



JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS D 0107 : 2011

(JSAE)

**Road vehicles—Braking equipments—
Vocabulary**

ICS 01.040.43;43.040.40

Reference number : JIS D 0107 : 2011 (E)

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Date of Establishment: 1975-03-01

Date of Revision: 2011-01-20

Date of Public Notice in Official Gazette: 2011-01-20

Investigated by: Japanese Industrial Standards Committee
Standards Board

JIS D 0107:2011, First English edition published in 2013-05

Translated and published by: Japanese Standards Association
4-1-24, Akasaka, Minato-ku, Tokyo, 107-8440 JAPAN

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Printed in Japan

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Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by Society of Automotive Engineers of Japan, Inc. (JSAE) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently **JIS D 0107:2005** is replaced with this Standard.

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Road vehicles—Brake equipments— Vocabulary

Introduction

This Japanese Industrial Standard was established in 1975 and has gone through 3 revisions to this day. The last revision was made in 2005, and it has been revised of corresponding to the addition of a new term according to progress of subsequent technology.

Further, no international standard corresponding to this Standard has been established at this point.

1 Scope

This Standard specifies the glossary of terms relating to braking equipment to be used for automobiles.

NOTE : This Standard does not specify terms relating to braking equipment to be used for other than automobiles.

2 Classification

The Classification of terms used in this Standard shall be as follows.

a) Regular brake

- 1) Brake pedal unit
- 2) Actuation
 - 2.1) Brake master cylinder
 - 2.2) Brake booster
 - 2.3) Air brake valve
 - 2.4) Air over hydraulic booster
- 3) Foundation
 - 3.1) Disc brake
 - 3.2) Drum brake
- 4) Power source
- 5) Piping
 - 5.1) Piping for hydraulic brake
 - 5.2) Piping for air brake
- 6) Mechanical control valve
 - 6.1) Hydraulic control valve
 - 6.2) Air control valve

6.3) Combination vehicle air brake connecting valve

7) Brake alarming device

NOTE : “Actuation” is a classification of terms regarding devices which get an output in proportion to an input, and “foundation” is a classification of terms regarding wheel brake-related devices which convert the output from “actuation” devices into braking force.

b) **Auxiliary brake**

1) Type utilizing the internal resistance of the engine

2) Type utilizing rotating resistance

c) **Parking brake**

d) **Brake lock**

e) **Automatic control device**

1) ABS

2) Brake assist system

3) Electronic braking system

4) Electronic stability control

5) EVSC

6) Hill stopper

3 Terms and definitions

The following terms and definitions apply.

NOTE 1 When there are definitions in two or more classifications for a term, or when a definition in a specific classification is presented, the term is shown by “—” in parentheses “()” in the column of terms.

NOTE 2 Corresponding customary terms and English equivalents are shown here for reference.

NOTE 3 All drawings shown here are for explanation of the concept and represent a single example.

a) **Regular brake**

1) **Brake pedal unit**

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
11101	ブレーキペダル装置	BURÊKI PEDARU SÔTI	a unit for a driver to operate with foot for braking (see figure 1)		brake pedal unit

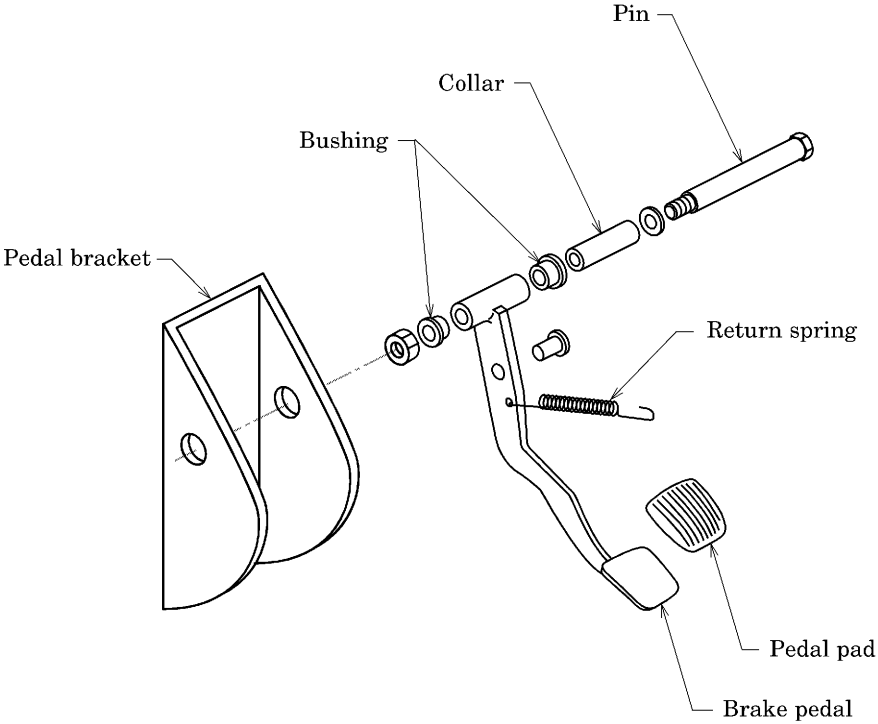


Figure 1 Brake pedal unit

2) **Actuation**2.1) **Brake master cylinder**

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
12101	ブレーキマスdashiリンダ	BURÊKI MASUTA SIRINDA	a component part to convert the force applied to the brake pedal to hydraulic pressure via mechanism	SYUBURÊKI SIRINDA	brake master cylinder
12102	プライマリカップ	PURAIMARI KAPPU	rubber seal to generate hydraulic pressure owing to action of piston		primary cup
12103	セカンダリカップ	SEKANDARI KAPPU	rubber seal mounted to a piston to prevent the leakage of brake liquid to outside		secondary cup
12104	ダイアフラムガスケット	DAIAHURAMU GASUKETTO	a diaphragm to shield the reservoir inside from atmosphere	MOISUTYA SÎRU	diaphragm gasket
12105	リリーフポート	RIRÎHU PÔTO	port for releasing hydraulic pressure		compensating port
12106	インレットバルブ (ブレーキマスdashiリンダの—)	INRETTO BARUBU (BURÊKI MASUTA SIRINDA NO —)	a valve to open and close the gangway to reservoir by actuation of piston	SENTA BARUBU	inlet valve
12107	タンデムマスdashiリンダ (コンベンショナル—コンベンショナル形)	TANDEMU MASUTA SIRINDA (KONBENSYONARU-KONBENSYONARU GATA)	a brake master cylinder composed of two hydraulic chambers having no valve structure, for the purpose of applying hydraulic pressure to a dual brake system (see figure 2)	SUPURITTO MASUTA SIRINDA	tandem brake master cylinder
12108	プライマリピストン	PURAIMARI PISUTON	a piston at push rod side		primary piston
12109	セカンダリピストン	SEKANDARI PISUTON	a piston located at tip side of cylinder		secondary piston
12110	プレッシャカップ	PURESSYA KAPPU	rubber seal which is mounted to the secondary piston to retain hydraulic pressure at primary piston side or that of both hydraulic chambers		pressure cup

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
12111	リザーバゲロメット	RIZÂBA GUROMETTO	a seal mounted to a cylinder body to retain reservoir and prevent brake fluid from leaking to outside	RIZÂBA SÎRU	reservoir seal, grommet
12112	タンデムマスタシリ ンダ（ポートレス ーポートレス形）	TANDEMU MASUTA SIRINDA (PÔTORESU- PÔTORESU GATA)	a brake master cylinder composed of two hydraulic chambers having valve structure, for the purpose of applying hydraulic pressure to a dual brake system (see figure 3)		tandem brake master cylinder
12113	タンデムマスタシリ ンダ（プランジャ ープランジャ形）	TANDEMU MASUTA SIRINDA (PURANZYA- PURANZYA GATA)	a brake master cylinder consisting of two pistons that slide along the bore diameter of the primary cup for the purpose of applying hydraulic pressure to a dual brake system (see figure 4 and figure 7)	MINIMASUTA	mini master cylinder
12114	スペーサ	SUPÊSA	parts to prevent the damage of cup due to hydraulic pressure	KAPPU PUROTEKUTA	spacer
12115	プッシュロッド（ブ レーキマスタシリ ンダのー）	PUSSYU RODDO (BURÊKI MASUTA SIRINDA NO —)	a rod to transmit the force from the brake pedal to a piston		push rod
12116	フローティングカッ プ	HURÔTINGU KAPPU	a cup mounted to the secondary piston that prevents liquid from moving from the atmosphere chamber to the primary side pressure chamber	HURÎ KAPPU	floating cup

2.2) Brake booster

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
12201	サーボユニット	SÂBO YUNITTO	a generic term of a device to reduce man power by negative pressure or compressed air in a brake	BÛSUTA, BAIRYOKU SÔTI, MASUTÂ BAKKU	servo unit
12202	ダイレクトアクティ ングバキュームサ ーボ	DAIREKUTO AKUTINGU BAKYÛMU SÂBO	a component part to increase man power applied to brake pedal by using negative pressure (see figure 5 and figure 7)	BÛSUTA, SÂBO	direct acting vacuum servo
12203	プッシュロッド (ブ レーキブースタの ー)	PUSSYU RODDO (BURÊKI BÛSUTA NO —)	a rod to transmit the increased force to brake master cylinder		push rod
12204	リアクションディス ク	RIAKUSYON DESUKU	a part to control the servo force corresponding to man power by receiving man power and servo force		reaction disc
12205	コントロールバルブ (ブレーキブースタ のー)	KONTORÔRU BARUBU (BURÊKI BÛSUTA NO —)	a valve to control flowing-in of negative pressure and atmosphere air		control valve
12206	バルブプランジャ	BARUBU PURANZYA	a part to control negative pressure by receiving reaction force corresponding to the tread force	EA BARUBU	valve plunger
12207	パワーダイアフラム	PAWÂ DAIAHURAMU	a part to generate force by difference of negative pressure and atmosphere		diaphragm
12208	ベアリング	BEARINGU	a bearing to guide the power piston		bearing
12209	タンデムダイレクト アクティングバキ ュームサーボ	TANDEMU DAIREKUTO AKUTINGU BAKYÛMU SÂBO	a component part to increase the man force applied to the pedal by utilizing negative pressure to two power pistons (see figure 6)	TANDEMU BÛSUTA, TANDEMU SÂBO	tandem direct acting vacuum servo
12210	センタプレート	SENTA PURÊTO	a wall plate to partition two power piston chambers		centre plate

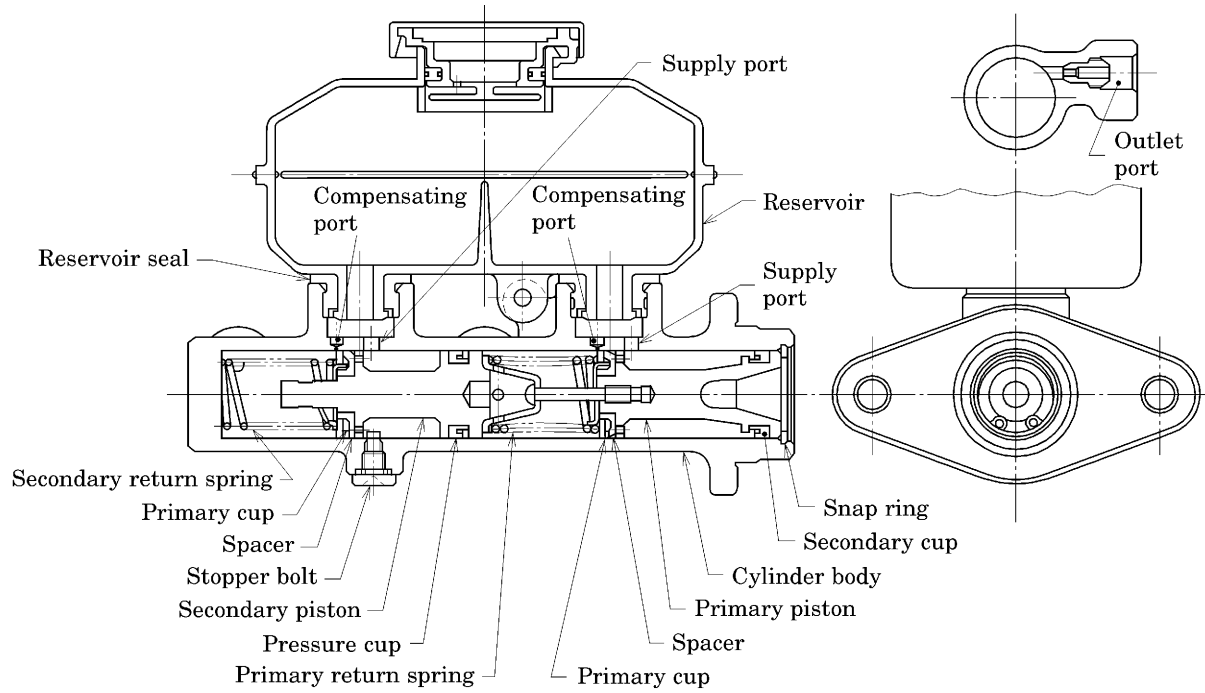


Figure 2 Tandem brake master cylinder (conventional-conventional style)

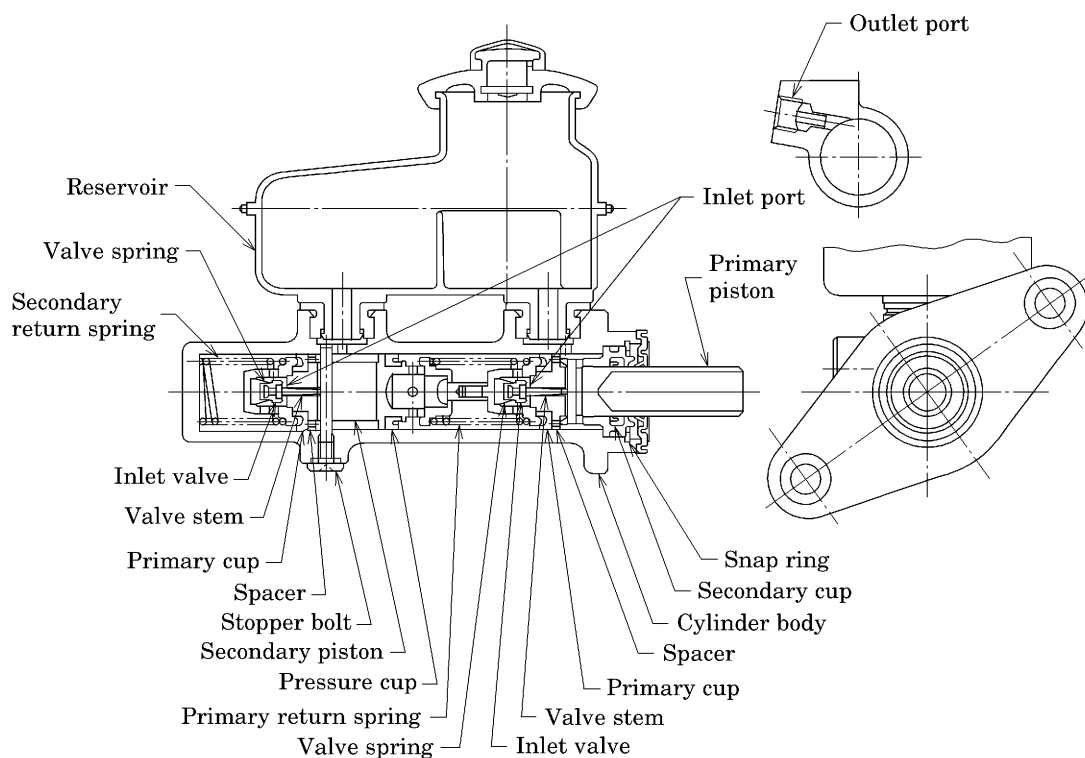


Figure 3 Tandem brake master cylinder (portless-portless style)

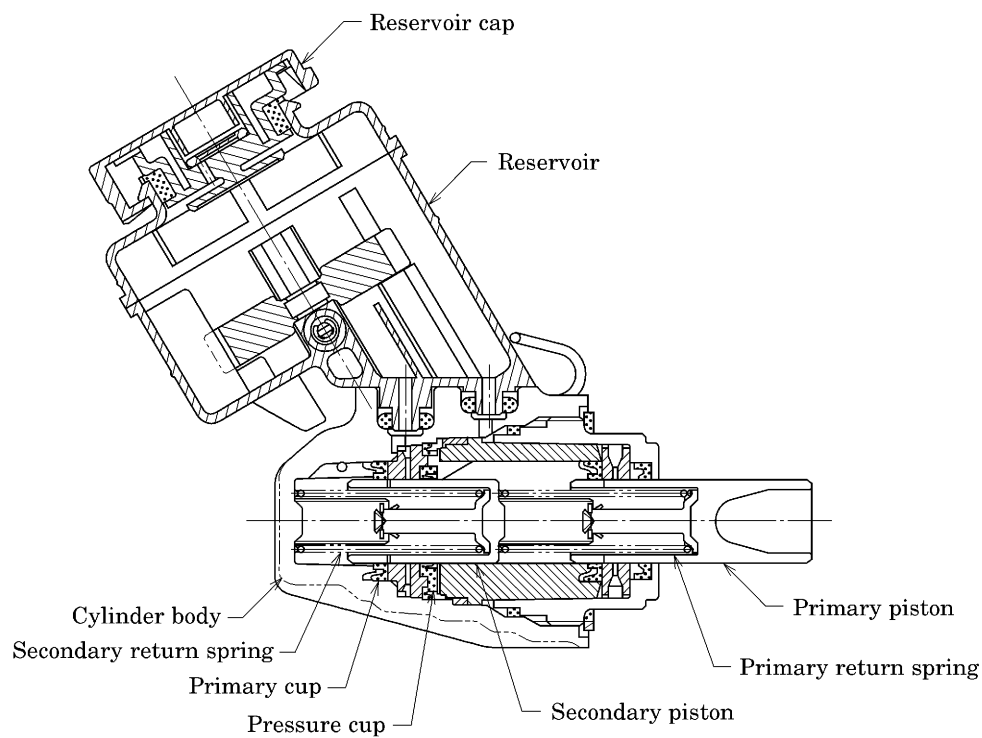


Figure 4 Mini master cylinder

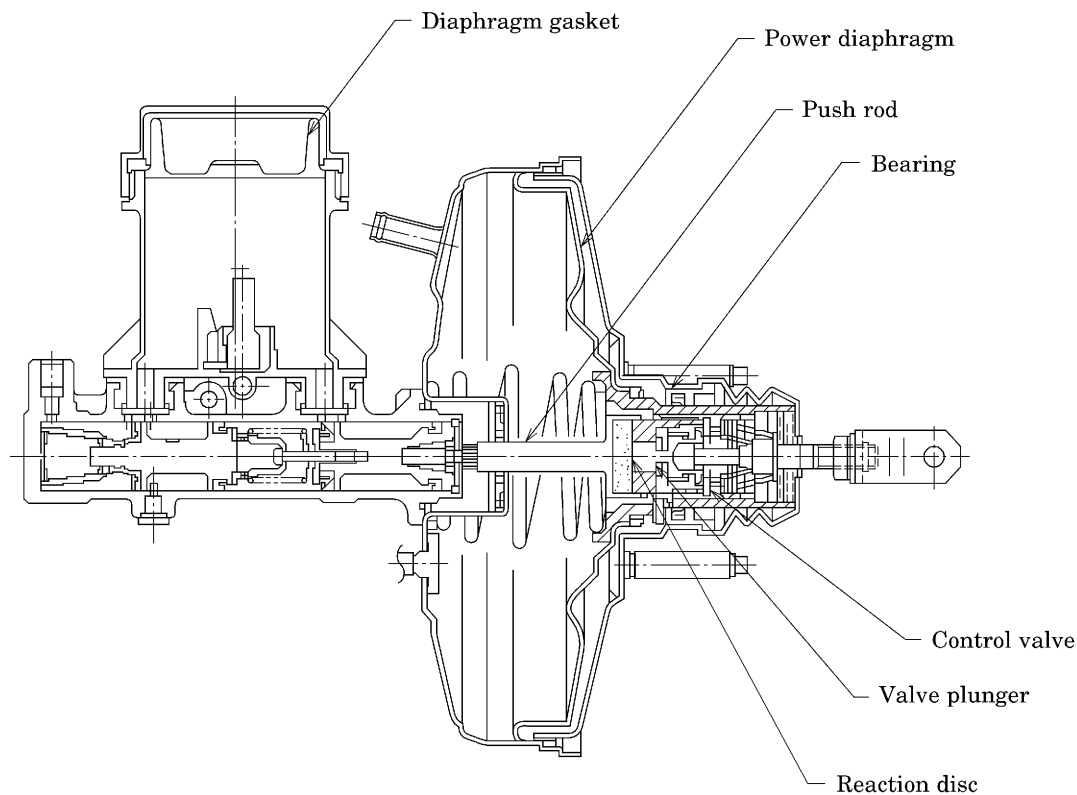


Figure 5 Direct acting vacuum servo

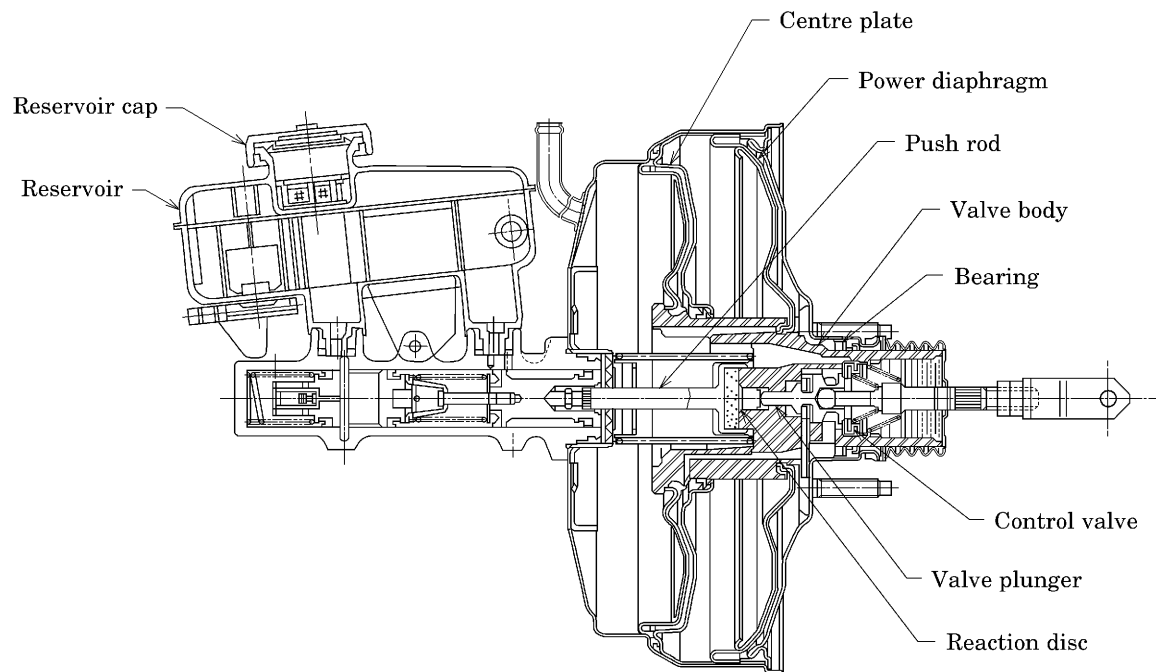


Figure 6 Tandem direct acting vacuum servo

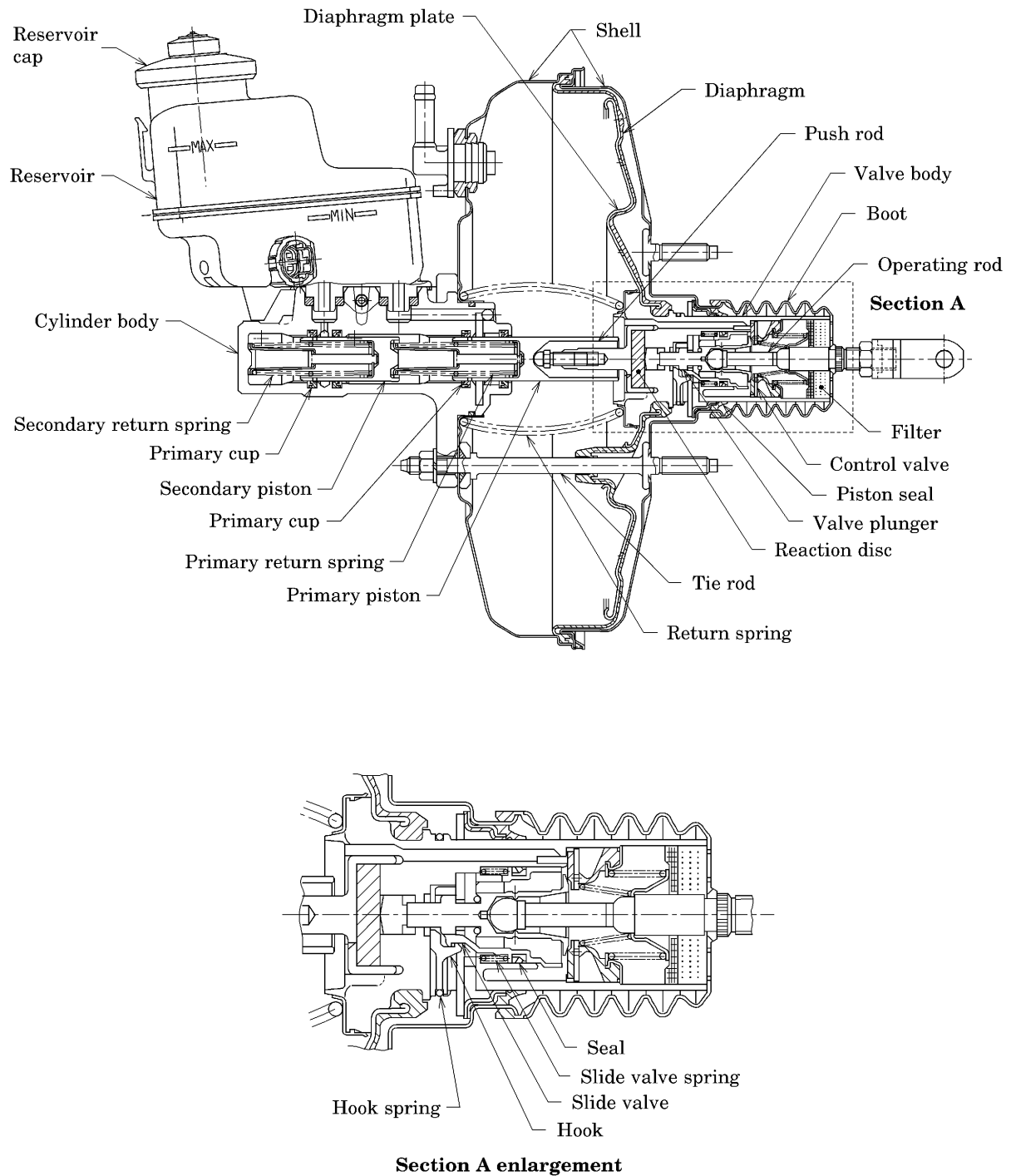


**Figure 7 Mini master cylinder and direct acting vacuum servo
(with BAS function)**

2.3) Air brake valve

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
12301	メインエアバルブ	MEIN EA BARUBU	a valve to be main for air brake system		main air valve
12302	エアブレーキバルブ	EA BURÊKI BARUBU	a valve to control air pressure by treading the brake pedal	BURÊKI BARUBU	air brake valve
12303	プランジャ	PURANZYA	a part to transmit the movement of pedal to the piston		plunger
12304	ピストン（エアブレーキバルブの－）	PISUTON (EA BURÊKI BARUBU NO —)	a part which actuates by a plunger and opens and closes the feed valve		piston
12305	フィードバルブ	HÎDO BARUBU	a valve to feed air pressure or to exhaust air by treading or releasing the brake pedal		feed valve
12306	デュアルエアブレーキバルブ	DYUARU EA BURÊKI BARUBU	a valve to control the air pressure of respectively independent two series by treading the brake pedal (see figure 8)		dual air brake valve
12307	アップフィードバルブ	APPA HÎDO BARUBU	a valve to feed or exhaust air pressure to upper-side outlet by treading or releasing the brake pedal		upper feed valve
12308	リレーピストン（エアブレーキバルブの－）	RIRÊ PISUTON (EA BURÊKI BARUBU NO —)	a piston to open and to close the lower feed valve by upper-side exhaust pressure		relay piston
12309	ロアーフィードバルブ	ROÂ HÎDO BARUBU	a valve to feed or exhaust the air pressure to lower-side outlet by treading or releasing the brake pedal		lower feed valve

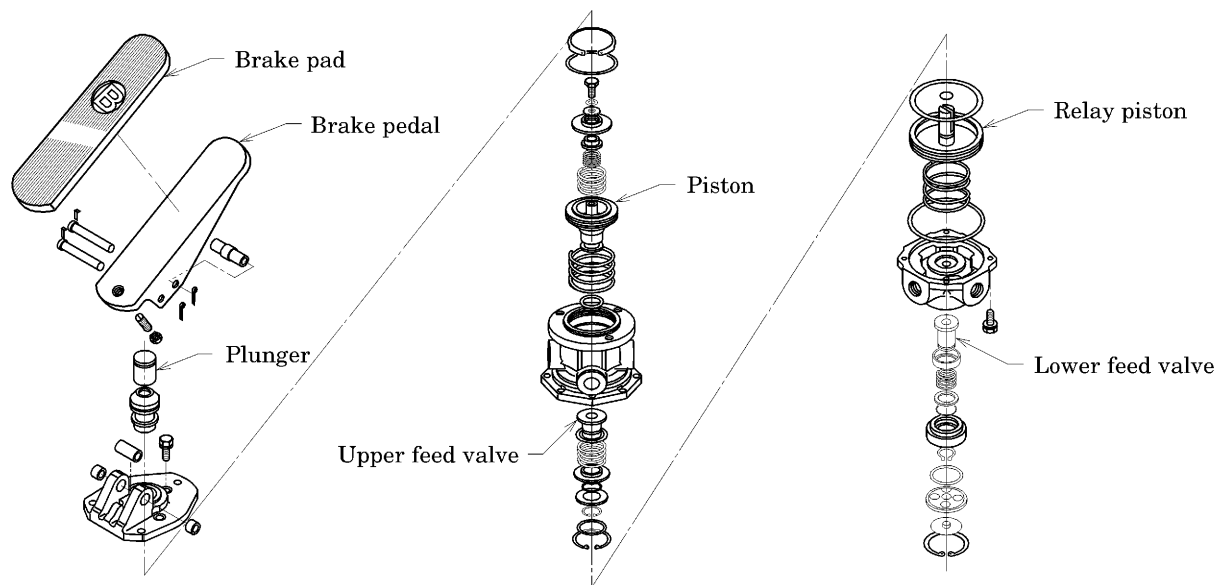


Figure 8 Dual air brake valve

2.4) Air over hydraulic booster

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
12401	エアオーバハイドロ リックブースタ	EA ÔBA HAIDORORIKKU BÛSUTA	a component part to increase braking hydraulic pressure corresponding to exhaust air pressure of air brake valve (see figure 9)	EA MASUTA	air over hydraulic intensifier, air over hydraulic booster

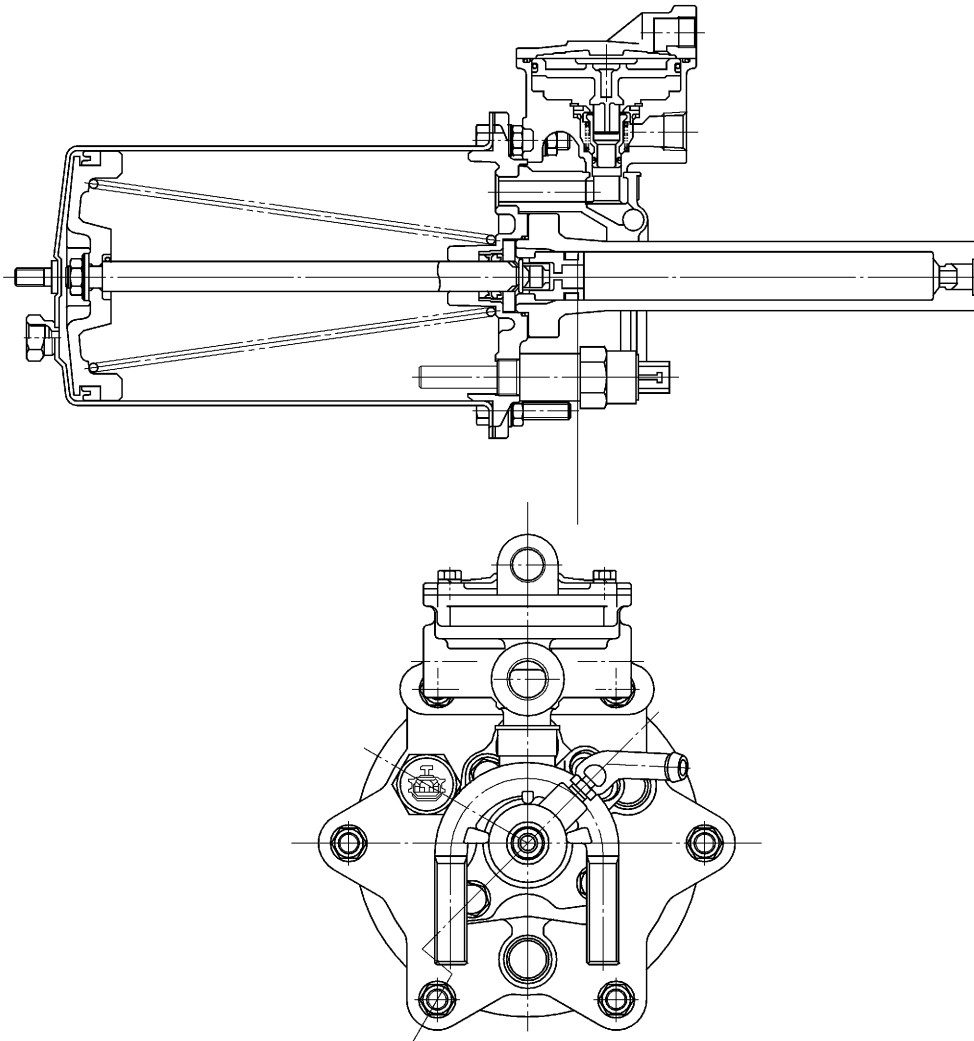


Figure 9 Air over hydraulic booster

3) Foundation

3.1) Disc brake

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
13101	ディスクブレーキ	DISUKU BURÊKI	a friction brake to brake by pressing brake lining to both surfaces of disc (see JIS D 0106)		disc brake
13102	ディスク	DISUKU	a round disc part to which the brake shoe is pressed to cause braking actuation NOTE: Solid type (see figure 10) and ventilated type (see figure 11) are available.	RÔTA	disc, disk
13103	キャリパアッセンブリ	KYARIPA ASSENBURI	a part having the function to press the brake lining to both surfaces of disc NOTE: Hydraulic type and air type are available. Floating caliper assembly (see figure 12) and opposed-piston caliper assembly (see figure 13) belong to hydraulic type. Caliper assembly with a parking brake function (see figure 65) is also available.		caliper assembly
13104	キャリパプレート	KYARIPA PURÊTO	a part to transmit pressurizing force to the pad at counter side of cylinder by floating caliper	YÔKU	caliper plate, yoke
13105	マウンティングブラケット	MAUNTINGU BURAKETTO	a part attached to car body to support the cylinder body and pad	MAUNTINGU SAPÔTO, TORUKU MENBA, TORUKU BURAKETTO, KYARIA	mounting bracket, torque plate, anchor plate, carrier
13106	パッド	PADDO	a brake lining to generate braking force by pressing the disc		pad

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
13107	スブラッシュガード	SUPURASSYU GÂDO	a part to prevent muddy water and the like from intruding into disc brake	DISUKU KABÂ, DASUTO KABÂ, DASUTO SÎRUDO	splash guard, splash shield, dust shield
13108	オペレーティングレバー	OPERÊTINGU REBÂ	a lever to transmit the force from parking control to pad	HANDO BURÊKI REBÂ, PÂKINGU REBÂ	operating lever
13109	アジャスタ (ディスクブレーキの—)	AZYASUTA (DISUKU BURÊKI NO —)	a part to retain the position of operating lever at constant against wearing of pad		adjuster
13110	スライドピン	SURAI DO PIN	a part to support cylinder body on mounting bracket and to slide it		slide pin bolt
13111	パッドピン	PADDO PIN	a part to support pad to the caliper which allows sliding		pad pin
13112	アンチラトルスプリング	ANTI RATORU SUPURINGU	a part to prevent rattling noise of the pad caused by vibration under the spring		spring
13113	ベンチレーテッドディスク	BENTIRÊTEDDO DISUKU	a disc provided with cavities to improve the cooling function (see figure 11)		ventilated disc, vented disc
13114	パワーチャンバ	PAWÂ TYANBA	a device to let the brake work by converting the air pressure to a mechanical force		power chamber
13115	ブレーキチャンバ	BURÊKI TYANBA	a component part to actuate the brake by pushing the push rod with a force corresponding to the pressure which the diaphragm or piston receives when air flow-in (see figure 16)		brake chamber

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
13116	スプリングブレーキ チャンバ	SUPURINGU BURÊKI TYANBA	a component part which, though the spring brake is pressed by compressed air and usually does not actuate, if the brake system is fractured or air pressure is lowered, actuates braking work automatically by means of the force of built-in spring and otherwise can actuate manually (see figure 67)		spring brake chamber

NOTE : A typical structure of the disk brake for air is shown in figure 14 and figure 15.

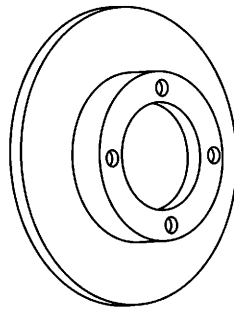


Figure 10 Solid disc

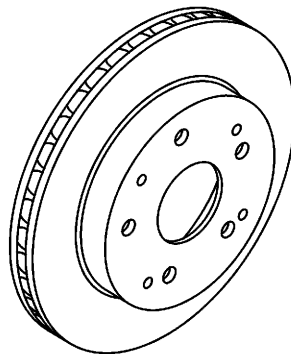


Figure 11 Ventilated disc

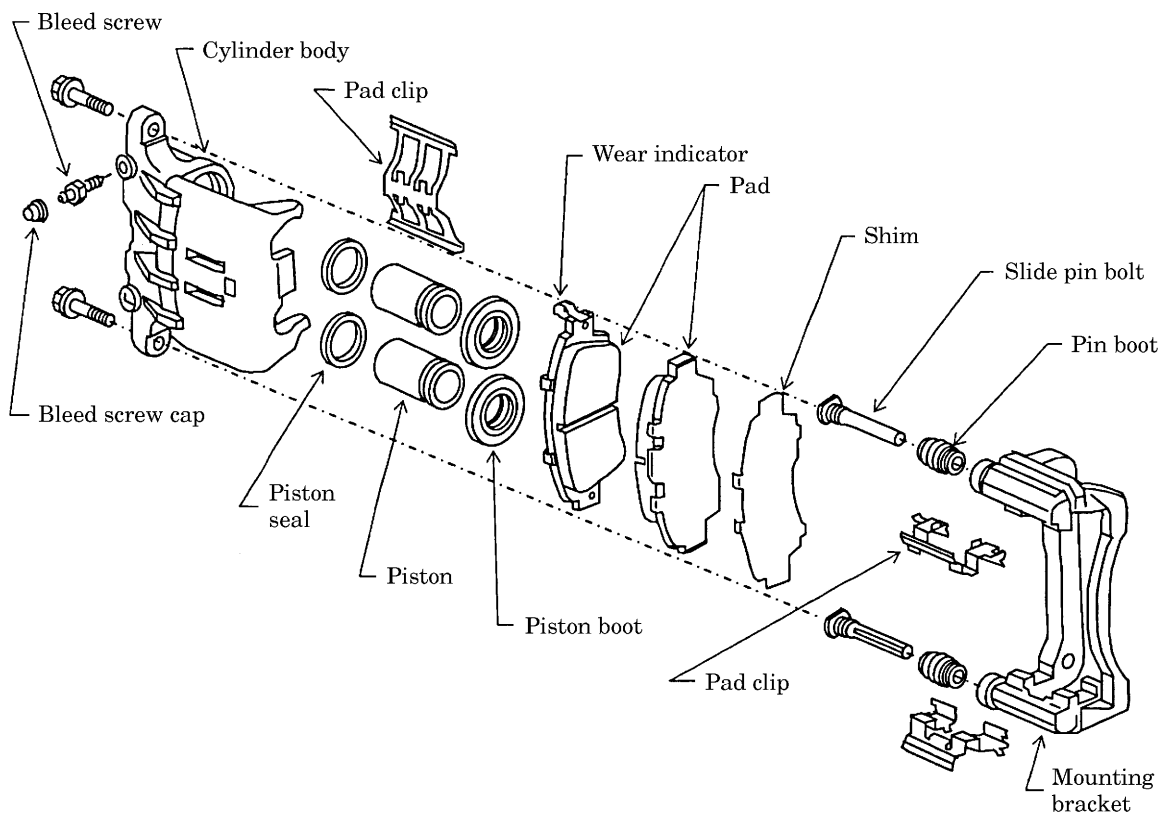


Figure 12 Floating caliper

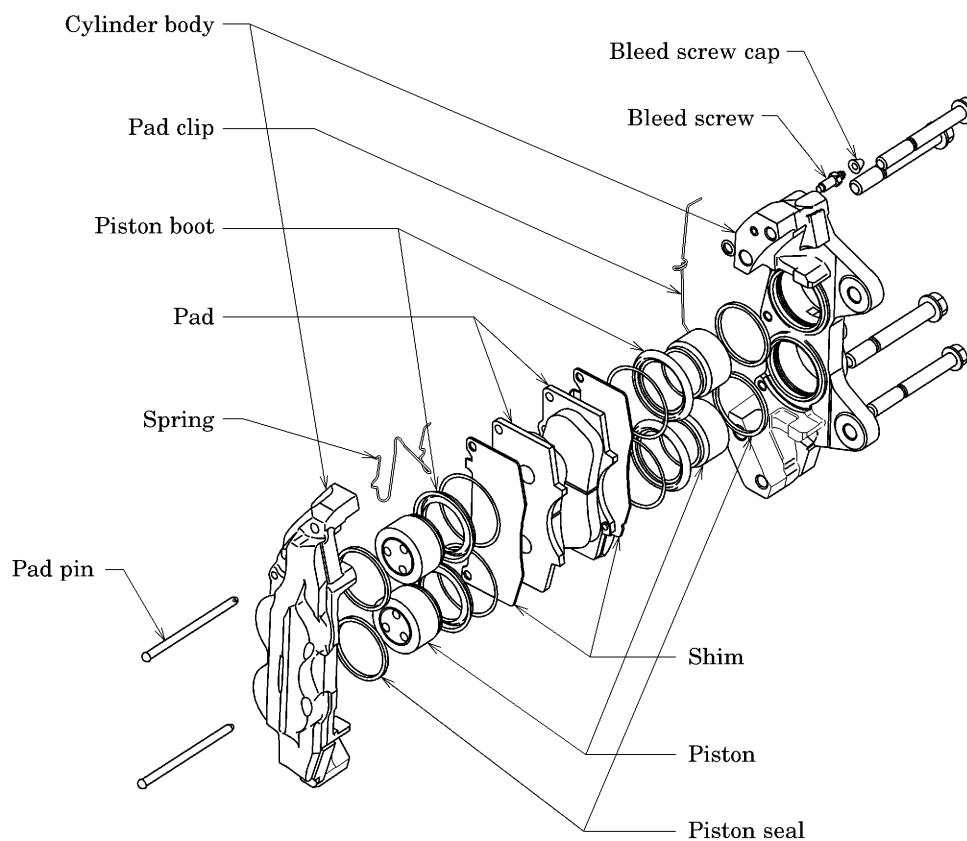


Figure 13 Opposed piston caliper

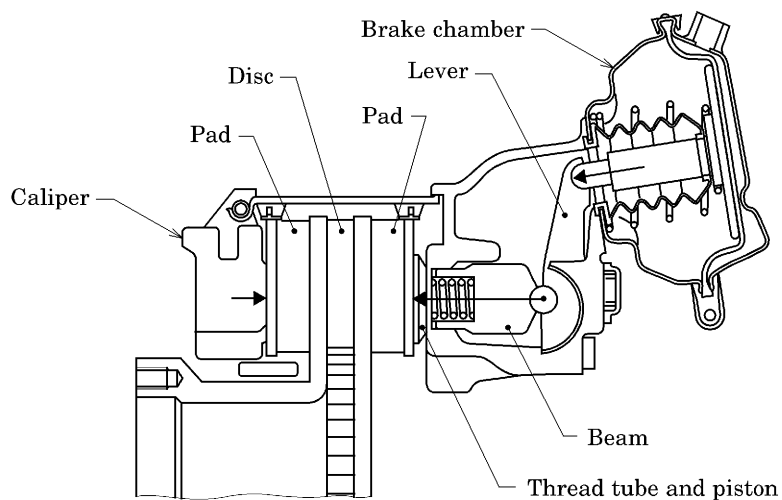


Figure 14 Disc brake for air

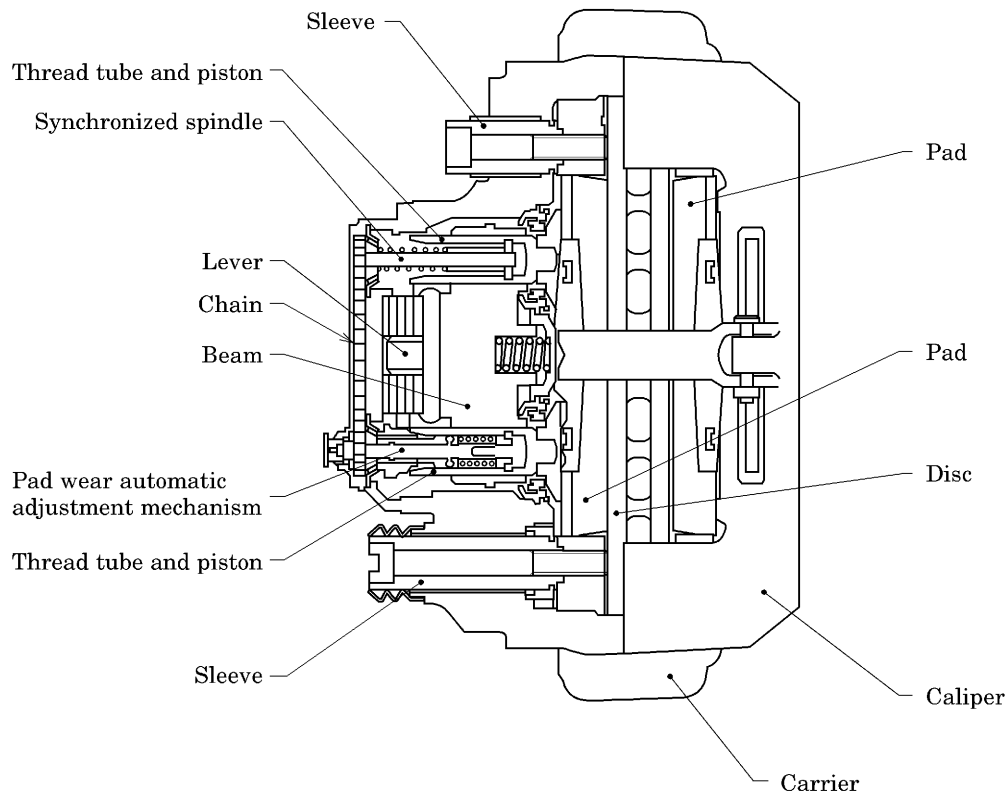


Figure 15 Caliper assembly for air

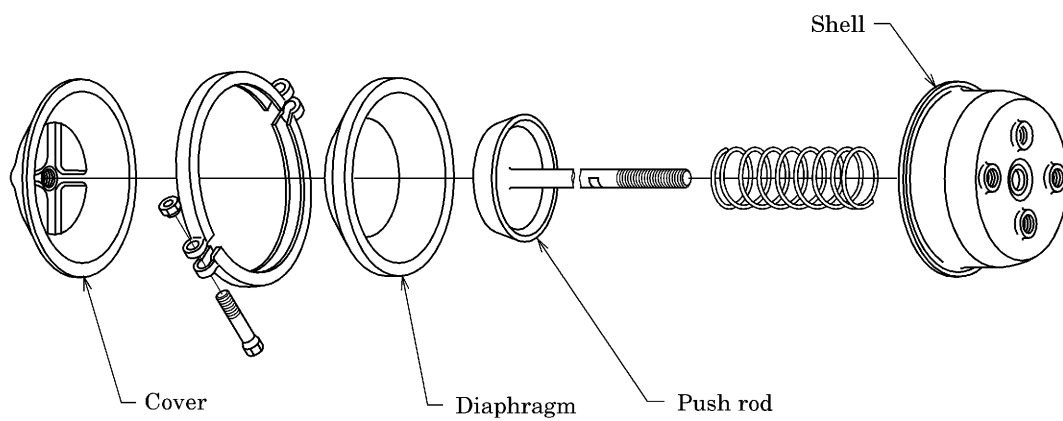


Figure 16 Brake chamber

3.2) Drum brake

No.	Term (Japanese character)	Reading	Definition	Reference	
				Customary terms	English equivalent
13201	ドラムブレーキ	DORAMU BURÊKI	a friction brake to brake with pressing brake lining to internal or external surface of drum (see JIS D 0106)		drum brake
13202	ドラム	DORAMU	a cylindrical part by which brake shoe is pressed to cause braking actuation (see figure 17)		drum
13203	ドラムブレーキアッセンブリ	DORAMU BURÊKI ASSEMBURI	a component part having a function to press the brake lining to inner or outer surface of drum NOTE: Drum brake assembly for hydraulic brake (see figure 18) and one for air brake are available. The drum brake assembly for air brake has S-cam type (see figure 19) and wedge type (see figure 20).		drum brake assembly
13204	エキスパンダアッセンブリ	EKISUPANDA ASSEMBURI	a component part to convert to force to expand brake shoe by receiving air pressure generated in a brake chamber or force generated in a spring brake chamber (see figure 21)		expander assembly
13205	ダストカバー	DASUTO KABÂ	a part to prevent intrusion of muddy water and the like into the drum brake		dust cover
13206	ブレーキシュー	BURÊKI SYÛ	a part to retain brake lining		brake shoe
13207	ブレーキライニング	BURÛKI RAININGU	a friction material to generate braking force by being pressed to drum		brake lining
13208	ブレーキシューアッセンブリ	BURÊKI SYÛ ASSEMBURI	a part composed of brake shoe and brake lining		brake shoe assembly
13209	アジャスタ (ドラムブレーキのー)	AZYASUTA (DORAMU BURÊKI NO —)	a part to adjust the clearance between the lining and the drum against wearing of brake lining		adjuster