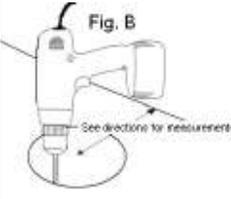
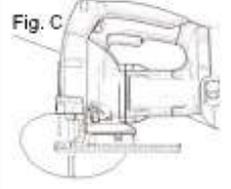
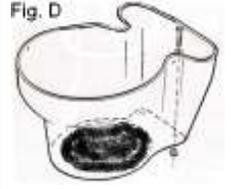


# INSTALLING THE SUN-MAR DRY TOILET

<p><b>Placement Of The SUN-MAR Dry Toilet</b></p>	<p>Ensure that the floor joists are not in the way and that there is an unobstructed 10" diameter passage from the underside of the AF "Dry Toilet" to the top of the transition piece. The 10" hole should be centered 11.5" (29.21 cm) from the back wall and at least 9" (22.86 cm) dry toilet from the side wall in the room where the toilet will be installed. The transition piece on the top of the composting unit should be located so that the center line of the transition piece is directly below the center of the 10" circular cutout which will be made in the bathroom floor above. The transition piece should be at a right angle to the composting unit.</p>	
<p><b>Installing The SUN-MAR Dry Toilet Base</b></p>	<p>The SUN-MAR Dry Toilet comes preassembled. For the purpose of explanation, the toilet base is the bottom of the toilet which is secured to the bathroom floor, the toilet chute is the black inner section (shown in Fig. A) that fits through the floor and is attached to the toilet top, the toilet top is the upper part of the toilet that attaches to the toilet base, and the bowl liner which is the black removable funnel shaped piece below the toilet seat.</p> <p>To install the SUN-MAR Dry Toilet, follow the procedure outlined below:</p> <ol style="list-style-type: none"> <li>1. To locate the position of the SUN-MAR Dry Toilet, place the toilet chute in the desired location on the floor in the bathroom and trace the 10"(25 cm) diameter cut out in the bottom of the toilet base on the floor in the bathroom. The centre of the 10" circle should be centered 11.5" (29.21 cm) from the wall against which the toilet will be mounted(See Fig. A)</li> <li>2. Drill a 1/2"(6mm) hole on the front of traced line and then check under the floor that the hole will be clear of floor joists and will line up with the composting unit below. (See Fig. B)</li> <li>3. If the position is correct, complete the cutting of the 10"(250mm) diameter circle with a jig saw. (See Fig. C)</li> <li>4. Center the toilet base over the 10"(250mm) diameter hole that Has been cut out of the floor and securely attach to the floor by using the four 5/16" by 2 1/2"(8mm by 64mm) lag bolts that are provided with your kit. (See Fig. D)</li> </ol> <p>**Prior to finishing the SUN-Mar Dry Toilet installation, it is a good Idea at this time to do a pre-assembly check to see if you will need any extension pipe.</p>	   
<p><b>The Transition Piece</b></p>	<p>Place transition piece (Fig. E) into the rectangular opening on the top of the composting unit. Make sure that the transition piece is completely vertical on the unit, or completely vertical. Important: the transition piece should be completely vertical. The opening in the toilet in bathroom should be oriented above the opening in the transition piece so that waste can drop directly into the patented bio-drum.</p>	

<p><b>Determining If An Extension Pipe Piece Is Required</b></p>	<p>Place the toilet chute into the toilet base in the bathroom. If the toilet chute extends 1-2”(25 - 50mm) into the transition piece, then no extension pipe pieces will be required. If the transition piece does not extend far enough up to meet the toilet chute, then one or more extension pipe pieces will be needed. These minimum 41” (112cm) pipe sections can be cut down to the correct length, so that when assembled and placed in the transition piece, they extend 1-2”(25-50mm) into the toilet chute. After taking into account the overlap, each pipe piece provides an extension of about 41”(104cm).</p>	
<p><b>Assembling And Installing The Extension Pipe Pieces</b></p>	<p>Each extension pipe piece, consists of two half pipes. These can be cut to the correct length, by cutting the required amount off the straight ends of each half with a hack saw (do not cut the belled end of the extension pipe piece. It is easier to cut pipe sections to length before joining the two halves together. After cutting, clean up the edges with coarse (40-60 grit) sandpaper. Before joining the two halves of the pipe pieces, spread a bead of silicone caulking from top to bottom along the inside flanges of both halves of pipe pieces (so that the inside of the pipe section will be sealed). Press the two halves together, and secure them by screwing the self tapping screws provided into the pre-drilled holes. Run a finger or spatula up along each joint inside the chute to remove any excess silicone. Insert the non-belled end of the extension pipe piece into the transition piece. Ensure that the transition piece overlaps the extension pipe piece by 1 -2 “ (25 - 50 mm).</p>	
<p><b>Finishing The SUN-MAR AF Dry Toilet Base Installation</b></p>	<p>Pre Assembly Check: Before finishing the installation, make sure all pieces fit together properly. The top of the pipe piece is belled out to accommodate the toilet chute. Place the transition piece in the cut out provided on the top of the composting unit. Place the pipe pieces, if any, inside the transition piece. Next lower the toilet top onto the base so that the chute projects 1-2”(25-50mm) into the pipe piece or directly into the transition piece if no pipe piece is used. Ensure that the toilet top is properly located over the toilet base, that the chute is completely vertical, and that the screws to attach the top to the toilet base, line up properly. ( Fig. A) If the pre-assembly check appears OK, then disassemble and reassemble each piece as in the pre-assembly check(see above).</p> <p>To assemble the toilet top with the chute, line up top with the chute and fasten the four screws around toilet opening and cover with the tap caps (Fig B). Insert the toilet chute into the toilet base until the toilet top rests on the base (Fig C). When reassembling use silicone caulking at the joints where the toilet chute sits inside the extension pipe piece, where the extension pipe piece sits inside the transition piece and where the transition piece sits inside the composting unit. Use a finger or spatula to remove any excess silicone.</p> <p>Align the two pre-drilled holes on the front of the toilet top, with the holes on the front of the toilet base, and insert two screws without tightening them. With these front two holes secured, tilt the rear of the top down over the base. Align the last four screws holes. Insert the CKS washers over the screws. Screw in all six screws, making sure not to over-tighten, and push the snap caps over the screw heads. Attach the toilet seat by threading the nylon screws through the toilet seat hinge and into the holes into the toilet top. Put the black removable bowl liner into place under the toilet seat.</p>	 <p>Fig. A</p> <p>Fig. B</p> <p>Fig. C</p>