Backup (Forge) Air Compressor

> **This air compressor has been modified** - a brass tee was installed between the tank and the check valve to allow it to act as a buffer tank for the forge's power hammer.

- Model: Central Pneumatic 61489, 2HP
- Capacity: 29 gal
- Pump oil: 11.4oz of SAE 40 is required
- Factory set points: on at 120PSI, off at 150PSI
- Manual: central_pneumatic_61489.pdf

Switching to the backup compressor

> This guide assumes that the semi-annual maintenance on the compressor has been performed. If it's been more than a year between servicing, it's recommended to do those maintenance steps before using the compressor as a backup.

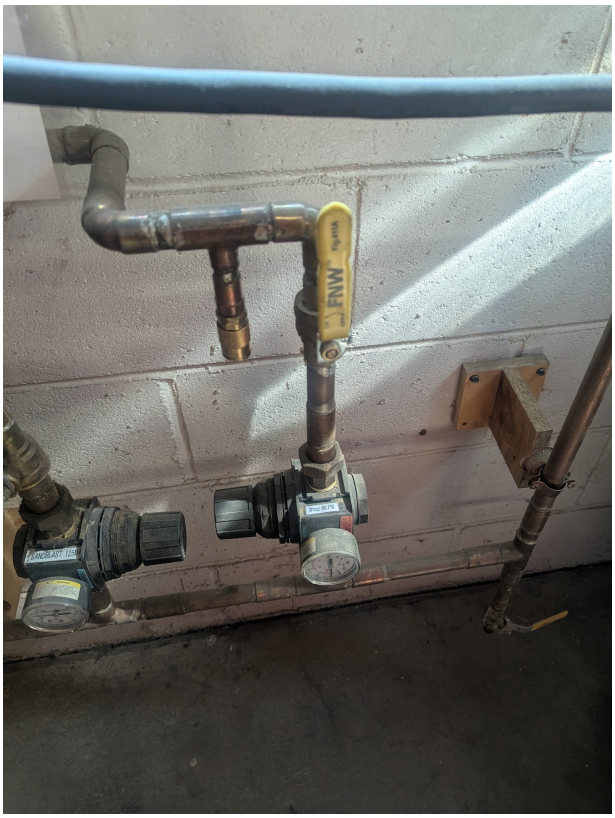
> These steps have never been performed. Read these instructions fully and very carefully think about missing steps before proceeding. Document everything you learn.

1. Check oil

Before running the compressor, check the sight glass to make sure there's oil in the compressor. Only the middle circle around the red dot shows the oil level - NOT the rest of the hexagonal clear plug. If you can't get a clear read, have someone (carefully) tilt the compressor forwards and then back again and see if the level moves. If you still can't get a clear read, drain and refill the oil tank as per the semi-annual maintenance instructions.

2. Switch valves

As of 2026-07-09, the black air compressor is downstream of the "Shop 80 PSI" line from the main compressor. The regulator is not made for back-flow, and must be isolated by turning the ball valve immediately downstream of it.



> Speculative note assuming we've added a push connect fitting upstream of the isolation valve by the FORGE air compressor:
>
> The forge compressor swings by 30 PSI when in operation, so it's best to use a push-connect-to-push-connect hose from the compressor's "normal" regulated outlet into the push connector on the copper line. This way, we can smooth out the pressure swings and deliver consistent pressure to tools.

3. Set expectations

The backup compressor is less powerful significantly further away from the majority of shop tools. It may take longer to replenish air, and as a result some tools (e.g. the sandblaster) will under-perform compared to when the main air compressor is online.

Be sure to announce this (email + Discord) and post a notice at the front desk.

Returning to normal (default off)

1. Turn the compressor off, and make sure to reattach any lockout systems used on the black compressor so that it cannot accidentally be plugged in while the other compressor is running.
2. Carefully undo all valve changes from above, in reverse order. The final state should be:
    1. Forge air compressor OFF
    2. Forge air compressor's "normal" regulated outlet is walked all the way out and no hose is connected

3. Ball valve of the forge compressor's copper line is OPEN
4. Ball valve just downstream of the "Shop 80 PSI" regulator is OPEN
5. Yellow air compressor is ON

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