**TECHNICALLY SPEAKING WITH TETA**

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# How Does Your Lift Hold Up?

*With the growing number of equipment lifts in our industry, comes the need to discuss safety in using these lifts as well as the need to consider periodic safety inspections. While these lifts make for a better way to inspect, repair, and maintain equipment, it is important that only trained personnel operate an equipment lift. If you do not know how to position or lift a piece of equipment properly,* ***do not operate the lift.***

*Every piece of equipment has a different center of gravity due to weight distribution, wheel base, three wheel or four wheel applications, and other factors.*

Before placing a piece of equipment on a lift it is necessary for the lift area to be free of grease, oil, tools, cords, hoses, trash, and other debris. Bystanders should not be in the lift area, nor should they be on the equipment when the lift is in use. These bystanders do not know the dangers or hazards associated with lifting equipment and may be injured. Do not lift equipment over the manufacturer's listed rated capacity. This rating is usually posted on the manufacturer's nameplate. If the nameplate is missing or unreadable, check with the manufacturer's representative.

Positioning the equipment properly before lifting is necessary in order to avoid accidents. Every piece of equipment has a different center of gravity due to weight distribution, wheel base, three wheel or four wheel applications, and other factors. In most applications the center of gravity is in line with the operator's seat. Position the center of gravity in accordance with the lift manufacturer's spotting devices. The lifting points of the equipment should not be damaged in any way. They should not be covered with grease, oil, or anything that can cause slippage. For the most part, most equipment lifts use a tray and forks that lift the equipment by the tires. Tires should be at the correct inflation before lifting.

Once the equipment is positioned correctly you are ready to lift it. Raise the lift until supports contact the equipment. At this point, you can visually check to see that the supports are securely contacting the equipment at the recommended position. Raise the equipment about a foot off the ground and inspect the lifting supports again. If the supports seem to be slipping, or do

*(continued on page 22)*

not contact a flat surface, or a lift arm has been incorrectly positioned, lower the lift carefully and start over. Once the load is secure, lift the unit to the desired height and recheck the lifting points. Be sure that the lift safety locks are engaged and working.

When removing a major component of the equipment, such as an engine, it is necessary to support the equipment with suitable jack stands of a rated capacity to hold the load stable and equalized. **Never try to lower the equipment onto the stands. Doing this disengages the lift's locking devices. If the lift is lowered too far or too quickly, the jack stands could move, causing the vehicle to fall.**

Before lowering the lift, be sure that all tool boxes, trays, jack stands, and other obstructions are removed from under the equipment. **Never override the instant stop controls on the lift. Always be at the lift controls while the lift is in motion.** When removing the equipment from the work bay, be sure to position lift arms and supports to allow for an unobstructed exit.

Lifts should be inspected on a daily basis and a record of the inspection kept in a log book. If at any time the lift malfunctions, **do not use it.** Qualified lift service personnel should make any repairs.

## Telescoping lift arms

Telescoping lift arms are mainly used on frame contact lifts. They are adjustable to accommodate various sizes and types of vehicles. To maintain the lift arms:

- Check the travel stops for wear
- Watch for stress cracks or breaks in the welds and castings
- Examine arms for any permanent distortion
- Lubricate swivel points
- Inspect all lift adaptors and extenders before using
- Replace damaged or worn parts with parts approved by the manufacturer

## Chains and cables

Chains and cables are used mainly on surface-mounted lifts as a means of synchronization. Here are some maintenance tips:

- Check chains and/or cables for unusual stretch and wear
- Lubricate chains and cables
- Inspect end connections for corrosion or fatigue, excessive wear, elongated holes, or deformity
- Check pulleys and sprockets for wear and damage. They must turn freely. Keep them lubricated.
- Examine coatings and sheaths on cables for wear
- Check for excessive slack in cable
- All damaged and worn parts should be replaced by parts approved by the manufacturer

## Surface mounted lift

Surface mounted lifts are normally anchored to the concrete floor. It is important to check the mounting hardware for tightness. Check the concrete for cracks or loose concrete around the mounting area. If any abnormalities are found, the lift should not be used until the problem is corrected.

For specific lift manufacturer's maintenance and inspection checklist see you owner's manual or contact the manufacturer for the information.