

General Safety Information

WARNING

“Maintenance interval depends on the usage and riding circumstances. Clean regularly the chain with an appropriate chaincleaner. Never use alkali based or acid based solvents such as rust cleaners. If those solvent be used chain might break and cause serious injury.”

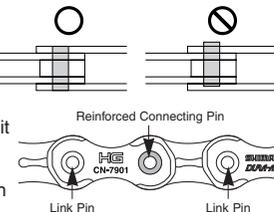
- In order to obtain good gear shifting performance, the CN-7901 has a forward side and a reverse side, and the sides are marked so that the CN-7901 will face the correct way when installed. The proper design performance will be obtained when the CN-7901 is installed so that it faces the correct way. 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.
- Use the reinforced connecting pin only for connecting the narrow type of chain.
- If connecting pins other than reinforced connecting pins are used, or if a reinforced connecting pin or tool which is not suitable for the type of chain is used, sufficient connection force may not be obtained, which could cause the chain to break or fall off.
- Make sure that the connecting pin is aligned with the outer link surface from the side that the pin is inserted. It should feel smooth and flush when you run your finger over it. The pin will protrude slightly on the backside after the break off pin is removed.
- If it is necessary to adjust the length of the chain due to a change in the number of sprocket teeth, make the cut at some other place than the place where the chain has been joined using a reinforced connecting pin. The chain will be damaged if it is cut at a place where it has been joined with a reinforced connecting pin.
- Check that the tension of the chain is correct and that the chain is not damaged. If the tension is too weak or the chain is damaged, the chain should be replaced. If this is not done, the chain may break and cause serious injury.
- 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 neutral detergent and lubricating it can be a 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.

- 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.

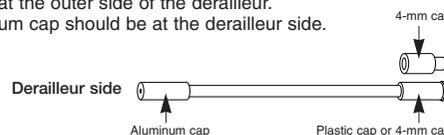
Chain	Reinforced connecting pin	Chain tool
10-speed super narrow chain such as CN-7901	with groove (3)  with groove (2) 	TL-CN32 TL-CN23 TL-CN27



Reinforced Connecting Pin

Link Pin

Link Pin



Derailleur side

Aluminum cap

Plastic cap or 4-mm cap

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

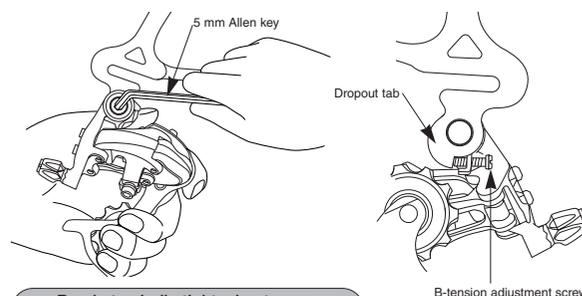
Series	DURA-ACE
Shifting lever	ST-7900
Gears	10
Outer casing	OT-SP41 (SIS-SP41)
Rear derailleur	RD-7900
Type	SS
Freehub	FH-7900
Cassette sprocket	CS-7900
Chain	CN-7901
Bottom bracket cable guide	SM-SP17

Specifications

Type	SS
Total capacity	33 teeth or less
Largest sprocket	28 T
Smallest sprocket	11 T
Front chainwheel tooth difference	16 teeth or less

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.



Bracket spindle tightening torque:
8 - 10 N·m {70 - 86 in. lbs.}

Chain length**Note:**

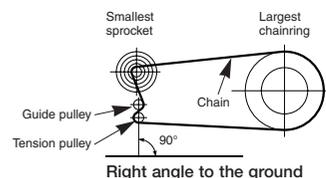
In order to obtain good gear shifting performance, the CN-7901 has a forward side and a reverse side, and the sides are marked so that the CN-7901 will face the correct way when installed.

Forward
(outer side)



The side with the mark shown in the illustration is the forward side (outer side).

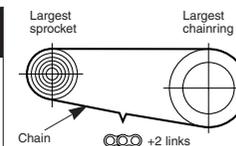
Reverse
(inner side)



Right angle to the ground

For an 11-28T sprocket

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

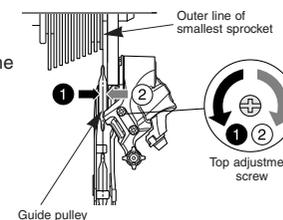


Chain

+2 links

Stroke 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.

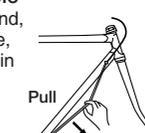


Guide pulley

Top adjustment screw

2. Connection and securing of the cable

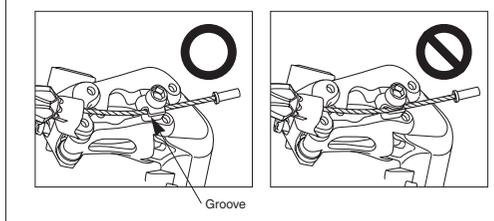
Connect the cable to the rear derailleur and, after taking up the initial slack in the cable, re-secure to the rear derailleur as shown in the illustration.



Pull

Tightening torque:
6 - 7 N·m {52 - 60 in. lbs.}

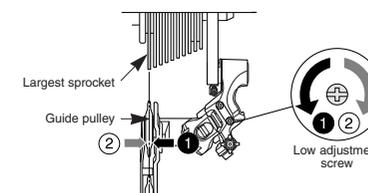
Note: Be sure that the cable is securely in the groove.



Groove

3. Low adjustment

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



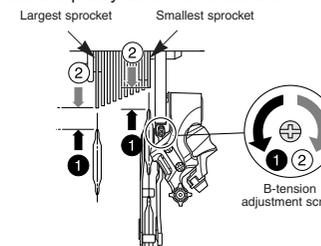
Largest sprocket

Guide pulley

Low adjustment screw

4. How to use the B-tension adjustment screw

Mount the chain on the smallest chainring and the 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.



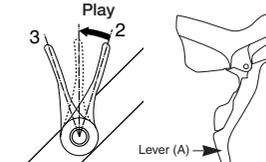
Largest sprocket

Smallest sprocket

B-tension adjustment screw

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.



3

Play

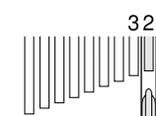
2

Lever (A)

When shifting to 3rd



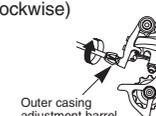
When no sound at all is heard



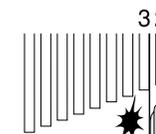
Tighten the outer cable adjusting barrel until the chain returns to the 2nd sprocket. (clockwise)



Loosen the outer casing adjustment barrel until the chain touches the 3rd sprocket and makes noise. (counter clockwise)

**Best setting**

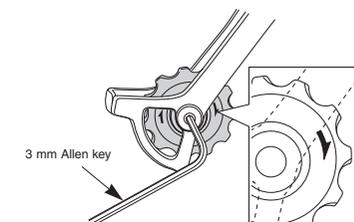
The best setting is when the shifting lever is operated just enough to take up the play and the chain touches the 3rd sprocket and makes noise.



* Return 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 until 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

Guide pulley / Tension pulley
Tightening torque :
2.5 - 5.0 N·m {22 - 44 in. lbs.}

RD-7900

Rear derailleur

SHIMANO

SHIMANO AMERICAN CORPORATION
One Holland, Irvine, California 92618, U.S.A. Phone: +1-949-951-5003

SHIMANO EUROPE B.V.
Industrieweg 24, 8071 CT Nunspeet, The Netherlands Phone: +31-341-272222

SHIMANO INC.
3-77 Oimatsu-cho, Sakai-shi, Osaka 590-8577, Japan

* Service Instructions in further languages are available at : <http://techdocs.shimano.com>

Please note: specifications are subject to change for improvement without notice. (English) © Mar. 2010 by Shimano Inc. XBC SZK Printed in Japan.