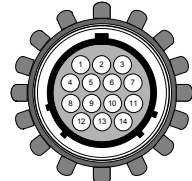


FULL FILENAME  
 \\PCSSTORAGE\OLDZ\PCS PRODUCTS\GEAR SELECT MOTOR\HARNESS\GSM-4020-001 GSM HARNESS DISCREET USER INPUTS\GSM-4020-001 GSM HARNESS DISCREET USER INPUTS.VSD

REVISION HISTORY				
LEVEL	DESCRIPTION	DATE	DRN	APP
1	RELEASE	11/12/18	FD	
1A	TEXT UPDATES	10/3/19	FD	



GSM MOTOR ENCLOSURE CONNECTOR FRONT VIEW

C2

QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-0021	female
13	TERMINALS	CON-0050	
1	Backshell		

INTERMINATED	CIRCUIT FUNCTION	COLOR	CONNECTS TO
	ORN/RED	ORN/RED	C2-5
	GRY/LT.BLU	GRY/LT.BLU	C2-7
	START	YEL/LT.GRN	C2-8
	START	YEL/RED	C2-9
	BACKUP	PNK/GRN	C2-10
	BACKUP	PNK/RED	C2-11
	NEUTRAL	BRN/BLK	C2-12
	REVERSE	BRN/RED	C2-13
	5V DC	RED/WHT	C2-14

QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-0065	
4	TERMINALS	CON-0051	
1	BACKSHELL	CON-0001	

- 1 • +12V SW RED
- 2 • GND BLK
- 3 • CAN HI WHT/RED
- 4 • CAN LOW WHT/BLK

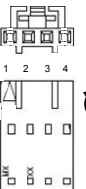
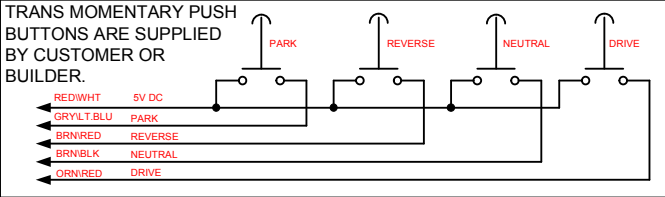
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-5050	
2	TERMINALS	CON-5200 (20-18gauge)	
1	WEDGE LOCK	CON-5102 WM-2s	
<b>** INCLUDE TERMINATOR RESISTOR PLUGIN**</b>			
1	TERM PLUG	CON-5004	

- 1 • CAN HI WHT/RED
- 2 • CAN LOW WHT/BLK

QTY	DESCRIPTION	P/N	NOTES
1	CONNECTOR	CON-5001	F
2	TERMINALS	CON-5201	MALE
1	WEDGE	CON-5002	ORN

- RED 16 AWG +12 SW
- BLK 16 AWG CHASSIS GND

- ORN/RED DRIVE
- GRY/LT.BLU PARK
- YEL/LT.GRN START
- YEL/RED START
- PNK/LT.GRN BACKUP LAMP
- PNK/RED BACKUP LAMP
- BRN/BLK NEUTRAL
- BRN/RED REVERSE
- RED/WHT 5V DC OUTPUT



- | QTY | DESCRIPTION | P/N      | NOTES | MOLEX           |
|-----|-------------|----------|-------|-----------------|
| 1   | CONNECTOR   | CON-9138 | M     | MDEX 50-57-9404 |
| 4   | TERMINALS   | TOM-7304 | F     |                 |

QTY	DESCRIPTION	P/N	NOTES	MOLEX
1	CONNECTOR	CON-2200		
1	FUSE CAP:	CON-2201	BLK	
1	TPA	CON-2202	BLU	
2	TERMINAL	CON-1020 (18-16 AWG)		
1	FUSE	CON-2211	10A	
2	CABLE SEAL	CON-1001	GRN	

BUTT SPLICE INFORMATION				F1				F2			
S-#	FUNCTION	COLOR	QTY	DESCRIPTION	PCS P/N	NOTES	QTY	DESCRIPTION	PCS P/N	NOTES	
S1	SWITCHED +12V DC	RED	1	CONNECTOR	CON-2200		1	CONNECTOR	CON-2200		
S2	CHASSIS GND	BLK	1	FUSE CAP:	CON-2201	BLK	1	FUSE CAP:	CON-2201	BLK	
S3	CAN HIGH	WHT/RED	1	TPA	CON-2202	BLU	1	TPA	CON-2202	BLU	
S4	CAN LOW	WHT/BLK	2	TERMINAL	CON-1020 (18-16 AWG)		2	TERMINAL	CON-1020 (18-16 AWG)		
S5	CAN HIGH	WHT/RED	1	FUSE	CON-2211	10A	1	FUSE	CON-2205	3A VIOLET	
S6	CAN LOW	WHT/BLK	2	CABLE SEAL	CON-1001	GRN	2	CABLE SEAL	CON-1001	GRN	

Belden Shipboard 8723SB CABLE  
 See Files for specs and price

Print Date  
 10/3/2019  
 1700

APPLICABLE STANDARDS  
 • ASME Y14.100-200  
 • ASME Y14.5M-1994  
 • IPC/WHMA-A-620A-CLASS 2  
 • MARK IAW MIL-STD-130.

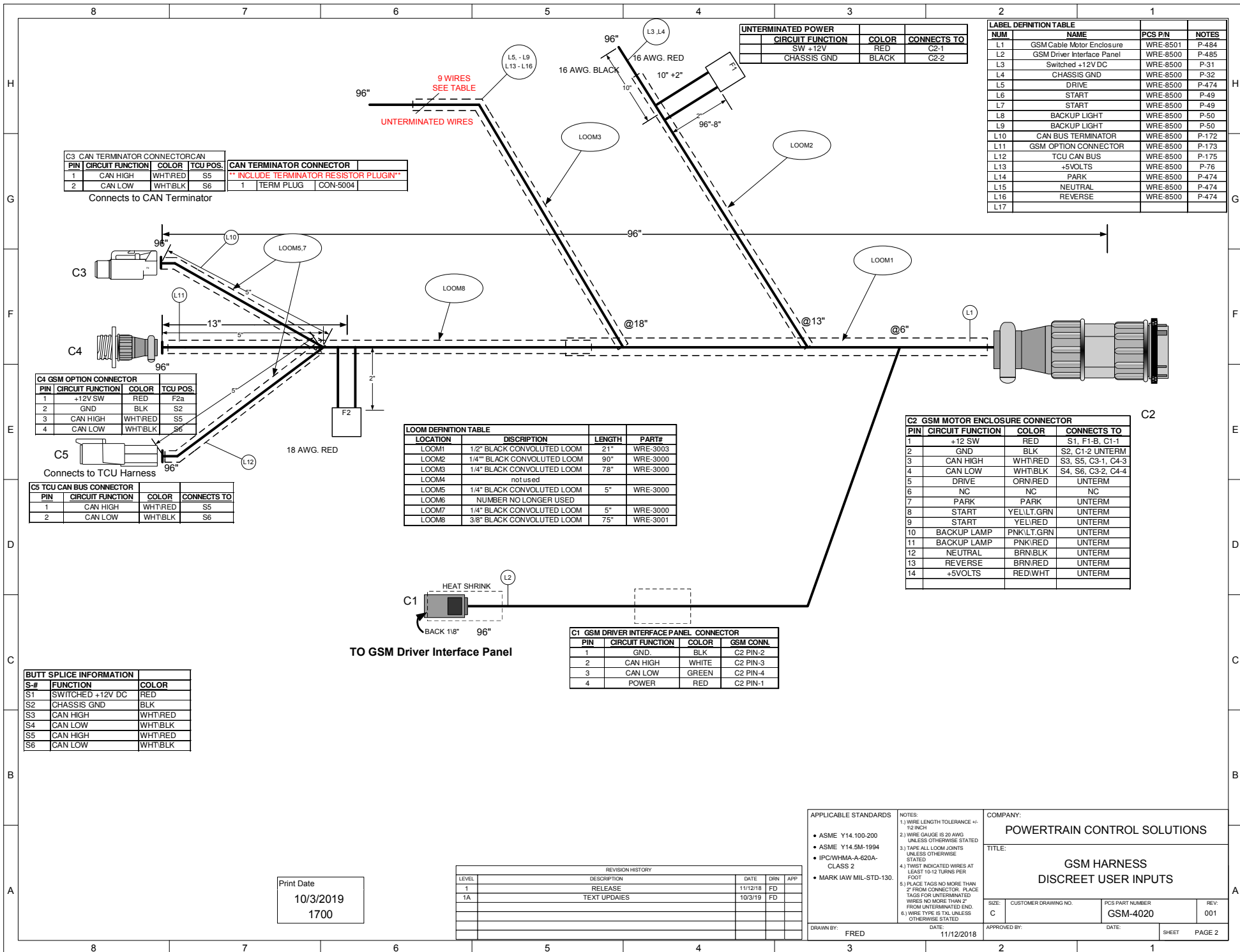
NOTES:  
 1.) WIRE LENGTH TOLERANCE +/- .12 INCH  
 2.) WIRE GAUGE IS 20 AWG UNLESS OTHERWISE STATED  
 3.) TAPE ALL LOOM JOINTS UNLESS OTHERWISE STATED  
 4.) TWIST INDICATED WIRES AT LEAST 10-12 TURNS PER FOOT  
 5.) PLACE TAGS NO MORE THAN 2" FROM CONNECTOR. PLACE TAGS FOR UNTERMINATED WIRES NO MORE THAN 2" FROM UNTERMINATED END.  
 6.) WIRE TYPE IS TXL UNLESS OTHERWISE STATED

COMPANY:  
**POWERTRAIN CONTROL SOLUTIONS**

TITLE:  
**GSM HARNESS DISCREET USER INPUTS**

SIZE: C CUSTOMER DRAWING NO. PCS PART NUMBER REV: 001  
**GSM-4020**

DRAWN BY: FRED DATE: 11/12/2018 APPROVED BY: SHEET PAGE 1



UNTERMINATED POWER			
CIRCUIT FUNCTION	COLOR	CONNECTS TO	
SW +12V	RED	C2-1	
CHASSIS GND	BLACK	C2-2	

LABEL DEFINITION TABLE			
NUM	NAME	PCS P/N	NOTES
L1	GSM Cable Motor Enclosure	WRE-8501	P-484
L2	GSM Driver Interface Panel	WRE-8500	P-485
L3	Switched +12V DC	WRE-8500	P-31
L4	CHASSIS GND	WRE-8500	P-32
L5	DRIVE	WRE-8500	P-474
L6	START	WRE-8500	P-49
L7	START	WRE-8500	P-49
L8	BACKUP LIGHT	WRE-8500	P-50
L9	BACKUP LIGHT	WRE-8500	P-50
L10	CAN BUS TERMINATOR	WRE-8500	P-172
L11	GSM OPTION CONNECTOR	WRE-8500	P-173
L12	TCU CAN BUS	WRE-8500	P-175
L13	+5VOLTS	WRE-8500	P-76
L14	PARK	WRE-8500	P-474
L15	NEUTRAL	WRE-8500	P-474
L16	REVERSE	WRE-8500	P-474
L17			

C3 CAN TERMINATOR CONNECTOR				CAN TERMINATOR CONNECTOR	
PIN	CIRCUIT FUNCTION	COLOR	TCU POS.		
1	CAN HIGH	WHT/RED	S5	** INCLUDE TERMINATOR RESISTOR PLUGIN**	
2	CAN LOW	WHT/BLK	S6	1	TERM PLUG CON-5004

Connects to CAN Terminator

C4 GSM OPTION CONNECTOR			
PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
1	+12V SW	RED	F2a
2	GND	BLK	S2
3	CAN HIGH	WHT/RED	S5
4	CAN LOW	WHT/BLK	S6

C5 TCU CAN BUS CONNECTOR			
PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
1	CAN HIGH	WHT/RED	S5
2	CAN LOW	WHT/BLK	S6

Connects to TCU Harness

LOOM DEFINITION TABLE			
LOCATION	DISCRIPTION	LENGTH	PART#
LOOM1	1/2" BLACK CONVOLUTED LOOM	21"	WRE-3003
LOOM2	1/4" BLACK CONVOLUTED LOOM	90"	WRE-3000
LOOM3	1/4" BLACK CONVOLUTED LOOM	78"	WRE-3000
LOOM4	not used		
LOOM5	1/4" BLACK CONVOLUTED LOOM	5"	WRE-3000
LOOM6	NUMBER NO LONGER USED		
LOOM7	1/4" BLACK CONVOLUTED LOOM	5"	WRE-3000
LOOM8	3/8" BLACK CONVOLUTED LOOM	75"	WRE-3001

C2 GSM MOTOR ENCLOSURE CONNECTOR			
PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
1	+12 SW	RED	S1, F1-B, C1-1
2	GND	BLK	S2, C1-2 UNTERM
3	CAN HIGH	WHT/RED	S3, S5, C3-1, C4-3
4	CAN LOW	WHT/BLK	S4, S6, C3-2, C4-4
5	DRIVE	ORN/RED	UNTERM
6	NC	NC	NC
7	PARK	PARK	UNTERM
8	START	YEL/LT.GRN	UNTERM
9	START	YEL/RED	UNTERM
10	BACKUP LAMP	PNK/LT.GRN	UNTERM
11	BACKUP LAMP	PNK/RED	UNTERM
12	NEUTRAL	BRN/BLK	UNTERM
13	REVERSE	BRN/RED	UNTERM
14	+5VOLTS	RED/WHT	UNTERM

C1 GSM DRIVER INTERFACE PANEL CONNECTOR				
PIN	CIRCUIT FUNCTION	COLOR	GSM CONN.	
1	GND	BLK	C2 PIN-2	
2	CAN HIGH	WHITE	C2 PIN-3	
3	CAN LOW	GREEN	C2 PIN-4	
4	POWER	RED	C2 PIN-1	

BUTT SPLICE INFORMATION		
S-#	FUNCTION	COLOR
S1	SWITCHED +12V DC	RED
S2	CHASSIS GND	BLK
S3	CAN HIGH	WHT/RED
S4	CAN LOW	WHT/BLK
S5	CAN HIGH	WHT/RED
S6	CAN LOW	WHT/BLK

Print Date  
10/3/2019  
1700

REVISION HISTORY				
LEVEL	DESCRIPTION	DATE	DRN	APP
1	RELEASE	11/12/18	FD	
1A	TEXT UPDATES	10/3/19	FD	

APPLICABLE STANDARDS

- ASME Y14.100-200
- ASME Y14.5M-1994
- IPC/WHMA-A-620A-CLASS 2
- MARK IAW MIL-STD-130.

NOTES

- WIRE LENGTH TOLERANCE +/- 1/2 INCH
- WIRE GAUGE IS 20 AWG UNLESS OTHERWISE STATED
- TAPE ALL LOOM JOINTS UNLESS OTHERWISE STATED
- TWIST INDICATED WIRES AT LEAST 10-12 TURNS PER FOOT
- PLACE TAGS NO MORE THAN 2" FROM CONNECTOR. PLACE TAGS FOR UNTERMINATED WIRES NO MORE THAN 2" FROM UNTERMINATED END.
- WIRE TYPE IS TXL UNLESS OTHERWISE STATED

DRAWN BY: FRED DATE: 11/12/2018

COMPANY: POWERTRAIN CONTROL SOLUTIONS

TITLE: GSM HARNESS DISCREET USER INPUTS

SIZE: C	CUSTOMER DRAWING NO:	PCS PART NUMBER: GSM-4020	REV: 001
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APPROVED BY: DATE: SHEET PAGE 2