F-150/F-150 LIGHTNING
WHAT'S NEW

- Updated Model Lineup and Weight Charts
- Added Lightning BEV No-Drill Zone Guidance
- Added Lighnting BEV Battery Venting Guidance
- Updated Tire and Wheel Data
- Added Lightning BEV Dimensional Data
- Added Lightning BEV Vehicle Height Data

F-150
INDEX

WARNING
During the production and servicing of these vehicles, due care should be taken to avoid damaging safety- or emissions-related systems such as braking, fuel lines, sensors, catalysts, etc. through contacting them while working on adjacent areas of the vehicle. Inadvertent damage can also occur due to adjacent welding / cutting operations or people standing near / on unprotected systems while performing other tasks.

F-150/ F-150 LIGHTNING INTRODUCTION

Important Notices

The information described herein is believed to be correct at the time of publication, but accuracy cannot be guaranteed. Ford reserves the right to discontinue models or change specifications or designs at any time without notice and without incurring any obligation.

Representations regarding the compliance of any Ford-manufactured incomplete vehicle to any rule, regulation or standard issued pursuant to the National Traffic and Motor Vehicle Safety Act or the Canadian Motor Vehicle Safety Act are set forth only in the Incomplete Vehicle Manual (IVM) which accompanies each incomplete vehicle.

Regulations such as those issued by the Federal Highway Administration (FHA) or issued pursuant to the Occupational Safety and Health Act (OSHA), and/or state, provincial, and local laws and regulations may require installation of additional equipment for the particular use intended for the vehicle. It is the responsibility of the subsequent stage manufacturer or completed vehicle alterer and the vehicle purchaser to ascertain how the vehicle will ultimately be used, if FHA, OSHA or state provincial or local regulations apply and how the vehicle as completed will comply with those requirements. Nothing contained herein is to be construed as a representation that such equipment required for the particular use intended has been installed on the completed or incomplete vehicle.

Reference Information

Ford Body Builder Advisory Service Publications

This document is an example of a program-specific Body Builders Layout Book (BBLB) published by the Ford Body Builder Advisory Service (BBAS) team. Each Ford Commercial Truck vehicle line has a similar document that aims to provide detailed information which may be of interest to a subsequent-stage manufacturer or alterer.

The Ford Transit and Transit Connect also have a Body and Equipment Mounting Manual (BEMM), which is a comprehensive resource dedicated to body and equipment mounting information.

Yet another source of program-specific information are the “Vehicle Specification” documents available on the Ford BBAS website. Information typically found in these documents are: vehicle curb and accessory weights, vehicle dimensions, component descriptions, capacities, GAWRs, alternator output, powertrain output and gear ratios.

In addition to the program-specific documents, there are several Ford BBLB documents that contain general best practices or information on specific subjects that span multiple vehicle lines. These include:

- General BBLB - contains Definitions, Design Recommendations and Vehicle Storage Guidelines.
- Snow Plow BBLB
- Pickup Box Removal BBLB

These publications are updated every model year and can be accessed via the web at https://fordbbas.com under “Publications”. For BBLB and BEMM documents, expand the “Body Builder Layout Book” Section to view all available documents. For Vehicle Specifications, expand the “Vehicle Specifications” section. The website search function can be used to filter for specific content or vehicle line.

Ford Body Builder Advisory Service Bulletins

Occasionally, the Ford BBAS team will create an SVE “Bulletin” to address a specific issue or distribute important information in a timely manner. These documents can be accessed via the web at https://fordbbas.com under “Bulletins”. The website search function can be used to filter for specific content or vehicle line.

If applicable, information from each SVE bulletin will be incorporated into the appropriate BBLB document the following model year. In some cases, SVE bulletins will continue to be referenced in this document.

Ford Body Builder Advisory Service Contact

The Ford Truck Body Builder Advisory Service may be consulted if questions regarding the completion of Ford commercial vehicles are not adequately addressed in the documentation described above. For assistance call (877) 840-4338 or e-mail via the web at https://fordbbas.com under “Contact Us” and select “General Questions”.

For Ford vehicle CAD requests, please visit https://fordbbas.com, select “Contact Us” and then “CAD Request”.

For both Questions and CAD Requests, please be as specific as possible with the request details to assure the most accurate and timely response.

Ford Service Publications

Ford Service Technical Resources (including wiring diagrams, repair manuals and diagnostic tool support) are available by subscription via the Motorcraft website: www.motorcraftservice.com

The following publications are examples of digital and printed manuals which are available from Helm Incorporated; call 1-800-782-4356 or contact Helm, Inc. at their website www.helminc.com:

- Ford Truck Shop Manuals
- Ford Towing Manuals
- Ford Wiring Diagrams

F-150
MODEL LINEUP
REGULAR CAB

Cab	WB (in)	Drive	Engine	GVWR	Payload (Max)[1]	Base Curb Weight			GAWR (MAX)[2]		Axle Rating		Spring Rating		ARC Wt (MAX)[3]	GCWR (MAX)
											Max	Max	Max	Max		
						Front	Rear	Total	Front	Rear	Front	Rear	Front	Rear		
Reg Cab	122 6.5" Box	4 X 2	3.3L	6010	1950	2382	1678	4060	2850	3500	3225	3500	2850	3500	533	12600
			2.7L GTDI	6050	1875	2471	1700	4171	2850	3450	3450	3450	2850	3450	576	13200
			5.0L	6200	1900	2522	1778	4300	2850	3800	3375	3800	2850	3800	573	13800
		4 X 4	3.3L	6050	1705	2610	1734	4344	3000	3400	3450	3400	3000	3400	511	12800
			2.7L GTDI	6150	1705	2677	1764	4441	3150	3400	3525	3400	3150	3400	598	13300
			5.0L	6400	1835	2769	1795	4564	3150	3800	3750	3800	3150	3800	583	14600
	141 8" Box	4 X 2	3.3L	6100	1965	2485	1649	4134	3000	3400	3225	3500	3000	3400	642	12700
			2.7L GTDI	6170	1905	2569	1694	4263	3000	3400	3450	3400	3000	3400	682	13300
			2.7L GTDI	6900	2480	2625	1795	4420	3150	4050	3525	4050	3150	4050	680	14800
			5.0L	6750	2350	2679	1719	4398	3150	4150	3375	4150	3150	4150	689	17900
			3.5L GTDI	7050	2620	2652	1776	4428	3150	4150	3600	4150	3150	4150	711	17900
			5.0L	7850	3325	2666	1858	4524	3400	4800	3750	4800	3400	4800	691	18000
			3.5L GTDI	7850	3250	2683	1917	4600	3400	4800	3750	4800	3400	4800	642	18400
		4 X 4	3.3L	6325	1910	2712	1700	4412	3150	3400	3450	3400	3150	3400	624	12900
			2.7L GTDI	6435	1885	2837	1709	4546	3300	3400	3525	3400	3300	3400	699	13300
			2.7L GTDI	6800	2125	2874	1798	4672	3300	3800	3600	3800	3375	3800	704	15100
			5.0L	6950	2300	2887	1763	4650	3375	4150	3750	4150	3375	4150	752	17900
			3.5L GTDI	7050	2360	2839	1851	4690	3300	4150	3750	4150	3375	4150	735	17900
			5.0L	7850	3050	2895	1902	4797	3400	4800	3750	4800	3400	4800	674	18300
			3.5L GTDI	7850	3035	2882	1932	4814	3400	4800	3750	4800	3400	4800	665	18400

Weight Unit: Pounds

F-150
MODEL LINEUP
SUPER CAB

Cab	WB (in)	Drive	Engine	GVWR	Payload (Max)[1]	Base Curb Weight			GAWR (MAX)[2]		Axle Rating		Spring Rating		ARC Wt (MAX)[3]	GCWR (MAX)
											Max	Max	Max	Max		
						Front	Rear	Total	Front	Rear	Front	Rear	Front	Rear		
Super Cab	145 6.5" Box	4 X 2	3.3L	6250	1850	2575	1825	4400	3225	3400	3225	3500	3225	3400	658	12900
			2.7L GTDI	6325	1815	2649	1859	4508	3300	3400	3450	3400	3375	3400	806	13300
			3.3L	6480	1840	2799	1839	4638	3450	3400	3450	3400	3450	3400	696	13100
			2.7L GTDI	6500	1735	2908	1854	4762	3600	3400	3600	3400	3600	3400	818	13300
			2.7L GTDI	6750	2175	2657	1916	4573	3375	3800	3525	4050	3375	3800	845	15000
			5.0L	6900	2345	2727	1827	4554	3375	3800	3375	3800	3450	3800	844	17800
			3.5L GTDI	6900	2290	2690	1917	4607	3375	3800	3600	4150	3375	3800	878	17500
			3.0L Lion	7050	2100	2904	2043	4947	3525	4050	3750	4050	3525	4050	810	17700
		4 X 4	2.7L GTDI	7000	2165	2894	1937	4831	3600	3800	3600	3800	3600	3800	852	15300
			5.0L	7050	2240	2929	1881	4810	3600	3800	3750	3800	3600	3800	888	17600
			3.5L GTDI	7050	2190	2907	1953	4860	3600	3800	3750	4150	3600	3800	883	17700
			3.0L Lion	7050	1840	3135	2072	5208	3900	4050	3900	4050	3900	4050	800	17900
	163 8" Box	4 X 2	2.7L GTDI	6500	1890	2771	1836	4607	3450	3400	3450	3400	3525	3400	821	13300
			2.7L GTDI	6900	2225	2771	1904	4675	3500	3800	3525	4050	3525	3800	853	15100
			5.0L	7000	2325	2805	1870	4675	3525	4150	3525	4150	3525	4150	851	18200
			3.5L GTDI	7050	2285	2813	1951	4764	3525	4150	3525	4150	3525	4150	884	19400
			5.0L	7850	3010	2819	2018	4837	3750	4800	3750	4800	3750	4800	753	18300
			3.5L GTDI	7850	2980	2816	2050	4866	3750	4800	3750	4800	3750	4800	741	19400
		4 X 4	5.0L	7150	2205	2929	2012	4941	3650	4150	3650	4150	3750	4150	899	18400
			3.5L GTDI	7150	2125	2898	2127	5025	3600	4150	3750	4150	3600	4150	892	19400
			5.0L	7850	2765	2975	2107	5082	3750	4800	3750	4800	3750	4800	782	18500
			3.5L GTDI	7850	2740	2969	2137	5106	3750	4800	3750	4800	3750	4800	770	19400

Weight Unit: Pounds

Ford PRO™ *Body Builders Layout Book*

F-150/F-150 LIGHTNING
MODEL LINEUP
CREW CAB

Cab	WB (in)	Drive	Engine	GVWR	Payload (Max)[1]	Base Curb Weight			GAWR (MAX)[2]		Axle Rating		Spring Rating		ARC Wt (MAX)[3]	GCWR (MAX)
											Max	Max	Max	Max		
						Front	Rear	Total	Front	Rear	Front	Rear	Front	Rear		
Crew Cab	145 6.5" Box	4 X 2	3.3L	6250	1745	2624	1877	4501	3225	3400	3225	3500	3225	3400	719	13000
			2.7L GTDI	6400	1815	2682	1902	4584	3375	3400	3450	3400	3375	3400	896	13300
			2.7L GTDI	6650	1960	2716	1973	4689	3375	3800	3525	4050	3450	3800	896	15100
			5.0L	6800	2135	2748	1913	4661	3450	3800	3525	3800	3450	3800	895	15600
			5.0L	7050	2335	2748	1963	4711	3450	4150	3525	4150	3450	4150	845	18100
			3.5L GTDI	6750	2050	2717	1979	4696	3375	3800	3600	3800	3375	3800	927	16500
			3.5L GTDI	7050	2300	2717	2029	4746	3375	4150	3600	4150	3375	4150	877	19300
			3.0L Lion	7050	2065	2898	2085	4983	3525	4050	3750	4050	3525	4050	884	17700
			3.5L Non-Miller	7350	2090	3058	2202	5260	3750	4150	3900	4150	3750	4150	848	18400
		4 X 4	3.3L	6470	1720	2841	1906	4747	3450	3400	3450	3400	3450	3400	744	13300
			2.7L GTDI	6600	1760	2916	1922	4838	3600	3400	3600	3400	3600	3400	842	13300
			2.7L GTDI	6900	1965	2937	1994	4931	3600	3800	3600	3800	3750	3800	903	15400
			5.0L	7050	2135	2976	1936	4912	3650	4150	3650	4150	3750	4150	939	18400
			3.5L GTDI	7050	2100	2944	2004	4948	3650	4150	3750	4150	3750	4150	934	19400
			3.0L Lion	7050	1805	3126	2117	5243	3900	4050	3900	4050	3900	4050	871	18000
			3.5L Non-Miller	7350	1830	3253	2264	5517	3900	4150	4000	4150	3900	4150	846	18400
			3.5L GTDI	7050	2030	2939	2077	5016	3450	3800	3750	3800	3450	3800	866	19400
			3.5L GTDI	7000	1885	2970	2145	5115	3600	3800	3600	3800	3600	3800	598	17100
			3.5L	7150	1440	3265	2445	5710	3750	3800	3750	3800	4000	5550	540	30000
			3.5L	7300	1445	3344	2507	5851	3750	3850	3750	3850	4000	5550	429	30000
	157 8" Box	4 X 2	2.7L GTDI	6450	1830	2756	1860	4616	3450	3400	3450	3400	3525	3400	902	13300
			2.7L GTDI	6800	2085	2771	1944	4715	3500	3800	3525	4050	3525	3800	900	15100
			5.0L	6950	2235	2823	1889	4712	3525	4150	3525	4150	3525	4150	881	18200
			3.5L GTDI	7000	2245	2798	1954	4752	3525	4150	3600	4150	3525	4150	931	19400
			5.0L	7850	2900	2879	2071	4950	3750	4800	3750	4800	3750	4800	795	18400
			3.5L GTDI	7850	2880	2867	2100	4967	3750	4800	3750	4800	3750	4800	784	19400
			3.0L Lion	7050	2000	2984	2065	5049	3750	4050	3750	4050	3750	4050	888	17800
			3.5L Non-Miller	7350	2120	3098	2130	5228	3750	4150	3900	4150	3900	4150	940	18400
		4 X 4	5.0L	7150	2135	3098	1916	5014	3850	4150	3850	4150	3900	4150	870	18400
			3.5L GTDI	7150	2155	3011	1984	4995	3750	4150	3750	4150	3750	4150	938	19400
			5.0L	7850	2650	3115	2084	5199	3750	4800	3750	4800	3750	4800	824	18600
			3.5L GTDI	7850	2640	3099	2110	5209	3750	4800	3750	4800	3750	4800	813	19500
			3.0L Lion	7100	1805	3196	2096	5292	3900	4050	3900	4050	3900	4050	876	18000
			3.5L Non-Miller	7350	1810	3332	2208	5540	4050	4150	4050	4150	4050	4150	890	18400
F-150 LIGHTNING																
Crew Cab	145 6.5" Box	4 X 4	BEV (4P)	8300	2129	3129	-	6015	3770	4900			3770	4900		11700
			BEV (5P)	8550	1997	3253	-	6361	3940	4950			3940	4950		15000
			BEV (5P) - 20" A/T	8400	1809	3314	-	6597	3940	4800			3940	4800		15000
			BEV (5P-Platinum)	8550	1484	3461	-	6893	4050	4800			4050	4800		15900

Weight Unit: Pounds

F-150/F-150 LIGHTNING
MODEL LINEUP
FOOTNOTES

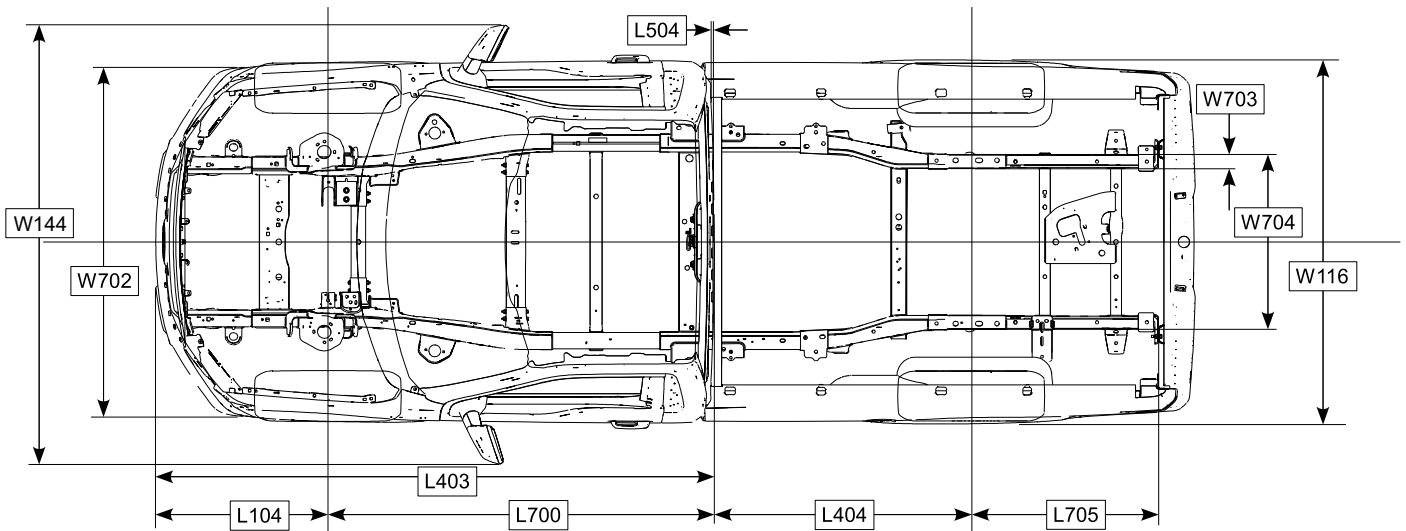
1) Payload rating represents the maximum allowable weight of passengers, cargo and body equipment, and is reduced by optional equipment weight.

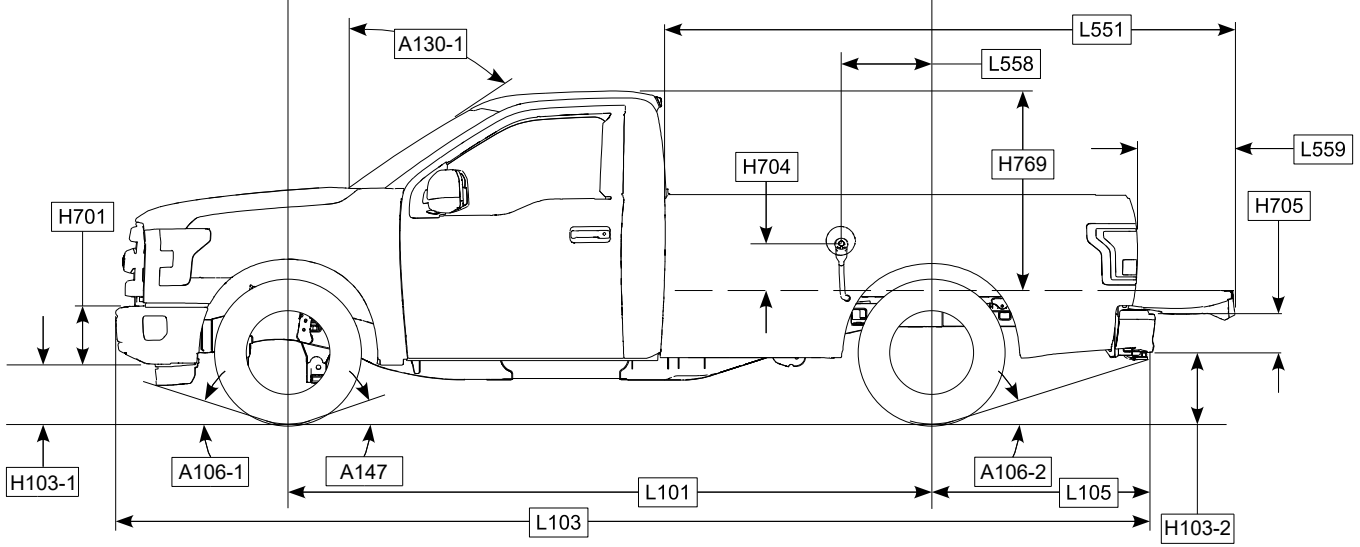
2) Gross Axle Weight Rating (GAWR) is determined by the rated capacity of the minimum component of the axle system (axle, computer-selected springs, wheels, tires) of a specific vehicle. Front and rear GAWRs will, in all cases, sum to a number equal to or greater than the GVWR for the particular vehicle. Maximum loaded vehicle (including passengers, equipment and payload) cannot exceed the GVWR.

3) Accessory Reserve Capacity (ARC) Weight is the maximum allowable weight of aftermarket equipment for models with standard equipment and the engine/transmission combination indicated. This capacity is reduced by optional equipment weight.

NOTE: Optional Equipment Weights can be found in on the Ford BBAS website.
Navigate to: https://fordbbas.com under “Publications”, expand the “Vehicle Specifications” section and select the vehicle.

F-150
DIMENSIONAL DATA
REGULAR CAB





F-150
DIMENSIONAL DATA
REGULAR CAB (Cont'd)

CHASSIS

CODE	DESCRIPTION	123" WB		142" WB	
		4x2	4x4	4x2	4x4
H103-1	BOTTOM OF FRONT BUMPER VALANCE TO GROUND @ CURB	259 [10.2]	285 [11.2]	250 [9.8]	294 [11.6]
H103-2	BOTTOM OF REAR BUMPER VALANCE TO GROUND @ CURB	462 [18.2]	508 [20.0]	461 [18.1]	506 [19.9]
A106-1	APPROACH ANGLE @ CURB (DEGREES)	21.7	23.9	21.0	24.6
A106-2	DEPARTURE ANGLE @ CURB (DEGREES) (TAKEN AT BOTTOM OF BUMPER)	23.9	26.2	23.9	26.1
A147	RAMP BREAKOVER ANGLE @ CURB (DEGREES)	20.8	23.5	18.3	21.0
L101	WHEELBASE	3120 [122.8]		3594 [141.5]	
L103	VEHICLE LENGTH	5310 [209.1]		5784 [227.7]	
L104	FRONT OVERHANG (NO LICENSE PLATE BRACKET)	955 [37.6]			
L105	REAR OVERHANG	1235 [48.6]			
L403	FRONT OF BUMPER TO BACK OF CAB	3083 [121.4]			
L404	CAB TO C_L OF REAR AXLE	992 [39.1]		1466 [57.7]	
L700	C_L OF FRONT AXLE TO BACK OF CAB	2128 [83.8]			
L705	C_L OF REAR AXLE TO REAR END OF FRAME	1031 [40.6]		1031 [40.6]	
W703	FRAME RAIL WIDTH	72 [2.8]			
W704	REAR FRAME WIDTH	972 [38.3]			

Dimensions (unless otherwise stated): mm [inches]

PICKUP BODY

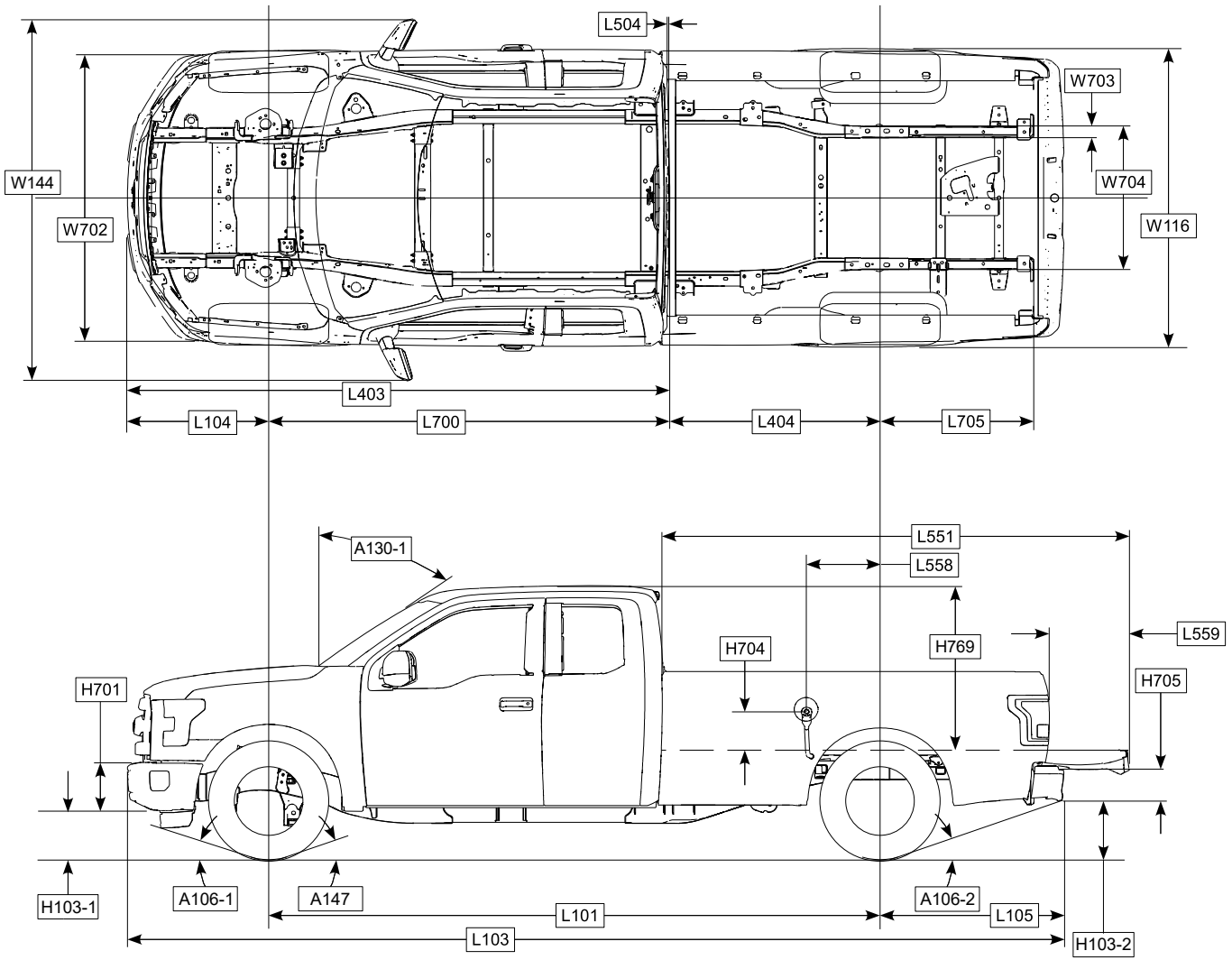
CODE	DESCRIPTION	123" WB	142" WB
	NOMINAL CARGO BODY SIZE	6.5 FT	8 FT
H704	TOP OF PICKUP BOX FLOOR (HIGHEST POINT) TO CL OF FUEL FILLER DOOR	301 [11.9]	
H705	REAR BUMPER HEIGHT	276 [10.9]	
H769	TOP OF PICKUP BOX FLOOR (HIGHEST POINT) TO TOP OF CAB @ CL OF REAR AXLE	1130 [44.5]	
L504	CAB TO PICKUP BOX	16 [0.6]	
L551	BOX OVERALL LENGTH TO OPEN TAILGATE (MINIMUM)	2665 [104.9]	3139 [123.6]
L558	C_L OF REAR AXLE TO C_L OF FUEL FILLER DOOR	504 [19.8]	
L559	LENGTH OF OPEN TAILGATE	537 [21.1]	

CAB*

CODE	DESCRIPTION	4x2	4x4
A130-1	WINDSHIELD ANGLE (DEGREES)	56.5	
H701	FRONT BUMPER HEIGHT W/ VALENCES	399 [15.7]	399 [15.7]
W116	VEHICLE BODY WIDTH (MAX W/O MIRRORS)	2030 [79.9]	
w144	VEHICLE WIDTH (MAX W/ STANDARD MIRRORS)	2430 [95.7]	
w144	VEHICLE WIDTH (MAX W/ OPTIONAL TRAILER TOW MIRRORS)	2689 [105.9]	
W702	FRONT BUMPER WIDTH	1970 [77.6]	

*Common cab dimensions between 123" & 142" WB

F-150
DIMENSIONAL DATA
SUPER CAB



F-150
DIMENSIONAL DATA
SUPER CAB
(Cont'd)

CHASSIS

CODE	DESCRIPTION	145" WB		164" WB	
		4x2	4x4	4x2	4x4
H103-1	BOTTOM OF FRONT BUMPER VALANCE TO GROUND @ CURB	256 [10.1]	295 [11.6]	253 [10.0]	299 [11.9]
H103-2	BOTTOM OF REAR BUMPER VALANCE TO GROUND @ CURB	445 [17.5]	492 [19.4]	461 [18.1]	496 [19.5]
A106-1	APPROACH ANGLE @ CURB (DEGREES)	21.5	24.6	21.2	24.9
A106-2	DEPARTURE ANGLE @ CURB (DEGREES) (TAKEN AT BOTTOM OF BUMPER)	23.2	25.4	23.9	25.6
A147	RAMP BREAKOVER ANGLE @ CURB (DEGREES)	17.6	20.2	16.0	18.2
L101	WHEELBASE	3694 [145.4]		4168 [164.1]	
L103	VEHICLE LENGTH	5884 [231.7]		6358 [250.3]	
L104	FRONT OVERHANG (NO LICENSE PLATE BRACKET)	955 [37.6]			
L105	REAR OVERHANG	1235 [48.6]			
L403	FRONT OF BUMPER TO BACK OF CAB	3657 [144.0]			
L404	CAB TO C_L OF REAR AXLE	992 [39.1]		1466 [57.7]	
L700	C_L OF FRONT AXLE TO BACK OF CAB	2702 [106.4]			
L705	C_L OF REAR AXLE TO REAR END OF FRAME	1031 [40.6]		1031 [40.6]	
W703	FRAME RAIL WIDTH	72 [2.8]			
W704	REAR FRAME WIDTH	972 [38.3]			

Dimensions (unless otherwise stated): mm [inches]

PICKUP BODY

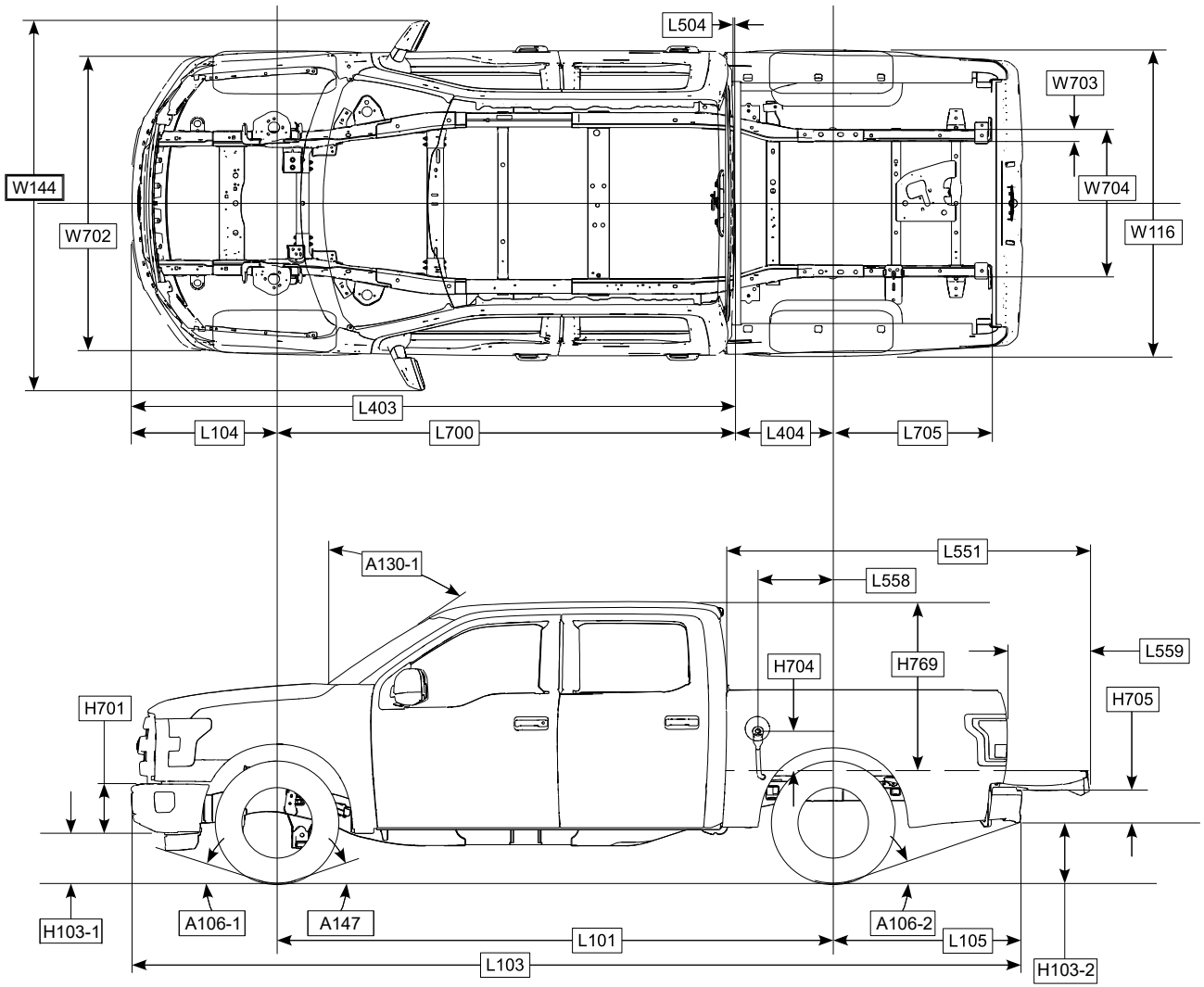
CODE	DESCRIPTION	145" WB	164" WB
	NOMINAL CARGO BODY SIZE	6.5 FT	8 FT
H704	TOP OF PICKUP BOX FLOOR (HIGHEST POINT) TO CL OF FUEL FILLER DOOR	301 [11.9]	
H705	REAR BUMPER HEIGHT	276 [10.9]	
H769	TOP OF PICKUP BOX FLOOR (HIGHEST POINT) TO TOP OF CAB @ CL OF REAR AXLE	1131 [44.5]	
L504	CAB TO PICKUP BOX	16 [0.6]	
L551	BOX OVERALL LENGTH TO OPEN TAILGATE (MINIMUM)	2665 [104.9]	3139 [123.6]
L558	C_L OF REAR AXLE TO C_L OF FUEL FILLER DOOR	504 [19.8]	
L559	LENGTH OF OPEN TAILGATE	537 [21.1]	

CAB*

CODE	DESCRIPTION	4x2	4x4
A130-1	WINDSHIELD ANGLE (DEGREES)	56.5	
H701	FRONT BUMPER HEIGHT W/ VALENCES	399 [15.7]	399 [15.7]
W116	VEHICLE BODY WIDTH (MAX W/O MIRRORS)	2030 [79.9]	
w144	VEHICLE WIDTH (MAX W/ STANDARD MIRRORS)	2430 [95.7]	
w144	VEHICLE WIDTH (MAX W/ OPTIONAL TRAILER TOW MIRRORS)	2689 [105.9]	
W702	FRONT BUMPER WIDTH	1970 [77.6]	

*Common cab dimensions between 145" & 164" WB

DIMENSIONAL DATA
SUPERCREW



F-150
DIMENSIONAL DATA
SUPERCREW
(Cont'd)

CODE	DESCRIPTION	145" WB		157" WB	
		4x2	4x4	4x2	4x4
H103-1	BOTTOM OF FRONT BUMPER VALANCE TO GROUND @ CURB	260 [10.2]	291 [11.5]	250 [9.8]	299 [11.3]
H103-2	BOTTOM OF REAR BUMPER VALANCE TO GROUND @ CURB	440 [17.3]	488 [19.2]	461 [18.1]	510 [20.1]
A106-1	APPROACH ANGLE @ CURB (DEGREES)	21.8	24.3	21.0	24.0
A106-2	DEPARTURE ANGLE @ CURB (DEGREES) (TAKEN AT BOTTOM OF BUMPER)	22.9	25.3	23.9	26.3
A147	RAMP BREAKOVER ANGLE @ CURB (DEGREES)	17.6	20.0	16.6	19.0
L101	WHEELBASE	3694 [145.4]		3994 [157.2]	
L103	VEHICLE LENGTH	5884 [231.7]		6184 [243.5]	
L104	FRONT OVERHANG (NO LICENSE PLATE BRACKET)	955 [37.6]			
L105	REAR OVERHANG	1235 [48.6]			
L403	FRONT OF BUMPER TO BACK OF CAB	3957 [155.8]			
L404	CAB TO C_L OF REAR AXLE	692 [27.2]		992 [39.1]	
L700	C_L OF FRONT AXLE TO BACK OF CAB	3002 [118.2]			
L705	C_L OF REAR AXLE TO REAR END OF FRAME	1031 [40.6]		1031 [40.6]	
W703	FRAME RAIL WIDTH	72 [2.8]			
W704	REAR FRAME WIDTH	972 [38.3]			

Dimensions (unless otherwise stated): mm [inches]

CODE	DESCRIPTION	145" WB	157" WB
	NOMINAL CARGO BODY SIZE	5.5 FT	6.5 FT
H704	TOP OF PICKUP BOX FLOOR (HIGHEST POINT) TO CL OF FUEL FILLER DOOR	301 [11.9]	
H705	REAR BUMPER HEIGHT	276 [10.9]	
H769	TOP OF PICKUP BOX FLOOR (HIGHEST POINT) TO TOP OF CAB @ CL OF REAR AXLE	1130 [44.5]	
L504	CAB TO PICKUP BOX	16 [0.6]	
L551	BOX OVERALL LENGTH TO OPEN TAILGATE (MINIMUM)	2365 [93.1]	2665 [104.9]
L558	C_L OF REAR AXLE TO C_L OF FUEL FILLER DOOR	504 [19.8]	
L559	LENGTH OF OPEN TAILGATE	537 [21.1]	

CODE	DESCRIPTION	4x2	4x4
A130-1	WINDSHIELD ANGLE (DEGREES)	56.5	
H701	FRONT BUMPER HEIGHT W/ VALENCES	399 [15.7]	399 [15.7]
W116	VEHICLE BODY WIDTH (MAX W/O MIRRORS)	2030 [79.9]	
W144	VEHICLE WIDTH (MAX W/ STANDARD MIRRORS)	2430 [95.7]	
W144	VEHICLE WIDTH (MAX W/ OPTIONAL TRAILER TOW MIRRORS)	2689 [105.9]	
W702	FRONT BUMPER WIDTH	1970 [77.6]	

*Common cab dimensions between 145" & 157" WB

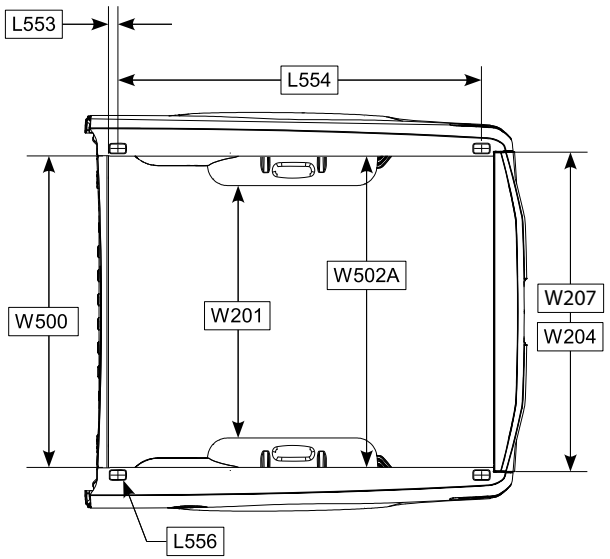
F-150 LIGHTNING
DIMENSIONAL DATA
SUPERCREW

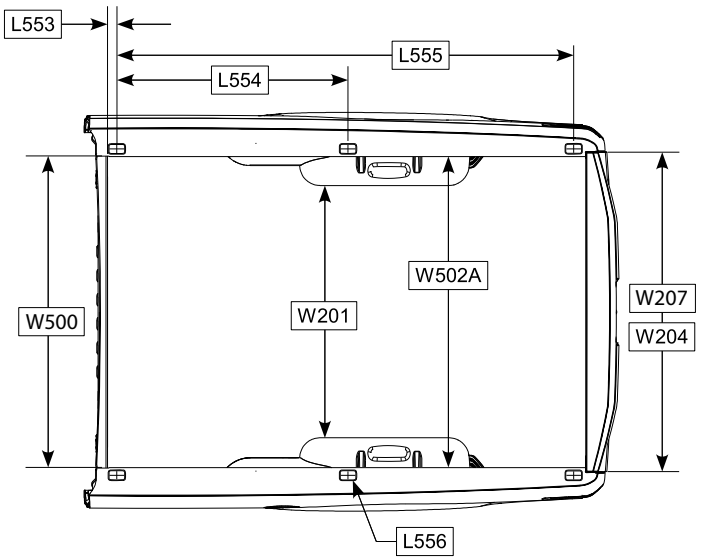
CHASSIS		
CODE	**DESCRIPTION**	**F-150 Lightning**
H103-1	BOTTOM OF FRONT BUMPER VALANCE TO GROUND @ CURB	292 [11.5]
H103-2	BOTTOM OF REAR BUMPER VALANCE TO GROUND @ CURB	503 [19.8]
A106-1	APPROACH ANGLE @ CURB (DEGREES)	24.4
A106-2	DEPARTURE ANGLE @ CURB (DEGREES) (TAKEN AT BOTTOM OF BUMPER)	23.6
A147	RAMP BREAKOVER ANGLE @ CURB (DEGREES)	17.6
L101	WHEELBASE	3696 [145.5]
L103	VEHICLE LENGTH	5911 [232.7]
L104	FRONT OVERHANG	959 [37.8]
L105	REAR OVERHANG	1256 [49.4]
L403	FRONT OF BUMPER TO BACK OF CAB	3961 [155.9]
L404	CAB TO CL OF REAR AXLE	695 [27.4]
L700	CL OF FRONT AXLE TO BACK OF CAB	3002 [118.2]
L705	CL OF REAR AXLE TO REAR END OF FRAME	1029 [40.5]
W703	FRAME RAIL WIDTH	68 [2.7]
W704	REAR FRAME WIDTH	964 [38.0]

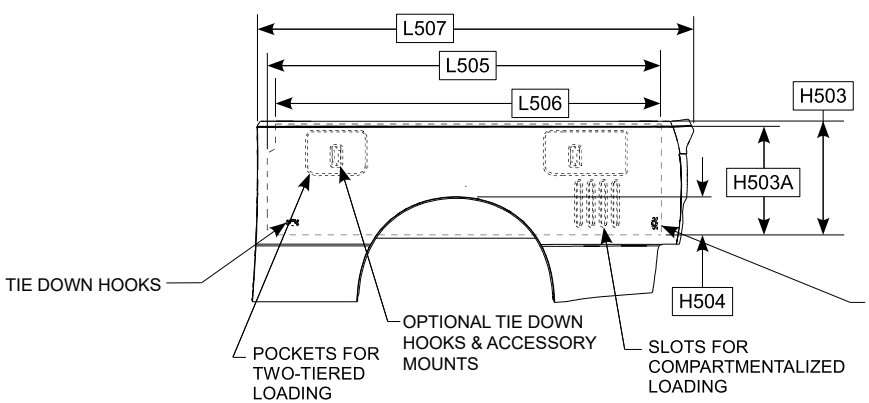
PICKUP BODY		
CODE	**DESCRIPTION**	**F-150 Lightning**
NOMINAL CARGO BODY SIZE		5.5 FT
H704	TOP OF PICKUP BOX FLOOR (HIGHEST POINT) TO CL OF FUEL FILLER DOOR	N/A (BEV)
H705	REAR BUMPER HEIGHT	240 [9.4] to bumper skin 279 [11.0] mm to bumper bracket
H769	TOP OF PICKUP BOX FLOOR (HIGHEST POINT) TO TOP OF CAB @ CL OF REAR AXLE	1118 [44.0]
L504	CAB TO PICKUP BOX	16 [0.6]
L551	BOX OVERALL LENGTH TO OPEN TAILGATE (MINIMUM)	2365 [93.1]
L558	CL OF REAR AXLE TO CL OF FUEL FILLER DOOR	N/A (BEV)
L559	LENGTH OF OPEN TAILGATE	537 [21.1]

CAB		
CODE	**DESCRIPTION**	**F-150 Lightning**
A130-1	WINDSHIELD ANGLE (DEGREES)	56.0
H701	FRONT BUMPER HEIGHT W/ VALENCES	443 [17.4]
W116	VEHICLE BODY WIDTH (MAX W/O MIRRORS)	2031 [80.0]
W144	VEHICLE WIDTH (MAX W/ STANDARD MIRRORS)	2438 [96.0]
W144	VEHICLE WIDTH (MAX W/ OPTIONAL TRAILER TOW MIRRORS)	N/A
W702	FRONT BUMPER WIDTH	1968 [77.5]

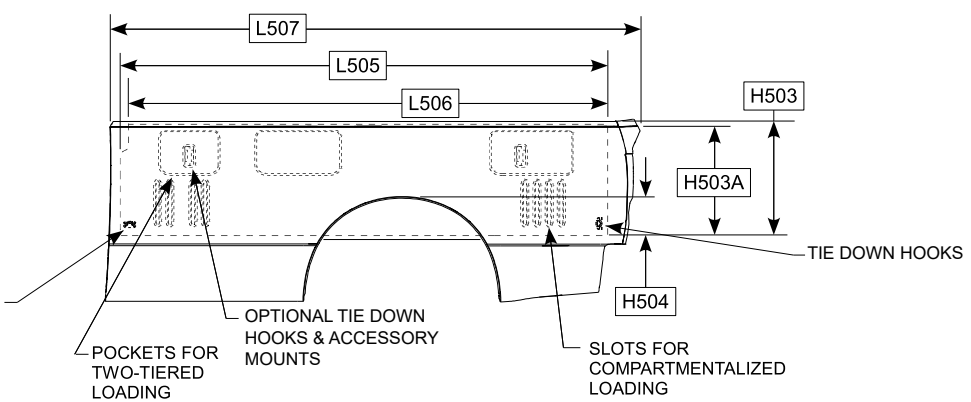
F-150/F-150 LIGHTNING
DIMENSIONAL DATA
STYLESIDE PICKUP BOX







5.5 & 6.5 FT. BOX



8 FT. BOX

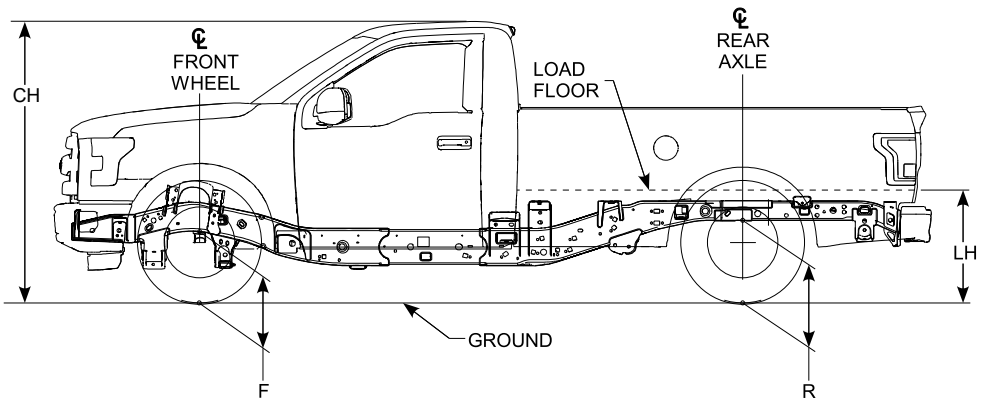
F-150/F-150 LIGHTNING
DIMENSIONAL DATA
STYLESIDE PICKUP BOX
(Cont'd)

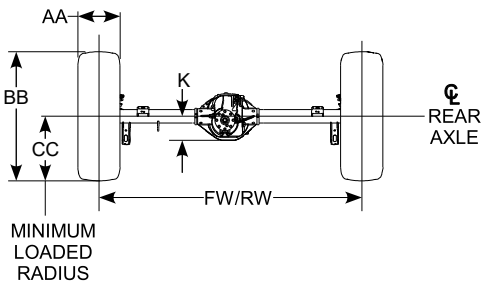
PICKUP BOX

CODE	DESCRIPTION	5.5' STYLESIDE	6.5' STYLESIDE	8' STYLESIDE	5.5' STYLESIDE (F-150 LIGHTINING)
H503	CARGO BODY HEIGHT W/MOLDING	543 [21.4]	543 [21.4]	543 [21.4]	543 [21.4]
H503A	CARGO BODY HEIGHT WITHOUT MOLDING	534 [21.0]	534 [21.0]	534 [21.0]	534 [21.0]
H504	WHEELHOUSE HEIGHT	234 [9.2]	234 [9.2]	234 [9.2]	234 [9.2]
L505	CARGO BODY LENGTH @ FLOOR	1705 [67.1]	2005 [78.5]	2479 [97.6]	1705 [67.1]
L506	CARGO BODY LENGTH @ TOP (BELT)	1662 [65.4]	1962 [77.2]	2436 [95.9]	1662 [65.4]
L507	CARGO BODY OVERALL LENGTH (Includes tailgate handle bezel)	1977 [77.8]	2277 [49.6]	2751 [108.3]	1977 [77.8]
L553	INSIDE FRONT OF BOX TO C_L OF STAKE #1	1597 [62.9]	48 [1.9]	48 [1.9]	1597 [62.9]
L554	C_L OF STAKE #1 TO C_L OF STAKE #2	N/A	1850 [72.8]	1176 [46.3]	N/A
L555	C_L OF STAKE #1 TO C_L OF STAKE #3	N/A	N/A	2324 [91.5]	N/A
L556	STAKE POCKET SIZE (L X W)	58 X 43 [2.3 X 1.7]	58 X 43 [2.3 X 1.7]	58 X 43 [2.3 X 1.7]	58 X 43 [2.3 X 1.7]
W201	CARGO WIDTH AT WHEELHOUSE	1285 [50.5]	1285 [50.5]	1285 [50.5]	1285 [50.5]
W207	REAR OPENING WIDTH AT FLOOR	1531 [60.3]	1531 [60.3]	1531 [60.3]	1531 [60.3]
W204	REAR OPENING WIDTH @ TOP (BELT)	1531 [60.3]	1531 [60.3]	1531 [60.3]	1531 [60.3]
W500	CARGO BODY MAXIMUM INSIDE WIDTH @ FLOOR	1656 [65.2]	1656 [65.2]	1656 [65.2]	1656 [65.2]
W502A	CARGO BODY MAXIMUM INSIDE WIDTH @ C_L OF REAR AXLE	1686 [66.4]	1686 [66.4]	1686 [66.4]	1686 [66.4]
V5	CARGO VOLUME - LITERS [CU.FT.]	1495 [52.8]	1765 [62.3]	2191 [77.4]	1495 [52.8]

Dimensions (unless otherwise stated): mm [inches]

F-150
AXLE / TIRE / VEHICLE HEIGHT DATA
REGULAR CAB & SUPERCAB

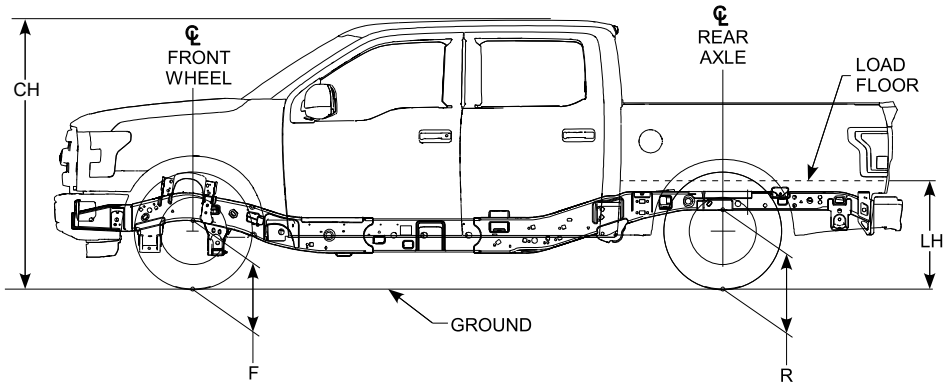


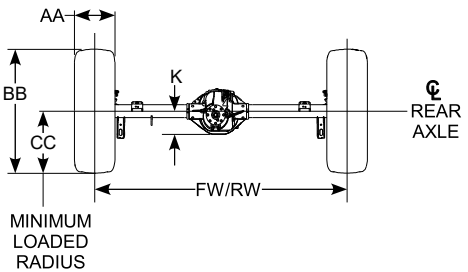


MODEL	WB (inches)	GVWR (pounds)	Base Tire	Units	"F" Height @ Front Wheel to Bottom of Frame (1) (2)		"R" Height @ Rear Wheel to Bottom of Frame (1) (2)		LH (1) (2)		CH (1) (2)		Units	K (8.8" Axle / 9.75" Axle)	AA (Section Width)	BB (Diameter)	CC (Static Load Radius)	FW	RW
					Height at Base Curb Wt.	Loaded Height @ Spring Rating	Height at Base Curb Wt.	Loaded Height @ Spring Rating	Empty	Loaded	Empty	Loaded							
F-150 Regular Cab 4x2	123	6050	245/70R17 110T A/S BSW	mm	473	429	620	510	845	713	1921	1837	mm	148 / 164	250	771	342	1725	1736
				inches	18.6	16.9	24.4	20.1	33.3	28.1	75.6	72.3	inches	5.8 / 6.5	9.8	30.4	13.5	67.9	68.3
	142	6100		mm	464	429	620	510	844	713	1911	1837	mm	148 / 164	250	771	342	1725	1736
				inches	18.3	16.9	24.4	20.1	33.2	28.1	75.2	72.3	inches	5.8 / 6.5	9.8	30.4	13.5	67.9	68.3
F-150 Regular Cab 4x4	123	6050	265/70R17 115T A/T OWL	mm	502	475	661	556	891	759	1957	1883	mm	148 / 164	268.9	796	350	1725	1736
				inches	19.8	18.7	26.0	21.9	35.1	29.9	77.0	74.1	inches	5.8 / 6.5	10.6	31.3	13.8	67.9	68.3
	142	6325		mm	508	473	665	556	890	760	1955	1882	mm	148 / 164	268.9	796	350	1725	1736
				inches	20.0	18.6	26.2	21.9	35.0	29.9	77.0	74.1	inches	5.8 / 6.5	10.6	31.3	13.8	67.9	68.3
F-150 SuperCab 4x2	145	6250	245/70R17 110T A/S BSW	mm	467	427	609	510	829	713	1917	1838	mm	148 / 164	250	771	342	1725	1736
				inches	18.4	16.8	24.0	20.1	32.6	28.1	75.5	72.4	inches	5.8 / 6.5	9.8	30.4	13.5	67.9	68.3
	164	7000		mm	464	424	623	504	845	706	1919	1832	mm	148 / 164	250	771	342	1725	1736
				inches	18.3	16.7	24.5	19.8	33.3	27.8	75.6	72.1	inches	5.8 / 6.5	9.8	30.4	13.5	67.9	68.3
F-150 SuperCab 4x4	145	6480	265/70R17 115T A/T OWL	mm	506	472	654	556	875	760	1960	1884	mm	148 / 164	268.9	796	350	1725	1736
				inches	19.9	18.6	25.7	21.9	34.4	29.9	77.2	74.2	inches	5.8 / 6.5	10.6	31.3	13.8	67.9	68.3
	164	7000		mm	509	469	660	550	880	753	1959	1878	mm	148 / 164	268.9	796	350	1725	1736
				inches	20.0	18.5	26.0	21.7	34.6	29.6	77.1	73.9	inches	5.8 / 6.5	10.6	31.3	13.8	67.9	68.3

(1) The Height Data shown represents dimensions of a base/standard vehicle with no options. Actual height may vary due to production tolerances.
(2) Vehicle ride heights are given at tire minimum loaded radius.

F-150 LIGHTNING
AXLE / TIRE / VEHICLE HEIGHT DATA
SUPERCREW





MODEL	WB (inches)	GVWR (pounds)	Base Tire	Units	"F" Height @ Front Wheel to Bottom of Frame (1) (2)		"R" Height @ Rear Wheel to Bottom of Frame (1) (2)		LH (1) (2)		CH (1) (2)		Units	K (8.8" Axle / 9.75" Axle)	AA (Section Width)	BB (Diameter)	CC (Static Load Radius)	FW	RW
					Height at Base Curb Wt.	Loaded Height @ Spring Rating	Height at Base Curb Wt.	Loaded Height @ Spring Rating	Empty	Loaded	Empty	Loaded							
F-150 Lightning	**145**	6250	275/65R18	mm	491	456	569	494	915	829	1990	1926	mm	-		-	-	1729	1736
				inches	19.3	18.0	22.4	19.5	36.0	32.6	78.4	75.8	inches	-	-	-	-	68.1	68.3

(1) The Height Data shown represents dimensions of a base/standard vehicle with no options. Actual height may vary due to production tolerances.
(2) Vehicle ride heights are given at tire minimum loaded radius.

F-150/ F-150 LIGHTNING
TIRE & WHEEL DATA

TIRE DATA

Tire Size / Description	Rim Width (in.)	Section Width (mm)	Static Loaded Radius (mm)	Diameter (mm)
245/70R17 110T A/S BSW (4x2 Base Tire)	7.5	250	342.2	771
265/70R17 115T A/T BSW(4x4 Base Tire)	7.5	268.9	350.4	795.6
265/60R18 110T A/S BSW	7.5 & 8.5	268.7	344.2	772
275/65R18 116T A/T BSW	7.5 & 8.5	285	361.9	816.6
275/60R20 115T A/S BSW	8.5	289.2	379.9	844.3
275/60R20 115T A/T BSW	8.5	274.2	368.2	835
275/60R20 115T A/T BSW	8.5	282.1	374.7	834.9
275/50R22 111T A/S BSW	8.5	277.1	380.7	841.9
LT265/70R17C 112/109S A/T BSW	7.5	273.2	369.2	805.6
LT265/70R18C 113/110S A/T BSW	7.5 & 8.5	267.5	383.2	836.8

WHEEL DATA

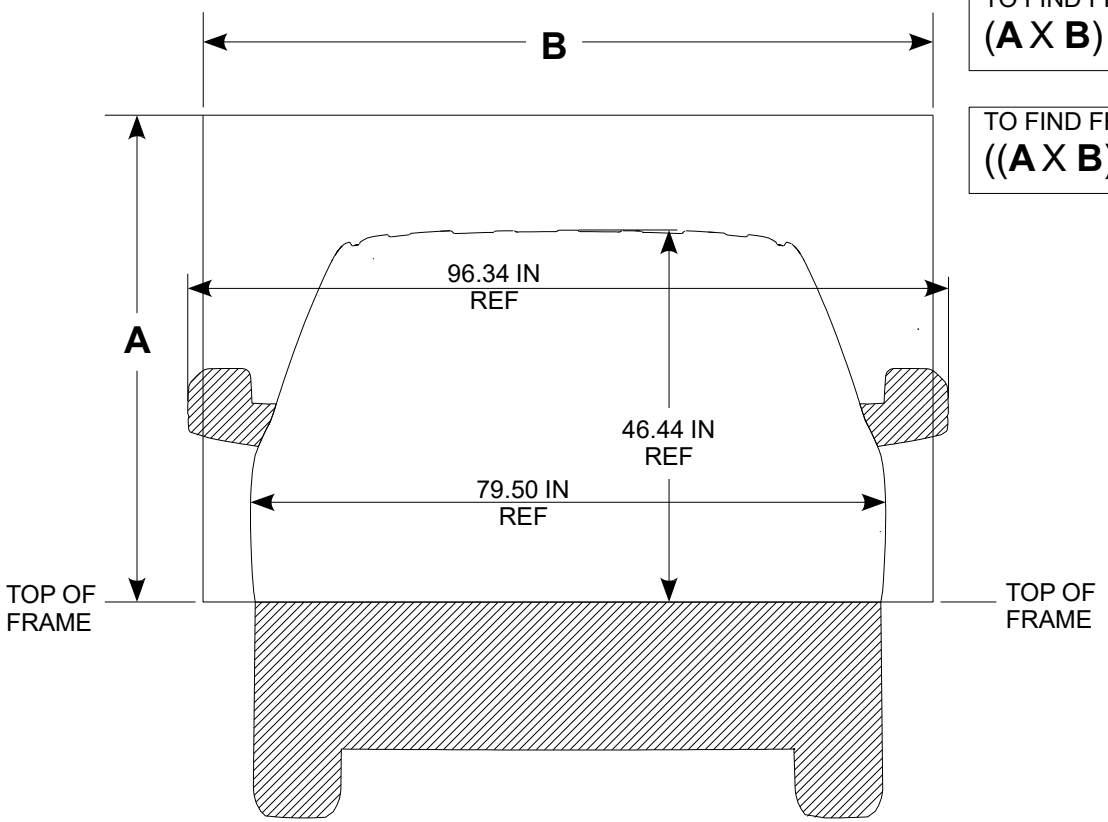
Wheel Type / Description	Wheel Size (in.)	Inset (in./mm)	No. of Studs	Bolt Circle (in./mm)	Max. Wheel Capacity Load Front / Rear (lbs)
Silver Steel	17 x 7.5	1.73 / 44	6	5.3 / 135	1825 / 2025
Silverpainted Aluminum	17 x 7.5	1.73 / 44	6	5.3 / 135	1825 / 2028
6spoke Machined Aluminum	18 x 8.5	1.73 / 44	6	5.3 / 135	1825 / 2028
Silver Aluminum (HeavyDuty Payload Package)	18 x 8.5	1.73 / 44	6	5.3 / 135	1991 / 2275
Machined Aluminum	18 x 8.5	1.73 / 44	6	5.3 / 135	1825 / 2028
Chromelike PVD	18 x 7.5	1.73 / 44	6	5.3 / 135	1825 / 2028
Machined Aluminum w / Painted Pockets	20 x 8.5	1.73 / 44	6	5.3 / 135	1825 / 2028
Aluminum	20 x 8.5	1.73 / 44	6	5.3 / 135	1825 / 2028
6spoke Premium Painted Aluminum	20 x 8.5	1.73 / 44	6	5.3 / 135	1825 / 2028
Chromelike PVD Aluminum	20 x 8.5	1.73 / 44	6	5.3 / 135	1825 / 2028
Polished Aluminum	20 x 8.5	1.73 / 44	6	5.3 / 135	1825 / 2028
Polished Aluminum	22 x 8.5	1.73 / 44	6	5.3 / 135	1825 / 2028
Lightning BEV Machined W/Black Pockets	18 x 8.5	1.73 / 44	6	5.3 / 135	2025 / 2475
Lightning BEV Alloy Dark Carbonized	20 x 8.5	1.73 / 44	6	5.3 / 135	2025 / 2475
Lightning BEV Bright Machined W/Black Pockets	20 x 8.5	1.73 / 44	6	5.3 / 135	2025 / 2400

FRONTAL SURFACE AREA WORKSHEET

A = BOX HEIGHT IN INCHES
B = BOX WIDTH IN INCHES

TO FIND FRONT SURFACE AREA IN SQ INCHES
(**A** X **B**) + 1785.6 =

TO FIND FRONT SURFACE AREA IN SQ FEET
((**A** X **B**) / 144) + 12.40 =

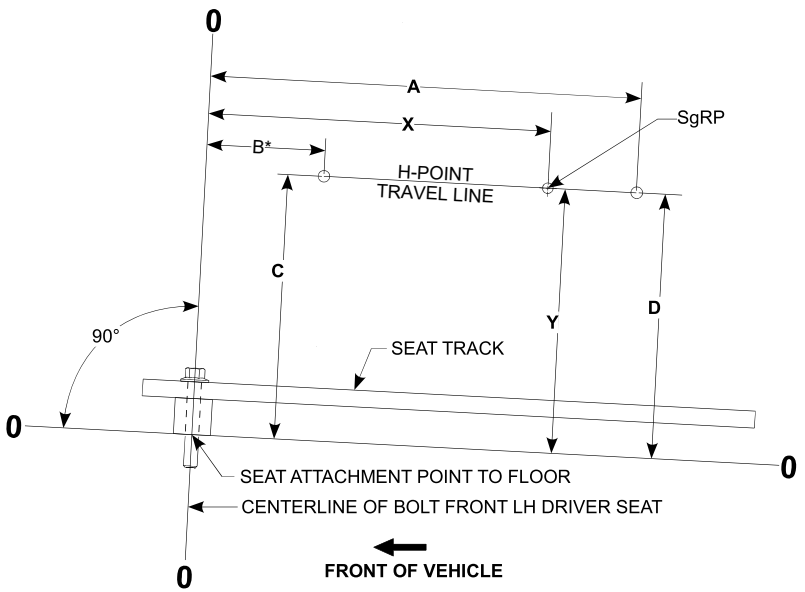


BELOW FRAME SHADED AREA EQUALS
1050376.4 / (25.4 X 25.4) = 1628.0868 SQ. IN.
1628.0868 / (12 X 12) = 11.3062 SQ. FT.

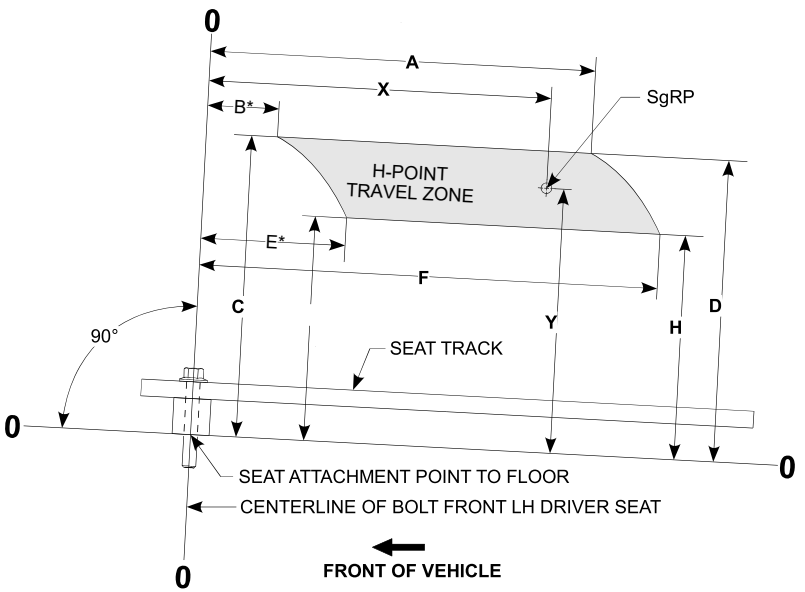
MIRROR SHADED AREA EQUALS
(50822.9 X 2) / (25.4 X 25.4) = 157.5513 SQ. IN.
157.5513 / (12 X 12) = 1.0941 SQ. FT.

TOTAL SHADED AREA EQUALS
1152022.2 / (25.4 X 25.4) = 1785.6379 SQ. IN.
1785.6379 / (12 X 12) = 12.4002 SQ. FT.

F-150
SEAT TRACK & H-POINT DATA



2-WAY SEATS



MULTI-WAY SEATS

Seat Dimensional Data

Seat Combinations		Seat Dimensions mm [inches]								SgRP Location mm	
Driver	**Passenger**	**A**	**B ***	**C**	**D**	**E ***	**F**	**G**	**H**	**X**	**Y**
2-Way	**2-Way**	393 [15.5]	138 [5.4]	318 [12.5]	307 [12.0]	—	—	—	—	317 [12.5]	311 [12.2]
8-Way **	**2-Way**	354 [13.9]	98 [3.9]	350 [13.8]	339 [13.3]	158 [6.2]	413 [16.3]	287 [11.3]	276 [10.9]	317 [12.5]	311 [12.2]
10-Way	**10-Way**	354 [13.9]	98 [3.9]	350 [13.8]	339 [13.3]	158 [6.2]	413 [16.3]	287 [11.3]	276 [10.9]	317 [12.5]	311 [12.2]

Seat Track Angle to (Horizontal) Top of Frame = 2.5°

* Add 10mm to dimension shown for Passenger Seat only.
** 8-way seat available on Driver's Side only (comes with 2-way Seat on Passenger Side).

Ford Co-Pilot360™ is a suite of driver-assist technology features that variously utilize a radar and/or camera system. The radar and camera systems help provide Ford Co-Pilot360 features such as:

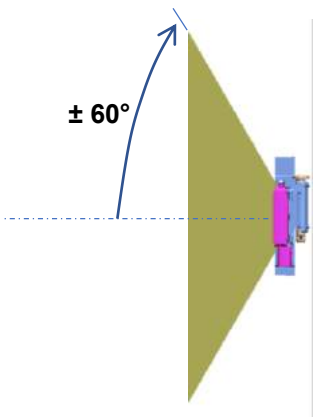
- Pre-Collision Assist with Automatic Emergency Braking (AEB)
- Forward Collision Warning
- Audible Lane Departure Warning
- Automatic High Beam
- Adaptive Cruise Control with Stop-and-Go
- BLIS® (Blind Spot Information System) with cross-traffic alert and trailer-tow monitoring

Installed upfitter equipment should not infringe on the radar or camera view zones. The CAD files of the radar and camera view zones are available upon request via the Ford BBAS web site (www.fordbbas.com/contactus).

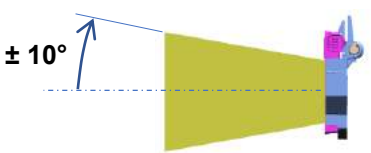
Consult the Order Guide for feature availability by vehicle model.

Radar View Zone

CAD File: ML3T-9G853-A



Radar Plan View

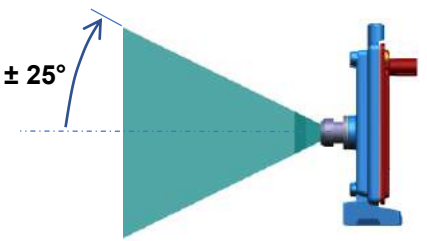


Radar Side View

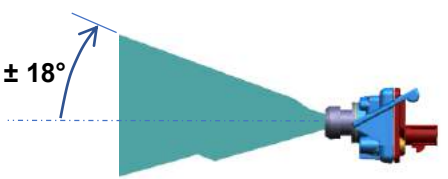
19.03.01

Camera View Zone

CAD File: ML3T-19H406-A



Camera Plan View



Camera Side View

19.04.02

F-150 LIGHTNING PRECAUTIONARY DRILL ZONES GUIDANCE

F-150 LIGHTNING PRECAUTIONARY DRILL ZONES

This guidance only applies to the F-150 BEV.

- Addition or installation of 12V+ accessories or upfits is not Recommended
- Box Removal on F-150 Lightning is not Recommended or Supported.

It is STRONGLY recommended that F-150 LIGHTNING CAD is obtained for upfitter use to understand vehicle component placement/location of Hi/Low-Voltage Wire harness routing, coolant line wiring, hydraulic brake line routing, rear drive unit placement, etc. CAD can be obtained from Ford Body Builder Advisory Service by submitting a helpdesk ticket, https://fordbbashelpdesk.kayako.com/Tickets/Submit

Take precautions when undertaking drilling, or any other operation, aft of B-Pillar in order to prevent damage to any components under the Van floor. HV grounding points in the vehicle are not to be touched.

- When adding holes/fasteners to the floor of the vehicle to secure upfits, consideration must be given to all components below the floor.

- It is strongly recommended that drill-depth stop be used. Drill stop depth shall not exceed 1.0 [25.4] MAXIMUM DEPTH

- Fasteners (including PlusNut® or equivalent) extending below the floor of the vehicle shall not exceed 1.0 [25.4] MAXIMUM DEPTH (Figure A)

- Fasteners (and/or alternative fastening method) extending below the floor of the vehicle shall have 2.0 [50.8] MINIMUM CLEARANCE to any surrounding Hi/Low-Voltage wiring and/or coolant line routing and/or hydraulic brake line routing to prevent any damage/chaffing. (Figure B)

NOTE:
Re-paint metal edges after cutting or drilling.

- All metal edges must comply with exterior and interior protection legislation. All fixings through the floor, sides or roof must be sealed.
- (Refer BEMM sections 5.1.1 Body Structures and 5.1.3 Corrosion Prevention)

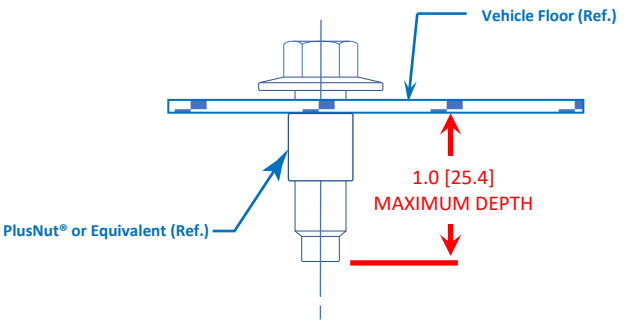


Figure A

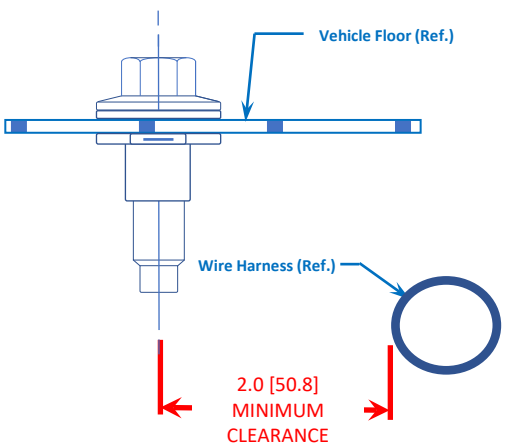
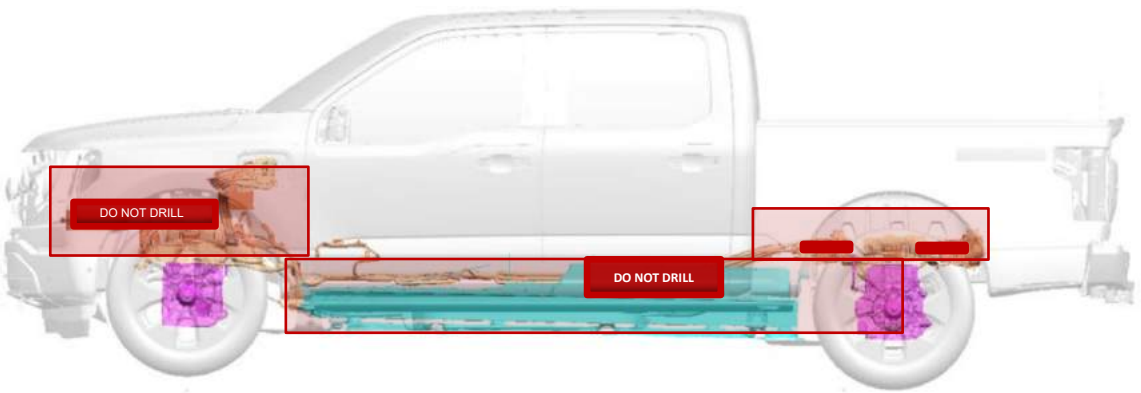
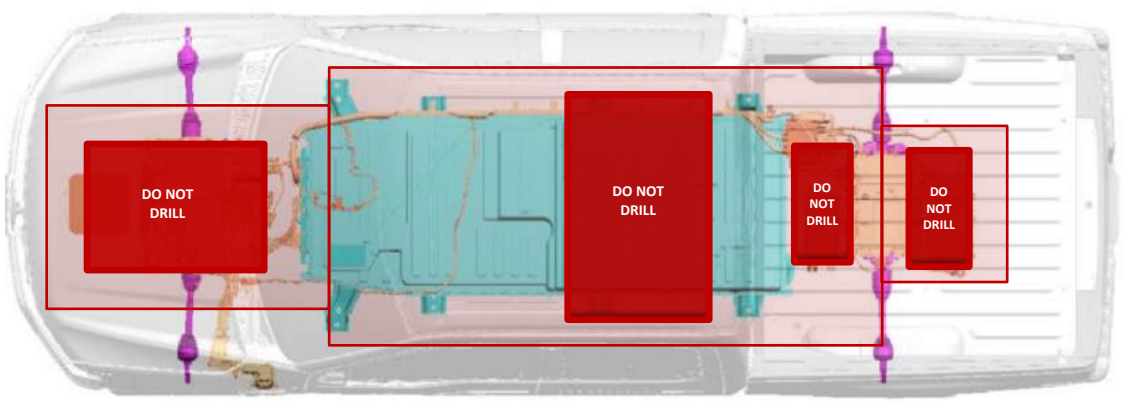


Figure B

WARNING: To prevent the risk of high-voltage shock, precisely follow all warnings, including instructions to depower the high voltage system. Failure to follow these instructions may result in serious personal injury or death. Additional Electrical System Guidance and High Voltage Warnings can be found in the General BBLB which can be accessed via the web at https://fordbbas.com under “Publications”. For BBLB documents, expand the “Body Builder Layout Book” Section to view all available documents.For Vehicle Specifications, expand the “Vehicle Specifications”section

F-150 LIGHTNING
PRECAUTIONARY DRILL ZONES GUIDANCE





FRONT

--- Precautionary Drill Zones- Cad Data Request Required For Component Placement

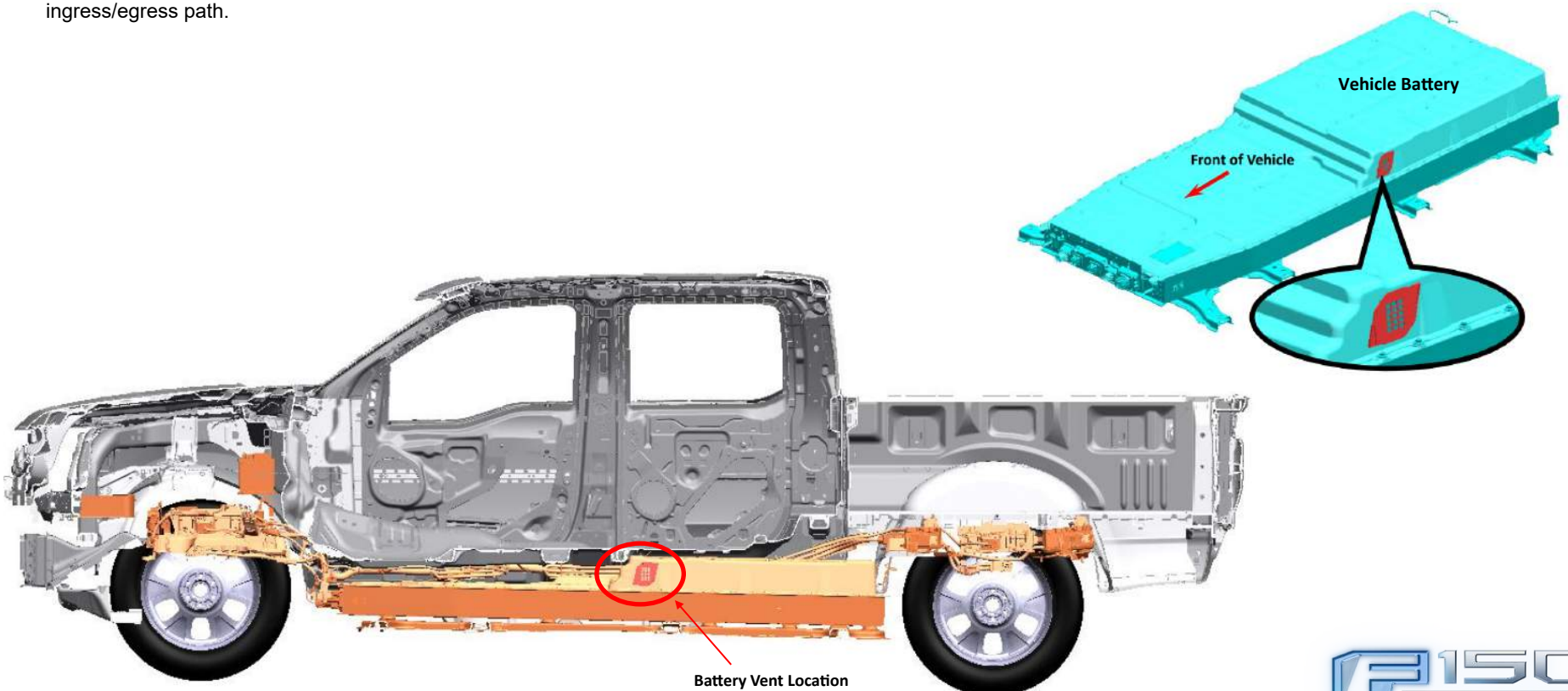
--- DO NOT DRILL

Warnings :

- Do not touch, drill, modify or obscure the orange High Voltage cables, fasteners, channels, strain relief, ground wire or connectors
- Fasteners that upfitters install must point away from the battery to not to cause damage to the battery. Do not add a fastener into the vehicle that would point toward the HV Battery
- No components or structure installed by an upfitter shall result in contact, penetration (especially added fasteners pointed towards the high voltage battery or other electrical components), separation, or other damage to the high voltage electrical system or any portion thereof when the vehicle is tested in any manner
- Do not drill the side impact bars or Side energy absorption members
- Do not weld to the High Voltage Battery, casing or cradle
- Do not weld or ground welding equipment to the battery, battery casing, or battery cradle
- Do not modify the High Voltage charge port inlet connector/mounting bracket
- Do not modify High Voltage/Low voltage grounding locations/joints/fasteners of the charge port package grounds
- Do not modify any of the orange High Voltage cables
- Do not remove fasteners and protective shield from Charge port inlet harness
- Take precaution when undertaking drilling or other operation in or near any HV/LV cabling, HV components, cooling lines to prevent damage

F-150 LIGHTNING BATTERY ELECTRICAL VEHICLE VENTING

- If the HV Battery is equipped with pressure equalization patches, pressure relief ports, and/or exhaust vent ducts, no additional components nor obstructions (beyond any installed by Ford) shall be located in the same environment as the battery (e.g., underbody), and within 150 mm of these features. Additionally, no components which may contain combustible liquids or gasses at any time shall be added by the upfitter within 300 mm of these features.
- There shall be no modifications or installed components which confine the air space near the outside of the HV Battery or obstruct the free flow of air about the battery (beyond any installed by Ford).
- Any cut outs or openings created between the occupant space and the vehicle underbody shall be sealed such that air is not free to pass from under the vehicle into the occupant space.
- If any primary ingress/egress paths for occupant spaces are located above or rearward of the rear axle(s), a metallic shielding shall be added to obstruct any air flow from the battery towards those ingress/egress paths and redirect that air flow towards a side/rear area that is not a primary ingress/egress path.



CHANGE CONTROL INDEX

LTRS	REVISIONS		
ORIGINATOR	CHECKER	ENGR APP	MATL APP
			INITIAL RELEASE
CHNL34-000000-BBLB-AA-01-FNA-ECN/1 RELEASED			20210714
KVINOTH4	RWAGNE43	SLAZARZ	--
CHNL34-000000-BBLB-AA-01-FNA-ECN/2 RELEASED			20220506
KVINOTH4	RWAGNE43	SLAZARZ	--