TOYOTA

ELECTRICAL WIRING DIAGRAM

CELICA Supra

1985 MODEL

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1985 TOYOTA CELICA SUPRA ELECTRICAL WIRING DIAGRAM

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CHARGING SYSTEM
FOG LIGHTS
HEADLIGHTS
LIGHT AUTO TURN OFF SYSTEM
TAILLIGHTS AND ILLUMINATION
TURN SIGNAL AND HAZARD WARNING LIGHTS
INTERIOR LIGHTS
BACK-UP LIGHTS
STOP LIGHTS
REAR WINDOW DEFOGGER
FRONT WIPER AND WASHER
REAR WIPER AND WASHER
HEADLIGHT CLEANER
REMOTE CONTROL MIRRORS WITH HEATER
POWER WINDOWS AND SUN ROOF
DOOR LOCKS
CIGARETTE LIGHTER AND CLOCK

UNLOCK AND SEAT BELT WARNING.

RADIO AND HORNS

AUTOMATIC AIR CONDITIONER

GROUND POINTS

RELAY LOCATIONS

ELECTRICAL WIRING ROUTING

OVER ALL ELECTRICAL WIRING DIAGRAM

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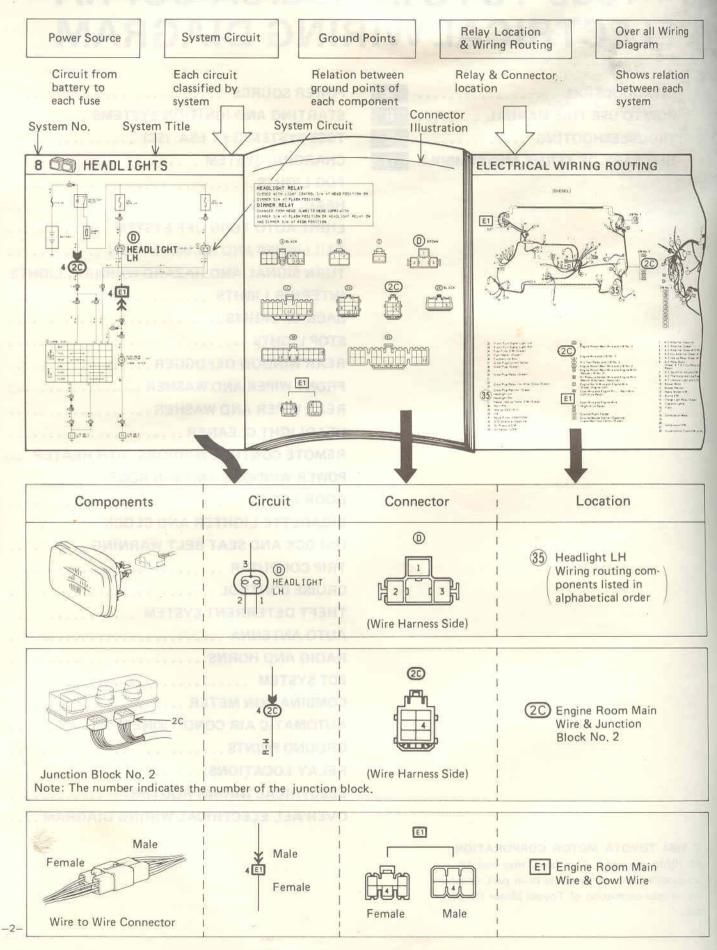
26

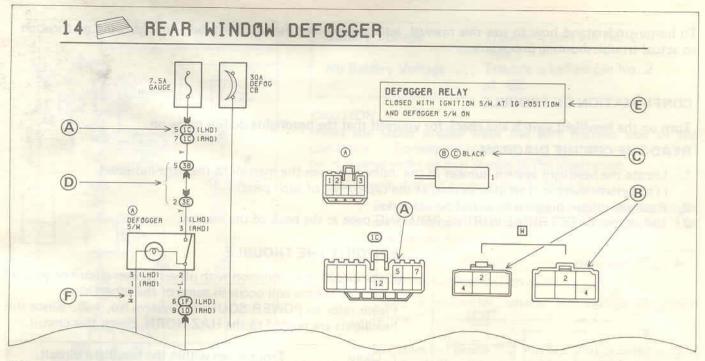
28

29

30

This manual is composed of the following 5 elements.





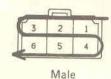
(A) Pin Number

Numbered in order from upper left to lower right

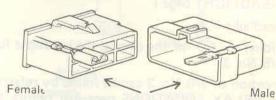
Numbered in oder from upper right to lower left



Female

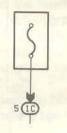


- B Male & female connectors distinguished by shape of their internal pins.
 - All connectors are shown from the open end, and the lock is on top.



Connector Color Connectors not indicated are milky white in color. DIndicates circuit in Junction Block No. 3.





IC indicates that it is inside Junction Block No. 1.

-3-

- E Troubleshooting Hints & Components Operation
- F Wire Color

Wire colors are indicated by an alphabetical code.

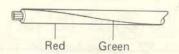
B = Black L = Light Blue R = Red

BR = Brown LG = Light Green V = Violet

G = Green O = Orange W = WhiteGR = Gray P = Pink Y = Yellow

The first letter indicates the basic wire color and the second letter indicates the color of the stripe.

Example: R-G



ABBREVIATIONS

The following abbreviations are used in this manual.

A/C = Air Conditioner J/B = Junction Block S/W = Switch

A/T = Automatic Transmission LH = Left-hand TCCS = Toyota Computer Controlled System

CB = Circuit Breaker M/T = Manual Transmission VSV = Vacuum Switching Valve

ECU = Electronic Controlled Unit O/D = Overdrive W/ = With

FL = Fusible Link RH = Right-hand W/O = Without

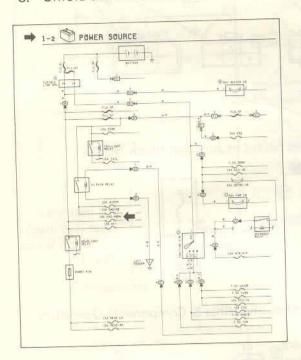
To better understand how to use this manual, let's assume that the headlights will not light, and go through an actual troubleshooting procedure.

CONFIRMATION OF TROUBLE

Turn on the headlight switch and check for yourself that the headlights do not come on.

READ THE CIRCUIT DIAGRAM

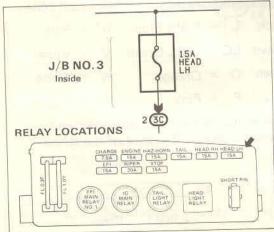
- 1. Locate the headlight system number in the index and open the manual to the page indicated. (The system number is written in bold at the top corner of each page).
- Read the circuit diagram to learn how it works.
- 3. Unfold the ELECTRICAL WIRING ROUTING page at the back of the manual.



PINPOINT THE TROUBLE

If the circuit is in common with others (power circuit or ground point), problems will occur in some of the others also. Please refer to POWER SOURCE (System No, 1-2). Since the headlights are related to the HAZ-HORN, check this circuit.

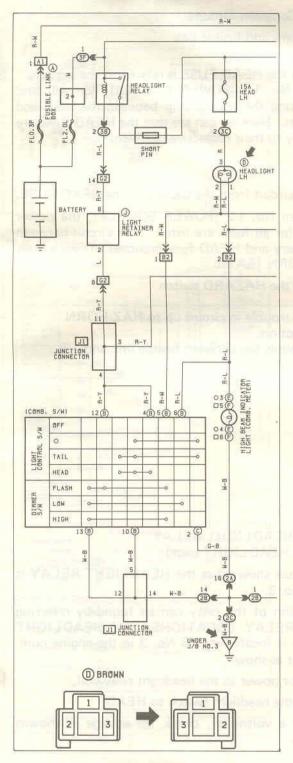
Okay Trouble lies within the headlight circuit. Bad Check circuits in common.



(30)

- Inspection of Headlight Circuit (Return to HEADLIGHT page.)
 - (a) Check Headlight Fuse
 - ① According to ③ of the circuit, the headlight fuse is in J/B No. 3.
 - 2 The location of J/B No. 3 can be found by referring to the RELAY LOCATIONS page just before the ELECTRICAL WIRING ROUTING page.
 - 3 Check if either fuse is blown.
 - (b) Check if there is power to pin No. 2 of @ .
 - 1) Turn the light control switch to HEAD.
 - 2 Using a woltmeter, check for voltage as shown below.

Negative (-) Probe Good ground point or negative battery terminal. Positive (+) Probe Pin No. 2 of 30





Battery Voltage Trouble is past pin No. 2 of No Battery Voltage . . . Trouble is before pin No. 2 of of ③ .

CAUTION:

Insert the tester probes from the wire harness side of the connector. Consequently, note that the pin numbers will be in reverse order of that shown in the illustration.

- (c) Check if there is power to the headlights.
 - 1) From the circuit we can see that (1) is the headlight connector and that there is power from pin No. 3 to 2 when the headlights are at high beam.
 - 2 Turn the light control switch to HEAD.
 - 3 Place the dimmer switch at HI.
 - 4 Using a voltmeter, check for voltage as shown below.

Negative (-) probe . . . Pin No. 2 of connector ① . Positive (+) probe Pin No. 3 of connector ① .

Voltage Trouble is in the headlight.

No Voltage . . . Probable defective ground past pin No.2 so make contact with negative lead to a good ground point or battery negative terminal and check for voltage.

Voltage Trouble is past pin No. 2 of

O

No Voltage Trouble is before pin No. 3 of [®]

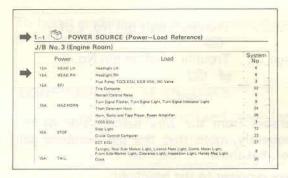
CAUTION:

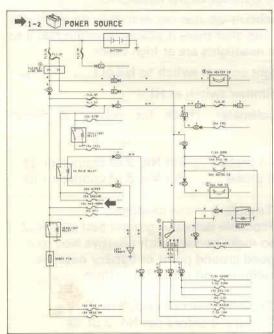
Do not check for continuity while voltage is applied or it may result in damage to the tester.

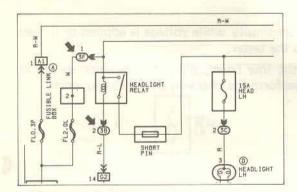
(d) To check the low beam, place the dimmer switch at LOW and perform the check in the same sequence.

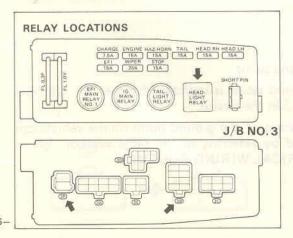
(e) Check ground point

- 1 The ground point is indicated by the ▼ UNDER J/B No. 3 in the circuit.
- 2 The location of the ground point on the vehicle can be found by referring to the same symbol 😲 in ELECTRICAL WIRING ROUTING.









- 2. Inspection of Common Circuits
 - (a) Check battery and fusible link
 - (b) Check related systems Check how the HEAD FUSE is related to the system. In system No. 1-1 (POWER SOURCE), you will find a chart listing the relationship between the fuses and components. Here we can see that the HEAD fuses are related only to their respective headlights.
 - (c) Check the circuit from the battery to the HEAD FUSE.
 - In system No. 1-2 (POWER SOURCE), tha power circuits for all fuses are listed. The circuit between the battery and HEAD fuse branches off with fuses HAZ-HORN 15A etc.
 - 2 Turn on the HAZARD switch

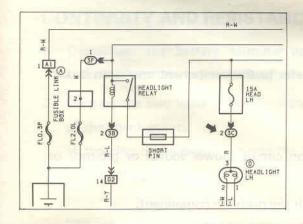
Okay No trouble in circuit up to HAZ-HORN junction.

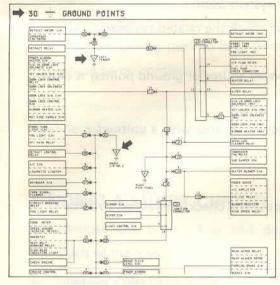
Bad Trouble lies between fusible link and J/B No. 3.

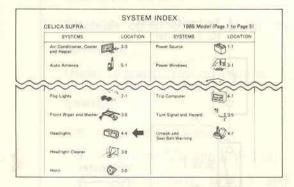
- (d) Check the HEADLIGHT RELAY (Return to HEADLIGHT page)
 - 1 The circuit shows that the HEADLIGHT RELAY is in J/B No. 3.
 - 2 Installation of the relay can be found by referring to the RELAY LOCATIONS. The HEADLIGHT RELAY is located in J/B No. 3 in the engine compartment as shown.
 - 3 Check for power to the headlight relay coil.
 - 1) Turn the headlight switch to HEAD.
 - 2 Using a voltmeter, check for voltage as shown below.

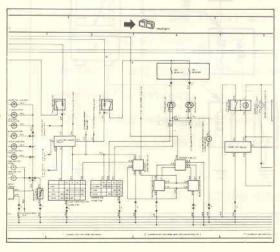
Nagative (-) Probe Pin No. 2 of ③B . Positive (+) Probe Pin No. 1 of ③F .

Confirm that there is voltage









4 Next, check if the headlight relay points are closed and there is power to the pin No. 2 of ③ . See step 1-(b)

If no voltage, trouble lies in the headlight relay.

(e) Check which systems (components) have the same ground point.

The ground points are listed in system No. 30 (GROUND POINTS). As shown, GROUND POINT is used for other components besides the HEAD-LIGHT SYSTEM, and it also connected to GROUND POINT

- (f) Check how the HEADLIGHT SYSTEM is connected to the other systems.
 - 1 From the EWD SYSTEM INDEX (facing the first EWD), we can find the location of the headlight system within the ELECTRICAL WIRING DIAGRAM at the back of the book (Page 4 of 5, grid 3 and 4).
 - 2 By referring to the ELECTRICAL WIRING DIAGRAM, we can see that the HEADLIGHT SYSTEM is related to the TAIL and ILLUMINA-TION SYSTEM.

NOTE:

The relationship between system circuits is not shown so always confirm with the overall wiring diagram.

(g) Re-check After repair, check that the circuit functions normally. Always follow the steps described above to narrow down the possible range of the trouble.

TROUBLESHOOTING PROCEDURE

- 1. Determine what is wrong with the system.
- 2. First read the diagram so you understand the system. Refer to the component operation boxed within the system circuit.
- 3. Locate the cause of the problem.
 - Determine whether the problem is with the common circuit (power source or ground) or individual circuit.

Check other loads or switches which are in parallel with the problem component.

If they are normal, the problem lies within the particular system itself.

Refer to the POWER SOURCE or GROUND POINTS and check the related systems.

(NOTE: Each component is grounded at 2 or 3 points.)

If the related systems are normal, the common circuit (power source or ground points) is okay. The problem lies within the individual system.

- b. Locate the exact point of the problem by narrowing down the area with a voltmeter or test lamp.
- 4. Repair and re-check the circuit.

If any wiring was disconnected for troubleshooting, reconnect it and check the related circuits.

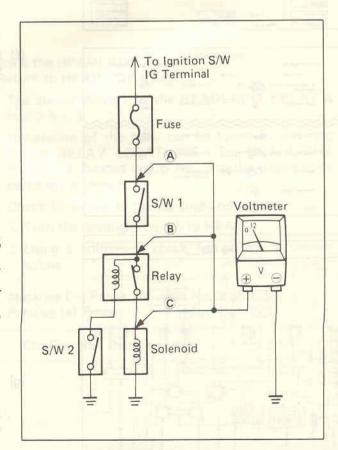
VOLTAGE CHECK

 Establish conditions in which voltage is present at the check point.

(Refer to component operations.)

Example:

- A Ignition S/W on
- (B) Ignition S/W and S/W 1 on
- © Ignition S/W, S/W 1 and Relay on (S/W 2 off)
- Using a voltmeter, connect the negative lead to a good ground point or negative battery terminal and the positive lead to the connector or component terminal. This check can be done with a test lamp instead of a voltmeter.



CONTINUITY AND RESISTANCE CHECK

- Disconnect the battery terminal or wire so there is no voltage between the check points.
- Contact the two leads of an ohmmeter to each of the check points.

If the circuit has diodes, reverse the two leads and check again.

When contacting the negative lead to the diode positive side and the positive lead to the negative side, there should be continuity.

When contacting the two leads in reverse, there should be no continuity.

FINDING A SHORT CIRCUIT

- Remove the blown fuse and disconnect all loads of the fuse.
- 2. Connect a test lamp in place of the fuse.
- Establish conditions in which the test lamp comes on.

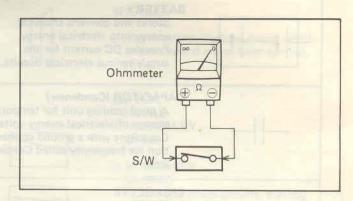
(Refer to component operations.)

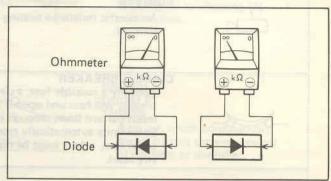
Example:

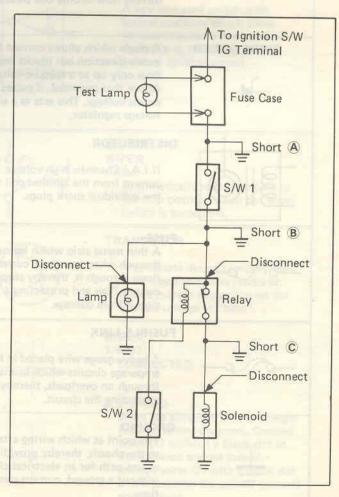
- A Ignition S/W on
- B Ignition S/W and S/W 1 on
- © Ignition S/W, S/W 1 and Relay on (Connect the Relay) and S/W 2 off (or Disconnect S/W 2)
- 4. Disconnect and reconnect the connectors while watching the test lamp.

The short lies between the connector where the test lamp stays lit and the connector where the lamp goes out.

5. Find the exact location of the short by lightly shaking the problem wire along the body.

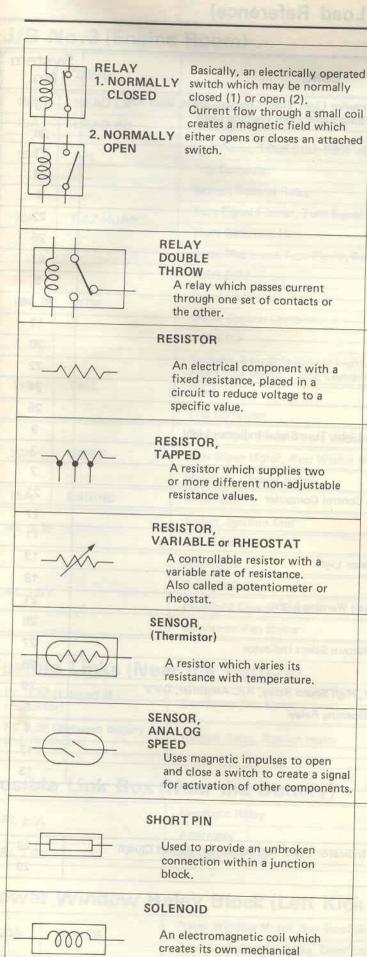






D GLOSSARY OF TERMS AND SYMBOLS

	BATTERY Stores and converts chemical energy into electrical energy. Provides DC current for the auto's various electrical circuits.	HEADLIGHTS, 1. SINGLE FILAMENT Current flow causes a headlight filament to heat up and emit light. A headlight may have either a single (1) filament or a double (2) filament.
	CAPACITOR (Condenser) A small holding unit for temporary storage of electrical energy voltage. Capacitors with a ground connection are frequently called Condensers.	2. DOUBLE FILAMENT
	CIGARETTE LIGHTER An electric resistance heating element.	An electric device which sounds a loud audible signal.
-86	CIRCUIT BREAKER Basically a reusable fuse, a circuit breaker will heat and open if too much current flows through it. Some units automatically reset when cool, others must be manually reset.	IGNITION COIL Converts low-voltage DC current into high-voltage ignition current for firing the spark plugs.
-	DIODE A semiconductor which allows current flow in only one direction.	FINDING A SHORT CIRCUIT.
DIODE, ZENER	A diode which allows current flow in one direction but blocks reverse flow only up to a specific voltage. Above that potential, if passes the excess voltage. This acts as a simple voltage regulator.	Current flow through a filament causes a light to heat up and emit light.
310	(I.I.A.) Channels high-voltage current from the ignition coil to the individual spark plugs.	LED (LIGHT EMITTING DIODE) Upon current flow, these diodes emit light without producing the heat of a comparable light. Used in instrument displays.
W MUCH TO THE REAL PROPERTY OF THE PERTY OF	FUSE A thin metal strip which burns through when too much current flows through it, thereby stopping current flow and protecting a circuit from damage.	METER, ANALOG Current flow activates a magnetic coil which causes a needle to move, thereby providing a relative display against a background calibration.
-00-	FUSIBLE LINK A heavy-gauge wire placed in high amperage circuits which burns through on overloads, thereby protecting the circuit.	METER, DIGITAL Current flow activates one or many LED's, LCD's, or flourescent dis- plays, which provide a relative or digital display.
	GROUND The point at which wiring attaches to the chassis, thereby providing a return path for an electrical circuit; without a ground, current cannot flow.	MOTOR A power unit which converts electrical energy into mechanical energy or rotary motion.



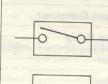
movement or force upon current

flow.



SPEAKER

An electromechanical device which creates sound waves from current flow.

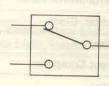


SWITCH, MANUAL 1. NORMALLY

OPEN 2 NORMALLY

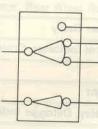


Opens and closes circuits, thereby stopping (1) or allowing (2) current flow.



SWITCH, DOUBLE THROW

A switch which continuously passes current through one set of contacts or the other.



SWITCH, IGNITION

> A key operated switch with several positions which allow various circuits to become operational, including the primary ignition circuit.



SWITCH, WIPER PARK

> Automatically returns wipers to the stop position when the wiper switch is turned off.



TRANSISTOR

A solidstate device typically used as an electronic relay; stops or passes current depending on the applied voltage at "base".



WIRES, 1. NOT CONNECTED

2. SPLICED

Wires are always drawn as straight lines on wiring diagrams. Crossed wires (1) without a black dot at the junction are not joined; crossed wires (2) with a black dot at the junction are spliced (joined) connections.





POWER SOURCE (Power-Load Reference)

J/B No.2 (Left Kick Panel)

Power		Load			
TO.	Hite met www.hogi	Vanity Mirror Light, Map Light, Interior Light, Door Courtesy Light, Door Key Cylinder Light, Back Door Light, Stop Light, Door Warning Light	10		
7.5A	DOME	Clock Luda III III Den bar den de Maria II I I I I I I I I I I I I I I I I I	20		
		Seat Belt Warning Relay	21		
	Y.A.	Theft Deterrent Computer	24		
		Light Retainer Relay	7		
15A	ECU-B	Trip Computer	22		
Vale	ming controlled to the control in	Antenna Motor	25		
	THE SUSPENSION OF THE	ECT ECU	27		
20A	FOG	Fog Light	5		
7.5A	RADIO	Radio and Tape Player	25, 26		
		Remote Control Mirror Motor	17		
		Cigarette Lighter, Clock	20		
15A	CIG	Trip Computer	22		
		Theft Deterrent Computer	24		
Station with re-	Stellar Arts Life	Antenna Motor	25		
7.5A	TURN	Turn Signal Flasher, Turn Signal Light, Turn Signal Indicator Light			
		TCCS ECU ARRENT ARRENT	3		
15A	ECU-IG	Light Retainer Relay	7		
ISA		Cruise Control Indicator, Cruise Control Computer	23		
	THE RESERVE AND ADDRESS OF THE PARTY AND ADDRE	ECT ECU	27		
	suitalle neltiner	Back-up Light	11		
		Defogger Relay, Defogger Indicator Light	13		
	GAUGE	Power Main Relay	18		
7 5 4		Seat Belt Warning Relay, Seat Belt Warning Light	21		
7.5A		Antenna Motor	25		
		ECT ECU, O/D Off Indicator, Pattern Select Indicator	27		
			28		
	Tig better	Heater Relay, Water Valve VSV, High Speed Relay, A/C Amplifier, DVV	29		
	IGN	EEI Main Belay No. 2 Circuit Opening Belay	3		
7.5A	IGN	Charge Warning Light	4		
10A	MIR-HTR	Mirror Heater	17		
30A	DEFOG CB	Rear Window Defogger	13		

A/C Relay Block (Right Kick Panel)

10A A/C		In-car Sensor Fan Motor, A/C Indicator Light, A/C Amplifier, Magnet Clutch				
20A	HEATER CB	Blower Motor	29			

J/B No.3 (Engine Room)

Power		Load	System No.	
15A	HEAD LH	Headlight LH	6	
15A	HEAD RH	Headlight RH		
15A	EFI	Fuel Pump, TCCS ECU, EGR VSV, ISC Valve	3	
IJA	Er.	Trip Computer	22	
		Retract Control Relay	6	
15A	HAZ-HORN	Turn Signal Flasher, Turn Signal Light, Turn Signal Indicator Light	9	
IJA	HAZ-HORN	Theft Deterrent Horn	24	
		Horn, Radio and Tape Player, Power Amplifier	26	
		TCCS ECU	3	
15A	CTOR	Stop Light	12	
IDA	STOP	Cruise Control Computer	23	
		ECT ECU	27	
		Taillight, Rear Side Marker Light, Licence Plate Light, Comb. Meter Light, Front Side Marker Light, Clearance Light, Inspection Light, Handy Map Light	8	
15A TAIL	TAIL	Clock	20	
		Trip Computer	22	
	1 000 X	Front Wiper Motor, Front Washer Motor, Front Wiper Relay	14	
20A	WIPER	Rear Wiper Motor, Rear Washer Motor, Rear Wiper Relay	15	
		Headlight Cleaner Relay	16	
15A	ENGINE	Alternator	4	
FL 0.3P		Igniter, Ignition Coil	2	
		EFI Resistor	3	
		Alternator	4	
FL 10V		Taillight Relay	7, 8, 24	
FL 1.0Y		Headlight Cleaner Motor	16	
		Condenser Fan Motor	29	

Fusible Links (Near the Battery)

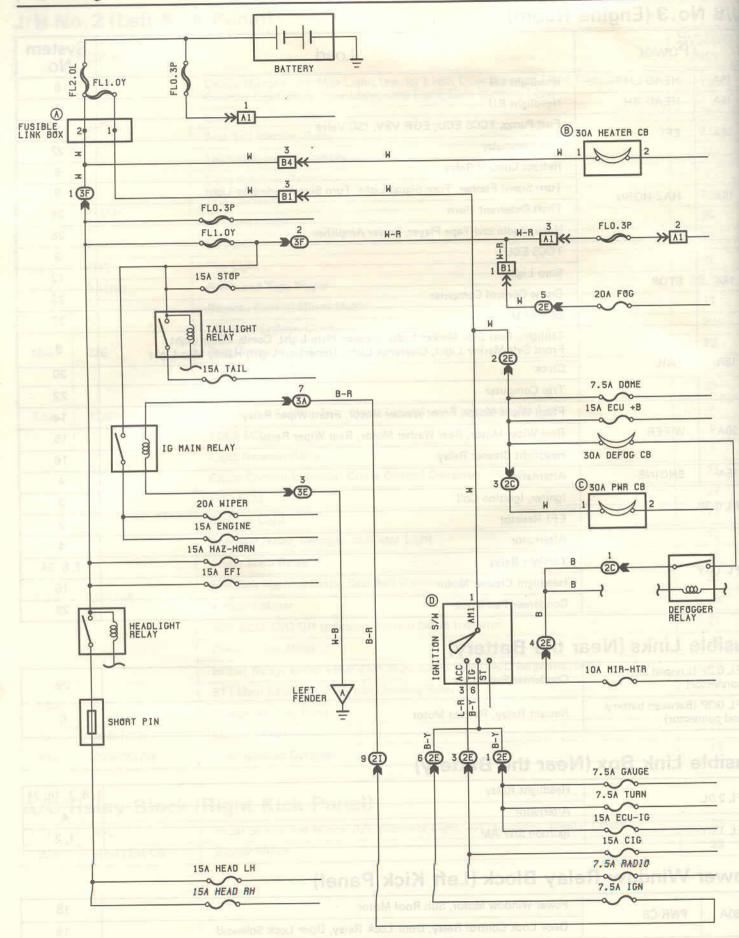
FL 0.3P (Looped at connector)	Condenser Fan Motor	8	29
FL 0.3P (Between battery and connector)	Retract Relay, Retract Motor	nea rither	6

Fusible Link Box (Near the Battery)

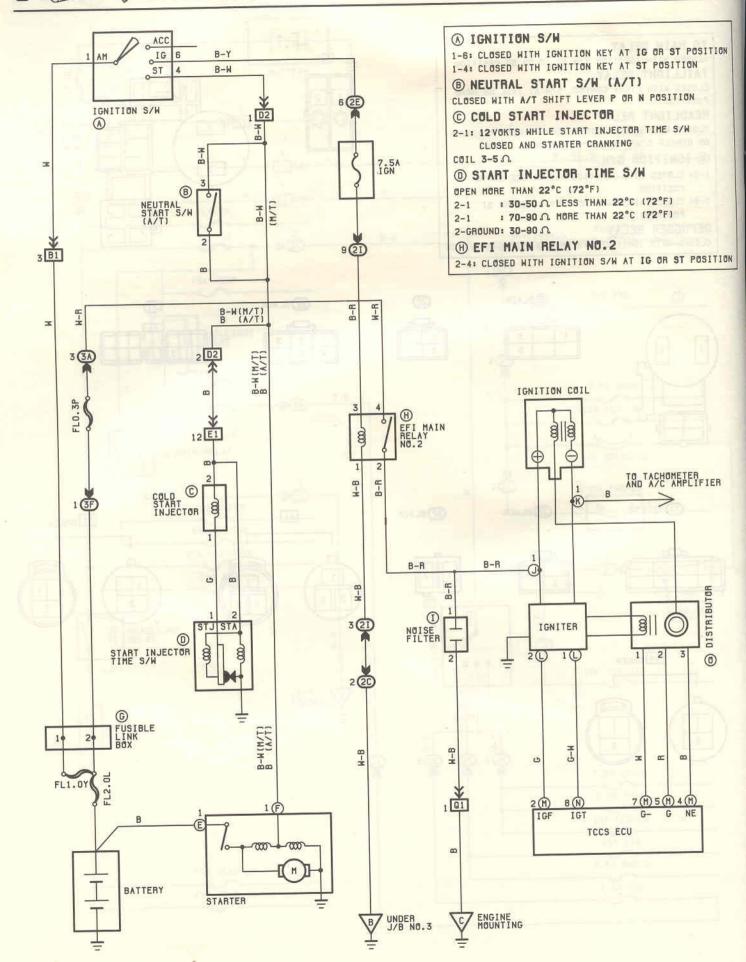
FL 2.0L	Headlight Relay	1, 6, 7, 16, 24
1 - 2.02	Alternator	4
FL 1.0Y	Ignition S/W AM	1, 2

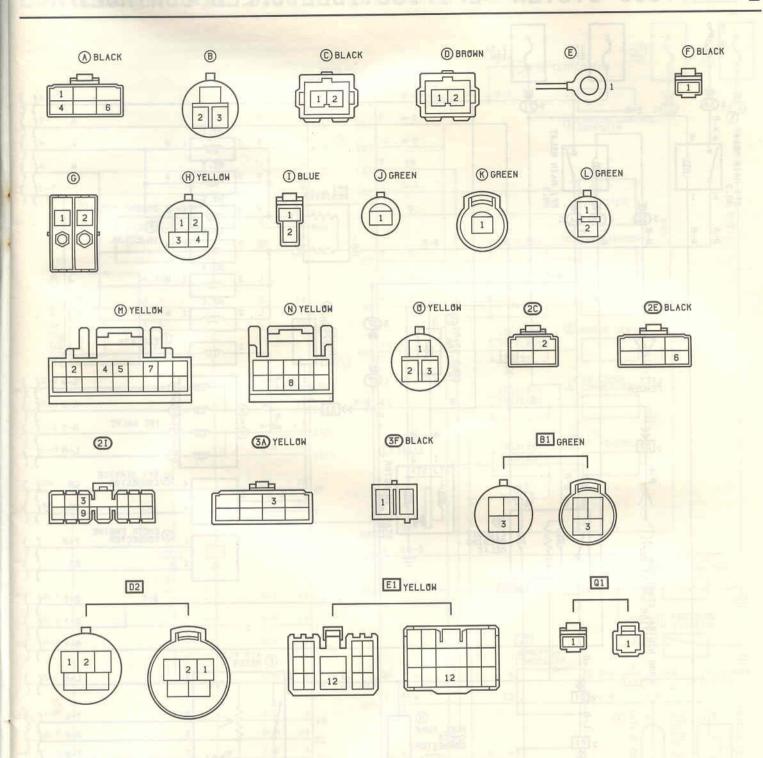
Power Window Relay Block (Left Kick Panel)

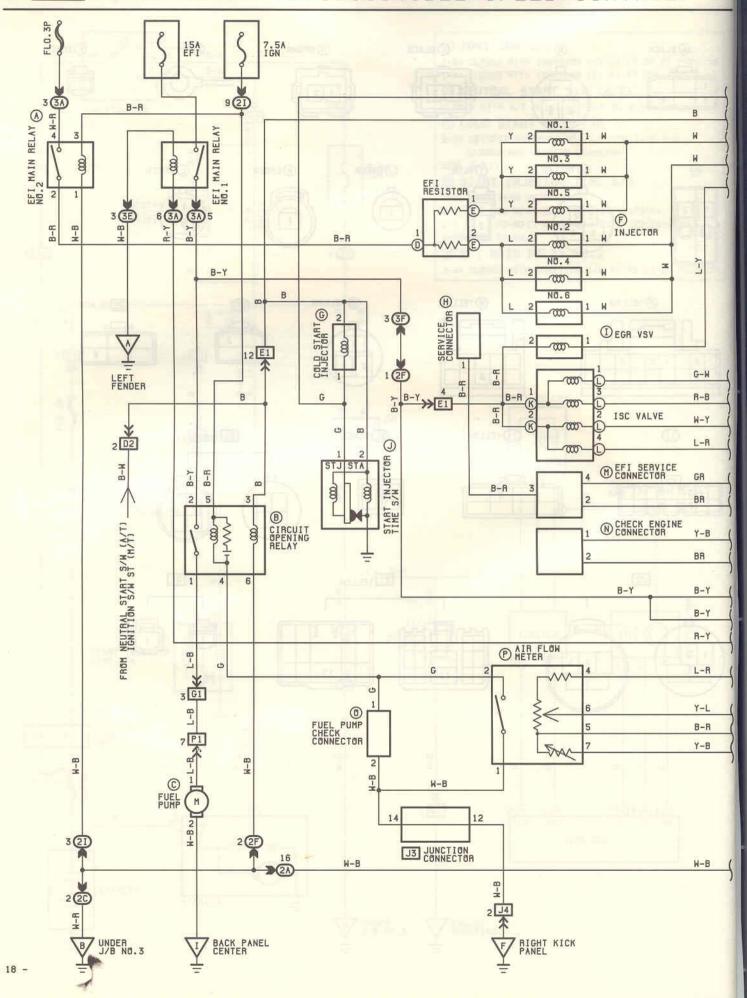
30A	PWR CB	Power Window Motor, Sun Roof Motor	18
30A		Door Lock Control Relay, Door Lock Relay, Door Lock Solenoid	19

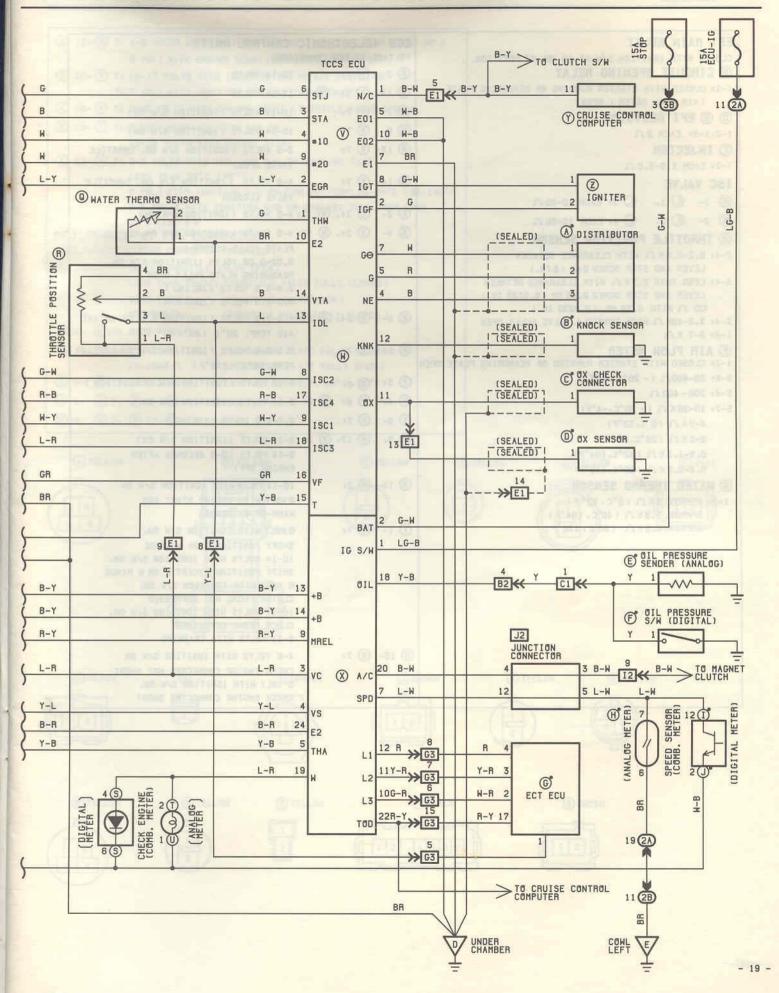


IG MAIN RELAY (1) (B) CLOSED WITH IGNITION S/W AT IG OR ST POSITION TAILLIGHT RELAY CLOSED WITH LIGHT CONTROL S/W AT TAIL OR HEAD POSITION HEADLIGHT RELAY 1 CLOSED WITH LIGHT CONTROL S/W AT HEAD POSITION OR DIMMER S/W AT FLASH POSITION 1 IGNITION S/W 2 1-3: CLOSED WITH IGNITION KEY AT ACC OR IG POSITION 1-6: CLOSED WITH IGNITION KEY AT IG OR ST POSITION DEFOGGER RELAY CLOSED WITH IGNITION S/W ON AND DEFOGGER S/W ON 0 (B) BLACK 20 (2E) BLACK (21) 2 3 5 6 3A YELLOW (3E) BLACK 3F BLACK A1 B1 GREEN 3 B4 GREEN



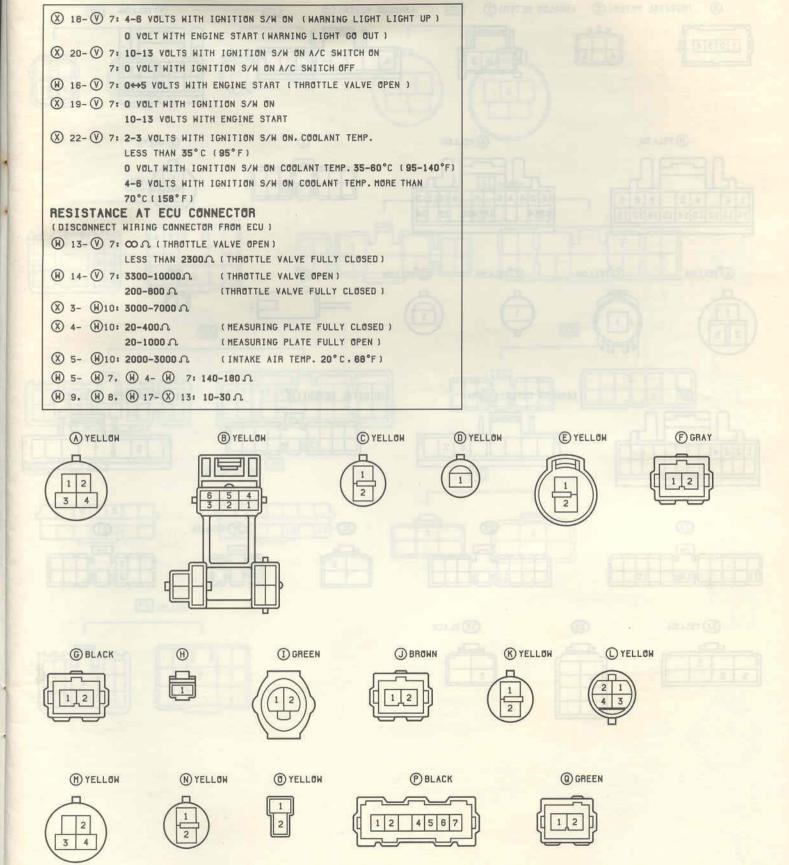




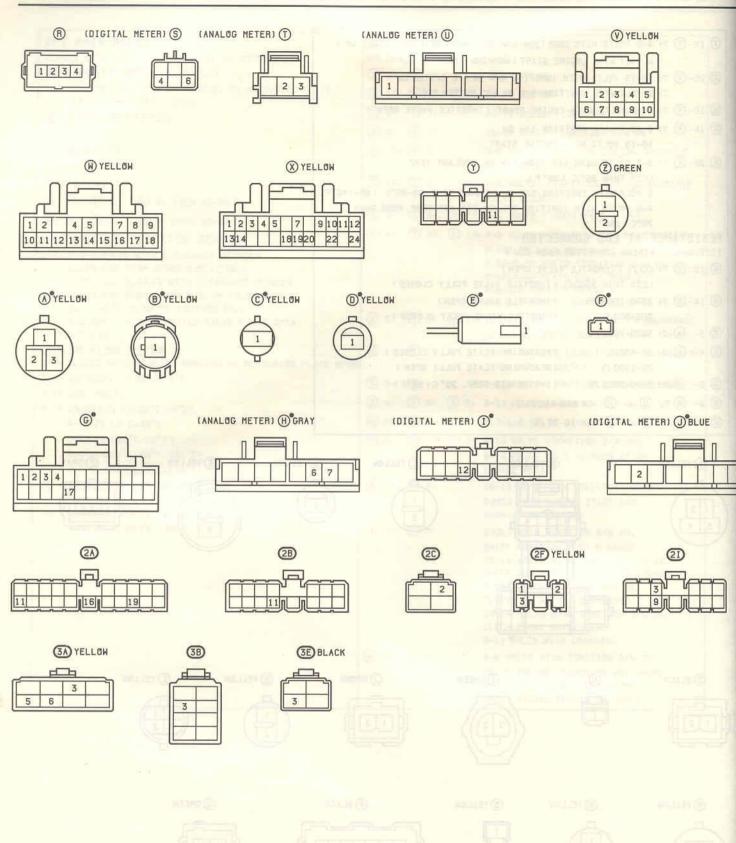


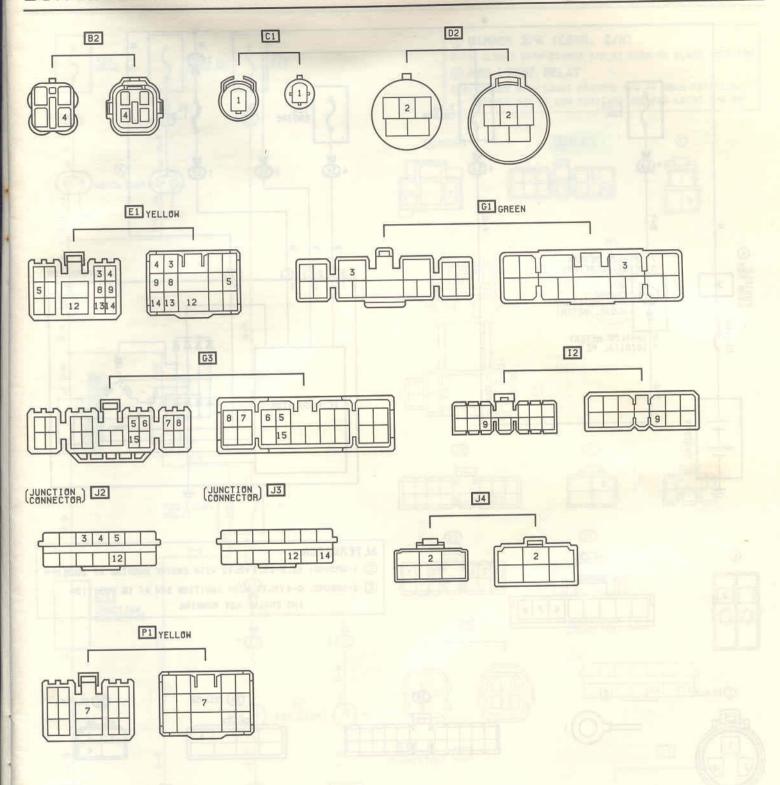
3 TOOS TOOS SYSTEM < EFI, ISC(IDLE SPEED CONTROL)

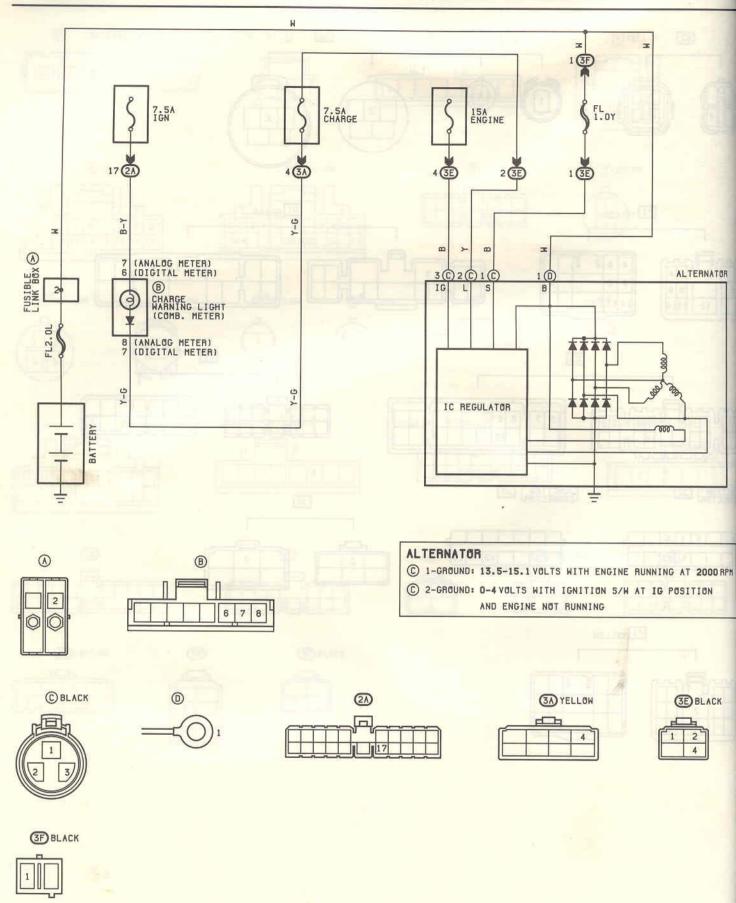
EFI MAIN RELAY							CONTROL UNIT)
CLOSED WITH IGNITION S/W AT IG OR ST POSITION (B) CIRCUIT OPENING RELAY	W. 1.000 W. 1.000	TAN-	- railbar				10-14 VOLTS
1-2: CLOSED WITH STARTER RUNNING OR MEASURING PLATE			250				10-14 VOLTS
(AIR FLOW METER) OPEN	100				•		
(D) (E) EFI RESISTOR		1-	-				10-14 VOLTS (IGNITION S/W ON)
1-2.1-3: EACH 2.Ω	1000	9-	357.0				10-14 VOLTS (IGNITION S/W ON)
(F) INJECTOR	W	13-	0	7:			3-5 VOLTS (IGNITION S/W ON, THROTTLE
1-2: EACH 1.5-3.0 ∩			_				VALVE OPEN)
ISC VALVE	(M)	14-	W	7:			4-8 YOLTS (IGNITION S/W ON, THROTTLE VALVE CLOSED)
® 1- □ 1. □ 3: EACH 10-30 Ω		-4	0		0		A STATE OF THE STA
(K) 2- (L) 2. (L) 4: EACH 10-30 Ω			100		-		: 4-6 VOLTS (IGNITION S/W ON)
M THROTTLE POSITION SENSOR	(X)	4-	(X)	24.	(M)	10	4-5 VOLTS (IGNITION S/W ON MEASURING
2-4: 0.2-0.8K ∩ WITH CLEARANCE BETWEEN							PLATE FULLY CLOSED) 0.02-0.08 VOLTS (IGNITION S/W ON.
LEVER AND STOP SCREW OMM (OIN.)	22.						MEASURING PLATE FULLY OPEN)
3-4: LESS THAN 2.3KA WITH CLEARANCE BETWEEN							2.0-4.0 VOLTS (IDLING)
LEVER AND STOP SCREW 0.35 MM (0.0138 IN.)							0.3-1.0 VOLTS (3000 RPM)
∞ . N HITH 0.59 MM (0.0232 IN.)	(X)	5-	(X)	24	(W)	10	: 1.0-2.0 VOLTS (IGNITION S/W ON, INTAKE
2-4: 3.3-10K A WITH THROTTLE VALVE FULLY OPEN		The state of	_	20000		Дене	AIR TEMP. 20°C (68°F)
1-4: 3-7 K \(\Omega\)	(1)	1-	0	7:	V		0.1-0.5 VOLTS (IGNITION S/W ON.COOLAN
P AIR FLOW METER 1-2: CLOSED WITH STARTER RUNNING OR MEASURING PLATE OPEN	_	1-	0				TEMP. 80°C (176°F)
5-6: 20-400\((-20°C,-4°F)		3-	(1)	7.			6-12 VOLTS (IGNITION S/W ST POSITION)
5-4: 200 - 400 A			_			7.	9-14 VOLTS (IGNITION S/W ON)
5-7: 10-20 K ∩ (- 20°C4°F)			100		0		
4-7KA (0 C.32°F)		8-	_		_		0.7-1.0 VOLTS (IDLING)
2-3KA (20°C.68°F)	W	9.	W	17	- (V)	7:	9-14 VOLTS (IGNITION S/W ON)
0.9-1.3KΩ (40°C,104°F)							9-14 VOLTS (2-3 SECONDS AFTER
0.4-0.7K \(\Omega\) (60°C,140°F)			_				ENGINE OFF)
@ WATER THERMO SENSOR	(X)	13-	W	2:			10-13 VOLTS WITH IGNITION S/W ON
1-2: APPROX. 6K \(\O^C\). 32° F)							D VOLT WITH ENGINE START AND WARM-UP OX SENSOR
APPROX. 1.5K ∩ (40°C . 104°F)	0		0				
APPROX. 0.5 K \(\Omega \) (80°C , 176°F)	W	1-	(V)	7:			O VOLT WITH IGNITION S/W ON. SHIFT POSITION P OR N RANGE
							10-14 VOLTS WITH IGNITION S/W ON.
	١.						SHIFT POSITION EXCEPT P OR N RANGE
	31.1						O VOLT WITH IGNITION S/W ON.
	l -						CLUTCH PEDAL NOT DEPRESSED
	1						10-14 VOLTS WITH IGNITION S/W ON.
	1						CLUCH PEDAL DEPRESSED
							9-11 VOLTS WITH CRANKING
	M	15-	(V)) 7:			4-6 VOLTS WITH IGNITION S/W ON
	H-I						CHECK ENGINE CONNECTOR NOT SHORT
	-						O VOLT WITH IGNITION S/W ON. CHECK ENGINE CONNECTOR SHORT
			Ш				CHECK ENGINE CONNECTOR SHORT



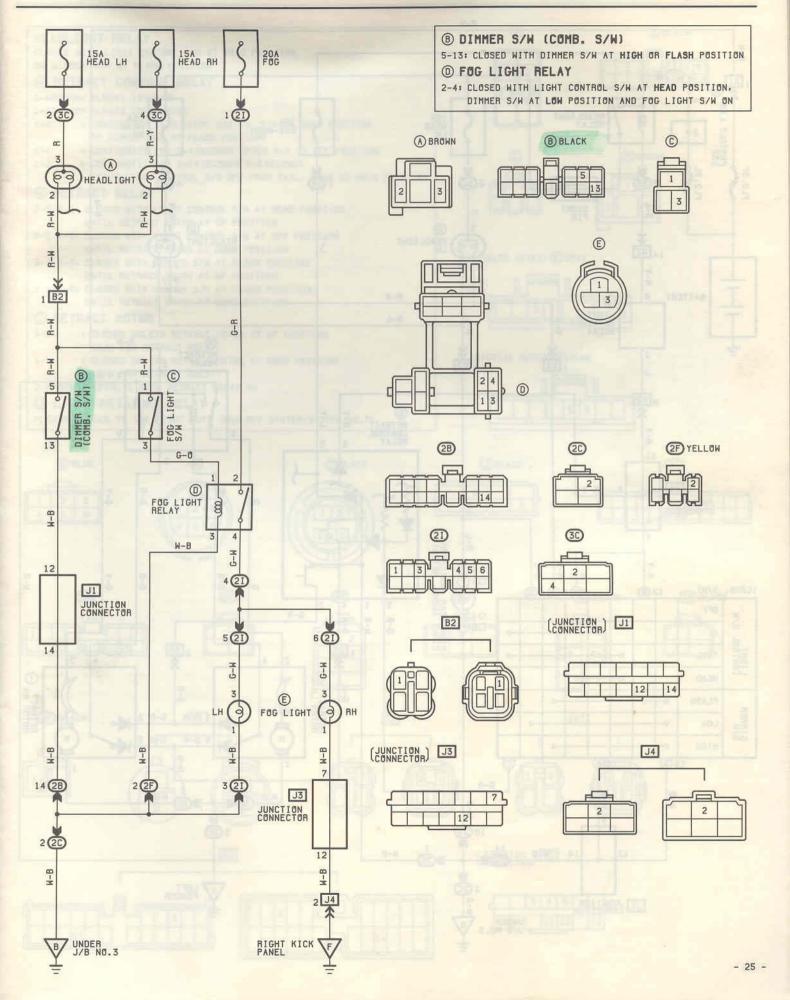
3 TCCS SYSTEM (EFI, ISC (IDLE SPEED CONTROL)

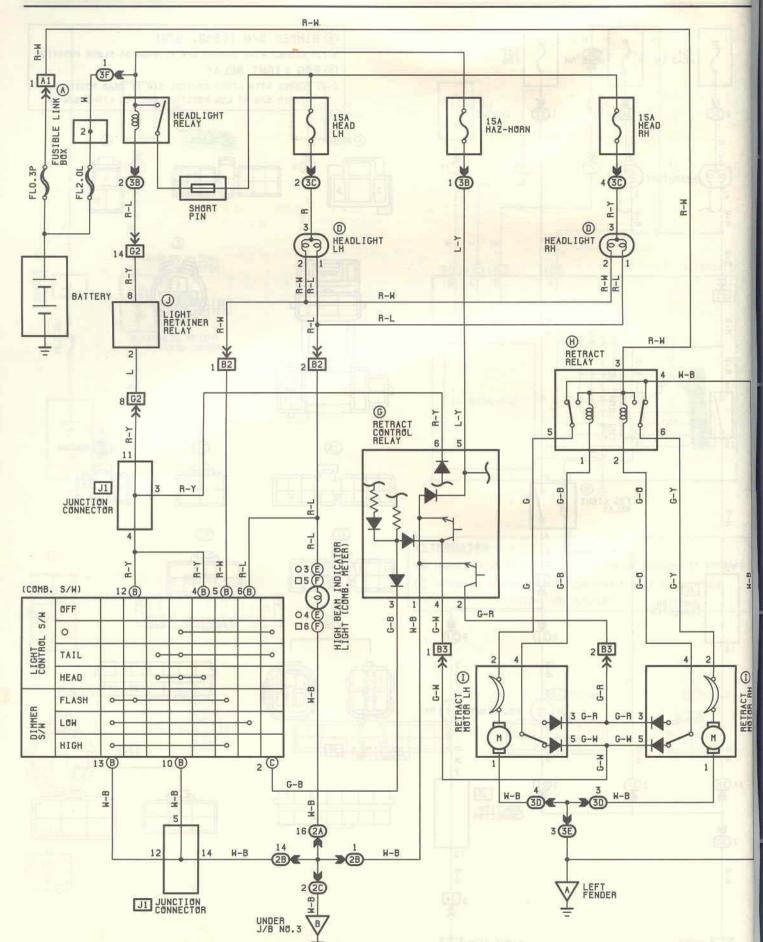






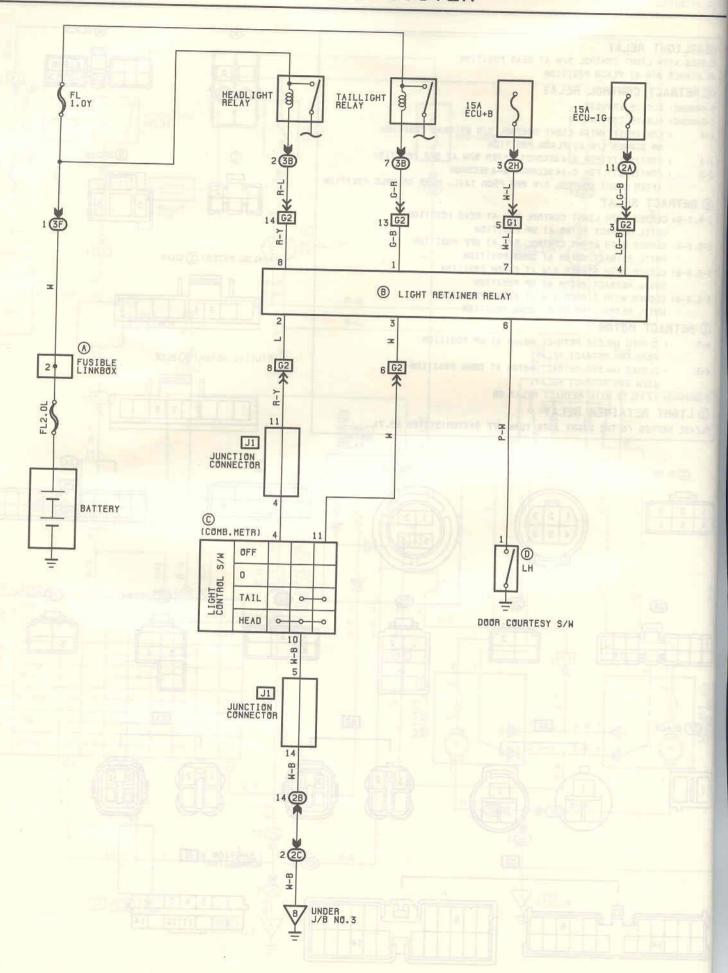






(1) (B) BLACK HEADLIGHT RELAY CLOSED WITH LIGHT CONTROL S/W AT HEAD POSITION OR DIMMER S/W AT FLASH POSITION @ RETRACT CONTROL RELAY 5-GROUND: ALWAYS 12 VOLTS 1-GROUND: ALWAYS CONTINUITY 1-4 : CONTINUITY WITH LIGHT CONTROL S/W AT HEAD POSITION OR DIMMER S/W AT FLASH POSITION : CONTINUITY FOR 2-4 SECONDS AFTER S/W AT OFF POSITION 1-4 (D) BROWN : CONTINUITY FOR 6-14 SECONDS 2-4 SECONDS AFTER LIGHT CONTROL S/W OFF FROM TAIL, HEAD OR HOLD POSITION (H) RETRACT RELAY 3-5.3-6: CLOSED WITH LIGHT CONTROL S/W AT HEAD POSITION UNTIL RETRACT MOTOR AT UP POSITION 3-5.3-6: CLOSED WITH LIGHT CONTROL S/W AT OFF POSITION UNTIL RETRACT MOTOR AT DOWN POSITION (ANALOG METER) (E) GRAY 3-5.3-6: CLOSED WITH DIMMER S/W AT FLASH POSITION UNTIL RETRACT MOTOR AT UP POSITION 3-5.3-6: CLOSED WITH DIMMER S/W AT FLASH POSITION UNTIL RETRACT MOTOR AT DOWN POSITION 3 4 (I) RETRACT MOTOR : CLOSED UNLESS RETRACT MOTOR AT UP POSITION 4-5 (S/W FOR RETRACT RELAY) (DIGITAL METER) (BLUE : CLOSED UNLESS RETRACT MOTOR AT DOWN POSITION (S/W FOR RETRACT RELAY) 2-GROUND: 12 VOLTS WITH RETRACT RELAY ON U LIGHT RETAINER RELAY PLEASE REFFER TO THE LIGHT AUTO TURN OFF SYSTEM (SYSTEM NO.7) (2A) (J) BLACK @ BLUE (I) BLACK H 5 (3E) BLACK (3C) 3D BROWN (3B) **2B** B3 B2 A1 (3F) BLACK (JUNCTION) J1 G2 11 12 - 27 -

LIGHT AUTO TURN OFF SYSTEM



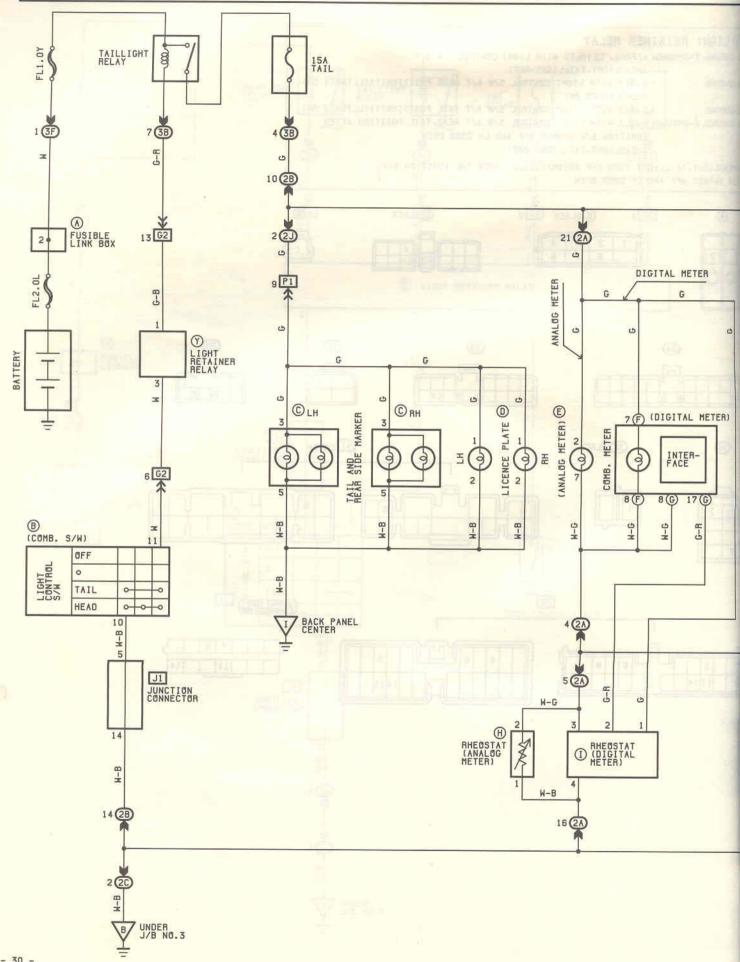
(HEADLIGHTS ON) : O VOLT WITH LIGHT CONTROL S/W A/T TAIL POSITION (TAILLIGHTS ON) 3-GROUND 2-GROUND, 3-GROUND: O VOLT WITH LIGHT CONTROL S/W A/T HEAD, TAIL POSITION AFTER IGNITION S/W TURNED OFF AND LH DOOR OPEN (HEADLIGHT.TAILLIGHT OFF) (HEADLIGHT, TAILLIGHT TURN OFF AUTOMATICALLY WHEN THE IGNITION S/W) IS TURNED OFF AND LH DOOR OPEN 1 C BLACK (A) (B) BLACK 2 28 20 **2H**) 21 G1 GREEN **3B** 3F) BLACK (JUNCTION J1 G2 6 3

B LIGHT RETAINER RELAY

2-GROUND

2-GROUND.3-GROUND: APPROX. 12 VOLTS WITH LIGHT CONTROL S/W OFF (HEADLIGHT, TAILLIGHT OFF)

: O VOLT WITH LIGHT CONTROL S/W A/T HEAD POSITION (TAILLIGHTS ON)



TAILLIGHT RELAY

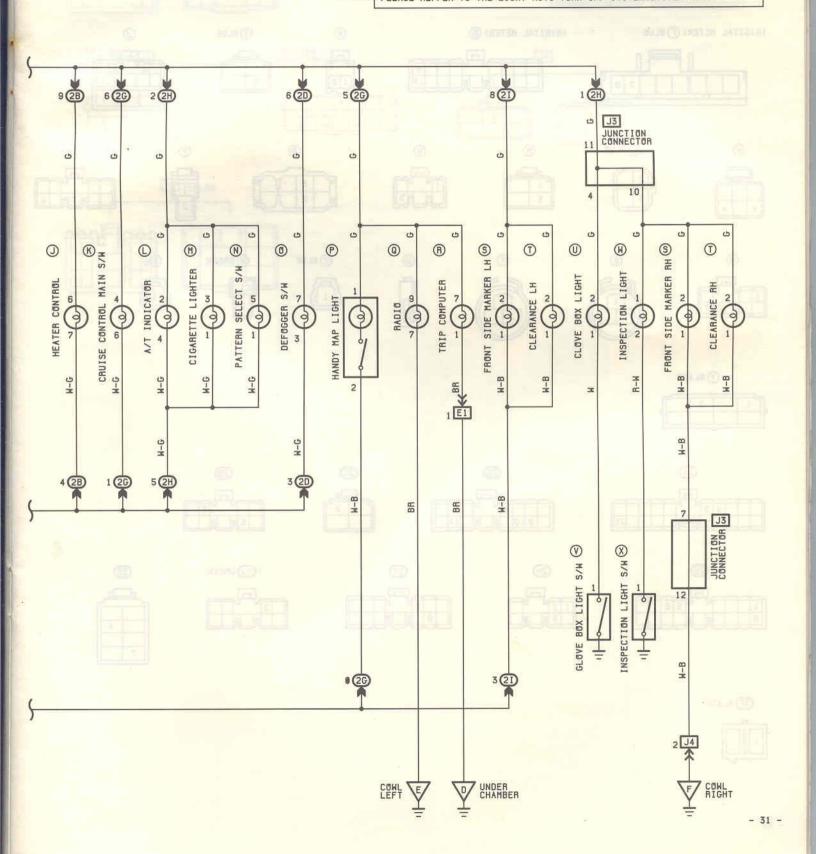
CLOSED WITH LIGHT CONTROL S/W AT TAIL OR HEAD POSITION

(I) RHEOSTAT (ANALOG METER)

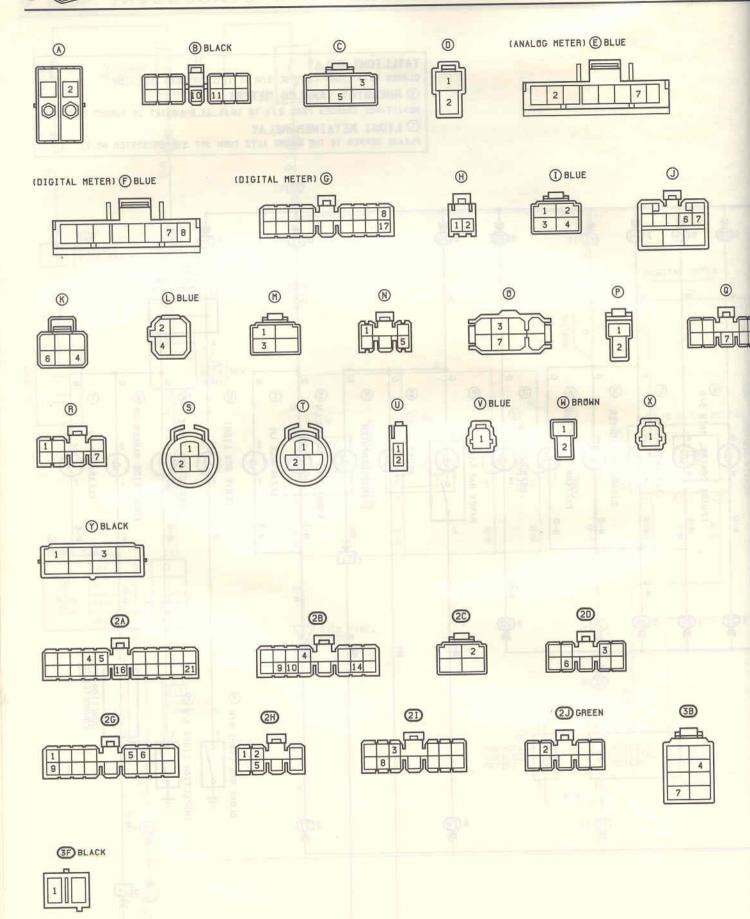
RESISTANCE CHANGES FROM O . TO 10 . AS RHEOSTAT IS TURNED CLOCKISE

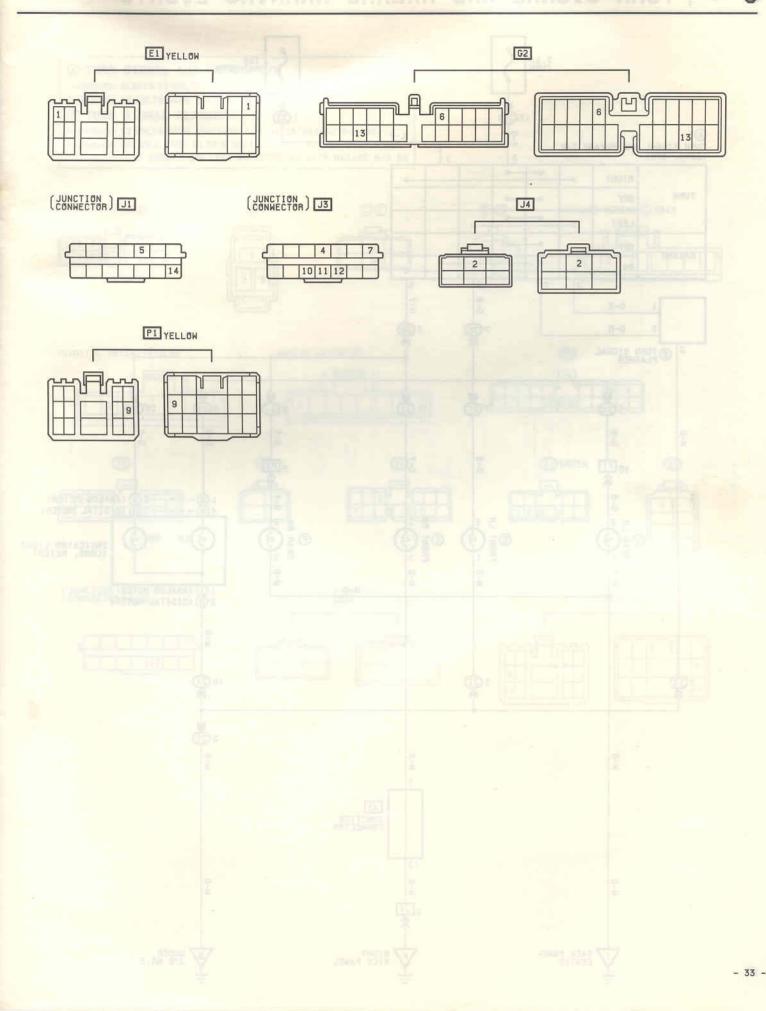
TIGHT RETAINER RELAY

PLEASE REFFER TO THE LIGHT AUTO TURN OFF SYSTEM (SYSTEM NO.7)

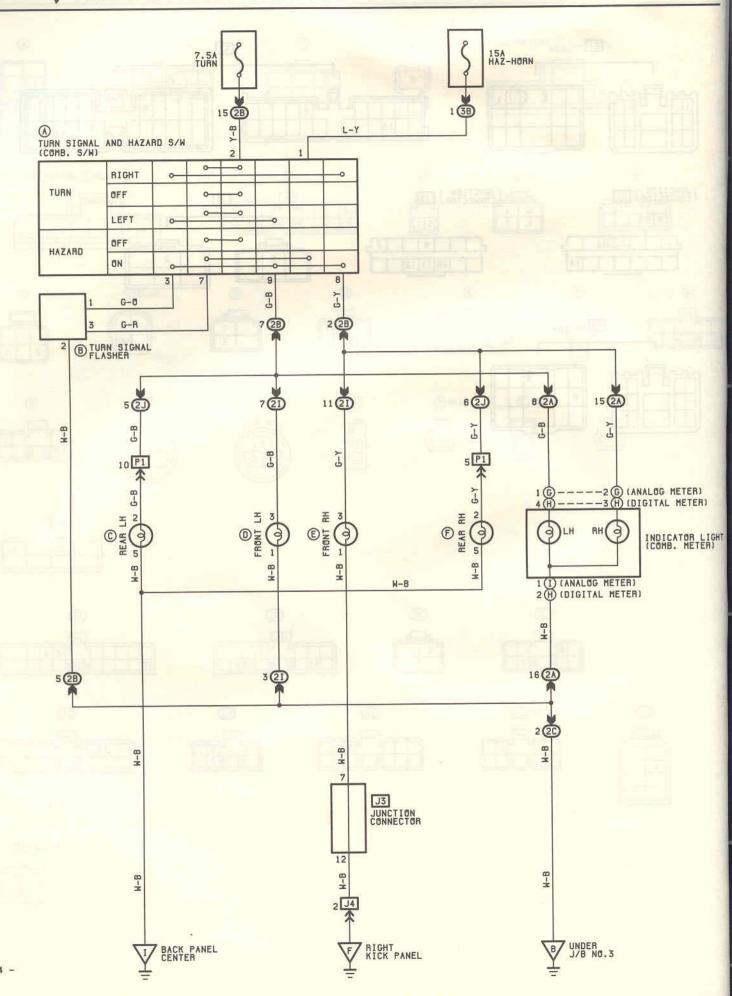


8 TAILLIGHTS AND ILLUMINATION





TURN SIGNAL AND HAZARD WARNING LIGHTS



A TURN SIGNAL AND HAZARD S/W

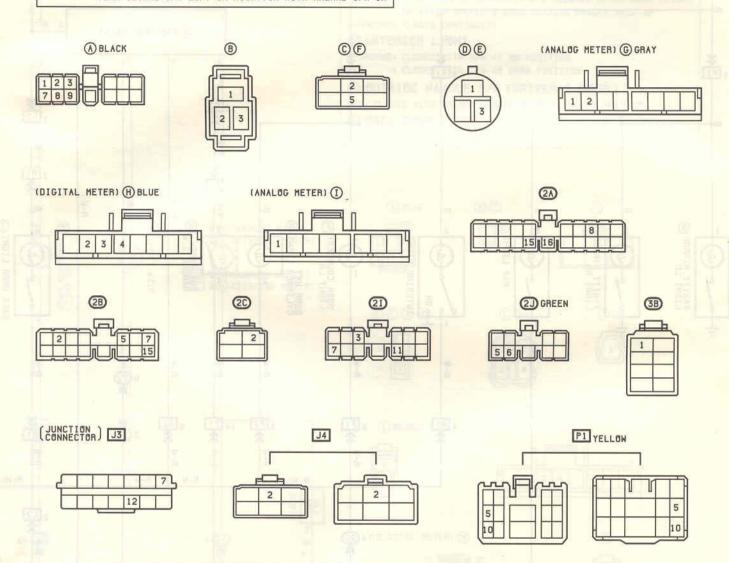
- 1-GROUND: ALWAYS 12 VOLTS
- 2-GROUND: 12 VOLTS WITH IGNITION S/W ON

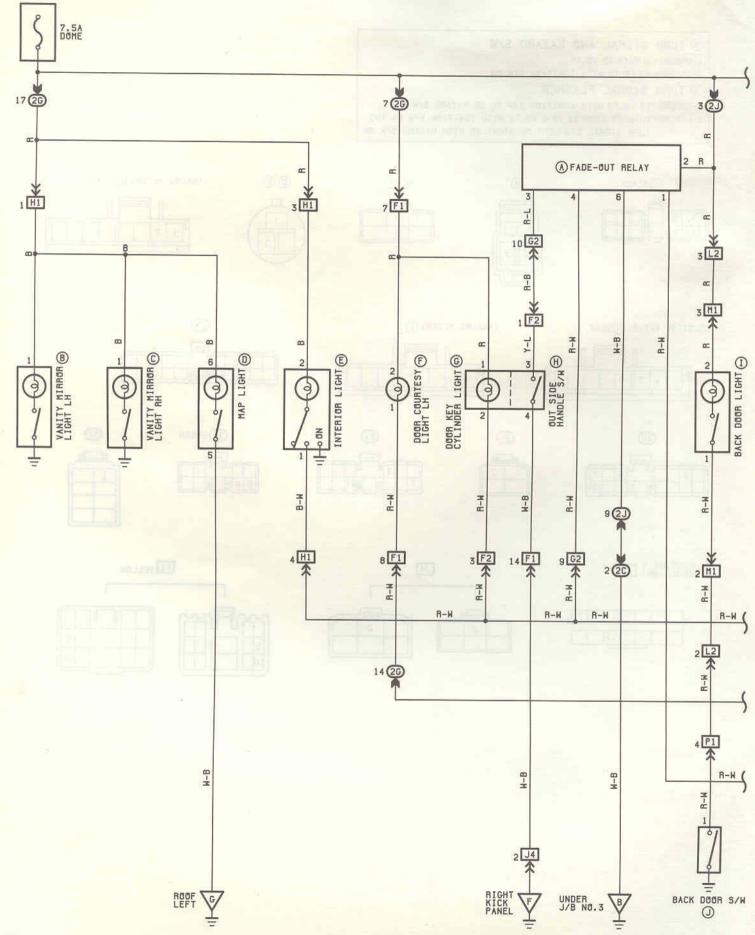
® TURN SIGNAL FLASHER

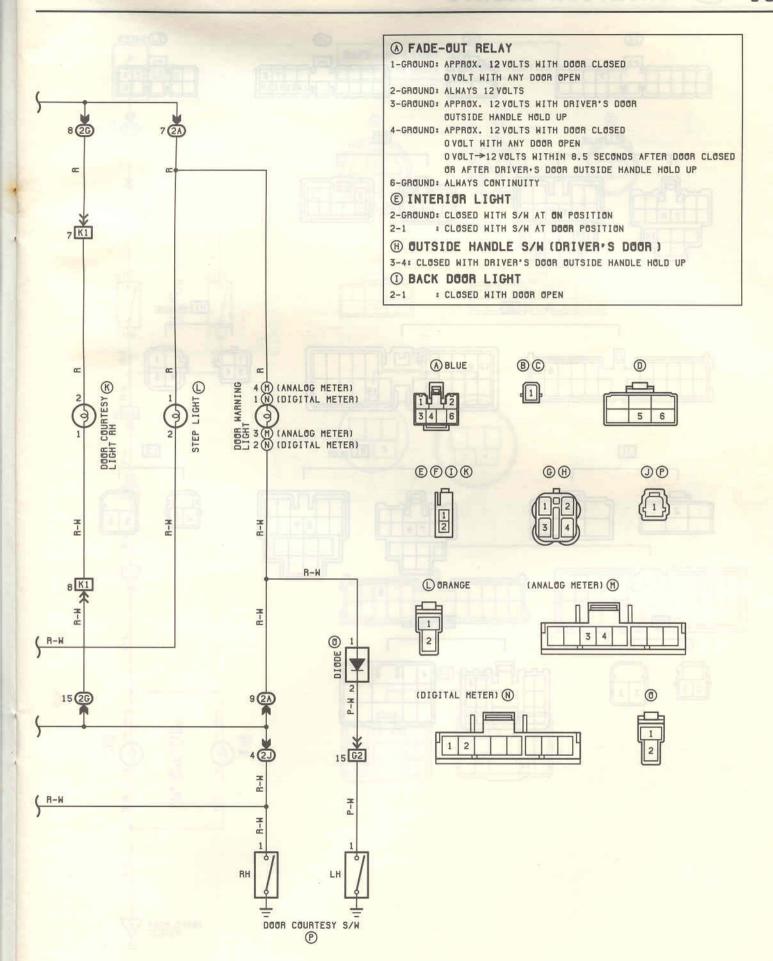
3-GROUND: 12 VOLTS WITH IGNITION S/W ON OR HAZARD S/W ON

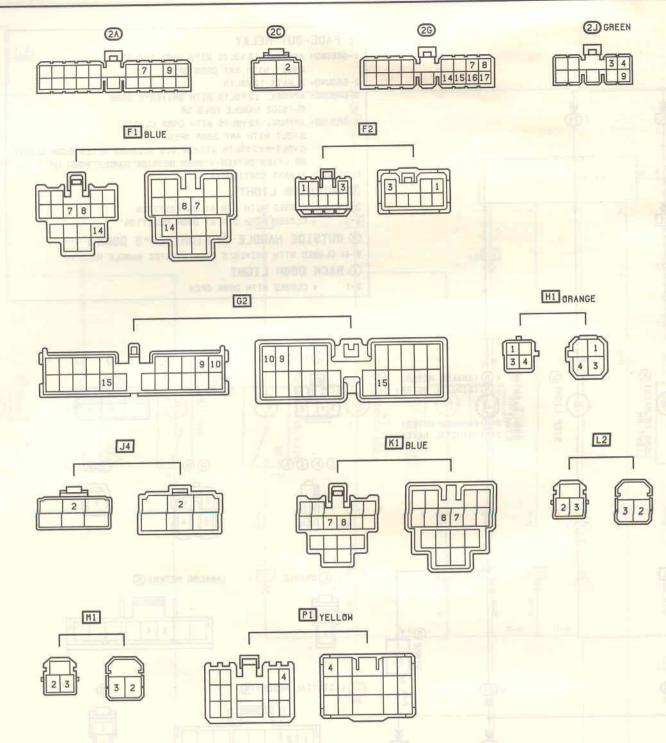
1-GROUND: CHANGES FROM 12 TO 0 VOLTS WITH IGNITION S/W ON AND

TURN SIGNAL S/W LEFT OR RIGHT, OR WITH HAZARD S/W ON

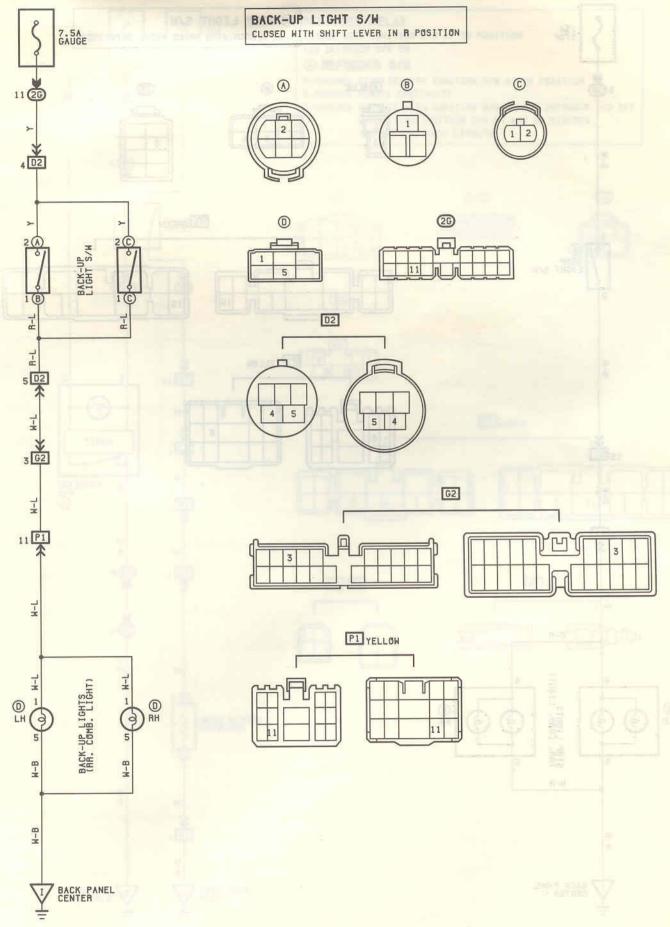


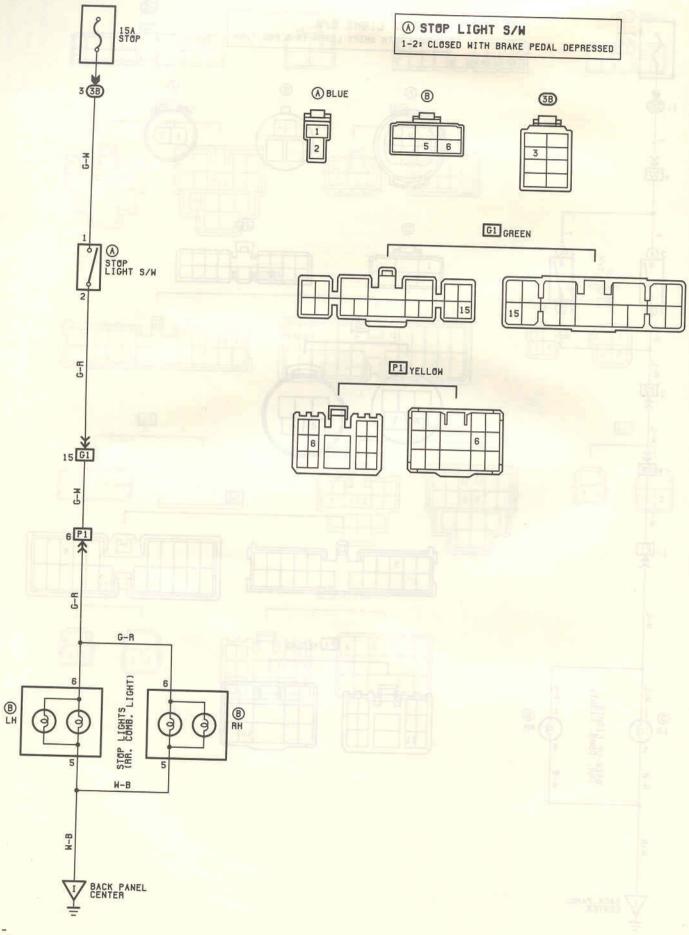




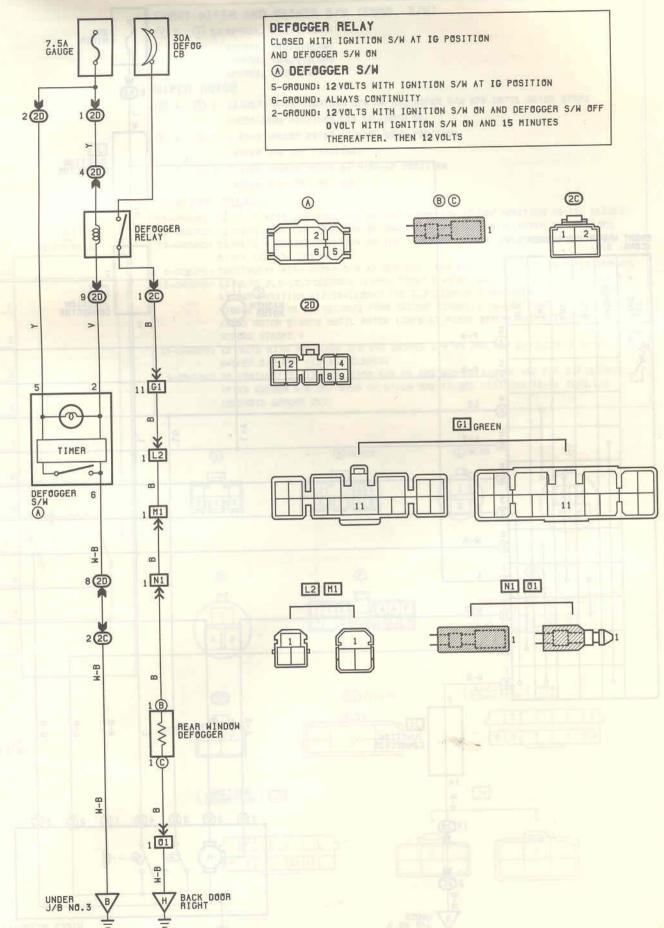


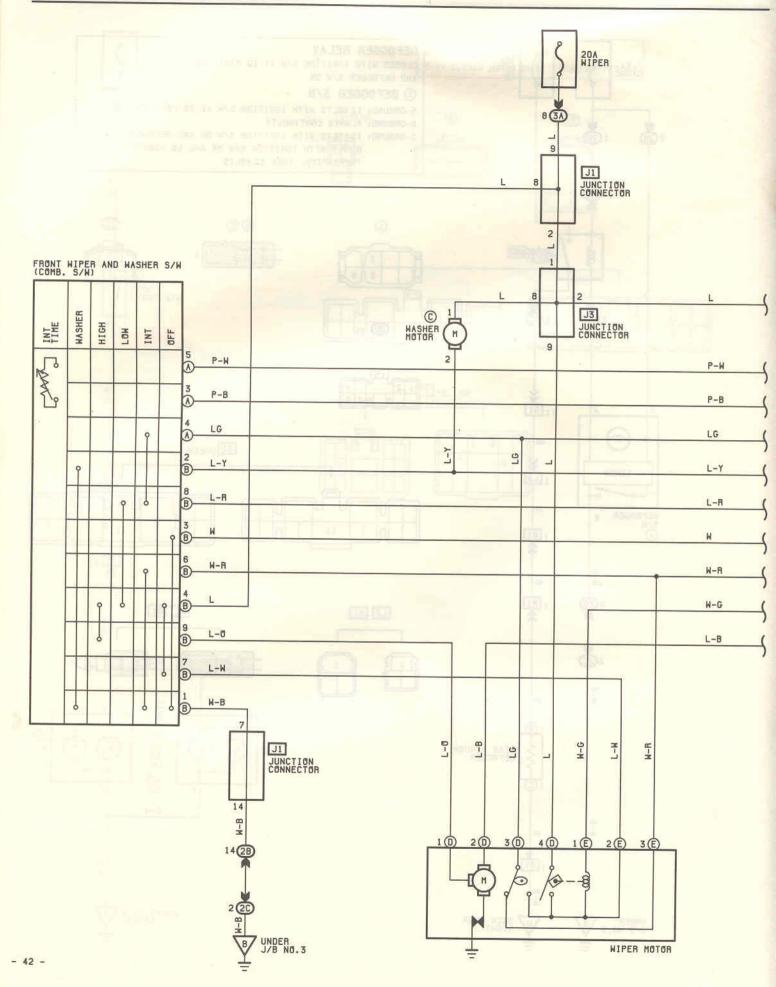












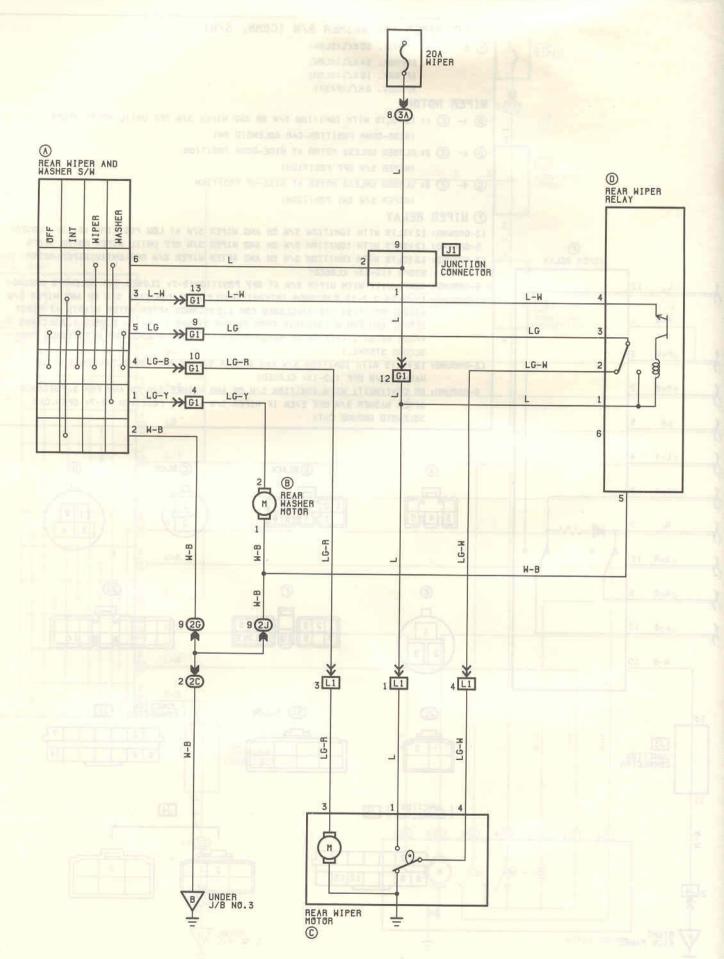
- 43 -

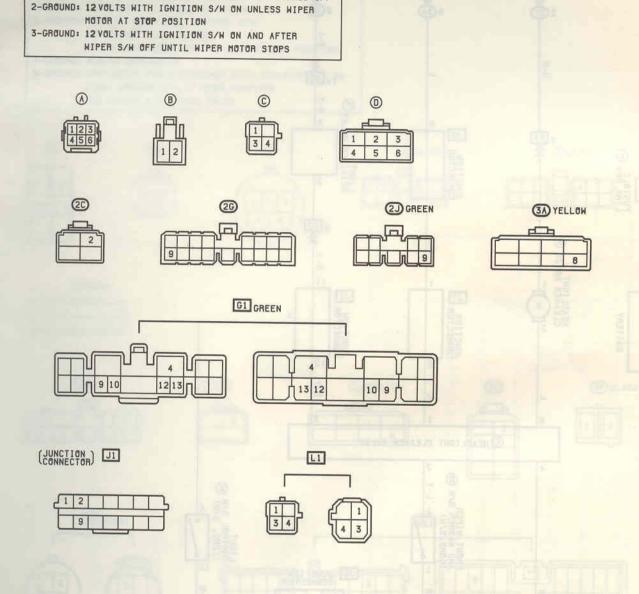
APPROX. 16 KA (SLOW) APPROX. OKA (FAST) WIPER MOTOR ① 4- ② 1: 12 VOLTS WITH IGNITION S/W ON AND WIPER S/W OFF UNTIL MOTOR STOPS (HIDE-DOWN POSITION. CAM SOLENGID ON) (D) 4- (E) 2: CLOSED UNLESS MOTOR AT HIDE-DOWN POSITION (WIPER S/W OFF POSITION) D 4- E 3: CLOSED UNLESS MOTOR AT RISE-UP POSITION (WIPER S/W INT POSITION) F WIPER RELAY 13-GROUND: 12 VOLTS WITH IGNITION S/W ON AND WIPER S/W AT LOW POSITION (6-13: CLOSED) 5-GROUND: 12 VOLTS WITH IGNITION S/W ON AND WIPER S/W OFF UNTIL WIPER MOTOR STOPS F WIPER RELAY 13-GROUND: 12 VOLTS WITH IGNITION S/W ON AND AFTER WIPER S/W OFF UNTIL WIPER MOTOR STOPS (12-13: CLOSED) 9-GROUND: CONTINUITY WITH WIPER S/W AT OFF POSITION(9-7: CLOSED, CAM SOLENGID GROUND) 13-GROUND: 12 VOLTS 2.7-12.7 SECONDS INTERMITTENTLY WITH IGNITION S/W ON AND WIPER S/W AT INT POSITION (12-13:CLOSED FOR 1.2 SECONDS AFTER MOTOR STARTS AT FIRST P-W STRUKE AND FOR 0.7 SECONDS FROM SECOND STRUKE.) (6-13: CLOSED 1.2 SECONDS AFTER MOTOR STARTS UNTIL MOTOR STOPS AT FIRST STROKE AND 0.7 SECONDS FROM P-W SECOND STROKE.) 13-GROUND: 12 VOLTS WITH IGNITION S/W AND WASHER S/W ON AND FOR 3.7 SECONDS AFTER WASHER S/W OFF (12-13: CLOSED) P-B 9-GROUND: NO CONTINUITY WITH IGNITION S/W ON AND WASHER S/W ON AND FOR 3.7 SECONDS AFTER WASHER S/W OFF EVEN IF WIPER S/W AT OFF POSITION (9-7: OPEN.CAM SOLENGID GROUND CUT) LG L-Y (B) BLACK (C) BLUE 0 L-R W-R 11 W-G (E) (F) **(2B)** L-B 13 4 5 6 W-B 10 (JUNCTION) JI (3A) YELLOW J3 2 JUNCTION CONNECTOR 12 (JUNCTION) J3 J4 M-B 1 2 8 9 2 J4 RIGHT KICK PANEL

FRONT WIPER AND WASHER S/W (COMB. S/W)

APPROX. 34 KA (SLOW)

(A) 3- (A) 5: APPROX. 50 K. (SLOW)





1 REAR WIPER RELAY

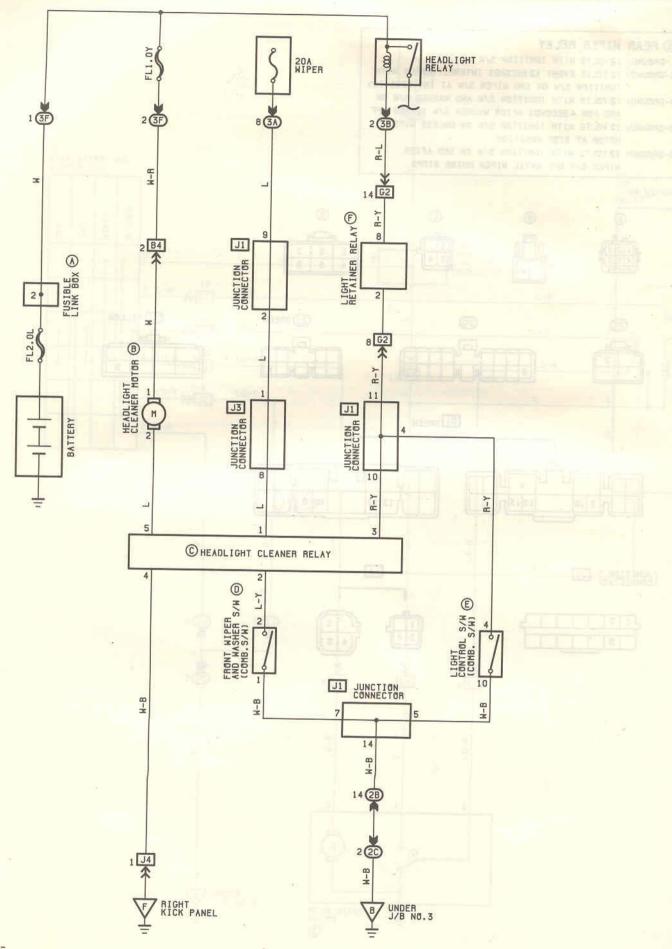
1-GROUND: 12 VOLTS WITH IGNITION S/W ON

3-GROUND: 12 VOLTS EVERY 12 SECONDS INTERMITTENTLY WITH

3-GROUND: 12 VOLTS WITH IGNITION S/W AND WASHER S/W ON

IGNITION S/W ON AND HIPER S/W AT INT POSITION

AND FOR 4 SECONDS AFTER WASHER S/W TURNED OFF



O VOLT WITH LIGHT CONTROL S/W AT HEAD POSITION 4-GROUND: ALWAYS CONTINUITY 5-GROUND: CONTINUITY FOR 0.5 SECONDS WITH IGNITION S/W ON . LIGHT CONTROL S/W AT HEAD POSITION AND WASHER S/W PUSHED TWICE (E) BLACK (D) BLACK 0 (B) (A) 1 2 3 5 (F) BLACK 3F BLACK (3B) 3A YELLOW **2B** G2 B4 GREEN 8 J4 J1 J3 -8 9 10 11

HEADLIGHT RELAY

OR DIMMER S/W AT FLASH POSITION

(E) HEADLIGHT CLEANER RELAY

1-GROUND: 12 VOLTS WITH IGNITION S/W ON

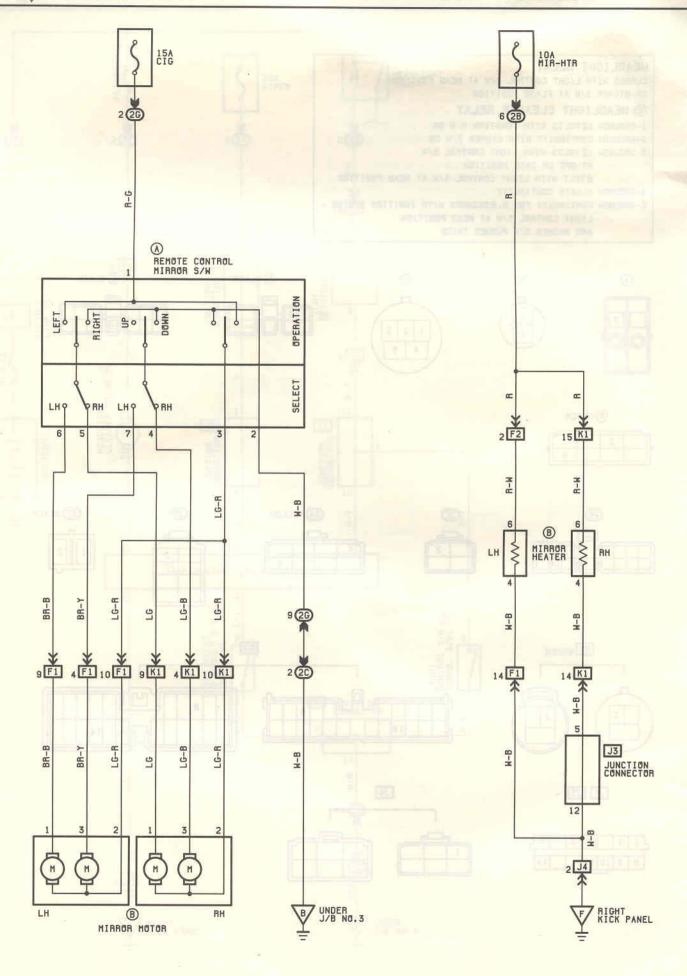
2-GROUND: CONTINUITY WITH WASHER S/W ON

3-GROUND: 12 VOLTS WITH LIGHT CONTROL S/W

AT OFF OR TAIL POSITION

CLOSED WITH LIGHT CONTROL S/W AT HEAD POSITION

17 PEMOTE CONTROL MIRRORS WITH HEATER



A REMOTE CONTROL MIRROR S/W

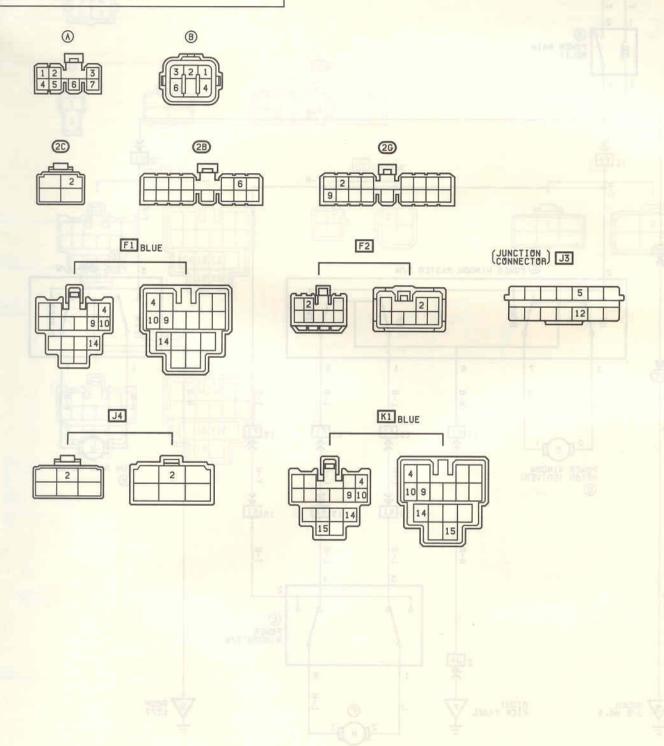
1-GROUND: 12 VOLTS WITH IGNITION S/W AT ACC OR IG POSITION

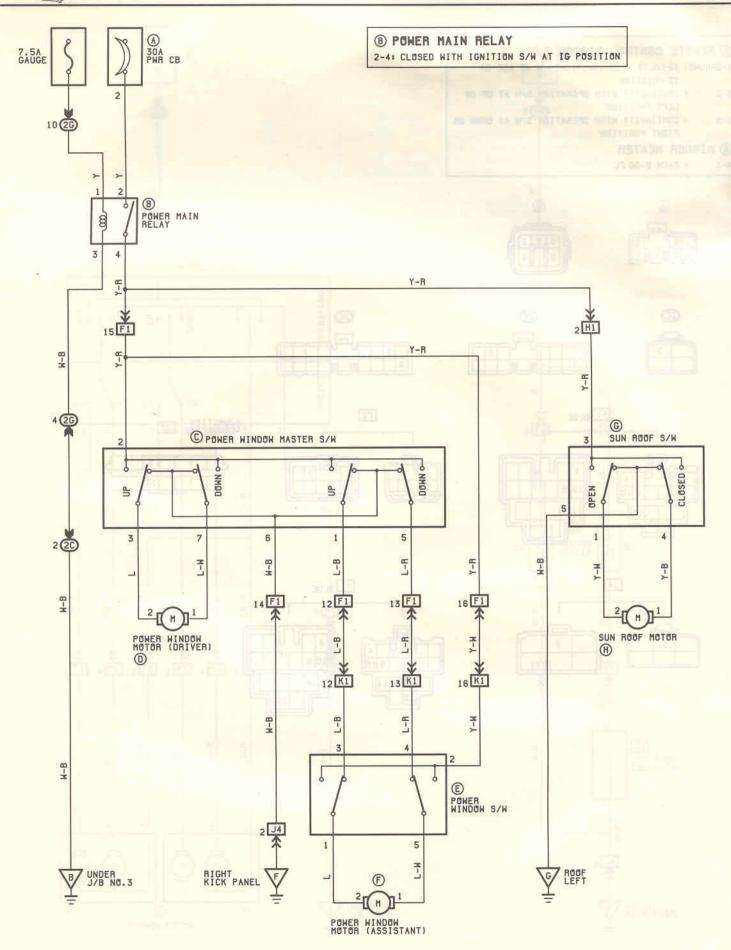
3-2 : CONTINUITY WITH OPERATION S/W AT UP OR LEFT POSITION

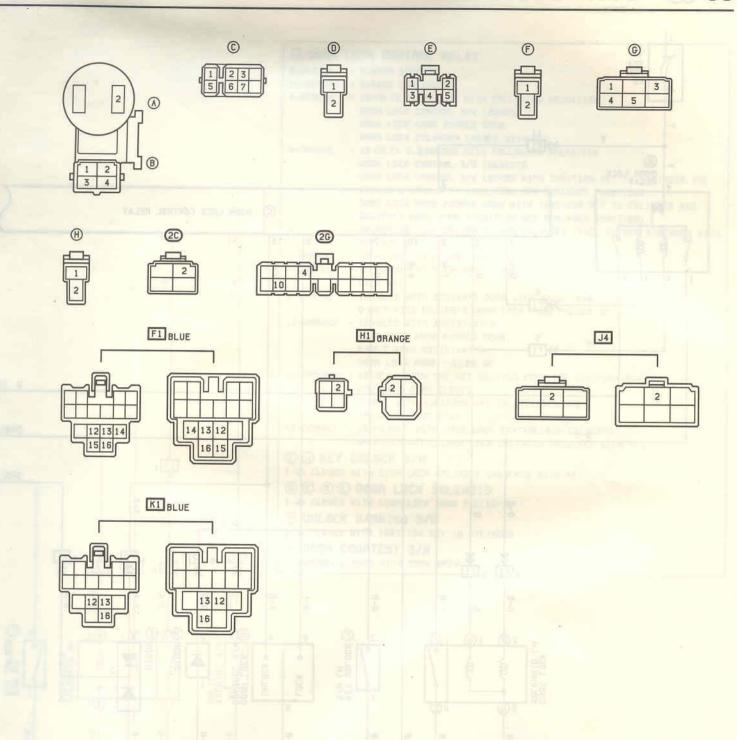
1-3 : CONTINUITY WITH OPERATION S/W AT DOWN OR RIGHT POSITION

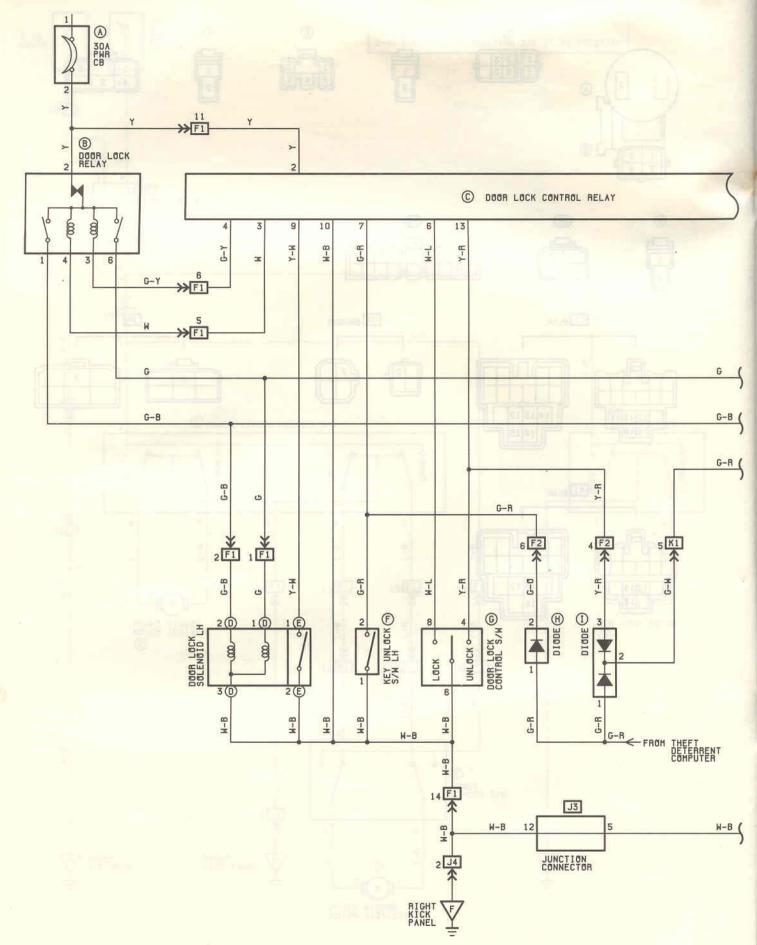
® MIRROR HEATER

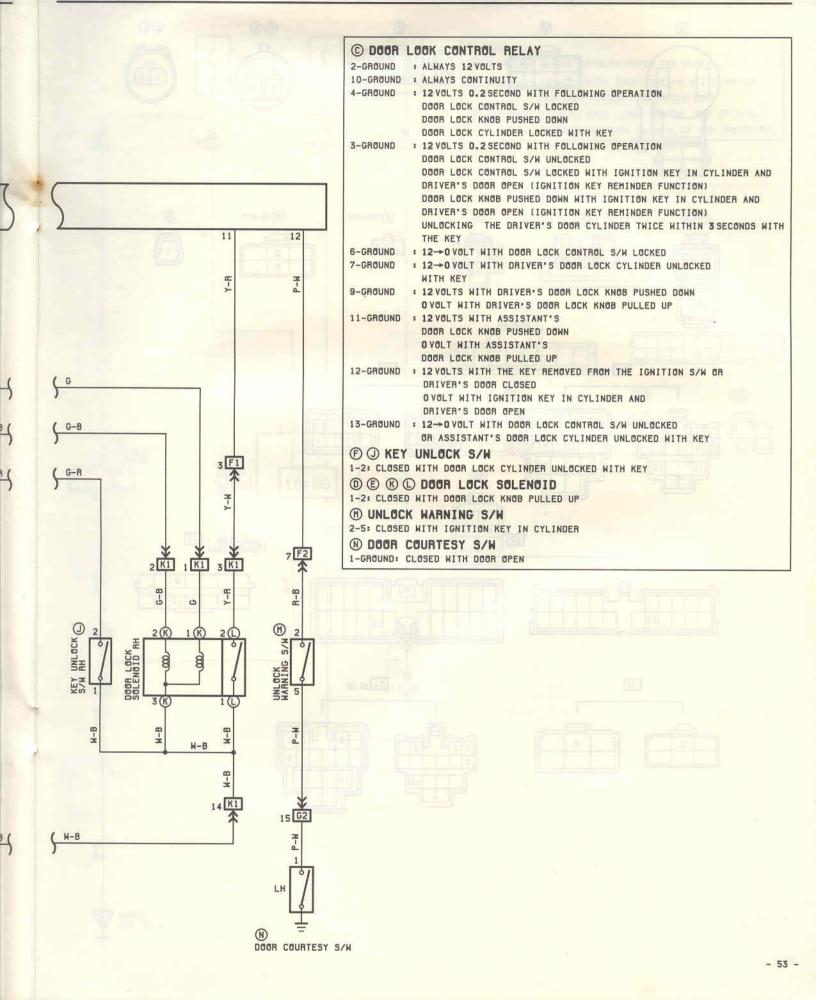
4-6 : EACH 5-30 €

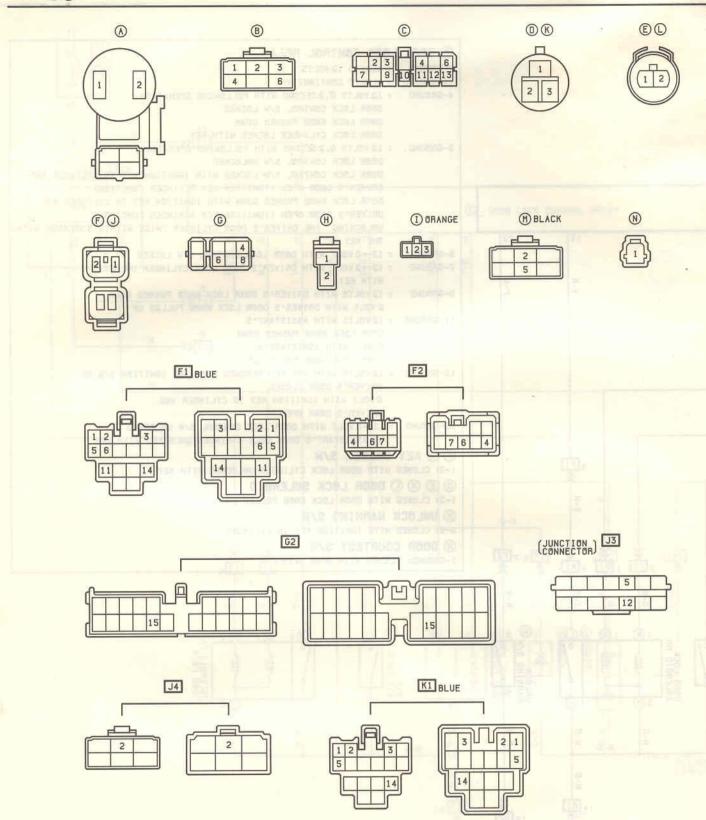






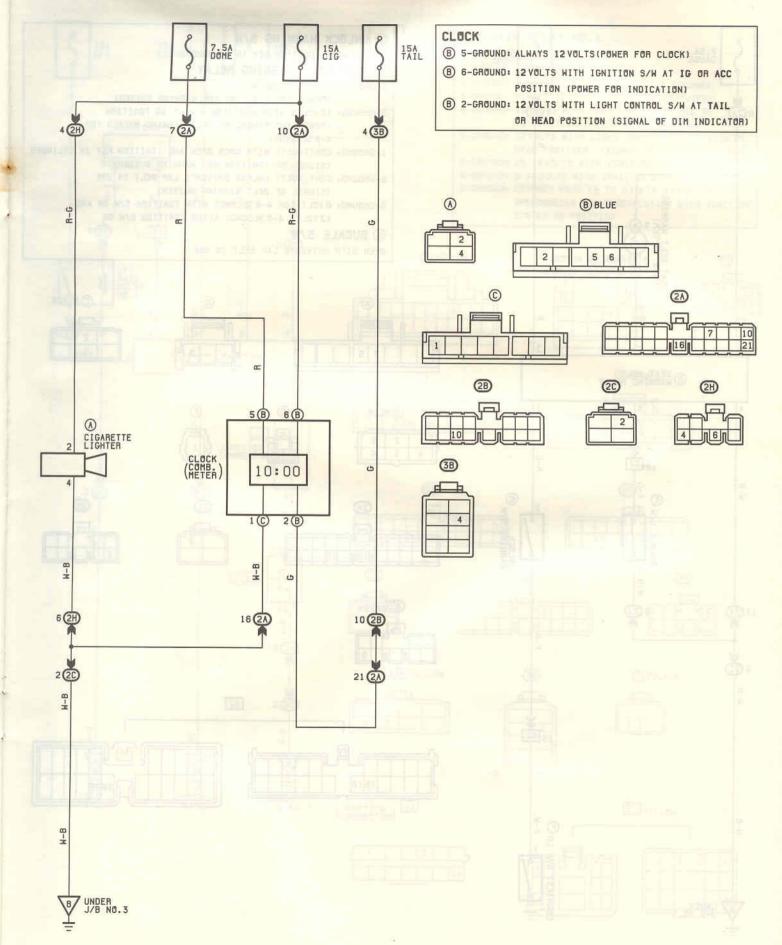




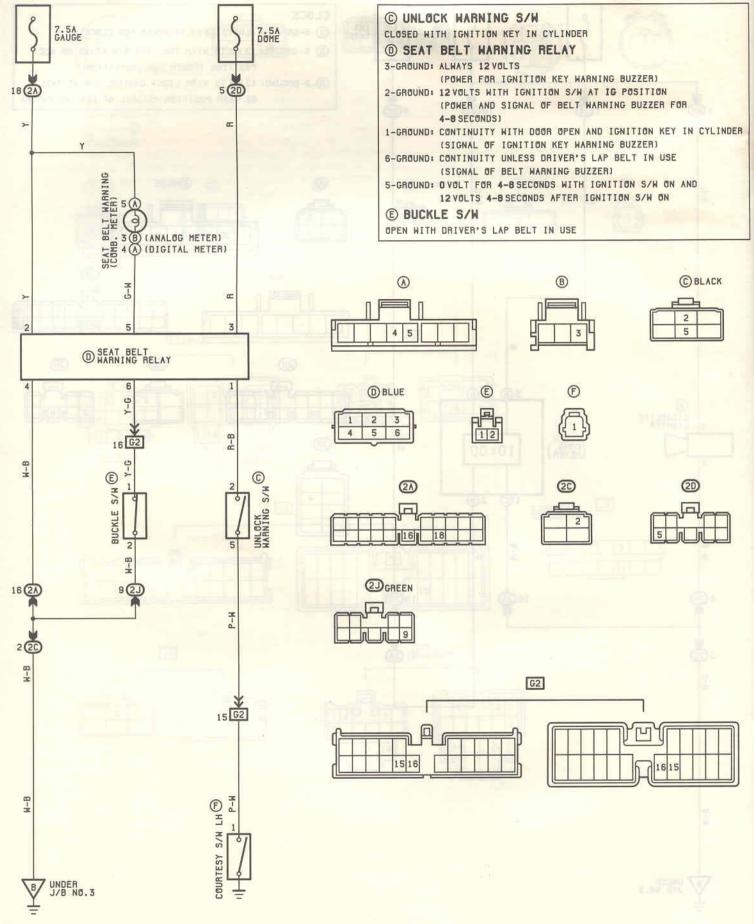






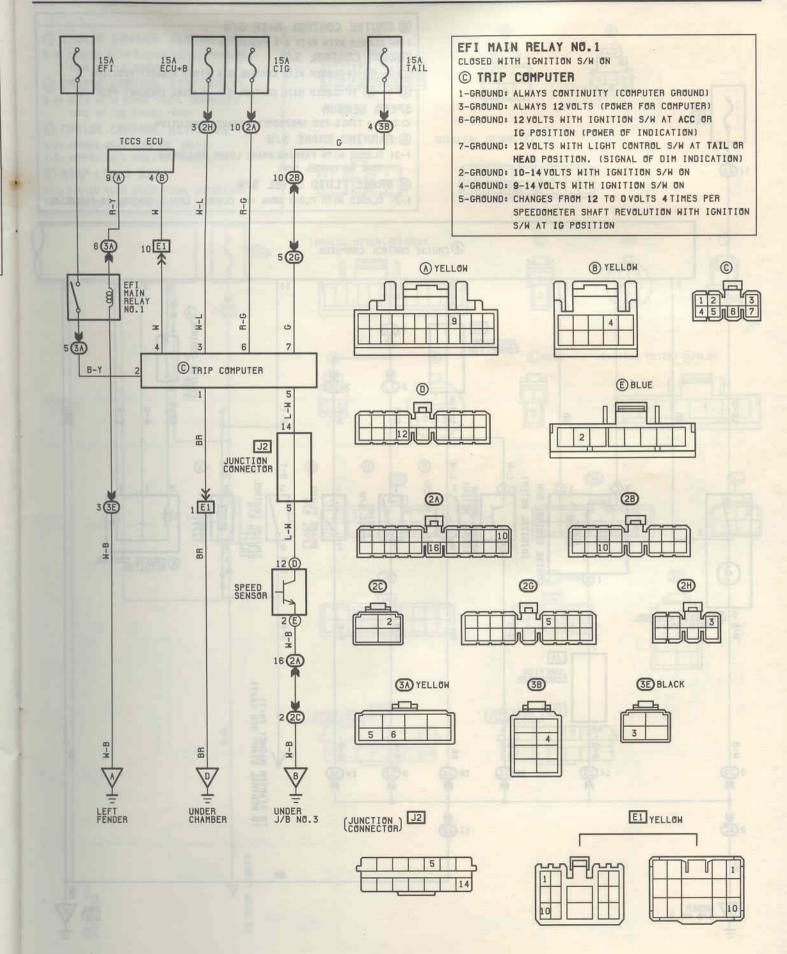




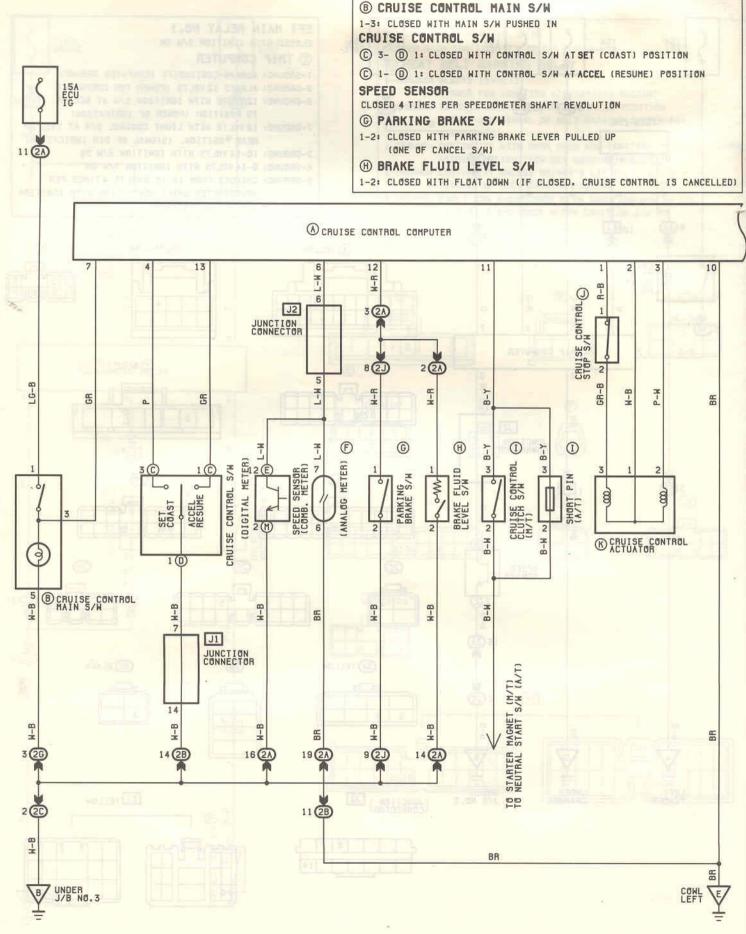


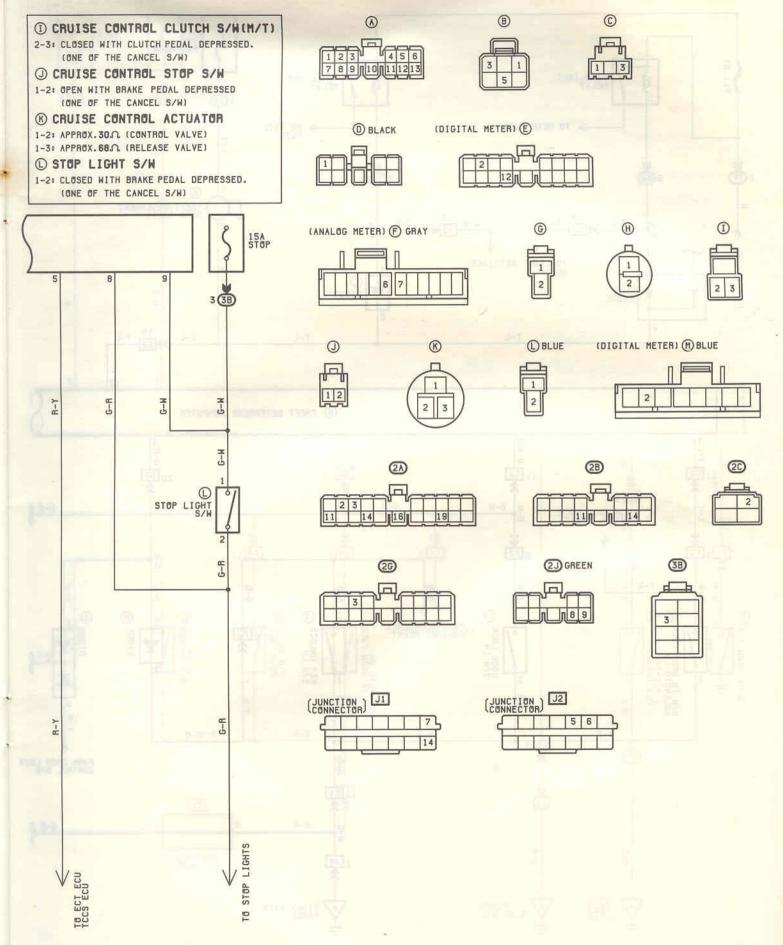
TRIP COMPUTER

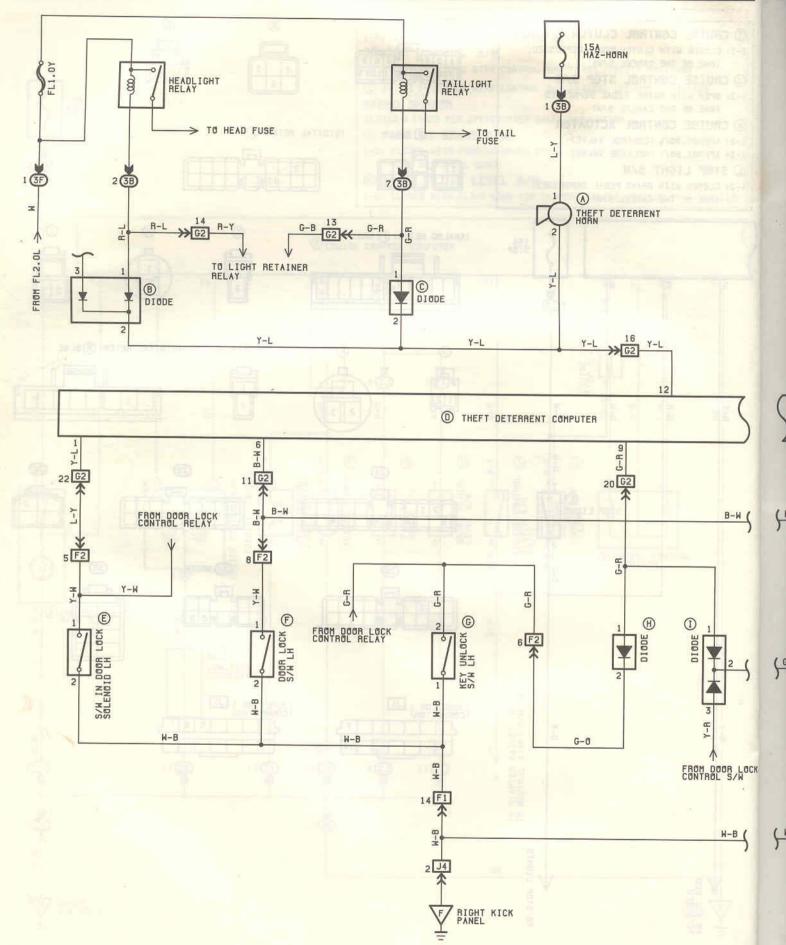


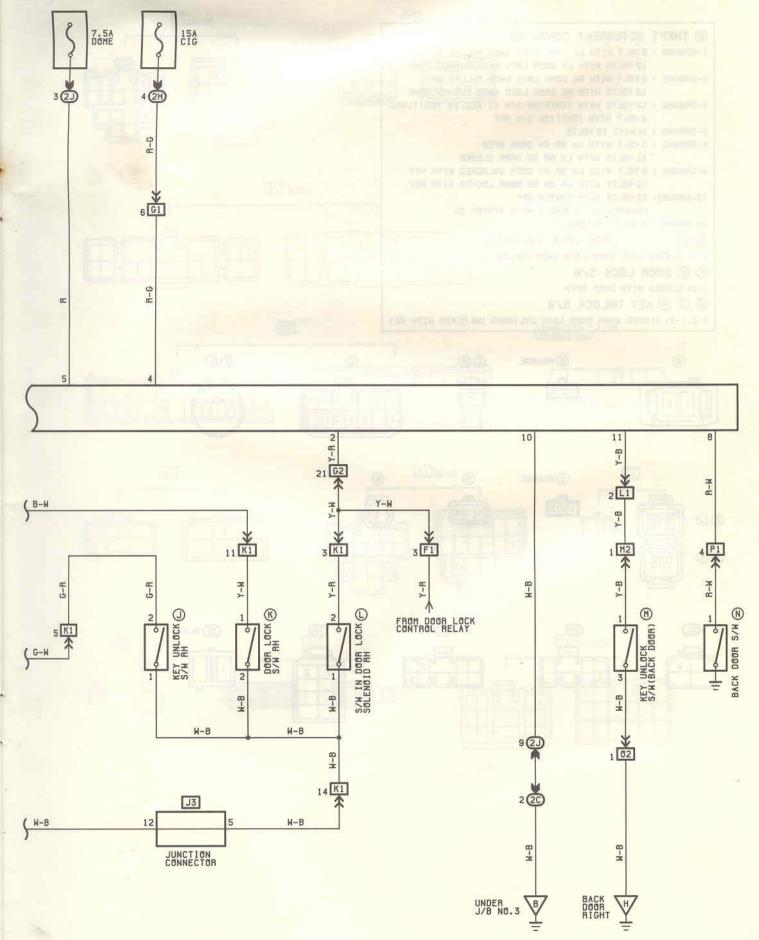


NDER







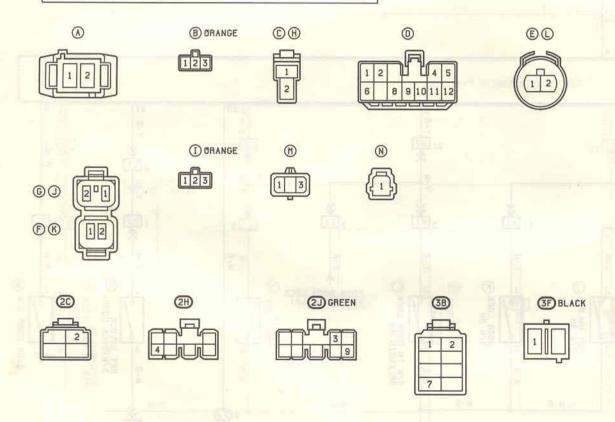


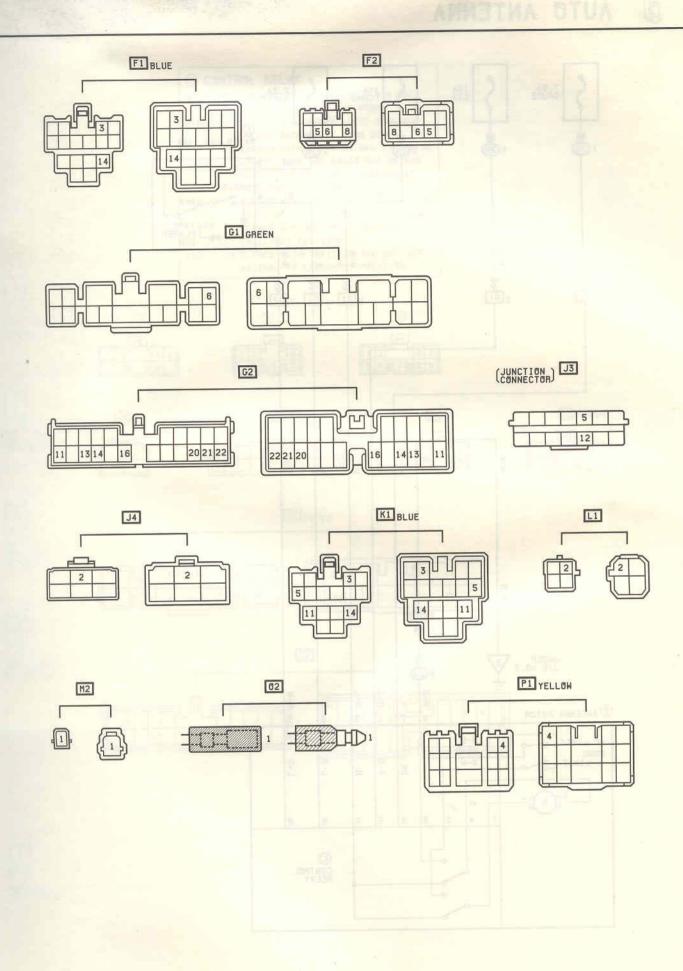
LOCK

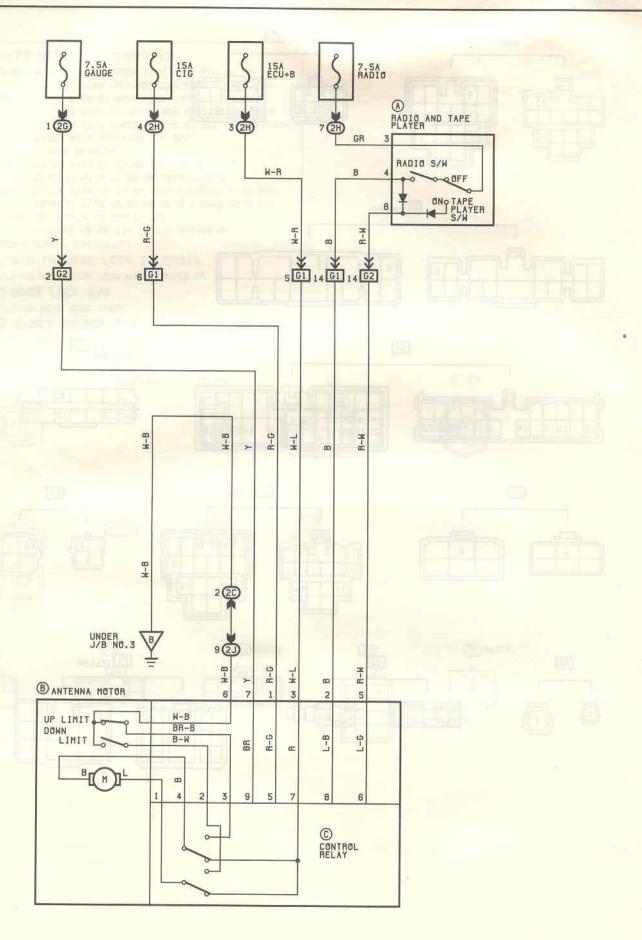
1 THEFT DETERRENT COMPUTER

- 1-GROUND : 0 VOLT WITH LH DOOR LOCK KNOB PULLED UP 12 VOLTS WITH LH DOOR LOCK KNOB PUSHED DOWN
- 2-GROUND : 0 VOLT WITH RH DOOR LOCK KNOB PULLED UP 12 VOLTS WITH RH DOOR LOCK KNOB PUSHED DOWN
- 4-GROUND : 12 VOLTS WITH IGNITION S/W AT ACC, IG POSITIONS

 O VOLT WITH IGNITION S/W OFF
- 5-GROUND : ALWAYS 12 VOLTS
- 6-GROUND: 0 VOLT WITH LH OR RH DOOR OPEN
 12 VOLTS WITH LH OR RH DOOR CLOSED
- 9-GROUND : O VOLT WITH LH OR RH DOOR UNLOCKED WITH KEY
 12 VOLTS WITH LH OR RH DOOR LOCKED WITH KEY
- 12-GROUND: 12 VOLTS WITH SYSTEM OFF
 CHANGES 12 TO 0 VOLT WITH SYSTEM ON
- 10-GROUND: ALWAYS CONTINUITY
- € U S/W IN DOOR LOCK SOLENOID
- 1-2: CLOSED WITH DOOR LOCK KNOB PULLED UP
- F & DOOR LOCK S/W
- 1-2: CLOSED WITH DOOR OPEN
- @ J M KEY UNLOCK S/W
- 1-2.1-3: CLOSED WITH DOOR LOCK CYLINDER UNLOCKED WITH KEY







© CONTROL RELAY

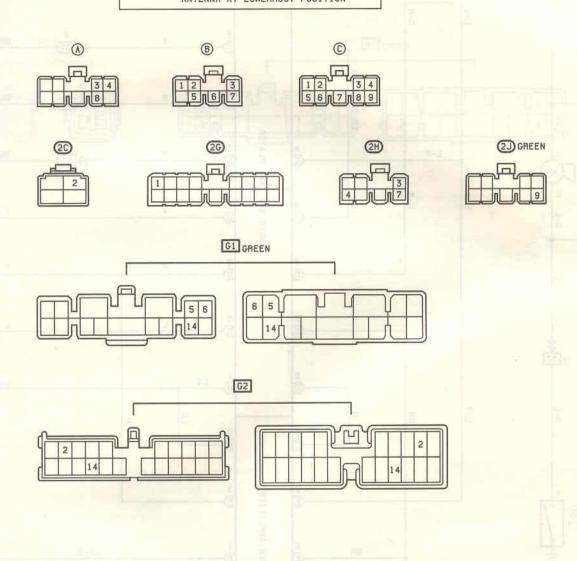
3-GROUND: CONTINUITY (UPPER LIMIT S/W ON)
UNLESS ANTENNA AT UP STOP

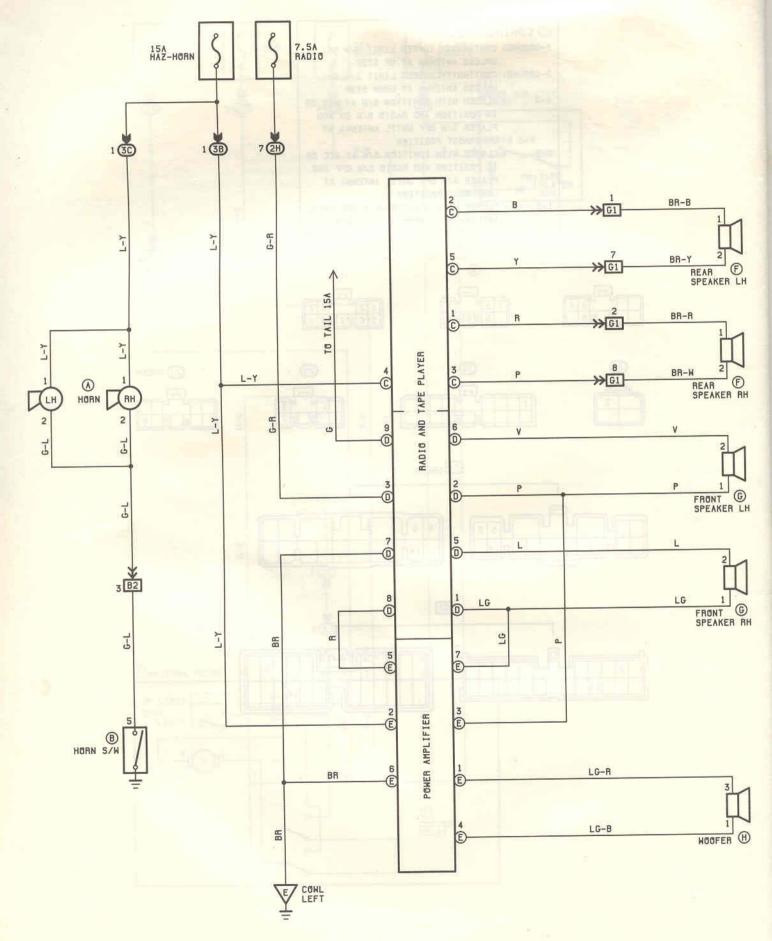
2-GROUND: CONTINUITY (UPPER LIMIT S/W ON)
UNLESS ANTENNA AT DOWN STOP

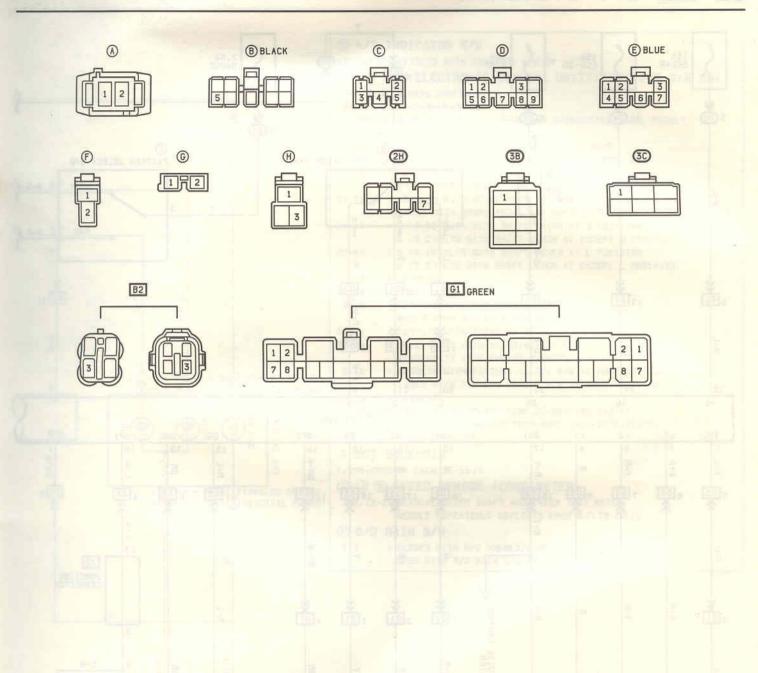
4-3 : CLUSED WITH IGNITION S/W AT ACC OR
IG POSITION AND RADIO S/W ON AND
PLAYER S/W OFF UNTIL ANTENNA AT
UPPERMOST POSITION

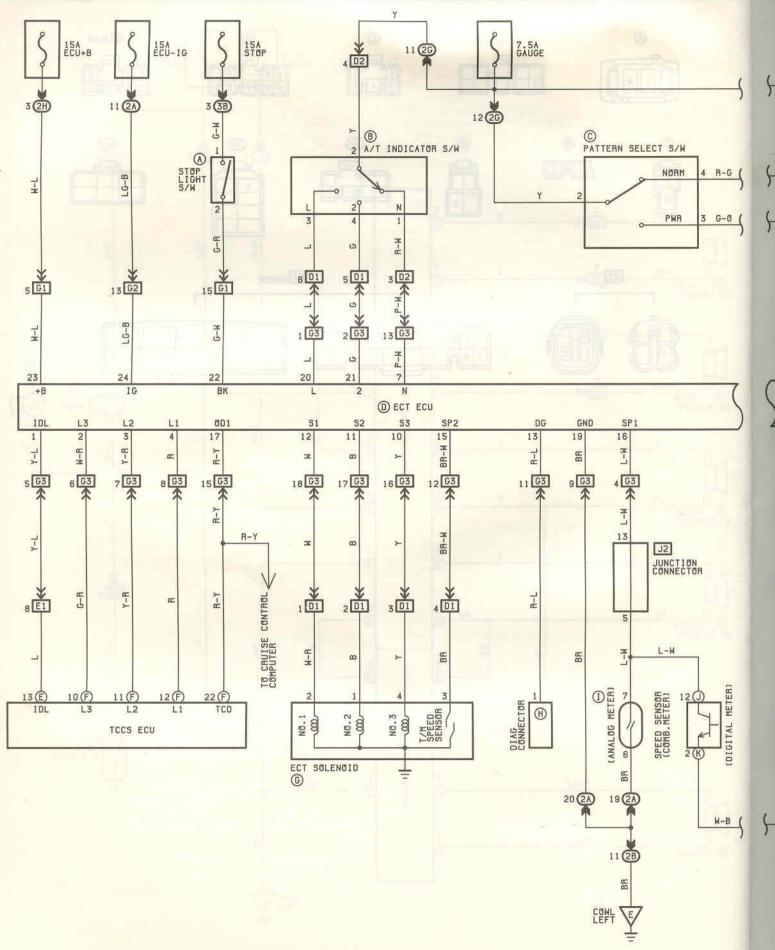
1-2 : CLOSED WITH IGNITION S/W AT ACC OR
IG POSITION AND RADIO S/W OFF AND
PLAYER S/W OFF UNTIL ANTENNA AT
LOWERMOST POSITION

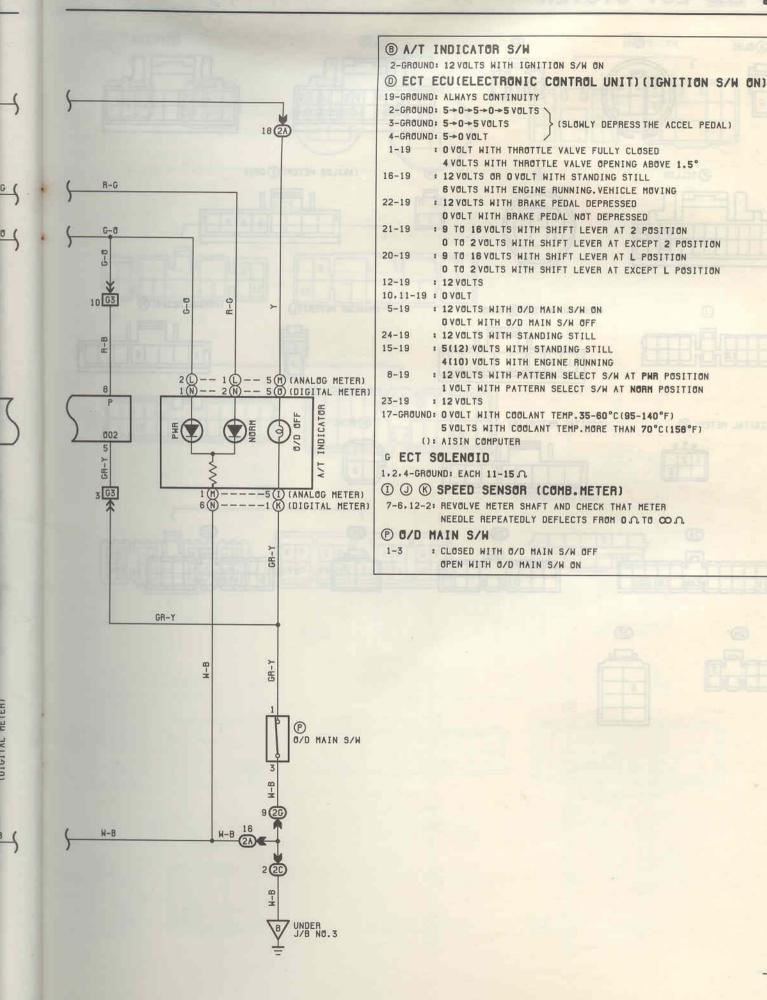
1-2 : CLOSED WITH IGNITION S/W OFF UNTIL
ANTENNA AT LOWERMOST POSITION

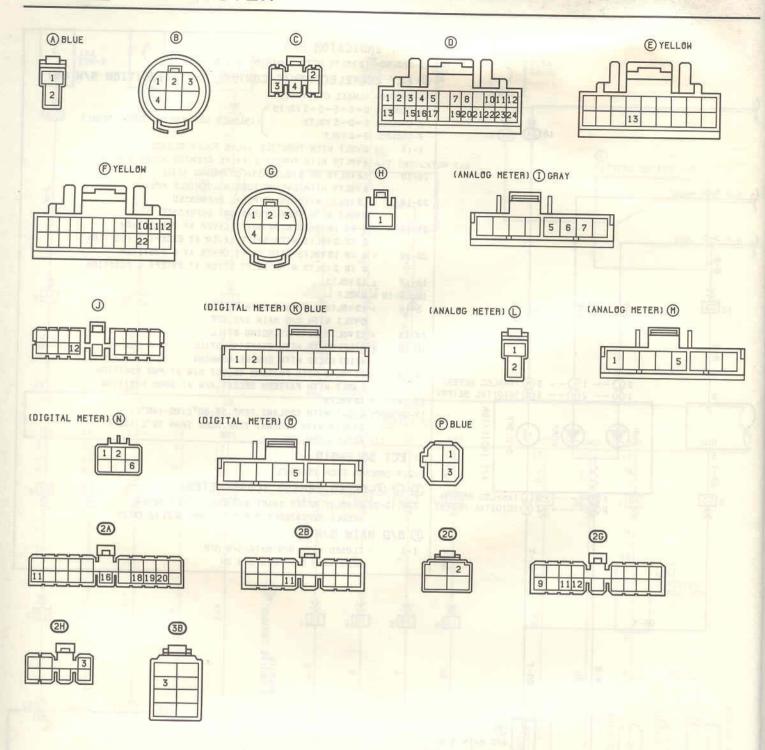


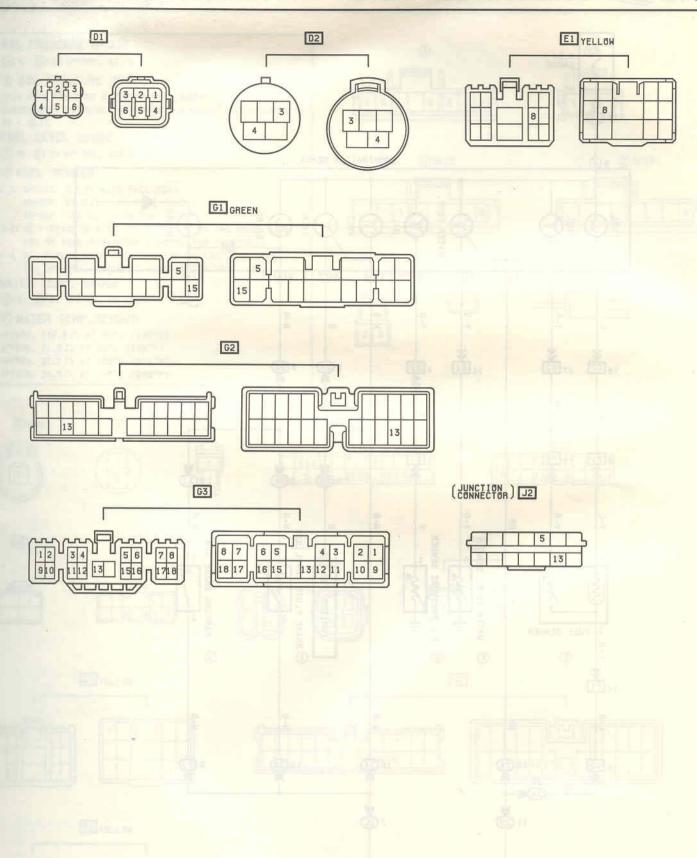


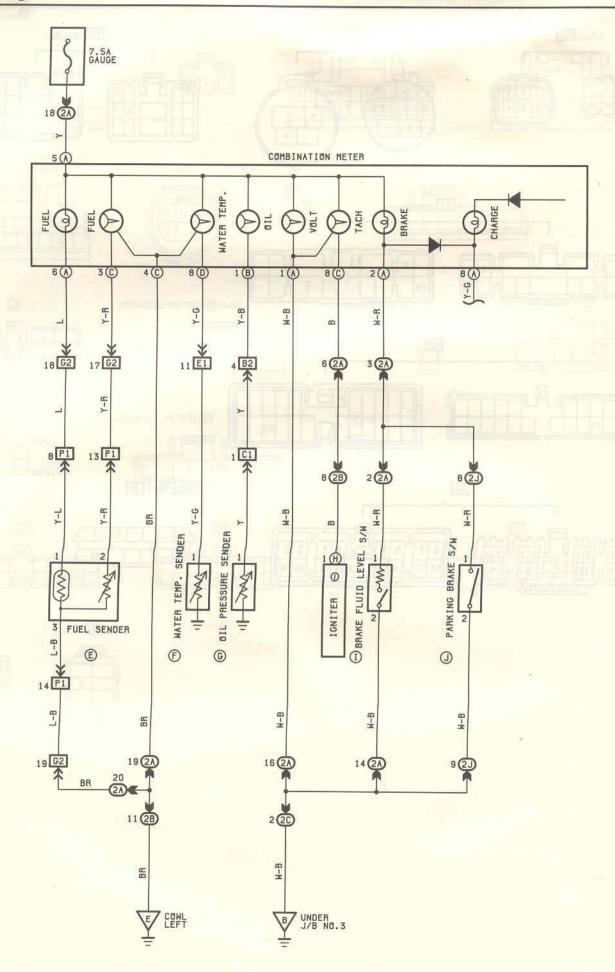


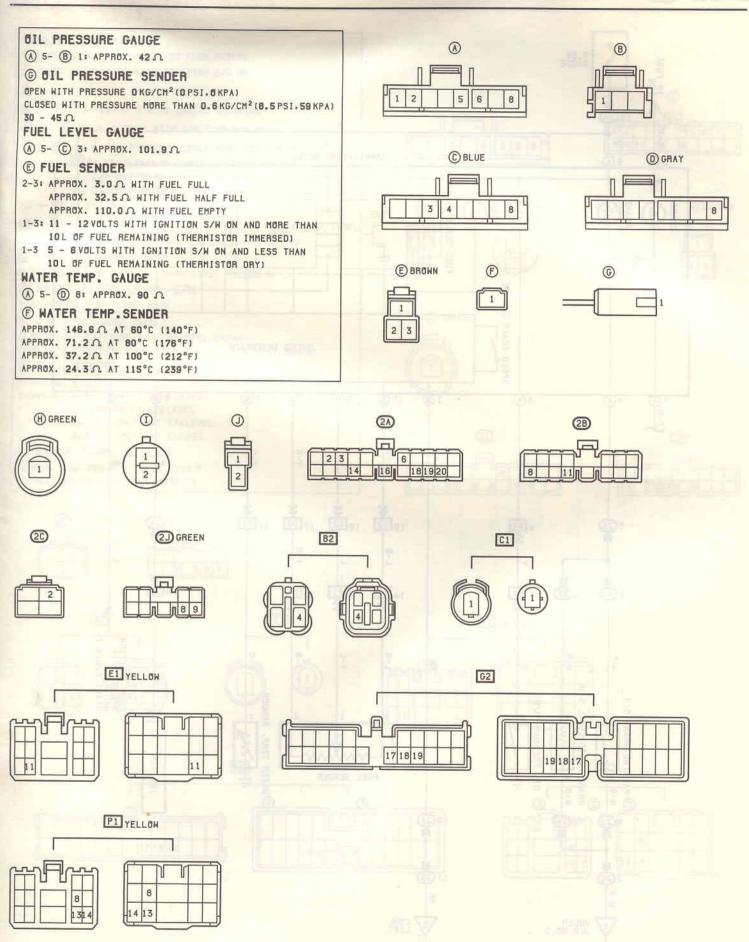


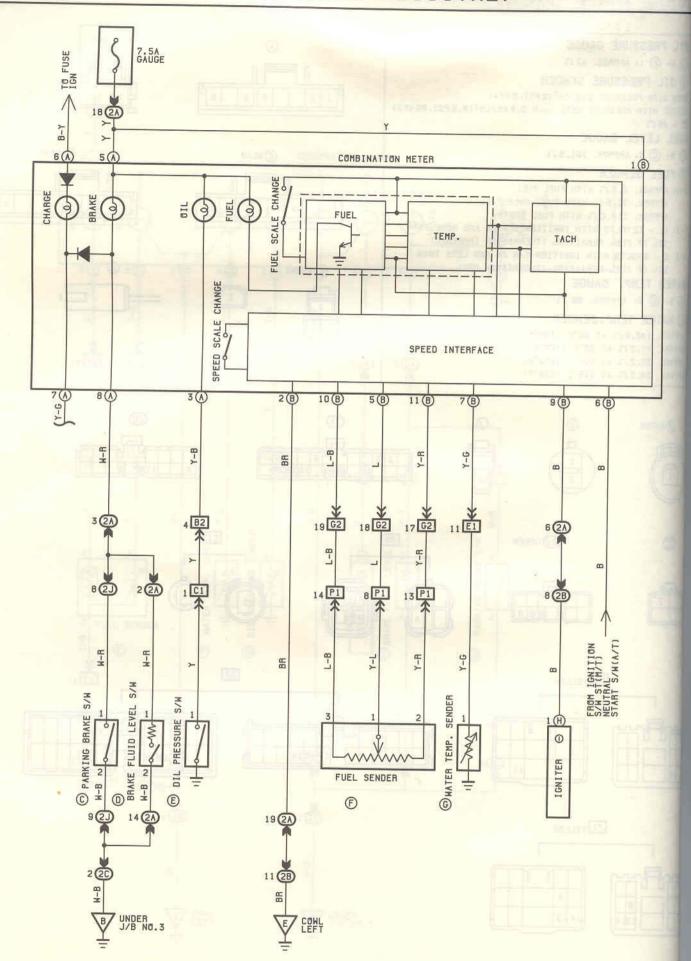


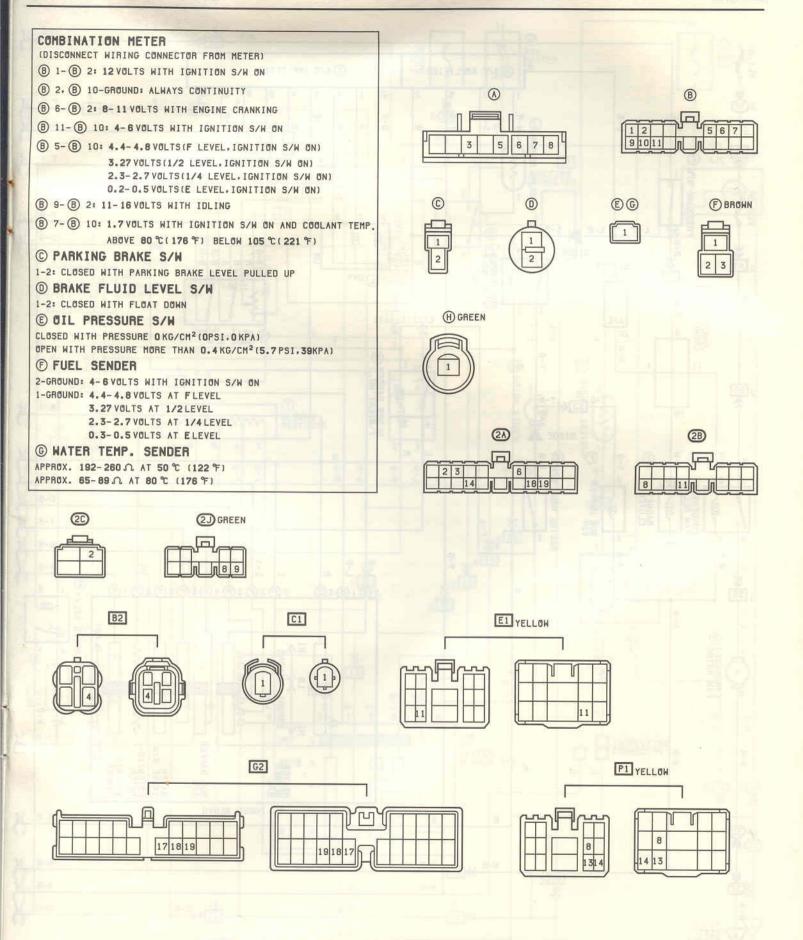


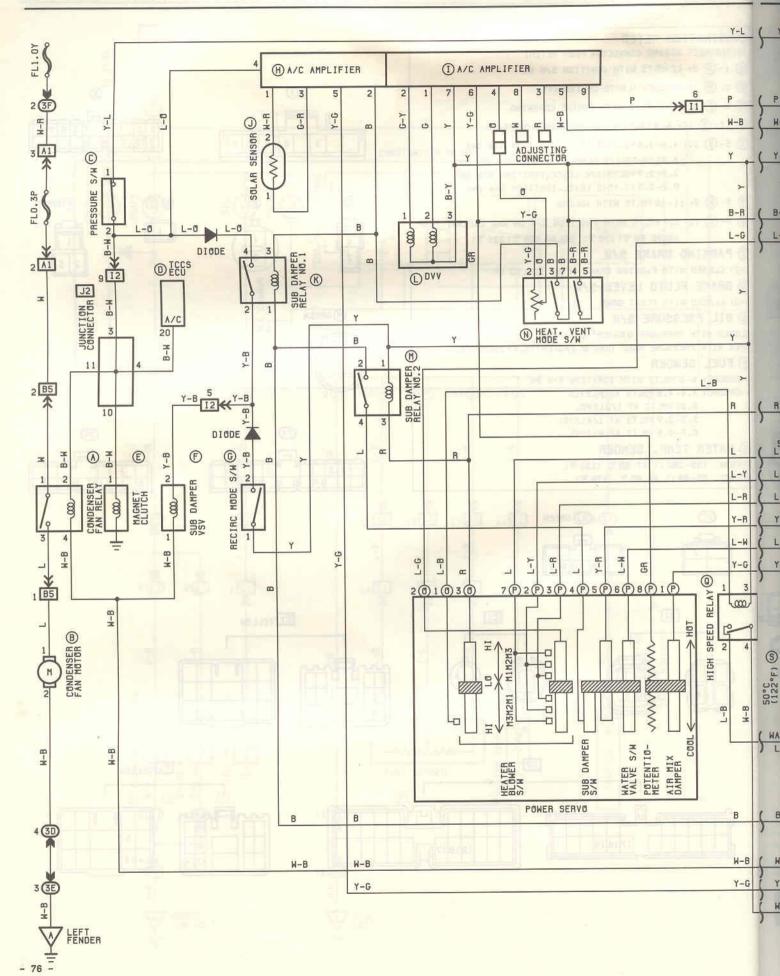


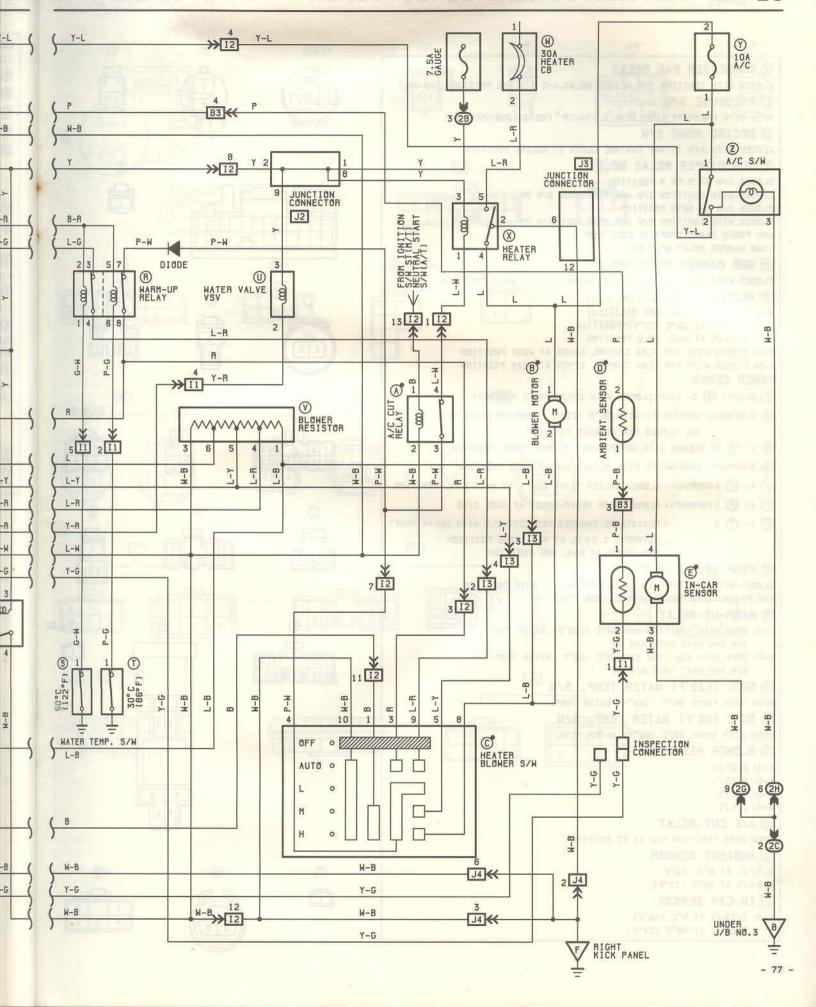


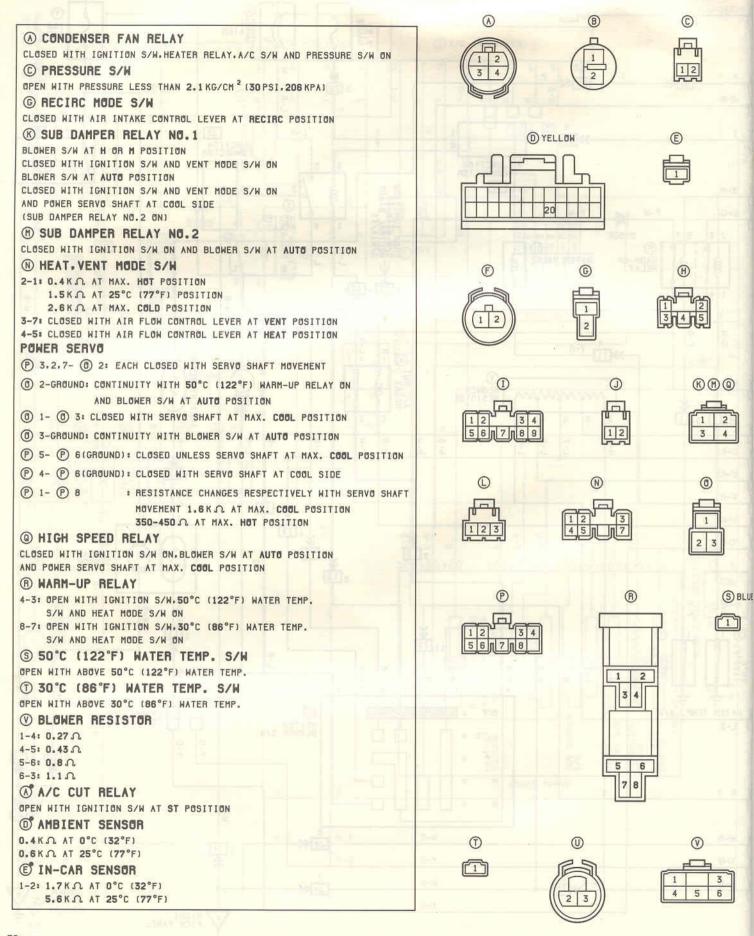


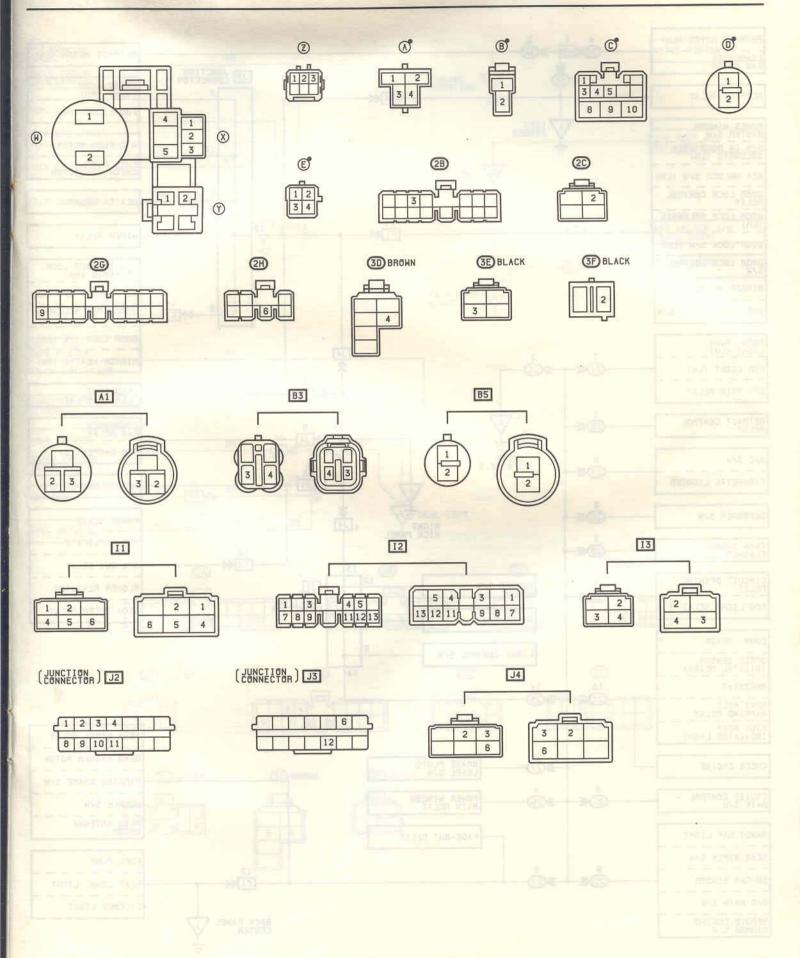


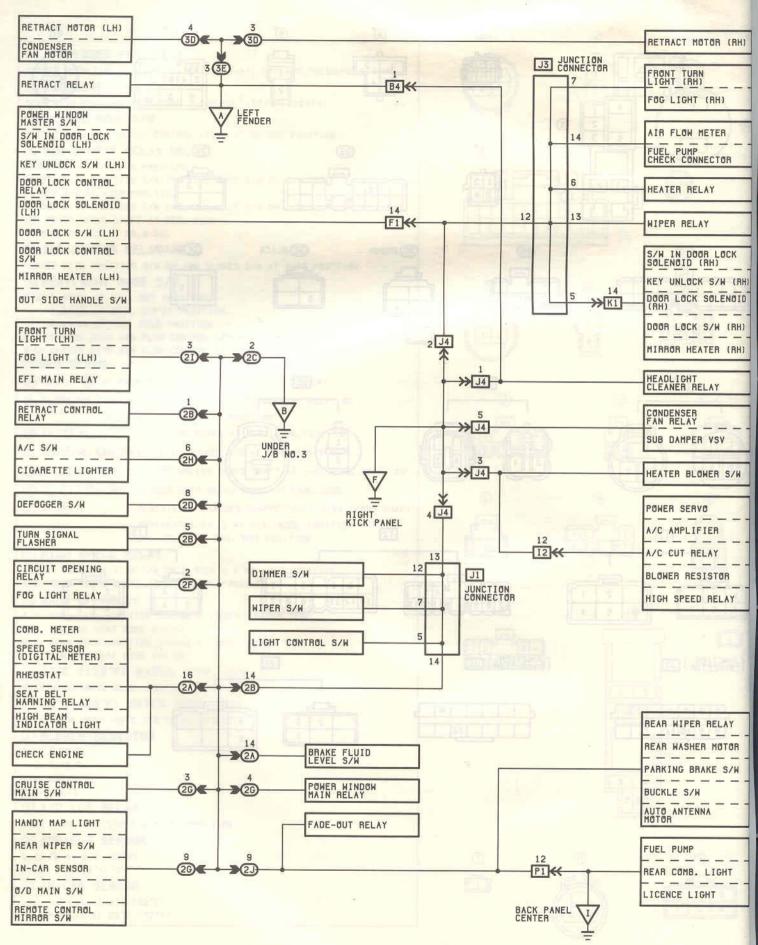


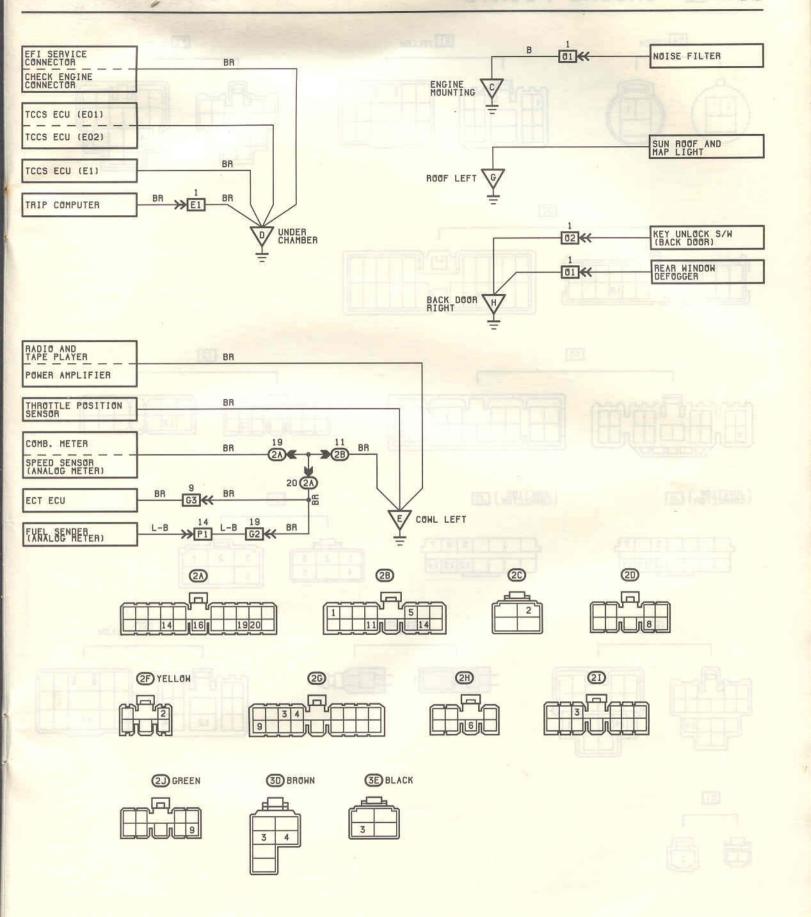


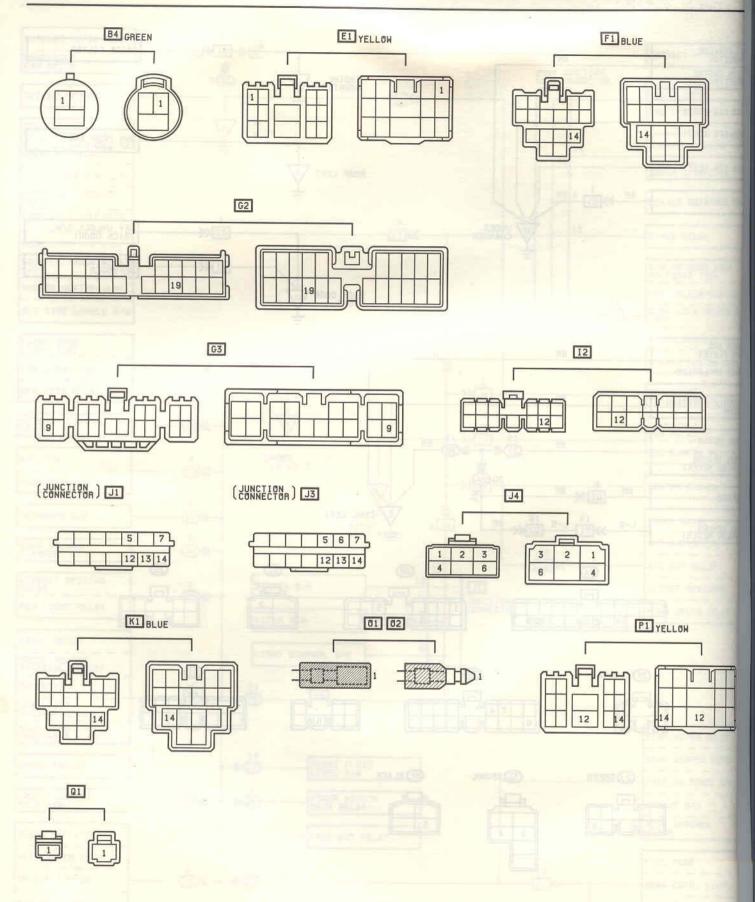




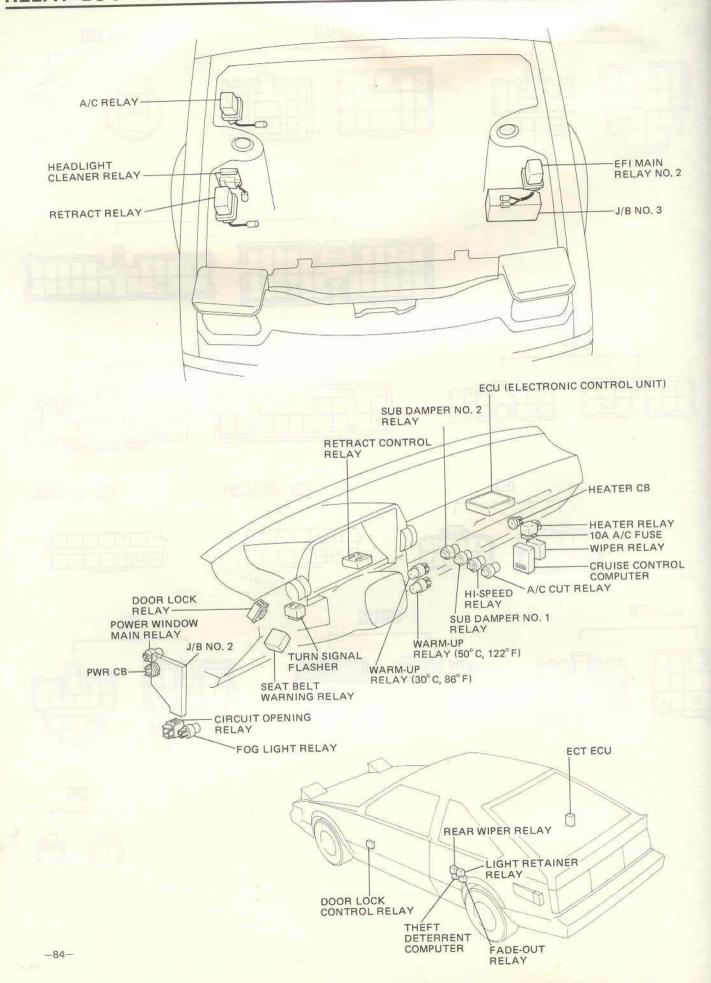


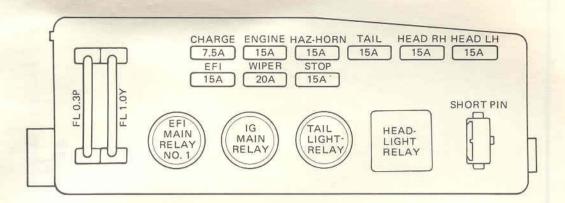




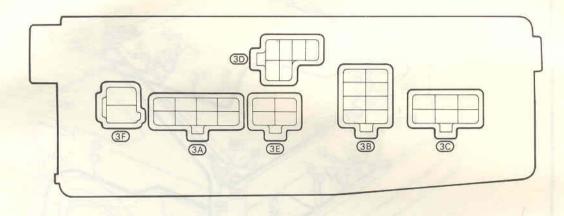


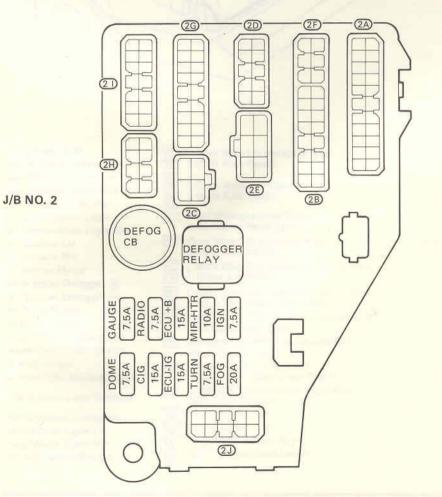




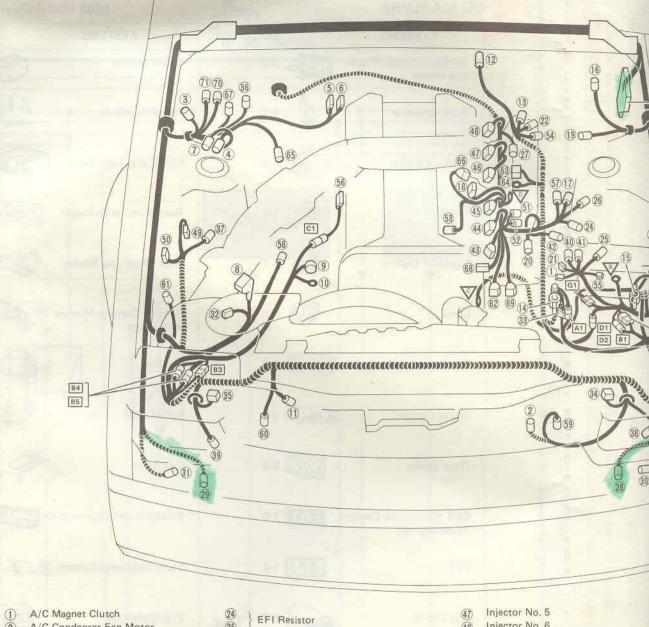


J/B NO. 3





ELECTRICAL WIRING ROUTING



	ATO Magnet Olaten
2	A/C Condenser Fan Motor
(3)	A/C Relay
4	A/C Sub Damper VSV
6	A/C Water Temp, S/W
(7)	A/C Water Valve VSV
8	Air Flow Meter
9	Alternator
(11)	Ambient Sensor
(12)	Back-up Light S/W [M/T]
(13)	Back-up Light S/W [A/T]
(14)	Battery (+) Terminal
(15)	Battery Terminal
(16)	Brake Fluid Level S/W
(17)	Check Engine Connector
(18)	Cold Start Injector
(19)	Cruise Control Actuator
20	Distributor
(21)	ECT DG Connector

ECT Solenoid

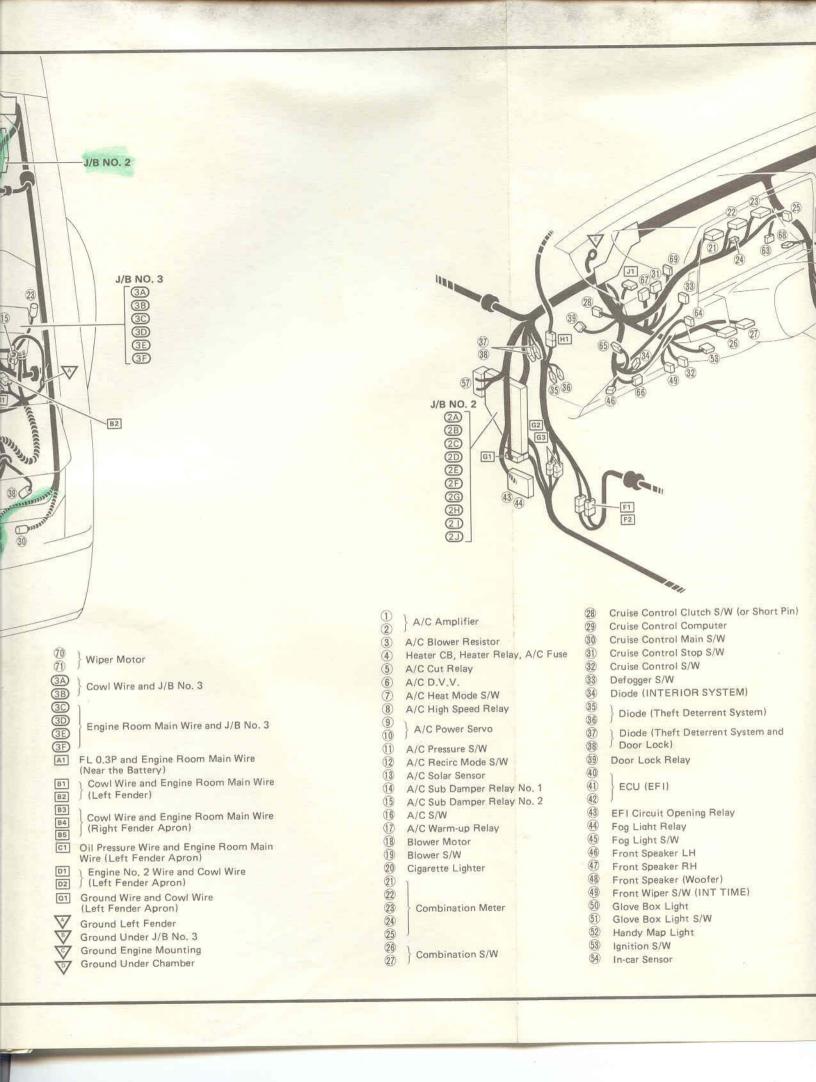
23 EFI Main Relay No. 2

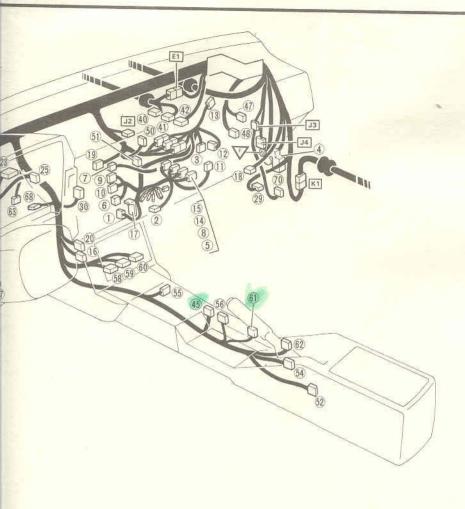
150	
(26)	EFI Service Connector
(27)	EGR Valve
(28)	Front Fog Light LH
(29)	Front Fog Light RH
(30)	Front Turn Signal and Clearance Light L
(31)	Front Turn Signal and Clearance Light R
(32)	Fuel Pump Check Connector
(33)	Fusible Link Box
(34)	Headlight LH
(35)	Headlight RH
(36)	Headlight Cleaner Motor
(37)	Headlight Cleaner Relay
(38)	Horn LH
(39)	Horn RH
(40)) resident
(41)	} Igniter
(42)	Ignition Coil
43	Injector No. 1
(44)	Injector No. 2
(45)	Injector No. 3
46	Injector No. 4

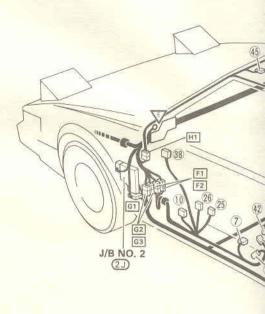
(47)	Injector No. 5
(48)	Injector No. 6
(49)	Inspection Light
(50)	Inspection Light S/W
(51) (52)	} ISC Valve
(53)	Knock Sensor
(54)	Neutral Start S/W
(55)	Noise Filter (Ignition)
(56)	Oil Pressure Sender
(57)	Ox Check Connector
(58)	Ox Sensor
(59)	Retract Motor LH
(60)	Retract Motor RH
(61)	Retract Relay
62	Start Injector Time S/W
(63) (64)	Starter
(65)	Theft Deterrent Horn
66	Throttle Position Sensor
(67)	Washer Motor

Water Temp, Sender

69 Water Thermo Sensor (EFI)







ort Pin) O/D S/W and A/T Indicator Light Pattern Select S/W (ECT) Power Window Main Relay and PWR CB (58) (59) Radio and Tape Player (60) (61) Rear Wiper S/W (62) Remote Control Mirror S/W Retract Control Relay (63) (64) and Rheostat (65) Seat Belt Warning Relay 66 Step Light (67) Stop Light S/W 68 Trip Computer 69 Turn Signal Flasher

Cowl Wire and J/B No. 2

70

Wiper Relay

Floor Wire and J/B No. 2

Engine Wire and Cowl Wire (Instrument Panel Right)

Door Wire LH and Cowl Wire F2 (Left Kick Panel)

G1 Floor Wire and Cowl Wire (Left Kick Panel) G3

H1 Roof Wire and Cowl Wire (Instrument Panel Left)

A/C Wire and Cowl Wire (Instrument Panel Right) 11 12

Junction Connector (Instrument Panel Left)

Junction Connector (Instrument Panel Right)

Junction Connector (Instrument Panel Right)

Ground Point [F1] and Cowl Wire (Right Kick Panel)

Door Wire RH and Cowl Wire K1 (Right Kick Panel)

Ground Cowl Left

Ground Right Kick Panel

Auto Antenna Motor and Control Relay Back Door Light

(3) Back Door S/W

4 5 Buckle S/W

Courtesy S/W 6

(7) Door Courtesy Light LH

Door Courtesy Light RH (8)

Door Key Cylinder Light and Out Side Handle S/W

Door Lock Control Relay

Door Lock Solenoid LH

Door Lock Solenoid RH (12)

ECT ECU

(14) Fade-out Relay

(15) Fuel Sender

(16) Fuel Pump

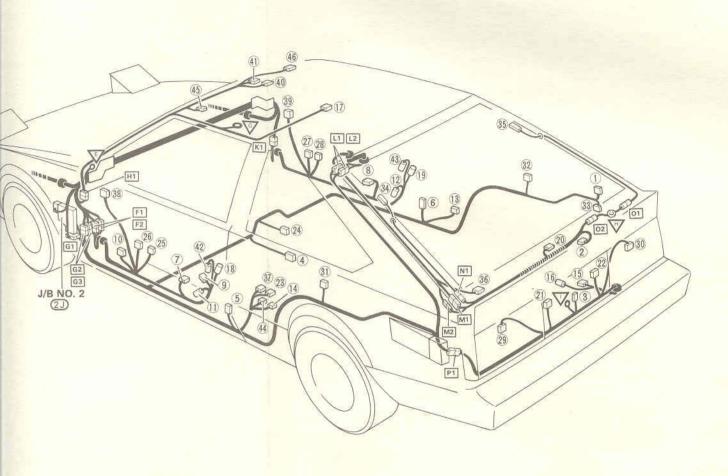
(17) Interior Light

(18) Key Unlock S/W and Door Lock S/W (19)

20 Key Unlock S/W (Back Door)

(21) Licence Light LH

(22) Licence Light RH Light Retainer Relay



Auto Antenna Motor and Control Relay

Back Door Light

Back Door S/W Buckle S/W

Courtesy S/W

Door Courtesy Light LH

Door Courtesy Light RH

Door Key Cylinder Light and Out Side Handle S/W

Door Lock Control Relay

Door Lock Solenoid LH

Door Lock Solenoid RH

ECT ECU

Fade-out Relay

Fuel Sender

Fuel Pump

Interior Light

Key Unlock S/W and Door Lock S/W

Key Unlock S/W (Back Door)

Licence Light LH

Licence Light RH

Light Retainer Relay

Parking Brake S/W

Power Window Master S/W

Power Window Motor LH (26)

Power Window Motor RH (27)

Power Window S/W RH

(29) Rear Combination Light LH

30 Rear Combination Light RH

Rear Speaker LH (31)

Rear Speaker RH

Rear Washer Motor (33)

Rear Window Defogger +

Rear Window Defogger 😑 (35)

Rear Wiper Motor

Rear Wiper Relay (37)

38 Remote Control Mirror LH

(39) Remote Control Mirror RH

(40) Sun Roof Motor

(41) Sun Roof S/W and Map Light

(42) S/W in Door Lock Solenoid (43)

(44) Theft Deterrent Computer

(45) Vanity Mirror Light LH (46)

Vanity Mirror Light RH (2J) Floor Wire and J/B No. 2 F1 Door Wire LH and Cowl Wire

(Left Kick Panel)

G1

Floor Wire and Cowl Wire (Left Kick Panel)

G2

Roof Wire and Cowl Wire HT (Instrument Panel Left)

K1 Door Wire RH and Cowl Wire

(Right Kick Panel)

Back Door No. 1 Wire and Floor Wire (Roof Left Rear)

Back Door No. 2 Wire and Back Door

No. 1 Wire (Back Door Left) M2

Defogger
 Wire and Back Door No. 2

Wire (Back Door Left) Defogger

Wire and Ground Wire

(Back Door Right)

Back Door No. 2 Wire and Ground Wire (Back Door Right)

Luggage Room Wire and Floor Wire

(Left Rear Fender)

Ground Cowl Left

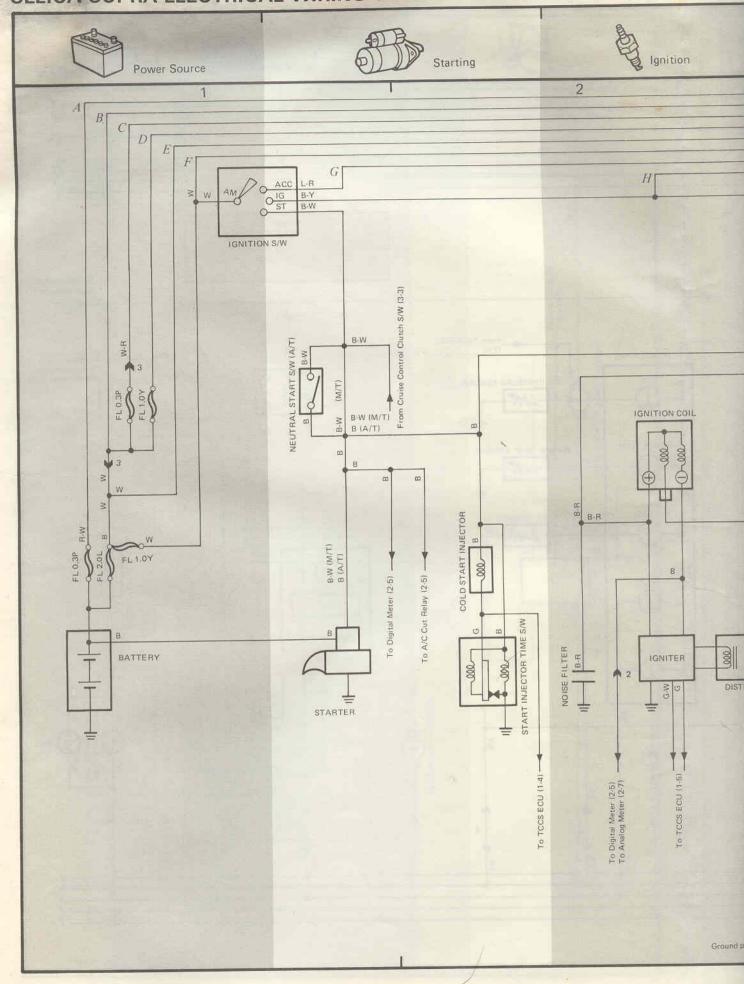
Ground Roof Left

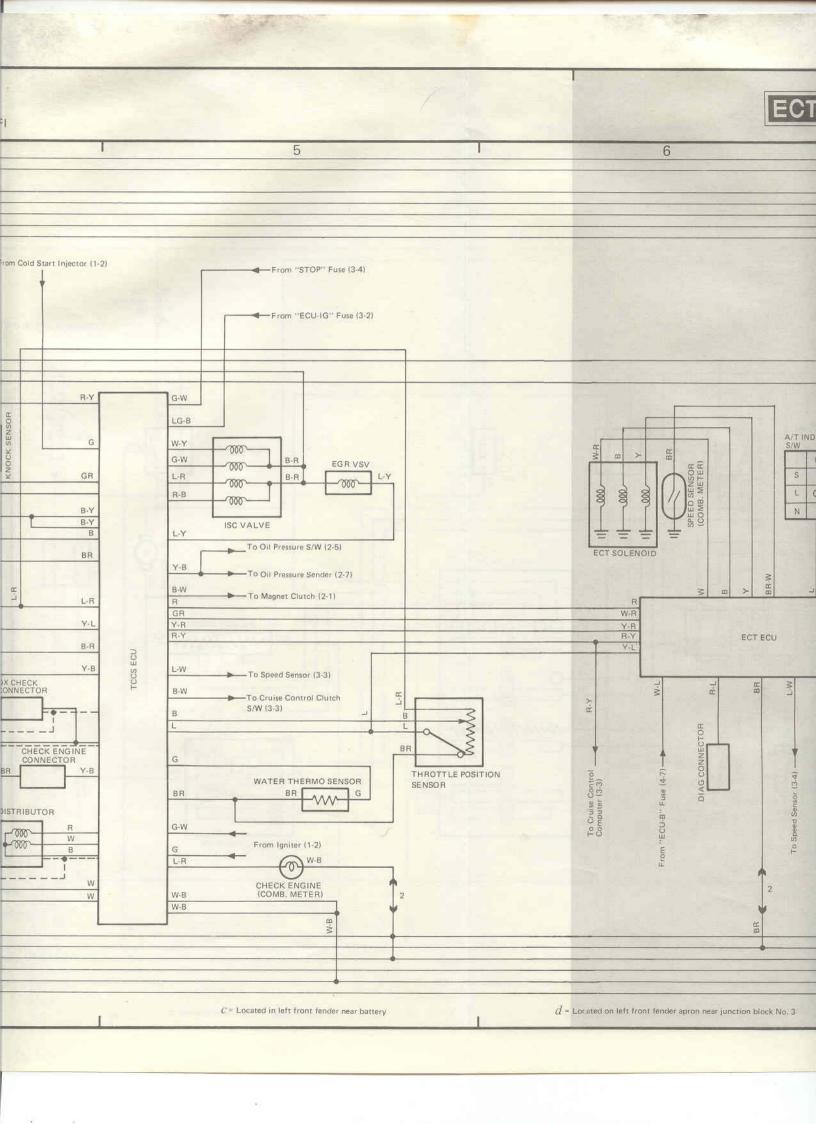
Ground Back Door Right

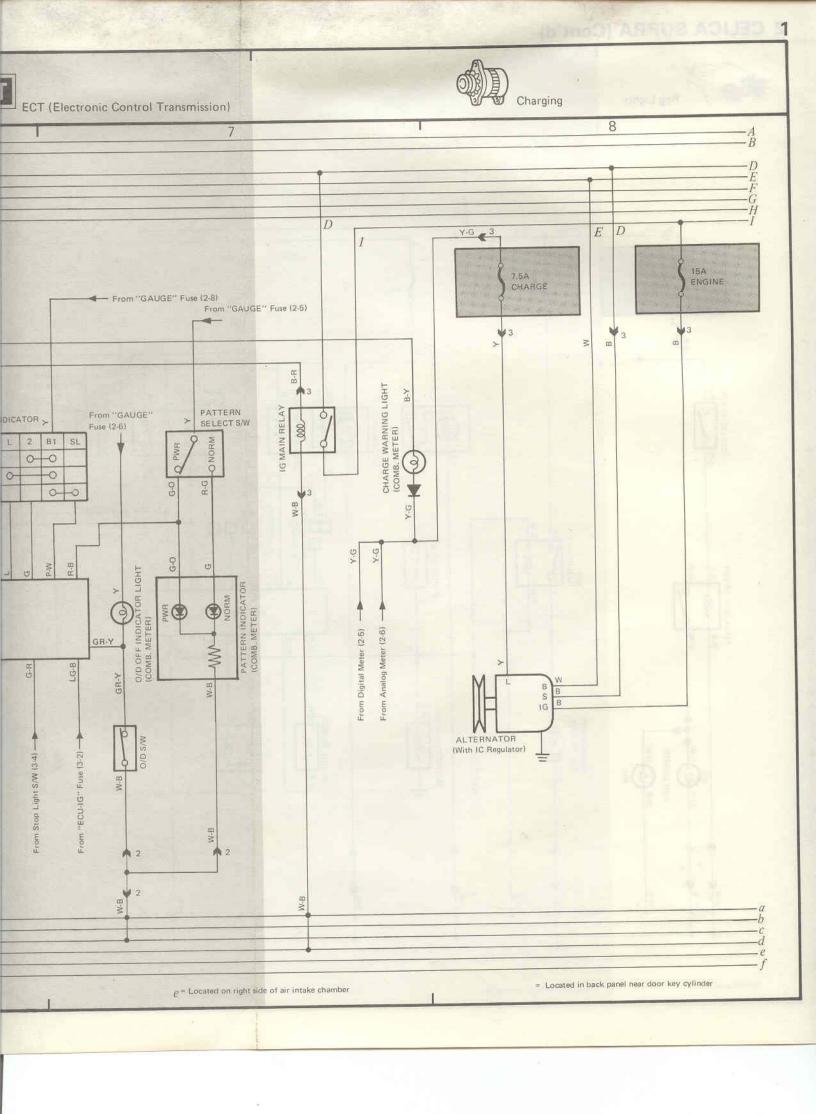
Ground Back Panel Center

SYSTEMS		LOCATION	SYSTEMS	LOCATION
Air Conditioner, Cooler and Heater		2-3	Power Source	1-1
Auto Antenna		5-1	Power Windows	3-1
Back-up Lights	A DEED	2-8	Radio and Tape Player	5-2
Charging		1-8	Rear Window Defogger	2-8
Cigarette Lighter	Co	5-1	Rear Wiper and Washer	3-7
Clock		5-1	Remote Control Mirrors with Heater	4-8
Combination Meter	[E003]	2-6	Starting	P 1-1
Cruise Control	40sr	3-3	Stop Lights	3-4
Door Locks	THE REPORT OF THE PARTY OF THE	5-3	Sun Roof	3-2
ECT (Electronic Control Transmission)	ECT	1-6	Taillights and Illumination	4-2
EFI	[EFI]	1-4	Theft Deterrent System	₎ 5-5
Fog Lights		2-1	Trip Computer	4.7
Front Wiper and Washer		3-6	Turn Signal and Hazard	13.5
Headlights		4-4	Unlock and Seat Belt Warning	4-7
Headlight Cleaner	P	3-8		
Horn	(I)	3-6	With a state of the state of th	
Ignition		1-2		
Interior Lights		4-5		

CELICA SUPRA ELECTRICAL WIRING DIAGRAM-1985 Model (Page 1 to Page







d = Located under right front piller

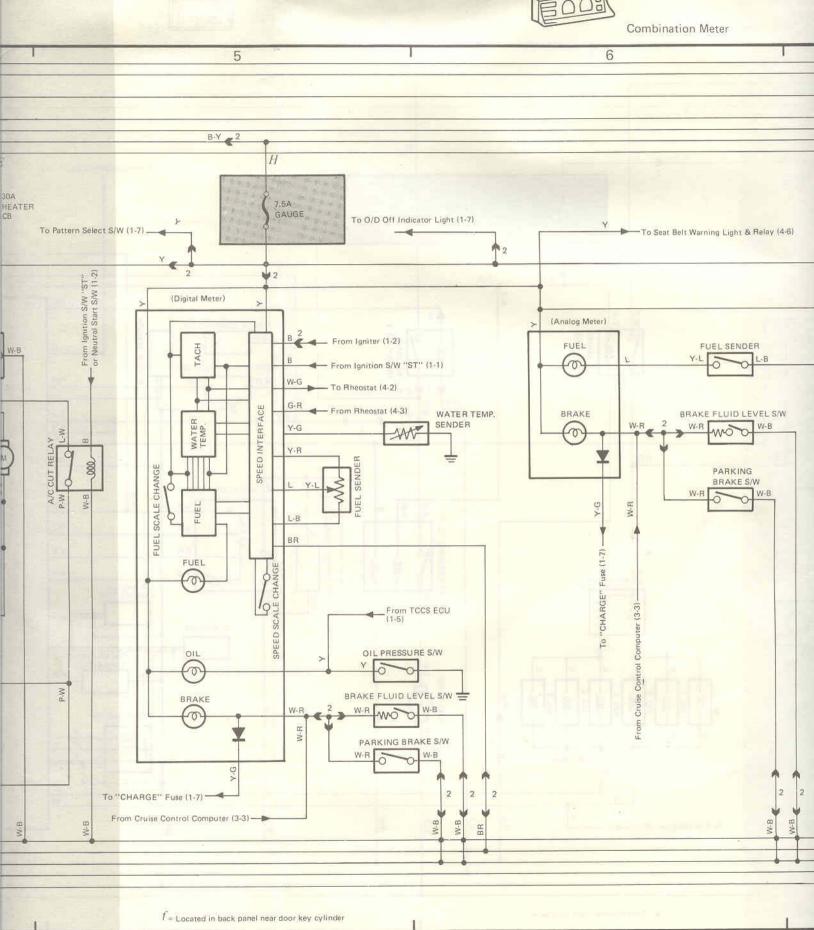
Ground points

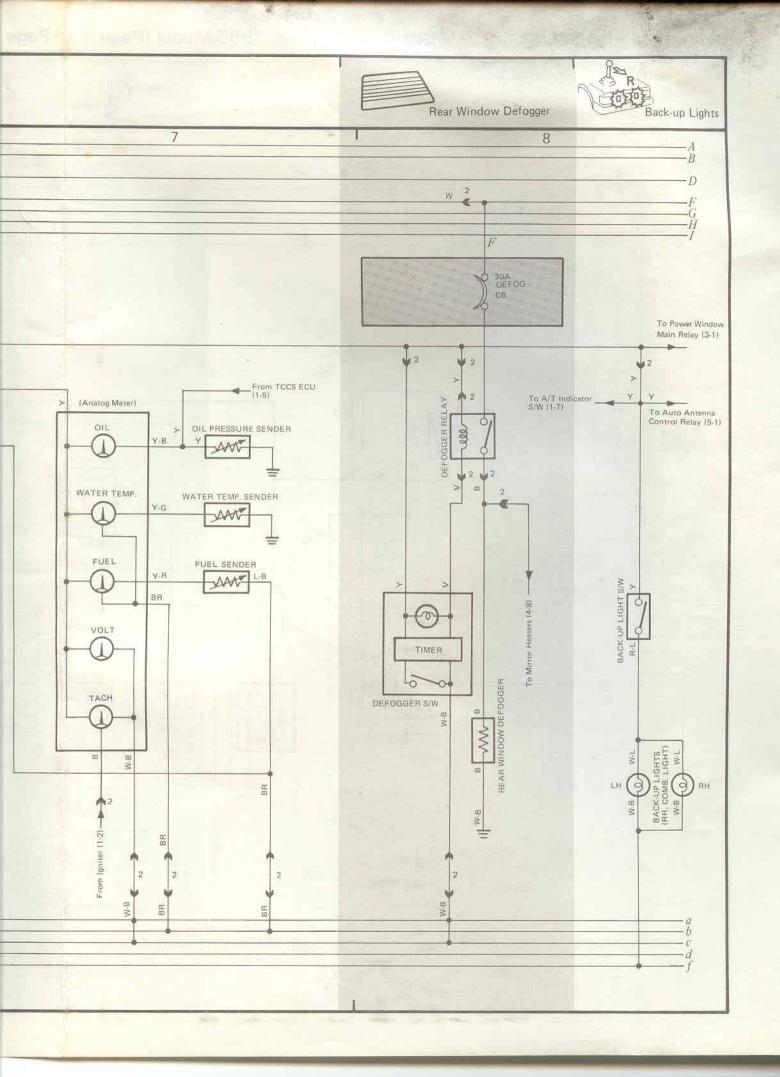
b = Located under left front piller



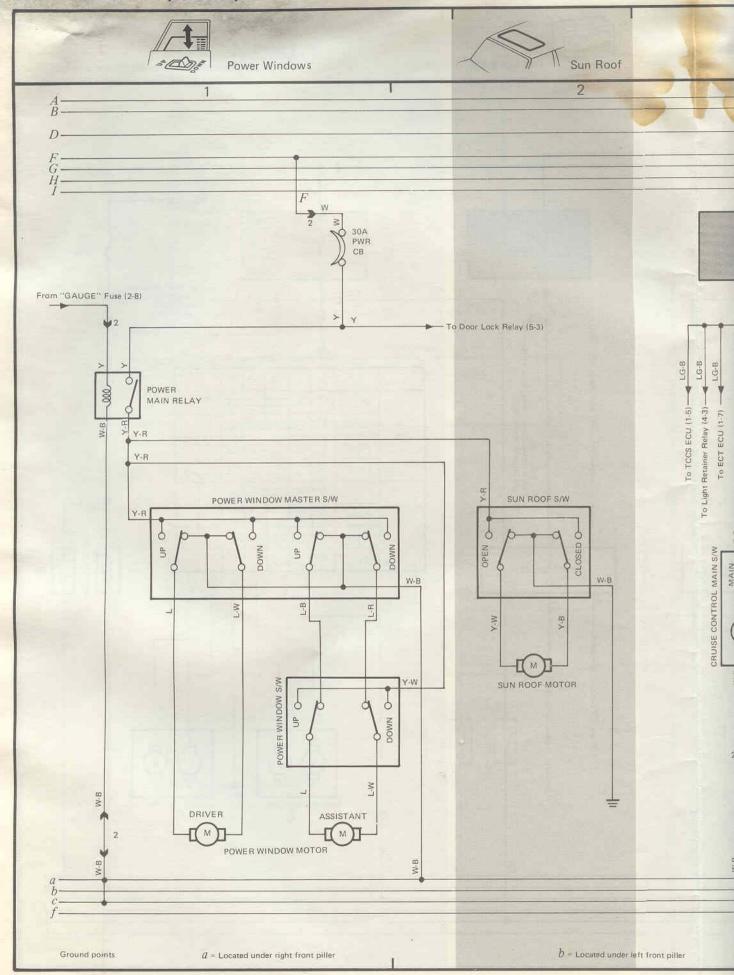
Air Conditioner, Cooler and Heater 4 3 E30A HEATER CB To Pattern S SUB DAMPER RELAY NO. 2 SUB DAMPER RELAY NO. 1 HIGH SPEED RELAY -000 HEATER RELAY BLOWER MOTOR POWER SERVO L-R L-Y WARM-UP RELAY BLOWER RESISTOR 1000 000 M-D R S/W (50°C) WATER TEMP, S/W (30°C) GR 1000 Y-B Y-G SUB DAMPER VSV В Y-R W-B HEATER BLOWER S/W W-B W-B W-B

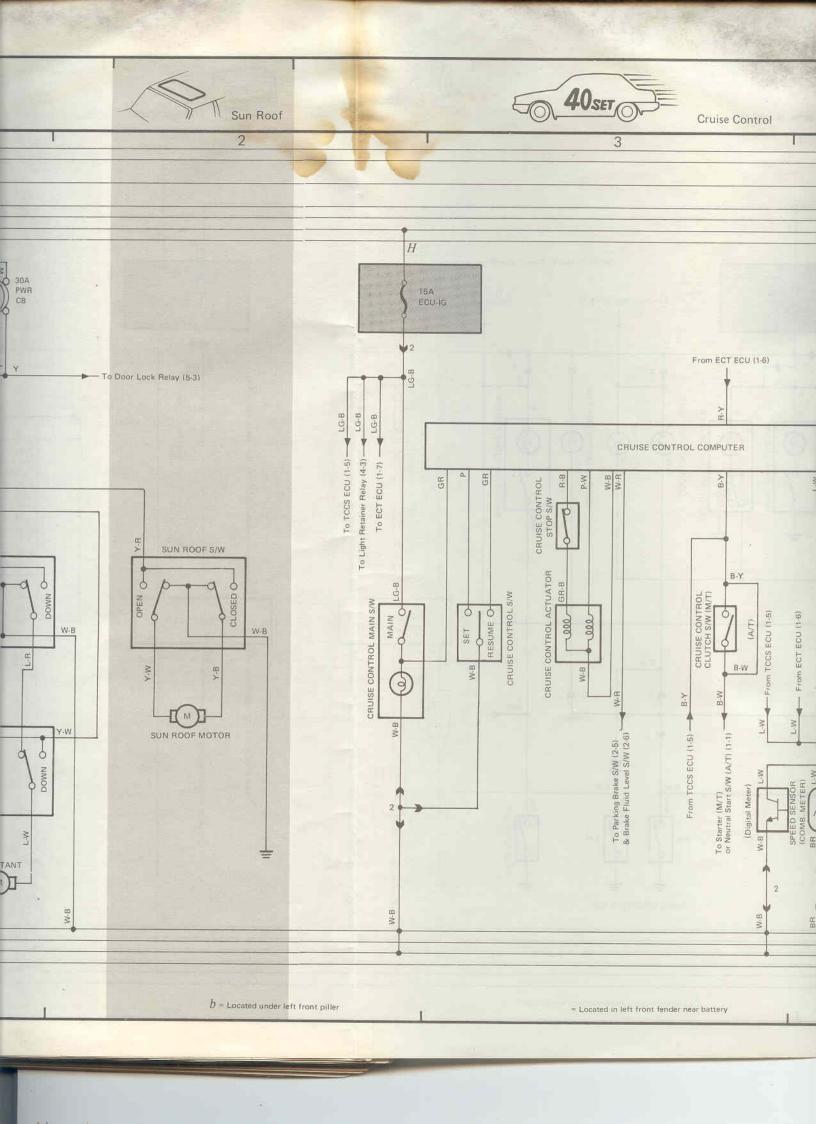


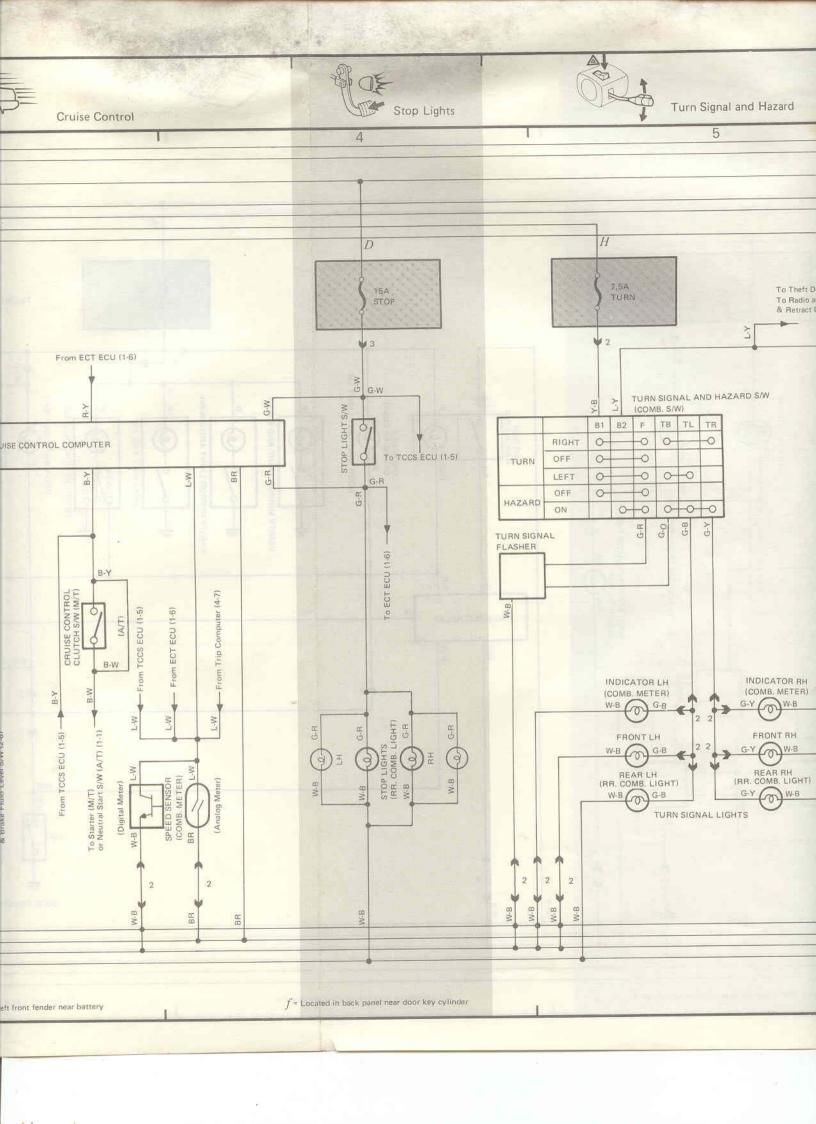


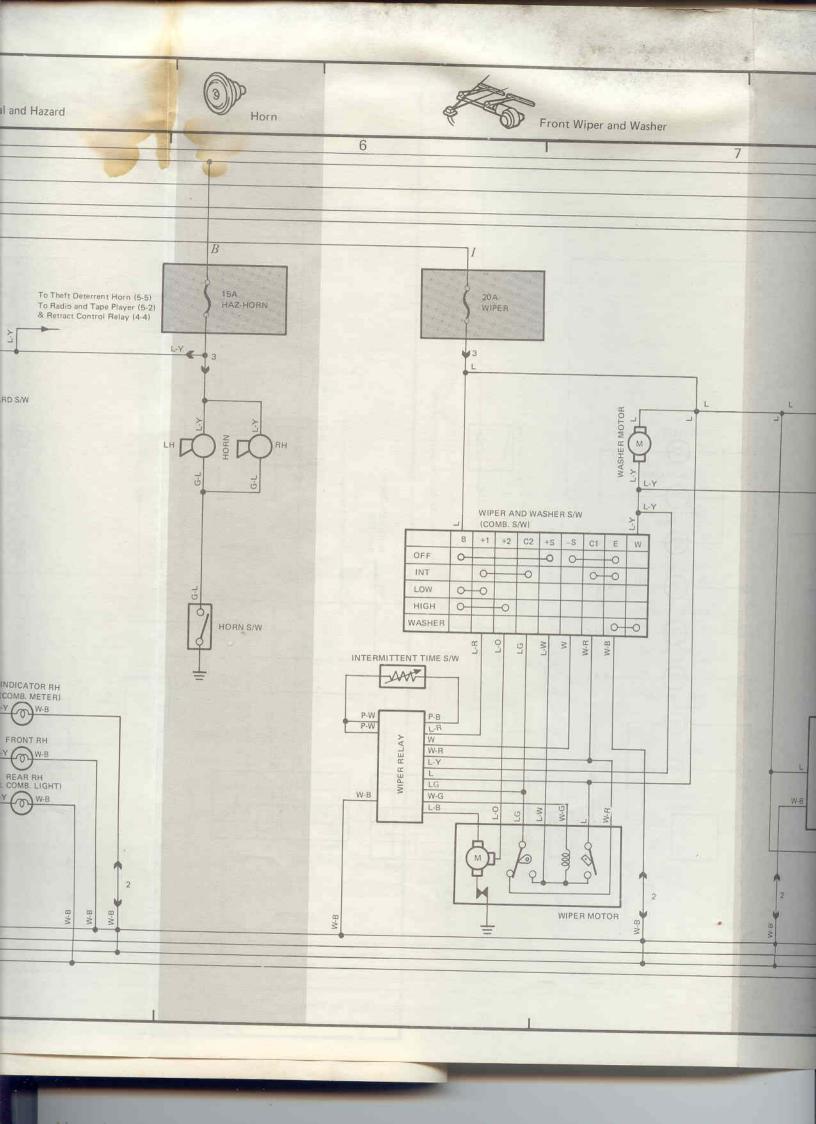


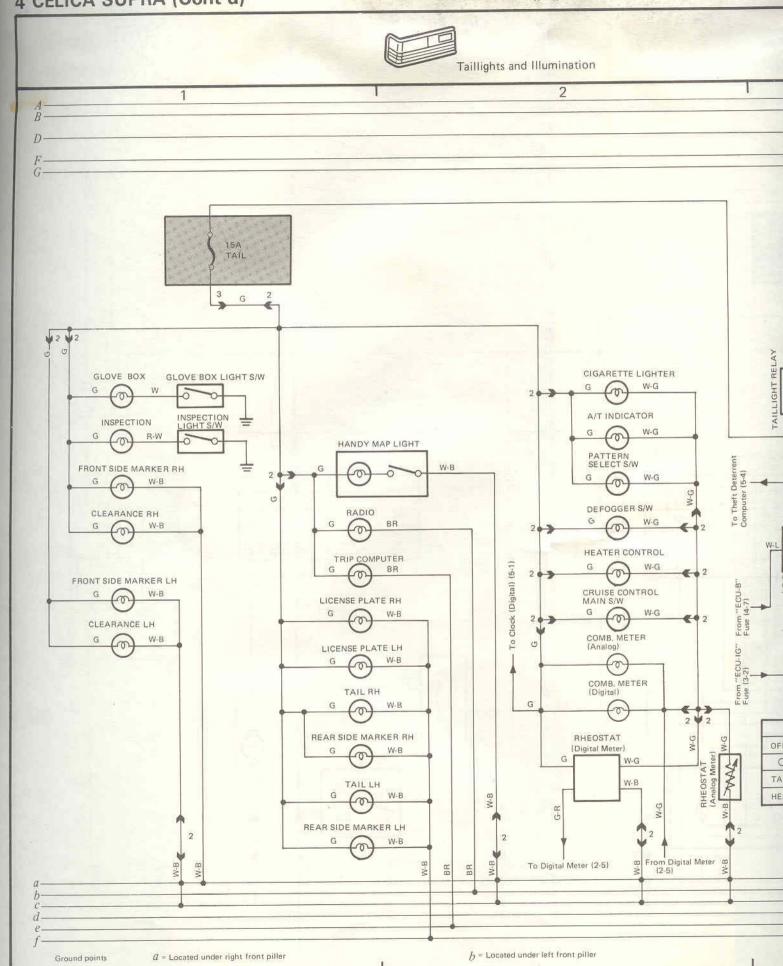
CELICA SUPRA (Cont'd)

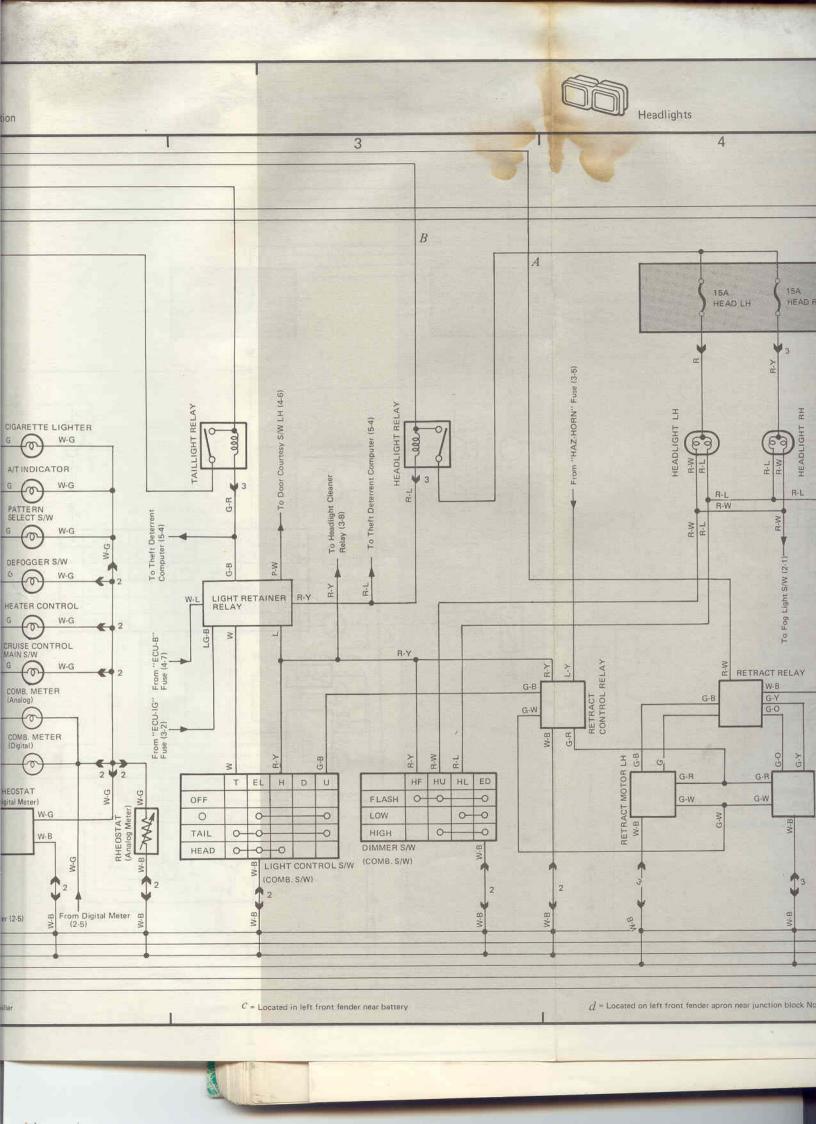


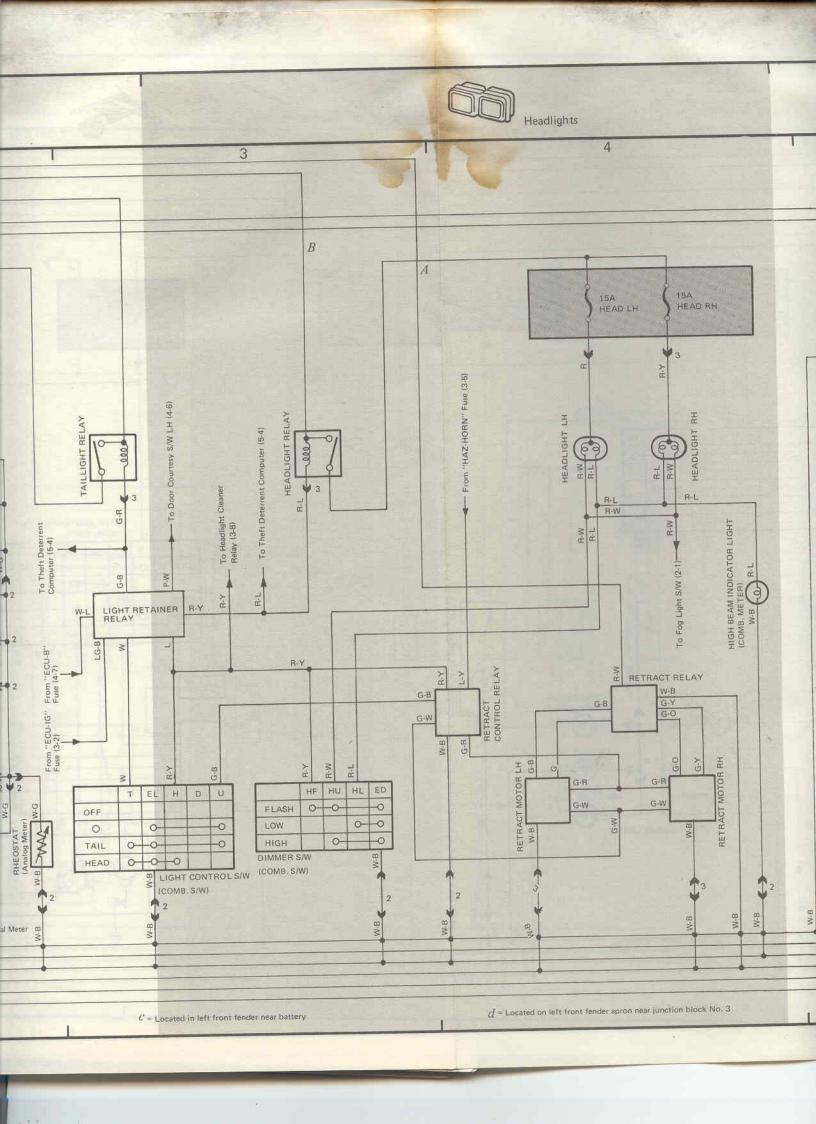


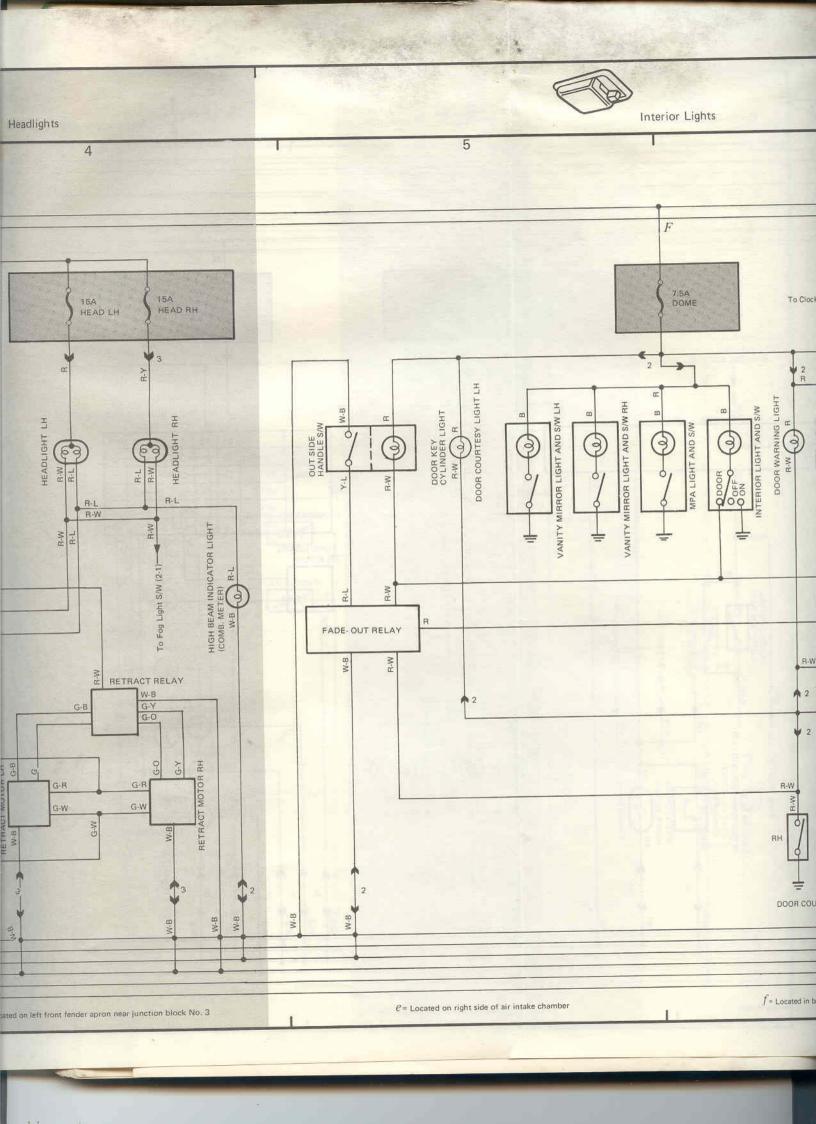


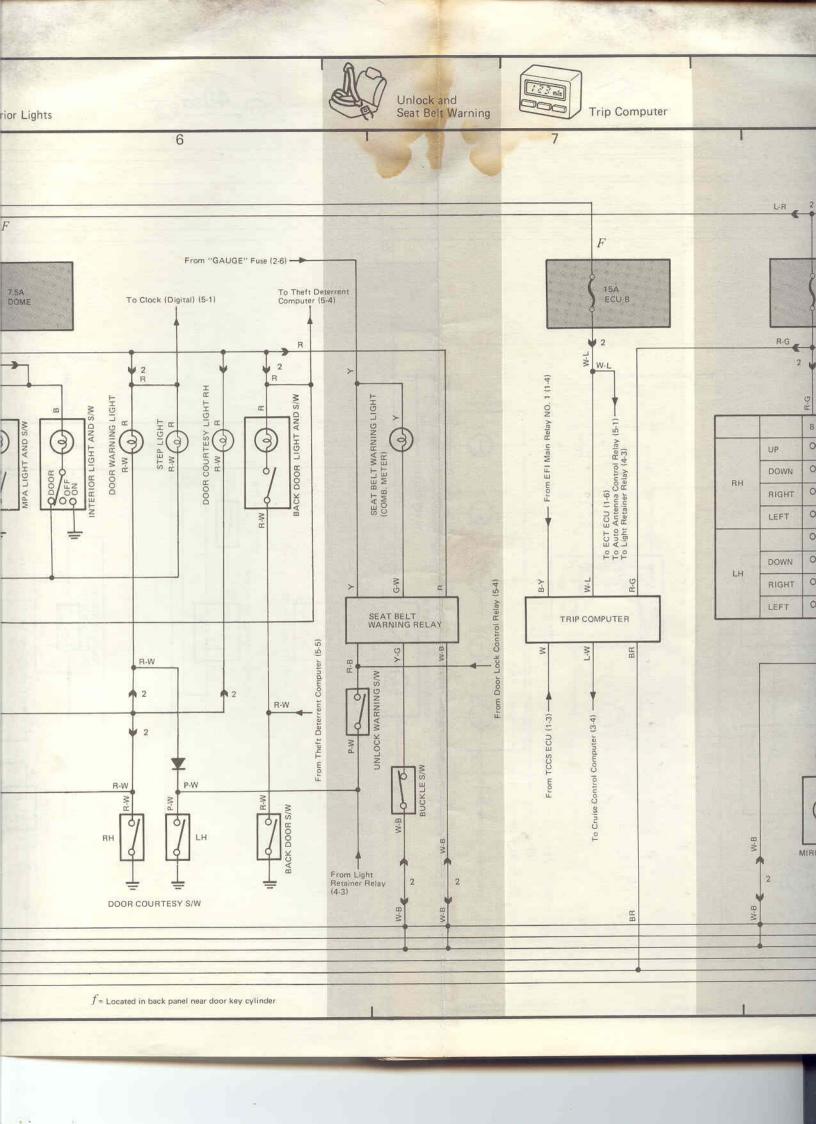


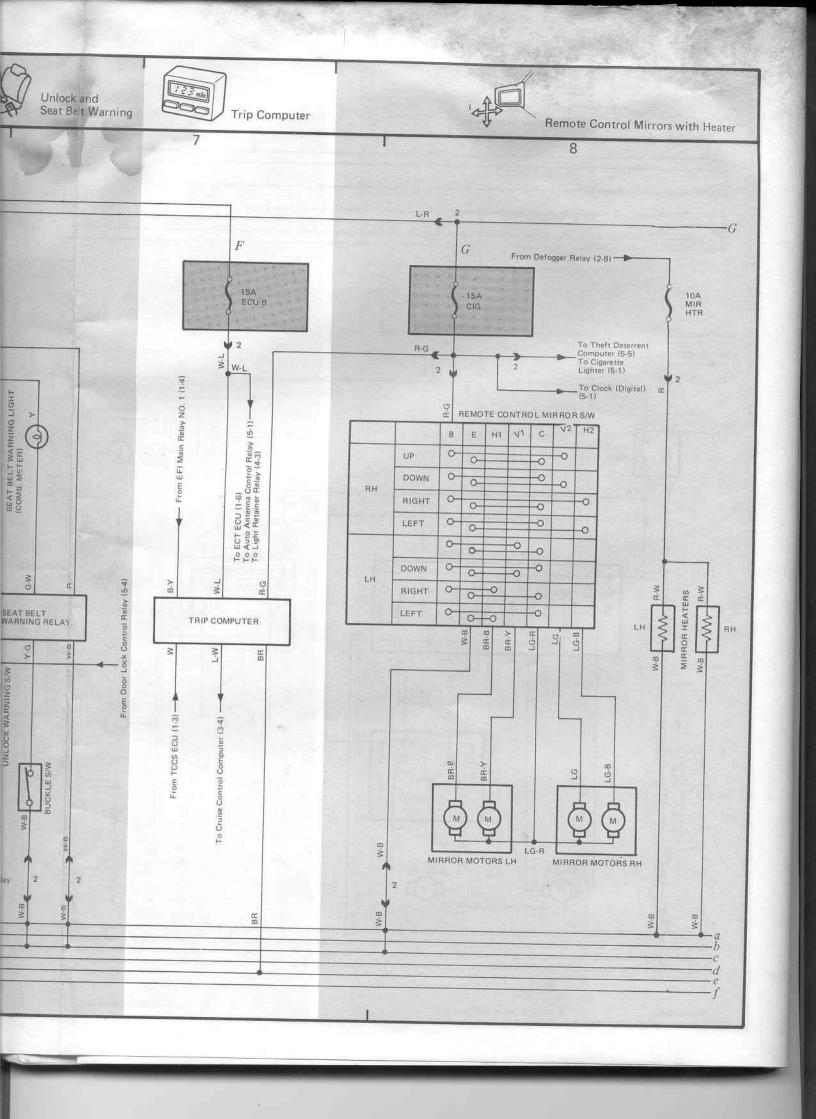












CELICA SUPRA (Cont'd)

