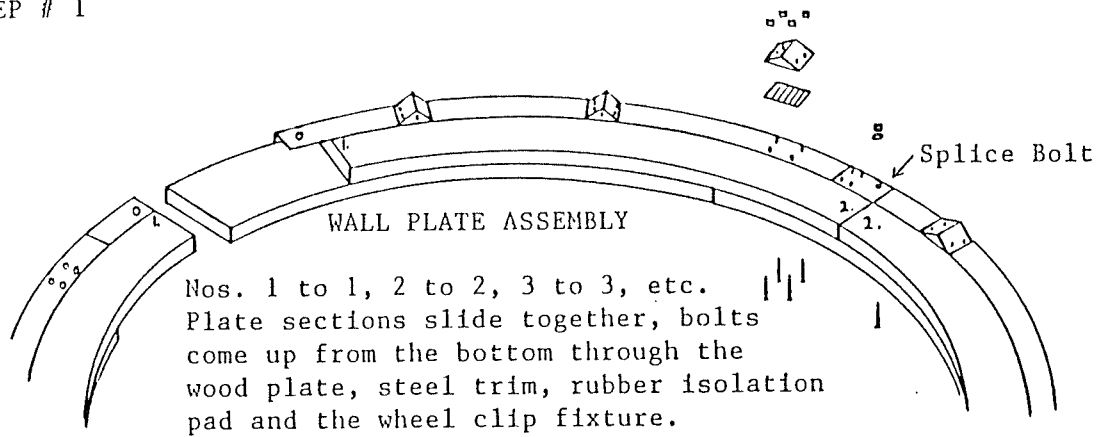


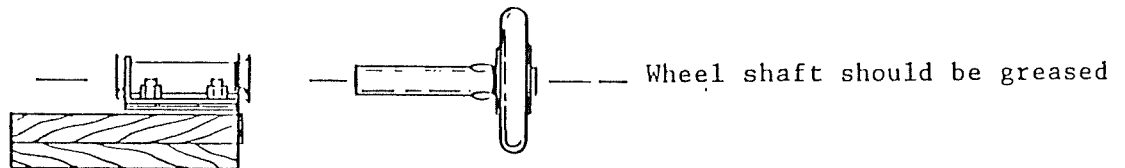
STEP # 1

ASSEMBLY SUPPLEMENT - PAGE 1

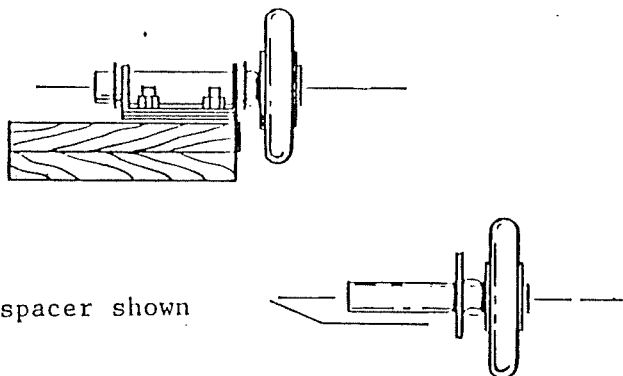


TIP : Holes for the wheel fixture will align easier if you put the splice bolt in first.

STEP # 2



Shafts should be lubricated annually with any good grade lubricant.

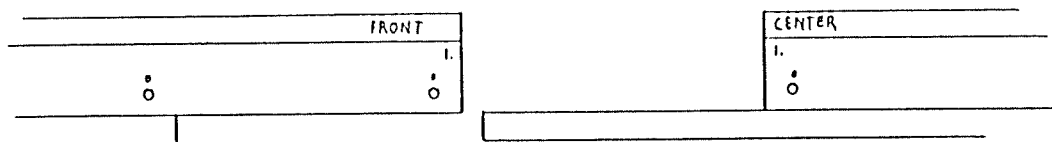


Use only if you feel its necessary

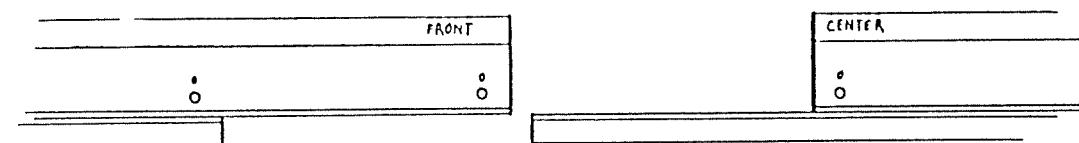
STEP # 2 cont.

INSTALLATION OF DOME SUPPORT TRACK

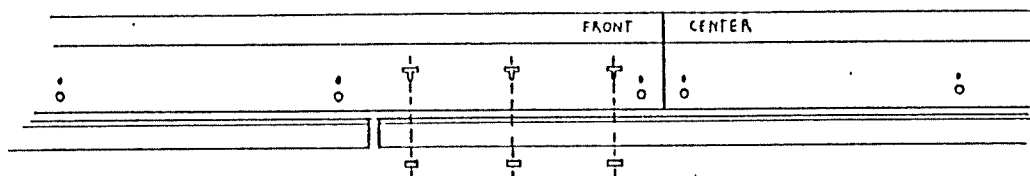
OUTSIDE VIEW showing the joint at No.1, No.1. Place one end of the dome track segment on a dome roller and roll the segment onto the wall plate assembly. the track must be assembled on the wall plate and rollers.



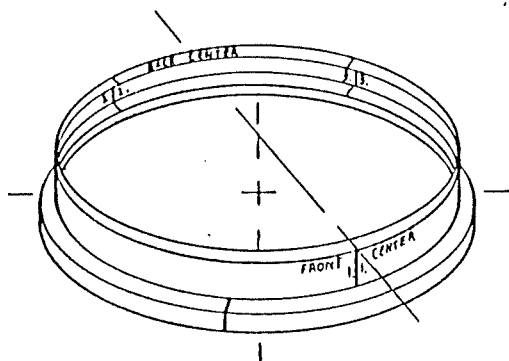
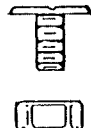
INSIDE VIEW - This shows the overlap of the joint.



3 low profile truss head bolts and nuts are used at each splice in the track.



The bolts go down through the track, nuts on the bottom, this allows clearance.

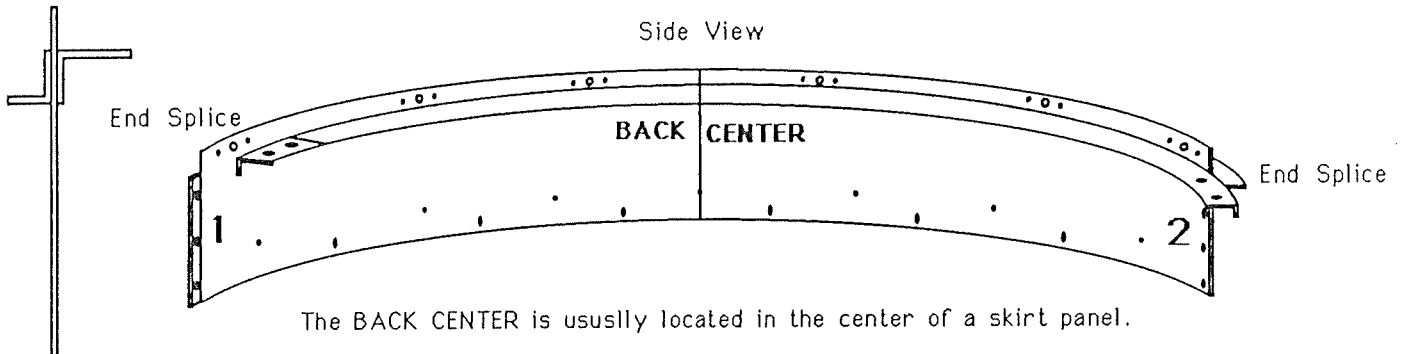


TIP : Assemble all the dome track segments with the nuts and bolts finger tight. When the last piece is installed, tighten all the joints.

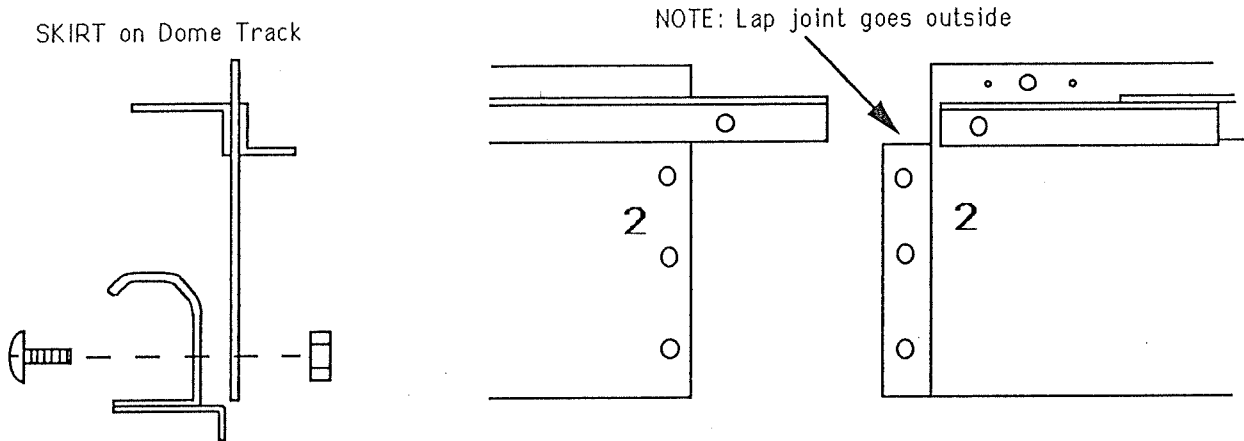
FRONT & BACK CENTERS will be your reference points during the assembly of the rest of the observatory dome. The Front & Back Centers are equal distant from each other around the circumference of the dome track.

Step #3

Cross Section Skirt

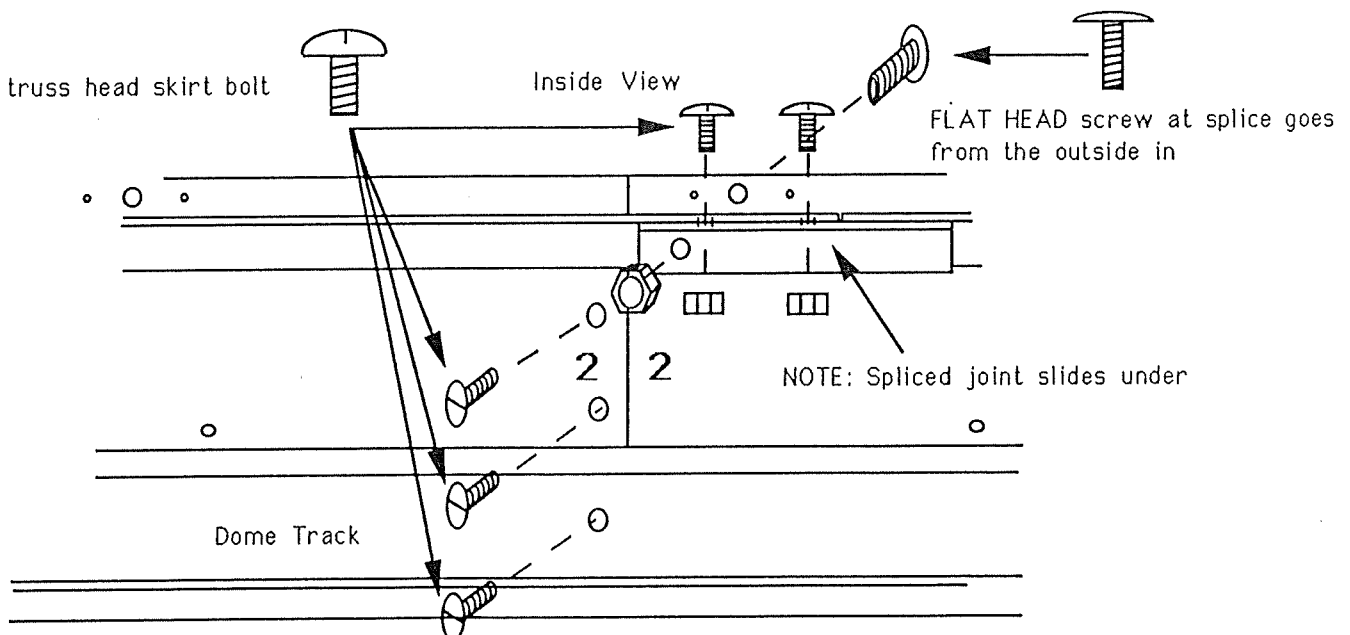


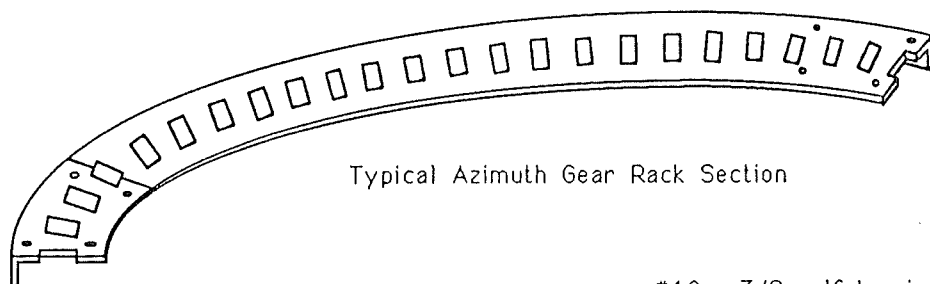
SKIRT on Dome Track



Bolts go from the inside of the dome track out. Nuts go on the outside, this keeps the rollers unobstructed.

Standard truss head skirt bolt

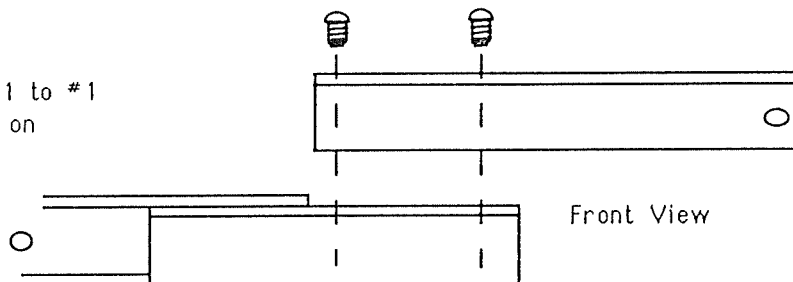




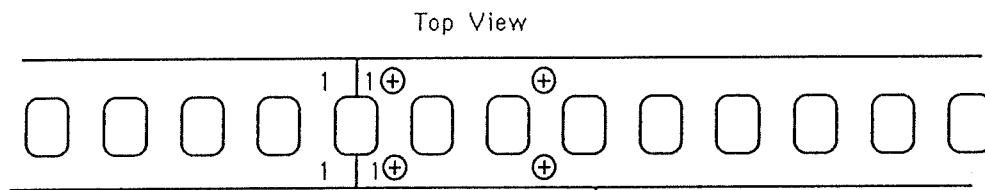
Typical Azimuth Gear Rack Section

#10 x 3/8 self tapping screw

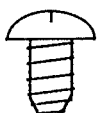
LAP Joints fit #1 to #1
#2 to #2 and so on



Front View

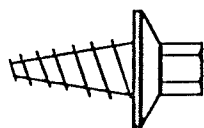


Top View

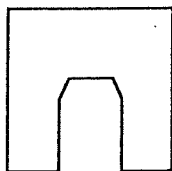


#10 x 3/8 Self Tapping Screw

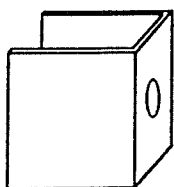
SKIRT on Dome Track



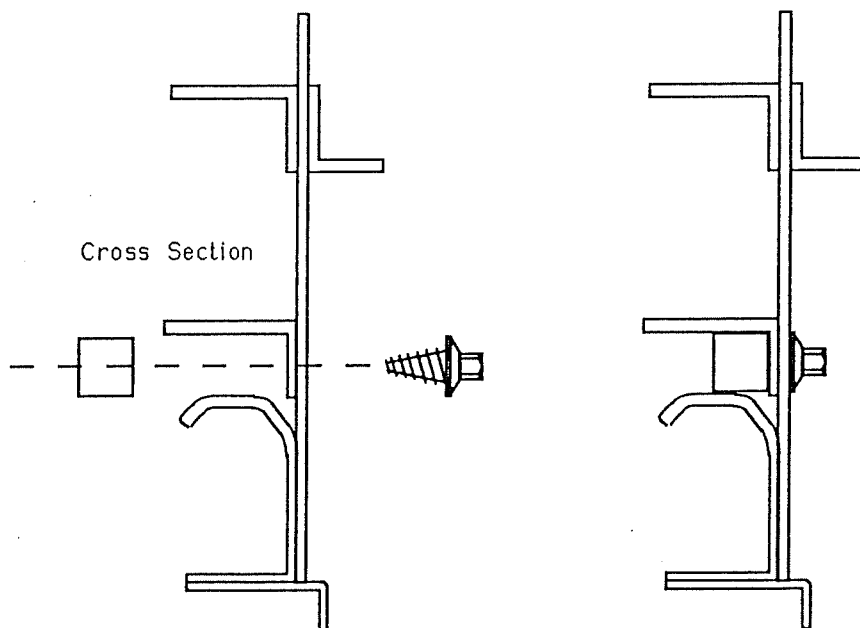
Weatherguard self tapping screw



Gear Rack Shim
(not needed in all units)
See Drawing 104

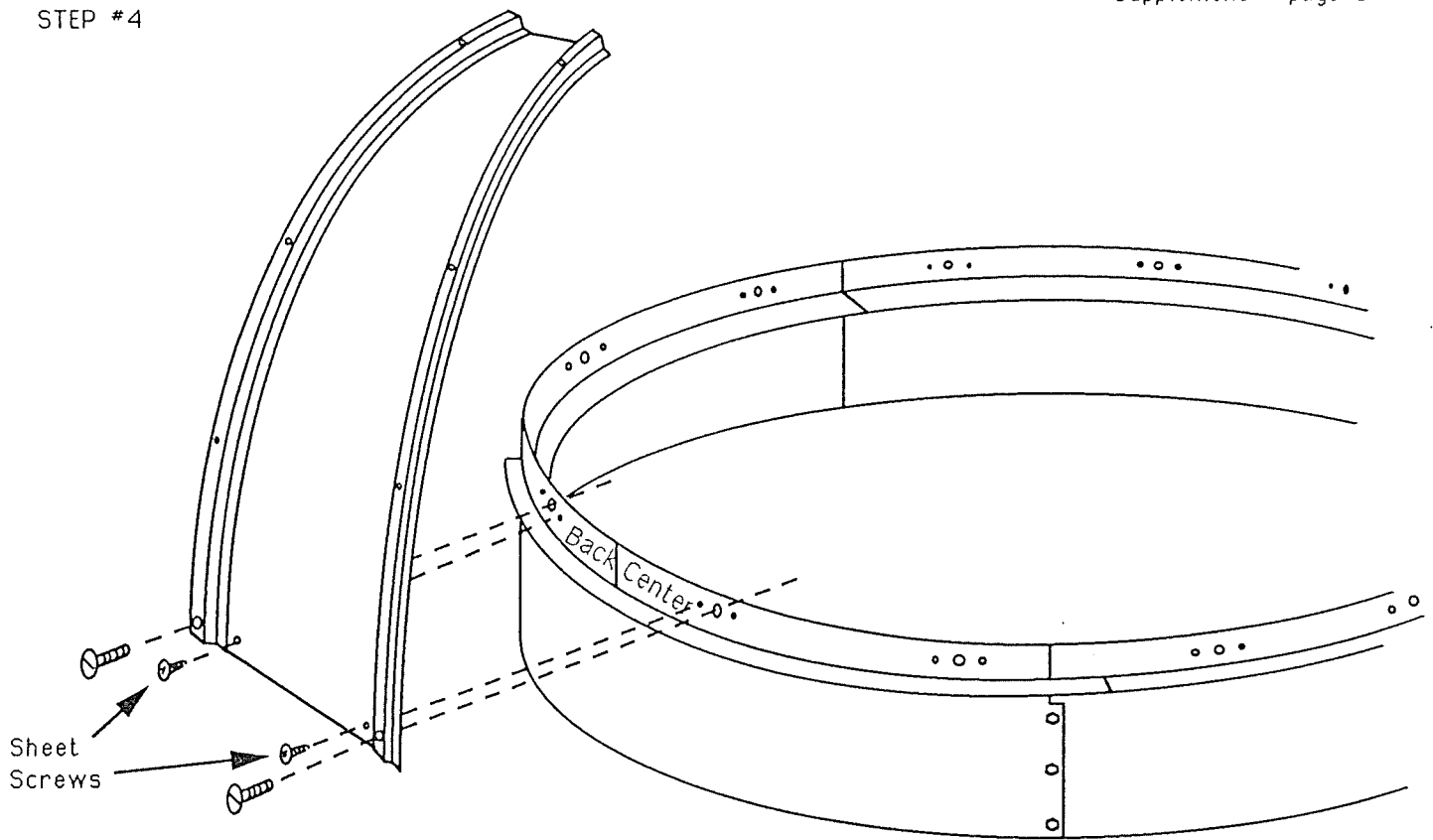


Chair (this is screwed into to secure
the azimuth gear rack to the skirt)

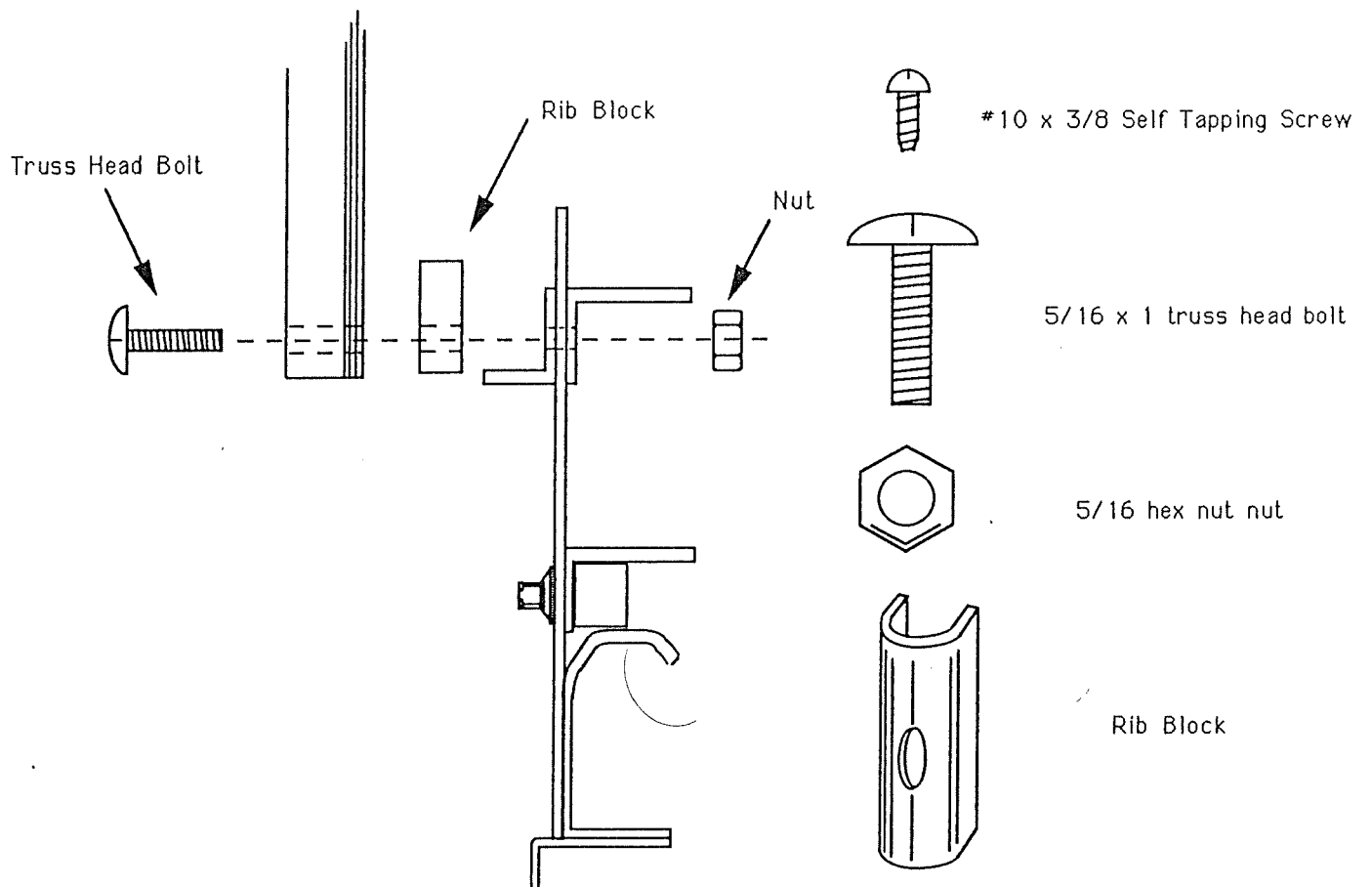


Cross Section

STEP #4

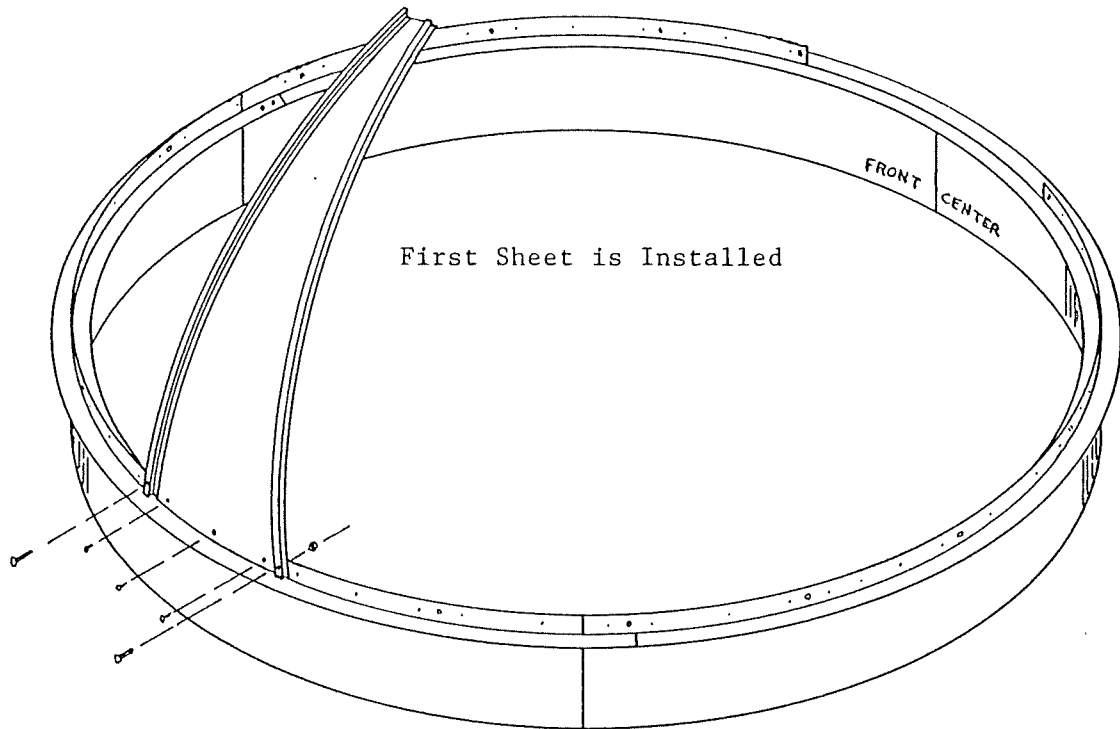


The 1st panel on the dome skirt starts at the 'Back Center'. This panel is marker 'Back Center' and numbered.

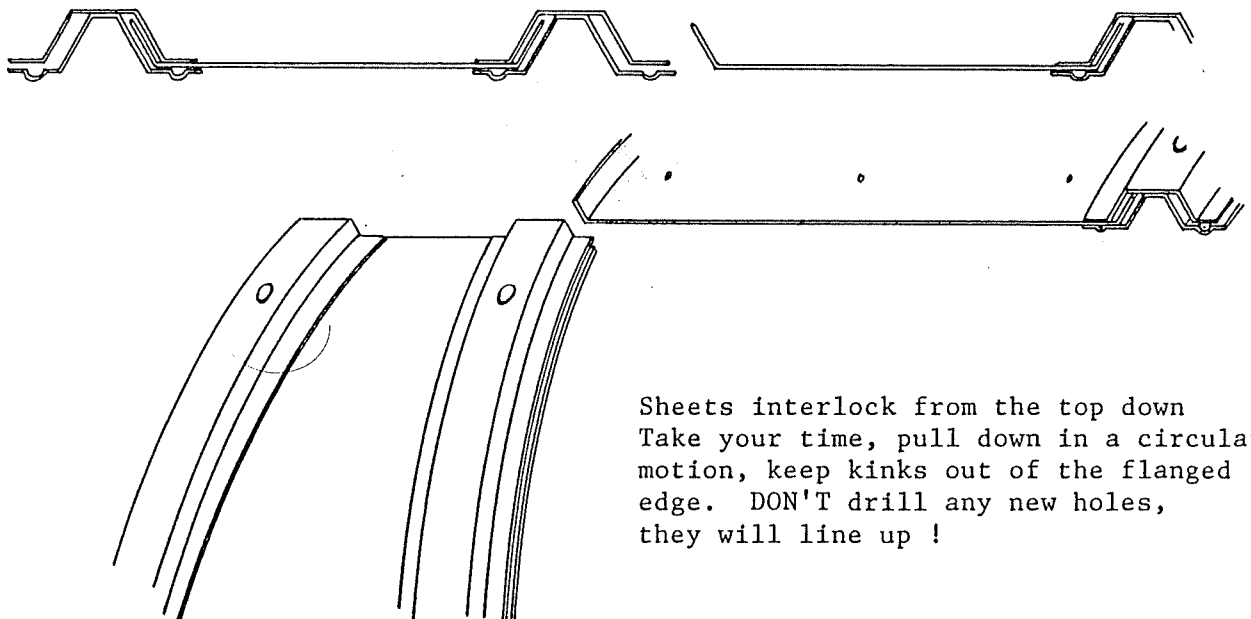


STEP # 4 cont.

ROOF SHEET ASSEMBLY

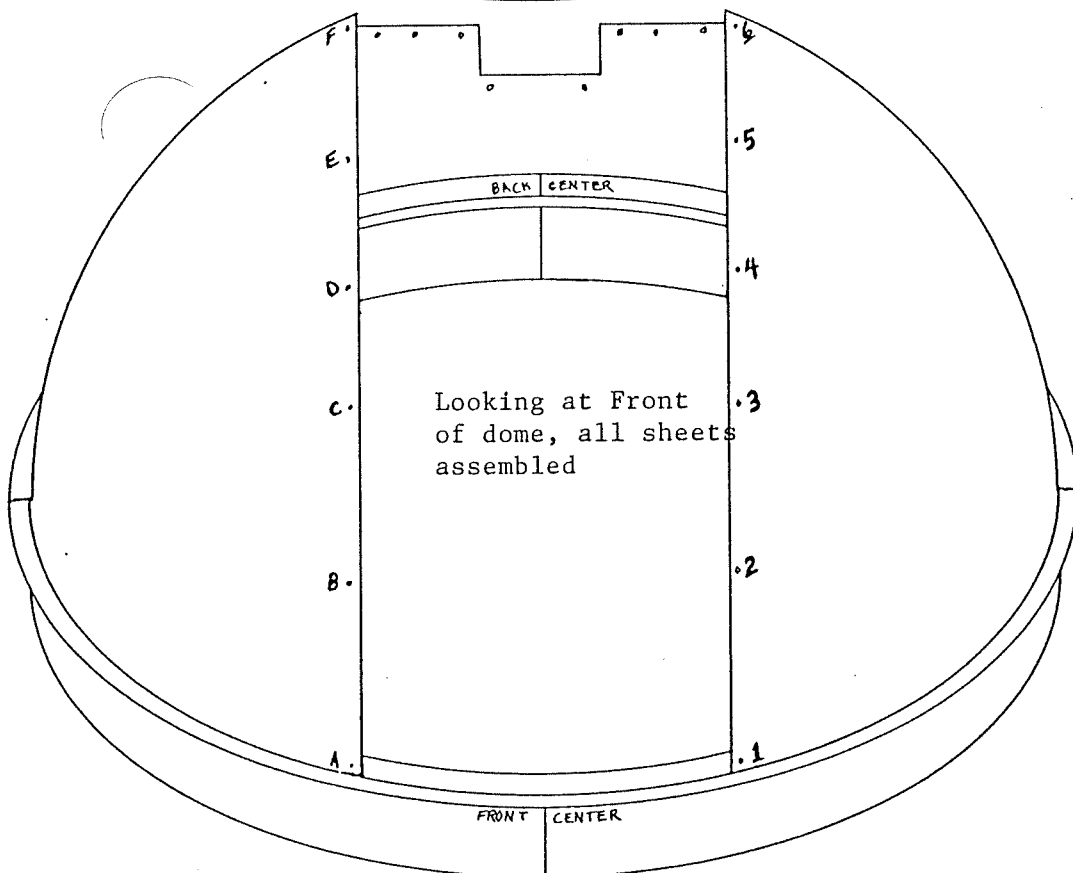
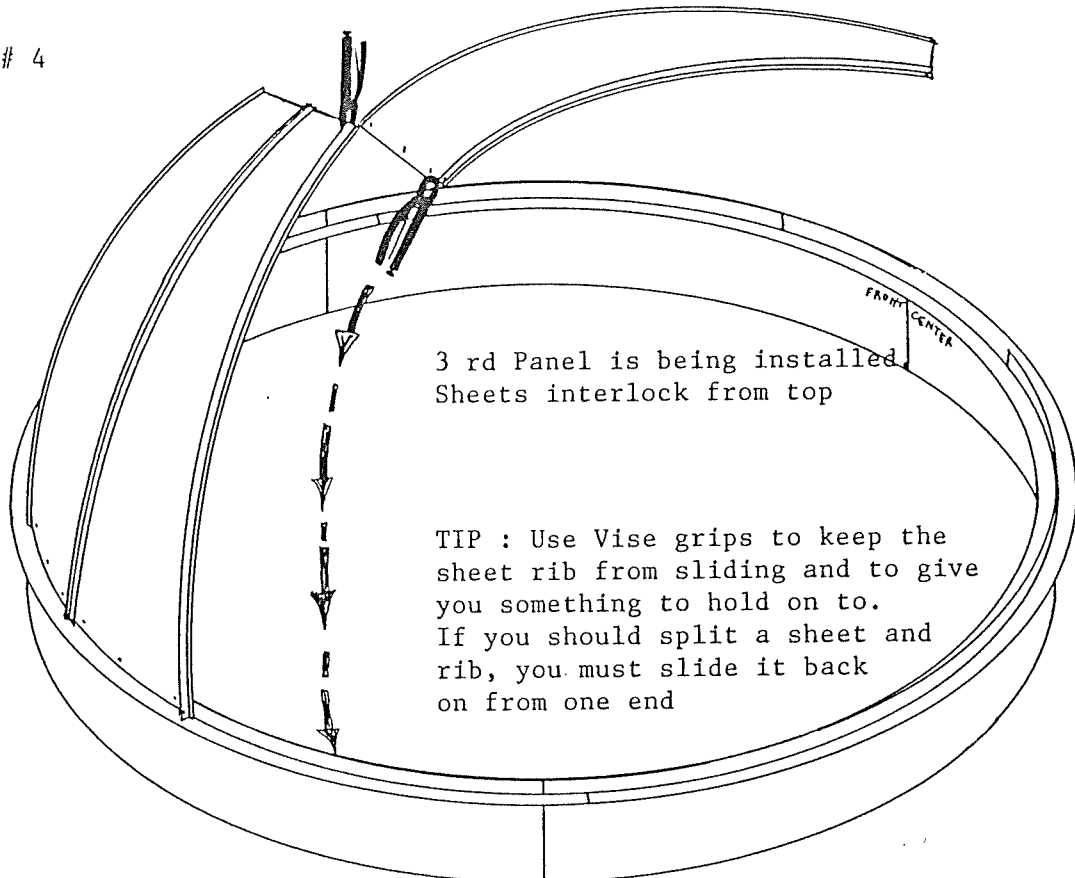


This shows the interlocking system and how the joint looks from the end view

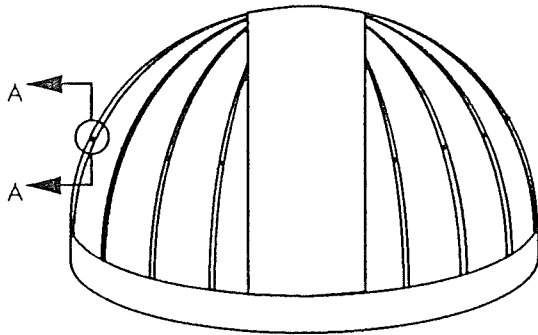


Sheets interlock from the top down
Take your time, pull down in a circular
motion, keep kinks out of the flanged
edge. DON'T drill any new holes,
they will line up !

STEP # 4

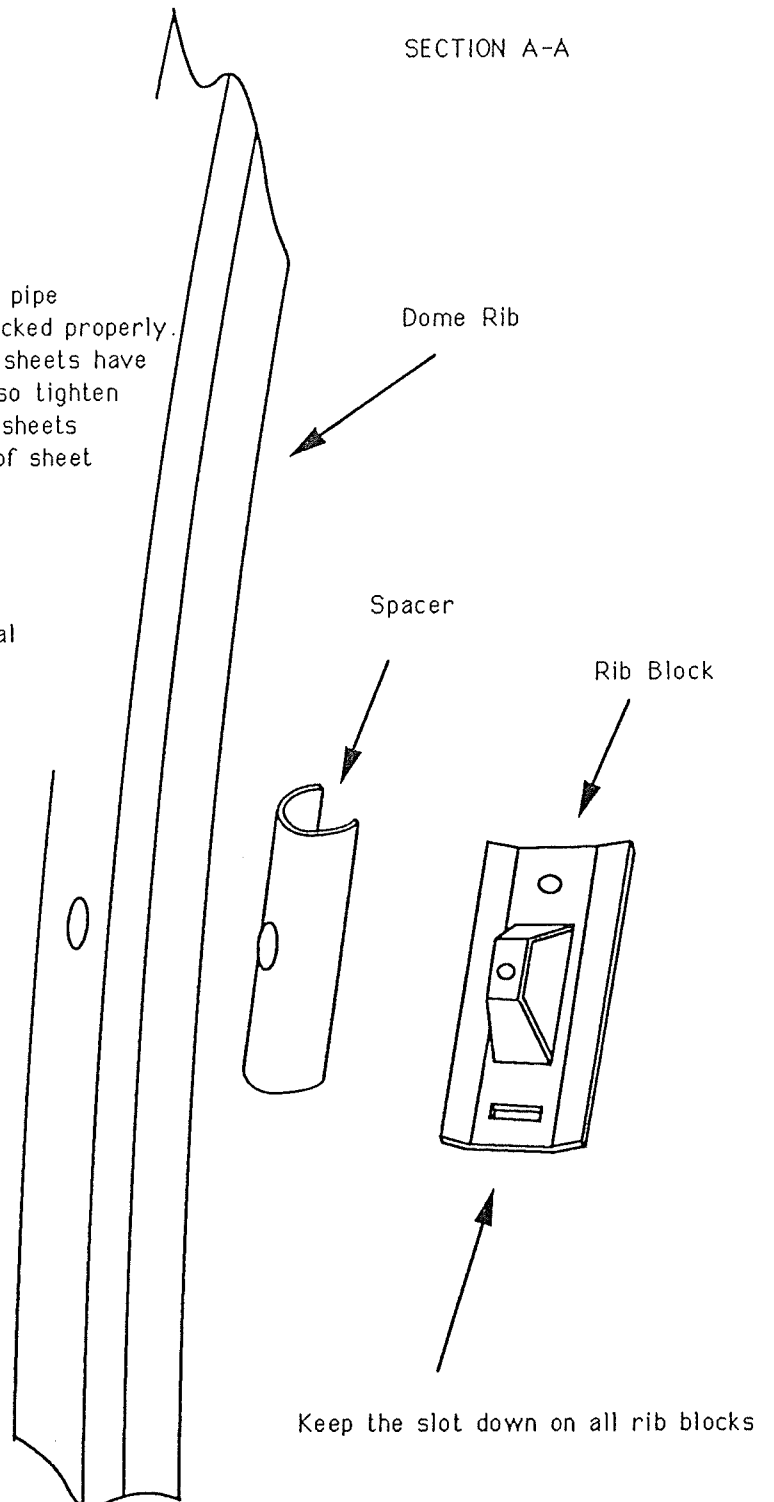
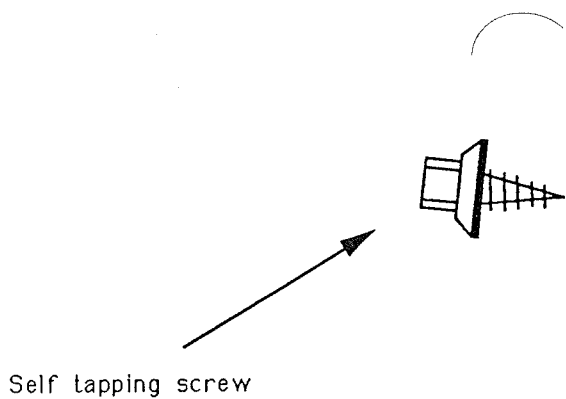


RIB BLOCK INSTALLATION



NOTE: The observatory dome is shipped without the pipe rib blocks in order to allow the roof sheets to be packed properly. These rib blocks should be installed after the roof sheets have been completely assembled. The rib blocks will also tighten the ribs to the roof sections. When sliding the roof sheets together it may be necessary to use soap on the roof sheet interlocking edge to help the sheet slide.

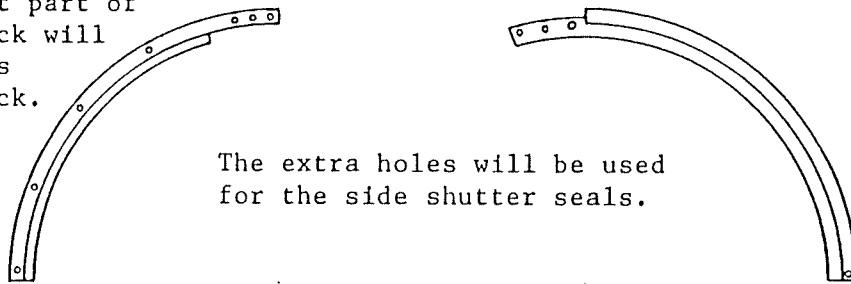
DO NOT USE OIL, oil will stain the material



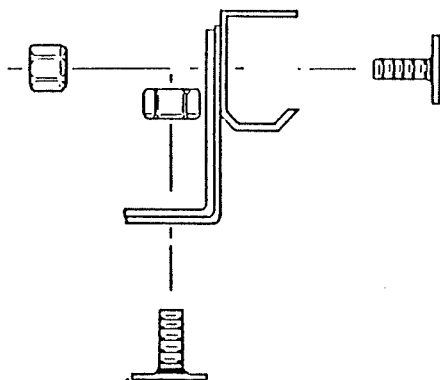
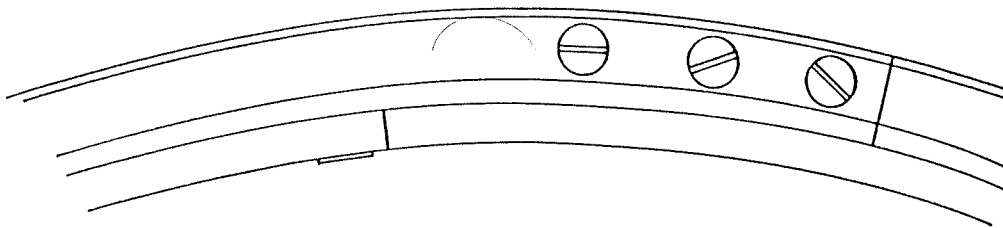
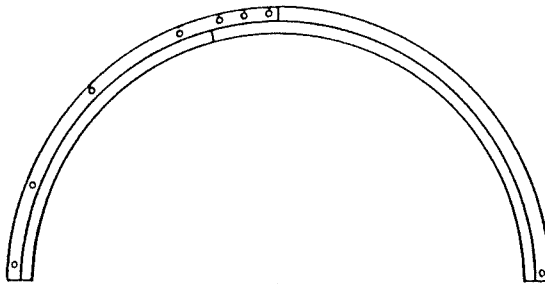
STEP #5

SHUTTER TRACK ASSEMBLY

NOTE: The front part of the shutter track will have extra holes through the track.



The extra holes will be used for the side shutter seals.

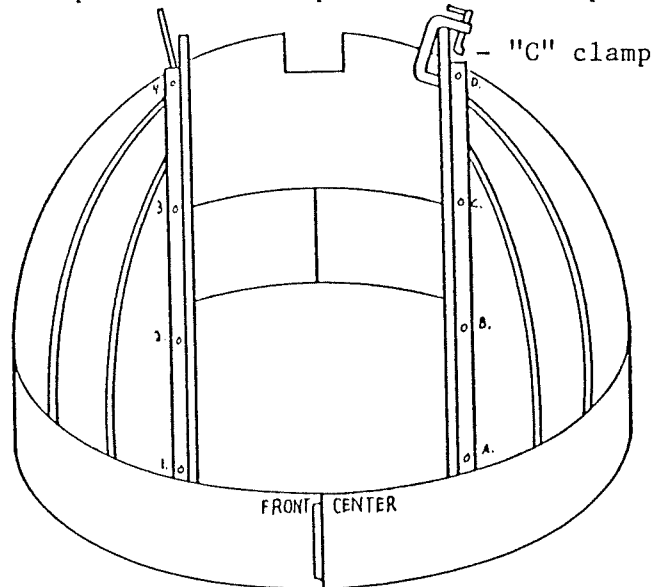


NOTE: Use the bolts that are marked Shutter Track.

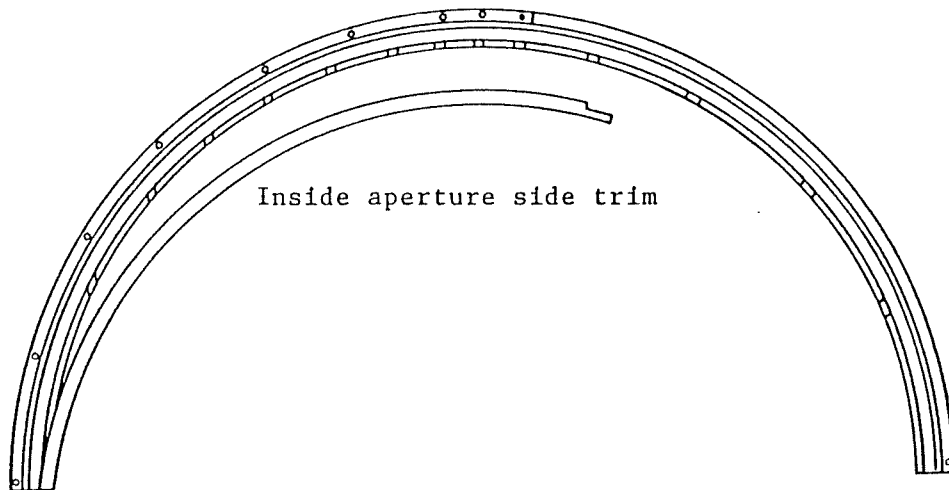
STEP #5 - Cont.

INSTALLATION OF SHUTTER TRACKS

NOTE - A large "C" clamp and a "drift pin" would be helpful tools.



NOTE - Secure the back of the track assembly and then come back around to the front. Work your way up from the bottom. This will pull the following holes into location.

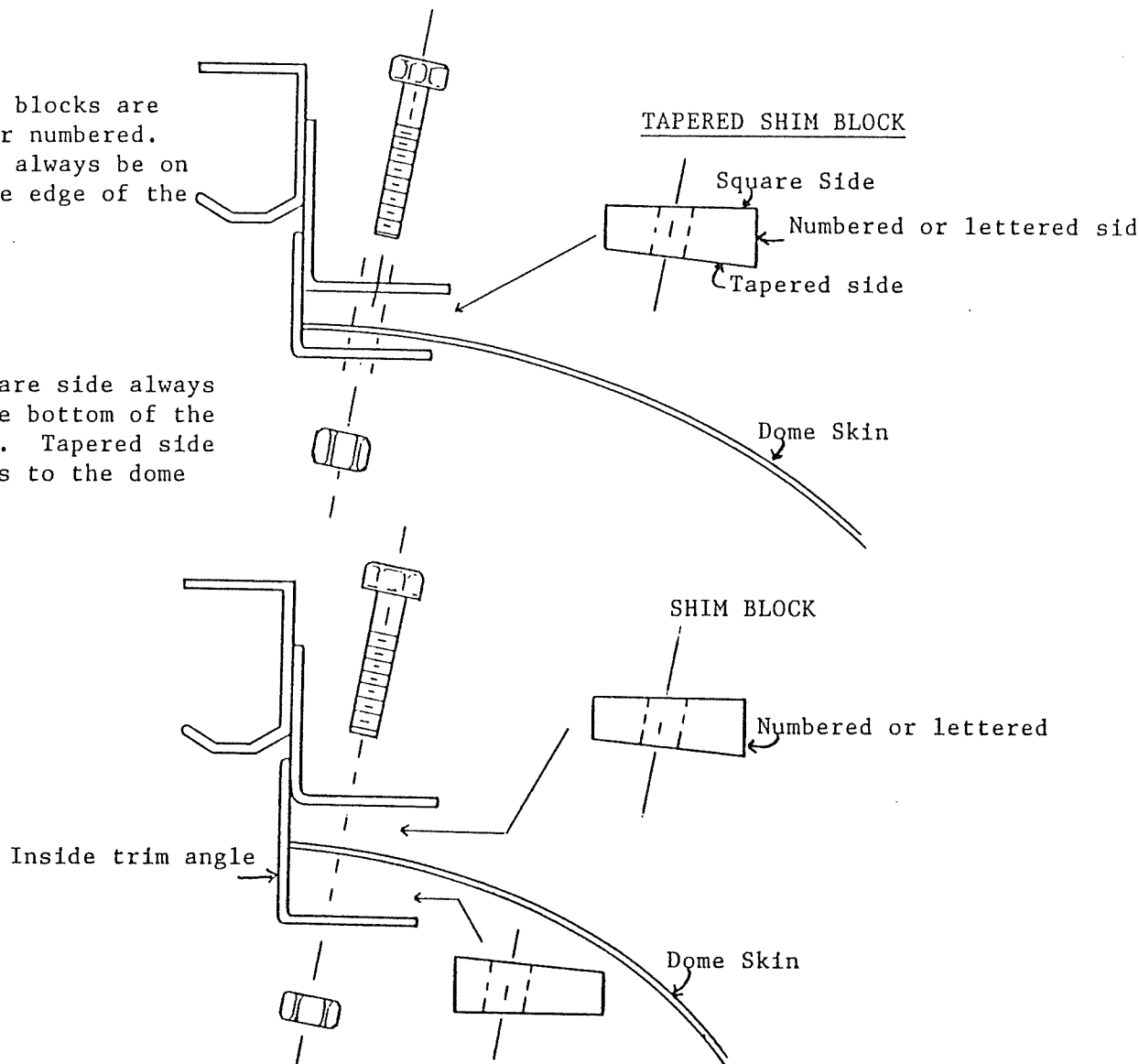


STEP #5 - Cont.

INSTALLATION OF SHUTTER TRACK ASSEMBLY

NOTE: All blocks are lettered or numbered. These will always be on the outside edge of the block.

NOTE: Square side always goes to the bottom of the dome track. Tapered side always goes to the dome skin.

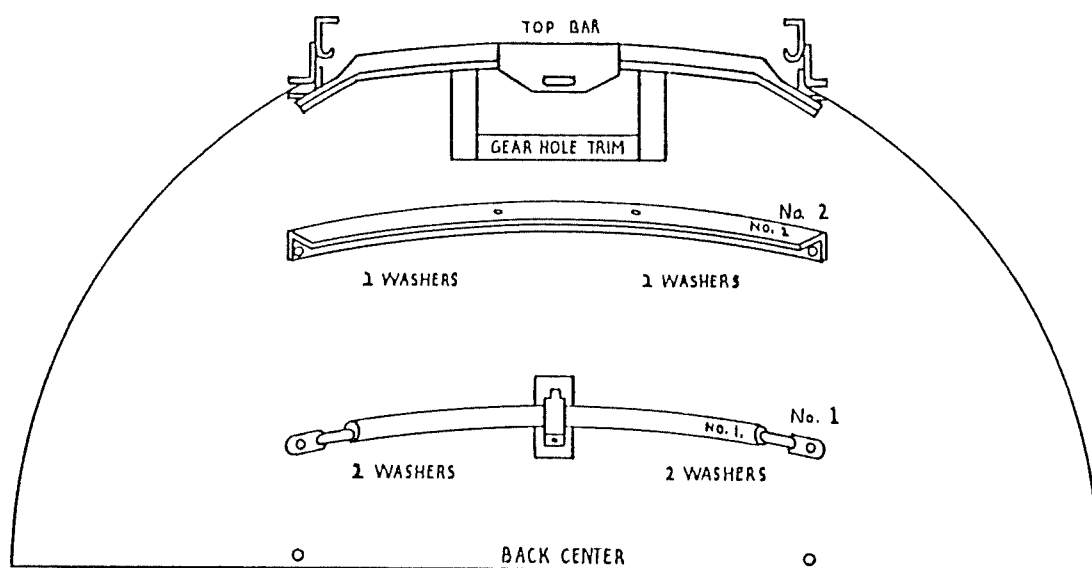


NOTE: If you have a double shim, the number or letter is always on the outside. Bolts will always angle slightly toward the center of the dome.

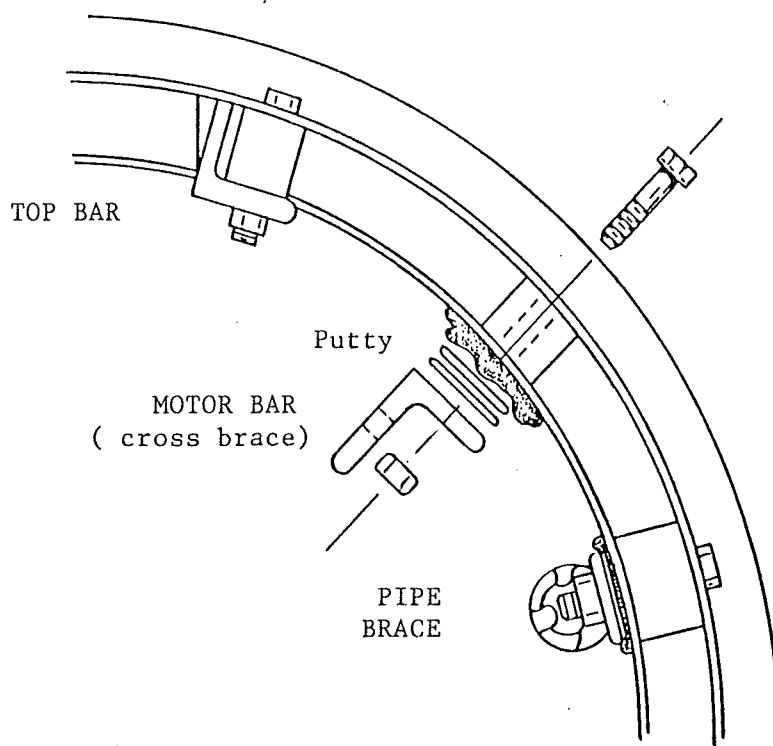
INSTALLATION OF INTERIOR BRACES AND GEAR HOLE TRIM

STEP # 5 cont.

ASSEMBLY SUPPLEMENT - 11



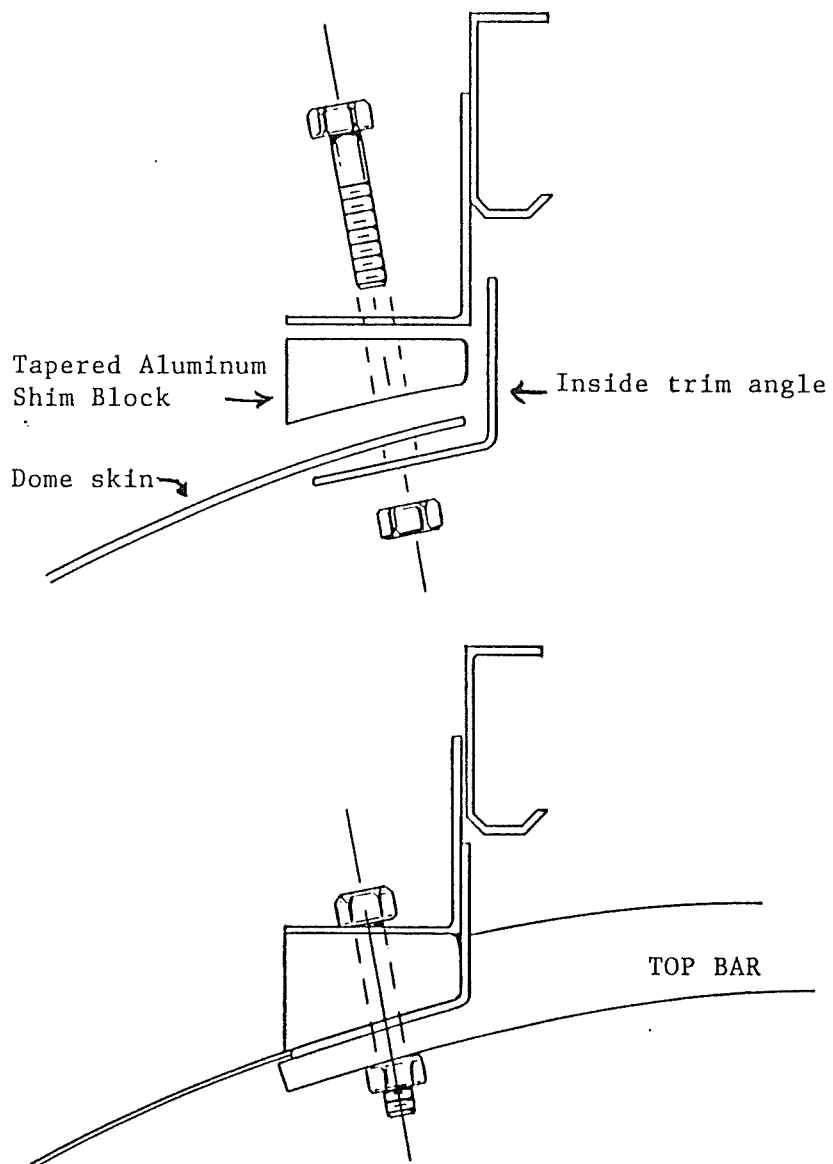
NOTE : Braces or spreader angles will always lay across pipe clips

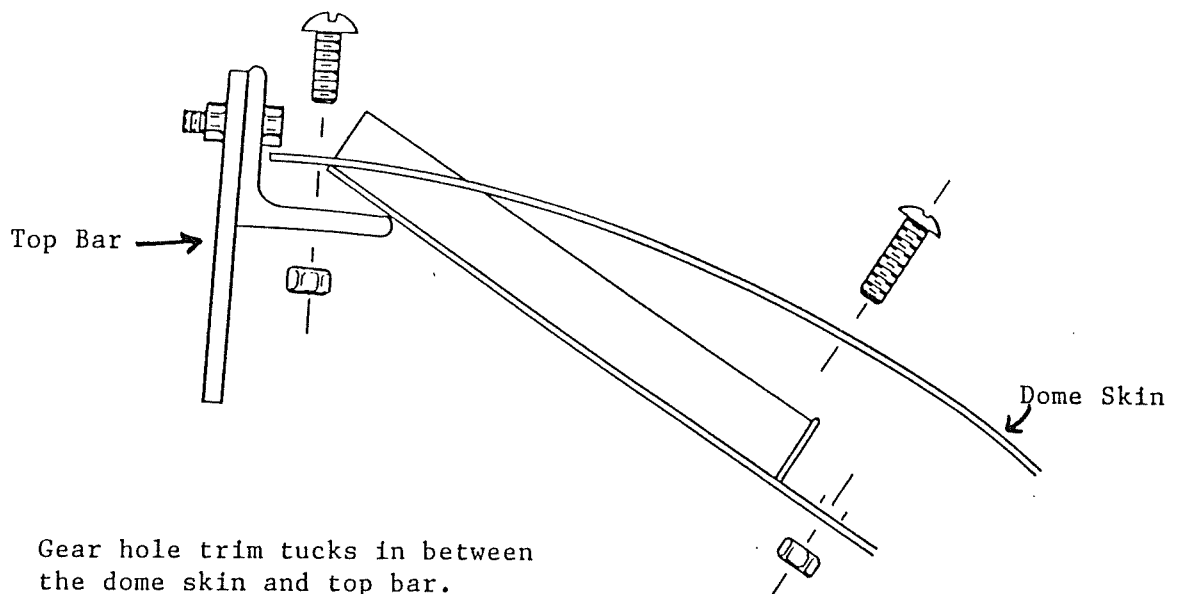
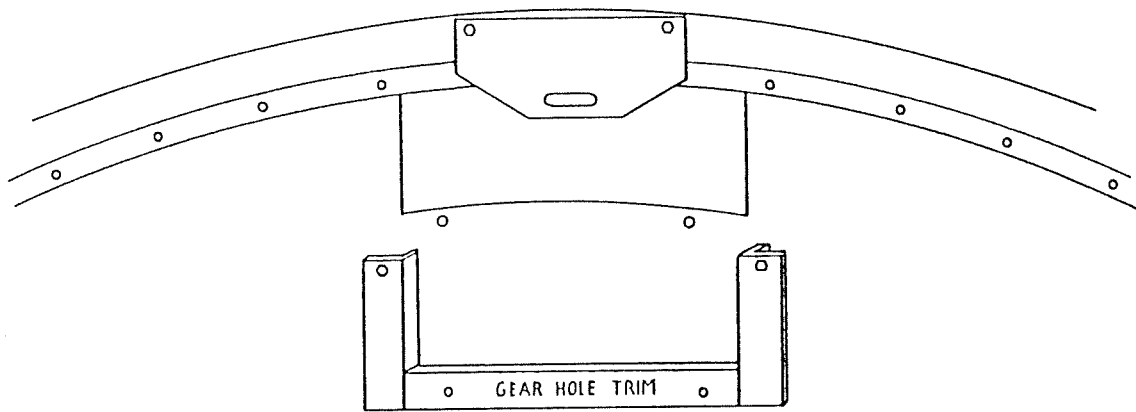


NOTE : The number of spacer washers will vary, this is noted on the inside of the roof sheet panel. Always put the putty around the bolt and then push the washers into the putty to seal the bolt hole.

STEP #5 - Cont.

INSTALLATION OF SHUTTER TRACK ASSEMBLY

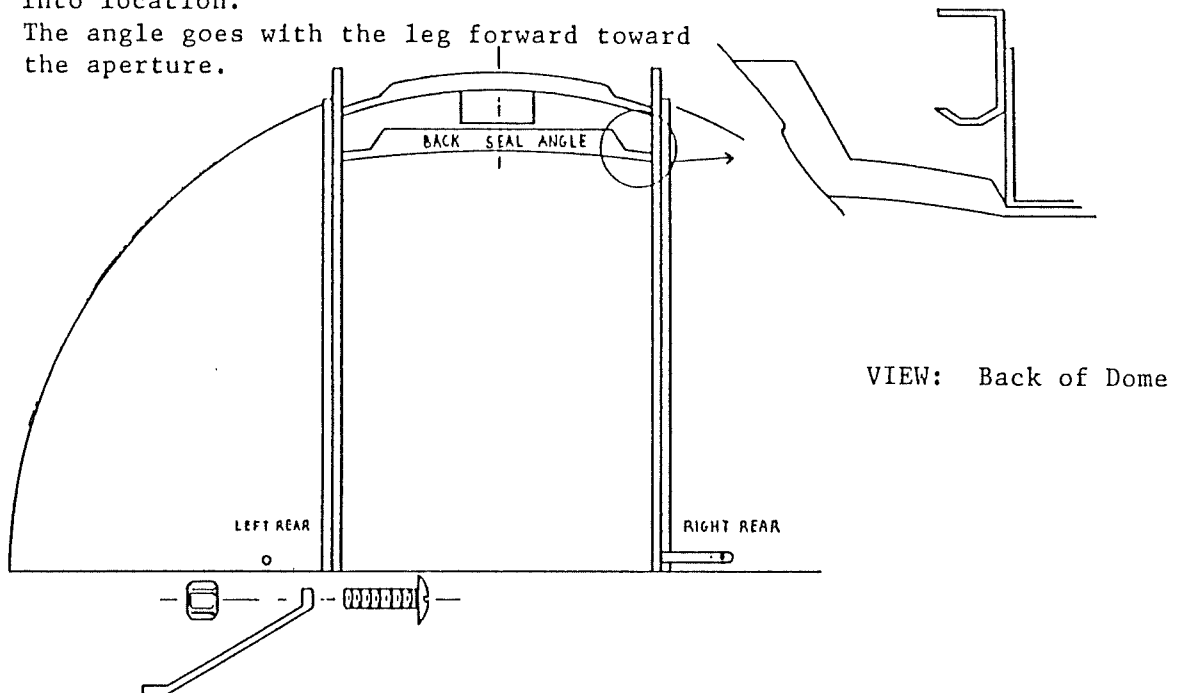




NOTE: Gear hole trim tucks in between the dome skin and top bar.

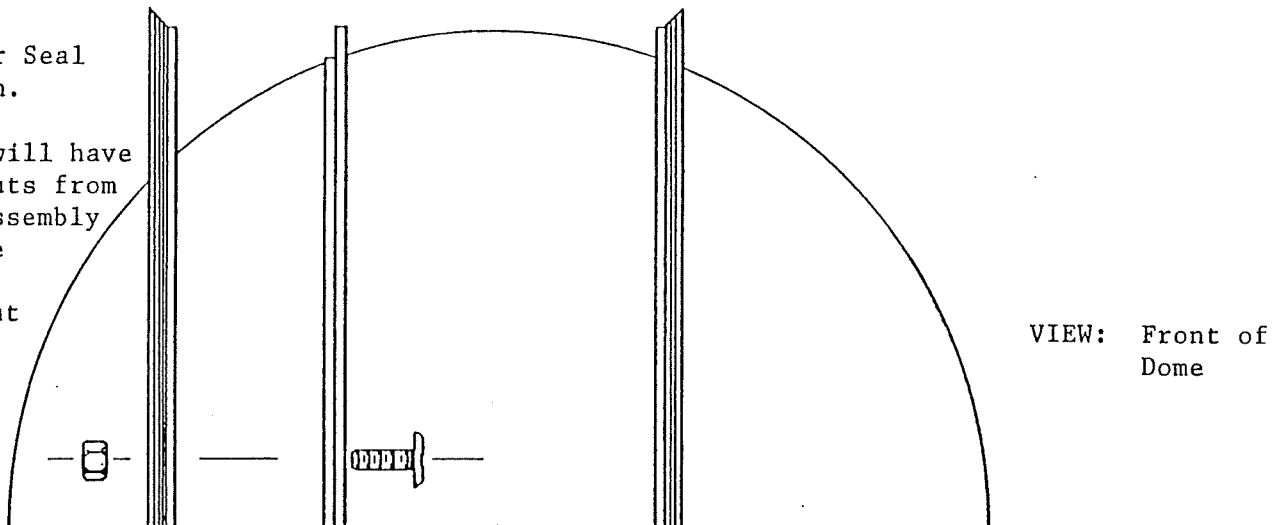
STEP #5 - Cont.

NOTE: Back seal angle tucks under shutter track.
Slide one end under and twist the other end into location.
The angle goes with the leg forward toward the aperture.



Side Shutter Seal Installation.

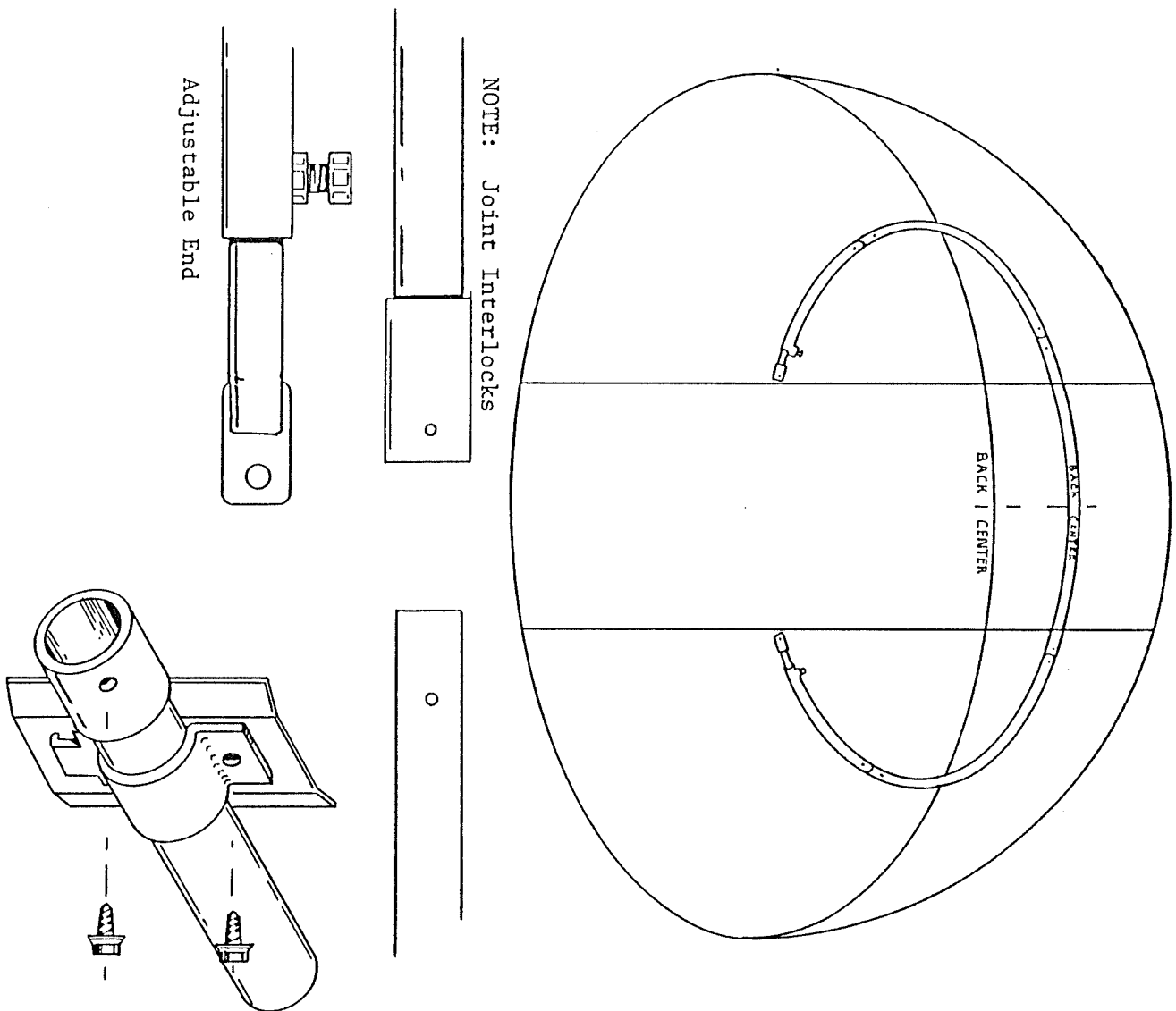
NOTE: You will have to remove nuts from the track assembly to put these pieces on. Nuts face out as shown.



Caulk up the front on both side by aluminum blocks and across the back under the back seal angle.

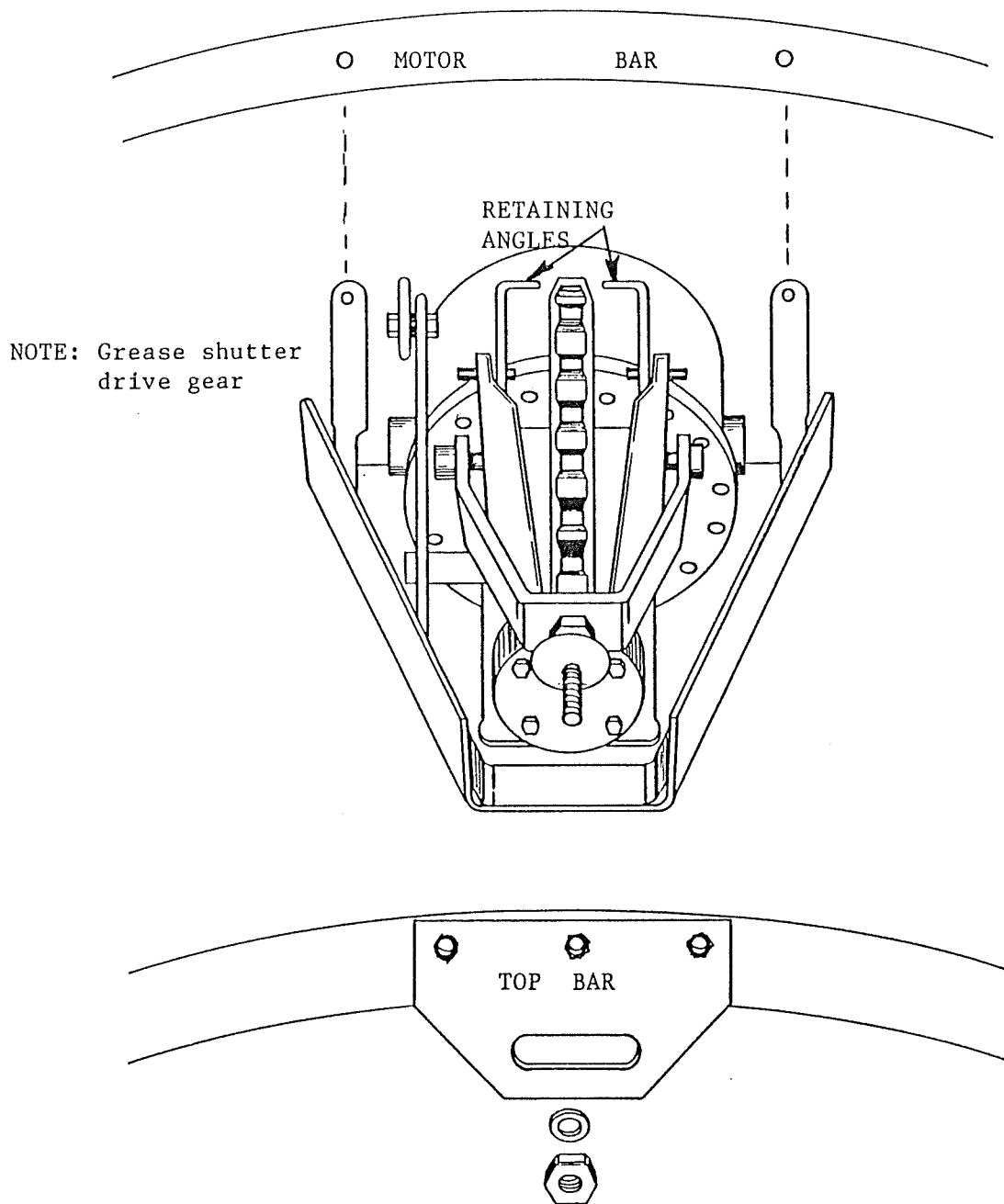
STEP #6

INSTALLATION OF REINFORCING RING



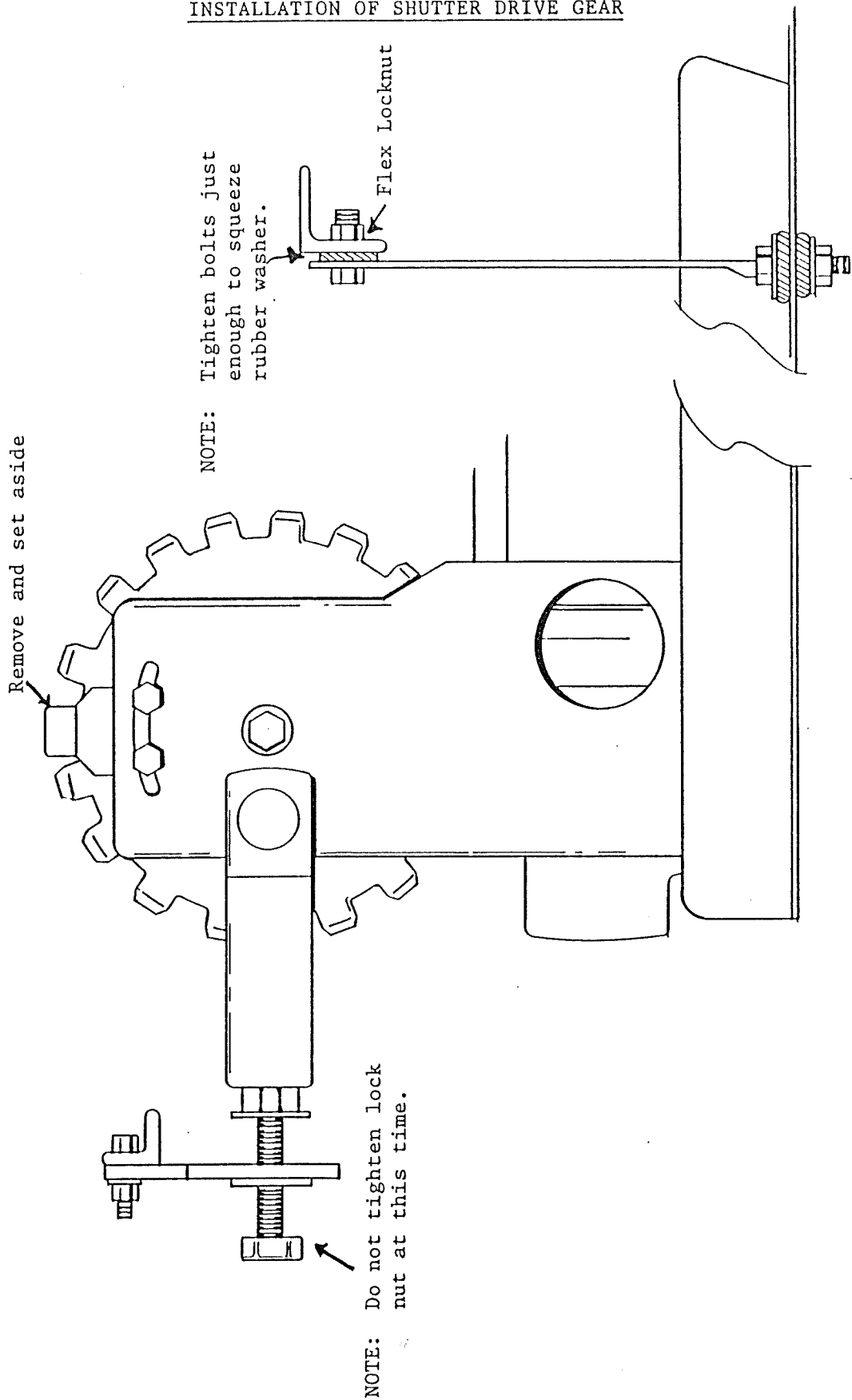
STEP #7

INSTALLATION OF SHUTTER DRIVE UNIT



STEP #7 - Cont.

INSTALLATION OF SHUTTER DRIVE GEAR



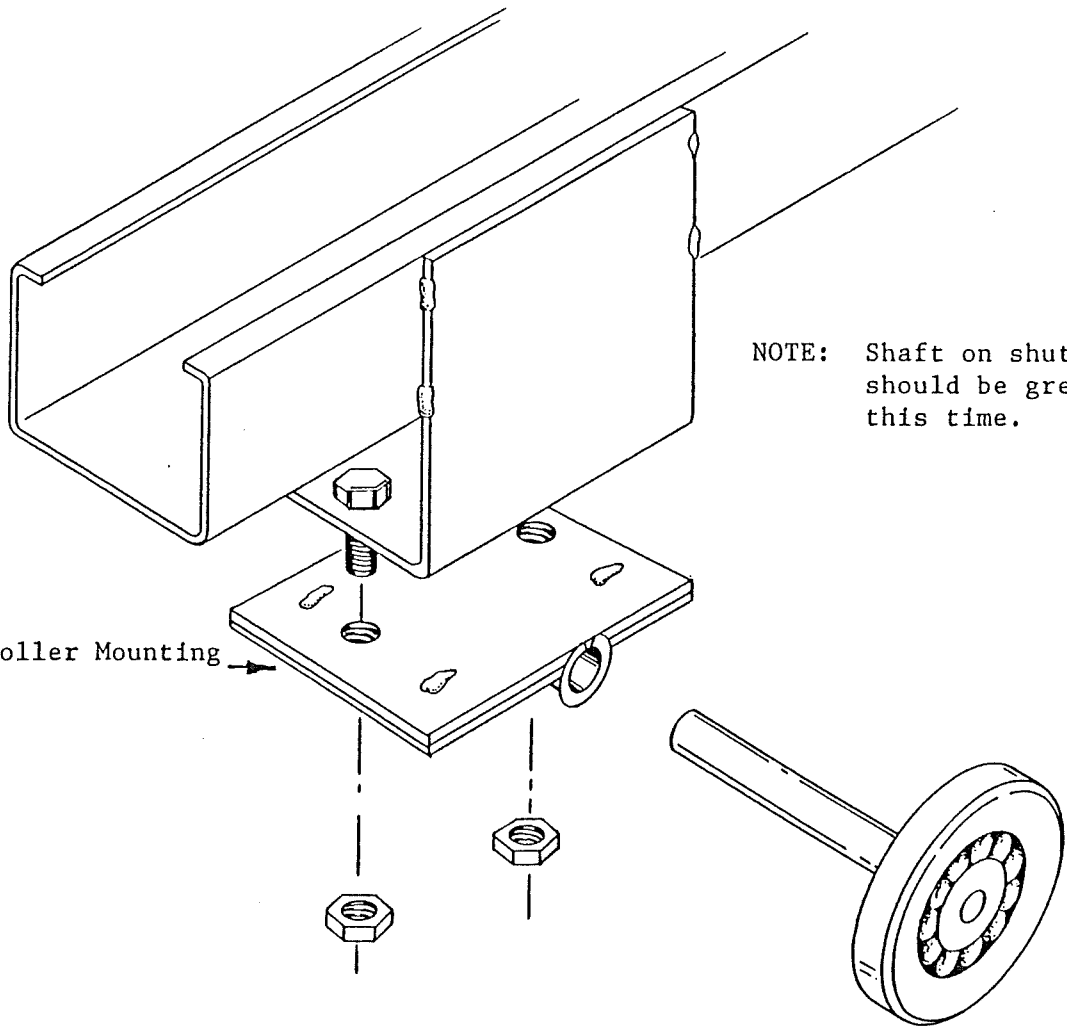
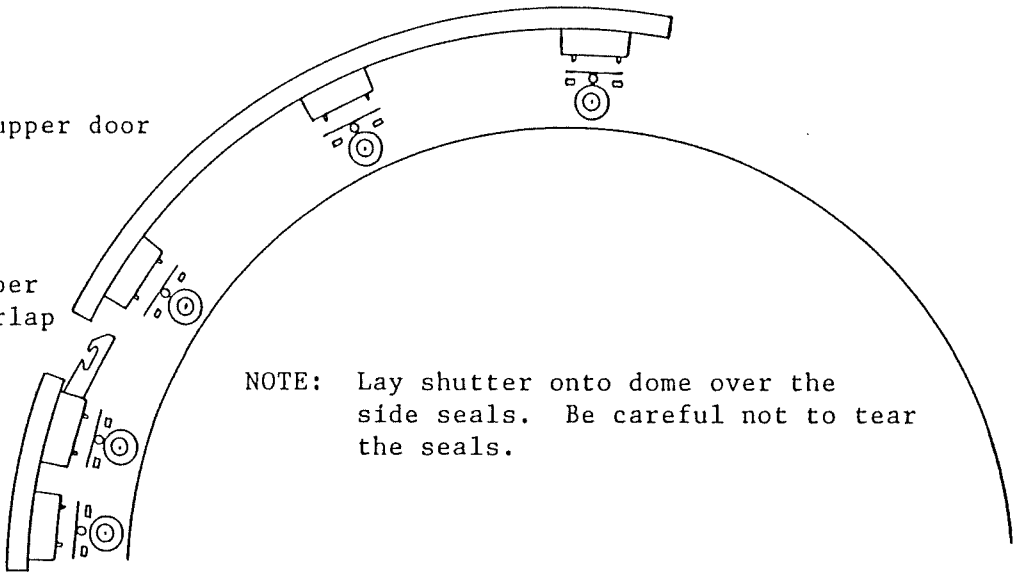
STEP #8

INSTALLATION OF SHUTTER SECTIONS

Install upper door first.

Bottom of upper door has overlap

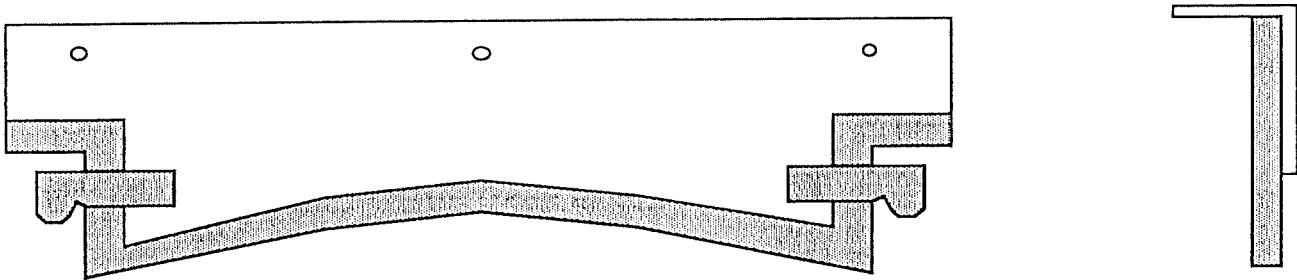
NOTE: Lay shutter onto dome over the side seals. Be careful not to tear the seals.



NOTE: Shaft on shutter roller should be greased at this time.

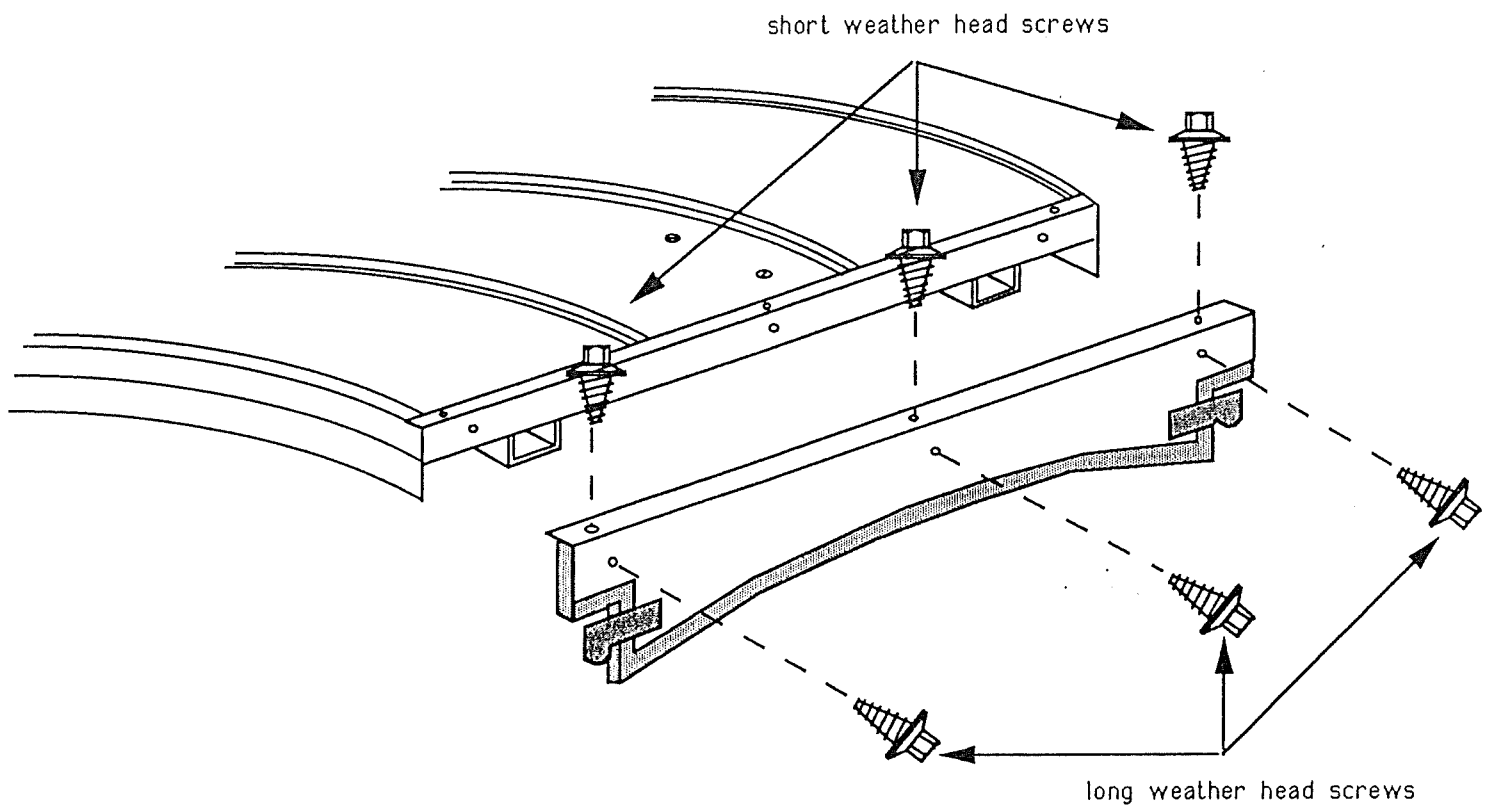
Support Roller Mounting
Fixture

Installation of Back Shutter Seal

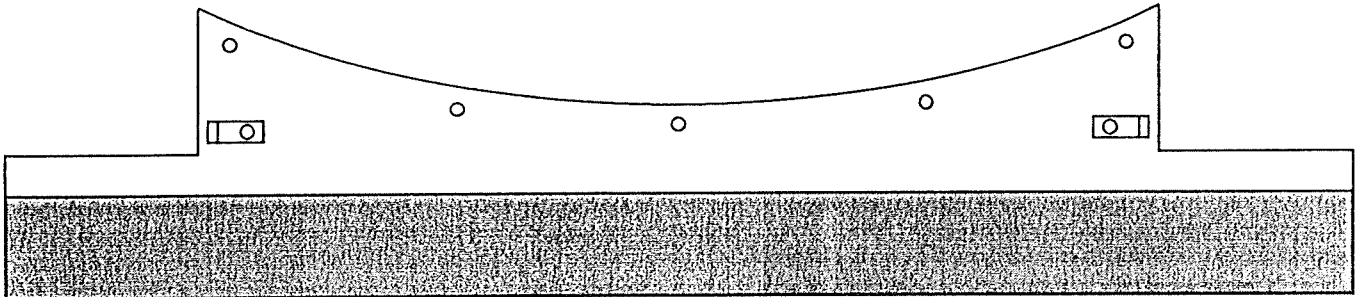


Tip : Run the upper door open and install Back Shutter Seal from back of dome

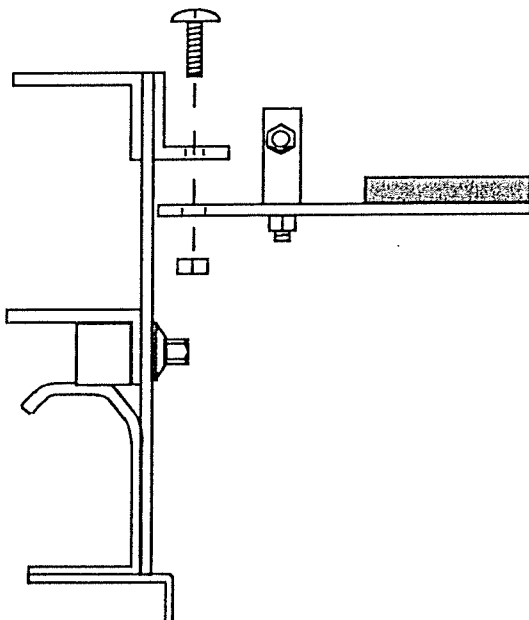
Back of Upper Door Section



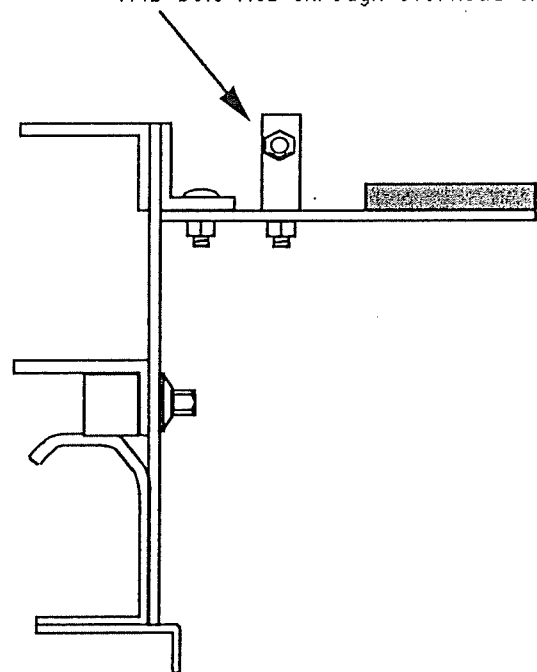
Front Shutter Seal



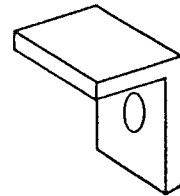
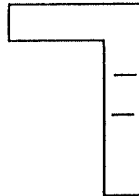
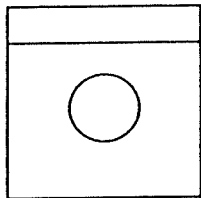
FRONT SHUTTER SEAL slides under front of skirt



TAB bolt fits through overhead track

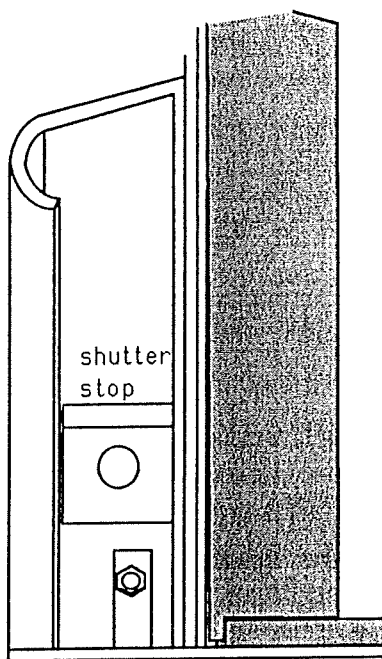


SHUTTER STOPS

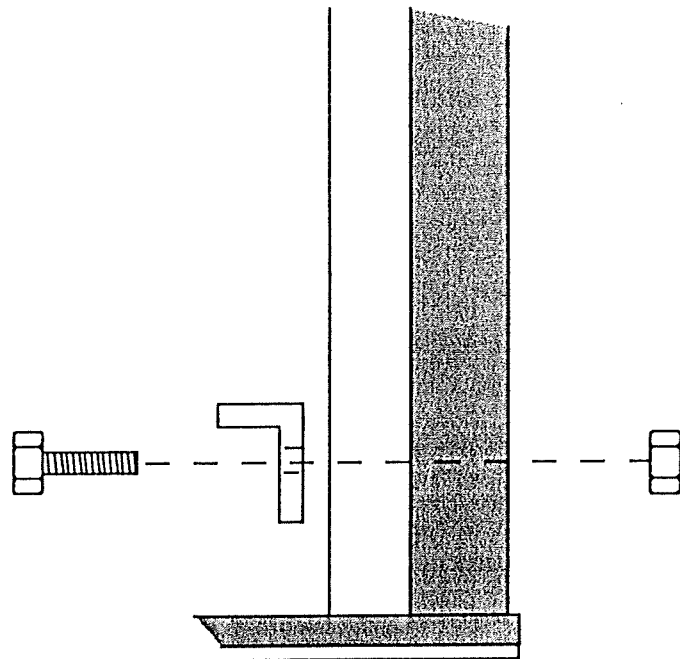


Shutter Stop fits inside of shutter track and serves as a mechanical stop incase the limit switch should fail.

Inside of Overhead Shutter Track



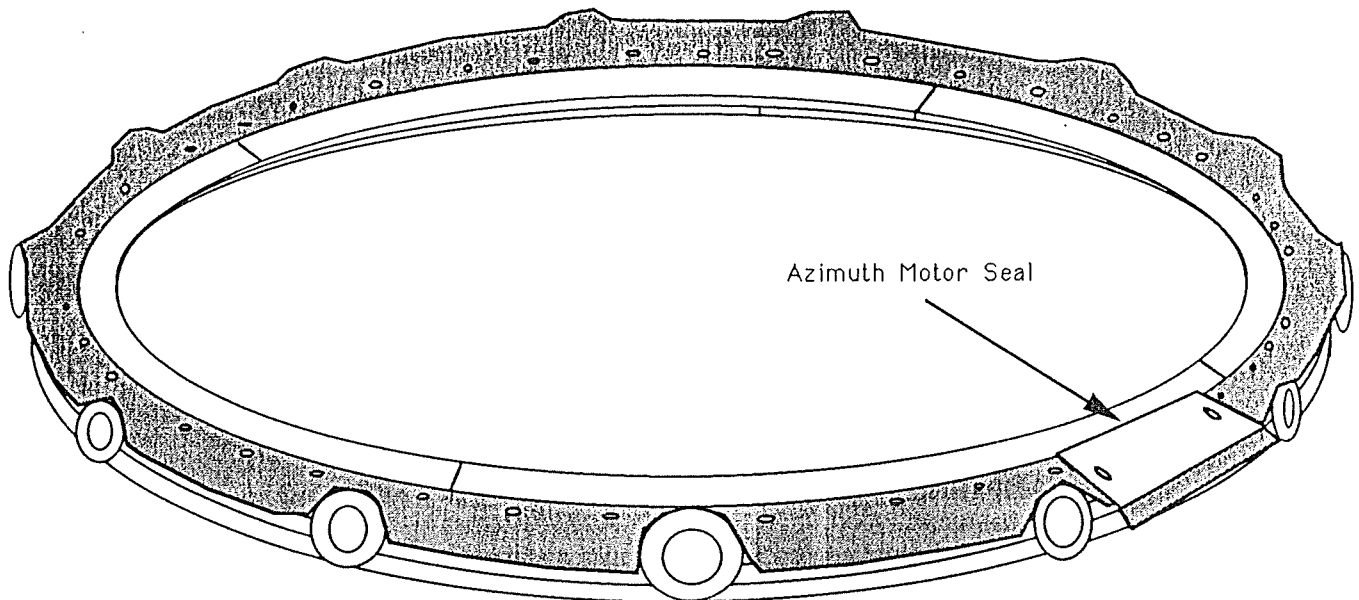
Side View



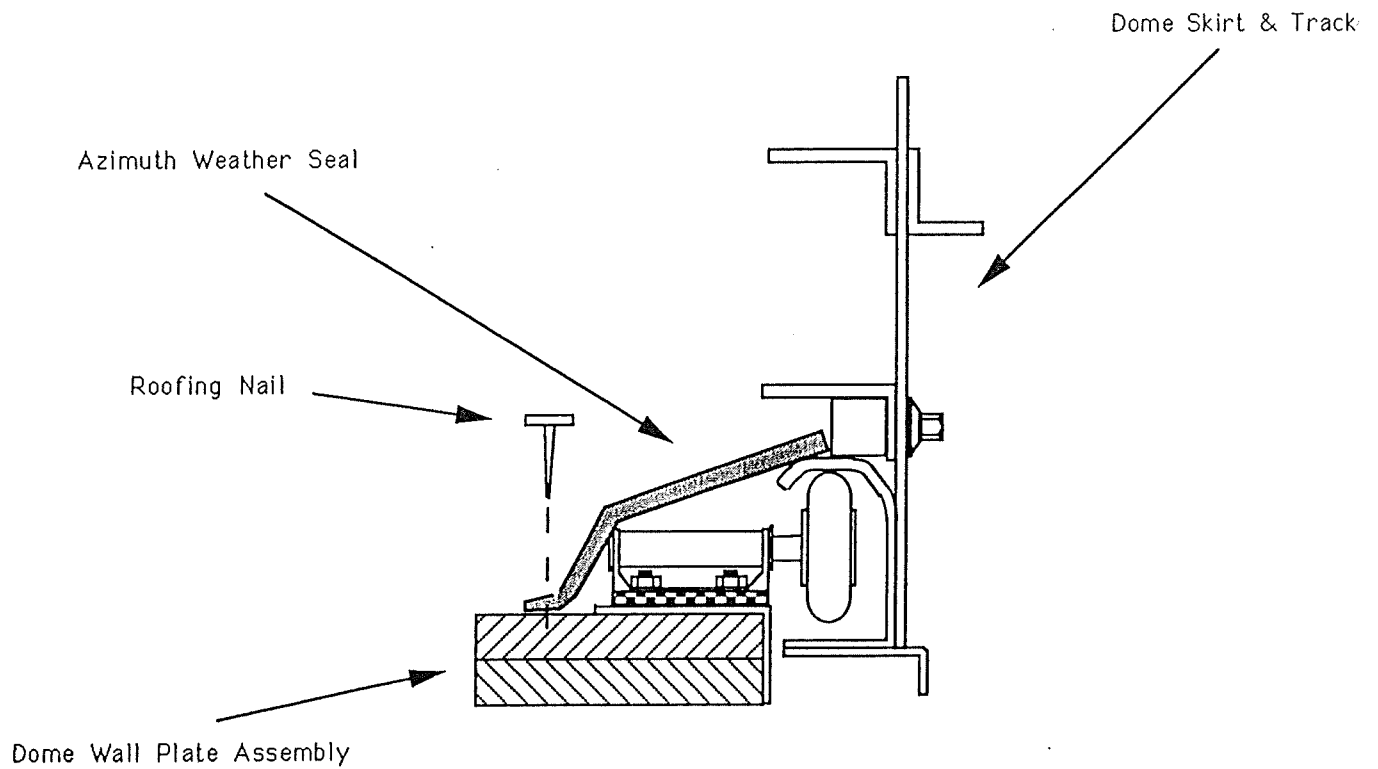
Front View

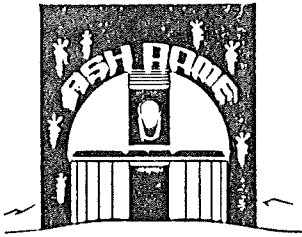
Step #9

Azimuth Weather Seal



Start Weather Seal at Azimuth Motor Mount before installing motor drive.





FEBRUARY 11, 1994

