

# Aircraft Tires, Tubes and Wheels

**Ask yourself these questions before working on a tire and wheel assembly.**

1. Have I read NAVAIR 04-10-506 Technical Manual for Aircraft Tires and Tubes, or NAVAIR 17-1-129, Support Equipment Tire and Wheel Assemblies, as applicable?
2. Have I read the Maintenance Instruction Manual for this particular assembly?
3. Have I read NAVAIR 17-1-123 Technical Manual for Operating and Maintaining the Tire Inflator Assembly?
4. Have I performed the pre-use inspection of the inflator-assembly kit in accordance with NAVAIR 17-600-174-6-1?
5. Do I understand the hazards of high-pressure gases?
6. Do I understand the procedures for inflating and deflating tires?
7. Am I fully qualified for the task in accordance with current directives?

## Precautions for Inflation

- Inflate unmounted tires only in a tire cage.
- Do not inflate mounted tires until the axle nut is secured against the wheel bearings.
- High-pressure sources must be equipped with valves that limit pressure to 150 percent above maximum tire-inflation pressure or 600 psi, whichever is less.
- Do not modify hose couplings or valve-stem adapters, and do not substitute adapter-valve cores.
- Handle remote-control inflator gauges gently.
- Use only the correct remote-inflator gauge after ensuring it has been calibrated within the last 12 months in accordance with the latest calibration directives. **Note: Do not adjust relief-valve setting.**
- Clear the tire-inflation area of loose objects within a 20-ft. radius.
- Clear the area of unneeded personnel (refer to NAVAIR 17-1-123, work package 03, page 10 for danger areas).
- Never set the regulator higher than 600 psi.
- Ensure all inflation-hose couplings are connected tightly.
- Stand as far away as the inflator hose will permit (10 ft.) in a line fore or aft of the wheel.
- Open the source valve slowly. Inflate tire in 10-psi increments to desired pressure—do not over-inflate. If over-inflation occurs, open bleeder valve on inflation gauge to release pressure. Allow tire pressure to stabilize a few minutes before disconnecting hose at valve stem.
- Replace valve cap on valve stem.

**Note: Use water-pumped nitrogen to inflate tires.**

**Dry, oil-free air should be used only when nitrogen is not available.**



## Deflation, Removal and Disassembly

Before removing a wheel and tire assembly from an aircraft, completely deflate the tire with an approved tire-deflator tool. When deflated, remove the valve core and install a “deflated-tire flag” in accordance with NAVAIR 04-10-506. Break the tire beads before removing any wheel bolts.