

Compressor Use Policy

Aim

The aim of this policy is to ensure all members who use the club’s compressor understand the requirements.

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1 Revision

This policy is to be maintained and reviewed by the AUSC Committee.

2 Application

This policy applies to all members who intend in using the club's compressor.

3 Induction

All members requiring to operate the club compressor must undergo an induction by a competent person.

A register is to be kept, which is responsible by the AUSC Equipment Officer.

4 Use

Any club member is able to use the compressor provide they are familiar with the safe operation of the compressor and filling panel. Instruction in using the compressor can be sought from any other club member who is comfortable with the safe use of the compressor.

The following are rules to ensure the compressor is used safely:

- Always follow safe operating procedures outlined in club procedures;
- Do not use the compressor unless fully confident you are able to use it safely;
- Do not fill a cylinder if you are not able to identify an up to date test stamp, cylinder working pressure and burst disk;
- Always wear appropriate protective equipment when operating the compressor (eye and ear protection); and
- Never leave tanks filling unattended.

Members shall not in any way assist in the obtaining of air fills for individuals who are not properly certified.

5 Instructions

Refer Appendix A and Appendix B for procedures for use.

6 Document control

Revision (Date)	Person	Comments
0 (13/10/2015)	Author: David Warren Reviewed: Committee (via Meeting 13/10/2015) Approved: David Warren	Document released to club membership. Note: Split section from training chapter. Incorporated SOP 9 <i>Operation for Tank Refill Compressors</i> (developed by Tim Brown) within policy.

Appendix A Procedures for start up / shut down

The following is to occur when the club's compressors are operated:

A.1 Start Up

1. Check compressor hours in log book and on hour meter and ensure filters, oil change and servicing is up to date.
2. Check oil level.
3. Check fuel on petrol compressor.
4. Always check test stamp on cylinder to be filled.
5. Operate the compressor and fill tanks in accordance documented procedures.

A.2 Shut down

1. Operate the compressor and fill tanks in accordance documented procedures.
2. Record hours in log book.
3. Notify equipment officer if filters or service is due.

Appendix B Procedures for operation

AUSC Compressor Training & Procedure for Use v1.22

Layout

- Banks – these stay open at all time
- Compressor air intake – ensure it is in a well-ventilated position
- DIN / Yoke Adaptor on whip – ensure whip fitting is matched to tank valve type

Fill Panel

- Representation of air flow, valves ('Filling Isolator', 'Compressor Isolator' and Bank valves)
- Gauges – rely on panel gauges, not tank connector (whip) gauges

Safety

- Hearing protection is to be worn in compressor shed when compressor running (Tip: check earmuffs)
- **Do not start filling tanks and walk away due to risk of overfill and consequent injury or death**
- Don't overfill tanks - maximum tank working pressure and ambient temperature
- Valves fingertip tight only (ie use only fingertips to open and close valves on panel)
- Compressor to be off when a source of carbon monoxide is nearby (eg boat engine)
- Tank inspection – test date within last 12 months, damage, excessive rust, cracks

Compressor

- Start and Stop buttons – note that compressor may not start for a while after an over-pressure shut-down
- Cut-out at 275bar (you can leave the compressor to fill banks, but not if a scuba tank is attached)
- Do not start compressor unless there is somewhere for the air to go (ie to banks or tanks)
- Check filter hours (refer whiteboard and logbook). **Don't start compressor if filter is out of date.**
- Do not attempt to change filters or adjust compressor unless you have been specifically trained

Start Up (Start filling tanks from the lower pressure bank and then top up tanks from the higher pressure bank)

- Identify which bank has lower pressure
- 2- Open Tank valve briefly to expel any water or material that might be in the valve
- 3 - Yoke or DIN tank valve adaptor – attach not too tight
- 4 - Close bleed valve - lightly
- 5 - Check that the Compressor Isolator valve is fully open (far right on fill panel)
- Check the two Bank valves are closed (fill panel)
- Open Tank valve (on tank)
- Open fully the Filling Isolator valve (bottom left on fill panel)
- Start compressor (compressor is now filling tank)
- Open lower pressure Bank valve (fill panel) slowly and watch tank pressure needle move (on panel, not tank connector gauges) [*Exception if tank pressure greater than bank pressure*]
- 11 - Observe when bank pressure and tank pressure have equalised, if this occurs:
 - Close lower pressure Bank valve (panel) and slowly open higher pressure Bank valve (panel)
- If bank pressure and tank pressure equalise before tank pressure reaches **232bar**:
 - Close Bank valve (panel) (compressor is now filling the tank) and fully open Filling Isolator valve (panel) if not already so
 - Fill tanks from compressor until **232bar**
 - Close Filling Isolator valve (panel) while opening the lower pressure Bank valve (panel) (compressor is now filling the lower pressure bank)
- If tank pressure reaches **232bar** before bank/tank equalisation:
 - Close Filling Isolator valve (panel) (compressor is now filling the open bank)
 - Close higher pressure Bank valve (panel) while opening the lower pressure Bank valve (panel) (compressor is now filling the lower pressure bank)

Change Tanks

- Close Tank valve (tank)
- Open connector bleed valve (just until the air releases)
- Disconnect tank connectors
- Apply tape around tank valve; leave a small tab of tape that the user can easily grab
- Repeat steps 2, 3 and 4 of Start Up, and open Tank valve (on tank)
- Open Filling Isolator valve (panel) slowly to commence filling because the Bank valve (panel) is fully open
- Go to Step 11

If no tanks are being filled, change banks so compressor is filling higher pressure bank.