SYSTEM OUTLINE

WITH THE IGNITION SW TURNED TO ON, CURRENT FLOWS THROUGH THE **GAUGE** FUSE TO **TERMINAL 5** OF THE CRUISE CONTROL INDICATOR LIGHT. THE CURRENT THROUGH THE **ECU–IG** FUSE FLOWS TO **TERMINAL 14** OF THE CRUISE CONTROL ECU.
WHEN THE IGNITION SW IS ON AND THE CRUISE CONTROL MAIN SW IS TURNED ON, A SIGNAL IS INPUT FROM **TERMINAL 15** OF THE CRUISE CONTROL SW TO **TERMINAL 19** OF THE CRUISE CONTROL ECU. AS A RESULT, THE CRUISE CONTROL ECU FUNCTIONS AND THE CURRENT TO **TERMINAL 14** OF THE CRUISE CONTROL ECU FLOWS TO **TERMINAL 13** OF THE CRUISE CONTROL ECU ➔ **GROUND**, AND THE CRUISE CONTROL SYSTEM IS IN A CONDITION READY FOR OPERATION.
AT THE SAME TIME, THE CURRENT FROM THE **GAUGE** FUSE FLOWS TO **TERMINAL 5** OF THE CRUISE CONTROL INDICATOR LIGHT ➔ **TERMINAL 9** ➔ **TERMINAL 7** OF THE CRUISE CONTROL ECU ➔ **TERMINAL 13** ➔ **GROUND**, CAUSING THE CRUISE CONTROL INDICATOR LIGHT TO LIGHT UP TO INDICATE THAT THE CRUISE CONTROL IS READY FOR OPERATION.

1. SET OPERATION

WHEN THE CRUISE CONTROL MAIN SW IS TURNED ON AND THE SET SW IS PUSHED WITH THE VEHICLE SPEED WITHIN THE SET LIMIT (APPROX. **36** KM/H, **22** MPH TO **200** KM/H, **124** MPH), A SIGNAL IS INPUT TO **TERMINAL 18** OF THE CRUISE CONTROL ECU AND THE VEHICLE SPEED AND THE TIME THE SET SW IS RELEASED IS MEMORIZED IN THE ECU AS THE SET SPEED.

2. SET SPEED CONTROL

DURING CRUISE CONTROL DRIVING, THE CRUISE CONTROL ECU COMPARES THE SET SPEED MEMORIZED IN THE CRUISE CONTROL ECU WITH THE ACTUAL VEHICLE SPEED INPUT INTO **TERMINAL 20** OF THE CRUISE CONTROL ECU FROM THE SPEEDOMETER, AND CONTROLS THE CRUISE CONTROL ACTUATOR TO MAINTAIN THE SET SPEED.
WHEN THE ACTUAL SPEED IS LOWER THAN THE SET SPEED, THE ECU CAUSES THE CURRENT TO THE CRUISE CONTROL ACTUATOR TO FLOW FROM **TERMINAL 12** OF THE CRUISE COTNROL ECU ➔ **TERMINAL 6** OF THE CRUISE CONTROL ACTUATOR ➔ **TERMINAL 7** ➔ **TERMINAL 11** OF THE CRUISE CONTROL ECU. AS A RESULT, THE MOTOR IN THE CRUISE CONTROL ACTUATOR IS ROTATED TO OPEN THE THROTTLE VALVE, AND THE THROTTLE CABLE IS PULLED TO INCREASE THE VEHICLE SPEED. WHEN THE ACTUAL DRIVING SPEED IS HIGHER THAN THE SET SPEED, THE CURRENT TO CRUISE CONTROL ACTUATOR FLOWS FROM **TERMINAL 11** OF THE CRUISE CONTROL ECU ➔ **TERMINAL 7** OF THE CRUISE CONTROL ACTUATOR ➔ **TERMINAL 6** ➔ **TERMINAL 12** OF THE CRUISE CONTROL ECU.
THIS CAUSES THE MOTOR IN THE CRUISE CONTROL ACTUATOR TO ROTATE TO CLOSE TO THE THROTTLE VALVE AND RETURN THE THROTTLE CABLE TO DECREASE THE VEHICLE SPEED.

3. COAST CONTROL

DURING CRUISE CONTROL DRIVING, WHILE THE COAST SW IS ON, THE CRUISE CONTROL ACTUATOR RETURNS THE THROTTLE CABLE TO CLOSE THE THROTTLE VALVE AND DECREASE THE DRIVING SPEED. THE VEHICLE SPEED WHEN THE COAST SWITCH IS TURNED OFF IS MEMORIZED, AND THE VEHICLE CONTINUES AT THE NEW SET SPEED.

4. ACCEL CONTROL

DURING CRUISE CONTROL DRIVING, WHILE THE ACCEL SW IS TURNED ON, THE CRUISE CONTROL ACTUATOR PULLS THE THROTTLE CABLE TO OPEN THE THROTTLE VALVE AND INCREASE THE DRIVING SPEED. THE VEHICLE SPEED WHEN THE ACCEL SW IS TURNED OFF IS MEMORIZED, AND THE VEHICLE CONTINUES AT THE NEW SET SPEED.

5. RESUME CONTROL

UNLESS THE VEHICLE SPEED FALLS BELOW THE MINIMUM SPEED LIMIT (APPROX. **40** KM/H, **25** MPH) AFTER CANCELING THE SET SPEED BY THE CANCEL SW, PUSHING THE RESUME SW WILL CAUSE THE VEHICLE TO RESUME THE SPEED SET BEFORE CANCELLATION.

6. MANUAL CANCEL MECHANISM

IF ANY OF THE FOLLOWING OPERATIONS OCCURS DURING CRUISE CONTROL OPERATION, THE MAGNETIC CLUTCH OF THE ACTUATOR MOTOR TURNS OFF, THE MOTOR ROTATES TO CLOSE THE THROTTLE VALVE, AND THE CRUISE CONTROL IS RELEASED.

* PLACING THE IGNITION SW AT **ST** POSITION. “SIGNAL INPUT TO **TERMINAL 2** OF THE CRUISE CONTROL ECU”
* DEPRESSING BRAKE PEDAL (STOP LIGHT SW ON). “SIGNAL INPUT TO **TERMINAL 16** OF THE CRUISE CONTROL ECU”
* PUSH THE CANCEL SW (CANCEL SW ON). “SIGNAL INPUT TO **TERMINAL 18** OF THE CRUISE CONTROL ECU”
* PUSH THE CRUISE SW (CRUISE SW OFF) “SIGNAL INPUT TO **TERMINAL 19** OF THE CRUISE CONTROL ECU”

7. AUTO CANCEL FUNCTION

A) IF ANY OF THE FOLLOWING OPERATING CONDITIONS OCCURS DURING CRUISE CONTROL OPERATION, THE SET SPEED IS ERASED, THE CURRENT FLOW TO MAGNETIC CLUTCH IS STOPPED, AND THE CRUISE CONTROL IS RELEASED. (MAIN SW TURNS OFF).

WHEN THIS OCCURS, THE IGNITION SW MUST BE TURNED OFF ONCE BEFORE THE MAIN SWITCH WILL TURN ON.

* OVER CURRENT TO TRANSISTOR DRIVING MOTOR AND/OR MAGNETIC CLUTCH.
* WHEN CURRENT CONTINUED TO FLOW TO THE MOTOR INSIDE THE ACTUATOR IN THE THROTTLE VALVE "OPEN" DIRECTION.
* OPEN CIRCUIT IN MAGNETIC CLUTCH.
* MOMENTARY INTERRUPTION OF VEHICLE SPEED SIGNAL.
* SHORT CIRCUIT IN CRUISE CONTROL SW.
* MOTOR DOES NOT OPERATE DESPITE THE MOTOR DRIVE SIGNAL BEING OUTPUT.

B) IF ANY OF THE FOLLOWING CONDITIONS OCCURS DURING CRUISE CONTROL OPERATION, THE SET SPEED IS ERASED, AND THE CRUISE CONTROL IS RELEASED. (THE POWER OF MAGNETIC CLUTCH IS CUT OFF UNTIL THE SET SW IS "ON" AGAIN.)

* WHEN THE VEHICLE SPEED FALLS BELOW THE MINIMUM SPEED LIMIT, APPROX. **40** KM/H (**25** MPH)
* WHEN THE VEHICLE SPEED FALLS MORE THAN **16** KM/H (**10** MPH) BELOW THE SET SPEED, E.G. ON AN UPWARD SLOPE.
* WHEN POWER TO THE CRUISE CONTROL SYSTEM IS MOMENTARILY CUT OFF.

8. AUTOMATIC TRANSMISSION CONTROL FUNCTION

* IN OVERDRIVE. IF THE VEHICLE SPEED BECOMES LOWER THAN THE OVERDRIVE CUT SPEED (SET SPEED MINUS APPROX. **4** KM/H, **2.5** MPH) DURING CRUISE CONTROL OPERATION, SUCH AS DRIVING UP A HILL, THE OVERDRIVE IS RELEASED AND THE POWER INCREASED TO PREVENT A REDUCTION IN THE VEHICLE SPEED.
* AFTER RELEASING THE OVERDRIVE, VEHICLE SPEED BECOMES HIGHER THAN THE OVERDRIVE RETURN SPEED (SET SPEED MINUS APPROX. **2** KM/H, **1.2** MPH), THE ECU JUDGE BY THE SIGNALS FROM POTENTIOMETER OF THE ACTUATOR THAT THE UPWARD SLOPE HAS FINISHED, AND OVERDRIVE IS RESUMED AFTER APPROXIMATELY **6** SECONDS.

TO MAINTAIN SMOOTH CRUISE CONTROL OPERATION (ON A DOWNWARD SLOPE ETC.), LOCK–UP RELEASE OF THE TRANSMISSION WHEN THE IDLING POINT OF THE THROTTLE POSITION IS "ON" IS FORBIDDEN.

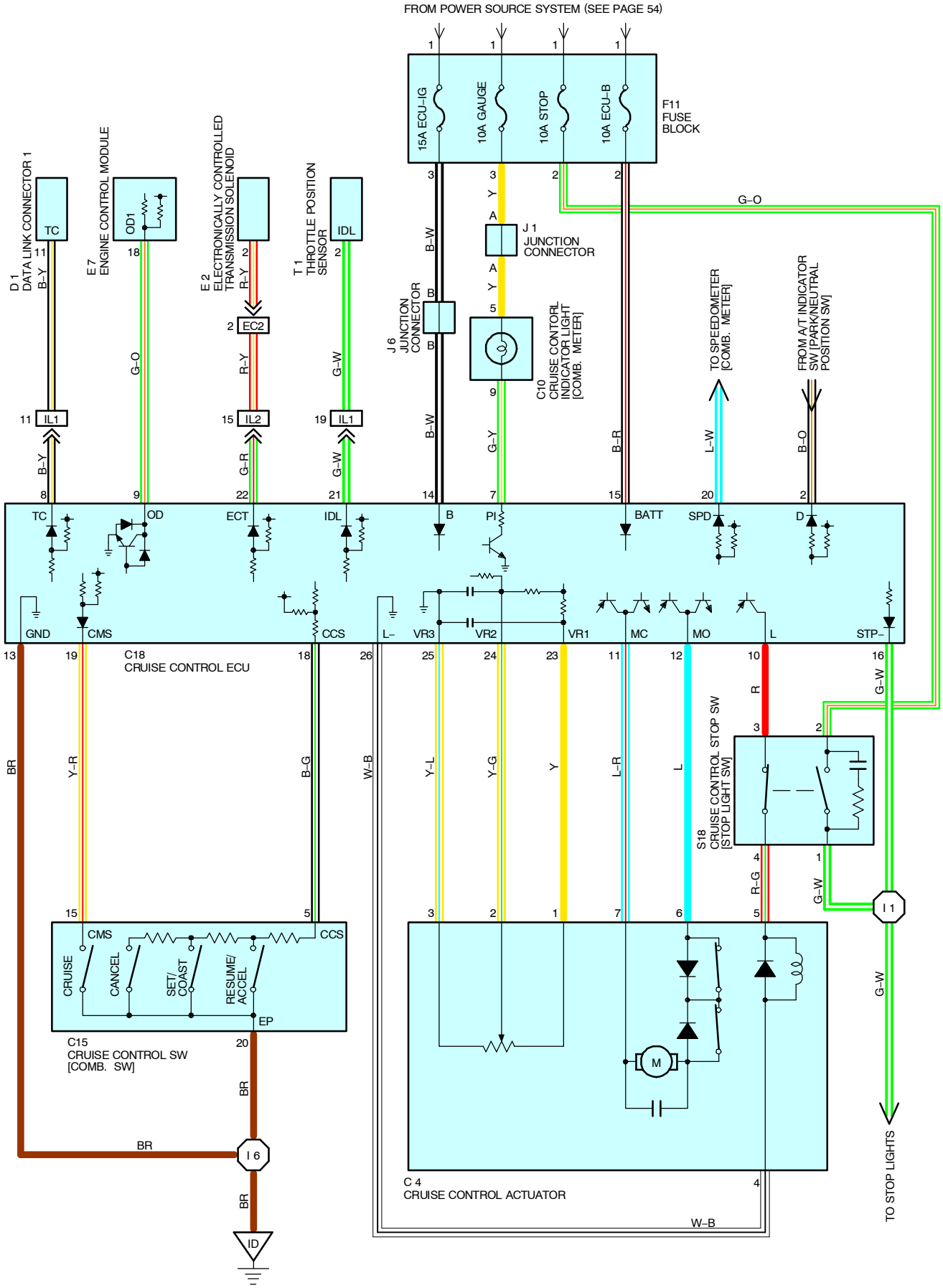
SERVICE HINTS

C4 CRUISE CONTROL ACTUATOR

1–3 : APPROX. **2** KΩ
5–4 : APPROX. **38.5** Ω

C18 CRUISE CONTROL ECU

14–GROUND : APPROX. **12** VOLTS WITH THE IGNITION SW AT **ON** POSITION
15–GROUND : ALWAYS APPROX. **12** VOLTS
20–GROUND : 4 PULSE WITH 1 ROTATION OF ROTOR SHAFT
18–GROUND : APPROX. **418** Ω WITH THE CANCEL SW ON IN THE CONTROL SW
APPROX. **68** Ω WITH THE RES/ACC SW ON IN THE CONTROL SW
APPROX. **198** Ω WITH THE SET/COAST SW ON IN THE CONTROL SW
19–GROUND : CONTINUITY WITH THE CRUISE SW ON IN THE CONTROL SW
13–GROUND : ALWAYS CONTINUITY


FROM POWER SOURCE SYSTEM (SEE PAGE 54)
15A ECU-IG
10A GAUGE
10A STOP
10A ECU-B
F11 FUSE BLOCK
D 1 DATA LINK CONNECTOR 1
E 7 ENGINE CONTROL MODULE
E 2 ELECTRONICALLY CONTROLLED TRANSMISSION SOLENOID
T 1 THROTTLE POSITION SENSOR
J 1 JUNCTION CONNECTOR
J 6 JUNCTION CONNECTOR
C10 CRUISE CONTORL INDICATOR LIGHT [COMB. METER]
TO SPEEDOMETER [COMB. METER]
FROM A/T INDICATOR SW [PARK/NEUTRAL POSITION SW]
TC
OD1
EC2
IDL
IL1
IL2
TC
OD
ECT
IDL
B
PI
BATT
SPD
D
GND
CMS
CCS
L-
VR3
VR2
VR1
MC
MO
L
STP-
C18 CRUISE CONTROL ECU
S18 CRUISE CONTROL STOP SW [STOP LIGHT SW]
C15 CRUISE CONTROL SW [COMB. SW]
CRUISE
CANCEL
SET/ COAST
RESUME/ ACCEL
EP
C 4 CRUISE CONTROL ACTUATOR
M
I 1
I 6
ID
TO STOP LIGHTS
W-B

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C4	22	D1	22	J1	25
C10	24	E2	22	J6	25
C15	24	E7	24	S18	25
C18	24	F11	25	T1	23

▭ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IL1	34	ENGINE WIRE AND COWL WIRE (BEHIND GLOVE BOX)
IL2		

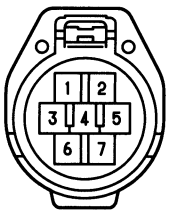
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	32	LEFT KICK PANEL

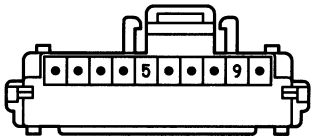
⬡ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I1	34	COWL WIRE	I13	34	COWL WIRE
I6					

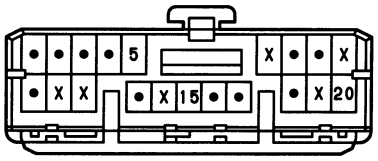
C 4 GRAY



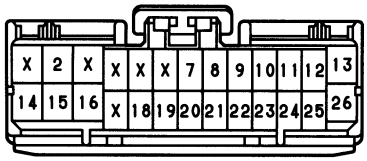
C10 GRAY



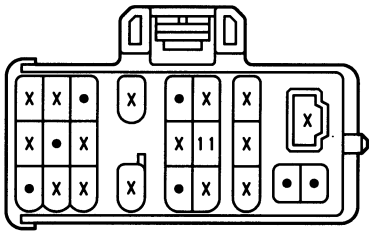
C15 BLACK



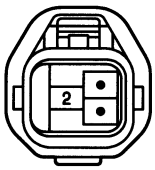
C18 GRAY



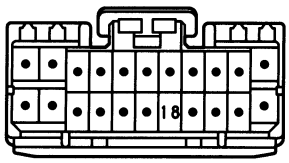
D 1 BLACK



E 2 BLACK



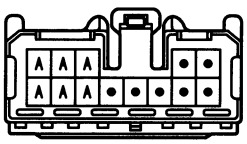
E 7 DARK GRAY



F11

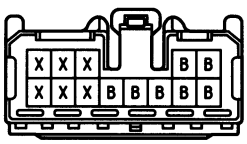
(SEE PAGE 20)

J 1



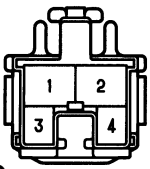
(HINT:SEE PAGE 7)

J 6



(HINT:SEE PAGE 7)

S18 BLACK



T 1 BLACK