eSID 03-06

Generation 2

User Guide

extended Saab Information Display (eSID)
for new generation Saab 9-3 (MY2003-2006)
with HPD (High Position Display)

Introduction

eSID 03-06 (here referred to as eSID) is an integrated add-on system to the Saab NG9-3 2003-2006 which gives the driver the possibility to read internal hidden performance data from the vehicle on the normal display (SID) together with additional functionality like one-touch-three-blink-indications, the manual wiper interval function and the possibility to read all fault codes*) in the vehicle and have them displayed on the integrated standard display.

*) All fault codes in the vehicle, not just the Engine emission codes like the basic diagnostic tools.

The standard display, SID (Saab Information Display) is controlled by the Infotainment System (more specifically the Infotainment Control Module (ICM) and the SID control panel (SIDC).

The ICM exist in three-different equipment levels:

- ICM1 – No Display
- ICM2 – Monographic Display
- ICM3 – LCD Display

The figure below shows how these three components look like (Example equipped with ICM3):

Components related to the SID

The standard functionality is that the ICM unit reads the status of the switches/encoders from SIDC and then controls the output to the SID accordingly.

One of eSID main objectives is to be integrated with the original system and with a long press on the INFO button on SIDC the SID will switch between ICM and eSID control, making the two systems work side-by-side.

<u>New in Generation 2 is that all ICM versions are fully supported by eSID!</u>

eSID 03-06 components

The eSID 03-06 consists of two components: eSID-HPD that mainly controls the display and eSID-GW that is a data collection and pre-processing unit.

eSID-HPD

HPD is short for “High Position Display” and was the internal development name of the display located near the windscreen on these model years (commonly known as SID, Saab Information Display).

eSID-HPD needs to be installed behind the SID, in series with the display cables between ICM and SID. See separate Installation Guide.

eSID-GW

eSID-GW (Gateway), needs to be placed in the diagnostic connector under the steering wheel above the driver feet. eSID-GW is easily installed within a few seconds.

Current consumption

It is always important to reduce the quiescent current consumption to avoid having an empty battery. If the vehicle needs to stand for a longer period of time its recommended to remove the eSID-GW from the OBD-connector.

eSID-GW does not have any memory and can be removed without losing any settings.

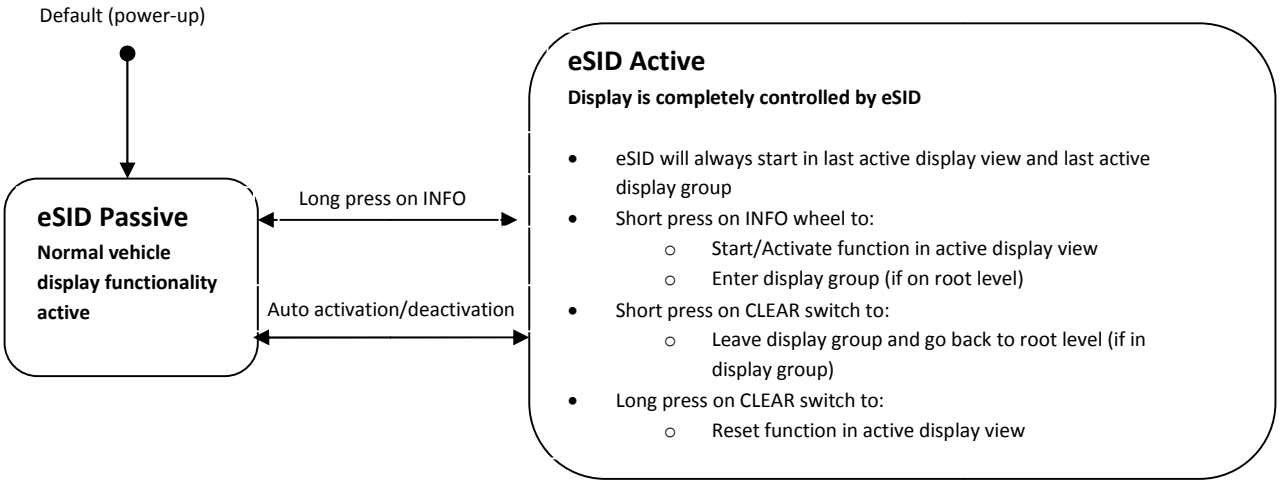
eSID-HPD stores all settings and keeps it also when the battery is removed.

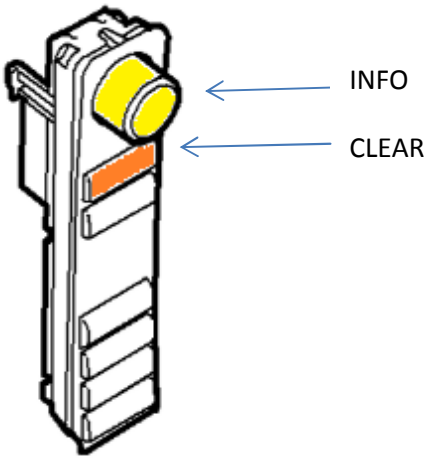
Component	Quiescent Current
eSID-GW	9 mA
eSID-HPD	< 2 mA

User Interface

eSID has two major states:

1. Passive — Normal vehicle display functionality active
2. Active — Display is completely controlled by eSID





eSID Activation/Deactivation

Transition between Active and Passive state

Switching between the states occurs:

a) If the driver presses the INFO switch on the SIDC for more than 1.5 seconds a switch between active and passive state will occur.
Note! eSID can only go to active state if the Ignition Key is in ON.

b) If a popup warning is triggered to be shown to the driver (Icon and text) the standard system requests the information icon in the instrument cluster to be activated (“ i “). eSID listens to this request and will switch to passive state (if currently in active state), to show the message to the driver.

Example warning that will trigger eSID to go passive

c) When the driver door is opened and the conditions to trigger the welcome message is fulfilled it will switch from passive to active state (and show the welcome message).

d) If Auto start is enabled it can trigger eSID to go from passive to active state (see separate section)

e) If the Ignition key is removed from the Ignition switch, the eSID will be switched to passive state.

Auto start

The normal SID display will always be active (eSID passive) when the key is inserted into the Ignition Lock, this to ensure that all warning messages are taken care of before eSID is started.

If Auto start is enabled, eSID switches from passive to active state when vehicle speed goes above 20 km/h if:

- No active warning/icon on the SID
- Driver seatbelt attached
- Auto start has not enabled eSID this driving cycle (i.e. Auto start is only activated once per driving cycle)

A new driving cycle starts if Ignition key is in OFF or if the driver door is opened while the vehicle speed is zero.

Welcome Message

The welcome message consists of a 64x64 orange pixel icon and two rows of text. The text lines can be adjusted in the settings menu and the icon can be changed using an external tool together with a CAN-interface. This tool is not finalized when this user guide is written so keep track on the website and the Facebook page for latest status.

The welcome message will be shown when the driver door is opened if any of the following conditions has been fulfilled:

- eSID has been a sleep (car has been standing unlocked for a while)
- Driver door has been locked and unlocked.

Languages

eSID supports the following languages:

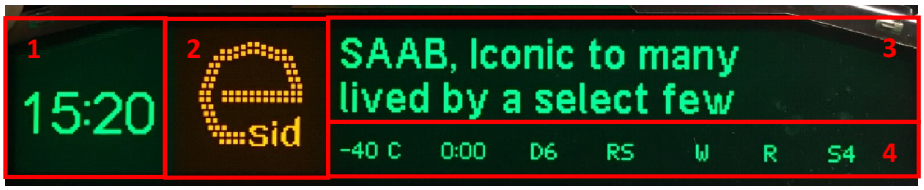
- English
- French
- German
- Spanish
- Swedish

All languages are built-in and the default setting is to follow the ICM selected language but can be overridden in the eSID settings.

Display

The display is divided into 4 different segments:

1) Clock View – Shows the clock (12H/24H depending on Units configuration)
2) Icon View – Shows yellow or red icon
3) Main View – Here all the display groups/functions will be showed
4) Status View - Here some extra useful information will be visible to the driver at all times



Main View

The display functions in the Main View are structured in five display groups:

- Favorites
  - 5 selectable favorite display functions from the other groups
- Powertrain
  - Engine and transmission related display functions
- Vehicle
  - Non-powertrain related display functions
- Diagnostics
  - Read/Clear diagnostic fault codes
  - Internal eSID debug data
  - Software versions
- eSID Settings
  - The settings are saved when the eSID goes to sleep (i.e. locked car) and the values will then be remembered if the battery is removed.
  - This menu is only enabled when the vehicle is standstill

Note! New in Generation2 is that only valid main views will be visible, for example: If the car runs on gasoline the Diesel Particle Filter views will not be visible.

Status View

The status view is always visible when eSID is active and is intended to show information to the driver that is always of interest, information that typically has a slow update rate.

- Outside Temperature (C/F °)
- Drive Time (HH:MM)
- Actual Gear *(only Automatic Gearbox, when in Drive)*
- Rain sensor active/inactive (RS)
- eSID Wiper function active (W)
- DPF Regeneration Active (R) *(only 1.9 diesel engines with DPF)*
- Active position in display structure *(P5 = Powertrain #5; F1 = Favorite #1 etc.)*

Display Units

eSID supports three sets of display units (it is not possible to mix between them):

- Metric
  - Torque (Nm)
  - Distance (km)
  - Temperature (Celsius)
  - Fuel (Liter)
  - Fuel Consumption (L/100km)
  - Boost (bar/bar)
  - Clock (24H)
  - Pressure (bar)
- Imperial UK
  - Torque (Lbft)
  - Distance (miles)
  - Temperature (Celsius)
  - Fuel (Liter)
  - Fuel Consumption (MPG UK)
  - Boost (bar/InHg)
  - Clock (12H)
  - Pressure (bar)
- US
  - Torque (Lbft)
  - Distance (miles)
  - Temperature (Fahrenheit)
  - Fuel (US Gallon)
  - Fuel Consumption (MPG US)
  - Boost (psi/InHg)
  - Clock (12H)
  - Pressure (psi)

The display units are changed in the normal SID settings (“Customize” -->)

Display Illumination

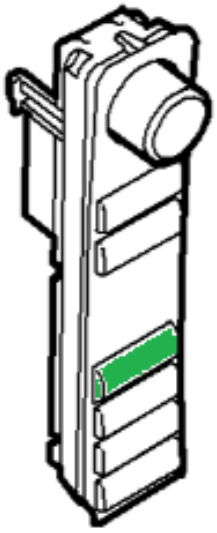
eSID reads the status on the built-in light sensor inside the SID and sends this to the ICM system. The ICM system believe its communicating with the real SID and send a display illumination request, which eSID in turns passes to the SID. In summary: The display intensity works exactly as usual. This is done automatically and it is not possible to manually override the intensity value when eSID is active.

If Night Panel is active at the same time as the eSID, then the illumination will be fixed to an extra low intensity value independent on the light sensor status (only visibile in the night). If the real night panel is requested, eSID must first be turned to passive state.

Display Group: Favorites

When standing in the Favorite display group, it is possible to change display functions for the active favorite (1-5) by using the Rheostat+ and Rheostat- switches on the SIDC. The selection will be saved in eSID.

Note! The display illumination will be changed as well, since eSID only listens to the button presses, the same as the original ICM system.



SIDC Rheostat switches

Display Group: Powertrain

Momentary Fuel

Description

Momentary fuel consumption is calculated every two seconds. If vehicle is standstill with engine running the consumption is extrapolated to one hour.

Units

- Liter/100km (Metric)
- Liter/hour (Metric)
- Mpg (Imperial UK, US)
- Gal/hour (Imperial UK, US)

User Inputs

N/A

Accumulated Fuel Consumption

Description

The accumulated fuel consumption has two counters, one that resets every trip and one that counts since last time the counter was manually cleared.

A new trip starts when Ignition key has been removed and inserted.

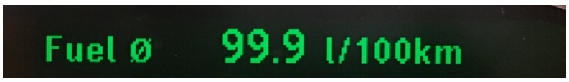
Units

- Liter (Metric, Imperial UK)
- Gal (US)

User Inputs

- CLEAR resets total accumulated fuel value.

Average Fuel Consumption



Description

The average fuel consumption has one counter and it counts since last time the counter was manually cleared.

Units

- Liter/100km (Metric)
- Mpg (Imperial UK, US)

User Inputs

- CLEAR resets total average fuel value.

Torque/Power

Description

The actual engine torque is read from the engine controller and the actual power is calculated from the engine torque and the engine speed.

Note! Tuned vehicles might not show correct values due to tricky limitations in the engine management software, automatic gearbox limitations or because the tuning company did not re-calibrate all the necessary parameters (talk to your tuning company, eSID only reads the estimated torque from the engine controller).

Units

- Nm/Hp (Metric)
- Lbft/Hp (Imperial UK, US)

User Inputs

- N/A

Intake Air Temperature / Coolant Temperature

Description

The intake air temperature and coolant temperature are read from the engine controller.

Units

- $^{\circ}C$ (Metric, Imperial UK)
- $^{\circ}F$ (US)

User Inputs

- N/A

Transmission Oil Temperature

Description

The transmission oil temperature is read from the automatic gearbox controller.

This function only works on Automatic Transmission cars.

Units

- $^{\circ}C$ (Metric, Imperial UK)
- $^{\circ}F$ (US)

User Inputs

- N/A

Engine Speed / Vehicle Speed

Description

Unfiltered engine speed (Engine management system does already filter it internally though) and unfiltered/uncompensated vehicle speed (the instrument cluster adds a few percentage to always show a higher value than the actual vehicle speed)

Units

- rpm / kmh (Metric)
- rpm / mph (Imperial UK / US)

User Inputs

- N/A

Maximum Torque / Power

Description

The maximum read torque and power values since last cleared.

Units

- Nm / Hp (Metric)
- Lbft/Hp (Imperial UK / US)

User Inputs

- CLEAR resets both values

Airmass (all except B207)

Description

The actual engine intake air mass is read from the engine controller. The maximum read value is shown as maximum air mass.

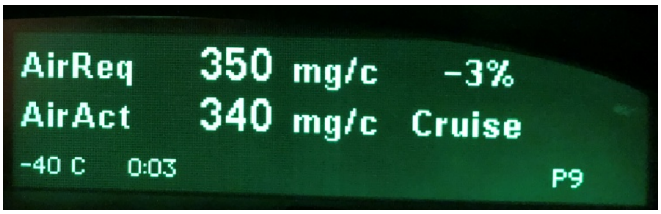
Units

- mg/c (2.2L Diesel)
- g/s (B284, Gasoline turbocharged engines 2.8L)
- kg/h (Z19DTx, Diesel turbocharged engines, 1.9L)

User Inputs

- CLEAR resets maximum air mass value.

Airmass (B207)



Description

The following parameters are read from the engine controller:

- Requested Air mass
- Measured Air mass
- Estimated Air mass

Only two of the parameters can be shown at a time. The difference between requested air mass (in percentage) and the other parameter will be shown if it is active.

Air mass limiter is also shown (great feature when tuning):

- Idle
- Pedal map
- Cruise Control
- Knock Limitation
- Traction
- Manual Gearbox Limit
- Automatic Gearbox Limit
- Max Torque
- Max Turbo Speed
- Max Engine Speed
- Max Vehicle Speed
- Minimum Load (Engine braking)

The maximum read air mass value is shown in a separate view.

Units

- mg/c

User Inputs

- INFO changes which two parameters to see
- CLEAR resets maximum air mass value (if active on display).

Turbo Boost pressure

Description

The actual engine boost/inlet pressure is read from the engine controller. The maximum read value is shown as maximum boost.

Units

- bar (Metric)
- bar/InHg (Imperial UK)
- psi/InHg (US)

User Inputs

- CLEAR resets maximum boost value

Ethanol Blend

Description

The estimated ethanol blend is read from the engine controller. BioPower was not officially introduced on MY2003-2006, but it is quite common to install a BioPower program if the engine software is tuned, so it has been added as well.

Units

- % (percentage of ethanol in the fuel, 0-85)

User Inputs

- N/A

Diesel DPF Data

Description

This display functions shows Diesel Particle Filter (DPF) status to know more about regeneration when the engine controller determines when to perform regeneration.

- Soot = Soot mass ratio in DPF, mass per filter volume (%)
- MR = Mileage since last regeneration (km)
- Regeneration Active (0-100%) is shown in the upper right corner and also on the status view.

Units

- Km (Metric)
- Miles (Imperial UK, US)

User Inputs

- N/A

Performance

Description

The performance view shows the actual torque, power, air mass and turbo boost. Since it is rather dangerous to look at the display while performing a full pedal acceleration, the values will reset to zero when accelerator pedal is pressed more than 80% and directly after it will show the maximum read value until the accelerator pedal is below 30% for more than 10 seconds, then it will again show the actual value. This means it is possible to perform acceleration and then afterwards look at the maximum values during that acceleration.

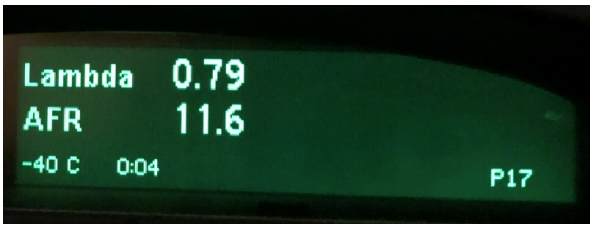
Units

- Same units as in Torque/Power/Air mass/Boost display views.

User Inputs

- N/A

Lambda/AFR



Description

This display functions shows the actual Lambda/AFR value (for gasoline). Only works on B284 engines.

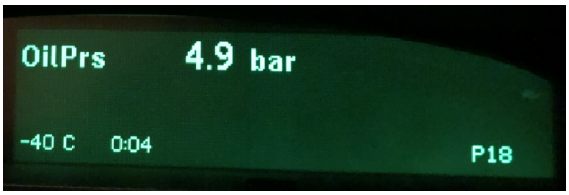
Units

- N/A

User Inputs

- N/A

Engine Oil Pressure



Description

This display functions shows the actual engine oil pressure. Only works on B284 engines.

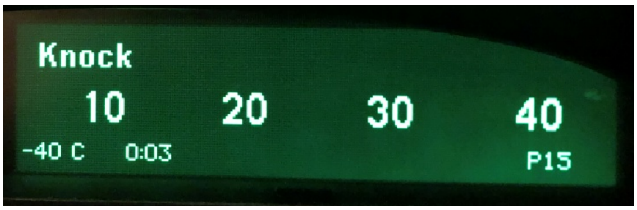
Units

- bar (Metric)
- bar (Imperial UK)
- psi (US)

User Inputs

- N/A

Knock



Description

This display functions shows the accumulated number of knocking on each cylinder. Only works on B207 engines.

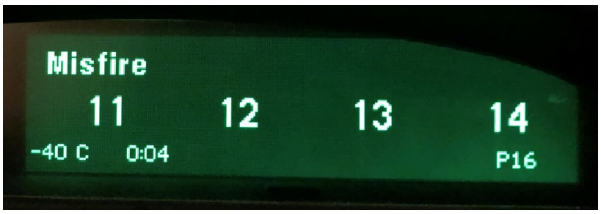
Units

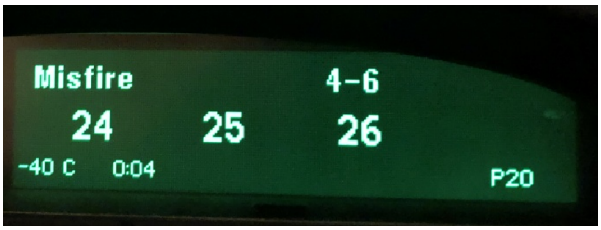
- N/A

User Inputs

- CLEAR resets the both misfire and knock values in the engine controller (B207)

Misfire





Description

This display functions shows the:

- Accumulated number of misfires on each cylinder (B207).
- Current number of misfires on each cylinder split into two views one for 1-3 and one for 4-6 (B284)

Units

- N/A

User Inputs

- CLEAR resets the both misfire and knock values in the engine controller (B207)

Fuel Rail Pressure

Description

This display functions shows the actual fuel rail pressure. Only works on Z19DTx engines.

Units

- bar (Metric)
- bar (Imperial UK)
- psi (US)

User Inputs

- N/A

Display Group: Vehicle

Drive Time

Description

Drive Time shows the accumulated driving since last reset. When the key is removed from the Ignition Lock the Drive Time will reset, or it can be reset manually.

This value is the same as shown in the Status View, but is possible to reset in this display view.

Units

- Hour:Minutes

User Inputs

- CLEAR resets Drive Time to zero.

Acceleration

Description

Acceleration shows the time from “Start” to “Stop” which is selected before it is started. “Stop” is either a speed or a distance (201meter / 402meter). Acceleration has the following states:

1. Inactive – Idle/Finished. Function needs to be started to run again
2. Red.Spd – Function is started but speed is too high to start counting, please reduce it first.
3. Go! – Function is running and the clock is ticking.

Units

- Seconds
- Kmh / meter (Metric)
- Mph / miles (Imperial UK, US)

User Inputs

- INFO – Changes “Start/Stop” values. Will force the display function to Inactive state
- CLEAR – Resets the old acceleration time and restarts the function with the “Start/Stop” values that are selected.

Battery/Crank Voltage

Description

This display function shows the current battery voltage and the lowest registered battery voltage during the last engine start (crank voltage). eSID reads the voltage when the starter is engaged, which gives a good hint about the condition of the battery.

Units

- Voltage

User Inputs

- N/A

Accumulated Distance

Description

The accumulated distance has two counters, one that resets every trip and one that counts since last time the counter was manually cleared.

A new trip starts when Ignition key has been removed and inserted.

Units

- km (Metric)
- miles (Imperial UK, US)

User Inputs

- CLEAR resets total accumulated distance value.

Brake distance and time measurement

Description

This function runs in the background always and will record and show the last event where the driver pressed the brake pedal with a vehicle speed higher than 20 km/h. The display will show the duration of the braking, how long brake distance it was and from what speed the braking began and ended.

In the example above it took 25.5 meters and 3.3 seconds to go down from 120 km/h to standstill.

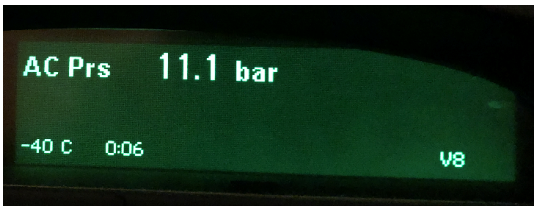
Units

- meter
- seconds

User Inputs

- N/A

AC Pressure



Description

This display functions shows the actual AC pressure, a typical AC pressure is around 8-12 bar.

Units

- bar (Metric)
- bar (Imperial UK)
- psi (US)

User Inputs

- N/A

Tire Pressure

Description

This display functions shows the actual tire pressure. Only works on vehicles equipped with TPMS (2004 or 2008 system)

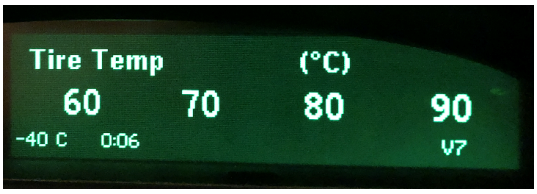
Units

- bar (Metric)
- bar (Imperial UK)
- psi (US)

User Inputs

- N/A

Tire Temperature



Description

This display functions shows the actual tire temperature. Only works on vehicles equipped with TPMS 2008 system.

Units

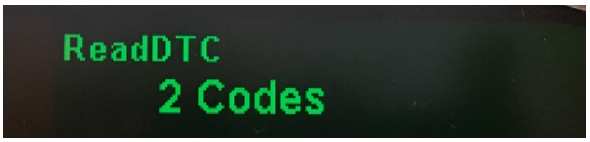
- bar (Metric)
- bar (Imperial UK)
- psi (US)

User Inputs

- N/A

Display Group: Diagnostics

Read DTC



Description

Read DTC function is able to read all the fault codes in the entire vehicle. The result is a list of codes with ECU and code number. This code number is then needed to look up in Saab WIS (Workshop Instruction System) before start of fault tracing.

This display function has the following states:

1. Disabled – When engine is running or when Ignition is not in RUN the function is disabled
2. Inactive – When engine is turned off and Ignition Key is in RUN position the functions is Inactive and ready to be started
3. Running – eSID is reading all the fault codes in all nodes.
4. XXX Codes – eSID finished reading codes and found X number of codes to be displayed.

Note! eSID might find more codes then Tech2 (Genuine Saab dealers analyzing tool), and this is due to the fact that Tech2 is hiding a large amount of fault codes from the customer due to various reasons (might not work so good, or is unreliable). Please inform the eSID developers if such codes are found.

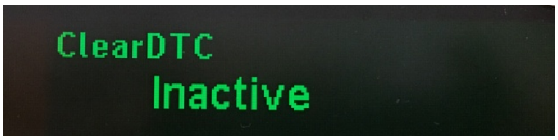
Units

- N/A

User Inputs

- INFO – Start reading codes (if function is not disabled)
- RHEOSTAT +/- shows the next/previous code after it is finished

Clear DTC



Description

Clear DTC function is able to clear/erase all the fault codes in the entire vehicle.

This display function has the following states:

1. Disabled – When engine is running or when Ignition is not in RUN the function is disabled
2. Inactive – When engine is turned off and Ignition Key is in RUN position the functions is Inactive and ready to be started
3. Running – eSID is erasing all the fault codes
4. Done – eSID has successfully erased all codes.

Units

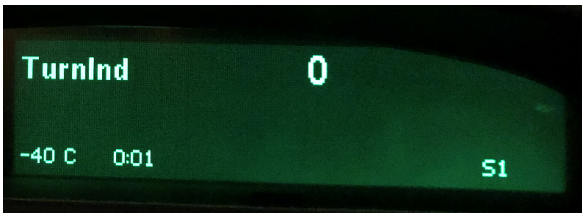
- N/A

User Inputs

- CLEAR – Triggers a new code erase (If not Disabled)

Display Group: Settings

Turn Indications



Description

When touching the direction indication stalk for a short amount of time (100-500ms), eSID will give a selectable number of extra blinks in the same direction.

If the stalk activation time is shorter than 100ms or longer than 500ms, the function will not start.

If the driver interrupts the Three Blink function by using the stalk in left or right direction while its active, then the function is disabled for three seconds (to avoid blinking back and forth)

User Inputs

- INFO – Triggers change to next settings (0=Off, 3-7 Blinks)

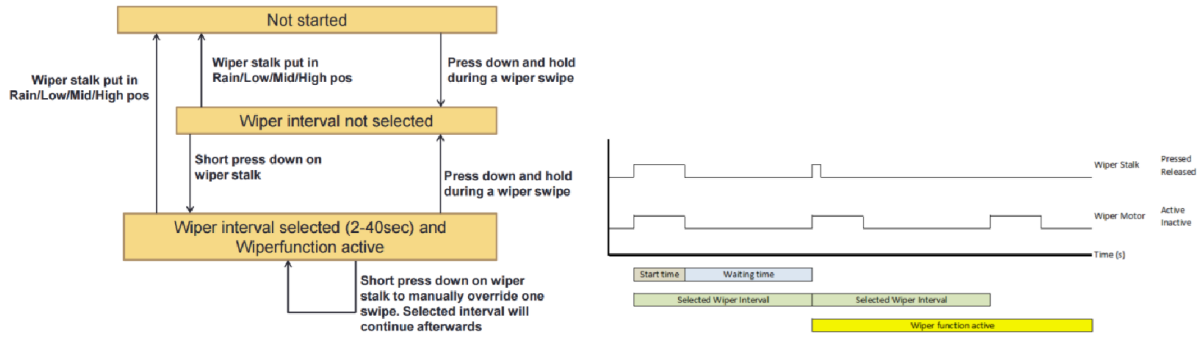
Manual Wiper speed interval

Description

This is a function to manually select the interval between the windscreen wipes. The point is to press down the wiper stalk and hold it down during a complete ”swipe” of the windscreen and when the wiper stalk is released back into ”idle” position the eSID counts the time from the stalk was released until a second short press down on the stalk is performed. Valid delay range is from 2 to 40 seconds.

When the time has been set, the windscreen wiper will continue to run until the driver moves the wiper stalk into any other position than ”idle” or if the ignition is turned off.

It is possible to manually clean the windscreen with an extra swipe while the function is running and the wiper will continue with the selected interval afterwards.



Wiper states

User Inputs

- INFO – Triggers change to next settings (Inactive/Active)

Automatic Foglight activation

Description

This function activates the front fog-lights automatically when turning the Main Light Switch to Park position or/and when activating the full/main beam

Normally the driver needs to manually switch the light switch to ”Park” and press the fog light switch. eSID helps with the activation so the driver only needs to turn the light switch to ”Park”.

When turning to ”Park” from ”Off” or ”Low beam” (and the fog Lights are off), then they will be activated (if configured)

When activating main beam (and the fog lights are off) the fog lights will activated (if configured)

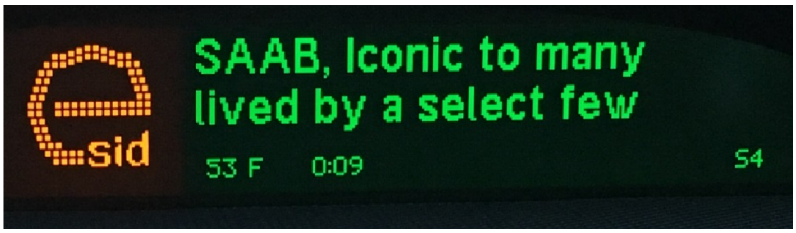
Main Light Switch

Automatic fog light activation in Park is not possible on USA/Canada-vehicles

User Inputs

- INFO – Triggers change to next settings
  (Off, Position Light, Main beam or Position Light AND Main beam)

Welcome Message

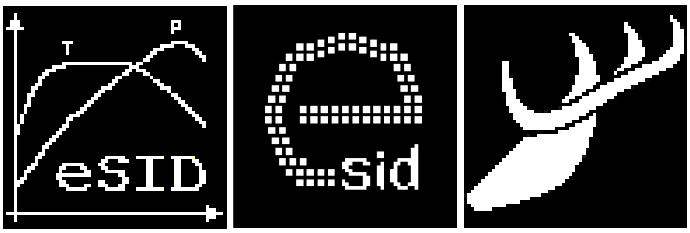


Description

This view shows the current status of the Welcome message and the welcome message text is adjustable here.

Welcome Icon

It will be possible to change the welcome icon using a separate utility program.



User Inputs

- INFO – Enter Edit Mode
- INFO +/- changes the character (Note! Not all ASCII characters can be displayed on the screen (will be blank) but keep scrolling +/- to change to all supported characters.

Fuel correction factor

Description

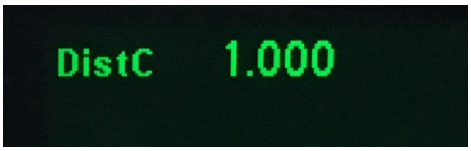
Used to trim the measured fuel values

Example: 1.053 means increase the measure value with 5.3%
0.987 means decrease the measured value with 1.3%

User Inputs

- INFO – Enter Edit Mode
- INFO +/- changes the value.

Distance correction factor



Description

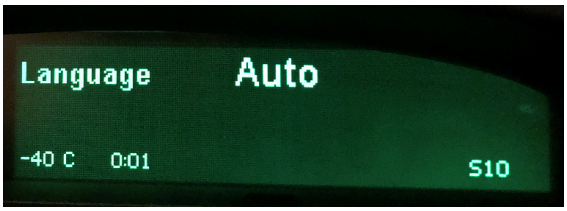
Used to trim the measured distance values

Example: 1.032 means increase the measure value with 3.2%
0.995 means decrease the measured value with 0.5%

User Inputs

- INFO – Enter Edit Mode
- INFO +/- changes the value.

Language



Description

Used to select language (default = AUTO)

User Inputs

- INFO – Enter Edit Mode
- INFO +/- changes the value.

Engine type

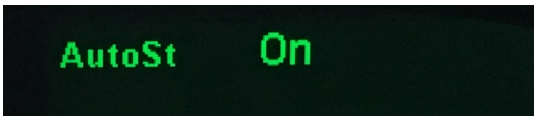
Description

Used to select engine type (default = AUTO)

User Inputs

- INFO – Enter Edit Mode
- INFO +/- changes the value.

Auto Start



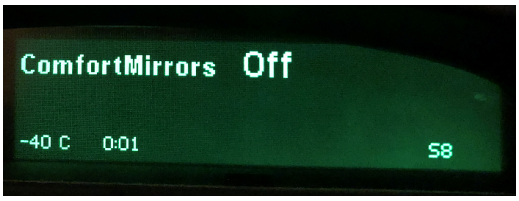
Description

This setting enables / disables the Auto Start function.

User Inputs

- INFO – Triggers change to next settings (Inactive/Active)

Comfort Mirrors



Description

This setting enables / disables the Comfort Mirrors function.

The mirrors will fold if the following conditions are fulfilled:

- Vehicle is locked with Remote (single press)
- Driver door is closed
- eSID has learned the mirror position (driver must use the fold/unfold once manually first)

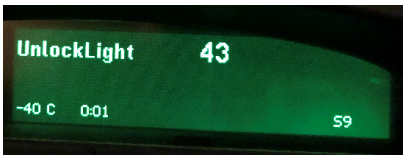
The mirrors will unfold if the following conditions are fulfilled:

- Vehicle is unlocked with Remote (single press)
- Mirrors was folded by eSID

User Inputs

- INFO – Triggers change to next settings (Inactive/Active)

Unlock Light



Description

This setting enables / disables the Unlock Light function. If the value is non-zero the eSID will suppress the two indicator blinks when performing an unlock lock command with the remote and instead activate exterior light.

Function will activate exterior light if all the following conditions are fulfilled:

- Unlock Light Logic value in eSID Settings != 0
- Driver Door is closed
- Vehicle is unlocked with Remote (single press)

Function will re-activate normal exterior light if any of the following conditions are fulfilled:

- Driver Door is opened
- Vehicle is locked with Remote (single press)
- 60 seconds activation timer has expired.

The light configuration is bit-coded into a value between 0 and 127.

	Bit						
	6	5	4	3	2	1	0
Front: PosLight+Sidemarkers							X
Front: FogLights						X	
Front: Lowbeam					X		
Rear: PosLight				X			
Rear: Brake light			X				
Rear: License Plate		X					
Front/Rear: Turn Indicators	X						

Example: If the position light (LED), front foglights and rear position light should be activated:

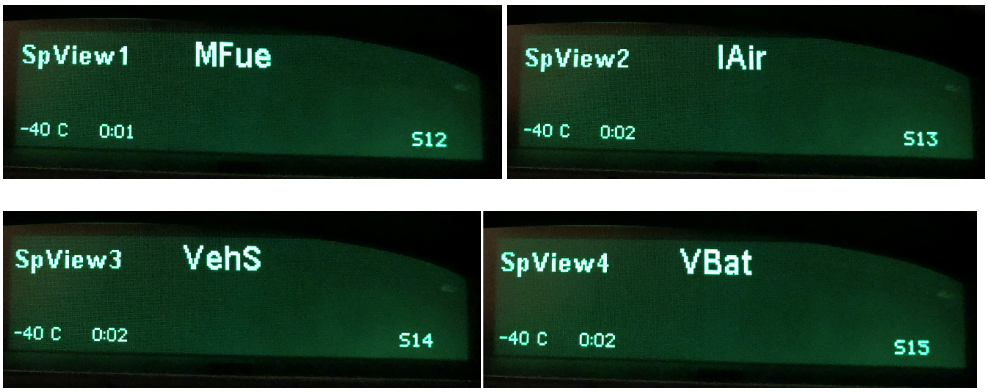
- Bit0 = 1 (position light)
- Bit1 = 1 (fog light)
- Bit3 = 1 (rear pos light)

Writing this in 8-bit binary result in: 0000 1011, which corresponds to ”11” in decimal value and this is the value that shall be put in the eSID Settings. Visit Download section on www.esid.se for a web-tool that helps you calculate the value if this is just too complicated.

User Inputs

- INFO – Enter Edit Mode
- INFO +/- changes the value.

Custom 4 Value Favorite View Settings



Description

These settings (four of them) selects the four favorite display functions to be shown the “Custom 4 Value Favorite view” which is possible to choose in the Favorite group.

- User can choose four values from this list of display functions:
  - Torque
  - Power
  - Intake Air Temperature
  - Coolant Temperature
  - Transmission Oil Temp [Cars with AT gearbox]
  - Lambda [Cars with B284 engine (V6)]
  - AFR [Cars with B284 engine (V6)]
  - Oil Pressure [Cars with B284 engine (V6)]
  - Momentary Fuel
  - Engine Speed
  - Vehicle Speed
  - Air mass
  - DPF Soot [Cars with Z19DTx engine (Diesel)]
  - DPF Regeneration Active percentage [Cars with Z19DTx engine (Diesel)]
  - Battery Voltage
  - Boost Pressure
  - Fuel Average

User Inputs

- INFO – Enter Edit Mode
- INFO +/- changes the value.

Extra functionality

Custom 2 value main view

eSID 03-06 supports a custom view where the user can put his/her own two customs variables using a CAN-Interface. Now the Name(s), Unit(s) and Data values can easily be changed with only a few CAN-messages. **Note! For experienced users only!**

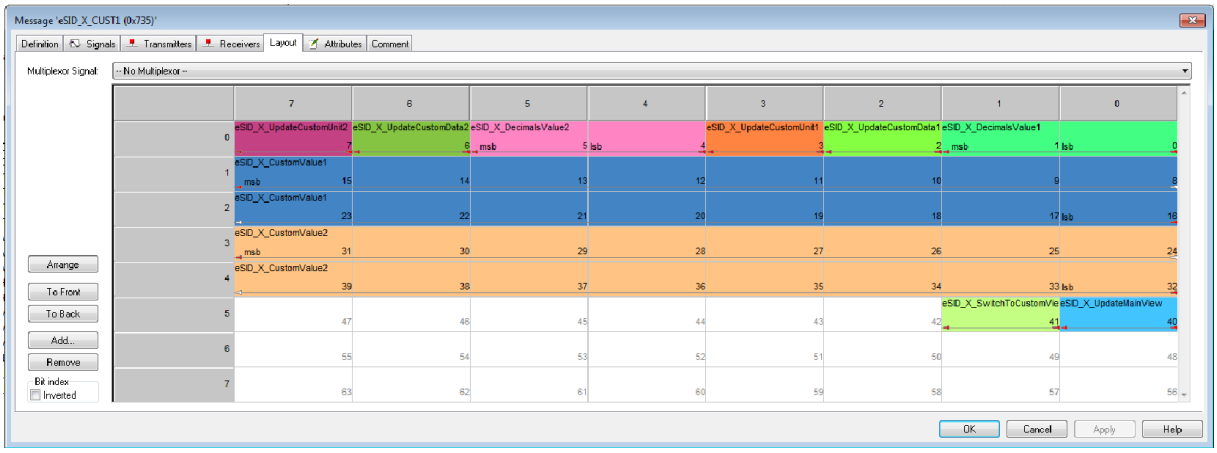
Change Custom1/2 Name or Unit:

Send CAN message 0x736 (DLC=8 bytes): Byte0=**0x10** (Custom1 Name), **0x20** (Custom1 Unit), **0x40** (Custom 2 Name) or **0x80** (Custom 2 Unit). Byte1-7=ASCII Char1-7

Change Data Value(s) / Update display

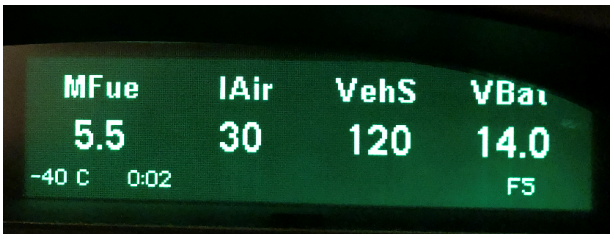
Send CAN message 0x735 (DLC=8 bytes):

Frame packaging: (DBC file can be provided)



Signal	Value	Comment
eSID_X_CustomValue1	0-65535	Value without decimals (ex. 0-65.535 with 3 dec)
eSID_X_CustomValue2	0-65535	Value without decimals (ex. 0-65.535 with 3 dec)
eSID_X_DecimalsValue1	0-3	See above
eSID_X_DecimalsValue2	0-3	See above
eSID_X_UpdateCustomData1	0-1	Should be set if value is changed only. Updates display value if custom view is active
eSID_X_UpdateCustomData2	0-1	Should be set if value is changed only. Updates display value if custom view is active
eSID_X_UpdateCustomUnit1	0-1	Should be set if unit is changed only. Updates display custom1 unit text if custom view is active
eSID_X_UpdateCustomUnit2	0-1	Should be set if unit is changed only. Updates display custom2 unit text if custom view is active
eSID_X_SwitchToCustomView	0-1	Should be set if user wants to force the active display view to the custom view instead (for instance if the user presses a button)
eSID_X_UpdateMainView	0-1	Should be set only if CustomName(s) has been changed, forces a complete rewrite of the strings on the screen. Shall **not** be kept to 1 as it will create a flickering screen due to a constant erase/rewrite.

Custom 4 Value Favorite View



Description

This main view is only found among the favorite views to choose from, and shows the value of the four selected parameters in the eSID Settings.

User Inputs

- N/A

Limitations

There are some limitations when using this eSID and all the limitations are due to how the Saab infotainment system is designed.

Some are understandable but it is not obvious why certain functions stops working but it is due to how the supplier of the system divided the software modules/functions between the internal components.

ICM system freezes and does not go to sleep or deactivate illumination (ICM: ALL)

There is a probability that the ICM can "freeze" while removing the key from Ignition Lock when eSID is active and then it will not go to sleep or turn off the interior illumination when locking the car.

This is a known ICM issue but just much more likely to occur when eSID is active and ICM does not have any connection to the SID. If this happens one must **remove and re-insert the Fuse 14 in the fuse box next to the steering wheel.**

Saab identified this issues (and many other issues) and made an aftermarket software release but only for 2005-2006 (available in TIS and called "field fix" from 2008). I recommend that this field fix is installed if possible.

For 2003-2004 there is unfortunately no solution except install a newer ICM with the field fix already installed, manually turn-off the eSID before removing the key from the Ignition Lock when leaving the car, or be aware of it and remove and insert the fuse whenever it happens. Some customers has it twice per month others only once in a 3 month period.

Not possible to see Navigation directions (ICM: 3)

ICM is unable to print navigation direction on the SID while eSID is active. It is possible to select in the menus to see them on half the ICM3 screen.

Different view when eSID is going passive (ICM: ALL)

ICM is still reading the SIDC at all times, even when eSID is active and the ICM cannot show anything on the SID. So when returning to ICM it might be in a different view then when switched to eSID.

It might also have detected a long press on INFO as a valid command to change Speed limit for instance.

It has been found that ICM can fail to print out all the data on the display when eSID is going from Active to Passive, but it is usually corrected by turning the SIDC. This is erratic fault handling in the ICM and only a consequence when using eSID, not eSID's fault.

Note! Avoid pressing "Customize" when eSID is active as one might change the ICM Settings without knowing/seeing it.