SEGA amusements international

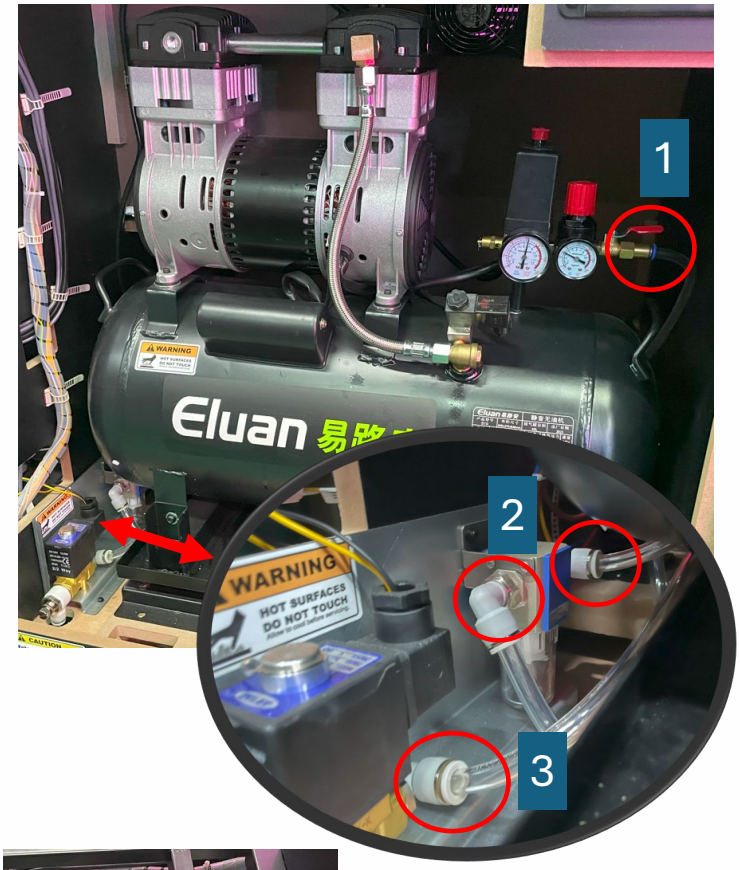
Compressor and air system maintenance

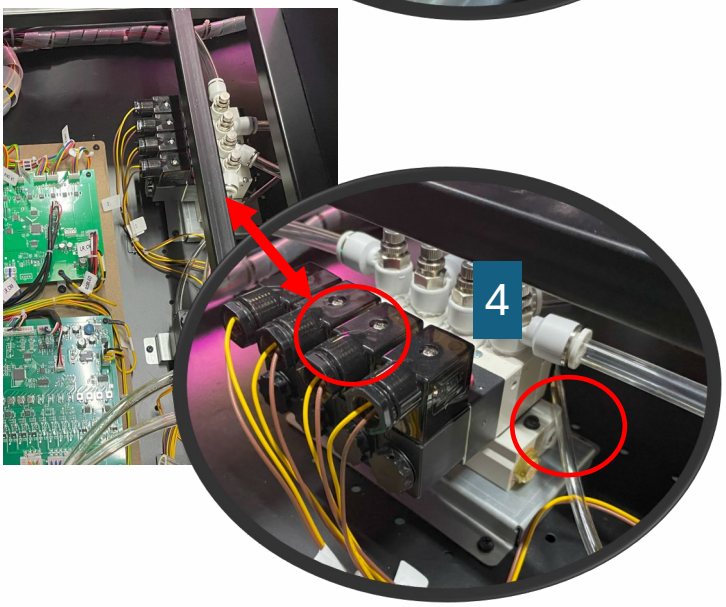
Air-driven motion games require periodic maintenance of the compressor and overall air system to ensure reliable performance. This guide outlines the recommended procedures to help keep your game operating in optimal (A1) condition.

Note: The compressor and associated components in your specific unit may vary in design and layout. While configurations may differ, the instructions provided here serve as a general maintenance reference.

Air connections:
Check the inlet and outlet pipes to ensure they are all secure and show no signs of damage or wear.

Position	Name
1	Outlet valve
2	Gas Source unit (Input and output connections)
3	Drain valve input
4	Input and Output control valves



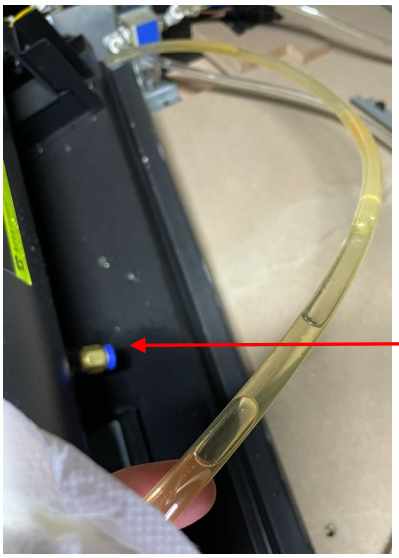


IMPORTANT

It is also prudent to check that there is no water in the output tubes between the compressor, gas source and control valves.

NOTE: Only the drain valve pipe should contain water residue.

Drain valve
Check proper operation of the drain valve.



- Remove the 2x 13mm hex fixings from the compressor plate and pull the compressor out and turn it 90 degrees to access the back.

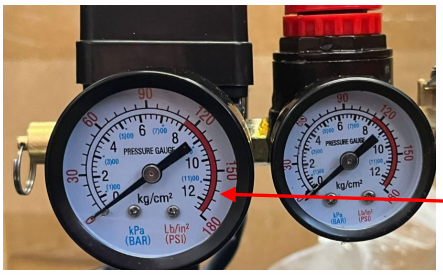
- Check the pipe is connected securely into the drain plug at the base of the compressor and at the drain valve to the left of the compressor.

- The drain valve should have a 12v supply and will be hot under normal operation.
- When the power is turned off to the game, the drain valve should open, and air should expel from the valve into the water tray below.
- When the game is turned ON, this valve will also open for Approx. 5 seconds to clear any residue from the tank.

- There is an adjustment to the valve that can attenuate the output pressure of the air from the compressor tank to the output tray.
- To increase the output pressure, loosen the locking nut, and turn the screw adjustment counter-clockwise until the desired pressure is set. Now close the locking nut so it is secure.

NOTE:
Only the drain valve should contain water residue.

If the compressor expels a lot of water into the tray, or the tube seems to have more corroded water than normal, you may have to remove the compressor and drain the tank manually by removing the plug in the base and tipping the compressor on its side.



Warning: Before removing the compressor, ALWAYS ensure the tank is empty of air by checking the regulated pressure gauge.

Compressor pressure:
It is paramount to correct operation and safety that the regulated tank and output pressures are correct.

- Power on the game and the compressor tank should charge to the regulated pressure of Approx 700kPa (7 BAR)

WARNING: If it goes past this and into the red then turn game OFF immediately and seek advice from Sega.

- The output pressure can be attenuated but should be around 300kPa (3-4 BAR) and no more than 500kPa (5 BAR)
- Use the Red dial on top of the gauge to increase and decrease the pressure noting the +/- markings.

- Ensure the stop valve works correctly.

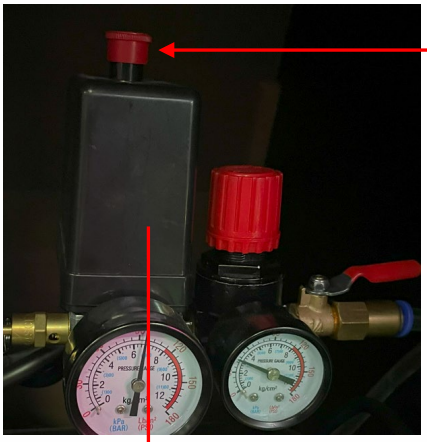
❑ Perpendicular to the outlet and pipe = Closed
❑ In line with outlet and pipe = Open (Normal operation).

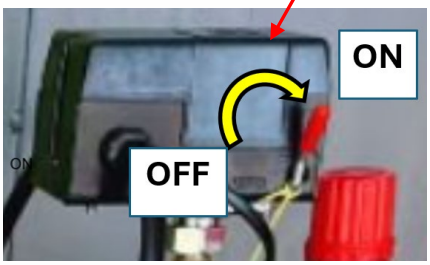
To check this, turn the lever from the open position to closed and remove the outlet pipe from the coupling. Open the lever and check that air expels correctly from the compressor.

Electrical checks

Compressors generate a lot of current which translates to heat, plus the motor will get hot, so regular checks of electrical connections and mechanical integrity is of upmost importance to safety and prolonged operation.

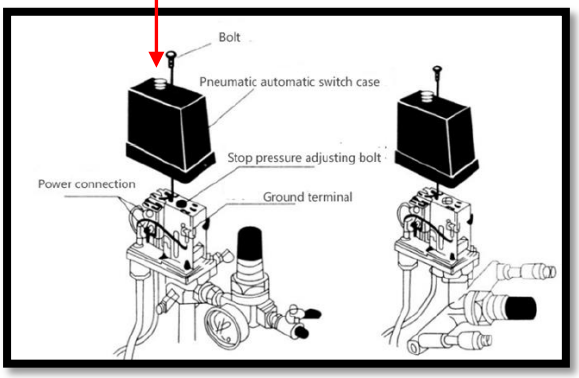
- Check that the ON/OFF manual pressure switch operates correctly. Pull up for **ON** / Push down for **OFF**
  - **NOTE**: Your game may have a lever type, so actuate the level (Up/Down) to control this.





Power OFF the compressor:

- Remove the screw in the top and lift off the lid to access the internal area of the pressure switch.
- Check that all terminals are tight using a crosshead screwdriver.



Final checks

- Check the compressor motor casing for any cracks or wear
- Check there is no abnormal vibrations when the compressor is running
- Check that all connections between the motor and compressor housing are secure and not lose.
- Check all other bolts around the compressor.

If you have any concerns on the content of this guide, or have any other questions, please contact your local distributor for advice.