

Revisions			
Rev.	Date	Author	Description
A	2/18/2019	Jefferson Jones	
B	6/8/2019	Nathan Cheek	

From	To	Conductor	Color	Gauge	From Contact PN
FIREWALL_2.1	S1	GND_SHIELD.Green		22 AWG	
FIREWALL_2.2	MAIN_PRIM_1.7	INVERTER_SUPPLY.Red		22 AWG	
FIREWALL_2.3	MAIN_PRIM_1.9	BRAKE_LIGHT.Red		22 AWG	
FIREWALL_2.4	MAIN_PRIM_1.10	12V_ACCUM_MAINT.Red		22 AWG	
FIREWALL_2.5	MAIN_PRIM_1.11	CAN_FRONT.White-Blue		22 AWG	
FIREWALL_2.6	MAIN_PRIM_1.12	CAN_FRONT.White		22 AWG	
FIREWALL_2.7	MAIN_PRIM_1.17	RET_FAN_1.Green		22 AWG	
FIREWALL_2.8	MAIN_PRIM_1.30	GND_ACCUM.Green		22 AWG	
FIREWALL_2.9	MAIN_PRIM_1.31	BMS_OK.Yellow		22 AWG	
FIREWALL_2.10	MAIN_PRIM_1.33	IMD_OKHS.Yellow		22 AWG	
FIREWALL_2.11	MAIN_PRIM_1.37	LATCH_EXT_BTN.White		22 AWG	
FIREWALL_2.12	S3	SHUTDOWN_F.Violet		22 AWG	
FIREWALL_2.13	S4	SSOK.Red		22 AWG	

From	To	Conductor	Color	Gauge
S1	DASH_1.1	GND_DASH.Green		22 AWG
S1	FIREWALL_2.1	GND_SHIELD.Green		22 AWG
S1	MAIN_PRIM_1.36	GND_DASH_GND_SHIELD.Green		22 AWG

From	To	Conductor	Color	Gauge	From Contact PN
MAIN_PRIM_1.1	DASH_1.2	DASH1.Blue		22 AWG	
MAIN_PRIM_1.2	DASH_1.3	DASH2.Blue		22 AWG	
MAIN_PRIM_1.3	DASH_1.4	DASH3.Blue		22 AWG	
MAIN_PRIM_1.4	DASH_1.5	DASH4.Blue		22 AWG	
MAIN_PRIM_1.5	PED_1.12	SHUTDOWN_D.Violet		22 AWG	
MAIN_PRIM_1.6	S2	DASH11.Blue		22 AWG	
MAIN_PRIM_1.7	FIREWALL_2.2	INVERTER_SUPPLY.Red		22 AWG	
MAIN_PRIM_1.8	BRAKE_1.3	SIGNAL_BRAKE.Yellow		22 AWG	
MAIN_PRIM_1.9	FIREWALL_2.3	BRAKE_LIGHT.Red		22 AWG	
MAIN_PRIM_1.10	FIREWALL_2.4	12V_ACCUM_MAINT.Red		22 AWG	
MAIN_PRIM_1.11	FIREWALL_2.5	CAN_FRONT.White-Blue		22 AWG	
MAIN_PRIM_1.12	FIREWALL_2.6	CAN_FRONT.White		22 AWG	
MAIN_PRIM_1.14	PED_1.5	ACCEL_1.White-Blue		22 AWG	
MAIN_PRIM_1.15	PED_1.1	ACCEL_2.White-Blue		22 AWG	
MAIN_PRIM_1.16	BRAKE_1.2	GND_BRAKE.Green		22 AWG	
MAIN_PRIM_1.17	FIREWALL_2.7	RET_FAN_1.Green		22 AWG	
MAIN_PRIM_1.18	DASH_1.6	DASH5.Blue		22 AWG	
MAIN_PRIM_1.19	DASH_1.7	DASH6.Blue		22 AWG	
MAIN_PRIM_1.20	DASH_1.8	DASH7.Blue		22 AWG	
MAIN_PRIM_1.21	DASH_1.9	DASH8.Blue		22 AWG	
MAIN_PRIM_1.22	S3	DASH12.Blue		22 AWG	
MAIN_PRIM_1.23	DASH_1.10	DASH9.Blue		22 AWG	
MAIN_PRIM_1.24	PED_1.4	ACCEL_2.White-Orange		22 AWG	
MAIN_PRIM_1.25	PED_1.3	ACCEL_1.White-Orange		22 AWG	
MAIN_PRIM_1.27	PED_1.6	ACCEL_1.White		22 AWG	
MAIN_PRIM_1.28	PED_1.2	ACCEL_2.White		22 AWG	
MAIN_PRIM_1.29	BRAKE_1.1	5V_BRAKE.Red		22 AWG	
MAIN_PRIM_1.30	FIREWALL_2.8	GND_ACCUM.Green		22 AWG	
MAIN_PRIM_1.31	FIREWALL_2.9	BMS_OK.Yellow		22 AWG	
MAIN_PRIM_1.32	DASH_1.11	DASH10.Blue		22 AWG	
MAIN_PRIM_1.33	FIREWALL_2.10	IMD_OKHS.Yellow		22 AWG	
MAIN_PRIM_1.36	S1	GND_DASH_GND_SHIELD.Green		22 AWG	
MAIN_PRIM_1.37	FIREWALL_2.11	LATCH_EXT_BTN.White		22 AWG	

Bill of Materials				
Id	Type	Manufacturer	Part Number	Quantity
1	Connector	Souriau	8STA61435SN	1
2	Connector	Souriau	8STA00235PN	1
3	Connector	Souriau	8STA61035SN	1
4	Connector	Souriau	8STA01035PN	2
5	Wire		M22759/32-22-6	
6	Wire		M22759/32-22-5	
7	Wire		M22759/32-22-4	
8	Wire		M22759/32-22-2	
9	Wire		M22759/32-22-7	
10	Splice	Morris	12102	4
11	Wire		M22759/32-22-9	
12	Cable		M27500-22SB2	
13	Cable		M27500-22SB3	

From	To	Conductor	Color	Gauge	From Contact PN
DASH_1.1	S1	GND_DASH.Green		22 AWG	
DASH_1.2	MAIN_PRIM_1.1	DASH1.Blue		22 AWG	
DASH_1.3	MAIN_PRIM_1.2	DASH2.Blue		22 AWG	
DASH_1.4	MAIN_PRIM_1.3	DASH3.Blue		22 AWG	
DASH_1.5	MAIN_PRIM_1.4	DASH4.Blue		22 AWG	
DASH_1.6	MAIN_PRIM_1.18	DASH5.Blue		22 AWG	
DASH_1.7	MAIN_PRIM_1.19	DASH6.Blue		22 AWG	
DASH_1.8	MAIN_PRIM_1.20	DASH7.Blue		22 AWG	
DASH_1.9	MAIN_PRIM_1.21	DASH8.Blue		22 AWG	
DASH_1.10	MAIN_PRIM_1.23	DASH9.Blue		22 AWG	
DASH_1.11	MAIN_PRIM_1.32	DASH10.Blue		22 AWG	
DASH_1.12	S2	DASH_11_SHUTDOWN_E.Blue		22 AWG	
DASH_1.13	S3	DASH_12_SHUTDOWN_F.Blue		22 AWG	

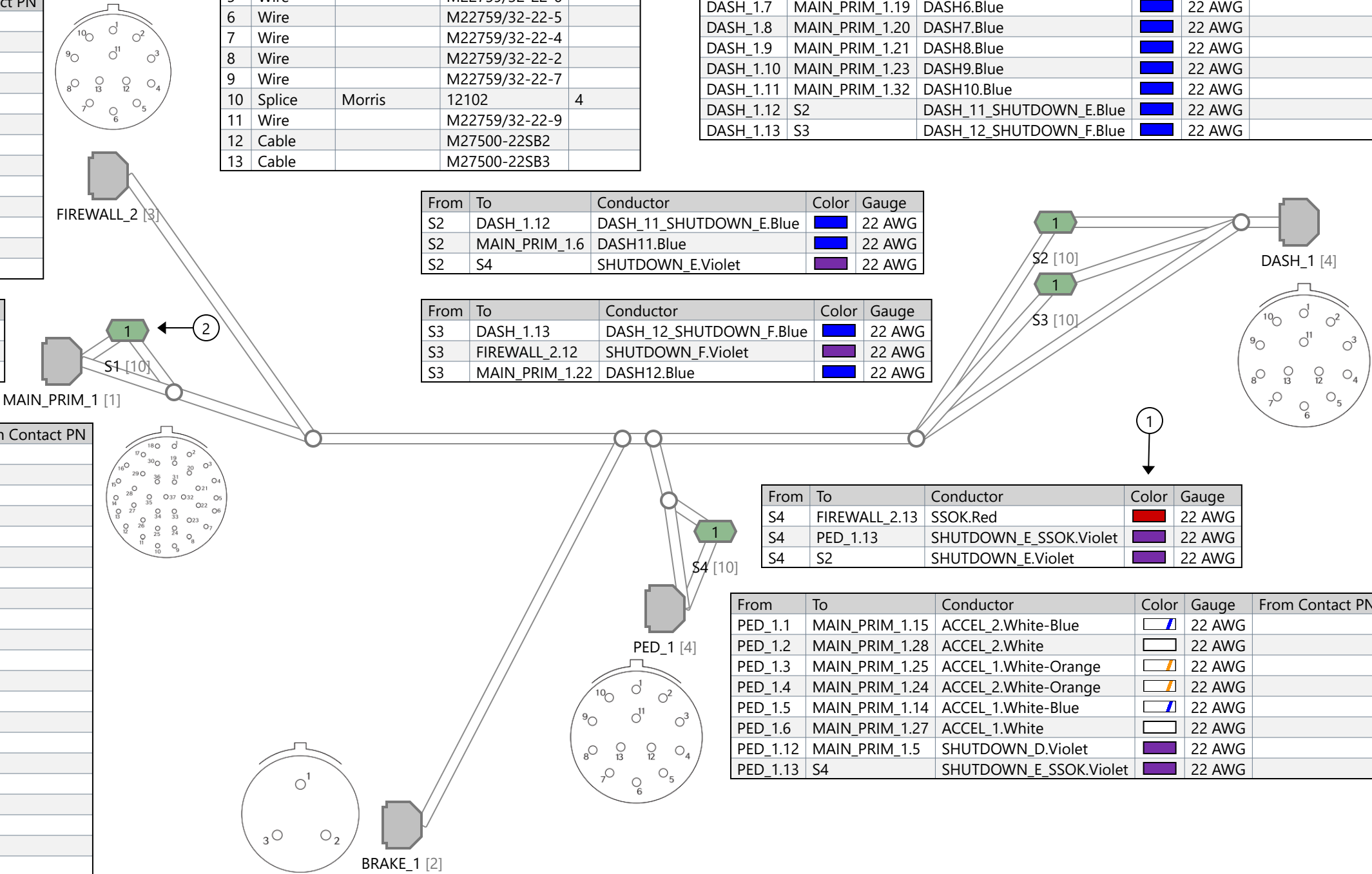
From	To	Conductor	Color	Gauge
S2	DASH_1.12	DASH_11_SHUTDOWN_E.Blue		22 AWG
S2	MAIN_PRIM_1.6	DASH11.Blue		22 AWG
S2	S4	SHUTDOWN_E.Violet		22 AWG

From	To	Conductor	Color	Gauge
S3	DASH_1.13	DASH_12_SHUTDOWN_F.Blue		22 AWG
S3	FIREWALL_2.12	SHUTDOWN_F.Violet		22 AWG
S3	MAIN_PRIM_1.22	DASH12.Blue		22 AWG

From	To	Conductor	Color	Gauge
S4	FIREWALL_2.13	SSOK.Red		22 AWG
S4	PED_1.13	SHUTDOWN_E_SSOK.Violet		22 AWG
S4	S2	SHUTDOWN_E.Violet		22 AWG


From	To	Conductor	Color	Gauge	From Contact PN
PED_1.1	MAIN_PRIM_1.15	ACCEL_2.White-Blue		22 AWG	
PED_1.2	MAIN_PRIM_1.28	ACCEL_2.White		22 AWG	
PED_1.3	MAIN_PRIM_1.25	ACCEL_1.White-Orange		22 AWG	
PED_1.4	MAIN_PRIM_1.24	ACCEL_2.White-Orange		22 AWG	
PED_1.5	MAIN_PRIM_1.14	ACCEL_1.White-Blue		22 AWG	
PED_1.6	MAIN_PRIM_1.27	ACCEL_1.White		22 AWG	
PED_1.12	MAIN_PRIM_1.5	SHUTDOWN_D.Violet		22 AWG	
PED_1.13	S4	SHUTDOWN_E_SSOK.Violet		22 AWG	

From	To	Conductor	Color	Gauge	From Contact PN
BRAKE_1.1	MAIN_PRIM_1.29	5V_BRAKE.Red		22 AWG	
BRAKE_1.2	MAIN_PRIM_1.16	GND_BRAKE.Green		22 AWG	
BRAKE_1.3	MAIN_PRIM_1.8	SIGNAL_BRAKE.Yellow		22 AWG	



Notes				
①	SSOK is yellow rear of firewall, red forward of firewall			
②	GND_DASH_GND_SHIELD also splits to ground cable shields; not shown in diagram			










































Title	----	Part Number	HT04.LV.HARNESS_FRONT
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:	HT04.LV.HARNES_FRONT
Description:	

Id	Type	Manufacturer	Part Number	Description	Quantity	Usage
1	Connector	Souriau	8STA61435SN	37CKT Socket - Plug - Size 14	1	MAIN_PRIM_1
2	Connector	Souriau	8STA00235PN	3CKT Pin - Panel Mount Receptacle - Size 02	1	BRAKE_1
3	Connector	Souriau	8STA61035SN	13CKT Socket - Plug - Size 10	1	FIREWALL_2
4	Connector	Souriau	8STA01035PN	13CKT Pin - Panel Mount Receptacle - Size 10	2	DASH_1, PED_1
5	Wire		M22759/32-22-6	M22759 22 AWG Blue Tin Plated Copper wire		DASH1, DASH2, DASH3, DASH4, DASH5, DASH6, DASH7, DASH8, DASH9, DASH10, DASH11, DASH12, DASH_11_SHUTDOWN_E, DASH_12_SHUTDOWN_F
6	Wire		M22759/32-22-5	M22759 22 AWG Green Tin Plated Copper wire		GND_ACCUM, GND_BRAKE, GND_DASH, GND_DASH_GND_SHIELD, GND_SHIELD, RET_FAN_1
7	Wire		M22759/32-22-4	M22759 22 AWG Yellow Tin Plated Copper wire		BMS_OK, IMD_OKHS, SIGNAL_BRAKE
8	Wire		M22759/32-22-2	M22759 22 AWG Red Tin Plated Copper wire		5V_BRAKE, 12V_ACCUM_MAINT, BRAKE_LIGHT, INVERTER_SUPPLY, SSOK
9	Wire		M22759/32-22-7	M22759 22 AWG Violet Tin Plated Copper wire		SHUTDOWN_D, SHUTDOWN_E, SHUTDOWN_E_SSOK, SHUTDOWN_F
10	Splice	Morris	12102	26-22 AWG butt splice connector	4	S1, S2, S3, S4
11	Wire		M22759/32-22-9	M22759 22 AWG White Tin Plated Copper wire		LATCH_EXT_BTN
12	Cable		M27500-22SB2	22AWG 2-conductor shielded		CAN_FRONT
13	Cable		M27500-22SB3	22AWG 3-conductor shielded		ACCEL_1, ACCEL_2

Title:	----
Part Number:	HT04.LV.HARNES_FRONT
Description:	

From	To	Conductor	Conductor PN	Twisted With	Gauge	Length	From Contact PN	Notes
MAIN_PRIM_1.1	DASH_1.2	 DASH1.Blue	M22759/32-22-6		22 AWG			
MAIN_PRIM_1.2	DASH_1.3	 DASH2.Blue	M22759/32-22-6		22 AWG			
MAIN_PRIM_1.3	DASH_1.4	 DASH3.Blue	M22759/32-22-6		22 AWG			
MAIN_PRIM_1.4	DASH_1.5	 DASH4.Blue	M22759/32-22-6		22 AWG			
MAIN_PRIM_1.5	PED_1.12	 SHUTDOWN_D.Violet	M22759/32-22-7		22 AWG			
MAIN_PRIM_1.6	S2	 DASH11.Blue	M22759/32-22-6		22 AWG			
MAIN_PRIM_1.7	FIREWALL_2.2	 INVERTER_SUPPLY.Red	M22759/32-22-2		22 AWG			
MAIN_PRIM_1.8	BRAKE_1.3	 SIGNAL_BRAKE.Yellow	M22759/32-22-4		22 AWG			
MAIN_PRIM_1.9	FIREWALL_2.3	 BRAKE_LIGHT.Red	M22759/32-22-2		22 AWG			
MAIN_PRIM_1.10	FIREWALL_2.4	 12V_ACCUM_MAINT.Red	M22759/32-22-2		22 AWG			
MAIN_PRIM_1.11	FIREWALL_2.5	 CAN_FRONT.White-Blue	M27500-22SB2	White	22 AWG			
MAIN_PRIM_1.12	FIREWALL_2.6	 CAN_FRONT.White	M27500-22SB2	White-Blue	22 AWG			
MAIN_PRIM_1.14	PED_1.5	 ACCEL_1.White-Blue	M27500-22SB3	White, White-Orange	22 AWG			
MAIN_PRIM_1.15	PED_1.1	 ACCEL_2.White-Blue	M27500-22SB3	White, White-Orange	22 AWG			
MAIN_PRIM_1.16	BRAKE_1.2	 GND_BRAKE.Green	M22759/32-22-5		22 AWG			
MAIN_PRIM_1.17	FIREWALL_2.7	 RET_FAN_1.Green	M22759/32-22-5		22 AWG			
MAIN_PRIM_1.18	DASH_1.6	 DASH5.Blue	M22759/32-22-6		22 AWG			
MAIN_PRIM_1.19	DASH_1.7	 DASH6.Blue	M22759/32-22-6		22 AWG			
MAIN_PRIM_1.20	DASH_1.8	 DASH7.Blue	M22759/32-22-6		22 AWG			
MAIN_PRIM_1.21	DASH_1.9	 DASH8.Blue	M22759/32-22-6		22 AWG			
MAIN_PRIM_1.22	S3	 DASH12.Blue	M22759/32-22-6		22 AWG			
MAIN_PRIM_1.23	DASH_1.10	 DASH9.Blue	M22759/32-22-6		22 AWG			
MAIN_PRIM_1.24	PED_1.4	 ACCEL_2.White-Orange	M27500-22SB3	White, White-Blue	22 AWG			
MAIN_PRIM_1.25	PED_1.3	 ACCEL_1.White-Orange	M27500-22SB3	White, White-Blue	22 AWG			
MAIN_PRIM_1.27	PED_1.6	 ACCEL_1.White	M27500-22SB3	White-Blue, White-Orange	22 AWG			
MAIN_PRIM_1.28	PED_1.2	 ACCEL_2.White	M27500-22SB3	White-Blue, White-Orange	22 AWG			
MAIN_PRIM_1.29	BRAKE_1.1	 5V_BRAKE.Red	M22759/32-22-2		22 AWG			
MAIN_PRIM_1.30	FIREWALL_2.8	 GND_ACCUM.Green	M22759/32-22-5		22 AWG			
MAIN_PRIM_1.31	FIREWALL_2.9	 BMS_OK.Yellow	M22759/32-22-4		22 AWG			
MAIN_PRIM_1.32	DASH_1.11	 DASH10.Blue	M22759/32-22-6		22 AWG			
MAIN_PRIM_1.33	FIREWALL_2.10	 IMD_OKHS.Yellow	M22759/32-22-4		22 AWG			
MAIN_PRIM_1.36	S1	 GND_DASH_GND_SHIELD.Green	M22759/32-22-5		22 AWG			
MAIN_PRIM_1.37	FIREWALL_2.11	 LATCH_EXT_BTN.White	M22759/32-22-9		22 AWG			
S1	DASH_1.1	 GND_DASH.Green	M22759/32-22-5		22 AWG			
S1	FIREWALL_2.1	 GND_SHIELD.Green	M22759/32-22-5		22 AWG			
S2	DASH_1.12	 DASH_11_SHUTDOWN_E.Blue	M22759/32-22-6		22 AWG			
S3	DASH_1.13	 DASH_12_SHUTDOWN_F.Blue	M22759/32-22-6		22 AWG			
S3	FIREWALL_2.12	 SHUTDOWN_F.Violet	M22759/32-22-7		22 AWG			
S4	FIREWALL_2.13	 SSOK.Red	M22759/32-22-2		22 AWG			
S4	PED_1.13	 SHUTDOWN_E_SSOK.Violet	M22759/32-22-7		22 AWG			
S4	S2	 SHUTDOWN_E.Violet	M22759/32-22-7		22 AWG			

Title:	----
Part Number:	HT04.LV.HARNES_FRONT
Description:	

#	Type	Reference Designator	Manufacturer	Part Number	Color	Gauge	Length	Twisted With
1	Cable	ACCEL_1		M27500-22SB3	 Blue			
2	Cable	ACCEL_2		M27500-22SB3	 Blue			
3	Cable	CAN_FRONT		M27500-22SB2	 Blue			
4	Wire	5V_BRAKE		M22759/32-22-2	 Red	22 AWG		
5	Wire	12V_ACCUM_MAINT		M22759/32-22-2	 Red	22 AWG		
6	Wire	BMS_OK		M22759/32-22-4	 Yellow	22 AWG		
7	Wire	BRAKE_LIGHT		M22759/32-22-2	 Red	22 AWG		
8	Wire	DASH1		M22759/32-22-6	 Blue	22 AWG		
9	Wire	DASH2		M22759/32-22-6	 Blue	22 AWG		
10	Wire	DASH3		M22759/32-22-6	 Blue	22 AWG		
11	Wire	DASH4		M22759/32-22-6	 Blue	22 AWG		
12	Wire	DASH5		M22759/32-22-6	 Blue	22 AWG		
13	Wire	DASH6		M22759/32-22-6	 Blue	22 AWG		
14	Wire	DASH7		M22759/32-22-6	 Blue	22 AWG		
15	Wire	DASH8		M22759/32-22-6	 Blue	22 AWG		
16	Wire	DASH9		M22759/32-22-6	 Blue	22 AWG		
17	Wire	DASH10		M22759/32-22-6	 Blue	22 AWG		
18	Wire	DASH11		M22759/32-22-6	 Blue	22 AWG		
19	Wire	DASH12		M22759/32-22-6	 Blue	22 AWG		
20	Wire	DASH_11_SHUTDOWN_E		M22759/32-22-6	 Blue	22 AWG		
21	Wire	DASH_12_SHUTDOWN_F		M22759/32-22-6	 Blue	22 AWG		
22	Wire	GND_ACCUM		M22759/32-22-5	 Green	22 AWG		
23	Wire	GND_BRAKE		M22759/32-22-5	 Green	22 AWG		
24	Wire	GND_DASH		M22759/32-22-5	 Green	22 AWG		
25	Wire	GND_DASH_GND_SHIELD		M22759/32-22-5	 Green	22 AWG		
26	Wire	GND_SHIELD		M22759/32-22-5	 Green	22 AWG		
27	Wire	IMD_OKHS		M22759/32-22-4	 Yellow	22 AWG		
28	Wire	INVERTER_SUPPLY		M22759/32-22-2	 Red	22 AWG		
29	Wire	LATCH_EXT_BTN		M22759/32-22-9	 White	22 AWG		
30	Wire	RET_FAN_1		M22759/32-22-5	 Green	22 AWG		
31	Wire	SHUTDOWN_D		M22759/32-22-7	 Violet	22 AWG		
32	Wire	SHUTDOWN_E		M22759/32-22-7	 Violet	22 AWG		
33	Wire	SHUTDOWN_E_SSOK		M22759/32-22-7	 Violet	22 AWG		
34	Wire	SHUTDOWN_F		M22759/32-22-7	 Violet	22 AWG		
35	Wire	SIGNAL_BRAKE		M22759/32-22-4	 Yellow	22 AWG		
36	Wire	SSOK		M22759/32-22-2	 Red	22 AWG		

Title:	----
Part Number:	HT04.LV.HARNESS_FRONT
Description:	



#	Manufacturer	Part Number	Description	Label Text