

TCU-21002300

REVISION HISTORY				
LEVEL	DESCRIPTION	DATE	DRN	APP
1	RELEASE	11/17/16	FD	

C-1 RANGE CONNECTOR			
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-2100	BLK
1	SECONDARY LOCK PLATE	CON-2102	YEL
10	TERMINAL	CON-2103	
4	CABLE SEAL	CON-2105	ORN
6	CABLE SEAL	CON-2106	VIO
2	CAVITY PLUG	CON-2107	BLK

C2 OUTPUT SHAFT SPEED SENSOR			
QTY	DESCRIPTION	P/N	NOTES
1	CONNECTOR	CON-4110	
2	PINS	CON-1006	20 AWG
3	RUBBER SEALS	CON-1004	

C3 TRANS CONNECTOR			
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-2150	
7	TERMINALS	CON-2140	
1	CAVITY PLUG	CON-xxxx	

C4 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

C5 OPTION			
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-0065	
4	TERMINALS	CON-0051	

C6 PCS EXPANSION			
QTY	DESCRIPTION	P/N	NOTES
1	CONNECTOR	CON-5050	
2	TERMINALS	CON-5200	[20-18gauge]
1	WEDGE LOCK	CON-5100	ORANGE

C7 THROTTLE POSITION SENSOR			
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-2302	
3	TERMINALS	CON-1006	
3	CABLE SEALS	CON-1004	VIO

CHASSIS GND			
QTY	DESCRIPTION	P/N	NOTES
1	RING TERM.	CON-0350	

C-7M THROTTLE POSITION SENSOR PIGTAIL			
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-2307	
2	TERMINALS	CON-1011	20 AWG
2	CABLE SEALS	CON-1004	VIO
1	PLUG	CON-0999	GRN

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

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	

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1700

F1 & F2			
QTY	DESCRIPTION	PCS P/N	NOTES
2	CONNECTOR	CON-2200	
2	FUSE CAP.	CON-2201	BLK
2	TPA	CON-2202	BLU
4	TERMINAL	CON-1020	(18-16 AWG)
1	FUSE - 1	CON-2217	3A
1	FUSE - 2	CON-2221	10A
4	CABLE SEAL	CON-1001	GRN

APPLICABLE STANDARDS

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

NOTES

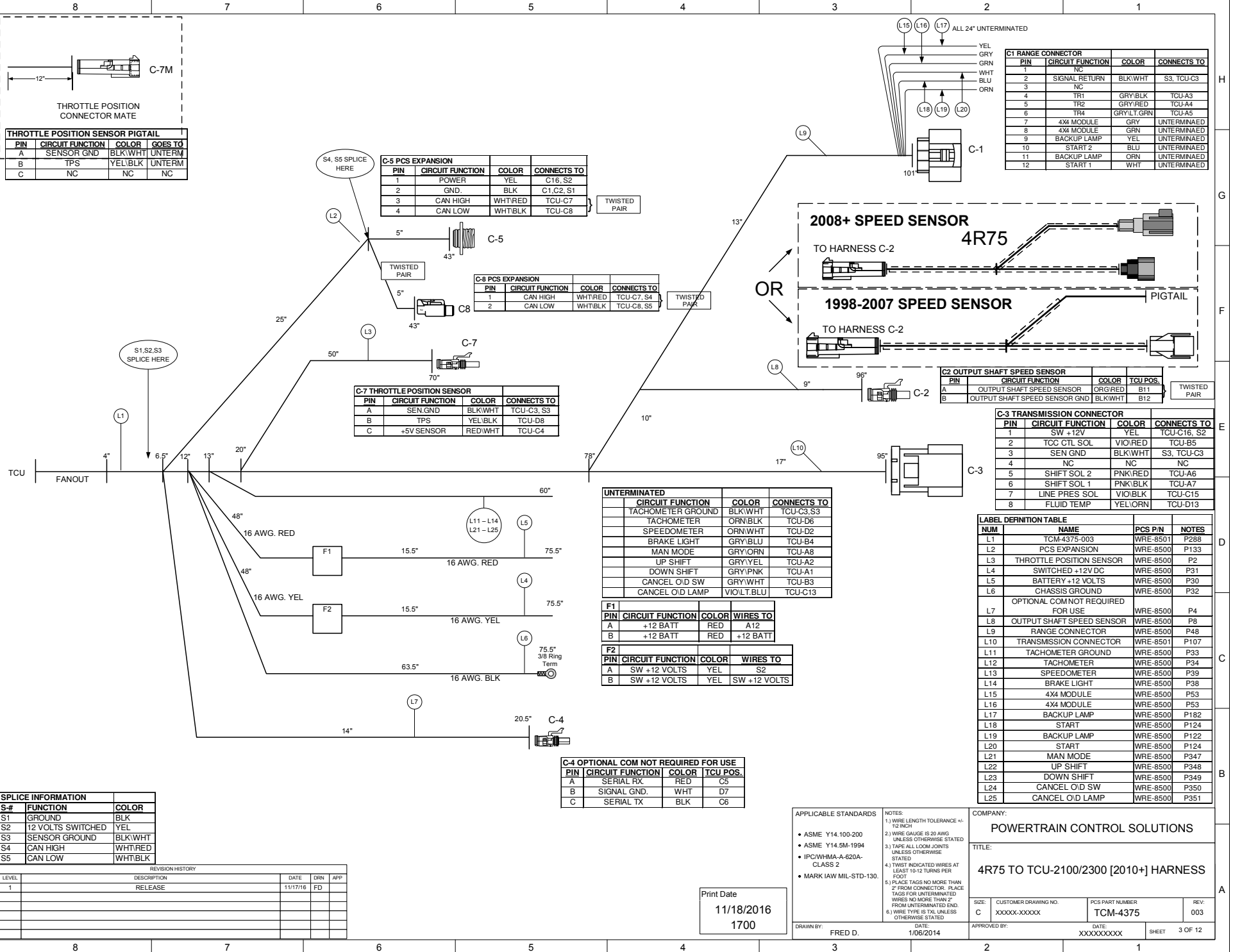
- WIRE LENGTH TOLERANCE +/- .12 INCH
- WIRE GAUGE IS 20 AWG UNLESS OTHERWISE STATED
- TAPE ALL LOCK JOINTS UNLESS OTHERWISE STATED
- TWIST INDICATED WIRES AT LEAST 10-12 TURNS PER FOOT
- PLACE TAGS NO MORE THAN 2" FROM CONNECTOR. PLACE TAGS TOP UNTERMINATED WIRES NO MORE THAN 2" FROM UNTERMINATED END.
- WIRE TYPE IS TXL UNLESS OTHERWISE STATED

COMPANY:
POWERTRAIN CONTROL SOLUTIONS

TITLE:
4R75 TO TCU-2100/2300 [2010+] HARNESS

SIZE: C CUSTOMER DRAWING NO. XXXXX-XXXXX PCS PART NUMBER TCM-4375 REV. 003

DRAWN BY: FRED D. DATE: 1/06/2014 APPROVED BY: DATE: SHEET 2 OF 12



THROTTLE POSITION SENSOR PIGTAIL

PIN	CIRCUIT FUNCTION	COLOR	GOES TO
A	SENSOR GND	BLK/WHT	UNTERM
B	TPS	YEL/BLK	UNTERM
C	NC	NC	NC

C-5 PCS EXPANSION

PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
1	POWER	YEL	C16, S2
2	GND.	BLK	C1, C2, S1
3	CAN HIGH	WHT/RED	TCU-C7
4	CAN LOW	WHT/BLK	TCU-C8

C-8 PCS EXPANSION

PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
1	CAN HIGH	WHT/RED	TCU-C7, S4
2	CAN LOW	WHT/BLK	TCU-C8, S5

C-7 THROTTLE POSITION SENSOR

PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
A	SEN.GND	BLK/WHT	TCU-C3, S3
B	TPS	YEL/BLK	TCU-D8
C	+5V SENSOR	RED/WHT	TCU-C4

C1 RANGE CONNECTOR

PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
1	NC		
2	SIGNAL RETURN	BLK/WHT	S3, TCU-C3
3	NC		
4	TR1	GRY/BLK	TCU-A3
5	TR2	GRY/RED	TCU-A4
6	TR4	GRY/LT.GRN	TCU-A5
7	4X4 MODULE	GRY	UNTERMINAED
8	4X4 MODULE	GRN	UNTERMINAED
9	BACKUP LAMP	YEL	UNTERMINAED
10	START 2	BLU	UNTERMINAED
11	BACKUP LAMP	ORN	UNTERMINAED
12	START 1	WHT	UNTERMINAED

C2 OUTPUT SHAFT SPEED SENSOR

PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
A	OUTPUT SHAFT SPEED SENSOR	ORG/RED	B11
B	OUTPUT SHAFT SPEED SENSOR GND	BLK/WHT	B12

C-3 TRANSMISSION CONNECTOR

PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
1	SW +12V	YEL	TCU-C16, S2
2	TCC CTL SOL	VIO/RED	TCU-B5
3	SEN GND	BLK/WHT	S3, TCU-C3
4	NC	NC	NC
5	SHIFT SOL 2	PNK/RED	TCU-A6
6	SHIFT SOL 1	PNK/BLK	TCU-A7
7	LINE PRES SOL	VIO/BLK	TCU-C15
8	FLUID TEMP	YEL/ORN	TCU-D13

UNTERMINATED

CIRCUIT FUNCTION	COLOR	CONNECTS TO
TACHOMETER GROUND	BLK/WHT	TCU-C3, S3
TACHOMETER	ORN/BLK	TCU-D6
SPEEDOMETER	ORN/WHT	TCU-D2
BRAKE LIGHT	GRY/BLU	TCU-B4
MAN MODE	GRY/ORN	TCU-A8
UP SHIFT	GRY/YEL	TCU-A2
DOWN SHIFT	GRY/PNK	TCU-A1
CANCEL O/D SW	GRY/WHT	TCU-B3
CANCEL O/D LAMP	VIO/LT.BLU	TCU-C13

F1

PIN	CIRCUIT FUNCTION	COLOR	WIRES TO
A	+12 BATT	RED	A12
B	+12 BATT	RED	+12 BATT

F2

PIN	CIRCUIT FUNCTION	COLOR	WIRES TO
A	SW +12 VOLTS	YEL	S2
B	SW +12 VOLTS	YEL	SW +12 VOLTS

C-4 OPTIONAL COM NOT REQUIRED FOR USE

PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
A	SERIAL RX	RED	C5
B	SIGNAL GND.	WHT	D7
C	SERIAL TX	BLK	C6

SPLICE INFORMATION

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

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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

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