



Hydraulic Brakes

Hydraulic Brake Components

Applications from ³/₄ ton through medium duty trucks. Catalog #205

Brake & Wheel Products

This catalog (**Catalog 205** - Hydraulic Brake Components) contains component drawing and photo reference information. The information is applicable to vehicle model years up to 2002. *Additional References:*

Catalog 203 Supplement (May, 2002) for application model years 1991 to 2001 Catalog 203 (August, 1997) for application model years 1997 to 1990. Catalog 204 (February, 1998) for application model years 1989 and earlier.

Products and Function:

Brake Master Cylinder: This device stores the reservoir of brake fluid, which is the life blood of the hydraulic system, and the cylinder initiates the braking force *(hydraulic pressure)* required to bring the vehicle to a safe stop.

Wheel Cylinder: These devices (*1 to 4 per wheel*) receive the brake fluid and resultant pressure to move the brake shoes into contact with the brake drum to begin, along with the resulting friction, the process of stopping the vehicle.

Brake Hoses: These devices are the vessels that move the brake fluid from the master cylinder to the various hydraulic devices that require the fluid to opperate.

Master and Wheel Cylinder Kits: These kits contain the necessary components required to rebuild these cylinders and to return them to a like-new condition.

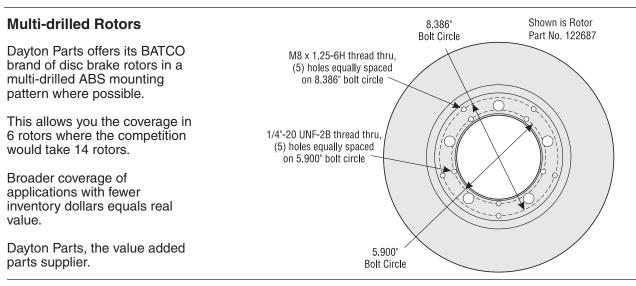
Clutch Master Cylinder: This cylinder, like the brake master cylinder, is the device that controls clutch operation in a manual transmission equipped vehicle.

Clutch Slave Cylinder: This cylinder works in tandem with the clutch master cylinder to control the operation of the clutch.

Clutch Master and Slave Cylinder Kits: These kits are used to rebuild the clutch cylinders. They contain the necessary components to return them to like-new operating condition.

Hydraulic Parts, as well as **Brake Hardware**, are often overlooked at brake replacement time. Leaks go undetected, wear patterns on brake linings are not properly *"read"*, which leads to a less than satisfactory brake service, and often the wrong component is *"blamed"* for a failure.

By taking the extra time to examine all the parts in the brake system, come-backs can be minimized or even eliminated. With proper care having been taken initially and a *"complete brake service"* being performed, a much safer vehicle is returned to the road, as well as a more satisfied customer who will enjoy getting longer life and less down time.



The names and reference numbers of manufacturers and suppliers, other than Dayton Parts, Inc., used in this catalog are shown only to assist our customers in identifying parts. Under no circumstances does Dayton Parts, Inc. Imply that the parts are of these OE manufacturers. Although care has been taken to ensure the accuracy of the data contained in this publication, Dayton Parts, Inc. does not assume any liability for errors or omissions.

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Hydraulic Brakes

Table of Contents Disc Pad Materials Abbreviations

Table of Contents

Hydraulic Disk Brakes	Wheel Cylinders
Pads Outline Drawings2-7	Photos
Calipers	Drums Dimensional Charts
Exploded View Drawings	Master Cylinders - Brakes
Photos	Photos
Rotors Light Duty48-51	Hydraulic Clutch Cylinders
Medium Duty	Master & Slave Cylinders
Hydraulic Drum Brakes	Brake Hoses97-98
-	Splined Hubs
Shoes	Photos
Outline Drawings54-55	Specifications101-111
Strip Lining	
	4x4 Locking Hubs112
Hydraulic Drum Brake Systems	
Exploded View Drawings	Numercal Listing113-116

Disc Pad Friction Materials

In today's medium duty truck market, most trucks are coming out with four-wheel disc brakes. Disc brakes are more efficient than drum brakes but they do generate more heat. All the more reason to be sure you select the proper grade of friction material for your particular application. That's way Dayton Parts offers three different grades of friction material on our disc brake pads. Here is a brief description of our three different grades.

Carbon Tech (CT suffix) - Our flagship disc pad, very versatile. Carbon based material is more stable and consistent as the brake temperature rises than the traditional semi-metallic pads. Carbon Tech has good progressive characteristics as the pedal pressure rises without being harsh on the rotors.

Ceramic (RH suffix) - Very similar to our Carbon Tech line. Ceramic disc pads can take more heat than carbon based material and still retain their characteristics. Being able to withstand more heat allows ceramic pads to last longer without wearing out your rotors.

Semi-Metallic (HD suffix) - A great traditional semi-metallic pad. As the heat rises, this pad becomes more aggressive and the brass chips become "stickier". This pad is excellent for applications where "panic stops" are the norm such as ambulances, fire trucks, wreckers, etc.

So, no matter what your application, Dayton Parts has the right disc brake pad for you.

Abbreviations and Symbols

"Inch(es) °Degree(s) 2wdTwo Wheel Drive 4wdFour Wheel Drive AAluminum (Piston) ABSBolt Circle	HR Integral Hub & Rotor ID Inside Diameter, Identification K Thousand of Pounds Ibs Pounds LH Left Hand mm Millimeter na, n/a Not Available, Non Applicable	PNPart Number RHRight Hand RHRotor, "Hat" shape RORotor Only RURotor, "U" shape SSteel (Steel) SRWSingle Rear Wheel
cbCounter Bored CylCylinder	noNumber	w/with
DiaDiameter	ODOutside Diameter OSOver Sized	w/owithout
DRWDual Rear Wheel	PPhenolic (Piston)	



1

Disc Brake Pads

Hydraulic Disc Brakes

Pads are listed by Part Number

Part N	umber	Width	Thickness	Page Number	
D50	Inner	6.21	0.224		
	Outer	7.2	0.164	4	
D52	Inner	7.22	0.194	_	
	Outer	7.77	0.135	5	
D120		7.56	0.21	5	
D149	Inner	7.2	0.256		
	Outer	8.12	0.194	4	
D153	Inner	183.3 (7.22)	5.6 (0.22)	r.	
	Outer	197.4 (7.77)	3.3 (0.13)	5	
D154	Inner	148.6 (5.85)	4.9 (0.193)	0	
	Outer	123.5 (4.86)	3.3 (0.13)	3	
D155	Inner	8.4	0.284	C	
	Outer	10.54	0.194	6	
D171	Inner	11.4	0.3	7	
	Outer	12.24	0.3	7	
D224		213.5 (8.4)	6.4 (0.25)	6	
D225	Inner	205 (8.07)	6.7 (0.265)	F	
	Outer	270 (10.62)	5.3 (0.209)	5	
D236		9	0.25	6	
D249	Inner	160 (6.3)	5.3 (0.209)	4	
	Outer	172 (6.77)	5.3 (0.209)	4	
D267	Inner	230 (9.05)	6.35 (0.25)	C	
	Outer	230 (9.05)	6.35 (0.25)	6	
D268	Inner	296 (11.65)	7.9 (0.311)	7	
	Outer	296 (11.65)	6.35 (0.25)	1	
D269	Inner	6.5	0.224	4	
	Outer	6.98	0.165	4	
D327		209 (8.23)	6 (0.236)	5	
D360	Inner	157.5 (6.2)	5.7 (0.224)	4	
	Outer	182.9 (7.2)	4.2 (0.165)	4	
D369	Inner	125 (4.92)	4.9 (0.193)		
		Note: 76 (2.99) h	gh	3	
	Outer	147.3 (5.8)	4.9 (0.193)		
D370	Inner	125 (4.92)	5.6 (0.22)		
		Note: 84.7 (3.33) high		3	
	Outer	147.3 (5.8)	4.9 (0.193)		
D375	Inner	157.5 (6.2)	5.7 (0.224)		
	Outer	182.9 (7.2)	4.2 (0.165)	4	
D379		209 (8.23)	6.1 (0.24)	6	

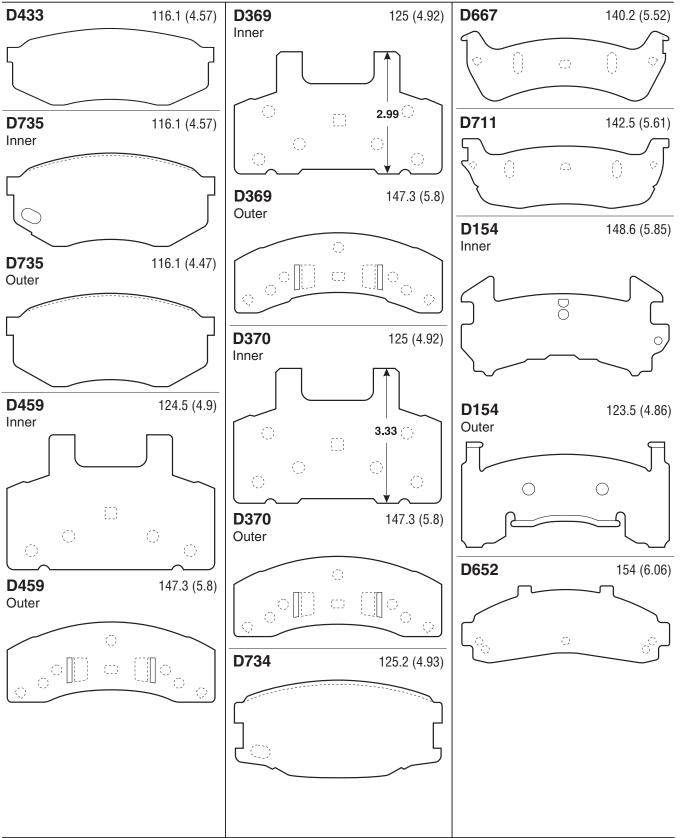
Part N	umber	Width	Thickness	Page Number	
D380	Inner	8.07	0.265		
	Outer	10.06	0.195	5	
D411	Inner	220 (8.66)	5.5 (0.217)		
	Outer	235.4 (9.27)	5.5 (0.217)	6	
D433		116.1 (4.57)	5.6 (0.22)	3	
D450		192 (7.56)	5.3 (0.209)	5	
D459	Inner	124.5 (4.9)	5.6 (0.22)	0	
	Outer	147.3 (5.8)	5.9 (0.232)	3	
D557	Inner	238 (9.37)	5.3 (0.209)	0	
	Outer	238 (9.37)	5.3 (0.209)	6	
D591	Inner	165.1 (6.5)	5.3 (0.209)	4	
	Outer	165.1 (6.5)	4.7 (0.185)	4	
D632	Inner	194 (7.64)	6.5 (0.256)	5	
	Outer	194 (7.64)	6.5 (0.256)	5	
D646		177 (6.97)	6.1 (0.24)	4	
D652		154 (6.06)	6.4 (0.252)	3	
D655		220.2 (8.67)	6.2 (0.244)	6	
D667		140.2 (5.52)	5 (0.197)	3	
D675	Inner	183.2 (7.21)	7.9 (0.311)	5	
	Outer	238.2 (9.38)	8.1 (0.319)	5	
D679		166 (6.54)	6.1 (0.24)	4	
D702		188.5 (7.42)	6.1 (0.24)	5	
D711		142.5 (5.61)	5.1 (0.201)	3	
D734		125.2 (4.93)	5.6 (0.22)	3	
D735	Inner	116.1 (4.57)	5.6 (0.22)	3	
	Outer	116.1 (4.47)	5.6 (0.22)	0	
D756		193.3 (7.61)	6.1 (0.24)	5	
D757		158.8 (6.25)	5.7 (0.224)	4	
D769		240 (9.45)	6.6 (0.26)	6	
D777		222 (8.74)	6.1 (0.24)	6	
D784		216.2 (8.51)	6.6 (0.26)	6	
D785		177 (6.97)	5.8 (0.288)	4	
D786		244 (9.61)	7.9 (0.311)	6	
D802		188.5 (7.42)	6.2 (0.244)	5	
D821		220.2 (8.67)	6.2 (0.244)	6	
D825		206.2 (8.12)	7.1 (0.28)	5	
		Note: 51.3 (2.02)	high	5	
D826		206.2 (8.12)	7.1 (0.28)	5	
		Note: 59.2 (2.33)	high		
D827		210.3 (8.28)	7.1 (0.28)	6	

Hydraulic Disc Brakes

2

Disc Brake Pad Illustrations

Pads are listed by the overall width of the steel backing plate.



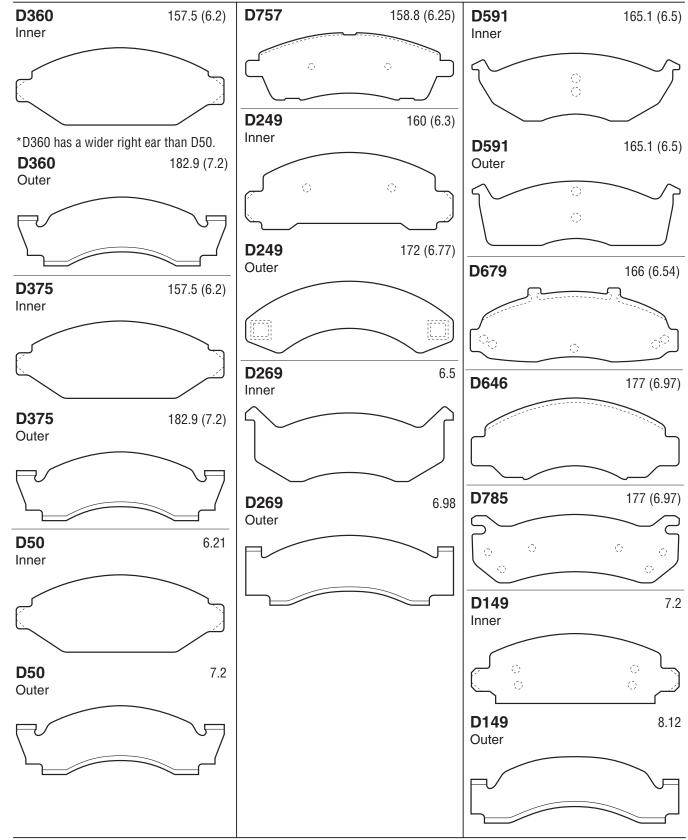
Hydraulic Disc Brakes

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Disc Brake Pad Illustrations

Pads are listed by the overall width of the steel backing plate.



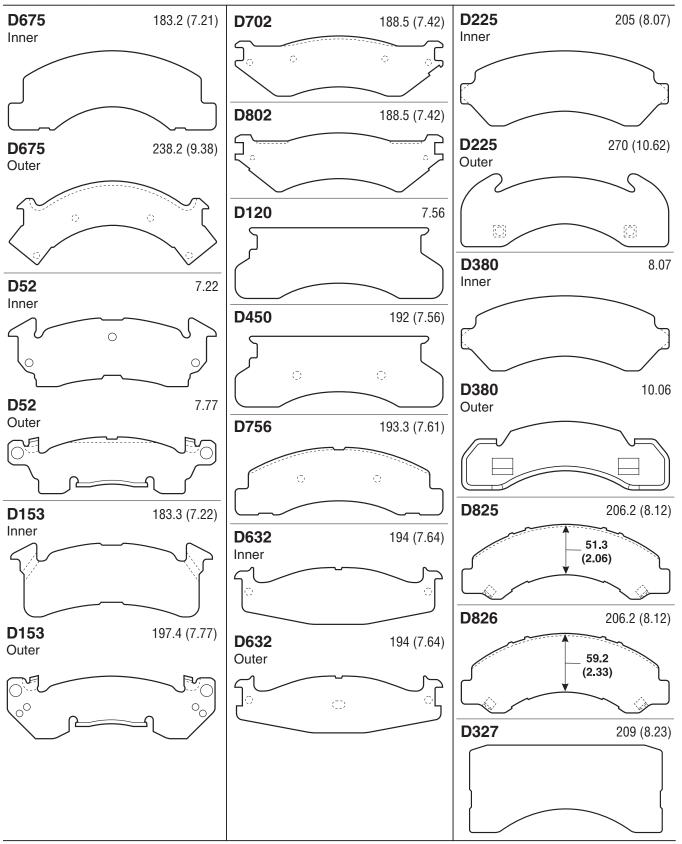
Hydraulic Disc Brakes

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Disc Brake Pad Illustrations

Pads are listed by the overall width of the steel backing plate.



Hydraulic Disc Brakes

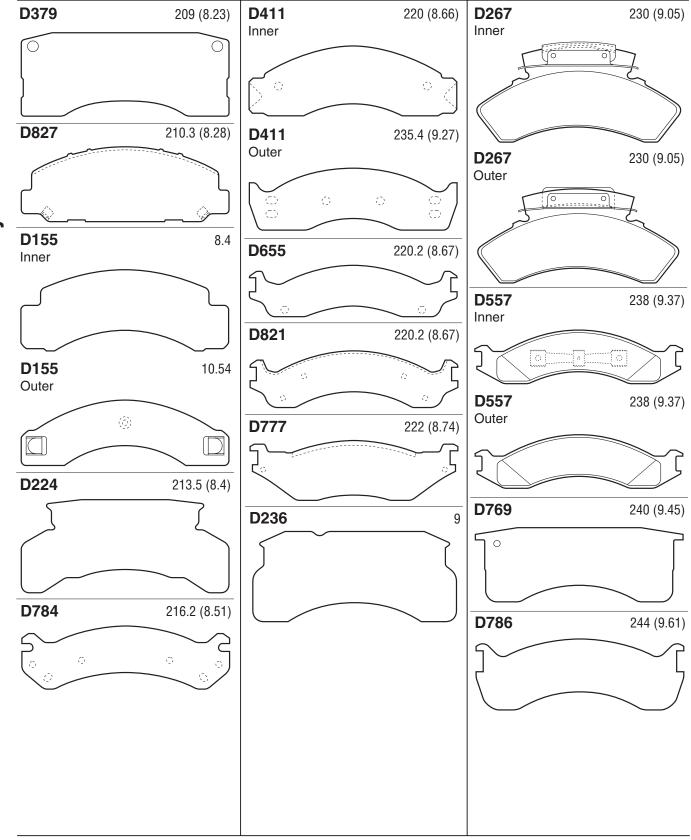
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Disc Brake Pad Illustrations

Pads are listed by the overall width of the steel backing plate.



Hydraulic Disc Brakes

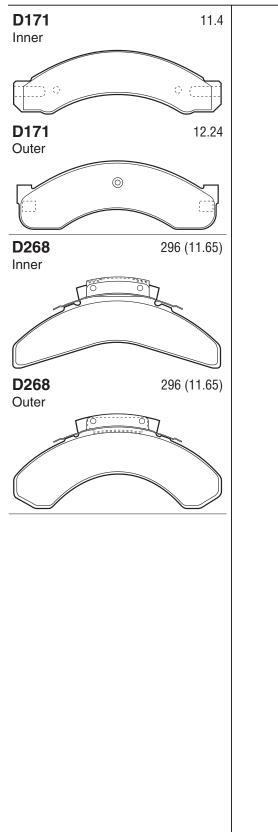
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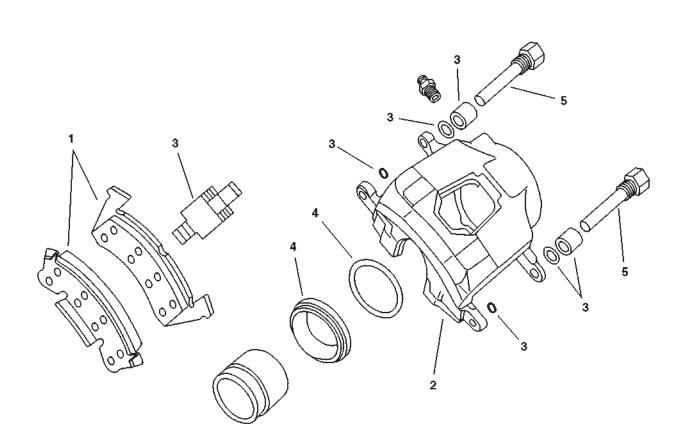
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Disc Brake Pad Illustrations

Pads are listed by the overall width of the steel backing plate.

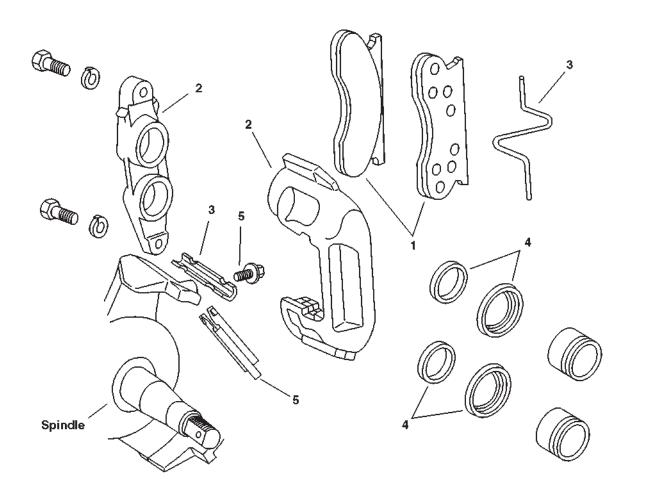






Key Number	Part Number	Description	Number Required	Remarks
1	D52	Disc Pad Set	1	
2	600-216	Caliper	1	LH
	600-217	Caliper	1	RH
3	CH5500	Hardware Kit	1	
4	C41009	Seal Kit	2	
5	CH5004	Guide Bolt	4	

Not Serviced by Dayton Parts

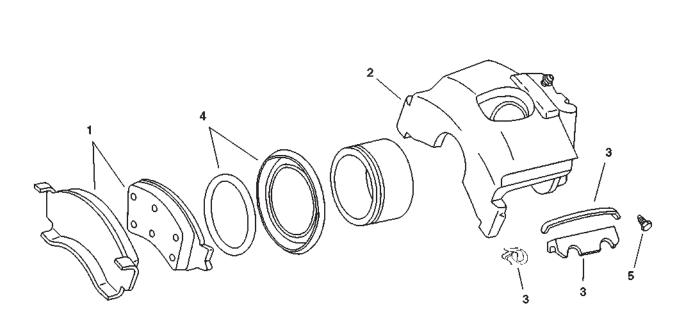


Note: Non-Keyed Items are not serviced by Dayton Parts, Inc.

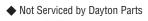
Key Number	Part Number	Description	Number Required	Remarks
1	D120	Disc Pad Set	1	
2	•	Caliper	2	
3	CH5584	Hardware Kit	1	
4	C41065	Seal Kit	2	
5	CH5030	Retaining Bolt	4	

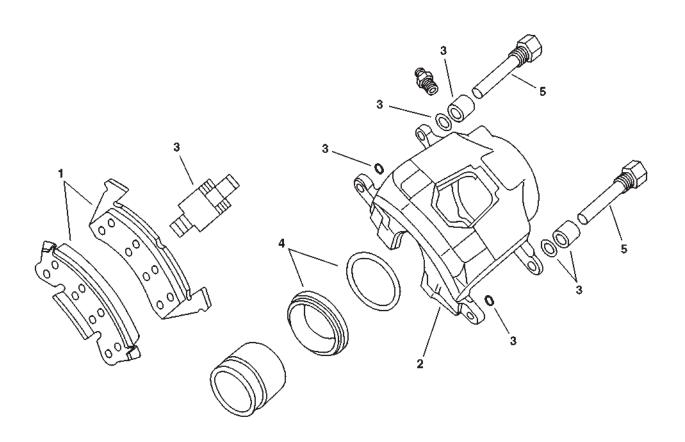
9

D149 - GM (Bendix) 1 x 3.37"



Key Number	Part Number	Description	Number Required	Remarks
1	D149	Disc Pad Set	1	
2	600-230	Caliper	1	LH
	600-231	Caliper	1	RH
3	CH5529	Hardware Kit	1	
4	C41049	Seal Kit	2	
5	CH5010	Retaining Bolt	4	

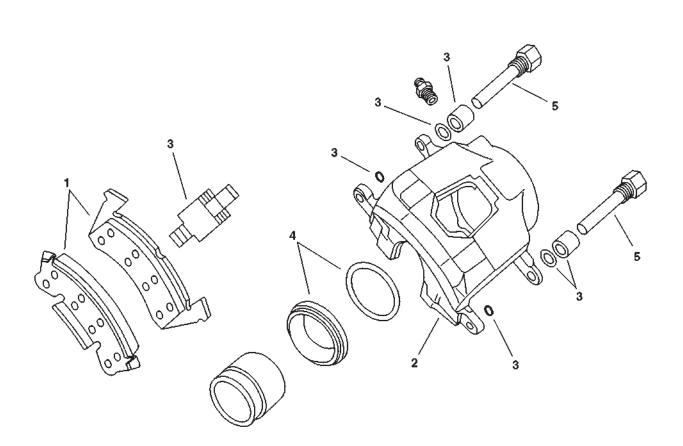




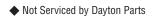
Note: Non-Keyed Items are not serviced by Dayton Parts, Inc.

Key Number	Part Number	Description	Number Required	Remarks
1	D153	Disc Pad Set	1	
2	600-233	Caliper	1	RH
	600-232	Caliper	1	LH
3	CH5539	Hardware Kit	1	
4	C41094	Seal Kit	2	
5	CH5004	Guide Bolt	4	

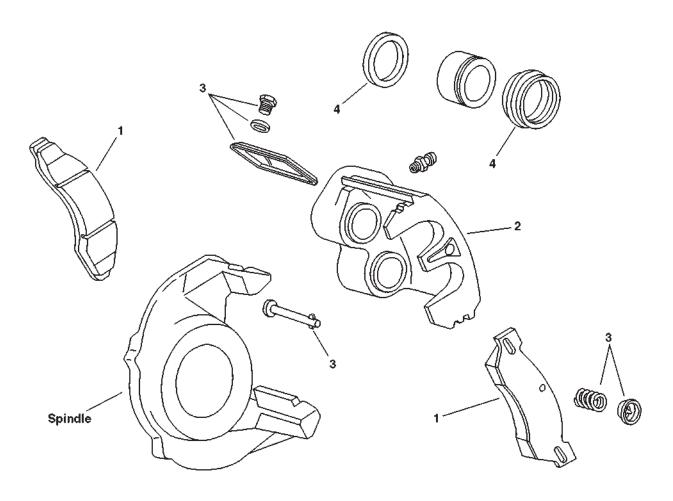




Key Number	Part Number	Description	Number Required	Remarks
1	D154	Disc Pad Set	1	
2	•	Caliper	2	
3	•	Hardware Kit	1	
4	•	Seal Kit	2	
5	CH5004	Guide Bolt	4	



D171 - Mack (Kelsey) 2 x 3.63" (air over hydraulic)

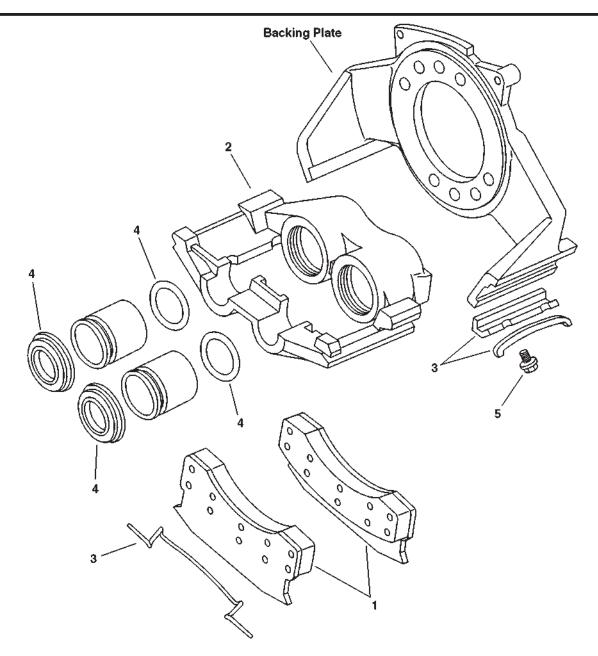


Key Number	Part Number	Description	Number Required	Remarks
1	D171	Disc Pad Set	1	
2	•	Caliper	2	
3	CH5502	Hardware Kit	1	
4	C41002	Seal Kit	2	



D224 - Ford/GM (Dayton) 2 x 2.50"

Hydraulic Disc Brakes



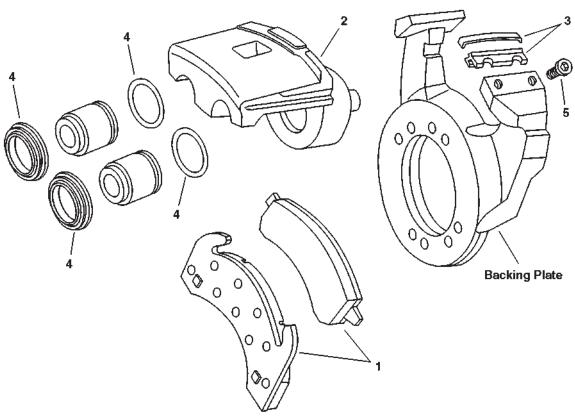
Note: Non-Keyed Items are not serviced by Dayton Parts, Inc.

Key Number	Part Number	Description	Number Required	Remarks
1	D224	Disc Pad Set	1	
2	600-905F	Caliper	2	
3	CH5594	Hardware Kit	1	
4	C41114	Seal Kit	2	
5	CH5037	Retaining Bolt	4	

Not Serviced by Dayton Parts

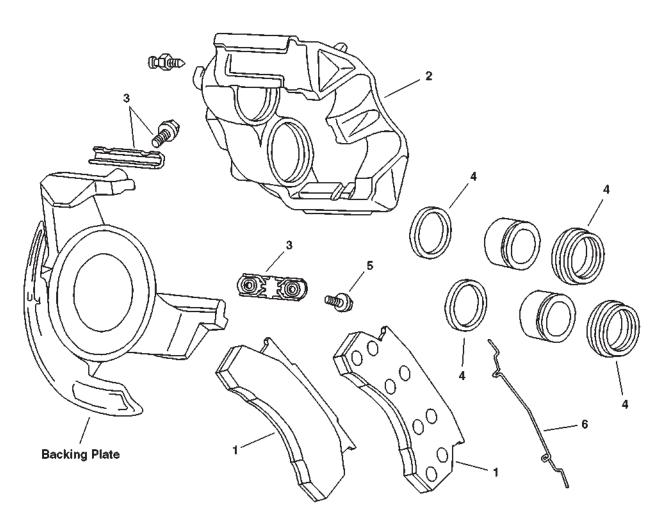
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D225 - GM/Navistar (Bendix) 2 x 2.88"



Key Number	Part Number	Description	Number Required	Remarks
1	D225	Disc Pad Set	1	
2	600-904	Caliper	2	
3	CH5522	Hardware Kit	1	
4	60050179	Seal Kit	2	to 1987
	60050183	Seal Kit	2	after 1987
5	CH5010	Retaining Bolt	4	

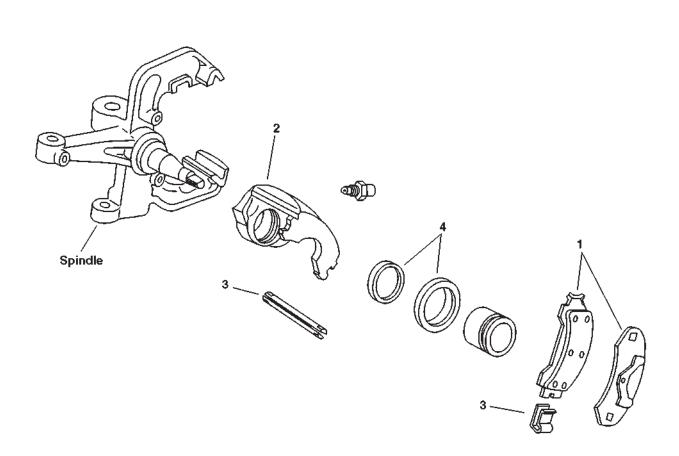




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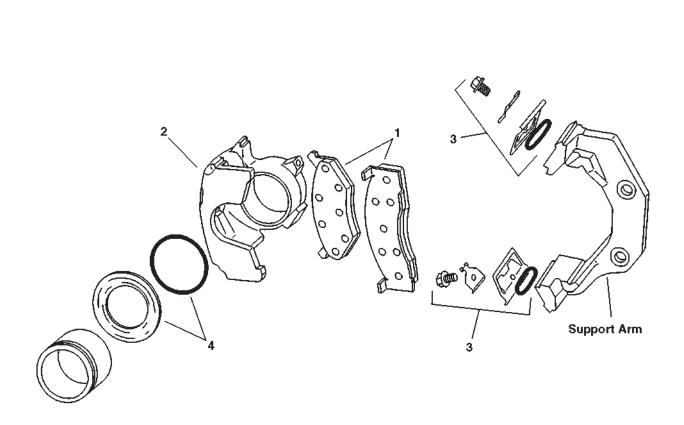
Key Number	Part Number	Description	Number Required	Remarks
1	D236	Disc Pad Set	1	
2	600-908	Caliper	2	
3	CH5597	Hardware Kit	1	to 1986
	CH5596	Hardware Kit	1	after 1986
4	C41115	Seal Kit	2	
5	CH5036	Retaining Bolt	4	
6	CH5423	Pad Retainer	4	

parts



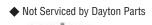
Key Number	Part Number	Description	Number Required	Remarks
1	D249	Disc Pad Set	1	
2	•	Caliper	2	
3	CH5554	Hardware Kit	1	
4	•	Seal Kit	2	
5	-	Retaining Pin	2	part of CH5554



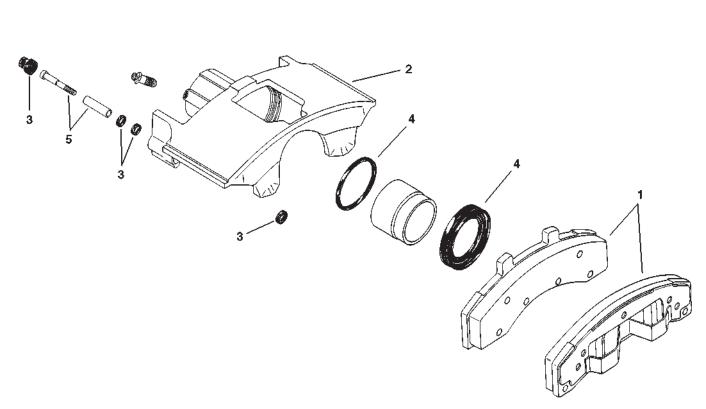


Note: Non-Keyed Items are not serviced by Dayton Parts, Inc.

Key Number	Part Number	Description	Number Required	Remarks
1	D269	Disc Pad Set	1	
2	•	Caliper	2	
3	CH5516	Hardware Kit	1	
4	•	Seal Kit	2	

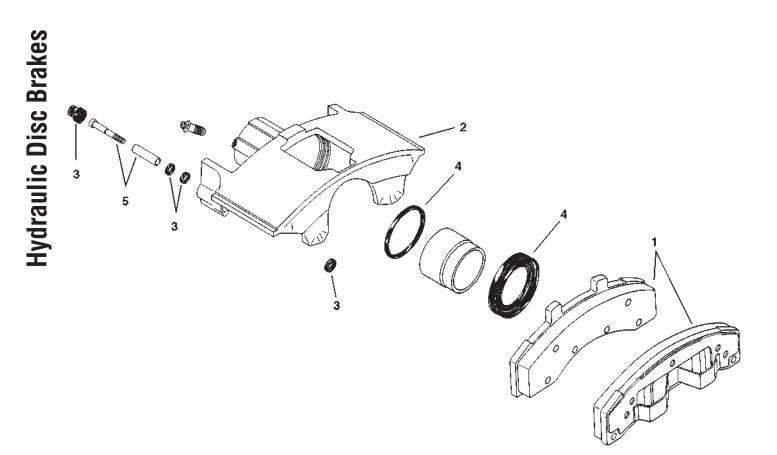


D369 - GM 1 x 2.94"



Key Number	Part Number	Description	Number Required	Remarks
1	D369	Disc Pad Set	1	
2	•	Caliper	2	
3	CH5585	Hardware Kit	1	
4	C41122	Seal Kit	2	
5	CH5044	Guide Bolt	4	

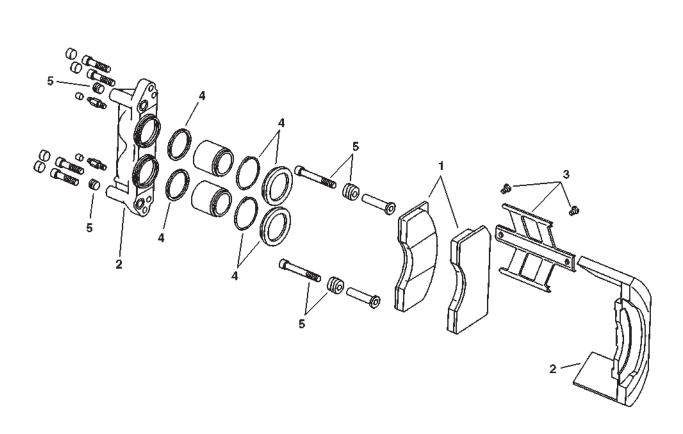




Key Number	Part Number	Description	Number Required	Remarks
1	D370	Disc Pad Set	1	
2	600-261	Caliper	1	RH
	600-260	Caliper	1	LH
3	CH5585	Hardware Kit	1	
4	•	Seal Kit	2	
5	CH5044	Guide Bolt	4	



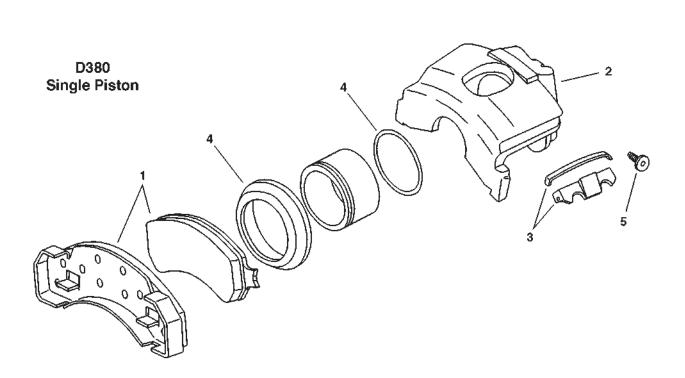
D379 - Ford (Varga) 2 x 2.66"



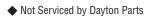
Key Number	Part Number	Description	Number Required	Remarks
1	D379	Disc Pad Set	1	
2	600-909	Caliper	1	RH
	600-910	Caliper	1	LH
3	•	Hardware Kit	1	
4	C41128	Seal Kit	2	
5	CH5048	Guide Bolt	4	



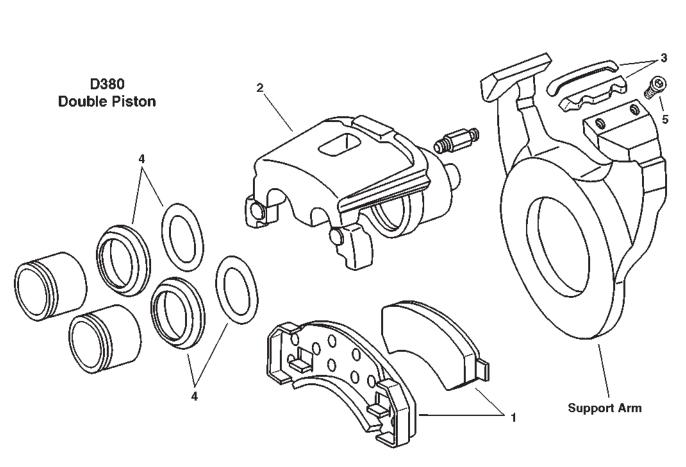
D380 Single - Navistar (Bendix) 1 x 3.38" Hydraulic Disc Brakes



Key Number	Part Number	Description	Number Required	Remarks
1	D380	Disc Pad Set	1	
2	600-230	Caliper	1	LH
	600-231	Caliper	1	RH
3	CH5529	Hardware Kit	1	
4	60050180	Seal Kit	2	
5	CH5010	Retaining Bolt	4	



Hydraulic Disc Brakes D380 Double - Navistar (Bendix) 2 x 2.60"



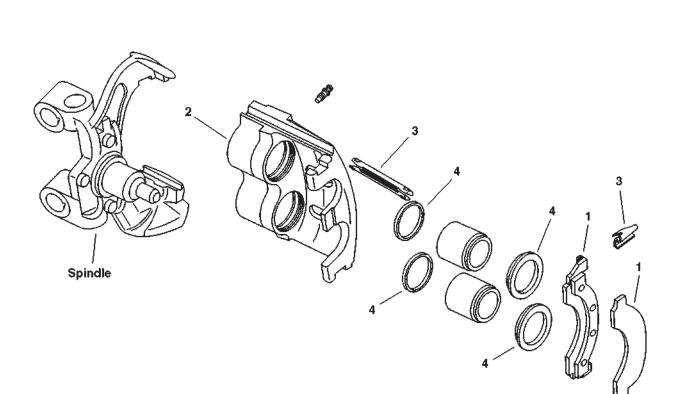
Hydraulic Disc Brakes

Key Number	Part Number	Description	Number Required	Remarks
1	D380	Disc Pad Set	1	
2	600-906	Caliper	2	
3	CH5519	Hardware Kit	1	
4	C41113	Seal Kit	2	soft boot
	C41145	Seal Kit	2	hard boot
5	CH5010	Retaining Bolt	4	



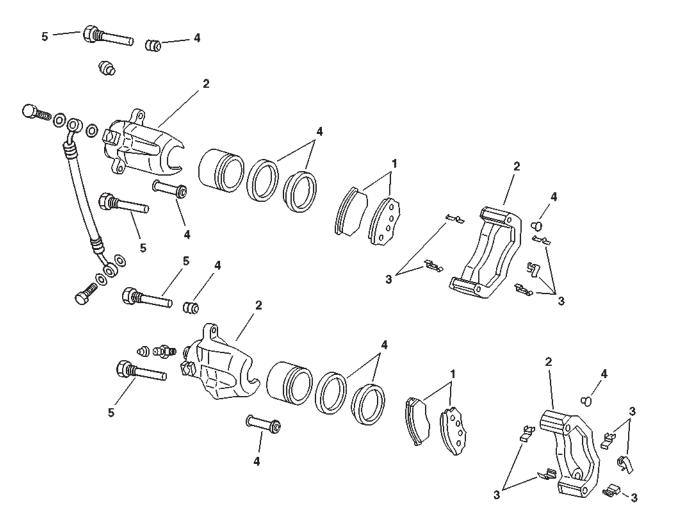






Key Number	Part Number	Description	Number Required	Remarks
1	D411	Disc Pad Set	1	
2	600-249	Caliper	1	RH
	600-248	Caliper	1	LH
3	CH5635	Hardware Kit	1	
4	C41127	Seal Kit	2	
5	-	Guide Bolt	2	part of CH5635

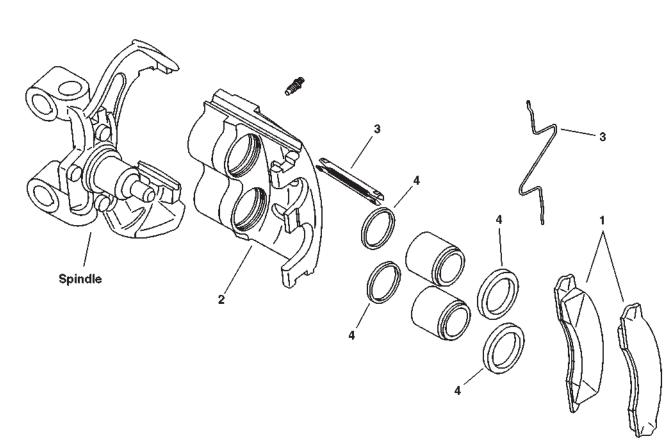
D433 - Mitsubishi Fuso 1 x 2.01" (51mm) Double



Key Number	Part Number	Description	Number Required	Remarks
1	D433	Disc Pad Set	1	
2	•	Caliper	2	
3	•	Hardware Kit	1	
4	•	Seal Kit	2	
5	•	Guide Bolt	8	

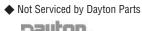






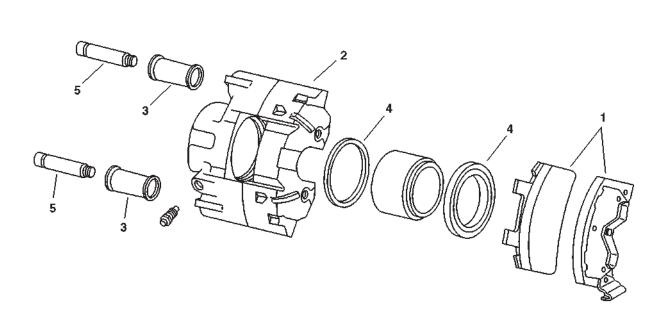
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Key Number	Part Number	Description	Number Required	Remarks
1	D450	Disc Pad Set	1	
2	600-284	Caliper	1	LH
	600-285	Caliper	1	RH
3	CH5584	Hardware Kit	1	
4	C41065	Seal Kit	2	to 3/1991
	C41139	Seal Kit	2	after 3/1991
5	-	Retaining Pin	2	part of CH5584



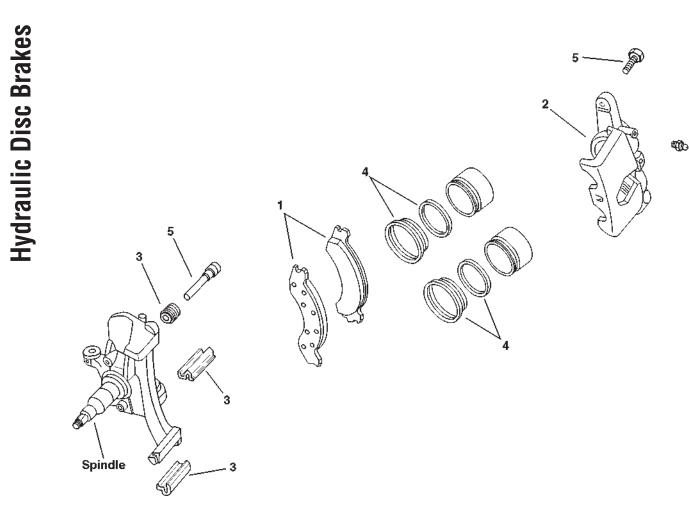
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D459 - GM 1 x 3.38"



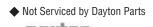
Key Number	Part Number	Description	Number Required	Remarks
1	D459	Disc Pad Set	1	
2	600-276	Caliper	1	LH
	600-277	Caliper	1	RH
3	CH5606	Hardware Kit	1	
4	C41143	Seal Kit	2	
5	CH5044	Guide Bolt	4	





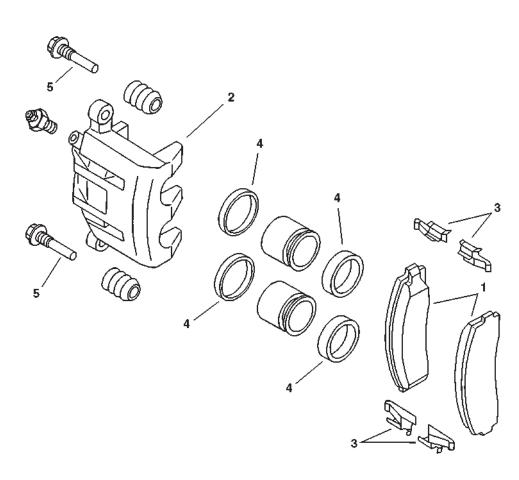
Note: Non-Keyed Items are not serviced by Dayton Parts, Inc.

Key Number	Part Number	Description	Number Required	Remarks
1	D557	Disc Pad Set	1	
2	600-282	Caliper	1	LH
	600-283	Caliper	1	RH
3	CH5612	Hardware Kit	1	
4	•	Seal Kit	2	
5	•	Guide Bolt	4	



parts

D646 - UD (Akebono) 2 x 2.13" (54mm)



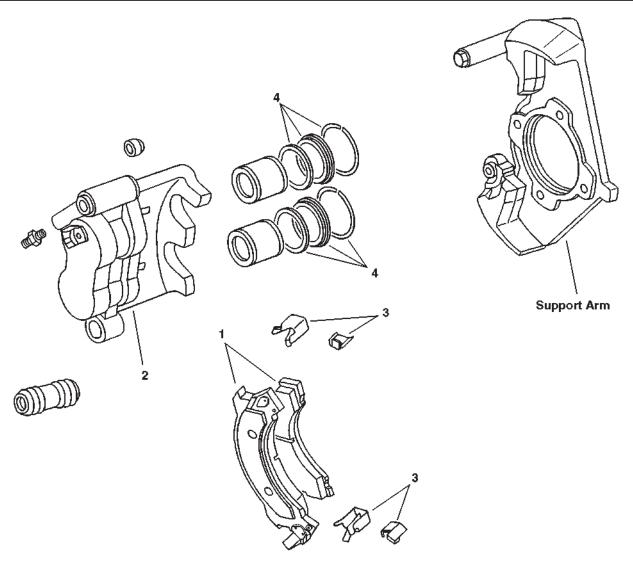
Note: Non-Keyed Items are not serviced by Dayton Parts, Inc.

Key Number	Part Number	Description	Number Required	Remarks
1	D646	Disc Pad Set	1	
2	•	Caliper	2	
3	•	Hardware Kit	1	
4	•	Seal Kit	2	
5	•	Guide Bolt	4	



D675 - GM/Isuzu 2 x 2.12"

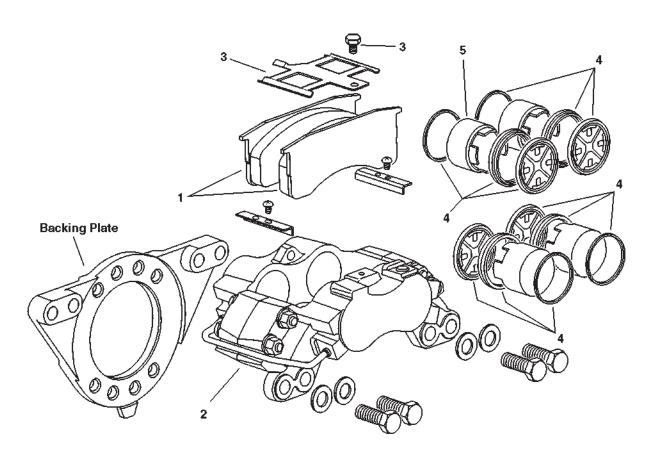
Hydraulic Disc Brakes



Key Number	Part Number	Description	Number Required	Remarks
1	D675	Disc Pad Set	1	
2	600-9192	Caliper	1	LH
	600-9191	Caliper	1	RH
3	CH5630	Hardware Kit	1	
4	C15192	Seal Kit	2	
5	•	Guide Bolt	4	



D769 - GM (Dayton) 4 x 2.76" (70mm)



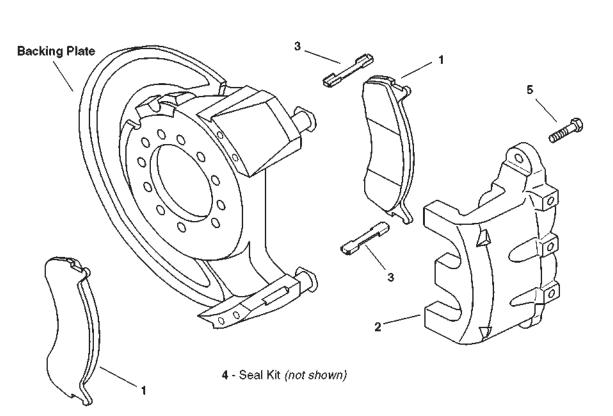
Note: Non-Keyed Items are not serviced by Dayton Parts, Inc.

Key Number	Part Number	Description	Number Required	Remarks
1	D769	Disc Pad Set	1	
2	•	Caliper	2	
3	CH100	Hardware Kit	2	
4	CH101	Seal Kit	2	
5	69270814	Piston	4	



D786 - Navistar (Bosch) 2 x 2.60" (66mm) & 2 x 2.88" (73mm)

Hydraulic Disc Brakes

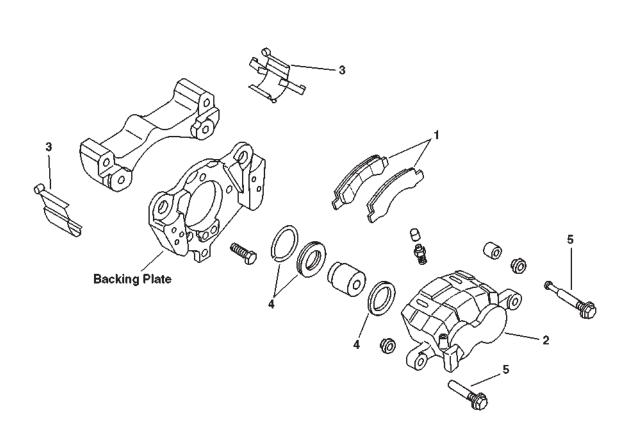


Note: Non-Keyed Items are not serviced by Dayton Parts, Inc.

Key Number	Part Number	Description	Number Required	Remarks
1	D786-4	Disc Pad Set	1	66mm piston
	D786-5	Disc Pad Set	1	73mm piston
2	600-911	Caliper	2	66mm piston
	600-912	Caliper	2	73mm piston
3	CH103	Hardware Kit	1	both
4	•	Seal Kit	2	66mm piston
	•	Seal Kit	2	73mm piston
5	CH5080	Retaining Bolt	2	both

Parts

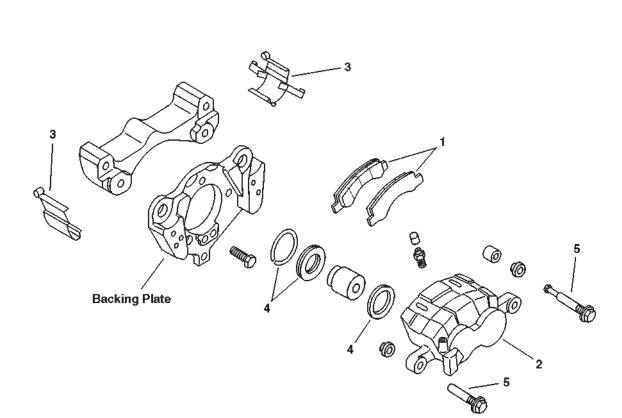
D825 - GM/Isuzu (Akebono) 2 x 2.13" (54mm)



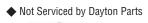
Key Number	Part Number	Description	Number Required	Remarks
1	D825	Disc Pad Set	1	
2	•	Caliper	2	
3	•	Hardware Kit	1	
4	C41194	Seal Kit	2	
5	•	Guide Bolt	4	

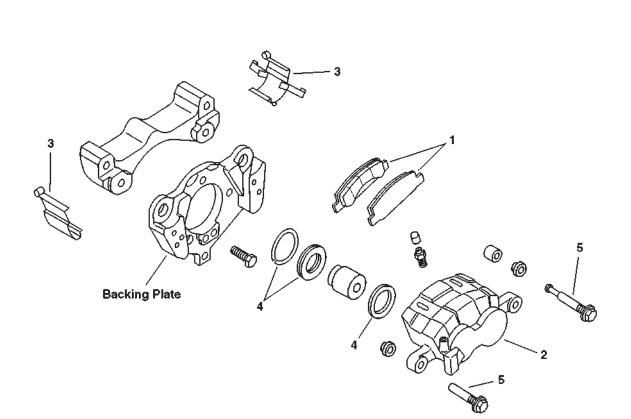


D826 - GM/Isuzu (Akebono) 2 x 2.25" (57mm)



Key Number	Part Number	Description	Number Required	Remarks
1	D826	Disc Pad Set	1	
2	•	Caliper	2	
3	•	Hardware Kit	1	
4	C41195	Seal Kit	2	
5	•	Guide Bolt	4	





Note: Non-Keyed Items are not serviced by Dayton Parts, Inc.

Key Number	Part Number	Description	Number Required	Remarks
1	D827	Disc Pad Set	1	
2	•	Caliper	2	
3	•	Hardware Kit	1	
4	C41195	Seal Kit	2	
5	•	Guide Bolt	4	



Service Procedure and Key Selection Instructions

Bendix Single Piston (3.38" Dia.) Caliper (D149 or D380)

Wear occurs between the Brake Caliper, Steering Knuckle and Retaining Mechanism on these Bendix Front Disc Brakes. This wear causes excess clearance between the caliper and knuckle slide surface resulting in a noise condition (rattle). Continued operation with this noise can result in loss of the Caliper Retaining Spring causing severe damaage to the brakes.

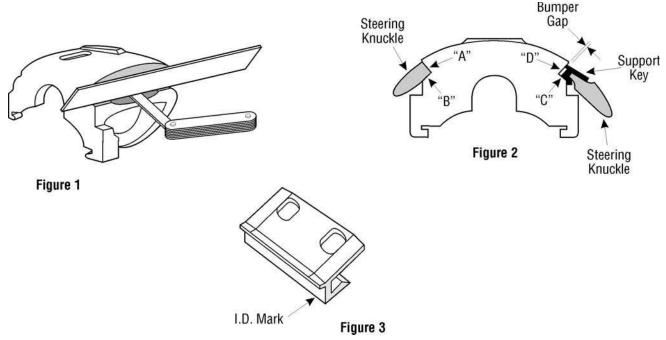
Vehicles which have this caliper rattle condition can be corrected by installing a new oversize retaining key and new style support spring. Use of the new key eliminates the necessity to replace caliper and/or steering knuckle to provide the proper caliper thrust clearances. However, in extreme cases, it will be necessary to replace the caliper and steering knuckle.

PROCEDURE

- After removal and cleaning of caliper, lay a straight edge across the caliper v-way surfaces (see figure 1) and measure the maximum depth of any wear on these surfaces with a feeler gauge. CALIPERS WORN TO A DEPTH OF .050" OR MORE MUST BE REPLACED.
- 2. Reinstall caliper (new or existing) back into knuckle. Install a NEW standard size key and retaining screw. DO NOT INSTALL SUPPORT SPRING AT THIS TIME. (see figure 2)
- 3. Insert a screwdriver into center of key bumper gap and pry firmly to seat caliper to three slide surfaces "A", "B", and "C". (see figure 2)
- 4. Measure bumper gap with largest feeler gauge (or stack of gauges) that will fit into the gap for its FULL LENGTH. (see figure 2)
- 5. Select a replacement Key according to the following guide.

MEASU	IREMENT	REPLAC	KIT NO.*		
More Than	Not exceeding	Size	I.D. Marking (fig. 3)	(Wheel Kit)	
0	.060"	Std Size		CH5555	
.060"	.100"	.040" O.S.	11	CH5556	
.100"	.140"	.080" O.S.	111	CH5557	
.220"	_	Replace anchor plate/knucl	kle and caliper and use standard key	and new support spring.	

- 6. Install selected replacement key and new support spring and, if needed, new retaining screw. (NOTE _ The support spring has been redesigned from a "C" to an "M" shape Be sure it is installed correctly.
- 7. Repeat this procedure for the other side of vehicle.



*Kit contains 1 Key, 1 new Support Spring, 1 new Pad Clip.



Shim Kits Service Instructions

Service Instructions For Shim Kit CH8204

Bendix Single Piston (3.38" dia.) (D149 or D380) and Two Piston (2.88"dia.) (D225) Caliper

A. SERVICE PROCEDURE FOR SHIM KIT

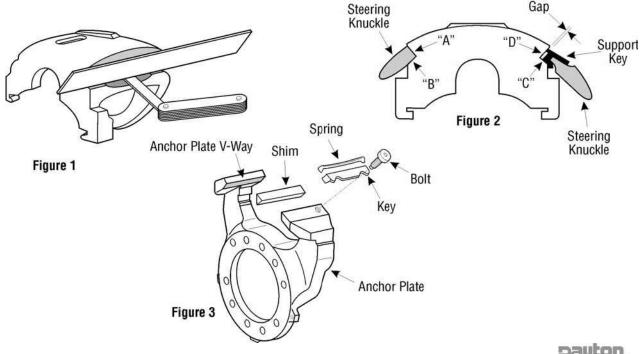
- 1. Remove the caliper assembly from the anchor plate by removing the key retention bolt and tapping out the key and spring.
- 2. Clean the v-way surfaces of the caliper and anchor plate with a wire brush, filling smooth any deep nicks and/or gouges.
- 3. Lay a straight edge across the caliper v-way surfaces (see figure 1) and measure with a feeler gauge. (Calipers worn to the depth of .050" or more must be replaced.)
- 4. Reinstall the caliper back into the anchor plate. Install a new production key and bolt, but do not install the support spring at this time.
- 5. Insert a screwdriver into center of key/bumper gap and pry firmly to assure that the caliper is seated against the three slide surfaces A, B, and C (see figure 2).
- 6. Measure the bumper gap with the largest feeler gauge (or stack of gauges) that will fit into the gap on either side of the screwdriver (see figure 2).
- 7. Based on the bumper gap measurement, select a shim according to the following table:

More than	But not exceeding	Shim thickness
0	.058"	Not required
.058"	.101"	.025"
.101"	.145"	.045"
.145"	—	See Step 8

8. If bumper gap exceeds .145", remove old caliper and replace with a new caliper and remeasure bumper gap. If the bumper gap with the new caliper is between .058" and .145", select a shim from Table 1. If the bumper gap with a new caliper exceeds .145", replace the anchor plate also. Use a new key and spring when assembling the new components.

B. PROCEDURE FOR REINSTALLING THE CALIPER IF A SHIM HAS BEEN SELECTED

- 1. Remove the caliper assembly from the anchor plate and install the selected shim on the anchor plate v-way (see figure 3).
- 2. With the shim installed on the anchor plate v-way, reinstall the caliper assembly using a new key and spring.
- Remeasure the bumper gap as described in Step 6. If the gap exceeds .058", install a thicker shim or replace components as described in Part A.
 Bumper



Shim Kits Service Instructions

Hydraulic Disc Brakes

Service Instructions For Shim Kit CH8205

Dayton Two Piston (2.50" dia.) Caliper (D224).

PROCEDURE

1. TO DETERMINE WHEATHER SHIMS ARE REQUIRED:

- Remove spring (3), retainer (4), and bolt (5). Α.
- Lift caliper (1) up and off support (2). Do Not let the caliper hang from the hydraulic hose. Lay the caliper on the Β. suspension or support it with a length of sturdy wire.
- C. Wire brush the support rails (6) and (7). Wire brush rail surfaces of the caliper.
- Reinstall caliper (1) on support (2). D.

Shim Kits

- E. F. Reinstall spring (3) and retainer (4).
- With caliper (1) assembled in place on the support (2), place a screwdriver or other suitable tool between the rotor vanes as shown in Figure 1 and rotate the wheel by hand in the forward direction to place the forward support rail in full contact with the caliper support rail surfaces at (A).

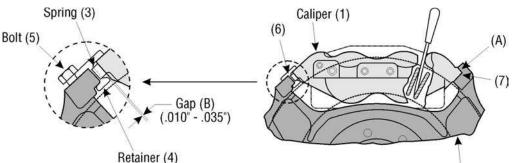




Figure 1

Shim Selection Chart

Support (Z)						
Shim	Gap (B) Measurement	Shim ID				
	.036"055" .056"075" .076"095" .096"115"	682* 683 684 685				
Caliper (1)	If gap is greater than .11	If gap is greater than .115", replace support (2).				
Wide Side Fig	* Number 682 is the thinnest shim number stamped on its surface.	and will not have the part				

of Shim

Support (2)

- Measure the gap at (B) with feeler gauges. If the measurement is within limits shown, no shims are required. G.
- If measurement is greater than .035", select a shim of proper thickness (see chart) to return the gap within the limits given. Η.

2. INSTALL SHIMS AS FOLLOWS:

- Remove spring (3), retainer (4), and bolt (5). Α.
- Lift forward end of caliper enough to provide clearance between the caliper and the support rail at (A) to permit installation Β. of the shim as shown in figure 2.
- NOTE: Widest side of shim is to fit up against widest surface of support rail (see figure 2).
- C. Lubricate the support rail surface of the caliper that will come into contact with shim with grease approved for disc brake installlations.
- With shim installed, return the caliper (1) to its original position on the support (2), install new spring (3), and new retainer D. (4) found in the hardware kit. Also install new bolt (5).
- Measure gap (B) to assure that it is within the .010"-.035" limits. If not, repeat step 2 choosing the next thicker shim. E.

CAUTION: Do not use a shim thickness that will result in a gap (B) that is less than the .010" dimension.



Shim Kits Service Instructions

Service Instructions For Shim Kit CH8206

Dayton Two Piston (2.88" dia.) Caliper (D236)

PROCEDURE

1. TO DETERMINE NEED FOR SHIMS:

- A. Place screwdriver or other suitable tool in between the caliper and outboard lining plate. Apply light pressure back and forth to force pistons back slightly from the rotor. Remove screwdriver.
- B. Remove bolts (3) and spring assembly (4).
- C. Remove bolt (6) and retainer (7).
- D. Lift caliper (1) up and off support rail (5). DO NOT let the caliper hang from the hydraulic hose. Lay the caliper on the suspension or support it with a length of strong wire.

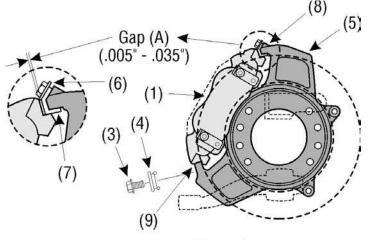


Figure 1

- E. Wire brush support rails (8) and (9). Wire brush rail surfaces of the caliper.
- F. Reinstall caliper (1) on support (5).
- G. Reinstall retainer (7).
- H. With the caliper (1) in place on the support (5), pull out on the top end of the caliper as if to remove it from the support. This will open up a gap (A) between the caliper rail and the retainer (7). See figure 1.
- I. Place a screwdriver or other suitable wedge shaped device in the gap between the rail surfaces at (A) to maintain the gap when measuring.

CAUTION: DO NOT USE EXCESSIVE FORCE TO WEDGE THE RAILS APART.

- J. Measure the gap at (A) with feeler gauges. If measurement is within limits shown (see chart), no shims are required.
- K. If measurement is greater than the maximum value of .035", select a shim of proper thickness (see chart) to return the gap as close as possible to the .005" minimum.
- 2. INSTALL SHIMS AS FOLLOWS:
- A. Remove retainer (7).
- B. Lift caliper (1) up and off support rail (5). Do not let the caliper hang from the hydraulic hose. Lay the caliper on the suspension or support it with a length of sturdy wire.
- C. Lubricate the rail surfaces of the caliper (1) with grease approved for disc brake installations.
- D. With shim installed, return the caliper (1) to its original position on the support (5). Install a new retainer (7) and a new bolt (6) that are porvided in the disc hardware kit.

E. Measure the gap at (A) between the retainer (7) and caliper rail to assure that the gap is not less than .005". If the gap is greater than .035", repeat Step 2, choosing the next thicker shim.

CAUTION: Do not use a shim thickness that will result in a gap width that is less than the .005" minimum. See figure 2.

F. Install new spring assembly (4), provided in the disc hardware kit, and bolts (3).

NOTE: If support (5) is replaced, measure new gap at (A) and install shim, if gap exceeds .035".



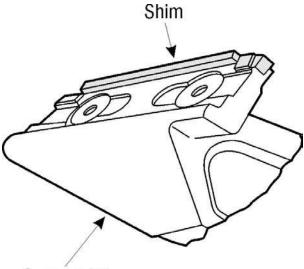
39

Shim Kits Service Instructions

Hydraulic Disc Brakes

Service Instructions For Shim Kit CH8206 (continued)

Dayton Two Piston (2.88" dia.) Caliper (D236)



Gap (B)	Shim
Measurement	ID
.036"059"	690*
.060"074"	691
.075"089"	692
.090"114"	693
.115"130"	694

If gap is greater than .130", replace support (5).

*

Number 690 is the thinnest shim and may not have the part number stamped on its surface.

Support (5)



Caliper Illustrations Disc Brake Calipers by Part Number S-2.38 600-209 S-3.38 600-200 **Disc Brake Calipers** P-3.10 600-201 600-210 S-2.38 600-211 600-204 S-2.94 P-3.10 600-205 600-218 S-2.94 S-2.94 600-219 600-208 S-3.38 S-2.94

Piston Material/Size: A = Aluminum, P = Phenolic, S = Steel

Caliper Illustrations by Part Number

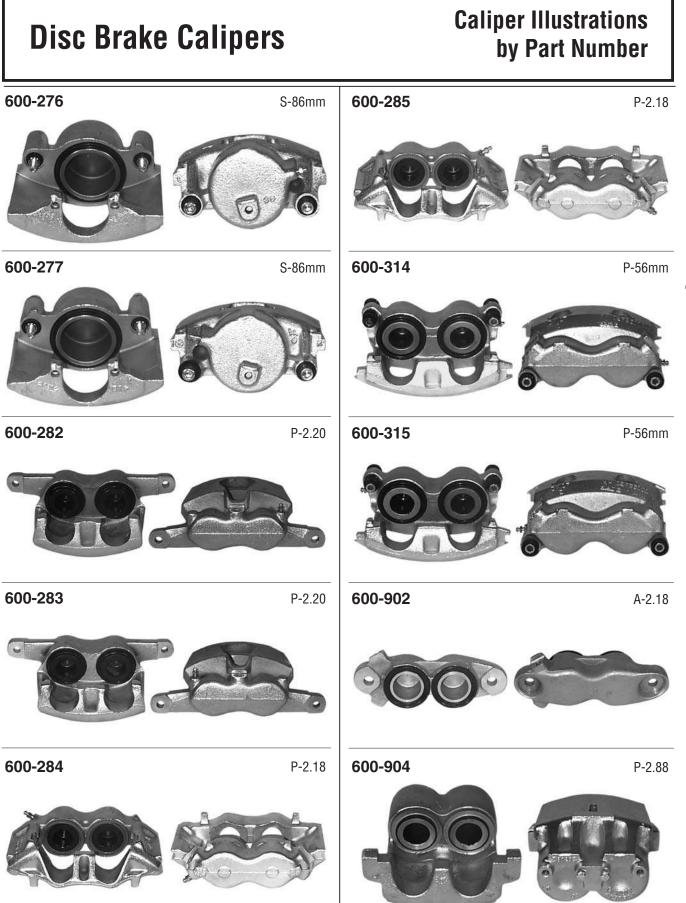
Disc Brake Calipers



Piston Material/Size: A = Aluminum, P = Phenolic, S = Steel

Disc Brake Calipers

42



Piston Material/Size: A = Aluminum, P = Phenolic, S = Steel



Caliper Illustrations by Part Number

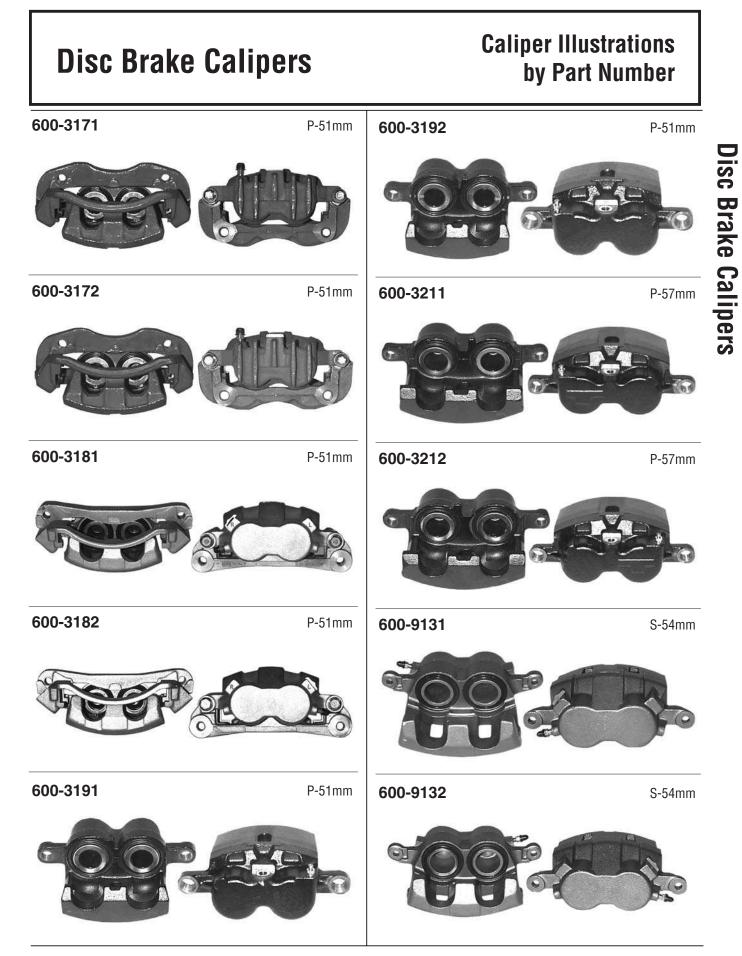
Disc Brake Calipers



Piston Material/Size: A = Aluminum, P = Phenolic, S = Steel

Disc Brake Calipers

44

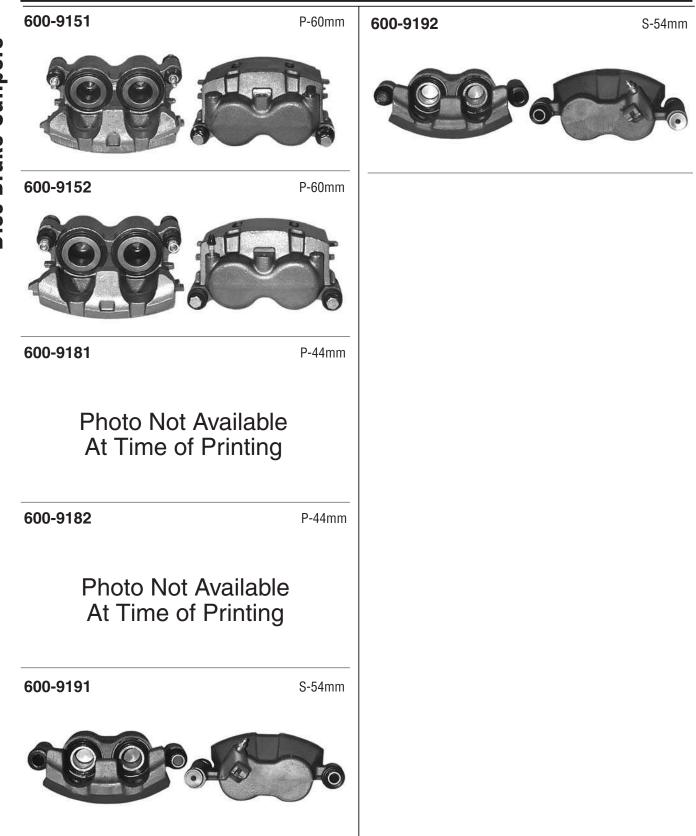


Piston Material/Size: A = Aluminum, P = Phenolic, S = Steel

payton Parts 45

Caliper Illustrations by Part Number

Disc Brake Calipers



Piston Material/Size: A = Aluminum, P = Phenolic, S = Steel

Disc Brake Calipers

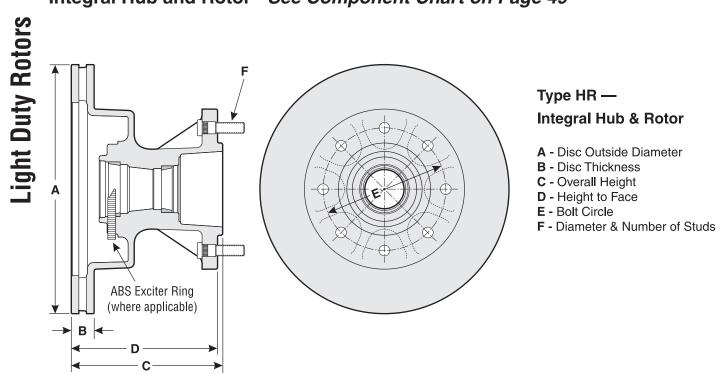
Caliper Specifications by Piston Size

Part Number	OEM	Piston Dia.	Piston Material	Disc Pad Part No.	Hardware Kit	Caliper Location	Part Number	OEM	Piston Dia.	Piston Material	Disc Pad Part No.	Hardware Kit	Caliper Location
Single Piston					Double Piston Continued								
600-204	GM	2.94	Steel	D52	CH5500	LH	600-9191	Isuzu	54mm	Steel	D675	CH5630	RH
600-205	GM	2.94	Steel	D52	CH5500	RH	600-9192	Isuzu	54mm	Steel	D675	CH5630	LH
600-218	GM	2.94	Steel	D52	CH5500	LH	600-228	Dayton	2.18	Aluminum	D120	CH5533	LH
600-219	GM	2.94	Steel	D52	CH5500	RH	600-229	Dayton	2.18	Aluminum	D120	CH5533	RH
600-210	Chrysler	3.10	Phenolic	D269	CH5516	LH	600-284	Dayton	2.18	Phenolic	D450	CH5584	LH
600-211	Chrysler	3.10	Phenolic	D269	CH5516	RH	600-285	Dayton	2.18	Phenolic	D450	CH5584	RH
600-232	GM	80mm	Steel	D153	CH5539	LH	600-902	Dayton	2.18	Aluminum	D120	CH5533	Both
600-233	GM	80mm	Steel	D153	CH5539	RH	600-282	Ford	2.20	Phenolic	D557	CH5612	LH
600-260	GM	3.15	Steel	D370	CH5585	LH	600-283	Ford	2.20	Phenolic	D557	CH5612	RH
600-261	GM	3.15	Steel	D370	CH5585	RH	600-314	Kelsey	56mm	Phenolic	D655	CH5621	LH
600-208	Bendix	3.38	Steel	D149	CH5529	LH	600-315	Kelsey	56mm	Phenolic	D655	CH5621	RH
600-209	Bendix	3.38	Steel	D149	CH5529	RH	600-3211	Kelsey	57mm	Phenolic	D784	CH5645	RH
600-230	Bendix	3.38	Steel	D149 & D380	CH5529	LH	600-3212	Kelsey	57mm	Phenolic	D784	CH5645	LH
600-231	Bendix	3.38	Steel	D380	CH5529	RH	600-248	Kelsey	60mm	Steel	D411	CH5598	LH
000-231	Denuix	5.50	51661	D380	0113323	T T T	600-249	Kelsey	60mm	Steel	D411	CH5598	RH
600-276	GM	86mm	Steel	D459	CH5606	LH	600-9151	Kelsey	60mm	Phenolic	D777	CH5651	RH
600-277	GM	86mm	Steel	D459	CH5606	RH	600-9152	Kelsey	60mm	Phenolic	D777	CH5651	LH
Double Pis	ton		T	T			600-200	Kelsey	2.38	Steel	D87	CH5546	LH
600-914	Kelsey	42mm	Steel	D757	CH5643	Both	600-201	Kelsey	2.38	Steel	D87	CH5546	RH
600-9181	Kelsey	44mm	Phenolic	D802	CH5628	RH	600-905F	Dayton	2.50	Aluminum	D224	CH5594	Both
600-9182	Kelsey	44mm	Phenolic	D802	CH5628	LH	600-906	Bendix	2.60	Steel	D380	CH5519	Both
600-3171	Kelsey	51mm	Phenolic	D711	CH5629	RH	600-907	Bendix	2.60	Phenolic	D380	CH5519	Both
600-3172	Kelsey	51mm	Phenolic	D711	CH5629	LH	600-911	Bosch	66mm	Phenolic	D786-4	CH103	Both
600-3181	Kelsey	51mm	Phenolic	D702	CH5628	RH	600-917	Bendix	66mm	Phenolic	D380	CH5522	Both
600-3182	Kelsey	51mm	Phenolic	D702	CH5628	LH	600-909	Varga	2.66	Steel	D379	CH5524	LH
600-3191	Kelsey	51mm	Phenolic	D785	CH5644	RH	600-910	Varga	2.66	Steel	D379	CH5524	RH
600-3192	Kelsey	51mm	Phenolic	D785	CH5644	LH	600-904	Bendix	2.88	Phenolic	D225	CH5522	Both
600-9131	Kelsey	54mm	Steel	D756	CH5642	RH	600-908	Dayton	2.88	Phenolic	D236	CH5596	Both
600-9132	Kelsey	54mm	Steel	D756	CH5642	LH	600-912	Bosch	73mm	Phenolic	D786-5	CH103	Both



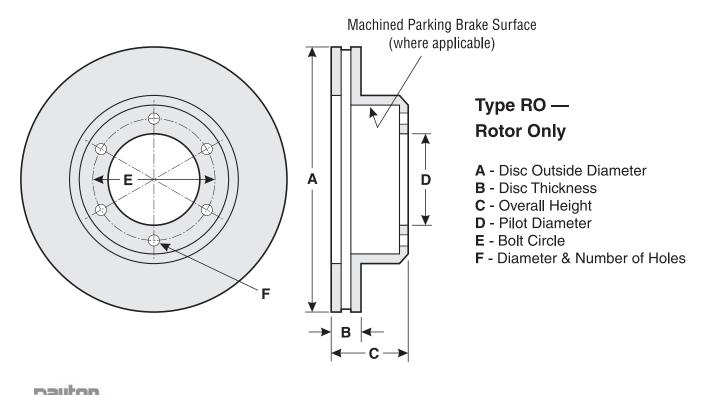
Diagrams and Chart Key

Light Duty Rotors



Integral Hub and Rotor - See Component Chart on Page 49

Rotor Only - See Component Chart on Page 50



48

Light Duty Rotors

Light Duty Integral Hub and Rotor Listed by Size

No.(A)(B)(C)(D)(E)(F)RenD468710.280.874.142.494.505@0.500D466410.501.044.312.234.755@ M12 x 1.5D472410.710.874.432.694.505@ 0.500D475310.870.872.482.484.505@ 0.500D453011.001.004.783.254.505@ 0.500D456311.001.254.823.134.755@ 0.500D475711.300.954.383.094.506@ 0.500D472011.611.044.312.565.005@ 0.500D472011.611.294.512.585.006@ 0.563D476411.611.294.512.585.005@ 0.500D476511.611.294.512.585.005@ 0.500	narks
D466410.501.044.312.234.755 @ M12 x 1.5D472410.710.874.432.694.505 @ 0.500D475310.870.872.482.484.505 @ 0.500D453011.001.004.783.254.505 @ 0.500D456311.001.254.823.134.755 @ 0.500D475711.300.954.383.094.506 @ 0.500D472911.420.874.313.124.505 @ 0.500D472011.611.044.312.565.005 @ 0.500D18111.611.294.512.585.005 @ 0.500D476411.611.294.512.585.005 @ 0.500	
D472410.710.874.432.694.505@0.500D475310.870.872.482.484.505@0.500D453011.001.004.783.254.505@0.500D456311.001.254.823.134.755@0.500D475711.300.954.383.094.506@0.500D472911.420.874.313.124.505@0.500D472011.611.044.312.565.005@0.500D18111.611.294.512.585.005@0.500D476411.611.294.512.585.005@0.500	
D475310.870.872.482.484.505@0.500D453011.001.004.783.254.505@0.500D456311.001.254.823.134.755@0.500D475711.300.954.383.094.506@0.500D472911.420.874.313.124.505@0.500D472011.611.044.312.565.005@0.500D18111.611.294.512.585.006@0.563D476411.611.294.512.585.005@0.500	
D453011.001.004.783.254.505@0.500D456311.001.254.823.134.755@0.500D475711.300.954.383.094.506@0.500D472911.420.874.313.124.505@0.500D472011.611.044.312.565.005@0.500D018111.611.294.512.585.006@0.563D476411.611.294.512.585.005@0.500	
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D475711.300.954.383.094.506@0.500D472911.420.874.313.124.505@0.500D472011.611.044.312.565.005@0.500D018111.611.294.512.585.006@0.563D476411.611.294.512.585.005@0.500	
D4729 11.42 0.87 4.31 3.12 4.50 5@0.500 D4720 11.61 1.04 4.31 2.56 5.00 5@0.500 D0181 11.61 1.29 4.51 2.58 5.00 6@0.563 D4764 11.61 1.29 4.51 2.58 5.00 5@0.500	
D4720 11.61 1.04 4.31 2.56 5.00 5@0.500 D0181 11.61 1.29 4.51 2.58 5.00 6@0.563 D4764 11.61 1.29 4.51 2.58 5.00 5@0.500	
D0181 11.61 1.29 4.51 2.58 5.00 6@0.563 D4764 11.61 1.29 4.51 2.58 5.00 5@0.500	
D4764 11.61 1.29 4.51 2.58 5.00 5@ 0.500	
D4823 11.61 1.29 4.51 2.58 5.50 6 @ M14 x 1.5 Includes ABS excited	. rina
D4831 11.61 1.29 4.51 2.58 5.50 5 @ 0.500 Includes ABS excited	-
D4786 11.72 1.03 5.25 3.05 5.50 5 @ 0.500	5
D4847 11.72 1.03 6.94 3.05 5.50 5 @ 0.500	
D4580 11.72 1.19 5.39 3.21 5.50 5 @ 0.500	
D4704 11.75 1.25 5.05 3.27 5.50 5 @ 0.500	
D4877 11.75 1.25 5.06 3.25 5.25 5.20 Includes ABS excited	[.] ring
D4560 11.86 1.29 5.16 3.12 5.50 5 @ 0.500	
D4810 11.86 1.29 4.95 2.90 5.00 5 @ 0.500 Includes ABS excited	ring
D4890 12.12 1.18 4.02 2.56 5.75 7 @ M12 x 1.5	
D4520 12.50 1.29 4.78 3.48 6.50 8@0.563	
D4815 12.50 1.29 4.78 3.48 6.50 8 @ 0.563 Includes ABS excited	ring
D4802 12.50 1.29 4.87 3.12 6.50 8 @ M14 x 1.5 Includes ABS excited	ring
D0179 12.50 1.29 4.96 3.16 6.50 8 @ 0.563	
D4833 12.50 1.29 5.18 3.06 6.50 8 @ 0.563 Includes ABS excited	-
D4814 12.50 1.54 5.17 3.82 6.50 8 @ 0.563 Includes ABS excited	ring
D4627 12.50 1.54 7.62 7.31 6.50 8 @ M14 x 1.5	
D4800 12.50 1.54 7.69 7.31 6.50 8 @ 0.563	
D4876 12.50 1.54 7.75 7.25 6.50 8 @ 0.563 Includes ABS excited	ring
D4749 12.50 1.54 7.87 7.29 6.50 8@0.563	
D4542 12.56 1.00 5.33 3.87 6.50 8 @ 0.500	
D4545 12.56 1.00 5.33 3.87 6.50 8 @ 0.563	
D4598 12.56 1.25 5.14 3.69 6.50 8 @ 0.563 D4700 10.50 1.25 5.14 3.69 6.50 8 @ 0.563	
D4723 12.56 1.25 5.57 3.67 6.50 8 @ 0.563 D4763 12.56 1.25 5.62 3.93 6.50 8 @ 0.563	
D4763 12.56 1.25 5.62 3.93 6.50 8 @ 0.563 D4850 12.56 1.25 5.63 3.95 6.50 8 @ 0.563 Includes ABS excited	ring
D4650 12.50 1.25 5.05 5.95 0.50 8 @ 0.505 Includes ABS excited D4748 12.56 1.54 8.25 7.93 6.50 8 @ M14 x 1.5	my
D4565 12.66 1.19 5.80 3.66 6.50 8 @ 0.500	
D4303 12.00 11.13 3.00 3.00 0.00 <th0.00< th=""> 0.00 <th0.00< th=""> <t< th=""><th>rina</th></t<></th0.00<></th0.00<>	rina
D4656 12.82 1.25 5.86 3.89 6.50 8 @ 0.563	ing
D4776 13.00 1.19 5.65 3.71 6.50 8@0.563	
D4856 13.00 1.19 7.68 8.00 6.50 8@M14 x 1.5	
D4779 13.00 1.19 7.93 7.62 6.50 8 @ 0.563 Includes ABS excited	. rina
D4777 13.00 1.19 8.50 7.87 6.50 8@0.563	··• 9
D4904 13.00 1.50 5.62 3.75 6.75 8@0.543	
D4894 13.00 1.50 5.75 3.75 6.75 8 @ 0.543 Includes ABS excited	[.] ring
D4895 13.00 1.50 9.00 8.43 6.75 8 @ 0.500 Includes ABS excited	-