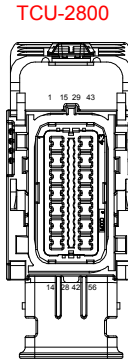
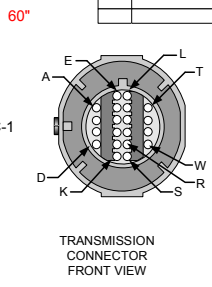
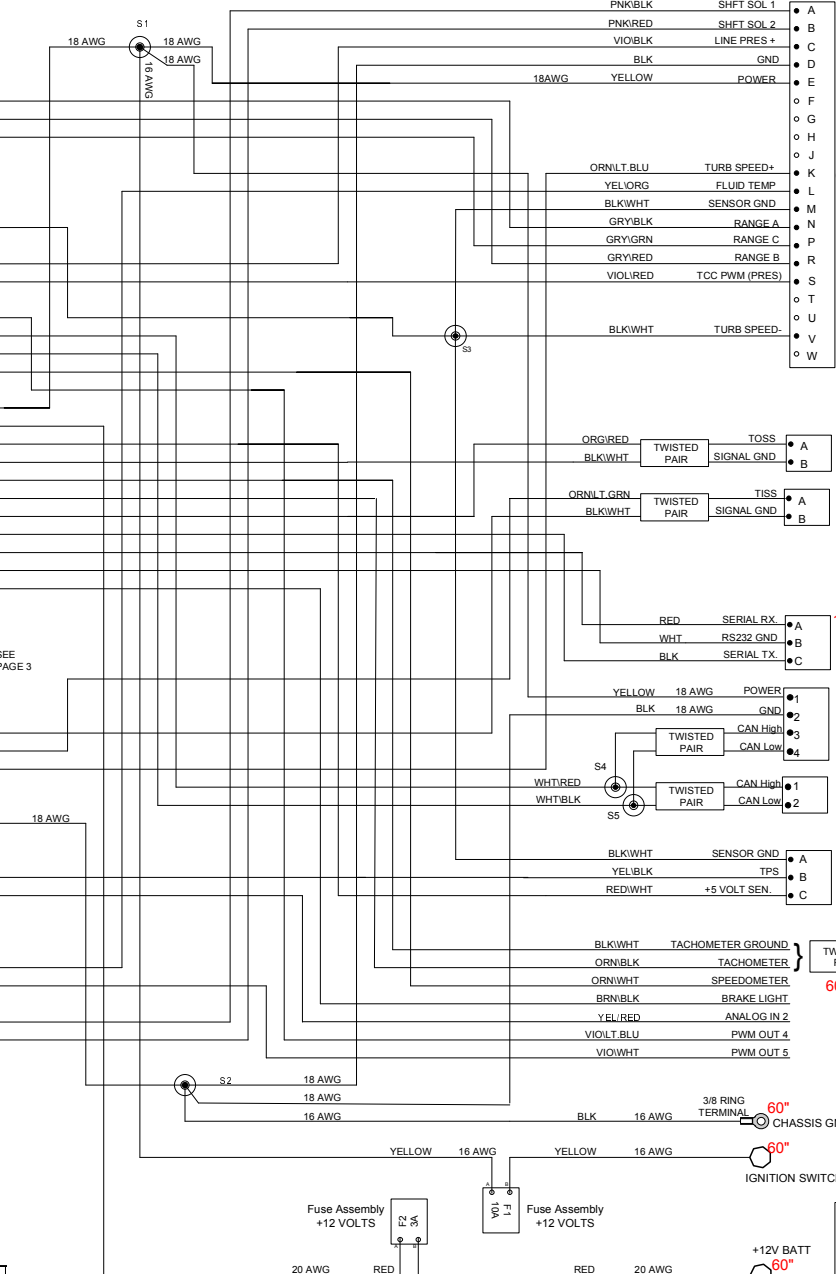


REVISION LEVEL				
LEVEL	DESCRIPTION	DATE	DRN	APP
3	RELEASE			
3A	ADDED HARNESS LABEL	2/5/16	FD	
3B	REDLINE 9/12 CHANGES PER JOEY	9/12/17	FD	

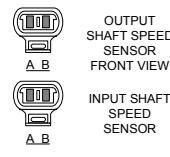


QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-2000	
36	TERMINALS	CON-1084	
20	CABLE SEALS	CON-1093	
1	TPA	CON-2008	

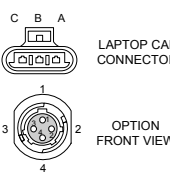
- 1 BRN/BLU CLASS 2 SER DATA
- 2 GRN/BLK DIG IN 1
- 3 GRN/RED DIG IN 2
- 4 GRN/YLT GRN DIG IN 3
- 5 GRN/YLT BLU DIG IN 4
- 6 GRN/WHT DIG IN 5
- 7 GRN/YORN DIG IN 6
- 8 GRN/YEL DIG IN 7
- 9 BLK/WHT SEN GND
- 10 GRN/PNK DIG IN 8
- 11 VIO/BLK PWM1
- 12 VIO/RED PWM2
- 13 VIO/LT GRN PWM3
- 14 VIO/LT BLU PWM4
- 15 WHT/RED CAN1 HI
- 16 WHT/BLK CAN1 LOW
- 17 ORN/WHT SPEEDO OUT
- 18 YEL (OUT) SW +12V OUT
- 19 YEL (IN) SW +12V
- 20 RED +12V BATT
- 21 RED/WHT +5V REF
- 22 BLK/WHT SIG GND
- 23 BLK/WHT SIG GND
- 24 ORN/BLK SPEED 1
- 25 ORN/RED SPEED 2
- 26 BLK COM TX
- 27 RED COM RX
- 28 WHT COM GND
- 29 BRN/BLK DIG IN 9
- 30 BRN/RED DIG IN 10
- 31 BRN/LT GRN DIG IN 11
- 32 BRN/LT BLU DIG IN 12
- 33 BRN/WHT DIG IN 13
- 34 BRN/YORN DIG IN 14
- 35 BRN/YEL DIG IN 15
- 36 BRN/PNK DIG IN 16
- 37 BLK/WHT SIG GND
- 38 ORN/LT GRN SPEED IN 3
- 39 ORN/LT BLU SPEED IN 4
- 40 PNK/LT GRN PWM 9
- 41 VIO/WHT DIG OUT 4
- 42 BLK GND 2
- 43 YELLOW CAN 2 HIGH
- 44 GREEN CAN 2 LOW
- 45 YEL/BLK ANA IN 1
- 46 YEL/RED ANA IN 2
- 47 YEL/LT GRN ANA IN 3
- 48 YEL/LT BLU ANA IN 4
- 49 YEL/WHT ANA IN 5
- 50 YEL/YORN ANA IN 6
- 51 VIO/WHT PWM 5
- 52 VIO/YORN PWM 6
- 53 PNK/BLK PWM 7
- 54 PNK/RED PWM 8
- 55 PNK/WHT DIG OUT 5
- 56 PNK/YORN DIG OUT 6



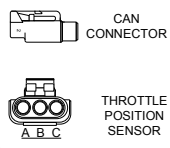
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-2000	
14	TERMINAL	CON-2804	20-22 AWG.
1	TERMINAL	CON-2805	16-18 AWG
5	CAVITY PLUG	CON-1044	BLU
1	MULTI CABLE SEAL	CON-3309	LT GRN
1	CONDUIT CLIP	CON-2008	BLK
1	TPA	CON-2003	GRN



QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-1070	
2	TERMINALS	CON-1084	20 AWG
2	CABLE SEAL	CON-1093	GRN
1	TPA	CON-1072	GRY



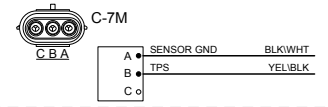
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-3416	
3	TERMINALS	CON-1038	
1	TPA	CON-3417	CREAM
3	CABLE SEALS	CON-1027	WHT



QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-0665	
4	TERMINALS	CON-0051	

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

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



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

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

COMPANY: POWERTRAIN CONTROL SOLUTIONS

TITLE: GM 4L80/85E(1993+) TCM-2800 HARNESS

CUSTOMER DRAWING NO: NONE

PCS PART NUMBER: TCM-4800

DATE: 9/14/2016

REVISION: 003

SHEET 2 OF 12

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	

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

Print Date
9/12/2017
1730

APPLICABLE STANDARDS

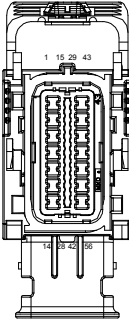
- ASME Y14.100-200
- ASME Y14.5M-1994
- IPC/WHMA-A-620A-CLASS 2
- MARK IAW MIL-STD-130.

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 UNTERMINATED END.
- 6) WIRE TYPE IS TXL UNLESS OTHERWISE STATED

REVISION LEVEL			
LEVEL	DESCRIPTION	DATE	DRN APP
3	RELEASE		
3A	ADDED HARNESS LABEL	25/16	FD
3B	REDLINE 9/12 CHANGES PER JOEY	9/12/17	FD

TCU-2800

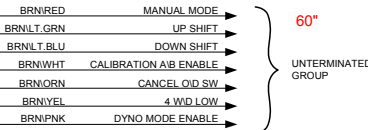


TCU-2800 Connector		PCS P/N NOTES	
QTY	DESCRIPTION	CON-1292	MTF
36	TERMINALS	CON-1292	
1	CONNECTOR COVER	CON-1293	
20	CAVITY PLUG	CON-1294	

- 1 0 BRNLT.BLU CLASS 2 SER DATA
- 2 0 GRYBLK DIG IN 1
- 3 0 GRYRED DIG IN 2
- 4 0 GRYLT.GRN DIG IN 3
- 5 0 GRYLT.BLU DIG IN 4
- 6 0 GRYWHT DIG IN 5
- 7 0 GRYORN DIG IN 6
- 8 0 GRYVEL DIG IN 7
- 9 0 BLK GND
- 10 0 GRYPNK DIG IN 8
- 11 0 VIOBLK PWM1
- 12 0 VIORED PWM2
- 13 0 VIOLT.GRN PWM3
- 14 0 VIOLT.BLU PWM4
- 15 0 WHTRED CAN1 HI
- 16 0 WHTBLK CAN1 LOW
- 17 0 ORNWHT SPEED0 OUT
- 18 0 YEL(OUT) SW +12V OUT
- 19 0 YEL(IN) SW +12V
- 20 0 RED +12V BATT
- 21 0 REDWHT +5V REF
- 22 0 BLKWHT SIG GND
- 23 0 BLKWHT SIG GND
- 24 0 ORNBLK SPEED 1
- 25 0 ORNRED SPEED 2
- 26 0 BLK COM TX
- 27 0 RED COM RX
- 28 0 WHT COM GND
- 29 0 BRNBLK DIG IN 9
- 30 0 BRNRED DIG IN 10
- 31 0 BRNLT.GRN DIG IN 11
- 32 0 BRNLT.BLU DIG IN 12
- 33 0 BRNWHT DIG IN 13
- 34 0 BRNORN DIG IN 14
- 35 0 BRNVEL DIG IN 15
- 36 0 BRNPNK DIG IN 16
- 37 0 BLKWHT SIG GND
- 38 0 ORNLT.GRN SPEED IN 3
- 39 0 ORNLT.BLU SPEED IN 4
- 40 0 PNKLT.GRN PWM 9
- 41 0 VIOWHT DIG OUT 4
- 42 0 BLK GND 2
- 43 0 YELLOW CAN 2 HIGH
- 44 0 GREEN CAN 2 LOW
- 45 0 YELBLK ANA IN 1
- 46 0 YELRED ANA IN 2
- 47 0 YELLT.GRN ANA IN 3
- 48 0 YELLT.BLU ANA IN 4
- 49 0 YELWHT ANA IN 5
- 50 0 YELORN ANA IN 6
- 51 0 VIOWHT PWM 5
- 52 0 VIOORN PWM 6
- 53 0 PNKBLK PWM 7
- 54 0 PNKRED PWM 8
- 55 0 PNKWHT DIG OUT 5
- 56 0 PNKORN DIG OUT 6

SEE PAGE 2 FOR CONNECTIONS

SEE PAGE 2 FOR CONNECTIONS



Print Date
2/5/2016
1730

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

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

Print Date
9/12/2017
1730

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: GM 4L80/85E(1993+) TCM-2800 HARNESS
DRAWN BY: FAD	DATE: 9/14/2016	APPROVED BY: DATE:
REV: 003		REV: 003
REVISION LEVEL 3		REVISION LEVEL 3

NUM	NAME	STOCK #	NOTES
L1	TCM-4800-003	594-01105	P329
L2	CAN BUS	594-09105	P35
L3	THROTTLE POSITION SENSOR	594-09105	P2
L4	SWITCHED +12VDC	594-09105	P31
L5	CHASSIS GROUND	594-09105	P32
L6	LAPTOP CALIBRATION CONNECTOR	594-09105	P65
L7	OUTPUT SHAFT SPEED SENSOR	594-09105	P8
L8	INPUT SHAFT SPEED SENSOR	594-09105	P7
L9	TRANSMISSION CONNECTOR	594-01105	P107
L10	TACHOMETER GROUND	594-09105	P33
L11	TACHOMETER	594-09105	P34
L12	SPEEDOMETER	594-09105	P39
L13	BRAKE LIGHT	594-09105	P38
L14	ANALOG IN 2	594-09105	P95
L15	MANUAL MODE	594-09105	P347
L16	UP SHIFT	594-09105	P348
L17	DOWN SHIFT	594-09105	P349
L18	PWM OUT 4	594-09105	P99
L19	PWM OUT 5	594-09105	P100
L20	OPTION CONNECTOR	594-09105	P5
L21	+12V BATTERY	594-09105	P30
L22	CALIBRATION A/B ENABLE	594-09105	P80
L23	CANCEL O/D SW	594-09105	P350
L24	4 W/D LOW	594-09105	P87
L25	DYNO MODE ENABLE	594-09105	P64

TCU-2800 CONNECTOR

L1

F2 3A

F1 10A

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		

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

Print Date
9/12/2017
1730

LAPTOP CAL CONNECTOR	PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
A	SERIAL RX		RED	TCU-27
B	SIGNAL GND.		WHT	TCU-28
C	SERIAL TX		BLK	TCU-26

THROTTLE POSITION SENSOR	PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
A	SEN GND		BLK/WHT	S3
B	TPS		YEL/BLK	TCU-45
C	+5V SENSOR		RED/WHT	TCU-21

OPTION	PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
1	POWER		YEL	S1
2	GND.		BLK	S2
3	CAN HIGH		WHT/RED	TCU-15, S4
4	CAN LOW		WHT/BLK	TCU-16, S5

CAN	PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
1	CAN HIGH		WHT/RED	S4
2	CAN LOW		WHT/BLK	S5

UNTERMINATED	CIRCUIT FUNCTION	COLOR	CONNECTS TO
	TACHOMETER GROUND	BLK/WHT	TCU-23
	TACHOMETER	ORN/BLK	TCU-24
	SPEEDOMETER	ORN/WHT	TCU-17
	BRAKE LIGHT	BRN/BLK	TCU-29
	ANALOG IN 2	YEL/RED	TCU-46
	PWM OUT 4	VIO/LT.BLU	TCM-14
	PWM OUT 5	VIO/WHT	TCM-51
	TRUE MANUAL MODE	BLK/RED	TCU-30
	UP SHIFT	BLK/LT.GRN	TCU-31
	DOWN SHIFT	BLK/LT.BLU	TCU-32
	CAL "B"	BLK/WHT	TCU-33
	CANCEL O/D	BLK/ORN	TCU-34
	4 W/D LOW	BLK/YEL	TCU-35
	DYNO MODE	BLK/PNK	TCU-36

F2	PIN	CIRCUIT FUNCTION	COLOR	WIRES TO
A	+12 BATT FUSED		RED	TCU-20
B	+12 BATT		RED	FUSED BATT SOURCE

F1	PIN	CIRCUIT FUNCTION	COLOR	WIRES TO
A	+12 BATT FUSED		YEL	TCU-19, S1
B	+12 BATT		YEL	FUSED SW +12V SOURCE

REVISION LEVEL	DESCRIPTION	DATE	DRN	APP
3	RELEASE			
3A	ADDED HARNESS LABEL	3/5/16	FD	
3B	REDLINE 9/12 CHANGES PER JOEY	9/12/17	FD	

OUTPUT SHAFT SPEED SENSOR	PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
A	TOSS+		ORG/RED	TCU-25
B	TOSS-		BLK/WHT	TCU-22

INPUT SHAFT SPEED SENSOR	PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
A	TISS+		ORG/LT.GRN	TCU-38
B	TISS-		BLK/WHT	TCU-37

TRANSMISSION CONNECTOR	PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
A	SHIFT SOL-A (1-2)		PNK/BLK	TCU-53
B	SHIFT SOL B-(2-3)		PNK/RED	TCU-54
C	LINE PRESSURE +		VIO/BLK	TCU-11
D	LINE PRESSURE -		BLK	TCU-42, S2
E	POWER		YEL (18 AWG)	TCU-19, S1
F	NC		NC	NC
G	NC		NC	NC
H	NC		NC	NC
J	NC		NC	NC
K	TURB SPEED+		ORN/LT.GRN	TCU-39
L	ATF TEMP +		YEL/ORG	TCU-50
M	ATF TEMP -		BLK/WHT	TCU-9, S3
N	RANGE A		GRY/BLK	TCU-2
P	RANGE C		GRY/GRN	TCU-4
R	RANGE B		GRY/RED	TCU-3
S	3-2 DOWN		VIO/RED	TCU-12
T	NC		NC	NC
U	NC		NC	NC
V	TURB SPEED-		BLK/WHT	TCU-9, S3
W	NC		NC	NC

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 TX UNLESS OTHERWISE STATED.

COMPANY:
POWERTRAIN CONTROL SOLUTIONS

TITLE:
**GM 4L80/85E(1993+)
TCM-2800 HARNESS**

C CUSTOMER DRAWING NO: NONE
 PCS PART NUMBER: TCM-4800
 REV: 003

DRAWN BY: FAD DATE: 9/14/2016
 APPROVED BY: DATE: SHEET 4 OF 12