

TIRES AND RIMS

The truck tires should be inspected and tire pressure checked with an accurate pressure gauge before each working shift. Tire pressure will vary according to manufacturer and local working conditions. Consult the tire manufacturer for recommended tire pressure.

Insure valve caps are securely applied to valve stems. The caps protect valves from dirt build up and damage. **DO NOT** bleed air from tires which are hot due to operation; under such circumstances, it is normal for pressure to increase in the tire due to expansion.

A bent or damaged rim which does not support the bead properly may cause abnormal strain on the tire resulting in a malfunction. If a tire should become deeply cut, it should be removed and repaired. Neglected cuts cause many tire problems. Water, sand, grit, dirt and other foreign materials work into a tire through a cut eventually causing tread or ply separation.

Tires should be stored indoors, if possible. If stored outdoors, cover tires with tarpaulin to keep out dirt, water and other foreign materials. Long exposure to the sun will cause ozone cracks. Storage should be in a cool, dry, dark, draft free location. Tires should be stored vertically. If they must be laid on their sides for a short period, avoid distortion by stacking no more than three tires on top of one another. Avoid contact with oil, grease and other petroleum products.

Before storing used tires, clean thoroughly and inspect for damage. Repair as necessary. When a truck is placed in storage, it should be blocked to remove the weight from the deflated tires. If stored truck cannot be blocked, check air pressure and inspect tires twice a month for proper inflation pressure.

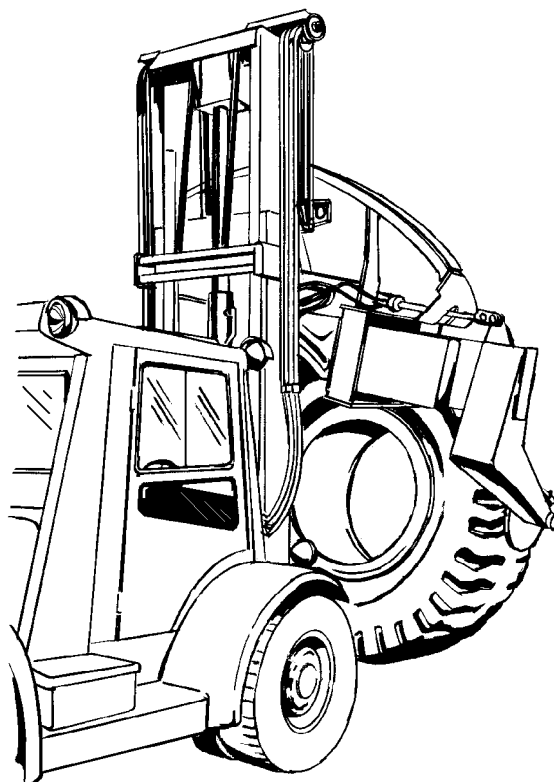
⚠ WARNING

- **DO NOT weld or apply heat on the rim assembly with the tire mounted on the rim. Resulting gases inside the tire may ignite causing explosion of tire and rim.**
- **When inflating tires ALWAYS use a safety cage.**
- **NEVER inflate a tire until the locking is securely in place.**
- **DO NOT stand in front of or over the lock ring during inflation procedures.**

⚠ WARNING

- **NEVER overinflate a tire. Refer to tire manufacturers recommendations.**
- **ALWAYS keep personnel away from a wheel and tire assembly when it is being removed or installed.**
- **DO NOT go near tires after brake fires until tires have cooled.**
- **The tire and rim weigh approximately 10,000 lbs. (4540 kg). BE CERTAIN tire handling equipment is capable of lifting and maneuvering the load.**

Manual tire removal and installation is possible but, due to the size and weight of the components, special handling equipment such as a "tire handler" as shown in Figure 2-1 is desirable. Consult local tire vendors for sources of equipment designed especially to remove, repair, and install large off-highway truck tires.



91573A

FIGURE 2-1. TYPICAL TIRE HANDLER

FRONT TIRES AND RIMS

Removal

1. Apply parking brake and block rear wheels.
2. Shut down the engine and allow at least 90 seconds for the accumulator to bleed down. Turn the steering wheel to be sure no pressure remains.
3. Place jack under spindle or under frame directly behind horseshollar structure.
4. Raise front end of truck until tire clears ground; block up securely under frame. Release air from tire by removing valve core.
5. Grasp tire assembly with the tire handler.

CAUTION

Care should be taken not to damage the inflation stem during tire removal.

6. Remove capscrews and washers (2, figure 2-2).
7. Move wheel and tire assembly away from wheel hub and into clean work area.

WARNING

Due to its size and weight, always keep personnel away from a wheel and tire assembly when it is being removed or installed.

8. Visually inspect all brake components for damage or wear. Inspect hydraulic brake lines for damage or leaking fittings.

Installation

NOTE: Remove all dirt and rust from mating parts before installing wheel assembly.

1. Grasp tire assembly with the tire handler and move into position on wheel hub (1, Figure 2-2). Install capscrews and washers (2). Alternately tighten each capscrew to **1050 ft. lbs. (1424 N.m)** torque.
2. Inflate tire to manufacturer's recommended pressure.
3. Operate truck for one load and retighten wheel capscrews as specified in Step 1. Check torque after each load until proper torque has been assured on each capscrew. Check intermittently to insure torque is maintained.

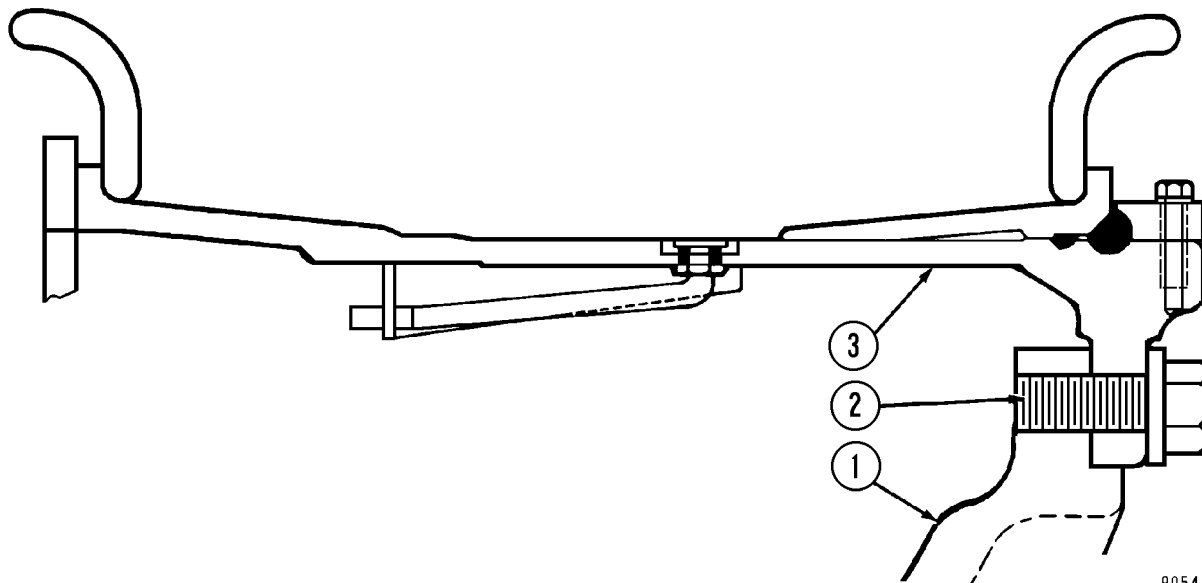


FIGURE 2-2. FRONT WHEEL AND TIRE

1. Wheel Hub

2. Capscrew & Washer

3. Tire & Rim Assembly

REAR TIRE AND RIM

Removal

1. Park truck on level ground and block front wheels. As a safety precaution, make sure steering accumulators have bled down completely. Place jack as close as possible to outside rim of rear drive case.
2. Raise rear section of truck until tires clear ground. Securely block up rear axle housing. Release tire air pressure by removing the tire valve cores.
3. Disconnect inner tire valve stem (2, Figure 2-3) and valve stem clamp. Remove valve extension.
4. Grasp the outer wheel and tire with the tire handler. Remove wheel capscrews and washers (3) securing outer rim to wheel hub (6).
5. Pull straight out on outer wheel and tire and remove.
6. If inner tire removal is necessary, remove capscrews and washers (3) and pull straight out to remove from wheel hub.
7. Grasp inner tire with tire handler and pull straight out to remove from wheel hub (6, Figure 2-3).

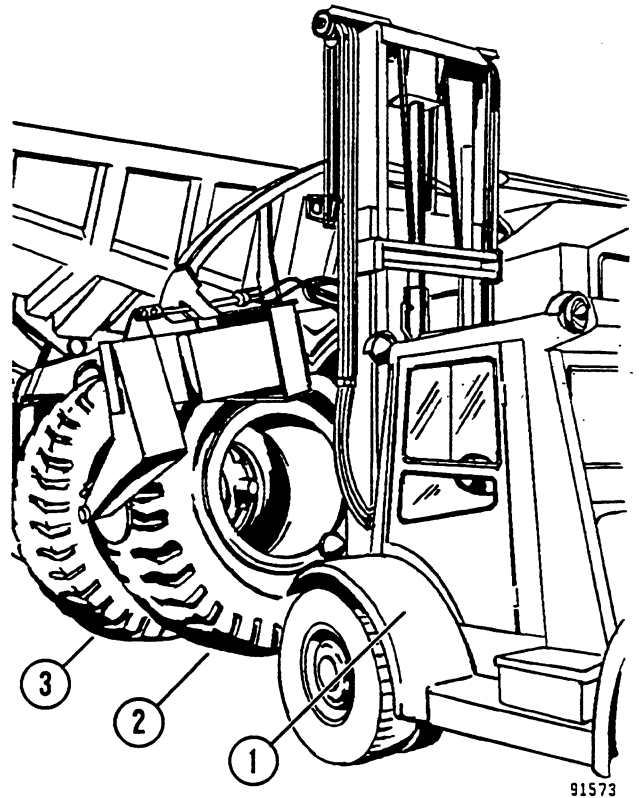


FIGURE 2-4. REAR TIRE REMOVAL

- | | |
|----------------------------|----------------------------|
| 1. Tire Handler | 3. Inner Rear Wheel & Tire |
| 2. Outer Rear Wheel & Tire | |

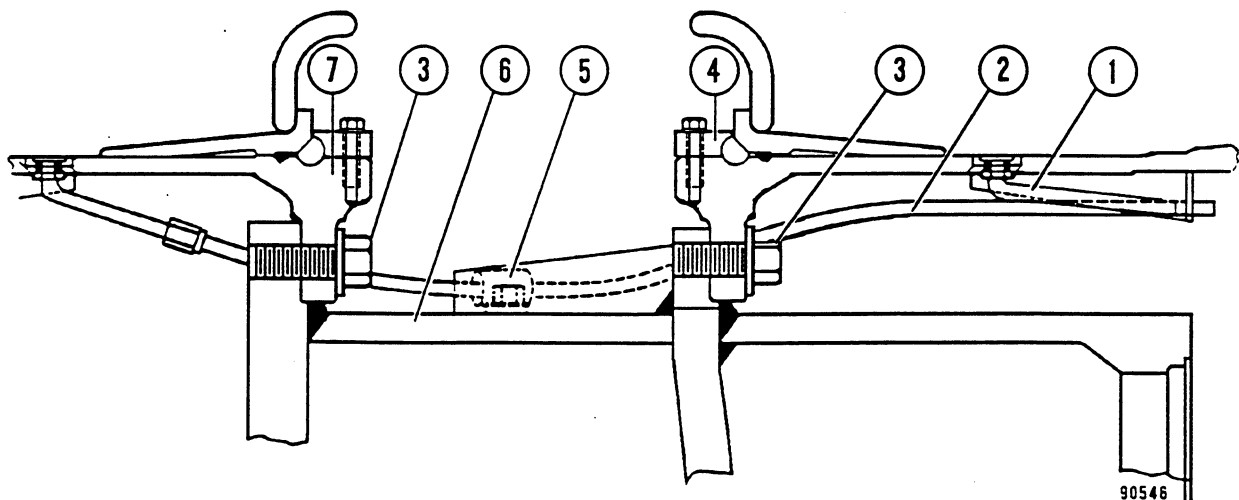


FIGURE 2-3. REAR WHEELS AND TIRES

- | | | |
|----------------------------|-------------------------|-------------------------|
| 1. Valve Stem (Outer Dual) | 4. Outer Dual Wheel Rim | 6. Wheel Hub |
| 2. Valve Stem (Inner Dual) | 5. Valve Stem Clamp | 7. Inner Dual Wheel Rim |
| 3. Capscrew & Washer | | |