

# mityvac<sup>®</sup>

## **Mityvac Fuel System Test Kit**

***The MV5545 FST PRO revolutionizes automotive diagnostics by combining fuel pressure and flow testing with patented load simulation technology to diagnose and pinpoint fuel delivery system malfunctions.***

- ***Tests flow and pressure while the car is running***
- ***Simulates heavy-load conditions***
- ***Increases shop profitability***
- ***Decreases diagnostic time***
- ***Eliminates fuel pump returns***
- ***Compatible with all fuel systems***

### **Available Mityvac Fuel System Test Kits:**

***MV5545 — Flow and Pressure Test Kit***

***MV5546 — Pressure Test Kit***

***MVA5552 — Pressure Test Accessory Kit***

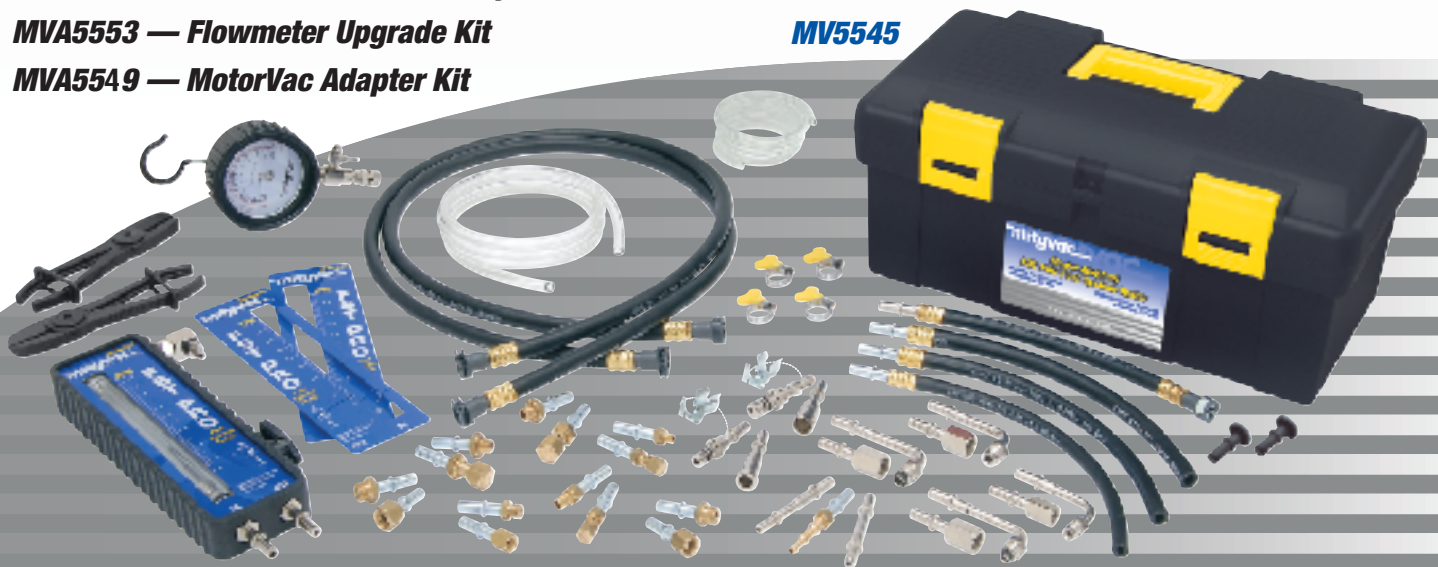
***MVA5553 — Flowmeter Upgrade Kit***

***MVA5549 — MotorVac Adapter Kit***

**MV5546**



**MV5545**



**MVA5549**

**MVA5552**

**MVA5553**

# Are you sure it's the fuel pump?

Fuel pumps have a higher rate of return than almost any other automotive part. Fuel pump manufacturers estimate that 80% or more of returned pumps are misdiagnosed, costing them, consumers, and repair shops millions of dollars each year.

A problem with the fuel system could be one of many things including the fuel pump, pressure regulator, fuel filter, fuel line or the inlet strainer.

Fuel pressure and flow are equally important for an engine to run at peak performance and efficiency. Testing for one without the other provides only half the picture. The FST PRO combines a pressure gauge and flowmeter to ensure the technician has the complete picture.

The patented Flow Control Valve operates in three positions to simulate varying load conditions from idle to wide-open-throttle (WOT). It allows the technician to test fuel delivery performance under the heaviest load conditions, while the car idles in the shop.

## Advantages of FST PRO Testing

- Diagnose and pinpoint fuel system malfunctions:
  - Clogged fuel filter or inlet screen
  - Faulty pressure regulator
  - Pinched or blocked fuel lines
  - Failing fuel pump
  - Leaky injectors
  - Faulty fuel pump check valve
  - Faulty swirl pots
  - Leaking fuel pickup lines
- Visual inspection of fuel for impurities and aeration
- Simulate engine load conditions in the shop for accurate diagnoses

**Modular quick-connect design for flexibility and ease of storage**

**Rubber boot surrounds entire flowmeter for protection from accidental breakage**

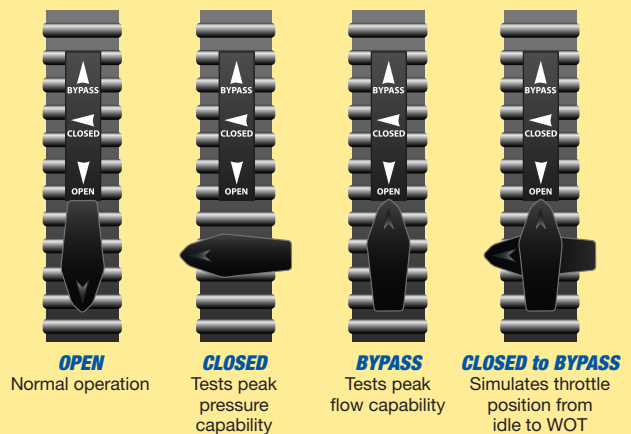
**Acrylic shield protects glass flow-tube from damage**

**Borosilicate glass flow-tube is impervious to chemicals, and safety rated to 200 psi**

**Flow-tube and weight are custom designed to the specific gravity of gasoline for increased accuracy**



## Flow Control Valve Positions



**Diaphragm style gauge provides maximum accuracy and durability**

**Push-button pressure relief**

**Fuel bypass port allows controlled, unrestricted fuel flow**

**Designed for maximum durability and ease of serviceability**

**Face plate is interchangeable for alternative scales of measure**

**Patented flow control valve allows demand testing of pressure and flow**

**Utilizes fuel rated quick-connects standard on many modern vehicles**



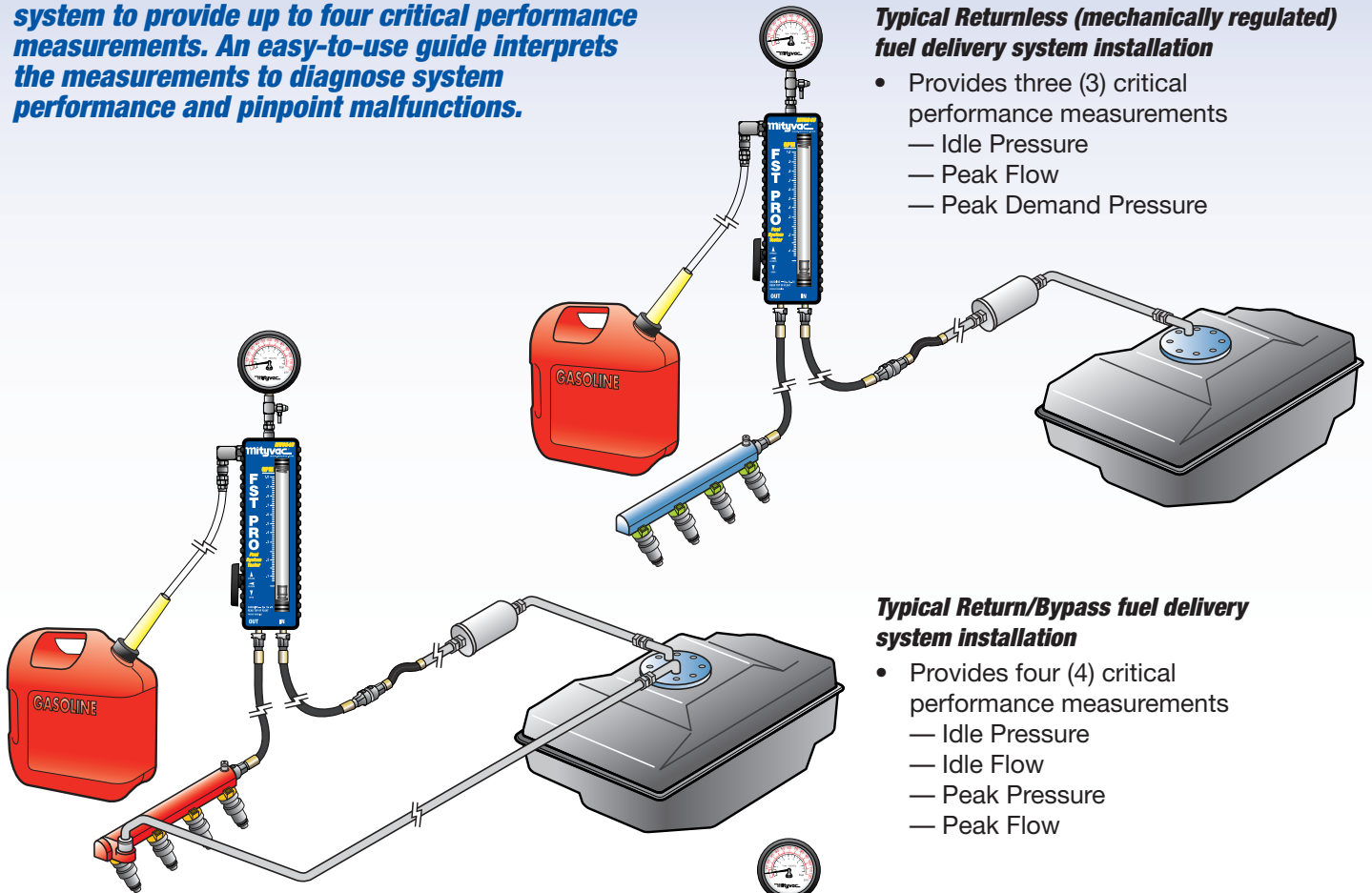
## Mityvac FST PRO Fuel System Tester

The FST installs on-car quickly and easily to diagnose whether an engine is receiving the proper fuel pressure and flow to perform at peak efficiency and output. It is equally capable of testing Return (Bypass) or Returnless fuel delivery systems, even electronically regulated systems and systems with multiple speed pumps.

The FST connects inline with a vehicle's fuel system to provide up to four critical performance measurements. An easy-to-use guide interprets the measurements to diagnose system performance and pinpoint malfunctions.

### Typical Returnless (mechanically regulated) fuel delivery system installation

- Provides three (3) critical performance measurements
  - Idle Pressure
  - Peak Flow
  - Peak Demand Pressure

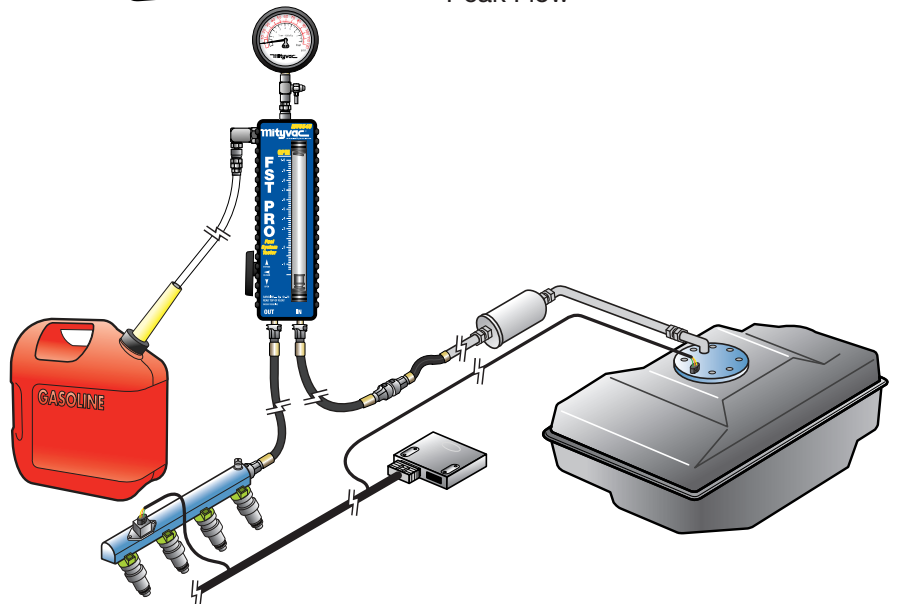


### Typical Return/Bypass fuel delivery system installation

- Provides four (4) critical performance measurements
  - Idle Pressure
  - Idle Flow
  - Peak Pressure
  - Peak Flow

### Typical Returnless (electronically regulated) fuel delivery system installation

- Provides four (4) critical performance measurements
  - Idle Pressure
  - Peak Demand Pressure
  - Peak Pressure
  - Peak Flow

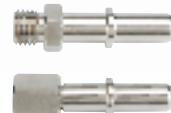


# Adapter Application Reference

The following adapters are included in the MV5545 and MV5546 and fit most US, Asian and European manufactured vehicles.

Part #	Description	Application(s)
MVA507*	GM/Chrysler Right Angle Test Port Adapter	GM & some Chrysler vehicles with 7/16"-20 thread test port on fuel rail
MVA508*	Ford/Chrysler Right Angle Test Port Adapter	Ford & some Chrysler vehicles with .308-32 thread test port on fuel rail
MVA510*	GM/Chrysler Test Port Adapter	GM & some Chrysler vehicles with 7/16"-20 thread test port on fuel rail
MVA511*	Ford/Chrysler Test Port Adapter	Ford & some Chrysler vehicles with .308-32 thread test port on fuel rail
MVA512	3/8" Quick-change Adapter	GM, Chrysler, Jeep/Eagle
MVA505	1/4"-3/8" Barbed Flex Hose Adapter	Vehicles with 1/4", 5/16", or 3/8" rubber to steel hose connection
	1/4" Flex Hose Adapter	Vehicles with 1/4" rubber to steel hose connection
	5/16" Flex Hose Adapter	Vehicles with 5/16" rubber to steel hose connection
	3/8" Flex Hose Adapter	Vehicles with 3/8" rubber to steel hose connection
MVA513	M8 x 1.0 Banjo Adapter	Toyota
MVA514	M10 x 1.0 Banjo Adapter	Toyota
MVA515	M12 x 1.25 Banjo Adapter	Toyota, Lexus, Geo, Honda, Acura, Hyundai, Mazda, Daihatsu, Chrysler imports
MVA516	M12 x 1.5 Banjo Adapter	Audi, Volkswagen
MVA517	M12 x 1.5 Ball Nose Adapter	European vehicles with CIS fuel system
MVA518	M14 x 1.5 Ball Nose Adapter	European vehicles with CIS fuel system
MVA519	M16 x 1.5 Ball Nose Adapter	European vehicles with CIS fuel system
MVA520	M16 x 1.5 Adapter	GM Vortec
MVA521	M14 x 1.5 Adapter	GM Vortec
MVA522	3/8" Flare Nut Adapter	Carbureted & early fuel injected systems
MVA523	5/16" Flare Nut Adapter	Carbureted & early fuel injected systems
MVA524	3/8" Spring Lock Adapter	Ford fuel injected systems
MVA525	1/2" Spring Lock Adapter	Ford fuel injected systems
MVA526	5/16" Quick Connect Adapter	GM, Chrysler, Jeep/Eagle

\* Not Included in MV5545 or MV5546. Available individually or in MVA5552 Pressure Test Accessory Kit.



MVA511\*

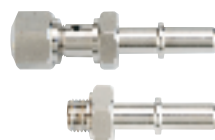


MVA505

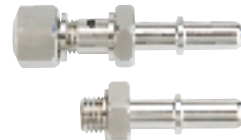
MVA513



MVA514



MVA515



MVA516



MVA517



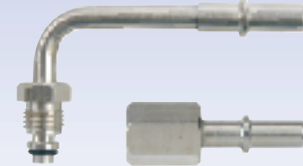
MVA518



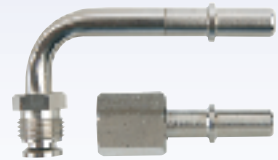
MVA519



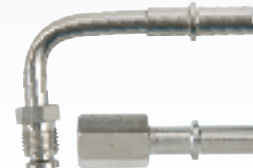
MVA520



MVA521



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