

## General Safety Information

### WARNING

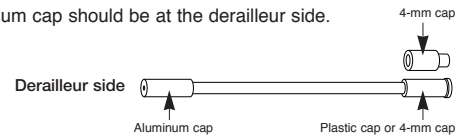
- In order to obtain good gear shifting performance, the CN-7900 has a forward side and a reverse side, and the sides are marked so that the CN-7900 will face the correct way when installed. The proper design performance will be obtained when the CN-7900 is installed so that it faces the correct way. 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 neutral detergent to clean the chain. Do not use alkali-based or acid based detergent such as rust cleaners as it may result in damage and/or failure of the chain.
- For a narrow-type chain, connect using a QUICK-LINK (SM-CN79) or a reinforced connecting pin. If using a QUICK-LINK, follow the procedure given in the QUICK-LINK Service Instructions.
- 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.

Chain	Reinforced connecting pin	Chain tool
10-speed super narrow chain such as CN-7900	with groove (2)	TL-CN32 TL-CN23 TL-CN27

- 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.
- 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 a mark which indicates the direction of rotation. The side with the arrow is the front side.
- 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.

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

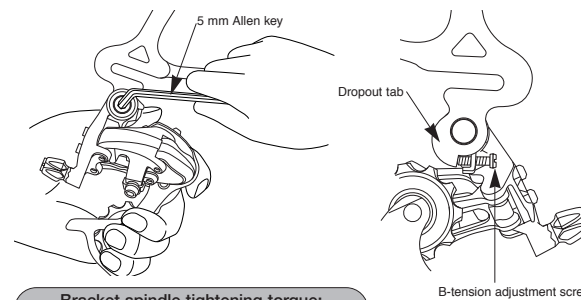
Series	DURA-ACE
Shifting lever	ST-7900
Gears	10
Outer casing	SIS-SP41
Rear derailleur	RD-7900
Type	SS
Freehub	FH-7900
Cassette sprocket	CS-7900
Chain	CN-7900
Bottom bracket cable guide	SM-SP17

## 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

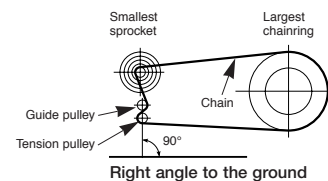
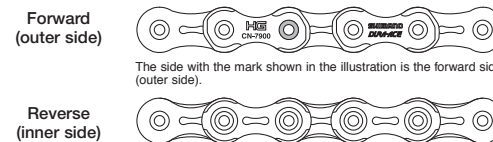
When installing, be careful that deformation is not caused by the B-tension adjustment screw coming into contact with the dropout tab.



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

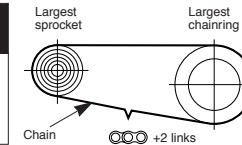
## Chain length

**Note:**  
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If the sprocket is 11T - 28T

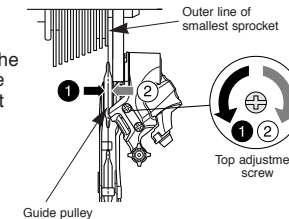
Add 2 links (with the chain on both the largest sprocket and the largest chainring)



## Stroke adjustment and cable securing

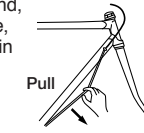
### 1. Top adjustment

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.



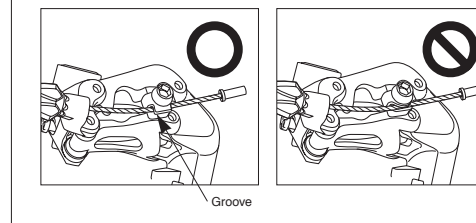
### 2. Connection and securing of the cable

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.



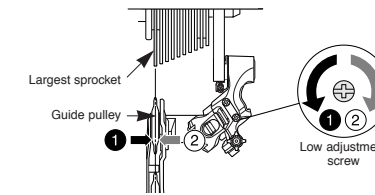
Tightening torque:  
5 - 7 N·m {44 - 60 in. lbs.}

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



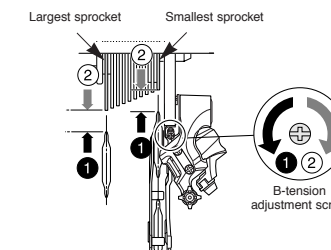
### 3. Low adjustment

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



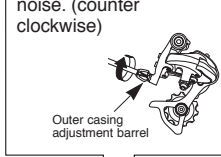
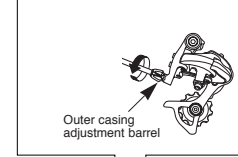
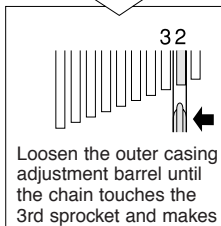
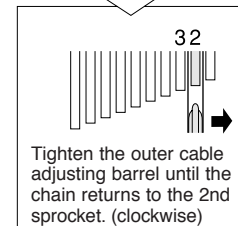
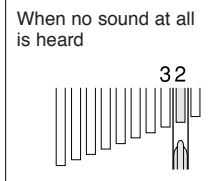
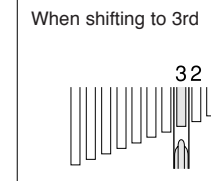
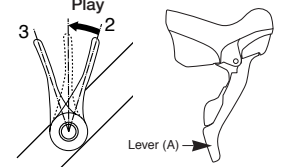
### 4. How to use the B-tension adjustment screw

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.



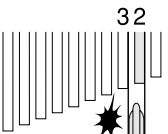
## 5. SIS Adjustment

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.



\* 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.

## SHIMANO

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Please note: specifications are subject to change for improvement without notice.  
(English)  
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## Technical Service Instructions

SI-5X00A-001

RD-7900

Rear Derailleur