

To order Pilot Assemblies, specify complete designation.  
Example: 4014-3-AT Gas Boosted Pilot Set

### Parts List

Part Name	4014-1-T	4014-2-T	4014-3-AT	4014-3-BT	4014-4-T
Pilot Tip	4-5242-1	4-3587-1	OA4-1602-1	OA4-1602-2	OA4-2517-2
Raw Gas Tube	OA4-2510-1	OA4-2488-1	OA4-2487-1	OA4-2947-1	OA4-2518-1
Mixer Gas Cartridge	4-6062-1	4-6062-2	4-6062-3	4-6062-4	4-6062-4
Boost Gas Valve w/Internal Flow Adj.	1808-01	1808-01	1808-01	-	-
Boost Gas Ball Valve	-	-	-	1821B-01	1821B-01
Boost Gas Limiting Orifice Valve	-	-	-	1807-01	1807-01
Igniter (standard 10mm)	R240-2465	R240-2465	R240-2465	R240-2465	R240-2465

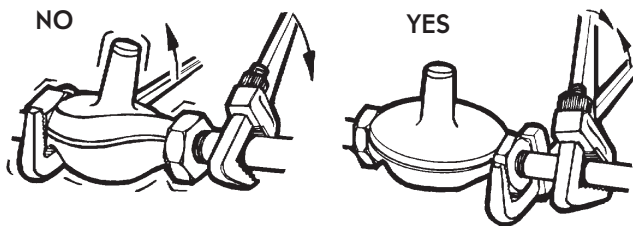
### PILOT INSTALLATION TIPS

Most combustion system pressures are 2 psi or less. Often the pressures are a small fraction of a pound. Pressure gauges made for low pressures are sensitive to rough handling. When servicing combustion equipment we recommend using a water or digital manometer for pressure measurement. Flames often are not easily visible when sealed-in nozzles are used. Consider using a 8666 Testip to facilitate setting desired air/fuel mixture.

- To make it easier to remove a threaded pilot tip from the burner in the future. Use anti-seize compound on threaded discharges and screw hand tight into the burner mounting.

- The preferred location for pilot tips (and UV cells) is on the top or side of a burner so that scale, dirt, and refractory crumbs cannot fall into it.

- Avoid stressing and distorting valves and regulators, small pilot regulators may be easily damaged by incorrect use of wrenches. Put your wrench on the end nearest the pipe that it's being threaded into.

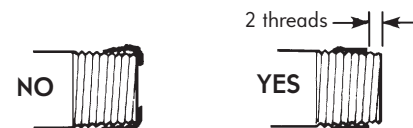


- If the pilot regulator inlet gas pressure exceeds its pressure rating, install a pressure-reducing regulator upstream. 7344 Regulators reduce up to 10 psi gas to 4-12" w.c. For capacities or inlet pressures beyond the range of 7344 Regulators, see Bulletin 7337. Use a separate pilot regulator. Do not run pilot gas through any of the regulators for main burner gas because those regulators cannot turn down low enough for pilot gas flow, and will therefore chatter or shut-off.

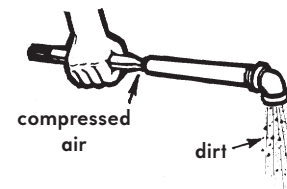
The inlet pressure to the pilot gas pilot ratio regulator should be set at least 2 psi greater than the connected pilot air pressure + the pressure drop through the regulator.

- A filter on the combustion air blower inlet will help prevent plugging the small openings in the pilot system with dirt and debris.

- Avoid thread dope or Teflon tape applied over the ends of pipe thread, it can break loose and plug pilot tips.



- Always blow out each fitting and section of pipe before and after installing it, (but don't put pressure on regulators and solenoid).



- Short run impulse lines for pilot systems should be 1/4" thin wall tubing. 304 stainless tube 1/4" OD x .035" wall is a good choice. Copper tubing can also be used, but is more susceptible to kinking.

For additional information see:

Bulletin 4011/4021: 4011 Pilot Sets/4021 Pilot Tips  
HBS 289: Prevent "Pooped" Pilots