

REFERENCE:	Nova Bus Manuals
SECTION:	11: Exhaust System
RS N°:	MQR 7621-1311
EFFECTIVE IN PROD.:	N/A

APPLICATION DEADLINE: 2018OC26
CLAIM REFERENCE NUMBER: WB-4137

SUBJECT:	NOx sensors (Located on turbocharger and SCR)
JUSTIFICATION:	Existing NOx sensors may be prone to failures.

LEVEL	DESCRIPTION	DIRECT CHARGES		TIME
		LABOUR	MATERIAL	
1	Remove and replace with the new NOx sensors.	Nova Bus	Nova Bus	60 min
2	–	–	–	–

MATERIAL

QTY	PART N°	REV.	DESCRIPTION	REPLACES PART N°
LEVEL 1				
1	–	–	–	–
2	–	–	–	–
LEVEL 2				
–	–	–	–	–

DISPOSAL OF PARTS

REMOVED PARTS ARE:	DISCARDED *	RETAINED	* Dispose of the unused parts and the defective parts in accordance with local environmental standards in effect.
	Yes	–	

REVISION HISTORY

REV.	DATE	CHANGE DESCRIPTION	WRITTEN BY
NR	2017SE20	Initial release	Kumaraswamy K S

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
SEPTA - Pennsylvania	L728	8600	8600	L82W7D4500335	L82W7D4500335	1
SEPTA - Pennsylvania	L741	7370	7370	S92L4E4500504	S92L4E4500504	1
SEPTA - Pennsylvania	L742	7371	7414	S92L6E4500729	S92L7E4500772	44
SEPTA - Pennsylvania	L743	7355	7369	S92L1E4500489	S92L2E4500503	15
SEPTA - Pennsylvania	L744	8601	8689	L82L7E4500570	L82LXE4500661	89
SEPTA - Pennsylvania	L745	7415	7415	S92L0F4500873	S92L0F4500873	1
SEPTA - Pennsylvania	L746	7416	7454	S92L7F4500952	S92L8F4501012	39
SEPTA - Pennsylvania	L749	7302	7354	S92Y7D4500409	S92L2E4500470	53
SEPTA - Pennsylvania	L861	7300	7484	S92L5G9775188	S92L8G9775220	32

**WARNING**

Follow your internal safety procedures.

PROCEDURE

- 1.1. Park the vehicle on an even surface with transmission in neutral (N).
- 1.2. Turn the ignition switch to OFF position and engage the parking brake.
- 1.3. Set the Master control switch in the STOP position (see Figure 1).

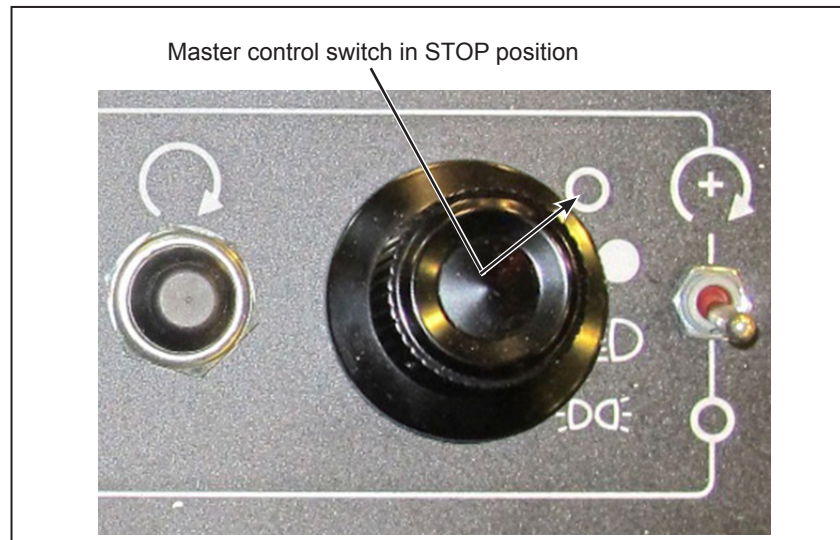


Figure 1 - Master Control Switch in STOP Position

- 1.4. Set the battery disconnect switch in the battery compartment to the OFF position (see Figure 2).

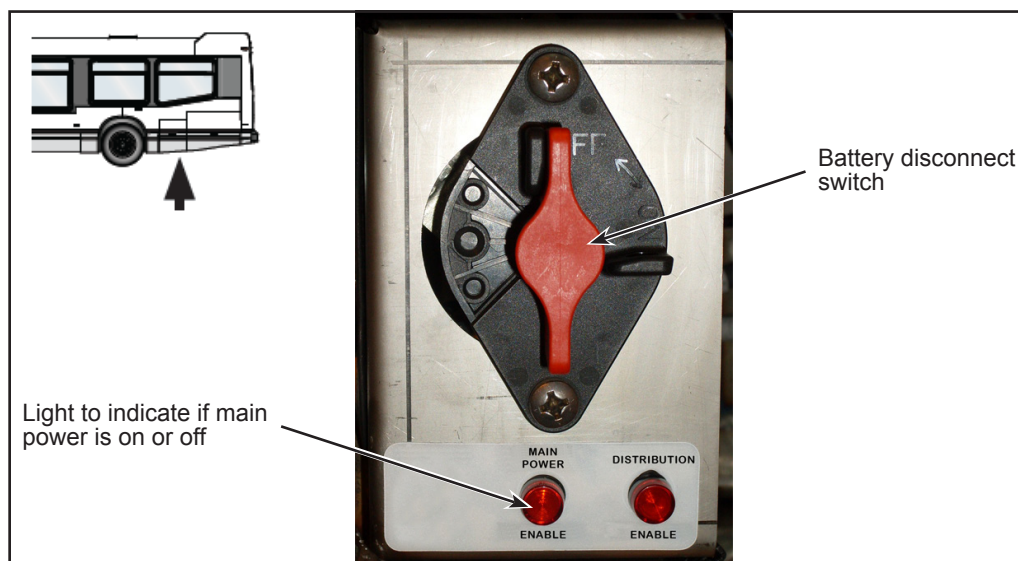


Figure 2 - Typical Battery Disconnect Switch

**WARNING**

The aftertreatment system will stay hot to the touch for long periods of time after the engine has been shut down. To reduce the possibility of personal injury, avoid direct contact of hot components.

**CAUTION**

The exhaust catalyst will stay hot to the touch for long periods of time after the engine has been switched off.

The exhaust catalyst will stay hot to the touch for long periods of time after the engine has been switched off. The NOx sensor will also be hot if the engine keyswitch is ON.

Do not underseal or coat/paint any part of the NOx sensor.

**NOTE**

Refer to section 11: EXHAUST SYSTEM of Nova Bus Maintenance Manual for LOCATION of NOx SENSOR, SCR UNIT and related information.

Also refer to Cummin's Quick serve online for detailed information.

- 1.5. Locate the two NOx sensors on the turbocharger and the selective catalytic reduction (SCR) area in the upper streetside of the vehicle (see Figure 3).

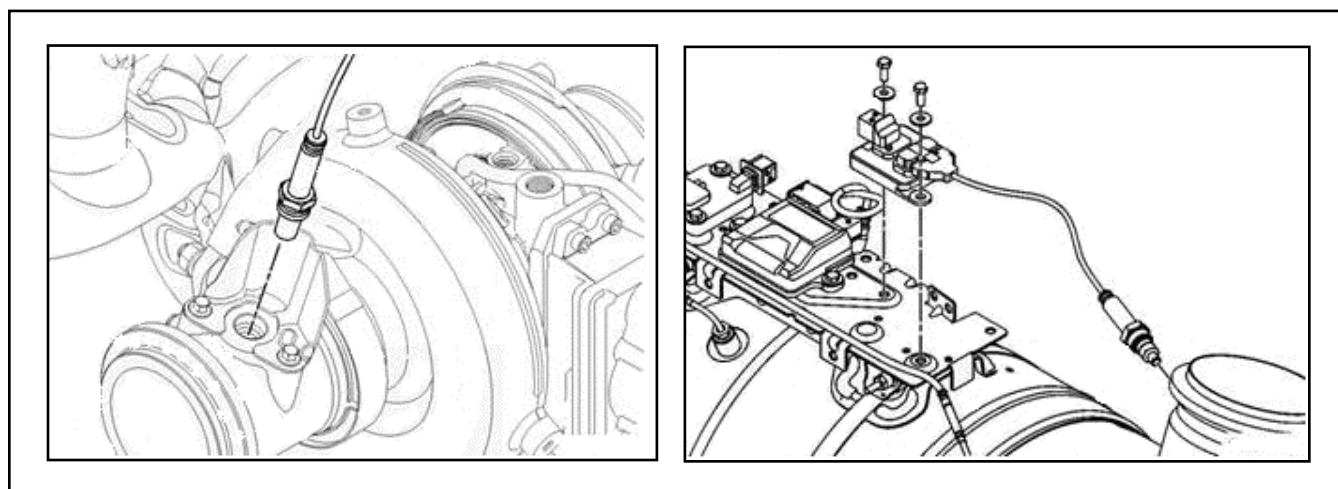


Figure 3 - Typical View of NOx Sensors Location

- 1.6. Disconnect the wiring harness on the side of the SCR unit after removing the capscrews (see Figure 4). Retain the capscrews.

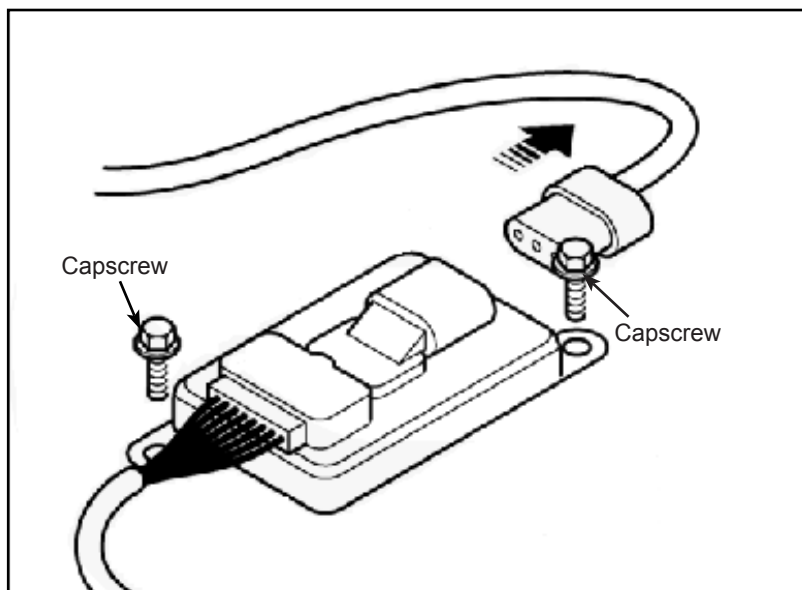


Figure 4 - Typical View of Unplugging the Sensor

- 1.7. Loosen the retaining nut, remove the NOx sensor from the exhaust system and discard (Figure 5).

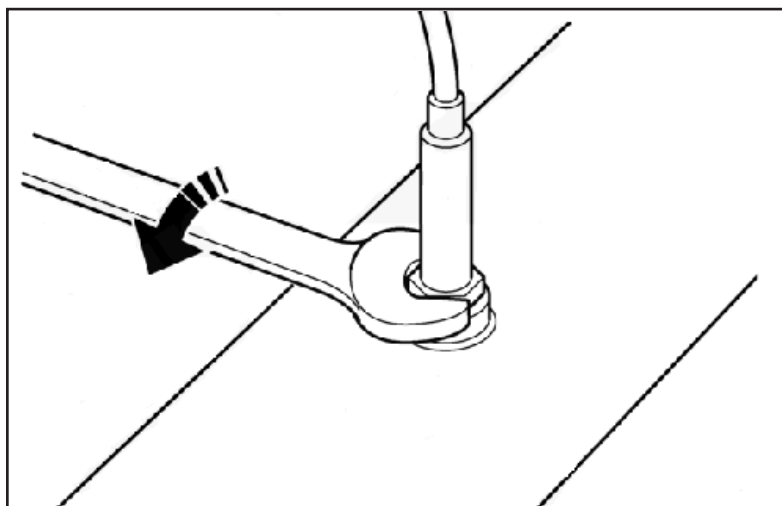


Figure 5 - Typical View of Loosening of NOx Sensor

- 1.8. Apply a light coating of anti-seize compound to the threads of the new NOx sensor that is to be fitted.
- 1.9. Install the NOx sensor to the exhaust system and tighten the retaining nut (see Figure 6).

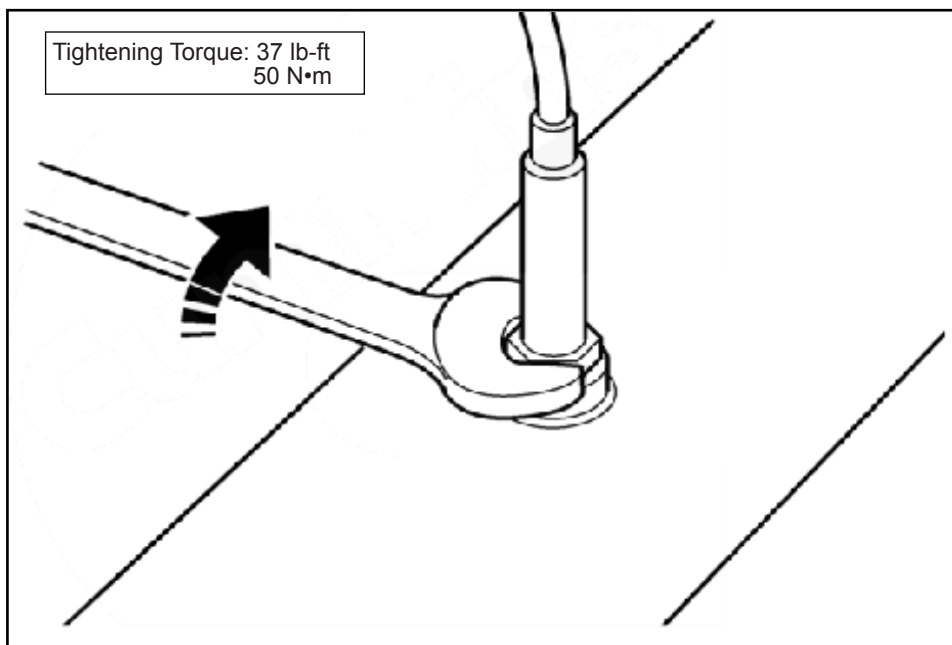


Figure 6 - Typical View of Tightening of NOx Sensor

- 1.10. Connect the wiring harness on the side of the SCR unit.
- 1.11. Install the retained capscrews of the harness connector (see Figure 7).

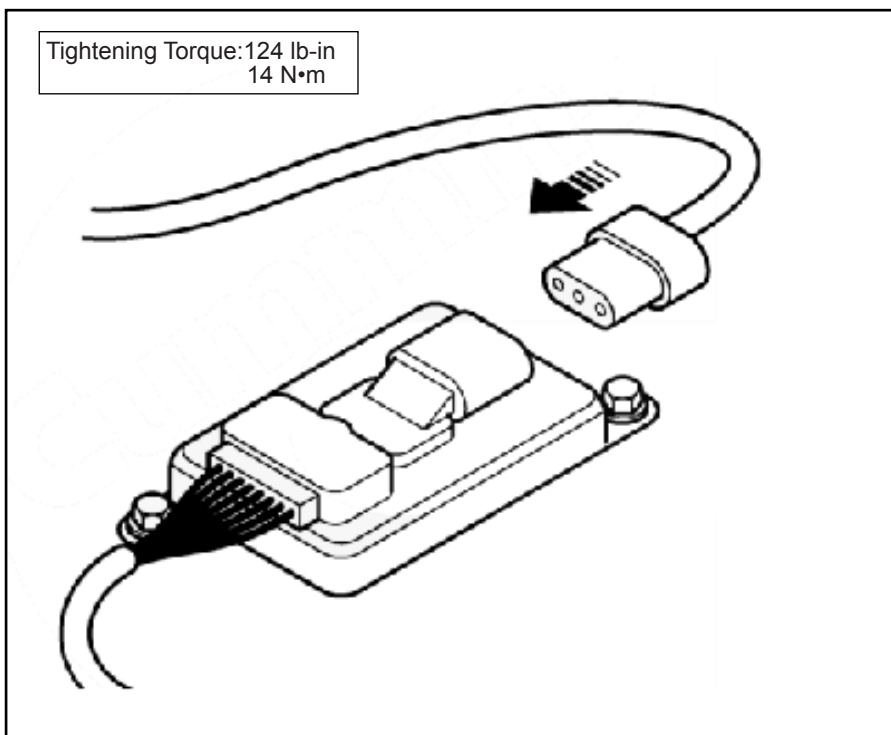


Figure 7 - Typical View of Plugging the Sensor

- 1.12. Set the battery disconnect switch in the battery compartment to ON position.
- 1.13. Set the master control switch in the ON position.
- 1.14. Start the engine. Check for any warning light or message on the dash.
- 1.15. The vehicle may be returned to service. ❖