

# Air Vacuums

Apollo®  
by MIDMARK

## Parts Manual

***Model Numbers:***

***AVB10S/AVB10SR***

***AVG10S/AVG10SR***

***AVU10S/AVU10SR***

***AVB15S/AVB15SR***

***AVG15S/AVG15SR***

***AVU15S/AVU15SR***

***AVB20S/AVB20SR***

***AVG20S/AVG20SR***

***AVU20S/AVU20SR***



***Please refer to AMM45010 for troubleshooting information.***

FOR USE BY MIDMARK TRAINED TECHNICIANS ONLY

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N/A

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N/A

## Section C

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N/A

## Section D

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## Symbols



### Caution

Indicates a potentially hazardous situation which could result in injury if not avoided.



### Equipment Alert

Indicates a potentially hazardous situation which could result in equipment damage if not avoided.

### Note

Amplifies a procedure, practice, or condition.



Indicates that the component the check mark appears beside should be tested before replacing it. In Section A, test the components in the order indicated. (ex. **1st** ✓ then, **2nd** ✓)

Refer to Section B for component testing procedures.

These symbols are used throughout this manual to represent the operational status of table functions and components.



Indicates the function / component is working properly. No action required.



Indicates the function / component is working, but a problem exists.



Indicates the function / component is not working at all.

## Ordering Parts

The following information is required when ordering parts:

- Serial number & model number
- Part number for desired part.

[Refer to Exploded Views / Parts Lists section]

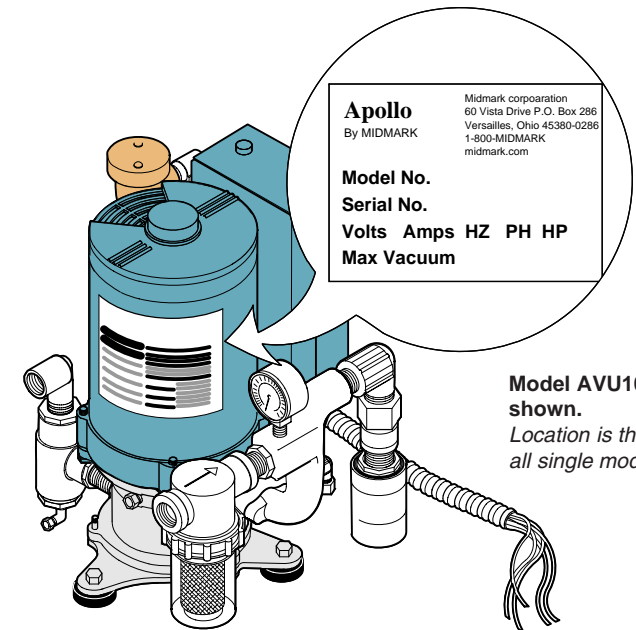
**Non-warranty parts orders may be faxed to Midmark using the Fax Order Form in the back of this manual.**

**For warranty parts orders, call Midmark's Technical Service Department with the required information.**

Hours: 8:00 am until 5:00 pm EST [Monday - Friday]

Phone: 1-(800)-Midmark

## Model / Serial Number Location



**Model AVU10SR is shown.**  
Location is the same for all single models.

AA131700i

# General Information

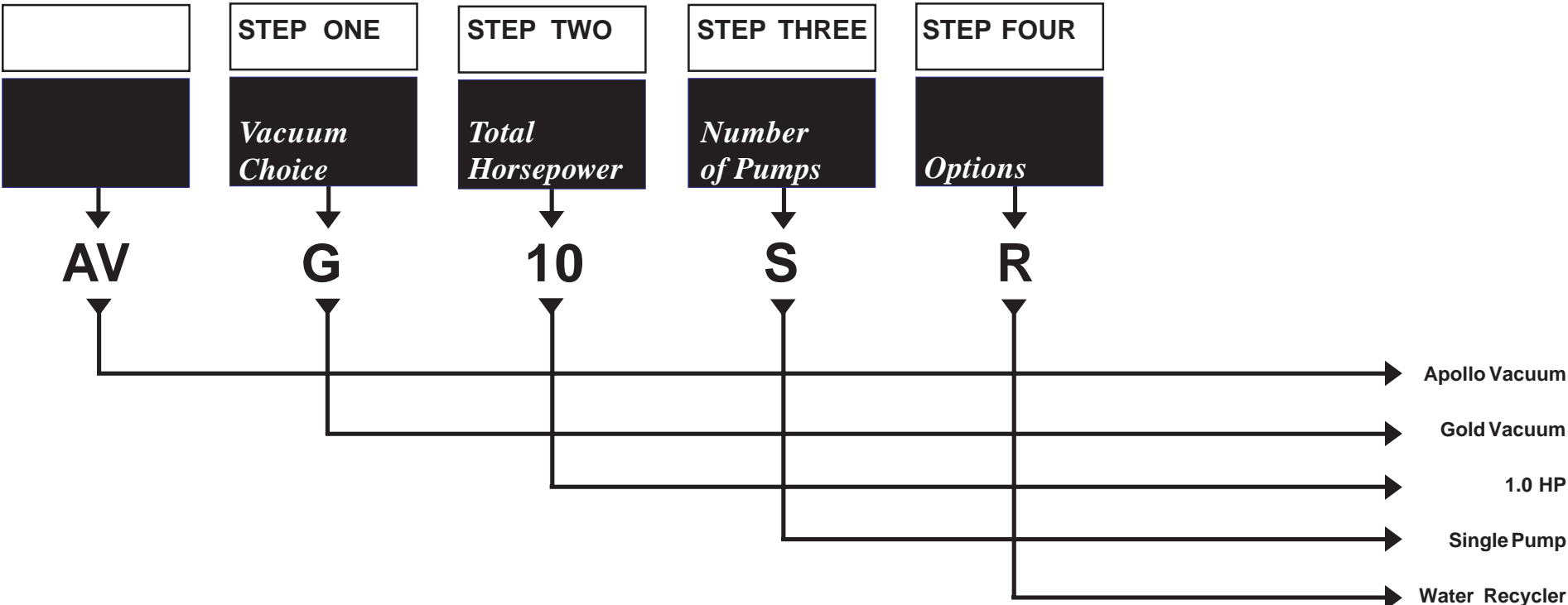
## *Weights, Dimensions, Electrical Specifications*

# Single Vacuum System

Vacuum Model	Max. Users	Width (IN.)	Depth (IN.)	Height (IN.)	Weight (LBS.)	Total HP	Voltage	Amps Per Pump	Hertz	Breaker Size per Pump (Amps)	Inlet Connection Size (IN.)	Drain Connection Size (IN.)	Fresh Water Connection Size (NOM.PIPE)
AVB10S AVB10SR	2	13	11	15	70	1	115/230	13/6.5	60	20	3/4	3/4	1/4, 3/8, OR 1/2
AVG10S AVG10SR	3	13	11	15	72	1	115/230	13/6.5	60	20	3/4	3/4	1/4, 3/8, OR 1/2
AVU10S AVU10SR	3	13	11	15	74	1	115/230	13/6.5	60	20	3/4	3/4	1/4, 3/8, OR 1/2
AVB15S AVB15SR	3	13	11	17	75	1.5	115/208/230	22/11	60	40/20	3/4	3/4	1/4, 3/8, OR 1/2
AVG15S AVG15SR	4	13	11	17	74	1.5	115/208/230	22/11	60	40/20	3/4	3/4	1/4, 3/8, OR 1/2
AVU15S AVU15SR	4	13	11	17	74	1.5	115/208/230	22/11	60	40/20	3/4	3/4	1/4, 3/8, OR 1/2
AVB20S AVB20SR	4	13	11	18	83	2	208-230	7	60	20	1	3/4	1/4, 3/8, OR 1/2
AVG20S AVG20SR	5	13	11	18	85	2	208-230	7	60	20	1	3/4	1/4, 3/8, OR 1/2
AVU20S AVU20SR	5	13	11	18	87	2	208-230	7	60	20	1	3/4	1/4, 3/8, OR 1/2

*Equipment not suitable for use in the presence of a flammable anesthetic mixture with air, or with oxygen, or nitrous oxide.*

# General Information



**Vacuum Choice:**

- D** Dry Vac
- U** Ultra Vac
- G** Gold Series
- B** Classic Bronze
- C** Centrifugal

**Total Horsepower:**

- 10** 1 hp
- 15** 1.5 hp
- 20** 2 hp
- 30** 3 hp
- 50** 5 hp
- 60** 6 hp
- 75** 7.5 hp
- 100** 10 hp
- 150** 15 hp

**Number of Pumps:**

- S** Single
- TN** Twin
- R** Triple
- D** Duplex

**Options:**

- R** Simple Solution Water Recycler
- E** Economy Model  
"Only Available with the Classic Bronze"
- R** Triple
- D** Duplex

# General Information

## Warranty

All Apollo products are thoroughly inspected and tested in accordance with rigid specifications and standards. Our products are guaranteed against any defective material and workmanship from the date of shipment; provided, that the installation, operation, and maintenance is done in accordance with Apollo procedures as outlined in our Installation and Maintenance Guides. No other warranties or guarantees, expressed or implied are made.

Midmark's obligation under the warranty is to provide parts to the dealer for repairs or, at its option, to provide the replacement product (**excluding labor and shipping charges**). All special, incidental and/or consequential damages are excluded. We will not issue credit for product without first attempting to correct the problem in the field. Written notice of breach of warranty must be given to Midmark within the warranty period. The warranty does not cover damage resulting from improper installation or maintenance, accident or misuse. The warranty does not cover damage resulting from the use of cleaning, disinfecting or sterilizing chemicals and processes. **The warranty does not cover vacuum failures due to hard water deposits.** Failure to follow instructions provided in Midmark's Installation and Maintenance Guides **will void the warranty.**

\* All warranty repairs must be repaired by authorized dealers and/or service dealers only - no exceptions.

\* Labor charges are NOT included.

\* Warranty period starts from the installation date.

\* Shipping damage or damage caused by equipment handlers and installers is not covered.

## Warranty Periods from Date of Install

Revolution™ Scroll Oil-Less Air Compressor 3 Years

UltraVac ® Vacuum 3 Years

Classic Bronze™ Vacuum 2 Years

Gold Series ® Vacuum 2 Years

Dry Vacuum (DryVac™) 2 Years

The Rock Oil-less Air Compressors 2 Years

Oil-less Air Compressors 2 Years

Lubricated Air Compressors 2 Years

Replacement Parts and Accessories 90 Days\*\*

\*\* Replacement parts and repairs are covered under the remaining warranty of the unit they are replacing, or 90 days from the date of shipment, which ever is the longest.

## Customer Service/Technical Support

Department hours are from 8:00 AM through 5:00 PM EST. Midmark Customer Service/Technical Support is available for order entry and technical support by phone 1-800-MIDMARK or (937) 526-3662 or FAX (877) 725-6495, Monday through Friday. We are closed on major holidays.

Additional product documentation and specifications are available at your request or at our website at <http://www.midmark.com>.

## Return Goods Procedure

All returns must be made through an authorized dealer. Units for repair should be sent to Midmark and packaged in the original shipping container if possible. Please contact our Customer Service Department at 1-800-Midmark (1-800-643-6275), prior to shipping the unit prepaid to receive authorization RMA number. Specify the RMA number on the outside of the box and label it to the attention of Repair Service Center.

Ship to:

Midmark Corporation

Plant A Returns Dept

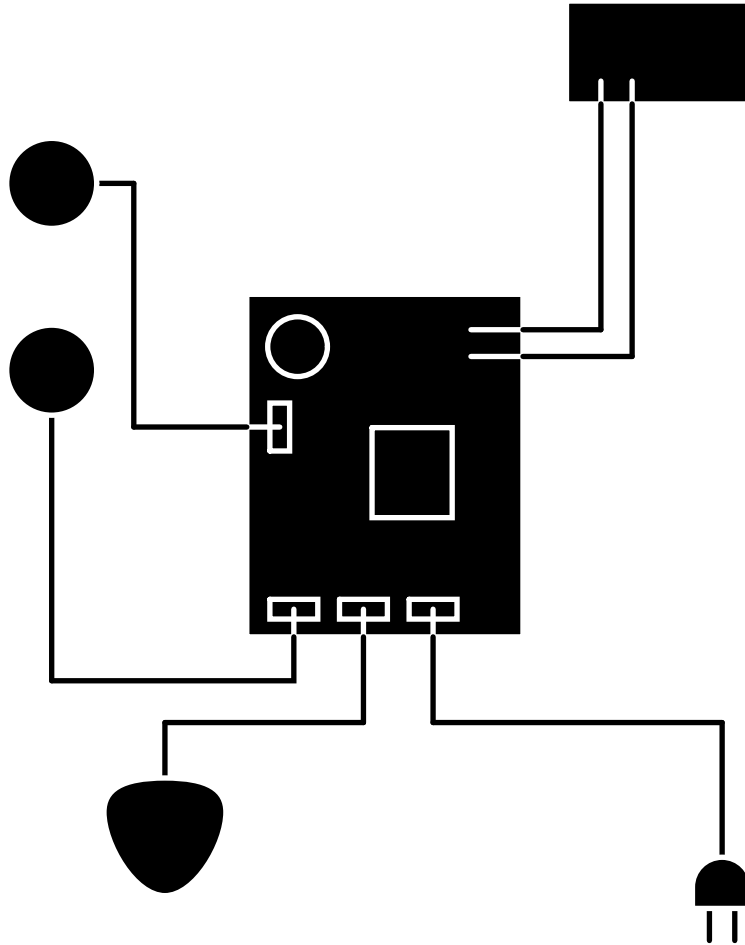
Attn: Repair Service Center

60 Vista Drive

Versailles OH 45380

# Section D

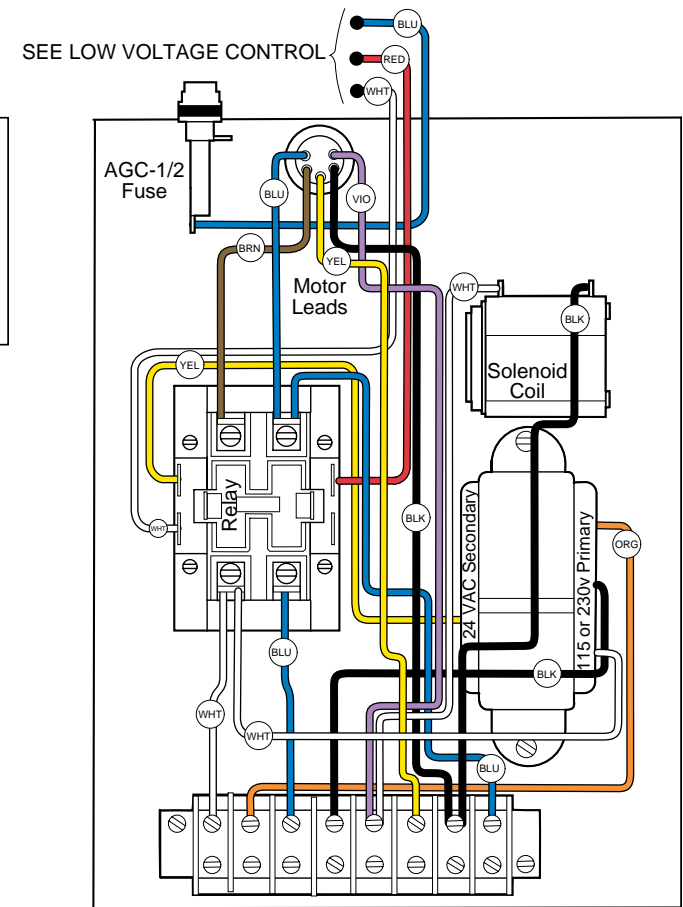
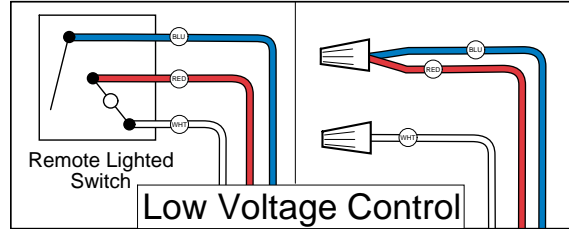
## Wiring Diagrams



<u>Model</u>	<u>Page</u>
Classic Bronze (AVB)	
Gold Series(AVG)	
Ultra Vac (AVU)	
10S / 10SR / 15S / 15SR - 1 HP / 1.5HP	
Dual Voltage 115 / 208-230 volt .....	D-2
Classic Bronze (AVB)	
Gold Series(AVG)	
Ultra Vac (AVU)	
20S / 20SR - 2HP	
208 / 230 volt .....	D-3

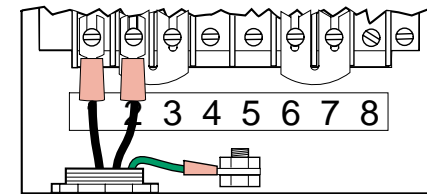
# Wiring Diagrams

Refer To:	Page
Operation & Troubleshooting .....	A-1
Component Testing / Repair .....	B-1
Access Procedures .....	C-1
Wiring Diagrams .....	D-1
Exploded Views / Part Numbers .....	E-1

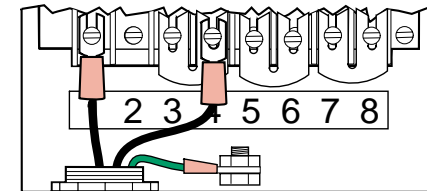


## (Factory Settings)

**208-230 Volt** supply to terminals 1 and 2. Install jumpers from 2 to 3, and 6 to 7.



**115 Volt** supply to terminals 1 and 4. Install jumpers from 3 to 4, 5 to 6, and 7 to 8.



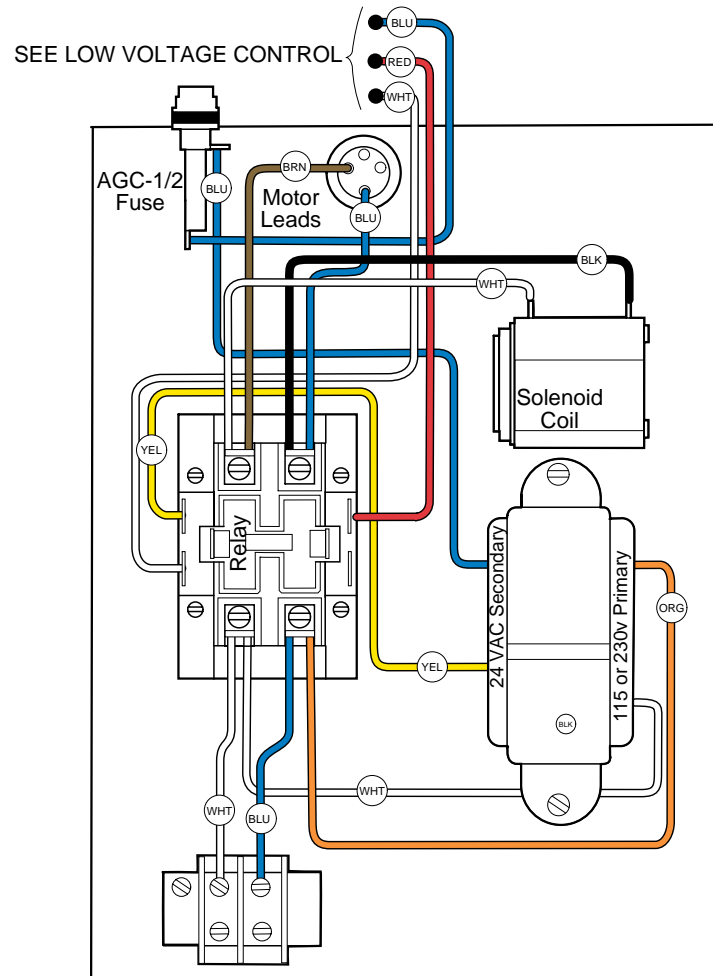
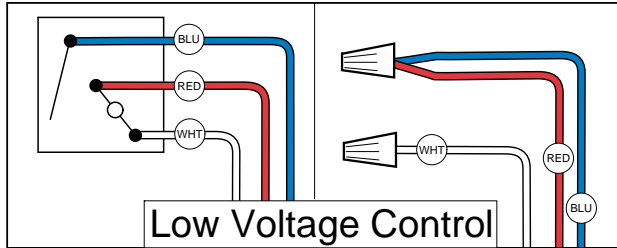
AA1318001

**1 HP Platform  
Dual Voltage**

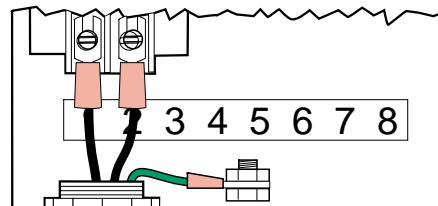
Models:	AVB10S -10SR (all) V2200 thru Present	AVU10S -10SR (all) V2200 thru Present	AVB15S -15SR (all) V2200 thru Present	AVU15S -15SR (all) V2200 thru Present
	AVG10S -10SR (all) V2200 thru Present		AVG10S -15SR (all) V2200 thru Present	



# Wiring Diagrams



208-230 Volt supply to terminals



Refer To:	Page
Operation & Troubleshooting .....	A-1
Component Testing / Repair .....	B-1
Access Procedures .....	C-1
Wiring Diagrams .....	D-1
Exploded Views / Part Numbers .....	E-1

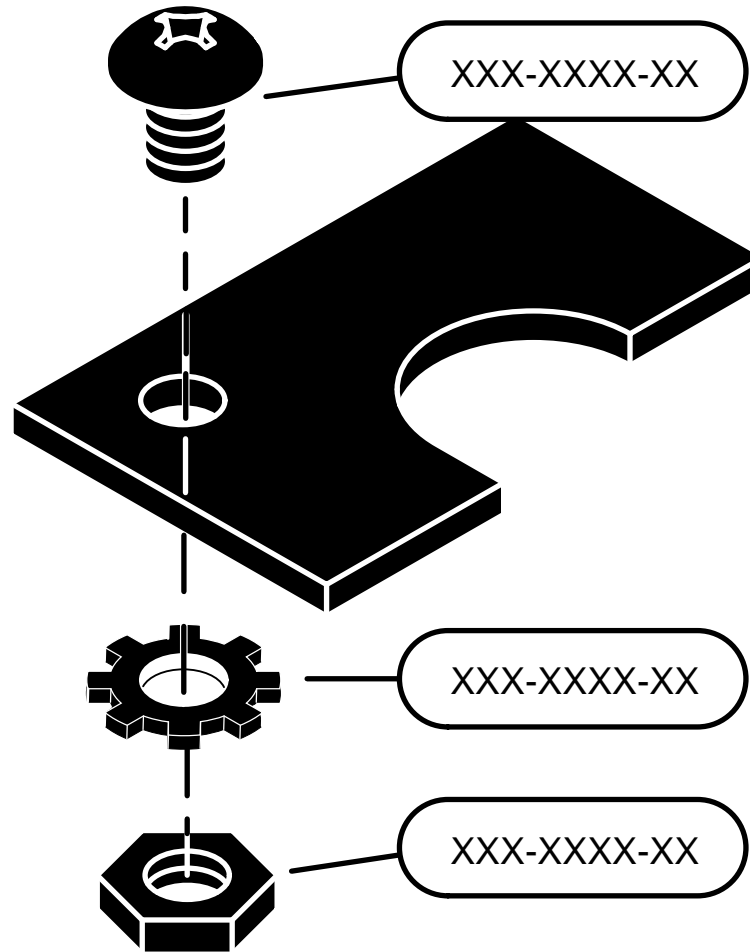
Models:	AVB20S (all) V2200 thru Present	AVG20S (all) V2200 thru Present	AVU20S (all) V2200 thru Present
	AVB20SR (all) V2200 thru Present	AVG20SR (all) V2200 thru Present	AVU20SR (all) V2200 thru Present

**2 HP Platform  
208-230 Volt Only**



# Section E

## *Exploded Views & Parts Lists*



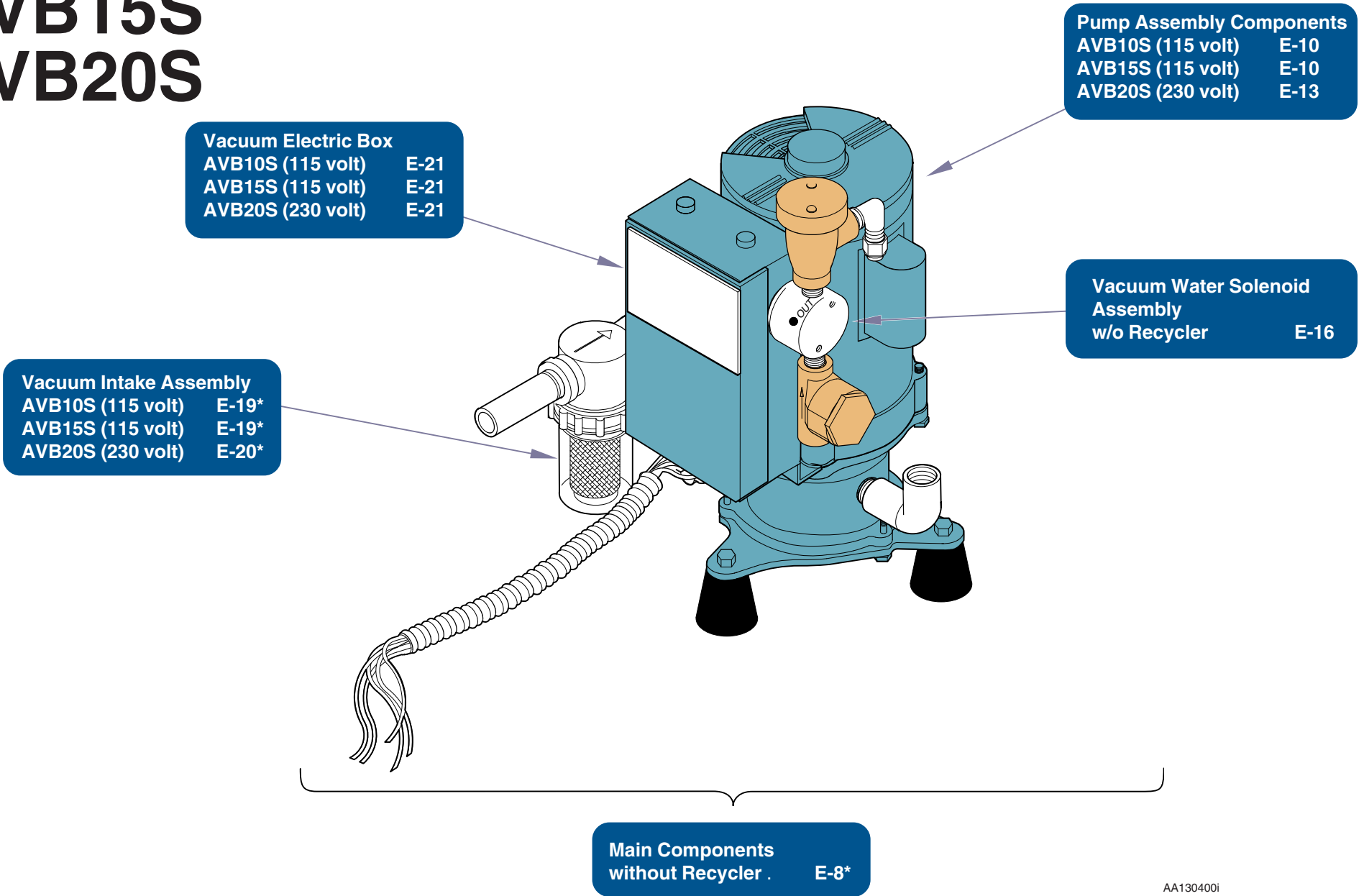
<u>Model</u>	<u>Page</u>
<b>Classic Bronze (AVB)</b>	
10S, 15S, 20S .....	E-2
10SR, 15SR, 20SR .....	E-5
<b>Gold Series (AVG)</b>	
10S, 15S, 20S .....	E-3
10SR, 15SR, 20SR .....	E-6
<b>Ultra Vac (AVU)</b>	
10S, 15S, 20S .....	E-4
10SR, 15SR, 20SR .....	E-7

# CLASSIC BRONZE

## AVB10S

## AVB15S

## AVB20S



# GOLD SERIES

## AVG10S

## AVG15S

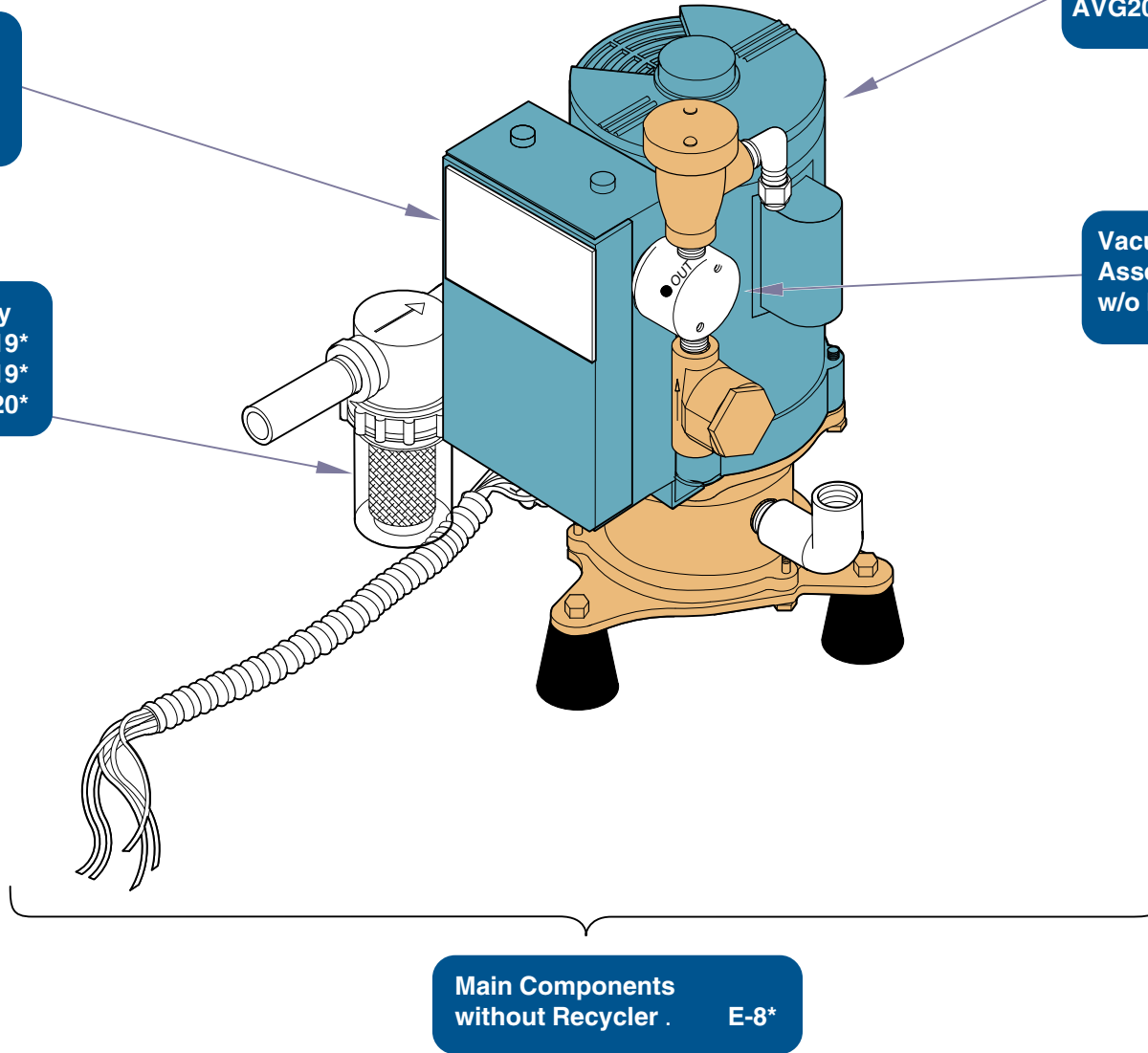
## AVG20S

**Vacuum Electric Box**  
 AVG10S (115 volt) E-21  
 AVG15S (115 volt) E-21  
 AVG20S (230 volt) E-21

**Vacuum Intake Assembly**  
 AVG10S (115 volt) E-19\*  
 AVG15S (115 volt) E-19\*  
 AVG20S (230 volt) E-20\*

**Pump Assembly Components**  
 AVG10S (115 volt) E-11  
 AVG15S (115 volt) E-11  
 AVG20S (230 volt) E-14

**Vacuum Water Solenoid Assembly w/o Recycler** E-16



**Main Components without Recycler** E-8\*

AA130000i

\* Indicates multiple pages due to a serial number break for the parts illustration

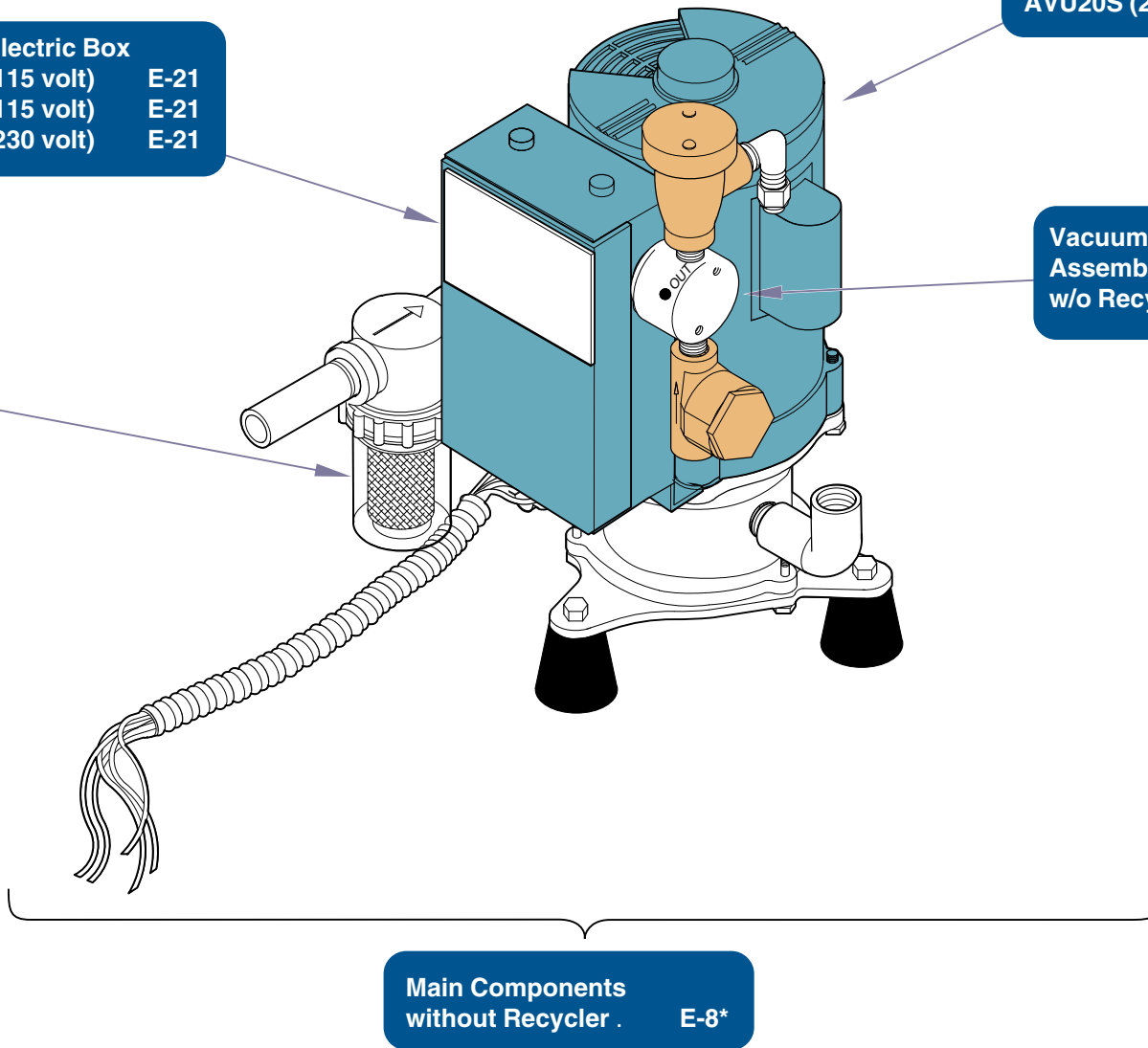
# ULTRA VAC AVU10S AVU15S AVU20S

**Vacuum Electric Box**  
 AVU10S (115 volt) E-21  
 AVU15S (115 volt) E-21  
 AVU20S (230 volt) E-21

**Vacuum Intake Assembly**  
 AVU10S (115 volt) E-19\*  
 AVU15S (115 volt) E-19\*  
 AVU20S (230 volt) E-20\*

**Pump Assembly Components**  
 AVU10S (115 volt) E-12\*  
 AVU15S (115 volt) E-12\*  
 AVU20S (230 volt) E-15\*

**Vacuum Water Solenoid  
 Assembly  
 w/o Recycler** E-16



**Main Components  
 without Recycler .** E-8\*

AA130500i

# CLASSIC BRONZE

## AVB10SR

## AVB15SR

## AVB20SR

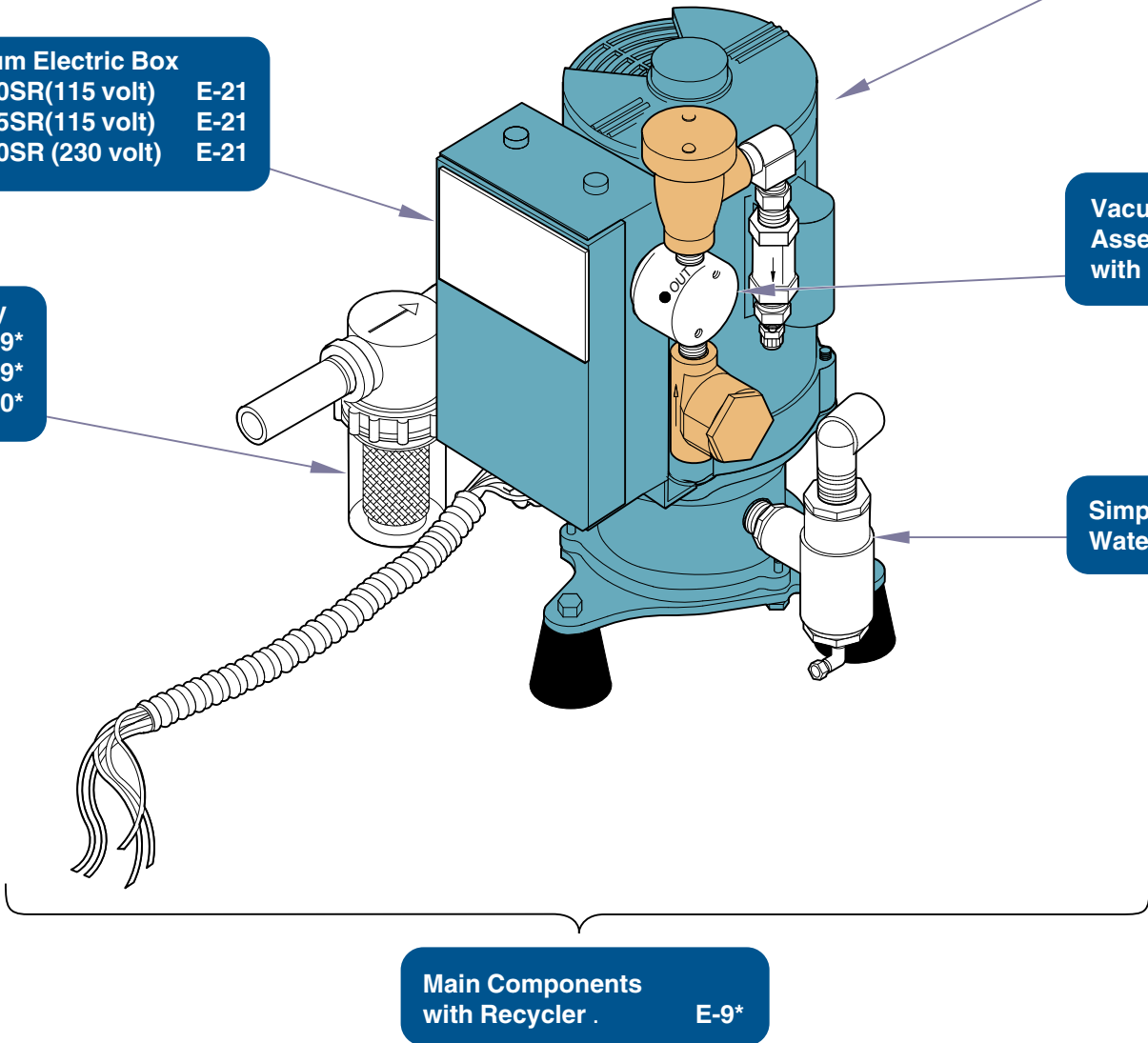
**Vacuum Electric Box**  
 AVB10SR(115 volt) E-21  
 AVB15SR(115 volt) E-21  
 AVB20SR (230 volt) E-21

**Vacuum Intake Assembly**  
 AVB10SR (115 volt) E-19\*  
 AVB15SR (115 volt) E-19\*  
 AVB20SR (230 volt) E-20\*

**Pump Assembly Components**  
 AVB10SR (115 volt) E-10  
 AVB15SR (115 volt) E-10  
 AVB20SR (230 volt) E-13

**Vacuum Water Solenoid Assembly with Recycler** E-17

**Simple Solution Water Recycler** E-18



**Main Components with Recycler** E-9\*

AA1307001

\* Indicates multiple pages due to a serial number break for the parts illustration

# GOLD SERIES

## AVG10SR

## AVG15SR

## AVG20SR

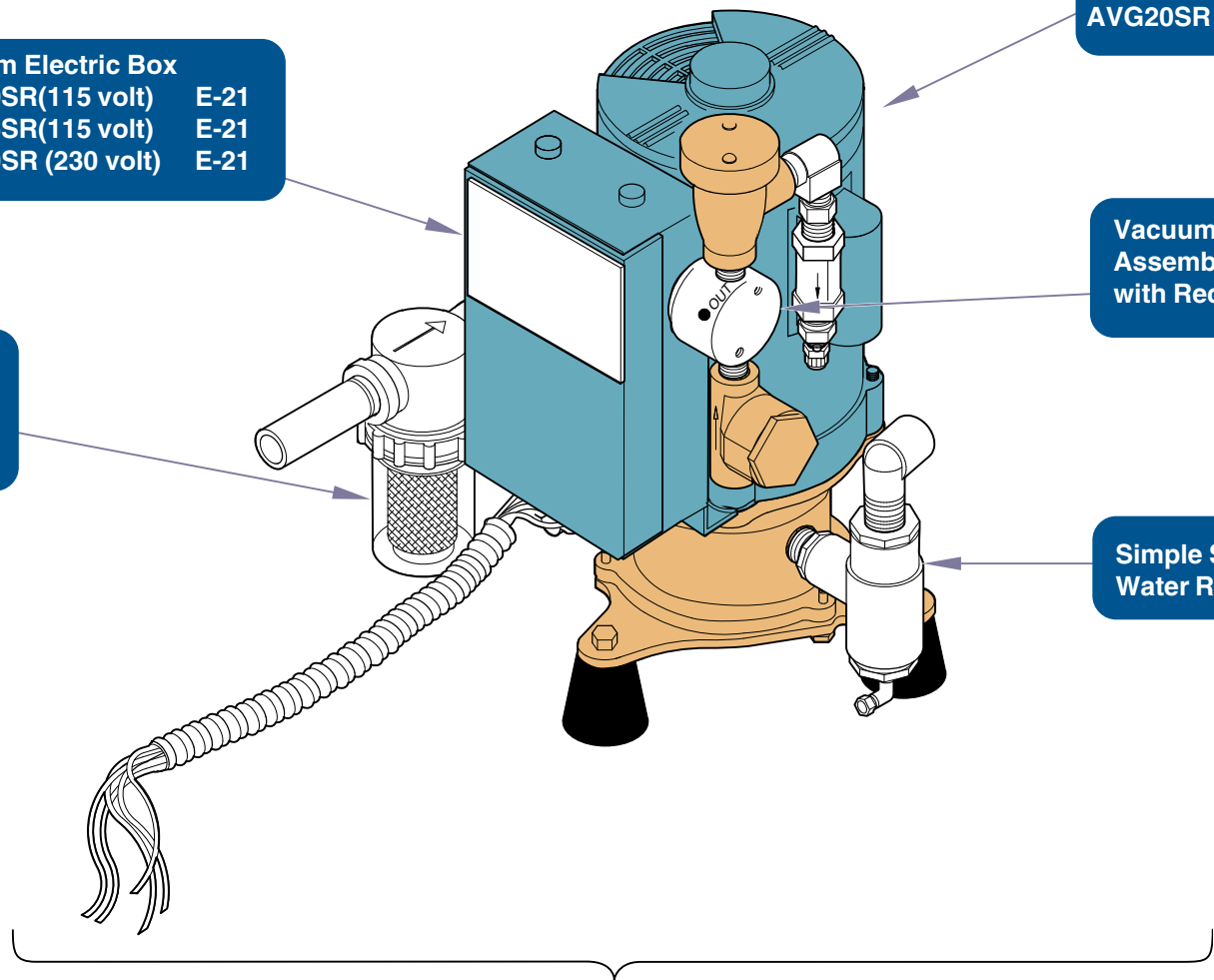
**Pump Assembly Components**  
 AVG10SR (115 volt) E-11  
 AVG15SR (115 volt) E-11  
 AVG20SR (230 volt) E-14

**Vacuum Electric Box**  
 AVG10SR(115 volt) E-21  
 AVG15SR(115 volt) E-21  
 AVG20SR (230 volt) E-21

**Vacuum Water Solenoid Assembly with Recycler** E-17

**Vacuum Intake Assembly**  
 AVG10SR (115 volt) E-19\*  
 AVG15SR (115 volt) E-19\*  
 AVG20SR (230 volt) E-20\*

**Simple Solution Water Recycler** E-18



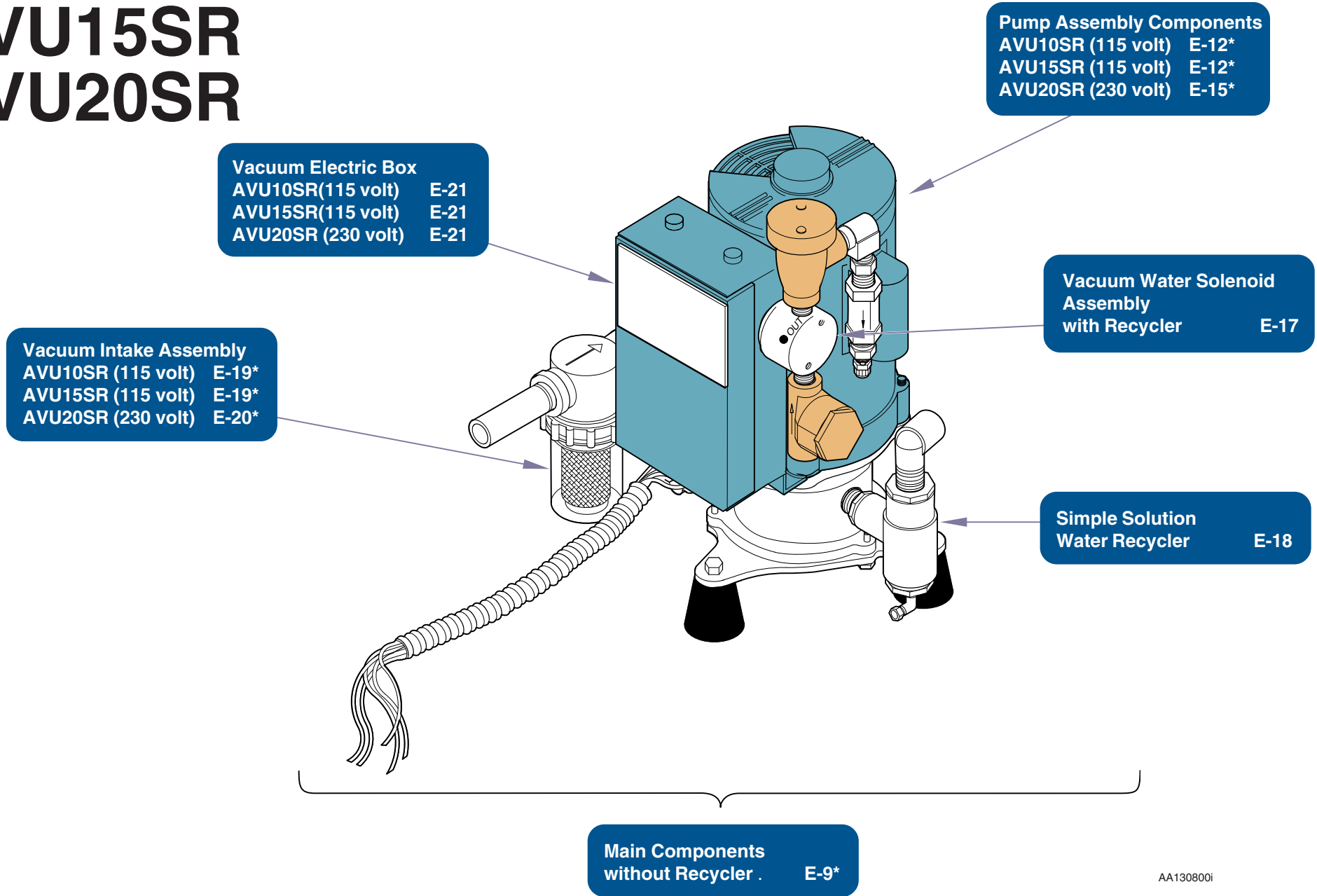
**Main Components with Recycler** E-9\*

AA130600i

\* Indicates multiple pages due to a serial number break for the parts illustration

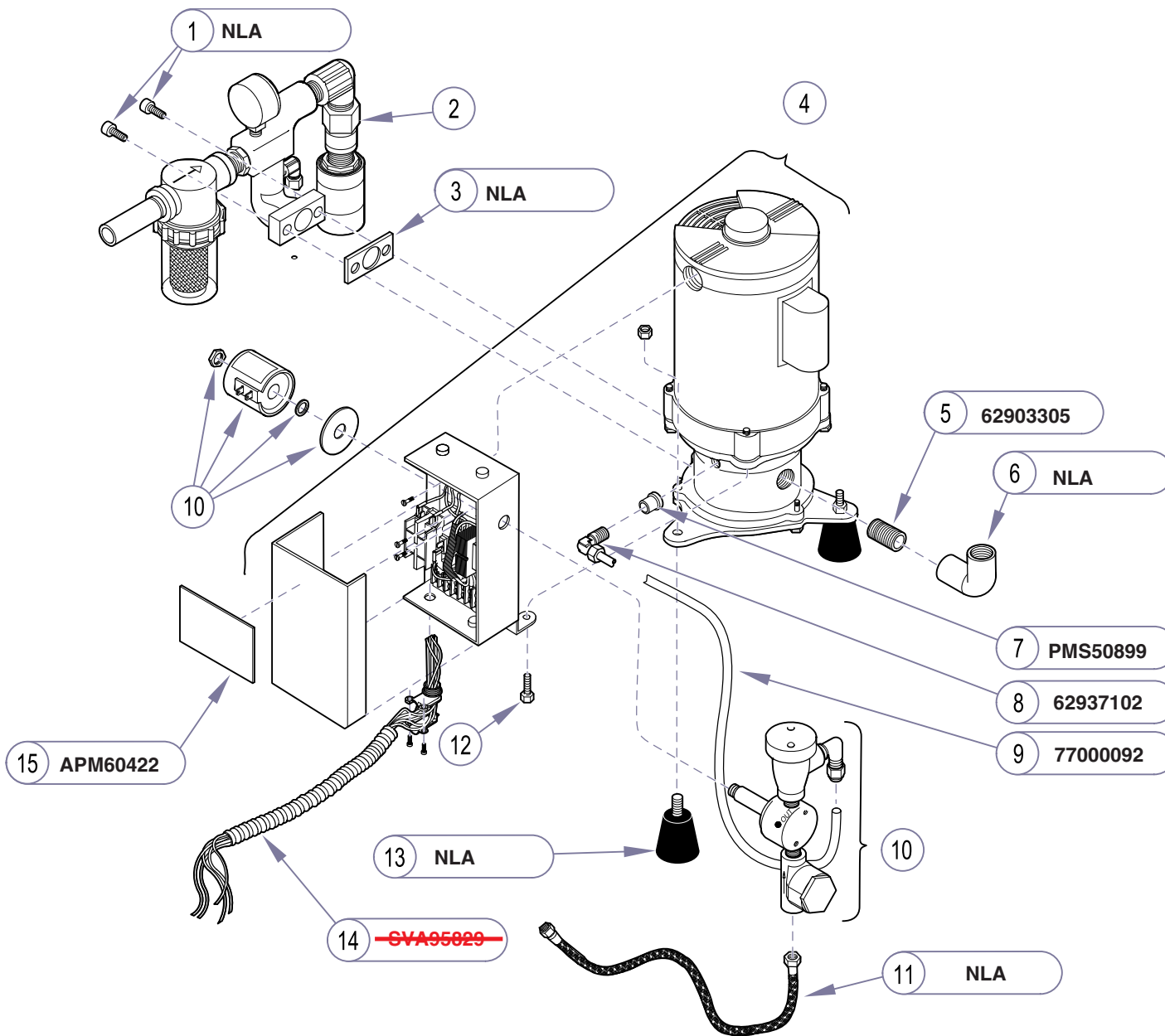


# ULTRA VAC AVU10SR AVU15SR AVU20SR



AA130800i

\* Indicates multiple pages due to a serial number break for the parts illustration



NLA = No Longer Available

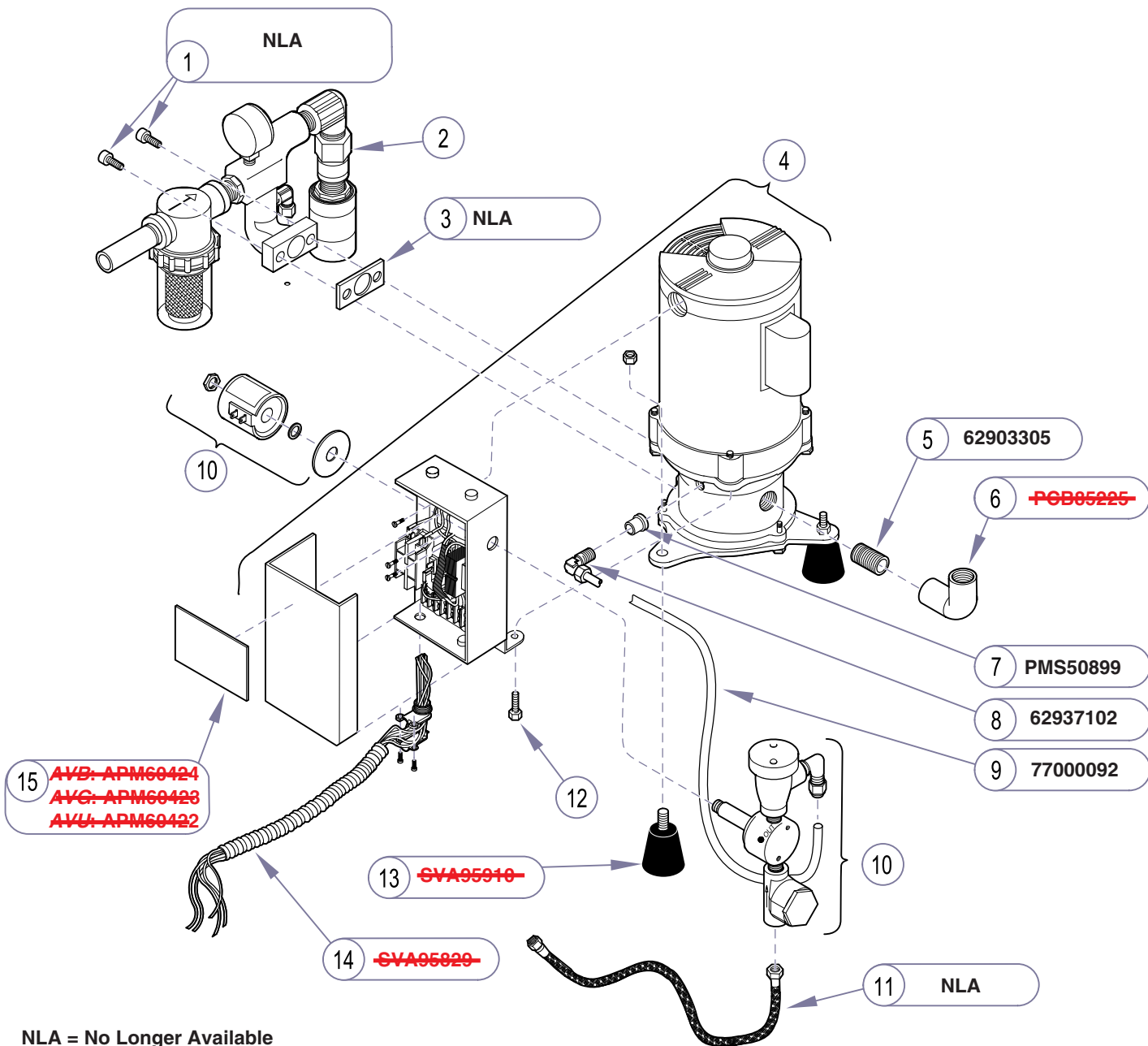
AA129605i

Item	Description	Qty.
1	Screw Socket Head (Stainless 1/4-20 x .75)	2
2	Refer to: "Vacuum Intake Assembly" .....	Ref
3	Gasket .....	1
4	Refer to: "Pump Assy Components" .....	Ref
5	Nipple (3/4 NPT Street) .....	1
6	Elbow (3/4 ) .....	1
7	Flow Control Plug .....	1
8	Elbow (0.5 gpm flow ) .....	1
9	Polyflo Tubing (19in long) .....	1
10	Refer to: "Vacuum Water Solenoid Assembly without recycler" .....	Ref
11	Hose Assembly (1/4" x 8') .....	1
12	Bolt (Removed from pump assembly) .....	AR
13	Rubber Mount Kit (w/nut) .....	3
14	<del>No Longer Available -</del> Vacuum Electric Lines (6 foot long) .....	1
15	Product Label .....	1

**Always Specify Model & Serial Number**

**Main Components  
without Recycler**

<b>Models:</b>	<b>AVU10S (all)</b>	<b>AVU20S (all)</b>		
<b>Serial Numbers:</b>	V2200 thru V127992	V2200 thru V127993		



NLA = No Longer Available

AA129606i

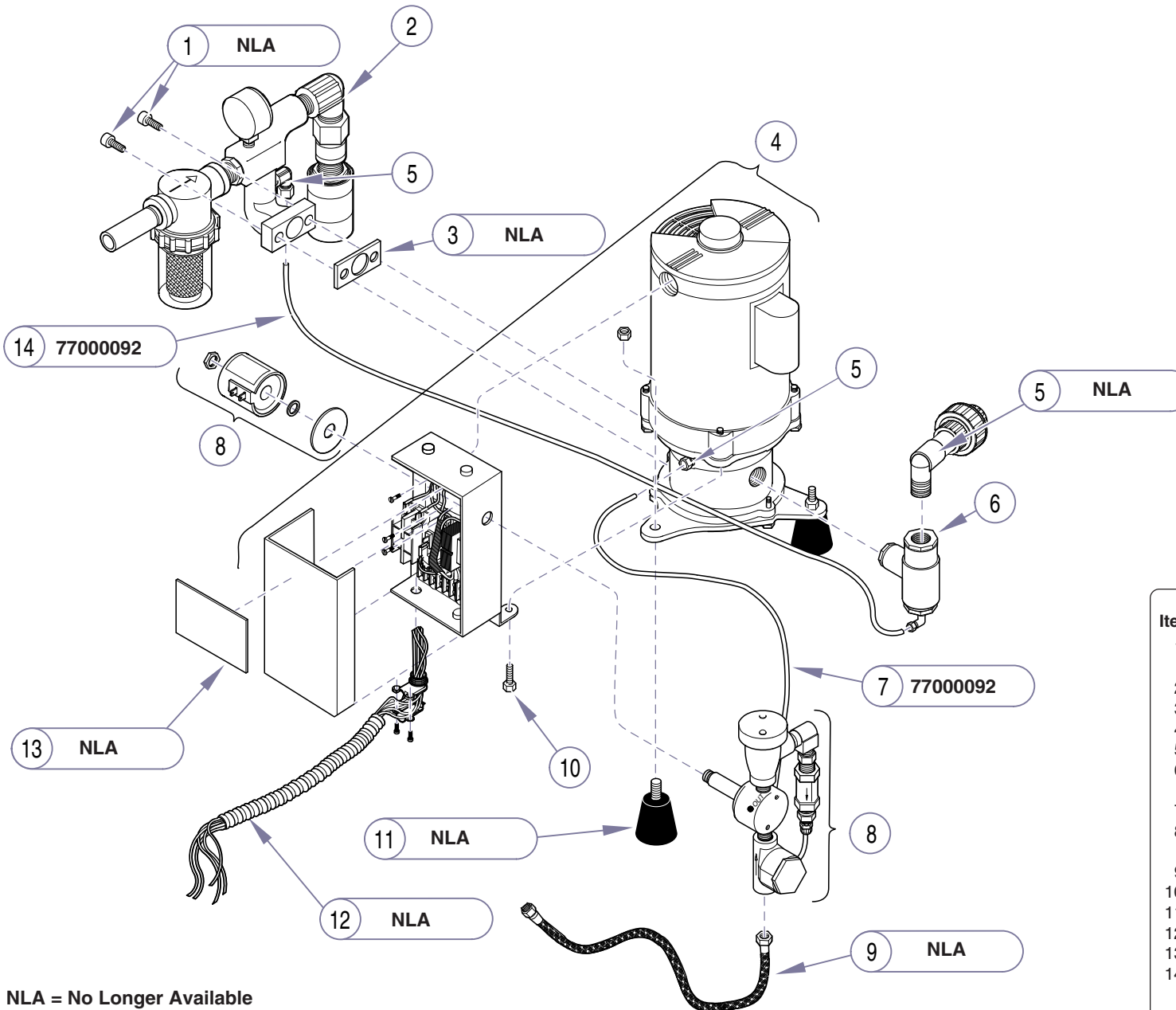
Item	Description	Qty.
1a	Screw Socket Head (1/4-20 x 7/8) .....	2
1b	Screw Socket Head (Stainless 1/4-20 x .75) .....	2
2	Refer to: "Vacuum Intake Assembly" .....	Ref
3	Gasket .....	1
4	Refer to: "Pump Assy Components" .....	Ref
5	Nipple (3/4 NPT Street) .....	1
6	<del>No Longer Available</del> - Elbow (3/4 ) .....	1
7	Flow Control Plug .....	1
8	Elbow (0.5 gpm flow ) .....	1
9	Polyflo Tubing (19in long) .....	1
10a	(115 volt)	
10b	(230 volt)	
	Refer to: "Vacuum Water Solenoid Assembly"	
	.....	Ref
11	Hose Assembly (1/4" x 8') .....	1
12	Bolt (Removed from pump assembly) .....	AR
13	<del>No Longer Available</del> - Rubber Mount Kit(w/nut) .....	3
14	<del>No Longer Available</del> - Vacuum Electric Lines (6 foot long) .....	1
15	<del>No Longer Available</del> - Product Label .....	1

Always Specify Model & Serial Number

<b>Models:</b>	<b>AVB15S (all)</b> V2200 thru Present	<b>AVU20S (all)</b> V127994 thru Present	<b>AVB10S (all)</b> V2200 thru Present	<b>AVB20S (all)</b> V2200 thru Present	<b>AVG20S (all)</b> V2200 thru Present
<b>Serial Numbers:</b>	<b>AVG15S (all)</b> V2200 thru Present	<b>AVU15S (all)</b> V2200 thru Present	<b>AVG10S (all)</b> V2200 thru Present	<b>AVU10S (all)</b> V127993 thru Present	

**Main Components  
without Recycler**

**E-8.1**



NLA = No Longer Available

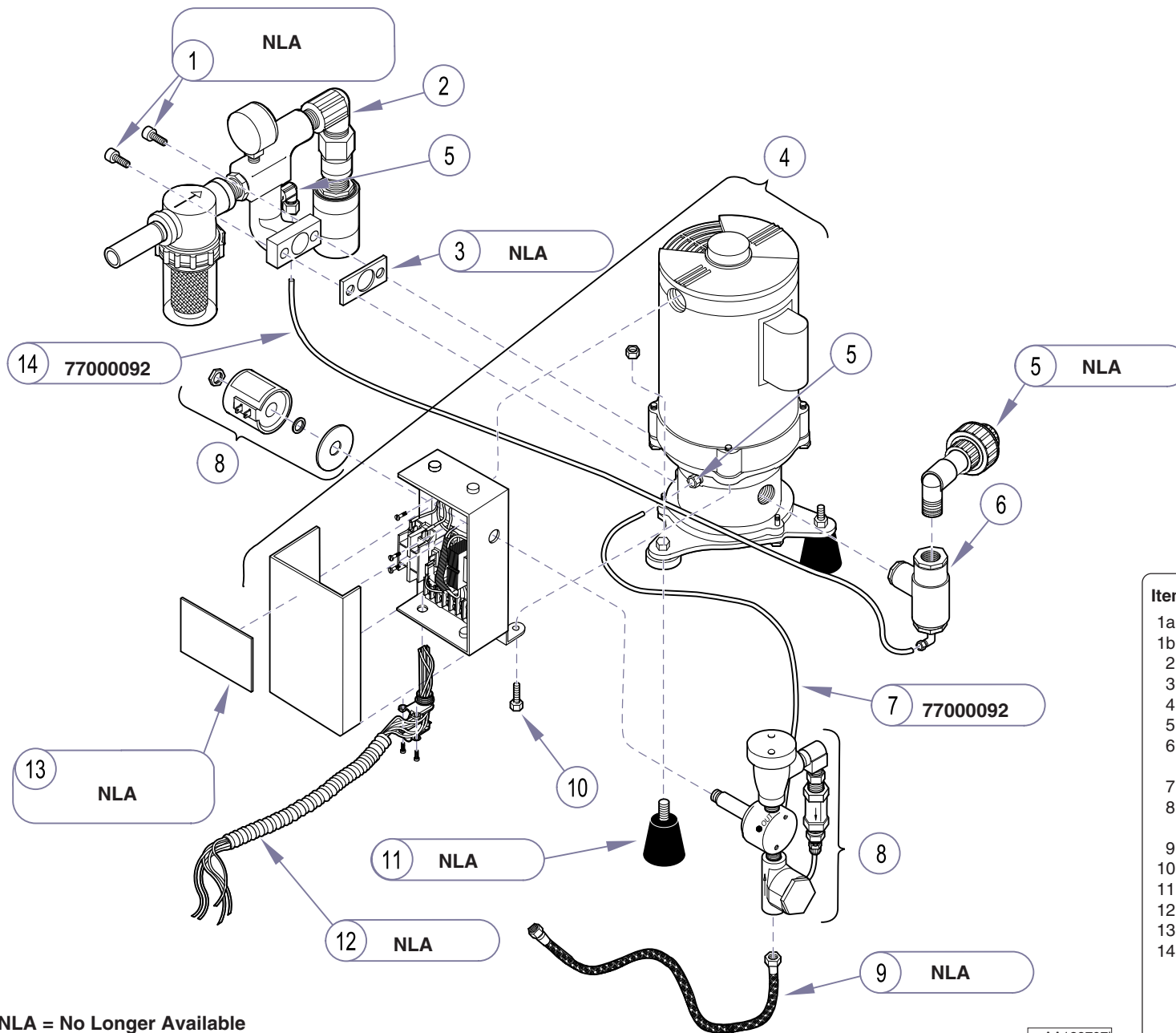
AA129708i

Item	Description	Qty.
1	Screw (Socket Head -Stainless1/4-20 x .75) .....	2
2	Refer to:" Vacuum Intake Assembly" .....	Ref
3	Gasket .....	1
4	Refer to: "Pump Assy Components" .....	Ref
5	Union Assembly (includes items 7 & 14) .....	1
6	Refer to:"Simple Solution Water Recycler" .....	Ref
7	Polyflo Tubing (19in long) .....	1
8	Refer to:"Vacuum Water Solenoid Assembly" .....	Ref
9	Hose Assembly (1/4" x 8') .....	1
10	Bolt (Removed from pump assembly) .....	AR
11	Rubber Mount Kit (w/nuts) .....	3
12	Vacuum Electric Lines (6 foot long).....	1
13	Product Label .....	1
14	Polyflo Tubing (12.5in long) .....	1

**Always Specify Model & Serial Number**

## Main Components with Recycler

**Models:** AVU10SR (all) AVU20SR (all)  
**Serial Numbers:** V2200 thru V124580 V2200 thru V128000



NLA = No Longer Available

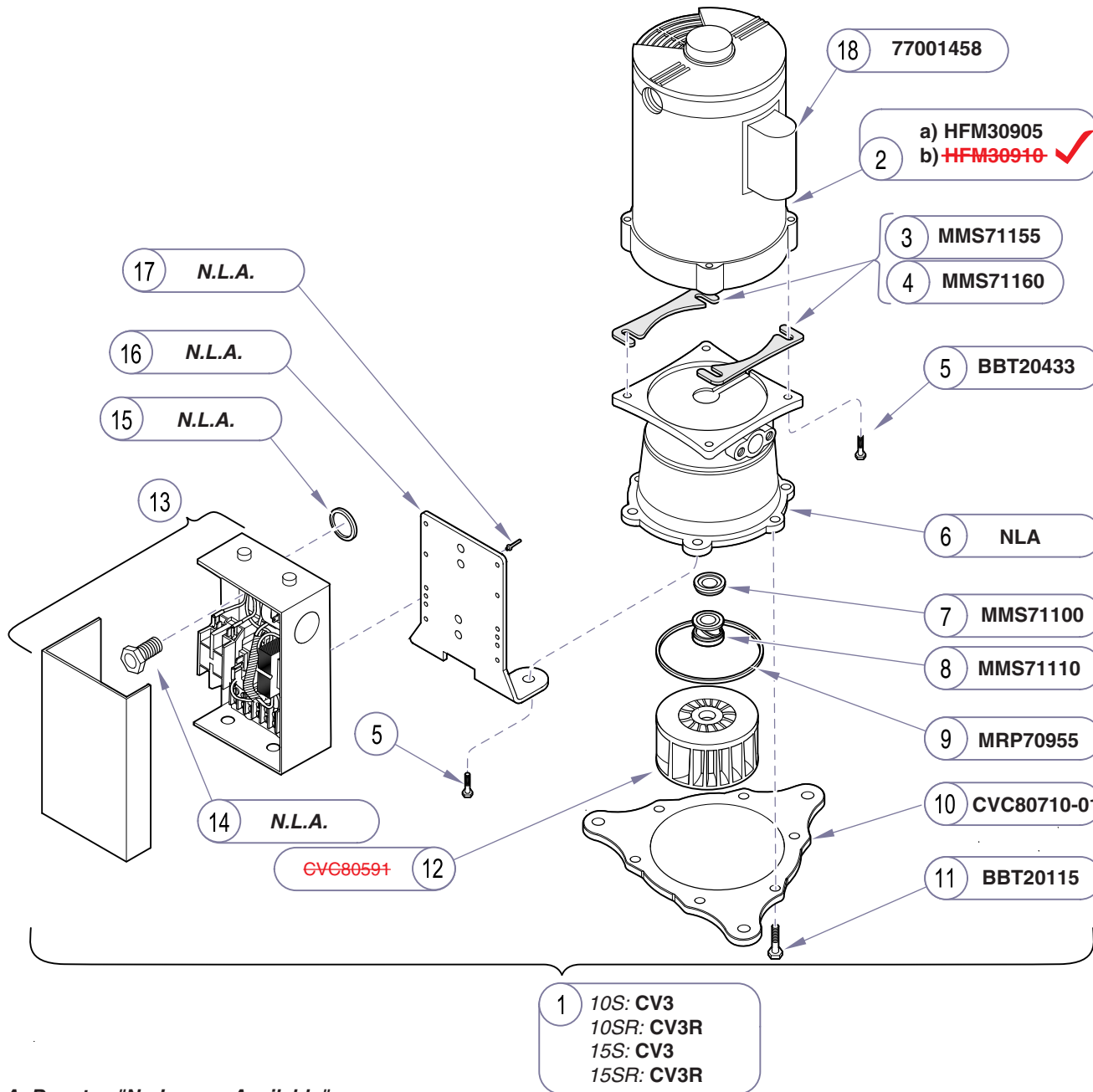
AA1297071

Item	Description	Qty.
1a	Screw (Socket Head -1/4-20 x 7/8) .....	2
1b	Screw (Socket Head -Stainless1/4-20 x .75)2	
2	Refer to: "Vacuum Intake Assembly .....	Ref
3	Gasket .....	1
4	Refer to: "Pump Assy Components" .....	Ref
5	Union Assembly (includes items 7 & 14) .....	1
6	Refer to:"Simple Solution Water Recycler" ...	Ref
7	Polyflo Tubing (19in long) .....	1
8	Refer to: "Vacuum Water Solenoid Assembly .....	Ref
9	Hose Assembly (1/4" x 8') .....	1
10	Bolt (Removed from pump assembly) .....	AR
11	Rubber Mount Kit (w/nuts) .....	3
12	Vacuum Electric Lines (6 foot long) .....	1
13	Product Label .....	1
14	Polyflo Tubing (12.5in long) .....	1

Always Specify Model & Serial Number

<b>Models:</b>	<b>AVB10SR</b> (all)	<b>AVG10SR</b> (all)	<b>AVU10SR</b> (all)	<b>AVB15SR</b> (all)	<b>AVG15SR</b> (all)
	V2200 thru Present	V2200 thru Present	V124581 thru Present	V2200 thru Present	V2200 thru Present
<b>Serial Numbers:</b>	<b>AVU15SR</b> (all)	<b>AVB20SR</b> (all)	<b>AVG20SR</b> (all)	<b>AVU20SR</b> (all)	
	V2200 thru Present	V2200 thru Present	V2200 thru Present	V128001 thru Present	

## Main Components with Recycler



Item	Description	Qty.
1	Pump Assembly w/Electric Box (Includes items 1 thru 17) .....	1
2a	• Vacuum Pump Motor (1.0 hp motors) .....	1
2b	• <del>No Longer Available</del> - Vacuum Pump Motor (1.5 hp motors) .....	1
3	• Housing Shim (.005) .....	2
4	• Housing Shim (.010) .....	2
5	• Bolt (3/8"-16 x 3/4" #5 Plated) .....	4
6	• Vacuum Housing (Classic Bronze 1 & 1.5 hp) .....	1
7	• Ceramic Seat (5/8" shaft) .....	1
8	• Rotary Seal (5/8" shaft) .....	1
9	• O-ring (1 & 1.5 hp vacuum) .....	1
10	• Baseplate (Classic Bronze 1 & 1.5 hp.) ....	1
11	• Bolt (1/4"-20 x 3/4") .....	6
12	• Impeller (Classic Bronze 1hp.) .....	1
13	• Refer to: "Vacuum Electrical Box" .....	Ref
14	• Nipple (1/2") .....	1
15	• Shake Proof Washer (7/8" star) .....	1
16	• Electric Box Bracket .....	1
17	• Pop rivet 1/8" SS .....	2
18a	• Capacitor (used with 1.0 hp motors) .....	1
18b	• Capacitor (used with 1.5 hp motors) .....	1
19	• Nipple (3/4" brass fpt x fpt)	

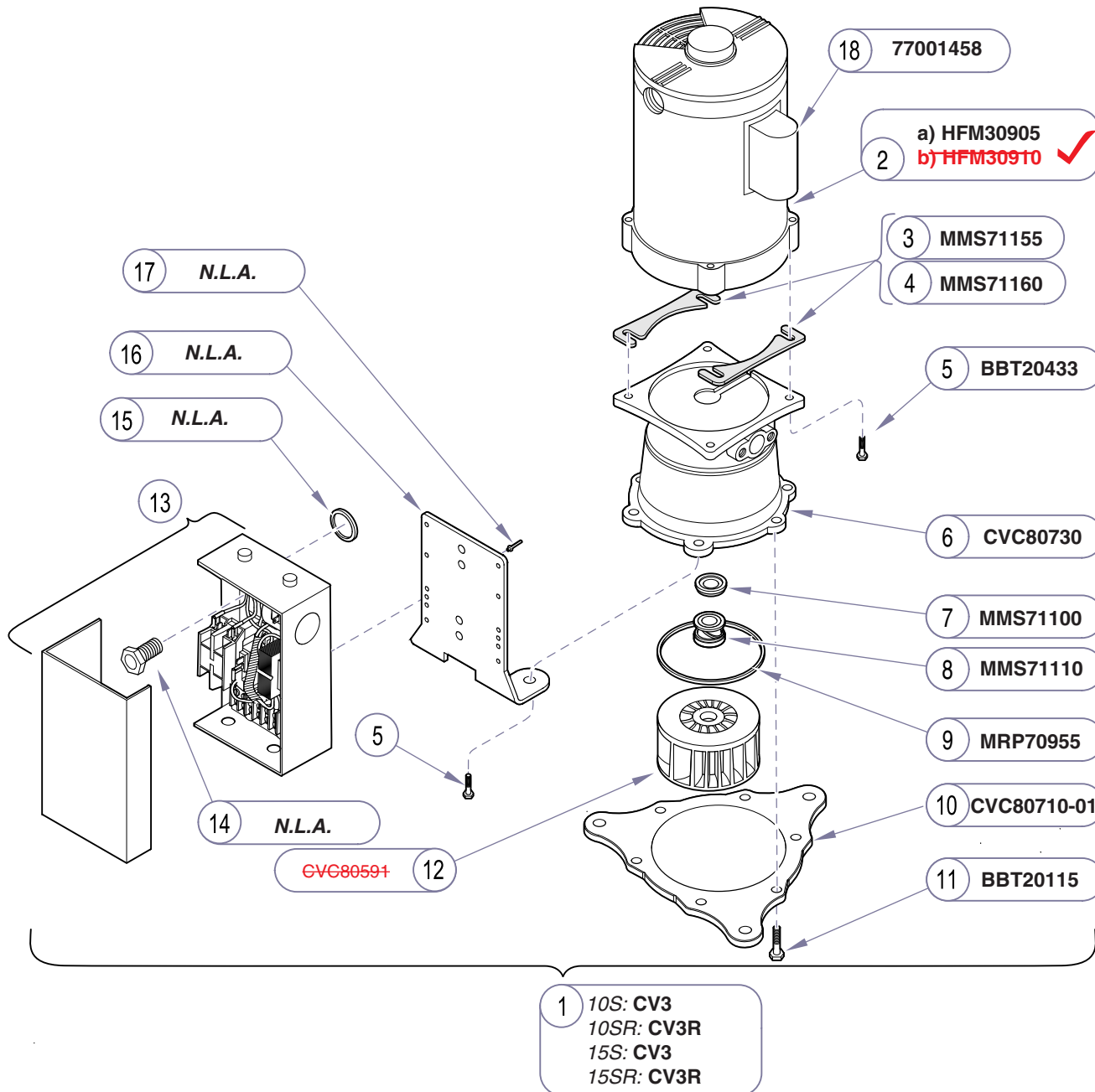
**Always Specify Model & Serial Number**

N.L.A. Denotes "No Longer Available"

AA131205i

# Pump Assembly Components

<b>Models:</b>	<b>AVB10S (all)</b>	<b>AVB10SR (all)</b>	<b>AVB15S (all)</b>	<b>AVB15SR (all)</b>
<b>Serial Numbers:</b>	V2200 thru Present	V2200 thru Present	V2200 thru Present	V2200 thru Present



N.L.A. Denotes "No Longer Available"

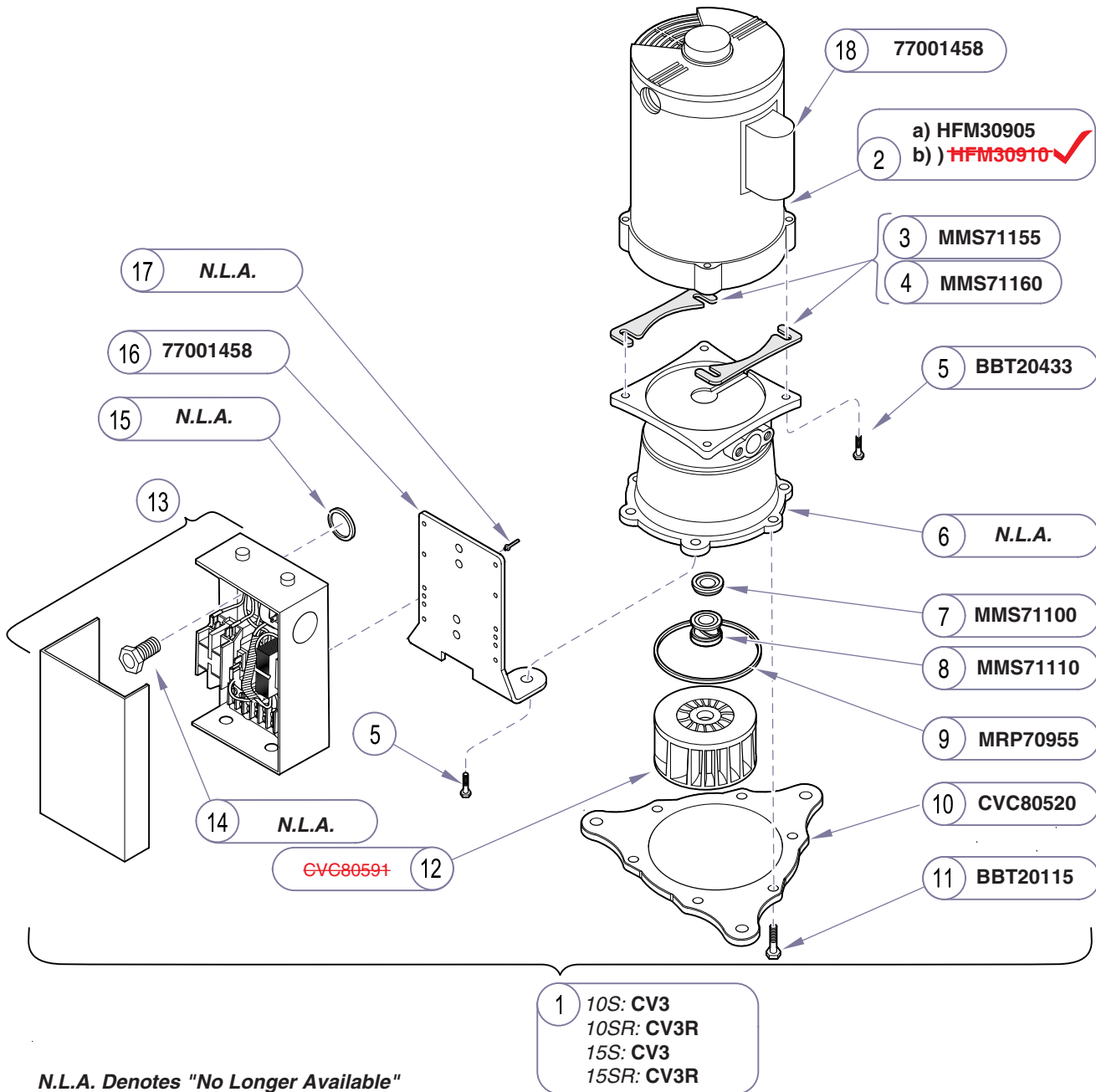
AA131205i

Item	Description	Qty.
1	Pump Assembly w/Electric Box (Includes items 1 thru 18) .....	1
2a	• Vacuum Pump Motor (1.0 hp motors) .....	1
2b	• <b>No Longer Available -</b> Vacuum Pump Motor (1.5 hp motors) .....	1
3	• Housing Shim (.005) .....	2
4	• Housing Shim (.010) .....	2
5	• Bolt (3/8"-16 x 3/4" #5 Plated) .....	4
6	• Vacuum Housing .....	1
7	• Ceramic Seat (5/8" shaft) .....	1
8	• Rotary Seal (5/8" shaft) .....	1
9	• O-ring (1 & 1.5 hp vacuum) .....	1
10	• Baseplate .....	1
11	• Bolt (1/4"-20 x 3/4") .....	6
12	• Impeller (Stainless) .....	1
13	• Refer to: "Vaccum Electrical Box" .....	Ref
14	• Nipple (1/2") .....	1
15	• Shake Proof Washer (7/8" star) .....	1
16	• Electric Box Bracket .....	1
17	• Pop rivet 1/8" SS .....	2
18a	Capacitor (used with 1.0 hp motors) .....	1
18b	Capacitor (used with 1.5 hp motors) .....	1

**Always Specify Model & Serial Number**

<b>Models:</b>	<b>AVG10S (all)</b>	<b>AVG10SR (all)</b>	<b>AVG15S (all)</b>	<b>AVG15SR (all)</b>
<b>Serial Numbers:</b>	V2200 thru Present	V2200 thru Present	V2200 thru Present	V2200 thru Present

## Pump Assembly Components



N.L.A. Denotes "No Longer Available"

AA131205i

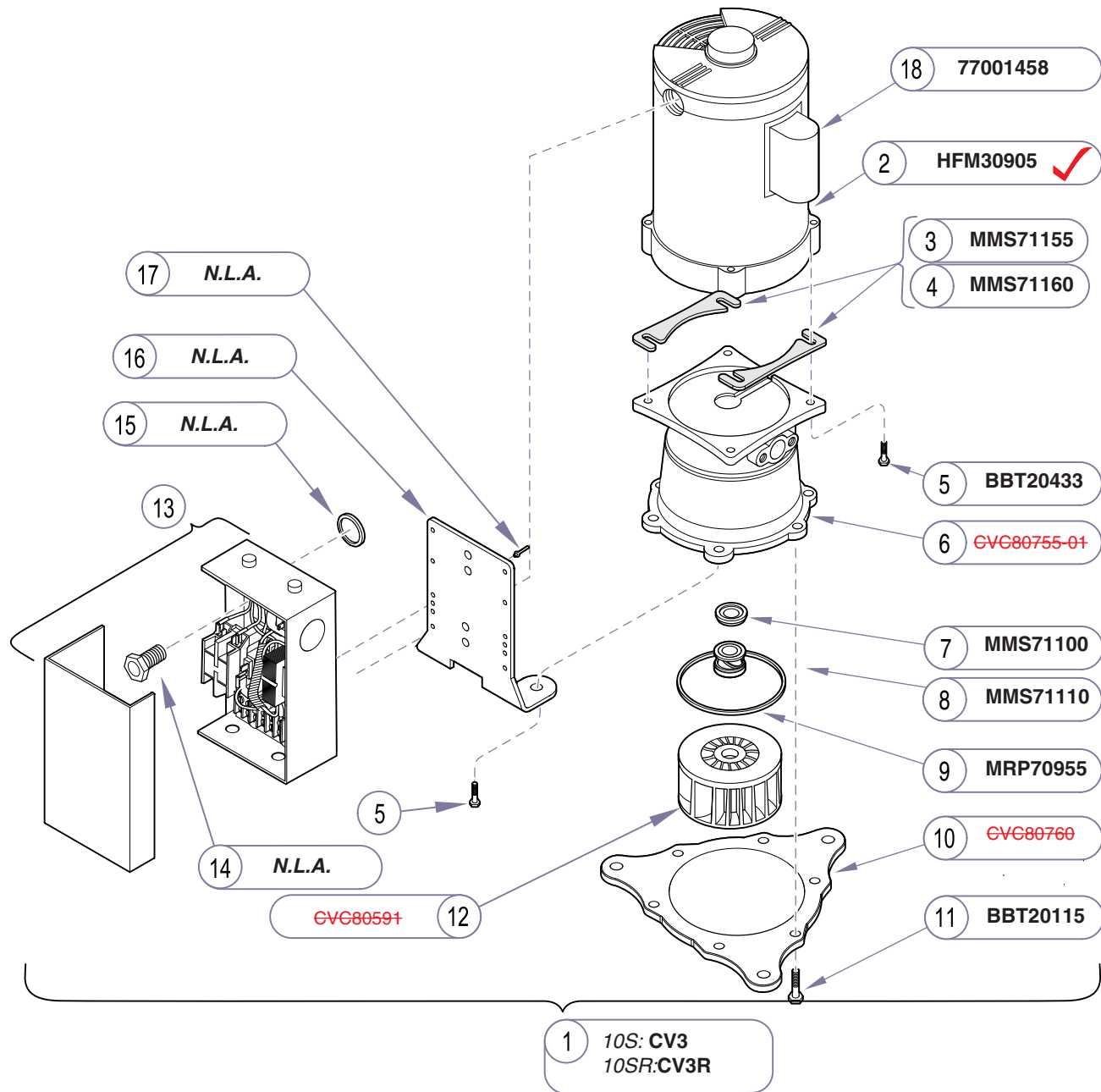
Item	Description	Qty.
1	Pump Assembly w/Electric Box (Includes items 1 thru 17) .....	1
2a	• Vacuum Pump Motor (1.0 hp motors) .....	1
2b	• <del>No Longer Available -</del> Vacuum Pump Motor (1.5 hp motors) .....	1
3	• Housing Shim (.005) .....	2
4	• Housing Shim (.010) .....	2
5	• Bolt (3/8"-16 x 3/4" #5 Plated) .....	4
6	• Vacuum Housing .....	1
7	• Ceramic Seat (5/8" shaft) .....	1
8	• Rotary Seal (5/8" shaft) .....	1
9	• O-ring (1 & 1.5 hp vacuum) .....	1
10	• Baseplate .....	1
11	• Bolt (1/4"-20 x 3/4") .....	6
12	• Impeller (Stainless) .....	1
13	• Refer to: "Vacuum Electrical Box" .....	Ref
14	• Nipple (1/2") .....	1
15	• Shake Proof Washer (7/8" star) .....	1
16	• Electric Box Bracket .....	1
17	• Pop rivet 1/8" SS .....	2
18	• Capacitor .....	1

Always Specify Model & Serial Number

# Pump Assembly Components

Models:	AVU10S (all)	AVU10SR (all)	AVU15S (all)	AVU15SR (all)
Serial Numbers:	V2200 thru V127992	V2200 thru V124580	V2200 thru Present	V2200 thru Present





Item	Description	Qty.
1	Pump Assembly w/Electric Box <i>(Includes items 1 thru 17)</i>	1
2	Vacuum Pump Motor (1.0 hp motors)	1
3	Housing Shim (.005)	2
4	Housing Shim (.010)	2
5	Bolt (3/8"-16 x 3/4" #5 Plated)	4
6	Vacuum Housing	1
7	Ceramic Seat (5/8" shaft)	1
8	Rotary Seal (5/8" shaft)	1
9	O-ring (1 & 1.5 hp vacuum)	1
10	Baseplate	1
11	Bolt (1/4"-20 x 3/4")	6
12	Impeller (Stainless)	1
13	Refer to: "Vacuum Electrical Box"	Ref
14	Nipple (1/2")	1
15	Shake Proof Washer (7/8" star)	1
16	Electric Box Bracket	1
17	Pop rivet 1/8" SS	2
18	Capacitor (used with 1.0 hp motors)	1

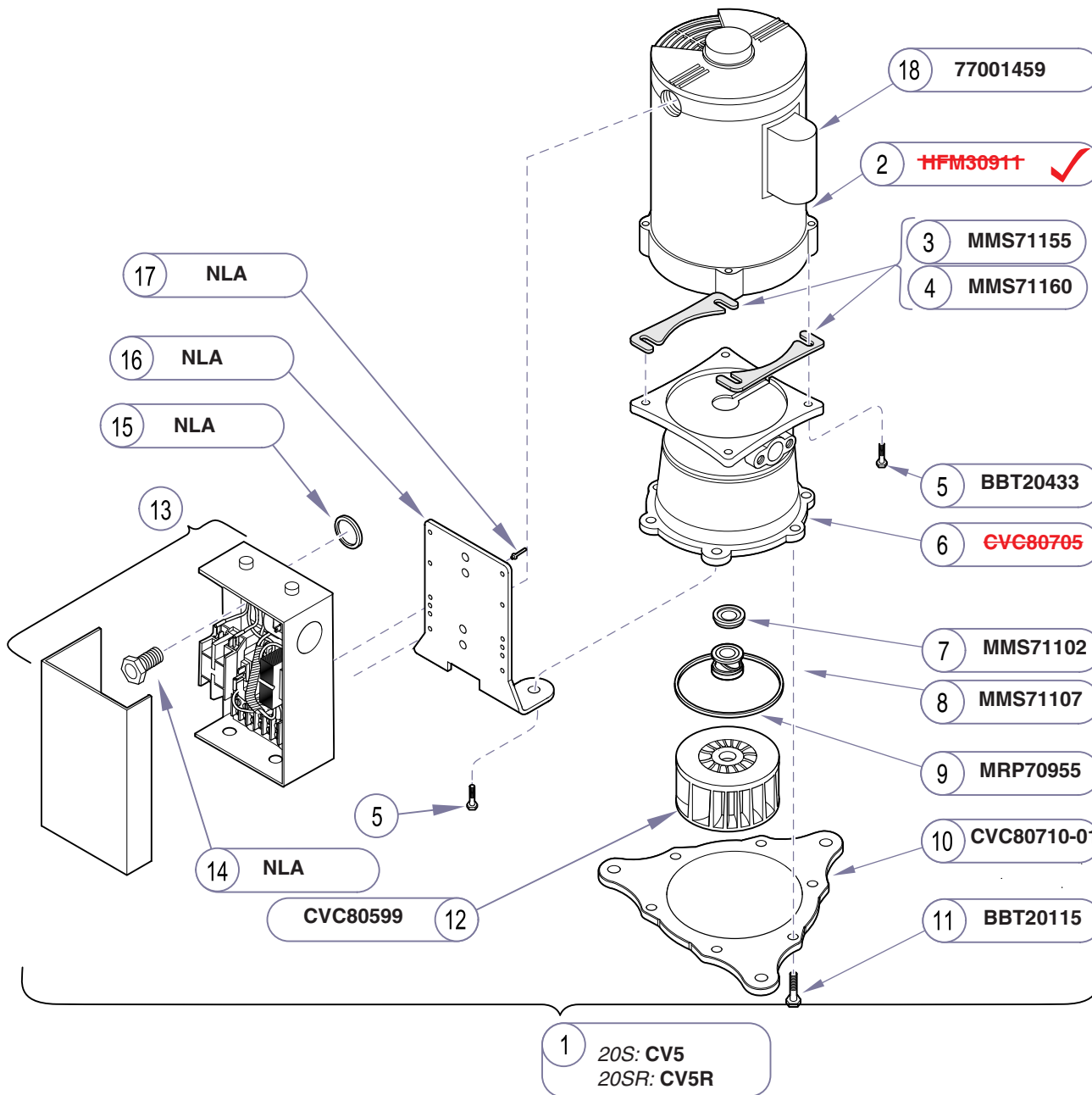
Always Specify Model & Serial Number

N.L.A. Denotes "No Longer Available"

AA131206i

<b>Models:</b>	<b>AVU10S (all)</b>	<b>AVU10SR (all)</b>		
<b>Serial Numbers:</b>	V127993 thru Present	V124581 thru Present		

# Pump Assembly Components



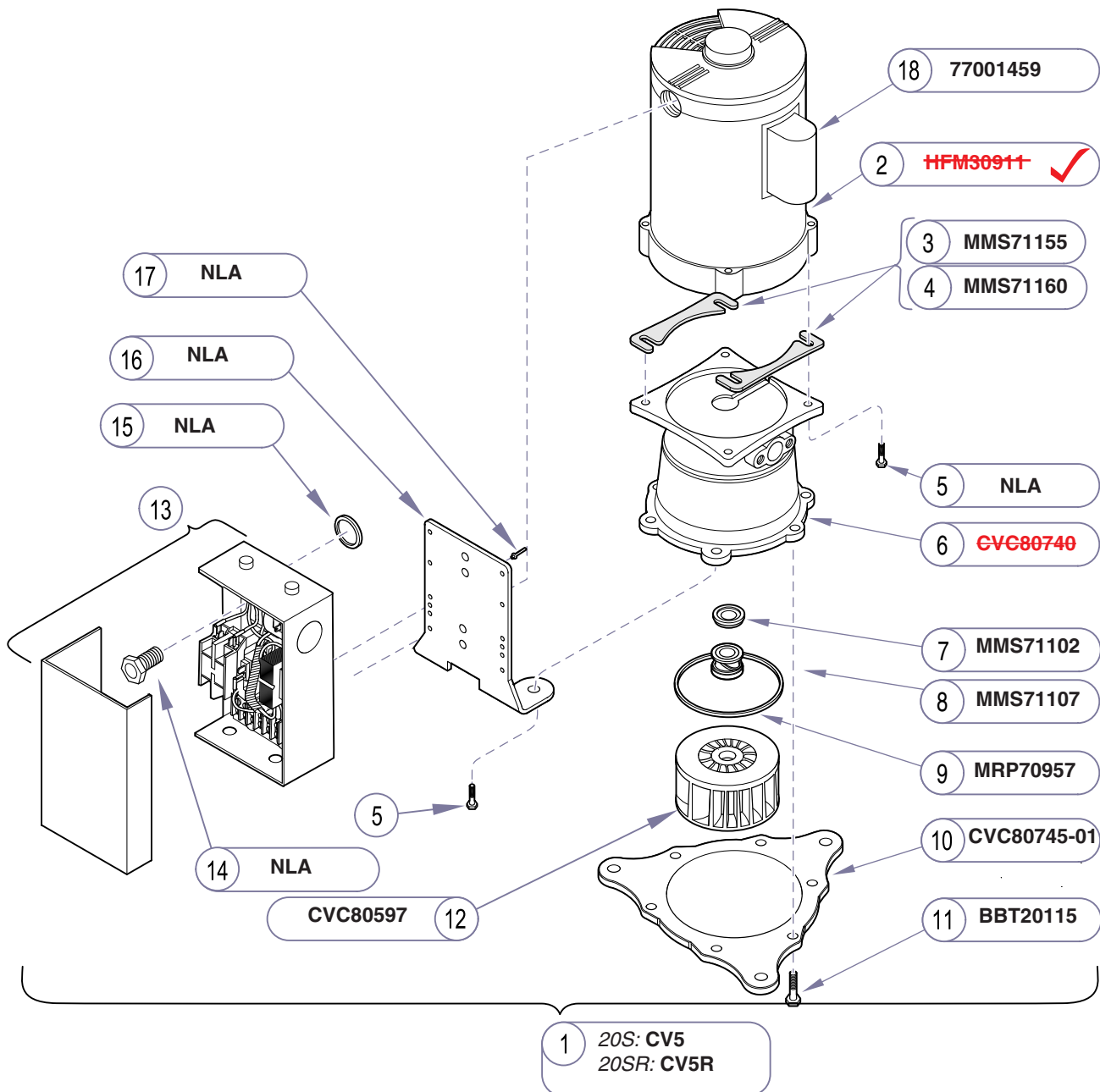
Item	Description	Qty.
1	Pump Assembly w/Electric Box (Includes items 1 thru 17)	1
2	• <b>No Longer Available</b> - Vacuum Pump Motor	1
3	• Housing Shim (.005)	2
4	• Housing Shim (.010)	2
5	• Bolt (3/8"-16 x 3/4" #5 Plated)	4
6	• <b>No Longer Available</b> - Vacuum Housing (Classic Bronze 1 & 1.5 hp)	1
7	• Ceramic Seat (3/4" shaft)	1
8	• Rotary Seal (3/4" shaft)	1
9	• O-ring (1 & 1.5 hp vacuum)	1
10	• Baseplate (Classic Bronze 1 & 1.5 hp.)	1
11	• Bolt (1/4"-20 x 3/4")	6
12	• Impeller (Classic Bronze 1hp.)	1
13	• Refer to: "Vaccum Electrical Box"	Ref
14	• Nipple (1/2")	1
15	• Shake Proof Washer(7/8" star)	1
16	• Electric Box Bracket	1
17	• Pop rivet 1/8" SS	2
18	Capacitor	1

**Always Specify Model & Serial Number**

AA131206i

# Pump Assembly Components

<b>Models:</b>	<b>AVB20S (all)</b>	<b>AVB20SR (all)</b>		
<b>Serial Numbers:</b>	V2200 thru Present	V2200 thru Present		



Item	Description	Qty.
1	Pump Assembly w/Electric Box (Includes items 1 thru 17) .....	1
2	<b>No Longer Available -</b> Vacuum Pump Motor .....	1
3	• Housing Shim (.005) .....	2
4	• Housing Shim (.010) .....	2
5	• Bolt (3/8"-16 x 3/4" #5 Plated) .....	4
6	<b>No Longer Available</b> Vacuum Housing (Classic Bronze 1 & 1.5 hp) .....	1
7	• Ceramic Seat (3/4" shaft) .....	1
8	• Rotary Seal (3/4" shaft) .....	1
9	• O-ring (1 & 1.5 hp vacuum) .....	1
10	• Baseplate (Classic Bronze 1 & 1.5 hp.) ....	1
11	• Bolt (1/4"-20 x 3/4") .....	6
12	• Impeller (Classic Bronze 1hp.) .....	1
13	• Refer to: "Vacuum Electrical Box" .....	Ref
14	• Nipple (1/2") .....	1
15	• Shake Proof Washer (7/8" star) .....	1
16	• Electric Box Bracket .....	1
17	• Pop rivet 1/8" SS .....	2
18	• Capacitor .....	1

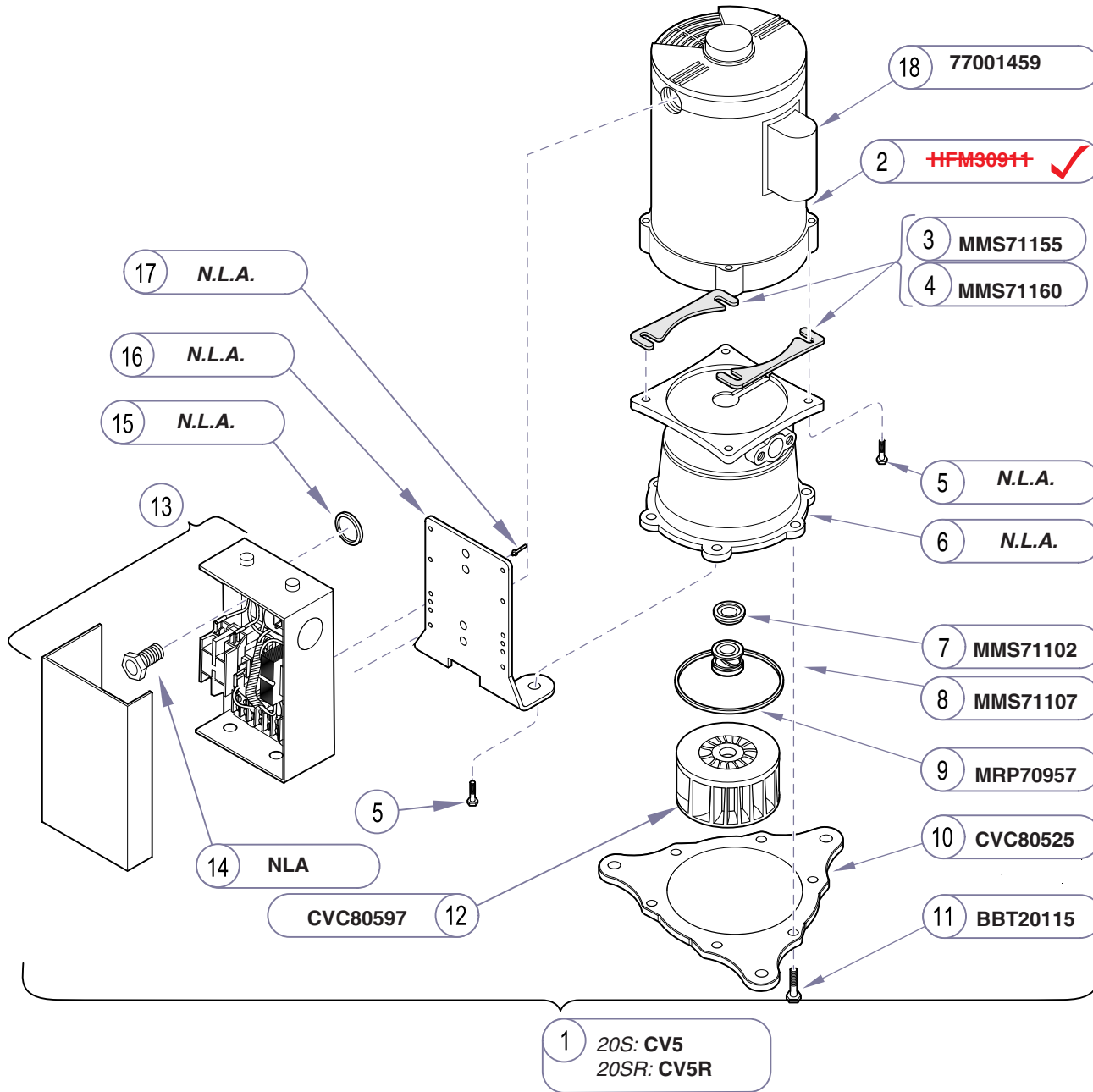
**Always Specify Model & Serial Number**

NLA = No Longer Available

AA131206i

<b>Models:</b>	<b>AVG20S (all)</b>	<b>AVG20SR (all)</b>		
<b>Serial Numbers:</b>	V2200 thru Present	V2200 thru Present		

## Pump Assembly Components



Item	Description	Qty.
1	Pump Assembly w/Electric Box (Includes items 1 thru 17) .....	1
2	• <b>No Longer Available -</b> Vacuum Pump Motor .....	1
3	• Housing Shim (.005) .....	2
4	• Housing Shim (.010) .....	2
5	• Bolt (3/8"-16 x 3/4" #5 Plated) .....	4
6	• Vacuum Housing (Classic Bronze 1 & 1.5 hp) .....	1
7	• Ceramic Seat (3/4" shaft) .....	1
8	• Rotary Seal (3/4" shaft) .....	1
9	• O-ring (1 & 1.5 hp vacuum) .....	1
10	• Baseplate (Classic Bronze 1 & 1.5 hp.) ....	1
11	• Bolt (1/4"-20 x 3/4") .....	6
12	• Impeller (Classic Bronze 1hp.) .....	1
13	• Refer to: "Vaccum Electrical Box" .....	Ref
14	• Nipple (1/2") .....	1
15	• Shake Proof Washer(7/8" star) .....	1
16	• Electric Box Bracket .....	1
17	• Pop rivet 1/8" SS .....	2
18	• Capacitor .....	1

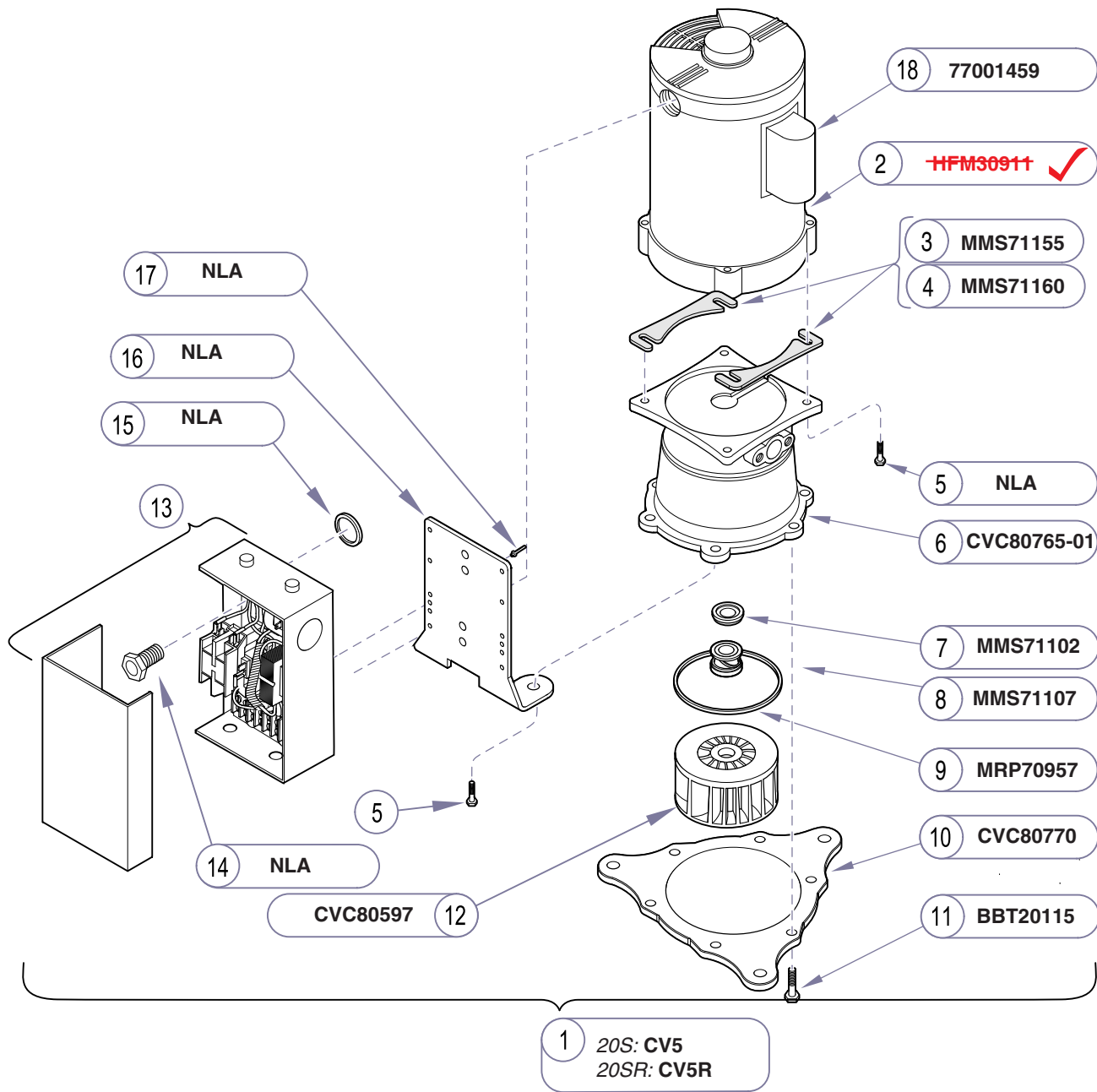
**Always Specify Model & Serial Number**

N.L.A. Denotes "No Longer Available"

AA131206i

## Pump Assembly Components

<b>Models:</b>	<b>AVU20S (all)</b>	<b>AVU20SR (all)</b>
<b>Serial Numbers:</b>	V2200 thru V128000	V2200 thru V127993



Item	Description	Qty.
1	Pump Assembly w/Electric Box (Includes items 1 thru 17)	1
2	<del>No Longer Available</del> - Vacuum Pump Motor	1
3	Housing Shim (.005)	2
4	Housing Shim (.010)	2
5	Bolt (3/8"-16 x 3/4" #5 Plated)	4
6	Vacuum Housing (Classic Bronze 1 & 1.5 hp)	1
7	Ceramic Seat (3/4" shaft)	1
8	Rotary Seal (3/4" shaft)	1
9	O-ring (1 & 1.5 hp vacuum)	1
10	Baseplate (Classic Bronze 1 & 1.5 hp.)	1
11	Bolt (1/4"-20 x 3/4")	6
12	Impeller (Classic Bronze 1hp.)	1
13	Refer to: "Vaccum Electrical Box"	Ref
14	Nipple (1/2")	1
15	Shake Proof Washer (7/8" star)	1
16	Electric Box Bracket	1
17	Pop rivet 1/8" SS	2
18	Capacitor	1

Always Specify Model & Serial Number

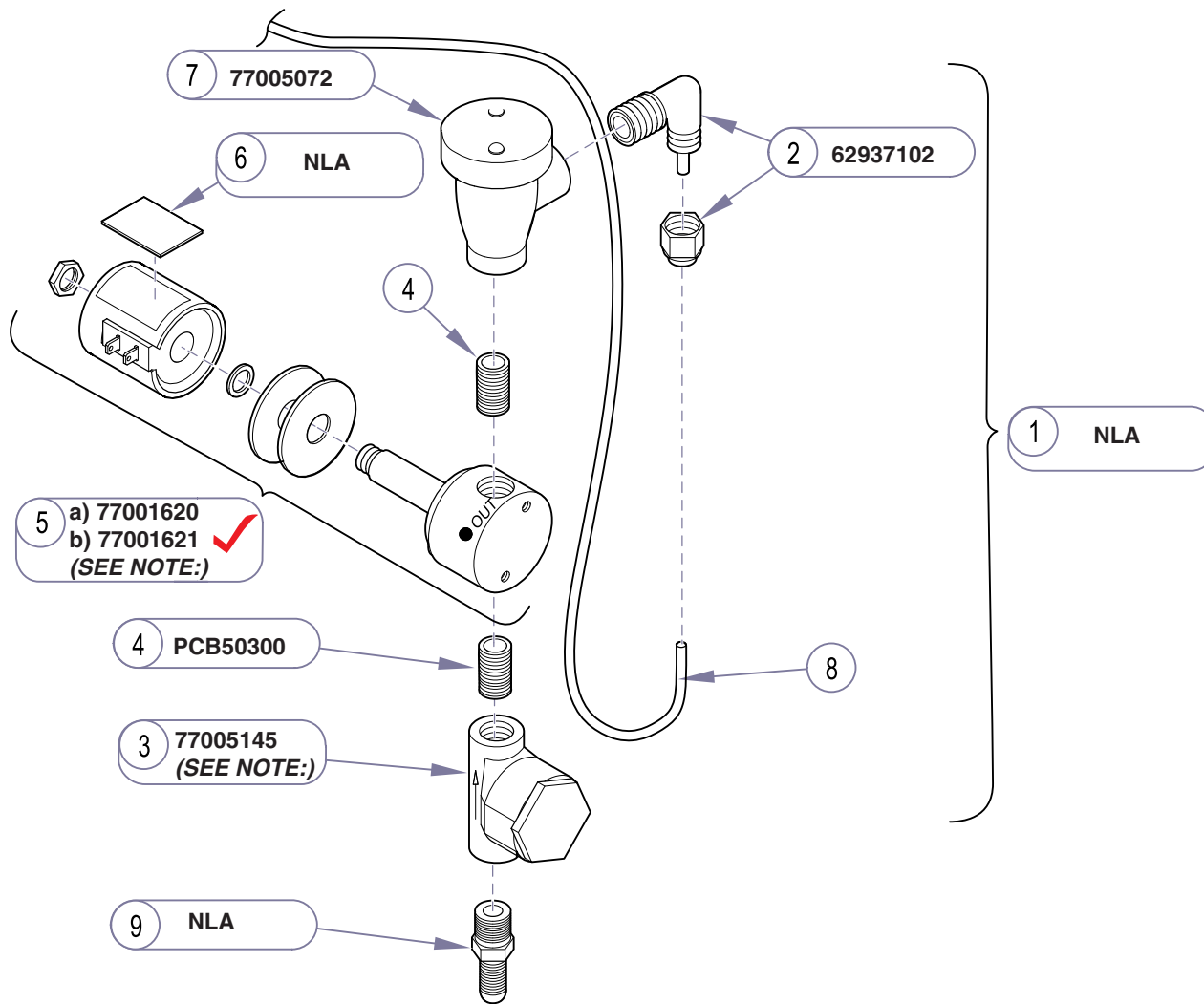
NLA = No Longer Available

AA131206i

<b>Models:</b>	<b>AVU20S (all)</b>	<b>AVU20SR (all)</b>		
<b>Serial Numbers:</b>	V128001 thru Present	V127994 thru Present		

## Pump Assembly Components

E-15.1



Item	Description	Qty.
1a	Vac Water Solenoid Assembly (115 volt) (used on all AV*10* and AV*15* models)	
1b	Vac Water Solenoid Assembly (230 volt) (used on all AV*20* models) (Includes Items 2 thru 12)	1
2	• Elbow (1/4")	1
3	• Strainer (1/4" Brass)	1
<b>Note: Direction of arrow is up)</b>		
4	• Nipple Close (1/4")	2
5a	• Solenoid Valve (1/4" S.S VAC, 115 volt)	1
5b	• Solenoid Valve (1/4" S.S VAC, 230 volt)	1
<b>(Note: "OUT" on this solenoid should be assembled so that it will appear on the top of this assy, along with RED MARK. Conversely "IN" should appear on the bottom of assy)</b>		
6a	• Unit Sticker (115 volt)	1
6b	• Unit Sticker (230 volt)	1
7	• Anti-Siphon Valve (1/4")	1
8	Refer to: "Main Components"	Ref

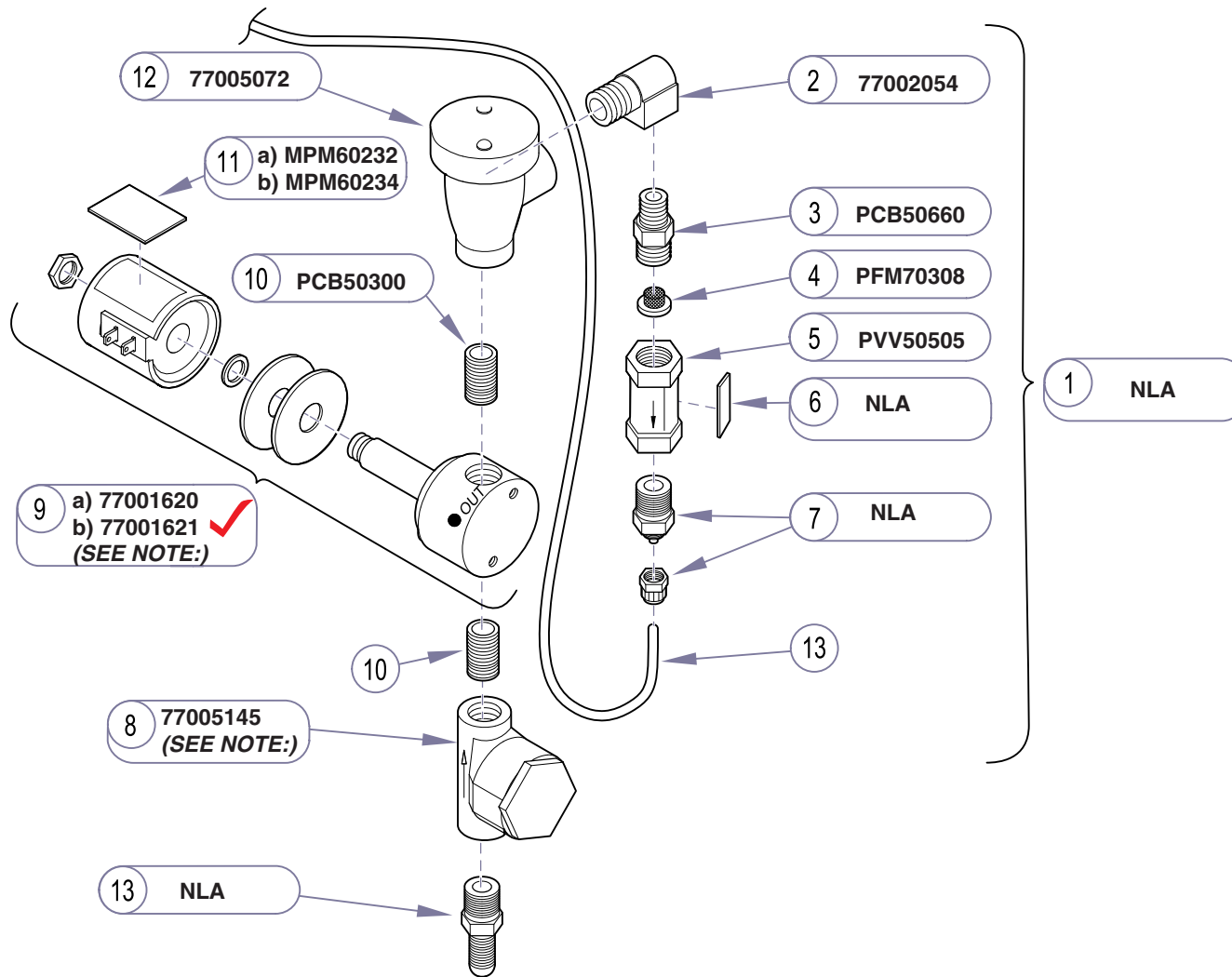
**Always Specify Model & Serial Number**

NLA = No Longer Available

AA131001i

**Vacuum Water Solenoid Assembly w/o Recycler**

Models:	AVB10S (all)	AVG10S (all)	AVU10S (all)	AVB15S (all)	AVG15S (all)
Serial Numbers:	V2200 thru Present	V2200 thru Present	V2200 thru Present	V2200 thru Present	V2200 thru Present
	AVG15S (all)	AVB20S (all)	AVG20S (all)	AVU20S (all)	
	V2200 thru Present	V2200 thru Present	V2200 thru Present	V2200 thru Present	



Item	Description	Qty.
1a	Vac Water Solenoid Assembly (115 volt) (used on all AV*10* and AV*15* models)	
1b	Vac Water Solenoid Assembly (230 volt) (used on all AV*20* models)	
	(Includes Items 2 thru 12) .....	1
2	• Elbow (1/4") .....	1
3	• Reducer Nipple (3/8" x 1/4") .....	1
4	• Filter Washer (.6 x .35 50x60 Mesh) .....	1
5	• Valve Flow Regulator (.19 GPM) .....	1
6	• Strainer Washer Label .....	1
	<b>(Note: Direction of arrow is down)</b>	
7	• Polyflow (MPT ST 3/8" x 1/4") .....	1
8	• Strainer (1/4" Brass) .....	1
	<b>(Note: Direction of arrow is up)</b> .....	2
9a	• Solenoid Valve (1/4" S.S VAC, 115 volt) ..	1
9b	• Solenoid Valve (1/4" S.S VAC, 230 volt) ..	1
	<b>(Note: "OUT" on this solenoid should be assembled so that it will appear on the top of this assy, along with RED MARK. Conversely "IN" should appear on the bottom of assy)</b>	
10	• Nipple Close (1/4") .....	2
11a	• Unit Sticker(115 volt) .....	1
11b	• Unit Sticker(230 volt) .....	1
12	• Anti-Siphon Valve (1/4") .....	1
13	Refer to: "Main Components" .....	Ref

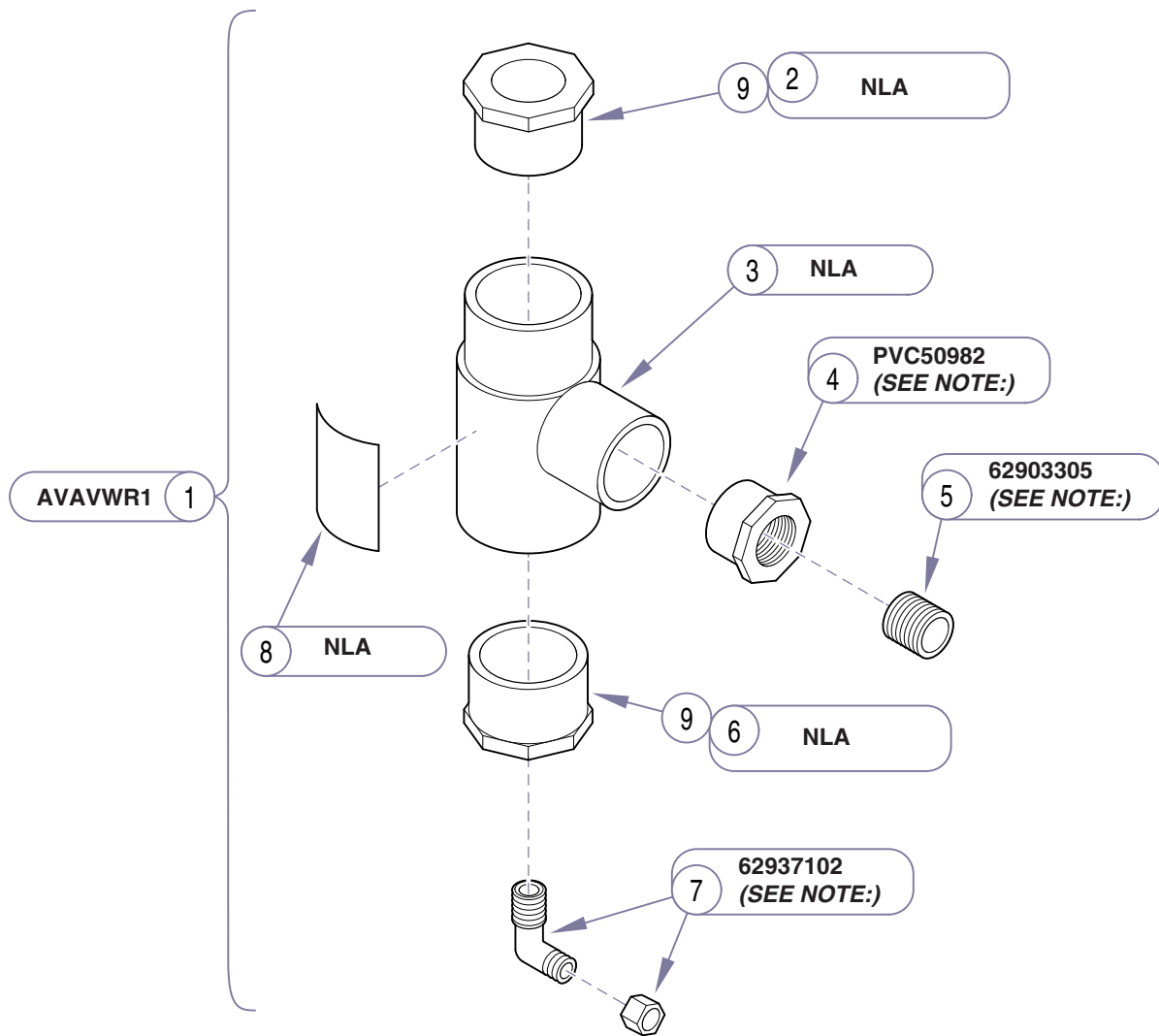
**Always Specify Model & Serial Number**

NLA = No Longer Available

AA130901i

<b>Models:</b>	<b>AVB10SR</b> (all) V2200 thru Present	<b>AVG10SR</b> (all) V2200 thru Present	<b>AVU10SR</b> (all) V2200 thru Present	<b>AVB15SR</b> (all) V2200 thru Present	<b>AVG15SR</b> (all) V2200 thru Present
<b>Serial Numbers:</b>	<b>AVU15SR</b> (all) V2200 thru Present	<b>AVB20SR</b> (all) V2200 thru Present	<b>AVG20SR</b> (all) V2200 thru Present	<b>AVU20SR</b> (all) V2200 thru Present	

**Vacuum Water Solenoid Assembly w/Recycler**



Item	Description	Qty.
1	Simple Solution Water Recycler (Includes Items 2 thru 9) .....	1
2	• PVC Bushing (1.25" SP x .75" FPT) .....	1
	<b>(Note: Requires Cement Item #9)</b>	
3	• Tee (1.5" x 1.25" x 1" Slip) .....	1
4	• PVC Bushing (1" x .75") .....	1
	<b>(Note: Requires No Cement)</b>	
5	• Nipple (.75" Close Brass) .....	1
	<b>(Note: Hand Tighten)</b>	
6	• PVC Bushing (1.5" SPIG x .25 FPT) .....	1
	<b>(Note: Requires Cement Item #9)</b>	
7	• Elbow (1/4" ca x 1/4" mpt) .....	1
	<b>(Note: Requires Teflon Tape on part)</b>	
8	• Simple Solution Label .....	1
9	• PVC Cement (Part # RSS40635) .....	AR
<b>Always Specify Model &amp; Serial Number</b>		

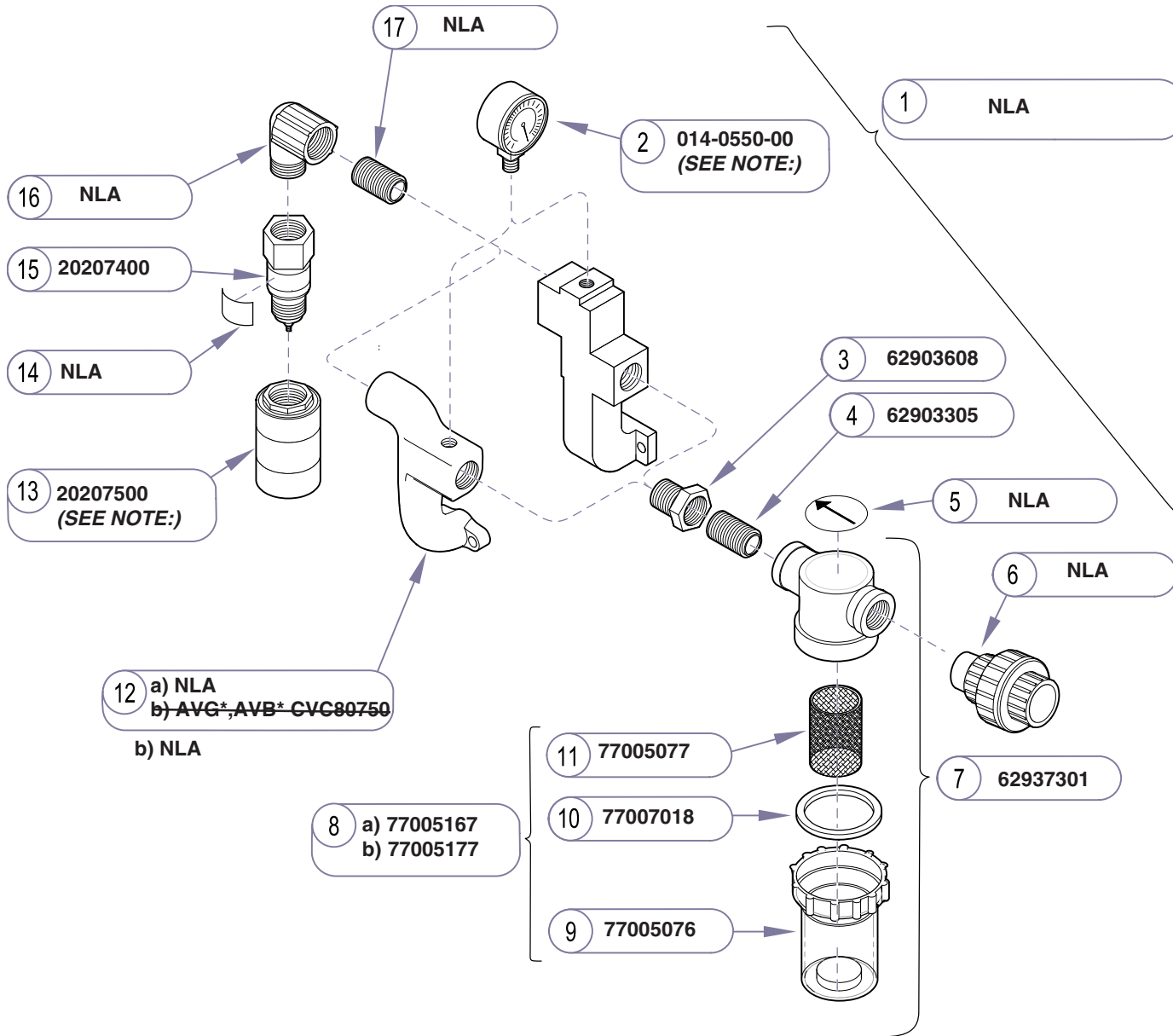
NLA = No Longer Available

AA131100i

# Simple Solution Water Recycler

<b>Models:</b> <b>Serial Numbers:</b>	<b>AVB10SR (all)</b> V2200 thru Present	<b>AVG10SR (all)</b> V2200 thru Present	<b>AVU10SR (all)</b> V2200 thru Present	
	<b>AVB20SR (all)</b> V2200 thru Present	<b>AVG20SR (all)</b> V2200 thru Present	<b>AVU20SR (all)</b> V2200 thru Present	





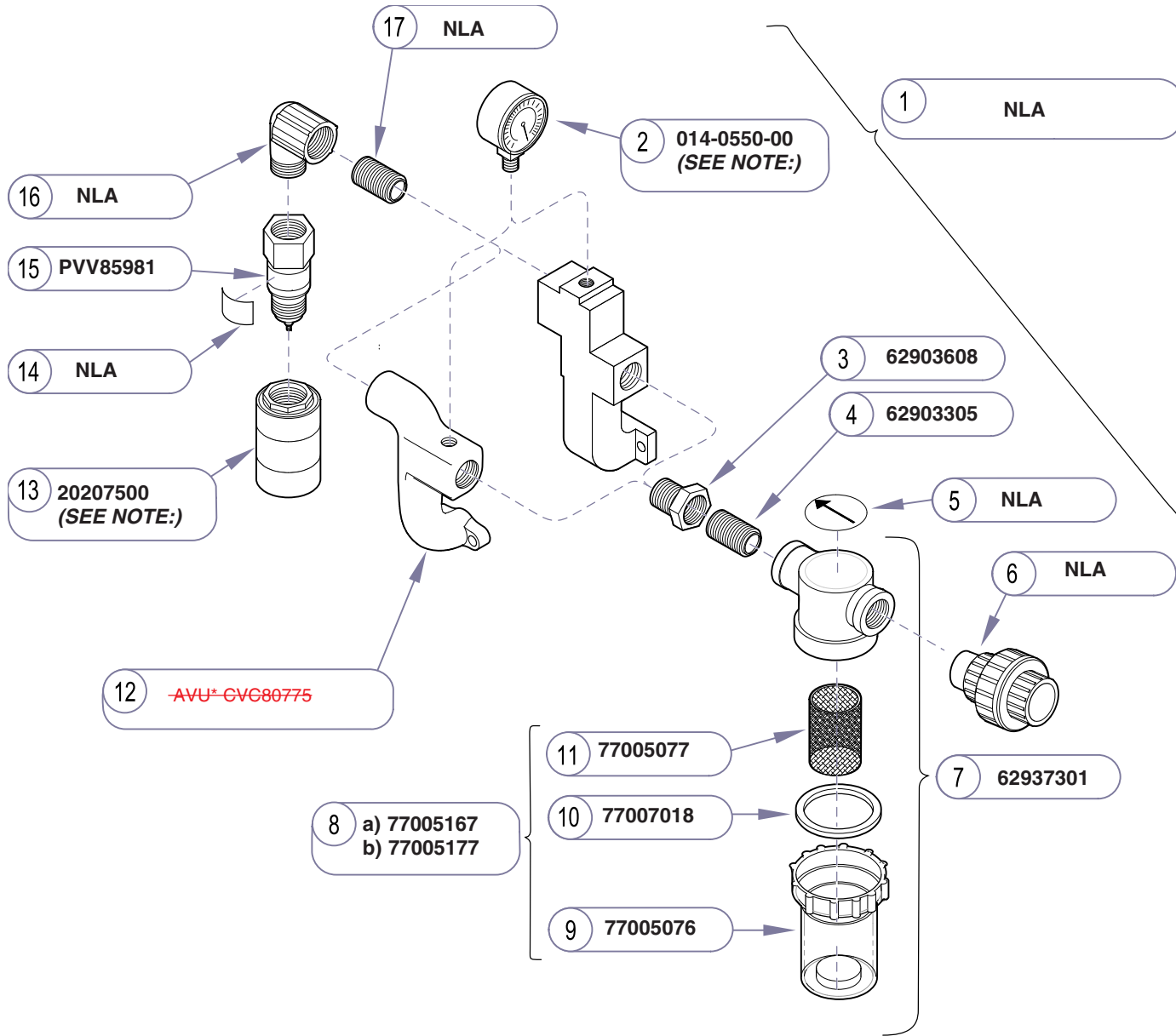
Item	Description	Qty.
1a	Vacuum Intake Assembly(avb* & avg*) .....	1
1b	Vacuum Intake Assembly(avu).....	1
2	Vacuum Gauge (2 x1/4" NPT) .....	1
	<b>(Note:Requires Teflon Tape #18).....</b>	1
	Intake Manifold (1-2 hp Stainless Steel) .....	1
	Intake Manifold (1-2 hp Gold& Bronze) .....	1
3	PVC Bushing (1" mpt x 3/4" FPT) .....	1
4	Nipple (3/4" Close Brass) .....	1
5	Decal (3/4" Dispose-a-bowl Top) .....	1
6	Union Toe Nipple Assy .....	1
7	Strainer (3/4")(Includes Items 8 thru 11) .....	1
8a	Dispose-a-bowl(Includes Items 9 thru 11) ...	1
8b	Dispose-a-bowl (12 pack carton) .....	1
9	Bowl Strainer .....	1
10	Gasket .....	1
11	Screen .....	1
12a	Intake Manifold (1-2 hp Stainless Steel) .....	1
12b	Intake Manifold (1-2 hp Gold & Bronze) .....	1
	<b>(Note:Hand Tighten ONLY)</b>	
13	Vacuum Relief Filter (1 inch) .....	1
14	Relief Valve Label .....	1
15	Vacuum Relief Valve (1 inch) .....	1
16	Elbow .....	1
17	Nipple (1" Close Brass).....	1
18	Teflon Tape (RSS40671) not shown .....	AR
<b>Always Specify Model &amp; Serial Number</b>		

NLA = No Longer Available

AA131602i

Models:	AVB10S (all)	AVG10S (all)	AVU10S (all)	AVB15S (all)
Serial Numbers:	V2200 thru Present	V2200 thru Present	V2200 thru V127992	V2200 thru Present
	<b>AVB10SR (all)</b>	<b>AVG10SR (all)</b>	<b>AVU10SR (all)</b>	<b>AVB15SR (all)</b>
	V2200 thru Present	V2200 thru Present	V2200 thru V124580	V2200 thru Present

## Vacuum Intake Assembly - 115v



Item	Description	Qty.
1a	Vacuum Intake Assembly(avb* & avg*) .....	1
1b	Vacuum Intake Assembly(avu) .....	1
2	Vacuum Gauge (2 x1/4" NPT) .....	1
	<b>(Note:Requires Teflon Tape #18)</b> .....	1
	Intake Manifold (1-2 hp Stainless Steel) .....	1
	Intake Manifold (1-2 hp Gold& Bronze) .....	1
3	PVC Bushing (1" mpt x 3/4" FPT) .....	1
4	Nipple (3/4" Close Brass) .....	1
5	Decal (3/4" Dispose-a-bowl Top) .....	1
6	Union Toe Nipple Assy .....	1
7	Strainer (3/4")(Includes Items 8 thru 11) .....	1
8a	Dispose-a-bowl(Includes Items 9 thru 11) ...	1
8b	Dispose-a-bowl (12 pack carton) .....	1
9	Bowl Strainer .....	1
10	Gasket .....	1
11	Screen .....	1
12	Intake Manifold (1-2 hp Stainless Steel) .....	1
13	Vacuum Relief Filter (1 inch) .....	1
	<b>(Note:Hand Tighten ONLY)</b>	
14	Relief Valve Label .....	1
15	Vacuum Relief Valve (1 inch) .....	1
16	Elbow .....	1
17	Nipple (1" Close Brass) .....	1
18	Teflon Tape (RSS40671) not shown .....	AR

**Always Specify Model & Serial Number**

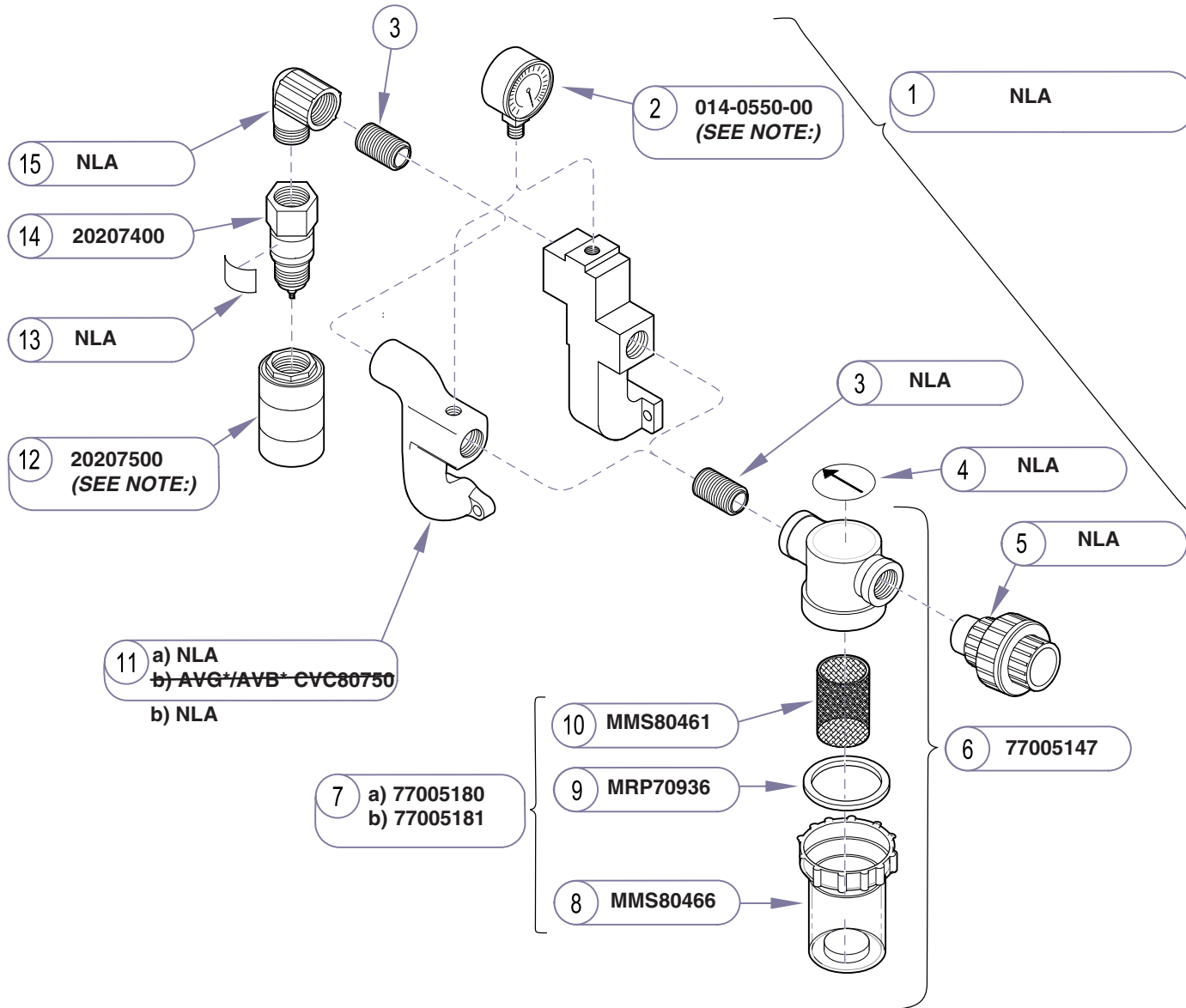
NLA = No Longer Available

AA131602i

E-19.1

**Vacuum Intake Assembly - 115v**

<b>Models:</b>	<b>AVU10S (all)</b>	<b>AVU10SR (all)</b>		
<b>Serial Numbers:</b>	V127993 thru Present	V124581 thru Present		



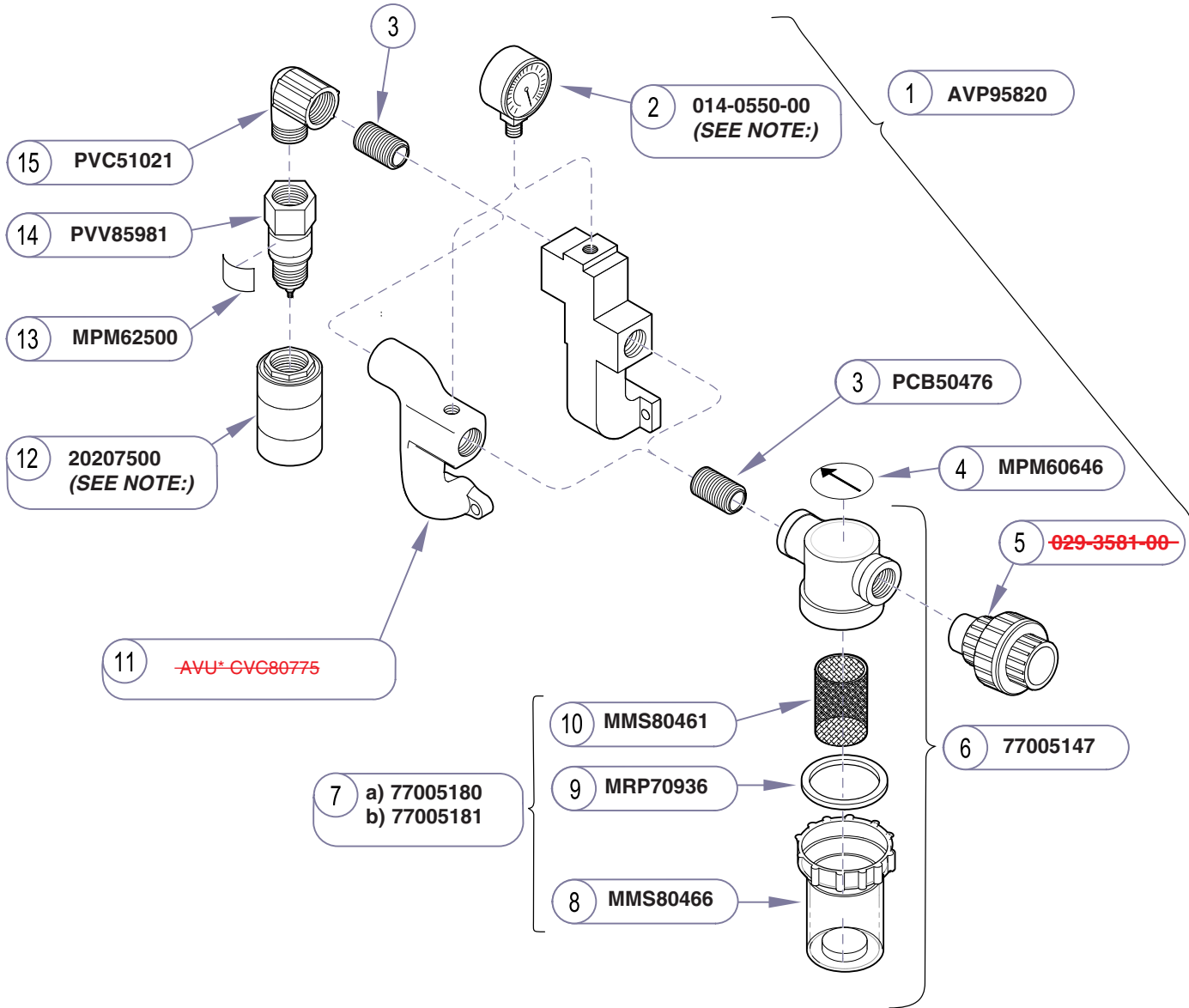
Item	Description	Qty.
1a	Vacuum Intake Assembly(avb* & avg*) .....	1
1b	Vacuum Intake Assembly(avu).....	1
2	Vacuum Guage (2 x1/4" NPT) .....	1
	<b>(Note:Requires Teflon Tape #16).....</b>	1
3	Nipple (1" Close Brass).....	2
4	Decal (1" Dispose-a-bowl Top) .....	1
5	UnionToe Nipple Assy .....	1
6	Strainer (1")/Includes Items 8 thru 11) .....	1
7a	Dispose-a-bowl/Includes Items 9 thru 11) ...	1
7b	Dispose-a-bowl (8 pack carton) .....	1
8	Bowl Strainer .....	1
9	Gasket .....	1
10	Screen .....	1
11a	Intake Manifold (1-2 hp Stainless Steel) ....	1
11b	Intake Manifold (1-2 hp Gold) .....	1
	<b>(Note:Hand Tighten ONLY)</b>	
12	Vacuum Relief Filter 1 inch).....	1
13	Relief Valve Label .....	1
14	Vacuum Relief Valve Kit (1 inch - Kit includes a filter) .....	1
15	Elbow .....	1
16	Teflon Tape (RSS40671) not shown .....	AR
	<b>Always Specify Model &amp; Serial Number</b>	

NLA = No Longer Available

AA131502i

<b>Models:</b>	<b>AVB20S (all)</b> V2200 thru Present	<b>AVG20S (all)</b> V2200 thru Present	<b>AVU20S (all)</b> V2200 thru V127993
<b>Serial Numbers:</b>	<b>AVB20SR (all)</b> V2200 thru Present	<b>AVG20SR (all)</b> V2200 thru Present	<b>AVU20SR (all)</b> V2200 thru V128000

## Vacuum Intake Assembly - 230v



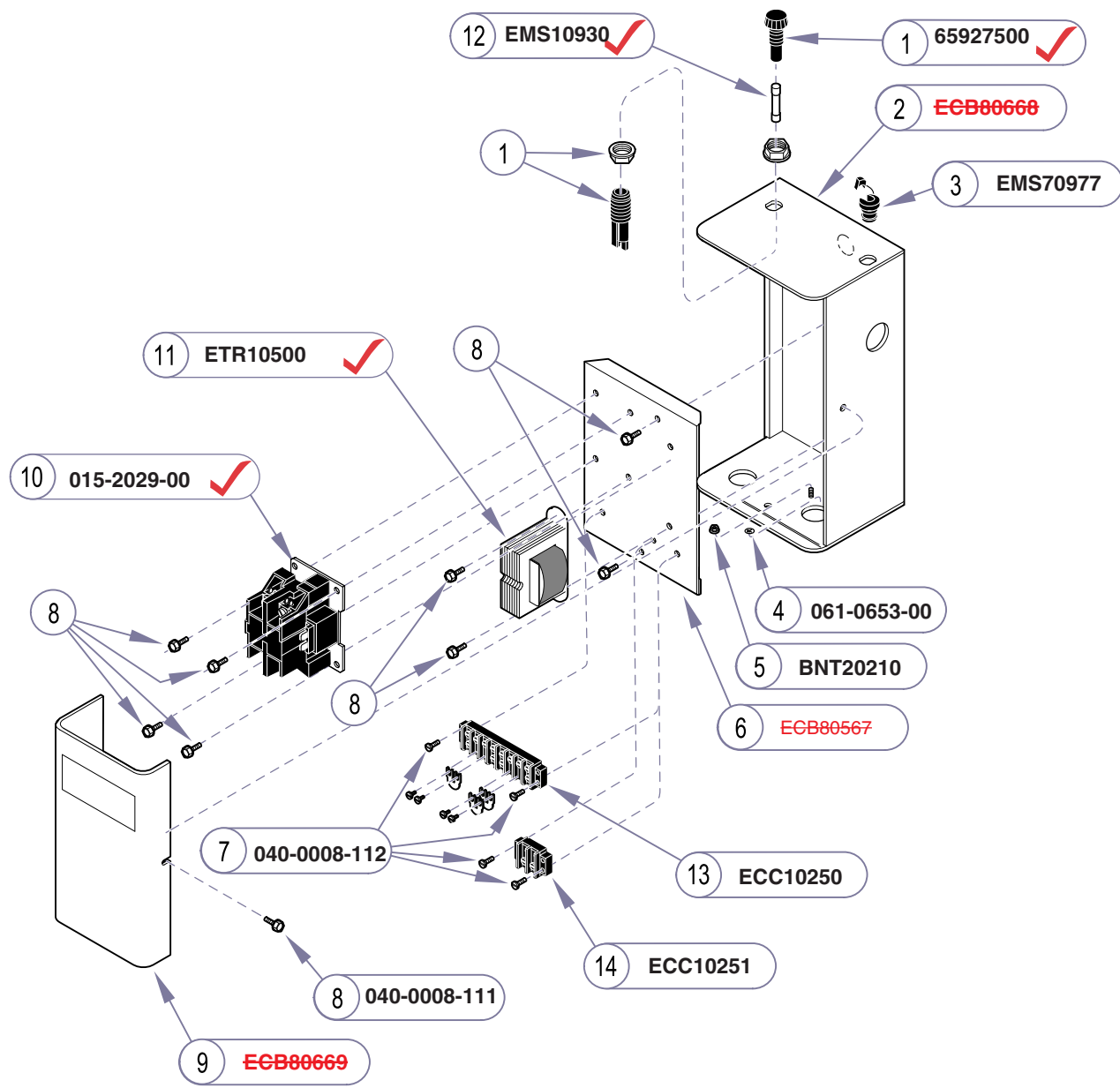
Item	Description	Qty.
1	Vacuum Intake Assembly .....	1
2	Vacuum Gauge (2 x1/4" NPT) .....	1
	<b>(Note: Requires Teflon Tape #16).....</b>	1
3	Nipple (1" Close Brass).....	2
4	Decal (1" Dispose-a-bowl Top) .....	1
5	<del>UnionToe Nipple Assy, No Longer Available</del>	
6	Strainer (1")(Includes Items 8 thru 11) .....	1
7a	Dispose-a-bowl(Includes Items 9 thru 11) ...	1
7b	Dispose-a-bowl (8 pack carton) .....	1
8	Bowl Strainer .....	1
9	Gasket .....	1
10	Screen .....	1
11	Intake Manifold (1-2 hp Stainless Steel) .....	1
12	Vacuum Relief Filter (1 inch) .....	1
	<b>(Note: Hand Tighten ONLY)</b>	
13	Relief Valve Label .....	1
14	Vacuum Relief Valve Kit (1 inch - Kit includes a filter) .....	1
15	Elbow .....	1
16	Teflon Tape (RSS40671) not shown .....	AR

**Always Specify Model & Serial Number**

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## Vacuum Intake Assembly - 230v

**Models:** AVU20S (all) AVU20SR (all)  
**Serial Numbers:** V127994 thru Present V128001 thru Present



Item	Description	Qty.
	<b>SVA95830 (115 Volt [incl. items 2 thru 13] (No Longer Available as an Assembly))</b>	
	<b>SVA95835 (230 Volt [incl. items 2 thru 12 &amp; 14] (No Longer Available as an Assembly))</b>	
1	Fuseholder .....	1
2	<b>No Longer Available</b> - Electrical Box .....	1
3	Strain Relief .....	1
4	Ground Label .....	1
5	Keps Nut .....	1
6	Electrical Box Platform .....	1
7	Screw (8-32 x 1/2") .....	4
8	Screw (8-32 x 1/4") .....	8
9	<b>No Longer Available</b> - Electrical Box Cover Single VAC .....	1
10	Relay (24 volt) .....	1
11a	Transformer (115/230 volt) .....	1
11b	Transformer (230 volt) .....	1
12	Fuse (.5 amp VAC) .....	1
13	Terminal Block (used on 115 volt) .....	1
14	Always Specify Model & Serial Number	1

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<b>Models:</b>	<b>All</b>				
<b>Serial Numbers:</b>	V2200 thru Present				

**Vacuum Electric Box**

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