

Part Numbers:

CONNECTOR ASSEMBLY:	CON-0031/205842-1
BACKSHELL:	CON-0005/206138-1
TERMINAL:	CON-0046/5-66504-9
SEAL:	CON-0043

LAPTOP CAL CONNECTOR	PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
A	1	SERIAL RX	RED	TCU-31
B	2	SIGNAL GND.	WHT	TCU-32
C	3	SERIAL TX	BLK	TCU-30

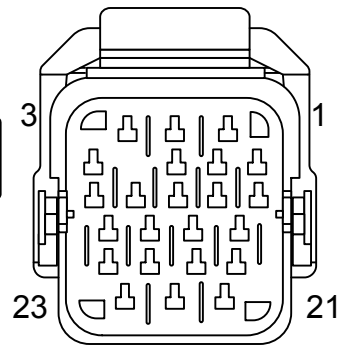
LAPTOP CAL CONNECTOR	QTY	DESCRIPTION	PCS P/N	NOTES
1	1	CONNECTOR	CON-3416	
3	3	TERMINALS	CON-1038	
1	1	TPA	CON-3417	CREAM
3	3	CABLE SEALS	CON-1027	WHT

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

OPTION	QTY	DESCRIPTION	PCS P/N	NOTES	CAN PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
1	1	CONNECTOR	CON-0065		1	SWITCHED +12VDC	RED	TCU-1,2,3,4, S1
2	2	TERMINALS	CON-5200	(20-18gauge)	1	GND	BLK	TCU-60,61,62,63, S2
3	3	TERMINALS	CON-5100		2	CAN HIGH	WHT/RED	TCU-33
4	4	TERMINALS	CON-0051		4	CAN LOW	WHT/BLK	TCU-34

CAN BUS CONNECTOR	QTY	DESCRIPTION	PCS P/N	NOTES	CAN PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
1	1	CONNECTOR	CON-5050		1	CAN HIGH	WHT/RED	TCU-33, S5
2	2	TERMINALS	CON-5200	(20-18gauge)	2	CAN LOW	WHT/BLK	TCU-34, S6
1	1	WEDGE LOCK	CON-5100	GRN				



PIN	SIGNAL NAME	WIRE COLOR	TCU PIN/NOTES
1	Fused Ignition Switch	red 18 ga	1-4
2	L/R Solenoid Control	pink	53,28
3	-	-	-
4	TRS T41 Sense (C1)	gray/lt.blue	16
5	TRS T42 Sense (C2)	gray/white	17
6	Backup Lamp Feed	white	unterm
7	Overdrive Solenoid Control	violet/white	52
8	TRS T3 Sense (C3)	gray/lt.green	15
9	TRS T1 Sense (C4)	gray/black	13
10	Transmission Control Relay	red 14ga	1-4
11	4C Pressure Switch Sense	brown	24
12	Pressure Control Solenoid Control	violet/black	37
13	TRS T2 Sense (C5)	gray	14
14	Low/Reverse Pressure Switch Sense	gray/orange	18
15	2C Pressure Switch Sense	black/lt.blue	23
16	Overdrive Pressure Switch Sense	pink/gray	22
17	Underdrive Solenoid Control	violet/gray	12
18	Underdrive Pressure Switch Sense	gray/yellow	21
19	4C Solenoid Control	pink/black	59
20	2C Solenoid Control	violet/yellow	45
21	MS Solenoid Control	violet/lt.green	20
22	Sensor Ground	black/white	54
23	Transmission Temperature Sensor	yellow	51

PIN	WIRE COLOR	FUNCTION	TCU POS
1	BLACK/WHITE	SENSOR GROUND	54
2	RED/BLACK	5 VOLT SUPPLY	58
3	YELLOW/RED	LINE PRESSURE SENSOR	47
4	-	-	-

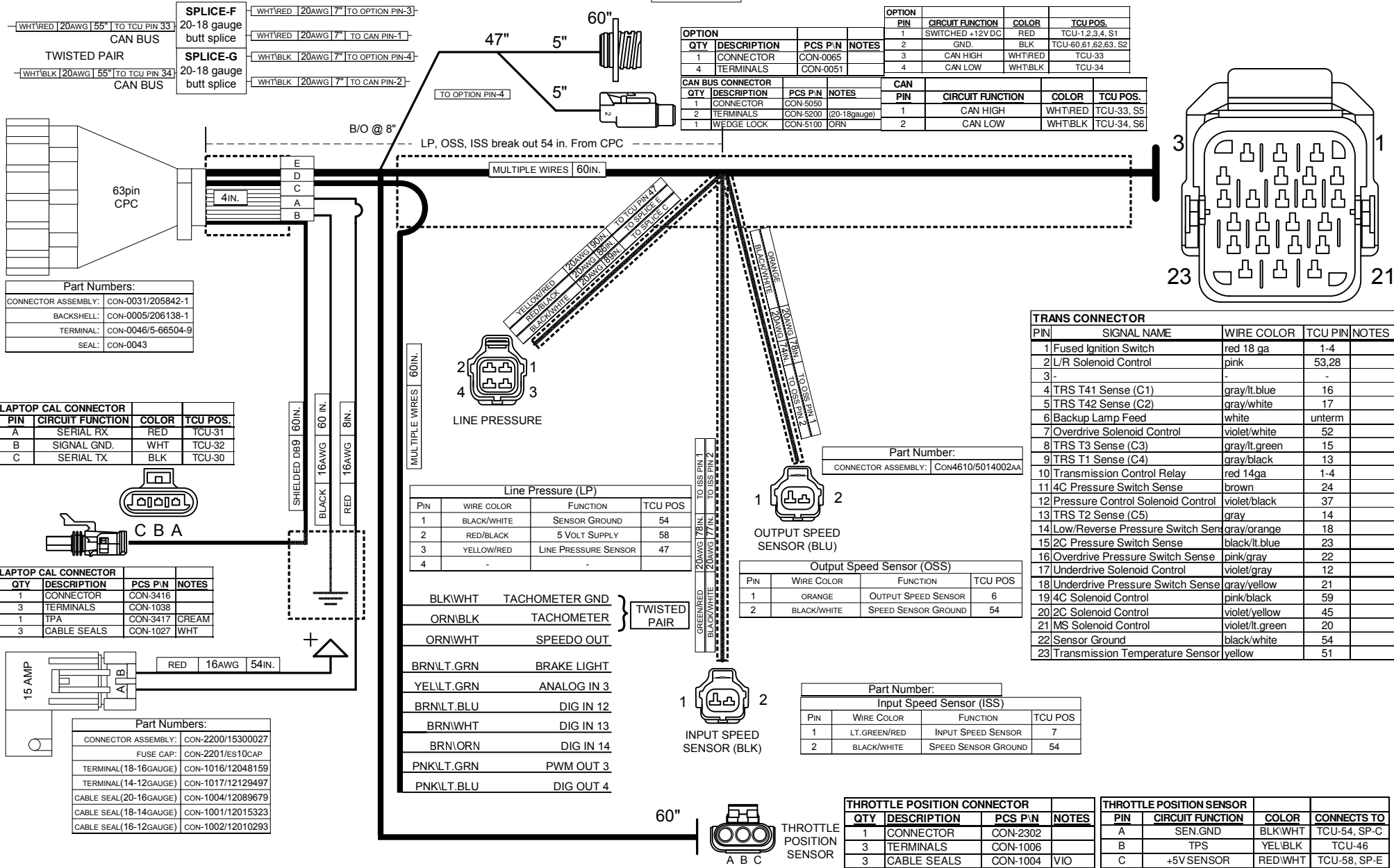
BLK/WHT	TACHOMETER GND
ORN/BLK	TACHOMETER
ORN/WHT	SPEEDO OUT
BRN/LT.GRN	BRAKE LIGHT
YEL/LT.GRN	ANALOG IN 3
BRN/LT.BLU	DIG IN 12
BRN/WHT	DIG IN 13
BRN/ORN	DIG IN 14
PNK/LT.GRN	PWM OUT 3
PNK/LT.BLU	DIG OUT 4

PIN	WIRE COLOR	FUNCTION	TCU POS
1	ORANGE	OUTPUT SPEED SENSOR	6
2	BLACK/WHITE	SPEED SENSOR GROUND	54

PIN	WIRE COLOR	FUNCTION	TCU POS
1	LT.GREEN/RED	INPUT SPEED SENSOR	7
2	BLACK/WHITE	SPEED SENSOR GROUND	54

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

PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
A	SEN.GND	BLK/WHT	TCU-54, SP-C
B	TPS	YEL/BLK	TCU-46
C	+5V SENSOR	RED/WHT	TCU-58, SP-E



Powertrain Control Solutions, LLC.

10511 Old Ridge Road Ashland, VA 23005
 www.ptcs.us (804) 227-3023
 Fax: (804) 227-3005

TITLE:

CHRYSLER 545RFE/45RFE

PART NUMBER: TCM-4123

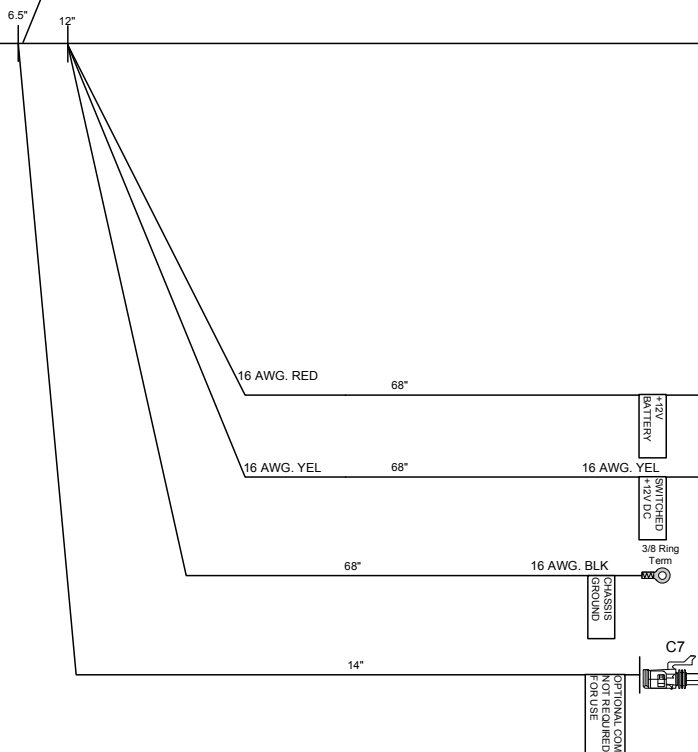
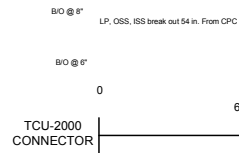
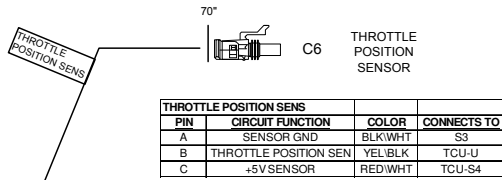
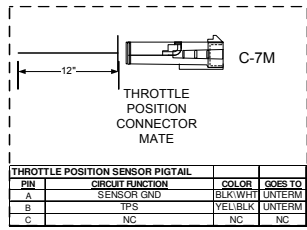
DESCRIPTION:
 545RFE/45RFE TRANSMISSION HARNESS

DRAWN BY: R. Cutright DATE: 6/13/2005 PAGE: 2 OF 2

REV.	DESCRIPTION	DATE	BY
0	45RFE ORIGINAL HARNESS	6/13/2005	RC
1	545RFE ADDED DIRECT PLUG IN HARNESS	3/14/2006	JB
2	Changed Wire Colors to Match Pre-Fab Dwg.	1/7/2008	jt
3	add. change	12/11/2012	FD
4	option pigtail, new com pigtail added	12/12/2012	FD

CPC	Pin Function	Harness Function	45RFE	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	Output speed	orange
7	Speed Input 3	TCC Speed Input	Input Speed	Lt. green/red
8	Speed Input 4	Optional Speed Input	VSS	orange/lt. blue
9	Speed Output	Speedometer Drive Output	Speedometer Drive	orange/white
10	unused	-	-	-
11	unused	-	-	-
12	PWM Out 4/freq2	PWM/Solenoid Driver	UD Solenoid	violet/gray
13	Digital Input 1	Digital Input	TRS 1	gray/black
14	Digital Input 2	Digital Input	TRS 2	gray
15	Digital Input 3	Digital Input	TRS 3	gray/lt. green
16	Digital Input 4	Digital Input	TRS T41 Sense	gray/lt. blue
17	Digital Input 5	Digital Input	TRS T42 Sense	gray/white
18	Digital Input 6	Digital Input	L/R pressure switch sense	gray/orange
19	Digital Out 5	Digital Driver		pink/white
20	PWM Out 3/freq2	PWM/Solenoid Driver	MS Solenoid	violet/lt. green
21	Digital Input 7	Digital Input	UD Pressure Switch Sense	gray/yellow
22	Digital Input 8	Digital Input	OD Pressure Switch Sense	pink/gray
23	Digital Input 9	Digital Input	2C Pressure Switch Sense	black/lt. blue
24	Digital Input 10	Digital Input	4C Pressure Switch Sense	brown
25	Digital Input 11	Digital Input	Brake Light	brown/lt. green
26	Digital Input 12	Digital Input	Spare Digital 12	brown/lt. blue
27	Digital Out 6	Digital Driver		pink/orange
28	PWM Out 2/freq1	PWM/Solenoid Driver	LR Solenoid	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	can	white/red
34	CAN Low	Communications Cable	can	white/black
35	unused	-	-	-
36	Digital Out 3/PWM 9	Digital Driver	SPARE PWM OUT 3	pink/lt. green
37	PWM Out 1/freq 1	PWM/Solenoid Driver	LP Solenoid	violet/black
38	unused	-	-	-
39	Digital Input 13	Digital Input	Spare Digital 13	brown/white
40	Digital Input 14	Digital Input	Spare Digital 14	brown/orange
41	Digital Input 15	Digital Input	OD Cancel	brown/yellow
42	Digital Input 16	Digital Input		brown/pink
43	unused	-	-	-
44	Digital Out 4	Digital Driver	SPARE DIG OUT 4	pink/lt. blue
45	PWM Out 6/freq1	PWM/Solenoid Driver	2C Solenoid	violet/yellow
46	Analog Input 1	Analog Input	TPS	yellow/black
47	Analog Input 2	Analog Input	LP Sensor	yellow/red
48	Analog Input 3	Analog Input	MAP/CLT	yellow/lt. green
49	Analog Input 4	Analog Input	Electronic TPS	yellow/lt. blue
50	Analog Input 5/temp	Analog Input	Spare Analog	yellow/white
51	Analog Input 6/temp	Analog Input	TFT+	yellow
52	Pwm Out 5/freq1	PWM/Solenoid Driver	OD Solenoid	violet/white
53	Digital Out 2/PWM 8	Digital Driver	LR/TCC Solenoid	pink/red
54	Sensor/AD Gnd	Sensor or reference Gnd	Sensor Ground	black/white
55	unused	-	-	-
56	unused	-	-	-
57	unused	-	-	-
58	Ref Voltage (+5v)	Sensor/reference Voltage	-	red/white
59	Digital Out 1/PWM 7	Digital Driver	4C Solenoid	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

REV.	DESCRIPTION	DATE	BY
0	Release	01/18/2010	FD



C5 LINE PRESSURE

PIN	CIRCUIT FUNCTION	COLOR	TCU color	CONNECTS TO
1	SENSOR GND	BLK/WHT	BLK/WHT	S3
2	+5V REF	RED/BLK	RED/WHT	S2
3	LINE PRES SEN	NC	GRY/PNK	TCU-m
4	NC	NC		

C4 ISS CONNECTOR

PIN	CIRCUIT FUNCTION	COLOR	COLOR	CONNEC
1	INPUT SPEED SEN	GRN/RED	ORN/GRN	TCU-J
2	SPEED SEN GND	BLK/WHT	BLK/WHT	S2

C3 OSS CONNECTOR

PIN	CIRCUIT FUNCTION	COLOR	COLOR	CONNECTS TO
1	INPUT SPEED SEN	ORN	ORN/RED	TCU-Y
2	SPEED SEN GND	BLK/WHT	BLK/WHT	S2

TRANS CONNECTOR

PIN	SIGNAL NAME	WIRE COLOR	TCU PIN/NOTES
1	Fused Ignition Switch	red 18 ga	1-4
2	L/R Solenoid Control	pink	53,28
3	NC	-	-
4	TRS T41 Sense (C1)	gray/lt.blue	16
5	TRS T42 Sense (C2)	gray/white	17
6	Backup Lamp Feed	white	unterm
7	Overdrive Solenoid Control	violet/white	52
8	TRS T3 Sense (C3)	gray/lt.green	15
9	TRS T1 Sense (C4)	gray/black	13
10	Transmission Control Relay	red 14ga	1-4
11	4C Pressure Switch Sense	brown	24
12	Pressure Control Solenoid Control	violet/black	37
13	TRS T2 Sense (C5)	gray	14
14	Low/Reverse Pressure Switch Sense	gray/orange	18
15	2C Pressure Switch Sense	black/lt.blue	23
16	Overdrive Pressure Switch Sense	pink/gray	22
17	Underdrive Solenoid Control	violet/gray	12
18	Underdrive Pressure Switch Sense	gray/yellow	21
19	4C Solenoid Control	pink/black	59
20	2C Solenoid Control	violet/yellow	45
21	MS Solenoid Control	violet/lt.green	20
22	Sensor Ground	black/white	54
23	Transmission Temperature Sensor	yellow	51

TRANSMISSION CONNECTOR

PIN	CIRCUIT FUNCTION	CONNECTOR COLOR	COLOR CURRENT	2200 COLOR	2200 connection
1	+12V IGNITION	RED	RED	RED	S1
2	L/R SEL CONTROL	PINK	VIO/RED	VIO/RED	J & K
3	NC	NC			NC
4	TRS T41 SENSE (C1)	GRY/LT.BLU	GRY/LT.BLU	GRY/LT.BLU	K
5	TRS T42 SENSE (C2)	GRY/WHT	GRY/WHT	GRY/WHT	T
6	BACKUP LAMP	WHT	WHT	WHT	UNTERM
7	OVERDRIVE SOL	VIO/WHT	VIO/WHT	VIO/WHT	G
8	TRS T3 SENSE (C3)	GRY/LT.GRN	GRY/LT.GRN	GRY/LT.GRN	g
9	TRS T1 SENSE (C4)	GRY/BLK	GRY/BLK	GRY/BLK	X
10	TRANS CTL RELAY	RED 14 awg	RED	RED	S1
11	4C PRES SW SENSE	BROWN	NC	NC	NC
12	PRES CTL SOL CONT	VIO/BLK	VIO/BLK	VIO/BLK	L
13	TRS T2 SENSE (T5)	GRAY	GRY/RED	GRY/RED	h
14	LOW/REV PRES SW SENSE	GRY/ORN	NC	NC	NC
15	2C PRES SW SENSE	BLK/BLU	NC	NC	NC
16	OD PRES SW SENSE	PNK/GRY	NC	NC	NC
17	UNDERDRIVE SOL CONT	VIO/GRY	VIO/BLU	VIO/BLU	N
18	UNDERDRIVE PRES SW SENSE	GRY/YEL	GRY/YEL	GRY/YEL	NC
19	4C SOL CONT	PNK/BLK	PNK/BLU	PNK/BLU	H
20	2C SOL CONT	YEL	VIO/YEL	VIO/YEL	K
21	MS SOL CONT	VIO/GRN	VIO/LT.GRN	VIO/LT.GRN	M
22	SENSOR GND	BLK/WHT	BLK/WHT	BLK/WHT	S3
23	TRANSD TEMP	YEL	YEL/GRN	YEL/GRN	C