

# VOLKSWAGEN

Group Motorsport



Volkswagen  
Motorsport



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## TN\_VAG\_08\_17\_Odometer\_Malfunction

Application to:

- All VAG cars

# TN\_VAG\_08\_17\_Odometer\_Malfunction

## Issue & Solution

### Issue

*The data acquisition system odometer function has been spotted to be adding mileage up by its own.*

### Solution

*To solve the problem a new protocol has been set up.*

*The new protocol is linked to the MXG configuration which means that to solve the issue the new configuration has to be loaded in the data logger and the old one can no longer be used.*

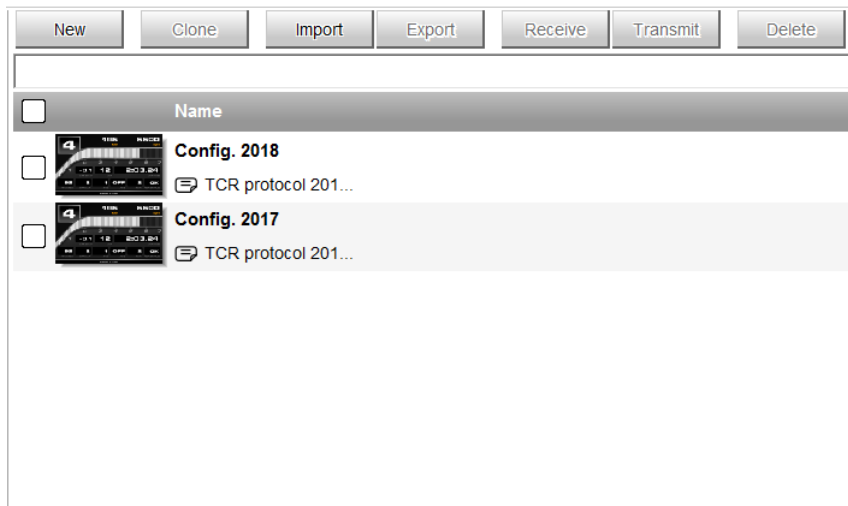
*The teams which want to keep the previous channels, displays, shiftlights, alarms and all details they previously had must set them manually in the new configuration.*

# TN\_VAG\_08\_17\_Odometer\_Malfunction

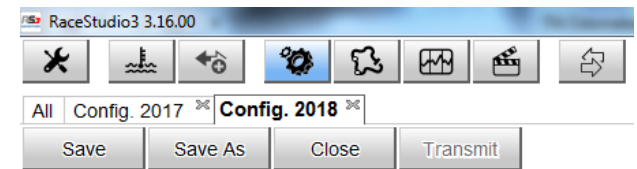
## Changing the configuration

*Open RaceStudio3, open your configuration and the new one provided by VAG Motorsport like shown:*

1. *Open both configurations*



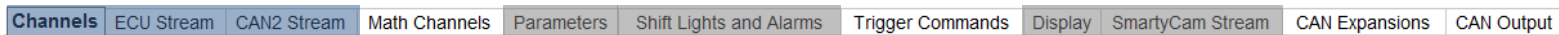
2. *Two tabs will appear at the top*



# TN\_VAG\_08\_17\_Odometer\_Malfunction

## Setting the details

Once inside the menu, the shadowed tabs shown here below allow to change the individual details on every configuration.



### Channels – ECU Stream – CAN2 Stream

Check that same channels on “Channels”, “ECU Stream” and “CAN2 Stream” are marked in both configurations in the same way.

ECU: **SEAT\_Sport - TCR\_MK3\_C1\_2017\_**

Enabled Channels (Max. 120) **54 / 78**

ID	<input checked="" type="checkbox"/>	Name
CC01	<input checked="" type="checkbox"/>	TORQ_ENG_REQ
CC02	<input checked="" type="checkbox"/>	TORQ_ENG_APP
CC03	<input checked="" type="checkbox"/>	RPM_ENG
CC04	<input type="checkbox"/>	TORQ_ENG_INTEG
CC05	<input checked="" type="checkbox"/>	TORQ_ENG_FromGCU
CC06	<input checked="" type="checkbox"/>	TORQ_GCU_CUT
CC07	<input type="checkbox"/>	POS_GBOX
CC08	<input type="checkbox"/>	N_DSG_GEAR
CC09	<input type="checkbox"/>	POS_GEAR_LEVER
CC10	<input checked="" type="checkbox"/>	P_TURBO



ECU: **SEAT\_Sport - TCR\_MK3\_C1\_2018\_**

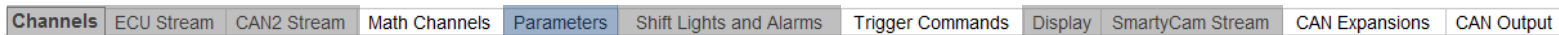
Enabled Channels (Max. 120) **54 / 78**

ID	<input checked="" type="checkbox"/>	Name
CC01	<input checked="" type="checkbox"/>	TORQ_ENG_REQ
CC02	<input checked="" type="checkbox"/>	TORQ_ENG_APP
CC03	<input checked="" type="checkbox"/>	RPM_ENG
CC04	<input type="checkbox"/>	TORQ_ENG_INTEG
CC05	<input checked="" type="checkbox"/>	TORQ_ENG_FromGCU
CC06	<input checked="" type="checkbox"/>	TORQ_GCU_CUT
CC07	<input type="checkbox"/>	POS_GBOX
CC08	<input type="checkbox"/>	N_DSG_GEAR
CC09	<input type="checkbox"/>	POS_GEAR_LEVER
CC10	<input checked="" type="checkbox"/>	P_TURBO

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## Setting the details

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### Parameters

Check that the lap detection and data recording configuration is the same of your previous configuration. The picture shows the standard configuration.

**Lap Detection**

Hold lap time for  sec ⓘ

**GPS Beacon**

Track Width  m ⓘ

Optical Beacon

Ignore additional lap signal for  sec ⓘ

**Start Data Recording**

Standard Conditions

Recording starts when RPM is greater than 500 or speed (not GPS) is greater than 10 km/h

**Custom Conditions**

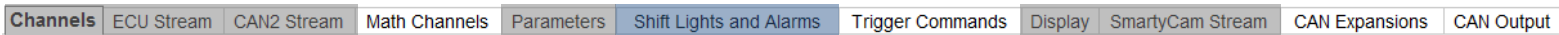
If  of the following conditions are true:

V_WHL_FL	↕	/	greater than	↕	km/h	<input type="text" value="10"/>	[-]	[+]
RPM_ENG	↕	/	greater than	↕	rpm	<input type="text" value="500"/>	[-]	[+]

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### Shiflights and alarms

Check that alarms and shiflights are set up in the same way as your previous configuration. Both configurations can be exported from the previous configuration and imported to the new one.

Choose a sequence mode of shift lights

- A LED stays on if it's threshold is exceeded
- A LED stays on until another LED with higher threshold is turned on

Choose the engine rpm channel: RPM\_ENG

Gear dependent shift lights      Max gear number: 6

Choose the gear channel: N\_GGU\_GEAR

Select colors and threshold values for shift lights:

Gear	Shift Light 1	2	3	4	5	6	7	8	9	10
6	6000	6000	6000	6200	6200	6200	6300	6400	6500	6600
5	5850	5850	5850	6050	6050	6050	6150	6250	6350	6450
4	5850	5850	5850	6050	6050	6050	6150	6250	6350	6450
3	6000	6000	6000	6200	6200	6200	6300	6400	6500	6600
2	6000	6000	6000	6200	6200	6200	6300	6400	6500	6600
1	6000	6000	6000	6200	6200	6200	6300	6400	6500	6600

still available alarms: 17

Import Alarm    Export Alarm

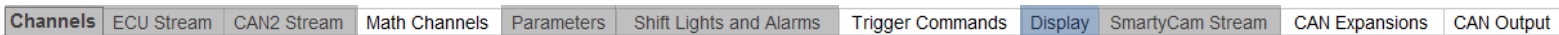
Import Shiftlights    Export Shiftlights

OK    Cancel

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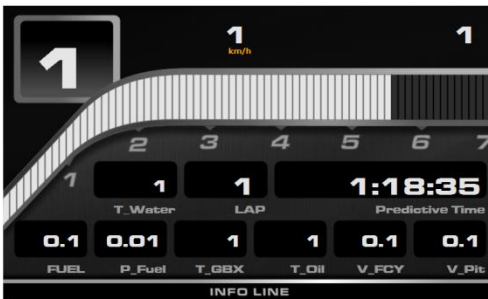
## Setting the details

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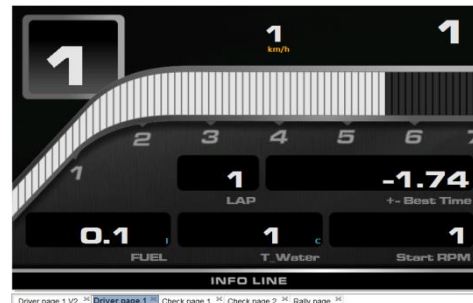


### Display

Adjust the display pages and channel names as your previous configuration



Channel	Label	Unit	Scale
N_GCU_GEAR	N_GCU_GEAR	#	
V_WHL_FR	V_WHL_FR	km/h	
RPM_ENG	RPM_ENG	rpm	7000
T_ENG_WATER	T_Water	°C	
Lap Number	Lap Number		
Predictive Time	Predictive Time		
FUEL_LEVEL	FUEL	l	
P_ENG_FUEL	P_Fuel	bar	
T_GCU_OIL	T_GBX	°C	
T_ENG_OIL	T_Oil	°C	
V_STW_FCY	V_FCY	km/h	
V_STW_LIMIT	V_Pit	km/h	



Driver page 1 V2 Driver page 1 Check page 1 Check page 2 Rally page



Driver page 1 V2 Driver page 1 Check page 1 Check page 2 Rally page



Driver page 1 V2 Driver page 1 Check page 1 Check page 2 Rally page

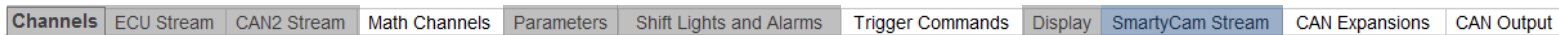


Driver page 1 V2 Driver page 1 Check page 1 Check page 2 Rally page

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## Setting the details

Once inside the menu, the shadowed tabs shown here below allow to change the individual details on every configuration.



### SmartyCam Stream

Check that SmartyCam channels are the same in both configurations

Enable all channels for functions

SmartyCam Function	Channel
Engine RPM	RPM_ENG
Speed	GPS Speed
Gear	N_GCU_GEAR
Water Temp	T_ENG_WATER
Head Temp	--- Not Set ---
Exhaust Temp	T_AIR
Oil Temp	T_ENG_OIL
Oil Press	P_ENG_OIL
Brake Press	P_BRK_FRONT
Throttle Pos	POS_PEDAL
Brake Pos	--- Not Set ---
Clutch Pos	--- Not Set ---
Steering Pos	A_STE
Lambda	--- Not Set ---
Fuel Level	FUEL_LEVEL
Battery Voltage	Battery

Save the configuration when finished and transmit it to the datalogger.

