

# Mechanism Assembly Part #19613

# RV Toilet Service Parts for Aria/Aria Deluxe

Phillips Screwdriver

Scraping tool

Pliers

#### Tools needed

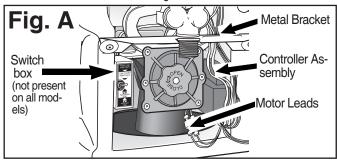
- Flat-blade screwdriver
- Adjustable Wrench
- Socket Wrench with 7/16" socket
- Silicone Grease
- DAP Dynaflex Caulk or equivalent (available at most hardware stores)

# Note:

Read all instructions before beginning work.

#### To Remove Toilet From Floor

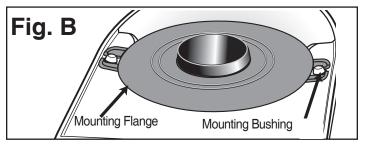
- 1. Turn off RV water supply per RV Owner's Manual.
- 2. Press both keypad buttons at the same time, twice, to open blade and drain bowl of water. If control or mechanism does not work, you will have to open the valve manually. Remove the Sound Deadening Insulation (if present) from the back of the mechanism to access the mechanism lead screw (Fig. E). Turn knob (if present otherwise use a 5/16" socket wrench) clockwise to open the valve.
- 3. Pry off Bolt Caps with Flat-blade screwdriver. Use 7/16-inch wrench to remove Lag Screws.

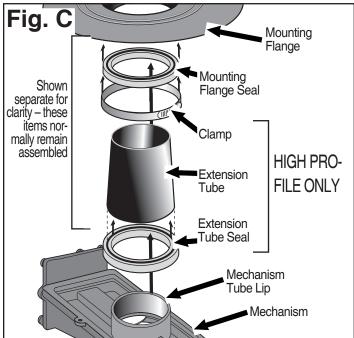


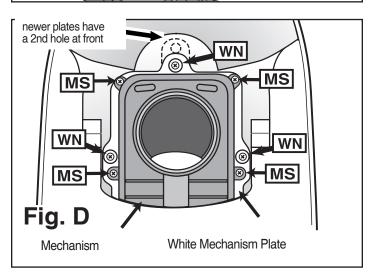
- 4. Turn off power to Toilet at RV's DC distribution panel.
- 5. Tilt Toilet toward you to gain access to connections.
- 6. Disconnect Toilet's 12-volt power hookup to RV.
- 7. Disconnect Water Supply Line from elbow connector by hand. Use Adjustable Wrench if necessary, with care.
- 8. Remove Toilet from floor and place upside down on towel or soft fabric mat.
- Remove old Closet Flange Seal (may be found on toilet or in floor at Closet Flange). Discard.
- 10. Cover Holding Tank opening to contain odor.

#### To Remove Old Part

- Using Screwdriver handle, tap out 2 Mounting Bushings (Fig. B). Save them.
- 2. Remove Mounting Flange (Fig. B).
- 3. **High Profile models only:** If Extension Tube (Fig. C) did not come out with Mounting Flange, remove it and the Extension Tube Seal. Save.
- 4. Remove and save 4 Mechanism Screws (MS, Fig. D).
- 5. Ease Mechanism Assembly off white Mechanism Plate. To get Mechanism out, you may need to remove other parts (Fig. A). To remove Metal Bracket, loosen screws and swing out. To remove Controller Assembly and/or Switch Box, use a flat-bladed screwdriver to pry them from wall of unit. Remove old adhesive pad(s).







- 6. Disconnect 2 (green/yellow) Wire Motor Leads from Mechanism Assembly (Fig. A). Use pliers if necessary.
- 7. Disconnect Overflow Tube if present (pre 3-16-03) from Mechanism Assembly. Discard Mechanism if not returning.

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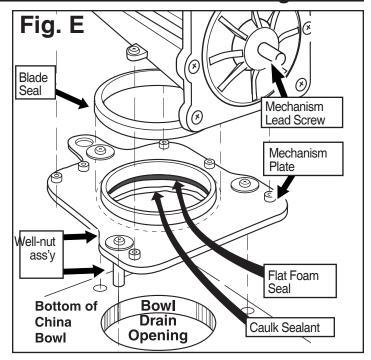
- 8. Remove Blade Seal from white mechanism plate. Discard.
- Important: If your mechanism plate has two holes at front (dotted lines in Fig. D), AND no leakage is suspected at foam gasket area, you do not need to install the new plate provided in this kit. Skip down to the heading "To Replace Mechanism."
  - To remove Mechanism Plate, loosen the 3 Screws in well nuts (WN, Fig. D) and pull the plate off the bowl. If well-nuts do not come out with the plate screws, either push them through to the interior or re-insert the screws to pull them out. Discard plate and well-nut hardware.
- Scrape off old Seal from china with sharp tool. Use mineral spirits or alcohol to remove residue.

# To Replace Mechanism Plate (if it has been removed)

- 1. Apply a 1/4" wide continuous ring of caulk sealant around the top of the exposed side of the flat foam seal. (Fig. E).
- 2. Line up well-nut assemblies on the mechanism plate with the holes in the china bowl. Then line up the openings and press into place. **Lightly hand-tighten the well-nuts to temporarily secure its position.**

# To Replace Mechanism

- 1. Wet blade seal with clean water.
- 2. Fully seat new blade seal, lip up, onto Mechanism Plate (Fig. E).
- To avoid damaging blade seal, make sure blade in new mechanism is fully closed. Turn mechanism lead screw counter-clockwise to close valve (Fig. E).
- 4. Connect 2 Motor Leads, yellow-yellow, green-green (Fig. A).
- Working from the back, position Mechanism in Toilet. NOTE: on some low-profile units, it may be a tight squeeze. Align mechanism over Mechanism Plate, press down and secure with four screws (MS, Fig. D).
- 6. Turn toilet over to check centering. Loosen well-nuts to re-center if needed. Do the permanent tightening down of the well-nut screws at this time by hand. Tighten in a diagonal pattern to get an even seal. Be careful not to overtighten and cause deflection of the plate at the edges. Wipe off excess sealant when done.
- 7. *If Overflow tube present* (pre-3-16-03 Arias): Cut approximately 1" off Overflow Tube. Remove silicone cap from Mechanism. Forming a full loop, reattach to Mechanism. Tuck in and away from lead screw.
  - *If Overflow tube not present:* Leave silicone cap on Mechanism; proceed to next step.
- 8. If you removed the Controller Assembly and/or the Switch Box, re-install now, using the adhesive foam pads provided. If you removed Metal Bracket, reinstall.
- 9. High Profile: To install Extension Tube (Refer to Fig. C):
  - a. Lubricate sealing surface of Extension Tube Seal with silicone grease.
  - b. Install Extension Tube Seal on Extension Tube.
  - c. Install Extension Tube and seal assembly on Mechanism. Make sure that seal is seated at least 1/2 inch below Mechanism tube lip.
  - d. Ensure Hose Clamp on Mounting Flange Seal is tight.
  - e. Lubricate Mounting Flange Seal sealing surface with Silicone Grease.



f. Install Mounting Flange and Seal assembly on Extension Tube. Make sure there is at least a 1/2" overlap between the Extension Tube and Mounting Flange Seal.

**Low Profile:** Replace the Mounting Flange Seal onto the lip of the Mounting Flange. Install Mounting Flange to Mechanism. (No extension tube is used.)

10. Replace 2 Mounting Bushings with flat surface out.

### To Test Mechanism Operation

- 1. Connect toilet to RV's 12V DC power.
- 2. Turn on 12V DC to toilet at RV power distribution panel.
- 3. Press the Flush button on Key Pad and observe mechanism operation. The solenoid valves will click on and off during the flush cycle.
- 4. Press both Key Pad buttons, twice, to open blade.

## To Replace Toilet To Floor

- 1. Secure new Closet Flange Seal, lip side up, to Toilet.
- 2. Set Toilet close enough to hook up water supply.
- 3. Reconnect Water Supply Line.
- Turn on water and check for leaks at the water connection. Correct any leakage.
- 5. Position Toilet over flange. Arrange wiring clear of Mechanism Lead Screw (Fig. E) and base of toilet.
- 6. Secure to floor with Lag Screws. Tighten.
- Press Toilet flush button controls to add water and to flush test. Check for leaks.
- 8. Resecure Bolt Caps.