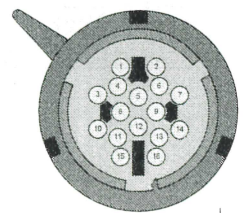


REVISION HISTORY				
LEVEL	DESCRIPTION	DATE	DRN	APP
1	Release	4/22/13	FD	
1a	C1 PIN 9 ADDED TO +12V SW	10/15/13	FD	
1b	Update C2 Part numbers	2-24-14	FD	
1c	Updates from production applied	3-24-14	FD	
2	Move Tapshft wire VIO/BLK from pin 7 to pin 8 on C3	2/18/15	FD	
2A	RED LINE UPDATE 12/8/16	12/8/16	FD	
2B	TEXT UPDATES	10/24/19	FD	

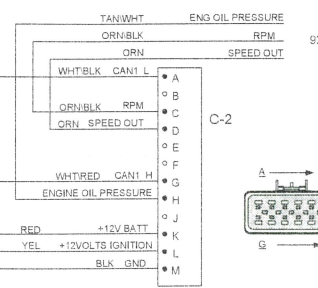


TRANSMISSION CONNECTOR FRONT VIEW

C-1

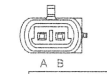
1	+12V BATT	RED	18 AWG
2	IGND	BLK	
3	PARK/ NEUTRAL	ORN/BLK	
4	+12V BATT	RED	18 AWG
5	IGND	BLK	16 AWG
6	BRAKE LIGHT	YEL/BLK	
7	TAP SHIFT	VIO/BLK	
8			
9	+12VOLTS IGN	YEL	16 AWG
10	CAN1 H	WHT/RED	
11	CAN1 L	WHT/BLK	
12	+12VOLTS IGN	YEL	16 AWG
13	CAN1 2 L	WHT/BLK	
14	CAN1 2 H	WHT/RED	
15			
16	OSS	ORN/ILT,GRN	

C1 TRANSMISSION CONNECTOR				
QTY	DESCRIPTION	PCS P/N	NOTES	
1	CONNECTOR	CON-2023		
14	TERMINALS	CON-2022		
14	SEAL	CON-2021		
2	PLUG	CON-2107		



C-2 BULKHEAD CONNECTOR FRONT VIEW

C-2 BULKHEAD CONNECTOR				
QTY	DESCRIPTION	P/N	NOTES	
1	CONNECTOR	CON-1073		GREEN
8	TERMINALS	CON-1086		20-22 AWG
6	CABLE SEAL (WHT)	CON-1090		
2	CABLE SEAL (BLU)	CON-1091		
4	CAVITY PLUG	CON-1092		
1	TPA	CON-1074		



C-4 OSS CONNECTOR FRONT VIEW

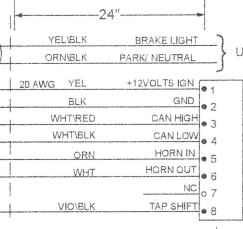
C4 OUTPUT SHAFT SPEED SENSOR				
QTY	DESCRIPTION	P/N	NOTES	
1	CONNECTOR	CON-1071		F
1	PIN	CON-1088		M
1	SEAL	CON-1093		GRN
1	LOCK	CON-1072		3/5/2013
1	PLUG	CON-1095		ORN



C-3 RECEIVER MODULE CONNECTOR FRONT VIEW

C3 RECEIVER MODULE CONNECTOR				
QTY	DESCRIPTION	P/N	NOTES	
1	CONNECTOR	CON-0026		
7	TERMINAL	CON-0045		
1	BACK SHELL	CON-0001		

NOTE: THESE TWO WIRES BRAKE OUT OF 24" FROM C3.



UNTERMINATED WIRES

UNTERMINATED WIRES

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	

SPLICE INFORMATION		
S-#	FUNCTION	COLOR
S1	IGND	BLK
S2	12 VOLTS SWITCHED	YEL
S3	+12V BATT	RED

FULL PREFIX NAME  
 \PCSSSTORAGE\OLDZ\PCS PRODUCTS\  
 6L80\TCM-4410-002\TCM-4410-002 GM  
 6L80-90 MECHATRONIC HARNESS.VSD

APPLICABLE STANDARDS		NOTES
• ASME Y14.100-200	• ASME Y14.5M-1994	1. WIRE LENGTH TOLERANCE +/- 10 INCH
• IPCW-HA-A-620A-CLASS 2	• MARK IAW MIL-STD-130.	2. WIRE GAUGE IS 20 AWG UNLESS OTHERWISE STATED
		3. IF WIRE ALL LOWER ALPHAS UNLESS OTHERWISE STATED
		4. TAPST 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 1" FROM UNTERMINATED END.
		6. WIRE TYPE IS TOL UNLESS OTHERWISE STATED.

COMPANY:			
POWERTRAIN CONTROL SOLUTIONS			
TITLE:			
GM 6L80/90 MECHATRONIC TRANSMISSION HARNESS TO BULKHEAD CONNECTOR			
SHEET	CUSTOMER DRAWING NO.	PCS PART NUMBER	REV
C		TCM-4410	002
DATE	DATE	DATE	DATE
3/31/2013			
DRAWN BY	APPROVED BY	SHEET	PAGE 1
FRED			

Print Date  
 10/24/2019  
 1700

REVISION HISTORY			
LEVEL	DESCRIPTION	DATE	DRN APP
1	Release	4/22/13	FD
1a	C1 PIN 9 ADDED TO +12V SW	10/15/13	FD
1b	Update C2 Part numbers	2-24-14	FD
1c	Updates from production applied	2-24-14	FD
2	Move Tapshift wire VIO/BLK from pin 7 to pin 8 on C3	2/18/15	FD
2A	RED LINE UPDATE 12/8/16	12/8/16	FD
2B	TEXT UPDATES	10/24/19	FD

C2 BULKHEAD CONNECTOR			
PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
A	CAN 1 LOW	WHT/BLK	C1-11
B	NC	NC	NC
C	RPM	ORN/BLK	UNTERM
D	SPEED OUT	ORN	UNTERM
E	NC	NC	NC
F	NC	NC	NC
G	CAN 1 HIGH	WHT/RED	C1-10
H	ENG OIL PRES	TAN/WHT	UNTERM
J	NC	NC	NC
K	+12V BATT	RED	C1-4
L	+12V IGN	YEL	S2, C1-12
M	GND	BLK	S1, C1-5

C4 OSS			
PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
A	OSS+	ORG LT,GRN	G4-16
B	Add Blocking Plug		

C1 TRANS CONNECTOR			
PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
1	+12V BATT	RED	C2-K S3
2	GND	BLK	C2-M, C3-2, S1
3	PARK/NEUTRAL	ORN/BLK	C3-6
4	+12V BATT	RED	C2-K, S3
5	GND	BLK	C2-M, C3-2, S1
6	HORN OUT	WHT	UNTERM
7	TAP SHIFT	MO/BLK	C3-8
8	BREAK LAMP	YEL/BLK	UNTERM
9	+12V IGN	YEL	C2-L, C3-1, S2
10	CAN HIGH	WHT/RED	C2-G
11	CAN LOW	WHT/BLK	C2-A
12	+12V IGN	YEL	C2-L, C3-1, S2
13	CAN2-L	WHT/BLK	C3-4
14	CAN2-H	WHT/RED	C3-3
15	NC	NC	NC
16	OSS	ORN/LT,GRN	C4-A

C3 RECEIVER MODULE CONNECTOR			
PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
1	+12VIGN	YEL	C1-12, S2
2	GND	BLK	C1-5, S1
3	CAN HIGH	WHT/RED	C1-14
4	CAN LOW	WHT/BLK	C1-11
5	HORN IN	ORN	UNTERM
6	HORN OUT	WHT	UNTERM
7	NC	NC	NC
8	TAP SHIFT	VIO/BLK	C1-7

UNTERMINATED WIRES { ORN WHT

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	GND	BLK
S2	12 VOLTS SWITCHED	YEL
S3	+12V BATT	RED

LABEL DEFINITION TABLE			
NUM	NAME	PCS P/N	NOTES
L1	TCM-4410-001	WRE-8501	
L2	BULKHEAD CONNECTOR	WRE-8500	
L3	BRAKE LIGHT	WRE-8500	
L4	PARK/NEUTRAL	WRE-8500	
L5	REC. MODULE CONNECTOR	WRE-8500	
L6	OSS CONNECTOR	WRE-8500	
L7	HORN IN	WRE-8500	
L8	HORN OUT	WRE-8500	
L9	TRANSMISSION CONNECTOR	WRE-8501	
L10	ENGINE OIL PRES	WRE-8500	
L11	SPEEDOMETER	WRE-8500	
L12	RPM	WRE-8500	

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 +/- .030 INCH  
 2.) WIRE GAUGE IS 20 AWG, UNLESS OTHERWISE STATED  
 3.) FARE ALL LOOM JOINTS UNLESS OTHERWISE STATED  
 4.) WIRE TAGS NO MORE THAN 1/4" FROM CONNECTOR. PLACE TAGS FOR UNTERMINATED WIRES NO MORE THAN 1/2" FROM UNTERMINATED END.  
 5.) WIRE TYPE IS TLL UNLESS OTHERWISE STATED

COMPANY: POWERTRAIN CONTROL SOLUTIONS  
 TITLE: GM 6L80/90 MECHATRONIC TRANSMISSION HARNESS TO BULKHEAD CONNECTOR  
 DATE: 3/31/2013  
 DRAWN BY: FRED  
 APPROVED BY: [Signature]  
 SHEET: 002  
 PAGE: 2

Print Date  
 10/24/2019  
 1700