**TIS ID:4565**

**1. TIS ID :** 4565

**2. FFS ID:** 282

**3. Feature Display Name:** Centinel Oil System

**4. Bucketing Hierarchy -> List of Features and their Parameters**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name** | **ID** | **TIS Param ID** | **IS Feature** | **Display ECM Value** | **Parent Name** | **ID** | **Not Adjustable in this Feature** | **Donot display user selectable** |
| Centinel Oil System | 590 | 5314 | Yes | Yes |  |  |  |  |
| Centinel Remote Oil Level Sensor User Selectable(Sub Feature) | 593 | 5376 | No | No | Centinel Reservoir Oil Level Sensor | 594 | Not Adjustable | DO not display in the tool |
| Centinel Reservoir Oil Level Sensor(Sub Feature) | 594 | 5343 | Yes | Yes | Centinel Oil System | 590 | Not adjustable | Do not display in the tool. |
| Centinel User Selectable(Sub Feature) | 589 | 5315 | No | No | Centinel Oil System | 590 |  |  |
| Oil Grade Type(Sub Feature) | 591 | 5344 | No | Yes | Centinel Oil System | 590 |  |  |
| Reset Missed Oil Valve Pulses(Sub Feature) | 596 | 5316 | No | Yes | Centinel Oil System | 590 |  |  |

5. **List of parameters supported in Trip Info or Monitors section for the assigned TIS**

List of Parameter supported for Trip Info:

No parameter will be display under Trip Info for Centinel Oil System.

List of Parameter supported in Monitors:

Monitor Parameter List

|  |  |  |
| --- | --- | --- |
| **Monitor Parameter Name** | **ID** | **TIS Param ID** |
| Remote Oil Level | 595 | 5491 |
| Reset Missed Oil Valve Pulses | 592 | 5316 |

**6. Data Type attributes for the Features and Parameters.**

**i)Centinel Oil System**

TIS Data Type: Enumeration

Service Data Type: Enumerations

Enumeration:

|  |  |  |  |
| --- | --- | --- | --- |
| Enum Name | Display Name | Value | Simulator Value |
| DISABLED | Disable | 0 | No |
| ENABLED | Enable | 1 | Yes |

**ii) Centinel Remote Oil Level Sensor User Selectable**

TIS Data Type: Enumeration

Service Data Type: Enumerations

Enumeration:

|  |  |  |  |
| --- | --- | --- | --- |
| Enum Name | Display Name | Value | Simulator Value |
| TRUE | True | 1 | Yes |
| FALSE | False | 0 | No |

**iii) Centinel Reservoir Oil Level Sensor**

TIS Data Type: Enumeration

Service Data Type: Enumerations

Enumeration:

|  |  |  |  |
| --- | --- | --- | --- |
| Enum Name | Display Name | Value | Simulator Value |
| DISABLED | Disable | 0 | No |
| ENABLED | Enable | 1 | Yes |

**iv) Centinel User Selectable**

TIS Data Type: Enumeration

Service Data Type: Enumerations

Enumeration:

|  |  |  |  |
| --- | --- | --- | --- |
| Enum Name | Display Name | Value | Simulator Value |
| TRUE | True | 1 | Yes |
| FALSE | False | 0 | No |

**v) Oil Grade Type**

TIS Data Type: Enumeration

Service Data Type: Enumerations

Enumeration:

|  |  |  |  |
| --- | --- | --- | --- |
| Enum Name | Display Name | Value | Simulator Value |
| TIS\_STANDARD | Standard | 0 | Yes |
| TIS\_PREMIUM | Premium | 1 | No |

**vi) Reset Missed Oil Valve Pulses**

TIS Data Type: Enumeration

Service Data Type: Enumerations

Enumeration:None

**7.** **Feature Active parameter of the assigned TIS**

If Feature active parameter will be enabled we will be able to see that parameter in our tool and if it is disabled we won’t be able to see it.

Feature active Parameter : CORS\_Enable

(This is a required parameter which indicates to the tool whether the CORS feature is enabled or disabled.)

The trimmable parameter which we search in our Calterm: T\_CORS\_Enable

When searched in Calterm it shows invalid Parameter which means this particular parameter is not supported by my Cal file.

It is a trimmable parameter because we will be able to modify this value even when we are connected to the ECM.

**8. User Selectable Parameter of the assigned TIS**

If user Selectable parameter will be active we will be able to modify that parameter and if this parmeter is disabled it wont allow the user to modify that parameter.

Selectable Parameter : CORS\_User\_Selectable

(This is a required parameter which indicates to the tool whether the CORS feature is available for selection by the tool.)

The calibratable parameter which we search in our caltermn: C\_CORS\_UserSel

When searched in Calterm it shows invalid Parameter which means this particular parameter is not supported by my Cal file.

It is a calibratable parameter because these parameter needs to be changed in calibration and then we need to calibrate that calibratiuon file in our ECM.

**9. Create a table for multiple conditions on Feature Active and User Selectable parameters.**

|  |  |  |  |
| --- | --- | --- | --- |
| User Selectable | User Active | Will we be able to modify? | Will it be Displayed |
| 0 | 0 | No | No |
| 0 | 1 | No | Yes |
| 1 | 0 | Yes | No |
| 1 | 1 | yes | Yes |

**10. Explain Simple Dependencies**

When one parameter is depenedent on another parameter than it is known as Simple dependencies.

Centinel Oil System have no Simple Dependencies.

**11 Explain Complex Dependencies**

When one parameter is dependent on more than one parameter than it is known as Complex Depndencies.

Centinel Oil System have no Complex Dependencies.

**12. \_Supported\_TIS\_IDs list of your ECM-PID configuration**

Please refer Attachment for this.

**13. Check if TIS 4927 (MLS3) is supported in your ECM.**

Yes TIS 4927 is supported in my ECM.

**14. Provide below information for the assigned TIS :**

* Base TIS and its Feature Active and User Selectable

When a TIS is not extension of any parameter than it is a Base TIS.

Centinel Oil System itself is a Base TIS it is not extension of any parameter i.e It is not dpendent on any TIS If its Feature active is 1 it will be visible and if its user selectable is 1 it will be editable else if its Feature active is 0 it wont we displayed and if its selctable user is we wont be able to modify it.

* Extension TIS and its Feature Active and User Selectable

Extension TIS is dependent on Base TIS state.

**15. Provide Information for any one parameter from the TIS assigned :**

* Security Domain

Parameter Name: CORS\_Remote\_Oil\_Level\_Sensor\_Enable

TIS ID:5343

Security Domain: Adjustable Domain

* Is included in template?

If this option is checked which means that particular option will be included in template which we create from ECM Image.

As Include in Template is checked for this parameter i.e CORS\_Remote\_Oil\_Level\_Sensor\_Enable which means it will be included in template when ECM image will be created and converted into template.

* Mandatory Save/Restore?

Mandotory Save/ restore is optional for CORS\_Remote\_Oil\_Level\_Sensor\_Enable

It means it is an optional parameter and if user doesn’t check the save and restore check box on J8 this parameters wont be restored.

* Its TIS parameter

Parameter Name: CORS\_Remote\_Oil\_Level\_Sensor\_Enable

TIS ID:5343