

ARMSTRONG®

FILE NO.:	6040.225
DATE:	June 1, 2004
SUPERSEDES:	6040.225
DATE:	Jan. 6, 2003

BASE MOUNTED PUMP

PARTS LIST

SERIES 4030

**TANGENTIAL DISCHARGE
"M" DESIGNATION**

1 1/4" IMPELLER BORE -- 1 5/8" MECHANICAL SEAL

OLD DESIGN

NEMA FRAME ASSIGNMENTS

OPEN & TEFC (TEFC FRAMES IN GREY BOX WHERE DIFFERENT THAN OPEN)

NEMA FRAME PROGRAM HP	3600 RPM						1800 RPM						1200 RPM			900 RPM		
	"T" FRAMES		"U" FRAMES		ORIGINAL NEMA FRAMES		"T" FRAMES		"U" FRAMES		ORIGINAL NEMA FRAMES		"T" FRAMES	"U" FRAMES	ORIGINAL NEMA FRAMES	"T" FRAMES	"U" FRAMES	ORIGINAL NEMA FRAMES
	1964		1952		FRAMES		1964		1952		FRAMES		1964	1952	FRAMES	1964	1952	FRAMES
	-		-		-		143T	182		203		145T	184	204	182T	213	225	
1 1/2	143T		182		203		145T	184		204		182T	184	224	184T	213	254	
2	145T		184		204		145T	184		224		184T	213	225	213T	215	254	
3	145T	182T	184		224		182T	213		225		213T	215	254	215T	254U	284	
5	182T	184T	213		225		184	215		254		215T	254U	284	254T	256U	324	
7 1/2	184T	213T	215		254		213T	254U		284		254T	256U	324	256T	284U	326	
10	213T	215T	254U		284		215T	256U		324		256T	284	326	284T	286U	364	
15	215T	254T	256U		324		254T	284T		326		284T	234T	364	286T	326U	365	
20	254T	256T	284U	286U	326		256T	286U		364		286T	326U	365	324T	364U	404	
25	256T	284TS	286U	324U	364S	365S	284T	324U		364	365	324T	364U	404	326T	365U	405	
30	284TS	286TS	324S	326S	364S	404S	286T	326U		365	404	326T	365U	405	364T	404U	444	
40	286TS	324TS	326S	364US	365S	405S	324T	364U		404	405	364T	404U	444	365T	405U	445	
50	324TS	326TS	364US		404S	444S	326T	365US		405S	444S	365T	405U	445	404T	444U	504U	
60	326TS	364TS	365US	405US	405S	445S	364TS	404US	405US	444S	445S	404T	444U	504U	405T	445U	505	
75	364TS	365TS	404US	444US	444S	504S	365TS	405US	444US	445S	504S	405T	445U	505	444T	-	-	
100	365TS	405TS	405US	445US	445S	505S	404TS	405TS	444US	445US	504S	505S	444T	-	-	445T	-	
125	404TS	444TS	444US		504US		405TS	444TS	445US		505S		445T	-	-	-	-	
150	405TS	445TS	445US		505S		444TS	445TS	-		-		-	-	-	-	-	
200	444TS		-		-		445TS		-		-		-	-	-	-	-	
250	445TS		-		-		-		-		-		-	-	-	-	-	

ARMSTRONG

OLD STYLE TANGENTIAL PUMPS CATALOG DESIGNATIONS

"JUNIOR " BEARING FRAME ASSEMBLY

CUSTOM SIZES								
FORMERLY	1524	3/4 AAB			1 AAB	1 1/4 AAB		1 1/2AAB
NEW DESIG.	4000	3/4 B			1B	1 1/4B		1 1/2B
STOCK SIZES								
CUSTOM SIZES		3/4 AAB			1 AAB	1 1/4 AAB		1 1/2AAB
FORMERLY	JR. UNIVERSAL	JU-10	JU-12	-	JU-14	JU-16	JU-18	JU-20
NEW DESIG.	4000	B-80	B-82	-	B-84	B-86	B-88	B-90

"SMALL " AND "MEDIUM" BEARING FRAME PUMPS

CUSTOM SIZES																			
FORMERLY	1510	1 1/4AB	1 1/2AB	2AB	2 1/2A	3A	4AB	1 1/4BB	1 1/2BB	2BB	2 1/2B	3BB	4BB	5BB	6BB	2G	3G	4G	6G
NEW DESIG.	4030	1 1/4D	1 1/2D	2D	2 1/2D	3D	4D	1 1/4E	1 1/2E	2E	2 1/2E	3E	4E	5E	6E	2C	3C	4C	6C
FORMERLY	UNIVERSAL	U1 1/4A	U 1/2A	U2A	U2 1/2A	U3A	U4A	U1 1/4B	U1 1/2B	U2B	U2 1/2B	U3B	U4B	U5B					
NEW DESIG.	4020	1 1/4D	1 1/2D	2D	2 1/2D	3D	4D	1 1/4E	1 1/2E	2E	2 1/2E	3E	4E	5E					
STOCK SIZES (See 4020 Parts List Item 102 Impeller (Stock Sizes) For Impeller Diameters)																			
CUSTOM SIZES		1 1/4D	1 1/2D	2D	2 1/2D	3D	4D	1 1/4E	1 1/2E	2E	2 1/2E	3E	4E	5E					
FORMERLY	UNIVERSAL	-	-	-	U1			-	-	-	U5	-		U8					
		-	-	-	U2	U4	U6	-	-	-	U7	-	U11	U10					
		-	-	-	U3			-	-	-	U9	-		U12					
NEW DESIG.	4020	-	-	-	D141			-	-	-	E145	-		E148					
		-	-	-	D142	D144	D146	-	-	-	E147	-	E151	E150					
		-	-	-	D143			-	-	-	E149	-		E152					

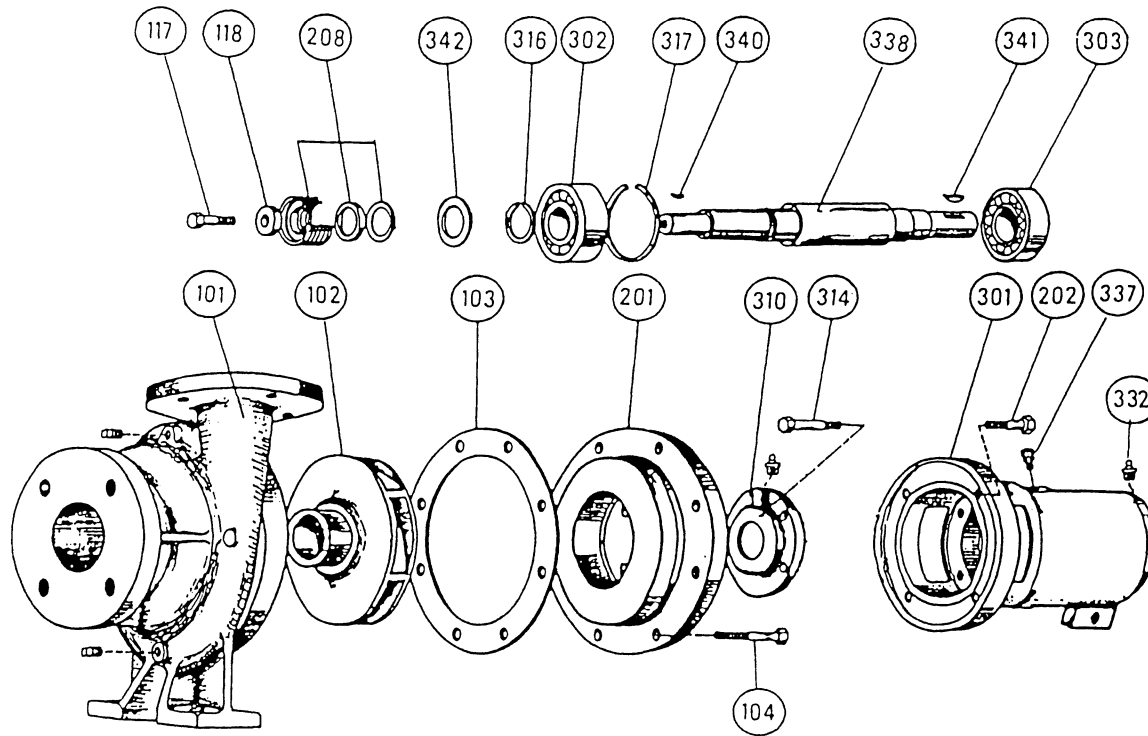
B&G MODEL 1510 --- ARMSTRONG MODEL 4030 BEARING FRAMES, ALL SPEEDS

MOTOR HP	1200RPM	1/2	3/4	1	1 1/2	2	3	5	7 1/2	10	-	-	15	20	-	-	25	30	-
AND	1800RPM	3/4	1	1 1/2&2	3	5	7 1/2	10	15	20	-	-	25	30	-	60	40	50	75
SPEED	3600RPM	-	-	-	5	7 1/2	10	15	20	25	30	40	-	-	50	60	-	-	75
FRAME	1954 RERATE	56	182	184	213	215	254U	256U	284U	286U	324S	326S	324U	326U	364US	365US	364U	365U	404US
SIZE	1964 RERATE	56	143T	145T	182T	184T	213T	215T	254T	256T	284TS	286TS	284T	286T	324TS	326TS	324T	326T	364TS
PUMP SIZE		-	-	-	-	-	-	-	-	-	-	-	-	-	-	364T	-	-	365T
B&G	ARMSTRONG																		
1 1/4A	1 1/4D	S	S	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-
1 1/2A	1 1/2D	S	S	S	S	S	S	S	M	M	-	-	-	-	-	-	-	-	-
2A	2D	S	S	S	S	S	S	S	M	M	-	-	-	-	-	-	-	-	-
2 1/2A	2 1/2D	S	S	S	S	S	S	S	M	M	M	M	-	-	-	-	-	-	-
3A	3D	-	S	S	S	S	S	S	M	M	M	M	-	-	-	-	-	-	-
4A	4D	-	S	S	S	S	S	S	M	M	M	M	-	-	-	-	-	-	-
1 1/4BB	1 1/4E	-	S	S	S	S	S	S	M	M	M	M	-	-	-	-	-	-	-
1 1/2BB	1 1/2E	-	S	S	S	S	S	S	M	M	M	M	-	-	-	-	-	-	-
2BB	2E	-	S	S	S	S	S	S	M	M	M	M	-	-	M	M	-	-	-
2 1/2B	2 1/2E	-	-	-	S	S	S	S	-	-	-	-	-	-	-	-	-	-	-
3BB	3E	-	-	-	S	S	S	S	M	-	-	-	-	-	-	-	-	-	-
4BB	4E	-	-	-	-	S	S	S	S	S	-	-	-	-	-	-	-	-	-
5BB	5E	-	-	-	-	-	S	S	S	M	-	-	M	-	-	-	-	-	-
6BB	6E	-	-	-	-	-	-	-	M	M	-	-	M	-	-	-	-	-	-
2C	2G	-	-	-	-	-	M	M	M	M	-	-	-	-	-	-	-	-	-
3C	3G	-	-	-	-	-	M	M	M	M	-	-	-	-	-	-	-	-	-
4C	4G	-	-	-	-	-	M	M	M	M	-	-	M	M	-	-	-	-	-
6C	6G	-	-	-	-	-	-	-	M	M	-	-	M	M	-	M	-	-	M

"S" DESIGNATION - 7/8" IMPELLER BORE, 1 1/4" MECHANICAL SEAL

"M" DESIGNATION - 1 1/4" IMPELLER BORE, 1 5/8" MECHANICAL SEAL

**SERIES 4030 TANGENTIAL, BASE MOUNTED PUMP
"M" SIZE 1 1/4" IMPELLER BORE -- 1 5/8" MECHANICAL SEAL
EXPLODED VIEW**



INDEX

ITEM	DESCRIPTION	PAGE	ITEM	DESCRIPTION	PAGE	ITEM	DESCRIPTION	PAGE
**	BRG. FRAME ASSY.	10	202	COVERPLATE CAPSCREW	8	333	LOCKNUT	10
101	VOLUTE	5 & 6	208	MECHANICAL SEAL ASSEMBLY	8	334	LOCKWASHER	10
102	IMPELLER	7 & 8	301	BEARING FRAME	10	337	VENT FITTING	10
103	VOLUTE GASKET	11	302	BALL BEARING (INBOARD)	10	338	SHAFT ASSEMBLY	10
104	VOLUTE CAPSCREW	9	303	BALL BEARING (OUTBOARD)	10	340	IMPELLER KEY	11
117	IMPELLER CAPSCREW	10	310	BEARING COVER (INBOARD)	10	341	COUPLER KEY	11
118	IMPELLER WASHER	8	314	BEARING COVER CAPSCREW	11	342	WATER SLINGER	10
201	COVERPLATE	9	332	GREASE FITTING	10	**	COUPLER	12

4030 PUMP PARTS

(OLD STYLE TANGENTIAL DISCHARGE)

"M" SIZE 1 1/4" IMPELLER BORE ----- 1 1/4" SHAFT DIAMETER AT COUPLER

1 5/8" MECHANICAL SEAL

ITEM 101 VOLUTE

PUMP SIZE	CONST.	PART NUMBER	BAR CODE
1 1/2D	B.F. & A.I.*	415293-011	
1 1/2D	A.B.*	415293-041	
2D	B.F. & A.I.*	425141-011	
2D	A.B.*	425141-041	
2 1/2D	B.F. & A.I.*	425143-011	
2 1/2D	A.B.*	425143-041	
3D	B.F. & A.I.*	425145-011	
3D	A.B.*	425145-041	
4D	B.F. & A.I.*	415299-011	
4D	A.B.*	415299-041	

* B.F. Denotes "Bronze Fitted " construction. Parts in contact with pumped liquid are bronze or copper, except volute and cover plate.

A.I. Denotes "All Iron " construction. Parts in contact with the pumped liquid are cast iron or steel, except shaft sleeve & mechanical seal.

A.B. Denotes "All Bronze" construction. Parts in contact with the pumped liquid are bronze or stainless steel.

VOLUTES CONTINUED ON PAGE 6

4030 PUMP PARTS

(OLD STYLE TANGENTIAL DISCHARGE)

"M" SIZE 1 1/4" IMPELLER BORE ----- 1 1/4" SHAFT DIAMETER AT COUPLER

1 5/8" MECHANICAL SEAL

ITEM 101 VOLUTE (cont'd)

PUMP SIZE	CONST.	PART NUMBER	BAR CODE
1 1/4E	B.F. & A.I.*	416168-011	
1 1/4E	A.B.*	416168-041	
1 1/2E	B.F. & A.I.*	425147-011	
1 1/2E	A.B.*	425147-041	
2E	B.F. & A.I.*	419153-011	
2E	A.B.*	419153-041	
5E	B.F. & A.I.*	415303-011	
5E	A.B.*	415303-041	
6E	B.F. & A.I.*	416188-011	
6E	A.B.*	416188-041	
2G	B.F. & A.I.*	419544-011	
2G	A.B.*	419544-041	
3G	B.F. & A.I.*	419003-011	
3G	A.B.*	419003-041	
4G	B.F. & A.I.*	419004-011	
4G	A.B.*	419004-041	
6G	B.F. & A.I.*	419542-011	
6G	A.B.*	419542-041	

* B.F. Denotes "Bronze Fitted " construction. Parts in contact with pumped liquid are bronze or copper, except volute and cover plate.

A.I. Denotes "All Iron " construction. Parts in contact with the pumped liquid are cast iron or steel, except shaft sleeve & mechanical seal.

A.B. Denotes "All Bronze" construction. Parts in contact with the pumped liquid are bronze or stainless steel.

4030 PUMP PARTS

(OLD STYLE TANGENTIAL DISCHARGE)

"M" SIZE 1 1/4" IMPELLER BORE ----- 1 1/4" SHAFT DIAMETER AT COUPLER

1 5/8" MECHANICAL SEAL

ITEM 102 IMPELLER **			
PUMP SIZE	CONST.	PART NUMBER	BAR CODE
1 1/2D	B.F. & AB.*	419229-041	
1 1/2D	A.I.*	419229-011	
2D	B.F. & AB.*	419229-041	
2D	A.I.*	419229-011	
2 1/2D	B.F. & AB.*	419232-041	
2 1/2D	A.I.*	419232-011	
3D	B.F. & AB.*	419234-041	
3D	A.I.*	419234-011	
4D	B.F. & AB.*	419236-041	
4D	A.I.*	419236-011	

NOTES:

* B.F. Denotes "Bronze Fitted " construction. Parts in contact with pumped liquid are bronze or copper, except volute and cover plate.

A.I. Denotes "All Iron " construction. Parts in contact with the pumped liquid are cast iron or steel, except shaft sleeve & mechanical seal.

A.B. Denotes "All Bronze" construction. Parts in contact with the pumped liquid are bronze or stainless steel.

** Impeller Part Numbers are for full or maximum diameter Impellers. Always specify Pump Serial Number and where possible, measure and advise the diameter of the Impeller being replaced on these Pumps.

IMPELLERS CONTINUED ON PAGE 8

4030 PUMP PARTS

(OLD STYLE TANGENTIAL DISCHARGE)

"M" SIZE 1 1/4" IMPELLER BORE ----- 1 1/4" SHAFT DIAMETER AT COUPLER

1 5/8" MECHANICAL SEAL

ITEM 102 IMPELLER ** (cont'd)

PUMP SIZE	CONST.	PART NUMBER	BAR CODE
1 1/4E	B.F. & AB.*	419238-041	
1 1/4E	A.I.*	419238-011	
1 1/2E	B.F. & AB.*	419238-041	
1 1/2E	A.I.*	419238-011	
2E	B.F. & AB.*	419239-041	
2E	A.I.*	419239-041	
5E	B.F. & AB.*	419245-041	
5E	A.I.*	419245-011	
6E	B.F. & AB.*	419247-041	
6E	A.I.*	419247-011	
<hr/>			
2G	B.F. & A.I.*	419543-041	
2G	A.B.*	419543-011	
3G	B.F. & A.I.*	419008-041	
3G	A.B.*	419008-011	
4G	B.F. & A.I.*	419009-041	
4G	A.B.*	419009-011	
6G	B.F. & A.I.*	419541-041	
6G	A.B.*	419541-011	

NOTES:

* B.F. Denotes "Bronze Fitted " construction. Parts in contact with pumped liquid are bronze or copper, except volute and cover plate.

A.I. Denotes "All Iron " construction. Parts in contact with the pumped liquid are cast iron or steel, except shaft sleeve & mechanical seal.

A.B. Denotes "All Bronze" construction. Parts in contact with the pumped liquid are bronze or stainless steel.

** Impeller Part Numbers are for full or maximum diameter Impellers. Always specify Pump Serial Number and where possible, measure and advise the diameter of the Impeller being replaced on these Pumps.

4030 PUMP PARTS

(OLD STYLE TANGENTIAL DISCHARGE)

"M" SIZE 1 1/4" IMPELLER BORE----- 1 1/4" SHAFT DIAMETER AT COUPLER

1 5/8" MECHANICAL SEAL

ITEM 201 COVERPLATE			
PUMP SIZE	CONST.	PART NUMBER	BAR CODE
1 1/2D TO 4D	B.F. & A.I.*	414498-011	
1 1/2D TO 4D	A.B.*	414498-041	
1 1/4E TO 6E	B.F. & A.I.*	411896-011	
1 1/4E TO 6E	A.B.*	411896-041	
2G TO 6G	B.F. & A.I.*	419467-011	
2G TO 6G	A.B.*	419467-041	

ITEM 104 VOLUTE CAPSCREW					
PUMP SIZE	CONST.	NO. REQ'D	SIZE	PART NUMBER	BAR CODE
1 1/2D TO 4D	ALL	8	3/8-16NCX2 5/8"	911121-120	
1 1/4E TO 6E	ALL	12	7/16-14NCX1 1/4"	911123-110	
2G TO 6G	ALL	12	1/2-13NCX1 1/2"	911125-116	

NOTES:

* B.F. Denotes "Bronze Fitted " construction. Parts in contact with pumped liquid are bronze or copper, except volute and cover plate.

A.I. Denotes "All Iron " construction. Parts in contact with the pumped liquid are cast iron or steel, except shaft sleeve & mechanical seal.

A.B. Denotes "All Bronze" construction. Parts in contact with the pumped liquid are bronze or stainless steel.

4030 PUMP PARTS

(OLD STYLE TANGENTIAL DISCHARGE)

"M" SIZE 1 1/4" IMPELLER BORE ---- 1 1/4" SHAFT DIAMETER AT COUPLER

1 5/8" MECHANICAL SEAL

BEARING FRAME ASSEMBLY

ITEM NUMBER	DESCRIPTION	PART NUMBER	BAR CODE
	BEARING FRAME ASSY. BF & IF	819310-071	
	BEARING FRAME ASSY. AB	819310-071	
<p>NOTE: Each Bearing Frame Assembly includes components in this table having a part number listed in the column below the Bearing Frame Part Number.</p>			
117	IMPELLER CAPSCREW	911900-113	
301	BEARING FRAME	419308-011	
302	BALL BEARING (INBOARD)	871101-721	
303	BALL BEARING (OUTBOARD)	871101-701	
310	BEARING COVER (INBOARD)	419303-011	
332	GREASE FITTING	425030-011	
333	LOCKNUT	419319-000	
334	LOCKWASHER	419320-000	
336	VENT FITTING	407444-000	
338	SHAFT AND SLEEVE ASSY. BF/AI/AB	819309-071	
342	WATER SLINGER	419315-000	

NOTES:

* B.F. Denotes "Bronze Fitted " construction. Parts in contact with pumped liquid are bronze or copper, except volute and cover plate.

A.I. Denotes "All Iron " construction. Parts in contact with the pumped liquid are cast iron or steel, except shaft sleeve & mechanical seal.

A.B. Denotes "All Bronze" construction. Parts in contact with the pumped liquid are bronze or stainless steel.

" FOR COMMON PARTS AND HARDWARE SEE PAGE 11 "

4030 PUMP PARTS

(OLD STYLE TANGENTIAL DISCHARGE)

"M" SIZE 1 1/4" IMPELLER BORE ---- 1 1/4" SHAFT DIAMETER AT COUPLER

1 5/8" MECHANICAL SEAL

COMMON PARTS

(Not included in the Bearing Frame Assembly)

ITEM NUMBER	DESCRIPTION	PART NUMBER	BAR CODE
118	IMPELLER WASHER BF/AI/AB	425742-003	
208	SEAL ASSEMBLY (Std.) BF/AB	811339-000	
208	SEAL ASSEMBLY AI	811866-000	
208	SEAL ASSEMBLY (Viton) BF/AB	819299-000	

HARDWARE

ITEM NUMBER	DESCRIPTION	PART NUMBER	BAR CODE
202	COVERPLATE CAPSCREW (8 REQ'D)	911121-110	
308	BEARING COVER CAPSCREW (4 REQ'D)	911121-108	
340	IMPELLER KEY	974515-100	
341	COUPLER KEY	974523-100	

NOTES:

* B.F. Denotes "Bronze Fitted " construction. Parts in contact with pumped liquid are bronze or copper, except volute and cover plate.

A.I. Denotes "All Iron " construction. Parts in contact with the pumped liquid are cast iron or steel, except shaft sleeve & mechanical seal.

A.B. Denotes "All Bronze" construction. Parts in contact with the pumped liquid are bronze or stainless steel.

ITEM 103 VOLUTE GASKET

PUMP SIZE	CONSTRUCTION	PART NUMBER	BAR CODE
1 1/2D TO 4D	ALL	106592-000	
1 1/4E TO 6E	ALL	406604-000	
2G TO 6G	ALL	419016-000	

4030 PUMP PARTS

(OLD STYLE TANGENTIAL DISCHARGE)

"M" SIZE 1 1/4" IMPELLER BORE ---- 1 1/4" SHAFT DIAMETER AT COUPLER

1 5/8" MECHANICAL SEAL

COUPLER SELECTION TABLE

(WOODS TYPE)

PUMP SHAFT SIZE	MOTOR FRAME SIZE	MOTOR SHAFT SIZE	WOODS SIZE	COUPLER PART NUMBER	BAR CODE
1 1/4"	254U -256U 213T - 215T	1 3/8"	6J	819344-012	
1 1/4"	254T - 256T 284U	1 5/8"	7J	819348-002	
1 1/4"	284T - 286T 324U	1 7/8"	8J	819349-002	
1 1/4"	324T - 326T	2 1/8"	9E	819350-002	

COUPLER INSERT SELECTION TABLE

(WOODS TYPE)

COUPLER INSERT SIZE	INSERT NUMBER	PART NUMBER	BAR CODE
6J	6JE	875000-803	
7J	7JE	875000-804	
8J	8JE	875000-805	
9J	9E	875000-807	