

Powertrain Control Solutions, LLC.

11139 Air Park Rd. Suite 2 Ashland, VA 23005
 www.ptcs.us Phone: (804) 752-6025 Fax: (804) 752-3516

DRAWN BY: J.Ballenger DATE: 10/13/2004 PAGE: 1 OF 3

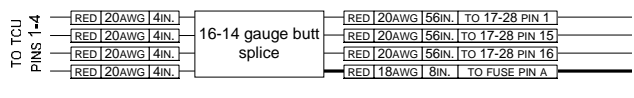
TITLE: **A340E/341E/343E HARNESS**

PART NUMBER: TCM-4103

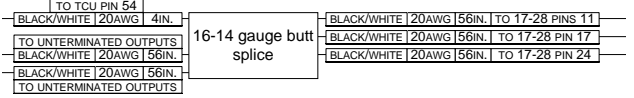
DESCRIPTION: Toyota A34X Series Wiring Harness

REV.	DESCRIPTION	DATE	BY
0	Original Revision	10/22/2004	JB

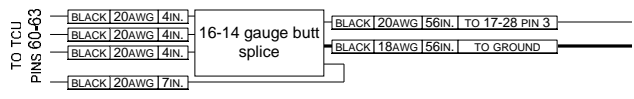
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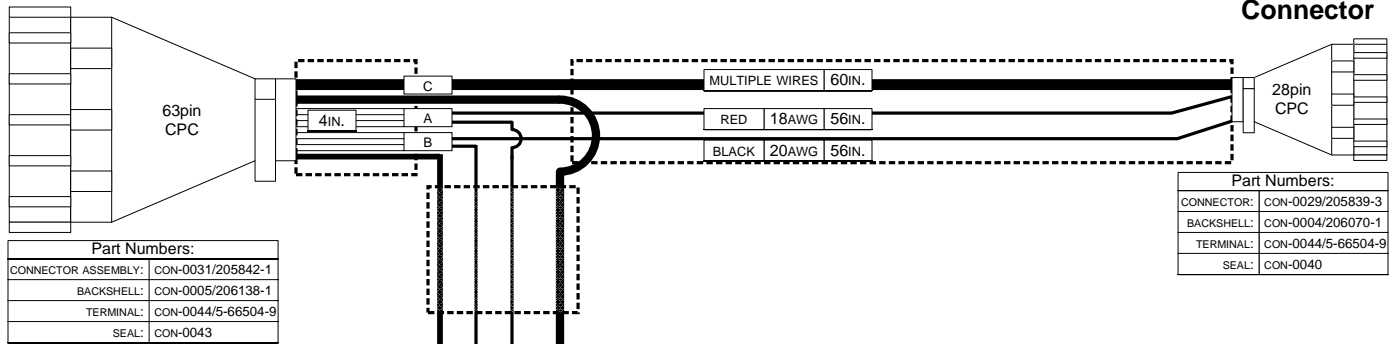
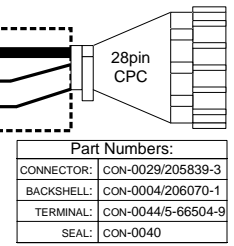
Splice C:



Splice B:

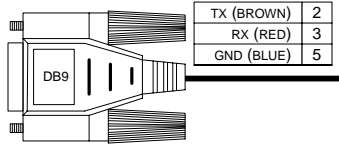


Optional Connector



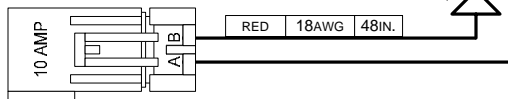
Part Numbers:

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



Part Numbers:

CONNECTOR ASSEMBLY:	WRE-2001
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Part Numbers:

CONNECTOR ASSEMBLY:	CON-2200/15300027
FUSE CAP:	CON-2201/ES10CAP
TERMINAL(18-16GAUGE)	CON-1016/12048159
TERMINAL(14-12GAUGE)	CON-1017/12129497
CABLE SEAL(20-16GAUGE)	CON-1004/12089679
CABLE SEAL(18-14GAUGE)	CON-1001/12015323
CABLE SEAL(16-12GAUGE)	CON-1002/12010293

Unterminated Wires

2-SENSOR GND	BLACK/WHITE
RPM	ORANGE/BLACK
SPEEDOMETER	ORANGE/WHITE
TPS	YELLOW/BLACK
MAP	YELLOW/RED
CLT	YELLOW/LT.GREEN
SPARE ANALOG 1	YELLOW/LT.BLUE
BRAKE LIGHT	GRAY/YELLOW
SPARE DIGITAL 1	GRAY/PINK
SPARE DIGITAL 2	BROWN/BLACK
SPARE DIGITAL 3	BROWN/RED

28 PIN CPC PINOUT & CORRESPONDANCE CHART

	PCS WIRE COLOR	PCS FUNCTION	TCU POS	TOYOTA CONNECTOR	TOYOTA FUNCTION
1	RED	+12V SOURCE	1-4	SOLENOID PIN 2	SLN+ (ACCUMULATOR)
2	GRAY/BLACK	DIGITAL INPUT 1	13	RANGE PIN 7	PARK INPUT
3	BLACK	GROUND SOURCE	60-63	SOLENOID PIN 5	BLT- (LINE PRESSURE)
4	NONE	NONE	NONE	NONE	NONE
5	GRAY/RED	DIGITAL INPUT 2	14	RANGE PIN 8	REVERSE INPUT
6	GRAY/LT.GREEN	DIGITAL INPUT 3	15	RANGE PIN 10	NEUTRAL INPUT
7	GRAY/LT.BLUE	DIGITAL INPUT 4	16	RANGE PIN 9	DRIVE INPUT
8	NONE	NONE	NONE	NONE	NONE
9	VIOLET/LT.GREEN	PWM OUTPUT 3	20	SOL PIN 7	SLU- (TCC LOCKUP)
10	NONE	NONE	NONE	NONE	NONE
11	BLACK/WHITE	S.GROUND	54	TURBINE SPEED PIN 1	NCO- (TURBINESPEED)
12	ORANGE/LT.GREEN	SPEED INPUT 3	7	TURBINE SPEED PIN 2	NCO+(TURBINESPEED)
13	NONE	NONE	NONE	NONE	NONE
14	VIOLET/RED	PWM OUTPUT 2	28	SOL PIN 6	SLN- (ACCUMULATOR)
15	RED	+12V SOURCE	1-4	SOL PIN 3	SLU+ (TCC LOCKUP)
16	RED	+12V SOURCE	1-4	RANGE PIN 4	RANGE POWER
17	BLACK/WHITE	S.GROUND	54	VSS2 PIN 1	SP2- (VSS2)
18	ORANGE/RED	SPEED INPUT 2	6	VSS2 PIN 2	SP2+ (VSS2)
19	NONE	NONE	NONE	NONE	NONE
20	VIOLET/BLACK	PWM OUTPUT 1	37	SOL PIN 1	BLT+ (LINE PRESSURE)
21	NONE	NONE	NONE	NONE	NONE
22	GRAY/WHITE	DIGITAL INPUT 5	17	RANGE PIN 2	"2" POSITION INPUT
23	GRAY/ORANGE	DIGITAL INPUT 6	18	RANGE PIN 3	"L" POSITION INPUT
24	BLACK/WHITE	S.GROUND	54	ATF PIN 1	ATF-
25	NONE	NONE	NONE	NONE	NONE
26	PINK/BLACK	DIGITAL OUTPUT 1	59	SOL PIN 4	SS1 (SHIFT SOL 1)
27	YELLOW/ORANGE	ANALOG INPUT 6	51	ATF PIN 2	ATF+
28	PINK/RED	DIGITAL OUTPUT 2	53	SOL PIN 8	SS2 (SHIFT SOL 2)

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TITLE: **A340E/341E/343E HARNESS**

PART NUMBER: TCM-4103

DESCRIPTION:
Toyota A34X Series Wiring Harness

DRAWN BY: J.Ballenger DATE: 10/13/2004 PAGE: 2 OF 3

REV.	DESCRIPTION	DATE	BY
0	Original Revision	10/22/2004	JB

CPC	Pin Function	Harness Function	A340E	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	-	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	-	violet/lt. blue
13	Digital Input 1	Digital Input	PARK INPUT	gray/black
14	Digital Input 2	Digital Input	REVERSE INPUT	gray/red
15	Digital Input 3	Digital Input	NEUTRAL INPUT	gray/lt. green
16	Digital Input 4	Digital Input	DRIVE INPUT	gray/lt. blue
17	Digital Input 5	Digital Input	"2" POS INPUT	gray/white
18	Digital Input 6	Digital Input	"L" POS INPUT	gray/orange
19	Digital Out 5	Digital Driver	-	pink/white
20	PWM Out 3/freq2	PWM/Solenoid Driver	TCC LOCKUP	violet/lt. green
21	Digital Input 7	Digital Input	BRAKE LIGHT	gray/yellow
22	Digital Input 8	Digital Input	SPARE DIG1	gray/pink
23	Digital Input 9	Digital Input	SPARE DIG2	brown/black
24	Digital Input 10	Digital Input	SPARE DIG3	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	ACCUMULATOR	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	Digital Driver	-	pink/lt. green
37	PWM Out 1/freq 1	PWM/Solenoid Driver	Line Pressure	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	-	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	CLT	yellow/lt. green
49	Analog Input 4	Analog Input	SPARE ANALOG1	yellow/lt. blue
50	Analog Input 5/temp	Analog Input	-	yellow/white
51	Analog Input 6/temp	Analog Input	ATF TEMP	yellow/orange
52	Pwm Out 5/freq1	PWM/Solenoid Driver	-	violet/white
53	Digital Out 2	Digital Driver	SHIFT SOL2	pink/red
54	Sensor/AD Gnd	Sensor or reference Gnd	ATF TEMP/VSS	black/white
55	unused	-	-	-
56	unused	-	-	-
57	unused	-	-	-
58	Ref Voltage (+5v)	Sensor/reference Voltage	-	red/white
59	Digital Out 1	Digital Driver	SHIFT SOL1	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	none
2	transmit	brown
3	receive	red
4	none	none
5	gnd	blue
6	none	none
7	none	none
8	none	none
9	none	none

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

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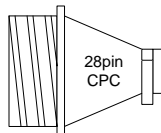
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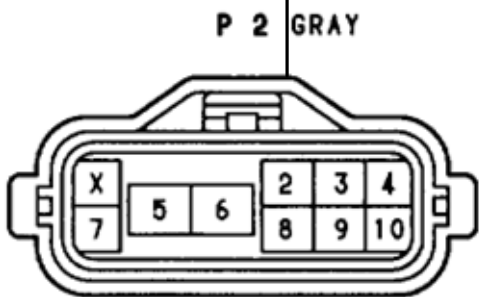
DESCRIPTION: Toyota A34X Series Wiring Harness

REV.	DESCRIPTION	DATE	BY
0	Original Revision	10/22/2004	JB

Optional Connector



Part Numbers:	
CONNECTOR:	CON-0084/206152-1
BACKSHELL:	CON-0004/206070-1
TERMINAL:	CON-0045/66506-3
SEAL:	CON-0040
PERIPHERAL SEAL:	CON-0015/206403-2

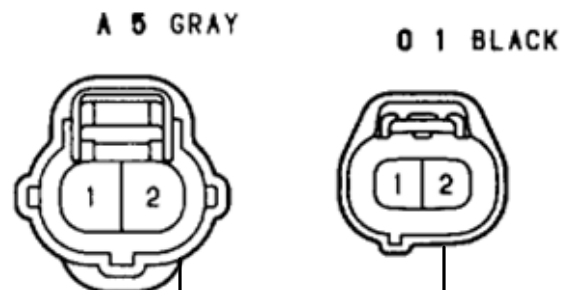


10 PIN TOYOTA RANGE SWITCH CONNECTOR	
TOYOTA FUNCTION	
1	NONE
2	"2" POSITION INPUT
3	"L" POSITION INPUT
4	RANGE POWER
5	NONE
6	NONE
7	PARK INPUT
8	REVERSE INPUT
9	DRIVE INPUT
10	NEUTRAL INPUT



8 PIN TOYOTA SOLENOID CONNECTOR	
TOYOTA FUNCTION	
1	BLT+ (LINE PRESSURE)
2	SLN+ (ACCUMULATOR)
3	SLU+ (TCC LOCKUP)
4	SS1 (SHIFT SOL 1)
5	BLT- (LINE PRESSURE)
6	SLN- (ACCUMULATOR)
7	SLU- (TCC LOCKUP)
8	SS2 (SHIFT SOL 2)

2 PIN ATF TEMP CONNECTOR	
TOYOTA FUNCTION	
1	ATF-
2	ATF+



3 PIN TURBINE SPEED CONNECTOR	
TOYOTA FUNCTION	
1	NCO- (TURBINE SPEED)
2	NCO+ (TURBINE SPEED)



2 PIN VSS2 CONNECTOR	
TOYOTA FUNCTION	
1	SP2- (VSS1)
2	SP2+ (VSS1)

28 PIN CPC PINOUT & CORRESPONDANCE CHART				
PCS WIRE COLOR	PCS FUNCTION	TCU POS	TOYOTA CONNECTOR	TOYOTA FUNCTION
1	RED +12V SOURCE	1-4	SOLENOID PIN 2	SLN+ (ACCUMULATOR)
2	GRAY/BLACK	DIGITAL INPUT 1	13	RANGE PIN 7
3	BLACK	GROUND SOURCE	60-63	SOLENOID PIN 5
4	NONE	NONE	NONE	NONE
5	GRAY/RED	DIGITAL INPUT 2	14	RANGE PIN 8
6	GRAY/LT.GREEN	DIGITAL INPUT 3	15	RANGE PIN 10
7	GRAY/LT.BLUE	DIGITAL INPUT 4	16	RANGE PIN 9
8	NONE	NONE	NONE	NONE
9	VIOLET/LT.GREEN	PWM OUTPUT 3	20	SOL PIN 7
10	NONE	NONE	NONE	NONE
11	BLACK/WHITE	S.GROUND	54	TURBINE SPEED PIN 1
12	ORANGE/LT.GREEN	SPEED INPUT 3	7	TURBINE SPEED PIN 2
13	NONE	NONE	NONE	NONE
14	VIOLET/RED	PWM OUTPUT 2	28	SOL PIN 6
15	RED	+12V SOURCE	1-4	SOL PIN 3
16	RED	+12V SOURCE	1-4	RANGE PIN 4
17	BLACK/WHITE	S.GROUND	54	VSS2 PIN 1
18	ORANGE/RED	SPEED INPUT 2	6	VSS2 PIN 2
19	NONE	NONE	NONE	NONE
20	VIOLET/BLACK	PWM OUTPUT 1	37	SOL PIN 1
21	NONE	NONE	NONE	NONE
22	GRAY/WHITE	DIGITAL INPUT 5	17	RANGE PIN 2
23	GRAY/ORANGE	DIGITAL INPUT 6	18	RANGE PIN 3
24	BLACK/WHITE	S.GROUND	54	ATF PIN 1
25	NONE	NONE	NONE	NONE
26	PINK/BLACK	DIGITAL OUTPUT 1	59	SOL PIN 4
27	YELLOW/ORANGE	ANALOG INPUT 6	51	ATF PIN 2
28	PINK/RED	DIGITAL OUTPUT 2	53	SOL PIN 8