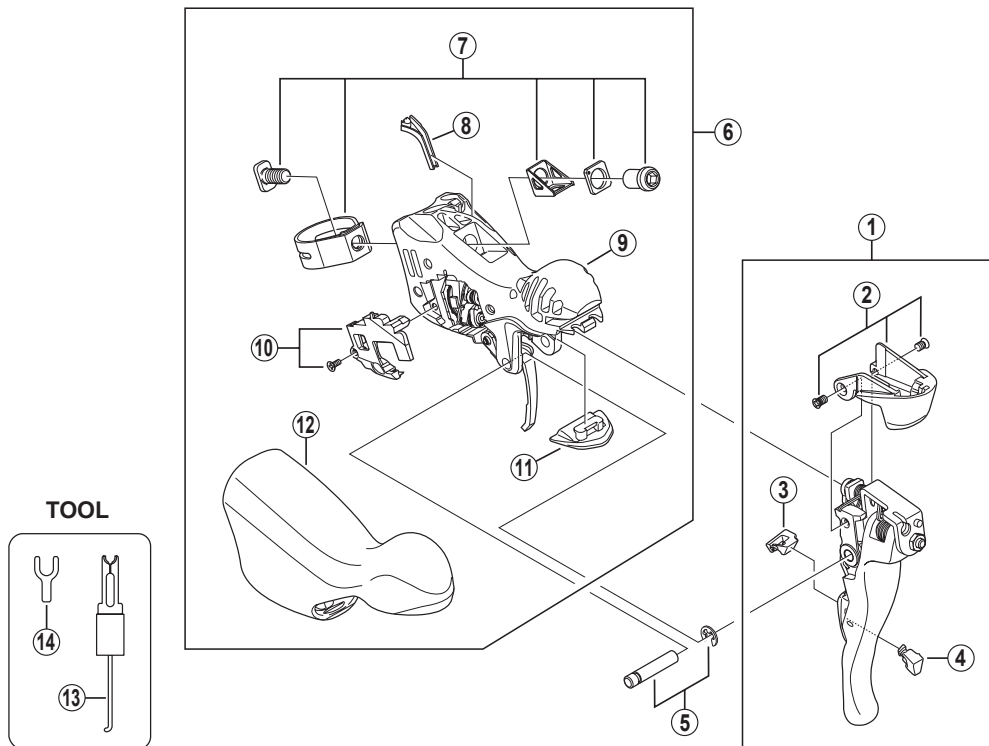


SHIMANO 105 Dual Control Lever (For Triple Gear)

ST-5703-S Silver Version

ST-5703-L Black Version

For Left Hand



ST-6703
ST-5703 (for Left)

ITEM NO.	SHIMANO CODE NO.	DESCRIPTION	INTERCHANGEABILITY
1	Y6TK98010	L.H. Main Lever Assembly (Silver)	
	Y6TK98020	L.H. Main Lever Assembly (Black)	
2	Y6TH98060	L.H. Name Plate & Fixing Screws	A
3	Y6TJ52000	L.H. Main Lever Support	A
4	Y6RU87010	L.H. Release Lever Support	A A
5	Y6SC98070	Lever Axle & E-ring	A A
6	Y6TK98030	L.H. Bracket Unit	
7	Y6SC98150	Clamp Band Unit (ø23.8 mm - ø24.2 mm)	A
8	Y6SE14000	L.H. SL Cable Guide	A
9	Y6TK98040	L.H. Bracket	
10	Y6SE98040	Unit Cover & Fixing Screw	
11	Y6SC76010	L.H. Adjustment Block (5 mm)	A A
	Y6SC75010	L.H. Adjustment Block (10 mm)	A A
12	Y6TK09000	Bracket Cover	
13	Y6RT68000	Tool A for E-ring	A
14	Y6RT66000	Tool B for E-ring	A A

A: Same parts.

B: Parts are usable, but differ in materials, appearance, finish, size, etc.

Absence of mark indicates non-interchangeability.

Mar.-2010-3029

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Specifications are subject to change without notice.

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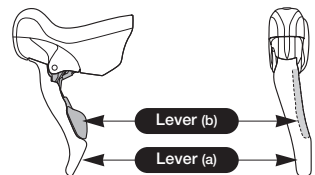
WARNING

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

Note

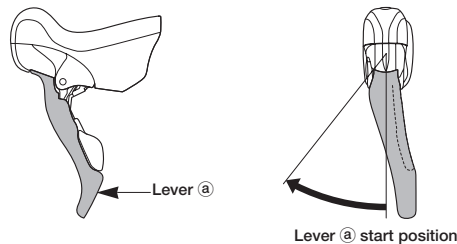
- The ST-6703/5703 front dual control lever is for use with triple front chainwheels, and cannot be used with double front chainwheel products.
- Operation of the levers related to gear shifting should be made only when the front chainwheel is turning.
- For smooth operation, use the specified outer 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.
- A special grease is used for the gear shifting cable. Do not use DURA-ACE grease or other types of grease, otherwise they may cause deterioration in gear shifting performance.
- Please refer to the Service Instructions for the ST-6700/5700 for details on installation and maintenance.
- Be sure to read these service instructions in conjunction with the service instructions for the FD-6703/5703 before use.
- 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.

Gear shifting operations

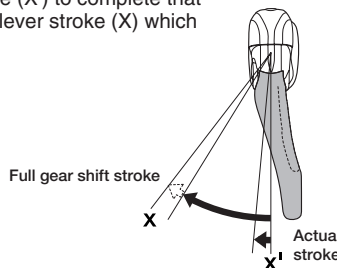


Lever (b) will also move when lever (a) is operated, but be careful not to apply pressure to lever (b). Similarly be careful not to press lever (a) when operating lever (b). Gears will not shift when both levers are pressed simultaneously.

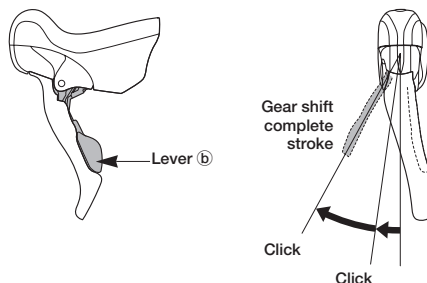
- **Lever (a)** : Shifting from the smallest chainring to the intermediate chainring or from the intermediate chainring to the largest chainring



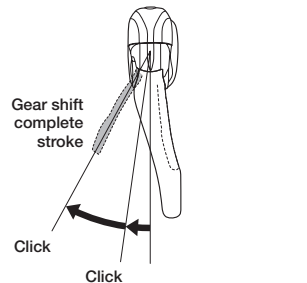
If operation of lever (a) does not complete the chainring shift stroke, operate lever (a) again for the distance (X) to complete that part of the lever stroke (X) which was short.



- **Lever (b)** : Shifts from largest chainring to intermediate chainring.

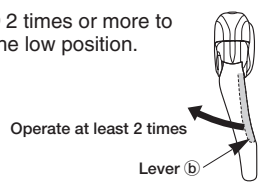


- **Lever (b)** : Shifts from intermediate chainring to smallest chainring.

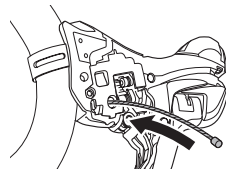


Installation of the shifting cable

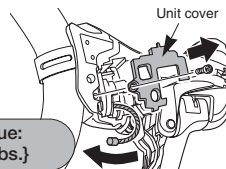
Operate lever (b) 2 times or more to set the lever to the low position.



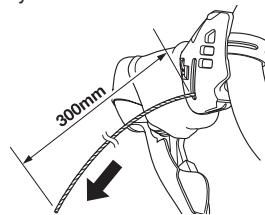
1. Pass the shifting cable straight in from the side as shown in the illustration.



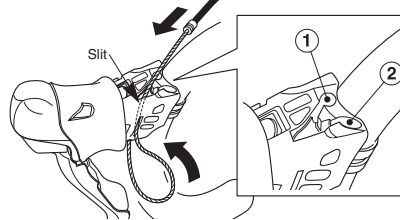
When removing parts in order to replace the inner cable, the work can be carried out more easily if the unit cover is removed as shown in the illustration.



2. Insert the shifting cable so that it protrudes out from the side by about 300 mm.



3. Pass the inner cable upward through the slit as shown in the illustration. The outer casing can be routed in two directions: either through cable guide (1) (inside) or cable guide (2) (outside).



Note:

Be careful not to bend or rub the inner cable while working. Insert the inner cable so that the inner cable drum goes into the winder unit as far as it can go.

Tightening torque:
 0.2 N·m {1.8 in. lbs.}

Trimming (noise prevention mechanism) operation

Depending on the position of the chain after shifting, the chain may rub against the chain guide outer plate or the chain guide inner plate of the front derailleur, producing a characteristic noise. If this sort of thing happens, you can press lever (a) or lever (b) slightly to move the front derailleur a little way so that it does not touch the chain. This operation is called "trimming". Trimming can be carried out whether the chain is on the largest, intermediate or smallest chainring. If noise occurs when the chain is in one of the positions shown below, carry out trimming to eliminate the noise.

Chain position	Symptom	Trimming operation	
		Lever operation	Front derailleur movement
Largest chainring Smaller sprockets	Chain contacts outer plate	Lever (a) Click (Hits)	Before trimming → After trimming Front derailleur movement
Intermediate chainring Smaller sprockets	Chain contacts inner plate	Lever (b) Click (Hits)	Before trimming → After trimming Front derailleur movement
Smallest chainring Smaller sprockets	Chain contacts inner plate	Lever (b) Click (Hits)	Before trimming → After trimming Front derailleur movement

Technical Service Instructions SI-6SE0B-002

ST-6703 / ST-5703

Front Dual Control Lever

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

Series	ULTEGRA	105
Dual control lever	ST-6703	ST-5703
Outer casing	OT-SP41 (SIS-SP41)	
Gears	30	
Front derailleur	FD-6703	FD-5703
Front chainwheel	FC-6703	FC-5703
Rear derailleur (GS Type)	RD-6700	RD-5700
Freehub	FH-6700	FH-5700
Cassette sprocket	CS-6700	CS-5700
Chain	CN-7801 / CN-6600 / CN-5600	
Bottom bracket cable guide	SM-SP17	
Cable adjuster	SM-CA70 / SM-CA50	

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Please note: specifications are subject to change for improvement without notice. (English)
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* Service Instructions in further languages are available at :
<http://techdocs.shimano.com>

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

WARNING

- 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.
- Use the ST-5700/5703, BL-TT79 with the BR-5700. Do not use the BR-5700 in combination with previous STI levers for road riding or with the BL-R770/BL-R550 brake levers for flat handlebars, otherwise the braking performance provided will be much too strong.
- Read these Technical Service Instructions carefully, and keep them in a safe place for later reference.

Note

- For triple front chainwheel specifications, be sure to read these Service Instructions in conjunction with the Service Instructions for the ST-5703 and FD-5703.
- Operation of the levers related to gear shifting should be made only when the front chainwheel is turning.
- 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.
- Because the high cable resistance of a frame with internal cable routing would impair the SIS function, this type of frame should not be used.
- A special grease is used for the gear shifting cable. Do not use DURA-ACE grease or other types of grease, otherwise they may cause deterioration in gear shifting performance.
- 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.

Technical Service Instructions SI-6TH0A-002

ST-5700

Shimano Total Integration

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

Series	105
Shifting lever	ST-5700
Outer casing	OT-SP41 (SIS-SP41)
Gears	20
Front derailleur	FD-5700
Front chainwheel	FC-5700
Rear derailleur	RD-5700-SS
Freehub	FH-5700
Cassette sprocket	CS-5700
Chain	CN-5701
Bottom bracket cable guide	SM-SP17
Cable adjuster	SM-CA70 / SM-CA50

Operation

Rear Front

Lever A : Shifts from smaller to larger rear sprocket.
Lever B : Shifts from larger to smaller rear sprocket.
Lever a : Shifts from smaller to larger chainring.
Lever b : Shifts from larger to smaller chainring.

All levers return to the starting position when released.

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Please note: specifications are subject to change for improvement without notice. (English)
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Operation of rear derailleur lever

- Lever A : Shifts from smaller to larger rear sprocket. Lever A has a click stop at positions 1 and 2.

① : Shifts one sprocket
E.x. : from 3rd to 4th

② : Quick-shifts two sprockets
E.x. : from 3rd to 5th

Lever B : Shifts from larger to smaller rear sprocket.
Press lever B once to shift from a larger to one smaller sprocket.

E.x. : from 4th to 3rd

Lever stroke adjustment

If you would like to make the lever stroke larger, remove the pad spacer.

If you would like to make the lever stroke smaller, replace the pad spacer with the accessory pad spacer (10 mm).

5 mm pad spacer (default) 10 mm pad spacer

Installation and removal of the pad spacer

<Removal> <Installation>

Installation

Installation to the handlebar

Move the bracket cover forward, and then securely tightening the mounting nut with a 5 mm Allen key.

Tightening torque:
6 - 8 N·m [52 - 69 in. lbs.]

The correct way for clamp washer (B) to face is so that the small hollow on the surface is in the top-left corner.

When installing the components to carbon frame/handle bar surfaces, verify with the manufacturer of the carbon frame/parts for their recommendation on tightening torque in order to prevent over tightening that can cause damage to the carbon material and/or under tightening that can cause lack of fixing strength for the components.

Operation of front derailleur levers (FD-5700)

- Lever a : Shifts from smaller to larger front chainring.

If operation of lever a dose not complete the chainring shift stroke, operate lever a again for the distance (X') to complete that part of the lever stroke (X) which was short.

When lever b is operated, there is one click where trimming (the noise prevention mechanism) engages, and a second stronger click when the gear shift stroke is completed. After trimming, the next push will complete the gear shift stroke.

Trimming (noise prevention operation)
If the chain is on the large front chainwheel and the larger rear sprocket, the chain will rub in the front derailleur plate, producing a characteristic noise. When this happens, press lever b lightly (to the point where it clicks); this causes the front derailleur to move slightly towards the smaller chainwheel, thereby eliminating the noise.

If the chain is on the smallest front chainring and a smaller rear sprocket, the chain will rub in the front derailleur plate, producing a characteristic noise. When this happens, press lever a lightly (to the point where it clicks); this causes the front derailleur to move slightly towards the larger chainring, thereby eliminating the noise.

Caution on operation

Lever B(b) will also move when lever A(a) is operated, but be careful not to apply pressure to lever B(b). Similarly be careful not to press lever A(a) when operating lever B(b). Gears will not shift when both levers are pressed simultaneously.

Be sure to read these service instructions in conjunction with the service instructions for the RD-5700, FD-5700 before use.

Installation of the brake cable

- Cable used
- Inner cable (stainless steel) $\phi 1.6$ mm
 - SLR outer casing $\phi 5$ mm

Be sure to leave some excess cable, even if cutting it to the full length of the handlebars.

Pass the inner cable through as shown in the illustration, and then set the inner cable drum into the cable hook.

Installing the shifting cable

Cable used

- Inner cable (PTFE inner cable) $\phi 1.2$ mm
- SP41 sealed outer casing (1) $\phi 4$ mm
- SP41 outer casing (2) $\phi 4$ mm

Cutting the outer casing

When cutting the outer casing, cut the opposite end to the end with the marking. After cutting the outer casing, make the end round so that the inside of the hole has a uniform diameter.

Rear lever

Operate lever B at least 9 times to set the lever to the highest position.

Pass the inner cable through the cable hole. The outer casing can be routed in two directions: either through cable guide (1) (inside) or cable guide 2 (outside).

Note:
Insert the inner cable so that the inner cable drum goes into the winder unit as far as it can go.

Tightening torque:
0.2 N·m [1.8 in. lbs.]

When removing parts in order to replace the inner cable, the work can be carried out more easily if the unit cover is removed as shown in the illustration.

Be careful not to cover the cable holes or the unit cover when wrapping on the handlebar tape. If the handlebar tape covers these places, it will not be possible to replace the inner cable.

Front lever

Operate lever b once or more to set the lever to the low position.

Pass the inner cable through the cable hole. The outer casing can be routed in two directions: either through cable guide (1) (inside) or cable guide 2 (outside).

Note:
Insert the inner cable so that the inner cable drum goes into the winder unit as far as it can go.

CAUTION

Be sure to install the shifting cable cover before use. If it is not installed, injury may occur.

Outer stopper

1. Install the outer stopper to the down tube.

Tightening torque:
1.5 - 2 N·m [13 - 18 in. lbs.]

Install with the adjustment bolt tightened. The adjustment range for the adjustment bolt is six full turns.

2. Pass the inner cable through, and set the outer casing.

Be sure leave some excess in the outer casing, even if cutting it to the full length of the handlebars.

Confirm

Make sure the outer casing is firmly seated in the outer stopper.

Maintenance

* The illustration shows the right-hand lever.

Bracket and lever disassembly

1. First use the special tool to remove the E-ring. Use part (B) of the special tool (2) to align the E-ring with the direction of removal. Next, set part A against the E-ring and remove the E-ring.

CAUTION

When removing the E-ring, it may suddenly spring out, so check the safety of any nearby people or objects before removing it.

2. Insert an Allen key or similar tool into the lever stud hole, and then tap it gently with a plastic mallet to push out the lever stud. When the lever stud comes out, the bracket body and lever body can be disassembled.

Always be sure to remove the lever stud in this direction. If it is removed in the opposite direction, it may damage the bracket body.

Assembling the bracket body and lever body

1. Insert the connector lever into the main lever support, and then assemble the bracket body and lever body. Next, insert the end of the return spring into the notch.

2. Align the stud holes, and then set the special tool (1) in the position shown in the illustration to press-fit the lever stud.

Do not press-fit the lever stud from this direction, otherwise it may damage the bracket body.

- The correct direction for the lever stud to face is with the E-ring groove at the top.
- Check that the surface of the bracket body is flush with the top of the lever stud to ensure that the E-ring can fit into the groove.

3. Remove the special tool (1), and then use the special tool (2) to install the E-ring.

Replacing the main lever support

Installation:
Insert the main lever support so that it pushes against the lever body drop-prevention notch.

Replacing the cable guide

Use this hole to replace the cable guide.

Replacing the bracket cover

The tabs on the bracket cover each fit to a matching slot on the bracket.

Note the markings:
R : for right
L : for left

Wipe a little rubbing alcohol inside the bracket cover to make installation easier.