

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER Q-13-021A

Small Off-Road Engine Evaporative Emission System Components

Parker Hannifin Corporation
Model Series 178-06XXXXXX
Fuel Hose

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 (SORE), 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 or she determines that the SORE 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 SORE evaporative system components.

NOW, THEREFORE, I, Michael T. Benjamin, Chief of MLD, find that the Parker Hannifin Corporation series 178-06XXXXXX fuel hose conforms to the performance requirements set forth in Cal. Code Regs., title 13, section 2754, when tested at a constant temperature of 40 °C, pursuant to Society of Automotive Engineers Specification J1527, using an approved test fuel of CE10, and evaluated using Society of Automotive Engineers Specification J1737.

IT IS ORDERED AND RESOLVED that the Parker Hannifin Corporation series 178-06XXXXXX SORE fuel hose identified in Table 1 is certified for use in small off-road equipment and will emit evaporative emissions up to the reported permeation rate.

Table 1

Parker Hannifin Corporation Model Series 178-06XXXXXX Fuel Hose *		
Nominal Inside Diameter (Inches)	Minimum Polyvinylidene Fluoride (PVDF) Barrier Thickness (Inches)	Certified Permeation Rate (grams/meter ² /day)
0.375 or greater	0.007 or greater	6

IT IS FURTHER ORDERED that Parker Hannifin Corporation shall provide a warranty to equipment manufacturers purchasing the Parker Hannifin Corporation series 178-06XXXXXX fuel hose. The warranty must conform to the requirements of Cal. Code Regs., title 13, section 2760.

IT IS FURTHER ORDERED that the certified Parker Hannifin Corporation series 178-06XXXXXX fuel hose shall be installed in accordance with manufacturer installation and use instructions for Parker Hannifin Corporation series 178-06XXXXXX fuel hose. A copy of this EO and fuel hose installation and use instructions shall be provided to manufacturers purchasing Parker Hannifin Corporation series 178-06XXXXXX fuel hose for installation on small off-road engines and equipment introduced into commerce in California.

IT IS FURTHER ORDERED that the Parker Hannifin Corporation series 178-06XXXXXX fuel hose introduced into commerce in California shall be clearly identified by a permanent identification showing the manufacturer's name, EO number, and model number.

IT IS FURTHER ORDERED that any alteration to the Parker Hannifin Corporation series 178-06XXXXXX fuel hose 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 Parker Hannifin Corporation series 178-06XXXXXX fuel hose 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 Parker Hannifin Corporation series 178-06XXXXXX fuel hose can be referenced in certification applications for small off-road engines and equipment that use SORE unless the Executive Officer finds that the Parker Hannifin Corporation series 178-06XXXXXX fuel hose no longer meets 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 25th day of January 2016.



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

* At the manufacturer's request, EO Q-13-021A issued to amend Q-13-021 by introducing a smaller internal diameter fuel hose that will also become the representative for this hose family, or Parker Hannifin Corporation model series 178-06XXXXXX fuel hose. New permeation test data for the smaller internal diameter hose was submitted and permeation rate calculations have been verified.