

PREVOST

Instruction Sheet

IS-18158

TOILET DRAIN VALVE REPLACEMENT

First Release

06-27-2019

MATERIAL

Kit # 401294 includes the following parts:

Part No.	Description	Qty
900195	VALVE, TOILET DRAIN 3 INCH	1
401296	ADAPTER	1
5000310	SCR CAP HEX SS NSS M6X1 X 40	4
5001833	WSH BEL SPR SS 301 6.65X17.4X1.27 (M6 x 1/4)	4
IS-18158	INSTRUCTION SHEET (EN)	1
FI-18158	INSTRUCTION SHEET (FR)	1

Other material that may be required:

Part No.	Description	Qty
680098	LOCTITE 567 TEFLON 250ML	1
684685	GLUE SIMSON ISR 70-03 BLACK, CARTRIDGE	1
N8907092	LOCTITE 7649 (SPRAY)	1

NOTE

Material can be obtained through regular channels.

PROCEDURE



DANGER

Park vehicle safely, apply parking brake, stop engine. Prior to working on the vehicle, set the ignition switch to the OFF position and trip the main circuit breakers equipped with a trip button. On Commuter type vehicles, set the battery master switch (master cut-out) to the OFF position.

Lock out & Tag out (LOTO) must be performed during set-up, maintenance or repair activities. Refer to your local procedure for detailed information regarding the control of hazardous energy.

PART 1: TOILET PREPARATION

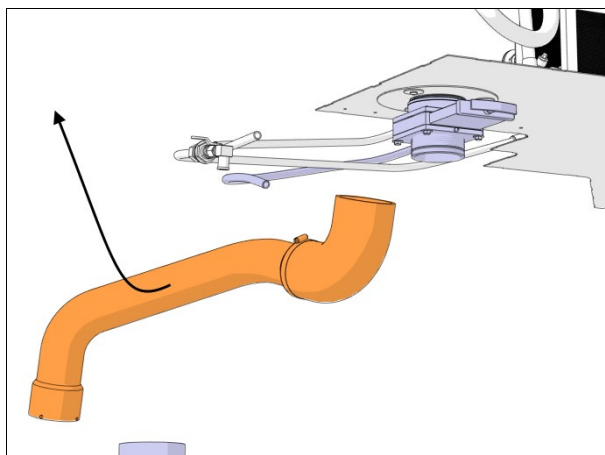
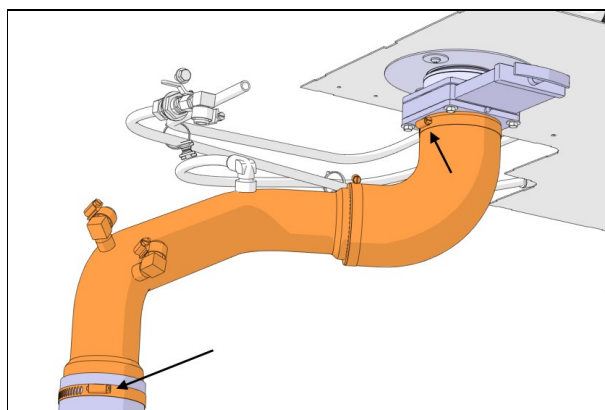
1. Remove the toilet drain pipe from the vehicle.

- Flush and rinse the toilet tank.

NOTE

Ideally, this operation is done a few hours before the valve replacement. The aim is to minimize the presence of dripping liquid at the toilet valve flange that could compromise sealing.

- Loosen upper and lower pipe hose clamps.
- Disconnect the overflow tube.
- Remove the drain pipe.

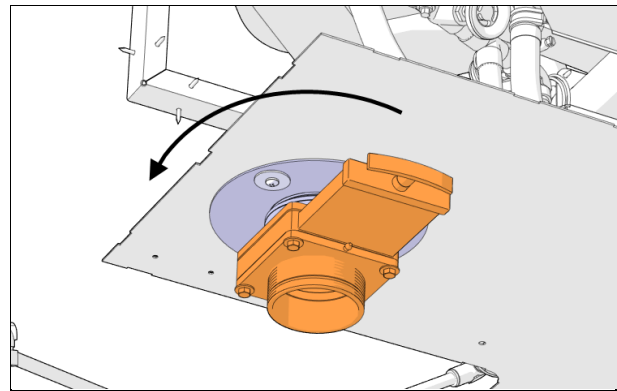
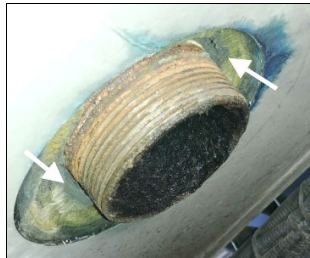


2. Remove the old toilet drain valve from the vehicle.

- Unscrew the valve from the toilet flange (flange may be tight, apply localized but moderate heat with a heat gun as required).

NOTE

Cut some insulating material around the toilet flange to expose a few more threads and ease cleaning as shown.



3. Clean the toilet flange threads.

- Clean the flange thread from loose crust of rust and adhesive using a suitable (non-aqueous) cleaner degreaser (wipe off the excess).
- Using a brass wire wheel brush mounted on a high speed rotary tool, thoroughly clean the flange threads from the remaining rust (clean to shiny bare metal).



CAUTION

Wear appropriate eyes protection.

- Complete the cleaning using a residue free cleaner (break cleaner or equivalent) on the threads.

PART 2: VALVE PREPARATION

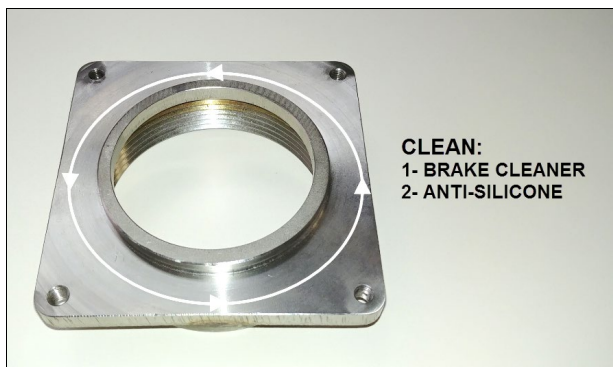
1. Remove and discard the top adapter part of the valve (with inner threads).

- Remove the four bolts holding the top and bottom adapters to the valve.
- Discard the top adapter (with inner threads) and the bolts (do not discard rubber seal).
- Clean the top of the valve body (where the top adapter was bolted) with brake cleaner followed by anti-silicone; surface must be free of assembly oil film.



2. Clean the new stainless adapter flange.

- Clean the bottom flange of the **401296** stainless adapter with brake cleaner followed by anti-silicone, surface must be free of contaminants.
- Also clean the rubber joint (oil free) and install it (dry) on the flange.



3. Apply adhesive to the valve upper part perimeter.

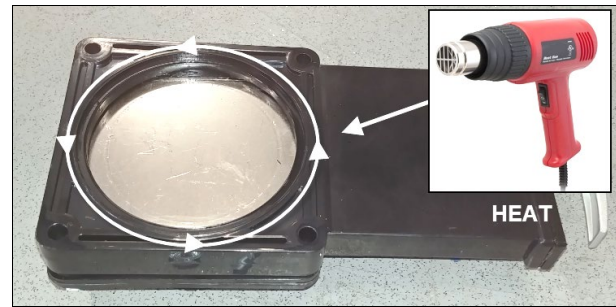
- Apply heat to the valve inner perimeter with a heat gun (try to minimise heating of the metal sliding “gate”). The heated area must be hot but must not distort (melt); the plastic will start to look “wet” when the melting temperature is about to be reached.

NOTE

Go slowly with the heat gun set at a medium temperature setting. Start at a safe distance from the valve body and adjust as necessary.

In any case, do not allow the plastic to reach the melting/distorting point.

- Apply a bead of black Simson 70-03 adhesive at the valve perimeter (heated area). Adhesive must be applied within 30 min. or the area will have to be re-heated.



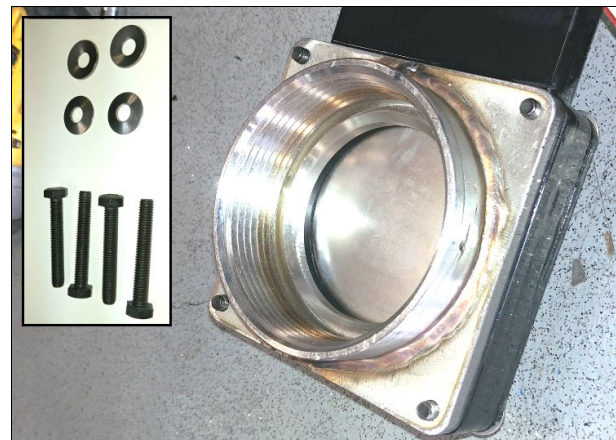
4. Reassemble the toilet valve.

- Install the stainless adapter (and rubber joint) on top of the valve body. Align bolt holes as much as possible and press slightly to spread the Simson adhesive.
- Reassemble the valve using the supplied **5000310** hex screws and **5001833** Belleville washers (the stainless adapter is threaded).

NOTE

Make sure that the lower adapter rubber joint is correctly reinstalled.

- Torque all screws to **40 lb-in (4.5Nm)** in a cross pattern.
- Wipe off any adhesive excess.
- Activate the valve a few times to ensure proper function.



PART 3: TOILET VALVE INSTALLATION

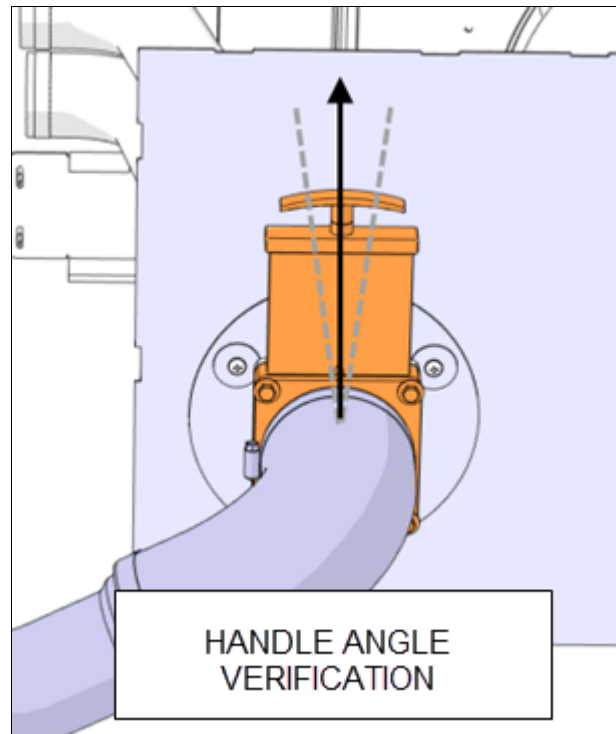
1. Trial fit the installation of the valve to the flange without any sealant.
 - Make sure that once torqued in place (pipe threads), the valve handle is pointing straight (facing the operator).
 - If the handle is not straight, try others starting positions 45 deg. apart until a correct torqued alignment is achieved and take note of it for final installation.

NOTE

Do not over torque or back up the valve to achieve correct alignment.

Mark the starting point of the valve vs. the flange on the valve body as necessary for future reference.

- Remove the valve from the toilet flange.



2. Apply primer to the threads.

- Apply a coat of Loctite 7649 primer/activator to the toilet flange *and* to the stainless adaptor threads (protect rubber joint).
- Allow the solvent in the primer time to evaporate until the surfaces are completely dry (+/- 15 min.).



3. Apply sealant to the threads.

- Apply a coat of Loctite 567 PST thread sealant to the toilet flange.
- Also apply a coat of thread sealant to the threads of the stainless adaptor (protect rubber joint).



NOTE

Push the sealer into the threads.



4. Screw the valve to the flange.

- Screw the flange until a fairly tight connection is achieved and the valve is pointing straight at the operator.

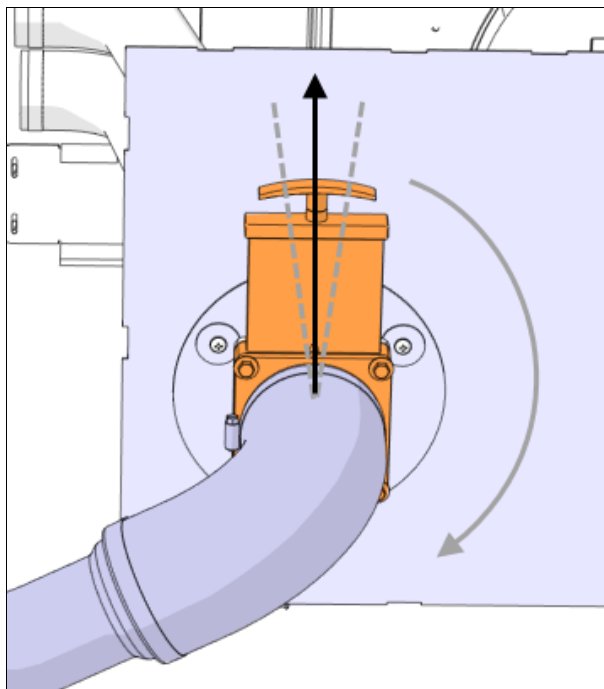
NOTE

Use the reference mark as required (see step 1 above).



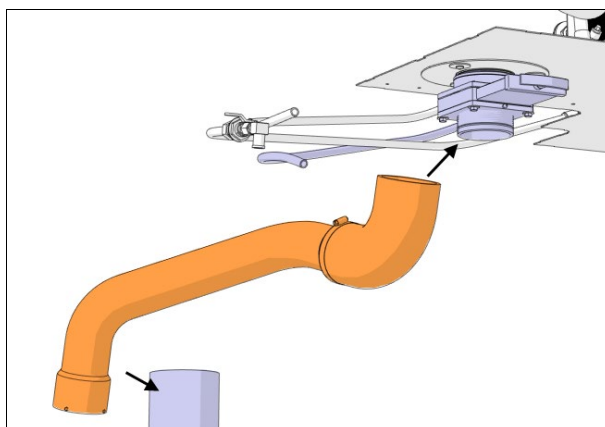
CAUTION

Do not over torque or back up the valve to achieve correct alignment.



5. Reinstall the toilet drain pipe and overflow tube.

- Reinstall the drain pipe and related hose clamps. Do not apply sealant at the lower valve flange.
- Reconnect the overflow tube and tighten hose clamp.

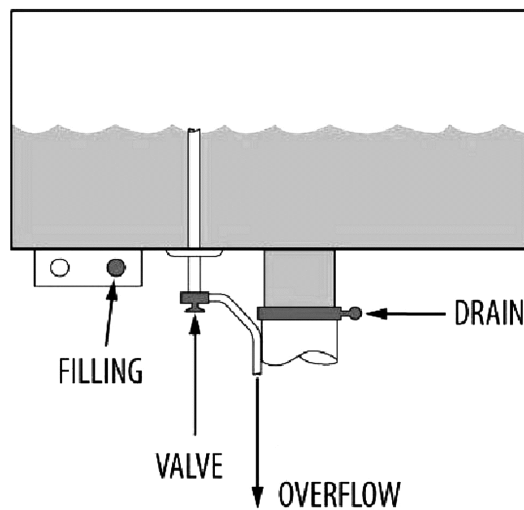


6. Refill the tank and check for leak.

NOTE

For maximum pressure resistance; Before filling the tank, allow the Loctite 567 to cure 24 hours.

SEPTIC TANK



PARTS / WASTE DISPOSAL

Discard waste according to applicable environmental regulations (Municipal/State[Prov.]/ Federal)