

ATSG 4R44E/4R55E

ATSG 4R44E/4R55E Ford Automatic Transmission Repair Manual

Comprehensive Technical Guide for Diagnosis, Overhaul, and Repair

1. INTRODUCTION

This technical manual provides detailed instructions for the diagnosis, overhaul, and repair of the ATSG 4R44E and 4R55E automatic transmissions. These transmissions are commonly found in Ford Explorer and Ford Ranger models manufactured from 1995 onwards. The manual is designed to assist both professional technicians and experienced do-it-yourselfers in performing various service procedures, from routine maintenance to complete rebuilds.

The content covers essential aspects such as assembly, disassembly, troubleshooting, and the operation of electronic controls, ensuring a thorough understanding of the transmission system.

2. SAFETY INFORMATION

Always prioritize safety when working on automotive components. Adhere to the following guidelines:

- Wear appropriate personal protective equipment (PPE), including safety glasses and gloves.
- Ensure the vehicle is securely supported on jack stands before working underneath it.
- Disconnect the vehicle's battery before performing any electrical work.
- Allow hot components to cool before handling.
- Use proper lifting techniques and equipment when removing or installing heavy components like transmissions.
- Refer to the vehicle manufacturer's service manual for additional safety precautions specific to your vehicle model.

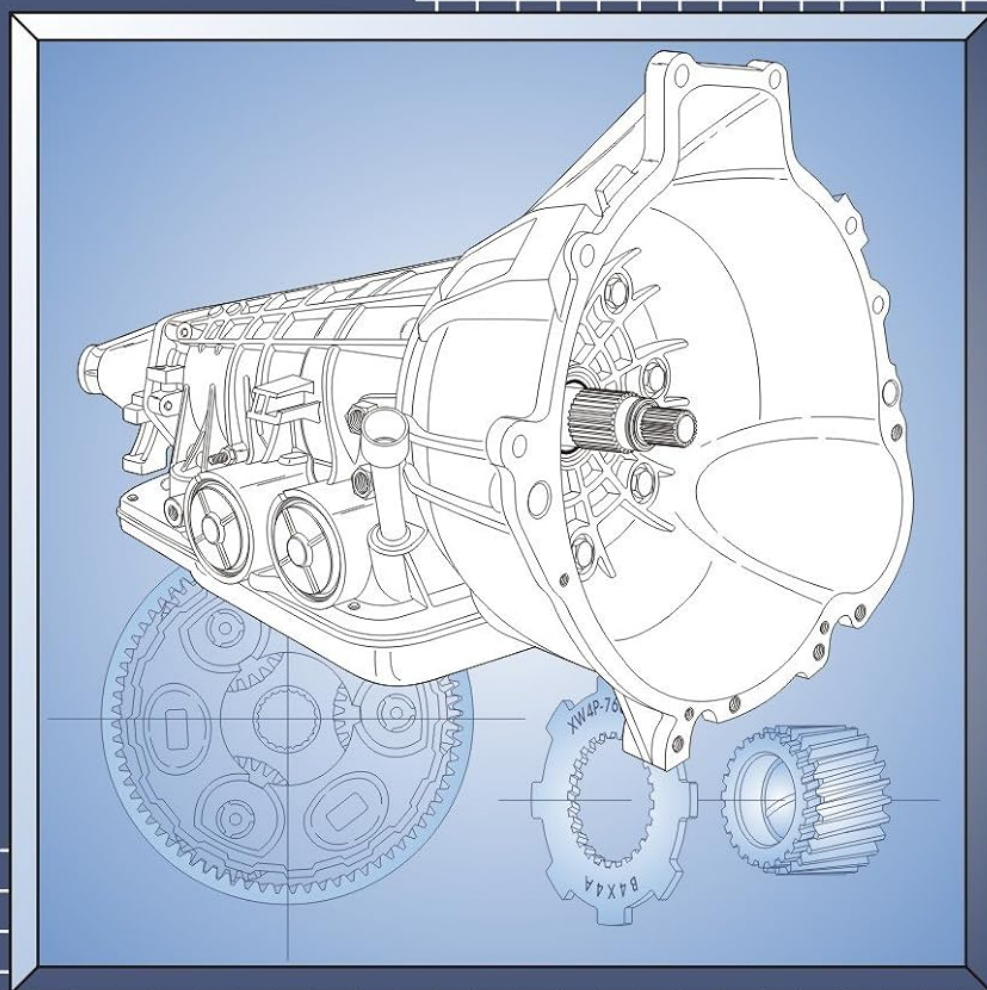
3. TRANSMISSION OVERVIEW

The ATSG 4R44E/4R55E manual provides detailed diagrams and descriptions of the transmission's internal and external components. Understanding the layout is crucial for effective servicing.



FORD MOTOR CO.
TECHTRAN™ MANUAL

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AUTOMATIC TRANSMISSION SERVICE GROUP

Figure 3.1: Cover of the ATSG 4R44E/4R55E Ford Automatic Transmission Repair Manual. This image displays the cover of the ATSG 4R44E/4R55E Ford Automatic Transmission Repair Manual. The cover features the ATSG logo, 'FORD MOTOR CO. TECHTRAN™ MANUAL', and a detailed blueprint-style line drawing of the 4R44E/4R55E automatic transmission. The model numbers '4R44E' and '4R55E' are prominently displayed on the left side, and the phrase 'AUTOMATIC TRANSMISSION SERVICE GROUP' is at the bottom.

This manual includes exploded views and parts identification to help locate and understand each component within the transmission assembly.

4. DISASSEMBLY PROCEDURES

Detailed, step-by-step instructions are provided for the complete disassembly of the 4R44E/4R55E transmission. This section covers:

- Initial inspection and fluid drainage.
- Removal of external components (e.g., valve body, extension housing).
- Disassembly of internal planetary components and clutch packs.
- Identification of wear and damage.

Each step is accompanied by clear descriptions to ensure proper procedure and prevent damage to components.

5. ASSEMBLY PROCEDURES

This section guides the user through the reassembly of the 4R44E/4R55E transmission, emphasizing correct component placement and torque specifications.

- Cleaning and inspection of all components prior to assembly.
- Installation of new seals, gaskets, and worn parts.
- Reassembly of planetary gear sets, clutch packs, and valve body.
- Application of specified torque values for all fasteners.
- Proper adjustment procedures, including band adjustments.

Adherence to torque specifications is critical for transmission longevity and performance.

6. DIAGNOSIS AND TROUBLESHOOTING

This manual provides comprehensive diagnostic charts and troubleshooting guides to identify common issues with the 4R44E/4R55E transmission. Topics include:

- Symptoms and their potential causes (e.g., slipping, harsh shifts, no engagement).
- Diagnostic flowcharts for systematic problem identification.
- Checks for fluid condition, pressure, and level.
- Guidance on interpreting diagnostic trouble codes (DTCs) related to transmission operation.

Effective diagnosis is key to performing targeted and efficient repairs.

7. ELECTRONIC CONTROLS AND OPERATION

The 4R44E/4R55E transmissions utilize electronic controls for optimal performance. This section details:

- Electrical diagrams and wiring harness locations.
- Function and testing of solenoids and sensors.
- Valve body identification and operation.
- Interaction between the transmission control module (TCM) and other vehicle systems.

Understanding these electronic components is vital for diagnosing and repairing electronically controlled transmission issues.

8. SPECIFICATIONS

This section provides critical technical specifications necessary for proper repair and assembly.

Specification	Value/Description
Transmission Models Covered	4R44E, 4R55E
Vehicle Applications	Ford Explorer (1995+), Ford Ranger (1995+)
Manual Type	Technical Repair Manual
Key Content	Assembly, Disassembly, Diagnosis, Troubleshooting, Electronic Controls, Torque Specs, Wiring Diagrams
Item Weight	12.8 ounces
Product Dimensions	11 x 8.3 x 0.3 inches

Refer to specific sections within the manual for detailed torque specifications, clearances, and other critical measurements.

9. MAINTENANCE

Regular maintenance is essential for the longevity and optimal performance of your 4R44E/4R55E transmission. This manual provides guidance on:

- Recommended fluid types and change intervals.
- Filter replacement procedures.
- Inspection of external components for leaks or damage.
- Checking and adjusting band clearances (if applicable).

Always consult your vehicle's owner's manual for specific maintenance schedules and fluid requirements.

10. SUPPORT AND WARRANTY

For additional technical support or inquiries regarding this ATSG manual, please refer to the contact information provided within the manual itself or on the official ATSG website. Information regarding any applicable warranty for the manual's content or physical product will also be detailed by the publisher.

Note: This manual is intended as a technical reference. Always exercise caution and consult with a certified professional if you are unsure about any repair procedure.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for

conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question