VB23/26 Floating Floor Socket Installation on Floating Floors with Lower Levels or Crawl Space Below Concrete or Wooden Subfloors

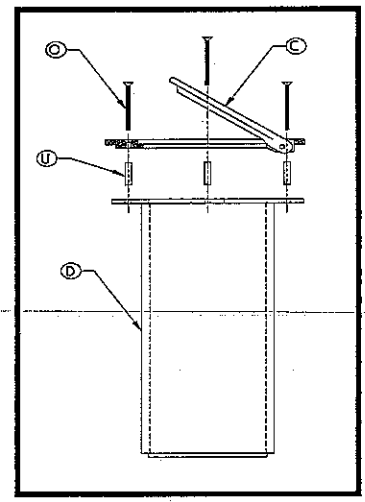
Using a VB230 (or field fabricated device)

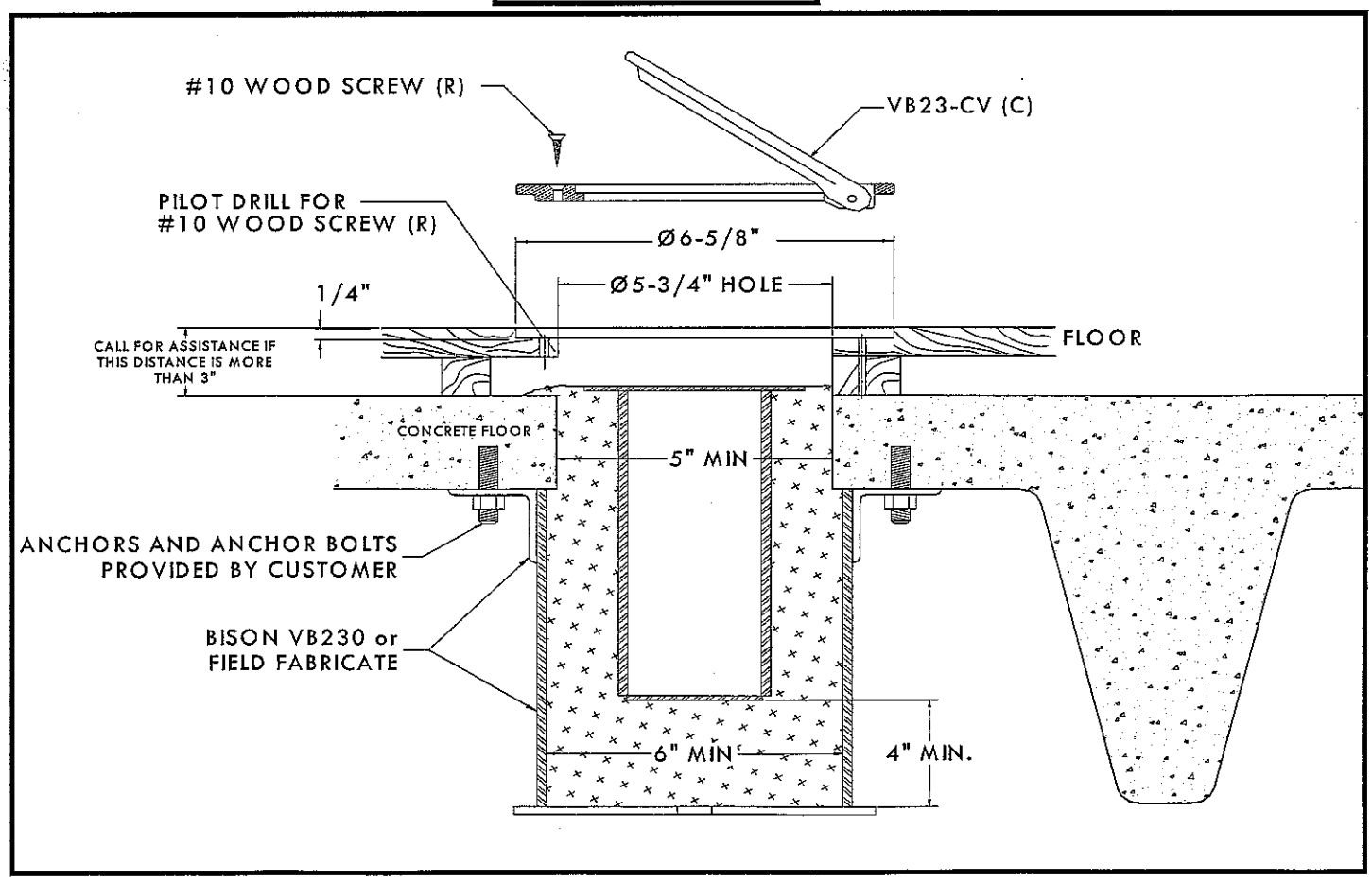
1. **WHILE MORE DIFFICULT TO INSTALL, IT IS POSSIBLE TO USE FLOOR SOCKETS ON SECOND LEVEL GYM FLOORS. UNLESS YOU ARE EXPERIENCED IN THIS TECHNIQUE, IT IS WISE TO CONSULT A PROFESSIONAL INSTALLER.**
2. Once desired location of sockets is determined, you will need to determine the type of subfloor, the location and orientation of all support structure, whether supports are steel, wood or pre-stressed concrete, and whether it is possible to feasibly access the area directly below the desired socket locations. Sometimes it is necessary to drill a small hole on the desired center line of the socket through the wood floor, concrete and support structure to determine location below. If this location is not used, the hole in the floor needs to be filled.
3. If it is determined that the locations of the sockets selected will allow for fabrication and installation of a concrete form below the floor, use the brass floor plate and pencil to draw a circle on the floor at each location.
4. Measure the distance from the top of the floor to the subfloor surface below. If the distance is greater than 3", call Bison Customer Service for guidance as you will need to make field modifications to your socket.
5. Cut a hole through the wood floor that is 1 ½" **SMALLER** in diameter than the circle drawn in #3 above. This should be approximately 5-3/4" in diameter. CAUTION: If you cut the hole on the large pencil circle, it will not be possible to install the brass floor plate properly.
   You will need to rout relief in the wood to accommodate the hinge mechanism and the three thickened areas on the brass floor plate.
6. Drill or break out a 5" diameter hole through the subfloor. Use of a rotary hammer drill and chisel or core drill on concrete subfloors is recommended. Do not use wet saw or coring drills if floor is wood as damage will occur.
7. Rout an accurate recess in the wood floor that allows flush and clean installation of the brass floor plate. This recess will be approximately 1/4" deep. Take caution in this step to avoid a sloppy, oversized, or over depth recess.
8. Assemble the brass floor plate VB23-CV to the socket VB23-SK using the screws and tubular standoffs provided. Some professional installers do not use the standoffs so that they can install the sockets at a slight angle to compensate for the flexibility of the pole when net is tightened (usually 2°-3°).
9. Install duct tape over the top of the socket to avoid grout entering the socket during installation.
10. Set the socket/floor plate assembly into the prepared hole to insure that both the socket and the floor plate fit neatly. Rework holes if necessary.
11. With the socket assembly properly sitting in the hole, inspect the installation area from the lower floor or crawl space. If the underside of your floor allows use Bison product *VB230 Socket Form.* If not, design and field fabricate custom steel forms that are capable of being securely attached to the under side of the subfloor and structural system and also capable of encasing the floor socket in no less than 6" diameter x 14" deep non-shrink grout. After installation of form, duct tape or caulk any openings that would allow wet grout to escape prior to curing.

CAUTION: Proper net tensioning places almost 5000# of force to the socket so it is imperative to use at least ¼" thick steel and suitable anchors to avoid socket damage.

12. Once form is fabricated and installed, fill the hole and form with premixed, non-shrink grout to within approximately 4" of the top surface of the concrete. Using a pole, vibrate the grout to insure the hole and form is filled.
13. Install socket assembly into hole. You will need to work assembly into hole to allow the grout to surround the sleeve. If grout does not flow out the top of the hole in the concrete, remove assembly and add more grout.

14. Only if the socket assembly wants to float in the hole, attach brass floor plate to wood floor using the *wood s crews* (**R**) provided. It is best to drill a small pilot hole into the wood to avoid cracking.
15. After allowing 2 hours for grout to set, remove the 4 wood screws if used and the 3 long bolts and standoffs. Replace the long bolts with the *#10-24 x 1" brass machine screws* (**P**), *lockwashers* (**S**), and *nuts* (**Q**) provided.
16. Install brass floor plate to floor using wood *screws* (**R**). It is best to drill a small pilot hole into the wood to avoid cracking of the floor.
17. **CAUTION:** Do not allow use of sockets for 10 days as permanent structural damage to the socket installation may occur when using regular grout. If using a quick set product, follow instructions provided with that product.





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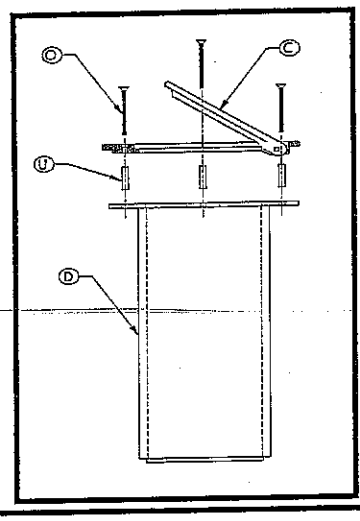

hole diameter is 9/16"
holes are 10 inches apart
angles are 36" long + 1st hole is 3 inches in from end