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TRANSGO 604 42LE 42RLE

TRANSGO 604 42LE 42RLE Shift Kit Valve Body Rebuild Kit Instruction Manual

Brand: TRANSGO | Model: 604 42LE 42RLE

INTRODUCTION

This instruction manual provides essential information for the installation, operation, and maintenance of the TRANSGO 604 42LE 42RLE Shift Kit Valve Body Rebuild Kit. This comprehensive kit is designed to enhance transmission performance and address common issues in 604, 42LE, and 42RLE automatic transmissions.

The kit includes specialized components for the case, accumulator, and valve body, facilitating upgrades from early designs to later specifications. Key features include special ring and seal upgrades, a no-shrink low/reverse housing gasket, high-temperature accumulator rings and expanders, an underdrive clutch tough seal with expander, and various spacers for calibration and durability. These components work together to prevent common transmission issues, ensure smooth and precise shifts, and improve overall drivability.

SETUP AND INSTALLATION

Installation of the TRANSGO Shift Kit involves working with the transmission's valve body and related components. Due to the complexity of this procedure, it is recommended to allocate sufficient time, ideally a full day, to ensure thorough and accurate installation without rushing.

Key steps and considerations:

- **Valve Body Disassembly:** Carefully disassemble the existing valve body, noting the position and orientation of all components.
- **Component Replacement:** Install the new components from the TRANSGO kit, including the case, accumulator, and valve body parts. Pay close attention to the special ring/seal upgrades, the no-shrink low/reverse housing gasket, high-temperature accumulator rings and expanders, and the underdrive clutch tough seal with expander.
- **Band Adjustment:** The kit requires specific band adjustments. Refer to the detailed band adjustment procedure provided in the manufacturer's instructions, typically found on the last page. This involves tightening bolts on the side of the transmission until resistance is felt, then backing them out a specified number of turns (e.g., two turns) before re-locking them down. This accounts for wear and ensures proper engagement.
- **Fluid Top-Off:** After installation, ensure the transmission fluid is properly topped off to the manufacturer's recommended level. Insufficient fluid can lead to improper operation and potential damage.
- **Consult Instructions:** Always refer to the detailed, step-by-step instructions provided with your specific TRANSGO Shift Kit for precise guidance and torque specifications.



Image: An overview of the TRANSGO Shift Kit components, including various parts for the valve body rebuild.

OPERATING BENEFITS

Once properly installed, the TRANSGO 604 42LE 42RLE Shift Kit provides several operational improvements:

- **Smooth and Clean Shifts:** Experience enhanced drivability with noticeably smoother and more precise gear changes.
- **Reduced Lag:** The kit helps eliminate transmission lag, providing more immediate power delivery when accelerating.
- **Prevention of Limp Mode:** By addressing common issues like shrinking gaskets and accumulator leaks, the kit prevents the transmission from entering "limp mode," which restricts vehicle performance.
- **Stabilized Pressure:** Improved internal sealing and calibration stabilize transmission pressure, contributing to consistent and reliable operation.
- **Enhanced Durability:** Special ring/seal upgrades and other components contribute to the long-term durability of the transmission.

MAINTENANCE

To ensure the longevity and optimal performance of your transmission after installing the TRANSGO Shift Kit, adhere to the following maintenance guidelines:

- **Regular Fluid Checks:** Periodically check your transmission fluid level and condition according to your vehicle manufacturer's recommendations. Use only the specified type of transmission fluid.
- **Fluid Changes:** Follow the recommended service intervals for transmission fluid and filter changes. Clean fluid is crucial for transmission health.
- **Monitor Performance:** Pay attention to any changes in shifting behavior, unusual noises, or warning lights. Address any concerns promptly.
- **Professional Inspection:** Consider periodic professional inspections of your transmission, especially if your vehicle is used for heavy-duty applications or has high mileage.

TROUBLESHOOTING

The TRANSGO 604 42LE 42RLE Shift Kit is designed to resolve several common transmission issues. If you encounter problems after installation, consider the following:

- **Delayed or Lost Forward/Reverse:** This kit specifically addresses issues related to shrinking gaskets in the rear of the case, which can cause these symptoms. Verify proper installation of the new gasket.
- **Accumulator Leaks:** The kit includes components to fix accumulator leaks. Re-check the installation of accumulator rings and expanders if this issue persists.
- **Harsh or Erratic Shifting:** While the kit aims for smoother shifts, incorrect band adjustment or fluid levels can lead to poor shifting. Re-verify band adjustments and fluid levels.
- **Diagnostic Trouble Codes (DTCs):** If your vehicle displays a P0741 code (Torque Converter Clutch Circuit Performance or Stuck Off) or similar transmission-related codes, the kit is intended to resolve these. If codes reappear, re-examine the installation and consult a qualified technician.

If troubleshooting steps do not resolve the issue, it is recommended to consult a certified automotive technician specializing in transmission repair.

SPECIFICATIONS

Feature	Detail
Brand	TRANSGO
Model Number	604 42LE 42RLE
Manufacturer Part Number	48121
Material	Metal
Exterior Finish	Brass, Stainless Steel
Inlet Connection Type	National Pipe Tapered
Outlet Connection Type	NPT
Number of Ports	3
Item Weight	9.6 ounces
Package Dimensions	6.2 x 6.2 x 1.4 inches

Feature	Detail
Date First Available	October 18, 2012

WARRANTY AND SUPPORT

For information regarding product warranty, technical support, or replacement parts, please refer to the official documentation included with your TRANSGO Shift Kit or visit the manufacturer's official website.

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