

tilton®

8XXX Series

Typical Application

Low-profile bellhousing mount, often with adapter.



Hydraulic Release Bearings | GEN3

Tilton HRBs

Tilton offers a wide range of hydraulic release bearings (HRB) for use with push-type clutches. Hydraulic release bearings are available for use with smaller diameter racing clutches (4.5", 5.5", & 7.25") and most OE-type clutches.

Tilton hydraulic release bearings are designed to eliminate the need for mechanical linkages, pivot balls, spacers and external slave cylinders.

Advanced manufacturing | Renowned Tilton quality

8000-Series HRB 52mm Bearing

[Installation Drawing](#)

82XX-Series HRB 44mm Bearing

[Installation Drawing](#)

8100-Series HRB Flat-face Bearing

[Installation Drawing](#)

83XX-Series HRB 38mm Bearing

[Installation Drawing](#)



Monoseal Technology



Constant Contact Design



Proprietary Coatings



High Quality Bearings

Tilton's unique monoseal technology is incorporated into all hydraulic release bearings. The high temperature monoseal features a quad tensioner to ensure proper seal tension. Seals have been tested to hundreds of thousands of actuations without failure. Tilton hydraulic release bearings feature a wiper seal to provide protection from debris entering the bore.

The constant contact design of Tilton hydraulic release bearings maintains pedal feel even as the clutch wears. In addition, Tilton hydraulic release bearings self-adjust for clutch wear.

Tilton hydraulic release bearings feature superior materials and proprietary low friction coatings, providing longevity and consistency.

Tilton hydraulic release bearing assemblies feature high-quality bearings to provide smooth and reliable operation.

8000-Series HRB

Flush-mount | **52mm** bearing



Mount:	2-bolt pattern
Bearing contact diameter:	2.05" (52mm)
Piston Area:	1.215 in ² (784mm ²)
Max Stroke:	.700" (17.8 mm)
Ports:	AN3 (3/8"-24)
Weight:	1.30 lbs
Includes:	AN3 fittings (2)

Part Number	Overall Height
60-8000	2.05" (52.0mm)

5.5" - 8.5" clutches

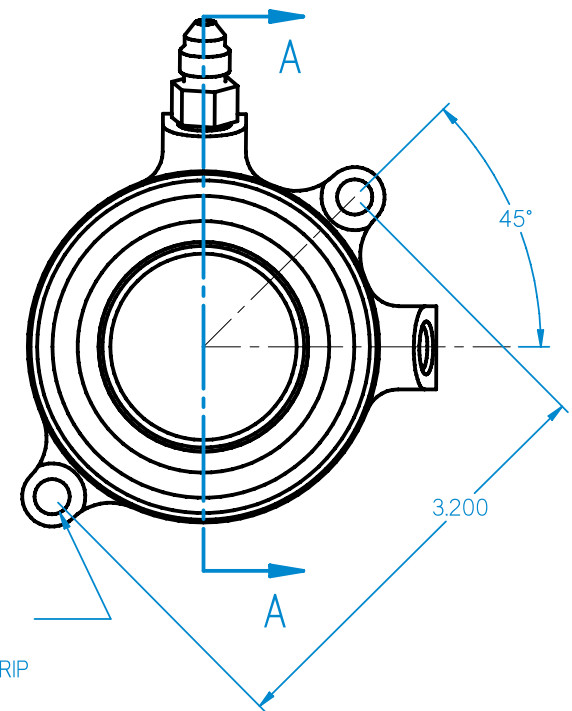
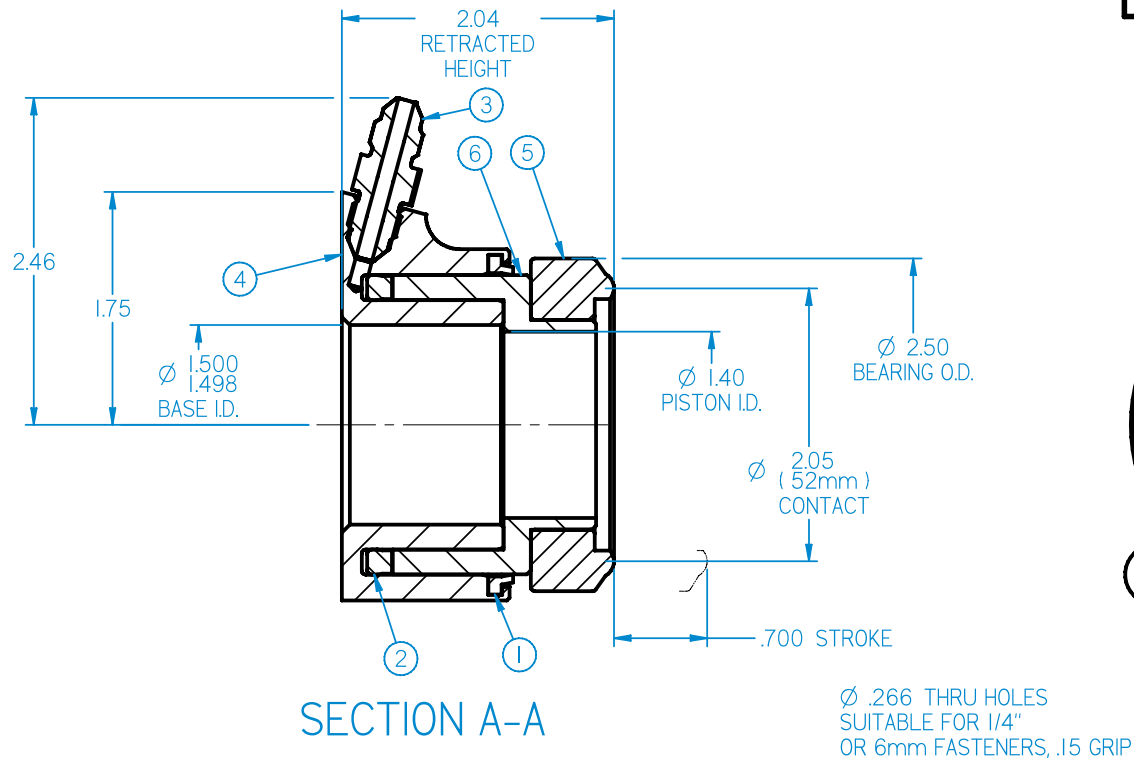
Radius face bearing

Billet Aluminum

Installation Drawing

60-8000 HRB

ITEM	PART NUMBER	DESCRIPTION	QTY
1	62-617	WIPER	1
2	62-614	HYDRAULIC SEAL	1
3	73-820	FITTING, AN-3	2
4	62-806	HYDRAULIC BASE	1
5	62-002	BEARING	1
6	62-612	PISTON	1



INSTALLATION NOTES:

1. USE ONLY WITH DOT-3 OR DOT-4 BRAKE FLUID.
2. NO INTERNAL TRAVEL LIMITER. MUST BE USED WITH CLUTCH PEDAL STOP.
3. SEAL REBUILD KIT = 62-905.
4. SEAL INSTALLATION TOOL = 96-002.
5. HYDRAULIC AREA = 1.215 SQ IN.
6. EITHER PORT MAY BE USED FOR FEED OR BLEED.
7. ORIENTATE BLEED PORT TO WITHIN 10 DEGREES OF TOP CENTER TO FACILITATE BLEEDING PROCESS.
8. BOTH PORTS 3/8-24 UNF X .28 THREAD DEPTH

8100-Series HRB

Flush-mount | **Flat face** bearing



Mount: **2-bolt pattern**

Bearing contact diameter: **1.71" – 3.03" (43.4mm – 77.0mm)**

Piston Area: **1.215 in² (784mm²)**

Max Stroke: **.700" (17.8 mm)**

Ports: **AN3 (3/8"-24)**

Weight: **1.45 lbs**

Includes: **AN3 fittings (2)**

Part Number	Overall Height
60-8100	1.79" (45.5mm)

8.5" - 11.0" bent finger clutches

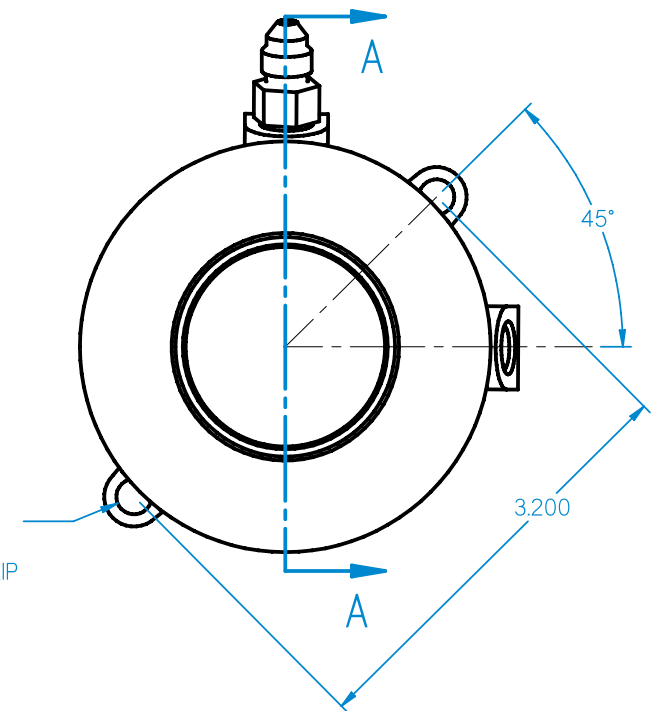
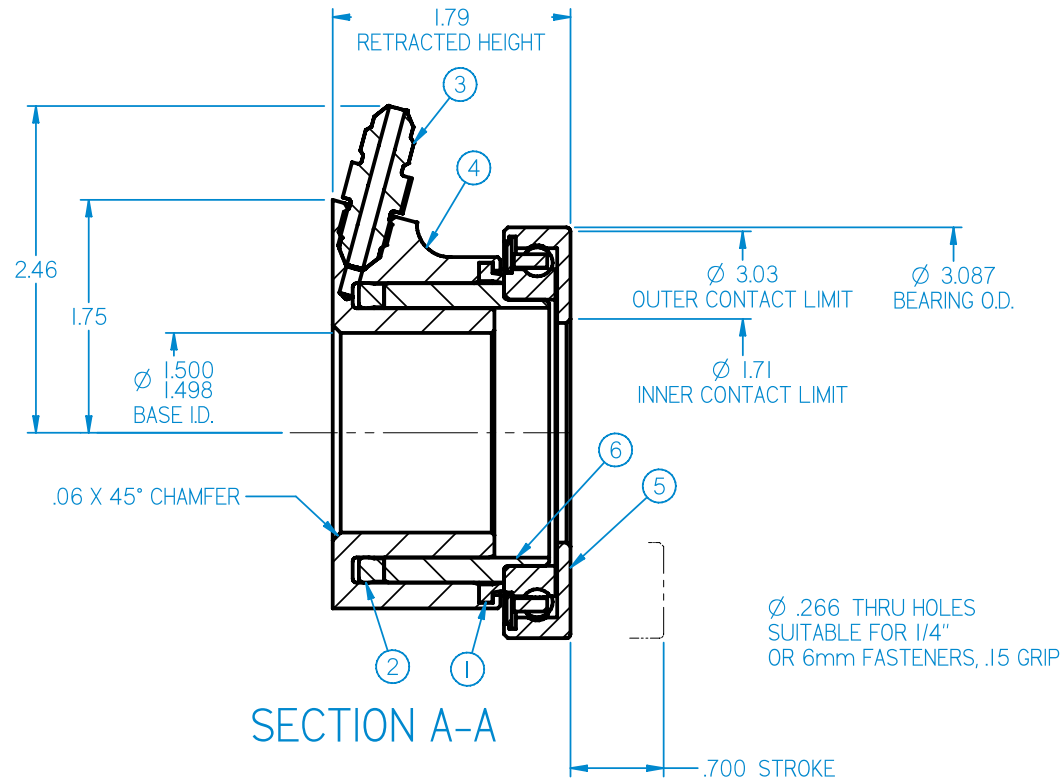
Flat face bearing

Billet Aluminum

Installation Drawing

60-8100 HRB

ITEM	PART NUMBER	DESCRIPTION	QTY
1	62-617	WIPER	1
2	62-614	HYDRAULIC SEAL	1
3	73-820	FITTING, AN-3	2
4	62-806	HYDRAULIC BASE	1
5	62-618	BEARING	1
6	62-6100	PISTON	1



INSTALLATION NOTES:

1. USE ONLY WITH DOT-3 OR DOT-4 BRAKE FLUID.
2. NO INTERNAL TRAVEL LIMITER. MUST BE USED WITH CLUTCH PEDAL STOP.
3. SEAL REBUILD KIT = 62-905.
4. SEAL INSTALLATION TOOL = 96-002.
5. HYDRAULIC AREA = 1.215 SQ IN.
6. EITHER PORT MAY BE USED FOR FEED OR BLEED.
7. ORIENTATE BLEED PORT TO WITHIN 10 DEGREES OF TOP CENTER TO FACILITATE BLEEDING PROCESS.
8. BOTH PORTS 3/8-24 X .28 THREAD DEPTH.

82XX-Series HRB

Flush-mount | **44mm** bearing



Mount:	2-bolt pattern
Bearing contact diameter:	1.75" (44mm)
Piston Area:	1.215 in² (784mm²)
Max Stroke:	.700" (17.8 mm)
Ports:	AN3 (3/8"-24)
Weight:	.70 lbs (varies by p/n)
Includes:	AN3 fittings (2)

5.5" - 7.25" clutches

Radius face bearing

Billet Aluminum

Also available:
Ultra-Low Profile (with reduced stroke)

Part Number	Overall Height	Stroke
	(in/mm)	(in/mm)
61-8122	1.44" (36.6mm)	.500"/12.7mm
61-8002	1.60" (40.6mm)	.650"/16.5mm

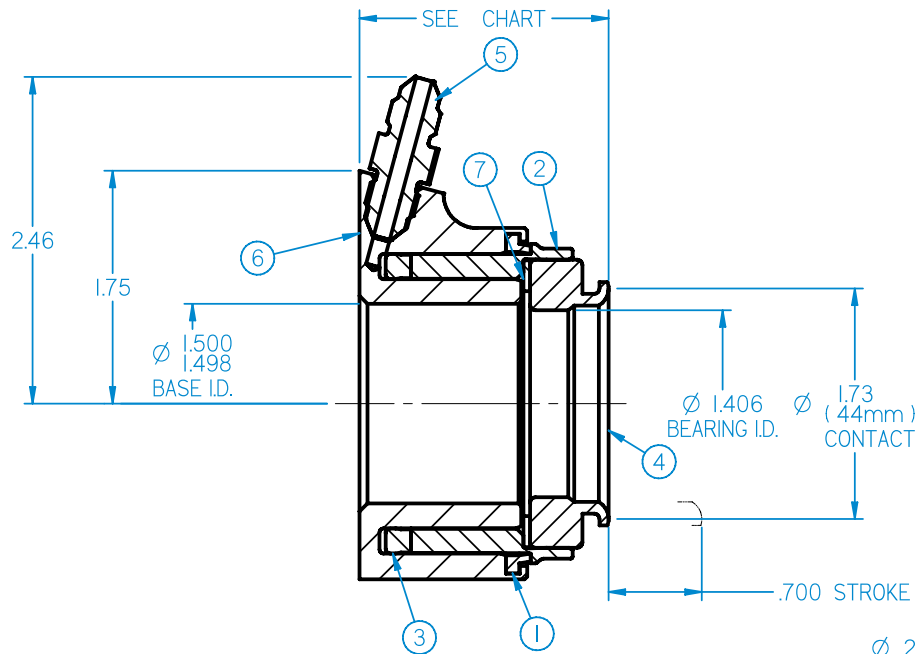
Part Number	Overall Height	
	with shim	without shim
60-8200	1.87" (47.5mm)	1.82" (46.2mm)
60-8210	1.97" (50.0mm)	1.92" (48.8mm)
60-8220	2.07" (52.3mm)	2.02" (51.3mm)
60-8230	2.17" (55.1mm)	2.12" (53.8mm)
60-8240	2.27" (57.7mm)	2.22" (56.4mm)
60-8250	2.37" (60.2mm)	2.32" (58.9mm)
60-8260	2.47" (62.7mm)	2.42" (61.5mm)
60-8270	2.57" (65.3mm)	2.52" (64.0mm)
60-8280	2.67" (67.8mm)	2.62" (66.5mm)
60-8290	2.77" (70.4mm)	2.72" (69.0mm)

HRB comes from Tilton factory with shim installed in piston under the bearing. Shim can be removed by customer to gain .050" (1.3mm) additional clearance.

Installation Drawing

60-82XX HRB

ITEM	PART NUMBER	DESCRIPTION	QTY
1	62-617	WIPER	1
2	SEE CHART	PISTON	1
3	62-614	HYDRAULIC SEAL	1
4	62-031	BEARING	1
5	73-820	FITTING, AN-3	2
6	62-806	HYDRAULIC BASE	1
7	62-903	SHIM	1



SECTION A-A

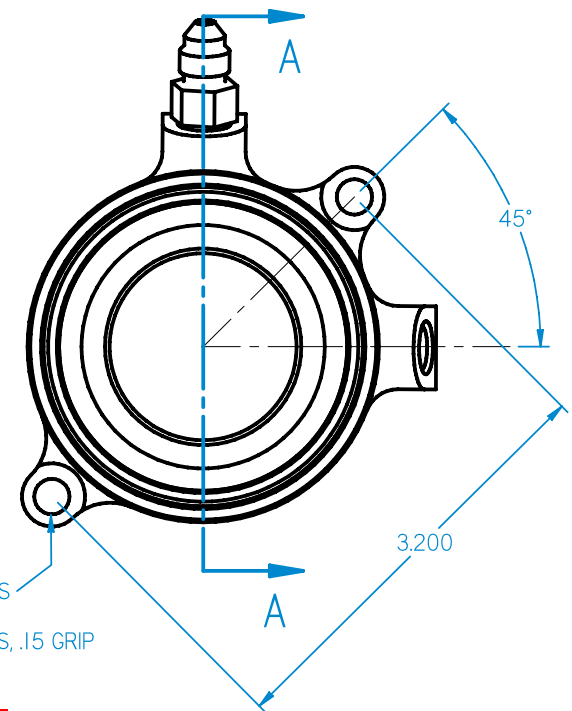


CHART OF AVAILABLE ASSEMBLIES		
HEIGHT	ASSY PN	PISTON PN
1.82"-1.87"	60-8200	62-6000
1.92"-1.97"	60-8210	62-6001
2.02"-2.07"	60-8220	62-6002
2.12"-2.17"	60-8230	62-6003
2.22"-2.27"	60-8240	62-6004
2.32"-2.37"	60-8250	62-6005
2.42"-2.47"	60-8260	62-6006
2.52"-2.57"	60-8270	62-6007
2.62"-2.67"	60-8280	62-6008
2.72"-2.77"	60-8290	62-6009

*HEIGHTS SHOWN IN CHART ARE WITH AND WITHOUT 62-903 SHIM

INSTALLATION NOTES:

1. USE ONLY WITH DOT-3 OR DOT-4 BRAKE FLUID.
2. NO INTERNAL TRAVEL LIMITER. MUST BE USED WITH CLUTCH PEDAL STOP.
3. SEAL REBUILD KIT = 62-905.
4. SEAL INSTALLATION TOOL = 96-002.
5. HYDRAULIC AREA = 1.215 SQ IN.
6. EITHER PORT MAY BE USED FOR FEED OR BLEED.
7. ORIENTATE BLEED PORT TO WITHIN 10 DEGREES OF TOP CENTER TO FACILITATE BLEEDING PROCESS.
8. UNIT IS SHIPPED WITH 62-903 SHIM (.050" THICK) INSTALLED UNDER THE BEARING WHICH MAY BE REMOVED FOR ADDITIONAL CLEARANCE.
9. BOTH PORTS 3/8-24 UNF X .28 THREAD DEPTH.

83XX-Series HRB

Flush-mount | **38mm** bearing



Mount:	2-bolt pattern
Bearing contact diameter:	1.50" (38mm)
Piston Area:	1.215 in² (784mm²)
Max Stroke:	.700" (17.8 mm)
Ports:	AN3 (3/8"-24)
Weight:	.75 lbs (varies by p/n)
Includes:	AN3 fittings (2)

4.5" - 5.5" clutches

Radius face bearing

Billet Aluminum

Also available:
Ultra-Low Profile (with reduced stroke)

Part Number	Overall Height	Stroke
	(in/mm)	(in/mm)
61-8123	1.44" (36.6mm)	.500"/12.7mm
61-8003	1.60" (40.6mm)	.650"/16.5mm

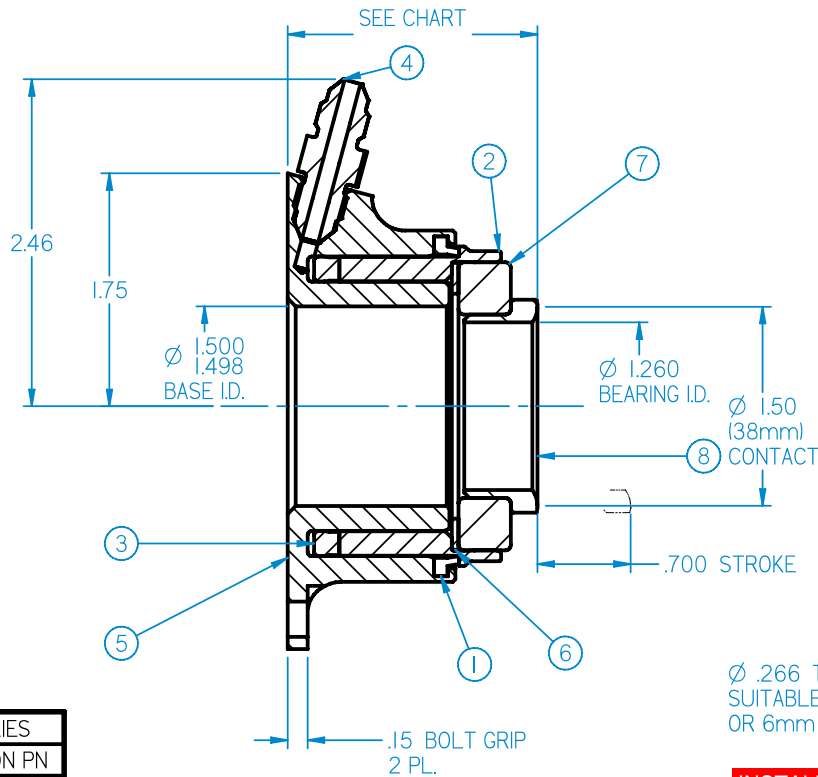
Part Number	Overall Height	
	with shim	without shim
60-8300	1.87" (47.5mm)	1.82" (46.2mm)
60-8310	1.97" (50.0mm)	1.92" (48.8mm)
60-8320	2.07" (52.3mm)	2.02" (51.3mm)
60-8330	2.17" (55.1mm)	2.12" (53.8mm)
60-8340	2.27" (57.7mm)	2.22" (56.4mm)
60-8350	2.37" (60.2mm)	2.32" (58.9mm)
60-8360	2.47" (62.7mm)	2.42" (61.5mm)
60-8370	2.57" (65.3mm)	2.52" (64.0mm)
60-8380	2.67" (67.8mm)	2.62" (66.5mm)
60-8390	2.77" (70.4mm)	2.72" (69.0mm)

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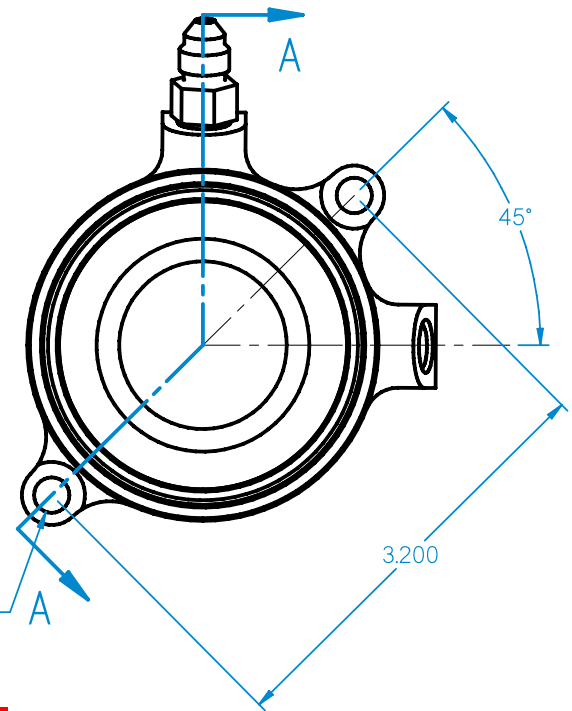
Installation Drawing

60-83XX HRB

Item	PART NUMBER	DESCRIPTION	QTY
1	62-617	WIPER	1
2	SEE CHART	PISTON	1
3	62-614	HYDRAULIC SEAL	1
4	73-820	FITTING, AN-3	2
5	62-806	HYDRAULIC BASE	1
6	62-903	SHIM	1
7	62-008	BEARING	1



SECTION A-A



Ø .266 THRU HOLES
SUITABLE FOR 1/4"
OR 6mm FASTENERS

CHART OF AVAILABLE ASSEMBLIES		
HEIGHT	ASSY PN	PISTON PN
1.82"-1.87"	60-8300	62-6000
1.92"-1.97"	60-8310	62-6001
2.02"-2.07"	60-8320	62-6002
2.12"-2.17"	60-8330	62-6003
2.22"-2.27"	60-8340	62-6004
2.32"-2.37"	60-8350	62-6005
2.42"-2.47"	60-8360	62-6006
2.52"-2.57"	60-8370	62-6007
2.62"-2.67"	60-8380	62-6008
2.72"-2.77"	60-8390	62-6009

*HEIGHTS SHOWN IN CHART ARE WITH AND WITHOUT 62-903 SHIM

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4. SEAL INSTALLATION TOOL = 96-002.
5. HYDRAULIC AREA = 1.215 SQ IN.
6. EITHER PORT MAY BE USED FOR FEED OR BLEED.
7. ORIENTATE BLEED PORT TO WITHIN 10 DEGREES OF TOP CENTER TO FACILITATE BLEEDING PROCESS.
8. UNIT IS SHIPPED WITH 62-903 SHIM (.050" THICK) INSTALLED UNDER THE BEARING WHICH MAY BE REMOVED FOR ADDITIONAL CLEARANCE.
9. BOTH PORTS 3/8-24 UNF X .28 THREAD DEPTH.



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