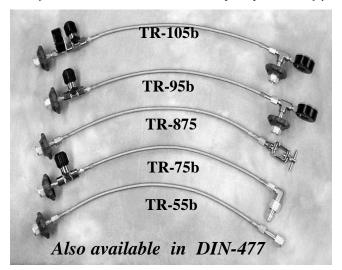
Mountain High E&S Co.

With our line of transfillers and adapters you can refill your cylinder without making expensive trips back to an airport or compressed gas facility. Rent a large oxygen cylinder and do your own refills in a fraction of the time and cost. Our transfillers have micro-particle filters at the inlets & outlets to help keep dirt out of your oxygen system to meet or exceed SAE, CGA and DOT specs.



Our transfiller line-up Custom lengths available

The **TR-95b** is an economical transfilling system for soaring and flying clubs where many cylinders are serviced frequently. Both connecting ends have "O" ring seals for a positive air-tight fit by hand to brass or chrome plated fittings. By providing a pressure gauge, you will always be aware of how much oxygen remains in your master (rental) cylinder. The **TR-95b** utilizes a master transfer valve to control the flow of oxygen into the cylinder being filled. A separate bleed valve allows you to bleed only the fittings and change cylinder after cylinder with almost no loss of valuable oxygen. In a typical transfilling system you must bleed the entire service line and fittings after each cylinder refill. We also have a dual-gauge version of the **TR-95b** called the **TR-105b**. It has an additional gauge at the slave cylinder side so that you can precheck cylinders without a gauge that you are about to fill. Also, the gauge is great for monitoring the transfill process.

The **TR-75b** is our most popular personal transfiller. Like the TR-95b it is equipped with "O" ring seals on both ends for a positive and air-tight fit by hand. A handy bleed valve is included to relieve the pressure in the system so that the fittings can be easily removed from the cylinder without damage to the "O" ring seals.

The **TR-875** allows you to transfill between equipment that has a CGA-870 (medical) fitting and a standard CGA-540 fitting. This allows all connections to be made air-tight by hand without tools.

The **TR-55b** is our entry level transfiller unit. One side has a CGA-540 nut & nipple with an "O" ring seal, while the other end is equipped with a hand grip and bare nipple. This allows you to slowly and safely bleed the line so the fittings can be easily removed from the cylinders.

The **TA-870-Y** is an adapter that converts a medical CGA-870 valved cylinder into the industrial standard CGA-540 outlet. The TA-870-Y adapter allows one to use CGA-540 regulators and accessories with CGA-870 medical-style cylinders.

You can Save yourself a lot of money by filling your own cylinder. What you will find at many FBOs is an oxygen-cart with a group of large oxygen cylinders cascaded together with a high-pressure hose-line system. This cart is pulled out to an aircraft if it has a built-in system. It is with a system such as this that an FBO will

fill your cylinder, portable or built-in. If you are going to use oxygen on a frequent basis, you can rent/lease the same cylinders, place them in a safe place in your hanger, cascade them together with our CIC kits, use one of our transfiller units and have your own mini oxygen service station.



Contrary to a common and published myth, there are no different grades of oxygen being produced or contained in cylinders maintained under DOT regulations. By the very nature of the state-of-the-art, process in which oxygen is produced, it will be better than 99.99% pure. In other words, it all originally comes from the same spout no matter what the purpose. In addition, oxygen for medical use does not have any more moisture than oxygen for any other purposes, nor is it added. Furthermore, because of the chemical nature

of oxygen it must be as pure and dry as possible if stored under pressure or else the cylinder and equipment may be damaged, or worse, personal injury or death may occur. Therefore, a hygiene protocol is necessary in order to prevent oxygen from being contaminated or to help keep contaminated oxygen from being used. This, perhaps, is why many believe there are different grades of oxygen.



CIC Cylinder Intercoupler Kit

If you do not have a transfilling system and are not able to have your 'AVO/ABO' filled at an FBO, but rather by a compressed gas agency or other facility, be sure to inform them that your oxygen cylinder is for 'Aviator's breathing oxygen'. Otherwise, they may

assume it is for medical purposes and you may be in for a great deal of inconvenience or denied service altogether. As far as the FDA is concerned any oxygen cylinder not marked as 'AVO or ABO' will be considered a drug and has to be held, dispensed and used under strict FDA protocols and



AVO / ABO: SPEC. NO. MIL-O-27210

cannot be lawfully used for any other purpose. A medical prescription is not needed for oxygen if it is for 'AVO', (but is for medical purposes) The FDA or FAA does not regulate oxygen for 'AVO / ABO' purposes. Don't fall victim to unnecessary FDA protocols!

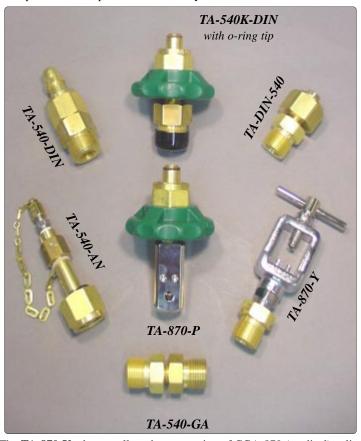
With our line of transfillers and adapters you can refill your cylinder without making expensive trips back to an airport or compressed gas facility. Rent a large oxygen cylinder and do your own refills in a fraction of the time and cost. Our transfillers have micro-particle filters at the inlets & outlets to help keep dirt out of your oxygen system to meet or exceed SAE, CGA and DOT specs.

Our compressed gas transfill adapters

With our line of oxygen-fitting adapters and transfilling-adapters you will have the confidence to connect, service and refill almost any type of oxygen cylinder for aviation. Our oxygen transfilling adapter fittings allow you to connect between the CGA-540, CGA-870 (medical) and the German DIN-477 (Euro-norm) regime. Product names with CGA-**540** and **DIN**-477 parts reflect oxygen flow direction. The TA-540-DIN flows from left to right.

The TA-540-DIN has a CGA-540-N to DIN-477-S hardware scheme. It is a useful adapter that allows the connection of DIN-477 devices to CGA-540 cylinders or devices. This adapter is also available in an 'easy-grip / handgrip' version called the TA-540K-DIN.

The TA-DIN-540 is a reversed version of the TA-540-DIN. It allows the connection of CGA-540 equipment to a DIN-477 cylinder. Or simply put, it adapts the service port of a DIN-477 cylinder to CGA-540.



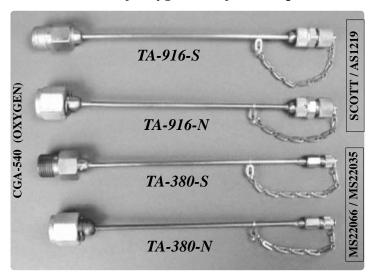
The TA-870-Y adapters allow the connection of CGA-870 (medical) cylinders & devices to connect to CGA-540 cylinders and devices. The TA-870-**P** unit does the reverse of the TA-870-Y.

Sometimes an FBO can't, quickly or easily adapt to the standard CGA-540 regime. Therefore, the TA-540-AN adapts a CGA-540 cylinder to the MS22035/66 regime. This allows one to refill a CGA-540 cylinder with what is commonly found at an FBO oxygen transfilling station.

The TA-540-GA is simply a CGA-540 to CGA-540 union. It is useful for connecting any of our transfilling devices to a CGA-540 extension line or any other adapter that expects the typical CGA-540-N (nipple) fitting.

Custom adapters can be made-to-order, call for details.

Our aircraft oxygen transfiller adapters



The industry standard for oxygen fittings are called 'CGA-540' Compressed Gas Association, Arlington Va., fitting No. 540. Aircraft do not usually use these heavy-weight fittings, instead special lighter-weight fill fittings have been developed. We have transfiller fittings for these, so that you can easily refill your built-in system from standard CGA-540 oxygen systems. The adapters shown above are for the aircraft fillers.

There are two types of aircraft oxygen filler fittings found in most GA aircraft. The earliest and most common versions are known as the MS22066 & MS22035. They are a 3/8-24 threaded fitting with a small valve-core or poppet-valve for a check-valve that opens during transfilling. The other is larger, 9/16-18 threads, commonly known as the SCOTT, Airline or AS1046 fitting.



AS1046 (9/16-18)

The TA-380-S & -N are for the MS22066 & MS22035 filler ports. The TA-916-S & -N are for the 9/16-18 'SCOTT' fittings. The -N is for nipple and

the -S for 'SOCKET' on the CGA-540 ends. This nomenclature is used because the term Male/Female was constantly being confused with CGA fittings. Micro-particle filters are installed on the 540 ends and an O-ring is on the 540 nipple for an air-tight fit by hand.



MS22066 (3/8-24)

