

# Dealer's Manual

ROAD	MTB	Trekking
City Touring/ Comfort Bike	URBAN SPORT	E-BIKE

## Cassette Sprocket

- CS-M9000
- CS-M9001
- CS-M8000
- CS-HG500-10
- CS-HG400-9
- CS-HG300-9
- CS-HG200-9
- CS-HG200-8
- CS-HG200-7
- CS-HG50-9
- CS-HG50-8

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## IMPORTANT NOTICE

- **This dealer's manual is intended primarily for use by professional bicycle mechanics.**

Users who are not professionally trained for bicycle assembly should not attempt to install the components themselves using the dealer's manuals. If any part of the information on the manual is unclear to you, do not proceed with the installation. Instead, contact your place of purchase or a local bicycle dealer for their assistance.

- Make sure to read all instruction manuals included with the product.
- Do not disassemble or modify the product other than as stated in the information contained in this dealer's manual.
- All dealer's manuals and instruction manuals can be viewed on-line on our website (<http://si.shimano.com>).
- Please observe the appropriate rules and regulations of the country, state or region in which you conduct your business as a dealer.

**For safety, be sure to read this dealer's manual thoroughly before use, and follow it for correct use.**

The following instructions must be observed at all times in order to prevent personal injury and physical damage to equipment and surroundings. The instructions are classified according to the degree of danger or damage which may occur if the product is used incorrectly.



Failure to follow the instructions will result in death or serious injury.




Failure to follow the instructions could result in death or serious injury.



Failure to follow the instructions could cause personal injury or physical damage to equipment and surroundings.

## TO ENSURE SAFETY

### WARNING

- **When installing components, be sure to follow the instructions that are given in the instruction manuals.**  
It is recommended to use genuine Shimano parts only. If parts such as bolts and nuts become loose or damaged, the bicycle may suddenly fall over, which may cause serious injury.  
In addition, if adjustments are not carried out correctly, problems may occur, and the bicycle may suddenly fall over, which may cause serious injury.
-  Be sure to wear safety glasses or goggles to protect your eyes while performing maintenance tasks such as replacing parts.
- After reading the dealer's manual thoroughly, keep it in a safe place for later reference.

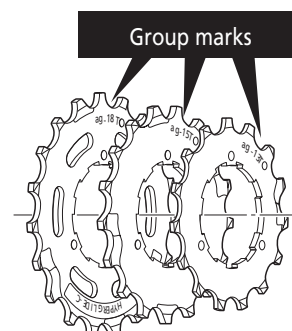
### NOTE

#### Be sure to also inform users of the following:

- Products are not guaranteed against natural wear and deterioration from normal use and aging.
- For maximum performance we highly recommend Shimano lubricants and maintenance products.
- If the chain keeps coming off the chainrings during use, replace the chainrings and the chain.

#### For Installation to the Bicycle, and Maintenance:

- The gears should be periodically washed with a neutral detergent. In addition, cleaning the chain with neutral detergent and lubricating it can be an effective way of extending the life of the gears and the chain.
- Always use the recommended combination of gears.
- Always be sure to use the sprocket set bearing the same group marks; never use in combination with a sprocket bearing a different group mark.
- \* Depending on the tooth combination, some may not have a mark.







- Always use CS-M9000, CS-M9001, CS-M8000 in combination with CN-HG901-11, CN-HG701-11, CN-HG601-11. Other chains cannot be used because the dimensions do not match.
- Always use CS-HG500-10 in combination with CN-HG95, CN-HG54. Other chains cannot be used because the dimensions do not match.
- Always use CS-HG400-9, CS-HG300-9, CS-HG200-9, CS-HG50-9 in combination with CN-HG53, CN-HG93, CN-HG73B. Other chains cannot be used because the dimensions do not match.
- Always use CS-HG200-8, CS-HG200-7, CS-HG50-8 in combination with CN-HG40, CN-HG71. Other chains cannot be used because the dimensions do not match.

The actual product may differ from the illustration because this manual is intended mainly to explain the procedures for using the product.

# **LIST OF TOOLS TO BE USED**

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Tool		Tool	
 TL-LR10	TL-LR10	 TL-SR21	TL-SR21
 TL-LR15	TL-LR15	 TL-SR23	TL-SR23

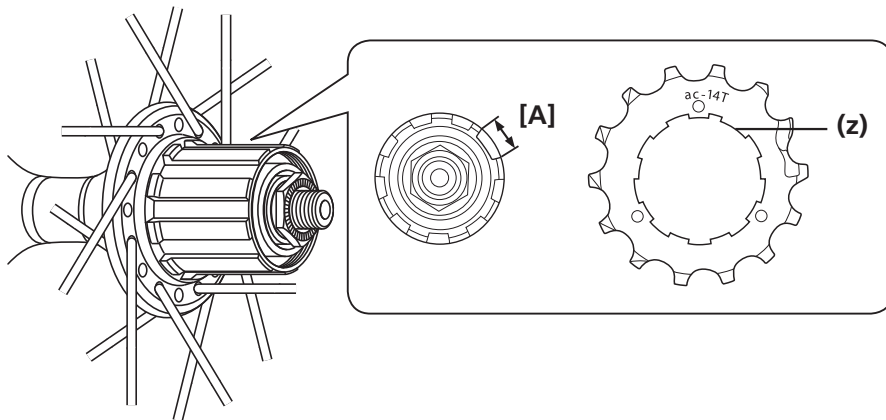
# INSTALLATION

# INSTALLATION

## Installation of cassette sprocket

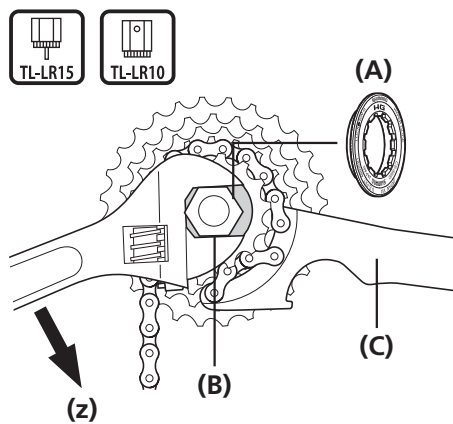
For each sprocket, the surface that has the group mark should face outward and be positioned so that the wide parts of the gear projections on each sprocket and the **[A]** part (where the groove width is wide) of the freewheel body are aligned.

1



**(z)** Wide part

2



For installation of the HG sprockets, use the Shimano original tool TL-LR15 / LR10 to tighten the lock ring.  
To replace the HG sprockets, use the Shimano original tool TL-LR15 / LR10 and TL-SR21 / 23 to remove the lock ring.

**(z)** Disassembly

- (A)** Lock ring
- (B)** TL-LR15 / LR10
- (C)** TL-SR21 / 23

### Tightening torque



TL-LR15



TL-LR10

30 - 50 N·m

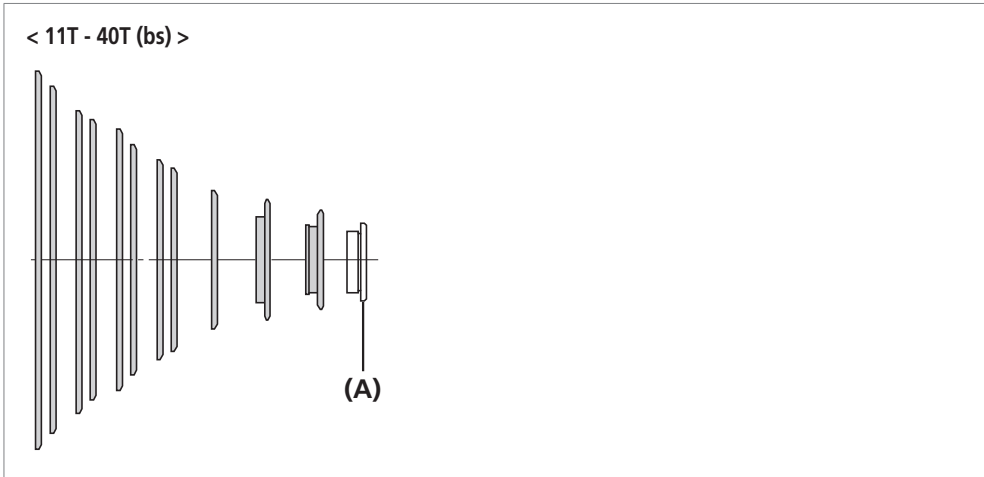
### NOTE

Set TL-SR21 / 23 on a sprocket smaller than the middle sprocket. If it is set on a sprocket larger than the middle sprocket, the tool will not be stable.



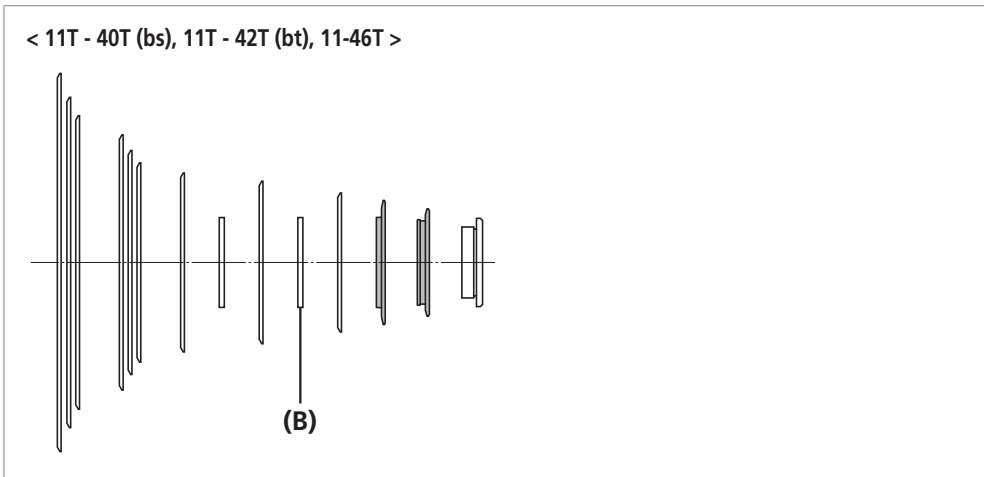
# Sprocket pattern

CS-M9000-1x11s, 2x11s / CS-M9001-3x11s



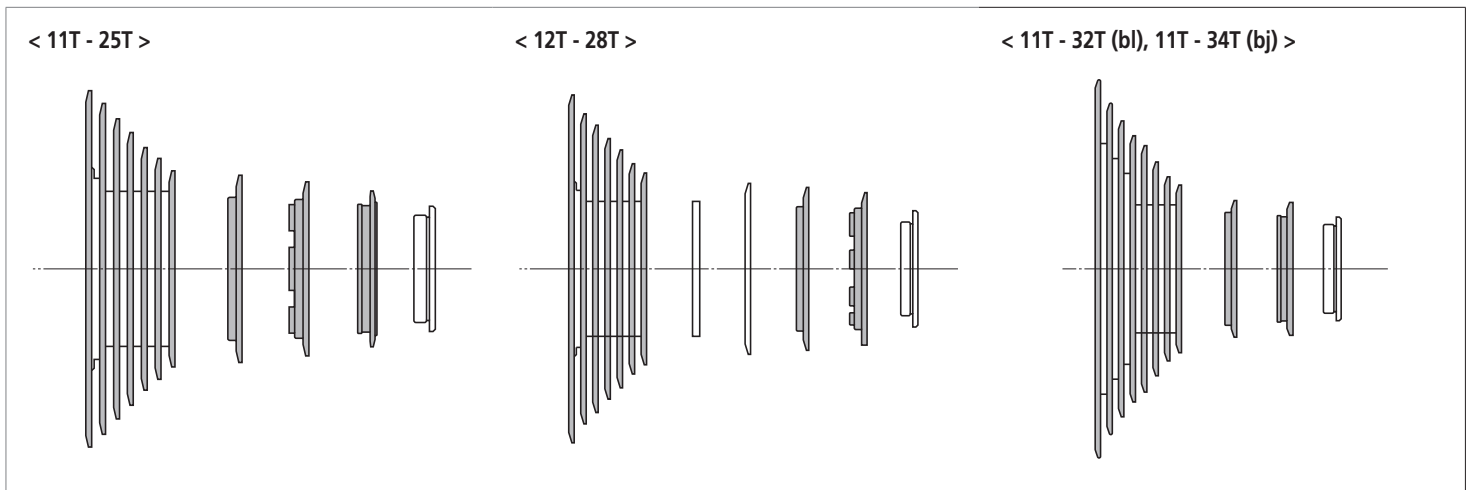
(A) Lock ring

CS-M8000

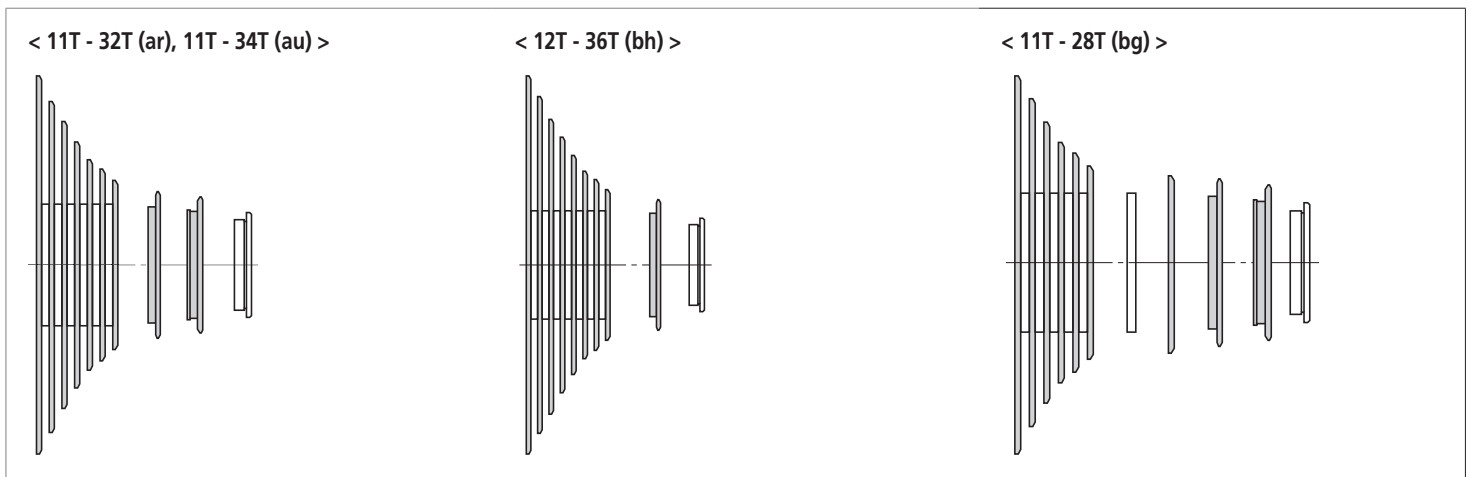


(B) Sprocket spacers

CS-HG500-10

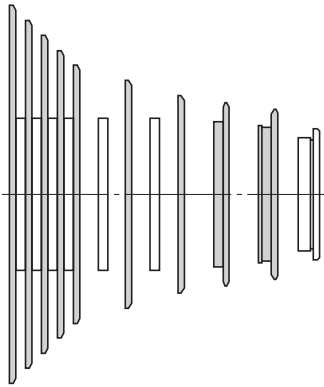


CS-HG400-9 / CS-HG300-9

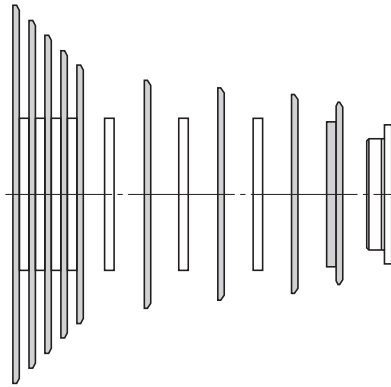


CS-HG50-9 / CS-HG200-9

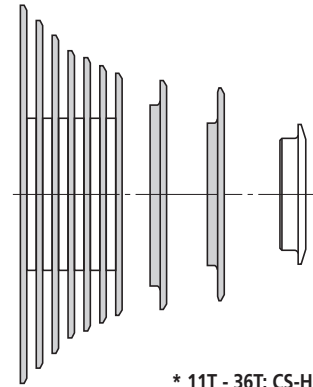
< 11T - 25T >



< 12T - 23T, 12T - 25T, 12T - 27T >

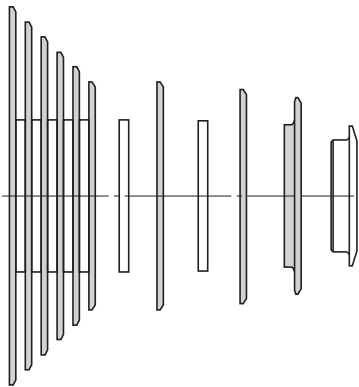


< 11T - 30T, 11T - 32T, 11T - 34T, 11T - 36T >

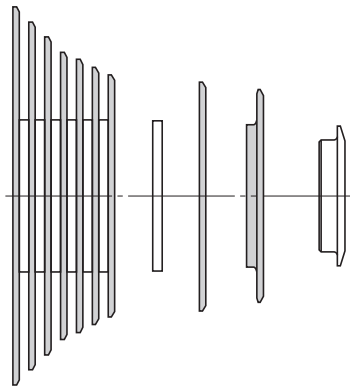


\* 11T - 36T: CS-HG200-9 Only

< 13T - 25T >

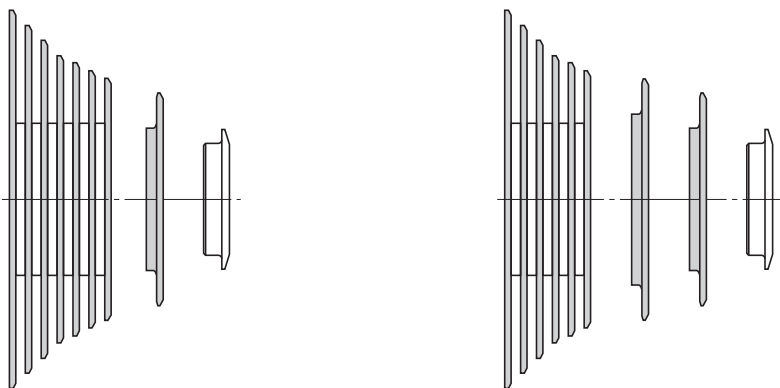


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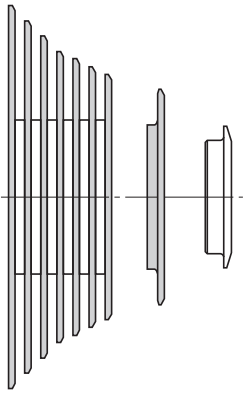
CS-HG50-8

< 11 - 28T (bf), 11 - 30T (an), 11 - 32T (aw) >



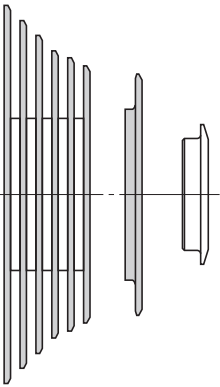
CS-HG200-8

< 14 - 32T (br) >



CS-HG200-7

< 12 - 28T (bm), 12 - 32T (bp) >



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

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