

Inset Light Fixtures at YVR



Vancouver is often known as the wet coast of Canada



- Having special equipment like a bottomless trailer is essential for replacing large numbers of fixtures in bad weather
- Cordless impact guns and power tools help us get the job done faster



Lighting Trailer



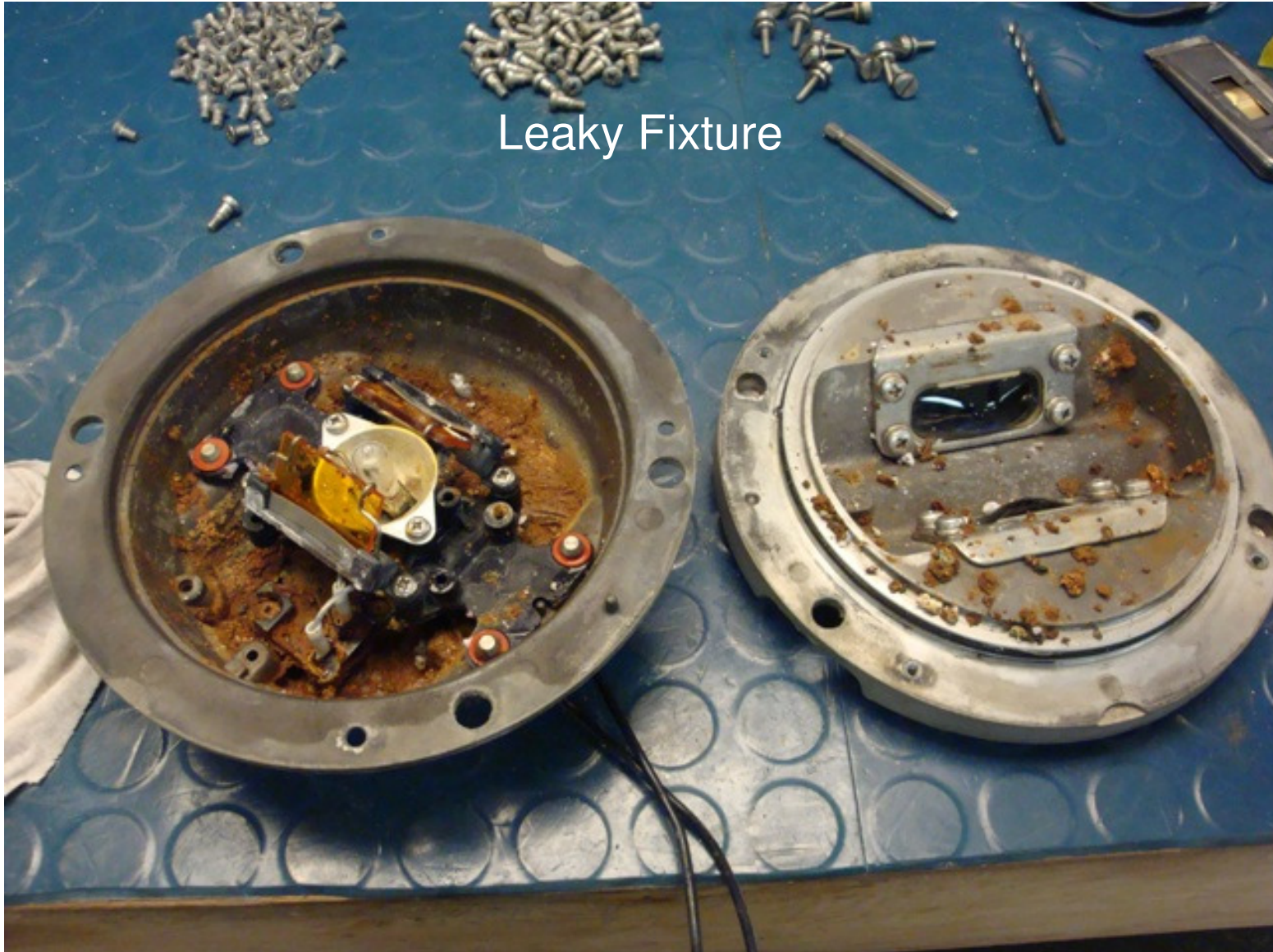
Trailer is fully equipped with a generator, air compressor and shop vacuum


Fixture Failures



- All that rain and the fact that the Airport is below sea level means our fixtures are constantly in contact with water
- This is the number one reason for failure, if water can find a way in, it will
- These leaky fixtures will have to be completely rebuilt with all new seals then pressure tested

Leaky Fixture



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- ❑ Even with our mild winters we do have occasional snowfalls
 - ❑ Snow removal causes havoc on our fixtures, costing thousands of dollars in damage
 - ❑ Aluminum fixtures are no match for a snowplow





Rebuilding Fixtures



Some of our specialized rebuild equipment includes:


- Sandblaster that uses plastic bead (won't scratch lenses)
- Manual impact screwdriver and cordless impact
- Torque screwdriver
- Pressure testing valve
- Lamp testing unit, with ground detection

Sandblaster With Reclaimer/ Dust Separator





Essential hand tools

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- Repairs are performed on a daily basis
 - Fixtures are first sandblasted to remove any debris
 - If they are found to be leaky they will require a complete rebuild with all new components
 - If there are no leaks they will have their lamps replaced, be tested and stored for future service

Lamp Tester with Ground Check





Fixture Storage

Maintaining Fixtures



- Fixtures are checked for light output on a yearly basis
- Fixtures are cleaned and torqued on a quarterly basis
- Outages are reported and repaired on a nightly basis


Light Meter and Test Jig



Recommendations



- Pressure test fixtures before putting them in service, leaky fixtures will not last long
- Spend the time to ensure all the screw heads are free from debris, clogged screws are guaranteed to strip
- Ensure that all screws are torqued to spec, they will be much easier to remove later on

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- Test fixtures on the bench first, there is nothing worse than getting out in the field and finding out that your fixture does not work
 - If you get a lot of snow install snowplow rings, it's a higher initial cost but will save you time and money in the end
 - Keep your fixture lenses clean, dirty or scratched lenses drastically cuts down your light output