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Bronco Equipment Installation Guide

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Change Control

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BRONCO 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.

Installation of additional equipment, or alterations to Bronco vehicles as sold by Ford Motor Company may void the vehicle warranty or require certification to US Federal (or Canadian) Motor Vehicle Safety Standards, Emissions standards, state, provincial, and/or local laws and regulations. It is the responsibility of the vehicle alterer to determine what standards, laws or regulations may be affected and take appropriate action.

The suspension and steering systems on the Bronco have been designed and tested to provide predictable performance; Ford does not recommend any modifications such as adding or removing parts (i.e. lift kits or stabilizer bars) or using replacement parts not equivalent to the original factory equipment. Any modifications to your vehicle that raise the center of gravity (i.e. lift kits, roof mounted accessories beyond the stated load capacity) may cause the vehicle to roll over when there is a loss of vehicle control.

The following important items should be carefully considered before modifying a Bronco vehicle:

- Installation of a snow plow of any kind is not endorsed by Ford Motor Company and may void the vehicle warranty.
- Sensors should not be removed, relocated or reoriented unless expressly authorized by Ford Motor Company. Installation of additional equipment should also not interfere with the field of view (FOV) of the camera and radar modules (see additional information in this document for sensor FOV zones). Examples of sensors:
 - o Front and rear view cameras
 - Forward facing radar
 - o Rear corner radar
 - o Crash sensors
 - o Yaw sensor
 - o ABS wheel speed sensors
- Any added accessories or equipment mounted near exterior lamps and/or reflectors should be checked to
 ensure the vehicle remains in compliance with FMVSS 108 Lamps, Reflective Devices and Associated
 Equipment standard.

Bronco CAD Requests

Component level CAD for the Bronco can be obtained from SEMA Tech Transfer. SEMA Tech Transfer link: https://www.semagarage.com/techtransfer/Index

Note: Access to Tech Transfer may require a SEMA membership and associated fees may apply.

Reference Information

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

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Bronco Equipment Installation Guide

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MODEL LINEUP: 2 DOOR

															Spr Rat			
					Max	В	ase Cu	rb		GAI	NR		Axle F	Rating	Conve	ntional	Max	
Vehicle	Facility	-			Advertised		Weight		Min	Max	Min	Max	Max	Max	Max		Total	Max
Description 2.3L GTDi MT88 ESOF SWB	Engine	Trans	(in)	(lbs)	Payload	Front	Rear	Total	Front	Front	Rear	Rear	Front	Rear	Front	Rear	ARC	GCWR
2.3L GTDi MT88 ESOF SWB Black Diamond	2.3L GTDi	MT88	100.4	5640	1057	2441	2096	4537	2900	2900	3000	3000	2900	3000	2900	3000	483	8780
2.3L GTDi MT88 ESOF SWB Big Bend	2.3L GTDi	MT88	100.4	5540	1153	2363	1980	4343	2900	2900	3000	3000	2900	3000	2900	3000	577	8780
2.3L GTDi MT88 EMTC SWB		:										:						
2.3L GTDi MT88 EMTC SWB Black Diamond	2.3L GTDi	MT88	100.4	5640	1034	2456	2104	4560	2900	2900	3000	3000	2900	3000	2900	3000	460	8780
2.3L GTDi MT88 EMTC SWB Badlands	2.3L GTDi	MT88	100.4	5700	1002	2520	2131	4651	2900	2900	3000	3000	2900	3000	2900	3000	382	8780
2.3L GTDi MT88 EMTC SWB Heritage Standard	2.3L GTDi	MT88	100.4	5620	879	2519	2175	4694	2900	2900	3000	3000	2900	3000	2900	3000	306	8780
2.3L GTDi MT88 EMTC SWB Big Bend	2.3L GTDi	MT88	100.4	5620	988	2478	2108	4586	2900	2900	3000	3000	2900	3000	2900	3000	414	8780
2.3L GTDi 10R60 ESOF SWB																		
2.3L GTDi 10R60 ESOF SWB Black Diamond	2.3L GTDi	10R60	100.4	5640	1037	2456	2101	4557	2900	2900	3000	3000	2900	3000	2900	3000	463	8780
2.3L GTDi 10R60 ESOF SWB Big Bend	2.3L GTDi	10R60	100.4	5540	1132	2378	1985	4363	2900	2900	3000	3000	2900	3000	2900	3000	557	8780
2.3L GTDi 10R60 EMTC SWB																		
2.3L GTDi 10R60 EMTC SWB Heritage Standard	2.3L GTDi	10R60	100.4	5620	858	2534	2180	4714	2900	2900	3000	3000	2900	3000	2900	3000	286	8780
2.3L GTDi 10R60 EMTC SWB Black Diamond	2.3L GTDi	10R60	100.4	5660	1034	2471	2109	4580	2900	2900	3000	3000	2900	3000	2900	3000	453	8780
2.3L GTDi 10R60 EMTC SWB Big Bend	2.3L GTDi	10R60	100.4	5620	968	2492	2114	4606	2900	2900	3000	3000	2900	3000	2900	3000	394	8780
2.7L GTDi 10R60 ESOF SWB																		
2.7L GTDI 10R60 ESOF SWB Black Diamond 2.7L GTDI 10R60 EMTC SWB	2.7L GTDI	10R60	100.4	5780	1036	2589	2107	4696	3000	3000	3000	3000	3000	3000	3000	3000	464	8780
2.7L GTDi 10R60 EMTC SWB Wildtrak	2.7L GTDi	10R60	100.4	5820	889	2733	2149	4882	3000	3000	3000	3000	3000	3000	3000	3000	318	8840
2.7L GTDi 10R60 EMTC SWB Heritage Standard	2.7L GTDi	10R60	100.4		858	2667		4853	3000	3000	3000	3000	3000	3000	3000	3000	287	8840
	2.7L GTDI																	
2.7L GTDI 10R60 EMTC SWB Heritage Limited 2.7L GTDI 10R60 EMTC SWB Black Diamond	2.7L GTDI 2.7 GTDI	10R60 10R60	100.4 100.4	5860 5800	888 1033	2707 2604	:	4922 4719	3000 3000	318 314	8780 8780							
2.7L GTDI 10R60 EMTC SWB Badlands	2.7L GTDI	10R60	100.4	5860	1002	2668	2142	4810	3000	3000	3000	3000	3000	3000	3000	3000	430	8780

Notes:

- (1) Maximum loaded vehicle (including passengers, equipment and payload) cannot exceed the GVWR or GAWRs (front or rear).
- (2) Load rating represents maximum allowable weight of people, cargo and body equipment and is reduced by optional equipment weight.
- (3) Accessory Reserve Capacity (ARC) is the maximum allowable weight of regular production options and aftermarket equipment for each configuration.
- (4) Gross Axle Weight Rating is determined by the rated capacity of the minimum component of the axle system (axle, springs, wheels, tires).
- (5) Base Curb Weights shown are for vehicles with standard equipment



BRONCO

MODEL LINEUP: 4 DOOR

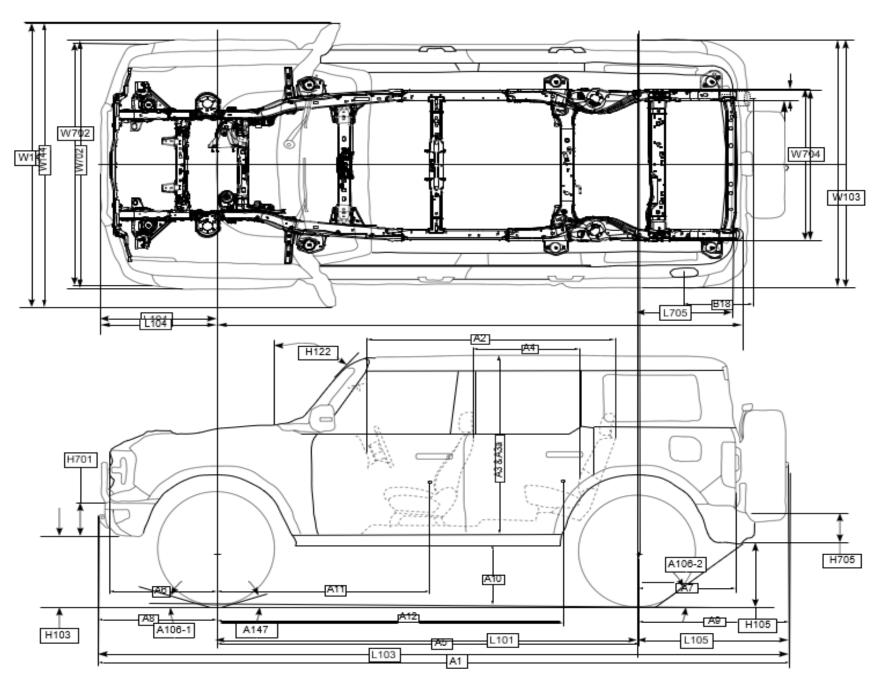
															Spring	Rating		
Vehicle Description	Engine	Trans	WB (in)	GVWR (lbs)	Max Advertised Payload	i	ase Cu Weight Rear		Min Front	GA\ Max Front	WR Min Rear	Max Rear	Max	Rating Max Rear	Max	entional Max Rear	Total	Max GCWF
2.3L GTDi MT88 ESOF LWB														:				
2.3L GTDi MT88 ESOF LWB Black Diamond	2.3L GTDi	MT88	116.1	6000	1178	2619	2155	4774	3170	3170	3070	3070	3170	3070	3170	3070	456	8780
2.3L GTDi MT88 ESOF LWB Big Bend 2.3L GTDi MT88 EMTC LWB	2.3L GTDi	MT88	116.1	5920	1366	2497	2011	4508	3090	3090	3070	3070	3090	3070	3090	3070	642	8780
2.3L GTDi MT88 EMTC LWB Heritage Standard	2.3L GTDi	MT88	116.1	5980	1047	2668	2216	4884	3090	3090	3070	3070	3090	3070	3090	3070	326	8780
2.3L GTDi MT88 EMTC LWB Black Diamond	2.3L GTDi	MT88	116.1	6000	1156	2634	2162	4796	3170	3170	3070	3070	3170	3070	3170	3070	434	8780
2.3L GTDi MT88 EMTC LWB Big Bend	2.3L GTDi	MT88	116.1	5980	1171	2611	2150	4761	3090	3090	3070	3070	3090	3070	3090	3070	449	8780
2.3L GTDi MT88 EMTC LWB Badlands 2.3L GTDi 10R60 ESOF LWB	2.3L GTDi	MT88	116.1	6060	1069	2760	2181	4941	3170	3170	3070	3070	3170	3070	3170	3070	349	8780
2.3L GTDI 10R60 ESOF LWB Outer Banks 2.3L GTDI 10R60 ESOF LWB Black Diamond 2.3L GTDI 10R60 ESOF LWB Big Bend 2.3L GTDI 10R60 EMTC LWB	2.3L 2.3L 2.3L	10R60 10R60 10R60	116.1 116.1 116.1	5920 6000 5920	1252 1158 1346	2563 2638 2516	2156	4621 4794 4528	:	3170	3070	3070 3070 3070	3170	3070 3070 3070	3090 3170 3090	3070 3070 3070	529 436 622	8780 8780 8780
2.3L GTDi 10R60 EMTC LWB Heritage Standard	2.3L GTDi	10R60	116.1	5980	1026	2687	2217	4904	3090	3090	3070	3070	3090	3070	3090	3070	306	30000
2.3L GTDi 10R60 EMTC LWB Outer Banks	2.3L GTDi	10R60	116.1	5980	1276	2578	2079	4657	3090	3090	3070	3070	3090	3070	3090	3070	553	30000
2.3L GTDi 10R60 EMTC LWB Everglades	2.3L GTDi	10R60	116.1	6180	903	2975	2249	5224	3270	3270	3070	3070	3270	3070	3270	3070	186	30000
2.3L GTDi 10R60 EMTC LWB Black Diamond	2.3L GTDi	10R60	116.1	6020	1155	2653	2163	4816	3170	3170	3070	3070	3170	3070	3170	3070	434	30000
2.3L GTDi 10R60 EMTC LWB Big Bend 2.7L GTDi 10R60 ESOF LWB	2.3L GTDi	10R60	116.1	5980	1151	2630	2151	4781	3090	3090	3070	3070	3090	3070	3090	3070	429	30000
2.7L GTDi 10R60 ESOF LWB Outer Banks	2.7L GTDi	10R60	116.1	6060	1252	2687	2073	4760	3220	3220	3070	3070	3220	3070	3220	3070	530	8740
2.7L GTDi 10R60 ESOF LWB Black Diamond 2.7L GTDi 10R60 EMTC LWB	2.7L GTDi	10R60	116.1	6120	1137	2762	2171	4933	3270	3270	3070	3070	3270	3070	3270	3070	417	8740
2.7L GTDi 10R60 EMTC LWB WildTrak	2.7L GTDi	10R60	116.1	6140	1031	2869	2189	5058	3220	3220	3070	3070	3220	3070	3220	3070	312	8840
2.7L GTDi 10R60 EMTC LWB Badlands	2.7L GTDi	10R60	116.1	6180	1029	2903	2197	5100	3270	3270	3070	3070	3270	3070	3270	3070	310	8840
2.7L GTDi 10R60 EMTC LWB Heritage Limited	2.7L GTDi	10R60	116.1	6180	938	2895	2295	5190	3270	3270	3070	3070	3270	3070	3270	3070	220	8840
2.7L GTDi 10R60 EMTC LWB Heritage Standard	2.7L GTDi	10R60	116.1	6100	1006	2811	2232	5043	3220	3220	3070	3070	3220	3070	3220	3070	287	8840
2.7L GTDi 10R60 EMTC LWB Outer Banks	2.7L GTDi	10R60	116.1	6100	1256	2702	2094	4796	3220	3220	3070	3070	3220	3070	3220	3070	534	8840
2.7L GTDi 10R60 EMTC LWB Black Diamond	2.7L GTDi	10R60	116.1	6140	1135	2777	2178	4955	3270	3270	3070	3070	3270	3070	3270	3070	415	8840

Notes:

- (1) Maximum loaded vehicle (including passengers, equipment and payload) cannot exceed the GVWR or GAWRs (front or rear).
- (2) Load rating represents maximum allowable weight of people, cargo and body equipment and is reduced by optional equipment weight.
- (3) Accessory Reserve Capacity (ARC) is the maximum allowable weight of regular production options and aftermarket equipment for each configuration.
- (4) Gross Axle Weight Rating is determined by the rated capacity of the minimum component of the axle system (axle, springs, wheels, tires).
- (5) Base Curb Weights shown are for vehicles with standard equipment

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BRONCO DIMENSIONAL DATA



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DIMENSIONAL DATA: RIDE HEIGHT, CAB HEIGHT & FRAME LENGTH

			0.0000			4 0000	
		Big	2 DOOR	Sasquat	Biq	4 DOOR	Sasquat
CODE	DESRIPTION	Bend	S	ch	Bend	S	ch
				-		33" Tire	
	BOTTOM OF FRONT	32 1116	33 1116	33 1116	32 1116	33 1116	33 1116
H103	BUMPER TO	404	463	491	404	463	491
11103	GROUND @ CURB	[15.9]	[18.2]	[19.3]	[15.9]	[18.2]	[19.3]
	BOTTOM OF REAR						
H105	BUMPER TO	460	482	519	459	481	518
11100	GROUND @ CURB	[18.1]	[19.0]	[20.4]	[18.1]	[18.9]	[20.4]
	APPROACH ANGLE						
A106-1	@ CURB (DEGREES)	38.2	40.4	43.2	38.2	40.3	43.2
	DEPARTURE ANGLE						
	@ CURB (DEGREES)						
	(TO REAR TOW	32.0	34.1	37.2	32.0	34.0	37.0
A106-2	HOOKS)						
	(TO REAR BUMPER -						
	` TOW HOOKS	36.5	38.6	41.6	36.4	38.5	41.4
	REMOVED)						
	RAMP BREAKÓVER						
A147	ANGLE@ CURB	23.6	25.9	29.0	22.0	23.6	26.3
	(DEGREES)						
L101	WHEELBASE	2	550 [100.4	4]	2	950 [116.	1]
L103	VEHICLE LENGTH	4411	4439	4413	4811	4839	4813
L103		[173.7]	[174.8]	[173.7]	[189.4]	[190.5]	[189.5]
	FRONT OVERHANG	794	822	783	794	822	783
L104	(NO LICENSE PLATE	[31.3]	[32.4]	[30.8]	[31.3]	[32.4]	
	BRACKET)	[00]	[0]	[00.0]	[00]	[0=]	[00.0]
	REAR OVERHANG	1067	1067	1080	1067	1067	1080
	(TO SPARE TIRE	[42.0]	[42.0]	[42.5]	[42.0]	[42.0]	[42.5]
L105	CARRIER)						· ·
	(TO REAR BUMPER)	833	818	818	833	818	818
		[32.8]	[32.2]	[32.2]	[32.8]	[32.2]	[32.2]
1.705	C/L OF REAR AXLE		747 [00 0			747 FOO O	. 1
L705	TO REAR END OF		717 [28.2]			717 [28.2]	
	FRAME						
	WINDSHIELD ANGLE						
H122	(DEGREES)		39.6			39.6	
	(DEGREES)						
	FRONT BUMPER	301	264	271	301	264	271
H701	HEIGHT	[11.9]	[10.4]	[10.7]	[11.9]	[10.4]	[10.7]
	REAR BUMPER	256	258	258	256	258	258
H705	HEIGHT	[10.1]	[10.2]	[10.2]	[10.1]	[10.2]	[10.2]
	HEIGH	[10.1]	[10.2]	[10.2]	[10.1]	[10.2]	[10.2]
	VEHICLE WIDTH	1928	1937	2015	1928	1937	2015
W103	(MAX W/O MIRRORS)	[75.9]	[76.3]	[29.3]	[75.9]		[29.3]
	VEHICLE WIDTH				,		
W144	(MAX W/ STANDARD	2	2189 [86.2	1	2	189 [86.2	₁
	MIRRORS)			-	_		٠
14/700	FRONT BUMPER	1873	1874	1872	1873	1874	1872
W702	WIDTH	[73.7]	[73.8]	[73.7]	[73.7]	[73.8]	[73.7]
W704	REAR FRAME WIDTH		170 [46.1		_	170 [46.1	

Note: Does not include rear tow hooks, optional trailer hitch reciever or spare tire

Note: Big Bend (Plastic), Badlands (Modular), Sasquatch (Steel)

Note: Badlands & Sasquatch measured to Design Nominal tire sidewall

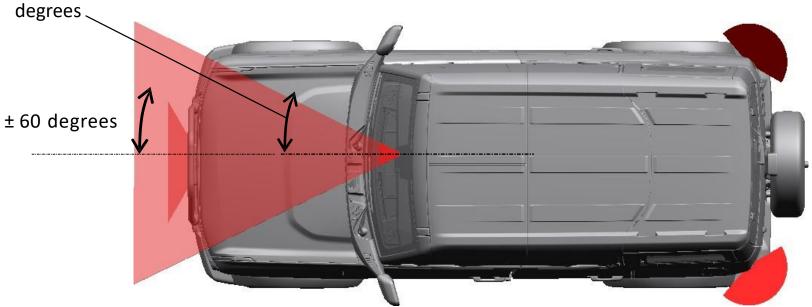
Note: High Series Mirrors with Turn Lamp (W144 = 2199mm [86.6])

DIMENSIONS SHOWN IN mm [in]

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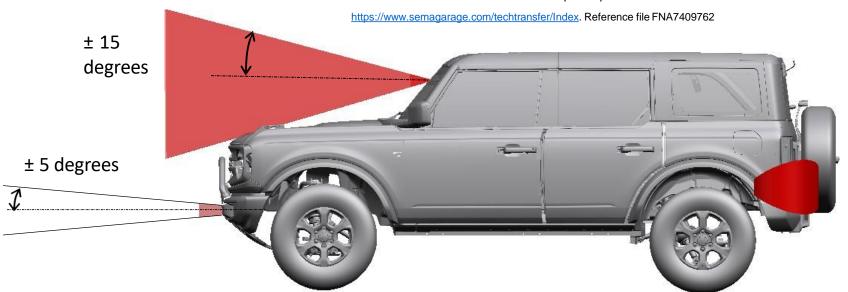
MODEL YEAR

ADAS SENSOR FIELD OF VIEWS (KEEP OUT ZONES) ± 25



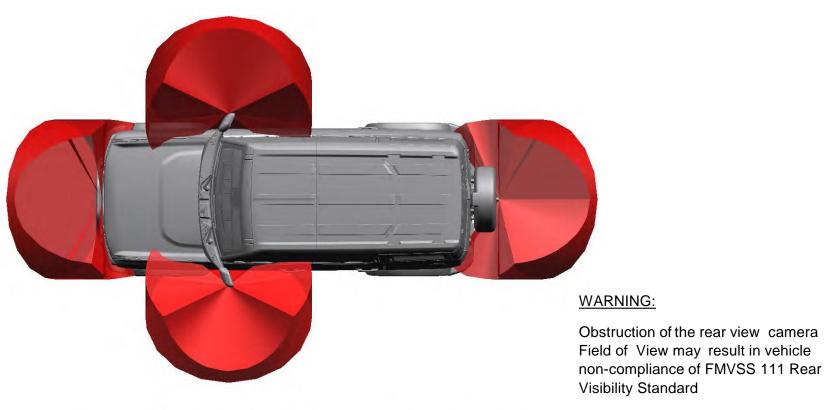
Installed equipment should not infringe on the sensor field of view zones.

CAD files for 3 and 5 door models are available upon request via SEMA Tech Transfer:



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MODEL YEAR



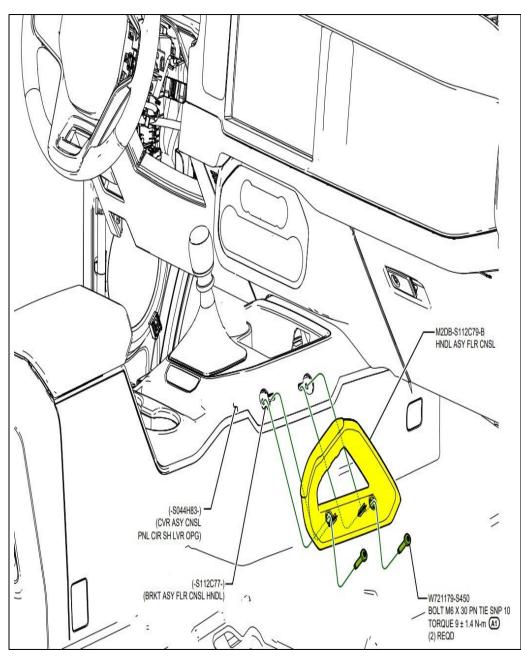


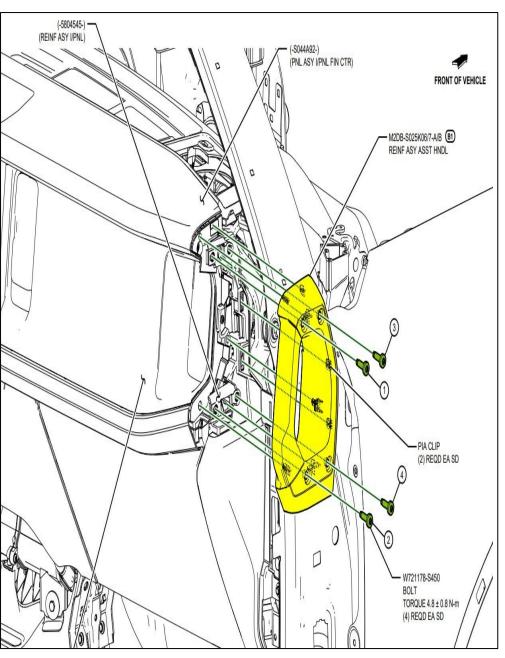
Ford PRO

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BRONCO INTERIOR



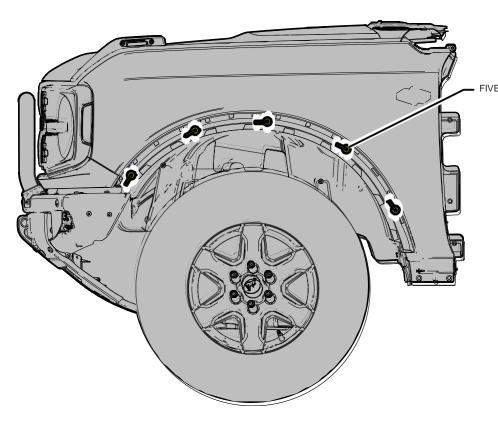


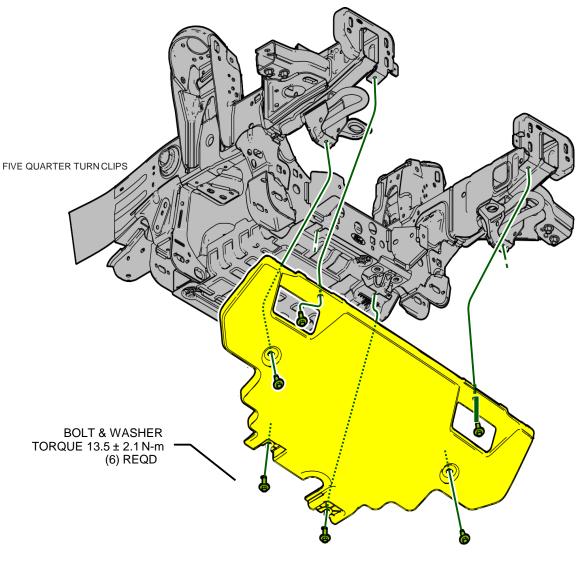
Console Grab Handle IP Grab Handle

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BRONCO BODY MOUNTING POINTS

FOR SAFETY REASONS, ACCESSORIES THAT ARE STRUCTURALLY SUBSTANTIAL SHOULD REMAIN REARWARD OF THE TOW HOOKS:

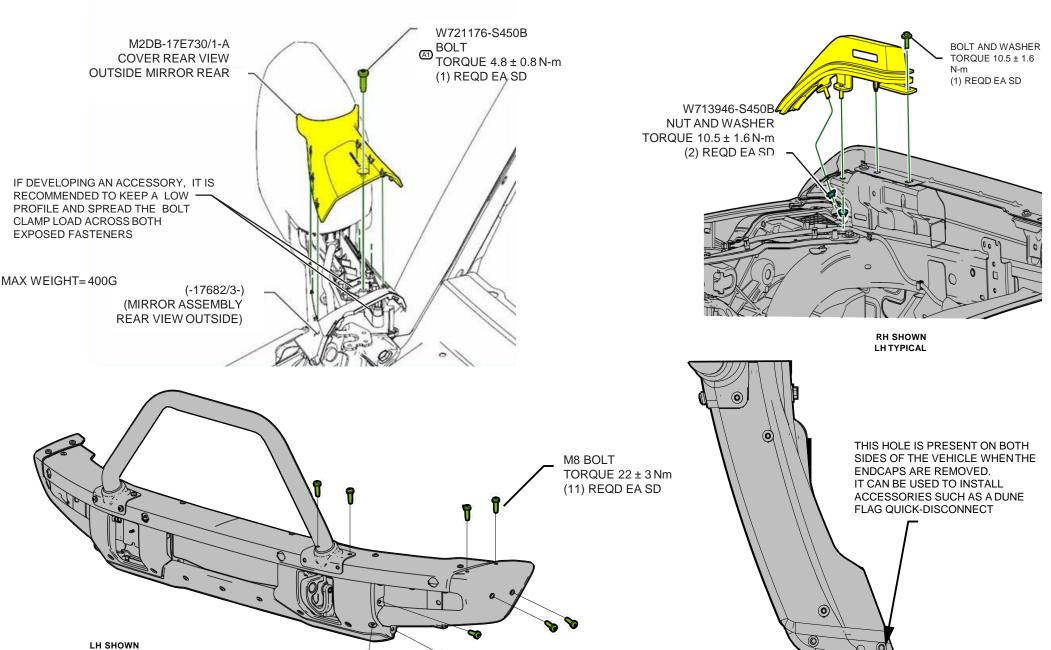




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BRONCO

BODY MOUNTING POINTS

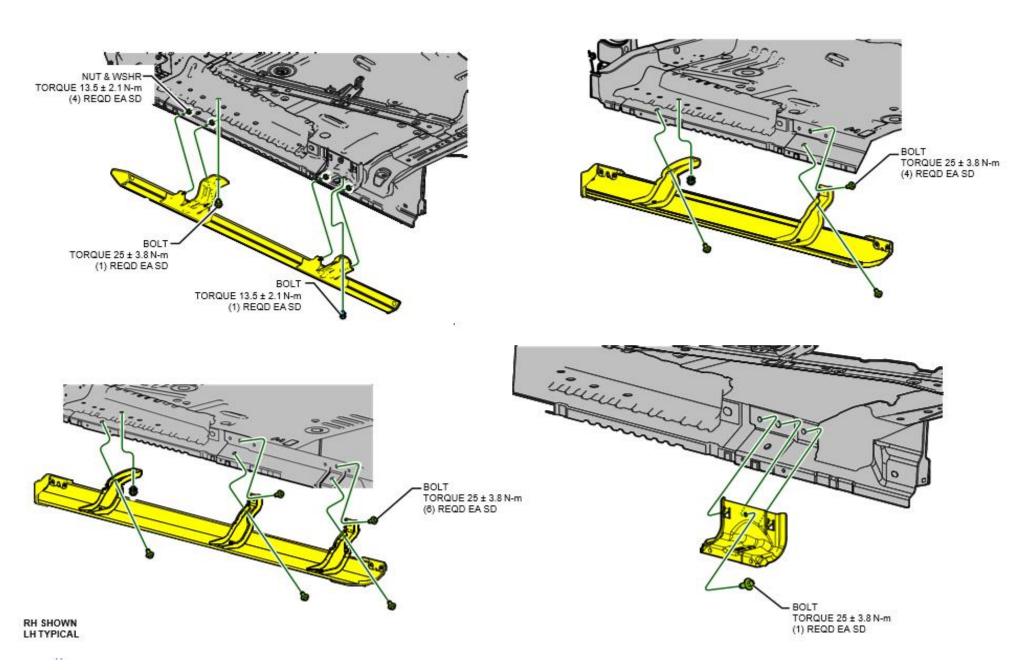


RH TYPICAL

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BODY MOUNTING POINTS

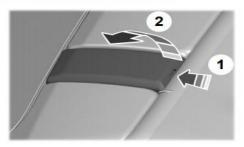


2024

MODEL YEAR

BRONCO BODY MOUNTING POINTS

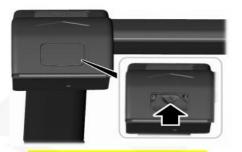
Installing the Roof Rack



- 1. To remove, press the button on the rear of the cover and rotate forward.
- 2. Remove the fasteners and remove the trim cover retaining plate.
- 3. Store the trim cover components.



- 4. Position the roof rack on the vehicle.
- Hand start the front roof rack fasteners.
- Using the provided T30 tool, tighten the front roof rack fasteners. Torque bolts to 7.7 lb.ft (10.5 Nm)
- 7. Align the cover with the alignment slot and rotate rearward.
- 8. Hand start the front roof rack cover fasteners.
- 9. Using the provided T30 tool, tighten the front roof rack cover fasteners. Torque bolts to 5.9 lb.ft (8 Nm).



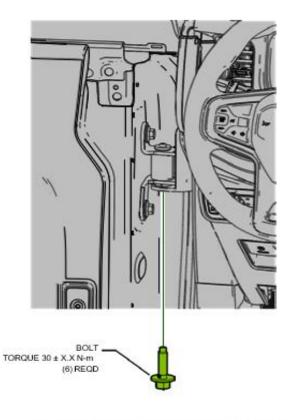
Note: The rear crossbar is part of the clamping system. If you removed the crossbar you must install it first for proper attachment to the hard top.

10. Using the supplied special tool, tighten the fastener.

Note: The supplied special tool stops turning the fastener when you have proper torque applied.

11. Install the rear roof rack fastener cover.

DOOR HINGEBOLTS



ROOF RACK LOAD CAPACITIES

Maximum Recommended Load Amounts

Description	Maximum Recommended Load
When in motion	110 lb (50 kg)
When stationary	450 lb (204 kg)
Vehicles with 315/70R17 Tires	0 lb (0 kg)

Note: The maximum recommended load is based on the load being evenly distributed on the crossbars.

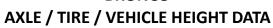
Maximum Recommended Door Weights

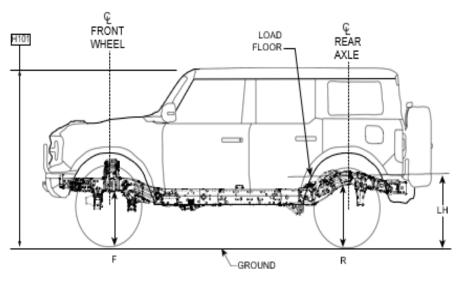
3 Door 62lbs Front

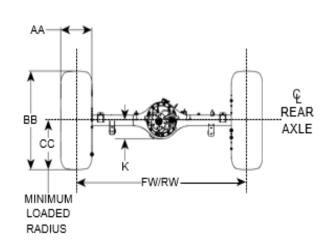
5 Door 55lbs Front Tailgate 133lbs

44lbs Rear

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					of Frame		Rear Wheel to of Frame [in]	L			101 [in]						
Model	WB inches	GVWR pounds	Tire	Height @ Base Curb Weight	Loaded Height @ Spring Rating	Height @ Base Curb Weight	Loaded Height @ Spring Rating	Empty	Loaded	Empty	Loaded	K mm [in]	AA mm [in]	BB mm [in]	CC mm [in]	W102-1 FW mm [in]	W102-1 RW mm [in]
2 Door Big Bend		5700	P255/75R17	466 [18.3]	432 [17.0]	581 [22.9]	514 [20.2]	785 [30.9]	709 [27.9]	1851 [72.9]	1784 [70.2]	138 [5.4]	260 [10.2]	814 [32.0]	391 [15.4]	1650 [65.0]	1650 [65.0]
2 Door Badlands	100.4	5800	LT285/70R17	490 [19.3]	463 [18.2]	605 [23.8}	547 [21.5]	809 [31.9]	744 [29.3]	1875 [73.8]	1818 [71.6]	138 [5.4]	286 [11.3]	838 [33.0]	399 [15.7]	1650 [65.0]	1650 [65.0]
2 Door Sasquatch		5800	LT315/70R17	521 [20.5]	500 [19.7]	640 [25.2]	585 [23.0]	845 [33.3]	782 [30.8]	1911 [75.2]	1856 [73.1]	138 [5.4]	313 [12.3]	880 [34.6]	421 [16.6]	1698 [66.9]	1700 [66.9]
4 Door Big Bend		6060	P255/75R17	465 [18.3]	428 [16.9]	581 [22.9]	510 [20.1]	784 [30.9]	706 [27.8]	Hard Top	Soft Top 1810 [71.3] Hard Top 1786 [70.3]	138 [5.4]	260 [10.2]	814 [32.0]	391 [15.4]	1650 [65.0]	1650 [65.0]
4 Door Badlands	116.1	6180	LT285/70R17	488 [19.2]	457 [18.0]	605 [23.8]	545 [21.5]	808 [31.8]	743 [29.3]	Hard Top	Soft Top 1845 [72.6] Hard Top 1821 [71.7]	138 [5.4]	286 [11.3]	838 [33.0]	399 [15.7]	1650 [65.0]	1650 [65.0]
4 Door Sasquatch		6180	LT315/70R17	520 [20.5]	493 [19.4]	640 [25.2]	583 [23.0]	844 [33.2]	781 [30.7]	Hard Top	Soft Top 1883 [74.1] Hard Top 1858 [73.1]	138 [5.4]	313 [12.3]	880 [34.6]	421 [16.6]	1698 [66.9]	1700 [66.9]

- (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.

- *Note:
- 2-Door is Hard Top Only
- 4-Door has both Soft Top and Hard Top
- Optional Roof Rack Add 92mm/[3.6] for 2-Door, Add 86mm/[3.4] for
- 4-Door Hard Tops

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BRONCO AXLE AND TRANSMISSION RATIOS

	Bronco Axle Availability																		
Final Drive Ratio	Front Differential	Rear Differential	Bas	se	Big Bend Blac		Black D	Black Diamond		Black Diamond		Black Diamond		Black Diamond		Wildtrak	Badl	ands	First Edition
Kauo			Manual	Auto	Manual	Auto	Manual	Auto	Auto	Auto	Manual	Auto	Auto						
3.73	Open	Open		S		S			S										
4.27	Open	Locking				0			0										
	Open	Open	S		S														
4.46	Open	Locking			0		S	S											
	Locking	Locking										S							
4.7	Locking	Locking		0		0		0	0	S	S	0	S						

В	Bronco Transmission Ratios								
108	P Auto	7sp N	lanual 💮						
Gear	Ratio (to 1)	Gear	Ratio (to 1)						
1st	4.714	Crawler	6.588						
2nd	2.997	1st	4.283						
3rd	2.149	2nd	2.365						
4th	1.769	3rd	1.453						
5th	1.521	4th	1						
6th	1.275	5th	0.776						
7th	1	6th	0.646						
8th	0.853	Reverse	5.625						
9th	0.689								
10th	0.636								
Reverse	4.885								

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BRONCO WHEEL AND TIRE DATA

Tire Specifications								
Size	Rim Width (in)	Section Width (in)	Static Load Radius (in)					
255/75R17 A/T	7.5	262.6	362					
255/70/R18 A /T	7.5	257.8	365					
LT265/70R17 A/T	7.5	270.6	400					
LT285/70R17 A/T	8	280	388					
LT285/70R17 M/T	8	292	386					
LT315/70R17 M/T	8.5	320	404					

		Wheel Specifications		
Wheel Type	Wheel size (in.)	Wheel Offset (in./mm)	Bolt Circle (in/mm)	No. ofStuds
Big Bend	17x7.5	2.1/55	5.5/139.7	6
Outer Banks	18x7.5	2.1/55	5.5/139.7	6
Black Diamond	17x7.5	2.1/55	5.5/139.7	6
Badlands	17x8	2.1/55	5.5/139.7	6
Optional Badlands	17x8	2.1/55	5.5/139.7	6
Sasquatch	17x8.5	1.2/30	5.5/139.7	6

Ford PRO

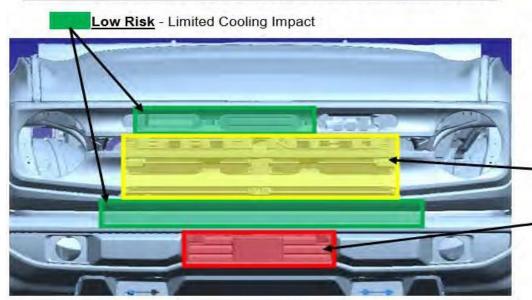
Bronco Equipment Installation Guide

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BRONCO

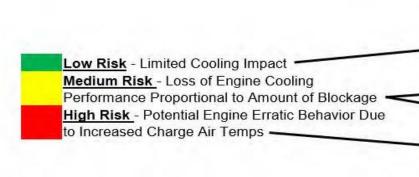
COOLING CONSIDERATIONS

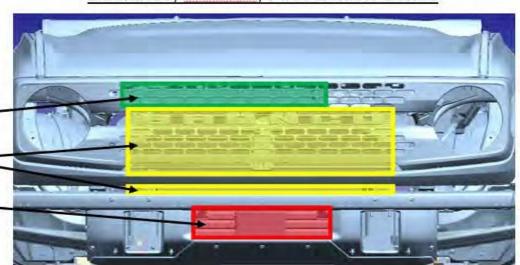
Base, Big Bend, Outer Banks, Black Diamond Series



Medium Risk - Loss of Engine Cooling
Performance Proportional to Amount of Blockage
High Risk - Potential Engine Erratic Behavior Due
to Increased Charge Air Temps

Badlands, Wildtrak, First Edition Series





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BRONCO

AUXILLARY SWITCHES AND WIRING

The Bronco is available with an Auxiliary Switch package that includes six switches wired to six powered circuits and five non-powered circuits to ease the installation of aftermarket equipment. The powered circuits are terminated in blunt cut wires in the underhood location shown. These powered circuits can be completed using the non-powered circuits provided and/or your own wire routing. Terminal locations for the non-power circuits are shown on the next page. Circuits provided are intended to complete the accessory power feed, grounds must be established for each powered circuit. Circuits are active with the ignition in the "on" position only.

Powered Circuits

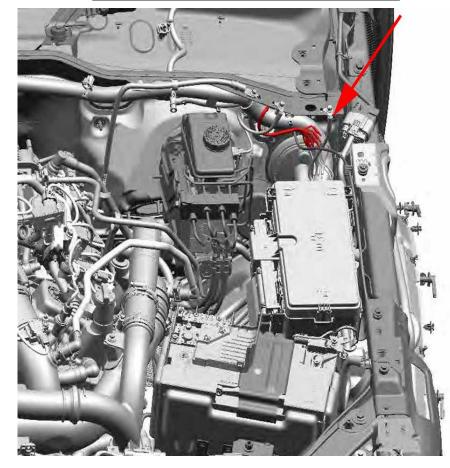
Switch Assignment	Wire Color	Wire Size	Fuse Size
AUX 1	Yellow	1.5 mm²	30A
AUX 2	Green/Brown	1.5 mm²	15A
AUX 3	Violet/Green	0.75 mm²	10A
AUX 4	Brown	0.75 mm²	10A
AUX 5	Blue/Orange	0.75 mm²	10A
AUX 6	Yellow/Orange	0.75 mm²	10A

Non-Powered Circuits

Terminal Location 1	Terminal Location 2	Wire Color	Wire Size (1)
A1 - Engine Compartment near Fuse Box	A2 - Passenger Compartment RH	Brown/White	1.5 mm²
B1 - Engine Compartment near Fuse Box	B2 - Passenger Compartment RH	White	1.5 mm²
C1 - Engine Compartment near Fuse Box	C2 - Front Grille	Violet/Grey	1.5 mm²
D1 - Passenger Compartment RH	D2 - Right-hand Visor	Grey/Orange	1.5 mm²
E1 - Passenger Compartment RH	E2 - Right-hand Rear Quarter Panel	White/Orange	1.5 mm²

¹⁾ Wiring for non-powered circuits is sized to work with any of the powered circuits.

Powered Circuit Terminal Location - Underhood





BRONCO

ADDED CIRCUITS

B+ (Hot at All Times)

Any added circuits must be appropriately fused (as close as possible to the battery) and connected to the positive battery terminal in the locations shown.

- · The maximum recommended thickness of terminals being installed is 2.5 mm
- The two terminal studs have different size threads (see below). Use property class 8 or 10 nuts for this application

Circuit Grounding

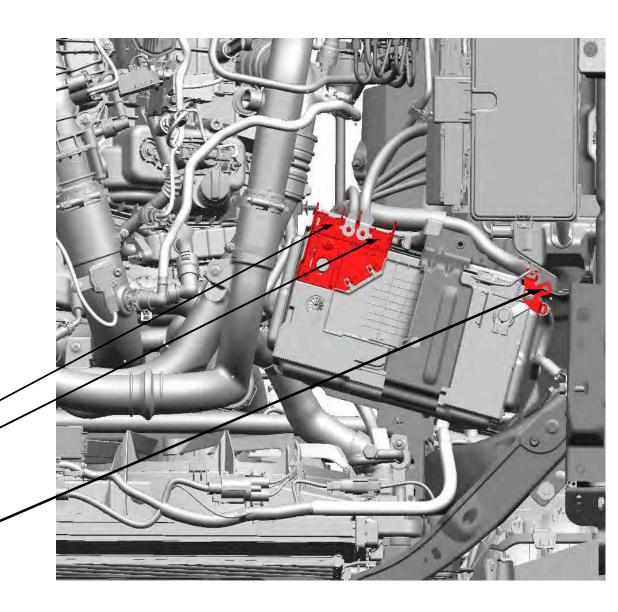
Ground wires for winch or other high current accessories can be connected directly to the battery B- in the location shown.

If grounding to the body - Do not use existing vehicle ground points, new ground location(s) must be established.

Locations for B+connection

M5 Nut, torque to 5.4 +/- 0.9 Nm M6 Nut, torque to 10 +/- 1.5 Nm Max eyelet diameter: 18 mm

Location for B-connection 8.5 mm diameter hole



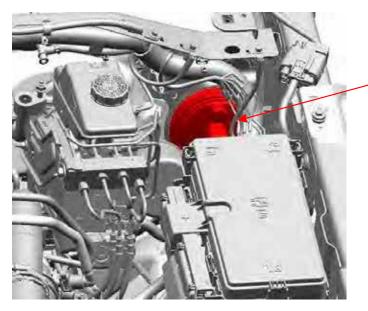
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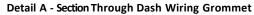
BRONCO

WIRING PASS THRU

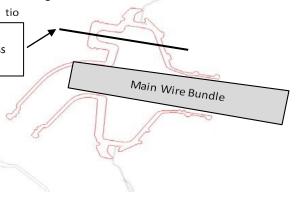
Passing wires through the vehicle dash panel is best done using the existing wiring grommets, which have a provision specifically for that purpose (See Detail A). Detail A shows the driver side grommet, there is also a similar grommet on the passenger side. Passing wires to roof mounted accessories should be done under the passenger side roof ditch molding as shown in Detail B (drilling required).

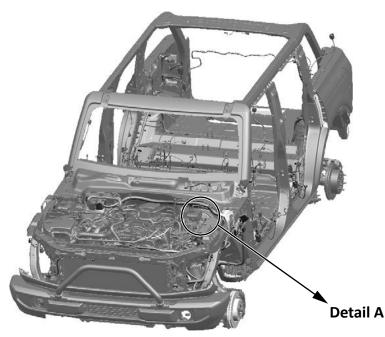


Dash Wire Grommet



Pass Through Location for additional wiring. Make sure pass through is adequately sealed.





Remove RH Roof Ditch Molding and Molding Retainer. Use the dimple provided in the sheet metal as a drill start point, drilling perpendicular to the exterior sheet metal surface. MAX DRILL SIZE is 7/16 diameter Make sure pass through is adequately sealed. When re- installing the molding retainer, torque attachment nuts to 10.5 +/- 1.6Nm.



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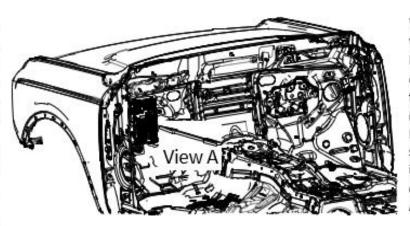
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ACCESSORY AND RUN/START CIRCUITS

Delayed Accessory

When installing auxiliary equipment that is active with delayed accessory, a BCM feed can be used to directly power added circuit(s) not exceeding 30A consumption. Install a female terminal kit (DU2Z-14474-JA) into the open location in BCM Connector 3, Pin 36 to start the circuit(s). This BCM output is protected by BCM Fuse #38, rated at 30 Amps. If power consumption of added the equipment exceeds 30 Amps. terminal kit inserted in BCM connector 3, pin can be used to drive relay(s) connected directly to B+.



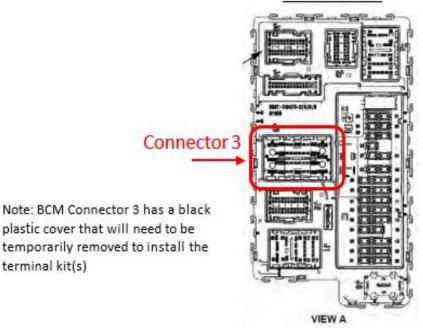
Run / Start

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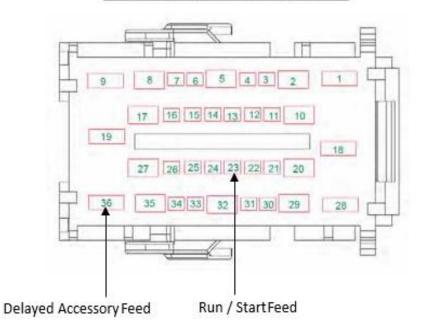
MODEL YEAR

When installing auxiliary equipment that is active with Run / Start condition, a relay connected to B+ must be installed. That relay can then be driven by a run / start feed from the BCM. Install a female terminal kit (DU2Z-14474-DA) into the open location in BCM Connector 3. Pin 23. The terminal kit should then be connected to the relay input (can install a switch between the fuse and relay). This circuit is protected by BCM fuse #22, rated at 5 Amps.





View of Front Face of BCM Connector 3



terminal kit(s)

BRONCO CHMSL CIRCUIT

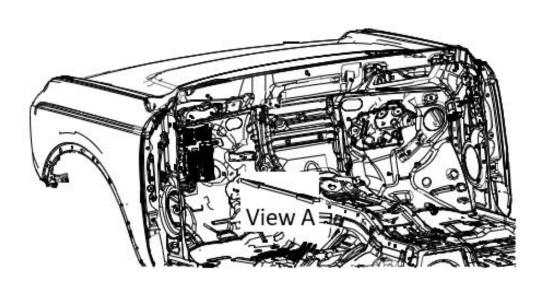
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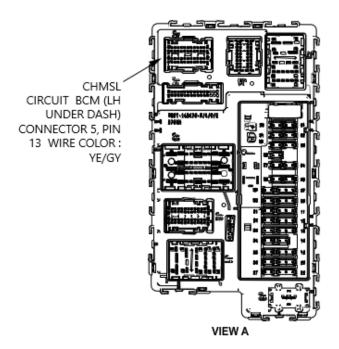
When Equipment is mounted that blocks the factory CHMSL, An auxiliary CHMSL must be fitted.

Circuit Type	Max Current (1) (3)	Factory CHMSL Load (3)	Circuit Reserve Capacity with Factory CHMSL (2)	
Non-PWM	1.70A	0.20A	1.50A	

Notes:

- (1)- The maximum current load for the circuit must not be exceeded
- (2)- If auxillary CHMSL exceeds the reserve capacity, the factory CHMSL must be disconnected
- (3)- Continuous 12V







BRONCO

HEADLAMPS AND TAIL LAMPS

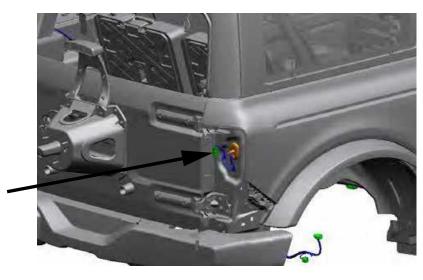


WARNING:

Head and Tail Lamp circuits must not be modified or reconfigured in any way when using the factory supplied lamps. If using after market Head or Tail Lamps, or if circuits are modified or reconfigured, the vehicle alterer assumes all responsibility for vehicle compliance to lighting related regulations.

Notes

Headlamp Pinout Mating Connector : 10 way male – Molex 33482-1601						
Function (4)	Pin #	Wire Color	Circuit Type	Max Current (2)		
Low Beam	1		Non-PWM	4.2A		
Turn	2		Non-PWM	2.2A		
Turn Lamp outage	4		N/A	N/A		
Lin Network	5		Network	N?A		
Daytime running lights	7		Non-PWM	2.3A		
High Beam	8		Non-PWM	20A Fused		
Park	9		Non-PWM	1.0A		
Ground	10		N/A	N/A		



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Tail Lamp Connector

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Bronco Equipment Installation Guide

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BRONCO CHANGE CONTROL