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 (IETMS) 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 11 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.