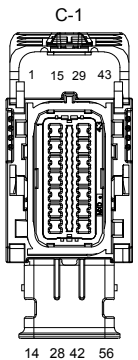
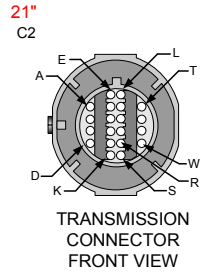
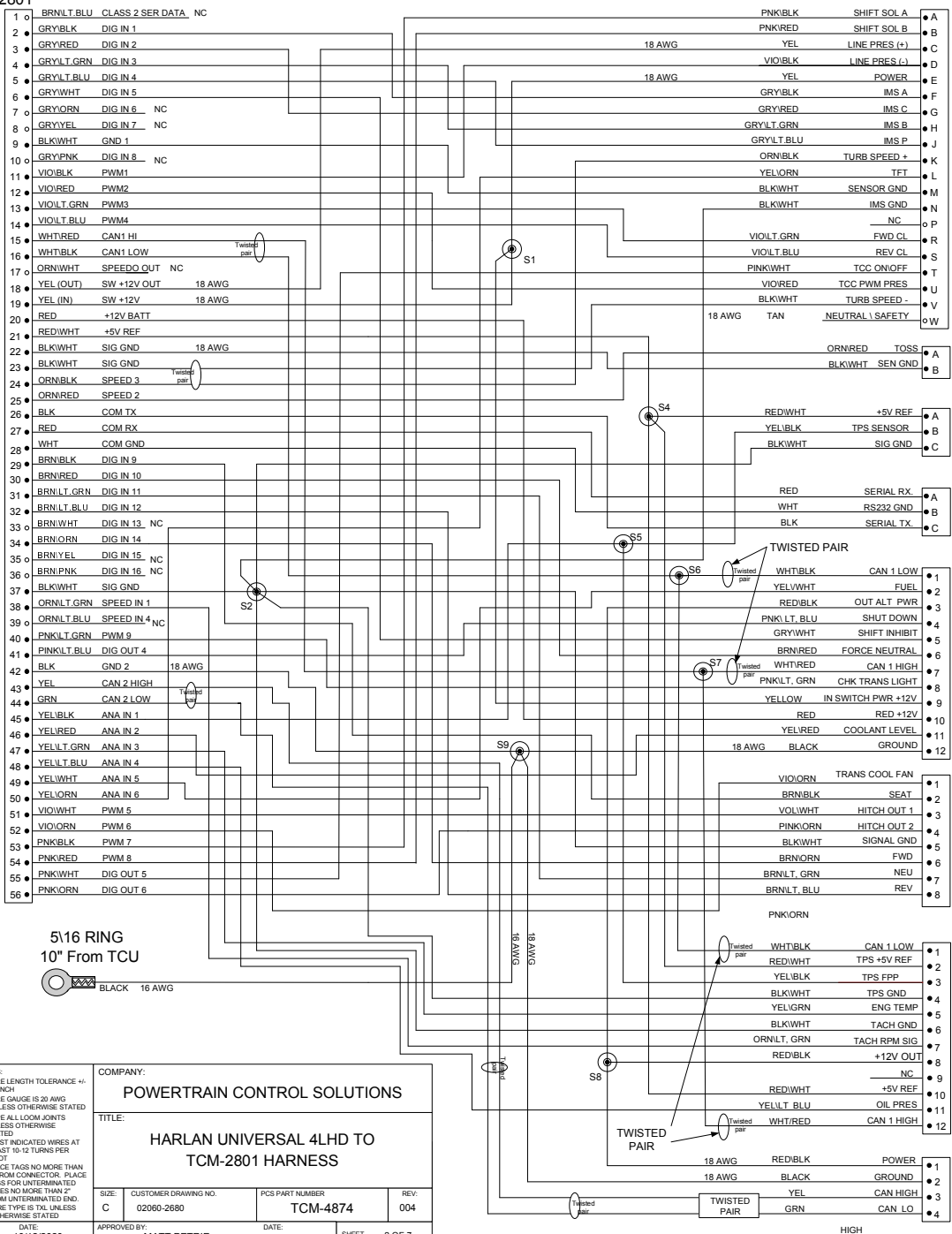


TCM-2801



QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-1202	M/F
48	TERMINALS	CON-1205	
1	CONNECTOR COVER	CON-1203	
8	CAVITY PLUG	CON-1204	



C-2 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	BLU
1	SEAL	CON-3309	LT.GREEN
1	CONDUIT CLIP	CON-2008	
1	TPA	CON-2003	GRY

C-3 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-4 THROTTLE POSITION CAP			
QTY	DESCRIPTION	PIN	NOTES
1	BODY	CON-5515	CON
1	CAP	CON-5530	

C-4 THROTTLE POSITION CONNECTOR			
QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	CON-5513	M/F
3	TERMINALS	CON-5400	OR TCM-5504
1	WEDGE LOCK	CON-5514	

C-6 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

C8 CON-5543			
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-5543	
12	TERMINALS	CON-5401	
1	TPA	CON-5544	CREAM

C7 CON-5532			
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-5532	
8	TERMINALS	CON-5400	
1	WEDGE	CON-5508	

C5 E-SHIFTER CONNECTOR			
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-5542	
12	TERMINALS	CON-5400	
1	WEDGE	CON-5532	

C9 POWER AND CAN CONNECTOR			
QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	M/F	CON-5540
4	TERMINALS		5538 MATE
1	WEDGE LOCK		CON-5541
			TBD

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Print Date  
3/31/2021  
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 +/- 1/8 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**

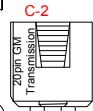
TITLE:  
**HARLAN UNIVERSAL 4LHD TO TCM-2801 HARNESS**

SIZE: C  
CUSTOMER DRAWING NO. 02060-2680  
PCS PART NUMBER TCM-4874  
REV. 004

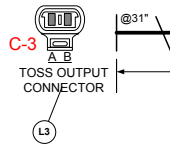
DATE: 10/12/2020  
APPROVED BY: MATT PETRIE  
SHEET 2 OF 7

DRAWN BY: FRED D.  
DATE: 10/12/2020

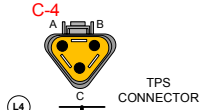
C-2 TRANSMISSION CONNECTOR			
QTY	DESCRIPTION	P/N	NOTES
1	CONNECTOR	CON-2000	
16	TERMINAL	CON-2804	20-22 AWG.
2	TERMINAL	CON-2805	18-18 AWG
1	BLOCKING PINS	CON-1044	BLU
1	SEAL	CON-3309	LT.GREEN
1	CONDUIT CLIP	CON-2008	
1	TPA	CON-2003	GRY



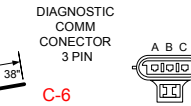
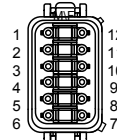
C3 OUTPUT SHAFT SPEED SENSOR			
PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
A	TOSS+	ORG/RED	25
B	TOSS-	BLK/WHT	22



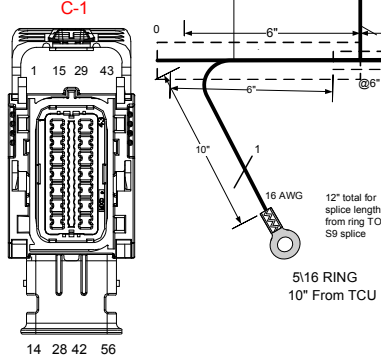
C4 TPS SENSOR			
PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
A	+5V SENSOR	RED/WHT	TCM-25
B	TPS SENSOR	YEL/BLK	S5, TCM-45
C	SIG GND	BLK/WHT	S2, TCU-37



C5 OPTIONS CONNECTOR 12 PIN CON			
PIN	CIRCUIT FUNCTION	COLOR	GOES TO
1	CAN1 LO	WHT/BLK, S6	S6, TCU-16
2	TPS +5V	RED/WHT	S4, TCU-21
3	TPS FPP	YEL/BLK	S5, TCU-45
4	TPS GND	BLK/WHT	S2, TCU-37
5	ENG TEMP	YEL/GRN	TCU-47
6	TACH GND	BLK/WHT	S2, TCU-37
7	TAC RPM SIG	ORN/LT.GRN	TCU-38
8	+12VOUT	RED/BLK	S8, C9-1, C8-3
9	NC	NC	NC
10	+5V REF	RED/WHT	S4, C8-3
11	OIL PRES	YEL/BLU	TCU-48
12	CAN 1 HI	WHT/RED, S7	S7, TCU-15,



C6 OPTIONAL COM			
PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
A	SERIAL RX	RED	TCU-27
B	SIGNAL GND.	WHT	TCU-28
C	SERIAL TX	BLK	TCU-26



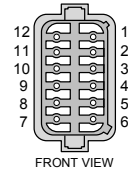
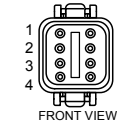
TCU-2801

12" WIRE LENGTH FOR RING TERMINAL TO SPLICE SINGLE WIRE LENGTH

C9 POWER AND CAN CONNECTOR			
PIN	CIRCUIT FUNCTION	COLOR	NOTES
1	RED	RED/BLK	S8
2	BLK	BLACK	S9
3	WHT/RED	YEL	TCU-43
4	WHT/BLK	GRN	TCU-44



C7 DASH "2"			
PIN	CIRCUIT FUNCTION	COLOR	GOES TO
1	TRANS COOL FAN	VIO/ORN	TCM-52
2	SEAT	BRN/BLK	TCM-29
3	HIGH OUT 1	VIO/WHT	TCM-51
4	HIGH OUT 2	PNK/WHT	TCM-56
5	SIGNAL GND	BLK/WHT	S2, TCU 37
6	DIG IN 10	BRN/ORN	TCM-34
7	DIG IN 11	BRN/LT.GRN	TCM-31
8	DIG IN 12	BLU/LT.BLU	TCM-32



C8 DASH "1" DASH INTERFACE			
PIN	CIRCUIT FUNCTION	COLOR	GOES TO
1	CAN 1 LOW	WHT/BLK, S6	S6, TCU/16
2	FUEL	YEL/WHT	TCU-49
3	OUT ALT POWER	RED/BLK	S8, C5-8, CP-1
4	SHUTDOWN	PNK/LT, BLU	TCU-41
5	SHIFT INHIBIT	GRY/WHT	TCU-6
6	FORCE NEUTRAL	BRN/RED	TCU-30
7	CAN 1 HIGH	WHT/RED, S7,	TCU-15
8	CHECK TRANS LIGHT	PNK/LT GRN	TCU-40
9	IN SWITCHED PWR +12V	YEL, S1	TCU-19
10	RED +12V BATT	RED	TCU-20
11	COOLANT LEVEL	YEL/RED	TCU-46
12	GROUND	BLK, S9	TCU-42

PROTO

LABEL DEFINITION TABLE			
NUM	NAME	PART #	
L1	TCM-4874-001	WRE-8501	P-608
L2	TRANSMISSION CONNECTOR	WRE-8500	P 107
L3	SPEED SENSOR	WRE-8500	P276
L4	TPS SENSOR	WRE-8500	P-553
L5	ENGINE OPTION CONNECTOR	WRE-8500	P5
L6	DIAG COM CONNECTOR	WRE-8500	P-609
L7	DASH #2 INTERFACE	WRE-8500	P-610
L8	DASH #1 INTERACE	WRE-8500	P-611

REVISION HISTORY				
LEVEL	DESCRIPTION	DATE	DRN	APP
1	NO RELEASE	12/15/20	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
  - 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: HARLAN UNIVERSAL 4LHD TO TCM-2801 HARNESS

SIZE: C CUSTOMER DRAWING NO. 02060-2680 PCS PART NUMBER TCM-4874 REV: 004

DRAWN BY: FRED D. DATE: 10/12/2020 APPROVED BY: MATT PETRIE DATE: SHEET 3 OF 7

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Print Date  
3/31/2021  
1700