

In many cases, it is necessary to use one or more adapters included in this kit to make the proper connection. Also, a fuel pressure adapter, may be needed to install in series with the fuel line, usually replacing the fuel filter (i. e., GM Quick connect adapter, #12). The Basic Hose (37) can then be attached to the side outlet of this adapter.

6. Start the engine and immediately check for fuel leaks from test connections.
7. Read the fuel pressure. Check the vehicle service manual for desired pressure levels.
8. Turn engine off.
9. Release pressure in the test hoses by turning the Pressure Gauge Bleed-Off valve counterclockwise. Be prepared to catch any fuel that may be forced out.
10. Remove testing components and hoses. Clean and store in Test Kit Box.
11. Reconnect vehicle's fuel injection lines.
12. Start the engine and check for leaks.

If leaks are present, turn engine off and re-secure all connections.

Maintenance

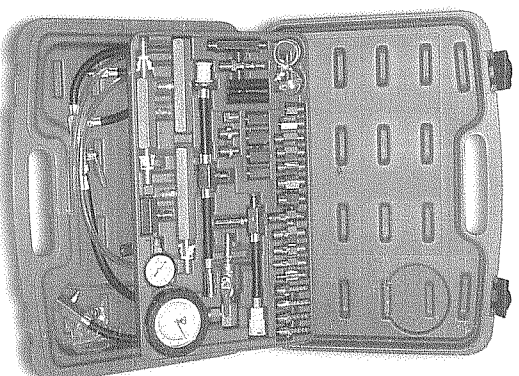
1. Clean all Fuel Injection Test Kit components immediately after use and place in the proper location in the Test Kit case.
2. Replace damaged components when they do not perform properly.
3. Drain all hoses before placing in the case.

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER NOR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

FUEL INJECTION TEST KIT

ASSEMBLY AND OPERATING INSTRUCTIONS



The adapter set tests fuel injection systems on vehicles on most makes and models: Accura Honda Hyundai Mazda, Suzuki, Toyota, Audi, BMW, Mercedes, Peugeot, Porsche, saab vw, Volvo w/cis CISE or K. jetroni.

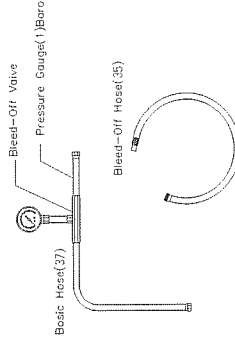
Parts List		
Item#	Description	Qty
1	0-100 PSI(0-7 Bar) Gauge	1
2	0-50 PSI (0-3.5 Bar) Gauge	1
3	1/4 inch NPT Tee with Valve	1
4	GM Quick Connect Adapter	1
5	GM 2.2K Adapter	1
6	GM T. B. I. Adapter	1
7	Ford Spring Lock Adapter	1
8	Ford Hair Pin Adapter	1
9	12mm-1.5Male * 8mm-1.00 Male Adapter	2
10	1/4* 1/4 inch Pipe Plug	1
11	5/16 inch Hose	1
12	1/4 inch Hose	1
14	12mm-1.5Male* 8mm-1.00 Male* 3 inch Adapter	1
19	5/16* 1/4 inch NPT Hose Barb	2
20	1/4* 1/4 inch NPT Hose Barb	2
21	Honda Adapter	1
22	8 mm-1.00 Banjo Bolt Adapter	1
23	10mm-1.00 Banjo Bolt Adapter	1
24	12mm-1.25 Banjo Bolt Adapter	1
25	12mm-1.50 Banjo Bolt Adapter	1
30	12mm-1.5Male* 10mm-1.00Male* 1-9/16 inch Adapter	1
31	12mm-1.5Male* 10mm-1.00Female* 1-1/4 inch Adapter	1
32	12mm-1.5Male* 8mm-1.00 Female* 5/16 inch Adapter	1
33	Hose Clamps	4
34	13 inch Ford Adapter Hose	1
35	Bleed-Off Hose	1
36	Bosch C. I. S. Hose	1
37	Basic Hose,24 inch	1
13(A)	12mm-1.5Male* 1/4 inch-3/8" Hose Barb	1
15(A)	1/4PT-19 union	1
16(A)	14mm-1.5union	1
17(A)	5/8-18 union	1
18(A)	16mm-1.5union	1
26(A)	12mm-1.5Male* 5/8-18mm-1.5Male* 1-9/16 inch Adapter	1
27(A)	12mm-1.5Male* 16mm-1.5Male* 1-9/16 inch Adapter	1
28(A)	12mm-1.5Male* 14mm-1.5Male* 1-9/16 inch Adapter	1
29(A)	12mm-1.5Male* 1/4PT-19Male* 1-9/16 inch Adapter	1

6. Release any air in the test hose by depressing the relief valve below the Pressure Gauge. Be prepared to catch any fuel that may be forced out.
7. Start the engine and immediately check for fuel leaks from test connections.
8. Read the fuel pressure. Check the vehicle service manual for desired pressure levels.
9. Turn engine off.
10. Release pressure in the test hose by depressing the relief valve below the gauge. Be prepared to catch any fuel that may be forced out.
11. Remove testing components and hoses. Clean and store in Test Kit Box.
12. Reconnect vehicle's fuel injection lines.
13. Start the engine and check for leaks.

If leaks are present, turn engine off and re-secure all connections.

Most Other Systems

1. Attach Basic Hose (37) to the Pressure Gauge (1). Use a small amount of pipe compound or teflon tape on the connection threads to prevent leaks. Tighten using a wrench.
2. Push the Bleed-Off Hose onto the Pressure Gauge assembly barb.
3. Close Bleed-Off valve on Pressure Gauge assembly (turn clockwise).



4. Relieve fuel pressure from line. Refer to the vehicle service manual for specific procedures.
5. Find the fuel outlet on the vehicle and attached the Basic Hose to it.

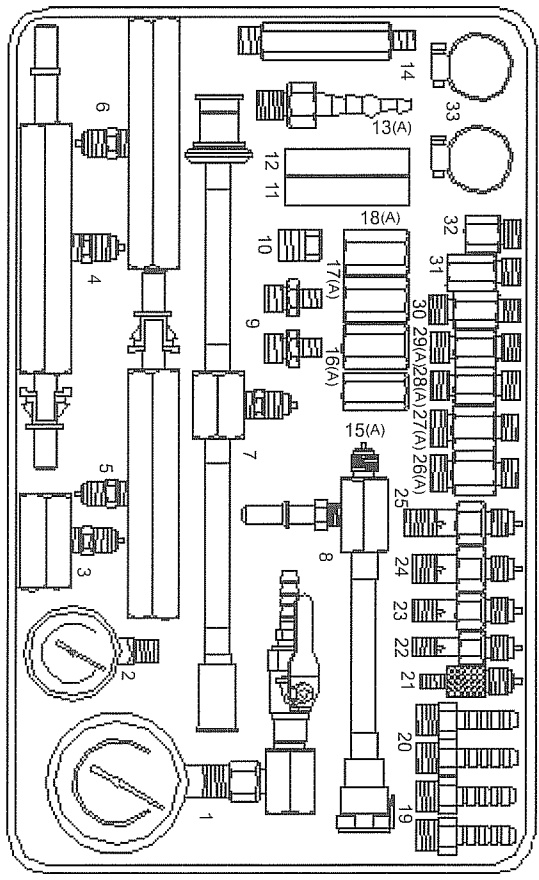
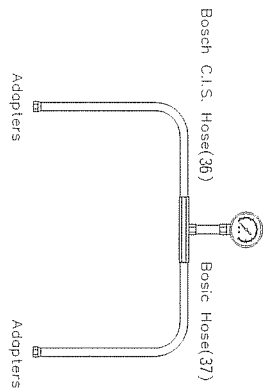
8. Do not allow fuel to come in contact with engine surface. Fire could occur.
9. Before making connections and testing, place a dry chemical (Class B) fire extinguisher nearby.
10. Always release fuel system pressure before loosening any fittings or hoses.

Connection and testing

There are two basic types of test component installation and testing procedures described on the following paragraphs: one for Bosch C.I.S. type vehicle fuel systems and one for most others. Always refer to the vehicles service manual for specific installations instructions.

Bosch Continuous Injection Systems (C.I.S.)

1. Using a wrench, remove the Pressure Gauge (1) from its lower busing and the connection.
2. Thread the Pressure Gauge into the Bosch C.I.S. hose assembly (located in the case pocket) and tighten using a wrench.
Use a small amount of pipe compound or teflon tape on the connection threads to prevent leaks.
3. Clean the fuel distributor to keep dirt from entering the fuel system.
4. Connect the Bosch C.I.S. Hose (36) to the fuel distributor, warm-up compensator hose, or pressure dampening hose.
Due to the differences between vehicle make, model, and year it may be necessary to use one of the kit adapters (hand tightened). This is the supply pressure side which is regulated by the fuel distributor.
5. Connect the Basic Hose (37) to the warm-up compensator its hose.
It may be necessary to use one of the kit adapters (hand tightened). This is the control pressure regulator side of the system.



Specifications

The Fuel Injection Test Kit tests fuel injection systems on vehicles on most popular models. Pinpoints problems in filters, lines, and regulators. This kit comes complete with assorted hoses, hose barb fittings, and hose clamps to adapt to earlier vehicle models, as well as current.

Save This Manual

You will need the manual for the safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep the manual and invoice in a safe and dry place for future reference.

Safety Warnings and Precautions

WARNING: When using tool, basic safety precautions should always be followed to reduce the risk of injury and damage to equipment.

Read all instructions before using this tester !

1. **Avoid working alone** .If an accident happens, an assistant can bring help.
2. **Keep work area clean**. Cluttered areas cause injuries.
3. **Keep children away**. Children must never be allowed in the work area. Do not let them handle machines, tools, or extension cords .
4. **Store idle equipment**. When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
5. **Dress properly**. Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically nonconductive clothes and nonskid footwear are recommended when working .wear restrictive hair covering to contain long hair.
6. **Use eye and ear protection** . Always wear ANSI approved impact safety goggles.
7. **Do not overreach** . Keep proper footing and balance at all times. Do not reach over or across electrical cables or frames.
8. **Maintain tools with care**. Ensure tester has fresh batteries. Inspect tool cords periodically and, If damaged have them repaired by an authorized technician.
9. **Stay alert**. Watch what you are doing, use common sense. Do not operate any tool when you are tired.

10. **Check for damaged parts**. Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts; any broken parts or mounting fixtures; and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use the tool if any switch does not turn On and Off properly.

11. **Replacement parts and accessories**. When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool. Approved accessories are available from Testtool Industrial CO. LTD.

12. **Do not operate tool if under the influence of alcohol or drugs**. Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any about, do not operate the tool.

Warning : the warnings, cautions, and instructions discussed in this instruction manual does not cover all possible condition and situations that may occur. It must be understood by the adapter that common sense and caution are factors, which cannot be built into this product ,but must be supplied by the operator.

Unpacking

When unpacking, check to make sure that all parts are included. Refer to the Assembly Drawing on the last page of this manual. If any parts missing or broken, please call Testtool Industrial CO. LTD. at the number on the cover of this manual.

Operation

Precautions Before and During Testing

1. Do not drive the vehicle while under test.
2. Do not change test fittings with the engine running.
3. Do not test diesel fuel systems.
4. Do not smoke in or around testing area.
5. Refer to manufacturer's vehicle service manual for procedures and pressure specifications.
6. Have a fuel container available to catch excess fuel when disconnecting components.
7. Turn engine off and depressurize system before removing test components.