Table of content

- Table of content ........................................................................................................... 2
- Introduction .................................................................................................................. 2
- External Controls and functions .................................................................................. 3
- Product identification .................................................................................................. 4
- Safety ............................................................................................................................ 4
- Preliminary check before tearing down the transmission ........................................... 5
- Preliminary check before re-install the transmission .................................................. 5
- Troubleshooting ........................................................................................................... 7
- Transmission tear down ............................................................................................... 8
- Repair procedures ....................................................................................................... 9 to 18
- Exploded views .......................................................................................................... 19 to 28
- Notes ............................................................................................................................ 29

Introduction

I- General Transmissions presentation
With 3 production sites, Mexico, China, France, and a policy focus on product quality and continuous innovation, General Transmission became a world leader in the design and manufacture of gearbox and transaxle, for lawn and garden equipment.

II- Manual introduction
The purpose of this manual is to provide service and repair information for the RS800P transaxle. Also included are exploded view, troubleshooting and repair procedures.

III- RS800P transaxle general description
The RS800P transaxle is design to provide an infinitely variable speed range and reverse operation thru a single pedal control. This transaxle also offer an integrate differential function and neutral automatic braking.

IV- How to use this manual
General Transmissions recommend, before tearing down the RS800P transaxle, to make sure that you have a clean and organize work area, as well as the required specific tools. General Transmissions also recommend to carefully read the general instructions provided in the manual (p.5), before starting any reparation.
After detected the potential defective component, using the troubleshooting, follow the repair procedures. It is necessary to complete the Preliminary operation, to be able to make the Replacement operation (see troubleshooting p.7).
A defective component might cause premature wear or deterioration of other components. Make sure that all necessary kit have been replaced.
For all service or repair operation, respect the shop and government safety rules.
External Controls and Functions

Main pulley

Inversion/Variation control

Bypass lever

Brake lever

Switch

Output shaft
Product identification

-The product identification number is located on the top of the barre-code sticker and engraved on the left output shaft.

Safety

Personal Safety

Safety precautions must be observed while servicing or repairing the transmission. This section is to be used in conjunction with all other safety material which may apply, such as:
-Local and shop safety rules.
-Government safety laws and regulations.

Do not place speed above safety.

Wear appropriate clothing. Loose or hanging clothing can be hazardous. Use the appropriate safety equipment.

Tool Safety

Use the proper tools and equipment for the task.

Servicing Safety

Certain procedures may require the vehicle to be disabled.
General Instructions

Preliminary check before tearing down the transmission

- Clean up the transmission
- Check all the control between tractor and transmission (see owner manual)
- Check the belt routing
- In case of failure in cold condition, check the transmission functionality after a while in a dry place. Failure might come from a frozen controls system.
- Check the correct installation of the transmission (see view below)

Screwing torque: 13 ±3 Nm
(9.5 ±2 lb-ft)

Preliminary check before re-install the transmission

- Ensure that the variation belt is in good position.
- Make sure that the inversion rod is properly seated in the inversion lever, and have its 2 springs.

- Verify the presence of the 4 springs.

- Ensure that both variation levers are in correct position.
## Troubleshooting checklist

<table>
<thead>
<tr>
<th>Customer complaints</th>
<th>Potential failure</th>
<th>Item to replace</th>
<th>PN</th>
<th>OP1 Driver</th>
<th>OP2 Driven</th>
<th>OP3 ISSS</th>
<th>OP4 Cover</th>
<th>OP5 Variation</th>
<th>OP6 Brake</th>
<th>OP7 Control</th>
<th>OP8 Bypass</th>
<th>OP9 Inversion</th>
</tr>
</thead>
<tbody>
<tr>
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R = Replacement operation / P = Preliminary operation
Transmission Tear Down

- Remove cutting deck (see owner manual)
- Lift up the rear of the tractor, then remove both rear wheels.
- Disconnect the variation rod (1).
- Disconnect the switch (4).
- Disconnect the bypass rod (2).
- Disconnect the brake spring (3).
- Activate and lock the parking brake, to slacken the belt, and remove it from the main pulley (5).
- Remove the mounting bolt, to separate the transmission from the frame.
  
  We recommend to keep 2 bolts partially unscrewed, to prevent the transmission falls.
- Lower the rear of the tractor until the transmission lightly touches the ground, then remove the 2 last bolts.
- Lift up the rear of the tractor to release the transmission.
**Repair Procedures**

**OP 1. Driver kit replacement** (view p.20)
- In case of speed down, the adjusting screw located at the rear of the transmission allow to slightly increase the speed.
- Use a T20 Torx screwdriver.

- **Note:** Over-adjustment of this screw can lead to the tractor creeping in Neutral! If this occurs, simply back out the screw until neutral is re-established.

- Remove the 4 screws as shown below to liberate the driver kit.
- At reassembling the kit, make sure that:
  - Both variation lever are properly seated.
  - The belt is in the pulley.
  - The adjusting screw is accessible.

Screwing torque: 3.2 ±0.1 Nm
(2.4 ±0.1 lb-ft)
**OP 2. Driven kit replacement** (view p.21)

- Remove the 3 screws to liberate the cover, press the aluminum ramp to compress the spring and liberate the pin, then remove the aluminum ramp, spring and mobile flange.

  Screwing torque: 2.2±0.1 Nm  
  (1.6±0.1 lb-ft)

- Unscrew the nut using the special tool P/N 79252 (see p.19), then remove the fixed flange.

  Screwing torque: 90 ±8 Nm  
  (65 ±5 lb-ft)

  Watch out for the balls located under the flange

When re-installing the components:
- Make sure the 8 balls are present under the flange.
- Respect the torques of the nut and screws.
- Make sure the belt is properly positioned in the pulley.
- Ensure that the spring is between the mobile flange and the aluminum ramp.
Repair Procedures

**OP 3. Inversion security system replacement** (view p.24)
- Remove the inversion security system.

⚠️ Watch out for the balls located under the flange

**OP 4. Remove the protection cover**

Screwing torque: 3.2±0.1 Nm (2.4±0.1 lb-ft)
**Repair Procedures**

**OP 5. Variation kit replacement** (view p.22)

- Disconnect both brake and neutral spring.
- Remove the e-clip to liberate the spring and variation rod.

![Diagram of brake and neutral springs with labels: Neutral spring, Brake spring, E-clip, Variation levers, Adjusting screw.]

When re-assembling the components, make sure that:

- Both variation levers are correctly seated on the upper case.
- The adjusting screw is accessible.
- The variation rod and neutral spring are properly positioned.
Repair Procedures

**OP 6. Brake kit replacement** (view p.23)
- Disconnect the brake spring, then remove the screws, to liberate the aluminum lever.

- As the aluminum lever has a conical shape, it might be hard to remove.

**Screwing torque:** 3.2±0.2 Nm (2.4 ±0.1 lb-ft)

When re-installing the components:
- Verify the presence of the O-ring
- Gap between both lever is normal
- Respect screwing torque.
Repair Procedures

**OP 7. Controls kit replacement** (view p.25)
- Remove the e-clip to liberate the neutral spring and the variation control.
- Remove the M8 screw, the control cam and the inversion lever (white).
- Remove the screw to liberate the 2nd inversion lever.
- Remove both control and variation rods.
- Remove the 2 screws to liberate the neutral position lever and its spring.
Repair Procedures

**OP 7. Controls kit replacement**
When re-installing the components:
- Verify the position of the neutral position lever.
- Insert the inversion rod in the inversion lever before putting it on the upper case.
- Insert both control and variation rods on the upper case.

- The cam and the inversion lever must be install at the same time.
- This assembly must be positioned at the same time on the cam pivot, inversion lever pivot and rods (5 points at the same time).
- Verify the position of the variation control and its spring.

**Screwing torque**
3.2±0.2 Nm
(2.4 ±0.1 lb-ft)
**OP 7. Controls kit replacement**

-The neutral position lever must be maintained to properly position the cam.

- Respect the tightening torque.
- As the variation control has not been attached, the cam should rotate freely.
- The stopping plate must be free in rotation on the control cam.

- Verify the position of the variation control and its spring.

**Stopping plate**

**Screwing torque:** 6±1Nm (4.4 ±1 lb-ft)
Repair Procedures

**OP 8. Bypass kit replacement (view p.26)**

- Separate and hold the 2 strips of the lever, to release the two studs and allow the lever removing.

- Remove bypass lever and its spring.

- Correct position of the bypass lever and spring.
Repair Procedures

OP 9. Inversion kit replacement (View p.27)
- The inversion kit is located in front of the transmission.

- Remove the nut to release the springs and rod.

- Remove the inversion lever

Screwing torque: 3.2±0.2 Nm
(2.4 ±0.1 lb-ft)

- When re-install the kit, respect the adjustment.
<table>
<thead>
<tr>
<th>Item</th>
<th>GT P/N</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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</tr>
<tr>
<td>2</td>
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<td>3</td>
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<td>4</td>
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<td>5</td>
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<tr>
<td>7</td>
<td>GT38012</td>
<td>Rotating cam</td>
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<td>8</td>
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<tr>
<td>9</td>
<td>GT79255</td>
<td>Brake kit</td>
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<td>11</td>
<td>GT41821</td>
<td>Seals</td>
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<td>12</td>
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<td>Inversion kit</td>
</tr>
<tr>
<td>13</td>
<td>GT79363</td>
<td>Hardware kit</td>
</tr>
<tr>
<td>14</td>
<td>GT79252</td>
<td>Driven tool</td>
</tr>
</tbody>
</table>

-Special tool is necessary to remove the driven kit GT79253. 
-Refer to the troubleshooting page 7, to know when driven kit must be removed.
Exploded Driven Kit
GT79253
Exploded Variation Kit

GT79254

- Clip
- Variation rods
- Neutral spring
- Variation lever
- Adjusting screw
Exploded Brake Kit
GT79255
Exploded Inversion security set
GT79186
Exploded Controls Kit
GT79256

Guidance rod
Stopping plate
Control cam
Rod axle
Control rod
Clip
Inversion lever
Neutral position lever
Neutral position spring

Rotating cam
GT38012
Exploded Bypass Kit
GT79257
Exploded Inversion Kit

GT79258

Inversion springs

Inversion rod
Hardware kit
GT79323

1 bypass spring
2 washers P/N:42619
3 screws 4x16 P/N:43621
8 screws 5x16 P/N:43622
2 e-clips P/N:42321
2 screws 4x16 P/N:42623

1 brake spring
1 Neutral position spring
2 washers P/N:42619
2 brake springs

1 neutral spring
1  Neutral position spring
2 e-clips P/N:42321
2 screws 4x16 P/N:42623

Cover
GT38800

1 bypass spring
2 washers P/N:42619
3 screws 4x16 P/N:43621
8 screws 5x16 P/N:43622
2 e-clips P/N:42321
2 screws 4x16 P/N:42623

1 brake spring
1 Neutral position spring
2 brake springs

1 neutral spring
2 washers P/N:42619
2 brake springs

Cover
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