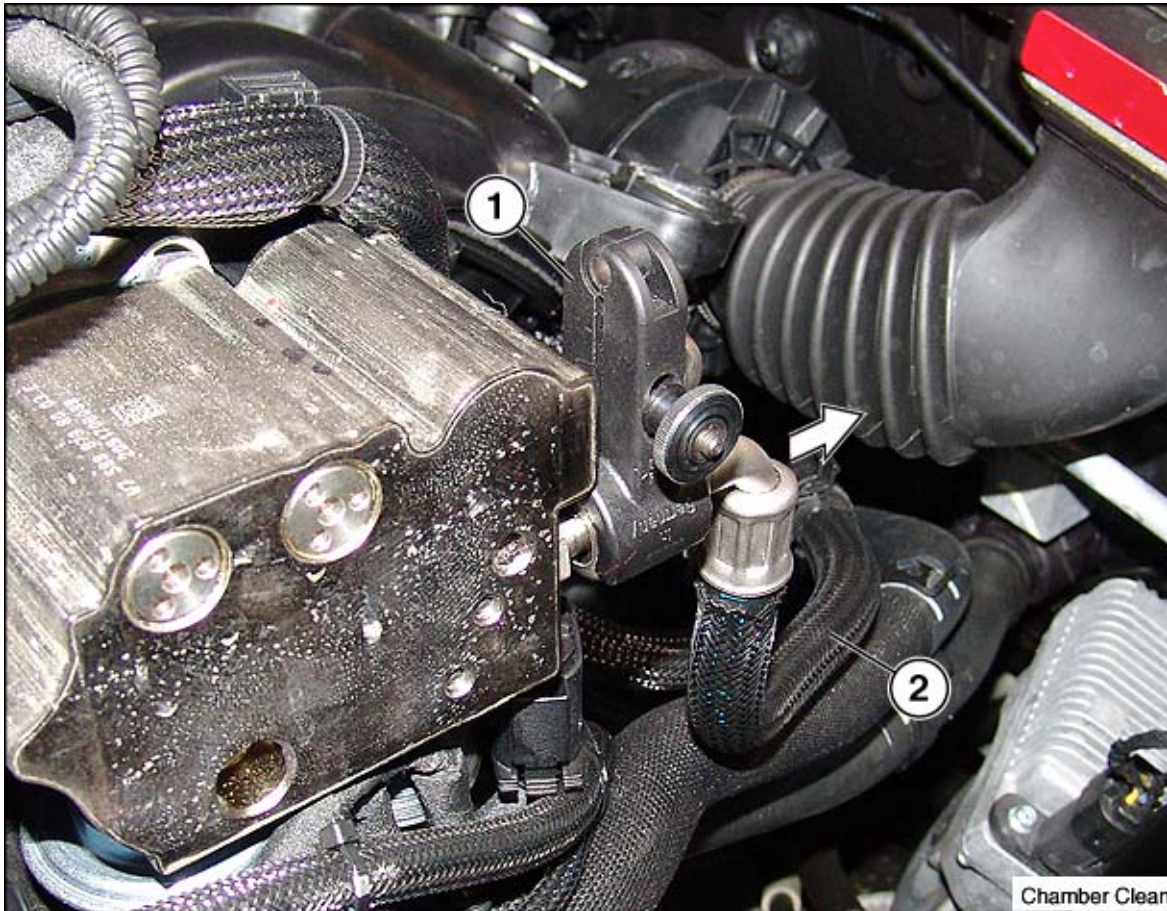


N14 Direct Injection and Combustion Chamber Cleaning Procedure

Attachment to SIM12 02 10

1. Run the vehicle for 5 minutes.
2. Remove EKP Module Fuse #43 (Cooper S).
3. Start the vehicle to depressurize the low-pressure fuel system. The engine will run for a short period and stall. Attempt to start it again a few times in a row, to remove any residual pressure.
4. Locate and separate the low-pressure connection on the high-pressure pump, as directed in RA 13 31 035 using special tool 13 0 250 (1). When disconnecting the fuel line (2), wrap the connection with a shop towel to absorb residual fuel.



N14 Direct Injection and Combustion Chamber Cleaning Procedure Attachment to SIM12 02 10

5. Install the Quick Disconnect Male Plug, P/N 82 14 0 429 694 (1), onto the fuel feed line (2).



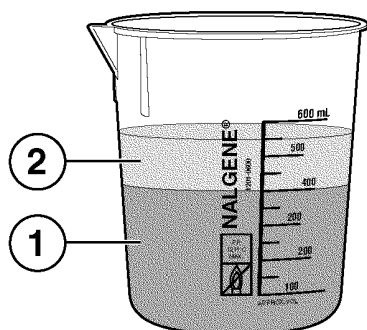
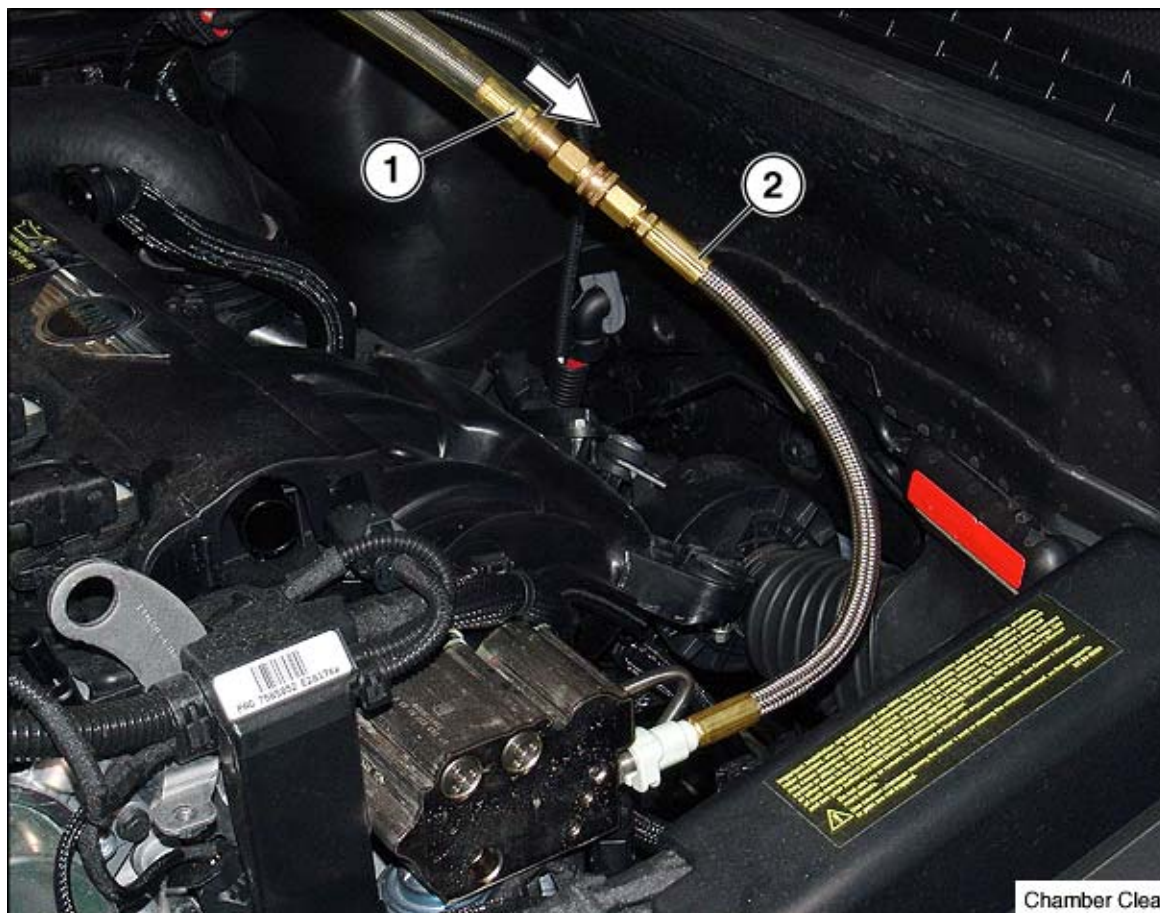
N14 Direct Injection and Combustion Chamber Cleaning Procedure Attachment to SIM12 02 10

6. Install the Braided Line/Female Quick Disconnect, P/N 82 14 0 429 697 (1), onto the high-pressure pump (2).



N14 Direct Injection and Combustion Chamber Cleaning Procedure Attachment to SIM12 02 10

7. Connect the Application Cylinder quick connect (1) to the Braided Line/Female Quick Disconnect, P/N 82 14 0 429 697 (2).



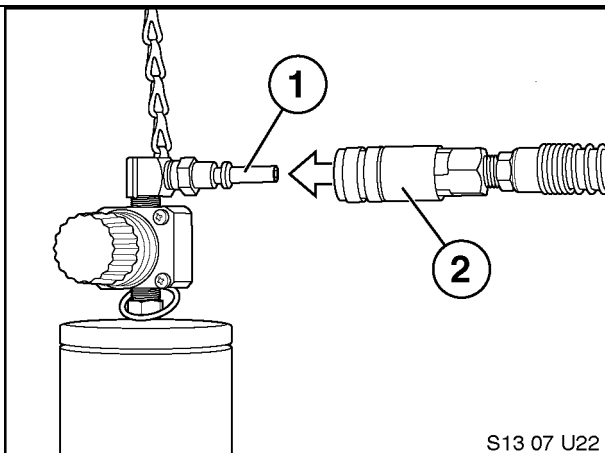
S13 07 U14

8. Pour 400ml of fuel (1) and 150ml of cleaner concentrate (2) into the beaker supplied in the kit.

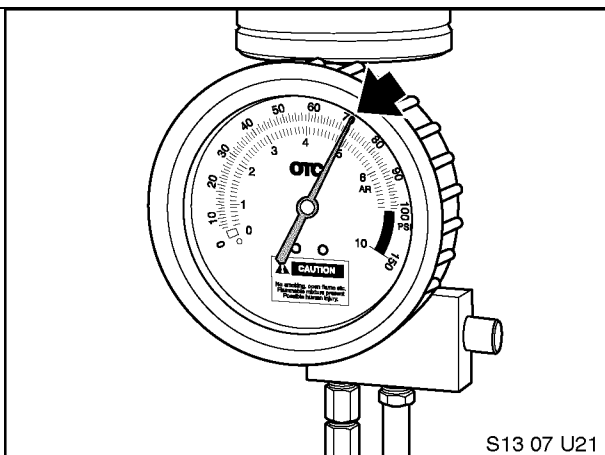
N14 Direct Injection and Combustion Chamber Cleaning Procedure

Attachment to SIM12 02 10

9. Unscrew the top portion of the applicator and pour the mixture inside the tool. Reinstall the lid hand-tight, and hang the cylinder from the hood striker.



10. Connect the shop air supply (2) to the application cylinder (1).

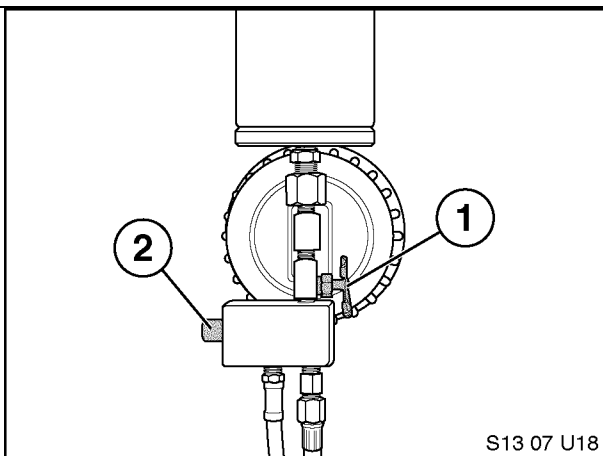


N14 Direct Injection and Combustion Chamber Cleaning Procedure

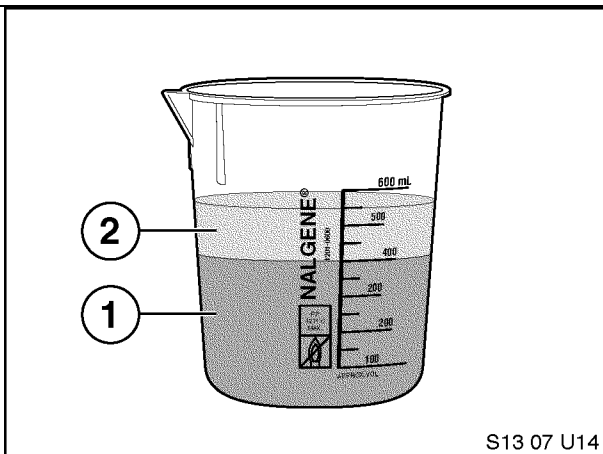
Attachment to SIM12 02 10

13. Start the vehicle; it should idle smoothly. The cleaning procedure should last approximately 25-30 minutes. It is recommended to change the RPM periodically, to help push the cleaner and gasoline mixture through the injection system at varying rates. Flaring the RPM periodically up to 4000 RPM is also suggested. If the vehicle begins to run roughly or misfire, turn the vehicle off. The applicator is nearing empty or is empty.

IMPORTANT! Remove the shop air supply hose from the applicator before removing the lid or releasing the pressure from the applicator.



14. Release the pressure from the applicator cylinder with the pressure release button (2). Close the shut-off valve (1).

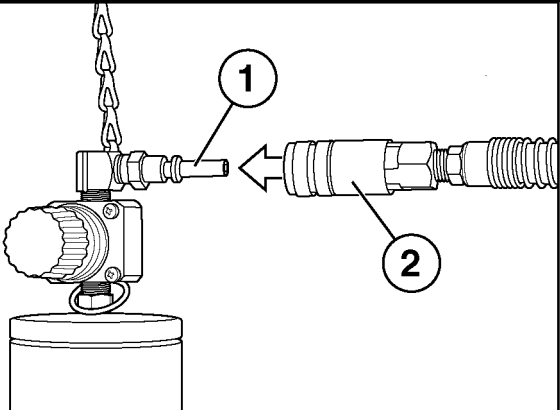
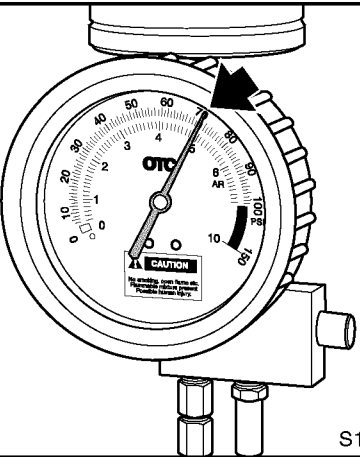


15. Pour 400ml of fuel (1) and 150ml of cleaner concentrate (2) into the beaker supplied in the kit again to start the second application.

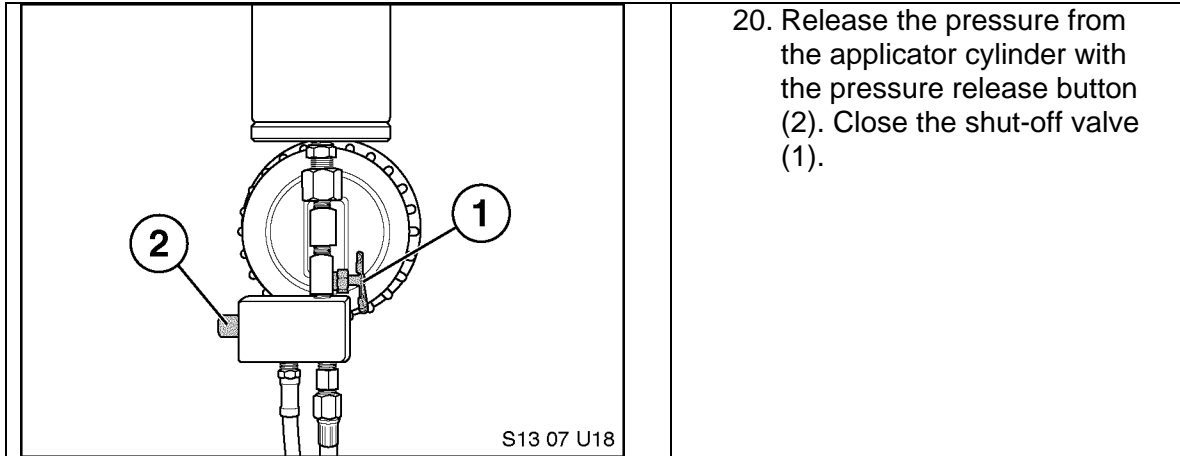
16. Unscrew the top portion of the applicator and pour the mixture inside the tool. Reinstall the lid hand-tight, and hang the cylinder from the hood striker.

N14 Direct Injection and Combustion Chamber Cleaning Procedure

Attachment to SIM12 02 10

 <p>S13 07 U22</p>	<p>17. Connect the shop air supply (2) to the application cylinder (1).</p>
 <p>S13 07 U21</p>	<p>18. Adjust the pressure regulator to 50 PSI, if needed, and open the shut-off valve at the bottom.</p>
<p>19. Start the vehicle; it should idle smoothly. The cleaning procedure should last approximately 25-30 minutes. It is recommended to change the RPM periodically, to help push the cleaner and gasoline mixture through the injection system at varying rates. Flaring the RPM periodically up to 4000 RPM is also suggested. If the vehicle begins to run roughly or misfire, turn the vehicle off. The applicator is nearing empty or is empty.</p>	
<p>IMPORTANT! Remove the shop air supply hose from the applicator before removing the lid or releasing the pressure from the applicator.</p>	

N14 Direct Injection and Combustion Chamber Cleaning Procedure Attachment to SIM12 02 10



21. Remove the application tools and reassemble the vehicle.

Advise the customer it is necessary to add one bottle of the BMW Group Fuel System Cleaner Plus, P/N 82 14 0 413 341, with either TOP TIER Detergent Gasoline or premium fuel with a minimum octane rating of AKI 91, the next time the vehicle is refueled.

For optimum cleaning, advise the customer to add one bottle every 3,000 miles when refueling. Refer to SI B13 05 06, BMW Fuel System Cleaner Plus. Further related information regarding fuel systems and fuel additives can be found in the following Service Information bulletins:

- SI M13 01 06 Alcohol Fuel Blends in BMW Vehicles
- SI M13 02 06 TOP TIER Detergent Gasoline in BMW Vehicles
- SI M13 04 06 Alcohol Detection Procedure
- SI M13 05 06 BMW Group Fuel System Cleaner Plus