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Focus On:
Heavy-Duty Lifts

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MAXIMA is respected and known worldwide for manufacturing high quality and economical Heavy Duty Mobile Column Lifts ranging from 16,500 lbs–18,500 lbs lifting capacity per column.

MAXIMA'S lifts are specifically designed and engineered for the transit, motor coach, and trucking industries.

MAXIMA was formed after the MIT Group decided to expand into the automotive after-market industry to create a company that specializes in heavy duty lifting applications. **MAXIMA's** international success has led to different divisions of **MAXIMA**, and currently **MAXIMA'S** lifts are sold in over 70 different countries.

MAXIMA'S North American facilities are located in Azusa, California.

MAXIMA's directive is to provide high quality, user friendly lifting solutions that offer the industry's best value.

MAXIMA USA is a proud to be a member of the Automotive Lift Institute.



MAXIMA California



MAXIMA China

Visit www.maximaproducts.com for more information!

The 4 Safety “Must Dos” in Preventive Maintenance

By Sam Fielden

Heavy-duty lifts are one of the most productive tools in a bus maintenance facility. Not only do they make the technician's job easier by lifting a 30,000-40,000 pound bus, but they can also increase a shop's performance, revenue and safety.

To make sure your heavy-duty lift is operating safely, at full capacity, preventive maintenance is highly important.

#1: Purchasing a lift – Not all heavy-duty lifts are equal. One of the most important components when purchasing a lift is to make sure that it is an Automotive Lift Institute (ALI) certified lift – you can find this certification on the lift.



The ANSI (American National Standards Institute) is the testing standard that all ALI-validated lifts must meet. In fact, the newly revised IBC (International Building Code) now requires that ALL vehicle lifts meet the American National Safety Standard ANSI/ALI ALCTV (current edition)

Safety Standards for the Construction, Testing and Validation of Automotive Lifts.

All ALI-certified lifts are provided with an owner's installation, operation and maintenance manual. The manual details operation safety standards, inspection and maintenance schedule for that specific lift. Information about operator training, as well as guidelines for hiring lift repairmen, including the qualifications that repairman should meet is also included with each lift.

With the variety of lifts available – from parallelograms to four-posts, in-grounds, mobile columns and more – installation, maintenance and operation can vary from lift to lift, so **it is imperative to read the operators' manual carefully.**

The “Lift Safety Tips,” is another important visual aid that is included with all ALI-certified lifts. It details the “do's” and “don'ts” of safe-lift operation.

Keep in mind that the *owner* of the lift is responsible for ensuring that the lift meets current safety standards and that it is maintained properly.

#2: Daily inspections – Daily inspections are critical.

Daily inspections should include (but are not limited to):

- * Checking for oil leaks.
- * Checking hoses, wires and cables to ensure they are not frayed, broken or leaking.



With the variety of lifts available – from parallelograms to four-posts, in-grounds, mobile columns and more – it is imperative to read the operators' manual carefully.

- * Checking the lift and the surrounding area to make sure it is clean and free of debris.

#3: Lift operations – The operators' manual and ANSI safety requirements booklet each contain operator training logs. The “Lifting It Right Guide,” also published by the ALI, provides detailed information on everything from how to position vehicles on the lifts to vehicle weight limits; proper lifting techniques; using the correct lifting points; and more.

#4: Lift yearly inspections and repairs –

The national safety standards require annual inspections, which are extremely detailed and can take up to an hour per lift. It is also important that annual inspections are conducted by a certified lift inspector. For information regarding certified lift inspectors in your area, visit www.autolift.org or contact your lift manufacturer.

Should repairs be required, it is critical to *only* use OEM parts on ALI-certified lifts. Buying non-certified lift parts means that those parts have not been tested or validated. If an operator elects to use non-OEM parts on a lift, the lift's ALI certification is null and void.

Please remember

- A vehicle lift is a **safety device** that should be inspected daily.
- Preventive maintenance begins when you first purchase your lift- by making sure it is ALI Certified.
- If you see a problem with your lift, report it immediately to a supervisor.

MAXIMA manufactures ALI validated lifts with many different lifting capabilities and configurations and are proud to be an Automotive Lift Institute member. **BRM**

Sam Fielden is vice president of MIT Automobile Inc. Visit them online at www.maximaproducts.com or call 626-774-5700 to reach Sam Fielden directly.

Best practices for safe lifting

By Robert Lu

The number one must-do for safe lifting is to make sure that the lift you are operating is Automotive Lift Institute (ALI) certified. This means that the heavy-duty vehicle lift is tested annually by a qualified lift inspector and meets their standards and regulations.

ALI's testing process includes a rigorous third-party testing, which verifies that the lift manufacturer is complying with the current ANSI requirements for lifts and that the lift also meets the terms of the International Building Code. To know if your lift is ALI Certified, simply look at it. Every ALI-validated lift will have the gold verification tag next to the lift's controls.

Now that you have made sure that the lift is ALI certified, you must make sure that the technician operating the lift has had the proper lift training and has taken the time to learn the lift prior to use.

First, read the manual. Pay close attention to how the safety lock system works. Know the rising/lowering times. Know the lifting capacity of your lift. Never load over that capacity. This is extremely important. Every column has a maximum lifting capacity per column as well as a total lifting capacity per configuration. Know the weight of the vehicle that you are loading and be aware if the front or back load is heavier.

In addition to training and reading the lift's manual, the operator should read ALI's automotive lift safety tips and abide by OSHA's rules. There are many ALI safety warning stickers available that the fleet manager or shop owner can utilize.

Now that you have a certified lift and your technician and fleet manager are up to date with the proper protocols, the next thing to do is to begin the operation of the lift.

The first thing that you want to do each and every time that you operate the lift is to inspect it and make sure that it is in regular working order. Next, make sure that the area is free from debris or anything else that may hinder the lift's movement. Remove anything that may compromise your work space. Before positioning the vehicle in the lift, make sure that the lift is fully lowered to the floor.

Follow the lift's manual on how to use the lift.

While the lift is lifting, do not leave the area. Watch and make sure it lifts properly.



Once the lift is at the appropriate level, lock it. Make sure that it is properly locked and begin to work on the vehicle.

Once the lift is at the appropriate level, lock it. Make sure that it is properly locked and begin to work on the vehicle.

Once you are finished repairing, follow the same safety precaution before lowering the lift. Make sure that the area is free from any tools, debris or anything that may compromise the lift's descent.

Make sure the lift is completely lowered and then turn off all columns. Once all columns are shut off and all cords are put safely away, store the columns in a safe environment until next use.

Never stand under a lift while it is ascending or descending.

Do keep up with ALI's protocols.

Do not put non-ALI certified parts in your lift.

Do use the right mobile column unit to raise loads.

MAXIMA'S ALI certified battery-operated mobile column lift's maximum lifting capacity ranges from 66,000 pounds to 111,000 lbs. and runs on a 24 volt DC electric hydraulic power unit. **BRM**

Robert Lu is the service manager for MAXIMA. Find MAXIMA online at www.maximaproducts.com

LIFT PURCHASING ADVICE

BUSRide Maintenance recently spoke with Sam Fielden, vice president of MIT Automobile Inc., manufacturer of the MAXIMA brand – lifts specifically designed and engineered for the transit, motorcoach and trucking industries. In this Q&A, we discuss best practices and advice for purchasing new heavy-duty vehicle lifts.



ALI Certification is evidence of compliance with the relevant electrical and mechanical standards reputable lift manufacturers and safety officials rely on.

What are the three most important factors to consider when purchasing a new lift?

For the North American market, Automotive Lift Institute (ALI) Certification should be the number one most important factor. ALI Certification is evidence of compliance with the relevant electrical and mechanical standards reputable lift manufacturers and safety officials rely on. The second most important factor is to make sure all accessories provided are included as a part of the ALI Certification. This can be easily verified by visiting the online Directory of Certified Automotive Lifts at <http://www.autolift.org/ali-directory-of-certified-lifts/certified-lift-search/>. The third point that is most important is to do your homework, don't just take the salesman's word for it! Vehicle lifts are a significant investment for most shops. Be sure your lift provider is able to provide timely responses, technical support, and since all lifts are mechanical devices, even the best lift will wear or break if not properly maintained. Be sure parts and service support is readily available. MAXIMA's lifts are ALI Certified.

What factors should operators observe when deciding if a new lift is right for their fleet?

The types of work performed, vehicle types including length, configuration, and capacity are all important aspects that should be discussed fully with the lift manufacturer or their representative.

How does product certification influence a lift purchase?

Product certification is huge throughout the world. In North America purchasers should not be fooled by those attempting to sell vehicle lifts that are CE approved – In the US and most Canadian provinces CE certification simply is not accepted by code enforcement, building code officials, or health and safety. Similarly, claims of “pending” certification should be avoided. For those placing lifts into a commercial application or for any lift installed where health and safety or building code can be enforced here in North America, lift certification (specifically

ALI Certified to the current edition of ANSI/ALI ALCTV) should be called out in all bid specifications and on all paperwork where an order is being placed or fulfilled. Since this is a Buyer Beware economy, sometimes this is the only protection that a lift purchaser has to get support from credit card companies or finance organizations if the product that arrives or the accessories do not carry an ALI Gold Certification Label.

How does purchasing replacement parts affect lift certification?

Each of the three American National Standards that are produced by ALI are very clear in stating, “Replace worn, damaged or broken parts with parts approved by the original equipment manufacturer or with parts meeting original manufacturer specifications.” Not unlike any other industry where there are safety replacement parts concerns. MAXIMA has never authorized any other group to manufacture our parts.

What should operators consider before purchasing a lift manufactured overseas?

Buyer Beware is real! Not because the lift may come from overseas, but simply because in every market segment that exists from Christmas lights to medical devices and even children's toys, we see less than ethical people trying take your money or we see some real honest people that don't know enough about engineering or product safety to know that small changes made to a credible design could be the cause of a fatal flaw. ALI's Lift Certification Program has engineers from North American based Nationally Recognized Testing Laboratories that travel the globe to evaluate lifts for our market. They go to factories in Texas, California, Canada, Italy, Germany, and many other countries including China. So long as you avoid buying from distributors or others not providing ALI certified lifts, most reputable manufacturers will generally agree that it simply does not matter where a vehicle lift is produced, as long as the manufacturer has the proper engineering and production support that is coupled with an appropriate quality control process and a clear understanding of the requirements defined in ANSI/ALI ALCTV.

Costs can be numerous when purchasing a lift – installation, user training and annual inspections are all factors. How can operators balance cost without sacrificing quality, efficiency and safety?

Operators do need to be responsible, but I want to be clear that at MAXIMA we won't cut corners when it comes to lift safety. Would you not agree that a fire department which does not have a suitable truck, appropriate training, and the right equipment should not be involved in structural firefighting? Proper lift installation, user training, and annual inspection are all important elements of operator safety that should never be overlooked. **BRM**

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The future of heavy-duty lifts

BUSride Maintenance recently spoke with Sam Fielden, vice president of MIT Automobile Inc., manufacturer of the MAXIMA brand – lifts specifically designed and engineered for the transit, motorcoach and trucking industries. In this Q&A, we discuss the

What engineering on the classic heavy-duty vehicle lift design can operators expect in the future?

There are a lot of changes in heavy-duty lift design, specifically with in-ground lifts and parallelogram lifts. In-ground lifts, in particular, are becoming more environmentally-friendly, as they are electric hydraulic and use very little oil.

The industry will also see more information systems built into vehicle lifts that will have, for example, repair data. You're going to see a lot of lifts in the future connected to the internet. A lift manufacturer could have data available online that a technician could access immediately, just by looking at the side of his lift.

How much of a role will safety considerations play in the development of the "future lift"? Are lifts as safe as they can be?

As you know, most major lift manufacturers are a member of the Automotive Lift Institute (ALI). In fact, really, just last month I voted on a new safety standard that will be coming soon. There are also new considerations, including seismic loads, that have to be considered – but nothing really major.

It all comes down to inspecting lifts annually and making sure lift operators know what they're doing. Lift safety education is a role that all lift manufacturers have embraced heavily – in 2017, we expect to see a new lift safety video released by ALI. Operators will be able to go online, watch the video and take a knowledge and competency test. This will be a good thing for lift operators, even if they've been using lifts for a long time.



As recent innovations on heavy-duty lifts have been realized, how fluid has ALI certification been to accommodate them? How fluid is ALI likely to be in the future?

The safety standards have to do with mechanical and electrical issues – the construction of the lift. The latest standards are a bit more complex than the current standard, in that they enhance reporting and reduce margins of error during inspections, but they speak directly toward making lifting safer for all operators.

ALI always keeps its safety standards current and comprehensive, leading the industry in this regard. **CRM**

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