



Ultima Dental Systems

COMPRESSOR MANUAL



www.UltimaDentalSystems.com
(888) 900-8584

Table of Contents

Introduction.....	Page 2
Quick Compressor Start Guide.....	Page 3-5
Compressor Pump Diagram.....	Page 6
Compressor Frame Diagram.....	Page 7
Helpful Compressor Tips.....	Page 8
Compressor Parts List.....	Page 9-10
Warranty.....	Page 11

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.



Ultima $\frac{3}{4}$ hp Oil-Free Compressor (Part# 54072)



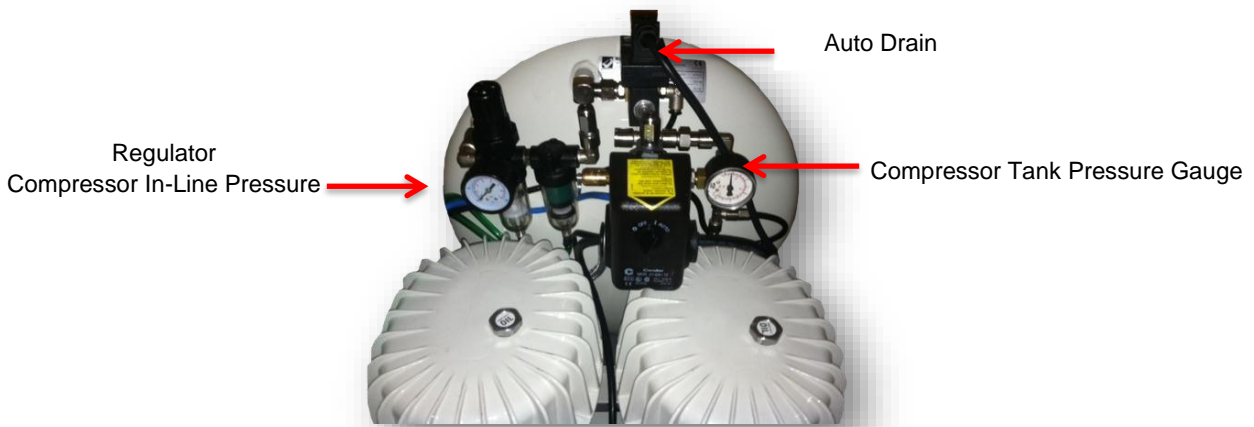
Ultima $\frac{1}{2}$ hp Oil Compressor (Part# 54070)



Ultima 1 hp Oil Compressor (Part# 54071)

Ultima Silent-Surge Compressor

1. 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, the compressor will turn back on and bring the pressure in the holding tank back to 120 psi.



Ultima 1 HP Dual Pump Compressor – Part # 54071

2. The Ultima 500 is equipped with an Auto Drain system. The Auto Drain system automatically purges the air holding tank for two seconds for every thirty minutes the power to the unit is on. This feature significantly extends the working life of the compressor preventing rust inside the tank.
3. Older Ultima 500 model units have a manual T-shaped valve located on the compressor air tank at about the twelve o'clock position that must be drained once a week.



Manual Drain Release Valve – Part # UD0197

Continued Next Page

4. The compressor collection bottle is located on the upper left corner inside the unit. This bottle needs to be empty and clean at all times. Allowing any amount of fluid to build up in

the bottle will cause overspray on the inside of the unit. Schedule for emptying the pick up bottle varies from one user to the other, but should at the very minimum be emptied and cleaned at least once a week. To empty, just remove the bottle from the bracket, unscrew the bottle from the top, and dispose of the waste. Fluid inside of the collection bottle is not toxic and can be poured down the sink drain.



Compressor Collection Bottle - Part # UD0191

5. Oil level on the unit should be checked regularly, this should be done before the unit is turned on. The oil should be changed once a year to validate warranty and ensure a long working life for the compressor.

For Silent-Surge Oil or the Ultima Yearly Maintenance Kit Call Ultima Dental Systems at (888) 900-8584 or your local distributor.

The Yearly Maintenance Kit with pump includes: Two bottles 24oz bottles of Silent-Surge compressor oil, heavy duty pump to remove oil, four replacement air filter elements, and compressor regulator filters – Part # 54078



The Yearly Maintenance Kit without pump includes: Two bottles 24oz bottles of Silent-Surge compressor oil, four replacement air filter elements, and compressor regulator filters – Part # 54078P



6. The compressor regulator filters should be replaced once a year along with the yearly oil change.



Regulator Filter
Part # UD0144

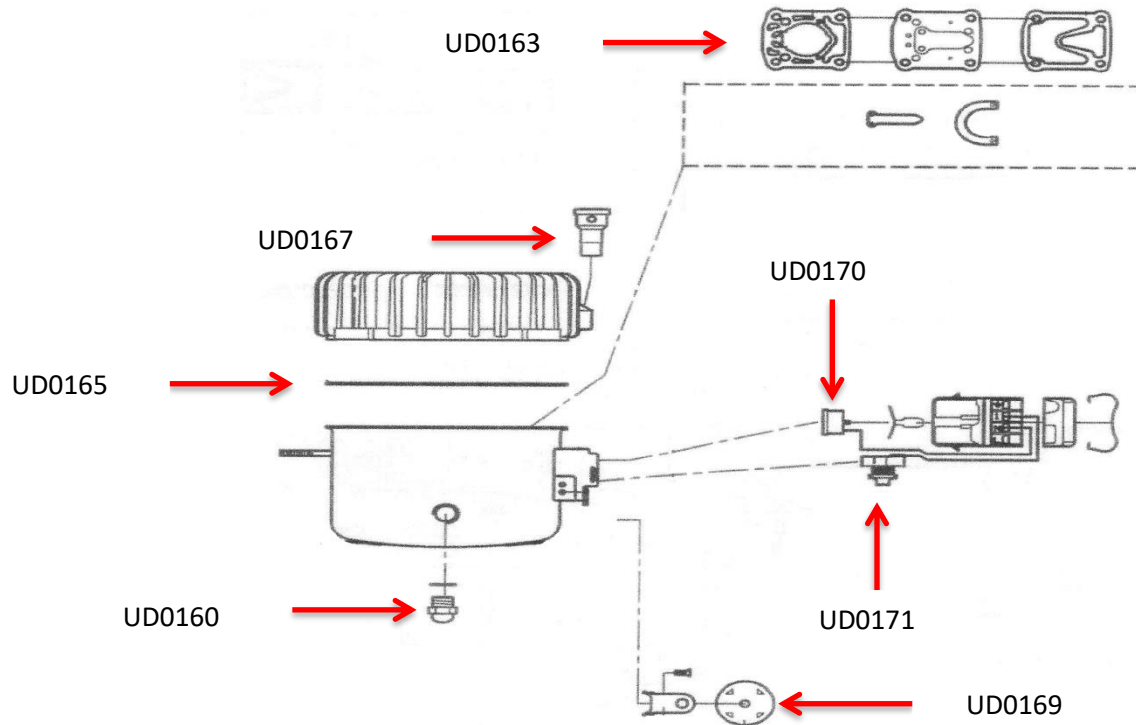


Coalescent Filter
Part # UD0140

Visit www.UltimaDentalSystems.com for helpful videos and tips on how to get the most out for your Ultima!

For technical assist or questions, simply call (888) 900-8584 and one of our knowledgeable customer support members will help you with what you need Monday through Friday 9am to 5pm Est.

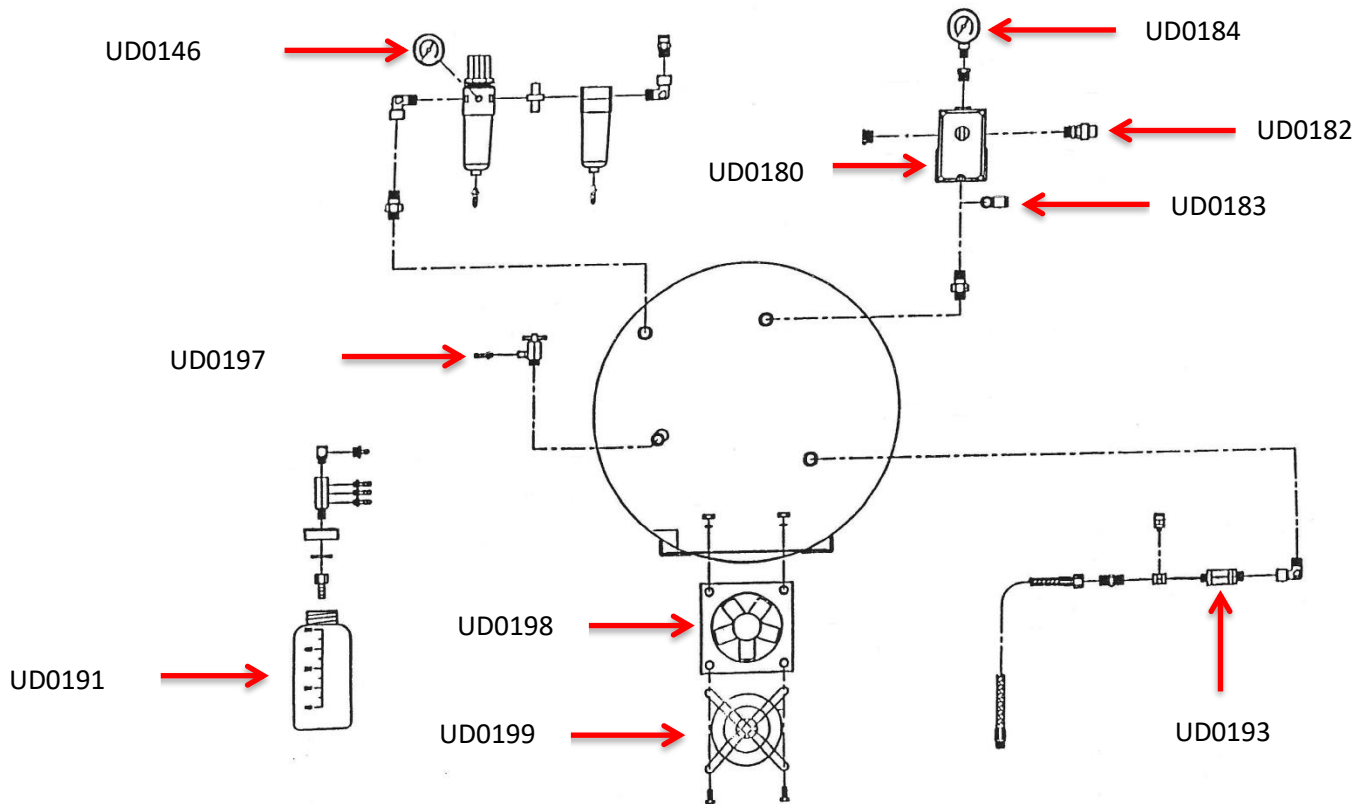
Compressor Pump Diagram



Visit www.UltimaDentalSystems.com for helpful videos and tips on how to get the most out of your Ultima!

For technical assist or questions, simply call (888) 900-8584 and one of our knowledgeable customer support members will help you with what you need Monday through Friday 9am to 5pm Est.

Compressor Frame Diagram



Visit www.UltimaDentalSystems.com for helpful videos and tips on how to get the most out for your Ultima!

For technical assist or questions, simply call (888) 900-8584 and one of our knowledgeable customer support members will help you with what you need Monday through Friday 9am to 5pm Est.

Helpful Compressor Tips

1. Always operate the compressor on a flat surface.
2. Check oil level and top off to mid level if needed. Oil sight glass should be ½ to ¾ full.
3. Use a properly grounded outlet that will except 3 prongs. DO NOT operate the compressor with a damaged cord.
4. Keep the compressor free of dust, animal fur and dirt. This will prolong air filter operation and prevent clogging of the safety relief valve.
5. DO NOT substitute or mix oil from other available brands. Any attempt to use other brands of oil will result in compressor breakdown and void all warranty.
6. Never attempt to service the compressor while plugged into an electrical outlet.
7. Avoid direct contact with the surface of the compressor after prolonged use, high temperatures may be present.
8. Use only factory authorized parts.

Fault Detected	Possible Cause	Solution
Compressor will not run	<ol style="list-style-type: none"> 1. No Power 2. Bad cord connection 3. Holding tank is pressurized 4. Thermal overload protector has been tripped 	<ol style="list-style-type: none"> 1. Check outlet voltage, fuse and circuit breakers. 2. Check cord connector for viable damage. If using an extension cord, make sure it is UL approved, it's heavy duty and grounded. 3. Wait 15 minutes and try starting again. 4. Call Ultima Dental Systems for additional assistance (888) 900-8584.
Compressor runs but will not supply air	<ol style="list-style-type: none"> 1. Air pressure regulator is not set properly 2. Air intake filter is clogged or not installed properly 3. Extensive leak 	<ol style="list-style-type: none"> 1. Reset regulator pressure to 65-70 psi. 2. Clean air intake filter or replace. 3. Check all compressor fittings and connections on the dental unit. Close the pressure regulator all the way (Counter Clockwise) if pressure in the tank builds up, the leak is in the dental unit. 4. Call Ultima Dental Systems for additional assistance (888) 900-8584.
Rattling noise during operation	<ol style="list-style-type: none"> 1. Compressor motor is touching the frame 2. Fan is loose or damaged 	<ol style="list-style-type: none"> 1. Operate on level surface, check oil level and adjust if necessary 2. Inspect the fan on the bottom of the compressor, make sure it is tightly secured to the frame. If tightly secured, possible bearing damage, replace fan. 3. Call Ultima Dental Systems for additional assistance (888) 900-8584.
Milky oil in compressor	<ol style="list-style-type: none"> 1. Oil has been contaminated with moisture or other foreign matter. 	<ol style="list-style-type: none"> 1. Change oil. Oil needs to be changed once a year. Use only oil from Ultima Dental Systems Part # UD0161. 2. Call Ultima Dental Systems for additional assistance (888) 900-8584.
Air holding tank is not holding pressure when the compressor is not running	<ol style="list-style-type: none"> 1. Air leak 2. Faulty Check Valve 	<ol style="list-style-type: none"> 1. Spray all connections with soap solution to determine the location of the leak. Reseal or replace leaking part(s). 2. Clean or replace faulty check valve. 3. Call Ultima Dental Systems for additional assistance (888) 900-8584.
No air pressure shown on regulator gauge	<ol style="list-style-type: none"> 1. Regulator has not been set and adjusted 2. Regulator is faulty 	<ol style="list-style-type: none"> 1. List knob and turn clockwise until gauge shows required pressure (65-70 psi). 2. Replace faulty regulator assembly (Part # UD0142).

Compressor Parts List

Compressor Regulator Parts

Part #	Description
UD0140	Comp. Coalescent Filter w/ Plastic Housing O-Ring
UD0142	Complete Comp. Regulator Set Up w/ Filters
UD0144	Comp. Regulator Filter w/ Plastic Housing O-Ring
UD0145	Comp. Regulator Filter Plastic Housing
UD0146	Comp. Regulator Pressure Gauge

Compressor Pump Parts

Part #	Description
UD0160	Comp. Oil Level Indicator
UD-2219	Comp. Oil Re-charge kit
UD0161	Ultima Silent Surge Comp. Oil (24oz Bottle)
UD0162	Ultima Comp. Oil Removal Pump
UD0163	Comp. Valve Plate w/ Gasket
UD0164	Comp. Upgrade Kit (Single Pump Only)
UD0165	Comp. Dome O-Ring
UD0166	Comp. Air Filter Elements (4 pack)
UD0167	Comp. Air Intake Filter Housing
UD0169	Comp. Capacitor 115 Volt
UD0170	Comp. Overload Protector
UD0171	Comp. Starting Relay 115 Volt

Compressor Pressure Switch Parts

Part #	Description
UD0180	Comp. Pressure Switch 4-P
UD0181	Comp. Pressure Switch Cover
UD0182	Comp. Safety Valve
UD0183	Comp Unloader Valve

Compressor Misc. Parts

Part #	Description
UD0190	Comp. Pick Up Bottle Clip
UD0191	Comp. Pick Up Bottle Only
UD0192	Comp Pick Up Bottle w/ Tubing
UD0193	Comp. Check Valve
UD0197	Comp. Drain Release Valve
UD0198	Comp Fan 120 Volt
UD0199	Comp. Fan Cover
UD0184	Comp. Tank Pressure Gauge

Warranty

- 5 year defective parts and technical support warranty. All parts on the compressor are covered for 5 years if defective.
- The Protective Aluminum Shell cover (If purchased for an Ultima compressor) are only covered under warranty if defective out of the box and damaged during shipping.
- Labor and shipping is not included.

For compressor parts and maintenance videos
visit **www.UltimaDentalSystems.com**