SECONDARY SHAFT COMPONENT ASSEMBLY

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1. Assemble the secondary shaft component in the order shown in the figure. R SST : APPLY SPECIFIED OIL TO INDIVIDUAL PARTS 8 SST **R** 20 R

1	Secondary 1st gear
2	Friction damper
3	Inner cone ring
4	Middle cone ring
	(See Middle Cone Ring Assembly Note.)
5	Synchronizer ring
	(See Synchronizer Ring (Secondary 1st Gear)
	Assembly Note.)
6	Clutch hub
	(See Clutch Hub Assembly Note.)
7	Gear sleeve
	(See Gear Sleeve Assembly Note.)
8	Secondary shaft
	(See Secondary Shaft Assembly Note.)

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9	Clutch hub sleeve
	(See Clutch Hub Sleeve Assembly Note.)
10	Synchronizer key
	(See Synchronizer Key Assembly Note.)
11	Synchronizer ring
	(See Synchronizer Ring (Secondary 2nd Gear)
	Assembly Note.)
12	Middle cone ring
13	Inner cone ring
14	Secondary 2nd gear
	(See Secondary 2nd Gear Assembly Note.)
15	Friction damper
	(See Friction Damper (Secondary 2nd Gear)
	Assembly Note.)

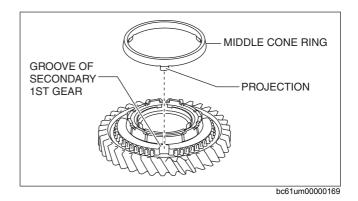
R

16	Secondary 5th gear
	(See Secondary 5th Gear Assembly Note.)
17	Clip
18	Secondary 6th gear
	(See Secondary 6th Gear and Secondary 3rd Gear
	Assembly Note.)
19	Secondary 3rd gear
	(See Secondary 6th Gear and Secondary 3rd Gear
	Assembly Note.)

20	Clip
21	Secondary 4th gear
	(See Secondary 4th Gear Assembly Note.)
22	Tapered roller bearing
22	(See Tapered Roller Bearing Assembly Note.)
23	Clip
24	Tapered roller bearing
24	(See Tapered Roller Bearing Assembly Note.)

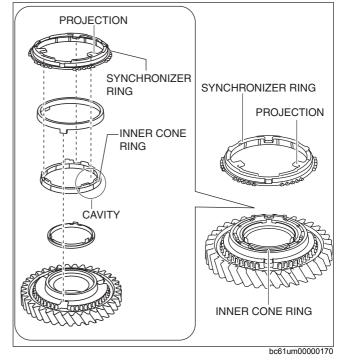
Middle Cone Ring Assembly Note

1. Assemble the middle cone ring so that the middle cone ring projection and the groove of the secondary 1st gear are engaged as shown in the figure.



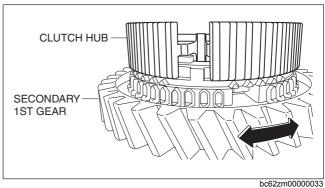
Synchronizer Ring (Secondary 1st Gear) Assembly Note

- 1. Assemble the synchronizer ring so that the synchronizer ring projection and the cavity of the inner cone ring are engaged as shown in the figure.
- 2. Verify that the ends of the inner cone ring, middle cone ring, and synchronizer ring are arranged in a flat plane.



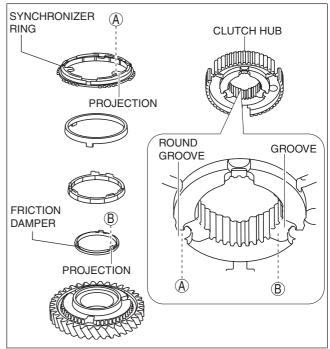
Clutch Hub Assembly Note

1. Assemble the clutch hub to the position shown in the figure while rotating the secondary 1st gear in the rotation direction.



Caution

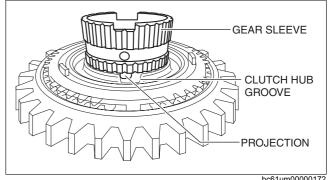
· When assembling the clutch hub, it is necessary to engage the synchronizer ring projection, round groove of the clutch hub, and grooves of the friction damper and clutch hub. Therefore, rotate the clutch hub and engage it with each part.



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Gear Sleeve Assembly Note

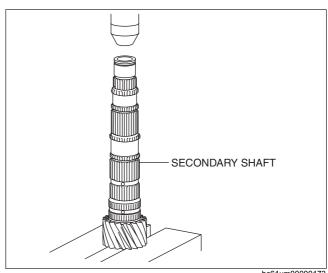
1. Assemble the gear sleeve so that the gear sleeve projection and clutch hub groove are engaged as shown in the figure.



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Secondary Shaft Assembly Note

1. Set the secondary shaft in a press as shown in the figure.

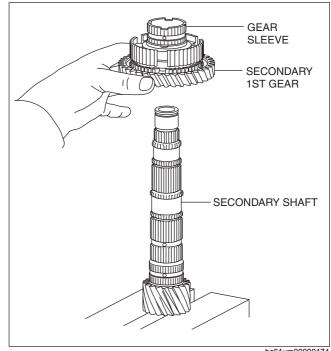


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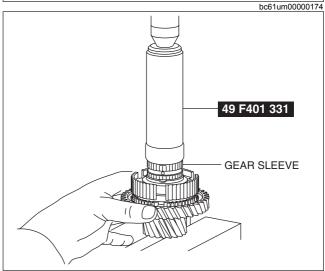
2. Set the secondary shaft with the parts from the secondary 1st gear to the gear sleeve as a single unit.

Caution

 If you take your hand off the secondary 1st gear, it will fall off and the assembled parts will come apart. Therefore, until the assembled parts are press-fit to the secondary shaft, lift up and hold the secondary 1st gear so that each part does not come apart.



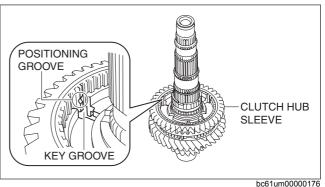
- 3. Set the gear sleeve to the **SST**.
- Using a press, press-fit the parts from the secondary 1st gear to the gear sleeve to the secondary shaft.



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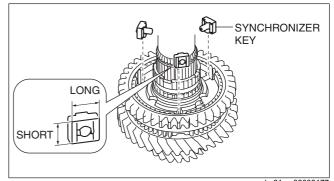
Clutch Hub Sleeve Assembly Note

1. Align the positioning groove of the clutch hub sleeve with the center of the clutch hub key groove as shown in the figure, and assemble the clutch hub sleeve.

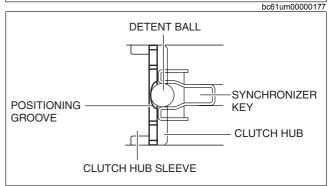


Synchronizer Key Assembly Note

1. Align with the direction of the synchronizer key as shown in the figure, and assemble the clutch hub.



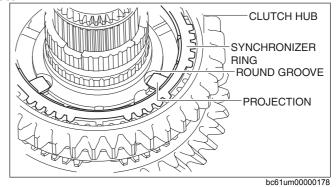
2. After the synchronizer key is assembled, verify that the detent ball of the synchronizer key is engaged with the positioning groove of the clutch hub sleeve.



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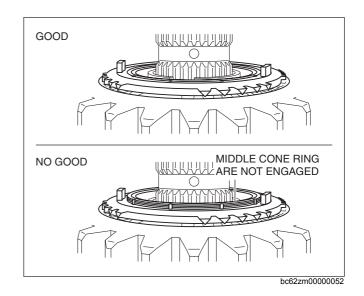
Synchronizer Ring (Secondary 2nd Gear) Assembly Note

1. Assemble the synchronizer ring so that the synchronizer ring projection and round groove of the clutch hub are engaged as shown in the figure.

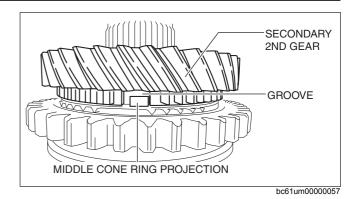


Secondary 2nd Gear Assembly Note

1. Verify that the ends of the inner cone ring, middle cone ring, and synchronizer ring are arranged in a flat plane.

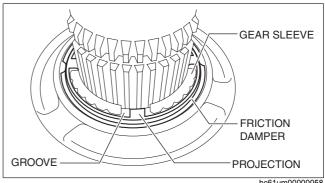


2. Assemble the secondary 2nd gear so that the groove of the secondary 2nd gear and middle cone ring projection are engaged as shown in the figure.



Friction Damper (Secondary 2nd Gear) Assembly Note

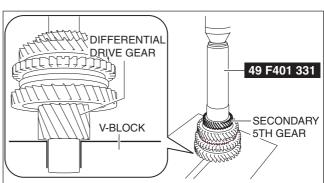
1. Assemble the friction damper so that the friction damper projection and the groove of the gear sleeve are engaged as shown in the figure.



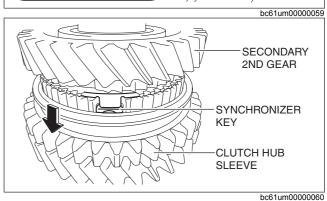
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Secondary 5th Gear Assembly Note

1. Set the secondary shaft component, secondary 5th gear, and the SST in a press as shown in the figure.

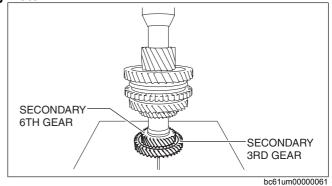


- 2. Move the clutch hub sleeve in the axial direction while pressing the secondary 2nd gear by hand so that it does not move, and verify that the synchronizer key is assembled correctly.
- 3. Assemble the secondary 5th gear using the press.



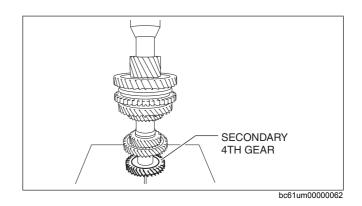
Secondary 6th Gear and Secondary 3rd Gear Assembly Note

- 1. Set the secondary shaft component, secondary 6th gear, and secondary 3rd gear in a press as shown in the figure.
- 2. Assemble the secondary 6th gear and secondary 3rd gear using the press.



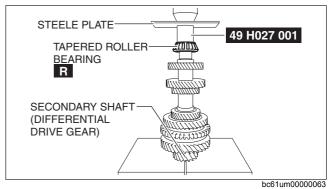
Secondary 4th Gear Assembly Note

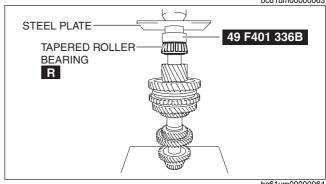
- 1. Set the secondary shaft component and secondary 4th gear in a press as shown in the figure.
- 2. Assemble the secondary 4th gear using the press.



Tapered Roller Bearing Assembly Note

- 1. Set the secondary shaft component, new tapered roller bearing (transaxle case side), SST, and an appropriate steel plate in a press as shown in the figure.
- 2. Assemble the tapered roller bearing (transaxle case side) using the press.
- 3. Assemble a new clip.
- 4. Set the secondary shaft component, new tapered roller bearing (clutch housing side), SST, and an appropriate steel plate in a press as shown in the figure.
- 5. Assemble the tapered roller bearing (clutch housing side) using the press.





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