Steering Angle Sensor Output Correction

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This function menu is located under X431 TOYOTA EHPS/EMPS work Support menu, TOYOTA-16 or CAN BUS II connector can be selected.
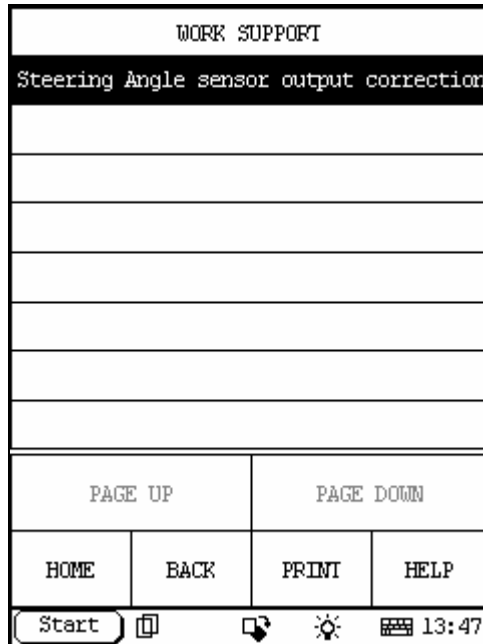
The following is the operation guide:

Fig.1

Condition: When steering actuators or ECU replaced, please performing this function, other wise it is not necessary. In fact, this function includes tow processes, steering angle sensor correction and torque sensor correction. Please confirm no DTCs stored before performing this function.

If you decide to do this function, please click the items in fig.1 to enter step 1/7, see fig.2:
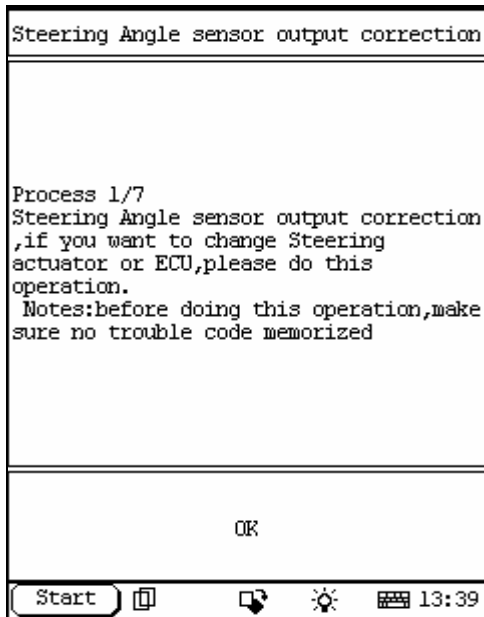
```
Steering Angle sensor output correction



Process 1/7
Steering Angle sensor output correction
,if you want to change Steering
actuator or ECU,please do this
operation.
 Notes:before doing this operation,make
sure no trouble code memorized




              OK

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Fig.2

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Steering Angle sensor output correction



Process 2/7
 Sensor correction value initialize。
Notes:
ignition switch ON, (HV vehicle—Ready
ON) , vehicle speed 0Km/h.




              OK

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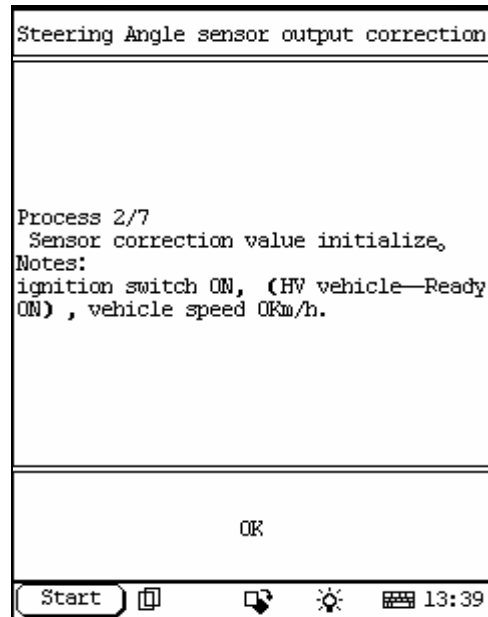
Fig.3

If conditions is met, please press "OK" key to enter step 2/7 as fig.3, perform as following guide, Steering angle sensor output correction can be finished after this process done. Attention: Ignition switch ON (HV vehicle-READY ON）, vehicle speed 0Km/h, click "OK" to perform this operation and then enter step 3/7 as Fig.4:
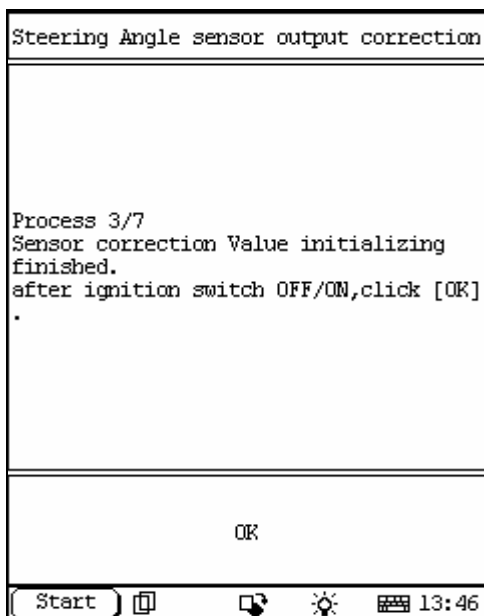
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Steering Angle sensor output correction



Process 3/7
Sensor correction Value initializing
finished.
after ignition switch OFF/ON,click [OK]
.




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Fig.4

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Steering Angle sensor output correction



Process 4/7
Steering Angle Sensor correction。
click [OK]
Notes:
make sure steering wheel and front
tyres directly forward.




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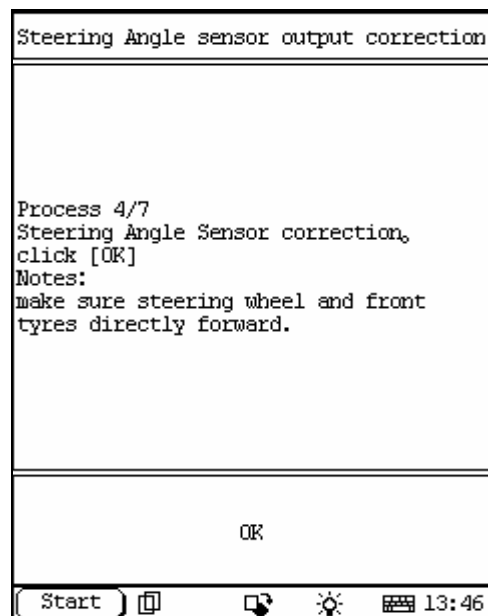
Fig.5

During this step, the sensor correction value initializing is finished, please turn ignition switch OFF➔ON and then click "OK" key to enter 4/7，see Fig.5:
If condition is met: Steering wheel and front wheel are directly forward, please click

"OK" key to enter step 5/7,as Fig6：

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Steering Angle sensor output correction



please do the following operations
1, steering wheel is at its medial
position
2, turn left 45 degree
3, return to its medial position
4, turn right 45 degree
5, return to its medial position
if the screen can not show the next
page,repeat the operation above.




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Steering Angle sensor output correction




Process 6/7
Torque sensor zero point correction.
Notes:
 DO not touch Steering Wheel while
correcting.




                     OK

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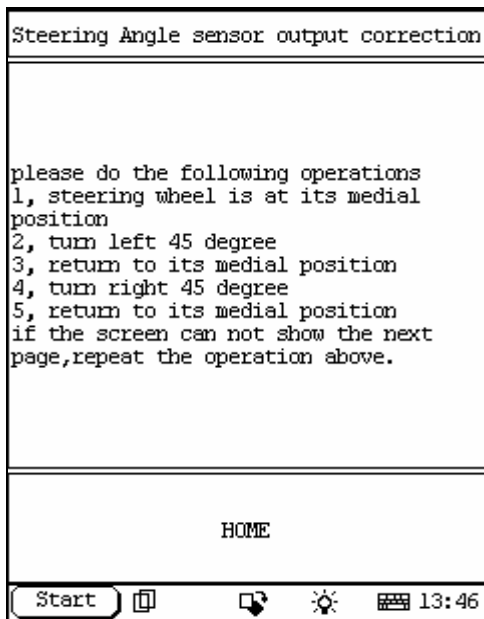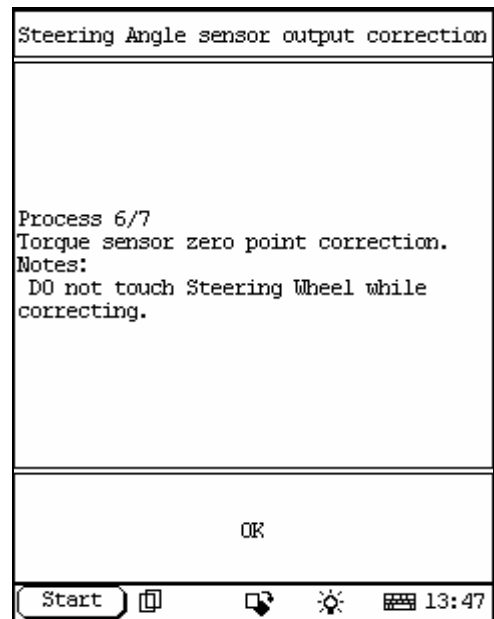
Fig.6   Fig.7

Please operate as description in Fig.6, if operation succeed, the interface will automatically switch to step 6/7, as fig.7, during this step, torque sensor zero point correction will be done. Notice: Do not touch steering wheel while correcting, click "OK" to perform operation, if successful, it will enter next step 7/7. See fig.8:

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Steering Angle sensor output correction





Process 7/7
 Torque sensor zero point correction
finished,
click [OK] to exit.






                    OK

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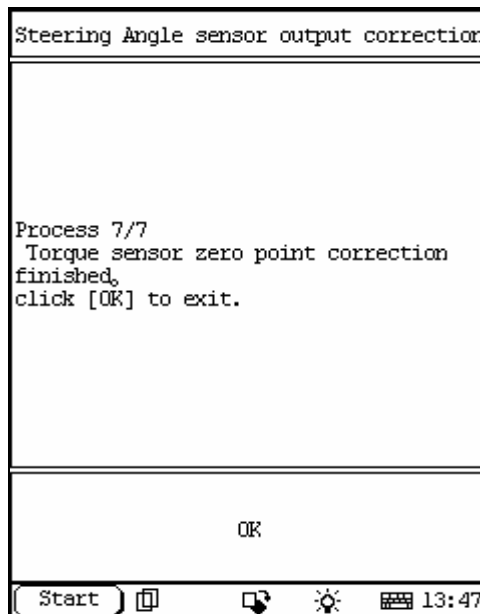
Fig.8

When the prompt--torque sensor zero point correction finished , is displayed, it means the whole operation is completed successfully. Please click "OK" to end.

(Translated by Spark wang)