MEFE
MITCHELL ENGINEERING
FOOD EQUIPMENT PTY LTD

Instruction Manual

Auto Toilet Flush

Infrared Sensor and Button CAT 672062

Revision 11

Pre-Install Instructions

- Before installing the valve, all pipes should be flushed with clean water to remove any impurities or silt in the pipeline.
- Recommended working pressure is 0.24Mpa—0.55Mpa. Recommend pipe inner diameter greater than 25mm for maximum flow.
- Avoid any reflections in front of the sensor such as mirrors, marble, stainless steel, etc.
- Do not install in direct sunlight.

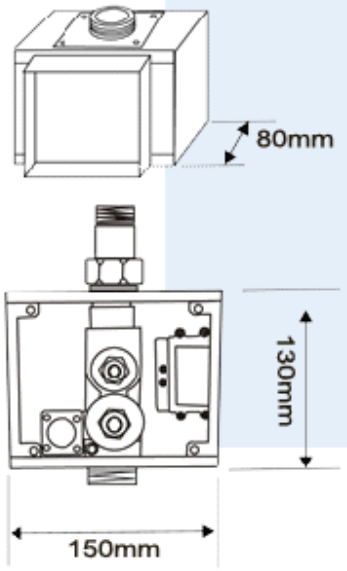
Recommended Tools and Materials

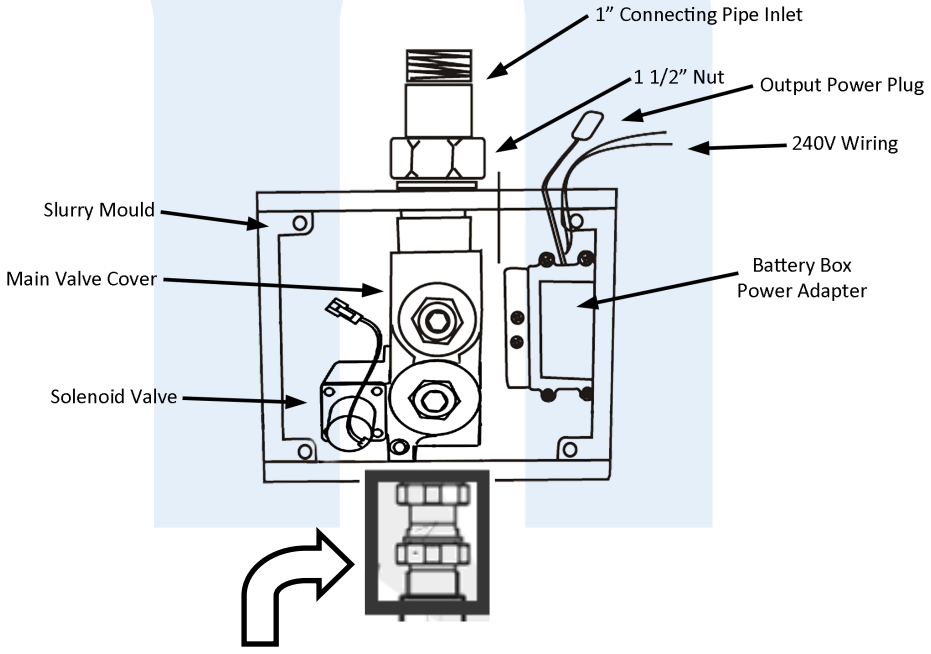
Open end/adjustable wrench	Level	Special wrenches
Tape measure	Pliers	Wire cutter
Basin wrench	Socket wrench with sockets	Insulation tape
Pipe wrench	Phillips driver	Bushing
Square	Seal tape	

Specifications

Power Supply	AC 220v 50-60Hz supply or DC 4 x AA Alkaline Batteries (Dual power supply automatically switched)
Sensor Distance	10 – 70cm self adjusting 10 – 100cm (±10cm) with optional remote control CAT 67206R
Dimensions	15 cm x 13 cm x 8 cm (10cm with slurry mould)
Flushing Style	2 Stages (3s activated on entry and 6s on departure) 2 Stages (Entry and departure 0—8 seconds (± 2 seconds) with optional remote control CAT 67206R)
Inlet Water	G 1” external thread
Outlet	M39 x 1.5mm
Water Pressure	0.05Mpa—0.8Mpa
Recommended Pressure	0.24Mpa—0.55Mpa
Installation	Concealed into wall

Unit Breakdown





CAT 67VB

Installation

1. Determine install location as per installation diagram and rough-in dimensions (Figures 1 and 1a). The groove depth is not less than 105mm. Install supply pipes, ensuring you flush the pipes free of any silt, impurities, etc. It is recommended that the inner diameter of the water supply pipeline (including water meters, valves, etc.) is greater than 25mm and length greater than 6 meters.

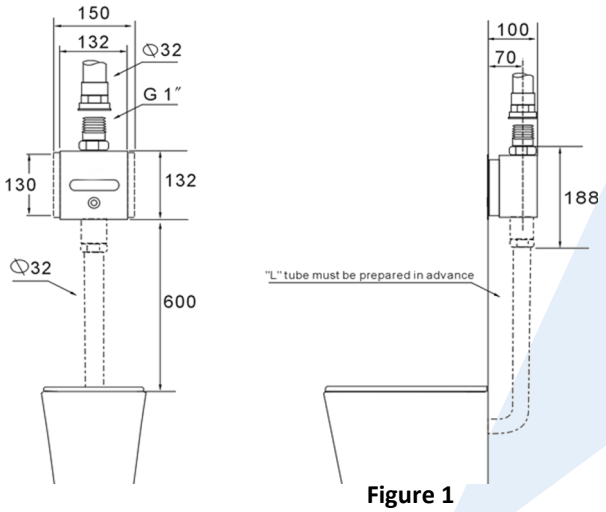


Figure 1

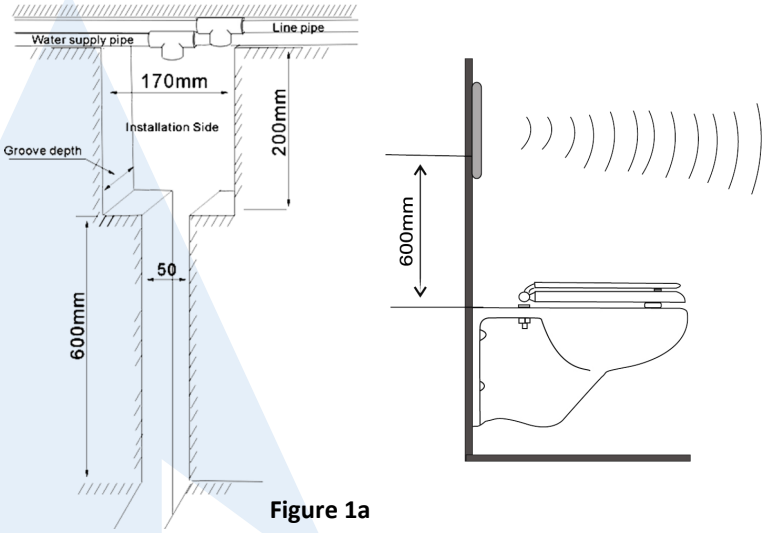


Figure 1a

Note: Avoid reflective objects directly opposite the sensor (such as mirrors, bright stainless steel plates and other mirrored objects, etc. and keep away from strong ultraviolet or electromagnetic fields.

2. Connect the G1" connecting pipe to the water supply pipe first, then connect the water inlet of the embedded box to the G1" pipe fixing the washer and inlet union nut. Connect the "L" pipe water outlet according to your installation.

3. Remove the mortar mould sleeve and check for leaks. Insert the AC 240V power cord into the hole of the embedded box if using AC power. Tie the 2 red wires of the power adapter box with the 2 AC 240V power wires respectively, and wrap them with electrical tape. If using batteries, install 4 x AA alkaline batteries into the battery box (Figure 2).

Note: Ensure you do not mistake the polarity of the batteries or mix old and new batteries together.

Tighten the screws of the battery box to avoid moisture in the battery box.

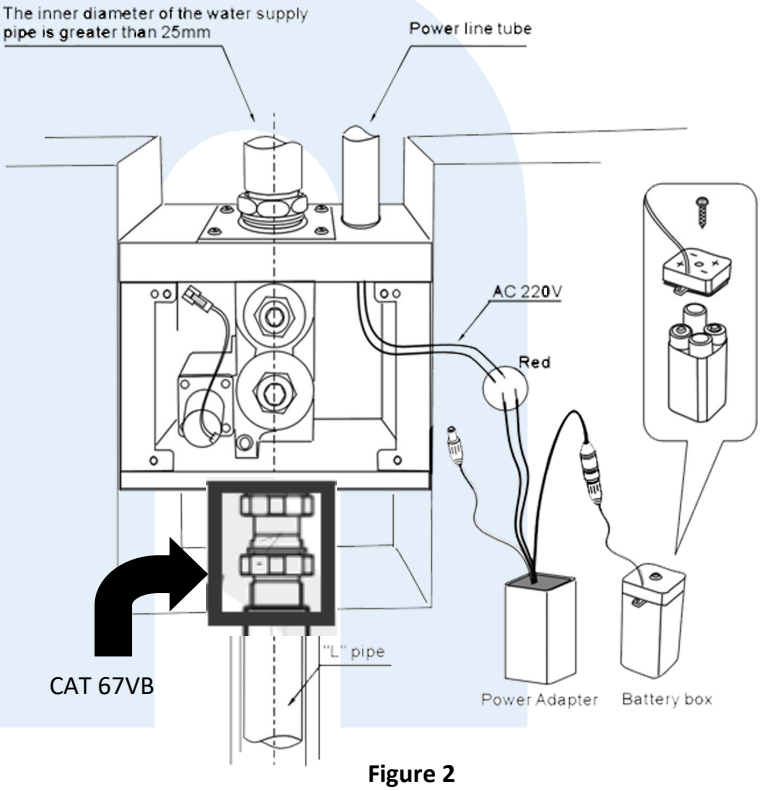


Figure 2

2. Connect to the water source a pressurize the pipeline to 0.7Mpa and check for leaks at connection points. Reinstall the mortar mould and grout any gaps between the control box and the wall and fix tiles down. Once the grout is dry, remove and dispose of the protective cover (Figures 3 and 3a).

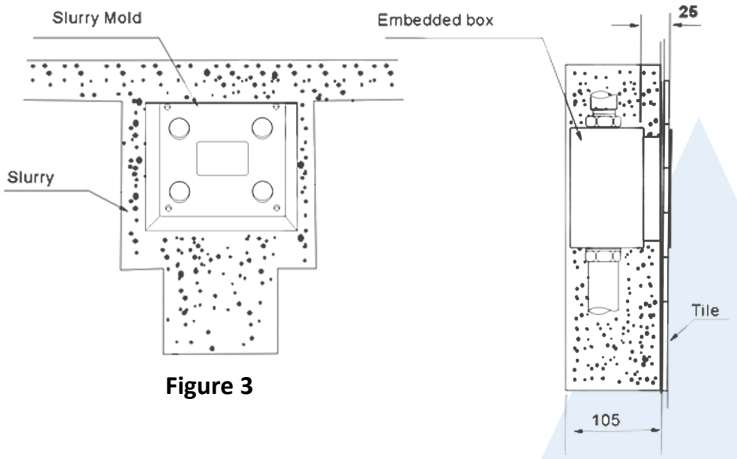


Figure 3

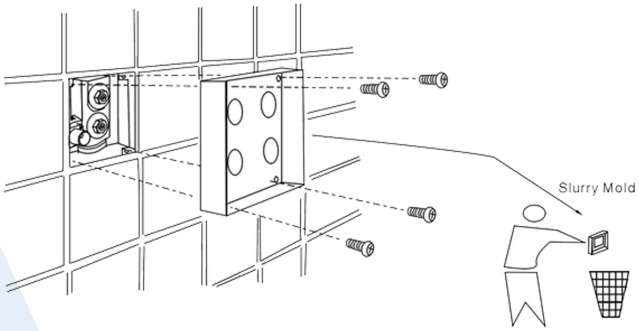


Figure 3a

3. After the mortar is solidified, remove the protective cover, connect the solenoid valve wire behind the panel and the connector of the control box assembly, and fix the panel frame with the equipped 4 long screws, and then cover the panel Figure 4.

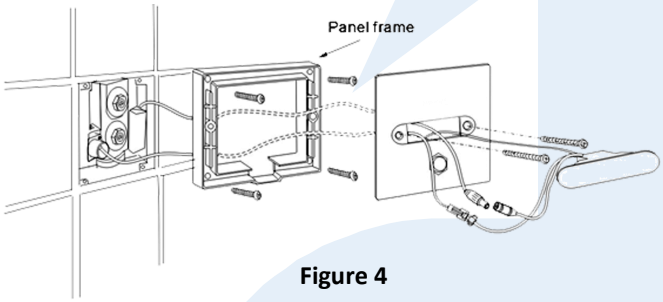
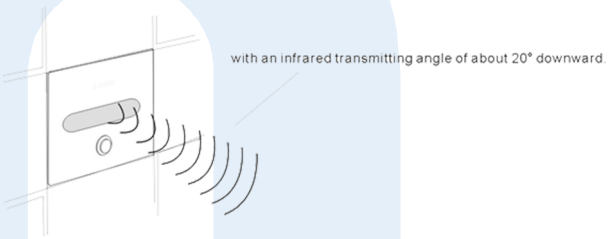


Figure 4

Sensing

When the user enters the active sensing range for more than 3 seconds, the valve will flush for 2 seconds. Once the user has finished and leaves the sensing range, the valve will flush for 6 seconds. The LED light will flash once every 3 seconds. Push the button to force flush. The sensor angle is set at within 70cm on an approx. 20° downward incline. This can be manually programmed with optional remote control CAT 67206R.



Panel Access and Adjusting Water Flow

To remove the front panel use the included suction cup to pull off the sensor revealing and using a screw driver to take out the screws either side. Then remove the bracket by unscrewing the 4 screws, using a hex on the main valve cover turning clockwise to slow water flow or counter clockwise to increase water flow.

Maintenance

If the flushing volume reduces sharply after installation or the valve has been used for a long time, and the cause is not related to water pressure, and you have checked and adjusted water flow, check the filter.

Turn off the water supply or fully close the valve. Then use an adjustable wrench to remove the filter and check for any silt and impurities and rinse accordingly. Check the seal is in place and tight. Please be cautious foreign materials do not enter the valve body.

When not in use for a long time, the sensor will drive the solenoid valve to flush once every 24 hours to prevent the deodorizer and drain pipe from drying up.

Cleaning

Keep the sensing window clean by wiping it regularly with a soft cloth. Only ever use soapy water.

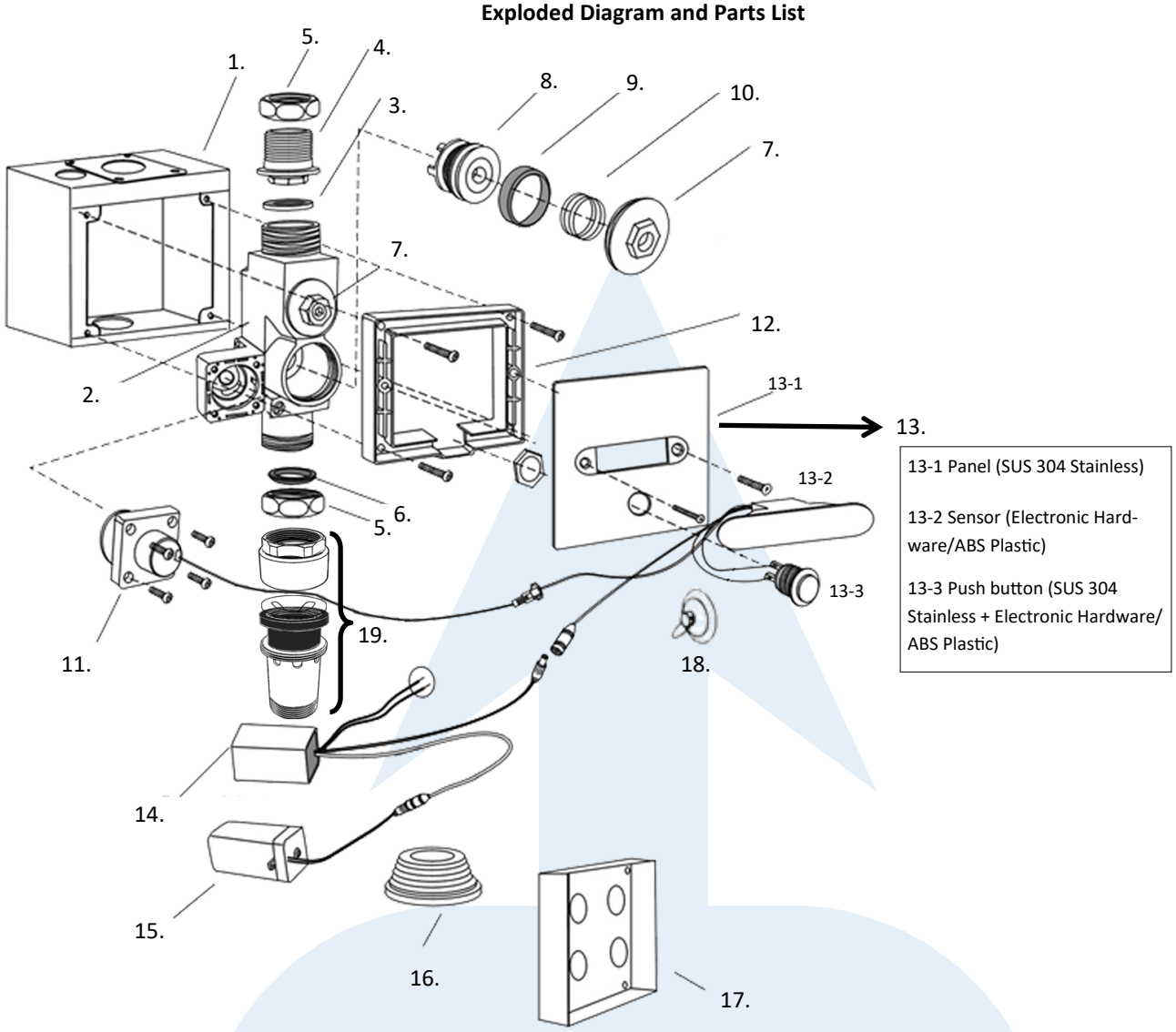
Do not use dust removing powder, abrasive powder, bleach, oil, acid or alkaline based products.

Do not spray air refresher, disinfector or other deodorising or cleaning solvent directly onto sensor window.

Troubleshooting

Problem	Cause	Solution
No water flow	Power supply insufficient Sensor compromised or poorly connected Solenoid valve poorly connected	The indicator light will flash 3 times every 6 seconds if power is insufficient, sensor is blocked or poorly connected, and solenoid is poor connected. Check power or replace batteries. After confirming power, ensure the sensor window is clear of obstacles and check for strong reflections. Unplug and plug in again. You may need to replace the sensor. Check the solenoid valve connections. You may need to replace the
Can't stop water flow	Solenoid or piston are blocked Water pressure is too low	Close the water volume control valve, open the piston valve cover, take out the piston for cleaning, and observe whether there are impurities inside the valve body. If there is still a small amount of water when the valve is closed the water pressure is too low or solenoid valve assembly is blocked or
Low water flow	Water pressure is too low Water regulation valve is not opened enough	Increase water pressure. Open the water regulation valve to its full open position.

Exploded Diagram and Parts List



13-1 Panel (SUS 304 Stainless)

13-2 Sensor (Electronic Hard-ware/ABS Plastic)

13-3 Push button (SUS 304 Stainless + Electronic Hardware/ ABS Plastic)

No.	Part	Description	Material	No.	Part	Description	Material
1.	67206-1	Embedded Box	SUS 304 Stainless	11.	67206-9	Solenoid Valve	SUS 304 Stainless + POM Plastic + Rubber
2.	67206-2	Body	Brass 59-1	12.	67206-10	Frame	ABS Plastic
3.	67206-3	Gasket	NBR Rubber	13.	CAT 67206D	Sensor Panel and Push Button	SUS 304 Stainless
4.	67206-4	G1” Connection	Brass 59-1	14.	67206-11	240V AC Power Adaptor	Electronic Hardware/ABS Plastic/ Epoxy Sealants
5.	67206-5	39*1.5” Nut	Brass 59-1	15.	679-121	6V DC Battery Box	ABS Plastic
6.	67206-6	Bevelled Ring	NBR Rubber	16.	67206-12	Stopper	NBR Rubber
7.	67206-7	Water Regulation Valve	Brass 59-1	17.	67206-13	Mortar Mould Set	ABS Plastic
8.	67206-8	Piston Body and Filter	Brass 59-1 + NBR Rubber	18.	67206-14	Suction cup	PVC Plastic
9.	67206-8	Piston Seal	NBR Rubber	19.	CAT 67VB	Vacuum Breaker	See breakdown pg. 7
10.	67206-8	Spring	SUS 304 Stainless				

*CAT 67206R

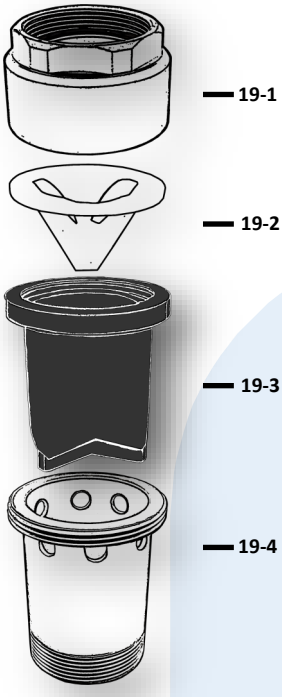
Optional remote to adjust sensing range or flush cycle

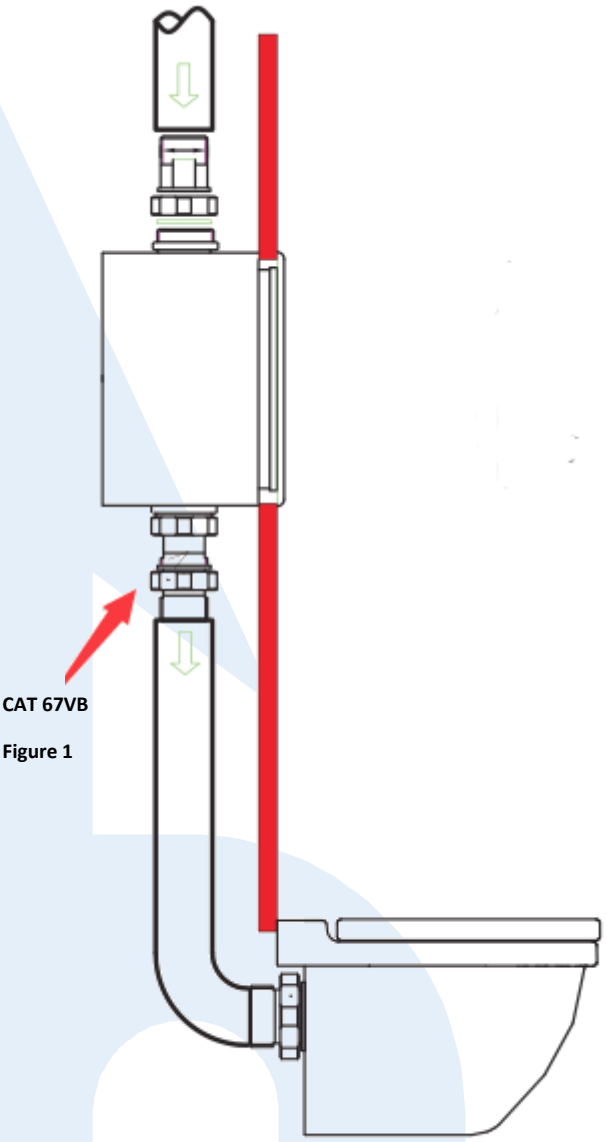
Exploded Diagram and Parts List

The CAT 67VB Must be installed as part of the **CAT 672062**.

Refer Figure 01

CAT 67VB





CAT 67VB

Figure 1

No.	Part	Description	Material
1	19-1	Brass Nut—M39 x 1.5”	Brass 59-1
2	19-2	Spreader / Sleeve	Plastic ABS
3	19-3	Vacuum Breaker Insert	Rubber NBR 70
4	19-4	Brass Tube—M39 x 1.5”	Brass 59-1