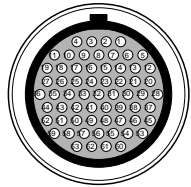


REVISION HISTORY				
LEVEL	DESCRIPTION	DATE	DRN	APP
1	RELEASE	6/12/2011	FAD	
1a	Added cable seal to range connector, 6 Ea., adjusted existing cable seal qty. of 4 Ea.	7/19/2011	FAD	DB
2	CHANGED WIRES FROM TCU TO C1, C2 TO TWISTED PAIR	7/21/2011	FAD	DB
3	C1, C2, C3, C5 LENGTH INCREASED 48"	1/27/2012	FAD	DB



TCU-2000 CONNECTOR	QTY	DESCRIPTION	PCS P/N	NOTES
CONNECTOR	1	CON-0031		
TERMINALS	36	CON-0046		
BACK SHELL	1	CON-0005		
MULTI CABLE SEAL	1	CON-0043	BLK	

SPLICE INFORMATION		
S#	FUNCTION	COLOR
S1	SWITCHED +12V DC	RED
S2	GROUND	BLK
S3	SENSOR GROUND	BLKWHT
S4	NONE	NONE
S5	CAN HIGH	WHT/RED
S6	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	

F1	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

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

C-1 Range Connector			
QTY	DESCRIPTION	PCS P/N	NOTES
1	Connector	CON-2100	Black
1	Secondary Lock Plate	CON-2102	Yellow
10	Terminal	CON-2103	
4	Cable Seal	CON-2105	Orange
6	Cable Seal	CON-2106	Violet
2	Cavity Plug	CON-2107	Black

C-2 Output Shaft Speed Sensor			
QTY	DESCRIPTION	PCS P/N	NOTES
1	Connector	CON-2130	Black
1	Wedgelock	CON-2125	Red
2	Terminal	CON-2121	

C-3 Transmission Connect			
QTY	DESCRIPTION	PCS P/N	NOTES
1	Connector	CON-2133	Gray
1	TPA	CON-2128	Red
9	Terminal	CON-2121	

C-4 LAPTOP CAL CONNECTOR			
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

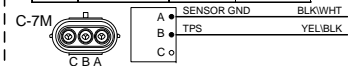
C-5 OPTION			
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-0065	
4	TERMINALS	CON-0051	

C-6 CAN BUS CONNECTOR			
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-5050	
2	TERMINALS	CON-5200	(20-18gauge)
1	WEDGE LOCK	CON-5100	ORN

C-8 Input Shaft Speed			
QTY	DESCRIPTION	PCS P/N	NOTES
1	Connector	CON-2130	Black
1	Wedgelock	CON-2125	Red
2	Terminal	CON-2121	

C-7 THROTTLE POSITION CONNECTOR			
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-2302	
3	TERMINALS	CON-1006	
3	CABLE SEALS	CON-1004	VIO

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



- 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

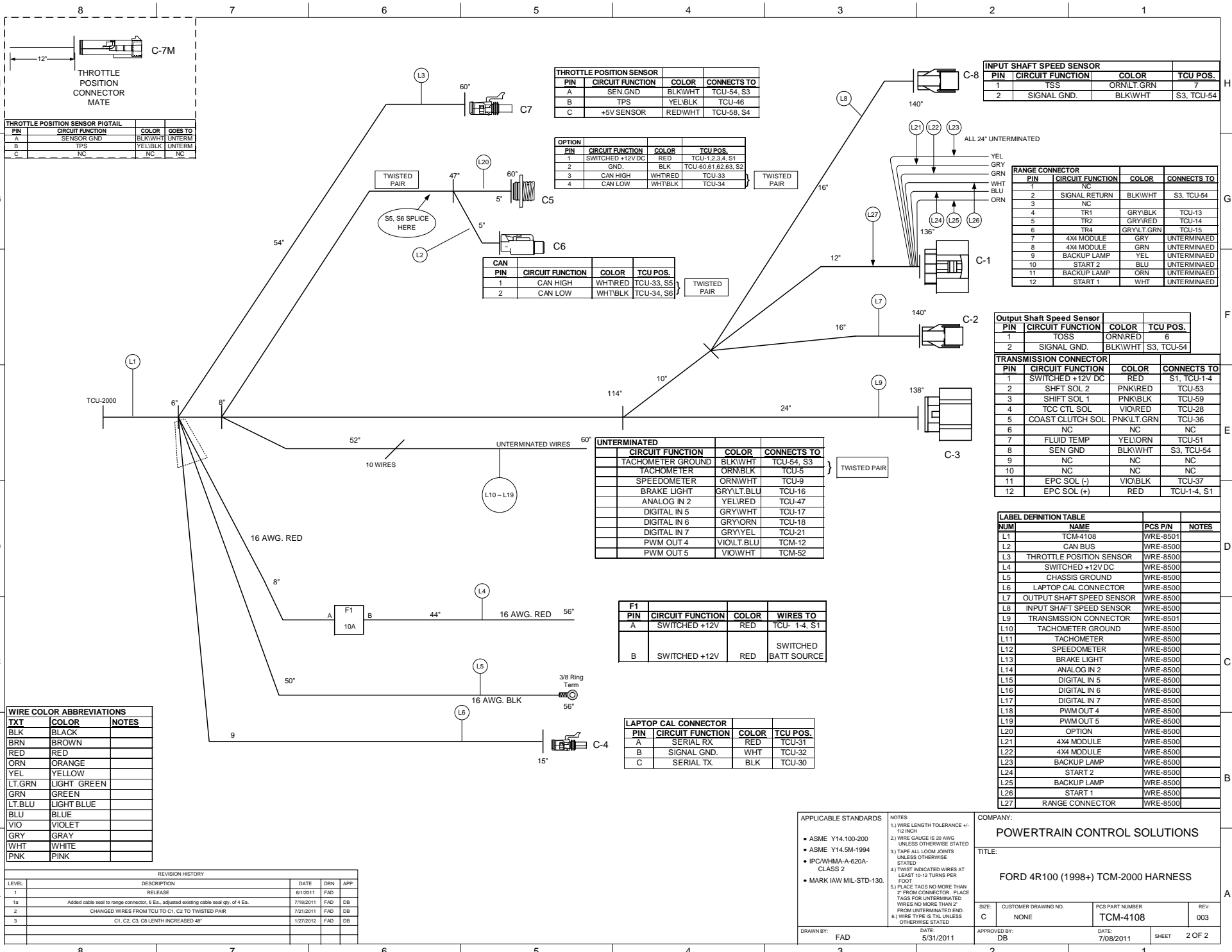
COMPANY: **POWERTRAIN CONTROL SOLUTIONS**

TITLE: **FORD 4R100 (1998+) TCM-2000 HARNESS**

SIZE: C CUSTOMER DRAWING NO. NONE PCS PART NUMBER: TCM-4108 REV: 003

DATE: 5/31/2011

APPROVED BY: DB DATE: 7/08/2011 SHEET 1 OF 2



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

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

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

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

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
ANALOG IN 2	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	1	SWITCHED +12V	RED	TCU-14, S1
B		SWITCHED +12V	RED	SWITCHED BATT SOURCE

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

PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
1	TSS	ORN/LT.GRN	7
2	SIGNAL GND.	BLK/WHT	S3, TCU-54

PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
1	NC		
2	SIGNAL RETURN	BLK/WHT	S3, TCU-54
3	NC		
4	TR1	GRY/BLK	TCU-13
5	TR2	GRY/RED	TCU-14
6	TR4	GRY/LT.GRN	TCU-15
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

PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
1	TSS	ORN/RED	6
2	SIGNAL GND.	BLK/WHT	S3, TCU-54

PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
1	SWITCHED +12V DC	RED	S1, TCU-14
2	SHIFT SOL 2	PNK/RED	TCU-63
3	SHIFT SOL 1	PNK/BLK	TCU-69
4	TCC CTL. SOL	VIO/RED	TCU-28
5	COAST CLUTCH SOL	PNK/LT.GRN	TCU-36
6	NC	NC	NC
7	FLUID TEMP	YEL/ORN	TCU-61
8	SEN GND	BLK/WHT	S3, TCU-54
9	NC	NC	NC
10	NC	NC	NC
11	EPC SOL (-)	VIO/BLK	TCU-37
12	EPC SOL (+)	RED	TCU-14, S1

NUM	NAME	PCS P/N	NOTES
L1	TCM-4108	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	INPUT SHAFT SPEED SENSOR	WRE-8500	
L9	TRANSMISSION CONNECTOR	WRE-8501	
L10	TACHOMETER GROUND	WRE-8500	
L11	TACHOMETER	WRE-8500	
L12	SPEEDOMETER	WRE-8500	
L13	BRAKE LIGHT	WRE-8500	
L14	ANALOG IN 2	WRE-8500	
L15	DIGITAL IN 5	WRE-8500	
L16	DIGITAL IN 6	WRE-8500	
L17	DIGITAL IN 7	WRE-8500	
L18	PWM OUT 4	WRE-8500	
L19	PWM OUT 5	WRE-8500	
L20	OPTION	WRE-8500	
L21	4X4 MODULE	WRE-8500	
L22	4X4 MODULE	WRE-8500	
L23	BACKUP LAMP	WRE-8500	
L24	START 2	WRE-8500	
L25	BACKUP LAMP	WRE-8500	
L26	START 1	WRE-8500	
L27	RANGE CONNECTOR	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	9/12/2011	FAD	
1a	Added cable seal to range connector. 4 Ea. adjusted existing cable seal qty. of 4 Ea.	7/19/2011	FAD	DB
2	CHANGED WIRES FROM TCU TO C1, C2 TO TWISTED PAIR	7/21/2011	FAD	DB
3	C1, C2, C3, C8 LENGTH INCREASED 48"	1/27/2012	FAD	DB

APPLICABLE STANDARDS

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

NOTES

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- 6.) WIRE TYPE IS TX UNLESS OTHERWISE STATED

COMPANY: POWERTRAIN CONTROL SOLUTIONS

TITLE: FORD 4R100 (1998+) TCM-2000 HARNESS

SIZE: NONE	CUSTOMER DRAWING NO.	PCS PART NUMBER	REV:
		TCM-4108	003

DRAWN BY: FAD DATE: 5/31/2011

APPROVED BY: DB DATE: 7/08/2011 SHEET 2 OF 2