



245 W. Roosevelt Road  
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West Chicago, IL 60185  
800-323-4498

[www.aquamarkboosters.com](http://www.aquamarkboosters.com)



# Installation, Operation & Maintenance Manual

## for

### AquaMark model AM-15V

Standard electrical connection is 120 volt. 20 amp dedicated circuit suggested.

## THIS PUMP MUST BE PRIMED!

Open the city water supply valve to the booster. Open the discharge valve from the pressure booster system that supplies water to the building. Run water in the building for a minute. This will force water into the pump housing from the city. The pump will be primed.

- We recommend a bypass valve configuration be installed on ALL booster pump installations.
- In normal operation the bypass valve should be in the closed position.
- In normal operation the supply line valve from the city water main MUST remain open.
- In normal operation the discharge valve to the building from the booster should be open.
- There is a relief valve included and installed on this AquaMark pressure booster system. This relief valve discharge shall be piped to a floor drain.
- Yearly inspections should be made to check for leaks or unusual noise and proper maintenance procedures performed if necessary.

**Relief valve discharge outlet shall be piped to floor drain. Follow local codes pertaining to relief valve piping and drainage.**

# Installation

- Leave 12” of clear space around the pressure booster to allow for service work to be performed as necessary in the future.
- Plumb pressure booster as shown in the diagram included in this manual.
- Supply pressure booster with correct incoming minimum supply line size (or greater) as noted on the first page of this manual.
- Plumb a three valve bypass system during installation of this pressure booster. When service needs to be performed this will allow normal city water pressure to be supplied to the building while servicing/repairing the pressure booster system.
- Unions are recommended when installing this pressure booster system.
- Optional accessories include anti-vibration mat, vibration isolator and diaphragm type tank to be installed after the booster system (the tank will allow for extended shut down periods during low flow demands).
- Have your electrician supply this pressure booster with a dedicated circuit.

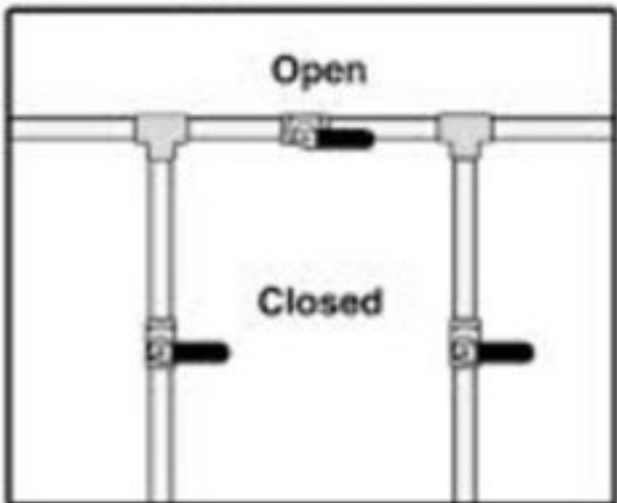
# Operation

- Make sure valve from city water supply to the pressure booster is in the full open position.
- Make sure valve on the discharge side of the pressure booster is in the full open position.
- Make sure that the bypass valve line is in the full closed position (if the bypass valve is in the open position the pressure booster will not shut off).
- Supply electrical power to the pressure booster by switching the wall mounted cut-off switch to the on position.
- Pressure booster will turn on and boost pressure to the desired set-point. Pressure booster will continue to run until the demand has been met. Pressure booster will enter sleep mode after demand has been met and a pre-determined amount of time has passed.

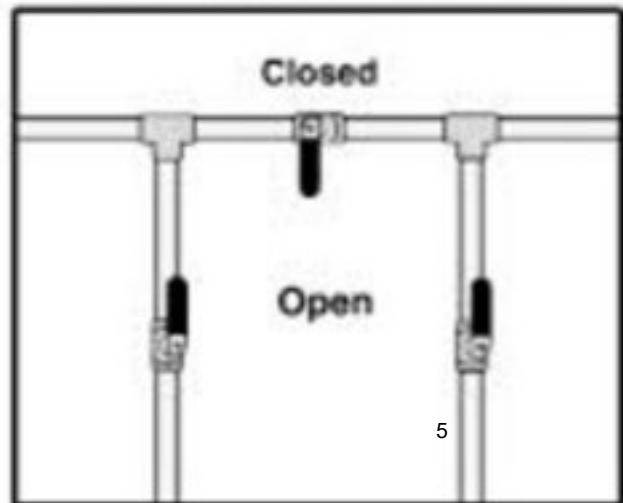
# Maintenance

- This pressure booster has been designed to be maintenance free for many years.
- Do not rest items against switches, gauges, tank drain valves, or pressure relief valve.
- Do not rest items against pump. The pump requires free air space surrounding it to dissipate heat and take in fresh air for cooling purposes. Leave 12" of free air space all around the system.

**In Bypass Position**



**In Service Position**



## Submittal Data

**AquaMark**  
 245 W. Roosevelt Rd  
 Building 12, Suite 83  
 West Chicago, IL 60185  
 Ph.# 800-323-4498

## Variable Frequency Drive

**Simplex Water Pressure  
 Ultra Low Profile  
 Booster System**

### AquaMark Model# AM-15V



Dimensions					Pipe Size				
Model	Motor	Height	Length	Width	Inlet	Outlet	Voltage	Hz.	Phase
AM-15V	3/4 HP	20"	24"	14"	1"	1"	120	60	1
Optional Voltage							240	60	1
Materials of Construction					Operating Conditions				
Description									
Pump Casing		Stainless Steel			Max. Flow		15 GPM		
Impeller		Stainless Steel			Max. Press Boost		See Chart Below		
Shaft		Stainless Steel			Max. System Press.		95 PSI		
Seal		Type 21			Min. Suction Press.		10 PSI		
Platform		Fab. Steel			Low Pressure Cut-off		7 PSI		
Valves		Brass			VFD Control		Nema1		
Connection Piping		Brass			Supply Line Minimum		See Below		
Diaphragm Tank		Steel			Up to a 5 Story Building				
Motor		ODP							

3/4" to 10 GPM 1" to 15 GPM	An additional tank may be installed after the booster for longer shut down periods during low flows.
45 PSI Boost @ 5 GPM 105' Head	
37 PSI Boost @ 10 GPM 85' Head	
28 PSI Boost @ 15 GPM 65' Head	
TWO YEAR WARRANTY	

Note: Discharge Line Size Cannot Be Larger Than The Supply Line Size.



# AM-15V

Model JEU

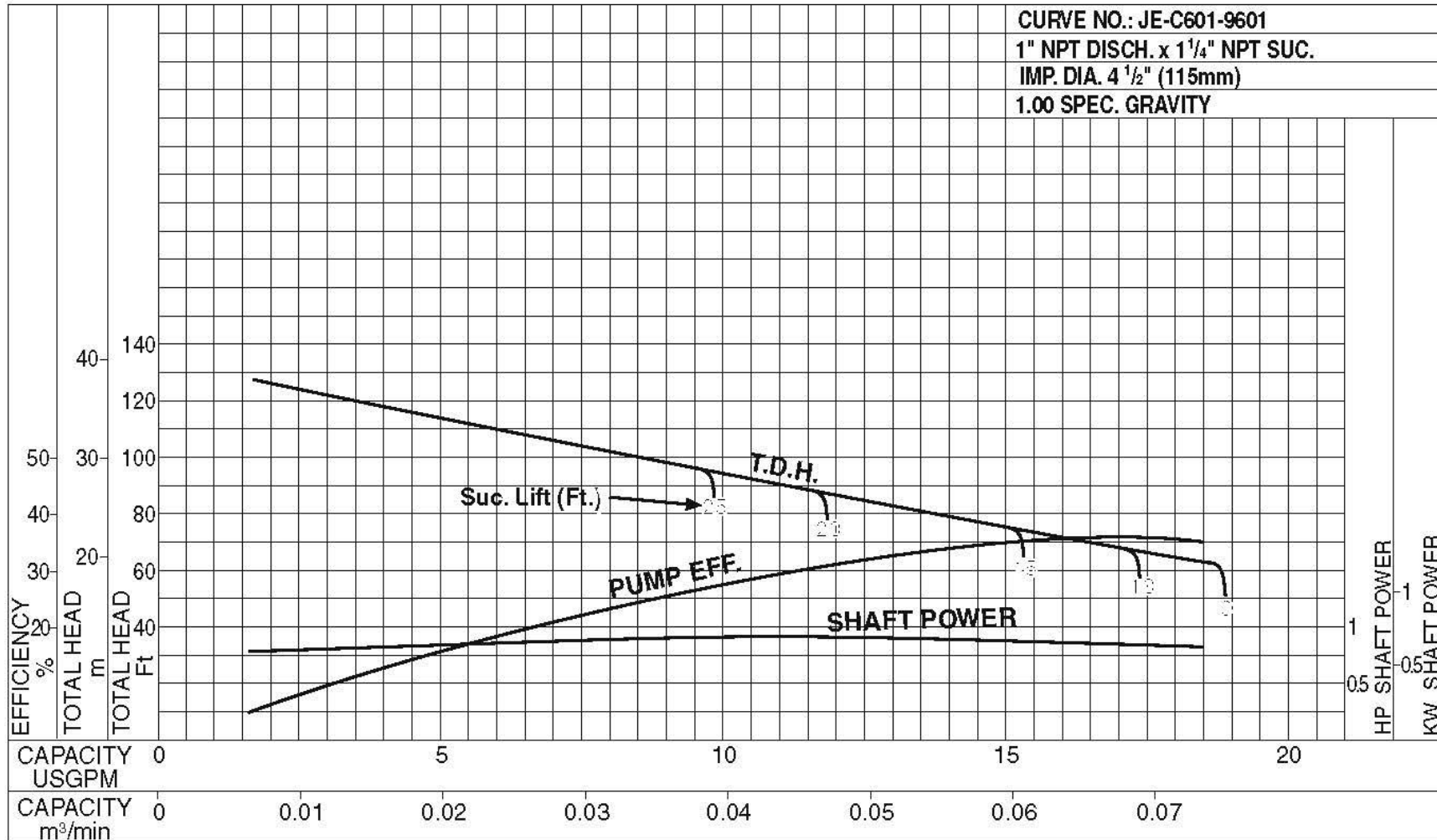
EBARA Stainless Steel Self Priming Jet Pumps

## Performance Curves

JEU806-<sup>3</sup>/<sub>4</sub> HP

Synchronous Speed: 3450 RPM

Size: 1 x 1<sup>1</sup>/<sub>4</sub> x 4<sup>1</sup>/<sub>2</sub>



EBARA



# Model JEU

Self-priming jet



EBARA Fluid Handling

*an EBARA International Corporation company*



# Model JEU

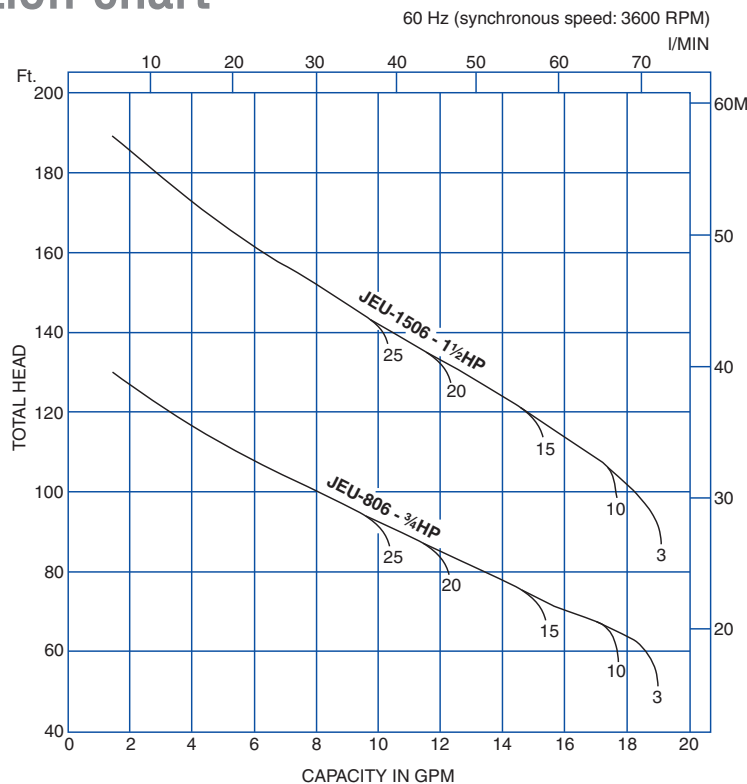
## Features

- **Close coupled design**
  - saves space; simplifies maintenance and installation
- **Stainless steel liquid end components**
  - high quality; corrosion resistance
- **Versatile mounting**
  - can be installed horizontally or vertically
- **Back pullout construction**
  - assembly and overhaul of the impeller and seal without disturbing suction and discharge connections
- **Top centerline discharge and foot support under casing**
  - ensures self-venting and reduces misalignment from pipe loads
- **High operating efficiency**
  - lowers operating costs
- **High quality mechanical shaft seals and o-rings**
  - available for standard pumping requirements or optional high temperature and chemical duty operation

## Applications

- Plant services
- Water supply systems
- Aqueous cleaning
- Bottle washing
- Cooling systems
- Car wash
- Ultrapure water systems
- Jockey pump services
- Sprinkler/flow irrigation
- OEM equipment application
- Pressure boosting
- Liquid transfer
- Spray systems
- Water reclamation and treatment
- General pump applications

## JEU selection chart



Note: Figures in selection chart indicate suction lift (Ft.)



\*Note: NSF/ANSI 61 Annex G listed



### EBARA Fluid Handling

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[www.pumpsebara.com](http://www.pumpsebara.com)

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EICJEU 0806

Model No.	Specifications	Selection Chart	Performance Curve	Pump Dimensions	Sectional View
JEU806- <sup>3</sup> / <sub>4</sub> HP JEU1506-1 <sup>1</sup> / <sub>2</sub> HP	502	503	504	505	506



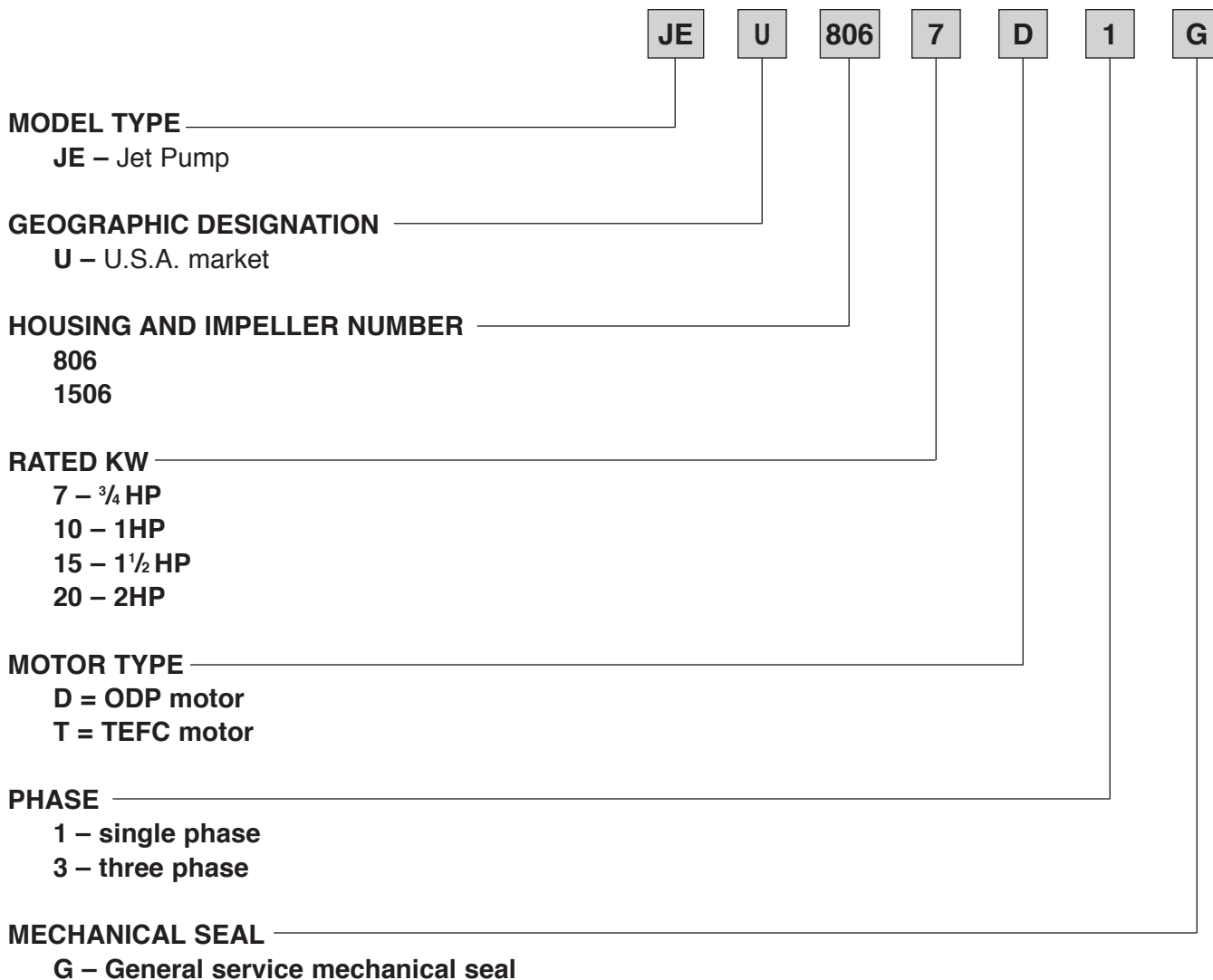
*\*Note: NSF/ANSI 61 Annex G listed*

Certified to  
NSF/ANSI 61, ANNEX G

Model JEU

EBARA Stainless Steel Self Priming Jet Pumps

Model Designation



**Specifications**

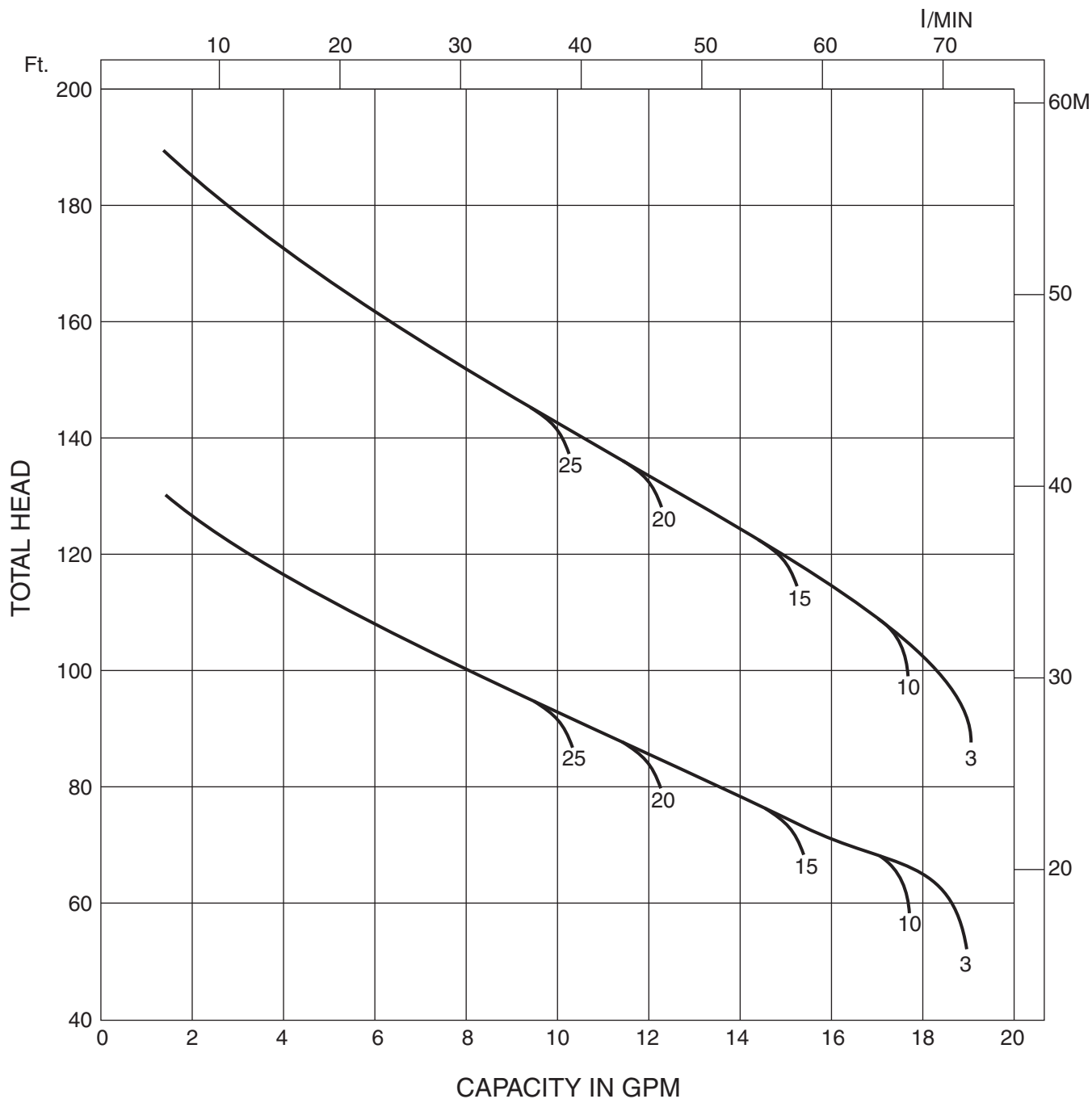
	Standard	Optional
<b>Size</b> Suction Discharge	1 1/4" NPT thread 1" NPT thread	
<b>Range of HP</b>	3/4 HP to 2HP	
<b>Range of Performance</b> Capacity Head	1.5 to 18.5 GPM at 3450 RPM 63 to 190 Feet at 3450 RPM	
<b>Liquid handled</b> Type of liquid Temperature Suction Lift Maximum working pressure	Clean water Maximum: 113°F (45°C) Maximum 25 Ft. at 68°F (20°C) 125 PSI (9 Bar)	
<b>Materials</b> Casing Impeller (closed type) Shaft Ejector Diffuser Bracket Shaft Seal Bearing	304L Stainless Steel 304L Stainless Steel Stainless Steel Noryl plus 20% Fiberglass Noryl plus 20% Fiberglass Aluminum Mechanical Seal – Type 21 Ball Bearing	
<b>Direction of Rotation</b>	Clockwise when viewed from motor end	
<b>Motor</b> Type Speed Single Phase  Three Phase  Motor Protection	NEMA 56J Frame 60 Hz, 3450 RPM (2 poles) TEFC – 1 HP and 2 HP ODP – 3/4 HP and 1 1/2 HP, 115/230V  TEFC – 1 HP and 2 HP ODP – 3/4 HP and 1 1/2 HP, 208-230/460V Built-in overload protection (single phase)	



**Model JEU  
Selection Chart**

**EBARA Stainless Steel Self Priming Jet Pumps**

**60 Hz Synchronous Speed: 3450 RPM**



NOTE: Figures in selection chart indicate suction lift (Ft.).

Model JEU

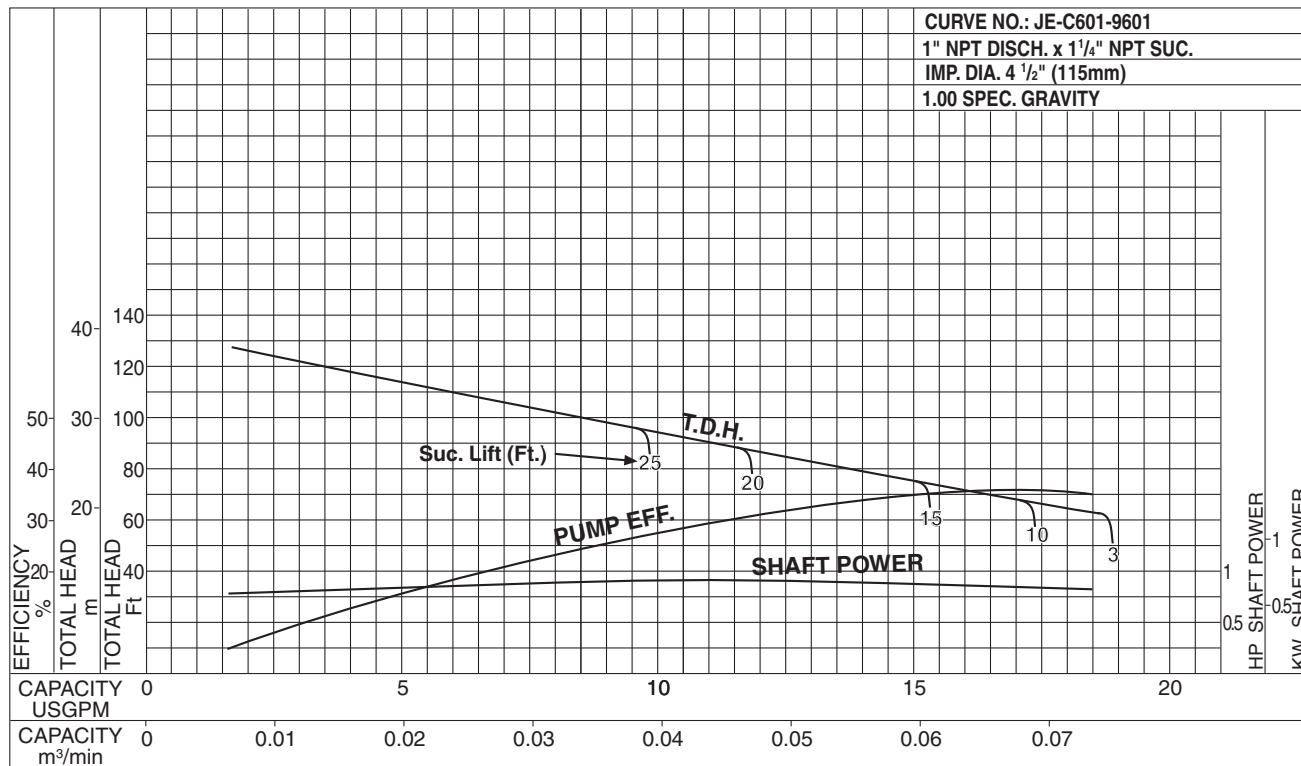
EBARA Stainless Steel Self Priming Jet Pumps

Performance Curves

JEU806-<sup>3</sup>/<sub>4</sub> HP

Synchronous Speed: 3450 RPM

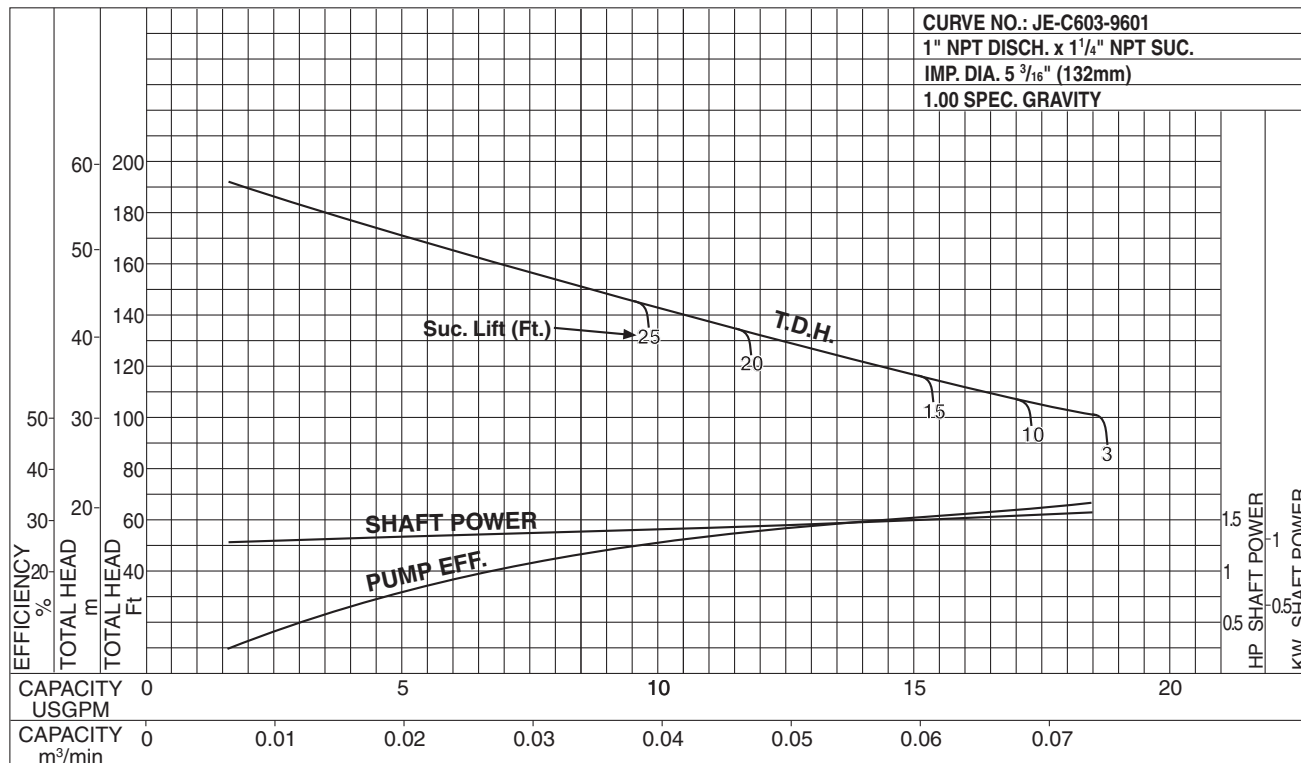
Size: 1 x 1<sup>1</sup>/<sub>4</sub> x 4<sup>1</sup>/<sub>2</sub>



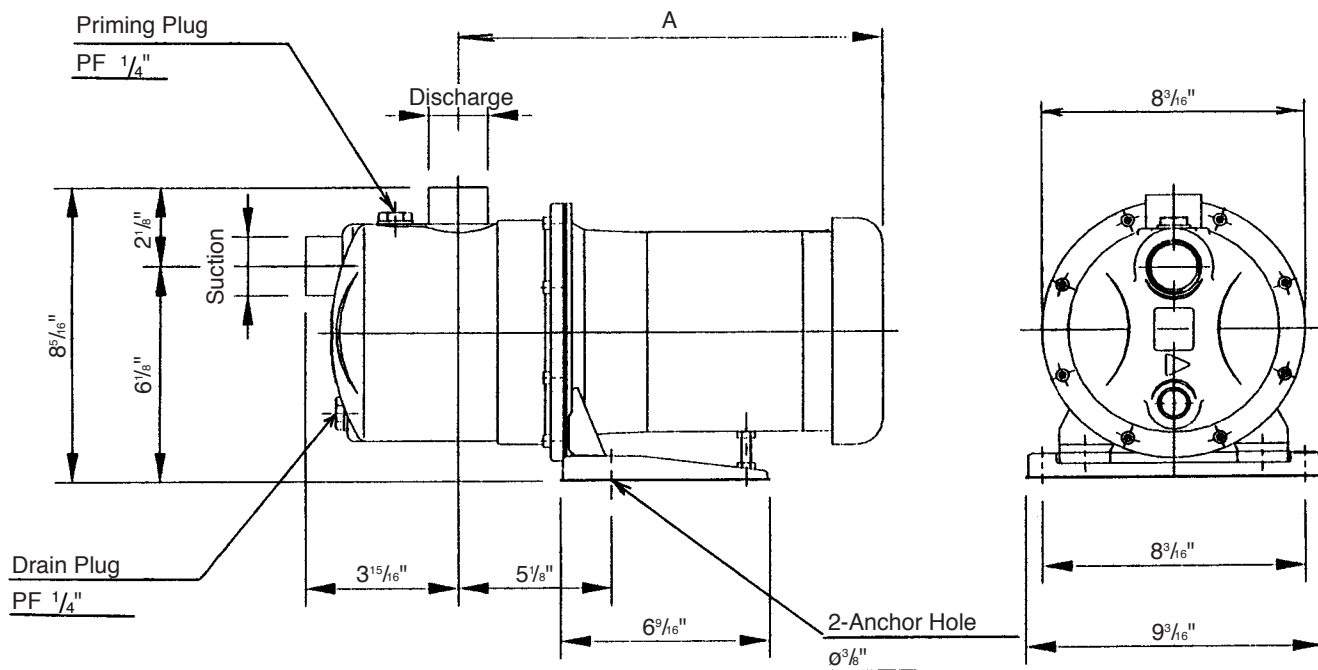
JEU1506-1<sup>1</sup>/<sub>2</sub> HP

Synchronous Speed: 3450 RPM

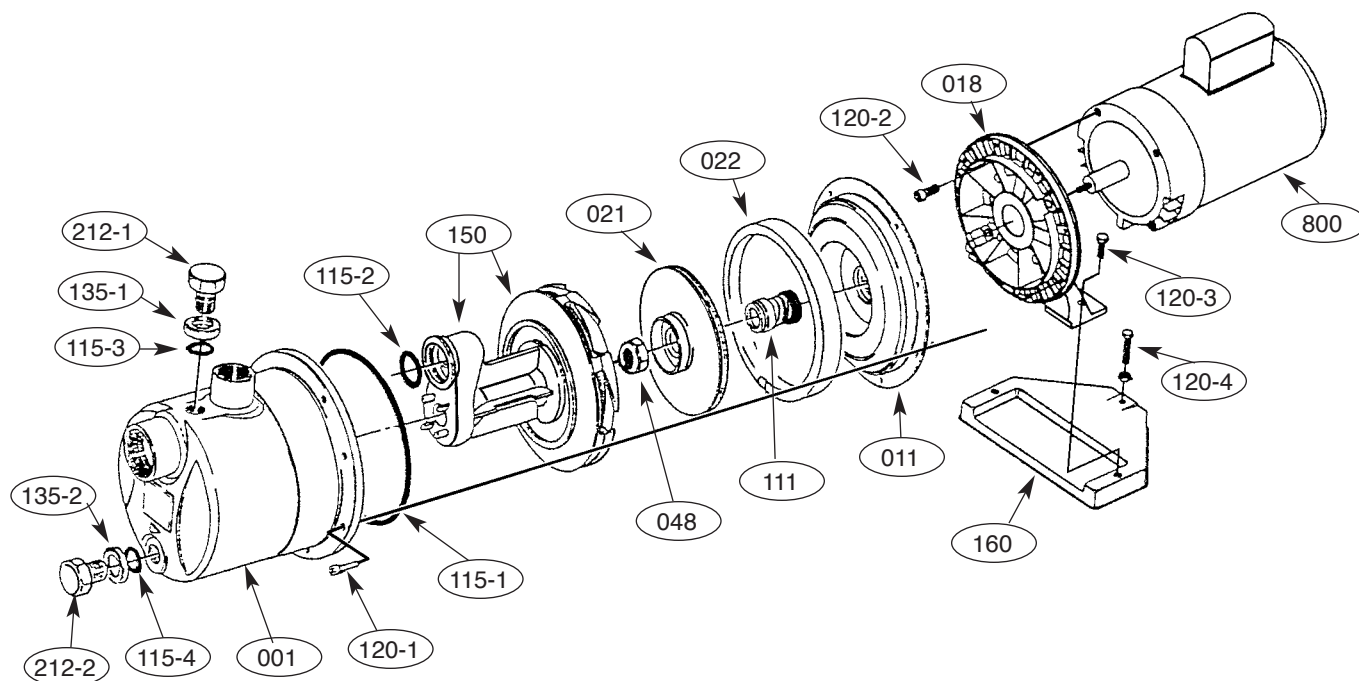
Size: 1 x 1<sup>1</sup>/<sub>4</sub> x 5<sup>3</sup>/<sub>16</sub>



### Dimensions



Model	Size	Pump Size-NPT (inch)		Dimension (inch)	Unit Weight (lbs.)			
		Suction	Discharge	A	Single Phase		Three Phase	
					ODP	TEFC	ODP	TEFC
JEU806-3/4HP	1×1 <sup>1</sup> / <sub>4</sub> ×4 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>4</sub>	1	15 <sup>5</sup> / <sub>8</sub> Max.	37	41	39	43
JEU1506-1 <sup>1</sup> / <sub>2</sub> HP	1×1 <sup>1</sup> / <sub>4</sub> ×5 <sup>3</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>4</sub>	1	19 <sup>1</sup> / <sub>8</sub> Max.	42	46	44	48



Part No.	Part Name	Material	No. for 1 Unit
001	Casing	304L Stainless	1
011	Casing cover	304L Stainless	1
018	Bracket	Aluminum	1
021	Impeller	304L Stainless	1
022	Guide vane	Noryl GFNZ	1
048	Impeller nut	304L Stainless	1
111	Mechanical seal	-	1 set
115-1	O-Ring	Viton	1
115-2	O-Ring	Viton	1
115-3	O-Ring	Viton	1
115-4	O-Ring	Viton	1
120-1	Bolt	304L Stainless	8
120-2	Bolt	304L Stainless	4
120-3	Bolt	304L Stainless	2
120-4	Bolt	304L Stainless	1
135-1	Washer	304L Stainless	1
135-2	Washer	304L Stainless	1
150	Diffuser & Venturi Tube	Noryl GFNZ	1
160	Base	Steel	1
212-1	Plug	304L Stainless	1
212-2	Plug	304L Stainless	1
800	Motor	NEMA 56J Frame	1



## TWO YEAR LIMITED WARRANTY

H.O.K. Sales, Incorporated/AquaMark (referred to as Manufacturer hereinafter) warrants all of its pressure boosting systems (Product) for two years from date of purchase, to be free of defects in materials and workmanship, provided they are installed in accordance with factory specifications (as specified in the "INSTALLATION, OPERATION & MAINTENANCE manual") for each individual system.

This warranty applies to the original purchaser (referred to as Purchaser hereinafter) and subsequent owners. By accepting and keeping this product Purchaser agrees to all the warranty terms and limitations of liability described herein. Manufacturer warrants only to original installation location and only when installed, operated and maintained in accordance with printed instructions accompanying the Product.

All claims must be made within the two (2) year warranty time period measured from the time the Product was purchased.

All warranty claims will be handled as follows: Any defect in material or workmanship will be repaired or, at Manufacturer's option, corrected with new or used replacement parts, or Products, at Manufacturer's expense. If after a reasonable number of attempts to remedy the problem, it cannot be repaired so the product will conform to this warranty, a new replacement component or entire Product will be supplied, at the Manufacturer's option. Under no circumstance will any claims for more than the original cost of the Product be accepted, including labor.

This warranty does not cover any failure or problem unless it is caused by a defect in material or workmanship and in addition shall not apply to the following:

- If the product is not correctly installed, operated, repaired, and or maintained as described in the INSTALLATION, OPERATION, & MAINTANANCE manual.
- If any failure or malfunction results from abuse, i.e., freezing, improper or negligent handling, shipping, storage, accident, lightning, flood or environmental conditions.
- If the product is used outside the U.S.A.
- Warranty does not cover any labor costs, shipping and delivery expenses, administrative fees or any costs related to removing or reinstalling the Product.
- If any repair and/or replacement costs are not authorized by Manufacturer or authorized representatives in advance.

Each system has specific electrical and unrestricted piping supply size requirements and they are critical to the application of the one year warranty. See INSTALLATION, OPERATION & MAINTENANCE manual for details.

The remedies in the Warranty are the Purchaser's exclusive remedies. In no circumstances will the Manufacturer or its authorized representatives be liable for more than, and the Purchasers remedies shall not exceed, the price paid for the Product. In no case, shall the Manufacturer or it's authorized representatives be liable for any special damage to property, loss of profits, loss of savings or revenue, loss of use of the Product or any associated equipment, facilities, building or services, downtime, and claims of third parties including customers.

Any covered Warranty service must be authorized by the Manufacturer. Contact the person from whom you purchased the Product, who must receive authorization from the Manufacturer. Before the Manufacturer or an authorized representative determines to provide any replacement parts or Product, it may as a pre-condition to making such a determination, required that the Warranty claimant ship the Product, postage prepaid, to the Manufacturer or an authorized Manufacturer's representative and provide proof of purchase evidenced by the original sales receipt.

In case of replacement of a Product or any component part, the Manufacturer reserves the right to make changes in the design, construction, or material of the substitute components or Products, which shall be subject to all the terms and limitations of the Warranty, except that the applicable warranty period shall be reduced by the amount of time the warranty claimant owned the Product prior to submitting notification of the warranty claim.

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