

SERVICING

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1. TROUBLESHOOTING

Symptom	Probable Cause	Solution	Reference Page
Uneven Braking Force	Brake pedal free travel unevenly adjusted	Adjust	4-S4
	Brake disc worn	Replace	4-S6
	Cam plate warped	Replace	4-S7
Brake Drags	Brake pedal free travel too small	Adjust	4-S4
	Parking brake lever free travel too small	Replace	4-S4
	Brake pedal return spring weaken or broken	Replace	–
	Brake cam rusted	Repair	4-S7
Poor Braking Force	Brake pedal free travel excessive	Adjust	4-S4
	Brake disc worn	Replace	4-S6
	Cam plate warped	Replace	4-S7
	Brake cam or lever damaged	Replace	4-S7
	Transmission fluid improper	Change	G-8

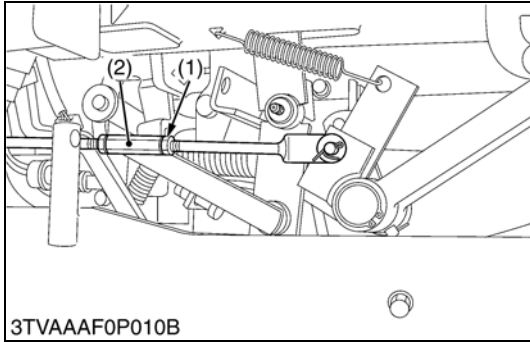
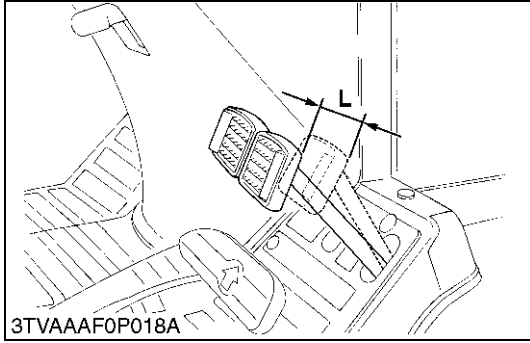
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2. SERVICING SPECIFICATIONS

Item		Factory Specification	Allowable Limit
Brake Pedal	Free Travel	30 to 40 mm 1.18 to 1.57 in.	–
	Difference of Stroke (RH and LH)	0 mm 0 in.	–
Cam Plate and Ball	Height	22.89 to 22.99 mm 0.9012 to 0.9051 in.	22.40 mm 0.8819 in.
Brake Disc	Thickness	3.3 to 3.5 mm 0.130 to 0.137 in.	3.0 mm 0.118 in.
Friction Plate	Thickness	1.92 to 2.08 mm 0.0756 to 0.0818 in.	1.52 mm 0.0598 in.

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3. CHECKING AND ADJUSTING



Adjusting Brake Pedal

CAUTION

- Stop the engine and chock the wheels before checking brake pedal.

1. Release the parking brake.
2. Slightly depress the brake pedals and measure free travel at the top of pedal stroke.
3. If adjustment is needed, loosen the lock nut and turn the turnbuckle to adjust the rod length within acceptable limits.
4. Retighten the lock nut.

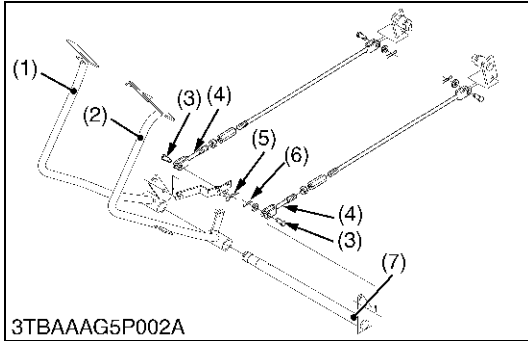
Brake pedal free travel	30 to 40 mm (1.18 to 1.57 in.) on the pedal
	Keep the free travel in the right and left brake pedals equal

- (1) Lock Nut
(2) Turnbuckle

L : Free Travel

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4. DISASSEMBLING AND ASSEMBLING



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Separating Brake Pedal

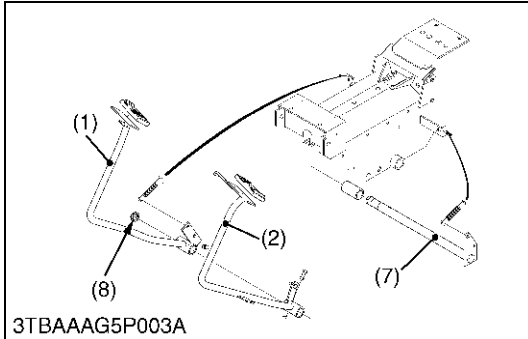
1. Remove the snap pin (5) and the split pin (6). And remove the joint pins (3) from the brake front pins (4).
2. Remove the external cir-clip (8) from the pedal shaft (7).
3. Top out the pedal shaft (7) from the brake pedals (1) (2).

(When reassembling)

- Apply grease to the brake pedal shaft.

- | | |
|----------------------|-----------------------|
| (1) Brake Pedal (RH) | (5) Snap Pin |
| (2) Brake Pedal (LH) | (6) Split Pin |
| (3) Joint Pin | (7) Pedal Shaft |
| (4) Brake Front Pin | (8) External Cir-clip |

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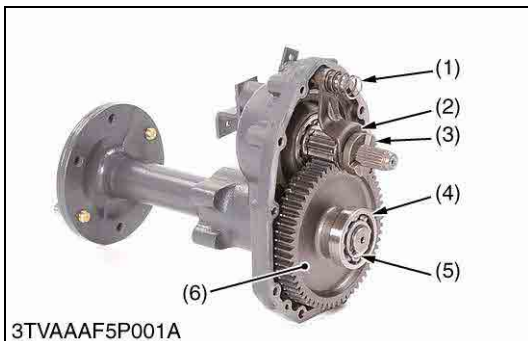


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Separating Rear Axle Case

1. Refer to "REAR AXLE" section.

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Differential Lock Clutch and Final Gear

1. Remove the spring (1).
2. Remove the differential lock clutch (3) and the differential shift fork (2).
3. Remove the external cir-clip (5).
4. Remove the ball bearing with a puller.
5. Remove the final gear (6).

- | | |
|----------------------------------|-----------------------|
| (1) Spring | (4) Ball Bearing |
| (2) Differential Lock Shift Fork | (5) External Cir-clip |
| (3) Differential Lock Clutch | (6) Final Gear (58T) |

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Separating Brake Pedal

1. Remove the differential fork lever (1).
2. Remove the internal snap ring (3).
3. Remove the brake shaft (2) with the brake disks and the brake plates as an assembly.

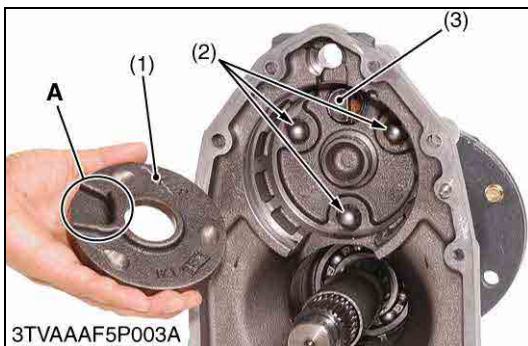
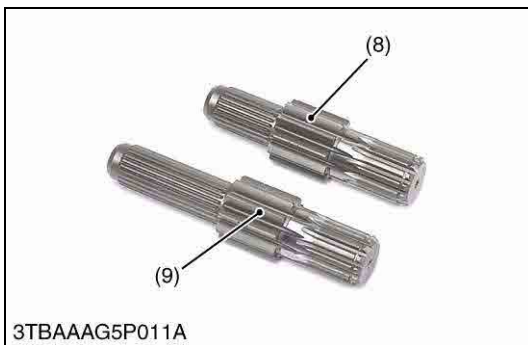
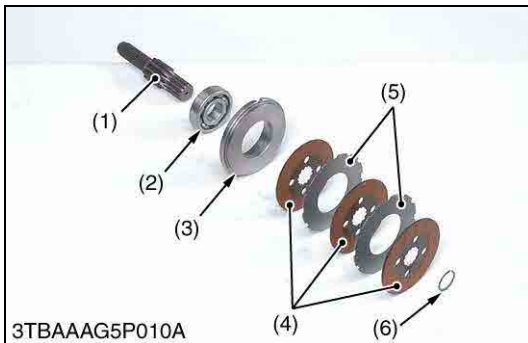
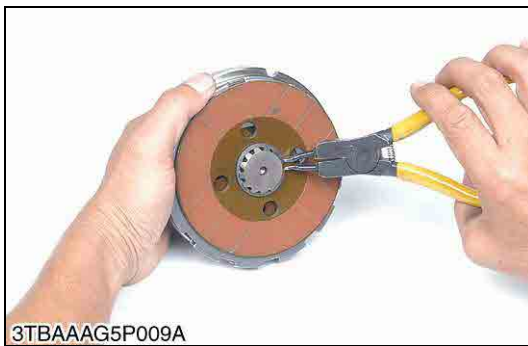
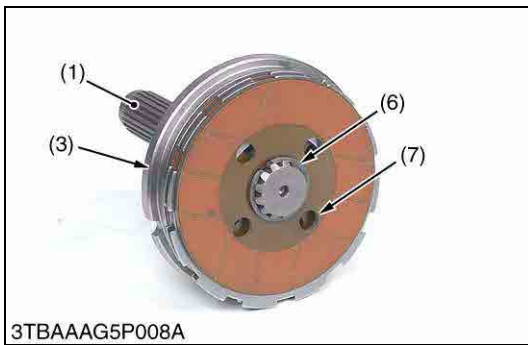
(When reassembling)

- When installing the internal snap ring (3) to the rear axle case as shown in the picture.
- When installing the bearing holder.

- (1) Differential Fork Lever
 (2) Brake Shaft
 (3) Internal Snap Ring

- (4) Straight Pin
 (5) Bearing Holder

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Brake Disks, Brake Plates and Brake Shaft

1. Remove the external cir-clip (6), and remove the brake disks (4) and the brake plates (5).
2. Remove the bearing holder (3) and the ball bearing (2).

(When reassembling)

■ **NOTE**

- Since the length of the brake shaft (LH) and the brake shaft (RH) are different, don't exchange them.
- Install the brake disks with their holes (7) deviation at less than 1/3 of the total hole area.

- | | |
|--------------------|-----------------------|
| (1) Brake Shaft | (6) External Cir-clip |
| (2) Ball Bearing | (7) Hole |
| (3) Bearing Holder | (8) Brake Shaft (LH) |
| (4) Brake Disk | (9) Brake Shaft (RH) |
| (5) Brake Plate | |

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Brake Cam Plate and Brake Cam Lever

1. Remove the brake cam plate (1) and the balls (3).

(When reassembling)

- Apply grease to the balls (3).
- If O-ring (4) is defective, change it.
- Install the brake cam lever (3) to the brake cam plate (1) securely.
- Move the brake cam lever (3) by hand to check the movement. If the movement is heavy, refine the brake cam plate (1) with emery paper.

- | | |
|---------------------|-----------------|
| (1) Brake Cam Plate | (5) Brake Shaft |
| (2) Ball | |
| (3) Brake Cam Lever | |
| (4) O-ring | |

A : Portion to the Brake Cam Lever

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5. SERVICING



Brake Cam Lever Movement

1. Move the brake cam lever (1) by hand to check the movement.
2. If the movement is heavy, refine the brake cam with emery paper.

(1) Brake Cam Lever

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Cam Plate Flatness and Bearing Holder Wear

1. Place a straightedge of 150 mm (5.91 in.) or more in length on the contacting surface of the cam plate and the bearing holder.
2. Inspect the friction surface of the cam plate and the bearing holder with the straightedge, and determine if a 0.30 mm (0.0118 in.) feeler gauge will fit on the part of wear.
3. If it will fit, resurface the cam plate.

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Height of Cam Plate and Ball

1. Measure the height of the cam plate with the ball installed.
2. If the measurement is less than the allowable limit, replace the cam plate and balls.
3. Inspect the ball holes of cam plate for uneven wear.
4. If the uneven wear is found, replace it.

Height of cam plate and ball	Factory spec.	22.89 to 22.99 mm 0.9012 to 0.9051 in.
	Allowable limit	22.40 mm 0.8819 in.

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Brake Disc and Friction Plate Wear

1. Measure the brake disc thickness and the friction plate thickness with an outside micrometer.
2. If the thickness is less than the allowable limit, replace it.

Brake disc thickness	Factory spec.	3.3 to 3.5 mm 0.130 to 0.137 in.
	Allowable limit	3.0 mm 0.118 in.

Friction plate thickness	Factory spec.	1.92 to 2.08 mm 0.0756 to 0.0818 in.
	Allowable limit	1.52 mm 0.0598 in.

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