

NC 174-6640, 261-2207, 2612208

NC GP-Transmission Control Module Instruction Manual

Models: 174-6640, 261-2207, 2612208

1. INTRODUCTION

This instruction manual provides essential information for the proper installation, operation, and maintenance of the NC GP-Transmission Control Module. This module is designed as a replacement part for specific Caterpillar Telehandler models. Please read this manual thoroughly before attempting any installation or operation to ensure safety and optimal performance.

2. PRODUCT OVERVIEW

The NC GP-Transmission Control Module is a critical component for managing the transmission functions (Forward, Neutral, Reverse) in compatible heavy machinery. It features a robust design suitable for demanding industrial environments and includes an integrated electrical connector for seamless integration into the vehicle's system.



Figure 2.1: Front view of the transmission control module. This image displays the main body of the control unit with the selector lever clearly marked for Forward (F), Neutral (N), and Reverse (R) positions. The handle features a textured grip for user comfort and control.



Figure 2.2: Rear view of the transmission control module. This image highlights the multi-pin electrical connector located on the back of the unit, essential for connecting to the vehicle's wiring harness. The part number '261-2207 02' is visible on the housing.

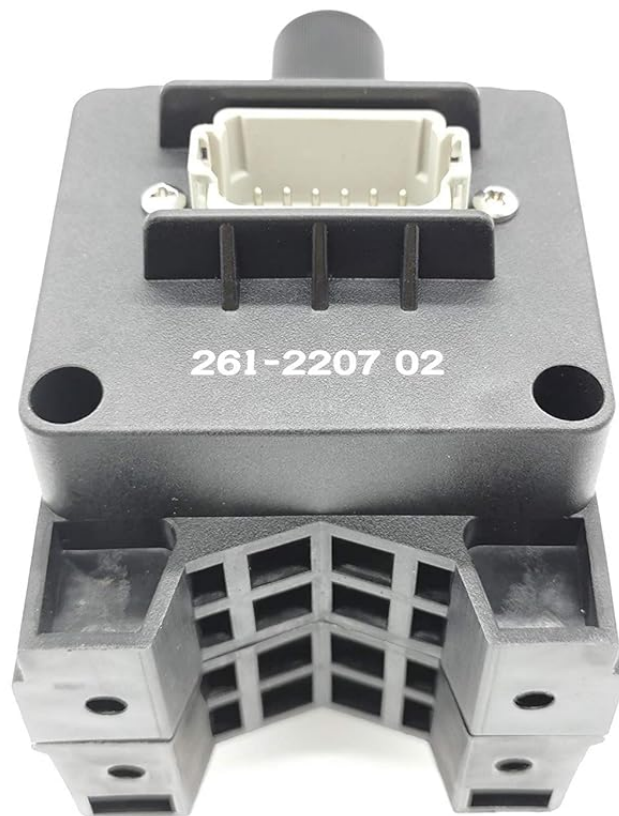


Figure 2.3: Angled rear view of the control module. This perspective provides a clearer view of the electrical connector and the integrated mounting points on the housing, indicating how the unit is secured within the vehicle's cabin or control panel.



Figure 2.4: Side view of the control module. This image illustrates the ergonomic design of the handle and its attachment to the main control housing, providing a sense of the unit's overall dimensions and profile.

3. SPECIFICATIONS

- **Part Numbers:** 174-6640, 261-2207, 2612208
- **Manufacturer:** NC
- **Function:** GP-Transmission Control (Forward, Neutral, Reverse)
- **Connector Type:** Multi-pin electrical connector (as shown in figures)

- **Material:** Durable industrial-grade plastic and metal components

4. COMPATIBILITY

This GP-Transmission Control Module is compatible with the following Caterpillar Telehandler models and engine types:

- Caterpillar CAT Telehandler TH220B
- Caterpillar CAT Telehandler TH330B
- Caterpillar CAT Telehandler TH340B
- Caterpillar CAT Telehandler TH350B
- Caterpillar CAT Telehandler TH355B
- Caterpillar CAT Telehandler TH460B
- Caterpillar CAT Telehandler TH560B
- Caterpillar CAT Telehandler TH580B
- Engine 3054

Always verify the part number against your existing component or vehicle specifications to ensure correct fitment.

5. SETUP AND INSTALLATION

Installation of the GP-Transmission Control Module should only be performed by qualified personnel with experience in heavy equipment maintenance and electrical systems. Improper installation can lead to equipment malfunction, damage, or personal injury.

1. **Safety First:** Ensure the vehicle is turned off, the parking brake is engaged, and the battery is disconnected before beginning installation.
2. **Access:** Locate the existing transmission control module in your Caterpillar Telehandler. This may require removing panels or covers.
3. **Disconnection:** Carefully disconnect the electrical harness from the old module. Note the orientation and connection points.
4. **Removal:** Unmount the old control module from its position.
5. **Installation:** Mount the new NC GP-Transmission Control Module in the same location, ensuring it is securely fastened.
6. **Connection:** Reconnect the electrical harness to the new module, ensuring a firm and correct connection.
7. **Testing:** Reconnect the battery, start the vehicle, and perform functional tests of the transmission control (Forward, Neutral, Reverse) in a safe, controlled environment before returning the vehicle to service.

Refer to your vehicle's specific service manual for detailed wiring diagrams and installation procedures.

6. OPERATING INSTRUCTIONS

The GP-Transmission Control Module operates by allowing the user to select the desired transmission mode: Forward (F), Neutral (N), or Reverse (R). The lever mechanism provides tactile feedback for each position.

- **Forward (F):** Move the lever to the 'F' position to engage forward gears.
- **Neutral (N):** Move the lever to the 'N' position to disengage all gears. The vehicle will not move in this

position.

- **Reverse (R):** Move the lever to the 'R' position to engage reverse gears.

Always ensure the vehicle is stationary and the engine is at idle before shifting between Forward, Neutral, and Reverse to prevent damage to the transmission.

7. MAINTENANCE

Regular inspection and basic maintenance can extend the lifespan and ensure reliable operation of your GP-Transmission Control Module.

- **Visual Inspection:** Periodically check the module for any signs of physical damage, loose connections, or excessive wear.
- **Cleaning:** Keep the control module and its surrounding area clean from dust, dirt, and debris. Use a soft, dry cloth. Avoid using harsh chemicals or excessive moisture.
- **Connection Check:** Ensure the electrical connector remains securely attached and free from corrosion.

If any issues are observed, consult a qualified technician for diagnosis and repair.

8. TROUBLESHOOTING

If you experience issues with your transmission control, consider the following basic troubleshooting steps. For complex problems, professional diagnosis is recommended.

- **No Response from Control:**
 - Check all electrical connections to ensure they are secure.
 - Verify power supply to the module (requires diagnostic tools).
 - Inspect wiring for any visible damage or breaks.
- **Incorrect Gear Engagement:**
 - Ensure the lever is fully engaged in the desired position.
 - Check for any obstructions preventing full lever movement.

If troubleshooting does not resolve the issue, contact a certified service technician or the product supplier.

9. WARRANTY INFORMATION

For specific warranty terms and conditions related to the NC GP-Transmission Control Module, please refer to the documentation provided at the time of purchase or contact your seller directly. Warranty coverage typically addresses manufacturing defects under normal operating conditions.

10. SUPPORT

Should you require technical assistance, have questions regarding installation, or need to report a product issue, please contact your original point of purchase or the manufacturer, NC. Provide your product model number (174-6640, 261-2207, 2612208) and details of your inquiry for efficient support.

