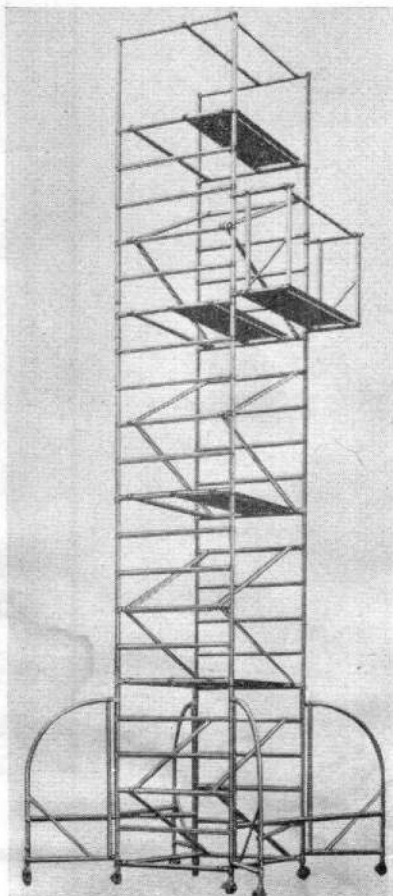
Weight (less cylinder) 257 lb.

Brief description This two-wheeled trolley is used in conjunction with a Mk. 6 or Mk. 12 gas transport cylinder for charging air systems, and is designed for charging two systems simultaneously. The trolley is of tubular steel construction and incorporates a cradle for carrying the gas cylinder. The air output is controlled by a Mk. 5 charging regulator (6D/2141) which is housed in a sheetmetal box mounted between the trolley handles. Two 30 ft. flexible charging hoses are connected to the regulator for delivering the controlled air output to the systems being charged and are coiled and stowed in the regulator compartment when not in use. The maximum working pressure of the gas cylinders is 6000 lb. per sq. in. for the Mk. 6 cylinder and 4000 lb. per sq. in. for the Mk. 12 cylinder.

RESTRICTED

ITEM 164

HI-WAY FABRICATED CONSTRUCTIONAL EQUIPMENT



A.P. Reference 4549B

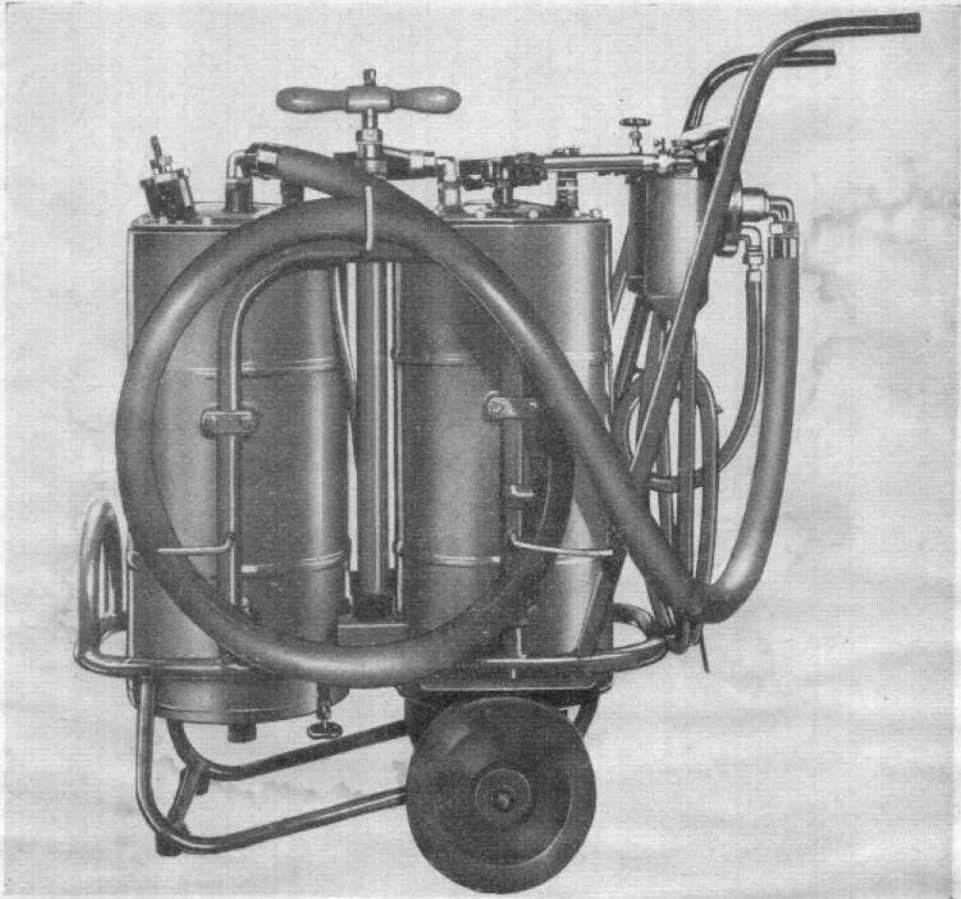
Ref. No. 4T/various

Classification 3

Brief description This equipment consists of a series of light-alloy standard components which can be quickly erected to form lightweight step and span structures of various sizes and shapes to provide access for aircraft servicing purposes. A step structure is used where height is the primary requirement, and a span structure is used when a length of platform is required; a combination of the two structures may also be erected. The components include platform and castor assemblies, tubular struts, braces and guard rails, and folding and non-folding frames or sections, the parts being connected by "snap action" hooks which eliminate any necessity for using bolts. A typical span tower structure is shown in the illustration above.

RESTRICTED

ITEM 165

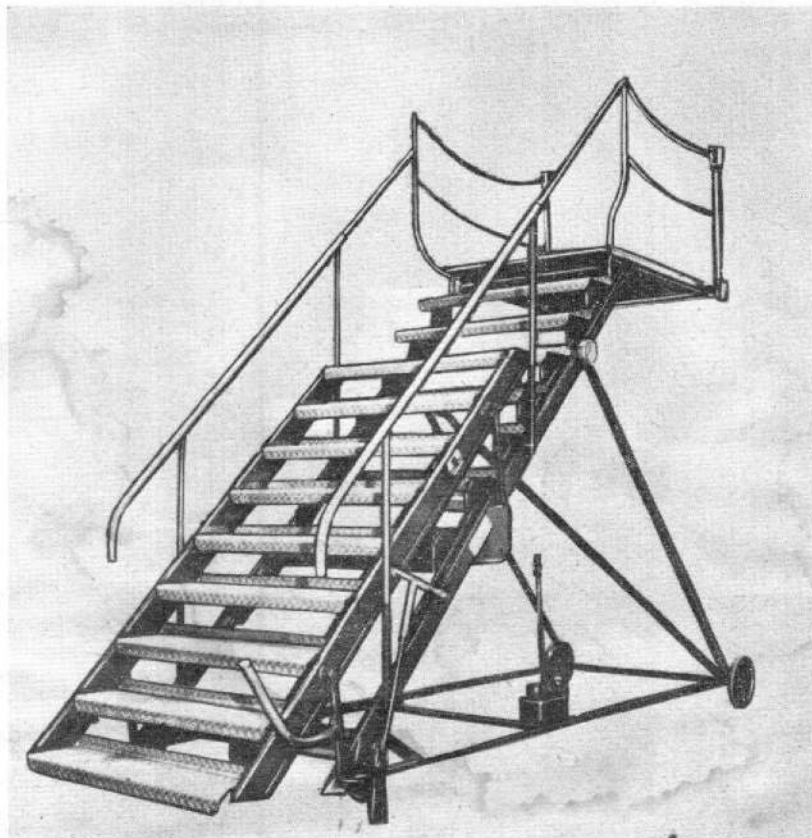
RIG, TURBINE COMPRESSOR WASHING**A.P. Reference** 1464G, Vol. 1, Part 2, Sect. 6, Chap. 2**Ref. No.** 4G/7130**Classification** 3**Overall dimensions****Length** 3 ft. 4 in.**Width** 1 ft. 8½ in.**Height** 3 ft. 4 in.**Weight (empty)** 77 lb.

Brief description This rig is used for cleaning the compressors of turbine aero-engines by injecting a detergent emulsion at a pressure of 4 lb. per sq. in. into the air intake whilst an engine is running at idling speed, the solution being introduced in the compressor via a flexible hose from the rig to a hinged spray ring assembled around the air intake. The washing solution is carried in two 5-gallon containers, a fluid supply tank and an air settling tank, mounted on a 2-wheeled trolley of tubular steel construction; a filler cap and a dipstick are fitted to the supply tank. The tanks can be pressurised via an air charging valve by a hand pump on the rig, or from an outside air supply, a pressure gauge being fitted to the air settling tank. Other components installed in the rig include a fluid filter, air filter, pressure-relief valve and two shut-off control cocks.

RESTRICTED

ITEM 166

STEPS, AIRCRAFT SERVICING (AIR TRANSPORTABLE)



A.P. Reference

Ref. No. 4G/8311

Classification 2

Overall dimensions

Length 14 ft. 3 in.

Width 4 ft. 5½ in.

Height (min.) 9 ft. 2 in.

Weight 850 lb.

Brief description These steps are used to provide access for servicing tasks in transport aircraft and are modified versions of the Cabin Entrance Steps (ITEM 149), so that they are now capable of being dismantled into three main sections for air transport purposes. The steps have a platform at the top which can be adjusted in height hydraulically between 6 ft. 6 in. and 10 ft. 6 in. The equipment consists of a 4-wheeled tubular steel frame which carries two step assemblies. The lower section is fixed to the frame, and the upper section slides on the frame side members when being raised or lowered; a safety latch secures the steps when raised. Castor wheels at the step end of the frame facilitate towing, the towbar sliding under the steps when not in use. Two steady jacks at the base of the steps prevent movement when the steps are in use. The stairway is 44½ in. wide, the step treads are 9 in. and the risers 8 in., and the platform area is 48 in. × 41 in. Handrails are fitted at each side of the steps and on the platform.

RESTRICTED

ITEM 167

TROLLEY, WATER/MENTHANOL REPLENISHMENT, Mk. 2



A.P. Reference 2306P

Ref. No. 4G/8346

Classification 2

Overall dimensions

Length 7 ft 11 in

Width 4 ft 6 in

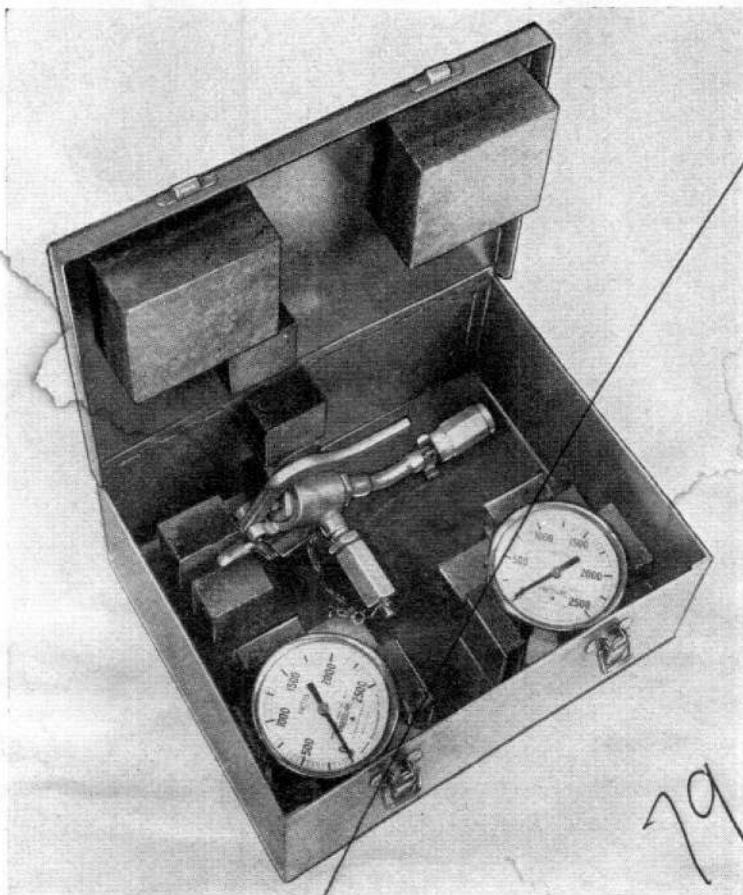
Height 4 ft 3 in

Weight 11 cwt 2 qr

Brief description This trolley is used for replenishing water/methanol systems in aircraft, either direct from the trolley or from an outside source. The trolley equipment is mounted on a four-wheeled chassis with drawbar steering and consists of a 100 gallon tank, hand pump, 10 ft. \times 1 $\frac{1}{2}$ in. bore suction hose with standpipe, 20 ft \times $\frac{3}{4}$ in bore delivery hose with delivery nozzle, flowmeter and 5-micron filter, the pumping equipment being mounted in the rear end of the trolley. The output of the hand pump is 6 to 7 gallon per minute. The trolley equipment is enclosed in a fibre glass removable canopy with a door at both front and rear. Parking brakes fitted to the rear wheels are operated by a pedal.

ITEM 168

ADAPTER, INFLATION, Mk. 6



A.P. Reference 1464G, Vol, 1, Part 2, Sect. 5, Chap. 38

Ref. No. 4G/7028

Classification 3

Overall dimensions of box

Length $10\frac{3}{16}$ in

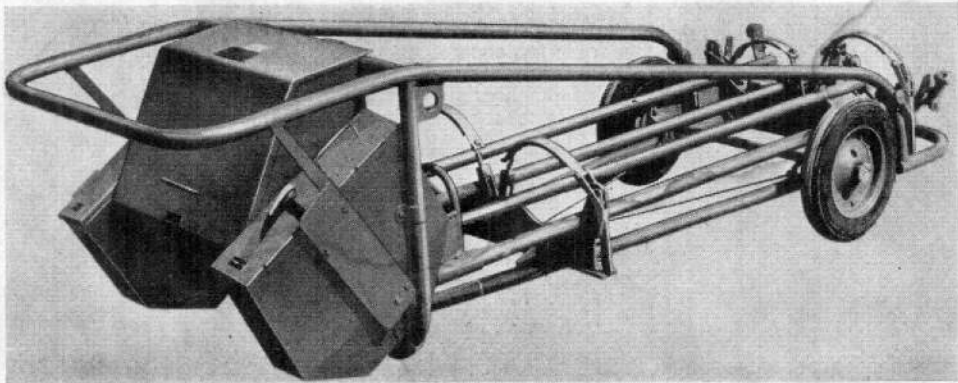
Width $8\frac{3}{4}$ in

Height $4\frac{3}{8}$ in

Weight (complete set) 6 lb

Brief description This Turner inflation adapter is used in conjunction with a pressure gauge to enable certain airframe components to be charged with nitrogen, or when checking the nitrogen pressure in hydraulic components. The adapter body (4G/7030) incorporates a curved extension, threaded $\frac{1}{4}$ in B.S.P., for direct connection to the nitrogen charging valve on the aircraft component. Pressure gauges 0-600 lb in² (4G/3026), 0-1500 lb in² (4G/3027) and 0-3500 lb. in² (4G/3029) are provided for use with the inflation adapter and should be demanded separately to suit local requirements. The adapter is supplied in a sheetmetal box (4G/7029) which has rubber-padded compartments to accommodate two gauges. ◀ An angled adapter (4G/7031) is scaled where necessary to allow the charging of air into nitrogen systems through the Mk. 2 adapter kit (4G/6246) in emergency, or when nitrogen is not available for charging. ▶

ITEM 169

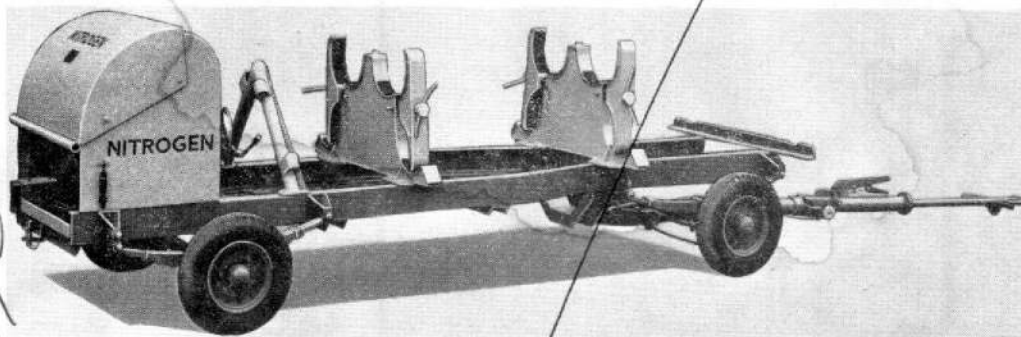
TROLLEY, AIR CHARGING, TWO-CYLINDER**A.P. Reference** 2306U, Vol. 1 and 6, Sect. 3, Chap. 5**Ref. No.** 4G/8379**Classification** 2**Overall dimensions****Length** 7 ft. 11 in.**Width** 2 ft. 6 in.**Height** 2 ft. 4½ in.**Weight (approx.) (less cylinders)** 2 cwt.

Brief description This three-wheeled trolley is used in conjunction with two Mk. 6, 7A, 12 or 12A compressed air transport cylinders for charging air systems, and is designed for charging two systems simultaneously. The trolley is of tubular steel construction and incorporates four cradle supports for carrying the two gas cylinders. The air output is controlled by a Mk. 5 charging regulator (6D/2141) which is mounted on a bracket in the cabinet at the rear end of the trolley. Two 30 ft. flexible charging hoses are connected to the regulator for delivering the controlled air output to the systems being charged and are coiled and stowed in two boxes on the sides of the regulator compartment when not in use. The maximum working pressure of the gas cylinders is 4000 lb. per sq. in. (6000 lb. per sq. in. when using the Mk. 6 cylinder).

RESTRICTED

ITEM 170

TROLLEY, NITROGEN, CHARGING FOUR-CYLINDER, Mk. 1A



A.P. Reference 2306U, Vol. 1 and 6, Sect. 4, Chap. 4

Ref. No. 4G/6734

Classification 2

Overall dimensions

Length (with towbar) 16 ft. 0 in.

Width 4 ft. 4 in.

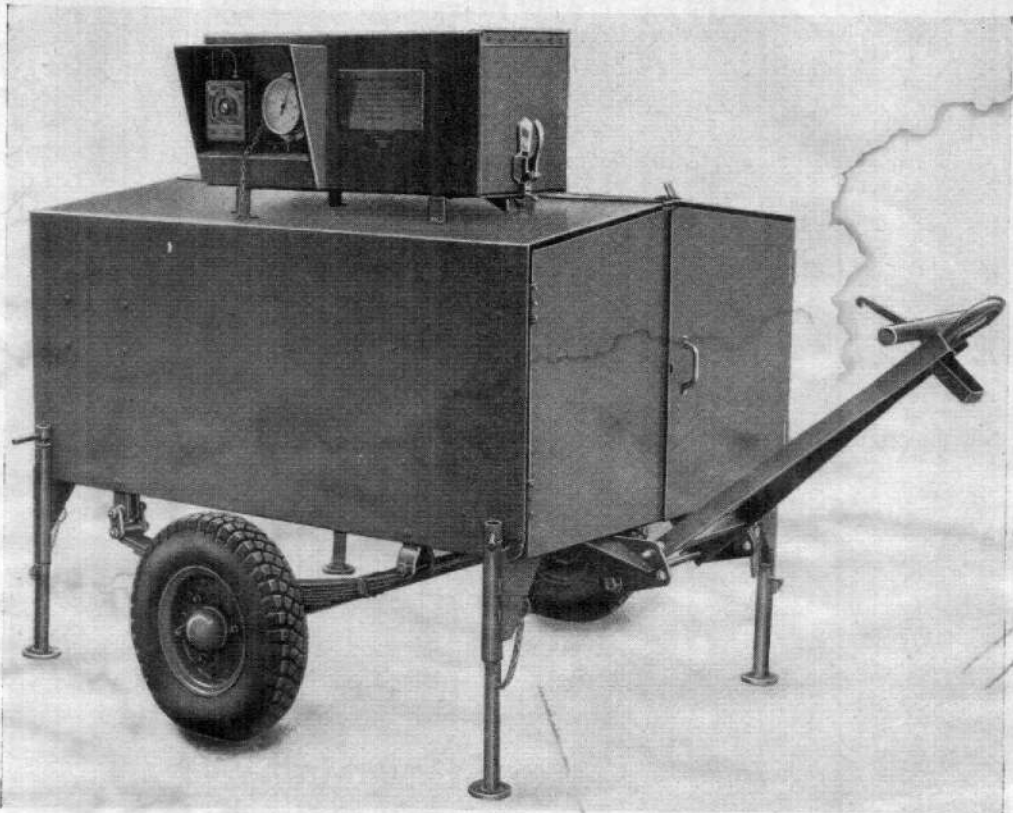
Height 3 ft. 2 in.

Weight (approx.) 7 cwt. 1 qr. 14 lb. (less cylinders), 18 cwt. (with 4 cylinders)

Brief description This trolley is used for charging nitrogen systems. It consists of a four-wheeled trailer chassis upon which is mounted a cradle for carrying four Mk. 7A, Mk. 12 or Mk. 12A nitrogen transport cylinders of 4000 lb. per sq. in. maximum working pressure. The cylinders are connected through a central manifold to a Mk. 5 charging regulator (6D/2141) which is enclosed in a sheet metal canopy at the rear end of the chassis and controls the nitrogen delivery to the required pressure. After leaving the regulator the nitrogen passes through a 30 ft. high pressure charging hose to the system being charged. One system only can be charged at any one time. The trolley road wheels are fitted with overrun/parking brakes operated from the towbar. The gas cylinders are supplied separately.

RESTRICTED

ITEM 175

TROLLEY, REFRIGERANT REPLENISHING

A.P. Reference 119F-2318-16

Ref. No. 4G/9261

Classification 1

Overall dimensions

Length (with tow-bar) 6 ft 11in Width 4 ft 0 in
 Length (less tow-bar) 4 ft 7 in

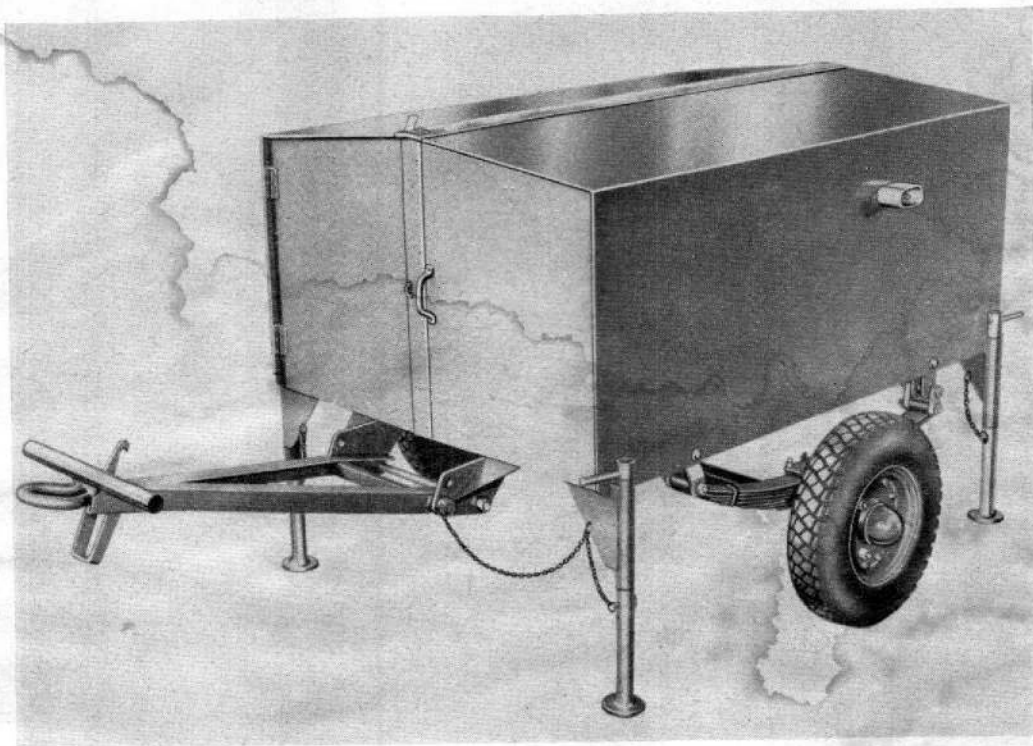
Height 4 ft 1½ in

Weight (approx.) 7 cwt

Brief description This trolley, which is for use on VC10 aircraft, is a Refrigerant replenishment trolley (ITEM 151) with a refrigerant cylinder heater fitted on the roof of the body. The purpose of the heater unit is to facilitate the transfer of refrigerant $C_2 Cl_2 F_4$ to the aircraft cooling system. The heater unit comprises a thermally insulated box to receive the refrigerant cylinder and is fitted with a temperature controller and atmospheric temperature gauge. Electrical supply for the heater is 230/250 volts. A cable, housed in the front compartment of the trolley, connects to a plug at the rear of the heater box.

ITEM 176

TROLLEY, REFRIGERANT REPLENISHMENT- NITROGEN PRESSURISED.



A.P. Reference 119F-2318-16

Ref. No. 4G/9085

Classification 1

Overall dimensions

Length (less tow-bar) 4 ft 7 in
(with tow-bar) 6 ft 11 in

Width 4 ft 0 in

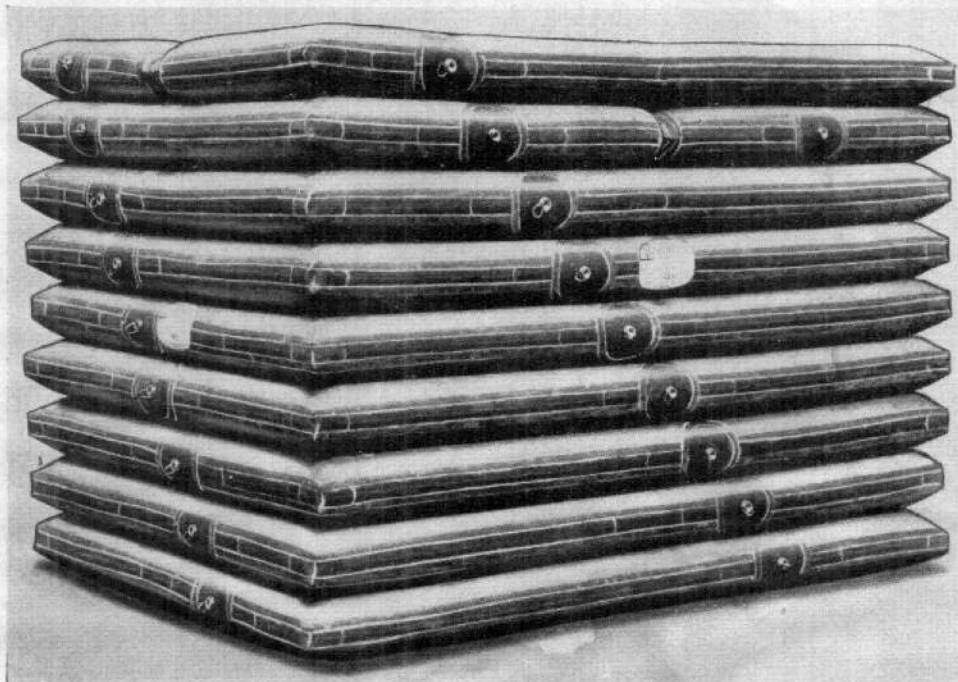
Height 3 ft 1½ in

Weight 8 cwt

Brief description This two wheeler type trolley is a conversion of the trolley Ref. No. 4G/6582 described in this section (Item 151) and introduces equipment to make the operation of replenishing refrigerant systems more efficient. The conversion provides a 750 litre Nitrogen cylinder for pressurising two 15 lb refrigerant cylinders and introduces an instrument and control panel. Construction of the trolley and the equipment contained in the rear compartment is identical to trolley (Ref. No. 4G/6582). The front compartment contains two refrigerant cylinders, a Nitrogen cylinder, an instrument and control panel and the associated equipment to enable delivery of refrigerant to be made to the aircraft.

ITEM 177

LOW LIFT AIR BAGS (RFD)



A.P. Reference 119Q-0200-16

Ref. No. 4GB/9132

Classification 2

Overall dimensions

Deflated 10 ft × 7 ft × 6 in

Rolled in valise 7 ft 3 in × 1 ft 8 in × 1 ft

Weight (in valise) 350 lb approx.

Maximum lifting height 6 ft 4½ in

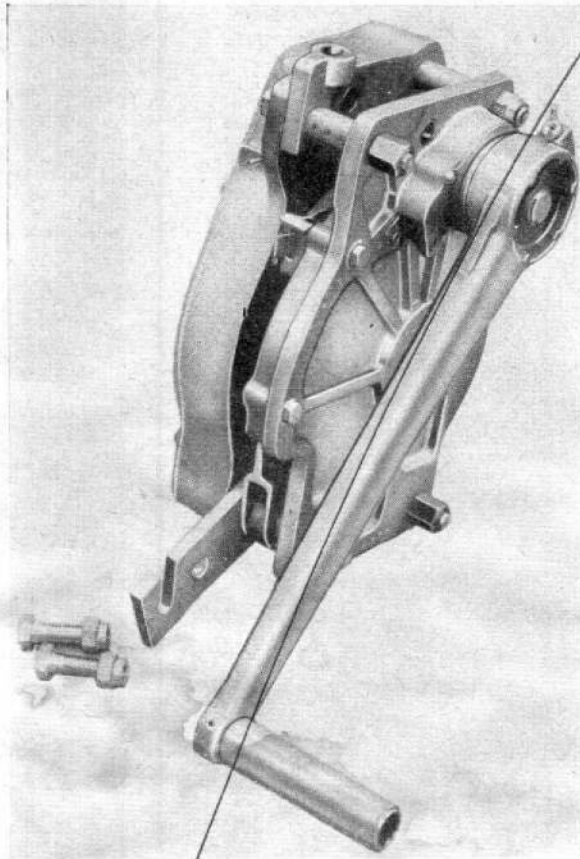
Lifting capacity 24000 to 56000 lb at pressures of 3 and 7 lb/in² respectively

Temperature range of operation -30 to + 70 deg. C

Brief description The air bags are used to lift crash landed aircraft when the gap between the aircraft and ground is small. A unit consists of nine elements, similar but independently bonded together in a stack to form a bag assembly. The bags are of woven nylon construction, proofed with neoprene compound against weathering and contact with fuel and oil. For storage and transport the air bags may be rolled and stowed in the valise. A source of compressed air is required for inflation; a suitable compressor is the Pressure-cabin testing trolley, Mk. 2.

ITEM 178

WINCH, M3 SKYCLIMBER



A.P. Reference 119K-0601-16

Ref. No. 4T/6909

Classification 2

Overall dimensions (excluding handle)

Length 10 inches

Width 7 inches

Height 13 inches

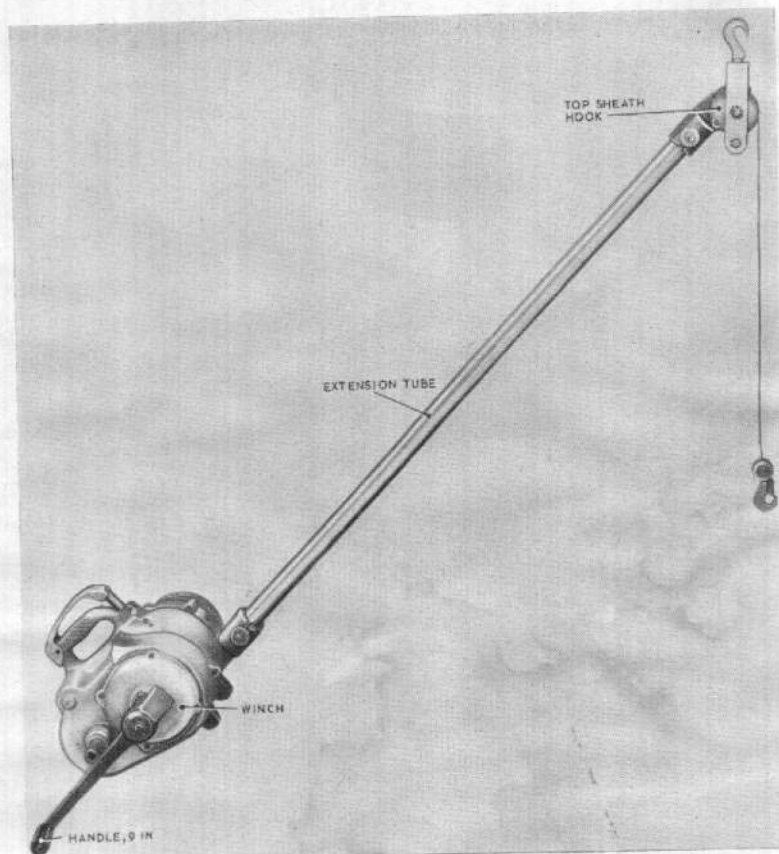
Length of handle 14 inches

Weight 31 lb

Safe working load 1000 lb

Brief description The winch is intended primarily for raising and lowering hoist platforms fitted to certain aircraft servicing stagings. The component parts of the winch are contained in a casing of machined aluminium alloy castings. It also incorporates an automatic load brake which prevents the load overrunning the handle. The length of cable varies according to the equipment to which the winch is fitted. The gear reduction is 5:2 to 1 and one complete revolution of the handle raises or lowers the applied load 3 to 4 inches.

HOIST HEAVY AIRCRAFT COMPONENTS 2½ CWT (MINILIFT)



A.P. Reference 119K-0603-16A

Ref. No. 4GC/7267

Overall dimensions (winch only)

Length 14 in.

Width 15 $\frac{3}{8}$ in.

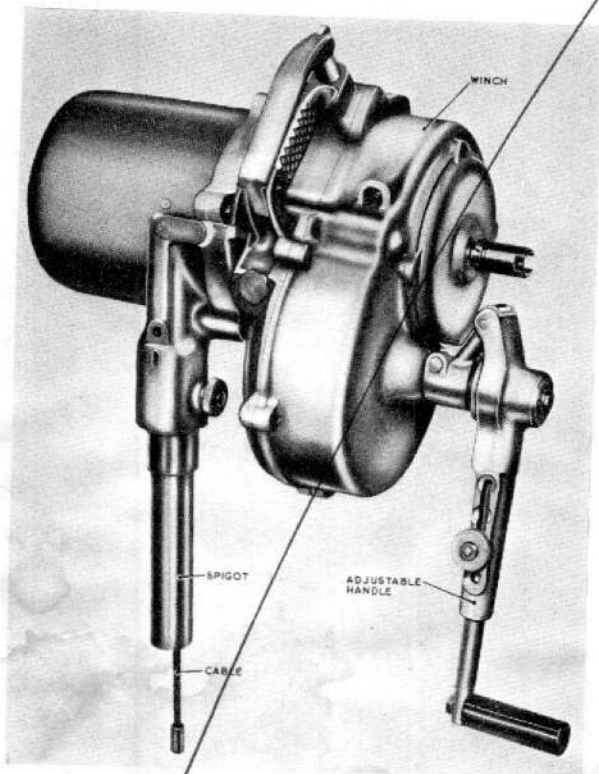
Height 10 $\frac{3}{4}$ in.

Weight of winch 40 lb.

Brief description This hoist is provided with a 45 ft. cable and various accessories to adapt the winch for use in confined spaces on aircraft in a variety of ways including overwing lifting. The lifting capacity is 2½ cwt., when using a single sheath, but the capacity can be doubled by using a double purchase block. The top sheath can be suspended from an aircraft strong point and extension tubes varying in length from 4½ in. to 84 in. are provided to facilitate winch operation from convenient positions.

ITEM 180

HOIST HEAVY AIRCRAFT COMPONENTS 18 CWT (MINILIFT)



A.P. Reference 119K-0607-16A

Ref. No. 4GC/1276060

Classification 2

Overall dimensions (winch only)

Length 16 in.

Width 17 $\frac{1}{4}$ in.

Height 12 $\frac{1}{4}$ in.

Brief description This hoist consists of a manually operated winch with various accessories which can be attached to enable the winch to be suspended or fitted to strong points on an aircraft so that it can be adapted for many uses in confined spaces. Two operating speeds are provided and the lifting capacity of 18 cwt. can be doubled by using a double purchase block. A slip clutch is incorporated to avoid overloading, a manually controlled brake is used when lowering or raising a load, and an automatic centrifugal governor brake prevents the load from being lowered too rapidly.

ITEM 181

KIT, TYRE INFLATION, HIGH PRESSURE



A 2 79

A.P. Reference NIL
Ref.No.4G/11154

Classification 2

Overall dimensions

Width 12 $\frac{1}{4}$ in (310mm) Depth 9 $\frac{3}{4}$ in (247mm) Height 8 $\frac{1}{2}$ in (216mm)

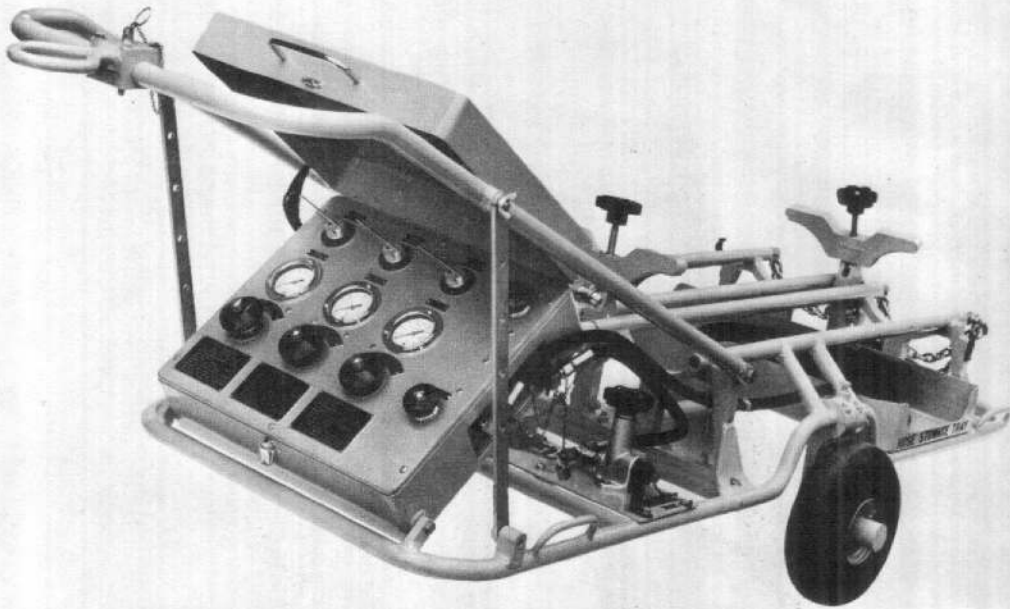
Weight 22 lb (10kg)

Brief description

This tyre inflation kit can be used to inflate aircraft tyres up to pressures of 500 lb/in² (35 kg/cm²). The kit can be used with air supplies of up to 4000 lb/in² (281 kg/cm²) and is fitted with a swivel connector of schraeder type suitable for use with standard tyre valves.

ITEM 183

TROLLEY, NITROGEN CHARGING, 2 CYLINDER, LIGHTWEIGHT



A.P.Reference
Ref.No.4GD/10669

Classification 2

Overall dimensions
In use

Length 90 $\frac{1}{2}$ in (2300mm) Width 33 $\frac{3}{4}$ in (857mm)
Height 42in (1067mm)

Pack arrangement

Length 76in (1930mm) Width 30in (762mm)
Height 12in (305mm)

Weight 150lb (68kg) basic
 352lb (160kg) complete with cylinders

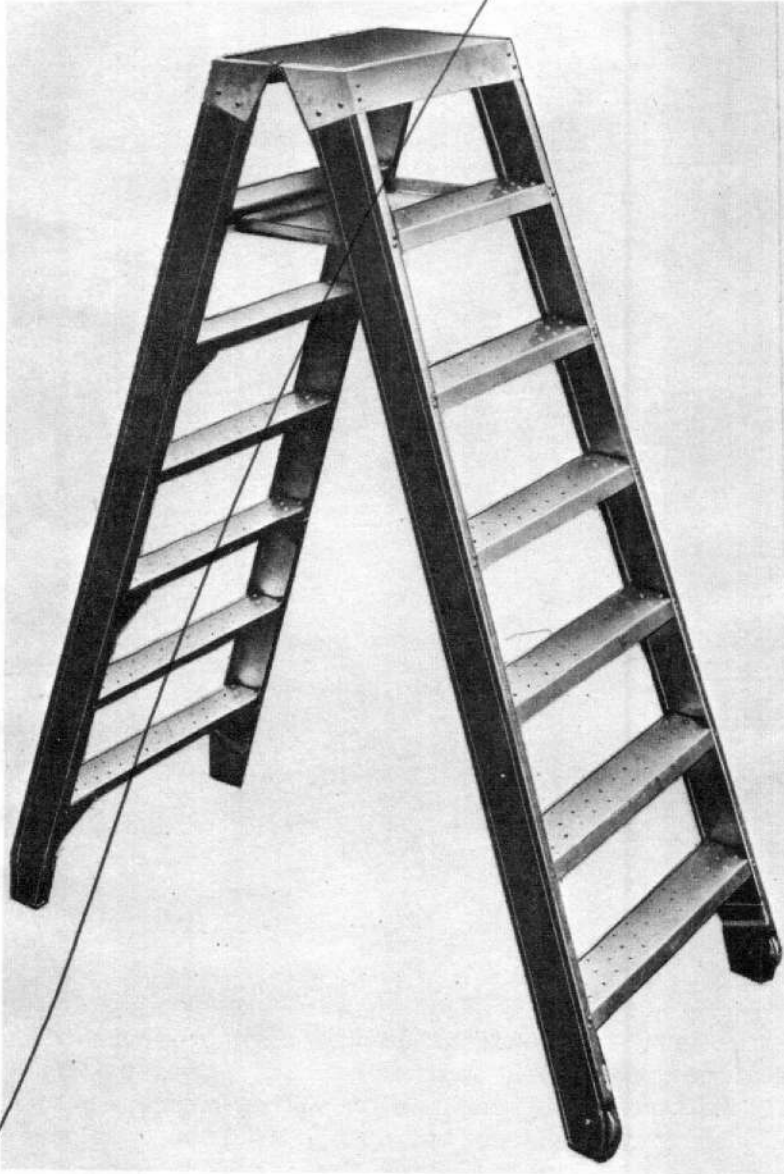
Brief description

The trolley is used for charging low to high pressure nitrogen systems on aircraft up to a maximum of 4000 lb/in². (281kg/cm²). It is easily manoeuvred by one man on either a prepared or a grass surface and for convenience a towing eye is fitted to the handle. The wheels and handle may be folded flat to form a pack arrangement for air transportation.

ITEM 184

LADDER, LIGHTWEIGHT FLAT TOP, 6 FOOT

AC76



A.P.Reference None

Ref.No.4G/2051053

Classification 3

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Instrument panel from a MiG-21 (XP558)