

DR Series

Air Compressors Instruction & Maintenance Manual

Thank you and congratulations on your purchase of the **SUPER SILENT** air compressor, the leader in the industry of portable silent air compressors.

This is a quality-built, highly efficient compressor, which, if properly used and maintained, will perform to your full satisfaction for many years to come.

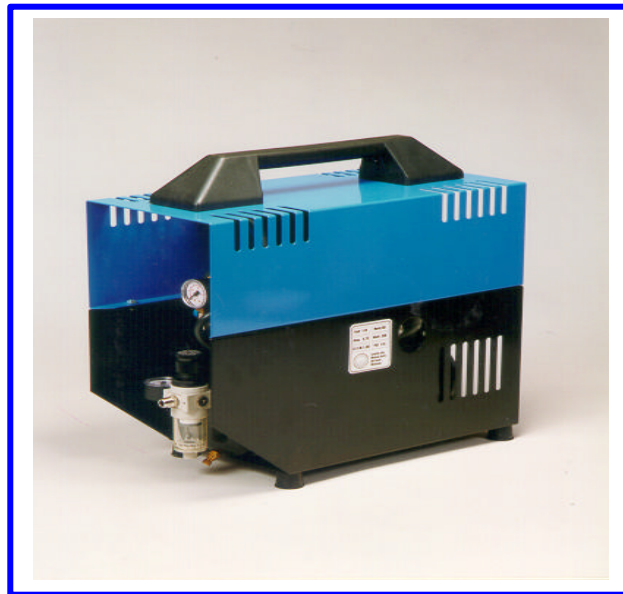
All **Super Silent** air compressors are virtually soundless and are totally automatic. Each unit includes a tank pressure gauge, line pressure gauge, line pressure regulator, moisture trap/filter, safety valve, air-intake filter and a handle for balanced carrying.

Please follow the instructions carefully to guarantee trouble-free operation.

DR 150

DR 300

DR 500



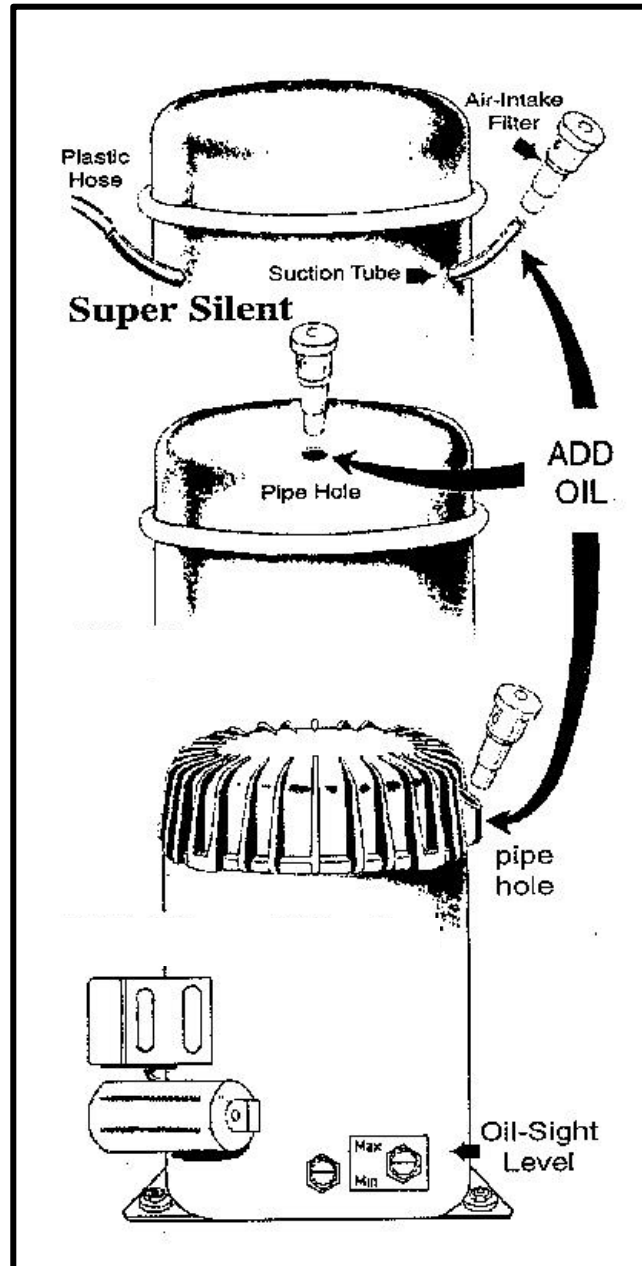
The **DR 150** features a 1/5-hp motor, the **DR 300** a 1/3-hp motor and the **DR 500** a 1/2-hp motor.

PRE-OPERATING INSTRUCTIONS

Remove your **Super Silent** compressor from the packaging. Read all of the literature enclosed and inspect the unit for possible shipping damages.

Then remove the white shipping plug from the hole in the top section of the pump. The Air-Intake Filter and the oil bottle spout are in a plastic bag hanging from the braided metal air hose coming out of the side of the pump. Attach the spout to the oil bottle. Pour the oil into the open hole. Stop when the oil level reaches the middle of the oil sight glass, which is located on the side of the pump. Then place the Air-Intake filter into the open hole. (See illustration below)

Connect desired air hose and selected tooling to the threaded port on the Filter Regulator marked "OUT".



OPERATING INSTRUCTIONS

1. Make sure the Air-Intake Filter has been installed (See Pre-Operating Instructions).
2. Make sure that the automatic ON/OFF Pressure Switch is in the OFF position (or turned fully counter-clockwise).
3. Plug the cord into 110 Volt Grounded outlets. Unit should be grounded because in the event of an electrical short, grounding reduces the risk of electric shock. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances. If it is necessary to use an extension cord, **DO NOT USE** a common household cords. Use a HEAVY-DUTY extension cord. Not using a HEAVY-DUTY extension cord will cause loss of power to the compressor, and possibly damage the electrical components. **NOTICE: TAMPERING WITH THE POWER CORD OR GROUNDING TERMINAL WILL VOID WARRANTY.**
4. Turn the automatic ON/OFF Pressure Switch to the "ON" position by turning the knob clockwise until it stops. This pressure switch has been set to automatically start and stop at the correct PSI levels. Leave it in the "ON" position until you need to turn off your compressor. To do this, simply turn the knob down counter clockwise. If the electrical power is interrupted while the compressor is in operation and it fails to restart after the power comes back on, turn the knob to the "OFF" position. This will release any pressure in the line and enable the compressor to restart.
5. After the compressor has run for a complete cycle and shuts off, the Pressure Regulator can then be adjusted to your desired setting. Simply lift the knob until it unlocks, and then turn it clockwise to increase the pressure, or counter clockwise to reduce it. Watch the pressure gauge close to the regulator to measure the pressure needed.

NOTICE: A standard feature on your compressor is the Safety Relief Valve. The Valve opens automatically if the tank pressure goes beyond a safe level. **DO NOT ATTEMPT TO ADJUST OR REMOVE THIS DEVICE.**

MAINTENANCE

AIR INTAKE FILTER: The air intake filter must be kept clean to permit easy airflow into the compressor. Filters that have become dirty, oily, or clogged can be cleaned thoroughly in a detergent soap and water solution or replaced. Cleaning or replacing the Air Intake Filter, under normal operating conditions is necessary every 3 to 6 months. **Never operate the compressor without an Air Intake Filter in place.**

MOISTURE TRAP: If used properly, the moisture trap (which is built into the Filter/Regulator) will trap moisture and dirt particles before releasing air into the line. Periodic checks for moisture and traces of oil should be done on a routine basis by looking through the clear bowl attached to the underside of the Filter/Regulator. When moisture and/or oil traces are detected, they can be removed by pressing up the valve core, which is located at the bottom of the bowl. The air pressure will blow the moisture and oil trace out through the valve core. Should it become necessary to remove the clear bowl for cleaning, **CAUTION** should be taken that there is no air pressure in the bowl at the time it is unscrewed.

OIL LEVEL: Periodically check the oil level at the oil sight glass. Should the level drop towards the lower edge of the glass, add the necessary quantity to bring the level up to the middle of the oil sight glass. (See illustration in Pre-Operating Instructions). It is strongly recommended to change the oil after every 150 hours of operation or when the oil is discolored. To change the oil, remove the air intake filter and tilt the unit until all oil has drained.

NOTICE: The oil supplied with your compressor is a highly researched synthetic grade oil. Do not mix or substitute the oil in your compressor with other available brands. Use of oil not specified by the manufacturer will result in compressor breakdown and void the limited warranty.

PRESSURE TANK: The air tank should be checked for water daily. Unplug the unit and release all air in the storage tank by opening the drain plug on the lower side of the pressure tank. Tilt the unit towards the plug to allow water to drain. The air hose and other accessories should also be drained on a regular basis.

COMPRESSOR SAFETY TIPS

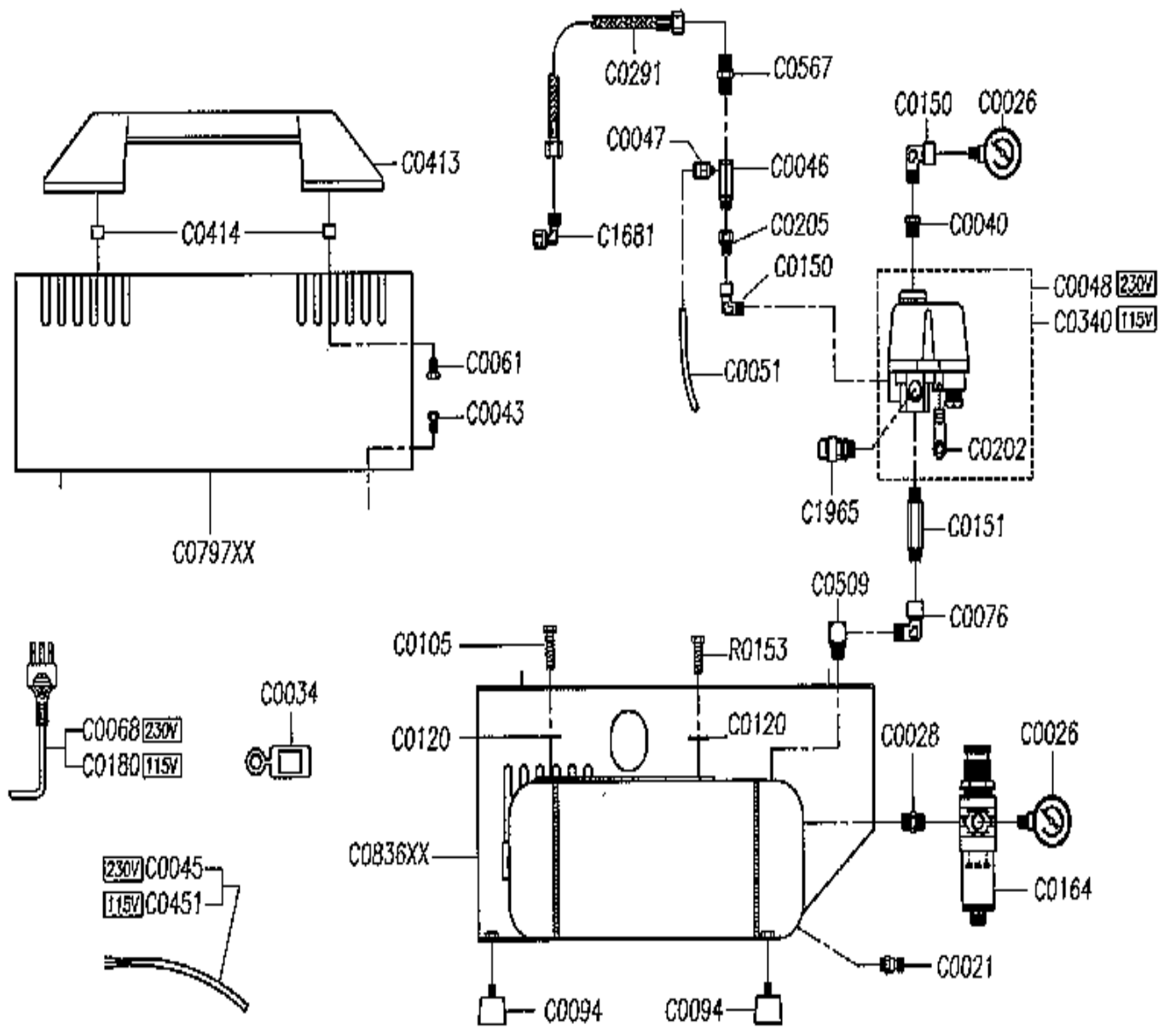
- Carefully inspect the hoses, fittings and overall appearance before each use.
- Always operate the compressor on a level surface.
- Periodically check the oil level at the oil sight glass.
- Use only properly grounded outlet that will accept 3 pronged plugs. Do not operate the compressor with a damaged cord.
- Keep the compressor free of dust, dirt, and paint. This will prolong Air Intake operation and prevent clogging for Safety Relief Valve.
- Use only recommended air handling tools and attachments that are acceptable for pressures rated for this company.
- Adjust the pressure regulator according to your compressor with other available brands. Any attempt to use oil differently from that specified by the manufacturer will result in compressor breakdown and void the Limited Warranty.
- Do not direct the air stream at your body.
- To reduce the risk of ELECTRIC SHOCK, do not expose the unit to rain or water while in use.
- Never attempt to service the compressor while it is plugged into an electrical outlet.
- Avoid direct contact with surface while operating – high temperatures may be present.
- Use only factory authorized parts.
- Always store your compressor in a clean and dry environment when not in use. Make sure all air pressure has been released from the system.

WARNING: ANY ATTEMPT TO SERVICE YOUR COMPRESSOR BY REMOVING THE COMPRESSOR SHALL OR TERMINAL BOX COVER, TAMPERING WITH THE PRESSURE SWITCH SETTING AND/OR GROUNDING PLUG WILL VOID THE LIMITED WARRANTY, AND MAY MAKE THE COMPRESSOR UNSAFE TO USE.

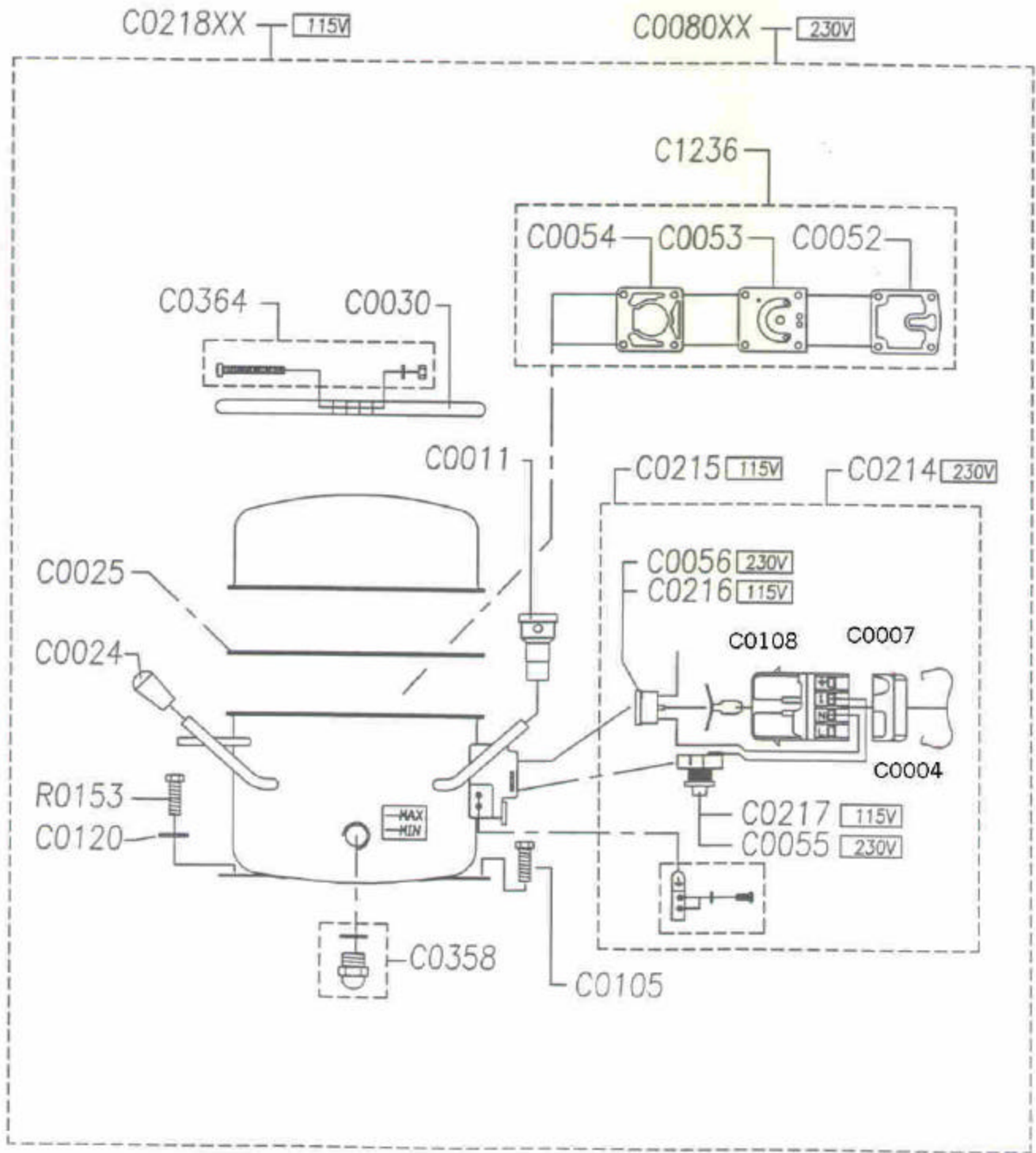
TROUBLE SHOOTING GUIDE

TROUBLE	CAUSE	REMEDY
Compressor will not run	No Power	Check outlet voltage, fuse and circuit breakers
	Bad cord connection for incorrect extension cord	Check cord connection for visible damage- if using an extension cord, make sure it is UL approved, and it's heavy duty and grounded
	Holding tank is fully pressurized	Use your equipment to lower pressure in tank
	Thermal overload protection has tripped	Wait 15 minutes and try starting again – if this was the cause; make sure compressor is in well ventilated area: check installation leaks; set the regulator's pressure minimum required for your equipment
Compressor runs but will not supply air	Air pressure regulator not set properly	Reset Air-Regulator to pressure required by your equipment
	Air-Intake Filter clogged or not installed	Clean Air-Intake Filter or replace
	Extensive leak	Install Air-Intake Filter on suction tube or hole (see machine set-up); check all fittings, connections and equipment, close your pressure regulator all the way (counterclockwise) – if pressure in tank builds up, leak is in your installation
Rattling noise during operation	Compressor motor touching shell	Operate on level surface – check oil level and adjust if it's necessary
Milky oil in compressor	Oil has been contaminated with moisture or other foreign matter	Change oil – Oil needs to be changed every 150 hours; use only original oil from <i>Silentaire Technology</i>
Air-Tank not holding pressure when compressor is not running	Faulty Check Valve	Disconnect pressure hose at pump and check for leaking back into pump – Clean or replace the check valve – Spray all connections and manifold with soap solution and reseal or replace leaking parts
No air pressure shown on regulator gauge	No equipment connected to compressor	Connect equipment
	Regulator has not been adjusted	Lift knob and turn clockwise until gauge shows required pressure – Gauge should be set at minimum level required by your equipment
Compressor operates very hot	Oil level is incorrect	Fill unit with oil unit MID level. Make sure compressor is well ventilated area.
	Non-Ventilated Area	
	Undersized model	Duty cycle of compressor should not exceed 50% - if pump is on for 1 minute it should stay off 1 minute
	Leaks in installation	Make sure no leaks are present. The setting on the pressure regulator must be at your equipment minimum level.

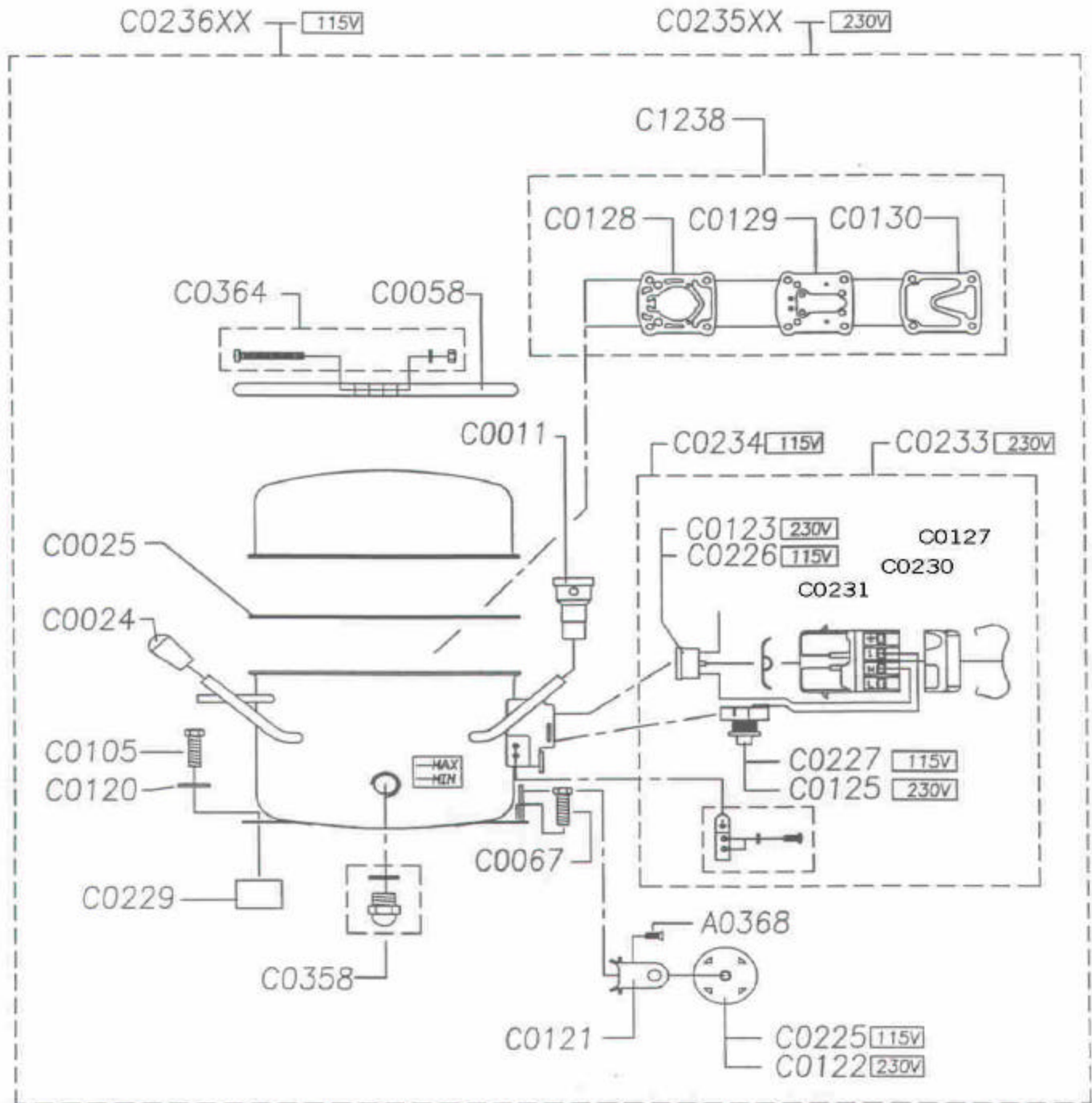
Exploded View for Models DR 150, DR 300 and DR 500



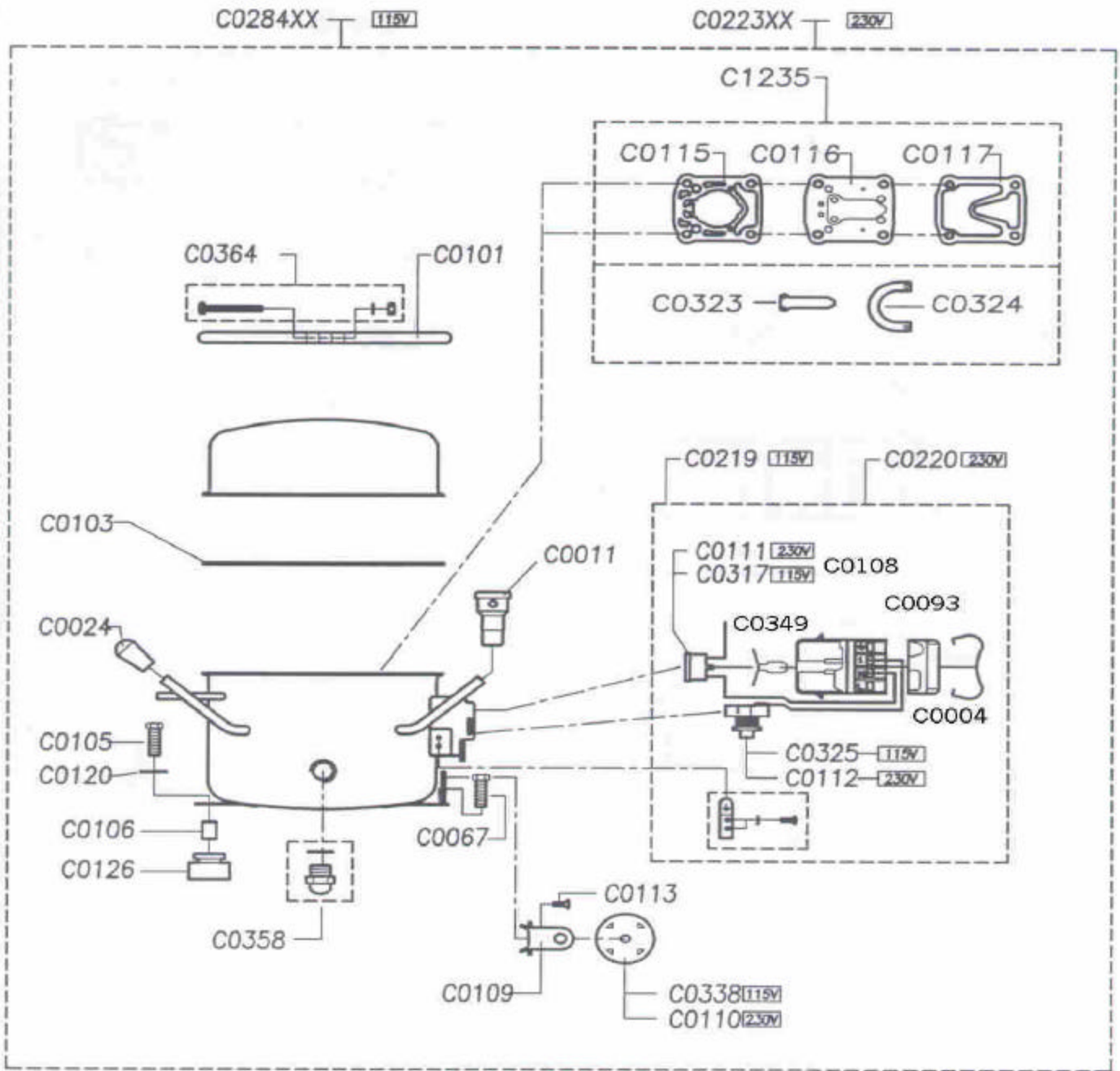
EXPLODED VIEW MOTOR E88- DR300



EXPLODED VIEW MOTOR AE2415 OLDER MODEL DR-500



EXPLODED VIEW MOTOR T2134 NEWER MODEL DR500



Parts List “Super Silent” DR-Series

Part #	Part Description	Part #	Part Description
B0035	Nut M6 UNI 5587	C0059	Fitting Extension M1/4”-F1/4”
C0001	Gasket Intake-Valve E59	C0061	Bolt M8x15mm
C0002	Valve Plate cpl. E59	C0062	Washer M10x20mm UNI 6592
C0003	Gasket Exhaust-Valve E59	C0063	Fitting L M1/4”-F1/8”
C0004	Clip for Terminal Bloc	C0064	Hose Air M1/8”-F1/4” 170mm
C0007	Cover to Terminal Bloc E59 + E88	C0065	Fitting L Rotating M1/4”-6,3mm
C0008	Overload Protector E59 230V	C0067	Bolt TE M8x35mm UNI 5739
C0009	Relay Starting 230V E59	C0068	Power Cord 230V Euro-Plug
C0011	Filter Air-Intake	C0080XX	Pump Compressor 230V E88
C0013XX	Pump Compressor E59 230V	C0094	Foot Rubber
C0021	Drain Cock M1/8”	C0105	Bolt TE M8x30mm UNI 5739
C0024	Plug for Oilfill	C0108	Terminal Bloc
C0025	Gasket Housing	C0120	Washer flat d=8-24mm UNI 6593
C0026	Gauge Pressure M1/8”-side 10 Bar d=40mm	C0121	Bracket for Capacitor
C0028	Fitting M1/4”-M1/4”	C0122	Capacitor 230V AE 2415 53-64 MFD
C0030	Closing Band E59 + E88	C0123	Overload Protector 230V AE 2415
C0034	Strain Relief	C0125	Relay Starting 230V AE 2415
C0040	Fitting Reduction M1/4”-F1/8”	C0127	Clip for Terminal Bloc AE 2415
C0043	Bolt M6x10mm DIN 934	C0128	Gasket Intake-Valve AE 2415
C0046	Valve Check M1/8”-F1/8”	C0129	Valve Plate cpl. AE 2415
C0047	Fitting M5-d=6mm	C0130	Gasket Exhaust-Valve AE 2415
C0048	Switch Pressure 4-P 230V MDR 2/11	C0132	Bolt
C0048-1	Cover to Switch Pressure C0048	C0151	Fitting M1/4”-M1/4” 60mm
C0048-2	Switch Pressure E59	C0164	Filter Regulator WI
C0051	Hose Nylon 6/4mm	C0164-1	Pressure Bowl WI
C0052	Gasket Intake-Valve E88	C0164-2	Filter Element
C0053	Valve Plate cpl. E88	C0164-4	Filter Regulator SMC
C0054	Gasket Exhaust-Valve E88	C0164-5	Pressure Bowl SMC
C0055	Relay Starting 230V E88	C0164-6	Filter Element SMC
C0056	Overload Protector 230V E88	C0164-7	Washer for Filter SMC
C0058	Closing Band AE 2415	C0171	Kit for Grounding
C0180	Power Cord 115V American-Pl. 2000mm	C0364	Bolt and Nut for Closing Band
C0202	Valve Head-Pressure Release	C0365	Kit Terminal Bloc E59 230V
C0214	Kit Terminal Bloc E88 230V	C0373	Relay Starting 115V E59
C0215	Kit Terminal Bloc E88 115V	C0374	Overload Protector 115V E59
C0216	Overload Protector 115V E88	C0375	Kit Terminal Bloc E59 115V
C0217	Relay Starting 115V E88	C0413	Handle
C0218XX	Pump Compressor 115V E88	C0414	Insert to Handle
C0225	Capacitor 115V 145-174 MFD AE 2415	C0416	Cable Electric 115V 600mm
C0226	Overload Protector 115V AE 2415	C0450	Cable Electric 230V 600mm
C0227	Relay Starting 115V AE 2415	C0617	Washer 6x12mm UNI 6592
C0229	Foot Rubber AE 2415	C0672	Fitting T M1/4”-M1/4”-M1/4”
C0230	Cover for Terminal Bloc	C0797XX	Housing DR 150 and DR 300
C0231	Terminal Bloc AE 2415	C0804XX	Housing DR 500
C0232	Spring for Overload AE 2415	C0836XX	Tank DR 150 and DR 300, black
C0233	Kit Terminal Bloc 230V AE 2415	C0837XX	Tank DR 500, black
C0234	Kit Terminal Bloc 115V AE 2415	C0939	Bolt TCEI M8x12mm UNI 5931
C0235XX	Pump Compressor 230V AE 2415	C1236	Kit Valve-Plate E88 cpl. with Gaskets
C0236XX	Pump Compressor 115V AE 2415	C1237	Kit Valve-Plate E59 cpl. with
C0250XX	Pump Compressor 115V E59	C1238	Kit Valve-Plate AE 2415 cpl. with Gaskets
C0340	Switch Pressure 4-P 115V MDR 21-EA/11	C1394	Valve Safety M1/4” 10 Bar
C0349	Spring for Overload E59 and E88	R0153	Bolt M8x25mm UNI 5739