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JULY 2007

Vehicle Lifting Points: Whom Do You Trust?

Where do you get your lift point information? When you need to go under a vehicle to diagnose or perform required vehicle service, where do you obtain information for the placement of the lift adapter pads? Are you confident your sources are reliable?

If you believe you haven't seen a vehicle you don't know how to lift or that everything is just common sense, you're destined for an accident. Don't assume that lifting is the same from vehicle to vehicle. Unfortunately, this is often the statement heard from experienced service technicians:

"It doesn't matter if it's a roadster, an SUV, a 4x4 with duals, a two-door or four-door family sedan, or even a truck. All you have to do is find a hard spot like the frame or the jack points on a unibody car. Sure, it's important if the hard spot is flat and level but, in a pinch, it's okay to use the spring hangers. They're connected to the frame aren't they? Some vehicle manufacturers even tell you to lift on the spring hangers." This is a risky assumption and one likely to lead to an accident.

There's quite a bit of information out there, so how do you know what to follow? Bottom line, if one source doesn't seem quite right, seek out another source and always use good old common sense! If something doesn't jibe with what you're reading, always question it. You are your best safety source; don't ignore your own sensibilities.

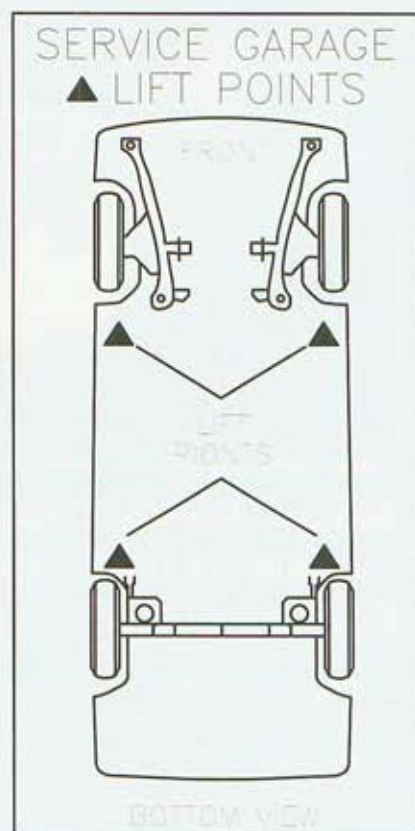
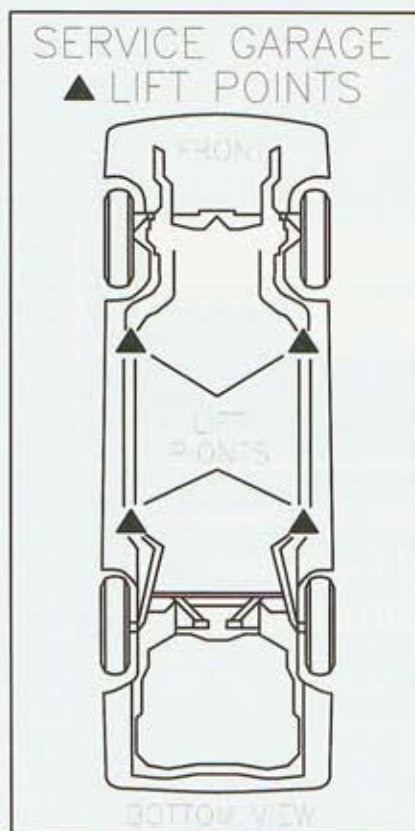
The first step in making a proper lift is to find the vehicle manufacturer recommended lifting points for that vehicle. Here are a few common sources of reliable lift point information:

- If you work in an automobile dealership, you can go to the

internal vehicle manufacturer web site to find lifting and jacking information. You can also go to the vehicle service manuals found in dealerships where the same make of vehicles are serviced every day.

- If you work in an independent shop, franchise store, or fleet maintenance operation, maybe you have the service manuals for the vehicle at issue and maybe you don't. Check to see if your employer subscribes to one of the independent, on-line vehicle information services. Some of these services cover proper vehicle lifting.

- The Vehicle Lifting Point Guide, published by Motor Information Systems for the Automotive Lift Institute (ALI) and furnished since 1997 by ALI member companies with all new, frame-engaging lifts. The Lifting Point Guide is developed from information obtained directly from the vehicle manufacturers and is available in paperback and CD-ROM.

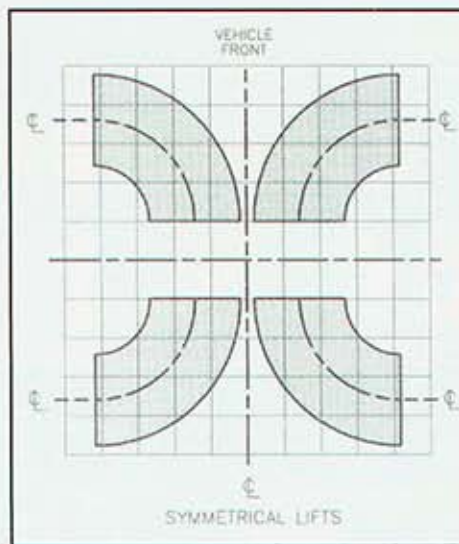


Vehicle Lifting Points: Whom Do You Trust?

Have you ever seen a vehicle slide off of a lift? It's not a pretty sight, especially if the service technician is under the falling vehicle. Don't be an accident statistic. Take enough time to examine the vehicle you're going to lift, so that it's safe to go under. Exercise your own independent discretion and judgment. Don't rely exclusively on these source materials without thinking for yourself.

Here are a few questions and tips you should always ask yourself when lifting a vehicle:

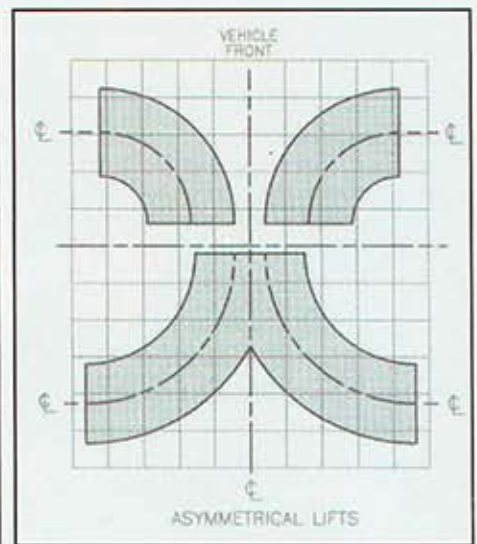
1. Think about the center of gravity for the specific vehicle you're working on. Are you lifting a short wheelbase roadster, a stretch limousine, or a plumbing truck?
2. Think about the contents of the vehicle you're working on in terms of balance. What's in the truck box? What's in the pickup with the camper cover? What's in the trunk of the family sedan? Could it be bags of concrete for a weekend project?
3. Think about the work you'll be doing and how it can shift the weight of the vehicle. Will you be removing heavy components from the vehicle? Should you use vehicle support stands to stabilize the lifted load?
4. Never assume the lift swing arm restraints will keep the arms from coming out from under the vehicle. If the adapters aren't placed on a flat, level surface, the horizontal force developed on the adapter pad can be greater than the vertical force applied to it. Swing arm restraints are only designed to resist 150 pounds of horizontal force.
5. Take the adapter design into consideration. Does your lift have flip-up adapters, screw-type adapters or stacking adapters? Are the adapter surfaces steel or rubber? Are there features on the adapters that would prevent lateral movement? Do you need to use extenders to prevent swing



arm contact with sills, rocker panels, pipes, dams, steps or running boards?

6. What about lifting on the spring hangers? The vehicle manufacturer says that's okay in some cases. If you place the adapter on the spring hanger, does the spring rest on part of the adapter pad? If the leaf spring is on the adapter, the vehicle can walk right off of the adapter if it is rocked up and down. After all, a spring is exactly that, a spring. It isn't a hard, flat, level surface. Further, how many spring hangers have you seen that are flat on the bottom where you'll be placing the adapter pad? Does this seem like a safe lift point to you?
7. Never use blocks (wood or other materials) between the adapters and the vehicle lift points, even if the vehicle manufacturer recommends them. The use of blocks can only lead to instability.
8. If the adapter pads on the lift won't reach the recommended vehicle lift points, use a different lift.

If you think about what you're doing and think several steps ahead, you'll be your own best safety advocate. There are some hard and fast rules that could help keep you safe if you follow them. For instance, in 1992, the Society of Automotive Engineers



(SAE) published a standard that recommended that automobile manufacturers identify the recommended vehicle lifting points by placing a triangular hole, boss or depression at each of the four lifting points. This standard has been in existence for 15 years, but only a handful of manufacturers have actually incorporated these lifting point identification marks. This is regrettable, but, even if the marks were in universal use, it wouldn't relieve you from using your own thought process.

So whom do you trust? Trust yourself to analyze each lift carefully. Think ahead and don't take printed safety materials at face value. Remember, you're the one who'll be under the raised vehicle, so trust your own instincts. A little time spent in lifting point selection can save your life.

Finally, before going under the vehicle, make one last check of all four adapters, to make sure they're engaged securely with the lift points you've selected.

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