

AUTOMATIC TRANSMISSION SYSTEM

PRECAUTION

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NOTICE:

- Perform the **RESET MEMORY** (AT initialization) when replacing the automatic transmission assembly, engine assembly or ECM (See page [AT-17](#)).
- Perform the **REGISTRATION** (VIN registration) when replacing the ECM (See page [ES-14](#)).

HINT:

RESET MEMORY cannot be completed by only disconnecting the negative cable from the battery.

2. CONNECT BATTERY NEGATIVE TERMINAL

- (a) Connect the battery negative terminal to the cable and run the engine at no less than 2,000 rpm for 1 minute.

NOTICE:

If the engine exceeds 2,000 rpm, the clutch is automatically disengaged by the compressor protection control system.

3. PRECAUTION FOR DISASSEMBLY AND REASSEMBLY

CAUTION:

When using compressed air, always aim away from yourself to prevent Automatic Transmission Fluid (ATF) or kerosene from spraying on your face.

NOTICE:

- The automatic transaxle is composed of precision-made parts, necessitating careful inspection before reassembly because even a small nick could cause fluid leakage or affect performance.
- The procedures are organized so that you work on only one component group at a time. This will help avoid confusion with similar-looking parts of different sub-assemblies being on your workbench at the same time.
- The component groups are inspected and repaired from the converter housing side.
- Whenever possible, complete the inspection, repair and reassembly before proceeding to the next component group. If a defect is found in a certain component group during reassembly, inspect and repair this group immediately. If a component group cannot be assembled because parts are being ordered, be sure to keep all parts of the group in a separate container while proceeding with disassembly, inspection, repair and reassembly of other component groups.

- When changing the automatic transmission fluid, use only "Toyota Genuine ATF WS" (ATF JWS3324 or NWS9638).
- All disassembled parts should be washed clean, and compressed air should be blown through any fluid passages and holes.
- Dry all parts with compressed air. Never use cloth.
- The recommended ATF or kerosene should be used for cleaning.
- After cleaning, the parts should be arranged in the order they were removed for efficient inspection, repairs, and reassembly.
- When disassembling a valve body, be sure to match each valve with its corresponding spring.
- New discs for the brakes and clutches that will be used for replacement must be soaked in ATF for at least 15 minutes before reassembly.
- All oil seal rings, clutch discs, clutch plates, rotating parts, and sliding surfaces should be coated with ATF prior to reassembly.
- All old gaskets and rubber O-rings must be replaced.
- Do not apply adhesive cement to gaskets and similar parts.
- Make sure that the ends of the snap rings are not aligned with any cutouts. Also make sure that snap rings are correctly installed into the grooves.
- If a worn bushing is to be replaced, the sub-assembly containing the bushing must also be replaced.
- Check the thrust bearings and races for wear or damage. Replace if necessary.
- Use petroleum jelly to keep parts in place.
- When working with FIPG material, perform the following:
 - Using a razor blade and gasket scraper, remove all old FIPG material from the gasket surface.
 - Clean all components thoroughly to remove all foreign matter.
 - Clean both sealing surfaces with a non-residue solvent.
 - Apply FIPG material in a continuous line approximately 1 mm (0.04 in.) in diameter on the sealing surface.
 - Reassemble parts within 10 minutes of applying FIPG material. Failing to do so will require the FIPG material to be removed and reapplied.