be set on a firm foundation and be exactly perpendicular to the load. To help prevent the jacks from slipping, a thin wood block between the top of the jack and the load is recommended. When the truck has been raised to the desired height, it should be supported by blocking or other permanent support

No work should be done near the fan or other moving parts until the motor has been stopped If the motor must be run in order for the repairman to inspect or check on moving parts, he must keep a safe distance and not attempt to make adjustments

Close-fitting clothing, safety shoes, and goggles are essential for repairmen

A particularly serious hazard in inflating tires is the possibility that the locking ring may blow off at high pressure Use of a tire safety rack will greatly reduce the hazard A locking ring must be seated properly and must not be yanked free by being twisted A defective locking ring or rim should be replaced with a sound one

Burns are frequent in the servicing of trucks An employee may remove the cap from a boiling radiator without allowing time for the liquid to cool and without taking the precaution to stand in the clear. Gasoline or radiator alcohol or ethylene glycol used near hot motors and spilled on them can cause a serious fire Suitable funnels and containers for handling fuel, water, and antifreeze should be provided

Tire operations

The principal hazards involved in tire operations are blowouts due to carelessness, which permit lock-rings, rims, or other fastenings to be hurled violently through the air, injuring persons and damaging property Other hazards are strains or hernias resulting from lifting heavy tire assemblies

Blowouts may occur because of overinflation of the tire, improper placement of the tire on the rim or wheel (causing pinching or chafing of the tire or tube), or improper mounting of lock-rings or rims Records show that most accidents in the handling of truck tires occur while tires are being inflated

Only employees thoroughly familiar with the hazards and safe methods involved in handling tire equipment should inspect, install, repair, and replace tires and rims

Mechanical lifting and moving devices should be provided so that workers are not required to lift heavy tires

Tires should be inflated in steel "cages" or similar devices which will restrain flying objects should a blowout occur

Rubber cement and flammable solvents used for patching inner tubes and casing compounds used for filling tire cuts should be kept in safety cans

Electric heating elements used for vulcanizing or branding tires should be inspected regularly Defective wiring should be replaced

Where power-driven rasps or scrapers are used for casings or inner tubes, the operators should be required to wear goggles (see Chapter 30, "Hand and Portable Power Tools") A local exhaust system should be applied to these machines to keep the finely divided rubber dust out of the workroom air This dust should be collected because deposits on floors or sidewalks are very slippery

Fire prevention

Since fire is a hazard in the operation of heavy-duty trucks, they should be equipped with fire extinguishers listed by the Underwriters' Laboratories for use on burning oil, gasoline, and grease. The extinguisher may be placed in a convenient location in the cab or on the running board, and the driver should be taught how to operate it Monthly inspection of fire fighting equipment is advisable

If cutting, burning, or welding *must* be done near fuel or oil tanks, an extinguisher should be at hand. Such work should not be done on a fuel tank or container until it has been drained and thoroughly purged of vapors.

Fueling requires certain precautions to avoid fires The motor should be stopped, and no smoking or use of open lights should be permitted A vapor-proof portable electric lantern or flashlight is provided by some companies When the tank is being filled, the metal spout of the hose should be held firmly against the tank

Fires occur in shops each year because gasoline and similar highly flammable solvents are used for cleaning parts Equally good cleaning liquids which are nonflam-