

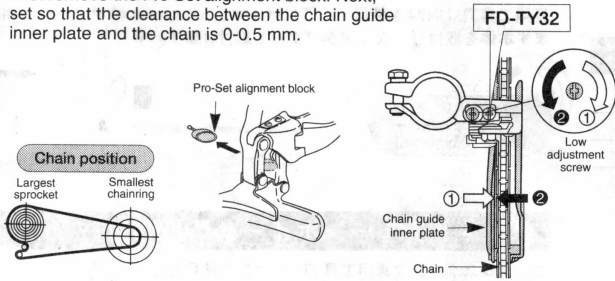
Adjustment

Be sure to follow the sequence described below.

1. Low adjustment

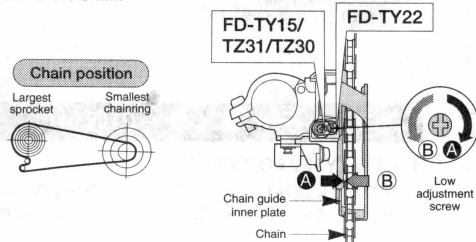
< FD-TY32 >

First remove the Pro-Set alignment block. Next, set so that the clearance between the chain guide inner plate and the chain is 0-0.5 mm.



< FD-TY22 / FD-TY15 / FD-TZ31 / FD-TZ30 >

Set so that the clearance between the chain guide inner plate and the chain is 0-0.5mm.



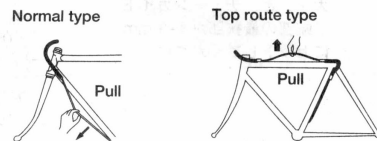
2. Connection and securing of cable

While firmly pulling the cable, tighten the fixing bolt with a 9 mm spanner (TY15) or a 5 mm Allen key (TY32, 22) to secure the cable.

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

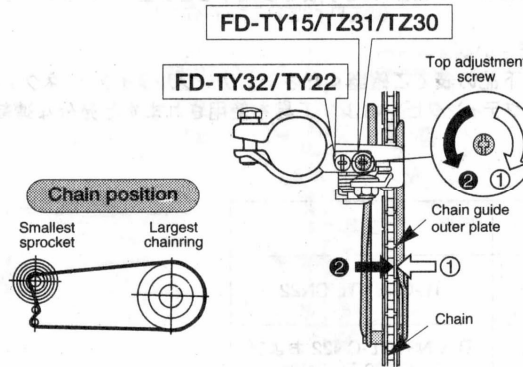
3. Adjustment of cable tension

After taking up the initial slack in the cable, re-secure to the front derailleur as shown in the illustration.



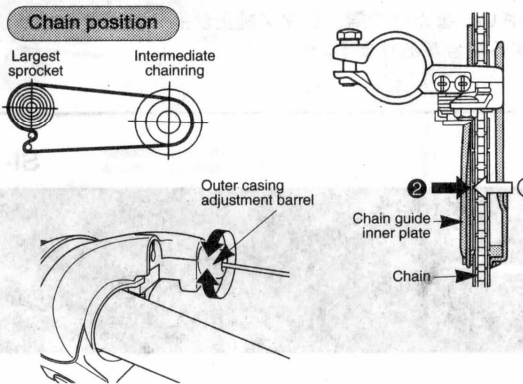
4. Top adjustment

Set so that the clearance between the chain guide outer plate and the chain is 0-0.5 mm.



5. Adjustment of the intermediate chainring (SL-RS41-L)

Set the chain onto the largest sprocket, and at the front, move the chain from the largest chainring to the intermediate chainring. Adjust using the cable adjusting bolt so that the clearance between the chain guide inner plate and the chain is 0-0.5 mm.



6. Troubleshooting chart

After completion of steps 1 - 5, move the shifting lever to check the shifting. (This also applies if shifting becomes difficult during use.)

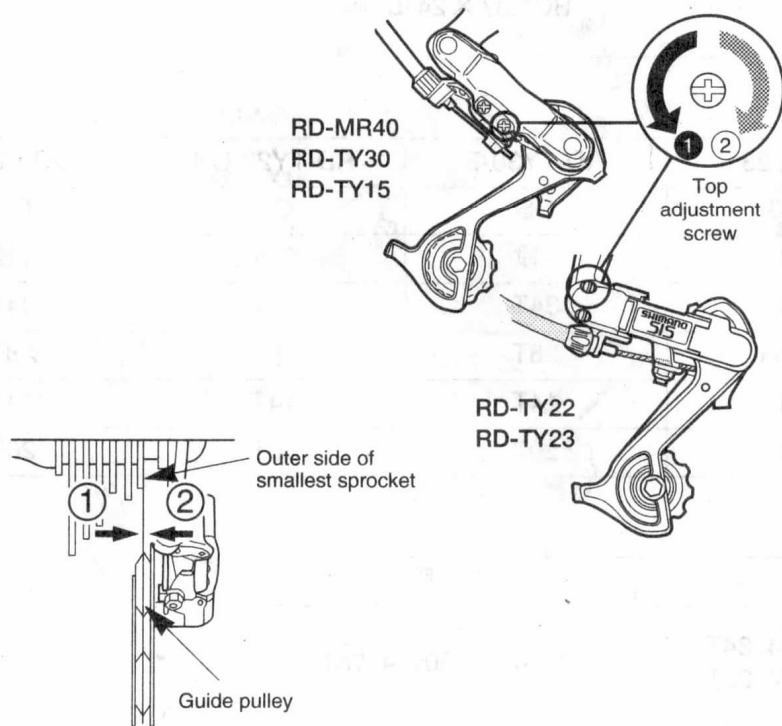
If the chain falls to the crank side	Tighten the top adjustment screw clockwise (about 1/4 turn).
If shifting is difficult from the intermediate chainring to the largest chainring	Loosen the top adjustment screw counterclockwise (about 1/8 turn).
If shifting is difficult from the intermediate chainring to the smallest chainring	Loosen the low adjustment screw counterclockwise (about 1/4 turn).
If there is interference between the chain and the front derailleur inner plate at the largest chainring	Tighten the top adjustment screw clockwise (about 1/8 turn).
If there is interference between the chain and the front derailleur outer plate at the largest chainring	Loosen the top adjustment screw counterclockwise (about 1/8 turn).
If the intermediate chainring is skipped when shifting from the largest chainring	Loosen the outer casing adjustment barrel counterclockwise (1 or 2 turns).
If there is interference between the chain and front derailleur inner plate when the rear sprocket is shifted to the largest sprocket when the chainwheel is at the intermediate chainring position.	Tighten the outer casing adjustment barrel clockwise (1 or 2 turns).
If shifting is difficult from the largest chainring to the intermediate chainring	
If the chain falls to the bottom bracket side	Tighten the low adjustment screw clockwise (about 1/2 turn).

* SL-RS41-L

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.

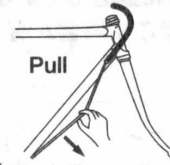


2. Connection and securing of cable

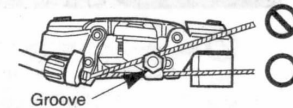
Connect the cable to the rear derailleur and, after taking up the initial slack in the cable, reattach to the rear derailleur as shown in the illustration.

Secure the cable by pulling it with pliers with a force of 5-10 kg.

Tightening torque:
5 - 7 N·m (44 - 60 in. lbs.)

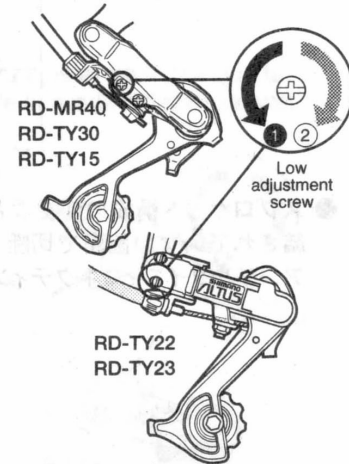
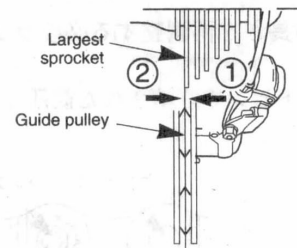


Note: Be sure that the cable is securely in the groove.



3. Low adjustment

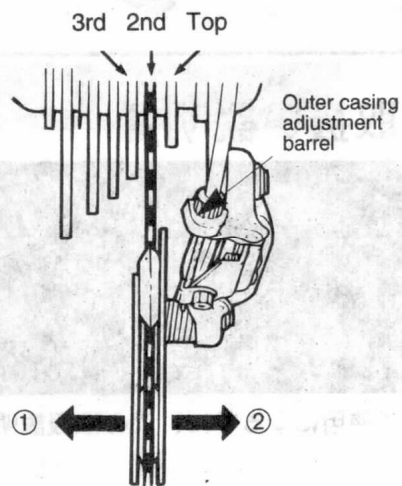
Turn the low adjustment screw so that the guide pulley moves to a position directly below the largest sprocket.



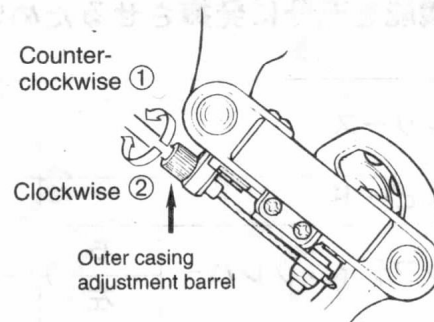
SIS Adjustment

1. Operate the shifting lever to move the chain from the top gear to the 2nd gear.

- * If the chain will not move to the 2nd gear, turn the outer casing adjustment barrel to increase the tension-----① (counter clockwise)
- * If the chain moves past the 2nd gear, decrease the tension---② (clockwise)



2. Next with the chain on the 2nd gear, increase the inner cable tension ① while turning the crank arm forward. Stop turning the outer casing adjustment barrel just before the chain makes noise against the 3rd gear. This completes the adjustment.



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