ATD-5659
Universal Compression Tester
Manual

- For gasoline engine compression testing on domestic and foreign cars and trucks
- Screw-in adapters with O-rings provide professional accuracy
- Adapters included: 14mm and 18mm short solid, 14mm and18mm long flex and 14mm long reach
- Long flex 12" hose and adapters eliminate having to remove engine accessories to test compression
- Side release valve allows quick re-testing of cylinder without removing adapter
- 2-1/2" gauge has dual scale dial with ranges from 0–300 psi and 0–21 BAR

⚠ WARNING ⚠

WARNING: This product contains chemicals, including lead, known to the State of California to cause cancer, birth defects or other reproductive harm. ***Wash hands after handling.***

WARNING

Flying particles can cause eye injury

- Wear safety goggles.
- Do not exceed 300 PSI (2,000 kPa).
- Be sure all connections are secure.
- Do not use gauge while engine is running.

Moving parts can cause injury

- Keep yourself, clothing and test equipment clear of moving parts.

Burn Risk

- Do not touch engine components that are hot.

Risk of sudden vehicle movement (continued)

- Set vehicle to neutral for a standard transmission or park for an automatic transmission. Set parking brake. If the vehicle has an automatic parking brake release, disconnect the release mechanism for testing.
- Turn off the ignition system while testing by disconnecting the battery from the coil.

Clear plastic lens on gauge can break

- Do not drop or hit gauge face.
- Do not use gauge if clear plastic lens is cracked or broken.

Gasoline Engine Compression Testing

Consult appropriate manufacturer's service manual for compression specifications.

1. The battery must be at or near full charge so that the cranking speed on the first cylinder is the same as on the last cylinder. A battery charger may be needed to maintain cranking RPM.
2. Idle the engine until operating temperature is reached. Stop the engine.
3. Remove all spark plugs and the air cleaner.
4. Block wide open the throttle body valve or carburetor throttle and choke plates.
5. Disconnect the ignition system using the appropriate method:
   a. On point-type ignition systems or electronic ignition systems that have a separate coil; disconnect power to the coil.
   b. On GM High Energy Ignition systems: remove the battery supply wire that connects to the distributor.
   c. On distributor-less ignition: disconnect the ignition module harness' electric plug.
6. Thread correct adapter into a spark plug hole, or hold rubber cone of the compression tester in the spark plug hole tightly to prevent leakage. **CAUTION: Do not use long reach adapters on engines with standard spark plugs as engine damage may occur.**
7. Crank engine 6 times or until maximum pressure is reached. Engines with higher compression may require 10 or more cranks, but limit time to fifteen seconds maximum.
8. To retest the same cylinder, or before going to the next cylinder, release the pressure by pushing in the depressor under the gauge.
9. Test each cylinder.

IMPORTANT: **Engines with aluminum heads require special care to prevent stripping of the spark plug hole threads. Prepare for a compression test by loosening and retightening the spark plugs when the engine is cold.** ***(Aluminum cylinder threads are less likely to strip when the engine is cold.)***

Before removing spark plugs, always clean dirt from around the plugs. By doing this, proper seating of the compression test adapter and the new spark plugs is ensured. Apply oil to threads and hand tighten when installing/removing compression test adapters.

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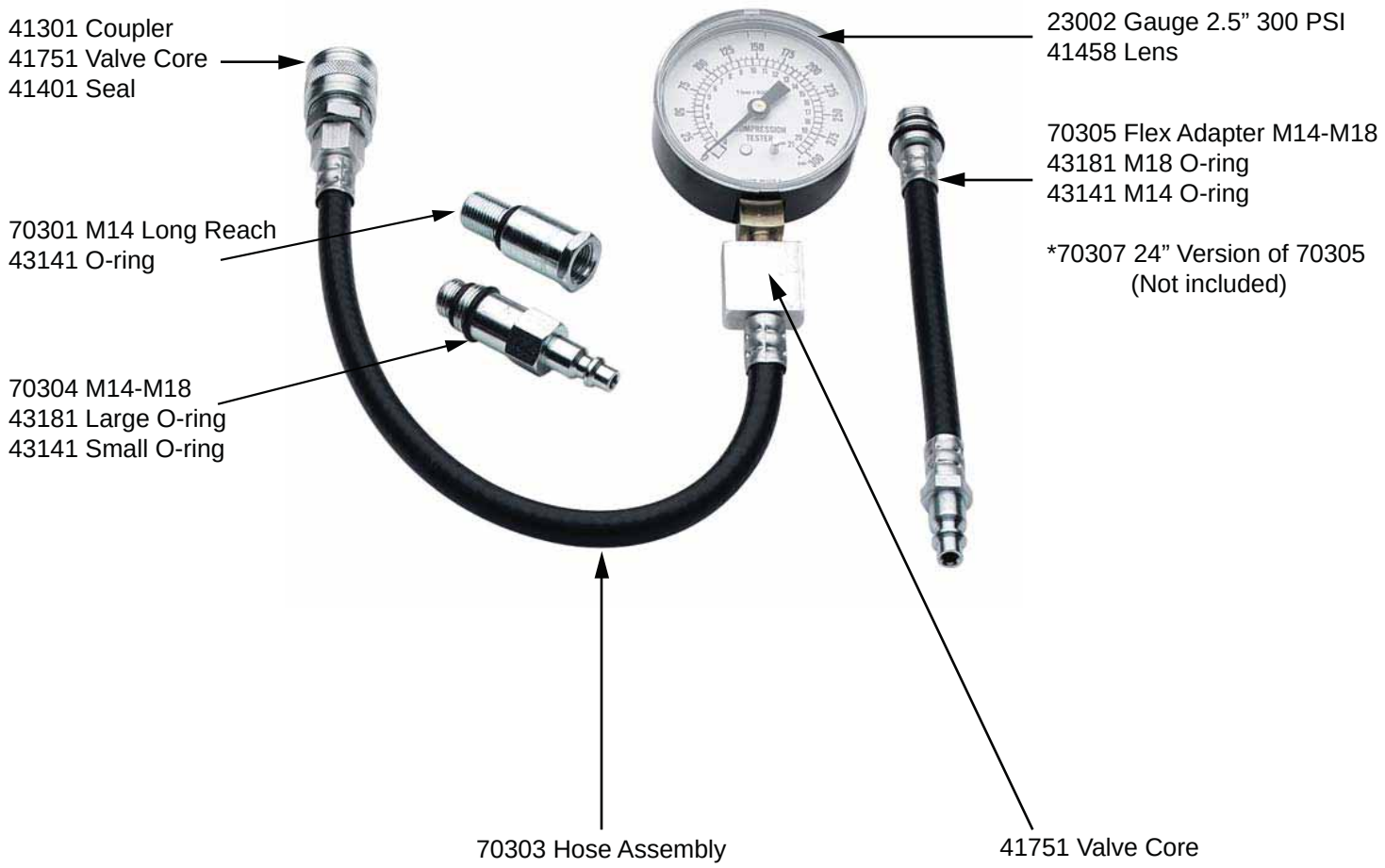

Part Number	Description
42003	Instruction Sheet
51007	Plastic Pouch
70301	M14 Long Adapter Assembly
70303	Hose Assembly
70304	M14 - M18 Short Adapter
70305	Hose Assembly - Long Flex Adapter
70308	Gauge and Hose Assembly