Max-Air®
HIGH PRESSURE BREATHING AIR COMPRESSORS

MEGA-MAX
OPEN
VERTICAL 6000

WARNING!

DO NOT USE WITH ENRICHED AIR SYSTEMS, ABOVE 21% OXYGEN, (THE USE OF ENRICHED AIR WILL VOID MANUFACTURES WARRANTY)

MEGA-MAX VERTICAL-6000
USE AND MAINTENANCE MANUAL

2807 PEDDLER LANE, KERRVILLE TEXAS USA 78028

Revised 6-30-21

Model No. **Mega-Max 6000** Date Mfg. _____

Serial No. _____

Final Pressure Switch Set At _____

Final Safety Relief Set At _____

❑ Single Phase ❑ Three Phase

❑ 50hz ❑ 60hz

Horse Power _____

Voltage _____

MEGA-MAX™ 6000

HIGH PRESSURE COMPRESSOR FOR BREATHING AIR

WARNING!
DO NOT USE WITH ENRICHED AIR SYSTEMS, ABOVE 21% OXYGEN
(the use of enriched air, above 21% oxygen, will void manufacturer's warranty)

IMPORTANT:

BEFORE USING THE COMPRESSOR READ THIS MANUAL CAREFULLY

Max-Air®
HIGH PRESSURE BREATHING AIR COMPRESSORS

2807 Peddler Lane West • Kerrville • Texas 78028 • USA
Tel. (830) 257-5006 • Fax (830) 257-3720 • e-mail: service@max-air.com

Dear Customer,

Thank you for choosing **Max-Air**, where quality and commitment give you the best in technology and support available today. This manual is provided together with the compressor to aid you in the use of the machine and ensure that your compressor produces the best possible results.

Please read all the instructions and information provided on the following pages. Ensure that the manual is at the disposal of the personnel who will be using/managing the compressor and carrying out any maintenance on it.

Should you require any clarification, when using the compressor for the first time or at any other time it is used, please remember that **Max-Air** is at your complete disposal.

Should you need to contact us our fax number is: (830) 257-3720 and our e-mail is: service@max-air.com

For routine or unscheduled maintenance note that **Max-Air**'s international technical service is able to provide you with assistance and spare parts when required.

To ensure that your requests are dealt with quickly the following information is provided:

Manufacturer's data: **Max-Air**
2807 Peddler Lane West
Kerrville, Texas 78028, USA
Tel: (830) 257-5006
Fax: (830) 257-3720
http://www.max-air.com
e-mail: service@max-air.com

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1 - GENERAL

1.1 - PRELIMINARY INFORMATION

Do not destroy or modify the manual and update it with additional inserts only.

Manual P/N: MM-6000-UMM06
Revision no: 00 Edition: 09/2006
Machine type: High pressure compressor for breathing air
Model: MEGA-MAX 6000

Manufacturer's data: **Max-Air**
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1.2 - REQUIRED OPERATOR TRAINING

This manual must be read carefully:
- all compressor operators / maintenance personnel must read this entire manual with due care and attention and observe the instructions/information contained herein.
- employers must ensure that the operator has the required aptitude for operation of the compressor and that he/she has read the manual.

1.3 - IMPORTANT INFORMATION FOR THE USER

The information/instructions for use contained in this manual concern the Max-Air compressor Mod. Mega-Max 6000 only.

The instruction manual must be read and used as follows:
- read this manual carefully; treat it as an essential part of the compressor;
- the instruction manual must be kept where it can readily be consulted by compressor operators and maintenance staff;
- keep the manual for the working life of the compressor;
- make sure updates are incorporated in the manual;
- make sure the manual is given to other users or subsequent owners in the event of resale;
- keep the manual in good condition and ensure its contents remain undamaged;
- do not remove, tear or re-write any part of the manual for any reason;
- keep the manual protected from moisture and heat;
- if the manual is lost or partially damaged and its contents cannot be read it is advisable to request a copy from the manufacturer.

Important: you must understand the following symbols and their meaning. They highlight essential information:

IMPORTANT:

Refers to additional information or suggestions for proper use of the compressor.

DANGER:

Refers to dangerous situations that may occur during use of the compressor: aims to ensure worker safety.

WARNING:

Refers to dangerous situations that may occur during use of the compressor: aims to prevent damage to objects and the compressor itself.

1.4 - FOREWORD

The regulations/instructions for use contained in this manual constitute an essential component of the supplied compressor.
These regulations/instructions are intended for an operator who has already been trained to use this type of compressor. They contain all the information necessary and essential to safety and efficiency, proper use of the compressor.
Hurried, incomplete preparation results in mistakes and this often leads to accidents.
Before beginning work, read the following suggestions carefully:

1) before using the compressor, gain familiarity with the tasks to be completed and the admissible working position;
2) the operator must always have the instruction manual on hand;
3) program all work with due care and attention;
4) you must have a detailed understanding of where and how the compressor is to be used;
5) before starting work make sure that safety devices are working properly and that their use is understood; in the event of any doubts do not use the compressor;
6) observe the warnings given in this manual with due care and attention;
7) constant and careful preventive maintenance will always ensure a high level of safety when using the compressor. Never postpone repairs and have them carried out by specialized personnel only; use only original spare parts.

1.5 - WARRANTY

IMPORTANT:

The materials supplied by Max-Air are covered by a 12-month warranty, the validity of which begins on the date of delivery as proven by the delivery document.

Max-Air shall repair or replace those parts it acknowledges to be faulty during the warranty period.
In replacing the faulty part Max-Air shall not be liable for any other expenses sustained by the dealer or his customer such as presumed damage (present or future), lost earnings or fines.

Routine and unscheduled maintenance must be carried out in compliance with the instructions contained in this manual. Should the required work not be covered by the manual or assistance be required you are advised to contact Max-Air directly by email, even where agreements have already been made on the phone. Max-Air cannot be held liable for any delays or failure to execute work.

Max-Air cannot be held liable for any damage or malfunctions caused by work carried out on the compressor by unauthorized personnel.

Max-Air guarantees that its compressors are free from defects vis-à-vis design, workmanship and the used materials for a period of 12 months starting from the date of delivery of the compressor; should the customer note any flaws and/or defects they must report them, in writing, to **Max-Air** within 14 (fourteen) days of delivery otherwise the warranty could be rendered null and void. The warranty only covers flaws and faults that occur where the compressor is used properly in compliance with the instructions contained in this manual and where periodic maintenance is carried out. The warranty does not cover faults caused by improper use of the compressor, exposure to atmospheric agents (rain etc.) or damage during transport; all materials subject to wear and those subject to periodic maintenance are not covered by the warranty and are to be paid for by the customer in full; in any event the warranty is rendered null and void if the compressor is tampered with or if work is carried out on it by personnel who have not been authorized by **Max-Air**.

A compressor that has been acknowledged as faulty on account of flaws in design, workmanship or materials shall be repaired or replaced free of charge by **Max-Air** at its plant in Kerrville, Texas; costs regarding transport, delivery of spare parts and any materials subject to wear shall be met by the customer. Should warranty-covered work need to be carried out on the customer's premises, travel and accommodation costs for personnel sent by **Max-Air** shall be met by the customer. The act of taking delivery of machines and/or faulty components or the sending of technicians to assess the presumed defects and/or flaws reported by the customer does not in itself imply acknowledgement that the defect is covered by warranty. Repairs and/or replacements made by **Max-Air** during the warranty period do not in any way prolong the latter itself. Acknowledgement that a defect is covered by warranty does not in itself mean that **Max-Air** is in any way liable to award compensation. **Max-Air** cannot be held liable for any other direct or indirect damages imputable to compressor defects and flaws (loss of production or earnings etc.) except in cases where serious negligence is demonstrated.

1.6 - ASSISTANCE

Max-Air technicians are at your disposal for all routine/unscheduled maintenance work. Please forward your request for assistance to **Max-Air** by calling, sending a fax or e-mail to:

Tel. (830) 830-5006

Fax. (830) 257-3720

service@max-air.com

1.7 - RESPONSIBILITY

Max-Air considers itself exonerated from any responsibility or obligation regarding injury or damage caused by:
- failure to observe the instructions contained in this manual that concern the running, use and maintenance of the compressor;
- violent actions or incorrect maneuvers during use or maintenance of the compressor;
- modifications made to the compressor without prior written authorisation from **Max-Air**;
- incidents beyond the scope of routine, proper use of the compressor.

In any case, should the user impute the incident to a defect of the compressor, he/she must demonstrate that the damage has been a major and direct consequence of this "defect".

WARNING:

Maintenance and repairs must only be carried out using original spare parts. Max-Air cannot be held liable for any damages caused by failure to observe this rule. The compressor is guaranteed as per the contractual agreements made at the time of sale. Failure to observe the regulations and instructions for use contained in this manual shall render the warranty null and void.

1.8 - PURPOSE OF THE MACHINE

The compressor mod. Mega-Max 6000 has been designed and built for the purpose of obtaining excellent quality breathing air by drawing it from the surrounding environment. The air is free from any harmful fumes. The air is passed through an intake filter and, after the filtration cycle, is stored in bottles constructed to contain air at high pressure. Any other use is inappropriate: the manufacturer cannot be held liable for any personal injury or damage to objects or the machine itself caused by improper use.

DANGER:

- Use only tested, certified bottles: do not exceed the working pressure indicated on them.

- Aspirate unpolluted air that is not stale.
Use the compressor in areas free from dust, risk of explosion, corrosion and fire.

- It is forbidden to use the compressor with an internal combustion engine indoors.
Make sure that air intakes are a long way from fume exhausts.

- Improper use could have serious consequences for the user.

- Do not disconnect the hose from the fittings or the clamp when under pressure.

- Change the air purification filters regularly as described in section “7.11.2 Changing the active carbon filters”.

- Drain the condensate regularly as illustrated in section “7.10 Condensate discharge”.

- The power breaker must be switched off:

- **if there is a problem during use**
- **before carrying out any cleaning or maintenance tasks.**
- **Never pull the plug out, if so equipped, by tugging the lead, if so equipped. Make sure the lead is not bent at a sharp angle and that it does not rub against any sharp edges. Use of extensions is advised.**

- Never run the compressor when:

- **the power lead is damaged;**
- **there is evident damage;**
- **the side doors are open.**

- All routine and unscheduled maintenance tasks must be carried out with the compressor at standstill, the electrical power supply disconnected and the pumping circuit depressurized, including purifier system.

DANGER:

- **After switching off the compressor wait about 30 minutes before carrying out any maintenance tasks so as to prevent burns.**

- **The high pressure flex hose that connects to the bottle (also called the refill hose) must be in good condition, especially in the areas near the fittings.**
  The plastic sheath that covers the pipe must not show any signs of abrasion otherwise moisture could get in, corrode the steel braid and weaken it.
  The hose must be changed periodically (yearly) or when it shows signs of wear. Failure to observe this rule could seriously endanger the users' safety.
  Make sue the minimum bending radius of the hose is no less than 250 mm (9¾").

To ensure maximum working efficiency, **Max-Air** has constructed the compressor with carefully selected components and materials. The compressor is tested prior to delivery. Continued compressor efficiency over time will also depend on proper use and maintenance as per the instructions contained in this manual.

All the components, connections and controls used in its construction have been designed and built to a high degree of safety so as to resist abnormal strain or in any case a strain greater than that indicated in the manual. Materials are of the finest quality; their introduction and storage in the company and their utilization in the workshop are controlled constantly so as to prevent any damage, deterioration or malfunction.

DANGER:

- **Before carrying out any work on the compressor each operator must have a perfect understanding of how the compressor works, know how to use the controls and have read the technical information contained in this manual.**

- **It is forbidden to use the compressor under conditions / for purposes other than those indicated in this manual and Max-Air cannot be held liable for breakdowns, problems or accidents caused by failure to observe this rule.**

- **Check that the fittings provide a proper seal by wetting them with soapy water: eliminate any leaks.**

- **Do not attempt to repair high pressure hoses by welding them.**

- **Do not empty the bottles completely, not even during winter storage as this practice prevents damp air getting in.**

- **It is forbidden to tamper with, alter or modify, even partially, the systems and equipment described in this instruction manual, especially as safety guards and safety symbols are concerned.**

- **It is also forbidden to carry out work in any way other than that described or to neglect the illustrated safety tasks.**

- **The safety information and the general information given in this manual are highly important.**

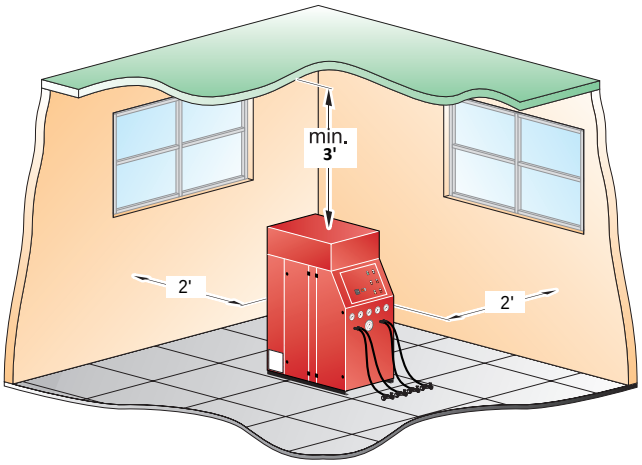
1.9 - WHERE THE MACHINE MAY BE USED

The compressor mod. Mega-Max 6000 has been designed and built for the purpose of obtaining excellent quality breathing air by drawing it from the surrounding environment, free from any harmful fumes.
The air is passed through an intake filter and, after the filtration cycle, is stored in bottles constructed to contain air at high pressure. The compressor must only be used in environments having the characteristics described in the following table.

AREA OF MACHINE USE: ESSENTIAL DATA TABLE

Characteristic	Unit of measure	Data
Temperature	°F (°C)	min. -4°F - Max. +113°F (min. -20°C - Max. +45°C)
Air humidity	(%)	max. 80%
Max admissible wind when in use	(m/s)	max. 15
Tolerated weather conditions	rain hail snow	None

Check that the area in which the compressor is to be positioned is adequately ventilated: no dust and no risk of explosion, corrosion or fire. If ambient temperatures exceed 113°F air conditioning will be required. Position the compressor no closer than 2 feet to surrounding walls; the gap between compressor and ceiling should be at least 3 feet. These distances ensure proper compressor operation and proper cooling of the pumping unit. Make sure that lighting in the area is sufficient to identify every detail (such as the writing on the info plates/stickers); use artificial lighting where daylight on its own is insufficient.



1.10 - RUNNING IN AND TESTING THE COMPRESSOR

Each compressor is carefully adjusted and tested prior to delivery.
A new compressor must be used with caution during the first 50 working hours so as to complete proper break-in of its components. If the compressor is subject to an excessive workload during initial use, its potential efficiency will be prematurely compromised and functionality soon reduced.
During the break-in period proceed as follows:
- after starting let the compressor run on free flow for 5-6 minutes.

After the first 65 hours, carry out - in addition to the scheduled maintenance - the following tasks:
- change the compressor oil;
- change the oil filter;
- check and adjust nuts, bolts and belts.

WARNING:

When changing the oil filter, inspect the internal parts and check for any deposits; if they are present track down the cause before restarting the compressor.

2 - BASIC INFORMATION ON THE COMPRESSOR

2.1 - DESCRIPTION OF THE COMPRESSOR

High pressure compressor for breathing air.

Compatible process gases:
- Carbon dioxide
- Nitrogen (also dry)
- Benzene
- Butadiene
- Helium
- Sulphur hexafluoride
- Natural gas
- Synthesis gas
- Hydrogen
- Methane
- Carbon monoxide
- Propane

Note: Some gasses will require modifications - call Max-Air for instructions

2.2 - IDENTIFYING THE COMPRESSOR

Each compressor has an identification serial # located on the block, manual (page 2) and identification sheet.

2.3 - GENERAL INSTRUCTIONS

WARNING:

- This manual must be read carefully before transporting, installing, using or carrying out any maintenance on the compressor.
- It must be preserved carefully in a place known to compressor users, managers and all transport/installation/maintenance/repair/final dismantling personnel.
- This manual indicates the purposes for which the compressor can be used and gives instructions for its transport, installation, assembly, adjustment and use. It also provides information on maintenance tasks, ordering spare parts, residual risks and staff training.
- The use and maintenance manual can never replace proper experience; some maintenance jobs are particularly difficult and in this regard the manual only offers general guidelines on the most important tasks, which must be carried out by personnel with proper training (e.g. acquired during training courses run by the manufacturer).
- This manual is an integral part of the compressor and must be stored in a suitable container near the compressor until its final demolition. If the manual is lost or damaged a copy can be requested from the manufacturer.
- Make sure all users have understood the regulations for use and the meaning of the symbols on the compressor.
- Observance of these technical instructions can prevent accidents: instructions have been drawn up in compliance with EEC Machinery Directive 89/392 and subsequent amendments.
- In any case always observe national safety regulations.
- Do not remove or damage guards, labels or notices, especially those required by law.
- The adhesives attached to the compressor are there for safety purposes. They must be replaced if they become illegible.
- This manual reflects the technical knowledge available at the time the compressor was sold and cannot be considered inadequate simply because updated at a later time on the basis of new experience.
- The manufacturer reserves the right to update products and manuals, without any obligation to update preceding products or manuals except in exceptional circumstances.
- To request or receive any updates or additions to this use and maintenance manual (which shall be considered an integral part of the manual) apply via the contact numbers given on page 11.
- Should you have any other queries or suggestions as to how to improve the manual please contact the manufacturer.
- Should you sell the compressor Max-Air invites you to provide us with the details of the new owner so that any new additions to the manual can be sent on.

3 - SAFETY REGULATIONS

3.1 - GENERAL SAFETY RULES

3.1.1 - KNOW THE MACHINE

The compressor must only be used by qualified personnel. They must have an understanding of the arrangement and function of all the controls, instruments, indicators, warning lights and the various info plates/labels.

3.1.2 - WEAR PROTECTIVE CLOTHING

All operators must use accident prevention items such as gloves, hard hat, eye goggles, accident prevention shoes and ear defenders against noise.

3.1.3 - KEEP EMERGENCY EQUIPMENT NEARBY

Make sure a first aid cabinet and a CO_2 fire extinguisher are near the compressor.
Keep the extinguisher fully loaded. Use according to standards in force.

3.1.4 - WARN OTHERS WHEN DOING CHECKS/MAINTENANCE

Apply a sign with the legend: “TESTING IN PROGRESS” on all sides of the compressor.
Check the compressor carefully every day it is used as per the task list given in this manual.

3.2 - GENERAL PRECAUTIONS

The EEC Machinery Directive 89/392 provides the following definitions (appendix 1, 1.1.1):

«DANGEROUS ZONE»: any zone inside and/or near a machine in which the presence of an exposed person constitutes a risk for his/her security and health.

«EXPOSED PERSON»: any person wholly or partially inside a dangerous zone.

«OPERATOR»: the person(s) charged with the task of installing, running, maintaining, cleaning, repairing and transporting the machine.

IMPORTANT:

- **Before carrying out any task or operation with the compressor it is compulsory to read and follow the instructions given in the use and maintenance manual. Doing so during work is too late: improper use or an erroneous maneuver could cause serious damage or injury.**
- **The employer must provide workers with detailed information on the risk of accident, especially risks deriving from noise, use of safety devices and the general accident prevention regulations provided for by international laws or standards or national standards within the country of use. All operators must observe both international accident prevention standards and the national ones relevant to the country of use.**
- **Before carrying out any work on the compressor each operator must have a perfect understanding of how the compressor works, know how to use the controls and have read the technical information contained in this manual.**

WARNING:

It is forbidden to tamper with or replace compressor parts without obtaining prior authorization from Max-Air.
The use of accessories, tools, materials subject to wear or spare parts other than those recommended by the manufacturer and/or illustrated in this manual can constitute a source of danger to operators and/or damage the machine.
Any modification to the compressor that has not been expressly authorized by Max-Air shall exonerate the manufacturer from any civil or penal liability

IMPORTANT:

- **Removing or tampering with any safety device is strictly forbidden.**
- **All installation, routine or unscheduled maintenance work must be carried out with the compressor at standstill and disconnected from the electrical power supply.**
- **Once the compressor has been cleaned the operator must check for any worn, damaged or loose parts; in this case seek assistance from the maintenance technician.**
  It is especially important to check that flex hoses or other parts subject to wear are in good condition. Check also for any leaking of oil or other dangerous substances. If such situations arise it is forbidden to restart the compressor before the situation is resolved. If these problems are observed at the end of the refilling the operator must, before leaving the machine unattended, place a sign on the compressor indicating that maintenance work is in progress and that it must not be restarted.

IMPORTANT:

- **Never place hands or introduce screwdrivers, keys or other tools into moving parts.**
- **Never clean with flammable fluids.**
- **Periodically check the info plates/labels and restore/replace them where necessary.**
- **The workplace must be kept clean, tidy and free from objects that might hinder movement.**
- **Operators must avoid carrying out "awkward" tasks in uncomfortable positions that might cause imbalance.**
- **Operators should be aware of the risk of entrapment caused by clothes or hair getting caught up in moving parts; wear a cap to contain long hair.**
- **Necklaces, bracelets and rings can also be a source of danger.**
- **Workplace lighting must be adequate for the work in progress. Insufficient or excessive lighting can generate risks.**
- **Always observe the instructions, accident prevention regulations and the warnings contained in this manual.**

3.2.1 - IMPORTANT SAFETY INFORMATION

The compressor has been designed and built to state of the art construction and complies with technical regulations in force concerning compressors for the production of high pressure breathing air. The laws, regulations, standards and directives in force for such machines have been complied with.
Materials, parts, production procedures and quality controls all comply with the strictest safety and reliability standards.
Using the compressor for the purposes described in this manual, handling it with due diligence and carrying out maintenance and overhauls according to proper working practices will ensure long lasting performance and functionality.

3.2.2 - ACCIDENT PREVENTION

The manufacturer cannot be held liable for accidents that occur during use of the compressor as a result of the user's non-observance of the laws, regulations, standards and directives in force for high pressure compressors. The compressor has been designed for use in weather conditions as described on page 14.

3.2.3 - WORKING SAFETY

The manufacturer cannot be held liable for malfunction or damage to the compressor:
- is used for purposes other than that for which its is intended;
- is not handled or maintained according to the instructions specified in this manual;
- is not periodically and continually maintained as instructed or if non-original spare parts are used;
- machine parts are modified or replaced without written authorization from the manufacturer, especially where the efficiency of safety devices has been reduced or eliminated;
- where it is used outside the admissible temperature range.

3.2.5 - SAFETY INFO LABELS: DESCRIPTION

A

Warning label.
Unauthorized, unqualified personnel are forbidden from opening the control panel.
The power supply must always be disconnected before carrying out any work on the control panel

B

Cooling fan direction of rotation info label (located on top rear panel).
When using the machine for the first time check that the fan rotates in the direction indicated by the arrow. If the fan rotates against the direction of the arrow invert two of the three phases on the main power lead.

C

Condensate collection tank info label.
This points out that the condensate separator must be emptied regularly as per the instructions in this manual.

D

Hot parts warning label.
Label warning that lubrication and maintenance must never be carried out with the compressor running.
Label warning that safety devices and guards must not be removed.

E

Label warning against presence of live parts.
Warning plate; read the use and maintenance manual and the appendices carefully before running the compressor.

F

Label with ideogram indicating that hard hat must be worn.
Label with ideogram indicating that protective gloves must be worn.
Label with ideogram indicating that eye goggles must be worn.

3.2.6 - RESIDUAL RISK ZONES

DANGER:

In some compressor zones there remain residual risks that were not possible to eliminate at the design stage or for which safety guards could not be provided without compromising the functionality of the Mega-Max 6000. To prevent accidents all operators must be aware of the residual risks on this compressor.

Residual risk zones:

1 Danger of polluting the produced air due to the possibility of mixing exhaust fumes or lubricating oil vapors with the compressed air being produced.

2 Electrical dangers. Do not use the machine without suitable insulation, especially against water and humidity.

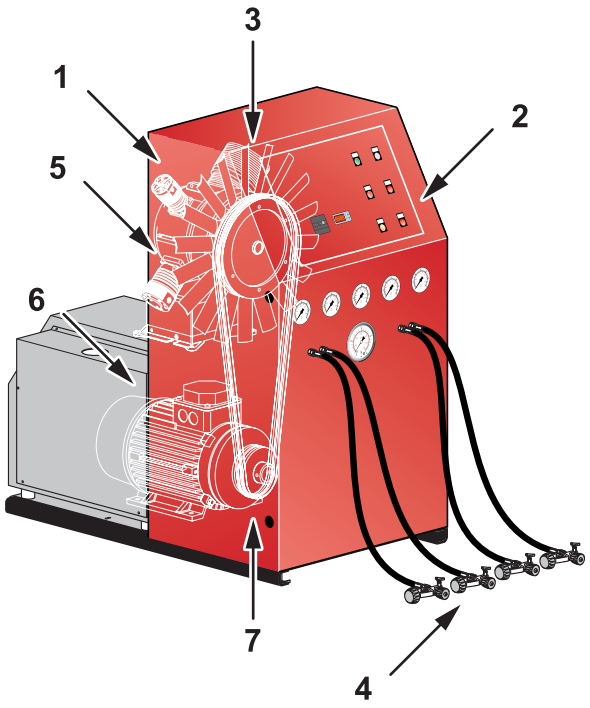
3 Danger of impact/abrasion in the cooling fan zone.

4 Danger of direct contact with operator in the event of hose burst during bottle refill.

5 Danger deriving from noise emitted by the compressor.

6 Fire risk.

7 Risk of being crushed or dragged in the transmission belt zone.



3.3 - GENERAL SAFETY REGULATIONS

3.3.1 - CARE AND MAINTENANCE

Damage and accidents are often caused by maintenance errors, such as:

- no oil,

- insufficient cleaning,

- compressed air circuit inefficiency (flex hoses damaged, loose pipes, screws etc.).

Maintenance work must be carried out with due care and attention: your safety depends on it.

Never postpone repairs.
Repairs must only be carried out by specialised or authorised personnel.

Always observe the following safety regulations, even when you become completely familiar with working procedures:

- Keep the compressor and the surrounding area clean at all times.

- Before starting work check that safety devices/guards are in good working order.

- Make sure no-one is in the compressor danger zone. Interrupt work if anyone is in the danger zone and tell them to leave.

- Never leave the machine unattended when it is on.

3.3.2 - FIRE EXTINGUISHERS AND FIRST AID

- Check that a fire extinguisher is present. Make sure you know where it is.
- Periodically check that extinguishers are full and operators know how to use them.
- The location of the first aid cabinet must be known.
- Check the first aid cabinet periodically to make sure it contains disinfectant, bandages, medicines etc.
- Fire drills must be known.
- Make sure a phone number for emergency medical assistance is kept nearby.

IMPORTANT:

The provision of a fire extinguisher is the responsibility of the owner of the compressor.

3.4 - MAINTENANCE PRECAUTIONS

3.4.1 - CARE AND MAINTENANCE

Before doing any maintenance work, turn off power at main breaker and make sure the compressed air system is completely depressurized, including the filtration.
If other people start the compressor or act on the control or off/auto switch while maintenance work is in progress there is a risk of serious injury or death.
To eliminate these dangers always place warning signs around the compressor before carrying out maintenance.

3.4.2 - TOOLS

Use only manufacturer-recommended tools; do not use worn, damaged, poor quality or improvised tools as they can cause injury.

WARNING:

The manufacturer cannot be held liable for any damage or injury caused by the use of tools that are not prescribed or modified without authorization.

3.4.3 - PERSONNEL

The routine maintenance tasks described in this manual must only be carried out by trained, authorized personnel.
For component maintenance/revision tasks not covered by this manual please contact **Max-Air**.

3.4.4 - KEEP THE COMPRESSOR CLEAN

Oil and grease stains, scattered tools or broken pieces constitute a danger to personnel, as they may cause slips and falls. Always keep the compressor and the surrounding work area clean and tidy.
Clean the compressor with a pressurized hot water or steam jet and commercially available detergents. Do not use diesel, petrol or solvents as they leave an oily film that causes dust to stick while solvents (even when weak) damage the paintwork and can lead to rust.
If the water jet gets inside the electrical parts it could, in addition to oxidizing the contacts, prevent the machine being started or even cause **a sudden, unexpected start**.
For this reason **never** use water or steam jets on sensors or connectors.

3.4.5 - PERIODIC REPLACEMENT OF ESSENTIAL SAFETY PARTS

Periodically check the following components, which are important for fire prevention:
- compressed air system: main compressed air circuit delivery hoses;
- bottle refill system: flex hoses for bottle refill.

Even though they may appear to be in good condition, these components must be periodically replaced with new ones. Over time these components tend to deteriorate.
Should any of these parts prove to be faulty, replace or repair them ahead of schedule.

4 - TECHNICAL DATA

4.1 - TECHNICAL CHARACTERISTICS

4.1.1 - MONOBLOCK, CRANKSHAFT, PISTONS, CYLINDERS

The monoblock is made of aluminium alloy; the flange with the roller bearings that support the crankshaft is kept oil-tight with the monoblock by O-rings.
The crankshaft and the connecting rods run on roller bearings only. The four connecting rods are fitted on the crankshaft with a single crank angle.
The cylinders are made of cast iron and feature traditional multiple piston rings.

4.1.2 - VALVES

The 1st , 2nd and 3rd stage valves are inserted in the head seats and held in place by a bracketing system.
The 4th stage valves are disassembled by removing the head.

4.1.3 - SAFETY VALVES

The safety valve is pre-adjusted during assembly of the compressor and prevents it being damaged in the event of a malfunction. The outlet pressure, as a function of the valve, is as follows:

414 Bar - (6400 PSI)

WARNING:

Tampering with the safety valve can cause serious damage and renders the warranty null and void.

4.1.4 - COOLING PIPES, LUBRICATION

The cooling pipes are made of stainless steel.
Lubrication with low pressure oil pump, delivery distributor and paper oil filter with clogging safety valve.

4.1.5 - FRAME, GUARDS

The compressor is mounted on a welded steel frame that has been painted with epoxy resins. The cooling fan and the drive belts are protected by steel guards.

4.1.6 - TECHNICAL SPECIFICATIONS TABLE

Construction	high pressure compressor with forced air cooling and 4 compression stages
Max. peak non-continuous pressure	414bar - 6000PSI
Flow rate	approx. 600 l/min. 12, 19, 21 cfm
Cylinder diameter	130 - 60 - 32 - 14 mm
Piston stroke	50 mm
RPM	1000 - 1300 rpm
Intermediate pressures	1st stage 3.5 bar – 50 PSI 2nd stage 18 bar – 260 PSI 3rd stage 70 bar – 1000 PSI 4th stage 414 bar – 6000 PSI
Oil pressure	4 bar (35 PSI) cold 1.5 bar(17 PSI) during routine use .35 bar (5 PSI) minimum pressure
Motor power	10hp - 20 PH 15kW - 20 HP
Voltage and frequency	230V - 50Hz 400V - 50Hz 208V - 60Hz 230V - 60Hz 440V - 60Hz 460V - 60Hz 575V - 60HZ

4.1.7 - NOISE LEVEL

The Mega-Max 6000 compressors have been designed and built to reduce noise pollution to a minimum. Compressor noise levels were measured in the “operator” (work) area. 86 dBA at 1 meter.

WARNING:

Should the compressor be used where the daily noise exposure level is greater than 81 dBA, the employer must apply all the relevant worker health and safety measures. Where necessary operators must use personal protection such as ear defenders.

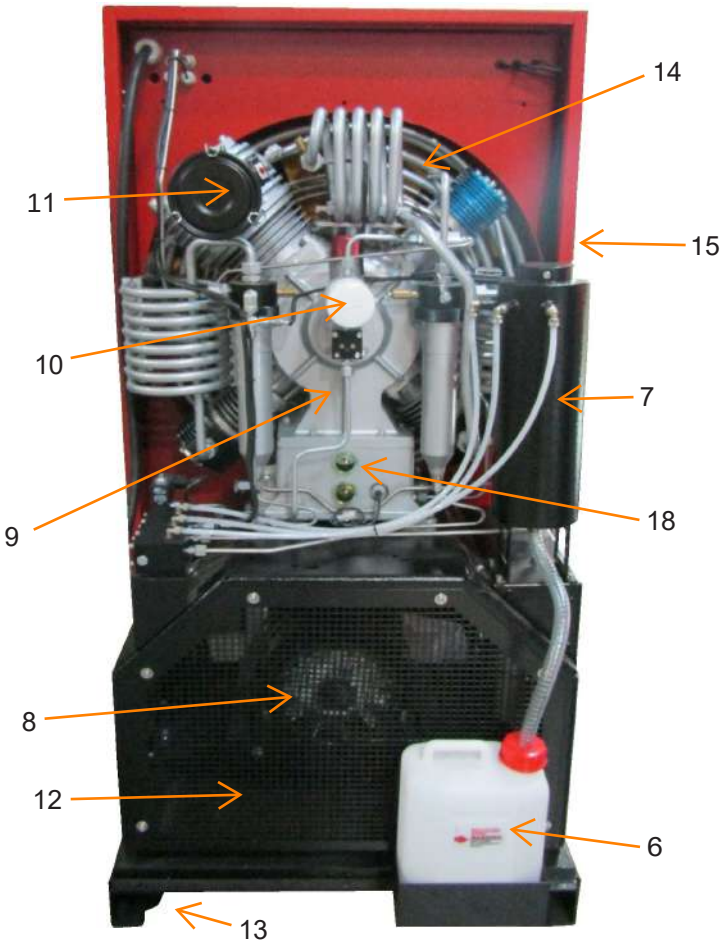
4.1.8 - DIMENSIONS AND WEIGHTS

A 47” B 36” C 61” Weight 830 lbs

4.1.9 - MACHINE PARTS

Description:

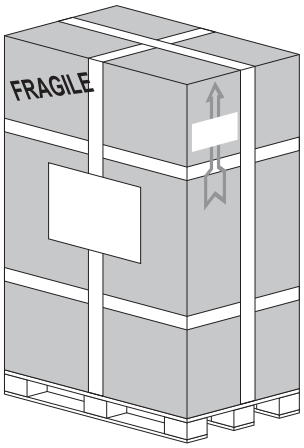
1 Frame
2 Control panel
3 Gauges
4 Refill taps
5 Oil level sight glass
6 Condensate collection container
7 Condensate expansion tank
8 Electric motor
9 Compressor block
10 Oil filter
11 Air filter
12 Safety mesh (removable)
13 Anti-vibration devices
14 Cooling fan
15 Belt
16 Active carbon air filter chamber
17 Dryer only air filter cartridge



5 - HANDLING AND INSTALLATION

5.1 - UNPACKING

The Mega-Max 6000 compressor is sent fully assembled, but with the supplied flex hoses separate.
The compressor is packed in a cardboard box; the latter is placed on a pallet to simplify handling and transport.
The box containing the compressor must be moved according to the instructions shown on the box itself.
The machine is supplied with the following as standard:
- 2 refill hoses, 4' long with on/off valve with bleed (varies based on configuration)
- use and maintenance manual
- appendix to the use and maintenance manual (Safety standards)
- Synthetic lubricating oil 1 gal. (#MA-550)



5.2 - HANDLING

After separating the compressor from its packaging it can be transported to the designated placement area.
Transfer will require the use of a fork-lift truck or transpallet (of suitable load-bearing capacity): the forks must be inserted in the feet of the pallet on which the compressor is positioned. The compressor has runners for handling with fork-lift trucks or transpallets.

5.3 - INSTALLATION

WARNING:

Before proceeding with the installation tasks described below, read Chapter 3 "SAFETY REGULATIONS" carefully.

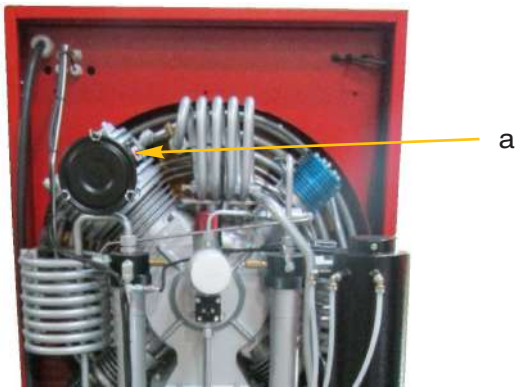
5.3.1 - POSITIONING

- Position the compressor in the designated area and check that it is level. For compressor dimensions please consult section 4.1.8 "Dimensions and weights".
- Check that the area in which the compressor is to be positioned is adequately ventilated: no dust and no risk of explosion, corrosion, fire or carbon monoxide.
- If ambient temperatures exceed 113°F air conditioning will be necessary.
- Position the compressor no closer than 2 feet to surrounding walls; the gap between compressor and ceiling should be at least 3 feet. These distances ensure proper compressor operation and proper cooling of the pumping unit.
- Make sure that lighting in the area is sufficient to identify every detail (such as the writing on the info labels); use artificial lighting where daylight is on its own insufficient.

5.3.2 - AIR INTAKE EXTENSION CONNECTION

If the compressor is installed in an area without the necessary ventilation requisites described in section 5.3.1 “Positioning”, it will be necessary to install an air intake extension leading in from outdoors or a place with the cited ventilation requisites.

- The extension, supplied as an optional, must be connected to the intake connector (**a**).
- Connect the extension pipe to the fitting.
- Fit the supplementary air intake filter on the end of the extension pipe.
- Position the end of the extension with the air intake filter in a properly ventilated area sheltered from weather and exhaust fumes.
- Point the air intake against the wind.
- Check that there are no kinks or breaks along the pipe. If it is damaged replace it.



WARNING:

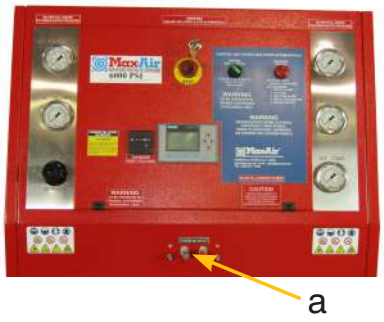
Use only a flexible pipe with internal steel braiding reinforcement so as to prevent kinks and a consequent reduction of air flow.

WARNING:

Do not aspirate harmful gases or exhaust fumes.

5.3.3 - REFILL HOSE CONNECTION

Attach the bottle refill hoses as follows:
- Screw the hoses onto the fittings (**a**)
- Use a dynamometric wrench to tighten the hoses to the compressor with a torque of 15NM (3.5 ft lb).



IMPORTANT:

The hoses must be replaced periodically (yearly or every 1000 hours) or when there are signs of wear.
The minimum bending radius of the hoses is 9¾”.

5.3.4 - ELECTRICAL CONNECTION

To connect up to the power supply insert the wires into the main power panel.
Check that the data on the compressor ID plate is compatible with mains power supply, especially as regards rated current and voltage.
The mains power system must have an efficient ground (earth); check that the earth resistance value complies with the protection / operational requirements of the compressor electrical system.

WARNING:

Before inserting the wiring, check that the electrical system complies with the standards in force in the country of installation.

An efficient compressor ground (earth) system is an essential compressor safety requirement.

6 - USING THE COMPRESSOR

6.1 - PRELIMINARY CHECKS BEFORE USING FOR THE FIRST TIME

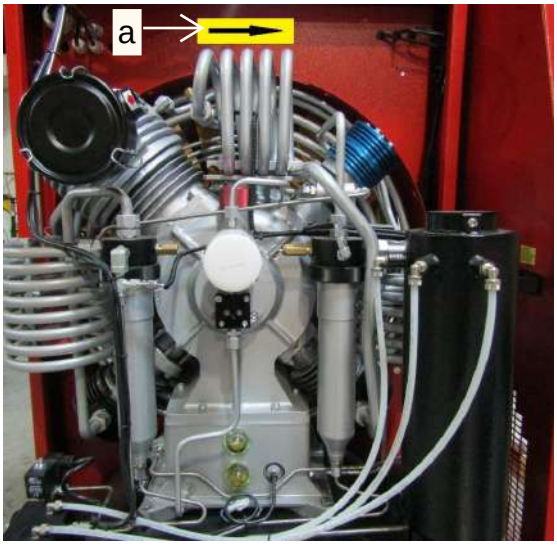
The operator must check that the compressor is supplied with:
- use and maintenance manual;
- appendix to the use and maintenance manual;
If the compressor is sold on the customer/user must provide the purchaser with a complete, undamaged use and maintenance manual.

6.1.1 - FILLING WITH LUBRICATING OIL

At the time of delivery the compressor contains lubricating oil; this is supplied together with the compressor in bottles contained in the packaging.
For filling instructions sees section “7.6.3 Changing the lubricating oil and filter”.

6.1.2 - CHECKING FOR PROPER ELECTRICAL CONNECTION

Check for proper connection of electrical phases by checking that the cooling fan rotates in the direction indicated on the label (a) on the fan cover.
If the direction of rotation is not as indicated by the arrow, invert two of the three phases on the main power lead.



DANGER:

Before carrying out this task disconnect the compressor from the main power supply.

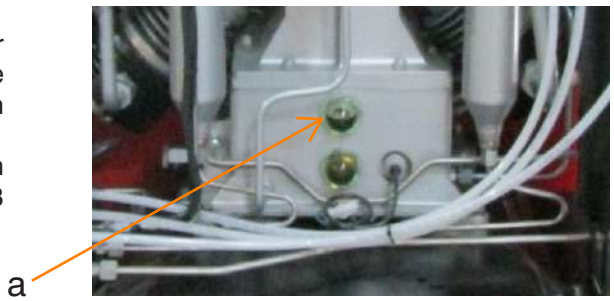
Do not invert or disconnect the ground (earth) wire (green).

6.2 - CHECKS TO RUN AT THE START OF EACH WORKING DAY

Inspect the exterior of the compressor (couplings, pipes, pneumatic components etc.) and check for any oil leaks.

6.2.1 - LUBRICATING OIL LEVEL CHECK

Check that the level of lubricating oil (**a**) is within acceptable limits (just above center of top sight glass).
Note that an excessive quantity of oil can cause over lubrication of the cylinders and leave deposits on the valves while too low a level prevents proper lubrication and could cause engine seizure.
If the oil level is not within the minimum and maximum limits top up or drain as described in section “7.6.3 Changing the lubricating oil and filter”.



6.2.2 - CHECKING THAT THE REFILL HOSES ARE IN GOOD CONDITION

Inspect the refill hoses and make sure there are no cuts, holes, abrasions, leaks etc. If necessary replace with new hoses.

6.2.3 - STORING TECHNICAL DOCUMENTATION

The use and maintenance manual and its appendices must be stored carefully and must always be kept where they can be accessed easily for immediate consultation.

WARNING:

The use and maintenance manual is an integral part of the compressor and must always be handed over in the event of a change of ownership.

6.3 - CONTROL PANEL

Key:

1	Power indicator light Off/Auto
2	Stop-emergency pushbutton
3	Hour counter
4	1st stage pressure gauge
5	2nd stage pressure gauge
6	3rd stage pressure gauge
7	Oil Pressure gauge
8	4th stage (final pressure)
9	CO/Moisture monitor
10	Status/Fault Indicator Light
11	Touch Screen (optional)

6.3.1 - POWER INDICATOR LIGHT

When the power indicator light (1) is on the compressor is powered.

6.3.2 - STOP-EMERGENCY PUSHBUTTON

Press the stop-emergency pushbutton (2) to shut down the compressor.
Check that the emergency pushbutton is working properly at the start of each working day: do this by switching on the compressor and pressing the pushbutton; if the compressor does not stop immediately after pressing disconnect the compressor from the main power supply and contact MAX-AIR.

WARNING:

IT IS ABSOLUTELY FORBIDDEN TO TAMPER WITH THE EMERGENCY PUSH BUTTON.

6.3.3 - HOUR COUNTER

The hour counter (3) indicates the hours of effective compressor operation: use this information to observe maintenance schedules.

6.3.4 - LUBRICATING OIL CIRCUIT PRESSURE GAUGE

The gauge indicates the pressure inside the lubricating oil circuit.
If pressure is less than .35 bar (5 PSI) check: oil level, oil filter, oil viscosity.
If pressure is higher than 4 bar (40 PSI) there is an obstruction along the circuit; change the oil filter and restart the machine. If pressure is still high contact MAX-AIR.

Compressor oil pressures are as follows:

- 4 bar (40 PSI) cold
- 1.5 bar (17 PSI) working pressure
- .35 bar (5 PSI) minimum pressure

6.3.5 - 1st STAGE PRESSURE GAUGE

The gauge indicates the pressure inside the 1st compression stage.
If pressure is not between 3 bar (45 PSI) and 4 bar (60 PSI) switch off the compressor and contact MAX-AIR.

6.3.6 - 2nd STAGE PRESSURE GAUGE

The gauge indicates the pressure inside the 2nd compression stage.
If pressure is not between 16 bar (230 PSI) and 20 bar (290 PSI) switch off the compressor and contact MAX-AIR.

6.3.7 - 3rd STAGE PRESSURE GAUGE

The gauge indicates the pressure inside the 3rd compression stage.
If pressure is not between 65 bar (940 PSI) and 80 bar (1200 PSI) switch off the compressor and contact MAX-AIR.

6.3.8 - 4TH STAGE PRESSURE GAUGE (FINAL PRESSURE)

The gauge indicates air pressure as it exits the compressor.
If the compressor fails to reach the pressure set on the pressure switch, switch off the compressor and contact MAX-AIR. (See page 2 of this manual for factory pre-setting.)

Working pressure:
414 bar - 6000 PSI

6.3.9 - MACHINE STATUS FAULT LIGHT INDICATOR

PROBLEM/FAULT	SOLUTION
1. Low oil alarm shutdown	Check oil level and pressure
2. CO alarm shutdown (optional)	Check CO PPM settings and possible CO contamination - call Max-Air
3. High temperature alarm shutdown	Check for proper rotation, ventilation/ obstructions of air flow - call Max-Air
4. Motor overload shutdown	Press reset button, check for dropped phase - call Max-Air or licensed electrician
5. 50 Hour service shutdown	Check general condition of compressor i.e.: belts, loose nuts, bolts, piping, fittings, airway obstructions

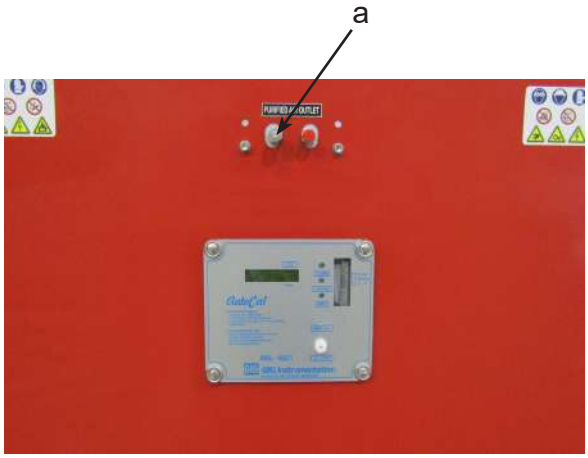
TO RESET MACHINE STATUS

A. Repair fault
B. For fault 1, 2, 3 and 4 after repairs are completed turn green OFF/AUTO Switch On and Off once
C. For service shutdown turn green OFF/AUTO Switch On and Off twice quickly

NOTE: For #1, 2, 3 and 4 the machine will NOT reset unless fault has been repaired. For #5 it can be reset at any time

6.3.10 - REFILL HOSE CONNECTION

There are two (2) hose connection fittings (a).



DANGER:

Bottle refill pressure is very high: before refilling check that the bottles are connected properly, and in good condition. Check that all hose taps not in use are closed properly so as to prevent dangers caused by hose movement.

During the bottle refill procedure any persons not directly involved in the process, must maintain a safe distance of at least three metres.

Disconnection of hoses from fittings or refill tap while the machine is under pressure is forbidden.

6.4 - PRELIMINARY TASKS

6.4.1 - SAFETY VALVE CHECKS

Check that safety valves are working properly by starting the compressor with the end taps closed: this will raise circuit pressure fast and trip the valves when their pressure setting is reached.
The valves are pre-adjusted to 414 bar (6400 PSI).

Check that the bottles to be refilled are in good condition: they must have been tested by the relevant authorities (stamped and/or certified). Run a visual check on the exterior.

Check that hoses and relevant fittings are in good condition.

After being refilled do not empty the bottles completely, not even during winter storage or for long periods of inactivity: this will prevent humidity getting in.

IMPORTANT:

Tampering with the safety valve to increase the pressure setting is strictly forbidden. Tampering with the safety valve can seriously damage the compressor, cause serious injury to personnel and renders the warranty null and void.

DANGER:

Should bottles show evident signs of internal/external corrosion, do not refill them even if they have been tested.

WARNING:

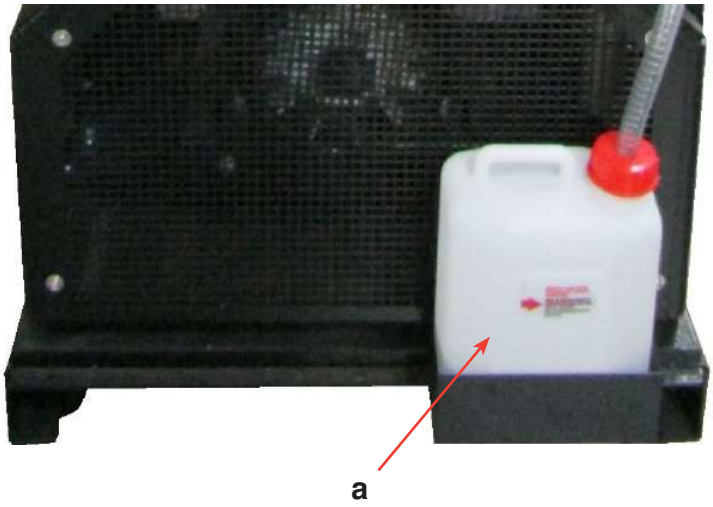
Use only tested bottles (as proven by a test stamp and/or certificate).

The working and bottle refill pressures are shown on the bottles themselves.

It is forbidden to refill them at a pressure greater than that indicated.

6.4.2 - AUTOMATIC CONDENSATE DISCHARGE

The condensate gathered in the container (**a**) must be drained as described below every day.
The release of vaporized water with lubricating oil during bottle refill is normal: the quantity depends on the level of humidity in the air.
The condensate must be disposed of as per the instructions shown in paragraph “9.1 Waste disposal”.



6.5 - BOTTLE REFILL

IMPORTANT:

During refill the operator must be in the work area (see “4.1.7 Noise level”).
It is advisable, during the bottle refill phase, to submerge the bottles in cold water to reduce the drop in pressure that accompanies cooling of the bottle.

WARNING:

During bottle refill those not involved in the refill procedure must maintain a safe distance of at least 3 meters. Also, it is forbidden to disconnect the hoses from the fittings or the refill tap while the machine is under pressure.

The available bottle refill connectors are:

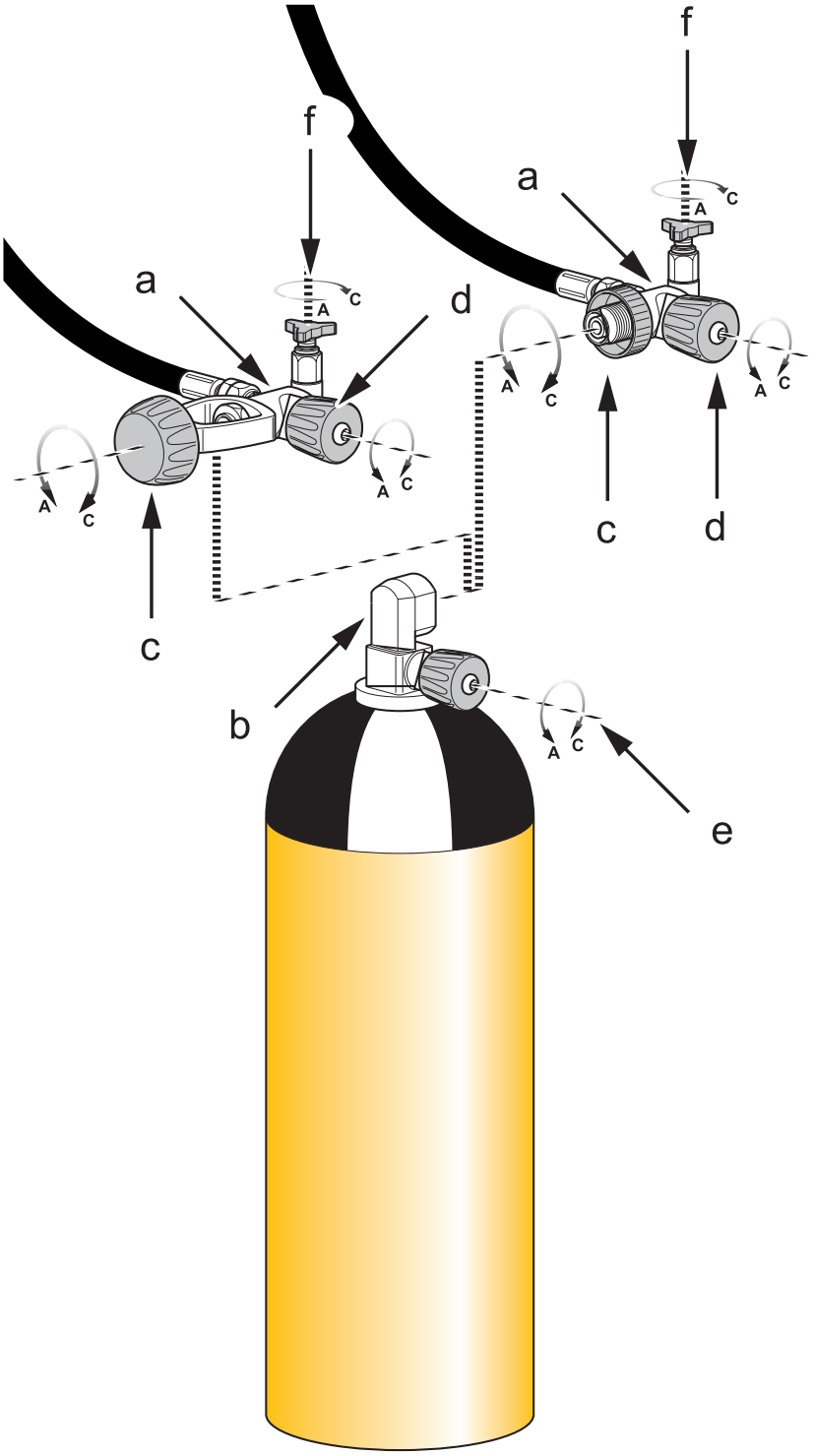
INT DIN230 DIN300USA DIN300

To refill the bottles proceed as follows:
- Fit the hose connector (**a**) to the bottle tap (**b**)
- Screw in the fixing knob (**c**) until it is completely tightened
- Check that the bleed tap (**f**) is closed by rotating it clockwise
- Open the tap (**d**) by rotating it counterclockwise
- Open the tap (**e**) by rotating it counterclockwise
- Start the compressor
- When the refill has been completed the compressor shuts down automatically
- Close taps (**d**) and (**e**) by rotating them clockwise
- Open the bleed tap (**f**) by rotating it counterclockwise, until all the residual air in the fitting has been expelled
- Unscrew the fixing knob (**c**) by rotating it counterclockwise
- Disconnect the bottle coupling.

If an emergency situation arises during refill, press the Stop-emergency pushbutton (6.3.2).

The compressor is equipped with a safety system that shuts it down automatically when:
- The pressure setting on the pressure switch has been reached.
- The electrical power supply is temporarily cut.
- The electric motor overload device is tripped.

Following an emergency shutdown, always make sure the cause of the emergency has been eliminated before proceeding with another refill.



WARNING:

Maintenance tasks must only be carried out by the MAX-AIR Customer Assistance Service or qualified personnel.

DANGER:

All maintenance tasks must be carried out with the compressor off and the power lead unplugged from the main socket.

7.1 - FOREWORD

To obtain the best possible performance from the compressor and ensure a long working life for all its parts it is essential that personnel follow the use and maintenance instructions with extreme diligence. It is thus advisable to read the information below and consult the manual every time a situation arises. For further information please contact our assistance center:

Contact MAX-AIR
830-955-8187
830-257-5006
e-mail: service@max-air.com

7.2 - GENERAL

- Proper preservation of the compressor requires thorough cleaning.
- This type of refill station, designed and built according to the most advanced technological criteria, requires only minimum preventive and routine maintenance.
- Before carrying out any maintenance tasks, run checks and/or controls on the compressor, switch off the compressor at the main breaker switch.
- The residual pressure present in the compressor (pumping circuit) must be released.
- During disassembly and re-assembly of the compressor, always use suitable wrenches/tools, so as not to damage the relevant components.
- Loosen stiff parts with a copper or plastic mallet.
- When refitting parts make sure they are clean and lubricated sufficiently.
- Compressor maintenance tasks must only be carried out by authorized personnel and recorded in the “Maintenance register” section of this manual.

7.3 - UNSCHEDULED MAINTENANCE

Involves repair and/or replacement of the mechanical parts of one or more compressor components: this work normally needs doing only after some years of use. If substantial modifications are made, the manufacturer cannot be held liable for any dangers that might arise. This work must be carried out by the assistance center.

7.4 - SCHEDULED MAINTENANCE TABLE

Maintenance	Daily	65 hrs	250 hrs	1000 hrs	2000 hrs	Yearly	10 years	15 years
Lubricating oil check	○							
Automatic shutdown check	○							
Condensate container discharge	○							
Belt wear and tension			○			●		
Rotate Air intake filter		○	●					
Fitting/hose leak check			○			●		
Oil Filter		●						
Oil Change		●						
Separator filter element cleaning				○		●		
1st-2nd-3rd stage valve				○	●			
4th stage valve				●				
Water and HP oil separator replacement							●	
HP filter body replacement								●

○ Check/clean/adjust ● Change

7.5 - TROUBLESHOOTING

Problem	Cause	Solution
- The electric motor does not start	• Phase missing	• Check fuses or overload
- Rotation speed and flow rate decrease	• Motor power too low • The belt slips	• Check the motor and the line • Restore proper belt tension
- The flow rate diminishes without rpm decreasing	• Valves not working • 4th stage piston worn • Fittings loose / leaking seals • Intake filter clogged • Intake extension kinked • Piston or piston rings worn	• Contact technical assistance • Contact technical assistance • Check for leaks with soapy water and eliminate them • Replace filter • Straighten, use stiffer pipe • Contact technical assistance
- Air smells of oil	• Cartridge filter exhausted • Piston rings worn	• Replace • Contact technical assistance
- Compressor overheats	• Direction of rotation wrong • Cooling tubes dirty • Incomplete valve closure (causing overload of another stage)	• Check direction of rotation • Contact technical assistance • Contact technical assistance

7.6 - CHECKING AND CHANGING THE LUBRICATING OIL AND FILTER

After putting the compressor into service the oil filter and the lubricating oil must be changed after the first 50 (fifty) working hours. Replacement of the oil filter and the lubricating oil must be done every 65 hours working hours or annually.

IMPORTANT:

The compressor must be placed on a solid surface with a tilt of no more than 5°.

DANGER:

Do not carry out these tasks if the compressor has only just shut down; wait for the compressor to cool.
Any oil spilled during the oil/filter change could cause personnel to slip; wear protective garments and anti-slip footwear and remove any traces of oil immediately.
Both oil and filter are classified as special wastes and must therefore be disposed of in compliance with the anti-pollution laws in force.
All maintenance work must be carried out with the compressor OFF and the main power breaker switched off.

7.6.1 - OIL TABLE

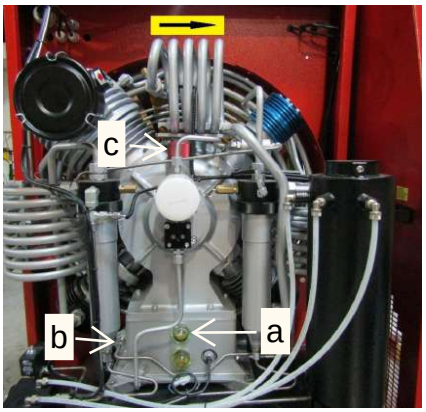
Sump capacity	1G / 3.8L
Recommended oils	Maxlube 550

7.6.2 - CHECKING THE OIL LEVEL

The oil level must be checked every 5 working hours of the compressor.
The oil level must be in the middle of the upper sight level bubble (**a**).

If the oil level is above the maximum level:
- position a recipient under the drain tap and end cap (**b**) so that the oil flows into the exhausted oil recipient (insert **b1**);
- open the drain tap and let the oil flow out until the oil level returns within the max. and min. limits;
- close the drain tap and cap at end of hose (**b**).

If the oil level is below the minimum level:
- open the oil fill cap (**c**);
- top off with oil until the level returns to the middle of the upper sight level bubble;
- replace oil fill cap (**c**).

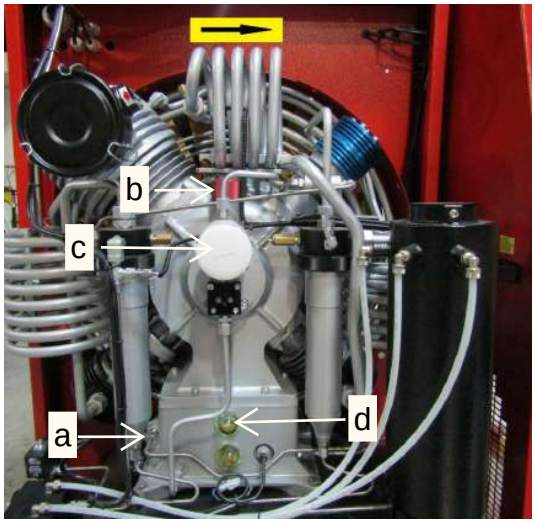


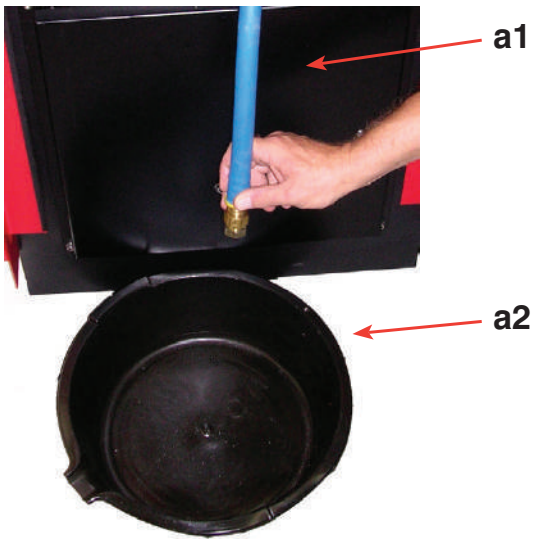
7.6.3 - CHANGING THE LUBRICATING OIL AND FILTER

The lubricating oil must be changed every 65 working hours or annually. Every time the lubricating oil is changed the oil filter must be changed too.
To change the oil proceed as described:

- position a recipient under the drain hose (**a1**) so that the oil flows into the exhausted oil recipient (**a2**) (recipient capacity of at least 3.8 liters (1 gal.) required).
- remove the oil fill cap (**b**).
- open the tap (**a**) and let all the oil flow out hose (**a1**).
- unscrew the filter (**c**) and remove.
- replace the filter with a new one.
- close the drain tap (**a**).
- fill the oil sump with 1 gallon of oil via the oil fill tube- replace the oil fill cap (**b**).
- switch on the compressor and run it for 30 seconds.
- switch off the compressor and turn off main power breaker.
- check the oil level (**d**); ensure it is in the middle of the upper sight bubble

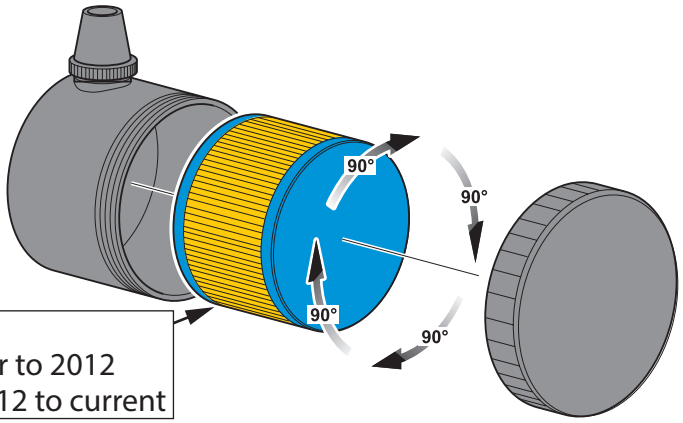
NOTE: Prior to checking oil level, let compressor stand for 10 minutes.





7.7 - CHANGING THE INTAKE FILTER

After putting the compressor into service the intake filter must be changed after the first 50 working hours.
The air filter must then be changed every 250 working hours or annually.
Every 50 working hours rotate the filtration cartridge inside the filter 90°.

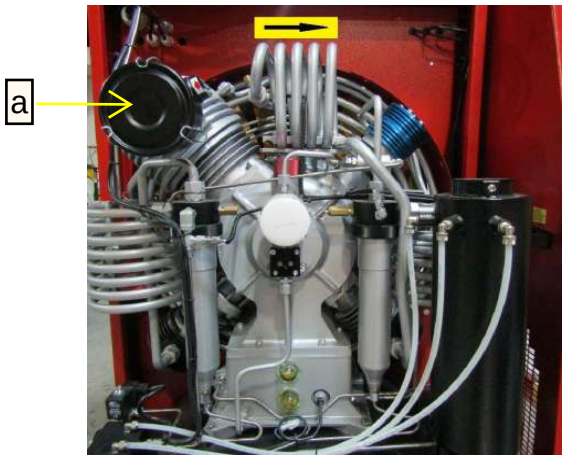


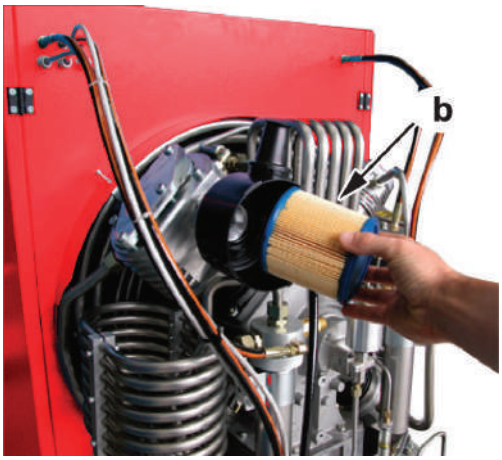
Filter cartridge
Code 36-01-016 - Prior to 2012
Code 36-05-0504 - 2012 to current

DANGER:

Do not carry out these tasks if the compressor has only just shut down; wait for the compressor to cool.
All maintenance work must be carried out with the compressor OFF and the main power breaker switched off.

The air intake filter must be changed every 250 working hours or annually.
To change the filter proceed as follows:
- unlatch the air filter cover (**a**).
- remove the air filter cartridge (**b**).
- replace the cartridge with a new one.
- re-close the cover (**a**.





7.8 - CHECKING THE SAFETY VALVE

The final safety valve protects bottles from being filled with air at too high a pressure; the valve setting is made at the time of testing the compressor to customer requirements.

IMPORTANT:

Should the safety valve fail to operate properly contact the MAX-AIR technical assistance service.

7.9 - TRANSMISSION BELTS

Belt tension should be checked every 250 hours, adjusted as needed and must be replaced yearly. If belts require replacement, contact MAX-AIR.

DANGER:

Do not carry out these tasks if the compressor has only just shut down; wait for the compressor to cool.
All maintenance work must be carried out with the compressor OFF and the main power breaker switched off.

7.10 - CONDENSATE DISCHARGE

The condensate jug must be drained at the end of every working day or when it reaches the max level of ½ full.

DANGER:

Do not carry out these tasks if the compressor has only just shut down; wait for the compressor to cool.
All maintenance work must be carried out with the compressor OFF and the main power breaker switched off.

7.11 - AUTOMATIC CONDENSATE DISCHARGE

An outflow of condensate water with lubricating oil is normal during refills: the quantity will depend on the level of humidity in the air. The condensate must be disposed of as per the instructions in section “9.1 Waste disposal”.

7.11 - ACTIVE CARBON FILTERS / MOLECULAR SIEVE

The active carbon filter must be replaced at intervals calculated on the basis of the characteristics of the environment in which the compressor is located. To calculate these intervals refer to the table below.
The filter must nevertheless be replaced before the air becomes malodorous.

IMPORTANT:

If the compressor is used in an environment where CO (exhaust fumes) may be present it is compulsory to use CO-fixing filters (HOPCALITE); these can be supplied on request.

DANGER:

Do not carry out these tasks if the compressor has only just shut down; wait for the compressor to cool.
All maintenance work must be carried out with the compressor OFF and the main power breaker switched off.
Depressurize the entire compressor circuit before carrying out any maintenance tasks.

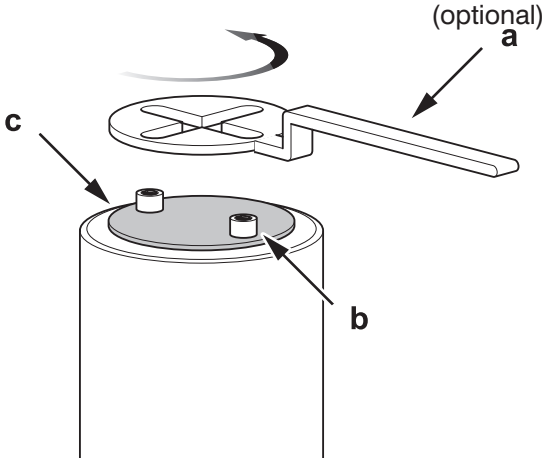
7.11.1 - FILTER REPLACEMENT FREQUENCY CALCULATION TABLE

Temperature (°C)	Temperature (°F)	Correction factor	Filter duration (hours)
50	122	0,2	(35x0,2)=7
40	104	0,34	(35x0,34)=12
30	86	0,57	(35x0,57)=20
20	**68**	**1**	**35**
10	50	1,85	(35x1,85)=64
5	41	2,6	(35x2,6)=91
0	32	3,8	(35x3,8)=133

7.11.2 - CHANGING THE DRYER AND ACTIVE CARBON FILTERS

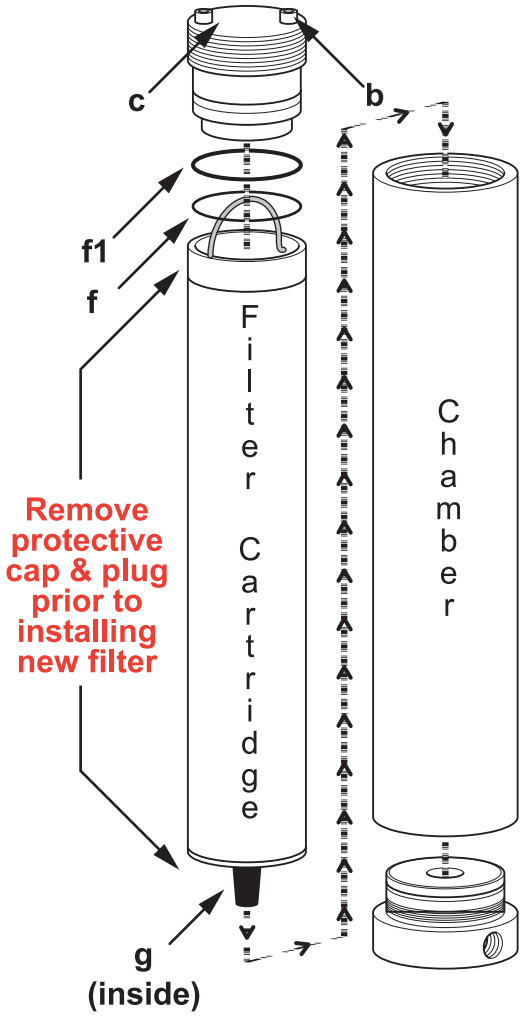
To change the active carbon filters (**d****) proceed as follows:
- vent all the compressed air inside the circuit, manual drain tap (**e**);
- use the wrench (**a**) (optional) to apply leverage on the screw heads (**b***) of the plug (**c**) and rotate counterclockwise;
- co/moisture visual indicator elements (not shown) must be changed whenever cartridges are changed.

b* DO NOT remove screw heads.
d** All cartridges must be changed at the same time.



- remove the filter plug (**c**);
- remove the dryer and active carbon filter cartridge (**d**) and replace it with a new one;
- check/grease the O-ring (**f**) and back up ring on the plug (**c**) every time the filter is changed;
- close the filter and screw it on with the wrench (**a**).

There are sealing O-rings (f-g (inside)) on the plug and the filter cartridge.
When replacing the O-rings observe the precautions described at the start of the section.
Note: Use silicone grease only. DO NOT use silicone sprays.



DANGER:

Read all labeling on replacement cartridges and follow instructions, i.e. removal of plugs and cap plugs, prior to inserting into machine.

WARNING:

The active carbon filters are classified as special waste: they must be disposed of in compliance with the anti-pollution standards in force.

7.12 - CHANGING THE FLEX HOSES

IMPORTANT:

The hoses must be changed periodically (yearly or every 1000 hours) or when they show signs of abrasion/ wear/damage.
The bending radius of the hoses must not be less than 250 mm (9¾").

DANGER:

Do not carry out these tasks if the compressor has only just shut down; wait for the compressor to cool.
All maintenance work must be carried out with the compressor OFF and the main power breaker switched off.
Vent the air from the compressor before carrying out any maintenance tasks.

To change the bottle refill hoses proceed as follows:
- disconnect the bottle refill hoses by unscrewing the fittings (a) at their extremities (14 mm wrench);
- replace the old hoses with new ones;
- screw the hoses onto the connectors (a);
- use a torque wrench to tighten the hoses to the compressor with a torque of 15 Nm (13.5 ft.lb.).

8 - STORAGE

Should the compressor not be used, it must be stored in a dry sheltered area at an ambient temperature of between 0°C and 40°C (32° F and 104° F).
Store the compressor away from sources of heat, flames or explosive.

8.1 - STOPPING THE MACHINE FOR A BRIEF PERIOD

If you do not intend to use the compressor for a brief period proceed with general cleaning.

8.2 - STOPPING THE MACHINE FOR A LONG PERIOD

If you do not intend to use the compressor for a long period, extract the active carbon filter cartridge. Run the compressor for a few minutes without actually filling bottles so as to flush out all the residual condensate. Stop the compressor, disassemble the intake filter, restart the compressor and spray a few drops of oil into the air intake hole so that a light film of lubricant is aspirated and penetrates the interior of the compressor. Stop the compressor and refit the air intake filter. Clean the external parts: eliminate any moisture, salt or oil deposits. Protect the compressor from dust and water by storing it in a clean, dry place. Switch off the machine via the main switch and remove the plug from the mains power socket. Proceed with a thorough general cleaning of all machine parts.

During machine downtimes it is advisable to run the compressor for 20 minutes every 15 days.

9 - DISMANTLING AND PUTTING OUT OF SERVICE

Should you decide not to use the compressor or any of its parts any longer you must proceed with its dismantling and putting out of service. These tasks must be carried out in compliance with the standards in force.

WARNING:

Should the compressor, or a part of it, be out of service its parts must be rendered harmless so they do not cause any danger.

WARNING:

Bear in mid that oil, filters or any other compressor parts are subject to local waste management laws. Collection must be disposed of in compliance with the standards in force.

9.1 - WASTE DISPOSAL

Use of the compressor generates waste that is classified as special. Bear in mind that residues from industrial, agricultural, crafts, commercial and service activities not classified by quality or quantity as urban waste must be treated as special waste. Deteriorated or obsolete machines are also classified as special waste.
Special attention must be paid to active carbon filters as they cannot be included in urban waste: observe the waste disposal laws in force where the compressor is used. Bear in mind that it is compulsory to record loading/unloading of exhausted oils, special wastes and toxic-harmful wastes that derive from heavy/light industry processes. Exhausted oils, special wastes and toxic-harmful waste must be collected by authorized companies.
It is especially important that exhausted oils be disposed of in compliance with the laws in the country of use.

9.2 - DISPOSING OF THE COMPRESSOR

IMPORTANT:

Disassembly and demolition must only be carried out by authorized agencies.

Dismantle the compressor in accordance with all the precautions imposed by the laws in force in the country of use. Before demolishing request an inspection by the relevant authorities and relative report.
Disconnect the compressor from the electrical system. Eliminate any interfaces the compressor may have with other machines, making sure that interfaces between remaining machines are unaffected. Empty the tank containing the lubricating oil and store in compliance with the laws in force. Proceed with disassembly of the individual compressor components and group them together according to the materials they are made of: the compressor mainly consists of steel, stainless steel, cast iron, aluminium and plastic parts. Then scrap the machine in compliance with the laws in force in the country of use.

IMPORTANT:

At every stage of demolition observe the safety regulations contained in this manual carefully.

10 - INSTRUCTIONS FOR EMERGENCY SITUATIONS

10.1 - FIRE

In the event of fire use a CO_2 extinguisher in compliance with the relevant standards in force and contact your local fire department.

11 - MAINTENANCE REGISTER

Date	Component	Task and notes	Signature

11 - MAINTENANCE REGISTER

Date	Component	Task and notes	Signature

11 - MAINTENANCE REGISTER

Date	Component	Task and notes	Signature

12 - NOTES

12 - NOTES

12 - NOTES

CARBON MONOXIDE ELEMENT #MI-4002R

DESCRIPTION

This detector consists of a 'Visual" indicator (#MI-4000), into which a small (15 mm diameter) replaceable disc is inserted. The 'Visual' indicator has a clear sight lens through which the disc may be seen. The disc changes color in the presence of low concentrations of carbon monoxide within 5 to 10 minutes of exposure and therefore acts as a clear visible warning before the proportion of gas reaches an unacceptable level. If higher and more dangerous concentrations or carbon monoxide are present, the disc changes color within a few seconds.

USAGE

The detection disc is specially treated to prolong its life. A color change from tan to dark grey will occur in the presence of carbon monoxide. The rate if change of color is directly related to the concentration of carbon monoxide present. The detector will change color in five to ten minutes at 50 –100 ppm of carbon monoxide, but will change color within a few seconds if the level reaches 500-1,000 ppm (0.05%-0.1%), at which concentration it can be lethal.

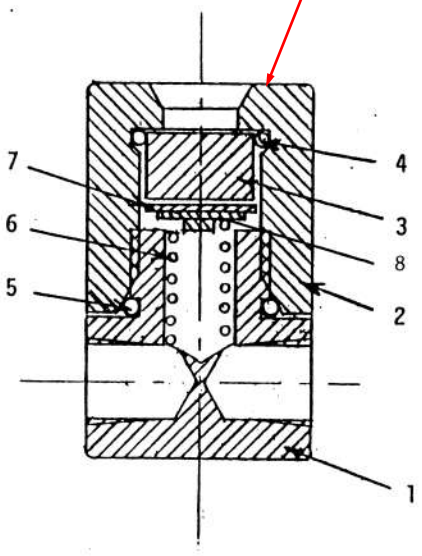
BENEFIT

The detector is a quick, inexpensive and simple means of showing the presence of carbon monoxide in the sample air. There is no need for troublesome sampling equipment or expensive analytical equipment. The change in color is easy to spot and the results can be interpreted by non- specialist staff.

Assembly and Disassembly
Model MI-4000 Visual Indicator

BLEED ALL PRESSURE FROM UNIT AND SHUT OFF POWER

Unscrew by hand , counter-clockwise, to remove and replace elements. Reinstall cap hand tight.



Item	Qty	Part No.	Description
1	1	583	Body
2.	1	584	Cap
3	1	593	Window
4	1	592-1	O ring 2-018
5	1	592-2	O ring 2-019
6	1	592-3	Spring
7	1	592-5	Indicator humidity (blue)
8	1	592-6	Indicator CO (beige)

NOTES:

1. Technical bulletin – 588
2. Use Dow silicone grease 111 or equivalent on seals and threads
3. Tighten cap hand tight only
4. Install window (3) with smooth, small diameter against O ring (4)
5. Insure window (3) is fully against shoulder of cap (2)
6. Avoid spring or other hard objects touching window
7. Install so both elements can be seen through window, insure spring is in place to hold element against window
8. When installing humidity element place it in cap (2) with blue face against window
9. COLOR CHANGE:
   - Blue to pink means high humidity
   - Beige to dark brown means dangerous levels of carbon monoxide

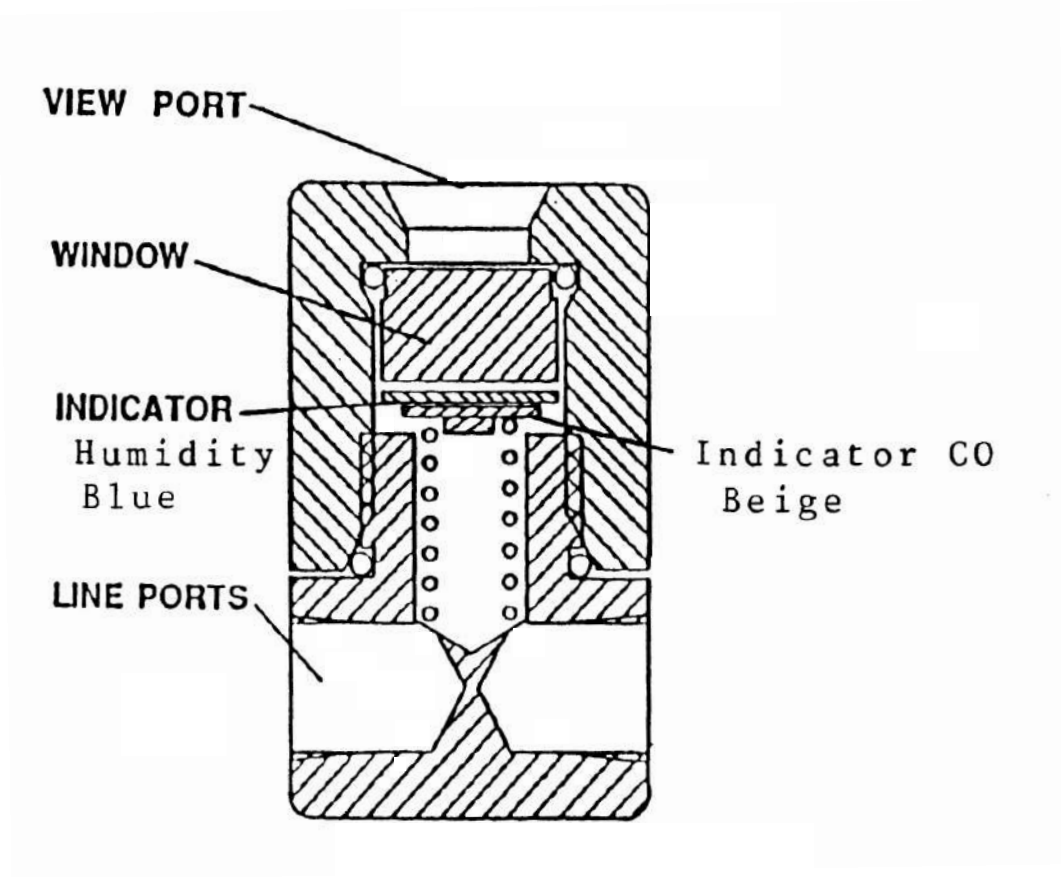
MI-4000K

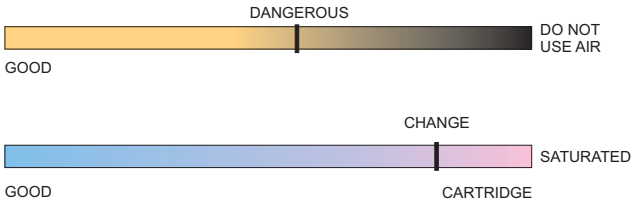
NOTE:

1. DO NO TOUCH ELEMENTS WITH HANDS USE CLEAN TWEEZERS OR CLEAN NEEDLE NOSE PLIERS

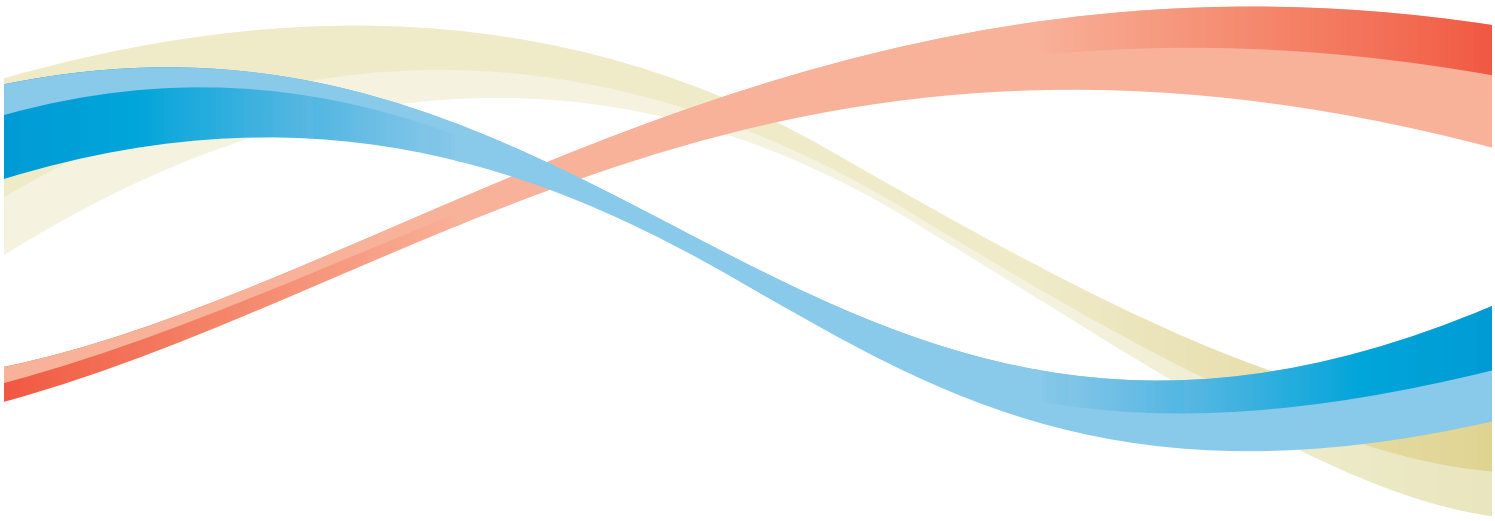
2. MAKE SURE COMPRESSOR AND FILTER HOUSING ARE COMPLETELY DRAINED OF ALL AIR PRESSURE PRIOR TO ATTEMPTING REMOVAL OF CAP FOR MAINTENANCE.

Remove top half of element housing and invert.
Place the blue moisture indicator down inside element against the glass taking care not to touch the blue element with your fingers.
Place the beige element on top of the spring if monitoring for CO
Re-attach the top half of the element housing hand tight.





Good Conditions: INNER RING - YELLOW
OUTER RING - BLUE



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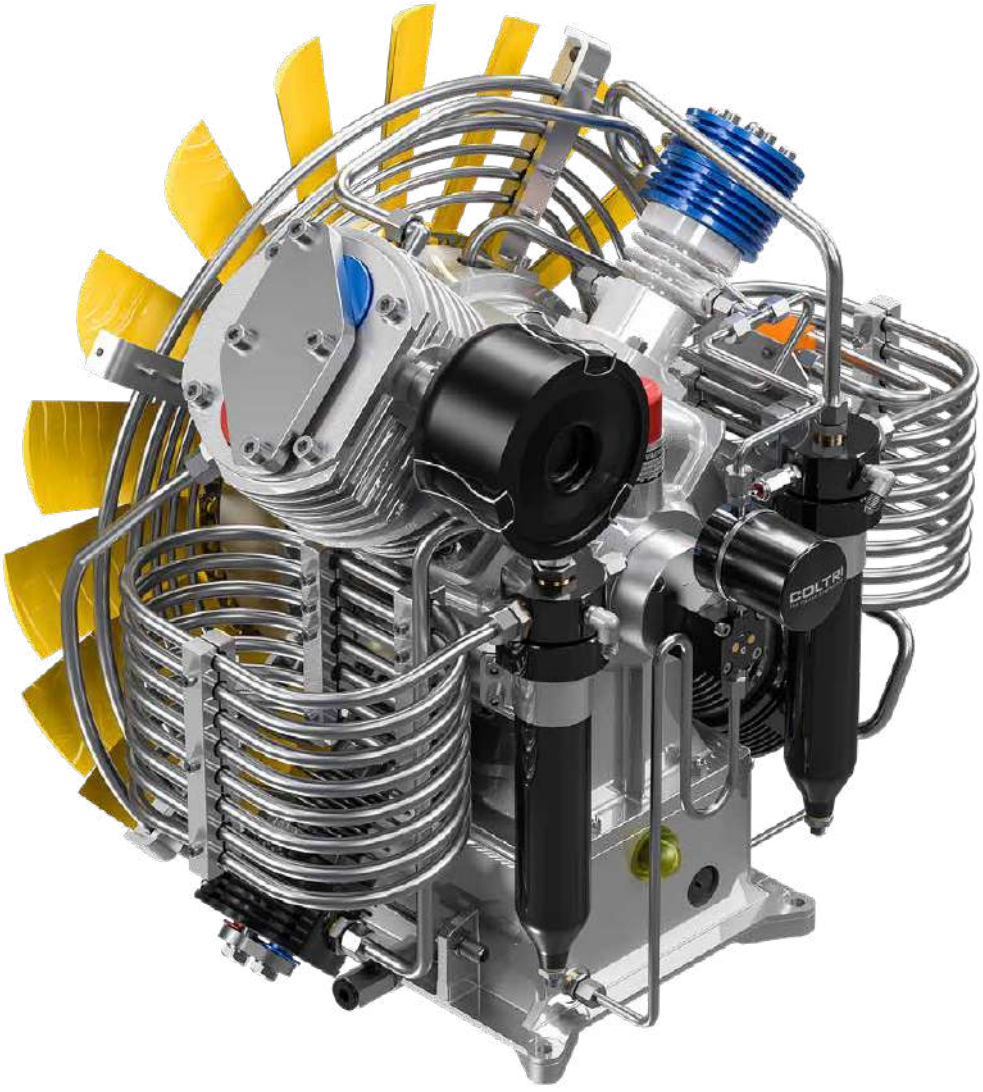


SPARE PARTS LIST

HEAVY DUTY LINE:
- MCH-22-30-36-45/OPEN
- MCH-22-30-36-45/SILENT

HEAVY DUTY

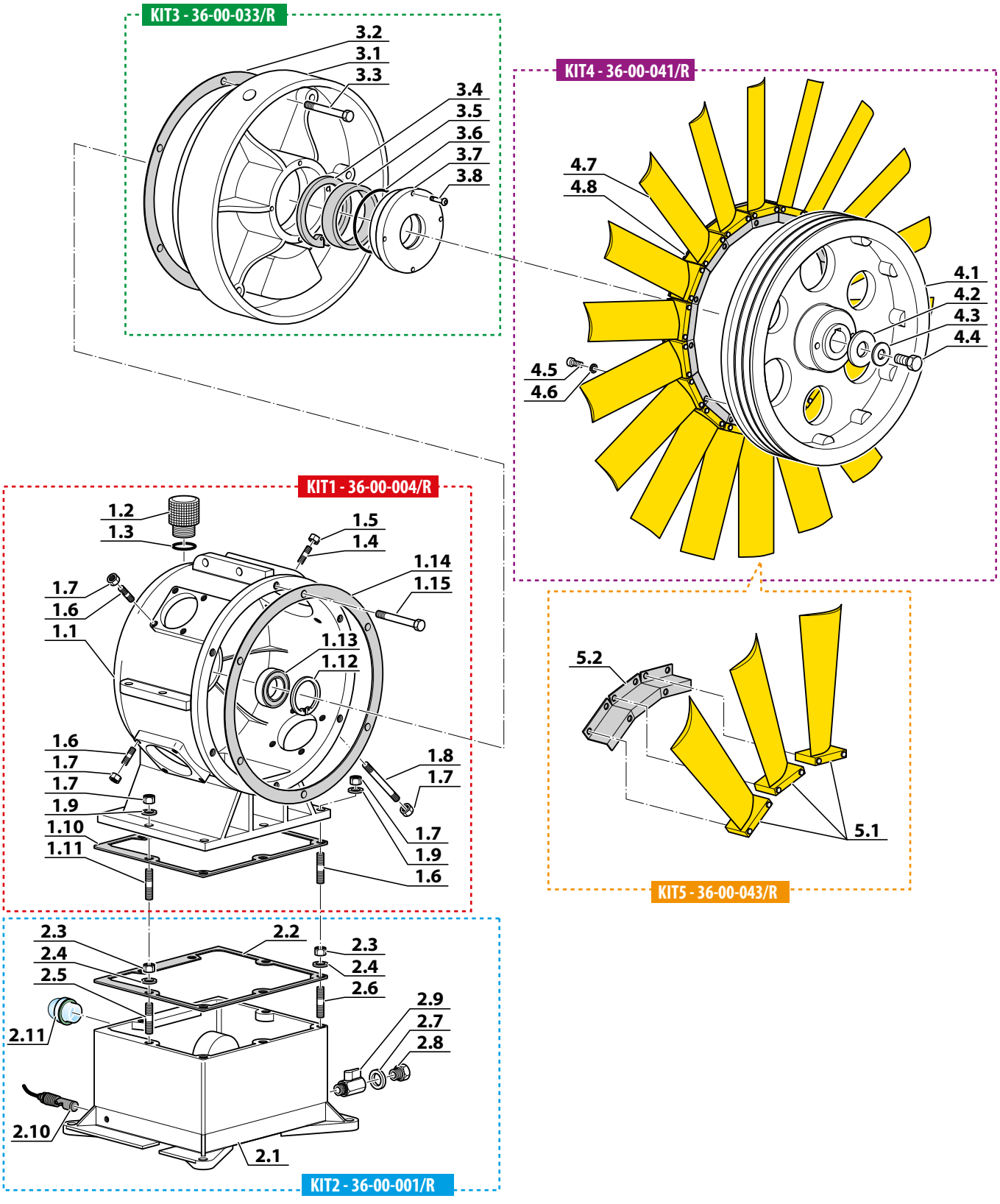
Rev. 8/20/21

CRANKCASE ASSEMBLY

POS.	QTY	CODE		DESCRIPTION
KIT1	1	36-00-004/R		CRANKCASE KIT
1.1	1			CRANKCASE MCH-36
1.2	1			OIL FILLER TAP
1.3	1			O-RING 4131 NBR 90 (D32,92x3.53)
1.4	4			TIE ROD M10X40-8.8
1.5	4			SELF-LOCKING NUT M10
1.6	14			TIE ROD M8X42-8.8
1.7	19			SELF-LOCKING NUT M8 INOX
1.8	4			TIE ROD M8X90-8.8
1.9	7			WASHER M8
1.10	1			GASKET CRANKCASE-BASE
1.11	1			TIE ROD M8X35
1.12	1			SEEGER J 62 DIN 472
1.13	1			ROLLER BEARING NU 305 ECP
1.14	1			GASKET CRANKCASE FLANGE
1.15	6			SCREW TCEIZN M8X35-8.8
KIT2a	1	36-00-001//R		NEW CRANKCASE BASE KIT
2.1	1			NEW CRANKCASE BASE
2.2	1			GASKET CRANKCASE-BASE
2.3	7			SELF-LOCKING NUT M8 INOX
2.4	7			WASHER Ø8
2.5	1			TIE ROD M8X35
2.6	6			TIE ROD M8X42-8.8
2.7	1			COPPER WASHER 21,5X28X1,5
2.8	1			OIL DRAIN PLUG
2.9	1			OIL DRAIN TAP
2.10	1			OIL LEVEL SWITCH
2.11	2			OIL LEVEL VIEWER WITH GASKET
KIT3	1	36-00-033/R		CRANKCASE FLANGE KIT
3.1	1			CRANKCASE FLANGE
3.2	1			GASKET CRANKCASE FLANGE
3.3	6			SCREW TCEIZN M8X35-8.8
3.4	1			SEEGER AK 40
3.5	1			OIL SPLASH GUARD A 40X55X7 NBR
3.6	1			O RING 2250 NBR90SH(63,22X1,78)
3.7	1			FAN SIDE FLANGE
3.8	4			SELF-TAPPING SCREW
KIT4	1	36-00-041/R		FAN PULLEY KIT
4.1	1			PULLEY COOLING FAN
4.2	1			FAN PULLEY WASHER
4.3	1			WASHER PLANT M13
4.4	1			SCREW INOX 10x45
4.5	12			SCREW T.C.E. ZINC. 6X16 DIN912
4.6	12			WASHER Ø6
4.7	18			FAN BLADE
4.8	6			FAN BLADE STAY
KIT5	1	36-00-043/R		NEW FAN BLADE KIT
5.1	3			NEW FAN BLADE
5.2	1			FAN BLADE STAY

** = The kit includes a bracket and 3 new yellow fan blade, for complete replacing must order 6 kits*

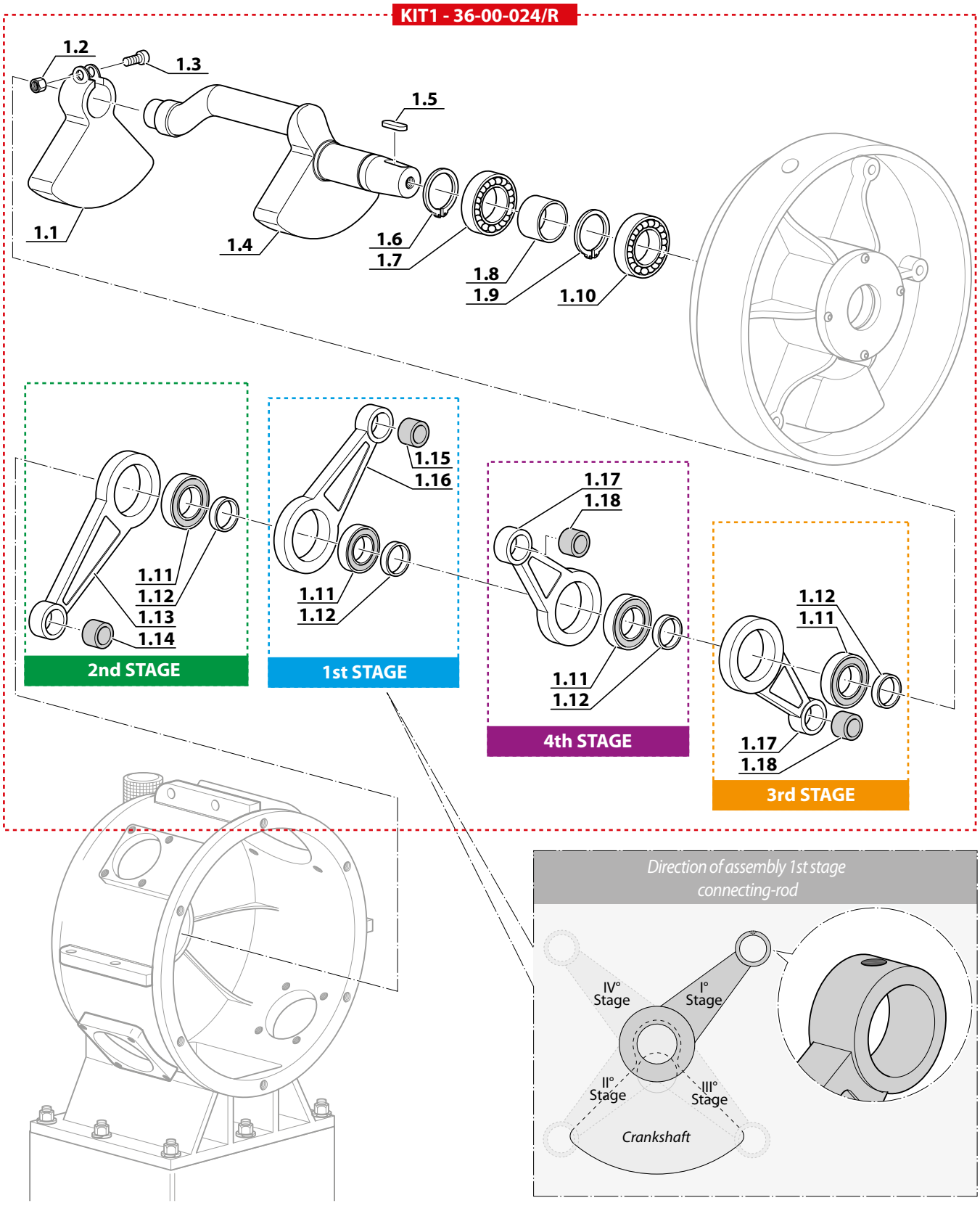
CRANKCASE ASSEMBLY



CRANKSHAFT

POS.	QTY	CODE		DESCRIPTION
KIT1	1	36-00-024/R		CRANKSHAFT + CONNECTING ROD KIT
1.1	1			COUNTERWEIGHT
1.2	1			NUT Ø8
1.3	1			SCREW TCEIZN M8X65-8.8
1.4	1			CRANKSHAFT
1.5	1			SPLINE
1.6	1			SNAP RING
1.7	1			BEARING N308 EC
1.8	1			CRANKSHAFT SPACER
1.9	1			SNAP RING
1.10	1			BEARING NUP208 EC
1.11	4			CONNECTING ROD BEARING NUP206 EC/C4
1.12	4			FIFTH WHEEL 30X42X0,5 MCH36
1.13	1			2ND STAGE CONNECTING ROD MCH-36
1.14	1			2ND STAGE CONNECTING ROD PIN BEARING
1.15	1			1ST STAGE CONNECTING ROD PIN BEARING
1.16	1			1ST STAGE CONNECTING ROD MCH-36
1.17	2			3RD/4TH STAGE CONNECTING ROD
1.18	2			3RD/4TH STAGE CONNECTING ROD PIN BEARING

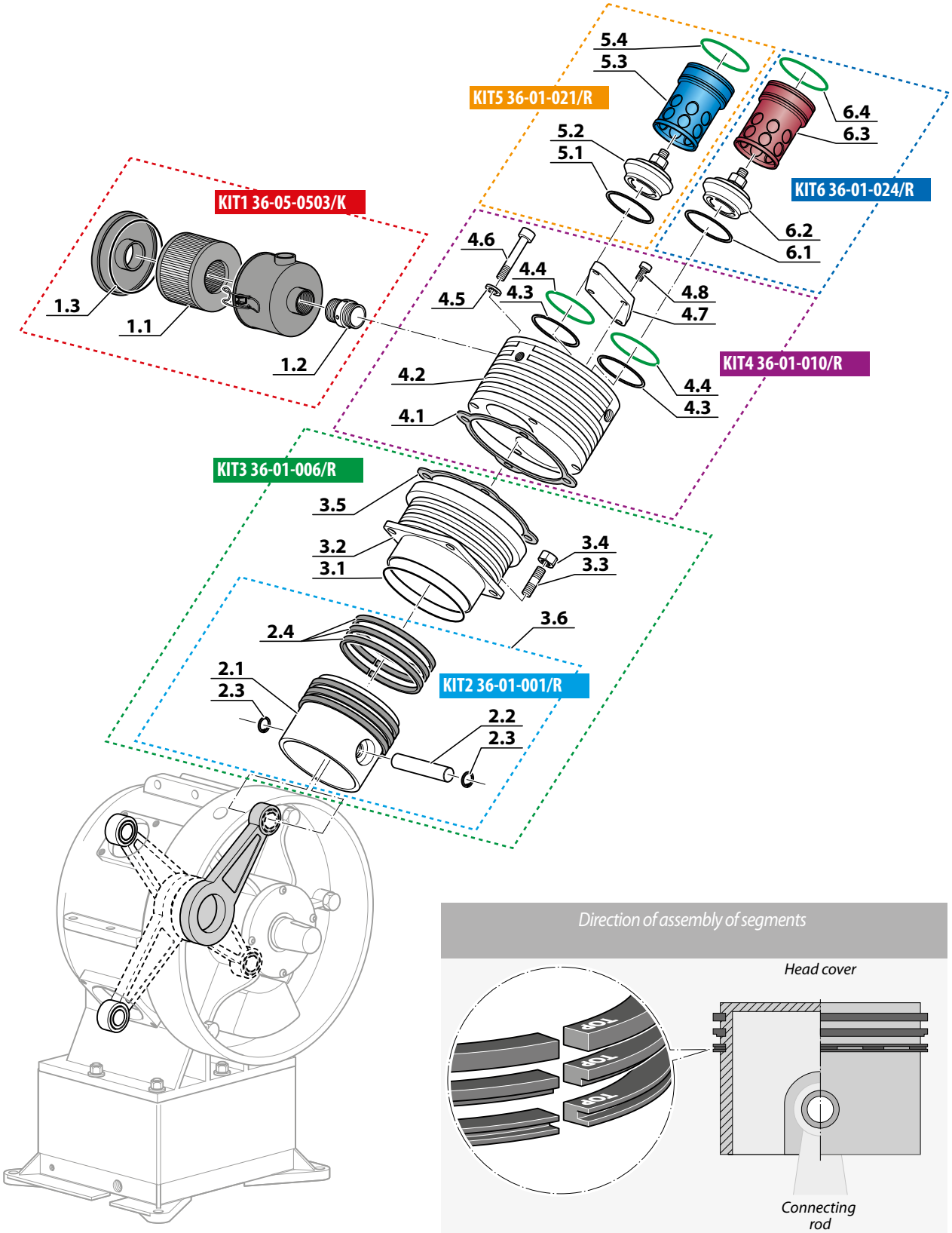
CRANKSHAFT


KIT1 - 36-00-024/R
1.2
1.3
1.5
1.1
1.4
1.6
1.7
1.8
1.9
1.10
1.11
1.12
1.13
1.14
2nd STAGE
1.15
1.16
1.11
1.12
1st STAGE
1.17
1.18
1.11
1.12
4th STAGE
1.12
1.11
1.17
1.18
3rd STAGE
Direction of assembly 1st stage connecting-rod
IV° Stage
I° Stage
II° Stage
III° Stage
Crankshaft

1st STAGE

POS.	QTY	CODE		DESCRIPTION
KIT1	1	36-05-0503/K		KIT INTAKE FILTER
1.1	1	36-05-0504		INTAKE FILTER CARTRIDGE
1.2	1			INTAKE FILTER PIPE
1.3	1			O-RING INTAKE FILTER MCH-30-36
KIT2	1	36-01-001/R		KIT 1ST STAGE PISTON 130MM
2.1	1			1ST STAGE PISTON 130MM
2.2	1			1ST STAGE PISTON PIN 130MM MCH36
2.3	2			SEEGER RETAINING RING
2.4	1	36-01-004		1ST STAGE PISTON RINGS (3) 130MM MCH36
KIT3	1	36-01-006/R		1ST STAGE CYLINDER 130MM KIT
3.1	1			O-RING 2525 NBR90SH(133,10X1,78)
3.2	1			1ST STAGE CYLINDER 130MM
3.3	4			STUD SCREW M10X40-8.8
3.4	4			NUT M10
3.5	1			HEAD GASKET 1ST STAGE M-36 130MNM
3.6	1			KIT 1ST STAGE PISTON 130MM
KIT4	1	36-01-010/R		1ST STAGE HEAD MCH-36 KIT
4.1	1			HEAD GASKET 1ST STAGE M-36 130MNM
4.2	1			1ST STAGE HEAD
4.3	2			COPPER WASHER 65X70X1
4.4	2			O-RING 3256 VITON90SH GREEN (64,77X2,62)
4.5	4			WASHER M10 INOX DIN125
4.6	4			SCREW T.C.E. INOX 10X120 DIN912
4.7	1			1ST STAGE VALVES BELLS COVER
4.8	4			SCREW TCEIZN M10X35-8.8
KIT5	1	36-01-021/R		1ST STAGE INTAKE VALVE KIT
5.1	1			COPPER WASHER 65X70X1
5.2	1	36-01-021		1ST STAGE INTAKE VALVE
5.3	1			1ST STAGE INTAKE VALVE BELL
5.4	1			O-RING 3256 VITON90SH GREEN (64,77X2,62)
KIT6	1	36-01-024/R		1ST STAGE DISCHARGE VALVE KIT
6.1	1			COPPER WASHER 65X70X1
6.2	1	36-01-024		1ST STAGE DISCHARGE VALVE
6.3	1			1ST STAGE DISCHARGE VALVE BELL
6.4	1			O-RING 3256 VITON90SH GREEN (64,77X2,62)

1st STAGE

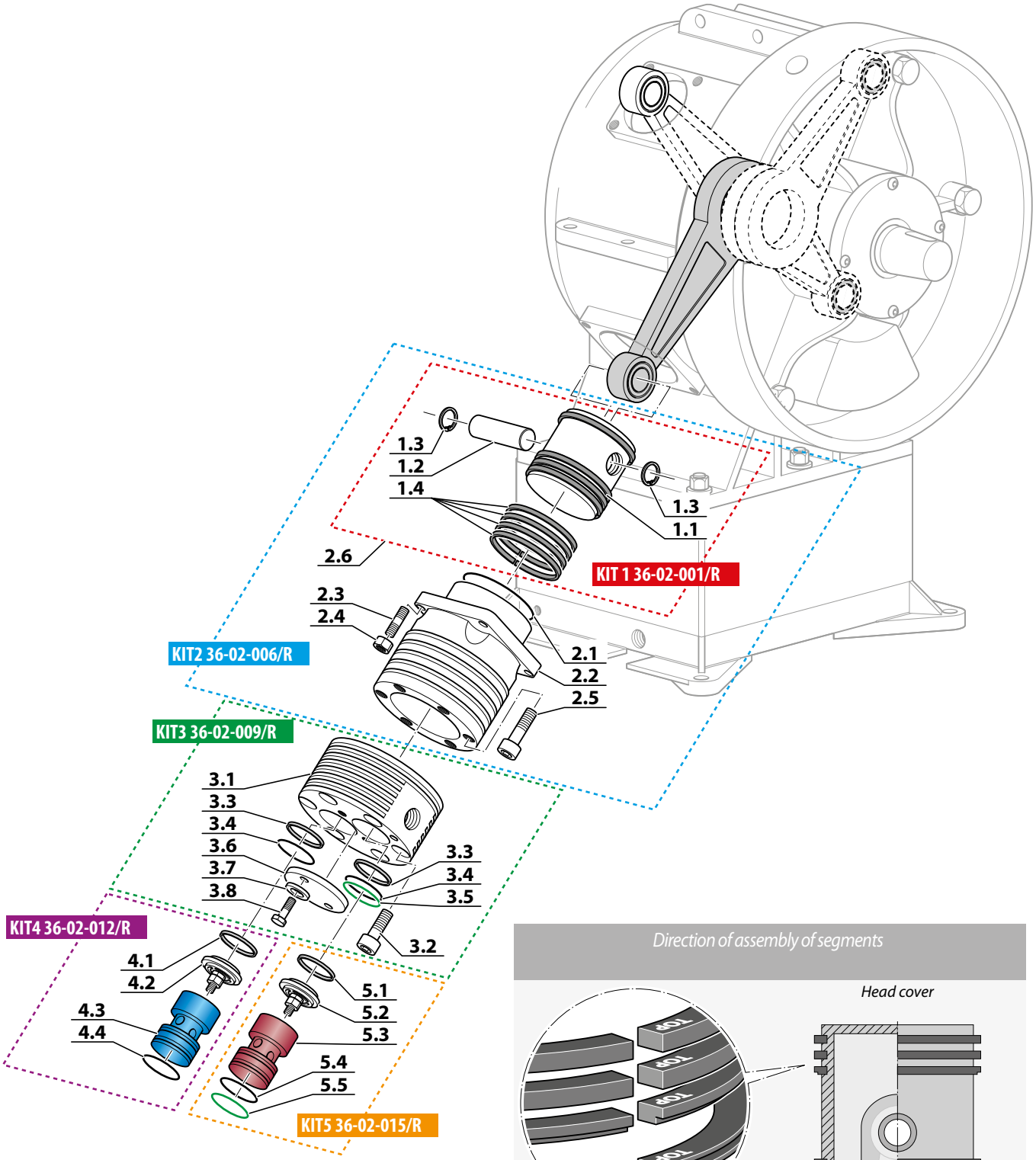


Direction of assembly of segments

2nd STAGE

POS.	QTY	CODE		DESCRIPTION
KIT1	1	36-02-001/R		KIT 2ND STAGE PISTON
1.1	1			2ND STAGE PISTON 60MM MCH36
1.2	1			2ND STAGE PISTON PIN
1.3	2			SNAP RING
1.4	4	36-02-004		SERIES N°4 SEGMENTS 2ND STAGE PISTON
KIT2	1	36-02-006/R		2ND STAGE CYLINDER KIT
2.1	1			O-RING 2275 NBR90SH (69.57X1.78)
2.2	1			2ND STAGE CYLINDER Ø60 MCH-36
2.3	4			STUD SCREW M8X42-8.8
2.4	4			NUT M8 INOX
2.5	6			SCREW T.C.E. ZINCATA 8X30
2.6	1			KIT 2ND STAGE PISTON
KIT3	1	36-02-009/R		2ND/3RD STAGE HEAD KIT
3.1	1			2ND/3RD STAGE HEAD
3.2	6			SCREW T.C.E. ZINCATA 8X30
3.3	2			COPPER WASHER 28X34X1
3.4	2			O-RING 4112 VITON90SH (28.17X3.53)
3.5	1			O RING 2112 VITON 90SH GREEN
3.6	1			2ND/3RD STAGEVALVES BELL COVER
3.7	2			WASHER M10 INOX DIN125
3.8	2			SCREW T.E. INOX 10X35 DIN933
KIT4	1	36-02-012/R		2ND STAGE INTAKE VALVE KIT
4.1	1			COPPER WASHER 28X34X1
4.2	1	36-02-012		2ND STAGE INTAKE VALVE
4.3	1			2ND/3RD STAGE INTAKE VALVE BELL
4.4	1			O-RING 4112 VITON90SH (28.17X3.53)
KIT5	1	36-02-015/R	KIT VALVOLA SCARICO 2°STADIO	2ND STAGE DISCHARGE VALVE KIT
5.1	1			COPPER WASHER 28X34X1
5.2	1	36-02-015		2ND STAGE DISCHARGE VALVE
5.3	1			2ND/3RD STAGE DISCHARGE VALVE BELL
5.4	1			O-RING 4112 VITON90SH (28.17X3.53)
5.5	1			O RING 2112 VITON 90SH GREEN

2nd STAGE

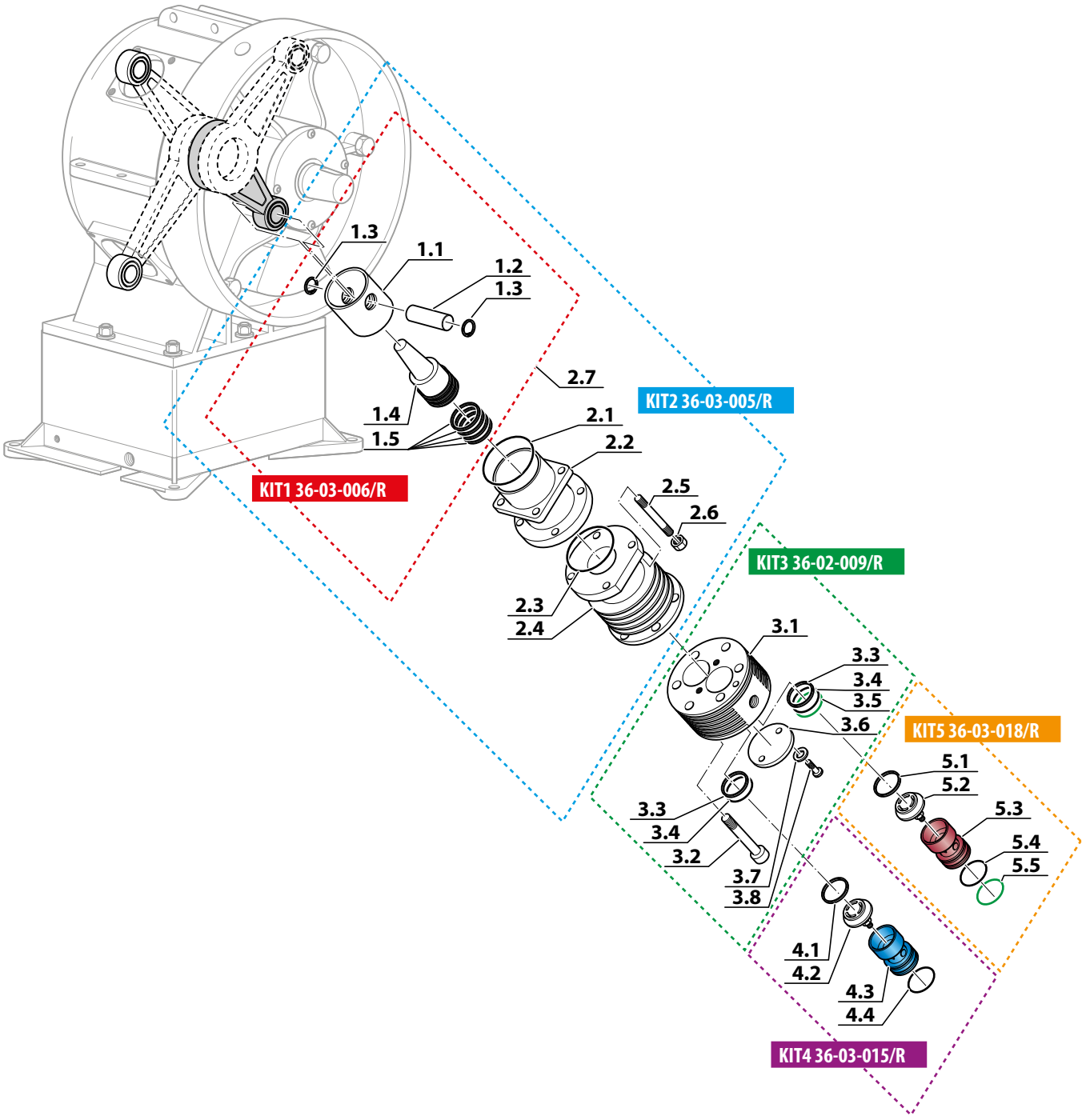


Direction of assembly of segments

3rd STAGE

POS.	QTY	CODE		DESCRIPTION
KIT1	1	36-03-006/R		KIT 3RD STAGE PAD+PISTON MCH36
1.1	1			3RD/4TH STAGE PAD Ø60 MCH36
1.2	1			3RD/4TH STAGE PISTON PIN B22X48
1.3	2			SNAP RING
1.4	1			3RD STAGE PISTON Ø32 MCH36
1.5	1	36-03-007		SERIES N°4 SEGMENTS 3RD STAGE PISTON
KIT2	1	36-03-005/R		KIT 3RD STAGE GUIDE CYLINDER Ø60 MCH36
2.1	1			O-RING 2275 NBR90SH (69.57X1.78)
2.2	1			3RD STAGE GUIDE CYLINDER Ø60 MCH36
2.3	1			O-RING 3237 NBR90SH (60.00X2.62)
2.4	1			3RD STAGE CYLINDER Ø32 MCH36
2.5	4			STUD SCREW M8X90-8.8
2.6	4			NUT M8 INOX
2.7	1			KIT 3RD/4TH STAGE PAD Ø60 MCH36
KIT3	1	36-02-009/R		KIT 2ND/3RD STAGE HEAD
3.1	1			2ND/3RD STAGE HEAD
3.2	6			SCREW T.C.E. ZINCATA 8X30
3.3	2			COPPER WASHER 28X34X1
3.4	2			O-RING 4112 VITON90SH (28.17X3.53)
3.5	1			O RING 2112 VITON 90SH GREEN (28.3 X 1.78)
3.6	1			2ND/3RD STAGEVALVES BELL COVER
3.7	2			WASHER M10 INOX DIN125
3.8	2			SCREW T.E. INOX 10X35 DIN933
KIT4	1	36-03-015/R		KIT 3RD STAGE INTAKE VALVE HOERBIGER 34-137753-AN
4.1	1			COPPER WASHER 28X34X1
4.2	1	36-03-015		3RD STAGE INTAKE VALVE
4.3	1			2ND/3RD STAGE INTAKE VALVE BELL
4.4	1			O-RING 4112 VITON90SH (28.17X3.53)
KIT5	1	36-03-018/R		KIT 3RD STAGE DISCHARGE VALVE HOERBIGER 39-137754-AN
5.1	1			COPPER WASHER 28X34X1
5.2	1	36-03-018		3RD STAGE DISCHARGE VALVE
5.3	1			2ND/3RD STAGE DISCHARGE VALVE BELL
5.4	1			O-RING 4112 VITON90SH (28.17X3.53)
5.5	1			O RING 2112 VITON 90SH GREEN (28.3 X 1.78)

3rd STAGE


1.3
1.1
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KIT2 36-03-005/R
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KIT1 36-03-006/R
2.5
2.6
KIT3 36-02-009/R
2.3
2.4
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3.6
KIT5 36-03-018/R
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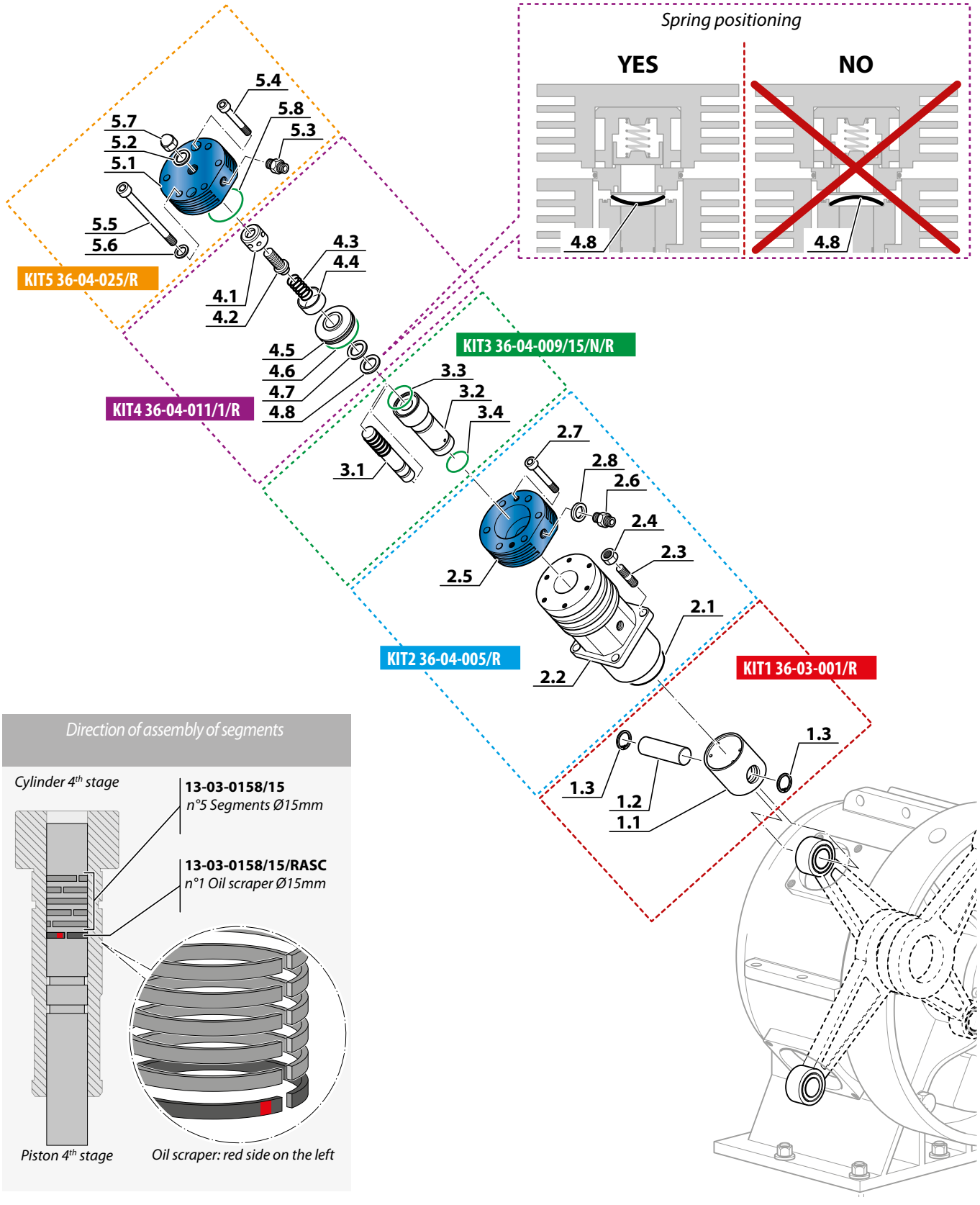
4.4
KIT4 36-03-015/R

4th STAGE

POS.	QTY	CODE		DESCRIPTION
KIT1	1	36-03-001/R		KIT 3RD/4TH STAGE PAD Ø60 MCH36
1.1	1			3RD/4TH STAGE PAD Ø60 MCH36
1.2	1			3RD/4TH STAGE PISTON PIN B22X48
1.3	2			SNAP RING
KIT2	1	36-04-005/R		KIT 4TH STAGE CYLINDER
2.1	1			O-RING 2275 NBR90SH (69.57X1.78)
2.2	1			4TH STAGE CYLINDER
2.3	4			STUD SCREW M8X42-8.8
2.4	4			NUT M8 INOX
2.5	1			SUCTION 4TH STAGE HEAD
2.6	1			FITTING ERMETO G3/8 M18x1,5 TUBE Ø12
2.7	2			SCREW T.C.E. ZINC. 6X40 DIN912
2.8	1			COPPER WASHER 3/8 (17X23X1.5)
KIT3	1	36-04-009/15/N/R		KIT NEW 4TH STAGE CYLINDER Ø15
3.1	1			4TH STAGE PISTON Ø15 MCH-36 WITH PISTON RINGS
3.2	1			NEW 4TH STAGE CYLINDER Ø15
3.3	1			O-RING 2106 VITON 90 SH GREEN (26,7X1,78)
3.4	1			O-RING 2081 VITON 90 SH GREEN (20.35X1.78)
KIT4	1	36-04-011/1/R		KIT VALVE HEAD 4° ST. MCH36
4.1	1			GUIDE BUSH DISCHARGE VALVE 4° ST. MCH36
4.2	1			LOWERED CYLINDRICAL HEAD SCREW M8X25 DIN 7
4.3	1			SPRING INOX Ø11X8,6 L. 18,5 FILO 1,2 4° ST. MCH-36
4.4	1			PLATE VALVE DISCHARGE HEAD 4° ST. MCH36
4.5	1			HEAD VALVE 4° ST. MCH36
4.6	1			OR-3137 VITON 90SH (34.60X2.62)
4.7	1			SUCTION DISK VALVE MCH36 (24X15,2X1)
4.8	1			SPRING DISK INOX SUCTION 4 ST. MCH-36
KIT5	1	36-04-025/R		KIT NEW 4TH STAGE HEAD COVER
5.1	1			4TH STAGE HEAD COVER
5.2	1			COPPER WASHER M8 (8X14X1,5)
5.3	1			FITTING OGIVE TUBO Ø8 - 1/4 NPT
5.4	2			SCREW T.C.E. ZINC. 6X40 DIN912
5.5	6			SCREW T.C.E. ZINC. 8X90
5.6	6			GALVANIZED FLAT WASHER M8 (8,5x14x1,5)
5.7	1			NUT INOX BLIND M8 DIN 1587
5.8	1			O-RING 2100 VITON 90 (25.12x1.78) GREEN

4° STADIO - 4th STAGE



Direction of assembly of segments

Cylinder 4th stage

13-03-0158/15
n°5 Segments Ø15mm

13-03-0158/15/RASC
n°1 Oil scraper Ø15mm

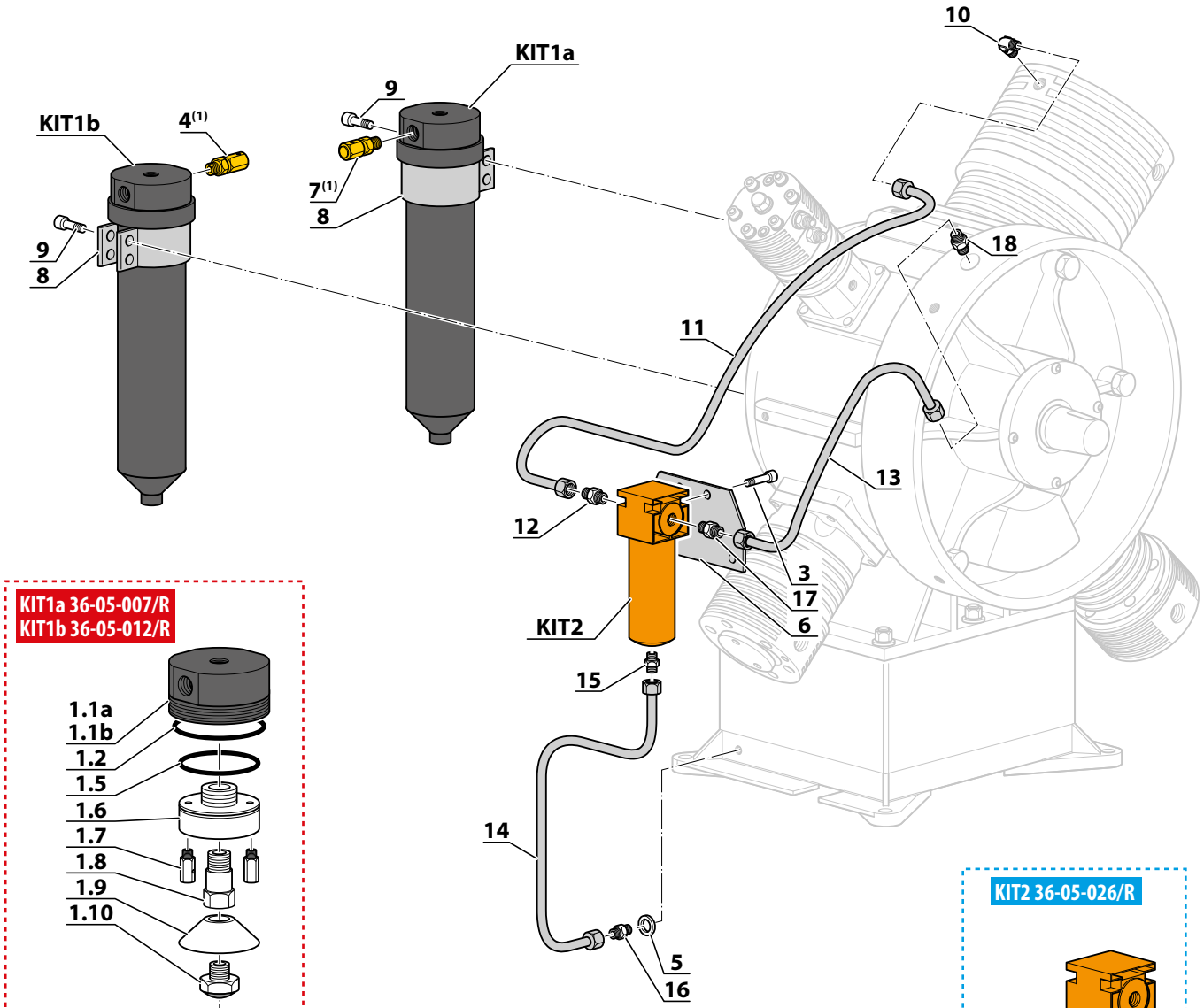
Piston 4th stage

Oil scraper: red side on the left

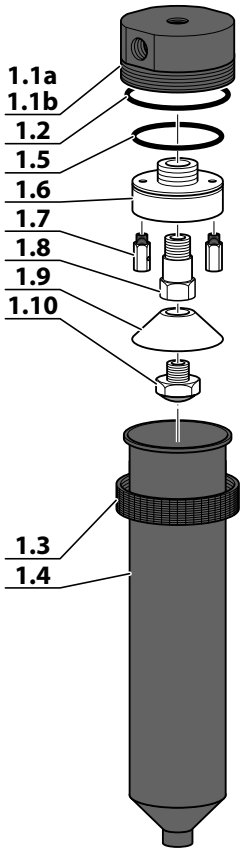
CONDENSATE SEPARATOR

POS.	QTY	CODE		DESCRIPTION
KIT1a	1	36-05-007/R		2ND STAGE CONDENSATE SEPARATOR
KIT1b	1	36-05-012/R		3RD STAGE CONDENSATE SEPARATOR
1.1a	1			2ND STAGE G1/2 SEPARATOR LEFT BODY
1.1b	1			3RD STAGE G3/8 SEPARATOR RIGHT BODY
1.2	1			O-RING 2212 NBR90SH (53.67X1.78)MCH36
1.3	1			SEPARATOR RING
1.4	1			CONDENSATE SEPARATOR PIPE, STAINLESS
1.5	1			OR- 2150 (37,82X1,78) NBR90SH
1.6	1			MCH-13/16 SEPARATOR FITTING INTERNAL PLUG
1.7	2			NEW CONDENSATE SEPARATOR DIFFUSER MCH13/16
1.8	1			EXTENSION OIL DRAIN CAP MCH6
1.9	1			D48 C/F D.13 IN ALL. SP. 1 WASHER
1.10	1			SILENCER 1/4 E90A4003
KIT2	1	36-05-026/R		VENT RECOVERY SEPARATOR KIT
2.1	1			VENT RECOVERY SEPARATOR
2.2	1			VENT RECOVERY SEPARATOR PLUG
2.3	1			O-RING 2131 NBR70 (33.05x1.78)
2.4	1			VENT RECOVERY SEPARATOR CUP
2.5				O-RING NBR 90 SH (29,9x1,78)
3	2	VITE0620		SCREW T.C.E. ZINC. M6x20 DIN912
4	1	36-05-021		SAFETY VALVE 100BAR
5	1	GUAR1319		COPPER GASKET 13,5X19X1,5
6	1	36-05-047		VENT RECOVERY SEPARATOR SUPPORT
7	1	36-05-020		2ND STAGE SAFETY VALVE
8	2	36-05-046		SEPARATOR COLLAR
9	4	13-00-0048I		SCREW TCEI M8X25-8.8 INOX
10	1	36-05-023		FITTING 90° TUBE Ø12
11	1	36-05-024/P		SEPARATOR VENT RECOVERY PIPE
12	1	13-02-0048E/X		FITTING G1/4 - M18X1,5 TUBE Ø12 INOX
13	1	36-05-030/P		CRANKCASE VENT RECOVERY PIPE
14	1	36-05-028/SS/P		OIL VENT RECOVERY PIPE
15	1	13-00-0174E/X		FITTING OGIVE TUBE Ø6 M12X1,5 - 1/8 NPT
16	1	13-00-0025E/X		FITTING ERMETO G1/4-12x1.5 TUBE Ø6
17	1	36-05-147E		FITTING M16X1,5 - G1/4 TUBE Ø12
18	1	36-05-025		FITTING 1/4 NPT - TUBE Ø12

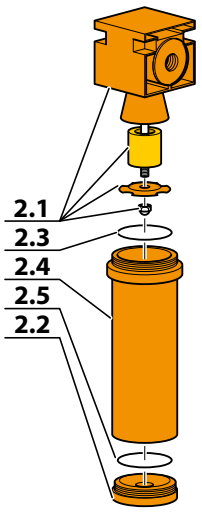
CONDENSATE SEPARATOR



KIT1a 36-05-007/R
KIT1b 36-05-012/R



KIT2 36-05-026/R

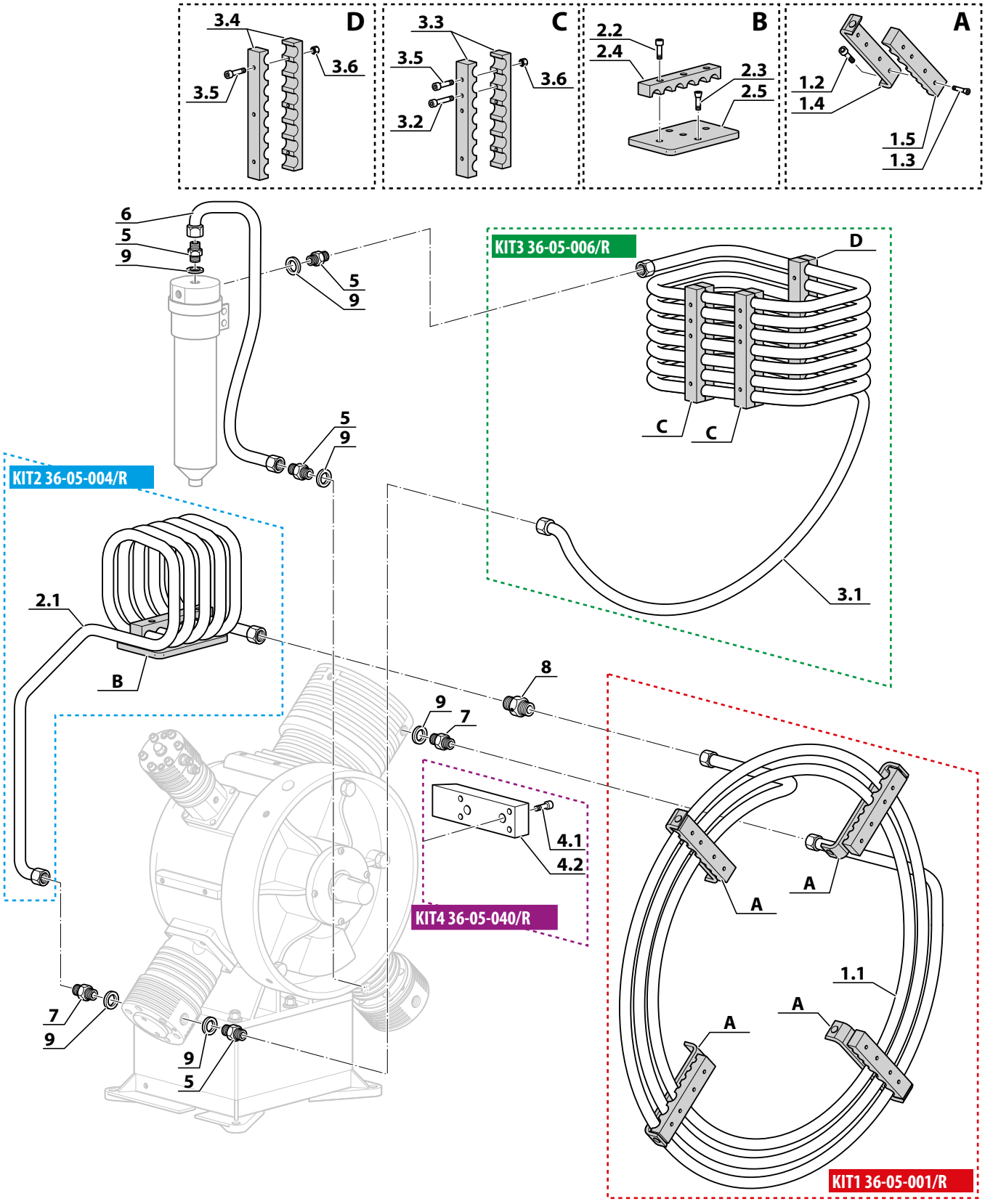


4 - 7 (1) The valve must be tightened with a torque of **20Nm**

1st/2nd PRESSURE CIRCUIT

POS.	QTY	CODE		DESCRIPTION
KIT1	1	36-05-001/R		KIT 1ST STAGE COOLING PIPE (1ST PART)
1.1	1			1ST STAGE COOLING PIPE (1ST PART)
1.2	4			SCREW TCEI INOX M8X25
1.3	16			SCREW TSPEIZN M8X35-10.9
1.4	4			1ST STAGE (1ST PART) COOLING PIPE "L" BRACKET
1.5	4			PIPE BRACKET Ø18 / Ø8
KIT2	1	36-05-004/R		KIT 1ST STAGE COOLING PIPE (2ND PART)
2.1	1			1ST STAGE COOLING PIPE (2ND PART)
2.2	3			SCREW TCEIZN M8X35-8.8
2.3	2			SCREW ZINC.8X30
2.4	1			PIPE BRACKET Ø18 SIX-WAY
2.5	1			1ST STAGE (2ND PART) COOLING PIPE SUPPORT
KIT3	1	36-05-006/R		KIT 2ND/3RD STAGE COOLING PIPE
3.1	1			2ND/3RD STAGE COOLING PIPE
3.2	4			SCREW 6X45 T.C.E. ZINC. DIN 912
3.3	4			INTERNAL PIPE BRACKET Ø15 SEVEN-WAY
3.4	2			EXTERNAL PIPE BRACKET Ø15 EIGHT-WAY
3.5	7			SCREW TCEI M6X40
3.6	7			NUT INOX AUTOBLOCK M6
KIT4	1	36-05-040/R		KIT COOLING PIPE SUPPORT MCH-36
4.1	2			SCREW TCEI INOX M8X25-8.8
4.2	1			COOLING PIPE SUPPORT MCH-36
5	4	36-05-005		FITTING TUBE D.15 G1/2 WITH GASKET
6	1	36-05-009/P		3RD STAGE SEPARATOR CONNECTION PIPE
7	2	36-05-002		FITTING E212 118 L G1/2
8	1	36-05-053		FITTING M26X1,5 TUBE Ø18 WITH 2 HOLE 1/8'NPT
9	6	13-00-0053		COPPER GASKET 21,5x28x1,5

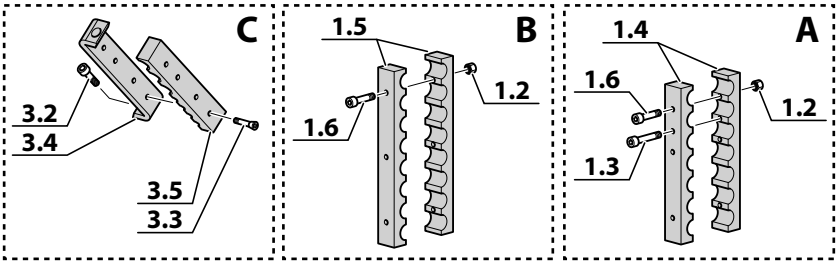
1st/2nd PRESSURE CIRCUIT

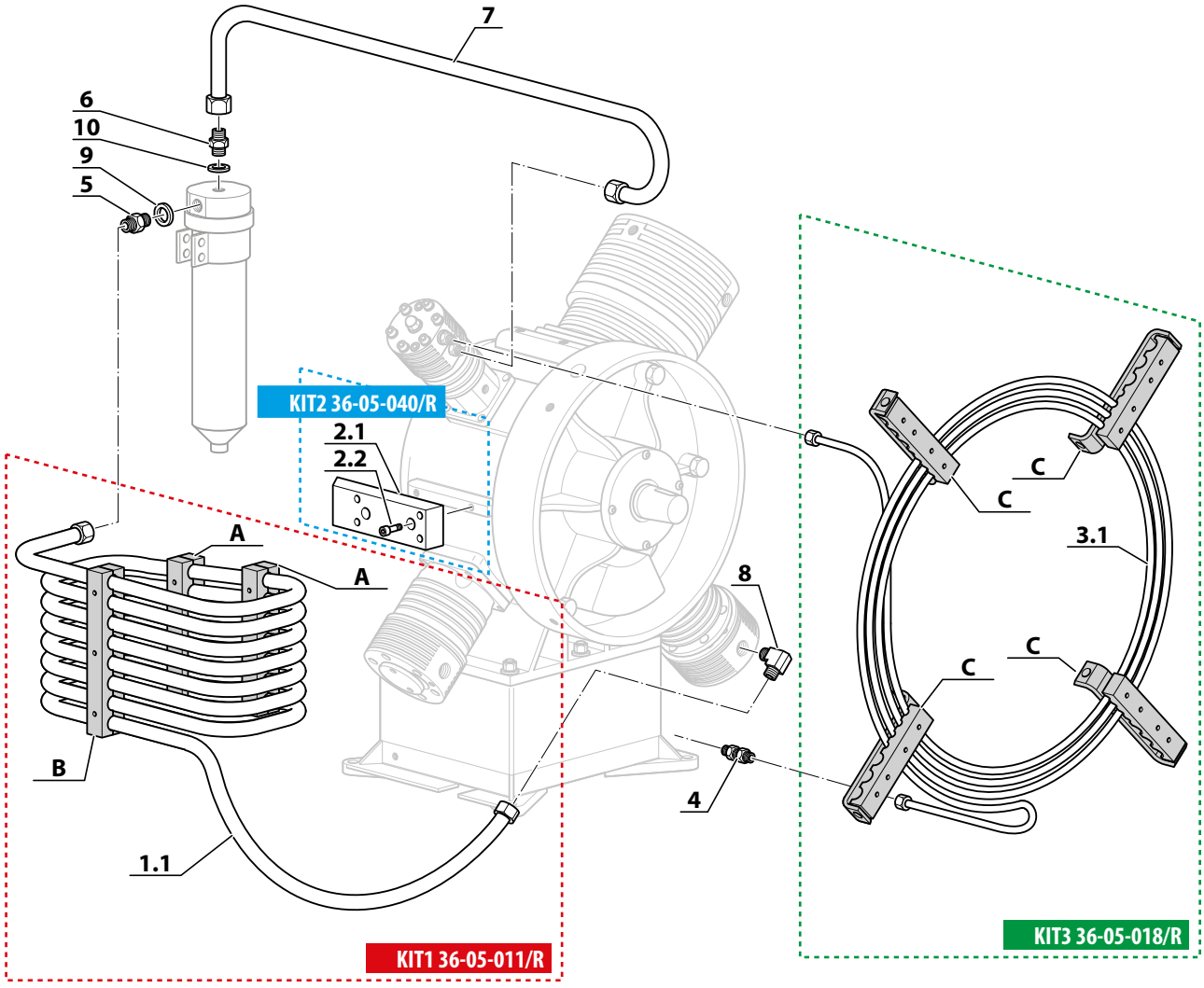


3rd/4th PRESSURE CIRCUIT

POS.	QTY	CODE		DESCRIPTION
KIT1	1	36-05-011/R		KIT 3RD/4TH STAGE COOLING PIPE
1.1	1			3RD/4TH STAGE COOLING PIPE
1.2	7			INOX NUT M6
1.3	4			SCREW 6X45 T.C.E. ZINC. DIN 912
1.4	4			INTERNAL PIPE BRACKET Ø15 SEVEN-WAY
1.5	2			EXTERNAL PIPE BRACKET Ø15 EIGHT-WAY
1.6	7			SCREW TCEI M6X40
KIT2	1	36-05-040/R		KIT COOLING PIPE SUPPORT MCH-36
2.1	1			COOLING PIPE SUPPORT MCH-36
2.2	2			SCREW TCEI INOX M8X25-8.8
KIT3	1	36-05-018/R		KIT 4TH STAGE COOLING PIPE
3.1	1			4TH STAGE COOLING PIPE
3.2	4			SCREW TCEI INOX M8X25
3.3	16			SCREW TSPEIZN M8X35-10.9
3.4	4			1ST STAGE (1ST PART) COOLING PIPE "L" BRACKET
3.5	4			PIPE BRACKET Ø18 / Ø8
4	1	36-05-019		THROUGH-WALL FITTING
5	1	36-05-005		FITTING TUBE D.15 G1/2 WITH GASKET
6	1	36-05-014		FITTING G 3/8' WITH GASKET
7	1	36-05-015/N/P		NEW 3RD/4TH STAGE SEPARATOR CONNECTION PIPE
8	1	36-05-010		FITTING 90° 1/2 NPT TUBE Ø15
9	1	13-00-0053		COPPER GASKET 21,5x28x1,5
10	1	13-01-0009		COPPER GASKET 3/8 (17X23X1.5)

3rd/4th PRESSURE CIRCUIT

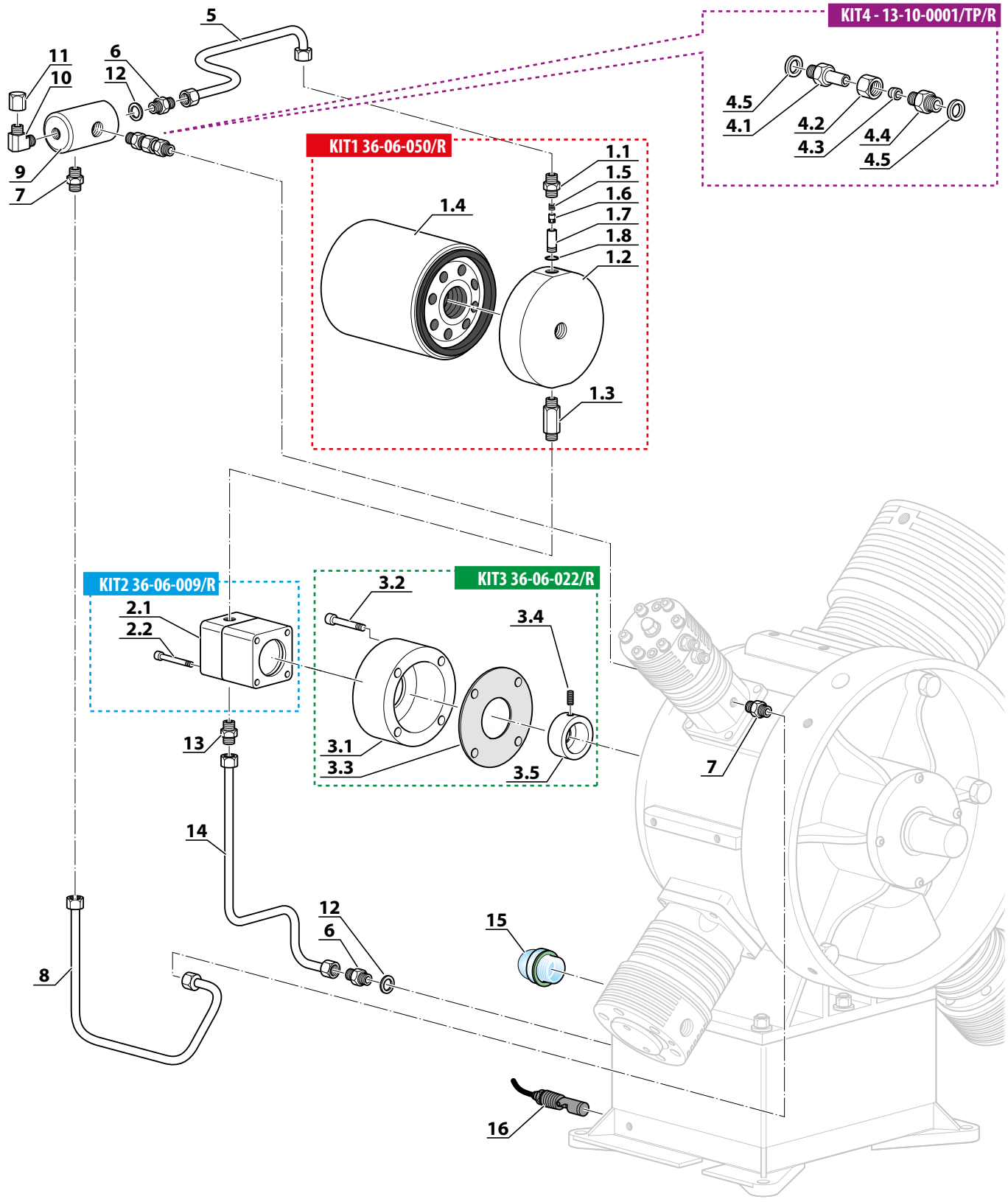




LUBRICATION CIRCUIT

POS.	QTY	CODE		DESCRIPTION
KIT1	1	36-06-050/R		KIT OIL FILTER SUPPORT
1.1	1			FITTING OGIVE TUBE Ø8 14X1.5-1/8 NPT
1.2	1			OIL FILTER SUPPORT
1.3	1			FITTING M 1/8 NPT - M 1/8 NPT
1.4	1	SC000688		OIL FILTER CARTRIDGE (FO0243V)
1.5	1			NON-RETURN VALVE SPRING
1.6	1			OIL PRESSURE RECOVERY PISTON
1.7	1			OIL PRESSURE RECOVERY CYLINDER
1.8	1			O-RING NBR 90 SH° (4.48x1.78)
KIT2	1	36-06-009/R		KIT OIL PUMP
2.1	1			OIL PUMP
2.2	2			SCREW 5X55 T.C.E. ZINC.
KIT3	1	36-06-022/R		KIT OIL PUMP FLANGE
3.1	1			OIL PUMP FLANGE
3.2	4			SCREW TCEI M6X40
3.3	1			OIL PUMP FLANGE GASKET
3.4	1			GRUB SCREW M8X8-8.8 TAPERED END
3.5	1			OIL PUMP COUPLING
KIT4	1	13-10-0001/TP/R		KIT FITTINGS 1/4 CONNECTION 2 HYYPERFILTER
4.1	1			FITTING ERMETO 1/4 - TUBE Ø8
4.2	1			NUT FOR FITTING ERMETO TUBE Ø8
4.3	1			OGIVE RING Ø8M
4.4	1			FITTING ERMETO G1/4-M14X1.5
4.5	2			COPPER WASHER 1/4
5	1	36-06-001/SS/P		OIL PUMP DISCHARGE PIPE
6	2	13-00-0175E/X		FITTING ERMETO G1/4-M14X1.5
7	2	13-00-0174E/X		FITTING OGIVE TUBE Ø6 M12X1,5 - 1/8 NPT
8	1	36-06-032/SS/P		BLOCK/4TH STAGE CONNECTION PIPE Ø6
9	1	36-06-013		OIL PRESSURE REGULATION BLOCK
10	1	13-00-0144		FITTING 90° 1/8 - TUBO 6MM
11	1	6-00-029		OIL BREATHER CAP
12	2	GUAR1319		COPPER WASHER 1/4
13	1	13-04-0175E/X		FITTING OGIVE TUBE Ø8 14X1.5-1/8 NPT
14	1	36-06-012/SS/P		OIL DISCHARGE PIPE
15	2	13-00-0068		OIL LEVEL VIEWER WITH GASKET
16	1	SC000334		OIL LEVEL SWITCH

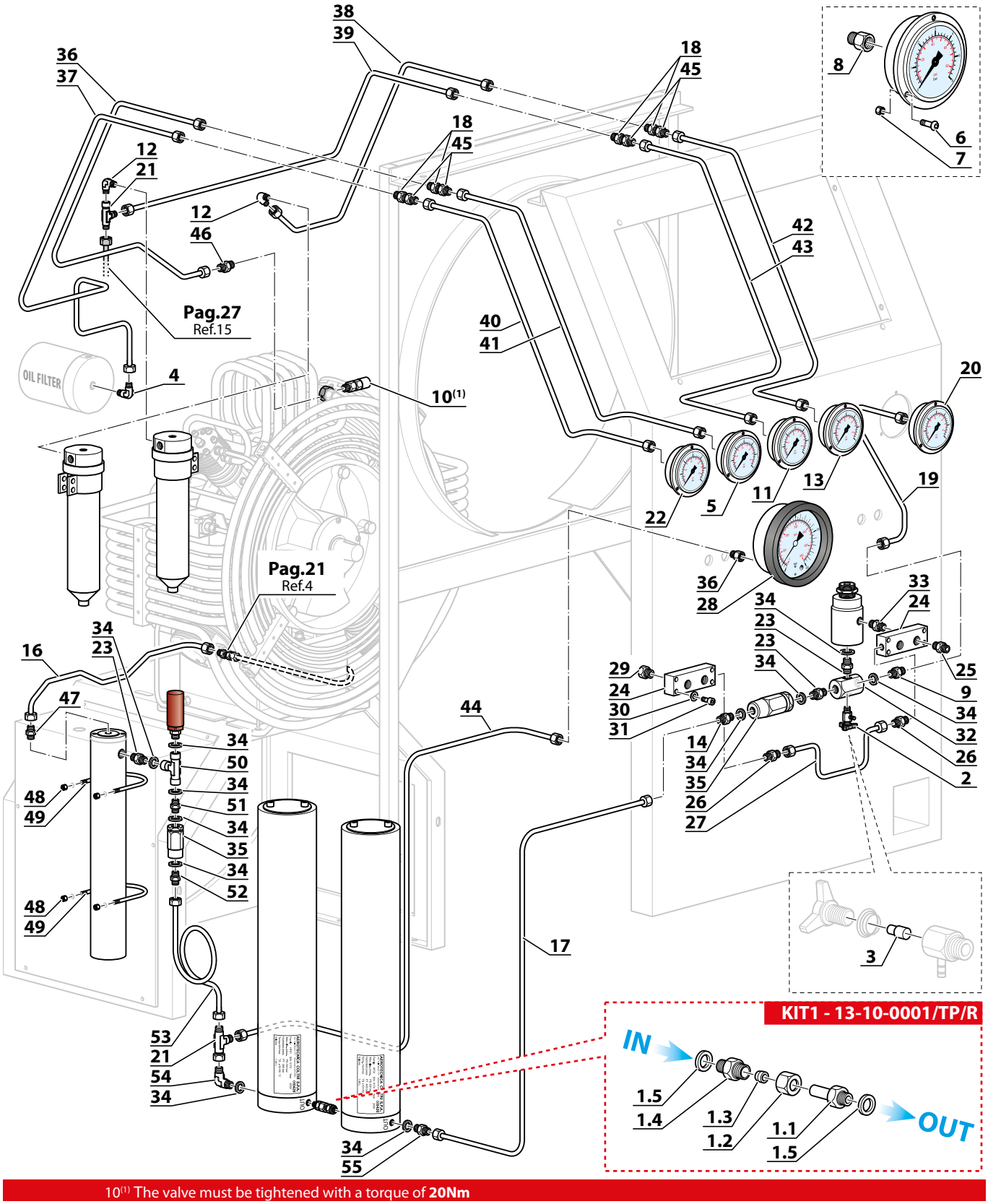
LUBRICATION CIRCUIT



PNEUMATIC CIRCUIT

POS.	QTY	CODE		DESCRIPTION
KIT1	1	13-10-0001/TP/R		KIT FITTINGS 1/4 CONNECTION 2 HYYPERFILTER
1.1	1			FITTING ERMETO 1/4 - TUBE Ø8
1.2	1			NUT FOR FITTING ERMETO TUBE Ø8
1.3	1			OGIVE RING Ø8M
1.4	1			FITTING ERMETO G1/4-M14X1.5
1.5	2			COPPER WASHER 1/4
2	1	13-00-0161-1/4N/P		KIT CONDENSATE DISCHARGE VALVE G1/4 NPT
3	1	13-00-0162		CONDENSATE DISCHARGE NYLON
4	1	13-00-0144		FITTING 90° 1/8 - 7/16 TUBE 6mm
5	1	36-07-005		1ST STAGE FLANGED GAUGE
6	15	36-07-006		SCREW TCEI M3X10 STAINLESS
7	15	DA003I		SELF LOCKING NUT M3 INOX
8	6	6-05-071/X		FITTING INOX 7/16 1/4GB
9	1	13-00-0125		1/4 GAS - 7/16 FITTING
10	1	36-07-066		1ST STAGE SAFETY VALVE
11	1	36-07-011		2ND STAGE FLANGED GAUGE
12	2	36-07-008		FITTING 90° 1/4NPT - 7/16
13	1	36-07-013		3RD STAGE FLANGED GAUGE
14	1	13-00-0175E		FITTING TUBE Ø8 G1/4' WITH GASKET
15	1	13-04-0322/AIR		HP 500mm AIR HOSE
16	1	36-07-014/SS/P		TUBE 4ST STAGE-SEPARATOR
17	1	36-07-039/SS/P		STAINLESS PIPE Ø8 H.F. / V.M.P.
18	4	36-07-003		THROUGH-WALL FITTING 7/16 7/16 MM.44,5
19	1	36-05-080/P		PIPE 4TH STAGE PRESSURE GAUGE-BLOCK MCH36
20	1	13-04-0211/500		FLANGED GAUGE 0-500BAR
21	2	RACC4R6MXS		FITTING 90° 1/8 - 7/16 TUBE 6mm
22	1	36-07-055		OIL PRESSURE FLANGED GAUGE 0-6BAR
23	3	13-04-0225		1/4 GAS-1/4 NPT PIPE FITTING
24	2	13-04-0217/1		RECHARGE RAMP ALUMINIUM BLOCK
25	5	13-00-0025		STRAIGHT FITTING 1/4 TUBE 6MM 7/16
26	2	13-07-0002		FITTING OGIVE TUBE Ø8 - 1/4 NPT
27	1	36-07-049/SS/P		STAINLESS BLOCK CONNECTION PIPE Ø8
28	1	SC000927		DIGITAL PRESSURE SWITCH
29	3	13-07-0003		PLUG 1/4 NPT
30	8	RON6I		FLAT WASHER M6 INOX DIN125
31	8	VITE0614		SCREW TCEI 6x14
32	1	36-07-093-1/4-1		BLOCK 1/4 GAS - 1/4 NPT
33	1	36-07-053		1/4 NPT - 1/4 NPT FITTING
34	11	GUAR1319		COPPER WASHER 1/4
35	2	13-05-0492/P		CHECK VALVE
36	1	36-05-076/P		PIPE 1ST STAGE PRESSURE - EXTERNAL BULKHEAD MCH36
37	1	36.0.D1S4.0010		PIPE OIL PRESSURE - EXTERNAL BULKHEAD MCH36
38	1	36-05-072/P		PIPE 3RD STAGE SEPARATOR - EXTERNAL BULKHEAD MCH36
39	1	36-05-077/P		PIPE 2ND STAGE SEPARATOR - EXTERNAL BULKHEAD MCH36
40	1	36-05-079/P		PIPE OIL PRESSURE GAUGE - INSIDE BULKHEAD
41	1	36-05-073/P		PIPE 1ST STAGE PRESSURE GAUGE - INSIDE BULKHEAD
42	1	36-05-075/P		PIPE 3RD STAGE PRESSURE GAUGE - INSIDE BULKHEAD
43	1	36-05-074/P		PIPE 2ND STAGE PRESSURE GAUGE - INSIDE BULKHEAD
44	1	36-05-071/P		PIPE PRESSURE SWITCH - T BEFORE FILTER MCH36
45	4	36-07-003/D		NUT FOR BULKHEAD FITTING 36-07-003/C
46	1	13-00-0174		FITTING 1/8 NPT - 7/16 UNF TUBE 6mm
47	1	36-05-017		FITTING ERMETO G1/4 M14x1,5 TUBE Ø8
48	4	13-00-0101I		NUT INOX AUTOBLOCK M8
49	2	13-00-0093		FILTER HOLDER BRACKET
50	1	RAC/1/4/T		FITTING "T" FFF 1/4
51	1	RAC/1/4G-1/4G		FITTING 1/4G M-1/4 G M
52	1	RAC4-4F40MXS		FITTING 4-4F40MXS 1/4G-7/16-20UNF
53	1	36-07-081/P		PIPE Ø6X1 SS SEP-HYPERFILTER
54	1	S600-06-13G		FITTING 90° 1/4 GAS 7/16 UNF TURNING
55	1	13-00-0175E/X		FITTING ERMETO G1/4-M14X1.5

PNEUMATIC CIRCUIT

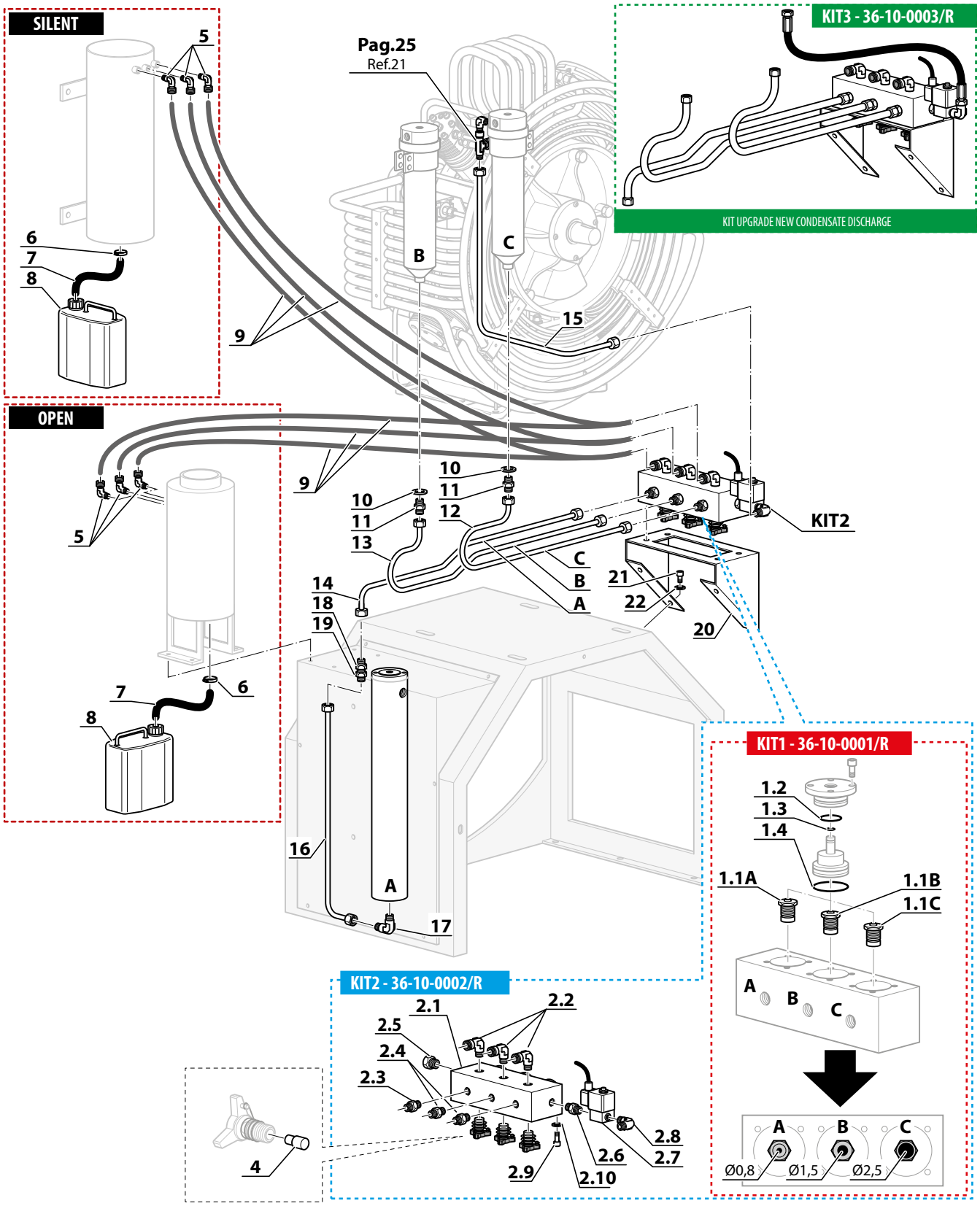


10(1) The valve must be tightened with a torque of **20Nm**

CONDENSATE DISCHARGE CIRCUIT

POS.	QTY	CODE		DESCRIPTION
KIT1	1	36-10-0001/R		KIT NOZZLES CONDENSATE DRAIN MCH-30-36
1.1A	1			NOZZLE CONDENSATE DRAIN Ø0,8
1.1B	1			NOZZLE CONDENSATE DRAIN Ø1,5
1.1C	1			NOZZLE CONDENSATE DRAIN Ø2,5
1.2	3			O RING 2106 NBR 90 SH (29,9x1,78)
1.3	3			O RING 2018 90SH (4,48X1,78)
1.4	3			O RING 2100 VITON 90 (25.12x1.78)
KIT2	1	36-10-0002/R		KIT CONDENSATE DISCHARGE MCH-30-36
2.1	1			KIT CONDENSATE DISCHARGE MCH-36
2.2	3			FITTING 90° 1/8 NPT TUBE Ø8 MM RILSAN
2.3	1			FITTING OGIVE TUBE Ø8 14X1.5-1/8 NPT
2.4	2			FITTING TUBE Ø6 G1/8
2.5	1			PLUG 1/8 NPT
2.6	1			STRAIGHT FITTING M 1/8 NPT - M 1/8 NPT
2.7	1	36-07-067		L.P. SYSTEM SOL. VALVE OPEN
2.8	1			FITTING 90° 1/8 - TUBO 6MM
2.9	4			SCREW TCEI M6x16 INOX
2.10	4			WASHER INOX M6 DIN 988
KIT3	1	36-10-0003/R		KIT UPGRADE NEW CONDENSATE DISCHARGE
4	1	13-00-0162		CONDENSATE DISCHARGE NYLON
5	3	RAC1500-8/6-1/4		FITTING 90° 1500 8/6 1/4
6	1	FASC/3B/17/29		CLIP INOX 3B D.17/29
7	1	36-07-080		S.C. PIPE Ø17X22 L. 120
8	1	TAN/80/5		S.C. TANK LT 5 1 HOLE 25MM
9	0,8	TUBRILSAN8X6		RILSAN HOSE 8X6
10	2	GUAR1319		COPPER WASHER 1/4
11	2	13-00-0025E/X		FITTING ERMETO G1/4-12x1.5 TUBE Ø6
12	1	36-07-059/SS/P		2ND STAGE SEPARATOR Ø6 STAINLESS PIPE
13	1	36-07-061/SS/P		3RD STAGE SEPARATOR Ø6 STAINLESS PIPE
14	1	36-07-062/SS/P		4TH STAGE SEPARATOR Ø6 STAINLESS PIPE
15	1	36-05-00240/N/P		SEPARAT-BLOCK STAINLESS PIPE
16	1	36-07-064/SS/P		S.C. STAINLESS PIPE
17	1	36-07-065		90° FITTING 1/8 NPT
18	1	36-05-019		THROUGH-WALL FITTING
19	1	36-05-019/D		NUT THROUGH-WALL FITTING 7/16-7/16 MM44.5
20	1	36-05-045		SUPPORT BLOCK CONDENSATE DRAIN
21	4	VITE0620I		SCREW T.C.E. INOX M6x20 DIN912
22	4	RON0618I		WASHER INOX M6 (6,5X18X2)

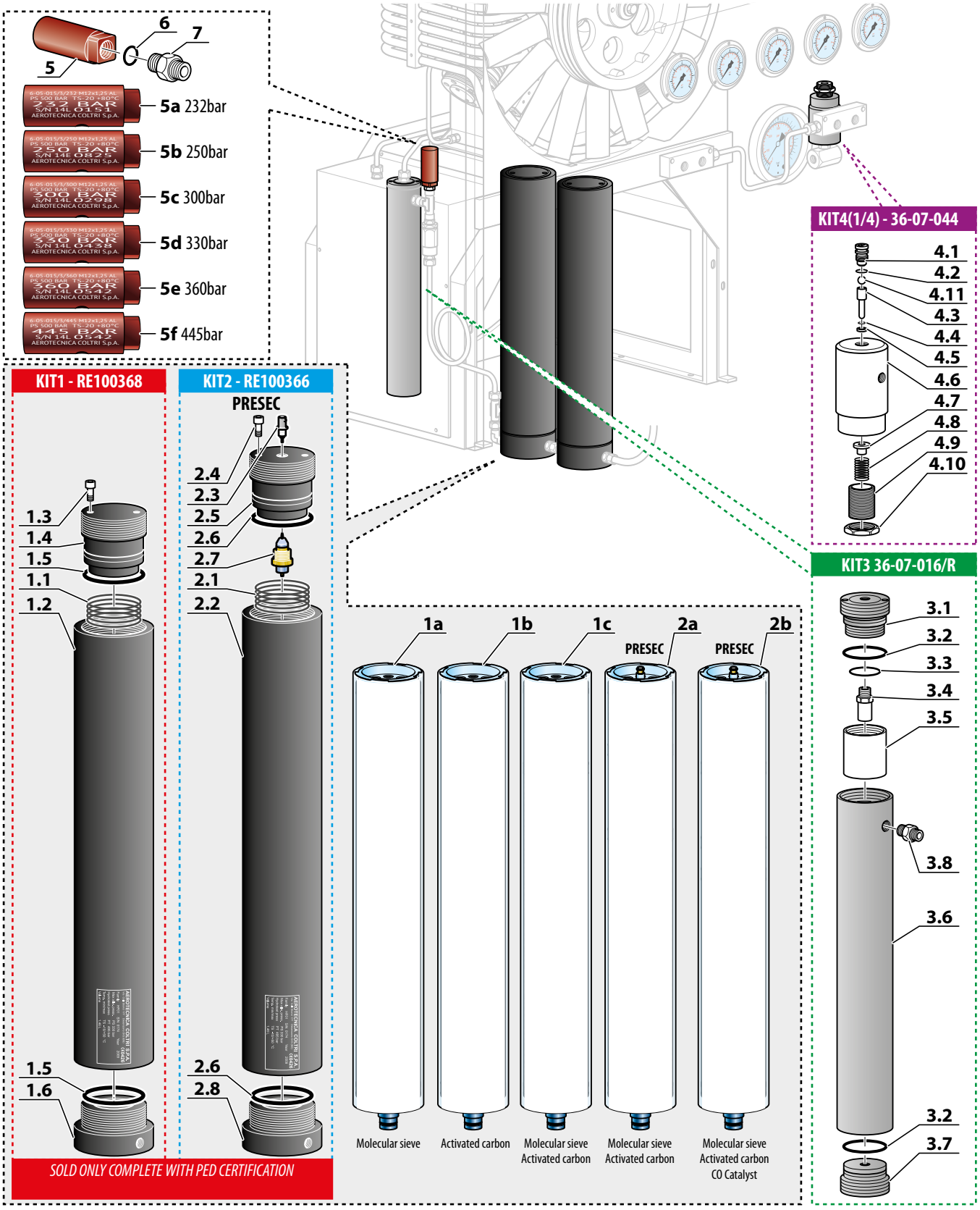
CONDENSATE DISCHARGE CIRCUIT



HYPERFILTER - CONDENSATE SEPARATOR - MAINTENANCE VALVE - SAFETY VALVE

POS.	Q.TY	CODE		DESCRIPTION
KIT1	1	RE100368		HYPER FILTER (without Hyper cartridge)
1.1	1			HYPERFILTER CARTRIDGE SPRING
1.2	1			HYPERFILTER BODY 110MM
1.3	2			SCREW T.C.E INOX 10X16 DIN912
1.4	1			UPPER PLUG WITHOUT SENSOR
1.5	2	OR-6250		O RING 6250 NBR 90 (62,87X5,34)
1.6	1			LOWER CAP HYPERFILTER HOLES TO 1/4G
KIT2	1	RE100366		HYPER FILTER PRESEC (without Hyper cartridge)
2.1	1			HYPERFILTER CARTRIDGE SPRING
2.2	1			HYPERFILTER BODY
2.3	1			PRESEC CONNECTOR
2.4	2			SCREW T.C.E INOX 10X16 DIN912
2.5	1			UPPER PLUG WITH SENSOR
2.6	2	OR-6250		O RING 6250 NBR 90 (62,87X5,34)
2.7	1			PRESEC SENSOR
2.8	1			LOWER CAP HYPERFILTER HOLES TO 1/4G
1a	1	36-07-034/PP/A-MS		HYPERFILTER MOLECULAR SIEVE CARTRIDGE
1b	1	36-07-034/PP/CARB		HYPERFILTER ACTIVE CARBON CARTRIDGE
1c	1	36-07-034/PP/B-AC		HYPERFILTER ACT. CARB./MOLEC. SIEVE CARTRIDGE
2a	1	SC000543		HYPERFILTER PRESEC CARBON/SIEVE CARTRIDGE
2b	1	SC000543/CO		HYPERFILTER PRESEC CARB./SIEVE/HOPK. CARTRIDGE
KIT3	1	36-07-016/R		KIT CONDENSATE DISCHARGE
3.1	1			4TH STAGE SEPARATOR UPPER PLUG
3.2	2	OR-6162V		O-RING 6162 VITON 90SH (40.65X5,33)
3.3	1	13-01-0013		O-RING 3137 NBR90SH (34.60X2.62)
3.4	1	36-07-023		4TH STAGE SEPARATOR FILTER
3.5	1			4TH STAGE SEPARATOR UPPER PLUG PIPE
3.6	1			4TH STAGE SEPARATOR BODY
3.7	1			4TH STAGE SEPARATOR LOWER PLUG
3.8	1			FITTING 1/4 GAS - 1/4 NPT
KIT4	1	36-07-044		PRESSURE MAINTENANCE VALVE MCH36
4.1	1			MAINTENANCE VALVE SCREW MCH13/16
4.2	1			O RING 2025 NBR90SH (6,07X1,78)
4.3	1			MAINTENANCE VALVE PISTON MCH13/16
4.4	1			O RING 2015 NBR90SH (3,69X1,78)
4.5	1			TEFLON RING VMP PISTON
4.6	1			MAINTENANCE VALVE BODY1/8 NPT
4.7	1			VMP PISTON SCREW SPACER
4.8	1			SAFETY VALVE SPRING
4.9	1			VMP CAP
4.10	1			VMP NUT M20X1,5
4.11	1			STAINLESS STEEL BALL Ø5 VMP
5a	1	6-05-015/3/232		SAFETY VALVE (232 BAR / 3300 PSI)
5b	1	6-05-015/3/250		SAFETY VALVE (250 BAR / 3600 PSI)
5c	1	6-05-015/3/300		SAFETY VALVE (300 BAR / 4300 PSI)
5d	1	6-05-015/3/330		SAFETY VALVE (330 BAR / 4700 PSI)
5e	1	6-05-015/3/360		SAFETY VALVE (360 BAR / 5200 PSI)
5f	1	6-05-015/3/445		SAFETY VALVE (445 BAR / 6400 PSI)
6	1	OR-114/90		O-RING 114 NBR90SH
7	1	36-06-200		SAFETY VALVE FITTING 1/4G-M12X1,25

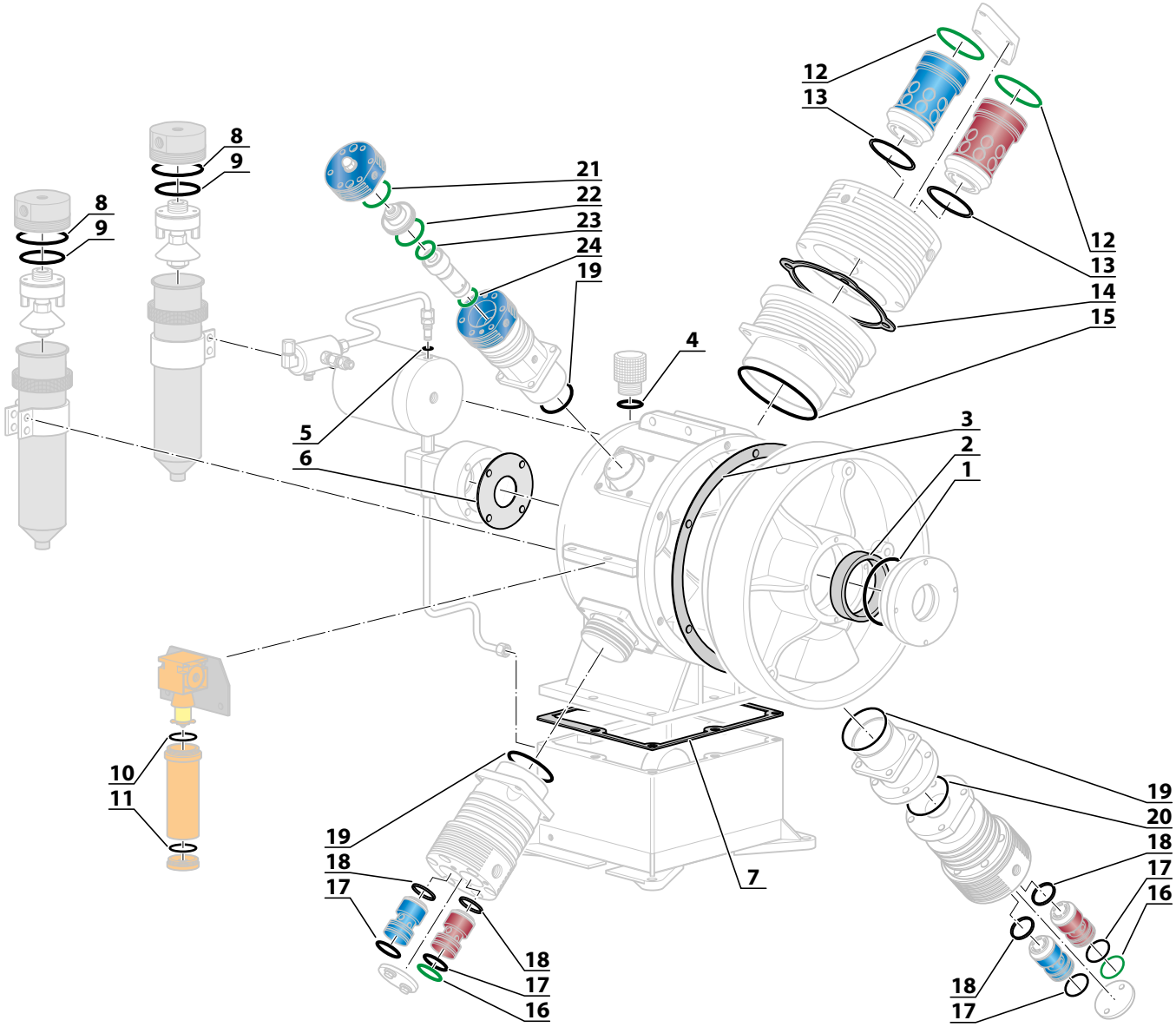
HYPERFILTER - CONDENSATE SEPARATOR - MAINTENANCE VALVE - SAFETY VALVE



GASKETS PUMPING GROUP

POS.	QTY	CODE		DESCRIPTION
1	10	OR-2250		O RING 2250 NBR90SH(63,22X1,78)
2	10	36-00-039		OIL SPLASH GUARD A 40X55X7 NBR
3	1	36-00-034		GASKET CRANKCASE FLANGE
4	10	OR-4131/90		O-RING 4131 NBR 90 (D32,92x3.53)
5	10	OR-2018/90		O-RING NBR 90 SH° (4.48x1.78)
6	10	36-06-021		OIL PUMP FLANGE GASKET
7	1	36-00-003		GASKET CRANKCASE-BASE
8	10	36-05-008		O-RING 2212 NBR90SH (53.67X1.78)MCH36
9	10	OR-2150		OR- 2150 (37,82X1,78) NBR90SH
10	10	36-05-052		O-RING 2131 NBR70 (33.05x1.78)
11	10	OR-2118		O-RING NBR 90 SH (29,9x1,78)
12	10	36-01-023		O-RING 3256 VITON90SH GREEN (64,77X2,62)
13	10	36-01-020		COPPER WASHER 65X70X1
14	1	36-01-009		HEAD GASKET 1ST STAGE M-36 130MNM
15	10	36-01-005		O-RING 2525 NBR90SH(133,10X1,78)
16	10	OR-2112/V/V		O RING 2112 VITON 90SH GREEN
17	10	36-02-014		O-RING 4112 VITON90SH (28.17X3.53)
18	10	36-02-011		COPPER WASHER 28X34X1
19	10	13-00-0015		O-RING 2275 NBR90SH (69.57X1.78)
20	10	13-00-0039		O-RING 3237 NBR90SH (60.00X2.62)
21	10	13-03-0123/90		O-RING 2100 VITON 90 (25.12x1.78) GREEN
22	10	OR-3137		OR-3137 VITON 90SH (34.60X2.62)
23	10	OR-2106/V/V		O-RING 2106 VITON 90 SH GREEN (26,7X1,78)
24	10	OR-2081/V/90		O-RING 2081 VITON 90 SH GREEN (20.35X1.78)

GASKETS PUMPING GROUP



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