## **Installation Manual**

NORITZ AMERICA CORPORATION

### Vent Kit for Condensing Tankless Gas Water Heater

Model: EZ2FVK-1 (Flex Vent 2" Kit 25 feet)

[Applicable Model]

- [EZTR40] NRC663-FSV
- [EZTR50] EZ98DV (GQ-C2859WX-FF US)
- [EZTR75] EZ111DV (GQ-C3259WX-FF UŚ)

Potential dangers from accidents during installation and use are divided into the following three categories. Closely observe these warnings, they are critical to your safety.

<b>⚠ DANGER</b>	DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
<b>WARNING</b>	WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
<b>CAUTION</b>	CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

#### **DANGER:**

• Never use this Vent Kit other than for the Applicable Model (including the model manufactured by others) designated in this manual.

#### WARNING:

- If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.
- · Do not install only with the EZTR Start-up Guide. Read this manual also before installation.



Prohibited



Be sure to do



**♠** CAUTION

### Requests to Installers

- This manual is for the vent components for the designated tankless water heater. For the installation of the Tankless Water Heater itself, read the installation manual packed with it.
- In order to install this vent kit correctly, read this installation manual carefully, and follow the installation instructions.
- Failures and damage caused by erroneous work or work not as instructed in this manual are not covered by the warranty.
- · Check that the installation was done properly in accordance with this installation manual upon completion.
- After completing installation, place this installation manual in a plastic pouch and attach it to the side of the water heater, or hand it to the customer to retain for future reference.

Installation must conform with local codes, or in the absence of local codes, the National Fuel Gas Code, ANSI Z223.1 /NFPA54-latest edition.

Noritz America reserves the right to discontinue, or change at any time, the designs and/or specifications of its products without notice.

EZ2FVK-1-LT SBB80TX

### 1.General Information

Property damage, personal injury or death can result if these instructions are not followed. They are a guide for professional installers generally familiar with the installation and maintenance of heating equipment and related vent systems.

- Flex Vent 2" Kit is designed only for the installation inside of B-Vent as sleeve. Do not use it for other installation method. Also do not use it outdoor.
- <u>Do not use for anything other than designated Tankless Water Heater (including the model manufactured by others).</u>
- · Flex Vent 2" Kit can be installed at zero clearance to combustible materials.
- · Appliances can be started up immediately after Flex Vent 2" Kit is installed and inspected.
- Flex Vent 2" Kit vent systems expand and contract slightly during heating cycles and must be installed following included instructions.
- Keep Flex vent greater than 40°F(5°C) during installation.
   Damage will occur if handled or installed at lower temperatures.



· Information regarding certification of "Flexible vent pipe and connections".

Standard(s)	ULC-S636-08 Standards for type BH Gas Venting Systems
Product	25Feet-Flex Pipe 2"-LE , Flex Vent 2" Rigid 45 Elbow Set - LE
Brand name	Living Engineering Co., Ltd.

## 2.Included Accessories

The following accessories are included. Check for any missing items before starting installation.

	Part	Shape	Q'ty
	Flex Feeder		1
Bag "Step-1"	Base Junction Support ·Clamp x3		1
	Base Junction Adapter Set		1
	Top Flex support		1
Bag "Step-2"	Universal Rain Cap		1
	Rigid 45 Elbow SET		1
Bag "Step-3"	Flex 2" Vent Gasket		1
,	Fastening Screws		2
	Aluminum tape		1

Part	Shape	Q'ty
Installation Manual (This document)		1
EZTR 25 Feet Start Up Guide	No. of the last of	1
Flex Pipe 2" approximately 25 feet		1
Flex Sleeve		1

## 3. General Safety

# **A DANGER**

#### Checkup

· If similar flexible vent has already been installed, it must be replaced with this designated new Flex Vent Kit.



- Flex Vent 2" Kit is designed only for installation inside of B-Vent wall. Do not use it for other installation method.
   Also do not use it outdoor.
- · Only approved for use with the designated B-Vent manufactures.
- If the Rain Cap and B-Vent itself are damaged by corrosion, it must be replaced with new ones.
- Before installation, make sure no nails or screws have penetrated the inner B-Vent wall where the flexible vent will be installed. Those obstructions may damage the flexible vent and may result in fires, property damage or exposure to Carbon Monoxide.
- Do not reuse the flexible vent once it has been installed, removal of the vent may have caused damage to the flexible vent.
- Keep Flex vent at a temperature greater than 40°F(5°C).
   Material temperature is not less than 40°F(5°C) during installation.
   Damage will occur if handled or installed at lower temperatures.



- If the temperature if below 40°F(5°C) it's recommended that you store the flexible vent in a warm room or car for 30 minutes.

  If you find that the flexible vent is still stiff, you may need to use a hair dryer and warm both ends of the pipe to prevent breakage.
- · Make sure components are kept under these following conditions.
  - ※ Clean and dry place.

  - Keep out of direct sunlight.



· Minimum bend radius should be more than 7 inch.



- Handle the flexible vent carefully.
   Dropping, Crushing and Stacking may cause damage, and may result in fires, property damage or exposure to Carbon Monoxide.
- · Flex Vent 2" Kit cannot be painted.
- Avoid places where open flame are common, such as those where gasoline, benzene and adhesives are handled, or places in which corrosive gases (ammonia, chlorine, sulfur, ethylene compounds, acids) are present.
- Avoid installation in places where dust or debris will accumulate.
   Dust may block the air-supply opening, causing the performance of the device fan to drop and incomplete combustion may occur as a result.
- · Avoid installation in places where special chemical agents (e.g., hair spray or spray detergent) are used.
- For your safety, do not attempt to work on a rooftop until safety precautions have been identified and proper fall safety measures have been taken, including the use of ladders or stairways, and personal protective equipment (PPE).
- · Installation in windy or wet conditions require additional precautions. Follow local safety regulations.



- · Check for any damage to components that may have occurred during transportation before installation.
- · Consult with the customer regarding the location of installation.
- Do not install this Flex Vent 2" Kit in a place where it may be subject to falling objects, such as under shelves.
- Flex Vent 2" Kit vent systems expand and contract slightly during heating cycles and must be installed according to supplied instructions.

### **4.Before Installation** (Check the condition of installation site)

Check that the following items are "(OK) Can be installed" before installation. If all items are "(OK) Can be installed", proceed to the next step, "6. Installation".

#### PAUSE FOR A MOMENT

Verify if the installation of a rain cap of different appearance will conflict with Home Owners Associations rules to prevent future issues.

If NOT, contact customer service at 1-866-766-7489 to purchase optional installation kit for the existing Rain Cap.

Check point	Can be installed(OK)	Cannot be installed(NG)	Mark " / " if each condition is matched.
	Vent system is used by 1 appliance only	Common vent	
1. Vent system.			
	No	Yes (If Yes to protruding screws or nails, flex vent cannot be installed.)	
2. No Screws or nails protruding within the B-Vent			

Check point	Can be installed(OK)	Cannot be installed(NG)	Mark " / " if each condition is matched.
	Round	Oval	
3.B-Vent shape			
4.B-Vent diameter	3" or 4"	5" or larger	
	5ft or less	More than 5 ft	
5.Horizontal distance between B-Vent connection from the ceiling and the unit is no more than 5ft.			
	25 feet or less	More than 25 feet	
6.Vent length from the top of unit to the rain cap.	If you need more than 25 feet of Flex pipe contact Noritz America 1-866-766-7489		

Check point	Can be installed(OK)	Cannot be installed(NG)	Mark " / " if each condition is matched.
	More than 40°F (5°C)	40°F (5°C) or less *Refer to page 4	
7.Ambient temperature where unit is installed.			
	Can access Rain Cap	Cannot access Rain Cap(High pitch etc.)	
8. Accessibility to Rain Cap			

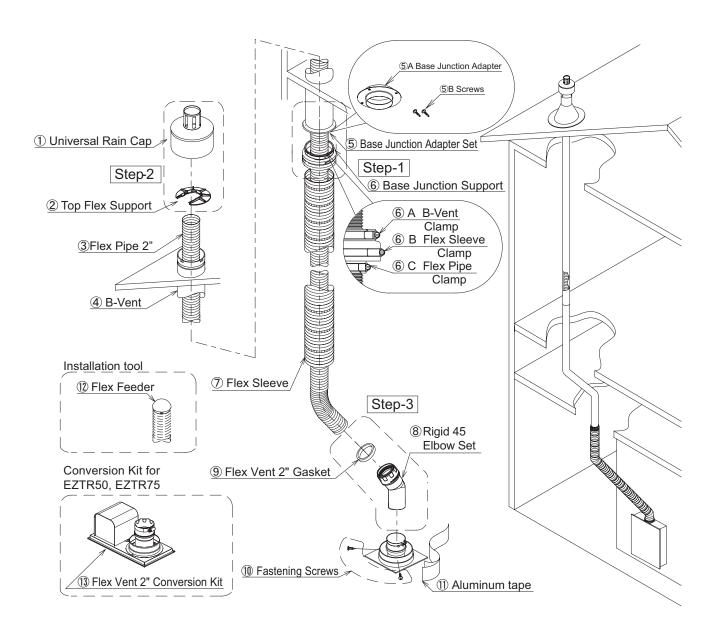
## 5. Sample of the Venting system

■ The pictured image of the system consisted of this Vent Kit and the explanation of the name of the components

The image of the Flex Vent 2" Kit system is as listed below.

Only when the venting components and the water heater are installed correctly, the customer can use the hot water correctly and safely.

The numbers before the names of the components are corresponding to the same component names as in step "6. Installation".



## 6.Installation

In the installation, some work will be done above the roof, extra care and fall protection may be required. Take extra care and responsibility to do the installation as safely as possible.

#### **WARNING:**

- For your safety, do not attempt to work on a rooftop until safety precautions have been identified and taken including without limitation fall protection measures, ladders or stairways, and personal protective equipment (PPE).
- · Installation in windy or wet conditions require additional precautions. Follow local safety regulations.



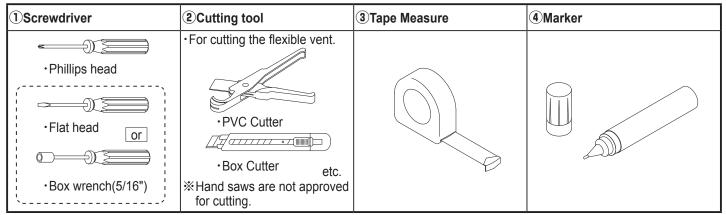
#### [Maximum Vent lengths]

- Max. Straight Vent Length: 35'(10.5m). Note that the kit comes with approximately 25' of venting. If you need more than 25 feet of Flex pipe contact Noritz America 1-866-766-7489.
- Max. allowable 45 degree elbows(B-Vent) are 2 elbows.
  - \* Not including "8 Rigid 45 Elbow Set"
  - \* No 90° elbows(B-Vent)



• Only when the all conditions of "4. Before Installation (Check the condition of installation)" are satisfied, proceed with the installation, following the below mentioned installation procedure.

#### 2. Tools necessary for the installation



#### 3.Installation Procedure

Follow the below motioned procedure and install correctly. Specially, be sure to check each [Point] carefully. If not installed correctly, the water heater will not function properly.

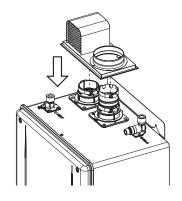


Only use the parts provided in the package for construction.
 Using parts other than the ones provided may cause the product to be assembled incorrectly.

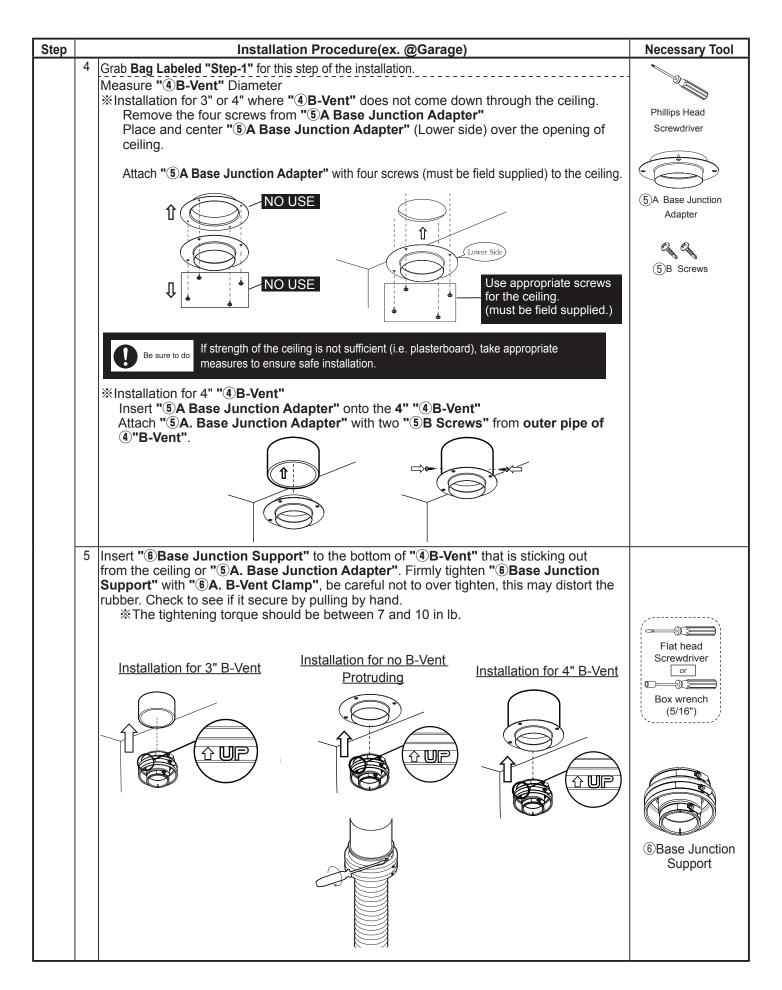
## For [EZTR50] EZ98DV(GQ-C2859WX-FF US) [EZTR75] EZ111DV(GQ-C3259WX-FF US)

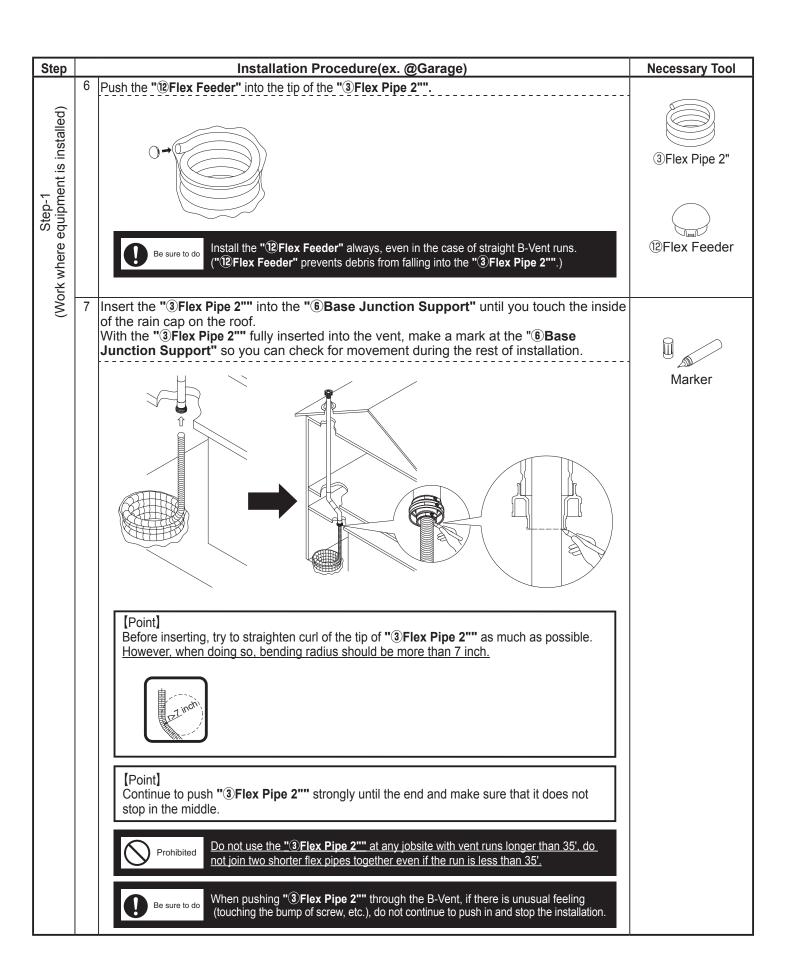
Follow the instruction in the Flex Vent 2" Conversion Kit Installation Manual to install the Flex Vent 2" Conversion Kit.

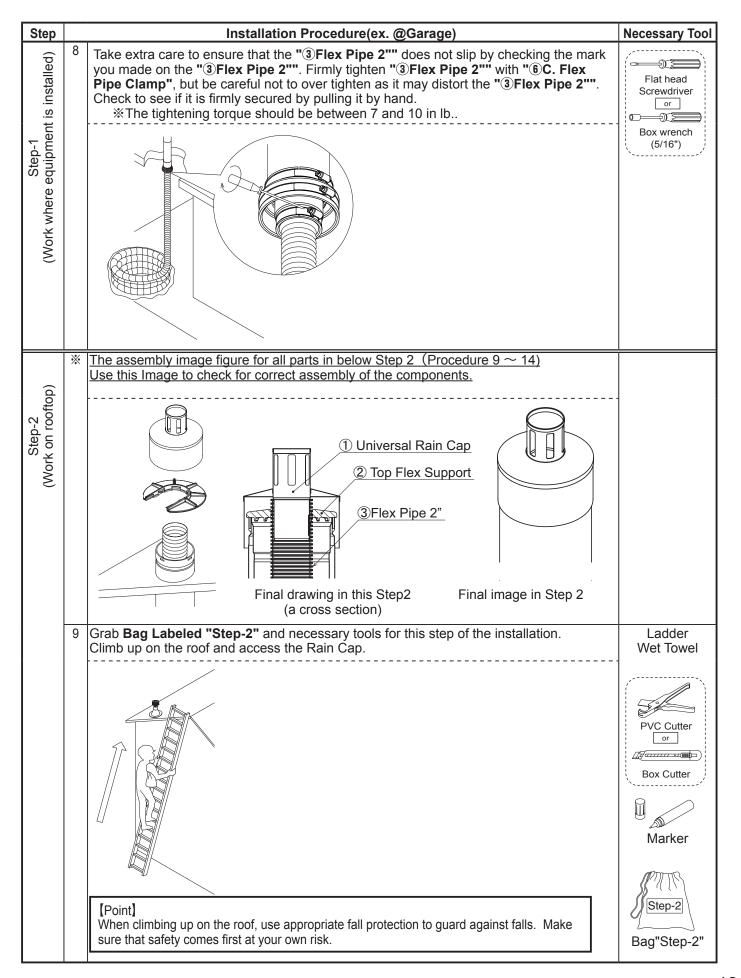
Note: This manual illustrates installation for the NRC663-FSV. Installation for other models may vary slightly.

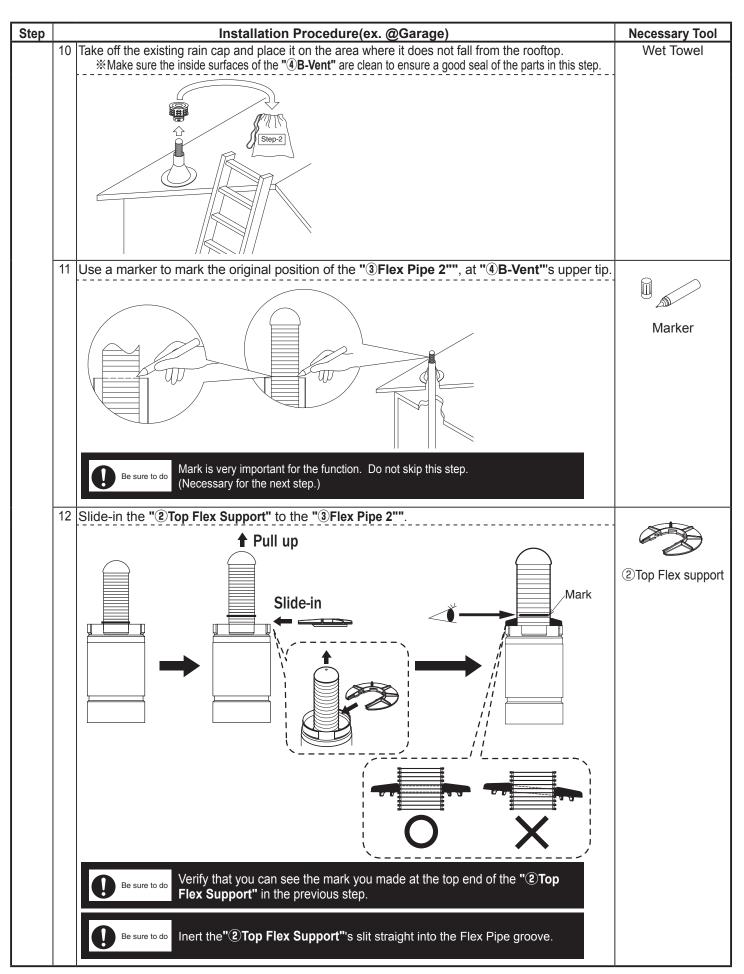


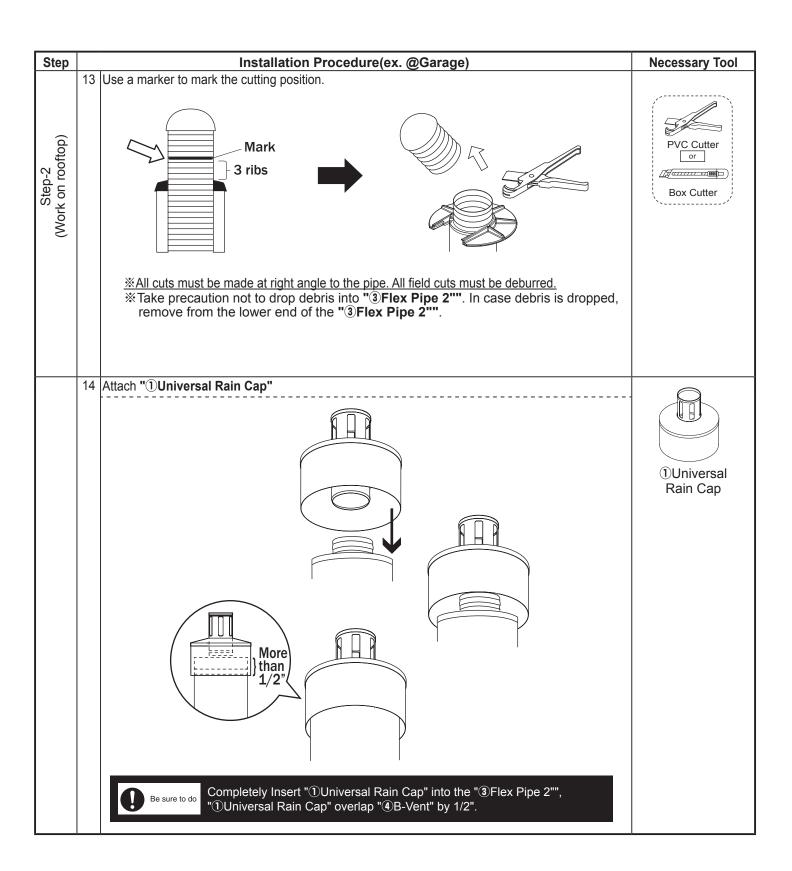
Step		Installation Procedure(ex. @Garage) Necessary Tool			
	1	Remove the B-Vent between bottom of ceiling and tank type water heater.	, , , , , , , , , , , , , , , , , , , ,		
	2	Drain and remove the tank type water heater.			
Step-1 (Work where equipment is installed)	3	Use a measuring tape to measure from the bottom of the "@B-Vent" to the roof termination to get the total length of the vent run.  *The Measured vent run length will be used in procedure No. 23 later. Make a note			
2		of the Vent Run Length.			
			Tape Measure		



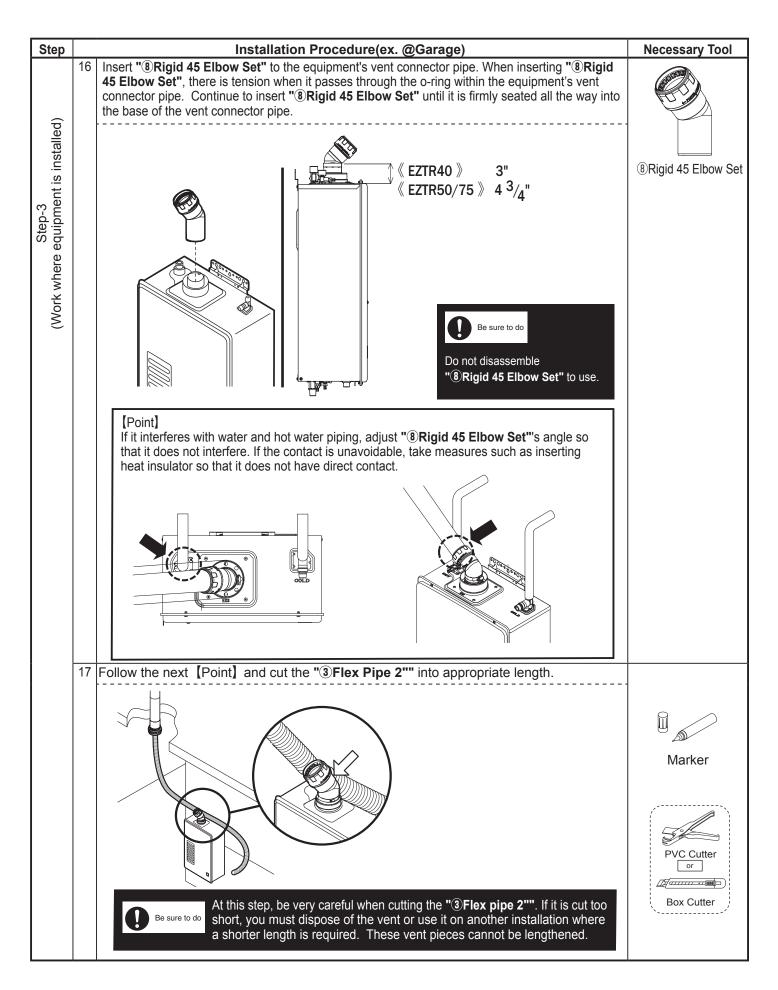


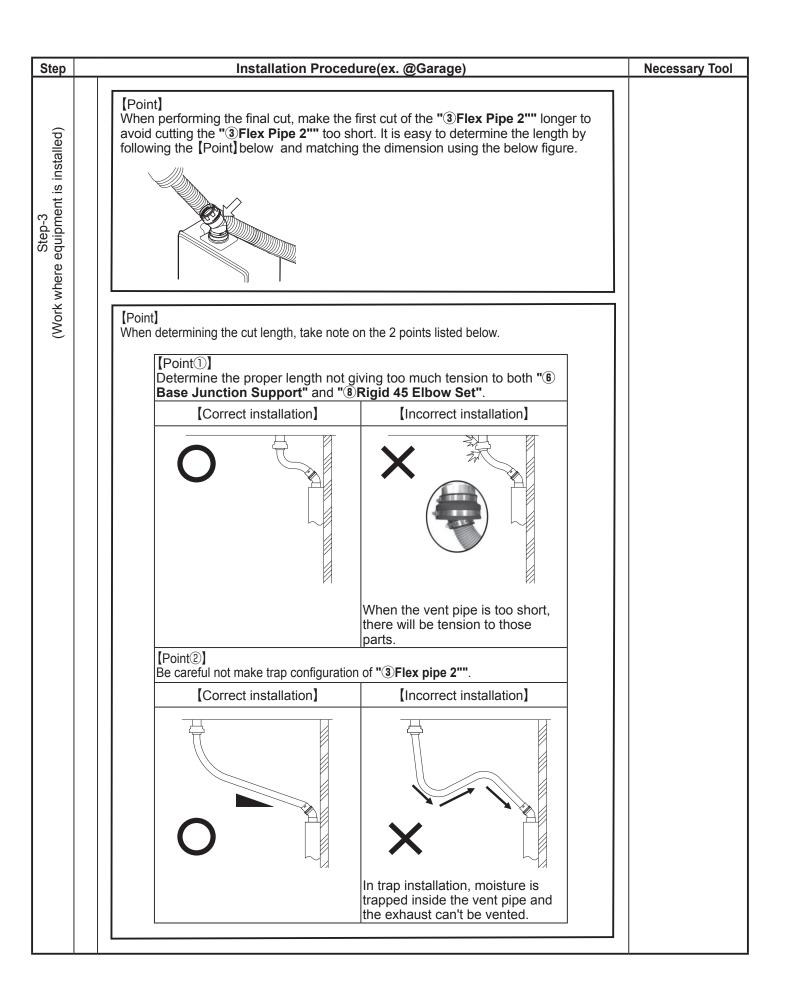


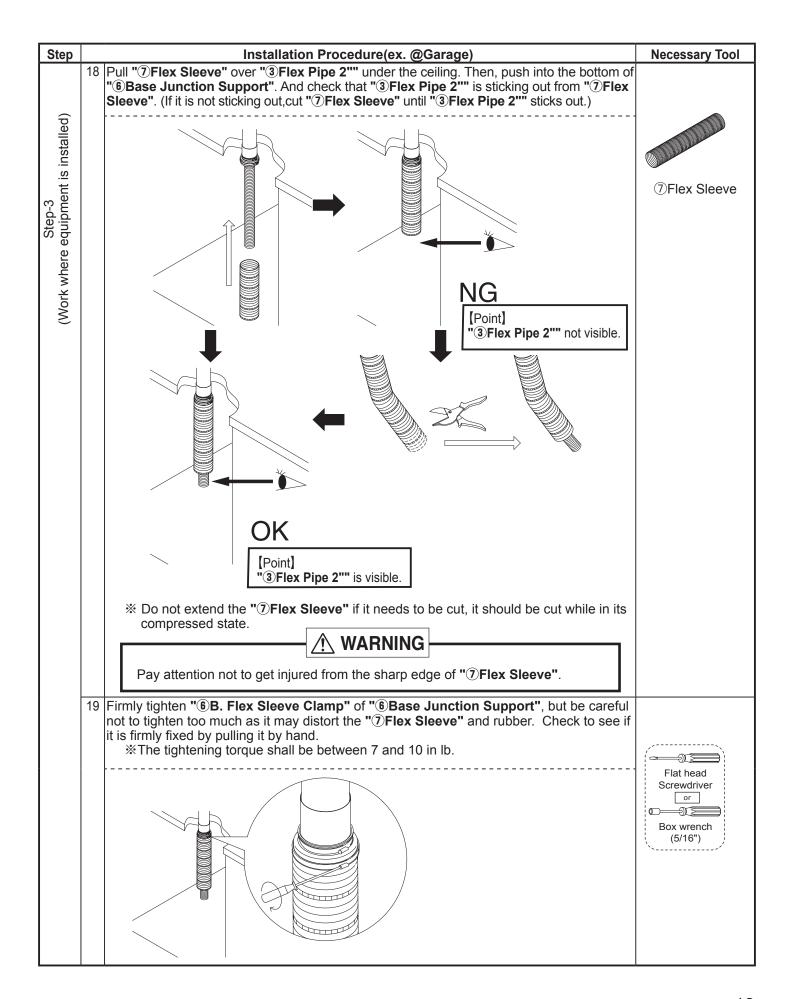


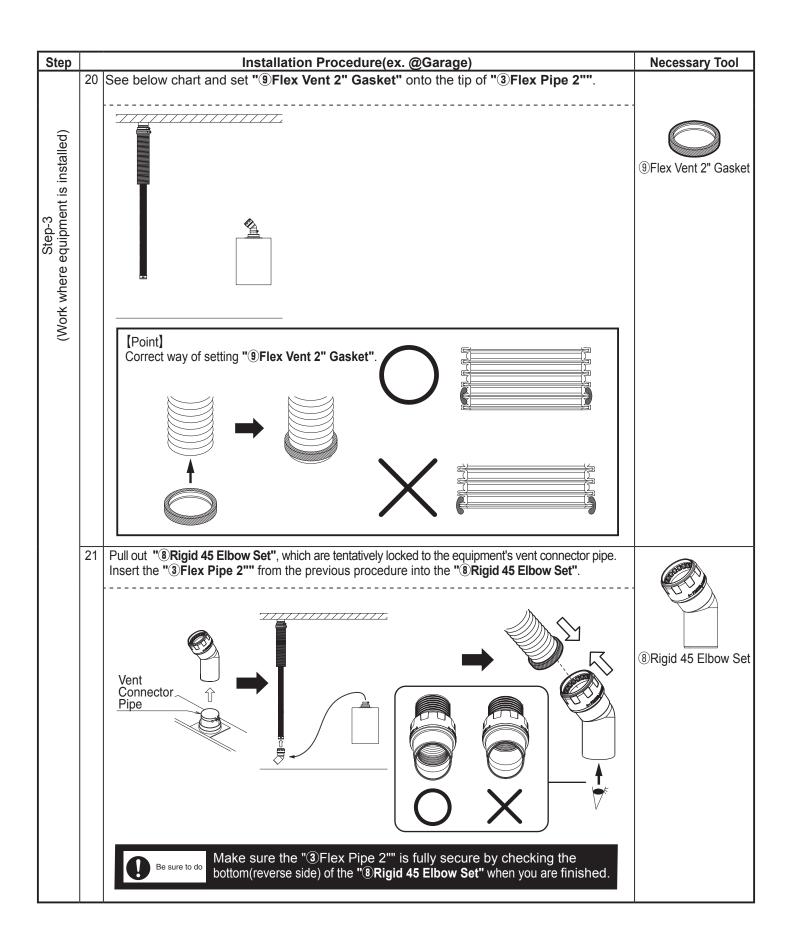


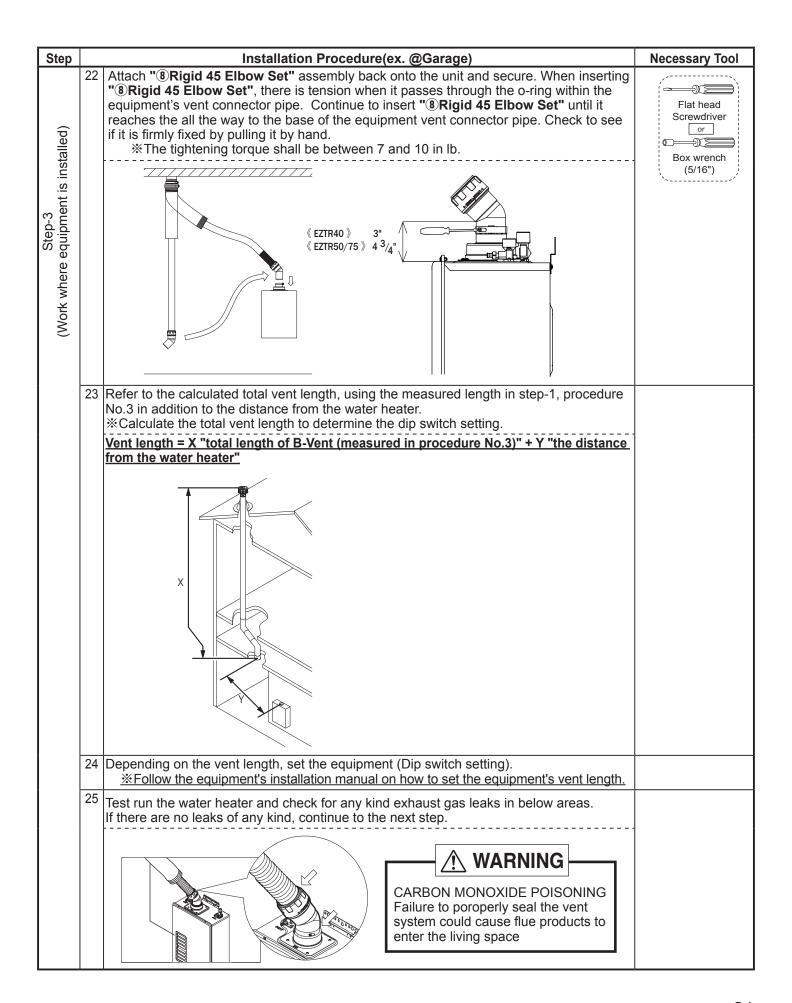
Step	Installation Procedure(ex. @Garage)	Necessary Tool
Step-3 (Work where equipment is installed)	Scrab Bag Labeled "Step-3" and necessary tools for this step of the installation. Mount the water heater at the appropriate height according to the chart below, connect the gas, cold and hot water lines, and drain pipes. Follow the equipment's installation manual on how to set the equipment's clearance from combustibles.    **The location(height)** where equipment can be installed varies by horizontal distance (L) shown below. Follow the below chart and install accordingly.   **Equipment** installation upper limit height chart by horizontal distance   Horizontal distance (L)   0'   ~1'   ~2'   ~3'   ~4'   ~5'   More than height(H)   2'   2'   2'   2.6'   3'   3'	Tape measure
	[Point]  Before you start the plumbing, imagine where the "3Flex Pipe 2"" will be ran and account for any clearance needed.	
	[Point] Always follow the above chart and determine the equipment's installation location (height).  →If it is not followed, there will be nonconformance such as large tension to the final connecting area of the vent pipe and/or can't connect.	

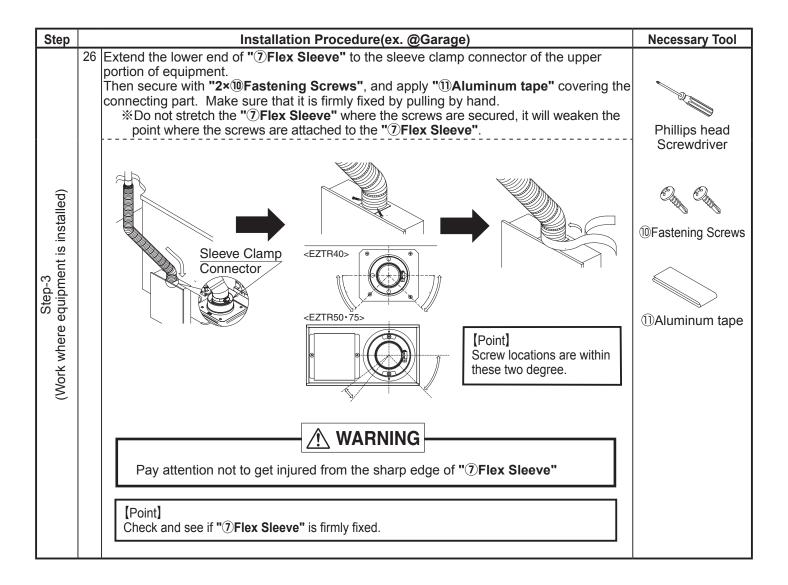












### 7. Maintenance

Periodically check the following to ensure proper operation of the water heater.

- The venting system must be examined periodically by a qualified service technician to check for any leaks or corrosion.
- Check and confirm that there is no tension to the flexible vent by hanging or suspending of anything.
- · When changing the water heater, change whole venting components to new ones.

# 8.Parts Lists

No.	Parts name	Shape	Part#
	Flex Vent 2" Kit 25 Feet		EZ2FVK-1
1)	Universal Rain Cap - LE		EZ2FVK-URC-1
2	Top Flex Support for EZ2FVK		EZ2FVK-TFS
3	25 Feet - Flex Pipe 2" - LE		EZ2FVP25-1
(5)	Base Junction Adapter Set		EZ2FVBJADS-1
6	Base Junction Support (w/o hole)		EZ2FVBJS-1
7	Flex Vent 2" Sleeve		EZ2FVS
8	Flex Vent 2" Rigid 45 Elbow Set - LE		EZ2FVR45ELB-1
9	Flex Vent 2" Gasket for EZ2FVK-1		EZ2FVK-1-G

No.	Parts name	Shape	Part#
10	Flex Vent 2" Fastening Screws		N/A
11)	Aluminum tape		N/A
(12)	Flex Feeder - LE		EZ2FVF-1
	Flex Vent 2" Kit 25 Feet Installation Manual (This document)		EZ2FVK-1-LT
	EZTR 25 Feet Start Up Guide		EZ2FVK-1-SUG
	Packing Box for Flex Vent 2" Kit 25 Feet		EZ2FVK-1-BOX

<sup>\* &</sup>quot;No." indicated on this page corresponds to the number on the applicable component on page 8.