



UNIVERSAL SILENCER

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Installation, Operation and Maintenance Instructions for U2, U5 and SU Series Silencers

Description

The U2 and U5 series are straight-through absorptive silencers. The SU series is an annular flow path absorptive silencer with the premium grade SU5 providing a blocked line-of-sight. These silencers provide varying degrees of noise reduction and are most appropriate in fan, blower, compressor and turbine applications where their high frequency insertion loss will be most effective. The standard unit in these series is designed for applications where the temperature does not exceed 325 °F, the pressure does not exceed 15 psig and/or vacuum does not exceed 15"Hg. There are no moving parts in the operation of these silencer units.

Receiving Inspection

- Upon receipt of the unit, check the nameplate against the packing list to verify the correct part numbers are received.
- Keep the shipping container to protect the unit until installation.
- Prior to unpacking, check for damage.
- Advise Universal Silencer of shipping damage within three days.

Storage

- Leave any cardboard boxing, plywood covering, crating, and/or plastic covering intact until ready to install.
- Be sure that all openings are closed so that no debris, vermin, rain, snow and/or ice can get into unit.
- Store unit on blocks, a minimum of 4" high so that air can freely circulate around unit.
- Do not store in contact with the ground or in a wet or flooded area.

- Indoor ambient temperature storage is preferable, especially for these units which have internal absorptive material. If this is not possible, keep the unit covered and protected from the weather.
- Clean unit prior to installation. Remove any minor corrosion and refinish per paint manufacturer's recommendations. If major corrosion has occurred such that the integrity of the unit is in question, contact Universal Silencer.

Mounting and alignment

- Insure that the necessary equipment to install the unit, including anchor and/or support bolts, flange bolts, saddles and expansion joints, are available before beginning installation.
 - Anchor and/or support bolting and grouting is not included with the unit.
 - Align the unit with the piping or ducting connections.
- + **IMPORTANT:** The unit is not designed to serve as a support for any piping, additional mounting pads or additional loads on the inlet or outlet other than those stated in the Universal Silencer drawing or product bulletin.
- Mount the unit securely to the foundation, adjacent piping and/or appropriate hangers.
 - Use thread lubricant on all bolted joints.
 - Use all gaskets provided with the unit.
 - If you replace or add bolts or gaskets, use the same size and material as the originals.
 - Ensure that the unit is firmly mounted immediately prior to startup of the equipment, and again 24 hours after startup to verify that supports and/or flange bolts have not vibrated loose.

Inspection and maintenance

- Components are either complete weldments or permanently assembled having no replaceable parts.
- Spare parts are not required.
- Periodically inspect exterior paint finish for damage or deterioration. **NOTE:** Minor localized damage may be touched up using touch-up paint. Areas with extensive damage or deterioration may require spot blasting and recoating. Consult paint manufacturer's recommendations.
- Examine connecting flanges and support/ anchor bolting at least annually. Retighten loose nuts as required.

Safety Issues

- **CAUTION** - All personnel working near high-temperature components during operation and cool down period should use care to prevent injury due to contact with high temperature surfaces.
- If performing any work internal to the silencer or adjacent components, ensure that all confined space requirements are met and that all tools and other materials are removed once work is completed.