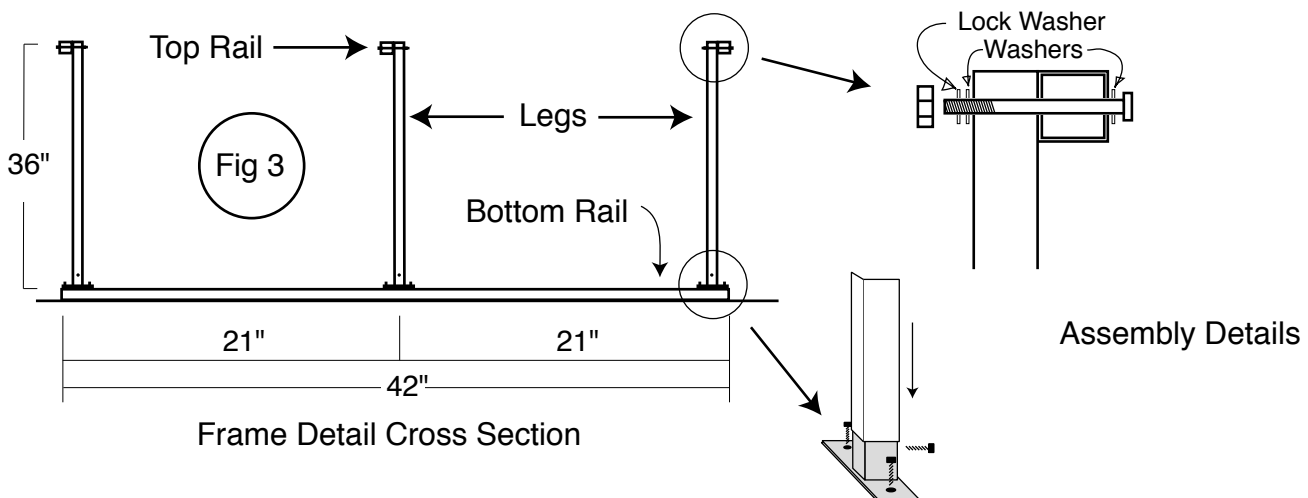
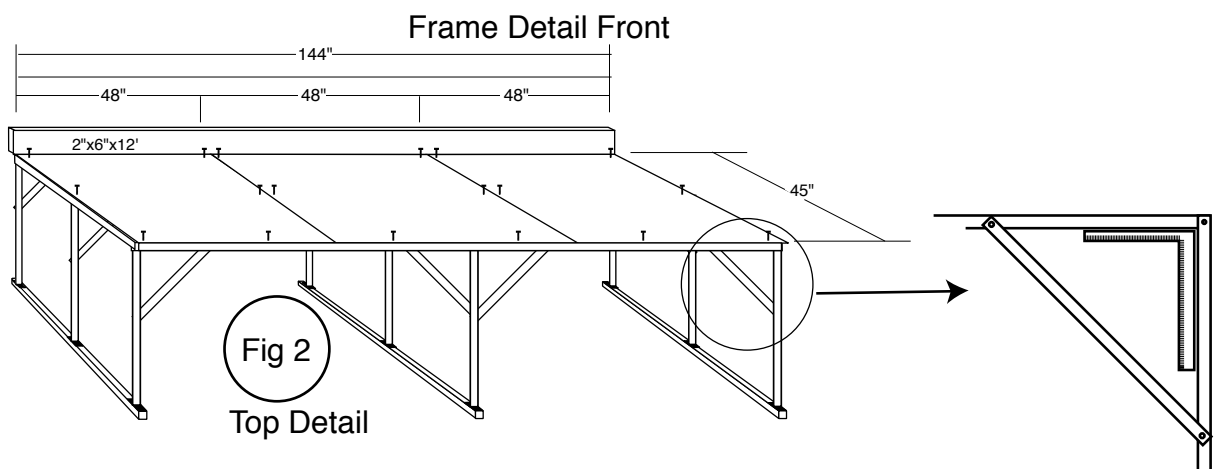
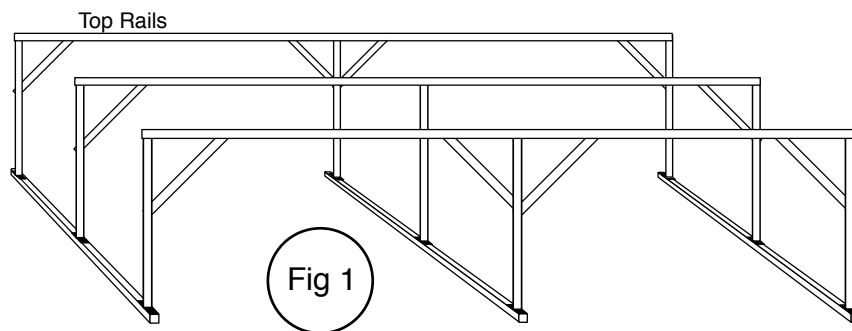


# 412 Propagation (1) Assembly Instructions

## Propagation Bench Frame Assembly:

- 1) Layout bottom rails and tec screw brackets onto rails as per Fig 3
- 2) Insert legs over brackets and tec screw leg to bracket Fig 3.  
(Be sure bolt holes in top of leg are parallel to bottom rail.)
- 3) Stand up leg frames. Bolt top rails to legs w/bolts provided (hand tight). Note that top rails are mounted on the OUTSIDE of frame.
- 4) Use framing square to install diagonals w/tec screws in postions as in Fig 1.
- 5) Once frame is square and level, tighten bolts and move into final position.

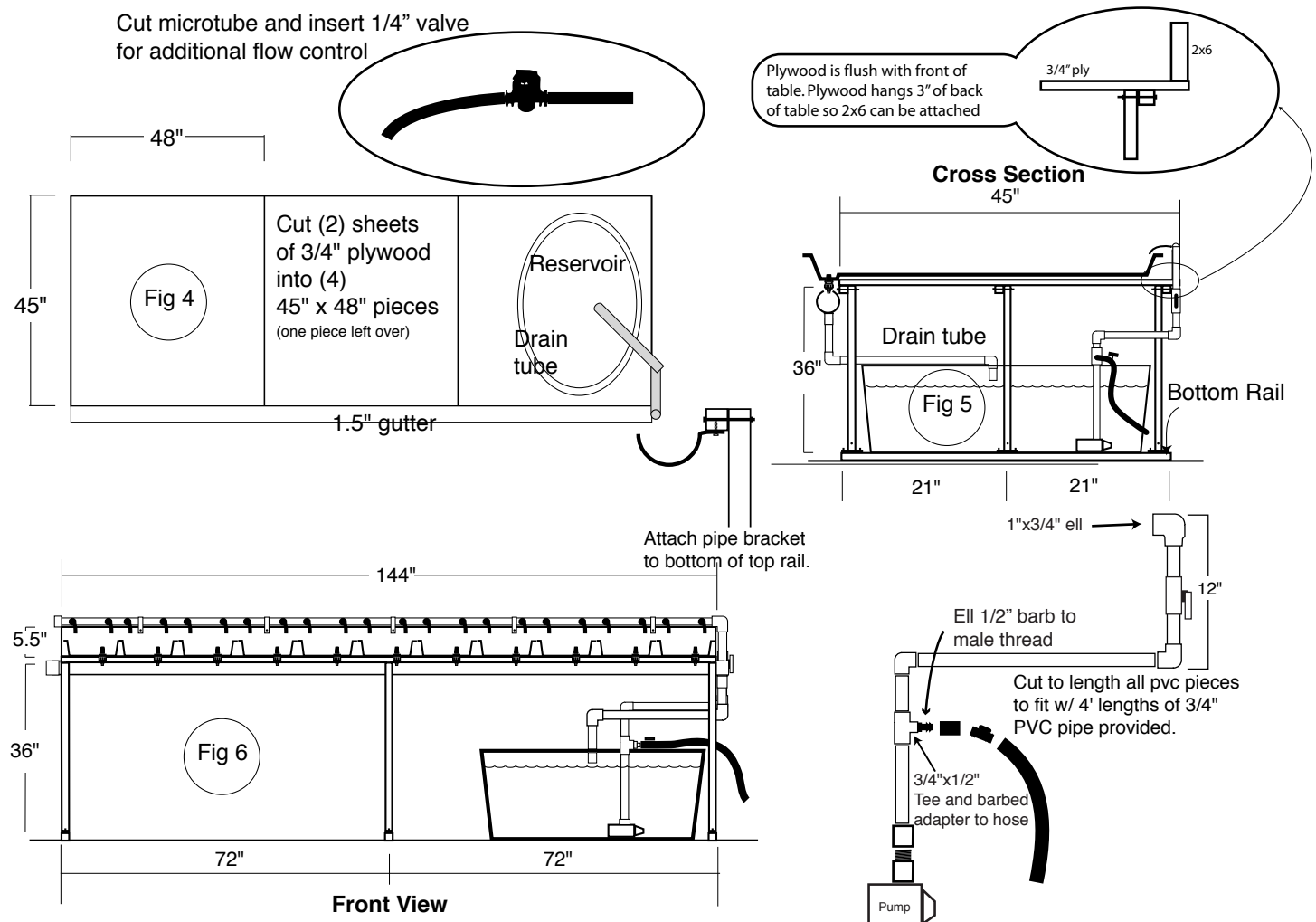


# 412 Propagation (2) Assembly Instructions

Extra components that you will require: (24) screws for plywood (8) wood screws for 2x6

## Table top assembly, feeder and collector manifolds:

- 1) Cut (2) sheets of 3/4" plywood (tongue and groove is best) to 45" x 48". Install as per Fig 2 w/ screws that you must provide. (make sure screws are flush with top of plywood)
- 2) Screw in from bottom 2" 2"x6" board as per Fig 2 with screws that you must provide.
- 3) We recommend that you cover the entire plywood top with 6 mil poly (if bottom heat package option was not purchased) at this point to protect wood from moisture.
- 4) Slide reservoir under table as per Fig 5 and 6.
- 5) Insert grommets and microtubes into 1" feeder manifold. Glue manifold into fitting assembly with micro tubes parallel to bench top and strap manifold to top of 2"x6" as per Fig 5 and 6. Cut and fit plumbing fittings and tubing together as per Fig 6. Attach to pump.
- 6) Screw in pipe bracket to bottom of tableframe and rest collector in place.
- 7) Assemble pvc drain tubes as per Fig 5, 6 and detail.
- 8) Cut and attach blue tubing to fitting (cut 2" pieces out of tubing provided). Install fittings in trays and trays on table.
- 9) Install float valve and float valve supply kit.
- 10) Fill reservoir, plug in pump, adjust flow of feed manifold to suit. Plug into timer. Microtubes can be looped into grommets to stop flow to trays.

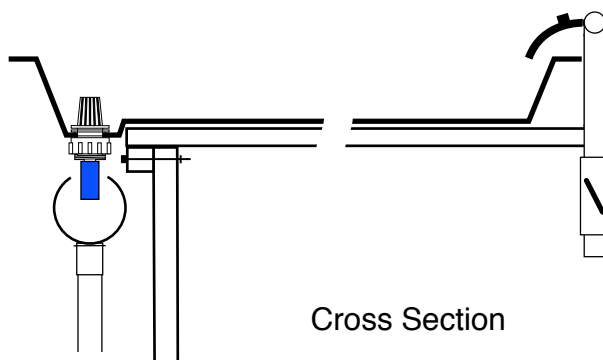
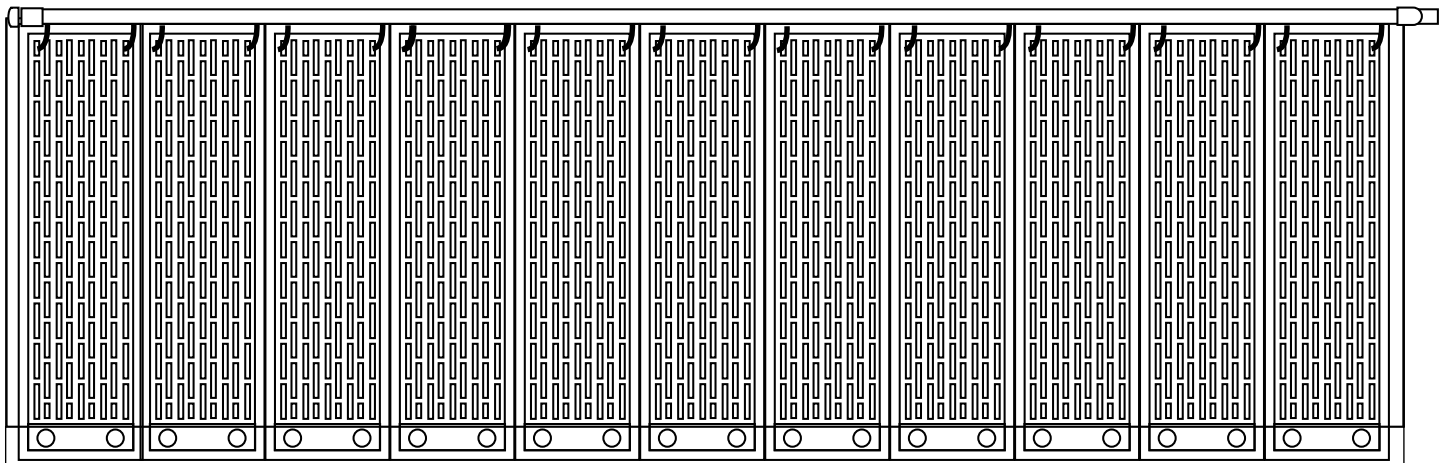


# 412 Propagation (3) Assembly Instructions

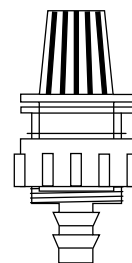
## Seedling Tray layout instructions:

If using bottom heat package, install now by following Bottom Heat Instructions. Be sure probe is in a wet cube always. Remove trays you are not using. Loop micro tube in on itself to stop flow.

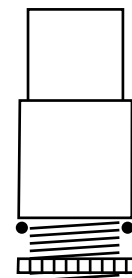
- 11 trays fit on one bench - 3,564 cubes (162 per sheet) if using 1" Oasis or 4,400 cubes (200 per sheet) if using 1" rockwool.
- Microtubes are pre-cut at 16" for ease of use. They should stay in position when tray is pulled out of system.
- Adjust flow rate with ball valve so that cubes wick up water and drain easily.
- To create an ebb flow type system, add overflow fitting, increase flow rate, (cut nipple to adjust height of flood). You can make this or purchase from American Hydroponics.



Cross Section



Fill/Drain



Overflow