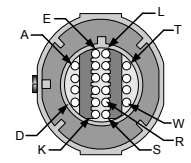
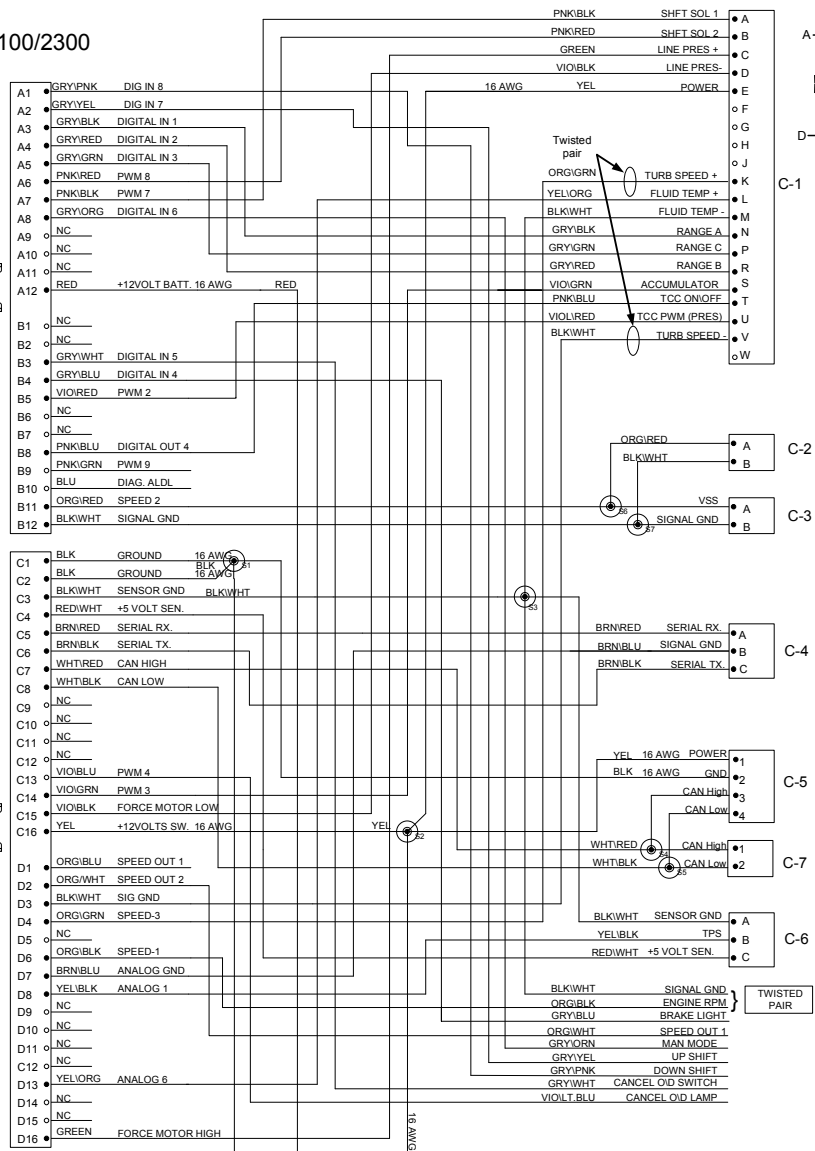


REVISION HISTORY				
LEVEL	DESCRIPTION	DATE	DRN	APP
1	RELEASE	8/23/13	FD	
2	NEW DRAWING CONVERSION	11/26/16	FD	
3	TEXT UPDATE	10/17/19	FD	

TCU-2100/2300



TRANSMISSION CONNECTOR			
QTY	DESCRIPTION	P/N	NOTES
1	CONNECTOR	CON-2000	
14	TERMINAL	CON-2804	20-22 AWG.
1	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

TCU CONNECTOR PARTS			
QTY	DESCRIPTION	P/N	NOTES
1	CONNECTOR 24P	CON-1950	
1	CONNECTOR 32P	CON-1953	
30	TERMINALS	CON-1980	
1Ea	LOCK TPA A:32 PIN	CON-1951	
1Ea	LOCK TPA B:32 PIN	CON-1952	
1Ea	LOCK TPA A:24 PIN	CON-1954	
1Ea	LOCK TPA B:24 PIN	CON-1955	

F1, F2	QTY	DESCRIPTION	P/N	NOTES
	1	connector assembly:	con-2200	
	1	fuse cap:	con-2201	
	1	back clip:	con-2202	
		terminal(18-16gauge)	con-1016	
		terminal(14-12gauge)	con-1017	
		cable seal(20-16gauge)	con-1004	
		cable seal(18-14gauge)	con-1001	
		cable seal(16-12gauge)	con-1002	

WIRE COLOR ABBREVIATIONS		
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	

SPLICE INFORMATION		
S-#	FUNCTION	COLOR
S1	GROUND	BLK
S2	12 VOLTS SWITCHED	YEL
S3	SENSOR GROUND	BLK/WHT
S4	CAN HIGH	WHT/RED
S5	CAN LOW	WHT/BLK
S6	VSS	ORG/RED
S7	VSS SENSOR GND	BLK/WHT

OUTPUT SHAFT SPEED SENSOR			
QTY	DESCRIPTION	P/N	NOTES
1	CONNECTOR	CON-1071	F
2	PIN	CON-1086	M
2	SEAL	CON-1093	GRN
1	LOCK	CON-1072	3/5/2013

OUTPUT SHAFT SPEED SENSOR			
QTY	DESCRIPTION	P/N	NOTES
1	CONNECTOR	CON-1070	M
2	PINS	CON-1084	F
2	SEAL	CON-1093	GRN
1	LOCK	CON-1072	3/5/2013

OPTIONAL COM NOT REQUIRED FOR USE			
QTY	DESCRIPTION	P/N	NOTES
1	CONNECTOR	CONNECTOR	CON-3416
3	TERMINALS	TERMINALS	CON-1038
1	LOCK	TPA	CON-3417 CREAM
3	RUBBER SEALS	CABLE SEALS	CON-1027 WHT

PCS EXPANSION			
QTY	DESCRIPTION	P/N	NOTES
1	CONNECTOR	CONNECTOR	CON-5050
2	TERMINALS	TERMINALS	CON-5200 (20-18gauge)
1	WEDGE LOCK	WEDGE LOCK	CON-5100 ORN

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

THROTTLE POSITION			
QTY	DESCRIPTION	P/N	NOTES
1	CONNECTOR	CON-2302	
3	TERMINALS	CON-1006	
3	RUBBER SEALS	CON-1004	

CHASSIS GND			
QTY	DESCRIPTION	P/N	NOTES
1	RING TERM.		3/8 ID 16-18 Ga.

- 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 +/- 1/2 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: **4L70 TO TCM 2100-2300[2006-2008]**

SIZE: C CUSTOMER DRAWING NO: PCS PART NUMBER: **TCM-4320** REV: 003

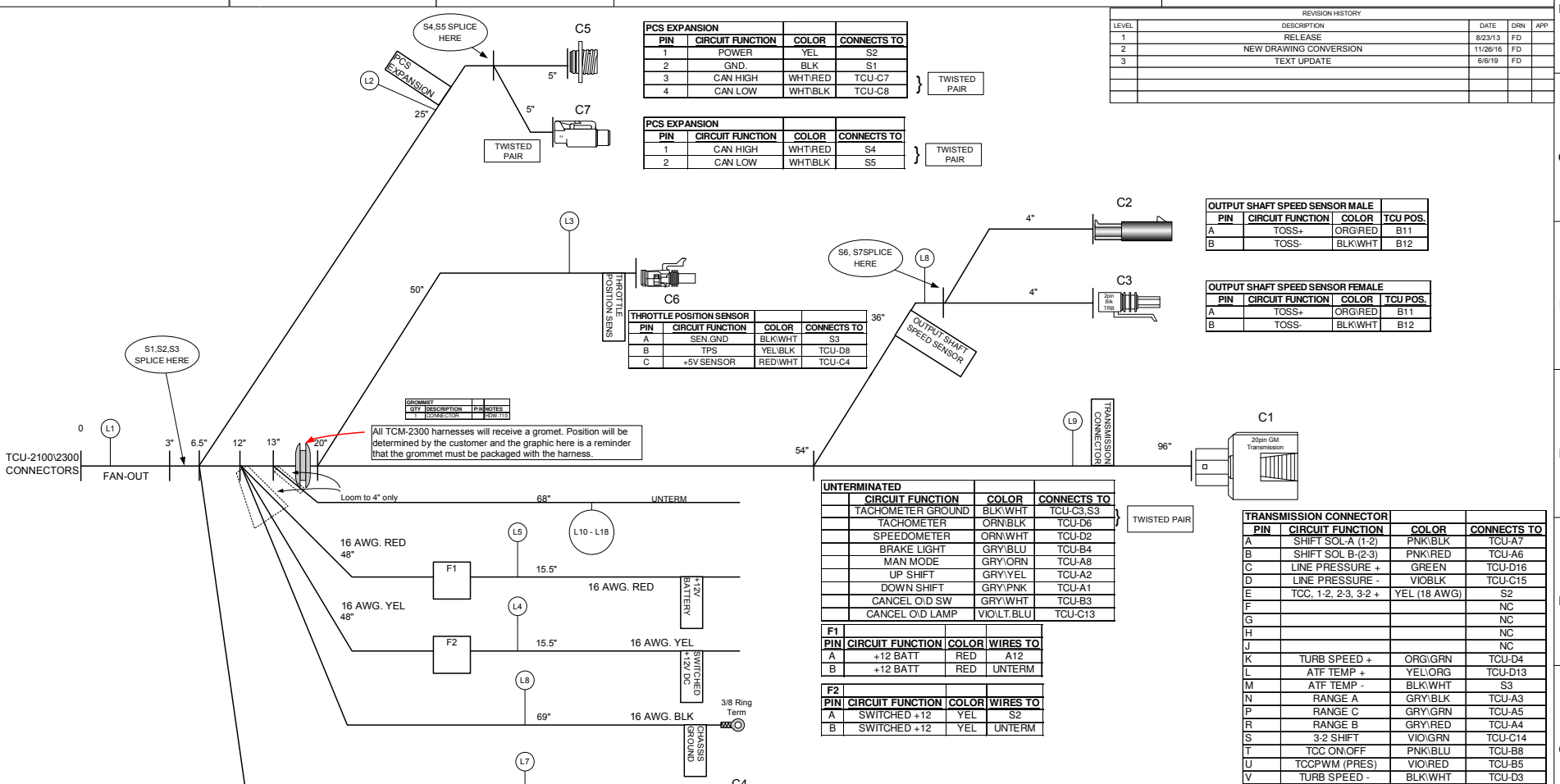
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Print Date
10/17/2019
1700

Powertrain Control Solutions, LLC.
 10511 Old Ridge Road Ashland, VA 23005
 www.ptcs.us PHONE: (804) 227-3023 FAX: (804) 227-3005

TITLE: **4L70 TCU-2100/2300 [2006-2008] HARNESS**
 PART #: **TCM-4320**
 DESCRIPTION: **TRANSMISSION HARNESS LINE LAYOUT DIAGRAM FOR GM 4L70 TO TCU-2100/2300**

DRAWN BY: **F. DEARHART** DATE: **1/21/2010** PAGE: **PAGE 2**



PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
1	POWER	YEL	S2
2	GND.	BLK	S1
3	CAN HIGH	WHT/RED	TCU-C7
4	CAN LOW	WHT/BLK	TCU-C8

PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
1	CAN HIGH	WHT/RED	S4
2	CAN LOW	WHT/BLK	S5

PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
A	SEN.GND	BLK/WHT	S3
B	TPS	YEL/BLK	TCU-D8
C	+5V SENSOR	RED/WHT	TCU-C4

PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
A	TOSS+	ORG/RED	B11
B	TOSS-	BLK/WHT	B12

PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
A	TOSS+	ORG/RED	B11
B	TOSS-	BLK/WHT	B12

CIRCUIT FUNCTION	COLOR	CONNECTS TO
TACHOMETER GROUND	BLK/WHT	TCU-C3, S3
TACHOMETER	ORN/BLK	TCU-D6
SPEEDOMETER	ORN/WHT	TCU-D2
BRAKE LIGHT	GRY/BLU	TCU-B4
MAN MODE	GRY/ORN	TCU-A8
UP SHIFT	GRY/YEL	TCU-A2
DOWN SHIFT	GRY/PNK	TCU-A1
CANCEL O/D SW	GRY/WHT	TCU-B3
CANCEL O/D LAMP	VIOLT/BLU	TCU-C13

PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
A	SHIFT SOL-A (1-2)	PNK/BLK	TCU-A7
B	SHIFT SOL-B (2-3)	PNK/RED	TCU-A6
C	LINE PRESSURE +	GREEN	TCU-D16
D	LINE PRESSURE -	VIOBLK	TCU-C15
E	TCC. 1-2, 2-3, 3-2 +	YEL (18 AWG)	S2
F			NC
G			NC
H			NC
I			NC
J			NC
K	TURB SPEED +	ORG/GRN	TCU-D4
L	ATF TEMP +	YEL/ORG	TCU-D13
M	ATF TEMP -	BLK/WHT	S3
N	RANGE A	GRY/BLK	TCU-A3
P	RANGE C	GRY/GRN	TCU-A5
R	RANGE B	GRY/RED	TCU-A4
S	3-2 SHIFT	VIO/GRN	TCU-C14
T	TCC ON/OFF	PNK/BLU	TCU-B8
U	TCCPWM (PRES)	VIO/RED	TCU-B5
V	TURB SPEED -	BLK/WHT	TCU-D3
W			NC

S#	FUNCTION	COLOR
S1	GROUND	BLK
S2	12 VOLTS SWITCHED	YEL
S3	SENSOR GROUND	BLK/WHT
S4	CAN HIGH	WHT/RED
S5	CAN LOW	WHT/BLK
S6	VSS	ORG/RED
S7	VSS SENSOR GND	BLK/WHT

NUM	NAME	PCS P/N	NOTES
L1	TCM-4320-003	WRE-8501	P52
L2	PCS EXPANSION	WRE-8500	P133
L3	THROTTLE POSITION SENSOR	WRE-8500	P31
L4	SWITCHED +12VDC	WRE-8500	P31
L5	BATTERY +12 VOLTS	WRE-8500	P30
L6	CHASSIS GROUND	WRE-8500	P32
L7	OPTIONAL COM NOT REQUIRED FOR USE	WRE-8500	P4
L8	OUTPUT SHAFT SPEED SENSOR	WRE-8500	P8
L9	TRANSMISSION CONNECTOR	WRE-8501	P107
L10	TACHOMETER GROUND	WRE-8500	P33
L11	TACHOMETER	WRE-8500	P34
L12	SPEEDOMETER	WRE-8500	P39
L13	BRAKE LAMP IN	WRE-8500	P38
L14	MAN MODE	WRE-8500	P347
L15	UP SHIFT	WRE-8500	P348
L16	DOWN SHIFT	WRE-8500	P349
L17	CANCEL O/D SW	WRE-8500	P350
L18	CANCEL O/D LAMP	WRE-8500	P351

TXL	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	

PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
A	SERIAL RX	BRN/RED	C5
B	SIGNAL GND.	BRN/BLU	D7
C	SERIAL TX	BRN/BLK	C6

LEVEL	DESCRIPTION	DATE	DRN	APP
1	RELEASE	8/23/13	FD	
2	NEW DRAWING CONVERSION	11/28/16	FD	
3	TEXT UPDATE	10/9/19	FD	

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 +/- 1/2 INCH
 2) WIRE GAUGE IS 20 AWG UNLESS OTHERWISE STATED
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 4) TWIST INDICATED WIRES AT LEAST 10-12 TURNS PER FOOT
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COMPANY: **POWERTRAIN CONTROL SOLUTIONS**
 TITLE: **4L70 TO TCM 2100-2300[2006-2008]**

SIZE: **C** CUSTOMER DRAWING NO: **TCM-4320** PCS PART NUMBER: **TCM-4320** REV: **003**

DRAWN BY: **FRED** DATE: **8/23/13** APPROVED BY: **FRED** DATE: **8/23/13** SHEET: **PAGE 2**

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10/17/2019
1700