What Makes a Mohawk?

A head to head, steel to steel, hard-nosed comparison with other two-post above ground lifts



MOHAWK LIFTS

America's #1 Lift Manufacturer. Established 1981.





WHY DOES SOMEBODY BUY A LIFT

Is it to make more money? Is it to make a difficult job safer & easier?

Do people buy lifts to save time? To save money?

THE ANSWER IS, PEOPLE BUY LIFTS FOR ALL OF THESE REASONS.

Simply stated, a decision to purchase a lift is motivated by **PRODUTIVITY**, **PROFITABLITY**, **SAFETY AND**

CONVENIENCE. When profit isn't the goal, then cost cutting or shop safety usually is. A municipal highway garage might not be interested in profit, but all lift users are interested in using a safe and reliable lift, which will save them the most amount of time, and is the best value. Mohawk is that lift.

Often a lift buyer will purchase lift(s) based on price. In other words, the choice of lift is made without regard to profit, longevity, safety or productivity. Instead, the buyer chooses the cheaper lift.

At Mohawk, we've known from the beginning that price and cost are very different things to consider.

Mohawk doesn't cut corners and try to build a lift for less. Mohawk builds the best lifts, to the highest standards, which means not cutting corners or saving pennies everywhere we can.

Mohawk lifts are made in the U.S., by U.S. welders, U.S. machinists, and U.S. assembly workers.



A lift that is poorly designed will cost you valuable time everyday you use it. Lost time isn't part of a lift's price, but it certainly has its cost. We've done our homework, and we know that the extra cost of poor design or questionable quality can exceed \$2,000 per year! Mohawk specializes in manufacturing lifts that are faster and easier to use. We do not have the cheapest price, but no lift will ever cost you less or last you longer than a Mohawk because of quality and ease of use. THAT'S VALUE! If measured in cost of ownership, a Mohawk lift is the least expensive lift you will ever own.

Mohawk cares about performance.

Every Mohawk lift built does more to save you time and increase your efficiency than any other lift on the planet. Here are just some of the ways that Mohawk sets itself apart:

Our lifts pick up vehicles that other lifts cannot.

Our lifts Install where other lifts do not fit.

Our lifts provide access that others do not.

We provide warranties that other lift companies wouldn't dare!

Mohawk Lifts last longer than any brand of lift with less parts, maintenance and wear. Mohawk is concerned about your lift investment. Like a financial planner, we want you to invest in the lift that offers you the greatest return. Mohawk is that lift.

This information will show you that a cheap lift is short-term based thinking and your success and safety is Mohawk's long-term goal. Following is an in-depth analysis of the two-post, above ground lift industry and the many different designs available.

You may have noticed from looking at other brands of lifts that most lift companies have knuckled under to pressure from competitors to lower their prices. To sell a lift with a lower price, even the biggest companies have cut back on materials, quality and/or outsource overseas labor. Not Mohawk! MOHAWK USA MADE LIFTS HAVE ALWAYS USED THE HIGHEST QUALITY MATERIALS AND DESIGNS AVAILABLE BECAUSE SMART LIFT BUYERS DEMAND IT!

We know you want the best because your success, and your safety depend on Mohawk to keep building lifts where performance is more important than cutting production costs.

Read on to learn more....

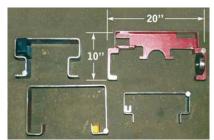
You'll only get partly through before you see how much better a Mohawk lift is. You don't have to become a lift expert to know how much more value a Mohawk lift offers, or why it's the only one worth working with. If you decide not to read this booklet, simply look at the pictures and read the captions so you can better understand the lift that you're about to purchase.

START WITH OUR COLUMNS:



COLUMN CONSTRUCTION

All Mohawk lifts are made of 3/4" or 1" thick rolled steel "C" shaped forklift channel columns. More than any other single feature, this is what makes a Mohawk lift a Mohawk lift! In shocking contrast, many of our competitors use 3/16" to 5/16" sheet metal (only 1/4" as thick as Mohawk's) that is put on a brake and bent to "form" their columns. Considering that all car lifts are a slight takeoff from a forklift, have you ever seen a forklift made out of sheet metal? No, and you never will. Bent sheet metal is stressed sheet metal! Under load it continues to stress. Ultimately it can (and often does) crack and/or spread (unbend itself) with use. A manufacturer can't build it better if their goal is to build it cheaper.



LIFT COLUMN CROSS SECTIONS

In addition to Mohawk's difference in steel thickness, our special "high strength" fork lift channel columns are inherently stronger than either bent sheet metal or extruded columns. Continuing with the forklift example; have you ever seen a forklift mast bent, break or even wear? Never! This is the kind of strength and solidity you surround yourself with when you choose a Mohawk lift. Have you ever wondered why after nearly 100 years forklifts still don't use sheet metal masts and plastic slide blocks? Mohawk uses high-strength and high quality steel channels which are rolled at only three steel mills in the world. Mohawk steel columns come from Steel of West Virginia.



Some of our competitors will say our lifts are "overbuilt." We accept the compliment. You may be wondering, "Do I really need all that strength? Won't less expensive lifts work?" The answer is no! What some might call the "extra" steel in a Mohawk allows you pick up vehicles the other lifts can't! If you were an NFL halfback, you'd have 300pound linemen blocking for you. As a mechanic, why would you risk your life working under a car held up by a lift with columns built like a 98 pound weakling? Some lift companies may "rate" their lifts at the same capacities as Mohawk lifts, but the issue isn't capacity, its ability! Time & time again for years to come. You may be able to lift an 80-lb. bag of cement, but can you hold it? At arms length? Safely? And for how long?

Column Width:

In providing a strong, stable lift, Mohawk's design theory is again to spread the load. That's why Mohawk lift columns range from 18" to 22' wide (when measuring between the fork lift mast sections). By comparison, most other lifts only have a 6" to 10" column width! You would never try to raise a 100-lb. barbell by grabbing it with both hands in the middle. Instead you would space your hands shoulder-width apart for a stable grip. There's no difference when raising a vehicle 6 feet in the air. Consider how wide a weightlifter's shoulders are.

COLUMN LIFT COMPARISON



Mohawk Column Footprints:

Mohawk columns "footprint" are made of 3/4" thick steel plate. The "feet" are the largest in the lift business. No other lift manufacturer uses thicker steel. In fact 9 out of 10 use a lighter steel, footprints usually a 1/4" or 3/8" thick plate. In addition Mohawk footprints are wider offering more stability.



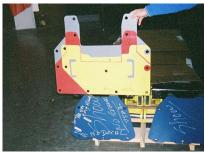
MOHAWK LIFT vs. COMPETITOR FOOTPRINT

In addition to a bigger, wider, thicker and heavier footprint, Mohawk lifts have more anchor bolts securing the lift to the concrete floor of your shop. The footprint is the part of the lift that contacts your shop floor. By making our footings as large as we do, pressure (as measured in psi) exerted on

your shop floor is reduced. Competitive lifts with small footprints exerting a high psi are no good because they can easily crack your concrete floor and don't provide a stable footing. Mohawk's large footprints exert a low pressure on the floor, are best for any lifts stability and for the shop floor it is mounted to. Look at the dramatic difference:

Most fully loaded competitive lifts exert between 75 to 150 psi on the garage floor. That could be too much! However, no fully loaded Mohawk lift exerts more than 50 psi on the shop floor. That's much safer than the competition! (It's easy to figure psi: simply add the weight of the lift to the fully loaded capacity of the lift, then divide by the total square inches of the lift's two footprints. Even if your shop has a strong floor, you should be concerned with the lift's footing. What happens if you outgrow your shop and move to a facility with a not-so-strong floor? All of a sudden. pressure on the shop floor becomes crucially important. The best advice: Plan ahead, long term.

Another way to think about lift stability and pressure on your shop floor is to think about a 110-lb. woman wearing high heels. If she stepped on your foot she could put a hole in it. Yet if she were barefoot, you'd barely notice it. Concentrating all that weight in a high heel or a small lifting footprint exerts lots of pressure on the floor. It won't provide much stability for the lift or its load. One ad for a competitor's lift talks about "the small but stable footprint." Sorry folks, the two are mutually exclusive. It's either small, or it's a stable footprint, it can't be both.



COMPARATIVE FOOTPRINTS 10,000 LB CAPACITY LIFTS. MOHAWK SHOWN ABOVE WITH CHALLENGER BELOW.

Next, look at the number of anchor bolts securing the lift to the shop floor. Because of leverage, the bolts in the rear of the column hold more load than the anchor bolts in the front, or the sides. When looking at different lifts, please note that a Mohawk 10,000 lb. capacity lift uses four 3/4" anchor bolts across the most critical rear of the footprint, while some major brands of lifts only use two anchor bolts. A Mohawk Lift with twice

as many anchor bolts, and twice the area on the shop floor will make a Mohawk lift much safer and stable than other brands.

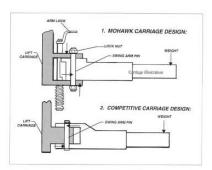
Some lift companies try to compensate for their small footprints by adding a 2" x 2" angle iron to the foot of the lift. These angle irons help secure the lift to the floor, yet they are an annoying obstruction for a mechanic trying to roll his toolbox and jacks around the shop. Instead of working with the lift, you're working around it. Another disadvantage to using these angles irons to secure the lift is they limit the lift's ability to stay securely bolted to the floor. Should the first bolt loosen (and maybe even pull out), the second, third or fourth are right behind. Again, this can't happen with a Mohawk lift because of the anchor-bolt pattern, and large and stable footprint. Mohawk lifts don't have this problem. Mohawk lifts are easier to work with, faster to work with, simply stated: you make more money when you use Mohawk lifts.

Compare Carriages:

Mohawk carriages are made of a 3/4" welded steel plate. We emphasize welded because most of our competitors build their carriages in the same wimpy way they build their columns: sheet metal put on a brake and bent.

Welding is the most expensive way to build a carriage, but Mohawk isn't in the business of cutting corners. More important is the fact that welding results in the strongest possible carriage. Everybody knows that the more times you bend a piece of steel, the weaker it gets. Whether we're talking about the steel we use for columns, carriages or swing arms, we're always proud to say to a customer or prospect: "Here's a piece of a Mohawk lift. It's not bent- its welded."

Mohawk carriages are designed so the swing arm fits securely into the carriage between two pieces of a 3/4" steel plate. The load on the arm is supported (sandwiched) by a steel "shelf" underneath, and snug-fit on top. We then use a grade 8, 1 3/4" steel swing



Mohawk's carriages (top) grip the arm distributing the load ($\hat{\mathbf{T}}$)throughout vs. competitive lifts with 100 percent shearing force ($\hat{\mathbf{T}}$) on the arm pin.

arm bolt to pin the arm into the carriage for the next 100-or-so years. The Mohawk design virtually eliminates shearing forces. The weight of the load is borne by the tensile strength of the carriage and swing arm bolt, not just the shear strength of a loosely fitting pin like some competitors use. To give you an idea of just how heavy this swing arm pin is, the same diameter pin is used on a 7000 lb. capacity Mohawk A-7 as is used on a 30,000 lb. capacity TP-30.

To save money, most competitive lift carriages are assembled just the opposite way; the arms fit over the carriage and are then pinned in. It doesn't take a rocket scientist to figure out that Mohawk's method of securing the arms leads to less deflection, meaningless chance of flex and bending. The Mohawk carriage design grips the swing arm more firmly, and allows the arm less chance to slip. These are all the reasons to build a carriage & swing arm assembly the "right way" vs. the "cheap way."

On most competitive lifts, since the arm is holding the carriage (instead of Mohawk's stronger method of the carriage holding the swing arm) the swing arm hole pin wears, and the hole grows out of round. Then the arms will sag permanently and drag across the floor when the lift is down...wasting your time and wasting your money. This less expensive design is always easy to see as lifts with these swing arms are always bending.



COMPETITOR SAGGING ARM (bottom)

MOHAWK BEARINGS:



MOHAWK CARRIAGE REAR VIEW

All Mohawk lifts use double-sealed, self lubricating, steel ball bearing rollers, housed in steel casings throughout the design of our carriages to freely roll up & down within each column. There just isn't a better bearing anywhere on earth for this type application. A few years ago, all lifts made used these steel bearings, but in an attempt to continually reduce manufacturing costs, most lift companies have chosen the plastic slide block method (also known as Ultra High Molecular Weight slide blocks or UHMW blocks). For the same reasons that Mohawk uses steel roller bearings, all forklifts, gantry cranes, and heavy industrial equipment use steel ball bearing rollers. The bearing that rides in the "C"-shaped lift channel is the best engineering choice for this application. (Naturally our TP-18 to TP-30 two post lifts use larger and heavier capacity bearings, which ride in tandem from each bearing support as the channels of the TP-18 to TP-30 models are considerably larger.)

If a competitive lift company tells you that the heavy steel construction versus formed sheet metal, and steel ball bearing construction versus plastic slide blocks aren't necessary for a lift, ask them, why? Yale, Hyster and other forklift manufactures haven't changed their design to lightweight sheet-metal and plastic slide blocks. Other manufacturers claim that their plastic slide blocks are maintenance free, but every one of them require you to clean and lubricate the columns monthly.

Mohawk bearings are maintenance-free. They save you money! We guarantee them for 5 full years. Period.

The second type of bearing found on our carriages is called a cam follower. These bearings (1 ½" on the A-7 and System 1 models, yet 4" on the larger two post models) ride on the side of the fork lift mast channels. These Mohawk bearings are also double-sealed, self-lubricating & require no maintenance. The purpose of these bearings is to handle "thrust load" (sideways load) which is necessary when working on uneven loads such as snow plows or dump-bed trucks. Again, these are maintenance-free bearings.

No maintenance. No cost of maintenance. No greasing. No regular checking that they're operating OK. All of this equates to you spending more time servicing vehicles, as opposed to checking on your lift and paying to service it.



UHMW SLIDEBLOCK vs. SEALED BALL BEARING

The great majority of lift manufacturers use plastic/Teflon (R) sliders blocks or UHMW blocks. Some lift manufacturers even use un-lubricated bushings. Some lift companies go as far as to call their bushings "bearings." These systems (like many other lift components) make these competitive lifts much cheaper to manufacture. Plastic sliders don't have the life expectancy of the steel bearings Mohawk uses. Furthermore, all lifts using plastic sliders require heavy greasing between the column, slider and carriage. Of course, grease is like a magnet for any dirt, grit and rust common in a repair shop. As the carriages travel up and down, this grit acts as an abrasive between the lift column and the plastic slider. This condition always results in wear. Besides, would you rather be using a lift which depends on a bearing surface (a roller) or a friction surface (a slide block)?

If a lift that uses plastic sliders isn't regularly and properly maintained, these plastic sliders wear down to "little nothings." When they wear, the steel of the carriage will contact the steel of the lift column, scratching and wearing a groove in the column. If you later decide to replace the plastic sliders which costs a great deal of time and money, these new sliders will wear very quickly as they're now rubbing against the scratched steel column (as opposed to the smooth new column the lift once had). This situation is just like driving brake pads down to the rivets. Once you get around to replacing the pads, it's too late; the rotors themselves are damaged. The difference is that you can refinish the rotors on your brake lathe, and remove the groove, but with the lift column...well, you'll just have to buy a new column

Now, let's look at drive mechanisms...

CYLINDERS:

Mohawk uses the biggest cylinders in the lift industry on every model we manufacture. Large cylinders serve several key functions:



MOHAWK CYLINDER (left) vs. COMPETITORS

They make lifting the load easier on the structure.

They decrease the pressure (psi) needed from the pump to power the load up, (also letting the electric motor and pump work more easily and last longer).

Decreased operating pressure on the wipers, o-rings and hydraulic seals.

All Mohawk two post lifts use two cylinders, one in each post. Obviously, a smaller competitive cylinder has to work at a higher operation pressure (psi) than a large cylinder to raise the same load.



COMPETITOR'S SMALL CYLINDER

Higher operating pressures lead to premature wear of the hydraulic cylinder, seals, wipers and o-rings, causing the power unit (motor and pump) to work harder and wear faster. Higher operating pressures cause the motor to draw more amps, costing you more to run! Higher operating pressures cause competitive cylinders to leak or burst their hydraulic hoses. For this reason Mohawk uses stainless steel hydraulic lines throughout. Hydraulic hoses lead to maintenance, cost and downtime. We're so certain our larger cylinders are better that we actually put our money where our mouth is and warranty our cylinders for as long as you own your Mohawk

Mechanical Safety Locks:

The safety locks on all Mohawk lifts are All-Position Safeties. These safeties engage every few inches all the way up and all the way down. Many of our competitors' safeties don't engage until the lift is 18" or even 36" off the ground. It is Mohawk's strongly held belief that even if a car is only 3" in the air (for example, when removing a dually wheel off a 1-ton truck), the lift should operate in total safety! Under a Mohawk lift you can feel completely confident and safe at any height. With other lifts, you can't. Why buy a lift that doesn't have mechanical safety locks that start engaging as soon as the lift starts going up?

LIFETIME CYLINDER WARRANTY

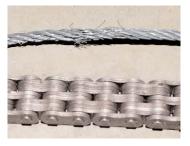


MECHANICAL SAFETY LOCKS

If you were doing a tire rotation, with some lifts you'd have all the wheels off but no safeties on. Would you get under a car that was just up by a floor jack? No! You would put jack stands under the vehicle first because it's not safe! There's no difference between this example and working on a lift that hasn't reached its safety locks yet. With a Mohawk lift you won't need jack stands because the mechanical locks are always on and engaged, saving you time. Mohawk lifts offer additional safety, but not at additional cost (in terms of safety and cost).

Mohawk mechanical safeties are gravity activated and automatically reset every time the lift goes up. Some lifts use spring-loaded safeties requiring regular maintenance and some do not reset automatically at mid-height when the safeties are released. Other competitive lifts must be fully lowered to re-engage the mechanical safety locks or their safeties must be manually re-engaged at mid-height. Suppose someone forgets? Better play it safe with Mohawk! Working under a Mohawk lift at any height, you know the safety catches are always engaged. It's a comfortable feeling that lets you concentrate on getting the job done instead of worrying about your safety, the safety of your employees and your customers' cars.

Chain lifting or direct drive lifting vs. cable lifting:



No maintenance cost and no downtime. Side by side images of chains vs. a worn cable.



Mohawk's 10,000-lb capacity-and-below lifts use a #646 leaf chain (15/8" thick with 24,000-lb. tensile strength) lifting over the yoke bearings where we use two bearings to raise the carriages. Compared to our competitors' cable lifting systems: chains don't stretch, fray, and there is virtually no maintenance required on a chain-lifting system.

Some lift companies use a single hydraulic cylinder and cable to raise both carriages. The single cylinder lifting method requires lifting power to the off-side post. To do this, cables or rarely chains are run through a set of pulleys, they must be greased and kept lubricated so they don't freeze up and stop rolling.

Cables have a limited lifespan. Cables stretch, fray, need regular replacing, and on occasion have been known to snap. A cablelifting system is not as long-lasting, nor as easy to maintain as a chain-lifting system. Any lift that uses cables to raise the off-side puts an undue stain on those cables at each location that the cable changes direction. When a cable needs replacing, a shop owner can lose a lot of business waiting around for the lift repairman (who is probably busy replacing somebody else's cable) to show up. The total cost of production would be at least \$500/day lost income, plus \$400 -\$500 to have the cables replaced. But wait! It soon happens again! Furthermore, cables must be run through an overhead cable cover or routed to the off-side post across the floor covered by an obtrusive piece of diamond plate. Either of these two lift designs interferes with the everyday movement of people and tools around the lift and shop. Looked at on either a short or long-term basis, the first time the cable fails, that cheaper lift costs more than a Mohawk.



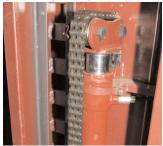
WORN CABLE ROLLER

Chain Rollers:

On top of the cylinders of Mohawk 7,000 & 10,000 lb.-capacity-two post lifts is a yoke with two bearings that act as a chain guide for lifting carriages. The entire load is on these two bearings, through the chains. Mohawk is the only lift manufacturer that uses two chain guide bearings on top of the cylinders. Like our carriage bearings, these are hardened steel, self-lubricating, maintenance-free bearings. All other lift manufacturers use one lonesome bearing. Some manufacturers don't even use a

bearing but a hardened steel roller, which is why you'll see their rollers wearing away after only a few months in operation. Another way to look at this Mohawk feature: **two bearings as opposed to one equals half the lifting load or twice the life from the bearing.**

CHAIN ROLLERS



Chain Break Safeties:

Mohawk 7,000 (model A-7) and 10,000-lb. (model System1) capacity lifts are chain drive lifts, whereas Mohawk 12,000-lb. and above capacity two-post units are direct drive lifts. For now we'd like to discuss the chain break safety feature found on the Mohawk A-7 and System1 models.

In looking near the top of a Mohawk cylinder, you'll see a heavy spring attached to a cable. This spring is attached to both the mechanical safety lock and the posts. This is Mohawk's exclusive chain break safety. If a chain or a weld ever broke, the mechanical safety will lock itself into the safety track so fast you won't have time to blink or see it engage! Though a chain or its welding has never broken since we've been building lifts, here again is an example if Mohawk's "safety-in-design" concern and another safety feature not found on competitive lifts. Mohawk may be preoccupied with safety, but if so it's for your protection, your shop's reputation, your employees, your investment, and your customers' vehicles.



CHAIN SAFETY LOCK SPRING

SAFETY SYSTEMS:

Mohawk's totally automatic safeties protect operators with more safety systems, different safety systems, and better safety systems than any other lift manufacture on the planet. Often, we don't even refer to many of our Mohawk systems as safeties. To Mohawk these safeties are just parts of the construction and design of the Mohawk lift-features that make a Mohawk lift the best piece of equipment in the lift industry. After all: which brand of lift would you rather work under all day long?

Mechanical Safety Locks:



SAFETY LOCK SYSTEM

Mohawk lifts have <u>all-position</u> mechanical safety locks in <u>both columns</u> that engage the instant the lifting arms engage the frame of the vehicle being raised. These mechanical safety locks are made of either a 3/4" or 1" thick steel plate that engage the full lifting height. These full-time safeties are operational in BOTH columns. Many competitors have safeties operating on the main-side only. With these lifts, the off-side safety comes into play *only* when a cable breaks. A similar situation would be to say "When you can't avoid a collision, it's too late to put on your seat belt."

Arm Restraints:



SAFETY ARM RESTRAINT

All Mohawk lifts incorporate automatically engaging swing arm restraints to prevent the arms from shifting. After positioning, Mohawk arms remain in position as soon as the arms leave the floor. As soon as the arms return to the floor, the arms release and become "free floating" to be removed from under the vehicle frame. A mechanic need not bend down to release Mohawk arm restraints- they remove the arms with their foot and that saves time. Once again: faster, easier, and profit-enhancing.

Most lift companies provide some sort of restraint device on the swing arm. But some lift companies' arms don't engage automatically. Instead, the arms must be manually restrained each time the arms are positioned, and manually released whenever the lift is lowered. Arm restraints like this are often ignored as mechanics find them inconvenient to use. With competitor's lifts they frequently disengage or don't use them at all. The result is that these "wing nut type" manually-set arm restraints are disabled or removed. Safety is removed at the time. A mechanic automatically uses Mohawk arm restraints. With Mohawk you'll be protected by the safety, but the protection will not require any effort.

The Mohawk arm restraint is an ALL POSITION restraint. Unlike many lifts with small arm restraint "teeth" which



COMPETITOR'S SWING ARM LOCKING MECHANISM

wear, break and require replacement, the Mohawk arm restraints do not have "teeth" to break, "chip" or parts to Replace (as broken teeth cause the arms to not be held in place). The Mohawk arm restraints work in ALL POSITIONS you don't have to be concerned if the "teeth" of the arm restraints "aligning" perfectly to restrain the swing arm. The Mohawk arm restraint works immediately upon ascent, and release as soon as the lift is fully lowered.

Hydraulic Safeties-External:

Mohawk's external hydraulic safety systems consist of velocity fuses, mounted on each cylinder where the hydraulic line enters the cylinder as well as pressure-compensated flow control valving. These two types of safeties are always open and monitoring the pressure within the ENTIRE hydraulic system. If a hydraulic line were ever to burst, these hydraulic safeties would shut the lift down by stopping the flow of fluid throughout the system.

If this were to happen, these hydraulic safeties cannot be re-opened until hydraulic pressure is applied from the opposite direction, by raising the lift. Once more, these three different valves **represent additional safety systems** not found on most competitive lifts.



VELOCITY FUSE

Hydraulic Safeties-Internal:

Mohawk's patented internal hydraulic safeties combined with our external hydraulic safeties to anticipate and protect against *any* possible mishap. Our internal hydraulic safeties located on both cylinders, can detect side-to-side pressure differentials of less than 200 lbs. and should an imbalance occur, both cylinders will hydraulically "lock." So should you inadvertently lower a car onto a tool box or even a soda can, our internal hydraulic safeties will detect this pressure imbalance and "lock" the lift.

These internal safety systems are Mohawk's exclusive and patented system which have been operational in the field since 1982 and are found on tens of thousands of Mohawk lifts. These safeties are another Mohawk safety exclusive not found anywhere else in the lift business.

Stainless Steel Hydraulic Lines:



Steel hydraulic lines are another Mohawk safety feature we need to mention. Unlike rubber hydraulic hoses, a steel line won't melt when a hot exhaust clamp drops on it, and won't wear at contact points where rubber hoses can chafe. Steel lines do not swell under pressure as rubber hoses do, causing a rupture that requires replacement. Finally, steel lines don't flap around in the breeze, getting banged by tool carts or caught in cable pulleys. Mohawk's steel hydraulic lines are bolted and clamped into position.



RUBBBER HOSE OR STEEL LINE

Unlike some competitors, you won't find "C" clips holding the rubber hydraulic hoses in place, some lift companies actually use double sided tape to hold the lines in place. Simply stated, the stainless steel hydraulic lines used in Mohawk lifts, do not wear, break, leak, rust and never need replacing. If a rubber hydraulic hose (as used on most competitive lifts) were as good as a steel hydraulic line, you'd never replace these hoses in the automotive repair work you do. Companies that use rubber hydraulic hoses do so because their goal is to build the lift for less. Mohawk just builds the best lifts possible, and we don't cut corners by using rubber hydraulic lines.

Another feature of the Mohawk two post lift is the adjustable height overhead hydraulic lines. Unlike lifts with overhead cable covers (which restrict lifting height of taller vehicles) you'll never have to pay for the "extra height" of longer overhead cables like some lift brands.

Finally the "cleanest installation" available, is only possible with a Mohawk two post lift is to route the hydraulic lines in the floor. A Mohawk lift with in-floor lines leaves no overhead obstruction of any sort, enabling an overhead shop crane or any other equipment to freely roll from bay to bay and never "bang" into the overhead cable cover found on most other lifts. Likewise, you'll never have a truck that can only be raised 3 feet because the overhead cable cover prevents full lifting.





SHOWN WITH OPTIONAL IN GROUND LINES (no overhead obstruction)

When Mohawk routes the hydraulic lines in the floor, these stainless steel hydraulic lines can't and don't rust out, and as "one piece" lines, there is no hydraulic fitting below the concrete that could leak.

Adjustable overhead stainless steel lines vs. lifts with an overhead shut off switch and cable cover.



BENT OVERHEAD COVER

As seen in the above image, a vehicle crashed into the overhead shut off bar of this lift, causing damage to the lift and vehicle being raised. Why? Because the \$15 shut off switch didn't work when the operator was raising a tall truck. How can you know when the shut-off switch is bad? You don't and you can't until it is too late! With a Mohawk lift, damage like this is impossible as the lines are routed as tall as you want, or in the shop floor. You'll never have to apologize to a customer as to why his trucks roof is smashed.

ADDITIONAL PRODUCT FEATURES:

We've discussed columns, carriages and safety. Now we'd like to touch on additional benefits that are standard features you ought to know about on Mohawk two-post lifts.

Lifting pads:

Mohawk uses corrugated steel lifting pads to contact the vehicle frame. These are big, easy-to-position pads, not flip pads with little surface area contacting the vehicle. We admit our steel pads may never win a beauty contest, but they get the job done better than any other lift pad in the business. They may even be the ugliest lifting pads in the industry.

LIFTING PAD TYPES



The fact is, steel lifting pads are safer and longer-lasting than any rubber and/or poly contact pad could possibly be. Especially when you put teeth on your pad as Mohawk does! Quite simply, a steel lifting pad contacting a vehicle's steel frame has a much lower chance of slipping out from under a vehicle than does an oily, greasy, rubber pad. Furthermore, the rubber/poly pads found throughout the lift industry always wear and are expensive to replace (never mind the smell when they contact a hot exhaust pipe). But if you insist on rubber lifting pads, we'll happily provide them

Adaptors:



Adaptors are needed for arm clearance when lifting trucks, minivans, 4x4's or most sport utility vehicles. These are three different types of adaptors in the lift business:

Mohawk "quick connect" stack adaptor System (shown above)

The screw-up (well named) adaptor system

The 3 position flip-up pad typically associated with in-ground lifts

Mohawk's stacking quick connect system is the **fastest**, **safest**, **easiest and best**. It allows Mohawk to offer the lowest possible arm clearance (3 1/2" minimum height on a System 1 model), permitting easier access under the lowest-riding sports cars. Mohawk's stacking pads change or adjust in just seconds. When Mohawk truck adaptors are needed, they're quick and easy to use. Like putting an extension on a ratchet, simply take the lifting pad off, pop in the adaptor, and put the pad back down. It's safe, it's secure, and you can't mess it up.

Safety is a huge concern with screw-up pad type adaptors found on other lifts. If all four pads aren't raised the same number of turns, the vehicle will not be supported evenly and could slip. Many screw pads can be screwed up far enough to be unsafe, where the screw shaft is only held in its socket by a single thread. Finally, because screw pads always have the screw shaft to contend with, low arm clearance, even in its lowest position, is always 4 1/2" or more. Yes, an inch higher than Mohawk. You say it's not important as you don't service sports cars. What about a car with sagging springs or the fact that the auto makers are lowering the cars for increased aerodynamics? Ask yourself, what will you be servicing two or three years from now? What will the automotive manufacturers be building? You've seen what cars of the future will look like and they are LOW riding!

The third pad type is the flip up pad. The disadvantage of the flip-up adaptor pad is that it requires space for the flip up section, even in its lowest position. This height requirement is why no flip up adaptor lift has an arm clearance lower than 4 7/8". That's an inch + higher than a Mohawk lift. Even our larger 12,000, 16,000 or 20,000 lb. capacity lifts are only 5" high when fully lowered. Yet Mohawk's larger lifts are suitable for low-riding cars.



Another disadvantage to the flip-up pad is the very small surface area (1" wide x 4' long) of the pad that makes contact with the vehicle when the pads are flipped up. Just setting up these pads can take a while to place them perfectly on the frame. Not so with a Mohawk.

Another important advantage of Mohawk's stacking pin system is the ability to stack the pins extra high should a vehicle have a high frame and low rocker panels such as a 4x4 truck, for example. When this truck comes into your shop equipped with a Mohawk lift, all that's required is to use the extra pads we provide. Most lift companies sell these adaptors as "optional equipment" and most only come two per set. That's not enough for a truck with running boards! This is why Mohawk ships COMLETE SETS of truck adaptors with every lift we sell.

Competitive truck adaptors have problems and limitations. Screw-pad systems waste all kinds of time! With one vehicle they have to be screwed up, and with the next screw down. With flip up systems, if the three position pads are at their highest position and still don't reach the vehicle frame, shop owners will frequently find themselves scavenging around for the optional height extenders or using wood blocks which are extremely unsafe. Trying to overcome these problems, lift manufacturers use the screw-up lift pads and the three position flip pads and have come up with spacers that attach to the end of the lift arm. Yet the fact remains, these extenders (spacers) don't reach every vehicle frame as the Mohawk stacking system will, and usually they come to you at additional cost. Not so with Mohawk!

Mohawk lifts come with adaptor holders on the lift. These holders prevent the adaptors from rolling around the shop and getting lost, another "minor detail" that most lift companies don't bother with. You need them so you'll know where the adaptors are when you need them (and because height adaptors left on the floor can rust out, and then they are unusable).



HEIGHT ADAPTOR BRACKET

A final point to remember here: Three sets of Mohawk quick-connect stacking adaptors are standard equipment with our lifts. Most companies charge extra for lift adaptors, some as high as \$475 for their full set of adaptors. If you don't think you need adaptors because you don't work on trucks, ask yourself if you work on Ford F-150's, Chevy Tahoes, Ford Explorers, mini-vans, Toyota 4Runners, and so on. These vehicles frequently have running boards, spoilers, extra gas tanks, and body trim (molding), all of which require adaptors. Remember: Mohawk's Adaptors are no extra cost.

OTHER ITEMS WITH ALL MOHAWK LIFTS:

Hydraulic Fluid:

Mohawk uses Dexron III automatic transmission fluid (ATF) in our hydraulic

systems. Most lift companies use common jack oil. The advantages of Dexron III is that, every shop has it, it flows much better on cold winter mornings before the shop has warmed up and most importantly; it extends the life of internal hydraulic components such as wipers, o-rings and seals.

Another simple reason to order a Mohawk is because Mohawk lifts are always shipped with Dexron III in them. Competitive lifts arrive dry. Here's another expense you incur when installing that "other" brand.

With a Mohawk lift, we even supply you with the male and female electrical connectors for a quick plug in/start up of your new lift. Included with each lift are the anchor bolts and a variety of shims to level the columns for installation. The point is: No lift company cares like Mohawk! If we didn't care, then we'd build lifts like everyone else!

OPTIONAL TWO POST LIFT EQUIPMENT:

Weight Gauge:



Another feature of a Mohawk lift is the optional weight gauge. Mohawks weight gauge is a "scale" that quickly attaches to the hydraulic system of your Mohawk lift. The weight gauge serves as both a diagnostic tool, a revenue generator and can serve as an additional safety warning. Let's look at the applications of the weight gauge.

Weight Gauge as a Diagnostic Tool:

Every shop owner has had the conversations with customers about poor mileage, premature brake wear, poor riding vehicle & other issues caused by a vehicle that's overloaded, and heavier than the day it came from the dealership. While an Econo line van might weigh 5,000 lb. from the dealership, once loaded with work tools and equipment, this same truck likely weighs 8,000 or 9,000 lbs. As a diagnostic tool, showing the vehicles weight to the customer is likely your first

step to selling heavier duty brakes, better tires, or load leveler shocks. If selling services in your shop is a "show & tell" scenario with some customers, then SHOWING the customer what their vehicle weighs is the first step to selling and installing these better and more profitable component parts.

Weight Gauge as an Additional Safety Tool:

Do you really know the weight of every vehicle you put on your lift? If the answer "no" then a weight gauge should be on your lift. While Mohawk lifts have hydraulic safeties to prevent lifting too heavy a vehicle on a specific capacity of lift, you still never "really know" how much you're lifting. The weight gauge, installed right where the lift operator can see it serves as a constant safety reminder to your shop teehs

Mohawk's weight gauge is a winner of the prestigious Motor Magazine top 20 tool awards.



Mohawk's SPEEDLANE:



As the name implies, the Mohawk SPEEDLANE saves you time as it allows vehicles to raise faster than placing the 4 individual swing arms. The **SPEEDLANE** is an aluminum (90 lbs) pair of ramps that sit on top of the swing arms and eliminate having to position and remove the swing arms for every vehicle. At the same time, the SPEEDLANE leaves tires hanging free for tire and brake service, but still leaves the under-vehicle area open and accessible for all types of repairs. Mohawk's **SPEEDLANE** works equally well for uni-body cars as it does for trucks and SUV's with a full frame under the vehicle. The patented **SPEEDLANE** is an option that can be added to any Mohawk 9,000, 10,000, 12,000, 15,000 or 16,000 lb. capacity two post lift.

Are you tired of bending over and

positioning the swing arms? Then the **SPEEDLANE** is the answer.

Are you concerned with trade school students (inexperienced mechanics) positioning the swing arms in the wrong position or lifting on the rusted frame of a '72 Duster? Again the **SPEEDLANE** is your answer.

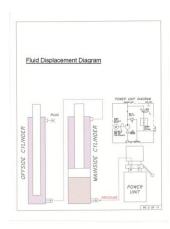
Hydraulic Synchronization:

All two-post lifts are kept synchronized with the opposite side post. Mohawk lifts are hydraulically synchronized from side to side. We do this by displacing hydraulic fluid from the main-side cylinder to the off-side cylinder through overhead (or in-floor) stainless steel hydraulic lines. These lines can be set at any height, routed up to the shop ceiling, cut lower to fit in a low ceiling shop (while still giving you a "clear floor lift"), or routed under-ground by cutting a 1"-deep-by-1" wide trough in the concrete floor (especially applicable to large shops with an overhead rolling crane that goes from bay to bay).



LOW CEILING APPLICATION

The versatility of Mohawk's steel hydraulic lines and absence of a fixed-position overhead cable or floor cover also allows you to install Mohawk lift posts wider or narrower than our competitors.



What do competitive lift companies do? All other two-post lift manufacturers use either cables (some use chains) to mechanically equalize the two carriages from side to side. If the lift has a floor brace, the cable/chain is routed through it. If the lift is a clear floor model, the cable/chain is routed overhead through a

cable cover. There are two main disadvantages to a system like this: First; the overhead cable cover (always light sheet metal, and NEVER a structural support) is fixed in position. This cover often will not allow a taller truck or cube van to be fully raised and serviced.



The obvious reason is that the vehicle roof hits the overhead cable cover. To combat this, many lift manufacturers put an overhead shut-off switch below the cover. This shut off is operated by a \$15 switch. If the switch fails, a crushed roof results.



The Second disadvantage is of a mechanically synchronized lift that some lift manufacturers resort to is extending their columns to set the overhead cable cover even higher. Again, you pay anywhere from \$200 to \$450 for a 1' to 2' extension. Yet even with these extensions, roof racks, emergency lights, and other vehicle equipment can hit the overhead cable cover and not the shut-off switch. Plus some lifts don't even have a shut-off switch! What if an open hood hits the cover? Problem! You will be in the market for a new hood. Do you want to watch the hood every time you raise a vehicle? No! That wastes time and time is wasted money.

Asymmetric Lifts:



MODEL A-7

Asymmetric lifts are also known as offset because that's how they raise a vehicle. Basically, there are three different types of asymmetric lifts. One like the Mohawk A-7 has its columns slightly rotated toward the rear of the

car. The swing arms are straight, distributing the lifting load into the columns and not onto the arms.



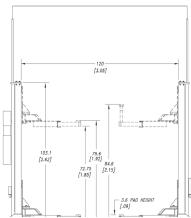
A-7 REAR VIEW

The second type of asymmetric lift doesn't have rotated columns. These lifts have columns that are square to each other and accomplish the open door aspect of an asymmetric lift by putting a "bend" (similar to a shoulder and elbow) in the front swing arms. The problem is instead of transferring the load into the columns (like Mohawk's A-7), the lifting load remains with the swing arm. Imagine holding an 80-lb. bag of cement. You'd hold it equally with both arms in front of your chest, not off to the side like some asymmetric "wannabes."

The third type of "cheaper to build" asymmetric lift has posts that are over rotated to a full 90 degrees. This is even worse than the bent elbow/arm design in terms of how it loads the vehicle and distributes weight throughout the arms & carriage and not the columns where the weight belongs.

A true asymmetric lift turns (rotates) the post so that the "spine" of the lift is facing the center of gravity of the load being lifted. Mohawk is a true asymmetric lift!

UNITS: INCHES [METERS]



Lifting Height:

To be brutally honest, many lift manufacturers lie on their spec. sheet about how high their lifts raise. There is only one issue to look at here, but in two different ways; How high will the lift raise the swing arms so you can walk under them without banging your head? How high will the lift raise the vehicle, as measured at the top if the swing arm lift pads (not including the added heightof the truck adaptors)?

We consider the lowered height of a Mohawk swing arm to be 0." The Mohawk arm has a lifting stroke of 6'. If you add the height if the lift pad (ranging from 3 1/2" to 5" depending on which model) to the lifting stroke, this is the true measure of how high the lift raises. If you want to go higher, just add the truck adaptors, or stack them in top of each other for even greater lifting height. In other words, there's 6' of clearance under the swing arms of a Mohawk lift, with a raised vehicle frame height of either 6'3 1/2" or 6'5". If you're using the stacking adaptors, that increases even more. A 6'3" tall tech won't hit his head on the bottom of the vehicle. And most lift companies can't make that claim!

Other lift manufacturers show the lowered height of their swing arm (0"), then show their lifting height spec. at the top of the swing arm! It's like measuring a man's height when he's wearing a top hat. It "appears" that other lifts raise as high as Mohawk, but they don't.

Shipping Weight:

Some manufacturers claim their lifts are heavier. Don't be fooled! No lift is heavier than a Mohawk Lift. Shipping weight doesn't contribute to safety. Heavy packing materials that get discarded do not make a lift safer or better built. Installed weight is what affects safety. Heavy shipping pieces that become discarded don't contribute to structural integrity and don't contribute to safety. The point is the operational weight of a Mohawk lift doesn't get wasted on heavy crating, shipping pallets, equalizer cables, cable covers, overhead shut-off switches, column extensions, and other needless materials. When Mohawk ships a 2500 lb. System-I two post lift, there's only 40 lbs of packaging material that is discarded. Mohawks "green policy" on shipping material doesn't contribute to environmental waste.

Ever ask why other major lift brands don't show the weight of their lifts on their brochures? Maybe they're embarrassed to show you how little their lifts weigh. As described earlier, a lift's support comes from its wide, stable footprint. Overhead cable covers found on most lifts are not structural supports. That's why Mohawk 2-post lifts up to 30,000 lbs. capacity do not have, or need any overhead cross member, cross bar, or cable cover. When comparing the weights

of lifts you're considering, ask if you're buying a 2-post lift *or* a 2-post lift with overhead covers and 100 lbs. of cables. The strength should be built into the columns.

Welding:



Throughout the construction of Mohawk lifts, we use long, heavy, continuous welds. We invite and encourage anyone to compare our welds with the spot and sectional welds found throughout competitor's lifts. Mohawk uses *more* steel everywhere in our lifts, including the welds! This is still another feature that demonstrates the superior strength and quality of Mohawk lifts.

Warranty:

Mohawk offers the only limited lifetime Cylinder seal warranty in the lift business. Our five-year warranty surpasses all others. We suggest you read any other lift company's warranty whose lift you may be considering. Then you'll know why Mohawk not only stands behind our products, but underneath them as well.

Power Units:

A Two Year Warranty

Mohawk uses U.S.-made Monarch hydraulic pumps with U.S.-made electric motors (either Baldor or Doerr). Monarch is best known for their DC pumps and you'll find Monarch pumps in most trucking, public works, tow trucks, and road machinery applications where the equipment demands a lot from a constantly running pump. This contrasts with the relatively easy task a pump is asked to perform on a Mohawk lift. Some specific features of the Monarch power unit compared with other power units used in the lift business are:

- 1) Steel-hardened gears. Other pump manufacturers make their gears with powdered metal leading to chipping gear teeth and premature pump failure.
- 2) Trust ball construction. In the operation of any motor/pump unit, there's a tendency for the motor and pump to want to separate under pressure. The thrust ball design positively prevents this.

- 3) Internal pump components are made of hard coat aluminum (versus competitors' untreated aluminum or cast iron components). Space age hard coating produces a surface that is actually harder than untreated aluminum or cast iron and provides better resistance to chipping or scoring.
- 4) Full needle bearing construction versus competitive power units that use internal bushings.
- 5) A heavy-duty thicker steel welded reservoir that won't dent, ding, or rust out. Certainly not the "plastic" reservoir that competitive lifts use.
- 6) While rated at 2 hp the electric motor used on Mohawk lifts/ Monarch pumps generates 2.8 hp based on a five minute duty cycle. Since no lift takes more than five minutes to raise, it's safe to say the Monarch power unit is always operating at 2.8 hp.
- 7) The electric motor is totally enclosed, sealed against foreign objects, dirt, grease, and whatever else getting into the motor and creating serious problems. Just as important, if the lift is located outdoors, rain won't penetrate (as opposed to open, fan cooled motors).

Mohawk/Monarch power units and their electric motors are designed and tested to start and run under maximum load conditions at a minimum voltage of 190 VAC, which is the key as to why Mohawk Lifts/Monarch power units DON'T FAIL! When comparing other companies to Mohawk, make sure you ask if the motor will not only start under full load with low voltage, but will it continue to run

Questions to Ask Before You Buy:

for a long life under low voltage?

Some lift manufacturers are causing confusion in today's lift market, claiming they are building any lift available. If you hear this nonsense, here are a few good questions to ask:

How long has Brand "X" been building lifts?

Can they give you a listing of customers that are using their various lifts?

What about a list of references for the specific model you are buying?

Can they provide a list of customers that you can call or visit?

If this isn't available, ask yourself "why

not?"

Are you about to become a guinea pig test facility?

Can you **see** one of their recently built lifts in use locally?

If not, that should be a "red flag" in your purchase considerations.

Would you buy a car without taking a test drive? Likely not, but are you willing to have a vehicle over your head without the ability to *see* the lift you're considering and the quality of how it's manufactured?

At Mohawk, all we ask is that you **LOOK** at a lift before you buy a lift, or listen to any lift sales representative. **REMEMBER:** it's you who'll be standing under the vehicles.

Is Brand X a lift manufacturer or are they a marketing company that has their lifts built for them? MANY lift brands are "sourced" in Asia. These lifts are built in third world countries by unknown fabricators, sometimes even using "questionable components." Sometimes, the companies that sell these "offshore" made lifts are what you'd think of as "traditional" U.S. manufacturers, or companies with "creative" names that imply that the lift is made in the USA (for example, Bend-Pak, Americas Pride, or even some models of Challenger lift.)

While you're raising questions of other lift companies; Ask...

Does the company have product liability insurance?

If they do, surely they can easily provide you a certificate of insurance. But what if they're just an importer (Greg Smith Equipment, Tuxedo Lifts, Americas Pride, Daytona Lifts and Budget Auto Equipment) as opposed to a U.S. fabricator? If an "incident" happened with these lifts, who is standing behind them? It's either a U.S. fabricator or a marketing company that imports product from around the world.

How long has distributor "X" been selling lifts and this brand in particular?

With all the fly-by-night companies around (distributors and manufacturers) it seems a five-year users' list should be readily available. On this same note, there are a number of warning signs you should know about when comparing Brand "X" with Mohawk, particularly when Brand "X" is promoted by mail order, by the classified sections of trade magazines (why wouldn't they take out a display ad like other advertisers?) or by telephone solicitation. Generally, no salesman comes to your shop and/or no factory phone number is shown on the

brochure. Naturally, these lifts are advertised at "come-on" prices (to get you to call). If there's resistance to having a salesman visit your shop, ask what's going to happen when you need service on this "bargain lift?"

Lately, some equipment distributors are attempting to sell lifts via the phone, mail, or in person on a private label basis. Beware!!! Shouldn't you have a U.S. factory standing behind the product as opposed to an office that sells private label lifts?? Of course you should! For your protection, call the "factory." Sometimes you'll discover the factory isn't a factory at all, but a legitimate company will naturally have a factory phone number and address on the brochure, and you'll find that Brand "X" will have the same exact photo of a Chevy Suburban on the brochure that Brand "Y" has. Why? Because neither Brand "X" nor "Y" are the manufacturer! Examples abound. Remember, these too-good-to-be-true sales appeals are just that. They're intended to grab your attention, get you to call, and sell you the lift over the phone. The only thing that usually gets lifted is your wallet by these fast buck artists. Regardless of pricing, don't be fooled. You deserve better...a lot better. You deserve a Mohawk!

Why are Mohawk prices higher than other lifts? Because Mohawk hasn't cut corners on product quality like all the other lift companies. We haven't changed from 3/4" forklift steel to bent sheet metal columns. We haven't changed our sealed roller bearings for cheap plastic slide blocks, and we haven't shrunk our cylinders until they're as small as your thumb. We've simply remained a quality lift builder and the value we provide is as great as it's ever been

In summary, we're sure you can see that a Mohawk lift is built like no other lift in the world.

We add safety where our competitors have none.

We include equipment that our competitors charge you extra for (even though you'll need it to do the job).

We build Mohawk lifts so you know they'll do the job they're meant to do.

It's not our ego that makes us want to build the best lift anywhere; it's your success that motivates us. When a Mohawk lift performs better, you make more money. Whether it's a high-cube van or a low- riding sports car, Mohawk gets it all the way up without the need for floor jacks or wood blocks. With features like automatic arm restraints, quick-connect height adaptors, extra

lifting muscle, automatic all-position mechanical and hydraulic safeties-and many more. A Mohawk lift is easier to use. It saves you time and makes you money that other lifts can't. If a Mohawk saves you just five minutes a day, that's over \$1100 a year in additional income. Other lifts waste 10-15 minutes a day by trying to position the flip-up pads in the right place, or readjusting the screw-up lifting pads. And that doesn't include monthly greasing of the columns, fittings, and never-ending cable adjustment, or bi-annual plastic slide block replacement. Now do the math and see how much less it costs to use a Mohawk lift than any other brand.

If you're concerned with the higher price of a Mohawk lift, think about the cost of not owning one, or owning a different brand. Because with these other lifts, the costs never end. We thank you for your time and consideration. Please contact us at www.mohawklifts.com or 1-800-833-2006 or (518) 842-1431 about owning your very own Mohawk lift.



