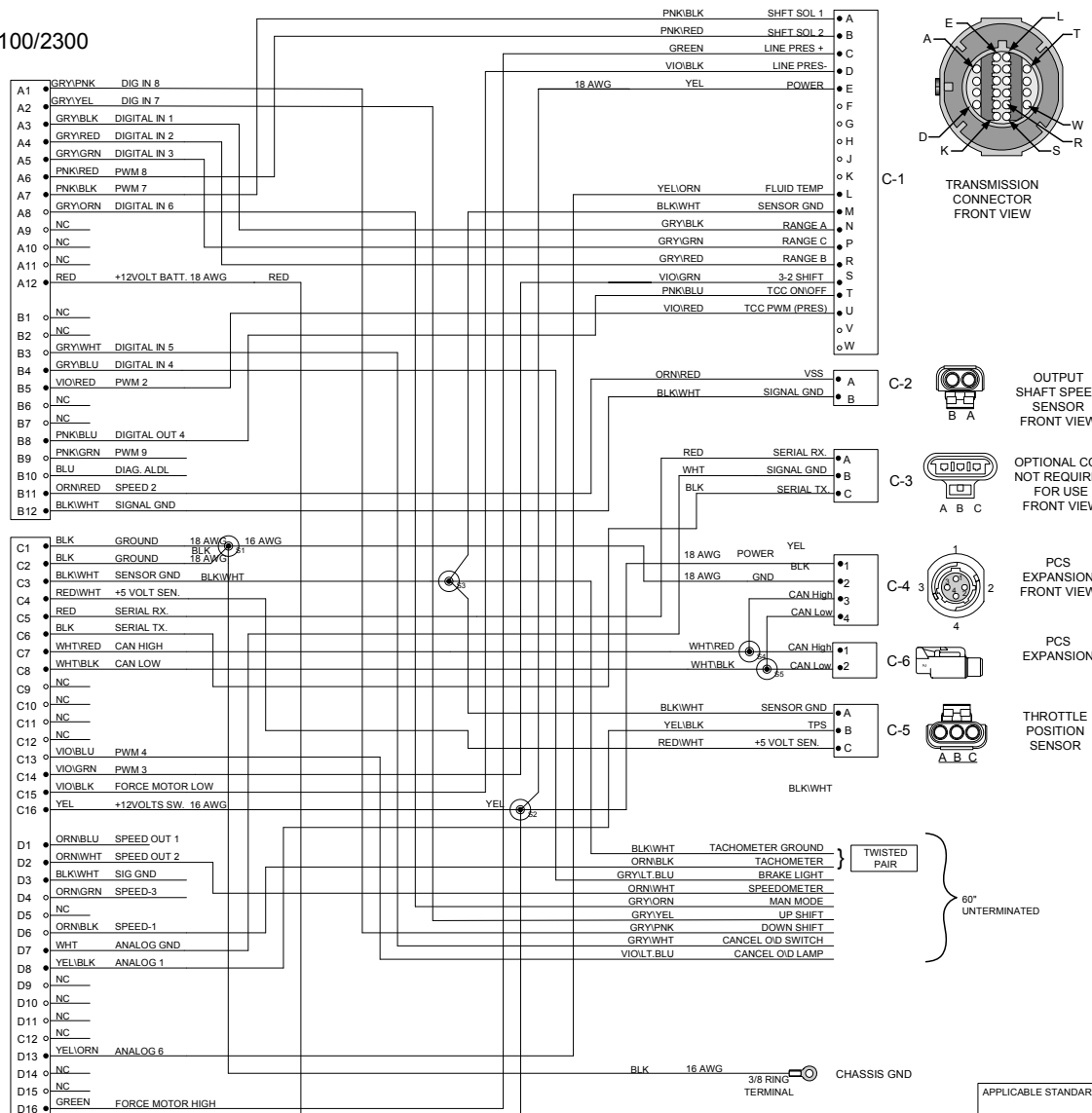


REVISION HISTORY				
LEVEL	DESCRIPTION	DATE	DRN	APP
003	NEW DRAWING CONVERSION	11/7/16	FD	

TCU-2100/2300



TCU CONNECTOR PARTS	QTY	DESCRIPTION	P/N	NOTES
1	1	CONNECTOR 24P	CON-1950	
2	1	CONNECTOR 32P	CON-1953	
30		TERMINALS	CON-1980	
1		TEAL LOCK TPA C232 P/N	CON-1951	
1		TEAL LOCK TPA D232 P/N	CON-1952	
1		TEAL LOCK TPA A24 P/N	CON-1954	
1		TEAL LOCK TPA B24 P/N	CON-1955	

TCU CONNECTOR PARTS	QTY	DESCRIPTION	P/N	NOTES
1	1	CONNECTOR 24P	CON-1950	
2	1	CONNECTOR 32P	CON-1953	
30		TERMINALS	CON-1980	
1		TEAL LOCK TPA C232 P/N	CON-1951	
1		TEAL LOCK TPA D232 P/N	CON-1952	
1		TEAL LOCK TPA A24 P/N	CON-1954	
1		TEAL LOCK TPA B24 P/N	CON-1955	

Print Date
4/24/2017
1700

WIRE COLOR ABBREVIATIONS	TX	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	GROUND	BLK
S2	12 VOLTS SWITCHED	YEL
S3	SENSOR GROUND	BLK/WHT
S4	CAN HIGH	WHT/RED
S5	CAN LOW	WHT/BLK

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

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

OPTIONAL COM NOT REQUIRED FOR USE			
QTY	DESCRIPTION	P/N	NOTES
1	CONNECTOR	CONNECTOR	CON-3416
3	TERMINALS	TERMINALS	CON-1038
1	LOCK	TPA	CON-3417 CREAM
3	RUBBER SEALS	CABLE SEALS	CON-1027 WHT

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

PCS EXPANSION			
QTY	DESCRIPTION	P/N	NOTES
1	CONNECTOR	CONNECTOR	CON-8050
2	TERMINALS	TERMINALS	CON-5200
1	WEDGE LOCK	WEDGE LOCK	CON-5100

THROTTLE POSITION			
QTY	DESCRIPTION	P/N	NOTES
1	CONNECTOR	CON-2302	
3	TERMINALS	CON-1006	
3	RUBBER SEALS	CON-1004	

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

NOTES:
1. WIRE SIZE IS 20 AWG, UNLESS OTHERWISE INDICATED.
2. TWIST INDICATED WIRES AT LEAST 10-12 TURNS PER FOOT

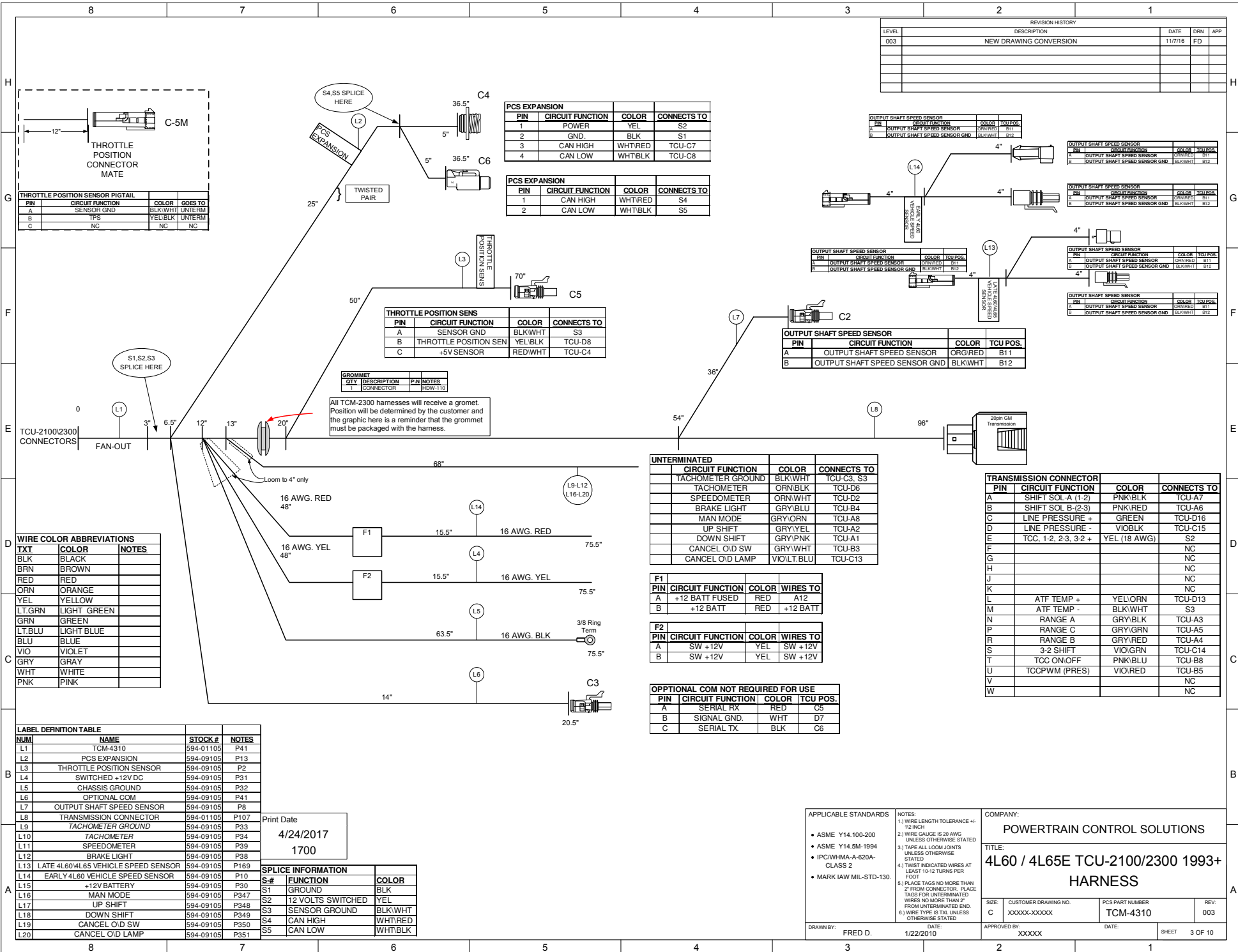
APPLICABLE STANDARDS
• ASME Y14.100-200
• ASME Y14.5M-1994
• IPC/WHMA-A-620A-CLASS 2
• MARK IAW MIL-STD-130.

NOTES:
1.) WIRE LENGTH TOLERANCE +/- 1/2 INCH
2.) WIRE GAUGE IS 20 AWG UNLESS OTHERWISE STATED
3.) TAPES ALL LOCK 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:
4L60 / 4L65E TCU-2100/2300 1993+ HARNESS

SIZE: C	CUSTOMER DRAWING NO: XXXXX-XXXXX	PCS PART NUMBER: TCM-4310	REV: 003
DRAWN BY: FRED D.		DATE: 1/22/2010	APPROVED BY: XXXXX
SHEET 2		OF 10	



REVISION HISTORY				
LEVEL	DESCRIPTION	DATE	DRN	APP
003	NEW DRAWING CONVERSION	11/7/16	FD	

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

PCS EXPANSION				
PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO	
1	CAN HIGH	WHT/RED	S4	
2	CAN LOW	WHT/BLK	S5	

THROTTLE POSITION SENS				
PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO	
A	SENSOR GND	BLK/WHT	S3	
B	THROTTLE POSITION SEN	YEL/BLK	TCU-D8	
C	+5V SENSOR	RED/WHT	TCU-C4	

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	

TRANSMISSION CONNECTOR				
PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO	
A	SHIFT SOL-A (1-2)	PNK/BLK	TCU-A7	
B	SHIFT SOL-B (2-3)	PNK/RED	TCU-A6	
C	LINE PRESSURE -	GREEN	TCU-D16	
D	LINE PRESSURE -	VIO/BLK	TCU-C15	
E	TCC, 1-2, 2-3, 3-2 +	YEL (18 AWG)	S2	
F			NC	
G			NC	
H			NC	
J			NC	
K			NC	
L	ATF TEMP +	YEL/ORN	TCU-D13	
M	ATF TEMP -	BLK/WHT	S3	
N	RANGE A	GRY/BLK	TCU-A3	
P	RANGE C	GRY/GRN	TCU-A5	
R	RANGE B	GRY/RED	TCU-A4	
S	3-2 SHIFT	VIO/GRN	TCU-C14	
T	TCC ON/OFF	PNK/BLU	TCU-B8	
U	TCC PWM (PRES)	VIO/RED	TCU-B5	
V			NC	
W			NC	

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	

WIRE COLOR ABBREVIATIONS		
TXI	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	

LABEL DEFINITION TABLE			
NUM	NAME	STOCK #	NOTES
L1	TCM-4310	594-01105	P41
L2	PCS EXPANSION	594-09105	P13
L3	THROTTLE POSITION SENSOR	594-09105	P2
L4	SWITCHED +12V DC	594-09105	P31
L5	CHASSIS GROUND	594-09105	P32
L6	OPTIONAL COM	594-09105	P41
L7	OUTPUT SHAFT SPEED SENSOR	594-09105	P8
L8	TRANSMISSION CONNECTOR	594-01105	P107
L9	TACHOMETER GROUND	594-09105	P33
L10	TACHOMETER	594-09105	P34
L11	SPEEDOMETER	594-09105	P39
L12	BRAKE LIGHT	594-09105	P38
L13	LATE 4L60/L65 VEHICLE SPEED SENSOR	594-09105	P169
L14	EARLY 4L60 VEHICLE SPEED SENSOR	594-09105	P10
L15	+12V BATTERY	594-09105	P30
L16	MAN MODE	594-09105	P347
L17	UP SHIFT	594-09105	P348
L18	DOWN SHIFT	594-09105	P349
L19	CANCEL O/D SW	594-09105	P350
L20	CANCEL O/D LAMP	594-09105	P351

Print Date
4/24/2017
1700

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

UNTERMINATED				
PIN	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 FUSED	RED	A12	
B	+12 BATT	RED	+12 BATT	

F2				
PIN	CIRCUIT FUNCTION	COLOR	WIRES TO	
A	SW +12V	YEL	SW +12V	
B	SW +12V	YEL	SW +12V	

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	

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.

DRAWN BY: FRED D. DATE: 1/22/2010

COMPANY:
POWERTRAIN CONTROL SOLUTIONS

TITLE:
4L60 / 4L65E TCU-2100/2300 1993+ HARNESS

SIZE: CUSTOMER DRAWING NO: PCS PART NUMBER: REV: XXXXX-XXXXX TCM-4310 003

APPROVED BY: DATE: SHEET 3 OF 10