

ARMSTRONG

PARTS LIST

BASE MOUNTED PUMP

SERIES 4000

(OLD JUNIOR UNIVERSAL AND 1524)

OLD STYLE

TANGENTIAL DISCHARGE

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 | | | | 1964 | | 1952 | | | | 1964 | 1952 | | 1964 | 1952 | |
| | | | | | | | | | | | | | | | | | | |
| 1 | - | | - | | - | | 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 |
| 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 | - | U4 | - | - | - | U5 | - | - | U11 | U8 | | | | |
| | | - | - | - | U2 | - | U6 | - | - | - | U7 | - | - | | U10 | | | | |
| | | - | - | - | U3 | - | | - | - | - | U9 | - | - | | U12 | | | | |
| NEW DESIG. | 4020 | - | - | - | D141 | - | D144 | D146 | - | - | - | E145 | - | - | E148 | | | | |
| | | - | - | - | D142 | - | | | - | - | - | E147 | - | E151 | E150 | | | | |
| | | - | - | - | D143 | - | | | - | - | - | E149 | - | | E152 | | | | |

SERIES 4000

OLD CATALOG DESIGNATION JUNIOR UNIVERSAL AND 1524
SECTIONAL DRAWING

| ITEM | DESCRIPTION | PAGE | ITEM | DESCRIPTION | PAGE |
|------|-------------------|-------|------|-----------------------|------|
| 101 | VOLUTE | 4 & 5 | 208 | MECH. SEAL ASSEMBLY | 8 |
| 102 | IMPELLER | 6 & 7 | 210 | OIL SEAL | 8 |
| 103 | VOLUTE GASKET | 9 | 301 | SHAFT & BRG. MODULE | 8 |
| 104 | VOLUTE CAPSCREWS | 9 | 305 | SEAL BEARING ASSEMBLY | 8 |
| 116 | IMPELLER NUT | 8 | 307 | BEARING FRAME | 8 |
| 117 | IMPELLER WASHER | 8 | 340 | IMPELLER KEY | 9 |
| 201 | FACEPLATE | 9 | - | COUPLER | 9 |
| 202 | BALANCING CHAMBER | 9 | | | |

SERIES 4000 PUMP PARTS

(OLD STYLE JUNIOR UNIVERSAL AND 1524)

ITEM 101 VOLUTE

STOCK SIZES

| PUMP SIZE | | CONST. | PART NUMBER | BAR CODE |
|-----------|------|-------------|-------------|----------|
| OLD | NEW | | | |
| JU-10 | B-80 | B.F. / A.I. | 411673-011 | |
| JU-10 | B-80 | A.B. | 411673-041 | |
| JU-12 | B-82 | B.F. / A.I. | 411673-011 | |
| JU-12 | B-82 | A.B. | 411673-041 | |
| JU-14 | B-84 | B.F. / A.I. | 411678-011 | |
| JU-14 | B-84 | A.B. | 411678-041 | |
| JU-16 | B-86 | B.F. / A.I. | 411678-011 | |
| JU-16 | B-86 | A.B. | 411678-041 | |
| JU-18 | B-88 | B.F. / A.I. | 407246-011 | |
| JU-18 | B-88 | A.B. | 407246-041 | |
| JU-20 | B-90 | B.F. / A.I. | 407246-011 | |
| JU-20 | B-90 | A.B. | 407246-041 | |

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 & mech. seal.

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

CUSTOM VOLUTES ON PAGE 5

SERIES 4000 PUMP PARTS

(OLD STYLE JUNIOR UNIVERSAL AND 1524)

ITEM 101 VOLUTE

CUSTOM SIZES

| PUMP SIZE | | CONST. | PART | BAR CODE |
|-----------|---------|-------------|------------|----------|
| OLD | NEW | | NUMBER | |
| 3/4 AAB | 3/4B | B.F. / A.I. | 411673-011 | |
| 3/4 AAB | 3/4B | A.B. | 411673-041 | |
| 1 AAB | 1 B | B.F. / A.I. | 413421-011 | |
| 1 AAB | 1 B | A.B. | 413421-041 | |
| 1 1/4 AAB | 1 1/4 B | B.F. / A.I. | 411678-011 | |
| 1 1/4 AAB | 1 1/4 B | A.B. | 411678-041 | |
| 1 1/2AAB | 1 1/2B | B.F. / A.I. | 407246-011 | |
| 1 1/2AAB | 1 1/2B | A.B. | 407246-041 | |

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.

SERIES 4000 PUMP PARTS

(OLD STYLE JUNIOR UNIVERSAL AND 1524)

ITEM 102 IMPELLER

STOCK SIZES

| PUMP SIZE | | CONST. | PART NUMBER | TRIM ** DIA. | BAR CODE |
|-----------|------|-------------|-------------|-----------------|----------|
| OLD | NEW | | | | |
| JU-10 | B-80 | A.I. | 116302-017 | 4 3/8" | |
| JU-10 | B-80 | B.F. & A.B. | 116302-051 | 4 3/8" | |
| JU-12 | B-82 | B.F. / A.I. | 116302-017 | 5" | |
| JU-12 | B-82 | A.B. | 116302-051 | 5" | |
| JU-14 | B-84 | B.F. / A.I. | 116303-017 | 4 1/4" | |
| JU-14 | B-84 | A.B. | 116303-047 | 4 1/4" | |
| JU-16 | B-86 | B.F. / A.I. | 116303-017 | 4 3/4" | |
| JU-16 | B-86 | A.B. | 116303-047 | 4 3/4" | |
| JU-18 | B-88 | B.F. / A.I. | 116304-017 | 4 1/2" | |
| JU-18 | B-88 | A.B. | 116304-047 | 4 1/2" | |
| JU-20 | B-90 | B.F. / A.I. | 116304-017 | 5" | |
| JU-20 | B-90 | A.B. | 116304-047 | 5 " | |

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 "Iron Fitted " 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 diameter Impellers. Impeller Diameters for Stock Pumps are indicated in Parts List under Trim Size.

STOCK IMPELLERS CONTINUED ON PAGE 10

SERIES 4000 PUMP PARTS

(OLD STYLE JUNIOR UNIVERSAL AND 1524)

ITEM 102 IMPELLER

CUSTOM SIZES

| PUMP SIZE | | CONST. | PART NUMBER | MAX. DIA. | BAR CODE |
|-----------|---------|-------------|-------------|-----------|----------|
| OLD | NEW | | | | |
| 3/4 AAB | 3/4B | B.F. / A.I. | 116302-017 | 5 1/4" | |
| 3/4 AAB | 3/4B | A.B. | 116302-051 | 5 1/4" | |
| 1 AAB | 1 B | B.F. / A.I. | 116302-017 | 5 1/4" | |
| 1 AAB | 1 B | A.B. | 116302-051 | 5 1/4" | |
| 1 1/4 AAB | 1 1/4 B | B.F. / A.I. | 116303-017 | 5 1/4" | |
| 1 1/4 AAB | 1 1/4 B | A.B. | 116303-047 | 5 1/4" | |
| 1 1/2AAB | 1 1/2B | B.F. / A.I. | 116304-017 | 5 1/4" | |
| 1 1/2AAB | 1 1/2B | A.B. | 116304-047 | 5 1/4" | |

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 "Iron Fitted " 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.

SERIES 4000 PUMP PARTS

(OLD STYLE JUNIOR UNIVERSAL AND 1524)

| BEARING FRAME ASSEMBLY | | | |
|-------------------------------|-----------------------------------|-------------|----------|
| ITEM NO. | DESCRIPTION | PART NUMBER | BAR CODE |
| 305 | SEAL BEARING ASSEMBLY B.F. & A.B. | 816036-011 | |
| 305 | SEAL BEARING ASSEMBLY A.I. | 816036-071 | |

| COMMON PARTS | | | |
|---------------------|-----------------------------------|-------------|----------|
| | DESCRIPTION | PART NUMBER | BAR CODE |
| 116 | IMPELLER NUT B.F & A.B. | 106076-000 | |
| 116 | IMPELLER NUT A.I. | 913171-100 | |
| 117 | IMPELLER WASHER B.F & A.B. | 927411-700 | |
| 117 | IMPELLER WASHER A.I. | 927311-100 | |
| 208 | MECH. SEAL ASSY. KIT B.F. & A.B. | 816706-001 | |
| 208 | MECH. SEAL ASSY. KIT A.I. | 816706-002 | |
| 210 | OIL SEAL B.F. - A.B. & A.I. | 116975-000 | |
| 301 | SHAFT AND BRG. MODULE B.F. & A.B. | 816999-041 | |
| 301 | SHAFT AND BRG. MODULE A.I. | 816999-071 | |
| 307 | BEARING FRAME B.F. - A.B. & A.I. | 416568-012 | |

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.

COMMON PARTS CONTINUED ON PAGE 9

SERIES 4000 PUMP PARTS

(OLD STYLE JUNIOR UNIVERSAL AND 1524)

| COMMON PARTS | | | |
|---------------------|--|-------------|----------|
| ITEM NO. | DESCRIPTION | PART NUMBER | BAR CODE |
| 103 | VOLUTE GASKET | 106592-000 | |
| 104 | VOLUTE CAPSCREW (6 req'd. 5/16-18X3/4") | 911119-106 | |
| 210 | OIL SEAL B.F. - A.B. & A.I. | 116975-000 | |
| 340 | IMPELLER KEY B.F. - A.B. & A.I. | 974507-100 | |
| 201 | FACEPLATE B.F. - A.B. & A.I. | 174003-071 | |
| 202 | BALANCE RING B.F. & A.B. | 106092-000 | |
| 202 | BALANCE RING A.I. | 106091-000 | |

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.

| COUPLER (NOT SHOWN ON DRAWING) | | | | | |
|---------------------------------------|-------------|-----------------|------------------|-------------|----------|
| ITEM NO. | DESCRIPTION | PUMP SHAFT DIA. | MOTOR SHAFT DIA. | PART NUMBER | BAR CODE |
| - | COUPLER | 1/2" | 5/8" | 806137-000 | |
| - | COUPLER | 1/2" | 7/8" | 806140-000 | |