Technical Service Instructions

RD-7900
Rear derailleur

In order to realize the best performance, we recommend that the following combination be used.

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Values</th>
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</thead>
<tbody>
<tr>
<td>Type</td>
<td>SS</td>
</tr>
<tr>
<td>Total capacity</td>
<td>33 teeth or less</td>
</tr>
<tr>
<td>Largest sprocket</td>
<td>28 T</td>
</tr>
<tr>
<td>Smallest sprocket</td>
<td>11 T</td>
</tr>
</tbody>
</table>

Installation of the rear derailleur

When installing, be careful that deformation is not caused by the B-tension adjustment screw coming into contact with the dropout tab.

1. Top adjustment
   - Turn the top adjustment screw to adjust so that the guide pulley is below the outer line of the smallest sprocket when looking from the rear.

2. Connection and securing of the cable
   - Connect the cable to the rear derailleur and, after taking up the initial slack in the cable, re-secure to the rear derailleur as shown in the illustration.

Note: Be sure that the cable is securely in the groove.

Specifications

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Note: In order to obtain good gear shifting performance, the CN-7901 has a forward side and a reverse side, and the sides are marked so that the CN-7901 will face the correct way when installed. The proper design performance will be achieved when the CN-7901 is installed so that it faces the correct way. If it is installed so that it faces the opposite way, the chain may come off and the bicycle may fall over and serious injury may occur as a result. We strongly recommend only using genuine Shimano replacement parts.

Obtain and read the service instructions carefully prior to installing the parts. Loose, worn or damaged parts may cause the bicycle to fall over and serious injury may occur as a result. We strongly recommend only using genuine Shimano replacement parts.

Obtain and read the service instructions carefully prior to installing the parts. If adjustments are not carried out correctly, the chain may come off and this may cause you to fall off the bicycle which could result in serious injury.

Read these Technical Service Instructions carefully, and keep them in a safe place for later reference.

Note: If gear shifting operations cannot be carried out smoothly, clean the derailleur and lubricate all moving parts.

- If the amount of looseness in the links is so great that adjustment is not possible, you should replace the derailleur.
- You should periodically clean the derailleur and lubricate all moving parts (mechanism and pulleys).
- If gear shifting adjustment cannot be carried out, check the degree of parallelism at the rear end of the bicycle. Also check if the cable is lubricated and if the outer casing is too long or too short.
- If you hear abnormal noise as a result of looseness in a pulley, you should replace the pulley.
- You should periodically wash the sprockets in a neutral detergent and then lubricate them again. In addition, cleaning the chain with a neutral detergent and lubricating it can be an effective way of extending the useful life of the sprockets and the chain.
- If the chain keeps coming off the sprockets during use, replace the sprockets and the chain.
- For smooth operation, use the specified outer casing and the bottom bracket cable guide.
- Grease the inner cable and the inside of the outer casing before use to ensure that they slide properly.
- Use a frame with internal cable routing is strongly discouraged as it has tendencies to impair the SIS shifting function due to its high cable resistance.
- The tension pulley has an arrow on it to indicate the direction of rotation. Install the tension pulley so that the arrow is pointing clockwise when looking at the outer side of the derailleur.
- The end of the outer casing which has the aluminum cap should be at the derailleur side.

Chain length

Note: In order to obtain good gear shifting performance, the CN-7901 has a forward side and a reverse side, and the sides are marked so that the CN-7901 will face the correct way when installed.

For an 11-28T sprocket

Add 2 links (with the chain on both the largest sprocket and the largest chaining).

Stoke adjustment and cable securing

1. Top adjustment
   - Turn the top adjustment screw to adjust so that the guide pulley is below the outer line of the smallest sprocket when looking from the rear.

2. Connection and securing of the cable
   - Connect the cable to the rear derailleur and, after taking up the initial slack in the cable, re-secure to the rear derailleur as shown in the illustration.

Note: Be sure that the cable is securely in the groove.

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3. Low adjustment
   - Turn the low adjustment screw so that the guide pulley moves to a position directly in line with the largest sprocket.

4. How to use the B-tension adjustment screw
   - Mount the chain on the smallest chaining and largest sprocket, and turn the crank arm backward. Then turn the B-tension adjustment screw to adjust the guide pulley as close to the sprocket as possible but not so close that it touches. Next, set the chain to the smallest sprocket and repeat the above to make sure that the pulley does not touch the sprocket.

5. SIS Adjustment
   - Operate the shifting lever several times to move the chain to the 2nd sprocket. Then, while pressing the lever just enough to take up the play in the lever, turn the crank arm.

Best setting

The best setting is when the shifting lever is operated just enough to take up the play and the chain touches the 3rd sprocket and makes noise.

- Retain the lever to its original position (the position where the lever is at the 2nd sprocket setting and it has been released) and then turn the crank arm clockwise. If the chain is touching the 3rd sprocket and making noise, turn the outer casing adjustment barrel clockwise slightly to tighten it if the noise stops and the chain runs smoothly.

Operate lever to change gears, and check that no noise occurs in any of the gear positions.

For the best SIS performance, periodically lubricate all power-transmission parts.

- Replacing the rear derailleur

- Parts are not guaranteed against natural wear or deterioration resulting from normal use.
- For maximum performance we highly recommend Shimano lubricants and maintenance products.
- For any questions regarding methods of installation, adjustment, maintenance or operation, please contact a professional bicycle dealer.