# State of California AIR RESOURCES BOARD

## **EXECUTIVE ORDER B-61U**

# Relating to Conversion of Off-Road Engines to Alternative Fuels

#### Altronic LLC

Pursuant to the authority vested in the Air Resources Board by Sections 43013 and 43018 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-14-012;

IT IS ORDERED AND RESOLVED: That the GTI Bi-Fuel natural gas conversion system, manufactured by Altronic LLC of 712 Trumbull Avenue, Girard, Ohio 44420, is certified as described below for the following off-road compression-ignition engines:

<u>Fuel type:</u> Natural gas and diesel mixture or diesel only

Engine: 1996 through 2013 model year; up to 3,000 kW;

Equipped with turbocharger and isochronous governor;

Not equipped with any original equipment manufacturer exhaust

aftertreatment systems, i.e. diesel oxidation catalysts, particulate filters

Emission standards: Tier 1, Tier 2, and Tier 3

Application: Stationary constant speed

Test cycle: 5-mode steady-state

## Major conversion system components:

Natural gas controller Natural gas supply pressure sensor

Natural gas filter Regulator output pressure sensor

Natural gas regulator Engine vacuum sensor

Electric shut off valve

Manual shut off valve

Manifold air pressure sensor

Manual shut off valve

Manifold air temperature sensor

Natural gas power valve

Exhaust gas temperature sensor

Natural gas mixer Engine vibration sensor

Diesel oxidation catalyst Kilowatt sensor (when required)

The 5-mode constant speed steady-state certification test emission values and the applicable emission standards for the test engines are shown below (g/kW-hr):

	NMHC+NOx	<u>CO</u>	<u>PM</u>
2006 Detroit Diesel Corp. Series 60			
GTI Bi-Fuel Test Results	3.8	0.1	0.07
Tier 3 Standards	4.0	3.5	0.20
2010 MTU Detroit Diesel Series 2000-05		•	
Baseline Test Results	5.5	1.1	0.18
GTI Bi-Fuel Test Results	3.6	0.3	0.11
Tier 2 Standards	6.4	3.5	0.20

All emission control systems and engine manufacturer's tune-up label shall be retained. The engine shall be adjusted to Altronic LLC's tune-up specifications. The production conversion system shall be in all material respect the same as that for which certification is granted.

BE IT FURTHER RESOLVED: That Altronic LLC shall provide a supplemental emission control information label, which shall be affixed in a permanent manner adjacent to the original Emission Control Information Label, and shall comply with the labeling requirements described in Sections I.E. of the "California Certification and Installation Procedures for Systems Designed to Convert Off-Road Vehicles, Engines, and Equipment to Use Alternative Fuels," adopted October 1, 1999.

BE IT FURTHER RESOLVED: That Altronic LLC shall maintain a record of the converted engine and/or equipment identification numbers as required under Section I.G. of the "California Certification and Installation Procedures for Systems Designed to Convert Off-Road Vehicles, Engines, and Equipment to Use Alternative Fuels," adopted October 1, 1999.

BE IT FURTHER RESOLVED: That Altronic LLC has submitted and the Executive Officer hereby approves the materials required to demonstrate certification compliance with the warranty requirements under Section X. of the "California Certification and Installation Procedures for Systems Designed to Convert Off-Road Vehicles, Engines, and Equipment to Use Alternative Fuels," Adopted October 1, 1999.

This Executive Order shall not apply to any GTI Bi-Fuel conversion system advertised, offered for sale, sold with, or installed on an engine prior to or concurrent with transfer to an ultimate purchaser.

THIS EXECUTIVE ORDER DOES NOT CONSTITUTE AN ACCREDITATION, APPROVAL, OR ANY OTHER TYPE OF ENDORSEMENT BY THE AIR RESOURCES BOARD OF ANY CLAIMS OF THE APPLICANT CONCERNING ANTI-POLLUTION BENEFITS OR ANY ALLEGED BENEFITS OF ALTRONIC LLC'S GTI BI-FUEL NATURAL GAS CONVERSION SYSTEM.

The conversion system certified under this Executive Order must conform to all applicable California emission regulations. Certification of the conversion system shall not be construed as a certification to sell, offer for sale, or advertise any component of the conversion system as an individually certified part.

Executed at El Monte, California this \_\_\_\_\_ day of May 2014.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division