

TCU2000 CONNECTOR	QTY	DESCRIPTION	PCS P/N	NOTES
1	40	TERMINALS	CON-1003	
	1	BACK SHELL	CON-1004	
	1	MULTI CABLE SEAL	CON-1005	

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	12 VOLTS SWITCHED	RED
S2	GROUND	BLK
S3	SENSOR GROUND	BLK/WHT
S4	CAN HIGH	WHT/RED
S5	CAN LOW	WHT/BLK

F1	QTY	DESCRIPTION	PCS P/N	NOTES
	1	CONNECTOR	CON-2200	
	1	FUSE CAP.	CON-2201	BLK
	1	TPA	CON-2202	BLU
	2	TERMINAL	CON-1020	(18-16 AWG)
	1	FUSE	CON-2221	10A
	2	CABLE SEAL	CON-1001	GRN

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: TCU 4T65E TO TCM-2000 HARNESS

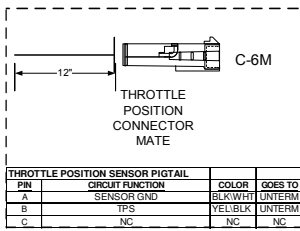
SIZE: C	CUSTOMER DRAWING NO: XXXXX-XXXXX	PCS PART NUMBER: TCM-4120-001	REV: 001
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DRAWN BY: FRED D. DATE: 2/19/2014

APPROVED BY: XXXXX DATE: SHEET 2 OF 10

NUM	NAME	PCS P/N	NOTES
L1	TCM-4120-001	WRE-8501	
L2	CAN BUS	WRE-8500	
L3	THROTTLE POSITION SENSOR	WRE-8500	
L4	SWITCHED +12V DC	WRE-8500	
L5	CHASSIS GROUND	WRE-8500	
L6	LAPTOP CAL CONNECTOR	WRE-8500	
L7	OUTPUT SHAFT SPEED SENSOR	WRE-8500	
L8	TRANSMISSION CONNECTOR	WRE-8501	
L9	TACHOMETER GROUND	WRE-8500	
L10	TACHOMETER	WRE-8500	
L11	SPEEDOMETER	WRE-8500	
L12	BRAKE LIGHT	WRE-8500	
L13	ANALOG IN 2	WRE-8500	
L14	DIGITAL IN 9	WRE-8500	
L15	DIGITAL IN 10	WRE-8500	
L16	DIGITAL IN 11	WRE-8500	
L17	PWM OUT 4	WRE-8500	
L18	PWM OUT 5	WRE-8500	
L19	OPTION CONNECTOR	WRE-8500	

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LT.BLU	LIGHT BLUE		
BLU	BLUE		
VIO	VIOLET		
GRY	GRAY		
WHT	WHITE		
PNK	PINK		



S-#	FUNCTION	COLOR
S1	12 VOLTS SWITCHED	RED
S2	GROUND	BLK
S3	SENSOR GROUND	BLK/WHT
S4	CAN HIGH	WHT/RED
S5	CAN LOW	WHT/BLK

C6 THROTTLE POSITION SENSOR			
PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
A	SEN GND	BLK/WHT	TCU-54, S3
B	TPS	YEL/BLK	TCU-46
C	+5V SENSOR	RED/WHT	TCU-58, S4

C4 OPTION			
PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
1	SWITCHED +12V DC	RED	TCU-1,2,3,4, S1
2	GND	BLK	TCU-60,61,62,63, S2
3	CAN HIGH	WHT/RED	TCU-33
4	CAN LOW	WHT/BLK	TCU-34

C2 OUTPUT SHAFT SPEED SENSOR			
PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
A	TOSS	ORN/RED	TCU-6
B	SENSOR GND	BLK/WHT	S3, TCU-54

C6 CAN			
PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
1	CAN HIGH	WHT/RED	TCU-33, S5
2	CAN LOW	WHT/BLK	TCU-34, S6

UNTERMINATED		
CIRCUIT FUNCTION	COLOR	CONNECTS TO
TACHOMETER GROUND	BLK/WHT	TCU-54, S3
TACHOMETER	ORN/BLK	TCU-5
SPEEDOMETER	ORN/WHT	TCU-9
BRAKE LIGHT	GRY/LT.BLU	TCU-16
SPARE ANALOG IN	YEL/RED	TCU-47
DIGITAL IN 5	GRY/WHT	TCU-17
DIGITAL IN 6	GRY/ORN	TCU-18
DIGITAL IN 7	GRY/YEL	TCU-21
PWM OUT 4	VIO/LT.BLU	TCM-12
PWM OUT 5	VIO/WHT	TCM-52

F1			
PIN	CIRCUIT FUNCTION	COLOR	WIRES TO
A	SWITCHED +12V	RED	TCU-1,4, S1
B	SWITCHED +12V	RED	SWITCHED BATT SOURCE

C3 LAPTOP CAL CONNECTOR			
PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
A	SERIAL RX	RED	TCU-31
B	SIGNAL GND.	WHT	TCU-32
C	SERIAL TX	BLK	TCU-30

C1 TRANSMISSION CONNECTOR				2200
PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO	
A	SHIFT SOL 1-2	PNK/BLK	TCU-59	
B	SHIFT SOL 2-3	PNK/RED	TCU-53	
C	LINE PRES (+)	VIO/BLK	TCU-37	
D	LINE PRES (-)	BLK	TCU-60,61,62,63, S2	
E	+12V	RED(18 AWG)	TCU-1,2,3,4, S1	
F	RANGE A	BRN/BLK	TCU-23	
G	RANGE B	BRN/RED	TCU-24	
H	RANGE B	BRN/LT.GRN	TCU-25	
J	RANGE P	BRN/LT.BLU	TCU-26	
K	RANGE SIG GND	BLK/WHT	TCU-54, S3	
L	TFT+	YEL/ORN	TCU-51	
M	TFT-	BLK/WHT	TCU-54, S3	
N	RANGE A	GRY/BLK	TCU-13	
P	RANGE C	GRY/LT.GRN	TCU-15	
R	RANGE B	GRY/RED	TCU-14	
S	TURB -	ORN/LT.GRN	TCU-7	
T	TCC PWM -	VIO/RED	TCU-28	
U	TCC SW	GRY/PNK	TCU-22	
V	TURB SPEED -	BLK/WHT	TCU-54, S3	
W	NC	NC	NC	

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NOTES:

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- 6.) WIRE TYPE IS TX UNLESS OTHERWISE STATED

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