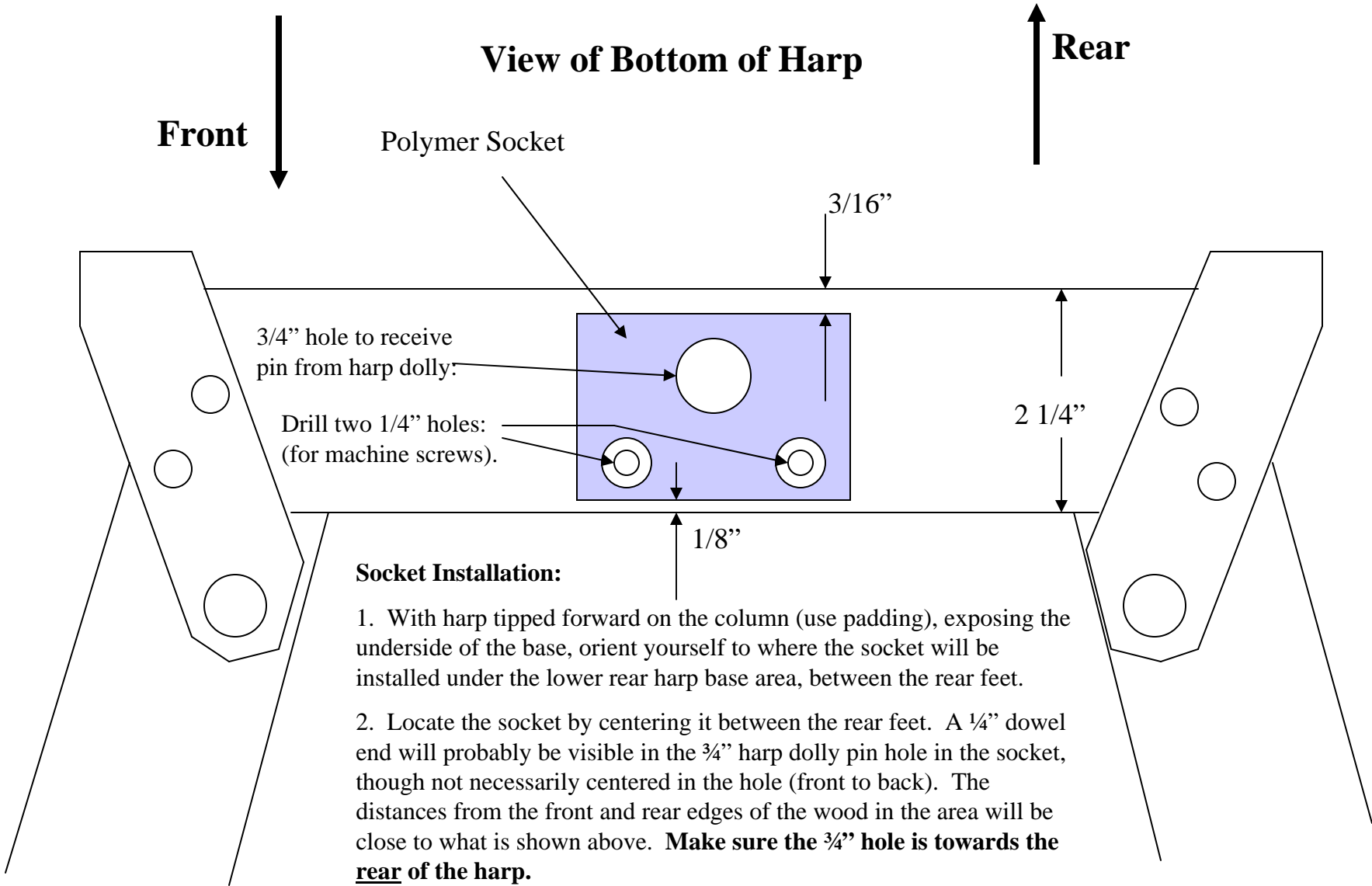


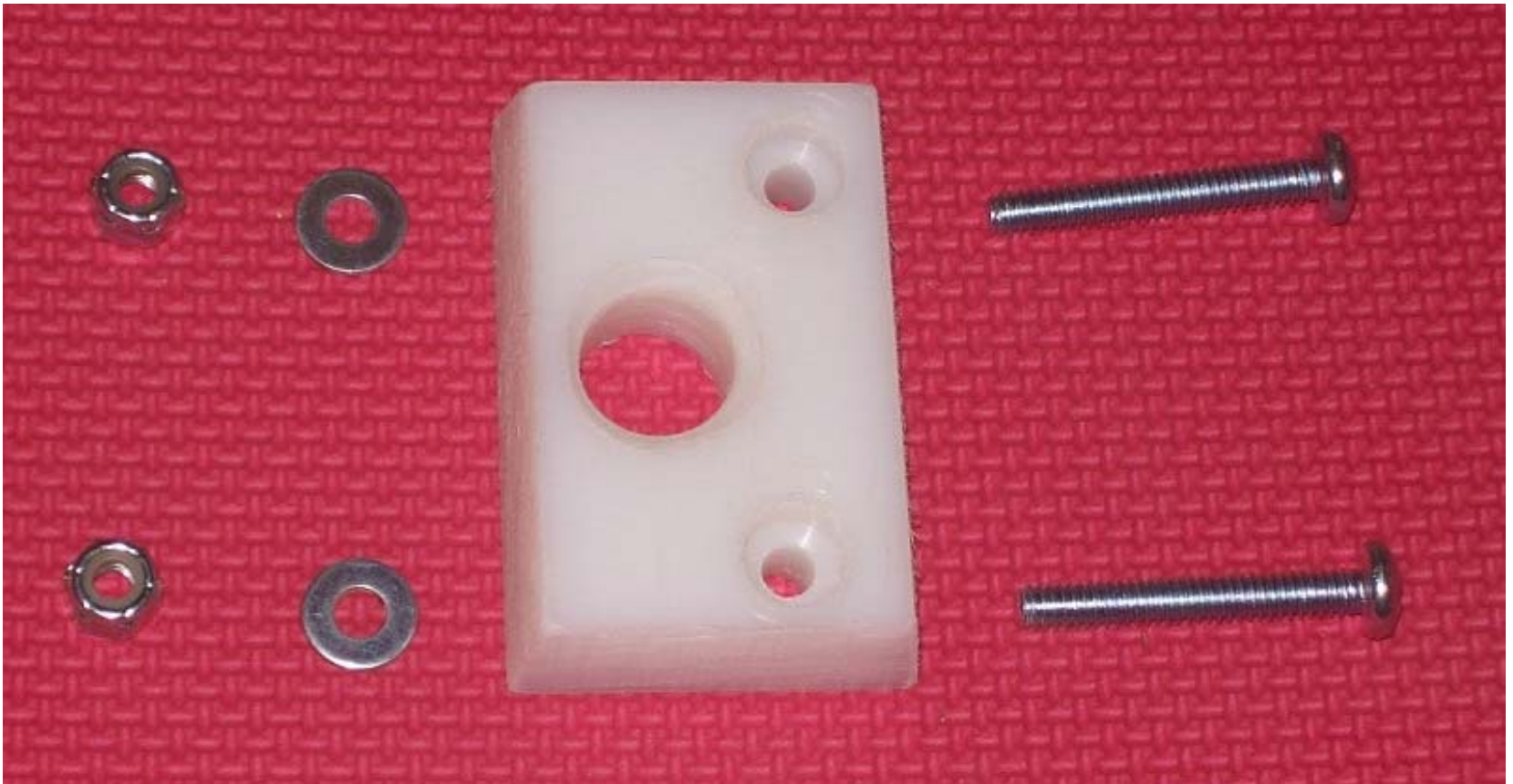
View of Bottom of Harp

Front

Rear



Socket and Attachment Hardware:



- 2 – 1/4" Machine screws**
- 2 – 1/4" Nylon-insert locknuts**
- 2 – Washers**
- 1 – Acetal socket piece.**

Socket Installation: (continued)

4. With the socket partially secured with one screw, align the other end of the socket carefully, and then drill the second ¼” screw hole through the lower shelf of the base, corresponding to the other screw hole in the socket. Drilling the holes and attaching the screws sequentially in this manner will insure that the two holes in the socket line up with the two new holes in the wooden base.

Note: Both of these holes will be through to the inside area of the base, and will not be visible outside the instrument. If you have access to “letter size drills,” you might use a “letter F” drill (.257”), so the ¼” machine screw will pass through the hole more easily.

5. Secure the screws as mentioned with a washer and a ¼” nylon insert lock nut. The washer goes between the nut and the wood (in the inside area of the base). The head of the ¼” x 2” machine screw goes into the polyethylene socket. This will require a Phillips screwdriver, and a 7/16” box or open end wrench on the nut. Secure the screws and nuts fairly snugly, but extreme tightness is not required, and may damage the socket. The nylon insert in the lock nut will prevent it from coming loose, even if it is not extremely tight. But you do want the socket tight enough so that it will not be the source of a buzz in the harp. It is recommended to check the snugness of the lock nuts every year or so.

Right: 3/4” Spade Bit:



6. Once the socket is secured under the back portion of the base, the ¾” hole in the socket must be deepened into the wood of the base, by about 3/8” or so. The correct depth will be when the harp dolly is affixed to the harp, and with the harp dolly pin in the socket, the rear rubber pads on the rear feet **both** rest firmly on the shelf of the harp dolly. If either of the white rubber rear foot pads is not fully resting on the aluminum shelf of the harp dolly (with the pin having bottomed out), the the ¾” diameter hole needs to be a bit deeper. Deepening this hole into the wood is best accomplished with a ¾” “spade bit” (pictured). Carefully locate the center point of the spade bit into the wood in the center of the hole. You will likely shave somewhat the side of the hole in the socket with the spade bit when drilling, but this won’t hurt anything, unless the drilling is considerably off-center. If you drill too deep, through or nearly through the bottom wooden layer of the base (3/4” deep or so), this will go through to the outside of the base, and will be visible outside on the lower rear part of the base. It won’t hurt the structural integrity of the harp, but it is something that would be visible and difficult to repair. It isn’t hard to deepen this hole, just be careful to do it a bit at a time, and check with the harp dolly affixed as described above to insure the correct depth.

7. The hole doesn’t need to be quite as deep when you are using the harp dolly with the base cover, but when you use the dolly without the base cover on the harp, you do want the rear foot pads to rest securely on the dolly shelf.

8. Call me (435) 835-3541 if you have any questions about the installation, or if you want me to walk you through it. —John

Harp Dolly Assembly

1. The dolly comes unassembled, to more easily fit inside a shipping container. The wheels simply slip onto the ends of the axles, and are secured by two nylon-insert lock nuts. The threads on the ends of the axle are a standard 7/16" "course" thread. Just remove the axle nuts from the ends of the axle (located there for shipping), and re-install them onto the axle ends after slipping the wheels on. No washers or such are provided or required. A 5/8" wrench is used to secure the nuts onto the axles. Tighten the lock nut down on the wheel until it just contacts the wheel bearings. Check for proper wheel rotation. *Do not over-tighten.* The nylon inserts in the lock nuts will prevent the nuts from coming lose even if not tight, though a periodic check wouldn't hurt. If you need to disassemble the dolly for any reason and remove the wheels, simply reverse the procedure. The axle is kept from rotating when the wheel nuts are secured or removed by a single #8 machine screw (and lock-nut) which goes through the center of the axle into the main stem of the dolly. If you over-tighten the wheel nuts, this #8 screw could possibly break, making it more difficult to install or remove the lock nuts holding the wheels. (Replacing this #8 machine screw wouldn't be too difficult, however.) The sole purpose of this #8 screw is to prevent the axle from rotating when installing or removing the wheel nuts.
2. The slide or "hook" is simply inserted into the top end of the main stem of the dolly. A 1/4" threaded knob screws into threads in the back top part of the stem, to secure the "hook" in the desired position. The threaded knob screws into a threaded solid steel insert, just inside the square aluminum stem. If the knob screwed into aluminum only, this would not hold up over time. That completes the dolly assembly.

Harp Dolly Use

1. Loosen the knob on the back of the stem, and roll the dolly in position immediately behind the harp.
2. Carefully tip the harp forward somewhat, and then move the dolly shelf under the rear feet of the harp, making sure the pin on the dolly shelf is inside the hole in the socket under the rear of the base. It might require a few attempts to locate and become accustomed to the “sweet spot” where the pin and socket connect, but it isn’t difficult. But **you must insure that the pin is inside the hole in the socket, or the harp will not be secure on the dolly.**
3. Once you are certain that the dolly shelf pin has engaged the hole in the socket, extend the “hook,” rotating the curved end towards the back of the harp, and insert the hook into the middle sound hole. Then slide the hook down as far as it will go, where the hook then rests on the bottom edge of the sound hole. Make sure there is as little play as possible. Then hand-tighten the knob, so the slide will not move from that position. This secures the harp to the dolly.
4. To move your harp, tip it back so the wheels of the dolly are free to roll, and maneuver the harp how you need to. We find that going up and down stairs with this dolly is not difficult. The advantage to this kind of system is that you have control of your harp with your own hands on the instrument, instead of your hands on the handles of some other dolly, or one hand on the dolly and one hand on the harp.
5. To use the dolly with the top and base cover set on your harp, the procedure is the same. However, it might be a bit more tricky to make sure that the dolly pin engages the socket. **Make sure that the pin engages the socket on the bottom of the harp.** The base cover has an opening underneath in the back, to accommodate the dolly pin, but it might again require some practice to find the exact spot or maneuver that works for you to have the pin engage the socket. With time you will become accustomed to doing this. With the top cover on, the “hook” engages the same middle sound hole on the harp through the slit in the back of the harp cover (which is also for grabbing the sound hole with your hand when moving the harp without a dolly). The current version of our harp cover is provided with handles on the outside of the column area and the knee block area to help in loading and transporting the harp. The knee block handles are especially useful for moving your harp with the dolly, when the cover is on.
6. Again, please contact us if you have any questions or concerns.