# VEHICLE LIFT GUIDE

# **GUIDE TO NEW LIFT TECHNOLOGY NEW FEATURES, SAFETY TIPS, AND**

**MAINTENANCE BEST PRACTICES** 

Latest Lifts Elevate Profits Are you turning away business because of your lift? Page 8

#### **Evolving for EVs**

Lift manufacturers creating new equipment to meet industry needs. Page 16

Supplement brought to you by



#### **Fleet**Maintenance **VEHICLESERVICE**PROS















# Dependable. Safe. Long Lasting.



Experience The Gray Difference At Gray Manufacturing, your ability to do business is our top concern. Our vertically integrated manufacturing process means that every component of our quality truck lifts is manufactured and built by Gray. When you need a repair or replacement part, you make one phone call. We specialize in service after the sale and are invested in your success as a service and repair facility.

#### Give us a call at 1-800-821-7320 today to learn more!

- Clutch Jacks
- Engine Stands
- Floor Service Jacks

1.800.821.7320 • GRAYUSA.COM Circle 1 on card or click "PTEN e-inquiry" on VehicleServicePros.com

- Fluid Handlers
- Fork Lift Jacks
- Miscellaneous Equipment
- Mobile Column Lifts
- Oil Filter Crushers
- Shop Cranes
- Shop Presses
- Surface Mounted Lifts
- And more!







# **Uplifting your shop**

As the landscape of vehicles on the road evolves, so, too, do your shop's equipment needs.

By Brendan Baker, Editor, PTEN

n this special supplement to *Professional Tool and Equipment News* (*PTEN*) and *Fleet Maintenance*, we dive into the deep end to look at what lifting equipment shops need today and what may be down the road a little further.

But before you do any heavy lifting, the issue of safety should always be front and center. We reached out to the foremost lift safety experts for advice on the subject and talked to some lift manufacturers for their feedback on safety. All of the manufacturers we spoke with are members of the Automotive Lift Institute (ALI), which, for more than 75 years, has ensured the safety of vehicle lifts for every technician's benefit.

As the landscape of vehicles on the road evolves, so too do your shop's equipment needs. It's difficult, at best, to work on vehicles without the right equipment, and a lift is one of the essential pieces to your shop's success. With EVs on the rise in the years ahead, lifting these vehicles will require redesigned equipment to raise them up to do standard brake and suspension jobs and remove the battery packs.

Goldman Sachs recently forecasted that EVs will make up 61 percent of worldwide car sales at about 73 million units in 2040, up from 2 percent, or around 20 million vehicles, in 2020. In many developed countries, Goldman analysts expect that percentage to be as high as 80 percent or more. So clearly, shops need to get ready to service EVs.

Lifting EVs can be tricky because their high–voltage batteries are usually underneath the vehicle, taking up most of the real estate. As a result, the OEM–recom– mended lifting points are often on the far edges of the frame and can be challenging to reach. New lifts offer more extension and retraction to reach these points.

EVs are also heavier than their internal combustion engine counterparts, so lift manufacturers are taking this into account and beefing up areas where the most strength is needed and adding more versatility to their products in the process.

Our experts say the lifespan of a lift can vary depending on factors such as usage, maintenance, and quality of the lift. But in general, vehicle lifts are typically replaced after 10–15 years of use.

Shops that keep up with the trends and have the right mix of equipment to handle the needs of their customers are typically more successful. If your shop has been contemplating a new lift, read on so you can purchase one that fits your needs.  $\bullet$ 

#### 3 WELCOME Uplifting your shop

An introduction to the Vehicle Lift Guide, brought to you by *Fleet Maintenance* and *PTEN* magazines.

#### 6 SAFETY Safety gets boo

# Safety gets boost from ALI's digital Lifting Points Guide

For the first time, ALI's guidance on vehicle lifting points is available digitally, which should lead to a safer shop environment.

#### 8 COVER STORY Latest lifts to elevate shop profits

Are you turning away business because you don't have a lift compatible with the vehicles coming to your shop for service?

#### **16 EV LIFTING** Evolving for EVs

With electric vehicles rising to prominence, lift manufacturers have been modifying and creating new shop equipment to meet the industry's needs.

#### 18 INSPECTIONS A closer look at lift inspections

Lift inspections are an important aspect of technician efficiency and shop safety, so shops need to be sure that they're ready to pass with flying colors.

#### **20 PRODUCTS**

The lastest in lift equipment.

On the cover: BendPak





f FACEBOOK facebook.com/ptenmagazine facebook.com/FleetMaintenanceMag

TWITTER



linkedin.com/company/professional-equipment-tool-news linkedin.com/company/fm-mag

Instagram @ptenmagazine

# NOW ONLINE AT VEHICLESERVICEPROS

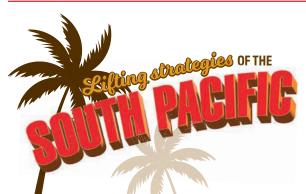


#### VIDEO

#### MOHAWK LIFTS ECDESIGN SOFTWARE DEMO

Ecdesign software is used by lift companies, lubrication companies, exhaust evacuation companies, toolbox manufacturers, and more, to design a shop facility. **To watch this video, visit: FleetMaintenance.com/21222529** 

#### ARTICLE



LIFTING STRATEGIES OF THE SOUTH PACIFIC Even in paradise, trucks need maintenance. And with space in short supply, that's often facilitated by mobile lifts. To read more, visit: FleetMaintenance.com/21281598

## ARTICLE



BENDPAK FOUNDER REFLECTS ON CAREER LIFTING UP THE VEHICLE REPAIR INDUSTRY Don Henthorn founded BendPak as an aerospace machining shop in 1965 and built it into a world-class shop equipment manufacturer. Here, he reflects on his career. To read more, visit: FleetMaintenance.com/21281244

#### **TECH TIP**



#### KEEP YOUR FLOOR JACKS FROM GETTING JACKED UP

Like all equipment, floor jacks should be inspected regularly for damage and kept clean. Here are five tips to keep your floor jacks from getting jacked up. **To read more, visit: FleetMaintenance.com/21206811** 

## **TECH TIP**



#### KNOWING THE LIFT YOU WORK UNDER

Not every vehicle lift is the same, so it's important to read the manual and familiarize yourself with everything you need to know about the lift. **To read more, visit: VehicleServicePros.com/21266897** 

## VIDEO



# ARTICLE



#### HOW TO PROPERLY BLEED A HYDRAULIC CYLINDER ON A TWO-POST LIFT

In this video, Challenger Lifts demonstrates how to properly bleed a hydraulic cylinder on a two-post lift. **To read more, visit: VehicleServicePros.com/21264912** 

#### 6 STEPS TO SAFETY DURING A VEHICLE LIFT

Stertil-Koni recommends shops follow this 6-step approach to ensure technician safety. **To read more, visit: VehicleServicePros.com/21255602** 



# LIFTING SOLUTIONS FOR ANY FLEET

Challenger's Heavy-Duty 2-Posts boast optimum flexibility with a lift designed from the anchors up to meet ALI® safety standards. **These lifts have a capacity from 12,000 lbs. to 20,000 lbs.** and can lift everything from compact cars to tall, heavy trucks.

Our Professional-grade CL12 and CL16 come equipped with 3-Stage front and rear arms, offering the most versatility. The CL20 lifts large vehicles without taking up a considerable footprint in your garage.



# **WIDE INGROUNDS**



Our NEW 10K & 12K Inground lifts provide an **88" drive-through clearance** for servicing standard, electric and exotic vehicles. Comes standard equipped with 3-Stage Arms front & rear.

# **MOBILE COLUMNS**

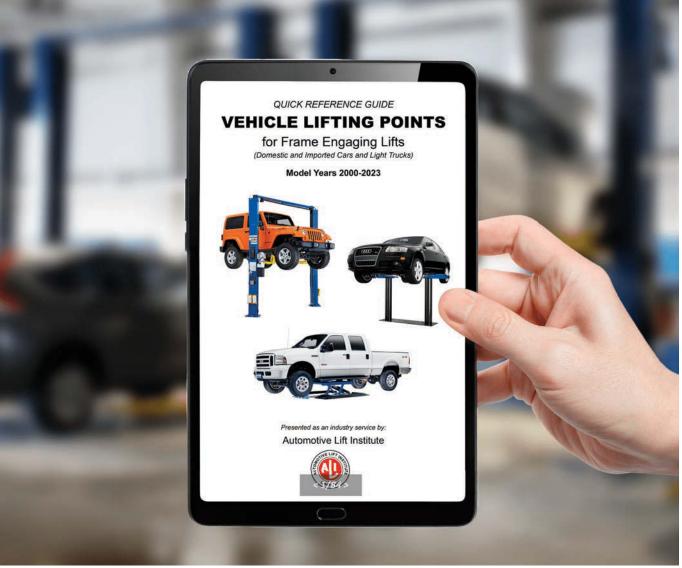


Our Mobile Columns provide the flexibility and convenience to lift any rubber-tired vehicle, **up to 152,000 lbs**, without the need for pits, cables or compressed air.

# S TWE LIFT HASTITUT

#### challengerlifts.com





# Safety gets boost from ALI's digital Lifting Points Guide

For the first time, ALI's guidance on vehicle lifting points is available digitally, which should lead to a safer shop environment. By John Hitch, Editor-in-chief, Fleet Maintenance A smore and more technology, such as tablets and laptops, enter the typical automotive shop, now is the perfect time for more training and safety materials to also be accessible digitally. That is the big reason why the Automotive Lift Institute (ALI) has made its most recent Lifting Points Guide for MY2000-2023, Vehicle Lifting Points for Frame Engaging Lifts, available for purchase as a PDF (\$15 for online access on three devices) at *autolift.org/shop/*.

The guide covers cars, SUVs, vans, light-duty trucks, and electric vehicles, and any facility with frame-engaging lifts to service these vehicles needs one nearby. The industry safety standard for lift operation, inspection, and maintenance, ANSI/ALI ALOIM: 2020, requires shops to make lifting points information available to technicians. The lifting points are provided by the OEMs. It includes more than 250 undercarriage illustrations as well as suggestions for safely lifting vehicles.

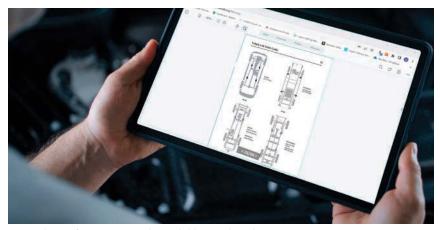
The layout and content mirror the paperbound version, with a few handy benefits. For starters, the guide is always on hand, and the technician merely has to click on the link via their smart device or computer. There's also no risk of paper pages being damaged by grease blots, coffee spills, or other shop messes.

Second, the document works like any PDF, and has a search bar to quickly find the right make and model to ensure the correct schematic and lifting points are being used. And the login can be shared among three individual devices, so the guide should be accessible for anyone operating the lift.

Whether paper or digital, having the latest guide is crucial, as the lifting points can change during a vehicle redesign as well as when electric models come out.

"As far as fleet managers' safety responsibilities go, updating your lifting point guide every single year is absolutely one of the best practices," notes Steve Perlstein, president of Mohawk Lifts. He stresses that incidents are likely to occur when a two-post lift's arms are positioned in the wrong place. Another issue is technicians factoring in total vehicle weight, and not axle weight.

"I don't know how many times a guy has called us up and said, 'My 13,000– lb ambulance has bent the arms on this 15,000–lb lift," Perlstein notes. "But the rear arms' capacity and the rear end of the ambulance are what matter. Don't overload the arms!" To calculate the correct capacity per swing arm, he advises to divide the weight per axle by two. Perlstein also adds that the center of



ALI made its Lifting Points Guide available as a digital PDF.

gravity will change if the 800–1,000–lb engine or transmission is removed.

#### **DROPPING DOWN NEAR MISSES**

ALI doesn't track specific lift-related injuries and fatalities, but the organization maintains that incorrectly positioning a vehicle on a lift is a leading cause of lift-related accidents. Anecdotally, ALI President Bob O'Gorman says if he's giving a presentation to a crowd of 150 automotive professionals and asks how many have experienced a lift-related loss-of-life scenario, "one or two hands might go up."

But when he asks how many have seen a vehicle shift or cause damage or injury, what one may classify as nearmisses, "that turns to a very large percentage of people in the room," he notes. "You can go to technical conferences, and you will talk to people who've been there when the vehicles dropped, or dropped the vehicle themselves."

The ALI's goal is to someday soon get the number of hands raised after the near-miss question to only a few, which would, in turn, make lift-related fatalities and severe injuries a relic of the past.

O'Gorman cites lack of training and lack of operational understanding of specific lifts as the root cause for "the larg– est percentage of those incidents." Planned maintenance on these lifts and annual inspections also ensure the equipment "is in the same condition that the manufacturer intended it to be used in."

"Safety does not happen by accident," O'Gorman says. "It's a conscious decision to pursue safety for your employees, for your shops, and reputation. And really for your customers, as well."

And as far as meeting that goal, having the recommended lift points on hand goes a long way.

"Any time you're raising a vehicle for service, whether at home or on the job-there's more riding on that lift than a car or truck. Your safety is riding on it," O'Gorman adds. "Taking a minute to find the recommended lifting points so you can properly pick up the vehicle could save your life."

The ALI also has the Lifting It Right online course available through its website, which takes users through the proper way to lift and lower a vehicle without injury or property damage. This includes guidance on spotting and lifting vehicles, prepping the bay, maintaining load stability, and maintenance. The course costs \$16 per participant (\$24 for the Spanish version) and takes on average less than an hour to complete. A certificate of completion is provided at the end.

O'Gorman notes that in 2022, ALI also released an updated safety manual to reinforce what's covered in the course. This is also available digitally. •



# Latest lifts to ELEVATE SHOP PROFITS

Are you turning away business because you don't have a lift compatible with the vehicles coming to your shop for service? by Brendan Baker,

160

Editor, PTEN

Challenger Lifts

N P



BendPak's two-post lift arms are redesigned for a lower profile and to reach in further.

ow often does your shop have to turn away business because you don't have the right tools or equipment? This likely has happened with various makes' advanced driver assistance systems, or other new or niche components, because it's often too costly to stock such tools and equipment that don't have a promising ROI. That said, if you don't have adequate lifts to service customer vehicles in your area, you may be missing out on jobs that will not only provide a nice return on the lift, but create plenty of return customers as well.

Rotary's wide twopost lift and table. For instance, if your shop typically services light–duty and consumer vehicles, but you have the space and labor to accommodate medium–duty as well, maybe your next lift



should have a 14,000-lb capacity. This will allow your shop to accommodate more of the growing last mile segment, which, due to the start/stop nature of the route, requires more tire and brake maintenance. There is one big caveat: Lifts should typically last at least a few decades, and in the next 10 years electric vehicles, which are heavier than fossil-fuel-powered models, will be more prevalent in both the consumer and commercial space. This means you should not just spec for the business you have today, but what you want tomorrow as well.

To help you do that, here are some updates from several of the leading lift manufacturers.

#### WHAT'S NEW?

Jason Matthews, product manager, automotive lifts, for Rotary Lifts/VSG, says they have some new alignment lifts for shops that are tighter on bay space. "The XA12 is an alignment lift that's specifically designed for small bays. Our XA14 is a large scissor alignment lift. It can accommodate a wide range of vehicles, but not everybody has the space for a large lift like that. The XA12 is a perfect solution for an owner who has a small bay but still needs to do alignments on cars and trucks."

Matthews says that Rotary's model numbers typically correspond to the capacity. "The [XA12] is a 12,000–lb capacity scissor lift. It works really well with cars and other unibody vehicles, all the way up to smaller trucks."

The XA12 can handle trucks up to F-250 and F-350s (unloaded), according to Matthews. But due to the big feature of this lift, even though he says it has the largest four-wheel alignment wheelbase range in its class, there are some limita-

tions based on the size of the bay area. "The maximum wheelbase for two-wheel alignments is 166". So, if you have a truck that had a longer wheelbase than that, then I mean, that

would be the only concern. But the really long wheelbase trucks are the exception, not the rule. The vast majority of vehicles are going to fit on [the XA12]."

Matthews says that if your shop works on a lot of vehicles with longer



wheelbases, then it would make more sense to move up to the larger XA14, 14,000–lb scissor lift that has much longer runways. But you need to have a lot more bay space for these lifts. The small lift still takes up a 13' by 28' bay. And that includes using Rotary's aligners, which are more compact.

"What's unique about [our aligners] is that they don't have the towers with the cameras that go in front of the lift," Matthews explains. "Our cameras actually mount to the side. So you don't have to have that extra space in front of the lifts to do alignments. Our 1090 and 1065 aligners help save space and enable someone that doesn't have a lot of space or a small bay to be still able to perform alignments and earn revenue on these jobs."

Matthews acknowledges that lift companies have become more safety conscious with all of the testing and inspections that are part of the industry today. He says that Rotary is one of the founding members of ALI, so they are very much in favor of these certifications, but they only test the strength or capacity of the lift. What is not covered in the certification process is the durability of the lift.

"Longevity and low cost of ownership are really important," says Matthews. "Those are all things the company is passionate about, and we make sure that technicians and shops are able to use our lifts and earn money with them for a very long time."

Durability testing is one of the most important aspects of Rotary's lifts besides its safety certification, Matthews explains. "We cycle our lifts 20,000 times with full load. It's akin to what an automotive manufacturer does when they're designing a vehicle. There's a lot of strength testing, which is what goes into that Gold Label testing. With durability testing, that's the determinant of longevity that the lift is going to last for a long time."

With over 150 new electric vehicles that are out now or will be coming out



BendPak's AP series lift is ideal for EVs.

**GC** Twenty to 30 years ago, your grandfather's Cadillac, weighing 4,500 lbs, was the largest vehicle being lifted. Today, we lift 25' long fourdoor dually trucks that weigh 12,000 lbs. We also saw the introduction of the unibody vehicle, where there was no frame on which to lift. 55

Brian Spikes, vice president and general manager, Challenger Lifts

in the next two to three years, shops will need to start preparing for this new technology that many techs have not seen before, and it will require some new equipment to handle them properly.

"There will be a lot of new things that a technician will have to worry about," Matthews says. "Shops will have to make sure they have the right equipment. The lift, for example, must be able to reach in and contact the specific pickup points that are right next to the battery underneath the vehicle." According to Brian Spikes, vice president and general manager of Challenger Lifts, they launched several products for new automotive technologies (i.e., EVs) at the 2022 SEMA Show last November. "Our EnviroLift wide series in-ground lift offers an industry-leading distance between cylinders, providing more room for battery removal and the width required to service today's wide-bodied or exotic vehicles."

Spikes says they have two new models of battery lifting tables designed to safely remove a battery of up to 3,300 lbs from underneath a lifted electric vehicle (EV). And Challenger also introduced an adjustable 12K two-post lift, which can be installed in three widths and heights – a feature available on their 10K, 16K, and 20K models.

"All 12K through 20K offerings serve the heavy-duty market," says Spikes. "We also launched medium-duty 5K mobile columns. These will allow shops with limited space to have the flexibility of a mobile column system in a more compact form and at a lower price point."

Finally, Spikes says Challenger added a new feature to their popular four-post lifts: hot-dipped, galvanized runways. "These rust-resistant runways are perfect for shop environments that encounter melting snow and ice and the road salt that is usually associated with those conditions."

Lifting has evolved with the changing needs of vehicles, notes Spikes. "20 to 30 years ago, your grandfather's Cadillac, weighing 4,500 lbs, was the largest vehicle being lifted. Today, we lift 25' long four-door dually trucks that weigh 12,000 lbs. We also saw the introduction of the unibody vehicle, where there was no frame on which to lift.

"To accommodate those vehicles, we went from a two-stage arm to a three-stage arm, allowing more length and retraction to hit frames and pinch welds. We also offer wider lift options on all commercial two-post and in-ground lifts with three-stage arms to add more flexibility in reaching the lift points." This trend continues today with the new EV vehicles, requiring changes to lifts to accommodate the addition and placement of the batteries.

In-ground lifts were once the only equipment available for lifting. They were a great product back in the day and lasted for years, according to Spikes. However, the issue, discovered later in their life cycle, was that they were not environmentally friendly. "These lifts were fully hydraulic and filled with numerous gallons of oil. If they leaked, oil went into the ground."

As environmental awareness evolved, Spike says Challenger and the industry have grown to offer environmentally friendly in-ground options. Their 10K, 12K, and 15K in-ground lifts are now low oil, high-pressure, and encased in an environmentally-friendly cassette, so if there are any leaks, the oil cannot



Hunter four-post pit ramps use wider runways for a variety of wheelbases and widths.

reach the soil. The change to a cassette also allows the lift to be serviced without digging the lift out of the ground. In fact, Challenger is now building their new, wide in-grounds similarly.

#### **TWO-POSTS 'REIMAGINED'**

"Two-post models are the most popular car lifts in the world," says Jeff Kritzer, BendPak president and CEO. "But just because something has been around a long time doesn't mean it can't be improved."

Subsequently, BendPak's AP Series lifts are the company's most customizable, versatile two-post lifts ever. The



GCMost heavy-duty shops<br/>are not strictly heavy duty.They are typically commercial shops that likely have<br/>fleet vehicles with inde-<br/>pendent rear suspensions.So we have wide (30")<br/>runways. 99

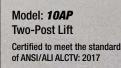
Pete Liebetreu, vice president of marketing for Hunter Engineering

new lifts can fit most bays with either a wide or narrow configuration, and their redesigned swing arms enable both symmetric and asymmetric lifting from a single lift. Each AP Series lift comes with a standard adapter package for compatibility with a wide range of vehicles in one of three 10,000–lb capacity models.

# EQUIPPED TO TAKE ON EVS?



Electric Vehicles are coming. Get ready with BendPak's all-new 10AP two-post lift and EV4000SL scissor-style lift table!





Model: **Mobi-EVS™** *EV4000SL* EV Battery Pack and Powertrain Lifting System

**1-800-253-2363** ©2023 BendPak Inc. All rights reserved.

BENDPAK.COM



Circle 3 on card or click "PTEN e-inquiry" on VehicleServicePros.com



EARN MORE

360-DEGREES SWING ARM

RESTRAINTS



**10AP SERIES** 



As the shift from gas engines to EV's grows, so does the need to safely handle the increased weight and EV-specific jacking points. Our newest 10AP two-post lift offers a generous 10,000 lb. lifting capacity combined with newly patented Bi-Metric<sup>™</sup> triple-telescoping arms that are perfectly suited for EV service and more. Super-strengthened arm restraints make sure the adjustable lift arms stay put.

#### Mobi-EVS™ EV4000SL

Our revolutionary Mobi-EVS<sup>™</sup> full-rise battery powered lift table is perfectly suited for EV battery pack replacement and powertrain service. With its compact design, this space-saving scissor lift can be easily transported anywhere in the workplace, making it ideal for multi-bay facilities or workplaces with confined areas. The Mobi-EVS lift table is multi-functional and features multiple recessed anchoring locations for accommodating a variety of modular fixtures, adapters and accessories for servicing transmissions, gas tanks, transaxle assemblies, and more!





#### **10AP SERIES**

- Bi-Metric<sup>™</sup> & Low-Pro<sup>™</sup> Swing Arms
- Industrial-Grade
   Hydraulic Cylinders
- Automatic Arm Restraints
- Configurable Wide Or Narrow Installation



#### EV4000SL

- Utility Trays
- 12V DC Power System
- Floor Locks
- Tri-Casters
- Slip Plate
- Remote Controller
- Twin Hydraulic Cylinders



## CALL NOW AND SCHEDULE AN ON-SITE DEMO!

Qualifying businesses can schedule an on-site demo to see the features that set us apart from the competition. To get started, **call 1-800-253-2363 or visit us at** www.bendpak.com/mobi-evs-demo



The standard 10AP has 73" of lifting height and an overhead beam height of 145" for shops with lower ceiling clearances. The 10AP-168 has the same 73" of lifting height plus a crossbar that's positioned two feet higher to accommodate high-roof cargo vans. The 10APX is a high-rise model – great for taller technicians – offering 79.5" of lifting height with a 157" top beam. The 10APX-181 maintains 79.5" of lifting height and increases the top beam height to 181".

"We put more than 50 years of experience into reimagining the two-post lift to make it more efficient, safer, and easier to use," Kritzer adds. "We're really proud of the results and hope our customers love it, too."

#### **HEAVY-DUTY ALIGNMENT RACKS**

Pete Liebetreu, vice president of marketing for Hunter Engineering, says they introduced two new lift options recently. "We have a large 35,000 lb four-post lift that is already optimized for alignment. Up until the L494HD, there were no purpose-built racks for wheel alignment. There were some build-to-order variations, but nobody had an off-theshelf solution until now. We also have

Servicing EVs will require a lift table for battery management. Photo: Challenger BT3300



Some racks offer wider alignment runways and galvanized surfaces for rust resistance.

pit variations of the same runway set for those who'd like to go that route."

Liebetreu also notes their new slip plates for lighter-duty vehicles are completely unique to Hunter. "Most heavyduty shops are not strictly heavy duty. They are typically commercial shops that likely have fleet vehicles with independent rear suspensions. So we have wide (30") runways. This seems like something simple, but it really adds to drive-on ease and safety that is not well represented in the heavy-duty world today. The galvanized runway surfaces also add to

> the longevity of this equipment in the harshest environments."

#### MOBILE COLUMN LIFTS

Mobile lifts are certainly an option for shops that may not have the space or ability to install in-

ground lifts. But lift experts say shops must be sure the concrete is level and able to hold the weight of the vehicle they are lifting. One tool that can help is Mohawk's slope indicator tool. This tool works with AC and DC mobile column lifts. Since these lifts can be moved and placed anywhere in or outside of the shop, Mohawk has designed this tool with technician safety in mind. Simply place the indicator on the mobile column, and it will indicate the floor slope in degrees. Mohawk's mobile columns can be used safely for up to three degrees of floor slope. The slope indicator ensures the safety of the lift, vehicle, and, most importantly, the technicians from a potentially unsafe lifting situation.

#### **IN-GROUND LIFTS**

Oftentimes, lifting points guidance from the OEMs come from light-duty manufacturers, who are a lot more proactive in getting those out, according to Carl Boyer, Midwest regional sales manager, Stertil-Koni.

Boyer says that many of the commercial vehicles that shops work on today are using a modified chassis that the manufacturer doesn't typically know how it will be up-fitted. "Some people may take the same chassis, and one will be made into a crane body and another into a service truck. At that point, I think one of the more important things on the commercial truck side is the weight differentials front to back.

"Some techs may look at a lift and say, 'my truck doesn't weigh 16,000 lbs,' but the problem is the way it is loaded. They could have 10,000 lbs in the back and 6,000 lbs up front. That's not really a safe lifting application. So, it's a little bit different on our side, perhaps, than it would be on the lightduty side."

Boyer explains that heavy-duty repair shops have a lot of options when it comes to purchasing a new lift. It really depends on factors such as budget, space, type of facility, and even the groundwater level for those looking at in-ground lifts.

"I think in a perfect world, everybody would probably have an axle–engaging in–ground lift," says Boyer. "But some facilities are rented or leased, and they can't put things in the ground or permanently mount them to the floor. Other issues are going to be budgetary. There's really no distinct disadvantages to an in–ground lift, with the exception of cost and modifying the floor, where you have to cut into the floor if you don't already have an existing lift that you're replacing."

Boyer notes there are a lot of compromises with whether it is better for a certain shop to go with an above–ground lift or perhaps a mobile column lift. "They all have trade–offs. With mobile column lifts, you have two steps – an additional step to remove wheels because you're picking them up from the wheels. You have to pick the vehicle up, set a jack stand, and use a high lift wheel dolly to remove a tire and wheel before you can do brake work, for example."

But a mobile column lift also costs less, according to Boyer. "It's going to cost half or a third of what it costs to put in an in-ground lift. That's where customers have to start making a trade-off. How much am I willing to give up from a convenience standpoint or a throughput standpoint vs. the money you have to spend on a lift?"

Tim Kerr, engineering sales support manager for Stertil– Koni, says shops that opt for a mobile column lift over an in– ground lift have more things to worry about. For example, he says you need to think about if the floor is level and whether the rebar structure in the concrete is sufficient enough to lift one of these vehicles.

Kerr explains that there are a lot more steps involved in doing brake work, tire work, and hub work on a mobile column lift. "Any time you add additional steps, you're just adding the possibility for human error. So with an in-ground lift, obviously, there's an added cost, and it's more complicated than mobile columns, but you eliminate a lot of those additional steps. And each one of those steps has the element of human error that can be involved."

One thing is for certain; the industry is changing along with the new vehicle technologies. Shops in the market for a new lift must be prepared to handle this new fleet of vehicles, whether it is a gas, diesel, EV, or commercial truck.

# MOHAWK LIFTS BUY ONCE. BUY RIGHT. BUY A MOHAWK!



No matter what vehicle you're lifting, Mohawk has the vehicle lift or automotive equipment you need to get the job done safely and easily. Mohawk offers environmentally safe above-ground service lifts, with capacities ranging from 10,000 to 240,000 pounds.

Mohawk builds the best products with the finest materials, to the highest standards. Proudly designed, welded and manufactured in the USA.

If there is a vehicle in the air, make sure there is a Mohawk Lift underneath it!



Circle 4 on card or click "PTEN e-inquiry" on VehicleServicePros.com



# **Evolving for EVs**

With electric vehicles rising to prominence, lift manufacturers have been modifying and creating new shop equipment to meet the industry's needs.

By Emily Markham, Editor, PTEN

he auto landscape is changing, with more and more EVs entering the scene. That means shops need to investigate if their equipment still meets the needs of all their customers' vehicles. This is particularly important regarding lifts and lift tables, as EVs such as the Ford Mustang Mach-E SUV weighs 33% more than the gasoline version, while the Ford F-150 Lightning can weigh one ton more than a traditional F-150. But capacity is just the start, and lift manufacturers have been busy retooling designs to not only meet the needs of new EVs, but the shops that service them as well.

#### **TO UPGRADE OR NOT TO UPGRADE?**

Whether your shop should or shouldn't upgrade depends on this one very important question: What are you using the equipment for? If you've set up your shop in a less populated rural area, chances are you're not seeing many, if any, electric vehicles. However, if your shop is in Southern California, servicing EVs is a certainty. Even so, this doesn't mean your shop needs to upgrade, as certain jobs can be outsourced. But, if you're looking to expand your shop's range of jobs, then you'll need to ask yourself the next most important question—what's the wheelbase of the vehicles you service?

Carl Boyer, Midwest regional sales manager for Stertil–Koni, says prospective lift customers should consider the range

The EV4000SL has a 4,000-lb capacity and the capability to elevate to more than 6' in less than 20 seconds.

of their vehicle wheelbases and weight. "Typically, they want to maximize their lift to get the widest variety of vehicles on the lift," he advises.

To find the right lift to suit their customer's needs, Boyer notes, they want to know the customer's shortest and longest wheelbase vehicles. From there, they also take a look at what work the shop will be doing on the lift – oil changes, quick maintenance, etc.—as that also factors into the decision of which style of lift the shop will need. However, Boyer cautions that not every lift manufacturer will have what's best for your shop's needs. Each company can only speak to the styles of lifts they manufacture, so it is in your best interest to do all of the research before settling on which lift to purchase.

#### LIFT MODIFICATIONS

As mentioned previosuly, EVs are much heavier than the average car. With the battery alone weighing around 1,000 lbs, EV lifts must have an increased lifting capacity. The battery location has also created a need for lift modifications. "The lift market is expanding to meet unique EV needs," says Brian Spikes, vice president and general manager at Challenger Lifts. "OEs have made lifting points more specific to accommodate delicate wiring and EV battery locations."

It's important the lift can hit those specific points, otherwise the equipment could cause interference with the vehicle's battery, notes Jason Matthews, product manager, automotive lifts for Rotary Lift. This interference could lead to vehicle damage or an inability to do the required repairs.

Lift manufacturers trying to stay ahead of the curve are working on modifying their lifts and lift accessories to cater to the electric vehicle market. Here are four EV lift manufacturers creating products to help shops prepare for the future of the industry.

#### **BENDPAK**

Announced at the 2023 NADA Expo, the BendPak Mobi–EVS EV battery and powertrain lifting system family includes the upgraded EV2400SL and the new EV4000SL.

"Mobi–EVS lift tables can handle high–voltage battery packs from a Tesla Model 3 to a Ford F–150 Lighting all the way up to a GMC Hummer EV1," says Jeff Kritzer, president and CEO of BendPak. "They protect technicians by eliminating manual lifting, lowering, and positioning of heavy battery packs and making it easy to ergonomically move them around the shop."

Both models feature full-length utility trays on both sides for keeping tools within reach, a stowable steering handle, zero-throw tri-casters, and an integrated slip-plate deck that enables side-toside shifting up to 1.5" along both axis for adjustability. The EV2400SL has a 2,400-lb capacity, while the EV4000SL has a 4,000-lb capacity and the capability to elevate to more than 6' in less than 20 seconds.



#### **CHALLENGER LIFTS**

Recently introduced at SEMA 2022, Spikes says, Challenger Lift's medium duty 5K Mobile Columns "will allow shops with limited space to have the flexibility of a mobile column system in a more compact form and at lower price point."

As a set of four, the wireless mobile columns are able to lift 20,000 lbs and can lift vehicles from the wheels. This gives technicians total undercarriage access on both electric and larger vehicles.

Challenger also offers two EV lift tables-the BT3000 and the BT3300. Though both lift tables can be used to install and remove EV batteries, battery packs, transmissions, etc., the BT3000 offers a higher maximum height at 79.5" and has a rechargeable battery. On the other hand, the BT3300 can be easily maneuvered with its pallet-jack-style handle and extending, adjusting, and tilting top plate.

#### **ROTARY LIFT**

One of Rotary Lift's newer lifts, the Wide Smartlift, allows better accessibility to EV batteries. Though Matthews notes that their lifts have always had clearance, he says "the difference between that and our standard Smartlift is that the plungers are farther away from each other. And that provides

the clearance needed to be able to remove electric batteries." He explains *Rotary Lift Wide Smartlift*  that previously if a shop had an inground lift, the way they were constructed typically would have interfered with the electric battery.

To complement the Wide Smartlift, Rotary Lift has the LT33A Air–Hydraulic Lift Table. The table can shift in sections with the lift platform extending an additional 8", which eliminates the need to move the entire table when multi–positioning larger loads. Additionally, the tabletop can shift side–to–side by an inch and can tilt up to 1 degree. The variety of adjustments helps technicians easily line up vehicle components during installa– tions. Rotary's lift table also features foot pedal controls.

#### STERTIL-KONI

With EVs becoming more and more prevalent in the market, many lift manufacturers, such as Stertil–Koni, are looking at the equipment they currently offer and trying to find ways to adapt it, so it not only works with electric vehicles but also the legacy vehicles on the road and the vehicles being transitioned from internal combustion to electric.

Just as important as the EV lift itself are the EV lift tables used for lowering the battery from the vehicle. Getting the vehicle off the ground is just step one – shops need additional EV lift accessories to finish the job, such as Stertil–Koni's SKTJ Hydraulic Transmission Jack.

"What we have right now is actually a transmission jack that's on swivels, and it has its own hydraulic piston that would come up to meet the batteries, and then lower [them] down safely," says Tim Kerr, engineering sales support manager for Stertil–Koni. "So that's currently what we're trying to work on and expand the capabilities [of]."

Kerr notes that they are looking to potentially add a large battery table to the jack, and with the equipment's 3,500–lb capacity, it would be able to handle lifting and lowering any EV battery. ●



# A closer look at lift inspections

Lift inspections are an important aspect of technician efficiency and shop safety, so shops need to be sure that they're ready to pass with flying colors.

By Alex Keenan, Associate Editor, Fleet Maintenance

hile they may disagree on what manufacturer or type of lift is superior, one thing all vehicle lift experts can agree on is the need for annual inspections, as an improperly maintained lift can lead to vehicle damage and, even worse, serious injury or fatality.

"It's not a matter of if a lift is going to fail, but a matter of when," warns Bob O'Gorman. "It's a mechanical device, and all mechanical devices have got to be properly maintained and inspected."

And Jason Matthews, product manager at Rotary Lifts, notes that along with safety and longevity, there's revenue at stake. At the very least, it will cost a shop "over \$1,000 a day that's lost when a lift is down," he offers. That alone is good reason to get a certified inspector into the shop every year to inspect them.

"The American National Standards Institute standard [ANSI/ALI ALOIM 'Safety Requirements for Operation, Inspection and Maintenance'] says, and has always said, that vehicle lifts are to be inspected annually. Period," emphasizes Steve Perlstein, president of Mohawk Lifts. And he agrees that "an experienced lift inspector" should complete the task.

#### **ALI'S NEW APPROACH**

ALI produces its own certified inspectors, who a shop can hire to perform an ALI-certified inspection. Last March, ALI launched a more comprehensive version called the Check360 Certified Lift Inspection. This was created using feedback from 100 experts, according to O'Gorman, and includes the ANSI/ ALI standards, mechanical and electrical examinations, and a review of training logs, operating instructions, and safety materials. A passing lift receives an exclusive Check360 Certified Lift Inspection label that features the ALI Certified Lift Inspector hologram, a serial number matching the lift inspection report, and the inspector's individual four-digit ID.

#### **PREPARATION MAKES PERFECT**

It's important to note that shops must do a little prep work to ensure the inspector can get in and out as quickly as possible. First off, the shop should perform the necessary maintenance on lifts to ensure they pass.

Part of this process includes ensuring that each lift is properly labeled with its capacity label and safety placard before an inspection. Even if labels aren't available, keeping the lift's bill of sale or owner's manual on hand can work as an apt substitute, notes Buck Gasner, a certified lift inspector for DEKRA North America

This element is particularly critical, as Gasner estimates that many lifts that fail their inspections do so not because of any technical problems, but because of improper documentation.

"People sometimes get angry when we say they fail for lack of a capacity label, but it's [really] simple," Gasner says. "How can I tell you if the lift is doing what it's supposed to do if I don't even know what the lift is supposed to do?"

Adding insult to injury with an improperly labeled lift is the process



of reinspecting the equipment once its documentation has been corrected. With some inspectors traveling to shops within a specific timeframe, scheduling a reinspection can be more costly in time and money than a shop would prefer.

Additionally, making sure that all the necessary documents, including manuals and training records, are organized and accessible is a critical time saver, though one inspectors wish was followed more often.

"We ask for all these materials, and 99 out of 100 times, it's the end of the day and the shop is still digging through filing cabinets," Gasner says. "If they take the time the day before to have that ready, that helps everything go much smoother as well."

"We get asked a lot of times, 'Can you mail me the label after I fix it?' No, no, we cannot," Gasner clarifies. "Those labels are treated like gold and serialized... So, the number one way to get recertified would be to come back and do a reinspect."

If bringing an inspector back around to the location is not an option, a shop must be able to build a watertight paper trail to prove their compliance. This means having the first lift inspection that displays any problems and then the invoice or work order for the part or label that needed replacement.

"And at that point in time, if an AHJ (authorities having jurisdiction) has a question, [the shop] can say, 'Yes, here's my inspection report that showed [the lift] had this deficiency, here's documentation that this deficiency was taken care of.' And at that point, you're covered," Gasner says.



# CALL NOW 866.898.2604



#### Atlas BP10000 10,000 Lb. Capacity 2-Post Baseplate Lift

- Single-point lock release
- Super symmetric arms



ATEATTD-412A-KIT

#### Atlas 412A 12,000 Lb. Capacity Commercial Grade Alignment 4-Post

- Built-In Slip Plates
- Alignment Turntables Included



ATEXH-PR09000

#### Atlas Garage Pro 9000 Extra Tall, Extra Long, Extra Wide, 9,000 Lb. Capacity 4-Post Hobbyist Lift

- Perfect For Storing Vehicles
- Caster Kit Included



#### Atlas WB41

#### Computerized Wheel Balancer

- Automatic start/stop when hood is lowered/raised
- Exceptional stability in reading the unbalance between planes
- Raised, Easy to Read Display
- Large Wheel Weight Tray

# Atlas TC289

- Extra Large Rim-Clamp Tire Changer
- Extra-Large turntable, more clearance
- Air operated jaws & bead breaker
- Metal mount/demount head w/ metal roller or replaceable plastic inserts
- Adjustable Bead Breaker Plate
  Built in "Beadblaster" a
  - ATEATTC289















We are the equipment experts with over 40 years in the equipment business providing exceptional customer service during and after the sale. We specialize in commercial grade shop equipment for the professionals, the DIYers, and the hobbyists.

# Call Now 866-898-2604

## www.AtlasAutoEquipment.com

Circle 5 on card or click "PTEN e-inquiry" on VehicleServicePros.com





#### HAS A LIFTING CAPACITY OF 10,000 LBS

The Atlas Automotive Equipment Platinum PVL10 Two-Post Lift is an ALI certified commercial-grade lift that accommodates many vehicles seen in commercial repair shops. The PVL10 features threestage telescoping front arms, double screwup adaptors with truck height extensions, rubber pads mounted to the carriage, and a single-point lock release. Its maximum lifting height (with adapters) is 81-1/2" and has a lifting capacity of 10,000 lbs.

Circle 6 on card or click "PTEN e-inquiry" on VehicleServicePros.com

#### IDEAL FOR SMALL SERVICE BAYS

The **XA12 Alignment Scissor Lift** from **Rotary Lift** is ideal for service bays with a minimum bay size footprint of 12' by 23'. With a 78" to 164" four-wheel alignment wheelbase range and 12,000-lb lifting capacity, the XA12 was engineered with space and flexibility in mind. It features adjustable radius gauges and comes standard with two 6,000-lb capacity air-operated rolling jacks, longer rear slip plates, and its hinged ramps automatically self-check and drop down when the lift is raised.

Circle 9 on card or click "PTEN e-inquiry" on VehicleServicePros.com





#### MULTIPLE PIN HOLES FOR QUICK AND EASY ADJUSTMENTS

The **AFF 22-Ton Pin-Style Truck Stand Set**, No. 6422, is designed for supporting trucks, trailers, and equipment in fleet garages, agricultural, industrial, and construction environments. Sold in pairs, the truck stands are made from heavy-gauge steel to provide strength and durability. They have pin holes to allow for quick and easy adjustments, large v-shaped saddle cradles for axles and other components, a large base to provide a stable working platform even on rough terrain, and a carrying handle for convenience and positioning.

Circle 7 on card or click "PTEN e-inquiry" on VehicleServicePros.com

#### FEATURES POWDER COATED STEEL CONSTRUCTION

The **ATD Tools Vehicle Door Jack Lift**, No. 6557, features a powder coated steel construction that provides strength, durability, and corrosion resistance. The Vehicle Door Jack Lift has 4" polyurethane casters (two swivel and two with brake) for easy maneuverability. The support size is 30" length by 24" width. The support pads height adjusts from 7" to 30", and the width adjusts from 8" to 20". The lift weighs 44 lbs and can hold up to 300 lbs.

Circle 10 on card or click "PTEN e-inquiry" on VehicleServicePros.com



#### EASILY REMOVES AND INSTALLS CALIPERS AND ROTORS

The **Gray Manufacturing Disc Brake Dolly**, No. DBD-200, allows technicians to easily remove and install both calipers and rotors. It holds and lifts components for removal and installation and allows the user to rotate the component for servicing and realignment. All adapters can be stored on the dolly and may be interchanged quickly by pinning and unpinning the adapter to the post. Includes rotor adapter and three caliper adapters. Made in the U.S.A.

Circle 8 on card or click "PTEN e-inquiry" on VehicleServicePros.com



#### IDEAL FOR LOW CEILINGS

The **AMGO LR10 Low-Rised Portable Lift** has a lifting capacity of 10,000 lbs and is ideal for low ceilings. It provides a good working height for tires, brakes, and body repairs. The LR20 features automatic safety locks and a lock release, a minimum height of 4-1/8", and a lifting height of 23-5/8". The portable unit is easy to move around the shop with the power unit stand. Standard rubber pads are included.

Circle 11 on card or click "PTEN e-inquiry" on VehicleServicePros.com



#### SIMPLE PLUG AND PLAY INSTALLATION

The MAHA USA MA STAR 6.5 Two-Post Lift features stable and torsion-resistant columns of edged H-section steel, and it can lift cars and vans with a total weight of up to 6.5 tons. The two-post lift offers triple safety due to its spindle nut package with self-locking thread, "giraffe" (patent-pending) nut breakage detection, and a motor brake. It also features an LED-based operation, plug and play installation, and powder coating. Additional options are available, including lighting and wheel engaging supports for special and electric vehicles. The latter allows unrestricted access to the underside of the vehicle and thus facilitates the removal and installation of vehicle batteries.

Circle 12 on card or click "PTEN e-inquiry" on VehicleServicePros.com

#### FEATURES A DOUBLE PUMP DESIGN

The **Ascot Supply 4-Ton Floor Jack** features a double pump design for quick lifting and improved efficiency. Its heavy steel construction ensures maximum durability and longevity. It also has a foot pedal for handsfree positioning. With a lift range between 4-3/8" and 20-1/4", it's ideal for many vehicle types. Includes a one-year limited warranty.

Circle 15 on card or click "PTEN e-inquiry" on VehicleServicePros.com



#### IDEAL FOR THE REMOVAL AND INSTALLATION OF VEHICLE TRANSMISSIONS

The **OTC High-Lift Transmission Jack**, TJH10, is ideal for the removal and installation of vehicle transmissions. The jack has a capacity of 1,000 lbs and features a universal saddle with large, easy-to-grip knobs to adjust the head. A foot-operated pump and lowering pedal allows for ease of control when positioning or removing a transmission. The hydraulic system features flashchromed rams to prevent rust from entering the system, prolonging jack life. A built-in safety overload system prevents the jack from being used beyond its rated capacity. Two locking casters help keep the jack in position during use.

Circle 13 on card or click "PTEN e-inquiry" on VehicleServicePros.com

#### BACKED BY AN AUTO-ENGAGE CLUTCH

The **JET Tools JLA Compact Lever Hoist Series** includes three models: 0.75-ton, 1.5ton, and 3-ton. All feature a compact design, allowing users to get into tight areas. The hoists are backed by an auto-engage clutch that allows for easy load chain adjustment while protecting against

accidental freewheeling under load. Each model also offers a fused brake for low maintenance safety, a zinc-plated grade 100 load chain, cast steel latches, a western-style double pawl system, and a short handle to get into tight areas.

Circle 16 on card or click "PTEN e-inquiry" on VehicleServicePros.com



#### **AVAILABLE IN TWO LENGTHS**

The John Bean 15k 4-Post Alignment Lift comes equipped with safety devices to protect both the operator and the vehicle. With open-front columns, ultra-wide 26" runways, and integrated 100"-long rear slip plates, the lift is sturdy and can handle heavy duty, dual-rear-wheel trucks as well as accommodate standard, four-wheel alignments on passenger vehicles. Available in two lengths, standard and extended, the lift is certified to the industry's leading ANSI/ALI automotive lift standard. Other notable features include: Enhanced rear slip plates, dimpled ramps, cable lock brake, and an adjustable air-hydraulic jack beam.

Circle 14 on card or click "PTEN e-inquiry" on VehicleServicePros.com

#### QUICKLY LIFTS CARS AND LIGHT TRUCKS

The **OEMTOOLS Mechanical Vehicle Positioning Jacks**, No. 24793, feature a durable ratcheting system to lift any car or light truck in seconds providing instant mobility in any direction, the company says. Upgraded heavy duty swivel casters with needle bearing allows for effortless movement through the shop, rolling in any direction. A foot pedal provides handsfree operation, while the side handle makes it easy to carry the jack. May be used on vehicles weighing up to 6,000 lbs (requires formiacle)







#### LIFTS BOTH INTERNAL COMBUSTION AND ELECTRIC VEHICLES

The BendPak AP Series Two-Post Lifts are designed to make lifting internal combustion and electric cars, trucks, and vans safer, easier, and more efficient. The series offers nested arms, an automatic swing arm restraint system, and an automatic safety lock system. The AP Series includes three 10,000-lb capacity models. The standard 10AP has a 73" lifting height and an overhead beam height of 145". The 10AP-168 also has 73" of lifting height plus a crossbar that's positioned 2' higher to accommodate high-roof cargo vans. The 10APX is a highrise model, offering 79.5" of lifting height with a 157" top beam. The 10APX-181 has a 79.5" lifting height and increases the top beam height to 181". All are ALI certified.

Circle 18 on card or click "PTEN e-inquiry" on VehicleServicePros.com

#### FOR MEDIUM AND HEAVY DUTY TRUCKS

The AME International JACKZILLA Premium 20-Ton Air/Hydraulic Bottle Jack, No. 14455, is designed for tire changing applications on commercial fleets, agricultural, construction, and maintenance equipment. It comes with a 10" by 10", 50-ton jack

> plate for optimal weight displacement on uneven or non-com-

pacted surfaces. Circle 21 on card or click "PTEN e-inquiry" on VehicleServicePros.com

#### MAXIMUM LIFT HEIGHT OF 38"

The **LiftMaster 7000** from **LiftWise** allows users to lift or lower a variety of parts into position for maintenance or other needs. Featuring a high lift capacity with a compact and maneuverable design, the hydraulic lift table provides easy operation for demanding operational tasks. The LiftMaster 7000 has a lift-off capacity of 5,500 lbs and a full capacity of 7,000 lbs. A pump handle is used to precisely raise/ lower the table with a maximum lift height of 38". The lift is 32" wide and 72" long with the handle raised. The handle can be folded for a storage height of just 10.5". An optional bolt-on transfer top is available.

Circle 19 on card or click "PTEN e-inquiry" on VehicleServicePros.com



#### AIMS TO PREVENT CAR LIFT ACCIDENTS

The Automotive Lift Institute Digital Vehicle Lifting Points Guide (2023) covers cars, SUVs, vans, light duty trucks, and EVs from model years 2000 through 2023. It helps prevent car lift accidents by making it easy to quickly look up OEM-



recommended lifting points. Lifting points are showcased in more than 250 undercarriage images. The digital version has the same content and layout as

the familiar print guide. Users can find a vehicle quickly via a keyword search function and are able to highlight or make notes as needed.

Circle 22 on card or click "PTEN e-inquiry" on VehicleServicePros.com



#### EXTRA-WIDE DRIVE-THROUGH CLEARANCE

The **Challenger Lifts EW1020 Wide In-ground Lift** features a lifting capacity of 10,000 lbs and an extra-wide drive-through clearance for servicing wide-bodied and electric vehicles. The hydraulic in-ground lift comes standard with True three-stage front and rear arms and double-telescoping screw pads. Bench-mounted controls are optional. Each arm has a capacity of 2,500 lbs and each screw pad adjusts from 4" to 6.125". The EW1020 has a rise height of 78", an overall width of 118", and a drivethrough clearance of 88".

Circle 20 on card or click "PTEN e-inquiry" on VehicleServicePros.com

#### MAXIMUM LIFTING HEIGHT OF 78"

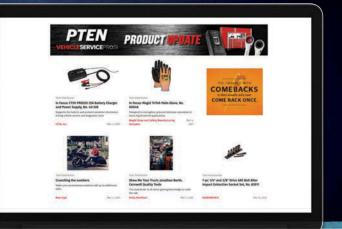
The Dannmar D4-12A Alignment Lift can be used to perform two- or four-wheel alignments and general service work on cars, SUVs, and light trucks weighing up to 12,000 lbs. The ALI-certified lift comes with free-floating, heavy duty turnplates and rear slip plates built into the runways for maximum convenience. The lift has a maximum lifting height of 78" and features an automatic leveling system with multiple auto-leveling locking positions in each column and a push-button safety release. The non-skid runways adjust for various tread widths. The D4-12A runs on an electric/hydraulic power system with a single hydraulic cylinder mounted under a runway for convenience and protection.

Circle 23 on card or click "PTEN e-inquiry" on VehicleServicePros.com



GET MARKET-BREAKING PRODUCT INFO AND NEWS DELIVERED STRAIGHT TO YOUR INBOX.

SIGN UP FOR THE **PTEN** NEWSLETTERS!



# VISIT VEHICLESERVICEPROS



# FleetMaintenance TODAY

## New and improved, just for you!

Get the most up-to-date fleet news, tips on maintaining vehicles to maximize vehicle uptime, and more, delivered right to you.

SUBSCRIBE TODAY!

FleetMaintenance.com/subscribe



# ACTIONS 1 GOAL OF THE LIFT OF

**BUY** only ALI Certified Lifts If you want the peace of mind that comes from knowing your lift has been third-party tested and independently certified to meet industry safety, construction, and performance standards as required by the International Building Code, look for the ALI Gold Label.





# **AIN** all technicians with ALI's Lifting It Right<sup>™</sup> online course

The world's best-selling lift safety program, Lifting It Right covers basic lift operating principles to help prevent accidents. Train technicians anywhere anytime in under an hour. It's the only lift safety course developed and supported by the technical experts from leading lift manufacturers and ALI.





#### Annual Check360™ Certified Lift Inspections

All lifts must be inspected by a qualified lift inspector at least annually. Ensure the inspection you get meets all national safety standard requirements by hiring an ALI Certified Lift Inspector and demanding a Check360 Certified Lift Inspection – the only lift inspection backed by ALI.



# YOUR SAFETY IS RIDING ON IT!™



Check the ALI Directory of Certified Lifts, order Lifting It Right online and other lift safety materials, find an ALI Certified Lift Inspector in your area, and get tips on being a smart lift buyer and operator at autolift.org.

Circle 24 on card or click "PTEN e-inquiry" on VehicleServicePros.com