

[< Previous](#) [Next >](#)

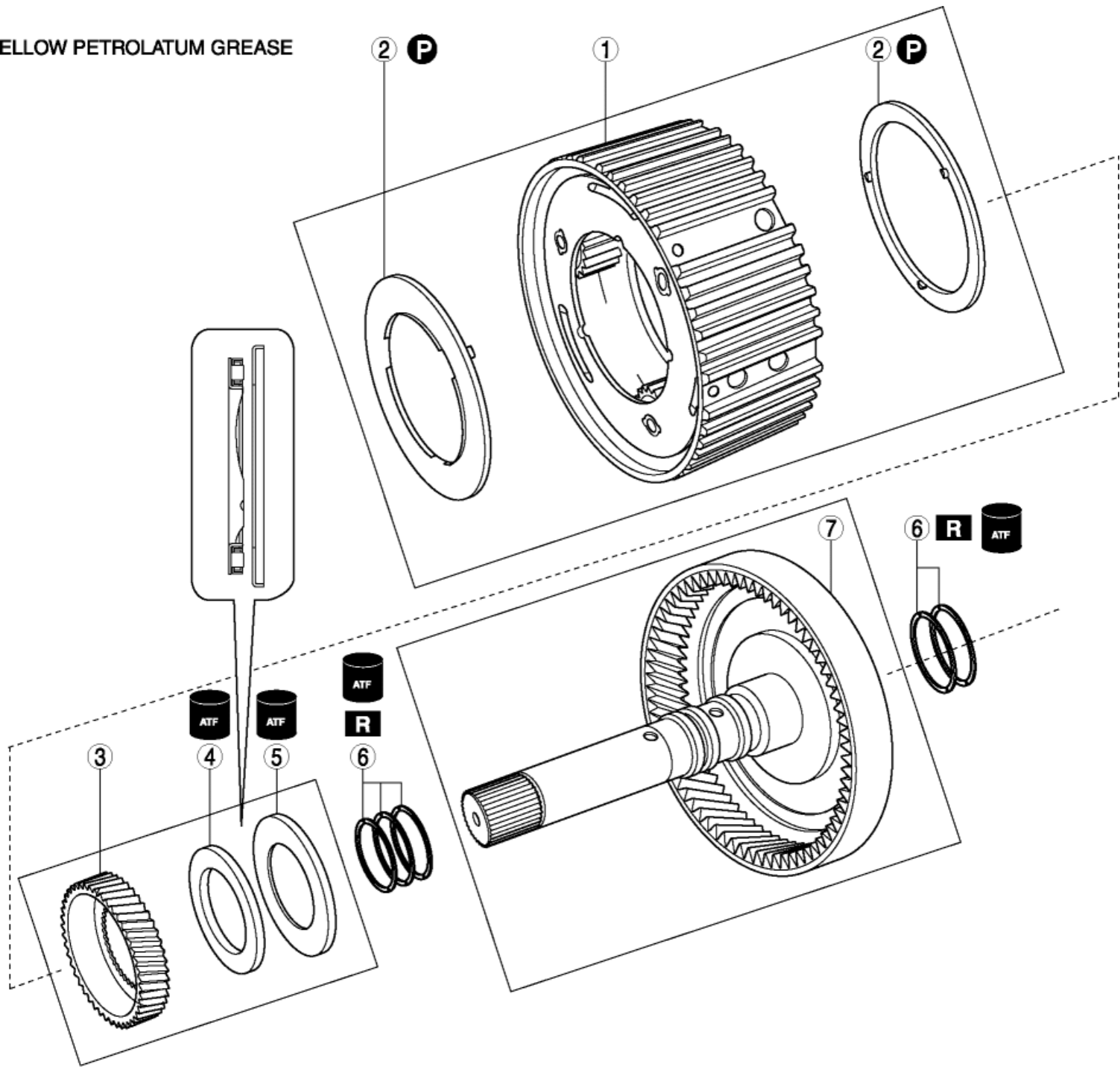
2012 - Mazda6 - Transmission/ Transaxle

FRONT PLANETARY GEAR COMPONENT AND INPUT SHAFT DISASSEMBLY/ ASSEMBLY [AY6A-EL]

NOTE:

- The following procedure is for replacement of the seal rings only. Replace the transaxle if other repairs are necessary.
1. Disassemble in the order indicated in the figure.
 2. Assemble in the reverse order of disassembly.

P YELLOW PETROLATUM GREASE



: NON SUPPLY PART

1 Front planetary gear component

(See [Front Planetary Gear Component Disassembly Note.](#))

(See [Front Planetary Gear Component Assembly Note.](#))

2 Thrust washer

(See [Thrust Washer Disassembly Note.](#))

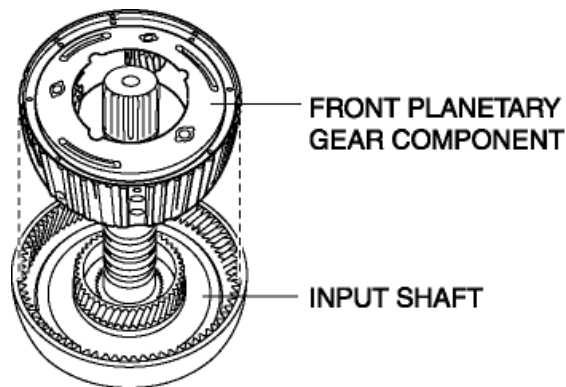
(See [Thrust Washer Assembly Note.](#))

3 Front planetary sun gear

	(See Front Planetary Sun Gear, Thrust Bearing And Bearing Race Disassembly Note.)
	(See Bearing Race, Thrust Bearing And The Front Planetary Sun Gear Assembly Note.)
4	Thrust bearing (See Front Planetary Sun Gear, Thrust Bearing And Bearing Race Disassembly Note.) (See Bearing Race, Thrust Bearing And The Front Planetary Sun Gear Assembly Note.)
5	Bearing race (See Front Planetary Sun Gear, Thrust Bearing And Bearing Race Disassembly Note.) (See Bearing Race, Thrust Bearing And The Front Planetary Sun Gear Assembly Note.)
6	Seal ring (See Seal Ring Disassembly Note.) (See Seal Ring Assembly Note.)
7	Input shaft

Front Planetary Gear Component Disassembly Note

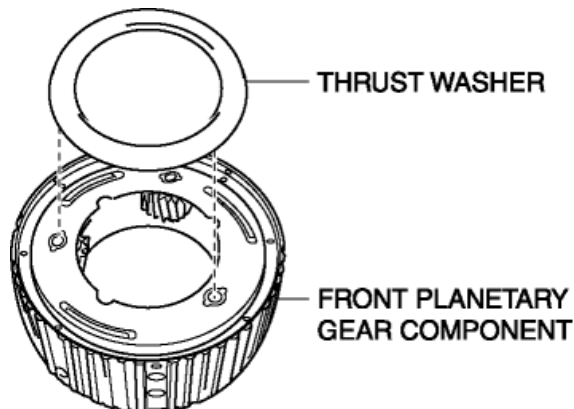
1. Remove the front planetary gear component from the input shaft.



Thrust Washer Disassembly Note

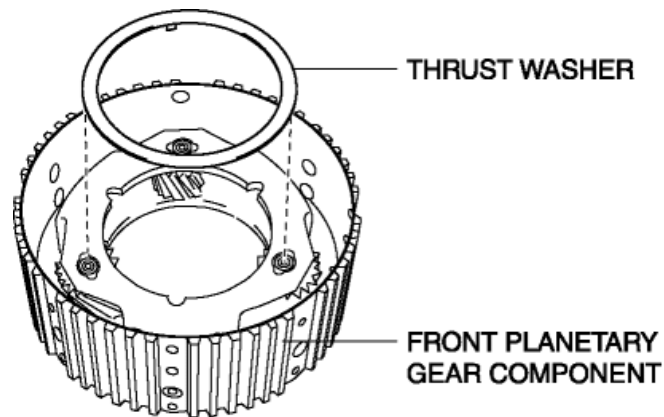
Converter housing side

1. Remove the thrust washer from the front planetary gear component.



Transaxle case side

1. Remove the thrust washer from the front planetary gear component.

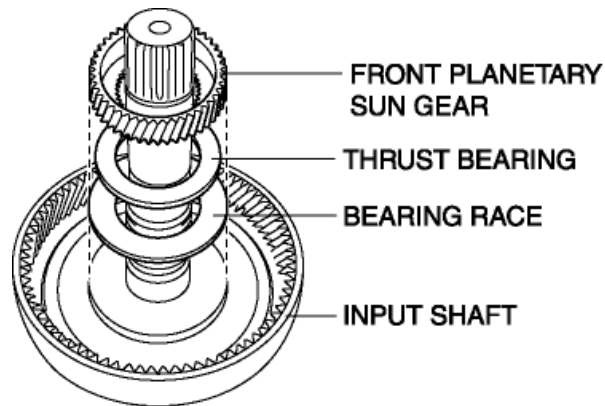


NOTE:

- In some cases, the thrust washer may be detached with the input shaft attached.

Front Planetary Sun Gear, Thrust Bearing And Bearing Race Disassembly Note

1. Remove the front planetary sun gear, thrust bearing and the bearing race from the input shaft.



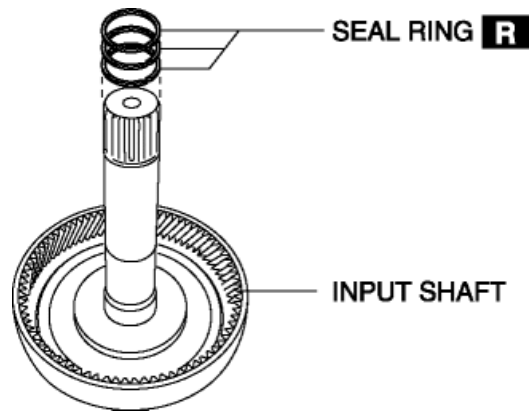
NOTE:

- If it is difficult to remove the bearing race, pry it off gently using a flathead screwdriver.

Seal Ring Disassembly Note

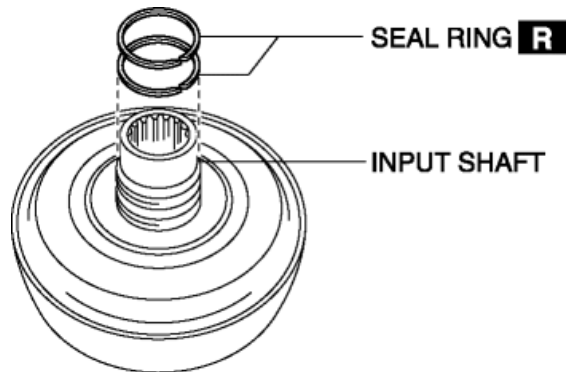
Converter housing side

1. Remove the seal rings from the input shaft.



Transaxle case side

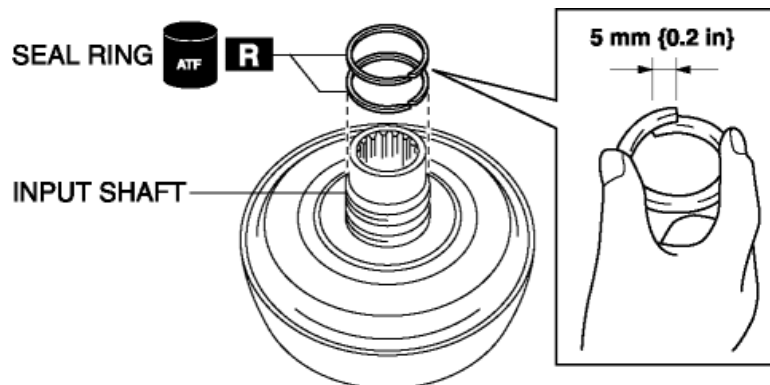
1. Remove the seal rings from the input shaft.



Seal Ring Assembly Note

Transaxle case side

1. Apply ATF to the new seal rings and sliding surface of the input shaft.
2. Compress the new seal rings as shown in the figure. Then install the seal rings to the input shaft.



CAUTION:

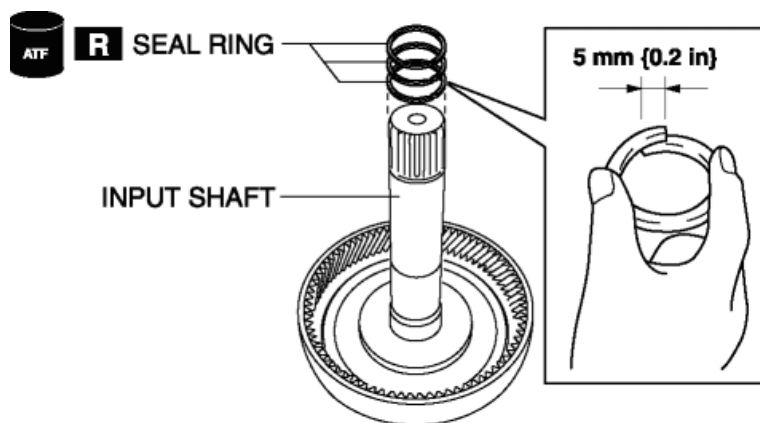
- Do not expand the seal rings too much.
- Be careful not to shorten the seal rings too much, when installing the seal rings.

NOTE:

- Verify that seal rings rotate smoothly after installing them.

Converter housing side

1. Apply ATF to the new seal rings and sliding surface of the input shaft.
2. Compress the new seal rings as shown in the figure. Then install the seal rings to the input shaft.



CAUTION:

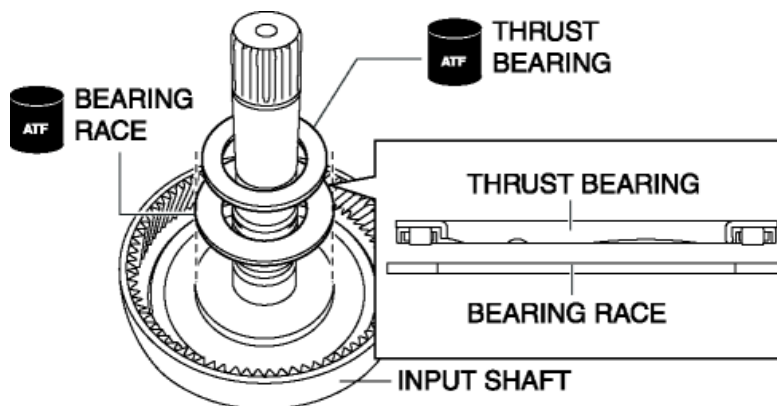
- Do not expand the seal rings too much.
- Be careful not to shorten the seal rings too much, when installing the seal rings.

NOTE:

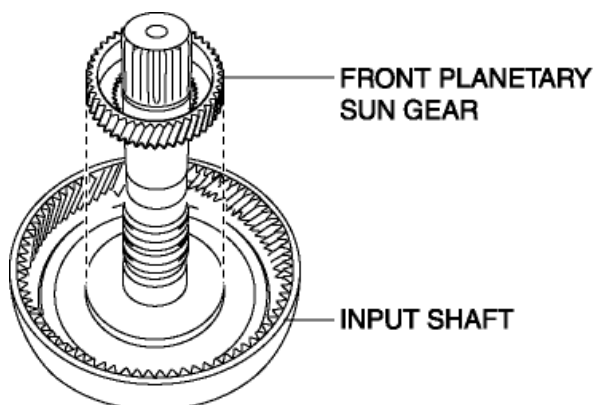
- Verify that seal rings rotate smoothly after installing them.

Bearing Race, Thrust Bearing And The Front Planetary Sun Gear Assembly Note

1. Apply ATF to the bearing race and thrust bearing.
2. Install the bearing race and thrust bearing to the input shaft as shown in the figure.



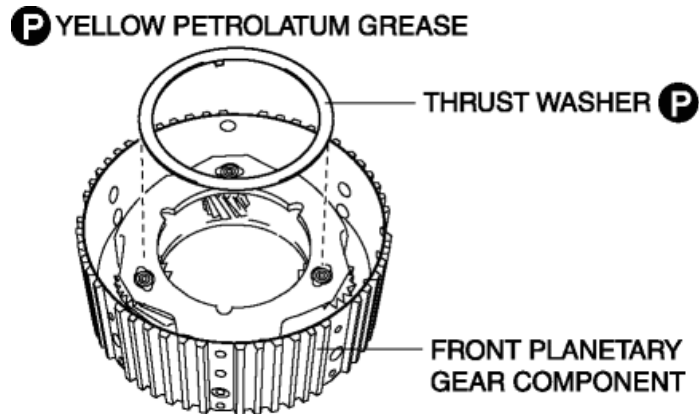
3. Install the front planetary sun gear to the input shaft.



Thrust Washer Assembly Note

Transaxle case side

1. Apply yellow petrolatum grease to the thrust washer.
2. Install the thrust washer to the front planetary gear component.

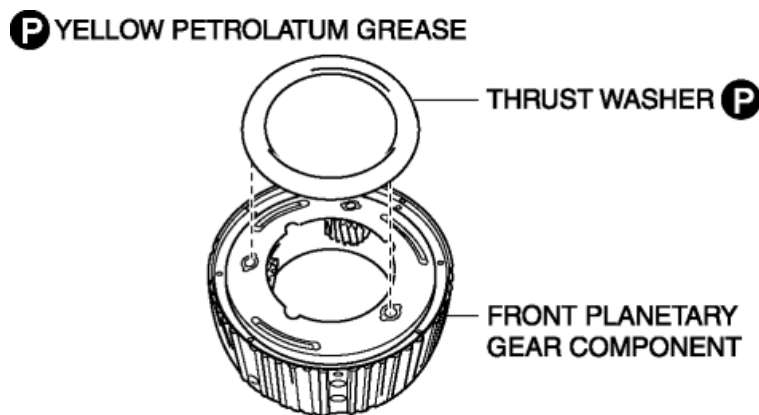


CAUTION:

- Apply yellow petrolatum grease to the mounting surface of the thrust washer so that it does not drop when the front planetary gear component is installed.
- Do not apply yellow petrolatum grease to the oil holes of the thrust washer.
- Do not drop the thrust washer.

Converter housing side

1. Apply yellow petrolatum grease to the thrust washer.
2. Install the thrust washer to the front planetary gear component.

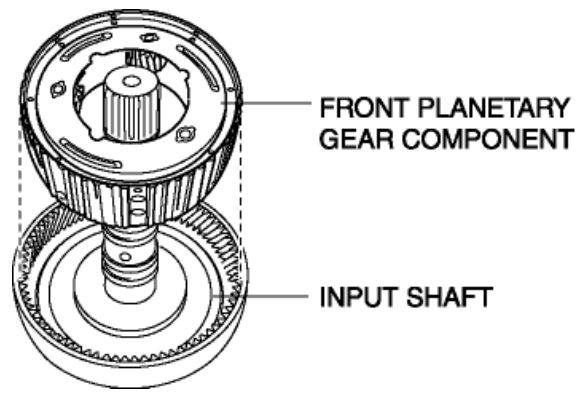


CAUTION:

- Apply yellow petrolatum grease to the mounting surface of the thrust washer so that it does not drop when the front planetary gear component is installed.
- Do not apply yellow petrolatum grease to the oil holes of the thrust washer.
- Do not drop the thrust washer.

Front Planetary Gear Component Assembly Note

1. Install the front planetary gear component to the input shaft.



[< Previous](#) [Next >](#)

© 2012 Mazda North American Operations, U.S.A.

[Back to Top](#)

[< Previous](#) [Next >](#)

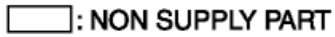
2012 - Mazda6 - Transmission/ Transaxle

FRONT PLANETARY GEAR COMPONENT AND INPUT SHAFT DISASSEMBLY/ ASSEMBLY [AY6A-EL]

NOTE:

- The following procedure is for replacement of the seal rings only. Replace the transaxle if other repairs are necessary.
1. Disassemble in the order indicated in the figure.
 2. Assemble in the reverse order of disassembly.

P YELLOW PETROLATUM GREASE **2** **P**



- 1 Front planetary gear component
(See [Front Planetary Gear Component Disassembly Note.](#))
(See [Front Planetary Gear Component Assembly Note.](#))

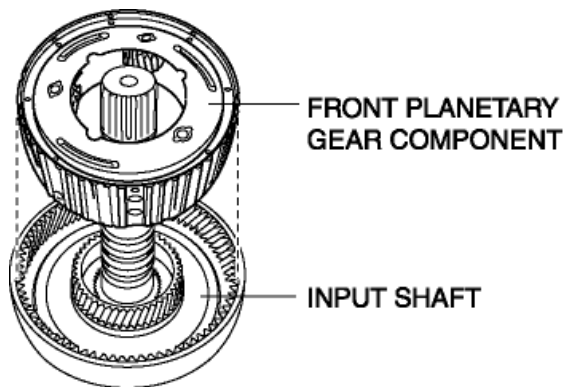
- 2 Thrust washer
- (See **Thrust Washer Disassembly Note.**)
- (See **Thrust Washer Assembly Note.**)

- 3 Front planetary sun gear

	(See Front Planetary Sun Gear, Thrust Bearing And Bearing Race Disassembly Note.)
	(See Bearing Race, Thrust Bearing And The Front Planetary Sun Gear Assembly Note.)
4	Thrust bearing (See Front Planetary Sun Gear, Thrust Bearing And Bearing Race Disassembly Note.) (See Bearing Race, Thrust Bearing And The Front Planetary Sun Gear Assembly Note.)
5	Bearing race (See Front Planetary Sun Gear, Thrust Bearing And Bearing Race Disassembly Note.) (See Bearing Race, Thrust Bearing And The Front Planetary Sun Gear Assembly Note.)
6	Seal ring (See Seal Ring Disassembly Note.) (See Seal Ring Assembly Note.)
7	Input shaft

Front Planetary Gear Component Disassembly Note

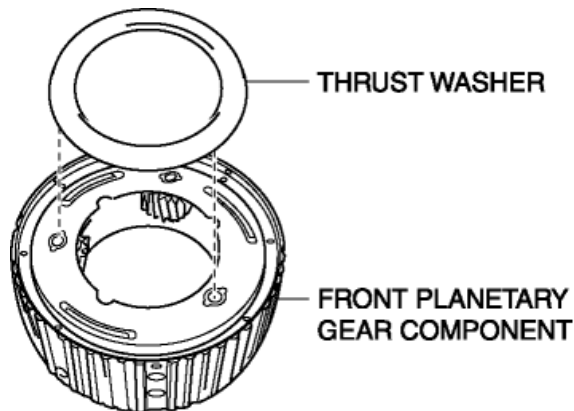
1. Remove the front planetary gear component from the input shaft.



Thrust Washer Disassembly Note

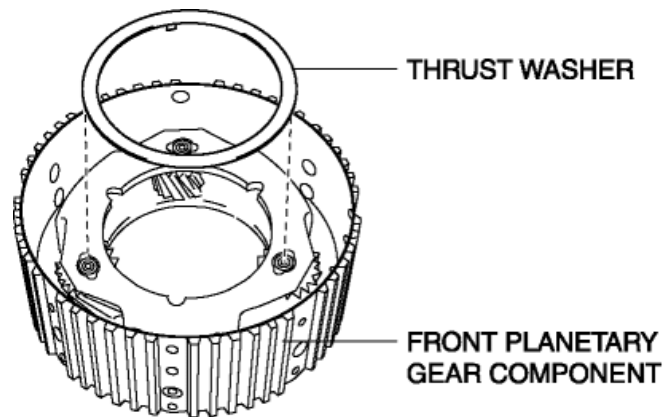
Converter housing side

1. Remove the thrust washer from the front planetary gear component.



Transaxle case side

1. Remove the thrust washer from the front planetary gear component.

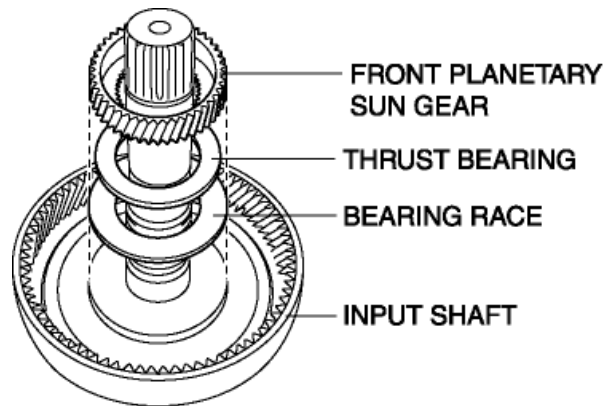


NOTE:

- In some cases, the thrust washer may be detached with the input shaft attached.

Front Planetary Sun Gear, Thrust Bearing And Bearing Race Disassembly Note

1. Remove the front planetary sun gear, thrust bearing and the bearing race from the input shaft.



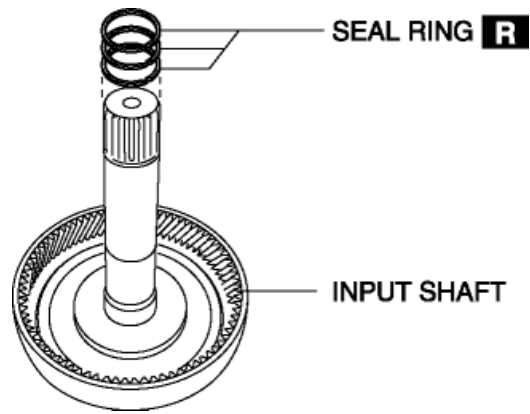
NOTE:

- If it is difficult to remove the bearing race, pry it off gently using a flathead screwdriver.

Seal Ring Disassembly Note

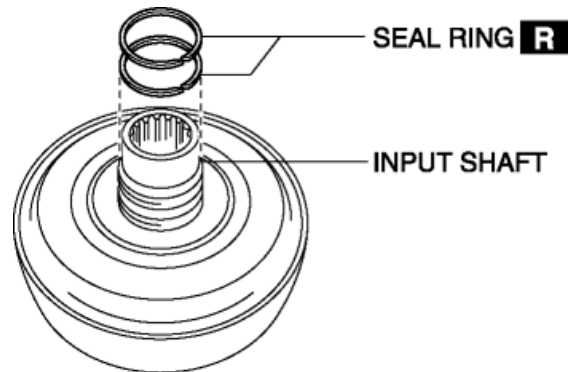
Converter housing side

1. Remove the seal rings from the input shaft.



Transaxle case side

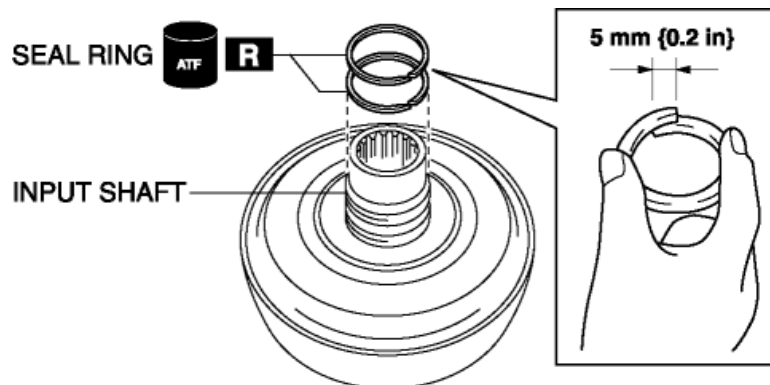
1. Remove the seal rings from the input shaft.



Seal Ring Assembly Note

Transaxle case side

1. Apply ATF to the new seal rings and sliding surface of the input shaft.
2. Compress the new seal rings as shown in the figure. Then install the seal rings to the input shaft.



CAUTION:

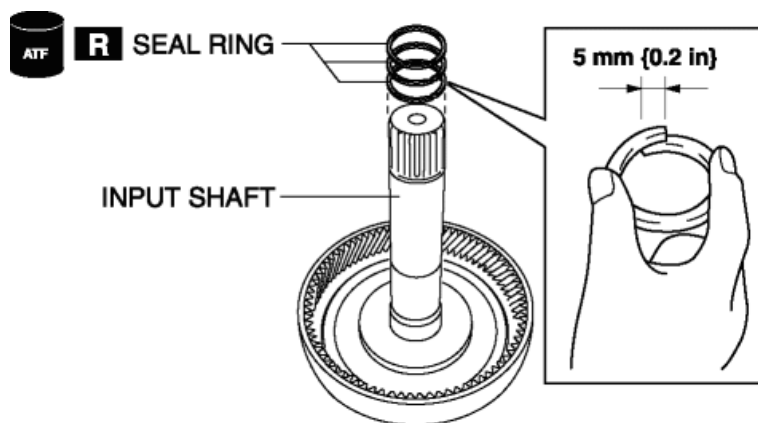
- Do not expand the seal rings too much.
- Be careful not to shorten the seal rings too much, when installing the seal rings.

NOTE:

- Verify that seal rings rotate smoothly after installing them.

Converter housing side

1. Apply ATF to the new seal rings and sliding surface of the input shaft.
2. Compress the new seal rings as shown in the figure. Then install the seal rings to the input shaft.



CAUTION:

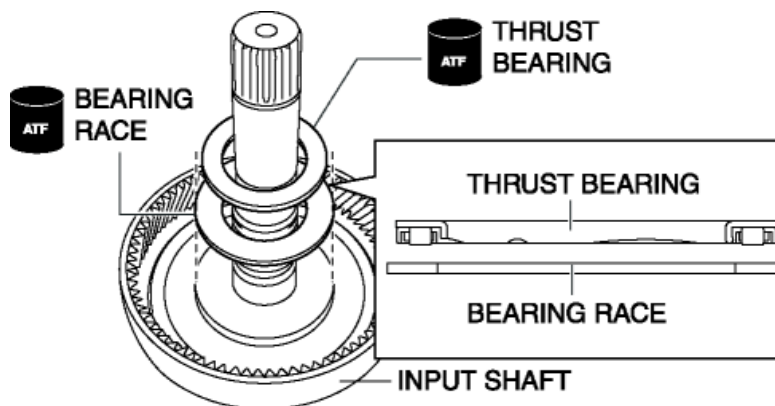
- Do not expand the seal rings too much.
- Be careful not to shorten the seal rings too much, when installing the seal rings.

NOTE:

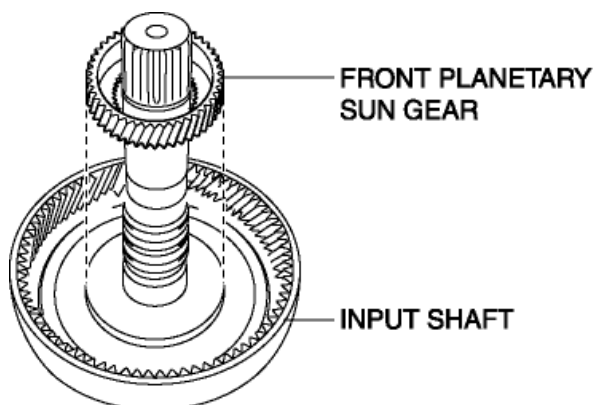
- Verify that seal rings rotate smoothly after installing them.

Bearing Race, Thrust Bearing And The Front Planetary Sun Gear Assembly Note

1. Apply ATF to the bearing race and thrust bearing.
2. Install the bearing race and thrust bearing to the input shaft as shown in the figure.



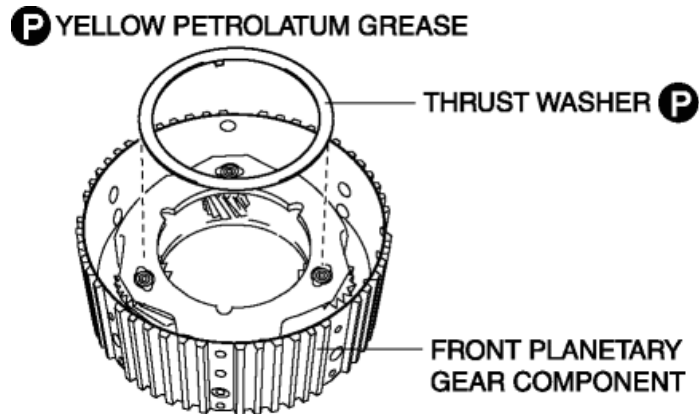
3. Install the front planetary sun gear to the input shaft.



Thrust Washer Assembly Note

Transaxle case side

1. Apply yellow petrolatum grease to the thrust washer.
2. Install the thrust washer to the front planetary gear component.

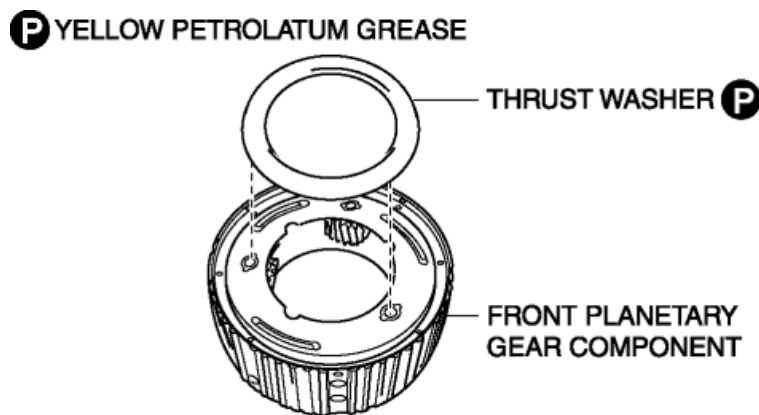


CAUTION:

- Apply yellow petrolatum grease to the mounting surface of the thrust washer so that it does not drop when the front planetary gear component is installed.
- Do not apply yellow petrolatum grease to the oil holes of the thrust washer.
- Do not drop the thrust washer.

Converter housing side

1. Apply yellow petrolatum grease to the thrust washer.
2. Install the thrust washer to the front planetary gear component.

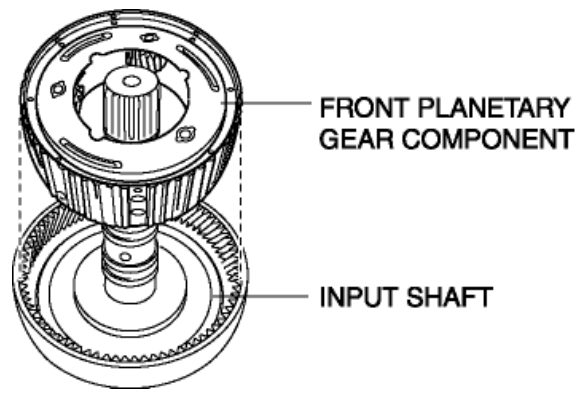


CAUTION:

- Apply yellow petrolatum grease to the mounting surface of the thrust washer so that it does not drop when the front planetary gear component is installed.
- Do not apply yellow petrolatum grease to the oil holes of the thrust washer.
- Do not drop the thrust washer.

Front Planetary Gear Component Assembly Note

1. Install the front planetary gear component to the input shaft.



[< Previous](#) [Next >](#)

© 2012 Mazda North American Operations, U.S.A.

[Back to Top](#)