

DIESEL COMPRESSION TEST KIT

Item Number W89731

OWNER'S MANUAL



Performance Tool®

▲WARNING: READ, UNDERSTAND AND FOLLOW ALL INSTRUCTIONS AND WARNINGS BEFORE OPERATING THIS TOOL. FAILURE TO DO SO MAY RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE AND WILL VOID WARRANTY.

PT®
Performance Tool

SPECIFICATIONS:

Pressure scale	0-1,000 psi (0-7,000 kPa)
Gauge accuracy	+/-2%
Hose size	15/16 in. I.D. x 35/64 in. OD x 16 in. L
Accessories	9 Adapter configurations & carrying case

Specifications are subject to change without notice.

SAFETY GUIDELINES / DEFINITIONS

This instruction manual is intended for your benefit. Please read and follow the safety, installation, maintenance and troubleshooting steps described within to ensure your safety and satisfaction. The contents of this instruction manual are based upon the latest product information available at the time of publication. The manufacturer reserves the right to make product changes at any time without notice.

▲WARNING: Read and understand this entire instruction manual before attempting to assemble, install, operate or maintain this product. Failure to comply with the instructions may result in serious personal injury and/or property damage!

The following signal words are used to emphasize safety warnings that must be followed when using this product:

▲DANGER: Indicates an imminently hazardous situation that, if not avoided, WILL result in death or serious injury.

▲CAUTION: Indicates a potentially hazardous situation that, if not avoided, MAY result in minor or moderate injury.

▲WARNING: Indicates a potentially hazardous situation that, if not avoided, COULD result in death or serious injury.

▲NOTE: Indicates important information, which if not followed, MAY cause damage to equipment.

IMPORTANT SAFETY INFORMATION

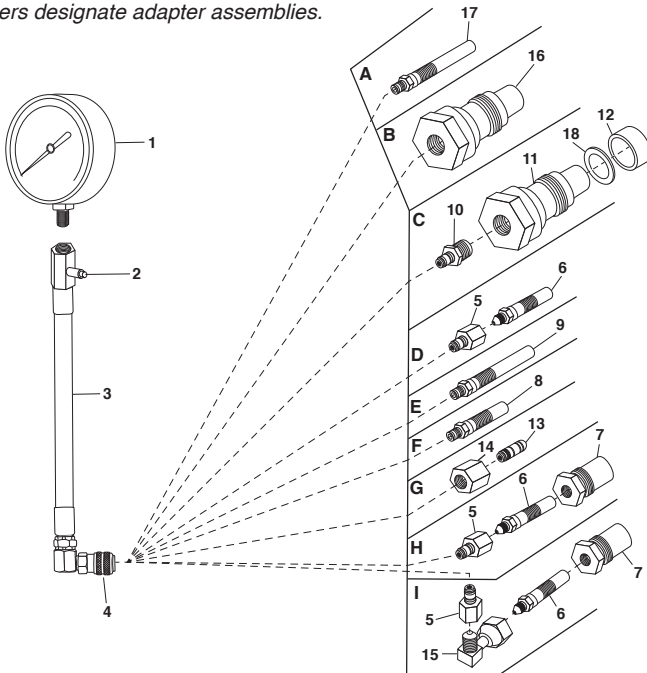
1. Do not exceed 1000 psi maximum pressure.
2. Wear ANSI approved safety goggles and protective wear during setup and use.
3. Use tester in well ventilated areas.
4. Before using, set transmission in park (for automatic transmission) or neutral (for manual transmission) and set parking brake.
5. Keep out of reach of children.
6. Install and remove tester only while engine is stopped.
7. Keep work area clean and well lit.
8. Dress properly. Do not wear loose clothing or jewelry as they can be caught in moving engine parts. Protective clothes and nonskid footwear are recommended when working. Wear restrictive hair covering to contain long hair.
9. Do not overreach. Keep proper footing and balance at all times.
10. Maintain test kit with care. Keep clean for better and safer performance. Inspect hoses periodically, and if damaged, have them repaired by a qualified technician.
11. Stay alert. Watch what you are doing, use common sense. Do not operate when you are tired.
12. Check for damaged parts. Before using, 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.
13. Do not operate if under the influence of alcohol or drugs. Read warning labels if taking prescription medicine to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate.
14. Do not start an engine in an enclosed area (like a garage). A running gasoline engine generates carbon monoxide; carbon monoxide is a colorless, odorless gas that can cause serious injury and death, if inhaled.
15. Keep hands away from the moving parts and hot parts of vehicle's engine.
16. Read and understand all instructions and safety precautions as outlined in the vehicle manufacturer's manual for air condition servicing.

CONTENTS

No.	Description	Qty.
1	Pressure Gauge	1
2	Air Release Button	1
3	Rubber Hose	1
4	1/8 in. NPT Quick Coupler	1
5	7/16 in.-20 (F) Quick Coupler	3
6	M12 x 1.25 (M)-7/16 in.-20 (M) Adapter.....	3
7	M12 x 1.25 (F)-M18 x 1.5 (M) Adapter	2
8	M10 x 1.25 Short Adapter	1
9	M10 x 1.25 Long Adapter	1
10	ZG 1/8 in. (M) Male Quick Coupler	1
11	ZG 1/8 in. (F)-M24 x 2 (M) Adapter	1
12	Adapter Sleeve	1
13	Quick Connect with Ball Tip	1
14	1/2 in.-19 Lock Nut.....	1
15	7/16 in.-20 (M)-7/16 in. x 20 (F) 90° Connector	1
16	ZG 1/8 in. (M)-M24 x 1.5 (M) Adapter.....	1
17	M10 x 1 (M) Adapter	1
18	Copper Washer	2

ASSEMBLY INSTRUCTIONS

NOTE: Letters designate adapter assemblies.



ASSEMBLY INSTRUCTIONS

1. Check that vehicle battery is fully charged. Set car in neutral or park and set parking brake.
2. Refer to adapter chart for correct engine adapter. Secure assembly as shown in diagram.
3. Start engine and allow to warm up to operating temperature.
4. Once engine is warm, shut off engine and remove fuel shutdown solenoid (refer to vehicles repair manual for location).
5. Remove all of the glow plugs or injectors depending on adapter being used. Mark injector wires for ease in reassembly. Label all injectors and glow plugs for reinstallation.
6. Connect compression tester to engine. With accelerator pedal fully depressed, turn engine over for 8 revolutions.

▲CAUTION: Continuing to crank engine for a longer period of time may result in damage to the starter motor or draining the battery.

7. Read and record compression number displayed on gauge. Press air release button and remove gauge from engine.
8. Repeat for remaining cylinders.
9. Reinstall injectors or glow plugs and reinstall fuel injection solenoid.
10. Clean tester and store in a cool, dry place out of reach of children.

NOTE: A good engine will see a quick jump in initial compression figures on the gauge, with a slow rise to maximum upon the 8th revolution of the motor. A poor engine will see a slow rise in compression and be below specifications in vehicle repair manual. In general, all cylinders should be within 10% from best to worst cylinder.

APPLICATION GUIDE

Manufacturer	Engine	Type	Thread	Adapter #
Audi®	All	Injector	24 x 2.00	C
Mercedes-Benz®	Early models	Injector	24 x 2.00	C
VW®	1970's Rabbit®	Injector	24 x 2.00	C
Volvo®	Early models except 30's & 40's	Injector	24 x 2.00	C
BMW®	2.4L	Glow Plug	12 x 1.25	H ^U
Chevette®/Isuzu®; Luv®/Isuzu®	1.8L, 2.2L	Glow Plug	10 x 1.25	E
Cummins®/Case® "B" Series	2.9L, 3.9L, 5.9L	Injector	24 x 1.5	B
Dodge®/Cummins®	5.9L	Injector	24 x 1.5	B
Ford®/Mazda®	(1984-87) 2.0L (1983-84) 2.2L	Glow Plug	10 x 1.25 10 x 1.25	F F
Ford®/Mitsubishi®	(1985-87) Ranger® 2.3L	Glow Plug	10 x 1.25	F
Ford®/Navistar®	(1983-94) 6.9L and 7.3L	Glow Plug	10 x 1.00	A
General Motors®	4.3L V6, 4.3L V8, 5.7L V8 Duramax® 6.6L Turbo Diesel	Glow Plug	10 x 1.00 10 x 1.25	A E
Hummer®	Optimizer 6500® V8 Turbo	Glow Plug	10 x 1.25	E
Isuzu®/Isuzu® Truck	1.8L & 2.2L (1992-1998) 4HE1-TC (1998-2005) 6HK1-TC (1998-2005) 4HE1-TC (Up to 1998) 6HK1-TC	Glow Plug Glow Plug Glow Plug Glow Plug	10 x 1.25 10 x 1.25 10 x 1.25 12 x 1.25 12 x 1.25	E E E H ^U H ^U

APPLICATION GUIDE CONT.

Manufacturer	Engine	Type	Thread	Adapter #
Kubota®	Some models	Glow Plug	10 x 1.25	F
Lincoln®, Mark VII®	1984-85 2.4L	Glow Plug	12 x 1.25	H
Continental®	Models using Volvo® engines	Glow Plug	10 x 1.25	F
Mercedes-Benz®	(1988-89) 190E 2.5L	Glow Plug	12 x 1.25	H ^U ,I ^U
	(1991-99) E300	Glow Plug	10 x 1.00	A
	2005 E320 CDI	Glow Plug	10 x 1.00	A
Mitsubishi®	2 & 3 Cylinder engines	Glow Plug	10 x 1.25	F
Mitsubishi-Fuso®				
Navistar®/ International®	Medium 6.9L and 7.3L	Glow Plug	10 x 1.00	A
Nissan®/ UD Truck®	2.2L	Glow Plug	10 x 1.25	F
Peugeot®	Medium	Glow Plug	12 x 1.25	H ^U
	Most	Glow Plug	18 x 1.50	H
Toyota®	Certain models	Glow Plug	10 x 1.25	E
	1.8L	Glow Plug	10 x 1.25	F
Volvo®	All cars & trucks	Injector	24 x 2.00	C
VW®	2.2L	Glow Plug	12 x 1.25	H ^U U
	(1979-84) Rabbit®	Glow Plug	12 x 1.25	H ^U U
	(1979-99) Jetta®	Glow Plug	12 x 1.25	H ^U U
	(1981-84) Pick-Up	Glow Plug	12 x 1.25	H ^U U
	(1987-99) Golf®	Glow Plug	12 x 1.25	H ^U U
	(1992-97) Passat®	Glow Plug	12 x 1.25	H ^U U
	(1992-98) Eurovan®	Glow Plug	10 x 1.00	A
	(1995-97) Passat®	Glow Plug	10 x 1.00	A
	(1997-05) Golf®	Glow Plug	10 x 1.00	A
	(1997-05) Jetta® & Wagon	Glow Plug	10 x 1.00	A
	(1998-05) New Beetle®	Glow Plug	10 x 1.00	A
	2004 Touareg®	Glow Plug	10 x 1.00	A
Older vehicles with TDI	Injector	24 x 2.00	C	

NOTE: U - Indicates that part 7 must be removed for these applications.

LIMITED WARRANTY

PERFORMANCE TOOL® extends only the following warranties, and only to original retail purchasers. These warranties give specific legal rights. Except where prohibited by local law, the law of the State of Washington governs all warranties and all exclusions and limitations of warranties and remedies. There may be other rights which vary from state to state.

PERFORMANCE TOOL® warrants the product to be free from defects in materials and workmanship under normal use and service. A defective product may be returned for a free replacement within 90 days from the date of purchase, provided that product is returned to place of purchase immediately after discovery of defect. After 90 days and up to one year from date of purchase, PERFORMANCE TOOL® will replace at no charge any parts which our examination shall disclose to be defective and under warranty. These warranties shall be valid only when a sales receipt showing the date of purchase accompanies the defective product or defective part (s) being returned. For part (s) after 90 days, please remit your request, postage prepaid to:

PERFORMANCE TOOL, P.O. Box 88259 Tukwila, WA 98138

These warranties exclude blades, bits, punches, dies, bulbs, fuses, hoses, and other consumables which must be replaced under normal use and service. These warranties shall not apply to any product or part which is used for a purpose for which it is not designed, or which has been repaired or altered in any way so as to affect adversely its performance or reliability, nor shall these warranties apply to any product or part which has been subject to misuse, neglect, accident or wear and tear incident to normal use and service.

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