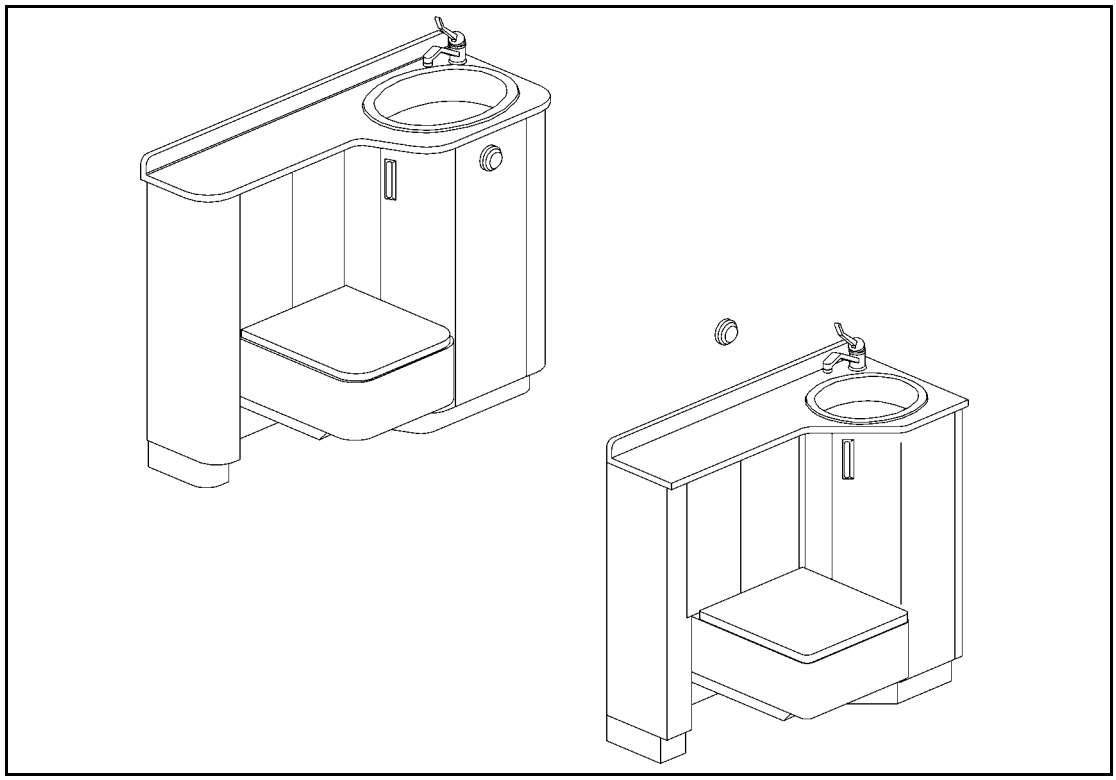
INSTALLATION INSTRUCTIONS

Patient Care Module (PCM)

From Hill-Rom



Product No. P150/P200

For Parts or Technical Assistance **is541rb**
USA (800) 445-3720 Canada (800) 267-2337
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Patient Care Module (PCM) Installation Instructions

Revisions

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NOTES:

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Subject: Patient Care Module (PCM) Installation Instructions

Tools required:	Phillips head screwdriver	Spud wrench
	Shims	Plumbing tools
	Pipe sealant	1/8" hex key
	Level	Utility knife
	Tape measure	Drill/Power screwdriver
	Safety glasses	As-built drawings

Parts required: Rough-in Drawings:

- 5900-2213-000 — Model 150 with wall-mounted water closet
- 5900-2214-000 — Model 150 with floor-mounted water closet
- 5900-2211-000 — Model 200 with wall-mounted water closet
- 5900-2212-000 — Model 200 with floor-mounted water closet

Introduction

The Patient Care Module (PCM) is a self-contained in-room bathroom that can be located in close proximity to the patient's bed. It is designed for convenience and cost savings. The standard module includes a water closet, sink, washing arm for bedpans and other utensils, and pluming hardware. Options include a deep sink, foot pedals, infrared controls, utility hook-up option, floor- or wall-mounted water closets, and several faucet styles.

These instructions are for both the 150 and 200 models, which differ only by size and available options. On the 150 model, the flush valve button is installed in the wall above the unit. Other differences are noted within.

NOTE:
Water closets are **not** installed in the cabinets when shipped.

Preparation

1. Before beginning installation, read this document completely.
2. Coordinate installation with the appropriate contractors.
3. Procure facility engineering drawings and project drawings for specific installation.

CAUTION:
Have qualified plumbing contractors perform the rough-in and plumbing connections. Failure to do so may result in rework, leaks, and poor performance. Any leaks discovered are the responsibility of the installing contractor.

4. Have the installing contractor route the plumbing to the appropriate rough-in locations prior to installation of the PCM.

   NOTE:
   Plumbing and cabinetry work should be performed by qualified individuals.

Preparing the Wall

WARNING:
The installation method differs for each wall and construction type. Failure to determine the wall and construction type could result in the collapse of the PCM. Personal injury or equipment damage could occur.

1. Before proceeding, refer to the local or state building codes, and determine the wall type and construction type:

   - **Seismic** walls are constructed to prevent damage from an earthquake.
   - **Non-seismic** walls are **not** constructed to prevent damage from an earthquake.
   - **Fire-rated** walls are constructed to prevent the spread of fire.
   - **Non-fire-rated** walls are **not** constructed to prevent the spread of fire.

WARNING:
For seismic applications, have the installing contractor correctly install the wall backing plates. Failure to secure the PCM to wall backing plates could cause the unit to collapse. Patient injury, personal injury, or equipment damage could occur.

2. Have the **installing contractor** install the wall backing plates (for seismic applications), provided by **others**, according to the Office of Statewide Health, Planning, and Development (OSHPD)-approved drawings and the as-built drawings.

CAUTION:
Use caution when moving the PCM. Do not drag or push it any distance. Always lift it, or use a transport device. Failure to do so may result in damage to the kick plate area.

Unpacking the PCM

1. Near the site of the installation, set each component upright.
2. Put a padded surface on the floor.

WARNING:
Use caution when using the utility knife. Failure to do so could result in personal injury or equipment damage

3. Carefully use the utility knife to cut and remove the shrink wrap from the components.

CAUTION:
Do not remove the wrapping securing the PCM doors and toilet seat cover. Keep them held secure until installation. Failure to do so may result in equipment damage.

CAUTION:
Do **not** set the components on the floor without first providing a padded surface to protect the finished surfaces of the components. Equipment damage could occur.

WARNING:
Wear eye protection. Failure to do so could result in eye injury.

4. Put on safety glasses.

5. Carefully remove all packing materials from the components, and set the components on the padded surface.

6. Remove the PCM from the packing skid. Avoid pushing or dragging it.

7. Inspect the PCM for damage.

Preparing the Plumbing Connections

Refer to the submittal drawings supplied with the engineering package for exact measurements and specifications. See figure 1 on page 4 and figure 2 on page 5 for general layouts.

Figure 1. Model 150 Plumbing Stub-outs

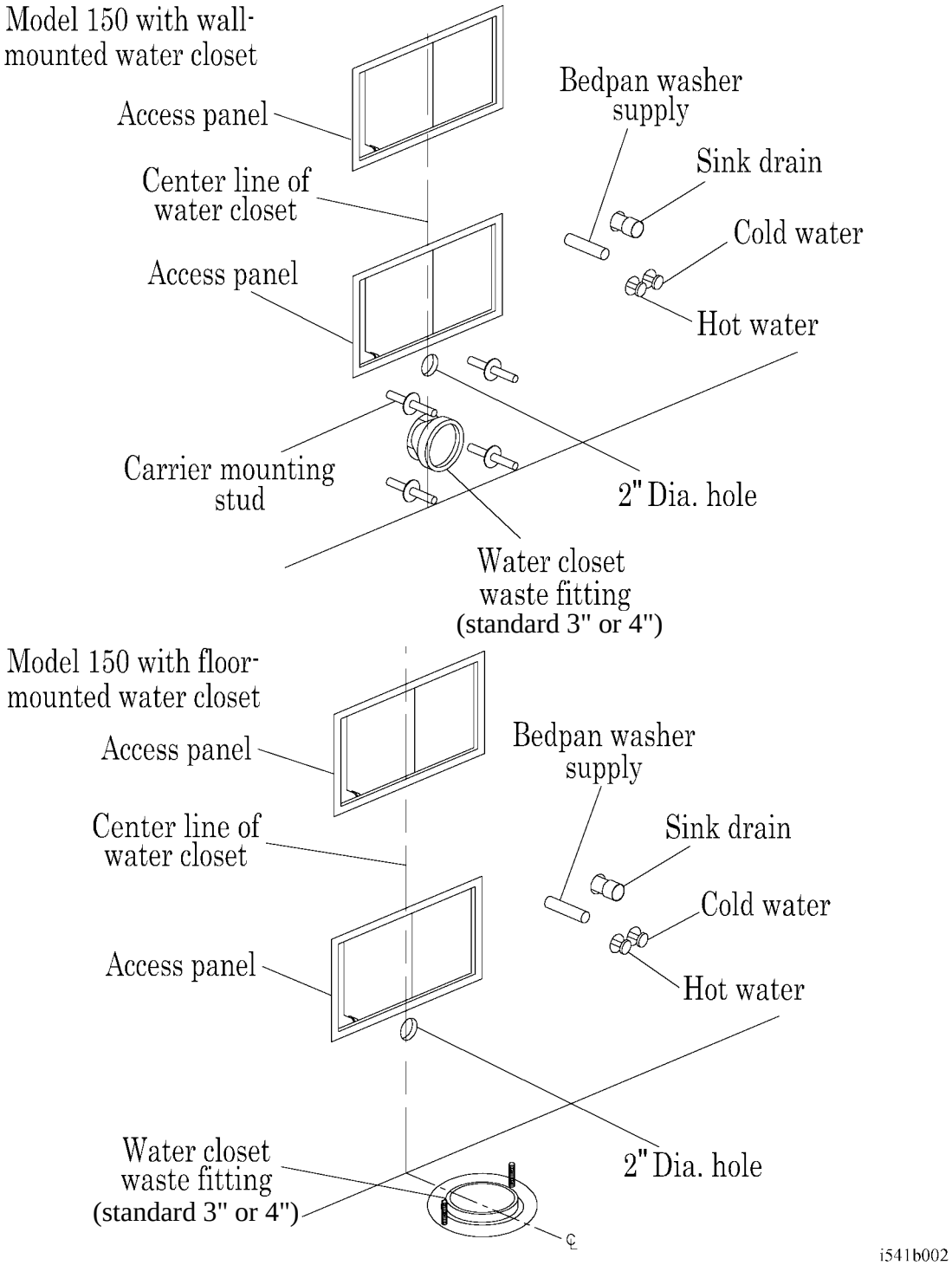
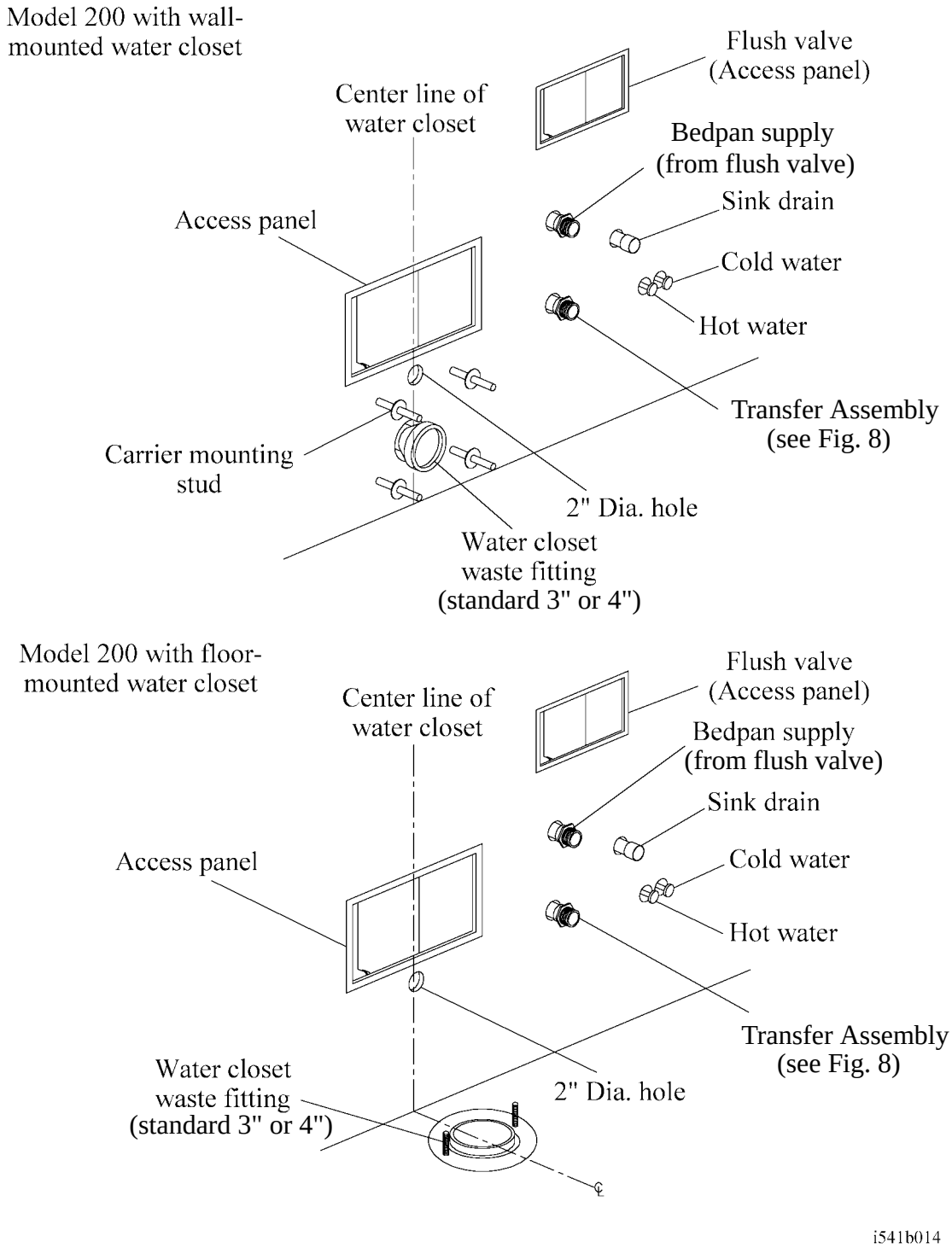


Figure 2. Model 200 Plumbing Stub-outs



CAUTION:
Have qualified plumbing contractors perform the plumbing connections. Failure to do so may result in rework, leaks, and poor performance. Any leaks discovered are the responsibility of the installing contractor.

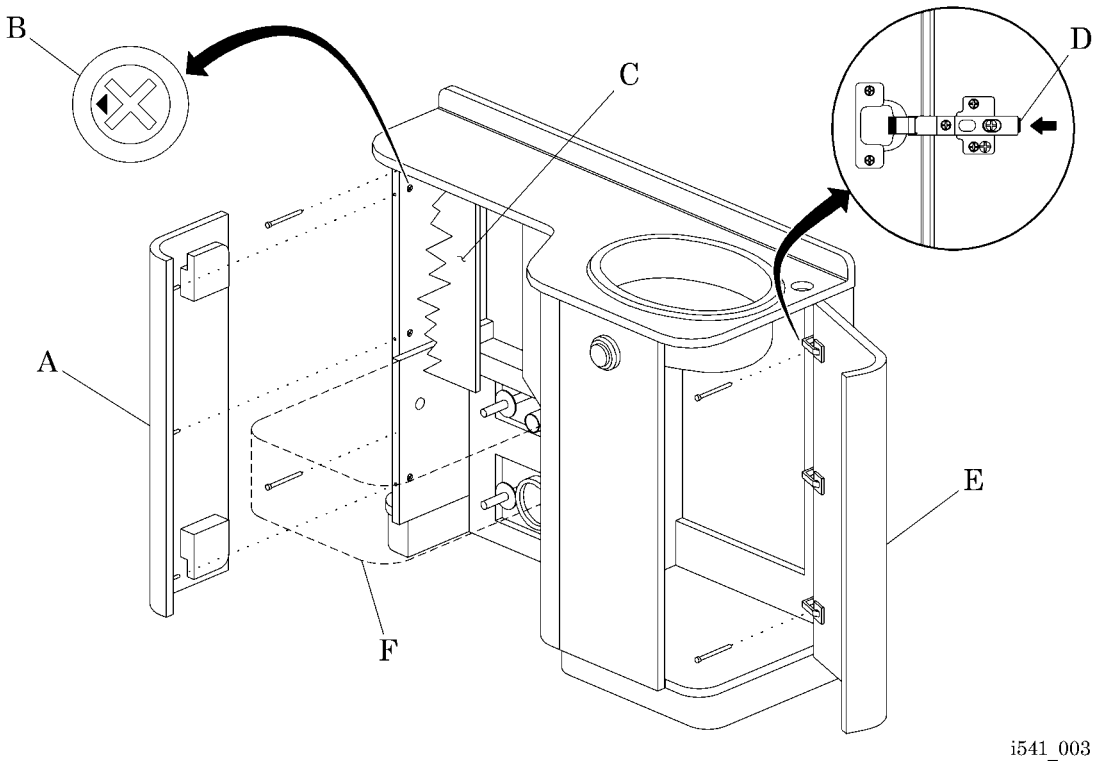
Installing the Cabinet

CAUTION:
Cabinet installation should be performed by qualified casework/cabinet installers. Failure to do so may result in damage or unsatisfactory performance.

If necessary, install the transfer assembly before mounting the cabinet. See "Transfer Assembly Connection" on page 13.

1. Remove the side access panel (A) (see figure 3 on page 6):

Figure 3. Installing the Cabinet



NOTE:
Two camlocks are located behind the swinging door, and one is located under the toilet seat cover.

a. Open a swinging door (C), and lower the toilet seat cover (F) to access the camlocks (B).

b. Turn the camlocks (B) until the directional arrows point forward.

c. Pull the side access panel (A) forward.

2. For ease of installation, remove the plumbing access door (E). The hinges (D) are designed to split and separate.

   a. Place a finger under the end of the hinge (D), and pull up until it snaps open.

   b. Support the plumbing access door (E) by hand, and repeat the previous step until all three hinges (D) are loose; then remove the plumbing access door (E).

3. Position the cabinet over the roughed-in pipes.

4. Adjust the cabinet sideways until the toilet seat cover (F) is centered, within 1/16" (1.6 mm) of center, on the water closet waste fitting.

CAUTION:
Provide proper backing (shimming) at all four mounting locations to reduce any twisting or stress on the cabinet. Failure to do so may result in damage to the cabinet or a misaligned cabinet top or doors.

5. Shim the cabinet as required to compensate for walls and floors that are not straight or square.

6. Fasten the cabinet to the wall (see figure 3 on page 6).

WARNING:
Make sure two #12 x 3" TEKS®[1] screws (each) are installed on the water closet and sink sides. Failure to secure the PCM to the wall backing plate or studs could cause the PCM to collapse. Personal injury or equipment damage could result.

Seismic Applications

a. Make sure two #12 x 3" TEKS® screws each (provided by others) are installed through the back panel of the sink side and in two places on the water closet side.

b. Attach the PCM to the 16-gauge wall backing plates (provided by others).

Non-Seismic Applications

a. Locate the studs around the sink side as well as the water closet side.

b. On each side, install two #12 x 3" screws (provided by others) through the back panel and into the studs.

7. Replace the side access panel (A) and plumbing access door (E).

1. TEKS® is a registered trademark of Illinois Tool Works, Inc.

a. Slide the side access panel (A) into position, and turn the camlocks (B) until the directional arrows point up.

b. Position the plumbing access door (E) so that the hinges (D) are matched up. Press on the hinges (D) until they snap back into place.

Mounting the Water Closet

CAUTION:
Do not lower the toilet seat cover before a complete water closet is installed. Putting pressure on the toilet seat cover without a water closet underneath for support can cause the cam bolts and door cables to break.

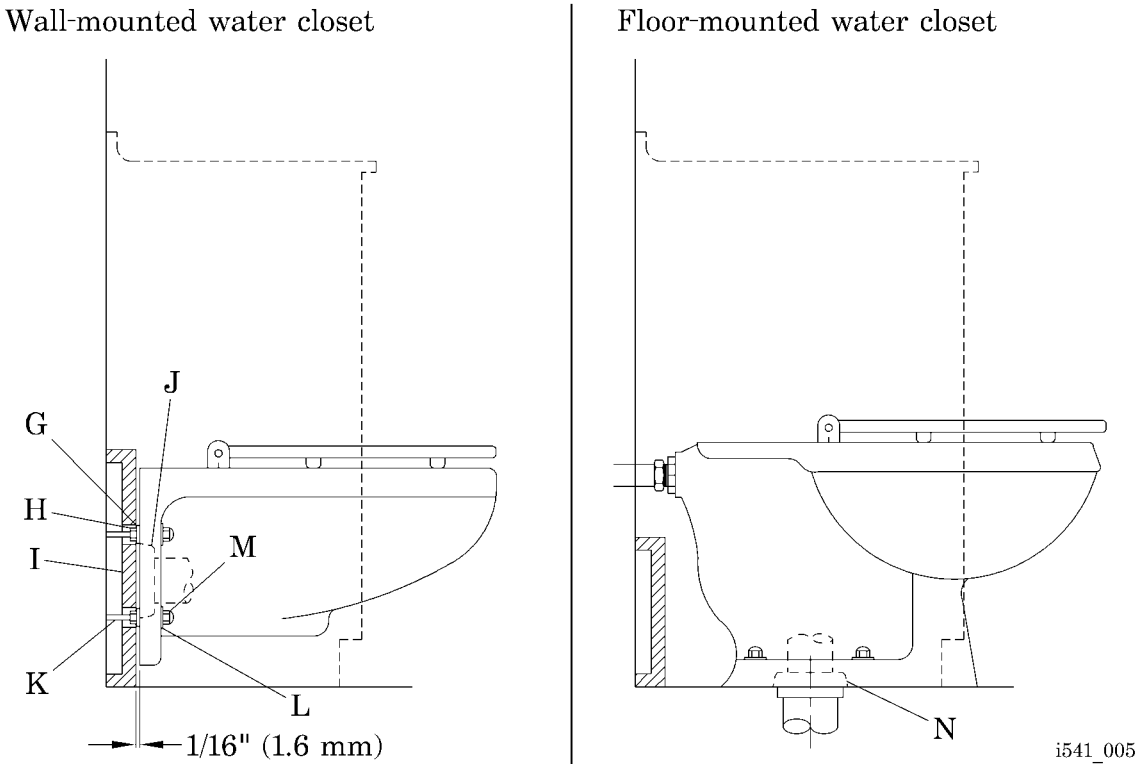
Wall-Mounted Water Closets

NOTE:
The cabinet must be installed before the water closet.

1. Attach the toilet seat to the water closet.

2. Adjust the four bearing nuts (H) on the carrier bolts until the bearing washers (G) are 1/16" (1.6 mm) beyond the front face of the span plate (I) (see figure 4 on page 8).

Figure 4. Mounting the Water Closet



3. Adjust the waste coupling to extend 5/16" (7.9 mm) beyond the front face of the span plate (I), and secure it to the waste fitting.

4. Place the neoprene seal (J) included (a wax gasket is not recommended) in the closet recess, and set the closet on the carrier studs (K), making sure that the closet outlet is centered on the waste nipple.

5. Place the fiber washers (L) over the carrier studs (K), and screw on the cap nuts (M).

   NOTE:
   When the water closet is fastened tightly in place, there should be a 1/16" (1.6 mm) gap between the back of the water closet and the front face of the span plate.

6. Draw up the water closet slowly and uniformly until it is snug against the bearing washers (G), with a 1/16" (1.6 mm) gap between the back of the water closet and the front face of the span plate (I).

Floor-Mounted Water Closets

NOTE:
The cabinet must be installed before the water closet.

1. Attach the toilet seat to the water closet.

2. Place the wax gasket (N) (supplied by others) over the waste fitting on the floor (see figure 4 on page 8).

3. Place the water closet over the waste fitting, ensuring that the seal fits properly into the closet recess on the bottom of the water closet.

4. Anchor the water closet to the floor.

Making the Plumbing Connections

CAUTION:
Have qualified plumbing contractors perform the rough-in and plumbing connections. Failure to do so may result in rework, leaks, and poor performance. Any leaks discovered are the responsibility of the installing contractor.

CAUTION:
Check **all** plumbing connections and fittings, especially those on the flush valve, before turning on the water supply. Some fittings may not be tight. Failure to do so may result in water damage.

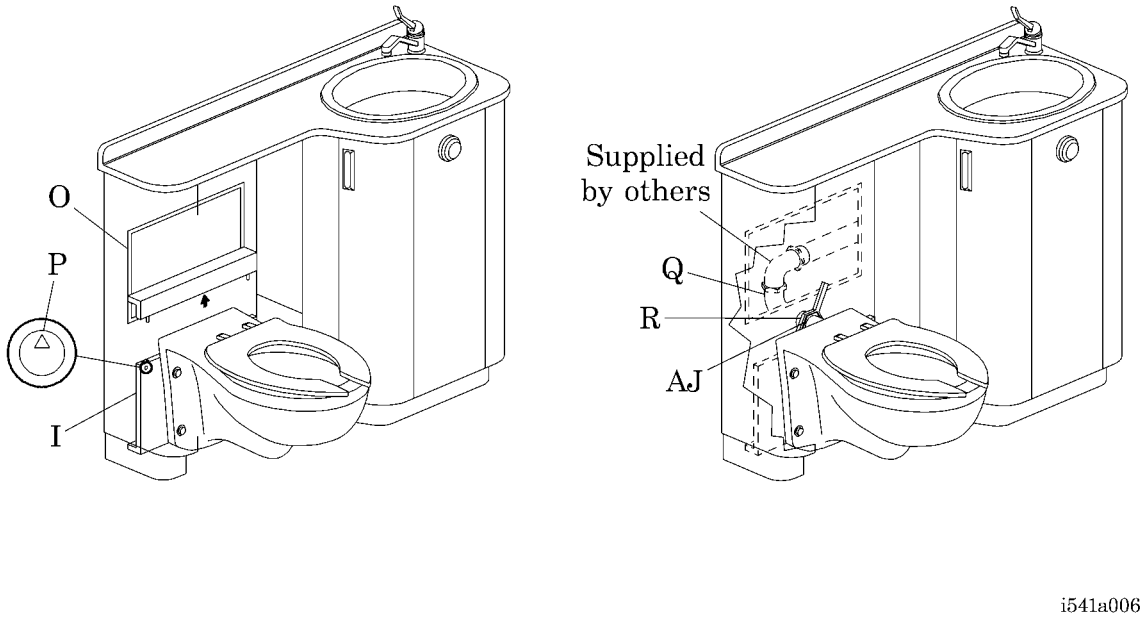
NOTE:
Unless otherwise indicated, plumbing items are furnished by the plumbing contractor.

Any leaks discovered in either the factory-installed or field-installed components shall be repaired and checked by the installing contractor.

Spud Connection for Wall-Mounted Water Closets

1. Loosen the two camlocks (P) in the span plate (I) on either side of the water closet by turning counterclockwise until the indicator arrows point up (see figure 5 on page 10).

Figure 5. Wall-Mounted Spud Connections



2. Lift and remove the spud access panel (O).

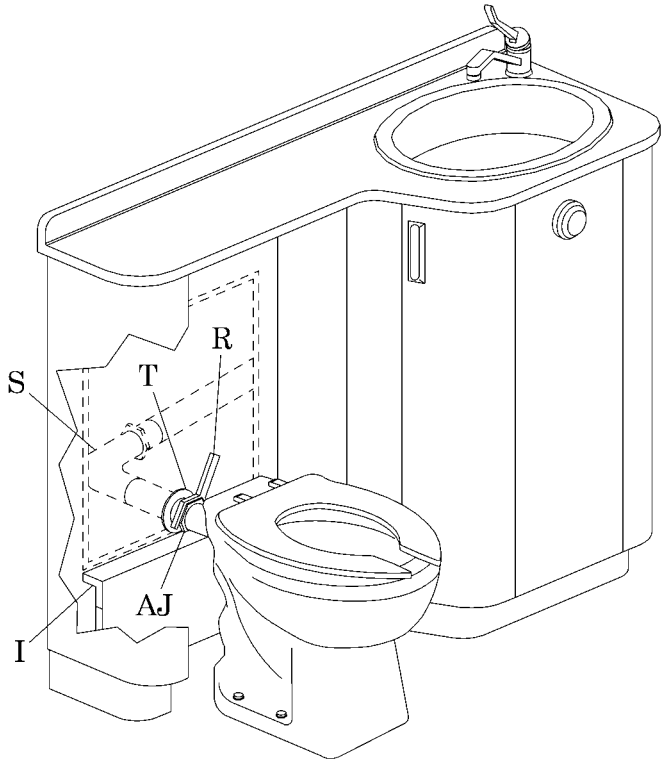
3. Connect the slip joint elbow (Q), previously installed behind the wall, to the water closet spud, and tighten the spud nut (AJ) with the spud wrench (R).

4. Replace the spud access panel (O), and tighten the two camlocks (P) on either side of the water closet.

Spud Connection for Floor-Mounted Water Closets

1. Place the tubular elbow (S), previously installed behind the wall, through the hole in the span plate (I) (see figure 6 on page 11).

Figure 6. Floor-Mounted Spud Connection



2. Place the escutcheon (T) over the tubular elbow (S) on the outside of the span plate (I).

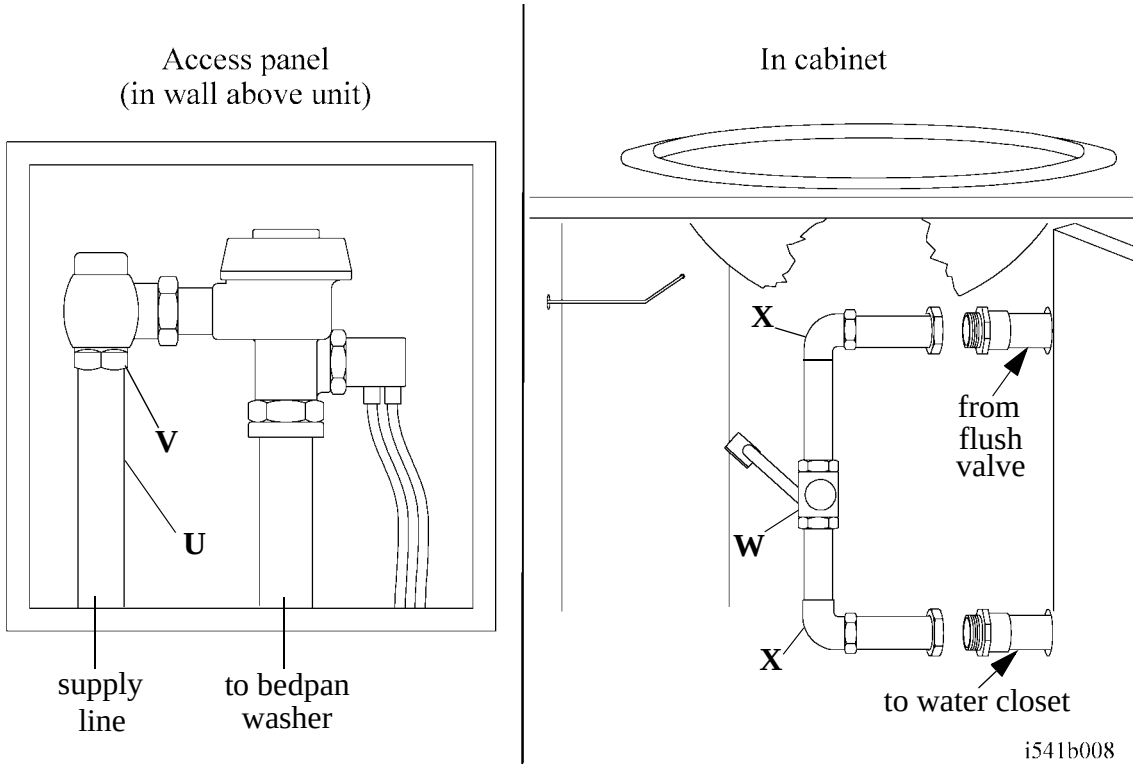
3. Connect the tubular elbow (S) to the closet spud, and tighten the spud nut (AJ) with the spud wrench (R).

Flush Valve Supply Connection

1. Working through the plumbing access door (E) (see figure 3 on page 6), prepare the fittings from the flush supply stub-out to the bedpan washer (see figure 2 on page 5).

2. Apply pipe sealant to a 1" pipe (U), and screw it into the female threads on the check stop of the flush valve (V) (see figure 7 on page 12).

Figure 7. Flush Valve Supply Connection



3. Dry-fit the pieces of the 1½" copper pipe (X) from the valve assembly to the bedpan washer (W).

4. Dry-fit the 1½" copper 90° elbow (X) onto the flush valve supply stub-out.

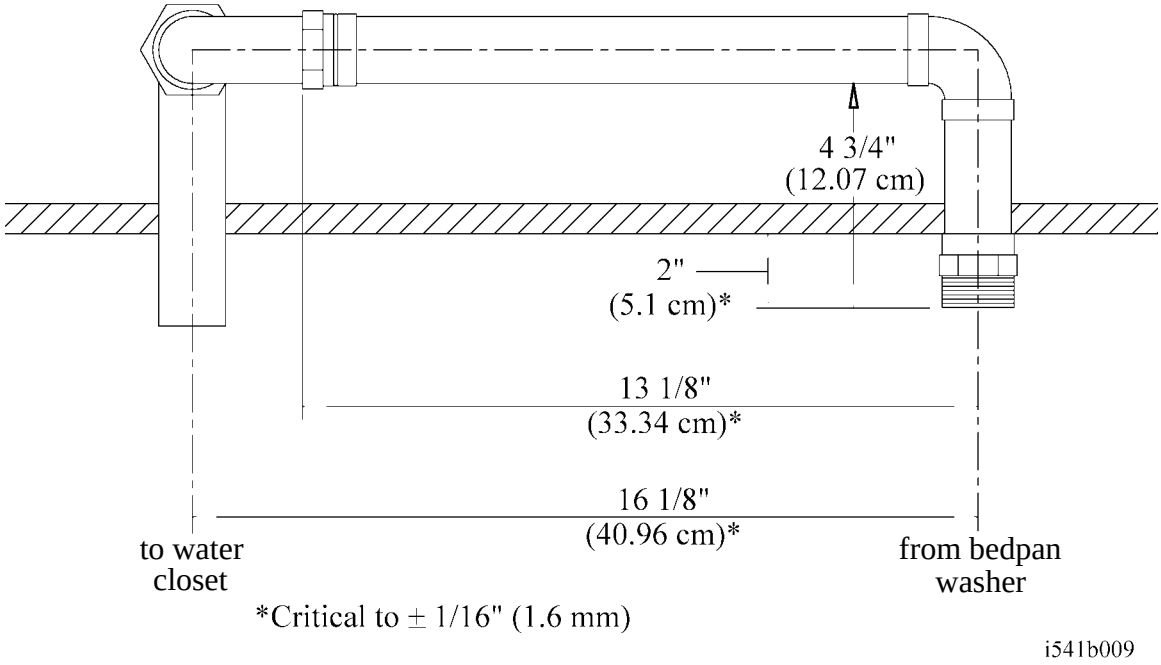
5. When all the pieces are properly fitted, tighten the fittings.

Transfer Assembly Connection

This assembly transfers water from the flush valve, behind the finished wall, to the rear spud of the water closet.

Dry-fit the pieces of 1½" plumbing (not supplied) of the transfer assembly according to the critical dimensions (see figure 8 on page 13).

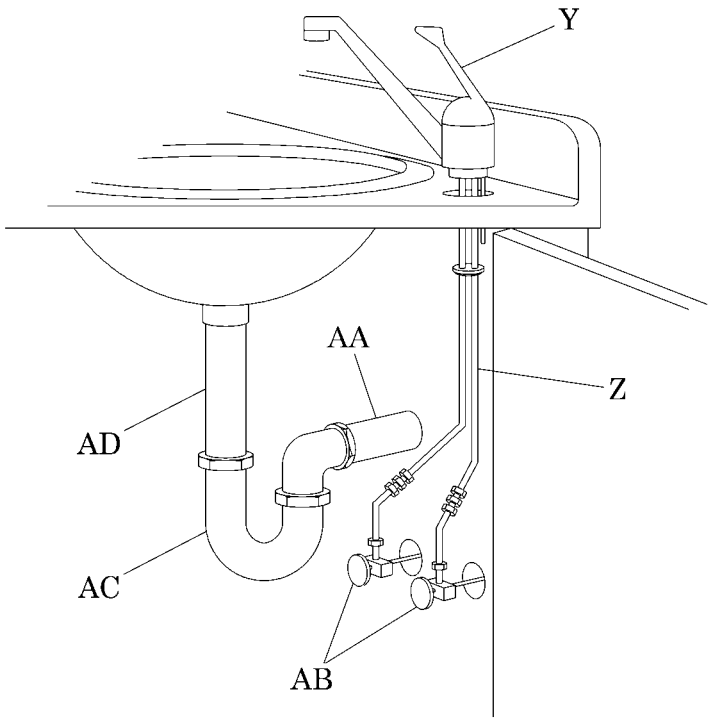
Figure 8. Transfer Assembly Connection



Lavatory Connections

1. Follow the utility connection manufacturer's installation instructions included to install the utility connection (Y) provided into the cabinet (see figure 9 on page 14).

Figure 9. Lavatory Connection



2. Connect the supply lines (Z) to hot and cold compression stops (AB).

   NOTE:
   Standard units use a 1¼" tail piece. Non-standard units may use a 1½" tail piece, which will require a 1¼"-to-1½" adapter.

3. Connect a 1¼" chrome P-trap (AC) and elbow between the lavatory tail piece (AD) (provided) and the lavatory waste stub-out (AA).

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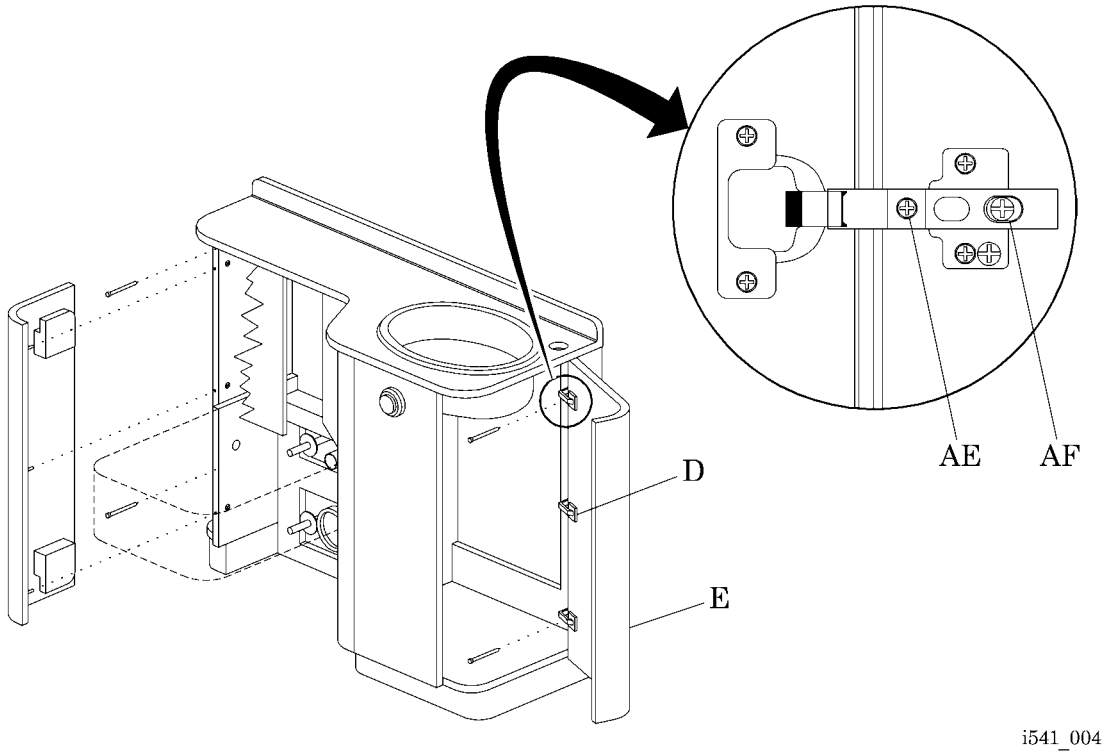
Adjusting Doors

Plumbing Access Door(s)

1. Test the plumbing access door (E) for smooth and unobstructed operation (see figure 10 on page 15).

Figure 10. Plumbing Access Door Adjustment



2. Check that the gap along the vertical edge between the plumbing access door (E) and cabinet frame is even from top to bottom.

   NOTE:
   Uneven gaps and door operation problems may be the result of improper cabinet installation. Make sure that attaching the cabinet to the wall has not pulled the cabinet out of square. It may be impossible to properly adjust the doors in this condition.

   a. Open the plumbing access door (E) to access the three adjustable hinges (D).

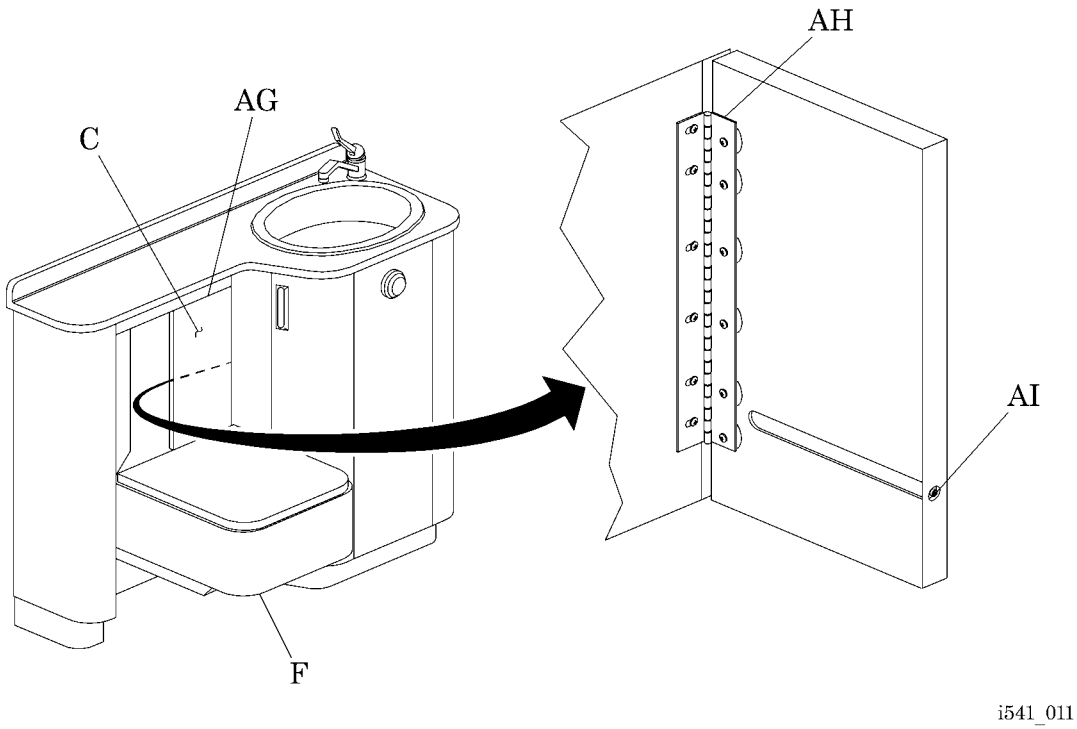
   b. To correct the gap spacing between the plumbing access door (E) and frame, turn each gap adjustment screw (AE) clockwise for less gap or counterclockwise for more gap.

   c. Turn each door adjustment screw (AF) to adjust the front door surface to be flush with the cabinet surface.

Swinging Doors

The swinging doors (C) that open when the toilet seat cover (F) is raised are adjusted from the factory (see figure 11 on page 16). Occasionally they may need adjustment if they do not open and close evenly, or do not meet exactly flush when closed.

Figure 11. Swinging Door Adjustment



NOTE:
Uneven gaps and door operation problems may be the result of improper cabinet installation. Make sure that attaching the cabinet to the wall has not pulled the cabinet out of square. It may be impossible to properly adjust the doors in this condition.

1. Check that the door stop (AG) is mounted properly and is not bent. Since the doors rest against it, it is important for it to be in good condition.

2. For open/close adjustments, and to make the swinging doors (C) meet flush when closed, use a 1/8" hex key to turn the adjustment screw (AI) inset into the inside edge of each swinging door.

    a. Turn the adjustment screw (AI) clockwise to shorten the swing; turn counterclockwise to lengthen the swing.

    b. Alternately lift and lower the toilet seat cover (F) to test the adjustment.

3. For major adjustments, or other alignment problems, it may be necessary to adjust the inside spring hinges (AH).

   a. With the toilet seat cover (F) down, manually push open the swinging door (C) opposite from the one needing adjustment.

   b. Looking inside, use a screwdriver to loosen the appropriate screws, and adjust the fit within the limits of the adjustment slots.

   c. Tighten the screws, and allow the opposite swinging door (C) to close. Check the fit.

   d. Repeat steps b and c as necessary.

NOTES: