

SYSTEM OUTLINE _

CURRENT IS APPLIED AT ALL TIMES THROUGH STOP FUSE TO **TERMINAL 1** OF THE CONTROL ECU AND **TERMINAL 1** OF STOP LIGHT SWITCH.

WHEN THE IGNITION SWITCH TURNED TO ON, THE CURRENT FLOWS THROUGH GAUGE FUSE TO **TERMINAL 5** OF CRUISE CONTROL INDICATOR LIGHT. THE CURRENT THROUGH ECU-IG FUSE FLOWS TO **TERMINAL 14** OF CRUISE CONTROL ECU AND **TERMINAL 1** OF CRUISE CONTROL SPEED SENSOR.

WHEN THE IGNITION SWITCH IS ON AND THE CRUISE CONTROL MAIN SWITCH IS TURNED ON, A SIGNAL IS INPUT FROM **TERMINAL 15** OF CRUISE CONTROL MAIN SWITCH TO **TERMINAL 4** OF CRUISE CONTROL ECU. AS A RESULT, THE CRUISE CONTROL ECU FUNCTIONS AND THE CURRENT TO **TERMINAL 14** OF CRUISE CONTROL ECU TO **TERMINAL 13** OF CRUISE CONTROL ECU \rightarrow **GROUND**, AND THE CRUISE CONTROL SYSTEM IS IN A CONDITION READY FOR OPERATION.

AT THE SAME TIME, THE CURRENT THROUGH THE GAUGE FUSE FLOWS FROM **TERMINAL 5** OF CRUISE CONTROL INDICATOR LIGHT \rightarrow **TERMINAL 9** \rightarrow **TERMINAL 5** OF CRUISE CONTROL ECU \rightarrow **TERMINAL 13** \rightarrow TO **GROUND**, CAUSING THE CRUISE CONTROL INDICATOR LIGHT TO LIGHT UP, INDICATING THAT THE CRUISE CONTROL IS READY FOR OPERATION.

1. SET OPERATION

WHEN THE CRUISE CONTROL MAIN SWITCH IS TURNED ON AND THE SET SWITCH 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 19** OF THE CRUISE CONTROL ECU AND THE VEHICLE SPEED AT THE TIME THE SET SWITCH IS RELEASED IS MEMORIZED IN THE ECU AS THE SET SPEED.

2. SET SPEED CONTROL

DURING CRUISE CONTROL DRIVING, THE ECU COMPARES THE SET SPEED MEMORIZED IN THE ECU WITH THE ACTUAL VEHICLE SPEED INPUT INTO **TERMINAL 20** OF THE CRUISE CONTROL ECU FROM THE SPEED SENSOR, 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** \rightarrow **TERMINAL 6** OF CRUISE CONTROL ACTUATOR \rightarrow **TERMINAL 7** \rightarrow **TERMINAL 11** OF 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 ECU \rightarrow **TERMINAL 7** OF CRUISE CONTROL ACTUATOR \rightarrow **TERMINAL 6** \rightarrow **TERMINAL 12** OF CRUISE CONTROL ECU.

THIS CAUSES THE MOTOR IN THE CRUISE CONTROL ACTUATOR TO ROTATE TO CLOSE THE THROTTLE VALVE AND RETURN THE THROTTLE CABLE TO DECREASE THE VEHICLE SPEED.

3. COAST CONTROL

DURING THE CRUISE CONTROL DRIVING, WHILE THE COAST SWITCH 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 SWITCH 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 SWITCH 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 SWITCH, PUSHING THE RESUME SWITCH 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 SAFETY MAGNET CLUTCH OF THE ACTUATOR MOTOR TURNS OFF AND THE MOTOR ROTATES TO CLOSE THE THROTTLE VALVE AND THE CRUISE CONTROL IS RELEASED.

- * PLACING THE SHIFT LEVER IN "N" RANGE (NEUTRAL START SWITCH ON). "SIGNAL INPUT TO **TERMINAL 2** OF ECU"
- * DEPRESSING THE BRAKE PEDAL (STOP LIGHT SWITCH ON). "SIGNAL INPUT TO TERMINAL 16 OF ECU"
- * DEPRESSING THE PARKING BRAKE PEDAL (PARKING BRAKE SWITCH ON). "SIGNAL INPUT TO TERMINAL 3 OF ECU"
- * PUSH THE CANCEL SWITCH (CANCEL SWITCH ON). "SIGNAL INPUT TO TERMINAL 17 OF ECU"

SERVICE HINTS -

C 4 CRUISE CONTROL ACTUATOR

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

C20 CRUISE CONTROL ECU

14-GROUND: APPROX. 12 VOLTS WITH IGNITION SW AT ON POSITION

1-GROUND: ALWAYS APPROX. 12 VOLTS

3-GROUND: CONTINUITY WITH PARKING BRAKE LEVER PULLED UP (ONE OF THE CANCEL SW) OR BRAKE LEVEL WARNING

SW ON

20-GROUND: 1 PULSE EACH 40CM (DRIVER VEHICLE SLOWLY)
17-GROUND: CONTINUITY WITH CANCEL SW ON IN CONTROL SW
18-GROUND: CONTINUITY WITH RES/ACC SW ON IN CONTROL SW
19-GROUND: CONTINUITY WITH SET/COAST SW ON IN CONTROL SW
4-GROUND: CONTINUITY WITH MAIN SW ON IN CONTROL SW

13-GROUND: ALWAYS CONTINUITY

: PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
B 2	19	C16	20	J 4	20
C 1	19	C20	20	01	19
C 4	19	E 5	20	S 1	19
C12	20	F13	20	S 9	20

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)		
EC1	22	ENGINE WIRE AND TRANSMISSION WIRE (NEAR THE STARTER)		
ID2	24	COWL WIRE AND FLOOR NO. 1 WIRE (LEFT KICK PANEL)		
IH1	24	ENGINE WIRE AND COWL WIRE (BEHIND GLOVE BOX)		
IH2	27	ENGINE WINE AND GOVE WINE (BETTING GEOVE BOX)		

: GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION	
EC	22	AIR INTAKE CHAMBER	
ID	24	LEFT KICK PANEL	
IE	24	RIGHT KICK PANEL	

: SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
13	24	COWL WIRE	18	24	COWL WIRE
17	24	OOVVE VVIICE	l11	24	COVVE VVIIVE

