

DATA LIST/ACTIVE TEST

1. DATA LIST

- (a) Connect the hand-held tester to the DLC3.
- (b) Turn the power switch on (IG).
- (c) Operate the hand-held tester according to the steps on the display and select "DATA LIST".

Item	Item Description	Inspection Condition	Reference Value
TRQ1	Torque sensor 1 output value/ Min.: 0 V, Max.: 5 V	<ol style="list-style-type: none"> 1. Steering wheel is not turned (without load) 2. Turning steering wheel to right with vehicle stopped 3. Turning steering wheel to left with vehicle stopped 	<ol style="list-style-type: none"> 1. 2.3 to 2.7 V 2. 2.5 to 4.7 V 3. 0.3 to 2.5 V
TRQ2	Torque sensor 2 output value/ Min.: 0 V, Max.: 5 V	<ol style="list-style-type: none"> 1. Steering wheel is not turned (without load) 2. Turning steering wheel to right with vehicle stopped 3. Turning steering wheel to left with vehicle stopped 	<ol style="list-style-type: none"> 1. 2.3 to 2.7 V 2. 2.5 to 4.7 V 3. 0.3 to 2.5 V
TRQ3	Torque value for assist control/ Min.: 0 V, Max.: 5 V	<ol style="list-style-type: none"> 1. Steering wheel is not turned (without load) 2. Turning steering wheel to right with vehicle stopped 3. Turning steering wheel to left with vehicle stopped 	<ol style="list-style-type: none"> 1. 2.3 to 2.7 V 2. 2.5 to 4.7 V 3. 0.3 to 2.5 V
SPD	Vehicle speed from meter/ Min.: 0 km/h, Max.: 255 km/h	<ol style="list-style-type: none"> 1. Vehicle is stopped 2. Vehicle is driven at a constant speed 	<ol style="list-style-type: none"> 1. 0 km/h 2. No significant fluctuation
MOTOR ACTUAL	Amount of current to motor/ Min.: -128 A, Max.: 127 A	–	–
COMMAND VALUE	Demanded amount of current to motor/ Min.: -128 A, Max.: 127 A	–	–
THERMISTOR TEMP	ECU substrate temperature/ Min.: -50 °C, Max.: 205 °C	Power switch is on (IG)	–
PIG SUPPLY	Power source voltage to activate motor/ Min.: 0 V, Max.: 25.5 V	Power steering is in operation	10 to 16 V
IG SUPPLY	ECU power source voltage/ Min.: 0 V, Max.: 25.5 V	–	10 to 16 V
TRQ1 ZERO VAL	Zero point value of torque sensor 1/ Min.: 0 V, Max.: 5 V	Steering wheel is not turned (without load)	2.3 to 2.7 V
TRQ2 ZERO VAL	Zero point value of torque sensor 2/ Min.: 0 V, Max.: 5 V	Steering wheel is not turned (without load)	2.3 to 2.7 V
TRQ3 ZERO VAL	Zero point value of torque sensor for assist control/ Min.: 0 V, Max.: 5 V	Steering wheel is not turned (without load)	2.3 to 2.7 V
MTR TERMINAL (+)	Motor terminal M1 voltage/ Min.: 0 V, Max.: 25.5 V	<ol style="list-style-type: none"> 1. Turning steering wheel to right 2. Turning steering wheel to left 	<ol style="list-style-type: none"> 1. 10 to 16 V 2. Below 1 V
MTR TERMINAL (-)	Motor terminal M2 voltage/ Min.: 0 V, Max.: 25.5 V	<ol style="list-style-type: none"> 1. Turning steering wheel to right 2. Turning steering wheel to left 	<ol style="list-style-type: none"> 1. Below 1 V 2. 10 to 16 V
MTR OVERHEAT	Continuous overheat prevention control record/ REC/UNREC	–	–

DIAGNOSTICS – ELECTRIC POWER STEERING SYSTEM

Item	Item Description	Inspection Condition	Reference Value
MTR LOW POWER	PIG power source voltage drop record/ REC/UNREC	–	–
CONTROL MODE	Codes indicating DTC detection timing during ECU control are displayed in hexadecimal	–	–
IG ON/OFF TIMES	Number of times power switch is turned on (IG) after DTC detection/ Min.: 0 time, Max.: 255 times	–	–
# CODES	Number of detected DTCs when freeze frame data is stored/ Min.: 0 time, Max.: 255 times	–	–
ASSIST MAP	Selected assist map	–	–
ECU I.D.	ECU identification information	–	–
TEST MODE STAT	Selected mode/ NORMAL MODE/TEST MODE	–	–
READY STATUS	HV system "READY"/ OFF/ON	HV system "READY" ⇔ Not "READY"	ON ⇔ OFF