

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

### TCU-2100/2300

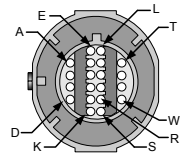
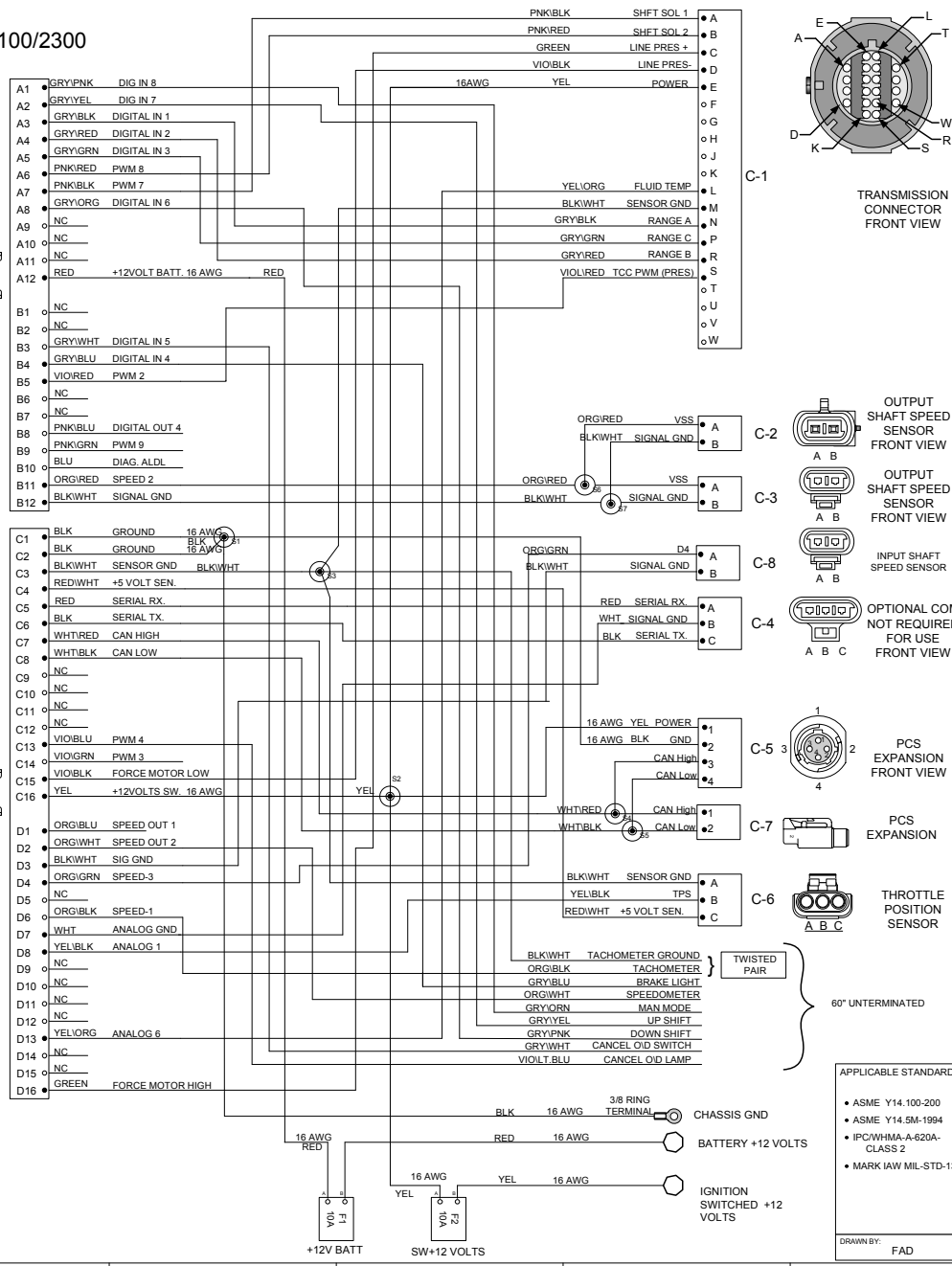
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-207	
2	TERMINALS	CON-1011	20 AWG
1	CABLE SEALS	CON-1004	VIO
1	PLUG	CON-0999	GRN

QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR 24P	CON-1950	
1	CONNECTOR 32P	CON-1953	
33	TERMINALS	CON-1980	
1Ea.	LOCK TPA A:32 PIN	CON-1951	
1Ea.	LOCK TPA B:32 PIN	CON-1952	
1Ea.	LOCK TPA A:24 PIN	CON-1954	
1Ea.	LOCK TPA B:24 PIN	CON-1955	

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	

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
S6	VSS	ORG/RED
S7	VSS SENSOR GND	BLK/WHT

F1, F2	DESCRIPTION	PIN	NOTES
1	connector assembly:	con-2200	
1	fuse cap.	con-2201	
1	back clip:	con-2202	
	terminal(18-16gauge)	con-1016	
	terminal(14-12gauge)	con-1017	
	cable seal(20-16gauge)	con-1004	
	cable seal(18-14gauge)	con-1001	
	cable seal(16-12gauge)	con-1002	



QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	CON-2000	
10	TERMINAL	CON-2804	20-22 AWG.
1	TERMINAL	CON-2805	16-18 AWG
9	BLOCKING PINS	CON-1044	BLUE
1	SEAL	CON-3309	LT.GREEN
1	CONDUIT CLIP	CON-2008	
1	TPA	CON-2003	GRY

QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	CON-1071	F
2	PIN	CON-1086	M
2	SEAL	CON-1093	GRN
1	LOCK	CON-1072	3/5/2013

QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	CON-1070	M
2	PINS	CON-1084	F
2	SEAL	CON-1093	GRN
1	LOCK	CON-1072	3/5/2013

QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	CON-1070	M
2	PINS	CON-1084	F
2	SEAL	CON-1093	GRN
1	LOCK	CON-1072	3/5/2013

QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	CON-3416	
3	TERMINALS	CON-1038	
1	TPA	CON-3417	CREAM
3	CABLE SEALS	CON-1027	WHT

QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	CON-0065	
4	TERMINALS	CON-0051	

QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	CON-5050	
2	TERMINALS	CON-5200	(20-18gauge)
1	WEDGE LOCK	CON-5100	ORN

QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	CON-2302	
3	TERMINALS	CON-1006	
3	RUBBER SEALS	CON-1004	

QTY	DESCRIPTION	PIN	NOTES
1	RING TERM.	CON-0350	

- 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) 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:  
**4L80/4L85E (1993+) SIMPLE SHIFT HARNESS**

CUSTOMER DRAWING NO. \_\_\_\_\_ PCS PART NUMBER \_\_\_\_\_ REV. \_\_\_\_\_  
C NONE TCM-4335 003

DATE: 11/15/2016 SHEET 2 OF 6

Print Date  
4/20/2017  
1700

**Powertrain Control Solutions, LLC.**

10511 OLD RIDGE RD. Ashland, VA 23005  
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 FAX: (804) 227-3005

TITLE:

**4L80/4L85E TCU-2100/2300[1993+] HARNESS**

PART #: **TCM-4335**

DESCRIPTION:

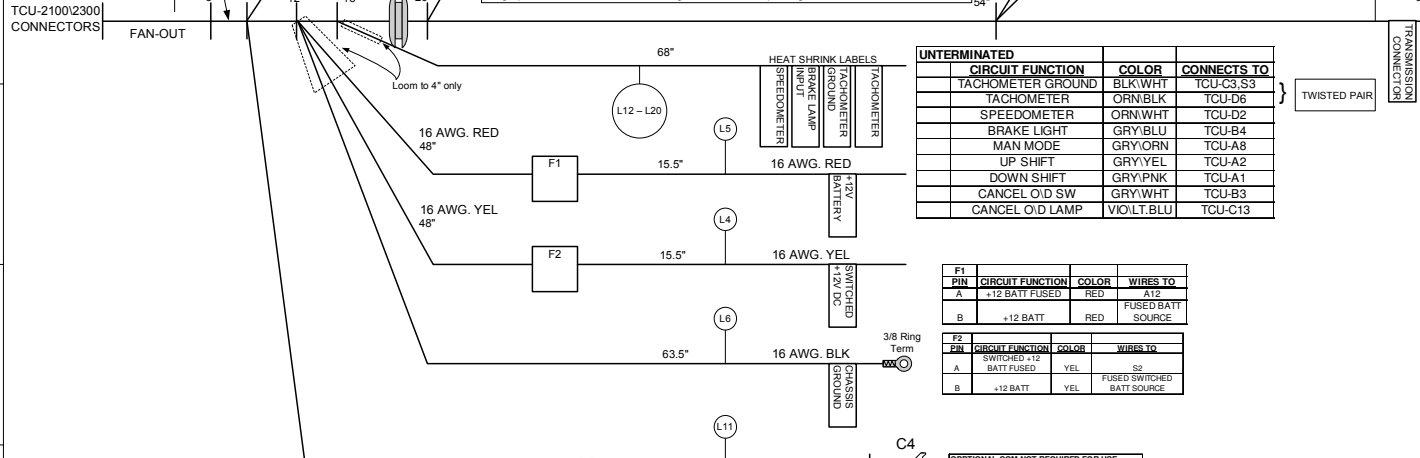
TRANSMISSION HARNESS LINE LAYOUT DIAGRAM FOR GM 4L80 TO TCU-2100/2300

DRAWN BY: **F. DEARHART** DATE: 1/21/2010 PAGE: 2 OF 3

NUM	NAME	PCS P/N	NOTES
L1	TCM-4335-003	WRE-8501	P40
L2	PCS EXPANSION	WRE-8500	P13
L3	THROTTLE POSITION SENSOR	WRE-8500	P2
L4	SWITCHED +12V DC	WRE-8500	P31
L5	BATTERY +12 VOLTS	WRE-8500	P30
L6	CHASSIS GROUND	WRE-8500	P32
L7	PCS EXPANSION	WRE-8500	P13
L8	OUTPUT SHAFT SPEED SENSOR	WRE-8500	P8
L9	INPUT SHAFT SPEED SENSOR	WRE-8500	P7
L10	TRANSMISSION CONNECTOR	WRE-8501	P107
L11	OPTIONAL COM	WRE-8500	P4
L12	TACHOMETER GROUND	WRE-8500	P33
L13	TACHOMETER	WRE-8500	P34
L14	SPEEDOMETER	WRE-8500	P39
L15	BRAKE LAMP IN	WRE-8500	P177
L16	MAN MODE	WRE-8500	P347
L17	UP SHIFT	WRE-8500	P348
L18	DOWN SHIFT	WRE-8500	P349
L19	CANCEL O/D SW	WRE-8500	P350
L20	CANCEL O/D LAMP	WRE-8500	P351

QTY	DESCRIPTION	P/N	NOTES
1	CONNECTOR	HDW-110	

All TCM-2300 harnesses will receive a grommet. Position will be determined by the customer and the graphic here is a reminder that the grommet must be packaged with the harness.



NUM	NAME	PCS P/N	NOTES
L1	TCM-4335-001	WRE-8501	P40
L2	PCS EXPANSION	WRE-8500	P133
L3	THROTTLE POSITION SENSOR	WRE-8500	P31
L4	SWITCHED +12V DC	WRE-8500	P31
L5	BATTERY +12 VOLTS	WRE-8500	P30
L6	CHASSIS GROUND	WRE-8500	P32
L7	OPTIONAL COM NOT REQUIRED FOR USE	WRE-8500	P4
L8	OUTPUT SHAFT SPEED SENSOR	WRE-8500	P8
L9	TRANSMISSION CONNECTOR	WRE-8501	P107
L10	TACHOMETER GROUND	WRE-8500	P33
L11	TACHOMETER	WRE-8500	P34
L12	SPEEDOMETER	WRE-8500	P39
L13	BRAKE LAMP IN	WRE-8500	P38
L14	MAN MODE	WRE-8500	P347
L15	UP SHIFT	WRE-8500	P348
L16	DOWN SHIFT	WRE-8500	P349
L17	CANCEL O/D SW	WRE-8500	P350
L18	CANCEL O/D LAMP	WRE-8500	P351

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
S6	VSS	ORG/RED
S7	VSS SENSOR GND	BLK/WHT

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

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

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

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

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	VIOLT/BLU	TCU-C13

F1	PIN	CIRCUIT FUNCTION	COLOR	WIRES TO
A		+12 BATT FUSED	RED	AT2
B		+12 BATT	RED	FUSED BATT SOURCE

PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
A	SIGNAL TX	RED	S2
B	SIGNAL GND	WHT	D7
C	SIGNAL TX	BLK	D6

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	

APPLICABLE STANDARDS  
 • ASME Y14.100-200  
 • ASME Y14.5M-1994  
 • IPC/WMA-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 TX UNLESS OTHERWISE STATED

PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
A	SHIFT SOLA (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 -	VOBLK	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/ORG	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	TCCPWM (PRES)	VIORED	TCU-B5
T			NC
U			NC
V			NC
W			NC

Print Date  
**4/20/2017**  
**1700**

COMPANY:  
**POWERTRAIN CONTROL SOLUTIONS**

TITLE:  
**4L80/4L85E (1993+) SIMPLE SHIFT HARNESS**

C	CUSTOMER DRAWING NO.	PCS PART NUMBER	REV:
C	NONE	TCM-4335	003

DRAWN BY: **FAD** DATE: **11/15/2016** APPROVED BY: DATE: SHEET **3 OF 6**