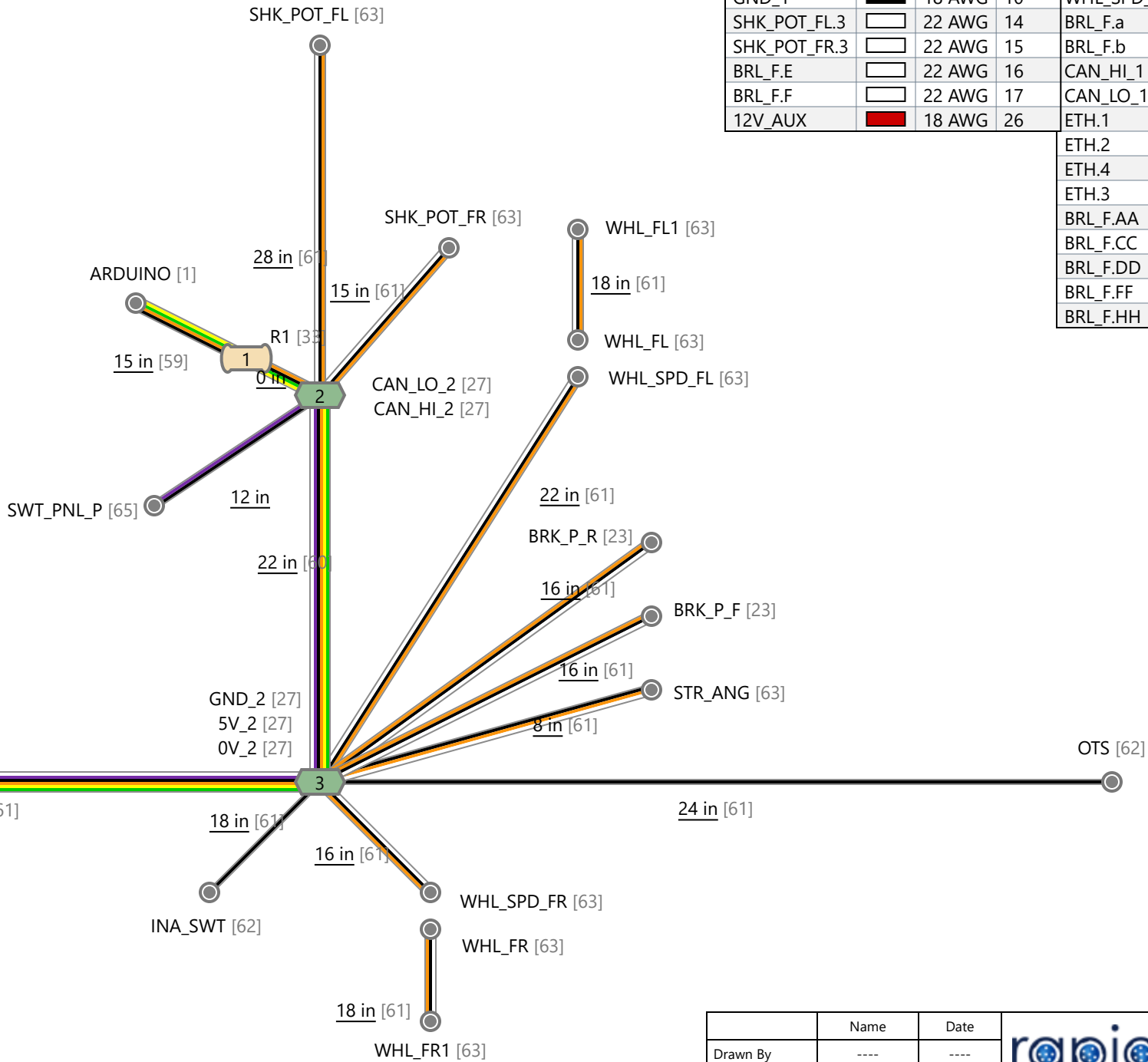
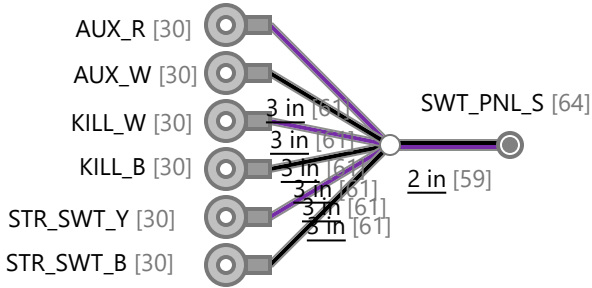
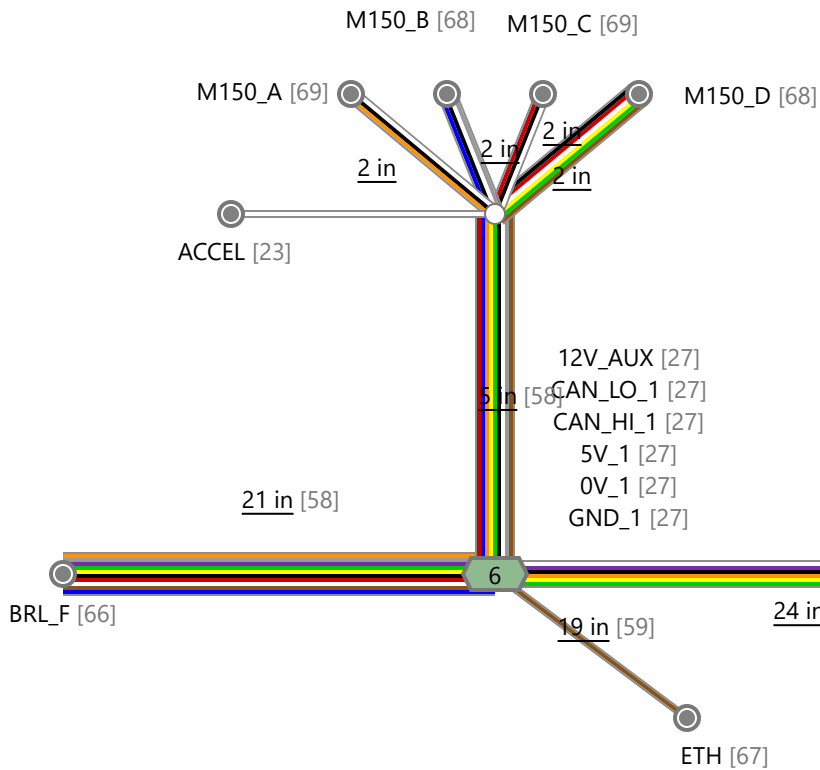


BRL_F

To	Color	Gauge	Cavity
M150_D.N/C		22 AWG	AA
M150_D.7		22 AWG	BB
M150_D.N/C		22 AWG	CC
M150_D.N/C		22 AWG	DD
M150_C.16		22 AWG	E
M150_D.1		22 AWG	EE
M150_C.17		22 AWG	F
M150_D.N/C		22 AWG	FF
M150_D.2		22 AWG	GG
M150_A.17		22 AWG	H
M150_D.N/C		22 AWG	HH
M150_A.4		22 AWG	L
M150_A.3		22 AWG	P
M150_B.15		22 AWG	V
M150_B.14		22 AWG	W
M150_B.9		22 AWG	X
M150_B.8		22 AWG	Y
5V_1		22 AWG	Z
M150_D.10		22 AWG	a
M150_D.11		22 AWG	b
M150_A.16		22 AWG	c
M150_A.2		22 AWG	d
M150_B.17		22 AWG	e
M150_B.16		22 AWG	f
M150_A.1		22 AWG	g
M150_B.10		22 AWG	h
M150_B.18		22 AWG	i
M150_C.6		18 AWG	j
M150_C.5		18 AWG	k
M150_C.4		18 AWG	m
M150_C.3		18 AWG	n
M150_B.1		22 AWG	p
M150_B.2		22 AWG	q
0V_1		22 AWG	r
M150_B.20		18 AWG	s
GND_1		18 AWG	t
12V_AUX		18 AWG	u
CAN_HI_1		22 AWG	v
CAN_LO_1		22 AWG	w
SWT_PNL_P.1		22 AWG	x
SWT_PNL_P.3		22 AWG	y
SWT_PNL_P.5		22 AWG	z




M150_A				M150_B			
To	Color	Gauge	Cavity	To	Color	Gauge	Cavity
BRL_F.g		22 AWG	1	BRL_F.p		22 AWG	1
BRL_F.d		22 AWG	2	BRL_F.q		22 AWG	2
BRL_F.P		22 AWG	3	BRL_F.Y		22 AWG	8
BRL_F.L		22 AWG	4	BRL_F.X		22 AWG	9
STR_ANG.3		22 AWG	5	BRL_F.h		22 AWG	10
BRL_F.c		22 AWG	16	BRK_P_F.3		22 AWG	11
BRL_F.H		22 AWG	17	BRK_P_R.3		22 AWG	12
5V_1		22 AWG	19	BRL_F.W		22 AWG	14
0V_1		22 AWG	33	BRL_F.V		22 AWG	15
ACCEL.3		22 AWG	N/C	BRL_F.f		22 AWG	16
				BRL_F.e		22 AWG	17
				BRL_F.i		22 AWG	18
				BRL_F.s		18 AWG	20



M150_C				M150_D			
To	Color	Gauge	Cavity	To	Color	Gauge	Cavity
BRL_F.n		18 AWG	3	BRL_F.EE		22 AWG	1
BRL_F.m		18 AWG	4	BRL_F.GG		22 AWG	2
BRL_F.k		18 AWG	5	BRL_F.BB		22 AWG	7
BRL_F.j		18 AWG	6	WHL_SPD_FL.3		22 AWG	8
GND_1		18 AWG	10	WHL_SPD_FR.3		22 AWG	9
SHK_POT_FL.3		22 AWG	14	BRL_F.a		22 AWG	10
SHK_POT_FR.3		22 AWG	15	BRL_F.b		22 AWG	11
BRL_F.E		22 AWG	16	CAN_HI_1		22 AWG	17
BRL_F.F		22 AWG	17	CAN_LO_1		22 AWG	18
12V_AUX		18 AWG	26	ETH.1		22 AWG	23
				ETH.2		22 AWG	24
				ETH.4		22 AWG	25
				ETH.3		22 AWG	26
				BRL_F.AA		22 AWG	N/C
				BRL_F.CC		22 AWG	N/C
				BRL_F.DD		22 AWG	N/C
				BRL_F.FF		22 AWG	N/C
				BRL_F.HH		22 AWG	N/C

Title	----	Part Number	2024 Front Harness	
Description			Revision	----

	Name	Date	 This document contains confidential and proprietary information that cannot be reproduced or divulged, in whole or in part, without written authorization.
Drawn By	----	----	
Eng Approved	----	----	
Mfg Approved	----	----	
QA	----	----	










































Title:	----
Part Number:	2024 Front Harness
Description:	

Id	Type	Manufacturer	Part Number	Description	Quantity	Usage
1	Connector		2 Cavity	Generic Connector	1	ARDUINO
9	Wire		18 AWG Red	Generic Wire	28 in	W16, W18
21	Wire		18 AWG Black	Generic Wire	56 in	W20, W183, W184
23	Connector		3 Cavity	Generic Connector	3	ACCEL, BRK_P_F, BRK_P_R
27	Splice		Generic Splice	Generic Splice	11	0V_1, 0V_2, 5V_1, 5V_2, 12V_AUX, CAN_HI_1, CAN_HI_2, CAN_LO_1, CAN_LO_2, GND_1, GND_2
30	Ring Terminal		18 AWG Gray	Generic Ring Terminal	6	AUX_R, AUX_W, KILL_B, KILL_W, STR_SWT_B, STR_SWT_Y
33	Resistor		Generic Resistor	Generic Resistor	1	R1
38	Wire		22 AWG Violet	Generic Wire	252 in	W73, W74, W75, W166, W167, W168
39	Wire		22 AWG Black	Generic Wire	262 in	W76, W77, W78, W82, W83, W84, W85, W169, W170, W171
41	Wire		22 AWG Orange	Generic Wire	290 in	W1, W2, W86, W87, W88, W89, W110, W112, W114, W118, W119, W124, W125
42	Wire		22 AWG Pink	Generic Wire	0 in	W3, W4, W92, W93, W94, W95, W96, W97, W98, W99, W100, W101, W102, W103, W104, W105, W106, W107, W108, W109, W186, W187, W190, W191
43	Wire		22 AWG Black - White		253 in	W5, W6, W128, W129, W130, W131, W132, W134, W135, W141, W142, W144
44	Wire		22 AWG Gray - Blue Stripe		28 in	W146
45	Wire		22 AWG Gray - Green Stripe		0 in	W147
46	Wire		22 AWG Gray - Red Stripe		28 in	W148
47	Wire		22 AWG Gray - Black Stripe		28 in	W149
48	Wire		18 AWG White-Blue	Generic Wire	28 in	W150
49	Wire		18 AWG White-Green	Generic Wire	0 in	W151
50	Wire		18 AWG White-Red	Generic Wire	28 in	W152
51	Wire		18 AWG White-Black	Generic Wire	28 in	W153
52	Wire		22 AWG Yellow	Generic Wire	89 in	W154, W155, W156, W157, W162
53	Wire		22 AWG Blue	Generic Wire	56 in	W164, W165
54	Cable		2 Wire 22 AWG shielded	Generic Cable	28 in	CBL_CKP
55	Cable		3 Wire 22 AWG shielded	Generic Cable	56 in	CBL_CMP, CBL_KNOCK
56	Wire		22 AWG Green	Generic Wire	89 in	W176, W177, W178, W179, W185
57	Wire		22 AWG Brown	Generic Wire	104 in	W48, W180, W181, W182










































Title:	----
Part Number:	2024 Front Harness
Description:	

Id	Type	Manufacturer	Part Number	Description	Quantity	Usage
58	Sleeving	TE Connectivity / Raychem	DR-25-3/4-0	Heat-Shrinkable Flexible Chemical and Abrasion Resistant Tubing 2: 1 3/4-Inch Black	26 in	See Drawing
59	Sleeving	TE Connectivity / Raychem	DR-25-3/16-0	Heat-Shrinkable Flexible Chemical and Abrasion Resistant Tubing 2: 1 3/16-Inch Black	36 in	See Drawing
60	Sleeving	TE Connectivity / Raychem	DR-25-1/4-0	Heat-Shrinkable Flexible Chemical and Abrasion Resistant Tubing 2: 1 1/4-Inch Black	22 in	See Drawing
61	Sleeving	TE Connectivity / Raychem	DR-25-1/8-0	Heat Shrink Tubing 2: 1 Cross-Linked Elastomer Black	241 in	See Drawing
62	Connector	TE Connectivity - Deutsch	DTM04-2P	TE Connectivity - Deutsch DT Series Connector	2	INA_SWT, OTS
63	Connector	TE Connectivity	DTM04-3P	Conn Housing RCP 3 POS Crimp ST Cable Mount Automotive	9	SHK_POT_FL, SHK_POT_FR, STR_ANG, WHL_FL, WHL_FL1, WHL_FR, WHL_FR1, WHL_SPD_FL, WHL_SPD_FR
64	Connector	TE Connectivity - Deutsch	DTM04-6S	TE Connectivity - Deutsch DT Series Connector	1	SWT_PNL_S
65	Connector	TE Connectivity - Deutsch	DTM04-6P	TE Connectivity - Deutsch DT Series Connector	1	SWT_PNL_P
66	Connector	TE Connectivity / DEUTSCH	MS3470A22-55S	MIL Series Connector, 55 Contact(s), Aluminum Alloy, Female, Crimp Terminal, Receptacle	1	BRL_F
67	Connector	TE Connectivity - Deutsch	DTM04-4P	TE Connectivity - Deutsch DT Series Connector	1	ETH
68	Connector	TE Connectivity	1473416-1	CONNECTOR, PLUG, SUPER SEAL, 26WAY; Series: Super Seal; No. of Positions: 26; For	2	M150_B, M150_D
69	Connector	TE Connectivity	3-1437290-9	SUPER SEAL Series, 34 Way Cable Mount Plug Housing TE Connectivity 3-1437290-9	2	M150_A, M150_C
70	Wire		22 AWG Gray - Violet		28 in	W7
71	Wire		18 AWG White - Violet		28 in	W8
72	Wire		22 AWG White	Generic Wire	≥ 812 in	W9, W10, W11, W12, W13, W14, W15, W17, W19, W21, W22, W23, W24, W25, W26, W27, W28, W29, W30, W31, W32, W33, W34, W35, W36





















Title:	----
Part Number:	2024 Front Harness
Description:	

From	To	Conductor	Conductor PN	Twisted With	Gauge	Length	From Contact PN	Notes
0V_1	0V_2	 W135.Black-White	22 AWG Black - White		22 AWG	24 in		
0V_1	M150_A.33	 W132.Black-White	22 AWG Black - White		22 AWG	7 in		
0V_2	BRK_P_F.2	 W130.Black-White	22 AWG Black - White		22 AWG	16 in		
0V_2	BRK_P_R.2	 W129.Black-White	22 AWG Black - White		22 AWG	16 in		
0V_2	SHK_POT_FL.2	 W142.Black-White	22 AWG Black - White		22 AWG	50 in		
0V_2	SHK_POT_FR.2	 W144.Black-White	22 AWG Black - White		22 AWG	37 in		
0V_2	STR_ANG.2	 W131.Black-White	22 AWG Black - White		22 AWG	8 in		
0V_2	WHL_SPD_FL.2	 W128.Black-White	22 AWG Black - White		22 AWG	22 in		
0V_2	WHL_SPD_FR.2	 W134.Black-White	22 AWG Black - White		22 AWG	16 in		
5V_1	5V_2	 W110.Orange	22 AWG Orange		22 AWG	24 in		
5V_1	M150_A.19	 W124.Orange	22 AWG Orange		22 AWG	7 in		
5V_2	ARDUINO.N/C	 W112.Orange	22 AWG Orange		22 AWG	37 in		
5V_2	BRK_P_F.1	 W87.Orange	22 AWG Orange		22 AWG	16 in		
5V_2	BRK_P_R.1	 W88.Orange	22 AWG Orange		22 AWG	16 in		
5V_2	SHK_POT_FL.1	 W118.Orange	22 AWG Orange		22 AWG	50 in		
5V_2	SHK_POT_FR.1	 W125.Orange	22 AWG Orange		22 AWG	37 in		
5V_2	STR_ANG.1	 W89.Orange	22 AWG Orange		22 AWG	8 in		
5V_2	WHL_SPD_FL.N/C	 W86.Orange	22 AWG Orange		22 AWG	22 in		
5V_2	WHL_SPD_FR.1	 W119.Orange	22 AWG Orange		22 AWG	16 in		
12V_AUX	M150_C.26	 W16.Red	18 AWG Red		18 AWG	7 in		ECU_12V_SUPPLY
ARDUINO.N/C	CAN_HI_2	 W179.Green	22 AWG Green		22 AWG	15 in		
ARDUINO.N/C	CAN_LO_2	 W162.Yellow	22 AWG Yellow		22 AWG	15 in		
AUX_R	SWT_PNL_S.1	 W166.Violet	22 AWG Violet		22 AWG	5 in		
AUX_W	SWT_PNL_S.2	 W169.Black	22 AWG Black		22 AWG	5 in		
BRK_P_F.3	M150_B.11	 W32.White	22 AWG White		22 AWG	47 in		
BRK_P_R.3	M150_B.12	 W24.White	22 AWG White		22 AWG	47 in		
BRL_F.AA	M150_D.N/C	 CBL_KNOCK.Black	3 Wire 22 AWG shielded		22 AWG	28 in		
BRL_F.BB	M150_D.7	 CBL_KNOCK.Brown	3 Wire 22 AWG shielded		22 AWG	28 in		
BRL_F.CC	M150_D.N/C	 CBL_KNOCK.Red	3 Wire 22 AWG shielded		22 AWG	28 in		
BRL_F.DD	M150_D.N/C	 CBL_CKP.Black	2 Wire 22 AWG shielded		22 AWG	28 in		
BRL_F.E	M150_C.16	 W28.White	22 AWG White		22 AWG	28 in		SHK_POT_RL
BRL_F.EE	M150_D.1	 CBL_CKP.Brown	2 Wire 22 AWG shielded		22 AWG	28 in		
BRL_F.F	M150_C.17	 W30.White	22 AWG White		22 AWG	28 in		SHK_POT_RR
BRL_F.FF	M150_D.N/C	 CBL_CMP.Black	3 Wire 22 AWG shielded		22 AWG	28 in		ECU GND
BRL_F.GG	M150_D.2	 CBL_CMP.Brown	3 Wire 22 AWG shielded		22 AWG	28 in		
BRL_F.H	M150_A.17	 W31.White	22 AWG White		22 AWG	28 in		VHL_SPD
BRL_F.HH	M150_D.N/C	 CBL_CMP.Red	3 Wire 22 AWG shielded		22 AWG	28 in		
BRL_F.L	M150_A.4	 W15.White	22 AWG White		22 AWG	28 in		TPS
BRL_F.P	M150_A.3	 W17.White	22 AWG White		22 AWG	28 in		EGT
BRL_F.V	M150_B.15	 W146.Gray-Blue	22 AWG Gray - Blue Stripe		22 AWG	28 in		INJ_4
BRL_F.W	M150_B.14	 W7.Gray-Violet	22 AWG Gray - Violet		22 AWG	28 in		INJ_3

Title:	----
Part Number:	2024 Front Harness
Description:	

From	To	Conductor	Conductor PN	Twisted With	Gauge	Length	From Contact PN	Notes
BRL_F.X	M150_B.9	 W148.Gray-Red	22 AWG Gray - Red Stripe		22 AWG	28 in		INJ_2
BRL_F.Y	M150_B.8	 W149.Gray-Black	22 AWG Gray - Black Stripe		22 AWG	28 in		INJ_1
BRL_F.Z	5V_1	 W114.Orange	22 AWG Orange		22 AWG	21 in		
BRL_F.a	M150_D.10	 W26.White	22 AWG White		22 AWG	28 in		WHL_SPD_RL
BRL_F.b	M150_D.11	 W27.White	22 AWG White		22 AWG	28 in		WHL_SPD_RR
BRL_F.c	M150_A.16	 W9.White	22 AWG White		22 AWG	28 in		N_IND
BRL_F.d	M150_A.2	 W29.White	22 AWG White		22 AWG	28 in		CLNT_T
BRL_F.e	M150_B.17	 W10.White	22 AWG White		22 AWG	28 in		OIL_P
BRL_F.f	M150_B.16	 W11.White	22 AWG White		22 AWG	28 in		AMB_P
BRL_F.g	M150_A.1	 W23.White	22 AWG White		22 AWG	28 in		TMAP_T
BRL_F.h	M150_B.10	 W12.White	22 AWG White		22 AWG	28 in		TMAP_P
BRL_F.i	M150_B.18	 W13.White	22 AWG White		22 AWG	28 in		FL_P
BRL_F.j	M150_C.6	 W150.White-Blue	18 AWG White-Blue		18 AWG	28 in		COIL_4
BRL_F.k	M150_C.5	 W8.White-Violet	18 AWG White - Violet		18 AWG	28 in		COIL_3
BRL_F.m	M150_C.4	 W152.White-Red	18 AWG White-Red		18 AWG	28 in		COIL_2
BRL_F.n	M150_C.3	 W153.White-Black	18 AWG White-Black		18 AWG	28 in		COIL_1
BRL_F.p	M150_B.1	 W164.Blue	22 AWG Blue		22 AWG	28 in		FL_RLY
BRL_F.q	M150_B.2	 W165.Blue	22 AWG Blue		22 AWG	28 in		FAN_RLY
BRL_F.r	0V_1	 W141.Black-White	22 AWG Black - White		22 AWG	21 in		
BRL_F.s	M150_B.20	 W183.Black	18 AWG Black		18 AWG	28 in		BRAKE LIGHT TRIGGER
BRL_F.t	GND_1	 W20.Black	18 AWG Black		18 AWG	21 in		
BRL_F.u	12V_AUX	 W18.Red	18 AWG Red		18 AWG	21 in		
BRL_F.v	CAN_HI_1	 W185.Green	22 AWG Green		22 AWG	21 in		
BRL_F.w	CAN_LO_1	 W157.Yellow	22 AWG Yellow		22 AWG	21 in		
BRL_F.x	SWT_PNL_P.1	 W73.Violet	22 AWG Violet		22 AWG	79 in		KILL_SWT 12V
BRL_F.y	SWT_PNL_P.3	 W74.Violet	22 AWG Violet		22 AWG	79 in		STR_SWT 12V
BRL_F.z	SWT_PNL_P.5	 W75.Violet	22 AWG Violet		22 AWG	79 in		AUX_SWT 12V
CAN_HI_1	CAN_HI_2	 W176.Green	22 AWG Green		22 AWG	46 in		
CAN_HI_1	M150_D.17	 W177.Green	22 AWG Green		22 AWG	7 in		
CAN_HI_2	R1.POS	 W178.Green	22 AWG Green		22 AWG	0 in		
CAN_LO_1	CAN_LO_2	 W154.Yellow	22 AWG Yellow		22 AWG	46 in		
CAN_LO_1	M150_D.18	 W155.Yellow	22 AWG Yellow		22 AWG	7 in		
CAN_LO_2	R1.NEG	 W156.Yellow	22 AWG Yellow		22 AWG	0 in		
ETH.1	M150_D.23	 W48.Brown	22 AWG Brown		22 AWG	26 in		ETH_T+
ETH.2	M150_D.24	 W180.Brown	22 AWG Brown		22 AWG	26 in		ETH_T-
ETH.3	M150_D.26	 W181.Brown	22 AWG Brown		22 AWG	26 in		ETH_R-
ETH.4	M150_D.25	 W182.Brown	22 AWG Brown		22 AWG	26 in		ETH_R+
GND_1	GND_2	 W83.Black	22 AWG Black		22 AWG	24 in		
GND_1	M150_C.10	 W184.Black	18 AWG Black		18 AWG	7 in		
GND_2	ARDUINO.N/C	 W84.Black	22 AWG Black		22 AWG	37 in		
GND_2	INA_SWT.2	 W78.Black	22 AWG Black		22 AWG	18 in		

Title:	----
Part Number:	2024 Front Harness
Description:	

From	To	Conductor	Conductor PN	Twisted With	Gauge	Length	From Contact PN	Notes
GND_2	SWT_PNL_P.4	 W76.Black	22 AWG Black		22 AWG	34 in		STR_SWT GROUND
GND_2	SWT_PNL_P.6	 W85.Black	22 AWG Black		22 AWG	34 in		AUX_SWT GROUND
KILL_B	SWT_PNL_S.4	 W170.Black	22 AWG Black		22 AWG	5 in		
KILL_W	SWT_PNL_S.3	 W167.Violet	22 AWG Violet		22 AWG	5 in		
M150_A.N/C	ACCEL.3	 W19.White	22 AWG White		22 AWG	≥ 2 in		Reverse splice
OTS.2	INA_SWT.1	 W77.Black	22 AWG Black		22 AWG	42 in		MUST ADD ~12" FOR PEDAL MOVING BACK
SHK_POT_FL.3	M150_C.14	 W14.White	22 AWG White		22 AWG	81 in		
SHK_POT_FR.3	M150_C.15	 W25.White	22 AWG White		22 AWG	68 in		
STR_ANG.3	M150_A.5	 W22.White	22 AWG White		22 AWG	39 in		
STR_SWT_B	SWT_PNL_S.6	 W171.Black	22 AWG Black		22 AWG	5 in		
STR_SWT_Y	SWT_PNL_S.5	 W168.Violet	22 AWG Violet		22 AWG	5 in		
SWT_PNL_P.2	OTS.1	 W82.Black	22 AWG Black		22 AWG	58 in		KILL_SWT GROUND
WHL_FL.1	WHL_FL1.1	 W1.Orange	22 AWG Orange		22 AWG	18 in		
WHL_FL.2	WHL_FL1.2	 W5.Black-White	22 AWG Black - White		22 AWG	18 in		
WHL_FL.3	WHL_FL1.3	 W35.White	22 AWG White		22 AWG	18 in		
WHL_FR.1	WHL_FR1.1	 W2.Orange	22 AWG Orange		22 AWG	18 in		
WHL_FR.2	WHL_FR1.2	 W6.Black-White	22 AWG Black - White		22 AWG	18 in		
WHL_FR.3	WHL_FR1.3	 W33.White	22 AWG White		22 AWG	18 in		
WHL_SPD_FL.3	M150_D.8	 W34.White	22 AWG White		22 AWG	53 in		
WHL_SPD_FR.3	M150_D.9	 W21.White	22 AWG White		22 AWG	47 in		