SHIMANO NEXUS 7-SPEED HUB



SERVICE MANUAL

vol. **1**





Disassembly of the Inter-7 hub

SG-7C26

Note:

Unit parts should never be disassembled. If they are, problems may result.

When replacing parts, replace the whole internal assembly or unit part.



Tools

Note:

Before carrying out disassembly, have ready the hub spanners(TL-7S20) and internal hub grease.



Screwdriver (Left)

TL-7S20 (Right) Hub spanners Part No. 3-130 9890 17mm x 22mm(2 pcs.)

 Hold the two bevelled surfaces of the hub axle on the brake arm side in a vice and remove the dust cap with a screwdriver.





Vice

Note:

Do not damage the threads of the hub axle.

2. Turn the brake arm unit upside down and hold the two bevelled surfaces of the hub axle on the sprocket side in a vice.



Note:
Do not damage the threads of the hub axle.

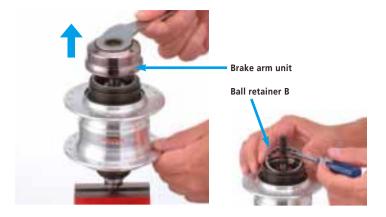


Remove the left hand lock nut from the hub axle, and then remove the stop nut.

TL-7S20



3. Remove the brake arm unit and ball retainer B from the hub axle.



4. Remove the hub shell.



Now it can be replaced with the new internal assembly.

Disassembly and assembly can be carried out quickly.

Part No. 33Z 9801



5. Remove the brake shoe unit.



6. Remove the stop ring with a screwdriver.
At this time, the stop ring come off with great force.
Be careful of the safety using cloth and so on.



7. Remove ring gear unit 2 and carrier unit 2 at the same time while turning ring gear unit 2 slightly to the left and right.



After removing them at the same time, remove carrier unit 2 from ring gear unit 2.



8. Remove sun gear unit 2 and 3 while turning them slightly to the left and right.



Note:

If undue force is applied during removal, the pawls inside will become damaged, which will cause operation problems.

9. Remove carrier unit 1.





11. Remove ball retainer H while pressing in pawl C on the driver and axle unit with a screwdriver.

Be careful not to bend ball retainer H.

Screwdriver

Ball retainer H

This completes the disassembly of the Inter-7 hub.



Assembly of the Inter-7 hub

1. Hold the two bevelled surfaces of the hub axle on the sprocket side in a vice.



Note:

Do not damage the threads of the hub axle.

Install ball retainer H while pressing in pawl C on the driver and axle unit with a screwdriver.

Ball retainer H

Vice

Screwdriver



Note:

Be careful of the setting direction.



Apply a liberal coating of internal hub grease.

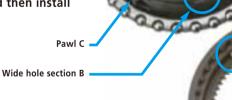
Be careful not to bend ball etainer H while pressing it.

Pawl C

Be careful not to catch on the end of return spring C.

3. Insert the end of the slide spring of ring gear unit 1 into the wide hole section B of the driver and axle unit, press in pawl C (2 places) with a screwdriver, and then install ring gear unit 1.

(Y-041 20800)



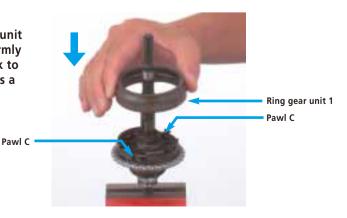
Note:

End of slide spring

Apply a liberal coating of internal hub grease to the gear inside ring gear unit 1.

Check:

After installing ring gear unit 1, turn ring gear unit 1 firmly counterclockwise to check to be sure that pawl C makes a clicking sound.





(Y-041 20800)

4. Engage the teeth of the planet pinion in carrier unit 1 with the teeth of ring gear unit 1, and then press in ring gear unit 1 while turning it slightly to the left and right.



Note:

Apply a liberal coating of internal hub grease to the planet pinions (3 places) in carrier unit 1.

Teeth of planet pinion in carrier unit 1

Teeth of ring gear unit 1



(Y-041 20800)

5. Engage the teeth of sun gear unit 2 and 3 with the teeth of the planet pinion in carrier unit 1 while turning sun gear unit 2 and 3 slightly to the left and right, and then press in carrier unit 1.

(Y-041 20800)

(Y-041 20800)





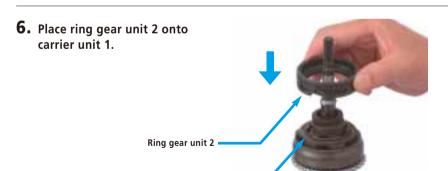
Apply a liberal coating of internal hub grease to the teeth of sun gear unit 2 and 3.

Be careful of the setting direction. If the setting is reversed, installation will not be possible.



The gear with the smooth ring section is at top.

If undue force is applied, the pawls inside will become damaged, which will cause operation problems. The gear with the smooth ring section is at top.



Carrier unit 1

Note:

Apply a liberal coating of internal hub grease to the teeth of ring gear unit 2.

Set so that the part with the teeth is at the top.

7. Engage the teeth of the planet pinion in carrier unit 2 with the teeth of ring gear unit 2 while turning carrier unit 2 slightly to the left and right, and then press in ring gear unit 2.

Teeth of planet pinion in carrier unit 2 Teeth of ring gear unit 2



(Y-041 20800)

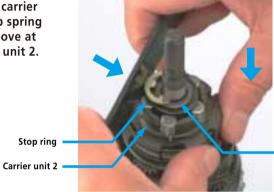


Note:

Apply a liberal coating of internal hub grease to the teeth of the planet pinion (3 places) in carrier unit 2.

If undue force is applied, the pawls inside will become damaged, which will cause operation problems.

8. While pushing down carrier unit 2, insert the stop spring into the hub axle groove at the surface of carrier unit 2.



Check

Check to be sure that the stop ring groove on the hub axle is visible from the edge of carrier unit 2 while carrier unit 2 is pushed down.



9. Align the notched section of the brake shoe unit with the end of slide spring in carrier unit 2, and then install the brake shoe unit.



Note:

Apply a liberal coating of internal hub grease to the inside and outside of the brake shoe unit.

Notched section of the brake shoe unit

End of slide spring



(Y-041 20800)

10. Install the internal assembly while turning the hub shell slightly to the right and left so that seal spring R of the hub shell is sitting in the right hand dust cap of the internal assembly.





Note

Apply a liberal coating of internal hub grease to the grease groove of the hub shell.

If seal spring R hooks into the wrong part of the right hand dust cap, push seal spring R with a screwdriver.

Check:

After installing the hub shell, turn the hub shell counterclockwise and check to be sure that it turns smoothly.

11. Place ball retainer B onto the hub shell.

GREASE (Y-041 20800)



Note:

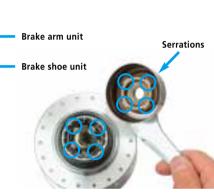
Be careful of the setting direction.



Apply a liberal coating of internal hub grease.

12. Place the brake arm unit onto the hub axle and turn it to the left and right so that the serrations of the brake shoe and brake arm unit engage with each other. Then push the brake arm unit fully into the brake shoe unit.





13. Screw the stop nut to adjust so that the hub shell can be turned smoothly without any play. After adjusting, secure the stop nut with the lock nut.



Note:

Apply a liberal coating of internal hub grease to the inside and outside of the brake shoe unit.



14. Install the dust cap



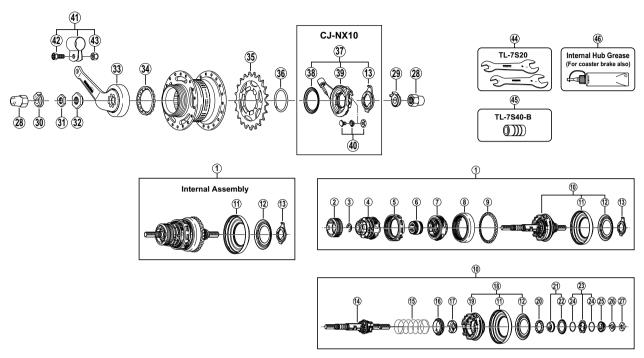
This completes the assembly of the Inter-7 hub.





SHIMANO NEXUS 7-SPEED HUB w/Coaster Brake

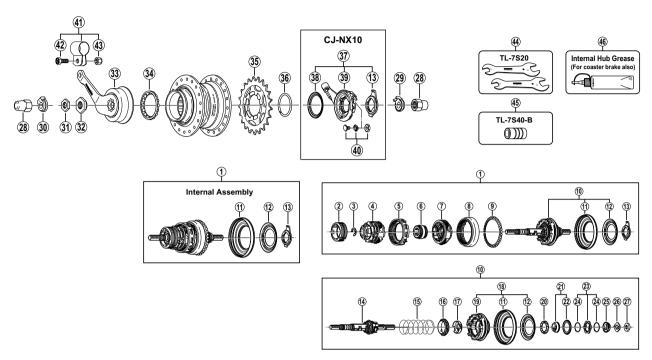
SG-7C16 Inter-7 Hub



O'TY	ITEM	SHIMANO	DESCRIPTION
	NO.	CODE NO.	
	1	Y-35B 98010	Internal Assembly (Axle Length 175.5 mm)
	2	Y-330 98010	Brake Shoe Unit
	3 4	Y-325 32000 Y-330 98040	Stop Ring (\$\phi 9\$ mm) Carrier Unit 2
	5	Y-330 98020	Carrier Unit 2
	6	Y-33F 98060	Ning Gear Unit 2 & 3
	7	Y-330 98060	Carrier Unit 1
	8	Y-330 98050	Ring Gear Unit 1
	9	Y-330 98070	Ball Retainer H (3/16" x 29)
-	10	Y-35B 98020	Axle & Driver Unit (Axle Length 175.5 mm) w/Right Hand Dust Cap B & C
	11	Y-35B 05000	wright radia bust cap b & C Right Hand Dust Cap B
	12	Y-33Z 26000	Right Hand Dust Cap C
	13	Y-33Z 98020	Cassette Joint Fixing Ring
	14	Y-34N 98030	Axle Unit (Axle Length 175.5 mm)
	15	Y-330 24000	Return Spring A
	16	Y-33Z 10000	Gear Shifting Cam
	17	Y-33Z 11000	Feed Cam
	18	Y-35B 98030	Driver Unit w/Right Hand Dust Cap B & C
	19	Y-35C 98040	Driver Unit
	20	Y-330 91600	Ball Retainer F (3/16" x 12)
	21	Y-33Z 98030	Right Hand Cone w/Seal
	22	Y-33Z 28000	Right Hand Cone Seal
	23	Y-33F 98040	Driver Plate w/Seal
	24	Y-330 12000	Driver Plate Seal Lock Washer
	25 26	Y-33E 98120 Y-33Z 08000	Lock washer Stop Washer
	26	Y-33Z 08000 Y-33Z 07020	Stop wasner Right Hand Lock Nut (3.4 mm)
	28	Y-314 14010	Right Hand Look Nut (3.4 min) Cap Nut (3/8")
	20	Y-33Z 20500	Non-turn Washer 5R (Yellow)
	29	Y-33M 39600	Non-turn Washer 6R (Silver)
		Y-33M 39700	Non-turn Washer 7R (Black)
		Y-33M 39510	Non-turn Washer 5L (Brown)
	30	Y-33M 39610	Non-turn Washer 6L (White)
	1 1	Y-33M 39710	Non-turn Washer 7L (Gray)
	31	Y-321 38040	Lock Nut (3.5 mm)
	32	Y-335 48110	Stop Nut
	33	Y-33D 90100	Brake Arm Unit
	34	Y-330 98110	Ball Retainer B (3/16" x 16)
		Y-322 03420	Sprocket Wheel 18T
		Y-322 03520	Sprocket Wheel 19T
	35	Y-322 03620	Sprocket Wheel 20T
		Y-330 60000	Sprocket Wheel 21T Sprocket Wheel 22T
	36	Y-330 60100 Y-321 20010	Sprocket wheel 221 Snap Ring C
	37	Y-74Y 98050	Shap Kilig C CJ-NX10 Cassette Joint Unit
	38	Y-74Y 98050 Y-74Y 18000	CJ-14X TO CASSELLE JOINT OTHE Driver Cap
	39	Y-74Y 93100	Diriver Cap CJ-NX10 Cassette Joint
	40	Y-74Y 98060	Inner Cable Fixing Bolt Unit for CJ-NX10
	41	Y-33F 98090	Brake Arm Clip Unit (5/8")
		Y-33F 98100	Brake Arm Clip Unit (3/4")
	42	Y-75M 06000	Clip Screw (M6 x 16)
	43	Y-317 27200	Clip Nut
	44	Y-130 98900	TL-7S20 Hub Spanner (17 mm x 22 mm) 2 pcs.
	45	Y-308 89000	TL-7S40-B Right Hand Cone Tool
	46	Y-041 20800	Internal Hub Grease (Net. 100g)

SHIMANO NEXUS 7-SPEED HUB w/Coaster Brake

SG-7C26 Inter-7 Hub



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Y-33 Y-32 Y-33 Y-33 Y-33 Y-35 Y-35 Y-35 Y-33 Y-33	30 98010 25 32000 30 98040 30 98040 30 98060 30 98060 30 98050 30 98050 30 98050 30 98050 32 98020 44 98020 32 98020 44 98030 30 24000 32 10000 32 11000	Brake Shoe Unit Stop Ring (99 mm) Carrier Unit 2 Ring Gear Unit 2 Sun Gear Unit 2 8 3 Carrier Unit 1 Ring Gear Unit (Axle Length 175.5 mm) w/Right Hand Dust Cap B & C Right Hand Dust Cap B Right Hand Dust Cap B Right Hand Dust Cap C Cassette Joint Fixing Ring Axle Unit (Axle Length 175.5 mm)
Y-32 Y-33 Y-33 Y-33 Y-35 Y-35 Y-35 Y-35 Y-35	25 32000 30 98040 30 98020 3F 98060 30 98060 30 98060 30 98070 5C 98020 5C 07000 3Z 26000 3Z 26000 3Z 98020 4N 98030 30 24000 3Z 110000	Stop Ring (\$\phi 9\$ mm) Carrier Unit 2 Ring Gear Unit 2 Sun Gear Unit 2 & 3 Carrier Unit 1 Ball Retainer H (3/16" x 29) Axle & Driver Unit (Axle Length 175.5 mm) W/Right Hand Dust Cap B & C Right Hand Dust Cap B Right Hand Dust Cap C Cassette Joint Fixing Ring Axle Unit (Axle Length 175.5 mm)
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Y-33	3Z 28000	Right Hand Cone Seal
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	30 12000	Driver Plate Seal
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