

MODELS: Lockheed Electra 10-B (Navy R-30-1), 12 PCLM

T.C. NUMBER: 584

(Same as Model 10-A except engines and nacelles.)

Engines

2 Wrights R975E-3

Placard limits	Maximum except takeoff 34-1/2 in. Hg., 2200 rpm (420 hp)					
Propellers	Takeoff (one minute) 36-1/2 in. Hg., 2250 rpm (450 hp)					
	Hamilton Standard, hubs 2D30, blades 6095A-6 to 6095A-8, inclusive. Diameter 9'1/8" maximum, 8'9-3/4" minimum low pitch setting 13 degrees, 152 lbs. each (-90) (See Item 57, 78 and 79)					
Placard speeds	Level flight or climb - 210 mph True Ind. Glide or dive - 261 mph True Ind. Flaps extended - 125 mph True Ind.					
Usable ceiling	(May be realized under conditions shown)					
Cell	Weight		Manifold	Pressure	T.I.A.S.	Min. Fuel
(ft.)	(lbs.)	RPM	(in.Hg.)	(mph)		Oct.
1800	10,500	2200	Full throttle	93		80
						Inop. Prop. Idling at 700 rpm

Additional conditions	(1) Standard air (2) Either engine inoperative (3) Carburetor intake on "cold air" (4) Leading edge de-icers installed but not operating
Fuel capacity	194 gallons (4 tanks in wings - 2 at 81 gallons each (-21); 2 forward of spar at 16 gallons each (-21))
Oil capacity	15 gallons (2 tanks at 7-1/2 gallons each) (-49)
No. passengers	10
Baggage	Maximum capacity of compartments: Compartment in nose 300 lbs. (-97.5); compartments in each stub wing 250 lbs. each (+20-1/2)
Maximum weight	10200 lbs. (See NOTES 2 and 4)
C.G. limits	(-9.75) and (+6.1) (Base line of cabin windows level)
Spec. basis	Type certificate No. 584 (Aero. Bulletin 7A requirements)
Serial Numbers	1036 and up eligible per NOTE A

**EQUIPMENT:**

(Datum is centerline of the center section wing spar) (\* Means net increase)

**Class I:**

1.	2 Engine ring cowls	61 lbs.	(-70)
2.	2 Exhaust collector rings	60 lbs.	(-60)
3.	2 Oil radiators (UAP 6")	38 lbs.	(-54)
4.	2 Landing lights and 1 warning light (in wing)	22 lbs.	(-10)
5.	Position lights		
6.	Flares (two 3-minute and brackets 5 lbs.)	50 lbs.	(-85)
8.	2 Starters (Electric)	64 lbs.	(-58)
9.	Battery (Exide 6XHS-13-1)	74 lbs.	(-32)
10.	Generator (50 amp)	36 lbs.	(-61)
11.	Pressure fire extinguisher system	35 lbs.	(-45)
12.	36x15-6 wheels (Goodyear 6HBM)	68 lbs.	(-23)
13.	35x15-6 (Goodyear) Heavy Duty 6-ply tires and plain tubes (wheels must be placarded for these tires)	109 lbs.	(-23)
14.	Retracting landing gear (Electric worm drive 100-amp fuse required)	269 lbs.	(-20)
15.	Shock struts (Aerol SP-400E)	96 lbs.	(-23)
16.	Wing split trailing edge flaps, electrically operated (30 amp. fuse required)	75 lbs.	(+55)
17.	Rudder equipped with trailing edge tab (single and spring type bungee (3 lbs.))		
18.	Elevator equipped with (external) balance weights 12 lbs.; auxiliary flap 3 lbs.; trailing edge tabs 2 lbs. Total	17 lbs.	(+310)
20.	Ventilating system	20 lbs.	(+85)
21.	Cabin heaters	40 lbs.	(+45)
22.	Toilet equipment	15 lbs.	(+180)
23.	Container and 1 gallon water	12 lbs.	(+168)
25.	2 Baggage straps (nose compartment)	4 lbs.	(-98)
26.	16x7-3 tail wheel (Goodyear 3 TW) with 4-ply tire	12 lbs.	(+313)
27.	Tail wheel strut (Aerol 300ET)	17 lbs.	(+300)
28.	Instruments (complete with panel)	56 lbs.	(-74)

**Class II:**

31.	2 Wheel fenders	8 lbs.	(-20)
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32.	Rudder lock in cockpit	1 lb.	(-65)
33.	Control wheel lock	2 lbs.	(-29)
34.	Tail wheel centering lock control	3 lbs.	(-70)
35.	Abrasion strips on lower fins	2 lbs.	(-84)
36.	230 gallon fuel capacity (with 2 extra 18 gallon tanks in wing - rear of spar)	45 lbs.	(-17)
37.	Deicer installation (fixed portion 56 lbs. removable 55 lbs.) (See NOTE 4)	111 lbs.*	(-24)
38.	35x15-6 cactus proof tire liners (two)	22 lbs.*	(-23)
39.	Landing gear retracting mechanism with 12.5:1 gear ratio and EDC No. 45040 electric motor (100 amp. fuse required)	6 lbs.	(-20)
40.	Heavy type landing gear yoke	14 lbs.	(-23)
41.	Double filler neck and plumbing	15 lbs.	(-28)
42.	Heavy type engine mount fittings	7 lbs.	(-45)
44.	Higher seat backs	30 lbs.*	(+45)
47.	Fuel capacity increased 56 gallons (two 28 gallon wing tanks aft of spar)	62 lbs.	(+17)
49.	Landing gear (knuckle type) retracting mechanism with 12-1/2 to 1 gear ratio and EDC No. 45040 electric motor (140 amp fuse required) (replaces standard worm and sector type)	275 lbs.	(-20)
50.	Fuel capacity increased 4 gallons (two 83 gallon main wing tanks replacing standard 81 gallon tanks when Item 49 is installed)	20 lbs.*	(-21)
51.	Oil tanks (two heavy gauge 7-1/2 gallon capacity replacing standard 7-1/2 gallon tanks. Refer to Drawing No. 45650)	6 lbs.*	(-49)
52.	Rudders equipped with fixed trimming tabs (replacing adjustable tabs) and and 3 lbs. spring type bungee	No change in weight	
53.	Standard passenger seats removed deduct 20 lbs. each (Roman numeral in parenthesis signify number of seats removed)		
54.	Fuel capacity increased 51 gallons (1 tank in fuselage, Lockheed No. 42505)	40 lbs.*	(-18)
55.	Fuel capacity increased 49 gallons (1 tank in fuselage Lockheed No. 43826)	40 lbs.*	(+26)
56.	Oil capacity 22 gallons (11 gallon tank, Lockheed No. 45859, in each nacelle replacing standard 7-1/2 gallon tanks)	10 lbs.*	(-44)
57.	Constant speed propeller control unit (low pitch setting 10 degrees)	20 lbs.	(-70)
58.	Abrasion straps on L.E. tail surfaces	5 lbs.	(+264)
59.	Couch - 3 place	115 lbs.	(+39)
67.	Two heavy gage 81 gallon fuel tanks (Lockheed No. 47534) replacing standard 81 gallon tanks	20 lbs.*	(-21)
70.	Automatic pilot (Sperry)	120 lbs.	(-180)
71.	Lockheed Model 10 ski and ski gear (Lockheed Drawing 45204) 624 lbs.; tail ski and gear (Lockheed Drawing 45205) 51 lbs.; and original portion of landing gear structure retained, 11 lbs.; total 686 lbs. Lockheed Drawing 45378 must be used when skis are installed with knuckle landing gear.		
72.	Exhaust gas analyzer (Cambridge)	12 lbs.	(-40)
73.	Cactus proof liner in tail wheel tire	3 lbs.	(+313)
74.	15.5 inch streamline tail wheel	12 lbs.	(+313)
76.	2 Landing lights and 1 warning light (in nose)	15 lbs.	(-126)
77.	New beaded (hydropressed) type main wing ribs (Lockheed Drawing 40200 K)	No weight change	
78.	Hamilton Standard propeller blades 6167A-6 to 6167A-8 including replacing 6095A Series blades. Diameter 9 1/8" maximum, 8 9/32" minimum. No change in weight, low pitch setting or pertinent notations	No weight change	
79.	Hamilton Standard propellers, hubs 2D30, blades 6101A-12 to 6101A-14, inclusive. Diameter 9 1/8" maximum, 8 9/32" minimum. Low pitch setting 10 degrees.	7 lbs. each	

NOTE A. Each aircraft manufactured after 10/7/41 must, prior to original certification, satisfactorily pass:

- (a) An inspection for workmanship, materials and conformity before any covering, metal priming or final finish is applied. All woodwork may be varnished.
- (b) A final inspection of the completed aircraft.
- (c) A check of flight characteristics.

NOTE 1. Weight and balance report including list of equipment instructions when necessary, must be submitted for each aircraft with original inspector's report and each subsequent report covering changes in equipment.

NOTE 2. Maximum weight may be increased to 10500 lbs. provided Item 57 (constant speed propeller control is installed).

NOTE 3. Eligible for export as follows, subject to provisions of MCP 2-4:  
(a) Canada  
- Landplane - eligible.  
- Skiplane - not eligible. However, structure complies with Canadian requirements for ski installation provided Item 71 is installed.  
(b) All other countries except New Zealand.

NOTE 4. Maximum weight may be increased an amount equal to  $.006 \times$  maximum weight when complete de-icer is installed.

NOTE 5. Fuel dump valves must be made positively inoperative pending satisfactory completion of dump tests.

NOTE 6. Placard lavatory door as follows: "This room not to be occupied during take-off and landing."