

State of California  
AIR RESOURCES BOARD

Small Off-Road Engine Evaporative Emission System Components

Executive Order Q-13-009  
Nichirin Co., Ltd.  
Fuel Hoses

WHEREAS, Pursuant to California Health and Safety Code, sections 39600, 39601, and 43013, the California Air Resources Board (ARB) has established a certification process for evaporative emission system components designed to control gasoline emissions from small off-road engines, as described in California Code of Regulations, title 13, section 2767.1;

WHEREAS, Pursuant to California Health and Safety Code, section 43013, ARB has established criteria and test procedures for determining the compliance of evaporative emission system components with the design requirements in Cal. Code Regs., title 13, section 2754;

WHEREAS, Pursuant to Cal. Code Regs., title 13, section 2767.1, ARB Executive Officer may issue an executive order (EO) if he determines that the small off-road engine evaporative emission system components conform to the applicable performance requirements set forth in Cal. Code Regs., title 13, section 2754; and

WHEREAS, Pursuant to California Health and Safety Code, sections 39515 and 39516, ARB Executive Officer issued EO G-05-008 delegating to the Chief of ARB Monitoring and Laboratory Division (MLD) the authority to certify small off-road engine evaporative system components.

NOW, THEREFORE, I, Michael T. Benjamin, Chief of MLD, find that the Nichirin Co., Ltd. model MC4 fuel hoses conform with the performance requirements set forth in Cal. Code Regs., title 13, section 2754, when tested at a constant temperature of 40 °C, pursuant to SAE J1737, using an approved test fuel of California Phase 2 Certification Fuel.

IT IS ORDERED AND RESOLVED that the Nichirin Co., Ltd. model MC4 small off-road engine fuel hoses identified in Table 1 are certified for use in small off-road equipment.

Table 1  
Dimensions and Tolerances for Nichirin Co., Ltd. Model MC4 Fuel Hoses

Nominal Inside Diameters (mm)	Minimum Fluoroelastomer Barrier Thickness (mm)
3.5 or greater	0.4

IT IS FURTHER ORDERED that Nichirin Co., Ltd. shall provide a warranty to equipment manufacturers purchasing the Nichirin Co., Ltd. model MC4 fuel hoses. The warranty must conform to the requirements of Cal. Code Regs., title 13, section 2760.

IT IS FURTHER ORDERED that the certified Nichirin Co., Ltd. model MC4 fuel hoses shall be installed in accordance with the manufacturer's installation and use instructions for Nichirin Co., Ltd. model MC4 fuel hoses. A copy of this EO and fuel hose installation and use instructions shall be provided to manufacturers purchasing Nichirin Co., Ltd. model MC4 fuel hoses for installation on small off-road engines and equipment introduced into commerce in California.

IT IS FURTHER ORDERED that Nichirin Co., Ltd. model MC4 fuel hoses introduced into commerce in California shall be clearly identified by a permanent identification that allows ARB to identify the manufacturer's name, EO number, and model number.

IT IS FURTHER ORDERED that any alteration to the fuel hoses certified hereby is prohibited. Any alteration or modification of the design approved by this EO will require the manufacturer to apply for a new EO.

IT IS FURTHER ORDERED that the Nichirin Co., Ltd. model MC4 fuel hoses shall be compatible with fuels in common use in California at the time of certification and any modifications to comply with future California fuel requirements shall be approved in writing by the Executive Officer or Executive Officer's delegate.

IT IS FURTHER ORDERED that the component certification of the Nichirin Co., Ltd. model MC4 fuel hoses can be referenced in certification applications for small off-road engines and equipment that use small off-road engines, unless the Executive Officer finds that the Nichirin Co., Ltd. model MC4 fuel hoses no longer meet the performance requirements set forth in Cal. Code Regs., title 13, section 2754 when tested pursuant to Cal. Code Regs., title 13, section 2765.

Executed at Sacramento, California, this 14<sup>th</sup> day of May 2013.



Dr. Michael T. Benjamin, Chief  
Monitoring and Laboratory Division