

FAILURE CODE [CA3582]

Action level	Failure code	Failure	SCR Catalyst Efficiency Low Error 1 (Engine controller system)
-	CA3582		
Detail of failure	The SCR catalyst efficiency remains low (70 % or less).		
Action of controller	<ul style="list-style-type: none"> The engine controller performs clearing active regeneration (approximately one hour) of urea deposit accumulation in repair limit. 		
Phenomenon on machine	<ul style="list-style-type: none"> The clearing active regeneration (approximately one hour) of urea deposit accumulation is performed automatically. 		
Related information	<p>⚠ The turbocharger outlet, KDPF, sensor fitting piping, and sensor probe become hot (Min. 500 °C). Be careful not to get burned.</p> <p>⚠ SCR assembly, the sensor installation piping, and the sensor probe become hot (Min. 400 °C). Be careful not to get burned.</p> <p>⚠ Be careful not to get burned by the sensor probe as it is heated by itself even if the ambient temperature is not high.</p> <p>⚠ Be careful of the attachment of AdBlue/DEF because AdBlue/DEF leaks when removing AdBlue/DEF mixing piping or AdBlue/DEF injector.</p> <ul style="list-style-type: none"> The failure state is not cleared after performing clearing active regeneration of urea deposit accumulation. Start clearing active regeneration of urea deposit accumulation again when performing repair limit again 20 or more minutes after. After the previous active regeneration (clearing of soot, time management, urea deposit accumulation), do not start active regeneration of urea deposit accumulation if any failures occur within 20 minutes. If the ambient pressure is 80 kPa or less and the ambient temperature is -7 °C or less, the engine controller does not troubleshoot this failure code (Under this condition, performing "Loaded Diagnostics Operation To Clear Failure Code" does not clear this failure code). Confirm on the Pre-defined Monitoring screen. Even if loaded diagnostics operation to clear failure code is performed, it cannot be canceled when it is under the following condition. <ol style="list-style-type: none"> When active regeneration is performed AdBlue/DEF injection is stopped by other failure code. For the procedure to remove and change the AdBlue/DEF injector, see "REMOVE AND INSTALL AdBlue/DEF INJECTOR". The cause of this failure code is cleared after accumulation of urea deposit is resolved by active regeneration. Troubleshooting is not necessary. This failure code is displayed for the purpose of monitoring for cause identification of the failure codes [CA3151] and [CA3543]. It is not necessary to troubleshoot and replace parts when this failure code is displayed alone. Even if cause of failure is eliminated, it takes time to detect that the cause has been eliminated, so the failure code may be displayed continuously, but no action is required. If this failure code is displayed more than 20 times during the latest SMR 50 h, specify the cause of failure according to following process. 		

<p>Related information</p>	<ul style="list-style-type: none"> • On the Pre-defined Monitoring screen, these 4 diagnosis are displayed. Engine operation state diagnosis, environment state diagnosis, SCR catalyst and NOx sensor and ammonia sensor diagnosis, AdBlue/DEF level and AdBlue/DEF quality sensor diagnosis. (The following numbers are the displayed monitoring codes) • Engine operation state diagnosis <ul style="list-style-type: none"> 01002 Engine speed 19200 Exhaust gas flow rate 47300 KDOC Inlet Temperature 19300 SCR Temperature 19302 SCR Outlet Temperature • Environmental state diagnosis <ul style="list-style-type: none"> 37400 Ambient Pressure 19400 Ambient Temperature 18400 Intake Temperature 19133 Engine Room Temperature 19115 AdBlue/DEF Temperature in Tank • SCR catalyst, NOx sensor, ammonia sensor diagnosis. <ul style="list-style-type: none"> 19203 Turbo Outlet NOx Sensor State 19210 SCR Outlet NOx Sensor State 19202 AFT Intake NOx Corrected 19209 SCR Outlet NOx Corrected 19205 AFT NH3 Sensor Corrected 19120 AdBlue/DEF Injection Quantity • AdBlue/DEF level, AdBlue/DEF quantity sensor diagnosis <ul style="list-style-type: none"> 19100 AdBlue/DEF Concentration 19110 AdBlue/DEF Level 19111 AdBlue/DEF Level Corrected 19115 AdBlue/DEF Temperature in Tank 19400 Ambient Temperature 19305 AdBlue/DEF Tank Heating State <p>NOTICE</p> <p>This failure code requires “Loaded Diagnostics Operation To Clear Failure Code”. After investigating the cause of the problem and completing the repair, perform “Loaded Diagnostics Operation To Clear Failure Code” to make sure the failure code is cleared. (This failure code is not cleared by only turning ON the starting switch again.)</p>
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No.	Cause	Procedure, measuring location, criteria and remarks
1	<p>Defective turbocharger outlet NOx sensor system (Open circuit, internal defect, defective sensor heater)</p>	<p>If failure code [CA1885], [CA3232], [CA3649], [CA3682], [CA3718], [CA3725], or [CA3748] is displayed, perform troubleshooting for these failure codes failure codes first.</p>