

Kmart Installation Instructions

Structure

Aluminum Trusses

NOTE: Read instructions completely prior to beginning installation.

Step A

Layout system on the pad of the garden shop prior to drilling anything.

Determine the placement for all posts prior to drilling the first anchor bolt. If your structure spans a door or a gate in fence make sure that the posts that are on either side of the door or gate and will not block access. The posts that are installed along the building and the fence side need to be placed approximately 3' 6" from the wall or fence to allow the Black Plant Fixture to fit in between the post and the wall or fence.

Step B

The cantilever outsert should be slid on to the top of the first post on the building side, while on the ground. The second post will be an intermediate post connecting the next bay projecting out from the building. The 3-way outsert should be slid on to the top of the post while on the ground. Again while on the ground, place the Projection Truss into the cantilever outsert, be sure that the squared end is facing the fence. The cantilever outsert should be 3' 6" from the end of the projection truss. Drill holes and use ¼" x 1 ½" bolts, included in the KM hardware kit, to attach truss to cantilever outsert through the trough at bottom of outsert and through the ears on top of the cantilever outsert (*Detail 1/A3*). The projection truss should be connected to the 3-way outsert. Place bottom cord of projection truss onto the trough of the 3-way outsert, (*Detail 3/A3*). Use ¼" x 1 ½" bolts to attach truss to outsert in the MD hardware kit. Remember the cross truss and the other squared end projection truss will also fit on the 3-way outsert. Lift both posts and the projection truss into the air. Position building side post in pre-determined spot. Set first post by drilling and using the ½" x 4 ¼" wedge anchor (in the KM hardware kit) through the base plate of the post into the concrete, (*Detail 4/A3*). Do not tighten all the way, this is done last to make sure all posts are plumb. This will not work with asphalt. Position intermediate post in pre-determined spot. Set post by drilling and using the ½" x 4 ¼" wedge anchor bolts (in the MD hardware kit) through the base plate of the post into the concrete, (*Detail 4/A3*). Do not tighten all the way, this is done last to make sure all posts are plumb.

Repeat instructions for placing outserts on to posts and projection truss to outserts for side of business.

With these exceptions:

1. Use an 4-way outsert for the intermediate post.
2. Do not drill holes for posts yet.

Step C

Lift both posts and the projection truss into the air. Position approximately 13' 1" from the first post center to center. Along the building side, clamp one 12' 10" cross truss to the end of the first projection truss that is already in the air and to the end of the second projection truss just raised. Along the intermediate side, clamp one 12' 10" cross truss to half of the end of the first projection truss that is already in the air and to half of the end of the second projection truss just raised. Set bottom chord of cross truss on the end of bracket trough. Square up the system. Bolt the cross trusses to the projection trusses along the building side, (*Detail 2/A3*). Drill holes through both plates on top of cross truss and projection truss and then attach using ½" x 2" bolts. Holes might have to be drilled on an angle. Attach intermediate cross truss to projection trusses by bolting cross

truss into trough of outsert. Drill holes through both plates on top of cross truss and projection truss, and then attach using $\frac{1}{2}$ " x 2" bolts, (*Detail 3/A3*).

NOTE: At this point you should have one bay in the air.

For some systems there will be only two bays projecting out from the building, for others there could be three to four. In any case this system is designed to bolt additional bays to it.

Step D

At the intermediate post, layout the next projection truss. Take the next post and slide onto the corresponding outsert. Cantilever outsert for two bay systems; 3-way outsert along the side of structure for three to four bay systems. Attach the outsert to the projection truss by drilling and using the $\frac{1}{4}$ " x $1\frac{1}{2}$ " bolts in the MD kit. Lift projection truss and post into the air and clamp both projection trusses together. (*Detail 3/A3*) Make sure that the bottom chord of truss is resting in the trough of the outsert. All trusses share the outserts equally. Bolt new projection truss to cross truss and other projection truss already in the air. Make sure base plate of post is sitting in its pre-determined location. Set post by drilling and using the $\frac{1}{2}$ " x $4\frac{1}{4}$ " wedge anchor in the MD hardware kit, (*Detail 4/A3*).

NOTE: Repeat Step D for next projection truss.

Remember to bolt cross truss to half of each end of projection truss on all intermediate points. Along the fence side, clamp one 12' 10" cross truss to the end of the first projection truss that is already in the air and to end of the second projection truss just raised. Square up the system and bolt the cross trusses to the projection trusses, (*Detail 2/A3*). Drill holes through both plates on top of cross truss and projection truss, then attach using $\frac{1}{2}$ " x 2" bolts. Holes might have to be drilled on an angle.

Continue these steps until all of the structure is in the air.

At this point go back to all the posts. Get out a level and plumb all post making sure to tighten all $\frac{1}{2}$ " x $4\frac{1}{4}$ " wedge anchors, (*Detail 4/A3*).

Once all trusses are connected and all posts bolted securely, drill out post outserts. Height adjustment of up to 8" is possible to make sure structure clears lights mounted to building. Raise outsert, drill, and bolt using $\frac{1}{2}$ " x 5" bolt at correct height, (*Details 1/A3, 3/A3*). An 8" maximum pitch is acceptable on system. Bolt down using $\frac{1}{2}$ " x 5" bolts, in both KM and MD kits.

NOTE: Always bolt outserts to post. Attach all 2-way and 3-way Linear Trough Brackets, (*Detail 2/A3*) to the outside connections where bottom chords of projection and cross trusses meet. This tightens all bottom cords projecting out past the cantilever outsert.

Step E

Installation of shade panels: Lace all 4 corners of panel to frame. Make sure spring is installed with hook end up. Hook small end of spring to shade panel. Hook large end of spring to top chord of truss. Attach springs to all grommets and **cut out all lacing on corners.**

After structure is completely bolted together, proceed with sprinkler installation.