



MINNESOTA HOIST INSPECTION, INC

P.O. BOX 3340 • DULUTH, MINNESOTA 55803 • PHONE: (218) 525-6977

Dear, Nancy

On July 9th and 16th, 2021, we inspected In-Ground Automotive Lifts at the Duluth Transit Authority facility in Duluth, MN.

Our inspection included the following:

1. Performance of an Automotive Lift Institute (ALI) ANSI/ALI ALOIM:2020 certified inspection on requested units.

INSPECTION RESULTS:

*The Automotive Lifts were found to be in unsatisfactory condition at the end of our non-destructive and visual inspection this year with the following write ups:

NO MAX CAP SIGNS FOR EACH LIFT.

ALL LIFTS MUST HAS ALI L400 PLACARDS.

MANUALS MUST BE PRESENT AND ACCESSIBLE FOR EACH LIFT.

NO POWER ON/OFF FOR HOISTS NO LABEL OF LIFT POWER DISCONNECT.

ALL LIFTS- NO DIRECTIONAL INDICATIONS ON FLOOR CONTROLS.

Hoist A:

1. Floor pit has 3" of oil in pit- must be cleaned out.
2. Oil tank low- below measurable dipstick in reservoir.
3. Floor control lock latch missing.
4. Front and Rear seals leaking.

Hoist E:

1. Have to use forklift to move forward post back and forth- tracking seems to be warped inwards not allowing post to have full function.
2. Front and Rear seals leaking.
3. Locks do not fall at top height.
4. Controls for both posts will stick at times while operating lift.
5. Gear will slip on drive shaft for moving post forward and aft motions.
6. Pump leaks oil at tank where pump to gear drive meets.
7. Tank for hydraulic oil leaks.
8. Oil tank half low due to whole tank leaking.

Hoist F:

1. Have to use forklift to move forward post back and forth- tracking seems to be warped inwards not allowing post to have full function.
2. Front and Rear seals leaking.
3. Locks do not fall at top height.
4. Pump leaks oil at tank where pump to gear drive meets.
5. Tank for hydraulic oil leaks.
6. Oil tank half low due to whole tank leaking.

Hoist G:

1. Hoist settles with load on lifting cylinders.
2. Tracking rails are tilted inwards- making fore and aft travel not possible.
3. Locks do not fall at top height.
4. Front cylinder is different size than rear cylinder- Max Capacity unknown.
5. Drive chain for front cylinder is rubbing on mounts.
6. Front cylinder leaks.
7. Rear cylinder rocks at top position with load on lift causing rocking motion when bus is present on lift.

Hoist H:

1. Hoist settles with load on lift.
2. Front and rear seals leak.
3. Pit has 9" of oil in pit- must be cleaned out.
4. Rear post has excessive amount of oil in floor- must be cleaned out.
5. Front cylinder is different size than rear cylinder- Max Capacity unknown.

Hoist M:

1. Front and rear seals leak.
2. Tracking rails are tilted inwards- making fore and aft travel not possible at times.
3. Pit has 3" of oil in pit- must be cleaned out.
4. Foot levers broken- locking tabs broke.
5. Back lifting cylinder will settle- was slightly settling while conducting inspection.
6. Oil level low- would not register on dipstick.

REMARKS:

Minnesota Hoist Inspection, Inc. was hired by the Duluth Transit Authority to perform an assessment of all operating Automotive Lifts in current use. Our inspection process is in accordance with ANS/ALI ALCTV-2020 pertaining to periodic inspections of Automotive Lifts. Please review ALI ALCTV:2020

(FOREWORD) pg. iii for back ground on Automotive Lifts – Safety Requirements for Construction, Testing and Validation.

We have found the current Automotive Lifts in use to be of the second generation from a safety stand point. Each generation that has been subsequently manufactured has added another level of safety. The most current generation of safety lift would be the 8 Steril Koni lifts present in the shop.

We also found missing data plates for the majority of the in ground lifts, we cannot tell or verify what the rated capacity of the lift is. The only way to tell what the rated capacity for the lift is to find the Model Number and Serial Number of the lift, call the manufacture and find what the lift was load tested and rated for.

In addition to our Automotive Lift Inspection, we also came across some environmental issues we feel need to be brought to your attention (oil in pits), and that is why we have included these in our reports.

RECOMMENDATIONS:

We recommend taking the Second generation Automotive Lifts with just a “full up” manual safety device to prevent the lift from accidentally moving to the down position out of service. In order to lower the lift, a person has to go under the lift, manually rotate the safety device walk back out from under the lift and lower the lift with most of the current lifts you have in service. Again, we recommend second generation lifts to be taken out of service, based primarily on the age and current conditions of these lifting units.

CONCLUSION:

*It is not our intention or purpose to insure the safety of each lifting apparatus that we inspected/tested, but rather, to note defects and/or conditions that may adversely affect the lifting equipment so they can be corrected. While the tests and inspections are designed to comply with ANS/ALI ALCTV - 2020 pertaining to periodic inspections of Automotive Lifts, Minnesota Hoist Inspection, Inc. assumes no liability or responsibility for damages arising in connection with the inspection. Due to the number of personnel utilizing the lifting equipment, abuse or excessive wear of mechanisms, lack of preventive maintenance, environmental conditions or overloading, we also cannot warranty the hoisting apparatus. Our primary goal is to assist Duluth Transit Authority, in detecting potential problem areas.

*If you have any questions regarding our inspection or other hoist related questions, please give us a call.