Release Mechanism

Front View - Main Assembly

Build from 3/4 inch thick by 2 inch wide stock. Screw together with deck screws. Make corner braces (green) from 1/4 inch thick plywood and tack on corners to hold frame square.

3D Schematic

Clip the large binder clip to a separate 3/4 inch thick strip of wood (not shown). Cut strip to length and screw onto top of main assembly with the front edge of the binder clip flush with the front of the main assembly. Binder clip handles should clear the back edge of the top of the main assembly by about 1/2 inch.

After mounting, tape spoon to top handle of binder clip by wrapping tape around handle and spoon. If correct, the spoon should then be able to pivot downward using the handle of the binder clip as a hinge.

Attach a rubberband (not shown) to spoon where handle and ladle meet. Pull other end of rubberband down underneath top board of main assembly and attach to bottom handle of binder clip. This rubberband should make the spoon want to tip downward. If not, increase tension on rubberband.

String a bead onto a wire (wire is about the gauge of a paperclip). Loop the wire around the handle of the spoon and twist tight so that the bead hangs down from the spoon handle when the spoon is pushed against the tension of the rubberband back up to level position. Tape the wire to the handle so that it can't slide on the handle. Open a clothespin so that one side of its jaws pass through the bottom handle of the binder clip and clip the clothespin to the bead. This should hold the spoon in a level position. If it doesn't hold, you will need to decrease rubberband tension some. Or, if the spoon is not level enough to hold things in its ladle, then you will need to adjust the length of the wire on which the bead hangs down.

Attach completed main assembly to the vertical 3 1/2 inch diameter pipe on the release base with two dryer exhaust hose clamps. The hose clamps will need to be altered to the correct length. Another possibility is to use very large regular hose clamps or connect together smaller hose clamps until they are long enough. Tighten both clamps until the friction is such that the main assembly can slides up and down the pipe when gently forced, but stays in place when you let go of it.