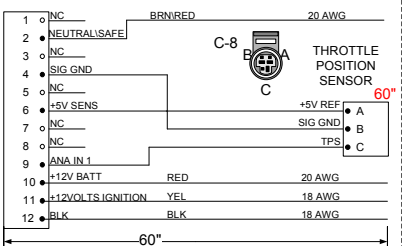
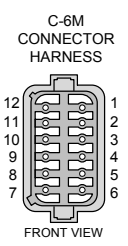
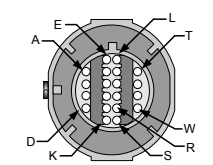


QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	CON-2328	
3	TERMINAL	CON-2329	



LEVEL	DESCRIPTION	DATE	DRN	APP
1A	REVISION	11/14/16	FD	
1B	PIN 2 BRN/RED ADDED TO PIGTAIL CONNECTOR	1/28/16	FD	
1B	ADDED TRN-1200 SWITCHING DETAIL	1/28/17	FD	
1C	REDLINE UPDATE	1/30/17	FD	



QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	CON-2000	
14	TERMINAL	CON-2804	20-22 AWG
2	TERMINAL	CON-2805	16-18 AWG
5	BLOCKING PINS	CON-1044	BLUE
1	SEAL	CON-3309	LT.GREEN
1	CONDUIT CLIP	CON-2008	
1	TPA	CON-2003	GRY

QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-1070	
2	TERMINALS	CON-1084	20 AWG
2	CABLE SEAL	CON-1093	GRN
1	TPA	CON-1072	GRY

QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-3416	
3	TERMINALS	CON-1038	
1	TPA	CON-3417	CREAM
3	CABLE SEALS	CON-1027	WHT

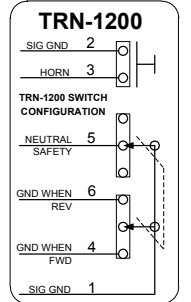
QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	CON-3415	
3	CAVITY PLUG	CON-1029	GRN
1	TPA	CON-3417	

PROVIDE A LAPTOP CALIBRATION CONNECT PROTECTIVE CAP

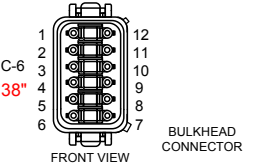
QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	CON-1071	F
2	PIN	CON-1088	M
1	SEAL	CON-1093	GRN
1	LOCK	CON-1072	3/5/2013

QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-5520	M/F
4	TERMINALS	CON-5504	
1	WEDGE LOCK	CON-5521	
1	CAVITY PLUG	CON-5530	

QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-2502	
1	RELAY	CON-2501	
4	TERMINAL	CON-2503	



PIN	CIRCUIT FUNCTION	COLOR	GOES TO	NOTES
30	+12V POWER	BLU/RED	UNTERM RY1-85, S6	18 AWG
87	REV LIGHT CKT	YEL	UNTERM	
85	+12V	BLU/RED	UNTERM RY1-30, S6	
86	GND WHN REV	BRN/LT.GRN	C7-6, S3, TCU-30	



QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-5542	GRY
12	TERMINALS	CON-5504	
1	WEDGE	CON-5508	GRN

APPLICABLE STANDARDS

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

NOTES

- WIRE LENGTH TOLERANCE +/- 1/2 INCH
- WIRE GAUGE IS 20 AWG UNLESS OTHERWISE STATED
- TWIST 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

COMPANY: POWERTRAIN CONTROL SOLUTIONS

TITLE: GM 4 SPEED TRANSMISSION C6 E-SHIFT

DATE: 11/22/16

DRAWN BY: FRED D.

CUSTOMER DRAWING NO: XXXXX-XXXXX

PCS PART NUMBER: TCM-4663

REV: 001

SHEET 2 OF 10

Print Date
1/30/2017
1700

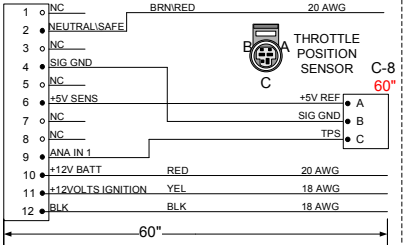
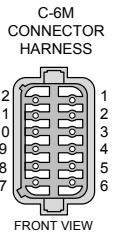
QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	CON-2328	
3	TERMINAL	CON-2329	

PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
A	+5V	RED	C6M-6 [TCU-21]
B	SIGNAL GND	BLK/WHT	C6M-6 [TCU-56]
C	TPS SIGNAL	YEL/BLK	C6M-9 [TCM-45]

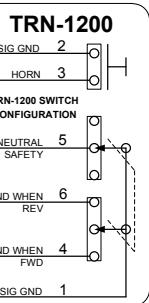
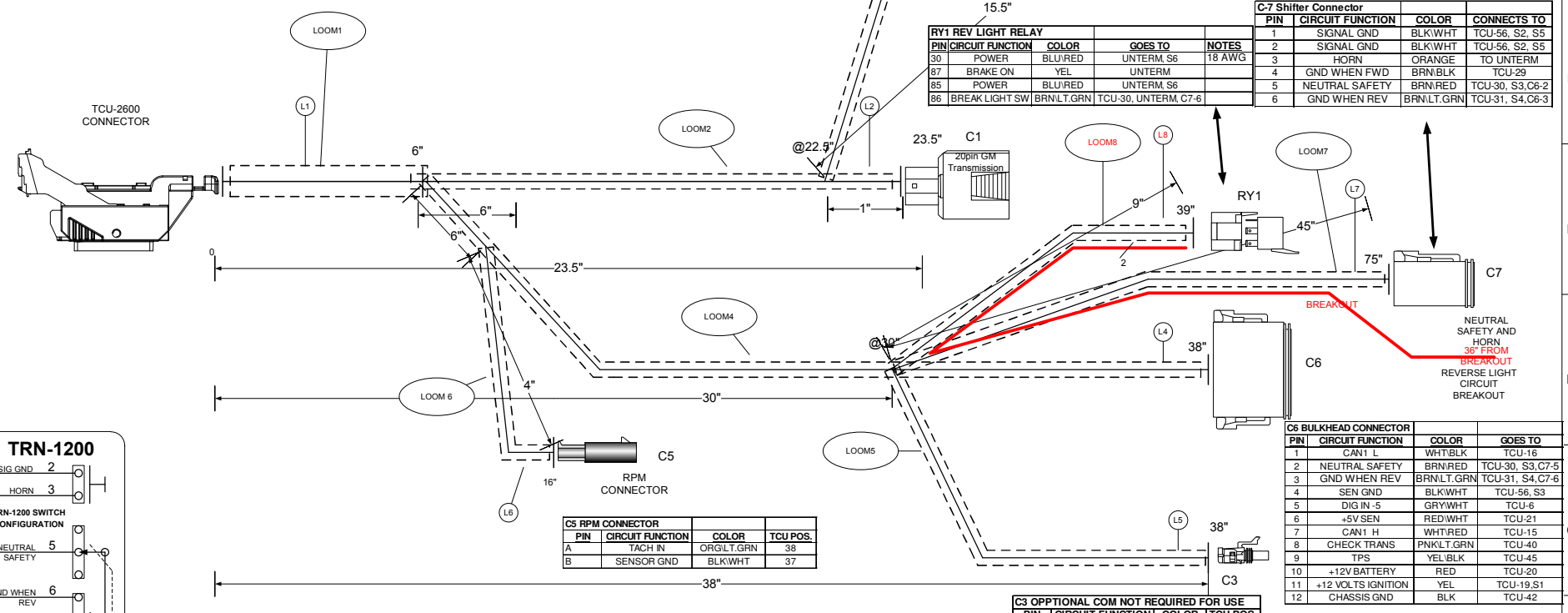
NUM	NAME	PART #	NOTES
L1	TCM-4663-001 GM 4 SPD TRANS C6 E-SHIFT	WRE-8501	P382
L2	TRANSMISSION CONNECTOR	WRE-8500	P107
L3	TOSS	WRE-8500	P8
L4	BULKHEAD CONNECTOR	WRE-8500	P64
L5	OPTIONAL COM NOT REQUIRED FOR USE	WRE-8500	P4
L6	RPM CONNECTOR	WRE-8500	P304
L7	SHIFTER CONNECTOR	WRE-8500	P280

LOCATION	DISCRPTION	LENGTH	PART#
LOOM1	3/4" BLACK CONVOLUTED LOOM	6.5"	WRE-3005
LOOM2	1/2" BLACK CONVOLUTED LOOM	17.5"	WRE-3003
LOOM3	1/4" BLACK CONVOLUTED LOOM	17.5"	WRE-3000
LOOM4	1/2" BLACK CONVOLUTED LOOM	32"	WRE-3003
LOOM5	1/4" BLACK CONVOLUTED LOOM	8"	WRE-3000
LOOM6	1/4" BLACK CONVOLUTED LOOM	4"	WRE-3000
LOOM7	1/4" BLACK CONVOLUTED LOOM	45"	WRE-3000
LOOM8	3/8" BLACK CONVOLUTED LOOM	9"	WRE-3001

PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
A	SHIFT SOL-A (1-2)	PNK/BLK	TCU-53
B	SHIFT SOL B-(2-3)	PNK/RED	TCU-54
C	LINE PRESSURE +	YEL (18 AWG)	TCU-18
D	LINE PRESSURE -	VOBLK	TCU-11
E	TCC, 1-2, 2-3, 3-2 +	YEL (18 AWG)	TCU-19, S1
F	IMS A	GRY/BLK	TCU-2
G	IMS C	GRY/RED	TCU-3
H	MSB	GRY/GRN	TCU-4
J	IMS P	GRY/LT.BLU	TCU-5
K	TURBINE SPEED +	ORG/BLK	TCU-24
L	ATF TEMP +	YEL/ORG	TCU-50
M	ATF TEMP -	BLK/WHT	TCU-9
N	IMS GND	BLK/WHT	TCU-55
P	NC	NC	NC
R	FWD CL	VIO/LT.GRN	TCU-13
S	REV CL	VIO/LT.BLU	TCU-14
T	TCC ON/OFF	VIO/WHT	TCU-41
U	TCC PWM	VIO/RED	TCU-12
V	TURBIN SPEED -	BLK/WHT	TCU-22
W	NC	NC	NC



PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
A	TOSS+	ORG/RED	25
B	TOSS-	BLK/WHT	23



PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
A	TACH IN	ORG/LT.GRN	38
B	SENSOR GND	BLK/WHT	37

PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
A	SERIAL RX	RED	TCU-27
B	SIGNAL GND	WHT	TCU-28
C	SERIAL TX	BLK	TCU-26

PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
1	SIGNAL GND	BLK/WHT	TCU-56, S2, S5
2	SIGNAL GND	BLK/WHT	TCU-56, S2, S5
3	HORN	ORANGE	TO INTERM
4	GND WHEN FWD	BRN/BLK	TCU-29
5	NEUTRAL SAFETY	BRN/RED	TCU-30, S3, C6-2
6	GND WHEN REV	BRN/LT.GRN	TCU-31, S4, C6-3

TXT	COLOR	NOTES
BLK	BLACK	
BRN	BROWN	
RED	RED	
ORN	ORANGE	
YEL	YELLOW	
LT.GRN	LIGHT GREEN	
GRN	GREEN	
LT.BLU	LIGHT BLUE	
BLU	BLUE	
VIO	VIOLET	
GRY	GRAY	
WHT	WHITE	
PNK	PINK	

S#	FUNCTION	COLOR
S1	12 VOLTS SWITCHED	YEL
S2	SIGNAL GND	BLK/WHT
S3	NEUTRAL SAFETY	BRN/RED
S4	GND WHEN REV	BRN/LT.GRN
S5	SIGNAL GND	BLK/WHT
S6	+12V	BLU/RED

PROVIDE A LAPTOP CALIBRATION CONNECT PROTECTIVE CAP

LEVEL	DESCRIPTION	DATE	DRN	APP
T	Release	11/16/16	FD	
1A	PIN 2 BRN/RED ADDED TO PIGTAIL CONNECTOR	12/28/16	FD	

Print Date
1/30/2017
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 500"
 - 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:
GM 4 SPEED TRANSMISSION C6 E-SHIFT

SIZE: C CUSTOMER DRAWING NO. XXXXX-XXXXX PCS PART NUMBER TCM-4663 REV: 001

DRAWN BY: FRED D. DATE: 11/22/16 SHEET 3 OF 10