

TCU-2600

QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-1203	M/F
36	TERMINALS	CON-1205	
1	CONNECTOR COVER	CON-1203	
20	CAVITY PLUGS	CON-1204	

WIRE COLOR ABBREVIATIONS	TX#	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	12 VOLTS SWITCHED	YEL

Print Date
9/11/2019
1506

REVISION HISTORY					
LEVEL	DESCRIPTION	DATE	DRN	APP	
1	Release	3/15/19	FD		
1A	C5 WIRE CHANGES FOR CORRECT COLORS	4/11/19	FD		
1B	TEXT UPDATE	7/17/19	FD		
1C	C5 GRAPHIC CHANGED	9/18/19	FD		

APPLICABLE STANDARDS
 • ASME Y14.100-200
 • ASME Y14.5M-1994
 • IPC-WHMA-A-620A CLASS 2
 • MARK 14W 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 TX UNLESS OTHERWISE STATED

COMPANY:
POWERTRAIN CONTROL SOLUTIONS

TITLE:
4L70E 2010+ SPECIAL TRANSMISSION MOUNTED TO TCU-2600

DATE: 3/15/2019

DRAWN BY: FRED D.
APPROVED BY:

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C-1 TRANSMISSION CONNECTOR			
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

C-2 OUTPUT SHAFT SPEED SENSOR FEMALE			
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

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

NEED A CAP FOR THIS

C-5 E RPM CONNECTOR			
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-1071	
2	TERMINALS	CON-1088	20 AWG
2	CABLE SEAL	CON-1093	

NEED A CAP FOR THIS

C-4 BULKHEAD CONNECTOR			
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-5542	GRY
12	TERMINALS	CON-5400	
1	WEDGE	CON-5508	GRN

PROVIDE A LAPTOP CALIBRATION CONNECT PROTECTIVE CAP

C-3 CAP LAPTOP CALIBRATION CONNECT CAP			
QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	CON-3415	
3	CAVITY PLUG	CON-1024	DK.RED
1	SECONDARY LOCK	CON-3417	

C-5 CAP E RPM CONNECTOR			
QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	CON-1070	
2	CAVITY PLUG	CON-1095	
1	SECONDARY LOCK	CON-1072	

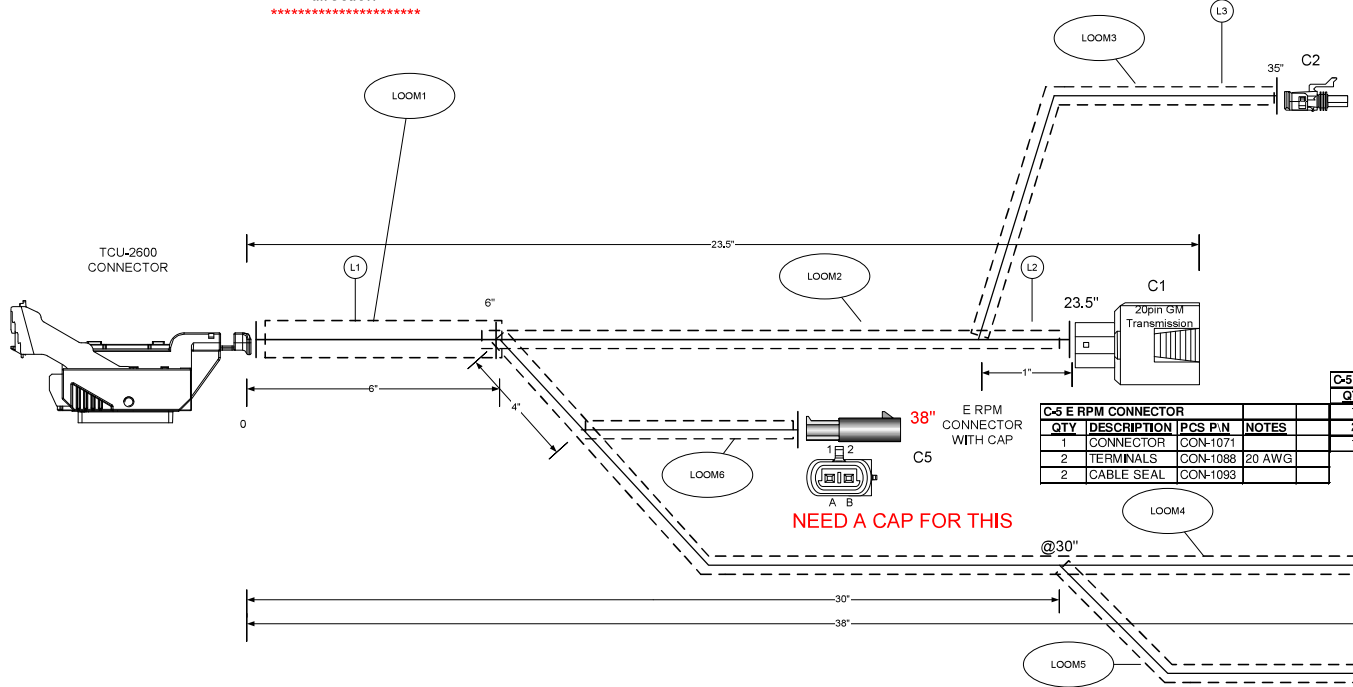
REVISION HISTORY					
LEVEL	DESCRIPTION	DATE	DRN	APP	
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1A	C5 WIRE CHANGES FOR CORRECT COLORS	4/11/19	FD		
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Breakout direction is critical. See photo for breakout placement and direction.

C2 OUTPUT SHAFT SPEED SENSOR FEMALE				
PIN	CIRCUIT FUNCTION	COLOR	TCU POS.	
A	TOSS+	ORG/RED	25	
B	TOSS-	BLK/WHT	23	

C1 TRANSMISSION CONNECTOR 2600 TO 4170 STAND ALONE			
PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
A	SHIFT SOL-A (1-2)	PNK/BLK	TCU-53
B	SHIFT SOL-B (2-3)	PNK/BLK	TCU-54
C	LINE PRESSURE +	YEL (18 AWG)	TCU-18
D	LINE PRESSURE -	VIO/BLK	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	IMSB	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			

C4 BULKHEAD CONNECTOR			
PIN	CIRCUIT FUNCTION	COLOR	GOES TO
1	CAN1 L	WHT/BLK	TCU-16
2	SIGNAL GND	BLK/WHT	TCU-37
3	RPM	ORN/LT.GRN	TCU-38
4	SEN GND	BLK/WHT	TCU-56
5	DIG IN -5	GRY/WHT	TCU-6
6	+5V SEN	RED/WHT	TCU-21
7	CAN1 H	WHT/RED	TCU-15
8	CHECK TRANS	PNK/LT.GRN	TCU-40
9	TPS	YEL/BLK	TCU-45
10	+12V BATTERY	RED	TCU-20
11	+12 VOLTS IGNITION	YEL	TCU-19,S1
12	CHASSIS GND	BLK	TCU-42



C5 E RPM CONNECTOR				
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C5 CAP E RPM CONNECTOR				
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1	CONNECTOR	CON-1070		
2	CAVITY PLUG	CON-1095		
1	SECONDARY LOCK	CON-1072		

NEED A CAP FOR THIS

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C3 OPTIONAL COM NOT REQUIRED FOR USE			
PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
A	SERIAL RX	RED	TCU-27
B	SIGNAL GND.	WHT	TCU-28
C	SERIAL TX	BLK	TCU-28

PROVIDE A LAPTOP CALIBRATION CONNECT PROTECTIVE CAP

C-3 CAP LAPTOP CALIBRATION CONNECT CAP				
QTY	DESCRIPTION	P/N	NOTES	
1	CONNECTOR	12129615		
3	CAVITY PLUG	12059168	DK.RED	
1	SECONDARY LOCK	12052845		
1	PIN BLOCKING PLUG			

Print Date
9/11/2019
1506

SPLICE INFORMATION		
S-#	FUNCTION	COLOR
S1	12 VOLTS SWITCHED	YEL

LABEL DEFINITION TABLE					
LOC	DESCRIPTION	LENGTH	PART#	NUM	NAME
L1	TCM-4649-001				
L2	TRANSMISSION CONNECTOR				
L3	TOSS				
L4	BULKHEAD CONNECTOR				
L5	OPTIONAL COM NOT REQUIRED FOR USE				
L6	E RPM CONNECTOR				

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COMPANY:
POWERTRAIN CONTROL SOLUTIONS

TITLE:
4L70E 2010+ SPECIAL TRANSMISSION MOUNTED TO TCU-2600

SEE CUSTOMER DRAWING NO. PCS PART NUMBER
TCM-4649

DATE: 3/15/2019

APPROVED BY: [Signature]

SHEET PAGE 1

LOOM DEFINITION TABLE					
LOCATION	DESCRIPTION	LENGTH	PART#	NUM	NAME
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	6"	WRE-3000		