

TCU-2600/  
2800

QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-1202	M/F
34	TERMINALS	CON-1203	
1	CONNECTOR COVER	CON-1203	
22	CAVITY PLUG	CON-1204	

WIRE COLOR ABBREVIATIONS	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	

BUTT SPLICE INFORMATION	S#	FUNCTION	COLOR
S1		SWITCHED +12V DC	YEL
S2		NEUTRAL SAFETY	TAN
S3		SIGNAL GND	BLK/WHT

SPLICE INFORMATION		
S#	FUNCTION	COLOR
S1	12 VOLTS SWITCHED	YEL

C-1 TRANSMISSION CONNECTOR			
QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	CON-2000	
17	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

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

C-3 CAP DIAGNOSTIC COMM CONNECTOR			
QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	12129615	
3	CAVITY PLUG	12059168	DK. RED
1	SECONDARY LOCK	12052845	
1	PIN BLOCKING PLUG		

C-4 BULKHEAD CONNECTOR			
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-5542	GGRY
12	TERMINALS	CON-5504	
1	WEDGE	CON-5508	GRN

PROVIDE A LAPTOP CALIBRATION CONNECT PROTECTIVE CAP

REVISION HISTORY				
LEVEL	DESCRIPTION	DATE	DRN	APP
1	Revised	1/27/17	FD	
1A	CLEANUP AND CORRECTIONS	2/17/17	FR	
1B	CHANGE C4-5 FROM DIG IN 5 TO ANA IN 5	2/17/17	FR	

Print Date: 4/26/2017 1500

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: 4LHD WITH DUAL ANALOG INPUTS

SIZE: C	CUSTOMER DRAWING NO. XXXXX-XXXXX	PCS PART NUMBER TCM-4865	REV: 001
DRAWN BY: FRED D.	DATE: 1/26/2017	APPROVED BY: XXXXXX	DATE: SHEET 2 OF 9

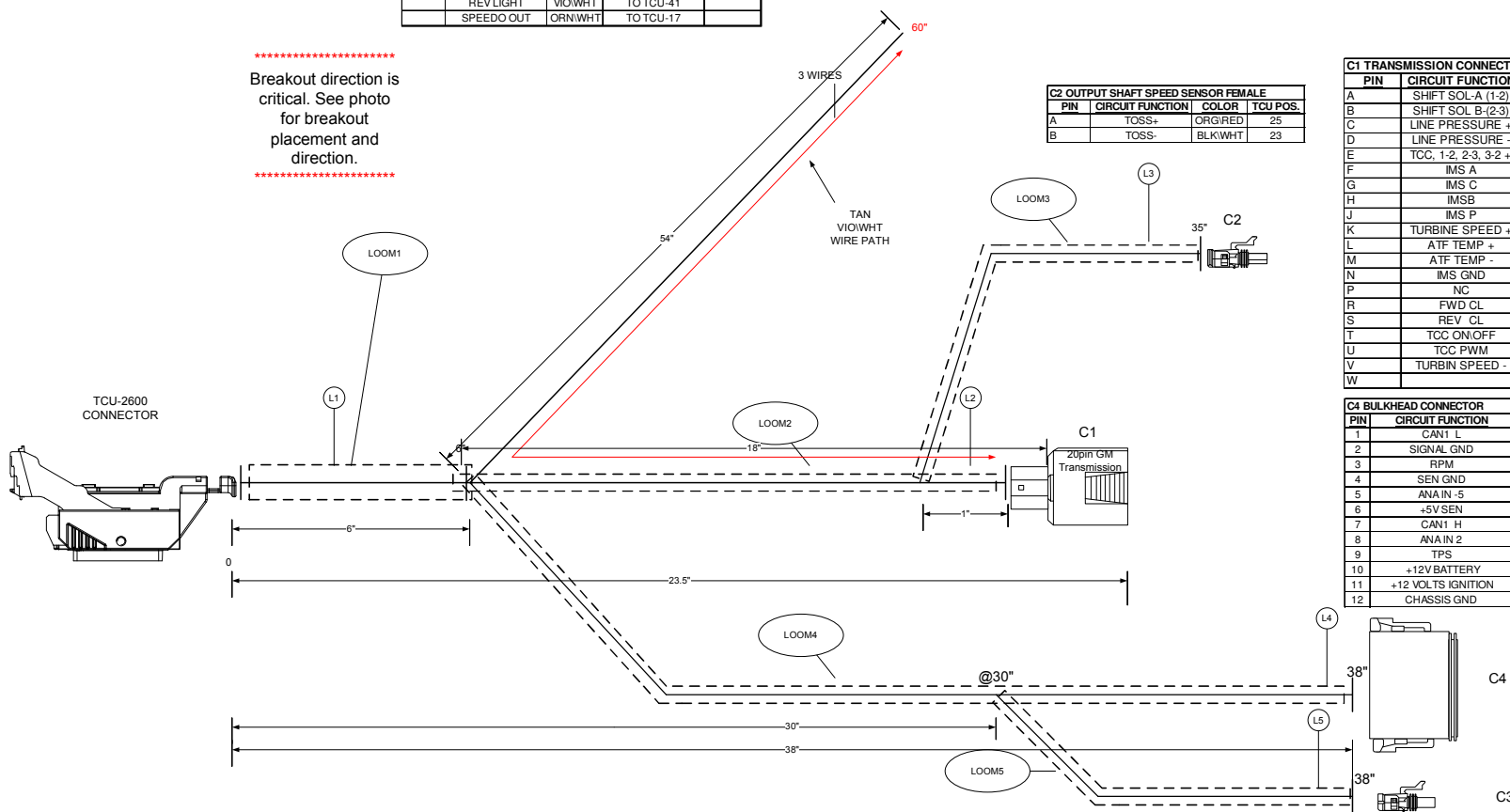
INTERM WIRE GROUP			
PIN	CIRCUIT FUNCTION	COLOR	CON TO
	NEUT SAFETY	TAN	TO C1-W
	REV LIGHT	VIO/WHT	TO TCU-41
	SPEEDO OUT	ORN/WHT	TO TCU-17

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Breakout direction is critical. See photo for breakout placement and direction.  
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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/RED	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-37, S3
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, S3
3	RPM	ORN/LT.GRN	TCU-38
4	SEN GND	BLK/WHT	TCU-37, S3
5	ANA IN -5	YEL/WHT	TCU-49
6	+5V SEN	RED/WHT	TCU-21
7	CAN1 H	YEL/RED	TCU-15
8	ANA IN 2	PNK/LT.GRN	TCU-46
9	TPS	YEL/BLK	TCU-45
10	+12V BATTERY	RED	TCU-20
11	+12 VOLTS IGNITION	YEL	TCU-51
12	CHASSIS GND	BLK	TCU-42



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3	CAVITY PLUG	12059168	DK.RED
1	SECONDARY LOCK	12052845	
1	PIN BLOCKING PLUG		

C3 DIAGNOSTIC COMM CONNECTOR			
PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
A	SERIAL RX	RED	TCU-27
B	SIGNAL GND.	WHT	TCU-28
C	SERIAL TX	BLK	TCU-26

REVISION HISTORY			
LEVEL	DESCRIPTION	DATE	DRN
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1B	CHANGE C4-5 FROM DIG IN 5 TO ANA IN 5	2/17/17	FR

Print Date  
4/26/2017  
1500

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

- NOTES
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  - 3) TAPE ALL LOOM JOINTS UNLESS OTHERWISE STATED
  - 4) TWIST INDICATED WIRES AT LEAST 10-12 TURNS PER FOOT
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TITLE: <b>4LHD WITH DUAL ANALOG INPUTS</b>	
SIZE: C	CUSTOMER DRAWING NO. XXXXX-XXXXX
PCB PART NUMBER <b>TCM-4865</b>	REV: 001
DRAWN BY: FRED D.	DATE: 1/26/2017
APPROVED BY: XXXXX	DATE:
SHEET 3 OF 9	

BUTT SPLICE INFORMATION		
S#	FUNCTION	COLOR
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S2	NEUTRAL SAFETY	TAN
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LOOM DEFINITION TABLE				
LOCATION	DISCRIPTION	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	

LABEL DEFINITION TABLE				
NUM	NAME	PART #	NOTES	
L1	TCM-4865-001 4170E 2010+ TO	WRE-8501	P-398	
L2	TRANSMISSION CONNECTOR	WRE-8501	P-107	
L3	TOSS	WRE-8500	P-8	
L4	BULKHEAD CONNECTOR	WRE-8500	P-64	
L5	DIAGNOSTIC COMM CONNECTOR	WRE-8500	P-337	

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