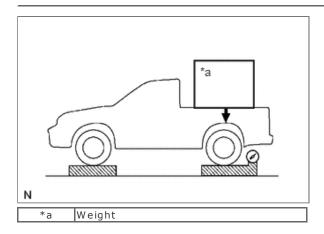
BRAKE SYSTEM (OTHER) LOAD SENSING PROPORTIONING VALVE ON-VEHICLE INSPECTION

PROCEDURE

■ 1.CHECK LOAD SENSING PROPORTIONING VALVE ASSEMBLY

47900



- a. Set the vehicle to its curb weight.
- b. Place weights (as necessary) on the rear deck until the rear axle load is as shown below.

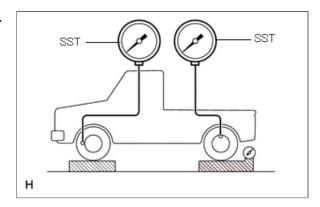
Standard Rear Axle Load:

Vehicle Type	Rear Brake	Specified Condition
GRJ71	Drum	12258 N (1250 kgf, 2755.8 lbf)
GRJ76		
HZJ71		
HZJ76		
GRJ78	Drum	14710 N (1500 kgf, 3306.9 lbf)
HZJ71	Disc	11278 N (1150 kgf, 2535.9 lbf)
GRJ76	Disc	12750 N (1300
HZJ76		kgf, 2866.3 lbf)
VDJ76	Drum	12258 N (1250 kgf, 2755.8 lbf)
	Disc	12750 N (1300 kgf, 2866.3 lbf)
GRJ79	Drum/Disc	14710 N (1500 kgf, 3306.9 lbf)
HZJ78		
HZJ79		
VDJ78	Drum/Disc	14710 N (1500 kgf, 3306.9 lbf)
VDJ79	Drum/Disc	14710 N (1500 kgf, 3306.9 lbf)

NOTICE:

- Be sure that the vehicle is on a level surface before starting the procedure.
- · When placing the weights on the vehicle, first place the weights so that the total is approximately 60 kg (132 lb) more than the specification. Then remove weights as necessary to adjust the load.

c.

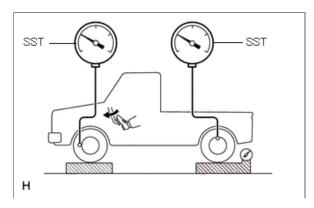


Install SST and bleed air from the brake system.

SS1

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Raise the front brake fluid pressure to 9000 kPa (91.8 kgf/cm^2 , 1305 psi) by depressing the brake pedal, and measure the rear brake fluid pressure.

Standard Rear Brake Fluid Pressure:

randara Rear Brake Flata Fressarer			
Rear Brake	Specified Condition		
Drum	5082 to 6258 kPa (51.9 to 63.8 kgf/cm2, 737 to 907 psi)		
Disc	7502 to 8678 kPa (76.5 to 88.4 kgf/cm2, 1088 to 1258 psi)		

HINT:

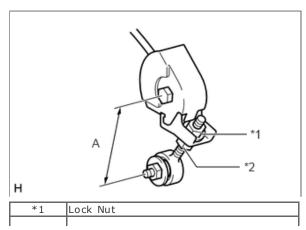
The pedal should not be depressed twice or released while the specified pressure is being set. Read the value of the rear pressure after adjusting and holding the specified fluid pressure for 2 seconds.

If necessary, adjust the load sensing proportioning valve.

2.ADJUST LOAD SENSING PROPORTIONING VALVE ASSEMBLY

47900





Adjust the length of the No. 2 load sensing spring shackle. Loosen the lock nut, and then adjust the length of the No. 2 shackle. When the rear brake fluid pressure is below the standard pressure, lengthen length A. When the rear brake fluid pressure is higher than the standard pressure, shorten length A. Standard Initial Length (A):

78 mm (3.07 in.)

Standard Length (A) after Adjustment:

72 to 84 mm (2.84 to 3.30 in.)

HINT:

The rear fluid pressure changes according to the table below by turning the adjusting nut.

Standard Rear Brake Fluid Pressure:

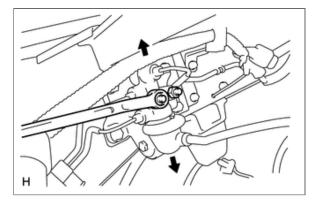
Standard Rear Brake Fluid Pressure:				
Model	Rear Brake	For 1 Turn of Lock Nut		
GRJ71	Drum	187 kPa (1.9 kgf/cm2, 27 psi)		
HZJ71				
HZJ76				
HZJ71	Diag	239 kPa (2.4		
HZJ76	Disc	kgf/cm2, 35 psi)		
GRJ76	Drum	187 kPa (1.9 kgf/cm2, 27 psi)		
	Disc	239 kPa (2.4 kgf/cm2, 35 psi)		
GRJ79	Drum	187 kPa (1.9 kgf/cm2, 27 psi)		
	Disc	239 kPa (2.4 kgf/cm2, 35 psi)		
VDJ76	Drum	187 kPa (1.9 kgf/cm2, 27 psi)		
	Disc	239 kPa (2.4 kgf/cm2, 35 psi)		
GRJ78		187 kPa (1.9 kgf/cm2, 27 psi)		
HZJ78	Drum			
HZJ79				
HZJ78	Disc	239 kPa (2.4		
HZJ79	Disc	kgf/cm2, 35 psi)		
VDJ78	Drum	187 kPa (1.9 kgf/cm2, 27 psi)		
	Disc	239 kPa (2.4 kgf/cm2, 35 psi)		
VDJ79	Drum	187 kPa (1.9 kgf/cm2, 27 psi)		
	Disc	239 kPa (2.4 kgf/cm2, 35 psi)		

b. Tighten the adjusting nut and lock nut.

Torque:

24.5 N*m (250 kgf*cm, 18 ft.*lbf)

c.



If the pressure cannot be adjusted by the No. 2 shackle, raise or lower the valve body. When the pressure is below the standard pressure, lower the load sensing valve assembly. When the pressure is higher than the standard pressure, raise the load sensing valve assembly.

d. Tighten the 2 nuts.

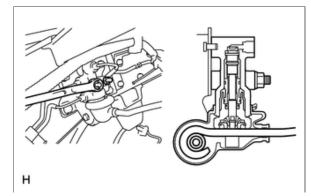
Torque:

12.5 N*m (127 kgf*cm, 9 ft.*lbf)

e. Adjust the length of the No. 2 shackle again. If the rear fluid pressure cannot be adjusted, check the valve body.

■ 3.CHECK VALVE BODY

a.



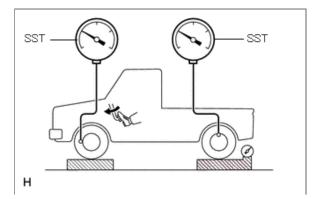
Install the valve body in the uppermost position.

HINT:

When the brakes are applied, the position will move down by approximately 0.8 mm (0.0315 in.). Even at this time, the piston should not make contact with or move the load sensing spring.

If the result is not as specified, replace the load sensing valve assembly.

b.



Using SST, check the rear brake pressure.

SST

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Standard Pressure:

Rear Brake	Front Brake Pressure	Rear Brake Pressure
Drum	981 kPa (10.0 kgf/cm2, 142 psi)	981 kPa (10.0 kgf/cm2, 142 psi)
	4903 kPa (50.0 kgf/cm2, 711 psi)	1569 to 2354 kPa (16.0 to 24.0 kgf/cm2, 228 to 341 psi)
	9807 kPa (100.0 kgf/cm2, 1422 psi)	2697 to 3677 kPa (27.5 to 37.5 kgf/cm2, 391 to 533 psi)
Disc	1961 kPa (20.0 kgf/cm2, 284 psi)	1961 kPa (20.0 kgf/cm2, 284 psi)
	4903 kPa (50.0 kgf/cm2, 711 psi)	2452 to 3236 kPa (25.0 to 33.0 kgf/cm2, 356 to 469 psi)
	9807 kPa (100.0 kgf/cm2, 1422 psi)	3825 to 4805 kPa (39.0 to 49.0 kgf/cm2, 555 to 696 psi)

If the result is not as specified, replace the load sensing proportioning valve.

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