



101 Fair Oaks Road, Asheville, N.C. 28704

MASTER S/N:

v1.8 10-3-14

CONVERSION INSPECTION CHECKLIST

NOTE: THIS IS A VISUAL INSPECTION. REFER TO BUILD OF MATERIAL AND AVAILABLE VISUAL AIDS AS REFERENCES.

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A) PRE-CONVERSION REPORT	D) UNDER CARRIAGE	F) INTERIOR
B) EXTERNAL	E) CYLINDER/TOOLBOX	G) LEAK CHECK
C) UNDERHOOD		H) TEST DRIVE

A) PRE-CONVERSION REPORT (Mark any that apply, write N/A if does not apply)

(Reminder: Any items removed from vehicle must be put back)

Outside

PASS	FAIL

Front
 Headlights
 Clearance lights
 Identification lights
 Turn signals & 4 way flasher
 Body condition/Dents/Rust
 Windsheild

PASS	FAIL

Left side
 Fuel tank & cap
 Side marker lights
 Reflectors
 Front tires, wheels & lugs
 Rear tires, wheels & lugs
 Body condition/Dents/Rust

Right side

Fuel tank & cap
 Side marker lights
 Reflectors
 Front tires, wheels & lugs
 Rear tires, wheels & lugs
 Body condition/Dents/Rust
 Glass

Rear

Tail lights
 Stop lights
 Turn signals & 4 way flasher
 Clearance lights
 Identification lights
 Reflectors
 Body condition/Dents/Rust

Under hood

Oil level
 Coolant level
 Transmission fluid level
 Power steering level
 Brake fluid level
 Cleanliness
 Indications of fluid leak(s)
 Missing items
 Damaged vacuum lines

Interior

Head liner
 Seats
 Carpet & floor mats
 Parking brake
 Radio
 Horn
 Gas gauge reading
 Spare tire
 Jack assembly

Check for OBD II codes
OEM gasoline fuel gauge is reading at least half tankfull

INSPECTOR SIGNATURE: _____ DATE: _____

PASS	FAIL

Damaged wires and hoses
 Badly rusted or loose panels
 Badly damaged areas of the vehicle
 Missing items under the hood

PASS	FAIL

Under Carriage
 Check for leaks (Oil, Coolant, etc.)
 Check for loose parts (Bolts, Clamps, etc.)
 Damage (body, frame, OEM lines)

		Worn wiring, hoses, vacuum lines
		Condition of tires
		Condition of springs
		Condition of engine(smoking, burning oil, or running poorly)

Comments:

B) EXTERNAL (POST-CONVERSION)

PASS	FAIL	FIXED
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- 1 Check for physical damage:
 - Dents
 - Scratches
 - Chipped paint
 - Glass cracks
 - Mirrors left & right
 - All lights
- 2 All tire pressures checked and set per label.
- 3 Sticker Decals on vehicle.
- 4 Body water leaks.
- 5 Windshield wipers.

C) UNDERHOOD (POST-CONVERSION)

PASS	FAIL	FIXED
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- 1 Verify the correct system is installed (Bi-fuel or Dedicated).
- 2 Verify all stickers are present underhood.
- 3 Verify the correct main harness is installed.
(compare Master S/N located in the fuse relay box)
- 4 Verify main harness is routed and secured correctly.
- 5 Verify all underhood connections are made:
 - Coils
 - Spark Plugs
 - MAF Sensor
 - MAP Sensor
 - Throttle Sensor
 - Battery
 - Injectors
 - Injector harness
 - Main harness to rear harness

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INSPECTOR SIGNATURE: _____ DATE: _____

PASS	FAIL	FIXED
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- Main harness to gauge/switch harness
 - Main harness to injector harness
- 6 Fuel rails installed correctly.
 - 7 Coolant lines are installed correctly and not leaking.
 - 8 Correct coolant hose clamps used.
 - 9 All bolts are tightened per torque specifications.
 - 10 Engine cooling.
 - 11 All CNG component connections torqued to correct specification
(refer to the installation manual).

D) UNDER CARRIAGE (POST-CONVERSION)

- 1 Verify rear harness is routed secured correctly.
- 2 Verify coolant hoses are routed and secured correctly.
- 3 Low pressure hose routed and secured correctly.
- 4 Fuel fill is installed and secured correctly.
- 5 Cylinder assembly secured correctly.
- 6 Check for coolant leaks.
- 7 Check for oil leaks.
- 8 Check for transmission leaks.
- 9 Check for loose bolts/clamps/zip ties.
- 10 All zip ties snipped appropriately.
- 11 Check that heat shield installation/re-installation is correct.
- 12 Backing plates secured correctly.
- 13 Exhaust shielding and leaks.
- 14 All CNG component connections torqued to correct specification (refer to the installation manual).

PASS	FAIL	FIXED

E) CYLINDER/COVER (POST-CONVERSION)

- 1 Verify cylinder master s/n. (refer to B.O.M.)
- 2 Verify Solenoid connection to rear harness.
- 3 Verify high pressure sensor connection to rear harness.
- 4 All hoses in proper location.
- 5 Check high pressure hose from cylinder to regulator.
- 6 Check high pressure hose from fuel fill to cylinder.
- 7 Check fuel fill is secured correctly.
- 8 Check low pressure hose to regulator and is secured correctly.
- 9 Check coolant lines to regulator (correct clamps and secure).
- 10 All wiring harnesses are secured.
- 11 Cylinder mounting plates secured.
- 12 Warning sticker inside center of cover and cylinder strap closest to the valve.
- 13 Leak test, (Methane detector and liquid methods)
- 14 Verify each solenoid opens (After being flashed, check one at a time)
- 15 Verify toolbox is centered and secured to bed.

PASS	FAIL	FIXED

INSPECTOR SIGNATURE: _____ DATE: _____

- 16 Correct bolts and pre-labeled holes were used to secure Toolbox.
- 17 Install skirt into place. Verify all bolts and U-Nuts are present and correct.
- 18 Valves are in open position.

PASS	FAIL	FIXED

F) INTERIOR (POST-CONVERSION)

- 1 CNG fuel gauge is operational (Check for visible light).
- 2 Switch is in correct location (use template as aid to verify).
- 3 Crank the vehicle.
 - BI-FUEL SYSTEM:** Switch is operational.
 - DEDICATED SYSTEM:** OEM Fuel gauge reading at a minimum of a quarter tank full.

Note: In a bi-fuel system, whatever the fuel last used will be used on startup and run for 90 seconds before switching
- 4 OEM operational:
 - Head lights (operational and level per OEM specification)

PASS	FAIL	FIXED

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Hazard lights
All misc lights
Brake Lights
Headliner
Seats
Parking brake
Radio
Horn
OEM Gauges
Speedometer
RPM level
Coolant temperature
Engine temperature
Oil temperature

- 5 Overall cleanliness.
- 6 Check for interior damage.
- 7 Carpet condition.

G) LEAK CHECK (While cylinder is filled with CNG)

- 1 Engine **NOT RUNNING**: Entire system leak tested.
- 2 Engine **RUNNING**: Entire system leak tested.

PASS	FAIL	FIXED

H) TEST DRIVE

- 1 Parking brake
- 2 Engine and transmission performance, including downshift and "PRNDL" indexing.
- 3 High Idle speed setting and full throttle pedal travel.
- 4 Heater and air conditioning function and leak test.
- 5 Brake performance.
- 6 Handling.
- 7 Steering evaluations.

PASS	FAIL	FIXED

INSPECTOR SIGNATURE: _____ DATE: _____

- 8 Vehicle vibration and noise.
- 9 Electrical functions.

PASS	FAIL	FIXED

TEST DRIVER SIGNATURE: _____ DATE: _____

INSPECTOR SIGNATURE: _____ DATE: _____

SUPERVISOR SIGNATURE: _____ DATE: _____

Upon supervisor's signature, the conversion system install is complete and the vehicle is considered to be road worthy and ready for release