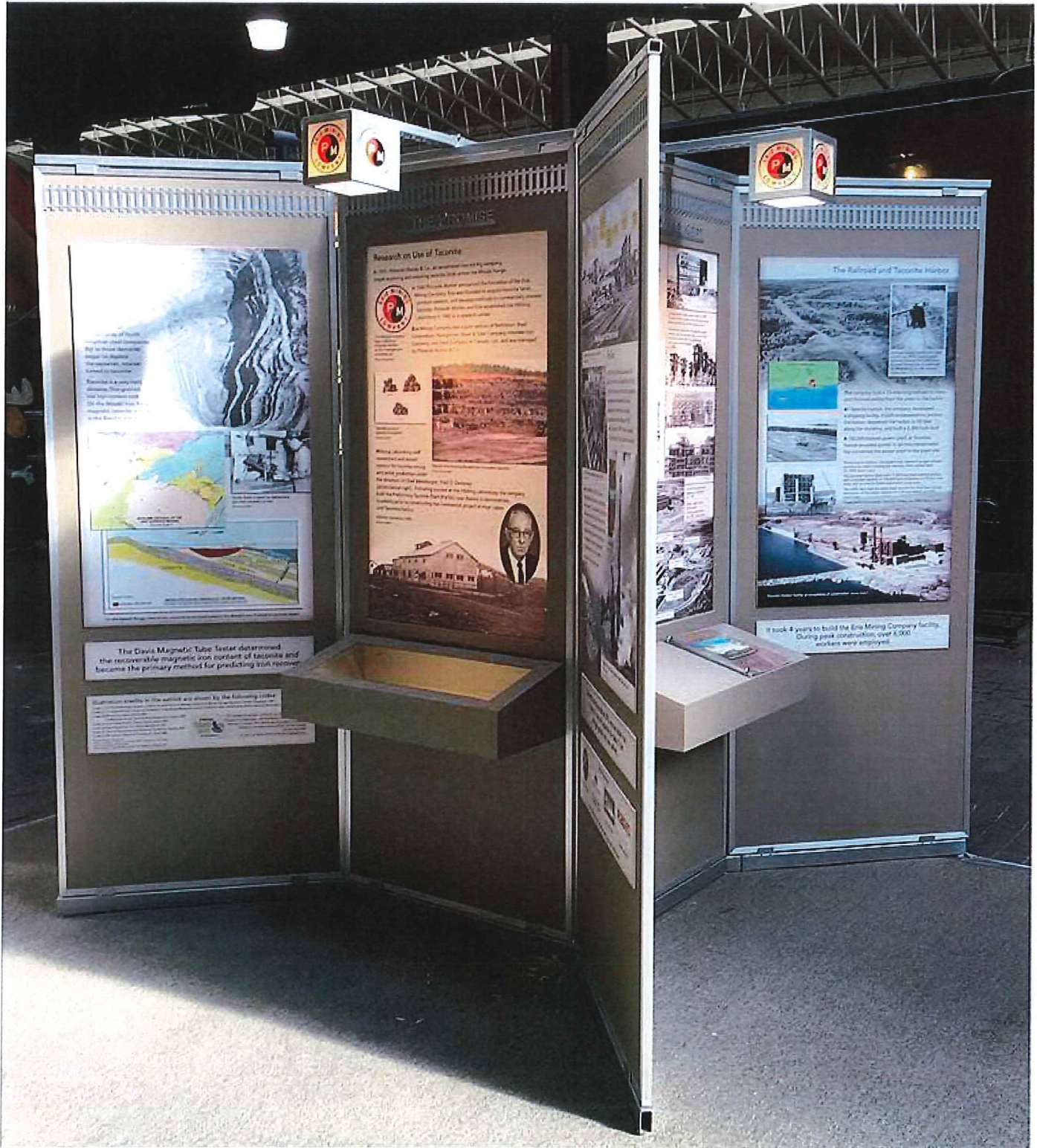


1 Erie Mining Traveling Exhibit Assembly Manual



This exhibit is a self-standing unit and can be assembled by three people with two 6' ladders, a 3' step stool, and a small crescent wrench. All components are interlocking and sturdy – yet need to be handled with care. The lighting draws less than 110 watts and comes with a 30' electrical cord with an inline switch 12" from the wall plug. Call 218-625-3035 with any questions regarding assembly or servicing of components.

2

Erie Mining Travelling Exhibit Assembly Manual The Crates and Components

The crates are labeled and numbered in order of their assembly.



Exhibit Base (EMC 1)

When completed,
this page will show
crates, sizes
weights
numbers
and list of componets
contained.



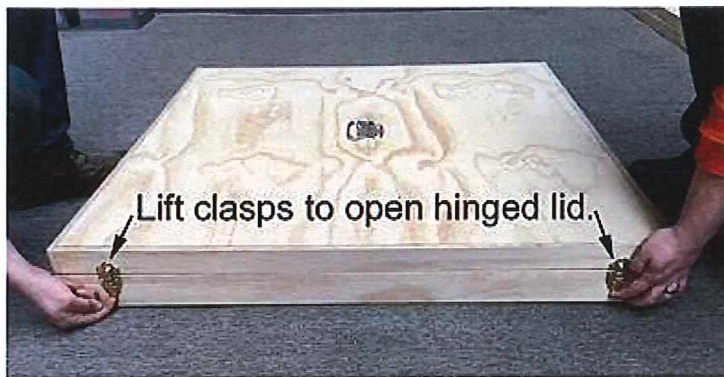
3

The Exhibit Base - Crate 1

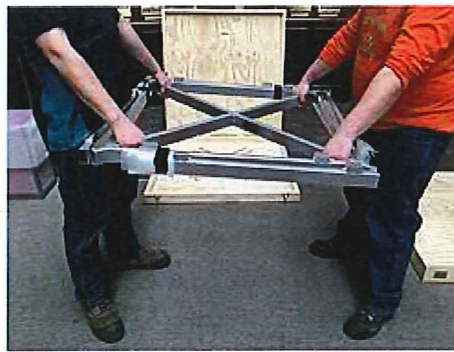
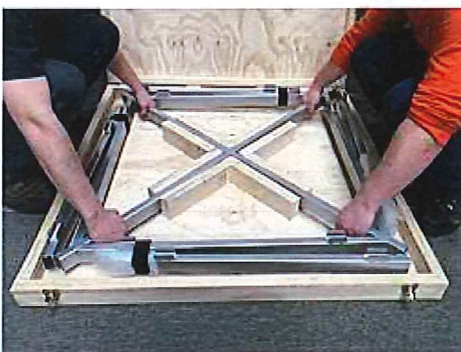
Transport the crate for the base as shown below



When laying the crate down, make sure floor is protected and handle underneath lies flat.



The hinged swing-out base legs have velcro straps holding them in place.



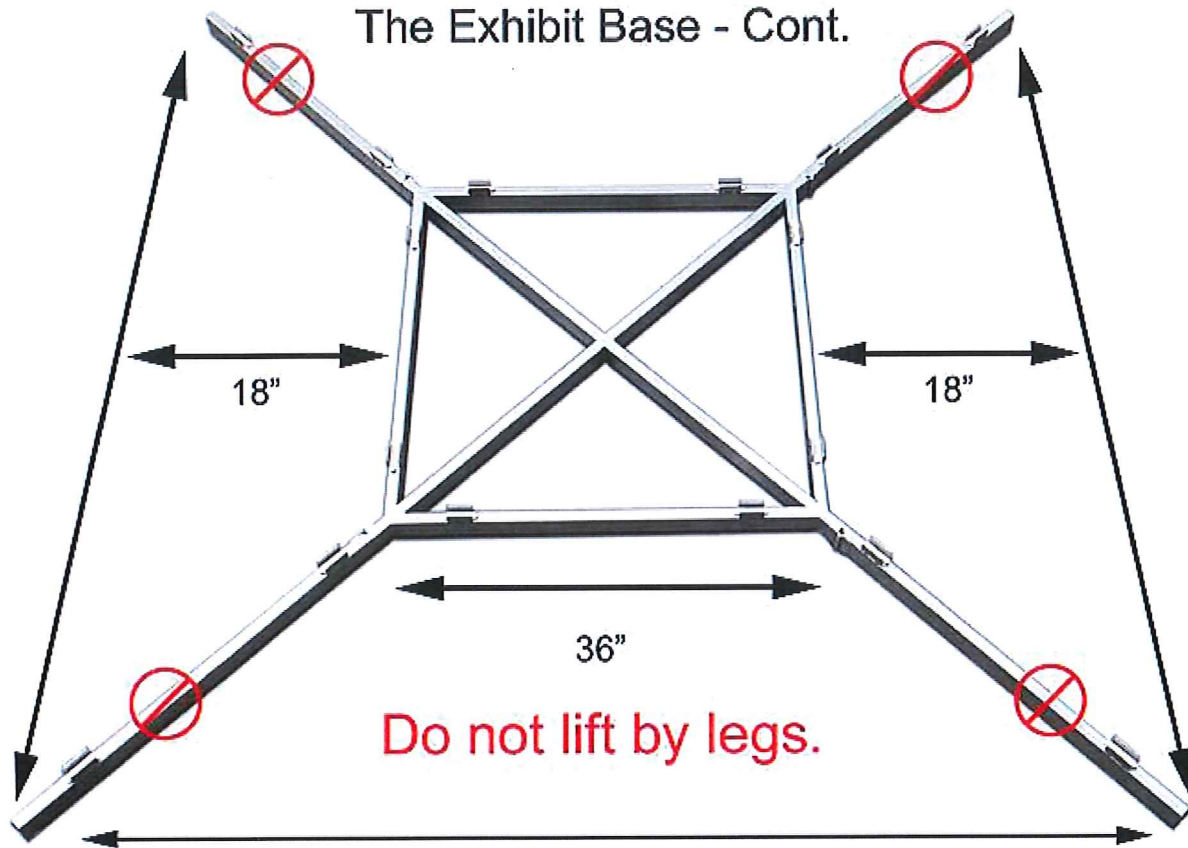
The base is heavy – Lift out of crate as shown to prevent back injury – Place base on floor.

Do not undo the velcro straps until exhibit base is placed in final position.

Before proceeding to unfolding legs –
See next page for exhibit base placement.

4

The Exhibit Base - Cont.



*The exhibit measures 6' square.

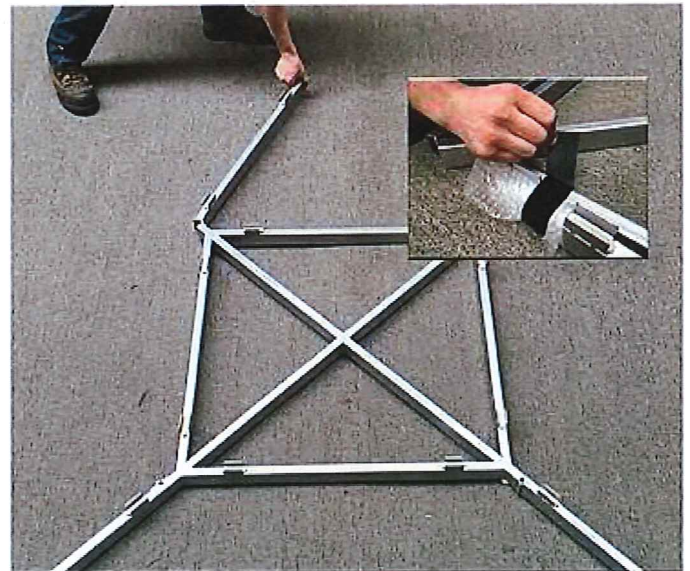
Allow 6' from clearance wall to allow ample space for visitor traffic.

*Ideally, The total exhibit and visitor area should be at least 20' x 20'.



Important!

When placing the exhibit base, make sure your electric cord pass-thru leg is closest to wall outlet. The cord channel only goes in one direction.



Unfold Legs

Once you have determined your final base placement, undo the velcro straps and unfold the legs. There is a little play in the hinges, which allows for the base to compensate floor slightly irregular floor surfaces.

5 Erie Mining Exhibit Assembly – Back-Lit Panels – Crate 2

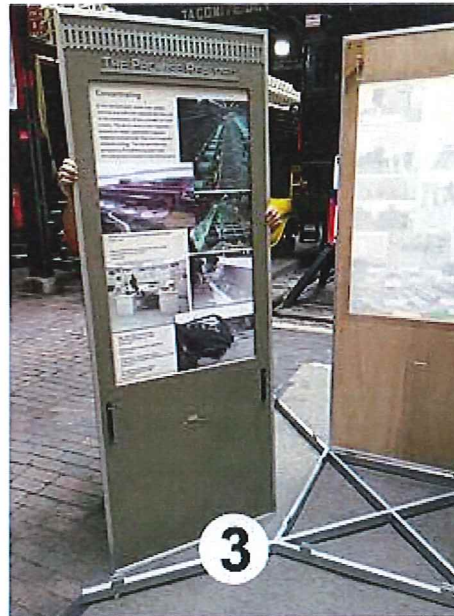
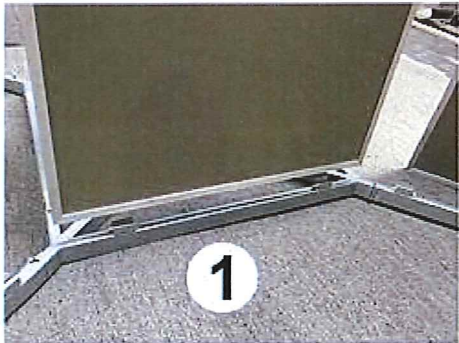
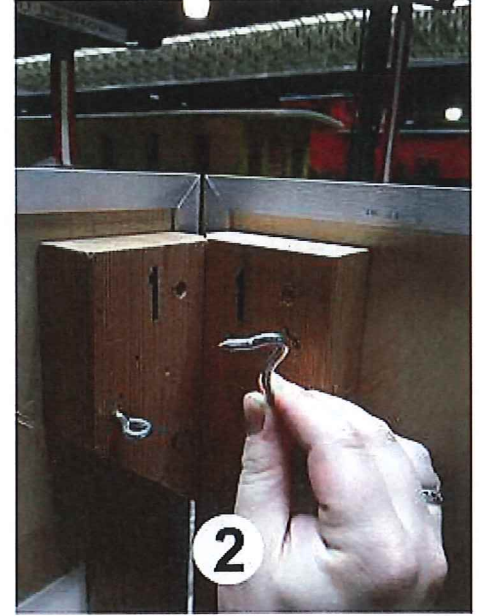
At this stage, the first three of the four panels with the acrylic inserts will be assembled. These panels are named The Promise, The Promise Kept, and The Promise Realized.

(The numbers and names are written on the backs of these panels)

Panel 1 – The Promise



Panel 2 – The Promise Kept



Assembling First Three Walls of Exhibit

Choose which side is the front of the exhibit (The Promise).

1) Insert the bottom of first panel into guides on base assembly, while inserting second panel the same way.

2) Latch the top corners of the first two panels.

3) Insert Panel 3 and latch the top corner to Panel 2.

At this point check where the the corners of the panels meet and see that the space is fairly even. There is some play in that space since the the hooks above were not intended to be tight so as to allow for slight wall adjustment.

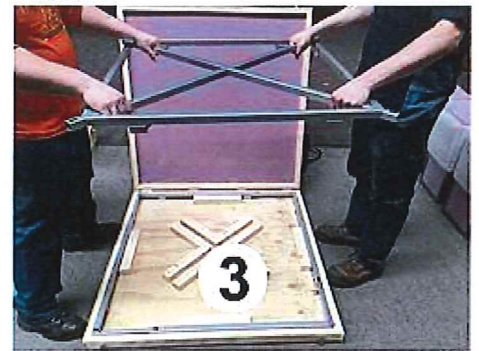
Panel 3 – The Promise Realized



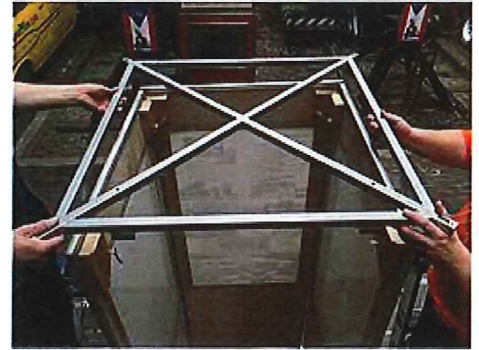
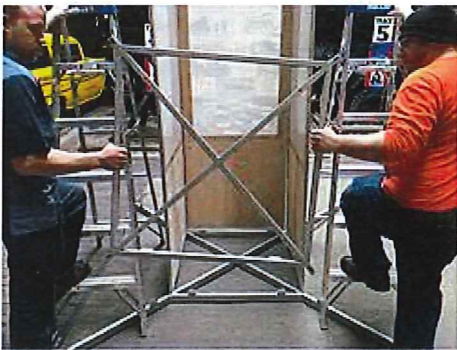
6 Erie Mining Exhibit Assembly – Exhibit Cap (Crate 3)

Two ladders (6' Min.) are required from this point on.

1) Set crate down as shown and undo clasps. 2) contents of the crate are the exhibit top and extension arms for the four solid wing panels. 3) Remove the top structure as shown set aside the crate with extension arms for use later. 4) Set top structure in place; even though this structure brace is light, it's best to have two people on ladders in positions shown so that the guides attached to the structure can be worked down onto the three linked panels, as, stated before, there is some play in the structure itself. This positioning of ladders and people also sets the stage for the placement of the much heavier main light structure as shown in the next steps.



4

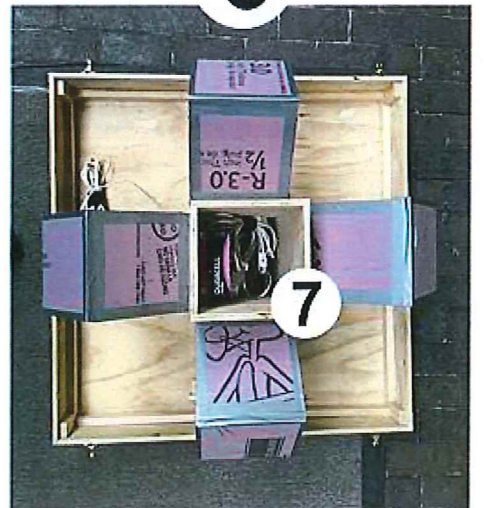
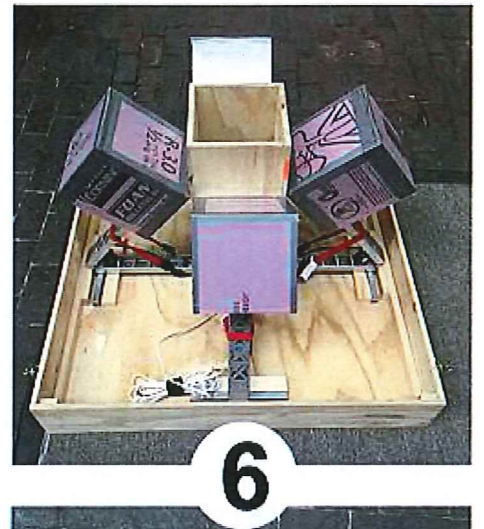


Next, you will be setting the main light fixture in place and even though the photos in the next section show only two people setting the light, it is highly advisable to have a third person on a step stool to be ready, beneath and center to assist the maneuvering of the light structure!

7 Erie Mining Exhibit Assembly – Light Fixture – Crate 4

Plase pay close attention to these images and instructions on careful unpacking and handling of these components, so as to prevent damage to the light fixture.

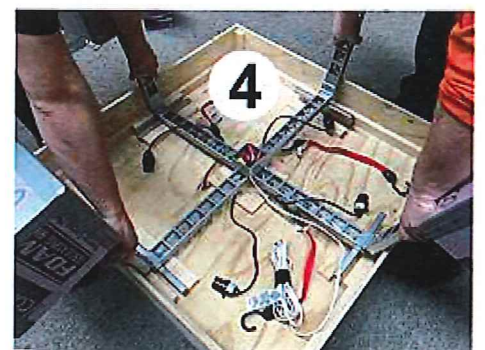
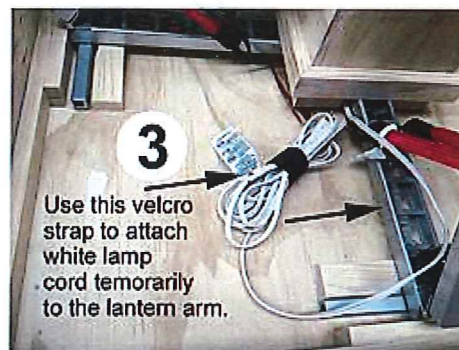
1) Carry the light fixture as shown. 2) Set down and turn it upright. 3) Lift lid straight up while using the handles to jiggle the crate because the lid fits snug. 4) Velcro strap holds four cushioned foam board boxes which contain the down lights which light the back-lit panels from inside. 5) undo velcro strap and set these boxes aside for later. 6) Overhead and front views showing the center stabilizing structure. This is held in place with the tension of the elastic straps, which will be removed in the next step. 7) remove the electrical cords and bulbs from the inside and set aside for later.



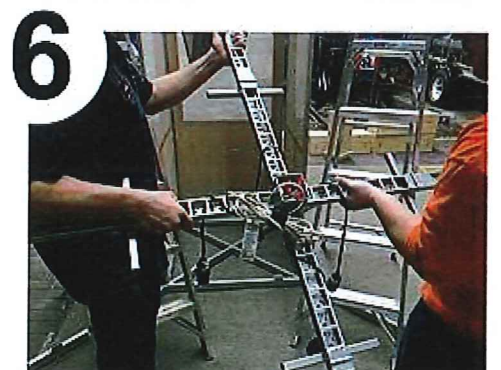
8 Erie Mining Exhibit Assembly – Light Fixture (Cont.)

Plase pay close attention to these images and instructions on careful unpacking and handling of these components, so as to prevent damage to the light fixture.

- 1) There are four LED bulbs in the center stablizing structure which will be put into the down-lights in the exhibit interior; set these aside along with the electrical cords until later.
 - 2) Unhook each of the four bungee hooks holding lanterns against stabilizing box.
 - 3) Note the white cord attached to the light; Undo the velcro strap from the cord, and wrap the cord onto one of the lantern arms temporarily so it is out of the way as the light is being placed atop the exhibit.
 - 4) Unfold all four lanterns (covered by foam board boxes).
- Keep the velcro straps on the foam boxes until light structure is in place atop the exhibit.
- 5) Remove the center stabilizing box and set aside.
 - 6) grasp the light fixture at points shown on on photo and lift carefully as lantern arms straighten out.



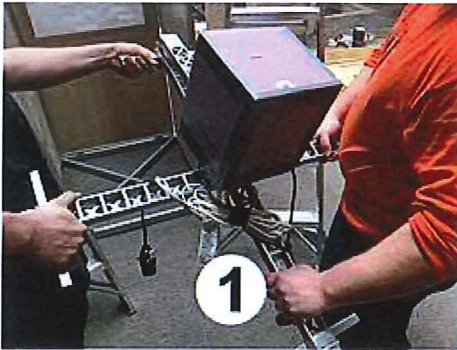
Carefully fold lantern arms let them rest against crate side as stabilizing box is removed and the light is carefully lifted, transitioning lantern arms to their final position.



Erie Mining Exhibit Assembly – Light Fixture (Cont.)

Plase pay close attention to these images and instructions on careful unpacking and handling of these components, to prevent damage to the light fixture.

1) Note that when fixture is being lifted into place for positioning, any one of the four lantern arms can be folded to allow easier handling of the fixture. This can also aid in creating better clearance of exhibit panel walls while lifting, thereby reducing chance of damaging exhibit.



2) With a person holding the fixture as shown, proceed up the ladder slowly (with third person below) and place the into the top of the exhibit.

3) The bar welded to bottom of each lantern arm guides the fixture into place.

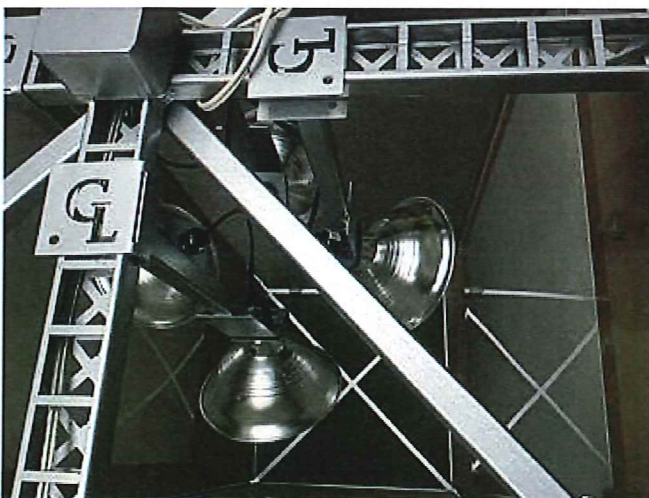
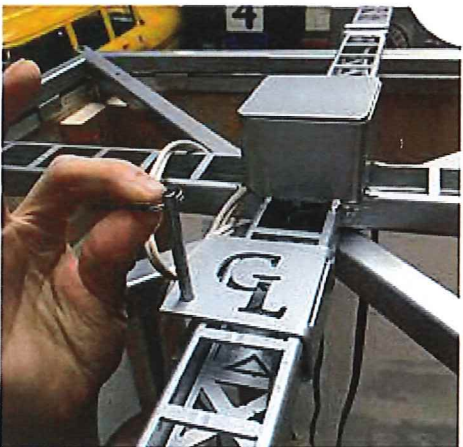


The protective lantern foam board boxes can now be removed.



Plase pay close attention to these images and instructions on careful unpacking and handling of these components, to prevent damage to the light fixture.

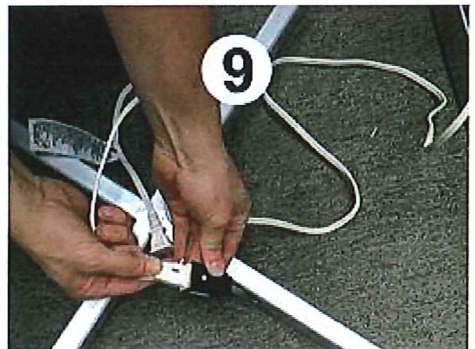
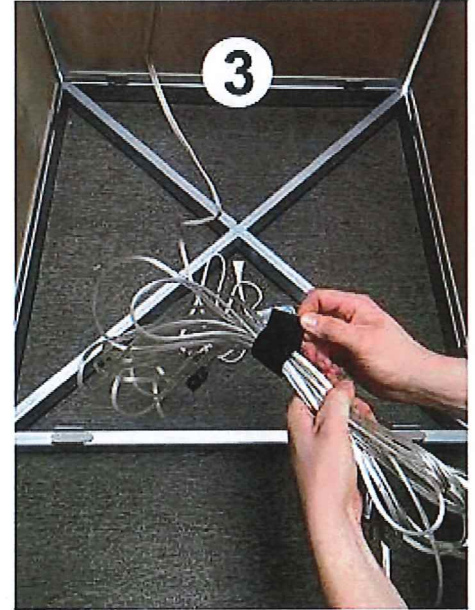
- 1) Place the extension arms for the lighting of the interior of the exhibit and insert catch pins.
- 2) Screw the light refractor shades on to the sockets.
- 3) Screw in the four LED bulbs.



Overhead
view of
top assembly

11 Erie Mining Exhibit Assembly – Cords for Light Fixtures

- 1) Undo the velcro from the cord.
- 2) How fixture should look.
- 3) Undo the velcro from main extension lamp cord (30' long).
- 4) Feed male (plug) end of lamp cord into the exhibit base.
- 5) Intercept the cord at leg hinge.
- 6) Feed cord rest of the way to the end of the leg.
- 7) Run cord to wall outlet.
- 8) Plug the triple-outlet extension cord into the cord running through the leg. The triple-outlet extension cord will now accommodate the three exhibit light fixtures. The main light fixture atop the exhibit plugs into the middle outlet in the triple-outlet cord

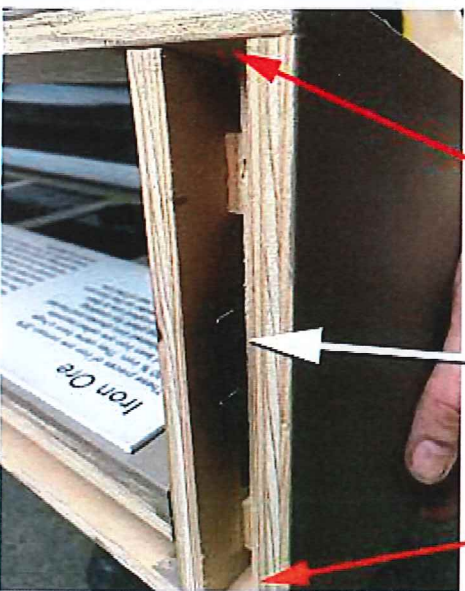


12 Erie Mining Exhibit Assembly – Glass-Window Exhibit Cases

There are two hanging exhibit cases with glass windows; “Ore Samples” and “Ore Mining in Minnesota.” The installation process is the same for both. Open the crate only when in upright position. Remove the exhibit case from the crate. The cases have an LED light fixture in them that will plug into the triple-outlet extension cord inside the exhibit.



All four of the Exhibit “hidden-hanger” components attach to their respective exhibit panels the same way. The cases are labeled with the panels name they hang on. With the glass topped cases, you need to feed the light cord through the hole in the panel before hanging.

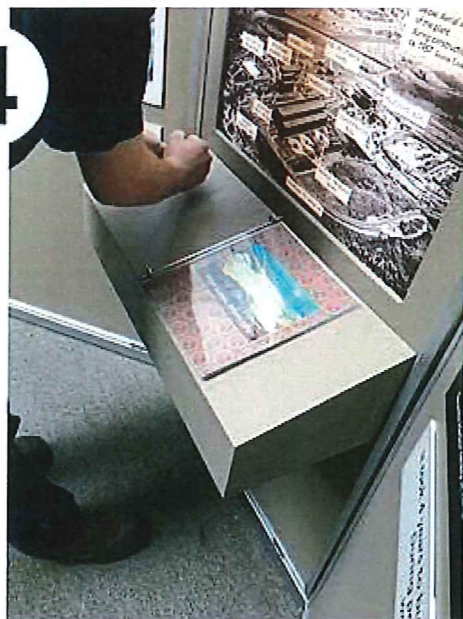
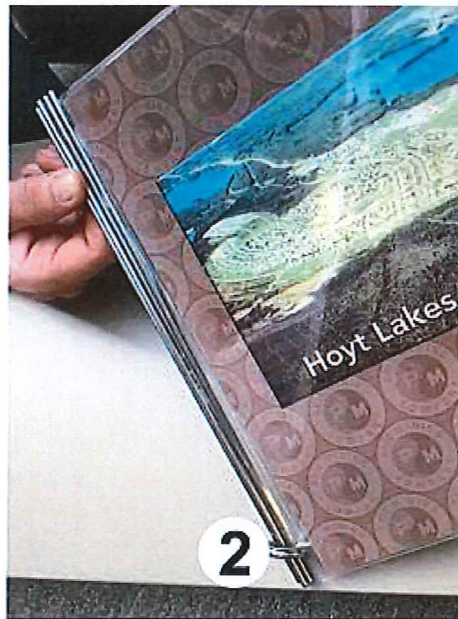


As shown in diagrams above, place the back of the case so that when looking at it from above, you are able to visually line up approximately where you need to insert the recessed brackets into the slots on the receiving brackets. Do this carefully, as you will feel when the bracket hooks are in the right place, then press forward and down. Once on, fist-bump the back corners of the unit to secure the case... not too hard though.

13 Erie Mining Exhibit Assembly – Flip Book Cases (Crates X)

After the flip books are configured. The flip book hanging cases are installed the same way as the glass-topped cases, The two flip books are “Hoyt Lakes, Minnesota”, which is attached to “The Promise Kept” center panel, and “The People Made it Work”, which is attach to “The Promise Renewed” center panel.

- 1) After removing hanging cases from the crates, you'll find the flip book pages inside the case.
- 2) they are attached to steel rods which insert into bottom eye screw.
- 3) place the loose eye screw onto the tops of the steel rods and secure the top eye screw with the nut. Tighten with small crecent wrench so eye screw is tight against case top.
- 4) Finish by installing the same way as the glass-topped cases shown on previuos page..
- 5) “The People Who Made it Work” component is not installed until fourth panel is placed.



14 Erie Mining Exhibit Assembly – Locking Exhibit Cases

Each exhibit hanging case has a lock which is secured with a key from underneath the case. In the unlocked position, the key slot runs parallel to the exhibit panel; in the locked position it runs perpendicular. To lock a case after hanging, insert the key and turn the right side toward you to lock the case.

Unlocked



Locking

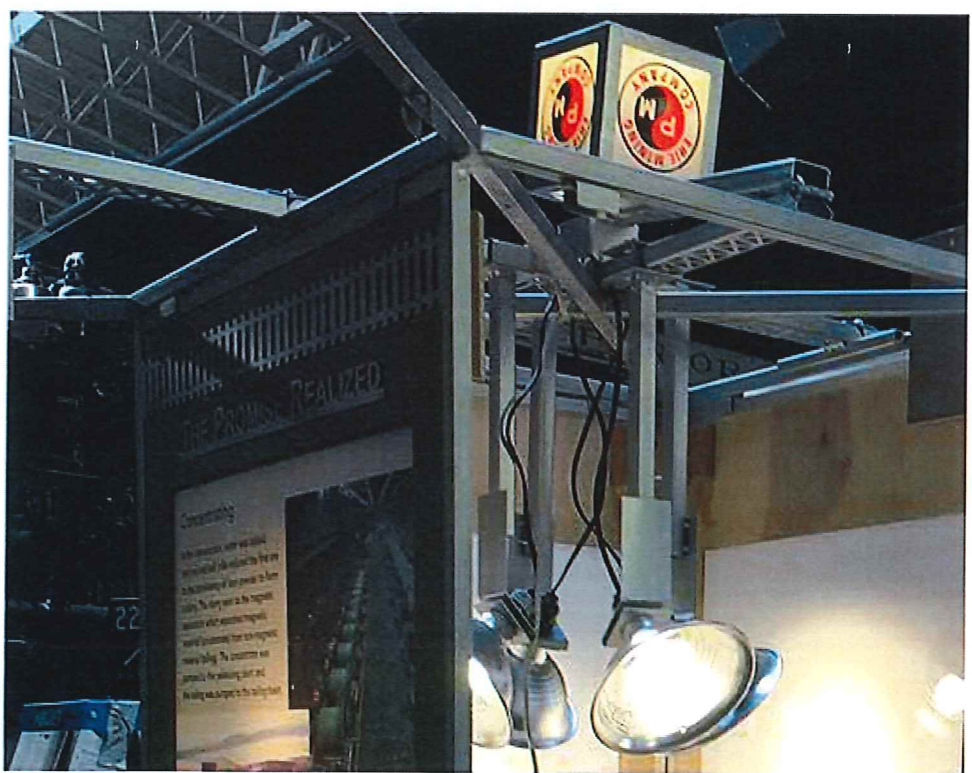


Locked



Finishing up the Interior of the Exhibit

You can now plug the hanging case plugs into the triple-outlet extension cord inside the exhibit. Match the plugs from the glass-topped exhibit hanging cases, which were fed through the panels, to the closest outlet on the cord. As instructed previously, the main light fixture overhead should be plugged into the middle outlet of the extension cord.



Attention!
This is the point in the exhibit assembly where you want to make sure all your lighting works!

The four lanterns, four interior lights and the two glass-topped hanging exhibit cases.

15

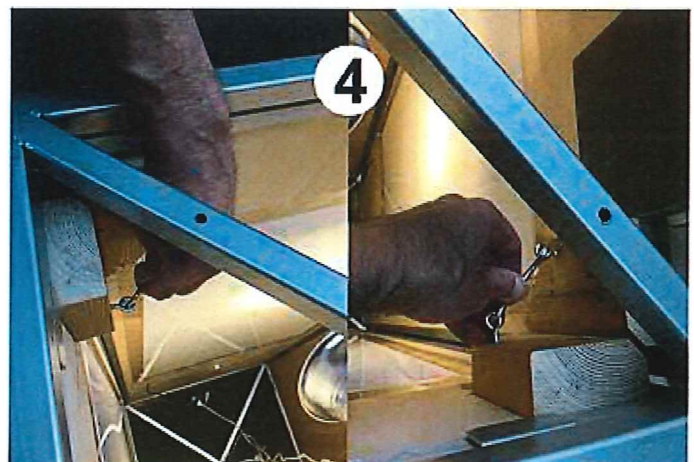
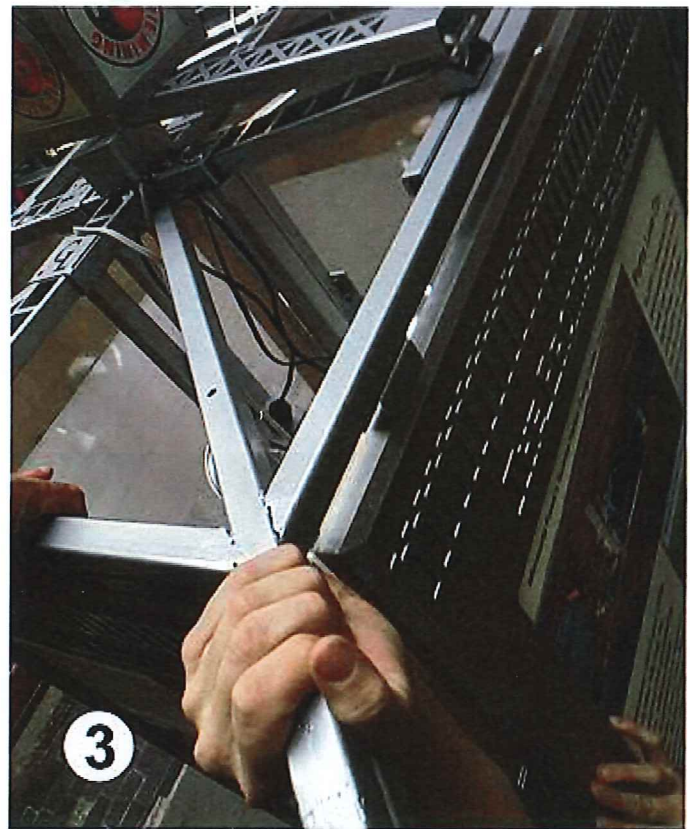
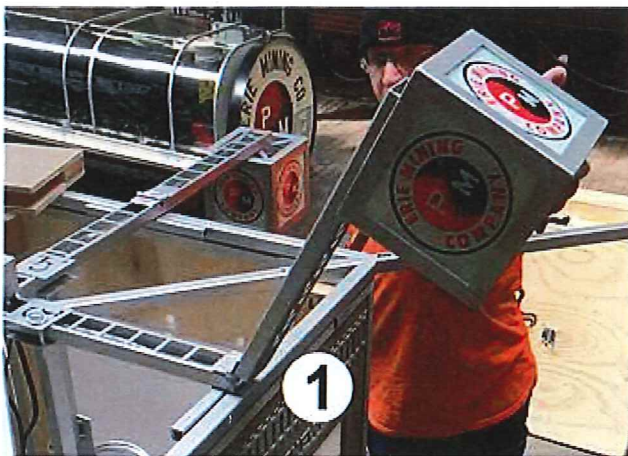
Erie Mining Exhibit Assembly – Place Fourth Back-lit Panel

This operation will need three people: Two on 6' ladders on both sides of panel placement and one below to insert and lean the fourth panel in.

- 1) Flip back the lantern above the area to allow clearance for the panel to be tilted in.
- 2) Place the bottom of the panel in the guides.
- 3) Simultaneously, the two people on ladders will grasp the top of the exhibit structure and lift it just enough (about an inch) for the person placing the panel, to fit it under the guides – at which point, the two people on ladders will lower the top structure back down to cap the fourth panel. You may have to wiggle the two adjacent panels slightly while re-fitting top onto them. Flip lantern back.

Be careful not to pinch fingers during the installation.

- 4) After panels are re-secured, reach in from the top and latch the corners.



16 Erie Mining Exhibit Assembly – Installing Wing Panels (Crate 9)

- 1) The extension arms which secure the solid wing panels into the are in the same crate that the exhibit top is stored in. 2) Insert small end into the exhibit cap which has the same letter. Push in all the way in insert catch pin in through hole as shown. Repeat this with the other three arms. 4) Carefully slide the panels into top and bottom guides. 5) Photo reference for correct order placement of the four wing panels



Panel
Examples
Placed
Here

