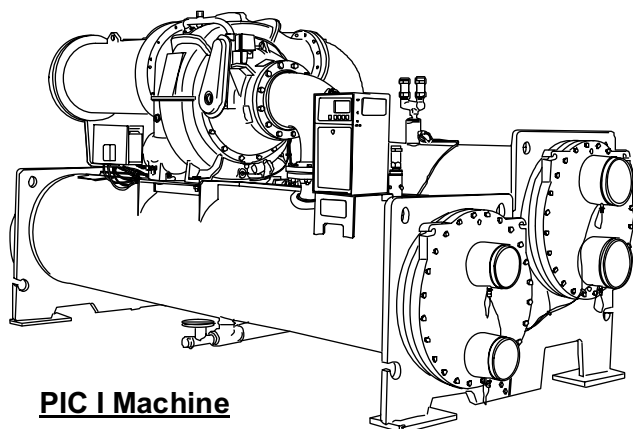


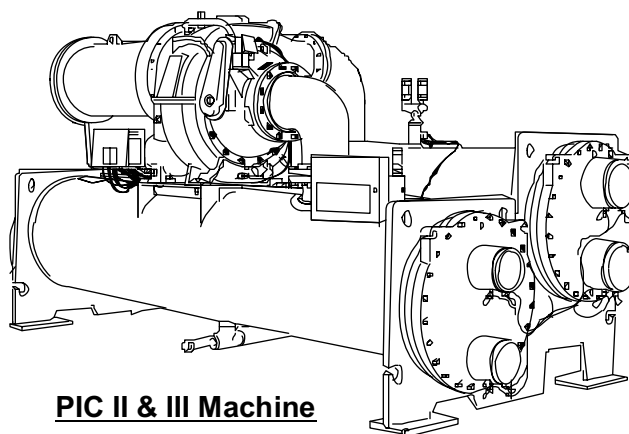
This Service Parts Guide Is Compressor Frame Size Driven.

Model Name Descriptions:

- (19XR FR#2) 19XR Machine With Frame #2 Compressor & With Frame #1, 2, Or 3 Cooler\Condenser Vessels.
- (19XR FR#3) 19XR Machine With Frame #3 Compressor & With Frame #3, 4, Or 5 Cooler\Condenser Vessels.
- (19XR FR#3 REB) 19XR Machine With Frame #3 Compressor With Roller Element Bearings & With Frame #3, 4 Or 5 Cooler\Condenser Vessels.
- (19XR FR#4) 19XR Machine With Frame #4 Compressor Without Split Ring Diffuser & With Frame #5, 6, Or 7 Cooler\Condenser Vessels, Built Prior To January 2002.
- 19XR FR#4 2002) 19XR Machine With Frame #4 Compressor Without Split Ring Diffuser & With Frame #5, 6, Or 7 Cooler\Condenser Vessels, Built After December 2001.
- 19XR FR#4) 19XR Machine With Frame #4 Compressor With Split Ring Diffuser & With Frame #5, 6, Or 7 Cooler\Condenser Vessels.
- (19XR FR#5) 19XR Machine With Frame #5 Compressor & With Frame #7 Or 8 Cooler\Condenser Vessels.



PIC I Machine



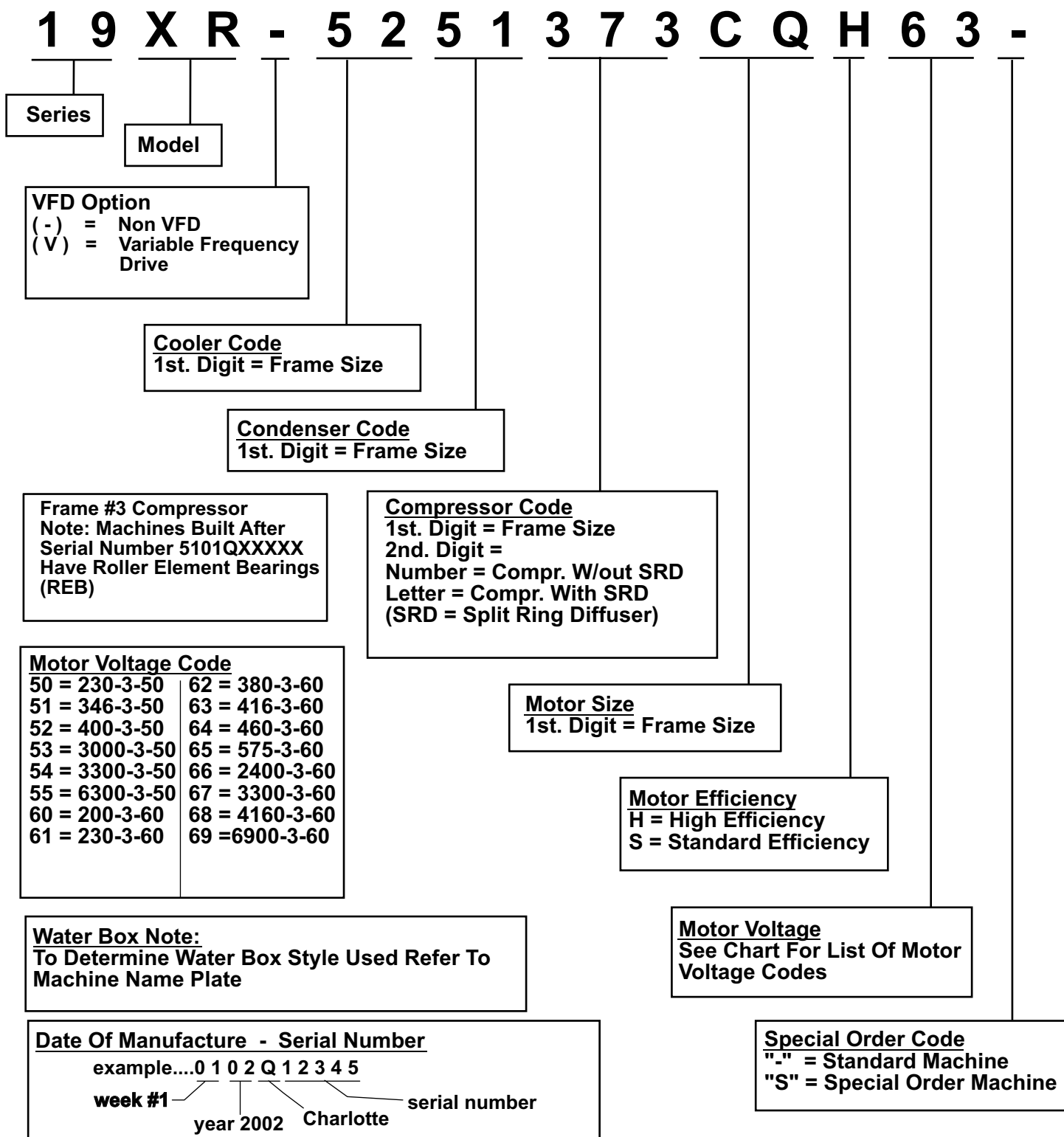
PIC II & III Machine

How To Use This Catalog

1. This Catalog Presents The Most Commonly Used Specified Replacement Parts For The Standard 19XR Centrifugal Refrigeration Machine And Is Not Applicable To Any Special Order Machines. (Contact Carrier With Machine Serial Number For Any Special Order Machine Parts.)
2. Occasionally, Due To Limitations Of Illustrations Used, A Part May Not Be Illustrated. These Parts Are Identified by "N" In The Column Next To The Item Number.
3. The Following Parts Are Not Listed In This Catalog:
 - A. Impellers, Shrouds, Diffusers
 - B. Compressor Motor (Rotor & Stator)
 - C. Evaporator Tube Part Number
 - D. Condenser Tube Part Number

If Any Of These Parts Are Required, Contact Your RCD Customer Service Representative With The Model Number And Serial Number Of Your Machine.
4. Positive Identification Of Your Machine To Properly Select Parts May Be Done By Referring To Machine Name Plate, See Significance Chart On Page #2 (Graphic 19061002)

Model Number Significance Chart



Graphic Pages Table Of Contents

Page 1 (Graphic 19061001).....Catalog Description

Page 2 (Graphic 19061002).....Model Number Significance Chart

Page 3 (Graphic 19061003).....Table Of Content

Page 4 (Graphic 19061004).....Lo-Speed Lab'y, Shaft And Impeller Shaft Selection Chart

Page 5 - 8 (Graphic 19061005 - 008).....Machine Arrangement & Piping Detail

Page 9, 10 (Graphic 19061009, 010).....Cooler & Condenser Waterbox Gasket

Page 11 (Graphic 19061011).....Variable Frequency Drive Cooling Connection

Page 12 - 14A (Graphic 19061012 - 014 & 19061062).....Frame #2 Compressor Detail

Page 15 - 17 (Graphic 19061015 - 017).....Frame #3 Compressor Detail

Page 18 - 24 (Graphic 19061018 - 024).....Frame #3 Compr. With Roller Element Bearing Detail

Page 25 - 27 (Graphic 19061025 - 027).....Frame #4 Compressor Detail

Page 28 - 34 (Graphic 19061028 - 034).....Frame #4 (2002) Compressor Detail

Page 35 - 42 (Graphic 19061035 - 042).....Frame #4 Compr. With Split Ring Diffuser Detail

Page 43 - 45A (Graphic 19061043 - 045 & 19061063).....Frame #5 Compressor Detail

Page 46 (Graphic 19061046).....Transmission Assembly Detail

Page 47 (Graphic 19061047).....High Speed Shaft Assembly Detail

Page 48 (Graphic 19061048).....Guide Vane Drive & Blade Ring Assembly Detail

Page 49 (Graphic 19061049).....Demister Assembly Detail

Page 50 (Graphic 19061050).....Oil Pump With Attached Filter Detail

Page 51 (Graphic 19061051).....Oil Pump Without Attached Filter Detail

Page 52 (Graphic 19061052).....Compressor Terminals & Box Detail

Page 53 (Graphic 19061053).....Power Panel (PIC I & PIC II) Detail

Page 54 (Graphic 19061054).....Control Panel (PIC I) Detail

Page 55 (Graphic 19061055).....Control Panel (PIC II) Detail

Page 56 (Graphic 19061056).....(PSN 5104Q)....Pumpdown Assembly Detail

Page 57 (Graphic 19061057).....(SSN 5104Q)....Pumpdown Assembly Detail

Page 58 - 59 (Graphic 19061058 - 059).....Liquid-Flo I Variable Frequency Drive (VFD)

Page 60 - 61 (Graphic 19061060- 061).....Liquid-Flo II Variable Frequency Drive (VFD)

Low-Speed Labyrinth & Gear Selection Charts

Low-Speed Labyrinth & Gear Selection Chart To Be Used For Frame #2 Compressor Only

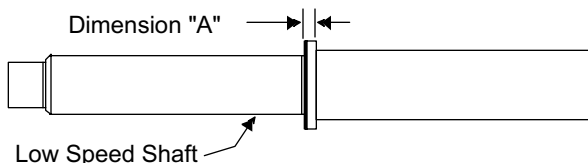
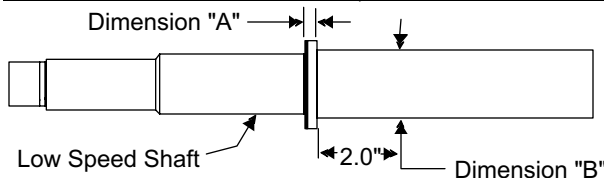


Chart 1A

- If Dimension "A" = 0.50" Use Item #206 For Low Speed Labyrinth
 - #210A For 60Hz Low Speed Gear
 - #210B For 50Hz Low Speed Gear
 - #211A For Retaining Ring
- If Dimension "A" = 1.00" Use Item #207 For Low Speed Labyrinth
 - #210C For 60Hz Low Speed Gear (psn 1504Q)
 - #210E For 60Hz Low Speed Gear (ssn 1504Q)
 - #210D For 50Hz Low Speed Gear (psn 1504Q)
 - #210F For 50Hz Low Speed Gear (ssn 1504Q)
 - #211B For Retaining Ring (psn 1504Q)
 - #211C For Retaining Ring (ssn 1504Q)

Low-Speed Labyrinth & Gear Selection Chart To Be Used For Frame #3, #3 w/REB & #4 Compressors Only

Chart 1B



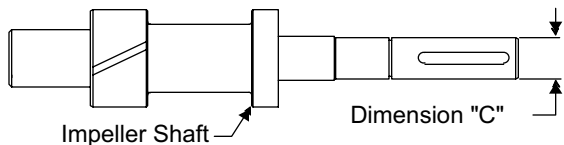
Do Not Use For Frame #4 Compressors w/SRD
Or Frame #4 Compressors (2002)

- If Dimension "A" = 1.44" Or 1.50" Use Item #206 For Low Speed Labyrinth
- If Dimension "A" = .50" Check Dimension "B"
- If Dimension "B" = 4.25" Use Item #207 For Low Speed Labyrinth
- If Dimension "B" = 4.50" Or 4.62" Use Item #208 For Low Speed Labyrinth

Impeller Shaft Selection Chart

Chart 2

To Be Used For Frame #3 & #4 Compressors Only



Do Not Use For Frame #3 Compressors
w/REB , Frame #4 Compressors w/SRD Or
Frame #4 Compressors (2002)

- If Dimension "C" = 1.37" You Have The Larger Diameter Shaft
Which Is A Direct Replacement
- If Dimension "C" = 1.15" You Have The Smaller Diameter Shaft
Which Is Not A Direct Replacement And You Must Call Your Carrier (RCD)
Representative Refer To Service Bulletin C9921 For More Information

Low-Speed Labyrinth & Gear Selection Charts

Low-Speed Labyrinth & Gear Selection Chart To Be Used For Frame #2 Compressor Only

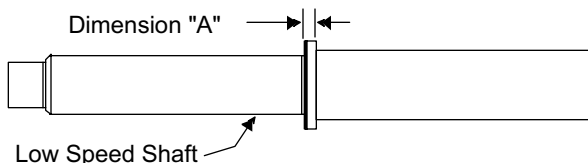
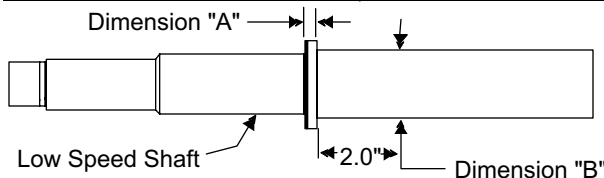


Chart 1A

- If Dimension "A" = 0.50" Use Item #206 For Low Speed Labyrinth
 - #210A For 60Hz Low Speed Gear
 - #210B For 50Hz Low Speed Gear
 - #211A For Retaining Ring
- If Dimension "A" = 1.00" Use Item #207 For Low Speed Labyrinth
 - #210C For 60Hz Low Speed Gear (psn 1504Q)
 - #210E For 60Hz Low Speed Gear (ssn 1504Q)
 - #210D For 50Hz Low Speed Gear (psn 1504Q)
 - #210F For 50Hz Low Speed Gear (ssn 1504Q)
 - #211B For Retaining Ring (psn 1504Q)
 - #211C For Retaining Ring (ssn 1504Q)

Low-Speed Labyrinth & Gear Selection Chart To Be Used For Frame #3, #3 w/REB & #4 Compressors Only

Chart 1B



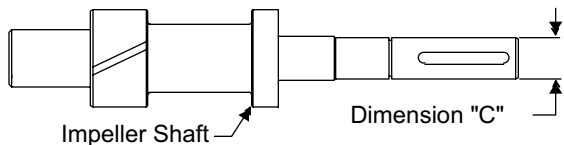
Do Not Use For Frame #4 Compressors w/SRD
Or Frame #4 Compressors (2002)

- If Dimension "A" = 1.44" Or 1.50" Use Item #206 For Low Speed Labyrinth
- If Dimension "A" = .50" Check Dimension "B"
- If Dimension "B" = 4.25" Use Item #207 For Low Speed Labyrinth
- If Dimension "B" = 4.50" Or 4.62" Use Item #208 For Low Speed Labyrinth

Impeller Shaft Selection Chart

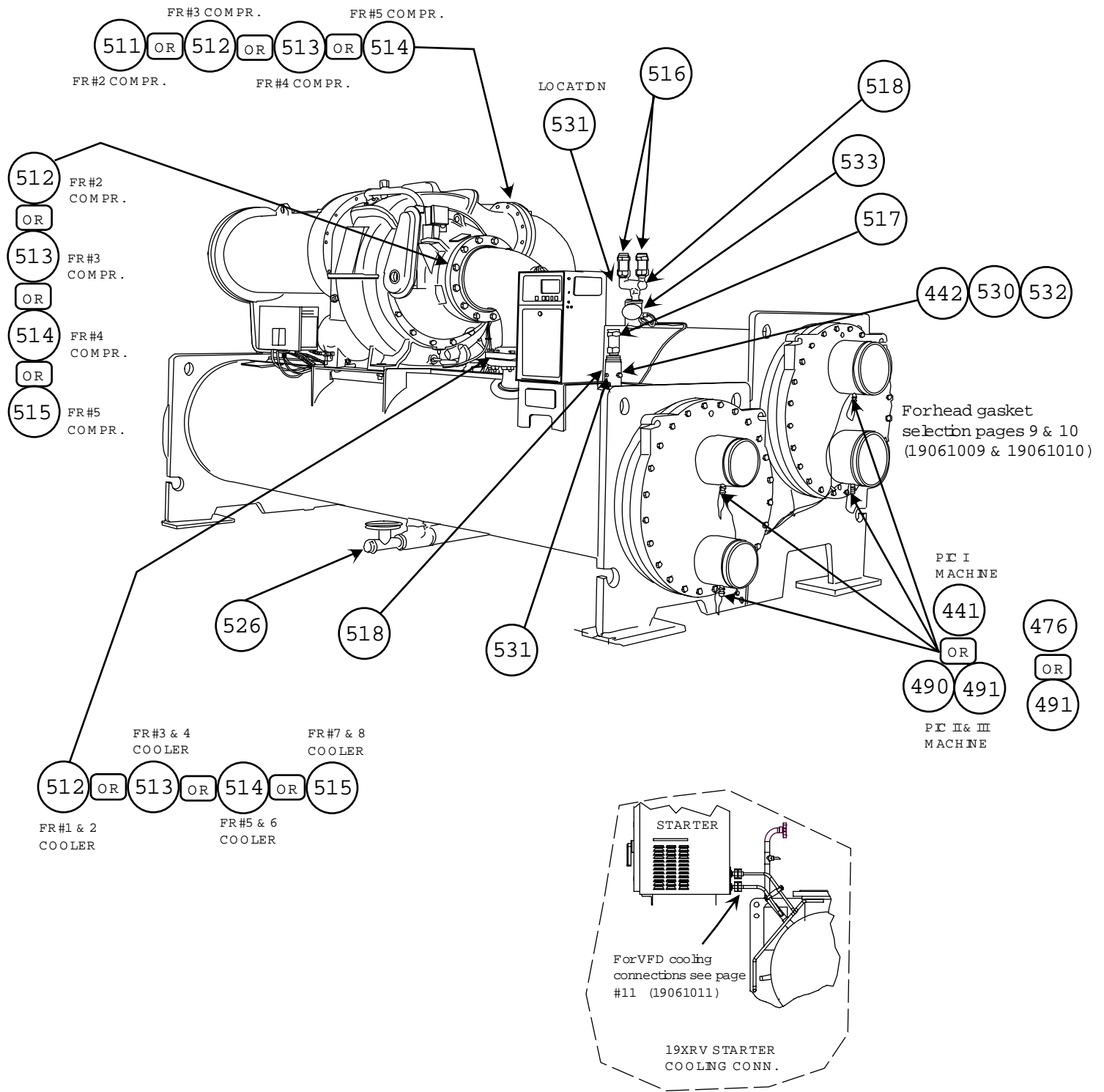
Chart 2

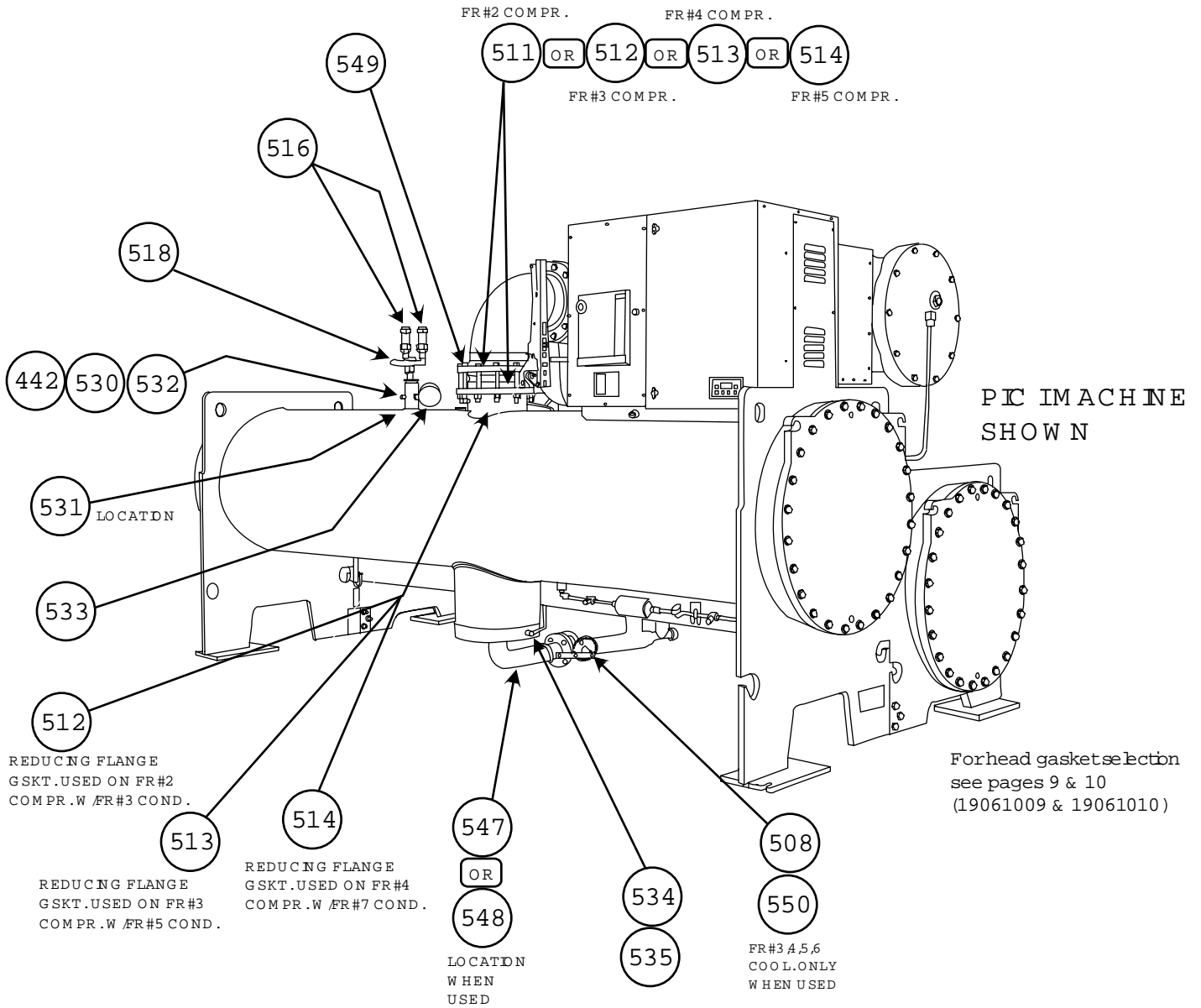
To Be Used For Frame #3 & #4 Compressors Only

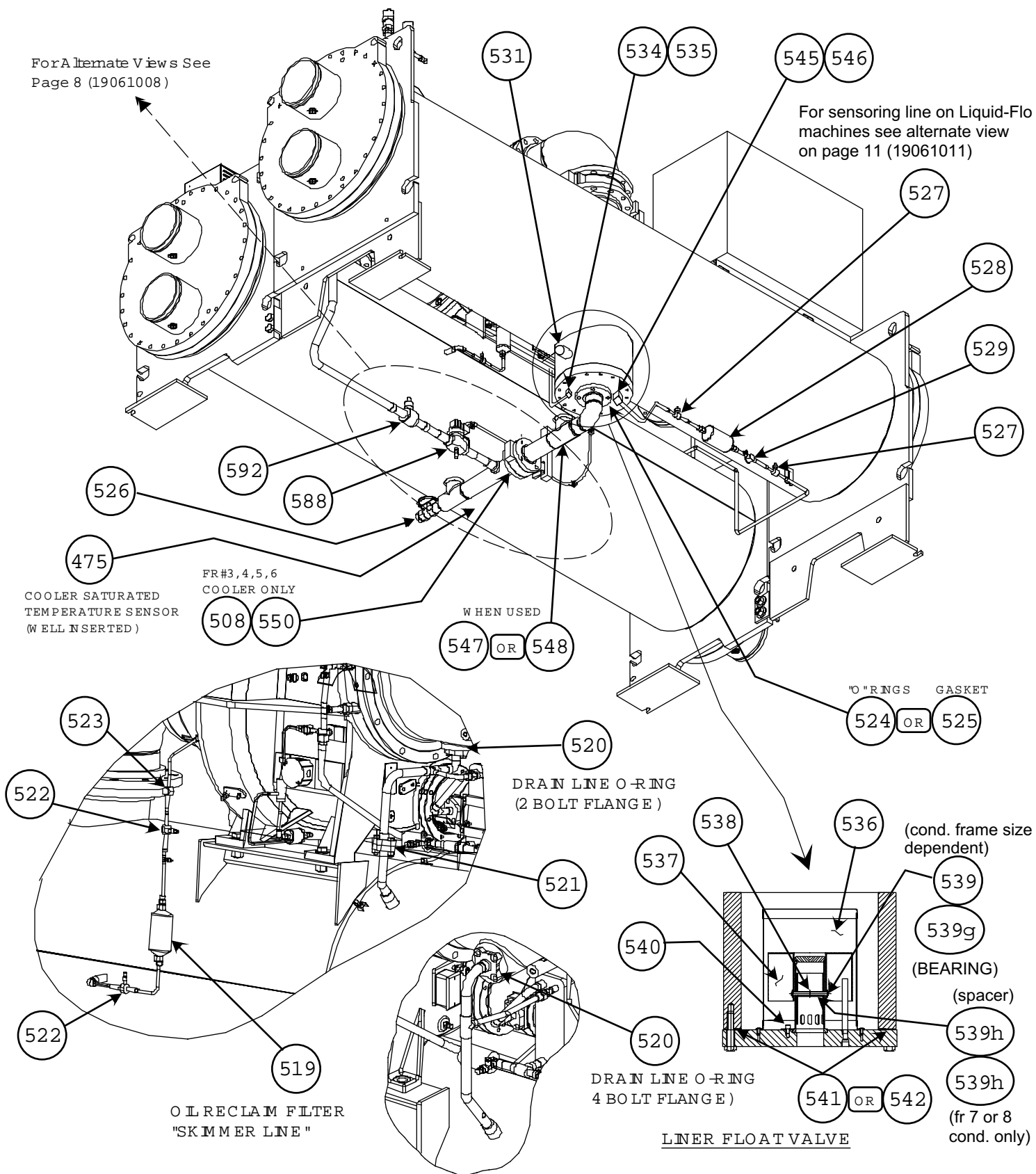


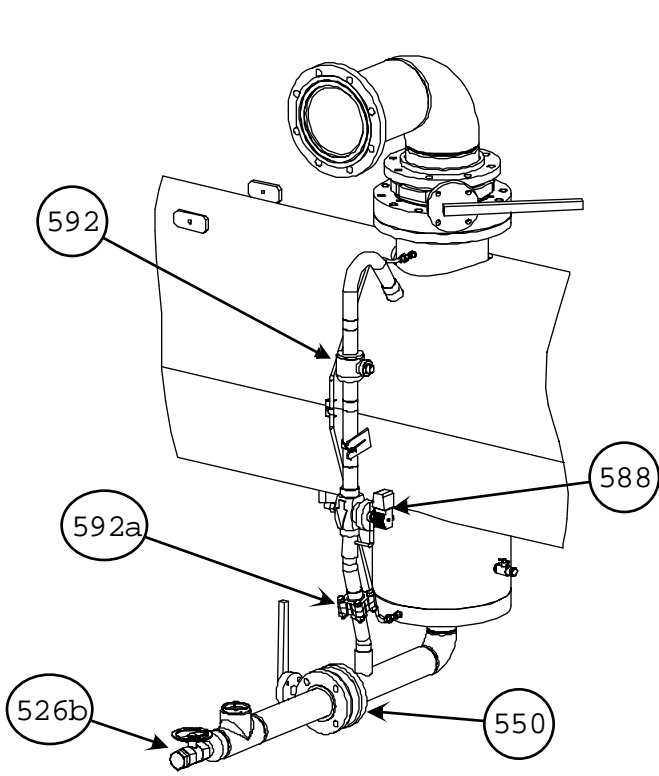
Do Not Use For Frame #3 Compressors
w/REB , Frame #4 Compressors w/SRD Or
Frame #4 Compressors (2002)

- If Dimension "C" = 1.37" You Have The Larger Diameter Shaft
Which Is A Direct Replacement
- If Dimension "C" = 1.15" You Have The Smaller Diameter Shaft
Which Is Not A Direct Replacement And You Must Call Your Carrier (RCD)
Representitive Refer To Service Bulletin C9921 For More Information

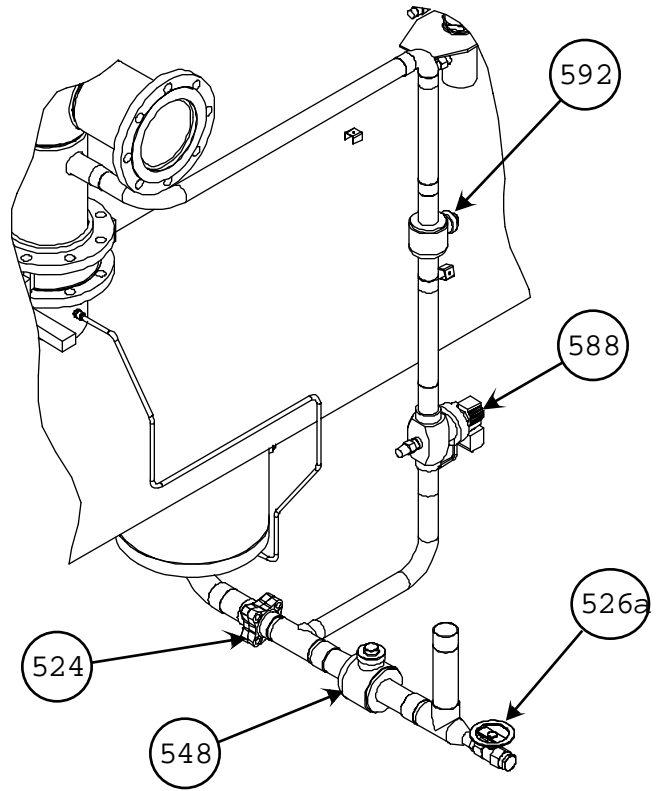




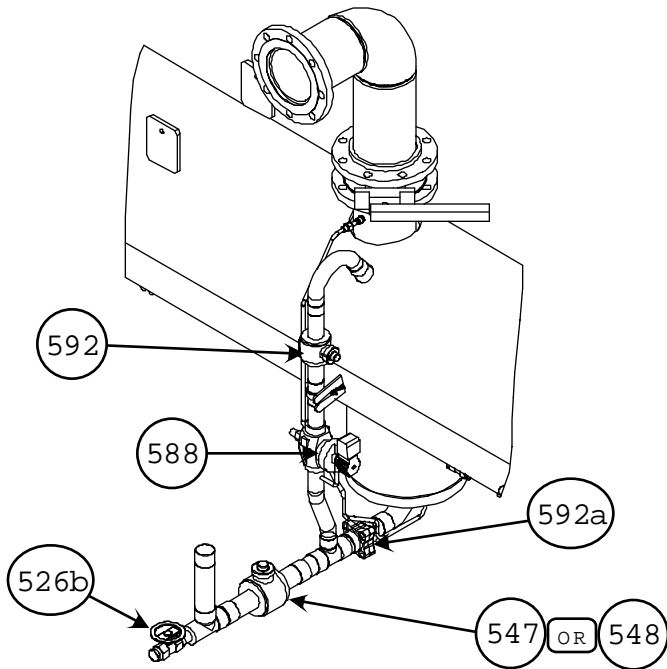




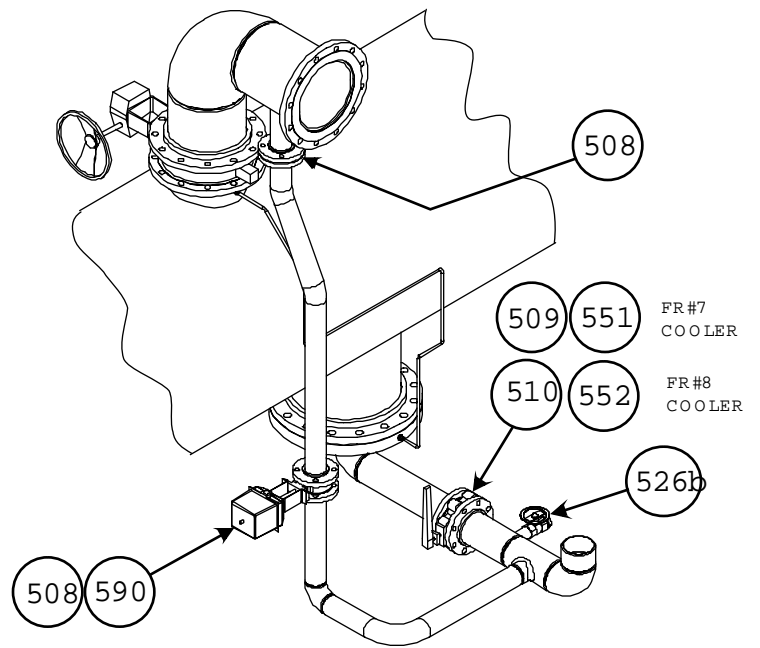
Cooler/Condenser Fr# 5 & 6
w/HGBP & w/Liquid Flb IVFD



Cooler/Condenser Fr# 1, 2, 3 & 4
w/HGBP & w/outVFD orw/Liquid Flb IVFD



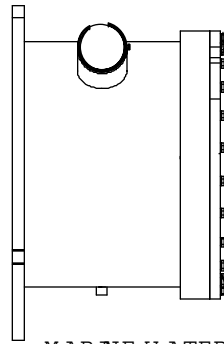
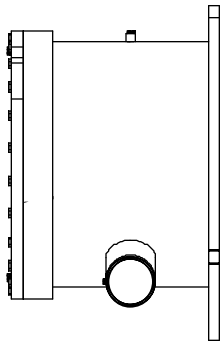
Cooler/Condenser Fr# 1, 2, 3 & 4
w/HGBP & w/Liquid Flb IVFD



Cooler/Condenser Fr# 5, 6, 7 & 8
w/HGBP & w/outVFD orw/Liquid Flb IVFD

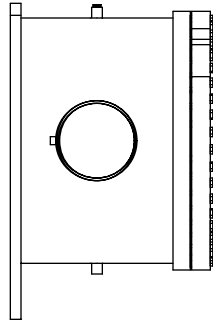
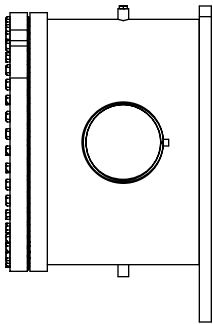
COOLER & CONDENSER VESSEL HEAD & WATERBOX GASKETS

SEE ITEMS
 557n THRU 557w
 OR
 558j THRU 558s



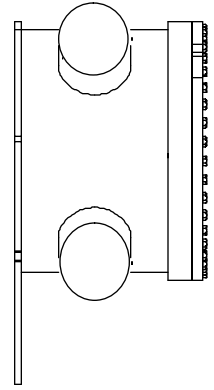
MARINE WATERBOXS
3-PASS

SEE ITEMS
 557a THRU 557m
 OR
 558a THRU 558i

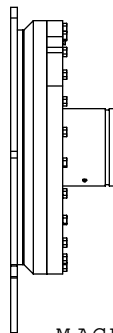
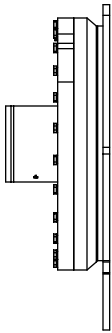


MARINE WATERBOXS
1-PASS

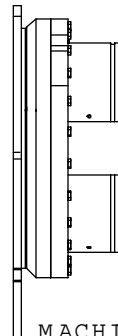
SEE ITEMS
 557n THRU 557w
 OR
 558j THRU 558s



MACHINED HEAD & MARINE WATERBOX
2-PASS



MACHINED HEADS (NH)
1-PASS

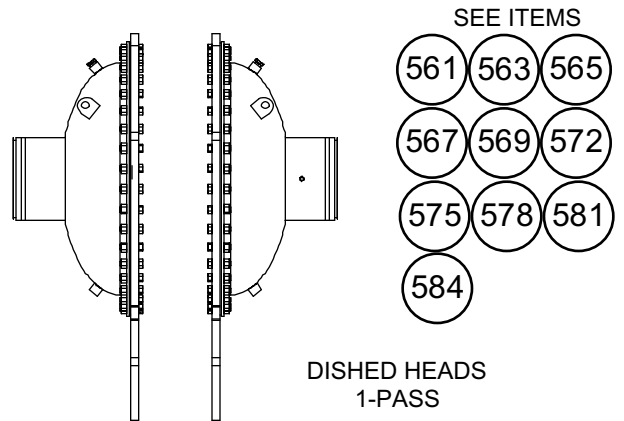
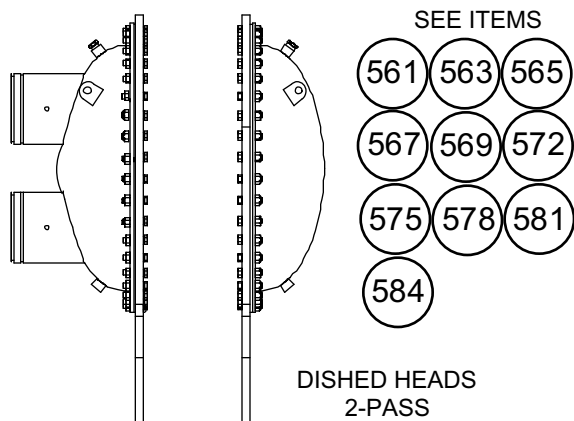
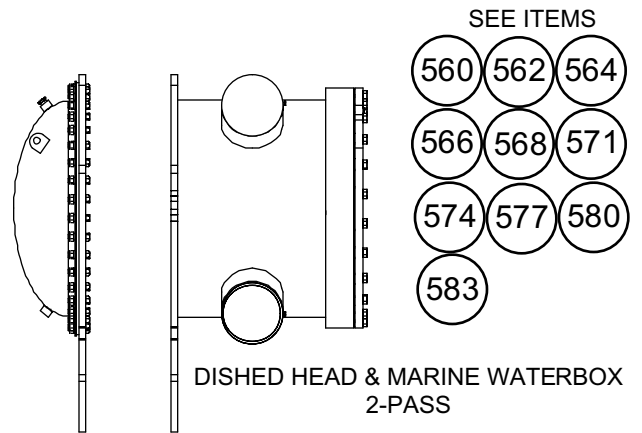
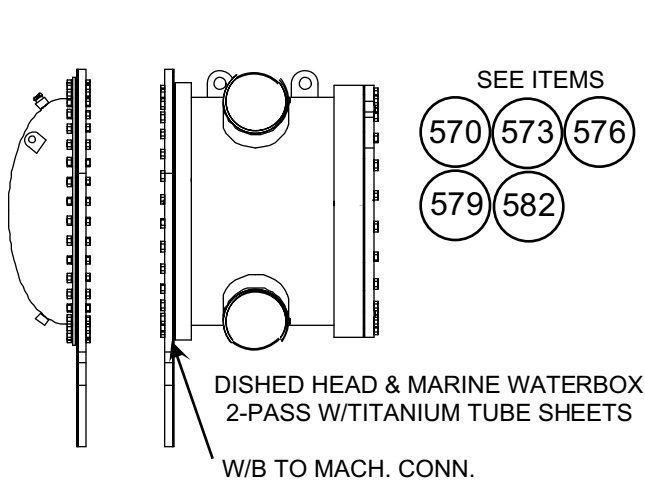
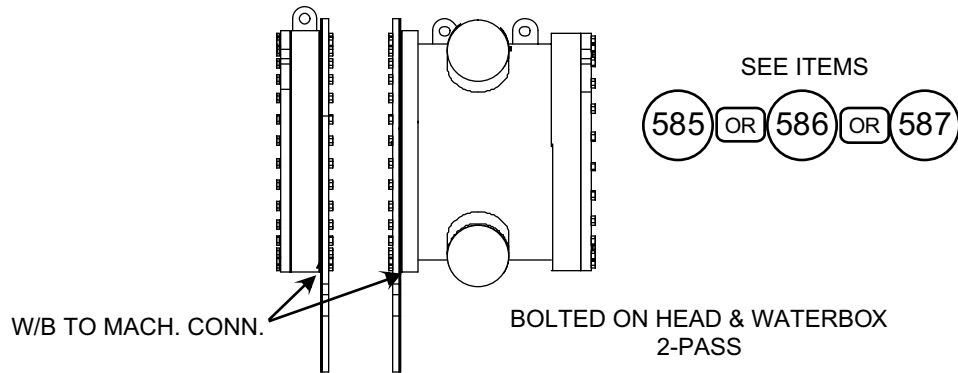


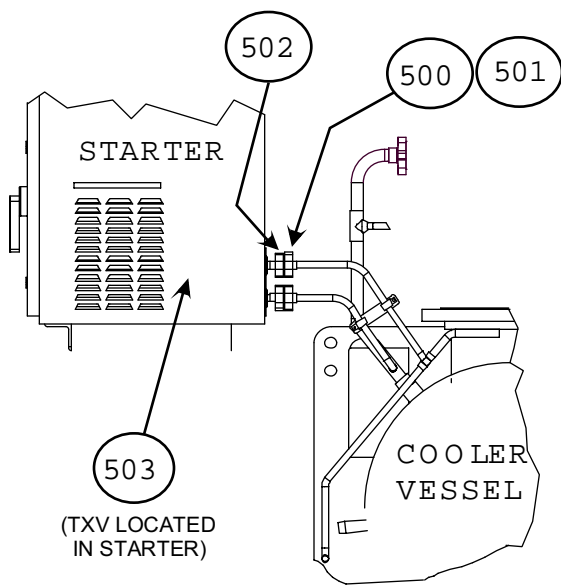
MACHINED HEADS (NH)
2-PASS

SEE ITEMS
 555a THRU 555p
 OR
 556a THRU 556p

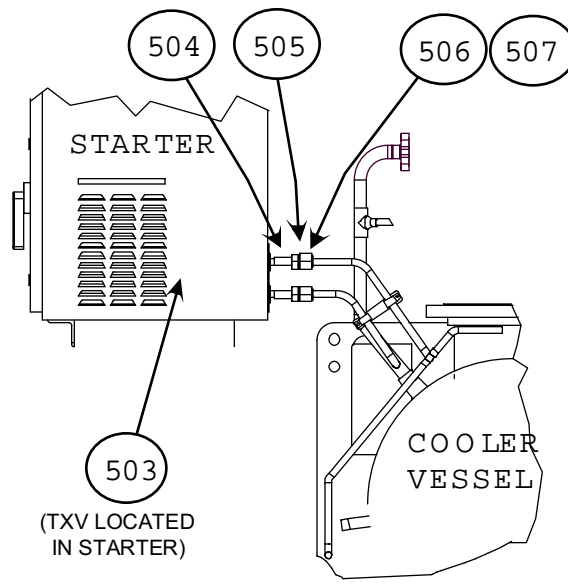
SEE ITEMS
 555a THRU 555p
 OR
 556a THRU 556p

COOLER & CONDENSER VESSEL HEAD & WATERBOX GASKETS





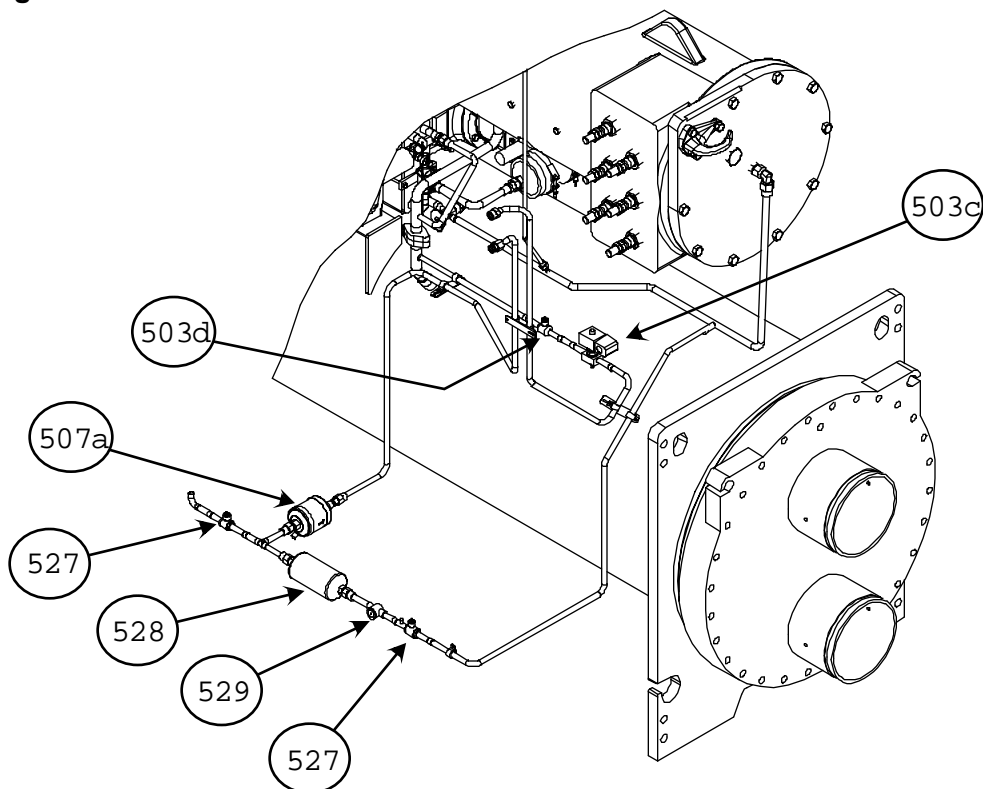
2-BOLT FLANGE CONFIGURATION



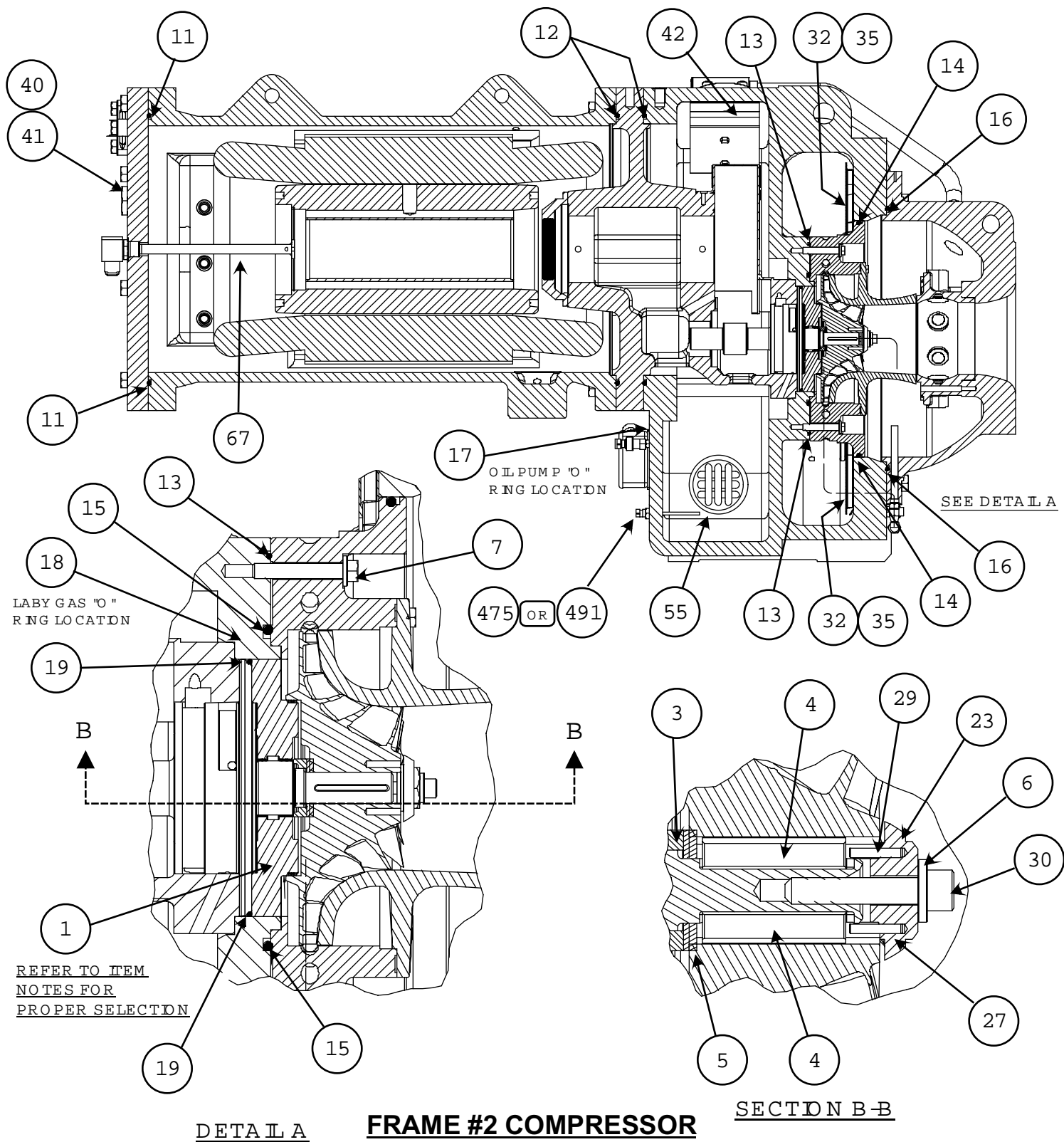
19XR VFD COOLING CONN.
(Liquid FLO 1 & FLO 2)

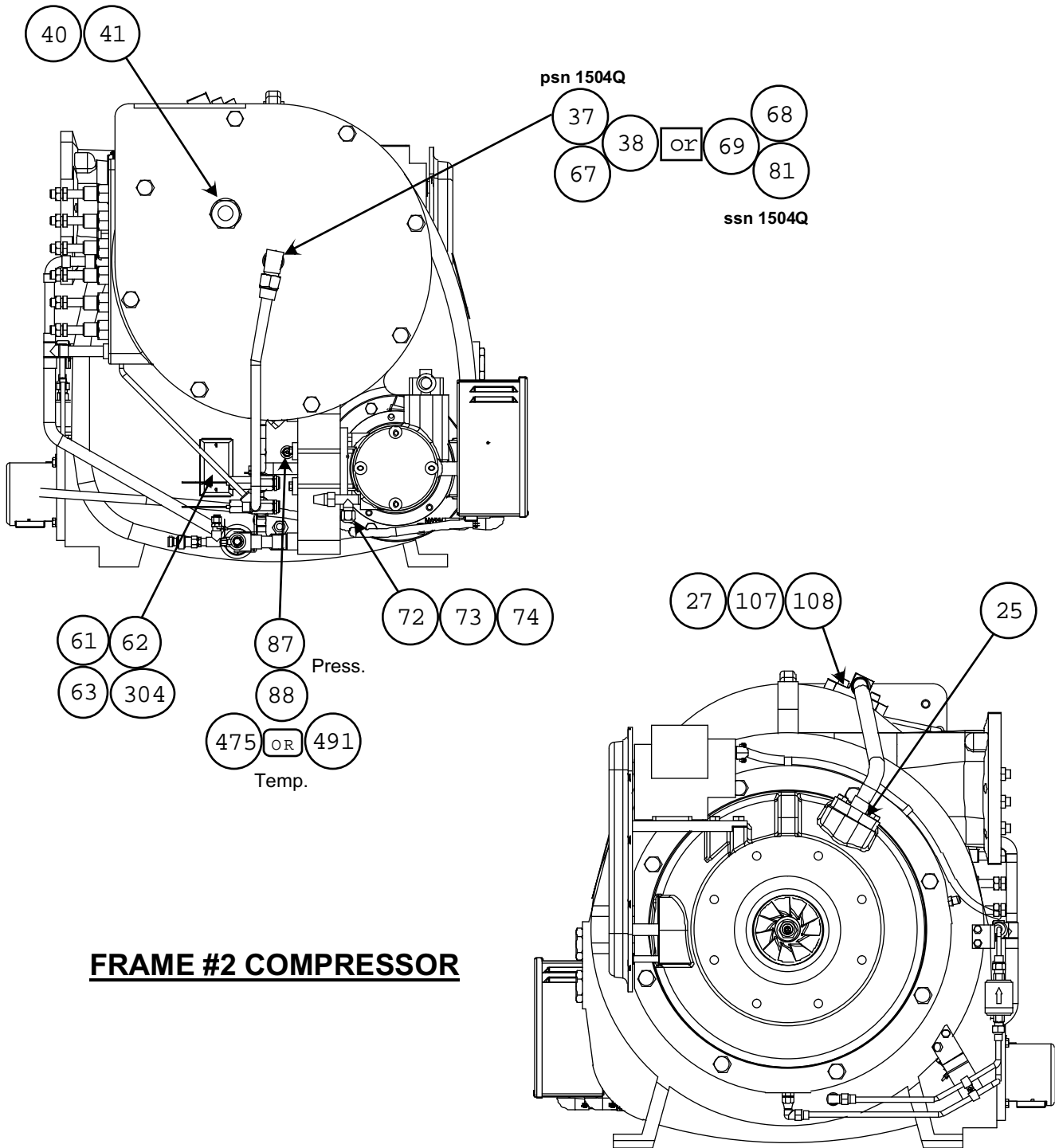
THREADED CONNECTOR CONFIGURATION

Note: To retrofit cooling line connections to latest design refer to Service Bulletin C0317



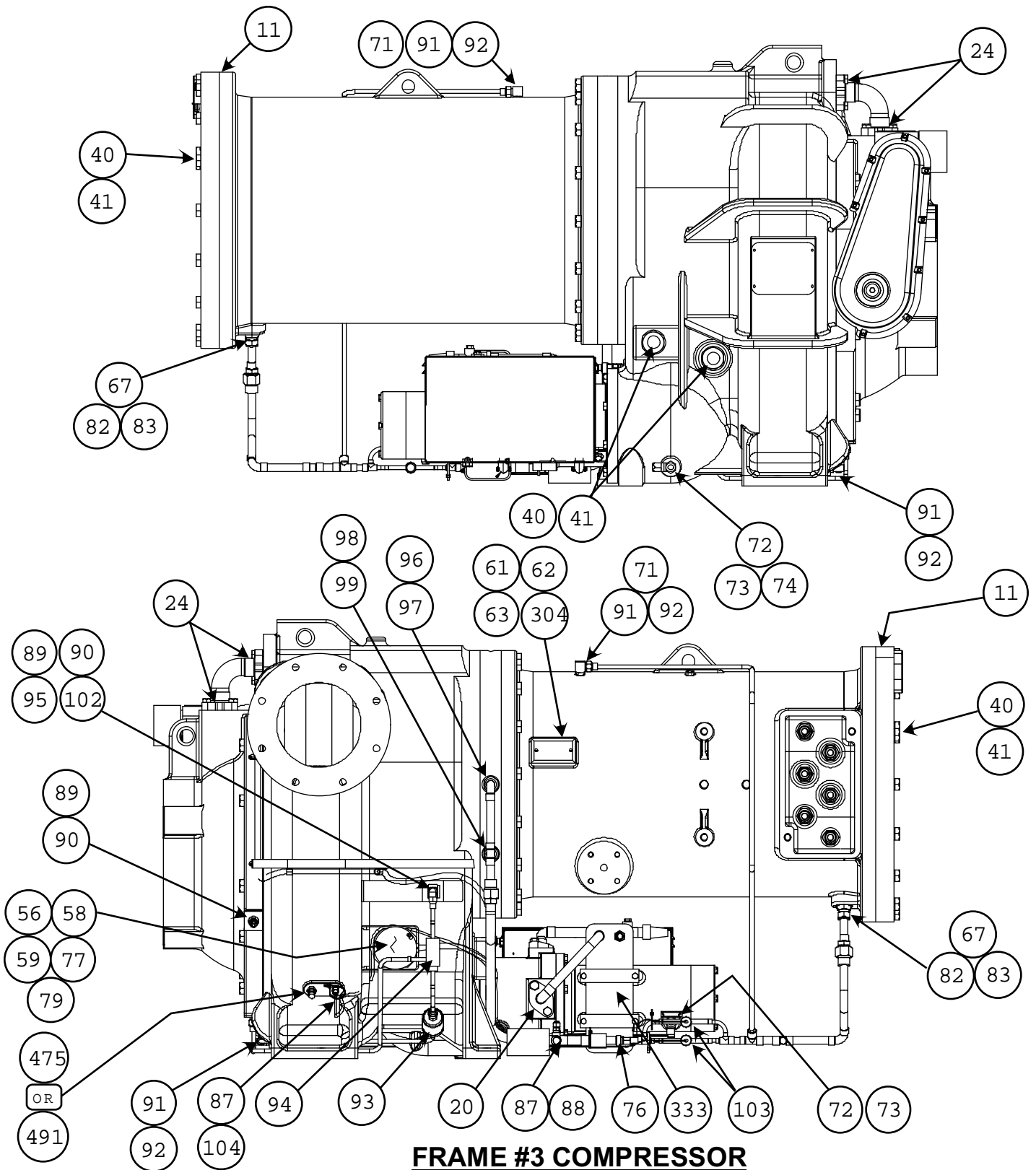
Liquid Flo II



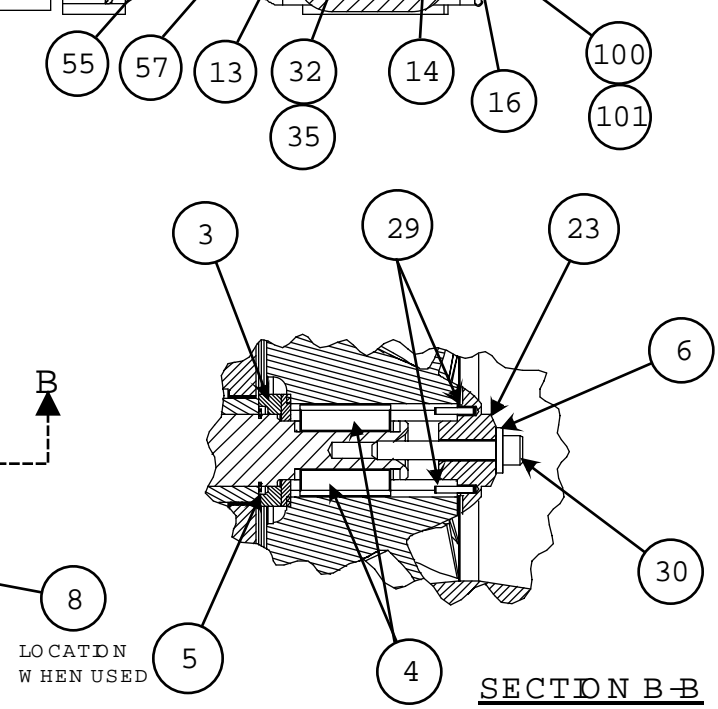
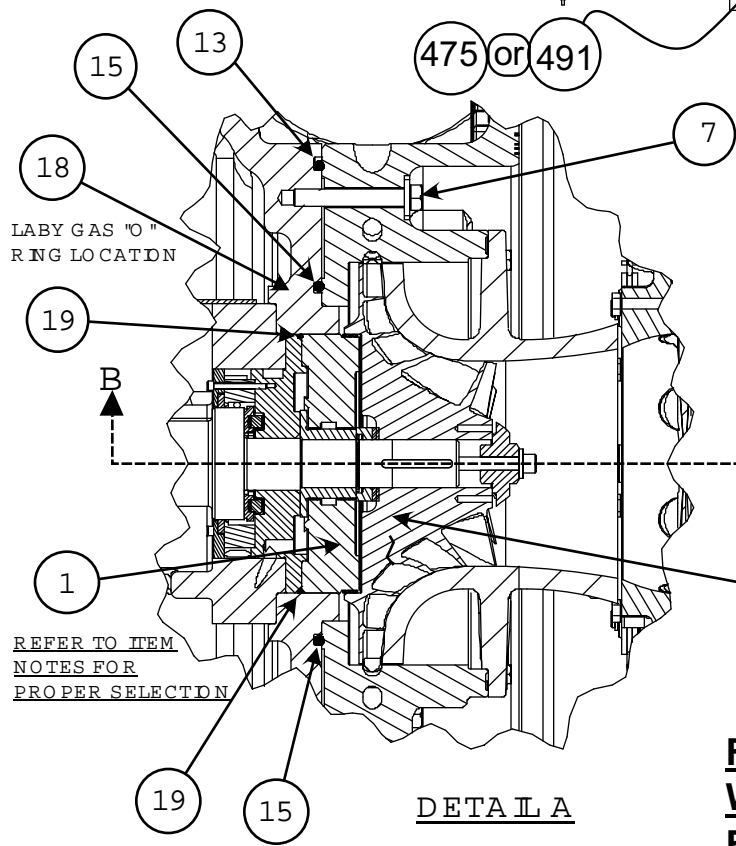
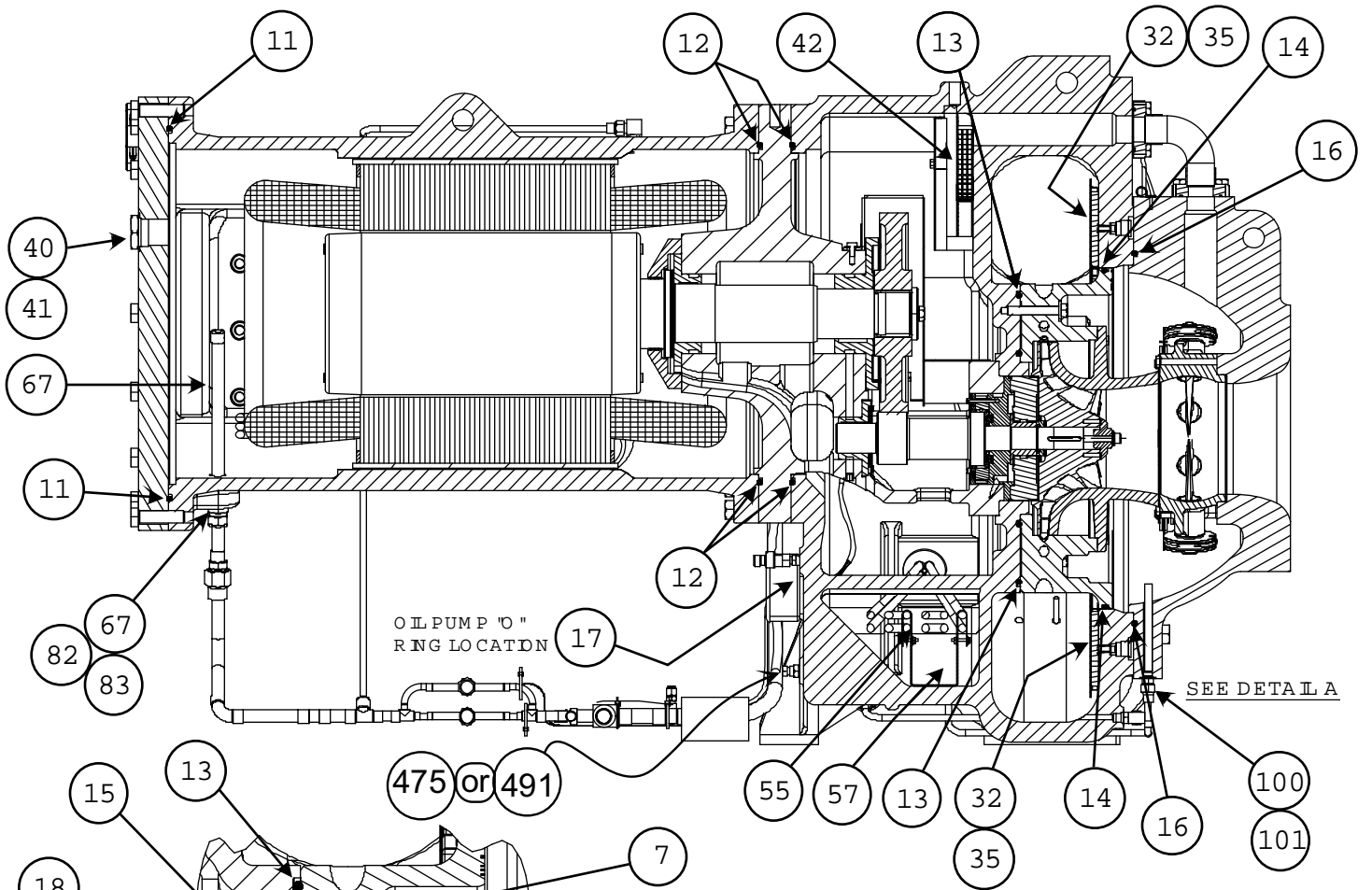


FRAME #2 COMPRESSOR

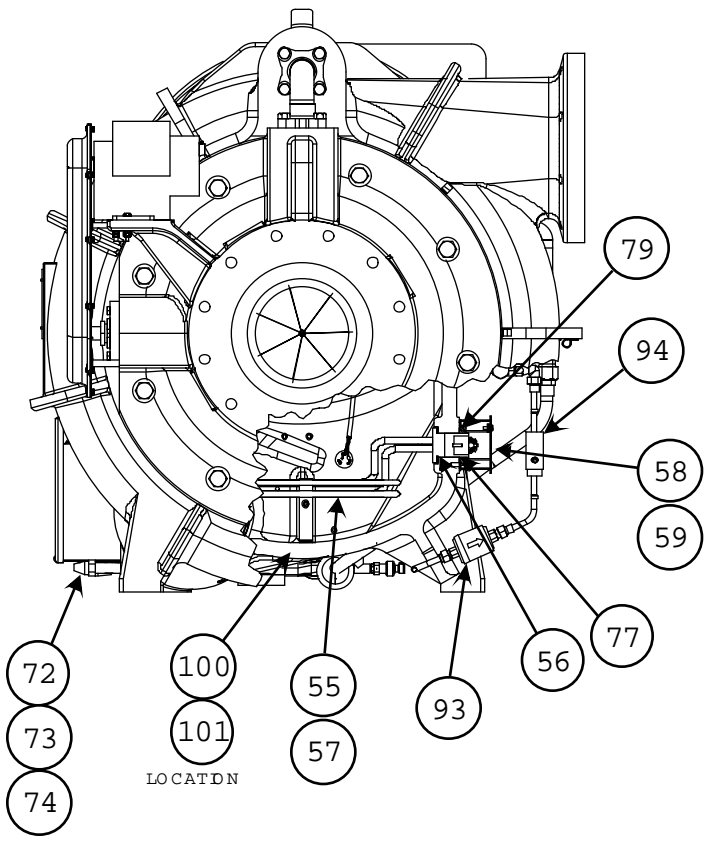
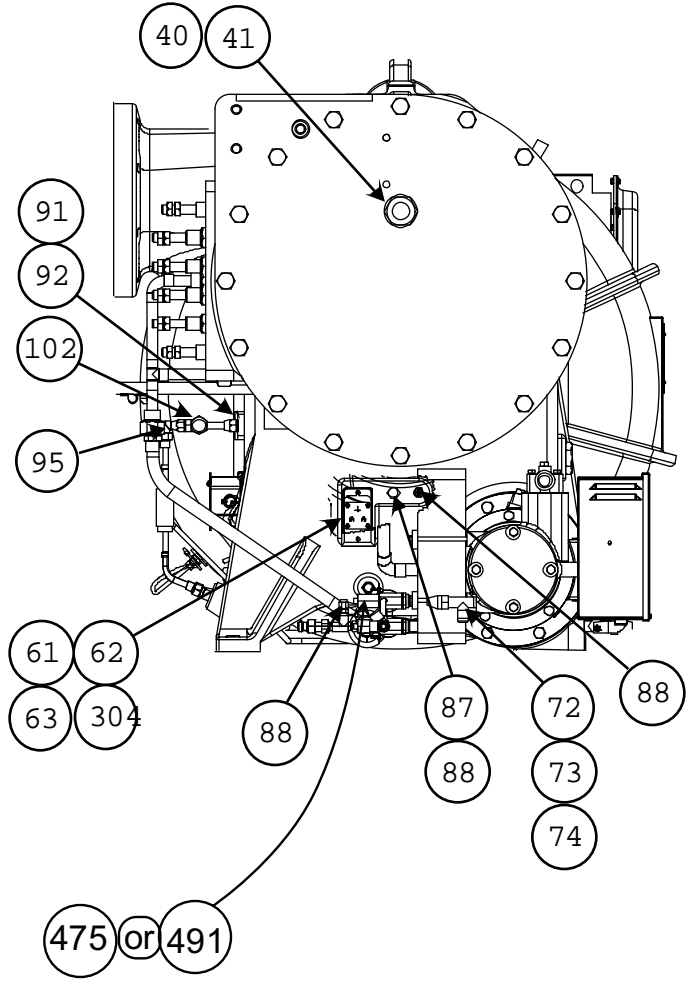
For Alternate Views of this Area Refer to Page 14A (graphic 19061063)



FRAME #3 COMPRESSOR
WITHOUT ROLLER ELEMENT
BEARINGS

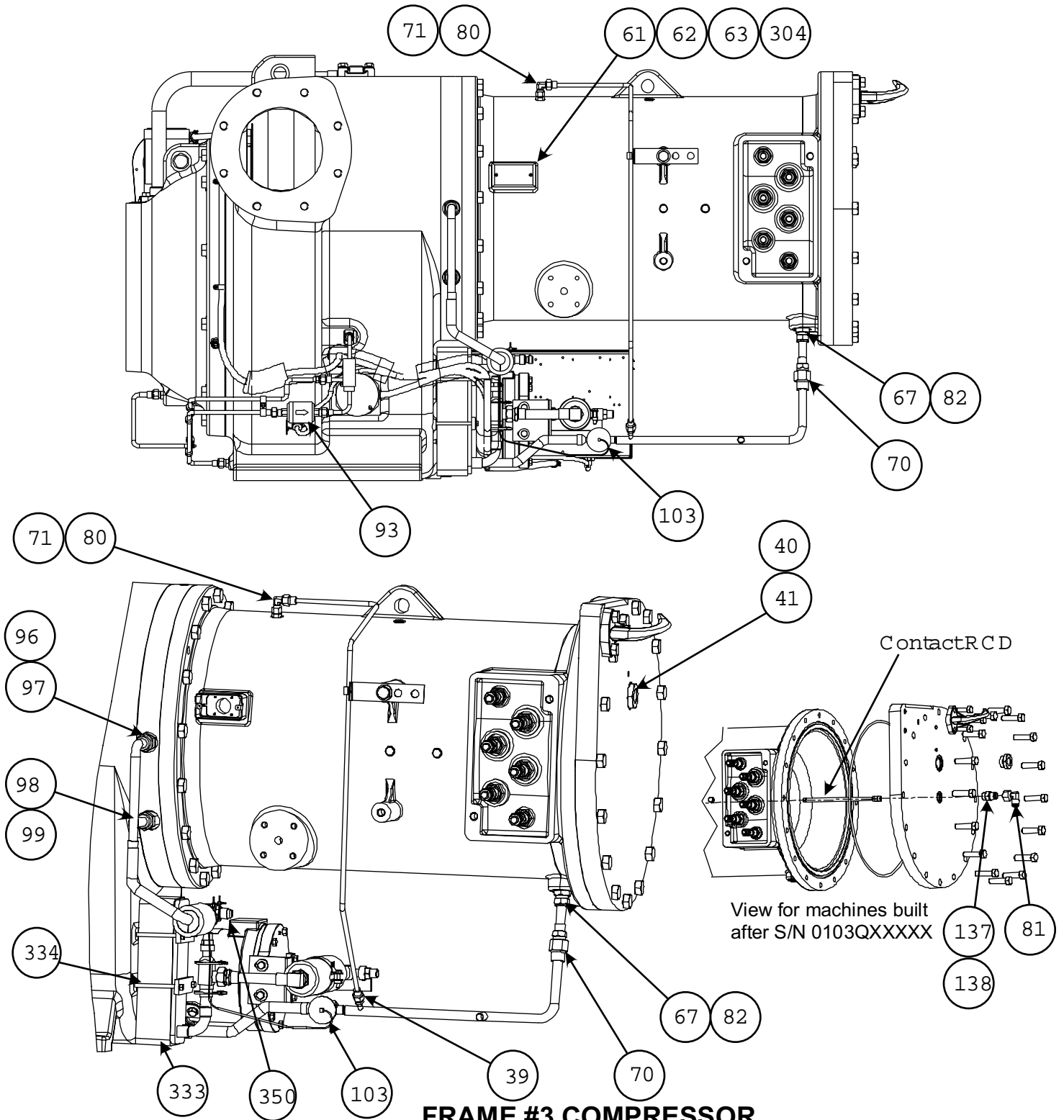


FRAME #3 COMPRESSOR
WITHOUT ROLLER ELEMENT
BEARINGS

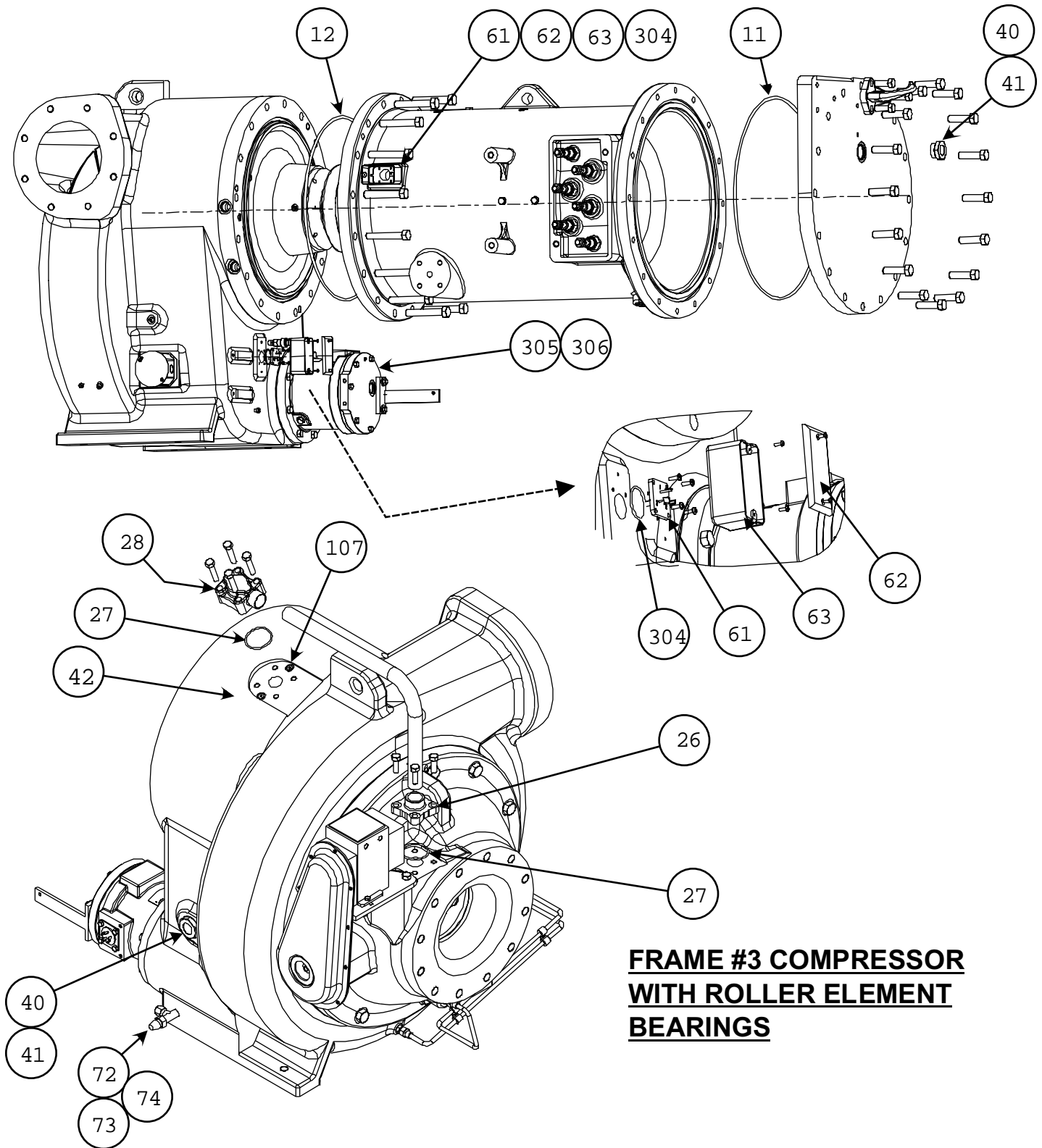


LOCATDN

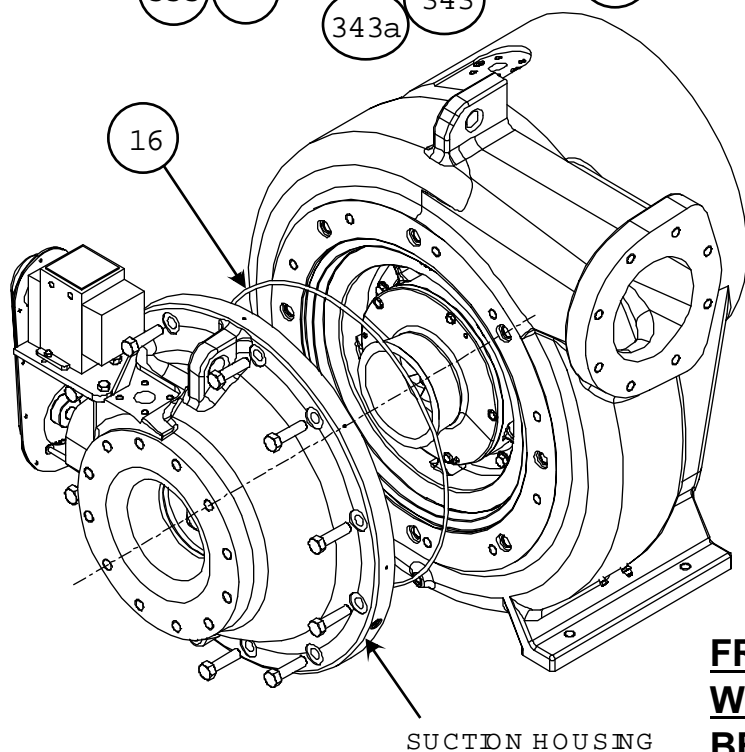
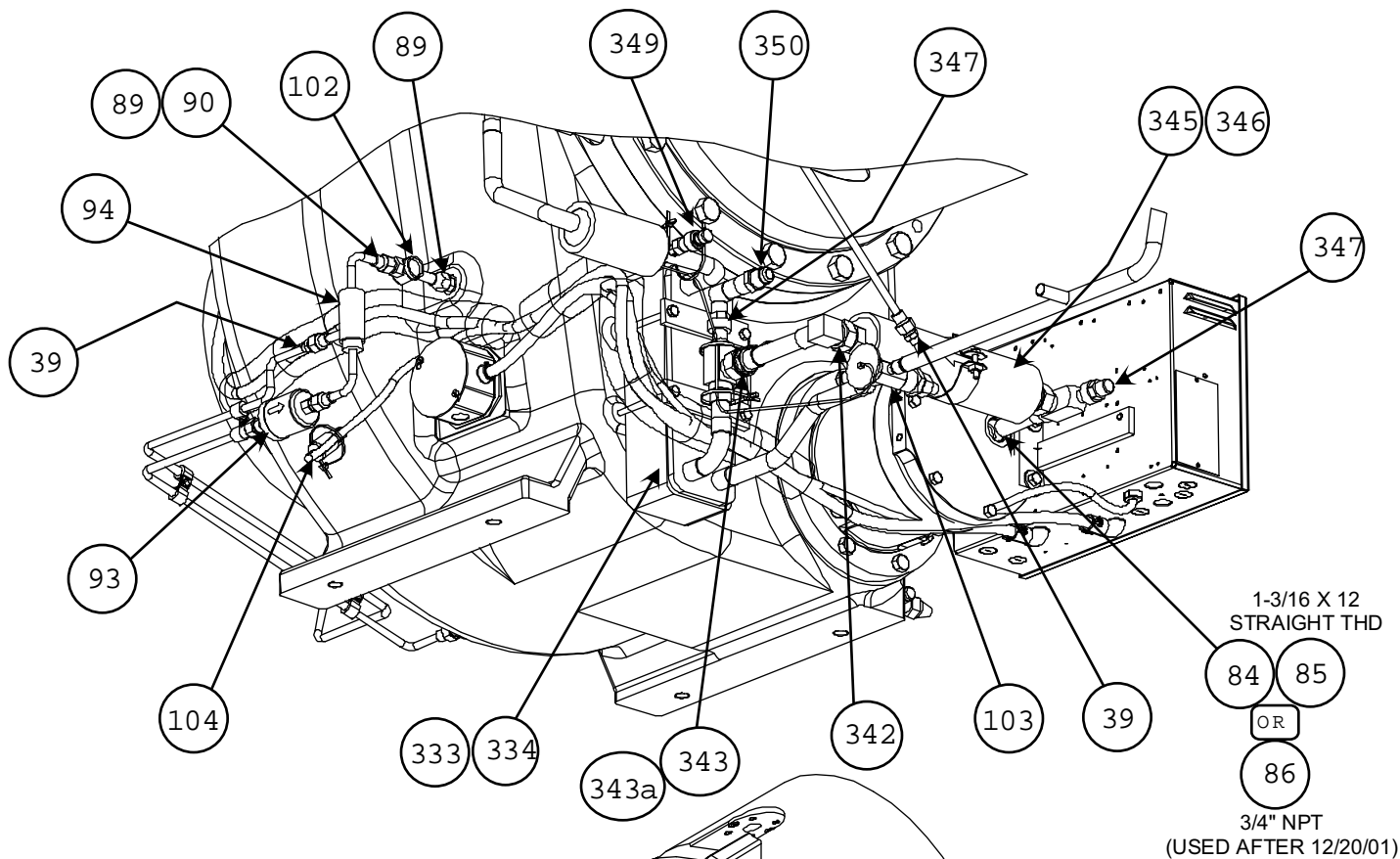
FRAME #3 COMPRESSOR
WITHOUT ROLLER ELEMENT
BEARINGS



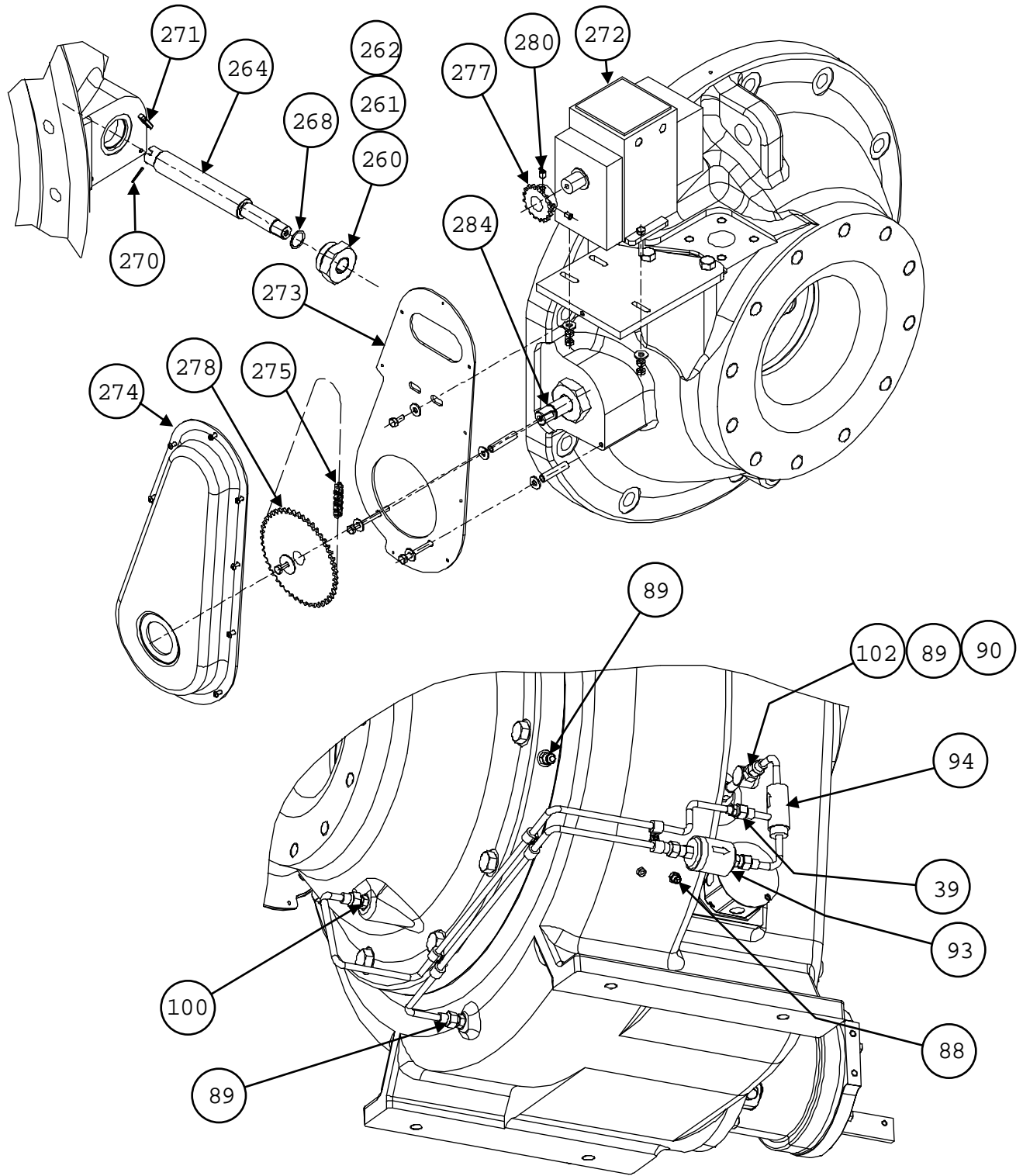
FRAME #3 COMPRESSOR
WITH ROLLER ELEMENT
BEARINGS



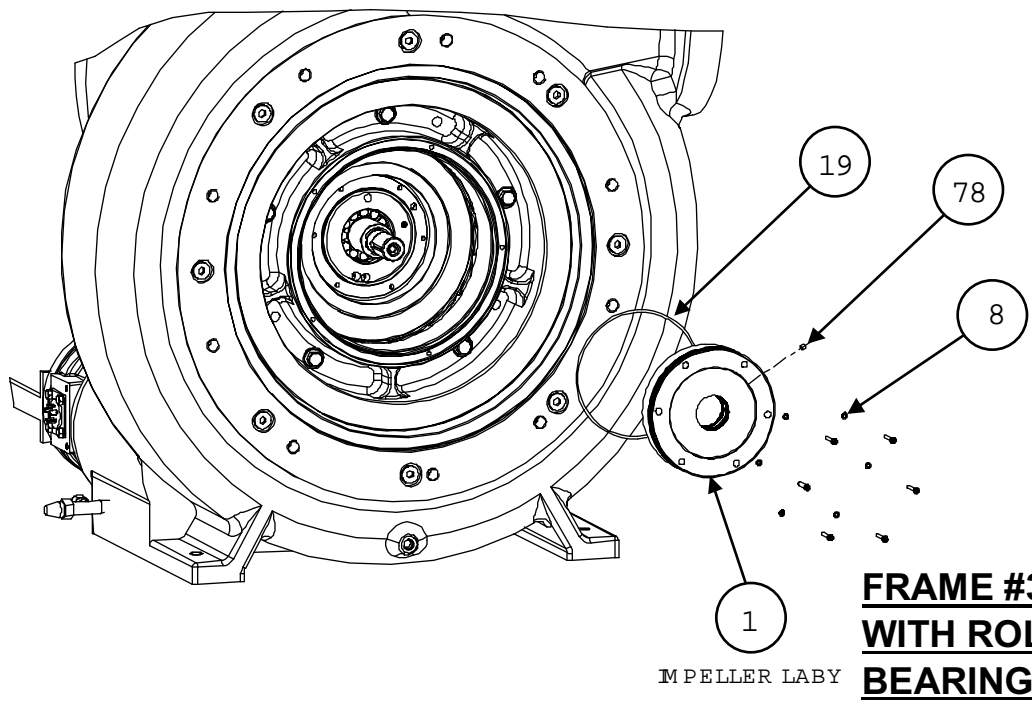
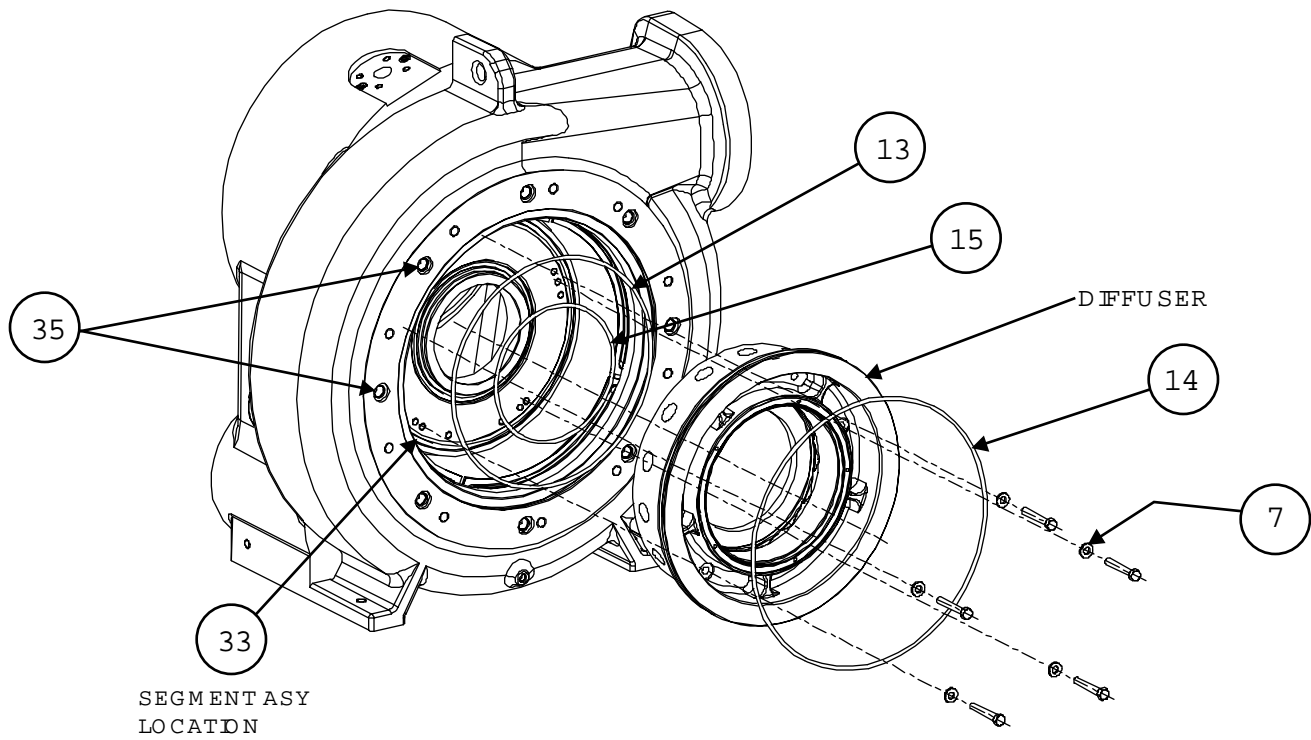
FRAME #3 COMPRESSOR
WITH ROLLER ELEMENT
BEARINGS

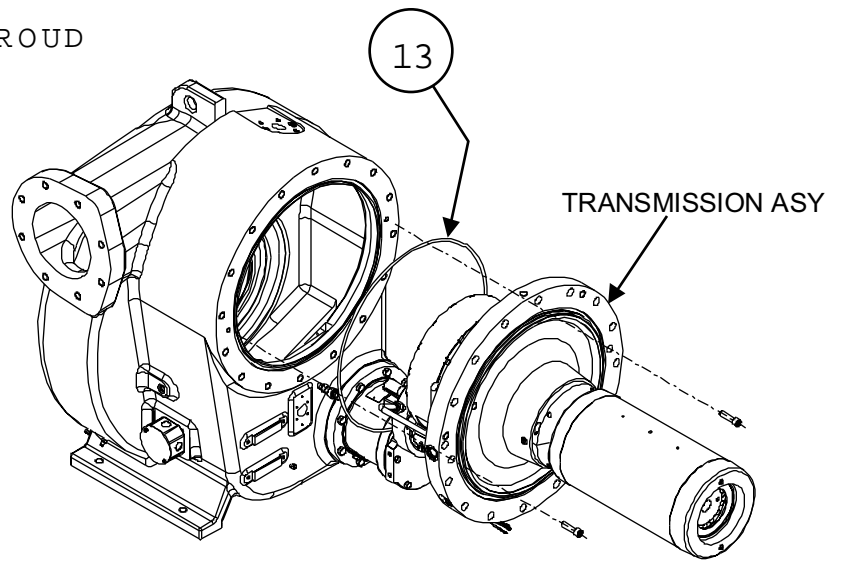
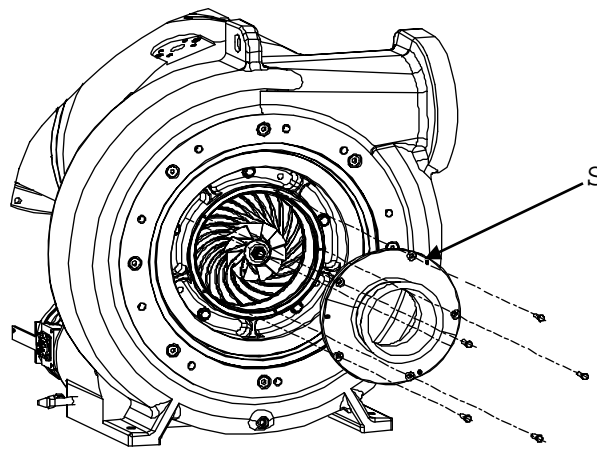
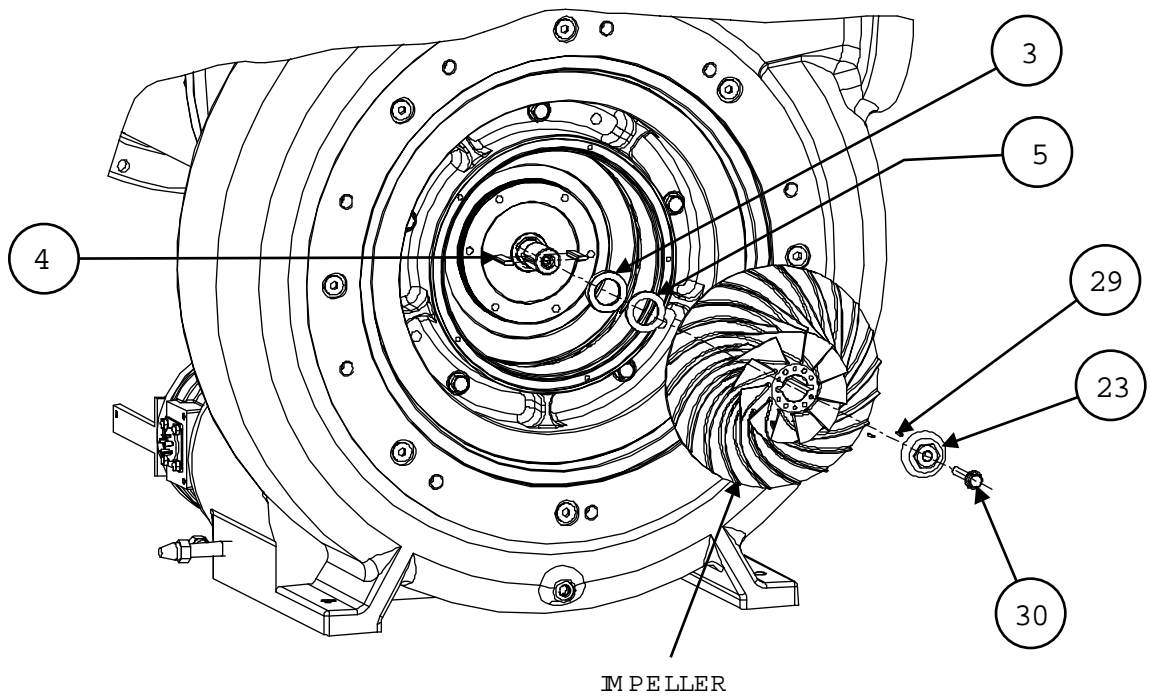


**FRAME #3 COMPRESSOR
WITH ROLLER ELEMENT
BEARINGS**

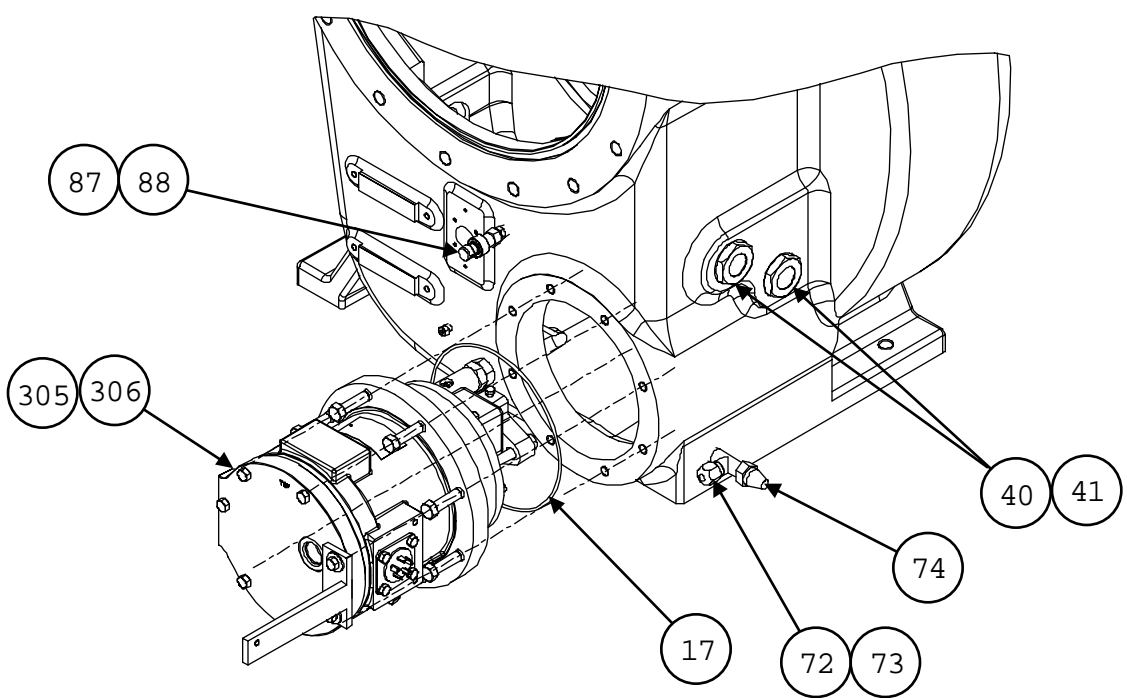
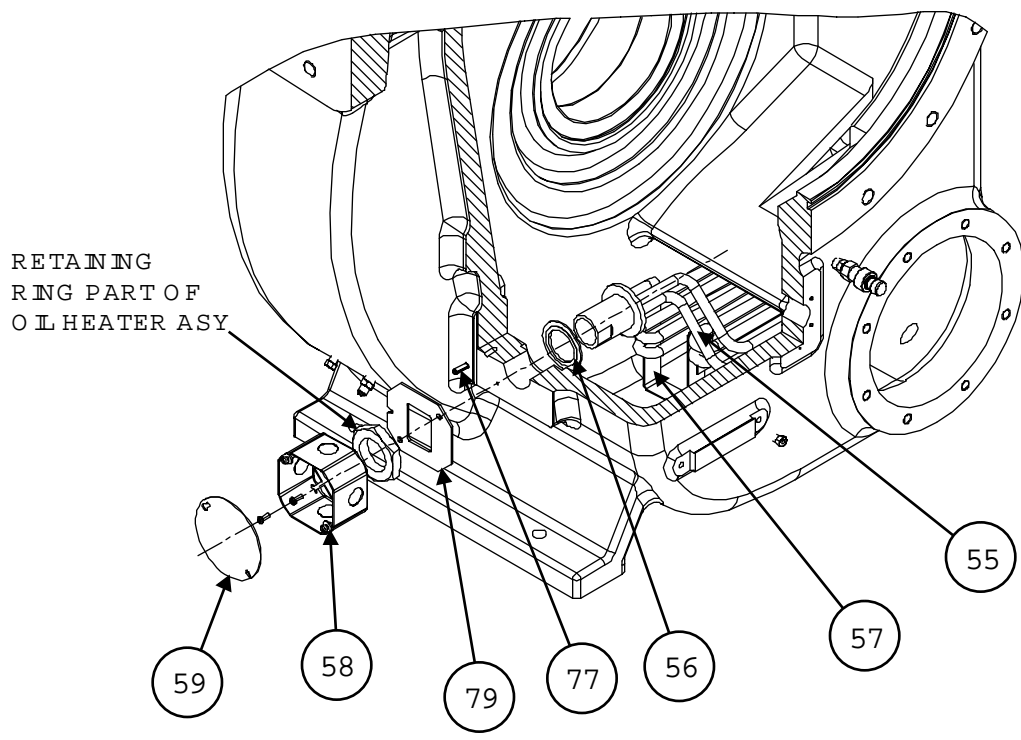


FRAME #3 COMPRESSOR
WITH ROLLER ELEMENT
BEARINGS

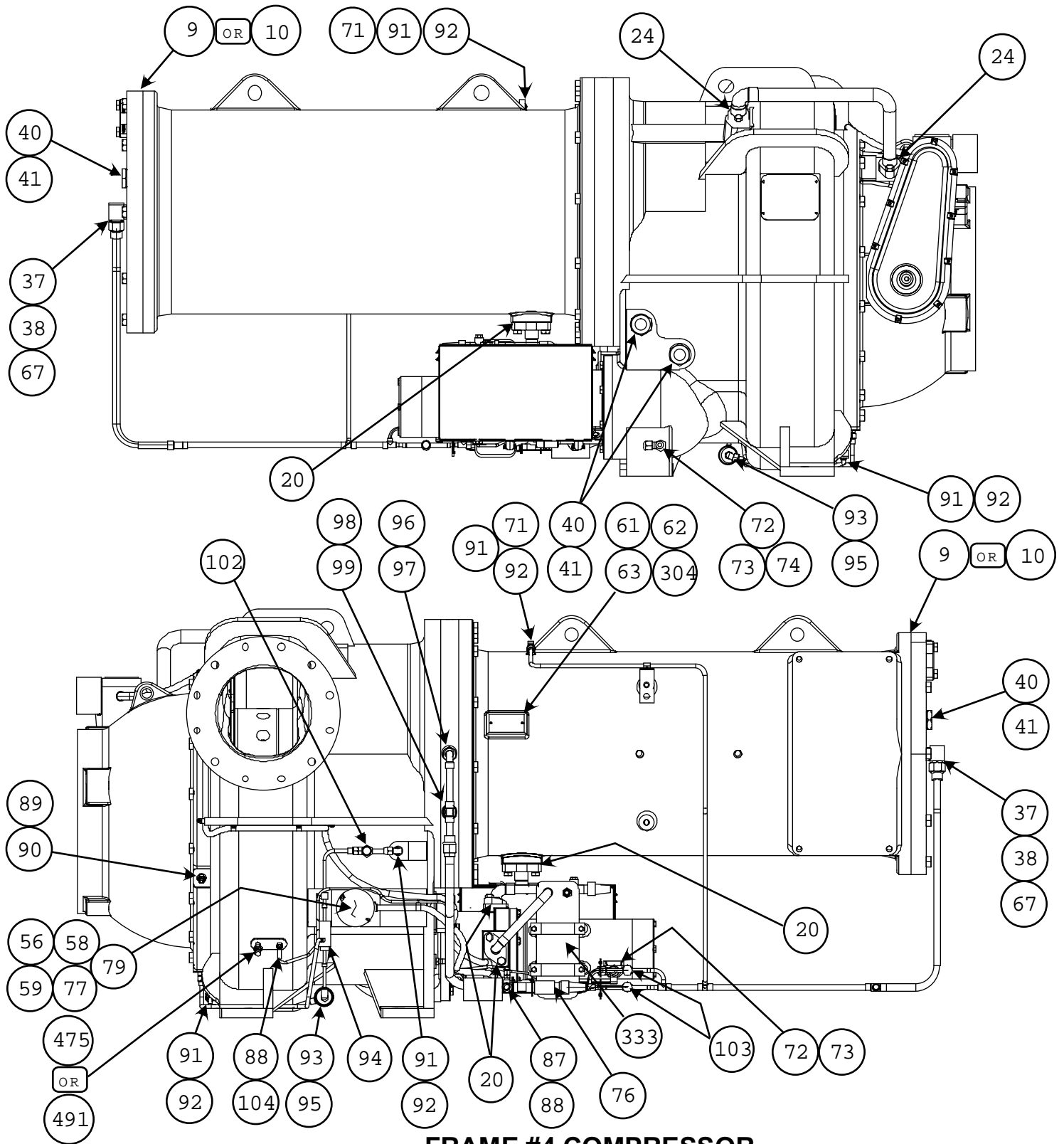




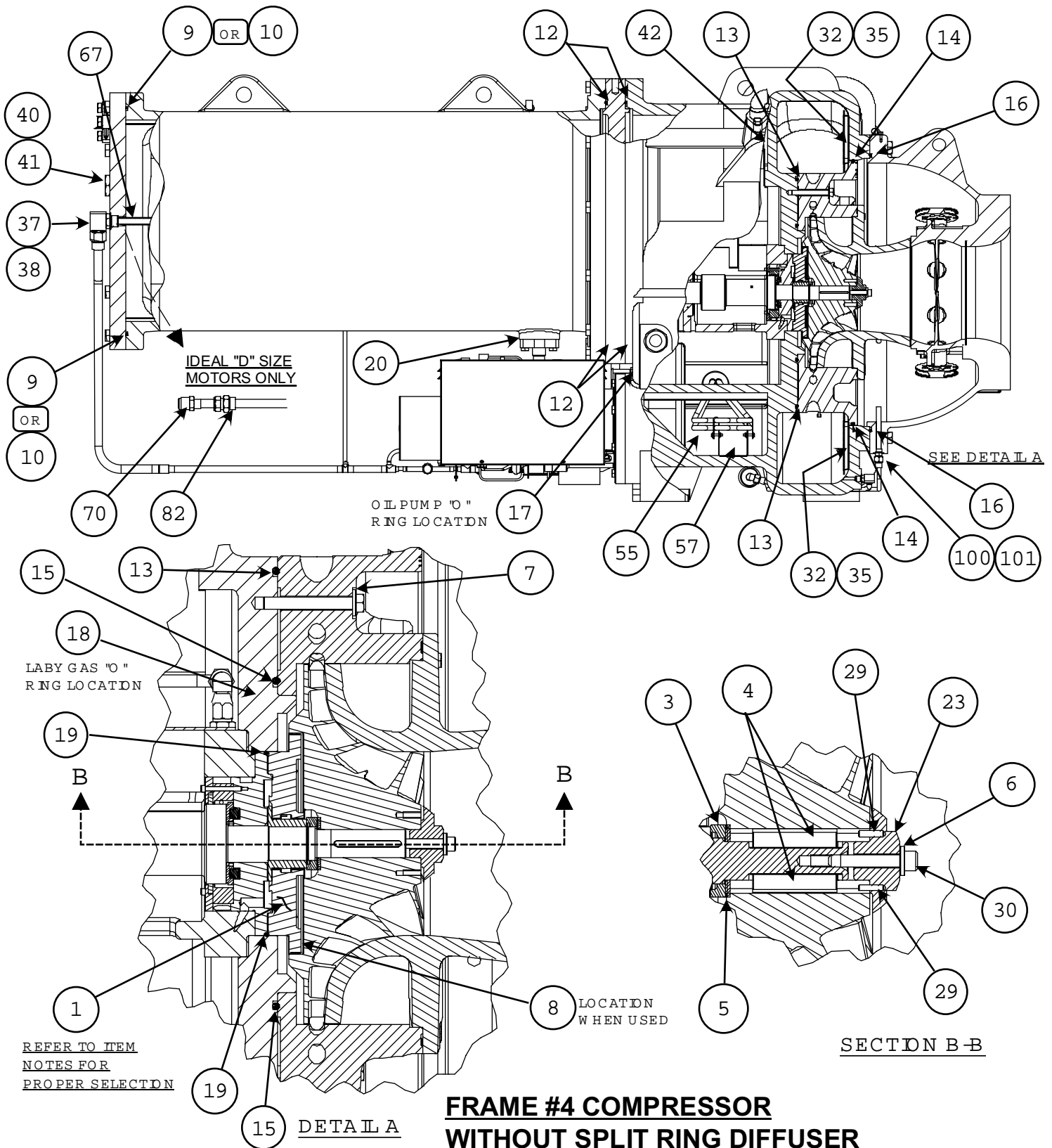
FRAME #3 COMPRESSOR
WITH ROLLER ELEMENT
BEARINGS



FRAME #3 COMPRESSOR
WITH ROLLER ELEMENT
BEARINGS

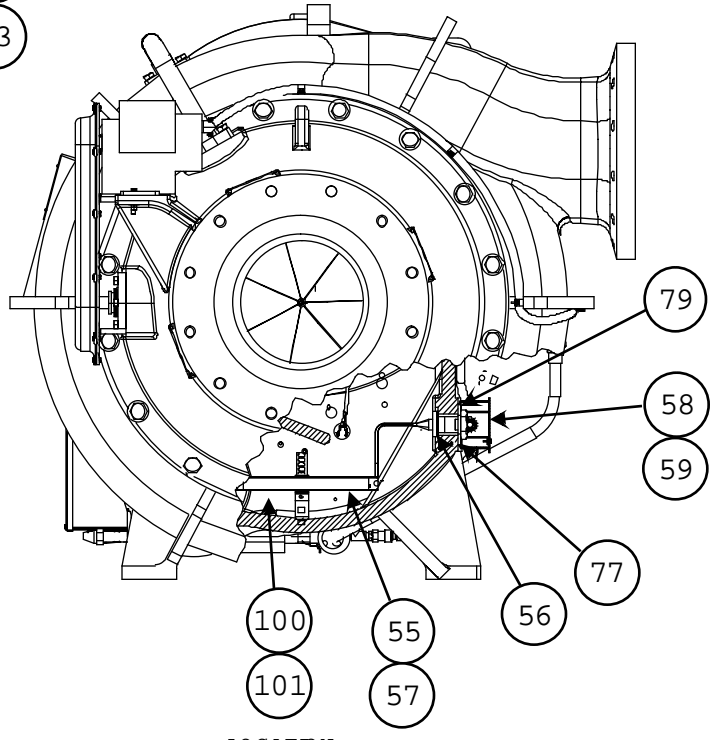
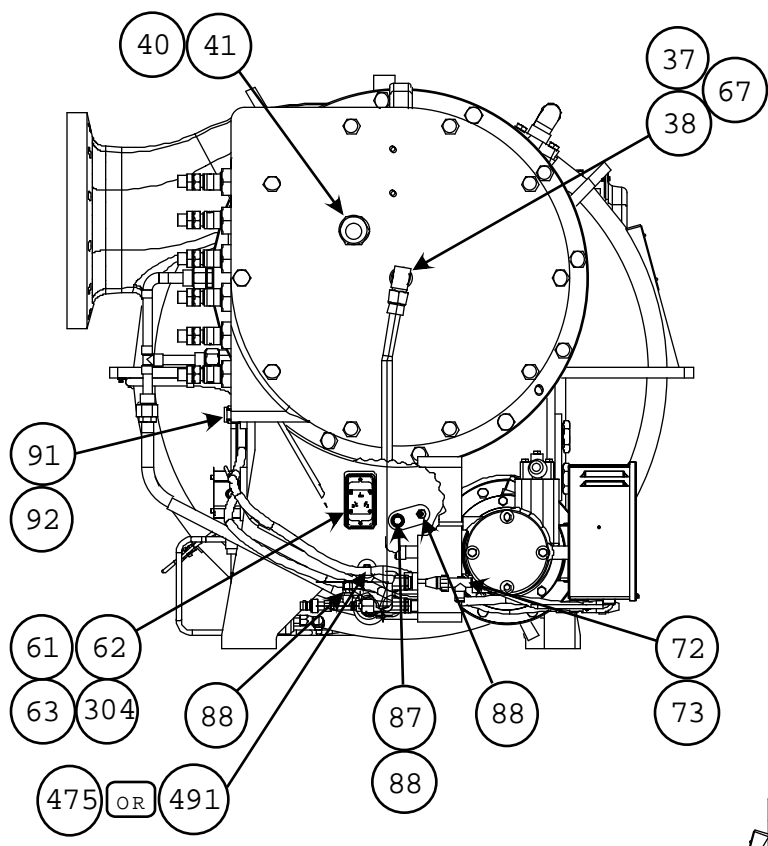


FRAME #4 COMPRESSOR
WITHOUT SPLIT RING DIFFUSER
BUILT PRIOR TO JAN. 2002



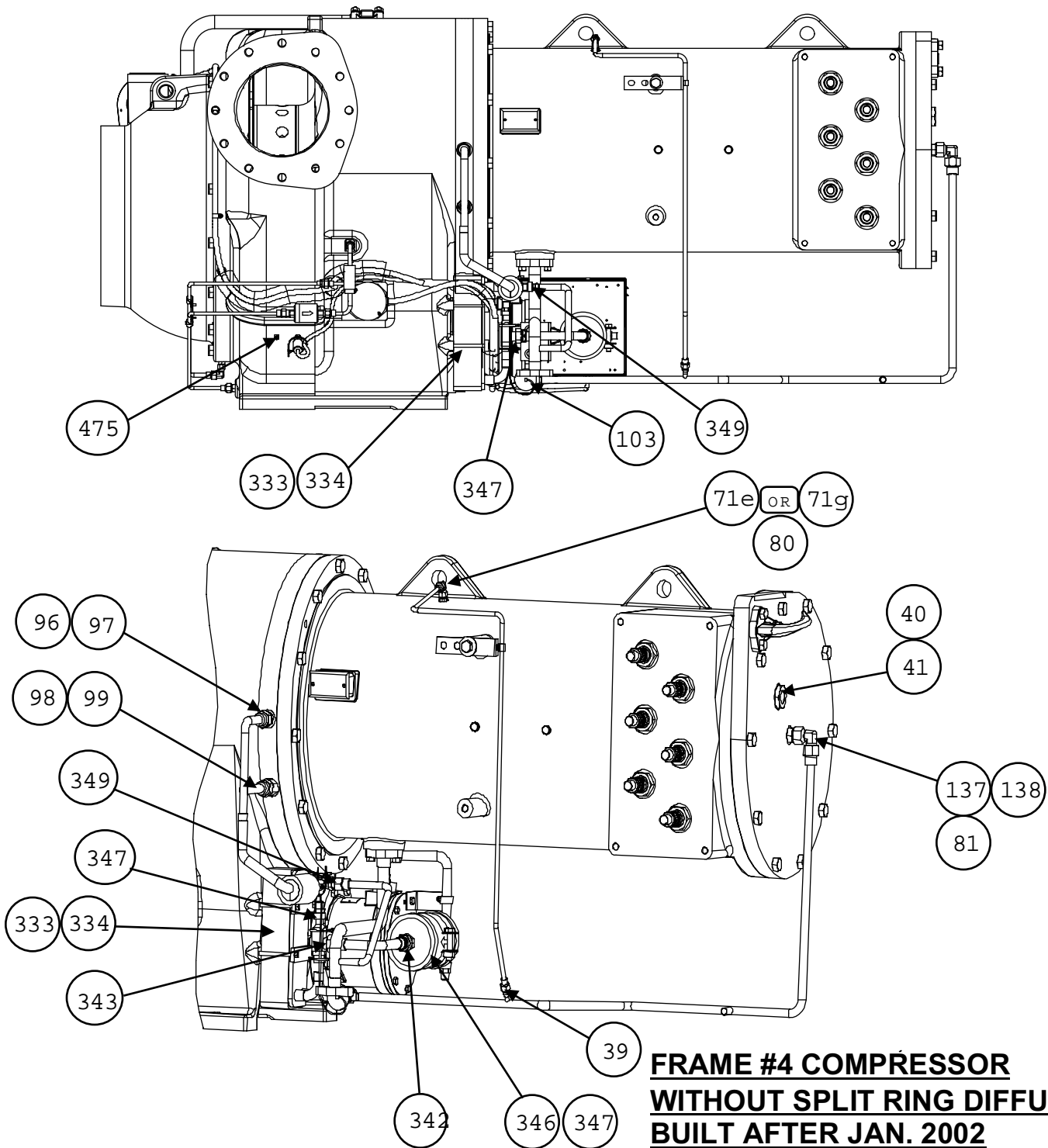
**FRAME #4 COMPRESSOR
WITHOUT SPLIT RING DIFFUSER
BUILT PRIOR TO JAN. 2002**

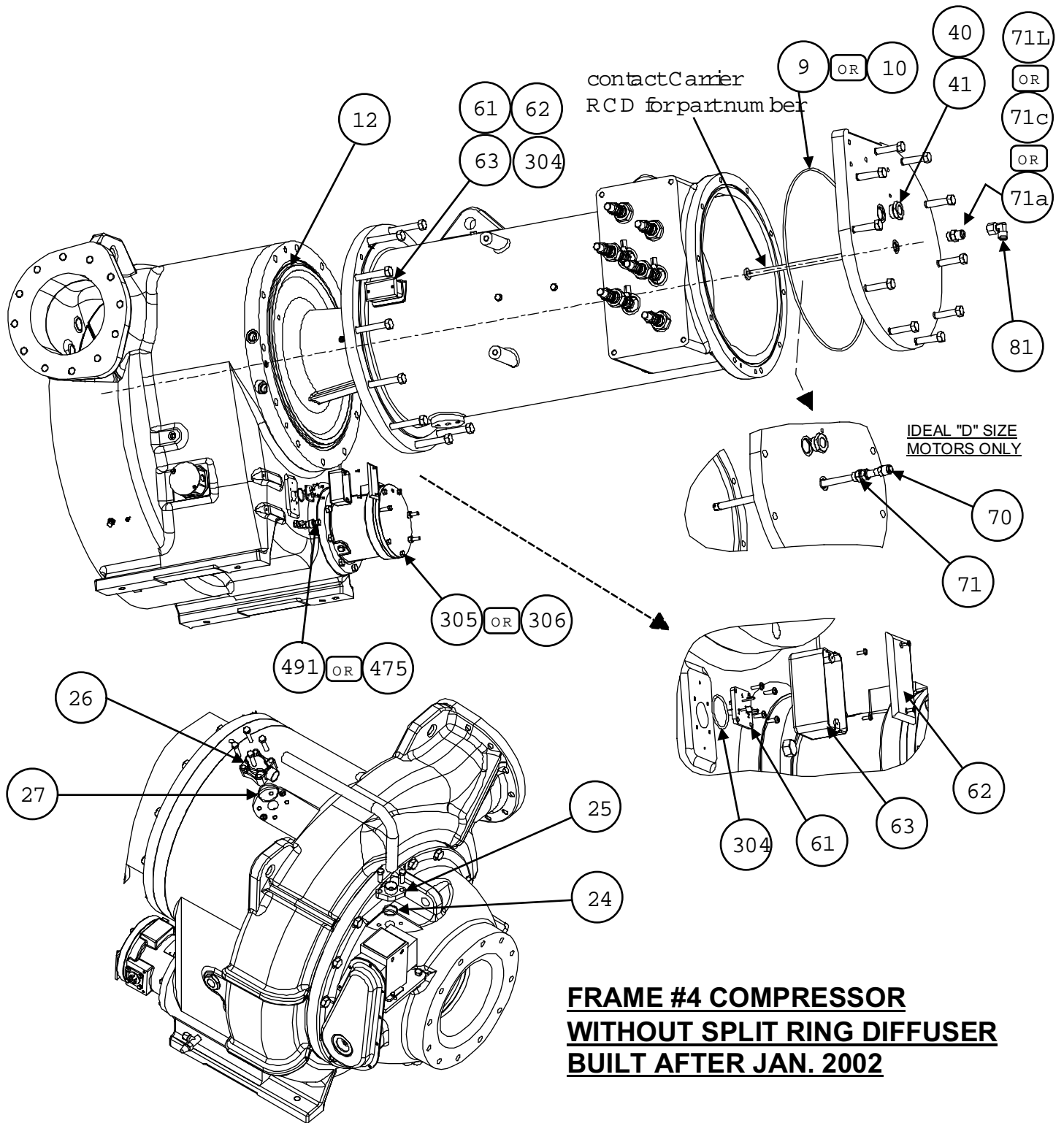
REFER TO ITEM NOTES FOR PROPER SELECTION

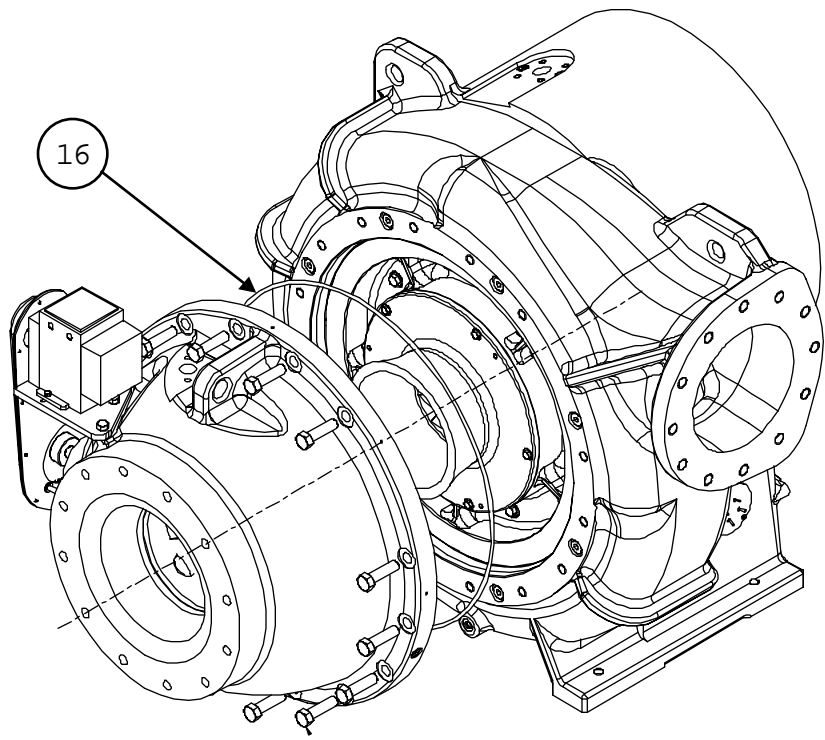
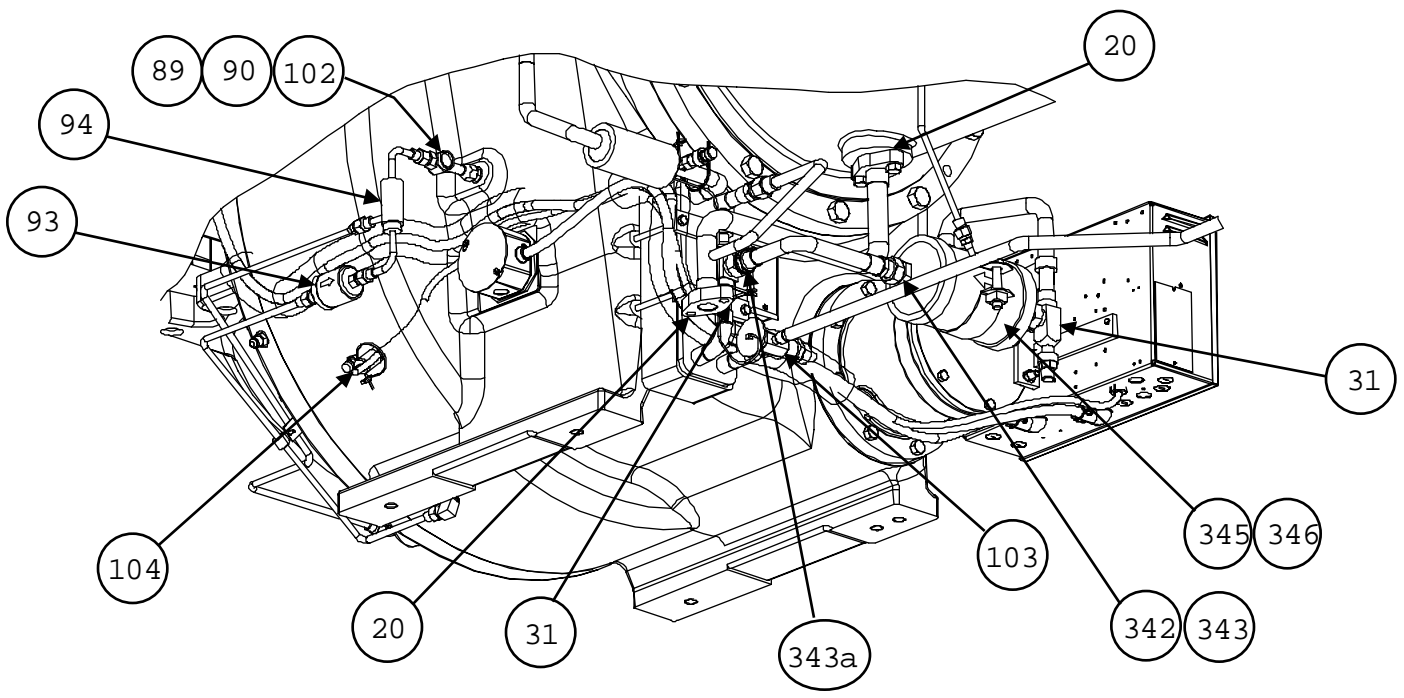


LOCATION

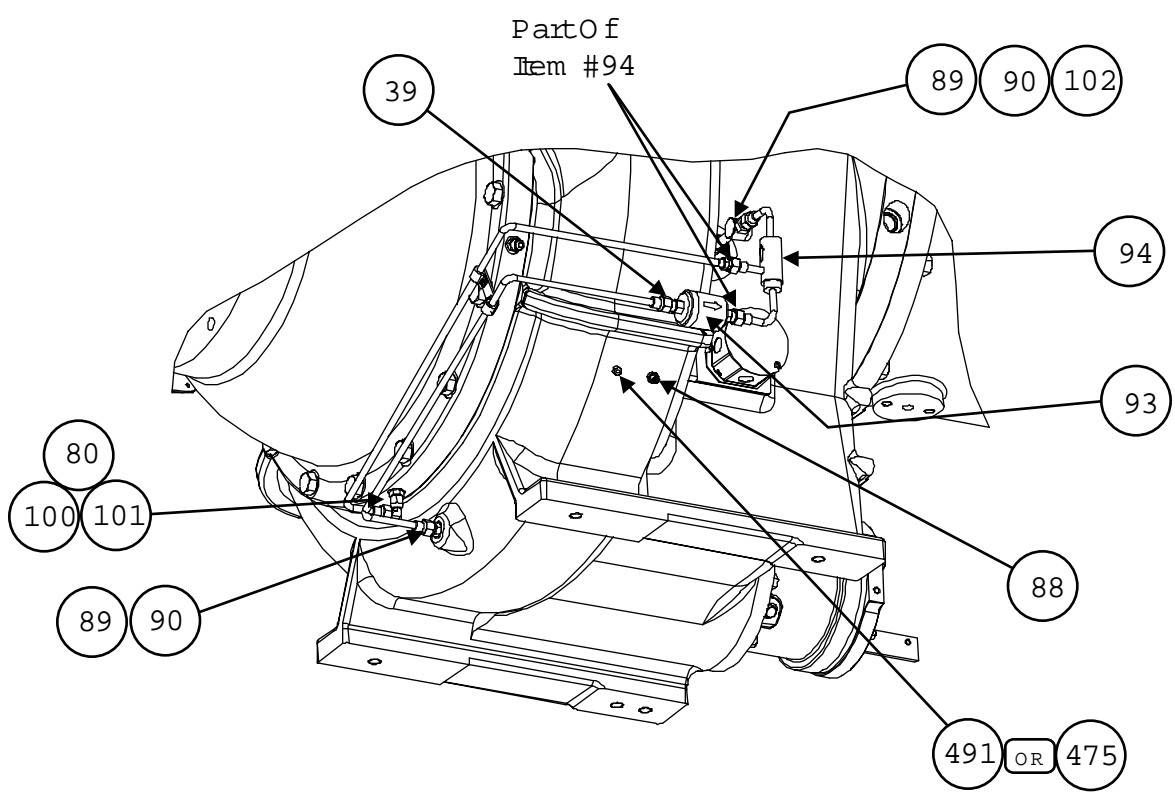
FRAME #4 COMPRESSOR
WITHOUT SPLIT RING DIFFUSER
BUILT PRIOR TO JAN. 2002



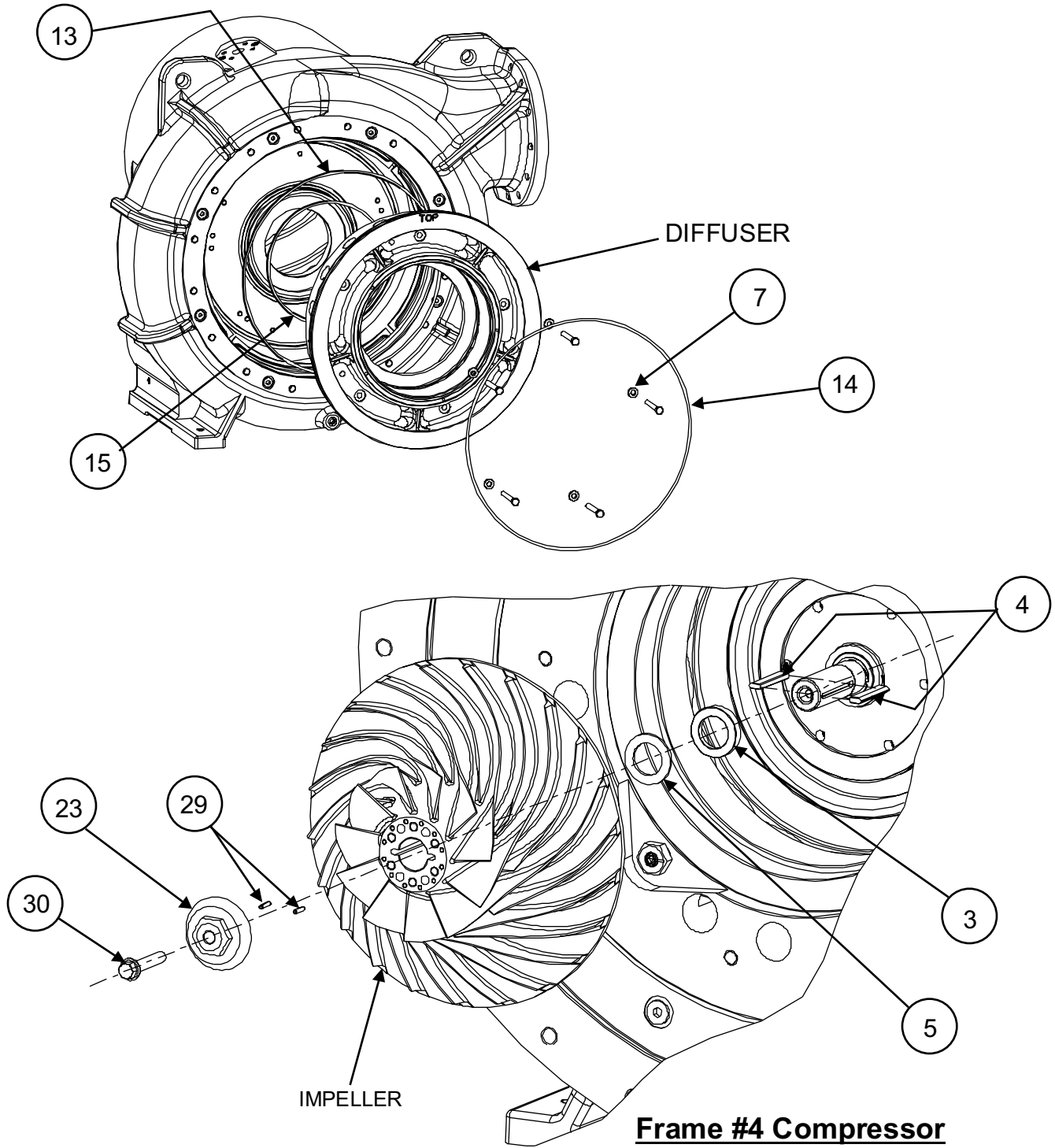




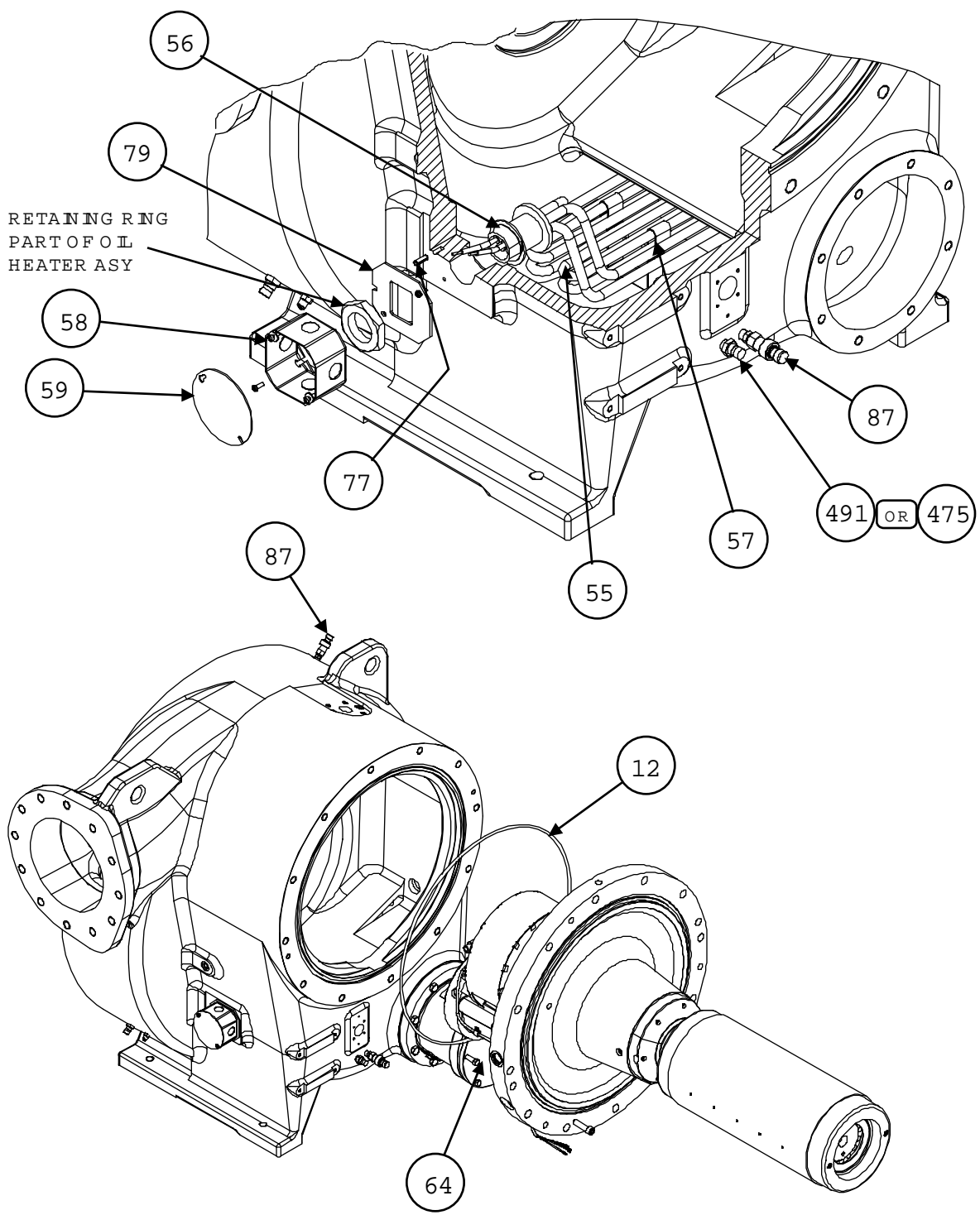
FRAME #4 COMPRESSOR
WITHOUT SPLIT RING DIFFUSER
BUILT AFTER JAN. 2002



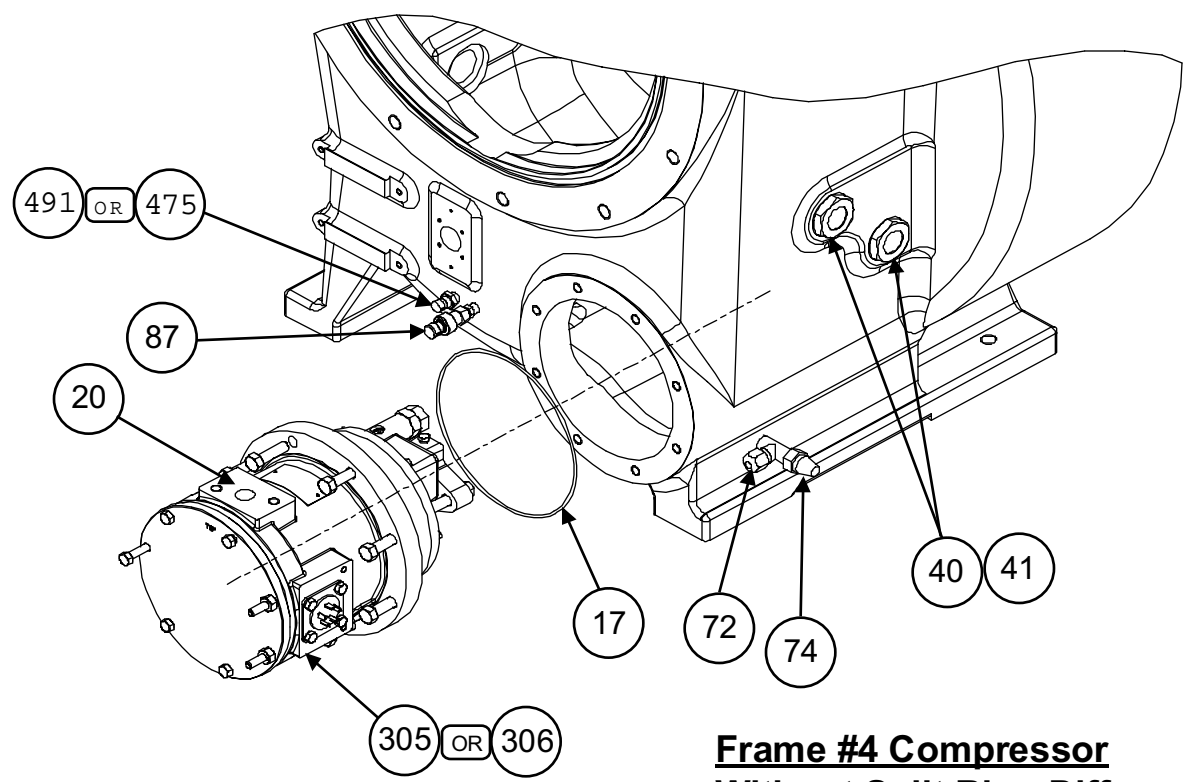
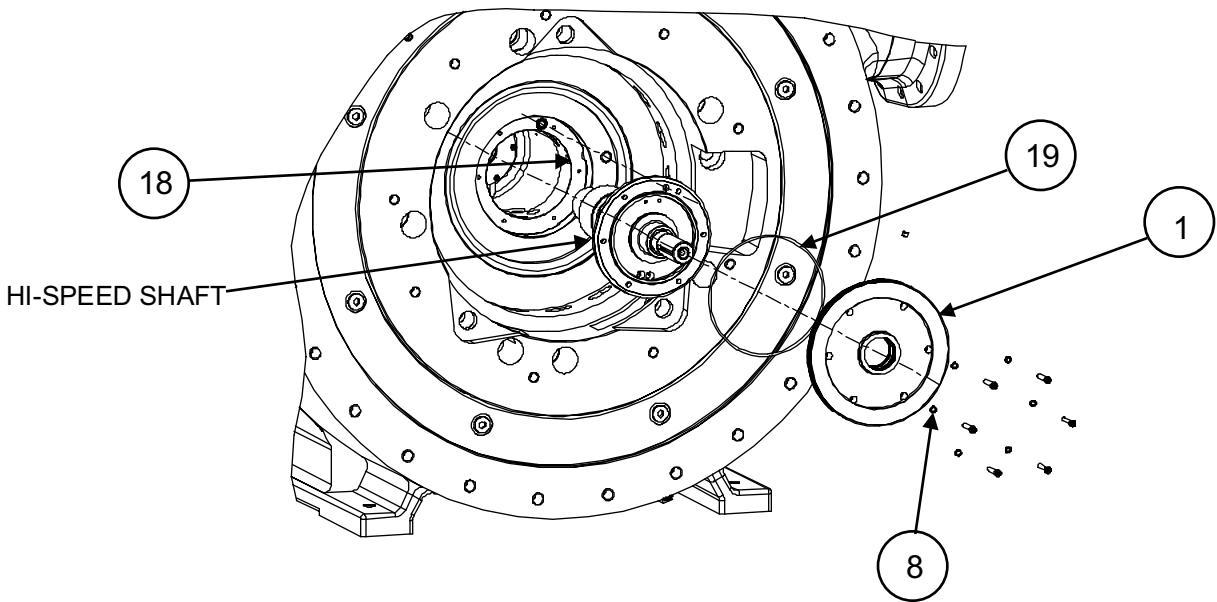
FRAME #4 COMPRESSOR
WITHOUT SPLIT RING DIFFUSER
BUILT AFTER JAN. 2002



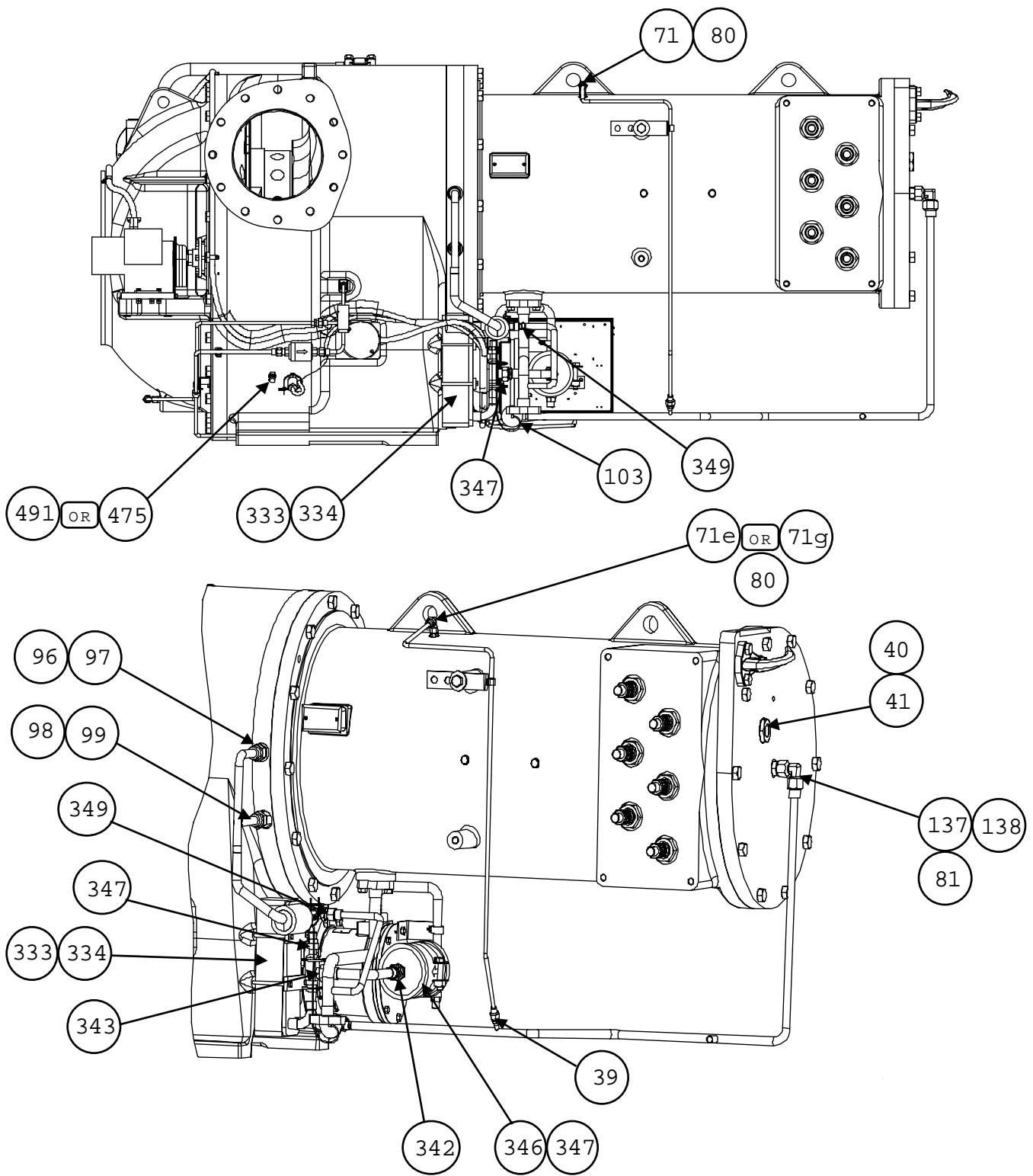
Frame #4 Compressor
Without Split Ring Diffuser
Built After January, 2002



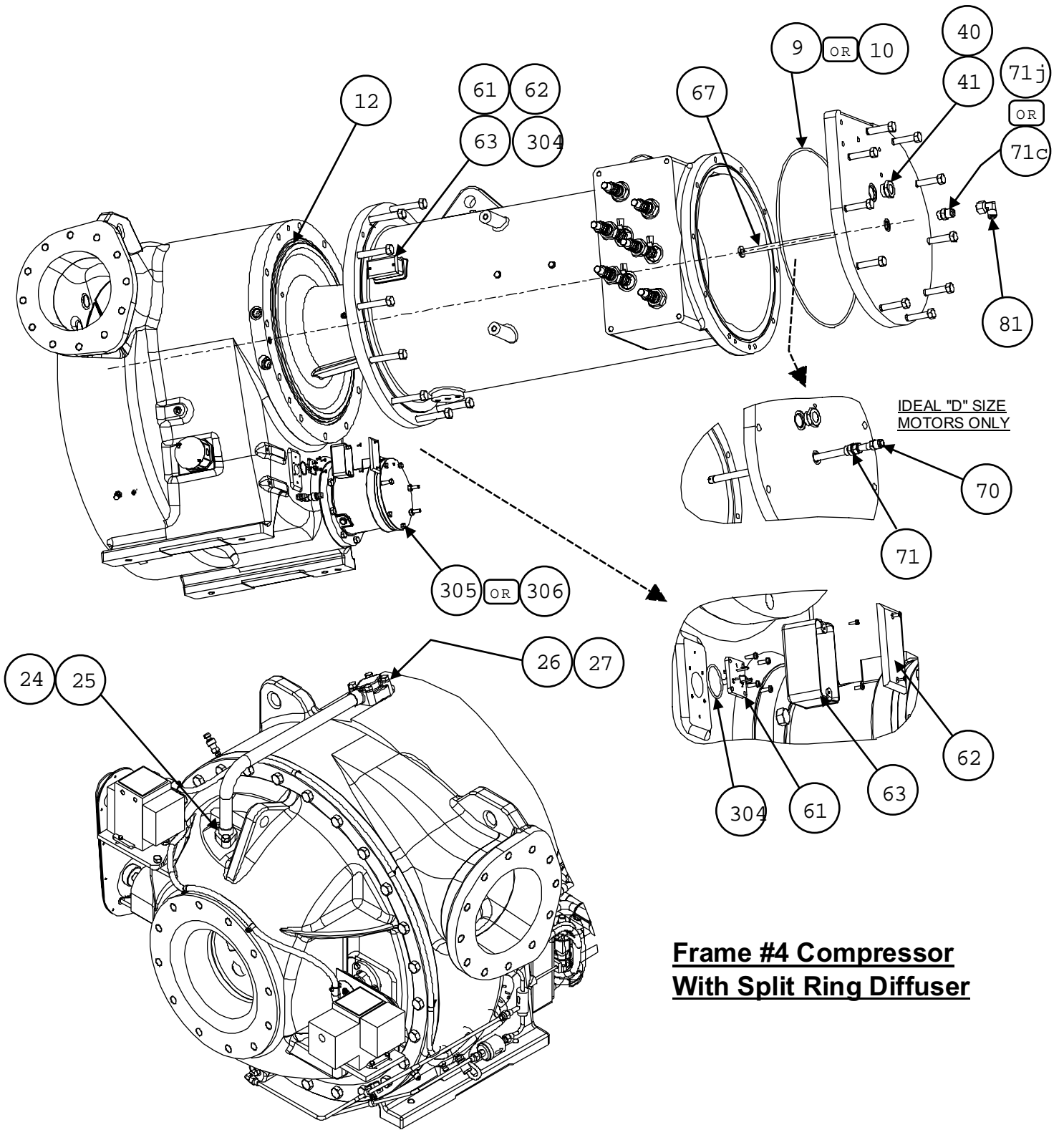
Frame #4 Compressor
Without Split Ring Diffuser
Built After January, 2002



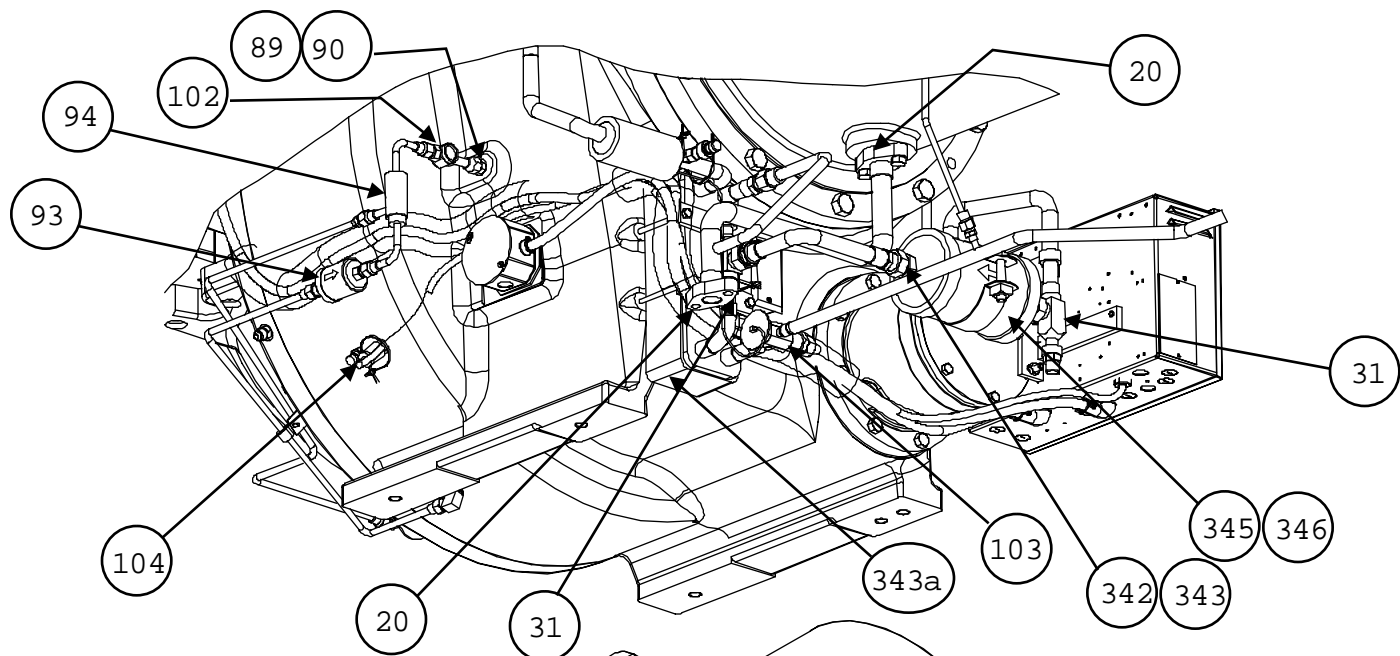
Frame #4 Compressor
Without Split Ring Diffuser
Built After January, 2002



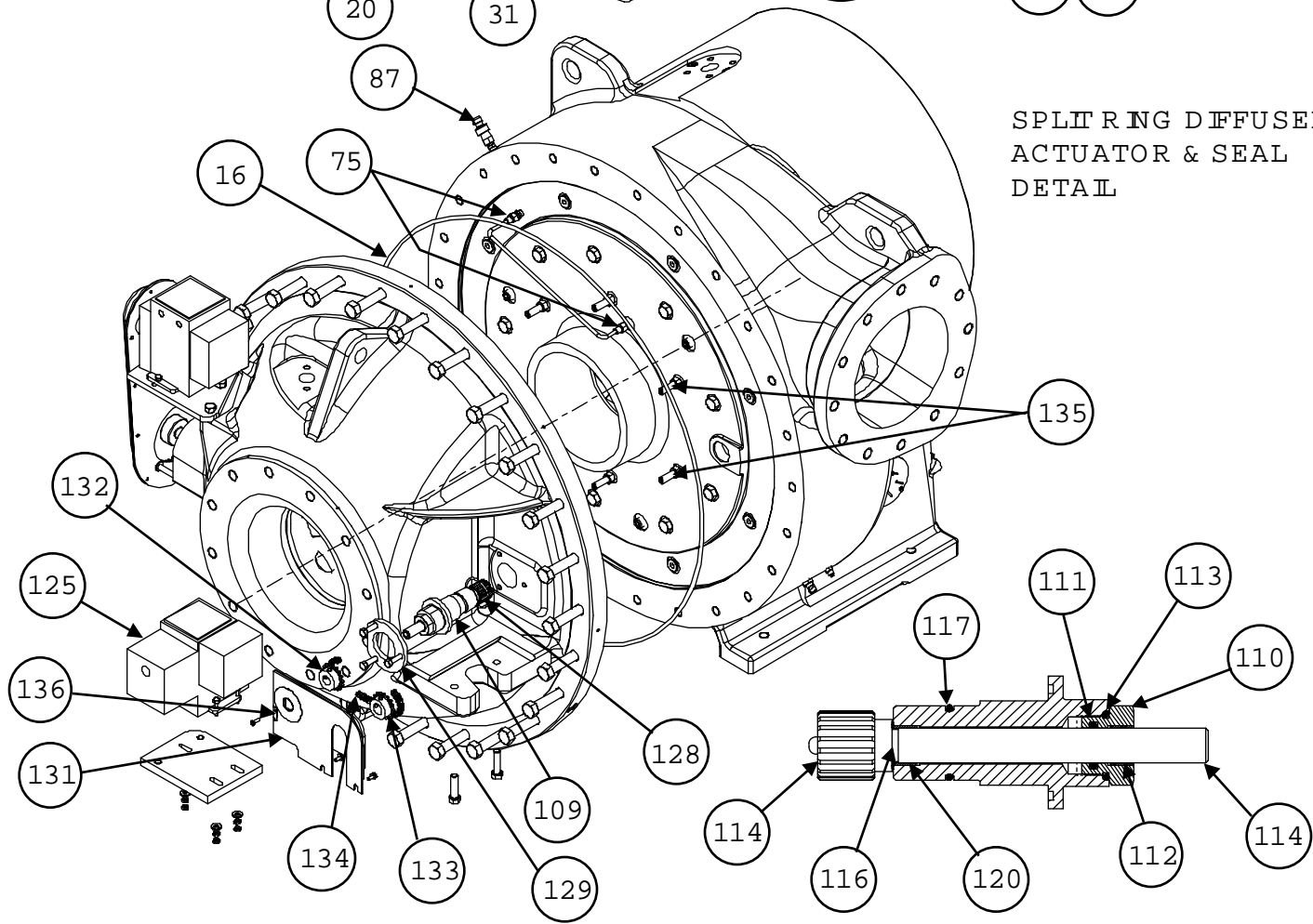
Frame #4 Compressor
With Split Ring Diffuser



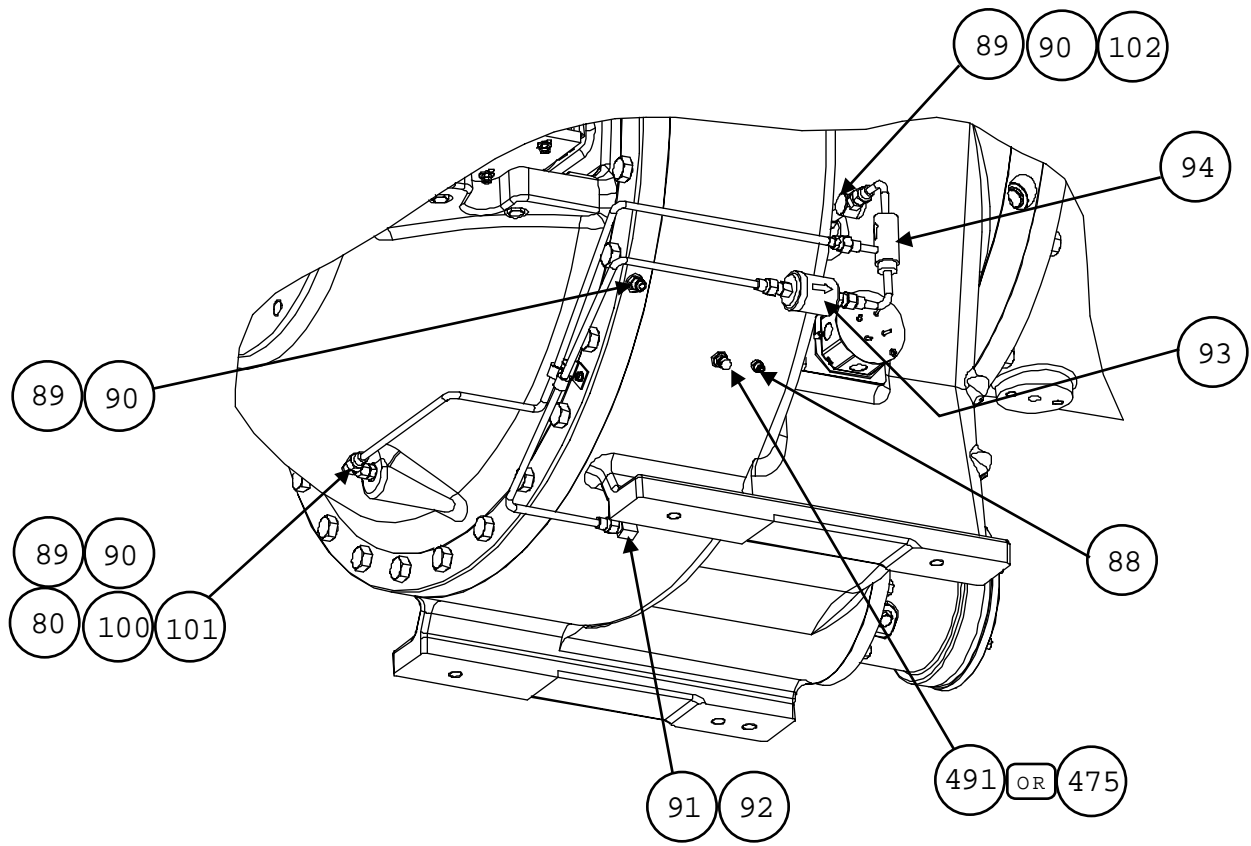
Frame #4 Compressor
With Split Ring Diffuser



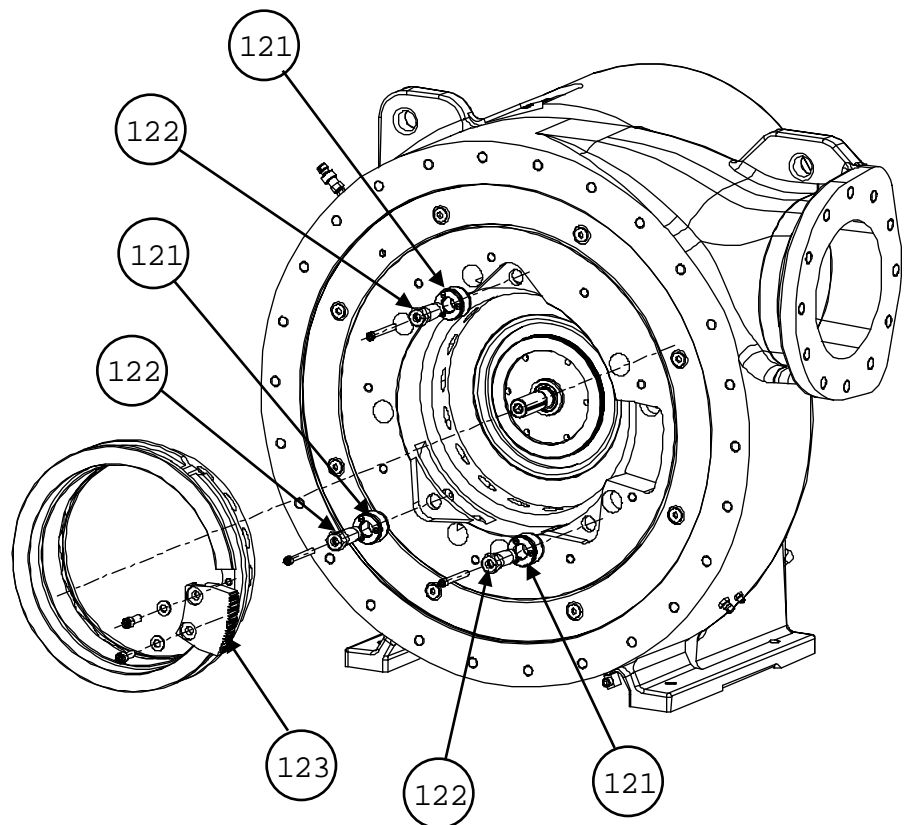
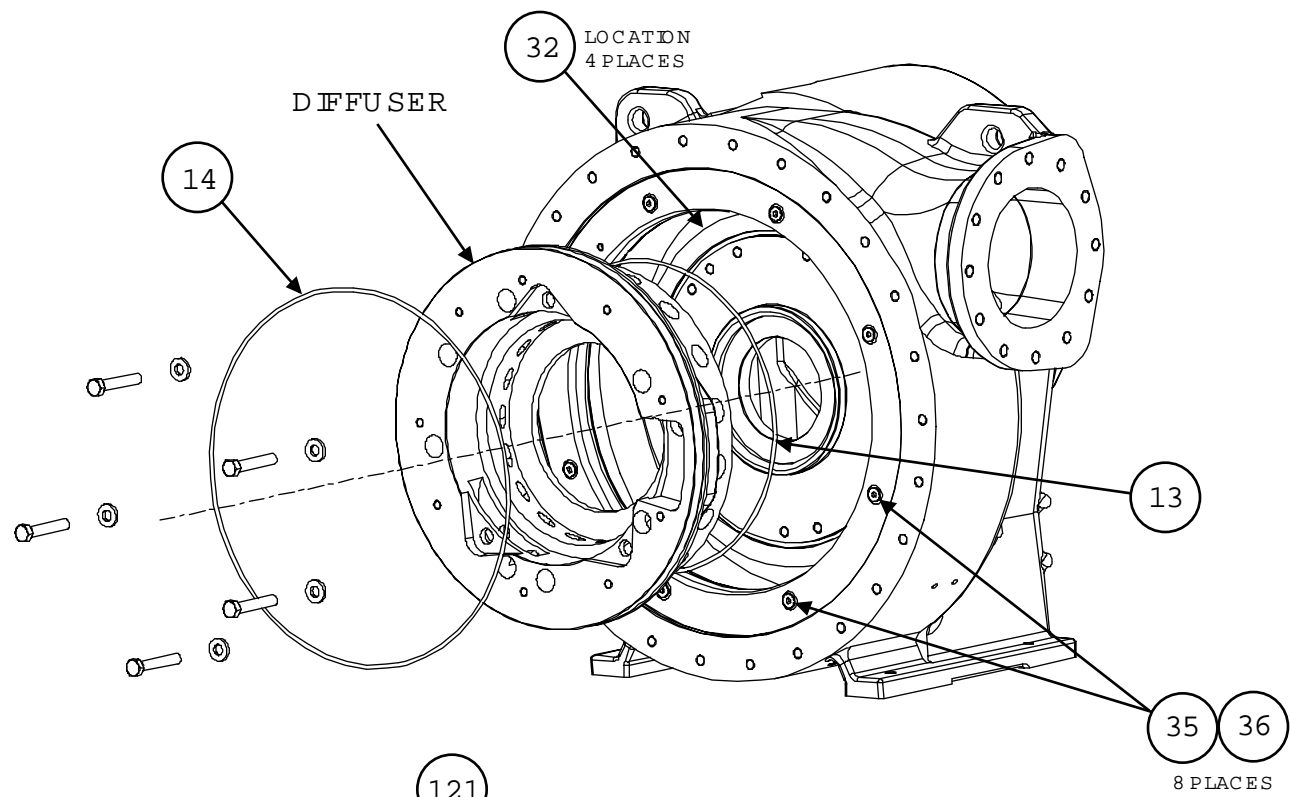
SPLITTING DIFFUSER
ACTUATOR & SEAL
DETAIL



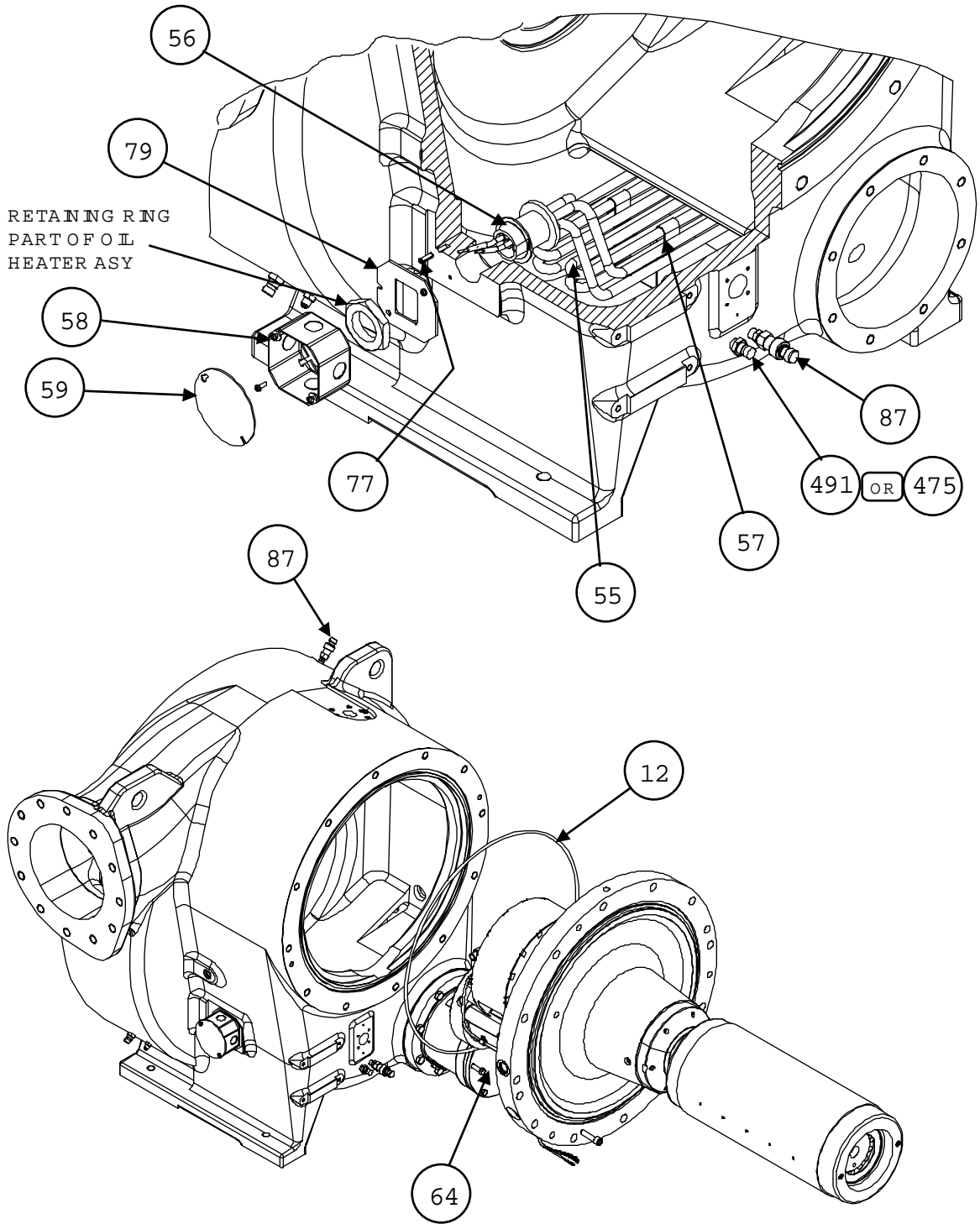
**Frame #4 Compressor
With Split Ring Diffuser**



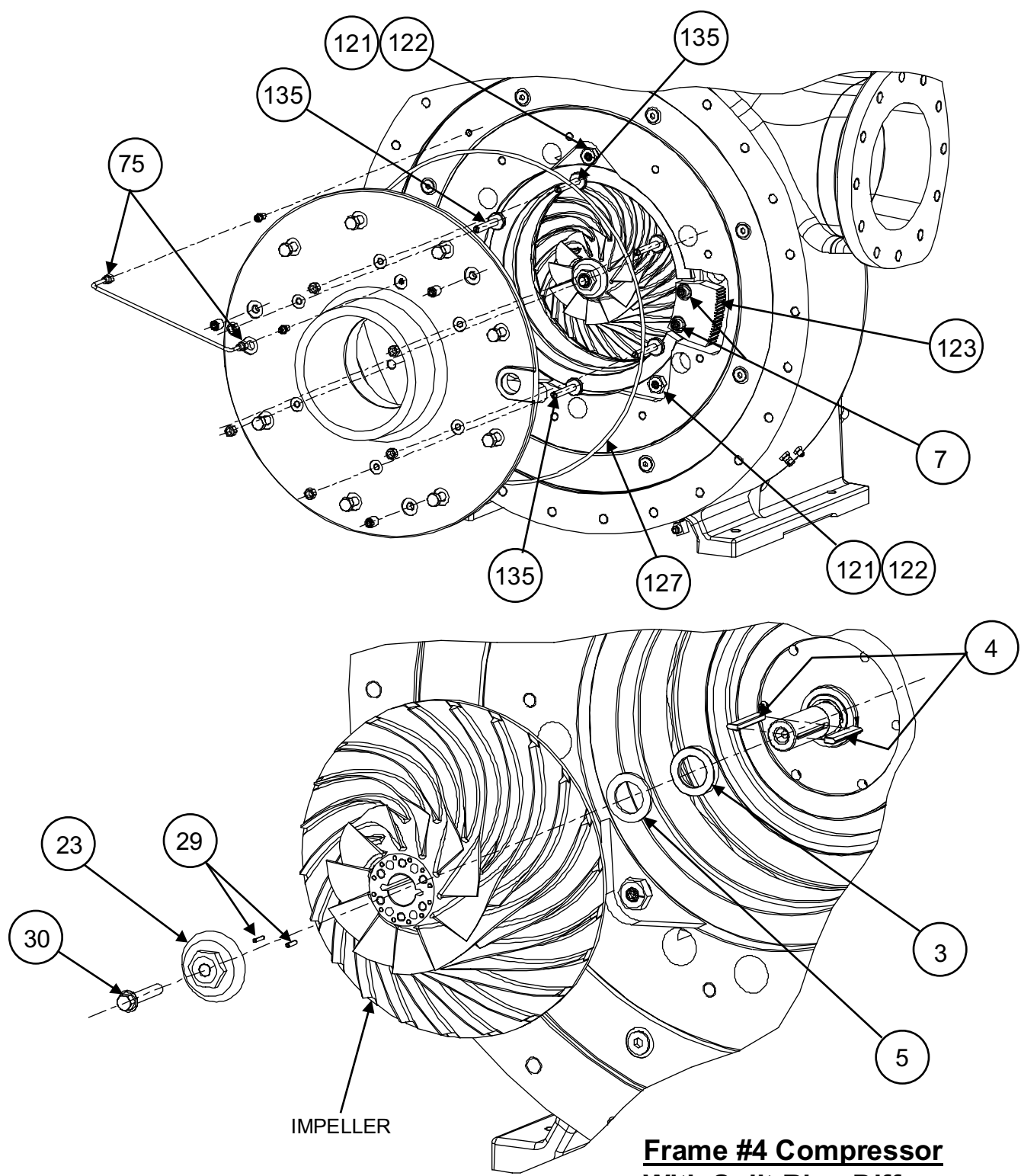
Frame #4 Compressor
With Split Ring Diffuser

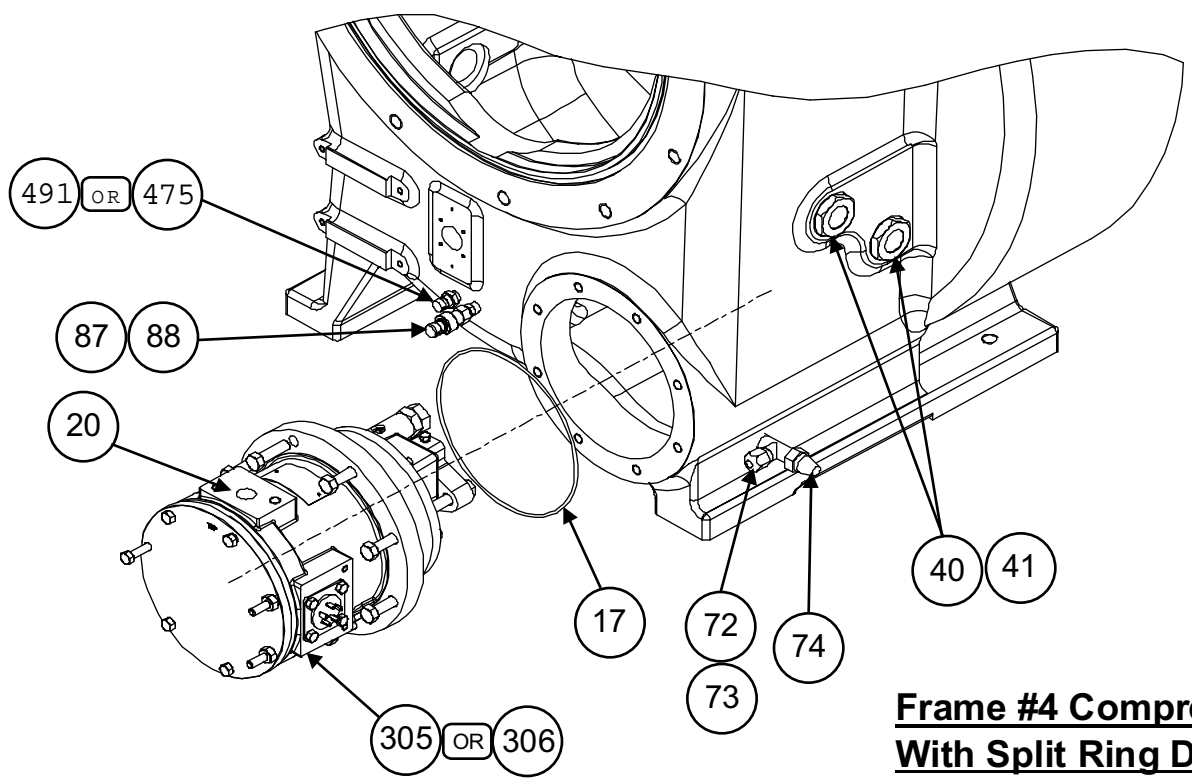
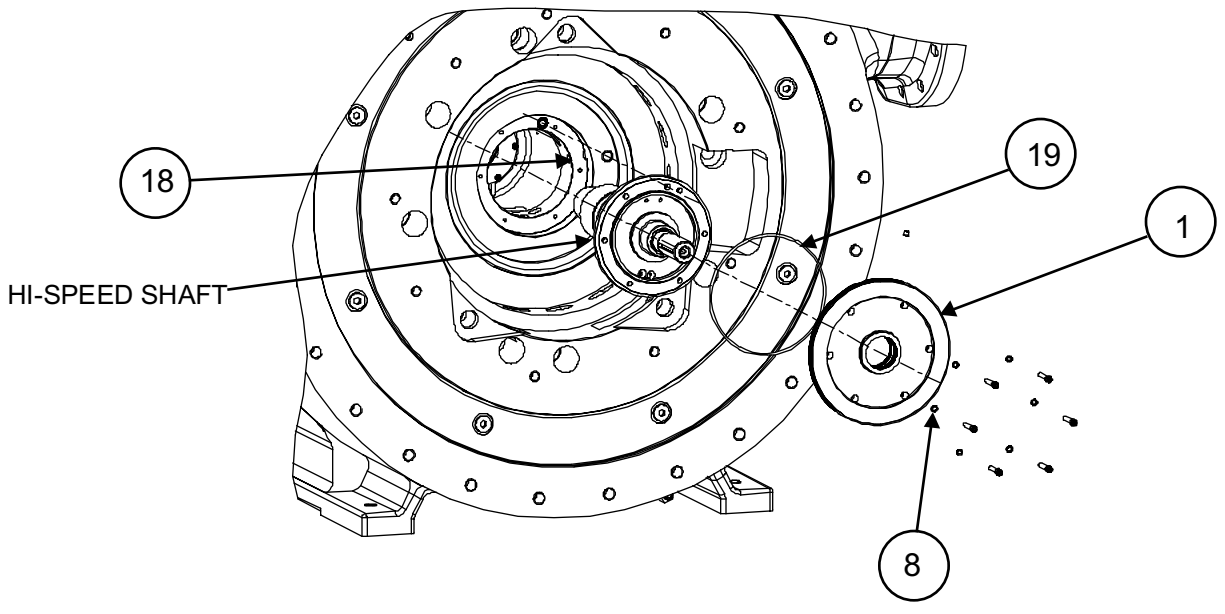


Frame #4 Compressor
With Split Ring Diffuser

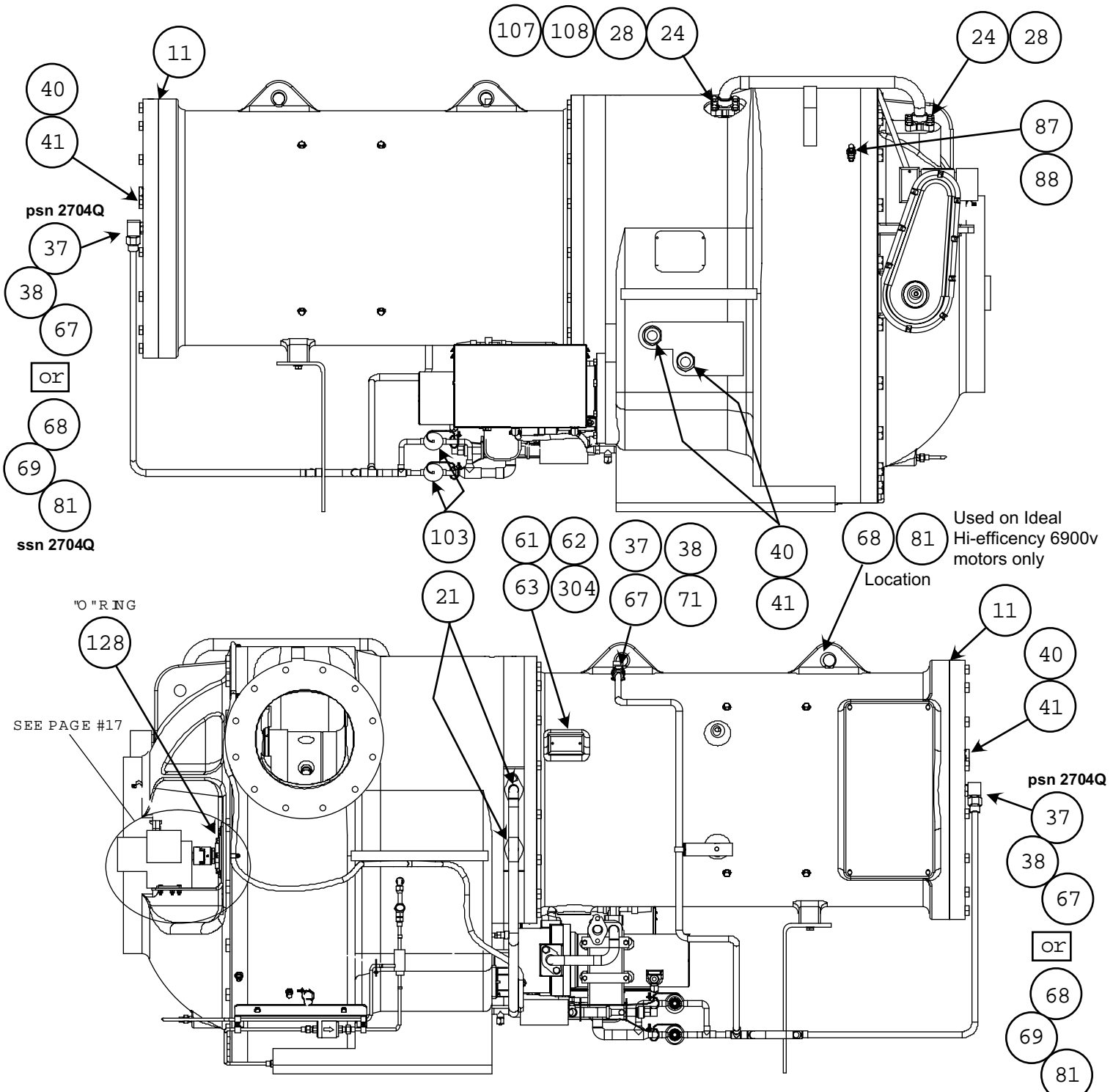


Frame #4 Compressor
With Split Ring Diffuser



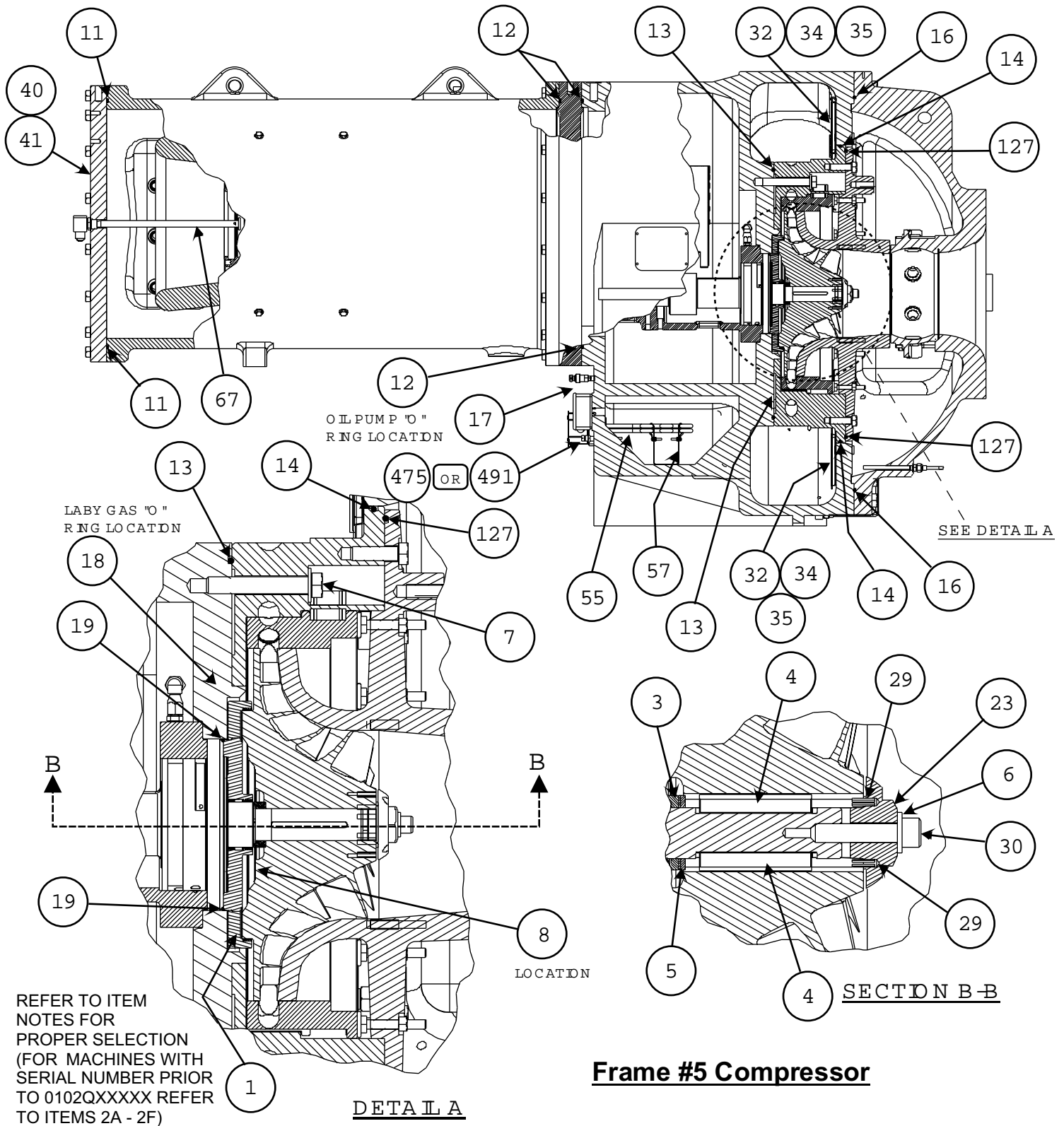


Frame #4 Compressor
With Split Ring Diffuser

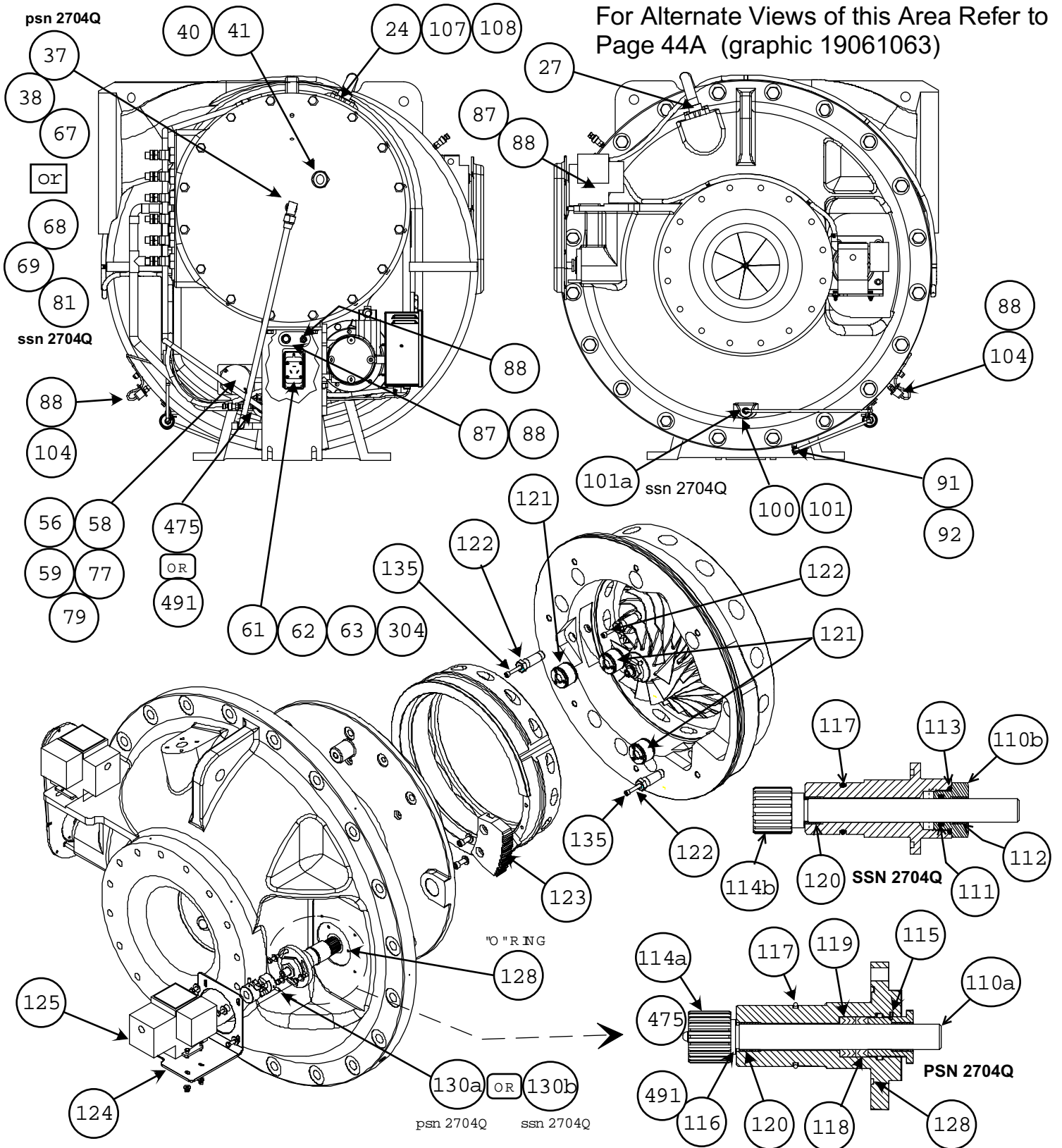


For Alternate Views of this Area Refer to Page 44A (graphic 19061063)

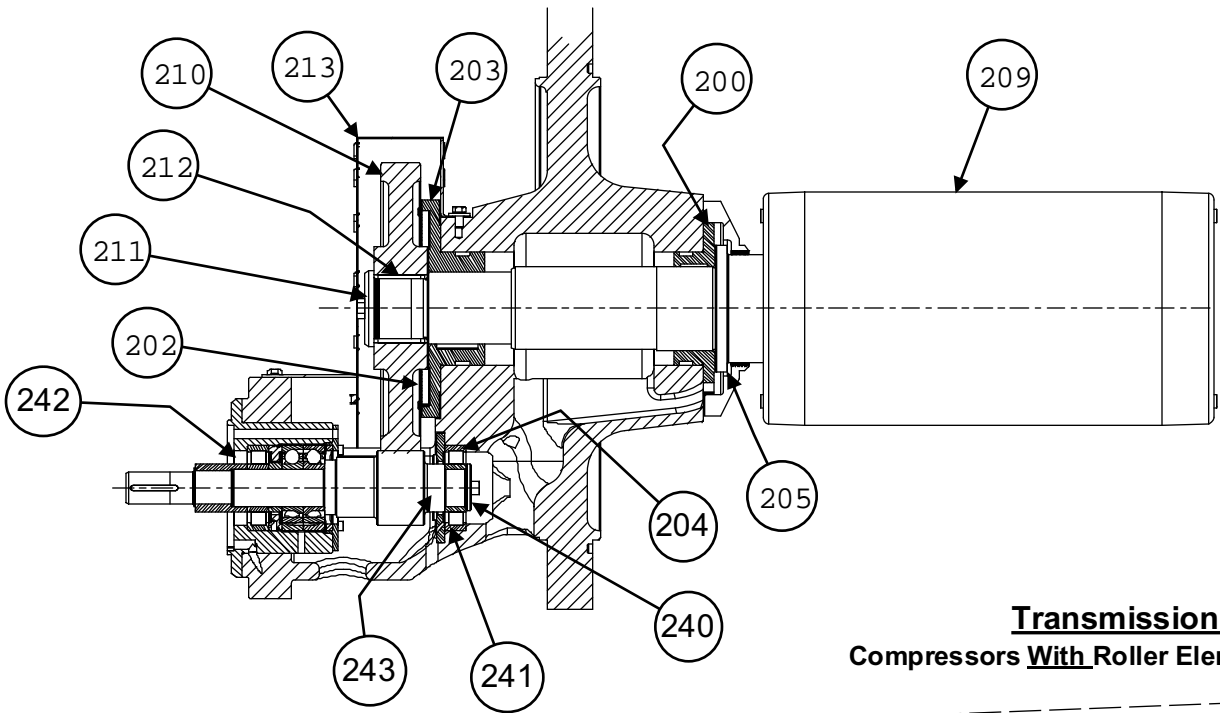
Frame #5 Compressor



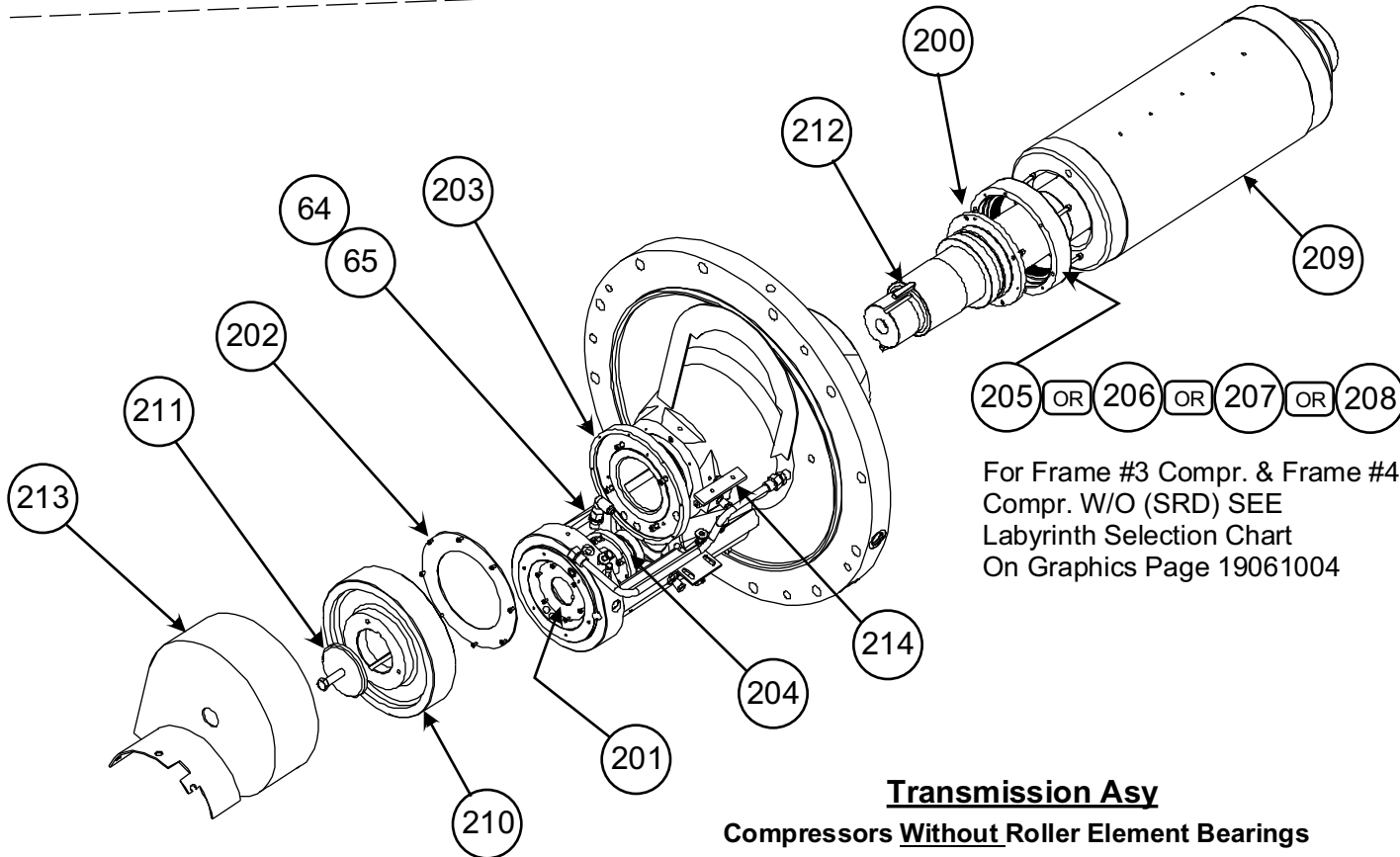
For Alternate Views of this Area Refer to Page 44A (graphic 19061063)



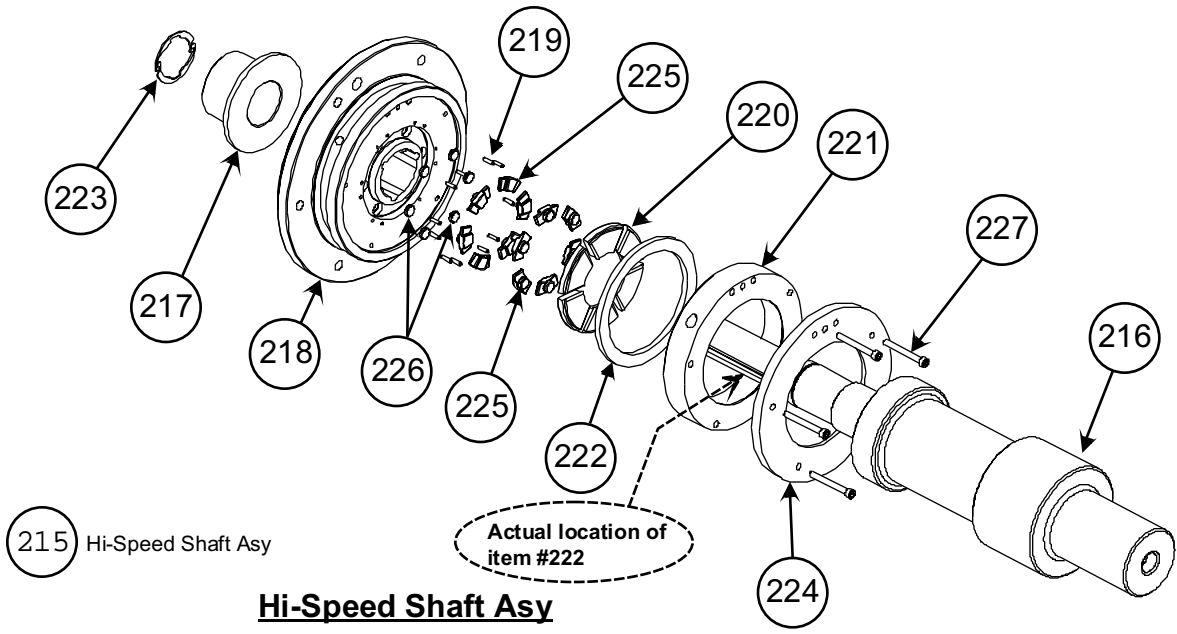
Frame #5 Compressor



Transmission Asy
Compressors With Roller Element Bearings



Transmission Asy
Compressors Without Roller Element Bearings



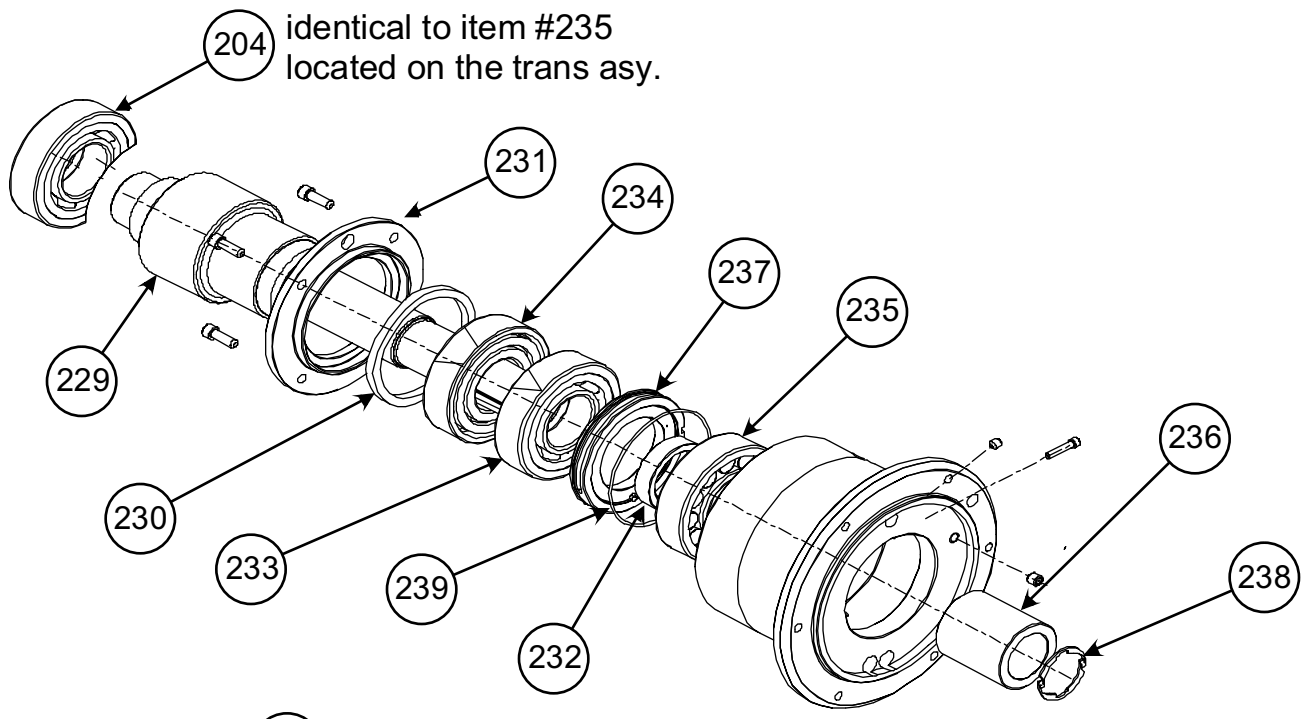
215 Hi-Speed Shaft Assy

Actual location of item #222

Hi-Speed Shaft Assy

Compressors Without Roller Element Bearings

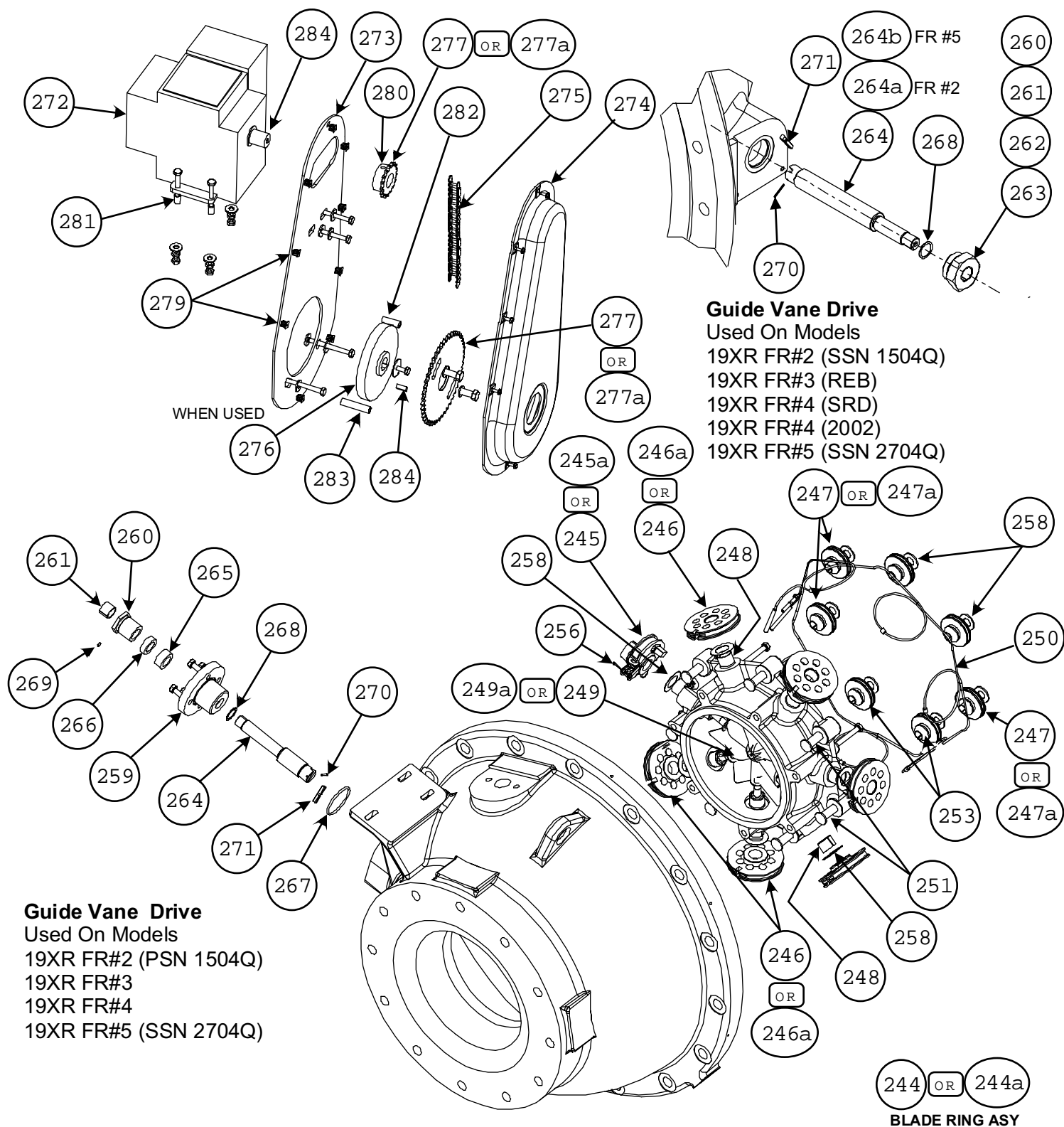
204 identical to item #235 located on the trans asy.



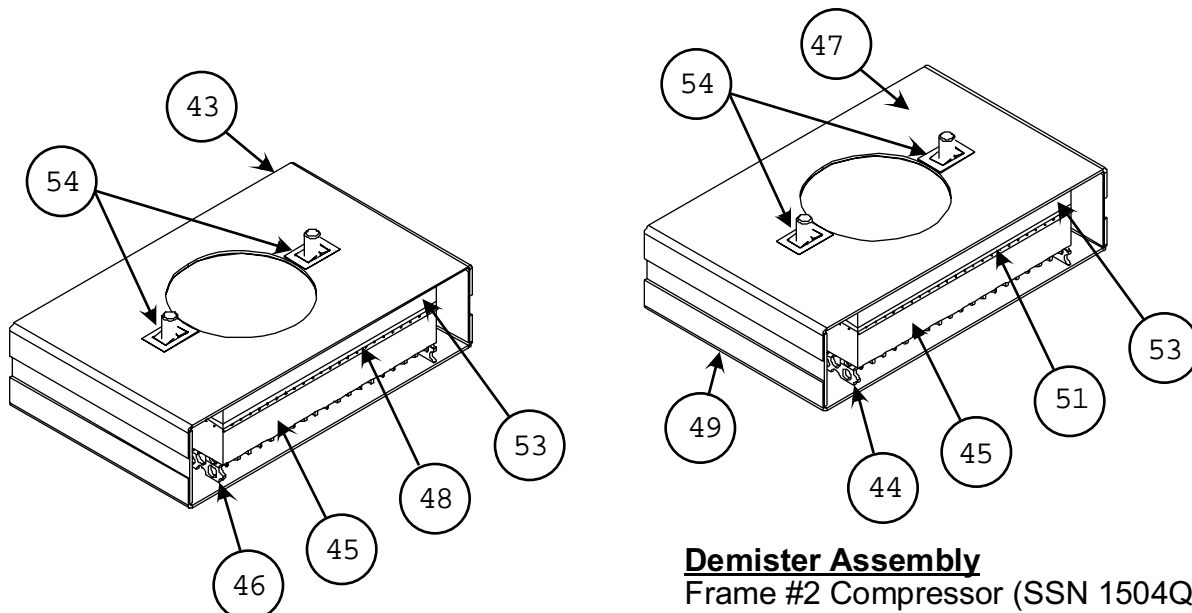
215 Hi-Speed Shaft Assy

Hi-Speed Shaft Assy

Compressors With Roller Element Bearings

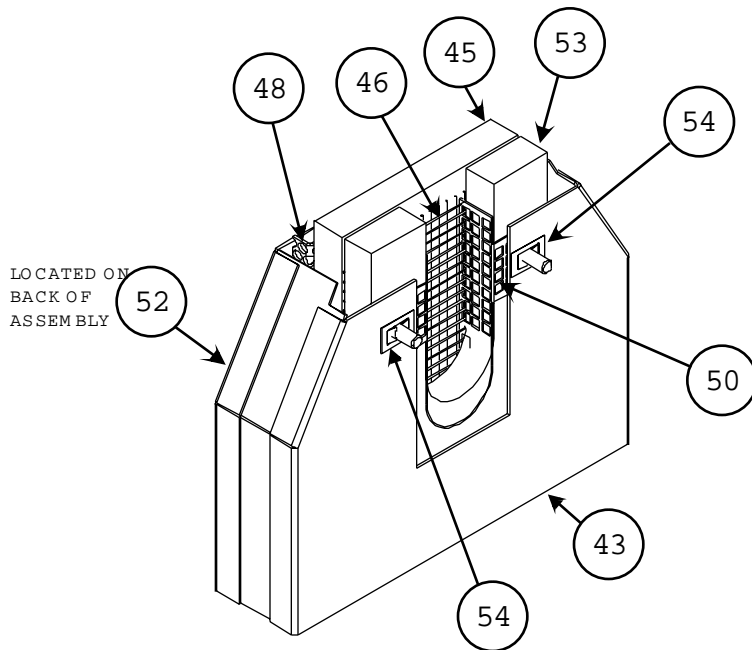


Suction End Housing For All Compressors

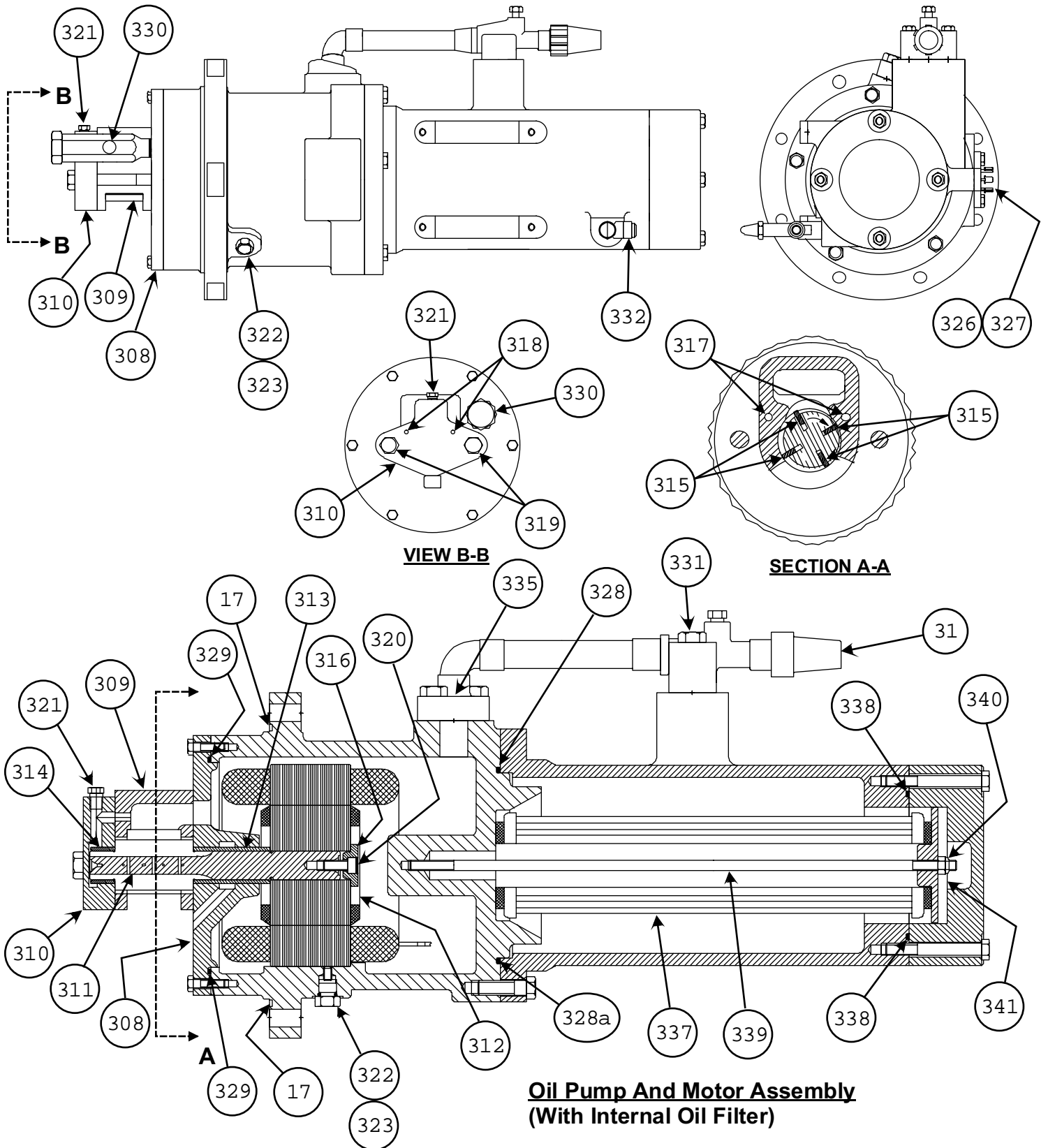


Demister Assembly
 Frame #2 Compressor (PSN 1504Q)

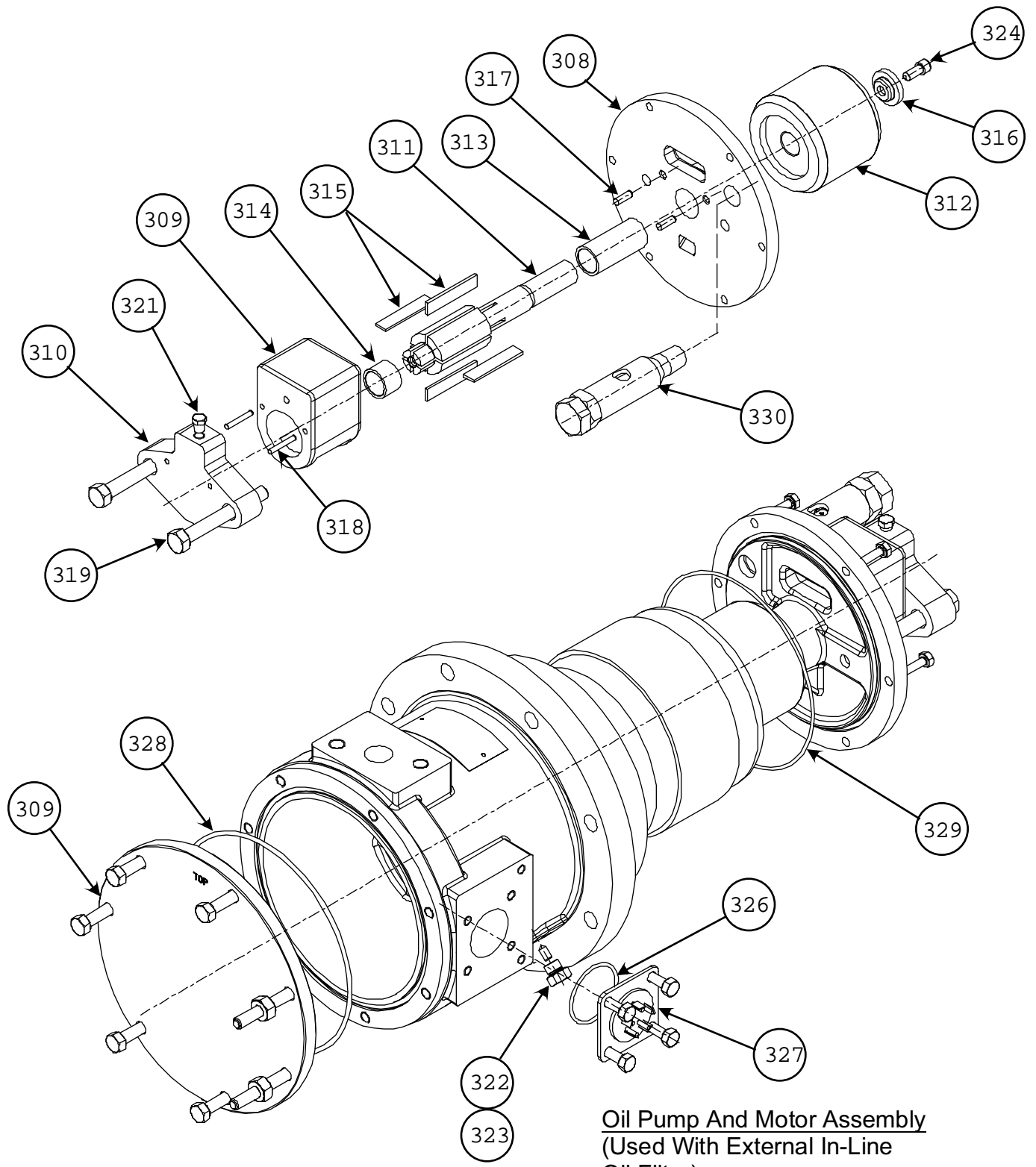
Demister Assembly
 Frame #2 Compressor (SSN 1504Q)
 Frame #3 (REB) Compressor
 Frame #4 (SRD) Compressor
 Frame #4 (2002) CompressorR
 Frame #5 Compressor (SSN 2704Q)



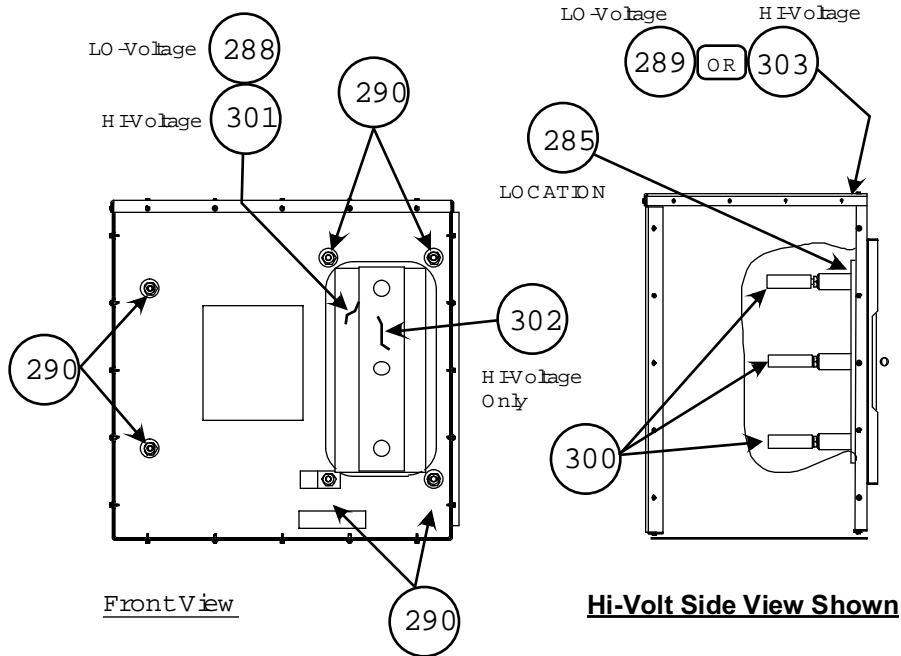
Demister Assembly
 Frame #3 Compressor
 Frame #4 Compressor
 Frame #5 Compressor (PSN 2704Q)



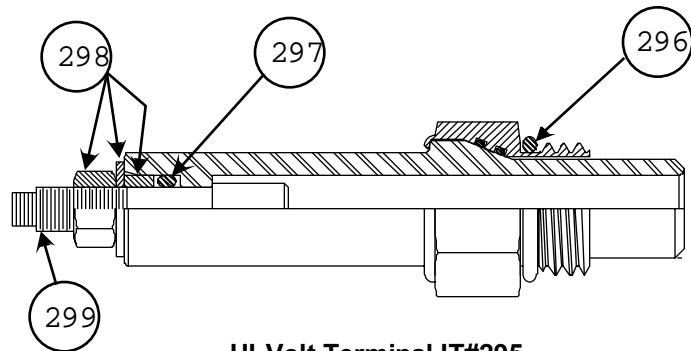
**Oil Pump And Motor Assembly
(With Internal Oil Filter)**



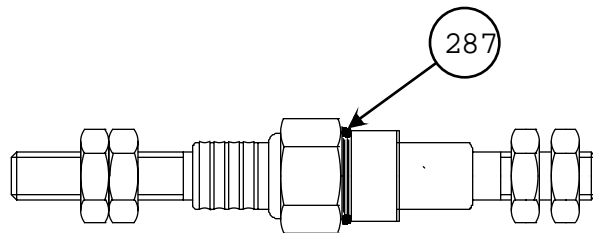
Oil Pump And Motor Assembly
(Used With External In-Line
Oil Filter)



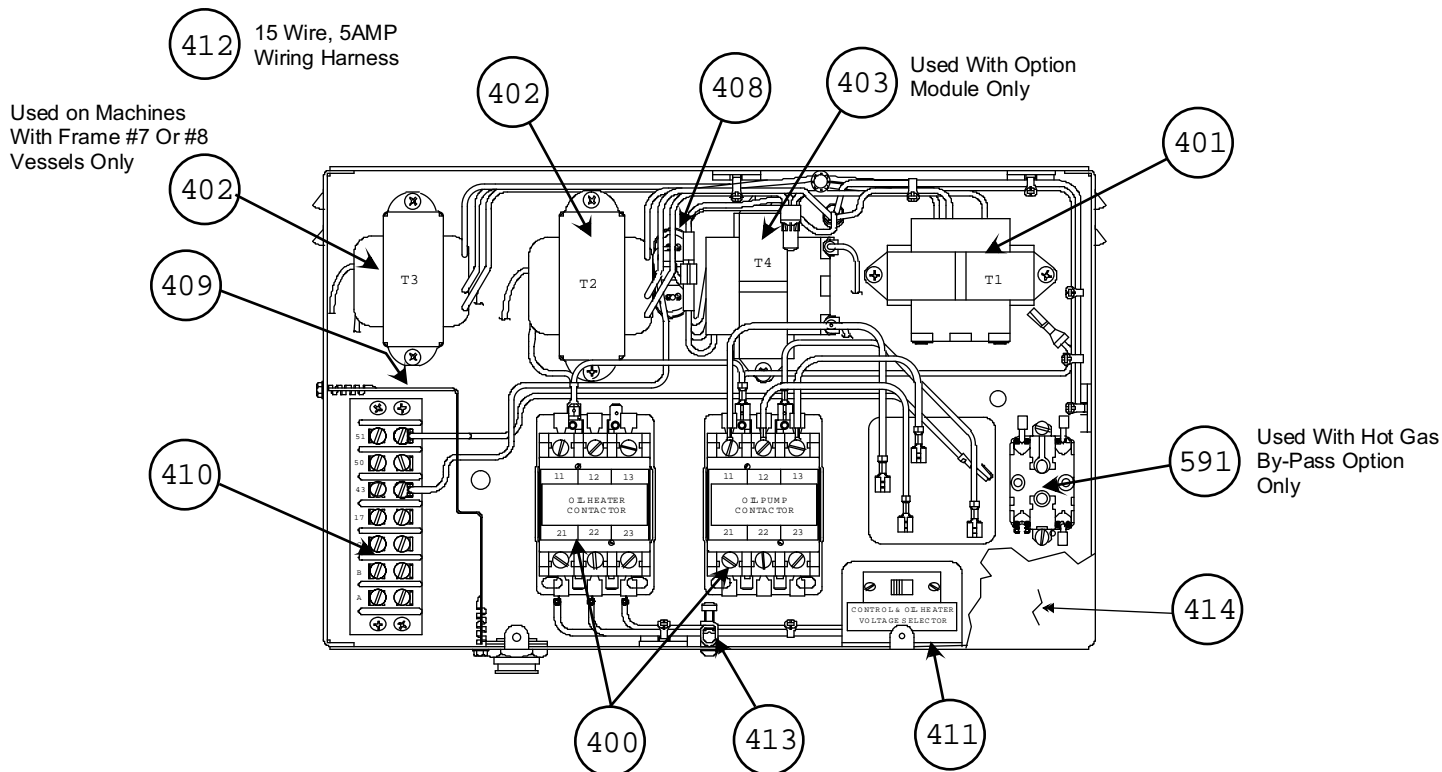
Compressor Terminal Box Assembly



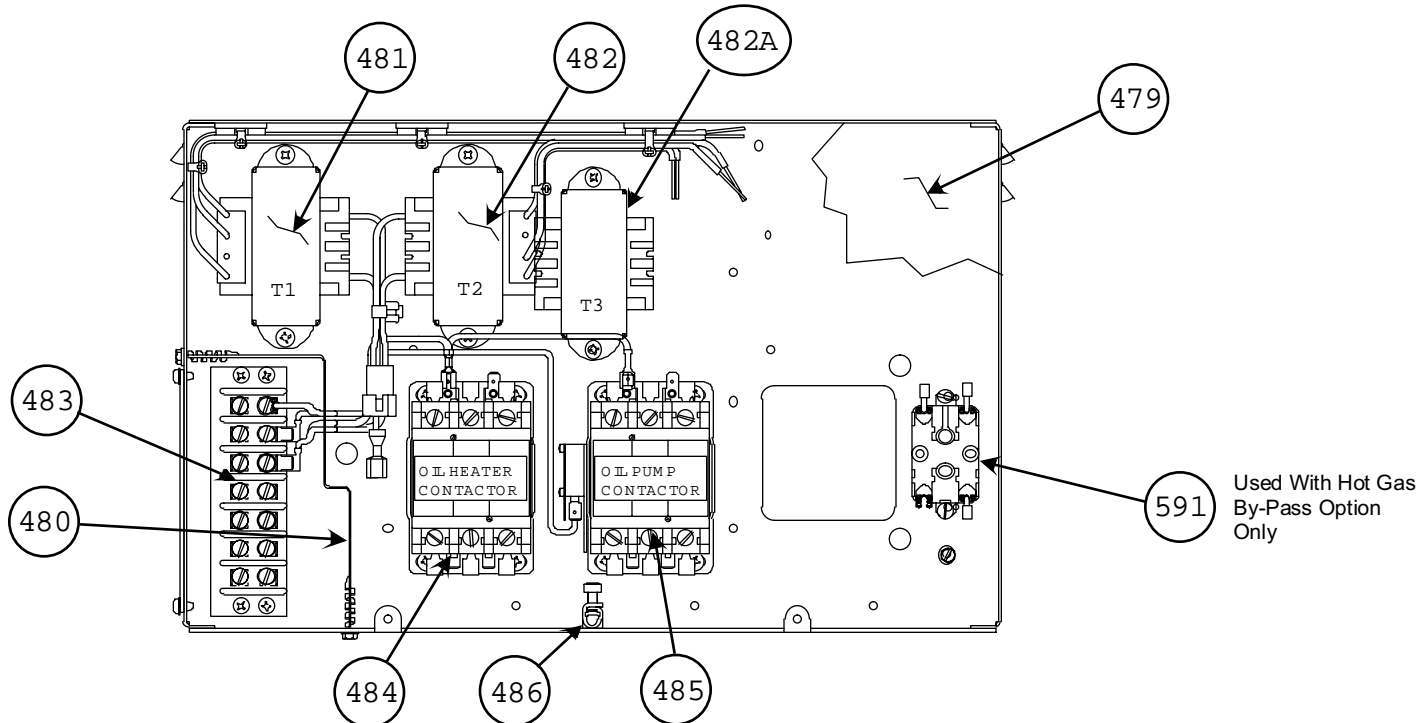
HI-Volt Terminal IT#295



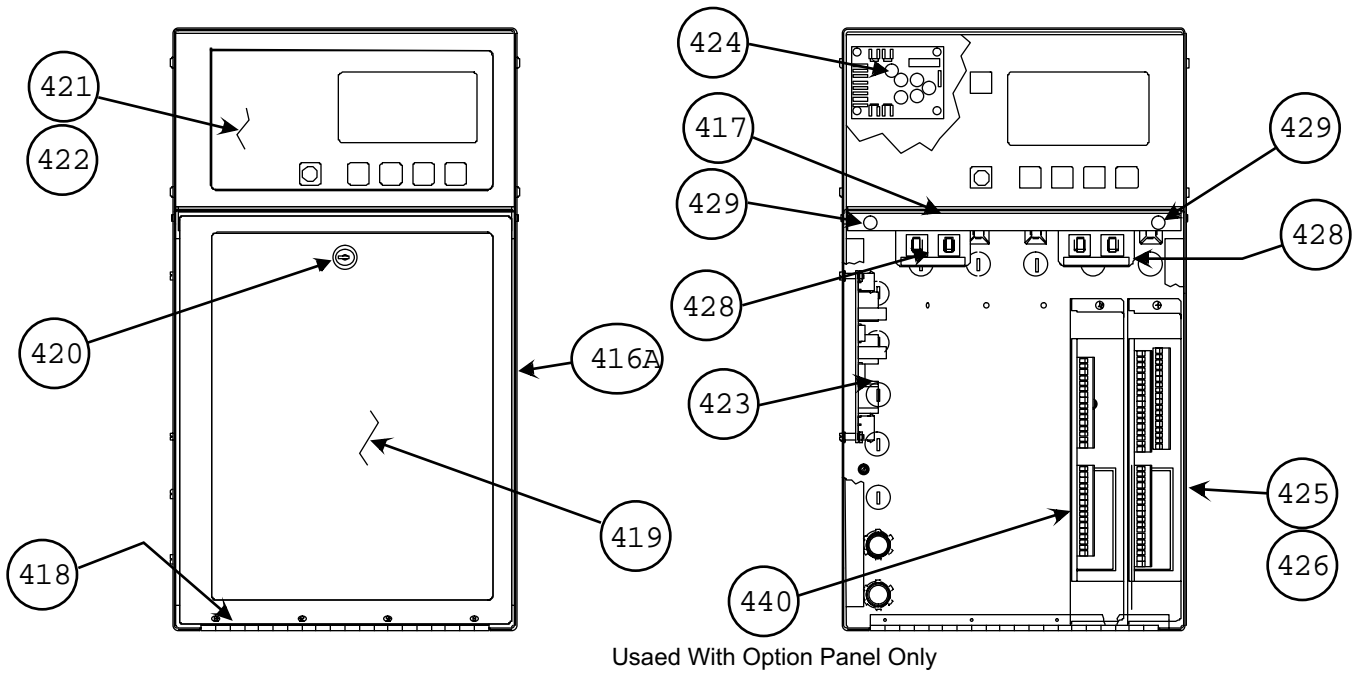
LO-Volt Terminal IT#286



Power Panel For PIC I Machines

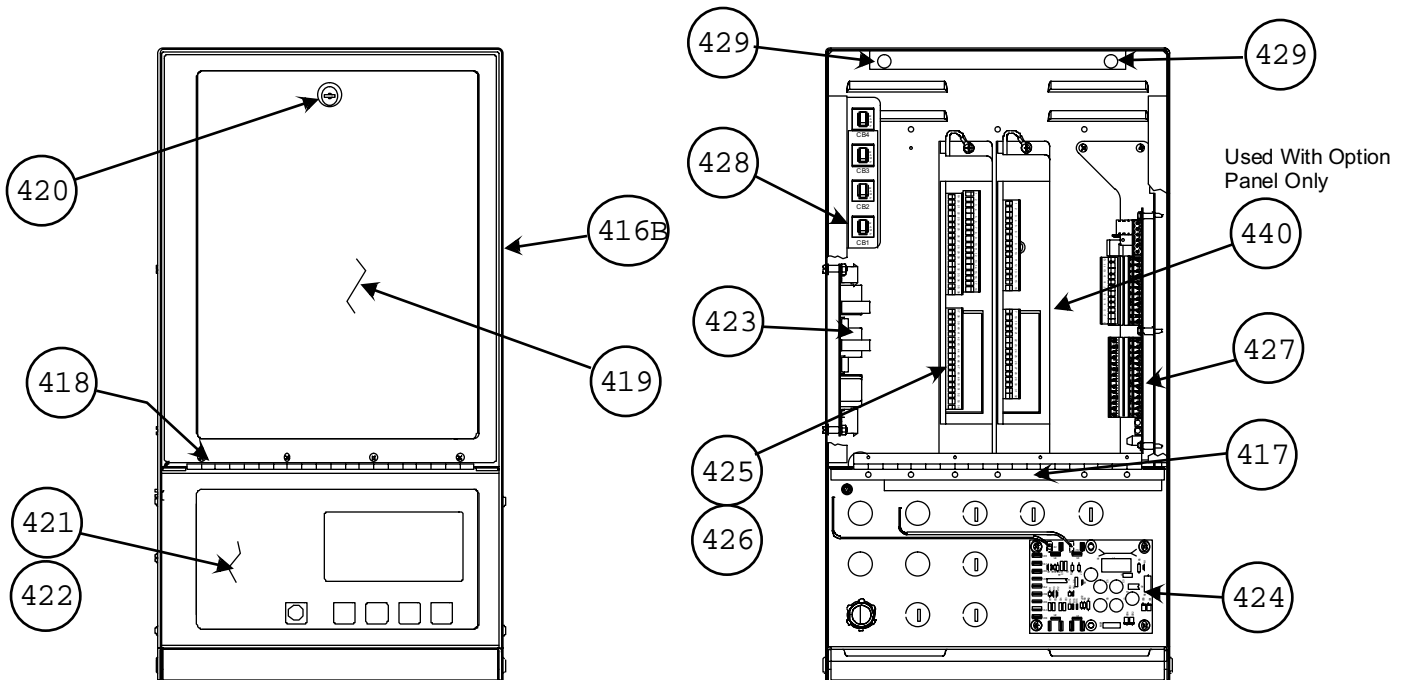


Power Panel For PIC II & PIC III Machines



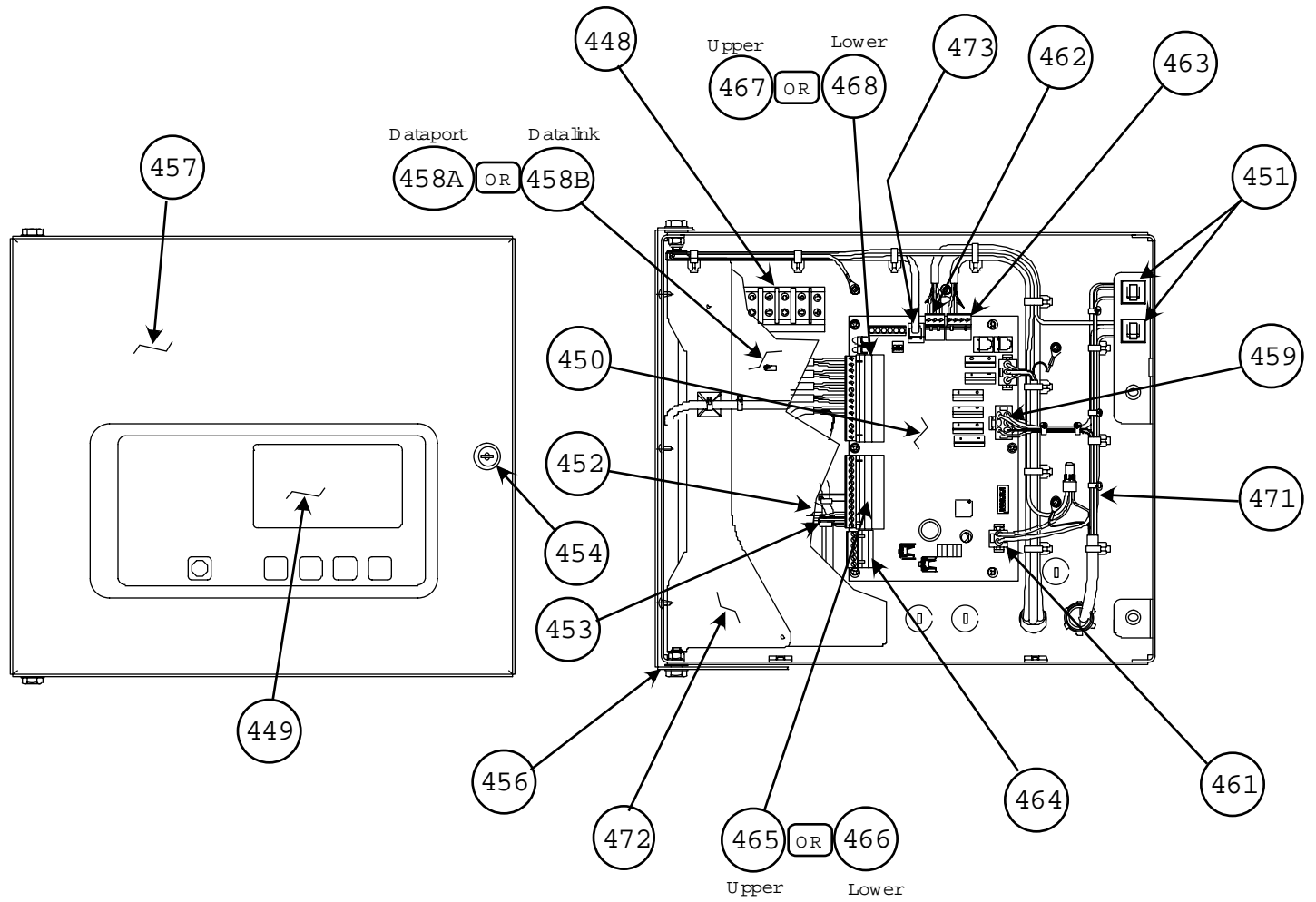
Cable Assemblies Are Items 431 & 432

Control Panel For PIC I Machines With Frame #1, 2, 3, 4, 5 Or 6 Vessels

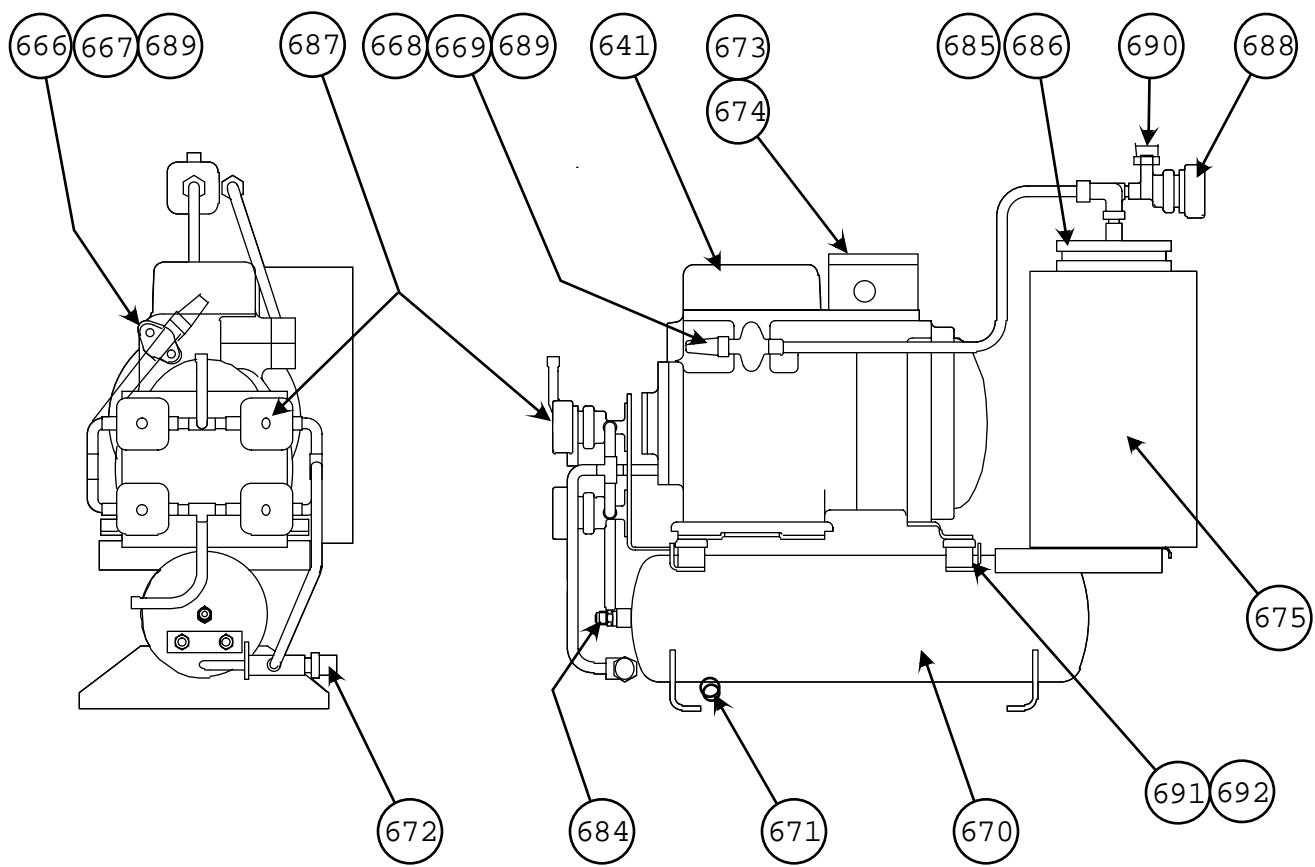


Cable Assemblies Are Items 431 & 432

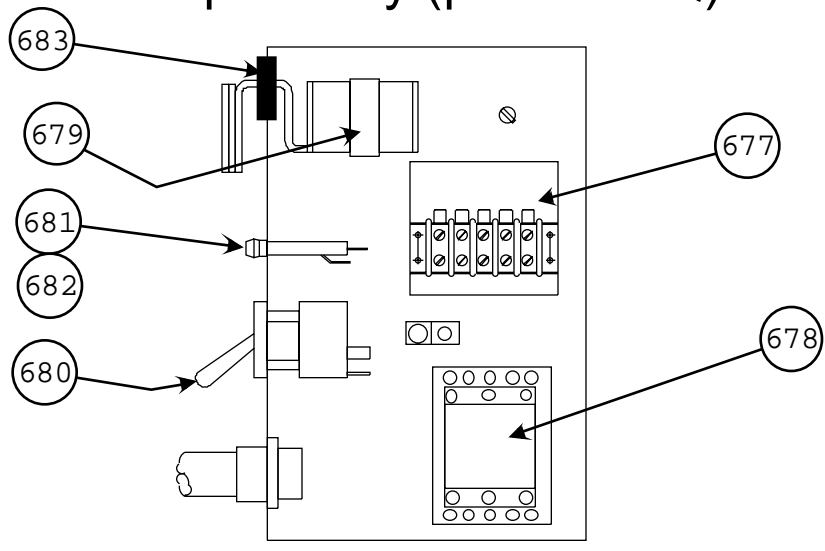
Control Panel For PIC I Machines With Frame #7 Or 8 Vessels



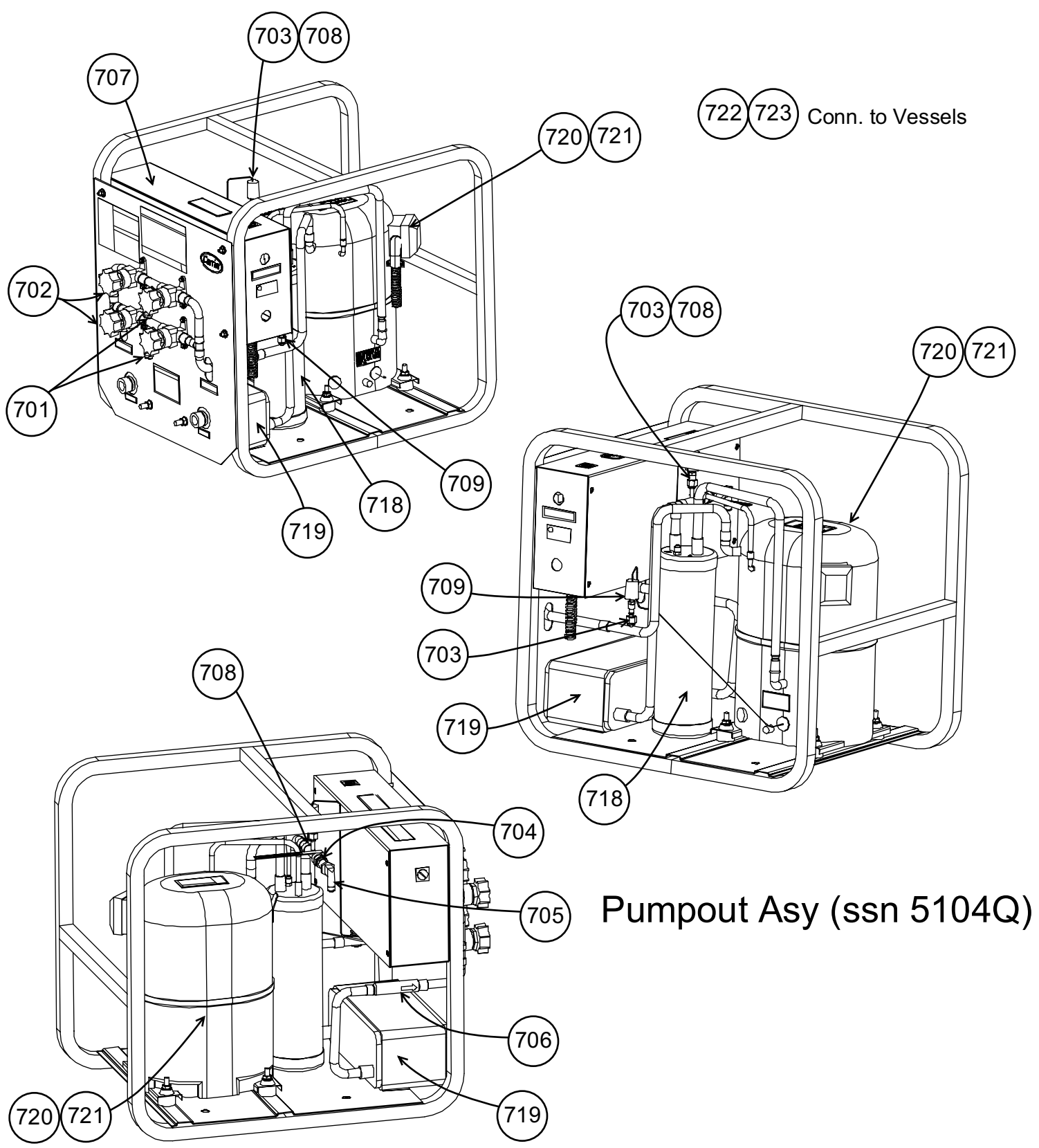
Control Panel For Machines With PIC II & PIC III Controls



Pumpout Asy (psn 5104Q)



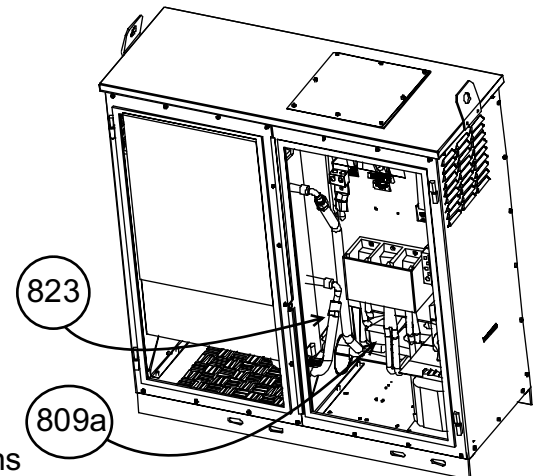
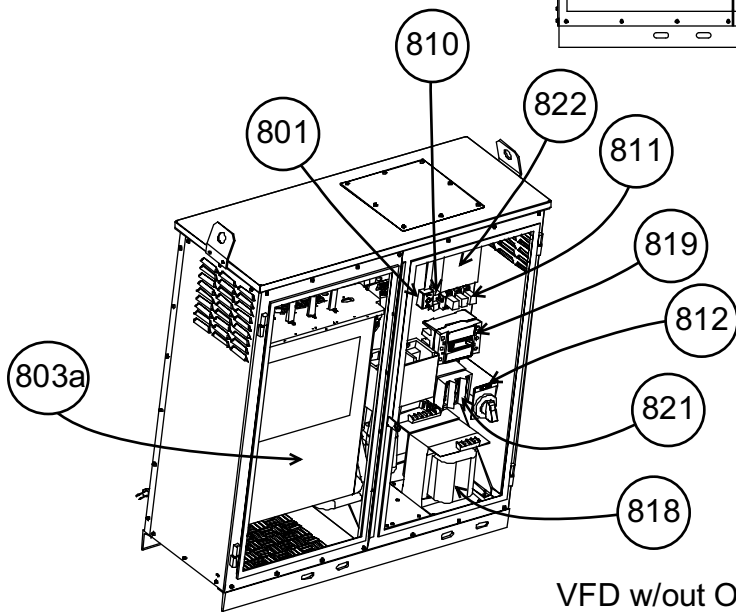
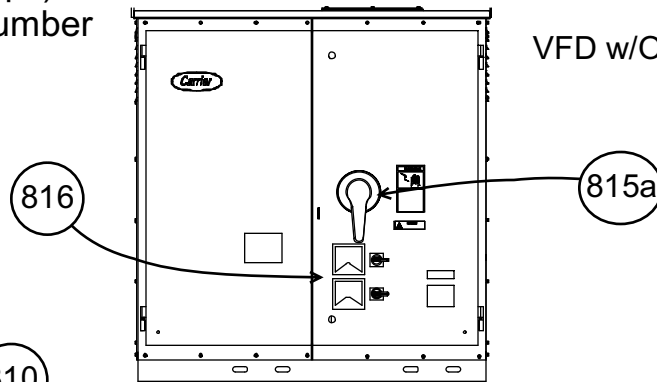
Pumpout Control Box



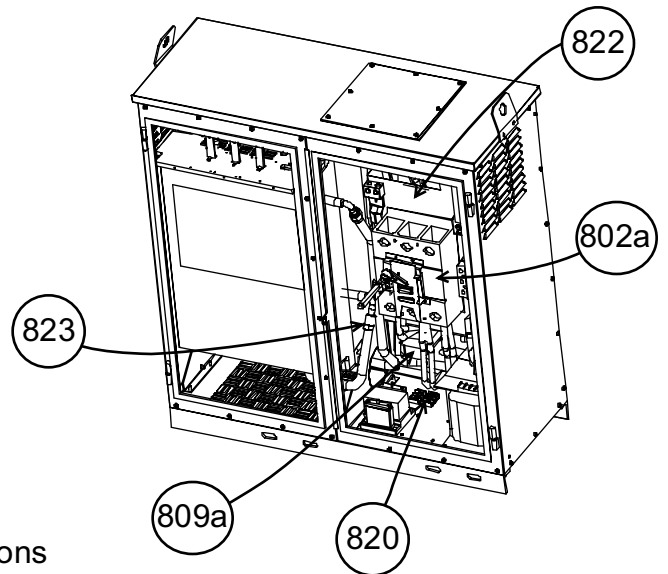
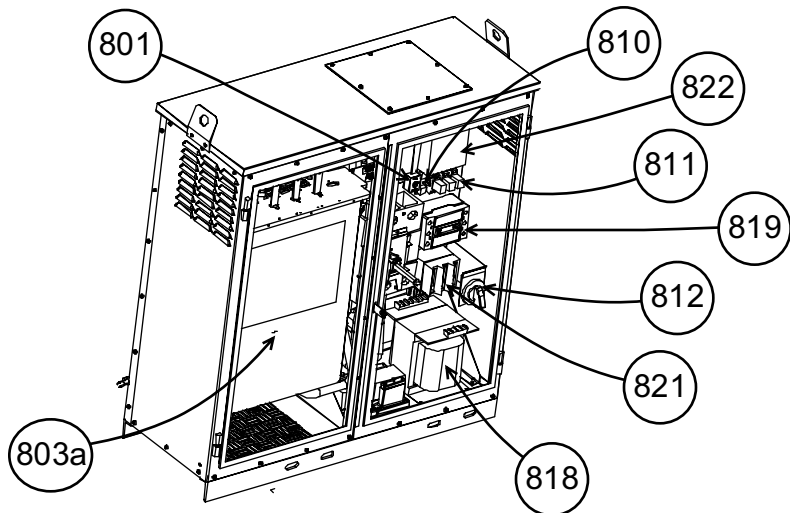
Liquid-Flo I (414 max amps)
Order Code/Assembly number
19XVR0414XXX

Note: PIC II Controls

VFD w/Options Shown



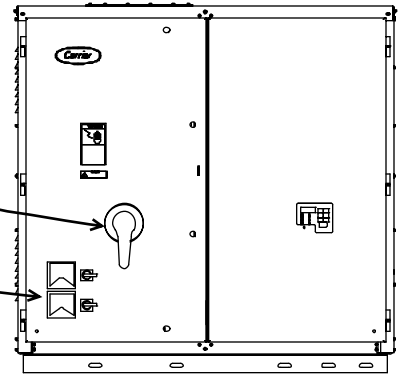
VFD w/out Options



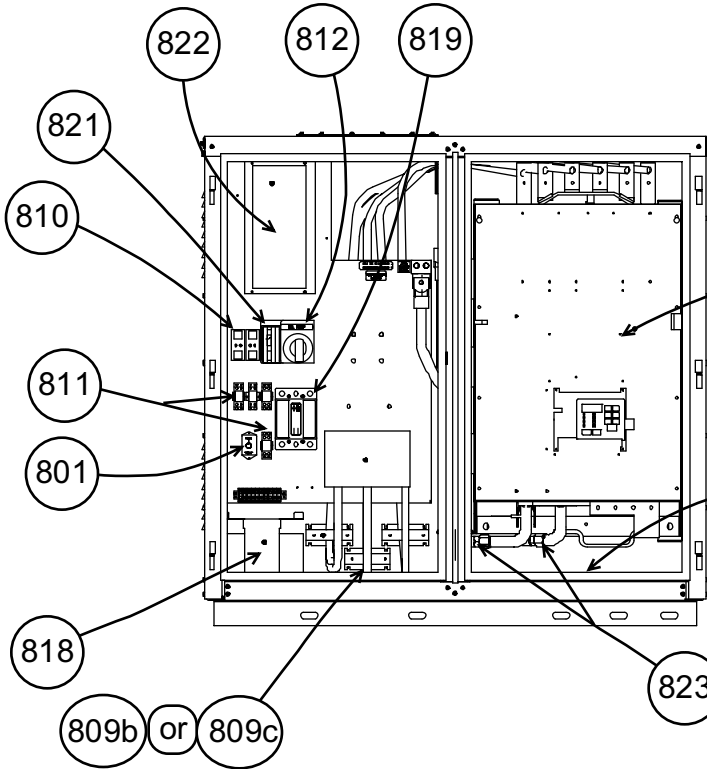
VFD w/Options

Note: PIC II Controls

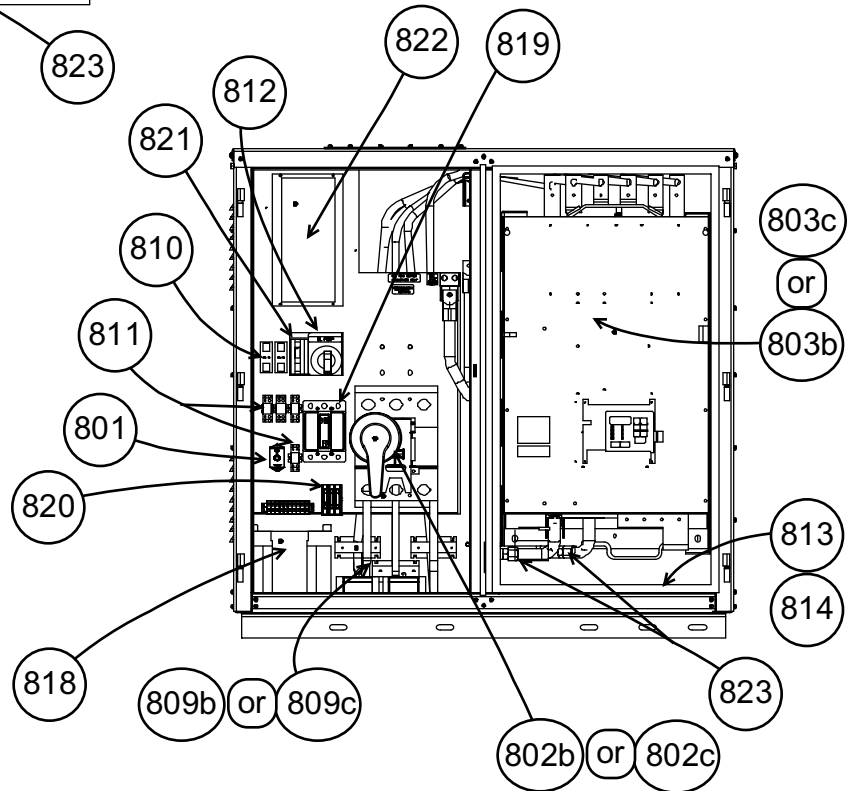
Liquid-Flo I (500 & 643 max amps)
 Order Code/Assembly number
 19XVR0500XXX & 19XVR643XXX



VFD w/Options Shown



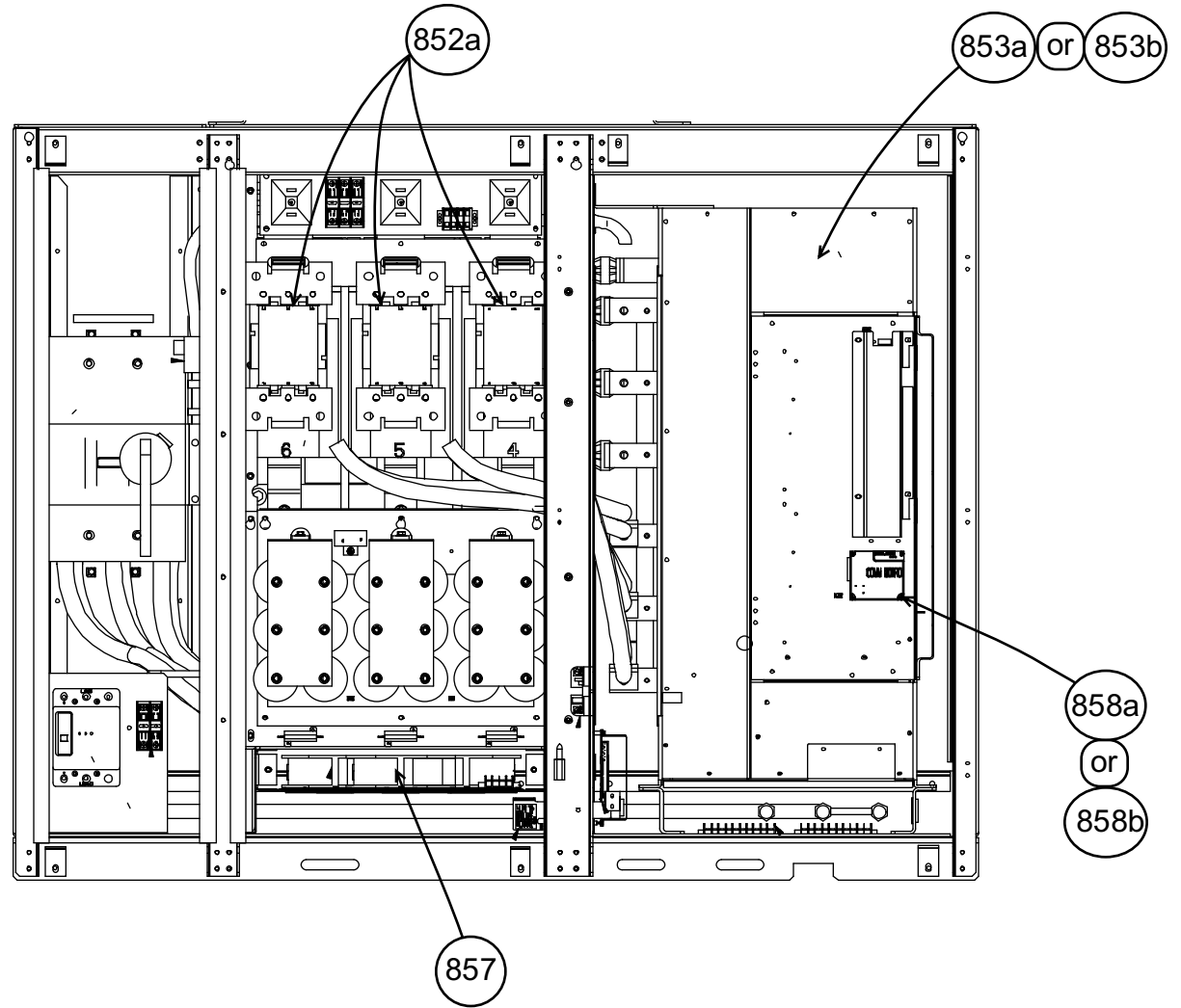
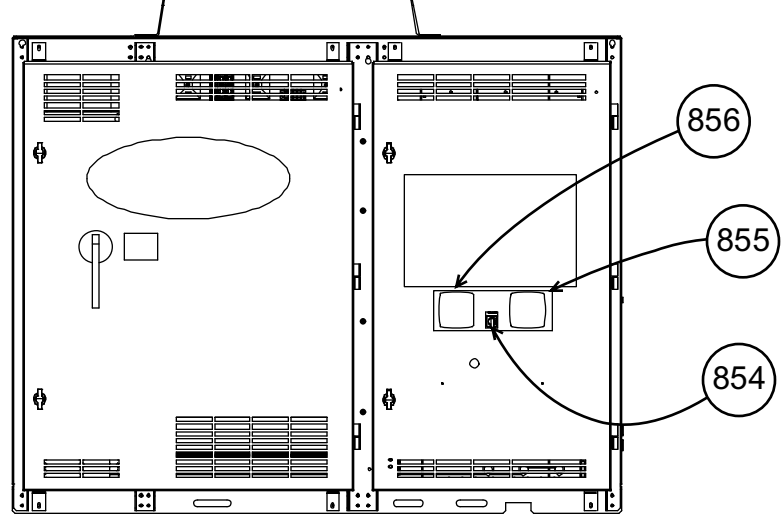
Standard Package w/o Options



Circuit Breaker & Analog Meter Options

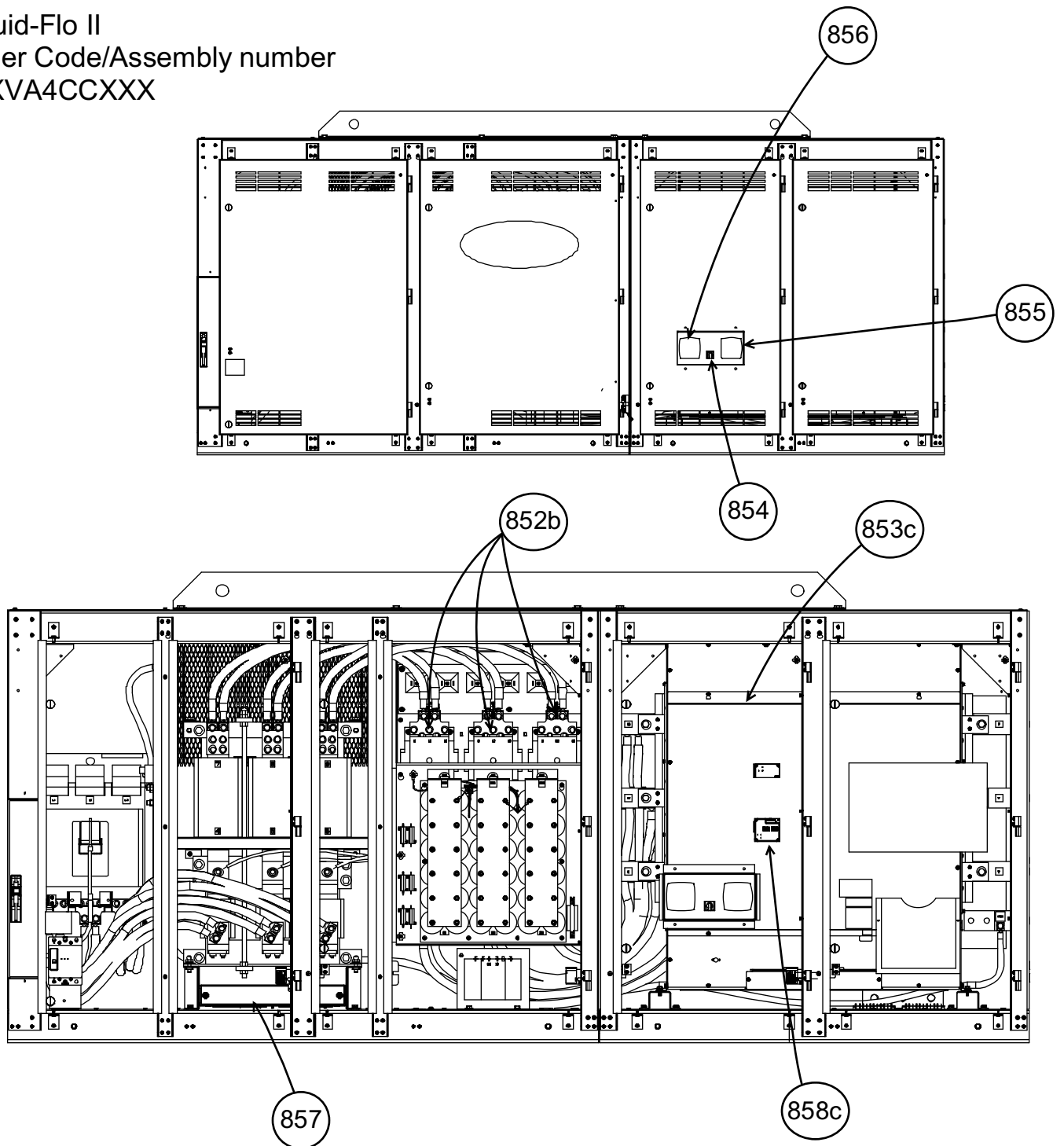
Note: PIC III Controls

Liquid-Flo II
Order Code/Assembly number
19XVA2AAXXX & 19XVA2CCXXX

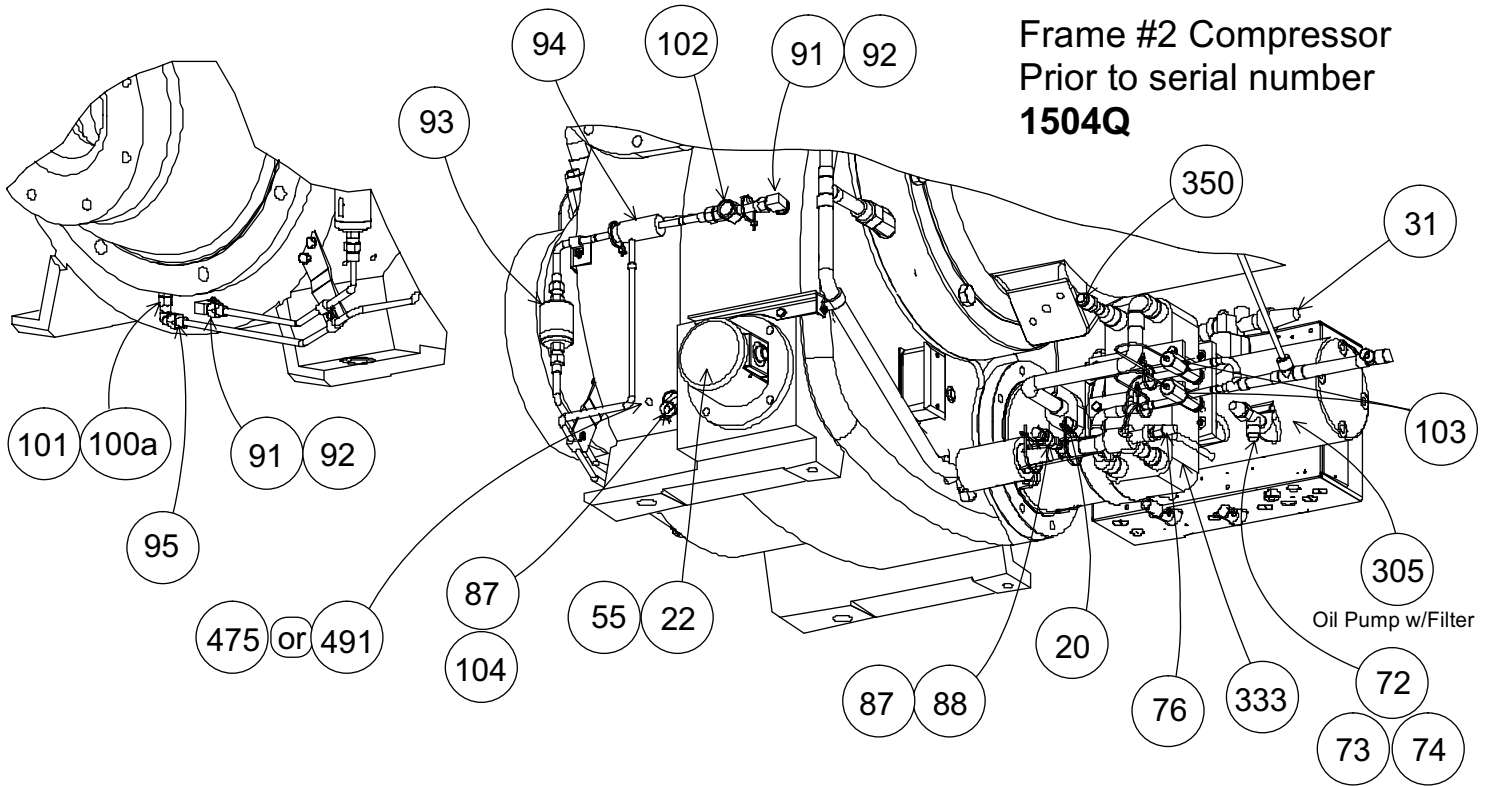


Note: PIC III Controls

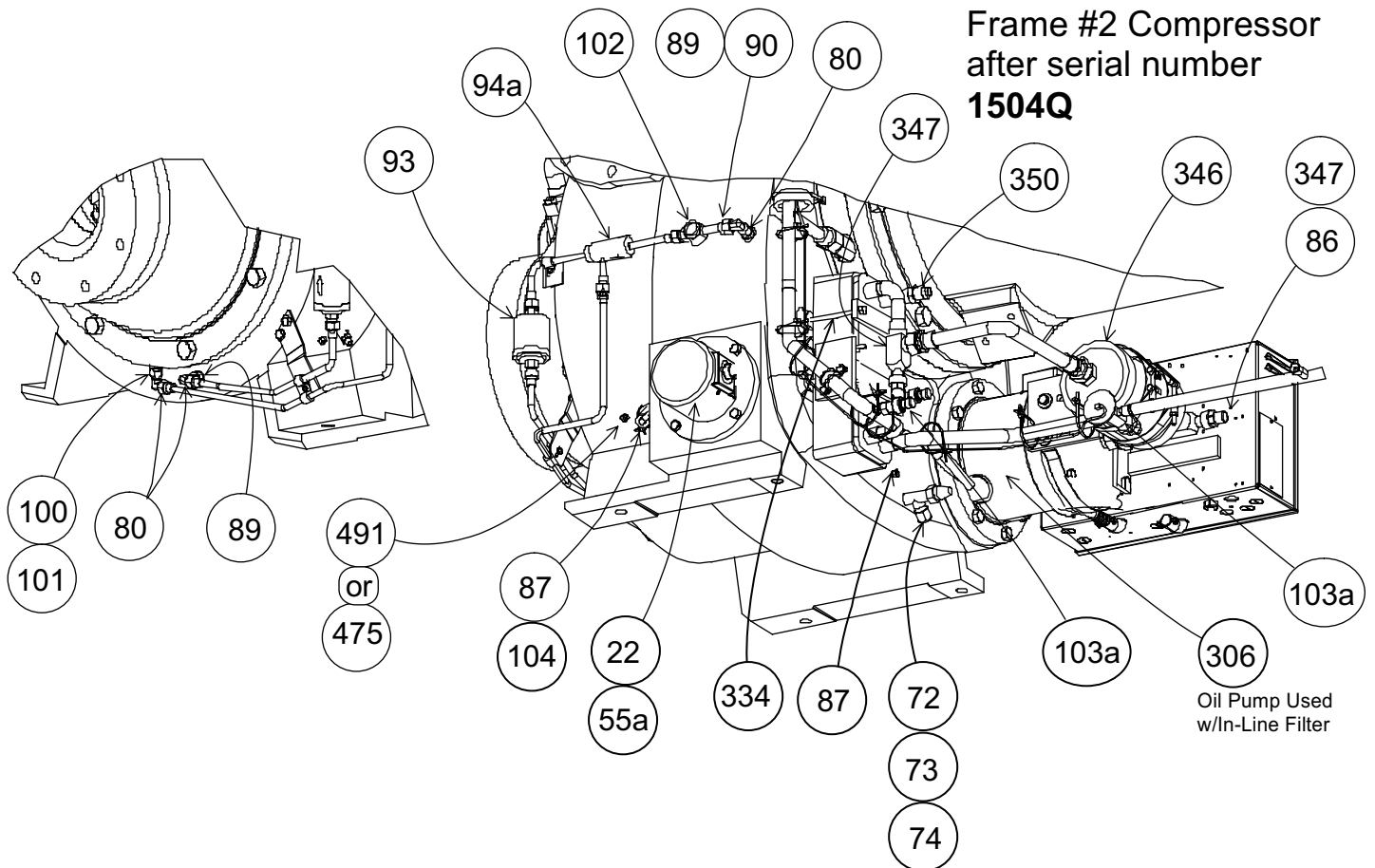
Liquid-Flo II
Order Code/Assembly number
19XVA4CCXXX



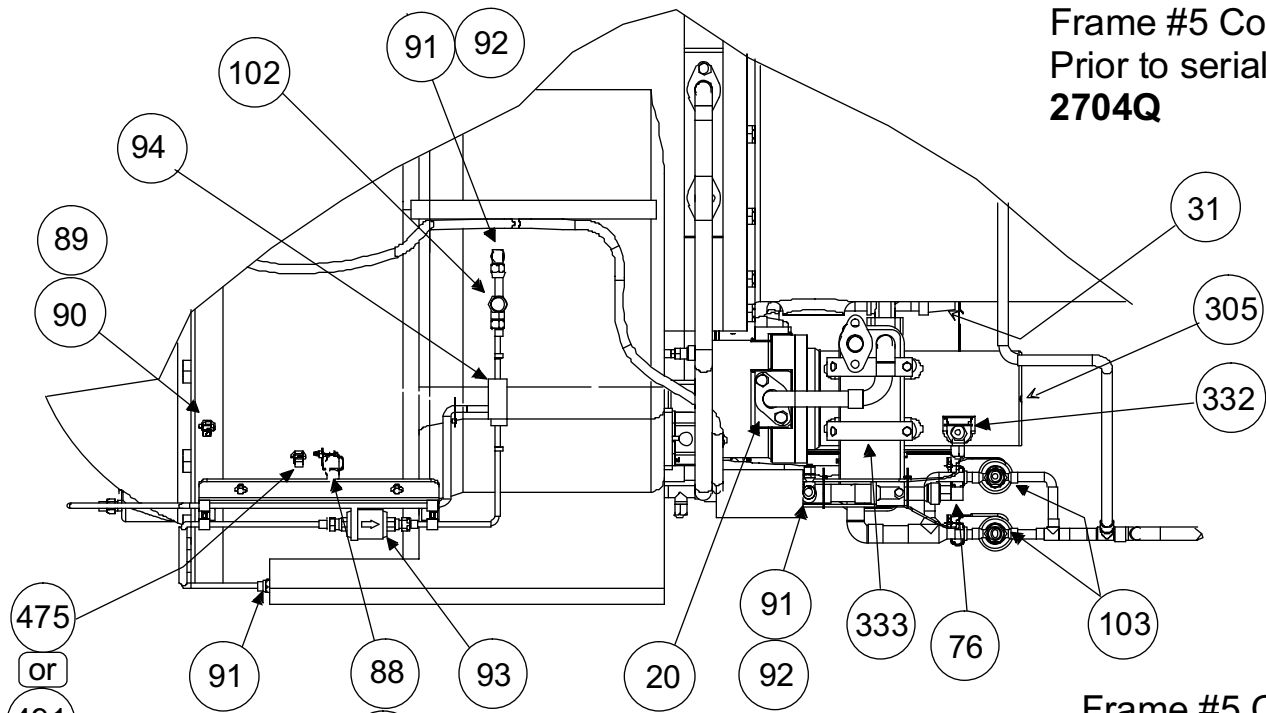
Frame #2 Compressor
Prior to serial number
1504Q



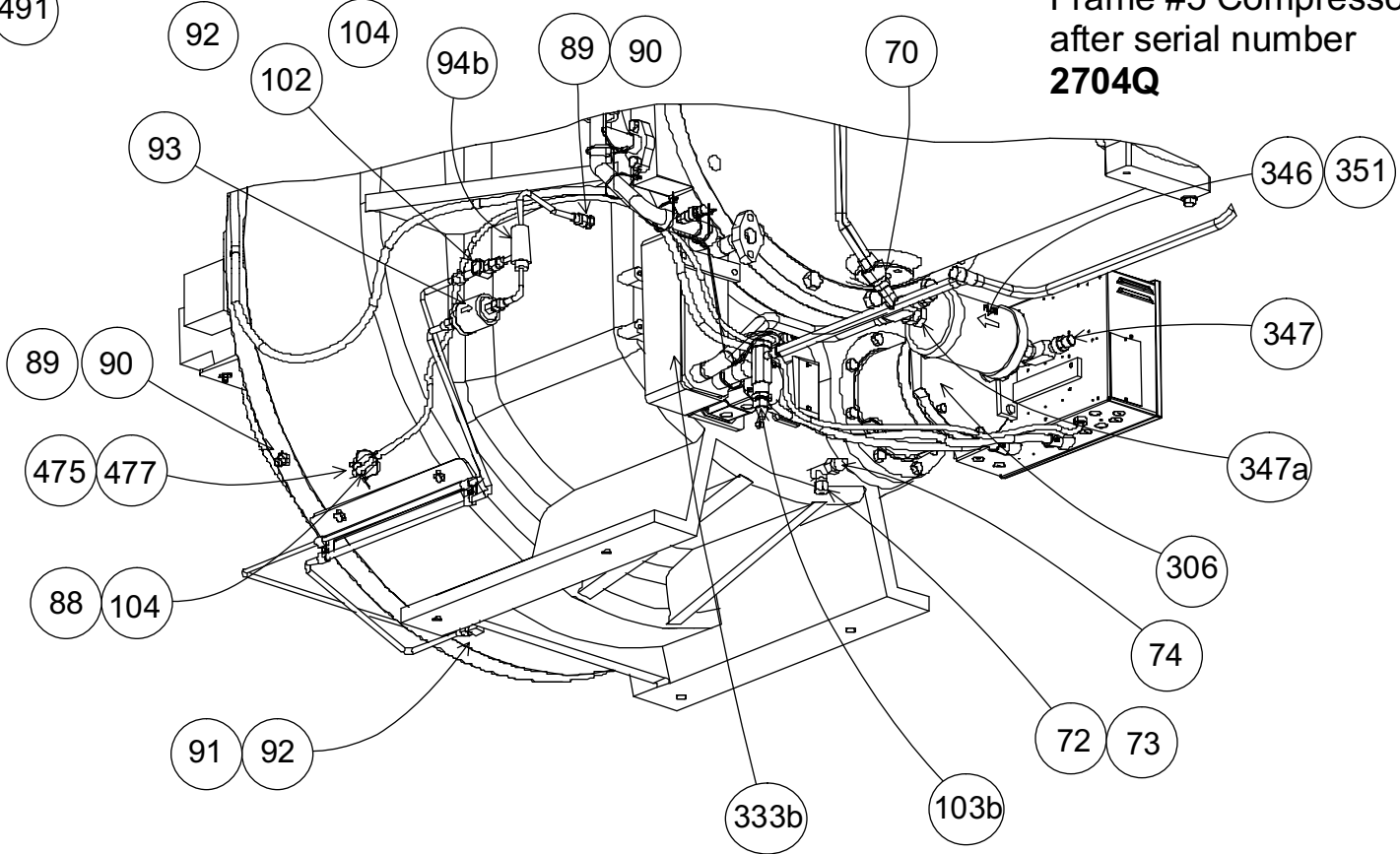
Frame #2 Compressor
after serial number
1504Q



Frame #5 Compressor
Prior to serial number
2704Q



Frame #5 Compressor
after serial number
2704Q





Model 19XR.FR#2.....

Description CENTRIFUGAL CHILLER (INCLUDES 19XR & 19XRV INFORMATION), COMPR. SIZE
(no detail)