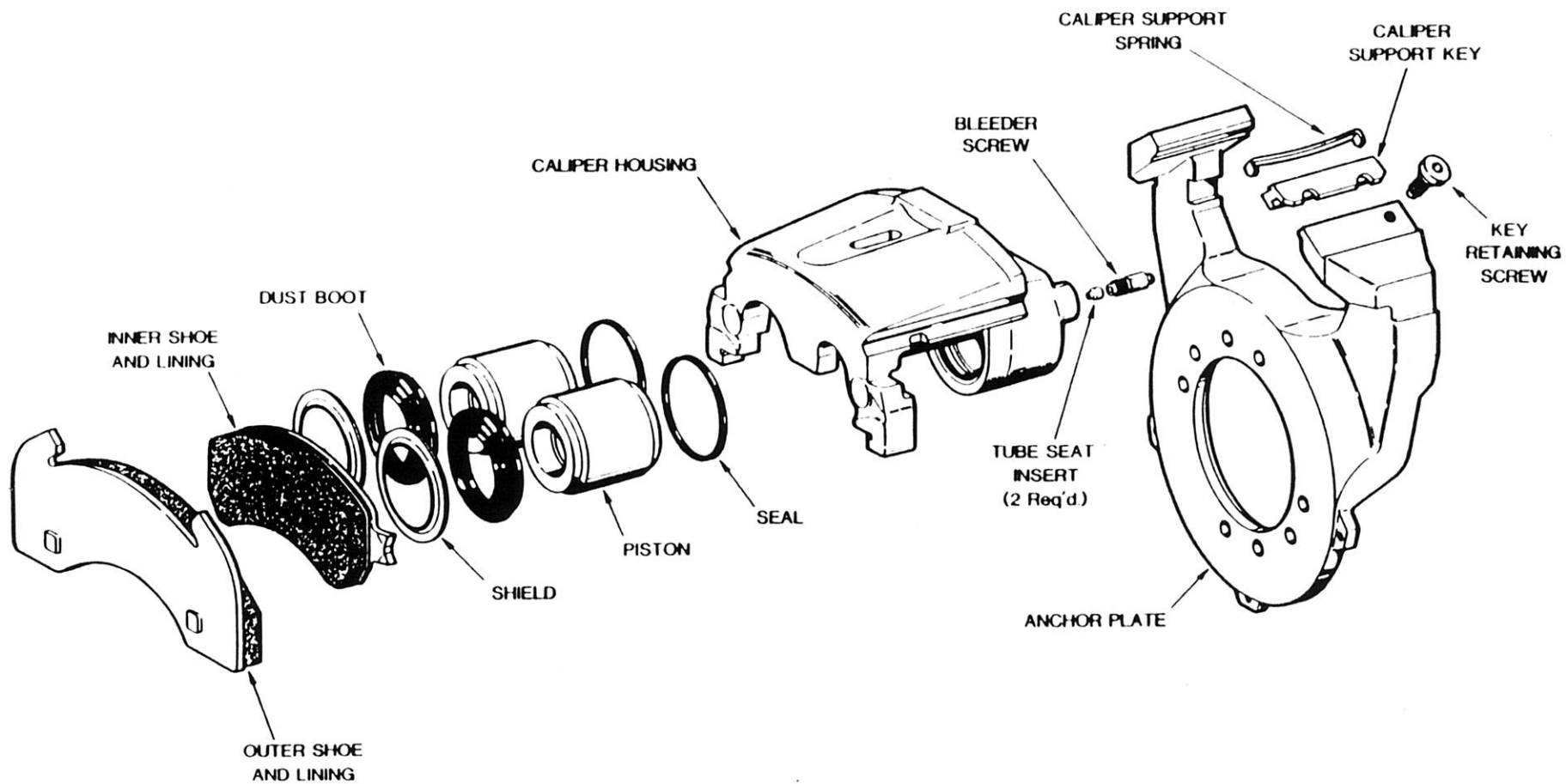


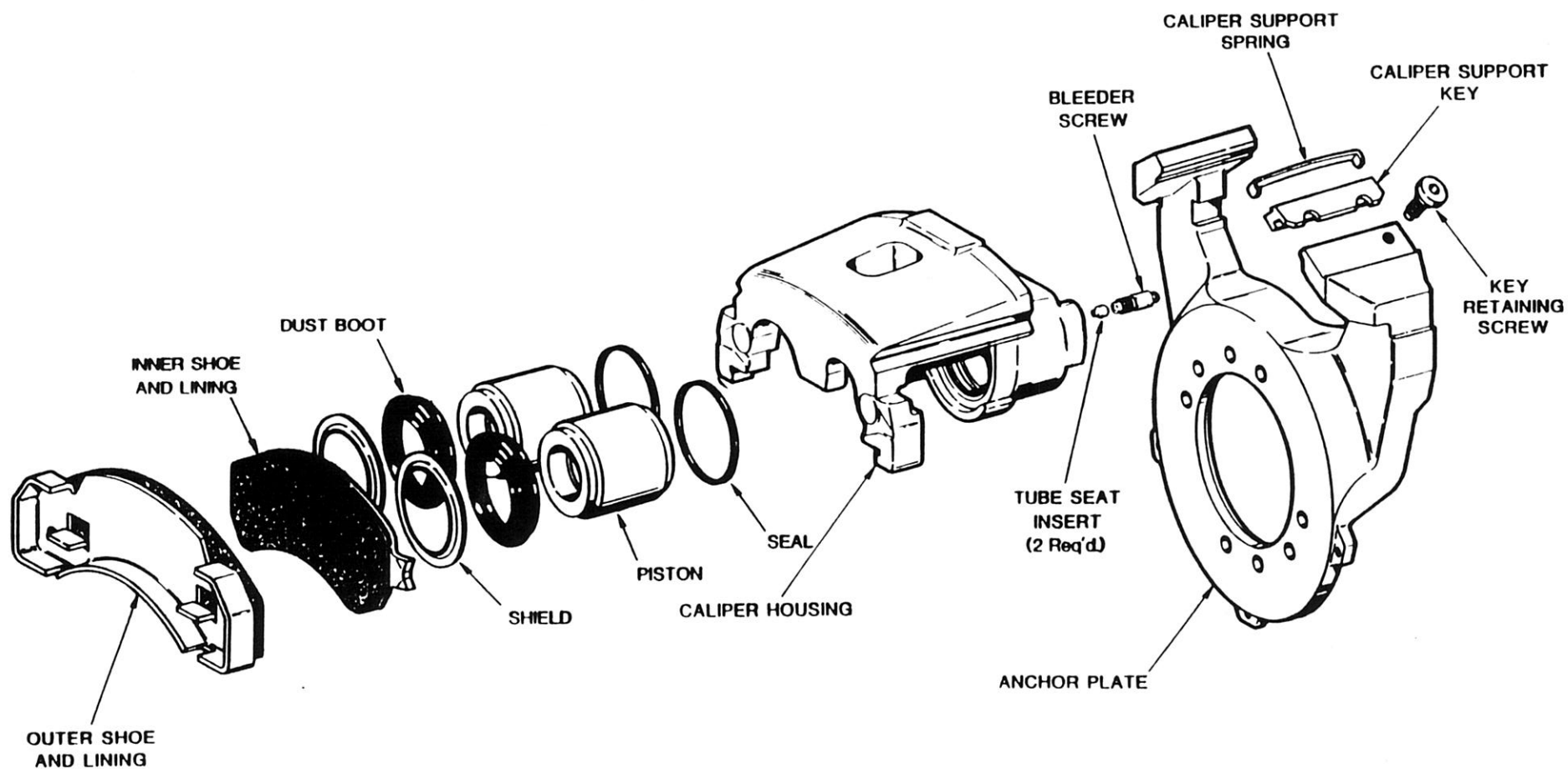
FOUNDATION BRAKE, CALIPERS

2.60"	DUAL PISTON
2.88"	DUAL PISTON

BENDIX 2.88" TWIN CALIPER ASSEMBLY



BENDIX 2.6" TWIN CALIPER ASSEMBLY



FOUNDATION BRAKES

● 2.6" DUAL PISTON

- FEATURES.

-- RAIL SLIDER (COMMON KEY AND SPRING WITH 2.88)

-- PHENOLIC PISTONS (STEEL FACE)

-- PRESS-IN BOOT "EP" RUBBER

-- NODULAR IRON HOUSING

-- LINING AREA: (IN²)

	<u>INNER</u>	<u>OUTER</u>
MOLDED	16.44	24.01

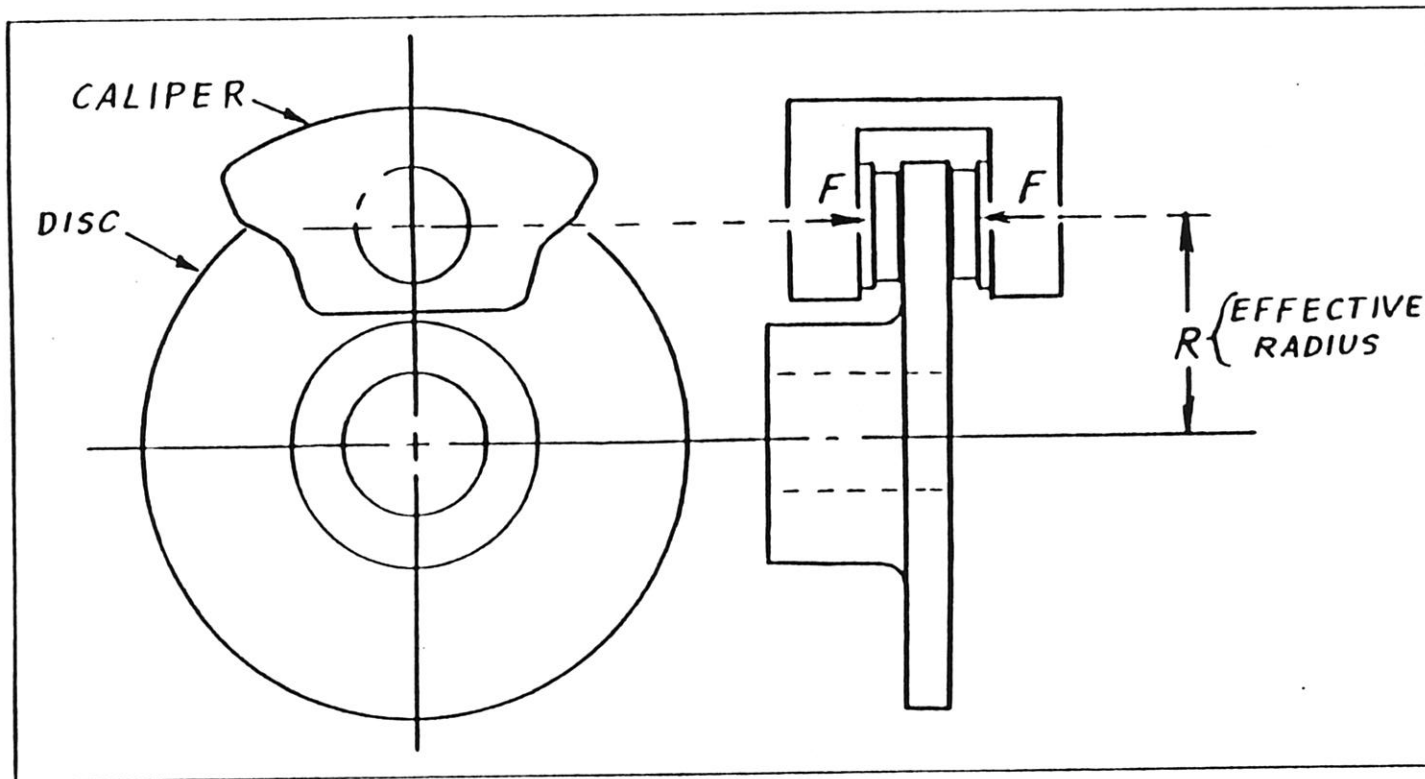
GENERAL INFORMATION

● DISC BRAKE OPERATION

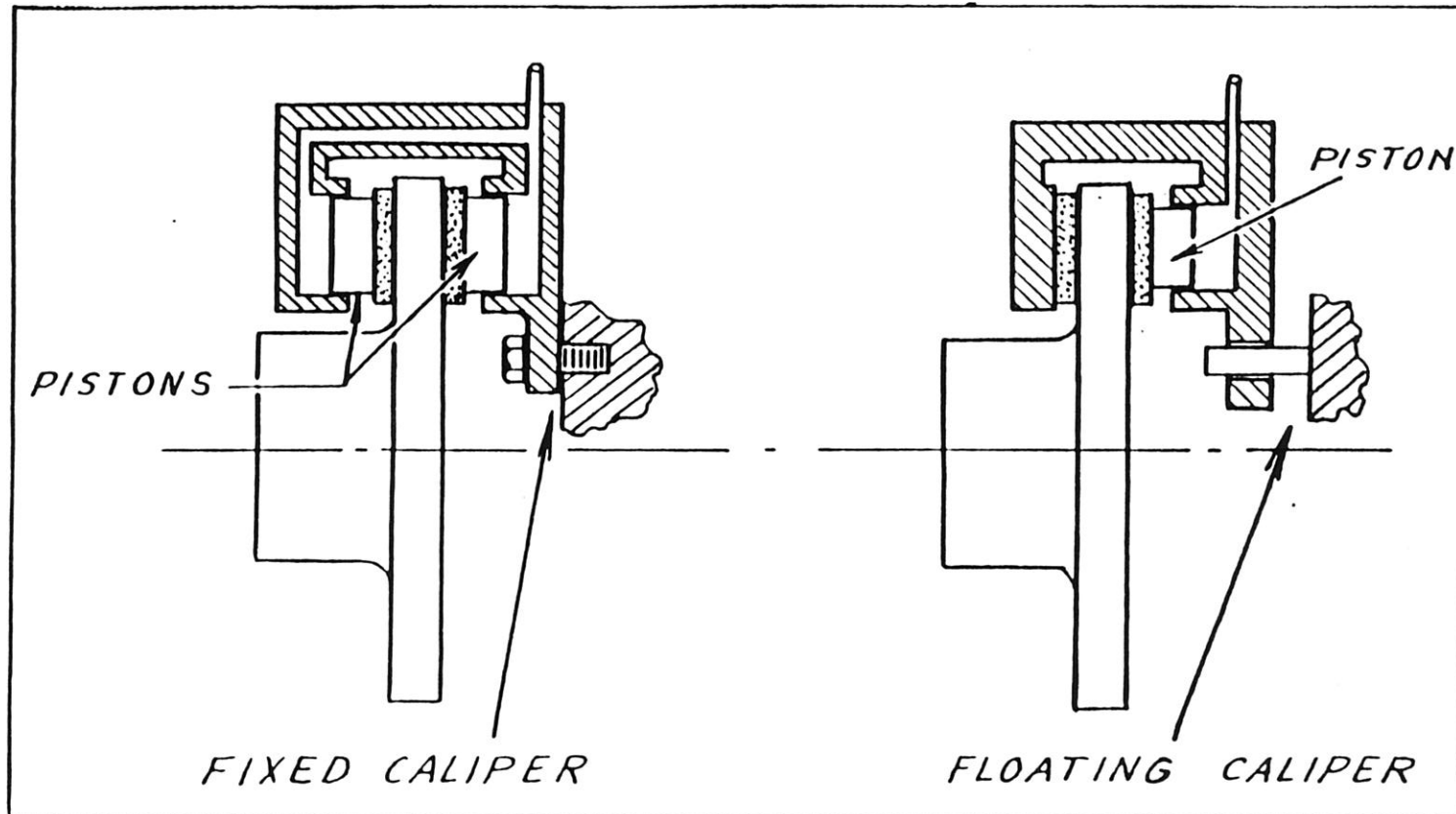
- A DISC BRAKE CONSISTS OF A MECHANISM THAT CLAMPS FRICTION MATERIAL ON TWO SIDES OF A ROTATING DISC.

● BASIC TYPES OF DISC BRAKES

- FIXED CALIPER OR OPPOSED PISTON DESIGN - CALIPER IS FIXED (DOES NOT SLIDE) WITH PISTONS ON BOTH SIDES OF THE DISC. FLUID PASSAGES ARE REQUIRED BETWEEN THE BORES. THIS DESIGN IS USED ON SOME HIGH PERFORMANCE AND LUXURY CARS PLUS SOME EUROPEAN VEHICLES ALSO USE THIS DESIGN.
- FLOATING CALIPER DESIGN - CALIPER IS NOT FIXED AND SLIDES ON V-WAYS, PINS OR OTHER SYSTEMS. PISTONS ARE ON ONE SIDE OF THE DISC ONLY. THIS DESIGN IS COMMONLY USED ON VEHICLES IN THE U.S.



DISC BRAKE OPERATION



BASIC TYPES

GENERAL INFORMATION
(CON'T)

● FEATURES

- FEATURES OF THE CALIPERS BENDIX WILL SUPPLY TO FREIGHTLINER.
 - FLOATING CALIPER DESIGN WITH THE CALIPER SLIDING ON MACHINED V-WAY SURFACES.
 - PISTON SIZES, 2.6" DIAMETER TWIN PISTON AND 2.88" DIAMETER TWIN PISTON "FAMILY TYPE" CALIPERS.
- FEATURES OF THE "FAMILY TYPE" CALIPERS.
 - COMMON V-WAY MACHINING ON BOTH CALIPER SIZES - ALLOWS FOR COMMON ANCHOR PLATES BETWEEN BOTH SIZES.
 - INLET AND BLEED PORTS ARE COMMON BETWEEN THE TWO CALIPERS ALLOWING COMMON HOSES AND COMMON RH AND LH CALIPERS.

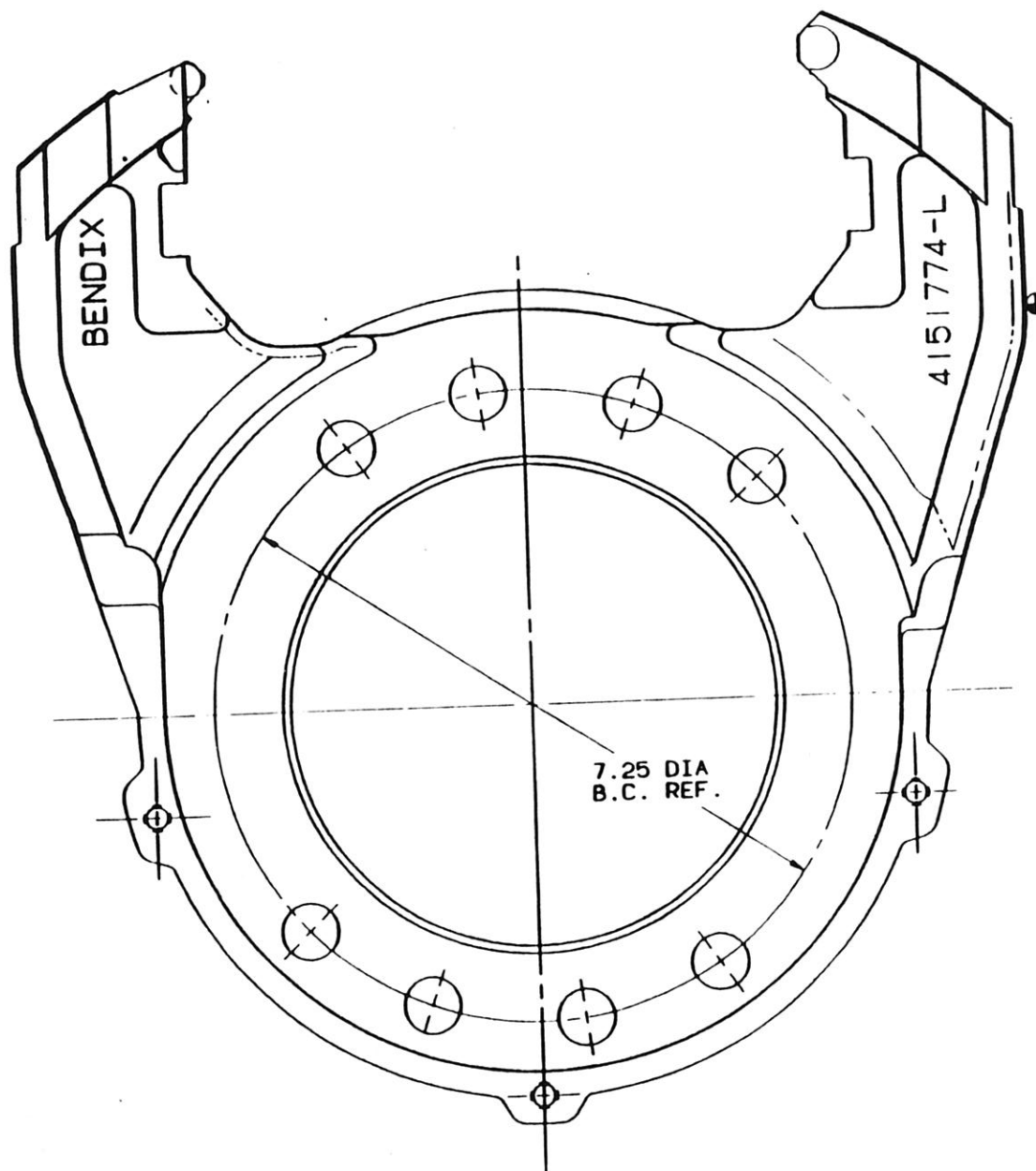
FOUNDATION BRAKES

● 2.88" DUAL PISTON

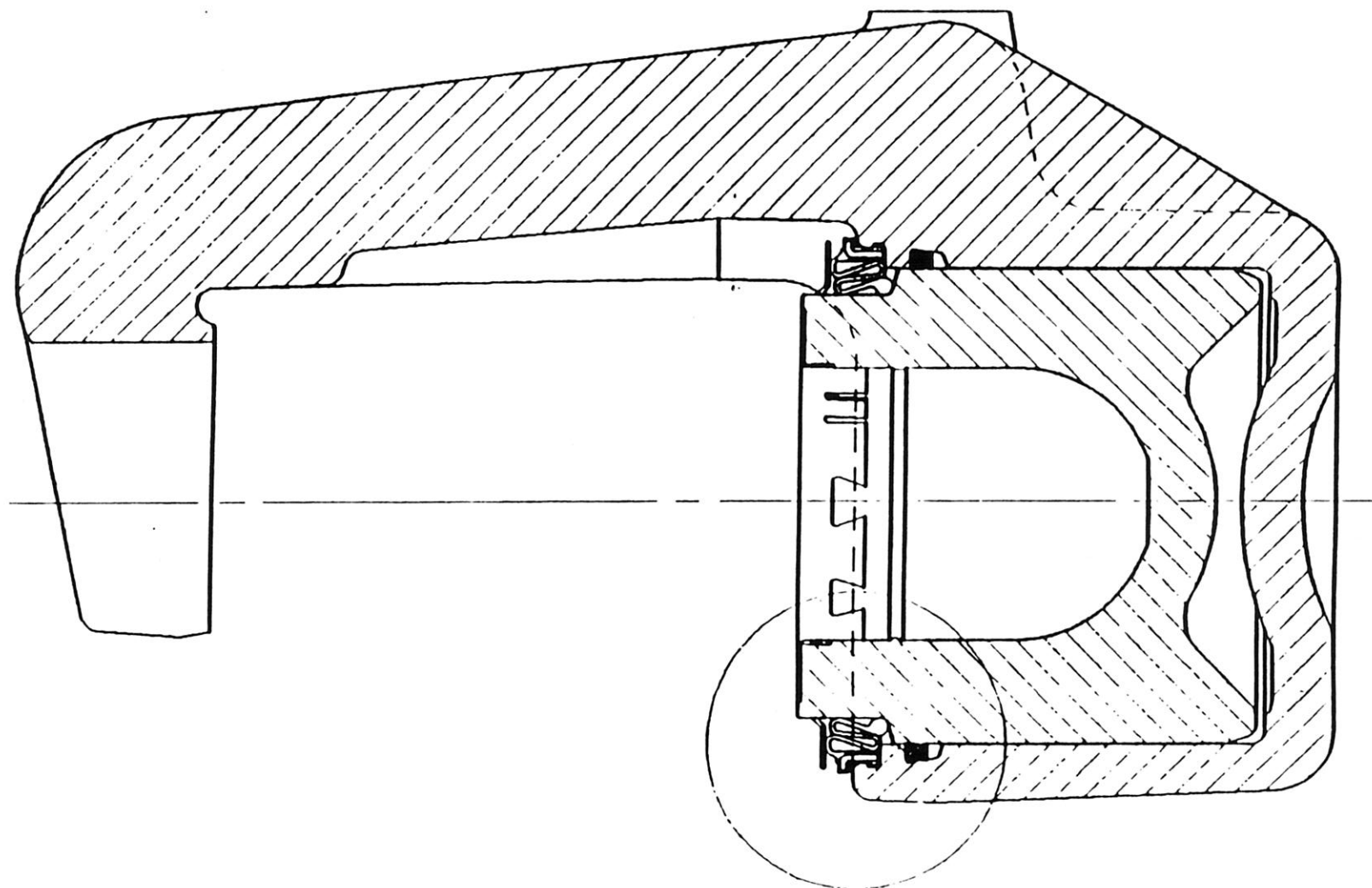
- FEATURES.

- RAIL SLIDER (COMMON KEY AND SPRING WITH 2.6)
- PHENOLIC PISTONS (STEEL FACE)
- PRESS-IN BOOT - SILICONE RUBBER
- MODULAR IRON HOUSING
- LINING AREA: (IN²)

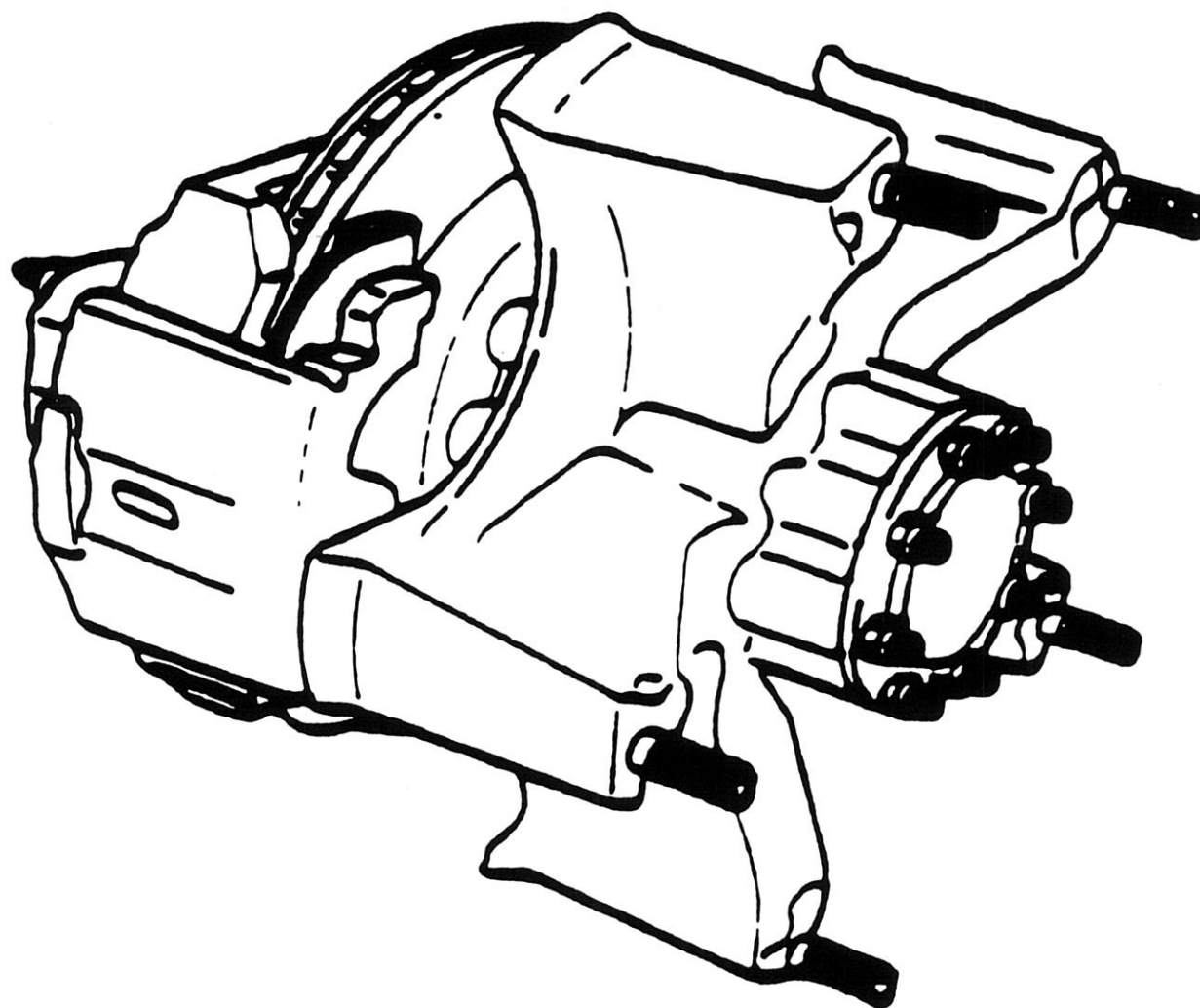
<u>INNER</u>	<u>OUTER</u>
16.44	25.06



TYPICAL ANCHOR PLATE



TYPICAL TWIN BORE CALIPER



TYPICAL BRAKE ASSEMBLY

SERVICEABLE ITEMS FOR DISC BRAKES

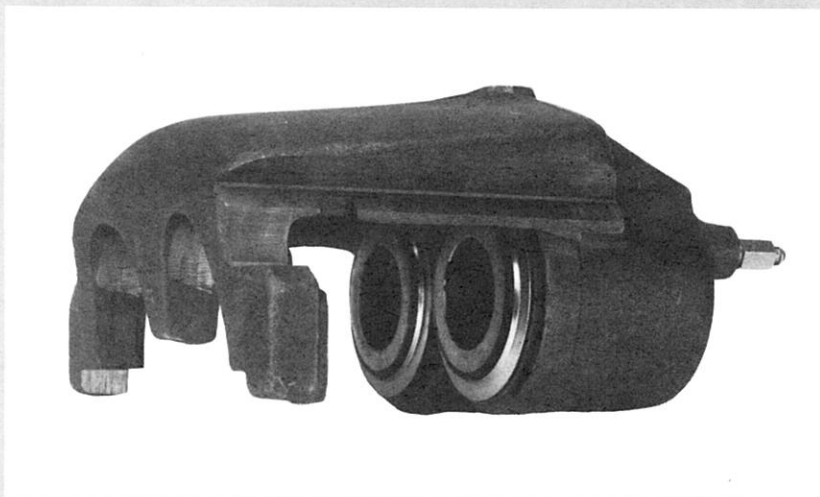
- SHOE AND LINING ASSEMBLIES - IF REPLACEMENT IS REQUIRED REPLACE AS A COMPLETE AXLE SET.
- BOOTS, SEALS AND BOOT SHIELDS - REPLACE IF DAMAGED OR LEAKAGE IS OBSERVED. SPECIAL TOOL REQUIRED TO INSTALL THE BOOT AND HEAT SHIELD. (AVAILABLE FROM KENT MOORE).
- PISTONS - REPLACE IF WORN.
- NEW V-WAY GREASE SHOULD BE APPLIED TO THE CALIPER AND ANCHOR PLATE SLIDES ANY TIME THE CALIPER IS REMOVED FROM THE ANCHOR PLATE.
- IF THE CALIPER IS LOOSE IN THE ANCHOR PLATE A SHIM KIT SHOULD BE USED - SEE WEAR SHIM PROCEDURE.

Bendix Parts Catalog

CATALOG 20-F-1

Hydraulic Disc Brakes

2.88 *Twin Piston Disc Brake Caliper*



The Bendix 2.88" diameter twin-piston caliper disc brake is a single piece casting that has two hydraulic cylinders and a twin pistons.

Machined surfaces on the caliper are positioned against mating machined surfaces on the anchor. A caliper support key is installed between the leading edge of the caliper and anchor plate, with a support spring inserted between the key and caliper. A key retaining screw keeps the support key from sliding out of the anchor plate assembly.

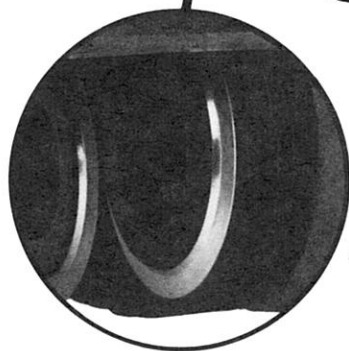
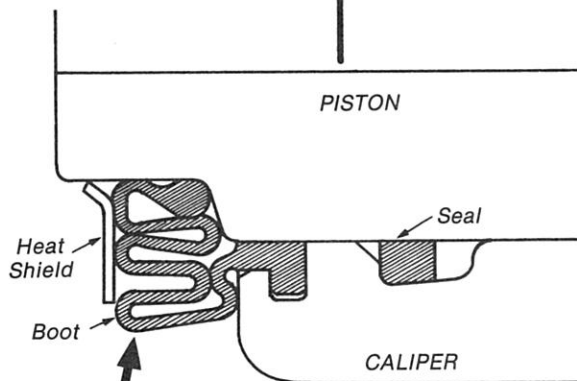
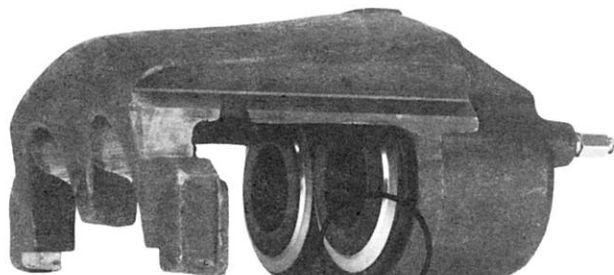
Device code 6600
Approx. Wt. 24 lbs.
VMRS No. 13-001-026

**IMPORTANT REPLACEMENT/SERVICE
INFORMATION:**

Beginning in model year 1988, Bendix began supplying an improved design of the 2.88" diameter twin piston caliper assembly. Part number 55250 remains unchanged and is used for both the old and improved 2.88" caliper assembly. Both versions of caliper 55250 are interchangeable as assemblies, however, the detail components are not. The casting of the improved caliper is machined differently to accommodate a new boot and a new piston. OLD AND NEW KITS AND PISTONS FOR CALIPER 55250 MAY NOT BE INTERCHANGED.

CALIPER 55250

OLD PRE 1988

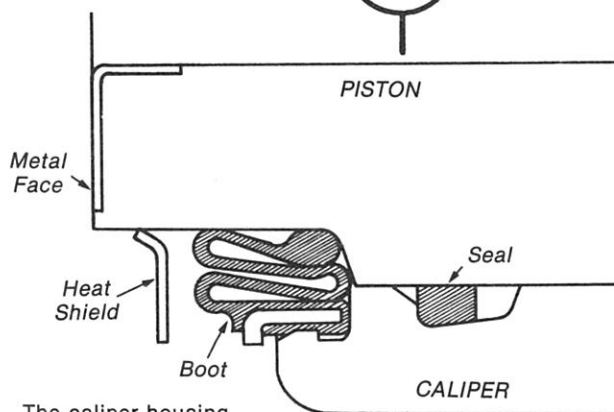
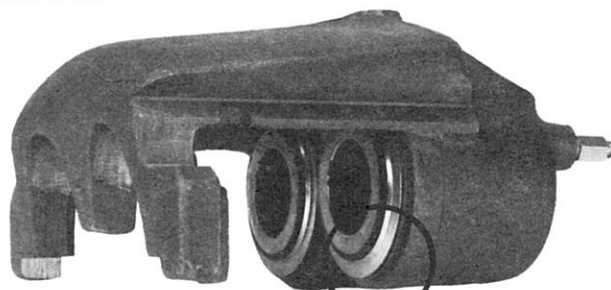


The old caliper assembly can be identified by noting the 3 folds in the boot.



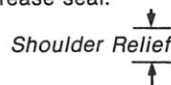
Pre 1988 Caliper Piston
P.C. No. 90070

NEW



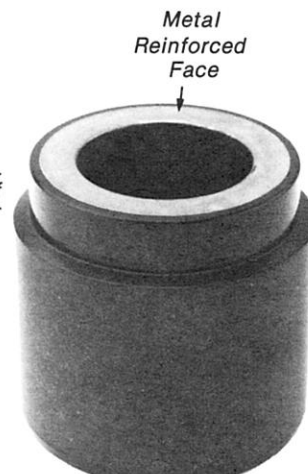
The caliper housing (casting) is machined differently to accept the new boot described below.

The new boot is constructed with a metal insert and is to be driven into the caliper housing in the same manner as an oil or grease seal.



Kent-Moore tool J-37863
Phone 800-328-6657 in U.S.
800-345-2233 in Canada.

New style piston shown incorporates metal reinforced "face." The shape of the piston has been altered to allow boot folds to be "stored" partially in the caliper.



Current Caliper Piston
P.C. No. 90096

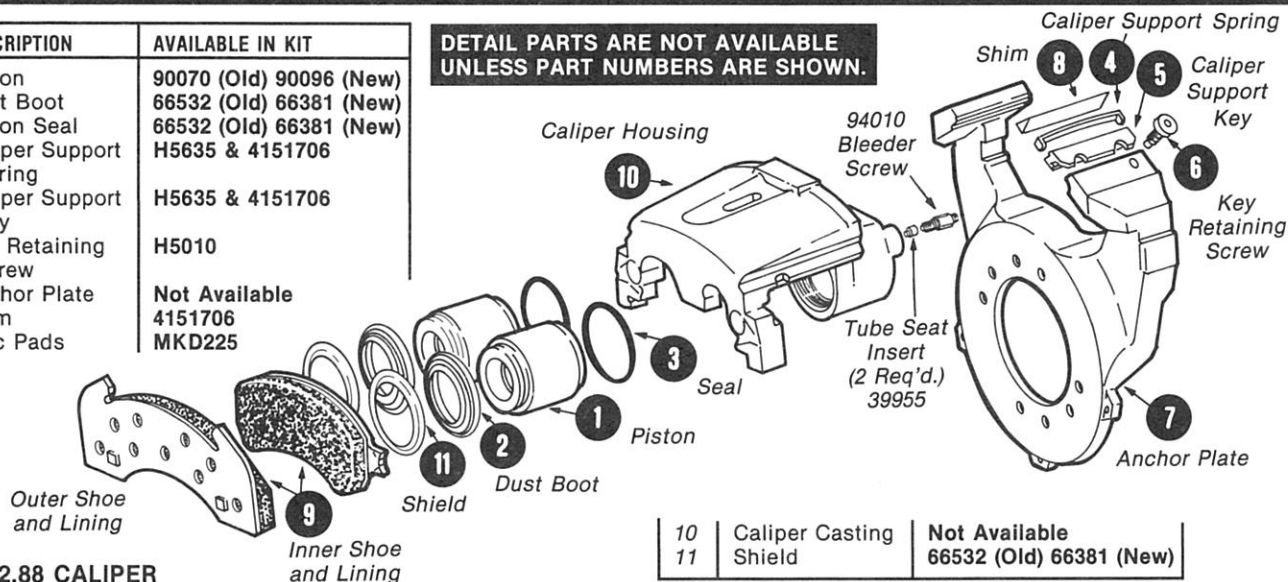
BENDIX 2.88 CALIPER MAINTENANCE KITS

HYDRAULIC
DISC BRAKES

CATALOG
20-F-3

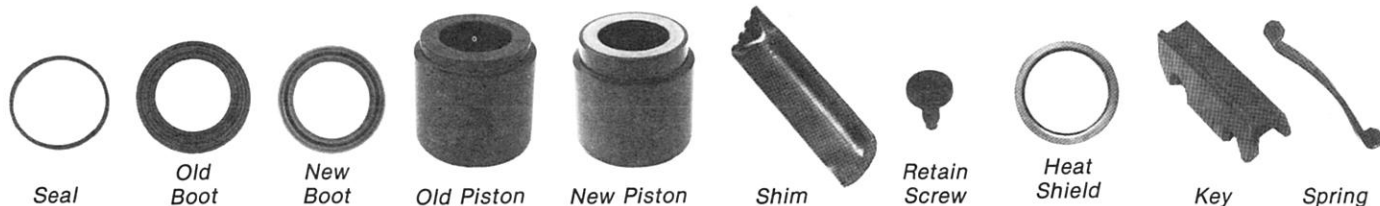
KEY	DESCRIPTION	AVAILABLE IN KIT
1	Piston	90070 (Old) 90096 (New)
2	Dust Boot	66532 (Old) 66381 (New)
3	Piston Seal	66532 (Old) 66381 (New)
4	Caliper Support Spring	H5635 & 4151706
5	Caliper Support Key	H5635 & 4151706
6	Key Retaining Screw	H5010
7	Anchor Plate	Not Available
8	Shim	4151706
9	Disc Pads	MKD225

DETAIL PARTS ARE NOT AVAILABLE
UNLESS PART NUMBERS ARE SHOWN.



TYPICAL 2.88 CALIPER

10	Caliper Casting	Not Available
11	Shield	66532 (Old) 66381 (New)



CALIPER ASSEMBLY 55250

VERSION	REPAIR KIT	PISTON	ATTAC'G KIT	BOLT KIT	SHIM KIT	DISC PADS	BLEEDER SCREW		TUBE SEAT
							PC. NO.	THRD.	
Old	66532	90070	H5635	H5010	4151706	MKD225	94010	7/16-24	39955
New	66381	90096	H5635	H5010	4151706	MKD225	94010	7/16-24	39955

KIT CONTENTS

CALIPER REPAIR KITS 66532 AND 66381 CONSIST OF:

KEY NO.	QTY.	DESCRIPTION
3	2	Seal
2	2	Dust Boot
11	2	Shield

CALIPER BOLT KIT H5010 CONSISTS OF:

KEY NO.	QTY.	DESCRIPTION
6	1	Key Retaining Screw

CALIPER ATTACHING KIT H5635 CONSISTS OF:

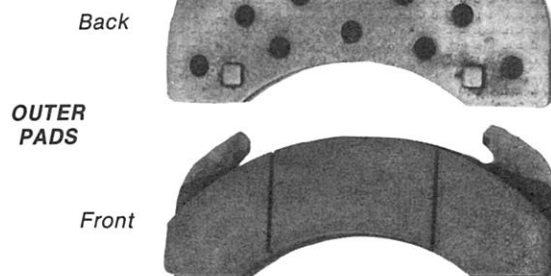
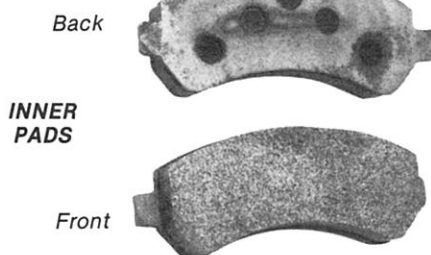
KEY NO.	QTY.	DESCRIPTION
4	1	Caliper Support Spring
5	1	Caliper Support Key

SHIM KIT 4151706 CONSISTS OF:

KEY NO.	QTY.	DESCRIPTION
4	2	Caliper Support Spring
5	2	Caliper Support Key
8	2	.025" shim
8	2	.045" shim

MKD 225 DISC PADS*

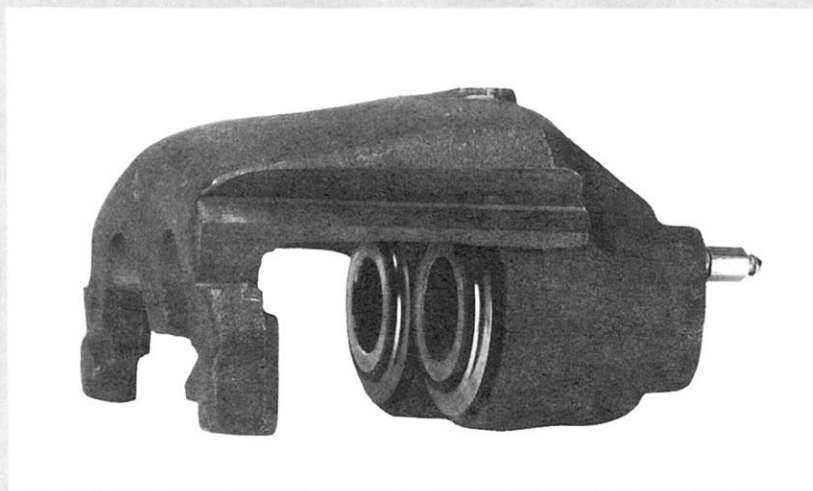
*CONTAINS 2
INNER AND 2
OUTER PADS
(1 AXLE)



CATALOG 20-G-1

Hydraulic Disc Brakes

2.60 *Twin Piston Disc Brake Caliper*



The Bendix 2.60" diameter twin-piston caliper disc brake is a single piece casting that has two hydraulic cylinders and a twin pistons.

Machined surfaces on the caliper are positioned against mating machined surfaces on the anchor. A caliper support key is installed between the leading edge of the caliper and anchor plate, with a support spring inserted between the key and caliper. A key retaining screw keeps the support key from sliding out of the anchor plate assembly.

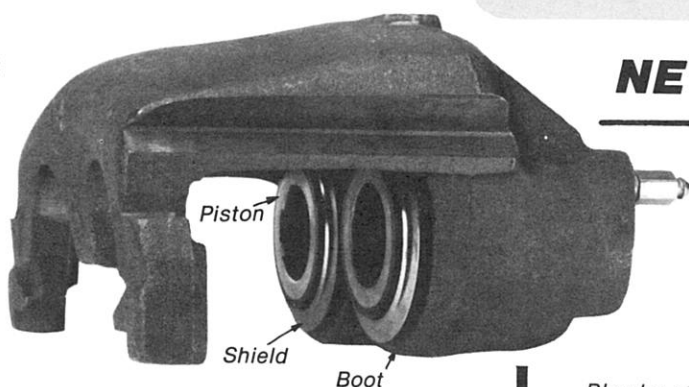
Device code 6600
Approx. Wt. 22 lbs.
VMRS No. 13-001-026

**IMPORTANT REPLACEMENT/SERVICE
INFORMATION:**

Beginning in model year 1989, Bendix began supplying an improved design of the 2.60" diameter twin piston caliper assembly. Part number 55245 remains unchanged and is used for both the old and improved 2.60" caliper assembly. Both versions of caliper 55245 are interchangeable as assemblies, however, the detail components are not. The casting of the improved caliper is machined differently to accommodate a new boot and a new piston. OLD AND NEW KITS AND PISTONS FOR CALIPER 55245 MAY NOT BE INTERCHANGED.

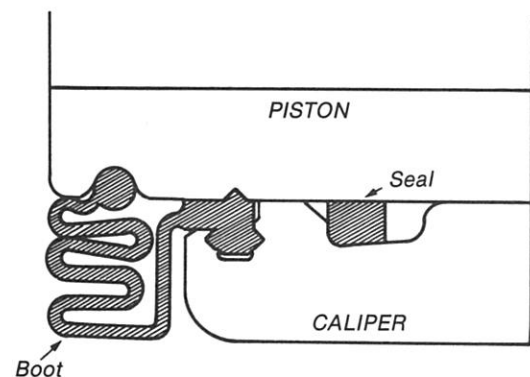
CALIPER 55245

OLD



**Current Revision
Caliper**

The casting number of the old revision caliper is 4151020 and is found below the cast-in "BENDIX".

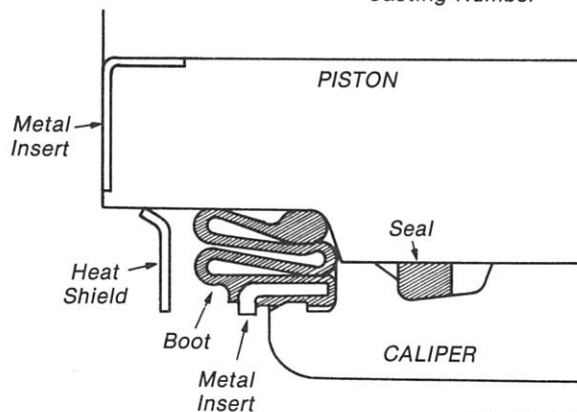
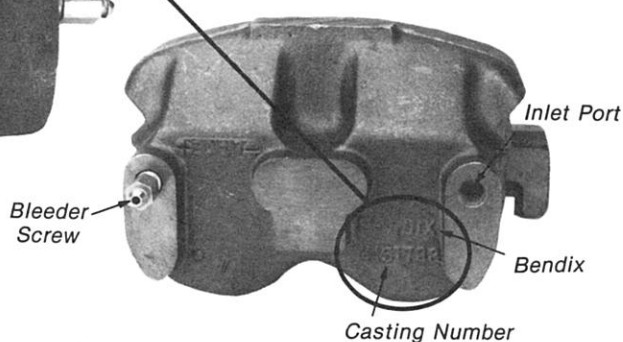


**Old Caliper Piston
P.C. No. 90055**



NEW

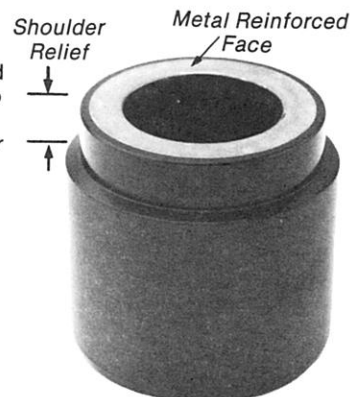
The casting number of the new revision caliper is 4151733 and is found below the cast-in "BENDIX".



The new boot is constructed with a metal insert and is to be driven into the caliper housing in the same manner as an oil or grease seal.

Kent-Moore tool SE-4046
Phone 800-328-6657 in U.S.
800-345-2233 in Canada.

New style piston shown incorporates metal reinforced "face." The shape of the piston has been altered to allow boot folds to be "stored" partially in the caliper.



**Current Caliper Piston
P.C. No. 4151728**

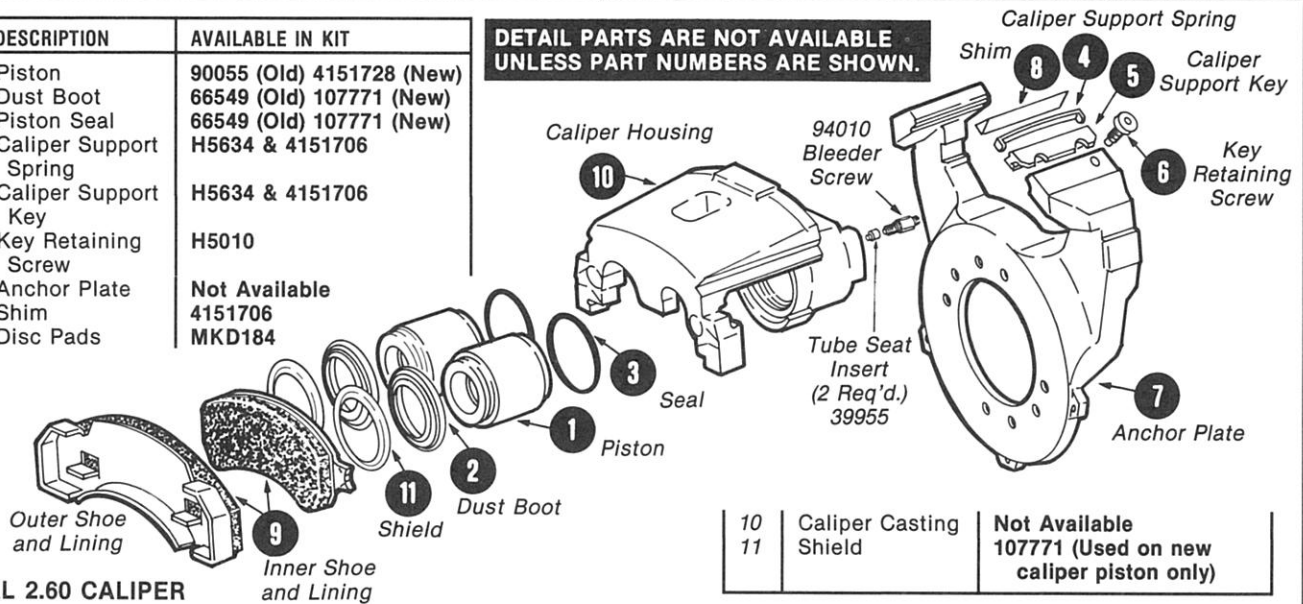
BENDIX 2.60 CALIPER MAINTENANCE KITS

HYDRAULIC
DISC BRAKES

CATALOG
20-G-3

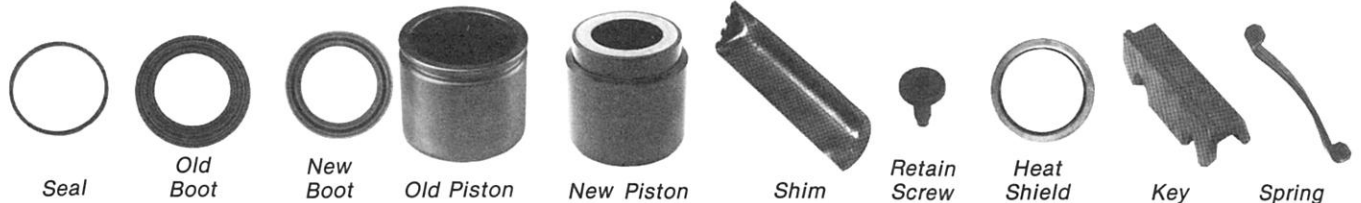
KEY	DESCRIPTION	AVAILABLE IN KIT
1	Piston	90055 (Old) 4151728 (New)
2	Dust Boot	66549 (Old) 107771 (New)
3	Piston Seal	66549 (Old) 107771 (New)
4	Caliper Support Spring	H5634 & 4151706
5	Caliper Support Key	H5634 & 4151706
6	Key Retaining Screw	H5010
7	Anchor Plate	Not Available
8	Shim	4151706
9	Disc Pads	MKD184

DETAIL PARTS ARE NOT AVAILABLE
UNLESS PART NUMBERS ARE SHOWN.



TYPICAL 2.60 CALIPER

10	Caliper Casting	Not Available
11	Shield	107771 (Used on new caliper piston only)



CALIPER ASSEMBLY 55250

VERSION	CALIPER CAST'G.#	REPAIR KIT	PISTON	ATTAC'G KIT	BOLT KIT	SHIM KIT	DISC PADS	BLEEDER SCREW		TUBE SEAT
								PC. NO.	THRD.	
Old	4151020	66549	90055	H5634	H5010	4151706	MKD184	94010	7/16-24	39955
New	4151733	107771	4151728	H5634	H5010	4151706	MKD184	94010	7/16-24	39955

KIT CONTENTS

CALIPER REPAIR KITS 66549 AND 107771 CONSIST OF:

KEY NO.	QTY.	DESCRIPTION
3	2	Seal
2	2	Dust Boot
11*	2	Shield

*Note: Contained in kit 107771 only.

CALIPER ATTACHING KIT H5634 CONSISTS OF:

KEY NO.	QTY.	DESCRIPTION
4	1	Caliper Support Spring
5	1	Caliper Support Key

CALIPER BOLT KIT H5010 CONSISTS OF:

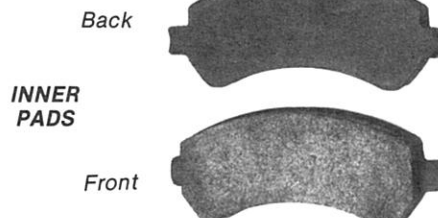
KEY NO.	QTY.	DESCRIPTION
6	1	Key Retaining Screw

SHIM KIT 4151706 CONSISTS OF:

KEY NO.	QTY.	DESCRIPTION
4	2	Caliper Support Spring
5	2	Caliper Support Key
8	2	.025" shim
8	2	.045" shim

MKD 184 DISC PADS*

*CONTAINS 2
INNER AND 2
OUTER PADS
(1 AXLE)



SERVICE PROCEDURE FOR WEAR SHIM

I. PROCEDURE TO DETERMINE IF A WEAR SHIM IS REQUIRED

1. Remove the caliper assembly from the anchor plate by removing the key retention bolt and tapping out key and spring.
2. Clean the V-way surfaces of the caliper and anchor plate with a wire brush, filing 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 the maximum depth of any wear on these surfaces. Calipers worn to a depth of .050" or more should be replaced.
4. Reinstall the caliper back into the anchor plate. Install a new production key and reinstall the key retention bolt, but do not install the caliper support spring at this time.
5. Insert a screw driver 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 largest feeler gauge (or stack of gauges) that will fit into the gap on either side of the screw driver (see Figure 2).
7. Based on the bumper gap measurement, select a shim according to the following table:

TABLE I

<u>BUMPER GAP</u>		<u>SHIM THICKNESS</u>	<u>BENDIX P/N</u>
<u>MORE THAN</u>	<u>BUT NOT EXCEEDING</u>		
0	.058	None required	
.058	.101	.025	4151587
.101	.145	.045	4151586
.145		See Note 1	

KIT NO. 4151706

Note 1:

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 I. If the bumper gap with the new caliper exceeds .145, replace the anchor plate also. Use a new key and spring when assembling the new components.

SERVICE PROCEDURE FOR WEAR SHIM (Cont'd)

II. 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 opposite to the key and spring 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.
3. Remeasure the bumper gap as described in Step I6. If the gap exceeds .058, install a thicker shim or replace components as described in Note 1.

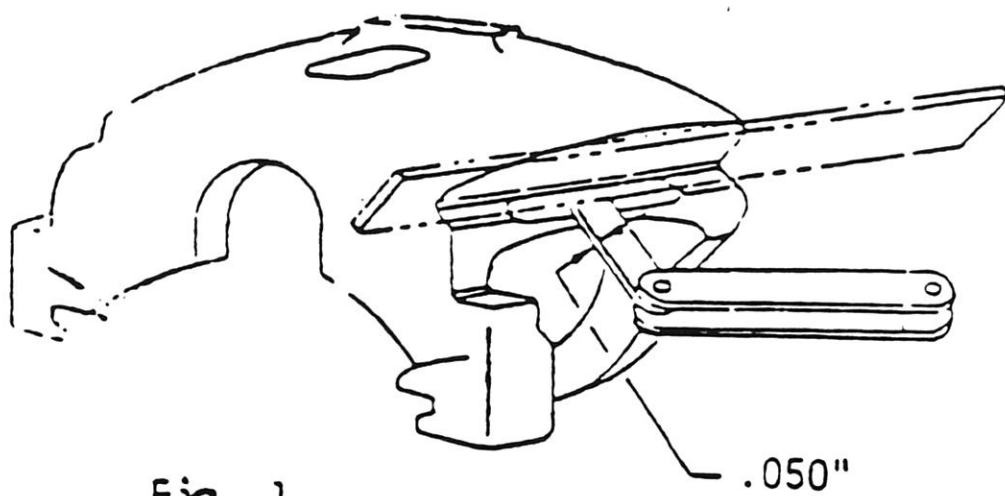


Fig. 1

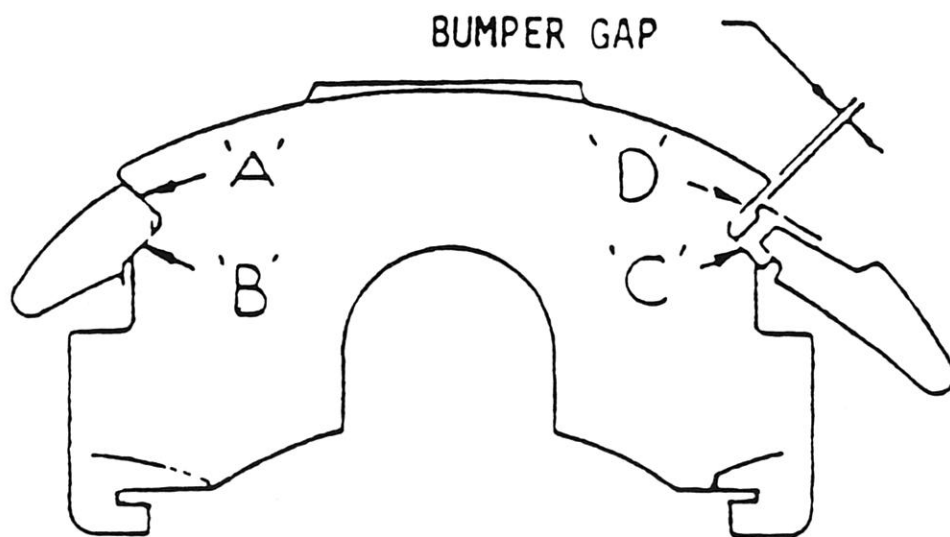


Fig. 2

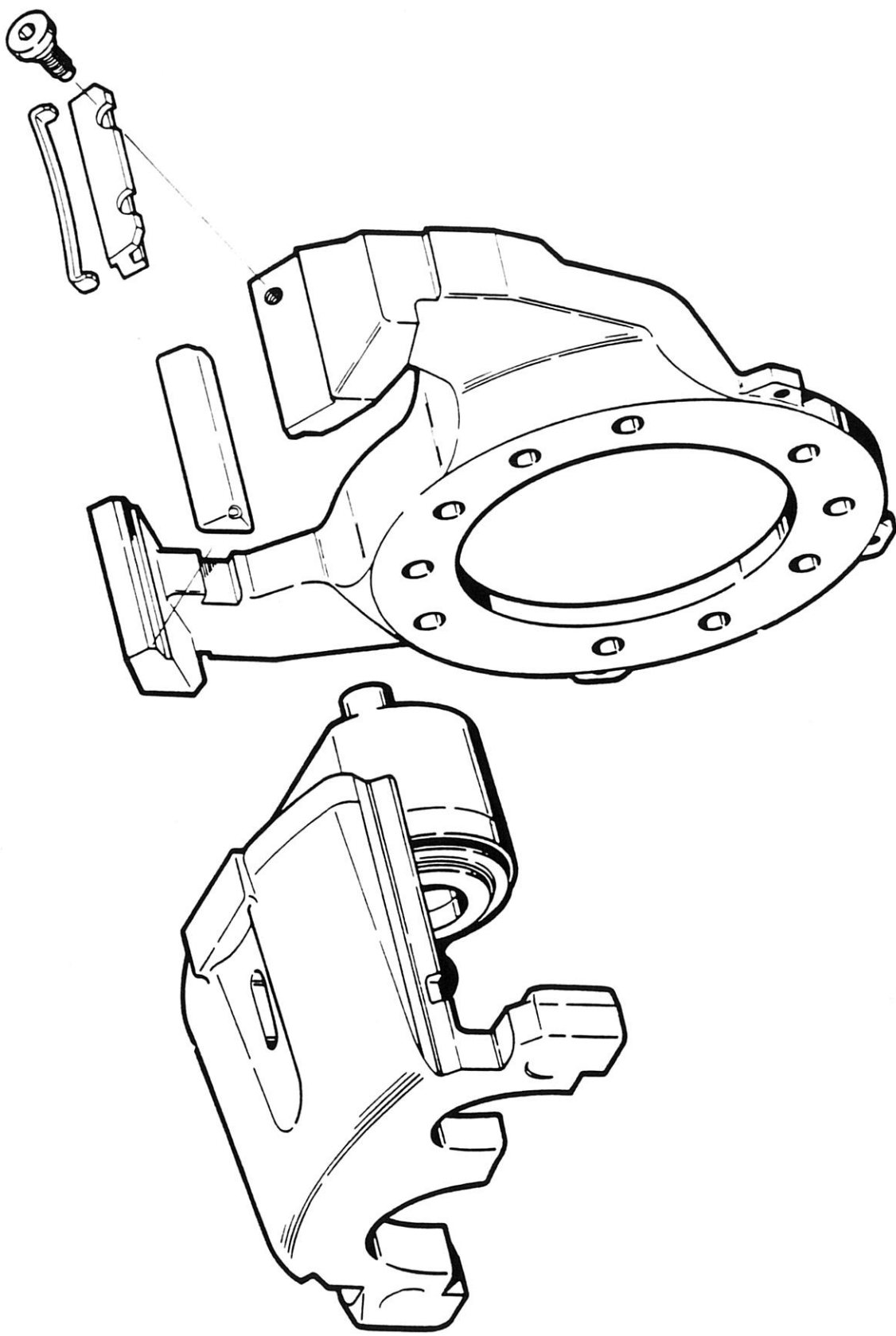


FIG. 3

UNLESS OTHERWISE SPECIFIED

1. THREAD LENGTH DIMENSIONS ARE FOR FULL FORM THREADS.
2. ROUGHNESS NOT TO EXCEED THE FOLLOWING MICROINCH VALUES FOR MACHINED SURFACES

3. REMOVE ALL BURRS AND SHARP EDGES RAD. OR CHAMFER
4. ALL DIAMETERS HAVING A COMMON CENTERLINE MUST BE WITHIN .020 MAX

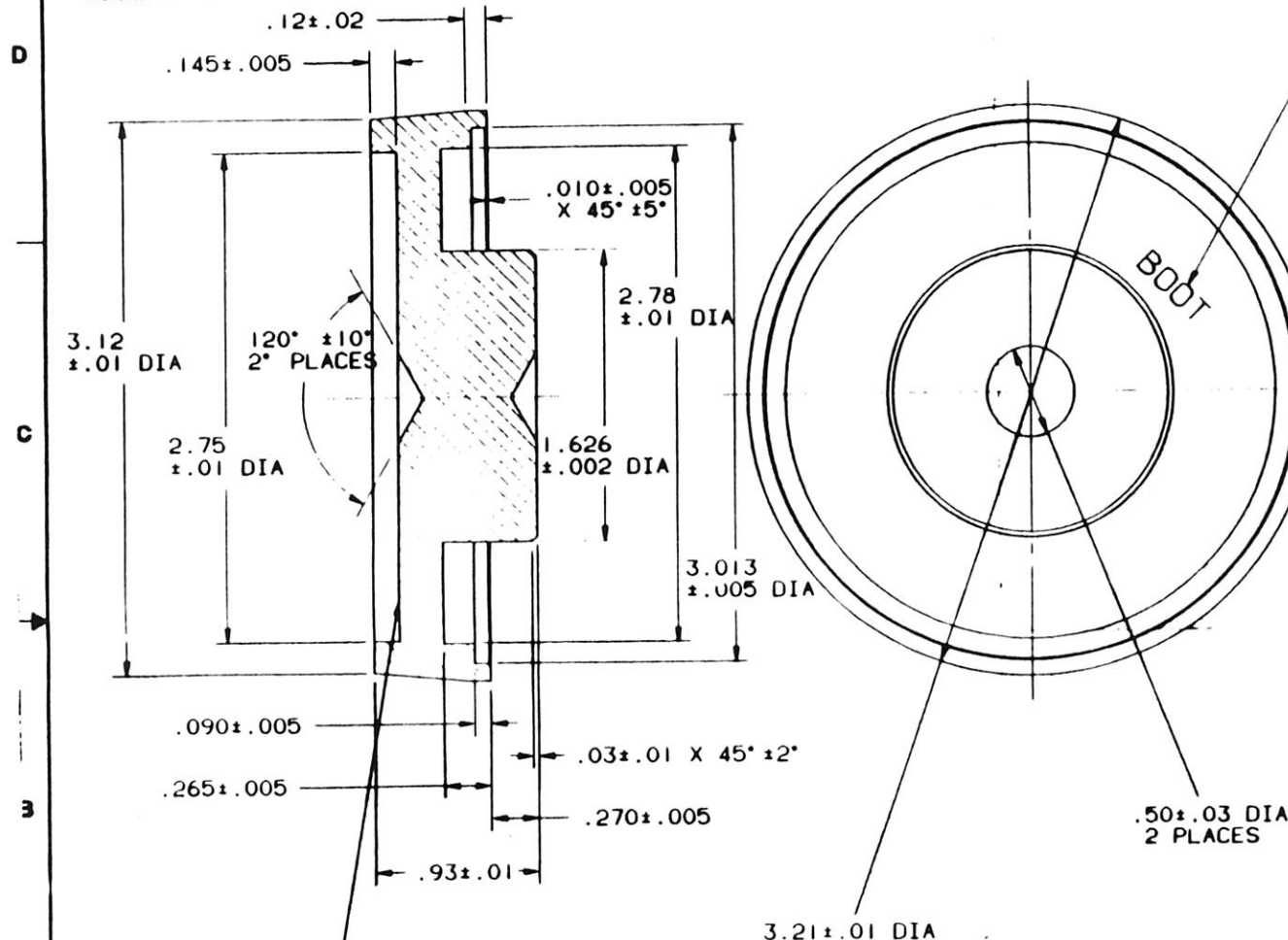
FORGING OR PATTERN NO.

EXP. PART NUMBER

SPECIFICATIONS & INSTRUCTIONS

DO NOT SCALE PRINT

SIMILAR PART



GEOMETRIC DRAWING SYMBOLS

- FLAT
- STRAIGHT
- SQUARE
- PARALLEL
- RADIUS
- TRUE POSITION
- ROUND
- CYLINDRICAL
- DIAMETER
- ANGULAR
- CONCENTRIC
- SYMMETRICAL
- PROFILE OF A LINE
- PROFILE OF A SURFACE

UXC-8603

- BASIC DIMENSION
- REGARDLESS OF FEATURE SIZE (RFS)
- MAXIMUM MATERIAL CONDITION (MMC)
- PROJECTED ZONE

FOR FEATURES OF SIZE, PERFECT STRAIGHTNESS NOT REQUIRED AT MMC. FOR DIAMETRAL FEATURES, ROUNDNESS MUST BE WITHIN THE MMC AND LMC (LEAST MATERIAL CONDITION) BOUNDARY. TRUE POSITION TOLERANCES, AND RELATED DATUMS (EXCEPT PLANE SURFACES), APPLY AT MMC. OTHER GEOMETRIC TOLERANCES, AND RELATED DATUMS, APPLY RFS. SEPARATE TRUE POSITION CALLOUTS MAY BE GAGED SEPARATELY, REGARDLESS OF DATUM REFERENCE.

HEAT TREAT

PROTECTIVE FINISH

MATERIAL

STEEL

	BY	DATE
DRAWN	DE	9-8-86
CHKD		
ENGR		
NFS		
QUALITY		
MATL ENG		
PURCH		
FINAL ASSY		

AUBO Automotive
Bendix Chevrolet & Buick
Components Division
South Bend, Indiana 46634 U.S.A.

PART NAME
TOOL -
BOOT & HEAT SHIELD
2.88 TWIN

REV
C
UXC-8603

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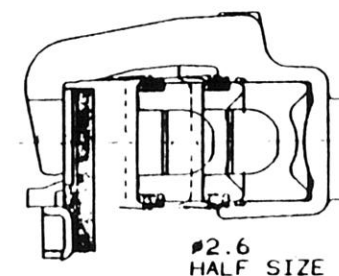
ENGINEERING SERVICE CODES

ZONE	CON	REV	DESCRIPTION	DATE	BY	CHK	ZONE	CON	REV	DESCRIPTION	DATE	BY	CHK

SCALE 2 : 1

4. ALL DIAMETERS HAVING A COMMON CENTERLINE MUST BE WITHIN .020 MAX. \varnothing

EXP. PART NUMBER	SPECIFICATIONS & INSTRUCTIONS
SIMILAR PART UXC-8603	



UXC- 9587

HEAT TREAT			
PROTECTIVE FINISH			
MATERIAL			
STEEL			
FINISH	BY	MM/DD/YY	UNSPECIFIED TITANIUM
CHECKED	XXX	11-24-87	PLACE 1
RESP ENG	XXX	XX/XX/XX	PLACE 1
	XXX	XX/XX/XX	ANGULAR 1
REFER TO			UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE IN INCHES

Alfred Signal Bands, Chassis & Brake Components Division
South Bend, Indiana 46634 U.S.A.


TITLE	TOOL - BOOT & HEAT SHIELD # 2.6" TWIN
-------	---

SIZE C	DRAWING NO UXC- 9587	REV REV
------------------	--------------------------------	------------

SCALE	2:1	DO NOT SCALE	SHEET 1 OF 1
-------	-----	--------------	--------------

[illegible]

ENGINEERING SERVICE COURSE

										 The Alloy Signal Corporation Bonds, Chassis & Brake Components Division South Bend, Indiana 46634 U.S.A.									
										TITLE TOOL - BOOT & HEAT SHIELD # 2.6" TWIN									
										SIZE C DRAWING NO. UXC-9587 REV. REV.									
										SCALE 2:1 DO NOT SCALE SHEET 1 OF 1									