



Compressor Manual



For Technical Assistance call the
UDS Support Team (954) 772-9779



The Ultima line of compressor has a 25 year track record of engineering excellence and manufacturing experience that have produced the most reliable, energy efficient, quiet running veterinary compressors available today, with a customer friendly design that is easy to maintain and service. There are three models available: $\frac{3}{4}$ horsepower environmentally friendly Oil free compressor, $\frac{1}{2}$ horsepower single pump silent oil compressor, and a 1 horsepower dual pump silent oil compressor.



Part# UD-OILLESS

Part# DTP00566

Part# DTP00567

Part Numbers for compressor with Aluminum Shell

Part# UD-COMPBOX-OILLESS

Part# UD-COMPBOX-1

Part# UD-COMPBOX-2

Each compressor is available individually or housed in a durable aluminum shell for greater protection.





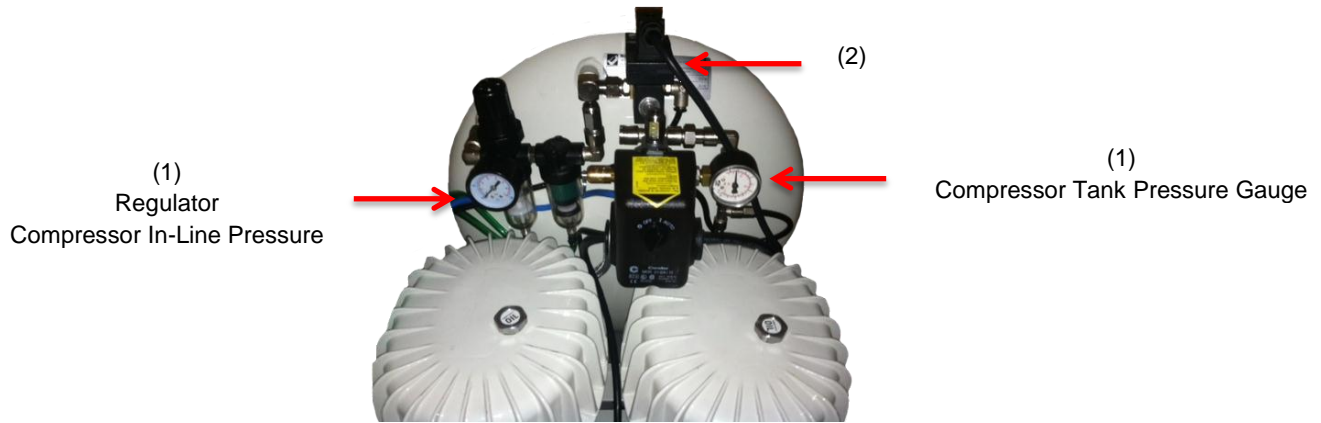
The compressor box has a magnetic front door that is fully detachable for easy access to all of the compressor parts.



The compressor box also has a quick disconnect air fitting on the outside for easy and convenient hook to any dental unit.



The air gauge to the left of the Off/Auto switch; the compressor in-line pressure gauge has been preset at the factory to 65-70 Psi. Do Not exceed 70 psi. The air gauge to the right of the Off/Auto switch is the tank pressure gauge. When the compressor on/off switch is set to auto it will build pressure to 120 psi. When the air in the holding tank drops down to 80 psi as the handpiece get used, the compressor will turn back on and bring the pressure in the holding tank back to 120 psi.



(Dual Pump Oil Compressor)

1. The Ultima Silent Surge Compressor is equip with an Auto Drain system. The Auto Drain system automatically purges the air holding tank for two seconds for every thrity minutes the power to the unit is on. This feature signifiently extends the working life of the compressor by preventing rust inside the tank. Every dental unit regardless of the brand needs to have the compressor air holding tank purged and drained. The Ultima Silent Surge Compressor is the only compresor in the veterinary industry with this feature.
2. Older Ultima Silent Surge Compressor model units have a manual T-shaped valve located at the top of the compressor air tank at about the tweleve o'clock position that must be drained once a week.



Manual Drain Release Valve

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3. The compressor pick-up bottle is located on the upper left corner when installed inside of a dental the unit, such as the Ultima 500 Series or Ultima 2000 Series dental units. When the compressor is installed into a compressor box or an Ultima 750 Series dental unit the pick up bottle is located out in the rear. This bottle needs to be emptied and should be checked at least once a week. To empty , just remove the bottle from the bracket, unscrew the bottle, and dispose of the waste.



4. Oil level on the compressor should be checked regularly, this should be done before the unit is turned on when all oil is settled at the bottom to get an accurate reading. The oil should be change once a year.
- The Oil level sight glass for the compressor is located on the side of the pumps. Oil level should be $\frac{1}{2}$ to $\frac{2}{3}$ full.



For Silent-Surge Oil or Ultima Re-Charge kit Call Ultima Dental Systems at (954) 772-9779 or your local distributor.

The Ultima Re-charge kit includes: Two bottles 24oz bottles of Silent-Surge compressor oil, heavy duty pump to remove oil, and four replacement air filter elements – Part# UD-2219

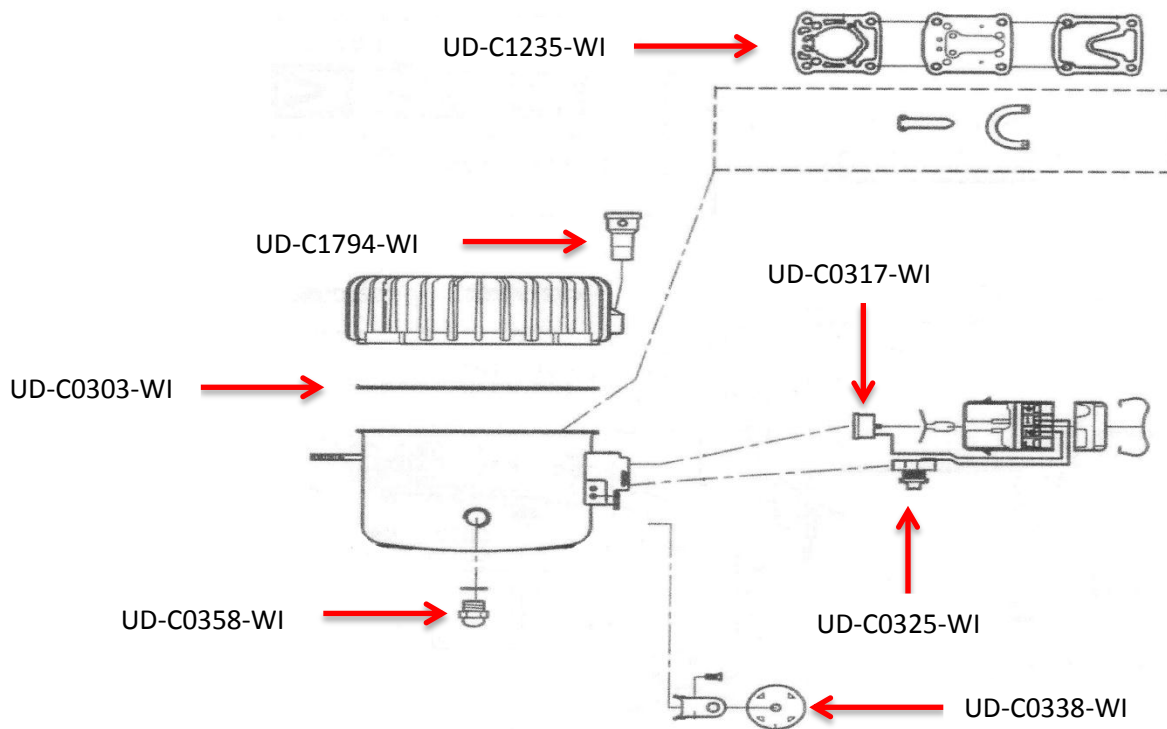


Re-Charge Kit
Part # UD-2219

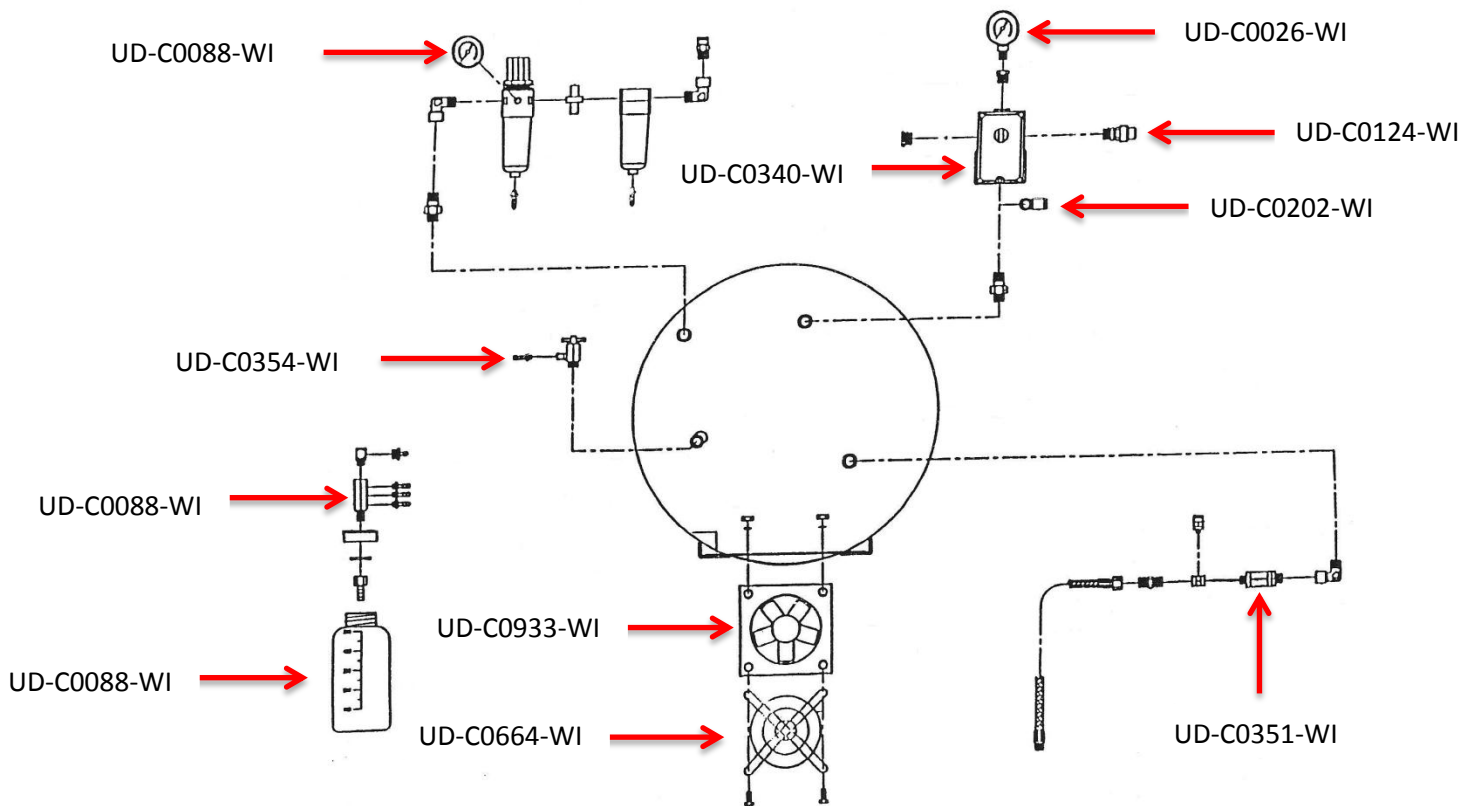


24oz Bottle Of Syntentic Silent Surge Compressor Oil
Part # UD-OIL

Compressor Pump Diagram



Compressor Frame Diagram



HELPFUL HINTS

- 1) Carefully inspect the hoses, fittings and overall appearance before each use.
- 2) Always operate the compressor on a flat surface.
- 3) Periodically check the oil level and top off to mid-level.
- 4) Use only properly grounded outlet that will accept 3-pronged plugs. Do not operate the compressor with a damaged cord.
- 5) Keep the compressor free of dust, dirt and paint. This will prolong Air Intake Filter operation and prevent clogging of Safety Relief Valve.
- 6) Use only recommended handling tools and attachments that are acceptable for pressure rated for this compressor.
- 7) Adjust the pressure regulator according to the recommended pressure setting of the air tool before attaching the tool to the compressor. When disconnecting attachments, close the pressure regulator counterclockwise, or bleed off all pressure from the tank and system.
- 8) Do not substitute or mix the oil in your compressor with other available brands. Any attempt to use oil different from that specified by the manufacturer will result in compressor breakdown and void all warranties.
- 9) Do not direct the air stream at your body.
- 10) To reduce the risk of **ELECTRIC SHOCK**, do not expose the unit to rain or water while in use.
- 11) Never attempt to service the compressor while it is plugged into an electrical outlet.
- 12) Avoid direct contact with the surface while operating – high temperatures may be present.
- 13) Use only factory authorized parts.
- 14) Always store your compressor in a clean and dry environment when in use. Make sure all air pressure has been released from the system.



Warning: Any attempt to service your compressor by removing the compressor shell 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	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 Werther International, Inc.
Air-Tank not holding pressure when compressor is not running	Faulty Check Valve Defective/Cracked Manifold See "Air Leak"	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 Call Werther 800-972-7668 for assistance.
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 Parts List



Ultima Compressor Regulator Parts

Part #	Description
UD-C0164-N7	Comp. Coalescent Filter w/ Plastic Housing O-Ring
UD-C0164-N3	Comp. Regulator Filter Set Up (Half – No metal barb)
UD-C0164-NCOMBO	Complete Comp. Regulator Set Up w/ Filters
UD-C0164-N1	Comp. Regulator w/ Knob & Coalescent Filter Set Up (Half)
UD-C0164-N6	Comp. Regulator Filter w/ Plastic Housing O-Ring
UD-C0164-N5-1	Comp. Regulator Filter Plastic Housing
UD-C088-WI	Comp. Regulator Pressure Gauge
UD-C0239-WI	Comp. Regulator Plastic Bottle metal barb

Ultima Compressor Pump Parts

Part #	Description
UD-C0358-WI	Comp. Oil Level Indicator
UD-2219	Comp. Oil Re-charge kit
UD-OIL	Ultima Silent Surge Comp. Oil (24oz Bottle)
UD-JA34060-DEP	Ultima Comp. Oil Removal Pump
UD-C1235-WI	Comp. Valve Plate w/ Gasket
UD-C9993-WI	Comp. Upgrade Kit (Single Pump Only)
UD-C0303-WI	Comp. Dome O-Ring
UD-C0011-1	Comp. Air Filter Elements (4 pack)
UD-C1794-WI	Comp. Air Intake Filter Housing
UD-C059-WI	Comp. 1/8" Female Hose Barb
UD-C0338-WI	Comp. Capacitor 115 Volt
UD-C0317-WI	Comp. Overload Protector
UD-C0325-WI	Comp. Starting Relay 115 Volt

Ultima Compressor Pressure Switch Parts

Part #	Description
UD-C0340-WI	Comp. Pressure Switch 4-P
UD-C0340-1- WI	Comp. Pressure Switch Cover
UD-C0124-WI	Comp. Safety Valve
UD-C0202-WI	Comp Unloader Valve

Ultima Compressor Misc. Parts

Part #	Description
UD-SE-45117-WI	Comp. Pick Up Bottle Clip
UD-1260-WI	Comp. Pick Up Bottle Only
UD-C1260-1-WI	Comp Pick Up Bottle w/ Tubing
UD-C0351-WI	Comp. Check Valve
UD-C0354-WI	Comp. Drain Release Valve
UD-C0933-WI	Comp Fan 120 Volt
UD-C0664-WI	Comp. Fan Cover
UD-C0026-WI	Comp. Tank Pressure Gauge