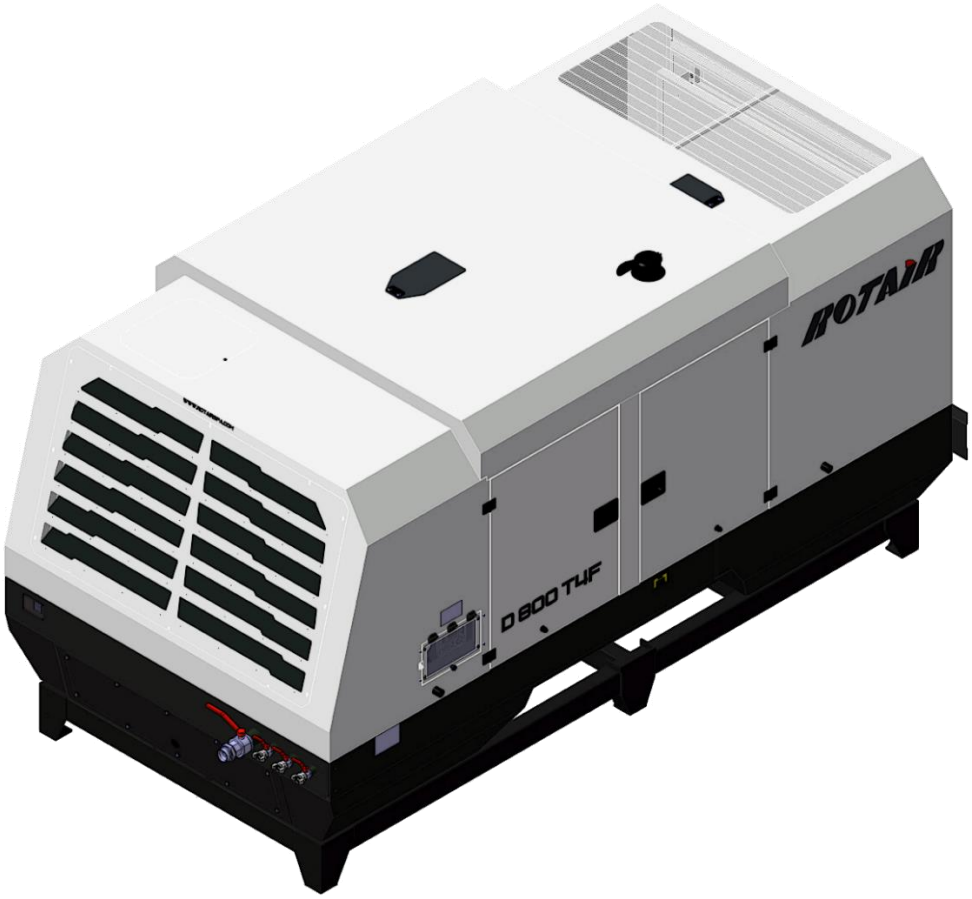
ROTAIR®

TECHNOLOGY AND ENGINEERING SOLUTIONS

USER'S AND MAINTENANCE MANUAL

MOTOR COMPRESSOR

D 800 T4F



Dear customer,

Thanks for having purchased this Rotair motor compressor, which is designed and manufactured in compliance with high standards, in order to ensure high quality performance, as well as easy use and installation.

For any information, you can contact our customer service at the following address:

ELGI PORTABLE COMPRESSORS
4610 Entrance Drive St A
Charlotte, NC 28273
704-523-4123
Portableservice@elgi.com
Portablesales@elgi.com

FOREWORD

These service instructions have been drafted to facilitate the knowledge of the machinery purchased and its modes of use.
In drafting them, we have intentionally omitted the technical in-depth description of some operations linked to the motor and the axle, since such information is contained in the user's and maintenance of the respective manufacturers.
The service instructions contain indications of utter importance concerning the safe appropriate and cost-effective operation of the machine.
The compliance with said operations helps prevent potentially hazardous situations, additional costs and loss of time, increasing at the same time its life-span.
The service instructions and safety measures reported in this manual must be complied with by the user of the machinery.
Besides the service instructions and the accident prevention prescriptions which apply in the countries and places of installation, all the more general rules of safety at the workplace must be complied with.
It is therefore recommended to carefully read the instructions reported in this manual.
This manual cannot be disclosed, duplicated or copied without the previous authorization by the Manufacturer.
Any lack of compliance with the above shall be pursued under the Law, in particular if the illicit action involves advantage for competing companies.

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1 GENERAL

1.1 Definitions

The most significant definitions contained in this manual are reported hereinafter

1.1.1 QUALIFIED PERSONNEL

"Qualified personnel" are those personnel who are familiar with the rules for installation, assembly, repair and servicing of the machinery and who are provided with the specified technical qualification, such as e.g.:
Technical training authorizing to operate in compliance with the safety standards as related to the hazards the presence of electric current, pressure circuits, etc. may involve.
Technical background or - in any case - specific training relevant to the user's and maintenance procedures of the machinery in safety conditions.
Training in the basic first-aid activities.

1.1.2 HAZARD

A potential source of injury or damage to health

1.1.3 HAZARDOUS AREA

Any area within and/or in proximity of machinery where the presence of a person constitutes a risk for the health and safety of said person.

1.1.4 EXPOSED PERSON

Any person being fully or partially in a hazardous area

1.1.5 OPERATOR

The person/people charged to install, operate, adjust, clean, repair or move a
Machinery or perform its maintenance.

1.1.6 RISK

Combination of the likelihood and severity of an injury or damage to health which may arise in a hazardous situation.

1.1.7 GUARD

Part of the machinery utilized to ensure protection by means of a material barrier.

1.1.8 PROTECTION EQUIPMENT

Device (different from a guard) which reduces the risk, by itself or associated to a guard.

1.1.9 EXPECTED USE

The use of the machinery in compliance with the user's information.

1.1.10 REASONABLY EXPECTABLE INCORRECT USE

The use of the machinery in a different way than the one indicated in the user's instructions, but which may derive from the easily expectable human behaviour.

1.1.11 COMPONENT

A constituent part of the electrical/pneumatic equipment, usually specified by its function, but used in various applications.

1.1.12 CONTROL DEVICE

A device introduced in a control circuit and used to control the operation of the system (e.g. position sensors, manual control switches, relays, electro-magnetic control valves).

1.1.13 SAFETY INTERLOCK

Mechanical, electrical or other device whose purpose is to prevent the parts of the machinery from operating in specified conditions (generally, until the guard is closed)

1.1.14 MANUFACTURER

Physical or legal person who designed and/or develops machinery or partly-completed machinery which is subject of this directive and who is liable for the compliance of the machinery or partly-completed machinery with this directive as related to its marketing with his/her name or brand, or for personal use. In absence of a Manufacturer as defined above, the Manufacturer shall be considered the physical or juridical person who markets or puts into service machinery or partly-completed machinery.

1.2 Machinery Identification

The identification nameplate is attached on the motor compressor chassis.
Such nameplate reports the Manufacturer's data, the denomination of the machinery, the code and year of manufacturing.
For any requests for spare parts or actions by our technicians, please refer to the data reported in the nameplate; in particular the code number of the machinery must always be mentioned.

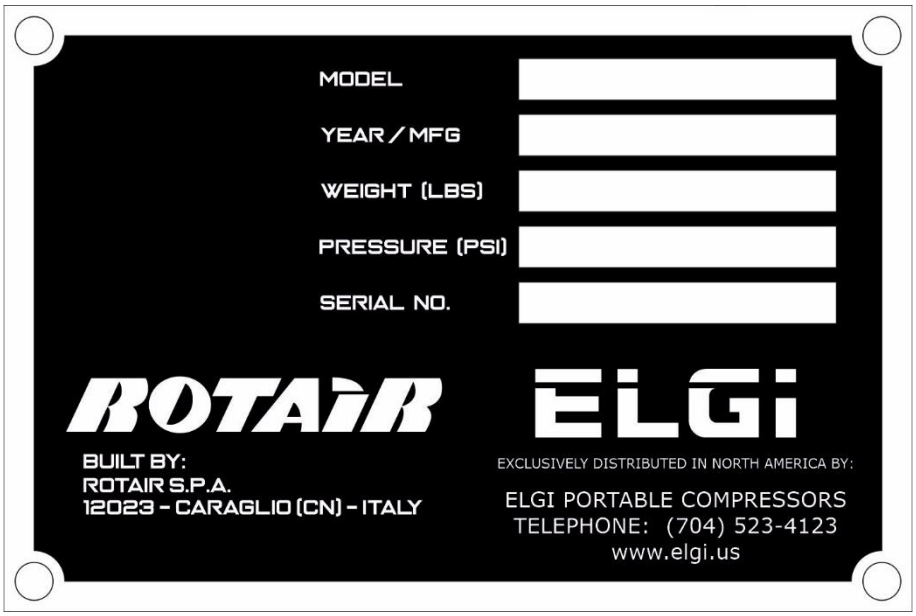


Figure 1.2-1 Identification nameplate D800T4F

1.3 Harmonized technical standards

The machinery has been designed and developed in compliance with the provisions contained in the technical standards reported herein under:

UNI EN ISO 12100	Safety of machinery -General design principles - Risk assessment and risk reduction.
UNI EN ISO 13857	Safety of machinery– Safety distances to prevent from reaching the hazardous areas with the upper or lower limps.
UNI EN ISO 13850	Safety of machinery - Emergency stop system, functional aspects
CEI EN 62061	Safety of machinery - Functional safety of the programmable electrical and electronic control systems as related to safety
CEI EN 60204-1	Safety of machinery - Electrical equipment of the machineries. Part I: General rules.
UNI EN 983	Safety of machinery. Safety requirements relevant to systems and related components for hydraulic and pneumatic transmission. Pneumatics.
UNI EN 349	Safety of machinery - Minimum openings to prevent the crushing of parts of the human body.
D. LGS. January 27th 2010 no.17	Implementation of Directive 2006/42/CE relevant to machinery, which modifies directive 95/16/CE relevant to elevators.
UNI EN ISO 14121-1	Safety of machinery - Risk assessment. General principles
UNI EN ISO -TR 14121-2	Safety of machinery - Examples

Machine directive 2006/42/CE.

Article 7. Presumption of conformity and harmonized standards

1. The Member States deem that the machinery provided with the “CE” marking and accompanied by the CE declaration of conformity, whose elements are provided for in Annex II, Part 1, Section A, comply with the provisions of this directive.
2. The machinery manufactured in compliance with an authorized standard, whose reference has been published on the Official Journal of the European Union is assumed to be compliant with the essential health and safety requirements covered by such harmonized standard.
3. The Commission published the references of the harmonized standards in the Official Journal of the European Union.
4. The Member States shall take the appropriate measures to allow the social partners influencing - at national level - the development and control process of the harmonized standards.

1.4 General description of the machinery

The machinery described in this manual is motor compressor D800T4F.
The motor compressor is a piece of machinery with the capacity of generating a given quantity of compressed air in l/m by using a diesel engine as primary energy.
The pneumatic energy finds applications in different fields of use, where "pneumatic" operation tools, accessories and equipment are utilized. For instance: demolition hammers, drilling hammers, vibrators, drilling machines, rammers, coating machines, etc.
Each of these tools/-accessories has its own consumption of compressed air, expressed in litters per minute.
The optimum coupling between the compressor and the tool is achieved when the compressed air consumption does not exceed 85% of the air generated by the compressor (furthermore, it must be taken into consideration that the quantity of compressed air required by the tool shall increase in time, proportionally to the wear of the tool itself).
The correct compressor-tool coupling ratio allows the machinery operating in optimum conditions, as appropriate to ensure long life-span at the highest performance.
An oversized tool - besides creating unfavourable conditions for the appropriate operation of the machinery - shall not develop full performance, since it cannot resort to the required quantity of compressed air.
This machinery has been designed to work at ambient temperature ranging from -10 C° (14°F) and +50°C (12°F).

2 TECHNICAL CHARACTERISTICS OF THE MACHINERY

The general technical characteristics of the machinery are reported hereinafter.

2.1 General technical characteristics

	D800T4F
DESCRIPTION	TECHNICAL VALUES AND DATA
Length	159 inches
Width	80 inches
Height	86 inches
Mass	7100 lbs
Compression system	Screw single-stage
Fuel tank capacity	100 gal

2.2 Technical characteristics of the compressor

	D800T4F
DESCRIPTION	TECHNICAL VALUES AND DATA
Service pressure	10 bar – 145 Psi
Minimum pressure	5,5 bar – 80 Psi
Max. pressure	11,5 bar – 167 Psi
Rated payload at service pressure	800 CFM
Cooling typology	Hydraulic oil (*)
Hydraulic system capacity	14.50 gal (11.85 fuel tank – 2.65 Airend)

(*) We recommend ROTAIR COMPRESSOR 46.

2.3 Technical characteristics of the engine

DESCRIPTION	TECHNICAL VALUES AND DATA
Engine brand	FPT
Type	N 67
Number of cylinders	6
Fuel	Diesel
Cooling	By liquid
	We recommend: ROL-ICE BLUE by ROLOIL
Power available	187 kW at 2200 rpm
Max. rotation speed	2100 r.p.m.
Min. rotation speed	1400 r.p.m.
Emissions	Interim Tier 4 Final
Engine oil tank capacity	4.8 gal

2.4 Technical characteristics of the electric battery

DESCRIPTION	TECHNICAL VALUES AND DATA
Rated voltage	12 Vdc (x2)
Capacity	185 Ah (x2)
Discharge current	1150 A (x2)

WARNING: Batteries should be connected in series with a final output of 24 Vdc

2.5 Service temperatures

DESCRIPTION	TECHNICAL VALUES AND DATA
Minimum ambient temperature limit	-10°C [14 ° F]
Maximum ambient temperature limit	+50° C [122°F]
Altitude	1.500 m above sea level

3 SYMBOLS AND WARNINGS

The pictograms and main warning for the operators are reported herein under and indicated by the following denominations and symbols:

3.1 Hazards

WARNING

The pictogram calls the attention of specific provisions in order to prevent damage.

WARNING FOR ELECTRICAL HAZARD

The pictogram calls the attention of specific provisions in order to prevent damage.

WARNING FOR CRUSHING HAZARD

The pictogram calls the attention on a likely hazardous situation with risk of crushing the upper limbs.

WARNING HAZARD OF ORGANS IN MOTION

The pictogram calls the attention to the hazard of organs in motion.

WARNING ON RISK OF SCALDING OR HAZARD DUE TO HIGH-TEMPERATURE ELEMENTS

The pictogram calls the attention on the hazard of high-temperature elements and risk of scalding.

WARNING: OVERHANG ING LOADS

OVERHANGING LOAD WARNING

The pictogram calls the attention to the hazard due to the presence of overhanging loads

WARNING OF THE PRESENCE OF PRESSURE VESSELS

The pictogram calls the attention to the presence of pressure vessels.

3.2 Forbiddances

FORBIDDANCE TO REMOVE THE PROTECTION EQUIPMENT AND THE GUARDS

The pictogram calls the attention on the forbiddance to remove protection equipment such as fixed, movable, interlock guards or to tamper with photocells or photocell barriers.

FORBIDDANCE TO PERFORM CLEANING OR MAINTENANCE WHEN THE MACHINERY IS IN MOTION

The pictogram calls the attention on the forbiddance to perform cleaning or maintenance operations with organs in motion.

FORBIDDANCE TO TRANSIT UNDER OVERHANGING LOADS

The pictogram calls the attention on the forbiddance to transit under overhanging loads.

FORBIDDANCE TO START THE MACHINERY WHEN THE HOOD IS OPEN

3.3 Obligations and notices

NOTICES

This symbol recommends to consult the manual before undertaking a given action.

OBLIGATIONS TO USE THE PPE (PERSONAL PROTECTION EQUIPMENT)

The pictogram calls the attention on the obligation to use the personal protection equipment.

NOTICES

This symbol highlights that the description involves significant parts, since they may cause severe mechanical and electrical damage and malfunctions if the relevant standards are not complied with. It is recommended to comply with the information contained in this manual and with the law provisions in force as related to health and safety at the workplace.

HIGHLIGHTING OF THE HOOKING POINT TO LIFT THE MACHINERY.

OBLIGATION TO USE THE SUPPORT FOOT, THE PARK BRAKE AND WHEEL LOCKING WEDGES.

3.4 General notices

This manual includes the user's and routine maintenance instructions of the machinery. Whenever it is not specified otherwise, the operational and maintenance actions are to be considered as "specialized", i.e. they can only be performed by a technician appointed to the purpose.

Before undertaking any operation on the machinery, carefully read this manual.

ROTAIR S.P.A. declines any responsibility for any operation performed in conflict with the contents of this document.

Before utilizing the machinery, carefully read this document and comply with the safety law, regulations and standards in force.

This manual and the annexed documents must be considered as an integral part of the machinery they refer to and must always accompany the machinery, even if the latter is transferred to another user. It is therefore appropriate to preserve them for further reference.

This manual and the annexed documents are specific for the machinery they have been drafted for.

Do NOT utilize this manual and the annexed documents to run operations on similar machinery, of the same brand or typology.

ROTAIR S.P.A. is available to its Customer for any further information. Please report the information (type of machinery, model and code) contained in the machinery identification nameplate. All the specific data not indicated in the text are mentioned in chapter "Technical characteristics of the Machinery" as well as in the technical annexes of this user's and maintenance manual.

This manual thoroughly describes:

- The information relevant to towing, lifting and parking of the machinery;
- The general rules and recommendations useful for routine and extraordinary maintenance;
- The modalities to identify and order the spare parts.

Remark: the instructions for the appropriate use of the engine are described in the manual drafted by the engine manufacturer.

This manual must be preserved with care, in its folder, far from sources of humidity, heat and sun rays, so that it can be consulted at any time by both the personnel appointed to the use and by those who need to perform routine and extraordinary maintenance.
This machinery has been exclusively designed and manufactured to deliver compressed air in the conditions stated by the Manufacturer. Every other utilization not mentioned in the "expected uses" shall relieve the manufacturer from any liabilities, which will be at full charge of the user.
“Approved purpose" assumes compliance with the provisions reported hereinafter and related to the appropriate use and maintenance, as well as to the transport of the unit.
All the accident prevention regulations and standards in force need to be complied with as well, besides complying with the general rules in terms of safety and occupational medicine which are governed by the legislation in force.
The manufacturer declines any responsibility in case of changes made on the machinery without its authorization.
Before commissioning, the buyer must ascertain that ANY equipment or machinery, components and protection installations that are not part of the supply of this machinery comply with Machine Directive 2006/42/CE and to the other applicable European Directives (2006/95/CE - 2004/108/CE, etc.).

4 USE OF THE MACHINERY

4.1 Use allowed

The machinery described in this manual is motor compressor D800T4F.
The machinery is allocated to work outdoor.
The motor compressor is a piece of machinery with the capacity of generating a given quantity of compressed air in l/m by using a diesel engine as primary energy.
The pneumatic energy finds applications in different fields of use, where "pneumatic" operation tools, accessories and equipment are utilized. For instance: demolition hammers, drilling hammers, vibrators, drilling machines, rammers, coating machines, etc.
Each of these tools/-accessories has its own consumption of compressed air, expressed in litres per minute.
The optimum coupling between the compressor and the tool is achieved when the compressed air consumption does not exceed 85% of the air generated by the compressor (furthermore, it must be taken into consideration that the quantity of compressed air required by the tool shall increase in time, proportionally to the wear of the tool itself).
The correct compressor-tool coupling ratio allows the machinery operating in optimum conditions, as appropriate to ensure long life-span at the highest performance.
An oversized tool - besides creating unfavourable conditions for the appropriate operation of the machinery - shall not develop full performance, since it cannot resort to the required quantity of compressed air.
This machinery has been designed to work at ambient temperature ranging from -10 C° (14°F) and +50°C (122°F).

WARNING: *It must be highlighted that the compressed air generated by this unit may contain some very fine traces of oil, therefore it is not appropriate to be utilized with those systems that call for fully oil-free air (e.g..: food processing and pharmaceutical industry, transports of flours and powders, cement, etc...).*

4.2 Use not allowed

It is not allowed to use the machinery for other processes than those which are mentioned in the section above.
ROTAIR S.P.A. declines any responsibility as related to injuries or accidents due to lack of compliance with the specific provisions for use.

4.3 Residual risk

Avoid standing in front of the compressed air discharges. The direct exposure to the air jet may cause medium severity injuries because of the strength and speed of the compressed air.

The machine must operate outdoor, because of the presence of the engine and of the relevant exhaust gases.

It is strictly forbidden to operate the machine in indoor environments whose atmosphere is made of vapours or mixtures of corrosive or explosive gases.

When performing demolition, drilling, sandblasting activities or any other operation that generates dust the tool needs to be connected to the compressor through a pressure-resistant hose of sufficient length to keep the machinery away from the work area, thus preventing the clogging of both the exhaustion filters mounted on the unit and of the radiator for the cooling of the lubrication and cooling liquids. Even in this case, a good operator will locate the machinery leeside versus the work area.

The machinery has been designed and built to work with the doors closed and - consequently - it is forbidden to keep it open when the engine is on, because - besides generation harmful sound emissions - the required internal ventilation would be interrupted, and this is instead indispensable for the appropriate operation of the compressor.
Even selecting the hoses to connect the machinery to the tool, make sure that they are sized as appropriate, taking into account their length, the volume of air which needs to pass through them and the service pressures: if the hoses show a too small diameter or excessive length, the air flow would interrupt, with subsequent loss of load and poor performance of the tool.
The hoses which convey compressed air to from the machinery to the tool, or to any device applied, is to be provided with a tap located at the end which is connected to the tool; the tap shall be held closed during the connection of the hoses to both the machinery and the tool in order to prevent an inappropriate opening of the tap on board the machine from generating strong flickering of the piping, which may cause injuries. Before disconnecting any hose, make sure there is no pressure inside.

5 LEVELS AND QUALIFICATIONS OF THE PERSONNEL

The actions on the machinery must be performed by qualified, trained and informed personnel only. "Qualified personnel" means people who - based upon their profession - have acquired experience and instructions as well as knowledge on the relevant standards and provisions on accident prevention and operational conditions. Such personnel, appointed by the machinery safety managers, must be able to perform the required operations as well as to recognize and anticipate the potential hazards.
Entrust the activities to appropriately trained or instructed personnel only; determine unmistakably the competences of the personnel as related to the fine tuning and to the maintenance and repair activities.
Define the responsibility of the operators appointed to run the equipment, also through accurate written provisions and authorize them to reject provisions by third parties if in conflict with the safety regulations and standards.
Make sure that the activities are performed by purposely-appointed personnel only.
The actions on the electrical equipment of the machinery can be performed - in compliance with the electro-technical regulations and standards - only by qualified electricians or by people with an appropriate level of competences in the electro-technical field.
The mechanical and pneumatic maintenance can be performed by the operators of the authorized workshops only.

6 SAFETY PROVISIONS

6.1 Safety provisions concerning transport

The motor-compressors which are not certified for towing need to be loaded onto another means of transport. The motor compressor shall have to be attached as appropriate to the floor of the means of transport in order to prevent and unbalancing of the load during transport.
The unit is shipped by Rotair attached to a support appropriate for its handling by means of fork-lift trucks; such wooden platform facilitates the anchorage to the floor of the transport vehicle and prevents the load from sliding. For safe transport, operate as follows:
1) Locate the unit with the towing steer opposed to the cockpit of the transport vehicle.
3) Make the ropes pass around the towing bar and tighten them by means of the winches provided with the means of transport.
4) Set two wedges (Part A Figure 6.1-1) on each wheel, attaching them to the vehicle floor, in order to prevent the machinery from moving. Utilize wedges of appropriate sizes, both in height and in width.
5) Travel at moderate speed.

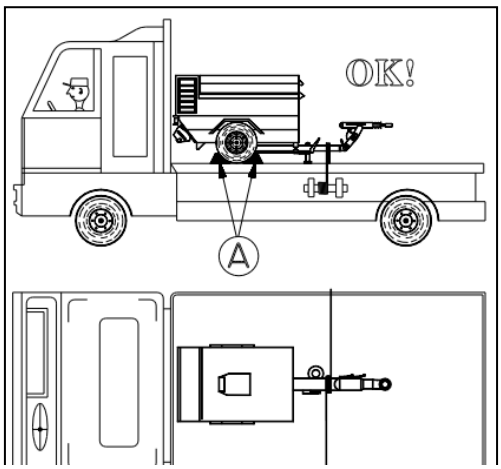


Figure 6.1-1 Lifting system of the machinery

6.2 Safety provisions concerning lifting

Check the status of ropes and chains before starting the handling operations.

A purposely-allocated opening, protected by a rubber plate, is obtained in the upper panel of the hood and allows for easy access to the lifting hook.

List of the operations for the safe lifting of the machine.

1) Make sure that the lifting device (crane, hoist, etc.) is of the appropriate payload to the weight of the unit and that it is maintained as appropriate.
2) In case of lifting installed on truck, use the side anti-tilting stabilizes of the means.
3) Attach the hook of the lifting means to the hooking point of the compressor (Figure 6.2-1).
4) Lift the unit slowly and without sudden pulls. In the side displacements, prevent the load from swaying excessively.

Figure 6.2-1 Lifting system of the machinery

The user must periodically check the efficiency of the lifting equipment and replace it if it results to be no longer appropriate or safe.

No other hooking and lifting systems are allowed except those which are provided with the machine.

This pictogram allows pointing out the hooking system to lift the machine.

5) Always check - before handling - that there are no moving parts that may fall. In such case, attach them as appropriate.
6) In any case, always make sure that the machine is solidly fixed to the rope and balanced as appropriate.
7) Communicate the start-up of the maneuver as appropriate.
8) Never leave the maneuver area with an overhanging load
9) Do not stand or walk under the overhanging load.

WARNING OVERHANGING LOADS

6.3 Safety provisions relevant to towing (for road-certified compressors only)

This paragraph concerns machines authorized for road circulation and therefore equipped with a regular homologation certificate.

For the appropriate towing of the motor compressor, comply with the following prescriptions:

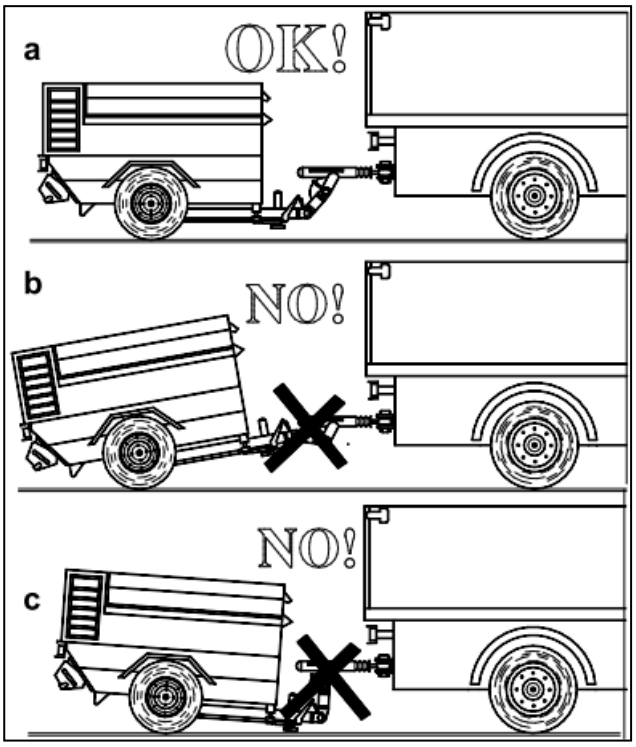


Figure 6.3-1 Instructions for safe towing

1) Make sure that the large towing eyebolt or the ball coupler connection is compatible with the towing device located on the towing vehicle. Make sure that the vehicle is enabled to tow a weight equal to or greater than the one of the motor compressor you intend to tow.
2) Check the pressure of the tires.
3) Adjust the height of the drawbar eye so that it corresponds to the tow vehicle hook; this can be obtained by acting on the articulated joints of the drawbar, until the tow bar that supports the drawbar eye is as horizontal as possible.
4) Solidly lock the articulations by means of the appropriate levers, make sure that there is no clearance between the joint teeth.
5) Insert the locking pins.
6) Hook the trailer to the vehicle, connecting also the safety cable.
7) Release the park brake.
8) Lock the foot, or the support wheel, in the highest possible position, making sure that the wheel cannot rotate on itself, and remove the wheel if required.
9) Connect the lighting system by introducing the motor compressor plug into the purposely-allocated power outlet located on the vehicle and make sure that all the lights (position, turn, stop, number plate) are operational.
10) If the machinery is provided with inertial brake, the latter disengages automatically when maneuvering at reverse speed.
11) Periodically check the brakes and - if required - maintain them.

For the maintenance of the towing steer, of the axle and for the adjustment of the brakes, refer to the Manufacturer's manual enclosed to this documentation.

WARNING: *To know the maximum speed for towing on the road, refer to the standards in force in the country where the towing is performed. On site or in a towing area, do not exceed the towing speed of 10 km/h (6 mph).*

6.4 Prescriptions for the installation and parking of the motor compressor

Before disconnecting the drawing vehicle, or from the lifting hook, adjust the height of the support foot (Part B Figure 6.4-1) or the pivoting wheel, so that the motor compressor is in horizontal position.
In case the machinery is on incline, locate the wedges (Part A Figure 6.4-1) provided with the machine, in front of or behind the wheels to prevent any displacements, which might also occur during the working stage.
Engage the park brake, if provided (Part C Figure 6.4-1). It is forbidden to operate with the machine hooked to the towing vehicle.

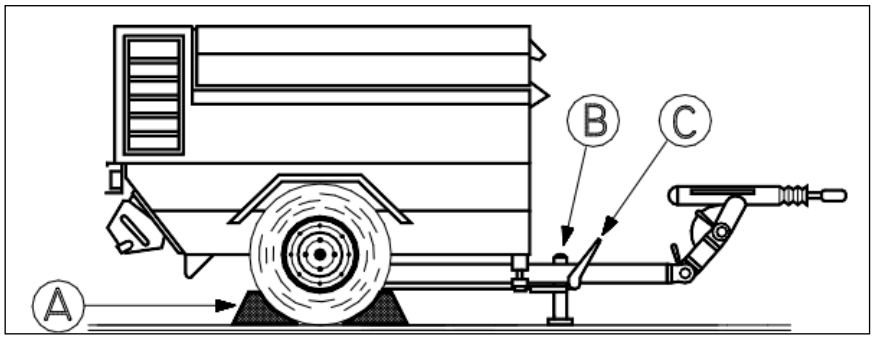


Figure 6.4-1 Instructions for parking and installation of the motor compressor

When parking, it is mandatory to use the support foot, of the hand brake and of the wheel locking wedges.

Only for the braked version is shown below the manual parking brake lever.

Figure6.4-2 Lever of the manual park brake with release red push-button

6.5 Safety provisions concerning maintenance

In order to perform the maintenance operations in safety conditions, the following provisions need to be complied with:

- Control and maintenance operations must be carried out by qualified and specialized personnel who are familiar with the indications in this manual. By qualified and specialized personnel we mean people in possession of a suitable qualification and with a level of appropriate skills to the type of intervention and who have acquired experience and instructions on the prevention of accidents and on the procedures to be implemented to carry out maintenance interventionsall the maintenance activities need to be performed after a safe stop of the machine and interrupting power supply to the engine;
- all the maintenance activities need to be performed after a safe stop of the machine and interrupting power supply to the engine;
- if the machinery is stopped during the maintenance and repair operations, it must be protected against accidental restart;
- in case of replacement of parts, the spare parts must be ordered at Rotair's customer service and must correspond to the technical standards defined by Rotair;
- the electrical equipment of the machinery must be periodically inspected. Any component's' faults must be immediately pointed out and replaced after careful assessment of their effectiveness and efficiency;
- keep the greatest possible cleanness during the maintenance operations, avoiding using flammable solvents;
- before restarting the machinery after maintenance or overhaul, make sure that all the guards and safety devices are restored and operational.
- never use water to extinguish the flames in case of fire (Figure 6.5-1).

Figure 6.5-1

After performing the maintenance operations, it is mandatory to restore the protections and - in particular -on the area of the cooling fan moving organs

7 MACHINERY COMPONENTS

This unit D800T4F product range is a single-phase, silenced oil injection screw mobile motor compressor.
The engine is internal-combustion, fuelled by diesel and is connected to the compressor by a flexible coupling.

7.1 Chassis and axle

The chassis is made from contoured and electrowelded sheet metal and is of load-bearing type. This chassis undergoes two paint coatings which ensure corrosion resistance and rust-proofing.
In the chassis there is the control panel which is protected by a transparent polycarbonate lid and which allows the compressed air pressure and the compressor oil temperature values to be read and allows a visual control of the warning lights each of which will indicate any anomalies of the machine element to which it is connected.

It is equipped with a drawbar which can be equipped with an eye hook or a ball coupling type hook. It consists of articulated, elements which permit correct attachment to the various pulling means.
The braking system includes the parking brake and the inertia braking system. Both act on the wheel-carrier drums of the axle.

7.2 Body

The galvanized metal sheet bodywork is treated with a special painting process that ensure excellent finish quality combined with maximum resistance to impact and rust. Special holes have been created in the elements forming the body, complete with baffles, which allow the cool air necessary for engine and compressor cooling to be sucked in from one side and the heated air to be expelled from the other side. These baffles have been carefully designed in terms of size and shape so as to allow the most efficient internal ventilation of the machine: it is advisable, therefore, to make sure that these openings are kept free and undamaged.
All the parts of the body have been treated with a special painting process which ensure excellent finishing quality together with maximum impact and rust resistance.

7.3 Engine

The unit is equipped with a Diesel engine whose features are described in Section 2.
As related to the user's and maintenance instructions, refer to the manual provided by the Manufacturer and enclosed to the documentation relevant to this machinery.

7.4 Compression unit

It is completely manufactured in the ROTAIR factory and consists of a central body (cylinder) inside which are fitted two screw rotors with asymmetric section, a male one with 5 lobes and female one with 6 lobes.
The cylinder is closed at the ends by two head sections which contain the bearings which bear the radial and axial loads created by the air compression. A series of channels, inside the cylinder and heads, undertake to deliver the oil to the various components. The distribution of the lubricant, serves to lubricate the bearings and to maintain a coating of oil between the rotors and the bearings themselves as well as the internal cylinder walls, thereby promoting compression resistance. Another important function of the oil injected between the rotors is that of absorbing the heat generated by the air compression.
The compressed air supplied by this compressor is free of any pulsations and compression comes about axially.
A "regulator" unit is mounted on the compression unit, the purpose of which is to regulate the quantity of air taken in according to the amount of air consumed. A double-stage filter mounted on the top of this unit ensure maximum purity of the suctioned air.

7.5 Separator tank

Consists of a pressurized container, and due to its construction features it is exempt from the annual I.S.P.E.L. inspection and is supplied with a conformity certificate issued by the manufacturer. The identification and inspection details are impressed on a plate which is welded to the machine.
The lid features the following elements: safety valve for overpressure, a thermal switch which intervenes if the temperature inside the tank exceeds 100°C and valves which regulate the maximum and minimum pressure of the machine.

7.6 Bell and flexible coupling

The engine and the compressor are interconnected by a bell which ensure concentricity between the engine flywheel and the compressor shaft.
A large-size block joint with rubber pieces interspaced transmits power in a smooth and silent way without splitting.
The engine-compressor thus assembled is clamped to the frame with four flexible supports (silent-blocks) which completely absorb the vibrations it generates. A fan is splined to the engine shaft on the opposite side to the flywheel which generates large air displacement which cools the machine fluids and elements.

7.7 Control panel

The control panel layout, on the left side, was specifically designed so as to have all the controls within reach of a single person.
All the necessary instruments to control the unit are located on the control panel.

8 ELECTRICAL EQUIPMENT OF THE MACHINERY

WARNING: any action on the electrical system must be performed by qualified personnel.

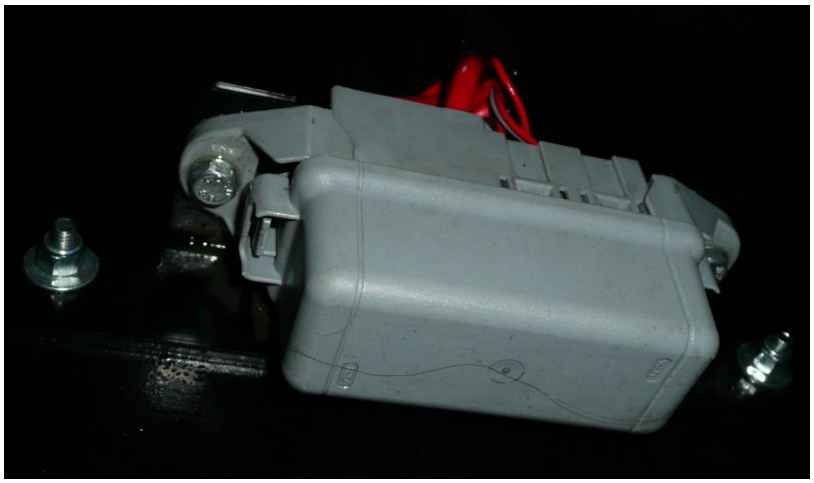
8.1 Control instrumentation and devices

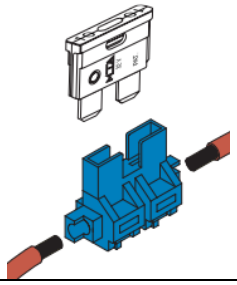
1- Manometer
2- ON-OFF switch
3- Control board

Figure 8.1-1 Control device

8.2 Fuses

The fuse is an electrical device which can protect a circuit or a device from over current.
The fuse consists of a cartridge provided by a thin lead wire through which the rated current of the circuit/element transits; this wire is the actual fuse, with a precise Amp load. In case of overcurrent, the filament melts and causes the circuit to open.



Fuse holder	Fuse drawing	Description	Ampere
		Secondary fuse: device to protect against overcurrent which might damage the fuel solenoid.	15 A

WARNING: *When replacing the fuses, we recommend always utilizing the sale type as indicated in this table and to follow the procedure reported in section 13.4.3 of the manual.*

8.3 Lights (for road-certified version)

The electrical system is completed by the light wiring (Figure 8.4-3). This system is directly connected to the towing machine through an extension supplied with the motor compressor.

Rear lights:

1) Turn light
2) Position and stop light (stop detected by light intensity)

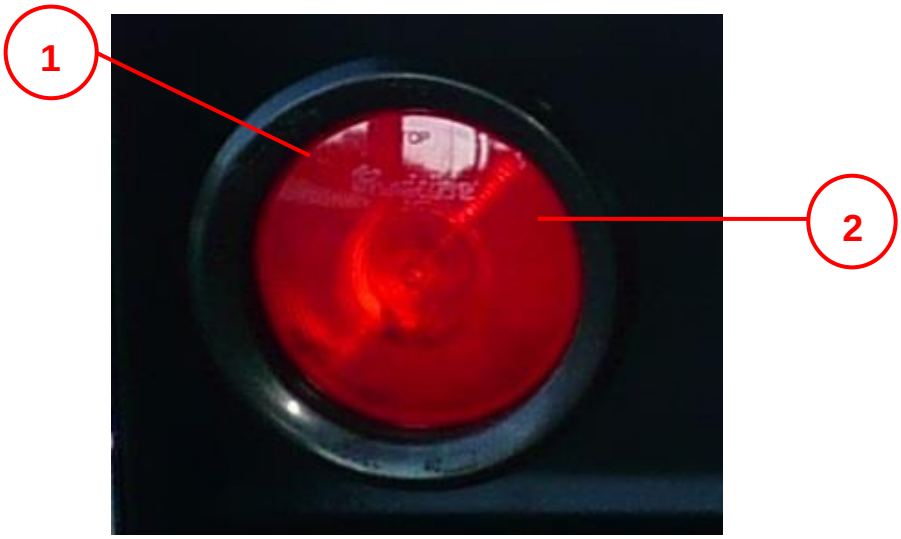


Figure 8.4-1 Rear light

WARNING: To replace the lamps, refer to the Maintenance chapter.

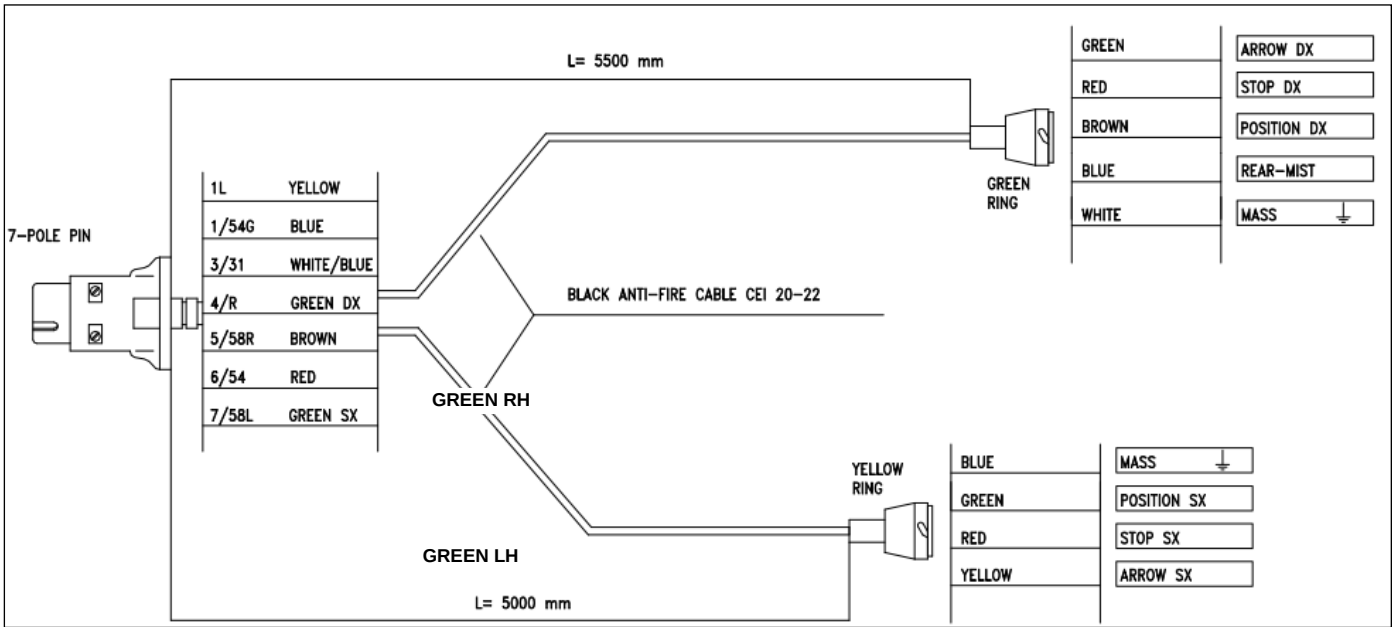


Figure 8.4-3 Light wiring harness

9 OLEOPNEUMATIC AND PNEUMATIC SYSTEM

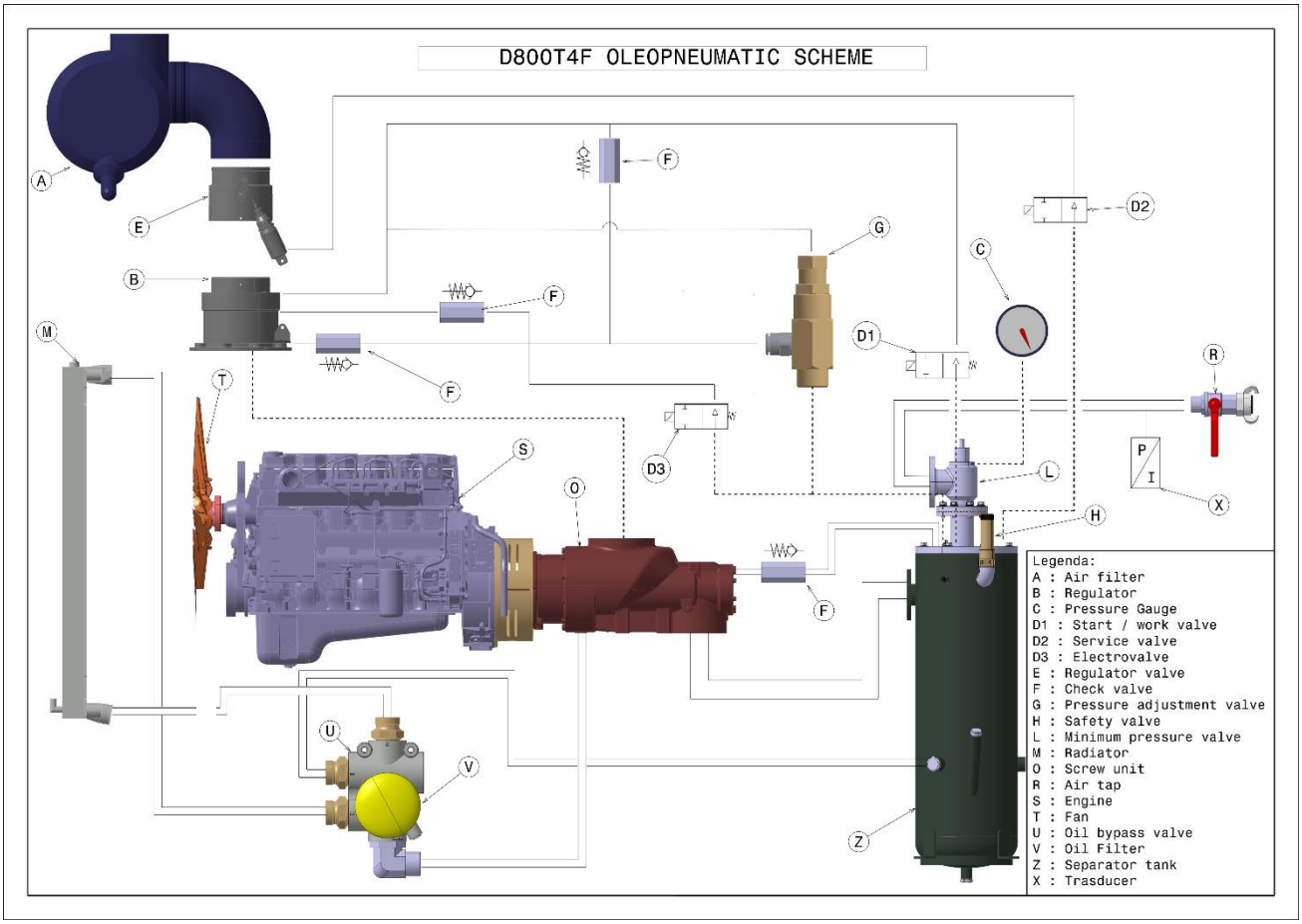


Figure 8.3-1 Oleopneumatic scheme

9.1 Compressor lubrification system

The hydraulic lubrication system (Figure 8.4-1) of the compressor consists of:

- oil separator tank (Z) ;
- thermostatic valve (U) ;
- oil filter (V) ;
- oil cooling radiator (M) ;

The system includes the oil separator tank (Z), the thermostatic valve (U) on which, at the entrance, the oil filter (V) and the oil cooling radiator (M) are mounted.

As shown in fig. 4 the lower part of the oil separator tank (Z) acts as an oil tank, will the filtering part is situated at the top which separates the air from the oil.

On starting up the machine, the pressure generated by the compressor, makes the oil inside the tank flow through the conduit in the direction indicated by the arrow. A thermostatic valve (U) is positioned along the route, which according to the actual oil temperature, conveys it all or partially to the cooling radiator (M), more specifically:

- at temperatures of below 65°c, the thermostatic valve remains open and the oil in circulation is directly injected into the compressor, without going through the radiator (M).

During the working cycle the oil is heated and when it reaches a temperature of 65°C, the thermostatic valve

(U) begins to close, thereby making it necessary for part of the oil to go through the cooling radiator (M).

When the oil temperature reaches 75°C, the thermostatic valve (U9 closed completely and from then on all the oil in circulation goes through the radiator and is thereby cooled (M).

From the radiator (M) the oil is injected into the compressor (O).

The filter (V) has an internal "by-pass" valve which permits oil circulation even if it gets blocked. In which case the oil will circulate regularly without being filtered. It is therefore necessary to replace the filter at regular intervals, as indicated in the maintenance programme.

The cooled and filtered oil thereby reaches the compressor (O) and by means of the various internal channels it is distributed to the various parts (rotors, bearings etc) which are thereby cooled and lubricated. From the compressor (O), the oil mixed with compressed air is sent to the tank (Z), inside which the separator undertakes to separate it from the air.

We have mentioned that the separator filter provides to separate the air from the oil; however a very small quantity is still able to penetrate the inside of the filter, and deposits itself on the low and concave part of the same. It is sucked through the piping on which the calibrated nozzle and the single-direction valve are positioned. The latter impedes the return of oil into the oil separator filter when the machine is stopped.

WARNING: The filter needs therefore to be replaces at regular intervals, as specified in the maintenance program.

9.2 Pneumatic system

The pneumatic system (Figure 8.4-1) includes:

- Air intake valve filter (A) ;
- suction regulator (B) ;
- compressor (O) ;
- tank (Z) ;
- oil separator element ;
- the minimum pressure and non-return valve (L) ;
- the cock (R) ;
- maximum pressure valve (G) ;
- discharge solenoid valve (P).

The system includes: the suction filter (A), the suction regulator (B), compressor (O), tank (Z) and the oil separator element, the minimum pressure and non-return valve (L), the cock (R) and the maximum pressure valve (G), and the discharge solenoid valve (P).

The suctioned air, after having passed through the double stage filter (A) reaches the suction regulator, followed by the compressor which conveys it, together with the injected oil, into the oil separator tank. Where the air is separated from the oil. This separation process firstly comes about by means of centrifugal spinning and in the second stage with the use of the oil separator filter .

The air which is cleansed of the oil, is conveyed by the minimum pressure valve (I), and only opens when the pressure in the tank reaches the pre-set value. This minimum pressure formed in the tank guarantees oil circulation even when the air discharge taps (R) are in fully open position.

It is however a good idea not to use tools and equipment, which excessively consume compressed air, and which may cause the tank pressure to fall to below 5-5.1 bar – 72,5 PSI.

In fact prolonged working conditions at below 5 bar-72,5 PSI, may cause compressor overheating, due to insufficient lubrication, and inadequate air and oil separation, resulting in excessive lubricant consumption.

The solenoid valve (P), on stopping the machine, opens automatically, gently discharging all the

compressed air still inside the system into the atmosphere.

The minimum pressure valve (L) also acts as a single-direction valve, impeding return into the compressed air unit of air coming from channels or tools connected to the machine.

WARNING: *pressure vessel.*

.

9.2.1 AUTOMATIC ADJUSTMENT OF THE ENGINE RPM

The system controls the speed of the diesel motor according to the compressed air taken in and consists of: maximum pressure valve (G), suction regulator (B), trasducer (X).

- With motor on and the cock (R) fully open, the motor speed is at the maximum and the suction regulator is fully open.
- By slightly closing the cock (R) reduced air consumption is simulated with consequent increase in pressure in the tank (Z).
- On closing the cock (R), the pressure reaches the pre-set value and the maximum pressure valve (G) opens, allowing compressed air to flow out, which acts on the trasducer (X) and beneath the suction regulator valve (B).
- Being stimulated by this pressure the trasducer (X) the motor is proportionally decelerated.
- At the same time the suction regulation valve (B) also closed proportionally, thereby reducing the suction air passage. Therefore with cock (R) closed and with no air suction, the motor stabilizes at the minimum set speed while the suction valve (B) of the regulator reaches almost total closure position.
- In this stage of the cycle the suctioned air is minimal and it serves to compensate for any leakage within the circuit itself.
- At this stage the maximum final pressure will be indicated on the pressure gauge of the control panel.
- On resumption of air intake stage the maximum pressure valve (G) will start to close up and it will be totally closed when the pressure value falls to below approx. 1 bar in relation to the maximum final pressure value.
- During this stage the compressor delivers the maximum capacity to the working pressure and the trasducer (X), accelerates the motor to maximum speed and the suction regulator valve reaches fully open position.
- In the event of use of tools with a consumption exceeding the nominal capacity of the compressor, a reduction in the pressure will be noted on the gauge, which must however never be less than 5 bar.
- Avoid any sudden opening of the cocks: they cause excessive stress on the oil separator filter and serious damage to the same.

10 PROVISIONS FOR THE APPROPRIATE UTILIZATION OF THE MOTOR COMPRESSOR

Consult this user's and maintenance manual before starting-up the machinery.

10.1 Before starting-up

Before starting-up the machinery, strictly follow the instructions here in under:

1. Level the planarity of the machine by acting on the support foot or on the wheel: no incline greater than 15° is allowed;
2. make sure that the electric wires are connected to the battery terminals; if the connection is to be performed, use the greater care so that the cable coming from the starter motor is connected to the positive pole (+) of the battery and the earthling one is connected to the negative pole (-) of the battery.
3. Check the fuel level in the tank*.
4. Check the level of the engine oil: as related to the types of lubricant and relevant quantities, comply with the prescriptions contained in the engine manufacturer's users and maintenance manual enclosed to the machinery documentation.
5. Check the oil level in the compressor: this operation must be performed not before than five minutes have passed from the time the machinery was stopped, and this to allow the lubricant in circulation to flow completely into the separator tank.
   a) Before unscrewing the filler plug where the level gauge is attached, make sure that there is no longer pressure in the system. (The pressure gauge shall indicate 0 bar).
   b) Take off the plug and clean the level gauge.
   c) Thoroughly screw back the filler plug and then take it off again to verify that the lubricant level is included between the two marks (min. and max. level) engraved on the gauge.
   d) Top up if required: the level must never exceed the max. mark.
   e) Exclusively utilize the types of oil recommended in this user's and maintenance manual.

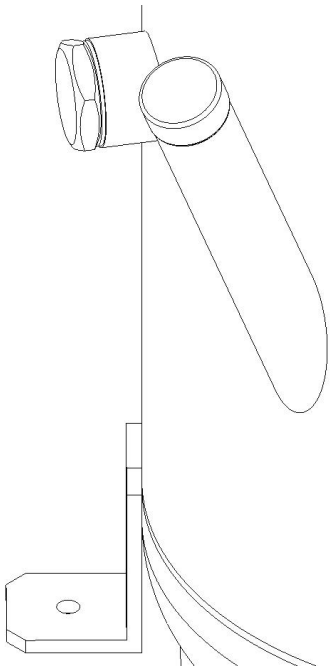


Figure 10.1-1 Checking the oil level in the compressor

*** Only use Diesel fuel for topping up.**

Figure 10.1-2 Gas oil tank for Diesel engine

6. If the motor compressor is equipped with a liquid-cooling diesel engine, check the level of the cooling liquid contained in the radiator (Figure 10.1-3).

Figure 10.1-3 Checking the radiator cooling liquid

Recommended cooling liquid: ROLOIL ROL-ICE BLU

WARNING: *the radiator plug (Figure 10.1-3) must never be removed when the engine is hot: this would cause a sudden outflow of liquid which might cause severe scalding. Topping up - if required - must be made by means of a blend of water and anti-freeze liquid, in the percentage indicated on the container of the latter.*

10.2 Start-up

Operations to be performed for a correct start-up of the machinery:

1) Fully close the air delivery taps

2) Position switch (2) to ON position, which will switch on the spark-plug pre-heating

3) Wait for the CHECK ENGINE LED to go off.

4) Press the green start button key on the controller, until the engine starts. Should the engine fail to start immediately, do not insist in order to prevent the risk of damage to the starter motor, repeat the operations starting from points 3,4.

WARNING: *In case of difficult start-up, repeat the maneuver with short start-ups at intervals.*

5) Once the engine is engaged, it will run at minimum speed for about 40 seconds; the pressure gauge will indicate a pressure level of between 2-3 bar, while the indicator lights on the control panel must all be off..
Should one or more of the indicators still be on after 5-6 seconds, immediately stop the machine to find the cause.
After 40 seconds the motorized compressor will automatically enter working mode: accelerate the engine, open the suction valve and the gauge pressure will reach maximum calibration values

6) Then connect the compressed air delivery pipes to the relative tools.

7) Gradually open the taps.

WARNING: *It is forbidden to start the motorcompresor with the doors open.*

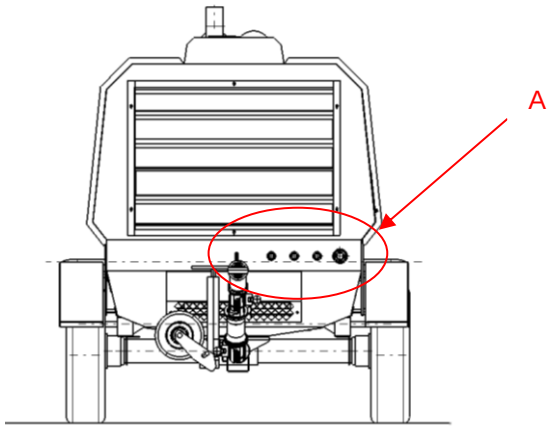


Figure 10.2-1 Location of the taps

WARNING: *Do not breathe the compressed air produced by this unit in output from the taps*

10.3 During the work cycle

The machine must always operate with the hood down and closed.

During the work cycle it is necessary to verify that the intake openings are free of foreign bodies such as pieces of paper, plastic, etc … as these materials can create obstructions to the ventilation system.

WARNING: *in the vicinity of the exhaust pipe are very hot exhaust gases and harmful. Avoid the stop in the vicinity of the exhaust pipe*

10.4 Stop

1) Fully close the delivery taps .
2) Push the Stop Key button on the controller board; the motorized compressor will act to de-pressurize the machine until the gauge pressure reaches a value of 3.5 bar before stopping. The control leds will flash during the de-pressurization stage

10.5 After stopping the machine

1) If the machine has operated in dusty environments, it will be necessary to clean or replace the air filter and check the status of cleaning the cooling radiator; where this is clogged, it will proceed as indicated in paragraph maintenance.
2) Check that during the working phase there are no losses of fuel or lubricating oil inside the machine
3) Where possible place the machine away from the elements.

11 MONITORING AND TESTING OF THE MACHINE

11.1 Monitoring and testing of engine speed

ALL TESTING AND CALIBRATION SYSTEMS MINIMUM AND MAXIMUM, MUST BE DONE BY A PROFESSIONAL, INFORMED, FORMAT AND TRAINED, EQUIPPED WITH A SPECIAL EQUIPMENT TACHYMETRIC A STRIKER REFLECTIVE AND EQUIPPED WITH HEADPHONES NOISE.

For all calibrations and adjustments we highlight the following residual risks

Presence of organs of motion. Pay attention to mechanical risks.

The presence of hot surfaces at high temperatures. Pay attention to the risk burn.

11.1.1 CONTROL SYSTEM OF MAXIMUM ENGINE SPEED

The calibration of the maximum speed is set by the manufacturer. It should not be changed for any reason. Any tampering or variation of the maximum speed of rotation of the motor will cause an immediate voiding of the warranty.

11.2 Monitoring and control of the air pressure of the compressor

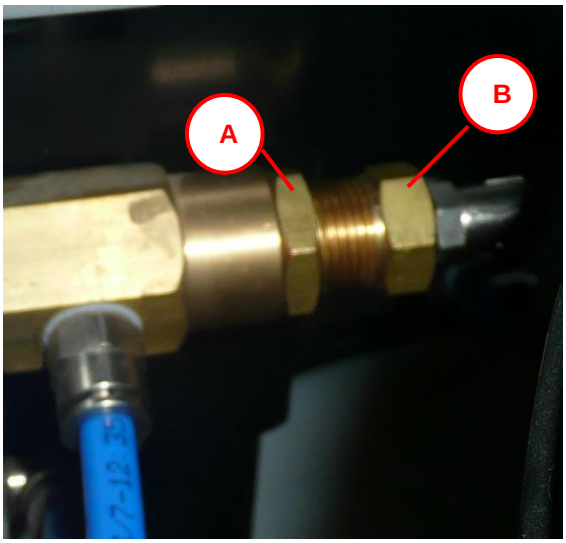


Figure 11.2-1 Adjusting maximum pressure pneumatic circuit

The maximum pneumatic pressure is calibrated during the testing phase of the machine.
If the value of the maximum pressure pneumatic, indicated by the pressure gauge on the control panel, diverged over a ± 5% from the value specified in Paragraph 2 of this manual, proceed as follows:

1. Start the machine as described in section10.2 “Start”,
2. Wait for the compressor reaches the maximum pressure and the engine stating the values of idle speed;
3. Close all faucets (Letter A in Figure 10.2 1);
4. Open the bonnet with the compressor in motion;
5. Unscrew with wrench 22 mm in, the nut (Letter A in Figure 11.2 1); Air filter area:

6. If you want to increase the maximum pressure must tighten with 19 mm wrench, nut (Letter B in Figure 11.2 1);
7. If you want to reduce the regime min unscrew, with a 19 mm wrench, nut (Letter B in Figure 11.2 1);
8. Once the adjustment screw, with a 22 mm wrench, nut (Letter A in Figure 11.2 1);
9. Slightly open for 3/4 seconds, the faucet supply air to the engine to accelerate, and then close it. Repeat this 2-3 times to allow the settling of the valve.
10. Reading on the pressure gauge located in the control panel, the value of the maximum pressure reached;
11. Compare the measured value with that reported in Paragraph 2, repeat the steps up to the alignment of the two values;
12. Close the bonnet.

WARNING: *Notice: if the gauge had a discontinuous, jerky, you will have to replace it. So, before making any calibration valve high or low pressure, make sure that the gauge is efficient and reliable.*

11.3 Monitoring and control of air pressure minimum compressor

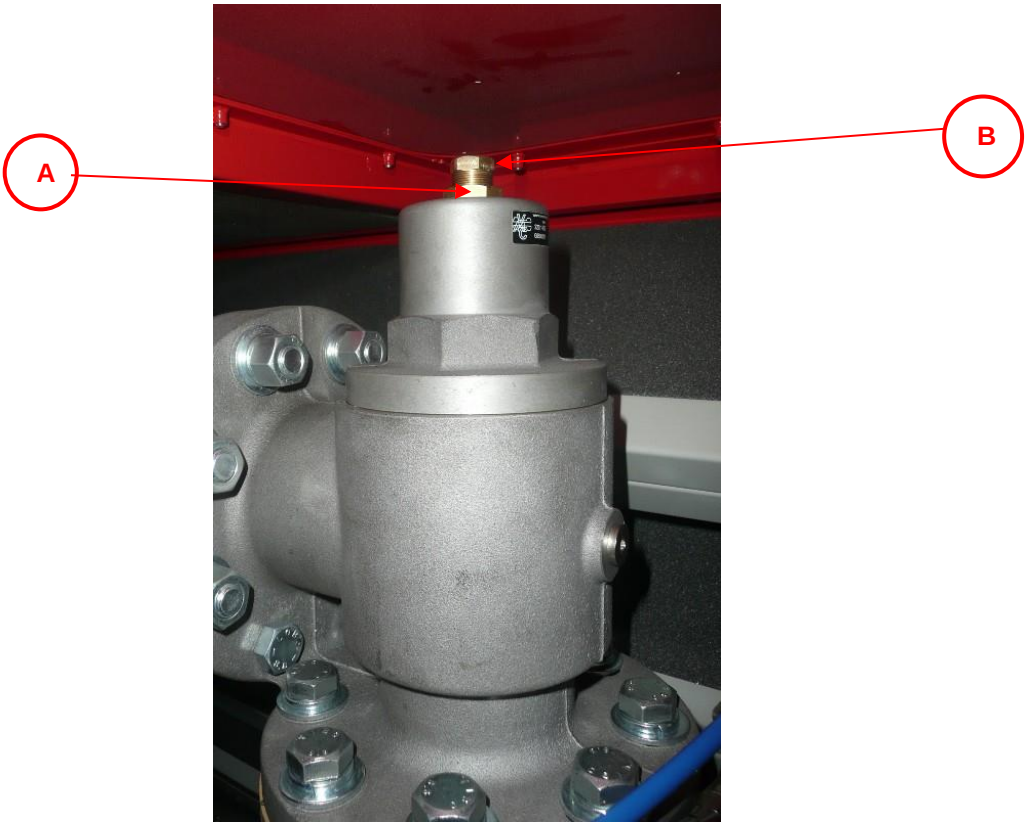


Figure 11.3-1 Réglage de la pression minimale du circuit pneumatique

The minimum pneumatic pressure is calibrated during the testing phase of the machine.
If the minimum pressure pneumatic, indicated by the pressure gauge on the control panel, diverged over a ± 5% from the value specified in Paragraph 2 of this manual, proceed as follows:

1. Start the machine as described in section 10.2 Start.
2. Wait for the compressor reaches the maximum pressure and the engine stating the values of idle speed;
3. Gradually open the air valve (Letter A in Figure 10.2-1);
4. Open the bonnet with the compressor in motion;
5. Unscrew, with 10 mm wrench, nut (Letter A Figure 11.3 1) located in the vicinity of the exhaust cleaner. Please Translate These points.
6. If you want to increase the maximum pressure must tighten the Allen screw (Figure 11.3 Letter B 1) with Allen key 3 mm;
7. If you want to reduce the regime min loosen the Allen screw (Figure 11.3 Letter B 1) with Allen key 3 mm;
8. Once the adjustment screw, with a 10 mm wrench, nut (Letter A Figure 11.3 1) and turn off the taps;
9. Reopen slowly the air tap (Letter A Figure 10.2 1) and close it again repeating the process a few times to allow the settling of the valve;
10. Close the bonnet.

WARNING: *Pressure vessel*

11.4 Verification of the safety valve

The safety valve is located on the oil separator tank and starts working to download any accidental overpressure.
The calibration of this valve is performed and verified in the testing of the factory and cannot be varied for any reason or tampered with.
Its efficiency should be checked quarterly by doing the following:

1) Start the machine the machine as described in section 10.2 “Start”
2) With the valves closed and with the engine at idle speed, open the valve manually using lever or nut;
3) The valve must open cleanly and must then close fully once once the lever has been relesed or the nut tightened. The operation must be short and performed just once.

Figure 12.2-1 Control of the safety valve

WARNING: *The air escaping from the valve during this operation control is also composed of small particles of oil.*

WARNING: *Pay attention to the danger of projection of liquids.*

If, following the traction using a clamp, the pin is not raised, thus preventing the valve to vent, will require an immediate replacement of the same.

In case of replacement, it is recommended to contact the service ROTAIR, quoting the serial number of the machine.
The use of a safety valve is not original and does not comply, the ROTAIR exempt from any liability.

12 MAINTENANCE

The machine must be subjected to regular periodic maintenance in order to keep unchanged the technical characteristics, and safety originate.

Maintenance work must be performed by qualified personnel of patterns and designs, the machine stopped and power switched off to the electrical panel. Therefore, all maintenance must be carried out only after turning off the machine.

The staff of the service maintenance has to check that they have withdrawn their tools at the end of surgery and before starting the machine again, to avoid damage to the moving parts.

12.1 Routine maintenance

Means with **routine maintenance**, all the maintenance actions that its sole objective was to bring back a system (or one of its components) from a state of failure, the state is working properly before the onset of the problem, without changing or improving the functions performed by the system, nor to increase the value, or improve performance.

Maintenance includes all those periodic operations including:

In the following chapter are listed in order of frequency, all transactions concerning the compressor part, while as regards the part of the engine, it will be necessary to refer to OPERATING AND MAINTENANCE, which is prepared by the manufacturer of the engine and that is as supplied with the machine.

12.2 Maintenance program

In this program are listed all the interventions and their frequency to be executed on the various components of the machine. Such interventions are essential for the proper functioning of the machine and its mechanical durability over time.

RECOMMENDED OPERATIONS	*FREQUENCY*
Checking the oil level compressor	Daily
Check engine oil level (refer to the manufacturer's manual)	Daily
Checking Coolant Level	Daily
Check fuel level and top up (if necessary)	Daily
Check oil or fuel leakage	Daily
Check operation indicator lights	Daily
Check the readability of measuring instruments	Daily
General cleaning operations	Daily
Control of the absence of obstructions to the ventilation system	Daily
Control and clean up the air filter	Every 100 hours
Control and thorough cleaning air filter in dusty	Daily
Check operation lights and license plate lights (only for the approved version of the road)	Daily
Control of the air filter Compressor	weekly
Control of the engine air filter	(Ref. Manual of the engine manufacturer).
Checking the battery electrolyte level	Monthly
Checking tire pressure	Monthly
Checking belt tension Quarterly	Three months
Speed control the minimum and maximum engine	Three months
Control of the efficiency of the safety valve	Three months
Cleaning the oil cooler	Three months
Control nozzle oil recovery	Three months
Drainage of the fuel tank	Three months
Replacing diesel pre-filter	Every 500 hours
Control of the efficiency of the braking system	Three months
Control and wheel lock	Three months
Change engine oil	(Ref. Manual of the engine manufacturer).
Oil Filter Replacement compressor	After the first 50 hours
Replacing compressor oil	After the first 50 hours
Control of tightening screws and bolts of the compressor and engine silent-blocks	Every 50 hours
Control of tightening screws and bolts	Every 100 hours
Check tightness of all pipe connections	Every 100 hours
Replace Air Filter Compressor	After 500 hours
Replace oil filter compressor	After 500 hours
Replacing compressor oil	After 1500 hours
Replacing oil separator element	After 2000 hours
Check-up by the service "authorized Rotair".	Every 3000 hours

RECOMMENDED OPERATIONS	*FREQUENCY*
Control readability nameplate EC Annual	Annual
Control valves from service "authorized Rotair".	Biennial

The ROTAIR S.P.A. disclaims any responsibility for the failure to comply with maintenance requirements in the table above.

12.3 Values of tightening screws and bolts

For the correct tightening of screws and bolts on the machine please observe the tightening values corresponding to the class of coupling illustrated in the table below.
We recommend the use of torque wrenches for tightening the screws and bolts on the machine.

Torques not binding N.m (Newton meters)							Couples test sockets for hexagonal screws							
These pairs are reference values for normal metric threads according to DIN ISO 261 and measures supporting heads according to DIN EN ISO 4762, DIN ISO EM 4032, DIN EN ISO 4014 and DIN 931-2, 6912, 7984 and 7990. With these values obtains an exploitation of 90% of the yield strength of the screws, on the basis of a coefficient of friction equal to 0.14 (screw new, untreated, not lubricated). Important: In extreme cases, e.g. screws lubricated with MOS2 and coupling elements cadmium-plated on both sides, the value of torque should be reduced by about 20%.								No. 2, 2A, 2B No. 1B, 308, 7	No. 4	No. 6, No. 1B, 7, 400	No. 25	No. 26 R No. 626	No. 35 A No. 35 B No. 3112	No. 894 No. 895
M	Tightening values for classes of coupling according to DIN 267						mm							
	4.6	5.6	6.9	8.8	10.9	12.9								
M 2	0,123	0,162	0,314	0,373	0,520	0,628	4			1,90				
M 2,2	0,196	0,265	0,510	0,598	0,843	1,010	4,5*			2,64				
M 2,5	0,284	0,373	0,726	0,863	1,206	1,451	5			3,55				
M 3	0,441	0,588	1,128	1,344	1,883	2,256	5,5			4,64		14,4		2,32
M 3,5	0,677	0,902	1,736	2,060	2,893	3,481	6*	17,6	7,4	5,92		17,6		2,96
M 4	1,000	1,344	2,599	3,040	4,315	5,148	7	25,2	11,4	9,12		25,2		4,56
M 5	1,916	2,648	5,099	6,031	8,483	10,200	8 9*	34,5 45,4	16,6 23	13,3 18,4		34,5 45,4	34,5 45,4	6,65 9,20
M 6	3,432	4,511	8,728	10,300	14,710	17,652	10	58,1	31	24,8	58,1	58,1	58,1	12,4
M 7	5,590	7,453	14,220	17,162	24,517	28,439	11 12	72,7 89,1	40,4 51,5	32,3 41,2	72,7 89,1	72,7 89,1	72,7 89,1	16,1 20,6
M 8	8,238	10,787	21,575	25,497	35,304	42,168	13 14*	107 128	64,5 79,4	51,6 63,5	107 128	107 128	107 128	25,8 31,7
M 10	16,67	21,575	42,168	50,014	70,608	85,317	15 16 17	150 175 201	96,2 115 134	77,0 92,3 107	150 175 201	150 175 201	150 175 201	38,5 46,1 53,5
M 12	28,44	38,246	73,550	87,279	122,60	147,10	18 19* 20*	230 261 294	160 186 215	128 149 172	230 261 294	230 261 294	230 261 294	64,0 74,5 86,0
M 14	45,11	60,801	116,70	138,30	194,20	235,40	21 22* 23*	330 368 408	247 281 319	198 225 255	330 368 408	330 368 408	330 368 408	99,0 112 127
M 16	69,63	93,163	178,5	210,80	299,10	357,90	24 25* 26*	451 496 544	359 402 449	287 322 359	451 496 544	451 496 544	451 496 544	143 161 179

12.4 Maintenance

13.4.1 CHECKING AND CLEANING THE FILTER AIR INTAKE

This check should be performed periodically every 100 hours of work;
If the machine operates in a very dusty environment, it will also be necessary on a daily basis.

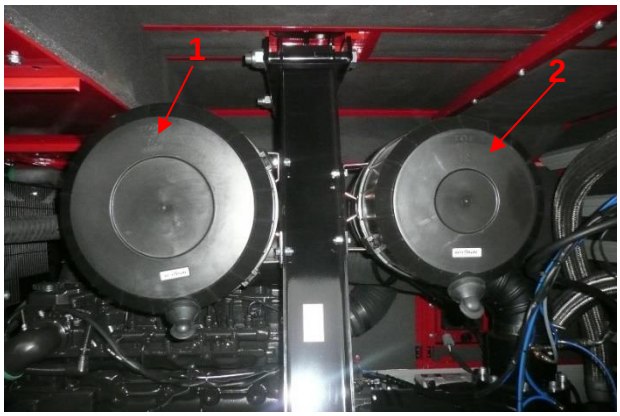
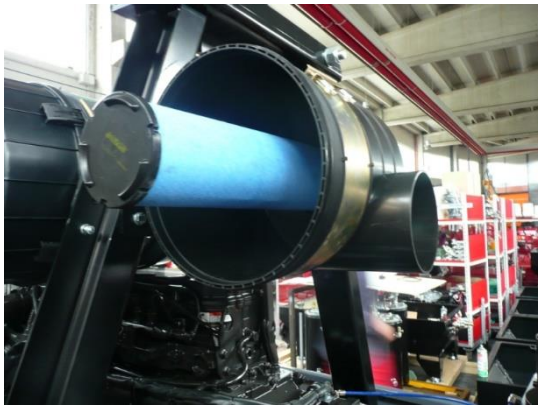


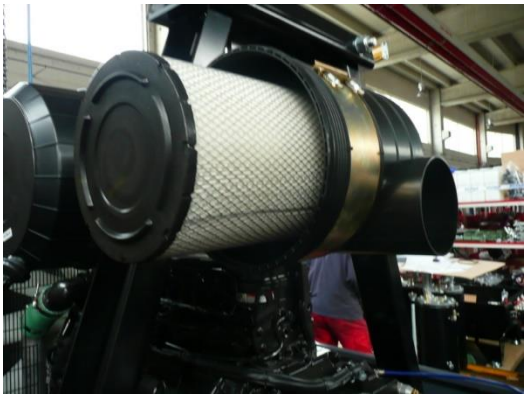
Figura 12.4-1 Aspiration air filter

1- COMPRESSOR AIR FILTER **2 – ENGINE AIR FILTER**

The filter consists of a filter cartridge.
For cleaning or replacement compressor air filter cartridge, proceed as follows:

1) Open the side tabs





2) Remove the cartridges.

The filter cartridge can be cleaned several times with compressed air.
The filter cartridge must never be washed with water or other substances;
It must, however, be replaced every 500 hours of work.

To replace the engine air filter see the user's manual of the engine, prepared by the manufacturer, attached to the documentation provided with the machine.

12.4.2 CONTROL THE ELECTRICAL BATTERY

Figure 12.4-2 Battery compartment

Extended not-use of the machine - battery charge status

- To avoid complete discharge of the battery, if the machine is not to be used for > 3 months, disconnect the negative terminal of the electrical system.
- Periodically check the battery charge and recharge it every 3 months.

If the batteries are to be replaced, the battery switch selector must be set to "ON" when connecting the battery cables; this is to allow the correct setup of the timing system. Once the cables have been connected, "OFF" can be selected so that the system is disconnected after the preset 180 seconds.

Cleaning the terminals
The battery terminals (poles) must be cleaned and greased periodically. The accumulation of dirt can hinder the passage of electric current.
For cleaning it is necessary to switch off the machine, disconnect the terminals starting from the negative terminal and clean the terminals.
Checking the clamps
Generally the negative and positive pole of the battery are greased (eg. Pulp vaseline or similar product) to avoid the oxidation of metals. The paste on the clamps must be periodically replaced.
In the same way, check that the terminals are firmly connected to the battery poles and if necessary tighten them. In fact, it may happen that vibrations loosen the grip of the clamps. A mobile connection can cause malfunctions and even failures to the vehicle's electrical devices.
Checking the battery fluid (in the case of an unsealed battery)
The electrolyte must always reach the covering level of the element plates.
If the battery fluid is low, it may compromise its operation.
In these cases, if the level of covering is below the minimum level it is necessary to have it checked by a qualified electric maintenance technician and if necessary to provide the addition of cold water distilled water to restore the liquid level.
If, despite top-up, the battery continues to discharge frequently, it must be replaced.

CAUTION: Take special care when handling battery fluid. Potentially corrosive liquid.

12.4.3 FUSO REPLACEMENT

Fuse replacement should be performed when one or both fuses were damaged or not intervene.

To replace the fuse proceed as follows:

1) Stop the machine;
2) Open the bonnet;
3) Open the fuse box;
4) Pull the fuse to be replaced with tweezers (to fuse 15 A), and unscrew the screws for the 40 A fuse:
5) Once removed the fuse concerned, observe the internal filament, this must be intact to function properly, if this is the case simply up item. If this filament is sectioned into two means this is to be replaced;
6) In the event of a damaged fuse replace it by choosing a fuse with identical characteristics. The characteristics of the fuses are described 8.3in this manual;
7) After inserting the new fuse in the housing close the fuse box;
8) Close the bonnet;
9) Now you can restart the machine.

12.4.4 REPLACEMENT LAMPS LIGHT (FOR VERSION APPROVED)

For the replacement of a bulb must procedures as listed below:

1) Stop the machine;
2) Open the cover of the headlight using a screwdriver to remove the four screws of the lamp
3) Unscrew the light bulb;
4) Screw in a new bulb taking into account the value of the corresponding power (see table below);
5) Close the cover of the headlight using a screwdriver to screw the four screws of the headlights

Headlight composition		
Type of bulb	**Power bulb**	**Number of bulbs**
Lamp position, stop *	5/21 W	1
Signal light bulb	21 W	1
License plate lamp and rear fog	21 W	1

* The lamp position/stop double stranded vary its own light intensity depending on the use of the brake

12.4.5 CLEAN THE RADIATOR COOLER

The coolants of the compressor and the motor are cooled by a radiator which, consequently, must be kept clean so that the ventilation air can pass freely and easily through its fins honeycomb.
A radiator fins clogged with dust or any other bodies, because of the harmful and dangerous overheating to the mechanical screw compressor, greatly jeopardizing the operation and durability. We recommend that you check it periodically and, if necessary, clean it with compressed air or clean it with a jet of water under pressure.

12.4.6 PERCENTAGE DOSAGE OF COOLING LIQUID

To determine the proper amount of antifreeze to be paid within the tank of the radiator (Figure 13.4-3) must follow the following table:

T (°C)	Total volume of the cooling plant	Water volume	Antifreeze volume	Antifreeze percentage*
(°C /°F)	*(Litres - gal)*	*(Litres - gal)*	*(Litres - gal)*	*%*
- 10 / 14	36 – 9.50	18 – 4.75	18 – 4.75	50%

**Cooling liquid suggestions: ROLOIL ROL-ICE BLU*

Figure 12.4-3 Checking the coolant radiator

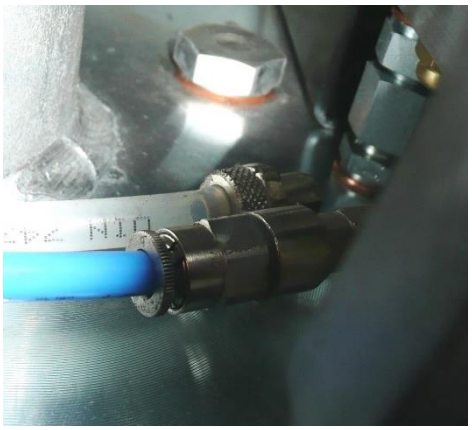
***WARNING**: He radiator cap (Figure 10.1-3) must never be removed in a warm engine: in this condition would occur a sudden leakage, which could cause serious burns to the person. The possible filling must be done with a mixture of water and antifreeze liquid, in the percentage indicated on the container of the latter.*

12.4.7 CHECKING AND CLEANING OIL RECOVERY ORIFICE

Control and clean the oil recovery is to be performed, should you find a leak of oil mist mixed with air compressed, operating as follows (Figure 13.4-4).

1) Unscrew the fitting located at the center of the tank (Letter Z in Figure 13.4-4);
2) Inside the ring (Letter Z in Figure 13.4-4) is a nozzle (Letter U in Figure 13.4-4): make sure that its calibrated hole is not blocked (blow with compressed air);
3) Replace the fitting.

WARNING: *During normal operation of the compressor, in the pipe from the fitting transparent part (Z), you will notice a certain amount of oil flow from the said fitting (Z) towards the head of the compressor*



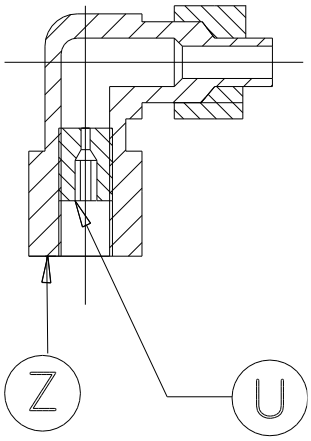


Figure 12.4-4 Nozzle oil recovery

12.4.8 DRAINAGE OF THE FUEL TANK

The draining of the fuel tank has the aim to eliminate the water possibly settled on the bottom of the tank due to the formation of condensation or refilling fuel polluted.
Avoid fuel filling with cans because sometimes, these may contain traces of water which, being heavier than the gas oil, is deposited on the bottom and can build up to reach the level of the dip tube.

Periodically carry out the drains to prevent even small parts of water can be aspirated and injected into the engine.

It is also advisable to carry refuel at the end of the work shift to prevent the temperature range of the tank walls make possible the formation of condensation inside it.
In conjunction with the drainage of the tank, also proceed to the replacement of the fuel filter to eliminate from the fuel every trace of water.

The draining of the tank must be performed at least 30 minutes after stopping the machine, to allow water to separate from the diesel fuel and to settle to the bottom of the tank.
The polluted fuel spilled from the purges should be collected and delivered to specialized centres and authorized the collection and disposal of hazardous waste.

Remember that the residual fuel should not be totally discarded in the environment.

12.4.9 REPLACING DIESEL PRE-FILTER

To replace the pre-fuel and fuel filter see the user's manual of the engine, prepared by the manufacturer, attached to the documentation provided with the machine.

12.4.10 CHECK BREAK DEVICE

For this and for the replacement of the brake drum see the user's manual of the group-axle brake-repulsion, prepared by the manufacturer, attached to the documentation provided with the machine.

12.4.11 CONTROL OF LOCKING WHEEL BOLTS

Periodically check the tightness of the wheel bolts using a spanner, avoiding the use of air screwdrivers that may damage the bolt threads.

12.4.12 OIL FILTER REPLACEMENT COMPRESSOR

For proper filter replacement compressor oil must do the following:

1) Stop the machine and open the hood of the engine compartment;
2) Use a chain wrench to unscrew the filter to be replaced (Figure 13.4-6);
3) Oil the seal of the new filter to be tightened and only by hand;
4) Start the machine and make sure that there are no oil leaks in the vicinity of the seal, in this case to stop the machine and recheck the status and the correct positioning of the seal in its housing.

Figure 12.4-5 Compressor oil filter

WARNING: The filter is impregnated exhausted mineral oil pollution and harmful to the environment, therefore it must be disposed of at specialized centres of collection and treatment of waste.

12.4.13 REPLACEMENT OF COMPRESSOR OIL

The oil compressor must be performed taking into consideration the working conditions in which the machine operates (dusty, very high temperatures, etc.).
The oil change intervals must never exceed 1,500 hours of work.
In conjunction with the replacement of the oil must be changed, the corresponding filter (Paragraph 10.9).

RECOMMENDED OIL PART NUMBER	AL-00025

List of compatible oils:

DEMOMINATION AND TYPE OF OIL	BRAND
DICREA 46	AGIP
COMPRESSOR OIL 46	API
ENERGOL RC-R 46	BP OIL
SCHUBERT 46	Q8
RARUS 425	MOBIL
SCARLATTI 46	Q8
LR CCW 46	ROLOIL
CORENA D 46	SHELL
DACNIS VS 46	TOTAL

Filter life oiler is expected around 2000 hours of work, but is closely related to a careful observance of all maintenance requirements given in this manual.

A quantity of oil or excessively low in the tank, the breach of the frequency of oil changes or the use of the machine with cooling radiator clogged may determine an anticipated and irreparable deterioration of the filters.

Therefore, if, after the control and clean the recovery (operation described in the paragraph 13.4.8) and making sure the proper oil level in the tank, you are still traces of oil in the compressed air, is will have to replace the exhaust cleaner.
To ascertain the degree of clogging of the filter separator operate as follows:

1) Install a pressure gauge upstream of the separator and make sure that on the machine is efficient.
2) Start the machine.
3) Partially open the faucet flow until the pressure gauge on the control panel shows the value of the operating pressure.
4) Read the value of the pressure gauge located upstream of the oil separator filter and compare two values: if, between the two readings, is a difference of more than 1 bar replace the filter separator

The oil separator filter must never be washed with water.

WARNING: *Pressure vessel*

12.4.14 ISTRUCTIONS FOR REPLACEMENT OF THE OIL SEPARATOR ELEMENT

1. The operation must be undertaken with machine off and no pressure in the oil separator tank.
2. Disconnect all the pipes from the connections positioned on the closure flange of the separator tank, marking them so there is no problem on re-assembly.
3. Loosen the screws (A) and remove the flange (B).
4. Extract the filtering element (D) together with the seals (C) and (E).
5. Assemble the new seal (E) in the relative slot which has been previously cleaned. Endure that a metallic insert has been clipped to the seal in order to avoid the isolation of the filter and the accumulation of static electricity. Otherwise there is a risk of the separator filter catching fire.
6. Insert the new separator element correctly positioning it into the relative slot.
7. Assemble the second seal (C) with the same precautions as above.
8. Reassemble the flange (B) in the pre-assembly position.
9. Tighten the bolts, (A), with a tightening torque of 80 Nm.
10. Re-connect all the pipes to the respective fittings.
11. Start up the machine ensuring there is no leakage between the cap and the tank.
12. Allow the machine to operate for 10-15 minutes with closed cocks
13. Stop the machine with tank depressurized to 0 bar, re-check the screw tightening (A).

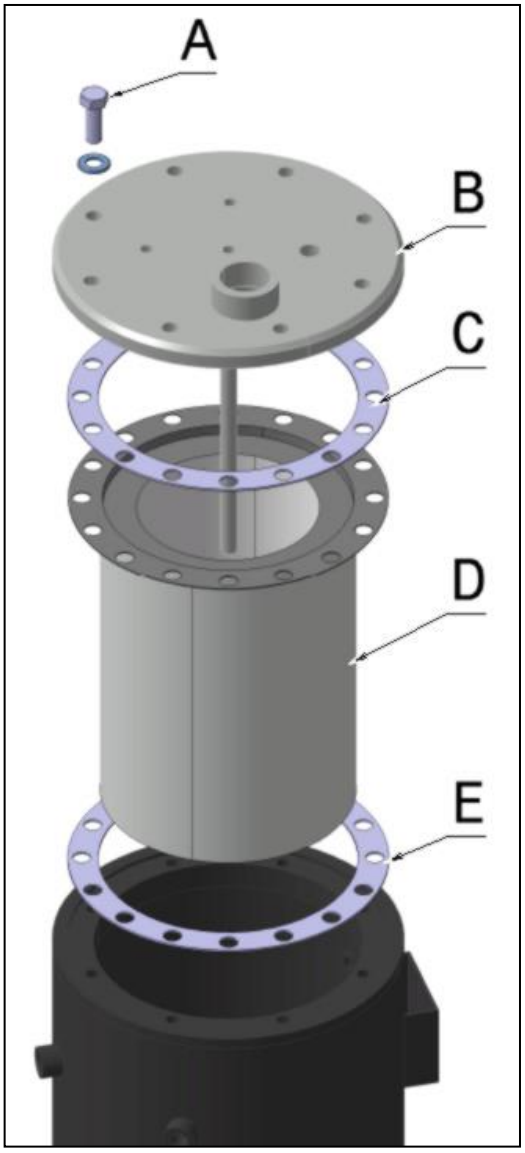


Figure 12.4-7 Separator filter

13.1.17 ENGINE CONTROL AND MAINTENANCE

As for the controls of the engine and replacing air filters, diesel filter, timing belt, motor oil and other specific controls refer to the owner's manual of the engine manufacturer attached to this documentation.

13 SPARE PARTS

In case of need to order a single component contact your authorized service center Rotair.

14 FAULTS AND TROUBLESHOOTING

Abnormal	Cause	Solution
The engine will not start.	Battery discharged or defective.	Recharge and replace if necessary.
	Terminals of the battery cables oxidized or loose.	Cleaning of the same and their tightening.
	No fuel.	Top up the fuel in the diesel tank.
	Solenoid faulty fuel.	Seek customer service by the manufacturer of the engine.
	Air in the fuel pipe.	Locate the infiltration by careful verification of all pipes.
	Injection pump defective.	Call in Customer Service by the engine manufacturer.
	Temperature sensors defective.	They are located at: - Headed-cylinder engine; - Output air compressor; - Tank separator. One at a time, unplug its power cable from the probes to identify the defective sensor and replace it. The temperature light on the control panel should go off.
	Starter defective Injectors failures	Call in Customer Service by the engine manufacturer.
Opening the taps the motor does not accelerate.	Control valve of maximum pressure defective.	Remove the control valve max and accurately control the spring and the conical seat. If the defect cannot be repaired, the valve must be replaced.
The engine speeds up but no air come out	Minimum pressure control valve blocked.	Disassemble and check that the piston is free to move. Check that the spring is intact. If the defect cannot be repaired the valve must be replaced. Reassemble and adjust the minimum pressure following the instructions in Section 11.3.
The machine stops suddenly and can only be restarted after a few minutes of waiting.	A temperature sensor detects a temperature anomaly and consequently stops the machine.	Take off one at a time, locate the probe that determines the stop. If that proves to be placed on the engine, check the oil level of the motor, the voltage and the conditions of the alternator belt. For water-cooled engines, check the coolant level. If it turned out to be the probe placed on the compressor control the level of 'oil in the tank and if necessary top up; Check the cooling fan and clean the radiator; replace the oil filter of the compressor. If that proves to be positioned on the oil separator tank, check the oil separator filter following the

Abnormal	Cause	Solution
		instructions to Par. 13.4-15, proceeding to its eventual replacement Par 13.4-16.
Abnormal	**Cause**	**Solution**
The engine does not reach the maximum speed of the speed indicated and the compressor does not do.	The spring piston accelerator is broken or to be put under tension.	Check the tension of the spring piston accelerator (Par. 11.1.2).
	Engine speed lower than expected.	Have the injection apparatus of the motor by qualified personnel. Replace the fuel filter. Run the draining of the fuel tank (Par. 13.4.9).
Oil leaking from the taps.	Minimum working pressure too low.	Adjust it according to the instructions of Par. 11.3.
	Too much oil in the tank.	To the correct level (Par.13.4).
	The machine works in non-horizontal position.	Ensure position the machine level
	Nozzle clogged oil recovery.	See Par. 13.4.8.
	Defective exhaust cleaner.	See Par. 13.4.15.

15 DISPOSAL, ELIMINATION, DISPOSAL OF THE MACHINE

15.1 Instructions for dismantling

To dismantle the machine safely, proceed as follows:

1) Place the machine in a wide and make sure it is turned off.
2) Empty the liquid waste in the tanks of motor oil, fuel, coolant, hydraulic oil and store them in special containers. For disposal of these types of waste follow the next paragraph.
3) Loosen the screws of the body and remove covers
4) Remove all the components of the machine one by one dividing them according to their material composition

The various components of the machine have to be disposed in relation to the type of waste to which they belong.

The following describes the different types of waste that can be generated during the life of the machine:

- Waste motor oil
- Waste hydraulic oil
- Residues of coolant
- Residual fuel
- Liquid remaining battery power
- Rags or paper impregnated with a diluents or other substances used for the cleaning of the various organs of the machine

16 ELIMINATING THE MACHINE

The operations of destruction and disposal must be carried out in a safe condition by a qualified specialist and after carefully reading and incorporated the recommendations and instructions provided in this section of the manual of use and maintenance and consulting the safety data sheets relating to substances in the machine mentioned in the previous chapter..

Once you reach the end of the mechanical life of the compressor, this has to be taken out of service so that it cannot be used for other purposes.

17 WASTE MANAGEMENT

The withdrawal of special waste and / or hazardous should be entrusted with the written contract to authorized firms; and those who physically transport and handling must be in possession of the required authorizations. The hauliers authorized must be enrolled in the relevant register.

17.1 Special waste

They are considered a hazardous waste residue from industrial, agricultural, crafts, commercial and service, for quality or quantity, is declared similar to municipal waste. These include also: machinery, equipment and metal parts of engines deteriorated and obsolete.

17.2 Toxic and hazardous waste

Are considered hazardous toxic waste all waste containing or contaminated by the substances listed in Directives 75/442 / CEE, 76/403 / CEE and 768/319 / CEE or other regulations in the countries of use and installation of the machines.

17.3 Temporary storage

Are considered hazardous toxic waste all waste containing or contaminated by substances listed in Directives 75/442 / CEE, 76/403 / CEE and 768/319 / CEE or other regulations in the countries of use and installation of the machines.

Temporary storage of toxic and hazardous waste is allowed according to the expected disposal of waste by treatment and / or final disposal. In any case, observe the mandatory laws of the country of the user in the field of environmental protection.

17.4 Features of the containers

The fixed and mobile containers, designed to contain toxic and hazardous waste must possess adequate strength requirements in relation to the chemical-physical properties and to its hazardous characteristics of the waste contained. The containers in which products are stored or dangerous or harmful materials must, in order to disclose the nature of their content, carry signs and markings prescribed.

17.5 Registration requirements

In accordance with the EU Directive 75/439 / CEE on the disposal of waste oil, the records of loading / unloading must be kept by all companies that produce hazardous waste or hazardous toxic from industrial and artisanal (in each case the 'Users should refer to the regulations implementing that Directive in the country of installation and use of the machines).

PARTS LIST

D 800 T4F

VERSION:

- STANDARD
- SKID
- AFTERCOOLED

Via Bernezzo 67 – 12023 CARAGLIO (CN) –ITALIA
TEL: +39 0171 619676 – FAX: +39 0171 619677
E-MAIL: info@rotairspa.com WEB: http://www.rotairspa.com

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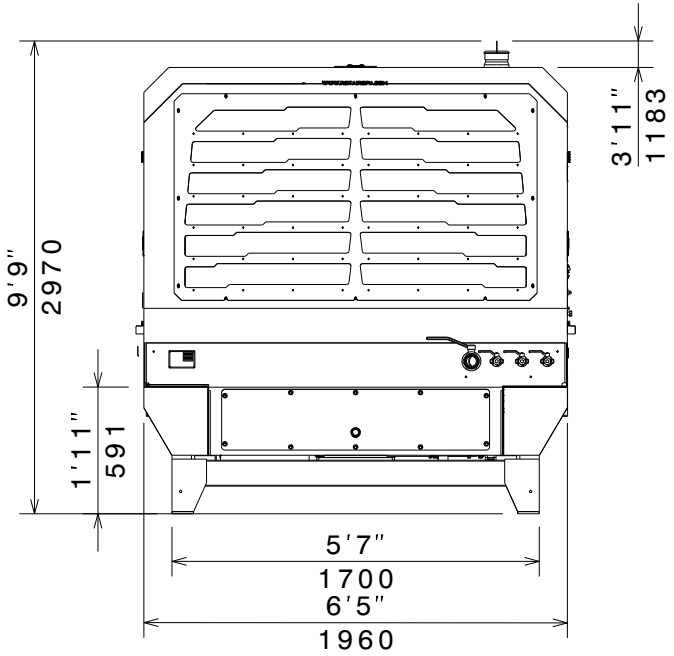
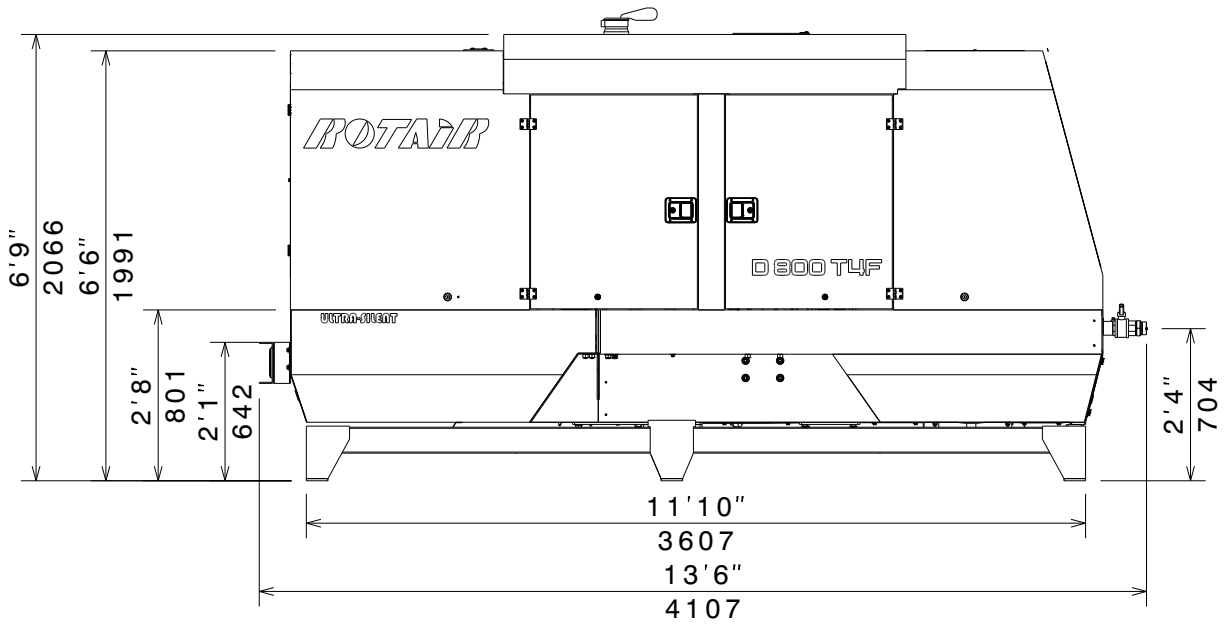
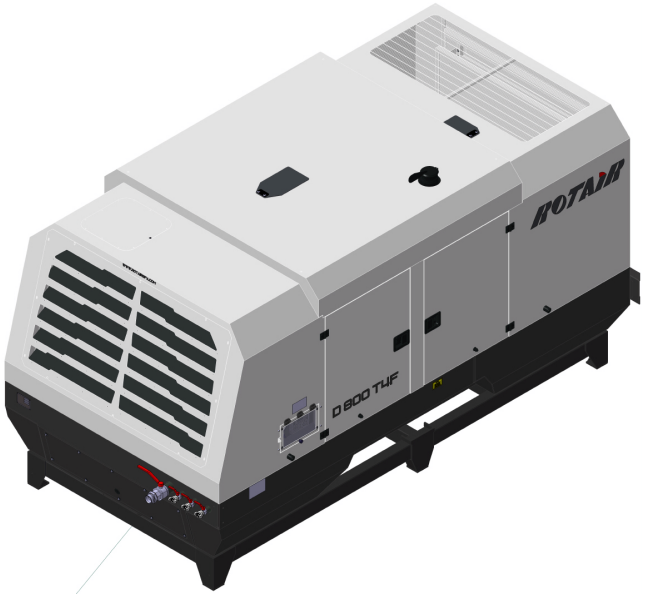
D800T4F - Dimensions

Tab. 01.0







feet/inches
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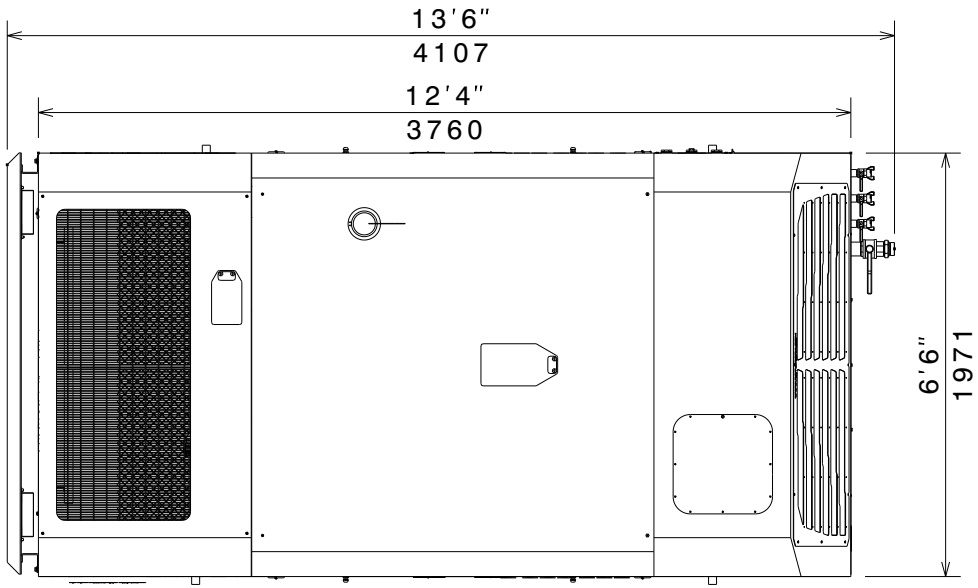
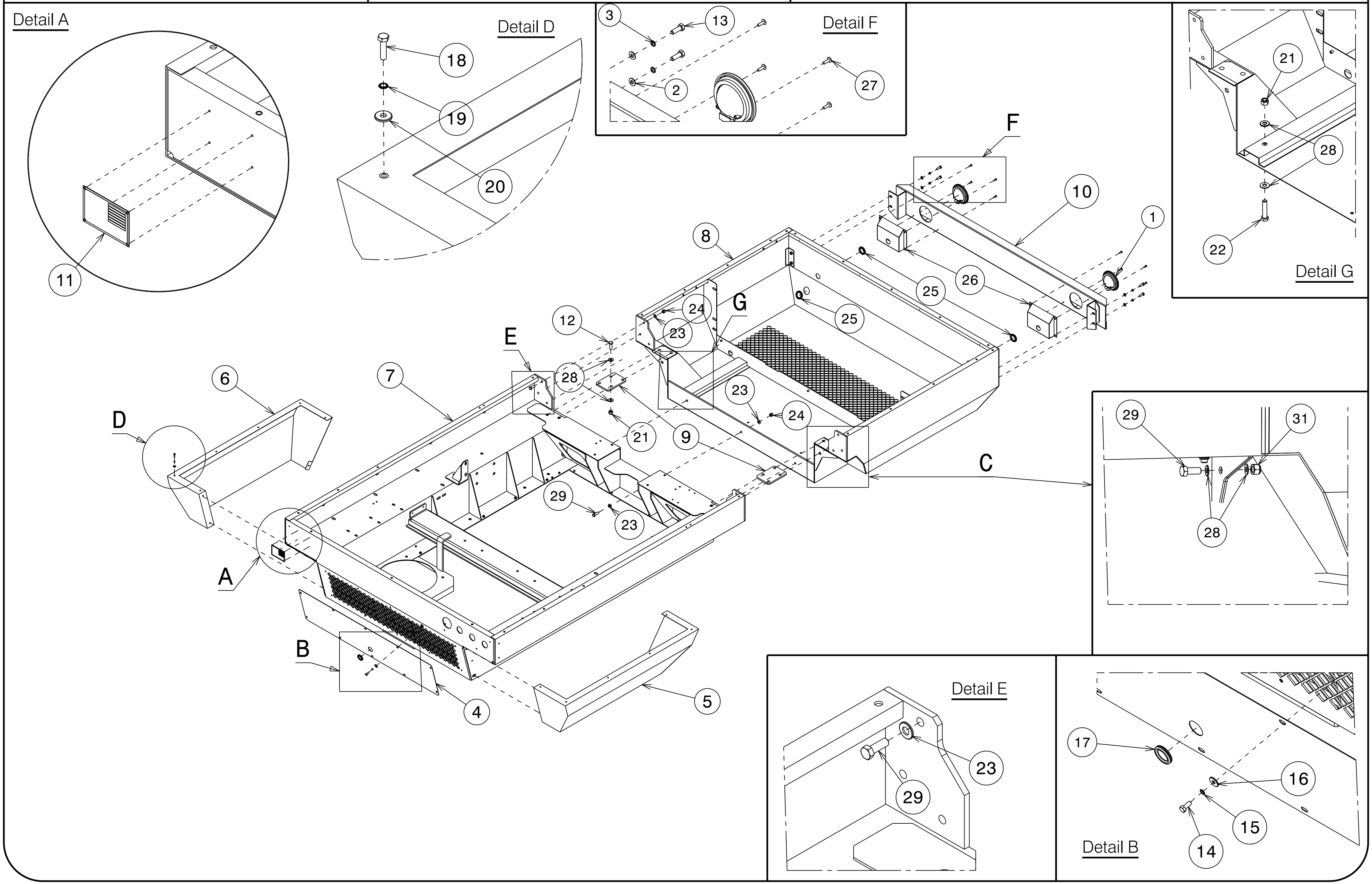


ROTAIR | D 800 T4F - Chassis | Tab. 01.1



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PARTS LIST

Motocompressor – D800T4F

PARTS LEGENDA: Chassis version | Tab. 01.1

REF	NAME	CODE	QUANTITY
1	USA Light	142-0050-S	2
2	Flat washer 10,2x21x2	015-032-S	4
3	Schnorr washer d.10	015-252-S	4
4	Front closing panel	124-249734-S	1
5	Right mudguard	055-03101-S	1
6	Left mudguard	055-03121-S	1
7	Chassis	038-12110-S	1
8	Chassis - radiator holding frame	038-12201-S	1
9	Chassis plate	208-3095-S	2
10	Rear bumper	032-118550-S	1
11	Serial No. plate	238-14763-S	1
12	Hex head screw M16x45	132-295-S	8
13	Hexagonal head screw M10x30 UNI 5739	132-143-S	4
14	Hex head screw . M8x20 UNI 5739	132-101-S	10
15	Schnorr washer d.8	015-251-S	10
16	Flat washer 8x24x2 UNI6593	015-031-S	10
17	Fairlead	239-040-S	1
18	Hex head screw screw M6x25 UNI 5739	132-065-S	18
19	Schnorr washer d.6	015-250-S	18
20	Washer d. 6.6x18x2	015-029-S	18
21	Self-locking nut M16	137-080-S	10
22	Hex head screw 16 x75tut.f.UNI5739	132-301.5-S	2
23	Flat washer d. 13	015-047-S	18
24	Self-locking nut M12	137-060-S	9
25	Membrane fairlead	239-036-S	3
26	USA Light protection panel	124-249635-S	2
27	Large head screw M6x20	243-010-S	8
28	Plane washer d. 16x35x3	015-048-S	8
29	Hex head screw M12x40 screw	132-194-S	11

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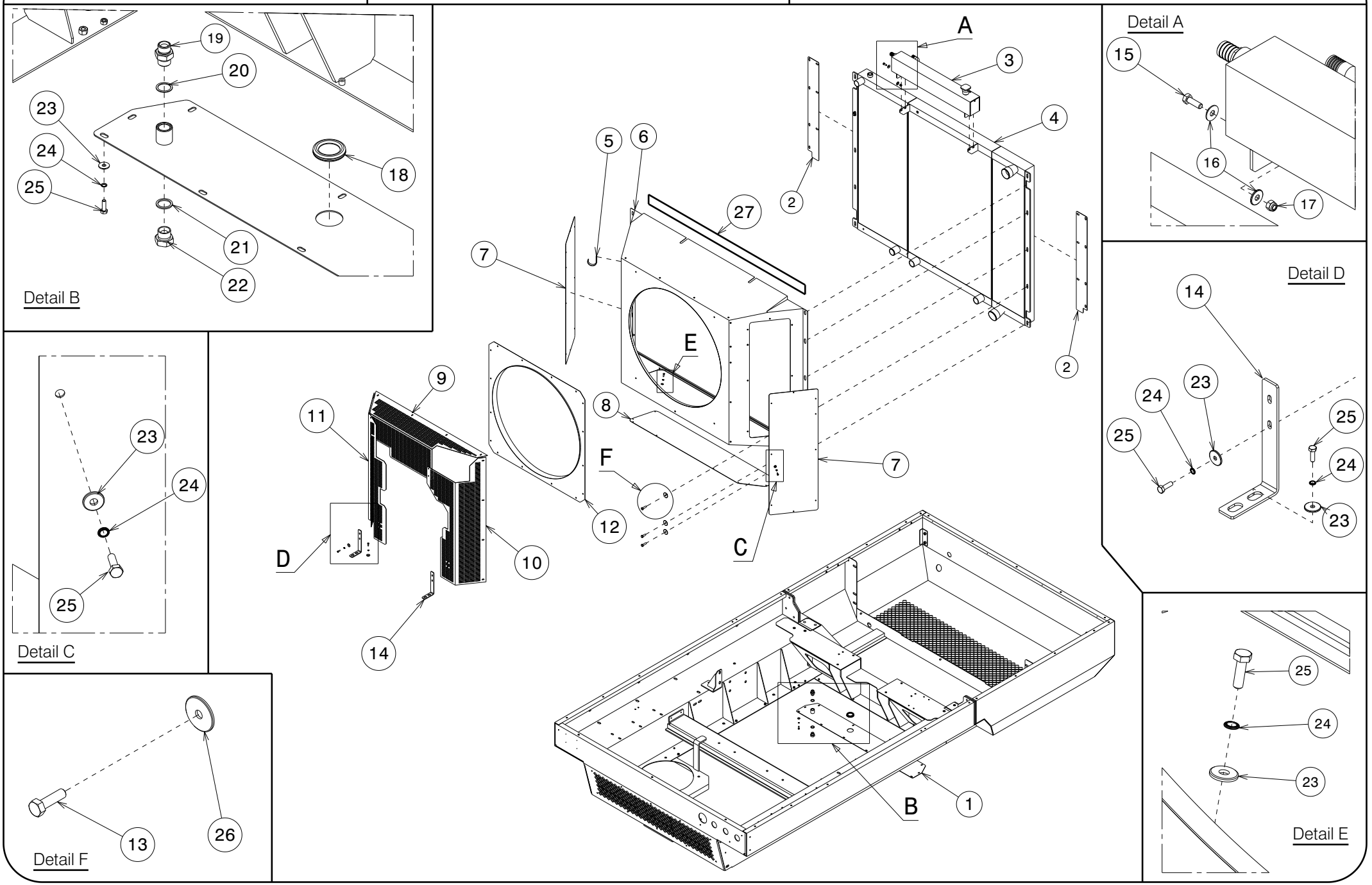
D 800 T4F - Fan cover - Radiator

Tab. 02



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PARTS LIST

Motocompressor – D800T4F

PARTS LEGENDA: Fan cover - Radiator | Tab. 02

REF	NAME	CODE	QUANTITY/ LENGTH
1	Chassis lower closing panel	124-24965-S	1
2	Radiator bulkhead	118-09700-S	2
3	Expansion vessel tank	201-0177-S	1
4	Air – water – oil radiator	011-03282-S	1
5	Pipe clamping ring	214-0196-S	1
6	Fan cover	001-02385-S	1
7	Side fan cover closing panel	124-28455-S	2
8	Fan cover internal panel	124-28456-S	1
9	Upper grid	124-249756-S	1
10	Right fan protection grid	124-249754-S	1
11	Left fan protection grid	124-249752-S	1
12	Fan panel	124-2497352-S	1
13	Hex head screw M10x35 UNI 5739	132-144-S	10
14	Fan protection grid support	010-309514-S	2
15	Hex head screw M8x25 UNI 5739	132-102-S	4
16	Flat washer 8x24x2 UNI6593	015-031-S	8
17	Self locking nut M8 UNI 7473	137-040-S	4
18	Membrane fairlead	239-036-S	1
19	Double screw (½" foro 12.6)	187-045-S	1
20	Copper washer (½")	015-012-S	1
21	Copper washer	015-0121-S	1
22	Male hexagonal head plug (½")	106-125-S	1
23	Washer d. 6.6x18x2	015-029-S	12
24	Schnorr washer d.6	015-250-S	12
25	Hex head screw . M6x20	132-063-S	42
26	Washer 10x40x2.5	015-037-S	10
27	SIC profile adhesive gasket	023-231-S	133 in

Tab. 03

D 800 T4F - Fuel tank

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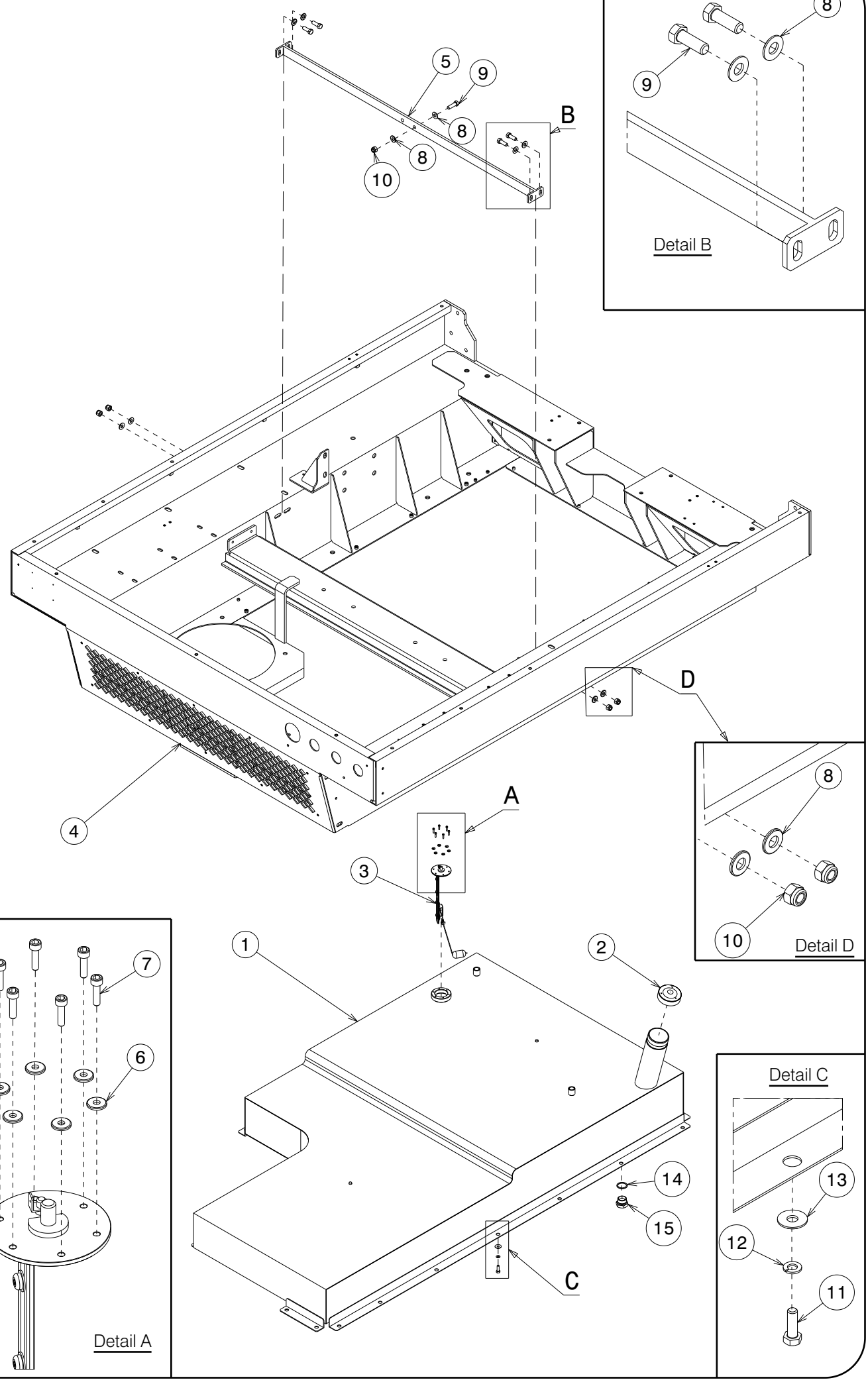

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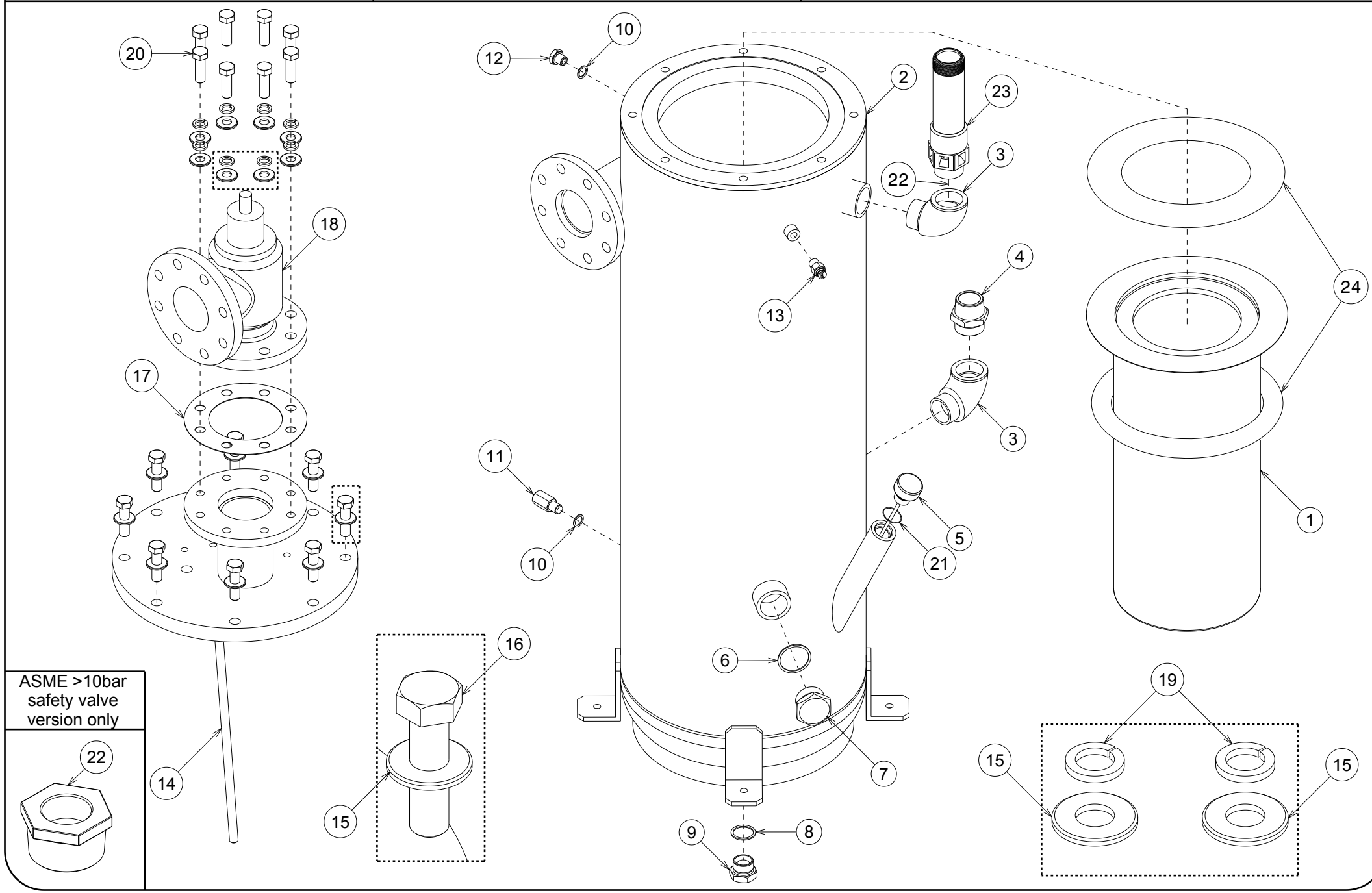
PARTS LIST

Motocompressor – D800T4F

PARTS LEGENDA: Fuel tank | Tab. 03

POSITION	DESCRIPTION	PART NO.	QUANTITY
1	Gasoil tank	201-04286-S	1
2	Gasoil tank plug	193-016-S	1
3	Float	192-011-S	1
4	Chassis	038-12110-S	1
5	Gasoil tank clamping blade	120-21978-S	1
6	Flat washer 4,3x12x1,5	015-028-S	6
7	Hex socket head cap screw M4x16 UNI 5931	133-044-S	6
8	Flat washer d. 13	015-047-S	12
9	Hex head screw screw M12x40 UNI 5739	132-194-S	6
10	Self-locking nut M12	137-060-S	6
11	Hex head screw M8x25 UNI 5739	132-102-S	16
12	Elastic washer d.8	139-040-S	16
13	Flat washer 8x24x2 UNI6593	015-031-S	16
14	Copper washer (1”)	015-018-S	1
15	Iron plug (1”)	106-135-S	1

ROTAIR	D 800 T4F - Separator tank	Tab. 04.1



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TECHNOLOGY AND ENGINEERING SOLUTIONS

PARTS LIST

Motocompressor – D800T4F

PARTS LEGENDA: Separator tank 150lt | Tab. 04.1

POSITION	DESCRIPTION	PART NO.	QUANTITY
1	Separator filter	157-202-S	1
2	ASME separator tank	037-0585-S	1
3	Short radius bend (1" ½)	111-061-S	2
4	Double screw (1" ½)	187-0906-S	1
5	Plug with oil level rod	106-0104-S	1
6	Copper washer (1" ½)	015-019.10-S	1
7	Male hexagonal head iron plug (1" ½)	106-137-S	1
8	Copper washer (1")	015-018-S	1
9	Male hexagonal head iron plug (1")	106-135-S	1
10	Copper washer (16.2x22x1.5)	015-009-S	2
11	Extension (M16x1.5 a 3/8")	189-001-S	1
12	Male hexagonal head iron plug (M16x1.5)	106-100-S	1
13	Compressor thermal contact 115°	103-008-S	1
14	Separator closing flange	004-11385-S	1
15	Flat washer d. 16x35x3	015-048-S	16
16	Hexagonal head screw M16x60	132-298-S	8
17	Flanged hose paper seal	023-09750-S	1
18	Min. pressure valve assembly	024-01050-F	1
19	Elastic washers d. 16	139-080-S	8
20	Hexagonal head screw M16x50	132-296-S	8
21	OR seal	023-026.5-S	1
22	Reduction M+F (1 ½" – 1")	190-081-S	1
23	ASME safety valve (1 ½") >10 bar	033-05485-S	1
	ASME safety valve (1") <10 bar	033-05477-S	
24	Separator seal	With 024-65130-S	1

Tab. 04.2

D 800 T4F - Separator tank

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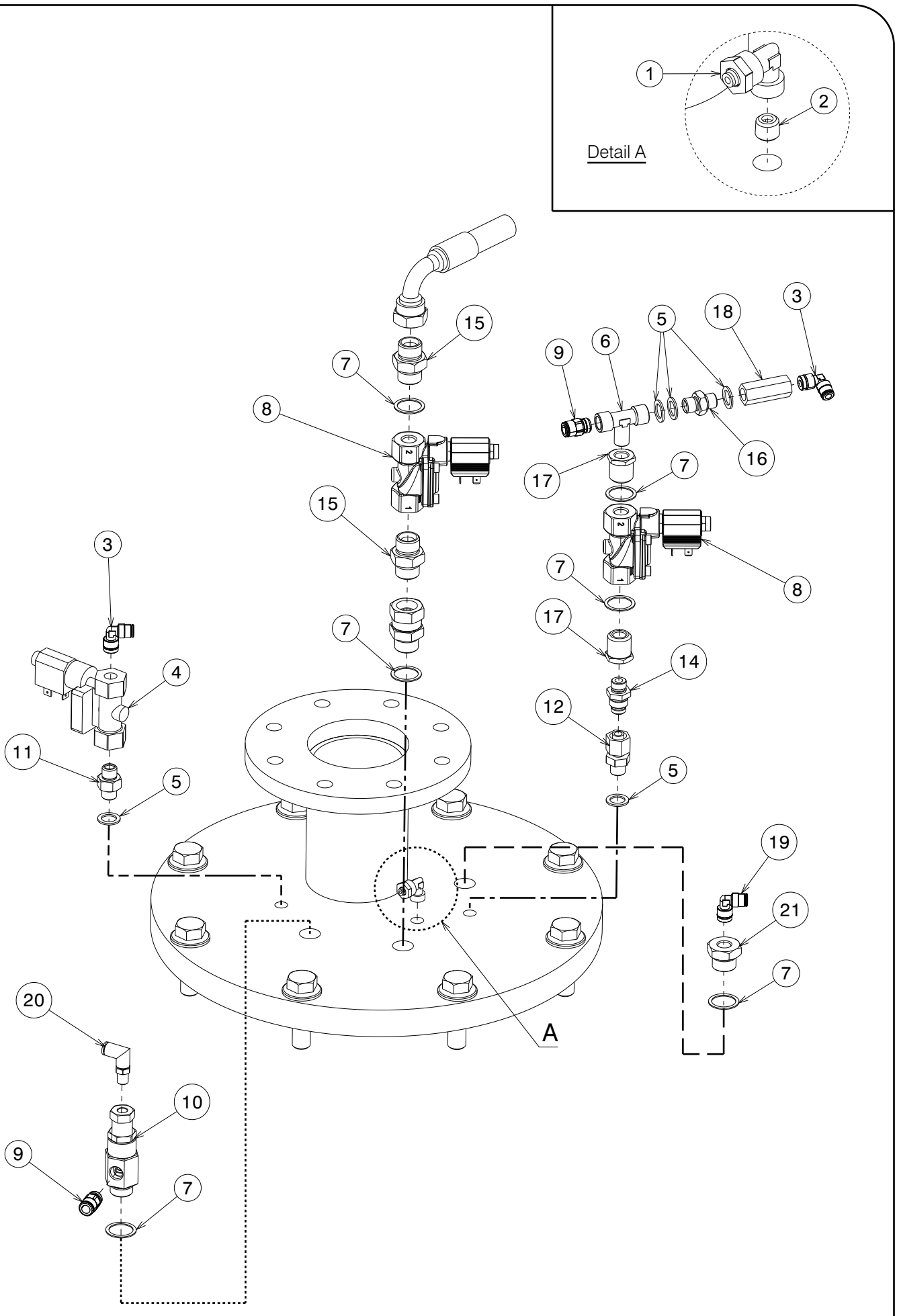

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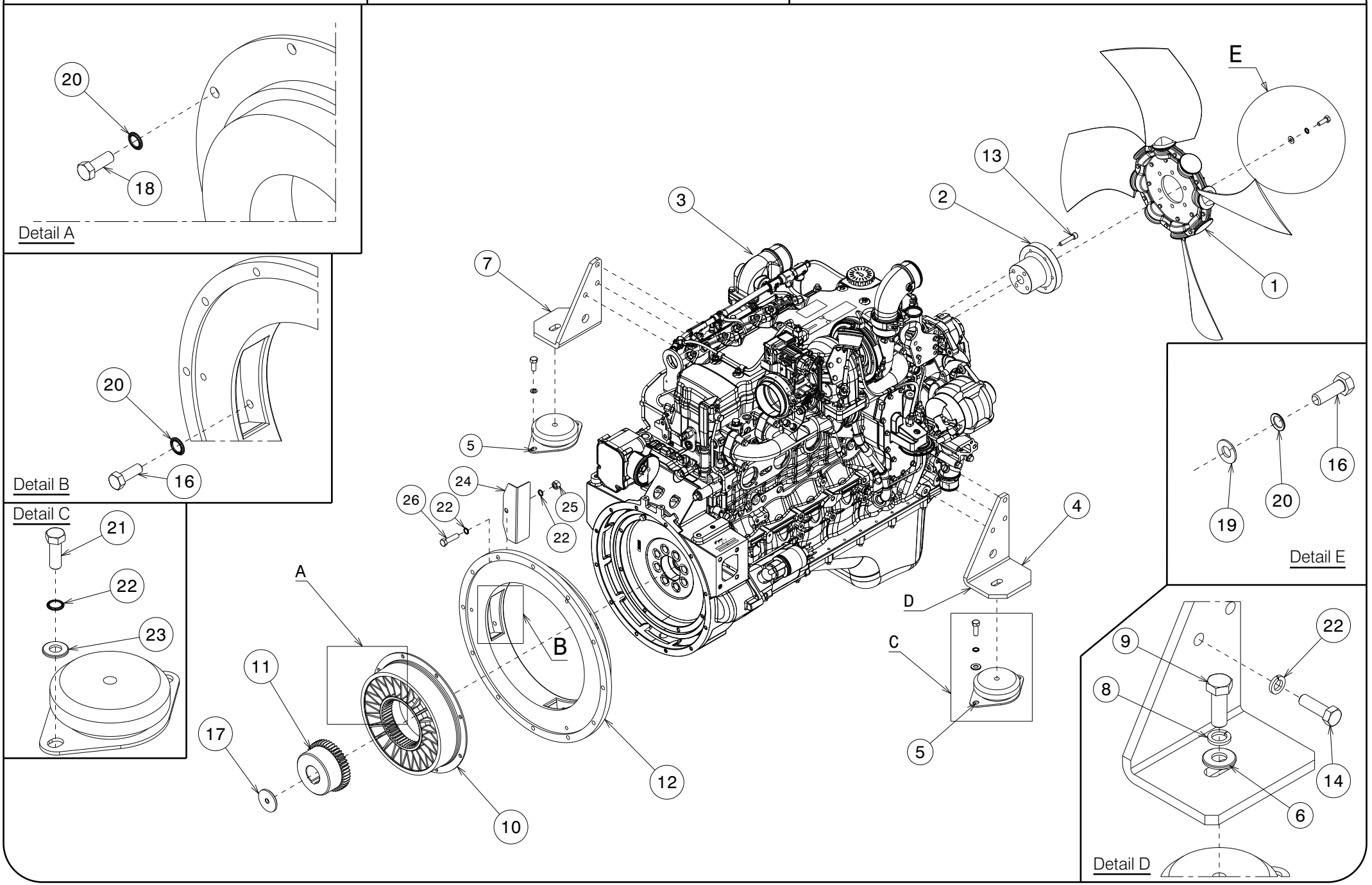
TECHNOLOGY AND ENGINEERING SOLUTIONS

PARTS LIST

Motocompressor – D800T4F

PARTS LEGENDA: Separator tank 150lt | Tab. 04.2

POSITION	DESCRIPTION	PART NO.	QUANTITY
1	90° fitting (1/4”) for pipe d. 8	148-110-S	1
2	Screw with built-in hexagon (1/8”)	218-001-S	1
3	90° quick coupling (1/4”) for pipe d. 8	148-573.5-S	5
4	Solenoid valve (1/4”)	160-0852-S	1
5	Copper washer (1/4”)	015-007-S	5
6	T fitting F+M+F (¼”)	148-194-S	1
7	Copper washer (1/2”)	015-0121-S	6
8	Solenoid valve (1/2”)	160-1012-S	2
9	Straight quick coupling (1/4”) for pipe d. 8	148-575-S	2
10	Max pressure regulation valve assembly	024-03280-S	1
11	Double screw (1/4”)	187-006-S	1
12	Straight end fitting (1/4”)	148-7115-S	1
13	Straight end fitting (1/2”)	148-004-S	1
14	Fitting (1/4”)	148-740-S	1
15	Double screw ½”	187-0455-S	2
16	Double screw (¼”)	187-005-S	1
17	Reduction 1/2" M npt - 1/4" F	190-0015-S	2
18	Non return valve (¼”)	033-0178-S	1
19	Quick coupling 90° (¼”) for pipe d.6	148-573-S	1
20	Rotating quick coupling 90° M (1/8”)	148-8001-S	3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TECHNOLOGY AND ENGINEERING SOLUTIONS

PARTS LIST

Motocompressor – D800T4F

PARTS LEGENDA: Engine | Tab. 05

POSITION	DESCRIPTION	PART NO.	QUANTITY
1	Fan	083-19306-S	1
2	Fan support	028-012152-S	1
3	Engine	165-0050-S	1
4	Engine right support	039-1322-S	1
5	Silent-block	061-0530-S	2
6	Plane washer d. 16x35x3	015-048-S	2
7	Engine left support	039-1323-S	1
8	Elastic washers d.16	139-080-S	2
9	Hex head screw M16x45	132-295-S	2
10	Engine joint	006-10820-S	1
11	Compressor joint	006-10815-S	1
12	Fly wheel housing	020-200000-S	1
13	Hex socket head cap screw M10x 60	133-189-S	4
14	Hex head screw M12x40	132-194-S	6
15	Elastic washers	139-060-S	6
16	Hexagonal head screw M10x30 UNI 5739	132-143-S	18
17	Joint washer	015-090-S	1
18	Hexagonal head screw M10x25 UNI 5739	132-142-S	8
19	Flat washer 10,2x21x2	015-032-S	14
20	Schnorr washer d.10	015-252-S	14
21	Hexagonal head screw M.12x35 UNI 5739	132-193-S	4
22	Schnorr washer d.12	015-254-S	16
23	Flat washer d.13	015-047-S	4
24	Carter	005-10880-S	3
25	Hex nut M12 UNI 5587	135-060-S	3
26	Hex head screw M12x50	132-196-S	3

Tab. 06

D 800 T4F- Air end clampings

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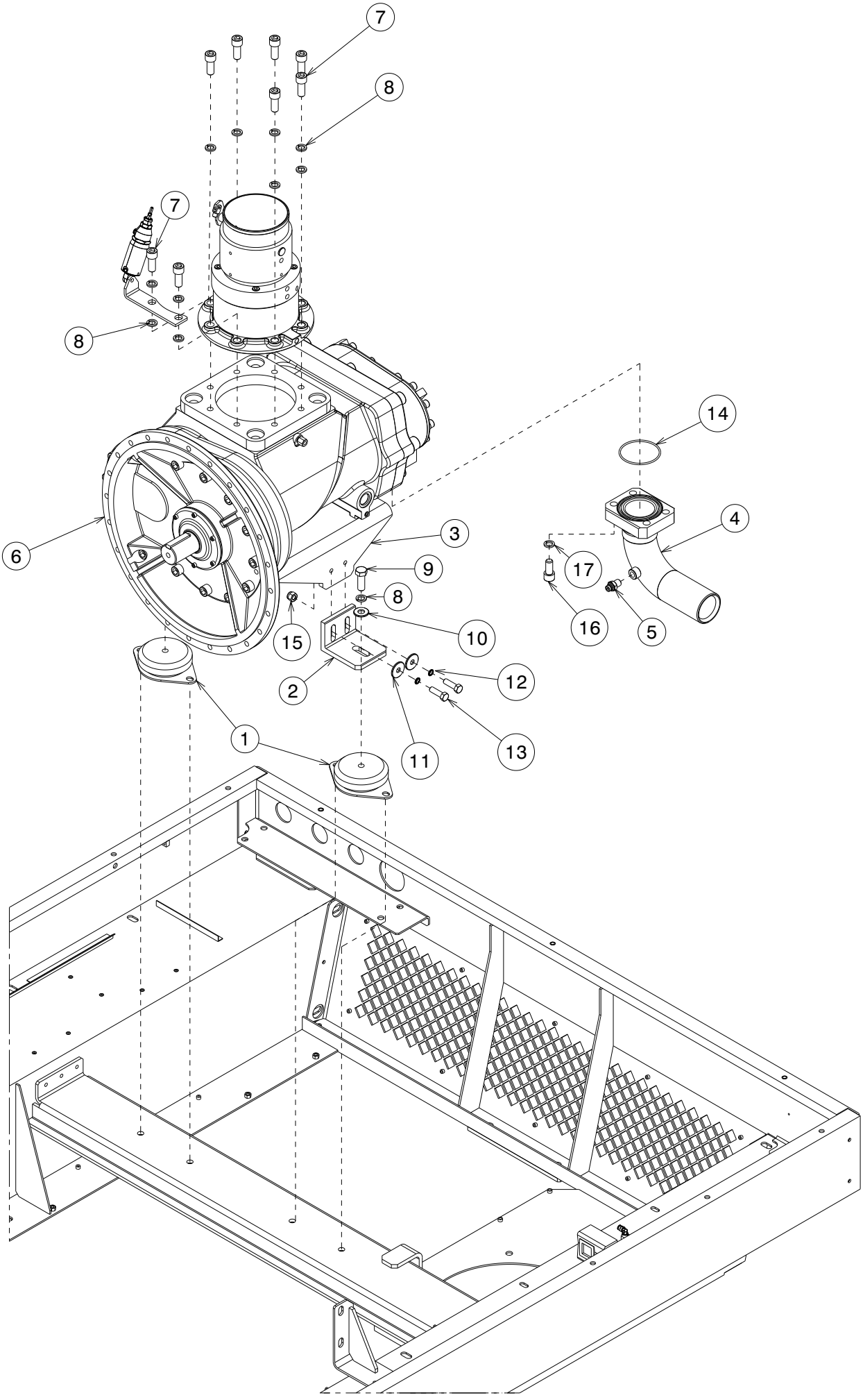

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PARTS LIST

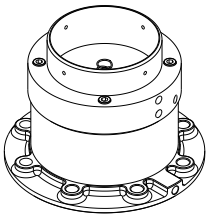
Motocompressor – D800T4F

PARTS LEGENDA: Air end | Tab. 06

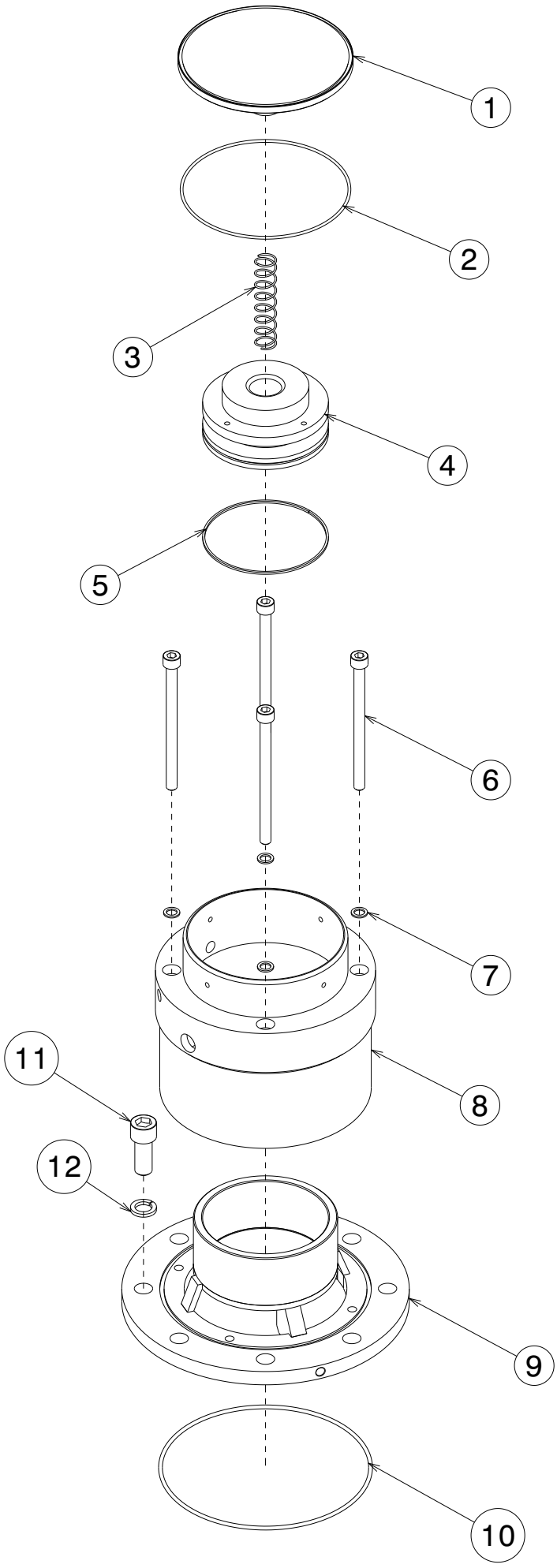
POSITION	DESCRIPTION	PART NO.	QUANTITY
1	Silent-block	061-0532-S	2
2	Engine support L-swinging	039-1309-S	1
3	Compressor support	027-0647-S	1
4	Flex clamping flange	004-10680-S	1
5	Compressor thermo contact 125°	103-0125-S	1
6	Air end	024-0329352-S	1
7	Hex socket head cap screw M 16x 40	133-333-S	8
8	Elastic washers d. 16	139-080-S	8
9	Hex head screw M16x45	132-295-S	2
10	Plane washer d. 16x35x3	015-048-S	2
11	Plane washer 12,5x40x3	015-040-S	2
12	Schnorr washer d.12	015-252-S	2
13	Hex head screw M12x45	132-195-S	2
14	OR	023-0451-S	1
15	Self locking nut d.12	137-060-S	2
16	Hex socket head cap screw M16x35	133-332-S	4
17	Elastic washers d.16	139-080-S	4

Tab. 07

D 800 T4F - Regulator intake valve



Regulator valve assembly



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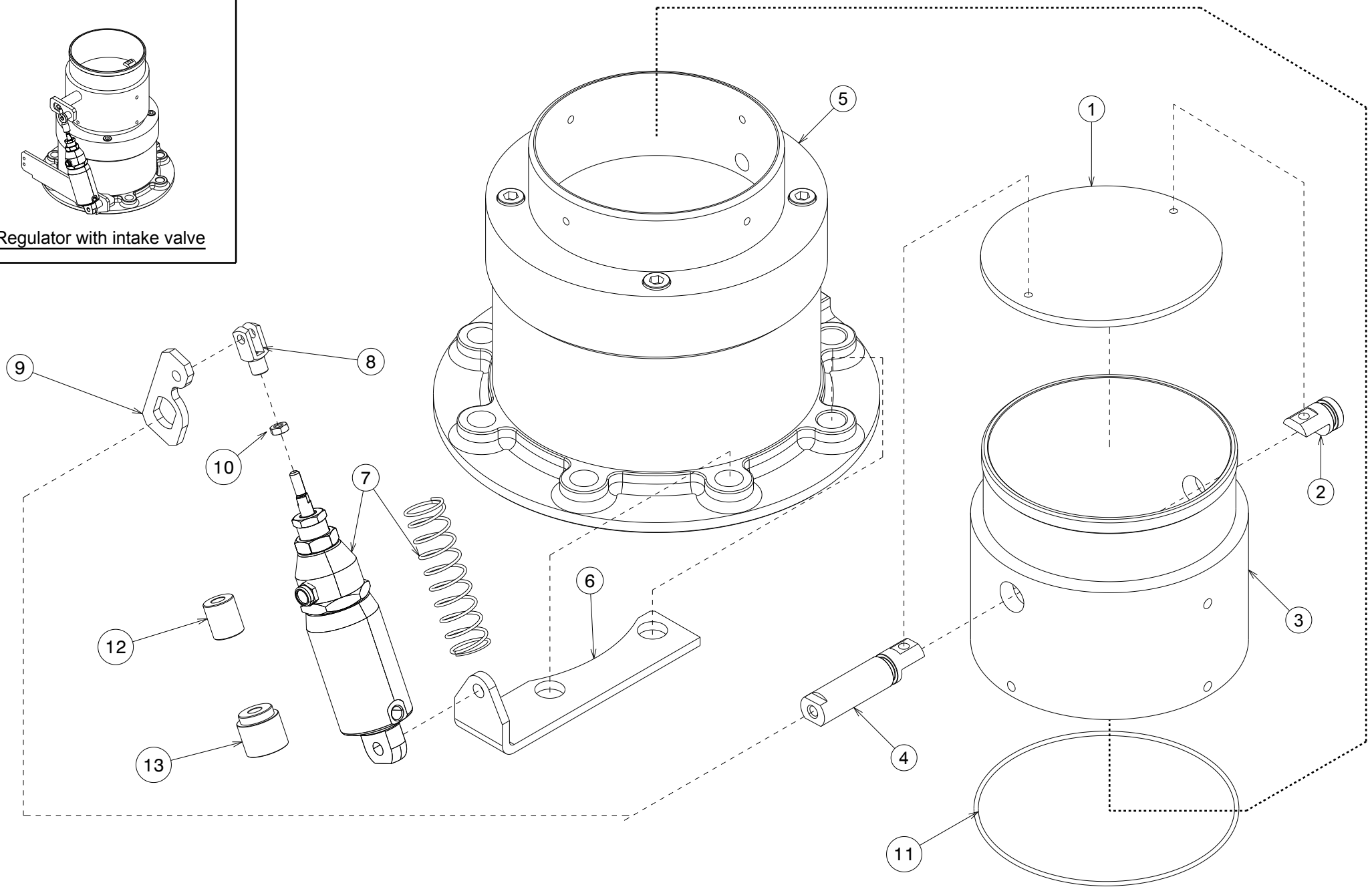
PARTS LIST

Motocompressor – D800T4F

PARTS LEGENDA: Intake valve | Tab. 07

POSITION	DESCRIPTION	PART NO.	QUANTITY
Intake valve assembly		024-1365-S	1
1	Regulator plate valve	033-0155-S	1
2	OR	023-2935-S	1
3	Spring	043-0125-S	1
4	Regulator piston	048-0105-S	1
5	Regulator piston ring	199-141-S	1
6	Hex socket head cap screw M10x140 UNI 5931	133-205-S	4
7	Copper washer (1/8”)	015-005-S	4
8	Regulator inlet flange	004-204-S	1
9	Regulator base	034-00552-S	1
10	OR	023-0025-S	1
11	Hex socket head cap screw M 16x 40	133-333-S	8
12	Elastic washers d.16	139-080-S	8

Regulator with intake valve



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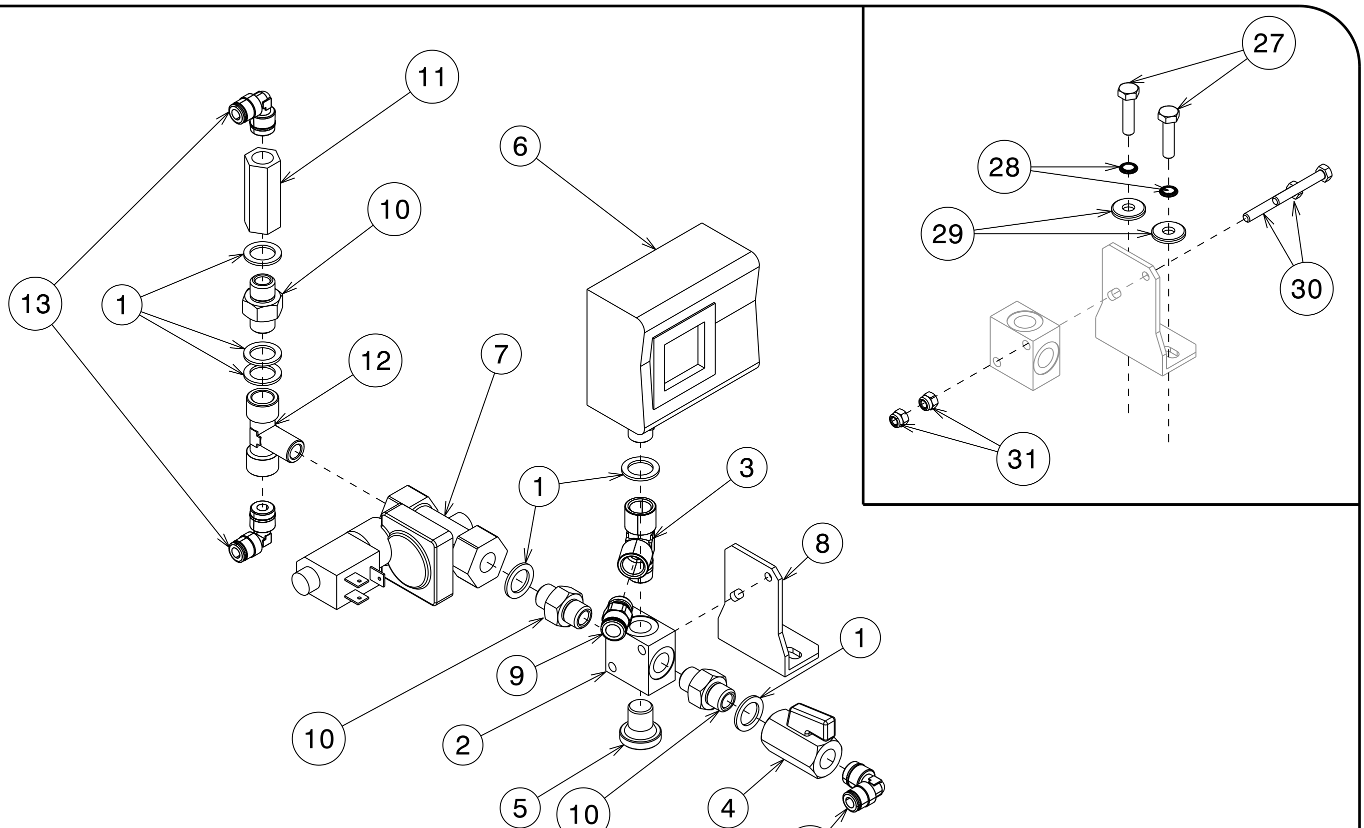
PARTS LIST

Motocompressor – D800T4F

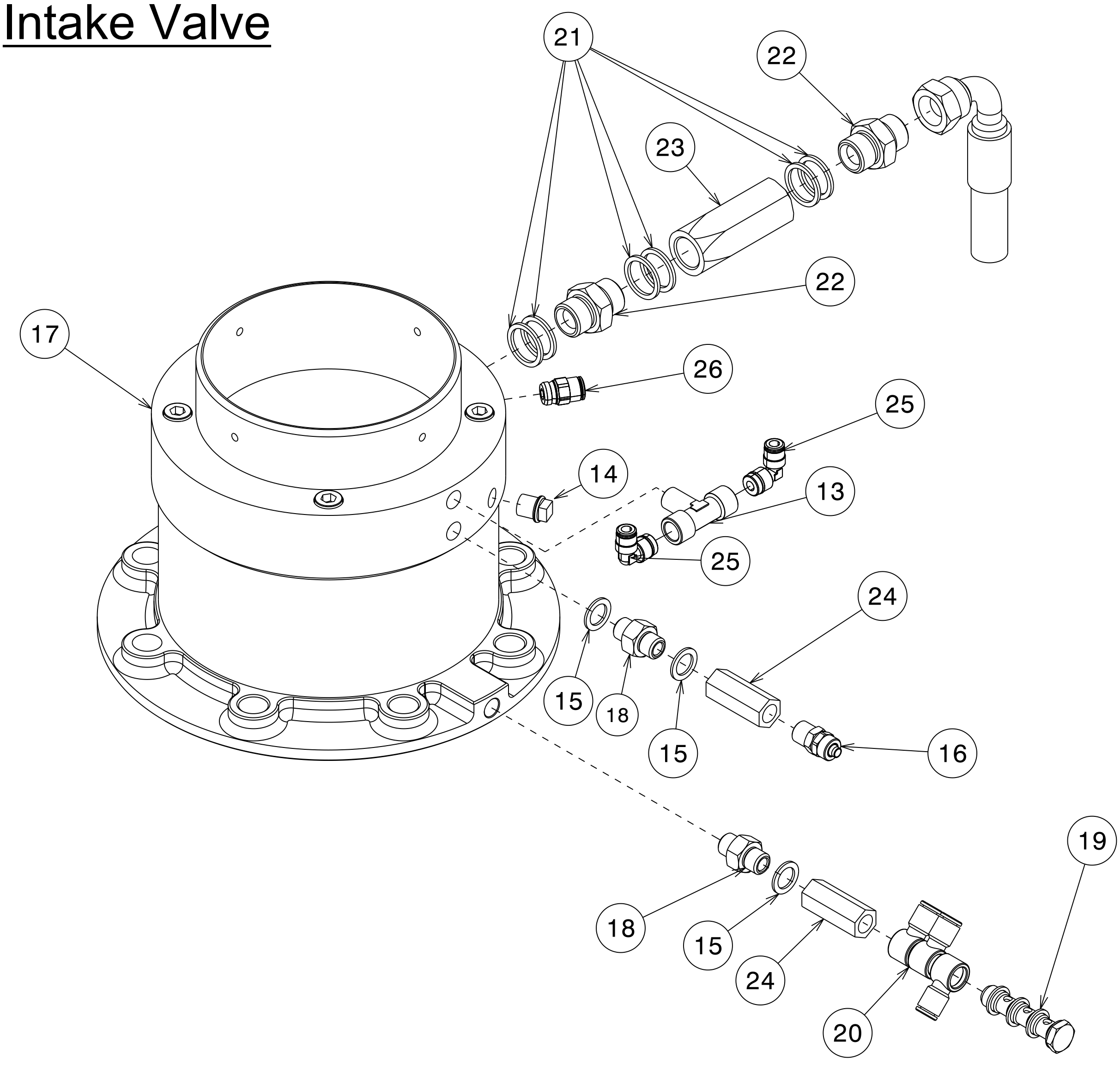
PARTS LEGENDA: Regulator flapper valve | Tab. 07.1

POSITION	DESCRIPTION	PART NO.	QUANTITY
Regulator flapper valve		024-136651-S	1
1	Throttle regulator closing flange	004-2050-S	1
2	Flange rotation rear shaft	282-0013-S	1
3	Throttle regulator	053-08155-S	1
4	Flange rotation front shaft	282-00121-S	1
5	Regulator intake valve assembly	024-1365-F	1
6	Throttle regulator support	010-3087701-S	1
7	Accelerator piston assembly	044-00405165-S	1
8	Accelerator piston articulated joint	196-010-S	1
9	Throttle regulator blade	120-219831-S	1
10	Hex nut M6 UNI 5589	135-031-S	1
11	OR	023-2935-S	1
12	Accelerator piston spacer L=22	009-10545-S	1
13	Accelerator piston spacer	009-10550-S	1



Pressure switch

Intake Valve



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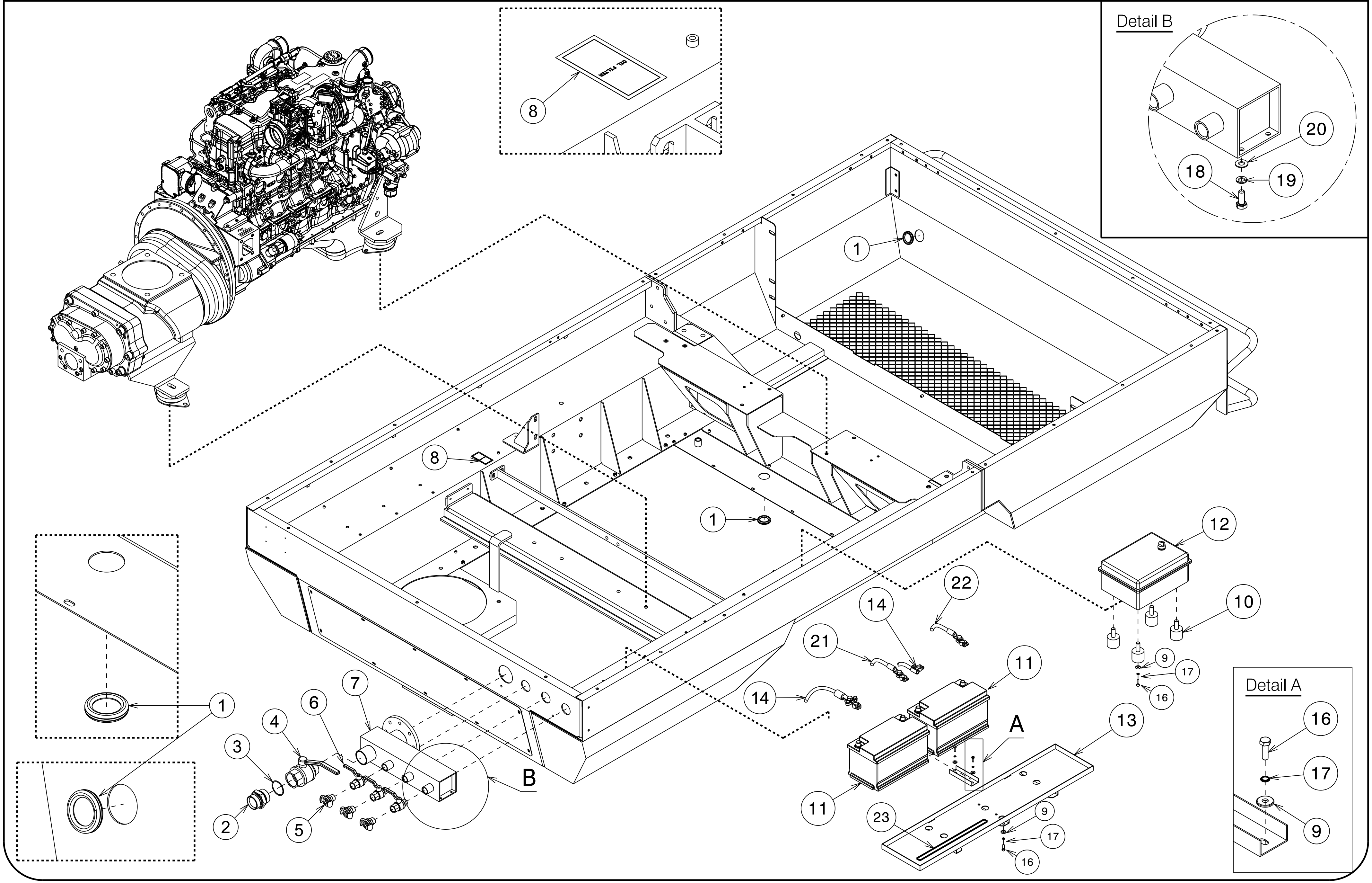
PARTS LIST

Motocompressor – D800T4F

PARTS LEGENDA: Intake valve – Pressure switch | Tab. 07.2

POSITION	DESCRIPTION	PART NO.	QUANTITY
Pressure Switch			
1	Copper washer (¼")	015-007-S	6
2	4-ways block body (¼")	053-2950-S	1
3	T Fitting M+F+F (1/4")	148-1942-S	1
4	Ball valve connection F+F (1/4")	152-016-S	1
5	Plug (1/4")	106-086-S	1
6	Pressure switch	205-010-S	1
7	Solenoid valve 12 V (1/4")	160-087-S	1
8	Solenoid valve support	010-1636-S	1
9	Straight quick coupling (¼") per tubo d.8	148-575-S	1
10	Double screw 1/4 cil.-1/4 con. hole 7	187-006-S	3
11	Non return valve (¼")	033-017-S	1
12	Quick coupling 90° (¼") per tubo d.8	148-573.5-S	3
27	Hex head screw screw M6x25 UNI 5739	132-065-S	2
28	Washer d.6	015-250-S	2
29	Washer d. 6.6x18x2	015-029-S	2
30	Hex head screw screw M5x35	132-043-S	2
31	Self locking nut M8 UNI 7473	137-020-S	2
Intake valve			
13	T fitting F+M+F (¼")	148-194-S	1
14	Square head plug (1/4")	106-025-S	1
15	Copper washer (¼")	015-007-S	3
16	Straight coupling for pipe d. 8 (1/4")	148-070-S	1
17	Intake valve assembly	024-1365-F	1
18	Double screw 1/4 cil.-1/4 con. hole 7	187-006-S	2
19	Quick coupling (¼")	148-5900-S	1
20	Super quick coupling (¼")	148-5901-S	3
21	Copper washer	015-0121-S	6
22	Double screw (½" foro 12.6)	187-045-S	2
23	Non return valve ½"	033-0990-S	1
24	Non return valve (¼")	033-017-S	2
25	Quick coupling 90° (¼") per tubo d.8	148-573.5-S	5
26	Straight quick coupling (¼") per tubo d.8	148-575-S	1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TECHNOLOGY AND ENGINEERING SOLUTIONS

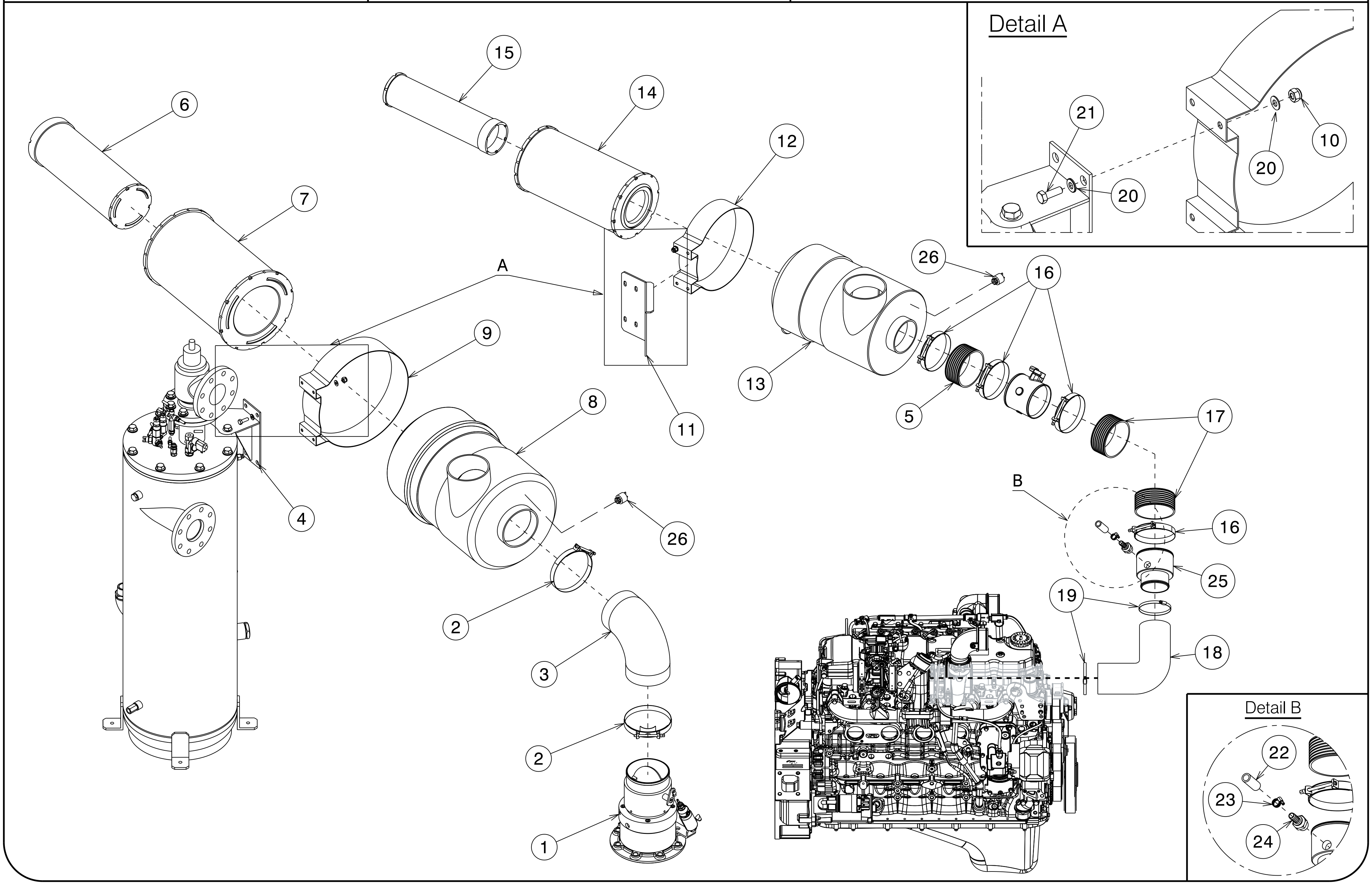
PARTS LIST

Motocompressor – D800T4F

PARTS LEGENDA: Engine – Air-end position | Tab. 08

POSITION	DESCRIPTION	PART NO.	QUANTITY
1	Membrane fairlead	239-036-S	2
2	Double screw (2”)	187-105-S	1
3	Copper washer (2”)	015-019.2-S	1
4	Ball valve (2”)	152-070-S	1
5	Bayonet fitting	148-651-S	3
6	Ball valve (3/4”)	152-030-S	3
7	Exit valves coupling	063-1168-S	1
8	Oil filter sticker	238-002-S	1
9	Washer d.6.6x18x2	015-029-S	12
10	Silent block	061-019800-S	4
11	Battery	174-095-S	2
12	Battery switch box	----------	1
13	Battery box	029-0240-S	1
	Belts	149-00245-S	2
14	Negative link cable	252-1550-S	1
15	Negative battery cable	252-080-S	1
16	Hex head screw M6x20	132-063-S	12
17	Washer d.6	015-250-S	12
18	Hex head screw . M10x25	132-142-S	4
19	Elastic washer d.10	139-050-S	4
20	Flat washer 10,2x21x2	015-032-S	4
21	Positive cable (to alternator)	252-0880-S	1
22	Positive cable (to battery switch)	252-0890-S	1
23	Adhesive strip	023-351-S	70 in

ROTAIR	D 800 T4F - Air filter cartridges	Tab. 09



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PARTS LIST

Motocompressor – D800T4F

PARTS LEGENDA: Air filter cartridges | Tab. 09

POSITION	DESCRIPTION	PART NO.	QUANTITY / LENGTH
1	Regulator assembly	024-1365-F	1
2	Clamp	149-1693-S	2
3	Rubber bend for air filter	111-1045-S	2
4	Compressor air filter support	010-309500-S	1
5	Pipe d. 130	089-05202-S	5 in
6	2° compressor air filter	162-5623-S	1
7	1°compressor air filter	162-5622-S	1
8	Case group+ compressor air filter	014-2812-S	1
9	CF clamp for filter	149-3852-S	1
10	Self-locking nut M10	137-050-S	8
11	Engine air filter support	010-309502-S	1
12	CF clamp for filter	149-3850-S	1
13	Case group+ engine air filter	014-2810-S	1
14	1° engine air filter	162-5620-S	1
15	2° engine air filter	162-5621-S	1
16	Clamp 130-140	149-1682-S	4
17	Pipe d. 130	089-05202-S	23 in
18	Rubber bend for air filter D.102	111-106770-S	1
19	Clamp 90-110	149-16130-S	2
20	Flat washer 10,2x21x2	015-032-S	8
21	Hexagonal head screw M10x30 UNI 5739	132-143-S	8
22	Pipe	089-0015-S	35.50 in
23	Pipe clamp	149-021-S	1
24	M fitting 3/4 M	148-19970-S	1
25	Reduction D.130 – D.100	190-6071705-S	1
26	Air clogging sensor	257-048-S	2

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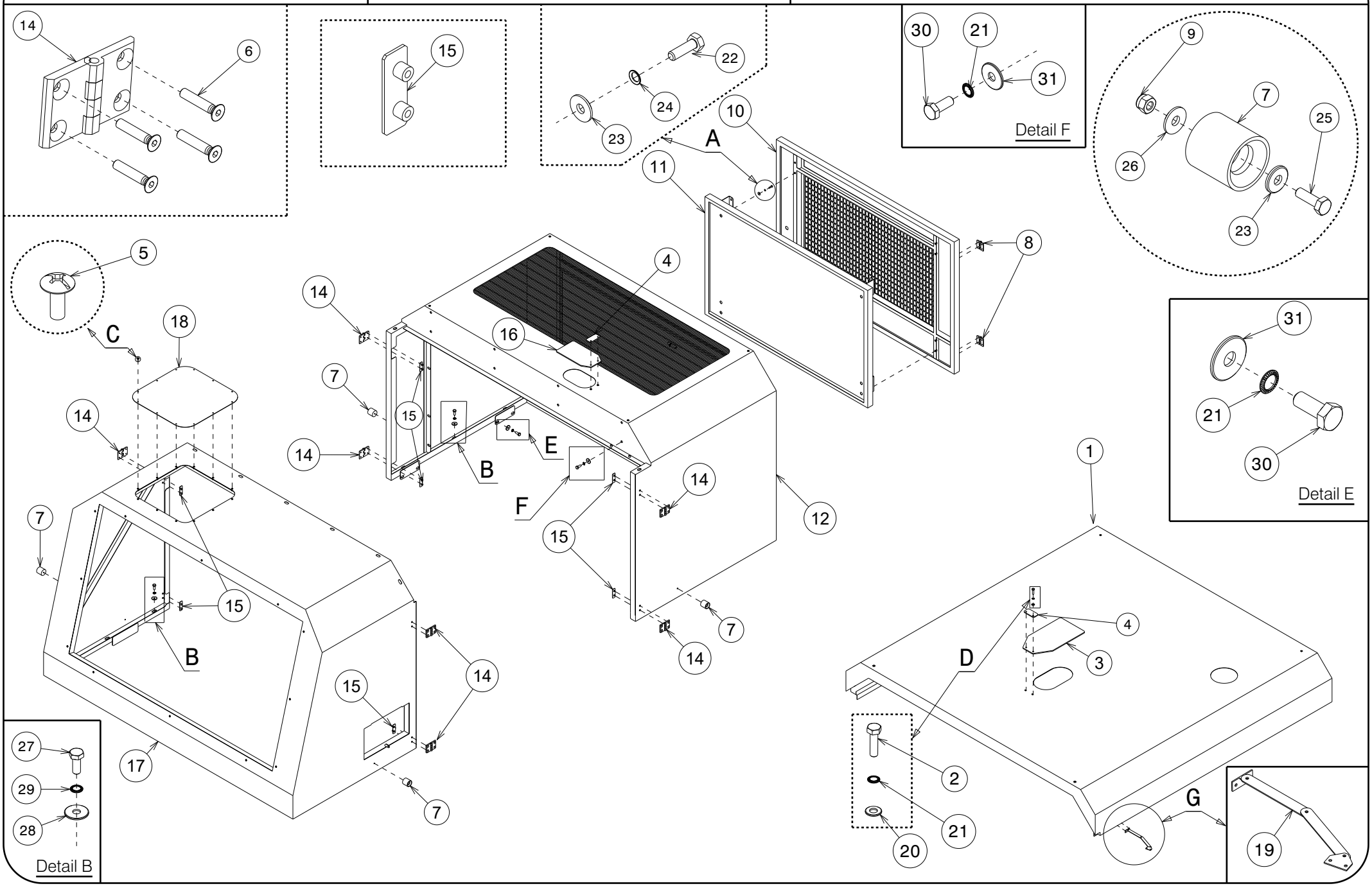
D 800 T4F- Canopy

Tab. 10.1



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TECHNOLOGY AND ENGINEERING SOLUTIONS

PARTS LIST

Motocompressor – D800T4F

PARTS LEGENDA: Canopy | Tab. 10.1

POSITION	DESCRIPTION		PART NO.	QUANTITY
1	Central canopy		036-19853-S	1
2	Hex head screw M8x30		132-103-S	4
3	Rubber plate		177-201-S	1
4	Rubber holding plate		208-004-S	2
5	Large head screw M6x16		243-009-S	12
6	Hexagon socket countersunk head 6x25 UNI 5933		146-094-S	40
7	Door clamp		197-015-S	4
8	Hinge 50x50		007-0342-S	2
9	Hex nut M6 UNI 7473		135-030-S	4
10	Rear removable panel		124-2497141-S	1
11	Sound-proofing rear panel		124-249716-S	1
12	Rear canopy		036-19751-S	1
14	Hinge 50x76		007-0343-S	8
15	Doors clamping blade		120-323825-S	8
16	Rubber plate		177-1955-S	1
17	Front canopy		036-19652-S	1
18	Oil tank covering upper panel		124-249704-S	1
19	Door stop	From Serial No.C40168	102-0880-S	1
20	Flat washer 8,4x17x1,5 UNI 6592		015-030-S	4
21	Schnorr washer d.8		015-251-S	8
22	Hex head screw M6x20		132-063-S	8
23	Washer d. 6.6x18x2		015-029-S	16
24	Washer d.6		015-250-S	8
25	Large head screw M6x25		243-012-S	4
26	Flat washer 10,2x21x2		015-032-S	4
27	Hexagonal head screw M10x30 UNI 5739		132-143-S	18
28	Flat washer 10x30x2,5 UNI6593		015-033-S	18
29	Schnorr washer d.10		015-252-S	18
30	Hex head screw M8x25 UNI 5739		132-102-S	8
31	Flat washer 8x24x2 UNI6593		015-031-S	8

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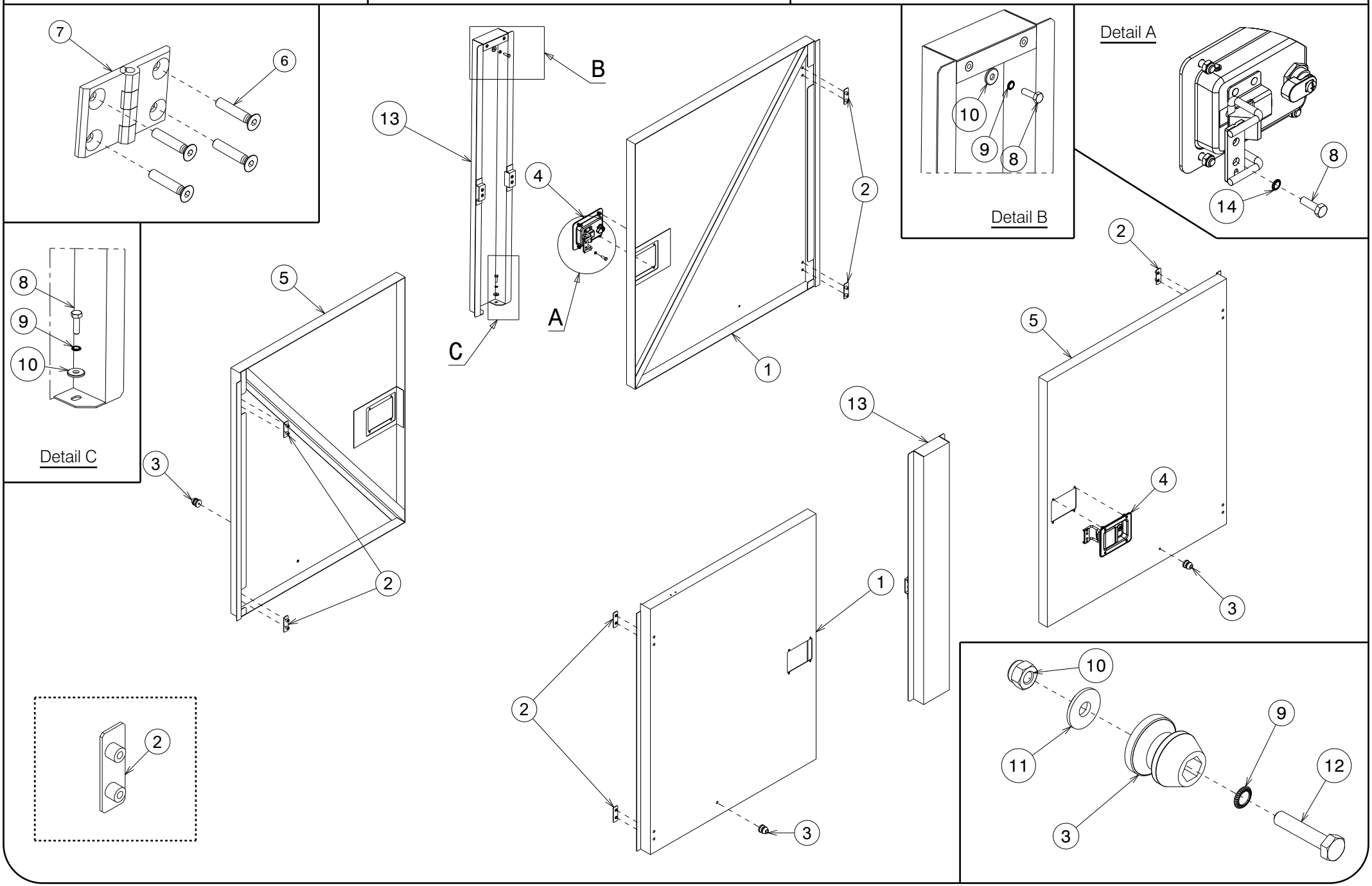
D 800 T4F - Canopy

Tab. 10.2



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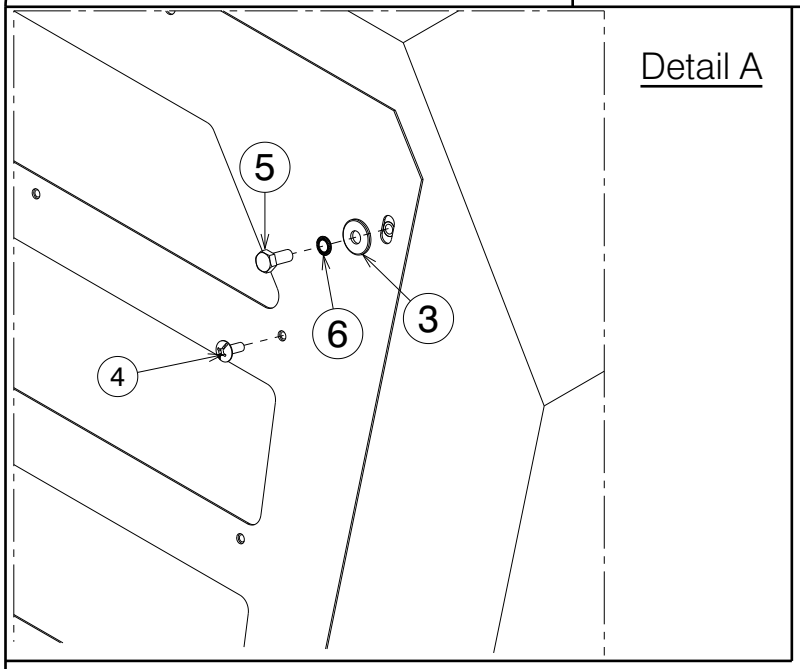
TECHNOLOGY AND ENGINEERING SOLUTIONS

PARTS LIST

Motocompressor – D800T4F

PARTS LEGENDA: Canopy | Tab. 10.2

POSITION	DESCRIPTION	PART NO.	QUANTITY
1	Door 1	110-0168024-S	2
2	Doors clamping blade	120-323825-S	8
3	Door clamping	197-015-S	4
4	Handle	209-0225-S	4
5	Door 2	110-0168044-S	2
6	Hexagon socket countersunk head 6x25 UNI 5933	146-094-S	32
7	Hinge 50x76	007-0343-S	8
8	Hex head screw . M6x20	132-063-S	16
9	Washer d.6	015-250-S	16
10	Hex nut M6 UNI 7473	137-030-S	4
11	Washer d. 6.6x18x2	015-029-S	12
12	Hexagonal head Screw M6x30 UNI 5739	132-066-S	4
13	Side upright	124-249750-S	2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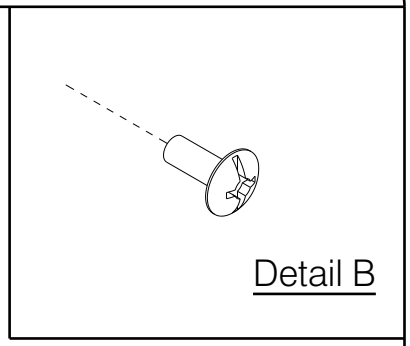
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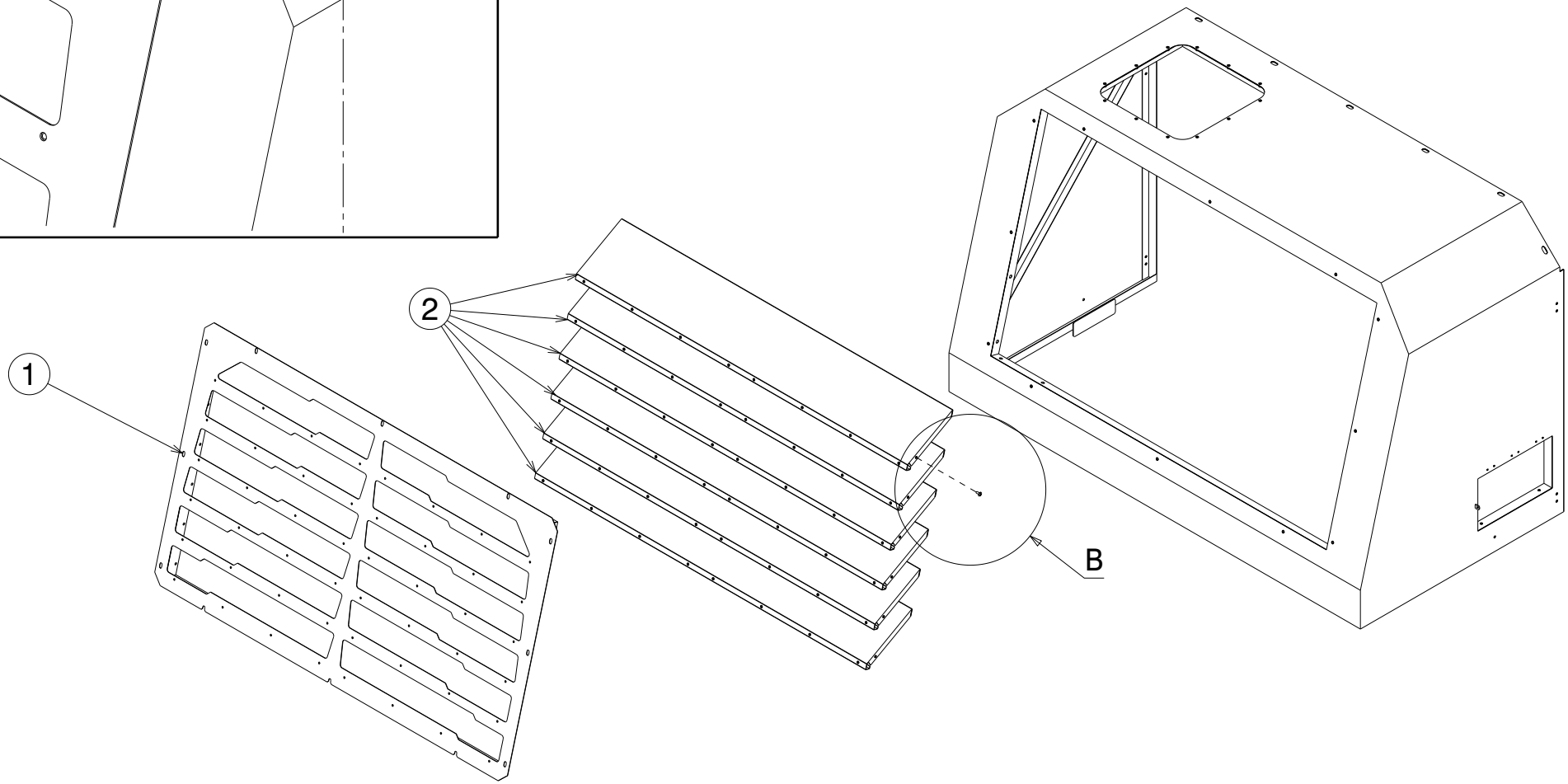
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TECHNOLOGY AND ENGINEERING SOLUTIONS

PARTS LIST

Motocompressor – D800T4F

PARTS LEGENDA: Air intake | Tab. 11

POSITION	DESCRIPTION	PART NO.	QUANTITY
1	Front air intake	022-049830-S	1
2	Soundproofing air intake panel 1	124-24971100-S	6
3	Washer diam.8x24x2 UNI6599	015-031-S	12
4	Large head screw M6x16	243-009-S	60
5	Hex head screw M8x20 UNI 5739	132-101-S	12
6	Schnorr washer d.8	015-251-S	12

Tab. 12

D 800 T4F - Separator tank position

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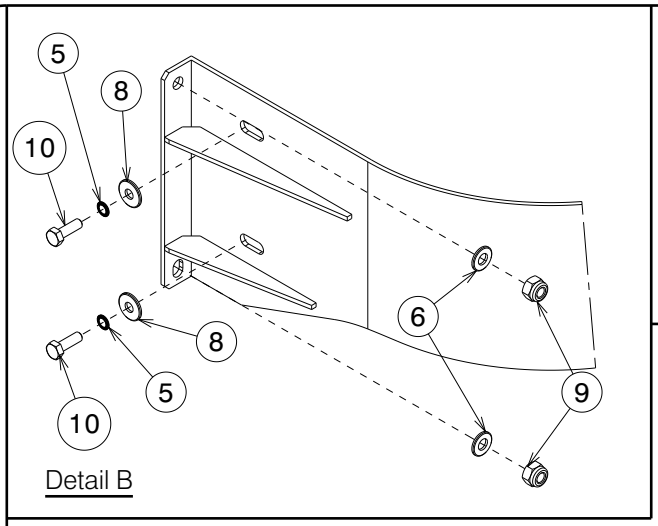

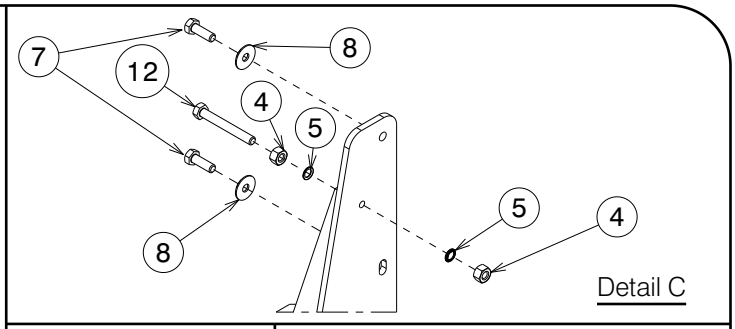

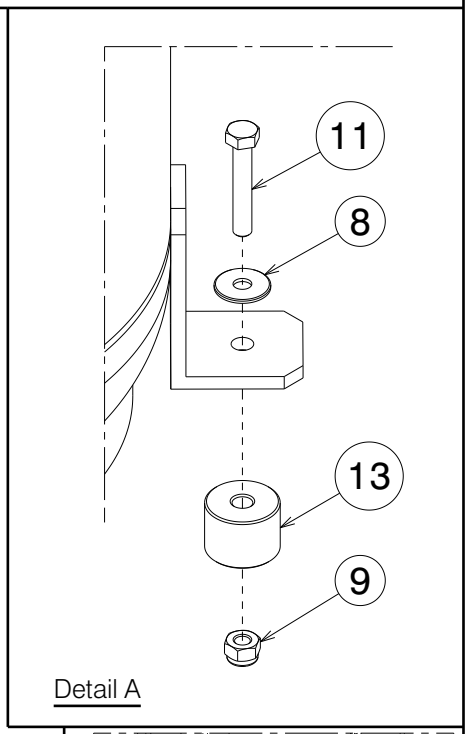

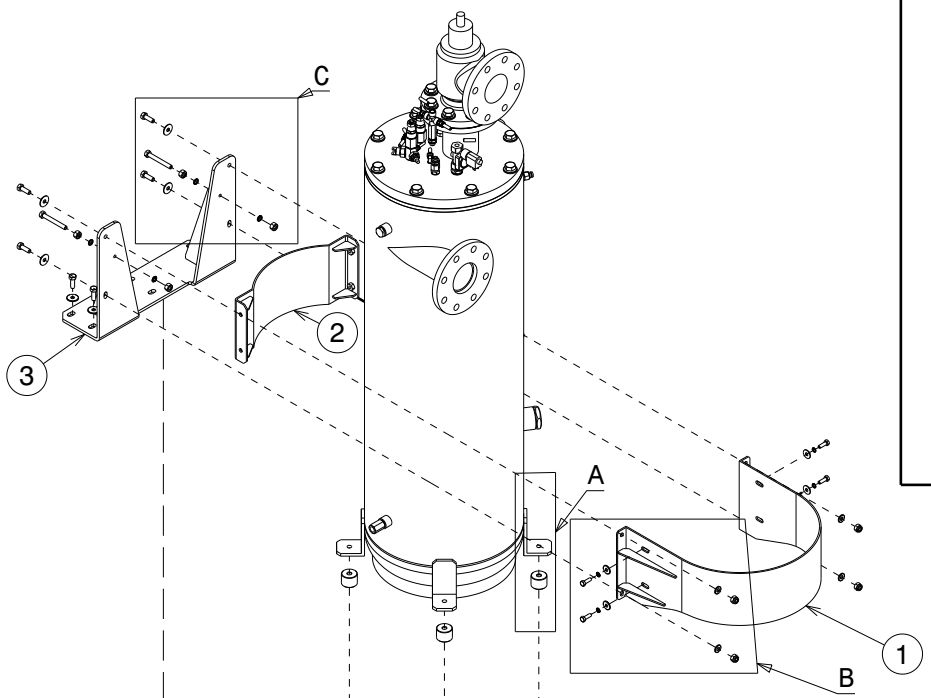

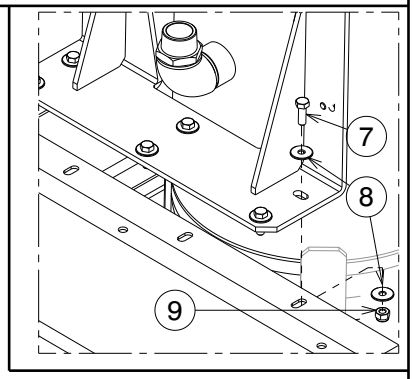

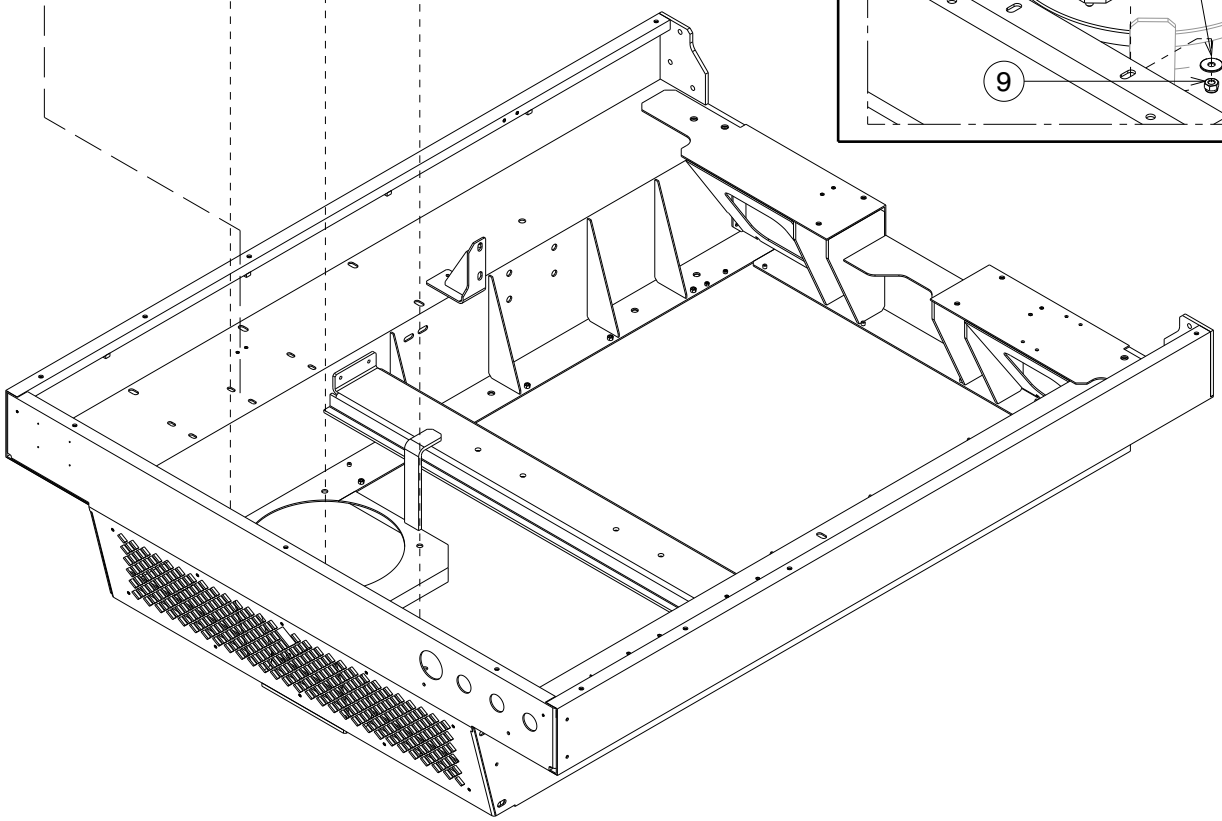

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TECHNOLOGY AND ENGINEERING SOLUTIONS

PARTS LIST

Motocompressor – D800T4F

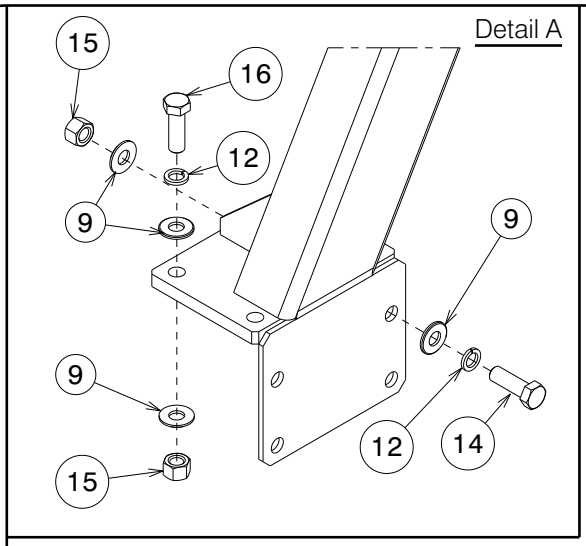
PARTS LEGENDA: Separator tank position | Tab. 12

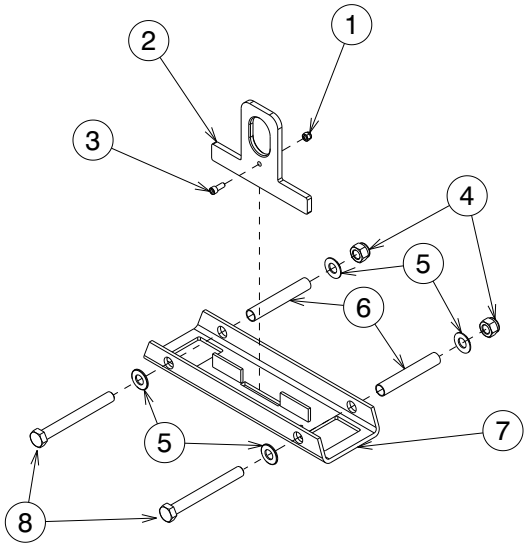
POSITION	DESCRIPTION	PART NO.	QUANTITY
1	Separator tank clamping ring	214-04581-S	1
2	Separator tank support blade	120-219351-S	1
3	Separator tank clamping blade	120-21936-S	1
4	Nut M10	135-050-S	4
5	Schnorr washer d.10	015-252-S	12
6	Flat washer 10,2x21x2	015-032-S	4
7	Hexagonal head screw M10x30 UNI 5739	132-143-S	10
8	Flat washer 10x30x2,5 UNI6593	015-033-S	24
9	Self-locking nut M10	137-050-S	14
10	Hex head screw M10x30 UNI 5739	132-142-S	4
11	Hex head screw M10x60 UNI5737	132-149-S	4
12	Hex head screw M10x80 UNI5739	132-153.1-S	2
13	Spacer	009-032-S	4

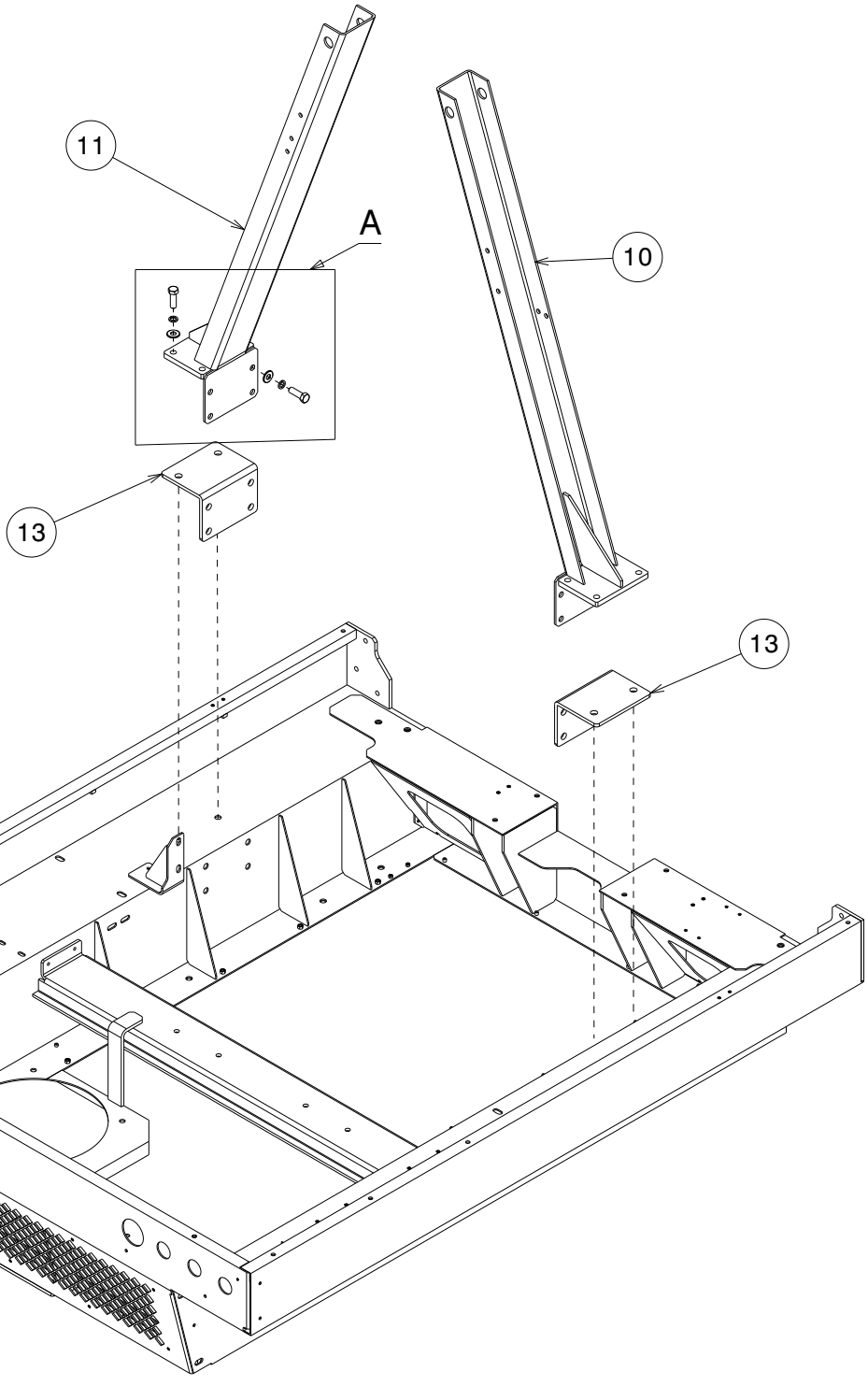
Tab. 12.1

D 800 T4F - Hoisting hook position

ROTAIR®







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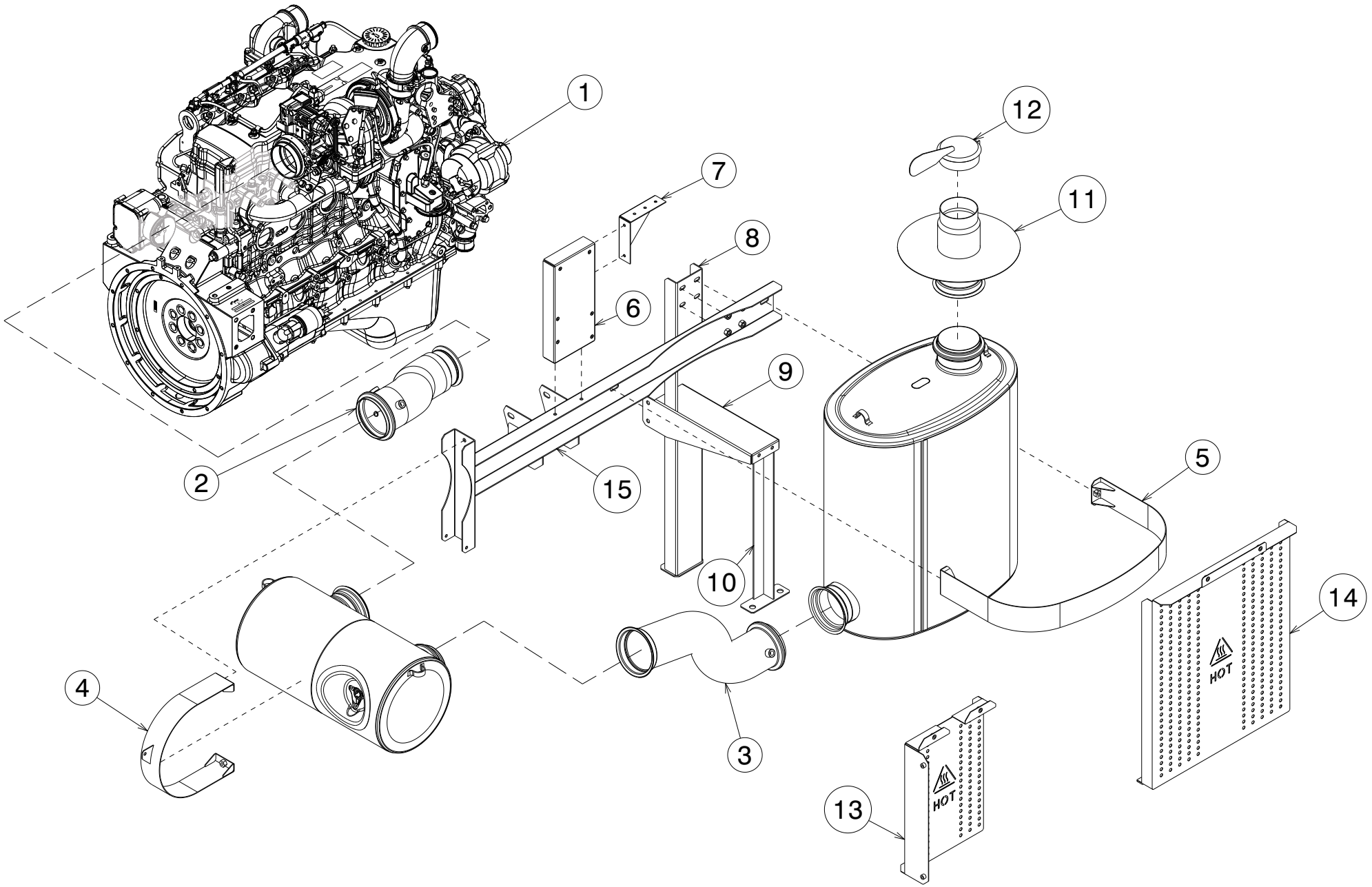
TECHNOLOGY AND ENGINEERING SOLUTIONS

PARTS LIST

Motocompressor – D800T4F

PARTS LEGENDA: Separator tank position | Tab. 12.1

POSITION	DESCRIPTION	PART NO.	QUANTITY
1	Self -locking nut (M12)	137-060-S	1
2	Hook	017-05603-S	1
3	Screw T.C.E.I M12x30	133-233-S	1
4	Self -locking nut (M27)	137-130-S	2
5	Plane washer d. 28x56x3.5	015-045-S	4
6	Distributor hook	017-05605-S	2
7	Upper hosting hook	017-05604-S	1
8	Hex head screw M27x250	132-584-S	2
9	Plane washer d. 16x35x3	015-048-S	24
10	Right hosting hook	017-05601-S	1
11	Left hosting hook	017-056025-S	1
12	Elastic washers d. 16	139-080-S	12
13	Hoist stiffening plate	208-3097-S	2
14	Hexagonal head screw M16x50	132-296-S	8
15	Hex nut M 16 UNI 5587	135-080-S	12
16	Hexagonal head screw M16x60	132-298-S	4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ROTAIR
TECHNOLOGY AND ENGINEERING SOLUTIONS

PARTS LIST

Motocompressor – D800T4F

PARTS LEGENDA: Connections | Tab. 13.1

POSITION	DESCRIPTION	PART NO.	QUANTITY
1	Engine	165-0050-S	1
2	Exhaust pipe	090-101208-S	1
3	Hose	064-200620-S	1
4	Clamping ring 1	214-04680-S	1
5	Clamping ring 2	214-04682-S	1
6	Sensor control units support	010-309512-S	1
7	SCR cables support	010-309511-S	1
8	ATS vertical support	010-309508-S	1
9	SCR support 1	010-309510-S	1
10	SCR support 2	010-309509-S	1
11	Exhaust manifold	119-07820-S	1
12	Exhaust rain cover	032-0330-S	1
13	DOC protection panel	124-249762-S	1
14	SCR protection panel	124-249760-S	1
15	ATS support	010-309506-S	1

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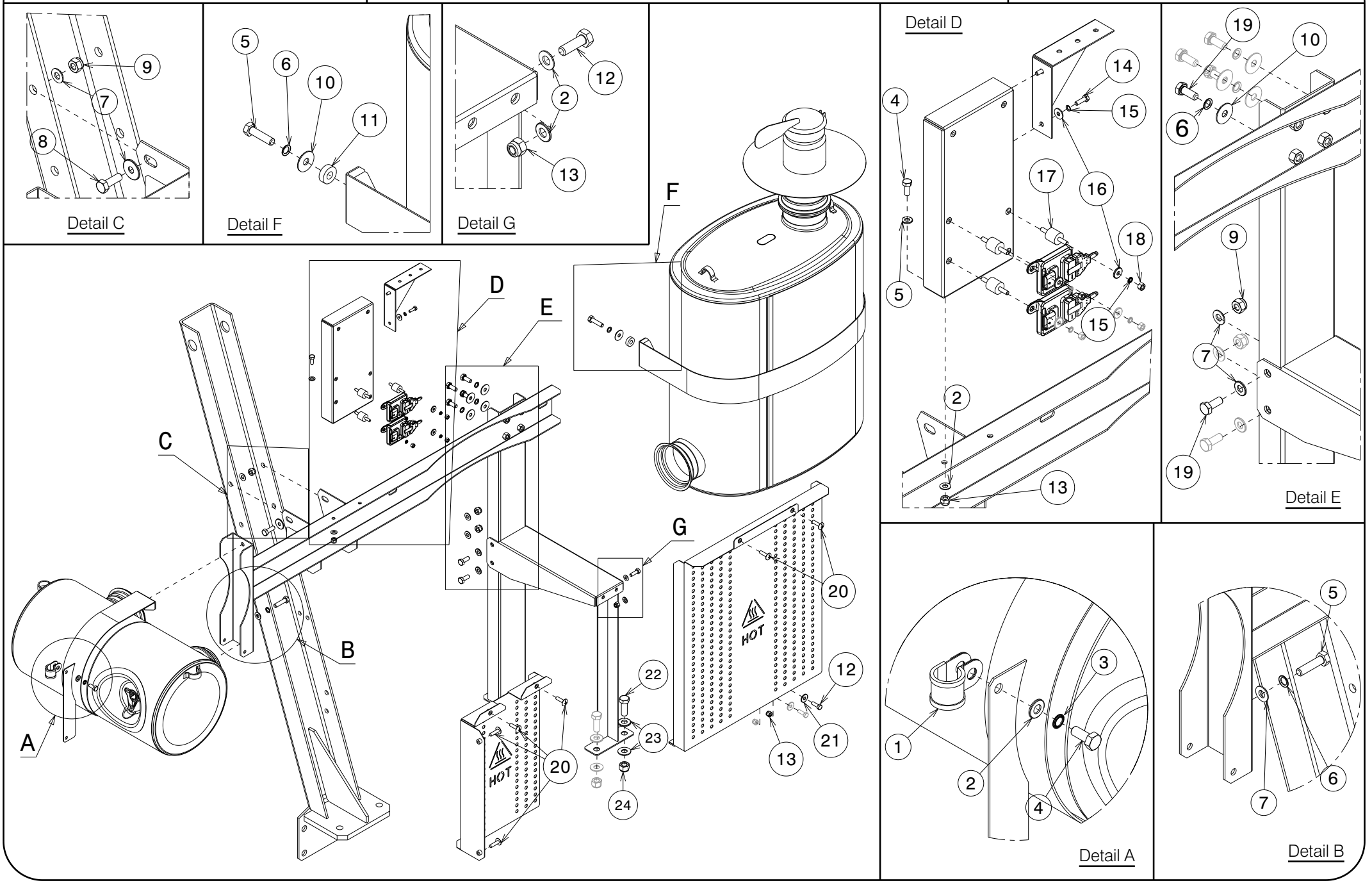
D 800 T4F - Clampings (Exhaust system)

Tab. 13.1.1



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TECHNOLOGY AND ENGINEERING SOLUTIONS

PARTS LIST

Motocompressor – D800T4F

PARTS LEGENDA: Clampings (Exhaust system) | Tab. 13.1.1

POSITION	DESCRIPTION	PART NO.	QUANTITY
1	Clamp	149-236-S	1
2	Flat washer 8,4x17x1,5 UNI 6592	015-030-S	7
3	Schnorr washer d.8	015-251-S	1
4	Hex head screw . M8x20 UNI 5739	132-101-S	3
5	Hex head screw M.10x40	132-145-S	4
6	Schnorr washer d.10	015-252-S	8
7	Flat washer 10,2x21x2	015-032-S	18
8	Hexagonal head screw M10x30 UNI 5739	132-143-S	4
9	Self-locking nut M10	137-050-S	8
10	Flat washer 10x30x2,5 UNI6593	015-033-S	6
11	Spacer	009-087.5-S	2
12	Hex head screw M8x25 UNI 5739	132-102-S	3
13	Self locking nut M8 UNI 7473	137-040-S	5
14	Hex head screw . M6x20	132-063-S	2
15	Washer d.6	015-250-S	6
16	Washer d. 6.6x18x2	015-029-S	6
17	Silent block	061-0226-S	4
18	Hex nut M6 UNI 5587	135-030-S	4
19	Hex head screw . M10x25	132-142-S	8
20	Poelier screw 8x30	243-015-S	6
21	Flat washer 8x24x2 UNI6593	015-031-S	2
22	Hex head screw M16x45	132-295-S	2
23	Plane washer d. 16x35x3	015-048-S	4
24	Self-locking nut M16	137-080-S	2

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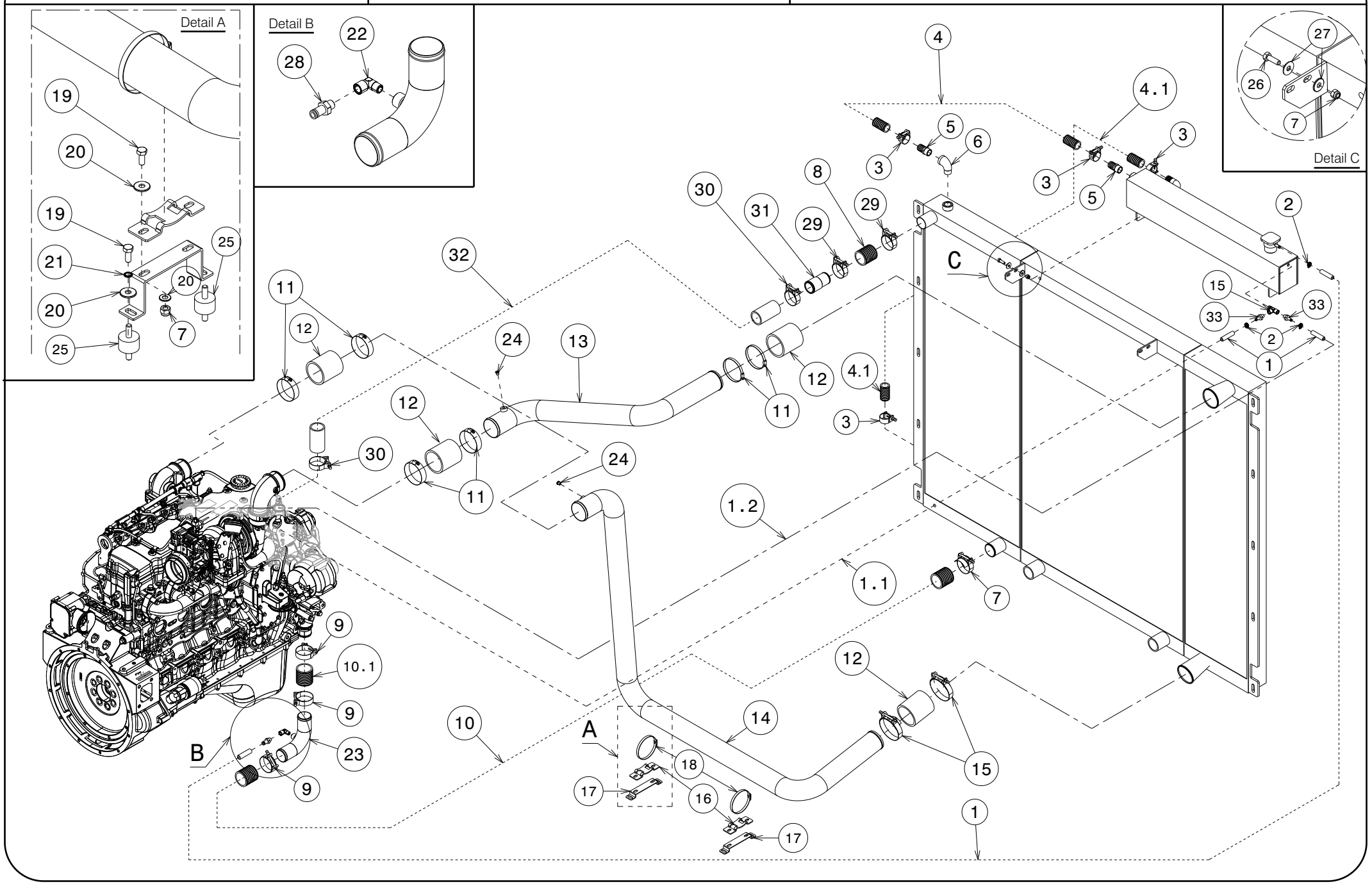
D 800 T4F - Radiator connections

Tab. 13.2



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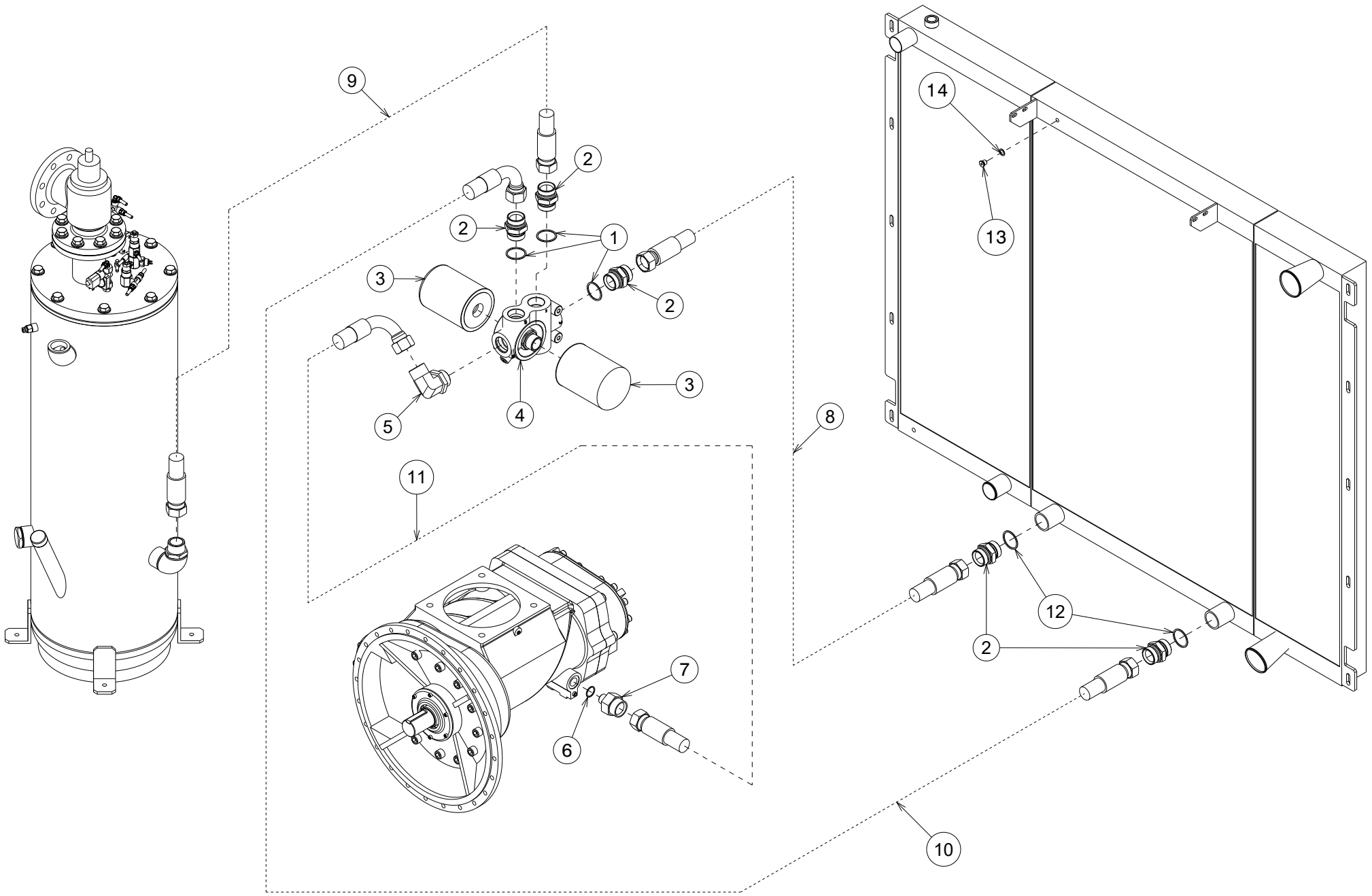
TECHNOLOGY AND ENGINEERING SOLUTIONS

PARTS LIST

Motocompressor – D800T4F

PARTS LEGENDA: Radiator connections | Tab. 13.2

POSITION	DESCRIPTION	PART NO.	QUANTITY / LENGTH
1	Pipe d. 15x8	089-1203-S	87 in
1.1			47.50 in
1.2			63 in
2	Pipe clamp d. 10x16	149-0052-S	3
3	Clamp 31-34	149-305-S	4
4	Pipe d. 35x34	089-009.5-S	17.50 in
4.1			75 in
5	Joint M (3/4”) for pipe d. 25	148-19970-S	2
6	Short radius curve (3/4”)	111-040-S	1
7	Self locking nut M8 UNI 7473	137-040-S	8
8	Pipe d. 48x58	089-0075-S	12.50 in
9	Clamp 59-63	149-310-S	3
10	Pipe d. 51x61	089-008-S	79 in
10.1			4 in
11	Clamp 70-92	149-1454-S	4
12	Pipe d. 80 for high temperatures (blue)	089-04530-S	N.4 /4.70 in
13	Intercooler inlet pipe	064-200624-S	1
14	Intercooler outlet pipe	064-200622-S	1
15	T Fitting M+F+F (1/4”)	148-1942-S	1
16	Clamp support	010-1530-S	2
17	Intercooler pipe inlet support	010-24621-S	1
18	Pipe clamp d.60x80	149-150-S	2
19	Hex head screw . M8x20 UNI 5739	132-101-S	8
20	Flat washer 8x24x2 UNI6593	015-031-S	8
21	Schnorr washer d.8	015-251-S	4
22	90° M+F fitting (¼”)	148-143-S	1
23	Elbow pipe	111-7000-S	1
24	Plug (1/8”)	106-085-S	2
25	Silent block	061-013-S	4
26	Hex head screw M8x25 UNI 5739	132-102-S	4
27	Flat washer 8x24x2 UNI6593	015-031-S	8
28	M fitting (¼”) d.12	148-198.01-S	1
29	Clamp 55-59	149-312-S	2
30	Clamp 51-55	149-313-S	2
31	Reduction 48 a 45 l=91	190-603840-S	1
32	Pipe d. 45x55	089-0072-S	51 in
33	M fitting (¼”) d.8	148-198.2-S	2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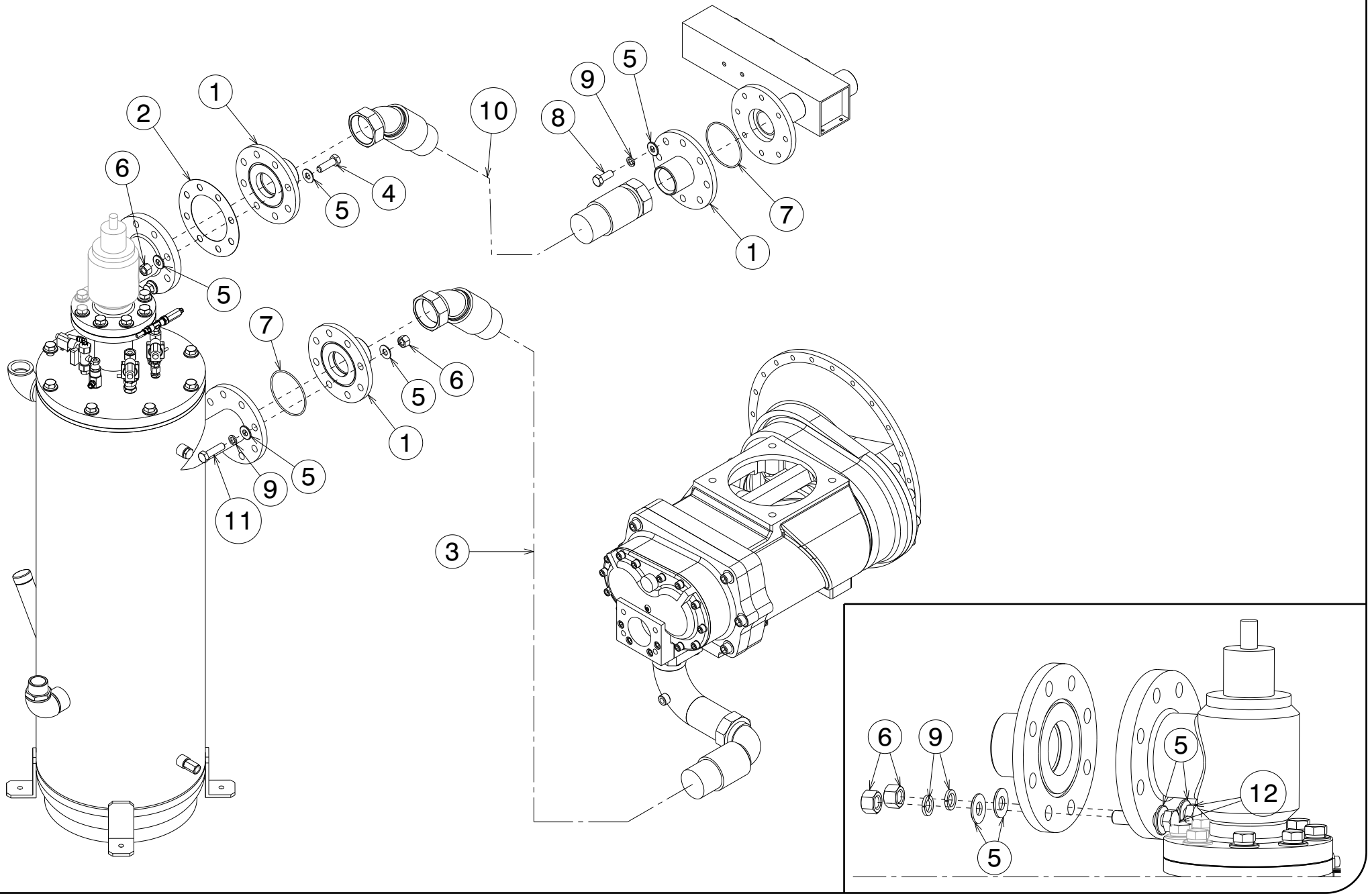
ROTAIR
TECHNOLOGY AND ENGINEERING SOLUTIONS

PARTS LIST

Motocompressor – D800T4F

PARTS LEGENDA: Oil connections | Tab. 13.3

POSITION	DESCRIPTION	PART NO.	QUANTITY
1	Copper washer (1 ½")	015-205-S	3
2	Double screw (1" ½)	187-090-S	5
3	Oil filter	099-009-S	2
4	By-pass valve assembly	024-02151-F	1
5	90° fitting (1" ½)	148-2988-S	1
6	Copper washer	015-016-S	1
7	Double screw (1" ½)	187-0902-S	1
8	Pipe (1" ½)	065-315.0905-S	1
9	Pipe (1" ½)	065-315.02-S	1
10	Pipe (1" ½)	065-314.95-S	1
11	Pipe (1" ½)	065-313.12-S	1
12	Copper washer (1 ½")	015-019.10-S	2
13	Plug (1/4")	106-086-S	1
14	Copper washer (¼")	015-007-S	1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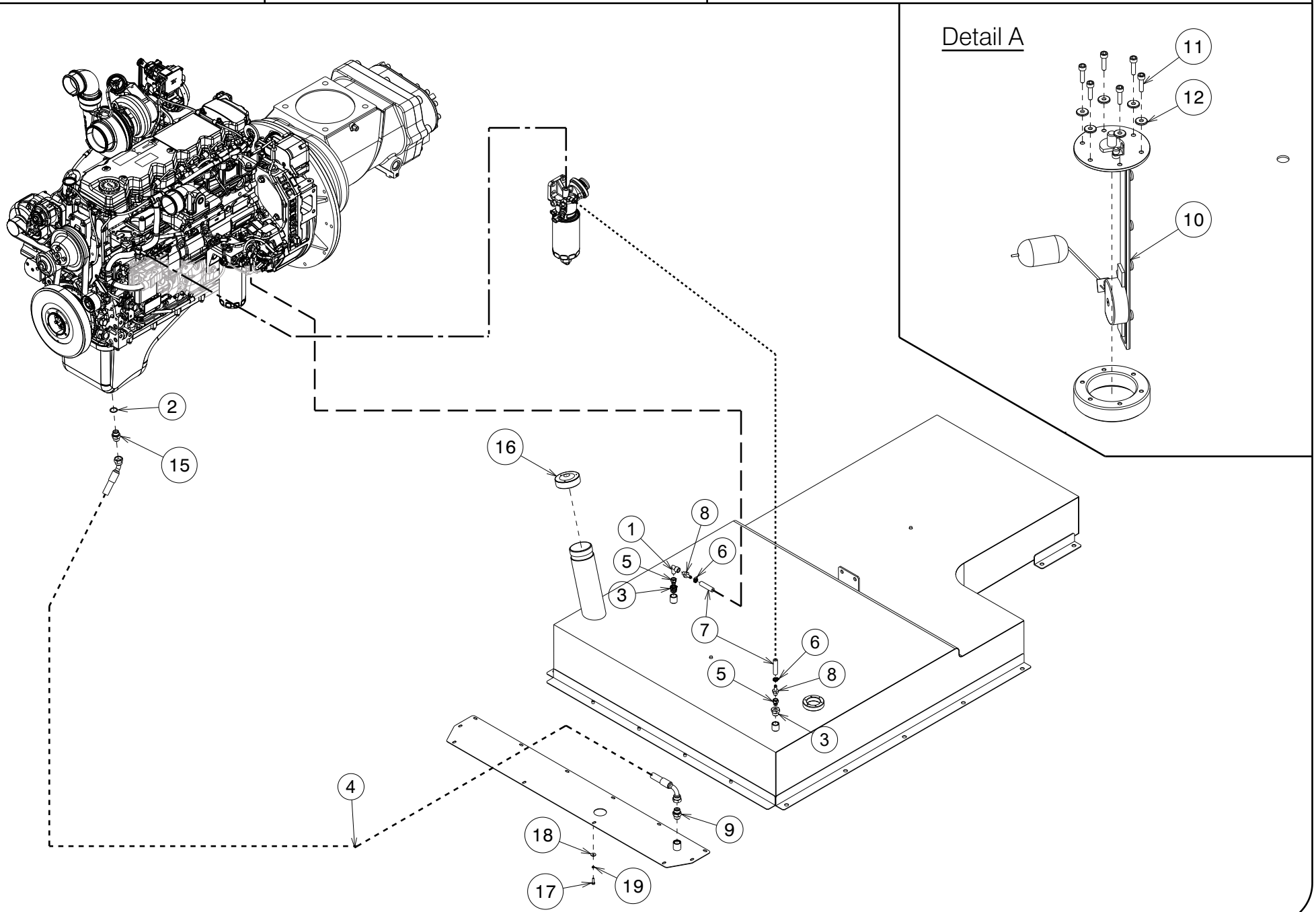
ROTAIR
TECHNOLOGY AND ENGINEERING SOLUTIONS

PARTS LIST

Motocompressor – D800T4F

PARTS LEGENDA: Oil connections | Tab. 13.3.1

POSITION	DESCRIPTION	PART NO.	QUANTITY
1	Flange	004-10670-S	3
2	Paper seal for flanged pipe	023-09750-S	1
3	Equat. Pipe 1 “2 ½	065-499.7107-S	1
4	Hexagonal head screw M16x50	132-296-S	6
5	Plane washer d. 16x35x3	015-048-S	40
6	Nut	135-080-S	16
7	OR seal	023-304-S	2
8	Hex head screw M12x40	132-294-S	8
9	Elastic washers d.16	139-080-S	18
10	Equat. Pipe 1 “2 ½ F90+FD	065-499.165-S	1
11	Hexagonal head screw M16x60	132-298-S	8
12	Hexagonal head screw M16x65	132-299-S	2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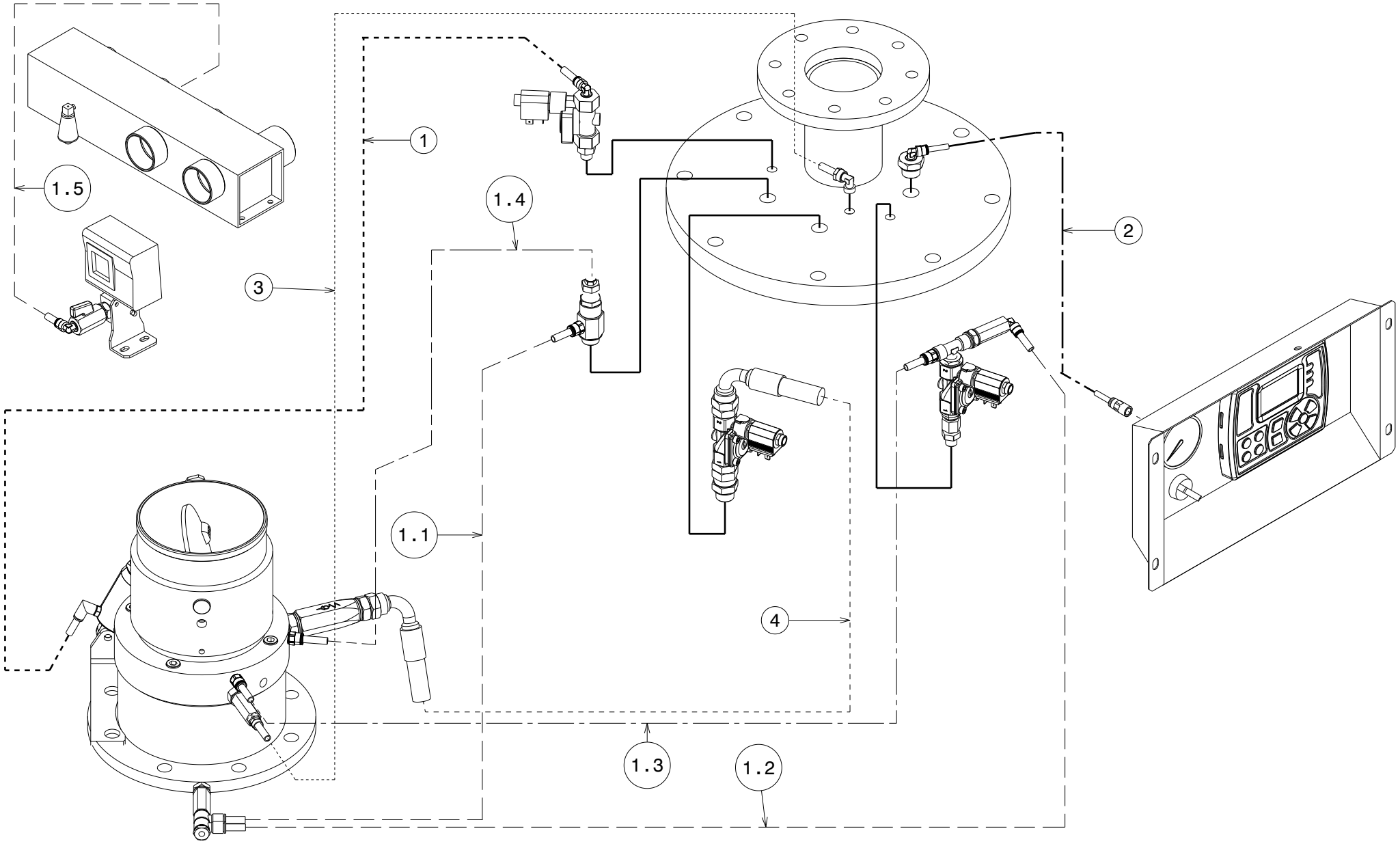
ROTAIR
TECHNOLOGY AND ENGINEERING SOLUTIONS

PARTS LIST

Motocompressor – D800T4F

PARTS LEGENDA: Connections | Tab. 13.4

POSITION	DESCRIPTION	PART NO.	QUANTITY
1	Elbow fitting (¼") for pipe d. 8x6	148-143-S	1
2	Copper washer (1/2")	015-013-S	1
3	Reduction (1/2" – ¼")	190-001-S	2
4	Pipe (1/2")	065-333.350-S	1
5	Straight fitting 1/4M con.-1/4F cil.	148-3600-S	2
6	Pipe clamp 10x16	149-007-S	4
7	Pipe d.15x8	089-1203-S	2
8	M fitting (¼") d.8	148-198.01-S	2
9	Double screw ½"	187-045-S	1
10	Float (for USA version tank)	192-011-S	1
11	Hex socket head cap screw M4x16 UNI 5931	133-044-S	6
12	Flat washer 4,3x12x1,5	015-028-S	6
13	Fuel tank	201-04286-S	1
14	Engine	165-0050-S	1
15	Double screw (½" – M22x1.5)	187-014-S	1
16	Plug	193-016-S	1
17	Hex head screw . M6x20	132-063-S	12
18	Washer d. 6.6x18x2	015-029-S	12
19	Washer d.6	015-250-S	12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TECHNOLOGY AND ENGINEERING SOLUTIONS

PARTS LIST

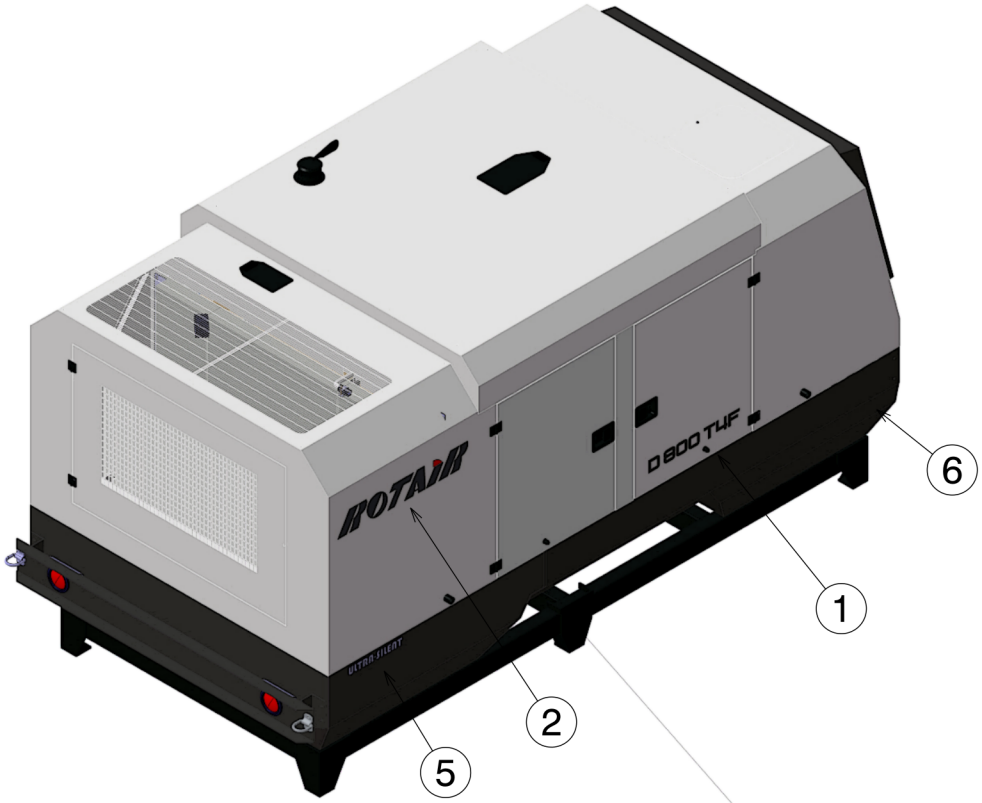
Motocompressor – D800T4F

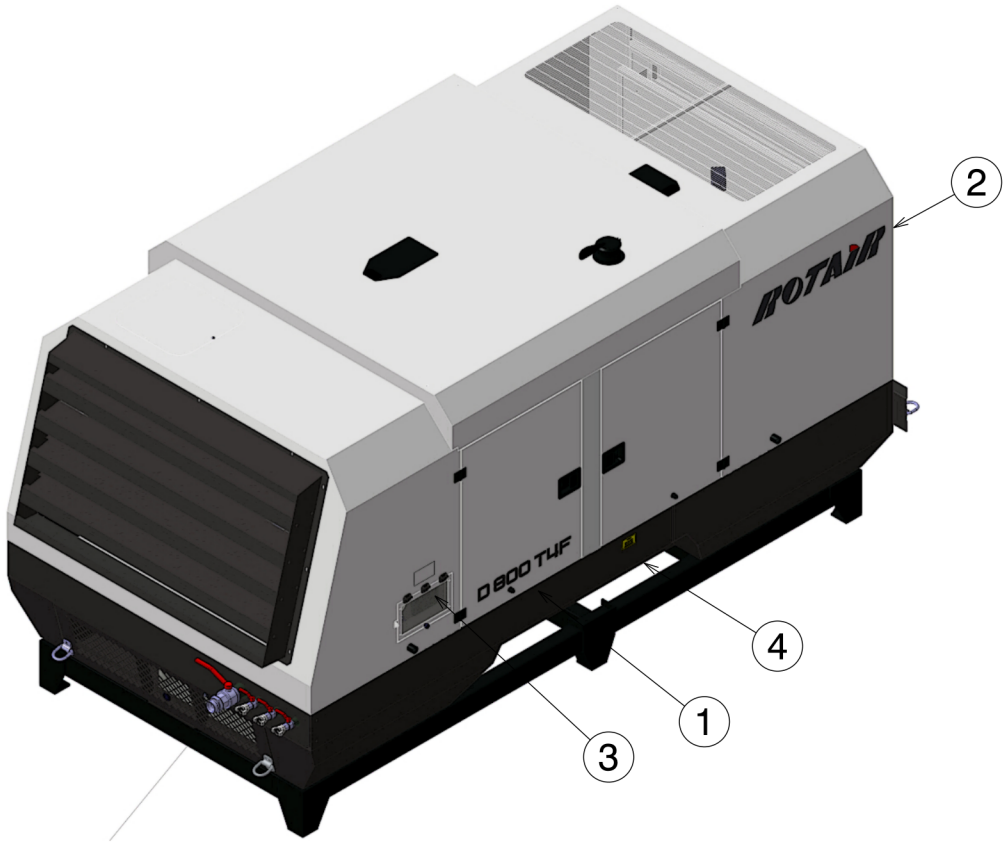
PARTS LEGENDA: Connections | Tab. 13.5

POSITION	DESCRIPTION	PART NO.	QUANTITY / LENGTH
1	Rilsan pipe blue d. 8x6	089-0705-S	53.50 in
1.1			37 in
1.2			45 in
1.3			51 in
1.4			38.50 in
1.5			81 in
2	Rilsan pipe blue d. 6x4	089-0605-S	71 in
3	Polyamide pipe d. 8x6	089-070-S	42.50 in
4	Piping ½" F90+F90	065-687.30-S	1

ROTAIR 2 D 800 T4F 1

CAUTION
DIESEL FUEL ONLY
SHUT ENGINE OFF
BEFORE REFUELING
4





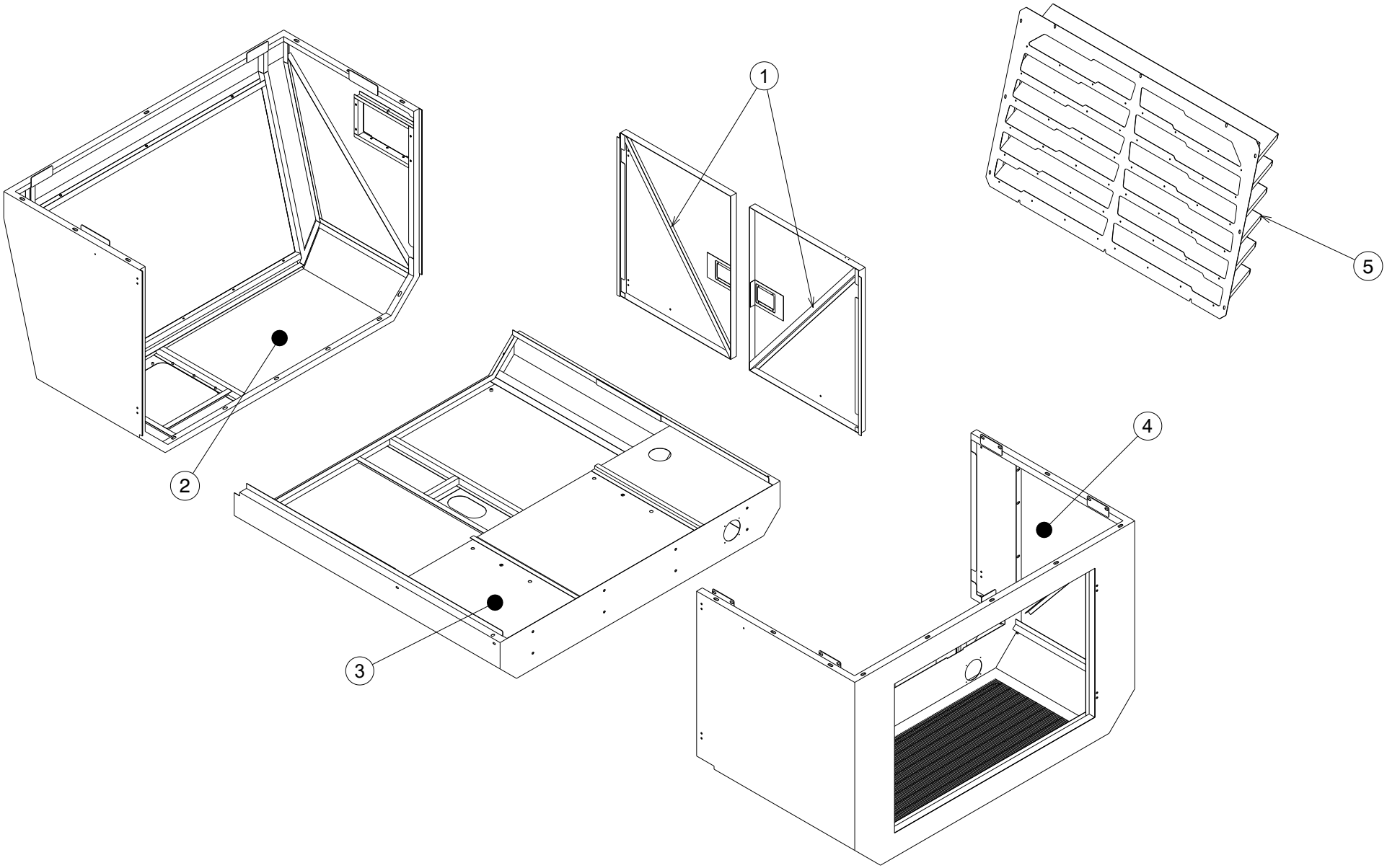
TECHNOLOGY AND ENGINEERING SOLUTIONS

PARTS LIST

Motocompressor – D800T4F

PARTS LEGENDA: Stickers | Tab. 14

POSITION	DESCRIPTION	PART NO.	QUANTITY
1	“D 800 T4F” sticker	238-325892.1-S	2
2	ROTAIR sticker	238-0213.2-S	2
3	Warnings sticker	238-1240.2-S	1
4	“Caution diesel only” sticker	238-097600-S	1
5	“Designed in the U.S.A.” sticker	238-35830-S	1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ROTAIR
TECHNOLOGY AND ENGINEERING SOLUTIONS

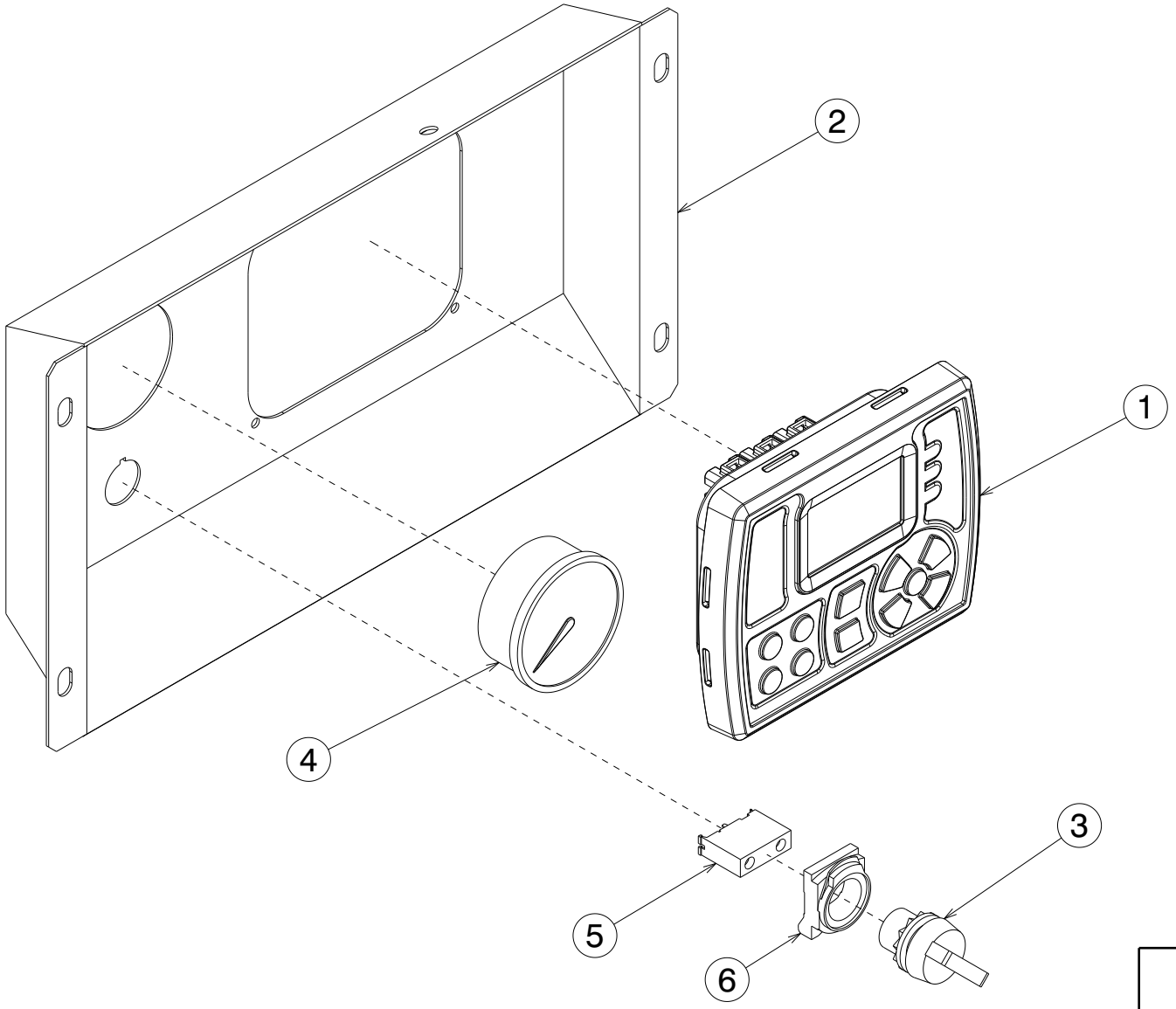
PARTS LIST

Motocompressor – D800T4F

PARTS LEGENDA: Soundproofing | Tab. 15

POSITION	DESCRIPTION	PART NO.	QUANTITY
1	Doors sound proofing kit	204-34705-S	1
2	Rear canopy sound proofing kit	204-34712-S	1
3	Upper roof sound proofing kit	204-34722-S	1
4	Front canopy sound proofing kit	204-34732-S	1
5	Air intake sound proofing kit	204-347430-S	1

Control panel assembly: 024-58175-S



Electrical harness ← 7

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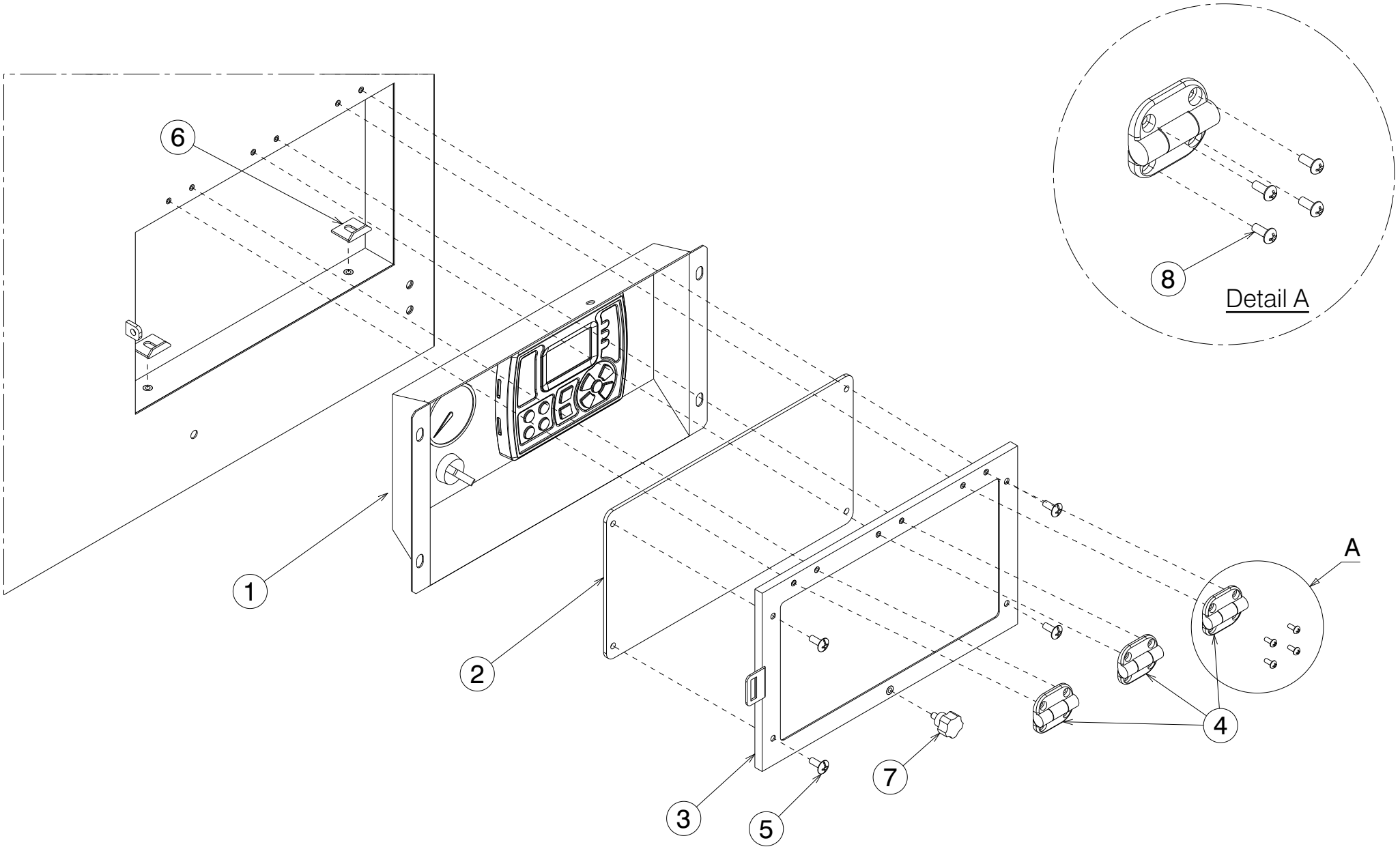
TECHNOLOGY AND ENGINEERING SOLUTIONS

PARTS LIST

Motocompressor – D800T4F

PARTS LEGENDA: Electrical components | Tab. 16

POSITION	DESCRIPTION	PART NO.	QUANTITY
Control panel assembly		**024-58175-S**	**1**
1	Electronic control board	269-423720-S	1
2	Control panel	040-037751-S	1
3	Two positions selector	249-022-S	1
4	Pressure gauge	206-010-S	1
5	Contact	127-375-S	1
6	Contact holder	127-376-S	1
7	Electrical harness	224-09255-S	1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ROTAIR
TECHNOLOGY AND ENGINEERING SOLUTIONS

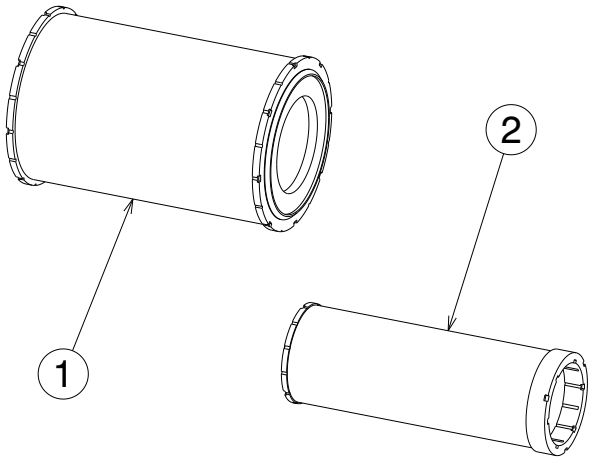
PARTS LIST

Motocompressor – D800T4F

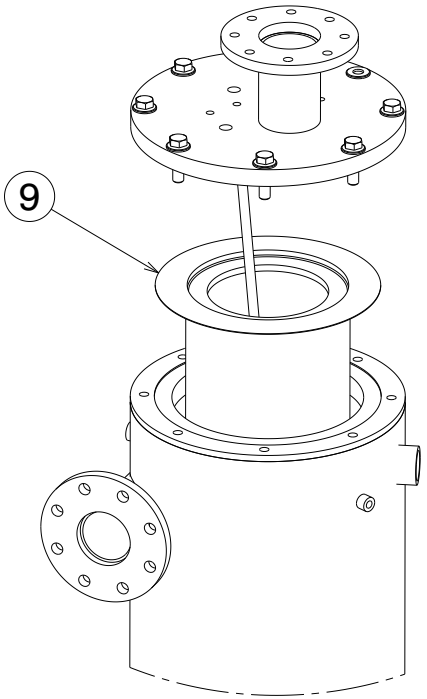
PARTS LEGENDA: Control panel door | Tab. 16.1

POSITION	DESCRIPTION	PART NO.	QUANTITY
1	Control panel assembly	024-58175-S	1
2	Plexiglass	057-02152-S	1
3	Control panel door	110-016810-S	1
4	Hinge	007-032-S	3
5	Large head screw M6x16	243-009-S	4
6	Support blade	120-219855-S	2
7	Knob M6x10	185-016-S	1
8	Large head screw 4x10	243-088-S	12

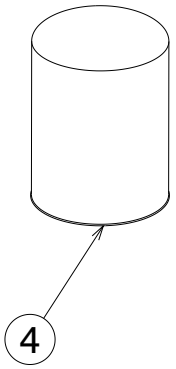
Compressor air filter



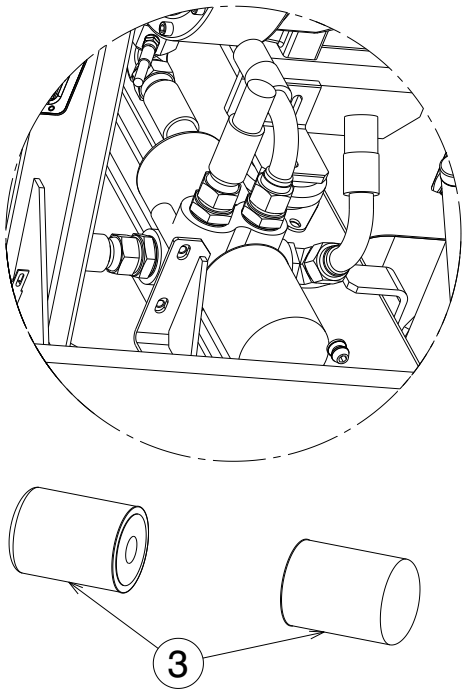
Separator filter



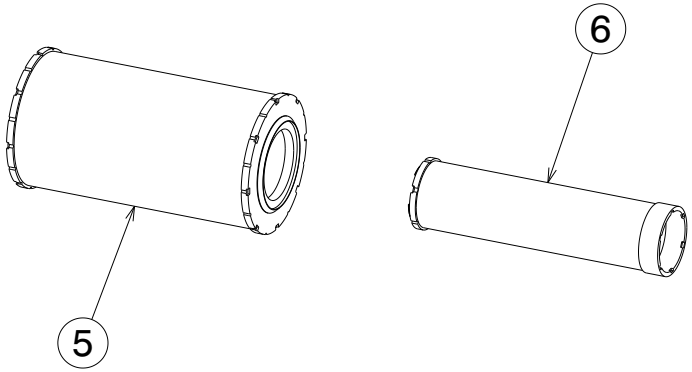
Engine oil filter



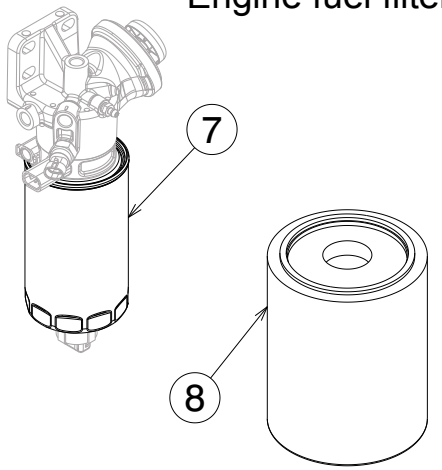
Compressor oil filter



Engine air filter



Engine fuel filters



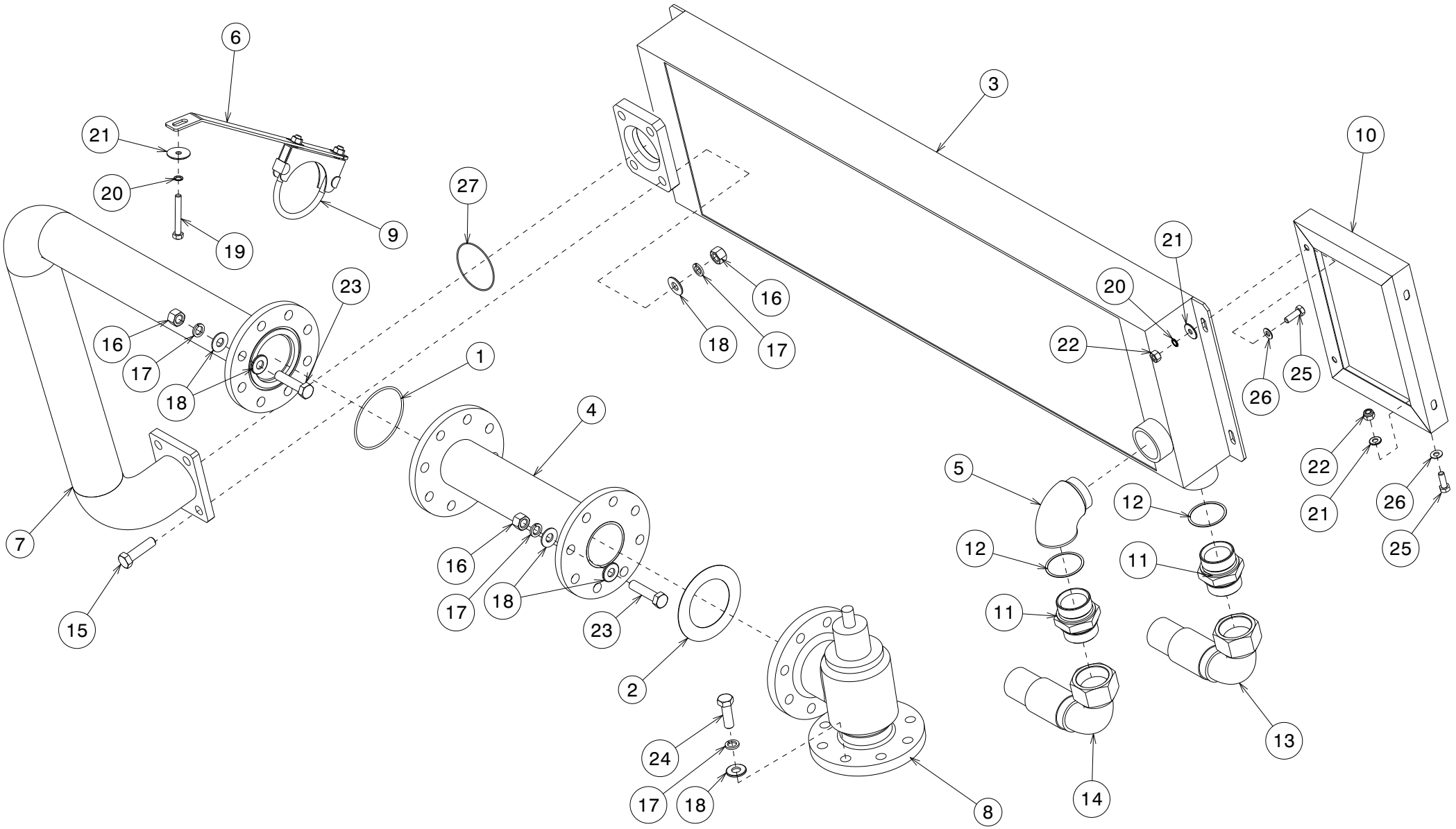
ROTAIR
TECHNOLOGY AND ENGINEERING SOLUTIONS

PARTS LIST

Motocompressor – D800T4F

PARTS LEGENDA: Filters Kit | Tab. 17

POSITION	DESCRIPTION	PART NO.	QUANTITY
Filters kit 500 Hrs			
1	Compressor air filter 1°	162-5622-S	1
2	Compressor air filter 2°	162-5623-S	1
3	Compressor oil filter	099-009-S	2
4	Engine oil filter	099-0520-S	2
5	1°stage engine air filter	162-5620-S	1
6	2°stage engine air filter	162-5621-S	1
7	Fuel Pre-filter	191-0851-S	1
8	Fuel filter	191-0850-S	1
Filters kit 2000 Hrs			
1	Compressor air filter 1°	162-5622-S	4
2	Compressor air filter 2°	162-5623-S	4
3	Compressor oil filter	099-009-S	8
4	Engine oil filter	099-0520-S	8
5	1°stage engine air filter	162-5620-S	4
6	2°stage engine air filter	162-5621-S	4
7	Fuel Pre-filter	191-0851-S	4
8	Fuel filter	191-0850-S	4
9	Separator filter	157-202-S	1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ROTAIR
TECHNOLOGY AND ENGINEERING SOLUTIONS

PARTS LIST

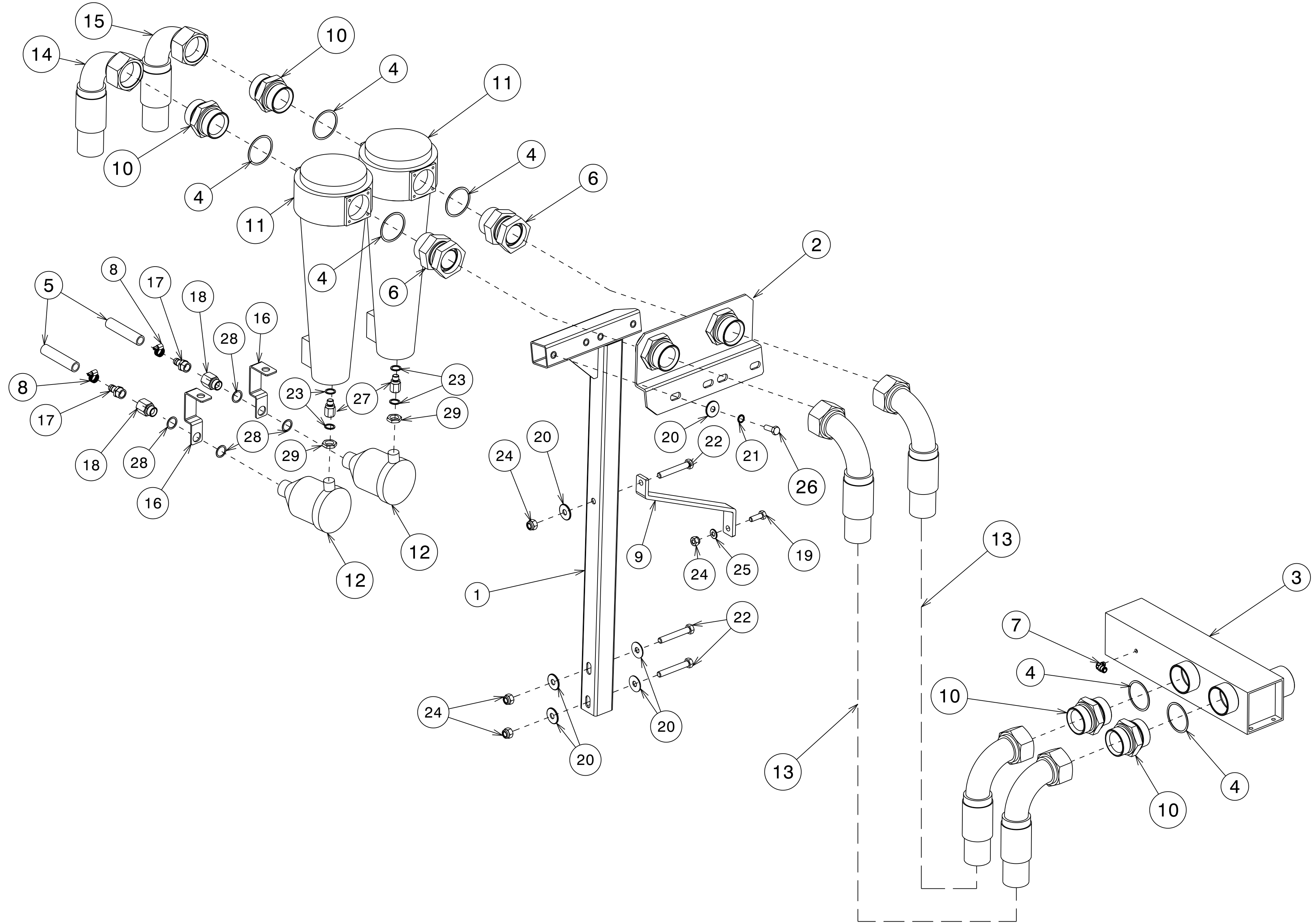
Motocompressor – D800T4F

LEGENDA: Aftercooled Kit – Radiator | Tab. 18.0

POSITION	DESCRIPTION	PART NO.	QUANTITY
1	OR seal	023-304-S	1
2	Paper seal .	023-097502-S	1
3	Radiator Air-Air	011-10851-S	1
4	Flanged pipe	090-1020-S	1
5	Short radius elbow (2”)	111-065-S	1
6	Pipe clamping blade	120-21982-S	1
7	Radiator-separator pipe	064-200360-S	1
8	Min pressure valve assembly	024-01050-F	1
9	Clamp	149-095-S	1
10	Air intake closing panel	124-249740-S	1
11	Double screw (2”)	187-105-S	2
12	Bonded washer 2”	015-206-S	2
13	Hose 2”	065-346235-S	1
14	Hose 2”	065-346210-S	1
15	Hexagonal head screw M16x60	132-298-S	4
16	Hex nut M16	135-080-S	20
17	Elastic washers d.16	139-080-S	28
18	Plane washer d. 16x35x3	015-048-S	44
19	Hex head screw M10x75 UNI 5739	132-152-S	1
20	Schnorr washer d.10	015-252-S	1
21	Flat washer 10x30x2,5 UNI6593	015-033-S	9
22	Self-locking nut M10	137-050-S	8
23	Hex head screw M16x70	132-300-S	16
24	Hexagonal head screw M16x50	132-296-S	8
25	Hexagonal head screw M10x30 UNI 5739	132-143-S	4
26	Flat washer 10,2x21x2	015-032-S	6
27	OR seal 4387 Viton	023-0015-S	1

D 800 T4F - Aftercooler Kit Condensate separator

Tab. 18.1



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TECHNOLOGY AND ENGINEERING SOLUTIONS

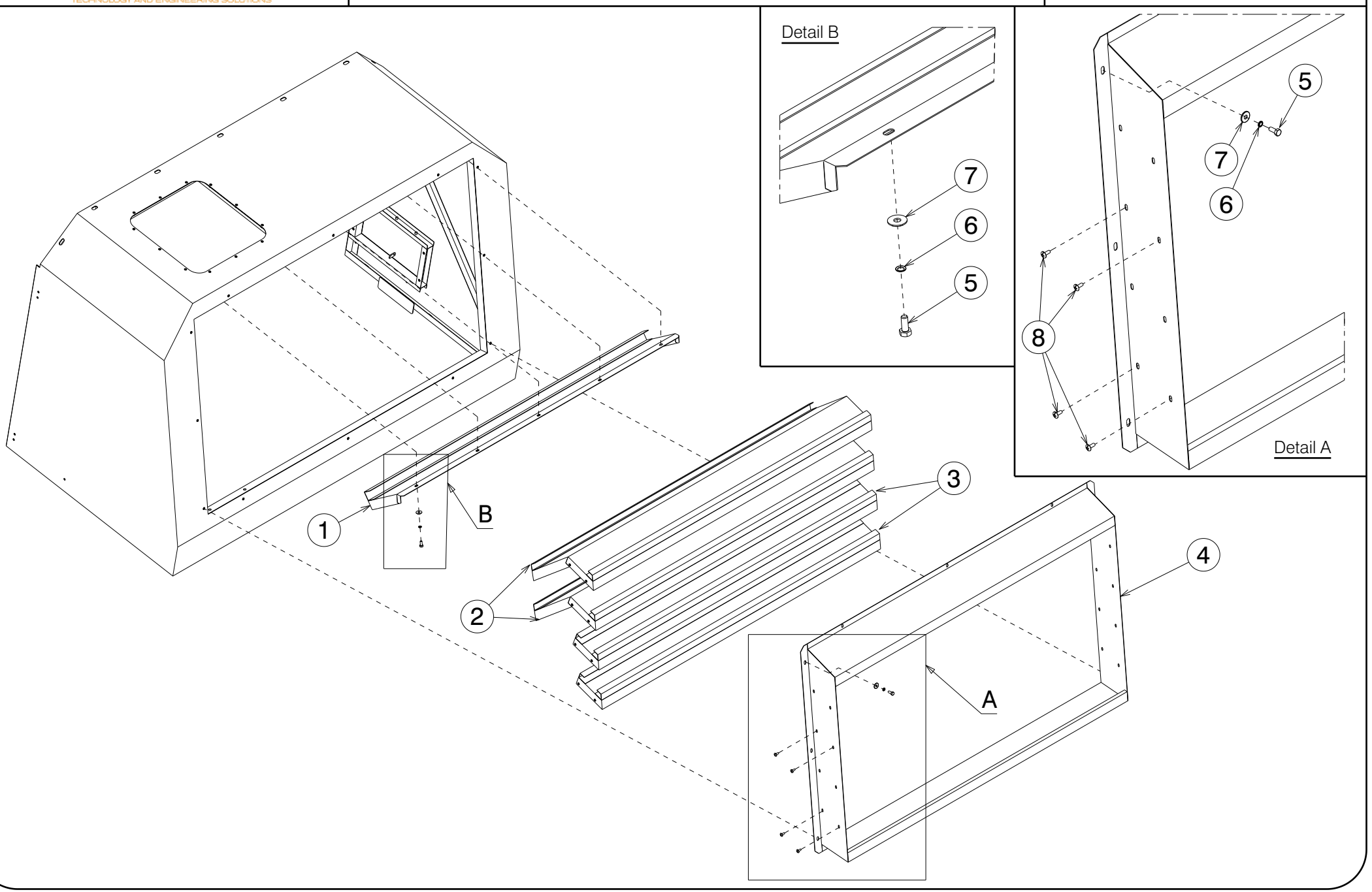
PARTS LIST

Motocompressor – D800T4F

LEGENDA: Refrigerated Kit – Condensate separator

Tab. 18.1

POSITION	DESCRIPTION	PART NO.	QUANTITY
1	Air hose support	010-24623-S	1
2	Condensate separator support	010-3087603-S	1
3	Exit valves coupling	063-11685-S	1
4	Bonded washer 2”	015-206-S	6
5	Kristall pipe d. int. 16	089-102-S	2
6	Straight coupling 2”	148-006.8-S	2
7	Quick coupling 90° (1/8”) for pipe d.8	148-572-S	1
8	Pipe clamp	149-011-S	2
9	Condensate separator support blade	120-219400-S	1
10	Double screw (2”)	187-105-S	4
11	Condensate separator	217-2021-S	2
12	Steam trap	237-305-S	2
13	Hose 2” F90-F90	065-343.03-S	2
14	Hose 2” F90-F90	065-346210-S	1
15	Hose 2” F90-F90	065-346235-S	1
16	Steam trap support	010-30876032-S	2
17	Fitting (1/2”) M for pipe d.14	148-198.5-S	2
18	Extension 1/2 M-1/2 F L=40	189-106-S	2
19	Hexagonal head screw M10x30 UNI 5739	132-143-S	1
20	Flat washer 12.5x36x2.5	015-040-S	9
21	Schnorr washer d.12	015-254-S	4
22	Hexagonal head screw M12x80	132-202-S	3
23	Copper washer d.int. 17x22x1.5 (3/8”)	015-010-S	4
24	Self-locking nut M12	137-060-S	3
25	Flat washer 10,2x21x2	015-032-S	1
26	Hexagonal head screw M.12x30 UNI 5739	132-192-S	4
27	Reduction extension 1/2 F-3/8 M L=36	189-320-S	2
28	Copper washer (½”)	015-012-S	4
29	Hex nut ½” l=6 mm	135-1601-S	2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TECHNOLOGY AND ENGINEERING SOLUTIONS

PARTS LIST

Motocompressor – D800T4F

PARTS LEGENDA: Refrigerated air intake | Tab. 18.2

POSITION	DESCRIPTION	PART NO.	QUANTITY
1	Upper air intake panel	124-2497121-S	1
2	Air intake panel	124-2497101-S	2
3	Air intake panel	124-2497105-S	2
4	Lower air intake	022-04981-S	1
5	Hex head screw . M8x20 UNI 5739	132-101-S	17
6	Schnorr washer d.8	015-251-S	17
7	Flat washer 8x24x2 UNI6593	015-031-S	17
8	Large head screw M6x16	243-009-S	16

SCHEDA DI GARANZIA WARRANTY CARD CARTE DE GARANTIE
GARANTIESCHEIN TARJETA DE GARANTIA

Macchina Tipo - Machine Type - Machine Type - Maschine Typ - Maquinaria Tipo

Numero Matricola - ID Number - Numero de Matricula - Matrikel Nummer -Numero d'Identification

Data di Acquisto - Purchase Date - Date d'Achat - Kauft am - Fecha de compra

Messo in servizio il - Commission Date - Mis en service le - Inbetriebnahme am -Fecha de activacion

Rivenditore - Dealer - Vendu par - Verkaufer -Vendido por

DA COMPILARSI A CURA DEL DISTRIBUTORE - TO BE FILLED BY DISTRIBUTOR - A REMPLIR PAR LE DISTRIBUTEUR - VON DER VERTRIEBER AUSZUFÜLLEN - A COMPILAR POR EL DISTRIBUIDOR

Acquirente - Purchaser - Acheteur - kauft bei - Comprado por

Indirizzo - Address - Adresse - Adresse - Direccion

Email

www

Luogo di installazione - Installed at - Installe a - Inbetriebsgesetz bei - lugar de installacion

Persona di riferimento - Contact person - Personne a contacter - Kontaktperson - Persona a contactar [TEL, FAX, EMAIL]

Data compilazione - Fill-in date - Date de compilation - Eingefüllt am - Fecha de compilacion

DA COMPILARSI A CURA DELL'ACQUIRENTE - TO BE FILLED BY END USER - A REMPLIR PAR L'UTILISATEUR - VON DER ENDKUNDE AUSZUFÜLLEN - A COMPILAR POR EL COMPRADOR

LA SCHEDA DEVE ESSERE COMPILATA **IN OGNI SUA PARTE** E SPEDITA A ROTAIR SPA ; LA COMPILAZIONE PARZIALE O LA MANCATA SPEDIZIONE SONO MOTIVO DI DECADENZA DELLA GARANZIA. FOTOCOPIARE/TRATTENERE UNA COPIA A CURA DEL CLIENTE

THE CARD SHALL BE **DULY FILLED** AND SENT TO ROTAIR SPA ; MISSING DATA OR THE NON COMPLIANCE WITH MAILING DUTY ENTAIL THE LOSS OF WARRANTY. COPY SHALL BE MADE AND KEPT AT THE CARE OF THE CUSTOMER

LA FICHE DOIT ETRE **COMPLETEMENT** REMPLIE ET ENVOYEE A ROTAIR SPA ; UNE FICHE INCOMPLETE OU NON TRANSMISE COMPORTE LA PERTE DE LA GARANTIE. COPIE A EFFECTUER ET GARDER AUX SOINS DU CLIENT.

DER SCHEIN MUSS **KOMPLETT** AUSGEFÜLLT UND AM ROTAIR SPA GESENDET WERDEN ; INKOMPLETTE DATEIEN ODER DAS FEHLENDES VERSAND EINSCHLISSEN DEN GARANTIEVERLUST. KOPIE SOLL BEI DER KUNDE GEHALTET WERDEN.

LLENAR LA TARJETA **EN TODAS SUS PARTES** Y ENVIARLA A A ROTAIR SPA ; UNA TARJETA INCOMPLETA O NO ENVIADA COMPORTA LA PERDIDA DE LA GARANTIA. EL CLIENTE DEBE GUARDAR COPIA.