SERVICE HINTS

C17 (A) TILT UNIT (COMB. SW)
(A) 3– (A) 5 : APPROX. **360**Ω WITH MANUAL SW AT **TILT UP** POSITION
APPROX. **2**KΩ WITH MANUAL SW AT **TILT DOWN** POSITION
(A) 2– (A) 6 : CLOSED WITH AUTO SW OFF
(A) 2– (A) 3 : APPROX. **5**KΩ
I16 UNLOCK WARNING SW [IGNITION SW]
10–9 : CLOSED WITH IGNITION KEY IN CYLINDER
N 1 A/T INDICATOR SW [NEUTRAL START SW]
9–1 : CONTINUITY WITH SHIFT LEVER AT "P" RANGE
T12 TILT ECU
10–GROUND : ALWAYS APPROX. **12** VOLTS
12–GROUND : APPROX. **12** VOLTS WITH IGNITION SW AT **ON** POSITION
8–GROUND : ALWAYS APPROX. **12** VOLTS
7–GROUND : APPROX. **12** VOLTS WITH IGNITION SW ON AND SHIFT LEVER AT "P" RANGE
11–GROUND : CONTINUITY WITH IGNITION KEY IN CYLINDER
1–GROUND : ALWAYS CONTINUITY
18–GROUND : ALWAYS CONTINUITY
2–GROUND : APPROX. **12** VOLTS WITH TILT UP OPERATION
3–GROUND : APPROX. **12** VOLTS WITH TILT DOWN OPERATION

: PARTS LOCATION

CODE		SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C15	C	26	**I16**	26	**T12**	27
C16	B	26	**J 1**	27		
C17	A	26	**N 1**	25		

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	18	COWL WIRE AND J/B NO.1 (LEFT SIDE OF STEERING COLUMN TUBE)
1D		
1G		
2B	20	COWL WIRE AND J/B NO.2 (ENGINE COMPARTMENT LEFT)
4A	23	COWL WIRE AND J/B NO.4 (BEHIND THE COMBINATION METER)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IH2	34	INSTRUMENT PANEL WIRE AND COWL WIRE (BEHIND GLOVE BOX)
IL3	36	ENGINE WIRE AND COWL WIRE (UNDER THE GLOVE BOX)

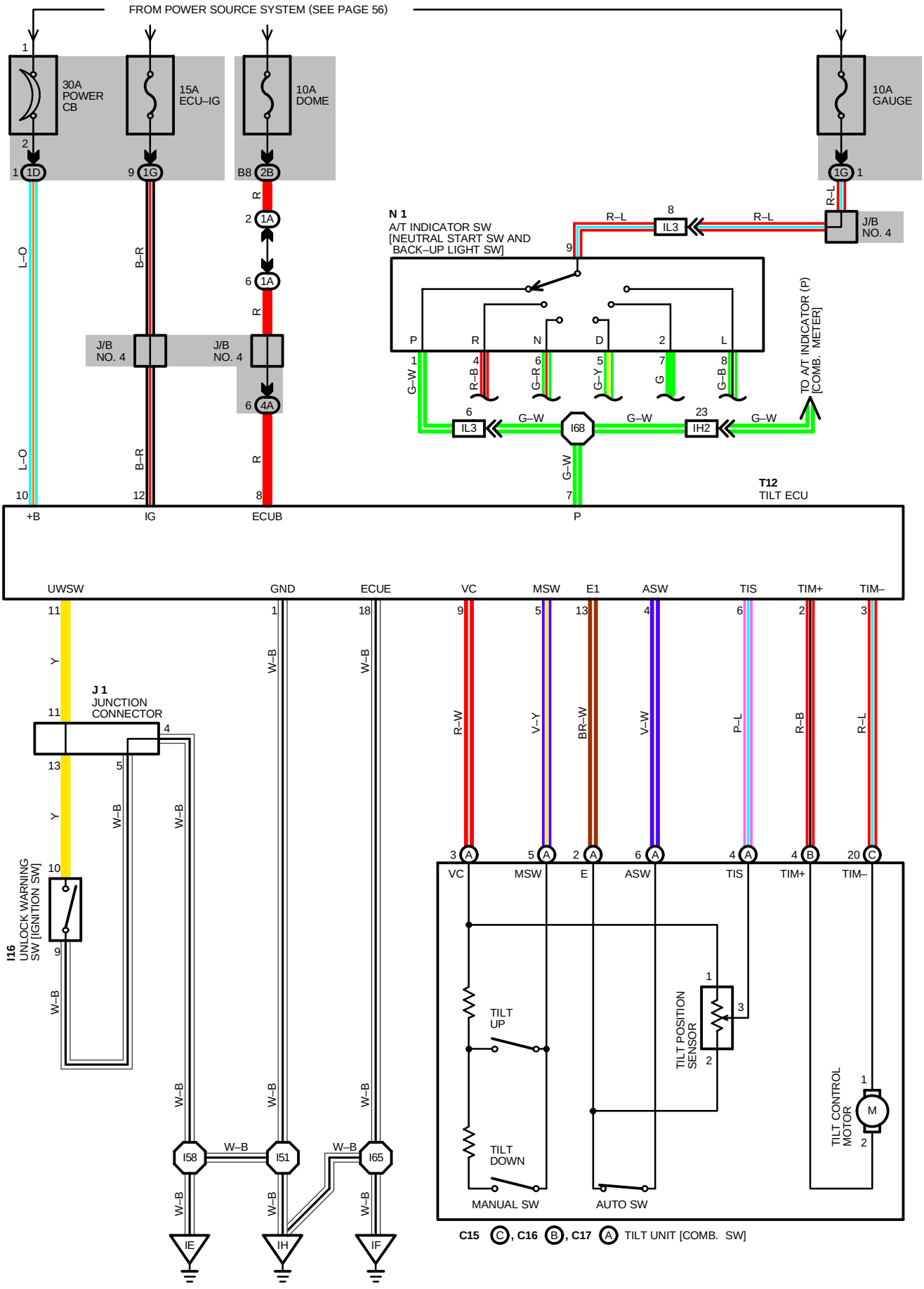
: GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IE	34	LEFT KICK PANEL
IF	34	INSTRUMENT PANEL BRACE LH
IH	34	RIGHT KICK PANEL

: SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 51	36	COWL WIRE	**I 65**	36	COWL WIRE
I 58			**I 68**		

POWER TILT (w/o POWER TELESCOPIC)



SYSTEM OUTLINE

THIS SYSTEM OPERATES THE TILT FUNCTION AUTOMATICALLY USING THE MOTOR DRIVE MECHANISM CONTROLLED BY THE ECU, AND CAN ADJUST THE STEERING POSITION UP OR DOWN STEPLESSLY, CAN SET THE STEERING POSITION FOR EASY DRIVING AND AUTOMATICALLY MOVE THE STEERING WHEEL TO A CONVENIENT POSITION WHEN THE DRIVER GETS IN OR OUT OF THE VEHICLE. CURRENT IS ALWAYS APPLIED THROUGH POWER CB TO **TERMINAL +B** OF TILT ECU, AND THROUGH DOME FUSE TO **TERMINAL ECUB** OF TILT ECU.

WITH THE IGNITION SW TURNED ON, CURRENT FLOWS FROM ECU–IG FUSE TO **TERMINAL IG** OF TILT ECU, AND FROM GAUGE FUSE TO**TERMINAL 9** OF A/T INDICATOR SW.

5. MANUAL TILT OPERATION

WHEN THE IGNITION KEY IS INSERTED INTO IGNITION KEY CYLINDER (UNLOCK WARNING SW ON), A SIGNAL IS INPUT INTO **TERMINAL UWSW** OF TILT ECU. PUSHING THE MANUAL SW TOWARD THE "TILT UP" SIDE CAUSES THE CURRENT TO FLOW FROM **TERMINAL VC** OF TILT ECU THROUGH THE MANUAL SW TO **TERMINAL MSW** OF TILT ECU (ECU DETECTS THE MANUAL SW MODE ACCORDING TO THE VOLUME OF CURRENT.).

AS A RESULT, TILT ECU OPERATES AND THE CURRENT TO **TERMINAL +B** OF ECU FLOWS FROM **TERMINAL TIM+** → **TERMINAL (B) 4** OF COMB. SW → **TERMINAL 2** OF TILT CONTROL MOTOR → **TERMINAL 1** → **TERMINAL (C) 20** OF COMB. SW → **TERMINAL TIM–** OF TILT ECU → **TERMINAL GND** → **GROUND**, SO THAT TILT UP OPERATION OCCURS WHILE THE MANUAL SW IS BEING PUSHED ON THE "TILT UP" SIDE.

FOR "TILT DOWN" OPERATION, WHEN THE MANUAL SW IS PUSHED TO THE DOWN SIDE, THE CURRENT FLOWS FROM TILT ECU TO **TERMINAL TIM–** OF TILT ECU → **TERMINAL (C) 20** OF COMB. SW → **TERMINAL 1** OF TILT CONTROL MOTOR → **TERMINAL 2** → **(B) 4** OF COMB. SW → **TERMINAL TIM+** OF TILT ECU. CAUSING THE MOTOR TO ROTATE IN THE REVERSE DIRECTION TO TILT UP OPERATION. SO THAT TILT DOWN OPERATION OCCURS WHILE THE MANUAL SW IS PUSHED.

6. AUTO AWAY OPERATION

WHEN THE IGNITION SW IS TURNED OFF, CURRENT STOPS FLOWING FROM ECU–IG FUSE TO **TERMINAL IG** OF TILT ECU AND IS INPUT AS A SIGNAL THAT THE IGNITION SW IS OFF.

WHEN THE AUTO SW IS TURNED ON, AN "AUTO SW ON" SIGNAL IS INPUT TO **TERMINAL ASW** OF TILT ECU.

IF THE IGNITION KEY IS THEN PULLED OUT OF THE IGNITION KEY CYLINDER (UNLOCK WARNING SW OFF), A SIGNAL IS INPUT FROM **TERMINAL UWSW** OF TILT ECU. ALSO, THE TILT POSITION SENSOR (COMB. SW) INPUTS THE STEERING TILT POSITION BEFORE THE IGNITION SW (FOR UNLOCK WARNING) IS TURNED OFF AS A SIGNAL INTO THE **TERMINAL TIS** OF TILT ECU.

AS A RESULT, TILT ECU OPERATES AND THE CURRENT TO **TERMINAL +B** OF TILT ECU FLOWS FROM **TERMINAL TIM+** OF TILT ECU → **TERMINAL (B) 4** OF COMB. SW → **TERMINAL 2** OF TILT CONTROL MOTOR → **TERMINAL 1** → **TERMINAL (C) 20** OF COMB. SW → **TERMINAL TIM–** OF TILT ECU → **TERMINAL GND** → **GROUND**, CAUSING THE MOTOR TO TURN IN THE TILT UP DIRECTION. THIS PERFORMANCE OF TILT UP OPERATION IN AUTO MODE IS THE AUTO AWAY OPERATION.

7. AUTO RETURN OPERATION

WHEN THE STEERING IS IN THE "AUTO AWAY" POSITION AND THE IGNITION KEY IS INSERTED INTO THE IGNITION KEY CYLINDER (UNLOCK WARNING SW ON), A SIGNAL IS INPUT TO **TERMINAL UWSW** OF TILT ECU.

AS A RESULT, TILT ECU OPERATES AND THE CURRENT TO **TERMINAL +B** OF TILT ECU FLOWS FROM **TERMINAL TIM–** OF TILT ECU → **TERMINAL (C) 20** OF COMB. SW → **TERMINAL 1** OF TILT CONTROL MOTOR → **TERMINAL 2** → **TERMINAL (B) 4** OF COMB. SW → **TERMINAL TIM+** OF TILT ECU → **TERMINAL GND** → **GROUND**, CAUSING THE TILT CONTROL MOTOR TO ROTATE UNTIL THE SIGNAL INPUT INTO THE **TERMINAL TIS** OF TILT ECU (A SIGNAL IDENTIFYING THE CURRENT POSITION OF THE STEERING) FROM THE TILT POSITION SENSOR MATCHES THE STEERING POSITION MEMORIZED BY THE ECU BEFORE AUTO AWAY OPERATION IS PERFORMED. IN THIS WAY THE STEERING COLUMN RETURNS AUTOMATICALLY TO ITS ORIGINAL POSITION.

THE AUTO RETURN STOPS OPERATING WHEN THE IGNITION SW IS TURNED FROM OFF TO ON, OR THE SHIFT LEVER IS SHIFTED INTO A RANGE OTHER THAN P OR N.