

Service Regeneration Diesel Partikle Filter (DPF) M29-CM2200

VM Service Tool - E.C.U. Diagnosis

1. Diagnostic codes
2. Parameters acquisition
3. Trip Recorder
4. Diagnostic tests
5. Engine Collect Data
6. ECU Information ←
7. Exit

R754EU6-c

[VM BOX 2014 COM7] Connected

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1. Diagnostic codes
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R754EU6-c

The right panel features a blue border and contains the engine model **R754EU6-c** in large black text. Below the text is the blue and red VW logo. Underneath the logo is a detailed 3D rendering of a multi-cylinder engine. At the bottom of the panel, there are two smaller 3D models: an ECU (Electronic Control Unit) on the left and a component, likely a sensor or actuator, on the right.

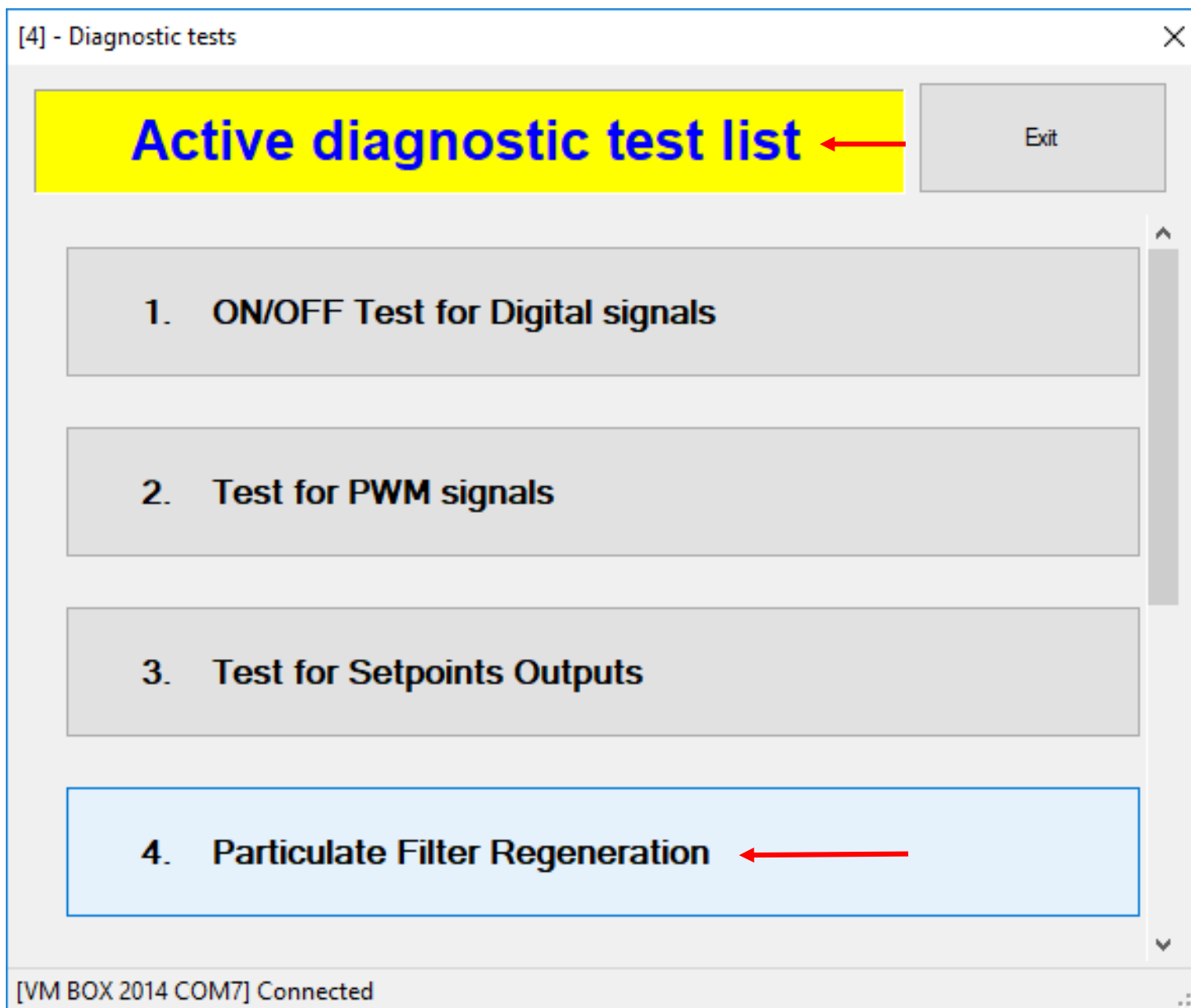
[VM BOX 2014 COM7] Connected

[4] - Diagnostic tests ✕

Active diagnostic test list ← Exit

1. ON/OFF Test for Digital signals
2. Test for PWM signals
3. Test for Setpoints Outputs
4. Particulate Filter Regeneration ←

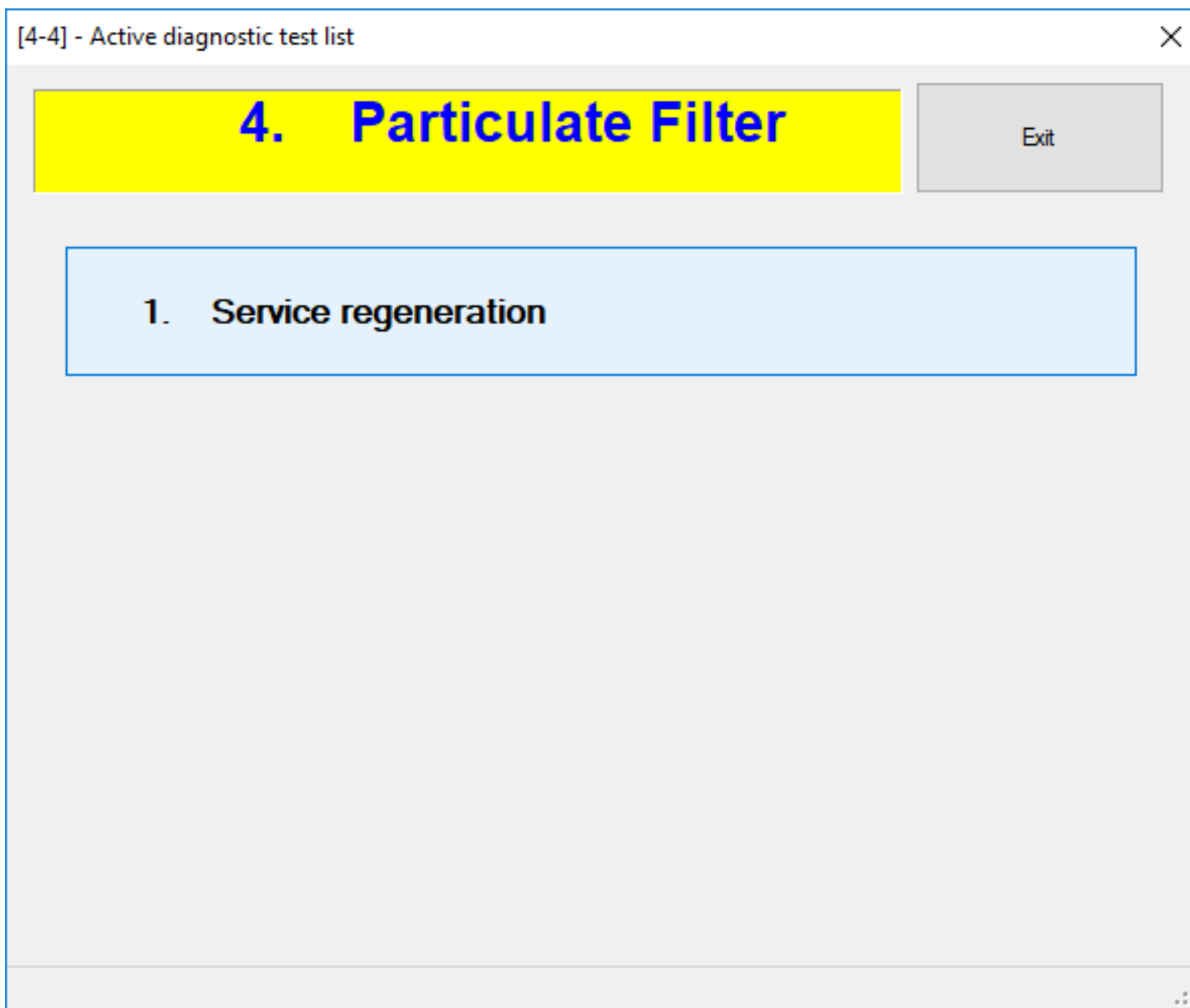
[VM BOX 2014 COM7] Connected



[4-4] - Active diagnostic test list ✕

4. Particulate Filter Exit

1. Service regeneration



[4-4-1] - Service regeneration

Make sure that the direction switch on the CM 2200 (S80) or the hand control lever on the M29 (R20) is in neutral position and that the handbrake (park brake) is engaged.

Operating conditions for the initiation of a regeneration:

Parameter monitoring

Debounced value of Hand Brake switch

Hand brake engaged

Engine coolant temperature -

min. 65°C °C

Engine RPM - (Epm_nEng)

Idle speed rpm

attuatore TVA Position - (ThrVlv_rPs)

%

Fuel quantity set - (InjCtl_qSetUnBal)

mm³/hub

Differential pressure particulate filter -

max. 0,3 bar bar

Soot mass in the particulate filter -

max. 38g g

DOC in Temperature - (Exh_tOxiCatUs)

After 5 minutes (heating) min. 250°C

DPF in Temperature - (Exh_tPFitUs)

from 520°C to max 700°C

Time service regeneration active -

s

Test result

Regeneration state

Regeneration abort conditions

Start

Abort test

Exit

[4-4-1] - Service Regeneration

Test am laufen Test running....

Parameter überwachen

Handbremse Zustand (HndBrk_stDebVal)	0	-
Kühlflüssigkeitstemperatur - (CEngDsT_t_mp)	85.56	OK °C
Motordrehzahl - (Epm_nEng)	846.50	OK rpm
Positione attuator TVA - (ThrVlv_rPs)	95.00	%
Kraftstoffmenge eingestellt -	13.9000	mm ³ /hub
Differenzialdruck Partikelfilter -	0.011	OK bar
Rußmasse im Partikelfilter -	23.0100	g
DOC-Eintrittstemperatur - (Exh_tOxiCatUs)	137.56	°C
DPF-Einlasstemperatur - (Exh_tPFitUs)	142.36	OK °C
Tigen Service regen. - (PFitSrv_tiRgnAct_mp)	0.0000	s

Testresultat

Regenerations-Status
Start

Bedingungen für Regenerationsabbruch

Handbremse nicht eingelegt
Handbrake is not engaged

Note:
Problem; For vehicles with emission level 6C, with the engine software RR30 regeneration can not be initiated by diagnostics. Cause: After flashing the engine software on RR30, the variant code was not written to 09.
Manual:
See: 09.2.8 Check variant coding VM-EU-6C.
Or instructions:
09.3.1 Software update VM- Engine

Start Testabbruch

[4-6-1] - VM Service Tool - Varianten-Datensatz Einstellung

Varianten-Code → 09

Schreiben Abbrechen

[tk_multicar] [ABC] Sende Sicherheitszugang komplett

Verlassen

Test running...

Parameter monitoring

Debounced value of Hand Brake switch	1	-
Engine coolant temperature -	79.36	°C
Engine RPM - (Epm_nEng)	1107.50	rpm
attuatore TVA Position - (ThrVlv_rPs)	19.29	%
Fuel quantity set - (InjCtl_qSetUnBal)	15.2300	mm ³ /hub
Differential pressure particulate filter -	0.009	bar
Soot mass in the particulate filter -	2.9900	g
DOC in Temperature - (Exh_tOxiCatUs)	138.36	°C
DPF in Temperature - (Exh_tPFItUs)	144.16	°C
Time service regeneration active -	3.6000	s

Test result

Regeneration state

Warming up 1 ←
Regeneration in progress

Regeneration abort conditions

After 5 minutes warming up, min. 250°C

min 520°C to max. 700°C

Start

Abort test

Exit

Test running...

Parameter monitoring

Debounced value of Hand Brake switch	1	-
Engine coolant temperature -	90.06	°C
Engine RPM - (Epm_nEng)	2002.50	OK rpm
attuatore TVA Position - (ThrVlv_rPs)	21.31	%
Fuel quantity set - (InjCtl_qSetUnBal)	18.5600	mm ³ /hub
Differential pressure particulate filter -	0.038	OK bar
Soot mass in the particulate filter -	23.0100	OK g
DOC in Temperature - (Exh_tOxiCatUs)	296.36	OK °C
DPF in Temperature - (Exh_tPFItUs)	526.66	OK °C
Time service regeneration active -	97.5000	s

Test result

Regeneration state

Warming up 2
Regeneration in progress

Regeneration abort conditions

Start

Abort test

Exit

[4-4-1] - Service regeneration

Test running...

Parameter monitoring

Debounced value of Hand Brake switch	1	-
Engine coolant temperature -	88.36	°C
Engine RPM - (Epm_nEng)	1998.50	rpm
attuatore TVA Position - (ThrVlv_rPs)	21.73	%
Fuel quantity set - (InjCtl_qSetUnBal)	17.7400	mm ³ /hub
Differential pressure particulate filter -	0.045	bar
Soot mass in the particulate filter -	23.089	g
DOC in Temperature - (Exh_tOxiCatUs)	345.56	°C
DPF in Temperature - (Exh_tPFItUs)	644.86	°C
Time service regeneration active -	317.7000	s

Test result

Regeneration state

Regeneration
Regeneration in progress

Regeneration abort conditions

StartAbort testExit

[hako_kud] [ABC] Parameter request 7/10

[4-4-1] - Service regeneration



Test running...

Parameter monitoring

Debounced value of Hand Brake switch	1	-
Engine coolant temperature -	88.66	°C
Engine RPM - (Epm_nEng)	1999.50	rpm
attuatore TVA Position - (ThrVlv_rPs)	95.00	%
Fuel quantity set - (InjCtl_qSetUnBal)	17.7200	mm ³ /hub
Differential pressure particulate filter -	0.041	bar
Soot mass in the particulate filter -	2.9500	g
DOC in Temperature - (Exh_tOxiCatUs)	303.76	°C
DPF in Temperature - (Exh_tPFItUs)	449.66	°C
Time service regeneration active -	1004.4000	s

Test result

Regeneration state

Cooling down
Successful service regeneration

Regeneration abort conditions

Target temperatures upstream of the oxidation catalyst and upstream of the particulate filter not reached within the permissible time - bank 1
Target temperatures upstream of the oxidation catalyst and upstream of the particulate filter not reached within the permissible time - bank 2

Start

Abort test

Exit



[4-4-1] - Service regeneration

Test running...

Parameter monitoring

Debounced value of Hand Brake switch	1
Engine coolant temperature -	80.00
Engine RPM - (Epm_nEng)	800
attuatore TVA Position - (ThrVlv_rPs)	90
Fuel quantity set - (InjCtl_qSetUnBal)	1.00
Differential pressure particulate filter -	0.00
Soot mass in the particulate filter -	2.00
DOC in Temperature - (Exh_tOxiCatUs)	200.00
DPF in Temperature - (Exh_tPFItUs)	200.00
Time service regeneration active -	1004.4000 s

Test result

Normal

Successful service generation

the oxidation catalyst and reached within the

the oxidation catalyst and reached within the

Status, service regeneration not active

Successfully completed regeneration

Exit

Start

Abort test

Exit

[hako_kud] [ABC] Parameter request 6/10