

**User's Manual** **m7**  
**QA-143/143L**  
**AIR DIE GRINDER**

**Read this manual carefully before installing, operating, servicing or repairing.**

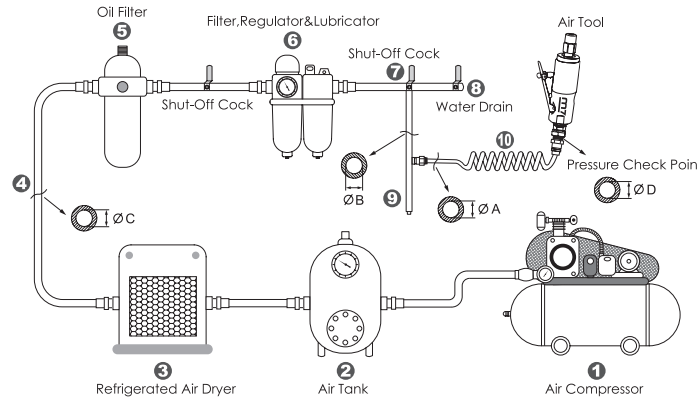
**Working environment:**

- Using these tools in any potentially explosive environment is strictly prohibited.
- It is always recommended that these types of tools must be operated when standing on a solid or firm location.
- Always use these tools in a well ventilated area.
- Slipping, stumbling and falling are the major causes of potential serious injury, therefore, a clean and clutter free surface in the working area before operating the tools is strongly recommended.

**Air supply and connection requirements:**

- The maximum recommended air pressure during operation must not exceed 90 psi (6.3bar). Higher air pressure may create unsafe operating conditions for the tool and the user.
- The compressed air should be cooled and have a water filter installed at the outlet end of the compressor. Even with a water filter installed, some water may still condense in the piping or hose and will enter the tool mechanism causing premature damage to the tool. Therefore, it is recommended to install an air filter-lubricator device somewhere between the tool and the compressor.
- Always use an air compressor of the proper capacity to operate each tool.
- Clean the hose with a blast of compressed air before connecting the hose to the air tool. This will prevent both moisture and dust inside the hose from entering the tool and causing possible rust or malfunction.

**Ideal system connection:**



**Piping diameters and length requirement:**

- ★The diameter  $\Phi A$  required for the inlet pipe (10) is recommended on the specification table.
- ★The diameter  $\Phi B$  required for the branch pipe (from 7 to 9) should be 2 times as large as  $\Phi A$ .  $\Phi B = 2 \times \Phi A$
- ★The diameter  $\Phi C$  required for the primary air supply (from 1 to 3) should be 3 times as large as  $\Phi A$ .  $\Phi C = 3 \times \Phi A$
- ★The length for the inlet pipe (10) should be less than 15 feet (4.5m).

**Warning:**

- This tool should only be used as a hand operated tool. It is powered by compressed air and is not insulated against electric shock.
- This tool is specially designed for tightening or loosening bolts or nuts. Any application or use of this tool other than what it is designed for is strictly prohibited.
- Use only pneumatic impact sockets and accessories on this tool. Never use hand sockets or accessories.
- High sound levels may cause hearing damage. Always wear hearing protection when operating this tool.
- Wearing eye/face protection can reduce the danger of high-speed socket being ejected from the tool, due to improper socket insertion during operation.
- User must wear proper clothing. Loose clothing, long hair, stings, straps, belts and jewelry should not be worn when operating this tool.
- Before using these tools, make sure that all couplings and plugs are securely mounted. Air hoses which are under pressure will cause a whipping action when disconnecting, this can lead to serious injury!
- Make certain to stand on a solid or firm location and keep body in well-balanced position while operating this tool.
- Test run the tool to confirm the rotation direction before practical use. This will reduce the potential hazard due to unexpected rotating direction.
- In case of tool insert failure, always keep hands away from rotating socket to reduce the risk of being injured, especially when working in confined spaces.
- Always turn off the air supply and disconnect the air hose before changing socket or making adjustments on the tool.
- Release the throttle trigger to avoid danger if there is a failure of energy supply and when connecting or disconnecting the air hose.
- Prolonged use will cause user fatigue. Periodic breaks are recommended for user safety.
- It is recommended to stop operating the tool whenever the user experiences discomfort, tingling or pain during use.
- Beware if the compressed air hose breaks unexpectedly, or is being connected or disconnected improperly. This whipping action may cause injury.
- Always use caution when operating this tool to prevent injury.
- Avoid storing this tool where it is subject to high humidity.



**EC DECLARATION OF CONFORMITY**

Original Language  
 Serial Number: Air Die Grinders  
 Item No.: QA-143 QA-143L  
 6.3 bar (90. psi)

We declare under our own responsibility that the above machinery fulfils all the relevant provisions of (MD) Machinery Directive 2006/42/EC and its amendment and is manufactured and tested according to the following standards:  
 EN ISO 11148-9 / EN ISO 15744 / EN ISO 28927-12

Declared in: Taichung, Taiwan  
 Dated: 2013/06/01

Signature

*Jonney Chen*

Jonney Chen  
 Declared by: QA Manager

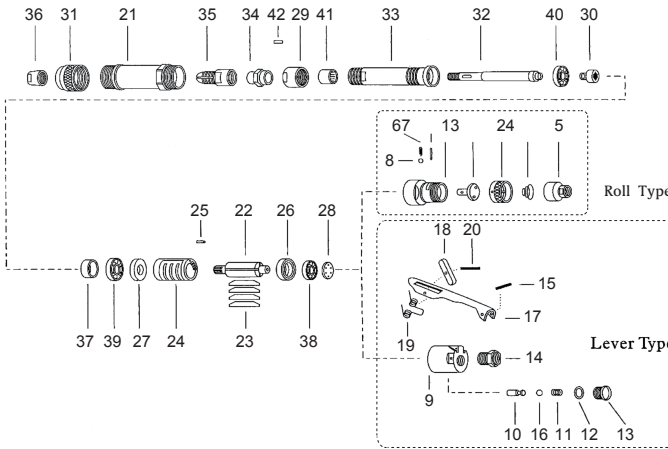


Manufacturer:  
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**Air Die Grinder**  
 Item No : QA-143 / QA-143L



Item No.	Collet Size	Free Speed	Avg. Air Consumption	Air Pressure	Overall Length	Motor	Net Weight	Air Hose	Sound Pressure	Vibration level
	mm(Inch)	R.P.M	CFM	PSI	mm	hp	kg	Inch	EN ISO 15744	m/s²
QA-143	6	24000	14	90	296	0.4	0.9	3/8"	75.0	2.5
QA-143L	6	24000	14	90	296	0.4	0.9	3/8"	75.0	2.5

Uncertainty K=0.5a if a ≤ 5 m/s² or K=0.4a if a > 5 m/s²

**Part List QA-143 / QA-143L**

NO.	PART NO.	DESCRIPTION	Q'TY	NO.	PART NO.	DESCRIPTION	Q'TY
1	QA-143P01	Housing Cover	1	22	QA-143P22	Rotor	1
2	QA-143P02	Throttle Valve Handle	1	23	QA-143T23	Rotor Blade (4 pcs)	1 SET
3	QA-143P03	Throttle Valve	1	24	QA-143P24	Cylinder	1
4	QA-143P04	Throttle Valve Spring	1	25	QA-143P25	spring pin	1
5A	QA-143P05A	Throttle Valve Cover(PT)	1	26	QA-143P26	Cylinder Upper Plate	1
5B	QA-143P05B	Throttle Valve Cover(NPT)	1	27	QA-143P27	Cylinder Lower Plate	1
6	QA-143P06	Knock Spring	1	28	QA-143P28	Bearing Cover	1
7	QA-143P07	Needle Roller	1	29	QA-143P29	Spindle Bearing Cover	1
8	QA-143P08	Ball	1	30	QA-143P30	Coupling	1
9	QA-143LP09	Throttle Valve Body	1	31	QA-143P31	Exhaust Cover	1
10	QA-143LP10	Throttle Valve Rod	1	32	QA-143P32	Wheel spindle	1
11	QA-143LP11	Throttle Valve Spring	1SET	33	QA-143P33	Wheel spindle Case	1
12	QA-143LP12	T.V. Cover Packing	1	34	QA-143P34	Chuck Collar	1
13	QA-143LP13	Throttle Valve Cover	1	35	QA-143P35	Collet	1
14	QA-143LP14	Inlet Bushing	1	36	QA-143P36	Collet Nut	1
15	QA-143LP15	Spring Pin	1	37	QA-143P37	Ring	1
16	QA-143LP16	O Ring	1	38	QA-143P38	Ball Bearing 606	1
17	QA-143LP17	Throttle Valve Lever	1	39	QA-143P39	Ball Bearing 6000	1
18	QA-143LP18	Lock Key	1	40	QA-143P40	Ball Bearing E13	1
19	QA-143LP19	Lock Spring	1	41	QA-143P41	Needle Bearing 1015	1
20	QA-143LP20	Spring Pin	1	42	QA-143P42	Key	1
21	QA-143P21	Housing	1				