



FLOATINGCEILING

MODEL: WHISTLER WASHINGTON LAKE LOUISE CASTLE

INSTALLATION INSTRUCTIONS



TOOLS REQUIRED

- Measuring Tape
- Drill
- Ladder
- 3" Paint Brush and latex paint for painting the canopy (If required)
- Mechanical lifter (such as a Gennie Super Hoist) <u>Recommended</u>

SECTION 1: UNPACKING

1.1. When your new Floating Ceiling arrives, transport it near to the cab you will be renovating and organize the crates so that they will be easily accessible.

The crates contents are itemized on its surface.

- 1.2. Carefully un-crate the ceiling package, making sure that none of the components are damaged.
- 1.3. Check the colours, features, and dimensions of the components against your order before you begin removing the existing elevator interior.

If you have any questions at this point, contact ECR before going ahead with any part of the installation.

For technical support on the Floating Ceiling installation, please contact us at:

Elevator Cab Renovations

Office: (613) 745-4870

Toll Free: 1-877-745-4870

ecr@elevatorcabs.ca

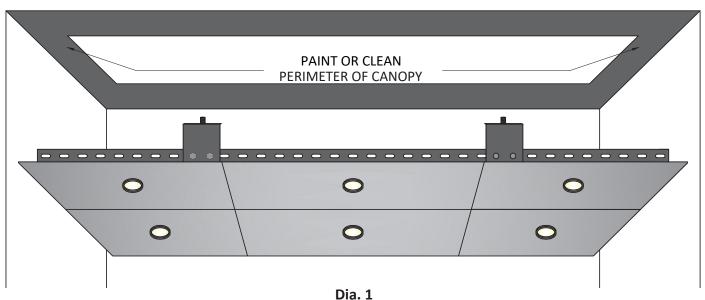
Office Hours: 6:30 AM to 3:30 PM Eastern Standard Time

SECTION 2: PREPARE CANOPY

- 2.1. Unless specified otherwise, your new floating ceiling will be inset from the shell walls by 2" on all sides. Please consult drawings accompanying ceiling.
- 2.2. Prepare canopy to accept new floating ceiling by completing one of the following options:
 - a) Sand, clean and re-paint the perimeter of the canopy with a desired color. Black or white are typical for this type of application
 - b) If the canopy is in good condition, a simple cleaning may be all that is required.



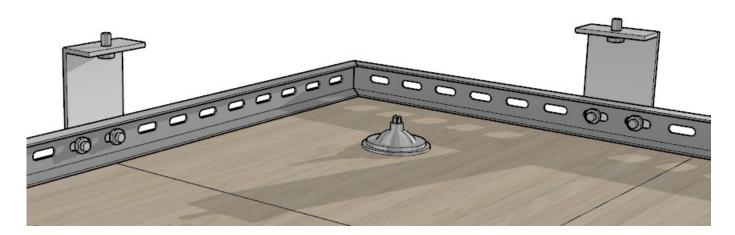
Note: It is suggested that for both options a or b, a minimum of 6" of the perimeter of the canopy should be addressed by the process chosen.



Floating ceiling preparations.

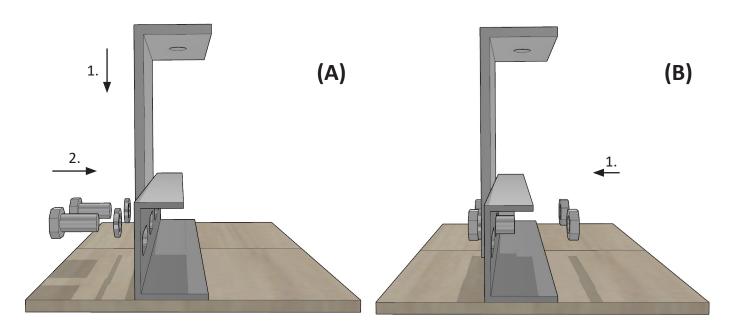
SECTION 3: INSTALL FLOATING CEILING

- 3.1. Your ceiling includes a mounting template. This will be used to transfer hole locations from the floating ceiling brackets to the canopy of the cab. Determine safe locations on the car top where ceiling brackets can be installed so that fasteners are not obstructed by ribs, car top equipment, etc.
- 3.2. Arrange the mounting brackets on the substructure to suit the safe locations (slots have been punched around the perimeter of the substructure for flexibility) (Dia. 2). A minimum of six (6) brackets should be installed on the ceiling. On larger ceilings, additional brackets may be used to shorten the span between supports.



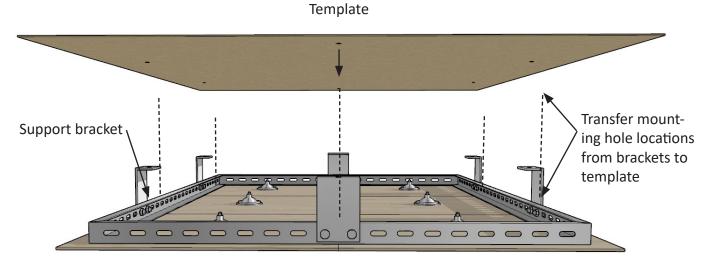
Dia. 2 Installed mounting brackets.

3.3. With the ceiling good side down, fasten the brackets to the frame in the locations you selected (Dia. 3).



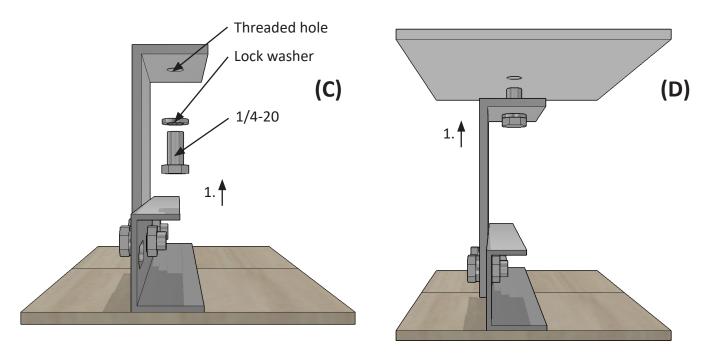
Dia. 3 Installing mounting brackets.

3.4. Place the template on top of the ceiling brackets and align it with the edge of the ceiling support frame. Once positioned, mark the mounting holes on the template and drill them out to at least 1/8" (Dia. 4).



Dia. 4 Floating Ceiling with mounting template.

3.5. Insert $\frac{1}{4}$ -20 x 2" machine screws with a lock washer through the hole in the ceiling bracket. The threaded section of the machine screw protrudes from the top of the bracket, pointing to the canopy (Dia. 5).



Dia. 5Ceiling brackets with fasteners installed.

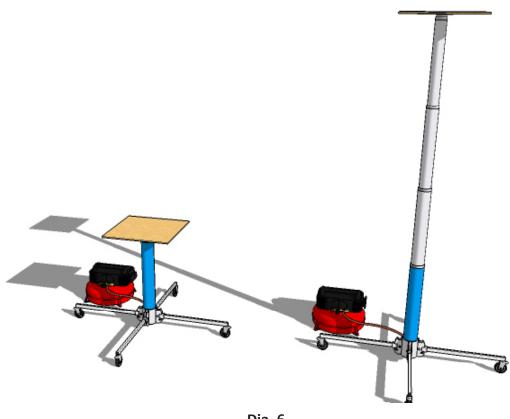
- 3.6. Position the template against the canopy of the cab in the desired location (typically centered side to side verify drawings accompanying ceiling) and temporarily secure into place with screws or tape. Copy the mounting holes to the canopy by marking through the template holes. Remove the template from the canopy.
- 3.7. Before drilling in the canopy, check the top of the car for any obstructions (i.e. ducts, cable, conduit etc). Progressively drill holes up to ½" diameter in the canopy.



Protect any exposed wall finishes prior to raising the floating ceiling into position.



All floating ceilings should be raised into position using a mechanical lifter (such as a Genie Super hoist) rated with enough capacity. Lifting the ceiling into position without proper equipment can result in damage to the ceiling, the surrounding angles and/or personal injury.



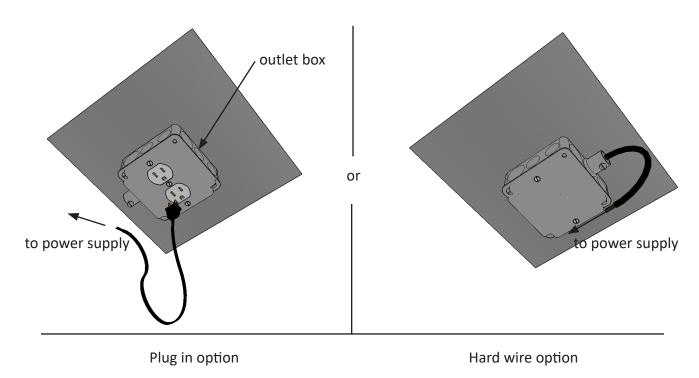
Dia. 6Genie ceiling lift.

- 3.8. Ensure the platform of the lifter will not damage the ceiling during use. This can be accomplished using plywood covered with foam, or another non-marking material. If possible, it is preferable to leave the hatch area un-obstructed.
- 3.9. Open the hatch on the canopy.
- 3.10. Place the ceiling on the lifter with the good side facing down. Remove the Floating Ceiling hatch portion and place it in a position where it can be reached from the escape hatch in the canopy.
- 3.11. Slowly raise the ceiling into place. This is best done with a person at the hatch looking between the ceiling and the canopy and making any adjustments necessary to align the studs with the holes in the canopy.

- 3.12. Loosely fasten the floating ceiling to the canopy using the washers, lock washers and nuts provided. Do not tighten fasteners until all are in place and the floating ceiling is properly positioned.
- 3.13 Make any necessary adjustments & then securely fasten the floating ceiling into position. Loctite can be applied to the mounting studs prior to installing the nuts (not provided).
- 3.14 Once the ceiling is secured in place, trim the studs protruding from the canopy as flush as possible to remove any potential trip hazards.
- 3.15 Carefully lower the mechanical lifter and remove it from the cab

SECTION 4: ELECTRICAL CONNECTIONS

- 4.1. Ceilings will be supplied pre-wired.
- 4.2. The lighting system runs on 110V AC through a low voltage power supply. The installer must provide 110V to the lighting system. The system can be hard wired or plugged into receptacle (utility box, connectors & outlets are provided). The lighting system will be energized once the plug is inserted into the outlet (Dia. 7).
- 4.3. If a dimmer has been requested it will be pre-installed. The dimmer will be located near the hatch. The installer can set the illumination to code (100Lx for passenger, 50Lx for freight) or brighter to suit customer requirements (B-44 ASME A17.1/CSA B44-10). Dimmers are only accessible by the installer and should not be altered once illumination levels have been determined.



Dia. 7 Electrical connections.

GLOSSARY

Canopy:

The roof of the cab.

The top structural component of the shell.

The canopy houses the emergency hatch.

The canopy may have various electrical and mechanical components attached to its surfaces, both interior and exterior.

Ceiling Brackets:

Ceiling brackets are "L-shaped" constructed of 1/16" thick steel. Brackets are manufactured with mounting holes for 1/4-20 bolts for fast and easy installation.

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