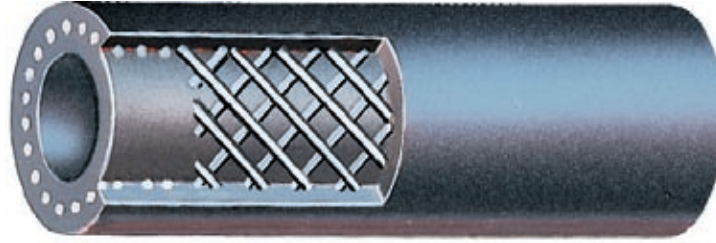


Install ACDelco Permeation-Resistant Fuel Line Hose to Help Avoid Comebacks



ACDelco Fuel Line Hose (SAE 30R9)

Fuel line hoses are designed to carry gasoline from the tank to the fuel pump, through the fuel filter, and to the fuel injection system. Select sections of the fuel line are made of rubber hose to help absorb vibrations from the engine and road.

Fuel line hose comes in two types: those that meet the SAE 30R7 standard, and fuel injection hose that meets the requirements of SAE 30R9.

Standard fuel and oil (SAE 30R7) hose is rated for low-pressure applications at 50 psi working pressure up to 3/8" size, and 35 psi for sizes over 3/8". This general-purpose hose contains a light reinforcement, and the rubber materials can be any compound that is suitable for fuel, oil and vapors.

However, fuel formulations at many US refineries are constantly changing as proprietary blends are introduced according to government mandates and seasonal influences. At times, more aggressive fuels can extract the oils that give SAE 30R7 hose its flexibility. Engineers caution that the result can be a brittle, stiff tube that could greatly reduce the performance and service life of the hose.

ACDelco fuel injection (SAE 30R9) hose or MPI (multi-port injection) hose is reinforced to handle higher pressures up to 180 psi. It can be used on all injection systems that use hose clamps but it is not designed to replace coupled assemblies on fuel injection systems.

Designed for low permeation contact with a wide variety of alcohols, alcohol fuel blends, and diesel fuel, ACDelco Fuel injection hose allows 15g/m²/day permeation whereas standard SAE 30R7 hose allows 550g/m²/day. (Our fuel injection hose routinely performs at 1g-to-2g/m²/day of fuel loss, which is well below the allowable standard.)

ACDelco SAE 30R9 hose uses a laminated tube of Fluoroelastomer, as a thin wall inner layer backed by traditional compounds. This first layer helps protect the rest of the hose from permeation from aromatics, oxidized gasoline (as can occur in fuel injection systems), ethanol or oxygenate additives and a wide range of petroleum-based products.

The laminated tube helps resist cracking caused by "sour gas," which forms when unused gas is returned to the fuel tank. As an added benefit, this hose helps reduce emissions because fuel can't evaporate through the hose walls.

The ACDelco SAE30R9 hose is also recommended for diesel fuel because its fluoroelastomer tube resists deterioration caused by some diesel fuel additives.

As refineries produce cleaner fuels and lower allowable permeation rates during the "vehicle at rest" condition, older hose specifications such as SAE 30R7 are becoming less reliable and are no longer specified on OEM automotive fuel applications because of stringent permeation standards.

Therefore, engineers assert that the best choice for automotive fuel line hose applications today is fuel injection SAE 30R9 hose. For independent service centers, it is the best choice to help reduce comebacks and for high performance trouble-free service in a changing fuel environment.

For submersible applications such as on the in-tank fuel pump, only SAE 30R10 hose should be used, because when the hose fails, the pump will fail. Low-swell fluoroelastomer compounds in the tube and cover resist gasoline and diesel fuel permeation and aging. Standard hoses have these fuel-resistant characteristics in the tube portion only.

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