A318

AIRCRAFT CHARACTERISTICS
AIRPORT AND MAINTENANCE PLANNING

AC

AIRBUS S.A.S.
Customer Services
Technical Data Support and Services
31707 Blagnac Cedex
FRANCE

HIGHLIGHTS

Revision No. 26 - Jun 01/24

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****ON A/C A318-100**

Purpose

1. General

The A318 AIRCRAFT CHARACTERISTICS – AIRPORT AND MAINTENANCE PLANNING (AC) manual is issued for the A318-100 series aircraft that have the wing-tip fences, to give necessary data to the airport operators, airlines and Maintenance/Repair Organizations (MRO) for airport and maintenance facilities planning.

This document is not customized and must not use it for the training purposes. No information can constitute a contractual commitment.

The A320 Family is the world's best-selling single-aisle aircraft. An A320 takes off or lands in the world each 2.5 seconds for each day, the family recorded more than 50 million cycles since the entry-into-service and records the best-in-class reliability of 99.7%.

When you fly the ACJ family member, we pride ourselves on four key intertwined DNA strands that are behind everything. We give the ultimate comfort, intercontinental freedom, pioneering technology and reliability. An ACJ is not only a plane but a home where you can experience space like no other jet, crafted ambience and artisanal quality materials you can connect with. We have selected the space and technology to let you do fine dining, pampering, movie night, working from the sky to make strategic business decisions or simply relaxing with your loved ones and guests, uncompromisingly.

1-2-0 Glossary

****ON A/C A318-100**

Glossary

1. List of Abbreviations

A/C	Aircraft
ACF	Aircraft Cabin Flex
ACN	Aircraft Classification Number
ACR	Aircraft Classification Rating
AMM	Aircraft Maintenance Manual
APU	Auxiliary Power Unit
B/C	Business Class
CBR	California Bearing Ratio
CC	Cargo Compartment
CG	Center of Gravity
CKPT	Cockpit
E	Young’s Modulus
ELEC	Electric, Electrical, Electricity
ESWL	Equivalent Single Wheel Load
FAA	Federal Aviation Administration
F/C	First Class
FDL	Fuselage Datum Line
FR	Frame
FSTE	Full Size Trolley Equivalent
FWD	Forward
GPU	Ground Power Unit
GSE	Ground Support Equipment
HYD	Hydraulic
ICAO	International Civil Aviation Organisation
IDG	Integrated Drive Generator
ISA	International Standard Atmosphere
L	Left
L	Radius of relative stiffness
LCN	Load Classification Number
LD	Lower Deck
L/G	Landing Gear
LH	Left Hand
LPS	Last Pax Seating

MAC	Mean Aerodynamic Chord
MAX	Maximum
MIN	Minimum
MLG	Main Landing Gear
NLG	Nose Landing Gear
OAT	Outside Air Temperature
PAX	Passenger
PBB	Passenger Boarding Bridge
PCA	Portland Cement Association
PCN	Pavement Classification Number
PCR	Pavement Classification Rating
PRM	Passenger with Reduced Mobility
R	Right
RH	Right Hand
ULD	Unit Load Device
US	United States
WV	Weight Variant
Y/C	Tourist Class

2. Design Weight Terminology

- Maximum Design Ramp Weight (MRW):
  Maximum weight for ground maneuver (including weight of taxi and run-up fuel) as limited by aircraft strength and airworthiness requirements. It is also called Maximum Design Taxi Weight (MTW).
- Maximum Design Landing Weight (MLW):
  Maximum weight for landing as limited by aircraft strength and airworthiness requirements.
- Maximum Design Takeoff Weight (MTOW):
  Maximum weight for takeoff as limited by aircraft strength and airworthiness requirements. (This is the maximum weight at start of the take-off run).
- Maximum Design Zero Fuel Weight (MZFW):
  Maximum permissible weight of the aircraft without usable fuel.
- Maximum Seating Capacity:
  Maximum number of passengers specifically certified or anticipated for certification.
- Usable Volume:
  Usable volume available for cargo, pressurized fuselage, passenger compartment and cockpit.
- Water Volume:
  Maximum volume of cargo compartment.
- Usable Fuel:
  Fuel available for aircraft propulsion.

AIRCRAFT DESCRIPTION

2-1-1 General Aircraft Characteristics Data

****ON A/C A318-100**

General Aircraft Characteristics Data

1. The following table gives characteristics of A318-100 and ACJA318 models, these data are specific to each weight variant:

Aircraft Characteristics					
	WV000	WV001	WV002	WV003	WV004
Maximum Ramp Weight (MRW) Maximum Taxi Weight (MTW)	59 400 kg (130 955 lb)	61 900 kg (136 466 lb)	63 400 kg (139 773 lb)	64 900 kg (143 080 lb)	66 400 kg (146 387 lb)
Maximum Take-Off Weight (MTOW)	59 000 kg (130 073 lb)	61 500 kg (135 584 lb)	63 000 kg (138 891 lb)	64 500 kg (142 198 lb)	66 000 kg (145 505 lb)
Maximum Landing Weight (MLW)	56 000 kg (123 459 lb)	56 000 kg (123 459 lb)	57 500 kg (126 766 lb)	57 500 kg (126 766 lb)	57 500 kg (126 766 lb)
Maximum Zero Fuel Weight (MZFW)	53 000 kg (116 845 lb)	53 000 kg (116 845 lb)	54 500 kg (120 152 lb)	54 500 kg (120 152 lb)	54 500 kg (120 152 lb)

Aircraft Characteristics					
	WV004 ACJ	WV005	WV005 ACJ	WV006	WV007
Maximum Ramp Weight (MRW) Maximum Taxi Weight (MTW)	66 400 kg (146 387 lb)	68 400 kg (150 796 lb)	68 400 kg (150 796 lb)	56 400 kg (124 341 lb)	61 400 kg (135 364 lb)
Maximum Take-Off Weight (MTOW)	66 000 kg (145 505 lb)	68 000 kg (149 914 lb)	68 000 kg (149 914 lb)	56 000 kg (123 459 lb)	61 000 kg (134 482 lb)
Maximum Landing Weight (MLW)	57 500 kg (126 766 lb)	57 500 kg (126 766 lb)	57 500 kg (126 766 lb)	56 000 kg (123 459 lb)	56 000 kg (123 459 lb)
Maximum Zero Fuel Weight (MZFW)	54 500 kg (120 152 lb)	54 500 kg (120 152 lb)	54 500 kg (120 152 lb)	53 000 kg (116 845 lb)	53 000 kg (116 845 lb)

Aircraft Characteristics			
	WV008	WV009 ACJ	WV010 ACJ
Maximum Ramp Weight (MRW) Maximum Taxi Weight (MTW)	64 400 kg (141 978 lb)	66 400 kg (146 387 lb)	68 400 kg (150 796 lb)
Maximum Take-Off Weight (MTOW)	64 000 kg (141 096 lb)	66 000 kg (145 505 lb)	68 000 kg (149 914 lb)
Maximum Landing Weight (MLW)	56 000 kg (123 459 lb)	57 500 kg (126 766 lb)	57 500 kg (126 766 lb)
Maximum Zero Fuel Weight (MZFW)	53 000 kg (116 845 lb)	48 000 kg (105 822 lb)	48 000 kg (105 822 lb)

2. The following table gives characteristics of A318-100 models, these data are common to each weight variant:

Aircraft Characteristics			
Standard Seating Capacity	132 (Single-Class)		
Usable Fuel Capacity (density = 0.785 kg/l)		A318	ACJ318 (Elite)
	Total Wing Fuel	15 959 l (4 216 US gal)	15 609 l (4 123 US gal)
	Center Tank fuel	8 250 l (2 179 US gal)	8 250 l (2 179 US gal)
	ACT 1	X	2 000 l (528 US gal)
	Maximum Total Aircraft-Fuel	24 209 l (6 395 US gal)	25 859 l (6 831 US gal)
Pressurized Fuselage Volume (A/C non equipped)	257 m³ (9 076 ft³)		
Passenger Compartment Volume	107 m³ (3 779 ft³)		
Cockpit Volume	9 m³ (318 ft³)		
Usable Volume, FWD CC	6.72 m³ (237 ft³)		
Usable Volume, AFT CC	8.87 m³ (313 ft³)		
Usable Volume, Bulk CC	5.71 m³		

Aircraft Characteristics	
	(202 ft^3)
Water Volume, FWD CC	8.34 m^3 (295 ft^3)
Water Volume, AFT CC	10.38 m^3 (367 ft^3)
Water Volume, Bulk CC	5.97 m^3 (211 ft^3)

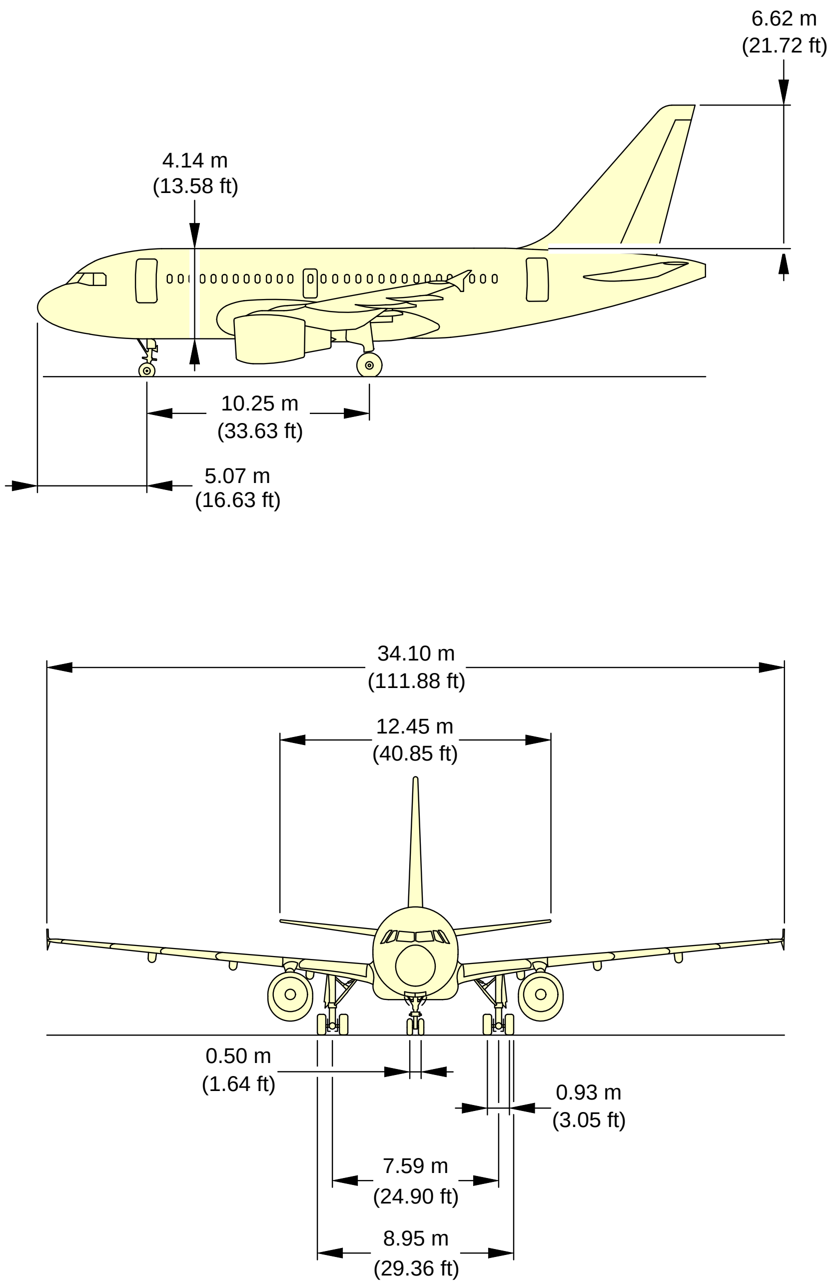
2-2-0 General Aircraft Dimensions

****ON A/C A318-100**

General Aircraft Dimensions

1. This section provides general aircraft dimensions.

****ON A/C A318-100**



NOTE:
RELATED TO AIRCRAFT ATTITUDE AND WEIGHT.

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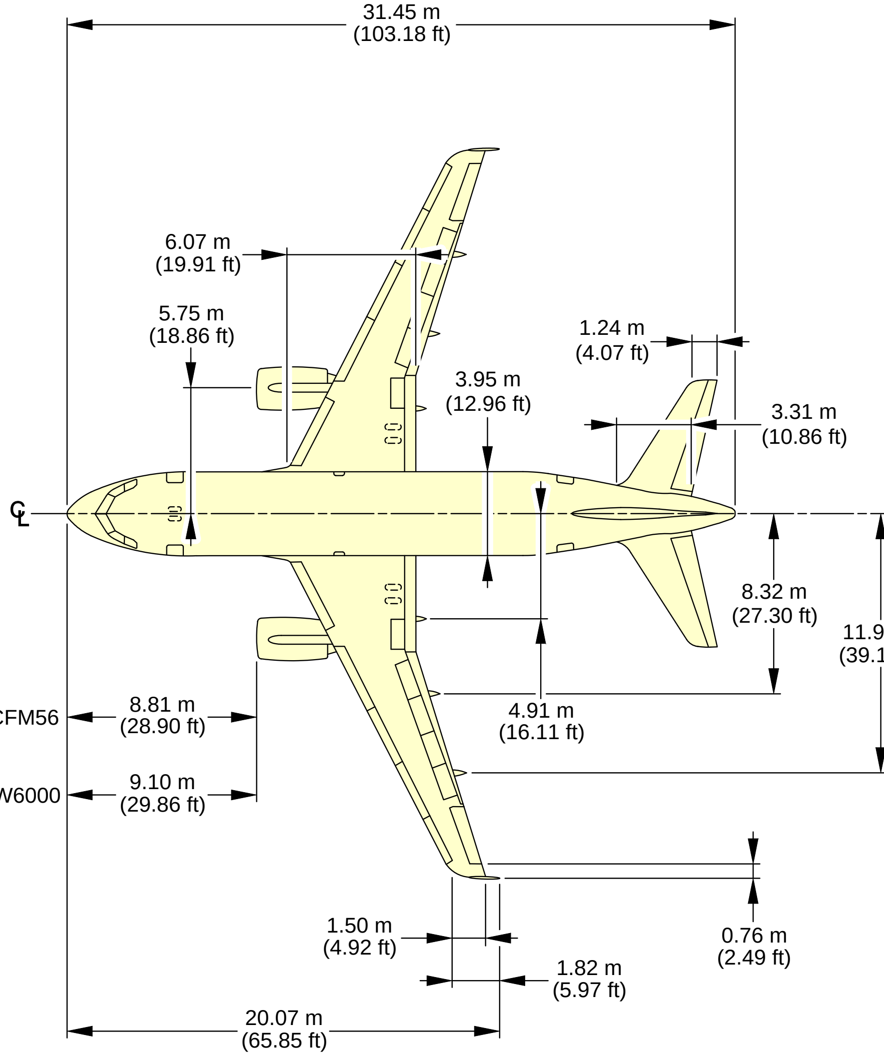
General Aircraft Dimensions
Wing Tip Fence (Sheet 1 of 2)
FIGURE-2-2-0-991-001-A01

****ON A/C A318-100**



NOTE:
RELATED TO AIRCRAFT ATTITUDE AND WEIGHT.

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General Aircraft Dimensions
Wing Tip Fence (Sheet 2 of 2)
FIGURE-2-2-0-991-001-A01

2-3-0 Ground Clearances

****ON A/C A318-100**

Ground Clearances

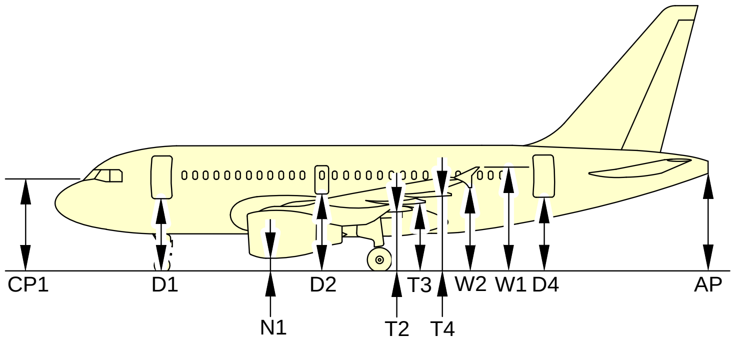
1. This section provides the height of various points of the aircraft, above the ground, for different aircraft configurations.

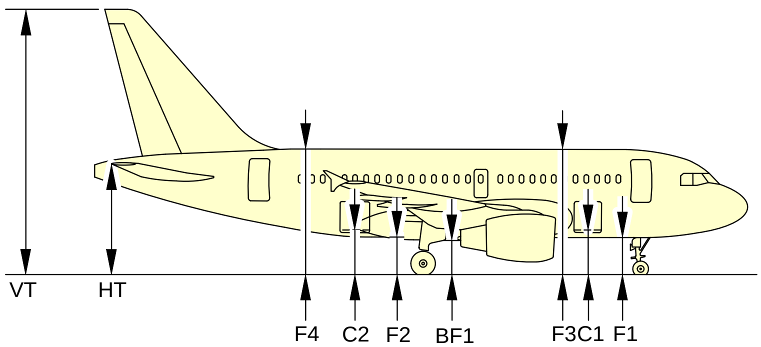
   Dimensions in the tables are approximate and will vary with tire type, weight and balance and other special conditions.

   The dimensions are given for:
   - A light weight, for an A/C in maintenance configuration with a mid
   - An aircraft at Maximum Ramp Weight with a FWD CG and an AFT CG,
   - Aircraft on jacks, FDL at 4.60 m (15.09 ft).

   NOTE : Passenger and cargo door ground clearances are measured from the center of the door sill and from floor level.

**ON A/C A318-100





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Ground Clearances
Wing Tip Fence (Sheet 1 of 2)
FIGURE-2-3-0-991-001-A01

****ON A/C A318-100**

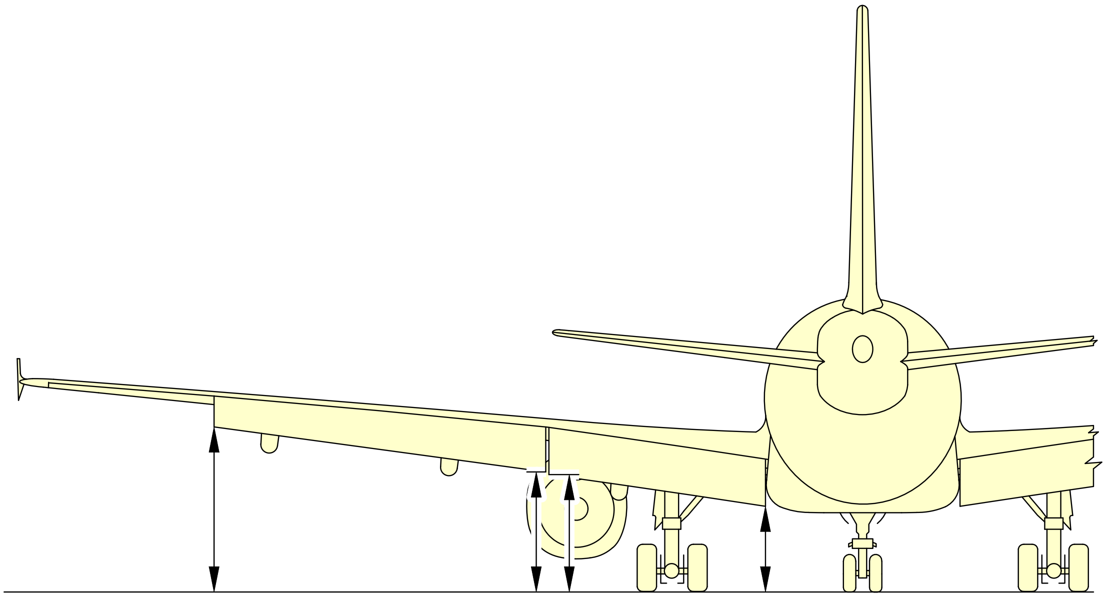
A/C CONFIGURATION			MRW (WV0) 59 400 kg (130 955 lb) FWD CG (15%) m	MRW (WV0) FWD CG (15%) ft	MRW (WV0) AFT CG (33.95%) m	MRW (WV0) AFT CG (33.95%) ft	MRW (WV8) 64 400 kg (141 978 lb) FWD CG (15.79%) m	MRW (WV8) FWD CG (15.79%) ft	MRW (WV8) AFT CG (32%) m	MRW (WV8) AFT CG (32%) ft	OEW 38 818 kg (85 579 lb) CG (25%) m	OEW CG (25%) ft	A/C JACKED FDL = 4.60 m (15.09 ft) m	A/C JACKED ft
PASSENGER DOORS	DOOR 1	D1	3.375	11.072	3.438	11.279	3.369	11.053	3.420	11.220	3.451	11.322	4.132	13.556
	EMERGENCY HATCH	D2	3.915	12.844	3.916	12.847	3.900	12.795	3.901	12.798	3.971	13.028	4.535	14.878
	DOOR 2	D4	3.697	12.129	3.613	11.853	3.671	12.043	3.603	11.820	3.724	12.214	4.132	13.556
CARGO DOORS	FWD CARGO DOOR	C1	1.830	6.003	1.868	6.128	1.820	5.971	1.851	6.072	1.898	6.227	2.532	8.307
	AFT CARGO DOOR	C2	1.976	6.482	1.947	6.387	1.958	6.423	1.934	6.345	2.022	6.633	2.532	8.307
REFERENCE POINT	PILOT VIEW	CP1	4.137	13.572	4.230	13.877	4.135	13.566	4.210	13.812	4.223	13.854	4.959	16.269
FUSELAGE	BOTTOM FWD	F1	1.715	5.626	1.761	5.777	1.707	5.600	1.744	5.721	1.786	5.859	2.434	7.985
	BOTTOM AFT	F2	1.886	6.187	1.854	6.082	1.867	6.125	1.841	6.040	1.931	6.335	2.434	7.985
	TOP FWD	F3	5.864	19.238	5.907	19.379	5.855	19.209	5.889	19.320	5.934	19.468	6.575	21.571
	TOP AFT	F4	6.036	19.803	5.999	19.681	6.016	19.737	5.987	19.642	6.079	19.944	6.575	21.571
	BELLY FAIRING	BF1	1.689	5.541	1.665	5.462	1.671	5.482	1.652	5.419	1.736	5.695	2.256	7.401
WING	FLAP TRACK 2	T2	2.685	8.809	2.659	8.723	2.667	8.750	2.646	8.681	2.732	8.963	3.248	10.656
	FLAP TRACK 3	T3	3.124	10.249	3.094	10.150	3.105	10.187	3.081	10.108	3.169	10.396	3.677	12.063
	FLAP TRACK 4	T4	3.472	11.391	3.433	11.263	3.452	11.325	3.420	11.220	3.514	11.528	4.005	13.139
	WING TIP FENCE TOP	W1	4.857	15.935	4.801	15.751	4.835	15.862	4.789	15.711	4.894	16.056	5.353	17.562
	WING TIP FENCE BOTTOM	W2	3.883	12.739	3.829	12.562	3.861	12.667	3.817	12.522	3.921	12.864	4.383	14.379
TAILPLANE	HORIZONTAL TAIL PLANE	HT	5.605	18.389	5.470	17.946	5.572	18.280	5.463	17.923	5.616	18.425	5.930	19.455
	APU EXHAUST	AP	4.906	16.095	4.758	15.610	4.871	15.980	4.752	15.590	4.912	16.115	5.203	17.070
	VERTICAL TAIL PLANE	VT	12.885	42.273	12.743	41.807	12.851	42.162	12.736	41.784	12.893	42.299	13.195	43.290
ENGINE/ NACELLE	CFM 5B NACELLE	N1	0.603	1.978	0.611	2.004	0.590	1.935	0.596	1.955	0.661	2.168	1.239	4.064
	PW6000	N1	0.403	1.322	0.411	1.348	0.390	1.279	0.396	1.299	0.461	1.512	1.039	3.408

NOTE:
PASSENGER AND CARGO DOOR GROUND CLEARANCES ARE MEASURED FROM THE CENTER OF THE DOOR SILL AND FROM FLOOR LEVEL.

N_AC_020300_1_0010103_01_01

Ground Clearances
Wing Tip Fence (Sheet 2 of 2)
FIGURE-2-3-0-991-001-A01

****ON A/C A318-100**



FLAPS EXTENDED							
DESCRIPTION		A/C IN MAINTENANCE CONFIGURATION MID CG		MAXIMUM RAMP WEIGHT FWD CG		MAXIMUM RAMP WEIGHT AFT CG	
		m	ft	m	ft	m	ft
FLAP 1 INBD	A	2.05	6.73	1.99	6.53	1.96	6.43
FLAP 1 OUTBD	B	2.77	9.09	2.71	8.89	2.68	8.79
FLAP 2 INBD	C	2.81	9.22	2.75	9.02	2.72	8.92
FLAP 2 OUTBD	D	3.65	11.98	3.60	11.81	3.54	11.61

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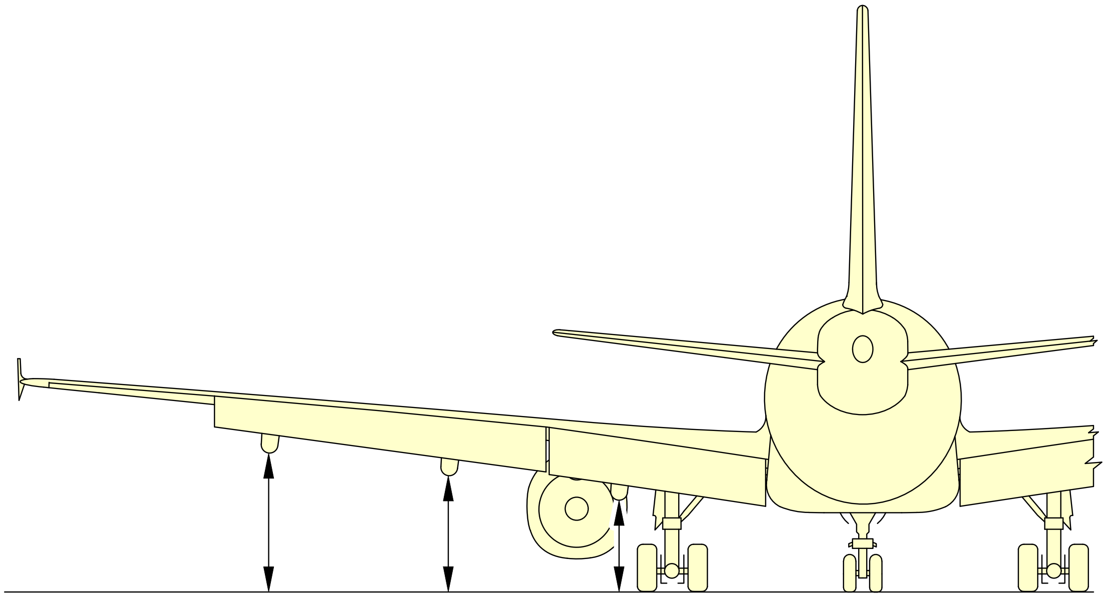
Ground Clearances
Trailing Edge Flaps - Extended
FIGURE-2-3-0-991-006-A01

****ON A/C A318-100**



FLAP TRACKS EXTENDED							
DESCRIPTION		A/C IN MAINTENANCE CONFIGURATION MID CG		MAXIMUM RAMP WEIGHT FWD CG		MAXIMUM RAMP WEIGHT AFT CG	
		m	ft	m	ft	m	ft
FLAP TRACK 2	A	2.10	6.89	2.03	6.66	2.00	6.56
FLAP TRACK 3	B	2.59	8.50	2.53	8.30	2.49	8.17
FLAP TRACK 4	C	3.05	10.01	2.99	9.81	2.94	9.65

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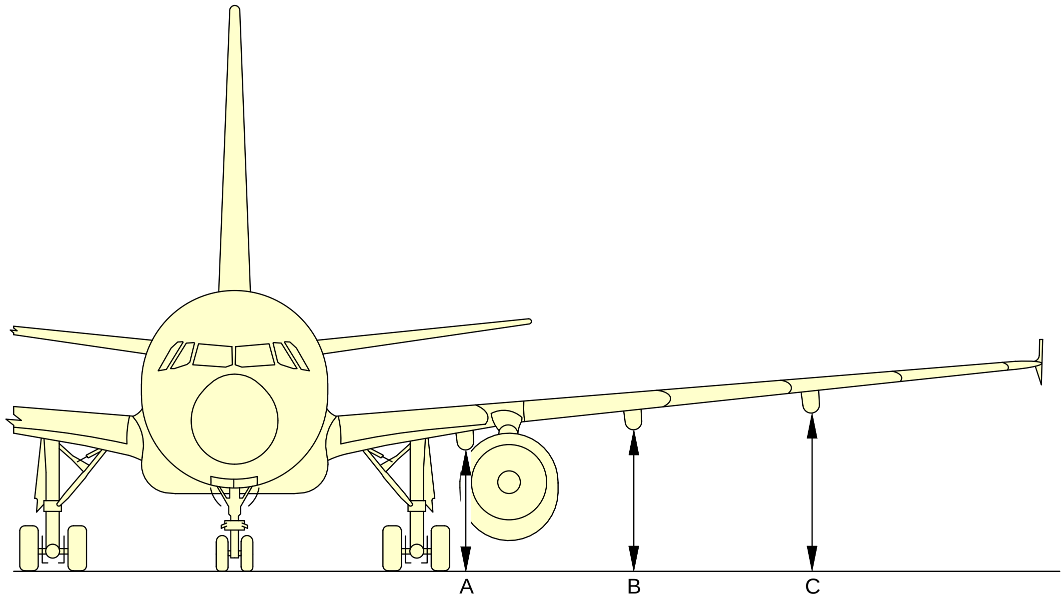
Ground Clearances
Flap Tracks - Extended
FIGURE-2-3-0-991-035-A01

****ON A/C A318-100**



FLAP TRACKS RETRACTED							
DESCRIPTION		A/C IN MAINTENANCE CONFIGURATION MID CG		MAXIMUM RAMP WEIGHT FWD CG		MAXIMUM RAMP WEIGHT AFT CG	
		m	ft	m	ft	m	ft
FLAP TRACK 2	A	2.70	8.86	2.60	8.53	2.58	8.46
FLAP TRACK 3	B	3.10	10.17	3.00	9.84	2.97	9.74
FLAP TRACK 4	C	3.50	11.48	3.39	11.12	3.36	11.02

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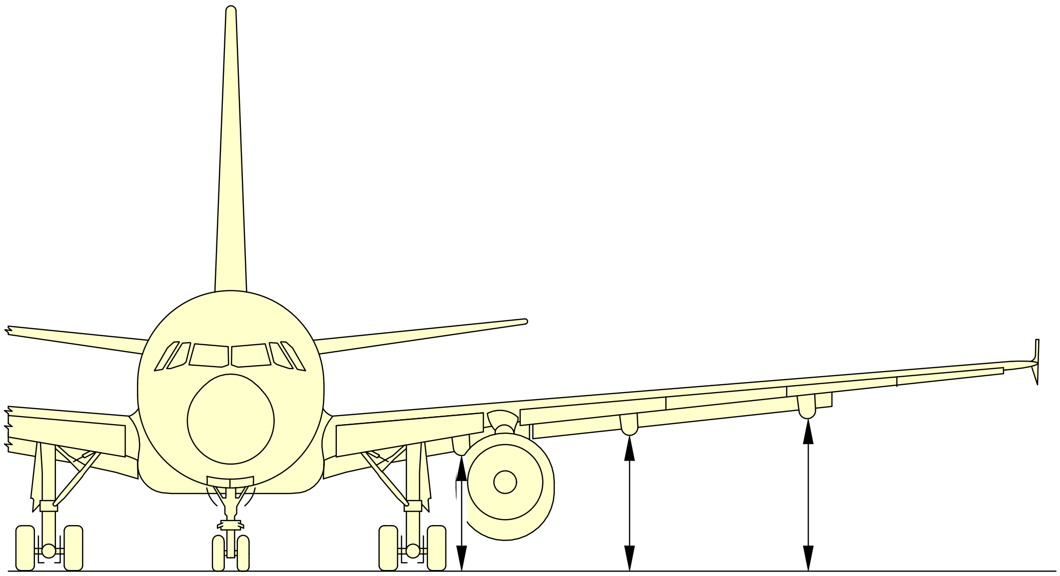
Ground Clearances
Flap Tracks - Retracted
FIGURE-2-3-0-991-007-A01

****ON A/C A318-100**



FLAP TRACKS 1+F							
DESCRIPTION		A/C IN MAINTENANCE CONFIGURATION MID CG		MAXIMUM RAMP WEIGHT FWD CG		MAXIMUM RAMP WEIGHT AFT CG	
		m	ft	m	ft	m	ft
FLAP TRACK 2	A	1.95	6.40	1.85	6.07	1.83	6.00
FLAP TRACK 3	B	2.31	7.58	2.21	7.25	2.18	7.15
FLAP TRACK 4	C	2.89	9.48	2.78	9.12	2.75	9.02

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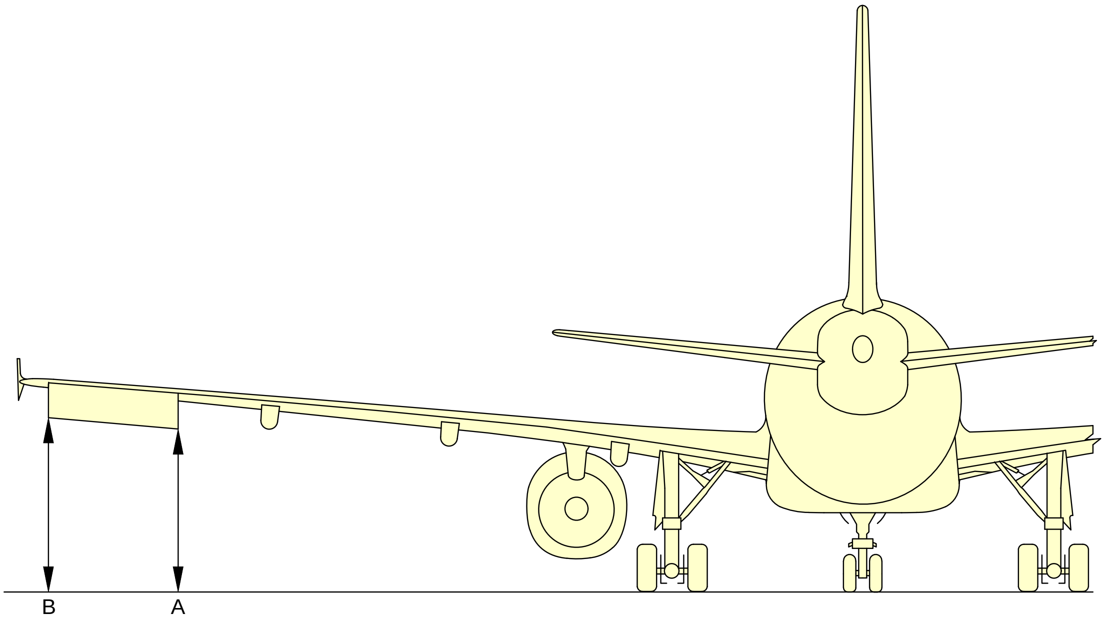
Ground Clearances
Flap Tracks - 1 + F
FIGURE-2-3-0-991-036-A01

****ON A/C A318-100**



AILERON DOWN							
DESCRIPTION		A/C IN MAINTENANCE CONFIGURATION MID CG		MAXIMUM RAMP WEIGHT FWD CG		MAXIMUM RAMP WEIGHT AFT CG	
		m	ft	m	ft	m	ft
AILERON INBD	A	3.84	12.60	3.78	12.40	3.74	12.27
AILERON OUTBD	B	4.19	13.75	4.13	13.55	4.07	13.35

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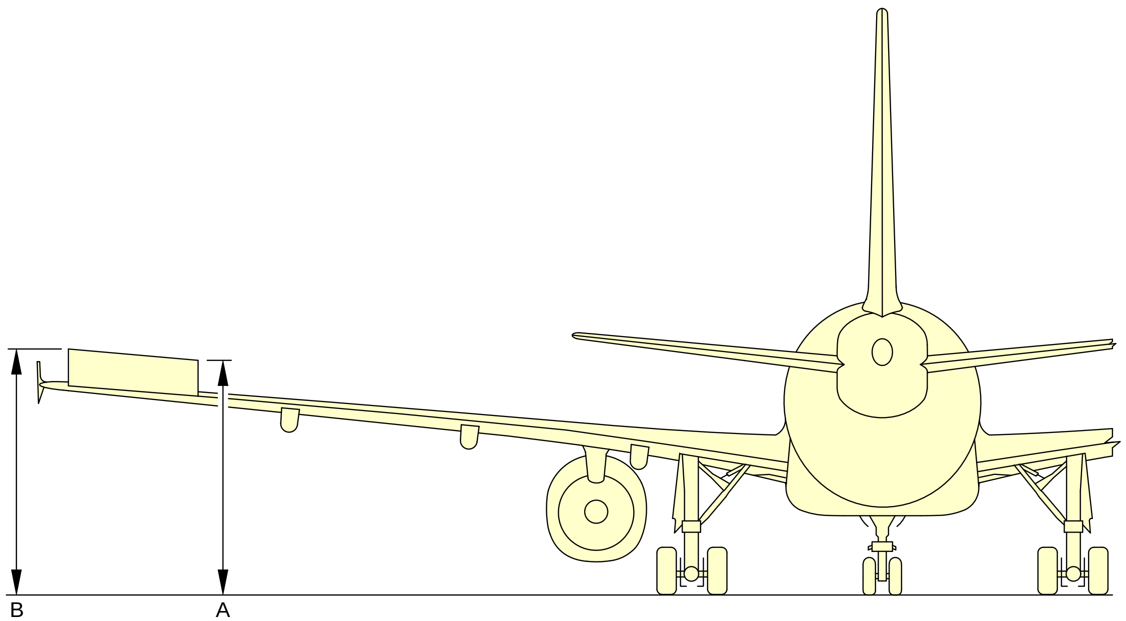
Ground Clearances
Aileron Down
FIGURE-2-3-0-991-008-A01

****ON A/C A318-100**



AILERON UP							
DESCRIPTION		A/C IN MAINTENANCE CONFIGURATION MID CG		MAXIMUM RAMP WEIGHT FWD CG		MAXIMUM RAMP WEIGHT AFT CG	
		m	ft	m	ft	m	ft
AILERON INBD	A	4.37	14.34	4.31	14.14	4.45	14.60
AILERON OUTBD	B	4.57	14.99	4.51	14.80	4.26	13.98

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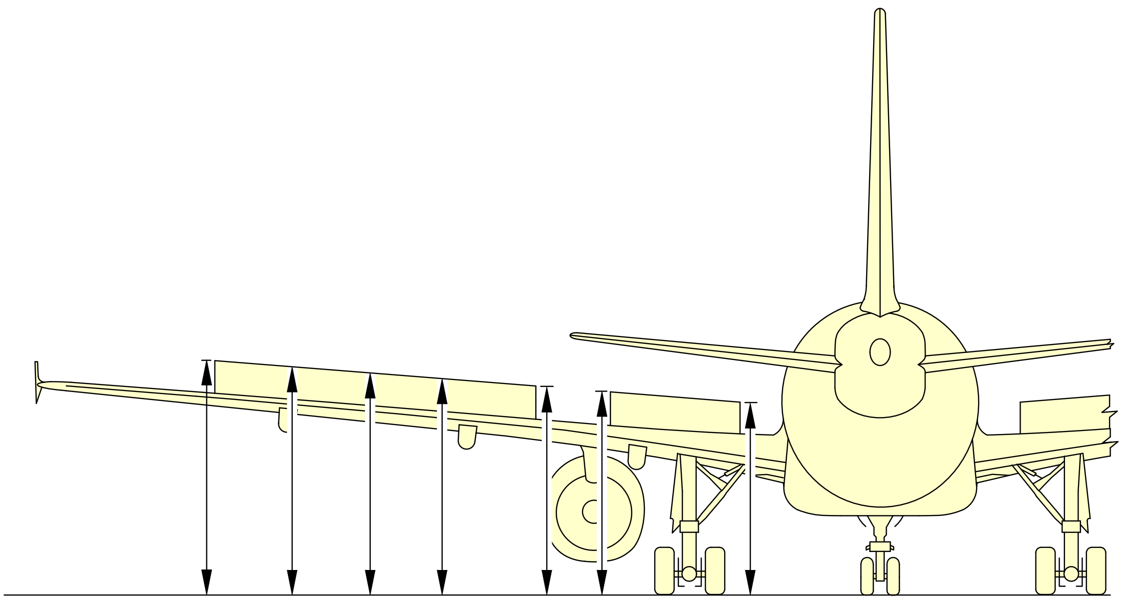
Ground Clearances
Aileron Up
FIGURE-2-3-0-991-037-A01

****ON A/C A318-100**

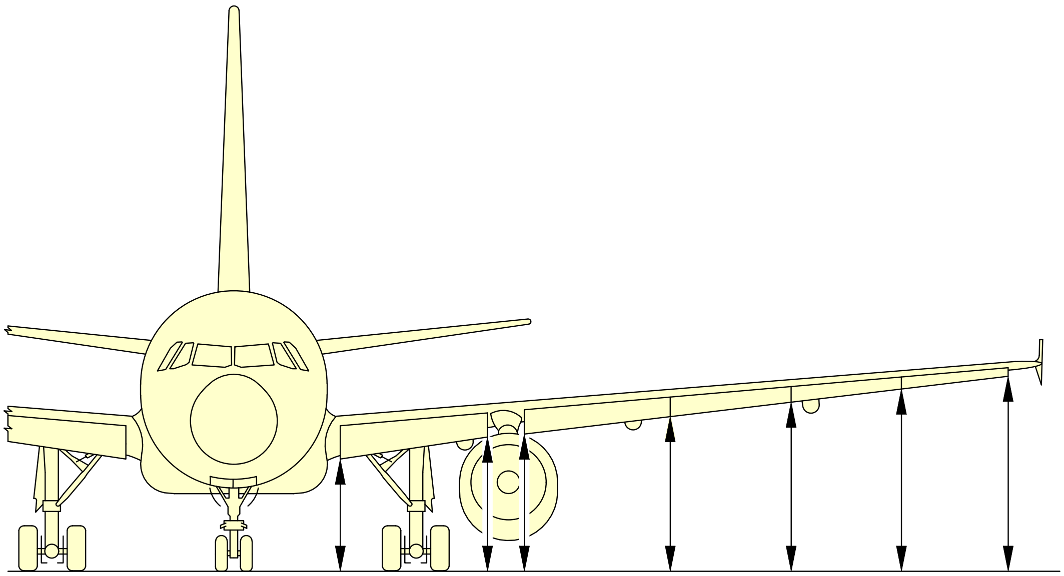


SPOILERS EXTENDED							
DESCRIPTION		A/C IN MAINTENANCE CONFIGURATION MID CG		MAXIMUM RAMP WEIGHT FWD CG		MAXIMUM RAMP WEIGHT AFT CG	
		m	ft	m	ft	m	ft
SPOILER 1 INBD	A	3.75	12.30	3.69	12.11	3.66	12.01
SPOILER 1 OUTBD	B	4.01	13.16	3.94	12.93	3.92	12.86
SPOILER 2 INBD	C	4.07	13.35	4.01	13.16	3.98	13.06
SPOILER 2/3	D	4.21	13.81	4.15	13.62	4.12	13.52
SPOILER 3/4	E	4.35	14.27	4.29	14.07	4.26	13.98
SPOILER 4/5	F	4.48	14.70	4.42	14.50	4.38	14.37
SPOILER 5 OUTBD	G	4.60	15.09	4.54	14.89	4.50	14.76

N_AC_020300_1_0090101_01_01

Ground Clearances
Spoilers - Extended
FIGURE-2-3-0-991-009-A01

****ON A/C A318-100**



LEADING EDGE SLATS EXTENDED							
DESCRIPTION		A/C IN MAINTENANCE CONFIGURATION MID CG		MAXIMUM RAMP WEIGHT FWD CG		MAXIMUM RAMP WEIGHT AFT CG	
		m	ft	m	ft	m	ft
SLAT 1 INBD	A	2.54	8.33	2.48	8.14	2.50	8.20
SLAT 1 OUTBD	B	2.96	9.71	2.90	9.51	2.91	9.55
SLAT 2 INBD	C	3.05	10.01	2.99	9.81	2.99	9.81
SLAT 2/3	D	3.35	10.99	3.29	10.79	3.28	10.76
SLAT 3/4	E	3.61	11.84	3.55	11.65	3.53	11.58
SLAT 4/5	F	3.86	12.66	3.80	12.47	3.77	12.37
SLAT 5 OUTBD	G	4.10	13.45	4.04	13.25	4.00	13.12

N_AC_020300_1_0100101_01_01

Ground Clearances
Leading Edge Slats - Extended
FIGURE-2-3-0-991-010-A01

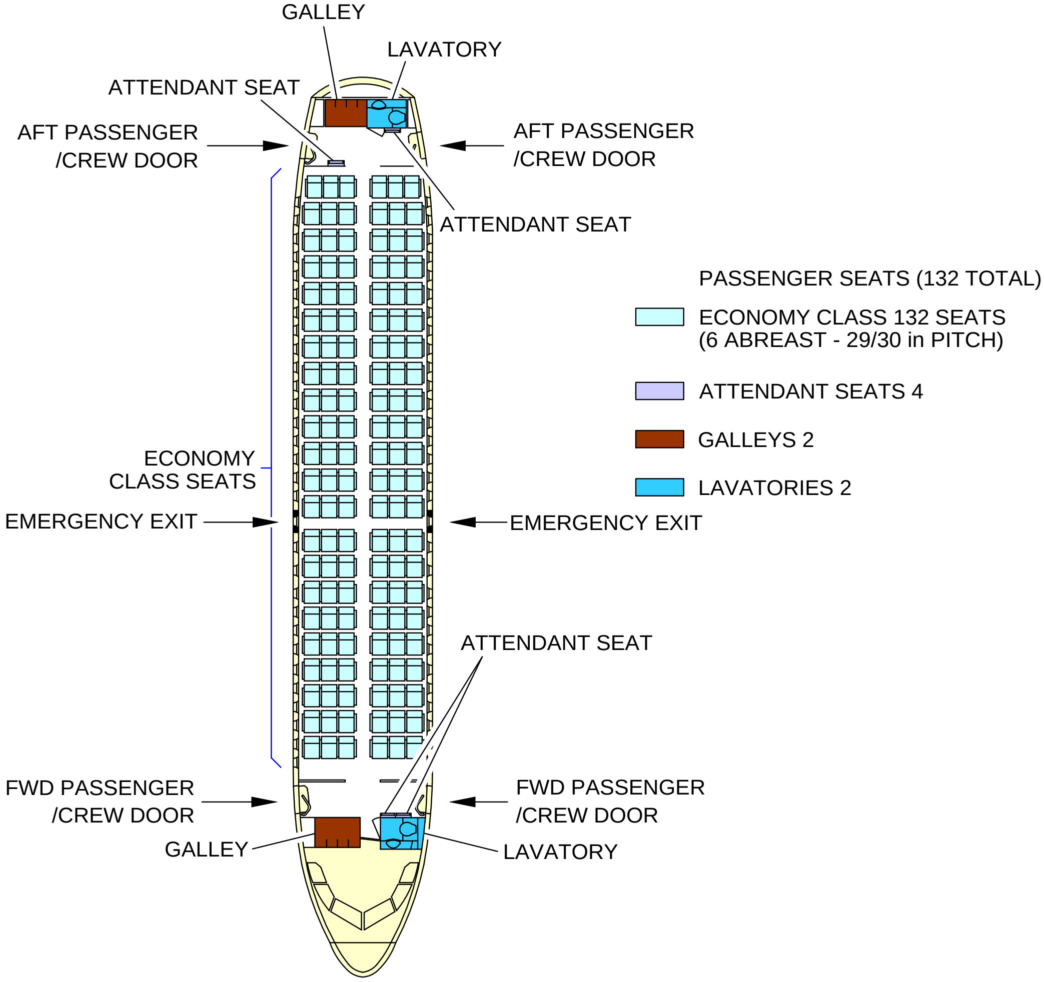
2-4-1 Interior Arrangements - Plan View

****ON A/C A318-100**

Interior Arrangements - Plan View

1. This section provides the typical interior configuration.

****ON A/C A318-100**



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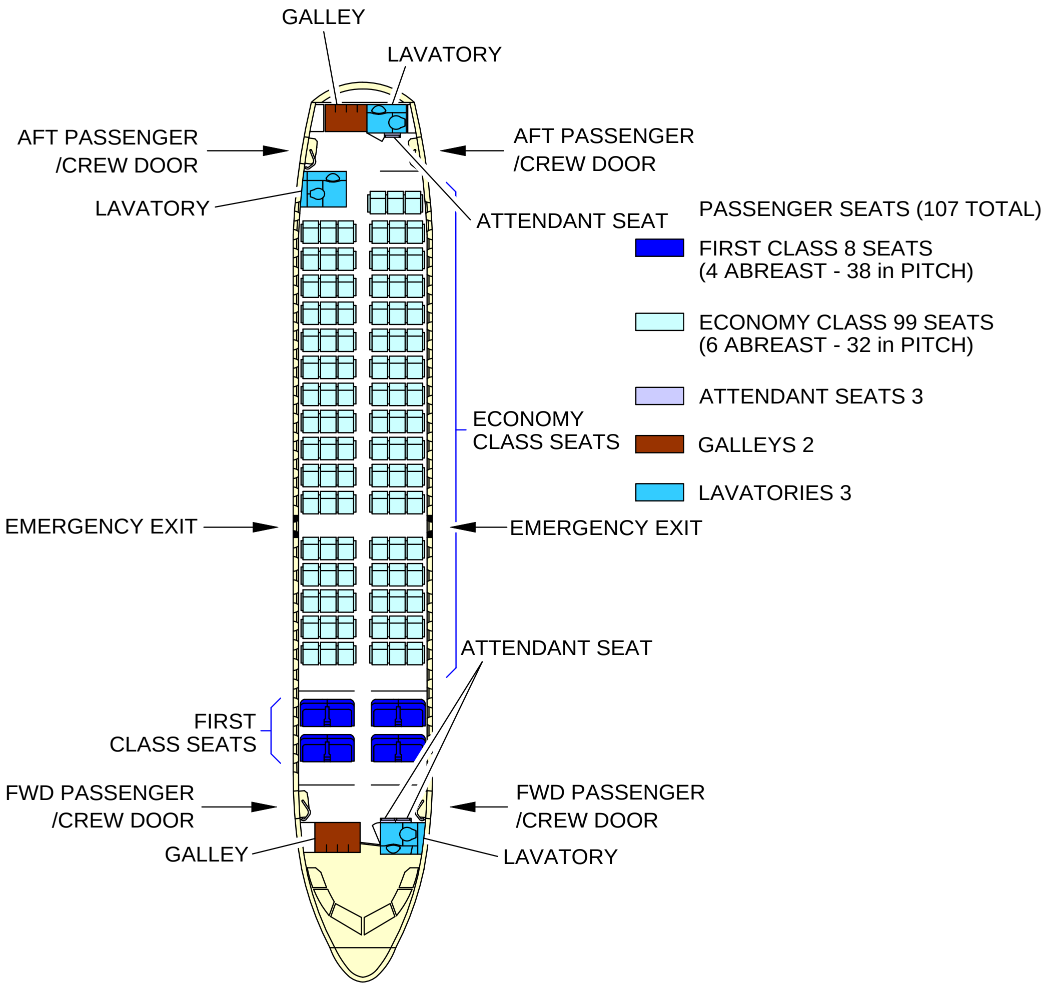
Interior Arrangements - Plan View
Typical Configuration - Single-Class, High Density
FIGURE-2-4-1-991-001-A01

****ON A/C A318-100**



N_AC_020401_1_0070101_01_01

Interior Arrangements - Plan View
Typical Configuration - Two-Class
FIGURE-2-4-1-991-007-A01

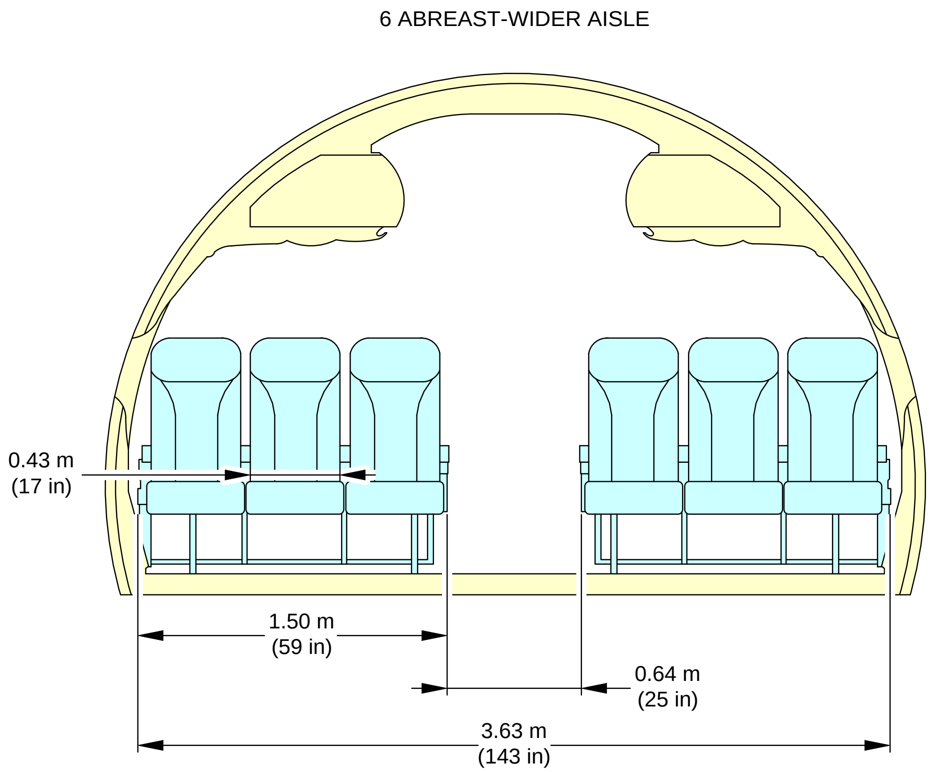
2-5-0 Interior Arrangements - Cross Section

****ON A/C A318-100**

Interior Arrangements - Cross Section

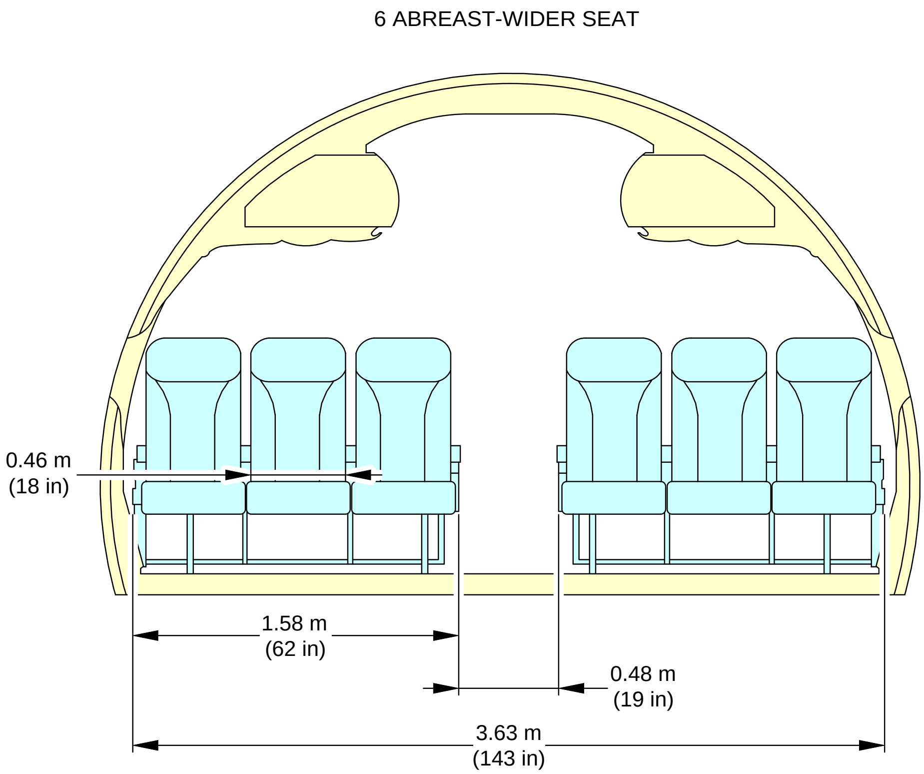
1. This section provides the typical configuration.

****ON A/C A318-100**



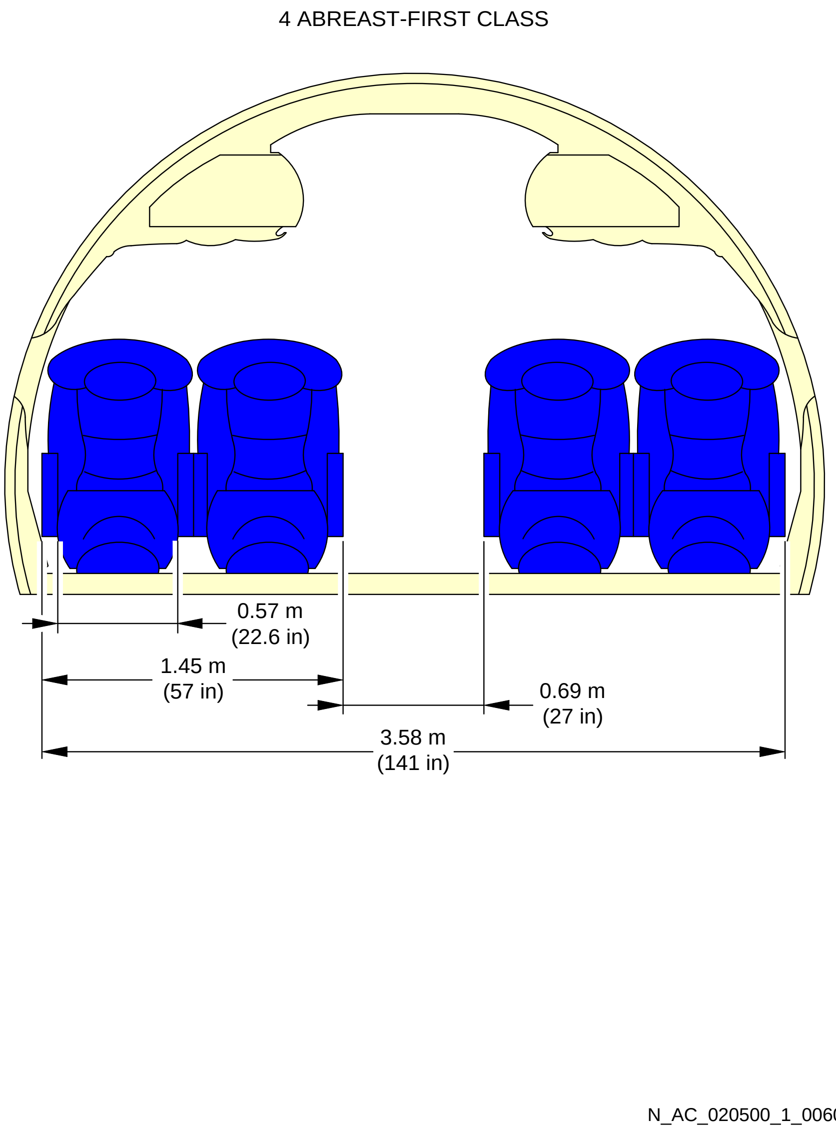
Interior Arrangements - Cross Section
Economy Class, 6 Abreast - Wider Aisle (Sheet 1 of 2)
FIGURE-2-5-0-991-005-A01

****ON A/C A318-100**



Interior Arrangements - Cross Section
Economy Class, 6 Abreast - Wider Seat (Sheet 2 of 2)
FIGURE-2-5-0-991-005-A01

****ON A/C A318-100**



Interior Arrangements - Cross Section
First-Class
FIGURE-2-5-0-991-006-A01

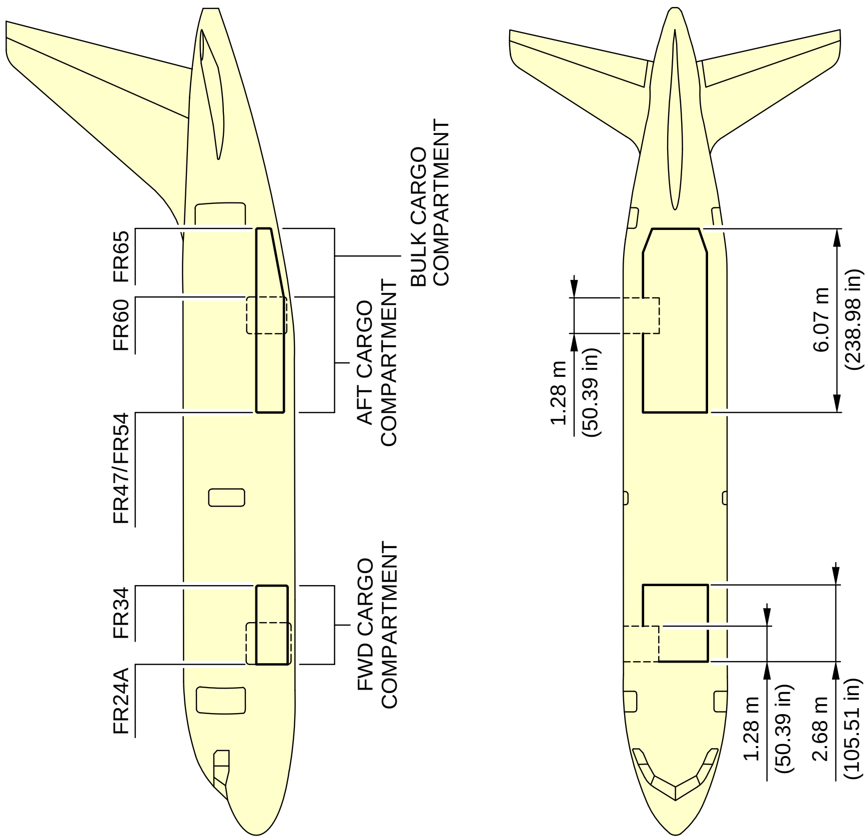
2-6-0 Cargo Compartments

****ON A/C A318-100**

Cargo Compartments

1. This section gives the cargo compartments locations, dimensions and loading combinations.

****ON A/C A318-100**



Cargo Compartments
Locations and Dimensions
FIGURE-2-6-0-991-001-A01

2-7-0 Door Clearances and Location

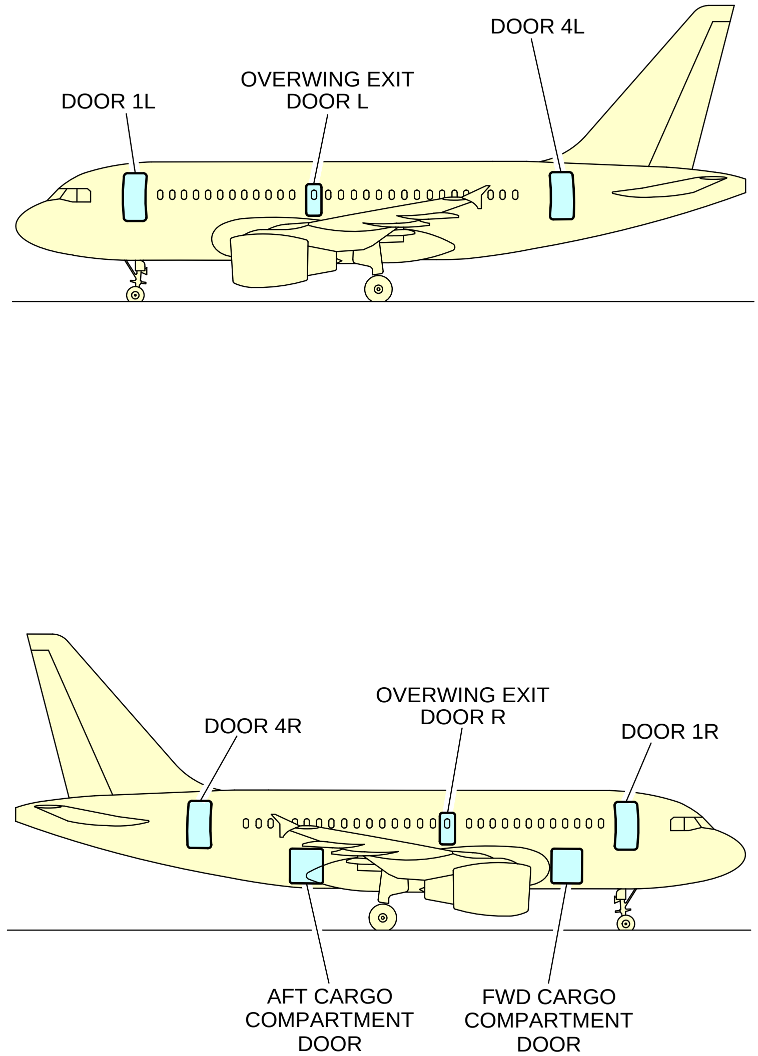
****ON A/C A318-100**

Door Clearances

1. This section gives door identification and location.

NOTE : Dimensions of the ground clearances are approximate and will change with tire type, weight and balance and other special conditions.

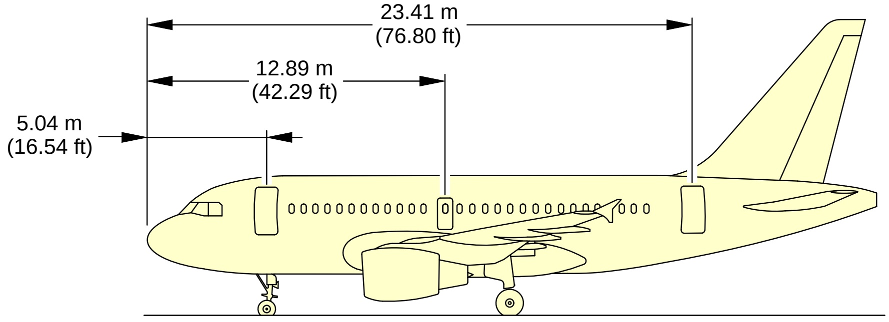
****ON A/C A318-100**

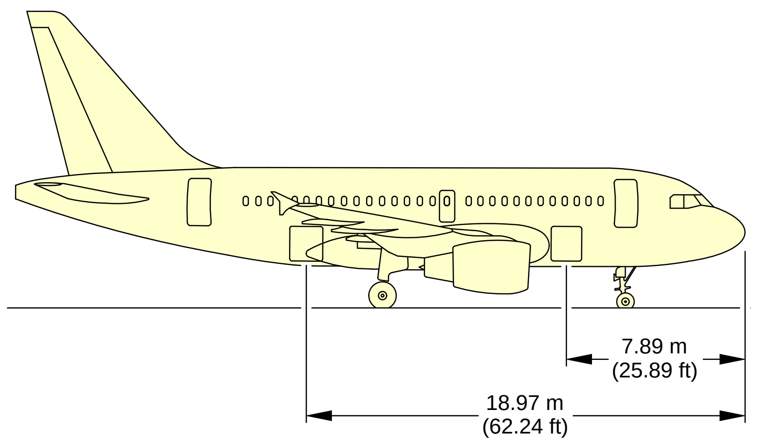


N_AC_020700_1_0010101_01_02

Door Identification and Location
Door Identification (Sheet 1 of 2)
FIGURE-2-7-0-991-001-A01

****ON A/C A318-100**





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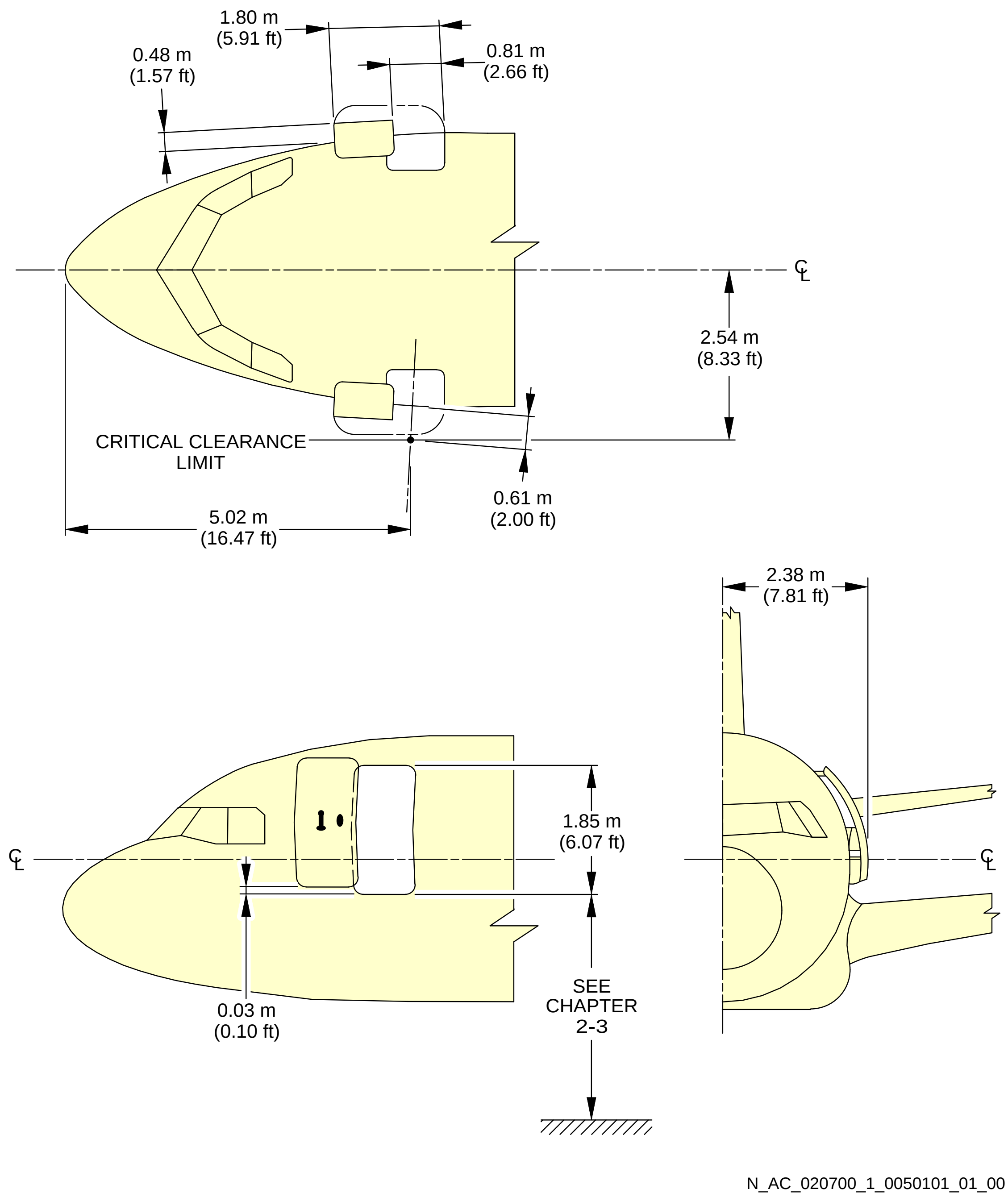
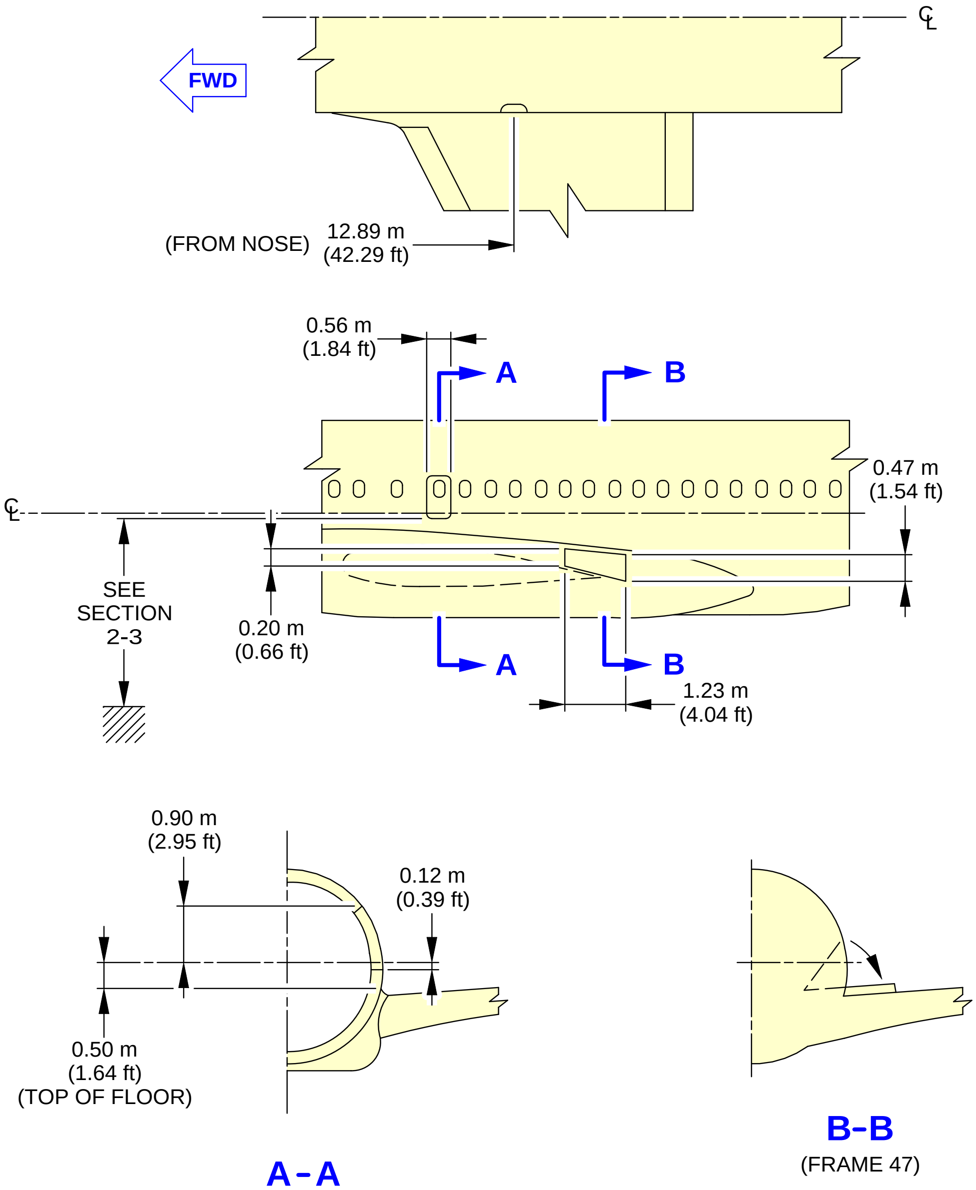
Door Identification and Location
Door Location (Sheet 2 of 2)
FIGURE-2-7-0-991-001-A01

****ON A/C A318-100**



Doors Clearances
Forward Passenger/Crew Doors
FIGURE-2-7-0-991-005-A01

****ON A/C A318-100**



NOTE:
ESCAPE SLIDE COMPARTMENT DOOR OPENS ON WING UPPER SURFACE.

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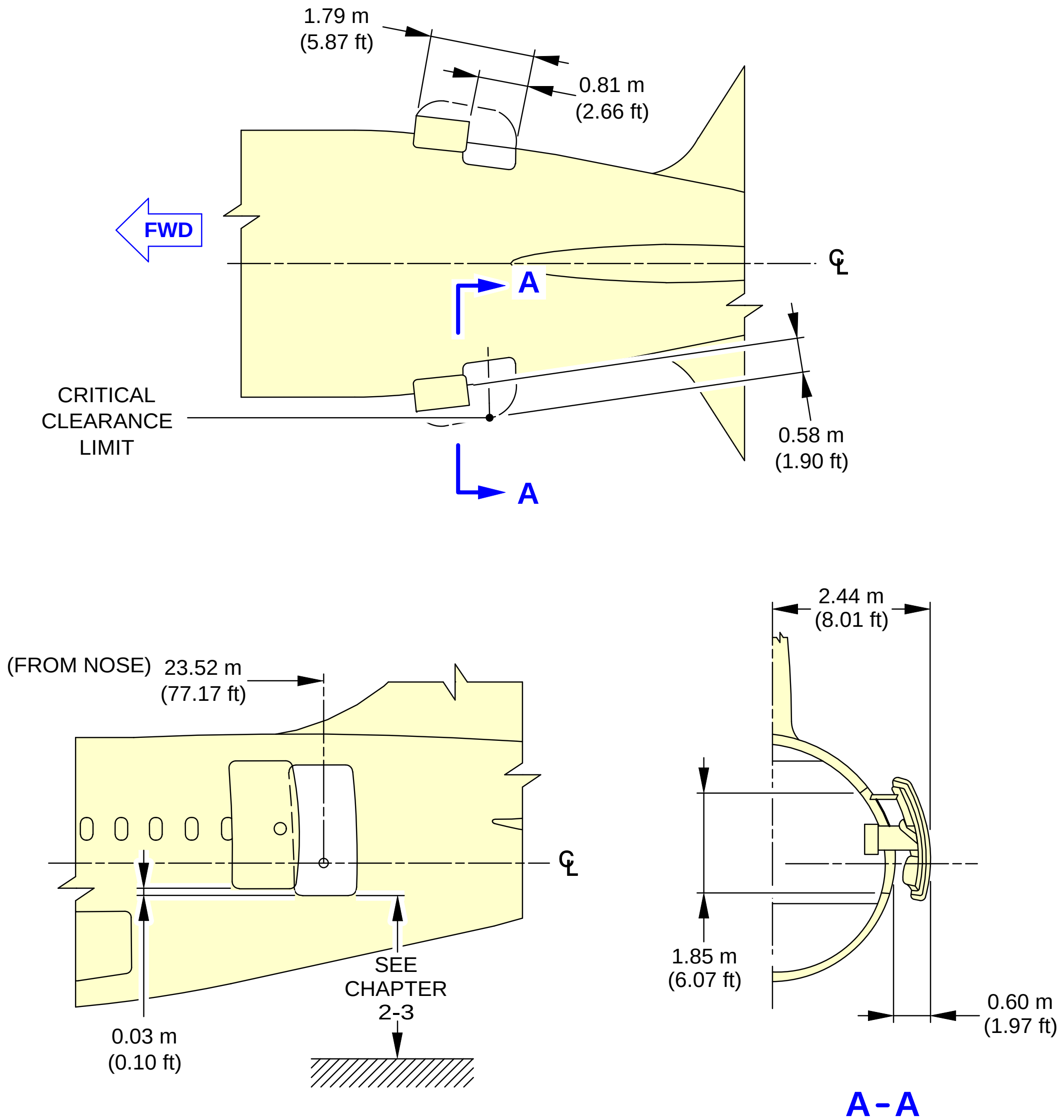
Doors Clearances
Emergency Exits
FIGURE-2-7-0-991-006-A01

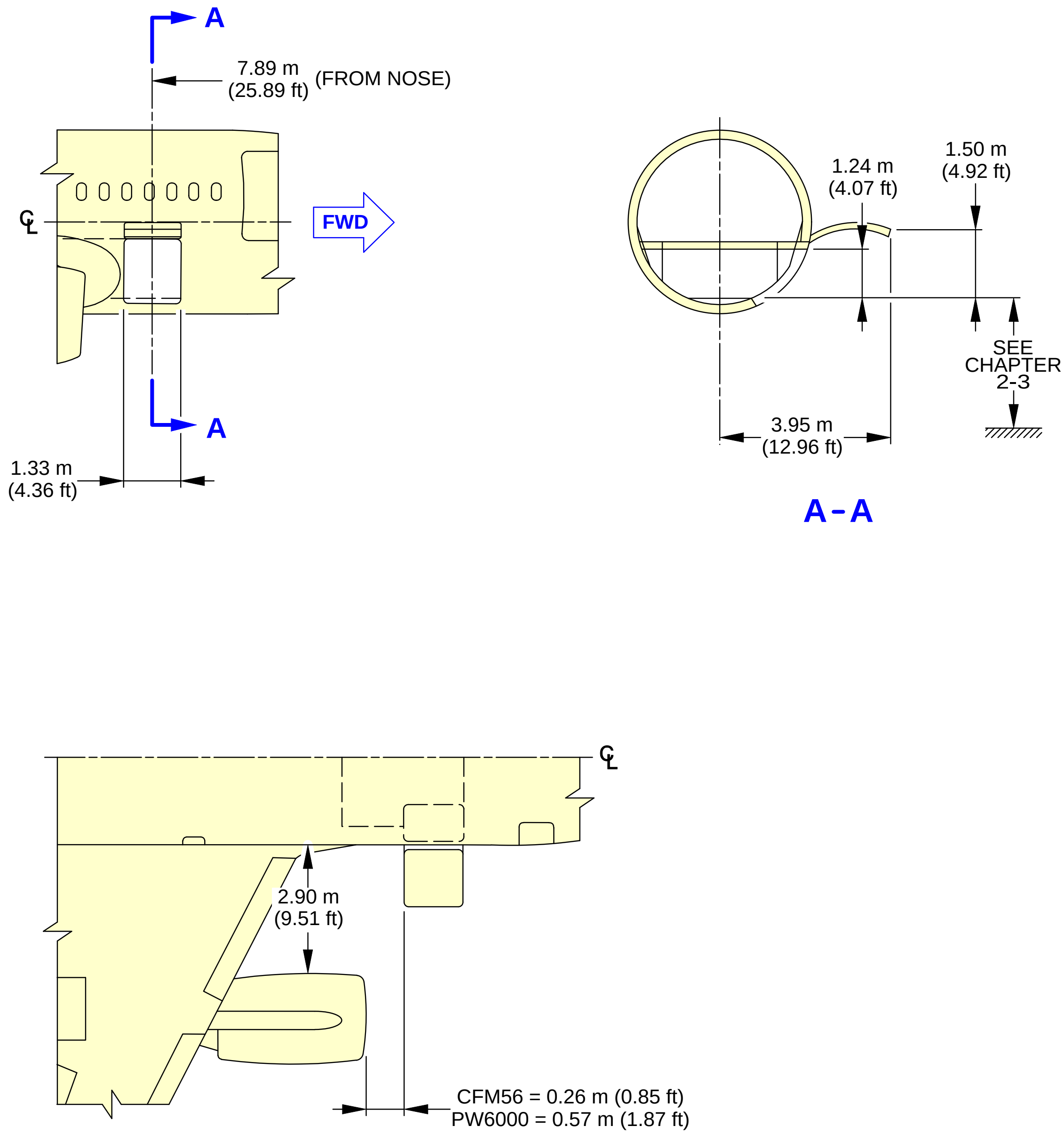
****ON A/C A318-100**



N_AC_020700_1_0070101_01_00

Doors Clearances
Aft Passenger/Crew Doors
FIGURE-2-7-0-991-007-A01

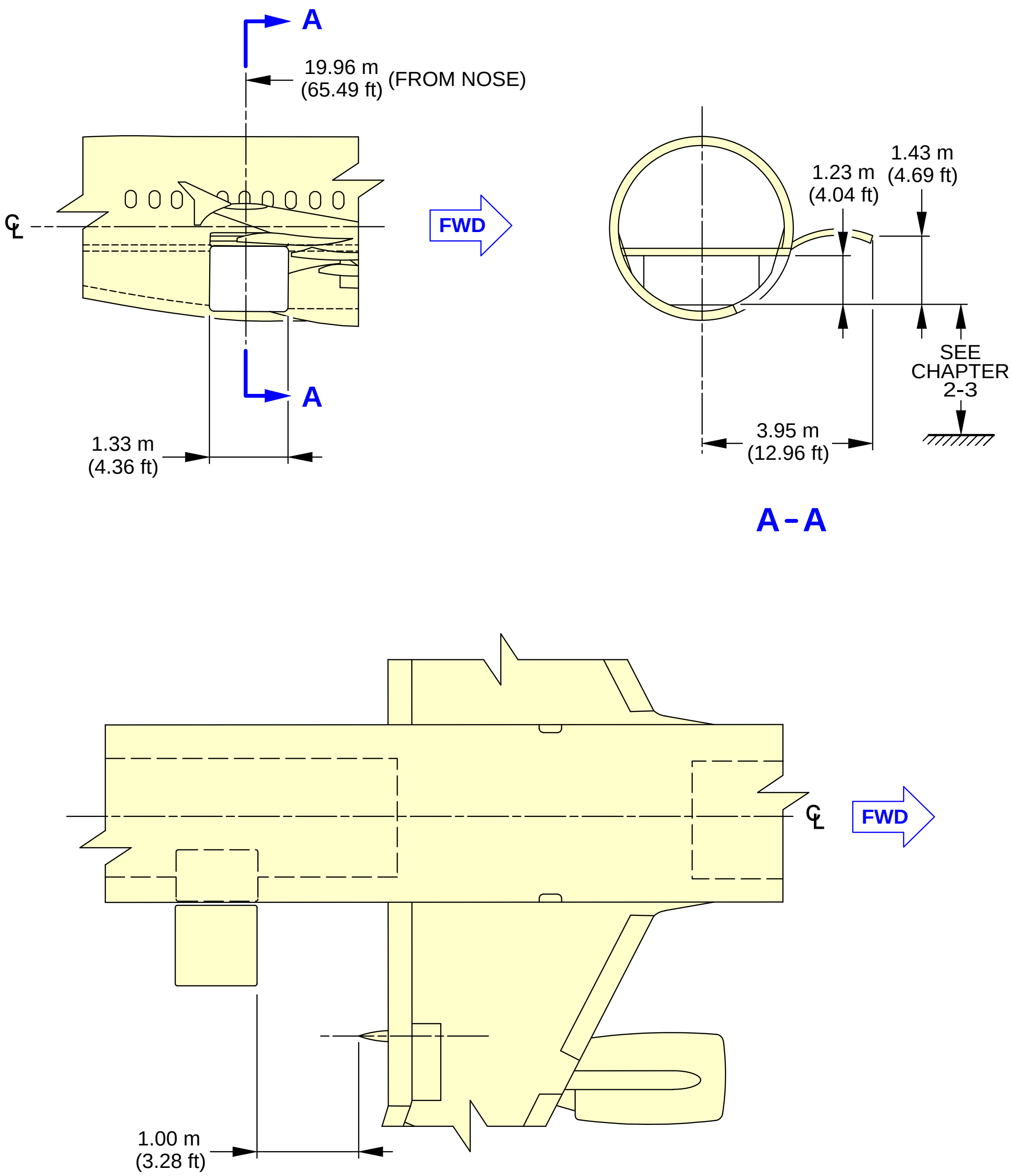
****ON A/C A318-100**



N_AC_020700_1_0080101_01_00

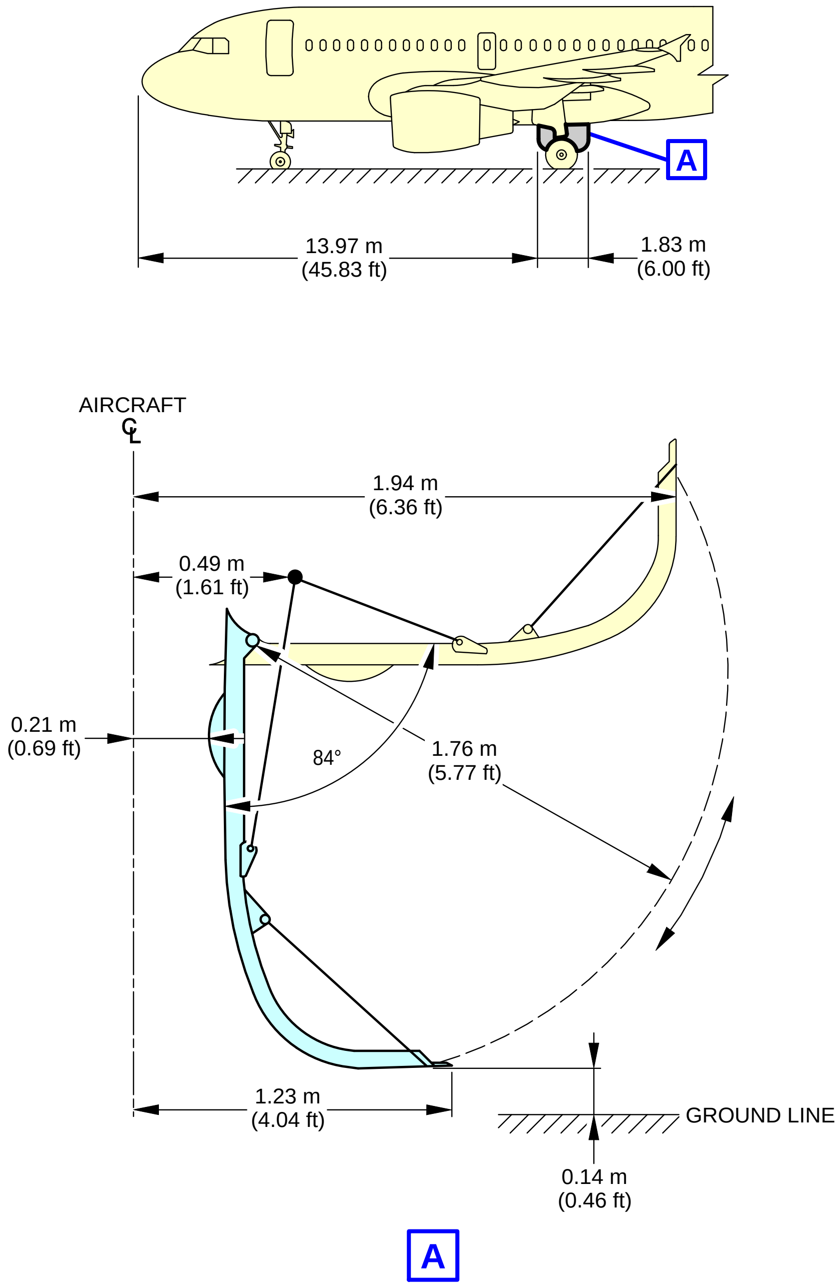
Doors Clearances
Forward Cargo Compartment Door
FIGURE-2-7-0-991-008-A01

****ON A/C A318-100**



Doors Clearances
Aft Cargo Compartment Door
FIGURE-2-7-0-991-009-A01

****ON A/C A318-100**

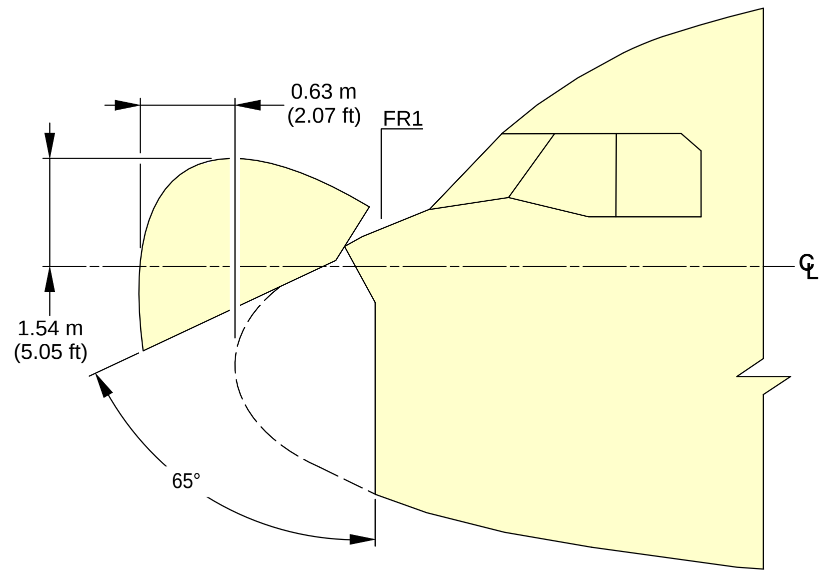


NOTE:
VALUE OF CG: 25% RC.

N_AC_020700_1_0100101_01_00

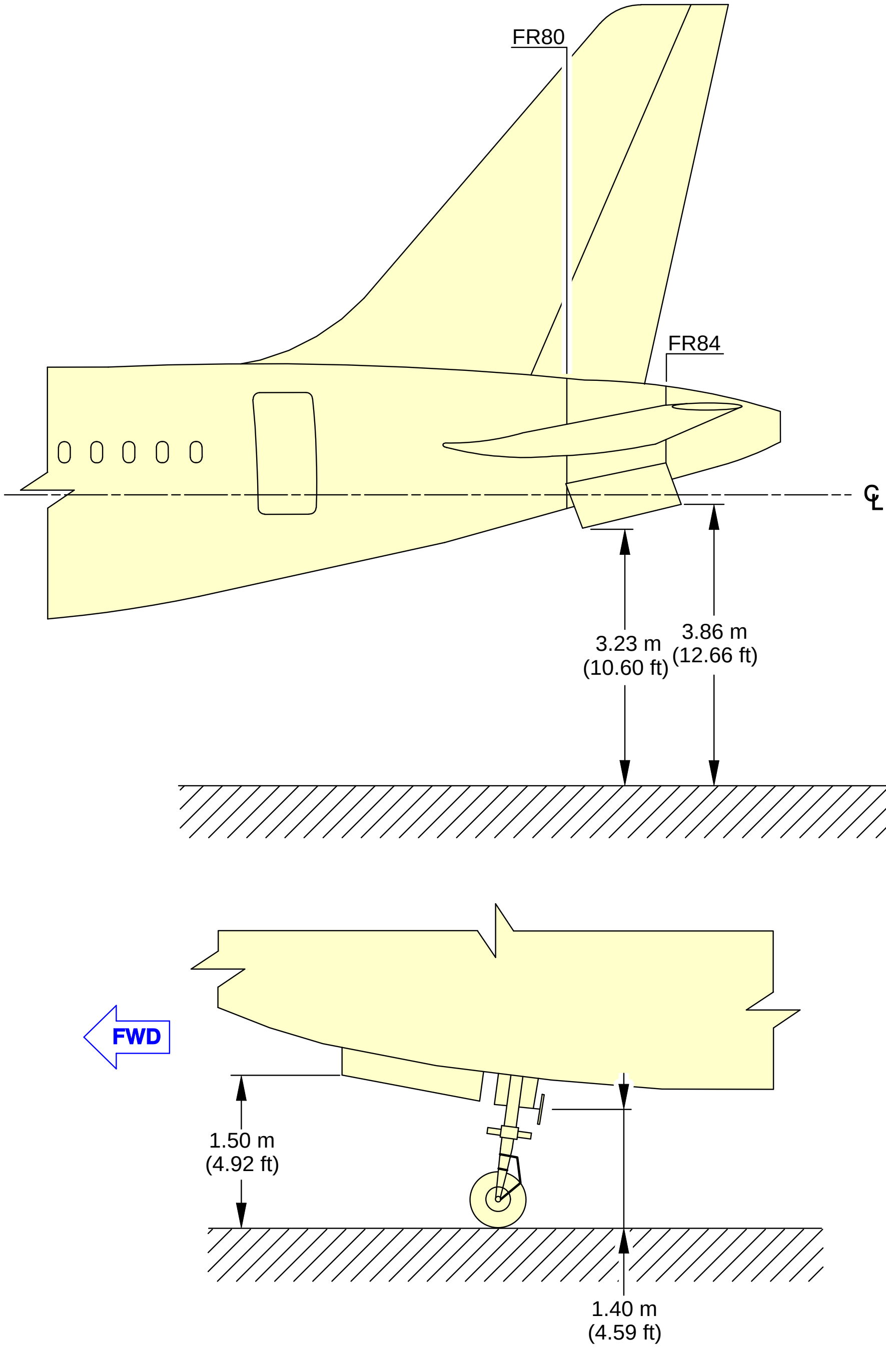
Doors Clearances
Main Landing Gear Doors
FIGURE-2-7-0-991-010-A01

****ON A/C A318-100**



Doors Clearances
Radome
FIGURE-2-7-0-991-011-A01

****ON A/C A318-100**



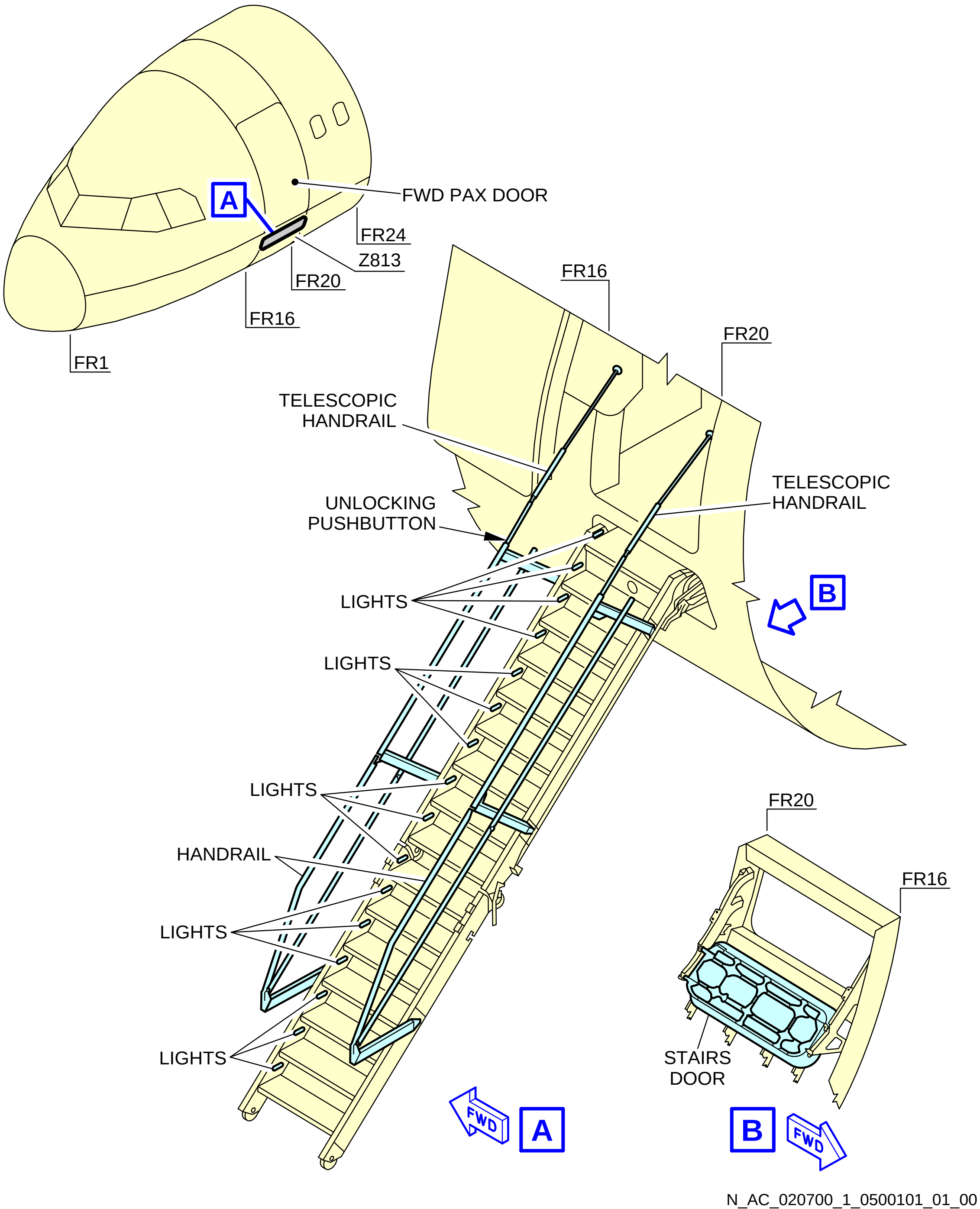
NOTE:

VALUE OF CG: 25% RC.

N_AC_020700_1_0120101_01_00

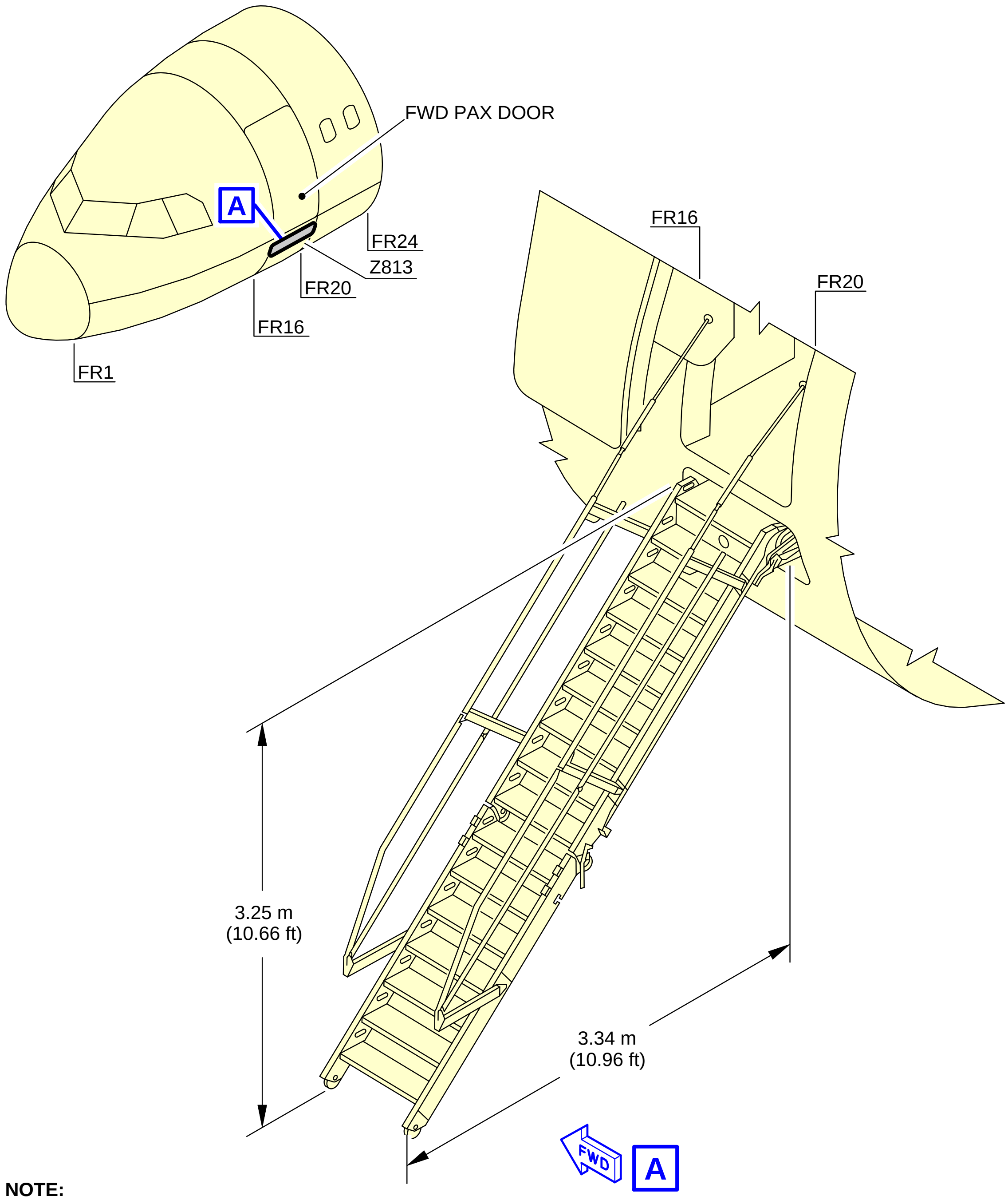
Doors Clearances
APU and Nose Landing Gear Doors
FIGURE-2-7-0-991-012-A01

****ON A/C A318-100**



Doors Clearances - Airstairs
Location
FIGURE-2-7-0-991-050-A01

****ON A/C A318-100**



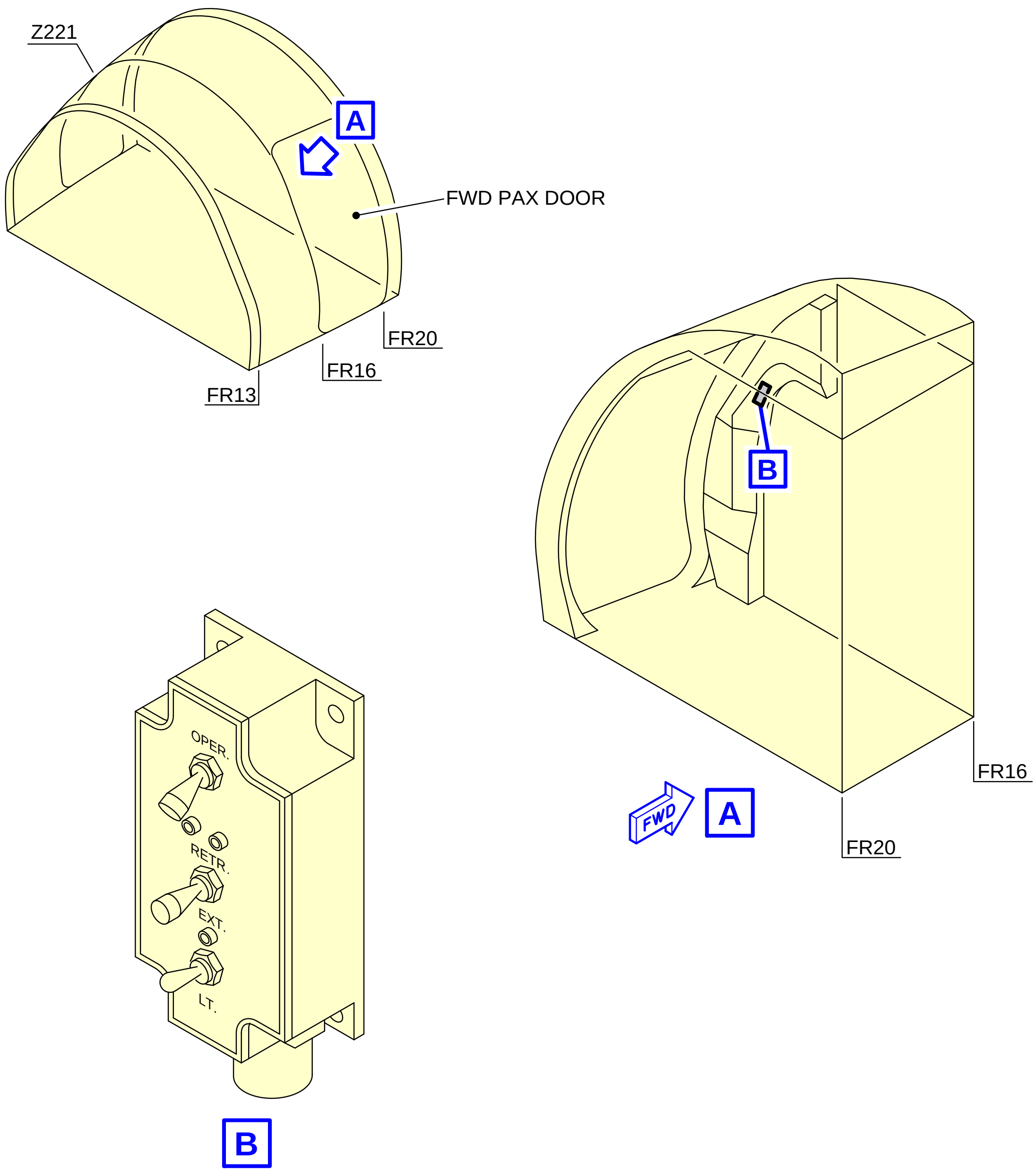
NOTE:

THE VALUES GIVEN DEPEND ON THE POSITION OF CENTER OF GRAVITY (CG) AND THE AIRCRAFT WEIGHT.

N_AC_020700_1_0510101_01_00

Doors Clearances - Airstairs
Dimensions
FIGURE-2-7-0-991-051-A01

****ON A/C A318-100**



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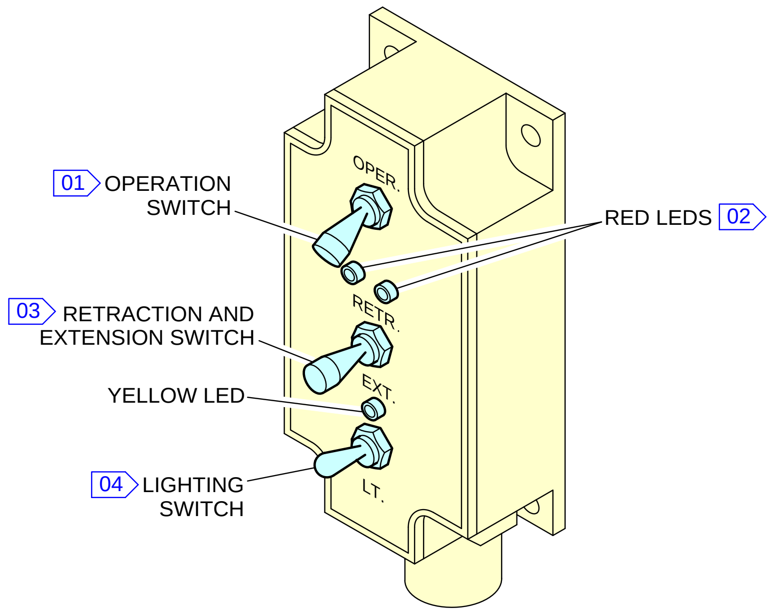
Doors Clearances - Airstairs
Location for Operating the Airstairs
FIGURE-2-7-0-991-052-A01

****ON A/C A318-100**



NOTE:

01 OPER.: WHEN THE FLIGHT CREW PUSHES THIS SWITCH TO THE OPER. POSITION AND HOLDS IT AGAINST THE SPRING, THE STAIRS WILL EXTEND OR RETRACT IF THE FLIGHT CREW ALSO HOLDS THE RETRACTION AND EXTENSION SWITCH IN THE RETR. OR EXT. POSITION.

OFF: OPERATION OF THE STAIRS IS PREVENTED.

02 THE TWO RED LIGHTS ARE ON DURING THE EXTENSION AND RETRACTION.

03 NEUTRAL: THIS IS THE STABLE, LOCKED POSITION. OPERATION OF THE STAIRS IS PREVENTED. TO MOVE IT FROM THIS POSITION, THE FLIGHT CREW MUST PULL THE SWITCH OUT.

RETR.: WHEN THE FLIGHT CREW HOLDS THE SWITCH IN THIS POSITION AGAINST THE SPRING, THE STAIRS RETRACT IF:
- THE OPERATION SWITCH IS HELD AT OPER.
- THE TELESCOPIC HANDRAILS ARE FULLY STOWED.

04 UP: THE STAIR LIGHTS COMES ON ALONG WITH THE YELLOW CONTROL LIGHT, IF:
- THE STAIRS ARE FULLY EXTENDED, AND
- THE POWER IS AVAILABLE FROM DC BUS 2.

DOWN: THE STAIR LIGHTS AND THE YELLOW CONTROL LIGHT ARE OFF.

N_AC_020700_1_0590101_01_00

Operation of the Airstairs
FIGURE-2-7-0-991-059-A01

2-8-0 Escape Slides

****ON A/C A318-100**

Escape Slides

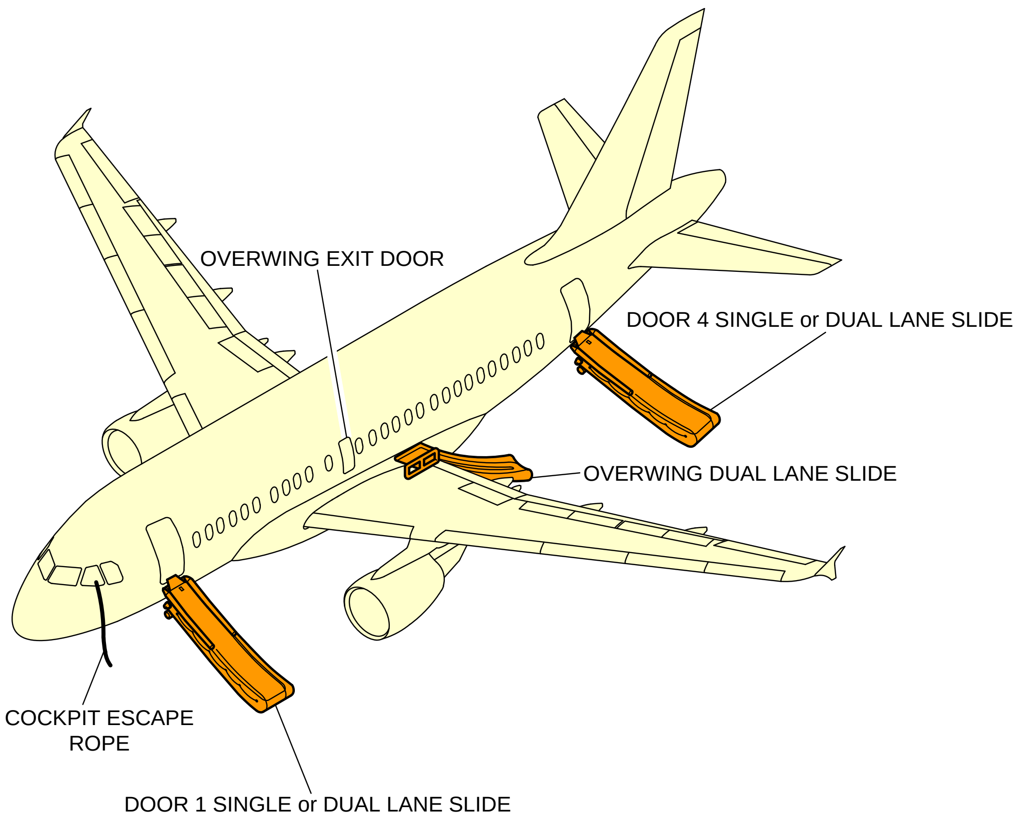
1. General

   This section provides location of slides/rafts facilities and related clearances.

2. Location

   Slides/rafts facilities are provided at the following locations:
   - One single or dual lane slide at each door 1 & 4 (total four)
   - Dual lane overwing slides are installed above the wings in the left and right wing-to-fuselage fairings for off-the-wing evacuation (total 2).

****ON A/C A318-100**

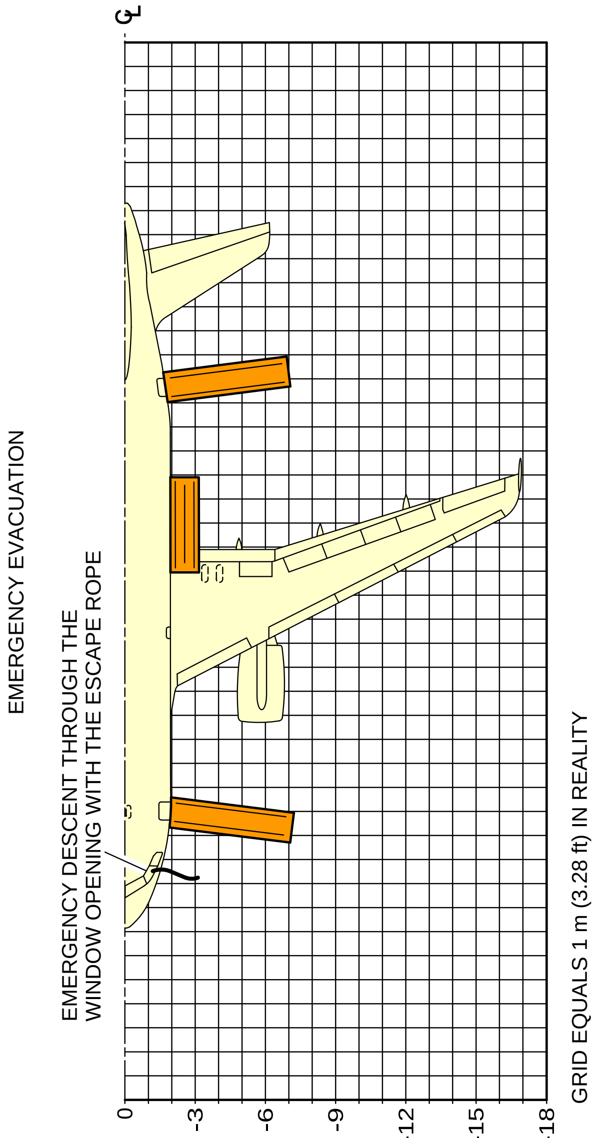


NOTE:
LH SHOWN, RH SYMMETRICAL.

N_AC_020800_1_0010101_01_04

Escape Slides
Location
FIGURE-2-8-0-991-001-A01

****ON A/C A318-100**



NOTE:
- LH SHOWN, RH SYMMETRICAL.
- DIMENSIONS ARE APPROXIMATE.

N_AC_020800_1_0020101_01_02

Escape Slides
Dimensions
FIGURE-2-8-0-991-002-A01

2-9-0 Landing Gear

****ON A/C A318-100**

Landing Gear

1. General

The landing gear is of the conventional retractable tricycle type comprising:
- Two main gears with twin-wheel,
- A twin-wheel nose gear.

The main landing gears are located under the wing and retract sideways towards the fuselage centerline.
The nose landing gear retracts forward into a fuselage compartment located between FR9 and FR20.

The landing gears and landing gear doors are operated and controlled electrically and hydraulically.
In abnormal operation, the landing gear can be extended by gravity.

For landing gear footprint and tire size, refer to 07-02-00.

2. Main Landing Gear

A. Twin-Wheel

Each of the two main landing gear assemblies consists of a conventional two-wheel direct type with an integral shock absorber supported in the fore and aft directions by a fixed drag strut and laterally by a folding strut mechanically locked when in the DOWN position.

3. Nose Landing Gear

The nose landing gear consists of a leg with a built-in shock absorber strut, carrying twin wheels with adequate shimmy damping and a folding strut mechanically locked when in the DOWN position.

4. Nose Wheel Steering

Steering is controlled by two hand wheels in the cockpit. For steering angle controlled by the hand wheels, refer to AMM 32-51-00.
For steering angle limitation, refer to AMM 09-10-00.

A steering disconnection box is installed on the nose landing gear to allow steering deactivation for towing purposes.

5. Landing Gear Servicing Points

A. General

Filling of the landing-gear shock absorbers is done through MIL-PRF-6164 standard valves.

Charging of the landing-gear shock absorbers is accomplished with nitrogen through MIL-PRF-6164 standard valves.

B. Charging Pressure

For charging of the landing-gear shock absorbers, refer to AMM 12-14-32.

6. Braking

A. General

The four main wheels are equipped with carbon multidisc brakes.

The braking system is electrically controlled and hydraulically operated.

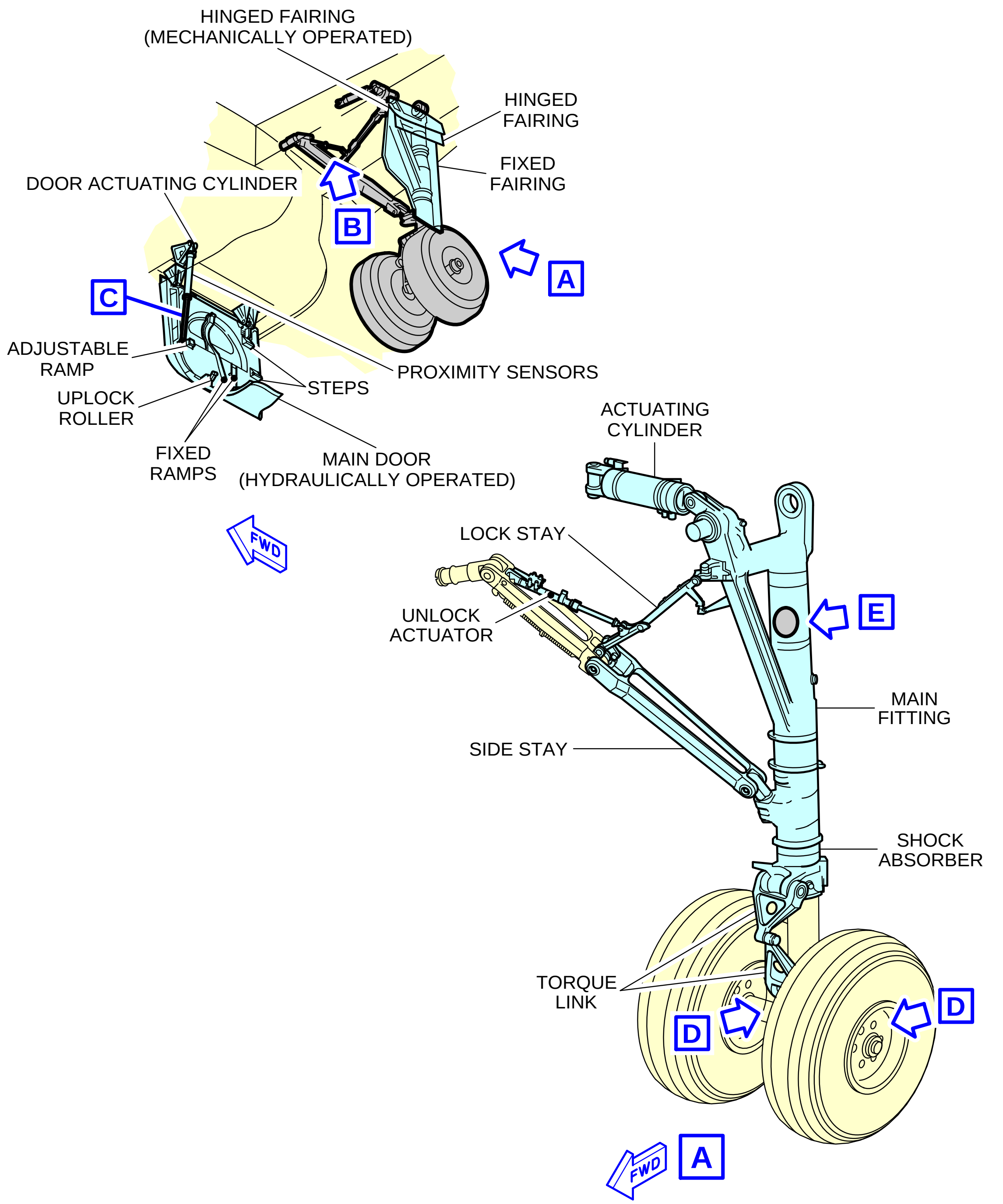
The braking system has four braking modes plus autobrake and anti-skid systems:
- Normal braking with anti-skid capability,
- Alternative braking with anti-skid capability,
- Alternative braking without anti-skid capability,
- Parking brake with full pressure application capability only.

B. In-Flight Wheel Braking

The main gear wheels are braked automatically before the wheels enter the wheel bay.

The nose gear wheels are stopped by the wheels contacting a rubbing strip (the brake band) when the gear is in the retracted position.

****ON A/C A318-100**

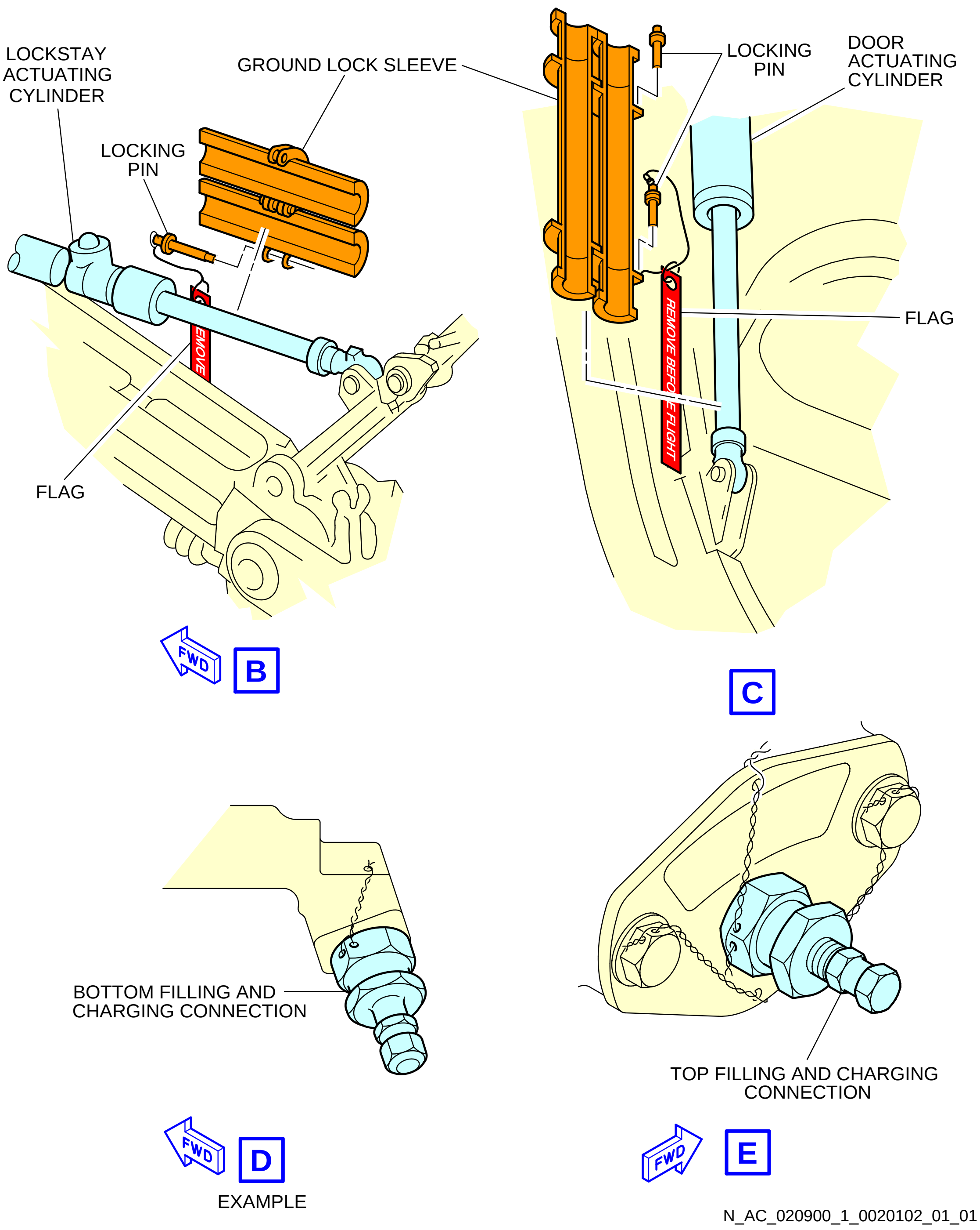


NOTE: MAIN DOOR SHOWN OPEN IN GROUND MAINTENANCE POSITION.

N_AC_020900_1_0020101_01_00

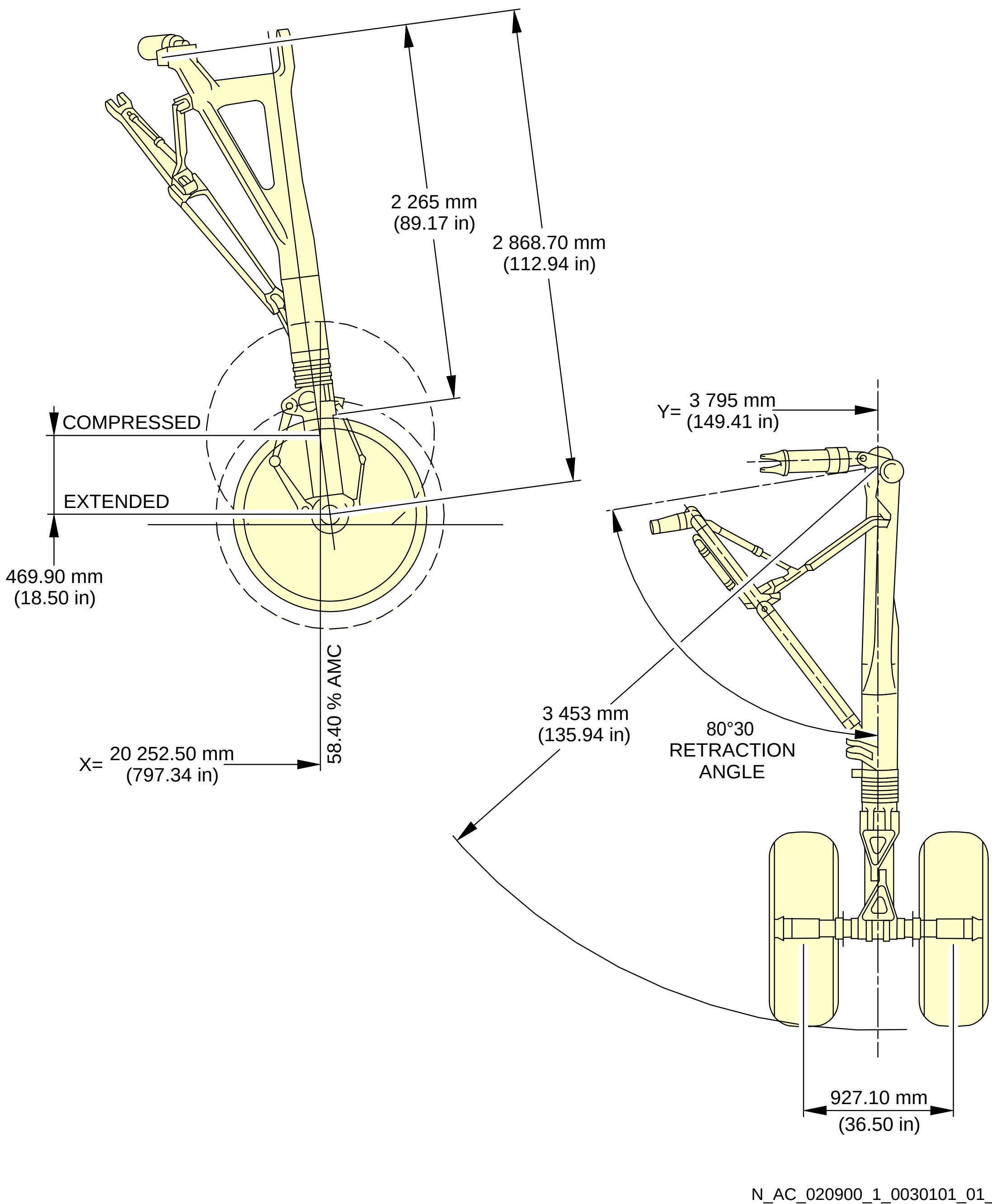
Landing Gear
Main Landing Gear - Twin-Wheel (Sheet 1 of 2)
FIGURE-2-9-0-991-002-A01

****ON A/C A318-100**



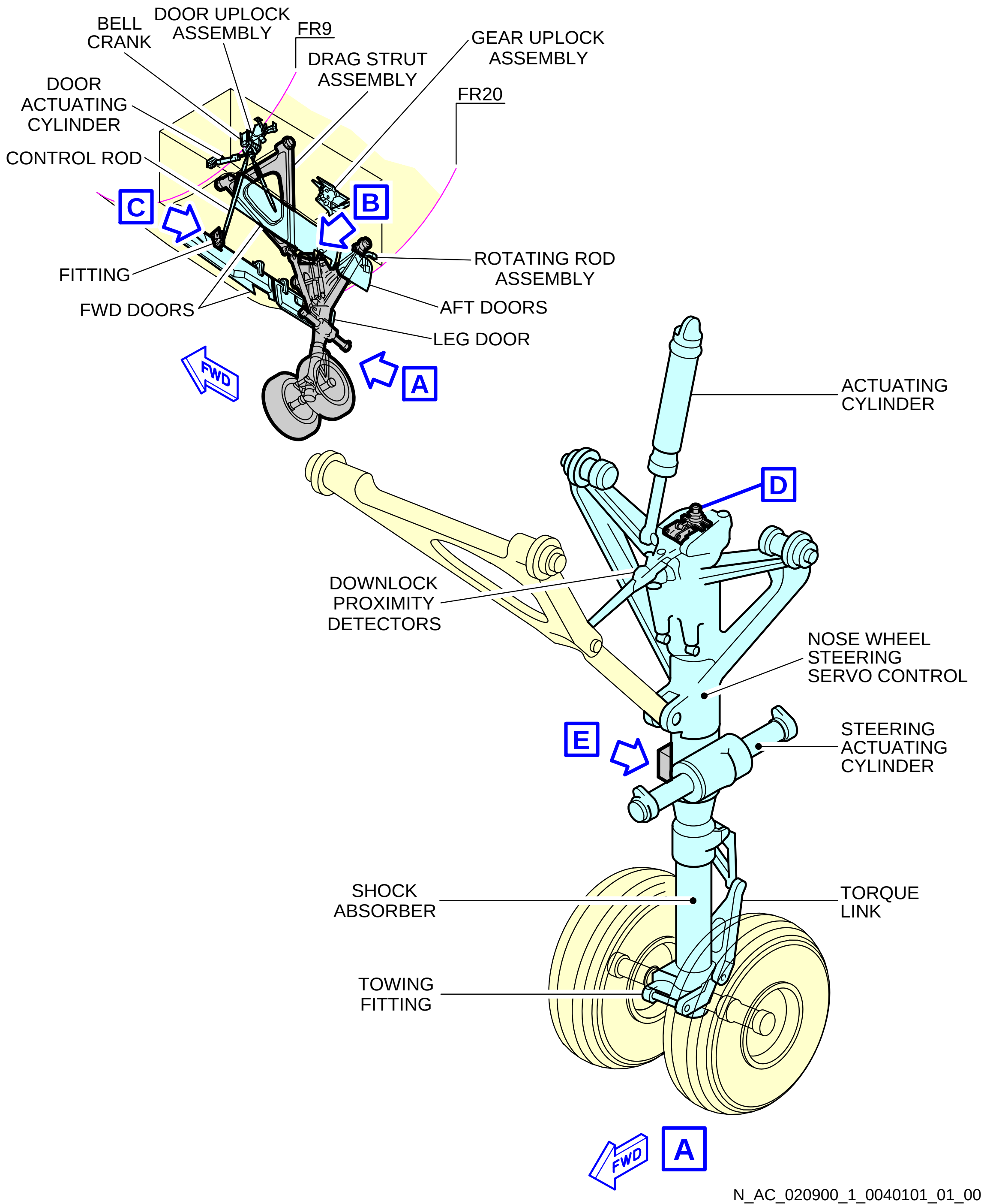
Landing Gear
Main Landing Gear - Twin-Wheel (Sheet 2 of 2)
FIGURE-2-9-0-991-002-A01

****ON A/C A318-100**



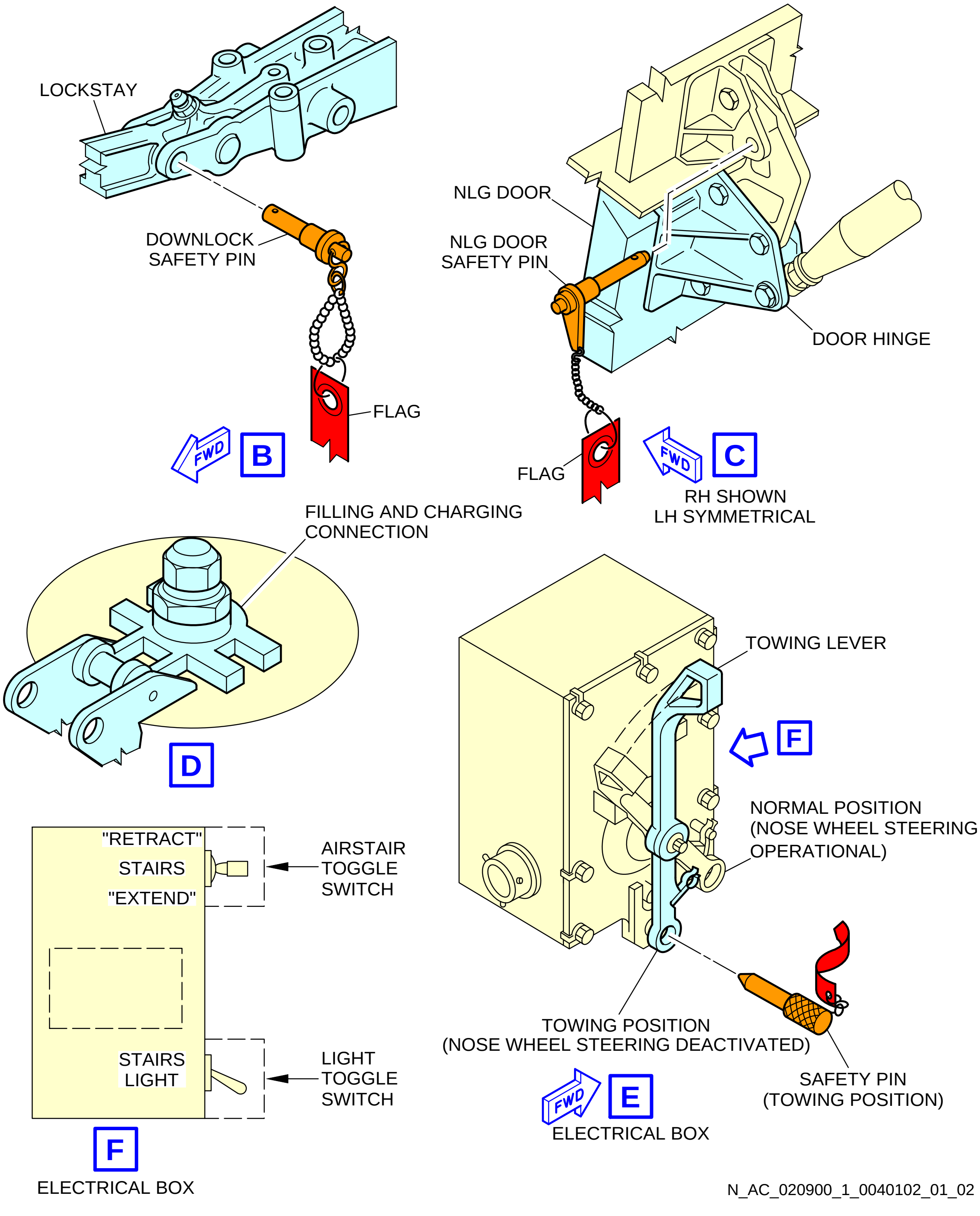
Landing Gear
Main Landing Gear Dimensions - Twin-Wheel
FIGURE-2-9-0-991-003-A01

****ON A/C A318-100**



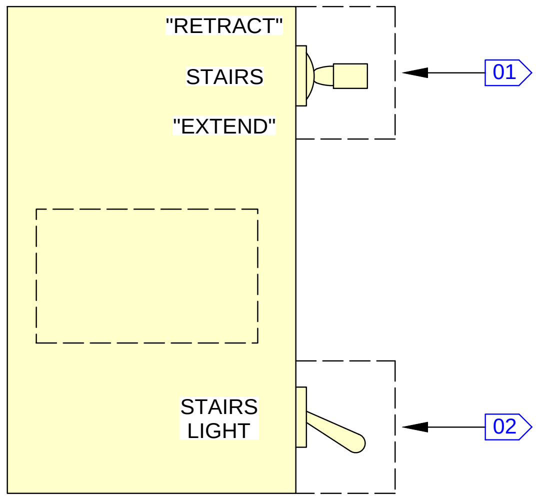
Landing Gear
Nose Landing Gear (Sheet 1 of 2)
FIGURE-2-9-0-991-004-A01

****ON A/C A318-100**



Landing Gear
Nose Landing Gear of ACJ (Sheet 2 of 2)
FIGURE-2-9-0-991-004-A01

****ON A/C A318-100**



NOTE:

01 STAIRS SW

NEUTRAL: THIS STABLE AND LOCKED POSITION PREVENTS OPERATION OF THE AIRSTAIRS. THE FLIGHT CREW MUST PULL THE SWITCH OUT TO MOVE IT FROM THE NEUTRAL POSITION.

RETRACT: WHEN GROUND CREW HOLDS THE SWITCH AGAINST THE SPRING IN THIS POSITION, THE AIRSTAIRS RETRACT IF THE TELESCOPIC HANDRAILS ARE FULLY STOWED.

EXTEND: WHEN GROUND CREW HOLDS THE SWITCH AGAINST THE SPRING IN THIS POSITION, THE AIRSTAIRS EXTEND.

02 STAIRS LIGHT

UP: STAIR LIGHTS COME ON, AS DOES THE YELLOW CONTROL LIGHT IN THE CABIN, IF:
- THE STAIRS ARE FULLY EXTENDED, AND
- POWER IS AVAILABLE FROM DC BUS 2.

DOWN: STAIR LIGHTS AND YELLOW CONTROL LIGHT ARE OFF.

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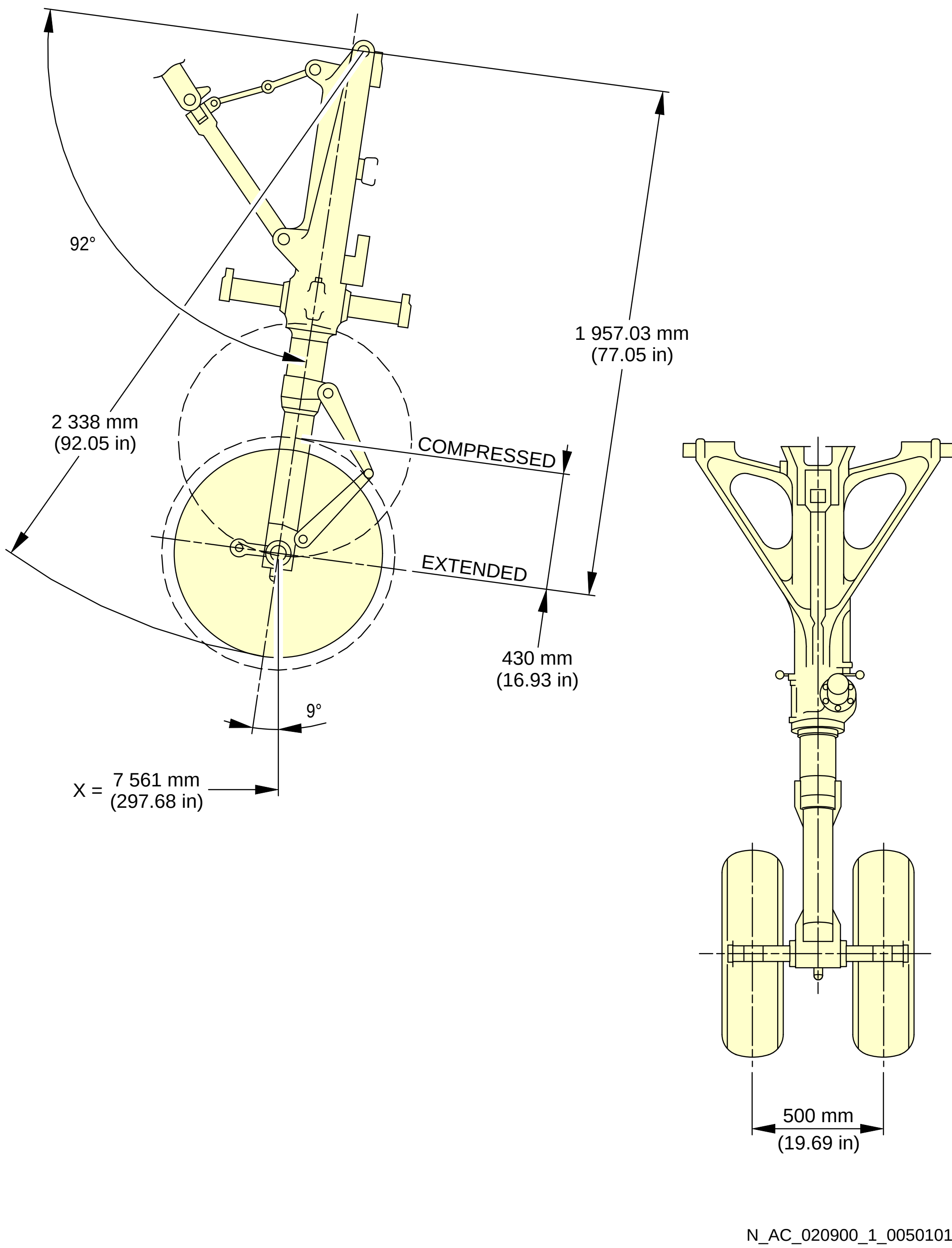
Operation of Airstairs for ACJ
FIGURE-2-9-0-991-028-A01

****ON A/C A318-100**



Landing Gear
Nose Landing Gear Dimensions
FIGURE-2-9-0-991-005-A01

****ON A/C A318-100**

Landing Gear Maintenance Pits

1. Description

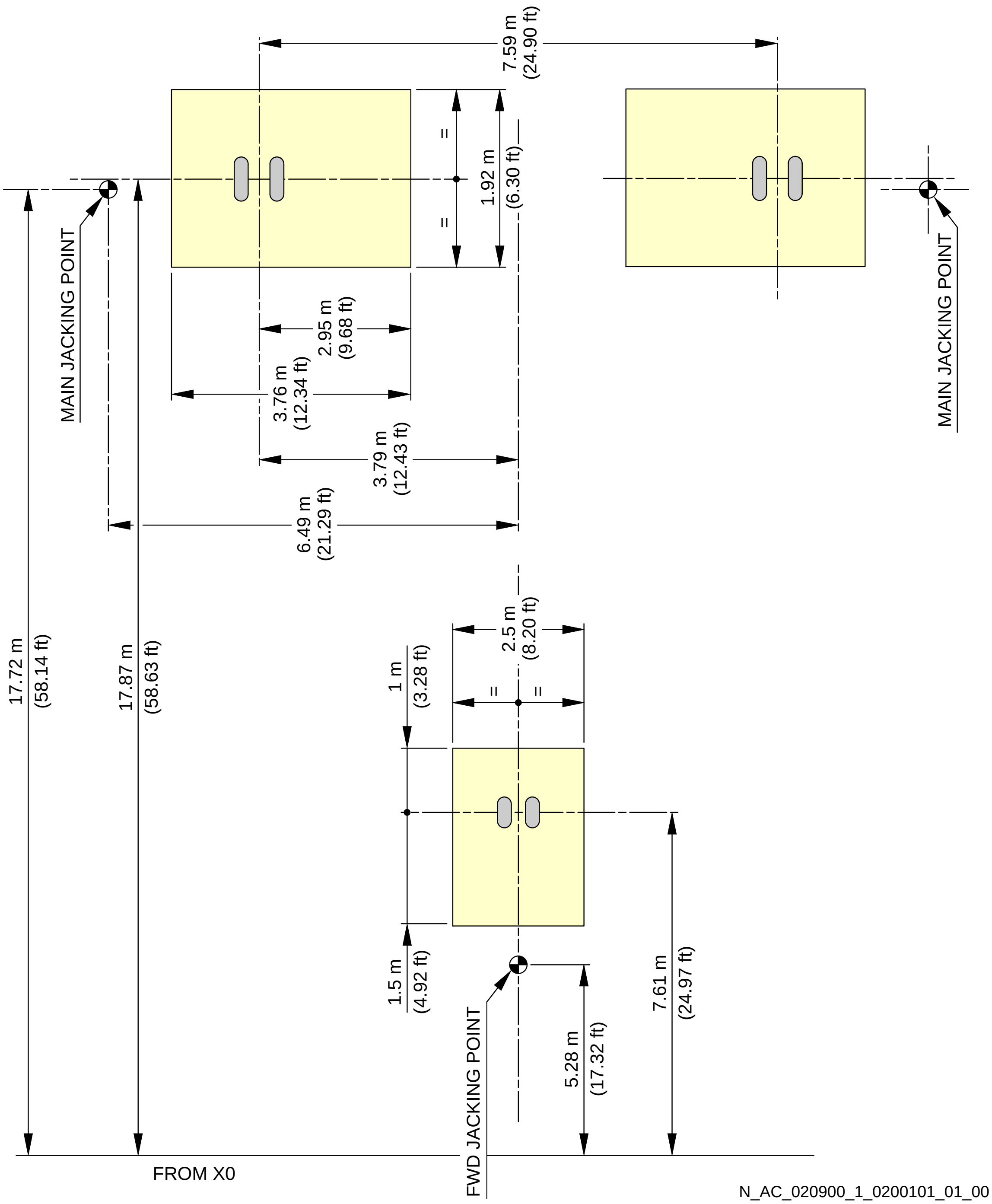
The minimum maintenance pit envelopes for the landing-gear shock absorber removal are shown in FIGURE 2-9-0-991-020-A and FIGURE 2-9-0-991-021-A.

All dimensions shown are minimum dimensions with zero clearances.

The dimensions for the pits have been determined as follows:
- The length and width of the pits allow the gear to rotate as the weight is taken off the landing gear.
- The depth of the pits allows the shock absorber to be removed when all the weight is taken off the landing gear.

Dimensions for elevators and associated mechanisms must be added to those in FIGURE 2-9-0-991-020-A and FIGURE 2-9-0-991-021-A.

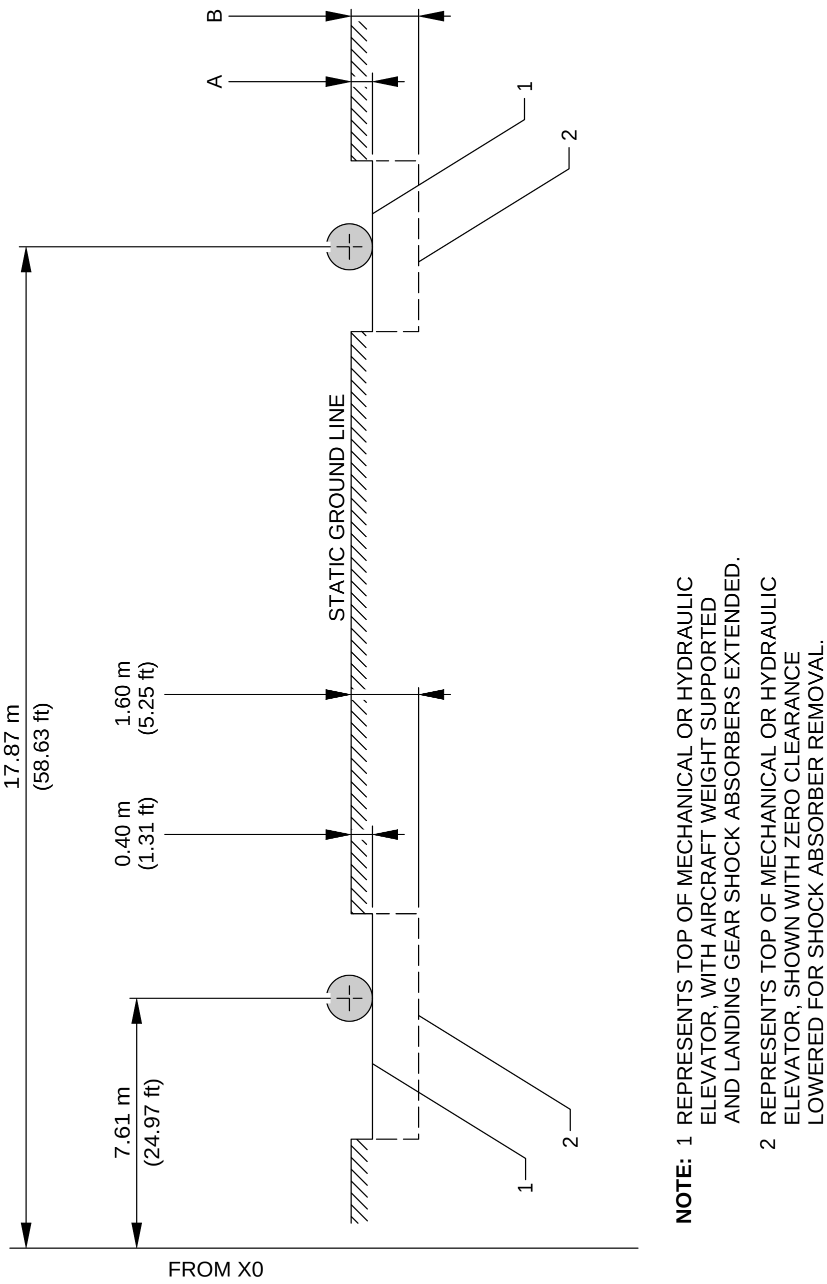
****ON A/C A318-100**



Landing Gear Maintenance Pits
Maintenance Pit Envelopes
FIGURE-2-9-0-991-020-A01

****ON A/C A318-100**

	A		B	
	m	ft	m	ft
DIM QUOTED IS WITH WHEELS REMOVED AND 153 mm (6.02 in) CLEARANCE AT JACKING DOME	0.52	1.71	1.17	3.84



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Landing Gear Maintenance Pits
Maintenance Pit Envelopes
FIGURE-2-9-0-991-021-A01

2-10-0 Exterior Lighting

****ON A/C A318-100**

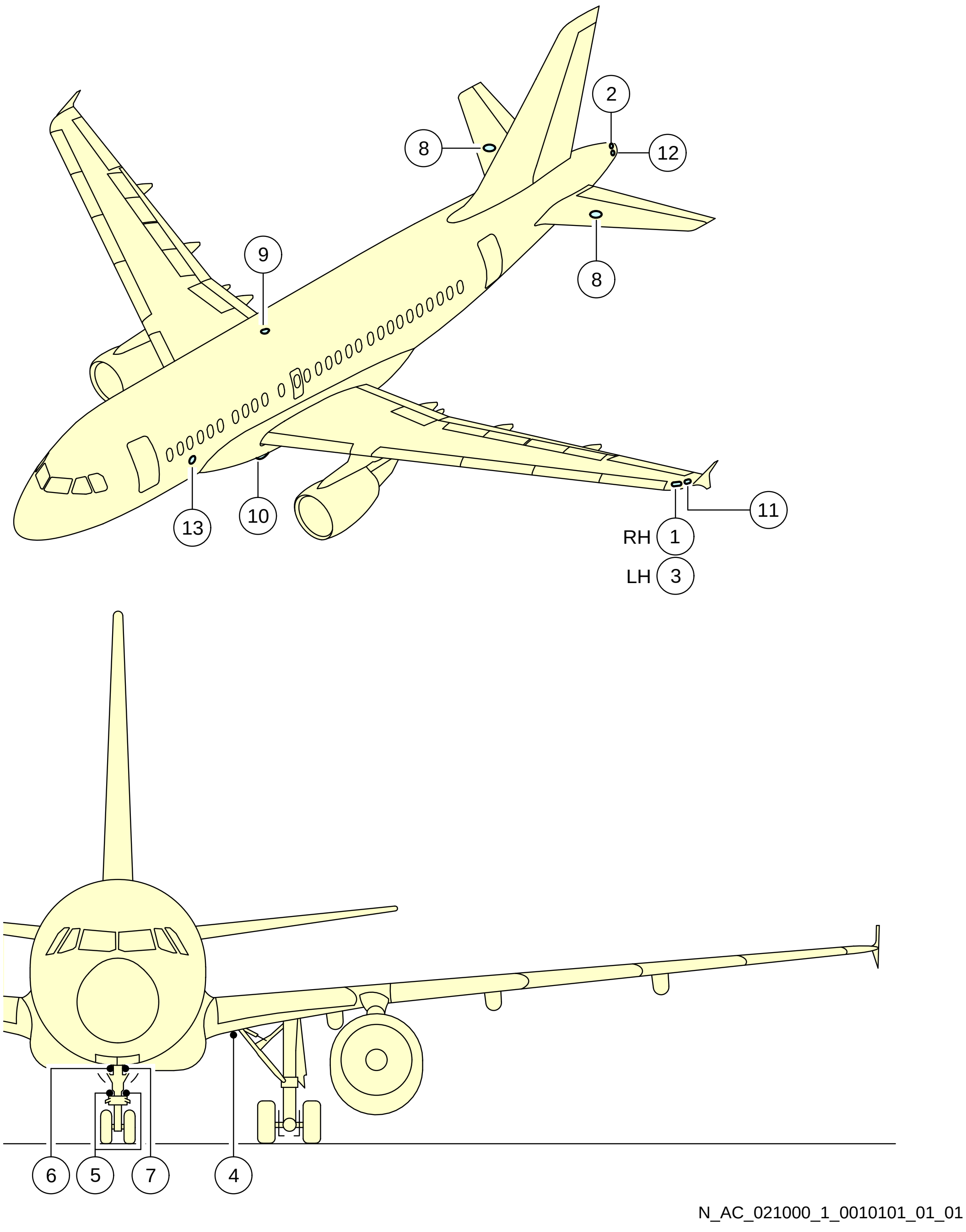
Exterior Lighting

1. General

This section provides the location of the aircraft exterior lighting.

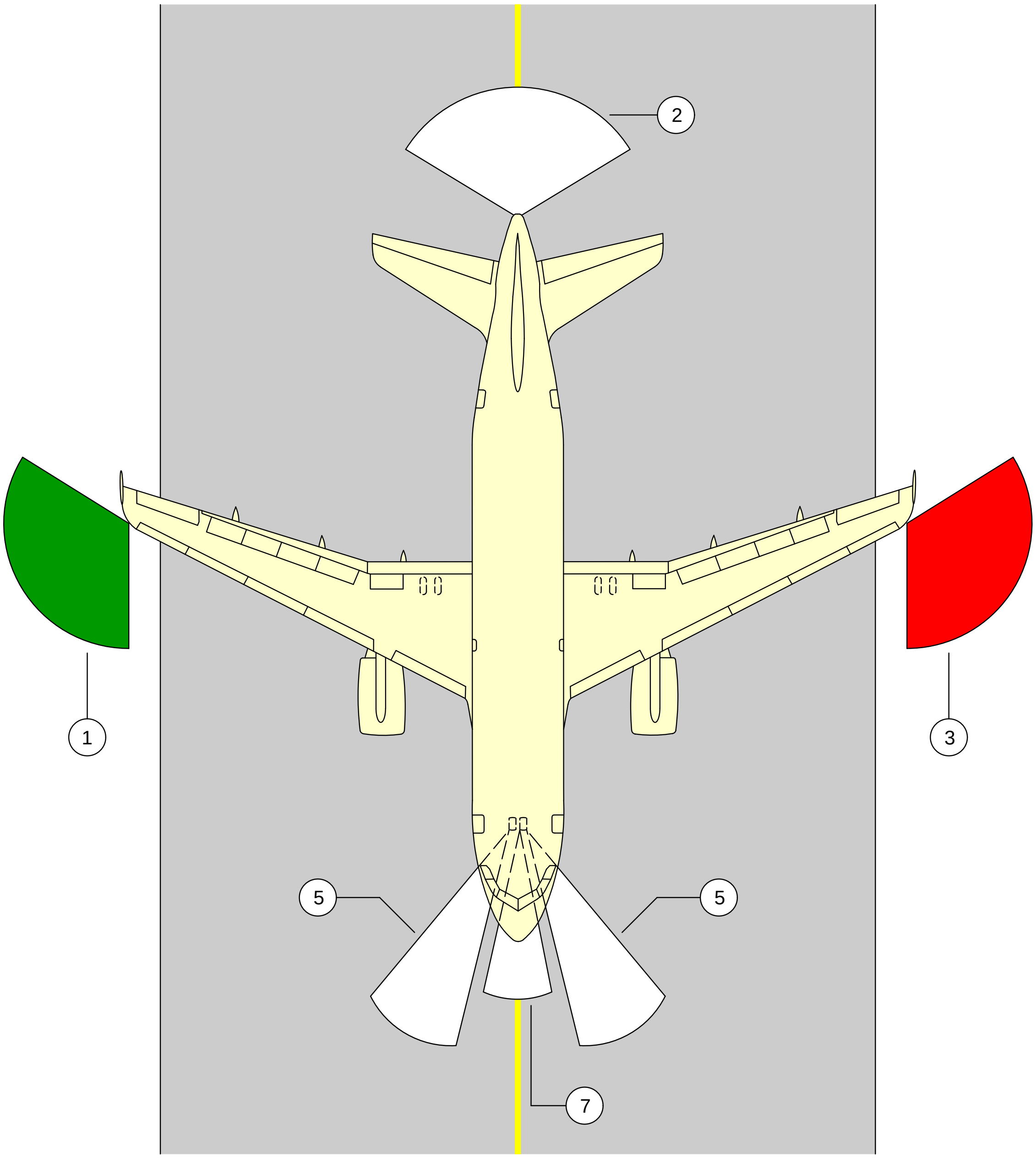
EXTERIOR LIGHTING	
ITEM	DESCRIPTION
1	RIGHT NAVIGATION LIGHT (GREEN)
2	TAIL NAVIGATION LIGHT (WHITE)
3	LEFT NAVIGATION LIGHT (RED)
4	RETRACTABLE LANDING LIGHT
5	RUNWAY TURN OFF LIGHT
6	TAXI LIGHT
7	TAKE-OFF LIGHT
8	LOGO LIGHT
9	UPPER ANTI-COLLISION LIGHT/BEACON (RED)
10	LOWER ANTI-COLLISION LIGHT/BEACON (RED)
11	WING STROBE LIGHT (HIGH INTENSITY, WHITE)
12	TAIL STROBE LIGHT (HIGH INTENSITY, WHITE)
13	WING/ENGINE SCAN LIGHT
14	WHEEL WELL LIGHT (DOME)
15	CARGO COMPARTMENT FLOOD LIGHT

**ON A/C A318-100



Exterior Lighting
FIGURE-2-10-0-991-001-A01

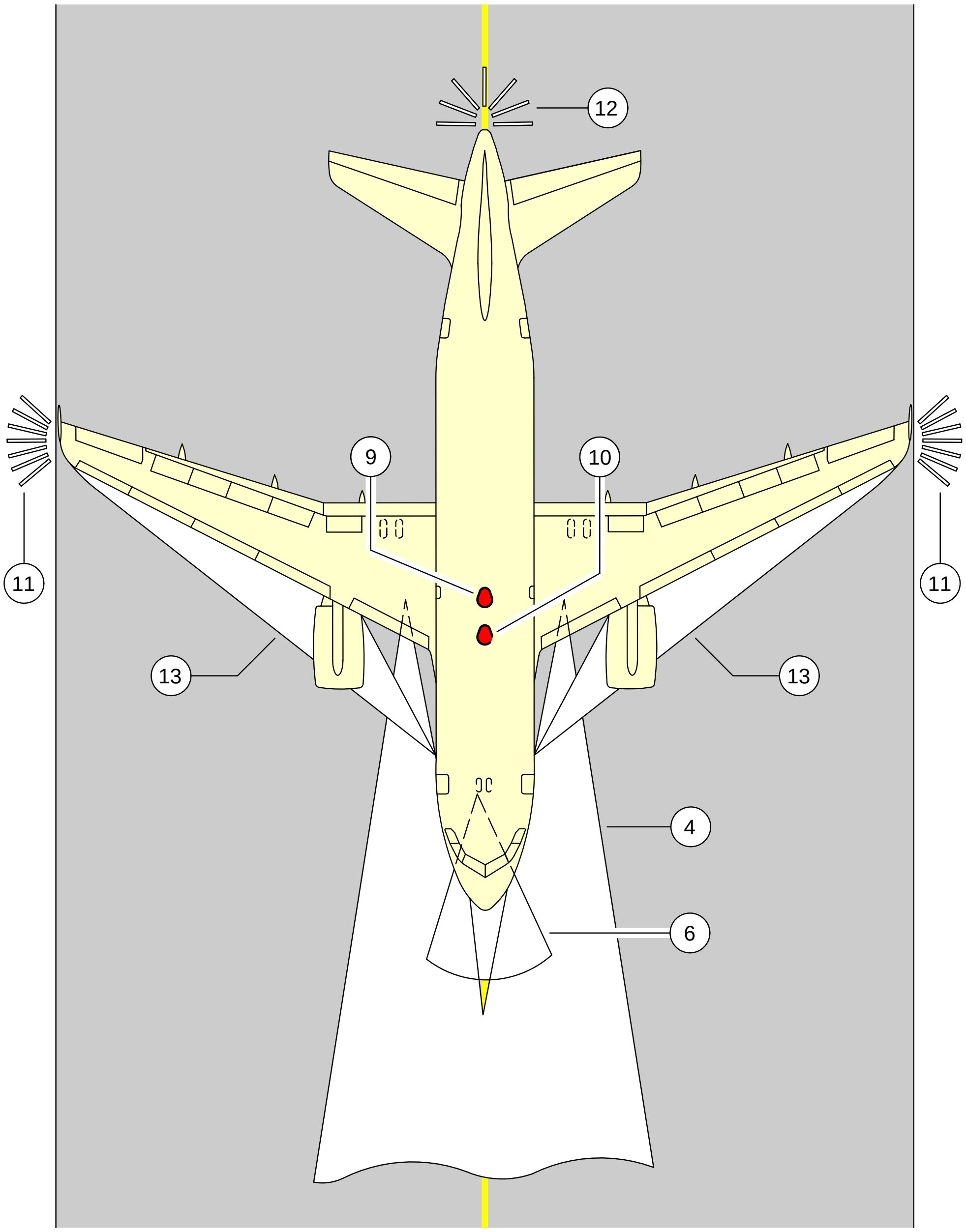
****ON A/C A318-100**



N_AC_021000_1_0020101_01_01

Exterior Lighting
FIGURE-2-10-0-991-002-A01

****ON A/C A318-100**



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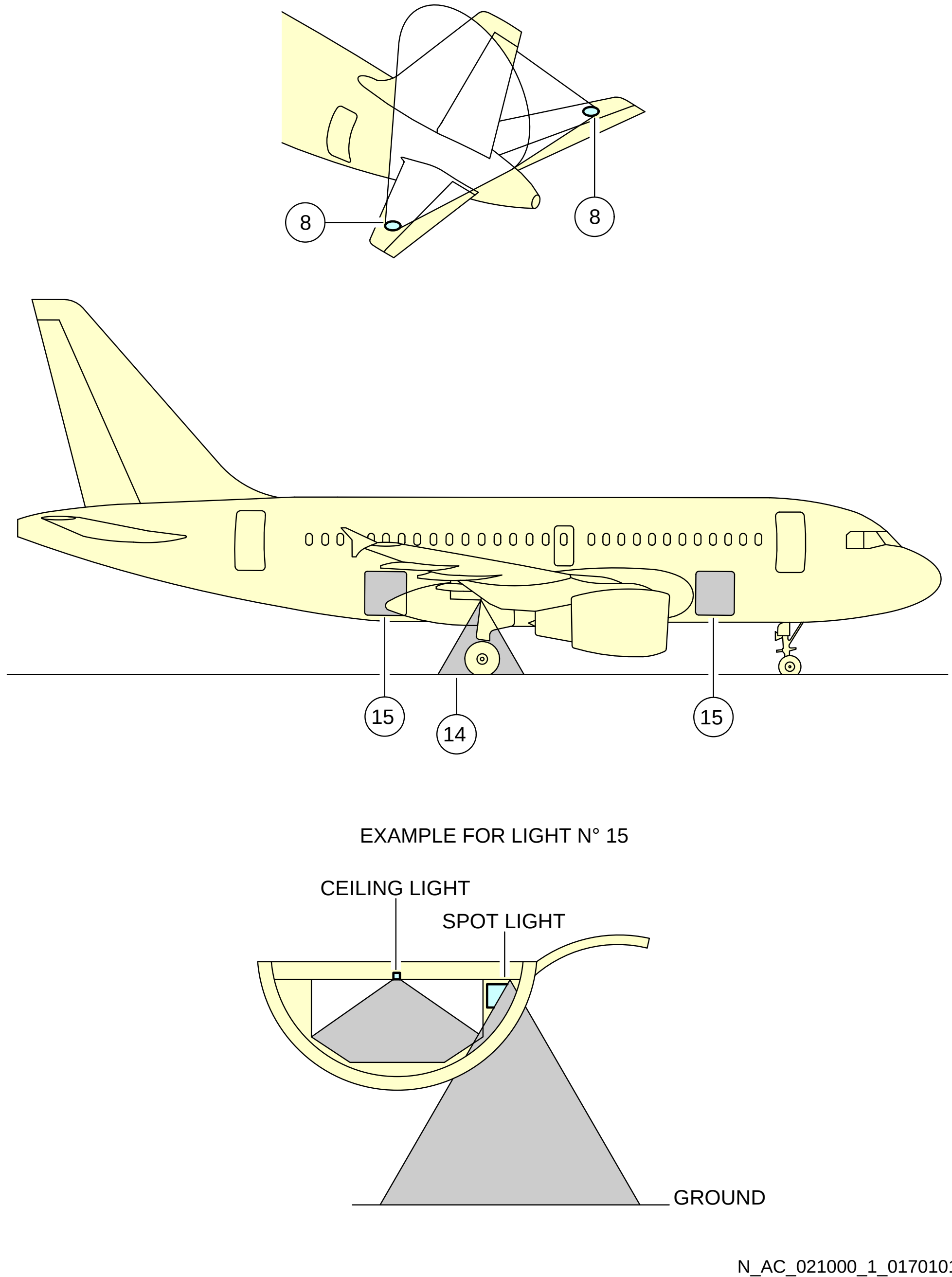
Exterior Lighting
FIGURE-2-10-0-991-003-A01

****ON A/C A318-100**



Exterior Lighting
FIGURE-2-10-0-991-017-A01

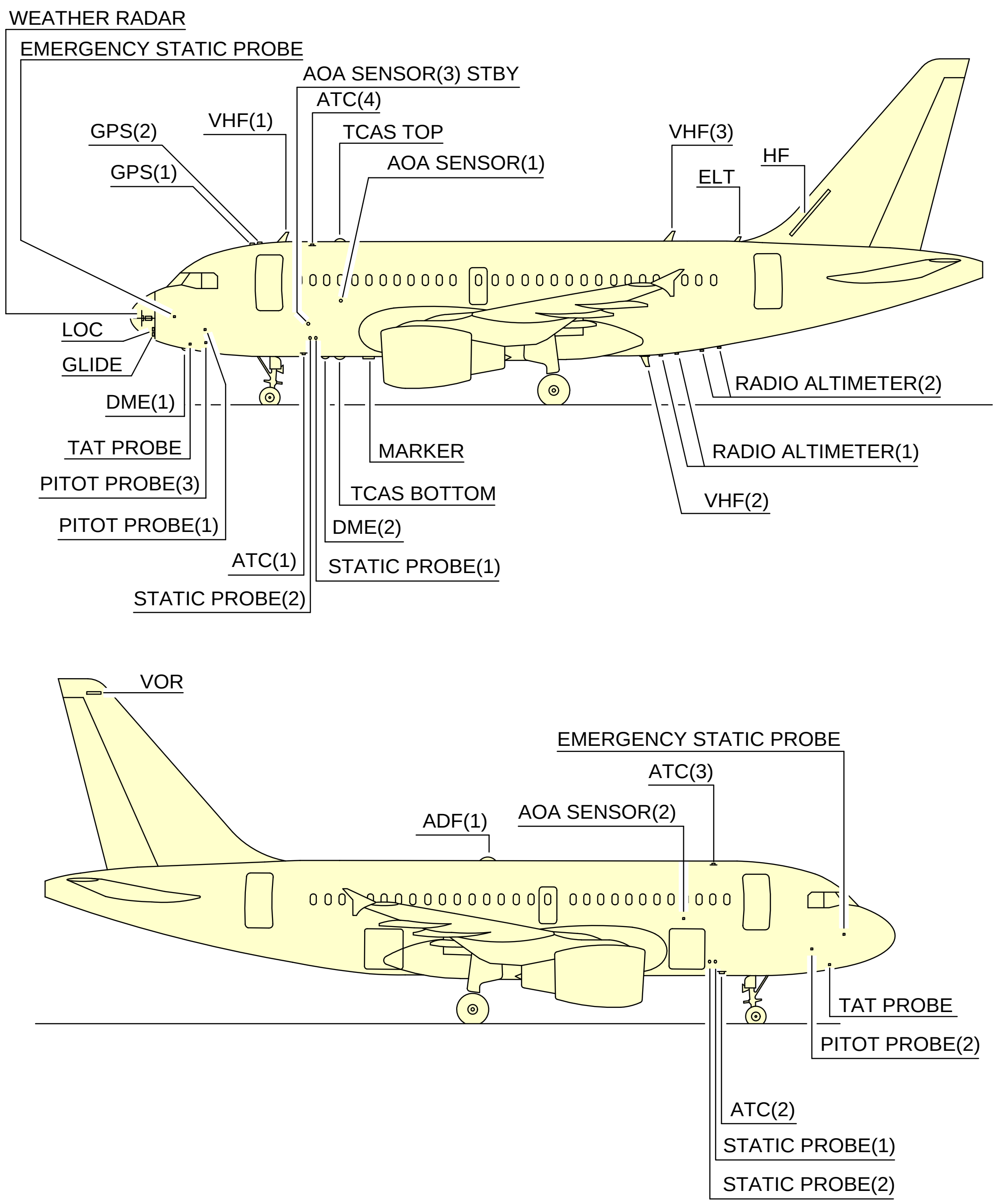
2-11-0 Antennas and Probes Location

****ON A/C A318-100**

Antennas and Probes Location

1. This section gives the location of antennas and probes.

**ON A/C A318-100



NOTE: DEPENDING ON AIRCRAFT CONFIGURATION

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Antennas and Probes
Location
FIGURE-2-11-0-991-001-A01

2-12-0 Power Plant

****ON A/C A318-100**

Auxiliary Power Unit

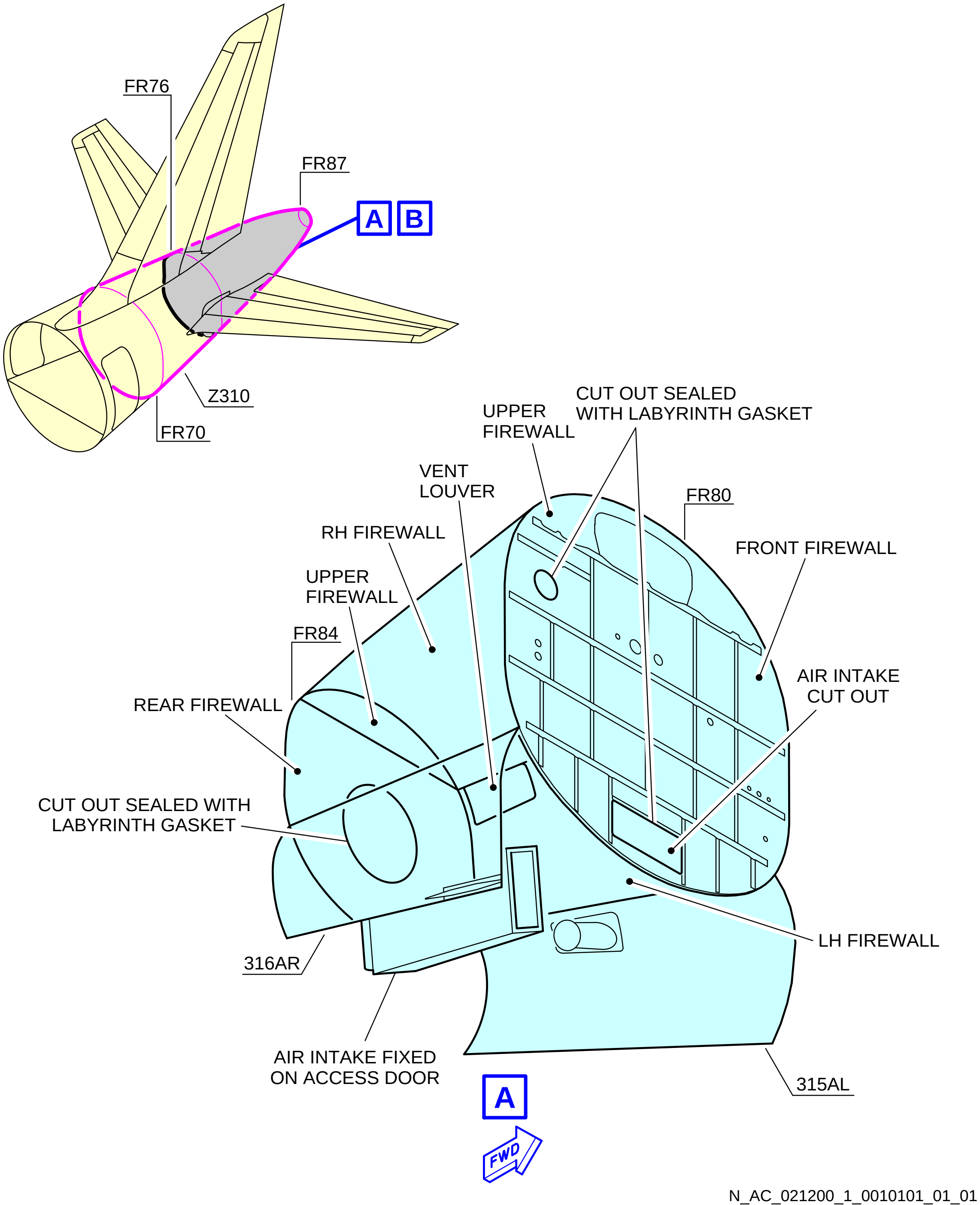
1. General

   The APU is installed at the rear part of the fuselage in the tail cone. An air intake system with a flap-type door is installed in front of the APU compartment. The exhaust gases pass overboard at the end of the fuselage cone.

2. Controls and Indication

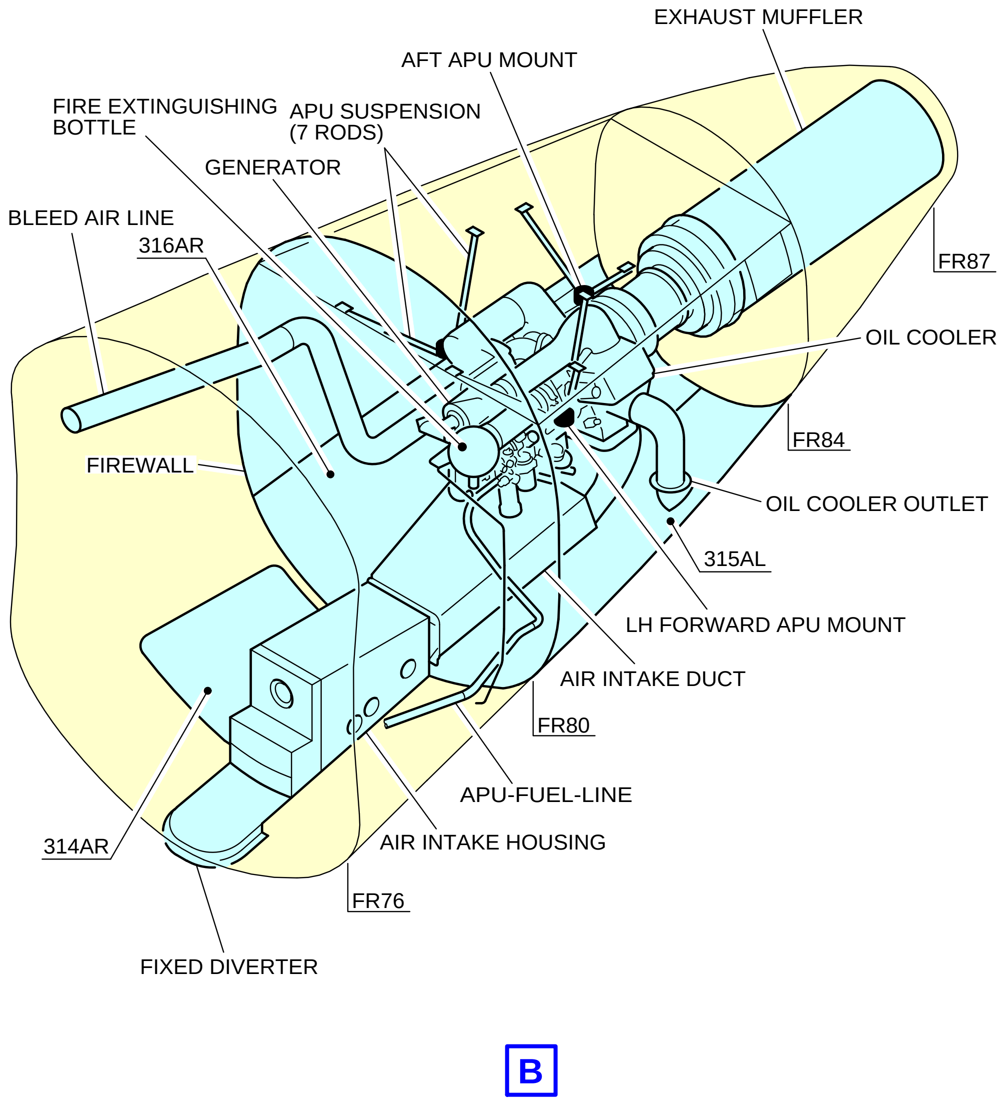
   The primary APU controls and indications are installed on the overhead panel, on the center pedestal and on the center instrument panel. Additionally, an external APU panel is installed on the nose landing gear to initiate an APU emergency shutdown.

****ON A/C A318-100**



Auxiliary Power Unit
Access Doors
FIGURE-2-12-0-991-001-A01

**ON A/C A318-100



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Auxiliary Power Unit
General Layout
FIGURE-2-12-0-991-002-A01

****ON A/C A318-100**

Engine and Nacelle

1. Engine and Nacelle - CFM56 Engine

A. Engine

The aircraft has two CFM International CFM56 engines that supply power to the aircraft.
The engines are turbofan engines that have:

- A high bypass ratio,
- A Full Authority Digital Engine Control (FADEC),
- A fuel system,
- An oil system,
- An air system,
- A thrust reverser system,
- An ignition system and a start system.

The engine has:
Two compressor turbine assemblies:

- The Low Pressure (LP) compressor turbine assembly,
- The High Pressure (HP) compressor turbine assembly.

Each turbine operates its associated compressor via a shaft.

- One accessory gearbox,
- One combustion chamber.

The engine operates as follows:

(1) The LP compressor, compresses the air.

(2) Then, the air is divided into two flows:
   - Most of the air flows out of the core engine, and provides most of the engine thrust.
   - The remaining air enters the core engine.

(3) The HP compressor compresses the air that enters the core engine.

(4) The fuel is added to and mixed with the compressed air of the core engine. The mixture is ignited in the combustion chamber.

(5) The gas that results from combustion drives the HP and the LP turbines.
   - The rotation speed of the fan provides the N1 engine parameter.
   - The rotation speed of the HP rotor provides the N2 engine parameter.
   - The N1 and N2 engine parameters appear on the Engine/Warning Display (E/WD).
   - The N1 and N2 engine parameters are current rotation speeds displayed in percentage.

The FADEC uses:

- The N1 engine parameter to compute the applicable engine thrust,
- The N1 and N2 engine parameters for engine control and monitoring.

B. Nacelle

The cowls enclose the periphery of the engine so as to form the engine nacelle. Each engine is housed in a nacelle suspended from a pylon attached below the wing.
The nacelle installation is designed to provide cooling and ventilation air for engine accessories mounted along the fan and core casing. The nacelle provides:

- Protection for the engine and the accessories
- Airflow around the engine during its operation
- Lighting protection
- HIRF and EMI attenuation.

2. Engine and Nacelle - PW6000 Engine

A. Engine

The aircraft has two Pratt & Whitney PW6000 engines that supply power to the aircraft.
The engines are turbofan engines that have:

- A high bypass ratio,
- A Full Authority Digital Engine Control (FADEC),
- A fuel system,
- An oil system,
- An air system,
- A thrust reverser system,
- An ignition system and a start system.

The engine has:
Two compressor turbine assemblies:

- The Low Pressure (LP) compressor turbine assembly,
- The High Pressure (HP) compressor turbine assembly.

Each turbine operates its associated compressor via a shaft.

- One accessory gearbox,
- One combustion chamber.

The engine operates as follows:

(1) The LP compressor, compresses the air.

(2) Then, the air is divided into two flows:
  - Most of the air flows out of the core engine, and provides most of the engine thrust.
  - The remaining air enters the core engine.

(3) The HP compressor compresses the air that enters the core engine.

(4) The fuel is added to and mixed with the compressed air of the core engine. The mixture is ignited in the combustion chamber.

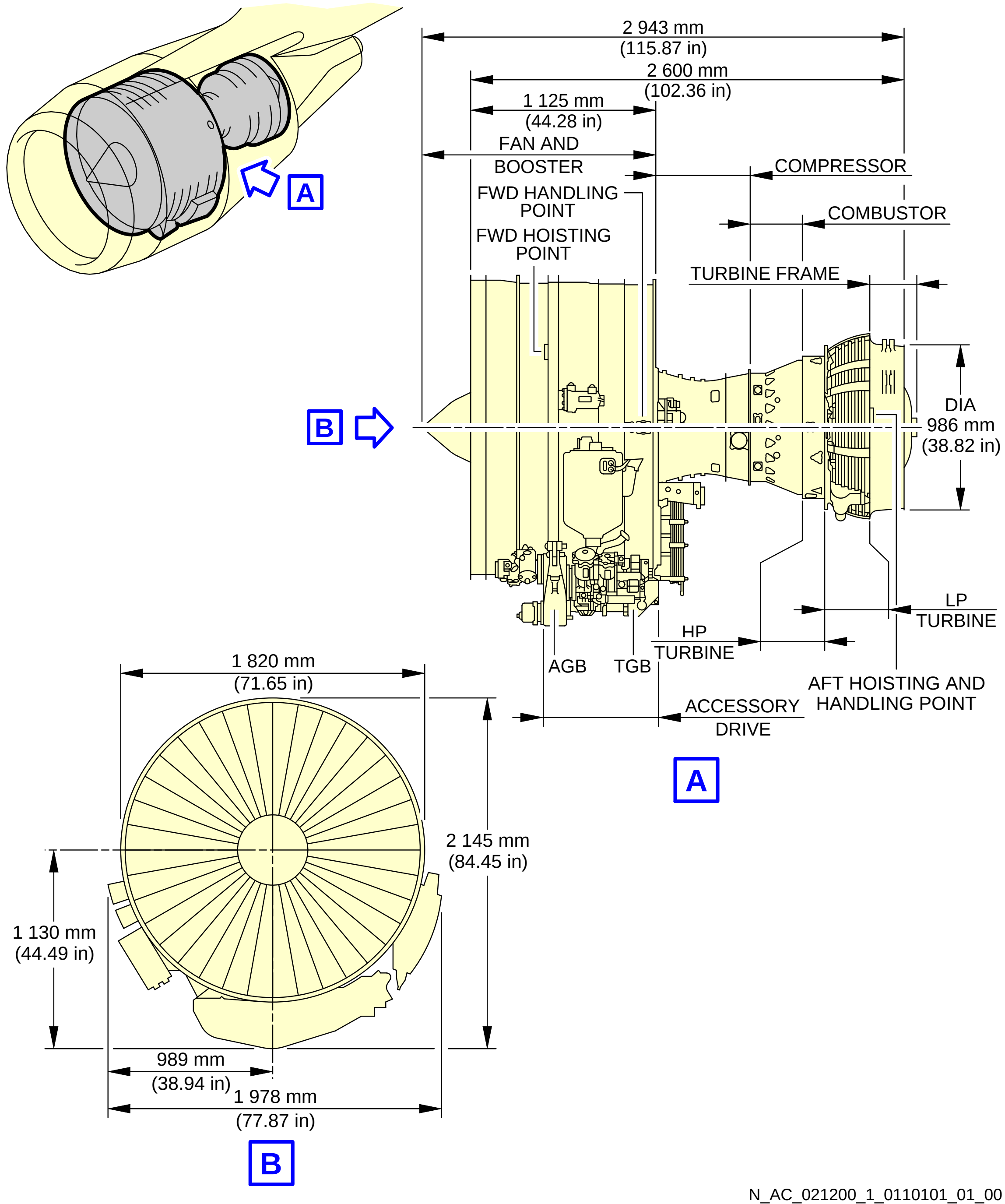
(5) The gas that results from combustion drives the HP and the LP turbines.
- The rotation speed of the fan provides the N1 engine parameter.
- The rotation speed of the HP rotor provides the N2 engine parameter.
- The N1 and N2 engine parameters appear on the Engine/Warning Display (E/WD).
- The N1 and N2 engine parameters are current rotation speeds displayed in percentage.

The FADEC uses:
- The N1 engine parameter to compute the applicable engine thrust,
- The N1 and N2 engine parameters for engine control and monitoring.

B. Nacelle

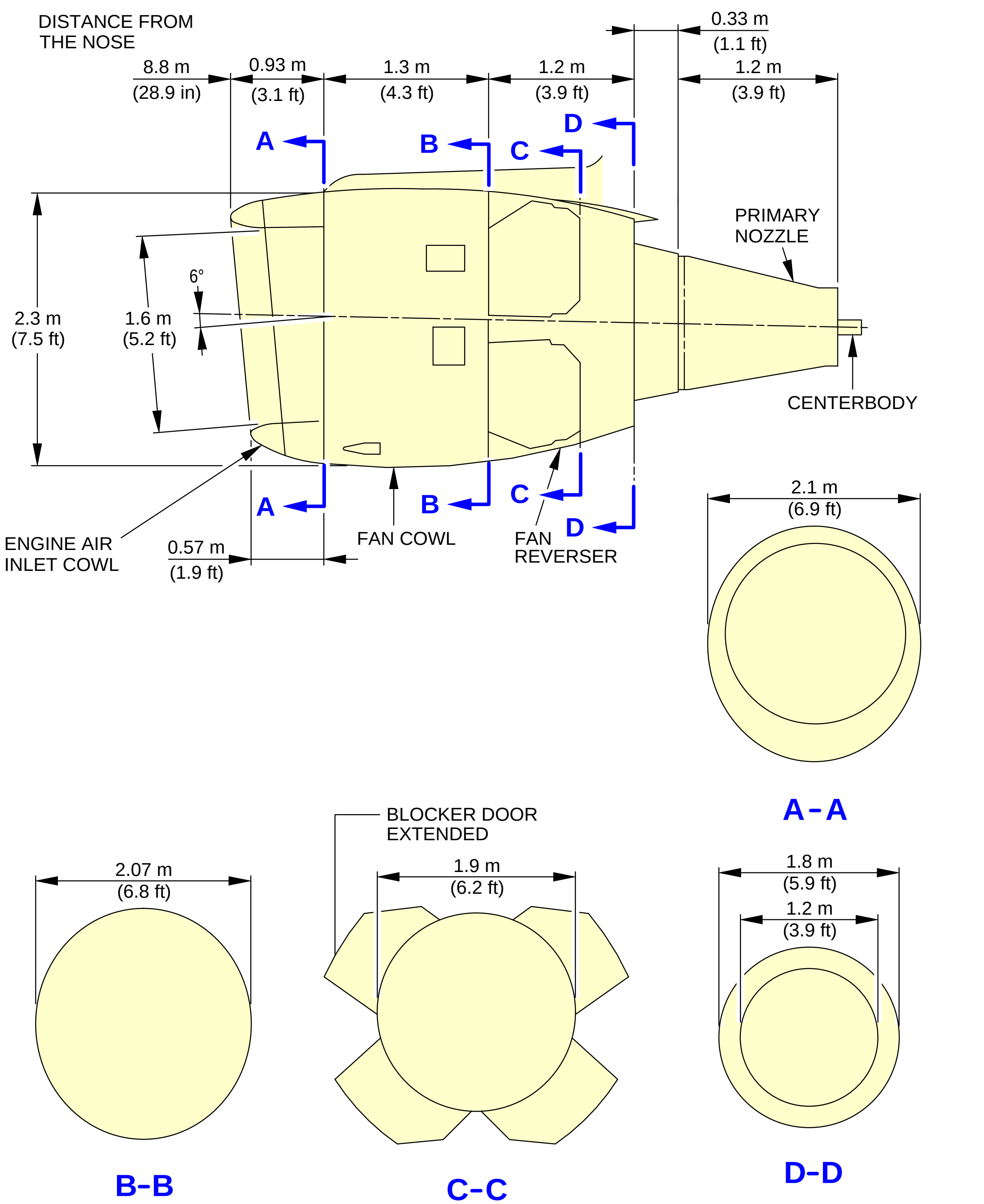
The cowls enclose the periphery of the engine so as to form the engine nacelle. Each engine is housed in a nacelle suspended from a pylon attached below the wing.
The nacelle installation is designed to provide cooling and ventilation air for engine accessories mounted along the fan and core casing. The nacelle provides:
- Protection for the engine and the accessories
- Airflow around the engine during its operation
- Lighting protection
- HIRF and EMI attenuation.

****ON A/C A318-100**



Power Plant Handling
Major Dimensions - CFM56 Series Engine
FIGURE-2-12-0-991-011-A01

****ON A/C A318-100**



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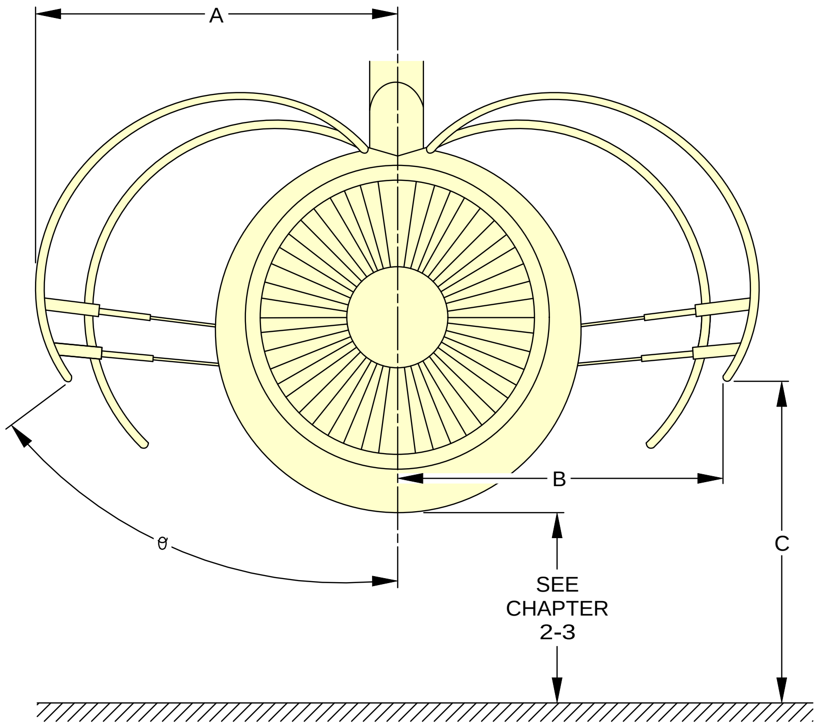
Power Plant Handling
Major Dimensions - CFM56 Series Engine
FIGURE-2-12-0-991-012-A01

****ON A/C A318-100**



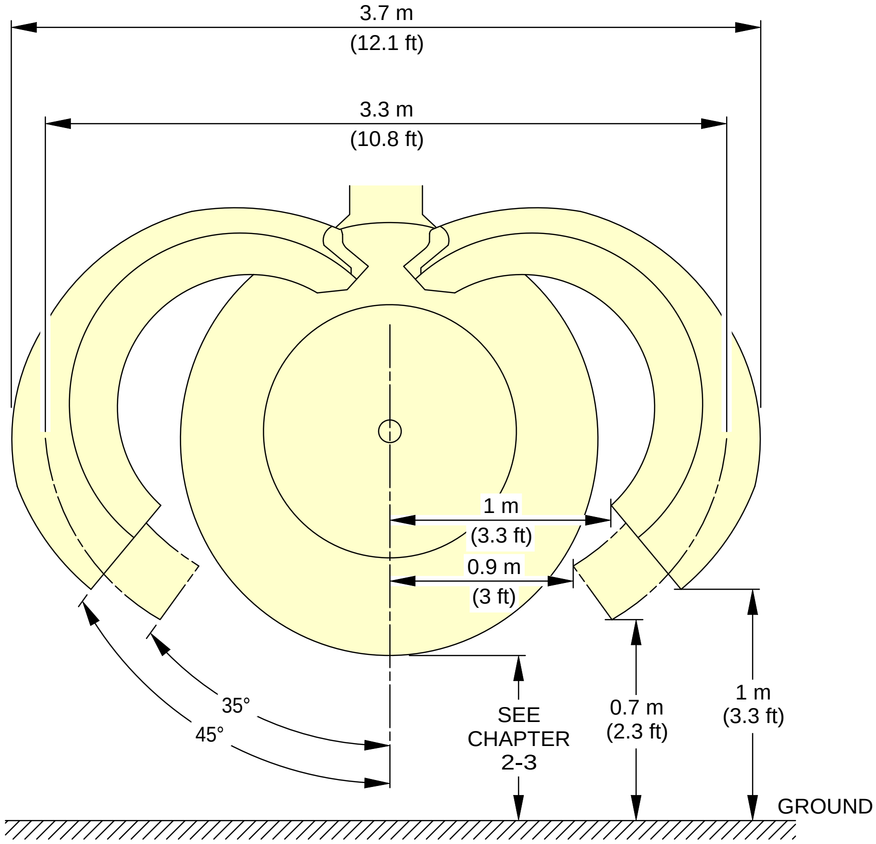
NOTE: APPROXIMATE DIMENSIONS.

m (ft)	θ	A	B	C
VIEW COWLING AFT	42°27	1.8 (5.9)	1.5 (4.9)	1.3 (4.3)
	55°15	2.0 (6.6)	1.8 (5.9)	1.7 (5.6)
VIEW COWLING FWD	40°40	1.8 (5.9)	1.4 (4.6)	1.3 (4.3)
	52°56	2.0 (6.6)	1.7 (5.6)	1.6 (5.2)

N_AC_021200_1_0130101_01_01

Power Plant Handling
Fan Cowls - CFM56 Series Engine
FIGURE-2-12-0-991-013-A01

****ON A/C A318-100**



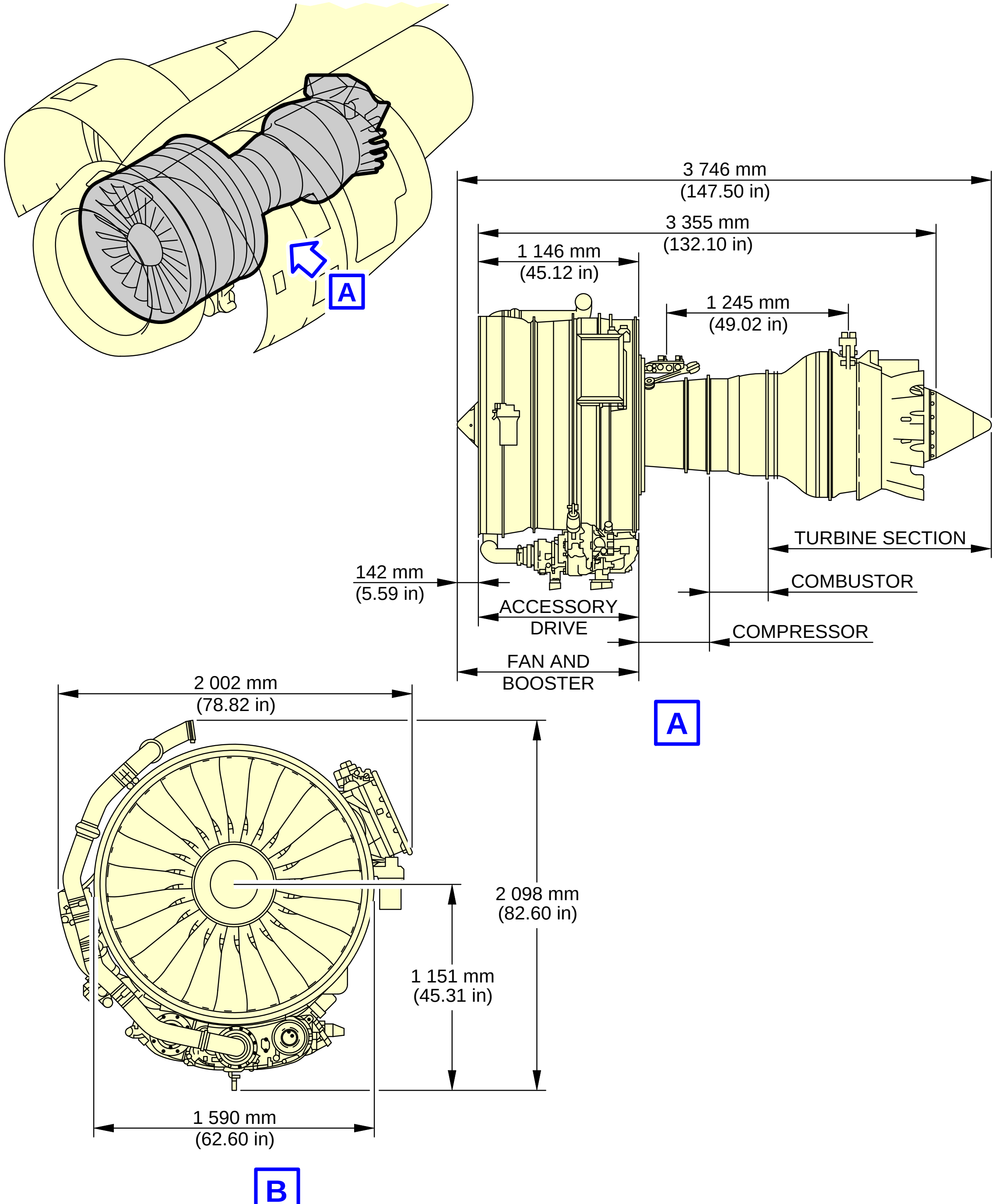
NOTE: APPROXIMATE DIMENSIONS.

CAUTION
DO NOT ACTUATE SLATS:
- WITH THRUST REVERSER COWLS 45° OPEN POSITION
- WITH BLOCKER DOORS OPEN AND THRUST REVERSER COWLS AT 35° AND 45° OPEN POSITION.

N_AC_021200_1_0140101_01_01

Power Plant Handling
Thrust Reverser Cowls - CFM56 Series Engine
FIGURE-2-12-0-991-014-A01

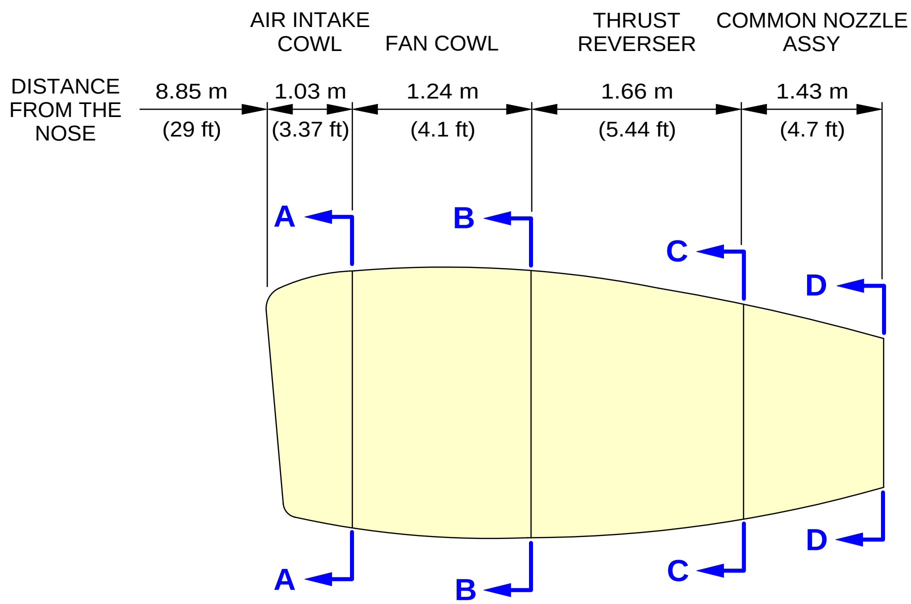
****ON A/C A318-100**



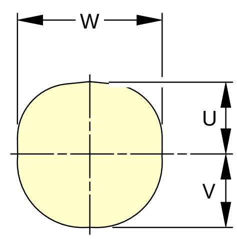
N_AC_021200_1_0150101_01_00

Power Plant Handling
Major Dimensions - PW 6000 Series Engine
FIGURE-2-12-0-991-015-A01

****ON A/C A318-100**



	W	U	V
A-A	2 m (6.6 ft)	0.9 m (3 ft)	1.05 m (3.4 ft)
B-B	2.08 m (6.8 ft)	0.96 m (3.1 ft)	1.07 m (3.5 ft)
C-C	1.63 m (5.3 ft)	0.76 m (2.5 ft)	0.81 m (2.7 ft)
D-D	1.12 m (3.7 ft)	0.56 m (1.8 ft)	0.56 m (1.8 ft)

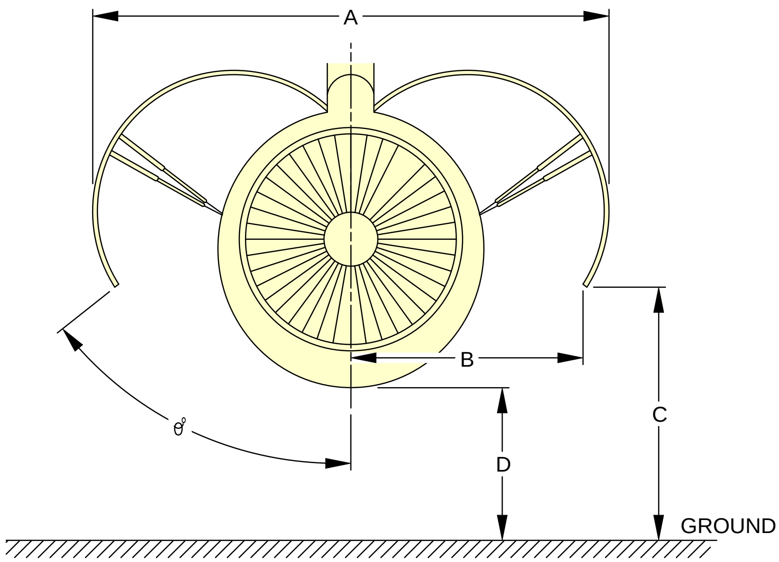


NOTE: ALL SIZES GIVEN ON THIS ILLUSTRATION ARE APPROXIMATE

N_AC_021200_1_0160101_01_00

Power Plant Handling
Nacelle Dimensions - PW 6000 Series Engine
FIGURE-2-12-0-991-016-A01

****ON A/C A318-100**



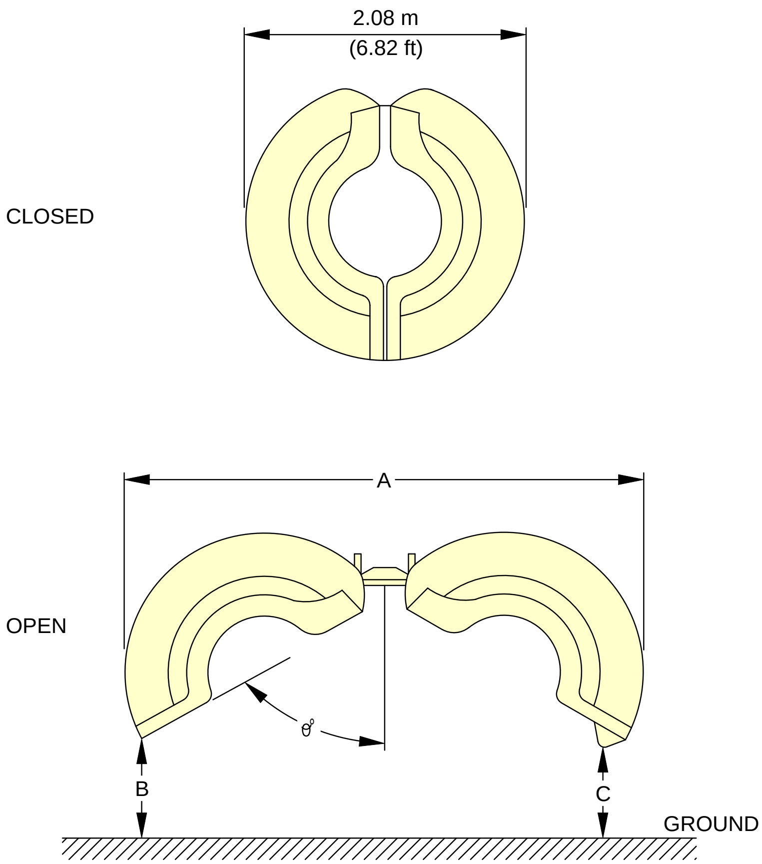
θ	A	B	C	D
27°	3.05 m (10 ft)	0.90 m (2.95 ft)	D + 0.2 m (D + 0.7 ft)	SEE CHAPTER 2-3
53°	3.85 m (12.63 ft)	1.65 m (5.41 ft)	D + 0.84 m (D + 2.8 ft)	

NOTE: APPROXIMATE DIMENSIONS.
ONLY MAIN DIMENSIONS SHOWN.

N_AC_021200_1_0170101_01_01

Power Plant Handling
Fan Cowls - PW 6000 Series Engine
FIGURE-2-12-0-991-017-A01

****ON A/C A318-100**



θ	A	B	C
45°	3.5 m (11.48 ft)	1.1 m (3.6 ft)	1.08 m (3.5 ft)

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Power Plant Handling
Thrust Reverser Halves - PW 6000 Series Engine
FIGURE-2-12-0-991-018-A01

2-13-0 Leveling, Symmetry and Alignment

****ON A/C A318-100**

Leveling, Symmetry and Alignment

1. Quick Leveling

   There are three alternative procedures to level the aircraft:
   - Quick leveling procedure with Air Data/Inertial Reference Unit (ADIRU).
   - Quick leveling procedure with a spirit level in the passenger compartment.
   - Quick leveling procedure with a spirit level in the FWD cargo compartment.

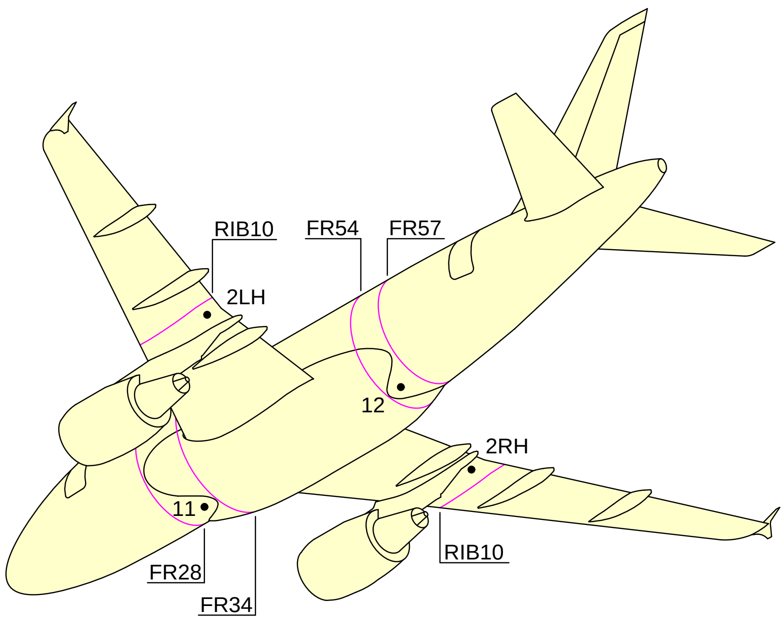
2. Precise Leveling

   For precise leveling, it is necessary to install sighting rods in the receptacles located under the fuselage (points 11 and 12 for longitudinal leveling) and under the wings (points 2LH and 2RH for lateral leveling) and use a sighting tube. With the aircraft on jacks, adjust the jacks until the reference marks on the sighting rods are aligned in the sighting plane (aircraft level).

3. Symmetry and Alignment Check

   Possible deformation of the aircraft is measured by photogrammetry.

****ON A/C A318-100**



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Location of the Leveling Points
FIGURE-2-13-0-991-001-A01

2-14-0 Jacking

****ON A/C A318-100**

Jacking for Maintenance

1. Aircraft Jacking Points for Maintenance

   A. General

      (1) The A318 can be jacked:
         - At not more than 53 000 kg (116 845 lb),
         - Within the limits of the permissible wind speed when the aircraft is not in a closed environment.

   B. Primary Jacking Points

      (1) The aircraft is provided with three primary jacking points:
         - One located under the forward fuselage (FR8),
         - Two located under the wings (one under each wing, located at the intersection of RIB9 and the datum of the rear spar).

      (2) Three jack adapters are used as intermediary parts between the aircraft and the jacks:
         - One male spherical jack adapter of 19 mm (0.75 in) radius, forming part of the aircraft structure (FR8),
         - Two wing jack pads (one attached to each wing at RIB9 with 2 bolts) for the location of the jack adaptor.
           Wing jack pads are ground equipment.

   C. Auxiliary Jacking Points (Safety Stay)

      (1) When the aircraft is on jacks, it is recommended that a safety stay be placed under the fuselage, between FR73 and FR74, to prevent tail tipping caused by accidental displacement of the center of gravity.

      (2) The safety stay must not be used to lift the aircraft.

      (3) A male spherical ball pad with a 19 mm (0.75 in) radius, forming part of the aircraft structure, is provided for using the safety stay.

2. Jacks and Safety Stay

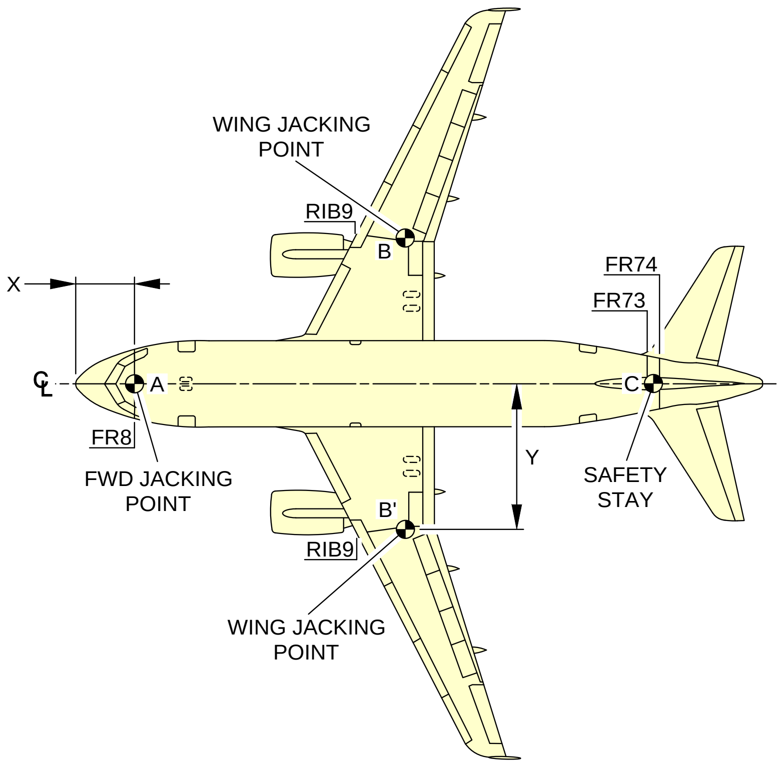
   A. Jack Design

      (1) The maximum permitted loads given in the table in FIGURE 2-14-0-991-001-A are the maximum loads applicable on jack fittings.

(2) In the fully retracted position (jack stroke at minimum), the height of the jack is such that the jack may be placed beneath the aircraft in the most adverse conditions, namely, tires deflated and shock absorbers depressurized. In addition, there must be a clearance of approximately 50 mm (1.97 in) between the aircraft jacking point and the jack upper end.

(3) The lifting jack stroke enables the aircraft to be jacked up so that the fuselage longitudinal datum line (aircraft center line) is parallel to the ground, with a clearance of 100 mm (3.94 in) between the main landing gear wheels and the ground. This enables the landing gear extension/retraction tests to be performed.

****ON A/C A318-100**



		X		Y		MAXIMUM LOAD ELIGIBLE
		m	ft	m	ft	daN
FORWARD FUSELAGE JACKING POINT	A	2.74	8.99	0	0	6 800
WING JACKING POINT	B	15.18	49.80	6.50	21.33	28 500
	B'	15.18	49.80	-6.50	-21.33	28 500
SAFETY STAY	C	26.44	86.75	0	0	2 000

NOTE:
SAFETY STAY IS NOT USED FOR JACKING.

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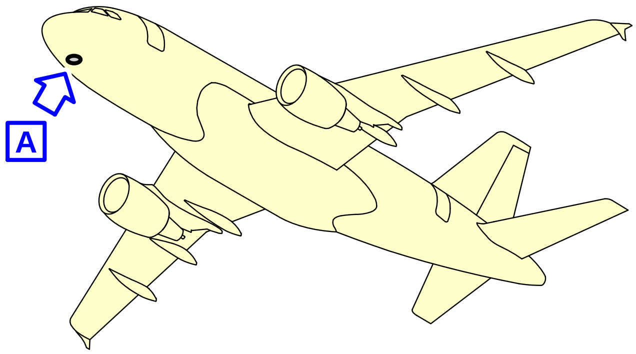
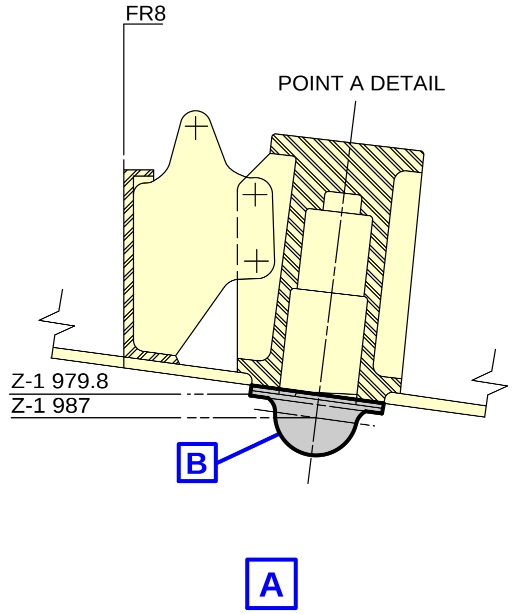
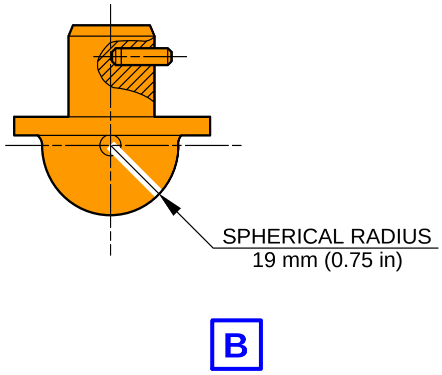
Jacking for Maintenance
Jacking Point Locations
FIGURE-2-14-0-991-001-A01

****ON A/C A318-100**







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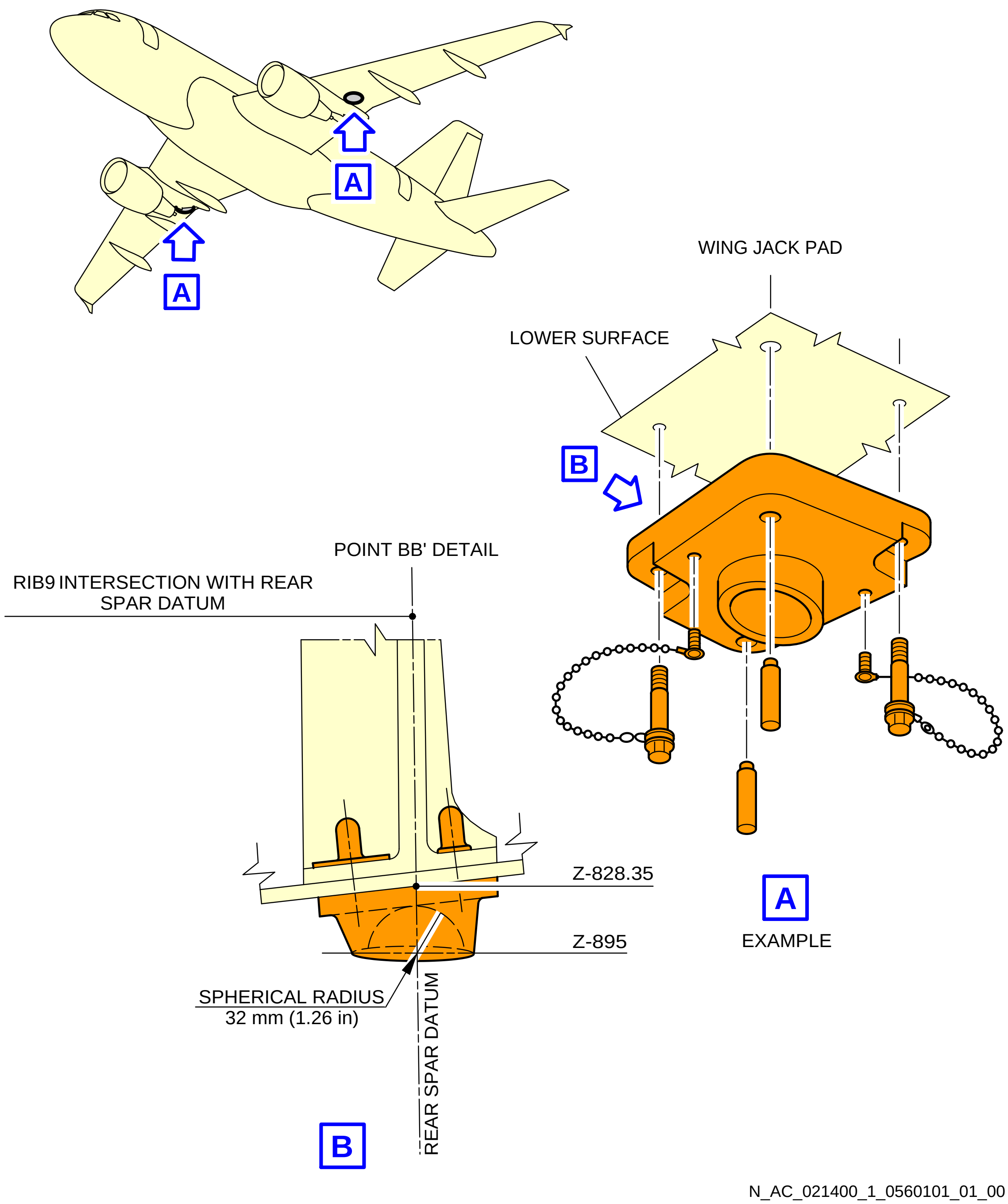
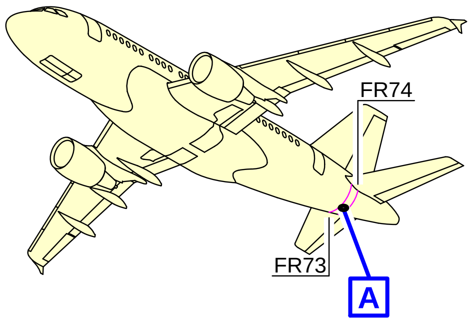
Jacking for Maintenance
Forward Jacking Point
FIGURE-2-14-0-991-003-A01

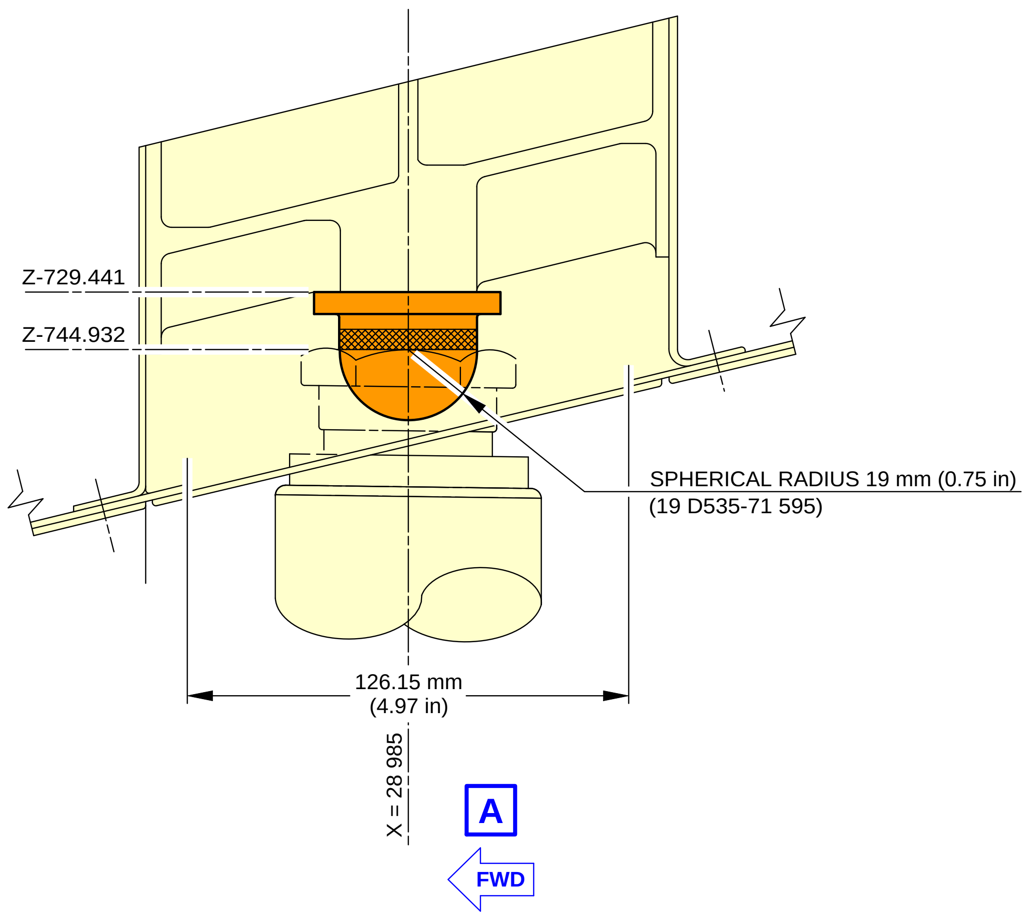
****ON A/C A318-100**



Jacking for Maintenance
Wing Jacking Points
FIGURE-2-14-0-991-056-A01

****ON A/C A318-100**

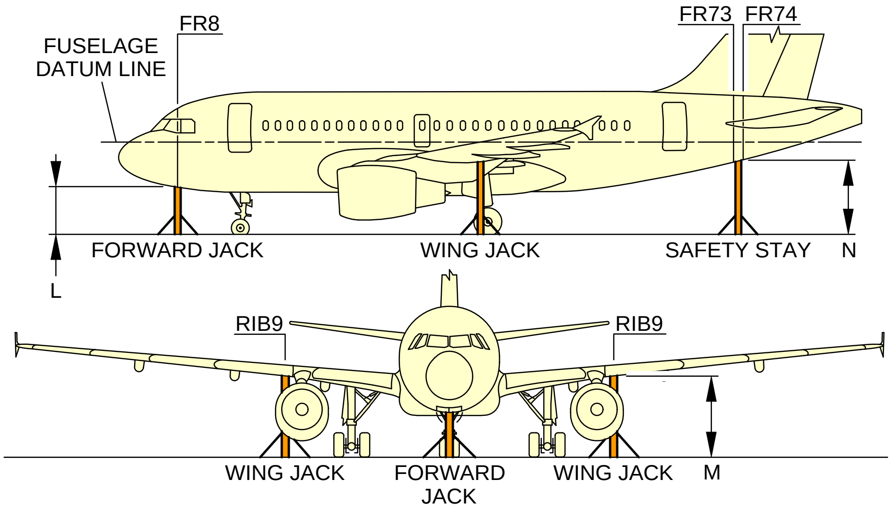




N_AC_021400_1_0570101_01_01

Jacking for Maintenance
Safety Stay
FIGURE-2-14-0-991-057-A01

****ON A/C A318-100**



TYPICAL JACK INSTALLATION SHOWN

CONFIGURATION	DESCRIPTION	DISTANCE BETWEEN JACKING/SAFETY POINTS AND THE GROUND		
		L (FORWARD JACK)	M (WING JACK)	N (SAFETY STAY)
– AIRCRAFT ON WHEELS	- NLG SHOCK ABSORBER DEFLATED AND NLG TIRES FLAT - MLG STANDARD TIRES, WITH STANDARD SHOCK ABSORBERS	1 565 mm (61.61 in)	3 136 mm (123.46 in)	3 685 mm (145.08 in)
	TIRES FLAT SHOCK ABSORBERS DEFLATED	1 660 mm (65.35 in)	2 736 mm (107.72 in)	2 836 mm (111.65 in)
	STANDARD TIRES STANDARD SHOCK ABSORBERS	1 851 mm (72.87 in)	3 138 mm (123.54 in)	3 430 mm (135.04 in)
– AIRCRAFT ON JACKS (FORWARD JACK AND WING JACKS) – FUSELAGE DATUM LINE PARALLEL TO THE GROUND	STANDARD TIRES MLG SHOCK ABSORBERS EXTENDED WITH WHEEL CLEARANCE OF 120 mm (4.72 in) FOR MLG RETRACTION OR EXTENSION	2 554 mm (100.55 in)	3 655 mm (143.90 in)	3 779 mm (148.78 in)
	STANDARD TIRES MLG SHOCK ABSORBERS EXTENDED WITH WHEEL CLEARANCE OF 770 mm (30.31 in) FOR REPLACEMENT OF THE MLG	3 204 mm (126.14 in)	4 305 mm (169.49 in)	4 429 mm (174.37 in)
– AIRCRAFT ON FORWARD JACK – MLG WHEELS ON THE GROUND	STANDARD TIRES NLG SHOCK ABSORBERS EXTENDED WITH WHEEL CLEARANCE OF 60 mm (2.36 in) FOR NLG RETRACTION OR EXTENSION	2 395 mm (94.29 in)	NA	2 939 mm (115.71 in)

NOTE:

THE SAFETY STAY IS NOT USED FOR JACKING.

N_AC_021400_1_0040101_01_02

Jacking for Maintenance
Jacking Design
FIGURE-2-14-0-991-004-A01

**ON A/C A318-100

Jacking of the Landing Gear

1. General

Landing gear jacking will be required to lift the landing gear wheels off the ground.

NOTE : You can lift the aircraft at Maximum Ramp Weight (MRW).

NOTE : The load at each jacking position is the load required to give a 25.4 mm (1 in) clearance between the ground and the tire.

2. Main Gear Jacking

The main gears are normally jacked up by placing a jack directly under the ball pad.

The ball spherical radius is 19 mm (0.75 in).

It is also possible to jack the main gear using a cantilever jack.

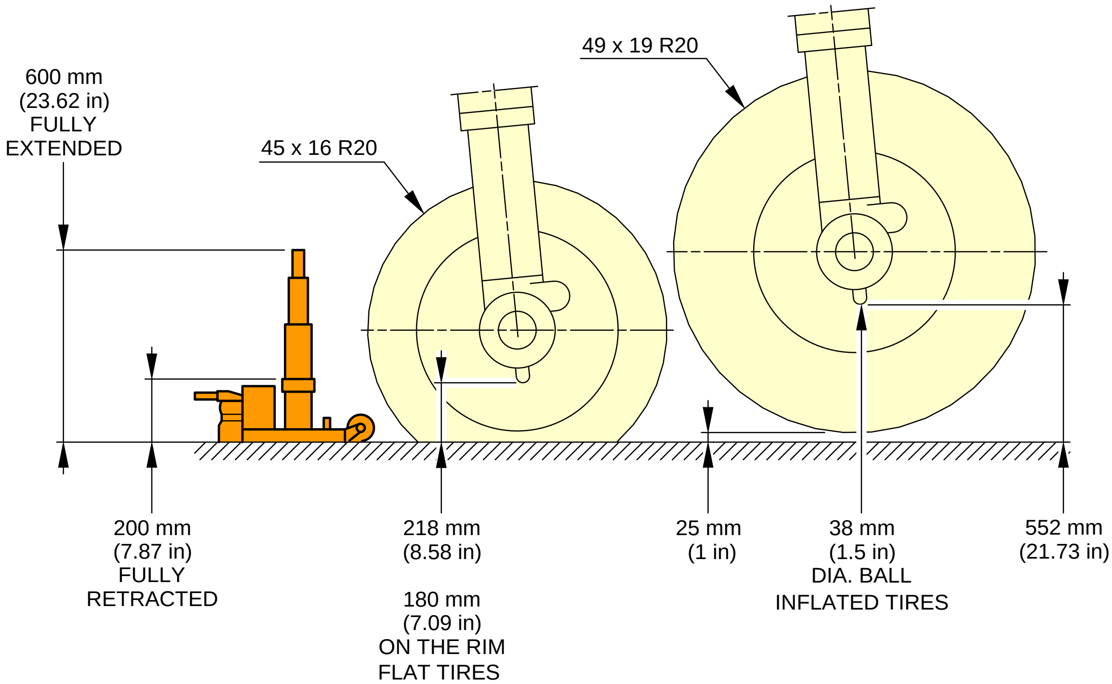
The reactions at each of the jacking points are shown in the table, see FIGURE 2-14-0-991-058-A.

3. Nose Gear Jacking

For nose gear jacking, a 19 mm (0.75 in) radius ball pad is fitted under the lower end of the shock-absorber sliding tube. Jacking can be accomplished either by placing a jack directly under the ball pad, or using an adapter fitting provided with an identical ball pad.

The reactions at each of the jacking points are shown in the table, see FIGURE 2-14-0-991-058-A.

ON A/C A318-100



NOTE: TWIN WHEEL TRACK IS 927 mm (36.5 in).
THE FLAT TIRES VIEW SHOWS THE MINIMUM HEIGHT TO ENGAGE JACK WITH 2 FLAT TIRES.
THE INFLATED TIRES VIEW SHOWS THE JACKING HEIGHT TO GIVE 25 mm (1 in) CLEARANCE BETWEEN THE TIRE AND GROUND.

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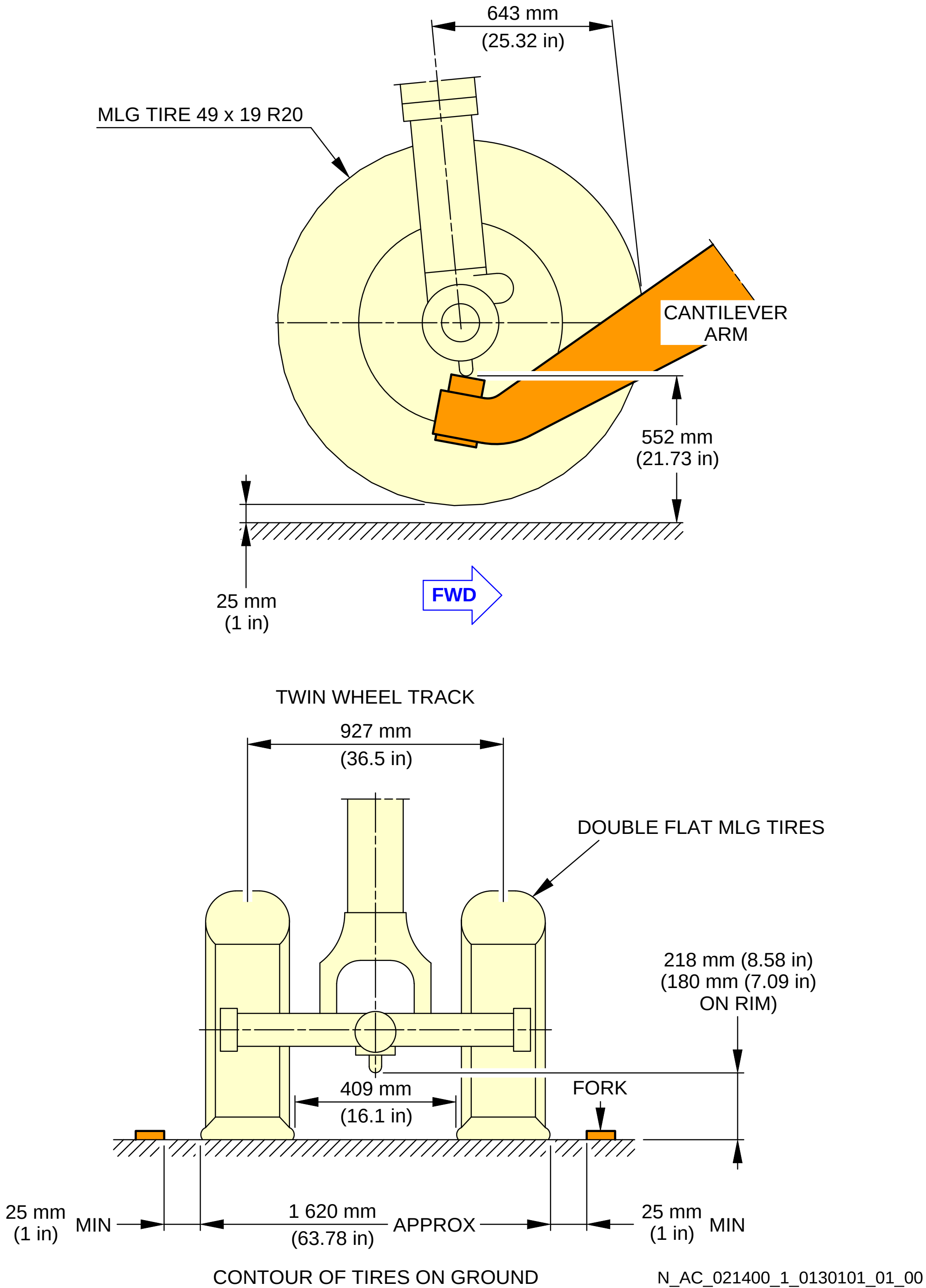
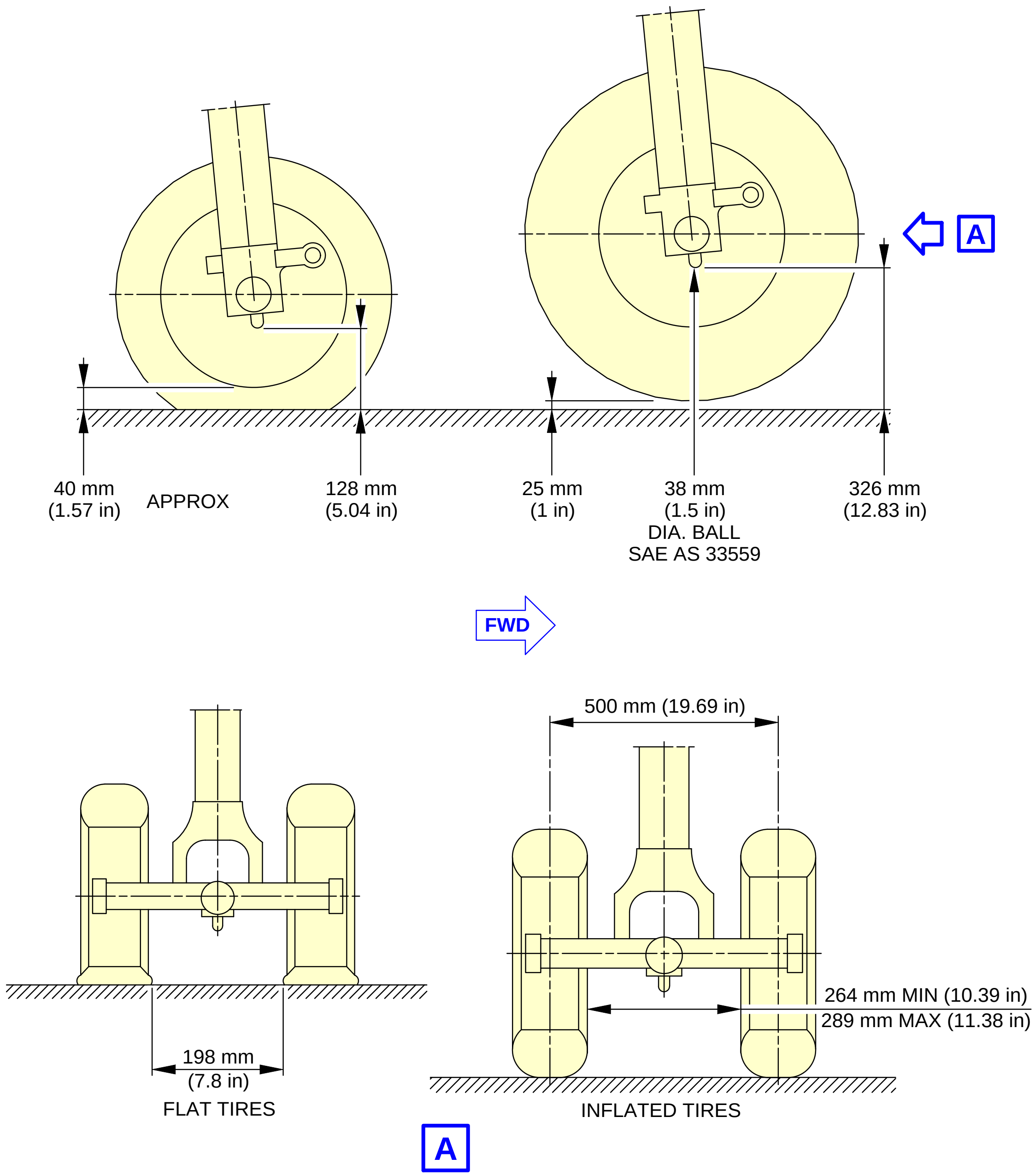
Jacking of the Landing Gear
MLG Jacking Point Location - Twin Wheels
FIGURE-2-14-0-991-012-A01

****ON A/C A318-100**



Jacking of the Landing Gear
MLG Jacking with Cantilever Jack - Twin Wheels
FIGURE-2-14-0-991-013-A01

****ON A/C A318-100**



NOTE: THE FLAT TIRES VIEW SHOWS THE MINIMUM HEIGHT TO ENGAGE JACK WITH 2 FLAT TIRES. THE INFLATED TIRES VIEW SHOWS THE JACKING HEIGHT TO GIVE 25 mm (1 in) CLEARANCE BETWEEN THE TIRE AND GROUND.

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Jacking of the Landing Gear
NLG Jacking - Point Location
FIGURE-2-14-0-991-015-A01

****ON A/C A318-100**

A318-100 WV005	
MAXIMUM DESIGN TAXI WEIGHT (MTW)	68 400 kg (150 796 lb)
MAXIMUM DESIGN TAKE-OFF WEIGHT (MTOW)	68 000 kg (149 914 lb)
MAXIMUM LOAD VALUE TO BE APPLIED ON NLG JACKING POINT	11 400 kg (25 133 lb)
NUMBER OF JACKING POINTS ON ONE MLG	1
MAXIMUM LOAD VALUE TO BE APPLIED ON MLG JACKING POINT (LEFT OR RIGHT)	30 500 kg (67 241 lb)

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Jacking of the Landing Gear
Maximum Load Capacity to Lift Each Jacking Point
FIGURE-2-14-0-991-058-A01

AIRCRAFT PERFORMANCE

3-1-0 General Information

****ON A/C A318-100**

General Information

1. Standard day temperatures for the altitudes shown are tabulated below:

Standard Day Temperatures for the Altitudes			
Altitude		Standard Day Temperature	
FEET	METERS	°F	°C
0	0	59.0	15.0
2 000	610	51.9	11.1
4 000	1 220	44.7	7.1
6 000	1 830	37.6	3.1
8 000	2 440	30.5	-0.8

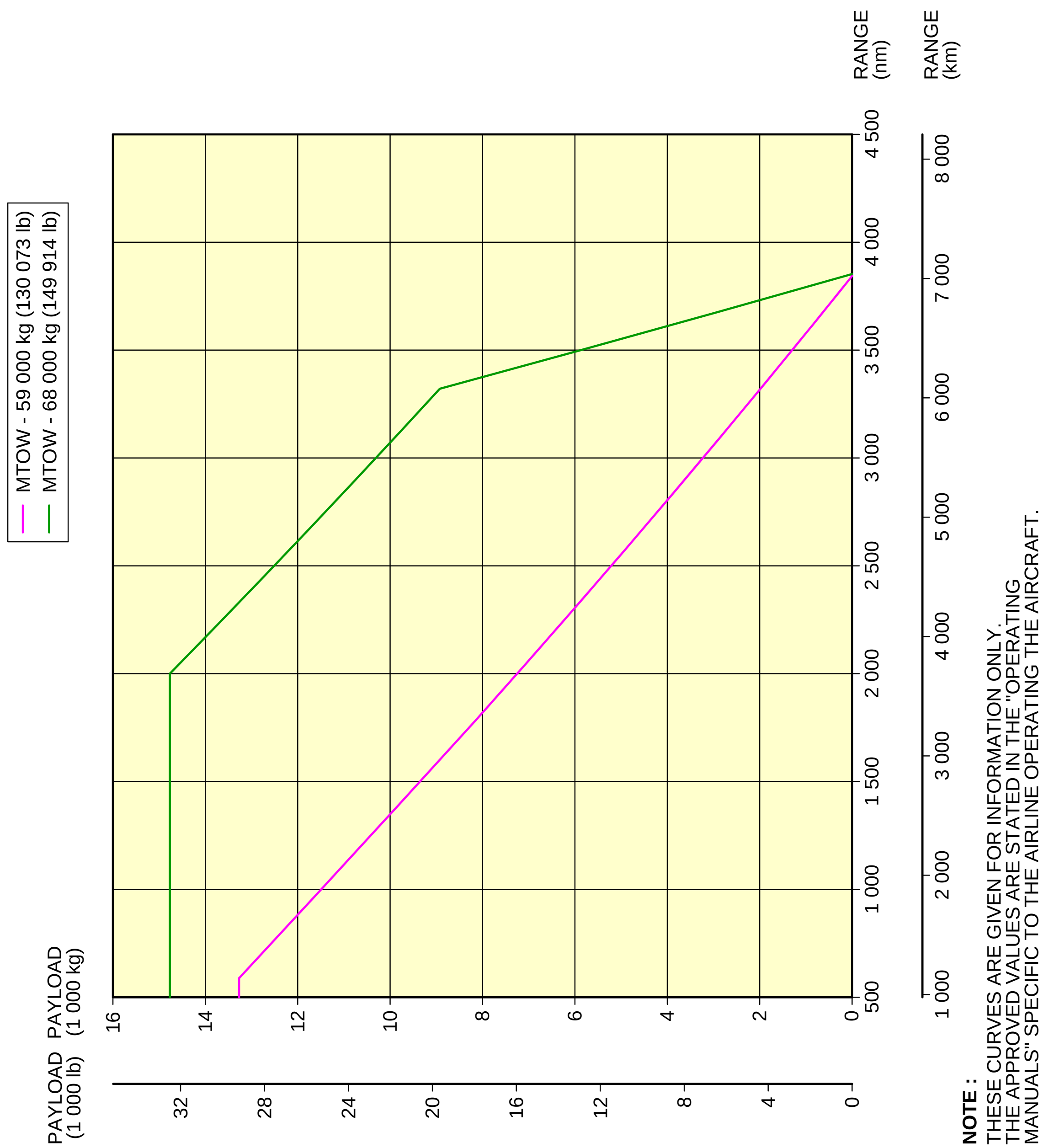
3-2-1 Payload / Range - ISA Conditions

****ON A/C A318-100**

Payload/Range - ISA Conditions

1. This section provides the payload/range at ISA conditions.

****ON A/C A318-100**



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Payload/Range - ISA Conditions
FIGURE-3-2-1-991-012-A01

3-3-1 Take-off Weight Limitation - ISA Conditions

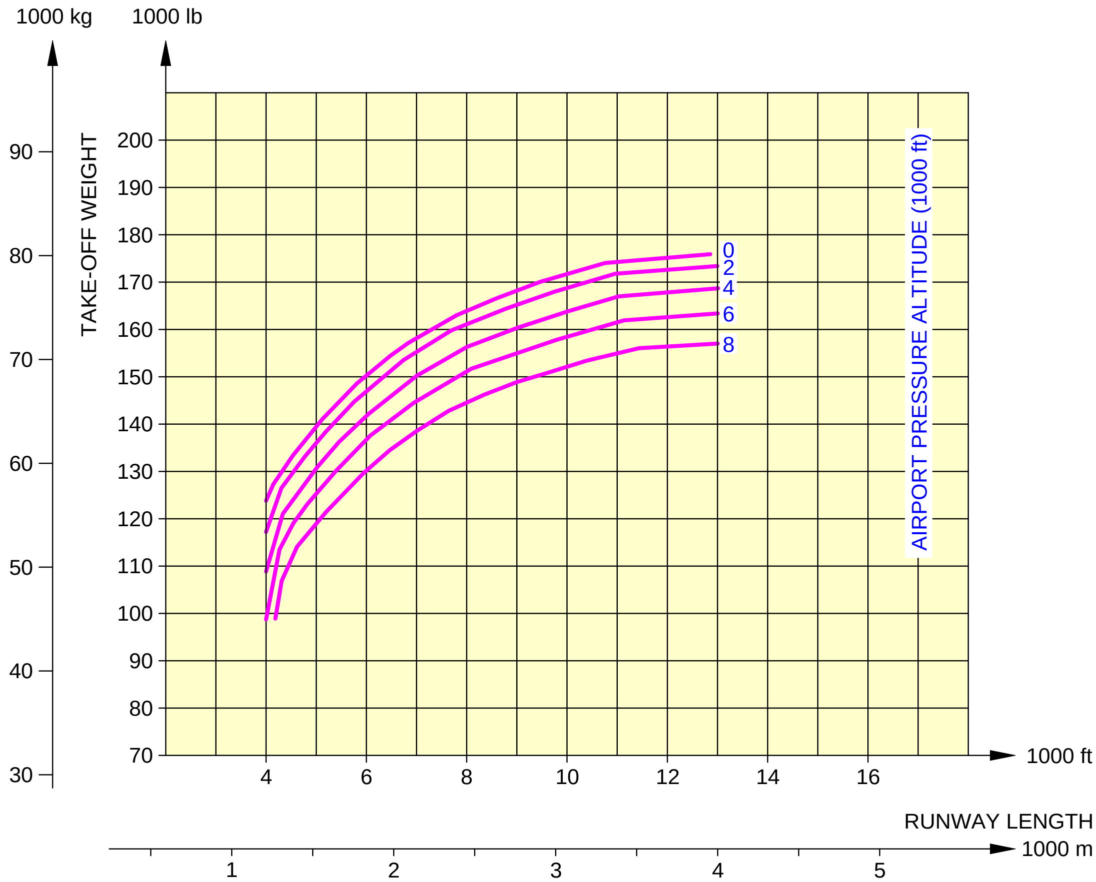
****ON A/C A318-100**

Take-Off Weight Limitation - ISA Conditions

1. This section gives the take-off weight limitation at ISA conditions.

****ON A/C A318-100**

NOTE: THESE CURVES ARE GIVEN FOR INFORMATION ONLY
THE APPROVED VALUES ARE STATED IN THE "OPERATING MANUALS" SPECIFIC TO THE AIRLINE OPERATING THE AIRCRAFT.



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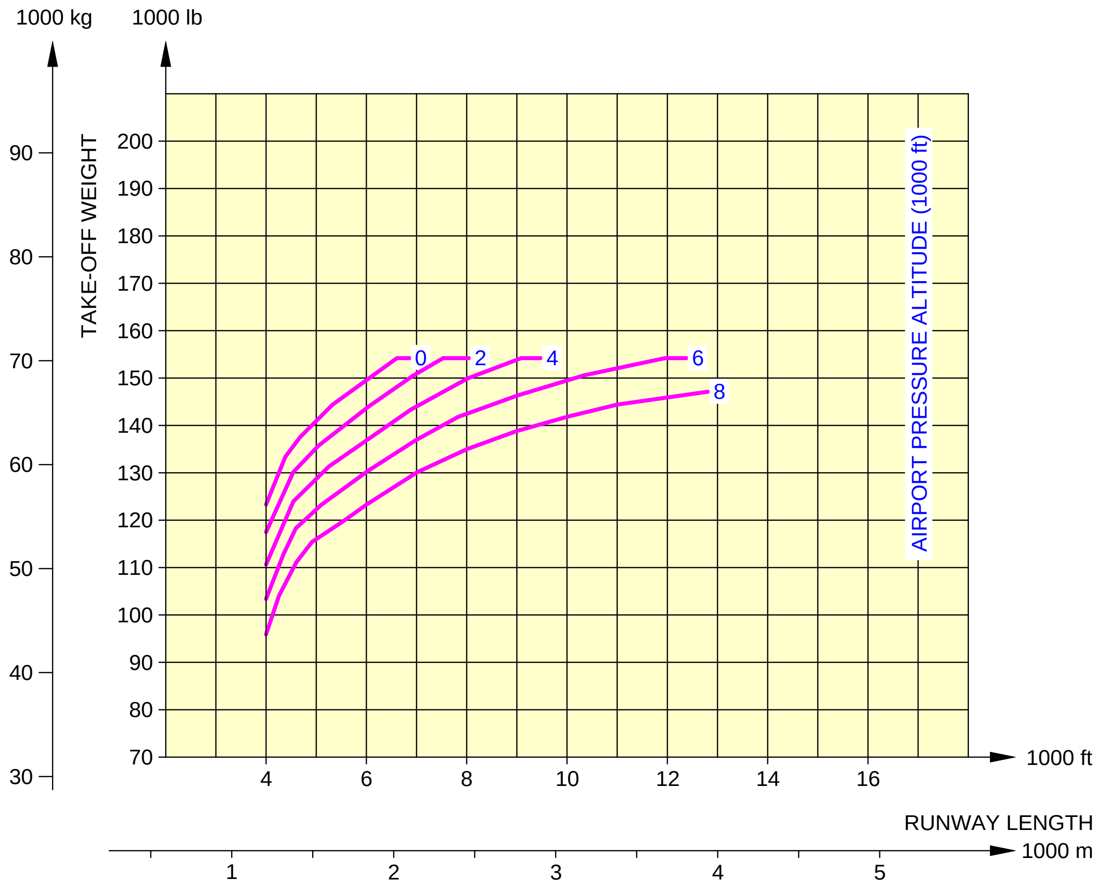
Take-Off Weight Limitation - ISA Conditions
CFM56 Series Engine
FIGURE-3-3-1-991-001-A01

****ON A/C A318-100**

NOTE: THESE CURVES ARE GIVEN FOR INFORMATION ONLY
THE APPROVED VALUES ARE STATED IN THE "OPERATING MANUALS" SPECIFIC TO THE AIRLINE OPERATING THE AIRCRAFT.



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Take-Off Weight Limitation - ISA Conditions
PW 6000 Series Engine
FIGURE-3-3-1-991-002-A01

3-3-2 Take-off Weight Limitation - ISA +15°C (+59°F) Conditions

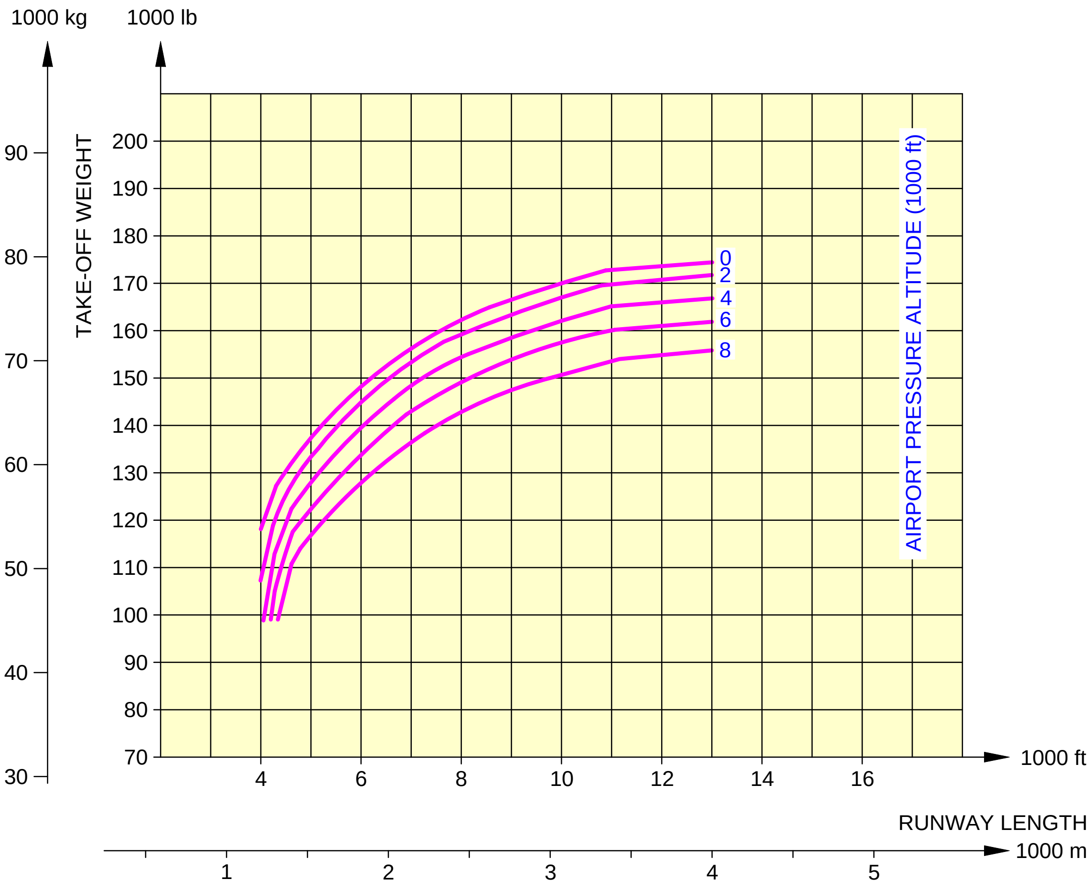
****ON A/C A318-100**

Take-Off Weight Limitation - ISA +15°C (+27°F) Conditions

1. This section gives the take-off weight limitation at ISA +15°C (+27°F) conditions.

**ON A/C A318-100

NOTE: THESE CURVES ARE GIVEN FOR INFORMATION ONLY
THE APPROVED VALUES ARE STATED IN THE "OPERATING MANUALS" SPECIFIC TO THE AIRLINE OPERATING THE AIRCRAFT.



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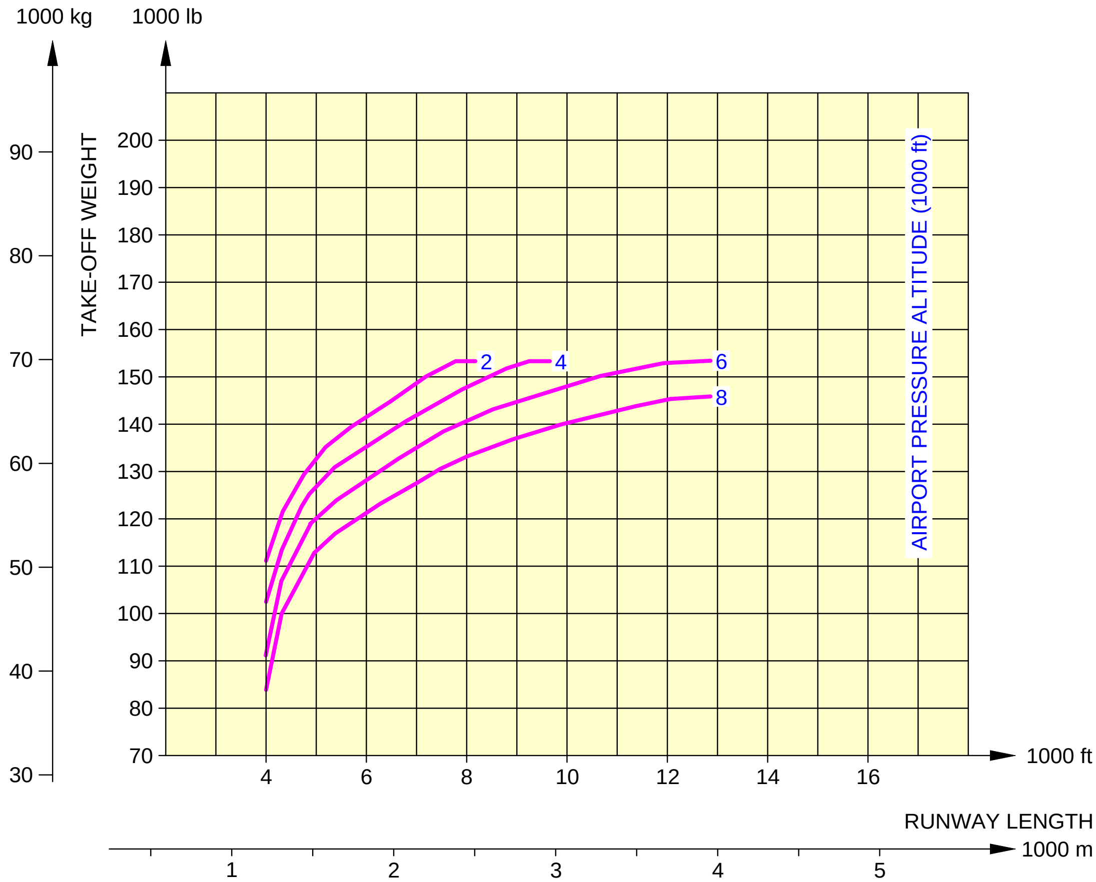
Take-Off Weight Limitation - ISA +15°C (+27°F) Conditions
CFM56 Series Engine
FIGURE-3-3-2-991-001-A01

****ON A/C A318-100**

NOTE: THESE CURVES ARE GIVEN FOR INFORMATION ONLY
THE APPROVED VALUES ARE STATED IN THE "OPERATING MANUALS" SPECIFIC TO THE AIRLINE OPERATING THE AIRCRAFT.



N_AC_030302_1_0020101_01_00

Take-Off Weight Limitation - ISA +15°C (+27°F) Conditions
PW 6000 Series Engine
FIGURE-3-3-2-991-002-A01

3-3-3 Aerodrome Reference Code

****ON A/C A318-100**

Aerodrome Reference Code

1. A318-100 is classified as code 3C as per ICAO Aerodrome Reference Code.

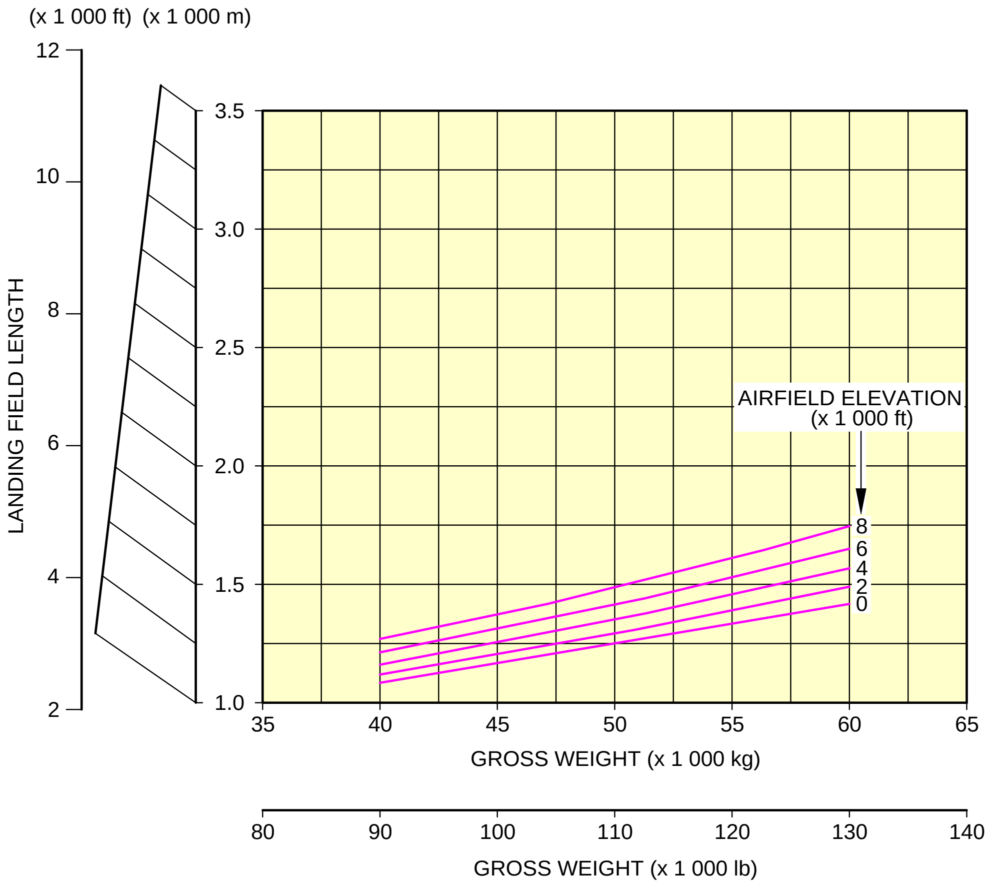
3-4-1 Landing Field Length - ISA Conditions

****ON A/C A318-100**

Landing Field Length - ISA Conditions

1. This section provides the landing field length.

****ON A/C A318-100**

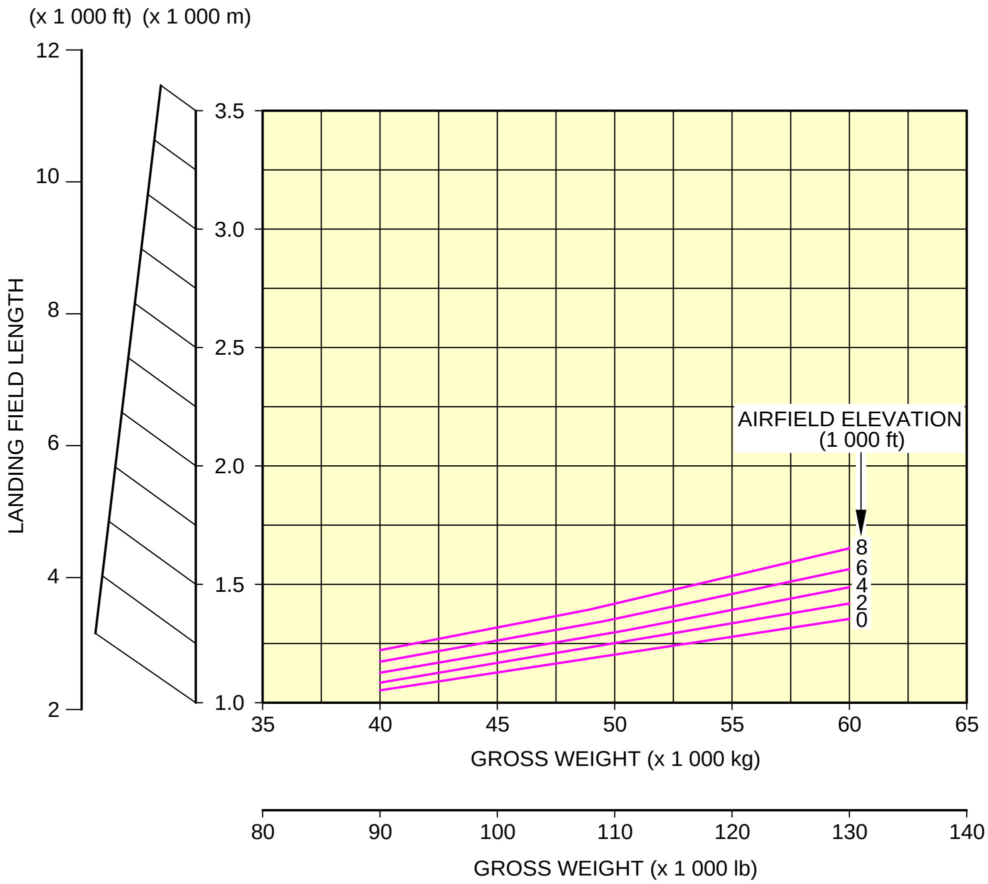


NOTE:
THESE CURVES ARE GIVEN FOR INFORMATION ONLY.
THE APPROVED VALUES ARE STATED IN THE "OPERATING MANUALS" SPECIFIC TO THE AIRLINE OPERATING THE AIRCRAFT.

N_AC_030401_1_0010101_01_01

Landing Field Length - ISA Conditions
CFM56-5B Series Engine
FIGURE-3-4-1-991-001-A01

****ON A/C A318-100**



NOTE:
THESE CURVES ARE GIVEN FOR INFORMATION ONLY.
THE APPROVED VALUES ARE STATED IN THE "OPERATING MANUALS" SPECIFIC TO THE AIRLINE OPERATING THE AIRCRAFT.

N_AC_030401_1_0020101_01_01

Landing Field Length - ISA Conditions
PW 6000 Series Engine
FIGURE-3-4-1-991-002-A01

3-5-0 Final Approach Speed

****ON A/C A318-100**

Final Approach Speed

1. This section provides the final approach speed. It is defined as the indicated airspeed at threshold in the landing configuration, at the certificated maximum flap setting and Maximum Landing Weight (MLW), in standard atmospheric conditions. The approach speed is used to classify the aircraft into an Aircraft Approach Category, a grouping of aircraft based on the indicated airspeed at threshold.

2. The final approach speed is 121 kt at a MLW of 57 500 kg (126 766 lb) and classifies the aircraft into the Aircraft Approach Category C.

   NOTE : This value is given for information only.

GROUND MANEUVERING

4-1-0 General Information

****ON A/C A318-100**

General Information

1. This section provides aircraft turning capability and maneuvering characteristics.

   For ease of presentation, this data has been determined from the theoretical limits imposed by the geometry of the aircraft, and where noted, provides for a normal allowance for tire slippage. As such, it reflects the turning capability of the aircraft in favorable operating circumstances. This data should only be used as a guideline for the method of determination of such parameters and for the maneuvering characteristics of this aircraft type.

   In ground operating mode, varying airline practices may demand that more conservative turning procedures be adopted to avoid excessive tire wear and reduce possible maintenance problems. Airline operating techniques will vary in the level of performance, over a wide range of operating circumstances throughout the world. Variations from standard aircraft operating patterns may be necessary to satisfy physical constraints within the maneuvering area, such as adverse grades, limited area or a high risk of jet blast damage. For these reasons, ground maneuvering requirements should be coordinated with the airlines in question prior to layout planning.

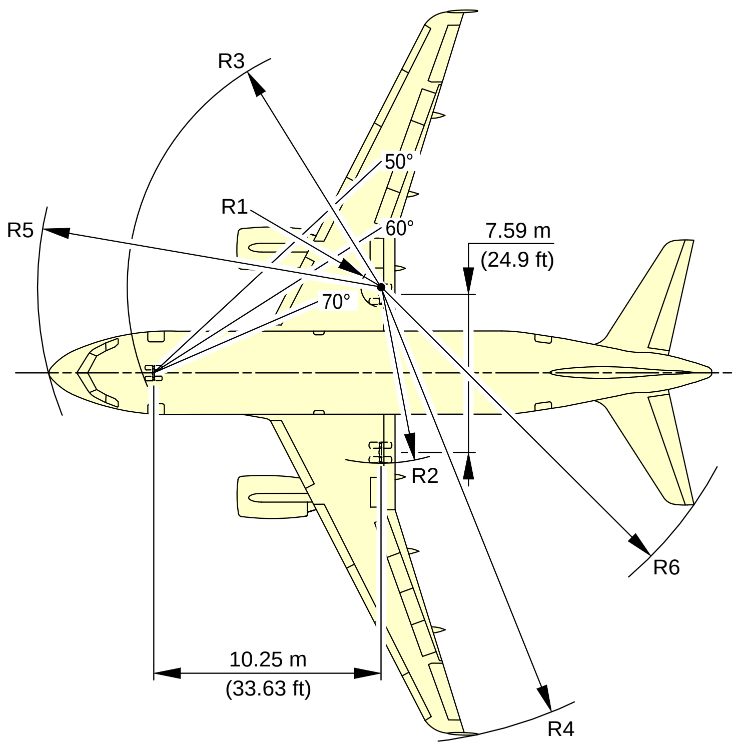
4-2-0 Turning Radii

****ON A/C A318-100**

Turning Radii

1. This section provides the turning radii.

****ON A/C A318-100**



NOTE: FOR STEERING DIMENSION TABLE SEE SHEET 2.

TURN TYPE:

1. ASYMMETRIC THRUST DIFFERENTIAL BRAKING (PIVOTTING ON ONE MAIN GEAR).
2. SYMMETRIC THRUST NO BRAKING.

N_AC_040200_1_0010101_01_02

Turning Radii, No Slip Angle
(Sheet 1)
FIGURE-4-2-0-991-001-A01

****ON A/C A318-100**

TYPE OF TURN	MAXIMUM RAMP WEIGHT		R1 RMLG		R2 LMLG		R3 NLG		R4 WINGTIP FENCE		R5 NOSE		R6 THS	
	STEERING ANGLE (deg)	EFFECTIVE STEERING ANGLE (deg)	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft
2	20	19.3	26.1	86	33.7	111	31.3	103	46.5	152	33.0	108	38.6	127
2	25	24.1	19.8	65	27.3	90	25.4	83	40.2	132	27.5	90	32.9	108
2	30	29.0	15.4	51	23.0	75	21.5	70	35.8	118	24.0	79	29.1	95
2	35	33.8	12.2	40	19.8	65	18.7	61	32.7	107	21.7	71	26.4	87
2	40	38.6	9.7	32	17.3	57	16.7	55	30.2	99	20.0	66	24.5	80
2	45	43.4	7.7	25	15.3	50	15.2	50	28.2	93	18.8	62	22.9	75
2	50	48.2	6.1	20	13.7	45	14.0	46	26.6	87	17.9	59	21.7	71
2	55	52.9	4.6	15	12.2	40	13.1	43	25.2	83	17.2	56	20.7	68
2	60	57.6	3.4	11	11.0	36	12.3	40	24.0	79	16.6	55	19.9	65
2	65	62.2	2.3	8	9.9	32	11.8	39	22.9	75	16.2	53	19.2	63
2	70	66.6	1.3	4	8.9	29	11.3	37	21.9	72	16.0	52	18.7	61
2	75 (MAX)	70.3	0.6	2	8.2	27	11.0	36	21.2	69	15.8	52	18.2	60
1	50	48.3	6.0	20	13.6	45	14.0	46	26.5	87	17.8	58	21.7	71
1	55	53.1	4.6	15	12.2	40	13.0	43	25.1	82	17.1	56	20.7	68
1	60	57.9	3.3	11	10.9	36	12.3	40	23.9	78	16.6	55	19.9	65
1	65	62.8	2.2	7	9.7	32	11.7	38	22.7	75	16.2	53	19.2	63
1	70	67.3	1.2	4	8.8	29	11.3	37	21.8	71	15.9	52	18.6	61
1	75 (MAX)	71.8	0.3	1	7.8	26	10.9	36	20.9	68	15.7	51	18.1	59

NOTE: ABOVE 50°, AIRLINES MAY USE TYPE 1 OR TYPE 2 TURNS DEPENDING ON THE SITUATION.
TYPE 1 TURNS USE: ASYMMETRIC THRUST DURING THE WHOLE TURN; AND DIFFERENTIAL BRAKING TO INITIATE THE TURN ONLY.
TYPE 2 TURNS USE: SYMMETRIC THRUST DURING THE WHOLE TURN; AND NO DIFFERENTIAL BRAKING AT ALL.
IT IS POSSIBLE TO GET LOWER VALUES THAN THOSE FROM TYPE 1 BY APPLYING DIFFERENTIAL BRAKING DURING THE WHOLE TURN.

N_AC_040200_1_0020101_01_02

Turning Radii, No Slip Angle
(Sheet 2)
FIGURE-4-2-0-991-002-A01

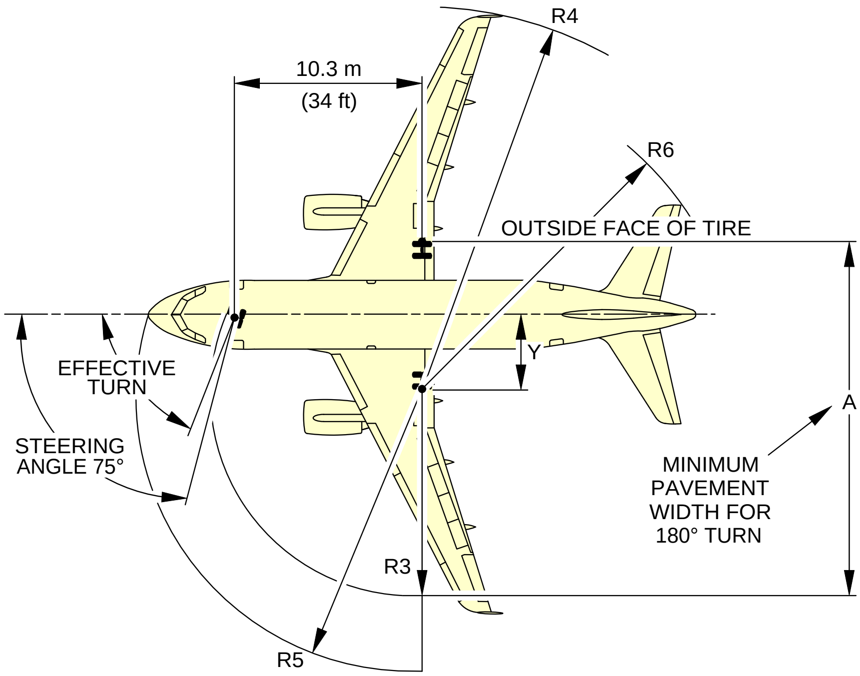
4-3-0 Minimum Turning Radii

****ON A/C A318-100**

Minimum Turning Radii

1. This section provides the minimum turning radii.

****ON A/C A318-100**



NOTE: NOSE GEAR RADII TRACK R3,
MEASURED FROM OUTSIDE FACE OF TIRE.
MODEL 100 TURN DIMENSION SHOWN.
THEORETICAL CENTER OF TURN
FOR MINIMUM TURNING RADIUS.
SLOW CONTINUOUS TURNING.
APPROXIMATELY IDLE THRUST
ON BOTH ENGINES.
NO DIFFERENTIAL BRAKING.
DRY SURFACE.

TYPE OF TURN	STEERING ANGLE (DEG)	EFFECTIVE STEERING ANGLE		Y	A	R3 NLG	R4 WING TIP FENCE	R5 NOSE	R6 THS
1	75 (MAX)	71.8°	m	3.4	19.0	10.9	20.9	15.7	18.1
			ft	11	62	36	68	51	59
2	75 (MAX)	70.3°	m	3.7	19.4	11.0	21.2	15.8	18.2
			ft	12	64	36	69	52	60

NOTE: IT IS POSSIBLE TO GET LOWER VALUES THAN THOSE FROM TYPE 1
BY APPLYING DIFFERENTIAL BRAKING DURING THE WHOLE TURN.

N_AC_040300_1_0010101_01_03

Minimum Turning Radii
FIGURE-4-3-0-991-001-A01

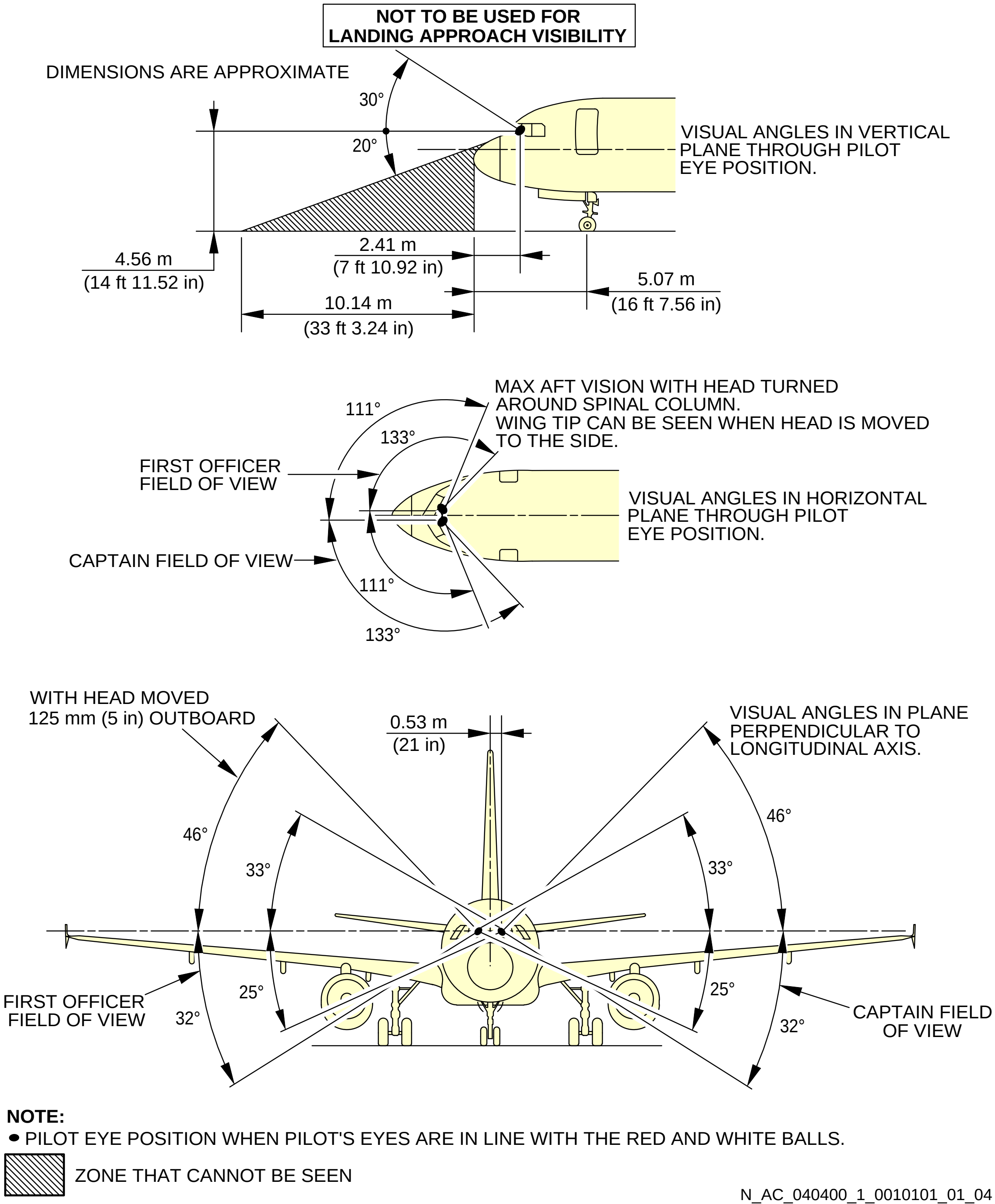
4-4-0 Visibility from Cockpit in Static Position

****ON A/C A318-100**

Visibility from Cockpit in Static Position

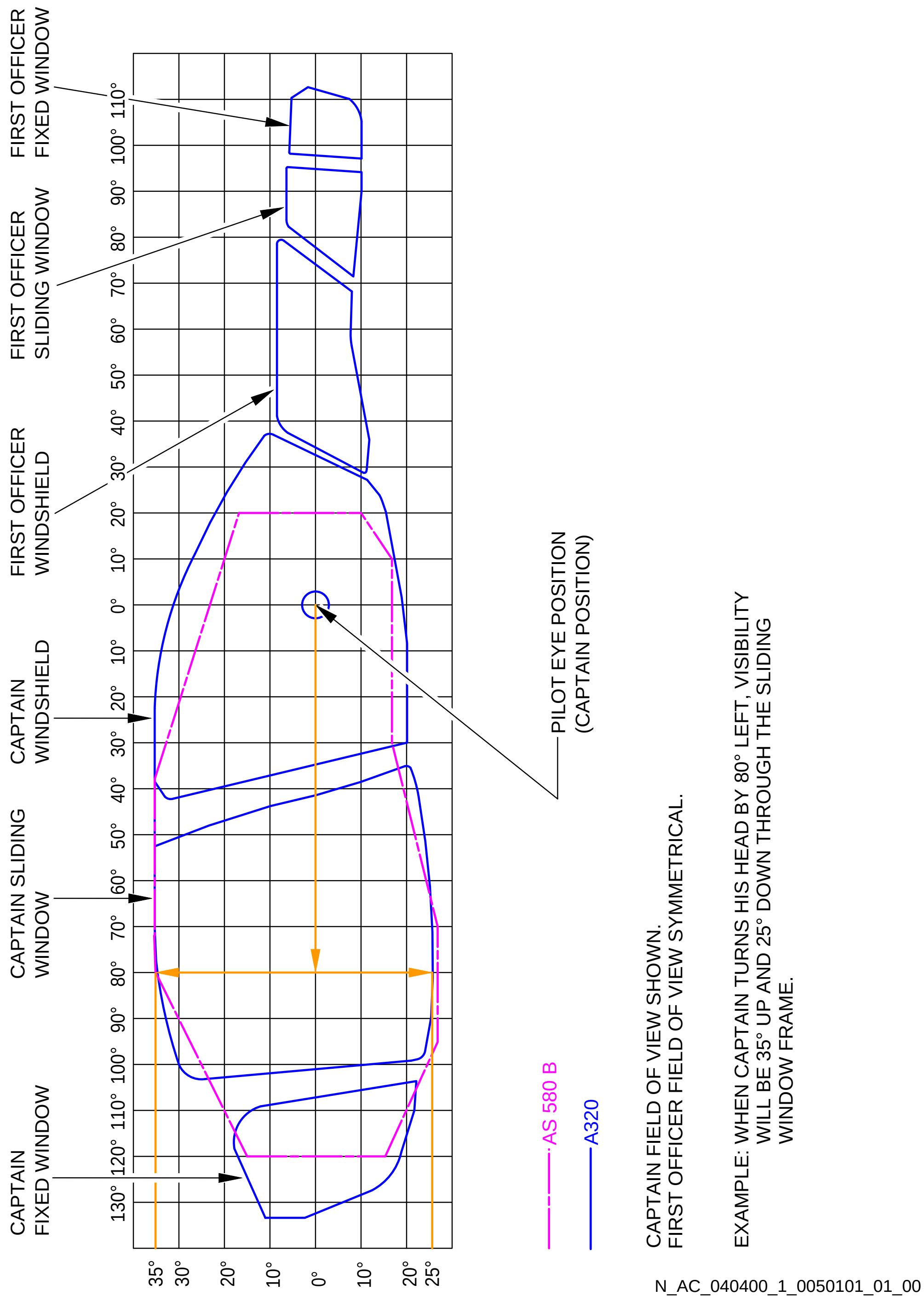
1. This section gives the visibility from cockpit in static position.

****ON A/C A318-100**



Visibility from Cockpit in Static Position
FIGURE-4-4-0-991-001-A01

****ON A/C A318-100**



Binocular Visibility Through Windows from Captain Eye Position
FIGURE-4-4-0-991-005-A01

4-5-0 Runway and Taxiway Turn Paths

****ON A/C A318-100**

Runway and Taxiway Turn Paths

1. Runway and Taxiway Turn Paths.

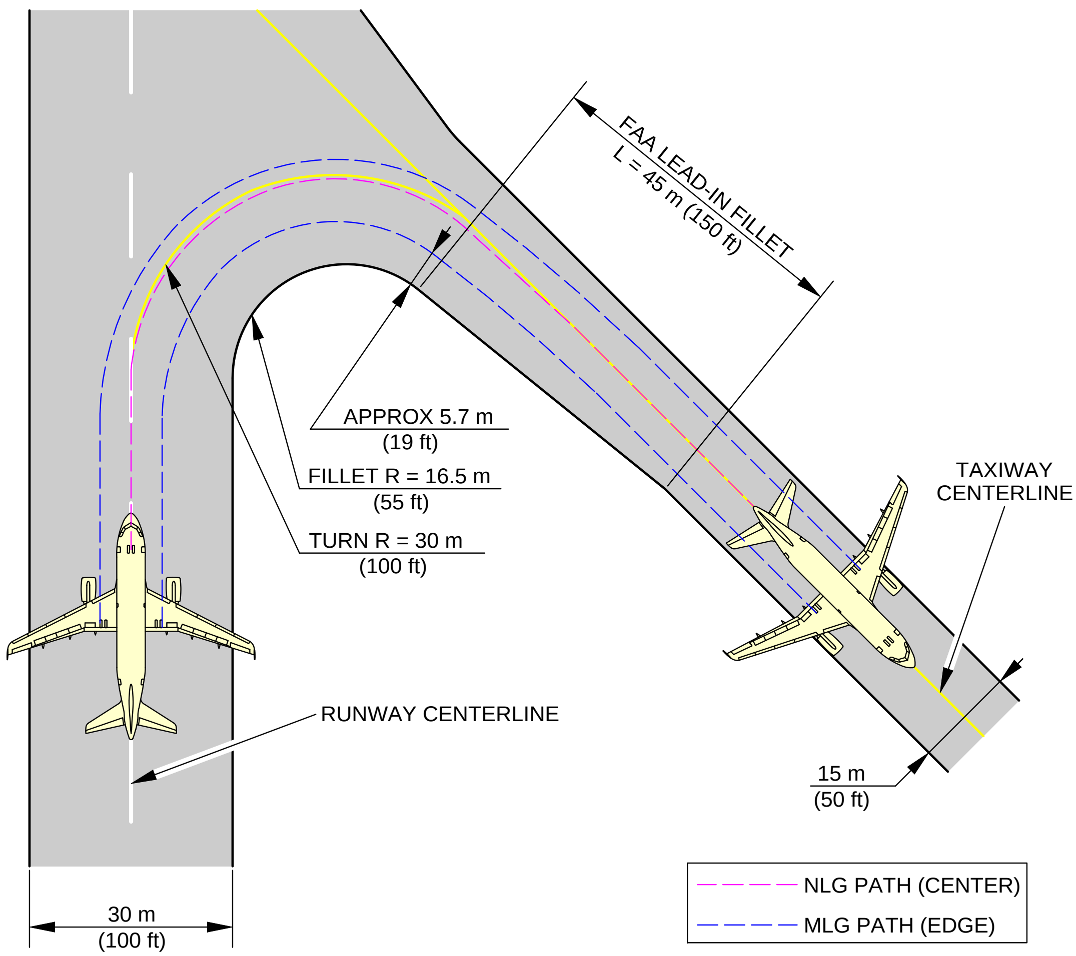
4-5-1 135° Turn - Runway to Taxiway

****ON A/C A318-100**

<u>135° Turn - Runway to Taxiway</u>

1. This section gives the 135° turn - runway to taxiway.

****ON A/C A318-100**

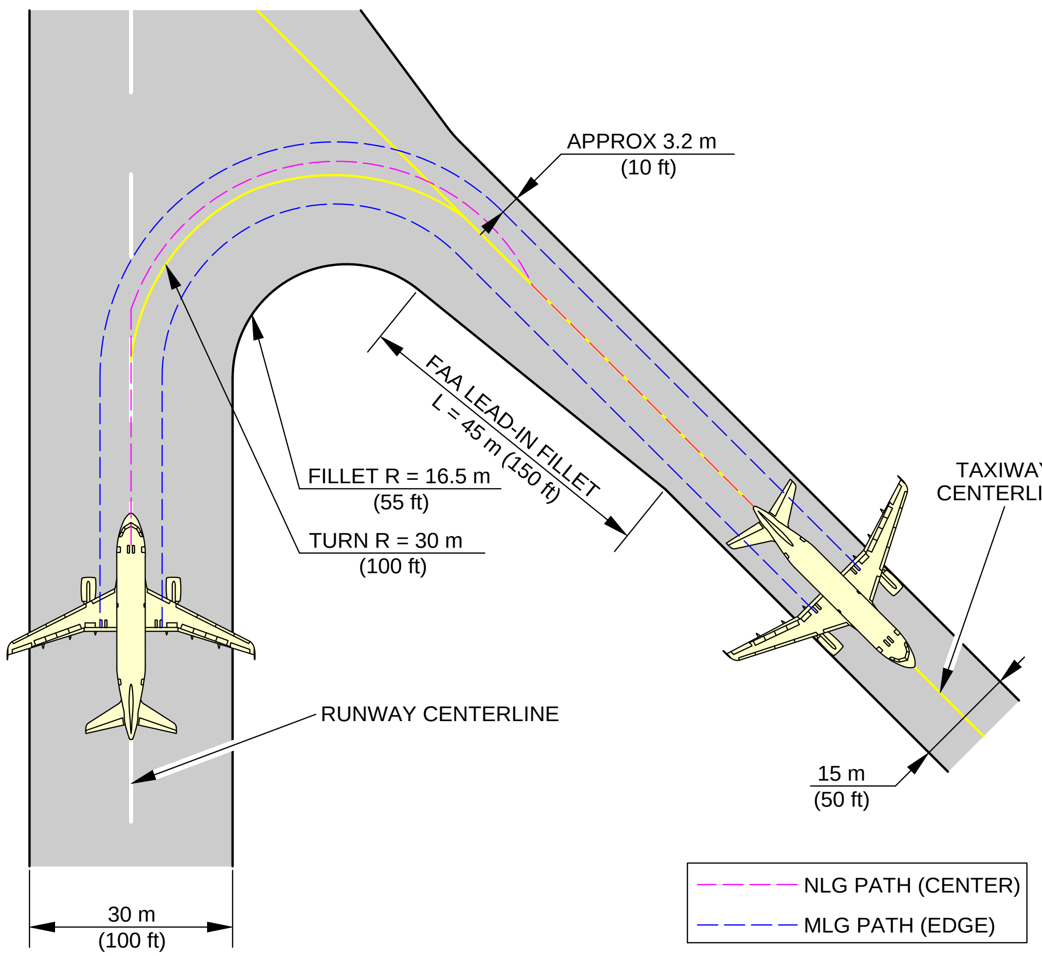


NOTE:
FAA GROUP III FACILITIES.

N_AC_040501_1_0010101_01_03

135° Turn - Runway to Taxiway
Cockpit Over Centerline Method
FIGURE-4-5-1-991-001-A01

****ON A/C A318-100**



NOTE:
FAA GROUP III FACILITIES.

N_AC_040501_1_0110101_01_01

135° Turn - Runway to Taxiway
Judgemental Oversteering Method
FIGURE-4-5-1-991-011-A01

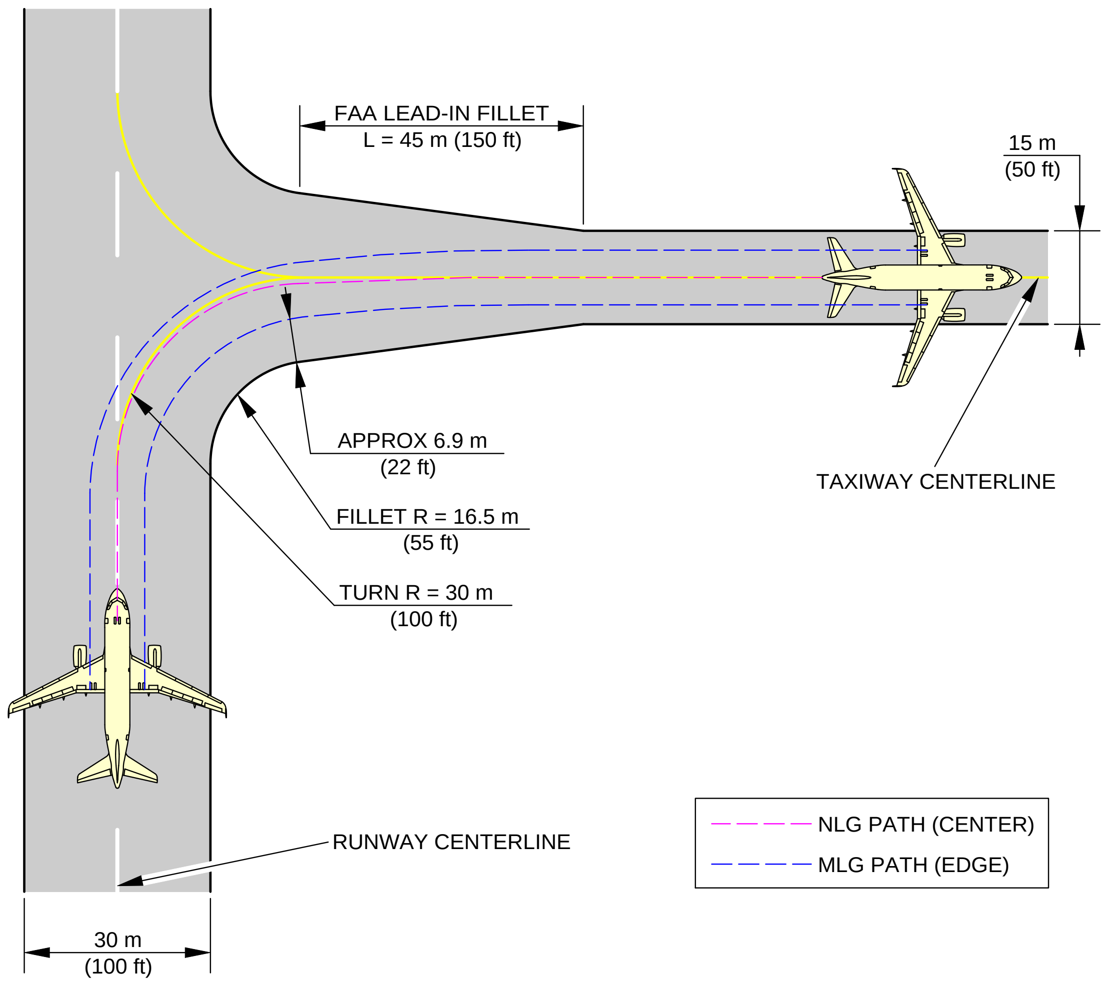
4-5-2 90° Turn - Runway to Taxiway

****ON A/C A318-100**

<u>90° Turn - Runway to Taxiway</u>

1. This section gives the 90° turn - runway to taxiway.

****ON A/C A318-100**

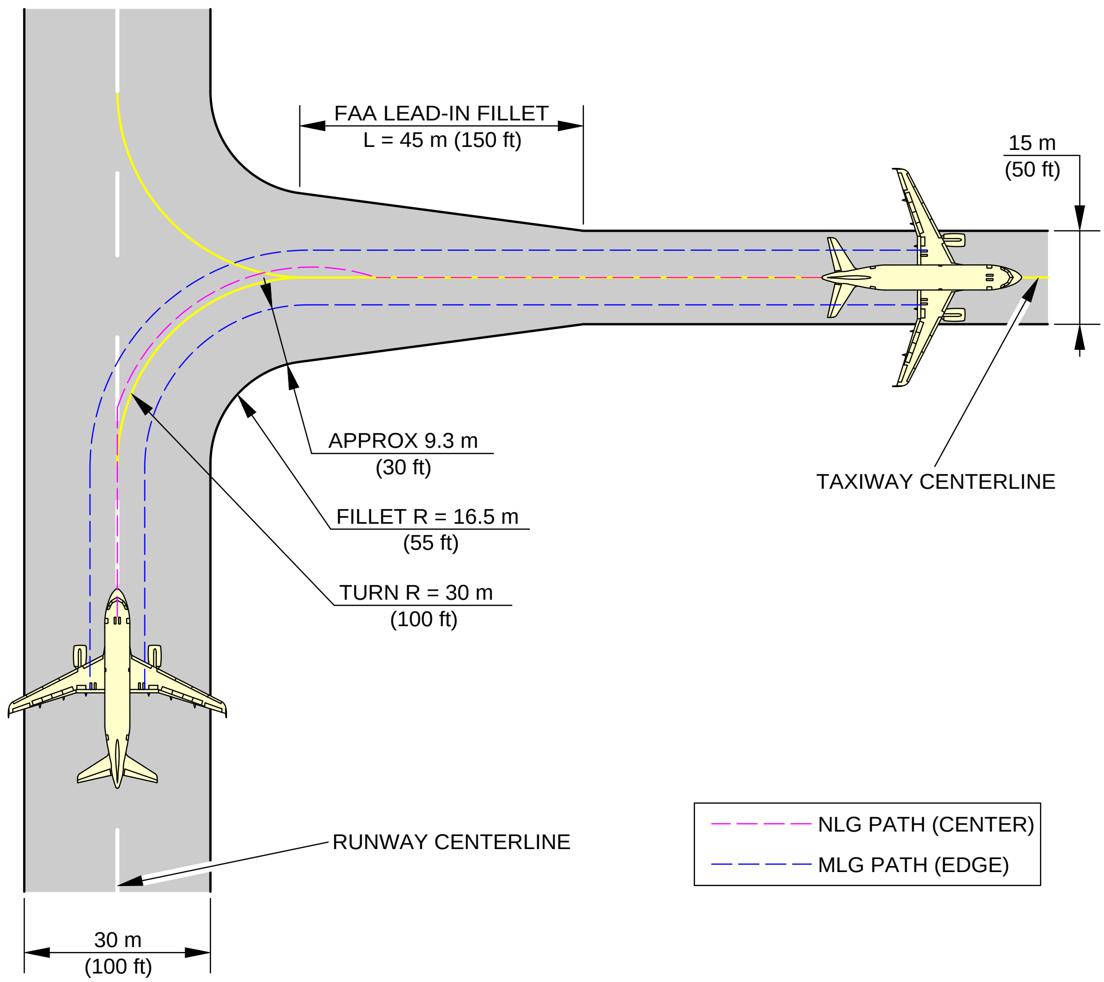


NOTE:
FAA GROUP III FACILITIES.

N_AC_040502_1_0010101_01_03

90° Turn - Runway to Taxiway
Cockpit Over Centerline Method
FIGURE-4-5-2-991-001-A01

****ON A/C A318-100**



NOTE:
FAA GROUP III FACILITIES.

N_AC_040502_1_0080101_01_01

90° Turn - Runway to Taxiway
Judgemental Oversteering Method
FIGURE-4-5-2-991-008-A01

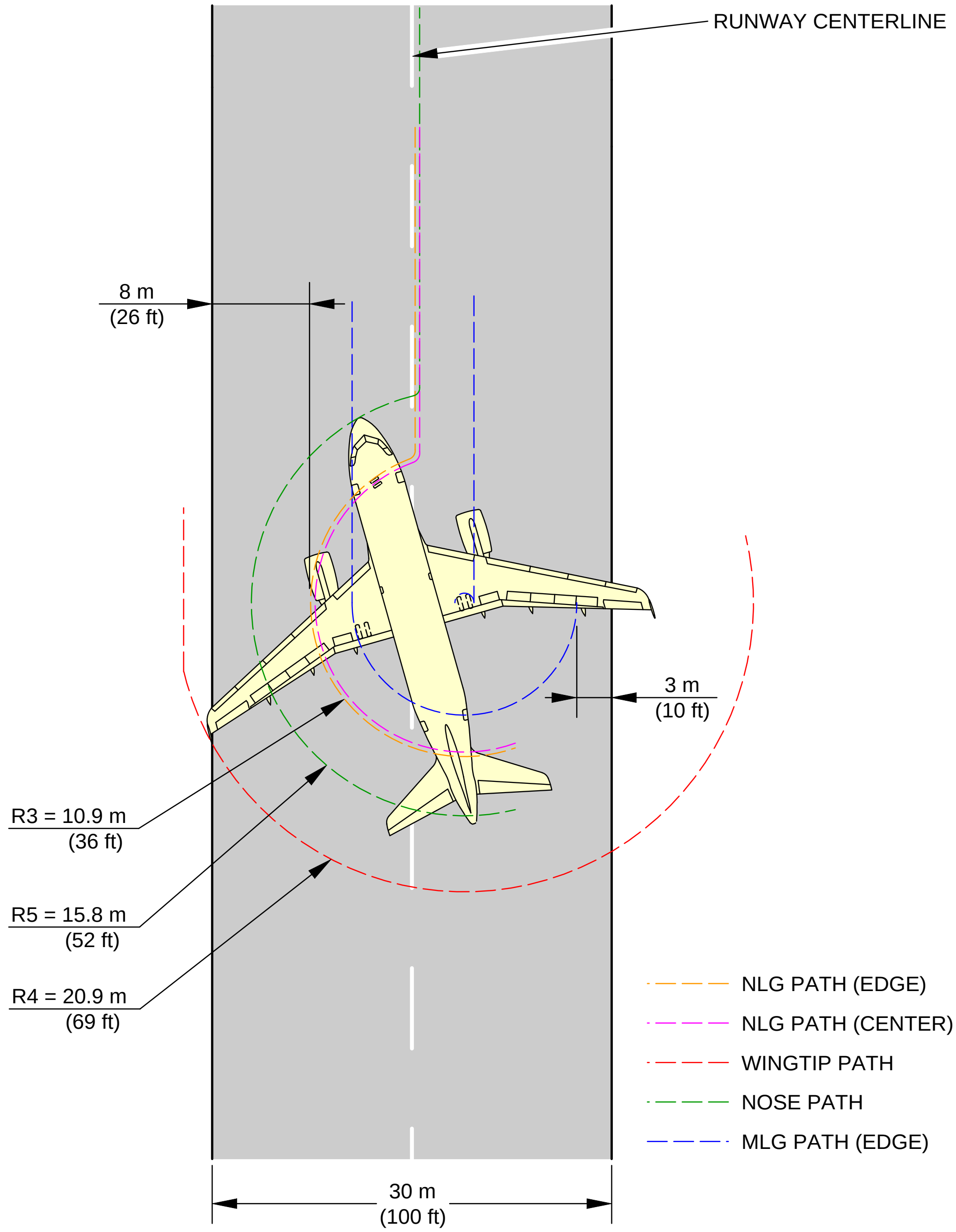
4-5-3 180° Turn on a Runway

****ON A/C A318-100**

180° Turn on a Runway

1. This section provides the 180° turn on a runway.

****ON A/C A318-100**

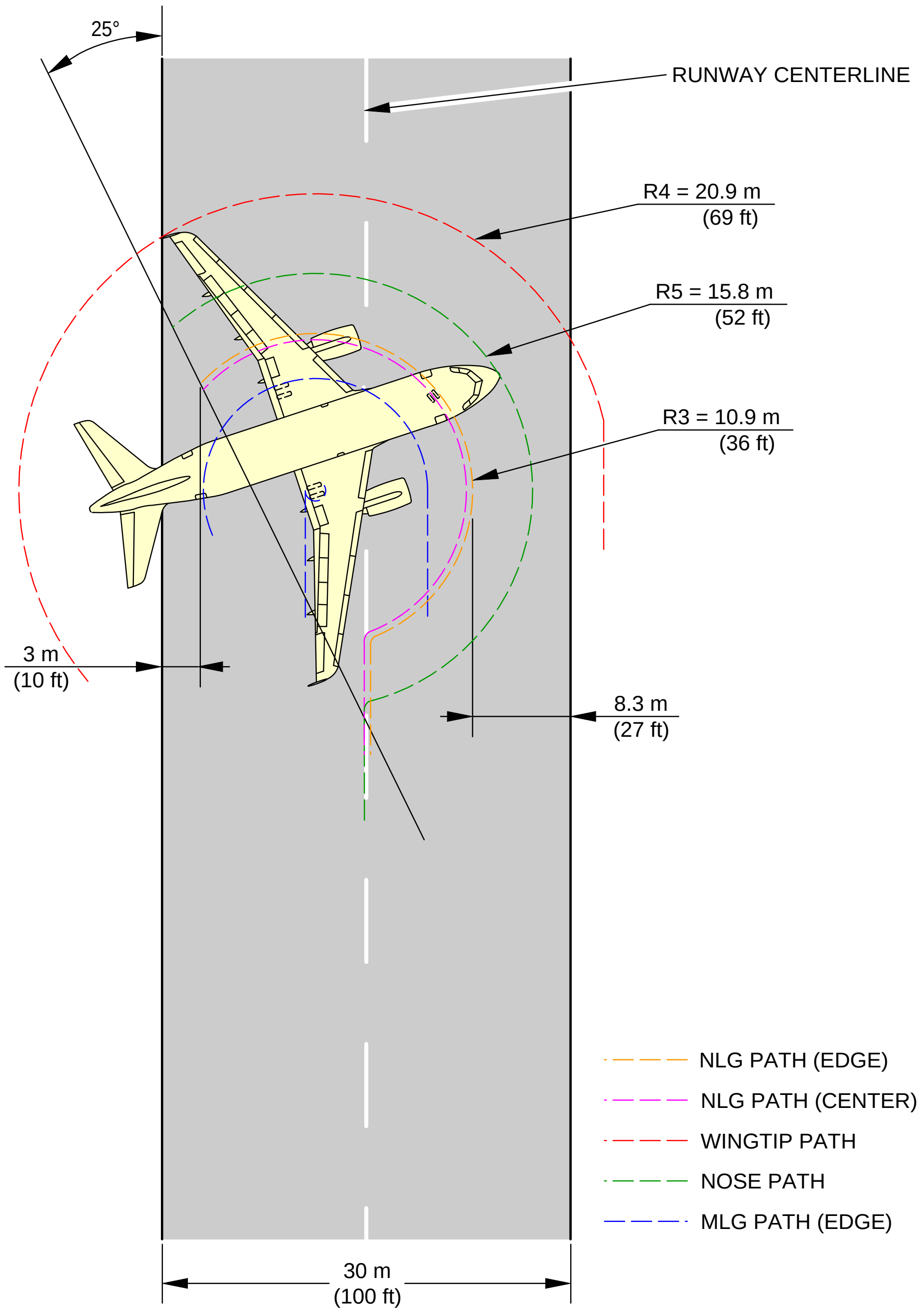


NOTE:
TYPE 1 VALUES.

N_AC_040503_1_0050101_01_02

180° Turn on a Runway
Edge of Runway Method (Sheet 1 of 2)
FIGURE-4-5-3-991-005-A01

****ON A/C A318-100**



NOTE:
TYPE 1 VALUES.

N_AC_040503_1_0050102_01_02

180° Turn on a Runway
Center of Runway Method (Sheet 2 of 2)
FIGURE-4-5-3-991-005-A01

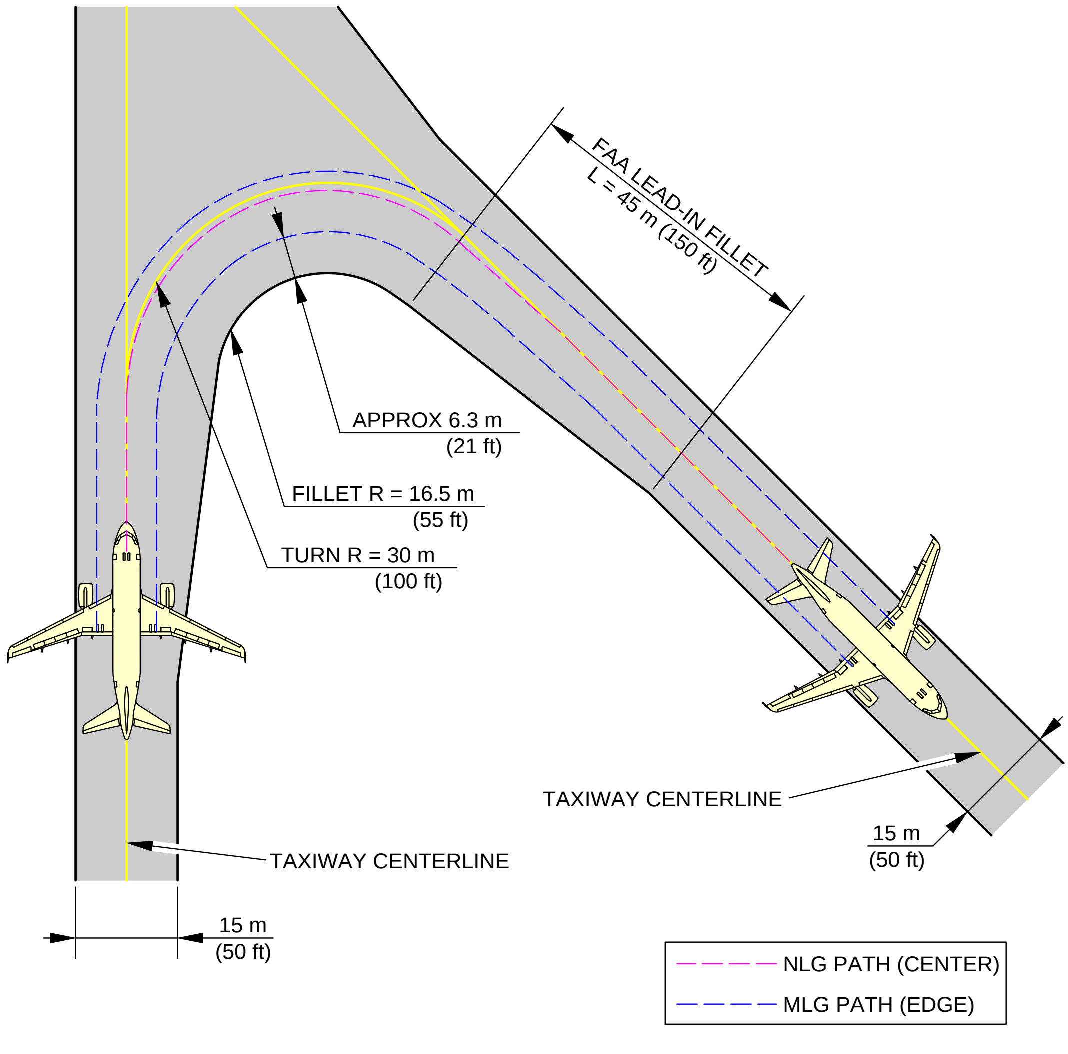
4-5-4 135° Turn - Taxiway to Taxiway

****ON A/C A318-100**

135° Turn - Taxiway to Taxiway

1. This section gives the 135° turn - taxiway to taxiway.

****ON A/C A318-100**

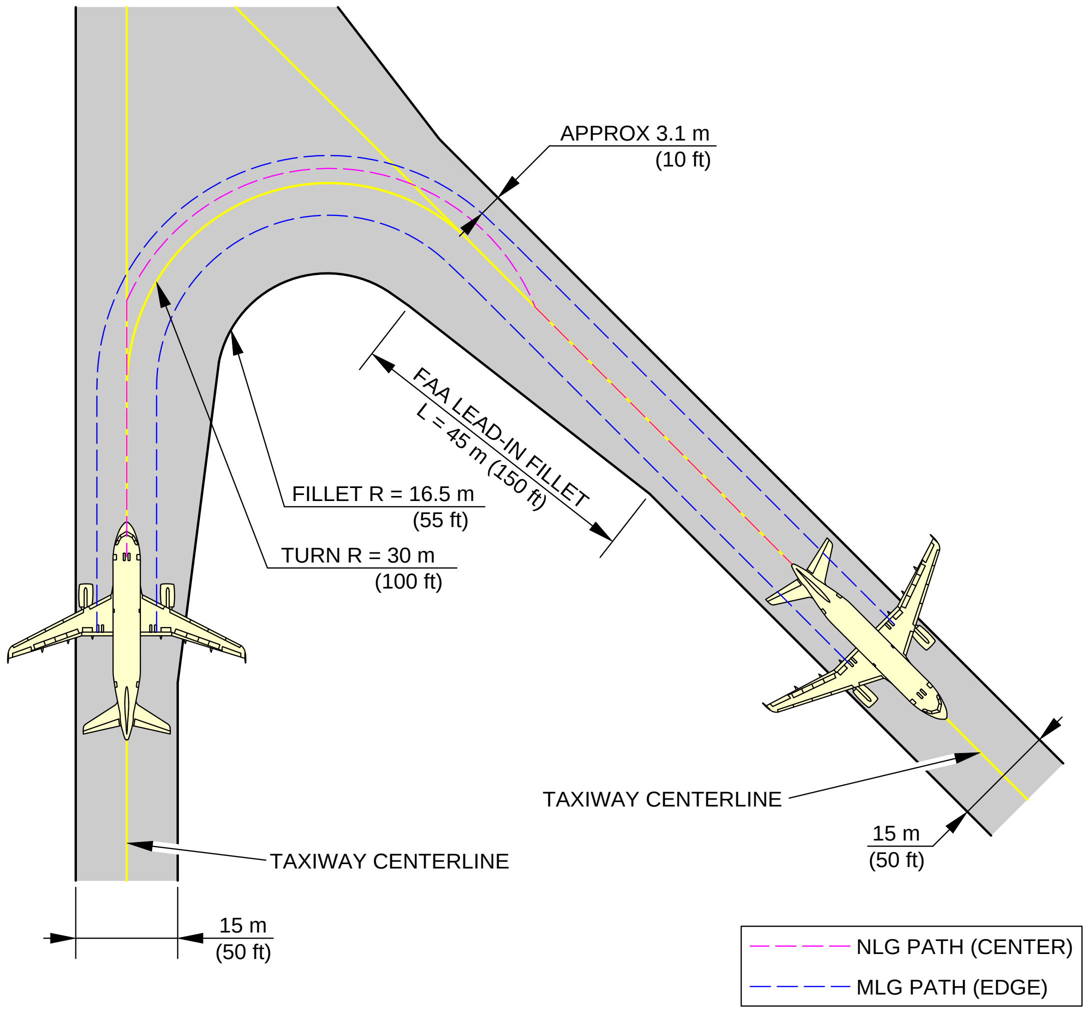


NOTE:
FAA GROUP III FACILITIES.

N_AC_040504_1_0010101_01_03

135° Turn - Taxiway to Taxiway
Cockpit Over Centerline Method (Sheet 1 of 2)
FIGURE-4-5-4-991-001-A01

****ON A/C A318-100**



NOTE:
FAA GROUP III FACILITIES.

N_AC_040504_1_0010102_01_01

135° Turn - Taxiway to Taxiway
Judgemental Oversteering Method (Sheet 2 of 2)
FIGURE-4-5-4-991-001-A01

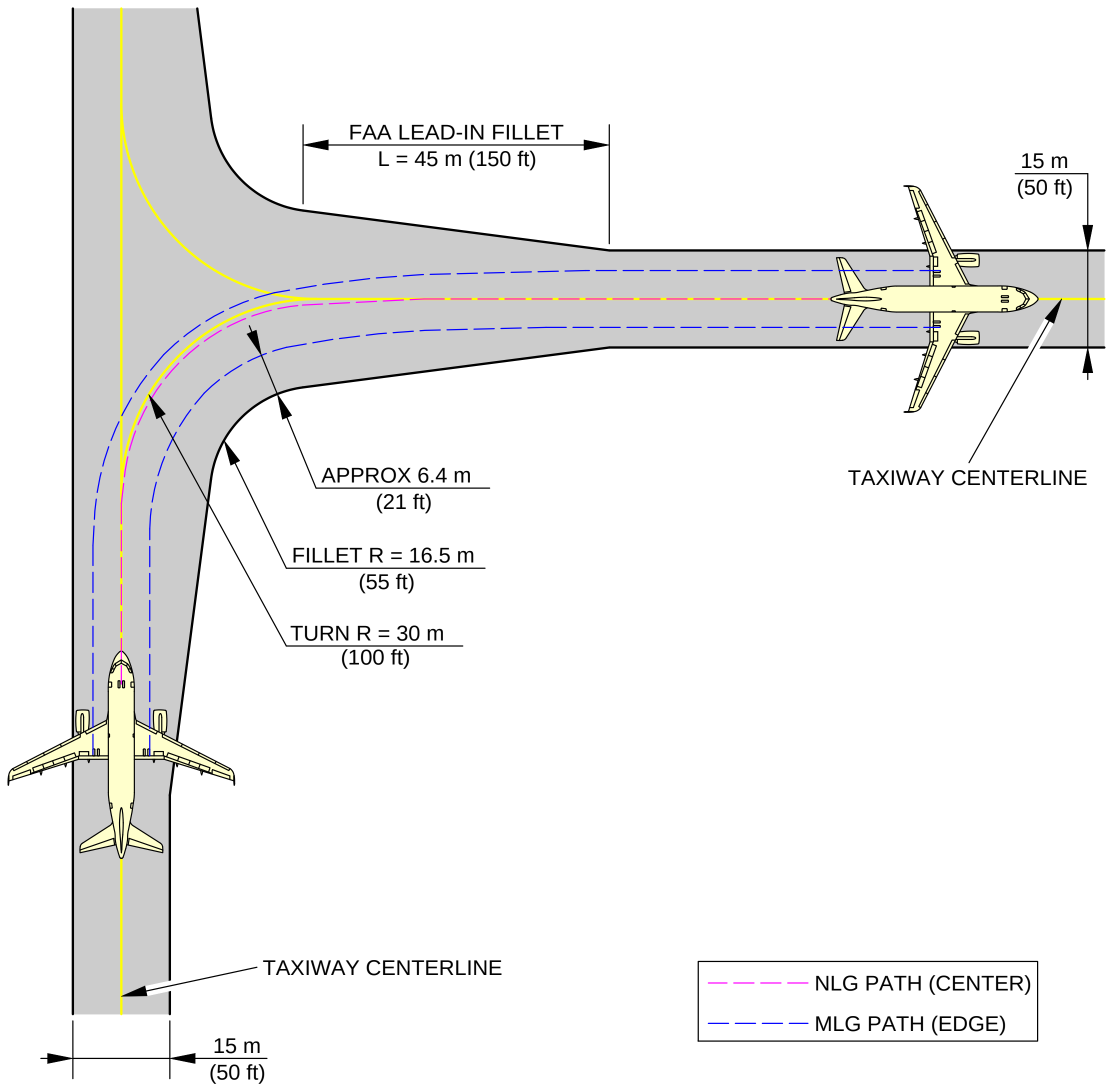
4-5-5 90° Turn - Taxiway to Taxiway

****ON A/C A318-100**

90° Turn - Taxiway to Taxiway

1. This section gives the 90° turn - taxiway to taxiway.

****ON A/C A318-100**

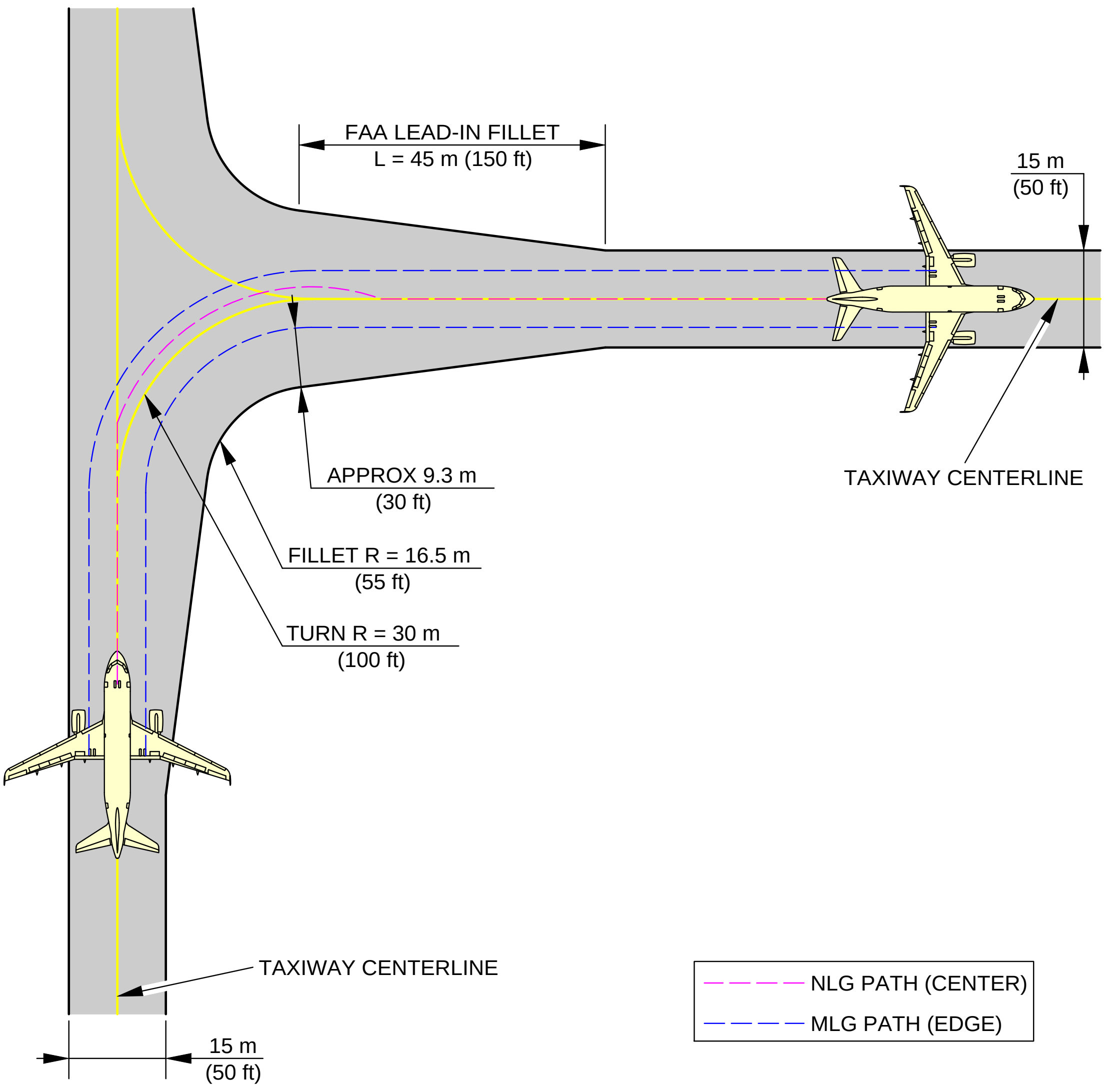


NOTE:
FAA GROUP III FACILITIES.

N_AC_040505_1_0010101_01_03

90° Turn - Taxiway to Taxiway
Cockpit Over Centerline Method (Sheet 1 of 2)
FIGURE-4-5-5-991-001-A01

****ON A/C A318-100**



NOTE:
FAA GROUP III FACILITIES.

N_AC_040505_1_0010102_01_01

90° Turn - Taxiway to Taxiway
Judgemental Oversteering Method (Sheet 2 of 2)
FIGURE-4-5-5-991-001-A01

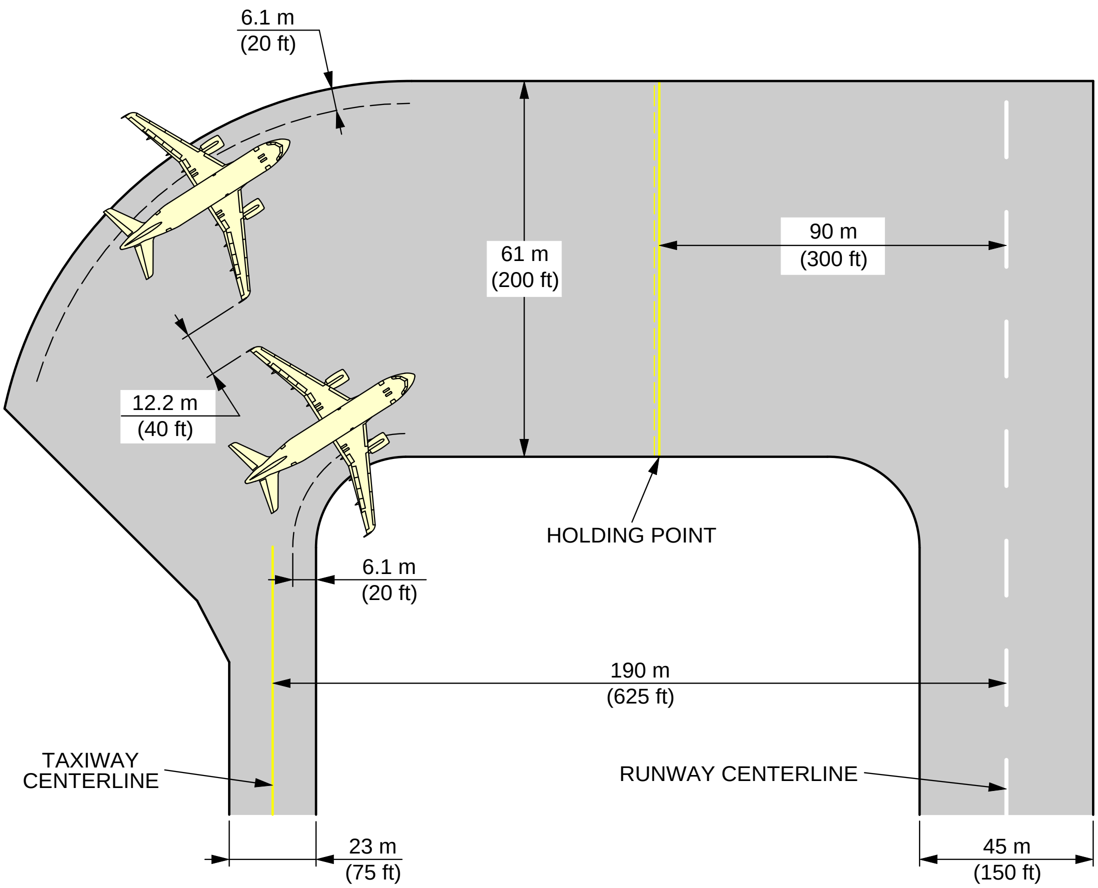
4-6-0 Runway Holding Bay (Apron)

****ON A/C A318-100**

Runway Holding Bay (Apron)

1. This section gives the runway holding bay (Apron).

****ON A/C A318-100**



N_AC_040600_1_0010101_01_02

Runway Holding Bay (Apron)
FIGURE-4-6-0-991-001-A01

4-7-0 Minimum Line-Up Distance Corrections

****ON A/C A318-100**

Minimum Line-Up Distance Corrections

1. The ground maneuvers were performed using asymmetric thrust and differential braking only to initiate the turn.

   TODA: Take-Off Distance Available
   ASDA: Acceleration-Stop Distance Available

2. 90° Turn on Runway Entry

   This section gives the minimum line-up distance correction for a 90° turn on runway entry.
   This maneuver consists in a 90° turn at minimum turn radius. It starts with the edge of the MLG at a distance of 3 m (10 ft) from the taxiway edge, and finishes with the aircraft aligned on the centerline of the runway, see FIGURE 4-7-0-991-014-A.
   During the turn, all the clearances must meet the minimum value of 3 m (10 ft) for this category of aircraft as recommended in ICAO Annex 14.

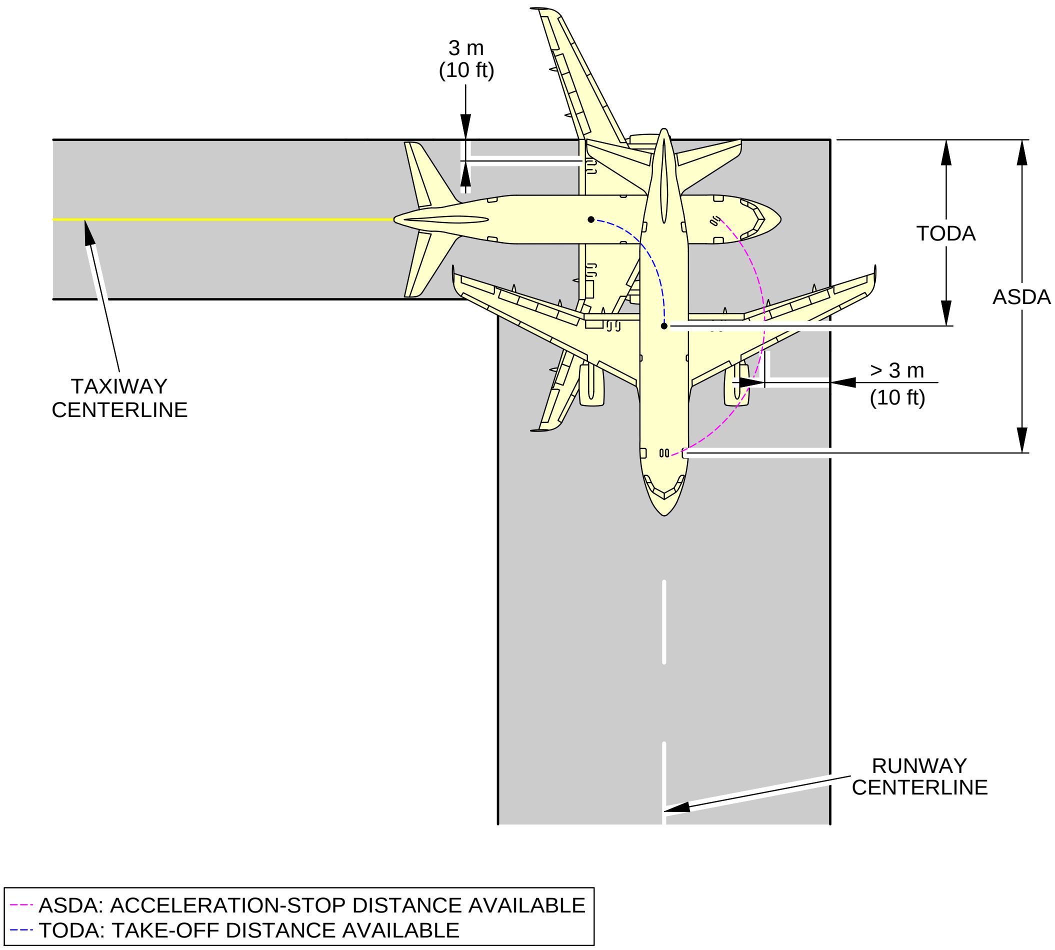
3. 180° Turn on Runway Turn Pad

   This section gives the minimum line-up distance correction for a 180° turn on the runway turn pad.
   This maneuver consists in a 180° turn at minimum turn radius on a runway turn pad with standard ICAO geometry.
   It starts with the edge of the MLG at a distance of 3 m (10 ft) from the pavement edge, and it finishes with the aircraft aligned on the centerline of the runway, see FIGURE 4-7-0-991-015-A.
   During the turn, all the clearances must meet the minimum value of 3 m (10 ft) for this category of aircraft as recommended in ICAO Annex 14.

4. 180° Turn on Runway Width

   This section gives the minimum line-up distance correction for a 180° turn on the runway width.
   For this maneuver, the pavement width is considered to be the runway width, which is a frozen parameter (30 m (100 ft), 45 m (150 ft) and 60 m (200 ft)).
   As per the standard operating procedures for the ”180° turn on runway” (described in the Flight Crew Operating Manual), the aircraft is initially angled with respect to the runway centerline when starting the 180° turn, see FIGURE 4-7-0-991-016-A.
   The value of this angle depends on the aircraft type and is mentioned in the FCOM.
   During the turn, all the clearances must meet the minimum value of 3 m (10 ft) for this category of aircraft as recommended in ICAO Annex 14.

****ON A/C A318-100**

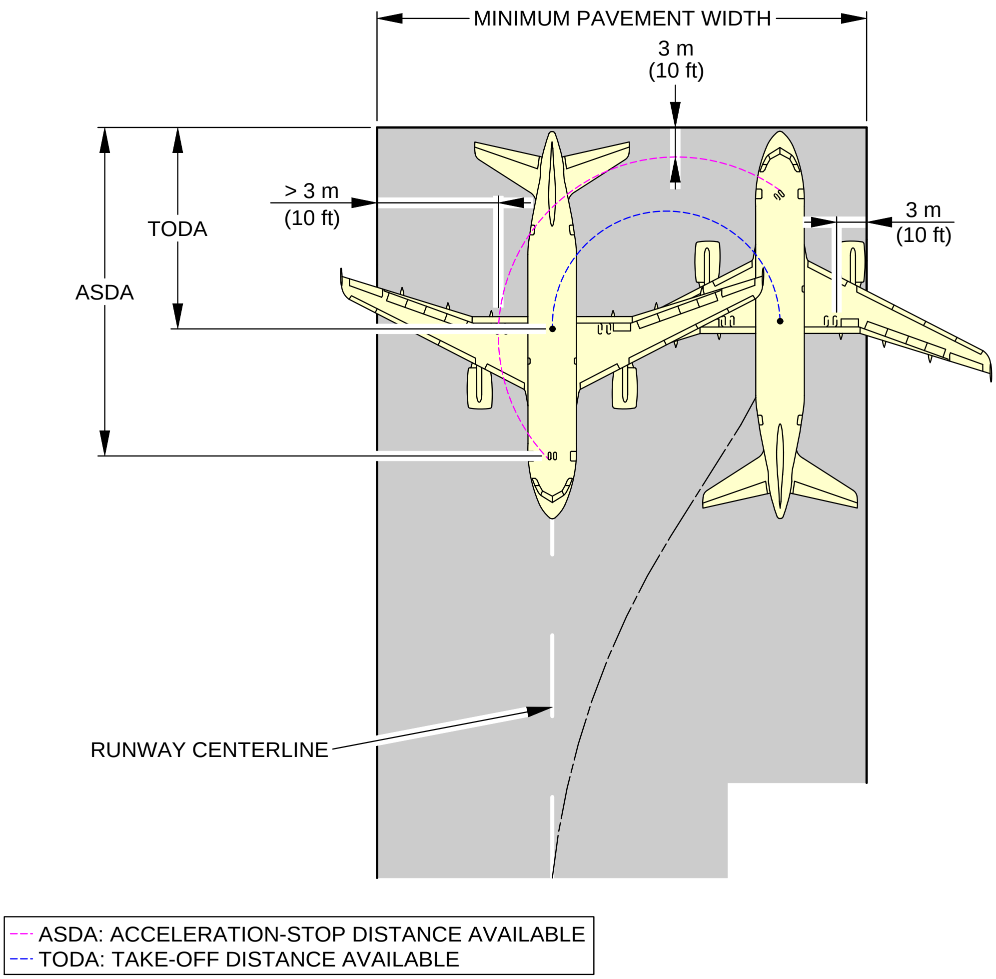


90° TURN ON RUNWAY ENTRY					
AIRCRAFT TYPE	MAX STEERING ANGLE	30 m (100 ft)/45 m (150 ft)/60 m (200 ft) WIDE RUNWAY			
		MINIMUM LINE-UP DISTANCE CORRECTION			
		ON TODA		ON ASDA	
A318	75°	10.8 m	35 ft	21.1 m	69 ft

N_AC_040700_1_0140101_01_00

Minimum Line-Up Distance Corrections
90° Turn on Runway Entry
FIGURE-4-7-0-991-014-A01

****ON A/C A318-100**

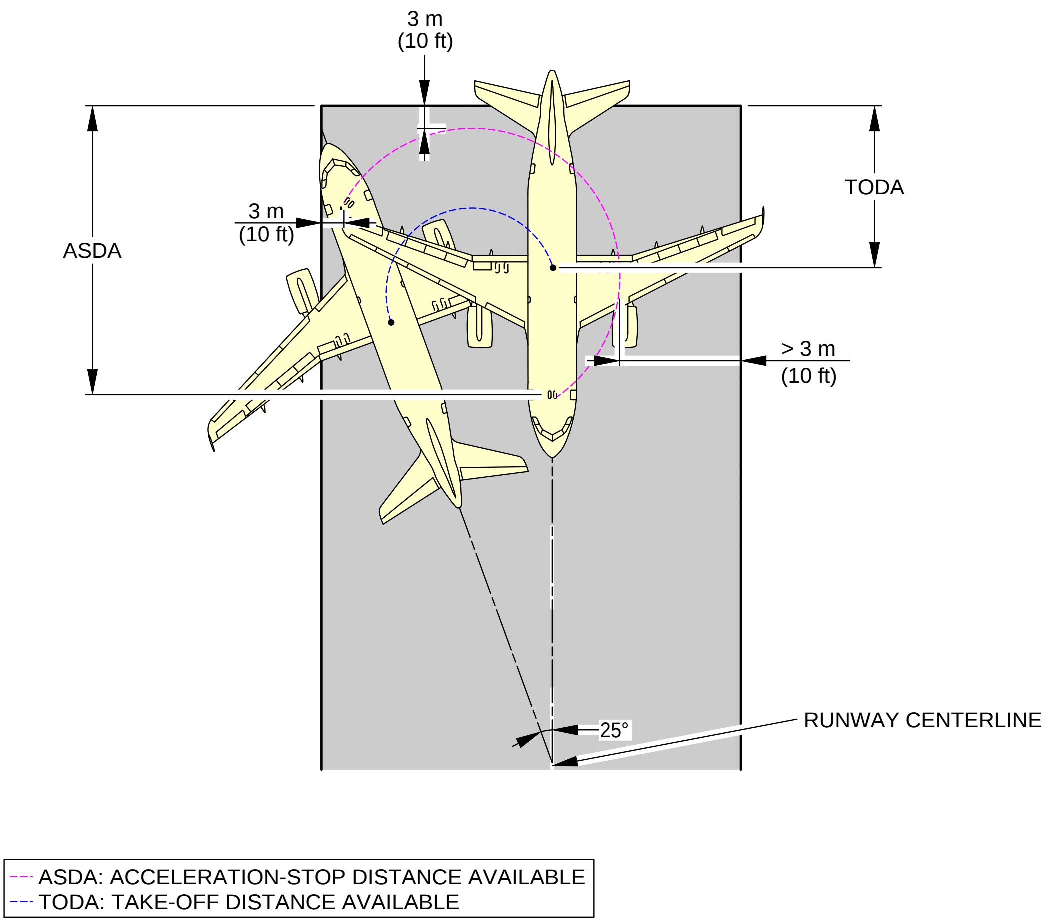


180° TURN ON RUNWAY TURN PAD							
AIRCRAFT TYPE	MAX STEERING ANGLE	30 m (100 ft)/45 m (150 ft)/60 m (200 ft) WIDE RUNWAY					
		MINIMUM LINE-UP DISTANCE CORRECTION				REQUIRED MINIMUM PAVEMENT WIDTH	
		ON TODA		ON ASDA			
A318	75°	14.1 m	46 ft	24.4 m	80 ft	29.2 m	96 ft

N_AC_040700_1_0150101_01_00

Minimum Line-Up Distance Corrections
180° Turn on Runway Turn Pad
FIGURE-4-7-0-991-015-A01

****ON A/C A318-100**



<table>
<tr><th colspan="6">180° TURN ON RUNWAY WIDTH</th></tr>
<tr><td rowspan="3">AIRCRAFT TYPE</td><td rowspan="3">MAX STEERING ANGLE</td><td colspan="4">30 m (100 ft)/45 m (150 ft)/60 m (200 ft) WIDE RUNWAY</td></tr>
<tr><td colspan="4">MINIMUM LINE-UP DISTANCE CORRECTION</td></tr>
<tr><td colspan="2">ON TODA</td><td colspan="2">ON ASDA</td></tr>
<tr><td>A318</td><td>75°</td><td>14.1 m</td><td>46 ft</td><td>24.4 m</td><td>80 ft</td></tr>
</table>

N_AC_040700_1_0160101_01_00

Minimum Line-Up Distance Corrections
180° Turn on Runway Width
FIGURE-4-7-0-991-016-A01

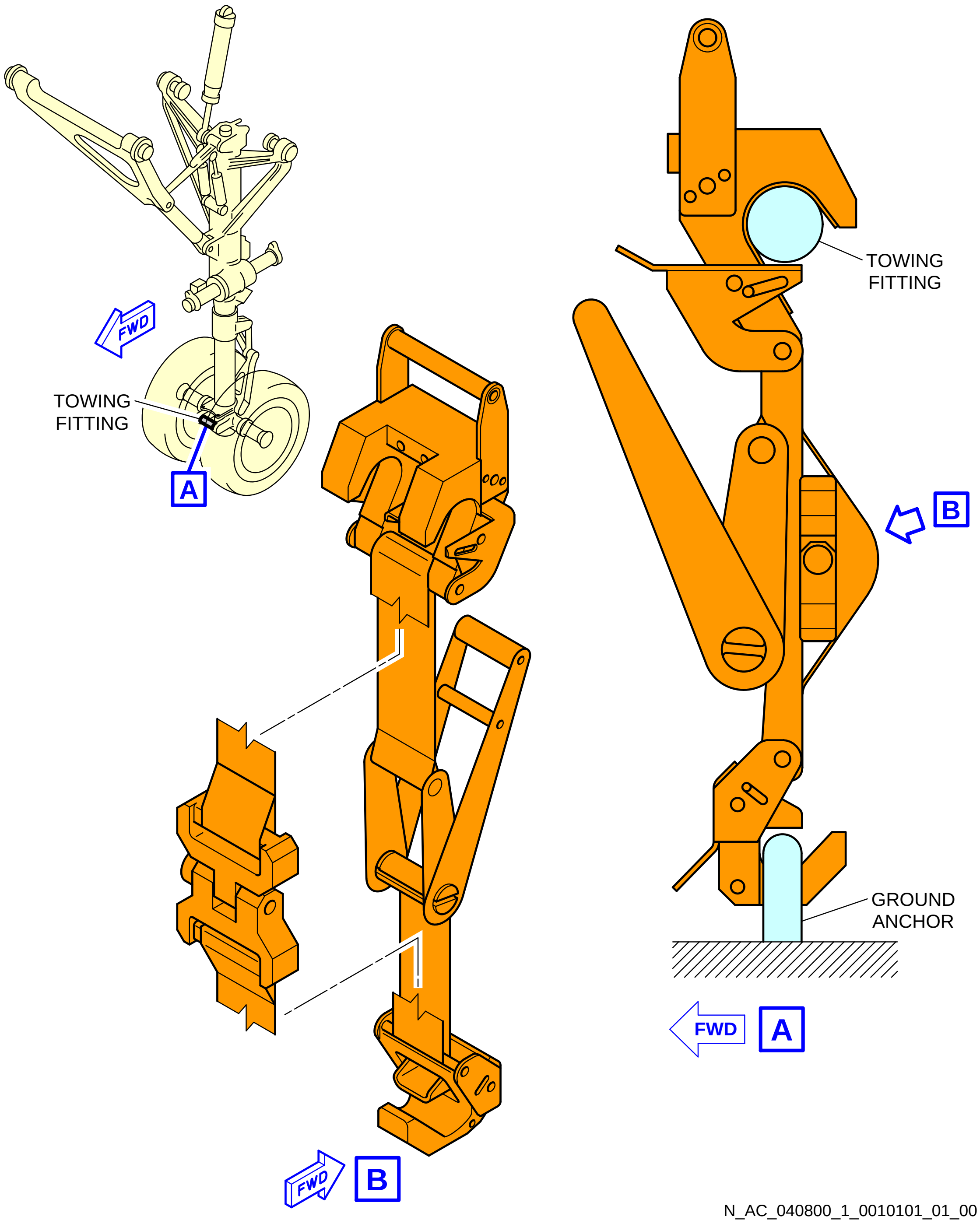
4-8-0 Aircraft Mooring

****ON A/C A318-100**

Aircraft Mooring

1. This section provides information on aircraft mooring.

****ON A/C A318-100**



Aircraft Mooring
FIGURE-4-8-0-991-001-A01

TERMINAL SERVICING

5-1-1 Aircraft Servicing Arrangements

****ON A/C A318-100**

Aircraft Servicing Arrangements

1. This section provides typical ramp layouts, showing the various GSE items in position during typical turn-round scenarios.

   These ramp layouts show typical arrangements only. Each operator will have its own specific requirements/regulations for positioning and operation on the ramp.

   This table gives the symbols used on servicing diagrams.

Ground Support Equipment	
AC	AIR CONDITIONING UNIT
AS	AIR START UNIT
BULK	BULK TRAIN
CAT	CATERING TRUCK
CB	CONVEYOR BELT
CLEAN	CLEANING TRUCK
FUEL	FUEL HYDRANT DISPENSER or TANKER
GPU	GROUND POWER UNIT
LDCL	LOWER DECK CARGO LOADER
LV	LAVATORY VEHICLE
PBB	PASSENGER BOARDING BRIDGE
PS	PASSENGER STAIRS
TOW	TOW TRACTOR
ULD	ULD TRAIN
WV	POTABLE WATER VEHICLE

5-1-2 Typical Ramp Layout - Open Apron

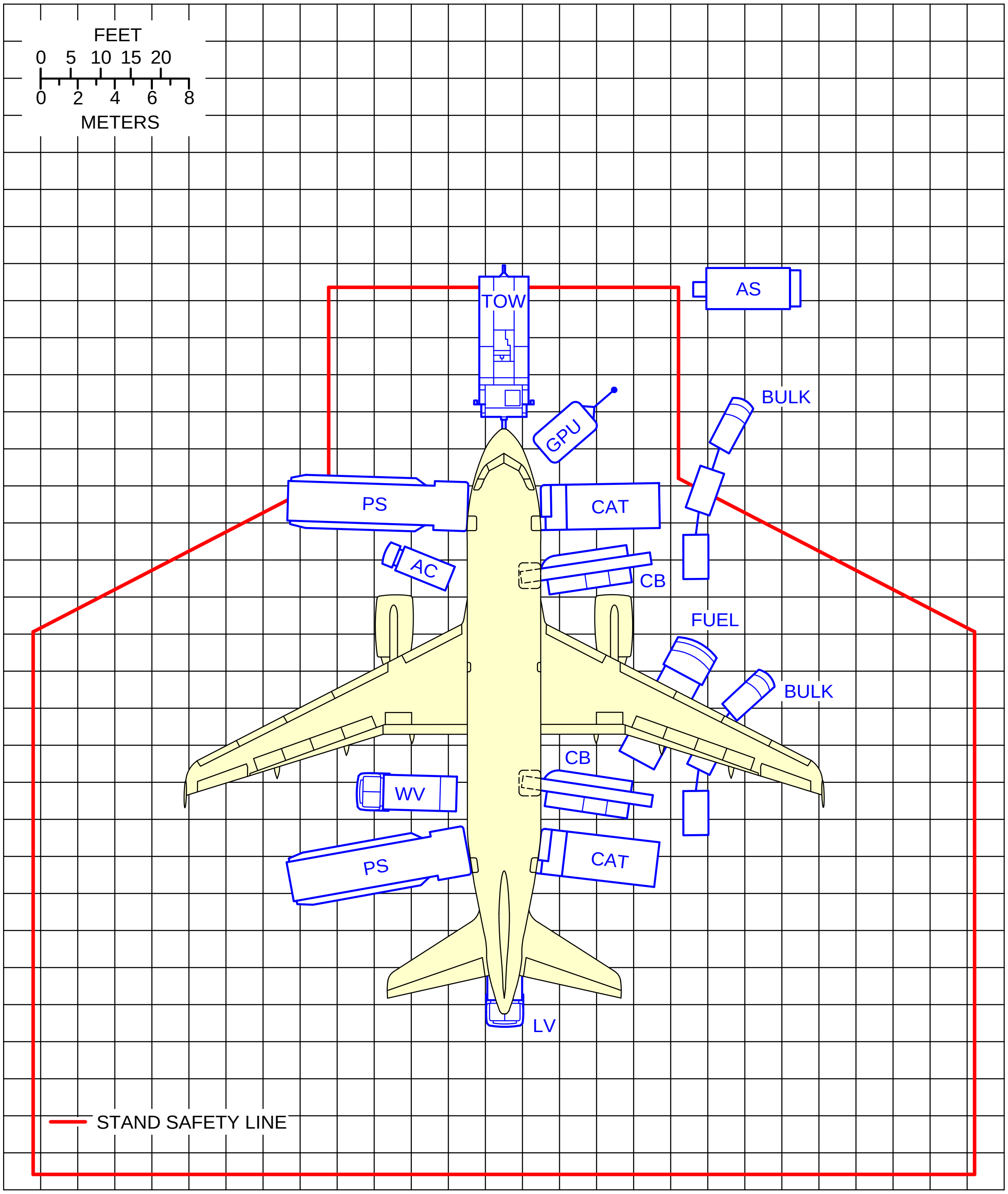
****ON A/C A318-100**

Typical Ramp Layout - Open Apron

1. This section gives the typical servicing arrangement for pax version (Open Apron).

   The Stand Safety Line delimits the Aircraft Safety Area (minimum distance 7.5 m from the aircraft). No vehicle must be parked in this area before complete stop of the aircraft (wheel chocks in position on landing gears).

****ON A/C A318-100**



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Typical Ramp Layout
Open Apron - Bulk Loading
FIGURE-5-1-2-991-001-A01

5-1-3 Typical Ramp Layout - Gate

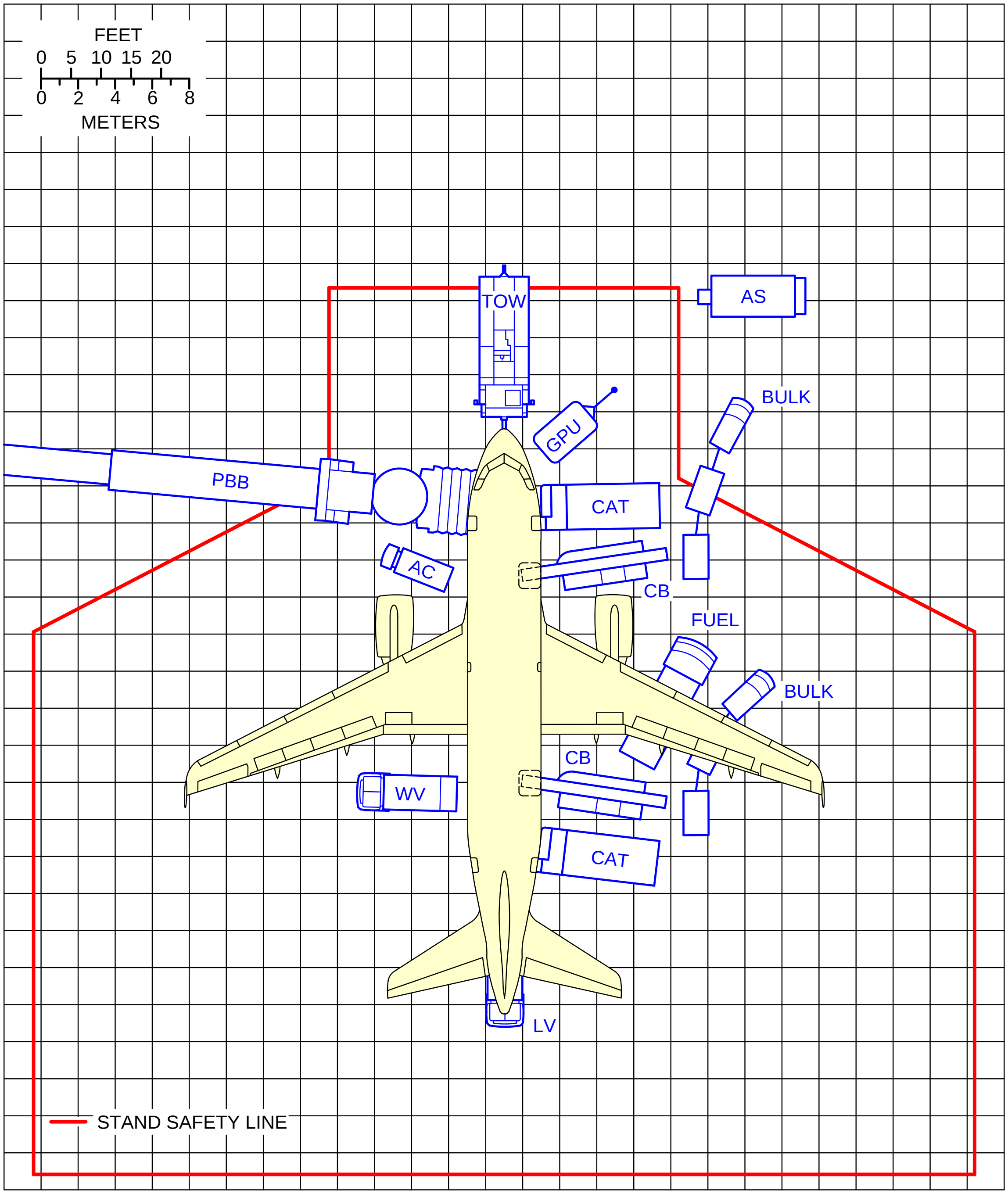
****ON A/C A318-100**

Typical Ramp Layout - Gate

1. This section give the typical servicing arrangement for pax version (Passenger Bridge).

   The Stand Safety Line delimits the Aircraft Safety Area (minimum distance of 7.5 m from the aircraft). No vehicle must be parked in this area before complete stop of the aircraft (wheel chocks in position on landing gears).

**ON A/C A318-100



Typical Ramp Layout
Gate
FIGURE-5-1-3-991-004-A01

5-2-0 Terminal Operations - Full Servicing Turn Round Time Chart

****ON A/C A318-100**

Terminal Operations - Full Servicing Turn Round Time

1. This section provides a typical turn round time chart showing the typical time for ramp activities during aircraft turn round.

   Actual times may vary due to each operator's specific practices, resources, equipment and operating conditions.

2. Assumptions used for full servicing turn round time chart

   A. PASSENGER HANDLING
   107 pax: 8 F/C + 99 Y/C.
   All passengers deplane and board the aircraft.
   1 Passenger Boarding Bridge (PBB) used at door 1L.
   Equipment positioning + opening door = +2 min.
   Closing door + equipment removal = +1.5 min.
   No Passenger with Reduced Mobility (PRM) on board.

   Deplaning:
   - 107 pax at door 1L
   - Deplaning rate = 20 pax/min per door
   - Priority deplaning for premium passengers.

   Boarding:
   - 107 pax at door 1L
   - Boarding rate = 12 pax/min per door
   - Last Pax Seating allowance (LPS) + headcounting = +2 min.

   B. CARGO
   2 belt loaders.
   Opening door + equipment positioning = +2 min.
   Equipment removal + closing door = +1.5 min.

   100% cargo exchange (baggage only):
   An average 15 kg (33 lb) per pax is assumed.
   - FWD cargo compartment: 800 kg (1 764 lb)
   - AFT cargo compartment: 800 kg (1 764 lb).

Bulk unloading/loading times:
- Unloading = 150 kg/min (331 lb/min)
- Loading = 120 kg/min (265 lb/min).

C. REFUELING

20 000 l (5 283 US gal) at 50 psig (3.45 bars-rel), one hose (right wing).
Dispenser positioning/removal + connection/disconnection times = +2.5 min.

D. CLEANING

Cleaning is performed in available time.

E. CATERING

1 catering truck for servicing galleys sequentially at doors 1R and 4R.
Equipment positioning + opening door = +2 min.
Closing door + equipment removal = +1.5 min.
Time to drive from one door to the other = +2 min.

Full Size Trolley Equivalent (FSTE) to unload and load: 8 FSTE
- 4 FSTE at door 1R
- 4 FSTE at door 4R.

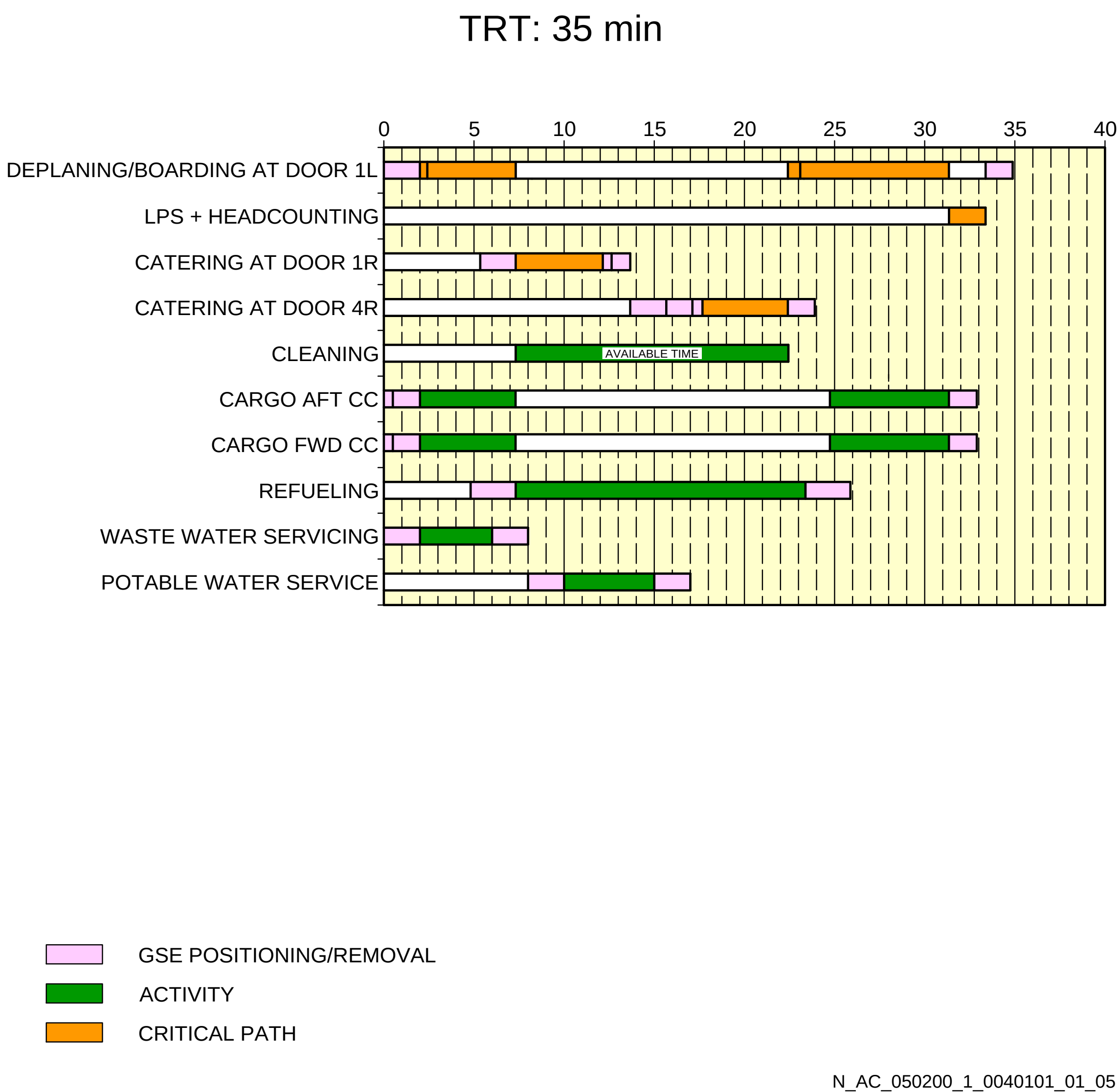
Time for trolley exchange = 1.2 min per FSTE.

F. GROUND HANDLING/GENERAL SERVICING

Start of operations:
- Bridges/stairs: t0 = 0
- Other equipment: t = t0 + 1 min.

Ground Power Unit (GPU): up to 90 kVA.
Air conditioning: one hose.
Potable water servicing: 100% uplift, 200 l (53 US gal).
Toilet servicing: draining + rinsing.

****ON A/C A318-100**



Full Servicing Turn Round Time Chart
FIGURE-5-2-0-991-004-A01

5-3-0 Terminal Operation - Outstation Turn Round Time Chart

****ON A/C A318-100**

Terminal Operations - Outstation Turn Round Time

1. This section provides a typical turn round time chart showing the typical time for ramp activities during aircraft turn round.

   Actual times may vary due to each operator's specific practices, resources, equipment and operating conditions.

2. Assumptions used for outstation turn round time chart

   A. PASSENGER HANDLING
   132 pax (all Y/C).
   All passengers deplane and board the aircraft.
   2 stairways used at doors 1L and 4L.
   Equipment positioning + opening door = +2 min.
   Closing door + equipment removal = +1.5 min.
   No Passenger with Reduced Mobility (PRM) on board.

   Deplaning:
   - 66 pax at door 1L
   - 66 pax at door 4L
   - Deplaning rate = 18 pax/min per door.

   Boarding:
   - 66 pax at door 1L
   - 66 pax at door 4L
   - Boarding rate = 12 pax/min per door
   - Last Pax Seating allowance (LPS) + headcounting = +2 min.

   B. CARGO
   2 belt loaders.
   Opening door + equipment positioning = +2 min.
   Equipment removal + closing door = +1.5 min.

   100% cargo exchange (baggage only):
   An average 15 kg (33 lb) per pax is assumed.
   - FWD cargo compartment: 990 kg (2 183 lb)
   - AFT cargo compartment: 990 kg (2 183 lb).

Bulk unloading/loading times:
- Unloading = 120 kg/min (265 lb/min)
- Loading = 100 kg/min (220 lb/min).

C. REFUELING
No refueling.

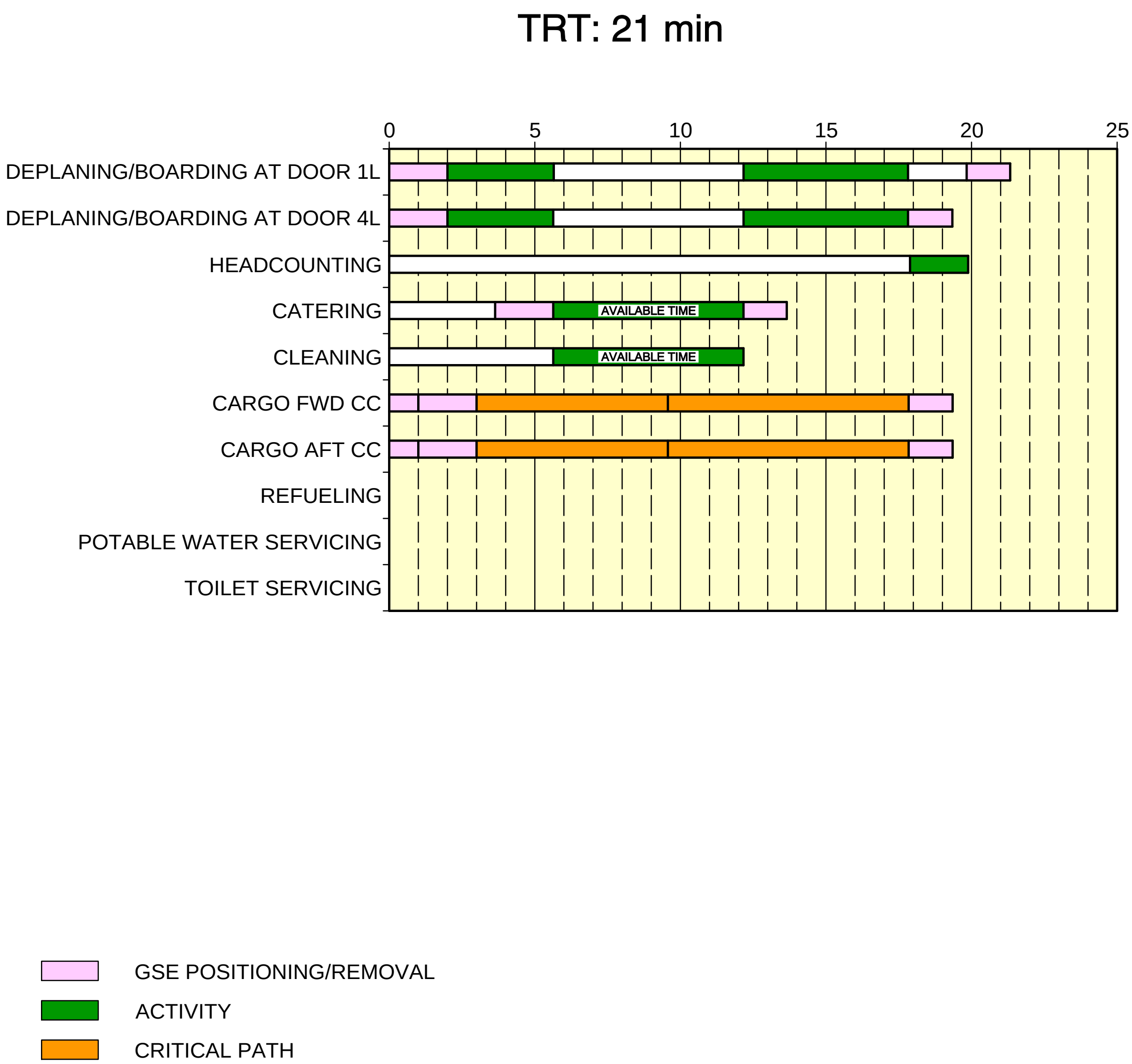
D. CLEANING
Cleaning is performed in available time.

E. CATERING
One catering truck for servicing the galleys as required.

F. GROUND HANDLING/GENERAL SERVICING
Start of operations:
- Bridges/stairs: t0 = 0
- Other equipment: t = t0.

Ground Power Unit (GPU): up to 90 kVA.
Air conditioning: one hose.
No potable water servicing.
No toilet servicing.

****ON A/C A318-100**



Outstation Turn Round Time Chart
FIGURE-5-3-0-991-001-A01

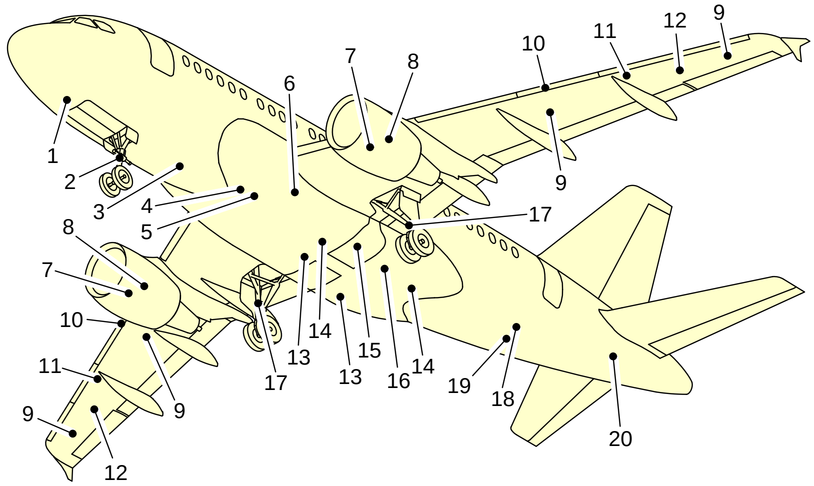
5-4-1 Ground Service Connections

****ON A/C A318-100**

Ground Service Connections Layout

1. This section provides the ground service connections layout.

****ON A/C A318-100**



1 - GROUND ELECTRICAL POWER CONNECTOR
2 - NLG GROUNDING (EARTHING) POINT
3 - POTABLE WATER DRAIN PANEL
4 - LOW PRESSURE AIR PRE-CONDITIONING
5 - HIGH PRESSURE AIR PRE-CONDITIONING
6 - REFUEL/DEFUEL INTEGRATED PANEL
7 - IDG/STARTER OIL SERVICING
8 - ENGINE OIL SERVICING*
9 - OVERPRESSURE PROTECTOR
10 - REFUEL/DEFUEL COUPLINGS (OPTIONAL-LH WING)
11 - OVERWING REFUEL (IF INSTALLED)
12 - NACA VENT INTAKE
13 - YELLOW HYDRAULIC-SYSTEM SERVICE PANEL
14 - BLUE HYDRAULIC-SYSTEM SERVICE PANEL
15 - ACCUMULATOR CHARGING (GREEN SYSTEM) AND RESERVOIR DRAIN (GREEN SYSTEM)
16 - GREEN HYDRAULIC-SYSTEM SERVICE PANEL
17 - MLG GROUNDING (EARTHING) POINT
18 - WASTE WATER SERVICE PANEL
19 - POTABLE WATER SERVICE PANEL
20 - APU OIL SERVICING

NOTE:

* FOR THE PW 6000 ENGINE, THE ENGINE OIL SERVICING POINTS (8) ARE LOCATED SYMMETRICALLY ON THE RH SIDE OF EACH ENGINE.
THE ENGINE OIL SERVICING POINTS (8) ARE SHOWN FOR THE CFM 56 ENGINE.

N_AC_050401_1_0010101_01_02

Ground Service Connections Layout
FIGURE-5-4-1-991-001-A01

5-4-2 Grounding Points

****ON A/C A318-100**

Grounding (Earthing) Points

1. Grounding (Earthing) Points

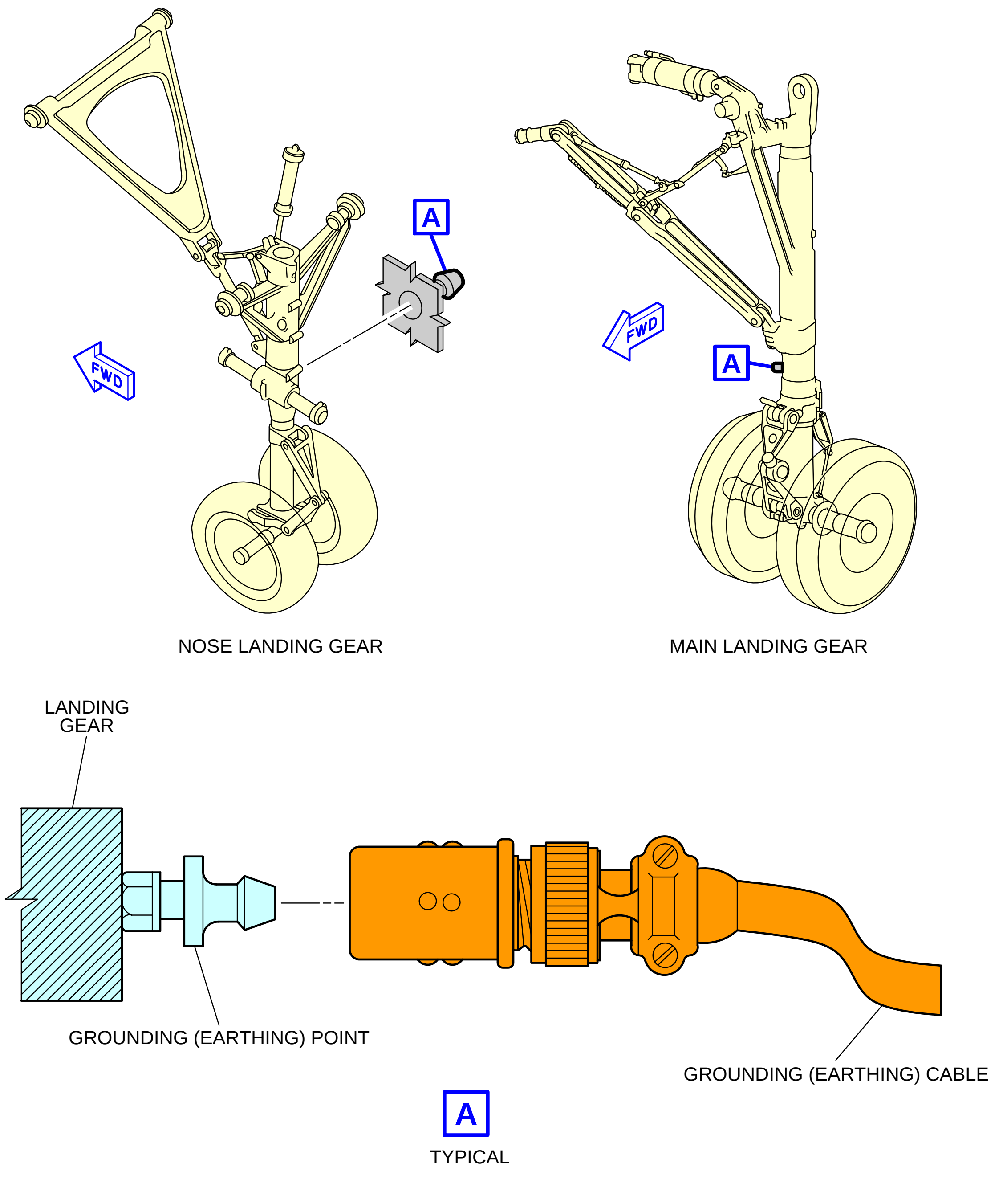
	DISTANCE			
	AFT OF NOSE	FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		LH SIDE	RH SIDE	
On NLG leg:	5.07 m (16.63 ft)	On Centerline		0.94 m (3.08 ft)
On left MLG leg:	15.32 m (50.26 ft)	3.79 m (12.43 ft)	-	1.07 m (3.51 ft)
On right MLG leg:	15.32 m (50.26 ft)	-	3.79 m (12.43 ft)	1.07 m (3.51 ft)

A. The grounding (earthing) stud on each landing gear leg is designed for use with a clip-on connector (such as Appleton TGR).

B. The grounding (earthing) studs are used to connect the aircraft to an approved ground (earth) connection on the ramp or in the hangar for:
   - Refuel/defuel operations,
   - Maintenance operations,
   - Bad weather conditions.

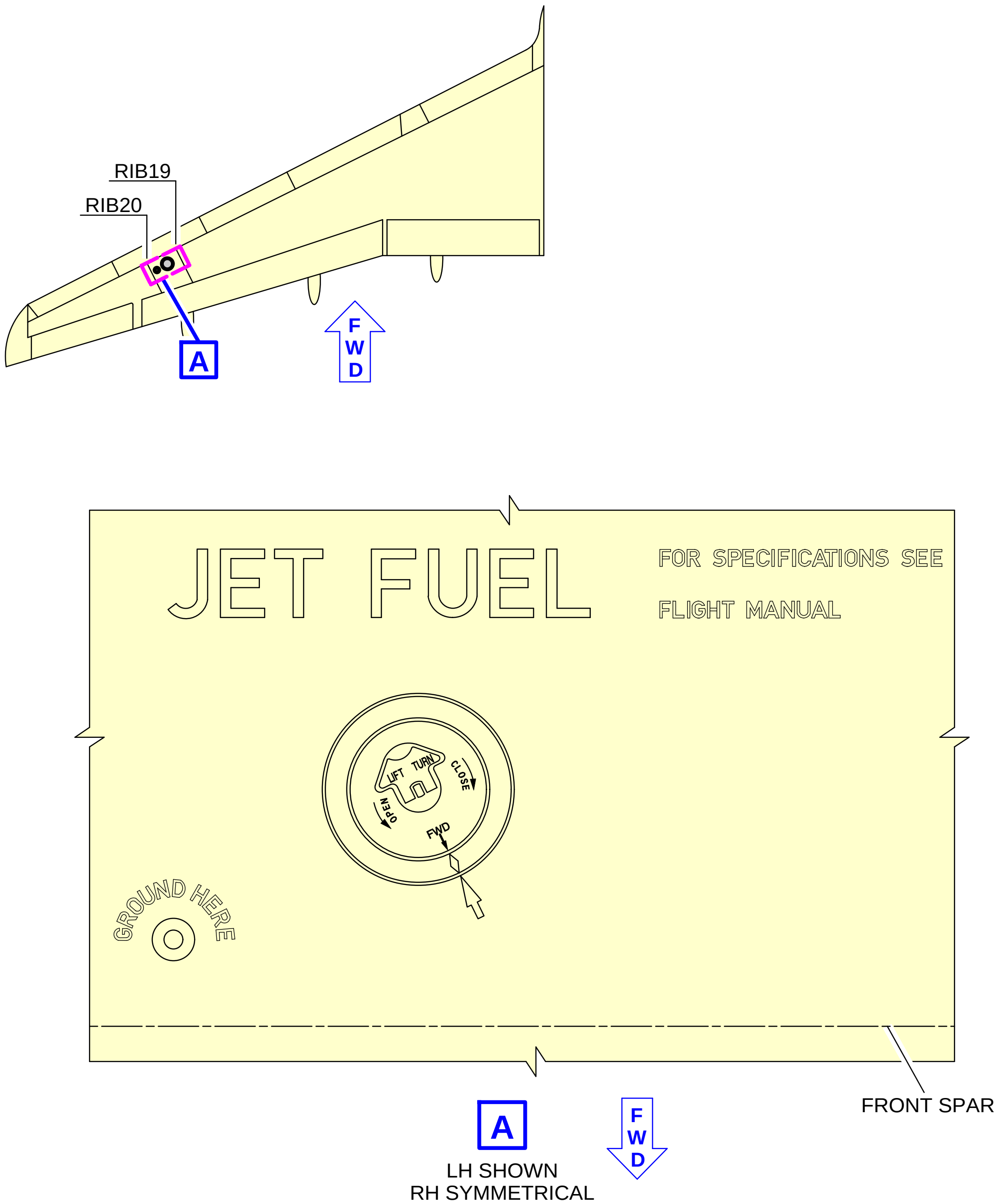
NOTE : In all other conditions, the electrostatic discharge through the tire is sufficient. If the aircraft is on jacks for retraction and extension checks or for the removal/ installation of the landing gear, the grounding (earthing) alternative points (if installed) are:
- In the hole on the avionics-compartment lateral right door-frame (on FR14),
- On the engine nacelles,
- On the wing upper surfaces.

****ON A/C A318-100**



Ground Service Connections
Grounding (Earthing) Points - Landing Gear
FIGURE-5-4-2-991-001-A01

****ON A/C A318-100**



NOTE:

THE REFUEL POINT ON THE WING UPPER SURFACE IS NOT AVAILABLE FOR SOME AIRCRAFTS.
THE LABEL "GROUND HERE" IS NOT AVAILABLE ON SOME AIRCRAFTS.
BUT THE GROUNDING (EARTHING) POINT CAN BE USED FOR THE GROUNDING (EARTHING) OF THE AIRCRAFT.

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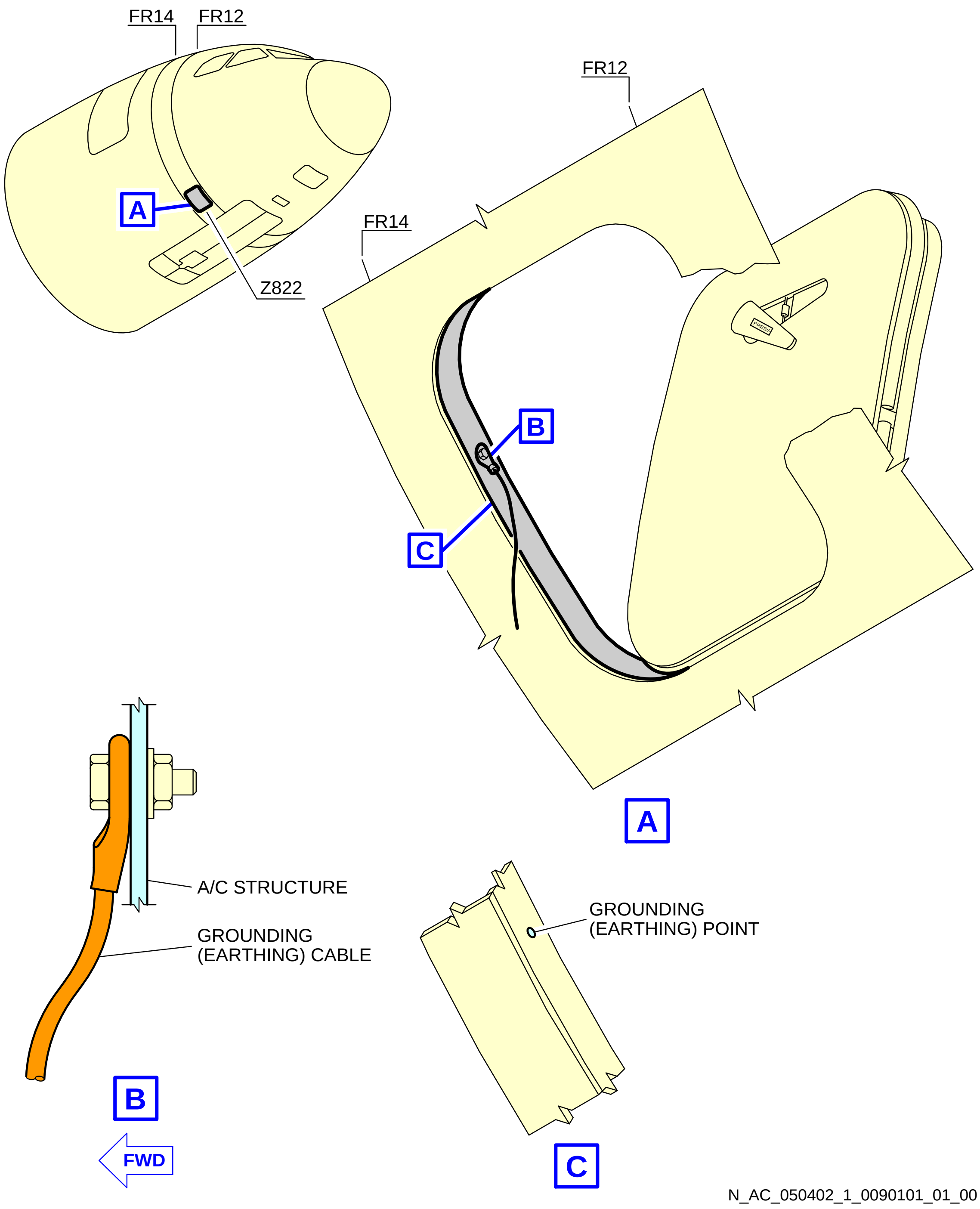
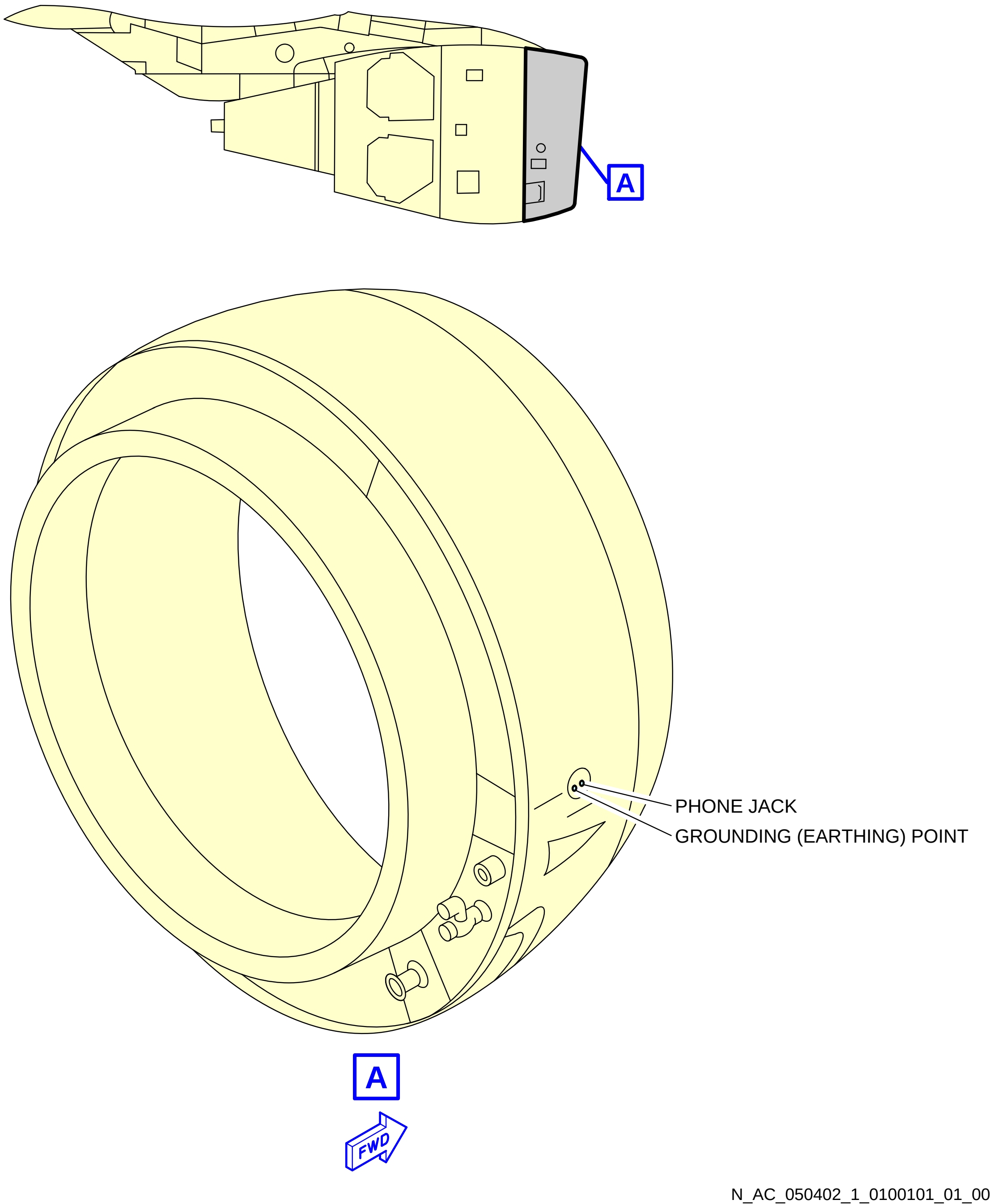
Ground Service Connections
Grounding (Earthing) Points - Wing
FIGURE-5-4-2-991-002-A01

****ON A/C A318-100**



Ground Service Connections
Grounding (Earthing) Point - Avionics Compartment Door-Frame
FIGURE-5-4-2-991-009-A01

****ON A/C A318-100**



Ground Service Connections
Grounding (Earthing) Point - Engine Air Intake (If Installed)
FIGURE-5-4-2-991-010-A01

5-4-3 Hydraulic System

****ON A/C A318-100**

Hydraulic Servicing

1. Access

ACCESS	DISTANCE			
	AFT OF NOSE	FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		LH SIDE	RH SIDE	
Green System: Access Door 197CB	16.43 m (53.90 ft)	1.27 m (4.17 ft)		1.76 m (5.77 ft)
Yellow System: Access Door 198CB	16.43 m (53.90 ft)		1.27 m (4.17 ft)	1.76 m (5.77 ft)
Blue System: Access Door 197EB	16.96 m (55.64 ft)	1.27 m (4.17 ft)		1.76 m (5.77 ft)

2. Reservoir Pressurization

ACCESS	DISTANCE			
	AFT OF NOSE	FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		LH SIDE	RH SIDE	
Access Door 195BB	13.20 m (43.31 ft)	0.25 m (0.82 ft)		1.74 m (5.71 ft)

3. Accumulator Charging

Four MIL-PRF-6164 connections:

ACCESS	DISTANCE			
	AFT OF NOSE	FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		LH SIDE	RH SIDE	
Yellow System Accumulator: Access Door 196BB	13.20 m (43.31 ft)		0.25 m (0.82 ft)	1.74 m (5.71 ft)
Green System Accumulator: Left MLG Door	14.30 m (46.92 ft)	0.25 m (0.82 ft)		3.20 m (10.50 ft)
Blue System Accumulator: Access Door 195BB	13.20 m (43.31 ft)	0.25 m (0.82 ft)		1.74 m (5.71 ft)
Yellow System Braking Accumulator: Access Door 196BB	13.20 m (43.31 ft)		0.25 m (0.82 ft)	1.74 m (5.71 ft)

4. Reservoir Filling

Centralized filling capability on the Green System ground service panel:

ACCESS	DISTANCE			
	AFT OF NOSE	FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		LH SIDE	RH SIDE	
Access Door 197CB	16.43 m (53.90 ft)	1.27 m (4.17 ft)		1.76 m (5.77 ft)

Filling: Ground pressurized supply or hand pump.

5. Reservoir Drain

Three 3/8 in. self-sealing connections:

ACCESS	DISTANCE			
	AFT OF NOSE	FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		LH SIDE	RH SIDE	
Yellow System:	13.20 m		0.25 m	1.74 m

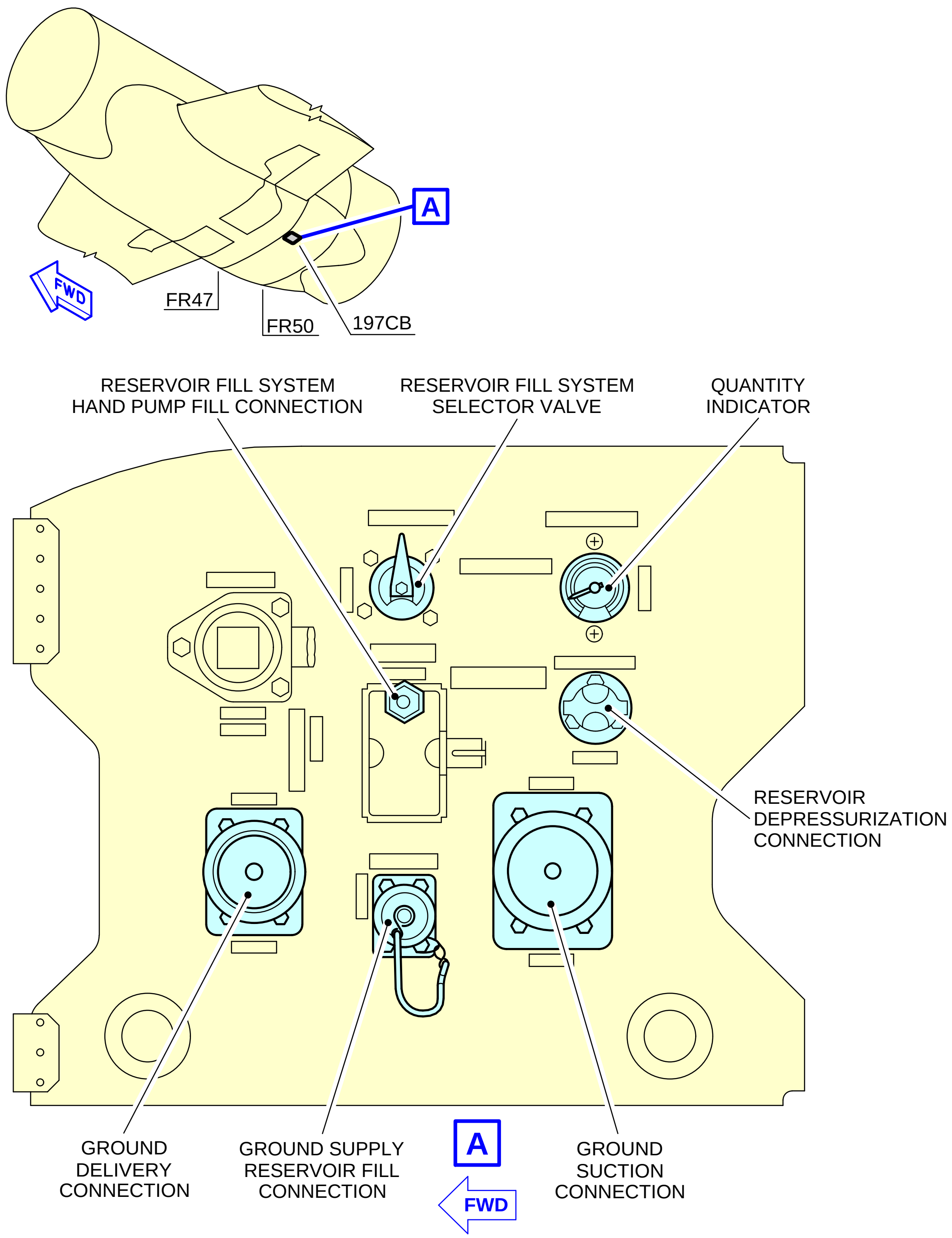
ACCESS	DISTANCE			
	AFT OF NOSE	FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		LH SIDE	RH SIDE	
Access Door 196BB	(43.31 ft)		(0.82 ft)	(5.71 ft)
Green System: Left MLG Door	14.30 m (46.92 ft)	0.25 m (0.82 ft)		3.20 m (10.50 ft)
Blue System: Access Door 197EB	16.96 m (55.64 ft)	1.27 m (4.17 ft)		1.76 m (5.77 ft)

NOTE : The drain valve is on the Blue System ground service panel for the reservoir of the Blue Hydraulic system.
The drain valve is on the reservoir for the Green and Yellow Hydraulic Systems.

6. Ground Test

On each ground service panel:
- One self-sealing connector (suction).
- One self-sealing connector (delivery).

****ON A/C A318-100**



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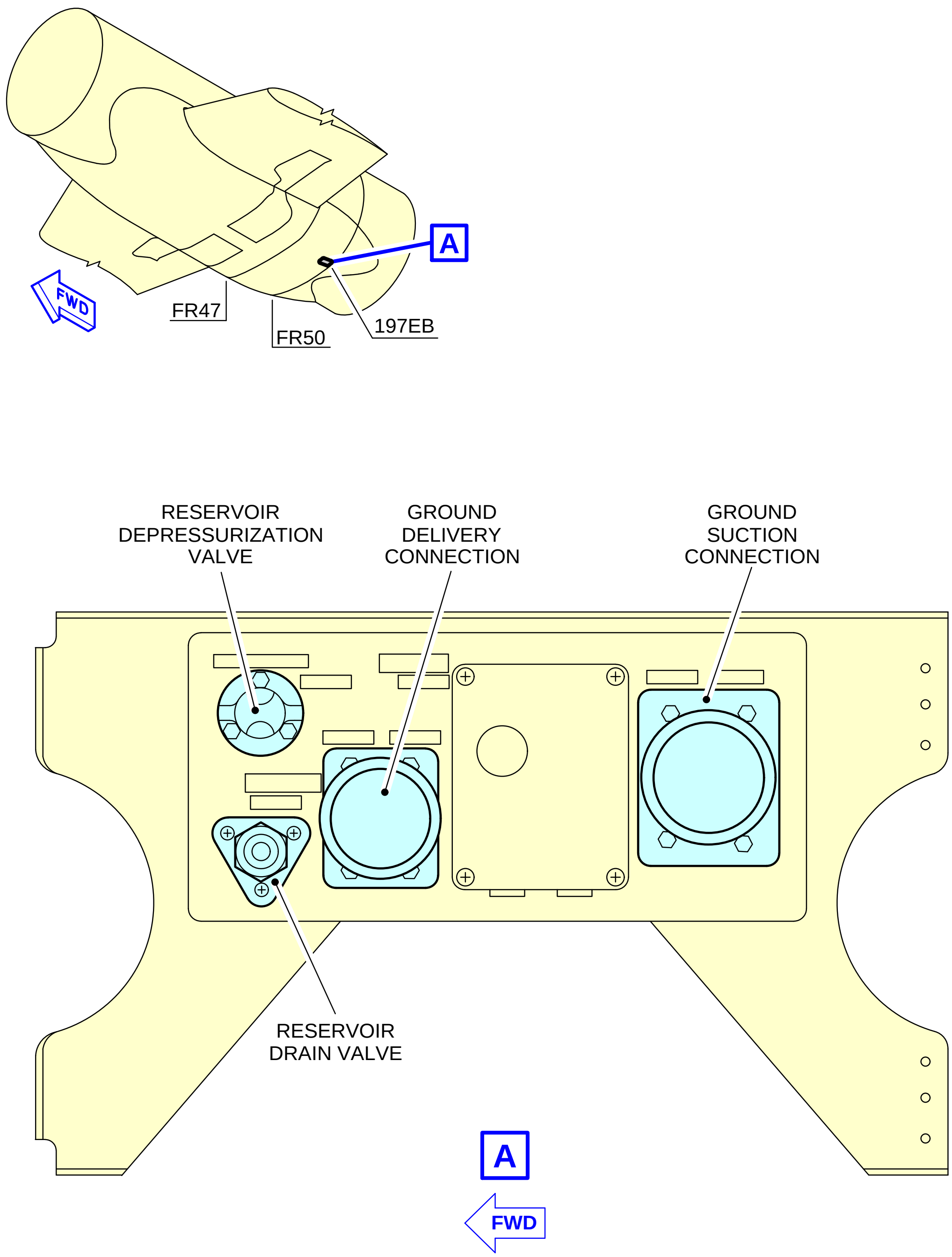
Ground Service Connections
Green System Ground Service Panel
FIGURE-5-4-3-991-004-A01

****ON A/C A318-100**



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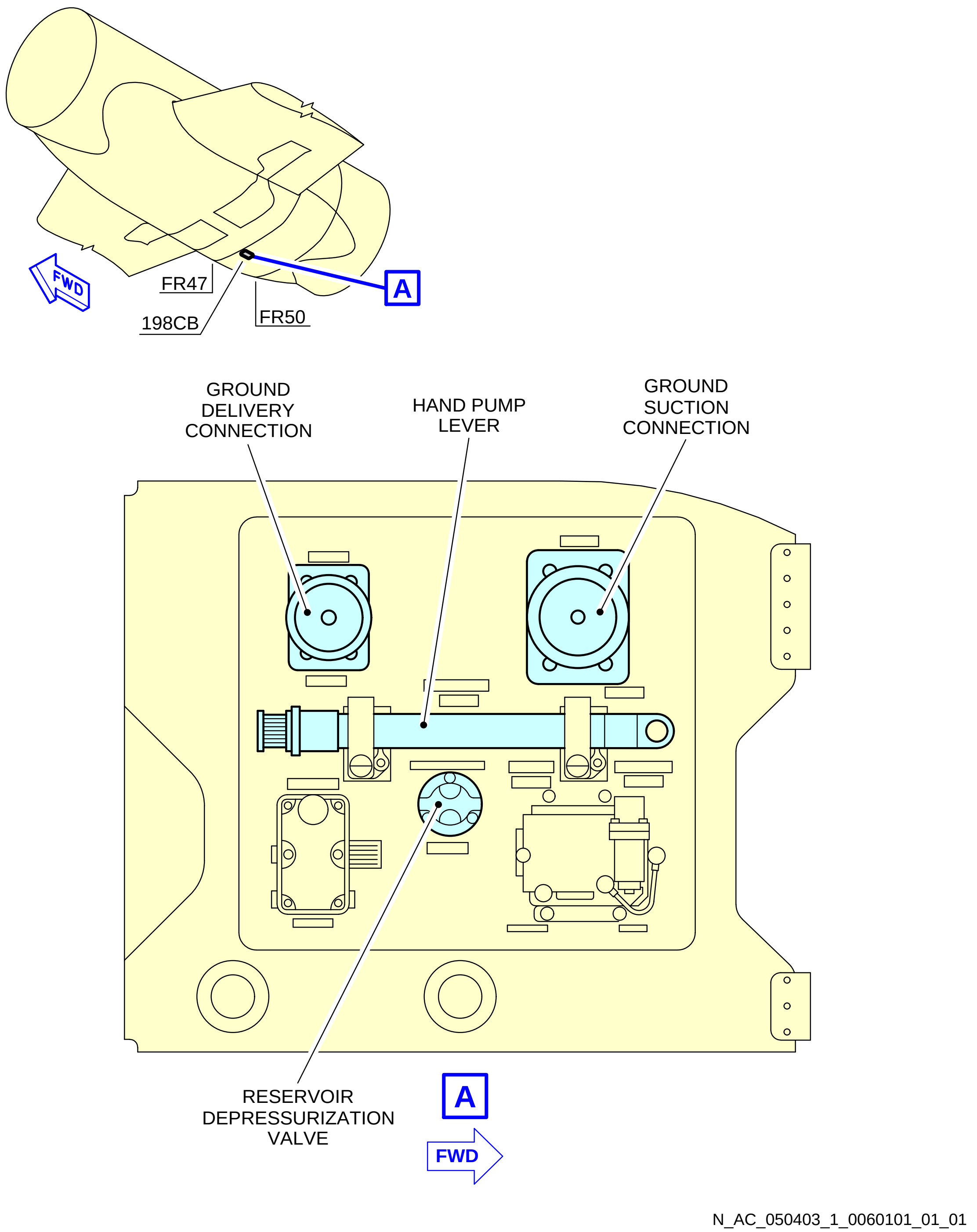
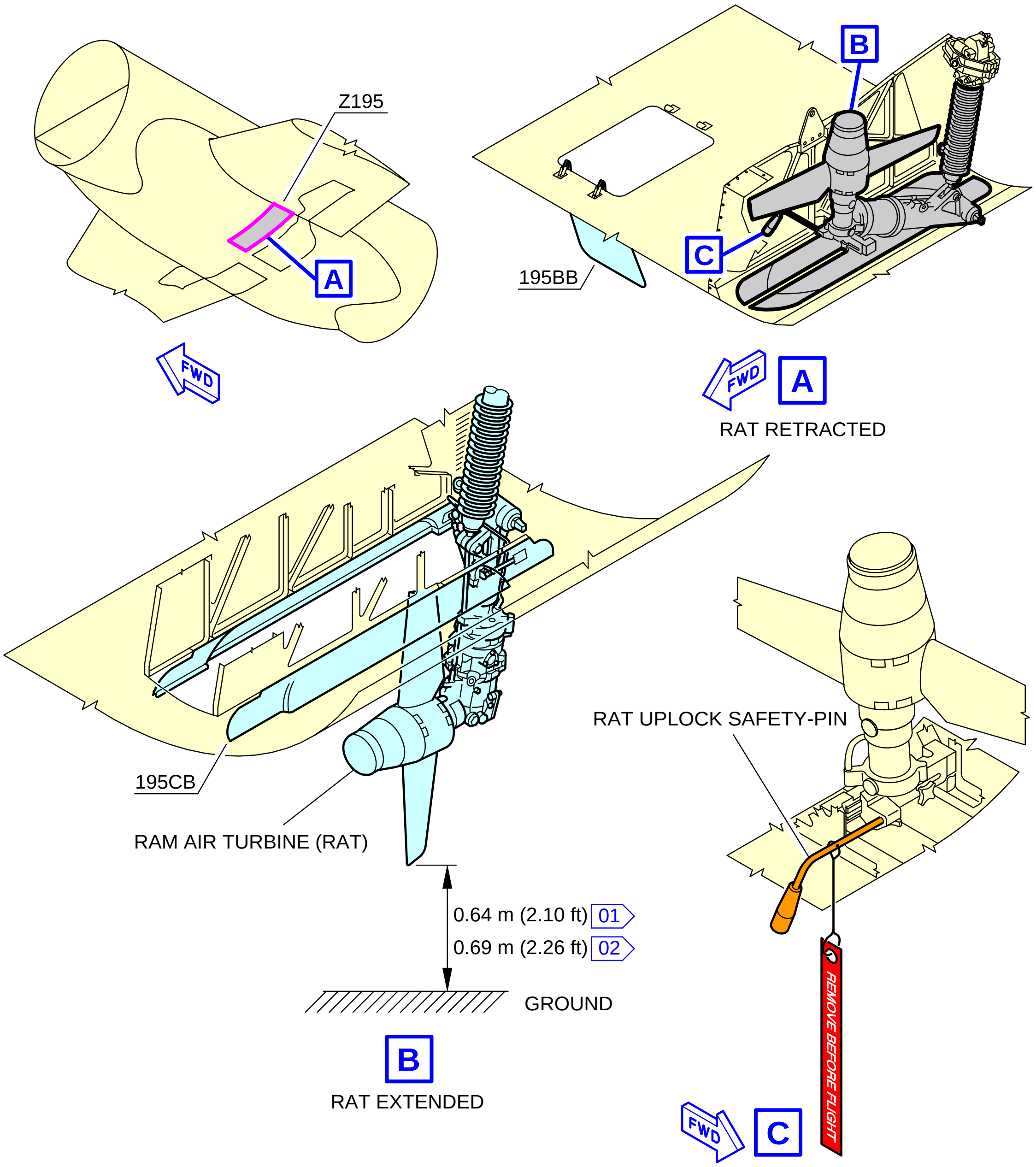
Ground Service Connections
Blue System Ground Service Panel
FIGURE-5-4-3-991-005-A01

****ON A/C A318-100**



Ground Service Connections
Yellow System Ground Service Panel
FIGURE-5-4-3-991-006-A01

****ON A/C A318-100**



NOTE:
01 FOR A318, A319 AND A320
02 FOR A321

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Ground Service Connections
RAT
FIGURE-5-4-3-991-007-A01

5-4-4 Electrical System

****ON A/C A318-100**

Electrical System

1. Electrical System

   This chapter provides data related to the location of the ground service connections.

ACCESS	DISTANCE			
	AFT OF NOSE	FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		LH SIDE	RH SIDE	
A/C External Power: Access Door 121AL	2.55 m (8.37 ft)	On centerline		2.00 m (6.56 ft)

   NOTE : Distances are approximate.

2. Technical Specifications

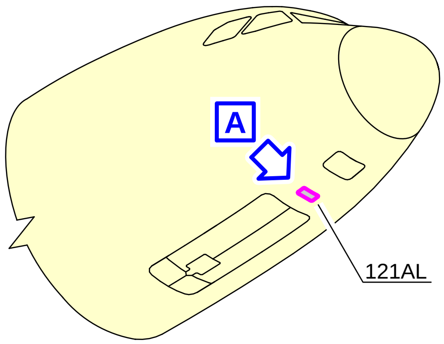
   A. External Power Receptacle:
      - One receptacle according to MS 90362-3 (without shield MS 17845-1) – 90 kVA.

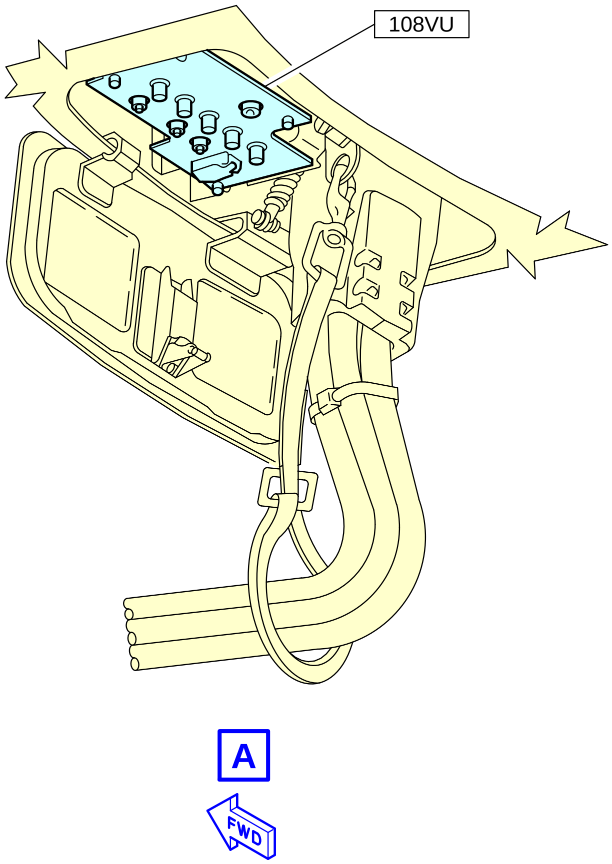
      NOTE : Make sure that for connectors featuring micro switches, the connector is chamfered to properly engage in the receptacle.

   B. Power Supply:
      - Three-phase, 115/200V, 400 Hz.

   C. Electrical Connectors for Servicing:
      - AC outlets: HUBBELL 5258
      - DC outlets: HUBBELL 7472.

****ON A/C A318-100**





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Ground Service Connections
External Power Receptacles
FIGURE-5-4-4-991-001-A01

5-4-5 Oxygen System

****ON A/C A318-100**

Oxygen System

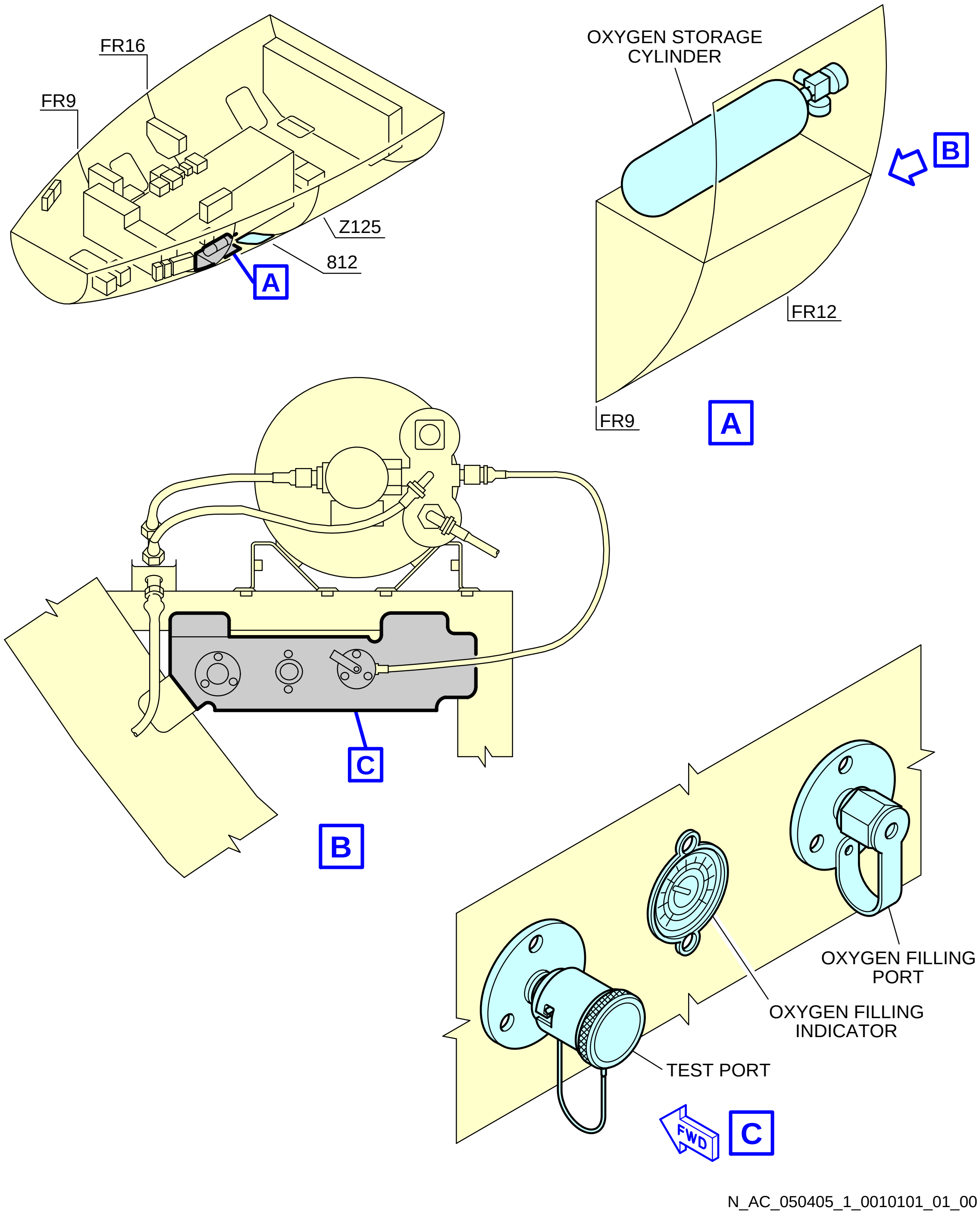
1. Oxygen System

ACCESS	DISTANCE			
	AFT OF NOSE	FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		LH SIDE	RH SIDE	
Oxygen Replenishment: Access Door 812	3.45 m (11.32 ft)	1.15 m (3.77 ft)	-	2.60 m (8.53 ft)

2. Technical Specifications
   - One 3/8 in. MIL-DTL 7891 standard service connection.

NOTE : External charging in the avionics compartment.

****ON A/C A318-100**



Ground Service Connections
Oxygen System
FIGURE-5-4-5-991-001-A01

5-4-6 Fuel System

****ON A/C A318-100**

Fuel System

1. Refuel/Defuel Control Panel

ACCESS	DISTANCE			
	AFT OF NOSE	POSITION FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		LH SIDE	RH SIDE	
Refuel/Defuel Integrated Panel: Access Door 192MB	14.01 m (45.96 ft)	-	1.8 m (5.91 ft)	1.8 m (5.91 ft)

2. Refuel/Defuel Connectors

ACCESS	DISTANCE			
	AFT OF NOSE	POSITION FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		LH SIDE	RH SIDE	
Refuel/Defuel Coupling, Left: Access Panel 522HB (Optional)	15.2 m (49.87 ft)	9.83 m (32.25 ft)	-	3.65 m (11.98 ft)
Refuel/Defuel Coupling, Right: Access Panel 622HB	15.2 m (49.87 ft)	-	9.83 m (32.25 ft)	3.65 m (11.98 ft)
Overwing Gravity-Refuel Cap	16.71 m (54.82 ft)	12.4 m (40.68 ft)	12.4 m (40.68 ft)	3.7 m (12.14 ft)

A. Refuel/Defuel Couplings:
   - Right wing: one standard ISO 45, 2.5 in.
   - Left wing: one optional standard ISO 45, 2.5 in.

B. Refuel Pressure:
- Maximum pressure: 3.45 bar (50 psi).

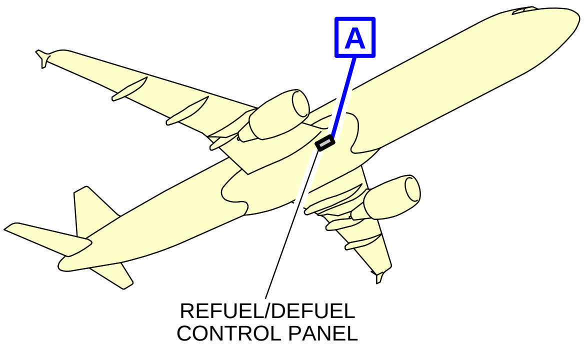
C. Average Flow Rate:
- 1250 l/min (330 US gal/min).

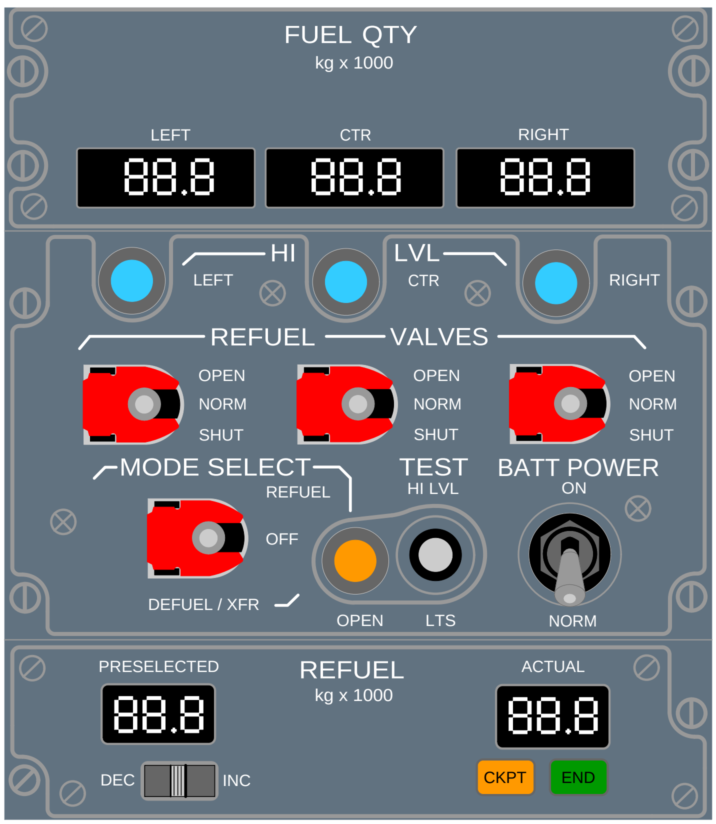
3. Overpressure Protectors and NACA Vent Intake

ACCESS	DISTANCE			
	AFT OF NOSE	POSITION FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		LH SIDE	RH SIDE	
Surge Tank Overpressure-Protector: Access Panel 550CB (650CB)	17.96 m (58.92 ft)	14.9 m (48.88 ft)	14.9 m (48.88 ft)	4.32 m (14.17 ft)
Inner Cell Overpressure-Protector: Access Panel 540HB (640HB)	16.5 m (54.14 ft)	9.19 m (30.15 ft)	9.19 m (30.15 ft)	4.1 m (13.45 ft)
NACA Vent Intake: Access Panel 550AB (650AB)	17.4 m (57.09 ft)	13.7 m (44.95 ft)	13.7 m (44.95 ft)	4.02 m (13.19 ft)

NOTE : Distances are approximate.

****ON A/C A318-100**





A

NOTE: STANDARD CONFIGURATION OF REFUEL/DEFUEL PANEL.

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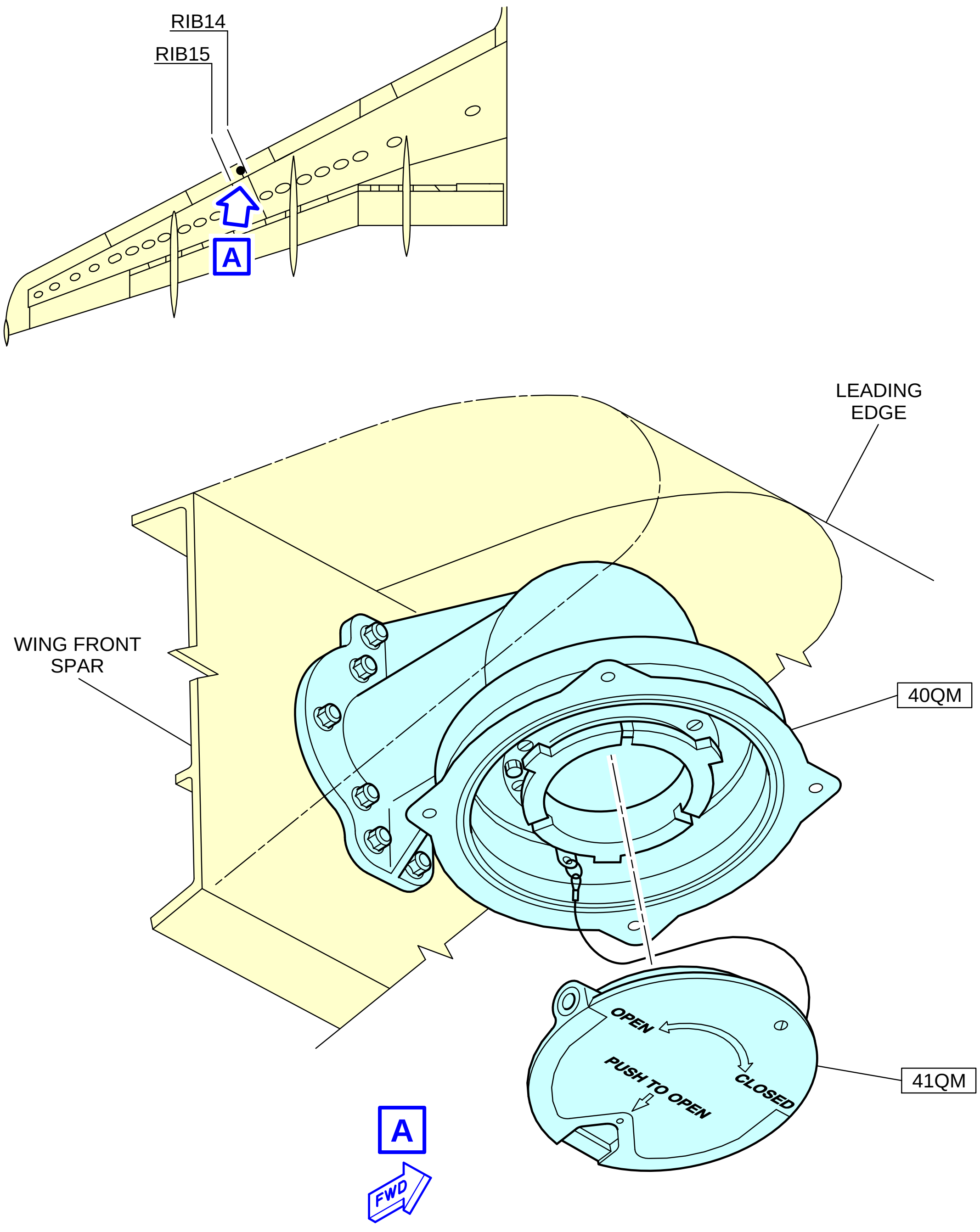
Ground Service Connections
Refuel/Defuel Control Panel
FIGURE-5-4-6-991-001-A01

****ON A/C A318-100**



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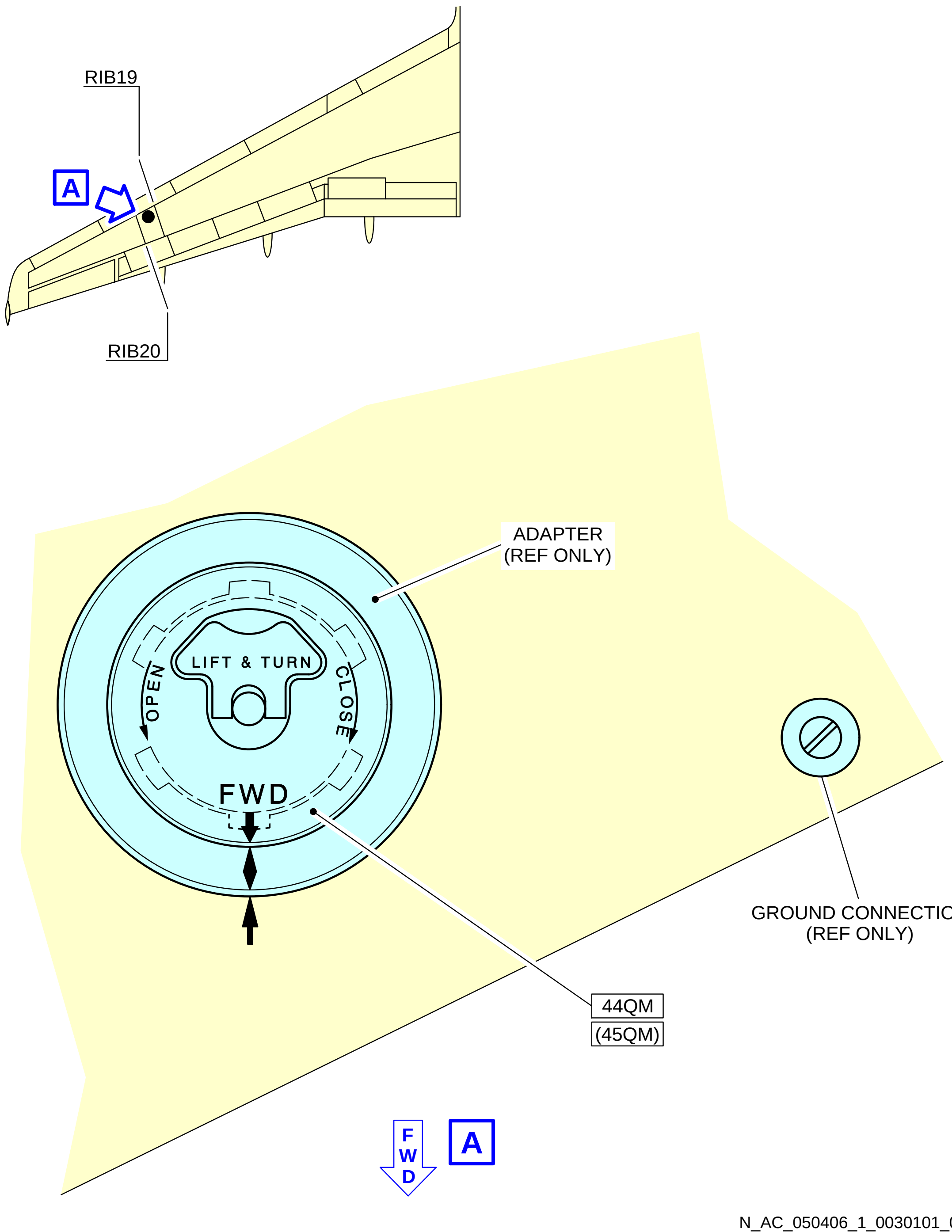
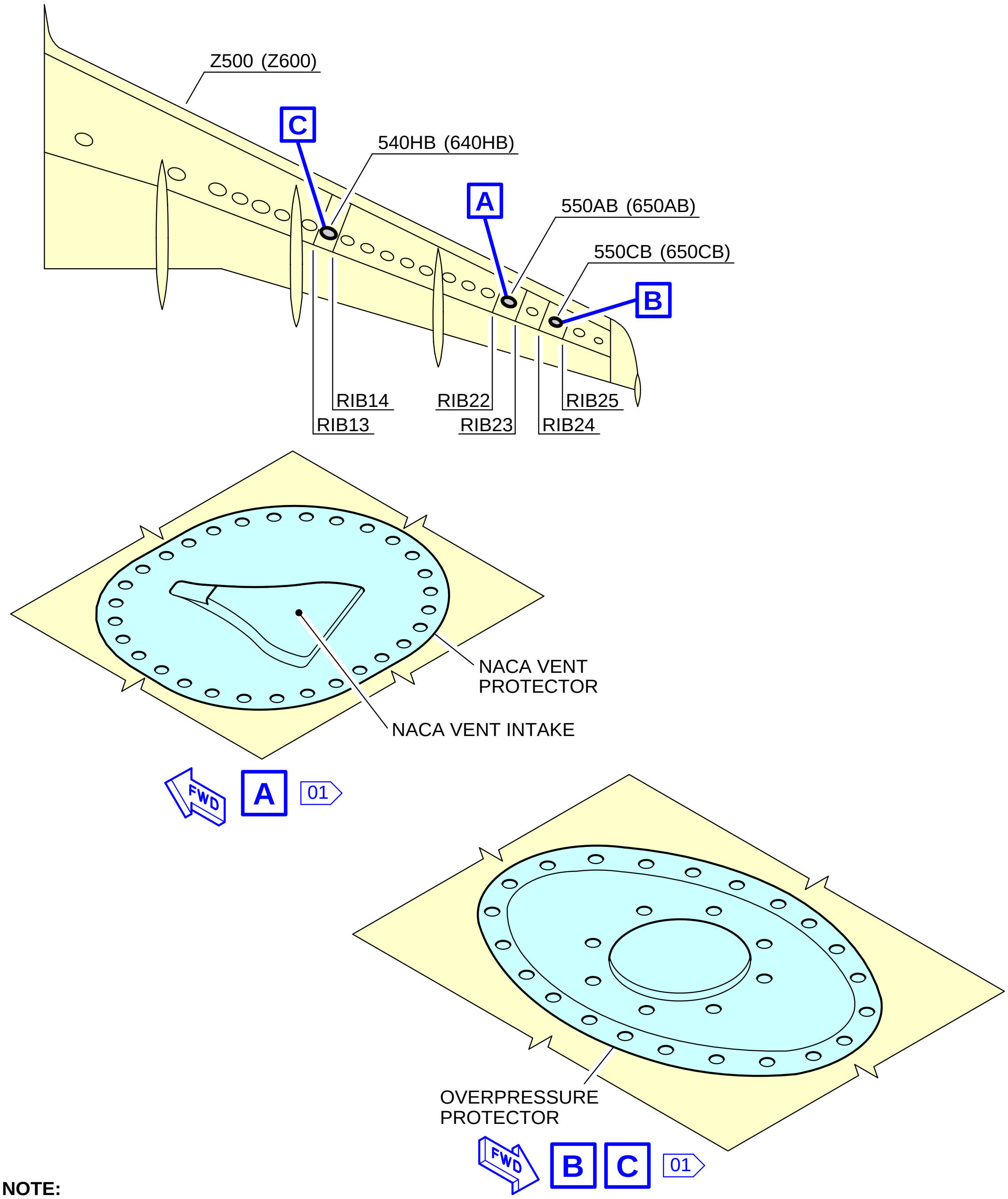
Ground Service Connections
Refuel/Defuel Couplings
FIGURE-5-4-6-991-002-A01

****ON A/C A318-100**



Ground Service Connections
Overwing Gravity-Refuel Cap (If Installed)
FIGURE-5-4-6-991-003-A01

****ON A/C A318-100**



NOTE:
01 LH SHOWN, RH SYMMETRICAL

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Ground Service Connections
Overpressure Protectors and NACA Vent Intake
FIGURE-5-4-6-991-004-A01

5-4-7 Pneumatic System

****ON A/C A318-100**

Pneumatic System

1. High Pressure Air Connector

ACCESS	DISTANCE			
	AFT OF NOSE	FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		LH SIDE	RH SIDE	
HP Connector: Access Door 191DB	10.43 m (34.22 ft)	0.84 m (2.76 ft)	-	1.76 m (5.77 ft)

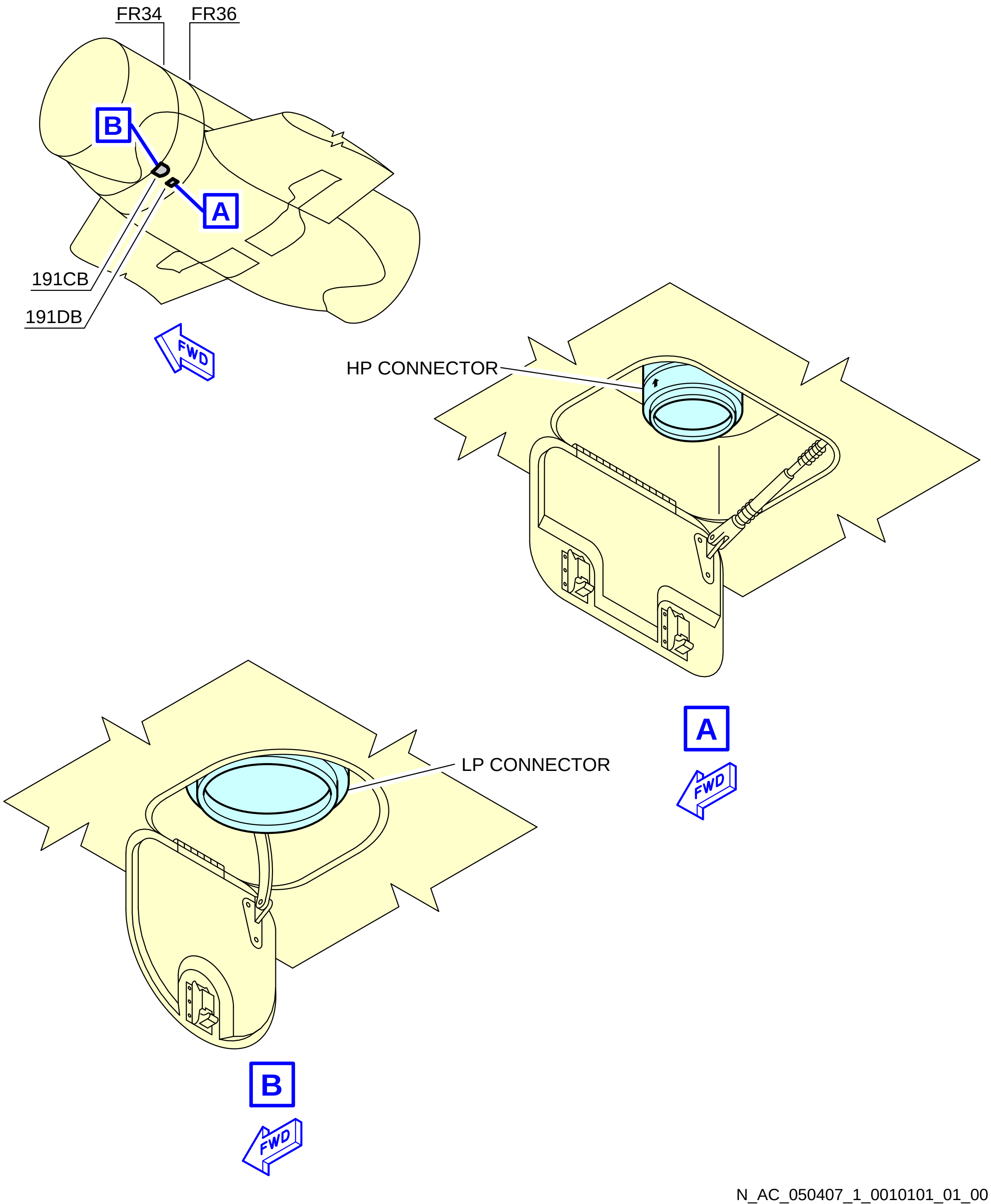
A. Connector:
- One standard 3 in. ISO 2026 connection.

2. Low Pressure Air Connector

ACCESS	DISTANCE			
	AFT OF NOSE	FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		LH SIDE	RH SIDE	
LP Connector: Access Door 191CB	9.9 m (32.48 ft)	1.11 m (3.64 ft)	-	1.73 m (5.68 ft)

A. Connector:
- One standard 8 in. SAE AS4262 connection.

****ON A/C A318-100**



Ground Service Connections
LP and HP Ground Connectors
FIGURE-5-4-7-991-001-A01

5-4-8 Oil System

****ON A/C A318-100**

Oil System

1. Engine Oil Replenishment for CFM56 Series Engine (See FIGURE 5-4-8-991-003-A):
   One gravity filling cap and one pressure filling connection per engine.

ACCESS	DISTANCE			
	AFT OF NOSE	FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		ENGINE 1 (LH)	ENGINE 2 (RH)	
Engine oil gravity-filling-cap: Access door: 437BL (LH), 447BL (RH)	12.30 m (40.35 ft)	6.63 m (21.75 ft)	4.82 m (15.81 ft)	1.46 m (4.79 ft)
Engine oil pressure-filling-port:	12.20 m (40.03 ft)	6.49 m (21.29 ft)	4.74 m (15.55 ft)	1.42 m (4.66 ft)

NOTE : Distances are approximate.

A. Tank capacity:
   - Full level: 19.60 l (5 US gal),
   - Usable: 9.46 l (3 US gal).

B. Maximum delivery pressure required: 1.72 bar (25 psi).
   Maximum delivery flow required: 180 l/h (48 US gal/h).

2. IDG Oil Replenishment for CFM56 Series Engine (See FIGURE 5-4-8-991-004-A):
   One pressure filling connection per engine.

ACCESS	DISTANCE			
	AFT OF NOSE	FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		ENGINE 1 (LH)	ENGINE 2 (RH)	
IDG oil-pressure-filling connection: Access door: 438AR (LH), 448AR (RH)	11.40 m (37.40 ft)	6.90 m (22.64 ft)	5.52 m (18.11 ft)	0.68 m (2.23 ft)

NOTE : Distances are approximate.

A. IDG oil tank capacity: 5 l (1 US gal).

B. Maximum servicing pressure: 0.34 bar (5 psi) to 2.76 bar (40 psi) at the IDG inlet.

3. Starter Oil Replenishment for CFM56 Series Engine (See FIGURE 5-4-8-991-005-A):
One gravity filling cap per engine.

ACCESS	DISTANCE			
	AFT OF NOSE	FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		ENGINE 1 (LH)	ENGINE 2 (RH)	
Starter-oil filling connection:	10.40 m (34.12 ft)	5.30 m (17.39 ft)	6.20 m (20.34 ft)	0.76 m (2.49 ft)

NOTE : Distances are approximate.

A. Tank capacity: 0.8 l (0.21 US gal).

4. Engine Oil Replenishment for PW 6000 Series Engine (See FIGURE 5-4-8-991-006-A):
One gravity filling cap per engine.

ACCESS	DISTANCE			
	AFT OF NOSE	FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		ENGINE 1 (LH)	ENGINE 2 (RH)	
Engine oil gravity-filling-cap: Access door: 438BR (LH), 448BR (RH)	10.16 m (33.33 ft)	4.80 m (15.75 ft)	6.63 m (21.75 ft)	1.80 m (5.91 ft)

NOTE : Distances are approximate.

A. Tank capacity:
- Full level: 18.36 l (5 US gal),
- Usable: 23.50 l (6 US gal),
- Engine oil tank capacity: 18.36 l (5 US gal).

5. IDG Oil Replenishment for PW 6000 Series Engine (See FIGURE 5-4-8-991-007-A):
One pressure filling connection per engine.

ACCESS	DISTANCE			
	AFT OF NOSE	FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		ENGINE 1 (LH)	ENGINE 2 (RH)	
IDG oil-pressure-filling connection: Access door: 438DR (LH), 448DR (RH)	10.00 m (32.81 ft)	5.33 m (17.49 ft)	6.17 m (20.24 ft)	1.02 m (3.35 ft)

NOTE : Distances are approximate.

A. Distances are approximate.
   - Tank capacity: 6.28 l (2 US gal),
   - Maximum servicing pressure: 2.41 bar (35 psi).

6. Starter Oil Replenishment for PW 6000 Series Engine (See FIGURE 5-4-8-991-008-A):
   One gravity filling cap per engine.

ACCESS	DISTANCE			
	AFT OF NOSE	FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		ENGINE 1 (LH)	ENGINE 2 (RH)	
Starter-oil filling connection:	10.16 m (33.33 ft)	5.84 m (19.16 ft)	5.59 m (18.34 ft)	1.02 m (3.35 ft)

NOTE : Distances are approximate.

A. Tank capacity: 0.35 l (0.09 US gal).

7. APU Oil System (See FIGURE 5-4-8-991-009-A):
   APU oil gravity-filling-cap.

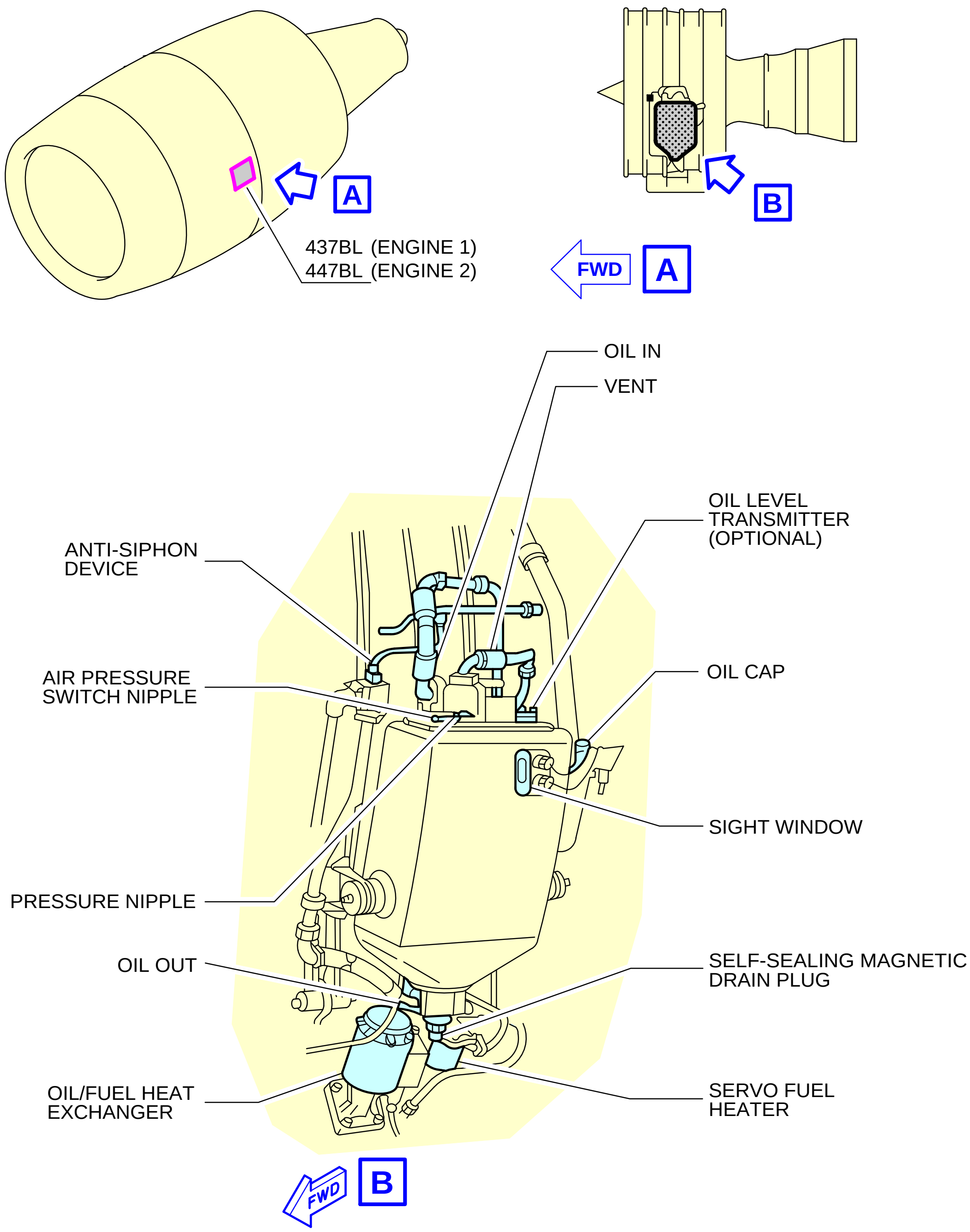
ACCESS	DISTANCE			
	AFT OF NOSE	FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		ENGINE 1 (LH)	ENGINE 2 (RH)	
GTCP 36-300	29.37 m (96.36 ft)	0.30 m (0.98 ft)	-	4.83 m (15.85 ft)
APS 3200	29.37 m (96.36 ft)	0.30 m (0.98 ft)	-	4.78 m (15.68 ft)
131-9	29.27 m	0.35 m	-	4.32 m

ACCESS	DISTANCE			
	AFT OF NOSE	FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		ENGINE 1 (LH)	ENGINE 2 (RH)	
	(96.03 ft)	(1.15 ft)		(14.17 ft)

NOTE : Distances are approximate.

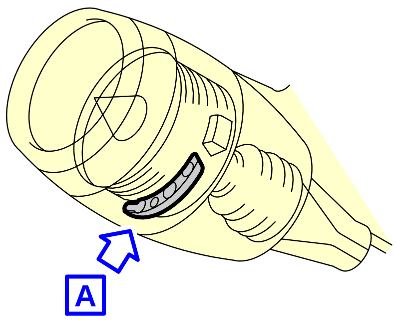
A. Tank capacity (usable):
- APU type GTCP 36-300: 6.20 l (2 US gal),
- APU type APS 3200: 5.40 l (1 US gal),
- APU type 131-9: 6.25 l (2 US gal).

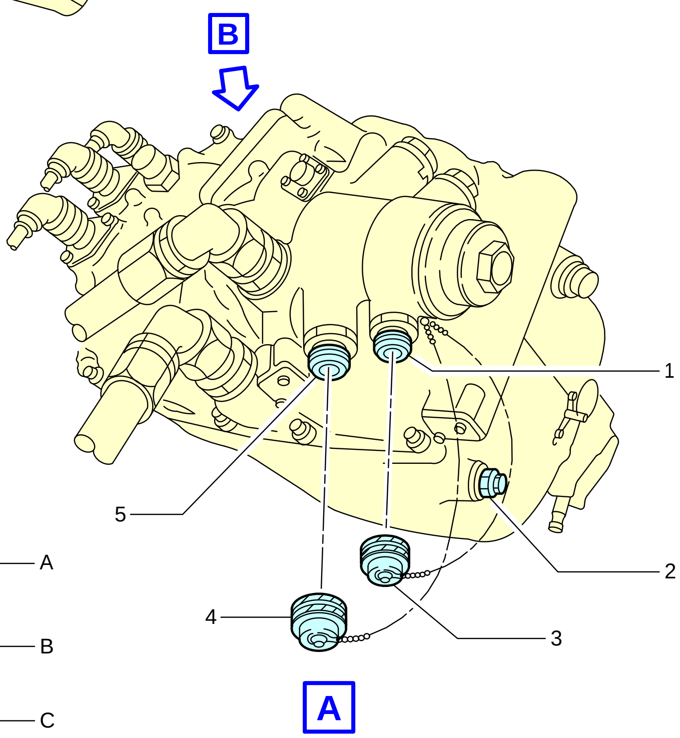
****ON A/C A318-100**



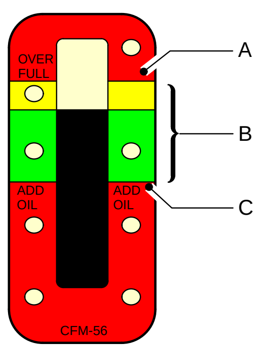
Ground Service Connections
Engine Oil Tank – CFM56 Series Engine
FIGURE-5-4-8-991-003-A01

****ON A/C A318-100**





1 - PRESSURE FILL VALVE
2 - CASE DRAIN PLUG
3 - DUST CAP
4 - DUST CAP
5 - OVERFLOW DRAIN VALVE



SIGHT GLASS

B

NOTE: A IF THE OIL LEVEL IS ABOVE THE YELLOW BAND, OIL SERVICING IS REQUIRED.
B IF THE OIL LEVEL IS WITHIN THE GREEN AND YELLOW BANDS, OIL SERVICING IS NOT REQUIRED.
C IF THE OIL LEVEL IS BELOW THE GREEN BAND, OIL SERVICING IS REQUIRED.

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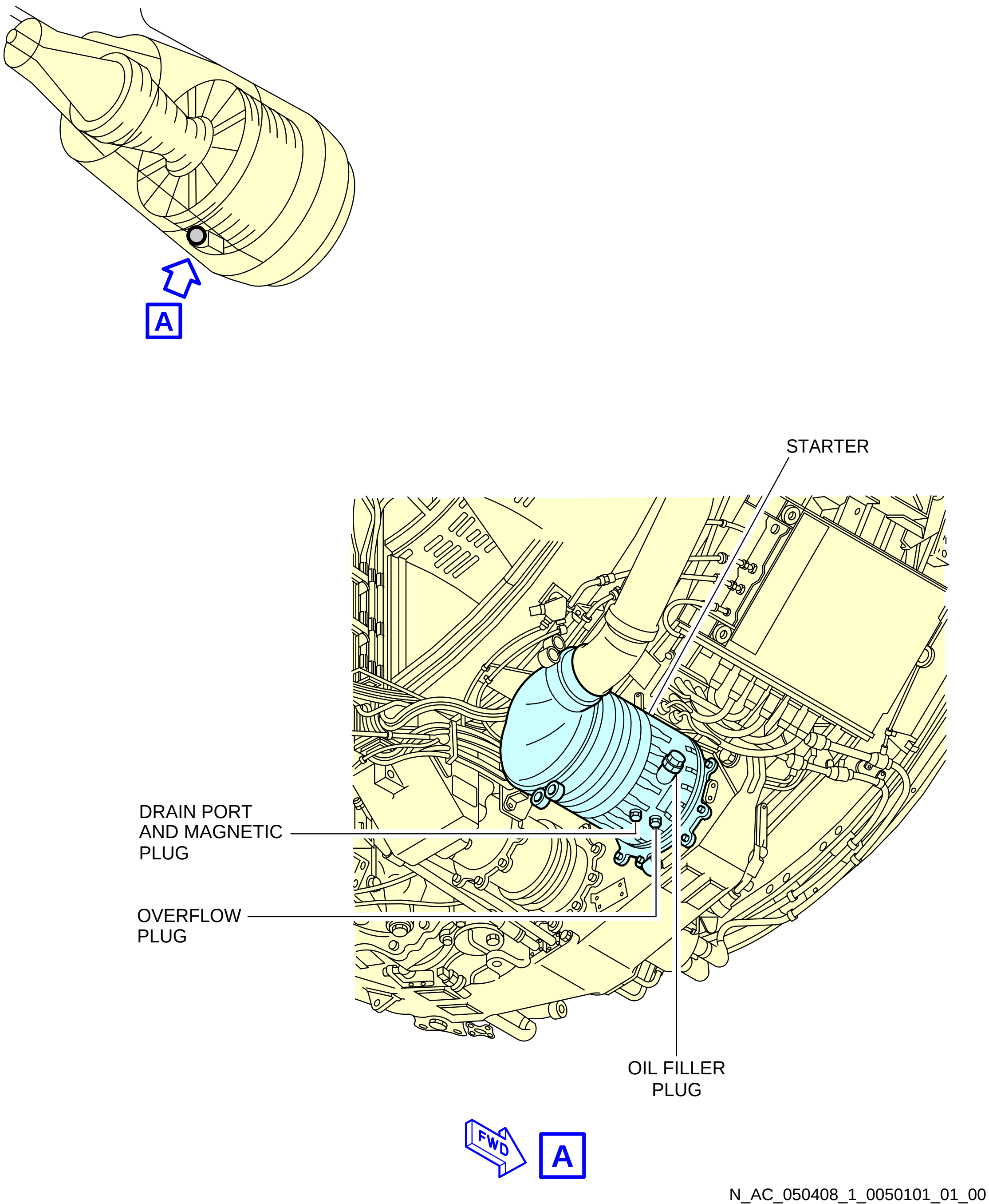
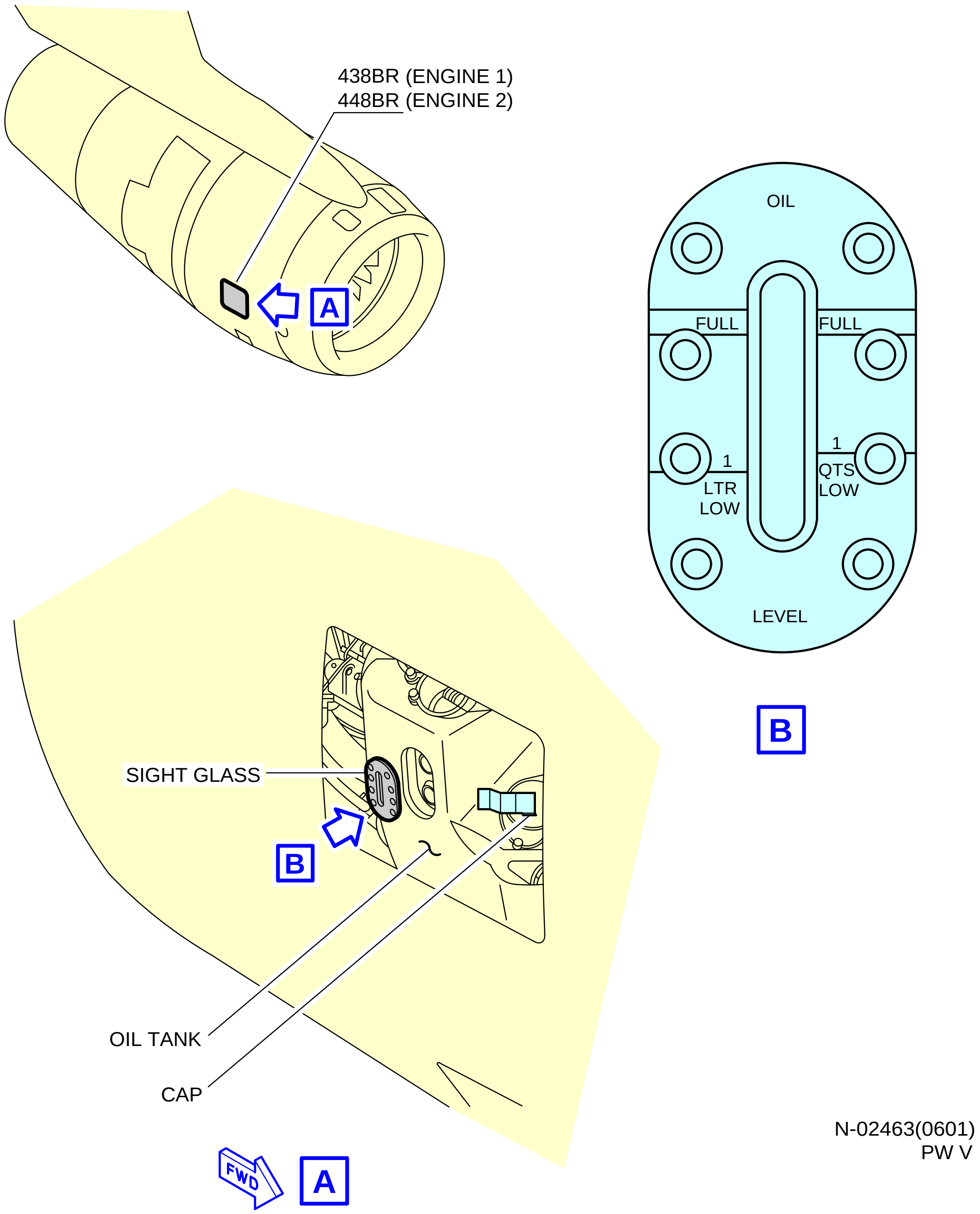
Ground Service Connections
IDG Oil Tank – CFM56 Series Engine
FIGURE-5-4-8-991-004-A01

****ON A/C A318-100**



Ground Service Connections
Starter Oil Tank – CFM56 Series Engine
FIGURE-5-4-8-991-005-A01

****ON A/C A318-100**



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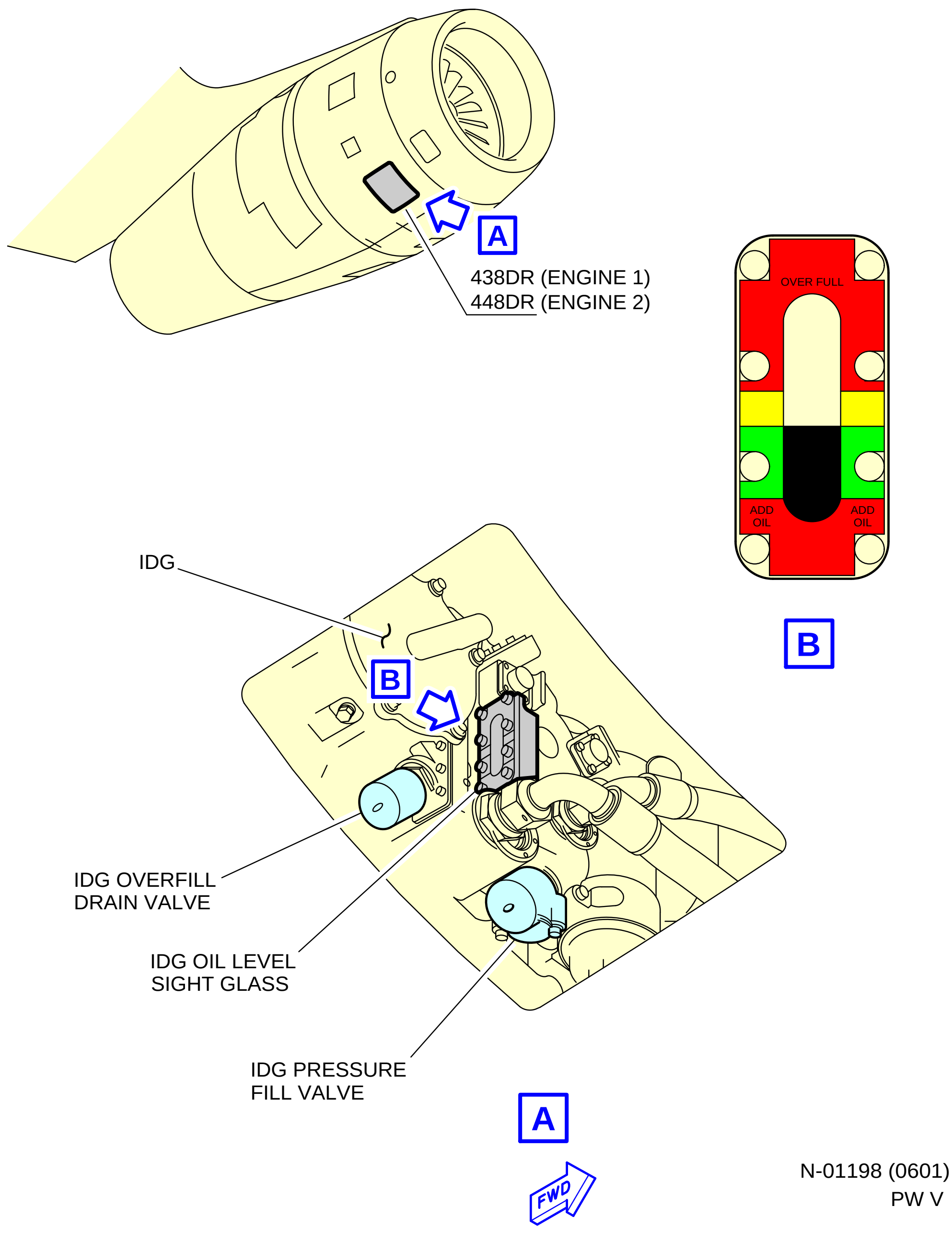
Ground Service Connections
Engine Oil Tank – PW6000 Series Engine
FIGURE-5-4-8-991-006-A01

****ON A/C A318-100**



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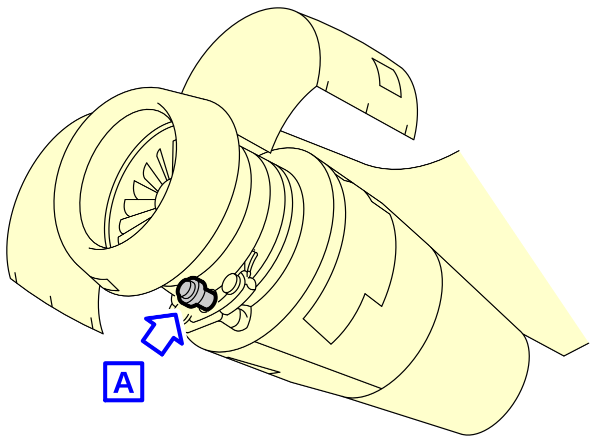
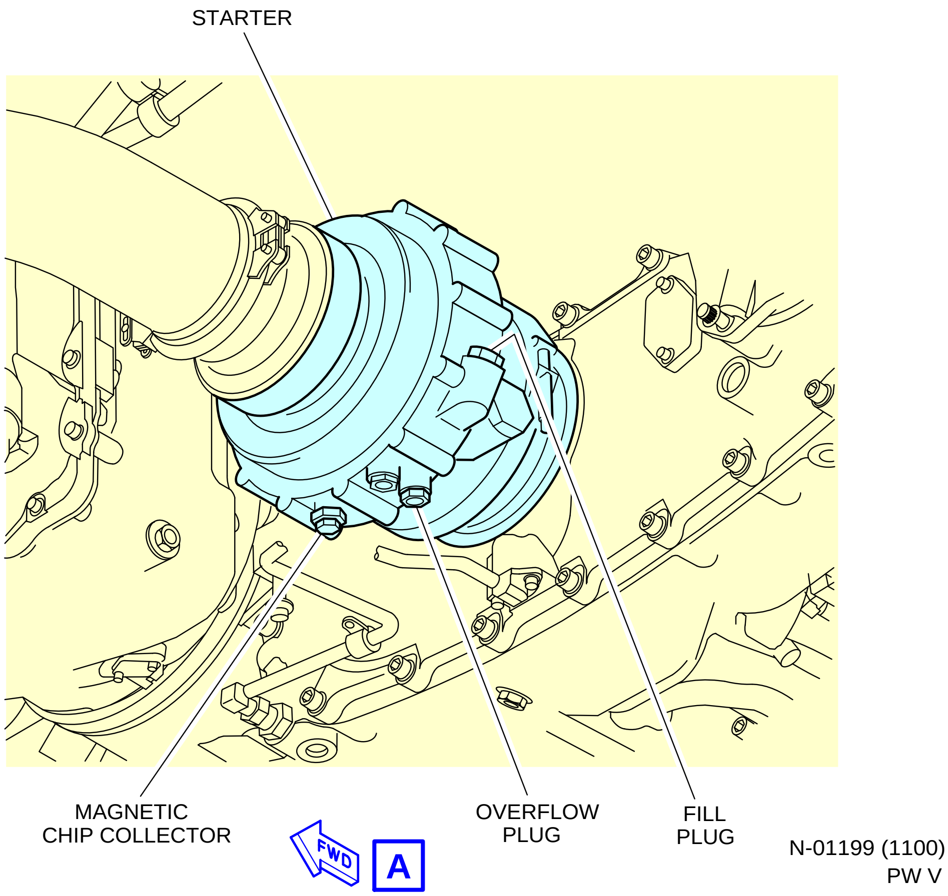
Ground Service Connections
IDG Oil Tank – PW6000 Series Engine
FIGURE-5-4-8-991-007-A01

**ON A/C A318-100





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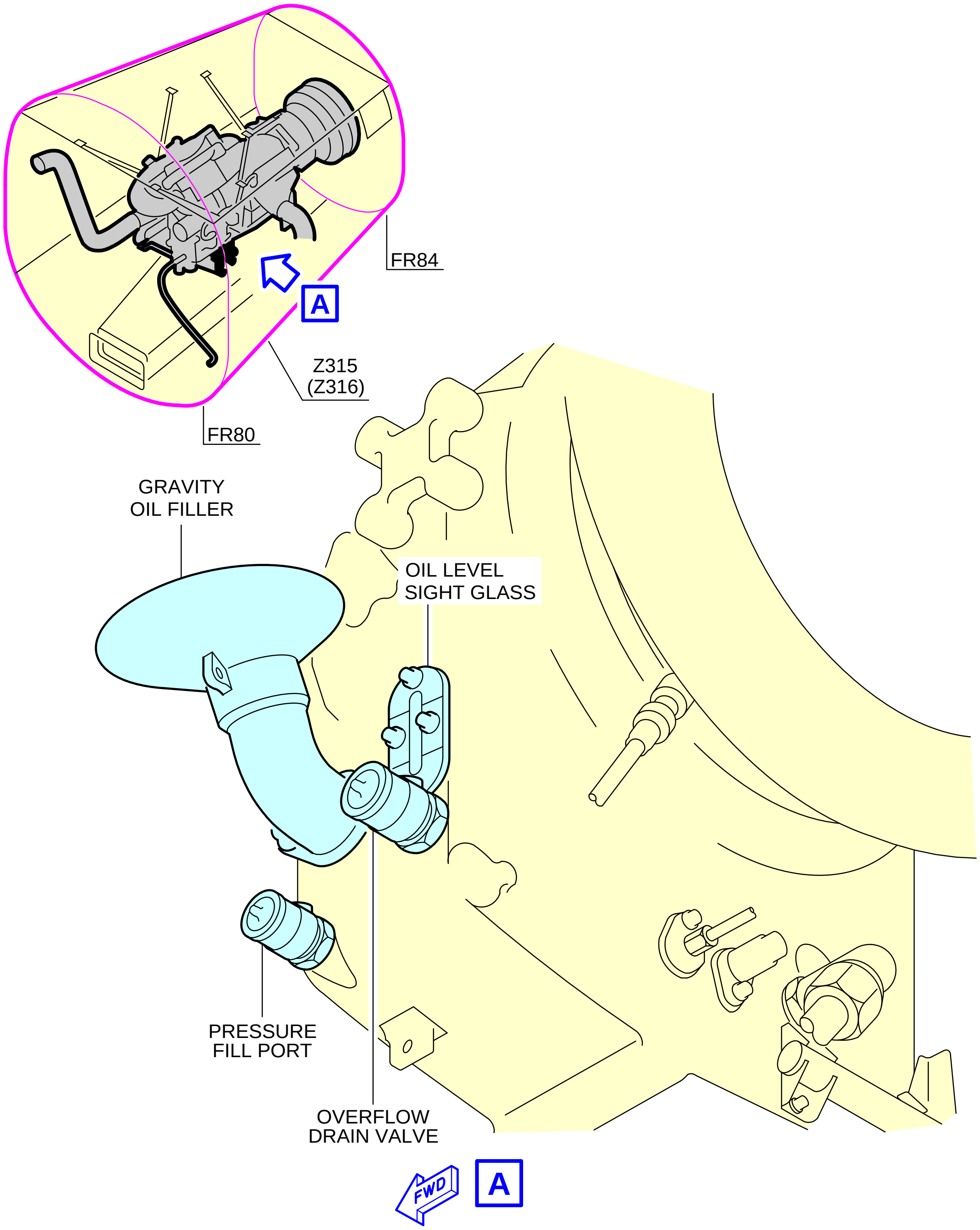
Ground Service Connections
Starter Oil Tank – PW6000 Series Engine
FIGURE-5-4-8-991-008-A01

****ON A/C A318-100**



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Ground Service Connections
APU Oil Tank
FIGURE-5-4-8-991-009-A01

5-4-9 Potable Water System

****ON A/C A318-100**

Potable Water System

1. Potable Water Ground Service Panels

ACCESS	DISTANCE			
	AFT OF NOSE	POSITION FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		LH SIDE	RH SIDE	
Potable-Water Service Panel: Access Door 171AL	25.2 m (82.68 ft)	0.3 m (0.98 ft)	-	2.6 m (8.53 ft)
Potable-Water Drain Panel: Access Door 133AL	11.4 m (37.4 ft)	0.15 m (0.49 ft)	-	1.75 m (5.74 ft)

NOTE : Distances are approximate.

2. Technical Specifications

A. Connectors:

(1) On the potable-water service panel (Access Door 171AL)
- Fill/Drain Nipple 3/4 in. (ISO 17775).
- One ground air-pressure connector.

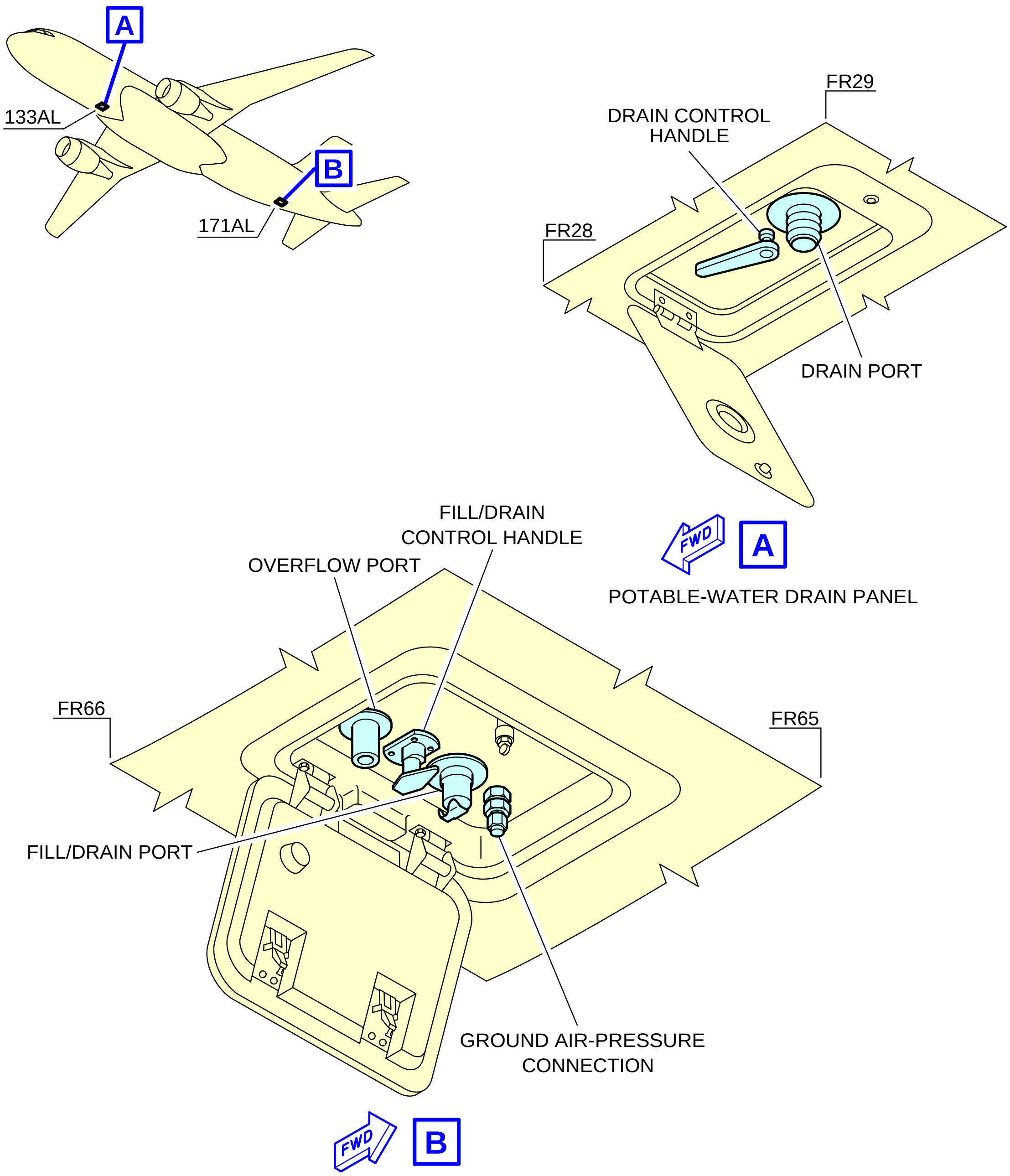
(2) On the potable-water drain panel (Access Door 133AL)
- Drain Nipple 3/4 in. (ISO 17775).

B. Usable capacity:
- Standard configuration - one tank: 200 l (53 US gal).

C. Filling pressure:
- 3.45 bar (50 psi).

D. Typical flow rate:
- 50 l/min (13 US gal/min).

****ON A/C A318-100**



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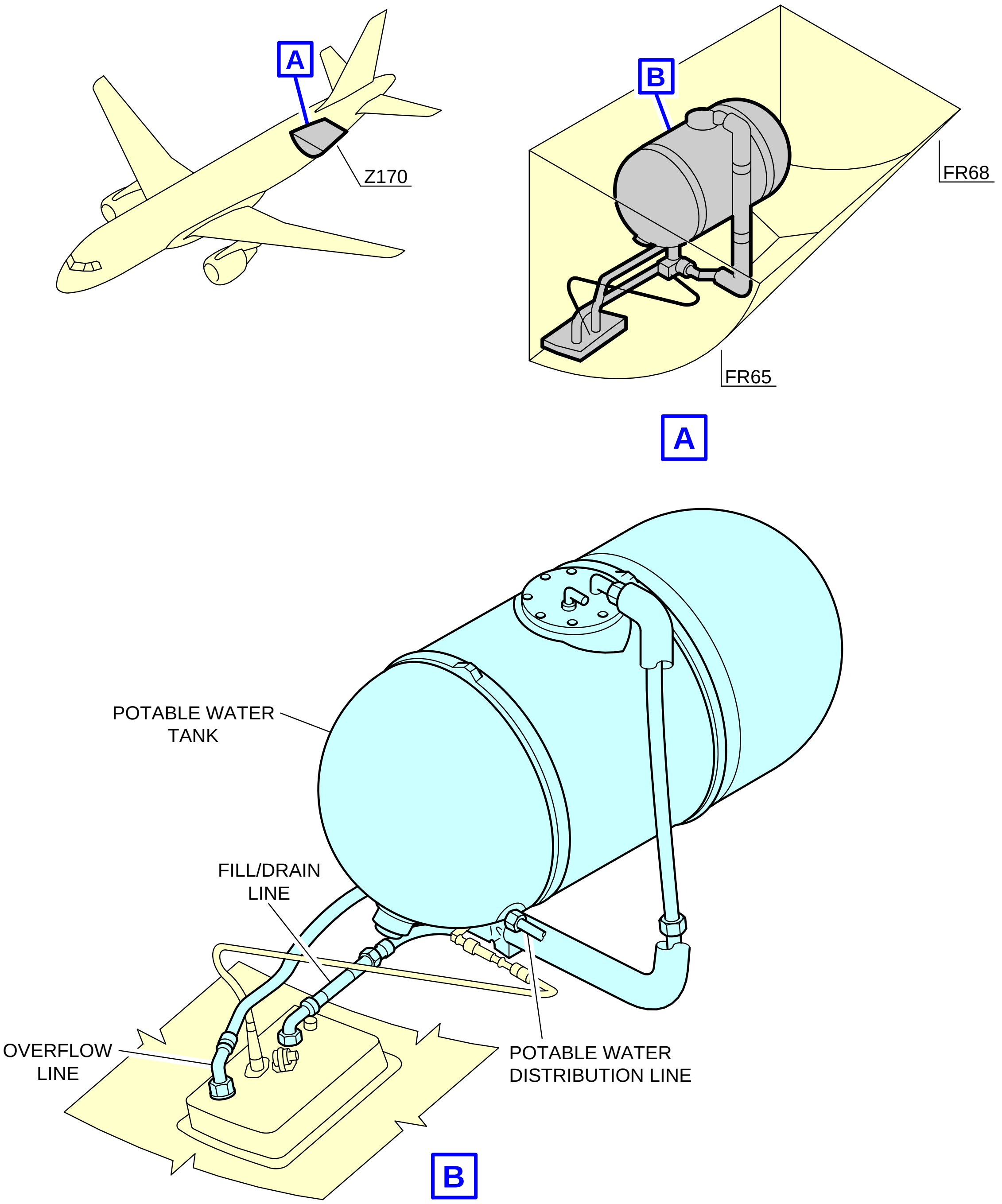
Ground Service Connections
Potable Water Ground Service Panels
FIGURE-5-4-9-991-029-A01

****ON A/C A318-100**



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Ground Service Connections
Potable Water Tank Location
FIGURE-5-4-9-991-030-A01

5-4-10 Waste Water System

****ON A/C A318-100**

Waste Water System

1. Waste Water System

<table>
<tr><th rowspan="3">ACCESS</th><th colspan="4">DISTANCE</th></tr>
<tr><th rowspan="2">AFT OF NOSE</th><th colspan="2">POSITION FROM AIRCRAFT CENTERLINE</th><th rowspan="2">MEAN HEIGHT FROM GROUND</th></tr>
<tr><th>LH SIDE</th><th>RH SIDE</th></tr>
<tr><td>Waste-Water Ground Service Panel: Access door 172AR</td><td>25.2 m (82.68 ft)</td><td>-</td><td>0.8 m (2.62 ft)</td><td>2.8 m (9.19 ft)</td></tr>
</table>

NOTE : Distances are approximate.

2. Technical Specifications

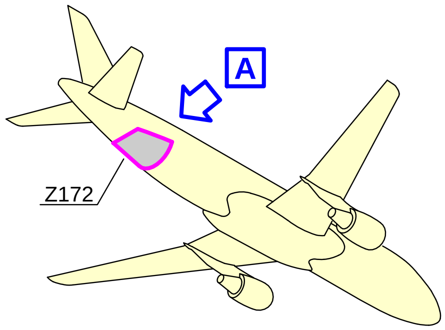
A. Connectors:
- Draining: 4 in. (ISO 17775).
- Flushing and filling: 1 in. (ISO 17775).

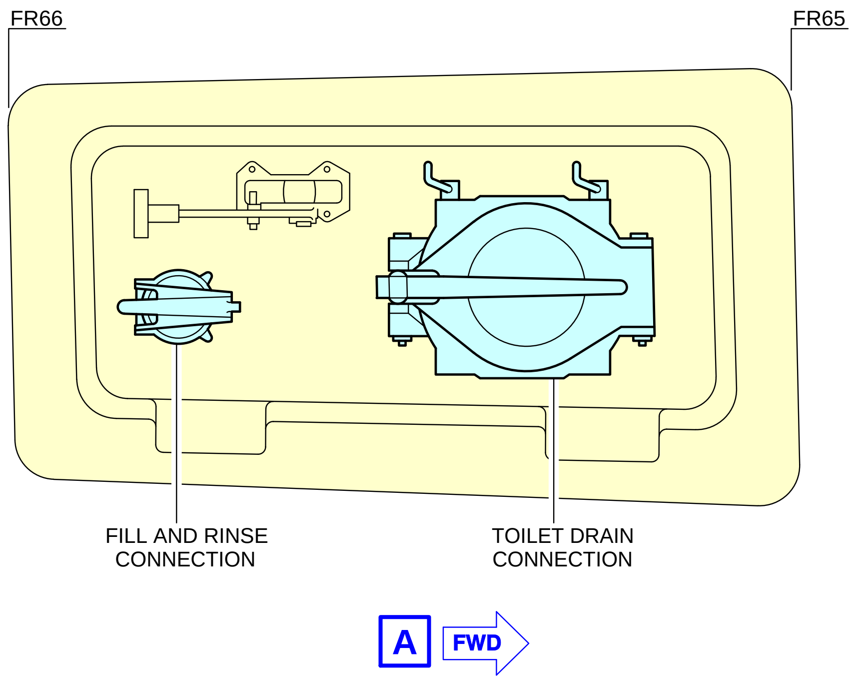
B. Usable waste tank capacity:
- Standard configuration - one tank: 177 l (47 US gal).

C. Waste tank - Rinsing:
- Operating pressure: 3.45 bar (50 psi).

D. Waste tank - Precharge:
- 10 l (3 US gal).

****ON A/C A318-100**





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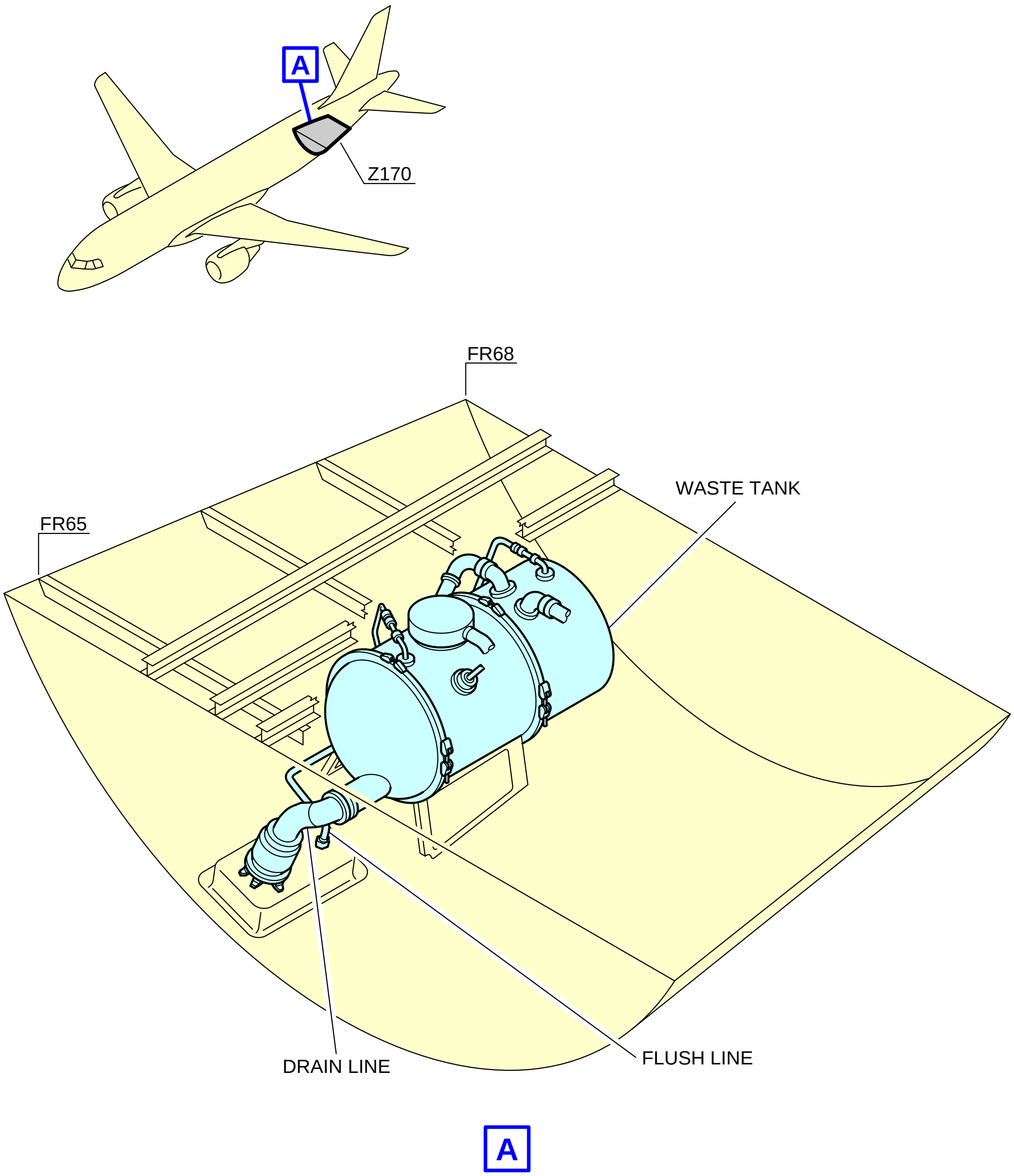
Ground Service Connections
Waste Water Ground Service Panel
FIGURE-5-4-10-991-001-A01

****ON A/C A318-100**



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Ground Service Connections
Waste Tank Location
FIGURE-5-4-10-991-004-A01

5-5-0 Engine Starting Pneumatic Requirements

****ON A/C A318-100**

Engine Starting Pneumatic Requirements

1. The function of this section gives the minimum air-data requirements at the aircraft.

Abbreviation	Definition
ASU	Air Start Unit
HPGC	High Pressure Ground Connection
OAT	Outside Air Temperature

A. The pressure at HPGC must not be more than 60 psig (75 psia) and less than 33 psig (48 psia). The temperature must be less than 220 °C (428 °F).

B. The recommended pressure at HPGC is 40 psig (55 psia).

C. The OAT and the ASU performances (see the technical data from the ASU manufacturer) effect the ASU output temperature.

D. The tables provide the global requirements for the airflow start for one engine.
If necessary, connect two ASUs in parallel which gives the same pressure (one for each HPGC) to supply the necessary airflow to the aircraft.

2. CFM56 Engines for an OAT between -40 °C (-40 °F) and 55 °C (131 °F) at Sea Level

ASU Output Temperature Range	Pressure at HPGC	Mass Flow at HPGC
100 °C (212 °F) - 125 °C (257 °F)	40 psig (55 psia)	186 ppm (84 kg/min)
125 °C (257 °F) - 175 °C (347 °F)	40 psig (55 psia)	180 ppm (82 kg/min)
175 °C (347 °F) - 220 °C (428 °F)	40 psig (55 psia)	169 ppm (77 kg/min)

ASU Output Temperature Range	Pressure at HPGC	Mass Flow at HPGC
TBD	40 psig (55 psia)	TBD

3. PW 6000 Engines for an OAT between -40 °C (-40 °F) and 55 °C (131 °F) at Sea Level

ASU Output Temperature Range	Pressure at HPGC	Mass Flow at HPGC
100 °C (212 °F) - 125 °C (257 °F)	40 psig (55 psia)	187 ppm (85 kg/min)
125 °C (257 °F) - 175 °C (347 °F)	40 psig (55 psia)	181 ppm (82 kg/min)
175 °C (347 °F) - 220 °C (428 °F)	40 psig (55 psia)	171 ppm (77 kg/min)

ASU Output Temperature Range	Pressure at HPGC	Mass Flow at HPGC
TBD	40 psig (55 psia)	TBD

5-6-0 Ground Pneumatic Power Requirements

****ON A/C A318-100**

Ground Pneumatic Power Requirements

1. General

This section describes the required performance for the ground equipment to maintain the cabin temperature at 27 °C (80.6 °F) for the cooling or 21 °C (69.8 °F) for heating cases after boarding (Section 5.7 - steady state), and provides the time needed to cool down or heat up the aircraft cabin to the required temperature (Section 5.6 - dynamic cases with aircraft empty).

ABBREVIATION	DEFINITION
A/C	Aircraft
AHM	Aircraft Handling Manual
AMM	Aircraft Maintenance Manual
GC	Ground Connection
GSE	Ground Service Equipment
IFE	In-Flight Entertainment
OAT	Outside Air Temperature
PCA	Pre-Conditioned Air

A. The air flow rates and temperature requirements for the GSE, provided in Sections 5.6 and 5.7, are given at A/C ground connection.

NOTE : The cooling capacity of the equipment (kW) is only indicative and is not sufficient by itself to ensure the performance (outlet temperature and flow rate combinations are the requirements needed for ground power). An example of cooling capacity calculation is given in Section 5.7.

NOTE : The maximum air flow is driven by pressure limitation at the ground connection.

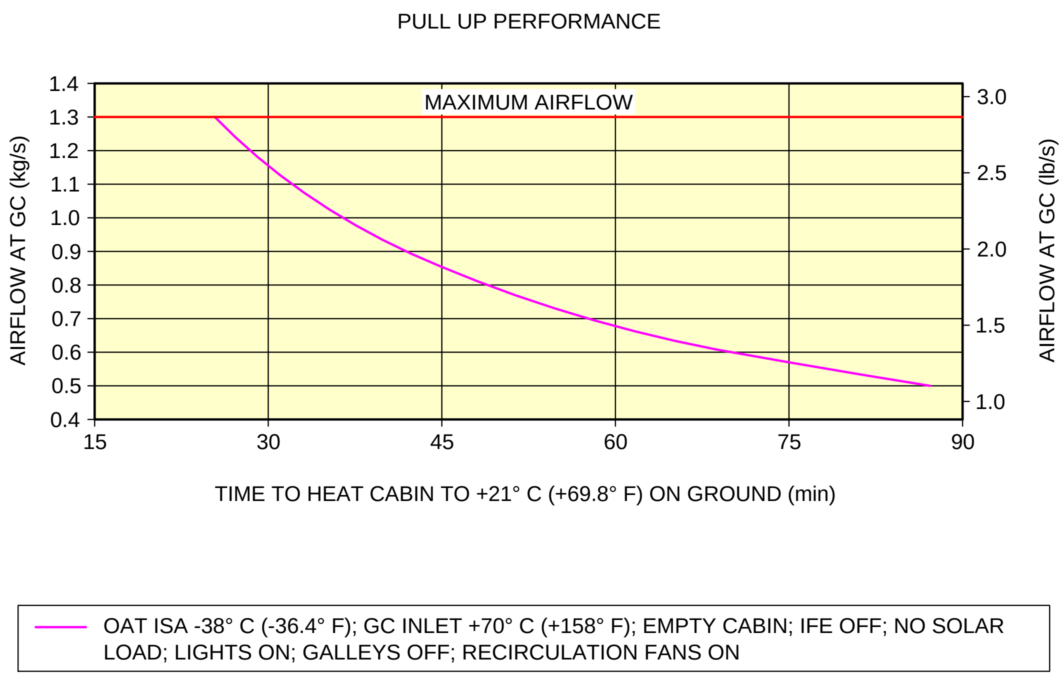
B. For temperatures at ground connection below 2 °C (35.6 °F) (Subfreezing), the ground equipment shall be compliant with the Airbus document ”Subfreezing PCA Carts - Compliance Document for Suppliers” (contact Airbus to obtain this document) defining all the requirements with which Subfreezing Pre-Conditioning Air equipment must comply to allow its use on Airbus aircraft. These requirements are in addition to the functional specifications included in the IATA AHM997.

2. Ground Pneumatic Power Requirements

This section provides the ground pneumatic power requirements for:

- Heating (pull up) the cabin, initially at OAT, up to 21 °C (69.8 °F) (see FIGURE 5-6-0-991-001-A)
- Cooling (pull down) the cabin, initially at OAT, down to 27 °C (80.6 °F) (see FIGURE 5-6-0-991-002-A).

****ON A/C A318-100**



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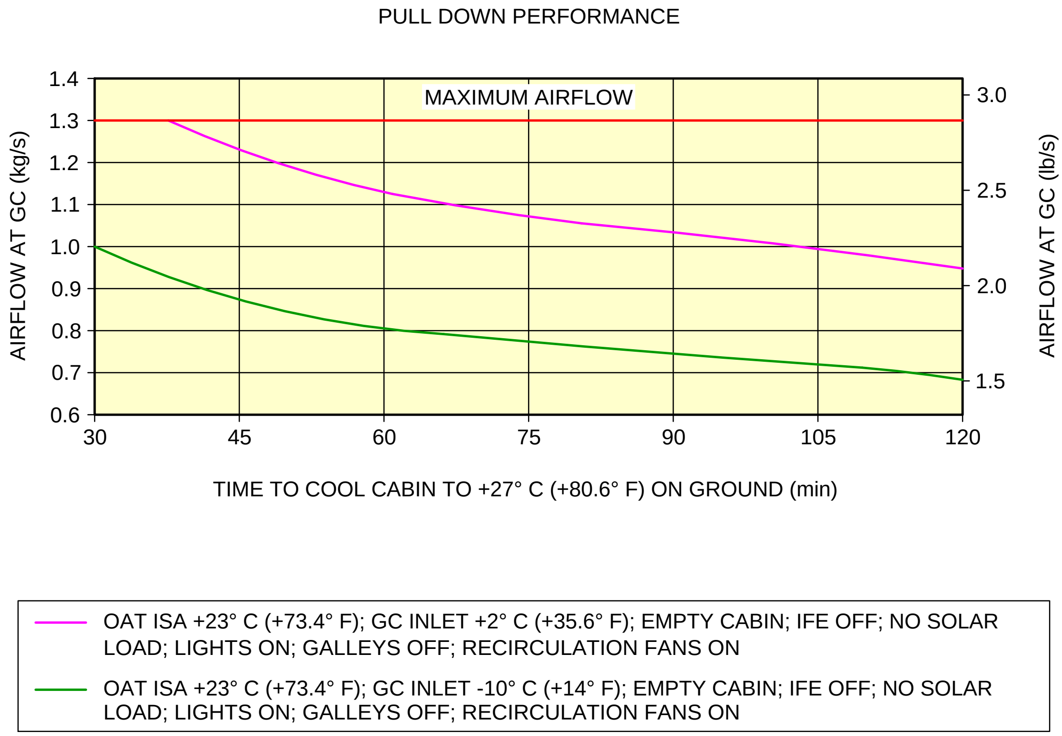
Ground Pneumatic Power Requirements
Heating
FIGURE-5-6-0-991-001-A01

****ON A/C A318-100**



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Ground Pneumatic Power Requirements
Cooling
FIGURE-5-6-0-991-002-A01

5-7-0 Preconditioned Airflow Requirements

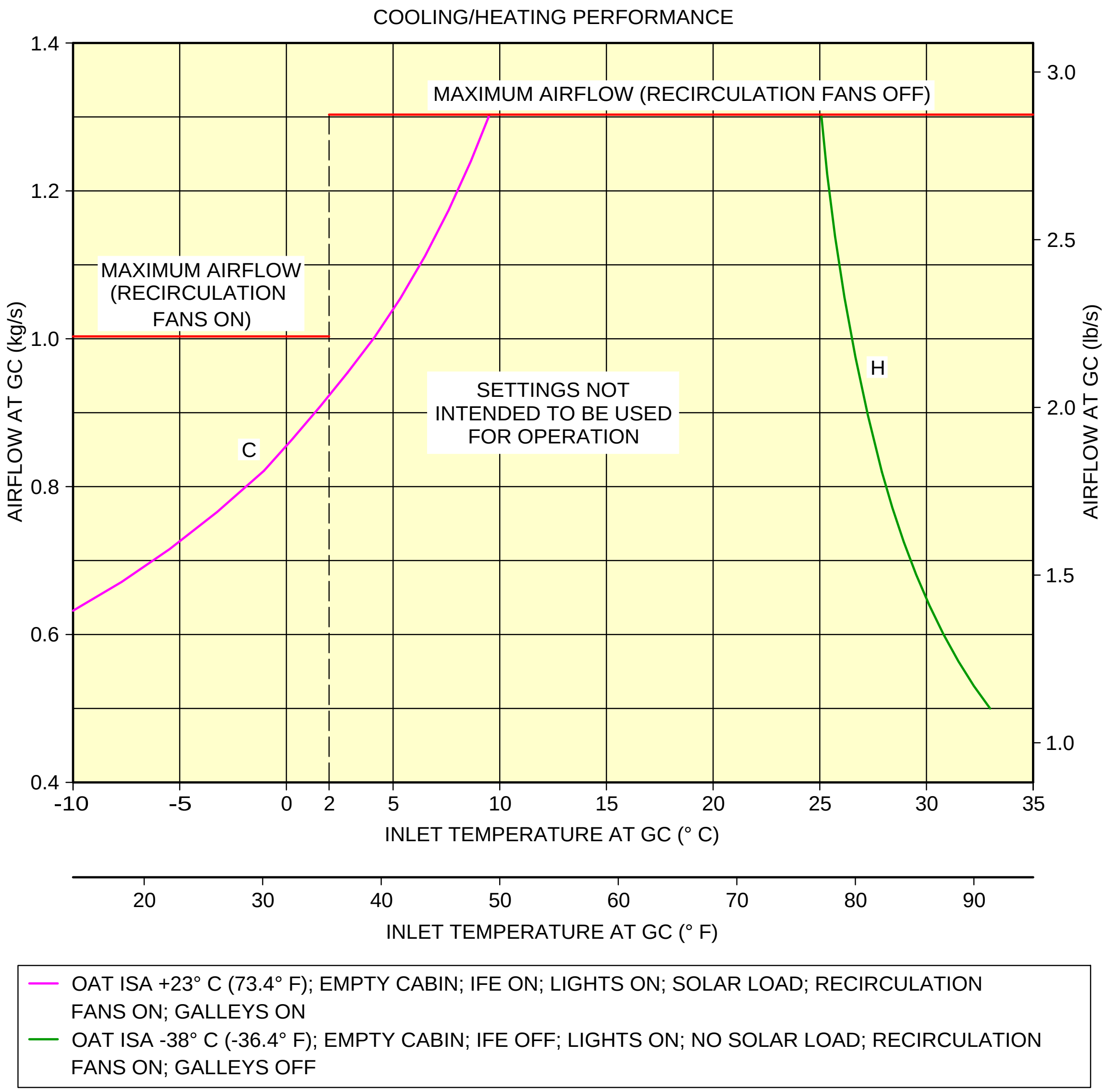
****ON A/C A318-100**

Preconditioned Airflow Requirements

1. This section provides the preconditioned airflow rate and temperature needed to maintain the cabin temperature at 27 °C (80.6 °F) for the cooling or 21 °C (69.8 °F) for the heating cases.

   These settings are not intended to be used for operation (they are not a substitute for the settings given in the AMM). They are based on theoretical simulations and give the picture of a real steady state.
   The purpose of the air conditioning (cooling) operation (described in the AMM) is to maintain the cabin temperature below 27 °C (80.6 °F) during boarding (therefore it is not a steady state).

****ON A/C A318-100**



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Preconditioned Airflow Requirements
FIGURE-5-7-0-991-001-A01

5-8-0 Ground Towing Requirements

****ON A/C A318-100**

Ground Towing Requirements

1. This section gives information on aircraft towing.

   This aircraft is designed with means for standard or towbarless towing. Information/procedures can be found for both in AMM 09.
   Status on towbarless towing equipment qualification can be found in ISI 09.11.00001.

   NOTE : The NLG steering deactivation pin has the same design for all Airbus programs.

   One towbar fitting is installed at the front of the leg.
   The main landing gears have attachment points for towing or debogging (for details, refer ARM 07).

   This section shows the chart to determine the drawbar pull and tow tractor mass requirements as a function of the following physical characteristics:
   - Aircraft weight,
   - Number of engines at idle,
   - Slope.

   The chart is based on the engine type with the highest idle thrust level.

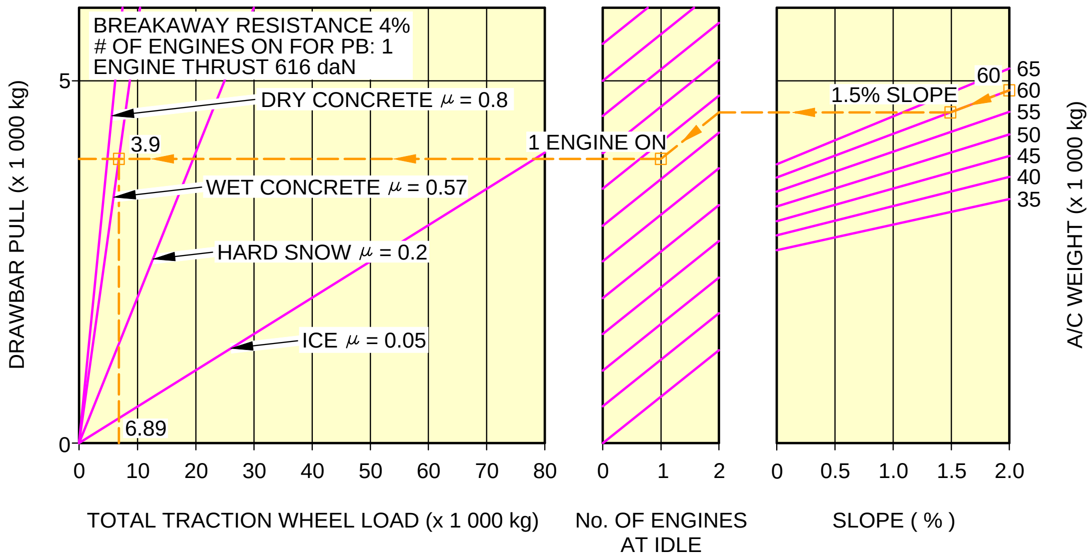
2. Towbar design guidelines

   The aircraft towbar shall comply with the following standards:
   - ISO 8267-1, ”Aircraft - Towbar Attachment Fitting - Interface Requirements - Part 1: Main Line Aircraft",
   - SAE AS 1614, ”Main Line Aircraft Towbar Attach Fitting Interface",
   - SAE ARP 1915, ”Aircraft Towbar",
   - ISO 9667, ”Aircraft Ground Support Equipment - Towbar - Connection to Aircraft and Tractor",
   - EN 12312-7, ”Aircraft Ground Support Equipment - Specific Requirements - Part 7: Aircraft Movement Equipment",
   - IATA Airport Handling Manual AHM 958, ”Functional Specification for an Aircraft Towbar".

   A standard type towbar is required which should be equipped with a damping system (to protect the nose gear against jerks), a rotating toweye and with towing shear pins:
   - A traction shear pin calibrated at 9 425 daN (21 188 lbf),
   - A torsion pi n calibrated at 826 m.daN (6 092 lbf.ft).

The towing head is designed according to ISO 8267-1, cat. I.

****ON A/C A318-100**



EXAMPLE HOW TO DETERMINE THE TRACTION WHEEL LOAD REQUIREMENT TO TOW A A318 AT 60 000 kg, AT 1.5% SLOPE, 1 ENGINE AT IDLE AND FOR WET TARMAC CONDITIONS:

- ON THE RIGHT HAND SIDE OF THE GRAPH, CHOOSE THE RELEVANT AIRCRAFT WEIGHT (60 000 kg),
- FROM THIS POINT DRAW A PARALLEL LINE TO THE REQUIRED SLOPE PERCENTAGE (1.5%),
- FROM THE POINT OBTAINED DRAW A STRAIGHT HORIZONTAL LINE UNTIL No. OF ENGINES AT IDLE = 2,
- FROM THIS POINT DRAW A PARALLEL LINE TO THE REQUESTED No. OF ENGINES (1),
- FROM THIS POINT DRAW A STRAIGHT HORIZONTAL LINE TO THE DRAWBAR PULL AXIS,
- THE Y-COORDINATE OBTAINED IS THE NECESSARY DRAWBAR PULL FOR THE TRACTOR (3 900 kg),
- SEARCH THE INTERSECTION WITH THE "WET CONCRETE" LINE.
  THE OBTAINED X-COORDINATE IS THE TOTAL TRACTION WHEEL LOAD (6 890 kg).

NOTE:

USE A TRACTOR WITH A LIMITED DRAWBAR PULL TO PREVENT LOADS ABOVE THE TOW-BAR SHEAR-PIN CAPACITY.
FOR ALL WHEEL-DRIVEN VEHICLES, THE TOTAL TRACTION WHEEL LOAD IS THE TRACTOR WEIGHT.

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Ground Towing Requirements
FIGURE-5-8-0-991-001-H01

5-9-0 De-Icing and External Cleaning

****ON A/C A318-100**

De-Icing and External Cleaning

1. De-Icing and External Cleaning on Ground

   The mobile equipment for aircraft de-icing and external cleaning must be capable of reaching heights up to approximately 13 m (43 ft).

2. De-Icing

AIRCRAFT TYPE	Wing Top Surface (Both Sides)		Wingtip Devices (Both Inside and Outside Surfaces) (Both Sides)		HTP Top Surface (Both Sides)		VTP (Both Sides)	
	m^2	ft^2	m^2	ft^2	m^2	ft^2	m^2	ft^2
A318	100	1 076	2	22	27	291	46	495

AIRCRAFT TYPE	Fuselage Top Surface (Top Third - 120° Arc)		Nacelle and Pylon (Top Third - 120° Arc) (All Engines)		Total De-Iced Area	
	m^2	ft^2	m^2	ft^2	m^2	ft^2
A318	112	1 206	24	258	310	3 337

NOTE : Dimensions are approximate.

3. External Cleaning

AIRCRAFT TYPE	Wing Top Surface (Both Sides)		Wing Lower Surface (Including Flap Track Fairing) (Both Sides)		Wingtip Devices (Both Inside and Outside Surfaces) (Both Sides)		HTP Top Surface (Both Sides)		HTP Lower Surface (Both Sides)	
	m^2	ft^2	m^2	ft^2	m^2	ft^2	m^2	ft^2	m^2	ft^2
A318	100	1 076	103	1 109	2	22	27	291	27	291

AIRCRAFT TYPE	VTP (Both Sides)		Fuselage and Belly Fairing		Nacelle and Pylon (All Engines)		Total Cleaned Area	
	m^2	ft^2	m^2	ft^2	m^2	ft^2	m^2	ft^2
A318	46	495	343	3 692	73	786	723	7 782

NOTE : Dimensions are approximate.

OPERATING CONDITIONS

6-1-0 Engine Exhaust Velocities and Temperatures

****ON A/C A318-100**

Engine Exhaust Velocities and Temperatures

1. General

   This section provides the estimated engine exhaust efflux velocities and temperatures contours for Ground Idle, Breakaway and Maximum Take-Off (MTO) conditions.

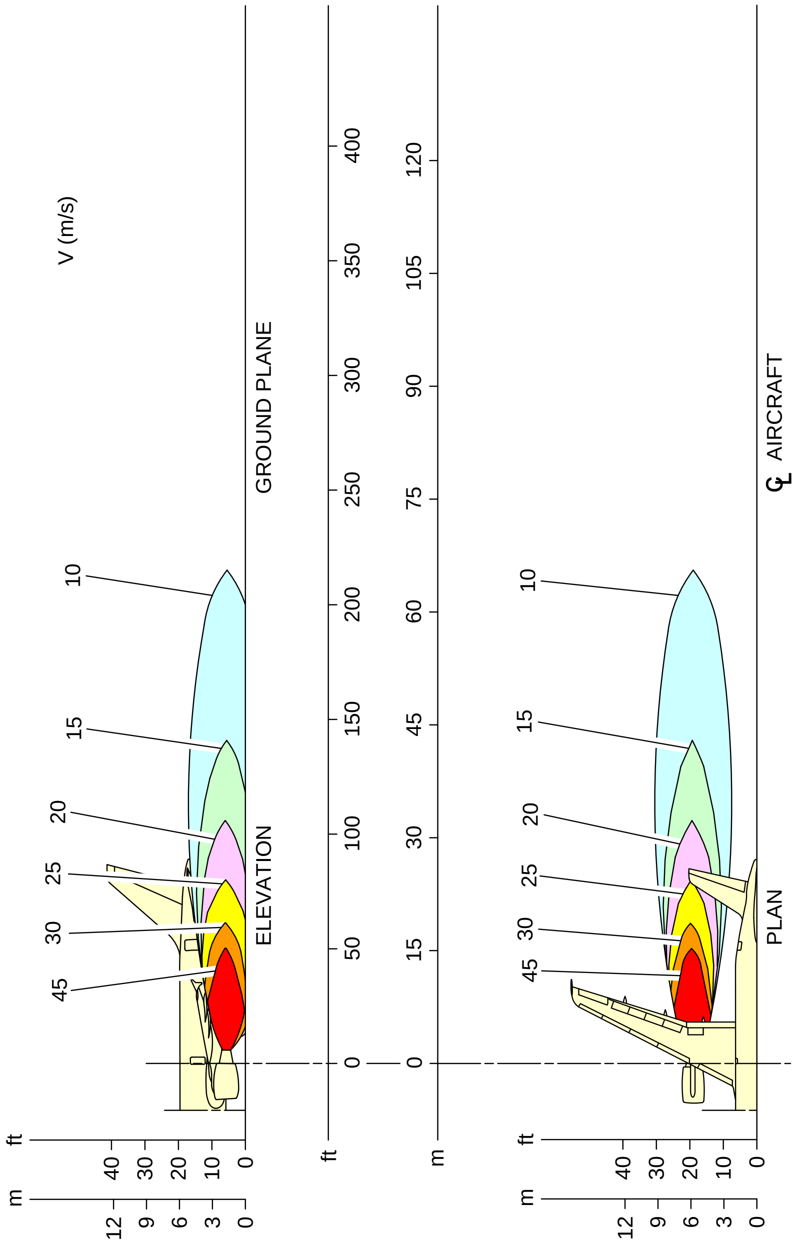
6-1-1 Engine Exhaust Velocities Contours - Ground Idle Power

****ON A/C A318-100**

Engine Exhaust Velocities Contours - Ground Idle Power

1. This section provides engine exhaust velocities contours at ground idle power.

****ON A/C A318-100**



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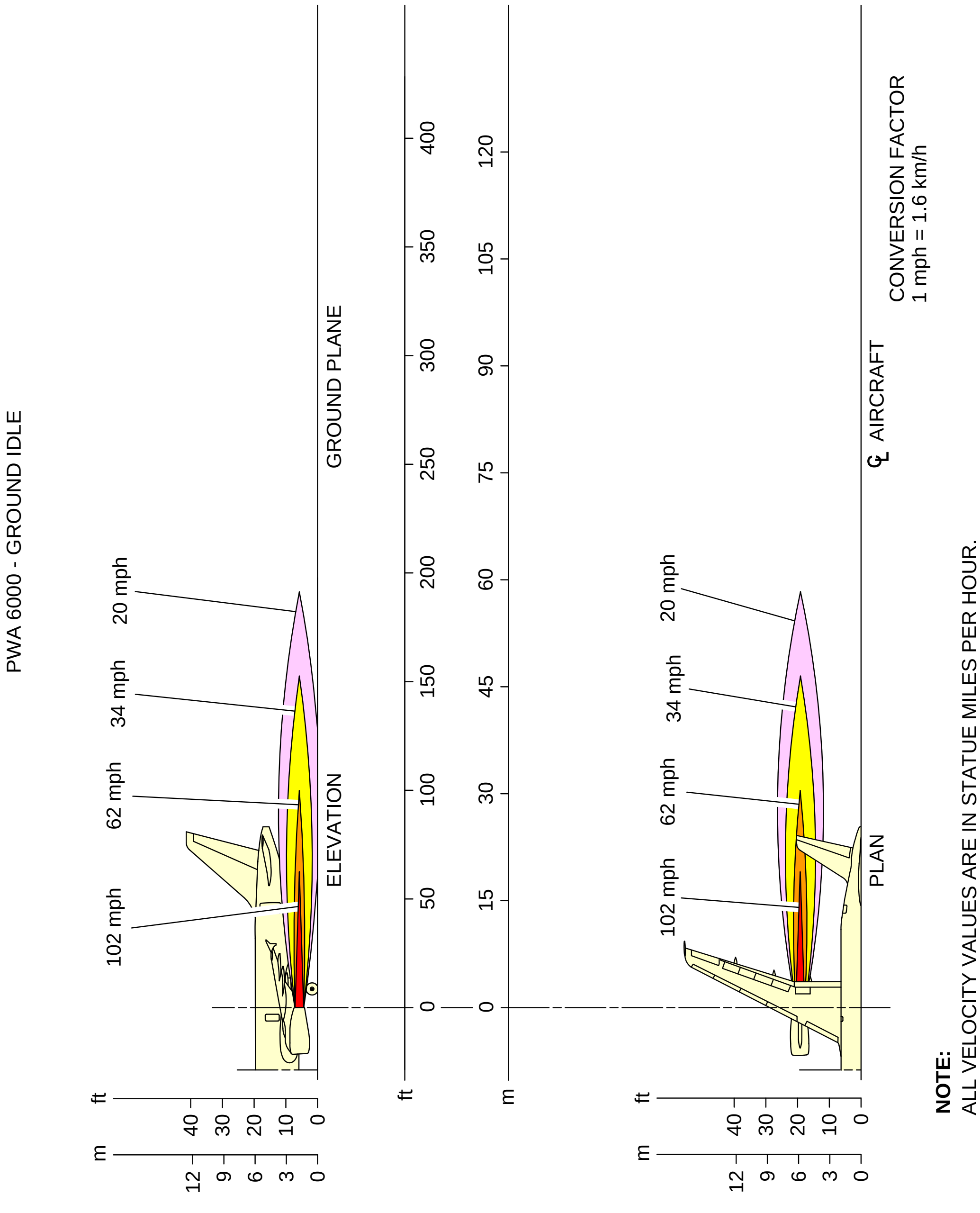
Engine Exhaust Velocities
Ground Idle Power – CFM56 Series Engine
FIGURE-6-1-1-991-001-A01

****ON A/C A318-100**



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Engine Exhaust Velocities
Ground Idle Power – PW 6000 Series Engine
FIGURE-6-1-1-991-002-A01

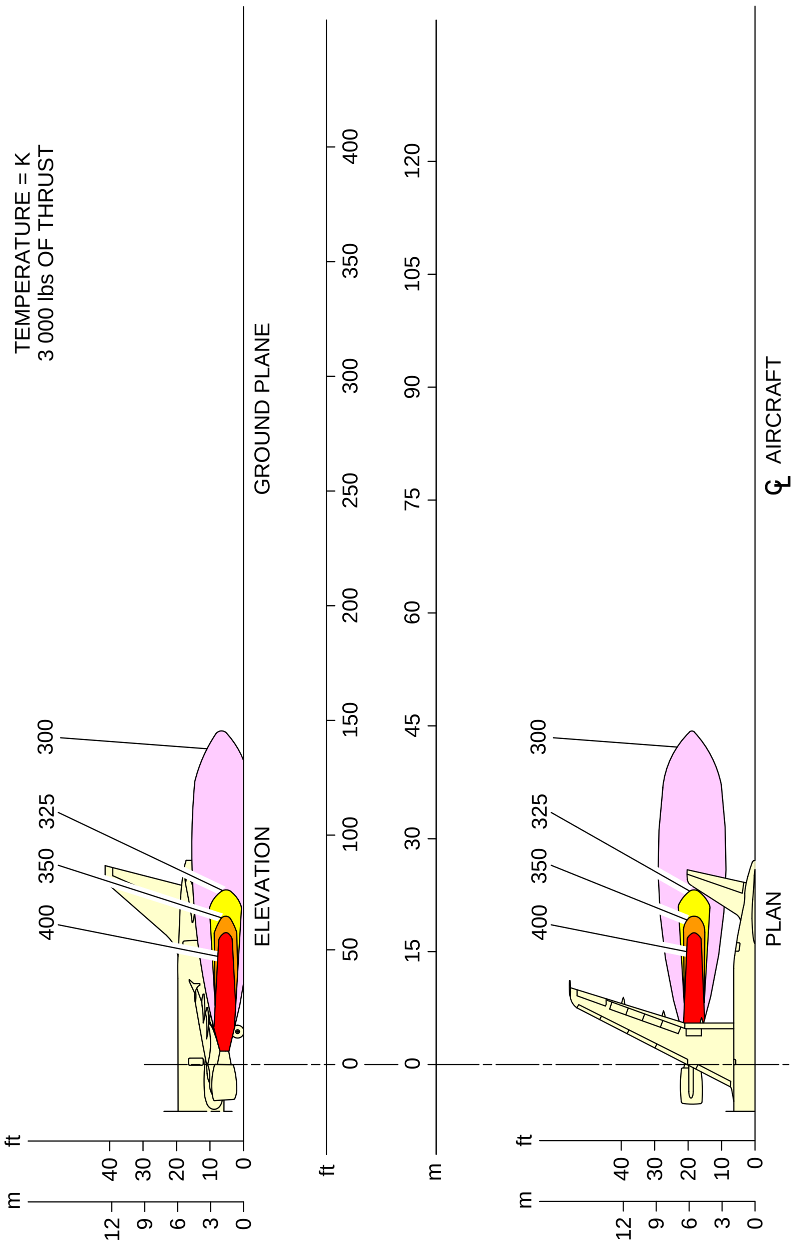
6-1-2 Engine Exhaust Temperatures Contours - Ground Idle Power

****ON A/C A318-100**

Engine Exhaust Temperatures Contours - Ground Idle Power

1. This section provides engine exhaust temperatures contours at ground idle power.

****ON A/C A318-100**



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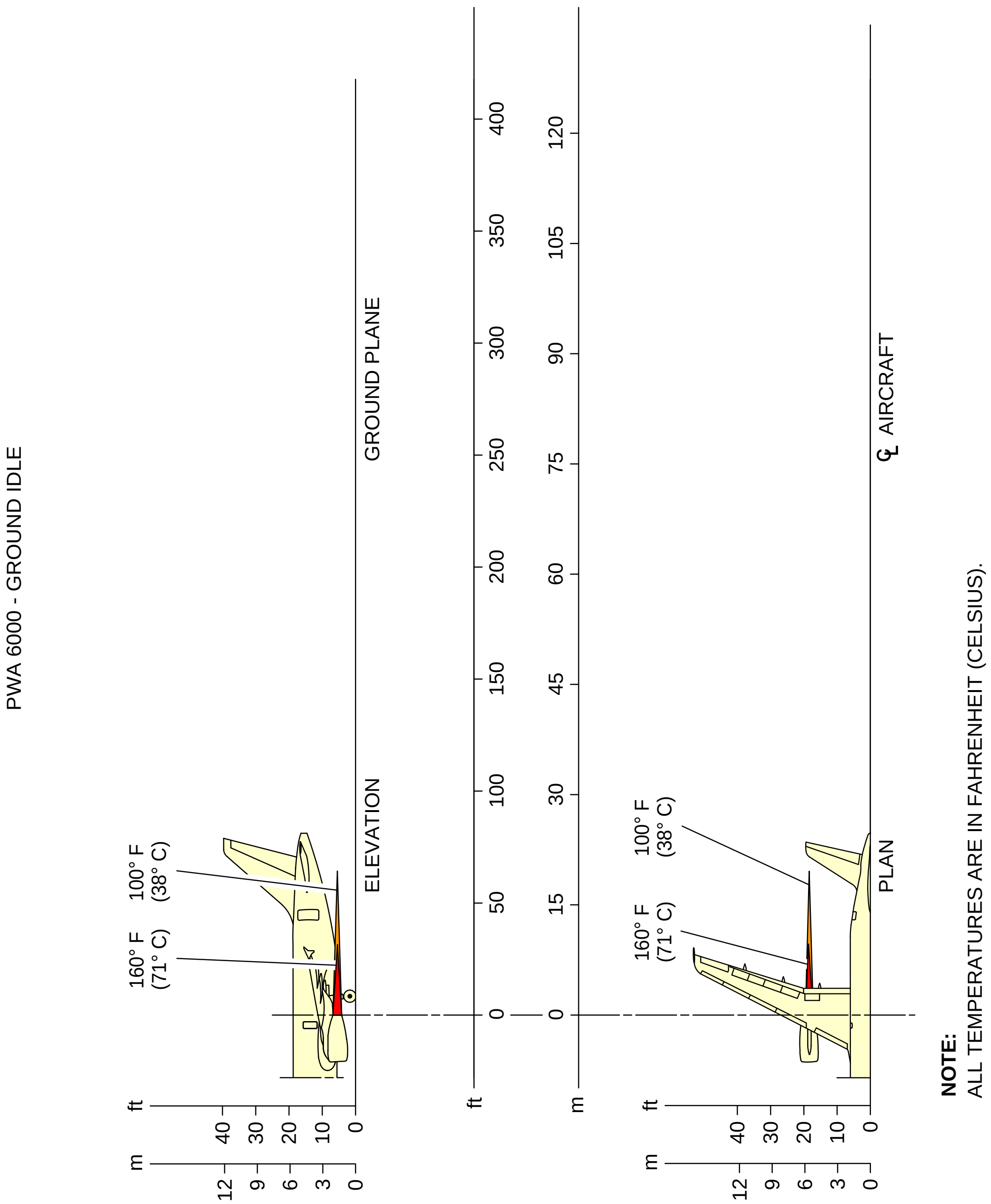
Engine Exhaust Temperatures
Ground Idle Power – CFM56 Series Engine
FIGURE-6-1-2-991-001-A01

****ON A/C A318-100**



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Engine Exhaust Temperatures
Ground Idle Power – PW 6000 Series Engine
FIGURE-6-1-2-991-002-A01

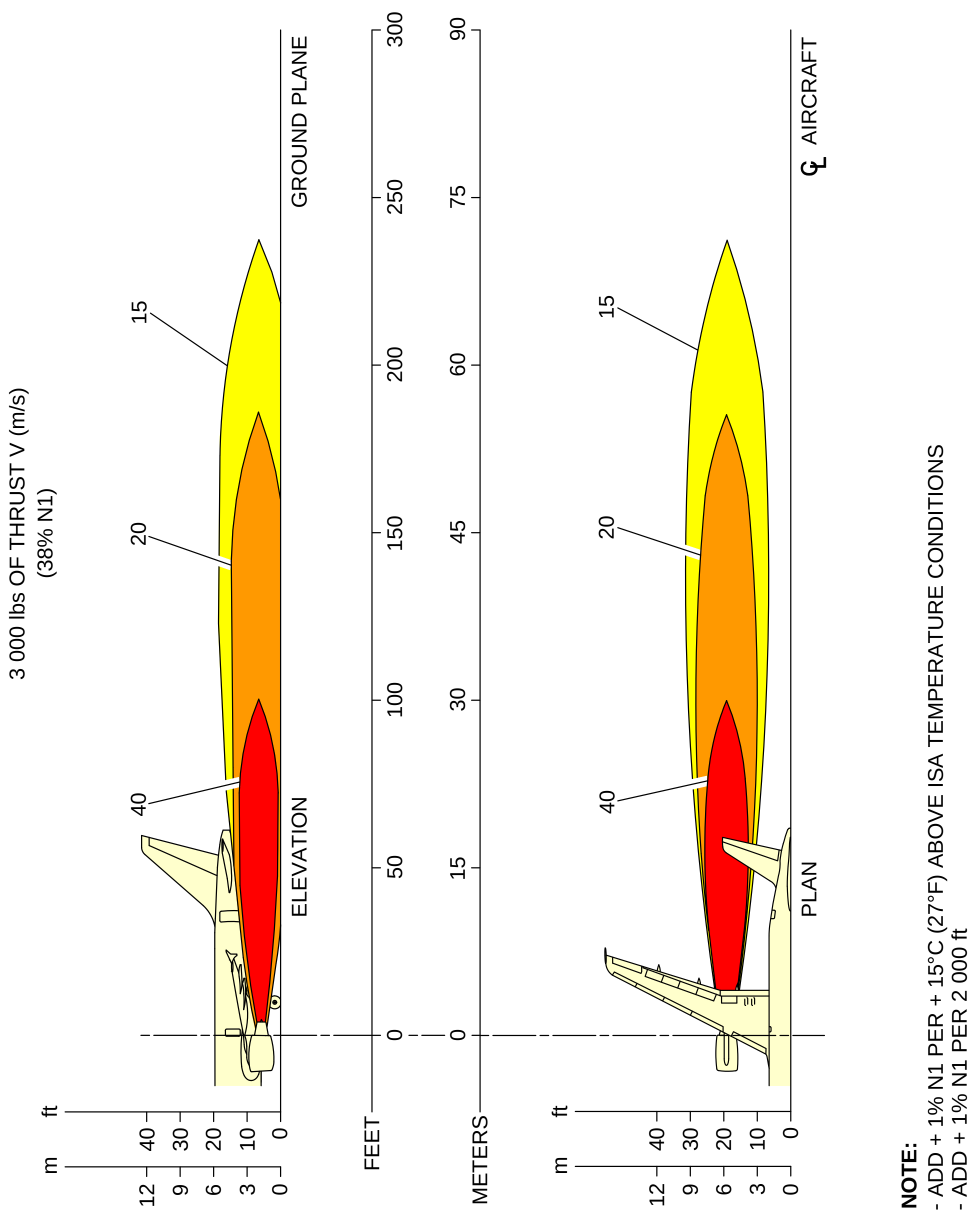
6-1-3 Engine Exhaust Velocities Contours - Breakaway Power

****ON A/C A318-100**

Engine Exhaust Velocities Contours - Breakaway Power

1. This section provides engine exhaust velocities contours at breakaway power.

****ON A/C A318-100**



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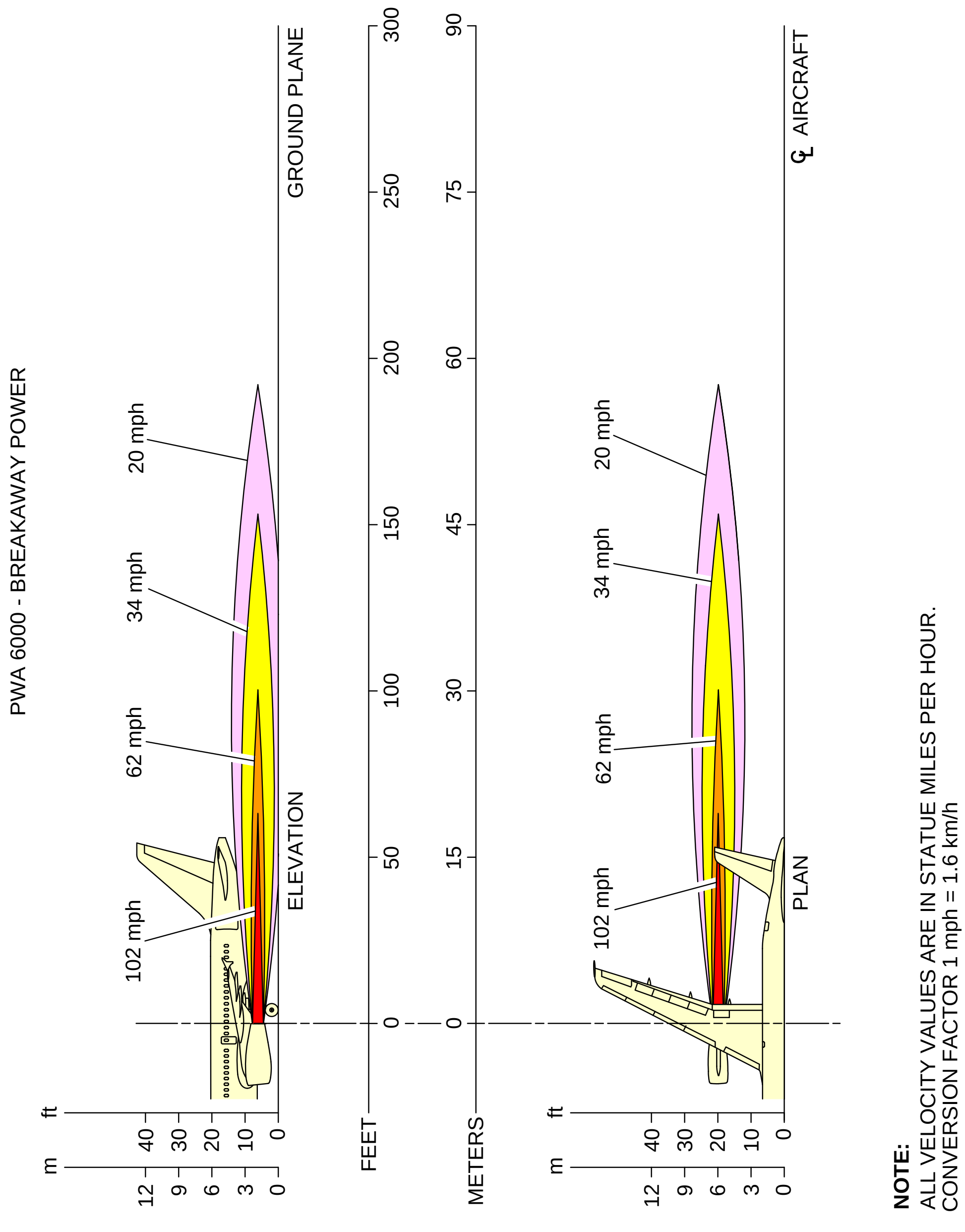
Engine Exhaust Velocities
Breakaway Power – CFM56 Series Engine
FIGURE-6-1-3-991-001-A01

****ON A/C A318-100**



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Engine Exhaust Velocities
Breakaway Power – PW 6000 Series Engine
FIGURE-6-1-3-991-002-A01

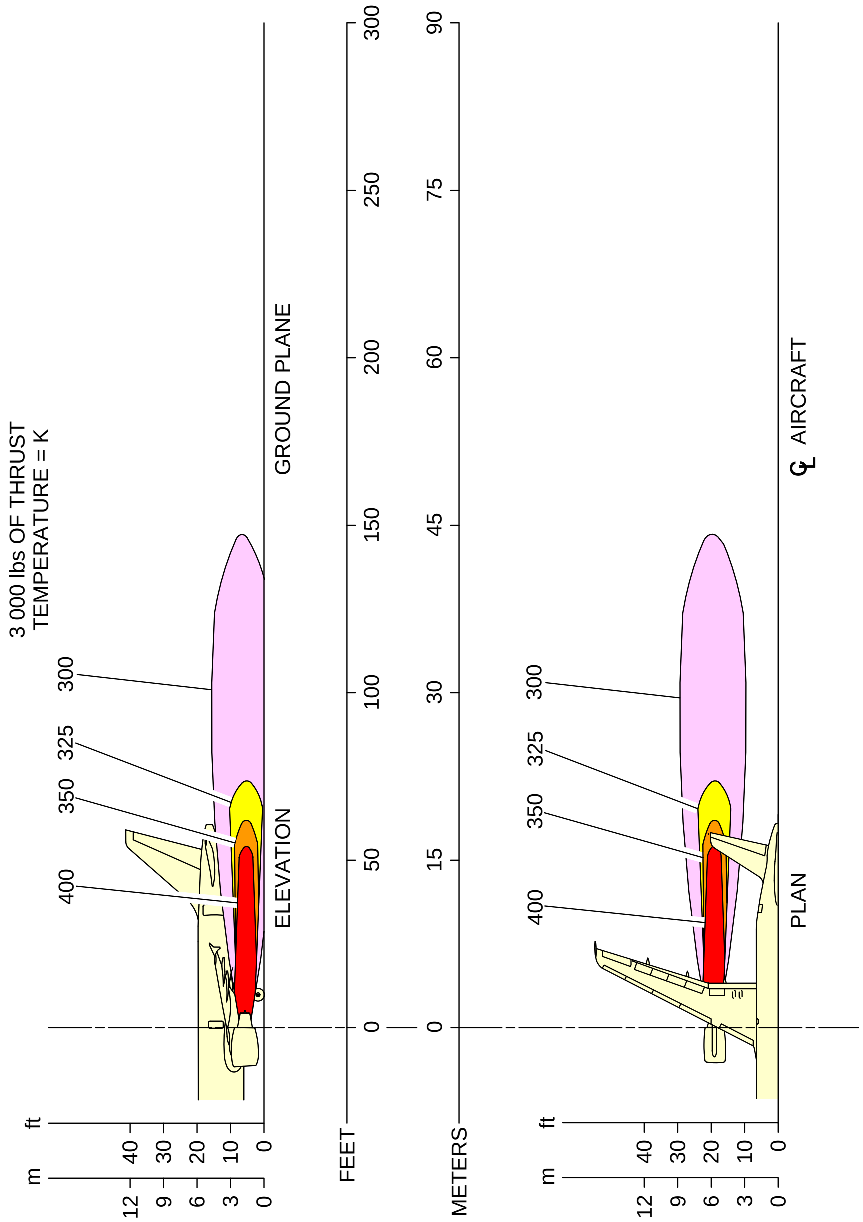
6-1-4 Engine Exhaust Temperatures Contours - Breakaway Power

****ON A/C A318-100**

Engine Exhaust Temperatures Contours - Breakaway Power

1. This section provides engine exhaust temperatures contours at breakaway power.

****ON A/C A318-100**



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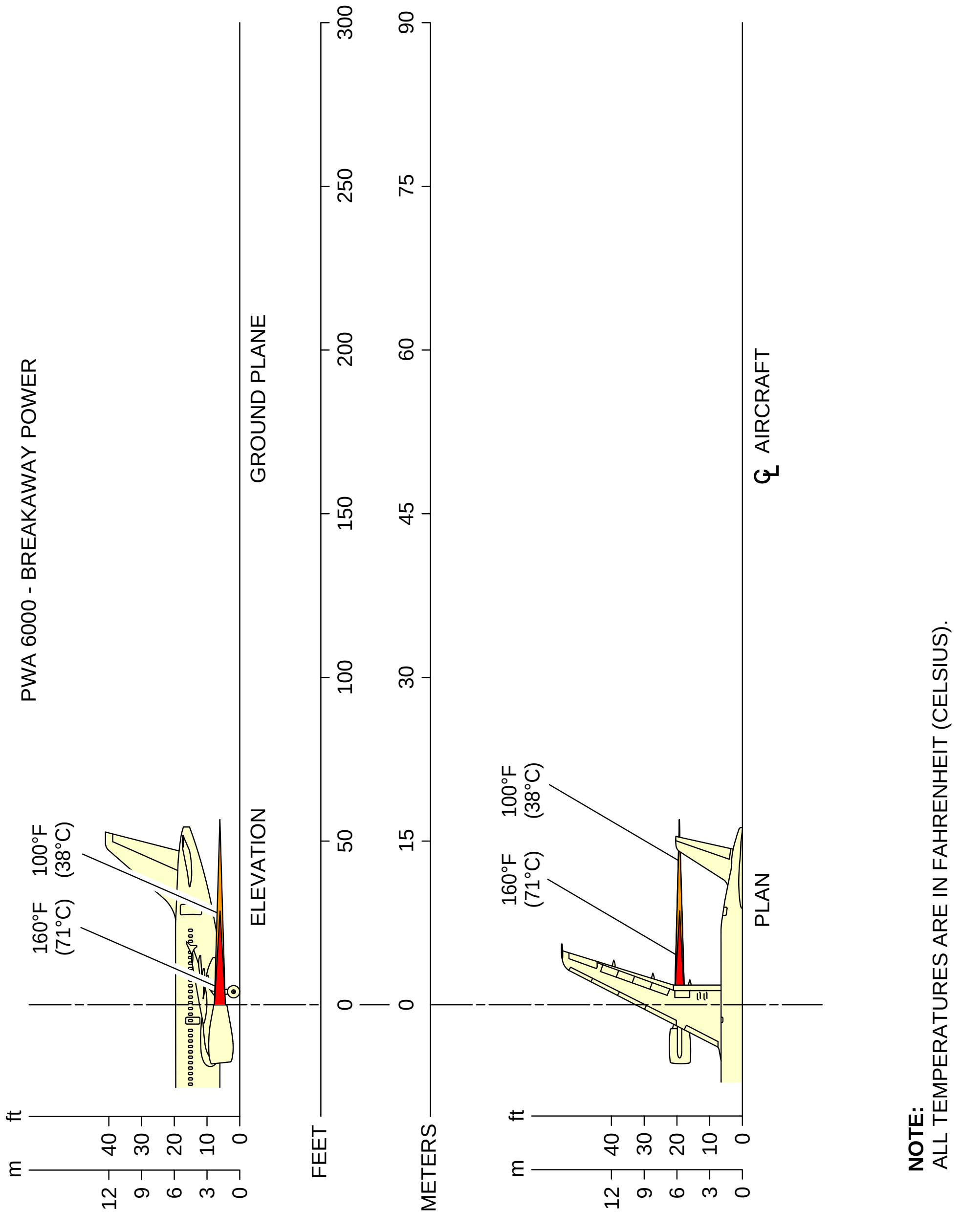
Engine Exhaust Temperatures
Breakaway Power – CFM56 Series Engine
FIGURE-6-1-4-991-001-A01

****ON A/C A318-100**



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Engine Exhaust Temperatures
Breakaway Power – PW 6000 Series Engine
FIGURE-6-1-4-991-002-A01

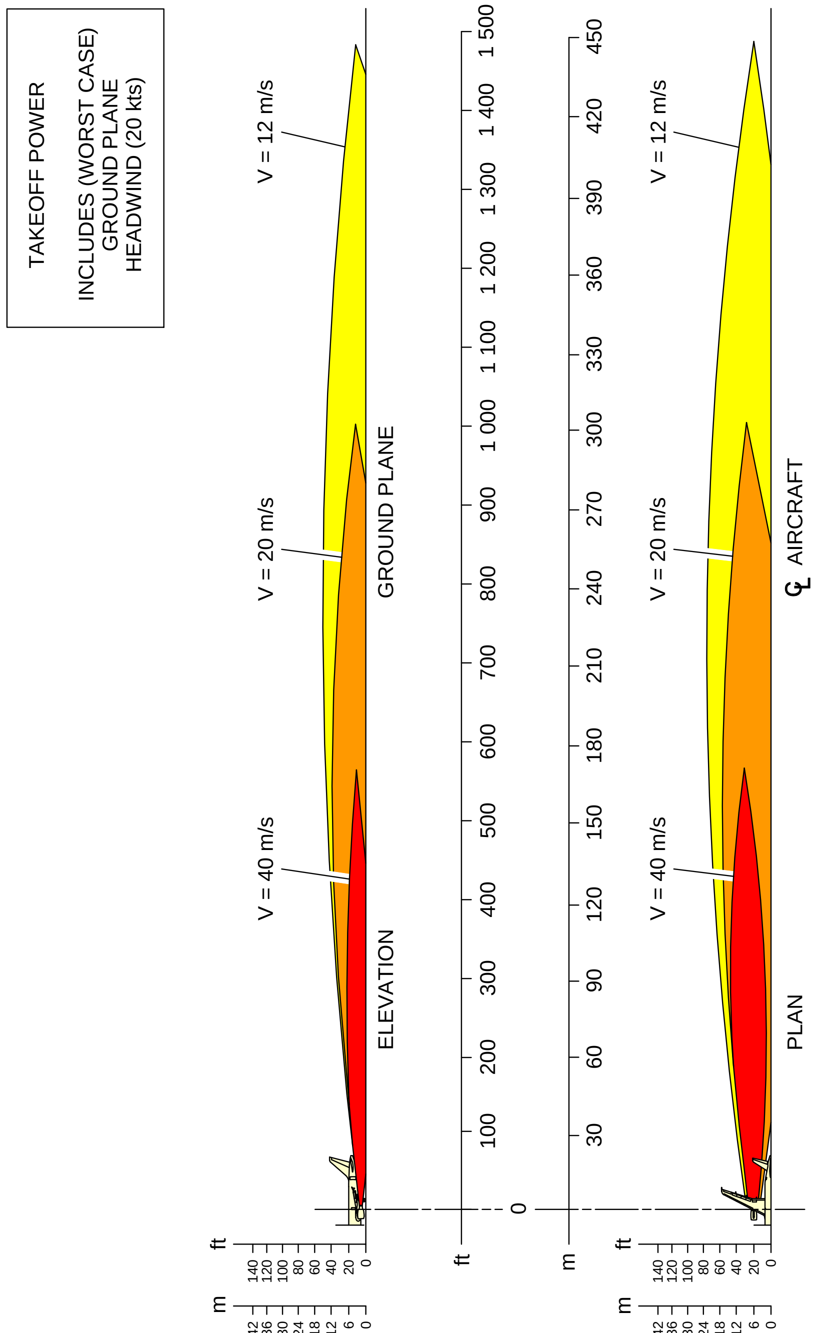
6-1-5 Engine Exhaust Velocities Contours - Takeoff Power

****ON A/C A318-100**

Engine Exhaust Velocities Contours - Takeoff Power

1. This section provides engine exhaust velocities contours at takeoff power.

****ON A/C A318-100**



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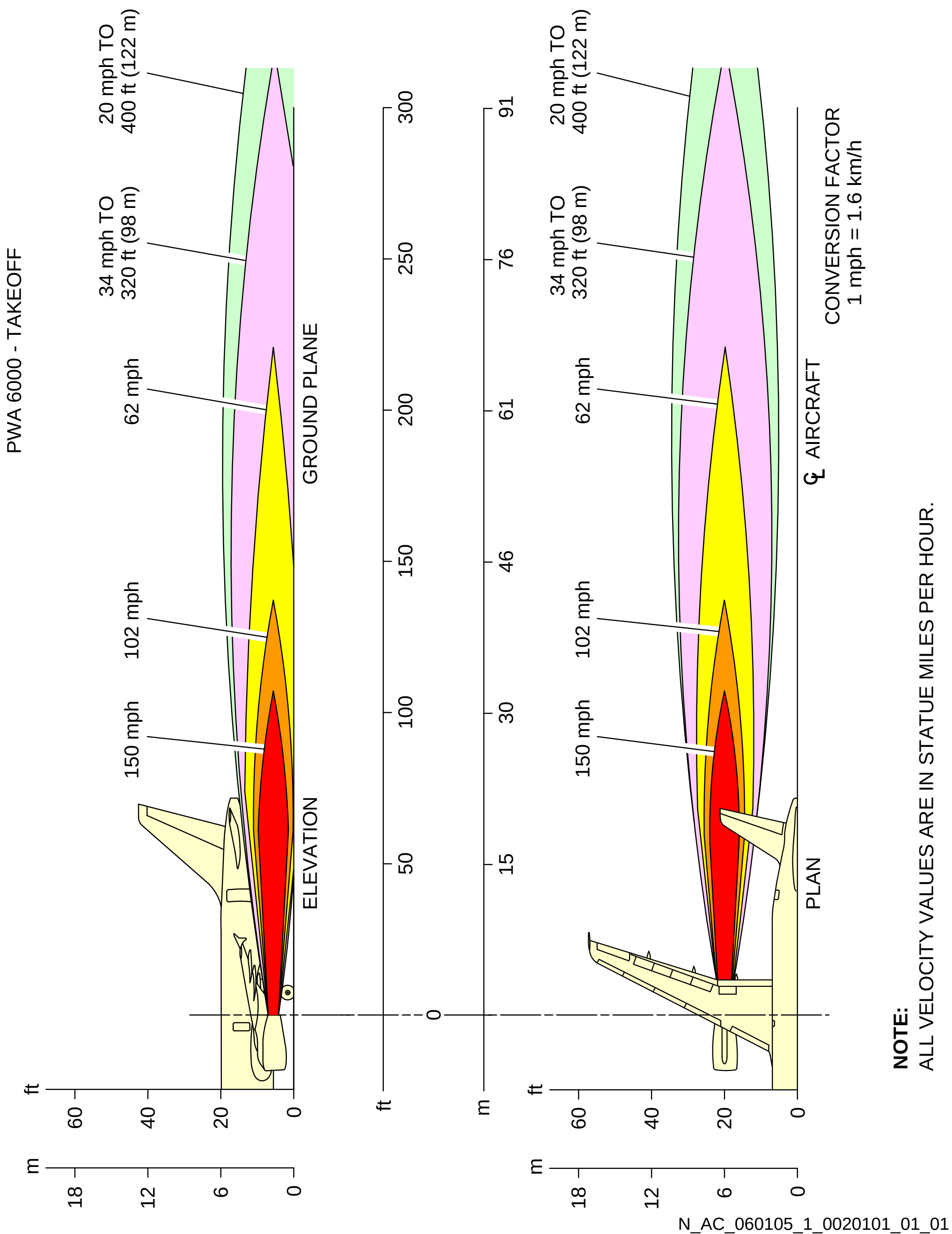
Engine Exhaust Velocities
Takeoff Power – CFM56 Series Engine
FIGURE-6-1-5-991-001-A01

****ON A/C A318-100**



Engine Exhaust Velocities
Takeoff Power – PW 6000 Series Engine
FIGURE-6-1-5-991-002-A01

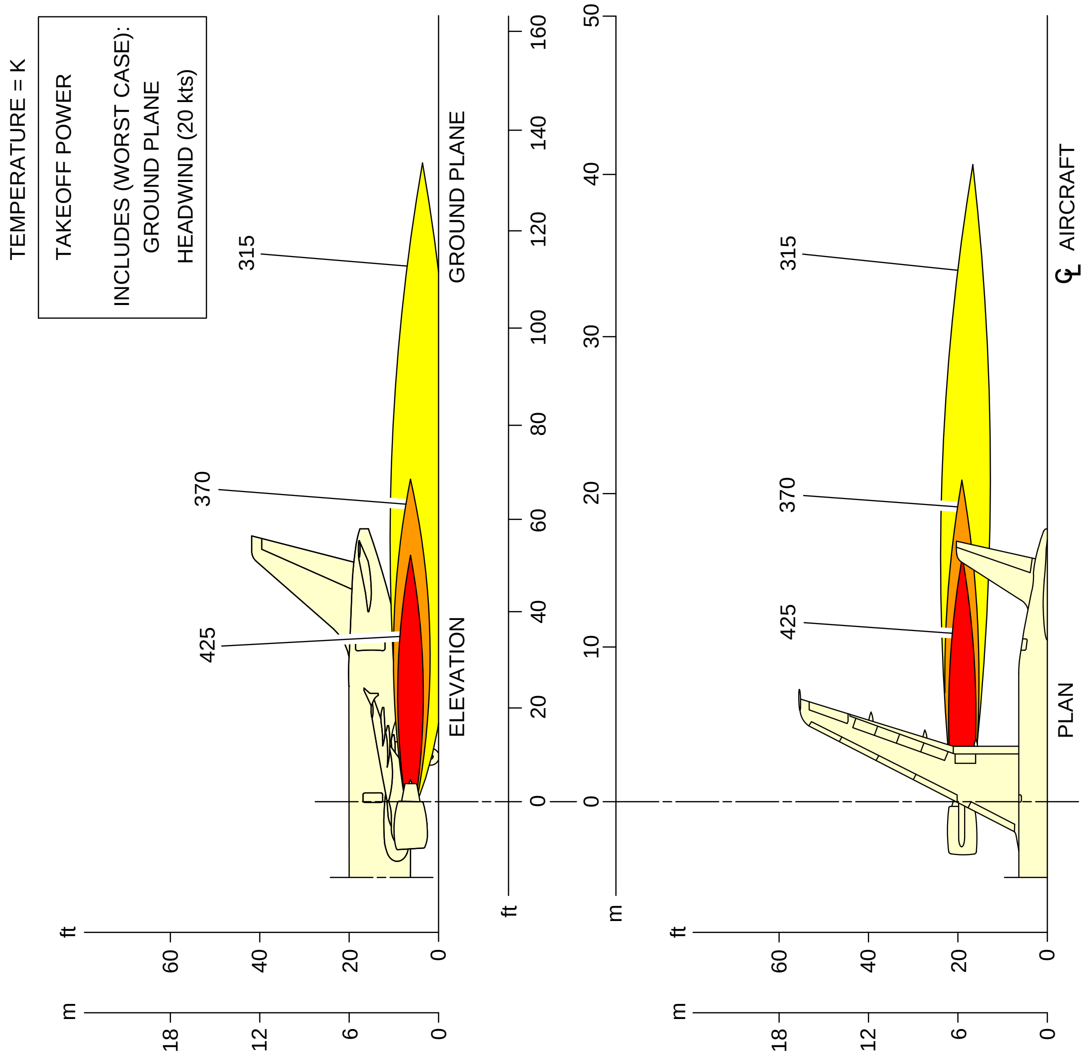
6-1-6 Engine Exhaust Temperatures Contours - Takeoff Power

****ON A/C A318-100**

Engine Exhaust Temperatures Contours - Takeoff Power

1. This section provides engine exhaust temperatures contours at takeoff power.

****ON A/C A318-100**



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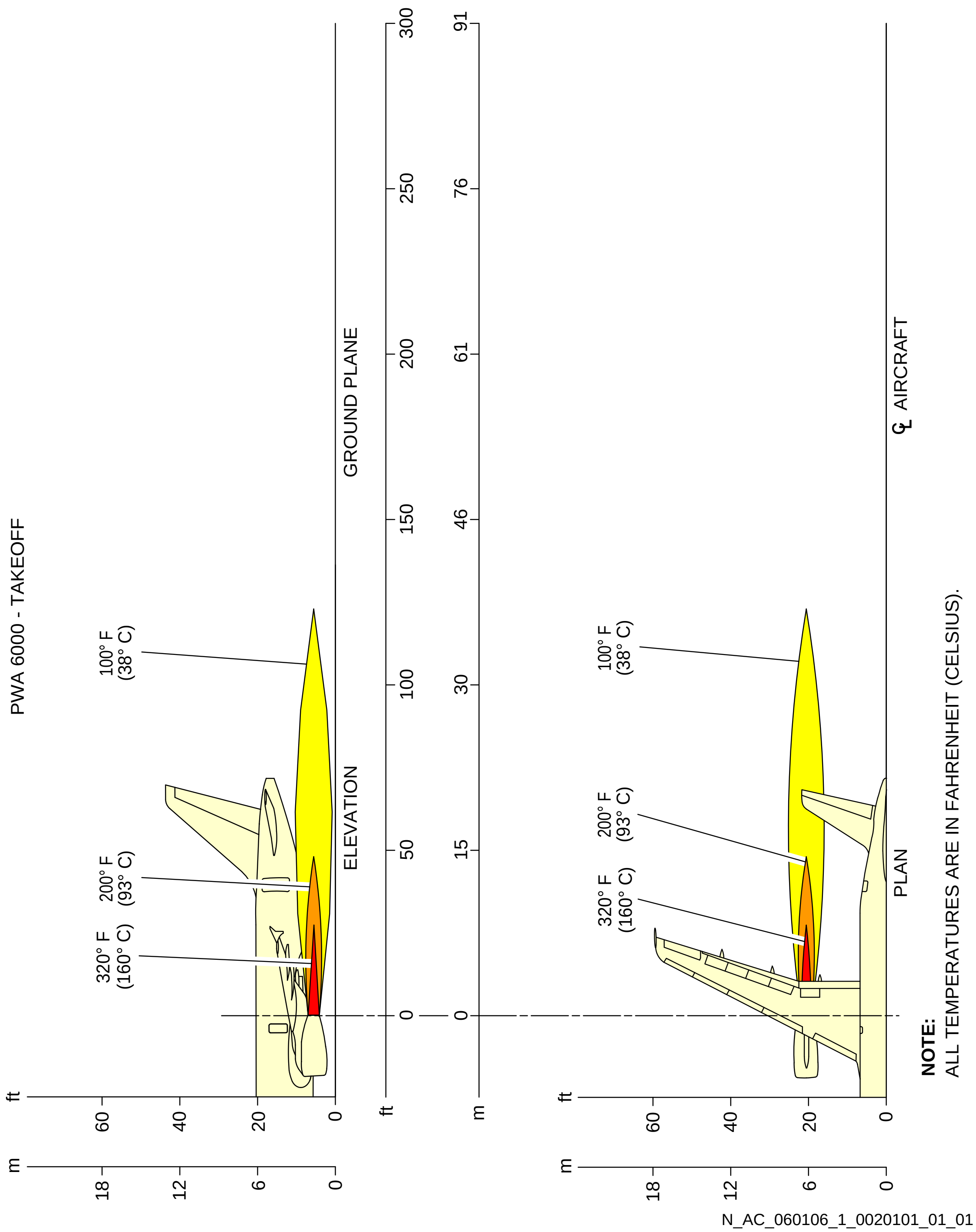
Engine Exhaust Temperatures
Takeoff Power – CFM56 Series Engine
FIGURE-6-1-6-991-001-A01

****ON A/C A318-100**



Engine Exhaust Temperatures
Takeoff Power – PW 6000 Series Engine
FIGURE-6-1-6-991-002-A01

6-3-0 Danger Areas of Engines

****ON A/C A318-100**

Danger Areas of Engines

1. Danger Areas of the Engines

   A. The danger areas of the engines shown below are given in the normalized format:
      - Entry corridors are only available at ground idle.
      - Do not go into the areas between the engines.
      - The exhaust danger areas are given for 0 kt headwind (if not specified otherwise).

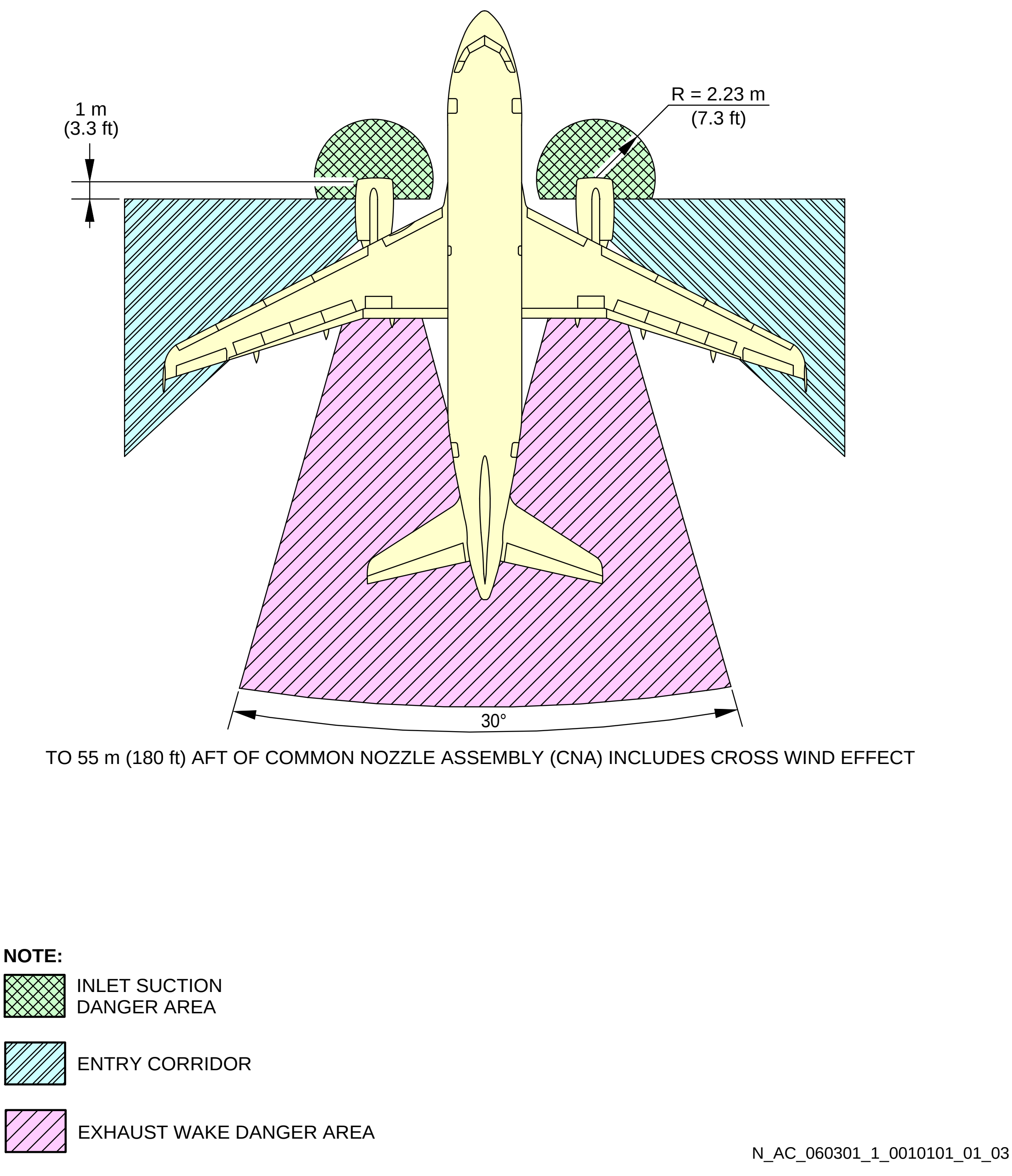
6-3-1 Ground Idle Power

****ON A/C A318-100**

Ground Idle Power

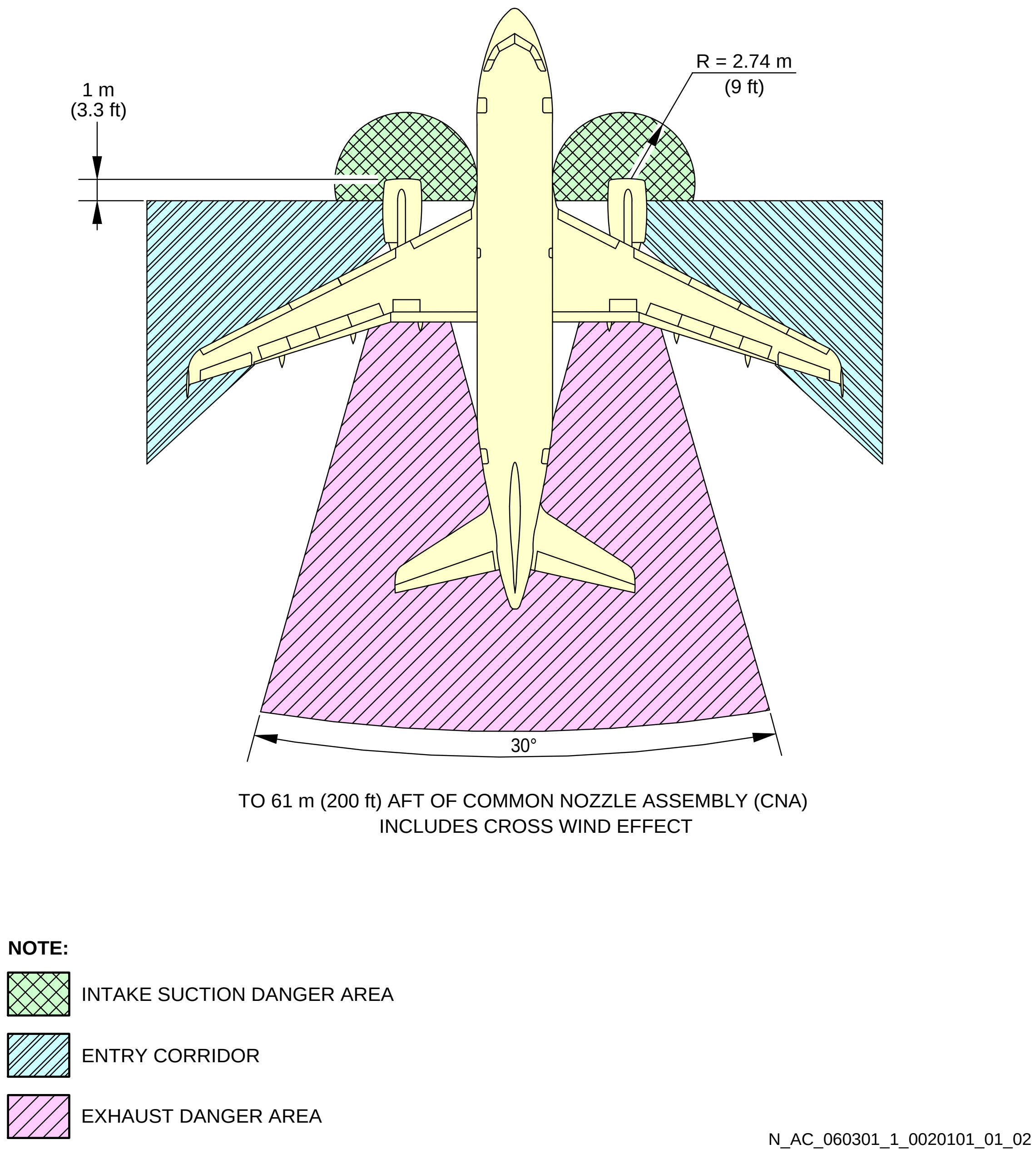
1. This section provides danger areas of the engines at ground idle power conditions.

**ON A/C A318-100



Danger Areas of the Engines
CFM56 Series Engine
FIGURE-6-3-1-991-001-A01

****ON A/C A318-100**



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Danger Areas of the Engines
PW 6000 Series Engine
FIGURE-6-3-1-991-002-A01

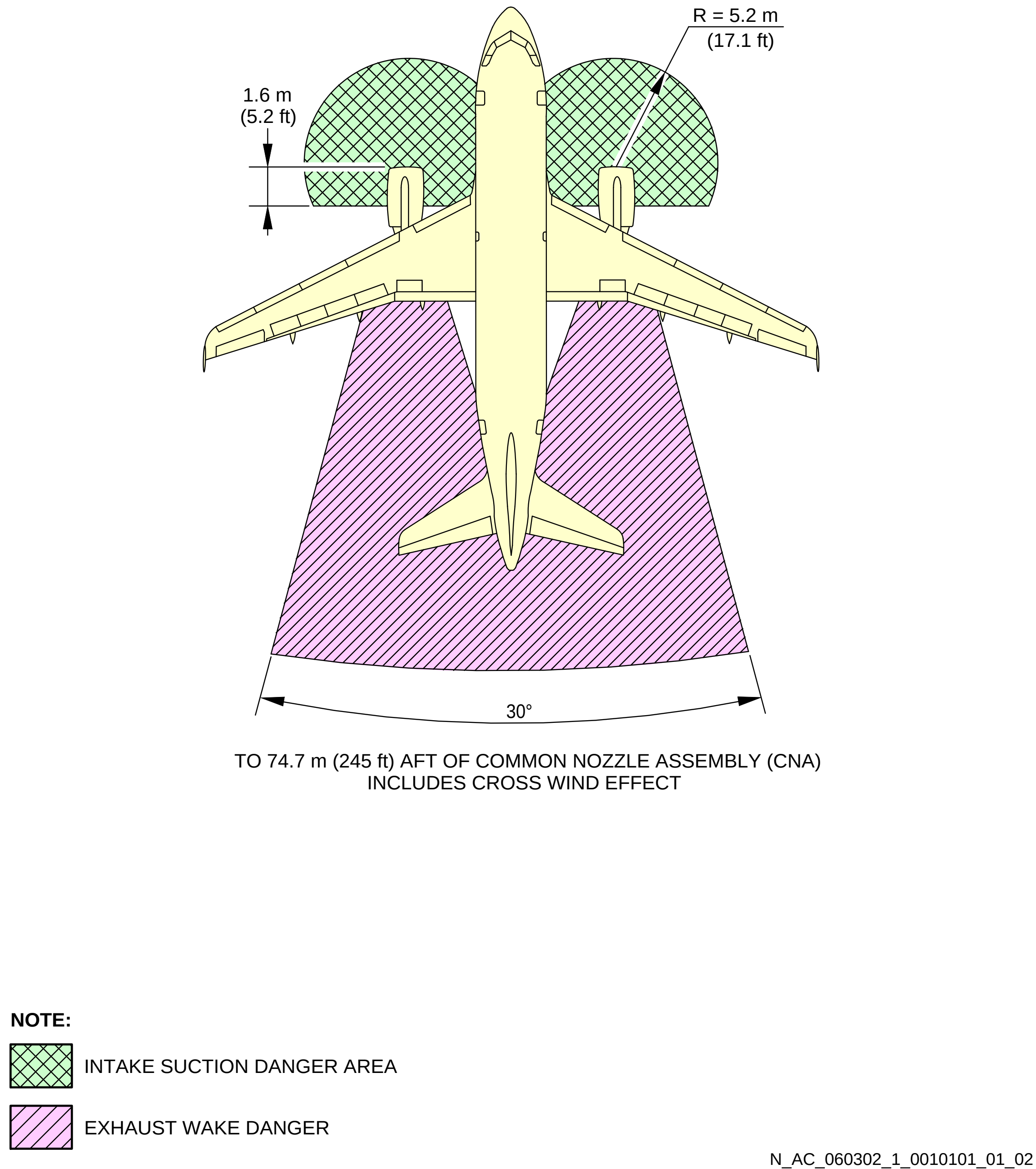
6-3-2 Breakaway Power

****ON A/C A318-100**

Breakaway Power

1. This section provides danger areas of the engines at breakaway power.

****ON A/C A318-100**



Danger Areas of the Engines
CFM56 Series Engine
FIGURE-6-3-2-991-001-A01

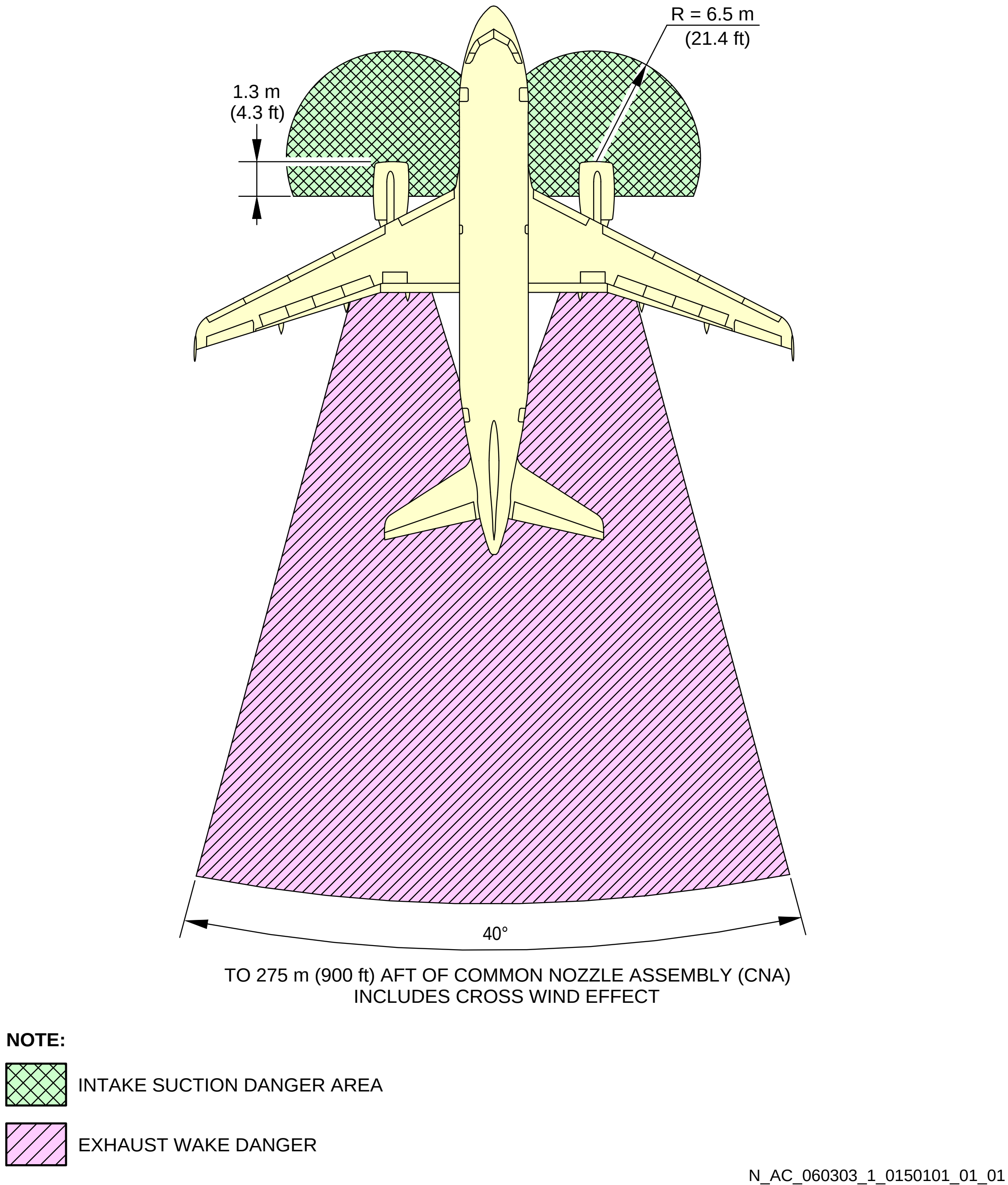
6-3-3 Max Take Off Power

****ON A/C A318-100**

Take Off Power

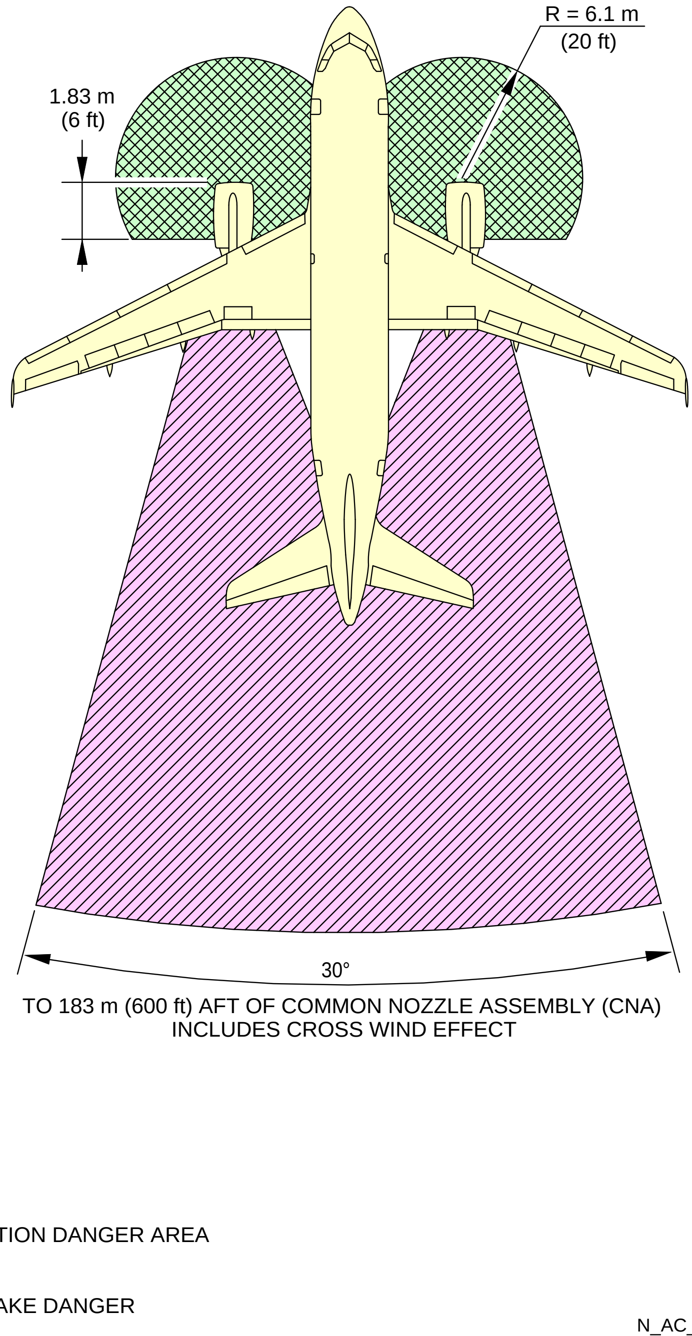
1. This section provides danger areas of the engines at max. take off conditions.

****ON A/C A318-100**



Danger Areas of the Engines
CFM56 Series Engine
FIGURE-6-3-3-991-015-A01

****ON A/C A318-100**



Danger Areas of the Engines
PW 6000 Series Engine
FIGURE-6-3-3-991-018-A01

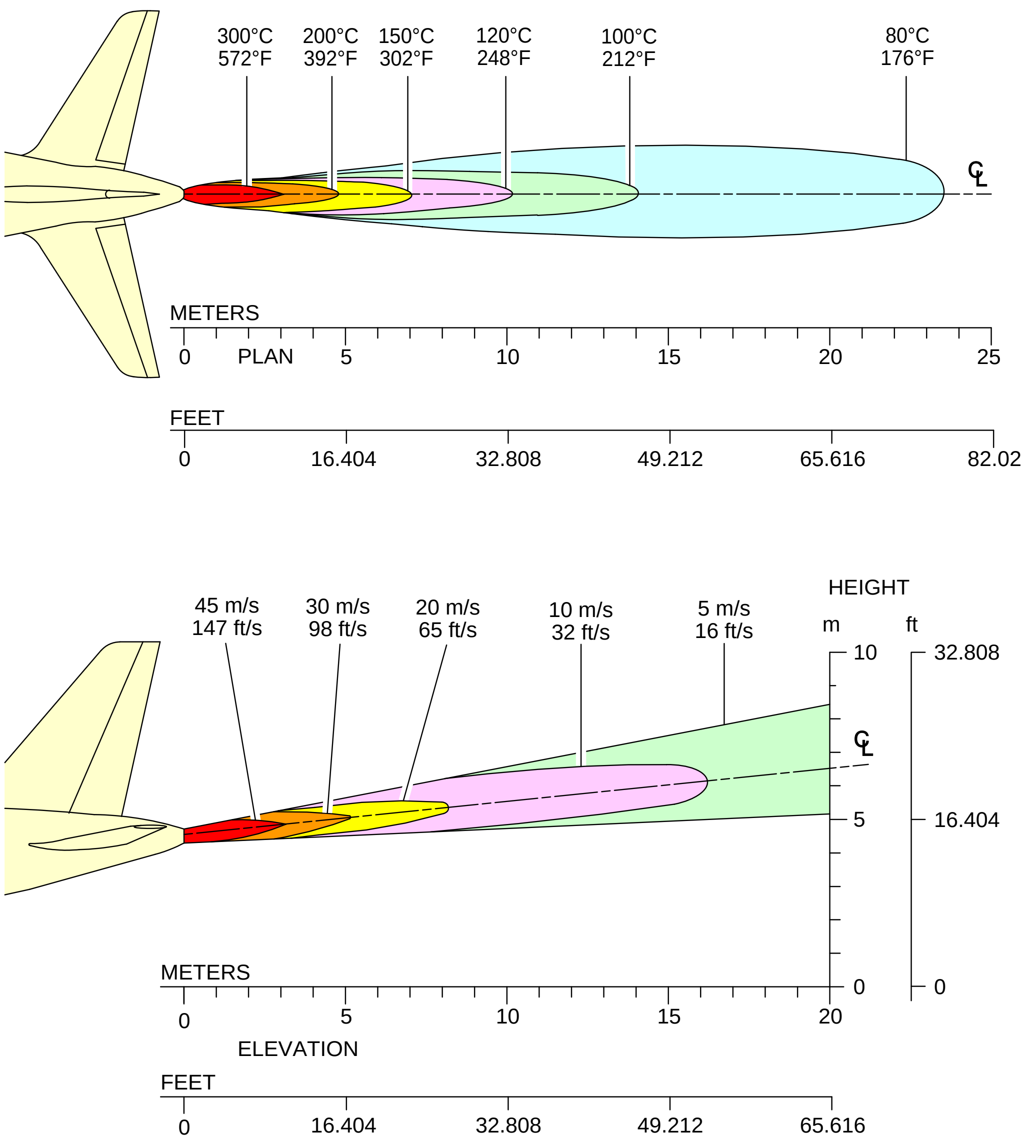
6-4-1 APU

****ON A/C A318-100**

APU - APIC & GARRETT

1. This section gives APU exhaust velocities and temperatures.

****ON A/C A318-100**



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Exhaust Velocities and Temperatures
APU – APIC & GARRETT
FIGURE-6-4-1-991-001-A01

PAVEMENT DATA

7-1-0 General Information

****ON A/C A318-100**

General Information

1. A brief description of the pavement charts that follow will help in airport planning.

   To aid in the interpolation between the discrete values shown, each aircraft configuration is shown with a minimum range of five loads on the Main Landing Gear (MLG).

   All curves on the charts represent data at a constant specified tire pressure with:
   - The aircraft loaded to the Maximum Ramp Weight (MRW),
   - The CG at its maximum permissible aft position.

   Pavement requirements for commercial aircraft are derived from the static analysis of loads imposed on the MLG struts.

   Landing Gear Footprint:
   Section 07-02-00 presents basic data on the landing gear footprint configuration, MRW and tire sizes and pressures.

   Maximum Pavement Loads:
   Section 07-03-00 shows maximum vertical and horizontal pavement loads for certain critical conditions at the tire-ground interfaces.

   Landing Gear Loading on Pavement:
   The curves related to the landing gear loading on pavement are not given in section 07-04-00. Because the relationship between the aircraft weight, the center of gravity and the landing gear loading on the pavement is not strictly linear, it cannot be shown in chart format. But you can find in section 07-03-00 the maximum vertical and horizontal pavement loads for some critical conditions at the tire/ground interfaces for all the operational weight variants of the aircraft. For questions that are related to landing gear loading on pavement, contact Airbus.

   Flexible Pavement Requirements - US Army Corps of Engineers Design Method:

The flexible pavement requirements curves as per U.S. Army Corps of Engineers Design Method are not given in section 07-05-00 since the related data is available through free software.
Sections 07-02-00 and 07-03-00 give all the inputs data required for the use of such software.
For questions that are related to the flexible pavement requirements, contact Airbus.

Flexible Pavement Requirements - LCN Conversion Method:
The Load Classification Number (LCN) curves are not given in section 07-06-00 since the LCN system for reporting pavement strength is old and are replaced by the ICAO recommended ACN/PCN system in 1983 and ACR/PCR system in 2020.
For questions that are related to the LCN system, contact Airbus.

Rigid Pavement Requirements - PCA (Portland Cement Association) Design Method:
The rigid pavement requirements curves as per as Portland Cement Association Design Method are not given in section 07-07-00 since the related data is available through free software.
Sections 07-02-00 and 07-03-00 give all the inputs data required for the use of such software.
For questions that are related to the rigid pavement requirements, contact Airbus.

Rigid Pavement Requirements - LCN Conversion:
The Load Classification Number (LCN) curves are not given in section 07-08-00 since the LCN system for reporting pavement strength is old and are replaced by the ICAO recommended ACN/PCN system in 1983 and ACR/PCR system in 2020.
For questions that are related to the rigid pavement requirements, contact Airbus.

ACN/PCN Reporting System:
Section 07-09-00 gives ACN data prepared according to the ACN/PCN system as referenced in ICAO Annex 14, ”Aerodromes”, Volume 1 ”Aerodrome Design and Operations”.
Eighth Edition July 2018, incorporating Amendments 1 to 14 and ICAO doc 9157, "Aerodrome Design Manual", part 3 "Pavements" Second Edition 1983.
The ACN/PCN system is applicable until November 2024.

ACN is the Aircraft Classification Number and PCN is the related Pavement Classification Number.

An aircraft with an ACN less than or equal to the PCN can operate without restriction on the pavement.

Numerically the ACN is two times the derived single wheel load expressed in thousands of kilograms.
The derived single wheel load is calculated as the load on a single tire inflated to 1.25 MPa (181 psi) that would have the same pavement requirements as the aircraft.
Computationally the ACN/PCN system uses PCA program PDILB for rigid pavements and S-77-1 for flexible pavements to calculate ACN values.

The airport authority must select the method of pavement analysis.
The results of their analysis should be reported using the following format:

PCN			
PAVEMENT TYPE	SUBGRADE CATEGORY	TIRE PRESSURE CATEGORY	EVALUATION METHOD
R – Rigid	A – High	W – No pressure limit	T – Technical
F – Flexible	B – Medium	X – High pressure limited to 1.75 MPa (254 psi)	U – Using Aircraft
	C – Low	Y – Medium pressure limited to 1.25 MPa (181 psi)	
	D – Ultra Low	Z – Low pressure limited to 0.5 MPa (73 psi)	

Section 07-09-00 shows the aircraft ACN values.

For flexible pavements, the four subgrade categories (CBR) are:

- A. High Strength CBR 15
- B. Medium Strength CBR 10
- C. Low Strength CBR 6
- D. Ultra Low Strength CBR 3

For rigid pavements, the four subgrade categories (k) are:

- A. High Strength $k = 150$ MN/m³ (550 pci)
- B. Medium Strength $k = 80$ MN/m³ (300 pci)
- C. Low Strength $k = 40$ MN/m³ (150 pci)
- D. Ultra Low Strength $k = 20$ MN/m³ (75 pci)

ACR/PCR Reporting System:
Section 07-10-00 gives ACR data prepared according to the ACR/PCR system as referenced in ICAO Annex 14, "Aerodromes", Volume 1 "Aerodrome Design and Operations".
Eight Edition July 2018, incorporating Amendments 1 to 15 and ICAO doc 9157, "Aerodrome Design Manual", part 3 "Pavements" Third Edition 2021.
The ACR/PCR system is effective from November 2020 and will be applicable in November 2024.

ACR is the Aircraft Classification Rating and PCR is the related Pavement Classification Rating.

An aircraft with an ACR less than or equal to the PCR can operate without restriction on the pavement.

Numerically the ACR is two times the derived single-wheel load expressed in hundreds of kilograms.

The derived single-wheel load is calculated as the load on a single tire inflated to 1.50 Mpa (218 psi) that can have the same pavement requirements as the aircraft.
Computationally the ACR/PCR system relies on the Linear Elastic Analysis (LEA). The ACR are computed with the official ICAO-ACR software.
States can start their own methods for PCR determination, which agree with the overall parameters of the ACR/PCR method.

The results of their analysis should be reported with the following format:

PCR			
PAVEMENT TYPE	SUBGRADE CATEGORY	TIRE PRESSURE CATEGORY	EVALUATION METHOD
R – Rigid	A – High	W – No pressure limit	T – Technical
F – Flexible	B – Medium	X – High pressure limited to 1.75 MPa (254 psi)	U – Using Aircraft
	C – Low	Y – Medium pressure limited to 1.25 MPa (181 psi)	
	D – Ultra Low	Z – Low pressure limited to 0.5 MPa (73 psi)	

Section 07-10-00 shows the aircraft ACR value.

For flexible and rigid pavement, the four subgrade categories are defined based on the subgrade modulus of elasticity (E):

- A. High Strength E = 200 Mpa (29 008 psi)
- B. Medium Strength E = 120 Mpa (17 405 psi)
- C. Low Strength E = 80 Mpa (11 603 psi)
- D. Ultra Low Strength E = 50 Mpa (7 252 psi)

7-2-0 Landing Gear Footprint

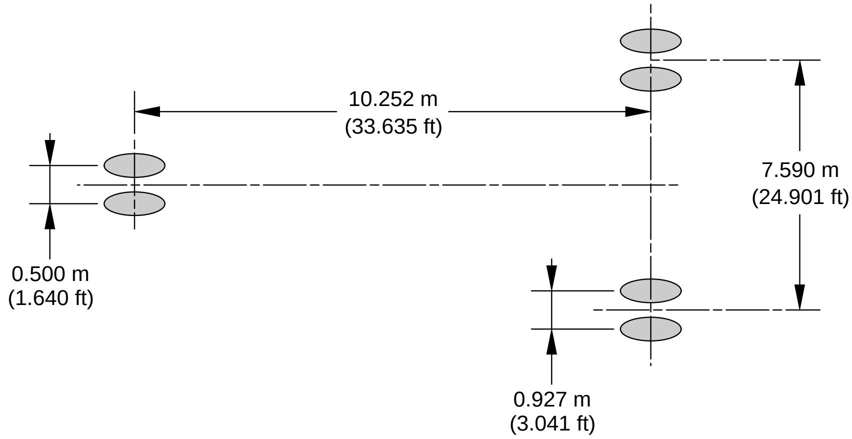
****ON A/C A318-100**

Landing Gear Footprint

1. This section gives data about the landing gear footprint in relation with the aircraft MRW and tire sizes and pressures.

   The landing-gear footprint information is given for all the operational weight variants of the aircraft.

****ON A/C A318-100**



WEIGHT VARIANT	MAXIMUM RAMP WEIGHT	PERCENTAGE OF WEIGHT ON MAIN GEAR GROUP	NOSE GEAR TIRE SIZE	NOSE GEAR TIRE PRESSURE	MAIN GEAR TIRE SIZE	MAIN GEAR TIRE PRESSURE
A318-100 WV000 (CG 33.93%)	59 400 kg (130 950 lb)	89.7%	30x8.8R15 (30x8.8-15)	12.8 bar (186 psi)	46x17R20 (46x16-20)	11.4 bar (165 psi)
A318-100 WV000 (CG 30%)	59 400 kg (130 950 lb)	88.1%	30x8.8R15 (30x8.8-15)	12.8 bar (186 psi)	46x17R20 (46x16-20)	11.4 bar (165 psi)
A318-100 WV001 (CG 32.7%)	61 900 kg (136 475 lb)	89.2%	30x8.8R15 (30x8.8-15)	12.8 bar (186 psi)	46x17R20 (46x16-20)	11.4 bar (165 psi)
A318-100 WV001 (CG 30%)	61 900 kg (136 475 lb)	88.1%	30x8.8R15 (30x8.8-15)	12.8 bar (186 psi)	46x17R20 (46x16-20)	11.4 bar (165 psi)
A318-100 WV002 (CG 32%)	63 400 kg (139 775 lb)	89.0%	30x8.8R15 (30x8.8-15)	12.8 bar (186 psi)	46x17R20 (46x16-20)	11.4 bar (165 psi)
A318-100 WV002 (CG 30%)	63 400 kg (139 775 lb)	88.1%	30x8.8R15 (30x8.8-15)	12.8 bar (186 psi)	46x17R20 (46x16-20)	11.4 bar (165 psi)
A318-100 WV003 (CG 32%)	64 900 kg (143 075 lb)	89.0%	30x8.8R15 (30x8.8-15)	13.5 bar (196 psi)	46x17R20 (46x16-20)	12.4 bar (180 psi)
A318-100 WV003 (CG 30%)	64 900 kg (143 075 lb)	88.1%	30x8.8R15 (30x8.8-15)	13.5 bar (196 psi)	46x17R20 (46x16-20)	12.4 bar (180 psi)
A318-100 WV004 (CG 32%)	66 400 kg (146 375 lb)	89.0%	30x8.8R15 (30x8.8-15)	13.5 bar (196 psi)	46x17R20 (46x16-20)	12.4 bar (180 psi)
A318-100 WV004 (CG 30%)	66 400 kg (146 375 lb)	88.1%	30x8.8R15 (30x8.8-15)	13.5 bar (196 psi)	46x17R20 (46x16-20)	12.4 bar (180 psi)
A318CJ WV004 (CG 32%)	66 400 kg (146 375 lb)	89.0%	30x8.8R15 (30x8.8-15)	13.5 bar (196 psi)	46x17R20 (46x16-20)	12.4 bar (180 psi)
A318-100 WV005 (CG 32%)	68 400 kg (150 800 lb)	89.0%	30x8.8R15 (30x8.8-15)	13.5 bar (196 psi)	46x17R20 (46x16-20)	12.4 bar (180 psi)
A318-100 WV005 (CG 30%)	68 400 kg (150 800 lb)	88.1%	30x8.8R15 (30x8.8-15)	13.5 bar (196 psi)	46x17R20 (46x16-20)	12.4 bar (180 psi)

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Landing Gear Footprint
(Sheet 1 of 2)
FIGURE-7-2-0-991-001-A01

****ON A/C A318-100**

WEIGHT VARIANT	MAXIMUM RAMP WEIGHT	PERCENTAGE OF WEIGHT ON MAIN GEAR GROUP	NOSE GEAR TIRE SIZE	NOSE GEAR TIRE PRESSURE	MAIN GEAR TIRE SIZE	MAIN GEAR TIRE PRESSURE
A318CJ WV005 (CG 32%)	68 400 kg (150 800 lb)	89.0%	30x8.8R15 (30x8.8-15)	13.5 bar (196 psi)	46x17R20 (46x16-20)	12.4 bar (180 psi)
A318-100 WV006 (CG 35%)	56 400 kg (124 350 lb)	90.2%	30x8.8R15 (30x8.8-15)	12.3 bar (178 psi)	46x17R20 (46x16-20)	10.2bar (148 psi)
A318-100 WV006 (CG 30.11%)	56 400 kg (124 350 lb)	88.1%	30x8.8R15 (30x8.8-15)	12.3 bar (178 psi)	46x17R20 (46x16-20)	10.2 bar (148 psi)
A318-100 WV007 (CG 32.93%)	61 400 kg (135 375 lb)	89.3%	30x8.8R15 (30x8.8-15)	12.8 bar (186 psi)	46x17R20 (46x16-20)	11.4 bar (165 psi)
A318-100 WV007 (CG 30%)	61 400 kg (135 375 lb)	88.1%	30x8.8R15 (30x8.8-15)	12.8 bar (186 psi)	46x17R20 (46x16-20)	11.4 bar (165 psi)
A318-100 WV008 (CG 32%)	64 400 kg (141 975 lb)	89.0%	30x8.8R15 (30x8.8-15)	13.5 bar (196 psi)	46x17R20 (46x16-20)	12.4 bar (180 psi)
A318-100 WV008 (CG 30%)	64 400 kg (141 975 lb)	88.1%	30x8.8R15 (30x8.8-15)	13.5 bar (196 psi)	46x17R20 (46x16-20)	12.4 bar (180 psi)
A318CJ WV009 (CG 32%)	66 400 kg (146 375 lb)	89.0%	30x8.8R15 (30x8.8-15)	13.5 bar (196 psi)	46x17R20 (46x16-20)	12.4 bar (180 psi)
A318CJ WV010 (CG 32%)	68 400 kg (150 800 lb)	89.0%	30x8.8R15 (30x8.8-15)	13.5 bar (196 psi)	46x17R20 (46x16-20)	12.4 bar (180 psi)

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Landing Gear Footprint
2 of 2)
7-2-0-991-001-A01

7-3-0 Maximum Pavement Loads

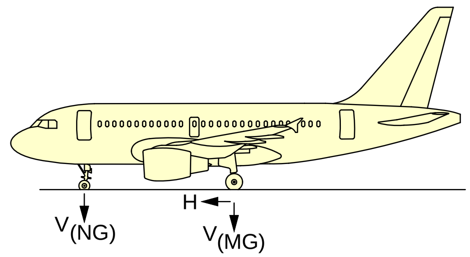
****ON A/C A318-100**

Maximum Pavement Loads

1. This section gives maximum vertical and horizontal pavement loads for some critical conditions at the tire-ground interfaces.

   The maximum pavement loads are given for all the operational weight variants of the aircraft.

****ON A/C A318-100**



$V_{(NG)}$ MAXIMUM VERTICAL NOSE GEAR GROUND LOAD AT FWD CG
$V_{(MG)}$ MAXIMUM VERTICAL MAIN GEAR GROUND LOAD AT AFT CG
H MAXIMUM HORIZONTAL GROUND LOAD FROM BRAKING

1	2	3		4	5		6	
		$V_{(NG)}$			$V_{(MG)}$ (PER STRUT)		H (PER STRUT)	
WEIGHT VARIANT	MAXIMUM RAMP WEIGHT	STATIC LOAD AT FWD CG		STATIC BRAKING AT 10 ft/s² DECELERATION	STATIC LOAD AT AFT CG		STEADY BRAKING AT 10 ft/s² DECELERATION	AT INSTANTANEOUS BRAKING COEFFICIENT = 0.8
A318-100 WV000 (CG 33.93%)	59 400 kg (130 950 lb)	10 840 kg (23 900 lb)	15% MAC (a)	16 810 kg (37 075 lb)	26 650 kg (58 750 lb)	33.93% MAC (a)	9 230 kg (20 350 lb) (b)	21 320 kg (47 000 lb) (b)
A318-100 WV000 (CG 30%)	59 400 kg (130 950 lb)	10 850 kg (23 900 lb)	15% MAC (a)	16 810 kg (37 075 lb)	26 160 kg (57 675 lb)	30% MAC (a)	9 230 kg (20 350 lb) (b)	20 930 kg (46 125 lb) (b)
A318-100 WV001 (CG 32.7%)	61 900 kg (136 475 lb)	11 290 kg (24 900 lb)	15% MAC (a)	17 490 kg (38 575 lb)	27 620 kg (60 900 lb)	32.7% MAC (a)	9 620 kg (21 200 lb) (b)	22 100 kg (48 700 lb) (b)
A318-100 WV001 (CG 30%)	61 900 kg (136 475 lb)	11 290 kg (24 900 lb)	15% MAC (a)	17 500 kg (38 575 lb)	27 260 kg (60 100 lb)	30% MAC (a)	9 620 kg (21 200 lb) (b)	21 810 kg (48 075 lb) (b)
A318-100 WV002 (CG 32%)	63 400 kg (139 775 lb)	11 560 kg (25 475 lb)	15% MAC (a)	17 900 kg (39 475 lb)	28 200 kg (62 175 lb)	32% MAC (a)	9 850 kg (21 725 lb) (b)	22 560 kg (49 725 lb) (b)
A318-100 WV002 (CG 30%)	63 400 kg (139 775 lb)	11 560 kg (25 475 lb)	15% MAC (a)	17 900 kg (39 475 lb)	27 930 kg (61 575 lb)	30% MAC (a)	9 850 kg (21 725 lb) (b)	22 340 kg (49 250 lb) (b)

NOTE:
(a) LOADS CALCULATED USING AIRCRAFT AT MRW.
(b) BRAKED MAIN GEAR.

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Maximum Pavement Loads for A318-100 and ACJ318-100
(Sheet 1 of 3)
FIGURE-7-3-0-991-020-A01

**ON A/C A318-100

1	2	3		4	5		6	
		$V_{(NG)}$			$V_{(MG)}$ (PER STRUT)		H (PER STRUT)	
WEIGHT VARIANT	MAXIMUM RAMP WEIGHT	STATIC LOAD AT FWD CG		STATIC BRAKING AT 10 ft/s² DECELERATION	STATIC LOAD AT AFT CG		STEADY BRAKING AT 10 ft/s² DECELERATION	AT INSTANTANEOUS BRAKING COEFFICIENT = 0.8
A318-100 WV003 (CG 32%)	64 900 kg (143 075 lb)	11 510 kg (25 375 lb)	16.17% MAC (b)	17 990 kg (39 675 lb)	28 870 kg (63 650 lb)	32% MAC (a)	10 090 kg (22 225 lb) (c)	23 090 kg (50 925 lb) (c)
A318-100 WV003 (CG 30%)	64 900 kg (143 075 lb)	11 510 kg (25 375 lb)	16.17% MAC (b)	17 990 kg (39 675 lb)	28 590 kg (63 025 lb)	30% MAC (a)	10 090 kg (22 225 lb) (c)	22 870 kg (50 425 lb) (c)
A318-100 WV004 (CG 32%)	66 400 kg (146 375 lb)	11 490 kg (25 325 lb)	15% MAC (b)	17 780 kg (39 175 lb)	29 540 kg (65 125 lb)	32% MAC (a)	10 320 kg (22 750 lb) (c)	23 630 kg (52 100 lb) (c)
A318-100 WV004 (CG 30%)	66 400 kg (146 375 lb)	11 490 kg (25 325 lb)	15% MAC (b)	17 780 kg (39 200 lb)	29 250 kg (64 500 lb)	30% MAC (a)	10 320 kg (22 750 lb) (c)	23 400 kg (51 600 lb) (c)
A318CJ-100 WV004 (CG 32%)	66 400 kg (146 375 lb)	11 490 kg (25 325 lb)	15% MAC (b)	17 780 kg (39 175 lb)	29 540 kg (65 125 lb)	32% MAC (a)	10 320 kg (22 750 lb) (c)	23 630 kg (52 100 lb) (c)
A318-100 WV005 (CG 32%)	68 400 kg (150 800 lb)	11 490 kg (25 325 lb)	15% MAC (b)	17 760 kg (39 150 lb)	30 430 kg (67 100 lb)	32% MAC (a)	10 630 kg (23 425 lb) (c)	24 340 kg (53 675 lb) (c)
A318-100 WV005 (CG 30%)	68 400 kg (150 800 lb)	11 490 kg (25 325 lb)	15% MAC (b)	17 760 kg (39 175 lb)	30 140 kg (66 450 lb)	30% MAC (a)	10 630 kg (23 425 lb) (c)	24 110 kg (53 150 lb) (c)
A318CJ-100 WV005 (CG 32%)	68 400 kg (150 800 lb)	11 490 kg (25 325 lb)	15% MAC (b)	17 760 kg (39 150 lb)	30 430 kg (67 100 lb)	32% MAC (a)	10 630 kg (23 425 lb) (c)	24 340 kg (53 675 lb) (c)
A318-100 WV006 (CG 35%)	56 400 kg (124 350 lb)	10 550 kg (23 250 lb)	14% MAC (a)	16 230 kg (35 775 lb)	25 430 kg (56 050 lb)	35% MAC (a)	8 760 kg (19 325 lb) (c)	20 340 kg (44 850 lb) (c)
A318-100 WV006 (CG 30.11%)	56 400 kg (124 350 lb)	10 310 kg (22 725 lb)	15% MAC (a)	16 000 kg (35 275 lb)	24 840 kg (54 775 lb)	30.11% MAC (a)	8 760 kg (19 325 lb) (c)	19 880 kg (43 825 lb) (c)
A318-100 WV007 (CG 32.93%)	61 400 kg (135 375 lb)	11 200 kg (24 700 lb)	15% MAC (a)	17 360 kg (38 275 lb)	27 420 kg (60 450 lb)	32.93% MAC (a)	9 540 kg (21 025 lb) (c)	21 940 kg (48 375 lb) (c)

NOTE:
(a) LOADS CALCULATED USING AIRCRAFT AT MRW.
(b) LOADS CALCULATED USING AIRCRAFT AT 63 000 kg (138 900 lb).
(c) BRAKED MAIN GEAR.

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Maximum Pavement Loads for A318-100 and ACJ318-100
(Sheet 2 of 3)
FIGURE-7-3-0-991-020-A01

****ON A/C A318-100**

1	2	3		4	5		6	
		$V_{(NG)}$			$V_{(MG)}$ (PER STRUT)		H (PER STRUT)	
WEIGHT VARIANT	MAXIMUM RAMP WEIGHT	STATIC LOAD AT FWD CG		STATIC BRAKING AT 10 ft/s² DECELERATION	STATIC LOAD AT AFT CG		STEADY BRAKING AT 10 ft/s² DECELERATION	AT INSTANTANEOUS BRAKING COEFFICIENT = 0.8
A318-100 WV007 (CG 30%)	61 400 kg (135 375 lb)	11 200 kg (24 700 lb)	15% MAC (a)	17 360 kg (38 275 lb)	27 040 kg (59 625 lb)	30% MAC (a)	9 540 kg (21 025 lb) (c)	21 630 kg (47 700 lb) (c)
A318-100 WV008 (CG 32%)	64 400 kg (141 975 lb)	11 520 kg (25 400 lb)	15.79% MAC (a)	17 960 kg (39 600 lb)	28 640 kg (63 150 lb)	32% MAC (a)	10 010 kg (22 075 lb) (c)	22 920 kg (50 025 lb) (c)
A318-100 WV008 (CG 30%)	64 400 kg (141 975 lb)	11 520 kg (25 400 lb)	15.79% MAC (a)	17 960 kg (39 600 lb)	28 370 kg (62 550 lb)	30% MAC (a)	10 010 kg (22 075 lb) (c)	22 700 kg (50 025 lb) (c)
A318CJ-100 WV009 (CG 32%)	66 400 kg (146 375 lb)	11 490 kg (25 325 lb)	15% MAC (b)	17 780 kg (39 175 lb)	29 540 kg (65 125 lb)	32% MAC (a)	10 320 kg (22 750 lb) (c)	23 630 kg (52 100 lb) (c)
A318CJ-100 WV010 (CG 32%)	68 400 kg (150 800 lb)	11 490 kg (25 325 lb)	15% MAC (b)	17 760 kg (39 150 lb)	30 430 kg (67 100 lb)	32% MAC (a)	10 630 kg (23 425 lb) (c)	24 340 kg (53 675 lb) (c)

NOTE:
(a) LOADS CALCULATED USING AIRCRAFT AT MRW.
(b) LOADS CALCULATED USING AIRCRAFT AT 63 000 kg (138 900 lb).
(c) BRAKED MAIN GEAR.

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Maximum Pavement Loads for A318-100 and ACJ318-100
3 of 3)
7-3-0-991-020-A01

7-4-0 Landing Gear Loading on Pavement

****ON A/C A318-100**

Landing Gear Loading on Pavement

1. The curves related to the landing gear loading on pavement are not given in section 07-04-00. Because the relationship between the aircraft weight, the center of gravity and the landing gear loading on the pavement is not strictly linear, it cannot be shown in chart format. But you can find in section 07-03-00 the maximum vertical and horizontal pavement loads for some critical conditions at the tire/ground interfaces for all the operational weight variants of the aircraft.

   For questions that are related to landing gear loading on pavement, contact Airbus.

7-5-0 Flexible Pavement Requirements - U.S. Army Corps of Engineers Design Method

****ON A/C A318-100**

Flexible Pavement Requirements - US Army Corps of Engineers Design Method

1. The flexible pavement requirements curves as per as U.S. Army Corps of Engineers Design Method are not given in section 07-05-00 since the related data is available through free software.

   Sections 07-02-00 and 07-03-00 give all the inputs data required for the use of such software.

   NOTE : The U.S. Army Corps of Engineers Design Method for flexible pavements is being gradually superseded by mechanistic-empirical design methods mostly relying on Linear Elastic Analysis (LEA). The number of parameters considered by such methods is not applicable for a chart format and the use of dedicated pavement-design software is necessary.

   For questions that are related to the flexible pavement requirements, contact Airbus.

7-6-0 Flexible Pavement Requirements - LCN Conversion

****ON A/C A318-100**

Flexible Pavement Requirements - LCN Conversion

1. The Load Classification Number (LCN) curves are not given in section 07-06-00 since the LCN system for reporting pavement strength is old and are replaced by the ICAO recommended ACN/PCN system in 1983 and ACR/PCR system in 2020.
   For questions that are related to the LCN system, contact Airbus.

7-7-0 Rigid Pavement Requirements - Portland Cement Association Design Method

****ON A/C A318-100**

Rigid Pavement Requirements - Portland Cement Association Design Method

1. The rigid-pavement requirements curves as per as Portland Cement Association Design Method are not given in section 07-07-00 since the related data is available through free software. Sections 07-02-00 and 07-03-00 give all the inputs data required for the use of such software.

   NOTE : The Portland Cement Association Design Method for rigid pavements is being gradually superseded by mechanistic-empirical design methods mostly relying on Finite Element Analysis (FEM). The number of parameters considered by such methods is not applicable for a chart format and the use of dedicated pavement-design software is necessary.

   For questions that are related to the rigid pavement requirements, contact Airbus.

7-8-0 Rigid Pavement Requirements - LCN Conversion

****ON A/C A318-100**

Rigid Pavement Requirements - LCN Conversion

1. The Load Classification Number (LCN) curves are not given in section 07-08-00 since the LCN system for reporting pavement strength is old and are replaced by the ICAO recommended ACN/PCN system in 1983 and ACR/PCR system in 2020.
   For questions that are related to the LCN system, contact Airbus.

7-9-0 ACN/PCN Reporting System - Flexible and Rigid Pavements

****ON A/C A318-100**

Aircraft Classification Number - Flexible and Rigid Pavements

1. This section gives data about the Aircraft Classification Number (ACN) for an aircraft gross weight in relation with standard subgrade strength values for flexible and rigid pavement.

   To find the ACN of an aircraft on flexible and rigid pavement, you must know the aircraft gross weight and the subgrade strength.

   NOTE : An aircraft with an ACN equal to or less than the reported PCN can operate on that pavement, subject to any limitation on the tire pressure.
   (Ref: ICAO Aerodrome Design Manual, Part 3, Chapter 1, Second Edition 1983).

2. Aircraft Classification Number - ACN table

   The table in FIGURE 7-9-0-991-001-A gives ACN data in tabular format for all the operational weight variants of the aircraft.
   As an approximation, use a linear interpolation in order to get the ACN at the required operating weight using the following equation:
   - ACN = ACN min + (ACN max - ACN min) x (Operating weight - 39 000 kg)/(MRW - 39 000 kg)
     Please note that the interpolation error may reach 5% to 10%.

   As an approximation, use a linear interpolation in order to get the aircraft weight at the pavement PCN using the following equation:
   - Operating weight = 39 000 kg + (MRW - 39 000 kg) x (PCN - ACN min)/(ACN max - ACN min)
     Please note that the interpolation error may reach up to 5%.

   With ACN max = ACN calculated at the MRW in the table and with ACN min = ACN calculated at 39 000 kg.

   For questions or specific calculation regarding ACN/PCN Reporting System, contact Airbus.

****ON A/C A318-100**

WEIGHT VARIANT	ALL UP MASS (kg)	LOAD ON ONE MAIN GEAR LEG (%)	TIRE PRESSURE (MPa)	ACN FOR RIGID PAVEMENT SUBGRADES - MN/m³				ACN FOR FLEXIBLE PAVEMENT SUBGRADES - CBR			
				HIGH 150	MEDIUM 80	LOW 40	ULTRA -LOW 20	HIGH 15	MEDIUM 10	LOW 6	ULTRA -LOW 3
A318-100 WV000 (CG 33.93%)	59 400	44.9	1.14	30	32	34	36	28	29	32	37
	39 000	44.8		18	20	21	22	17	17	19	22
A318-100 WV000 (CG 30%)	59 400	44.0	1.14	29	31	33	35	28	28	31	36
	39 000	44.0		18	19	20	22	17	17	19	21
A318-100 WV001 (CG 32.7%)	61 900	44.6	1.14	31	33	36	37	29	30	33	38
	39 000	44.6		18	19	21	22	17	17	19	22
A318-100 WV001 (CG 30%)	61 900	44.0	1.14	31	33	35	37	29	29	32	38
	39 000	44.0		18	19	20	22	17	17	19	21
A318-100 WV002 (CG 32%)	63 400	44.5	1.14	32	34	36	38	30	30	34	39
	39 000	44.4		18	19	21	22	17	17	19	22
A318-100 WV002 (CG 30%)	63 400	44.1	1.14	32	34	36	38	30	30	33	39
	39 000	44.0		18	19	20	22	17	17	19	21
A318-100 WV003 (CG 32%)	64 900	44.5	1.24	34	36	38	40	31	32	35	41
	39 000	44.4		19	20	21	22	17	18	19	22
A318-100 WV003 (CG 30%)	64 900	44.1	1.24	33	36	38	40	31	31	35	40
	39 000	44.0		18	20	21	22	17	17	19	21
A318-100 WV004 (CG 32%)	66 400	44.5	1.24	35	37	39	41	32	33	36	42
	39 000	44.4		19	20	21	22	17	18	19	22
A318-100 WV004 (CG 30%)	66 400	44.1	1.24	34	37	39	41	31	32	36	41
	39 000	44.0		18	20	21	22	17	17	19	21
A318CJ WV004 (CG 32%)	66 400	44.5	1.24	35	37	39	41	32	33	36	42
	39 000	44.4		19	20	21	22	17	18	19	22
A318-100 WV005 (CG 32%)	68 400	44.5	1.24	36	38	41	42	33	34	37	43
	39 000	44.4		19	20	21	22	17	18	19	22
A318-100 WV005 (CG 30%)	68 400	44.1	1.24	36	38	40	42	32	33	37	43
	39 000	44.0		18	20	21	22	17	17	19	21
A318CJ WV005 (CG 32%)	68 400	44.5	1.24	36	38	41	42	33	34	37	43
	39 000	44.4		19	20	21	22	17	18	19	22
A318-100 WV006 (CG 35%)	56 400	45.1	1.02	27	29	31	33	26	27	30	35
	39 000	45.1		18	19	20	22	17	17	19	22
A318-100 WV006 (CG 30.11%)	56 400	44.0	1.02	26	29	31	32	25	26	29	34
	39 000	44.0		17	19	20	21	16	17	18	21

N_AC_070900_1_0010101_01_03

ACN Table for A318-100 and A318CJ
(Sheet 1 of 2)
FIGURE-7-9-0-991-001-A01

****ON A/C A318-100**

WEIGHT VARIANT	ALL UP MASS (kg)	LOAD ON ONE MAIN GEAR LEG (%)	TIRE PRESSURE (MPa)	ACN FOR RIGID PAVEMENT SUBGRADES - MN/m³				ACN FOR FLEXIBLE PAVEMENT SUBGRADES - CBR			
				HIGH 150	MEDIUM 80	LOW 40	ULTRA -LOW 20	HIGH 15	MEDIUM 10	LOW 6	ULTRA -LOW 3
A318-100 WV007 (CG 32.93%)	61 400	44.7	1.14	31	33	35	37	29	30	33	38
	39 000	44.6		18	19	21	22	17	17	19	22
A318-100 WV007 (CG 30%)	61 400	44.0	1.14	30	33	35	36	29	29	32	37
	39 000	44.0		18	19	20	22	17	17	19	21
A318-100 WV008 (CG 32%)	64 400	44.5	1.24	33	36	38	40	31	31	35	40
	39 000	44.4		19	20	21	22	17	18	19	22
A318-100 WV008 (CG 30%)	64 400	44.1	1.24	33	35	37	39	30	31	34	40
	39 000	44.0		18	20	21	22	17	17	19	21
A318CJ WV009 (CG 32%)	66 400	44.5	1.24	35	37	39	41	32	33	36	42
	39 000	44.4		19	20	21	22	17	18	19	22
A318CJ WV010 (CG 32%)	68 400	44.5	1.24	36	38	41	42	33	34	37	43
	39 000	44.4		19	20	21	22	17	18	19	22

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ACN Table for A318-100 and A318CJ
2 of 2)
7-9-0-991-001-A01

7-10-0 ACR/PCR Reporting System - Flexible And Rigid Pavements

****ON A/C A318-100**

ACR/PCR Reporting System - Flexible and Rigid Pavements

1. The ACR/PCR system has been developed by the ICAO to overcome the deficiencies of the ACN/PCN system. Significant advances in pavement design methods had occurred since its development in the late 1970s early 1980s, leading to inconsistencies with the pavement-strength-rating system.

   The ACR/PCR system entails new procedures for the determination of both the ACR and the PCR that are consistent with the current pavement design procedures. This allows to capture the effects of the improved characteristics of new pavement materials as well as modern landing gear configurations, thus leading to an improved accuracy.

   This section gives data about the Aircraft Classification Rating (ACR) for the maximum ramp weight in relation with standard subgrade strength values for flexible and rigid pavement.
   To determine the ACR at other aircraft gross weight, use the official ICAO-ACR software.

   NOTE : An aircraft with an ACR equal to or less than the reported PCR can operate on that pavement, subject to any limitation on the tire pressure. (Ref: ICAO Aerodrome Design Manual, Part 3, Third Edition 2020).

2. Aircraft Classification Rating - ACR Table

   The table in FIGURE 7-10-0-991-003-A gives ACR data in tabular format for all the operational weight variants of the aircraft.
   For questions or specific calculation related to ACR/PCR Reporting System, contact Airbus.

****ON A/C A318-100**

WEIGHT VARIANT	ALL UP MASS (kg)	LOAD ON ONE MAIN GEAR LEG (%)	TIRE PRESSURE (MPa)	ACR FOR RIGID PAVEMENT SUBGRADES - MPa				ACR FOR FLEXIBLE PAVEMENT SUBGRADES - MPa			
				HIGH 200	MEDIUM 120	LOW 80	ULTRA -LOW 50	HIGH 200	MEDIUM 120	LOW 80	ULTRA -LOW 50
A318-100 WV000 (CG 33.93%)	59 400	44.9	1.14	310	330	340	360	250	260	280	320
A318-100 WV000 (CG 30%)	59 400	44.0	1.14	300	320	340	350	240	260	280	310
A318-100 WV001 (CG 32.7%)	61 900	44.6	1.14	320	340	360	370	260	280	300	330
A318-100 WV001 (CG 30%)	61 900	44.0	1.14	320	340	350	370	250	270	290	330
A318-100 WV002 (CG 32%)	63 400	44.5	1.14	330	350	370	380	260	280	300	340
A318-100 WV002 (CG 30%)	63 400	44.1	1.14	330	350	360	380	260	280	300	340
A318-100 WV003 (CG 32%)	64 900	44.5	1.24	350	370	380	400	280	290	310	350
A318-100 WV003 (CG 30%)	64 900	44.1	1.24	340	360	380	390	270	290	310	350
A318-100 WV004 (CG 32%)	66 400	44.5	1.24	360	380	390	410	280	300	320	360
A318-100 WV004 (CG 30%)	66 400	44.1	1.24	350	380	390	410	280	300	320	360
A318CJ WV004 (CG 32%)	66 400	44.5	1.24	360	380	390	410	280	300	320	360
A318-100 WV005 (CG 32%)	68 400	44.5	1.24	370	390	410	420	290	310	340	380
A318-100 WV005 (CG 30%)	68 400	44.1	1.24	370	390	400	420	290	310	330	370
A318CJ WV005 (CG 32%)	68 400	44.5	1.24	370	390	410	420	290	310	340	380
A318-100 WV006 (CG 35%)	56 400	45.1	1.02	280	300	320	330	220	250	260	300
A318-100 WV006 (CG 30.11%)	56 400	44.0	1.02	270	290	310	320	220	240	260	290

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ACR Table for A318-100 and A318CJ
(Sheet 1 of 2)
FIGURE-7-10-0-991-003-A01

****ON A/C A318-100**

WEIGHT VARIANT	ALL UP MASS (kg)	LOAD ON ONE MAIN GEAR LEG (%)	TIRE PRESSURE (MPa)	ACR FOR RIGID PAVEMENT SUBGRADES - MPa				ACR FOR FLEXIBLE PAVEMENT SUBGRADES - MPa			
				HIGH 200	MEDIUM 120	LOW 80	ULTRA -LOW 50	HIGH 200	MEDIUM 120	LOW 80	ULTRA -LOW 50
A318-100 WV007 (CG 32.93%)	61 400	44.7	1.14	320	340	360	370	250	270	290	330
A318-100 WV007 (CG 30%)	61 400	44.0	1.14	310	330	350	360	250	270	290	320
A318-100 WV008 (CG 32%)	64 400	44.5	1.24	350	370	380	400	270	290	310	350
A318-100 WV008 (CG 30%)	64 400	44.1	1.24	340	360	380	390	270	290	310	340
A318CJ WV009 (CG 32%)	66 400	44.5	1.24	360	380	390	410	280	300	320	360
A318CJ WV010 (CG 32%)	68 400	44.5	1.24	370	390	410	420	290	310	340	380

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ACR Table for A318-100 and A318CJ
2 of 2)
7-10-0-991-003-A01

SCALED DRAWINGS

8-0-0 SCALED DRAWINGS

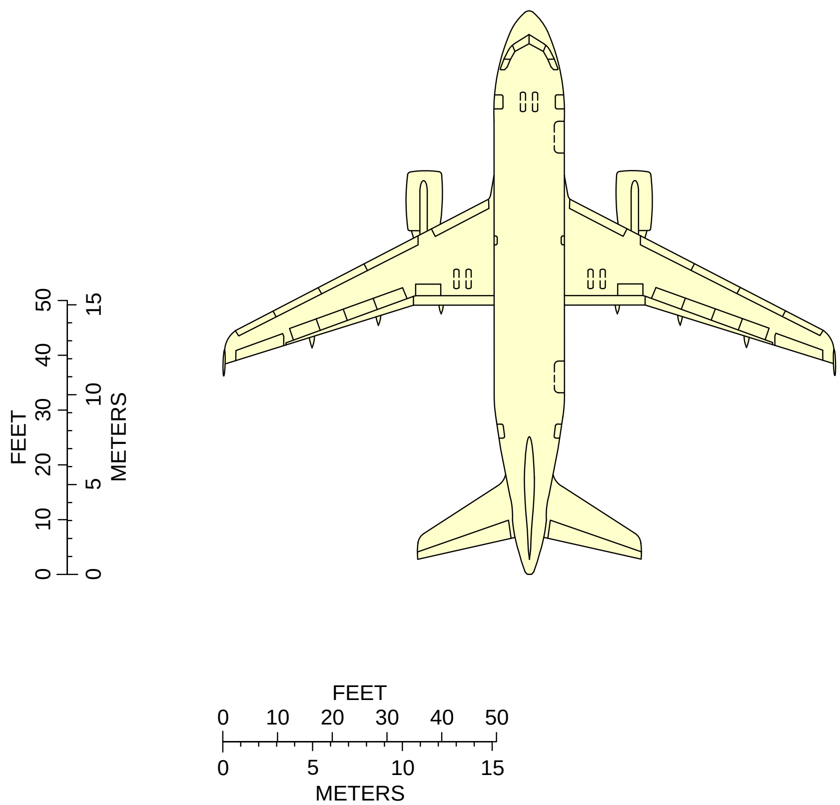
****ON A/C A318-100**

Scaled Drawings

1. This section provides the scaled drawings.

NOTE : When printing this drawing, make sure to adjust for proper scaling.

****ON A/C A318-100**



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING.

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Scaled Drawing
FIGURE-8-0-0-991-001-A01

AIRCRAFT RESCUE AND FIRE FIGHTING

10-0-0 AIRCRAFT RESCUE AND FIRE FIGHTING

****ON A/C A318-100**

Aircraft Rescue and Fire Fighting

1. Aircraft Rescue and Fire Fighting Charts

   This sections provides data related to aircraft rescue and fire fighting.
   The figures contained in this section are the figures that are in the Aircraft Rescue and Fire Fighting Charts poster available for download on AIRBUSWorld and the Airbus website.

****ON A/C A318-100**

AIRBUS
A318
Aircraft Rescue and Fire Fighting Chart
ARFC

NOTE:
THIS CHART GIVES THE GENERAL LAYOUT OF THE A318 STANDARD VERSION.
THE NUMBER AND ARRANGEMENT OF THE INDIVIDUAL ITEMS VARY WITH THE CUSTOMERS.
FIGURES CONTAINED IN THIS POSTER ARE AVAILABLE SEPARATELY IN THE CHAPTER 10 OF THE "AIRCRAFT CHARACTERISTICS – AIRPORT AND MAINTENANCE PLANNING" DOCUMENT.

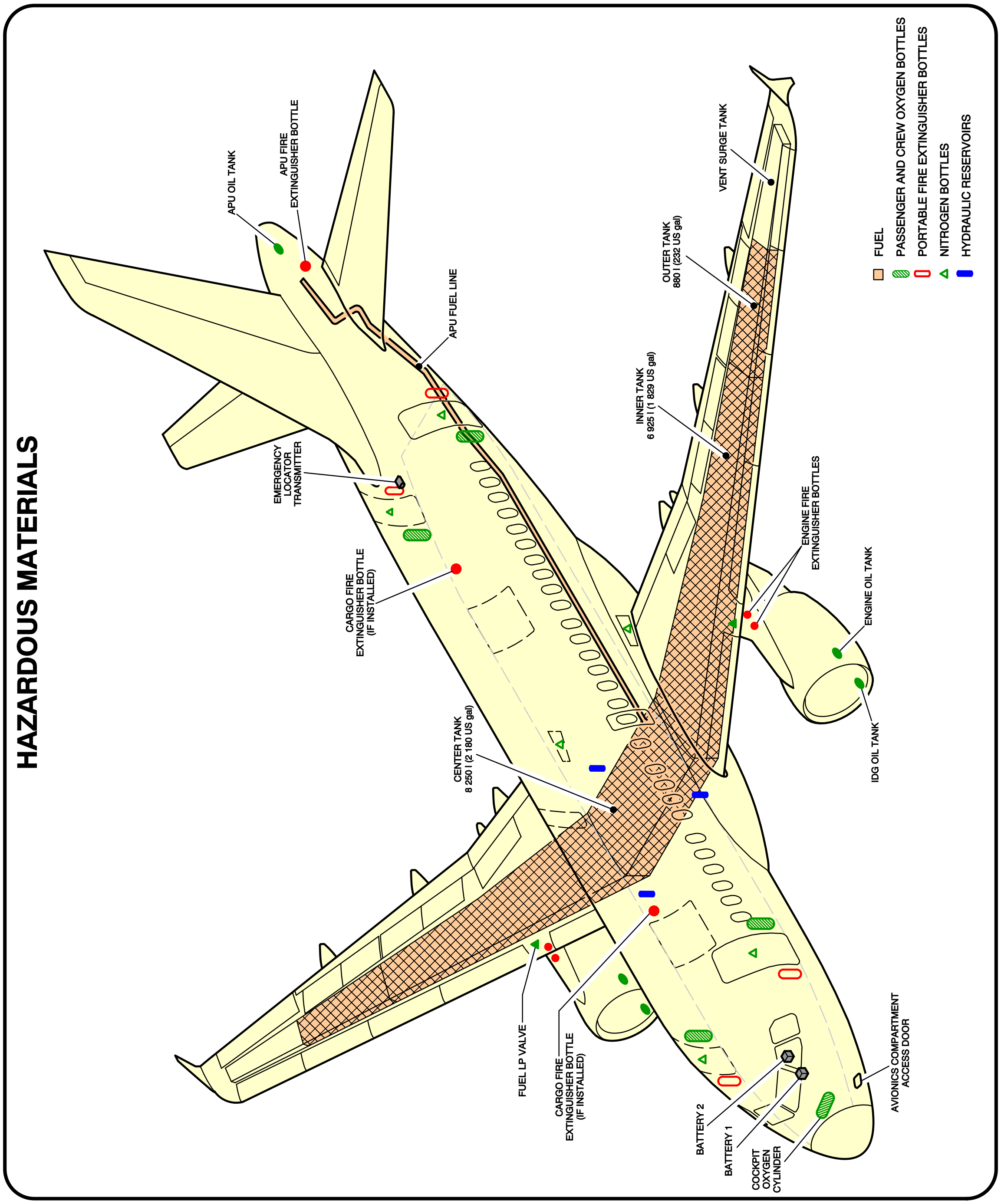
ISSUED BY:
AIRBUS S.A.S
CUSTOMER SERVICES
TECHNICAL DATA SUPPORT AND SERVICES
31707 BLAGNAC CEDEX
FRANCE

REVISION DATE: NOV 2019
REFERENCE : N_RF_000000_1_A318000
SHEET 1/2

N_AC_100000_1_0010101_01_05

Front Page
FIGURE-10-0-0-991-001-A01

****ON A/C A318-100**



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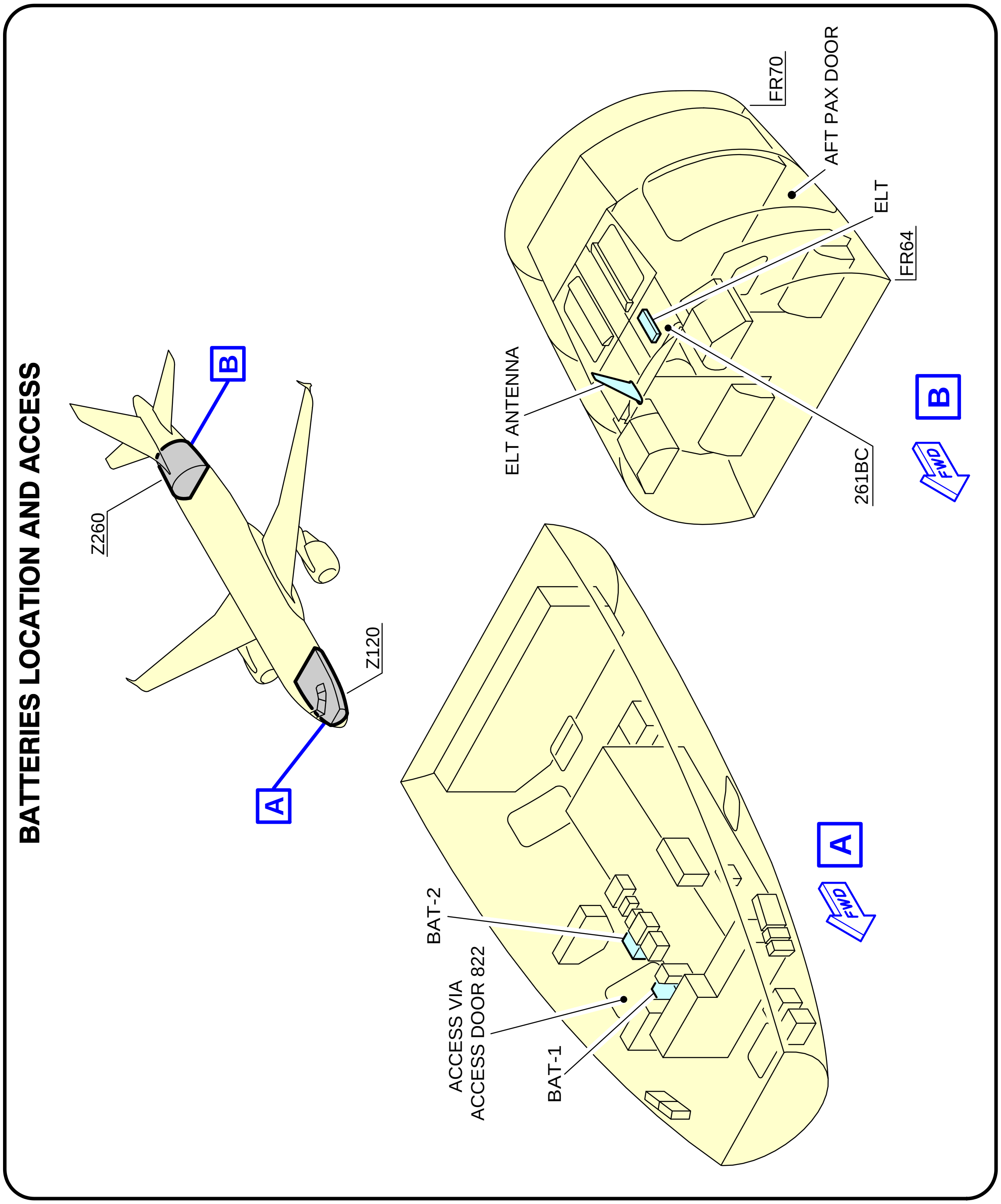
Highly Flammable and Hazardous Materials and Components
FIGURE-10-0-0-991-002-A01

****ON A/C A318-100**



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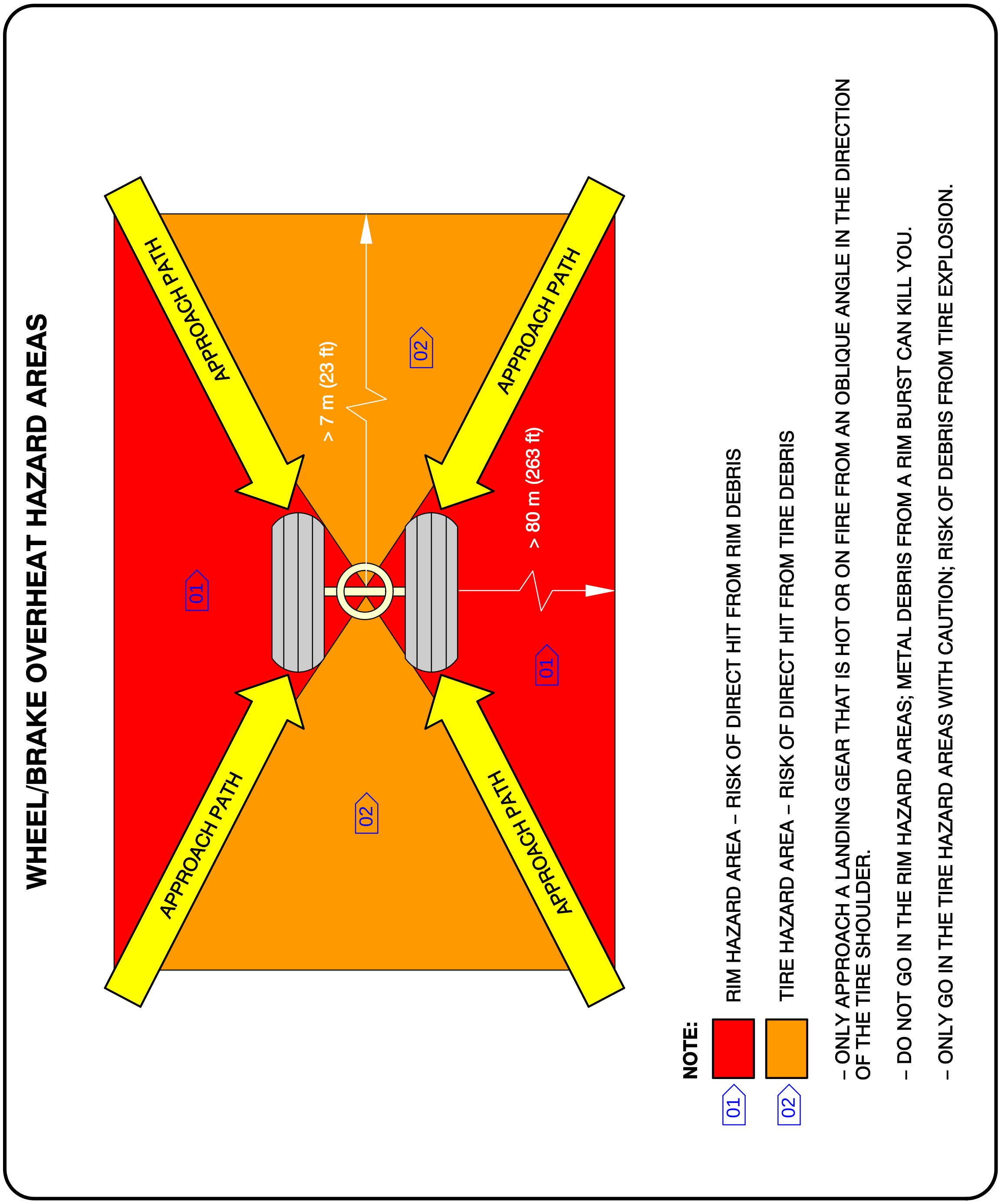
Batteries Location and Access
FIGURE-10-0-0-991-055-A01

****ON A/C A318-100**



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Wheel/Brake Overheat
Wheel Safety Area (Sheet 1 of 2)
FIGURE-10-0-0-991-003-A01

**ON A/C A318-100

BRAKE OVERHEAT AND LANDING GEAR FIRE

WARNING: BE VERY CAREFUL WHEN THERE IS A BRAKE OVERHEAT AND/OR LANDING GEAR FIRE.
THERE IS A RISK OF TIRE EXPLOSION AND/OR WHEEL RIM BURST THAT CAN CAUSE DEATH OR INJURY.
MAKE SURE THAT YOU OBEY THE SAFETY PRECAUTIONS THAT FOLLOW.

THE PROCEDURES THAT FOLLOW GIVE RECOMMENDATIONS AND SAFETY PRECAUTIONS FOR THE COOLING OF VERY HOT BRAKES AFTER ABNORMAL OPERATIONS SUCH AS A REJECTED TAKE–OFF OR OVERWEIGHT LANDING. FOR THE COOLING OF BRAKES AFTER NORMAL TAXI–IN, REFER TO YOUR COMPANY PROCEDURES.

BRAKE OVERHEAT:

1 – GET THE BRAKE TEMPERATURE FROM THE COCKPIT OR USE A REMOTE MEASUREMENT TECHNIQUE.
THE REAL TEMPERATURE OF THE BRAKES CAN BE MUCH HIGHER THAN THE TEMPERATURE SHOWN ON THE ECAM.
NOTE: AT HIGH TEMPERATURES (>800°C), THERE IS A RISK OF WARPING OF THE LANDING GEAR STRUTS AND AXLES.

2 – APPROACH THE LANDING GEAR WITH EXTREME CAUTION AND FROM AN OBLIQUE ANGLE IN THE DIRECTION OF THE TIRE SHOULDER. DO NOT GO INTO THE RIM HAZARD AREA AND ONLY GO IN THE TIRE HAZARD AREA WITH CAUTION. (REF FIG. WHEEL/BRAKE OVERHEAT HAZARD AREAS). IF POSSIBLE, STAY IN A VEHICLE.

3 – LOOK AT THE CONDITION OF THE TIRES:
IF THE TIRES ARE STILL INFLATED (FUSE PLUGS NOT MELTED), THERE IS A RISK OF TIRE EXPLOSION AND RIM BURST.
DO NOT USE COOLING FANS BECAUSE THEY CAN PREVENT OPERATION OF THE FUSE PLUGS.

4 – USE WATER MIST TO DECREASE THE TEMPERATURE OF THE COMPLETE WHEEL AND BRAKE ASSEMBLY.
USE A TECHNIQUE THAT PREVENTS SUDDEN COOLING. SUDDEN COOLING CAN CAUSE WHEEL CRACKS OR RIM BURST.
DO NOT APPLY WATER, FOAM OR CO2. THESE COOLING AGENTS (AND ESPECIALLY CO2, WHICH HAS A VERY STRONG COOLING EFFECT) CAN CAUSE THERMAL SHOCKS AND BURST OF HOT PARTS.

LANDING GEAR FIRE:

CAUTION: AIRBUS RECOMMENDS THAT YOU DO NOT USE DRY POWDERS OR DRY CHEMICALS ON HOT BRAKES OR LANDING GEAR FIRES. THESE AGENTS CAN CHANGE INTO SOLID OR ENAMELED DEPOSITS. THEY CAN DECREASE THE SPEED OF HEAT DISSIPATION WITH A POSSIBLE RISK OF PERMANENT STRUCTURAL DAMAGE TO THE BRAKES, WHEELS OR WHEEL AXLES.

1 – IMMEDIATELY STOP THE FIRE:

A) APPROACH THE LANDING GEAR WITH EXTREME CAUTION AND FROM AN OBLIQUE ANGLE IN THE DIRECTION OF THE TIRE SHOULDER. DO NOT GO INTO THE RIM HAZARD AREA AND ONLY GO IN THE TIRE HAZARD AREA WITH CAUTION. IF POSSIBLE, STAY IN A VEHICLE.

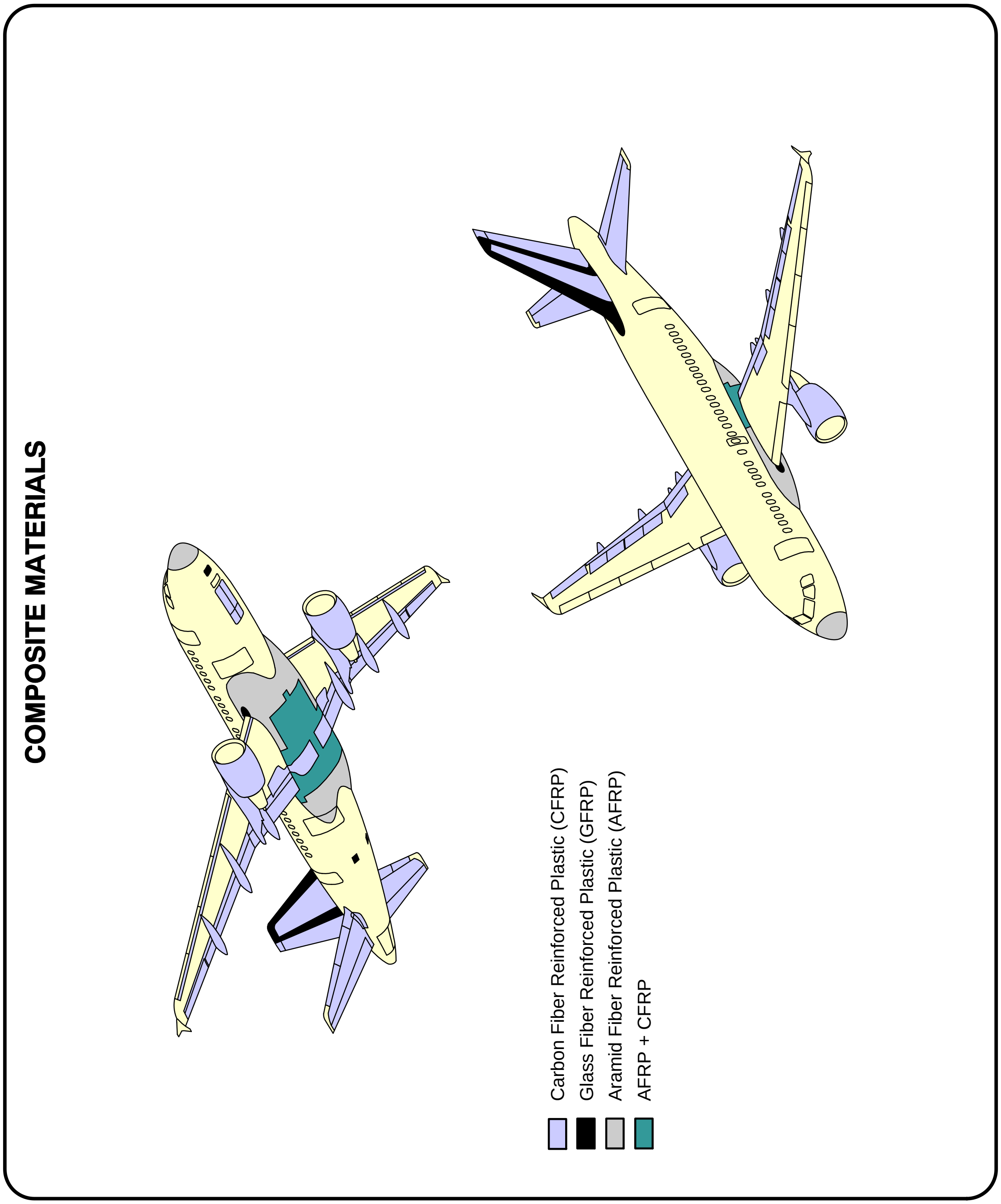
B) USE LARGE AMOUNTS OF WATER, WATER MIST; IF THE FUEL TANKS ARE AT RISK, USE FOAM.
USE A TECHNIQUE THAT PREVENTS SUDDEN COOLING. SUDDEN COOLING CAN CAUSE WHEEL CRACKS OR RIM BURST.

C) DO NOT USE FANS OR BLOWERS.

N_AC_100000_1_0030102_01_00

Wheel/Brake Overheat
Recommendations (Sheet 2 of 2)
FIGURE-10-0-0-991-003-A01

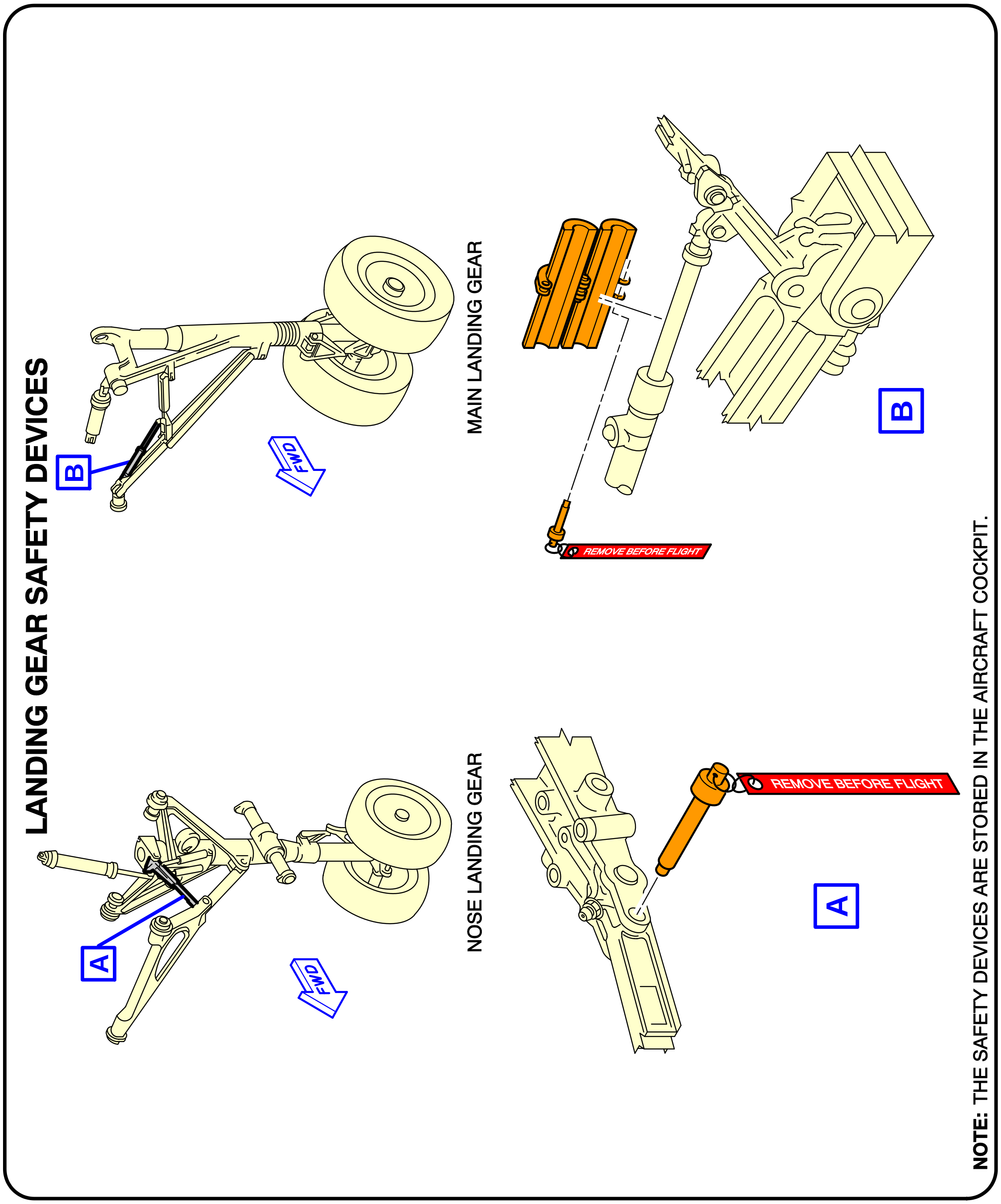
****ON A/C A318-100**



N_AC_100000_1_0040101_01_02

Composite Materials
FIGURE-10-0-0-991-004-A01

****ON A/C A318-100**



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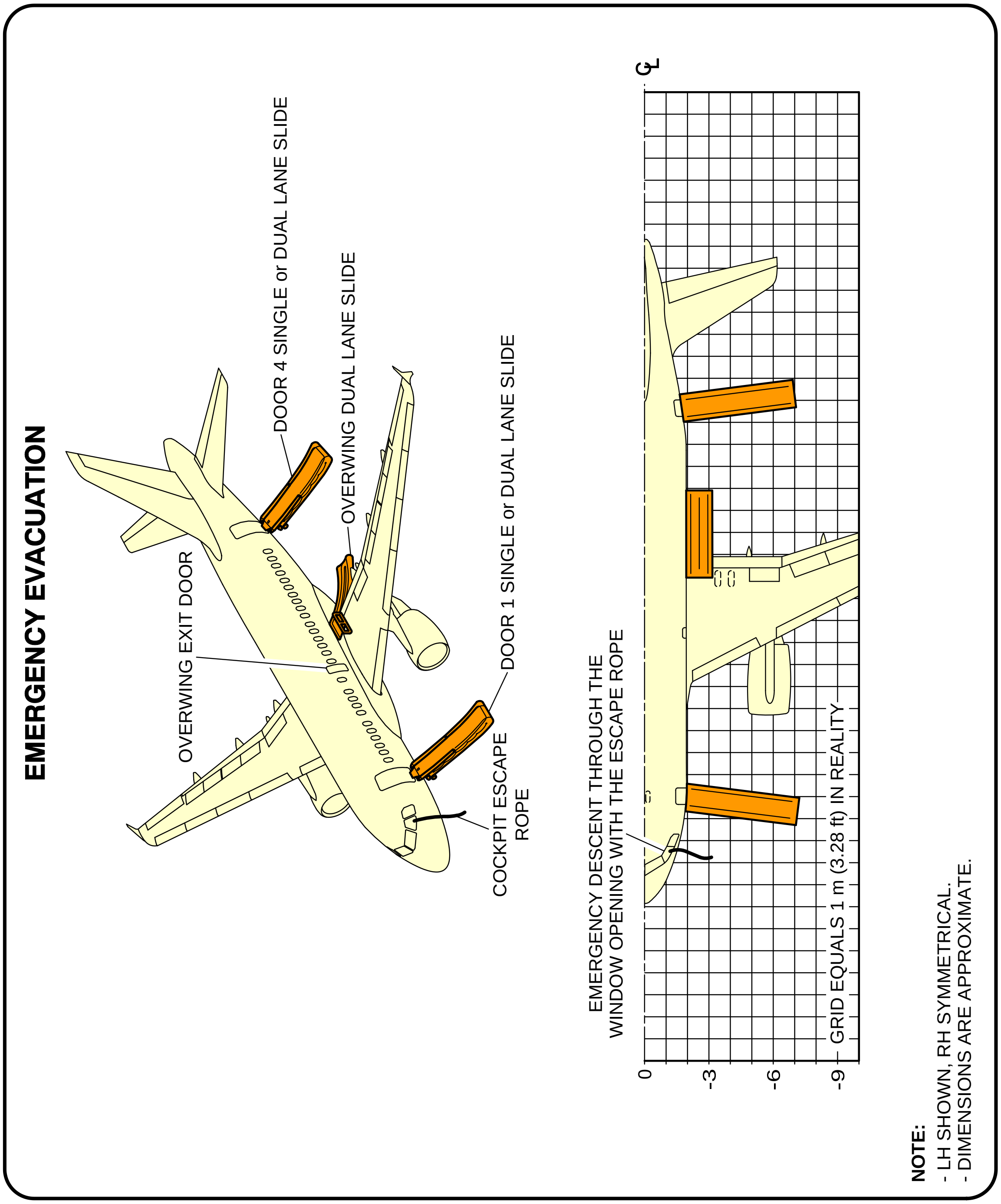
L/G Ground Lock Safety Devices
FIGURE-10-0-0-991-005-A01

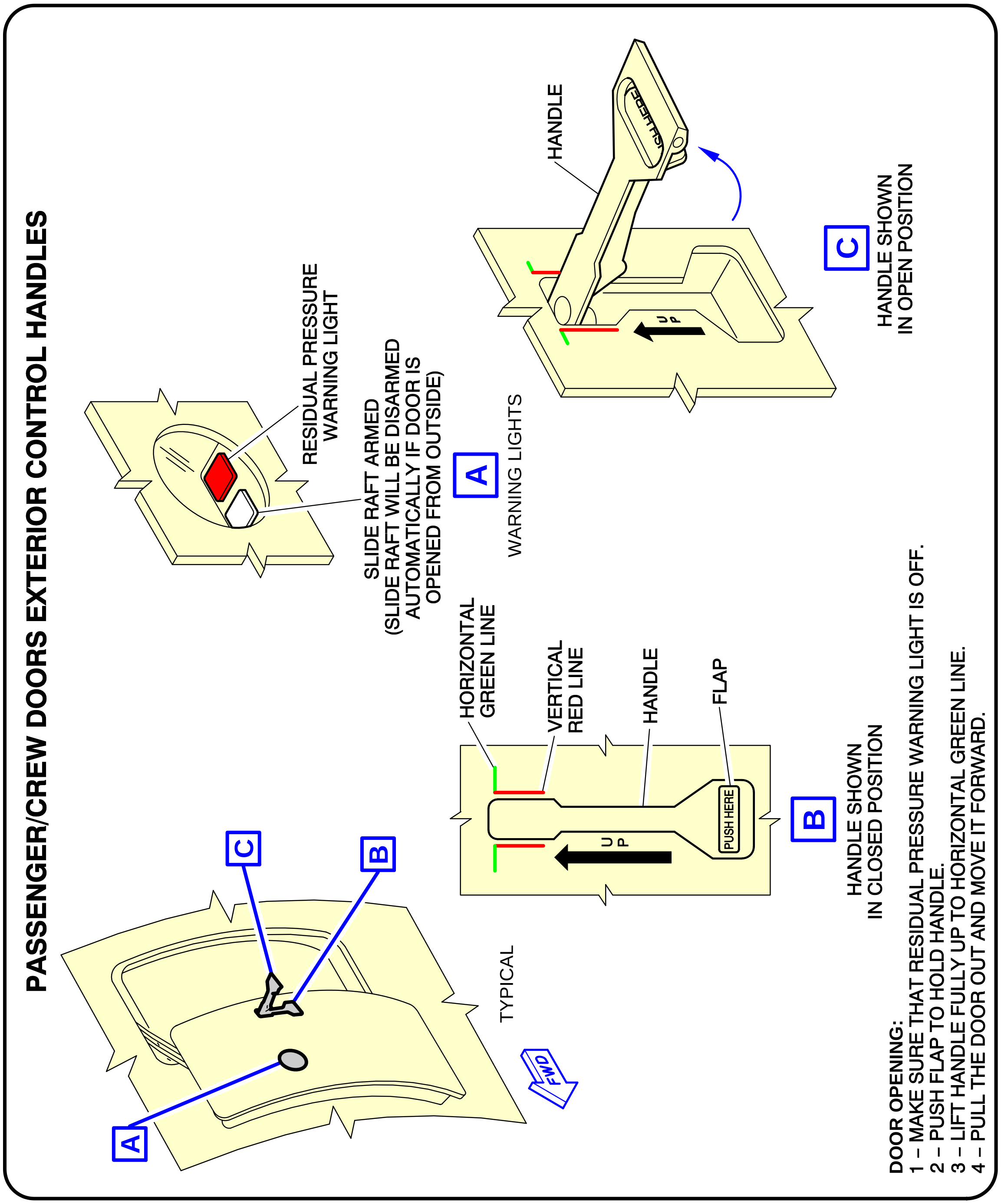
****ON A/C A318-100**



N_AC_100000_1_0060101_01_04

Emergency Evacuation Devices
FIGURE-10-0-0-991-006-A01

****ON A/C A318-100**



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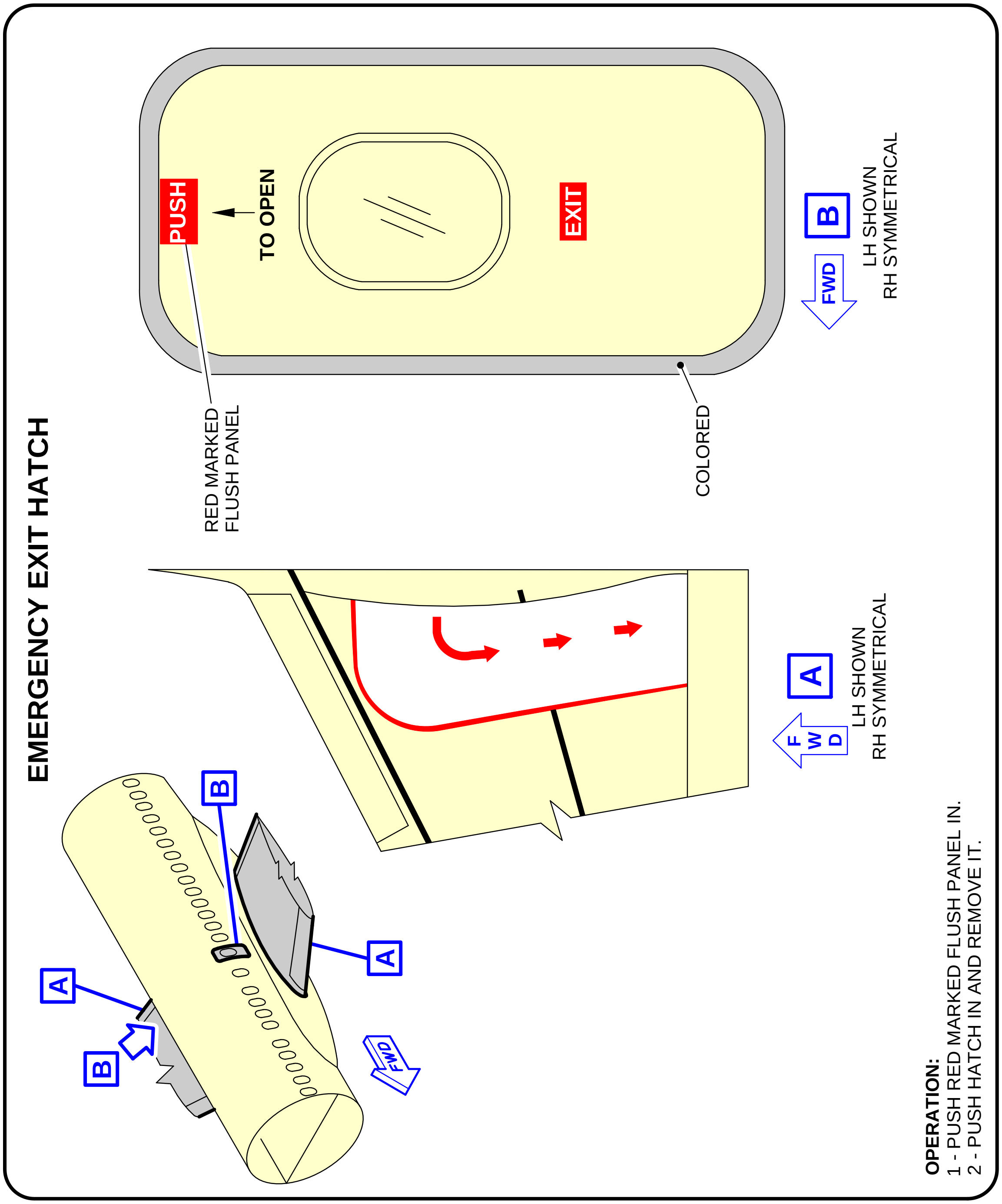
Pax/Crew Doors
FIGURE-10-0-0-991-007-A01

****ON A/C A318-100**



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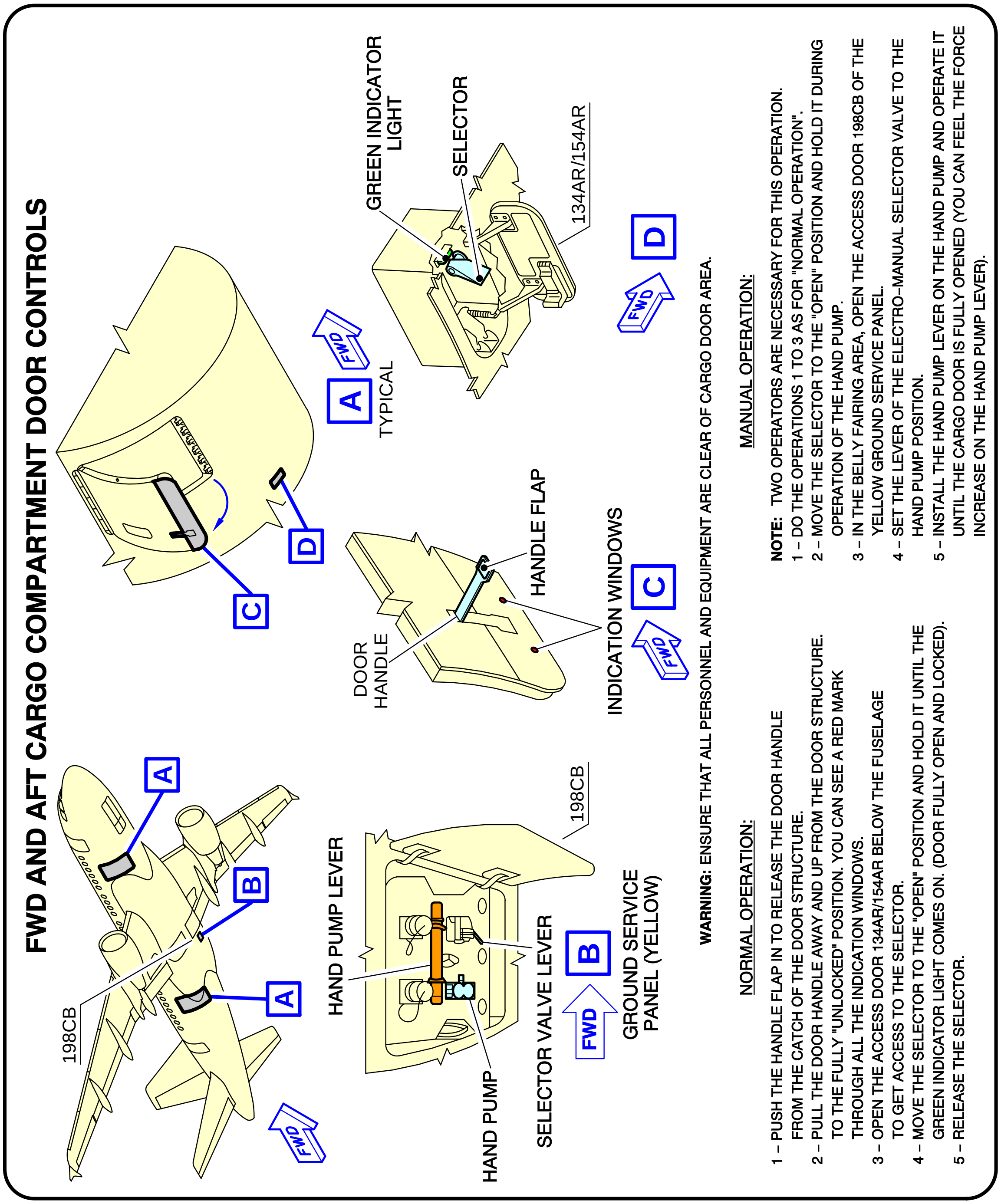
Emergency Exit Hatch
FIGURE-10-0-0-991-008-A01

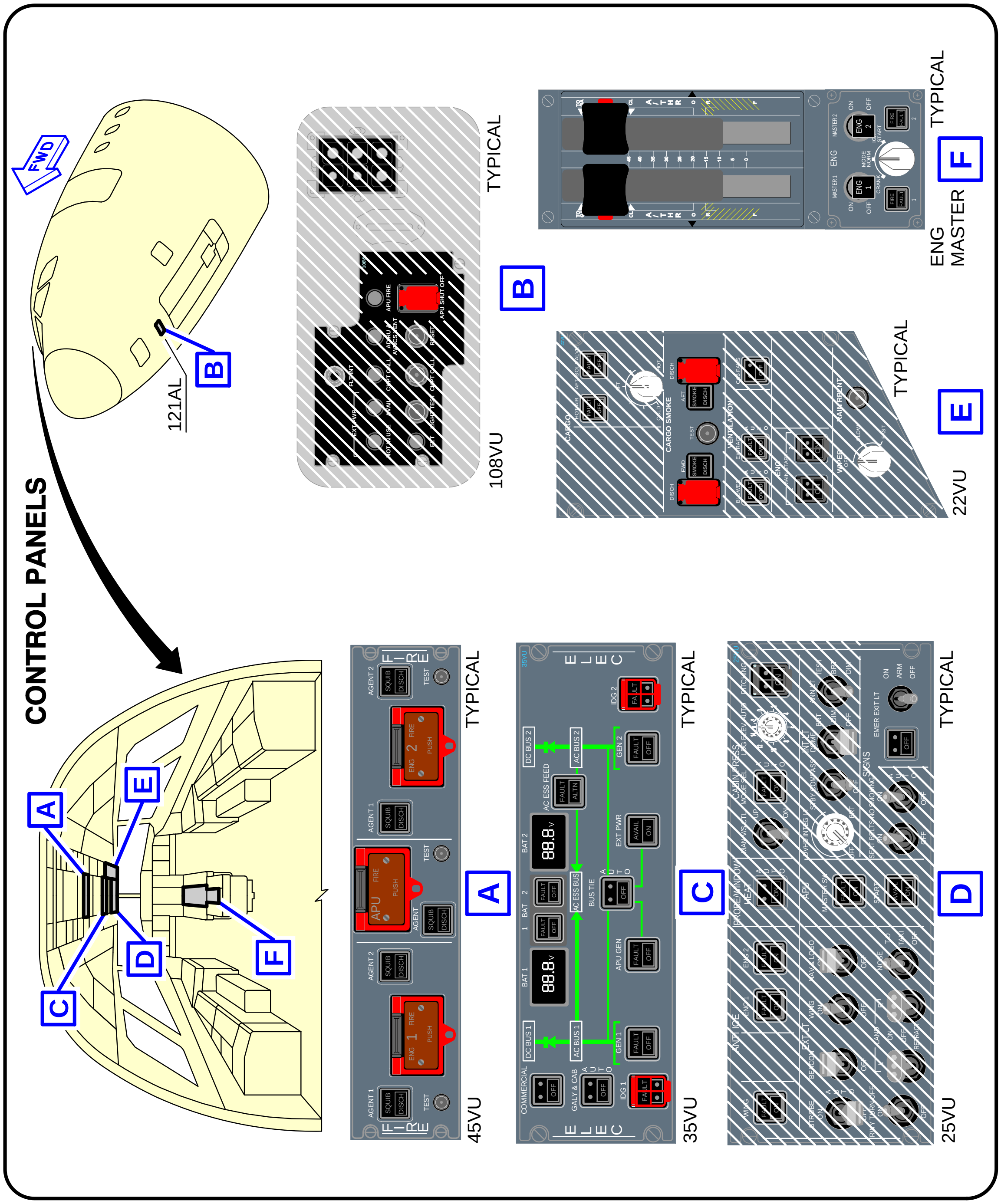
****ON A/C A318-100**



N_AC_100000_1_0090101_01_01

FWD and AFT Lower Deck Cargo Doors
FIGURE-10-0-0-991-009-A01

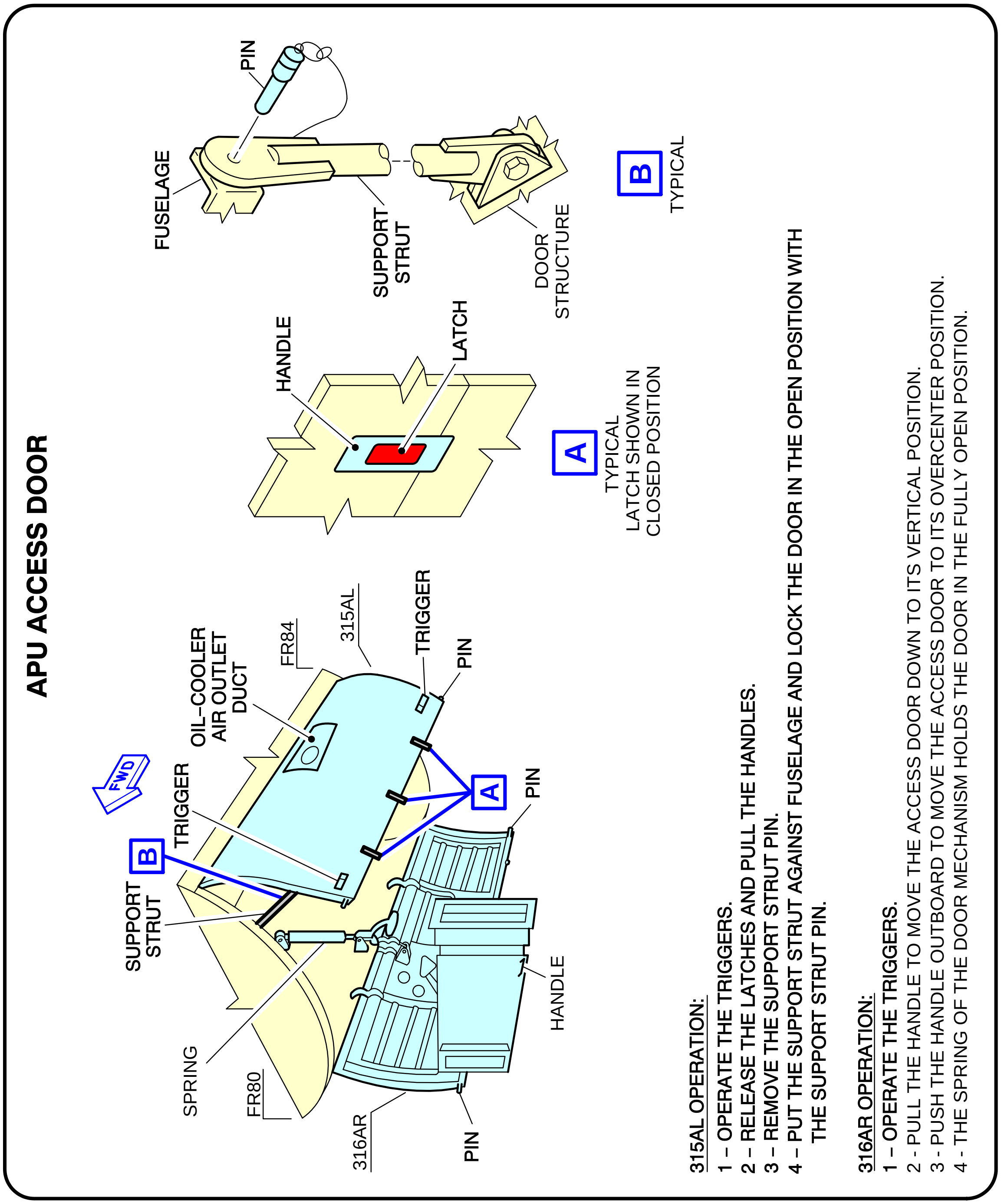
****ON A/C A318-100**



N_AC_100000_1_0120101_01_01

Control Panels
FIGURE-10-0-0-991-012-A01

****ON A/C A318-100**



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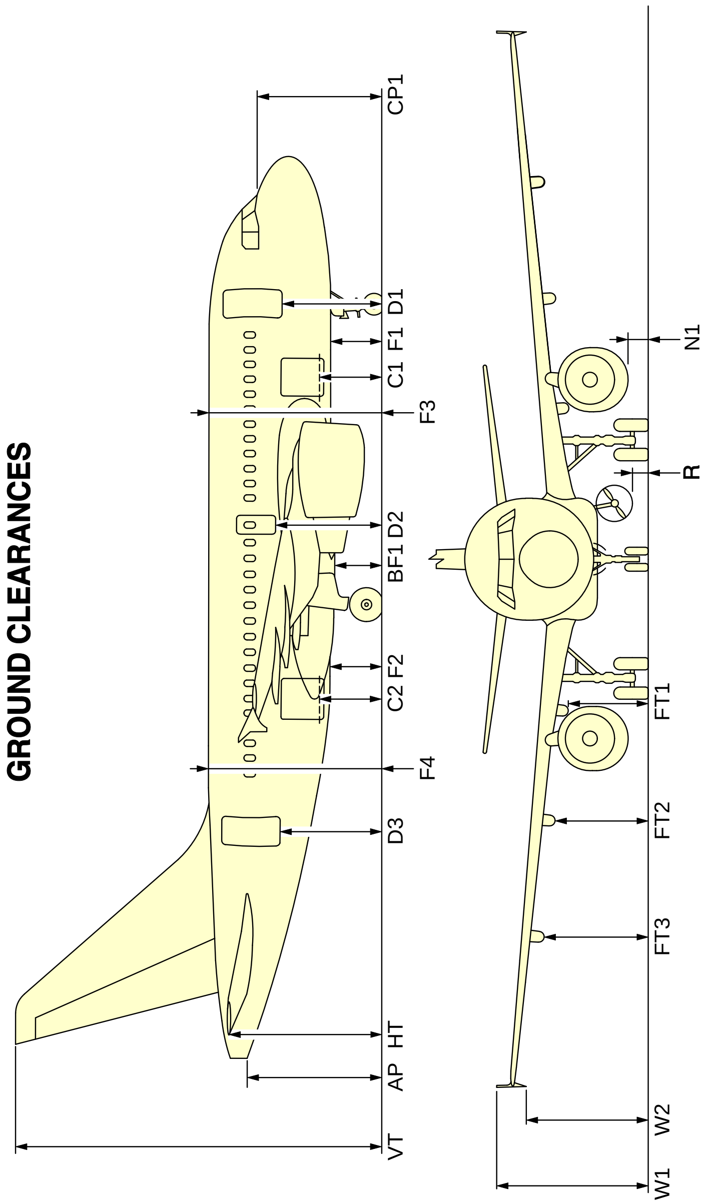
APU Access Door
FIGURE-10-0-0-991-013-A01

****ON A/C A318-100**

GROUND CLEARANCES



DIMENSIONS ARE RELATED TO AIRCRAFT WEIGHT AND CG CONFIGURATION

A/C CONFIGURATION		39 000 kg (85 980 lb) AFT CG (25%)	
		m	ft
DOORS	D1	3.45	11.32
	D2	3.97	13.02
	D3	3.72	12.20
	C1	2.08	6.82
	C2	2.20	7.22

A/C CONFIGURATION		39 000 kg (85 980 lb) AFT CG (25%)	
		m	ft
FUSELAGE	F1	1.79	5.87
	F2	1.93	6.33
	F3	5.93	19.46
	F4	6.08	19.95
	BF1	1.74	5.71
	CP1	4.22	13.85
ENGINE/ NACELLE	N1 (CFM)	0.66	2.17
	N2 (PW)	0.78	2.56

A/C CONFIGURATION		39 000 kg (85 980 lb) AFT CG (25%)	
		m	ft
WINGS	FT1	2.73	8.96
	FT2	3.17	10.40
	FT3	3.51	11.52
	W1	4.89	16.04
	W2	3.92	12.86
	R	0.64	2.10
TAILPLANE	HT	5.62	18.44
	AP	4.91	16.11
	VT	12.89	42.29

NOTE:
PASSENGER AND CARGO DOOR GROUND CLEARANCES ARE MEASURED FROM THE CENTER OF THE DOOR SILL AND FROM FLOOR LEVEL.

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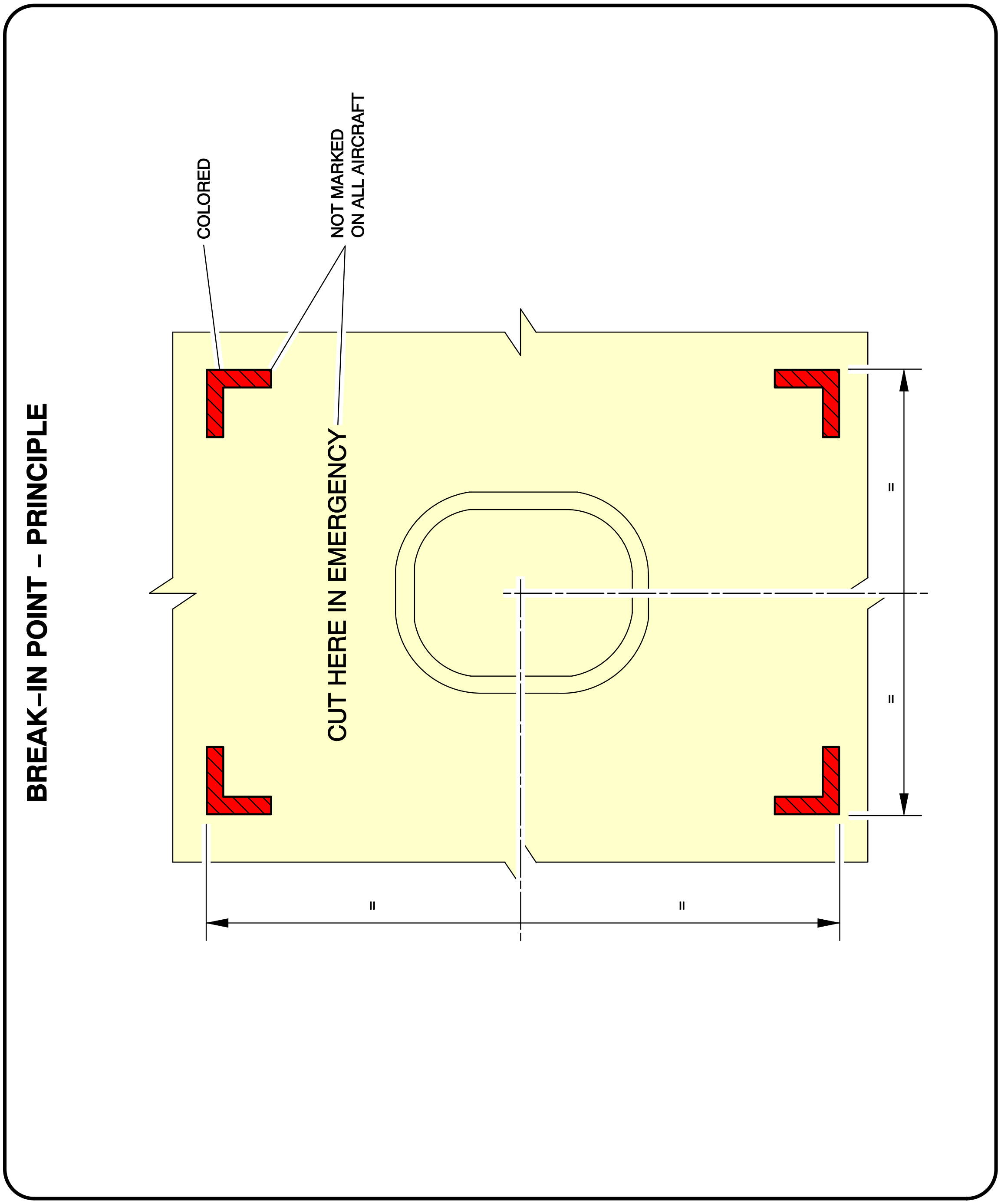
Aircraft Ground Clearances
FIGURE-10-0-0-991-014-A01

****ON A/C A318-100**



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Structural Break-in Points
FIGURE-10-0-0-991-015-A01