



Fundamentals of Working Safely with Compressed Gas: Attaching the Regulator

The regulator in cylinders should be inspected before laboratory use.

Remove the cylinder cap and ensure the cylinder valve is closed by checking for odors, visible plumes, and hissing sounds.

Check the regulator threads for damage and any grease, oil, or dust.

Close the regulator outlet flow valve by rotating the valve in a clockwise direction.

Close the regulator control valve by rotating it in a counterclockwise direction.

Screw the regulator into the cylinder valve by hand until finger tight. If the regulator is not threading, do not force it. A poor fit may indicate that the regulator is not intended for use on the gas chosen. Please note: inlet valves for flammable gases are turned counterclockwise to tighten. Inlet valves for nonflammable gases are turned clockwise to tighten.

Tighten the connection firmly using a spanner or fixed wrench. If the gas is flammable, use a spark-proof wrench. Do not use pliers, and never use oil or grease on the regulator threads for oxygen regulators.

Check with your regulator manufacturer or supplier before using jointing tape, like Teflon, to ensure a leakproof seal at the connections.

Link to video job aid: <https://reach.cdc.gov/jobaid/fundamentals-handling-compressed-gas-cylinders-safely-attaching-regulator>