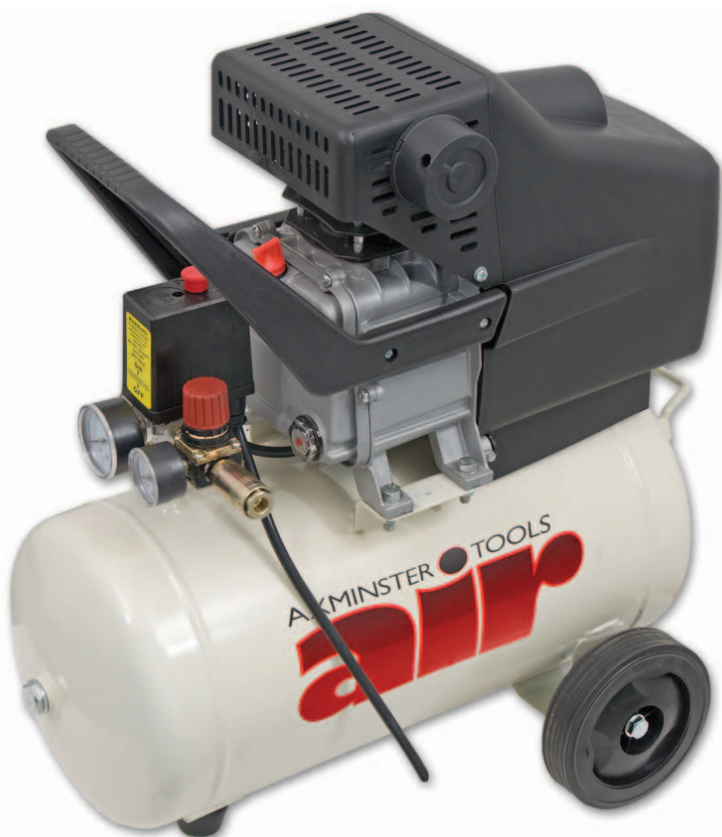


# AWC20HP Air Compressor



# Index of Contents

	Page
Index of Contents	02
Declaration of Conformity	02
What's Included	03
Safety Precautions	03
Specifications (AWC20HP Air Compressor)	04
Assembly Instructions	04-05
Illustration and Parts Description of Air Compressor	05-06-07
Operating Instruction	08
Maintenance	09
Parts Breakdown	10
Parts List	11
Trouble Shooting	12

## Declaration of Conformity

### Copied from CE Certificate

The undersigned, authorised by Matthias Grzam

Manufactured by Qingdao D&D Electromechanical Technologies Co., Ltd. 23rd FL., D&D Fortune Center No. 182-6 Haier Road Qingdao, Shandong 266000 P.R. China.

manufactured by Qingdao D&D Electromechanical Technologies Co., Ltd. is in compliance with the standards determined in the following Council Directive

**EN 55014-1: 2006**  
**EN 61000-3-2: 2006**  
**EN 61000-3-3: 2008**  
**EN 55014-2: 1997 +A1+A2**

### Model number

**RAC2024A** Air Compressor



## Warning

The symbols below advise that you follow the correct safety procedures when using this machine.



Fully read manual and safety instructions before use



Ear protection should be worn



Eye protection should be worn



Dust mask should be worn



**HAZARD**  
Motor gets hot

Quantity	Item		Model Number
1 off:	Air Compressor	1 off M8 Spring Washer (D)	RAC2024A
1 off	Bottle of oil	2 off M8 nuts (E)	
2 off	Wheels (A)	1 off Filter Assembly (F)	
1 off	M8x50mm Bolt (B)	1 off Oil Filler Plug (G)	
3 off	M8 Washers (C)	1 off Instruction Manual	

Safety Precautions

Good Working Practices/Safety

The following suggestions will enable you to observe good working practices, keep yourself and fellow workers safe and maintain your tools and equipment in good working order.



**WARNING!! KEEP TOOLS AND EQUIPMENT OUT OF THE REACH OF YOUNG CHILDREN**

Air Powered Tools

1. Always perform pre-operation checks before starting up the compressor.

2. Never leave inflammable objects or materials near to the compressor.

3. Always check oil level before using the compressor.

4. The cylinder, cylinder head and delivery pipe become hot during use. Do not touch these items while the compressor is running. Allow to cool thoroughly after shut-down before handling.

5. Do not operate above the maximum working pressure of 115 psi (7.8 bar).

6. Avoid using the compressor with an extension cable; this may reduce the supply voltage and make the motor overheat.

7. Switch the compressor on and off by using the pressure switch knob (Fig 3); only switch off at the mains in case of emergency.

8. Drain water from tank every day.

9. If the compressor shuts down through overload or overheating check the reason for the shut-down
- before re-starting.

10. Do not adjust the tank pressure switch without reference to Axminster Power Tool Service Department.

11. Do not remove parts from the compressor whilst it is running.

12. Do not operate the compressor with protective covers removed or damaged.

13. When spray painting always work in a well ventilated area and never close to open flames.

14. Never direct a jet of compressed air towards people or animals. Keep children and animals away from the compressor.

15. Do not use on an inclined surface.

16. Only use in ambient temperatures between –40°C and +70°C.

17. Only operate on 230 volt supply and with maximum fuse rating of 13 amps.

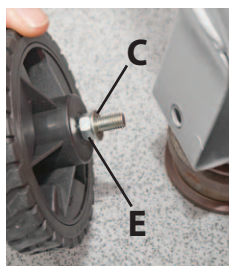
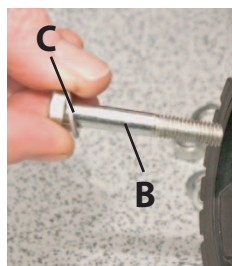
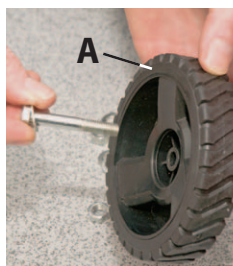
## Specification (AWC20HP Air Compressor)

Code	951816
Rating	Hobby
Power	1.4kW (230V)
Free Air Delivered	@ 40psi-5.0cfm, @ 90psi-4.0cfm
Max Pressure	115psi
Noise Level	94dB
Receiver Volume	24 litres
Oil Capacity	300ml
Supply Requirements	10 Amps
Overall L x W x H	570 x 300 x 590mm
Weight	22kg

### Assembly Instructions

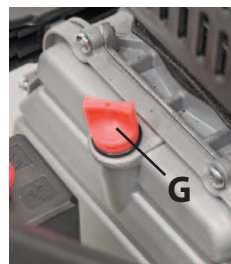
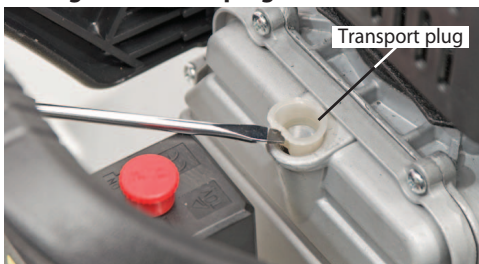
Remove the compressor from the packaging and check for damage or missing parts. Report any problems to Axminster Power Tool Centre's Customer Services Department. Fit the wheels, (see instructions below).

#### Fitting the wheels



Remove the plastic transport plug from the crankcase and fill with good quality compressor oil, (see our catalogue) until the level is in line with the circle marked on the oil level indicator. (See page 05) Locate the oil filler plug (G) and screw it into the crankcase.

#### Fitting the oil filler plug



Use two 16mm spanners to tighten the assembly

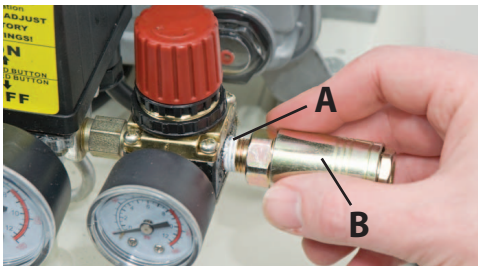
#### Fitting the air filter assembly

Remove the plastic transport plug from the cylinder head, locate the air filter assembly (F) and screw it into the cylinder head. (DO NOT OVERTIGHTEN)



## Fitting the quick release coupling

Wrap some PTFE tape (A) around the thread on the 1/4" BSP male coupling (B) and screw it into the pressure regulator outlet, lightly tighten using a spanner. **(DO NOT OVERTIGHTEN)** The compressor is now ready for use.



## Illustration and Parts Description of Air Compressor

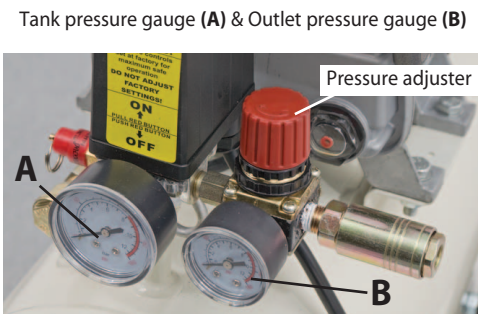
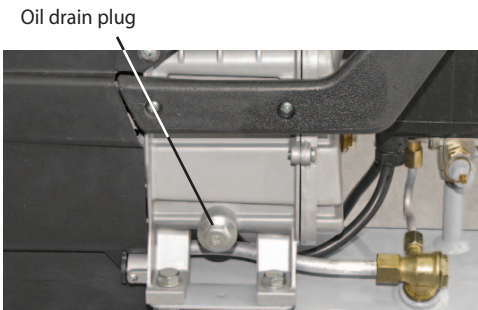
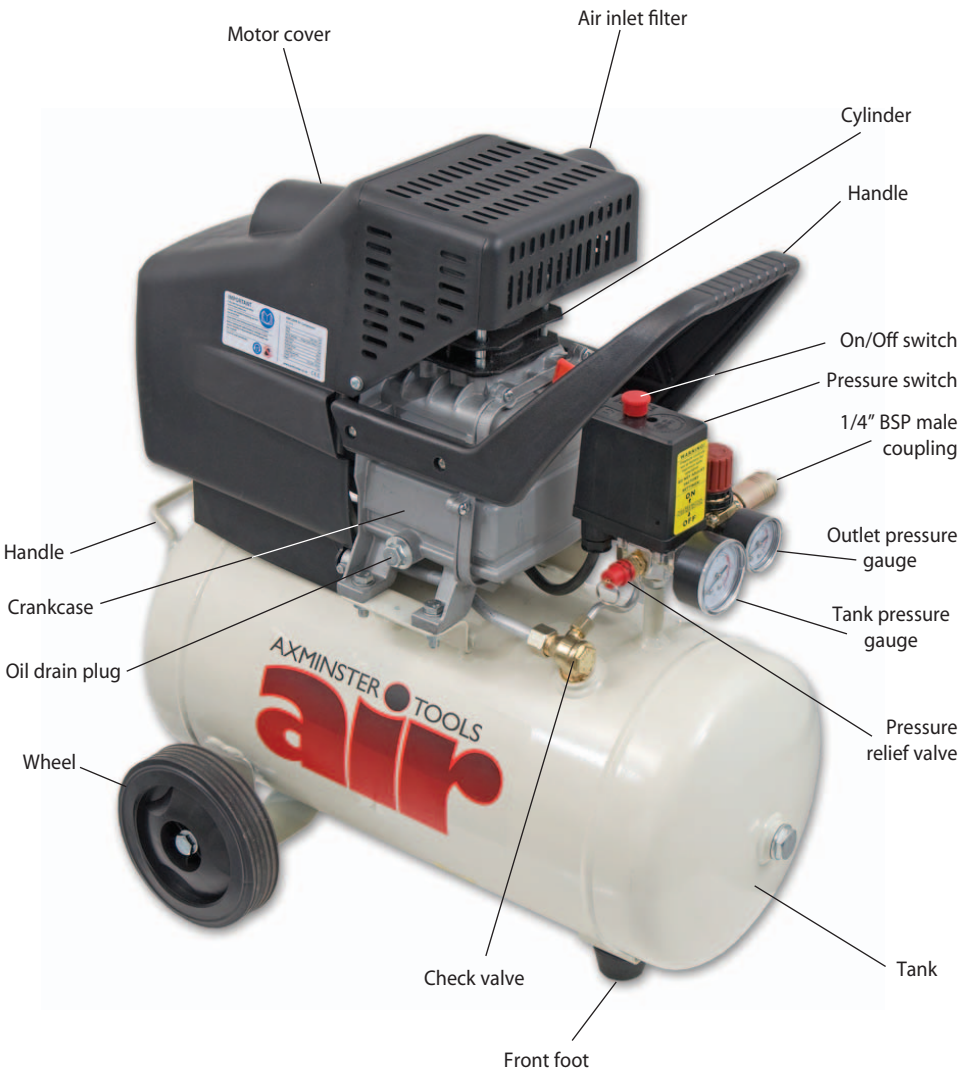




Fig 1



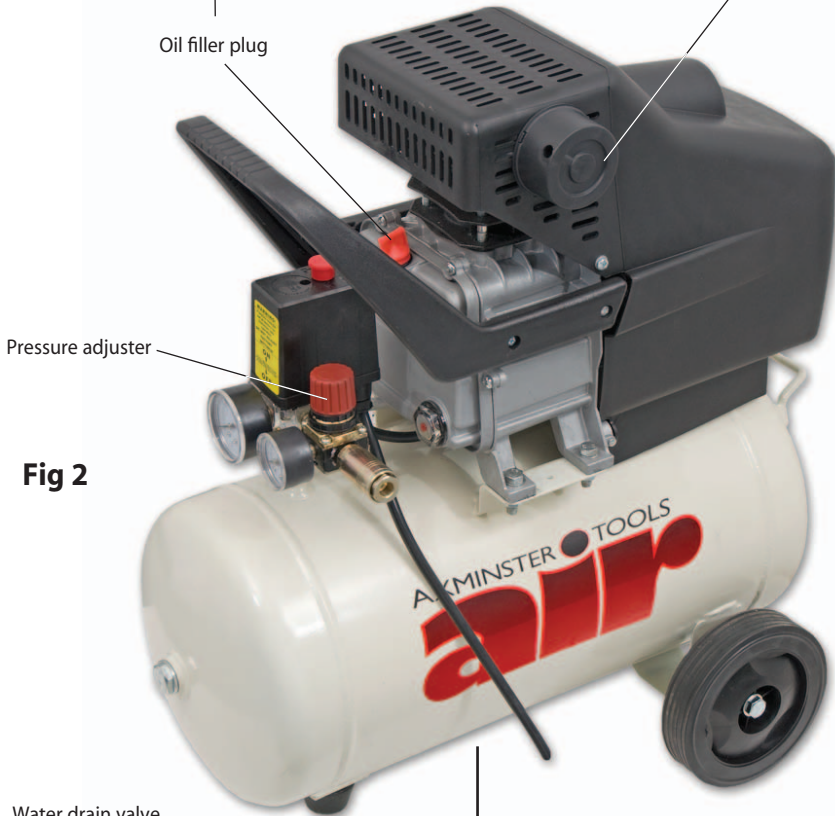
## Illustration and Parts Description of Air Compressor



Oil filler plug

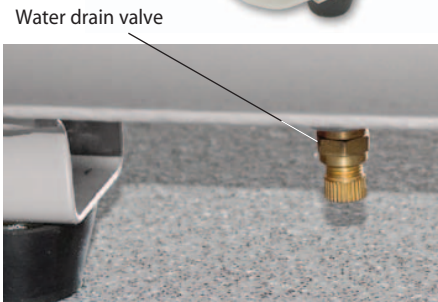


Filter



Pressure adjuster

**Fig 2**



Water drain valve

## Operating Instructions

The outlet air pressure can be regulated by rotating the regulator knob clockwise to increase the pressure and anticlockwise to reduce it. Do not leave the regulator set at maximum setting unnecessarily; reduce the setting by about two turns after finishing and then re-set to the required pressure when starting work again.

Connect the compressor to the mains supply and switch on by pulling the on/off knob upwards. (See figs 3-4) Check that the compressor pressurises the tank and shuts off when the maximum tank pressure is reached.

The compressor is automatic in operation; the pressure switch shuts the motor off when the maximum tank pressure is reached and re-starts it when the pressure

drops below a pre-set level. The cut-in and cut-out pressures are factory set and should not need to be altered.

**NOTE: It is advisable to fully drain the air from the tank if the compressor is left unused overnight, this will prevent the build-up of water in the tank.**

**Do not use dirty or non detergent oil.**

**Do not operate compressor in an ambient temperature above 40°C.**

**Do not operate in a badly ventilated area.**

**Keep the air filter clean.**

**Fig 3**



**Pull up for (ON)**

**Fig 4**



**Push down for (OFF)**



### Daily:

Drain water from tank. (See fig 5)

### Weekly:

Check oil level and top-up if necessary. (See fig 6)

### Monthly:

Un-clip and remove the air inlet filter outer casing and clean the filter element with the following: (See fig 7)

(a) Compressed air

(b) Wash in soapy water and left to dry.

**Do not** use the compressor without the air filter fitted.

### Six Monthly:

Change the oil. With the oil still warm remove the oil

filler plug, place a suitable container under the drain plug and drain the oil right out. (See fig 8) Replace drain plug and refill to the level mark on the sight glass.

### Yearly:

(a) Replace the air filter element.

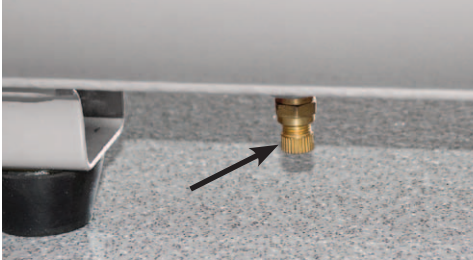
(b) Check and clean the air intake and delivery valves.

(c) Check the non return - valve and replace the seal between the crankcase and cover if necessary.

When components are removed for servicing, take the opportunity to fit new seals.

**Note: (b) and (c)** should be undertaken by a competent service engineer.

**Fig 5**



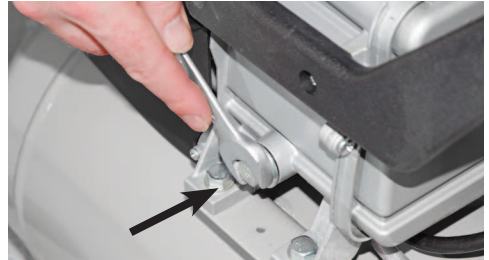
**Fig 6**

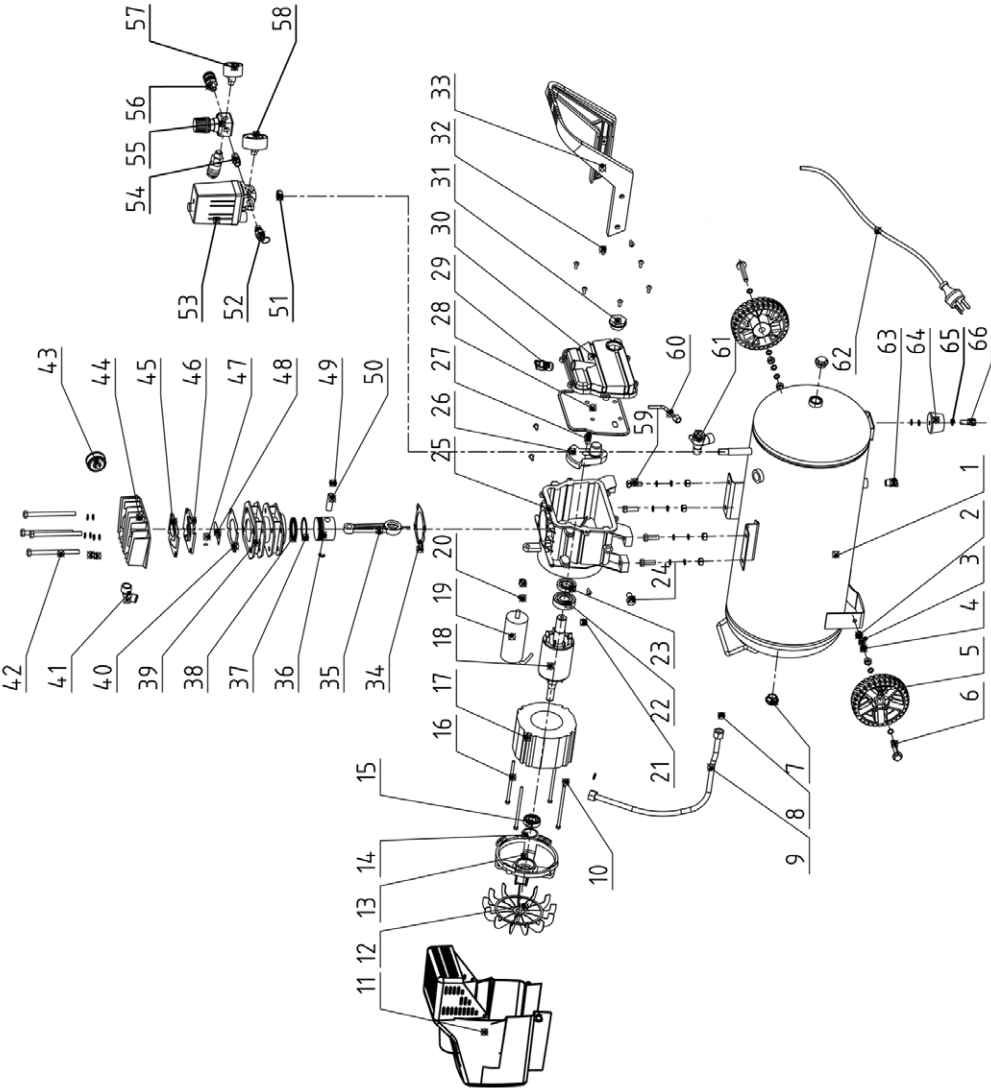


**Fig 7**



**Fig 8**





Item	Description in English	Qty
1	Tank assembly	1
2	Hex nut	8
3	Spring washer	7
4	Plate washer	15
5	Wheel	2
6	Hexagon headed bolt	2
7	Block	2
8	Seal washer	2
9	Delivery pipe assembly	1
10	Spring washer	4
11	Cowl	1
12	Fan	1
13	Rear motor cover	1
14	Washer	1
15	Bearing	1
16	Hexagon headed bolt	4
17	Stator assembly	1
18	Rator assembly	1
19	Capacitor	1
20	Washer	1
21	Screw	2
22	Bearing	1
23	Washer	1
24	Hexagon flange bolt	1
25	Crankcase	1
26	Crank	1
27	hexagon socket cap screw	1
28	Crankcase cover gasket	1
29	Breath pipe assy	1
30	Crankcase cover	1
31	Oil leveler	1
32	Screw	6
33	Handle	1

34	Cylinder gaset	2
35	Connecting rod	1
36	Piston	1
37	Oil clean ring	1
38	Seal ring	2
39	Cylinder	1
40	Valve plate gasket	1
41	Right-angle connector	1
42	Bolt	4
43	Air filter assembly	1
44	Cylinder cover	1
45	Cylinder cover gasket	1
46	Valve plate	1
47	Limit pin	2
48	Air intake valve	1
49	Ring	2
50	Piston pin	1
51	Nut	1
52	Safe valve assembly	1
53	Pressure switch assy	1
54	Connector	1
55	Regulated valve assy	1
56	Quick release adaptor	2
57	Gauge	1
58	Gauge (bigger)	1
59	Bolt	4
60	Starter valve	1
61	Non-return valve	1
62	Cord and plug	1
63	Drain valve assembly	1
64	Rubber foot	1
65	Plate washer	1
66	Hexagon bolt	1

# Trouble Shooting

PROBLEM	CAUSE	REMEDIAL ACTION
Tank pressure drops.	Leakage at connections or joints.	Set the compressor to maximum pressure. Switch off and brush a soapy water solution onto all connections and joints. Look for bubbles. Tighten connections or joints where leakage is visible.
The pressure switch valve leaks when the compressor is stopped	Non-return valve seal dirty or defective	Release any air in tank. Remove non-return valve seal. If necessary, replace the seal. Re-assemble
The compressor stops and will not start again	Bad electrical connections	Check the connections. Clean and tighten as necessary
	Current over-load protector or over-heat protector has activated.	Press the reset button on the current over-load and wait for a minute. The motor will run when it has cooled
	Motor winding burnt out	Contact Axminster Tool Centre
	Compressor head gasket blown or valve broken	Wait for compressor to cool down. Disassemble the head and replace any broken components. Carefully clean all sealing surfaces before re-assembling
The compressor does not reach the set pressure and overheats	Crank bearing failure	Stop the compressor and contact Axminster Tool Centre
The compressor is noisy. Repetitive metallic clanking	Pressure switch failure	Stop the compressor quickly. Release any air in tank and replace the pressure switch