

A318

AIRCRAFT CHARACTERISTICS AIRPORT AND MAINTENANCE PLANNING

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Customer Services
Technical Data Support and Services
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Revision No. 25 - Dec 01/23

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SCOPE

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**ON A/C A318-100

Purpose

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 quests, uncompromisingly.

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**ON A/C A318-100

Glossary

List of Abbreviations 1.

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

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

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:

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

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

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

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

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

@A318

Aircra	aft Characteristics
Water Volume, FWD CC	8.34 m³
	(295 ft ³)
Water Volume, AFT CC	10.38 m³
	(367 ft ³)
Water Volume, Bulk CC	5.97 m³
	(211 ft³)

@A318

AIRCRAFT CHARACTERISTICS - AIRPORT AND MAINTENANCE PLANNING

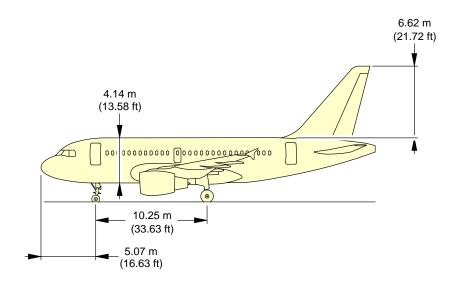
2-2-0 General Aircraft Dimensions

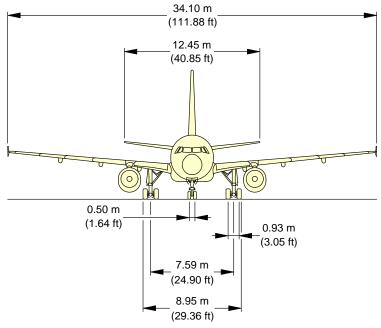
**ON A/C A318-100

General Aircraft Dimensions

1. This section provides general aircraft dimensions.

**ON A/C A318-100



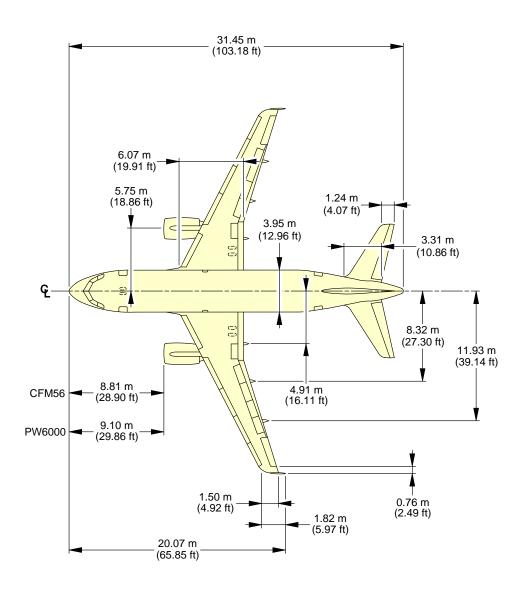


NOTE:RELATED TO AIRCRAFT ATTITUDE AND WEIGHT.

N_AC_020200_1_0010101_01_04

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.

N_AC_020200_1_0010107_01_02

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.

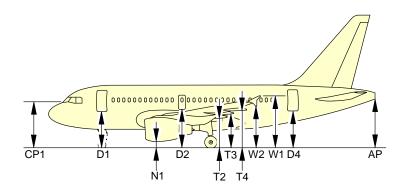
Dimensions in the tables are approximate and will vary with tire type, weight and balance and other special conditions.

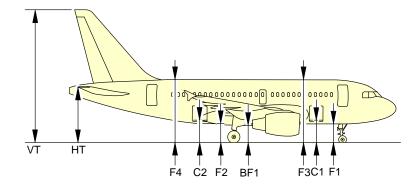
The dimensions are given for:

- 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





N_AC_020300_1_0010101_01_09

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



**ON A/C A318-100

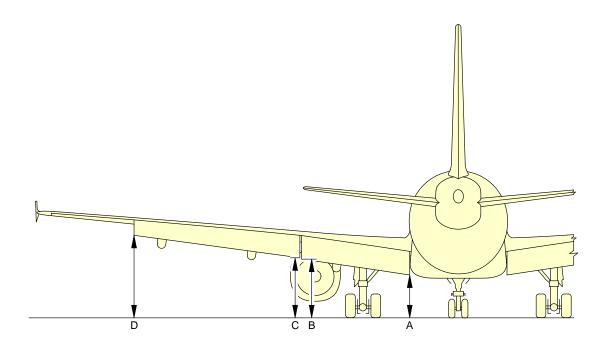
	i di			MRW (WV0) 59 400 kg (130 955 lb)	(WV0) 00 kg 55 lb)			MRW (WV8) 64 400 kg (141 978 lb)	MRW (WV8) 64 400 kg (141 978 lb)		OEW 38 818 kg (85 579 lb)	W 8 kg 79 lb)	A/C J/	A/C JACKED
3	AC CONFIGURATION		FWE (15	FWD CG (15%)	AFT (33.9	AFT CG (33.95%)	FWD CG (15.79%)	FWD CG (15.79%)	AFT CG (32%)	00 (%	C (25	CG (25%)	(15.	(15.09 ft)
			ш	ft	ш	ft	ш	ft	m	Ħ	ш	ft	ш	ft
	DOOR 1	5	3.375	11.072	3.438	11.279 3.369 11.053	3.369	11.053	3.420	3.420 11.220	3.451	11.322	4.132	13.556
PASSENGER DOORS	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
	D00R 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	FWD CARGO DOOR	5	1.830	6.003	1.868	6.128	1.820	5.971	1.851	6.072	1.898	6.227	2.532	8.307
DOORS	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
	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		6.082	1.867	6.125	1.841		1.931	6.335	2.434	7.985
FUSELAGE	TOP FWD	F3	5.864	5.864 19.238 5.907		19.379 5.855 19.209	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
	FLAP TRACK 2	T2	2.685	8.809	2.659	8.723		8.750	2.646	8.681	2.732	8.963	3.248	10.656
	FLAP TRACK 3	T3	3.124	10.249	3.094		_	10.187	3.081	10.108	3.169	10.396	3.677	12.063
	FLAP TRACK 4	Т4	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	WING TIP FENCE TOP	M	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
	HORIZONTAL TAIL PLANE	노	5.605	5.605 18.389	5.470	17.946	5.572	18.280	5.463	17.923	5.616	18.425	5.930	19.455
TAILPLANE	APU EXHAUST	ЧΡ	4.906	16.095	4.758	4.906 16.095 4.758 15.610 4.871 15.980	4.871	15.980	4.752	4.752 15.590	4.912	16.115	5.203	17.070
	VERTICAL TAIL PLANE	⋝	12.885	42.273	12.743	12.885 42.273 12.743 41.807 12.851 42.162	12.851	42.162	12.736	12.736 41.784	12.893	42.299	13.195	43.290
/HNICNH	CFM 5B NACELLE	Z	0.603	1.978	0.611	2.004	0.590	1.935	0.596	1.955	0.661	2.168	1.239	4.064
NACELLE	PW6000	۲	0.403	1.322	0.411	1.348	0.390	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

> Page 3 Dec 01/23

**ON A/C A318-100

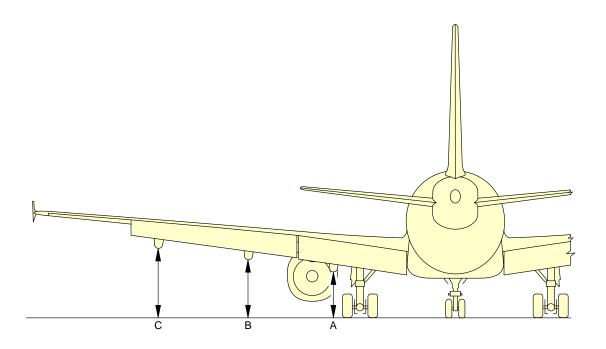


FLAPS EXTENDED										
DESCRIPTION		A/C IN MAINTENANCE CONFIGURATION MID CG		MAXIMUM RAMP WEIGHT FWD CG		MAXIMUM RAMP WEIGHT AFT CG				
		m	ft	m	ft	m	ft			
FLAP 1 INBD	Α	2.05	6.73	1.99	6.53	1.96	6.43			
FLAP 1 OUTBD	В	2.77	9.09	2.71	8.89	2.68	8.79			
FLAP 2 INBD	С	2.81	9.22	2.75	9.02	2.72	8.92			
FLAP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

N_AC_020300_1_0060101_01_01

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

**ON A/C A318-100

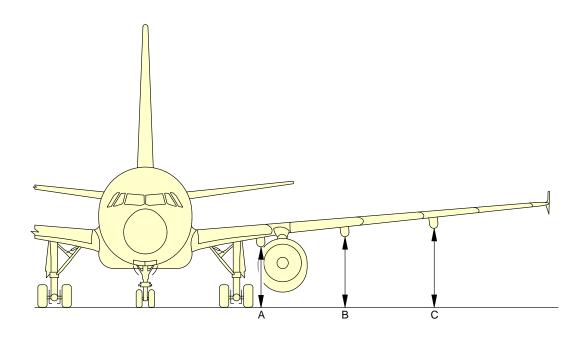


FLAP TRACKS EXTENDED											
DESCRIPTION		A/C IN MAINTENANCE CONFIGURATION MID CG		MAXIMUM RAMP WEIGHT FWD CG		MAXIMUM RAMP WEIGHT AFT CG					
		m	ft	m	m ft		ft				
FLAP TRACK 2	Α	2.10	6.89	2.03	6.66	2.00	6.56				
FLAP TRACK 3	В	2.59	8.50	2.53	8.30	2.49	8.17				
FLAP TRACK 4	С	3.05	10.01	2.99	9.81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

N_AC_020300_1_0350101_01_00

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

**ON A/C A318-100

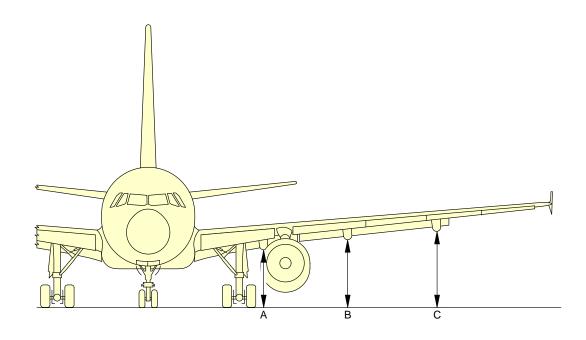


FLAP TRACKS RETRACTED										
DESCRIPTION		A/C IN MAINTENANCE CONFIGURATION MID CG		MAXIMUM RAMP WEIGHT FWD CG		MAXIMUM RAMP WEIGHT AFT CG				
		m	ft	m	ft	m	ft			
FLAP TRACK 2	Α	2.70	8.86	2.60	8.53	2.58	8.46			
FLAP TRACK 3	В	3.10	10.17	3.00	9.84	2.97	9.74			
FLAP TRACK 4	С	3.50	11.48	3.39	11.12	3.36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

N_AC_020300_1_0070101_01_01

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

**ON A/C A318-100

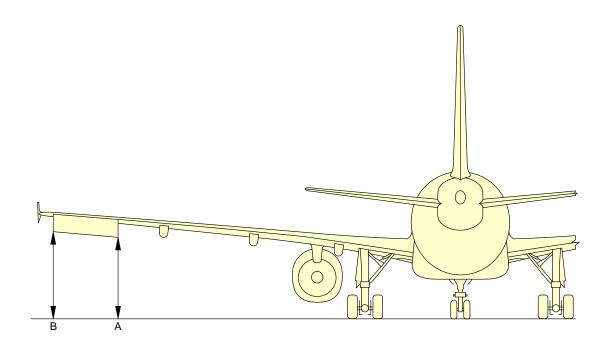


FLAP TRACKS 1+F											
DESCRIPTION		A/C IN MAINTENANCE CONFIGURATION MID CG		MAXIMUM RAMP WEIGHT FWD CG		MAXIMUM RAMP WEIGHT AFT CG					
		m	ft	m	ft	m	ft				
FLAP TRACK 2	Α	1.95	6.40	1.85	6.07	1.83	6.00				
FLAP TRACK 3	В	2.31	7.58	2.21	7.25	2.18	7.15				
FLAP TRACK 4	С	2.89	9.48	2.78	9.12	2.75	9.02				

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

**ON A/C A318-100

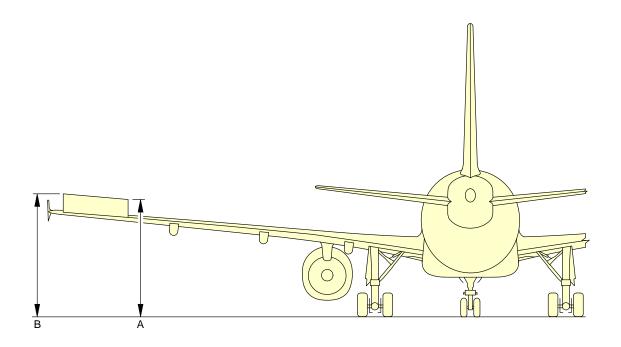


AILERON DOWN										
DESCRIPTION		CONFIGL	NTENANCE JRATION CG	MAXIMUM RAMP WEIGHT FWD CG		MAXIMUM RAMP WEIGHT AFT CG				
		m	ft	m	ft	m	ft			
AILERON INBD	Α	3.84	12.60	3.78	12.40	3.74	12.27			
AILERON OUTBD	В	4.19	13.75	4.13	13.55	4.07	13.35			

N_AC_020300_1_0080101_01_01

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

**ON A/C A318-100

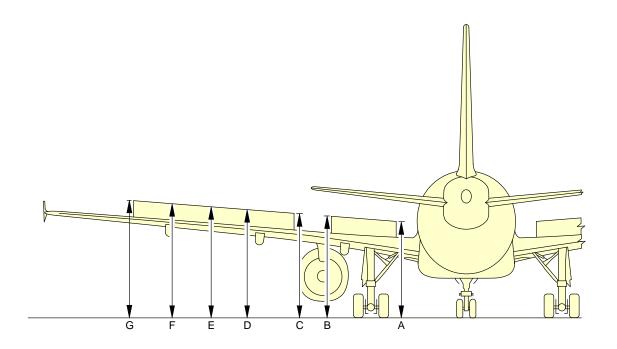


AILERON UP										
DESCRIPTION		CONFIGL	NTENANCE JRATION CG	MAXIMUM RAMP WEIGHT FWD CG		MAXIMUM RAMP WEIGHT AFT CG				
		m	ft	m	ft	m	ft			
AILERON INBD	Α	4.37	14.34	4.31	14.14	4.45	14.60			
AILERON OUTBD	JTBD B 4.57		14.99	4.51	14.80	4.26	13.98			

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

**ON A/C A318-100

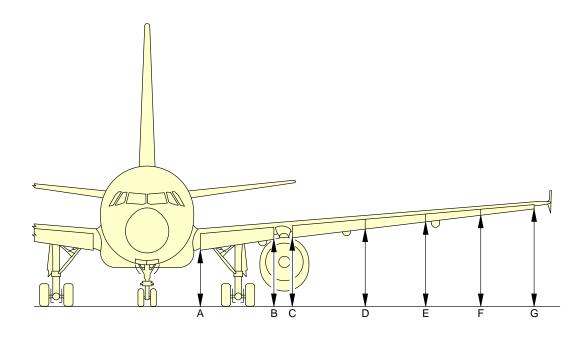


SPOILERS EXTENDED									
DESCRIPTION	A/C IN MAINTENANCE CONFIGURATION MID CG		MAXIMUM RAMP WEIGHT FWD CG		MAXIMUM RAMP WEIGHT AFT CG				
	m	ft	m	ft	m	ft			
SPOILER 1 INBD	Α	3.75	12.30	3.69	12.11	3.66	12.01		
SPOILER 1 OUTBD	В	4.01	13.16	3.94	12.93	3.92	12.86		
SPOILER 2 INBD	С	4.07	13.35	4.01	13.16	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	А	2.54	8.33	2.48	8.14	2.50	8.20		
SLAT 1 OUTBD	В	2.96	9.71	2.90	9.51	2.91	9.55		
SLAT 2 INBD	С	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

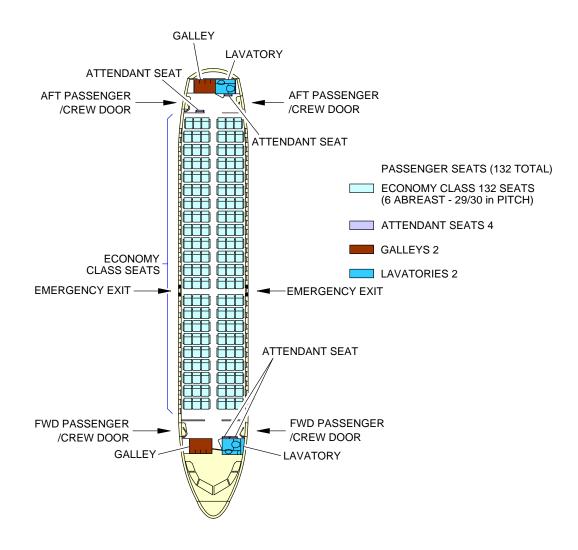
2-4-1 Interior Arrangements - Plan View

**ON A/C A318-100

Interior Arrangements - Plan View

1. This section provides the typical interior configuration.

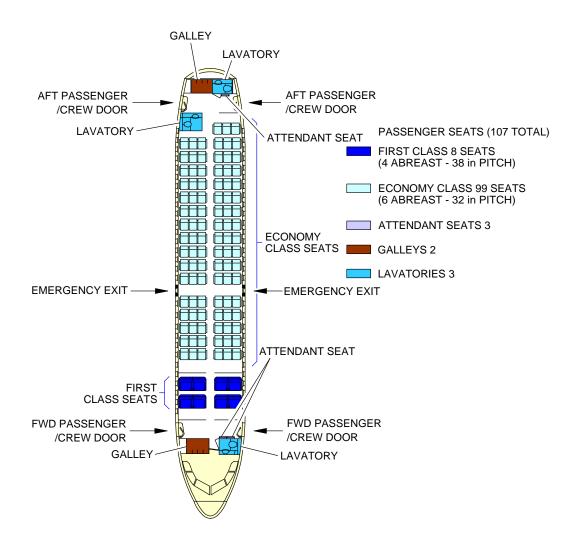
**ON A/C A318-100



N_AC_020401_1_0010101_01_02

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

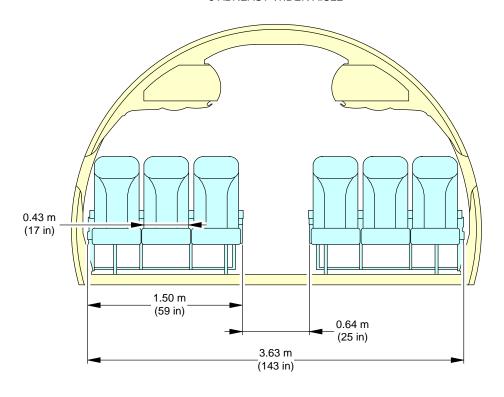
**ON A/C A318-100

Interior Arrangements - Cross Section

1. This section provides the typical configuration.

**ON A/C A318-100

6 ABREAST-WIDER AISLE



N_AC_020500_1_0050101_01_01

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

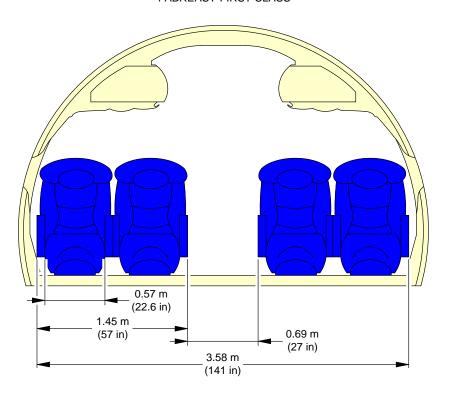
0.46 m (18 in) 1.58 m (62 in) 0.48 m (19 in) 3.63 m (143 in)

N_AC_020500_1_0050102_01_03

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

4 ABREAST-FIRST CLASS



N_AC_020500_1_0060101_01_01

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

SA318

AIRCRAFT CHARACTERISTICS - AIRPORT AND MAINTENANCE PLANNING

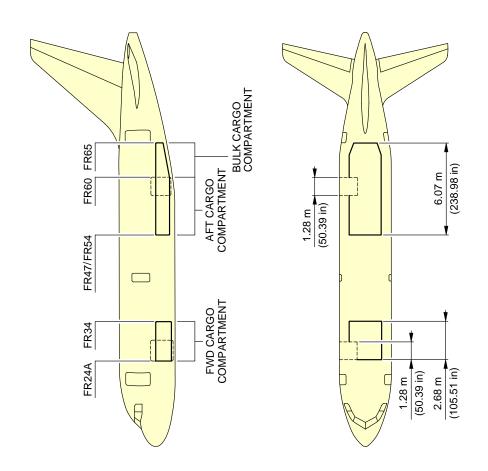
2-6-0 Cargo Compartments

**ON A/C A318-100

Cargo Compartments

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

**ON A/C A318-100



N_AC_020600_1_0010101_01_00

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

2-7-0 Door Clearances and Location

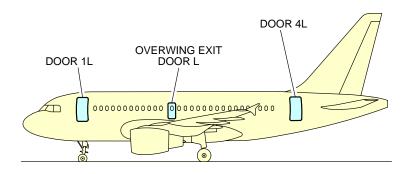
**ON A/C A318-100

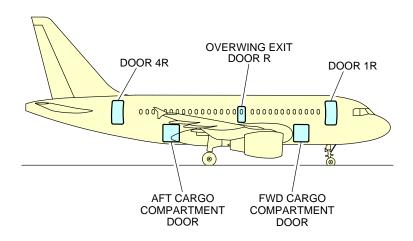
Door Clearances

1. This section gives door identification and location.

<u>NOTE</u>: 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

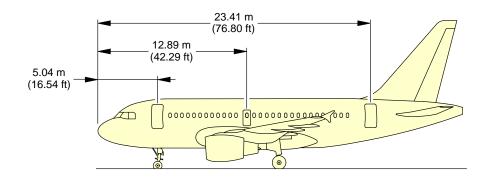


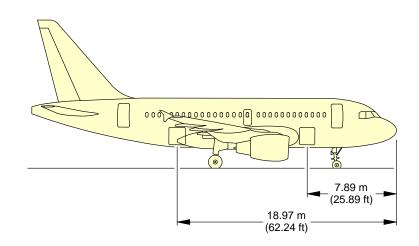


N_AC_020700_1_0010101_01_02

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

**ON A/C A318-100

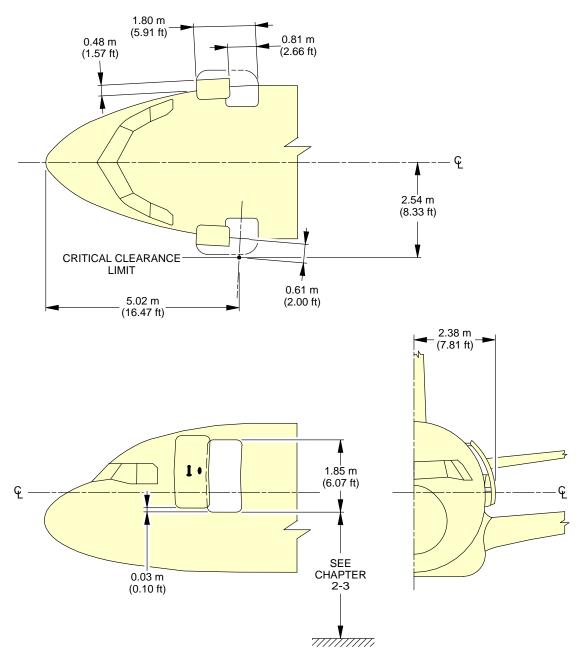




N_AC_020700_1_0010102_01_01

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

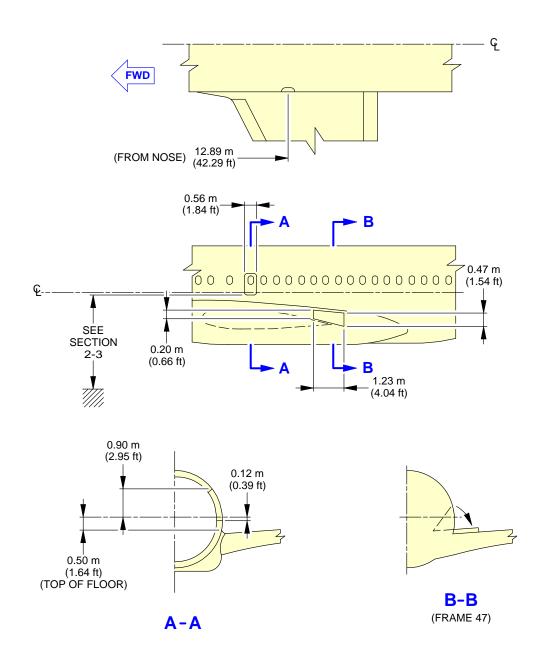
**ON A/C A318-100



N_AC_020700_1_0050101_01_00

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

**ON A/C A318-100



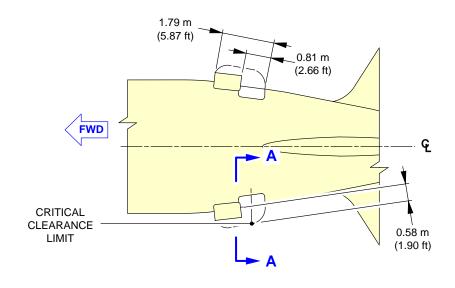
NOTE:

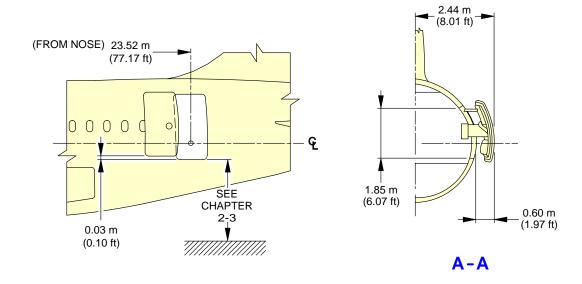
ESCAPE SLIDE COMPARTMENT DOOR OPENS ON WING UPPER SURFACE.

N_AC_020700_1_0060101_01_00

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

**ON A/C A318-100

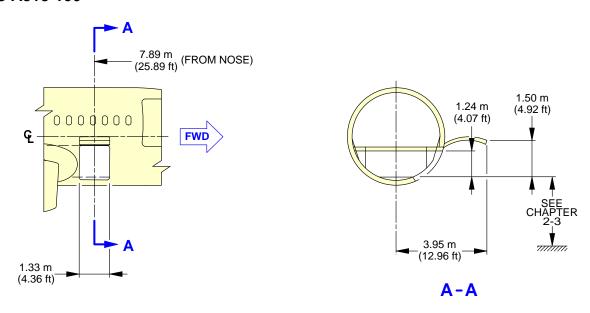


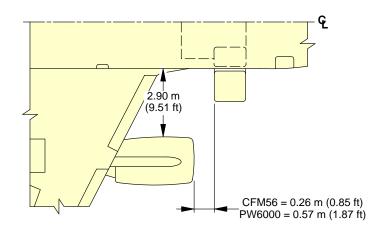


N_AC_020700_1_0070101_01_00

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

**ON A/C A318-100

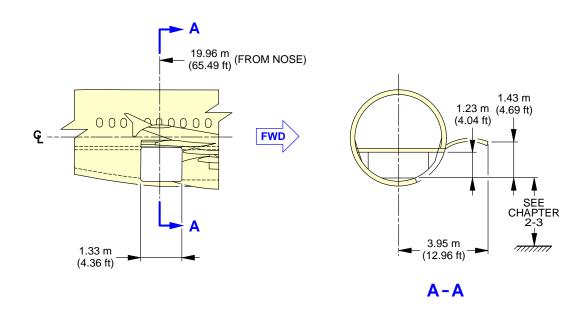


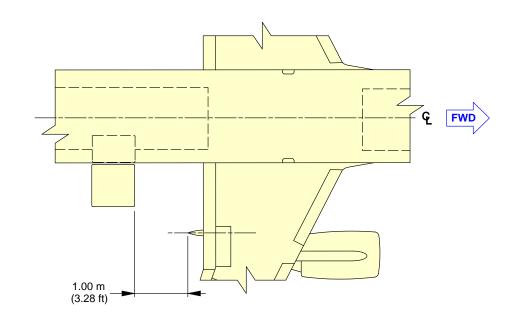


N_AC_020700_1_0080101_01_00

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

**ON A/C A318-100

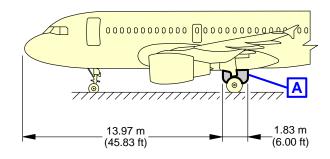


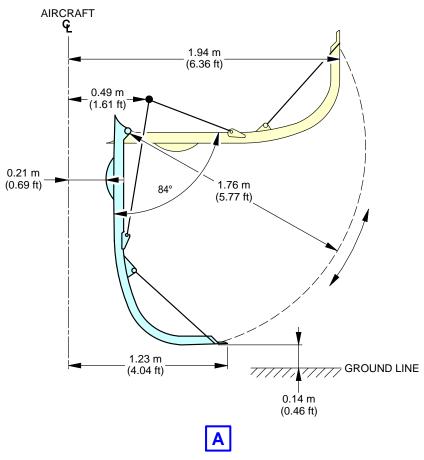


N_AC_020700_1_0090101_01_00

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

**ON A/C A318-100



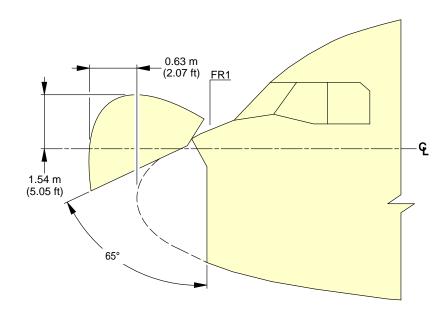


NOTE: VALUE OF CG: 25% RC.

N_AC_020700_1_0100101_01_00

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

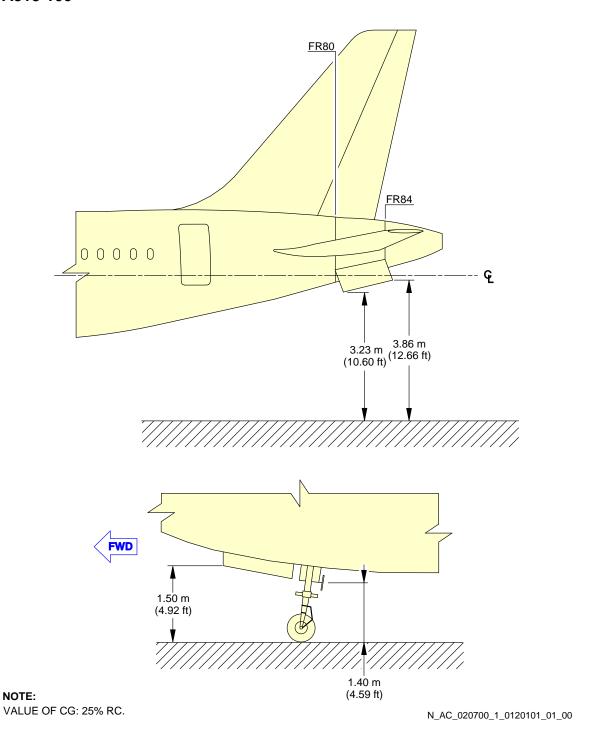
**ON A/C A318-100



N_AC_020700_1_0110101_01_00

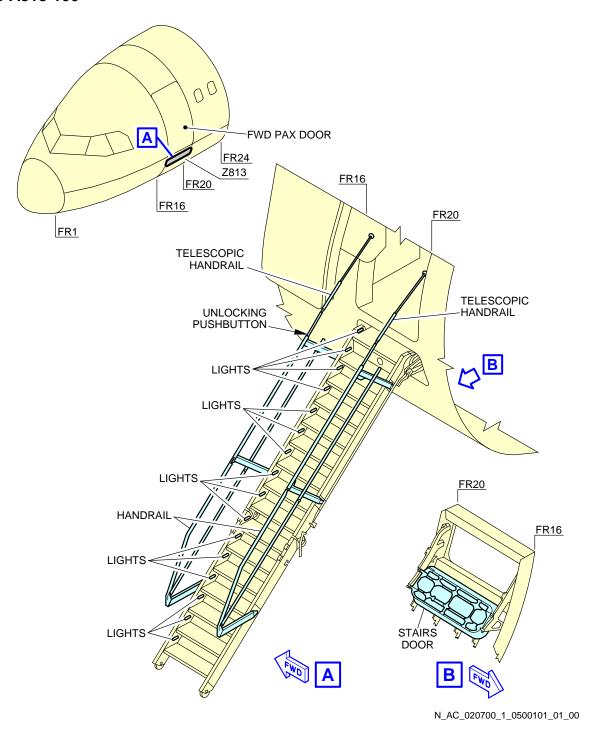
Doors Clearances Radome FIGURE-2-7-0-991-011-A01

**ON A/C A318-100



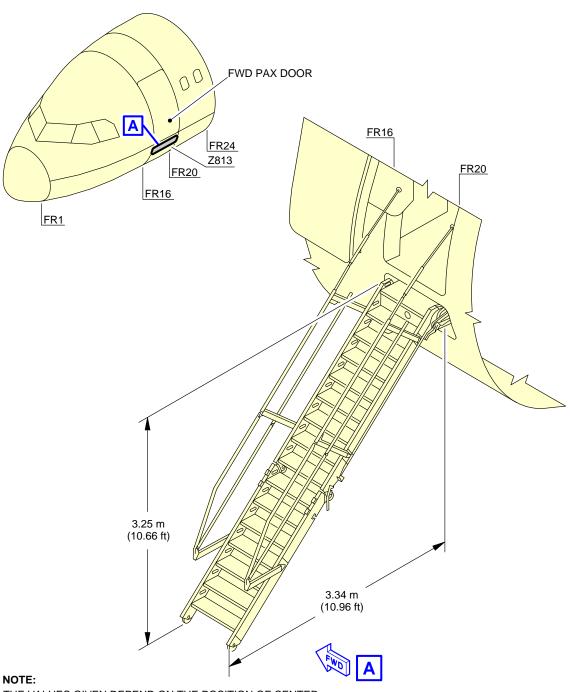
Doors Clearances APU and Nose Landing Gear Doors FIGURE-2-7-0-991-012-A01

**ON A/C A318-100



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

**ON A/C A318-100

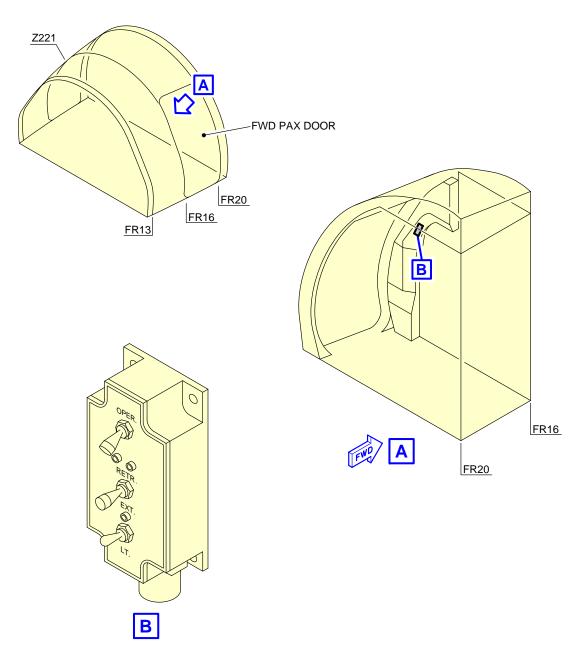


THE VALUES GIVEN DEPEND ON THE POSITION OF CENTER OF GRAVITY (CG) AND THE AIRCRAFT WEIGHT.

N_AC_020700_1_0510101_01_00

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

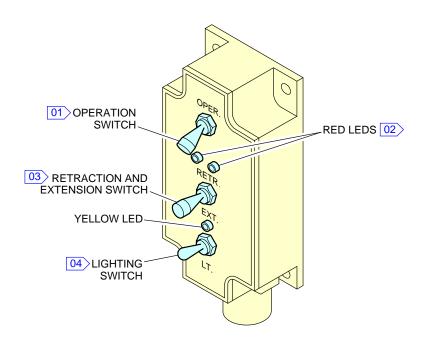
**ON A/C A318-100



N_AC_020700_1_0520101_01_00

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

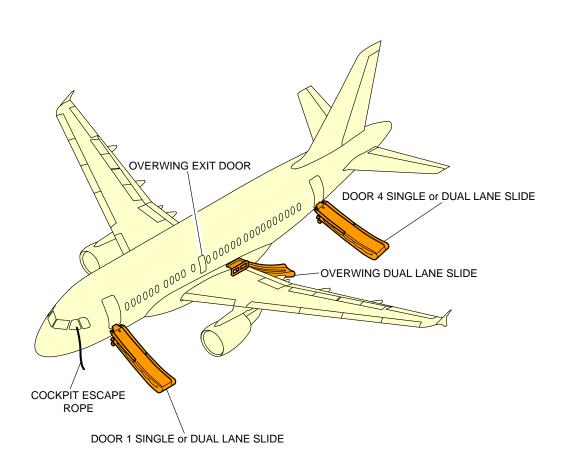
This section provides location of slides/rafts facilities and related clearances.

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



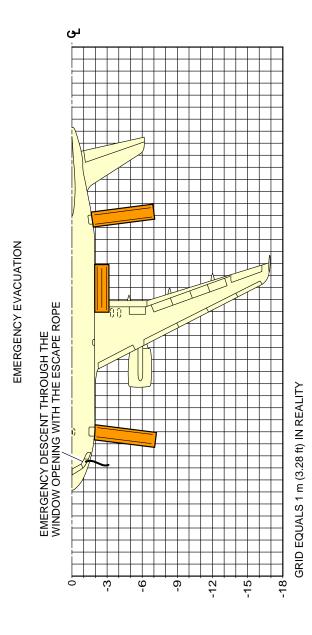
NOTE:

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.

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.

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.

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

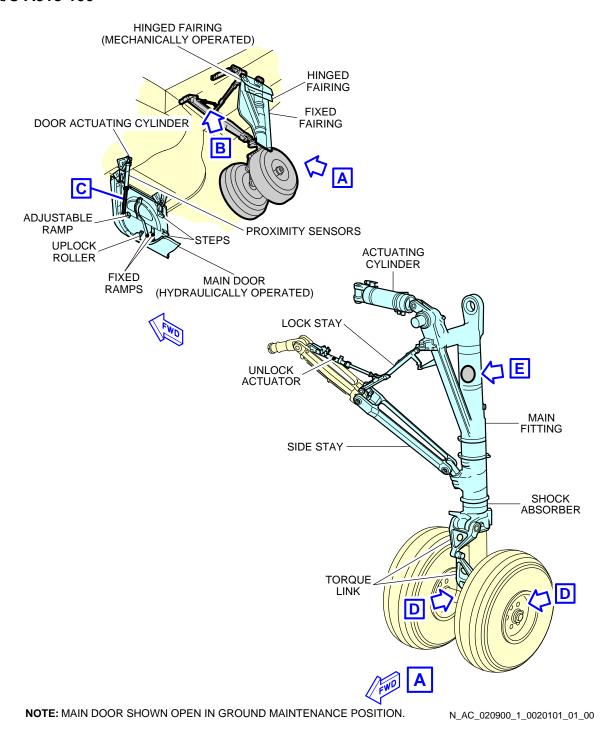
The main gear wheels are braked automatically before the wheels enter the wheel bay.

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

SA318

AIRCRAFT CHARACTERISTICS - AIRPORT AND MAINTENANCE PLANNING

**ON A/C A318-100

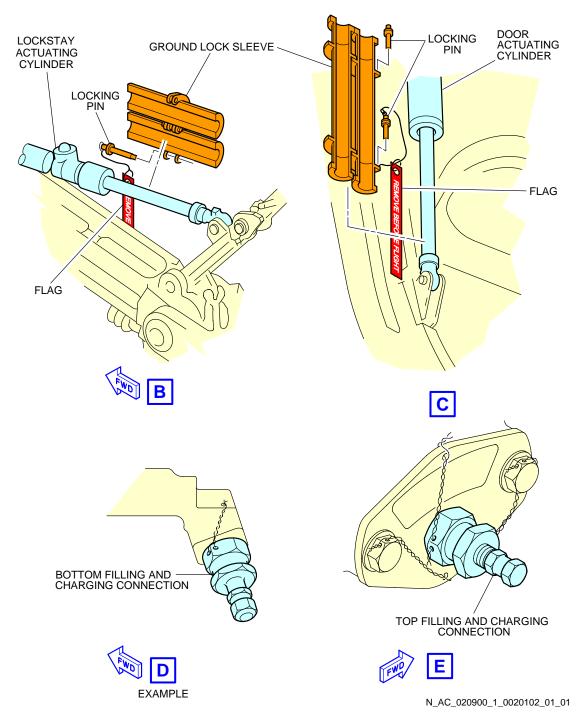


Landing Gear
Main Landing Gear - Twin-Wheel (Sheet 1 of 2)
FIGURE-2-9-0-991-002-A01

@A318

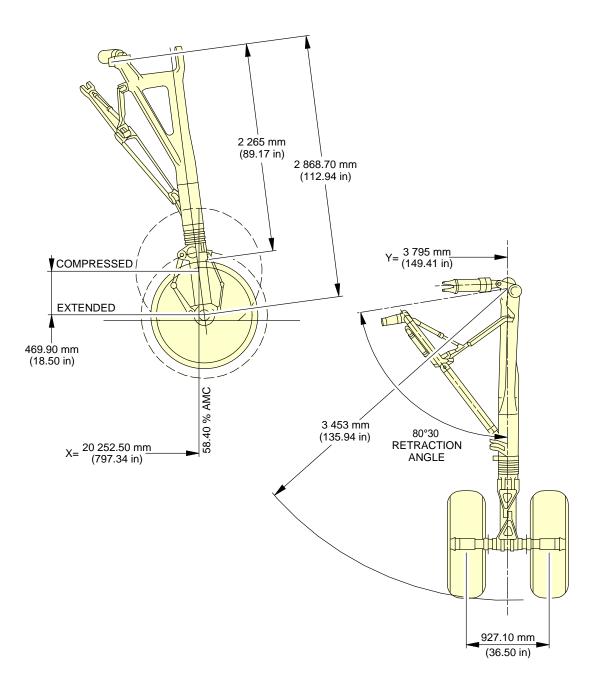
AIRCRAFT CHARACTERISTICS - AIRPORT AND MAINTENANCE PLANNING

**ON A/C A318-100



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

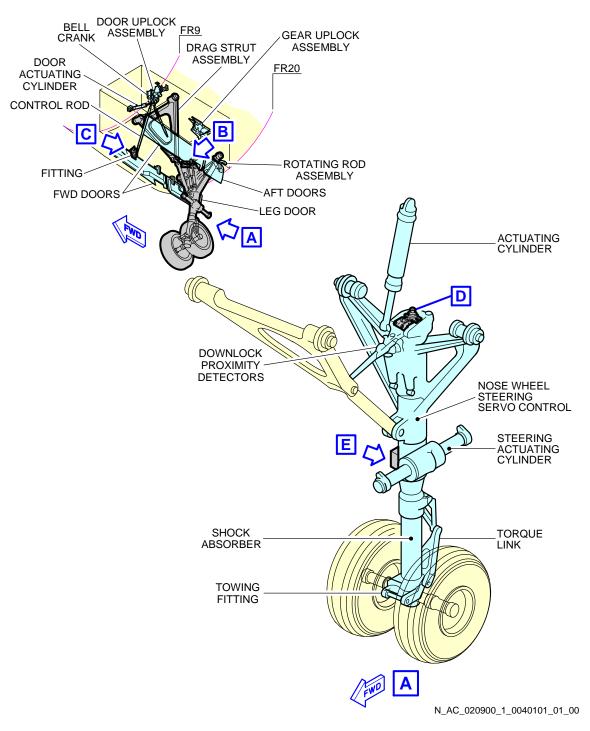
**ON A/C A318-100



N_AC_020900_1_0030101_01_00

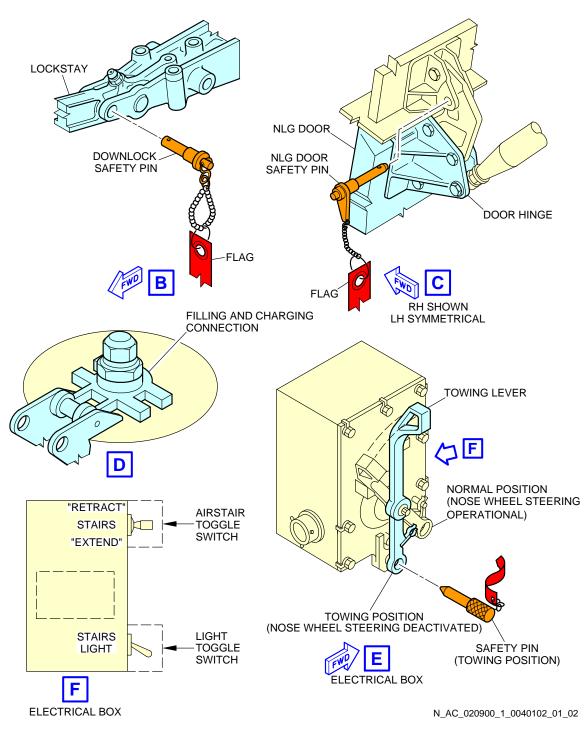
Landing Gear Main Landing Gear Dimensions - Twin-Wheel FIGURE-2-9-0-991-003-A01

**ON A/C A318-100



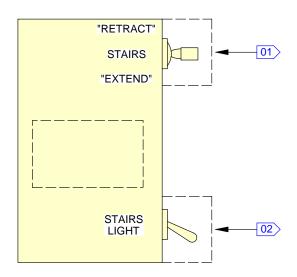
Landing Gear Nose Landing Gear (Sheet 1 of 2) FIGURE-2-9-0-991-004-A01

**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

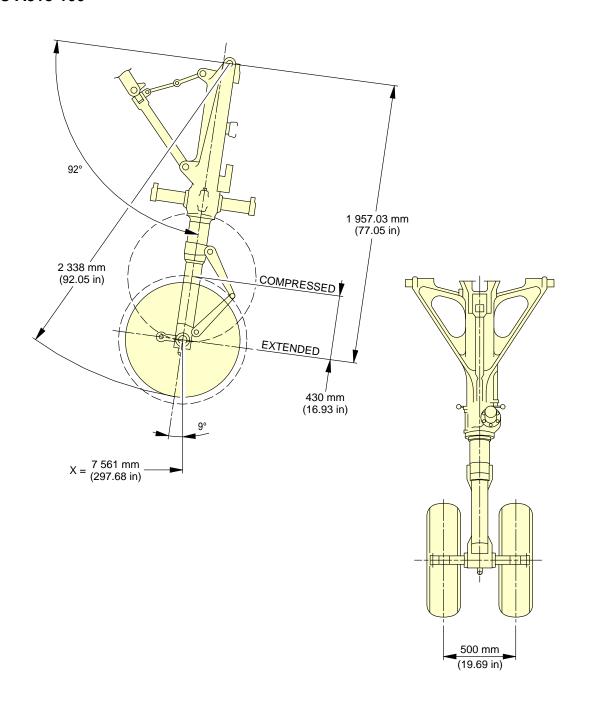
- POWER IS AVAILABLE FROM DC BUS 2.

DOWN: STAIR LIGHTS AND YELLOW CONTROL LIGHT ARE OFF.

N_AC_020900_1_0280101_01_00

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

**ON A/C A318-100



N_AC_020900_1_0050101_01_00

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.

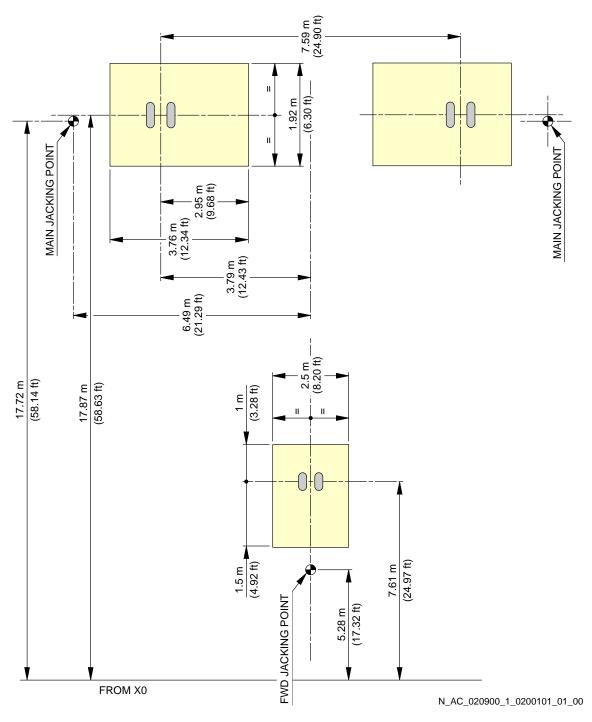
All dimensions shown are minimum dimensions with zero clearances.

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.

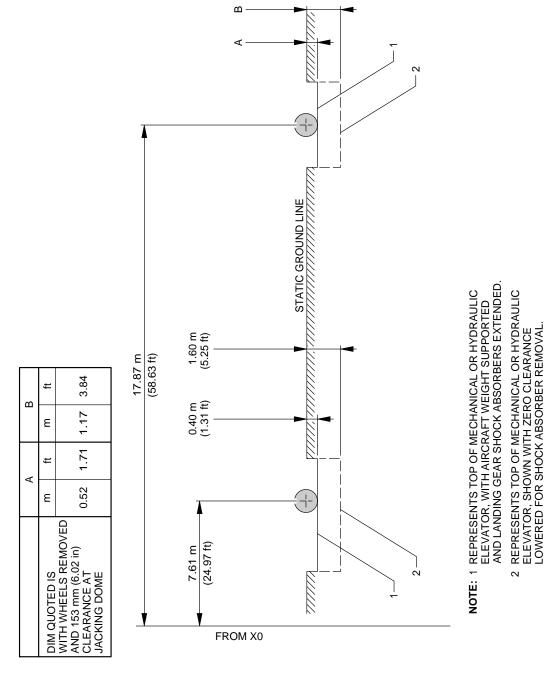
Dimensions for elevators and associated mechanisms must be added to those in FIGURE 2-9-0-991-020-A and FIGURE 2-9-0-991-021-A.

**ON A/C A318-100



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

**ON A/C A318-100



N_AC_020900_1_0210101_01_00

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

2-10-0 Exterior Lighting

**ON A/C A318-100

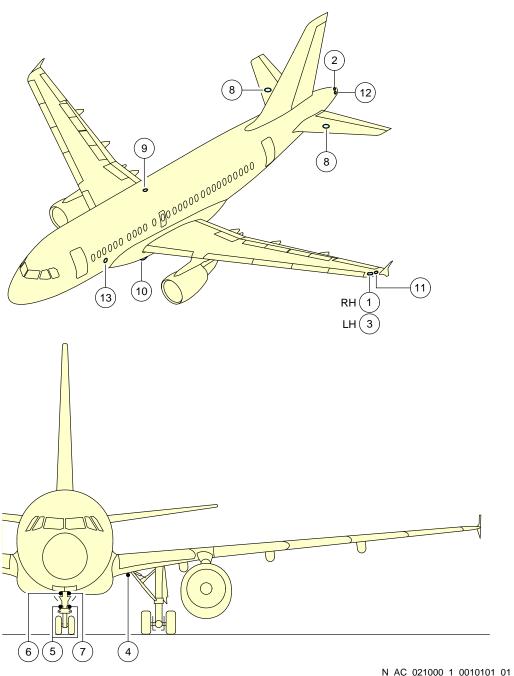
Exterior Lighting

1. General

This section provides the location of the aircraft exterior lighting.

EXTERIOR LIGHTING			
ITEM	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		

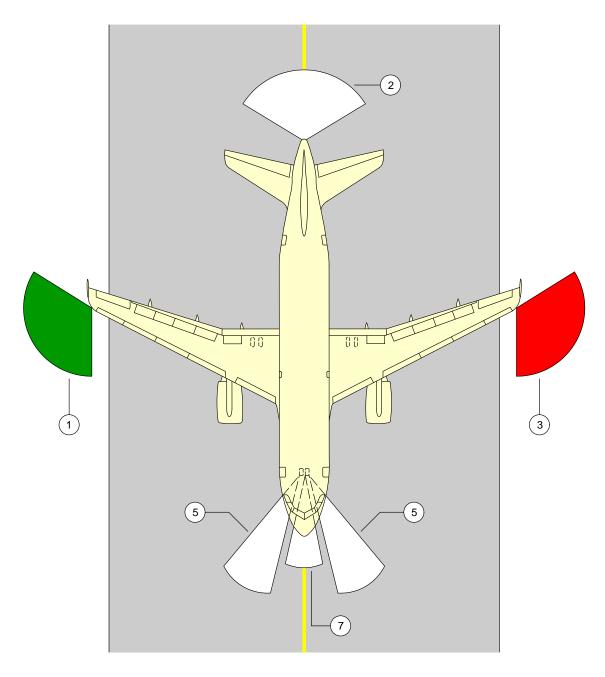
**ON A/C A318-100



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

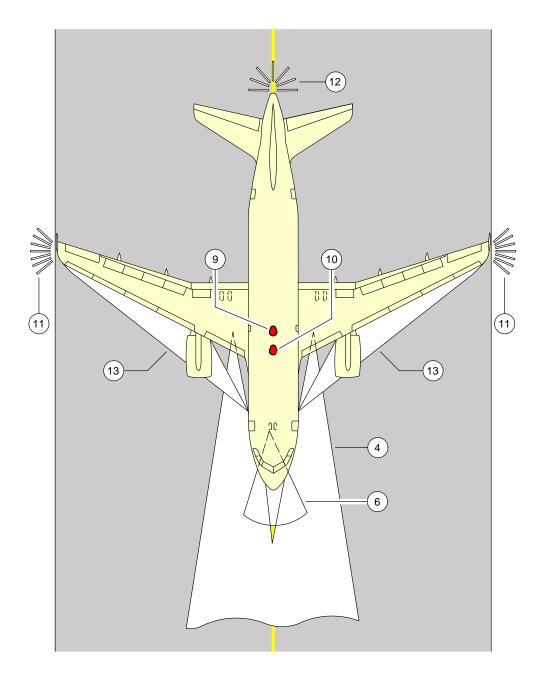
**ON A/C A318-100



N_AC_021000_1_0020101_01_01

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

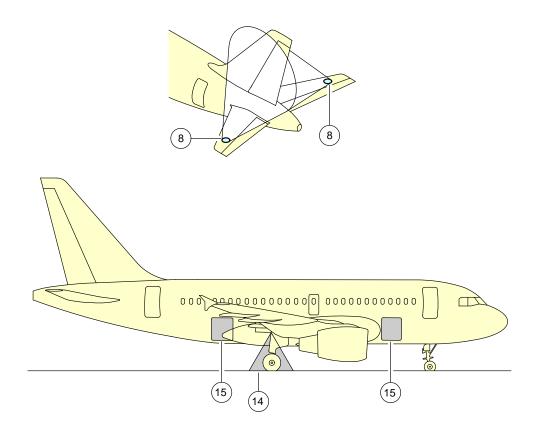
**ON A/C A318-100



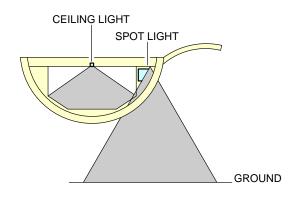
N_AC_021000_1_0030101_01_01

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

**ON A/C A318-100



EXAMPLE FOR LIGHT N° 15



N_AC_021000_1_0170101_01_01

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

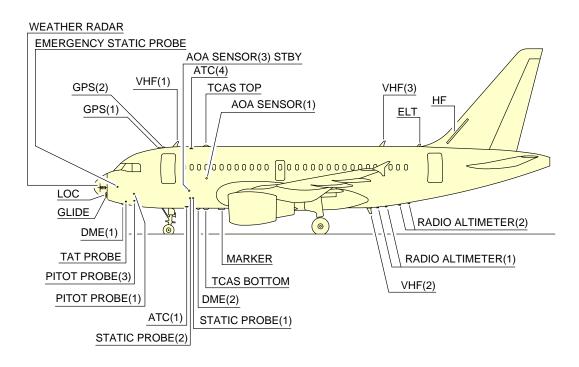
2-11-0 Antennas and Probes Location

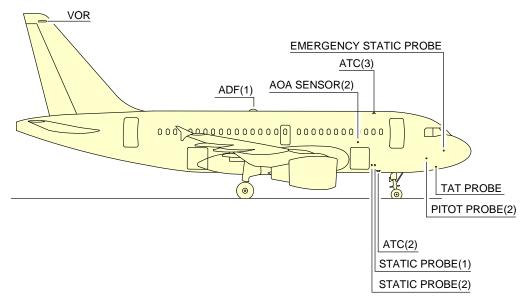
**ON A/C A318-100

Antennas and Probes Location

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

**ON A/C A318-100





NOTE: DEPENDING ON AIRCRAFT CONFIGURATION

N_AC_021100_1_0010101_01_00

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

2-12-0 Power Plant

**ON A/C A318-100

Auxiliary Power Unit

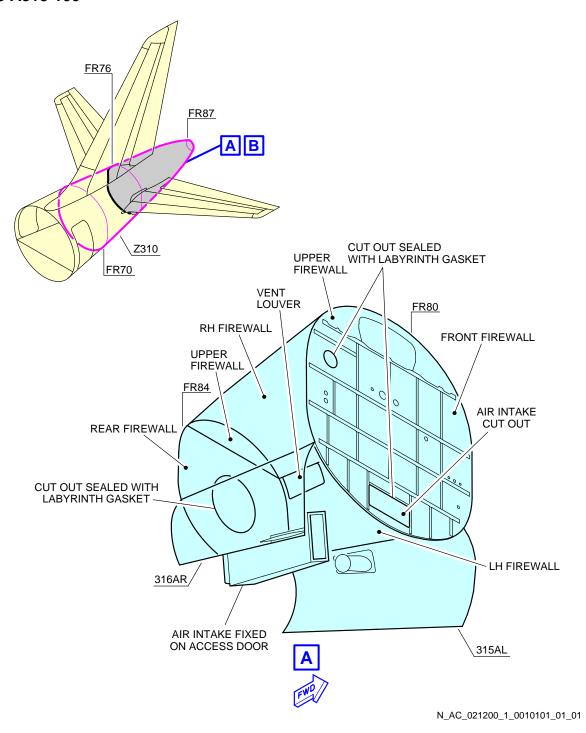
1. General

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

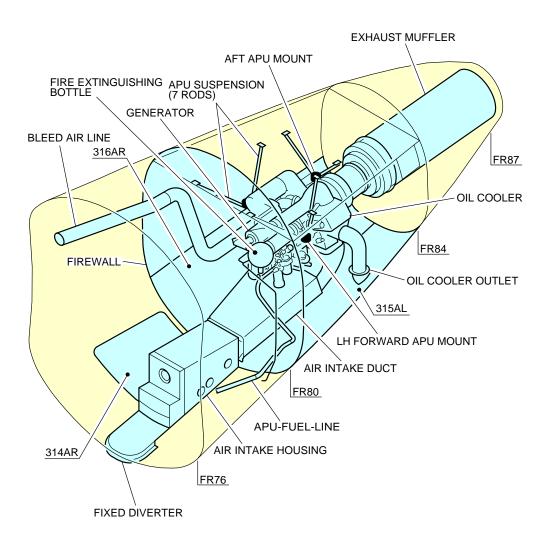
The primary APU controls and indications are installed on the overhead panel, on the center pedestal and on the center instrument panel. Additionally, an external APU panel is installed on the nose landing gear to initiate an APU emergency shutdown.

**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:

- 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:

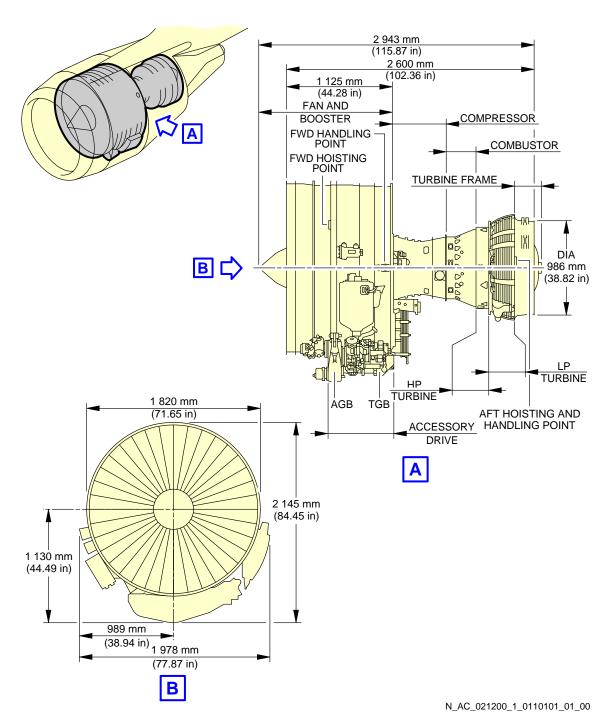
- The N1 engine parameter to compute the applicable engine thrust,
- The N1 and N2 engine parameters for engine control and monitoring.

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:

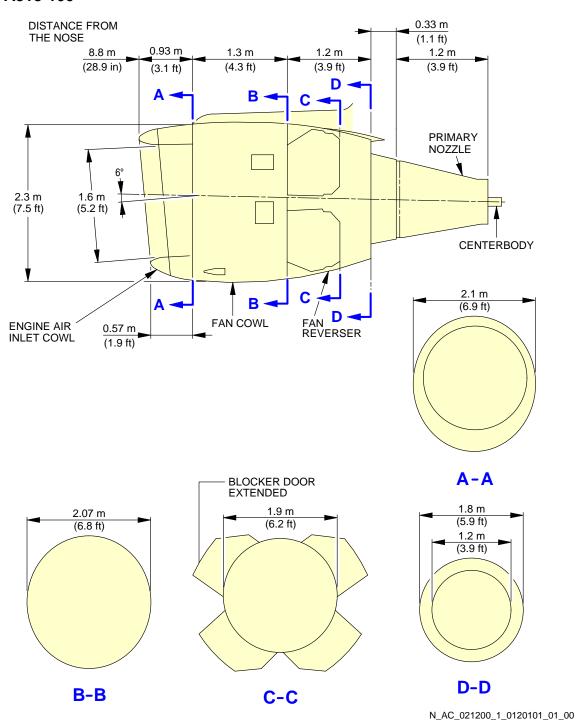
- Protection for the engine and the accessories
- Airflow around the engine during its operation
- Lighting protection
- HIRF and EMI attenuation.

**ON A/C A318-100



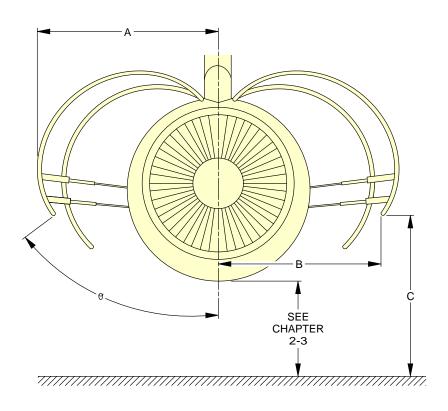
Power Plant Handling Major Dimensions - CFM56 Series Engine FIGURE-2-12-0-991-011-A01

**ON A/C A318-100



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

**ON A/C A318-100



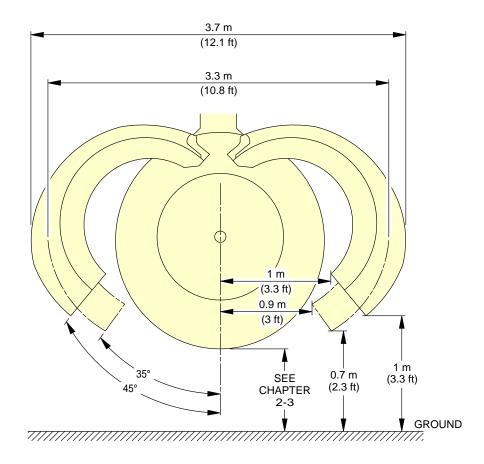
NOTE: APPROXIMATE DIMENSIONS.

m (ft)	9	Α	В	С
VIEW COWLING	42°27	1.8 (5.9)	1.5 (4.9)	1.3 (4.3)
AFT	55°15	2.0 (6.6)	1.8 (5.9)	1.7 (5.6)
VIEW COWLING	40°40	1.8 (5.9)	1.4 (4.6)	1.3 (4.3)
FWD	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.

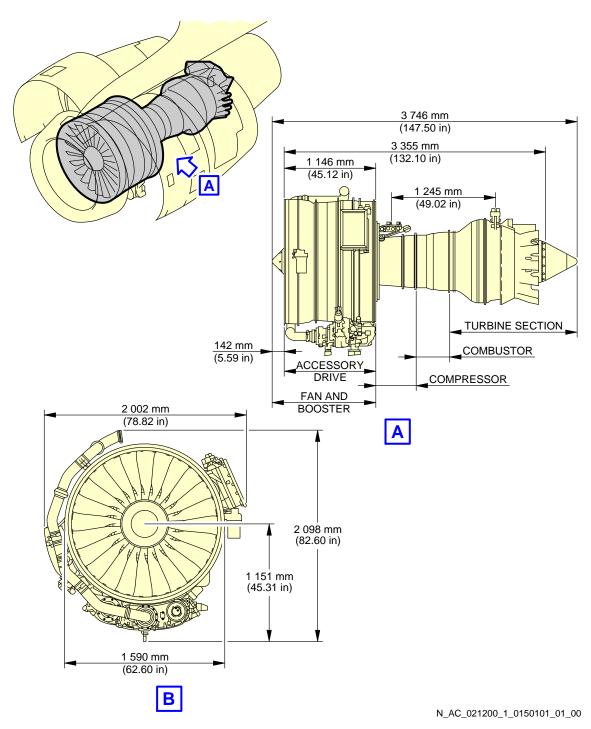
CAUTION DO NOT ACTUATE SLATS:

- 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

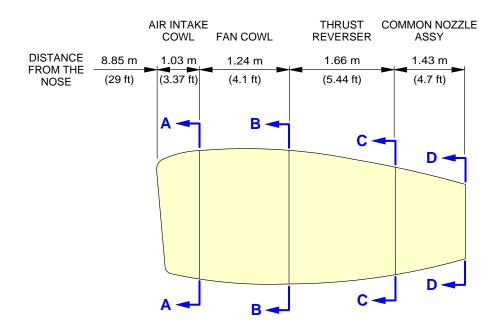
Power Plant Handling Thrust Reverser Cowls - CFM56 Series Engine FIGURE-2-12-0-991-014-A01

**ON A/C A318-100

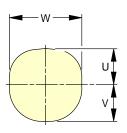


Power Plant Handling
Major Dimensions - PW 6000 Series Engine
FIGURE-2-12-0-991-015-A01

**ON A/C A318-100



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

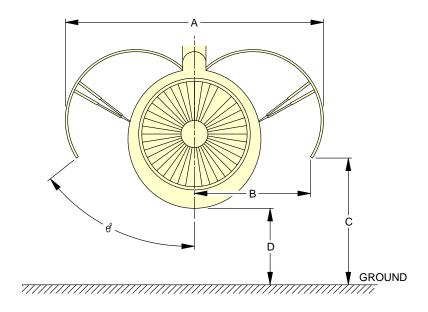


NOTE: ALL SIZES GIVEN ON THIS ILLUSTRATION ARE APPROXIMATE

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



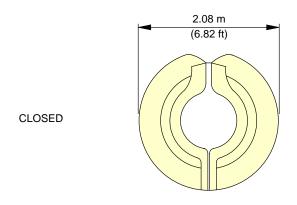
6	Α	В	С	D
27°	3.05 m (10 ft)	0.90 m (2.95 ft)	D + 0.2 m (D + 0.7 ft)	SEE
53°	3.85 m (12.63 ft)	1.65 m (5.41 ft)	D + 0.84 m (D + 2.8 ft)	CHAPTER 2-3

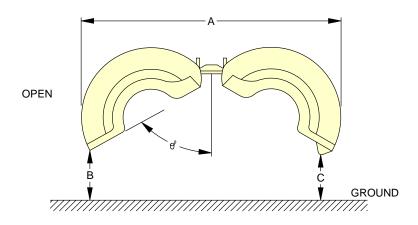
NOTE: APPROXIMATE DIMENSIONS.
ONLY MAIN DIMENSIONS SHOWN.

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





e	А	В	С
45°	3.5 m (11.48 ft)	1.1 m (3.6 ft)	1.08 m (3.5 ft)

N_AC_021200_1_0180101_01_00

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.

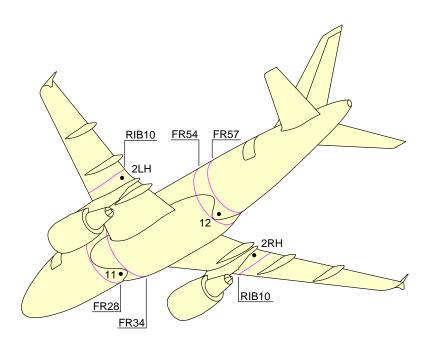
2. Precise Leveling

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



N_AC_021300_1_0010101_01_00

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

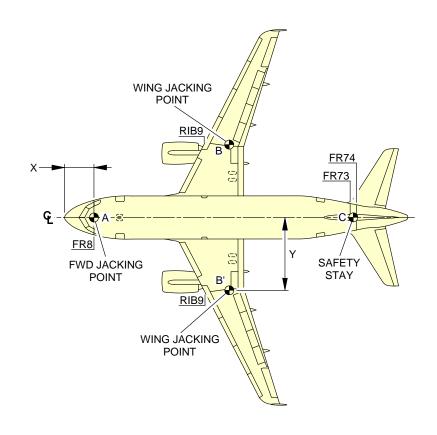
(1) The maximum permitted loads given in the table in FIGURE 2-14-0-991-001-A are the maximum loads applicable on jack fittings.

SA318

AIRCRAFT CHARACTERISTICS - AIRPORT AND MAINTENANCE PLANNING

- (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



)	<	١	(MAXIMUM LOAD ELIGIBLE		
		m	ft	m	ft	daN	
FORWARD FUSEL/ JACKING POINT	AGE A	2.74	8.99	0	0	6 800	
WING JACKING	В	15.18	49.80	6.50	21.33	28 500	
POINT	B'	15.18	49.80	-6.50	-21.33	28 500	
SAFETY STAY C		26.44	86.75	0	0	2 000	

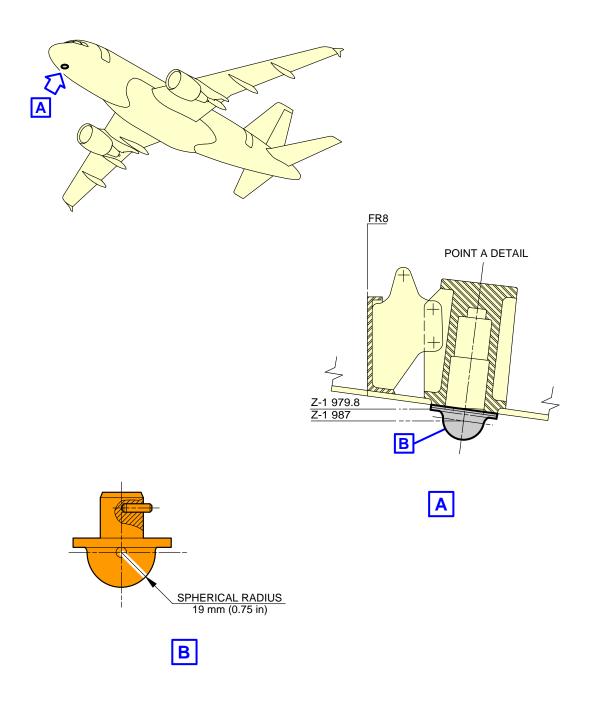
NOTE:

SAFETY STAY IS NOT USED FOR JACKING.

N_AC_021400_1_0010101_01_02

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

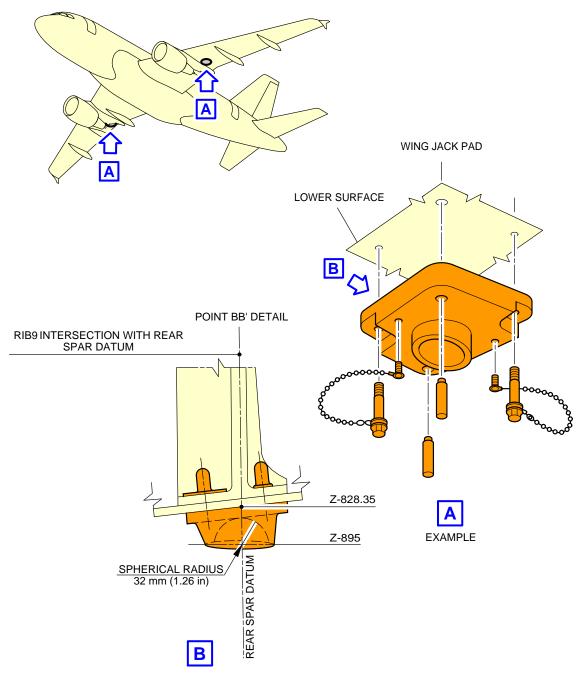
**ON A/C A318-100



N_AC_021400_1_0030101_01_00

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

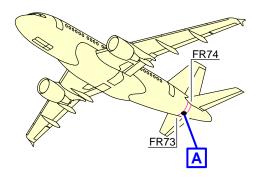
**ON A/C A318-100

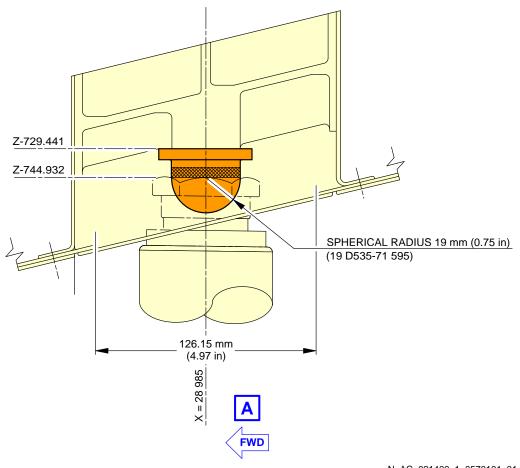


N_AC_021400_1_0560101_01_00

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

**ON A/C A318-100

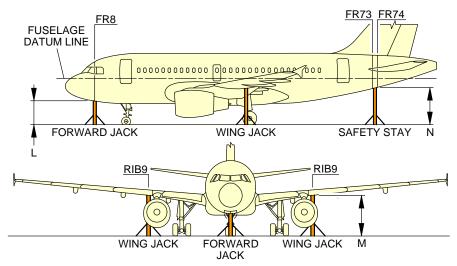




N_AC_021400_1_0570101_01_01

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				
CONFIGURATION	DESCRIPTION	L (FORWARD JACK)	M (WING JACK)	N (SAFETY STAY)		
	- NLG SHOCK ABSORBER DEFLATED AND NLG TIRES FLAT - MLG STANDARD TIRES, WITH STANDARD SHOCK ABSORBERS	1 565 mm (61.61 in)		3 685 mm (145.08 in)		
- AIRCRAFT ON WHEELS	TIRES FLAT SHOCK ABSORBERS DEFLATED	1 660 mm (65.35 in)		2 836 mm (111.65 in)		
	STANDARD TIRES STANDARD SHOCK ABSORBERS	1 851 mm (72.87 in)		3 430 mm (135.04 in)		
- AIRCRAFT ON JACKS (FORWARD JACK AND WING JACKS) - FUSELAGE DATUM LINE	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)		3 779 mm (148.78 in)		
PARALLEL TO THE GROUND	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)		4 429 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.

<u>NOTE</u>: 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.

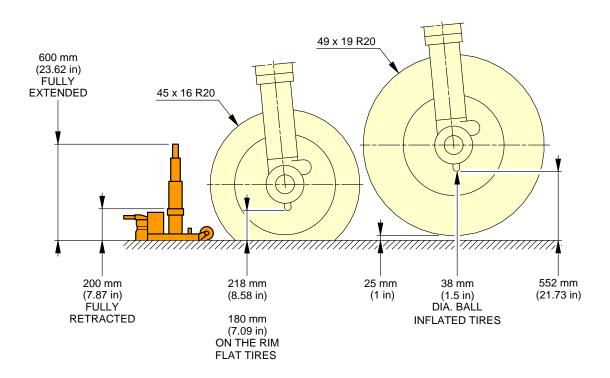
The reactions at each of the jacking points are shown in the table, see FIGURE 2-14-0-991-058-A.

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)

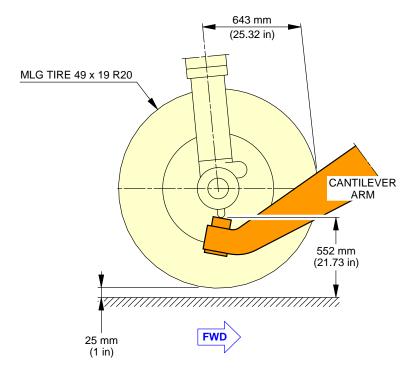
CLEARANCE BETWEEN THE TIRE AND GROUND.

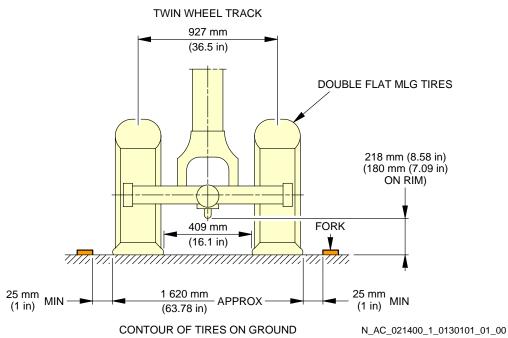
N_AC_021400_1_0120101_01_00

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

2-14-0 Page 9 Dec 01/23

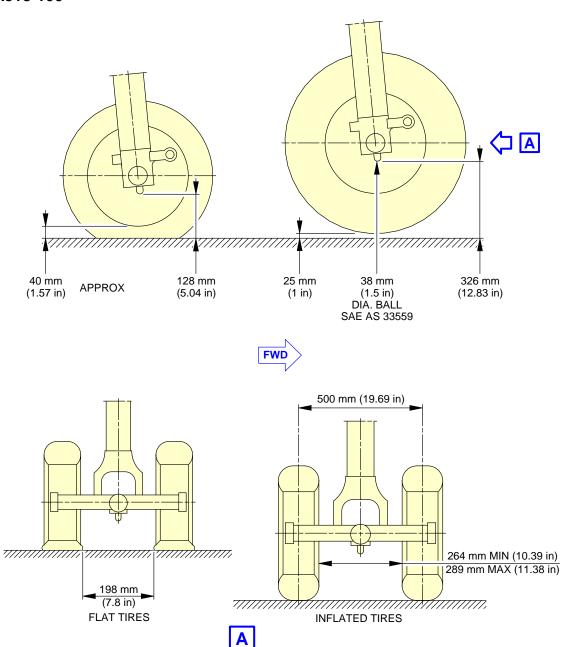
**ON A/C A318-100





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.

N_AC_021400_1_0150101_01_00

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)							

N_AC_021400_1_0580101_01_00

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 Tem	peratures for the Altitu	des						
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						

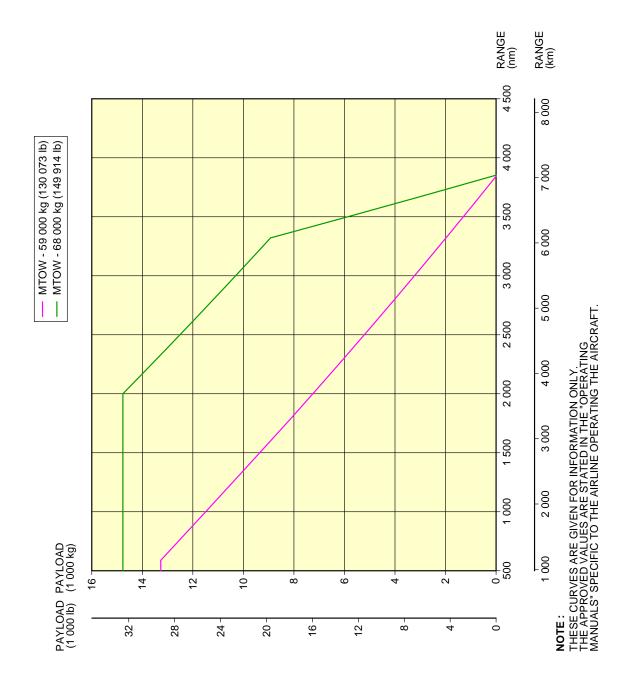
3-2-1 Payload / Range - ISA Conditions

**ON A/C A318-100

Payload/Range - ISA Conditions

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

**ON A/C A318-100



N_AC_030201_1_0120101_01_00

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

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

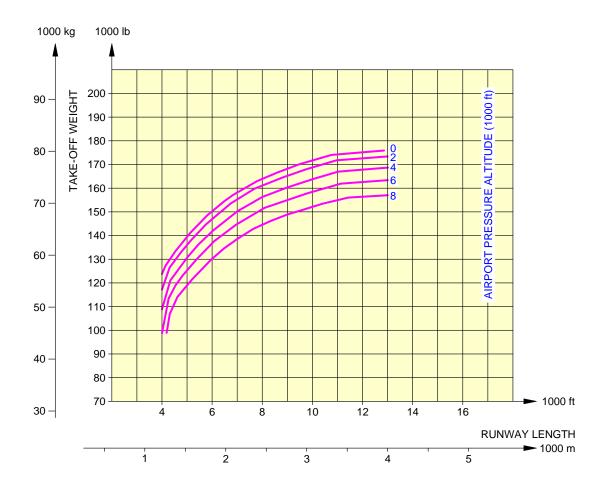
**ON A/C A318-100

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.

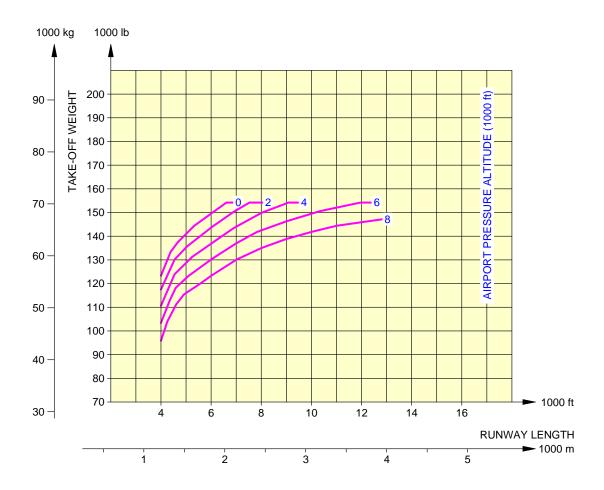


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Take-Off Weight Limitation - ISA Conditions CFM56 Series Engine FIGURE-3-3-1-991-001-A01

**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.



N_AC_030301_1_0020101_01_00

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

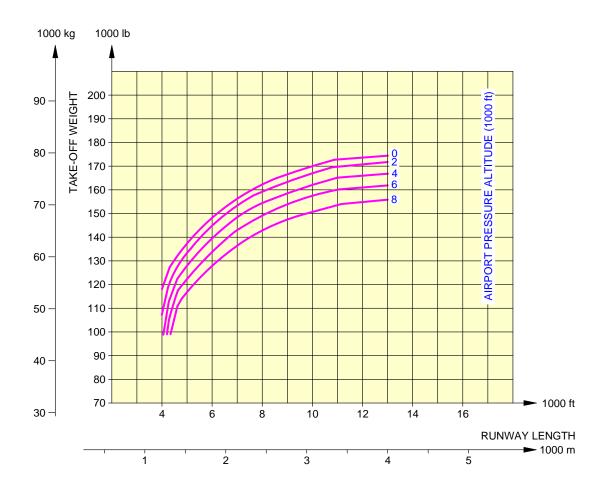
**ON A/C A318-100

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.

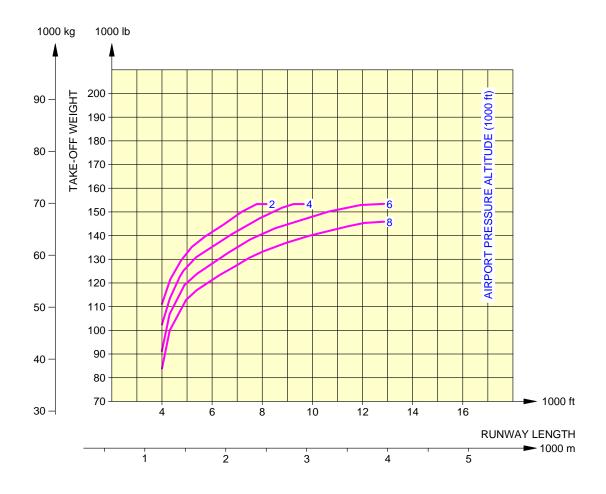


N_AC_030302_1_0010101_01_00

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.

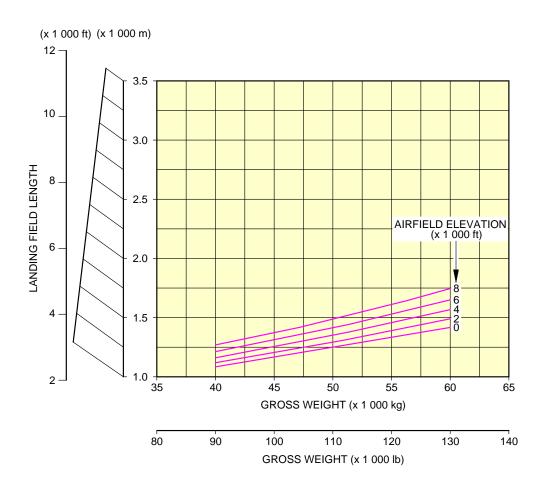
3-4-1 Landing Field Length - ISA Conditions

**ON A/C A318-100

Landing Field Length - ISA Conditions

1. This section provides the landing field length.

**ON A/C A318-100



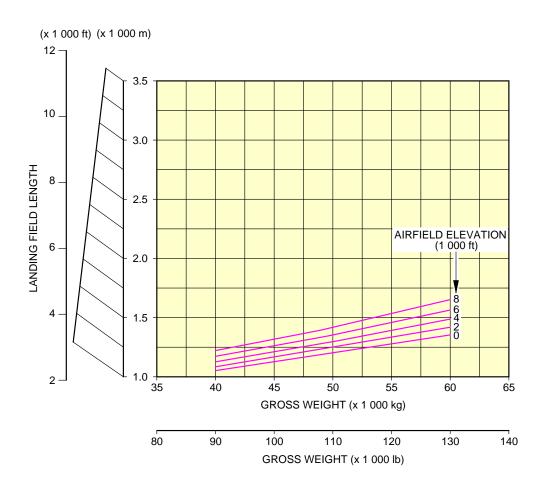
NOTE:

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

- 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.

@A318

AIRCRAFT CHARACTERISTICS - AIRPORT AND MAINTENANCE PLANNING

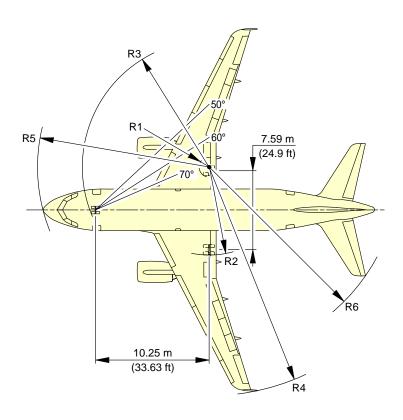
4-2-0 Turning Radii

**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

R6 SE THS	ft	127	108	95	87	80	75	71	89	65	63	61	90	71	68	65	63	61	59
	E	38.6	32.9	29.1	26.4	24.5	22.9	21.7	20.7	19.9	19.2	18.7	18.2	21.7	20.7	19.9	19.2	18.6	18.1
	Ħ	108	06	79	7.1	99	62	59	99	22	53	52	52	58	99	55	53	52	51
R5 NOSE	٤	33.0	27.5	24.0	21.7	20.0	18.8	17.9	17.2	16.6	16.2	16.0	15.8	17.8	17.1	16.6	16.2	15.9	15.7
R4 NGTIP ENCE	#	152	132	118	107	66	93	87	83	79	75	72	69	87	82	78	75	71	89
R4 WINGTIP FENCE	٤	46.5	40.2	35.8	32.7	30.2	28.2	26.6	25.2	24.0	22.9	21.9	21.2	26.5	25.1	23.9	22.7	21.8	20.9
R3 NLG	#	103	83	70	61	55	20	46	43	40	39	37	36	46	43	40	38	37	36
~~	٤	31.3	25.4	21.5	18.7	16.7	15.2	14.0	13.1	12.3	11.8	11.3	11.0	14.0	13.0	12.3	11.7	11.3	10.9
R2 -MLG	Ħ	111	06	75	65	22	20	45	40	36	32	29	27	45	40	36	32	29	26
LM	٤	33.7	27.3	23.0	19.8	17.3	15.3	13.7	12.2	11.0	9.9	8.9	8.2	13.6	12.2	10.9	9.7	8.8	7.8
R1 RMLG	#	98	65	51	40	32	25	20	15	7	∞	4	2	20	15	7	7	4	1
R1 RML	٤	26.1	19.8	15.4	12.2	9.7	7.7	6.1	4.6	3.4	2.3	1.3	9.0	0.9	4.6	3.3	2.2	1.2	0.3
MAXIMUM RAMP WEIGHT	EFFECTIVE STEERING ANGLE (deg)	19.3	24.1	29.0	33.8	38.6	43.4	48.2	52.9	57.6	62.2	9.99	70.3	48.3	53.1	57.9	62.8	67.3	71.8
MAXIMUM	STEERING ANGLE (deg)	20	25	30	35	40	45	50	55	09	65	70	75 (MAX)	20	55	09	65	02	75 (MAX)
, H	TURN	2	2	2	2	2	2	7	2	2	2	2	2	-	-	-	-	-	-

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

@A318

AIRCRAFT CHARACTERISTICS - AIRPORT AND MAINTENANCE PLANNING

4-3-0 Minimum Turning Radii

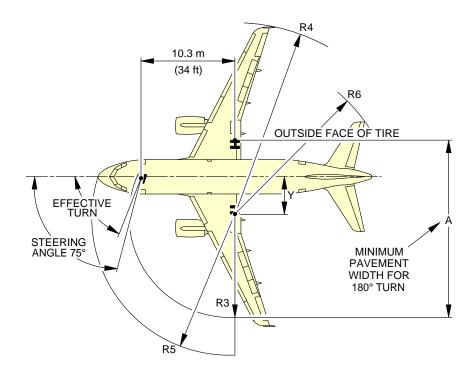
**ON A/C A318-100

Minimum Turning Radii

1. This section provides the minimum turning radii.

4-3-0

**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	А	R3 NLG	R4 WING TIP FENCE	R5 NOSE	R6 THS	
4	1 75 (MAX)	71.8°	m	3.4	19.0	10.9	20.9	15.7	18.1	
7 75 (WAX)	11.0	71.0	71.0	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		
	(XAIVI) C1	70.3	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

> Page 2 Dec 01/23

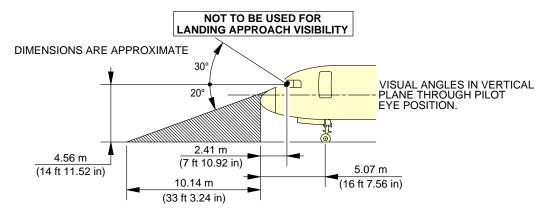
4-4-0 Visibility from Cockpit in Static Position

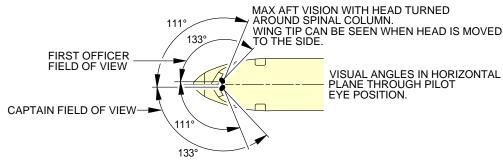
**ON A/C A318-100

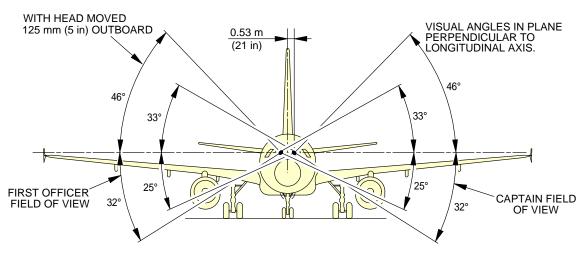
Visibility from Cockpit in Static Position

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

**ON A/C A318-100







NOTE:

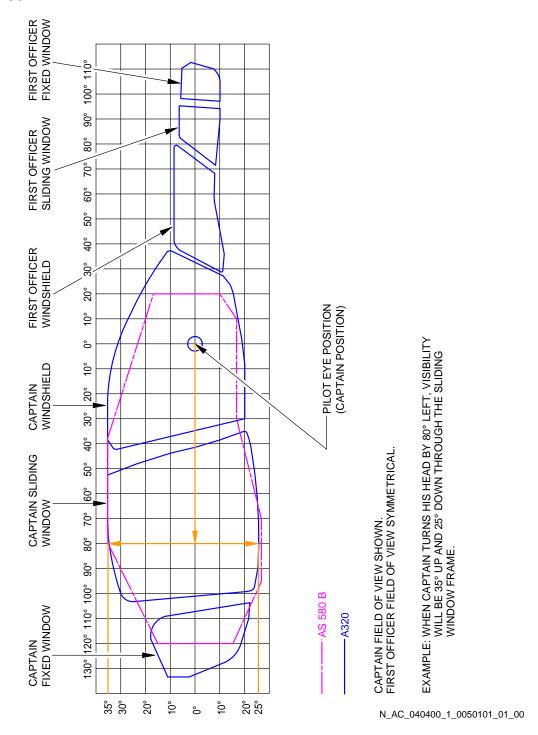
• PILOT EYE POSITION WHEN PILOT'S EYES ARE IN LINE WITH THE RED AND WHITE BALLS.

ZONE THAT CANNOT BE SEEN

N_AC_040400_1_0010101_01_04

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.

@A318

AIRCRAFT CHARACTERISTICS - AIRPORT AND MAINTENANCE PLANNING

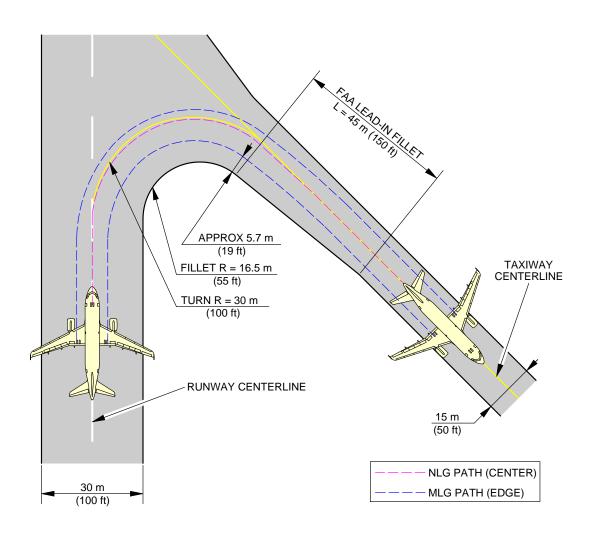
4-5-1 135° Turn - Runway to Taxiway

**ON A/C A318-100

135° Turn - Runway to Taxiway

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

**ON A/C A318-100

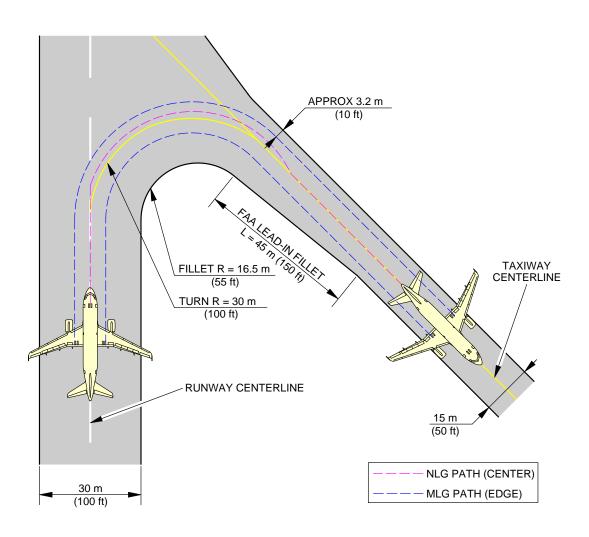


NOTE: FAA GROUP III FACILITIES.

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

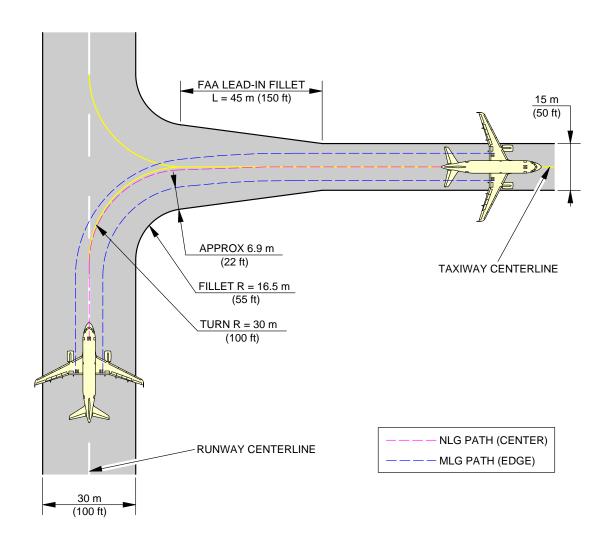
4-5-2 90° Turn - Runway to Taxiway

**ON A/C A318-100

90° Turn - Runway to Taxiway

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

**ON A/C A318-100

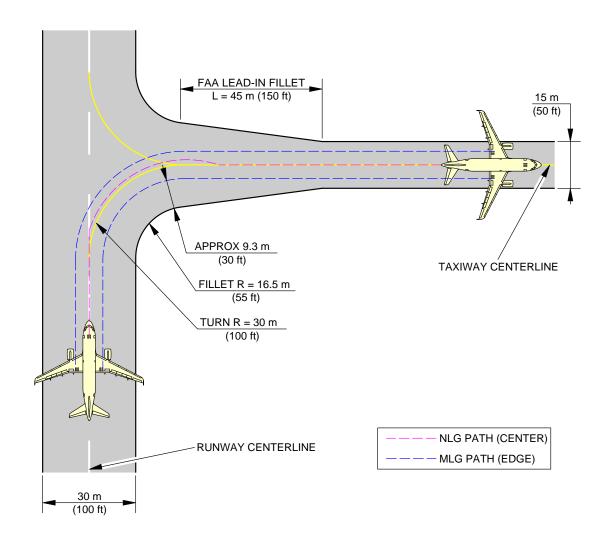


NOTE: FAA GROUP III FACILITIES.

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

@A318

AIRCRAFT CHARACTERISTICS - AIRPORT AND MAINTENANCE PLANNING

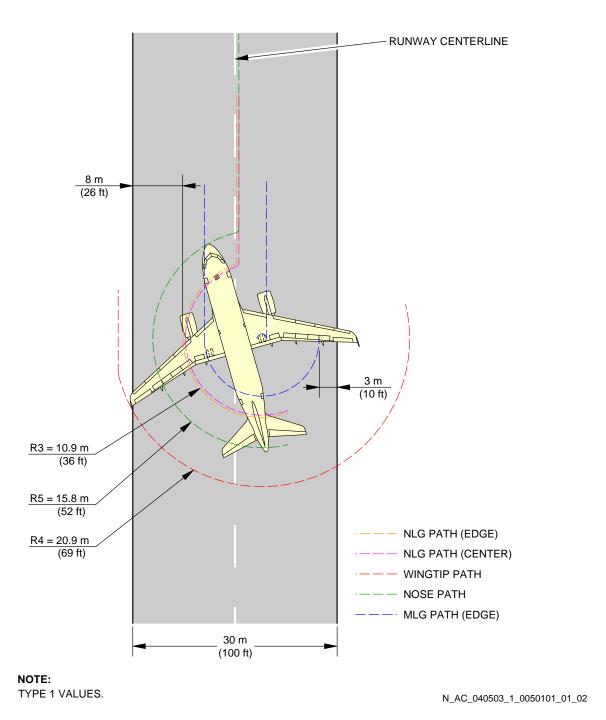
4-5-3 180° Turn on a Runway

**ON A/C A318-100

180° Turn on a Runway

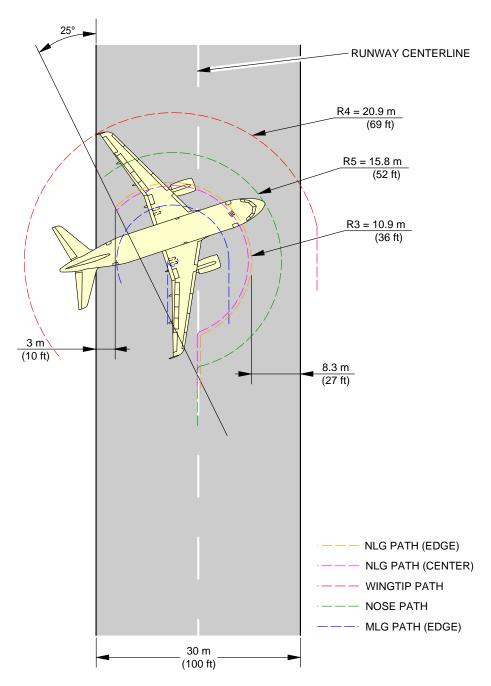
1. This section provides the 180° turn on a runway.

**ON A/C A318-100



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

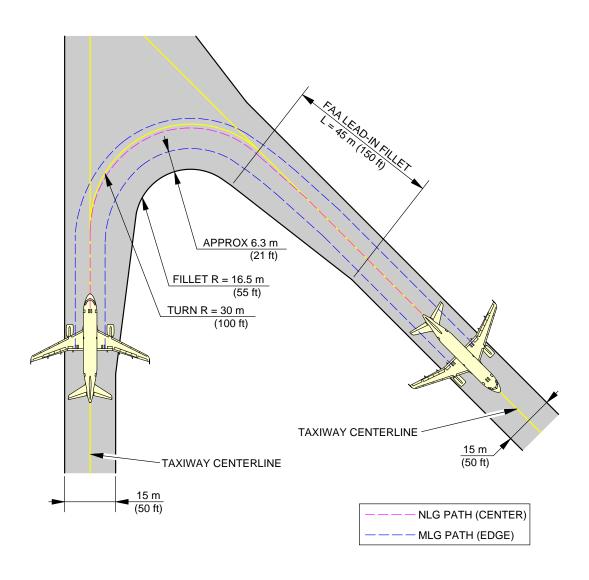
4-5-4 135° Turn - Taxiway to Taxiway

**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

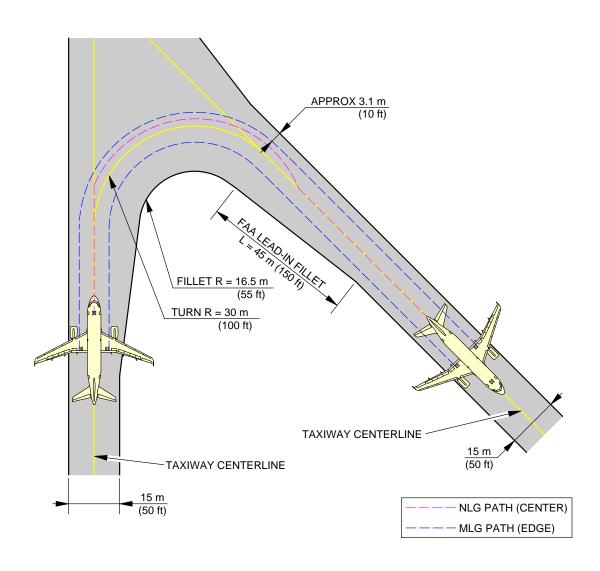


NOTE: FAA GROUP III FACILITIES.

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

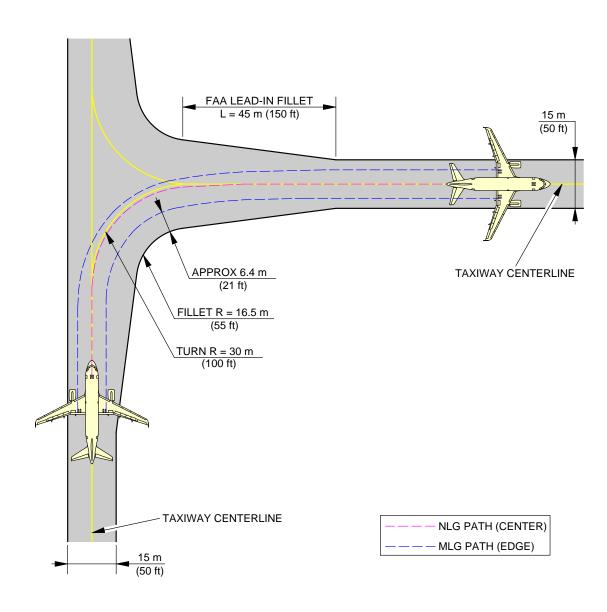
4-5-5 90° Turn - Taxiway to Taxiway

**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

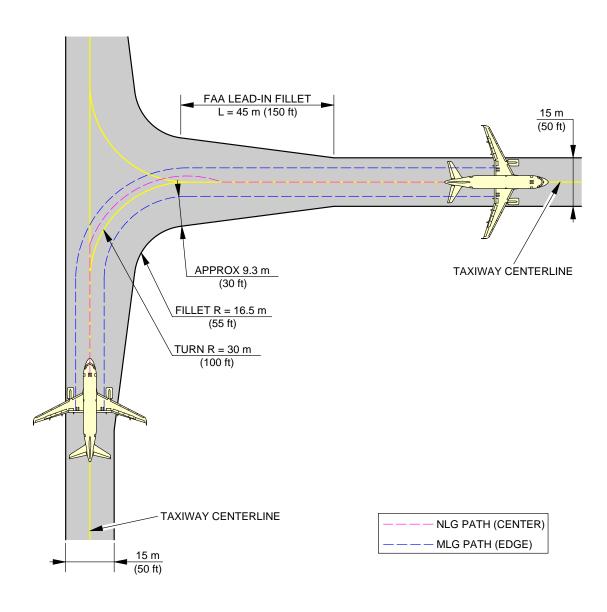


NOTE: FAA GROUP III FACILITIES.

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

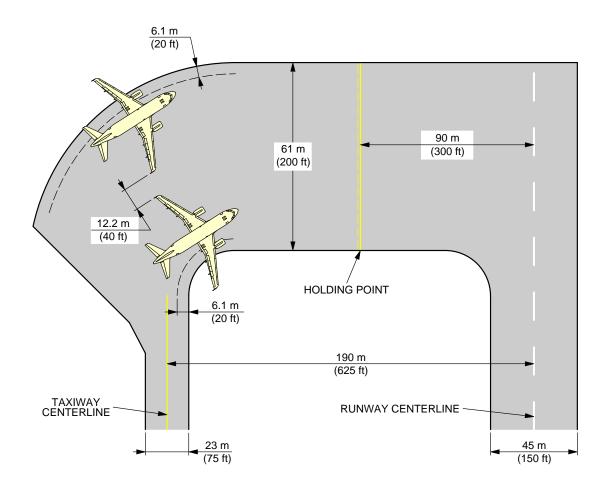
4-6-0 Runway Holding Bay (Apron)

**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

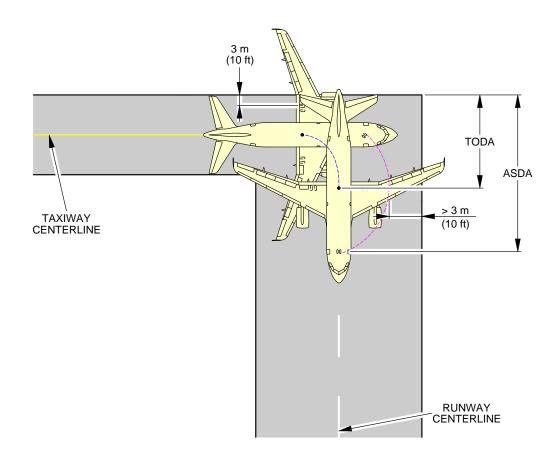
This section gives the minimum line-up distance correction for a 180° turn on the runway width. For this maneuver, the pavement width is considered to be the runway width, which is a frozen parameter (30 m (100 ft), 45 m (150 ft) and 60 m (200 ft)).

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



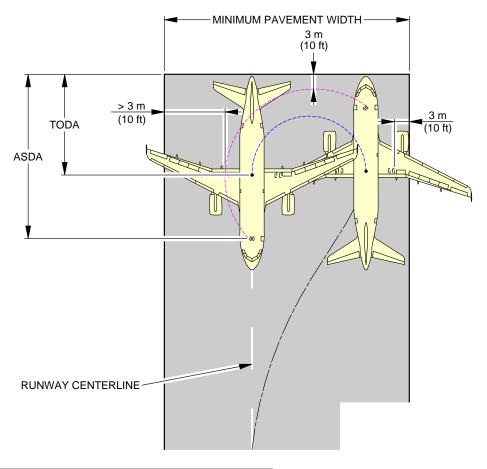
--- ASDA: ACCELERATION-STOP DISTANCE AVAILABLE --- TODA: TAKE-OFF DISTANCE AVAILABLE

90° TURN ON RUNWAY ENTRY						
		30 m (100 ft)/45 m (150 ft)/60 m (200 ft) WIDE RUNWAY				
AIRCRAFT TYPE	TSTEERING		MINIMUM LINE-UP DISTANCE CORRECTION			
		ON TODA ON ASDA		SDA		
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



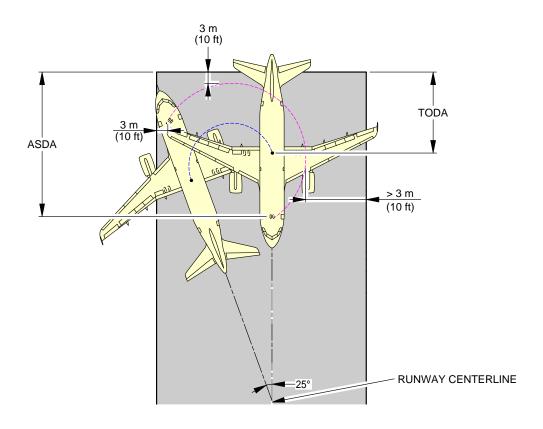
--- ASDA: ACCELERATION-STOP DISTANCE AVAILABLE --- TODA: TAKE-OFF DISTANCE AVAILABLE

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			
		ON TODA		ON ASDA		WIDTH	
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



--- ASDA: ACCELERATION-STOP DISTANCE AVAILABLE --- TODA: TAKE-OFF DISTANCE AVAILABLE

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

N_AC_040700_1_0160101_01_00

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

@A318

AIRCRAFT CHARACTERISTICS - AIRPORT AND MAINTENANCE PLANNING

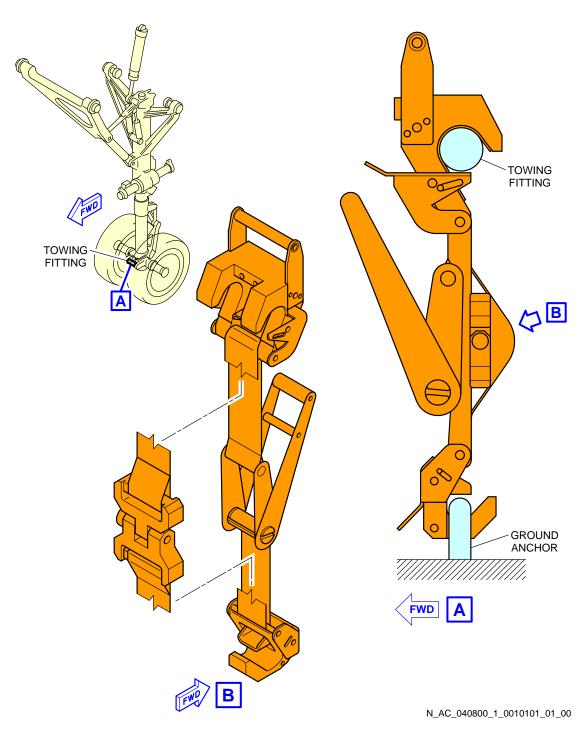
4-8-0 Aircraft Mooring

**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			
СВ	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

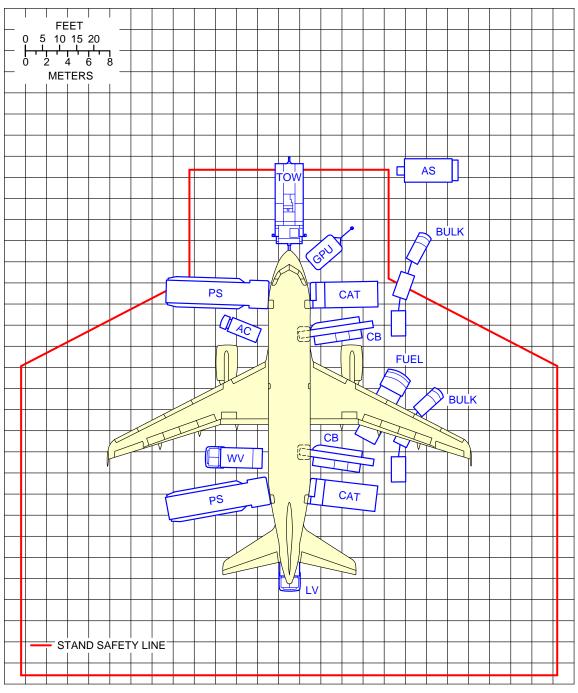
**ON A/C A318-100

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



N_AC_050102_1_0010101_01_04

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

5-1-3 Typical Ramp Layout - Gate

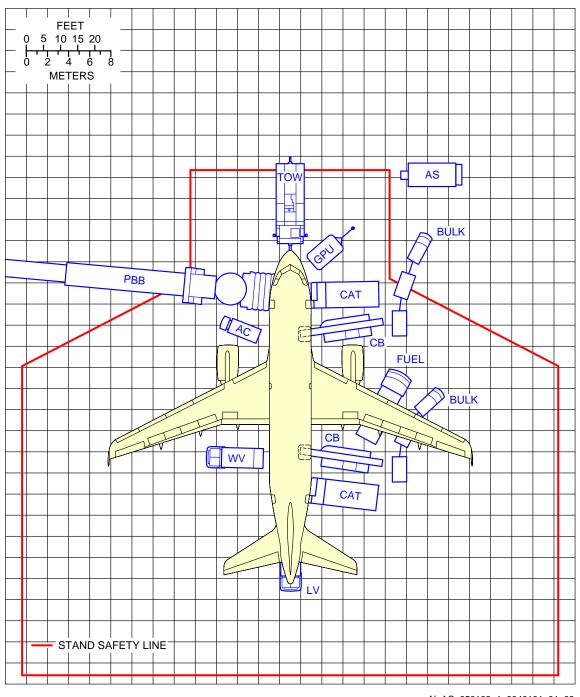
**ON A/C A318-100

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



N_AC_050103_1_0040101_01_03

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 I (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.

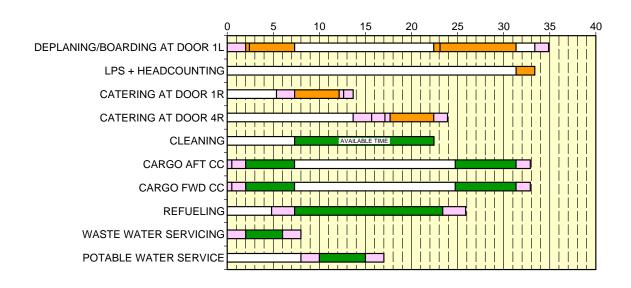
Air conditioning: one hose.

Potable water servicing: 100% uplift, 200 I (53 US gal).

Toilet servicing: draining + rinsing.

**ON A/C A318-100

TRT: 35 min



GSE POSITIONING/REMOVAL
ACTIVITY
CRITICAL PATH

N_AC_050200_1_0040101_01_05

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

<u>Terminal Operations - Outstation Turn Round Time</u>

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.

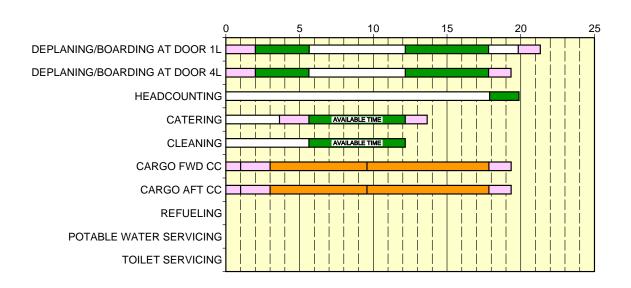
Air conditioning: one hose.

No potable water servicing.

No toilet servicing.

**ON A/C A318-100

TRT: 21 min



GSE POSITIONING/REMOVAL
ACTIVITY
CRITICAL PATH

N_AC_050300_1_0010101_01_05

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

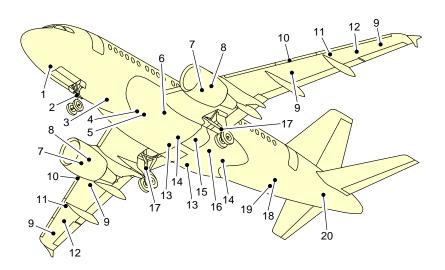
5-4-1 Ground Service Connections

**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

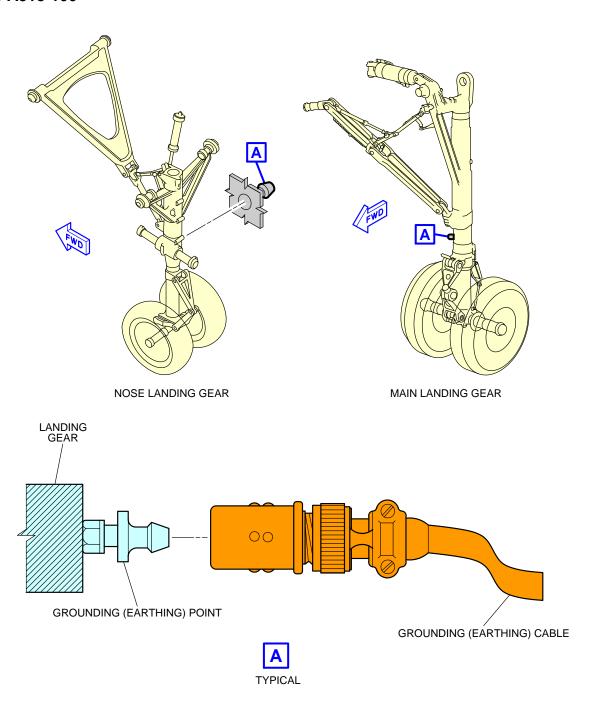
	DISTANCE				
		FROM AIRCRAF	MEAN HEIGHT		
	AFT OF NOSE	LH SIDE	RH SIDE	FROM GROUND	
On Nose Landing Gear leg:	5.07 m (16.63 ft)	On Centerline		0.94 m (3.08 ft)	
On left Main Landing	15.32 m	3.79 m		1.07 m	
Gear leg:	(50.26 ft)	(12.43 ft)		(3.51 ft)	
On right Main Landing Gear leg:	15.32 m (50.26 ft)	-	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,
- Adjacent to the high-pressure connector,
- On the wing upper surfaces.

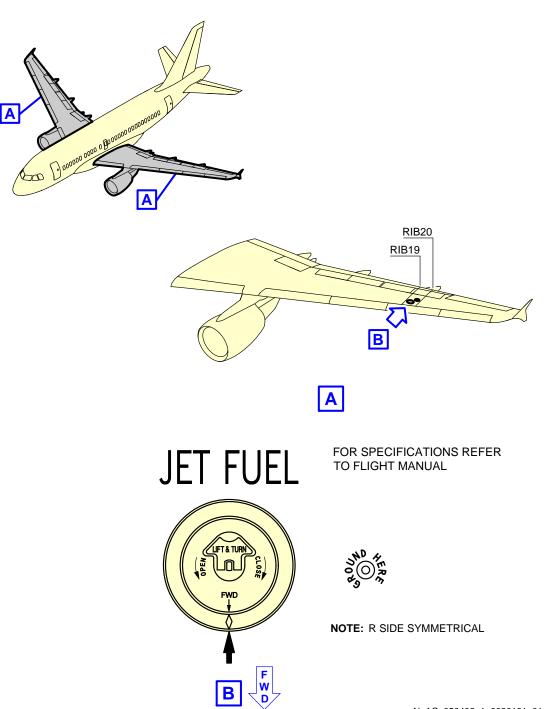
**ON A/C A318-100



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

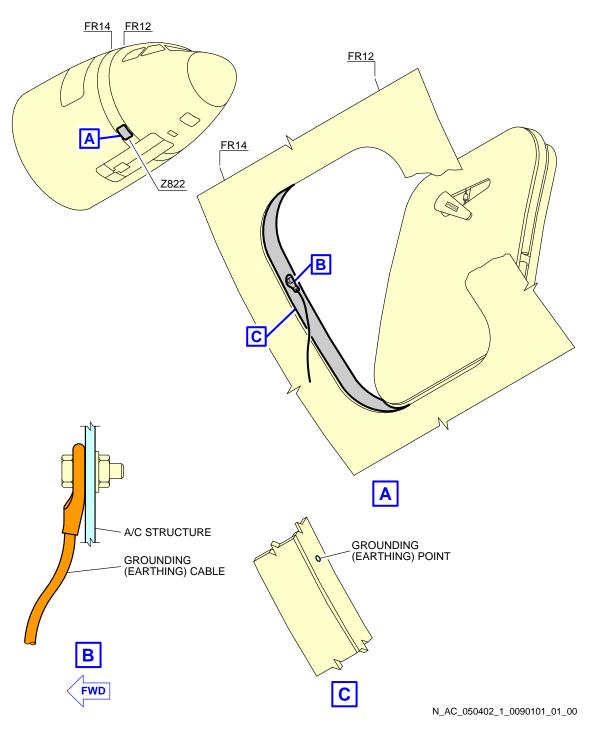
**ON A/C A318-100



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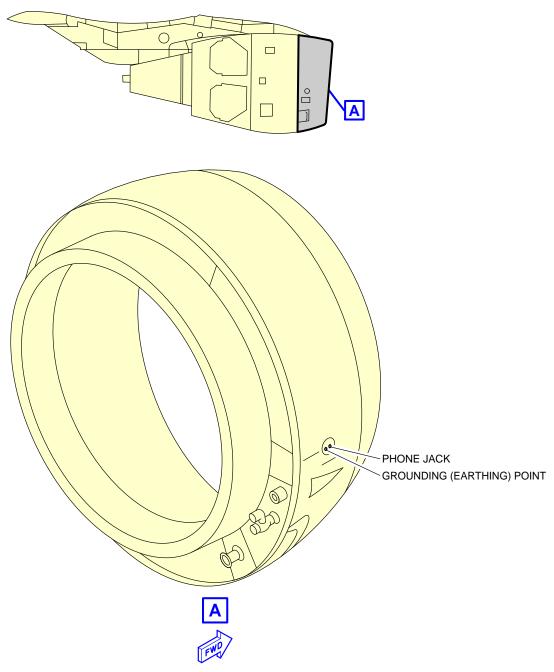
Ground Service Connections
Grounding (Earthing) Points - Wing (If Installed)
FIGURE-5-4-2-991-002-A01

**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



N_AC_050402_1_0100101_01_00

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

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

2. Reservoir Pressurization

ACCESS	DISTANCE				
		FROM AIRCRAF	T CENTERLINE	MEAN HEIGHT	
	AFT OF NOSE	LH SIDE	RH SIDE	FROM GROUND	
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:

		DISTAI	NCE	
ACCESS		FROM AIRCRAI	T CENTERLINE	MEAN HEIGHT
7.00200	AFT OF NOSE	LH SIDE	RH SIDE	FROM GROUND
IAccumulator.	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)
IΔccumulator.	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:

	DISTANCE				
ACCESS		FROM AIRCRAF	T CENTERLINE	MEAN HEIGHT	
	AFT OF NOSE	LH SIDE	RH SIDE	FROM GROUND	
Access Door 107CB	16.43 m	1.27 m		1.76 m	
Access Door 197CB	(53.90 ft)	(4.17 ft)		(5.77 ft)	

Filling: Ground pressurized supply or hand pump.

5. Reservoir Drain

Three 3/8 in. self-sealing connections:

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

	DISTANCE				
ACCESS		FROM AIRCRAF	T CENTERLINE	MEAN HEIGHT	
7,00200	AFT OF NOSE	LH SIDE	RH SIDE	FROM GROUND	
Access Door 196BB	(43.31 ft)		(0.82 ft)	(5.71 ft)	
Green System:	14.30 m	0.25 m		3.20 m	
Left MLG Door	(46.92 ft)	(0.82 ft)		(10.50 ft)	
Blue System:	16.96 m	1.27 m		1.76 m	
Access Door 197EB	(55.64 ft)	(4.17 ft)		(5.77 ft)	

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

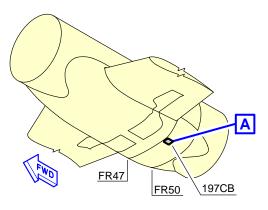
The drain valve is on the reservoir for the Green and Yellow Hydraulic Systems.

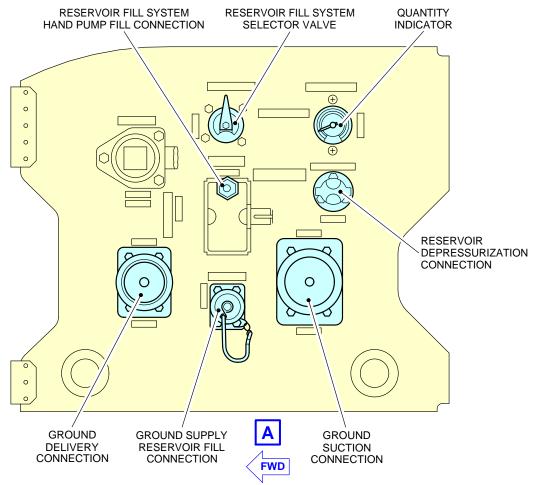
6. Ground Test

On each ground service panel:

- One self-sealing connector (suction).
- One self-sealing connector (delivery).

**ON A/C A318-100

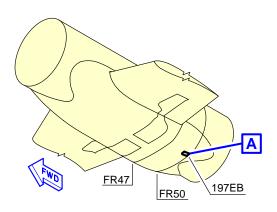


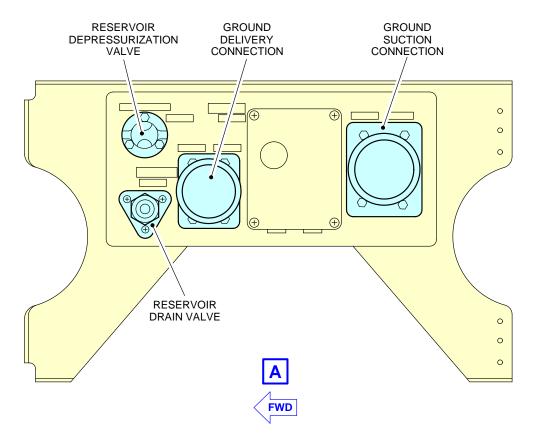


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Ground Service Connections Green System Ground Service Panel FIGURE-5-4-3-991-004-A01

**ON A/C A318-100

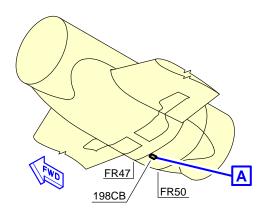


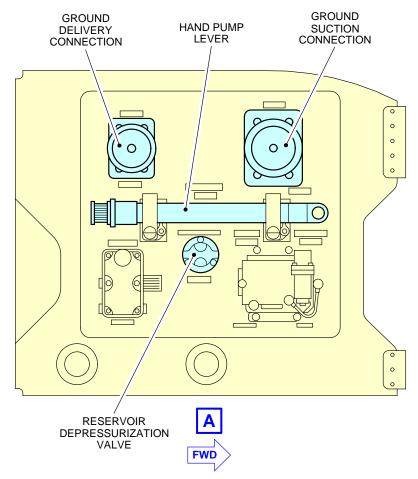


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Ground Service Connections
Blue System Ground Service Panel
FIGURE-5-4-3-991-005-A01

**ON A/C A318-100

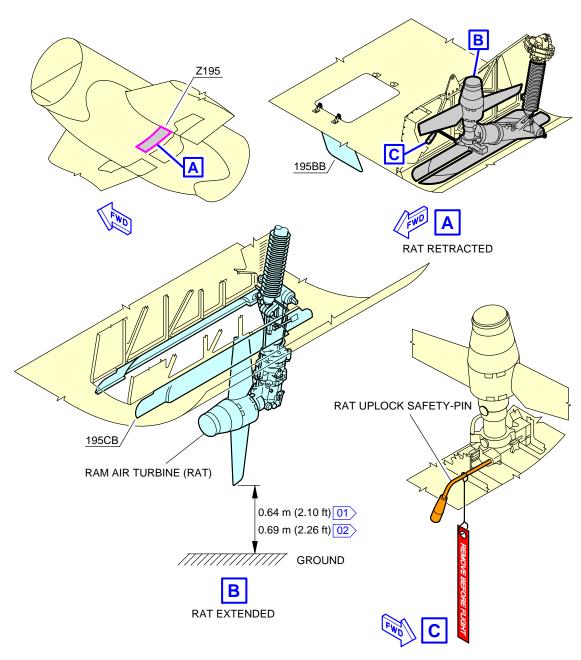




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Ground Service Connections Yellow System Ground Service Panel FIGURE-5-4-3-991-006-A01

**ON A/C A318-100



NOTE:

01 FOR A318, A319 AND A320

02 FOR A321

N_AC_050403_1_0070101_01_00

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.

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

NOTE: Distances are approximate.

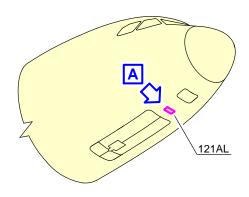
2. Technical Specifications

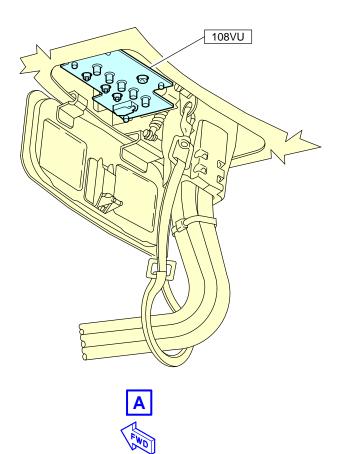
- A. External Power Receptacle:
 - One receptacle according to MS 90362-3 (without shield MS 17845-1) 90 kVA.

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 5258DC outlets: HUBBELL 7472.

**ON A/C A318-100





N_AC_050404_1_0010101_01_01

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

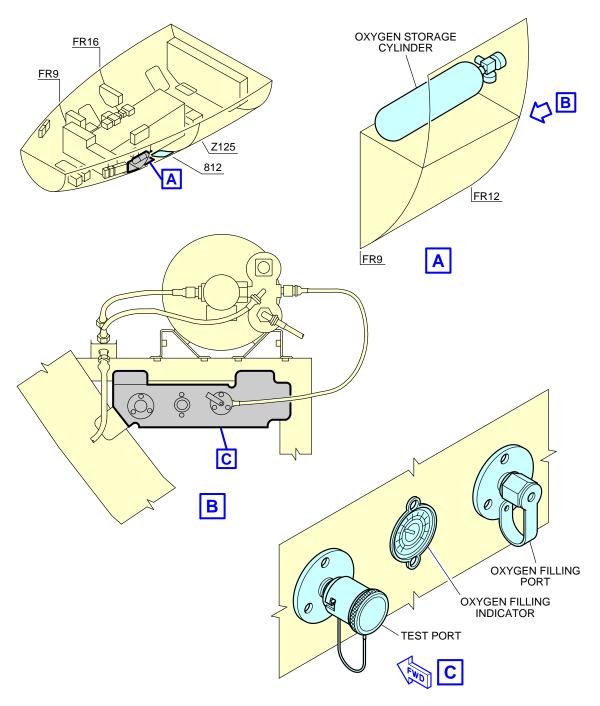
	DISTANCE				
ACCESS		FROM AIRCRAF	T CENTERLINE	MEAN HEIGHT	
	AFT OF NOSE	LH SIDE	RH SIDE	FROM GROUND	
Oxygen Replenishment:	3.45 m	1.15 m		2.60 m	
Access Door 812	(11.32 ft)	(3.77 ft)	-	(8.53 ft)	

2. Technical Specifications

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

<u>NOTE</u>: External charging in the avionics compartment.

**ON A/C A318-100



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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

		DISTANCE		
ACCESS	AFT OF NOSE	POSITION FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		LH SIDE	RH SIDE	T KOW GROOND
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

	DISTANCE				
ACCESS	AFT OF NOSE		N FROM CENTERLINE	MEAN HEIGHT FROM GROUND	
		LH SIDE	RH SIDE	1 KOW GROUND	
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:

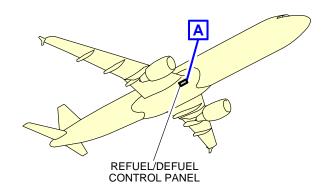
- 1250 l/min (330 US gal/min).

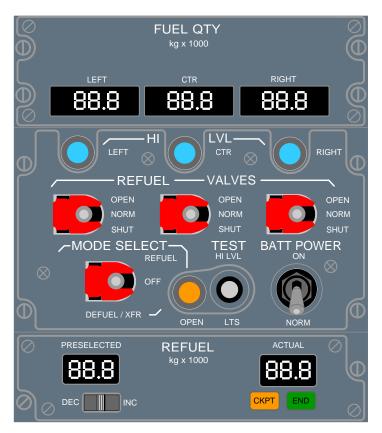
3. Overpressure Protectors and NACA Vent Intake

		DIST	ANCE	
ACCESS	AFT OF NOSE	AFT OF NOSE 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





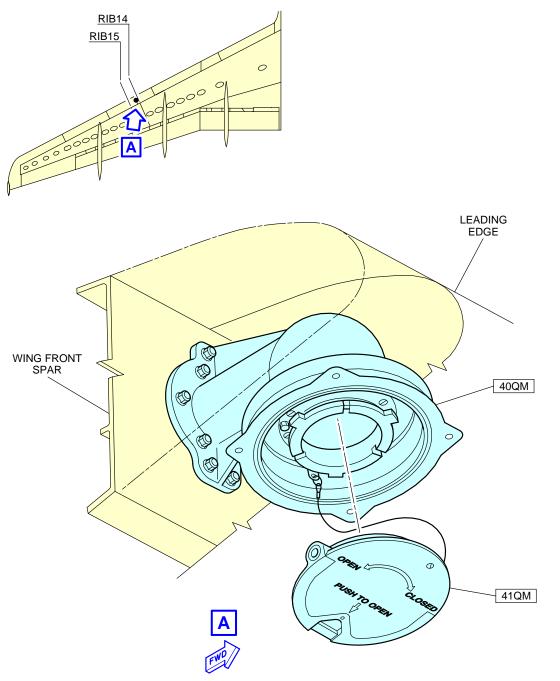


NOTE: STANDARD CONFIGURATION OF REFUEL/DEFUEL PANEL.

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

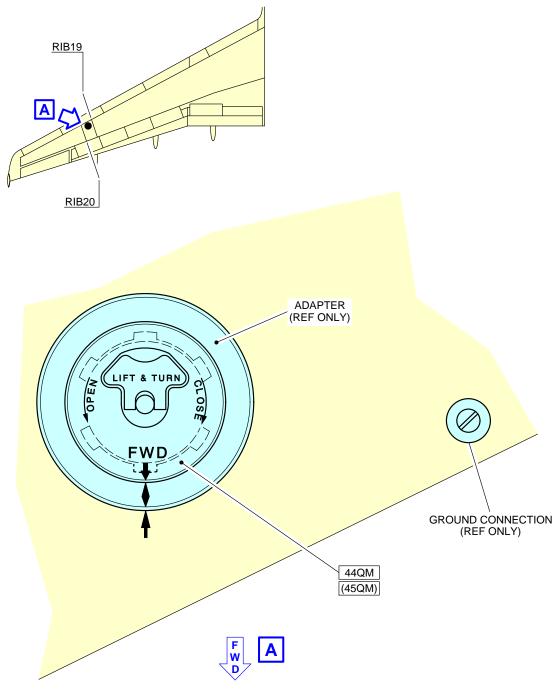
**ON A/C A318-100



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

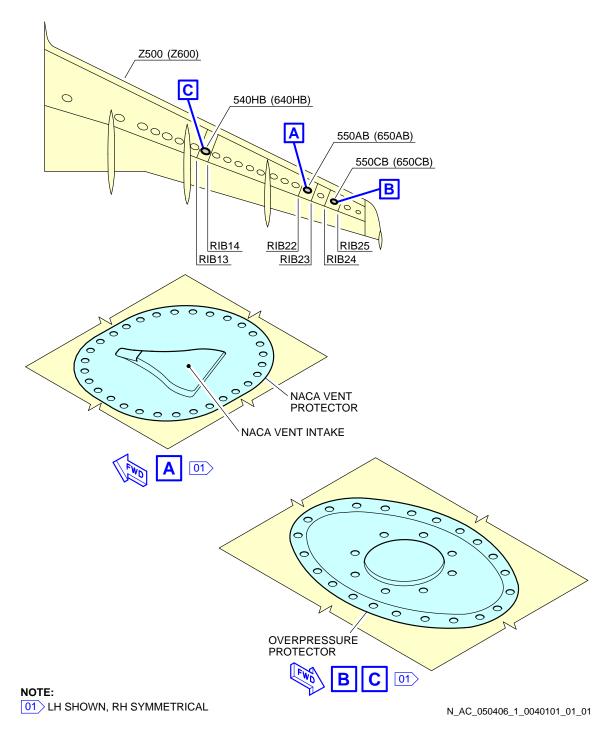
**ON A/C A318-100



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

**ON A/C A318-100



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

	DISTANCE			
ACCESS	AFT OF NOSE	FROM AIRCRAFT CENTERLINE		MEAN HEIGHT
	ALL OF NOSE	LH SIDE	RH SIDE	FROM GROUND
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.

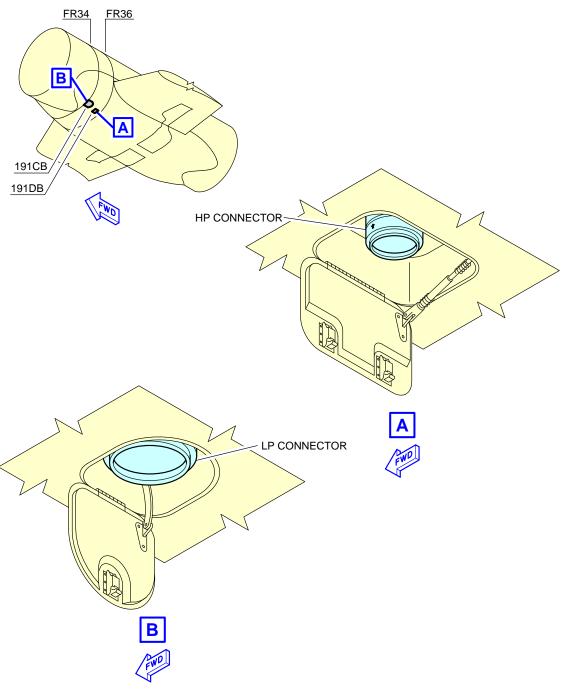
2. Low Pressure Air Connector

	DISTANCE				
ACCESS	AFT OF NOSE	FROM AIRCRAFT CENTERLINE		MEAN HEIGHT	
	ALL OF NOSE	LH SIDE	RH SIDE	FROM GROUND	
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



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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.

	DISTANCE				
ACCESS		FROM AIRCRAFT CENTERLINE		MEAN HEIGHT	
ACCESS	AFT OF NOSE	ENGINE 1 (LH)	ENGINE 2 (RH)	FROM GROUND	
IACCESS GOOL, TAKE	12.30 m (40.35 ft)		4.82 m (15.81 ft)	1.46 m (4.79 ft)	
0	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 I (5 US gal),

- Usable: 9.46 I (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.

	DISTANCE			
ACCESS		FROM AIRCRAFT CENTERLINE		MEAN HEIGHT
ACCESS	AFT OF NOSE	ENGINE 1 (LH)	ENGINE 2 (RH)	FROM GROUND
INCCESS HOUR, TANK			5.52 m (18.11 ft)	0.68 m (2.23 ft)

NOTE: Distances are approximate.

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

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

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

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

NOTE: Distances are approximate.

Tank capacity: 0.8 I (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.

	DISTANCE				
ACCESS	AFT OF NOSE	FROM AIRCRAFT CENTERLINE		MEAN HEIGHT	
ACCESS		ENGINE 1 (LH)	ENGINE 2 (RH)	FROM GROUND	
ACCESS HOOR. ARRE			6.63 m (21.75 ft)	1.80 m (5.91 ft)	

NOTE: Distances are approximate.

Tank capacity:

Full level: 18.36 I (5 US gal),

Usable: 23.50 I (6 US gal),

Engine oil tank capacity: 18.36 I (5 US gal).

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

	DISTANCE			
ACCESS		FROM AIRCRAFT CENTERLINE		MEAN HEIGHT
AGGEGG	AFT OF NOSE	ENGINE 1 (LH)	ENGINE 2 (RH)	FROM GROUND
ACCESS HOOR ARRINE			6.17 m (20.24 ft)	1.02 m (3.35 ft)

<u>NOTE</u>: Distances are approximate.

A. Distances are approximate.

- Tank capacity: 6.28 I (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.

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

<u>NOTE</u>: Distances are approximate.

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

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

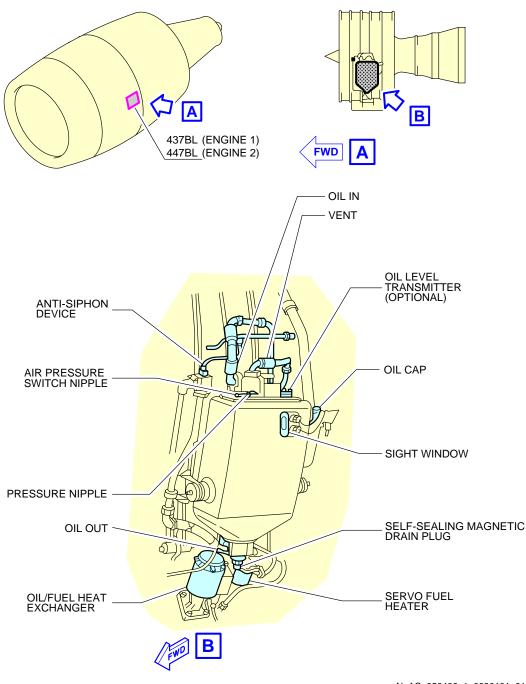
	DISTANCE			
ACCESS		FROM AIRCRAFT CENTERLINE		MEAN HEIGHT
ACCECC	AFT OF NOSE	ENGINE 1 (LH)	ENGINE 2 (RH)	FROM GROUND
GTCP 36-300	29.37 m	0.30 m		4.83 m
3161 30-300	(96.36 ft)	(0.98 ft)		(15.85 ft)
APS 3200	29.37 m	0.30 m		4.78 m
A 3 3200	(96.36 ft)	(0.98 ft)		(15.68 ft)
131-9	29.27 m	0.35 m	-	4.32 m

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

<u>NOTE</u>: Distances are approximate.

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

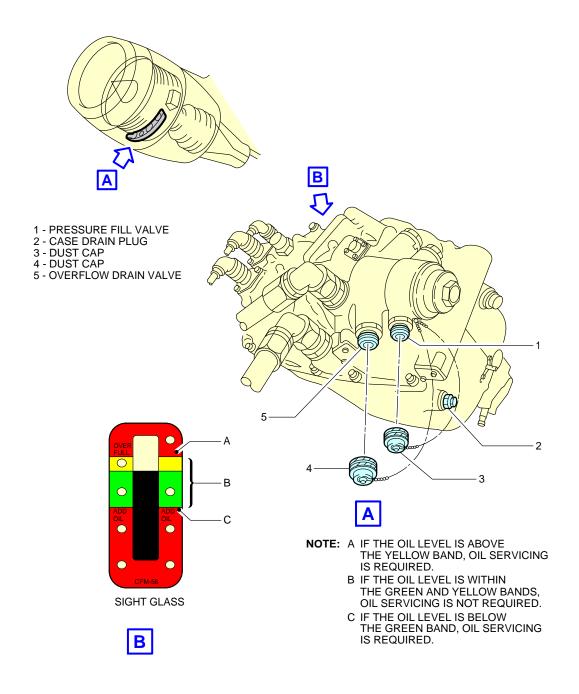
**ON A/C A318-100



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

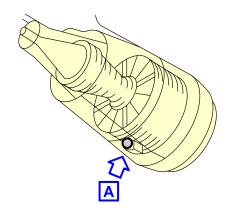
**ON A/C A318-100

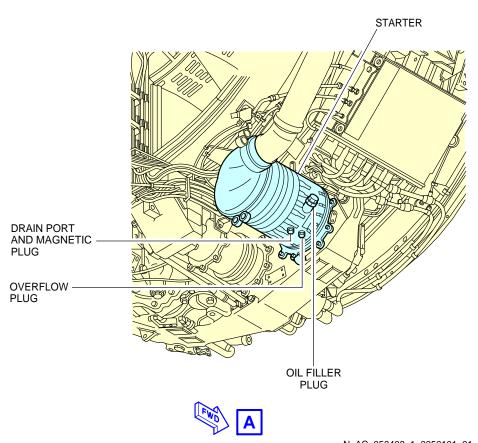


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Ground Service Connections IDG Oil Tank – CFM56 Series Engine FIGURE-5-4-8-991-004-A01

**ON A/C A318-100

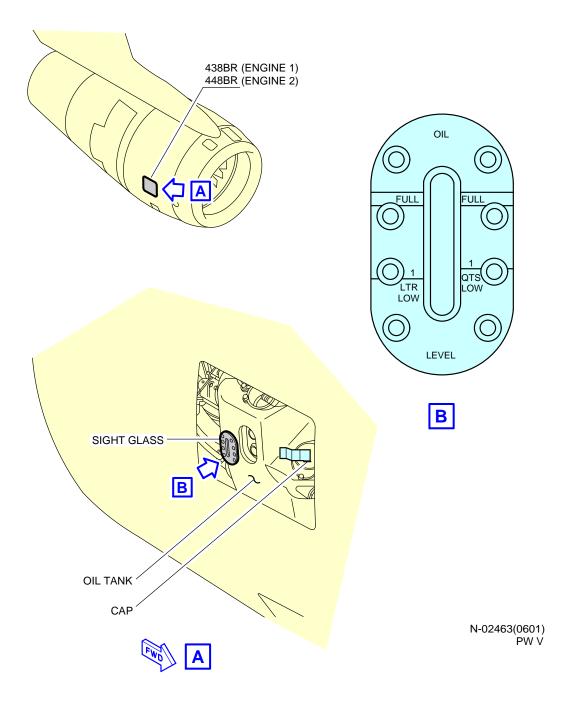




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Ground Service Connections Starter Oil Tank – CFM56 Series Engine FIGURE-5-4-8-991-005-A01

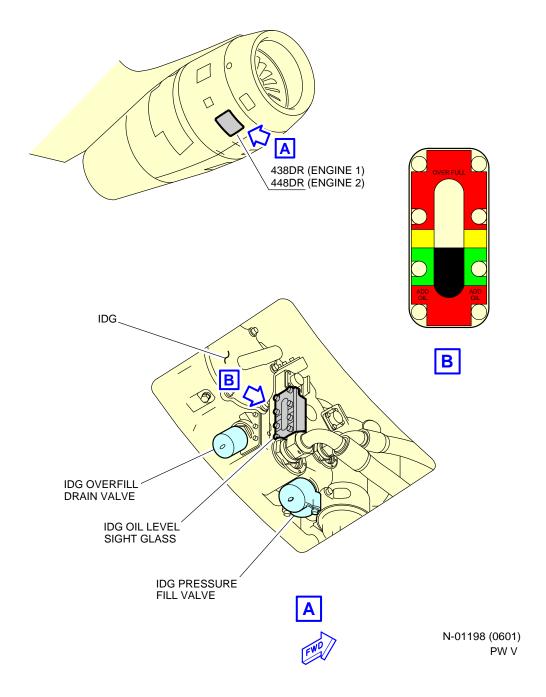
**ON A/C A318-100



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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



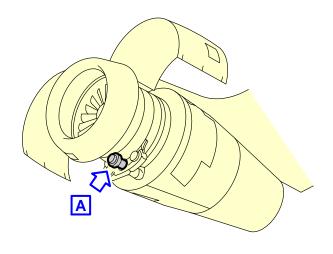
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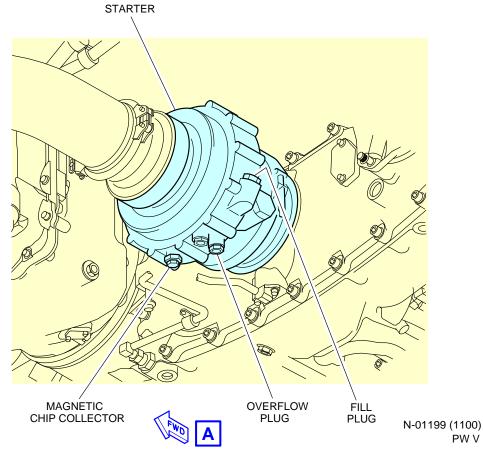
Ground Service Connections IDG Oil Tank – PW6000 Series Engine FIGURE-5-4-8-991-007-A01

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AIRCRAFT CHARACTERISTICS - AIRPORT AND MAINTENANCE PLANNING

**ON A/C A318-100

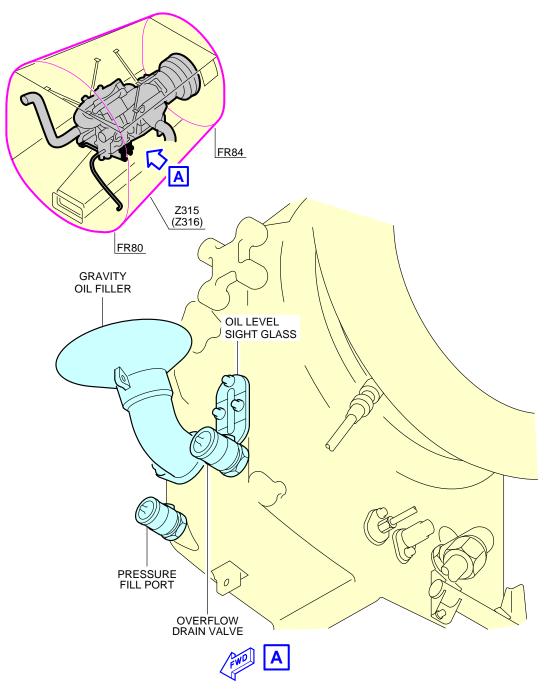




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Ground Service Connections Starter Oil Tank – PW6000 Series Engine FIGURE-5-4-8-991-008-A01

**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

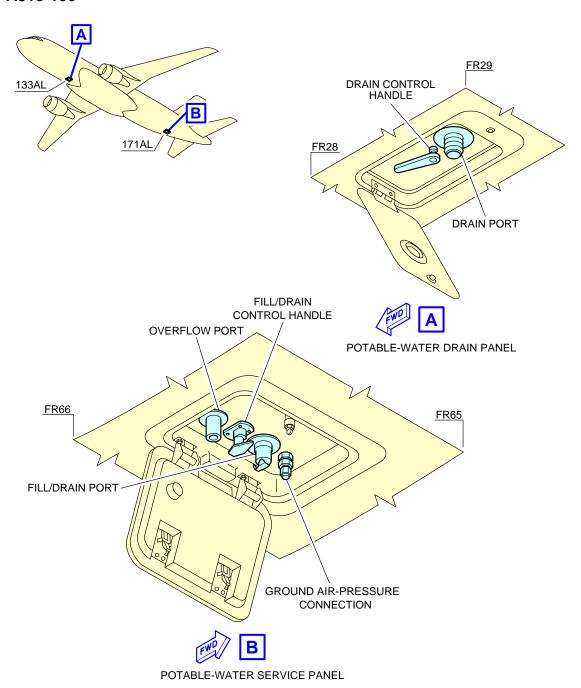
	DISTANCE				
ACCESS	AFT OF NOSE	POSITION FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND	
		LH SIDE	RH SIDE	FROM GROUND	
IService Panel:		0.3 m (0.98 ft)	_	2.6 m (8.53 ft)	
Potable-Water Drain Panel: Access Door 133AL		0.15 m (0.49 ft)	-	1.75 m (5.74 ft)	

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 I (53 US gal).
- C. Filling pressure:
 - 3.45 bar (50 psi).
- D. Typical flow rate:
 - 50 l/min (13 US gal/min).

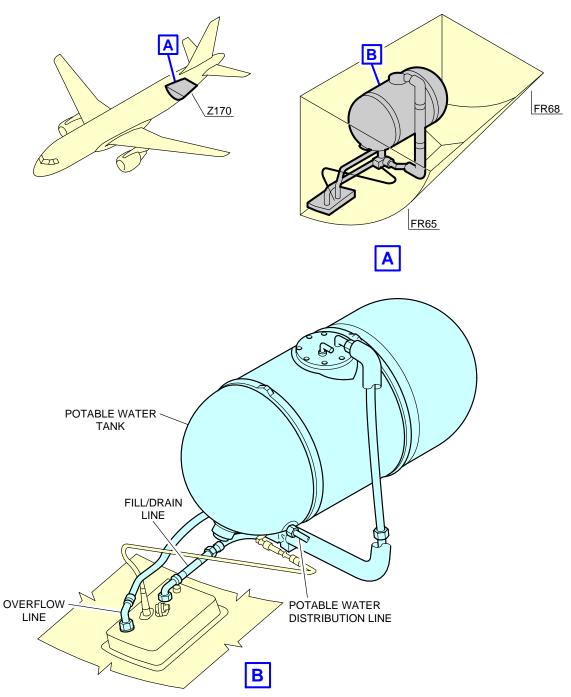
**ON A/C A318-100



N_AC_050409_1_0290101_01_00

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

**ON A/C A318-100



N_AC_050409_1_0300101_01_00

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

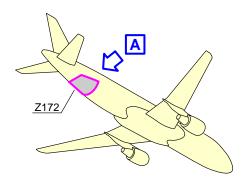
	DISTANCE							
ACCESS	AFT OF NOSE	POSITIO AIRCRAFT C	MEAN HEIGHT FROM GROUND					
		LH SIDE	RH SIDE	T KOW GROUND				
Waste-Water								
Ground Service	25.2 m		0.8 m	2.8 m				
Panel:	(82.68 ft)	=	(2.62 ft)	(9.19 ft)				
Access door 172AR								

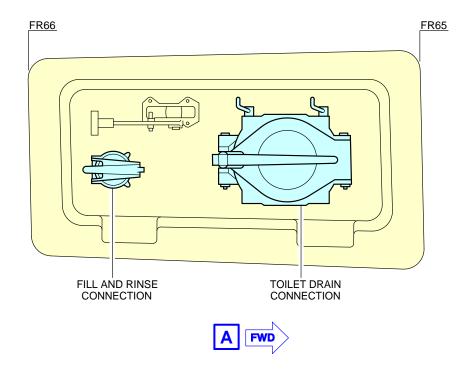
<u>NOTE</u>: Distances are approximate.

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 I (47 US gal).
- C. Waste tank Rinsing:
 - Operating pressure: 3.45 bar (50 psi).
- D. Waste tank Precharge:
 - 10 I (3 US gal).

**ON A/C A318-100

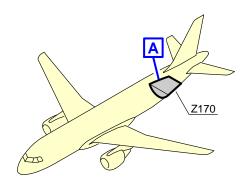


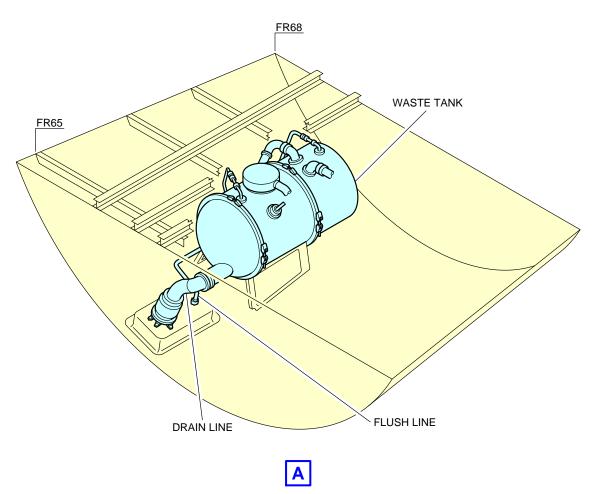


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Ground Service Connections Waste Water Ground Service Panel FIGURE-5-4-10-991-001-A01

**ON A/C A318-100





N_AC_050410_1_0040101_01_00

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		
	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.
- 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		
	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.

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

5-6-0

- 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:

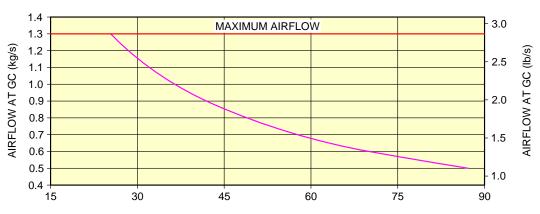
©A318

AIRCRAFT CHARACTERISTICS - AIRPORT AND MAINTENANCE PLANNING

- 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

PULL UP PERFORMANCE



TIME TO HEAT CABIN TO +21° C (+69.8° F) ON GROUND (min)

 OAT ISA -38° C (-36.4° F); GC INLET +70° C (+158° F); EMPTY CABIN; IFE OFF; NO SOLAR LOAD; LIGHTS ON; GALLEYS OFF; RECIRCULATION FANS ON

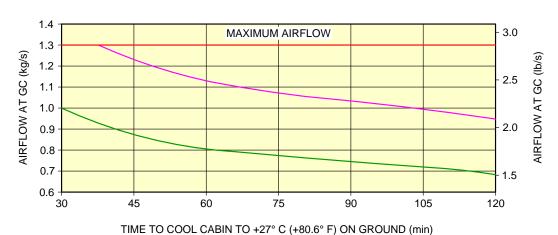
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Ground Pneumatic Power Requirements
Heating
FIGURE-5-6-0-991-001-A01

5-6-0

**ON A/C A318-100

PULL DOWN PERFORMANCE



 OAT ISA +23° C (+73.4° F); GC INLET +2° C (+35.6° F); EMPTY CABIN; IFE OFF; NO SOLAR LOAD; LIGHTS ON; GALLEYS OFF; RECIRCULATION FANS ON

 OAT ISA +23° C (+73.4° F); GC INLET -10° C (+14° F); EMPTY CABIN; IFE OFF; NO SOLAR LOAD; LIGHTS ON; GALLEYS OFF; RECIRCULATION FANS ON

N_AC_050600_1_0020101_01_00

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

5-6-0

5-7-0 Preconditioned Airflow Requirements

**ON A/C A318-100

Preconditioned Airflow Requirements

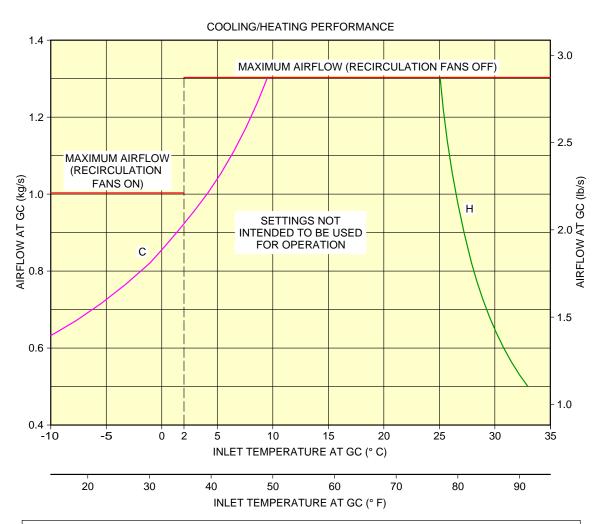
1. This section provides the preconditioned airflow rate and temperature needed to maintain the cabin temperature at 27 °C (80.6 °F) for the cooling or 21 °C (69.8 °F) for the heating cases.

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).

5-7-0

**ON A/C A318-100



- OAT ISA +23° C (73.4° F); EMPTY CABIN; IFE ON; LIGHTS ON; SOLAR LOAD; RECIRCULATION FANS ON; GALLEYS ON
- OAT ISA -38° C (-36.4° F); EMPTY CABIN; IFE OFF; LIGHTS ON; NO SOLAR LOAD; RECIRCULATION FANS ON; GALLEYS OFF

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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) and with towing shear pins:

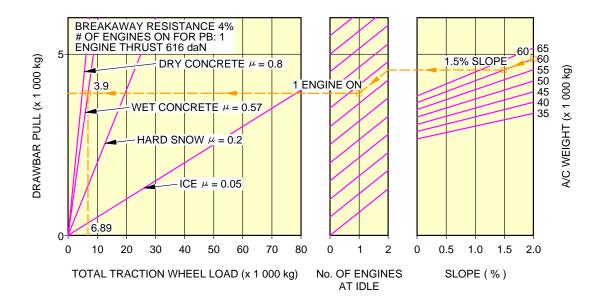
- A traction shear pin calibrated at 9 425 daN (21 188 lbf),
- A torsion pin calibrated at 826 m.daN (6 092 lbf.ft).

@A318

AIRCRAFT CHARACTERISTICS - AIRPORT AND MAINTENANCE PLANNING

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 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)		(Both Ir Outside	Wingtip Devices (Both Inside and Outside Surfaces) (Both Sides)		Surface Sides)	VTP (Both Sides)	
	m²	m² ft²		ft²	m²	ft²	m²	ft ²
A318	100	1 076	2	22	27	291	46	495

AIRCRAFT TYPE	RAFT TYPE Fuselage Top Surface (Top Third - 120° Arc) m² ft²		` '	ind Pylon - 120° Arc) igines)	Total De-Iced Area	
			m²	ft²	m²	ft²
A318	112	1 206	24	258	310	3 337

 $\underline{\mathsf{NOTE}}: \ \ \mathsf{Dimensions} \ \mathsf{are} \ \mathsf{approximate}.$

3. External Cleaning

			Wing	Lower	Wingtip	Devices					
	Wing Top		Surface		(Both Inside		HTP Top		HTP Lower		
AIRCRAFT			(Including Flap		and Outside		Surface		Surface		
TYPE	(Both	(Both Sides)		Track Fairing)		Surfaces)		(Both Sides)		(Both Sides)	
	,	·	(Both Sides)		(Both Sides)		,	•		ŕ	
	m²	ft²	m²	ft²	m²	ft²	m²	ft²	m²	ft²	
A318	100	1 076	103	1 109	2	22	27	291	27	291	

AIRCRAFT TYPE	VTP RAFT TYPE (Both Sides)		Fuselage and Belly Fairing			and Pylon ngines)	Total Cleaned Area	
	m²	ft ²	m²	ft²	m²	ft²	m²	ft²
A318	46	495	343	3 692	73	786	723	7 782

 $\underline{\mathsf{NOTE}}: \ \ \mathsf{Dimensions} \ \mathsf{are} \ \mathsf{approximate}.$

OPERATING CONDITIONS

6-1-0 Engine Exhaust Velocities and Temperatures

**ON A/C A318-100

Engine Exhaust Velocities and Temperatures

1. General

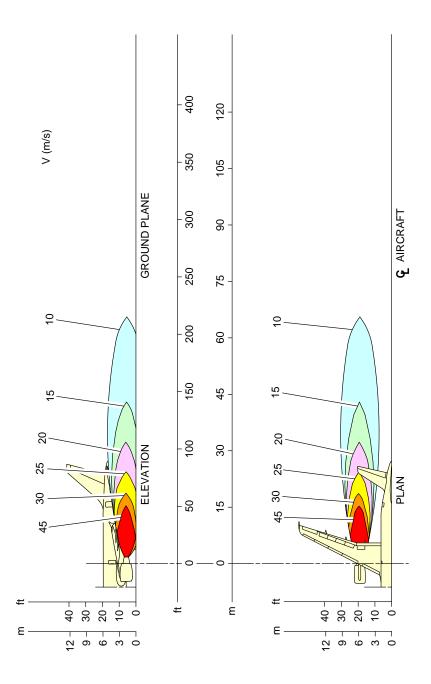
This section provides the estimated engine exhaust efflux velocities and temperatures contours for Ground Idle, Breakaway and Maximum Take-Off (MTO) conditions.

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

**ON A/C A318-100

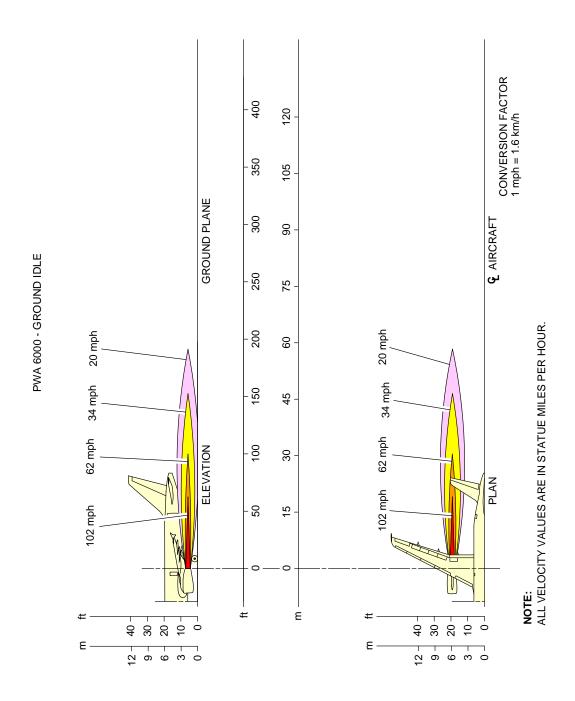
Engine Exhaust Velocities Contours - Ground Idle Power

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



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



N_AC_060101_1_0020101_01_01

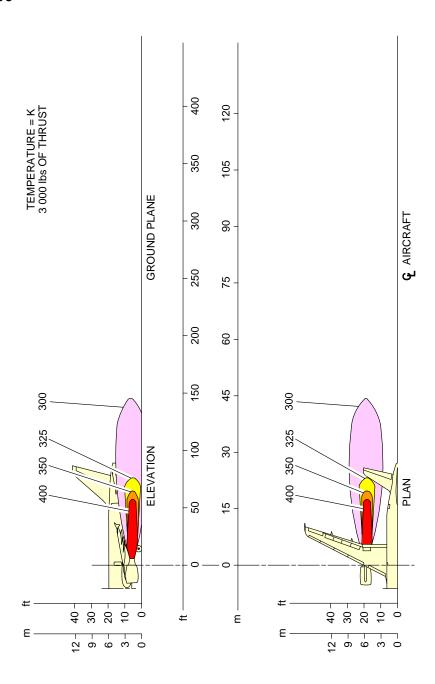
Engine Exhaust Velocities Ground Idle Power – PW 6000 Series Engine FIGURE-6-1-1-991-002-A01

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

**ON A/C A318-100

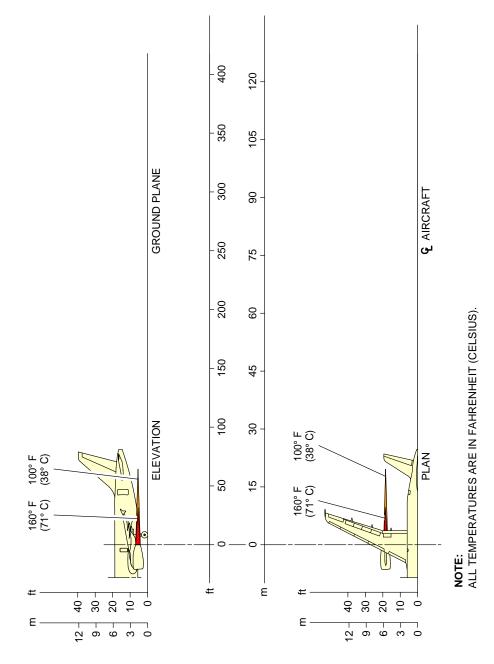
Engine Exhaust Temperatures Contours - Ground Idle Power

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



N_AC_060102_1_0010101_01_01

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



N_AC_060102_1_0020101_01_01

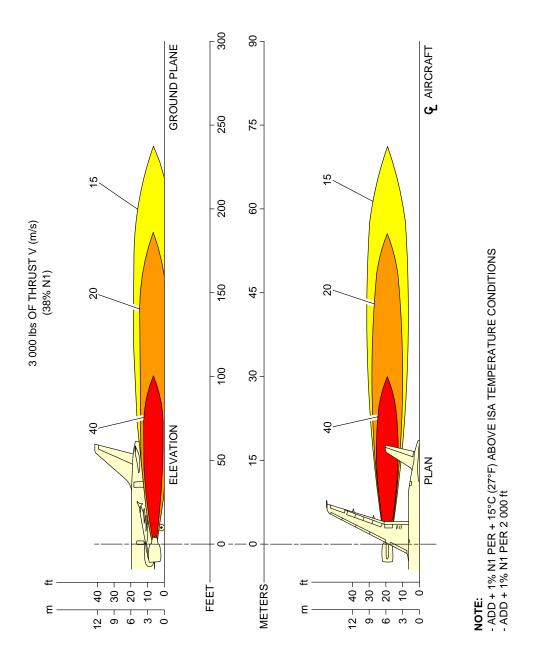
Engine Exhaust Temperatures Ground Idle Power – PW 6000 Series Engine FIGURE-6-1-2-991-002-A01

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

**ON A/C A318-100

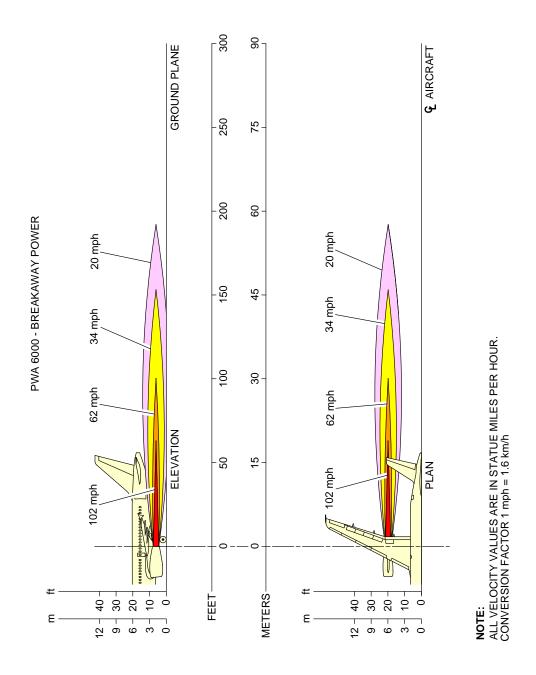
Engine Exhaust Velocities Contours - Breakaway Power

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



N_AC_060103_1_0010101_01_01

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



N_AC_060103_1_0020101_01_01

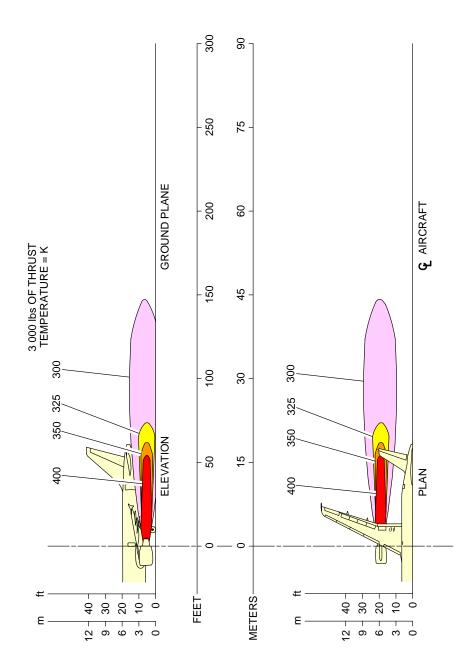
Engine Exhaust Velocities Breakaway Power – PW 6000 Series Engine FIGURE-6-1-3-991-002-A01

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

**ON A/C A318-100

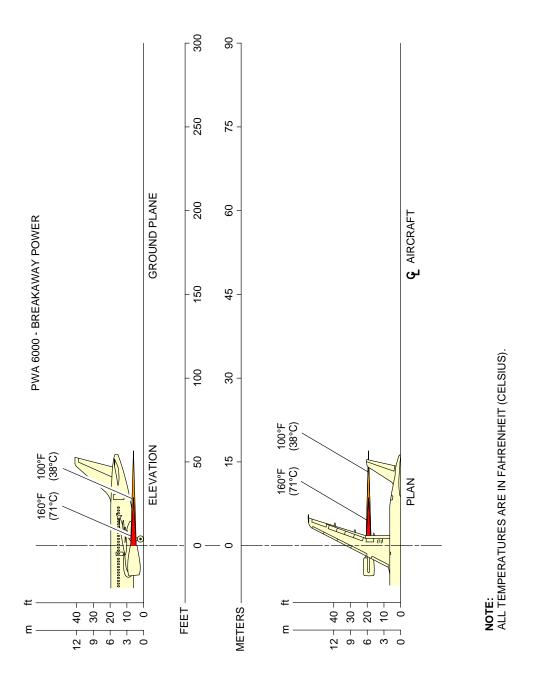
Engine Exhaust Temperatures Contours - Breakaway Power

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



N_AC_060104_1_0010101_01_01

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



N_AC_060104_1_0020101_01_01

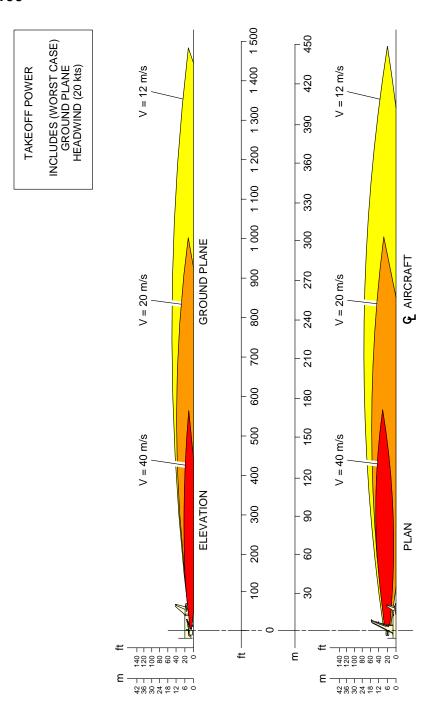
Engine Exhaust Temperatures Breakaway Power – PW 6000 Series Engine FIGURE-6-1-4-991-002-A01

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

**ON A/C A318-100

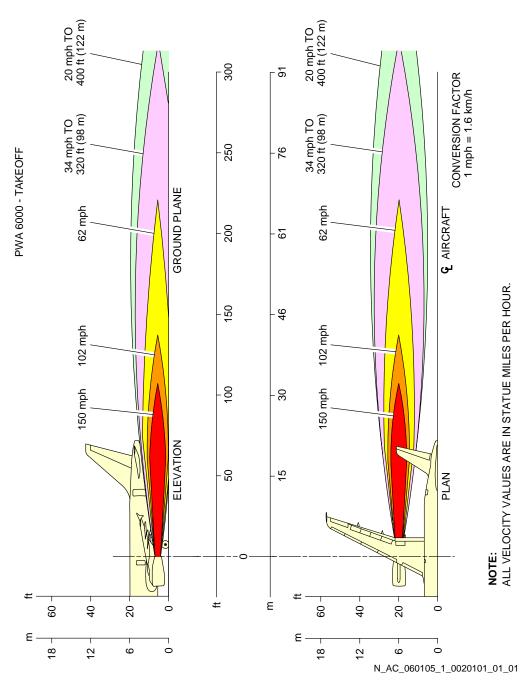
Engine Exhaust Velocities Contours - Takeoff Power

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



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



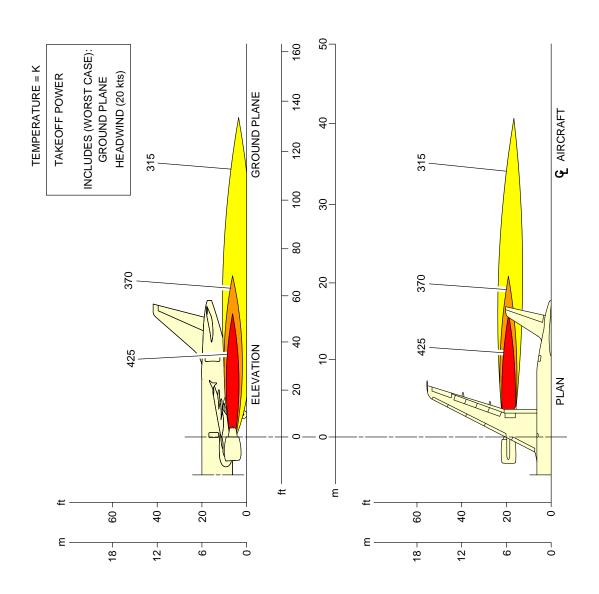
Engine Exhaust Velocities
Takeoff Power – PW 6000 Series Engine
FIGURE-6-1-5-991-002-A01

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

**ON A/C A318-100

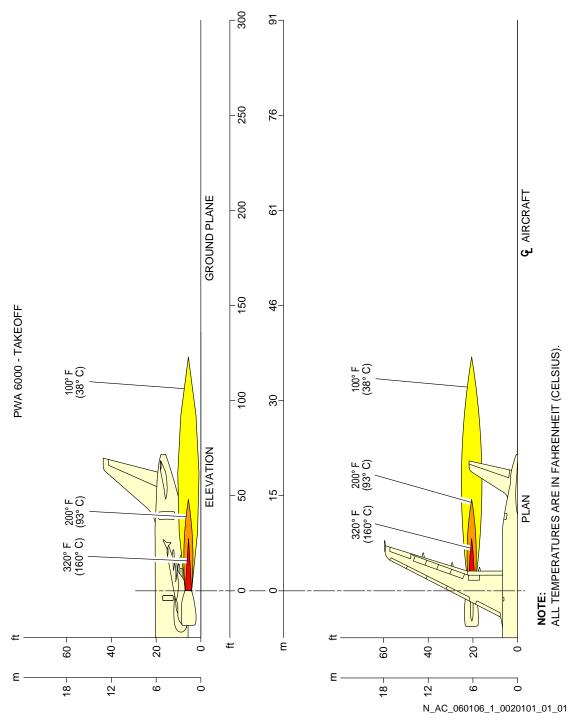
Engine Exhaust Temperatures Contours - Takeoff Power

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



N_AC_060106_1_0010101_01_01

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



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).

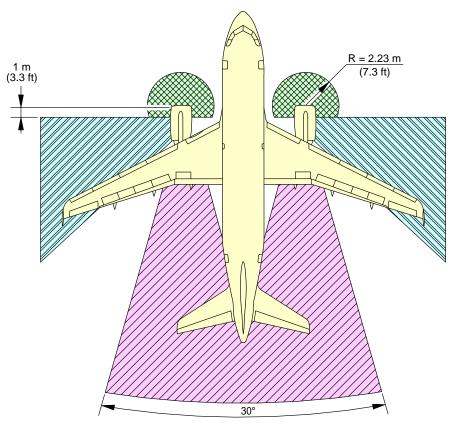
6-3-1 Ground Idle Power

**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



TO 55 m (180 ft) AFT OF COMMON NOZZLE ASSEMBLY (CNA) INCLUDES CROSS WIND EFFECT





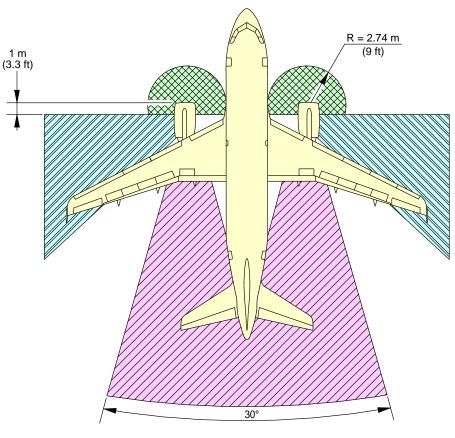


EXHAUST WAKE DANGER AREA

N_AC_060301_1_0010101_01_03

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

**ON A/C A318-100



TO 61 m (200 ft) AFT OF COMMON NOZZLE ASSEMBLY (CNA) INCLUDES CROSS WIND EFFECT

NOTE:

INTAKE SUCTION DANGER AREA

ENTRY CORRIDOR

EXHAUST DANGER AREA

N_AC_060301_1_0020101_01_02

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

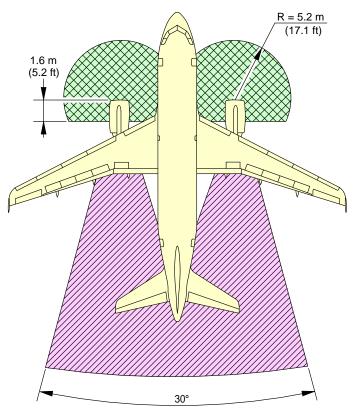
6-3-2 Breakaway Power

**ON A/C A318-100

Breakaway Power

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

**ON A/C A318-100



TO 74.7 m (245 ft) AFT OF COMMON NOZZLE ASSEMBLY (CNA) INCLUDES CROSS WIND EFFECT

NOTE:

INTAKE SUCTION DANGER AREA

EXHAUST WAKE DANGER

N_AC_060302_1_0010101_01_02

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

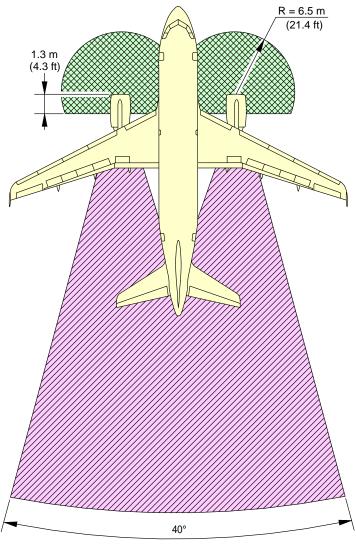
6-3-3 Max Take Off Power

**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



TO 275 m (900 ft) AFT OF COMMON NOZZLE ASSEMBLY (CNA) INCLUDES CROSS WIND EFFECT

NOTE:

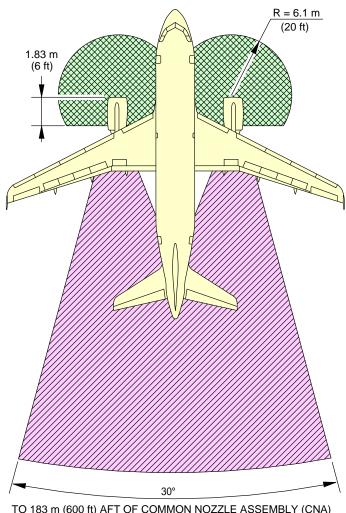
INTAKE SUCTION DANGER AREA

EXHAUST WAKE DANGER

N_AC_060303_1_0150101_01_01

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

**ON A/C A318-100



TO 183 m (600 ft) AFT OF COMMON NOZZLE ASSEMBLY (CNA) INCLUDES CROSS WIND EFFECT

NOTE:

INTAKE SUCTION DANGER AREA

EXHAUST WAKE DANGER

N_AC_060303_1_0180101_01_01

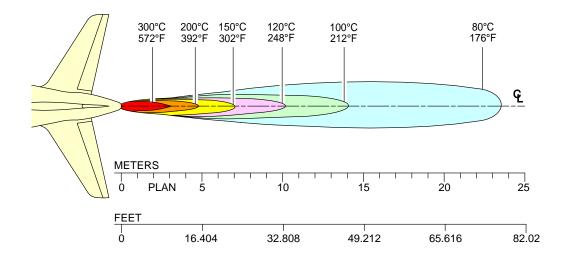
Danger Areas of the Engines PW 6000 Series Engine FIGURE-6-3-3-991-018-A01

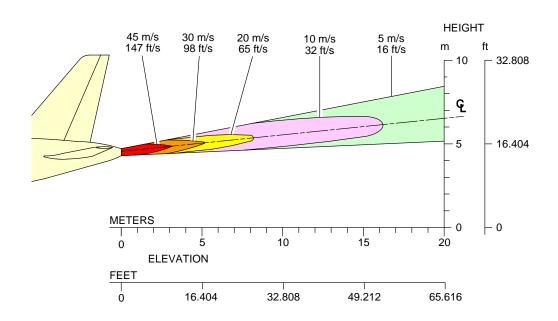
6-4-1 APU

**ON A/C A318-100

APU - APIC & GARRETT

1. This section gives APU exhaust velocities and temperatures.





N_AC_060401_1_0010101_01_00

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 $k = 150 \text{ MN/m}^3 (550 \text{ pci})$ - B. Medium Strength $k = 80 \text{ MN/m}^3 (300 \text{ pci})$ - C. Low Strength $k = 40 \text{ MN/m}^3 (150 \text{ pci})$ - D. Ultra Low Strength $k = 20 \text{ MN/m}^3 (75 \text{ pci})$

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	$\mathbf{B} = \mathbf{N} \mathbf{D} \mathbf{D} \mathbf{H} \mathbf{H}$	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
 - B. Medium Strength
 - C. Low Strength
 - D. Ultra Low Strength

7-2-0 Landing Gear Footprint

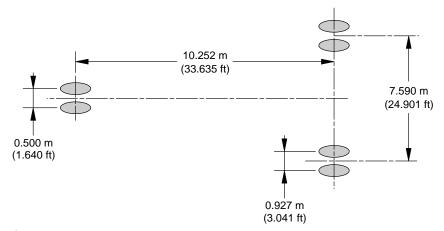
**ON A/C A318-100

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	59 400 kg	89.7%	30x8.8R15	12.8 bar	46x17R20	11.4 bar
WV000	(130 950 lb)		(30x8.8-15)	(186 psi)	(46x16-20)	(165 psi)
A318-100	61 900 kg	89.2%	30x8.8R15	12.8 bar	46x17R20	11.4 bar
WV001	(136 475 lb)		(30x8.8-15)	(186 psi)	(46x16-20)	(165 psi)
A318-100	63 400 kg	89.0%	30x8.8R15	12.8 bar	46x17R20	11.4 bar
WV002	(139 775 lb)		(30x8.8-15)	(186 psi)	(46x16-20)	(165 psi)
A318-100	64 900 kg	89.0%	30x8.8R15	13.5 bar	46x17R20	12.4 bar
WV003	(143 075 lb)		(30x8.8-15)	(196 psi)	(46x16-20)	(180 psi)
A318-100	66 400 kg	89.0%	30x8.8R15	13.5 bar	46x17R20	12.4 bar
WV004	(146 375 lb)		(30x8.8-15)	(196 psi)	(46x16-20)	(180 psi)
A318CJ	66 400 kg	89.0%	30x8.8R15	13.5 bar	46x17R20	12.4 bar
WV004	(146 375 lb)		(30x8.8-15)	(196 psi)	(46x16-20)	(180 psi)
A318-100	68 400 kg	89.0%	30x8.8R15	13.5 bar	46x17R20	12.4 bar
WV005	(150 800 lb)		(30x8.8-15)	(196 psi)	(46x16-20)	(180 psi)
A318CJ	68 400 kg	89.0%	30x8.8R15	13.5 bar	46x17R20	12.4 bar
WV005	(150 800 lb)		(30x8.8-15)	(196 psi)	(46x16-20)	(180 psi)
A318-100	56 400 kg	90.2%	30x8.8R15	12.3 bar	46x17R20	10.2 bar
WV006	(124 350 lb)		(30x8.8-15)	(178 psi)	(46x16-20)	(148 psi)
A318-100	61 400 kg	89.3%	30x8.8R15	12.8 bar	46x17R20	11.4 bar
WV007	(135 375 lb)		(30x8.8-15)	(186 psi)	(46x16-20)	(165 psi)
A318-100	64 400 kg	89.0%	30x8.8R15	13.5 bar	46x17R20	12.4 bar
WV008	(141 975 lb)		(30x8.8-15)	(196 psi)	(46x16-20)	(180 psi)
A318CJ	66 400 kg	89.0%	30x8.8R15	13.5 bar	46x17R20	12.4 bar
WV009	(146 375 lb)		(30x8.8-15)	(196 psi)	(46x16-20)	(180 psi)
A318CJ	68 400 kg	89.0%	30x8.8R15	13.5 bar	46x17R20	12.4 bar
WV010	(150 800 lb)		(30x8.8-15)	(196 psi)	(46x16-20)	(180 psi)

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Landing Gear Footprint FIGURE-7-2-0-991-001-A01

7-3-0 Maximum Pavement Loads

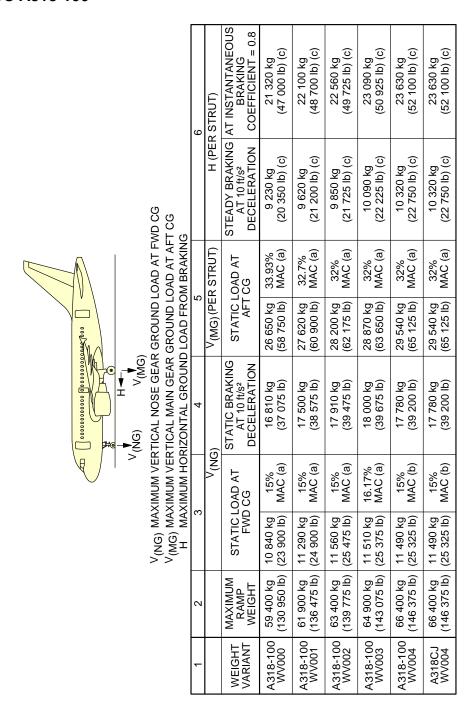
**ON A/C A318-100

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



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

N_AC_070300_1_0200101_01_03

Maximum Pavement Loads for A318-100 and ACJ318-100 (Sheet 1 of 2) FIGURE-7-3-0-991-020-A01



**ON A/C A318-100

		ANEOUS NG NT = 0.8	b) (c)	b) (c)	b) (c)	b) (c)	b) (c)	b) (c)	b) (c)
9	H (PER STRUT)	AT INSTANTANEOUS BRAKING COEFFICIENT = 0.8	24 340 kg (53 675 lb) (c)	24 340 kg (53 675 lb) (c)	20 340 kg (44 850 lb) (c)	21 940 kg (48 375 lb) (c)	22 920 kg (50 525 lb) (c)	23 630 kg (52 100 lb) (c)	24 340 kg (53 675 lb) (c)
	H (PER	STEADY BRAKING AT INSTANTANEOUS AT 10 ft/s² BRAKING DECELERATION COEFFICIENT = 0.8	10 630 kg (23 425 lb) (c)	10 630 kg (23 425 lb) (c)	8 760 kg (19 325 lb) (c)	9 540 kg (21 025 lb) (c)	10 010 kg (22 075 lb) (c)	10 320 kg (22 750 lb) (c)	10 630 kg (23 425 lb) (c)
	R STRUT)	OAD AT	32% MAC (a)	32% MAC (a)	35% MAC (a)	32.93% MAC (a)	32% MAC (a)	32% MAC (a)	32% MAC (a)
5	V _(MG) (PER STRUT)	STATIC LOAD AT AFT CG	30 430 kg (67 100 lb)	30 430 kg (67 100 lb)	25 430 kg (56 050 lb)	27 420 kg (60 450 lb)	28 640 kg (63 150 lb)	29 540 kg (65 125 lb)	30 430 kg (67 100 lb)
4	(6)	STATIC BRAKING AT 10 ft/s² DECELERATION	17 770 kg (39 175 lb)	17 770 kg (39 175 lb)	16 230 kg (35 800 lb)	17 360 kg (38 275 lb)	17 960 kg (39 600 lb)	17 780 kg (39 200 lb)	17 770 kg (39 175 lb)
	(NG)	TIC LOAD AT FWD CG	15% MAC (b)	15% MAC (b)	14% MAC (a)	15% MAC (a)	15.79% MAC (a)	15% MAC (b)	15% MAC (b)
3		STATIC LOAD AT FWD CG	11 490 kg (25 325 lb)	11 490 kg (25 325 lb)	10 550 kg (23 250 lb)	11 200 kg (24 700 lb)	11 520 kg (25 400 lb)	11 490 kg (25 325 lb)	11 490 kg (25 325 lb)
2		MAXIMUM RAMP WEIGHT	68 400 kg (150 800 lb)	68 400 kg (150 800 lb)	56 400 kg 10 550 kg (124 350 lb) (23 250 lb)	61 400 kg 11 200 kg (135 375 lb) (24 700 lb)	64 400 kg 11 520 kg (141 975 lb) (25 400 lb)	66 400 kg 11 490 kg (146 375 lb) (25 325 lb)	68 400 kg 11 490 kg (150 800 lb) (25 325 lb)
-		WEIGHT	A318-100 WV005	A318CJ WV005	A318-100 WV006	A318-100 WV007	A318-100 WV008	A318CJ WV009	A318CJ WV010

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

N_AC_070300_1_0200102_01_01

Maximum Pavement Loads for A318-100 and ACJ318-100 (Sheet 2 of 2) FIGURE-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

 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

 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

 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).

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

MENT	ULTRA-LOW	37	22	38	22	39	22	41	22	42	22	42	22	43	22	43	22	35	22	38	22	40	22	42	22	43	22
N FOR PAVE	9 MO7	32	19	33	19	34	19	35	19	36	19	36	19	37	19	37	19	30	19	33	19	35	19	36	19	37	19
ACN FOR FLEXIBLE PAVEMENT SUBGRADES - CBR	MEDIUM 10	59	17	08	4٤	30	4٤	32	18	33	18	33	18	34	18	34	18	27	17	08	42	31	18	33	18	34	18
	HIGH 15	28	17	29	17	30	17	31	17	32	17	32	17	33	17	33	17	26	17	29	17	31	17	32	17	33	17
g L L	ULTRA-LOW 20	36	22	37	22	38	22	40	22	41	22	41	22	42	22	42	22	33	22	37	22	40	22	41	22	42	22
OR EMEN-	LOW 40	34	21	36	21	36	21	38	21	39	21	39	21	41	21	41	21	31	20	35	21	38	21	39	21	41	21
ACN FOR RIGID PAVEMENT SUBGRADES - MN/m³	HIGH MEDIUM LOW 150 80 40	32	20	33	19	34	19	36	20	37	20	37	20	38	20	38	20	29	19	33	19	36	20	37	20	38	20
		30	18	31	18	32	18	34	19	35	19	32	19	36	19	36	19	27	18	31	18	33	19	32	19	36	19
TIRE	(MPa)	7	4	777	- -	7	-	70.7	1.24	70.7	1.24	1 24	1.24	16.1	1.24	70.7	1.24	1 02	20.1	77	<u>.</u>	1 24	+7:1	10.1	1.24	707	1.24
LOAD ON ONE MAIN	GEAR LEG (%)	44.9	44.8	44.6	44.6	44.5	44.4	44.5	44.4	44.5	44.4	44.5	44.4	44.5	44.4	44.5	44.4	45.1	45.1	44.7	44.6	44.5	44.4	44.5	44.4	44.5	44.4
ALL UP	MASS (kg)	59 400	39 000	61 900	000 68	63 400	000 68	64 900	39 000	66 400	39 000	004 99	000 68	68 400	39 000	68 400	000 6E	56 400	39 000	61 400	000 68	64 400	000 68	904 99	39 000	68 400	39 000
WEIGHT	VARIANT	A318-100	WV000	A318-100	WV001	A318-100	WV002	A318-100	WV003	A318-100	WV004	A318CJ	WV004	A318-100	WV005	A318CJ	WV005	A318-100	MV006	A318-100	WV007	A318-100	WV008	A318CJ	600/W	A318CJ	WV010

N_AC_070900_1_0010101_01_02

ACN Table for A318-100 and A318CJ FIGURE-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

 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 pavementstrength-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	AN TIY	LOAD ON ONE MAIN	TIRE		ACR FOR RIGID PAVEMENT SUBGRADES - MPa	ACR FOR D PAVEMI SRADES -	ENT MPa		ACR FOR FLEXIBLE PAVEMENT SUBGRADES - MPa	R FOR PAVE ADES	EMENT - MPa
VAKIANI	MASS (Kg)	GEAR LEG (%)	(MPa)	HIGH 200	MEDIUM 120	LOW 80	HIGH MEDIUM LOW ULTRA-LOW 200 120 80 50	HIGH 200	MEDIUM 120	LOW 80	MEDIUM LOW ULTRA-LOW 120 80 50
A318-100 WV000	59 400	44.9	1.14	310	330	340	360	250	260	280	320
A318-100 WV001	006 19	44.6	1.14	320	340	360	370	260	280	300	330
A318-100 WV002	63 400	44.5	1.14	330	350	370	380	260	280	300	340
A318-100 WV003	64 900	44.5	1.24	350	370	380	400	280	290	310	350
A318-100 WV004	66 400	44.5	1.24	360	380	390	410	280	300	320	360
A318CJ WV004	66 400	44.5	1.24	360	380	390	410	280	300	320	360
A318-100 WV005	68 400	44.5	1.24	370	390	410	420	290	310	340	380
A318CJ WV005	68 400	44.5	1.24	370	390	410	420	290	310	340	380
A318-100 WV006	56 400	45.1	1.02	280	300	320	330	220	250	260	300
A318-100 WV007	61 400	44.7	1.14	320	340	360	370	250	270	290	330
A318-100 WV008	64 400	44.5	1.24	350	370	380	400	270	290	310	350
A318CJ WV009	66 400	44.5	1.24	360	380	390	410	280	300	320	360
A318CJ WV010	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 FIGURE-7-10-0-991-003-A01

SCALED DRAWINGS

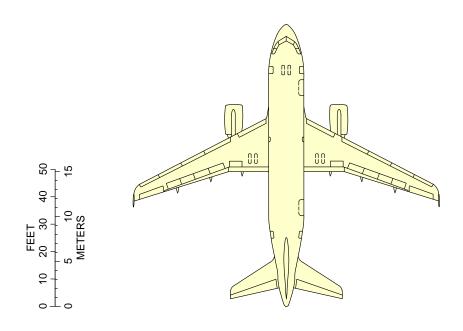
8-0-0 SCALED DRAWINGS

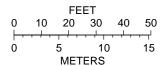
**ON A/C A318-100

Scaled Drawings

1. This section provides the scaled drawings.

<u>NOTE</u>: When printing this drawing, make sure to adjust for proper scaling.





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

SA318

AIRCRAFT CHARACTERISTICS - AIRPORT AND MAINTENANCE PLANNING

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.

AIRBUS

A318

Aircraft Rescue and Fire Fighting Chart

NOTE

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

ISSUED BY:

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

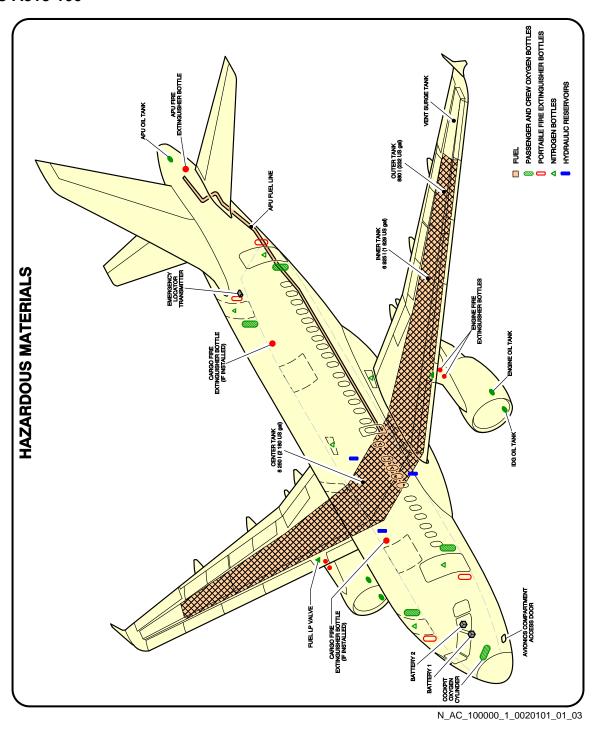
NOV 2019 N_RF_00000_1_A318000

REVISION DATE: 1 REFERENCE : 1 SHEET 1/2

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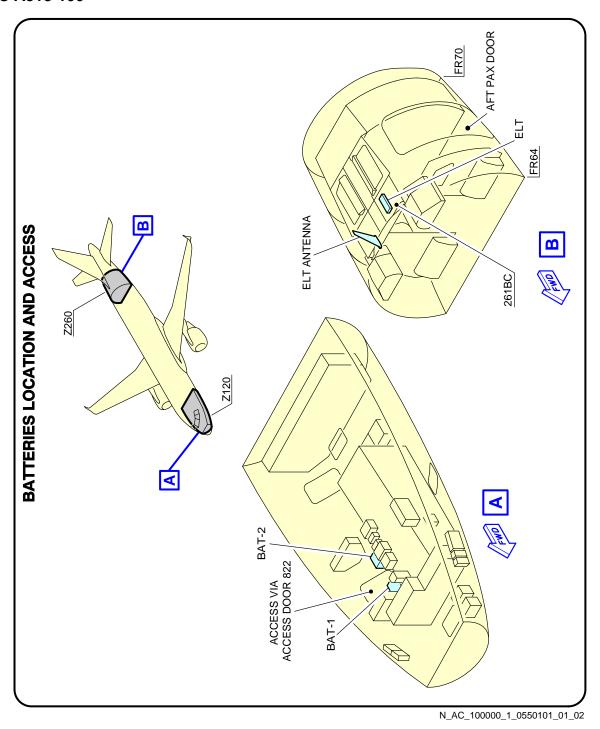
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Front Page FIGURE-10-0-0-991-001-A01

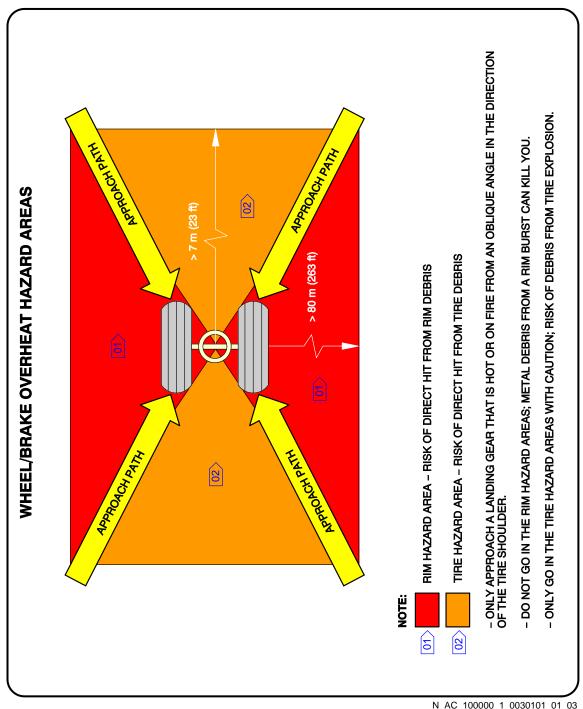


Highly Flammable and Hazardous Materials and Components FIGURE-10-0-0-991-002-A01

**ON A/C A318-100



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



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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

3RAKE OVERHEAT AND LANDING GEAR FIF

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 WARNING:

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:

- 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.
- 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. ٦ ا
- 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. ် က
- 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. USE WATER MIST TO DECREASE THE TEMPERATURE OF THE COMPLETE WHEEL AND BRAKE ASSEMBLY 4

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:

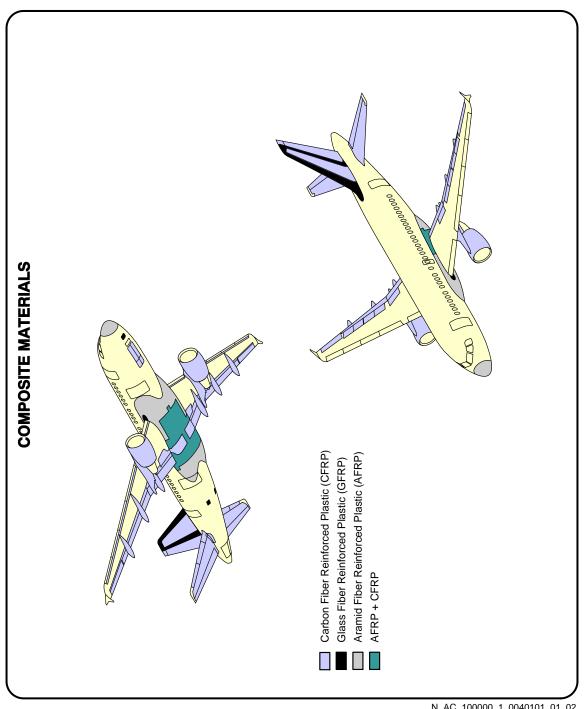
APPROACH THE LANDING GEAR WITH EXTREME CAUTION AND FROM AN OBLIQUE ANGLE IN THE DIRECTION OF THE TIRE SHOULDER. DO NOT GO INTO THE RIM HAZARD AREA AND ONLY GO IN THE TIRE HAZARD AREA WITH CAUTION. IF POSSIBLE, STAY IN A VEHICLE ₹

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 <u>@</u>

C) DO NOT USE FANS OR BLOWERS

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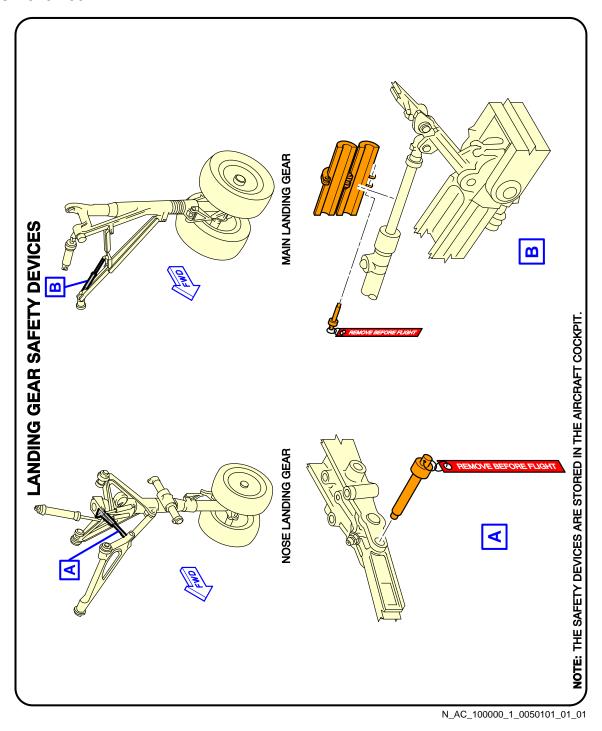
Wheel/Brake Overheat Recommendations (Sheet 2 of 2) FIGURE-10-0-0-991-003-A01



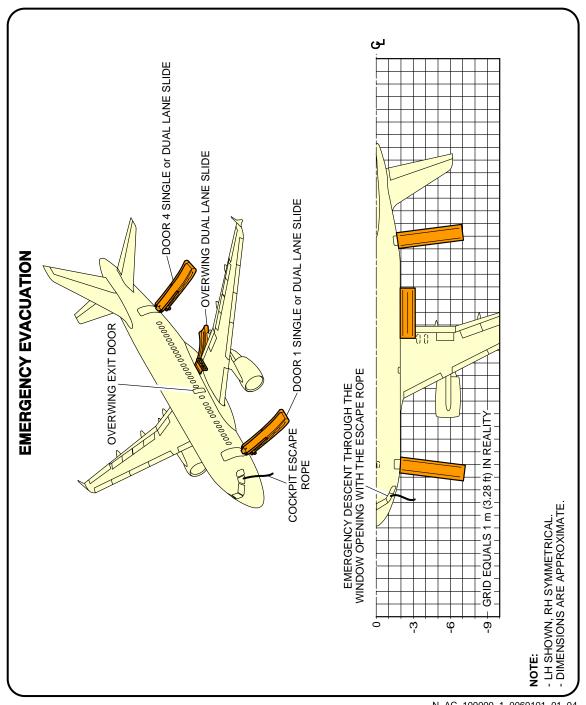
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Composite Materials FIGURE-10-0-0-991-004-A01

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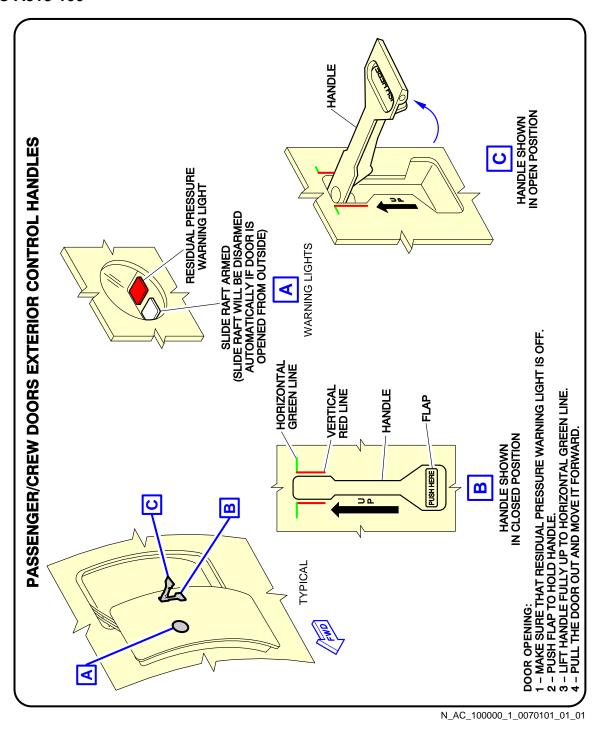


L/G Ground Lock Safety Devices FIGURE-10-0-0-991-005-A01

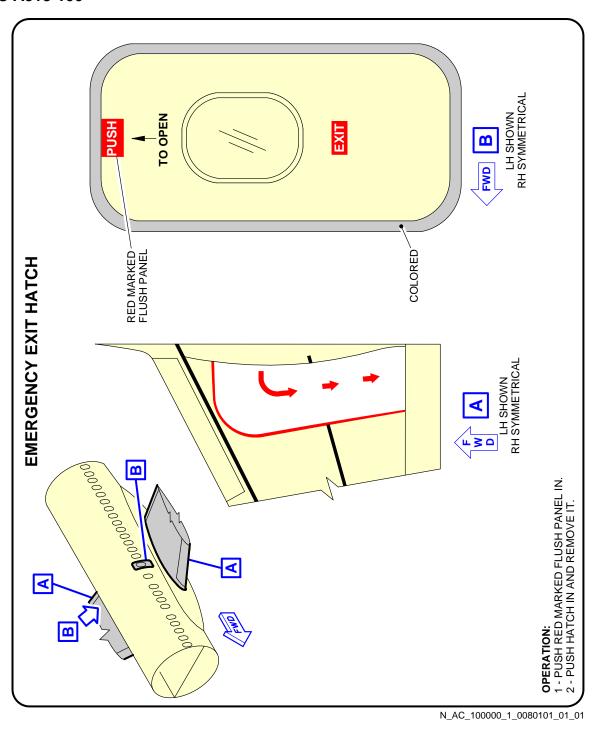


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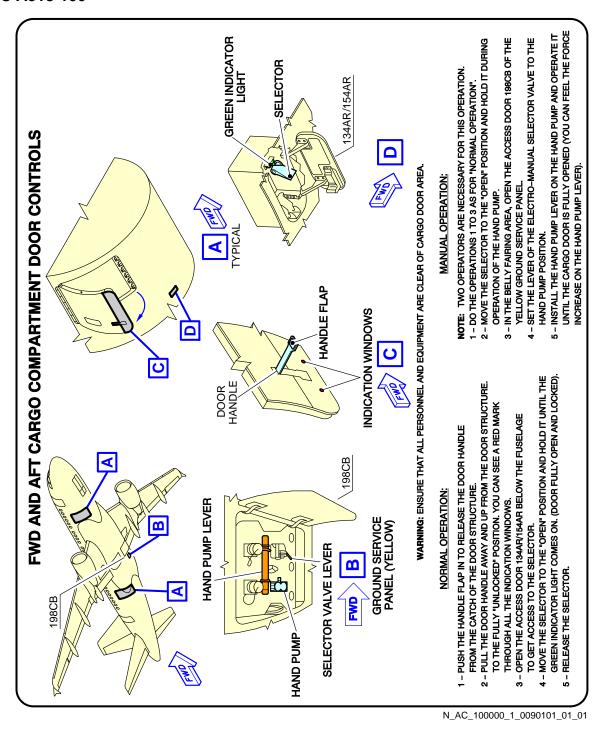
Emergency Evacuation Devices FIGURE-10-0-0-991-006-A01



Pax/Crew Doors FIGURE-10-0-0-991-007-A01

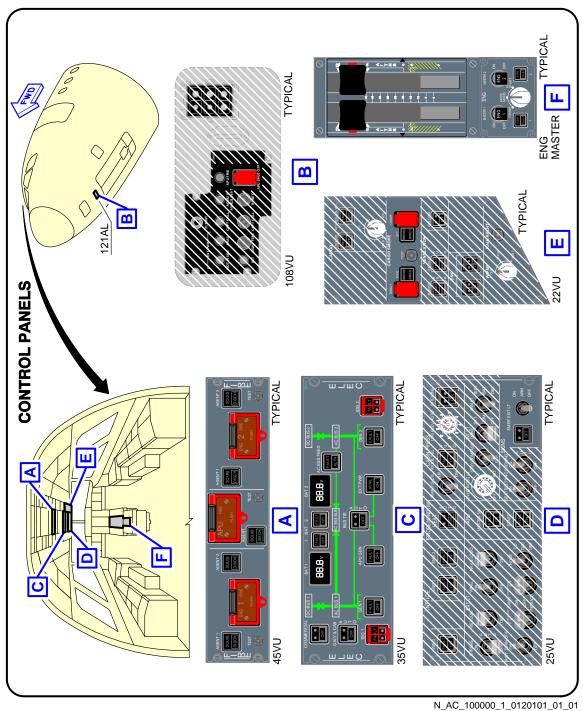


Emergency Exit Hatch FIGURE-10-0-0-991-008-A01

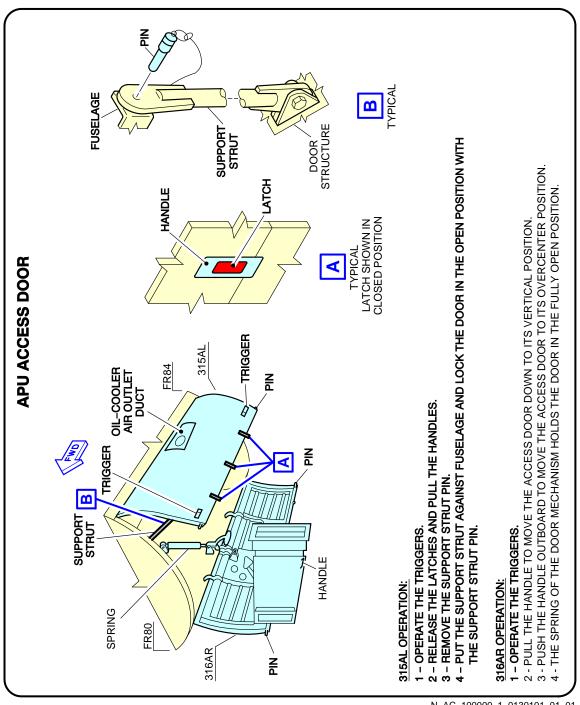


FWD and AFT Lower Deck Cargo Doors FIGURE-10-0-0-991-009-A01

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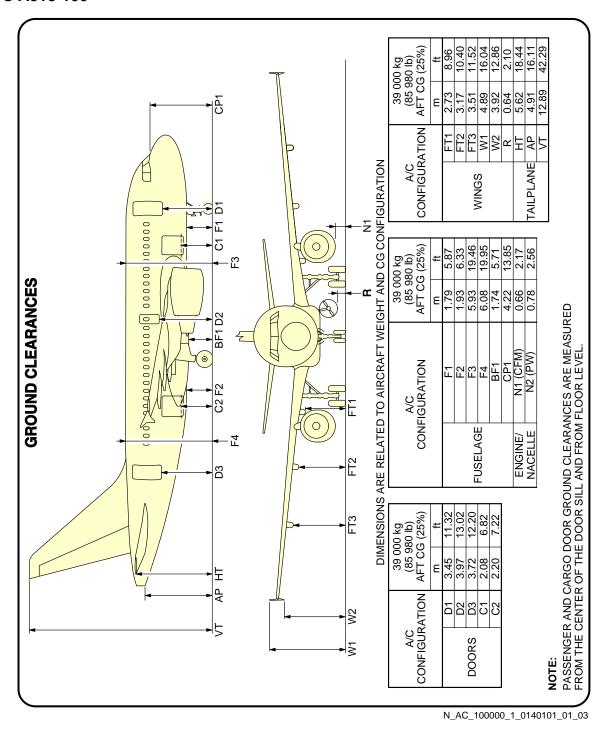


Control Panels FIGURE-10-0-0-991-012-A01

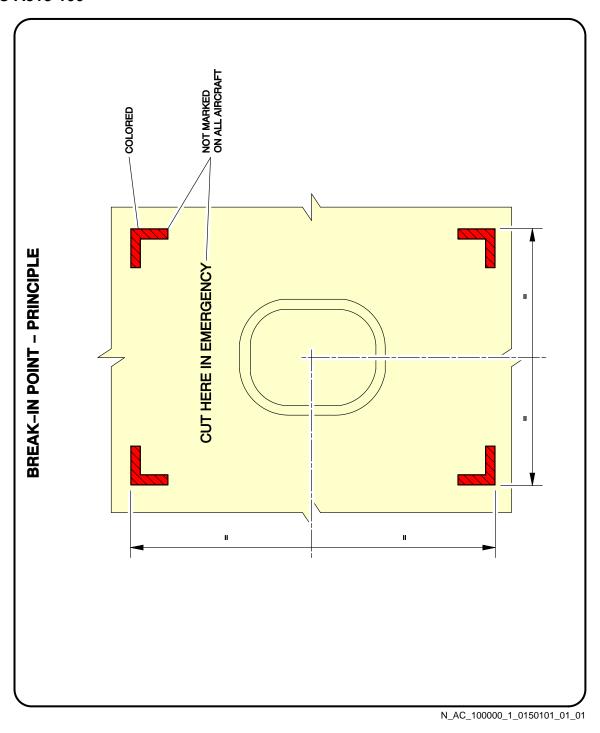


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APU Access Door FIGURE-10-0-0-991-013-A01



Aircraft Ground Clearances FIGURE-10-0-0-991-014-A01



Structural Break-in Points FIGURE-10-0-0-991-015-A01