

Andy Tsao
03/27/26

Puddle Light, Turn Signal and Heated Mirror Installation for Non-Premium Mustang

Item need:

- Turn signal mirror PR3Z-17682-L (LH) and PR3Z-17683-L (RH).
 - (Older parts from ebay will work too... I brought the PR3Z-17682-C and PR3Z-17683-C to installed)
- Turn signal cap Left and Right: FR3Z-17D743-BAPTM & FR3Z-17D742-BAPTM
- 20- and 22-Gauges wire. (can get this from amazon for \$5-10)
 - 22-Gauges: <https://a.co/d/0bmNwJOW>
 - 20-Gauges: <https://a.co/d/06aOnjM3>
- Pin for the connector
 - Female 8100-3619 x6 & Male 8230-5222 x1 from Sumitomos

Terminal (UNIT : mm)

0.64 (S)



F (8100-3619)

Applicable wire size (mm ²)	0.22-0.35 AWG24-22
Cable overall diameter (mm)	1.5-1.7
Material	Heat-resistant copper alloy
Surface treatment	Sn plated
Applicable Tab Thickness (mm)	0.64


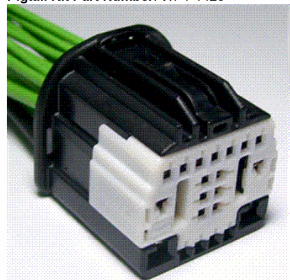
0.64 (M)



M (8230-5222)

Applicable wire size (mm ²)	0.22-0.35 AWG24-22
Cable overall diameter (mm)	1.5-1.7
Material	Brass
Surface treatment	Sn plated
Applicable Tab Thickness (mm)	0.64


- (The pins above are very hard to get. I recommend buying the entire pigtailed WPT-1561 and WPT-1559 or WPT-1425 and depinning them.)

 <p>Pigtail Kit Part Number: WPT-1561</p>	<p>Service Part Number: JU2Z-14S411-ARA Gauge: 14 16 20 Pin material: Tin Cavities: 21</p> <p>Vehicle Uses: Connector - Inline</p>
 <p>Pigtail Kit Part Number: WPT-1425</p>	<p>Service Part Number: FU2Z-14S411-RA Gauge: 14 16 20 Pin material: Tin & Silver Cavities: 21</p> <p>Vehicle Uses: Connector - Inline</p>

Andy Tsao
03/27/26

- 33012-2003 Molex from Digikey

0330122003



DigiKey Part Number WM3692TR-ND - Tape & Reel (TR)
WM3692CT-ND - Cut Tape (CT)

Manufacturer Molex

Manufacturer Product Number 0330122003

Description CONN SOCKET 22AWG CRIMP TIN

Manufacturer Standard Lead Time 6 Weeks

Customer Reference

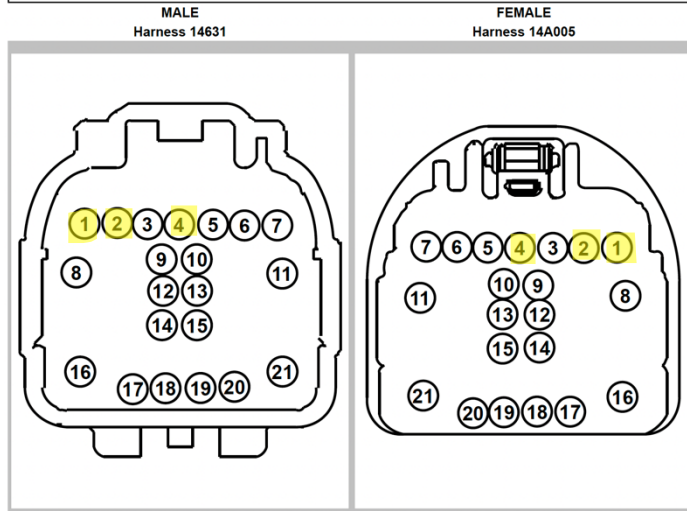
Detailed Description Socket Contact Tin 22 AWG Crimp

Datasheet [Datasheet](#)

Image shown is a representation only. Exact specifications should be obtained from the product data sheet.

- For driver side: C311A, Pin 1 (CLS23, 20 Gauge, Left Turn Signal), Pin 2 (CBB51, 22 Gauge, Heated Mirror), Pin 4 (CLN25, 22 Gauge, Puddle light)

Inline:	Description	Color	Harness	Base Part #	Service Pigtail
C311A	INLINE	DK GY	14631 14A005		See Below



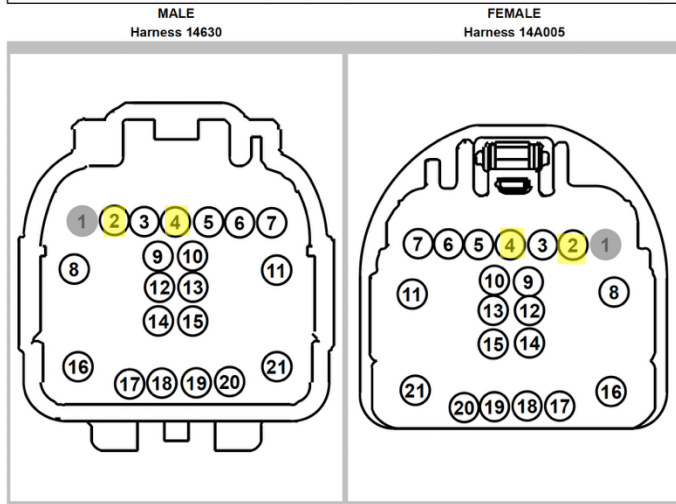
Connector Viewer - 150

Pin	Circuit	Gauge	Qualifier	Pin	Circuit	Gauge	Qualifier
1	CLS23 (GY-OG)	20		1	CLS23 (GY-OG)	20	
2	CBB51 (BN)	22		2	CBB51 (BN)	22	
3	CBP02 (GN)	22		3	CBP02 (GN)	22	
4	CLN25 (WH-GN)	22		4	CLN25 (WH-GN)	22	
5	CLN44 (OG)	22		5	CLN44 (OG)	22	
6	CLN45 (GN)	22		6	CLN45 (GN)	22	
7	CPL12 (VT-OG)	18		7	CPL12 (VT-OG)	18	
8	CPL51 (BU-GN)	18		8	CPL51 (BU-GN)	18	
9	VR236 (BU-OG)	20	14631	9	VR236 (BU-OG)	22	14A005
10	RR174 (WH-OG)	20	14631	10	RR174 (WH-OG)	22	14A005
11	CPL11 (GY-BN)	18		11	CPL11 (GY-BN)	18	
12	CPL43 (VT-GY)	22		12	CPL43 (VT-GY)	22	
13	CLN46 (BU)	22		13	CLN46 (BU)	22	
14	CPL26 (GN-VT)	22		14	CPL26 (GN-VT)	22	
15	CPL42 (GY-YE)	22		15	CPL42 (GY-YE)	22	
16	SBP23 (WH-RD)	14		16	SBP23 (WH-RD)	14	
17	CPL89 (BN-BU)	22		17	CPL89 (BN-BU)	22	
18	VPK01 (BN-YE)	22		18	VPK01 (BN-YE)	22	
19	RPK01 (WH-GN)	22		19	RPK01 (WH-GN)	22	
20	VPW78 (WH-BU)	22		20	VPW78 (WH-BU)	22	
21	GD233 (BK)	12		21	GD233 (BK)	12	

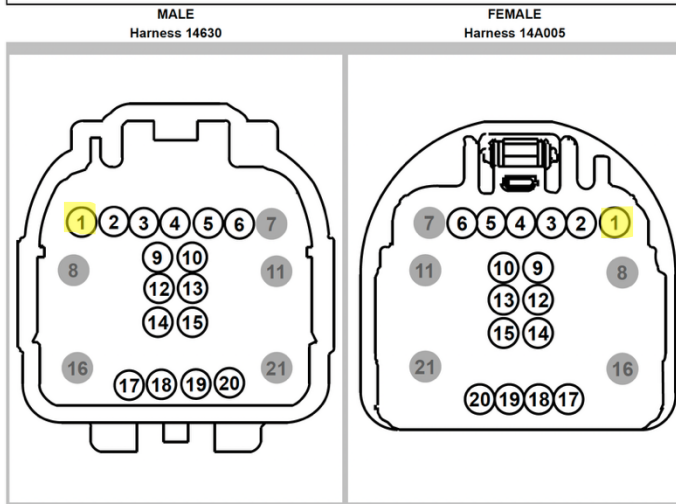
Andy Tsao
03/27/26

- For passenger side: C313A, Pin 2 (CBB51, 22 Gauge, Heated Mirror), Pin 4 (CLN25, 22 Gauge, Puddle light). C313B, Pin 1 (CLS27, 20 Gauge, Left Turn Signal).

Inline:	Description	Color	Harness	Base Part #	Service Pigtail
C313A	INLINE	DK GY	14630 14A005		See Below



Inline:	Description	Color	Harness	Base Part #	Service Pigtail
C313B	INLINE	NA	14630 14A005		See Below



Connector Viewer - 150

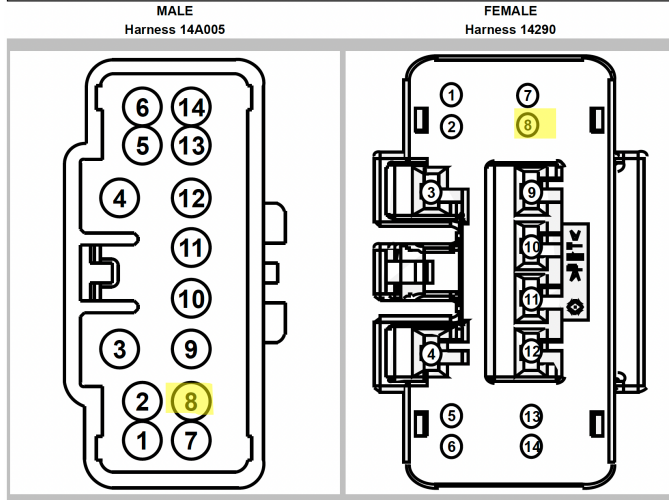
Pin	Circuit	Gauge	Qualifier	Pin	Circuit	Gauge	Qualifier
1	*	*		1	*	*	
2	CBB51 (BN)	22		2	CBB51 (BN)	22	
3	CBP02 (GN)	22		3	CBP02 (GN)	22	
4	CLN25 (WH-GN)	22		4	CLN25 (WH-GN)	22	
5	CLN44 (OG)	22		5	CLN44 (OG)	22	
6	CLN45 (GN)	22		6	CLN45 (GN)	22	
7	CPL12 (VT-OG)	18		7	CPL12 (VT-OG)	18	
8	CPL13 (BU-GN)	18	14630	8	CPL13 (BN-GN)	16	14A005
9	VR237 (BN-WH)	20	14630	9	VR237 (BN-WH)	22	14A005
10	RR175 (YE-OG)	20	14630	10	RR175 (YE-OG)	22	14A005
11	CPL11 (GY-BN)	18		11	CPL11 (GY-BN)	18	
12	CPL43 (VT-GY)	22		12	CPL43 (VT-GY)	22	
13	CLN46 (BU)	22		13	CLN46 (BU)	22	
14	CPL31 (WH)	22	14630	14	CPL31 (WH)	18	14A005
15	CPL42 (GY-YE)	22		15	CPL42 (GY-YE)	22	
16	SBP26 (YE-RD)	14	14630	16	SBP26 (YE-RD)	12	14A005
17	CPL89 (BN-BU)	22		17	CPL89 (BN-BU)	22	
18	VPK02 (VT-WH)	22		18	VPK02 (VT-WH)	22	
19	RPK02 (GY-YE)	22		19	RPK02 (GY-YE)	22	
20	VPW79 (VT-GN)	22		20	VPW79 (VT-GN)	22	
21	GD238 (BK-WH)	12		21	GD238 (BK-WH)	12	

Pin	Circuit	Gauge	Qualifier	Pin	Circuit	Gauge	Qualifier
1	CLS27 (GN-OG)	20		1	CLS27 (GN-OG)	20	
2	CPW13 (BN-YE)	22		2	CPW13 (BN-YE)	22	
3	CPM23 (GY)	22		3	CPM23 (GY)	22	
4	CPM20 (BN-WH)	22		4	CPM20 (BN-WH)	22	
5	CPM21 (YE-VT)	22		5	CPM21 (YE-VT)	22	
6	CPW12 (GN-OG)	22		6	CPW12 (GN-OG)	22	
7	*	*		7	*	*	
8	*	*		8	*	*	

Andy Tsao
03/27/26

- C265 for Heated Mirror:

Inline:	Description	Color	Harness	Base Part #	Service Pigtail
C265	INLINE	NA	14A005 14290		See Below



Connector Viewer - 150

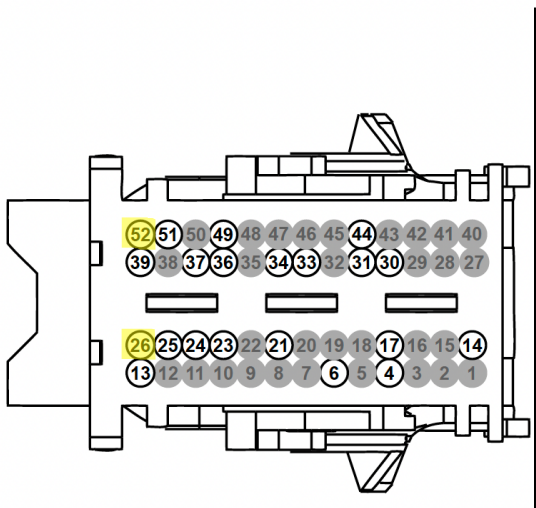
Pin	Circuit	Gauge	Qualifier	Pin	Circuit	Gauge	Qualifier
1	CBK03 (GY)	18		1	CBK03 (GY)	18	
2	RMF14 (GN-WH)	16	RHD	2	RMF14 (GN-WH)	16	RHD
3	CCB18 (YE-GY)	16		3	CCB18 (YE-GY)	16	
3	SBB38 (BN-RD)	12	14A005	3	SBB38 (BN-RD)	12	14290
4	CCB19 (GN-BN)	16	LHD	4	CCB19 (GN-BN)	16	LHD
4	SBB31 (WH-RD)	12	RHD	4	SBB31 (WH-RD)	12	RHD
5	CBB16 (GN-BN)	18	RHD/LHD - Late production	5	CBB16 (GN-BN)	18	RHD/LHD - Late production
6	VE915 (BN-GN)	18		6	VE915 (BN-GN)	18	
7	WE196 (WH-VT)	18		7	WE196 (WH-VT)	18	
8	CBB51 (BN)	22	14A005	8	CBB51 (BN)	20	14290
9	CCB17 (BU-GN)	16		9	CCB17 (BU-GN)	16	

- C2280E for Turn Signal:

Connector:	Description
C2280E	BODY CONTROL MODULE (BCM)

Pin	Circuit	Gauge	Qualifier
20	CLC23 (GY-OG)	20	REDUNDANT
26	CLC23 (GY-OG)	20	ECU - TURN LAMP LEFT REAR LHD
26	CLS23 (GY-OG)	22	ECU - TURN LAMP LEFT REAR
27	*	*	Not Used

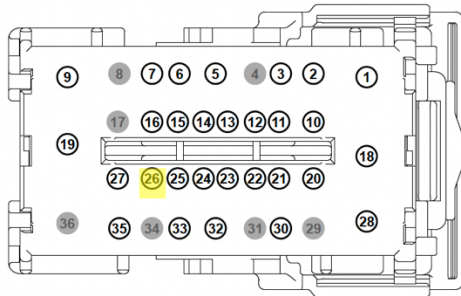
Pin	Circuit	Gauge	Qualifier
52	CLS27 (GN-OG)	20	FRONT/REAR RIGHT convertible
52	CLS27 (GN-OG)	22	ECU - TURN LAMP RIGHT REAR coupe



Andy Tsao
03/27/26

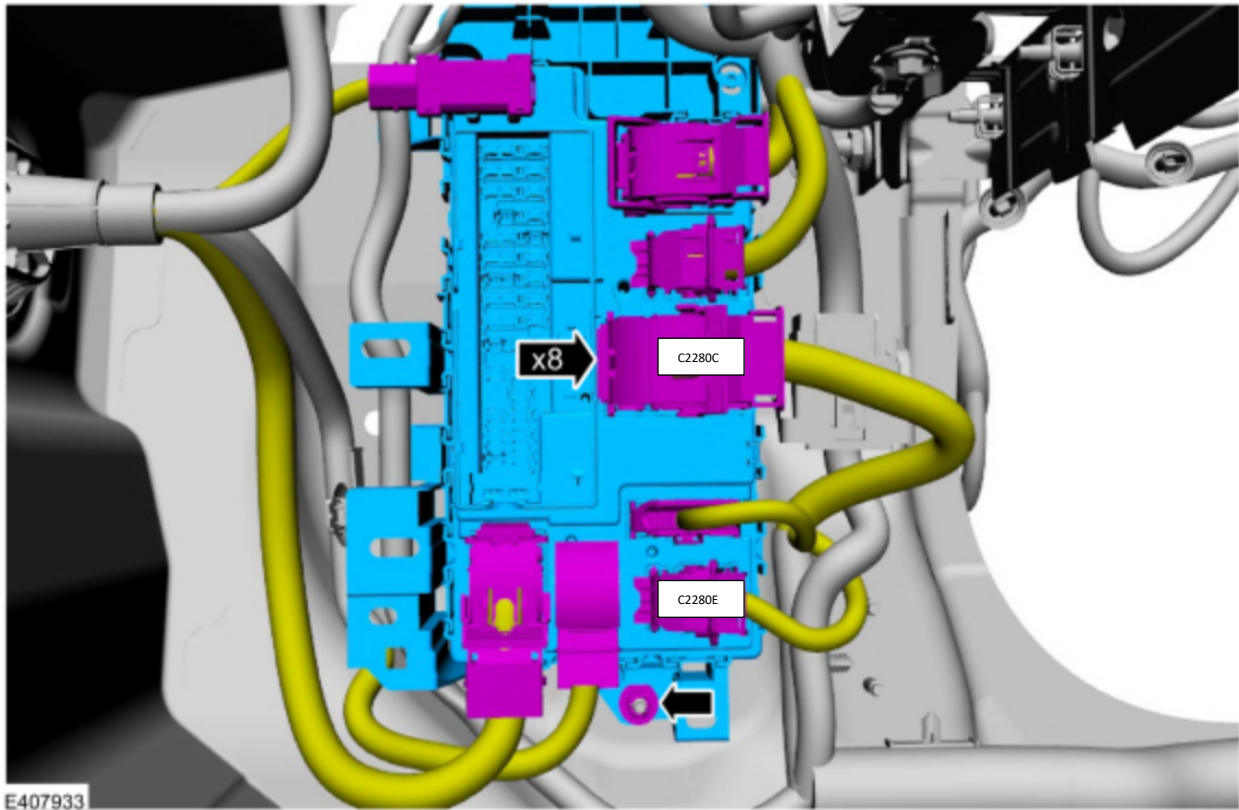
- C2280C for Puddle Light:

Connector:	Description
C2280C	BODY CONTROL MODULE (BCM)



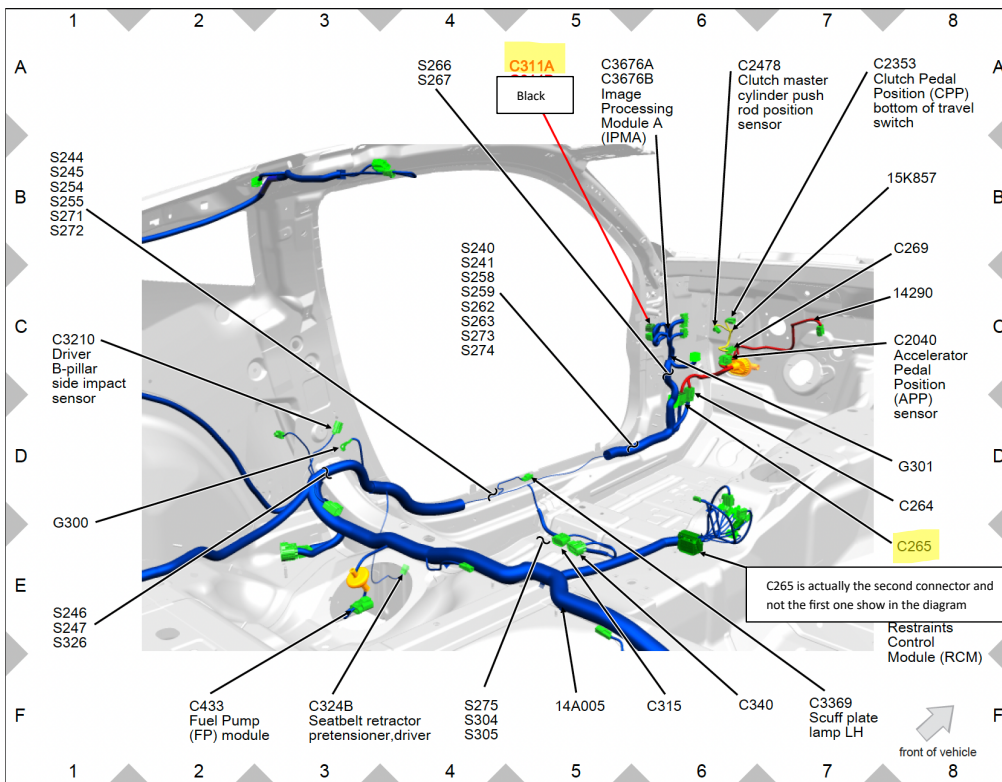
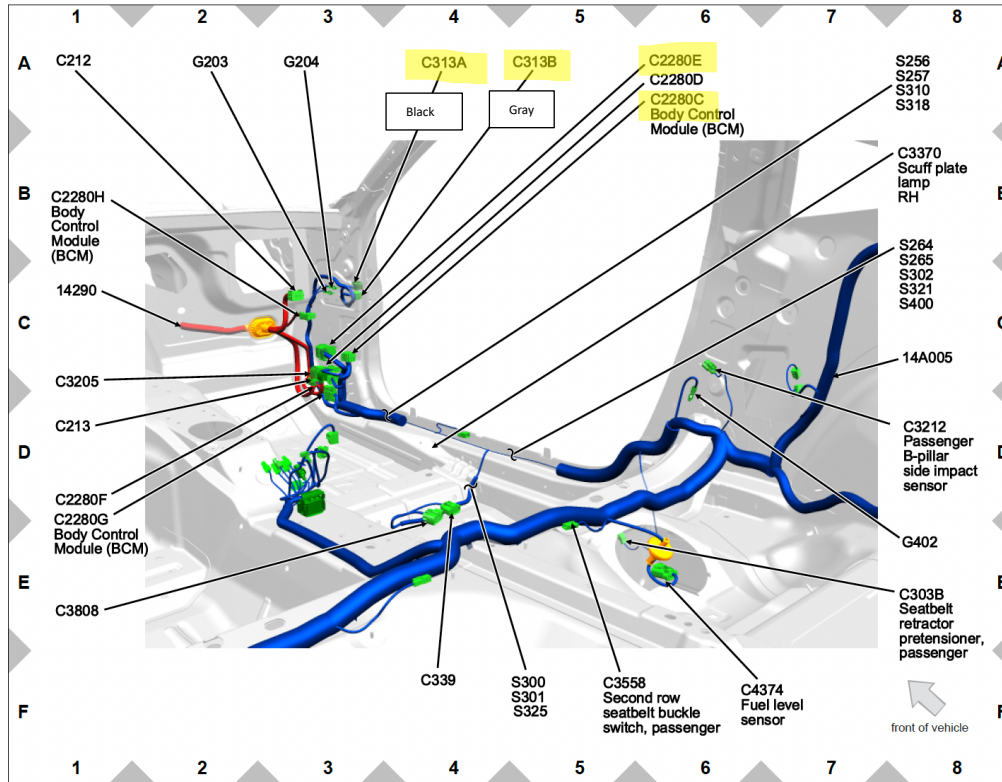
25	(GN-WH) CLS37 (WH-BU)	20	LOCK + ECU - FOG LAMP REAR (RIGHT OR COMMON)
26	CLN25 (WH-GN)	22	RELAY - PUDDLE LAMPS (KERB ILLUM.)
27	CPL51 (BU-GN)	18	ECU - DOOR LOCK # DRIVER UNLOCK
28	SBP23 (WH-RD)	14	FUSE - 23 OR CIRCUIT BREAKER

- BCM:



Andy Tsao
03/27/26

• Location:



Andy Tsao

03/27/26

- Remove the right-hand kick panel to access BCM, then feed the harness to the door connector C313A & C313B.

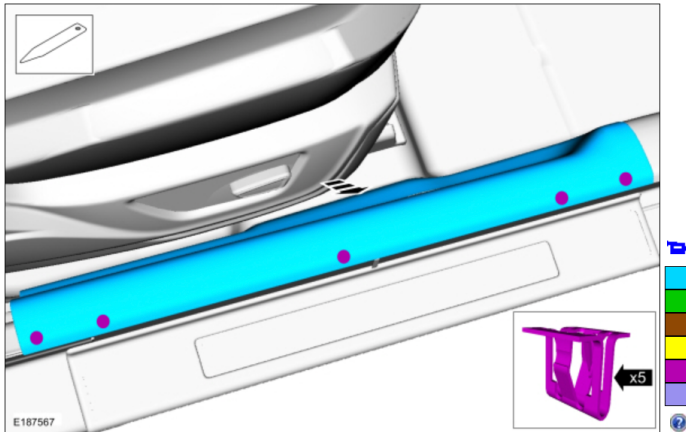
Removal

NOTE: Removal steps in this procedure may contain installation details.

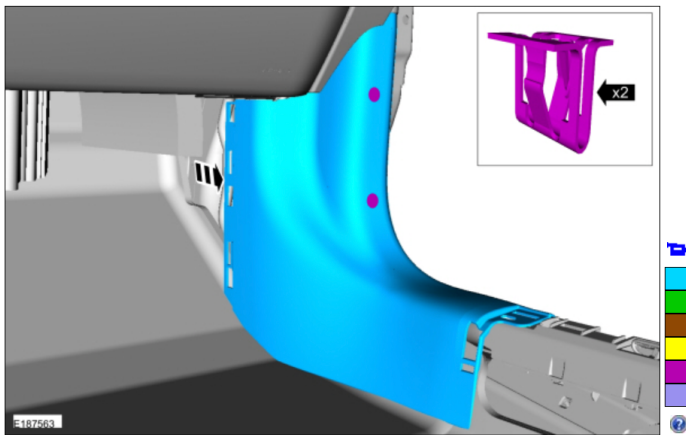
1. **NOTE:** If the BCM did not respond to the diagnostic scan tool, As-Built Data may need to be entered as part of the repair. This step is only necessary if the BCM is being replaced

Using a diagnostic scan tool, begin the PMI process for the BCM following the on-screen instructions.

2. Release the clips and remove the RH scuff plate.
Use the General Equipment: Interior Trim Remover



3. Release the clips and remove the lower RH cowl trim panel.



Andy Tsao
03/27/26

- Remove the hood latch release handle and the left-hand kick panel to access C265, then feed the harness to the door connector C311A.
- Remove the left-hand kick panel using the same procedure as for the right-hand side.

Hood Latch Release Handle

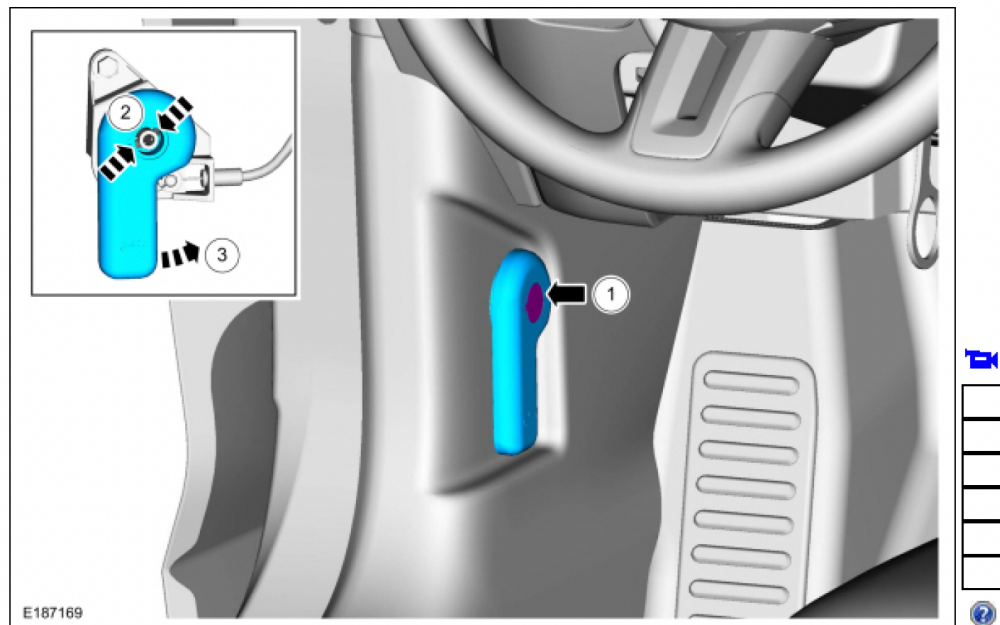
Removal

NOTE: *LHD shown, RHD similar.*

1. **NOTE:** *Insert a 10 mm 1/4 inch drive socket to release the clips.*

Remove the hood latch release handle.

1. Remove the hood latch release handle access cover.
2. Release the clips releasing the hood latch release handle.
3. Remove the hood latch release handle.

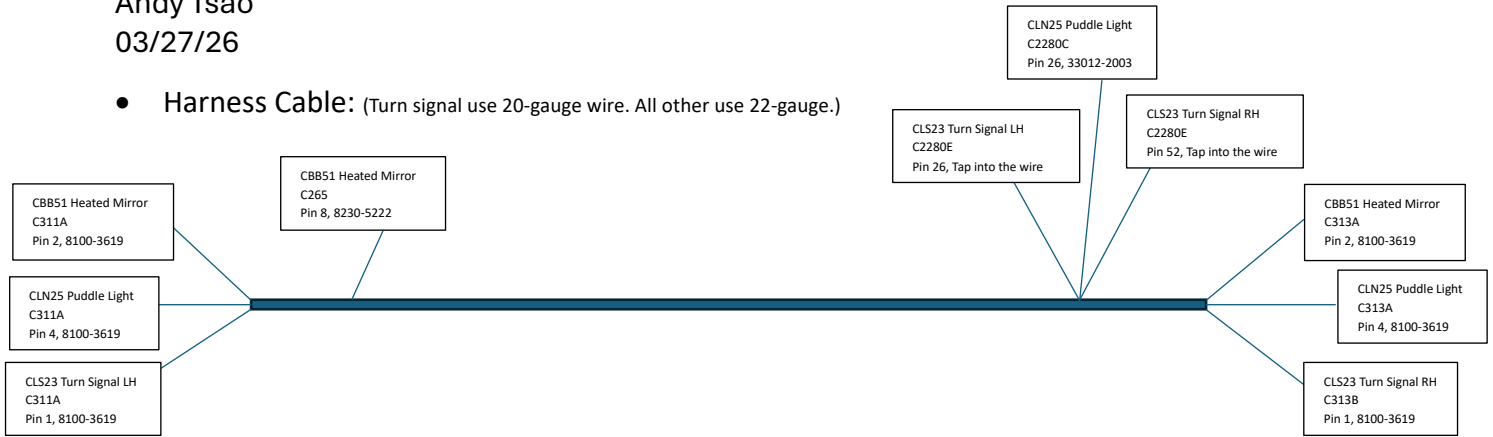


Installation

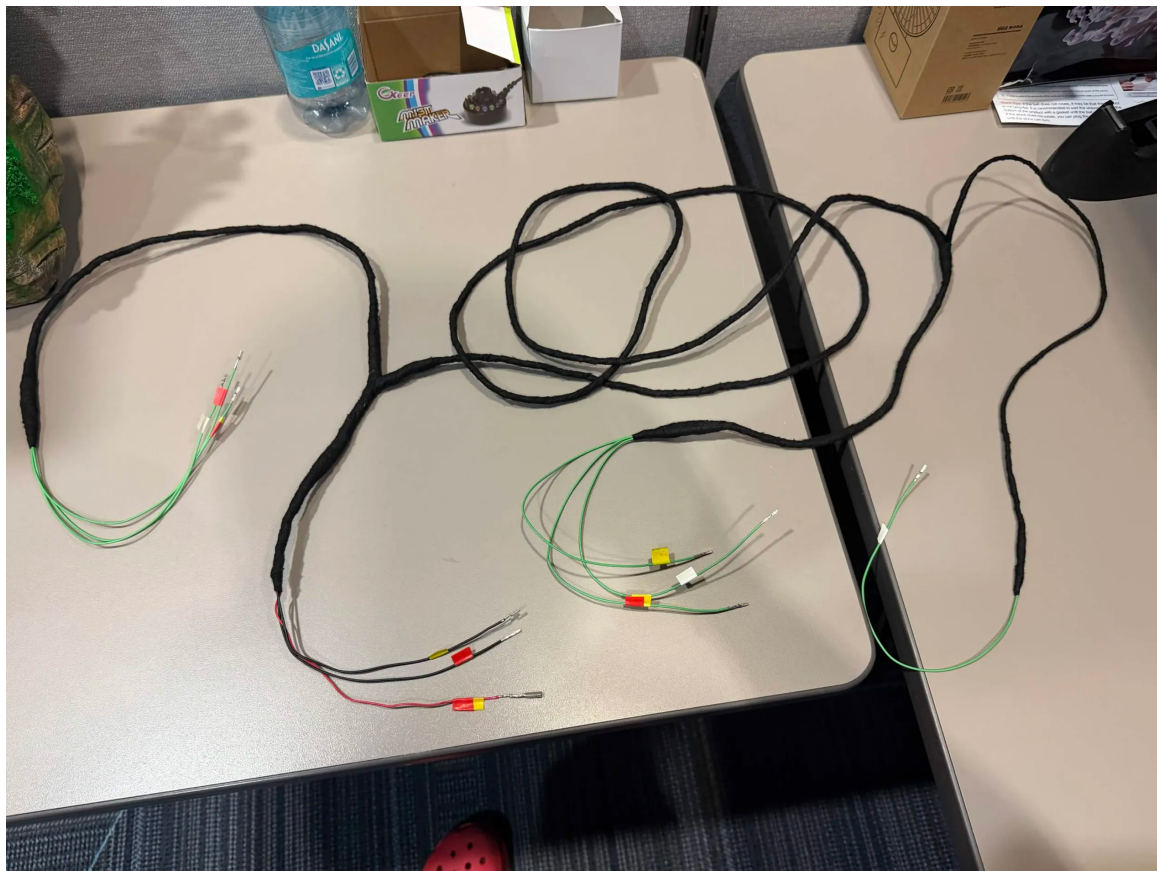
1. To install, reverse the removal procedure.

Andy Tsao
03/27/26

- **Harness Cable:** (Turn signal use 20-gauge wire. All other use 22-gauge.)



- Clamp the connector pin to the wire according to the diagram above. The right-hand side of the wire going to the BCM will need to be joined together by soldering.
- Optional (I did all these to make sure they are stronger):
 - Solder all connections between the wires and barrels.
 - Solder all connections between the connector pins and wires.
- Use electrical tape to prevent them from touching and shorting together. (<https://a.co/d/0eSijyEu>)
- Use cloth tape to wrap the entire harness. (<https://a.co/d/09WvHQSO>)
- The turn signal wire to the BCM C2280E connector needs to be tapped into or soldered into the existing wire from the connector.



Andy Tsao

03/27/26

- Install the mirror. (https://youtu.be/kwjzr_ziBm8?si=CX-IFmJZEUcjEV7e)
- After adding the pin into all the connectors, open Forscan to enable the puddle light.
 - BCM Job2 below:

863					DomePuddleSelection_Cfg (DPSC)			
864	726-48-01	x*xx	xxxx	xx--	0 = DPSC DISABLE_BOTH		2 = DPSC ENABLE_DOME	
865					1 = DPSC ENABLE_BOTH		3 = DPSC ENABLE_PUDDLE	

- Set it to 3 = Enable_Puddle

871					Puddle_Lamp_Ckt_Cfg (PLCC)			
872	726-48-02	xxxx	x*xx	xx--	0 = PLCC CARGO		3 = PLCC PUDDLE	
873					1 = PLCC DOOR		5 = PLCC CHM_CARGO	
874					2 = PLCC NOTUSED			

- Set it to 3 = PLCC_Puddle

1231					PuddleLampCkt_Cfg (PLCC)			
1232	726-71-02	x*xx	xxxx	xx--	0 = PLCC NOT_USED		1 = PLCC USED	

- Set it to 3 = PLCC_USED