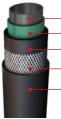


TECHNICAL SERVICE BULLETIN

FUEL HOSE FOR TODAY'S FUELS

ETHANOL GAS AND BIODIESEL FUELS:

Ethanol and Biodiesel are aggressive fuel blends which can damage the rubber compounds found in general purpose (SAE 30 R6 and R7) fuel line. Gates Barricade® fuel hose is manufactured with a tube that is compatible with these fuels.



BARRIER TUBE Fortified to resist high heat and aggressive fuel mixtures such as ethanol and biodiesel GreenshieldTM BARRIER Patented thermoplastic materiales deliver low permeation performance ADHESION LAYER Serves as a second defense against oil and aggressive fuels REINFORCEMENT Textile spiral weave provides best-in-class working pressure (for fuel injection) COVER Outstanding ozone and heat resistance

Ethanol, identified by an "E" number on the pump, denotes the mixture percentage by volume. For example, E85 contains 85% ethanol and 15% gasoline or other hydrocarbon by volume. E10, E15 and E85 are the most common blends. Ethanol blends will permeate through general purpose fuel hose and contribute to the formation of ground-level ozone. Several states recommend general purpose fuel line hose not be used, some potentially consider it illegal. The use of fuel additives may accelerate this situation. Gates Barricade Fuel Line Hose with GreenShield Technology is compatible with EPA fuels, including gasoline, Ethanol blends, Methanol, Diesel, and Biodiesel.

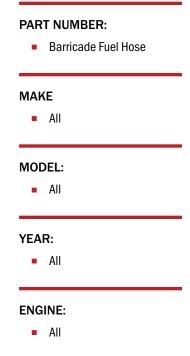
General purpose fuel hose also has a high permeation rate allowed per the SAE specification. General purpose fuel line can have permeation rates as high as 600g/m²/day. A 2-foot section of general purpose fuel hose will permeate one gallon of gasoline each year. Gates Barricade hose has a permeation rate of only 1g/m²/day which results in a loss of only two tablespoons of fuel per year.

General purpose fuel hose are susceptible to hose damage by ethanol blends. Deteriorating hose can contaminate other parts of the system; injectors and sensors, causing reduced efficiency and additional repair costs.

Proper working pressure is an absolute requirement of the fuel system (FI). Over 98% of vehicles today have fuel injection. Fuel injection systems are under high pressure and a higher working pressure hose is required. General purpose fuel hose has a working pressure rating of 50 PSI, while FI systems require a fuel line hose with working pressure rating up to100 PSI. The use of standard fuel line on FI systems could potentially lead to catastrophic failure and risk of fire. Gates Barricade Fuel Injection Hose has a working pressure rating of 225 psi which exceeds all OEM requirements.

WITH OVER 100 YEARS OF EXPERIENCE, GATES PRODUCTS ARE TRUSTED BY PROFESSIONAL TECHNICANS AROUND THE WORLD

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TSB 073 US



GENERAL PURPOSE FUEL LINE DAMAGED BY ETHANOL