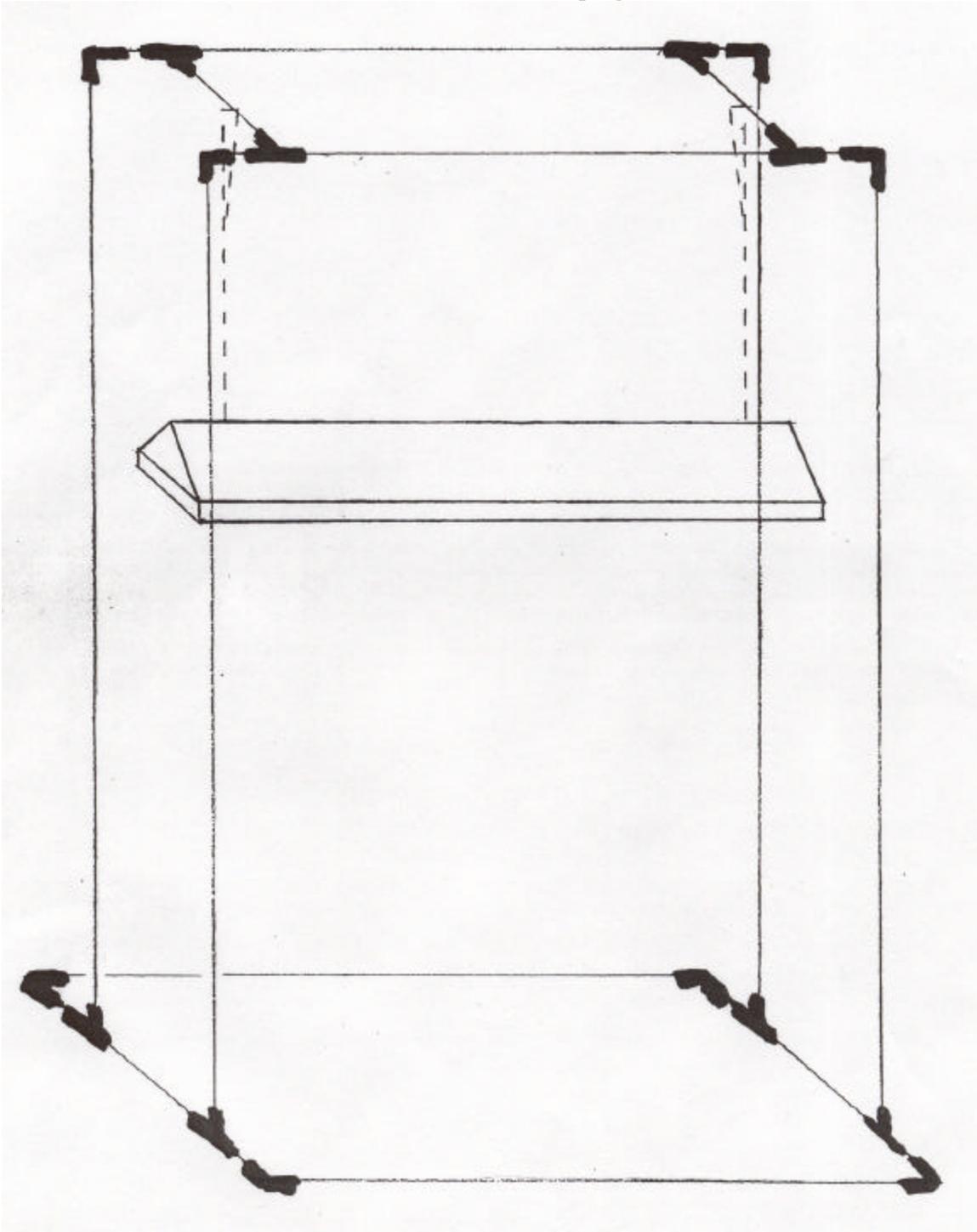


SHOPLIGHT-GROWLIGHT

24 inch fluorescent shop light



PVC SHOPLIGHT-GROWLIGHT FRAME

Designed

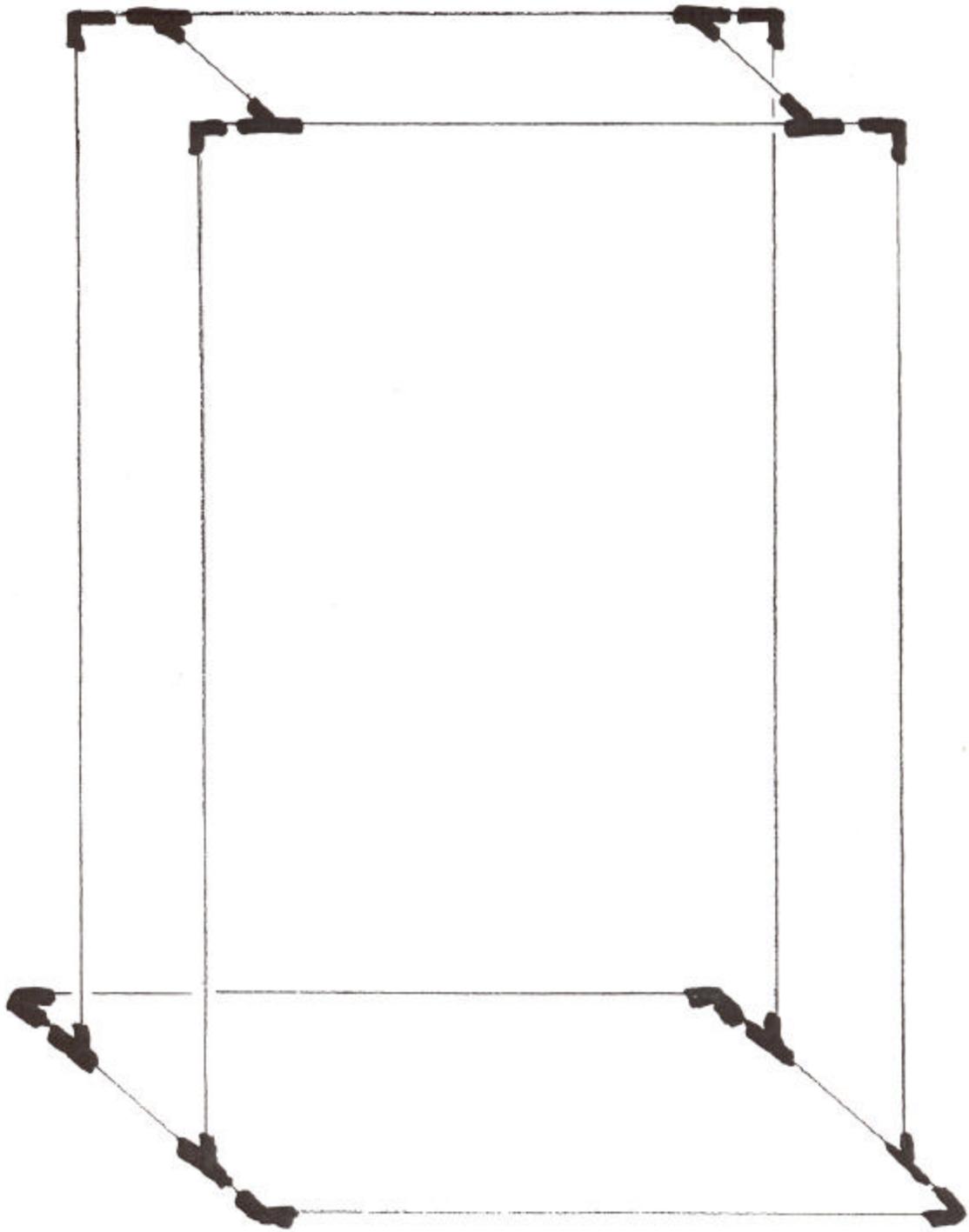
by

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SHOPLIGHT - GROWLIGHT

MATERIALS

- (3) 10' long 3/4" PVC pipe
- (8) 3/4" PVC Tee (non-threaded)
- (8) 3/4" PVC 90° elbow (non-threaded)
- (4) S hooks (1" size)
- (2) 2 ½ feet of chain (loops large enough for S hooks)
- 24" fluorescent shop light (2 lamp)(20 watt)
- (1) 24" cool white fluorescent bulb (20 watt)
- (1) 24" daylight (warm) fluorescent bulb (20 watt)

OTHER MATERIALS

- timer
- extension cord
- bottom tray
- top shelf
- plastic sheet

INSTRUCTIONS

Before making any connection, make sure that the pipe and fitting are correctly positioned. (See diagram.) Insert the pipe into the fitting as far as you can by hand. The fitting has an internal ridge. The end of the pipe should touch this ridge. Hit the fitting with a block of wood until the pipe is snug against the ridge. Several blows with some force will probably be necessary.

CUT THE PIPE

(Most types of saws will make the cuts. A miter box is helpful to make straight cuts.)

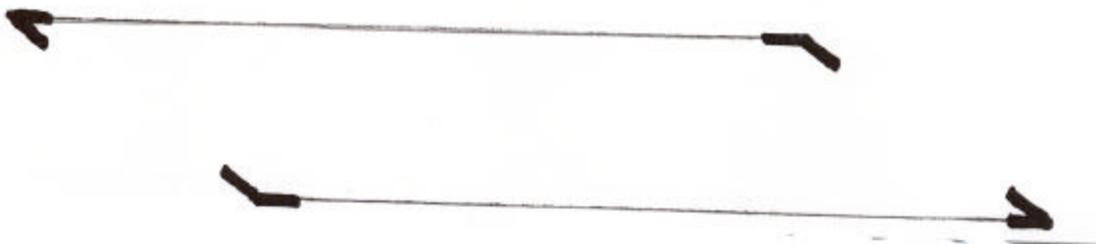
1. From one 10' pipe length saw two 25" pieces and two 34" pieces.
2. From a second 10' pipe length saw two 34" pieces. Two other pieces will be cut from this pipe after their lengths are determined.
3. From the third 10' pipe length saw four 6" pieces and eight short pieces.*

* Measure the depth a pipe will enter an elbow from the edge of the elbow to its internal ridge. (This depth varies depending on the manufacturer of the fitting.) Measure the similar internal depth in a Tee. Add the two depths together and subtract 1/8". This will be the length of the eight short pieces to be cut.

ASSEMBLE THE FRAME

THE BASE

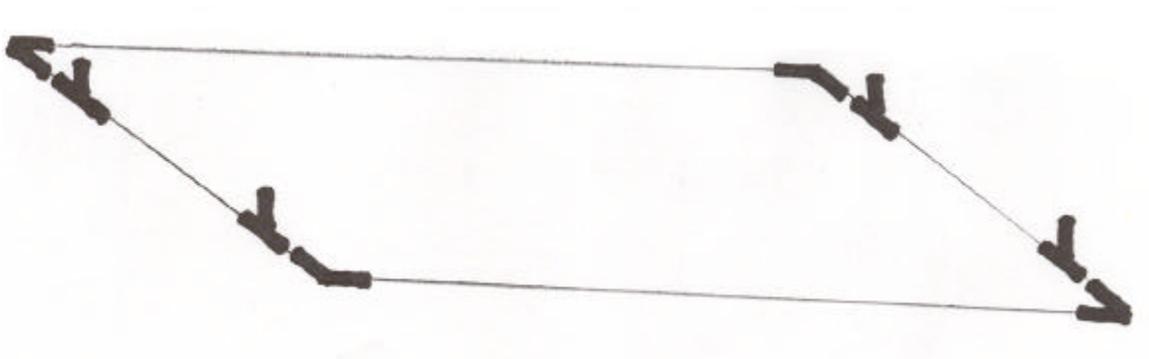
Connect one 90° elbow to a 25" pipe. Connect another elbow to other end of the pipe in the same direction as the first elbow. Connect elbows to other 25" pipe in the same manner.



Position a Tee in the proper direction. Insert a short piece of pipe between them and force the fittings together. Connect three other Tees in the appropriate directions.



Connect two 6" pipes (one fitting at a time) between the Tees on each side of the base.



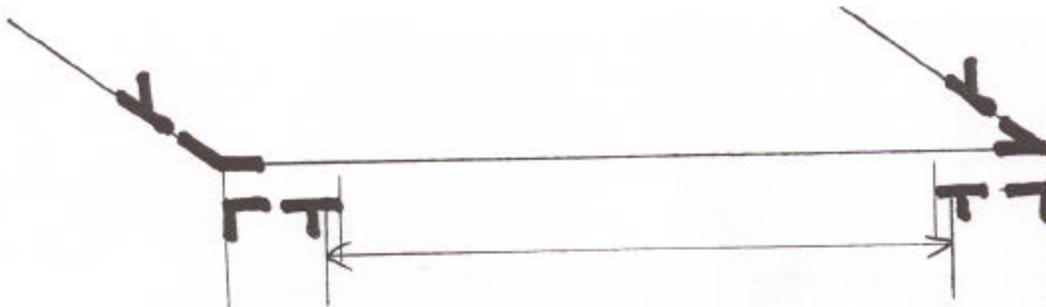
THE TOP

The front assembly of the top should have the same width as the front assembly of the base.

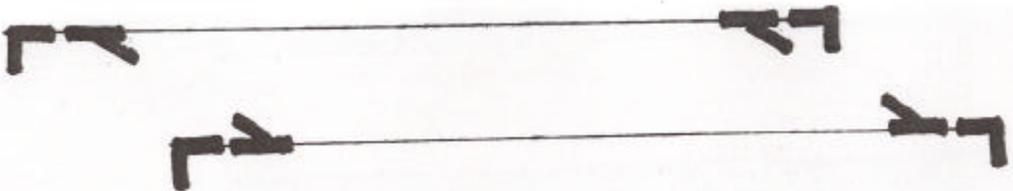
Place an elbow and a Tee touching each other along one end of the front of the base. Place another Tee and an elbow touching each other along the other end of the front of the base.

Measure the distance between the edges of the Tees and then add to this measure the depths the pipe will fit into the two Tees. (This depth varies depending on the manufacturer of the fittings.)

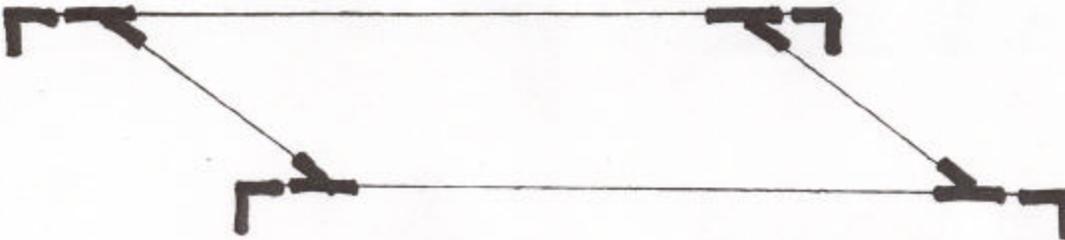
The total is the length of each of the two pieces of pipe remaining to be cut.



Cut the two pieces. With two elbows, two Tees, two short pieces of pipe and one of the new pieces of pipe, connect the front assembly of the top. Connect the back assembly of the top with similar pipes and fittings.



Connect the front and back assemblies of the top with two 6" pieces of pipe.



FINAL ASSEMBLY

Connect each of the four 34" pipes to the four Tees on the base. Position the top assembly onto the 34" pipes. Connect the four Tees of the top, one at a time, to the 34" pipes.

HANG THE SHOP LIGHT

Loop the chain around a top 6" pipe and close the loop by connecting the end of the chain to one of its links with an S hook. Similarly loop the other piece of chain around the other top 6" pipe. With S hooks attach the lower end of the chains to the slots on the shop light.

The distance between the top of the plants and the shop light can be adjusted by changing the lengths of the loops.

DOUBLE SHOP LIGHT OPTION

If you would like to double the depth of the unit described, cut and use **four 17 inch pieces** of pipe INSTEAD of the four 8 inch pieces. Purchase a second 24" fluorescent shop light 2 lamp) (40 watt), one 24" cool white fluorescent bulb (40 watt), one 24" daylight (warm) fluorescent bulb (40 watt), four S hooks (1" size) and two 2 ½ feet of chain (loops large enough for the S hooks).

This system of using two shop lights will allow you to adjust the height of each set of lights independently and provide light to both short and tall plants within the same unit.