



ESPRIT 3T 60 DIVING HOOKAH

User Manual

3-Liter Air Tank Capacity

Includes Regulator & 55.8 ft (17m) Quick Disconnect Hose



The Esprit 3T 60 Hookah, manufactured by NARDI COMPRESSORI Srl of Italy and distributed by NUVAIR.com, is part of the NARDI oil-free range of diving hookahs and is designed for medium-duty applications, providing reliable air supply to a diver while maintaining a compact and lightweight design. The rugged hookah frame also serves as a **3-liter air storage tank**.

The CE mark indicates that the compressor complies with CEE Directives 89/392, 89/336, 87/404, EN 292/2, EN 294, and EN 60204-1.

INTRODUCTION

Manufactured in Italy, the ESPRIT 3T 60 DIVING HOOKAH series of compressors features oil-free piston compressor pump units, which are known worldwide for their quality, reliability, and quiet operation.

The ESPRIT 3T 60 DIVING HOOKAH compressor delivers **exceptional performance, pressure, and dependability**. Its true oil-free design ensures **guaranteed air quality** and **enhanced safety**.

This series of surface supply diving hookahs are ideal for both recreational activities and commercial work, such as:

Recreational Diving • Boat Maintenance • Coral Restoration
Lobstering • Fossil Hunting • Diver Training • Pier and Marina Maintenance
Swimming Pool Repairs • Marine Research • Golf Ball Retrieval

The included 55.8-foot-long (17 meters) hose/regulator set is equipped with quick-connect fittings. Hose extensions (55.8 ft · 17m) can be purchased separately.

The output pressure is manually adjustable. The compressor works without oil and the quality of air delivered conforms to all relevant legislation regarding breathable air.

SYMBOL DEFINITIONS

This manual uses specific words and symbols to highlight conditions, practices, or techniques that could impact your safety. Be especially mindful of information indicated by the following symbols or terms:

SYMBOL	MEANING	DESCRIPTION
	DANGER	Indicates an imminently hazardous situation, which if not avoided, will result in serious personal injury or death.
	WARNING	Indicates a potentially hazardous situation, which if not avoided, could result in serious personal injury or death. It may also be used to alert against unsafe practices.
	CARBON MONOXIDE	Carbon monoxide (CO), a colorless and odorless gas that, when inhaled can result in seizures, loss of consciousness, serious injury or death. When inhaled underwater, CO can also result in death by drowning.
	PRESSURIZED GAS	Compressors contain gas (air) that is under pressure. Sudden failure of the equipment can cause significant injury. Ensure the equipment is properly maintained.

UNPACKING & ASSEMBLY

Packing List

- Nardi Diving Hookah
- Nardi Hose / Regulator Set (55.8 ft · 17m)
- User Manual

Carefully remove the diving hookah and accessories from the box. Check that all the items are included. Inspect the diving hookah carefully to ensure no damage occurred during shipping. Do not discard the packaging materials until you have inspected and satisfactorily operated the diving hookah. This diving hookah model requires no assembly.



DANGER

1. This diving hookah should **ONLY** be operated by individuals with proper training.
2. **DO NOT** rely exclusively on this hookah for air while diving.
3. **ALWAYS** have a backup air source when diving.



PRESSURIZED GAS

When using a diving hookah system—also known as a Surface Supplied Breathing Apparatus (SSBA)—you are breathing compressed air. Pressurized air can be hazardous if you have not been properly trained.

SPECIFICATIONS

Power Source	Esprit 3T 60/2	110V / 230V Electrical Outlet
	Esprit 3T 60 12 V · 500-watt	Battery (DC)
	Esprit 3T 60 12 V · 600-watt	Battery (DC)
	Esprit 3T 60 24 V · 500-watt	Battery (DC)
Motor	Esprit 3T 60/2	0.75 hp (0.5 kW)
	Esprit 3T 60 12 V · 500-watt	500-watt (52A)
	Esprit 3T 60 12 V · 600-watt	600-watt (62A)
	Esprit 3T 60 24 V · 500-watt	500-watt (62A)
Compressor	2 Cylinders (Oil-Free)	
Duty Cycle	<u>110 Volt and 230 Volt Models</u>	
	50% · 30~40 minutes runtime / 30~40 minutes rest time	
	<u>12 Volt and 24 Volt Models</u>	
	50% · ~20 minutes runtime / ~20 minutes rest time	

RPM	Esprit 3T 60/2	2800
	Esprit 3T 60 12 V · 500-watt	2400
	Esprit 3T 60 12 V · 600-watt	3000
	Esprit 3T 60 24 V · 500-watt	3000
Air Intake	Esprit 3T 60/2	210 L/min (7.4 CFM)
	Esprit 3T 60 12 V · 500-watt	180 L/min (6.4 CFM)
	Esprit 3T 60 12 V · 600-watt	225 L/min (7.9 CFM)
	Esprit 3T 60 24 V · 500-watt	225 L/min (7.9 CFM)
Air Output at Surface 0 meters · 0 feet Seawater	Esprit 3T 60/2	125 L/min (4.4 CFM)
	Esprit 3T 60 12 V · 500-watt	75 L/min (2.6 CFM)
	Esprit 3T 60 12 V · 600-watt	112 L/min (4.0 CFM)
	Esprit 3T 60 24 V · 500-watt	130 L/min (4.6 CFM)
Air Output at Depth 15 meters · 49 feet Seawater	Esprit 3T 60/2	110 L/min (3.9 CFM)
	Esprit 3T 60 12 V · 500-watt	58 L/min (2.0 CFM)
	Esprit 3T 60 12 V · 600-watt	106 L/min (3.7 CFM)
	Esprit 3T 60 24 V · 500-watt	107 L/min (3.8 CFM)
Tank Size	3 liters (0.11 cubic feet)	
Tank Pressure	145 psi (10 bar)	
Outlet Pressure	0–145 psi (0–10 bar) Adjustable	
Maximum Number of Divers	1	
Maximum Recommended Depth	49 feet (15 meters)	
Recommended Working Temperature	+41°F to +122°F +5°C to +50°C	
Unit Dimensions (L x W x H)	17.7 x 9.4 x 11"	
	45 x 24 x 28cm	
Unit Weight	Esprit 3T 60/2	29 lb (13 kg)
	Esprit 3T 60 12 V · 500-watt	27 lb (12 kg)
	Esprit 3T 60 12 V · 600-watt	32 lb (14.5 kg)
	Esprit 3T 60 24 V · 500-watt	32 lb (14.5 kg)
Noise (dB)	Esprit 3T 60/2	62
	Esprit 3T 60 12 V · 500-watt	58
	Esprit 3T 60 12 V · 600-watt	62
	Esprit 3T 60 24 V · 500-watt	62
Warranty	24 months	

GENERAL DIVING HOOKAH SAFETY



Diving Poses Risks at Any Depth. This diving hookah should ONLY be operated by individuals with proper training. If you lack suitable training, complete an accredited diving course before using this equipment.



Do Not Rely Exclusively on This Diving Hookah for Air While Diving. While it provides an excellent primary air source, diving hookahs are mechanical devices that can fail unexpectedly due to equipment malfunctions, power interruptions, or air supply disruptions.



Always Dive with a Backup Air Source. A “Bailout Bottle” or “Pony Bottle,” with an integrated regulator, is an ideal secondary air supply. Ensure any backup air source is appropriately sized to allow for a controlled ascent to the surface.



Contaminated Air Supply. The breathing air supplied by this diving hookah is only as safe as the air that it takes in. Always monitor air quality where the diving hookah is positioned. Avoid placing it near boat engines, generators, fuel sources, or batteries, as these can contaminate the air.



Carbon Monoxide. This diving hookah does not produce carbon monoxide on its own, but if there is any chance of carbon monoxide (CO) entering the hookah air intake, do one or more of the following: (a) Reposition the hookah, (b) Turn off any gasoline- or diesel-powered machinery in the area, (c) Install a [breathing air filter](#) rated for use with gasoline-power diving hookahs, (d) Use a [CO analyzer](#) to monitor diver air supply and/or (e) Do not dive.

Airflow. Proper cooling of the diving hookah depends on adequate airflow. Ensure there is sufficient space around the hookah to allow airflow for motor and compressor cooling. Do not use it in closed environments with a limited circulation of air.

Maintenance Procedures. Before performing any maintenance, make sure the diving hookah is powered off, disconnected from its power source, and fully depressurized. Allow the diving hookah to cool to room temperature before starting any maintenance tasks.

ADDITIONAL SAFETY MEASURES

Transportation. Move the compressor using appropriate lifting techniques to avoid personal injury. To avoid injuries caused by vibration, do not move the compressor while in operation.

Hearing Protection. In case of prolonged close-proximity use, hearing protection is recommended.

Environmental Exposure. The suggested working temperature is +41°F to +122°F (+5°C to +50°C). Do not use the compressor near flames or heat sources. Avoid prolonged exposure of the compressor to direct sunlight. Keep children and animals away from the compressor. Do not use the compressor in dusty environments.

Tampering. Do not modify or tamper with the hookah's safety devices or regulator. If your diving hookah requires maintenance or repair, please contact your supplier for additional information.

OPERATION

Location. Position the diving hookah on a stable and reasonably level surface. The diving hookah does not contain any lubricating fluids, so the surface does not need to be perfectly level. Locating the diving hookah on an excessively sloped surface; however, an uneven surface could allow it to slowly 'creep' due to vibration while running.

Ensure there is sufficient room around the diving hookah to allow a free flow of cooling air to the cooling fan and from the cooling fan.

Be mindful that the diving hookah draws breathing air from underneath the cooling fan cover. The air being drawn into the cooling fan is the air that will be supplied to the diver. Be constantly mindful of the air quality at the cooling fan. Boat motors, generators, fuel supplies and batteries are all potential sources of breathing air contamination.

Power Connection: Electrical Outlet. Connect the diving hookah only to a 110 volt / 230 volt power outlet with Earth Leakage Protection and ensure the electrical service current matches the voltage printed on the hookah product sticker. Make sure the connection is secure.

The unit is fitted with a 6-foot-long (1.8m) power cable. Using an extension cord will result in a voltage drop which can cause motor damage and overheating. Additionally, lower voltage will reduce the speed of the motor thereby reducing the air output. Any extension cord utilized should be the minimum length required and rated for heavy-duty applications.

Power Connection: Battery Power. Connect the diving hookah to an appropriate battery. Ensure the battery voltage matches the voltage printed on the hookah product sticker. Connect the RED positive cable to the positive (+) battery terminal. Connect the BLACK negative cable to the negative (-) battery terminal. Make sure the connections are secure.

The unit is fitted with a 6-foot-long (1.8m) power cable. Extending the cables over greater distances will result in a voltage drop which can cause motor damage and overheating. Additionally, lower voltage will reduce the speed of the motor thereby reducing the air output. Any extensions to the power cables should be handled by a licensed electrician and may require upgrading the cables to a larger gauge than what is supplied with the diving hookah.

Hose Connection. Connected the supplied hose/regulator assembly to the breathing air outlet located on the end of the diving hookah filter assembly. The hose connects by simply pushing the male hose connector into the female air coupling. Ensure that the chrome outer ring of the air outlet clicks back into place securely. Ensure that the connection is secure.

Switching the Diving Hookah On. Before starting the machine, make sure no damage occurred to the compressor during transportation. The diving hookah's electrical control box incorporates a red ON/OFF switch. Switch the diving hookah on by turning the red switch to the AUTO position. The compressor will then run and pressurize the air storage tank to approximately 145 psi (10 bar). The

compressor will then switch off automatically. As air is used by the diver, the compressor will cycle on and off, thereby constantly repressurizing the air storage tank to approximately 145 psi (10 bar).

Outlet Pressure Regulation. The outlet air pressure (filtered air delivered to the diver) is reduced by a pressure regulator. The pressure regulator is mounted under the pressure gauge; the pressure gauge displays the regulated outlet air pressure. The pressure regulator can be adjusted by pulling the red adjustment knob up until it clicks and then turning the knob until the desired outlet pressure is obtained. Once adjusted, the knob should be pushed back into place until it clicks. The outlet air pressure is factory set to approximately 58 psi (4 bar) and adjustment is not generally necessary. Increasing the outlet air pressure can place excessive strain on the diving air hose, fittings, and second stage breathing regulator/mouthpiece.

Hookah Limitations. Understand the operational limitations of your diving hookah. Comply with specifications that include, but are not limited to, maximum number of divers and maximum operating depth.

Using The Diving Hookah as an Air Compressor. This model diving hookah is fitted with a standard Nitto compressed air outlet and can be used as an oil-free air compressor. Oil-free compressors are not designed to run continuously and are therefore not designed to operate high airflow tools for long periods of time. The compressor requires pauses in operation to prevent overheating.

After Use. After diving operations conclude, the diving hookah should be switched off by turning the red ON/OFF switch to the OFF position. The air storage tank should be drained of air via the drain valve located on the lower side of the air tank. Accumulated tank moisture (condensate), which has accumulated in the tank during operation, will also drain. This is normal. It is also normal for the moisture to be discolored.

BREATHING AIR NEEDS

When shopping for a recreational hookah, it is important to understand what the air demand on the hookah will be. Can a hookah reliably support one diver at depth, or can two divers be supported simultaneously at the hookah's recommended Maximum Operating Depth (MOD)? Based upon data provided by [Divers Alert Network \(DAN\)](https://world.dan.org/health-medicine/health-resource/smart-guides/13-ways-to-run-out-of-air-how-not-to/how-much-air-do-you-really-need/), the below chart provides average air requirements for one (1) diver under differing workloads and at various seawater depths.

DEPTH	AVERAGE BREATHING GAS NEEDS		
of Sea Water	At Rest	Light to Moderate Activity	Vigorous Exercise
0m (0') · Surface	8 L/min (0.28 CFM)	20 L/min (0.7 CFM)	70 L/min (2.5 CFM)
5m (16')	12 L/min (0.42 CFM)	30 L/min (1.1 CFM)	105 L/min (3.7 CFM)
10m (33')	16 L/min (0.56 CFM)	40 L/min (1.4 CFM)	140 L/min (4.9 CFM)
15m (49')	20 L/min (0.7 CFM)	50 L/min (1.8 CFM)	175 L/min (6.2 CFM)
20m (66')	24 L/min (0.85 CFM)	60 L/min (2.1 CFM)	210 L/min (7.4 CFM)

Source: <https://world.dan.org/health-medicine/health-resource/smart-guides/13-ways-to-run-out-of-air-how-not-to/how-much-air-do-you-really-need/>

BREATHING AIR DELIVERY

The recommended Maximum Operating Depth (MOD) of the Esprit 3T line of diving hookahs is 15 meters (49 feet). The following chart indicates the air output of each model in both liters per minute (L/min) and cubic feet per minute (CFM).



DANGER

Although the following chart provides air delivery information to a depth of 100 meters (330 feet), use of the Esprit 3T line by (a) more than one diver, and/or (b) deeper than the recommended MOD, will result in injury or death.

Note: 50Hz/2 = 50 Hertz, 2-pole motor. 60Hz/2 = 60 Hertz, 2-pole motor.

MODEL	ESPRIT 3T 60/2		ESPRIT 3T 60/2		ESPRIT 3T 60 12V 600W		ESPRIT 3T 60 24V 500W		ESPRIT 3T 60 12V 500W	
RPM	3300 (60Hz/2)		2800 (50Hz/2)		3000 (12V)		2700 (24V)		2400 (12V)	
OUTPUT	L/min	CFM	L/min	CFM	L/min	CFM	L/min	CFM	L/min	CFM
0m (0')	145	5.1	125	4.4	112	4.0	130	4.6	75	2.6
10m (33')	130	4.6	115	4.1	98	3.5	113	4.0	62	2.2
15m (49')	125	4.4	110	3.9	106	3.7	107	3.8	58	2.0
20m (66')	120	4.2	105	3.7	83	2.9	100	3.5	54	1.9
30m (99')	110	3.9	95	3.4	70	2.5	90	3.2	45	1.6
40m (132')	97	3.4	85	3.0	62	2.2	80	2.8	40	1.4
50m (165')	88	3.1	75	2.6	55	1.9	70	2.5	35	1.2
60m (198')	75	2.6	65	2.3	50	1.8	65	2.3	30	1.1
70m (231')	67	2.4	58	2.0	45	1.6	58	2.0	28	1.0
80m (264')	59	2.1	50	1.8	40	1.4	52	1.8	22	0.8
90m (297')	50	1.8	43	1.5	35	1.2	45	1.6	20	0.7
100m (330')	42	1.5	38	1.3	30	1.1	40	1.4	15	0.5

Exceeds Recommended Operating Depth

MAINTENANCE

Under normal operation, the diving hookah requires very little maintenance.

Air Intake Filter. Unscrew the filter and clean it periodically using compressed air. Clean from the center to the outside.

Air Leaks. The user should always be on the lookout for air leaks. An air leak will cause the diving hookah to run longer and more often than necessary, which will be detrimental to the machine. An air leak will usually be audible. Air leaks may also be present if the air storage tank continuously loses pressure. Once switched on, the diving hookah should pressurize the air storage tank to approximately 145 psi (10 bar) and the tank pressure should remain at 145 psi (10 bar) until air is used by the diver. A suspected air leak can be easily located using soapy water. Any air leaks found should be rectified before continuing to use the diving hookah.

Air Tank Moisture. As previously mentioned, it is normal for the humidity in compressed air to condense. It is necessary to periodically discharge this liquid (condensate) from the air tank by unscrewing the drain plug and tilting the tank slightly to drain any residual condensate.

Breathing Air Filter Cartridge. The breathing air filter (mounted on the air storage tank) contains a replaceable filter cartridge. The filter cartridge should be replaced every 20 to 30 operating hours or anytime when outlet air odor is detected. If the diving hookah is being used regularly in a commercial setting, then it may be necessary to replace the cartridge more frequently. The filter cartridge can be accessed by unscrewing the knurled aluminum end of the filter housing along with the diving hose connector. Replacement filter cartridges are available from authorized dealers (SKU AC036-101).

Service Kits. Service/Rebuild Kits are available for the diving hookah (SKU EX041-160). The service kit includes replacement piston seals, gaskets, O-rings and air intake filters. A service kit may be required if the diving hookah has been operated extensively in a commercial setting or if the diving hookah has been overheated.

ACCESSORIES

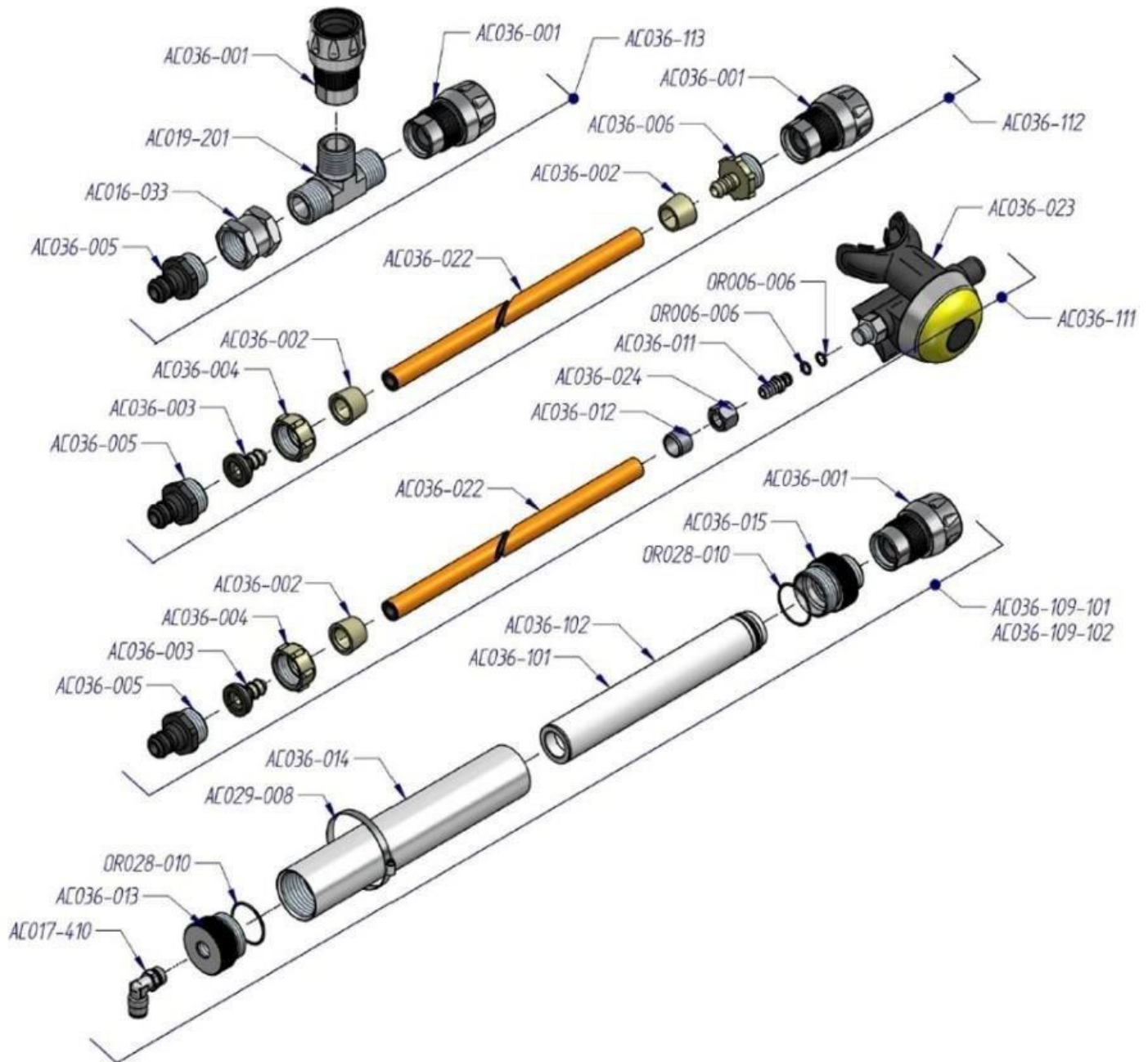
Esprit Hookah accessories can be purchased from NUVAIR.com.

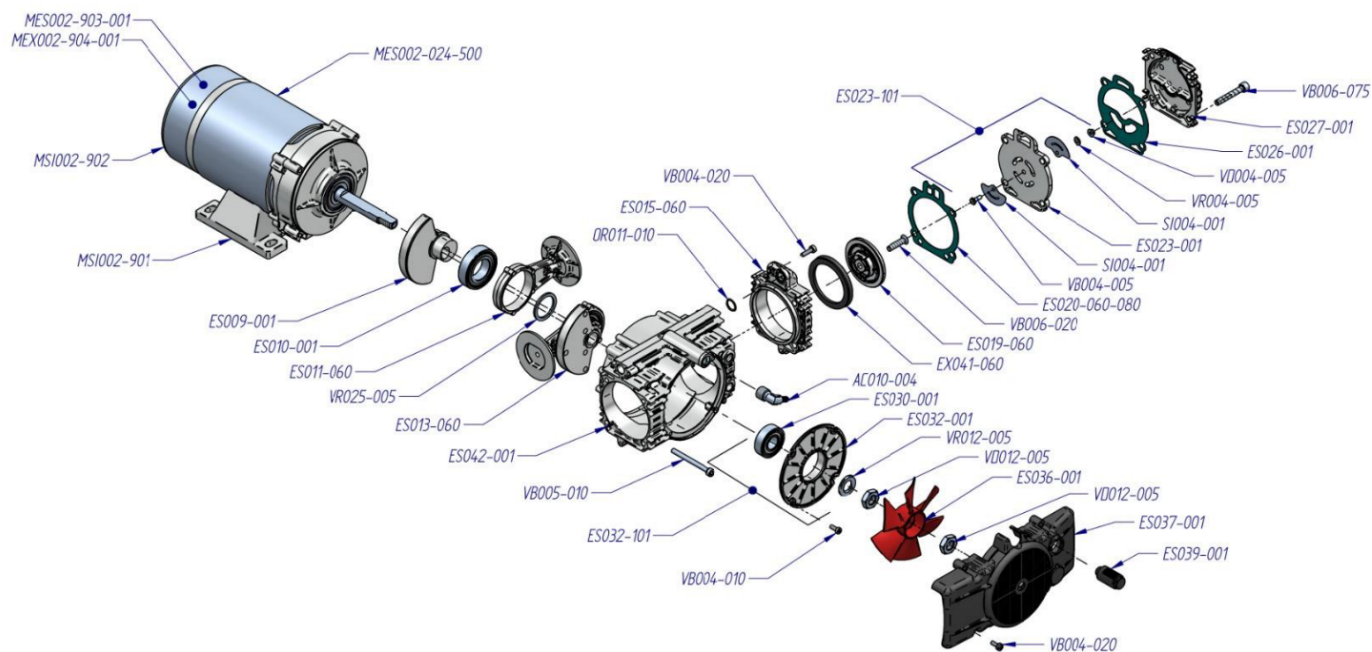
IMAGE	SKU	DESCRIPTION
	<u>AC036-112</u>	Nardi 17m (55.8') Hookah Extension Hose <i>This genuine Nardi extension hose fits directly to the breathing air outlet on your diving hookah and extends the length of a standard NARDI Hose & Regulator to 111.6 feet (34m). Regulator not included. Do not exceed your hookah's Maximum Recommended Depth. Hose ID: 8mm · Hose OD: 15mm</i>
	<u>AC036-111</u>	Nardi 17m (55.8') Hookah Hose with Regulator <i>The hookah hose and regulator set ships as standard equipment with all Nardi diving hookahs.</i>
	<u>AC036-113</u>	Nardi T-Coupling for Dual Hookah Hoses <i>The T-Coupling allows for the connection of two (2) dive hoses to a single hookah. This device can only be used on hookahs rated for two (2) divers.</i>
	<u>AC036-102</u>	Nardi Hookah Air Filter · Gasoline Version <i>Genuine NARDI Replacement Filter Cartridge for breathing air. This item suits gasoline-powered diving hookahs or in environments where carbon monoxide (CO) is a concern. Cartridges go through a decontamination process and are then sealed, and vacuum packed to ensure integrity during storage.</i>
	<u>AC036-101</u>	Nardi Hookah Air Filter · Electric Version <i>Genuine NARDI Replacement Filter Cartridge for breathing air. This item suits electric-powered diving hookahs and for environments where the presence of carbon monoxide (CO) is not possible. Cartridges go through a decontamination process and are then sealed, and vacuum packed to ensure integrity during storage.</i>
	<u>9625</u>	Nuvair Pro CO Alarm Handheld Analyzer <i>Designed to detect the presence of carbon monoxide (CO) in stored gas cylinders, enclosed spaces and compressors, the handheld Nuvair Pro CO Alarm analyzer comes with two user-programmable alarms. If the analyzer reading drops below or rises above the alarm setpoints, a small relay sounds an alarm and can illuminate a small LED.</i>
	EX041-164	Nardi Esprit 60 Service Kit

REPLACEMENT PARTS

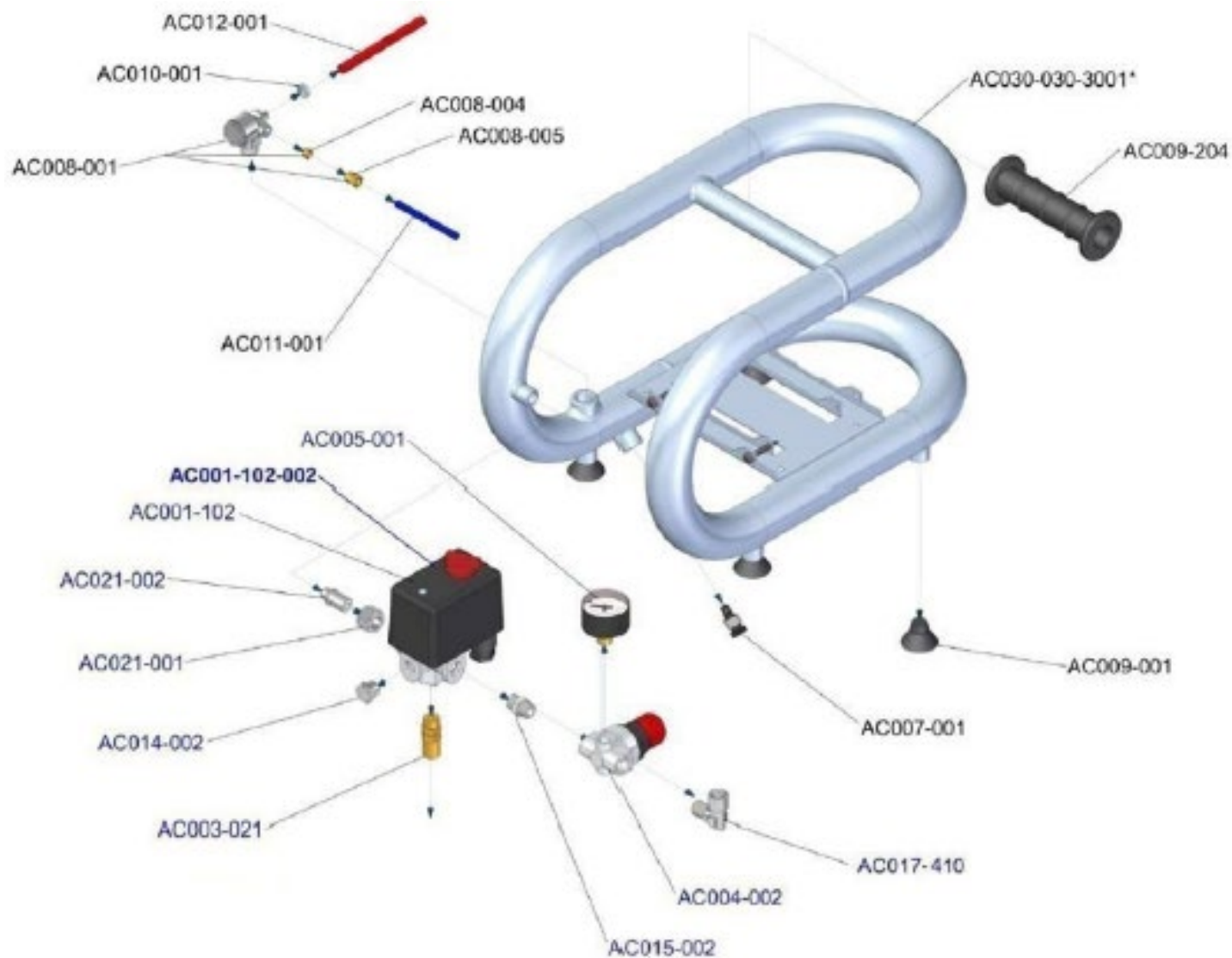
Parts diagrams for the Esprit Hookah follow. Parts can be purchased from NUVAIR.com.

Hookah Parts





CODE	DESCRIPTION	CODE	DESCRIPTION	CODE	DESCRIPTION
AC010-004	Pipe fitting "L"	ES032-001	Flange	VB004-010	Screw
ES009-001	Crank	ES032-101	Flange with bearing	VB004-020	Screw
ES010-001	Bearing	ES036-001	Plastic fan of compressor "RED"	VB005-010	Screw
ES011-060	Connecting rod 60 mm	ES037-001	Plastic cover fan "BLACK"	VB006-020	Screw
ES013-060	Connecting rod complete	ES039-001	Suction filter	VB006-075	Screw
ES015-060	Cylinder 60 mm	ES042-001	Monoblock	VD004-005	Nut
ES019-060	Piston top 60 mm	EX041-060	Piston seal	VD012-005	Nut
ES020-060-030	Cylinder 60 mm gasket 0,30 mm	MES002-024-500	Electric motor 24 Volt 500 Watt	VR004-005	Washer
ES020-060-050	Cylinder 60 mm gasket 0,50 mm	MES002-903-001	Brush holders motor	VR012-005	Washer
ES020-060-080	Cylinder 60 mm gasket 0,80 mm	MEX002-904-001	Brush	VR025-005	Washer
ES023-001	Valve plate	MSI002-901	Support motor		
ES023-101	Valve plate complete	MSI002-902	Cover motor brush		
ES026-001	Head gasket	OR011-010	O-ring		
ES027-001	Head	SI004-001	Valve		
ES030-001	Bearing	VB004-005	Screw		



WARRANTY

Your electric diving hookah is covered by a 24-month warranty against defective components. The warranty does not cover normal wear and tear, nor does it cover defects caused by misuse or operation not in accordance with the supplied User Manual. Please retain your original purchase receipt as proof of purchase. Shipping costs are the hookah owner's responsibility.

For additional warranty information or to register your product for warranty coverage within 10 days of receipt, please visit <https://nuvair.com/warranty-registration>.



Recycling

The compressor must be scrapped according to disposal norms in the country where it will be disposed of.





Nuvair

Phone +1.805.815.4044
Fax +1.805.486.0900
1600 Beacon Place
Oxnard, California 93033 USA
info@nuvair.com
www.nuvair.com

Rev. 02.03.2025