

TECHNICAL BULLETIN EN-38

DATE: January 30, 2009
 MODEL YEAR: 2008 ~ 2009
 ENGINE MODEL: J05 and J08
 BULLETIN NUMBER: EN-38
 FILE IN THE ENGINE SECTION OF THE TECHNICAL BULLETIN BINDER

EXHAUST BRAKE INSPECTION/ADJUSTMENT

PURPOSE

To provide the UD Truck technician the proper exhaust brake shutter inspection and adjustment procedures for the 2008~2009 Model Years.

INSPECTION PROCEDURE

Step 1) Place transmission in neutral and set the parking brake. Connect the PC Consult software and start the engine. Display engine rpm, fuel injection quantity, and coolant temperature in the data monitor. Run engine until coolant temperature reaches 82° C before proceeding to the next step.

Note: Exhaust brake may be turned on to aid in rapid warm up.

Step 2) Turn off all lights, accessories, PTO, and ensure that the air compressor has finished charging the air system. With the exhaust brake on, use the idle volume switch located on the dash, and adjust the engine RPM to 980.

- Record the fuel injection quantity value; this will be value “A” in the chart below.

Step 3) Turn the exhaust brake off, keep the engine RPM at 980 and run the engine for 30 seconds.

- Record the fuel injection quantity value; this will be value “B” in the chart below.

Important: Ensure that the engine is not in the long idle mode* when recording fuel injection quantity (B) or an incorrect injection quantity value will result.

Step 4) Using the chart below, subtract value “B” from value “A”, if the difference of fuel injection quantity value is outside the adjustable range, proceed to the adjustment procedures on Page 2. If fuel injection quantity value is within range, no exhaust brake adjustment is needed.

EXAMPLE:	Engine RPM	980
	Exhaust brake on	A
	Exhaust brake off	B
	Difference of adjustable range of fuel injection quantity (A - B = Q)	Q
	Desired target of fuel injection quantity (Between 10-18 mm3/st)	14 mm3/st

* Long idle mode is when the engine ECU sees engine idle and exhaust temperature less than 190° Celsius at the catalyst for a period of 1 hour. At the 1 hour mark the engine idle increases to 980 rpm and the exhaust brake closes for 10 minutes to bring the temperature of the DPF up enough to prevent white smoke.

ADJUSTMENT PROCEDURES

Step 1) Ensure that the engine coolant temperature is above 82° C before proceeding to Step 2.

Step 2) Turn the exhaust brake on and adjust engine RPM to 980.

Step 3) Adjust the exhaust brake stopper bolt to achieve the proper difference of adjustable range of fuel injection quantity. (See Figure A)

Note: Turning the stopper bolt clockwise will decrease the shutter gap which increases the fuel injection quantity.

Step 4) Once stopper bolt adjustment is complete, check the manual forced regeneration function. The regeneration function is normal if regeneration completes within 20 minutes.

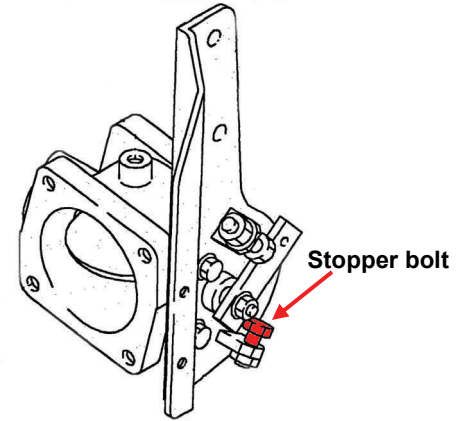


Figure A

EXAMPLE:	Engine RPM	980
	Before Stopper Adjustment (A - B = Q)	A = 34.5 mm ³ /st B = 11.5 mm ³ /st Q = 23.5 mm ³ /st (Out of spec)
	After Stopper Adjustment (A - B = Q)	A = 25.5 mm ³ /st B = 11.5 mm ³ /st Q = 14 mm ³ /st (In Spec)

THE INFORMATION CONTAINED IN THIS BULLETIN SHOULD NOT BE INTERPRETED AS THE BASIS FOR WARRANTY CLAIMS							
FOR THE INDICATED PERSONNEL BELOW, PLEASE READ, INITIAL, AND ROUTE TO THE FOLLOWING:							
X	SERVICE MANAGER	X	WARRANTY MANAGER	X SERVICE TECHNICIANS INITIAL BELOW:			
X	PARTS MANAGER	X	SHOP FOREMAN				