SECTION 4 BRAKE SYSTEM

GROUP 1 STRUCTURE AND FUNCTIONS

1. INTRODUCTION

There are two types of brake systems: Service brake and parking brake.

Pressing the service brake pedal generates hydraulic pressure in the master cylinder. This pressure lets the brake lever press the pressure pin to apply braking pressure on the disk carrier.

The parking brake lever operates with cable to make the pressure pin apply braking pressure on the disk carrier



2. SPECIFICATIONS

1) SERVICE BRAKE

ltem	Specifications	
Туре	Front-wheel mounted, dry disk mode	
Brake Oil	Dot 3	

2) PARKING BRAKE

Item	Dimensions	
Туре	Mechanical	
Parking lever stroke	48.3 deg.	

3. BRAKE PEDAL AND PIPING



- 1 Parking Brake Lever
- 3 Hose

- 4 Bracket
- 5 Brake Pedal
- 6 Brake Cylinder



- Bolt
 Washer-
- 2 Washer-Spring
- 3 Plug
- 4 Rod-Spring
- 5 Plate Assy
- 6 Pin
- 7 Rod-Parking
- 8 Brake Pad Assy
- 9 Gap Adjustment 18 Rod-Parking

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Pin

Pawl

Spring-Tension

Spring-Compress

Spring-Torsional

Washer-Spring

Ring-Retainer

Boss-Spring

- 19 Spring-Return
- 20 Spring Assy
- 21 Spring-Return
- 22 Block-Guide
- 23 Plate-Guide
- 24 Spring
- 25 Brake Pad & Pin Assy
- 26 Slave Pump
- Cable Assy RH/1650mm
 - ' Cable Assy LH/1200mm

GROUP 2 OPERATIONAL CHECKS AND TROUBLESHOOTING

Tro	uble	Cause	Corrective action
Brake	Brake drum	\cdot Space between brake pad assy	· Adjust
perform bad		and brake drum is too big	
	Oil leak	· Connector loose	·Tighten the connector, replace parts if
			required
	Air in system	· Air in system	· Fully bleed the system.
		· Connector loose	\cdot Tighten the connector, replace parts
			if required
No brake	Brake drum	\cdot Brake pad assy reach the limit of	·Replace
		life	
	Hub oil seal	\cdot Oil seal broken, oil flow into	\cdot Replace the oil seal and clean brake
		brake drum.	drum, replace parts if they cannot be
			cleaned.
	Slave Pump	\cdot Oil leak, oil flow into brake drum	\cdot Replace slave pump assy and clean
			brake drum, replace parts if they
			cannot be cleaned.
Always brake	Brake drum	\cdot Space between brake pad assy	· Adjust
		and brake drum is too small	

GROUP 3 TESTING AND ADJUSTMENT

1. BRAKE BLEEDING

Bleeding should be performed on brake system after filling brake oil.

- Unscrew (not remove) the nut in the plug, and connect a hose to put discharging fluid into a container.
- 2) Press brake pedal to apply pressure.
- Continue to loosen the nut until oil flows out while pressing brake pedal to bleed the brake oil.
- * Put discharged brake fluid into a container.
- * Do not spill brake fluid on the floor, or discharge it into drain.
- * Repeat this process until brake fluid shows no bubble.
- $\,\,\times\,\,$ Check the level of brake oil in the tank, and fill the brake oil, if required.
- 4) Once brake oil is discharged without indication of bubble, remove hose, fasten the plug, and install dust prevention cap on the plug.

2. BRAKE PEDAL

Adjust the height of pedal from the floor plate with a stopper bolt.

Pedal height: 90 mm





3. BRAKE SYSTEM

The brake system does not need maintenance, except after replacing the friction plate. Please adjust the braking system in the following order.

1) Brake Drum

Brake drum does not need to be adjusted unless the brake pad assy (8#) has been replaced. The distance between pad assy (8#) and plate assy (5#) should be 0.25-0.4mm.

Distance is too big:

- 1 Remove the rubber plug.
- ② Pull down the gap adjustment gear (9#) until the pawl (14#) slip.
- ③ Mount the rubber plug.

Distance is too small:

- ① Remove the rubber plug.
- ② Push the pawl (14#) away by a screwdriver
- ③ Pull up the gap adjustment gear (9#) until the distance is in range.
- ④ Mount the rubber plug.
- 2) Running-in

After changing the friction plate, it is necessary to run 500-800 circles in order to increase the contact area between the friction plate and brake drum.

There are two ways to run-in:

- When the front wheels are off the ground, press accelerator pedal and brake pedal at the same time. Repeat the process for a total of 2-3 minutes for one side.
- ② Repeat going frontward and backward. When the speed is at 15Km/h, press the brake pedal to slow down to 10~12Km/h and drive for 1-2 seconds. Then change the direction. Repeat the process for a total of 2-3 minutes.
- When there is only one brake drum is well-adjusted, jack this side and press accelerator pedal and brake pedal at the same.

A When running-in, pay attention to prevent accidental intrusion.

3) Parking Brake

There are two parking cables that control LH/RH.

Move the parking cable up or down to adjust parking brake force by adjusting two nuts at the same time.

A Make sure the brake system work properly before the truck is operated.



