Forklift Jacking and Blocking Safety Talk

Servicing a forklift with wheels off the ground creates a high-consequence crushing hazard. Forklifts are heavy, have a shifting center of gravity, and can move unexpectedly. If lifting points are wrong, the floor is uneven, or supports are underrated, the forklift can shift or fall without warning, placing anyone nearby at serious risk of injury or death.

Safe jacking and blocking relies on three fundamentals: (1) control energy and movement, (2) lift only at approved points with rated equipment, and (3) support the load with redundant, stable blocking before any work begins under or near the chassis.

Pre-Job Setup

- Identify the task and hazards (tire change, brake work, steering repair) and restrict access to the work zone.
- Select the correct lifting method: jack for raising, stands/cribbing for supporting. Hydraulic jacks can drift or roll; they are not a primary support for work beneath a raised load.
- Confirm capacity and condition: verify jack and stand ratings exceed the forklift's axle or corner weight; inspect for bent frames, cracked welds, damaged pins/ratchets, leaks, and missing labels.
- Use the right surface: lift only on sound, level concrete or equivalent engineered surface; avoid soft asphalt, gravel, oily floors, and slopes.

Secure the Forklift Before Lifting

- Park on level ground, lower forks to the floor, place controls in neutral, set the parking brake, and shut the truck down.
- Chock/wedge wheels that will remain on the floor to prevent rolling.
- Apply lockout/tagout (or equivalent energy control) when servicing can be affected by unexpected start-up or stored energy release (electrical, hydraulic, mechanical)

Correct Jacking and Support Steps

1. Use manufacturer-approved lift/jacking points (frame/axle points designed for lifting). Never improvise on counterweights, guards, steering linkage, or mast components unless specifically designated. (Reference the truck's service manual for exact points.)
2. Center the jack saddle on the lift point; keep the jack vertical and aligned. Raise the forklift slowly, watching for shifting.

3. Place jack stands under structural support points and adjust to equal height. Stands must sit flat; avoid stacking makeshift shims.
4. Add blocking/cribbing as a secondary, redundant support where practical (e.g., hardwood cribbing built square and stable, or engineered cribbing systems).
5. Lower the forklift onto the stands/cribbing so the load is carried by the supports, not the jack. Keep the jack in light contact only as a backup when feasible.
6. Perform a stability check: apply a controlled, gentle push at the frame (no rocking). If movement occurs, re-set the supports.

During the Repair

- Keep body parts out from under an unsupported load; never place any part of the body under a forklift supported only by a jack. Fatal investigations repeatedly show collapses and roll-offs when blocking/chocking is missing or inadequate.
- Maintain guarding and safe work practices around rotating parts and pinch points during maintenance and testing.
- Use appropriate PPE for the task (safety footwear, eye protection, gloves; additional protection as needed for pressurized or chemical exposures).

Summary

Safe forklift maintenance requires controlling energy and movement, lifting only at manufacturer-approved points with rated jacks, and supporting the load with properly placed stands and stable blocking before any work begins. Emphasis was placed on integrating lockout/tagout, using level surfaces, verifying equipment capacity and condition, and preventing crushing hazards during tire changes and repairs.

Discussion points:

1. *What manufacturer-approved lift points are specified for the forklifts in use?*
2. *How is redundant blocking or cribbing verified before work begins?*