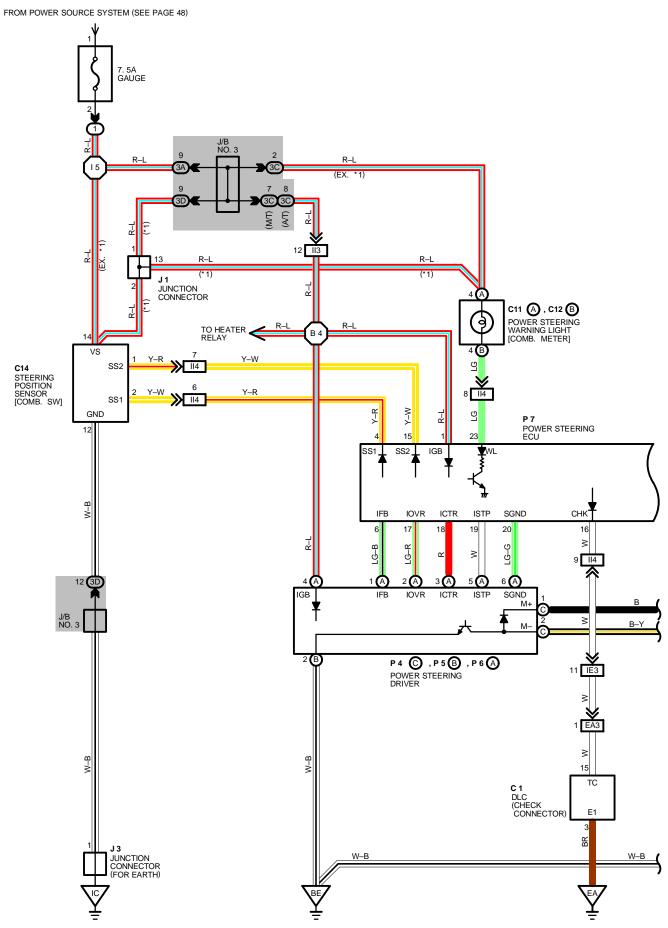
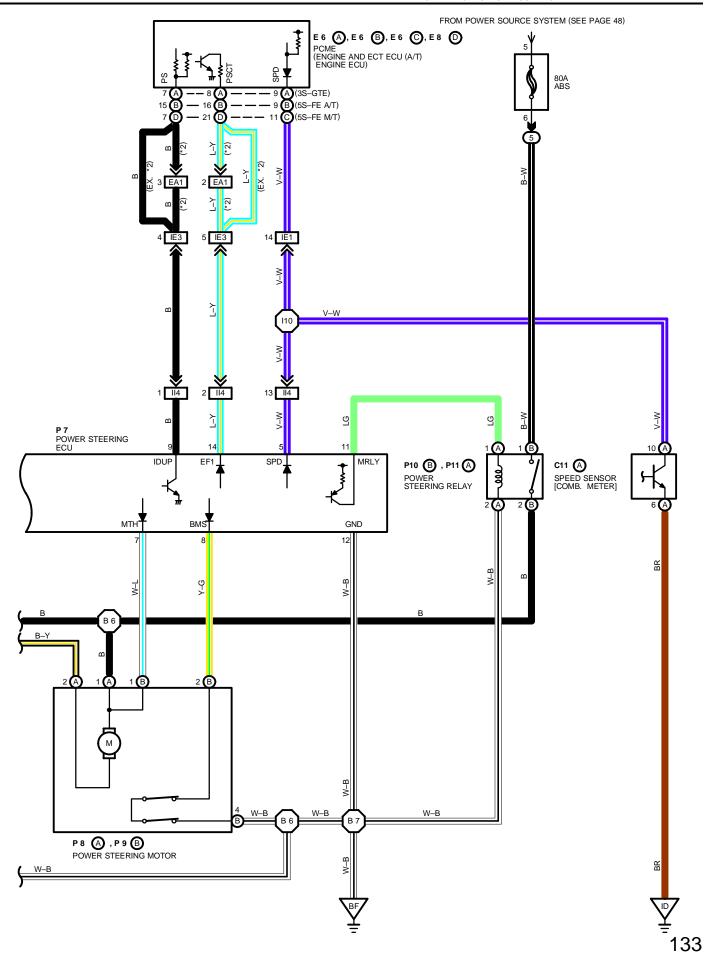
EHPS (ELECTRO HYDRAULIC POWER STEERING)





EHPS (ELECTRO HYDRAULIC POWER STEERING)

SYSTEM OUTLINE

THE EHPS (ELECTRO HYDRAULIC POWER STEERING) SYSTEM FUNCTIONS TO CHANGE THE FORCE REQUIRED FOR STEERING MANEUVERS, AND THEREBY PROVIDE THE IDEAL STEERING FEELING FOR AT VEHICLE SPEEDS AND STEERING CONDITIONS. THIS IS DONE BY THE POWER STEERING ECU CONTROLLING THE HYDRAULIC PRESSURE ACTING UPON THE HYDRAULIC REACTION CHAMBER (LOCATED IN THE GEAR BOX CONTROL UNIT) BY REGULATING THE POWER STEERING MOTOR'S SPEED (AND HENCE THE AMOUNT OF FLUID FLOW).

EHPS OPERATION

WHEN THE IGNITION SWITCHED ON, STARTING CURRENT FLOWS FROM THE GAUGE FUSE TO TERMINAL IGB OF THE POWER STEERING ELECTRONIC CONTROL UNIT, TERMINAL VS OF THE STEERING POSITION SENSOR, AND TERMINAL (A) 4 OF THE POWER STEERING DRIVER.

THE VEHICLE SPEED IS DETECTED AT THE SPEED SENSOR, AND SIGNALS ARE INPUT AS CONTROL SIGNALS TO **TERMINAL SPD** OF THE POWER STEERING ELECTRONIC CONTROL UNIT AND TO **TERMINALS SS1** AND **SS2** OF THE POWER STEERING ELECTRONIC CONTROL UNIT.

WHEN THE ENGINE IS STARTED, SIGNALS ARE INPUT TO **TERMINAL EFI** OF THE POWER STEERING ELECTRONIC CONTROL UNIT FROM THE ENGINE OF **TERMINAL PSCT** OF THE ENGINE AND ECT ECU. AS A RESULT, THE CURRENT APPLIED TO **TERMINAL IGB** OF THE POWER STEERING ECU FROM THE **GAUGE** FUSE FLOWS FROM **TERMINAL MRLY** OF THE POWER STEERING ECU \rightarrow **TERMINAL (B) 1** OF THE POWER STEERING RELAY \rightarrow **TERMINAL (B) 2** \rightarrow **GROUND**, AND THE POWER STEERING RELAY IS SWITCHED ON. AS A RESULT, THE CURRENT APPLIED TO **TERMINAL (A) 1** OF THE POWER STEERING RELAY FROM THE **ABS** FUSE FLOWS FROM **TERMINAL (A) 2** OF THE POWER STEERING RELAY \rightarrow **TERMINAL (B) 1** OF THE POWER STEERING DRIVER AND TO **TERMINAL (A) 1** OF THE POWER STEERING MOTOR.

IF THE VEHICLE SPEED IS LOW, THE SPEED OF THE POWER STEERING MOTOR IS INCREASED BY INCREASING THE VOLTAGE OF THE CURRENT THAT FLOWS FROM **TERMINAL (A) 1** OF THE POWER STEERING MOTOR TO **TERMINAL (A) 2** OF THE POWER STEERING DRIVER \rightarrow **TERMINAL (B) 2** OF THE POWER STEERING DRIVER \rightarrow **TERMINAL (C) 2** \rightarrow **GROUND**, WITH THE RESULT THAT THE VOLUME OF FLOW OF THE POWER STEERING FLUID BECOMES GREATER, THUS PROVIDING A LIGHT STEERING FEELING.

WHEN THE VEHICLE SPEED IS HIGH, THE SPEED OF THE POWER STEERING MOTOR DECREASES AS A RESULT OF THE REDUCED VOLTAGE APPLIED TO THE POWER STEERING MOTOR, AND THUS THE VOLUME OF FLOW OF THE POWER STEERING FLUID IS REDUCED, SO THE STEERING FEELING IS MORE RESISTANT.

SERVICE HINTS

P 2 POWER STEERING ECU

1-GROUND: APPROX. 12 VOLTS WITH IGNITION SW ON

12-GROUND: ALWAYS CONTINUITY

5-GROUND: 1 PULSE EACH 40 CM (DRIVER VEHICLE SLOWLY)

C14 STEERING POSITION SENSOR [COMB. SW]

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

12-GROUND: ALWAYS CONTINUITY

P 1 POWER STEERING DRIVER

(A)4-GROUND : APPROX. 12 VOLTS WITH IGNITION SW ON

(B)2-GROUND : ALWAYS CONTINUITY

: PARTS LOCATION

CODE		SEE PAGE CODE		SEE PAGE	CODE		SEE PAGE	
C 1		24 (5S-FE), 25 (3S-GTE)	E 6	С	24 (5S-FE)	P 7		27
C11	Α	26	E 8	D	24	P 8	Α	27
C12	В	26	J	3	26	P 9	В	27
C14		26	P 4	С	27	P10	В	27
E 6	Α	25 (3S-GTE)	P 5	В	27	P11	Α	27
E 6	В	24 (5S-FE)	P 6	Α	27			

: RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
5	21 R/B NO. 5 (FRONT LUGGAGE COMPARTMENT RIGHT)	

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A		
3C	21	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3D		

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)			
EA1	30 (3S-GTE)	ENGINE ROOM MAIN WIRE AND ENGINE WIRE (REAR LUGGAGE COMPARTMENT LEFT)			
EA3	28 (5S-FE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO. 2 INNER)			
EAS	30 (3S-GTE)				
IE1	- 32	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)			
IE3	32				
II3	34	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)			
II4					

: GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION			
EA	28 (5S-FE)	INTAKE MANIFOLD			
EA	30 (3S-GTE)	INTAKE MANIFOLD			
IC	32	INSTRUMENT PANEL BRACE LH			
ID	32	RIGHT KICK PANEL			
BE	36	FRONT RIGHT FENDER			
BF	36	FRONT LEFT FENDER			

: SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
15	24	COWL WIRE	B 6	26	LUGGAGE ROOM WIRE
l10	34		В7	36	
B 4	36	LUGGAGE ROOM WIRE			

