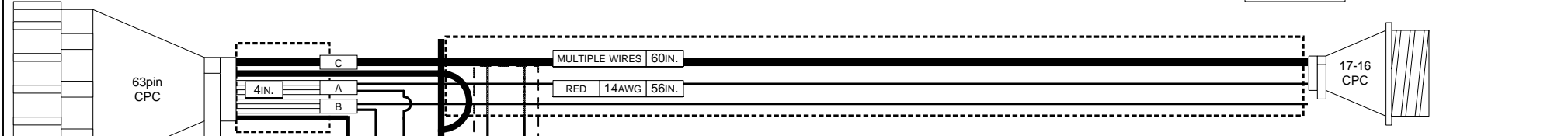
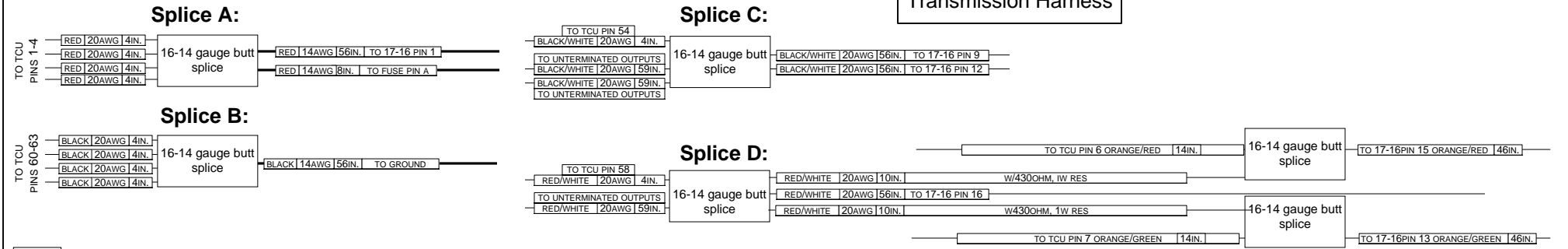


PART NUMBER:	TCM-4119	REV.	DESCRIPTION	DATE	BY
		0	ORIGINAL HARNESS	4/29/2005	JT
DESCRIPTION:	Ford 5R110 Transmission Harness		1	CLARIFIED RESISTOR SPLICE	4/29/2007

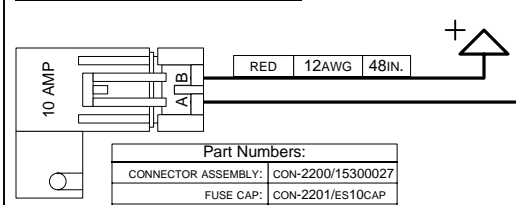
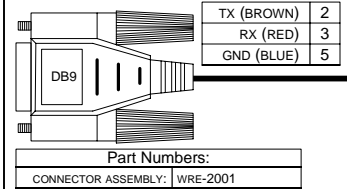


Part Numbers:

CONNECTOR ASSEMBLY:	CON-0031/205842-1
BACKSHELL:	CON-0005/206138-1
TERMINAL:	CON-0044/5-66504-9
SEAL:	CON-0043

Part Numbers:

CONNECTOR:	CON-0069/206036-3
BACKSHELL:	CON-0004/206070-1
TERMINAL:	CON-0050/66098-7
SEAL:	CON-0039/213920-2



CONNECTOR ASSEMBLY:	CON-5050/DTM06-2S
WEDGELOCK (ORANGE):	CON-5100/WM-2S
TERMINAL(20-18GAUGE)	CON-5200/1062-20-1022

Unterminated Wires

2-SENSOR GND	BLACK/WHITE	54
RPM	ORANGE/BLACK	5
SPEEDOMETER DRIVE	ORANGE/WHITE	9
TPS	YELLOW/BLACK	46
MAP	YELLOW/RED	47
CLT	YELLOW/LT.GREEN	48
SPARE ANALOG 1	YELLOW/LT.BLUE	49
DIGITAL IN 1	GRAY/BLACK	13
DIGITAL IN 2	GRAY/RED	14
DIGITAL IN 3	GRAY/LT.GREEN	15
DIGITAL IN 4	GRAY/LT.BLUE	16
DIGITAL IN 5	GRAY/WHITE	17
DIGITAL OUT 2	PINK/RED	53
DIGITAL OUT 3	PINK/LT. GREEN	36
+5 V	RED/WHITE	58

17 - 16 PINOUT & CORRESPONDANCE CHART

TCU POS	PCS WIRE COLOR	PCS FUNCTION	PIN	FORD COLOR	FORD FUNCTION
1-4	RED 14GA	12V	1	YELLOW/WHITE	VPWR
59	PINK/BLACK	PWM7	2	DARK BLUE/WHITE	SSPC-E (-)
12	VIOLET/LT. BLUE	PWM4	3	VIOLET/ORANGE	SSPC-B (-)
45	VIOLET/ORANGE	PWM6	4	BLACK/LTGREEN	SSPC-D (-)
52	VIOLET/WHITE	PWM5	5	PINK/BLACK	SSPC-C (-)
28	VIOLET/RED	PWM2	6	BROWN/ORANGE	TCC SOL (-)
37	VIOLET/BLACK	PWM1	7	VIOLET/YELLOW	PC-A (-)
20	VIOLET/LT. GREEN	PWM3	8	ORANGE/YELLOW	SSPC-A (-)
54	BLACK/WHITE	SGND	9	BLACK/WHITE	SGND
8	ORANGE/LT.BLUE	SPEED 4	10	LT.BLUE/YELLOW	RANGE S
51	YELLOW/ORANGE	ANALOG 6	11	ORANGE/BLACK	TFT +
54	BLACK/WHITE	SGND	12	ORANGE/WHITE	TFT -
7	ORANGE/LTGREEN	SPEED 3	13	DRK.GREEN/WHITE	T SPEED
-	-	-	14	GRAY/ORANGE	I SPEED
6	ORANGE/RED	SPEED 2	15	DRK.BLUE/YELLOW	O SPEED
58	RED/WHITE	+5 V	16	PINK/WHITE	+ 5 V

Powertrain Control Solutions, LLC.

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Phone: (804) 752-6025
Fax: (804) 752-3516

TITLE:

FORD 5R110

PART NUMBER: **TCM-4119**

DESCRIPTION:
FORD 5R110

DRAWN BY: **Jim Taylor** DATE: **04/29/2005** PAGE: **2 OF 3**

REV.	DESCRIPTION	DATE	BY
0	ORIGINAL HARNESS	4/29/2005	JT
1	CLARIFIED RESISTOR SPLICE	4/29/2007	JT

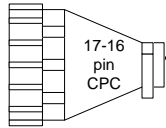
CPC	Pin Function	Harness Function	5R110	colors
1	+12v	Battery Connection	+12v	red
2	+12v	Battery Connection	+12v	red
3	+12v	Battery Connection	+12v	red
4	+12v	Battery Connection	+12v	red
5	Speed Input 1	Engine Speed Input	RPM	orange/black
6	Speed Input 2	Transmission Speed Input	VSS	orange/red
7	Speed Input 3	TCC Speed Input	Turbine Speed	orange/lt. green
8	Speed Input 4	Optional Speed Input	Range Sensor	orange/lt. blue
9	Speed Output	Speedometer Drive Output	Speedometer In	orange/white
10	unused	-	-	-
11	unused	-	-	-
12	PWM Out 4/freq2	PWM/Solenoid Driver	SSPC-B	violet/lt. blue
13	Digital Input 1	Digital Input	brake light	gray/black
14	Digital Input 2	Digital Input	Spare Dig1	gray/red
15	Digital Input 3	Digital Input	Spare Dig2	gray/lt. green
16	Digital Input 4	Digital Input	Spare Dig3	gray/lt. blue
17	Digital Input 5	Digital Input	Spare Dig4	gray/white
18	Digital Input 6	Digital Input	-	gray/orange
19	Digital Out 5	Digital Driver	-	pink/white
20	PWM Out 3/freq2	PWM/Solenoid Driver	SSPC-A	violet/lt. green
21	Digital Input 7	Digital Input	-	gray/yellow
22	Digital Input 8	Digital Input	-	gray/pink
23	Digital Input 9	Digital Input	-	brown/black
24	Digital Input 10	Digital Input	-	brown/red
25	Digital Input 11	Digital Input	-	brown/lt. green
26	Digital Input 12	Digital Input	-	brown/lt. blue
27	Digital Out 6	Digital Driver	-	pink/orange
28	PWM Out 2/freq1	PWM/Solenoid Driver	TCC PWM Sol	violet/red
29	unused	-	-	-
30	RS-232 Transmit	Communications Cable	db9	white/orange
31	RS-232 Receive	Communications Cable	db9	white/lt. blue
32	CAN/RS-232 GND	Communications Cable	db9	white/lt. green
33	CAN High	Communications Cable	-	white/red
34	CAN Low	Communications Cable	-	white/black
35	unused	-	-	-
36	Digital Out 3/PWM 9	Digital Driver	Spare Output	pink/lt. green
37	PWM Out 1/freq 1	PWM/Solenoid Driver	PC-A	violet/black
38	unused	-	-	-
39	Digital Input 13	Digital Input	-	brown/white
40	Digital Input 14	Digital Input	-	brown/orange
41	Digital Input 15	Digital Input	-	brown/yellow
42	Digital Input 16	Digital Input	-	brown/pink
43	unused	-	-	-
44	Digital Out 4	Digital Driver	-	pink/lt. blue
45	PWM Out 6/freq1	PWM/Solenoid Driver	SSPC-D	violet/orange
46	Analog Input 1	Analog Input	tps	yellow/black
47	Analog Input 2	Analog Input	map	yellow/red
48	Analog Input 3	Analog Input	cit	yellow/lt. green
49	Analog Input 4	Analog Input	Spare An1	yellow/lt. blue
50	Analog Input 5/temp	Analog Input	-	yellow/white
51	Analog Input 6/temp	Analog Input	fluid temp	yellow/orange
52	Pwm Out 5/freq1	PWM/Solenoid Driver	SSPC-C	violet/white
53	Digital Out 2/PWM 8	Digital Driver	Spare Output	pink/red
54	Sensor/AD Gnd	Sensor or reference Gnd	fluid temp/vss	black/white
55	unused	-	-	-
56	unused	-	-	-
57	unused	-	-	-
58	Ref Voltage (+5v)	Sensor/reference Voltage	+5V	red/white
59	Digital Out 1/PWM 7	Digital Driver	SSPC-E	pink/black
60	Gnd	Battery Connection	Gnd	black
61	Gnd	Battery Connection	Gnd	black
62	Gnd	Battery Connection	Gnd	black
63	Gnd	Battery Connection	Gnd	black

db9 pinout	DB9
1	none
2	transmit
3	receive
4	none
5	gnd
6	none
7	none
8	none
9	none

17-16 Connector	Ford Wire	PCS Wire	TCU Pin
1	12V	Yellow/White	Red 14 awg
2	PWM7	D. Blue/White	Pink/Black
3	PWM4	Violet/Orange	Violet/lt. blue
4	PWM6	Black/Lt. Green	Violet/Orange
5	PWM5	Pink/Black	Violet/White
6	PWM2	Brown/Orange	Violet/Red
7	PWM1	Violet/Yellow	Violet/Black
8	PWM3	Orange/Yellow	Violet/lt. Green
9	SGND	Black/White	Black/White
10	Speed 4	Lt. Blue/Yellow	Orange Lt. Blue
11	Analog 6	Orange/Black	Yellow/Orange
12	SGND	Orange/White	Black/White
13	Speed 3	D.Green/White	Orange/Lt. Green
14	-	Gray/Orange	-
15	Speed 2	D. Blue/ Yellow	Orange/Red
16	+5V	Pink/White	Red/White

Extra wires list	
1	gray/orange
2	pink/white
3	gray/yellow
4	gray/pink
5	brown/black
6	brown/red
7	brown/lt. green
8	brown/lt. blue
9	pink/orange
10	white/red
11	white/black
12	brown/white
13	brown/orange
14	brown/yellow
15	brown/pink
16	pink/lt. blue
17	yellow/white

REV.	DESCRIPTION	DATE	BY
0	ORIGINAL HARNESS	4/29/2005	JT
1	Edited c1107, 3 pin conn	7/13/07	jt



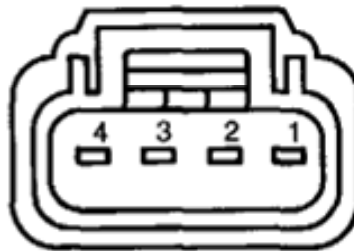
NOTE: 400 Ohm resistor between terminals 1 and 3

Part Numbers:	
CONNECTOR:	CON-0022/206037-1
BACKSHELL:	CON-0004/206070-1
TERMINAL:	CON-0051/661007
SEAL:	CON-0039/213920-2

17 - 16 PINOUT & CORRESPONDANCE CHART			
PIN	FORD COLOR	TCU POS	PCS WIRE COLOR
1	YELLOW/WHITE 7	1-4	RED 16GA
2	DARK BLUE/WHITE13	59	PINK/BLACK
3	VIOLET/ORANGE 10	12	VIOLET/LT. BLUE
4	BLACK/LTGREEN 12	45	VIOLET/ORANGE
5	PINK/BLACK 11	52	VIOLET/WHITE
6	BROWN/ORANGE 14	28	VIOLET/RED
7	VIOLET/YELLOW 2	37	VIOLET/BLACK
8	ORANGE/YELLOW 9	20	VIOLET/LT. GREEN
9	BLACK/WHITE 22	54	BLACK/WHITE
10	LT.BLUE/YELLOW 25	8	ORANGE/LT.BLUE
11	ORANGE/BLACK 26	51	YELLOW/ORANGE
12	ORANGE/WHITE 30	54	BLACK/WHITE
13	DRKGREEN/WHITE 29	7	ORANGE/LTGREEN
14	GRAY/ORANGE 27	-	-
15	DRKBLUE/YELLOW 28	6	ORANGE/RED
16	Pink/WHITE 1	58	RED/WHITE

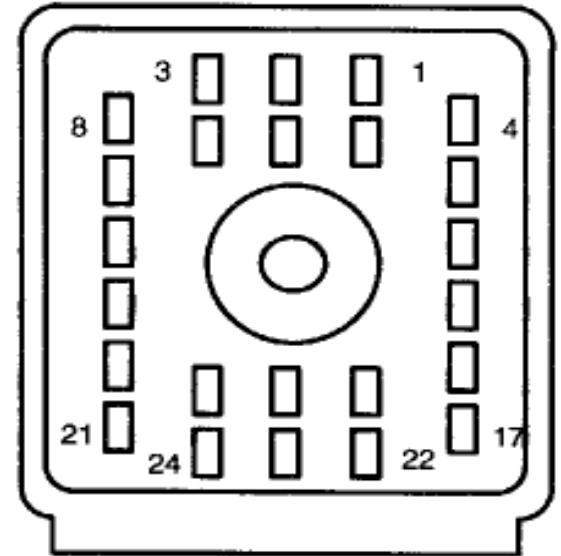
OUTPUT SHAFT SPEED SENSOR			
PIN	WIRE COLR	CIRCUIT FUNCTION	TCU Pos
1	PINK/WHITE	MONITOR	58
2	DRK BLUE/YELLOW	SIGNAL RETURN	6
3	BLACK/WHITE	REFERENCE VOLTAGE	54

Rear View



SPEED SENSOR ASSEMBLY			
PIN	WIRE COLOR	CIRCUIT FUNCTION	TCU Pos
1	PINK/WHITE	REFERENCE VOLTAGE	58
2	BLACK/WHITE	SIGNAL RETURN	54
3	Dk. GREEN/WHITE	TURBINE SHAFT SPEED SENSOR (TSS)	7
4	GRAY/ORANGE	INTERMEDIATE SHAFT SPEED SNSOR (ISS)	-

NOTE: 400 Ohm resistor between terminals 1 and 3
 NOTE: 400 Ohm resistor between terminals 1 and 4



TORQSHIFT TRANSMISSION			
PIN	WIRE COLR	CIRCUIT FUNCTION	TCU Pos
1	DARK BLUE/WHITE	SHIFT SOLENOID PRESSURE CONTROL E (-)	59
2	-	-	-
3	VIOLET/ORANGE	SHIFT SOLENOID PRESSURE CONTROL B (-)	12
4	BLACK/LT. GREEN	SHIFT SOLENOID PRESSURE CONTROL D (-)	45
5	PINK/BLACK	SHIFT SOLENOID PRESSURE CONTROL C (-)	52
6	-	-	-
7	YELLOW/WHITE	SHIFT SOLENOID VPWR	1-4
8	BROWN/ORANGE	TORQUE CONVERTER CLUTCH (TCC) SOL (-)	28
9	Lt. BLUE/RED	PRESSURE SWITCH C	INTERM
10	VIOLET/YELLOW	PRESSURE CONTROL SOLENOID (-)	37
11	WHITE/RED	PRESSURE SWITCH D	INTERM
12	ORANGE/YELLOW	SHIFT SOLENOID PRESSURE CONTROL A (-)	20
13	PINK/LT. BLUE	PRESSURE SWITCH E	INTERM
14	WHITE/ YELLOW	PRESSURE SWITCH A	INTERM
15	Lt. BLUE/YELLOW	TRANSMISSION RANGE SNR ASSEMBLY SIGNAL	8
16	Lt. BLUE/PINK	PRESSURE SWITCH B	INTERM
17	BLACK/ WHITE	TRANSMISSION RANGE SNR ASSEMBLY GROUND	54
18	ORANGE/BLACK	TRANSMISSION FLUID TEMPERATURE (TFT)	51
19	-	-	-
20	YELLOW/WHITE	SHIFT SOLENOID VPWR	1-4
21	PINK/WHITE	REF. VOLTAGE TRANSMISSION RANGE ASSEMBLY	58
22	ORANGE/WHITE	SIGNAL RETURN TFT SENSOR	54
23	-	-	-
24	YELLOW/WHITE	SHIFT SOLENOID VPWR	1-4