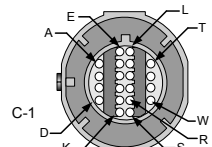
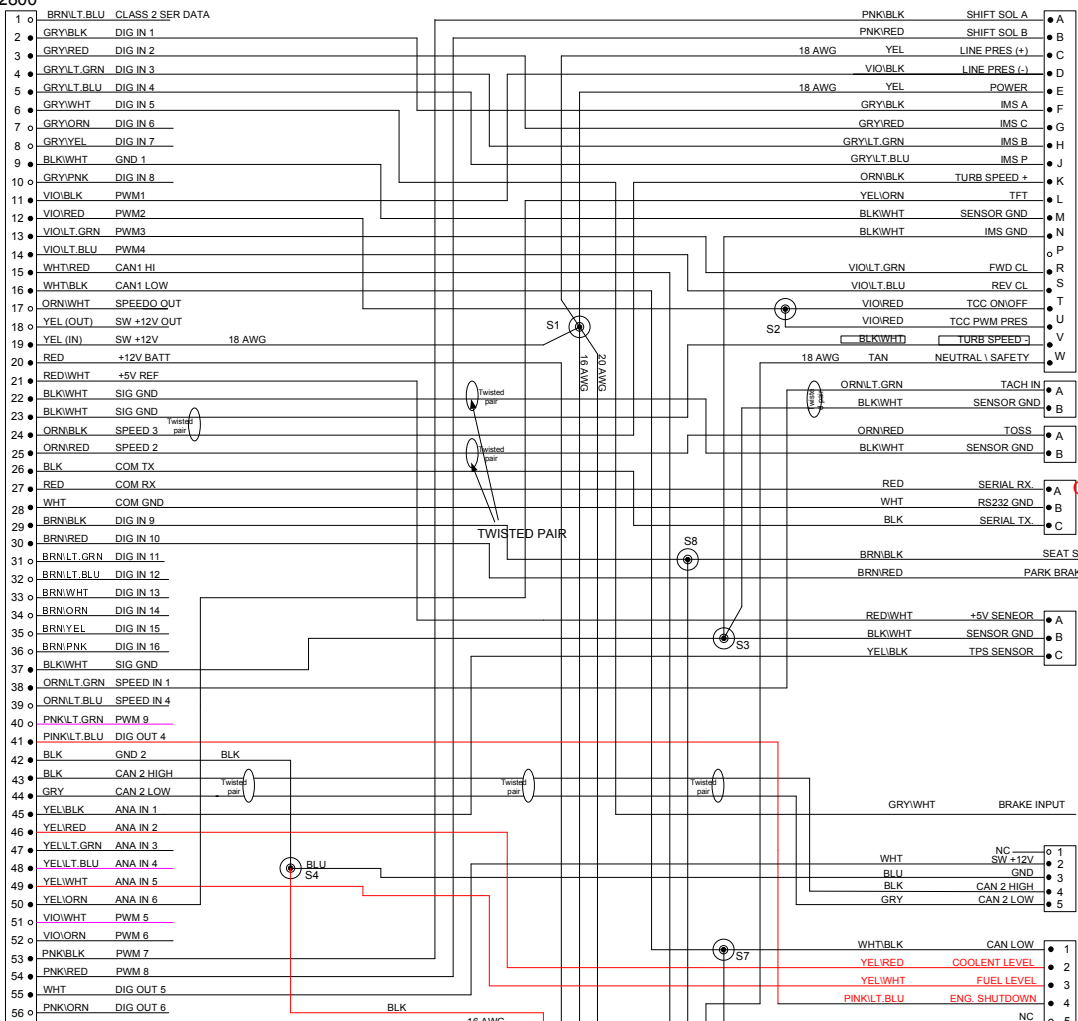
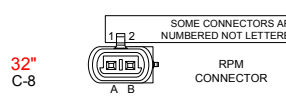


REVISION HISTORY				
LEVEL	DESCRIPTION	DATE	DRN	APP
1	Release	11/29/18	FD	

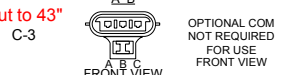
TCM-2800
C-1



28" TRANSMISSION CONNECTOR FRONT VIEW



32" C-8 RPM CONNECTOR



39" C-2 OUTPUT SHAFT SPEED SENSOR FRONT VIEW



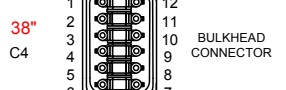
50" C-3 OPTIONAL COM NOT REQUIRED FOR USE FRONT VIEW



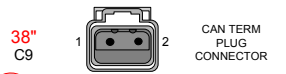
50" C-7 THROTTLE POSITION SENSOR



54" C-10 BRAKE INPUT PIGTAIL NEAR C9 BREAKOUT TO Digital Dash



38" C-4 BULKHEAD CONNECTOR



38" C-9 CAN BUS CONNECTOR



38" C-9M CAN1 TERM PLUG CONNECTOR

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

C8 RPM CONNECTOR			
QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	CON-1071	F/M
2	PIN	CON-1088	
1	SEAL	CON-1093	GRN
1	LOCK	CON-1072	

C8M RPM CONNECTOR PIGTAIL			
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-1070	M/F
2	TERMINALS	CON-1084	20 AWG
2	CABLE SEAL	CON-1093	GRN
1	TPA	CON-1072	GRY

C-2 OUTPUT SHAFT SPEED SENSOR			
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-1070	M/F
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	
3	TERMINALS	CON-1038	
1	TPA	CON-3417	CREAM
3	CABLE SEALS	CON-1027	WHT

C-7 THROTTLE POSITION SENSOR			
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-2328	
3	TERMINALS	CON-2329	

Note:
There is no longer a splice point SS
Requested changes 11-28-18
Page rough out 11-28-18

fad

C10 DIGITAL DASH CONNECTOR			
QTY	DESCRIPTION	PCS P/N	NOTES
1	IFM CABLE	DIS-7001	

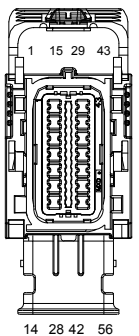
C-4 BULKHEAD CONNECTOR			
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-5542	GRY M/F
5	TERMINAL	CON-5504	
1	WEDGE	CON-5506	GRN

C9 CAN BUS CONNECTOR			
QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	CON-5001	F
2	TERMINALS	CON-5201	MALE
1	WEDGE	CON-5003	BLK WEDGE

C-9M CAN1 TERM			
QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	CON-5056	

INCLUDE THROTTLE POSITION SENSOR KIT			
QUAN	DESCRIPTION	PIN	NOTES
1	TPS KIT	TCM-6040	

RY-1 SEAT SW RELAY			
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-2502	BLACK
1	RELAY	CON-2500	
4	TERMINAL	CON-2503	



TCU-2800

TCU-2800 Connector			
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-2002	M/F
40	TERMINALS	CON-2805	
1	CONNECTOR COVER	CON-2003	
16	CAVITY PLUG	CON-2004	

PROVIDE A LAPTOP CALIBRATION CONNECTOR PROTECTIVE CAP

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

PROVIDE A RPM PIGTAIL CONNECTOR WITH 4" LEADS SEE PAGE 3

COMPANY: **POWERTRAIN CONTROL SOLUTIONS**

TITLE: **4L70E 2010+ TRANSMISSION MOUNTED TO TCU-2800**

SIZE: C CUSTOMER DRAWING NO. XXXXX-XXXXX PCS PART NUMBER TCM-4872 REV. 001

DATE: 12/5/2018 1700

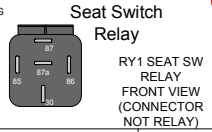
DATE: 11/29/2018 APPROVED BY: XXXXX SHEET 2 OF 10

APPLICABLE STANDARDS:

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

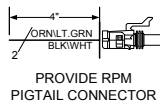
NOTES:

- 1) WIRE LENGTH TOLERANCE +/- .12 INCH
- 2) WIRE GAUGE IS 20 AWG UNLESS OTHERWISE STATED
- 3) TAPES ALL LOCK 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.



5/16 RING 6" From TCU
Seat Switch Relay
RY1 SEAT SW RELAY FRONT VIEW (CONNECTOR NOT RELAY)

PROVIDE A RPM PIGTAIL CONNECTOR WITH 4" LEADS

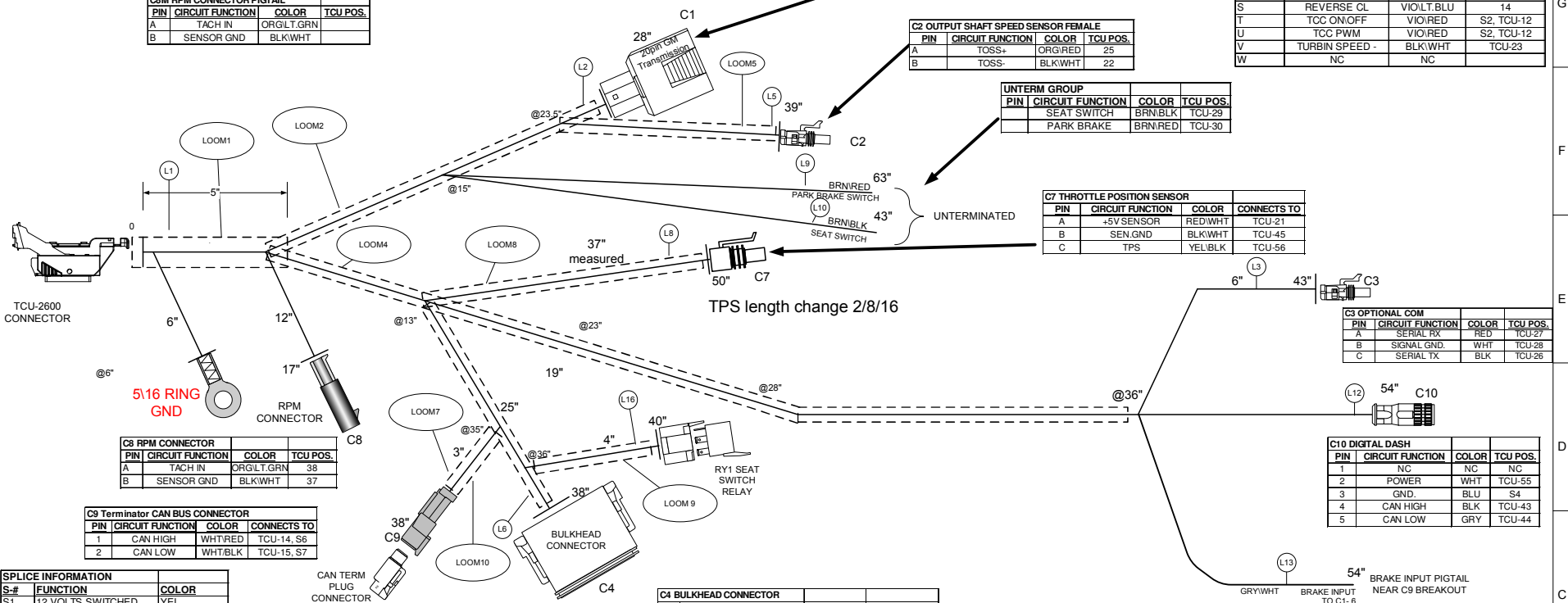


QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-1070	M/F
2	TERMINALS	CON-1084	20 AWG
2	CABLE SEAL	CON-1093	GRN
1	TPA	CON-1072	GRY

PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
A	TACH IN	ORGLT.GRN	
B	SENSOR GND	BLK/WHT	

LOCATION	DISCRPTION	LENGTH	PART#
LOOM1	3/4" BLACK CONVOLUTED LOOM	5"	WRE-3005
LOOM2	1/2" BLACK CONVOLUTED LOOM	23"	WRE-3003
LOOM3	1/4" BLACK CONVOLUTED LOOM	37"	WRE-3000
LOOM4	1/2" BLACK CONVOLUTED LOOM	37"	WRE-3003
LOOM5	3/8" BLACK CONVOLUTED LOOM	15.5"	WRE-3001
LOOM6	NO LONGER USED		
LOOM7	1/4" BLACK CONVOLUTED LOOM	3"	WRE-3000
LOOM8	1/4" BLACK CONVOLUTED LOOM	79"	WRE-3000
LOOM9	1/4" BLACK CONVOLUTED LOOM	4"	WRE-3000
LOOM10	3/8" BLACK CONVOLUTED LOOM	24"	WRE-3001

PIN	CIRCUIT FUNCTION	2800 TO 4170 STAND ALONE 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	IMS B	GRY/GRN	TCU-4
J	IMS P	GRY/LT.BLU	TCU-6
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-37, S3
P	NC	NC	NC
R	FORWARD CL	VIO/LT.GRN	13
S	REVERSE CL	VIO/LT.BLU	14
T	TCC ON/OFF	VIO/RED	S2, TCU-12
U	TCC PWM	VIO/RED	S2, TCU-12
V	TURBIN SPEED -	BLK/WHT	TCU-23
W	NC	NC	NC



PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
A	TOSS+	ORG/RED	25
B	TOSS-	BLK/WHT	22

PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
	SEAT SWITCH	BRN/BLK	TCU-29
	PARK BRAKE	BRN/RED	TCU-30

PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
A	+5V SENSOR	RED/WHT	TCU-21
B	SEN.GND	BLK/WHT	TCU-45
C	TPS	YEL/BLK	TCU-56

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	TCU POS.
1	NC	NC	NC
2	POWER	WHT	TCU-55
3	GND	BLU	S4
4	CAN HIGH	BLK	TCU-43
5	CAN LOW	GRY	TCU-44

PIN	CIRCUIT FUNCTION	COLOR	GOES TO
1	CAN1 L	WHT/BLK	TCU-16
2	COOLENT LEVEL	YEL/RED	TCU-46
3	FUEL LEVEL	YEL/WHT	TCU-49
4	ENG. SHUTDOWN	PNK/LT.BLU	TCU-41
5	NC	NC	NC
6	NC	NC	NC
7	CAN1 H	WHT/RED	TCU-15
8	NC	NC	NC
9	NC	NC	NC
10	+12V BATTERY	RED	TCU-20
11	+12 VOLTS IGNITION	YEL	TCU-19,S1
12	NC	NC	NC

S-#	FUNCTION	COLOR
S1	12 VOLTS SWITCHED	YEL
S2	TCC CONTROL	VIO/RED
S3	SIGNAL GND	BLK/WHT
S4	CHASSIS GND 2	BLK
S5	RPM	ORN/LT.GRN
S6	CAN HIGH	WHT/RED
S7	CAN LOW	WHT/BLK
S8	SEAT SW RELAY	BRN/BLK

NUM	NAME	PART #
L1	TCM-4835-005	WRE-8501 P-489
L2	TRANSMISSION CONNECTOR	WRE-8500 P107
L3	OPTIONAL COM NOT REQUIRED	WRE-8500 P-004
L4	NOT USED	
L5	TOSS	WRE-8500 P-008
L6	BULKHEAD CONNECTOR	WRE-8500 P-035
L7	NOT USED	
L8	TPS SENSOR	WRE-8500 P002
L9	SEAT SWITCH	WRE-8500 P-226
L10	NOT USED	
L11	NU	NU NU
L12	DIGITAL DASH	WRE-8500 P-228
L13	REAR BRAKE	WRE-8500 P-230
L14	not used	WRE-8500
L15	not used	WRE-8500
L16	RY1 SEAT SWITCH RELAY	WRE-8500

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	

LEVEL	DESCRIPTION	DATE	DRN	APP
1	Release	11/29/18	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 +/- .12 INCH
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 6.) WIRE TYPE IS TXL UNLESS OTHERWISE STATED

COMPANY:
POWERTRAIN CONTROL SOLUTIONS

TITLE:
4L70E 2010+ TRANSMISSION MOUNTED TO TCU-2800

SIZE: C CUSTOMER DRAWING NO. XXXXX-XXXXX PCS PART NUMBER TCM-4872 REV: 001

DRAWN BY: FRED D. DATE: 11/29/2018 APPROVED BY: XXXXX DATE: SHEET 3 OF 10

Print Date
 12/5/2018
 1700