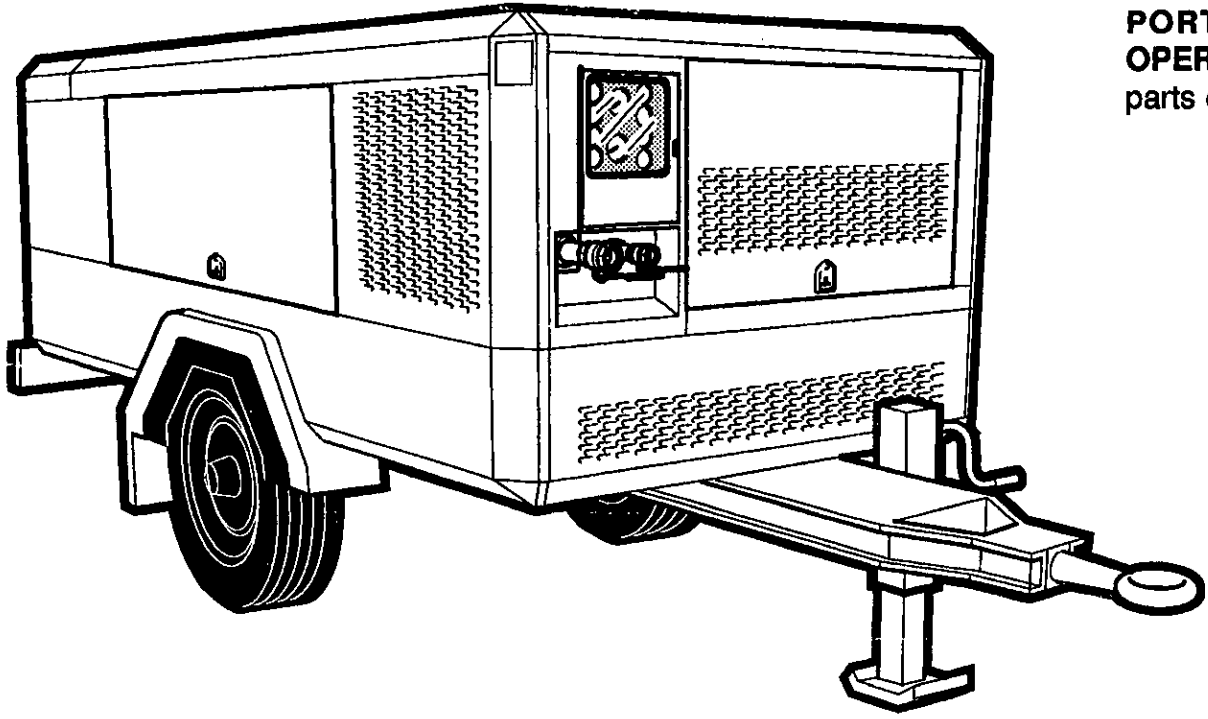
INGERSOLL-RAND®

XHP760 2T MoD

PORTABLE COMPRESSOR CATERPILLAR ENGINE
OPERATION AND MAINTENANCE MANUAL with
parts catalogue



Doosan purchased Bobcat Company from Ingersoll-Rand Company in 2007. Any reference to Ingersoll-Rand Company or use of trademarks, service marks, logos, or other proprietary identifying marks belonging to Ingersoll-Rand Company in this manual is historical or nominative in nature, and is not meant to suggest a current affiliation between Ingersoll-Rand Company and Doosan Company or the products of either.

C.P.N : 89259089
ISSUE : 1
DATE : JUNE 1998
Revised (09-12)

SERIAL NUMBER RANGE

860299	TO	860499

CE

EC DECLARATION OF CONFORMITY

WITH EC DIRECTIVES

P. RANGE
TAPE 1.

89/392/EEC, 91/368/EEC, 93/44/EEC, 93/68/EEC, 89/336/EEC

WE

INGERSOLL-RAND COMPANY LIMITED
STANDARD PRODUCTS DIVISION
SWAN LANE
HINDLEY GREEN
WIGAN WN2 4EZ
UNITED KINGDOM

DECLARE THAT, UNDER OUR SOLE RESPONSIBILITY FOR MANUFACTURE AND SUPPLY, THE PRODUCT(S)

XHP760 2T MoD

TO WHICH THIS DECLARATION RELATES, IS (ARE) IN CONFORMITY WITH THE PROVISIONS OF THE ABOVE DIRECTIVES USING THE FOLLOWING PRINCIPAL STANDARDS.

EN29001, EN292, EN60204-1, EN1012-1, PN8NTC2, EN50081, EN50082

ISSUED AT HINDLEY GREEN ON 01/01/1998 BY H.SEDDON, QUALITY ASSURANCE MANAGER

H.SEDDON

Revision 00
03/94

WARNING: Electrical shock risk.

WARNING – Hot surface.

WARNING – Corrosion risk.

WARNING – Pressurised component or system.

WARNING – Maintain correct tyre pressure. (Refer to the *GENERAL INFORMATION* section of this manual).

WARNING – Pressurised vessel.

WARNING – Pressure control.

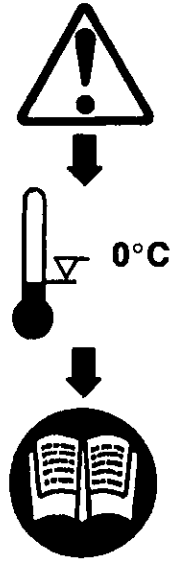
WARNING – Air/gas flow or Air discharge.

WARNING – Hot and harmful exhaust gas.

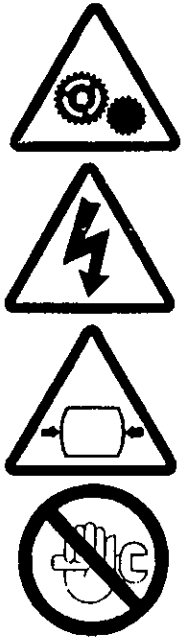
WARNING – Flammable liquid.

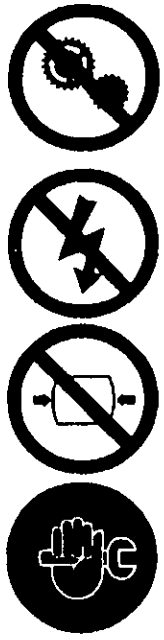
XHP760 2T
MoD

WARNING – Before connecting the tow bar or commencing to tow consult the operation and maintenance manual.



WARNING – For operating temperature below 0°C, consult the operation and maintenance manual.





WARNING – Do not undertake any maintenance on this machine until the electrical supply is disconnected and the air pressure is totally relieved.

WARNING – Consult the operation and maintenance manual before commencing any maintenance.

Do not breathe the compressed air from this machine.

Do not stack.

Do not stand on any service valve or other parts of the pressure system.

Do not use fork lift truck from this side.

No naked lights.

Do not remove the Operating and Maintenance manual and manual holder from this machine.

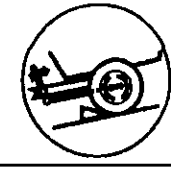
Do not operate the machine without the guard being fitted.

Do not operate with the doors or enclosure open.

Do not exceed the trailer speed limit.

Do not open the service valve before the airhose is attached

XHP760 2T
MoD

 Use fork lift truck from this side only.	 Emergency stop.
 Tie down point	 On (power).
 Lifting point.	 Off (power).
 Read the Operation and Maintenance manual before operation or maintenance of this machine is undertaken.	 When parking use prop stand, handrake and wheel chocks.
	 Contains asbestos.

WARNINGS

Warnings call attention to instructions which must be followed precisely to avoid injury or death.

CAUTIONS

Cautions call attention to instructions which must be followed precisely to avoid damaging the product, process or its surroundings.

NOTES

Notes are used for supplementary information.

SAFETY PRECAUTIONS

General Information

Ensure that the operator reads and *understands* the decals and consults the manuals before maintenance or operation.

Ensure that the Operation and Maintenance manual, and the manual holder, are not removed permanently from the machine.

Ensure that maintenance personnel are adequately trained, competent and have read the Maintenance Manuals.

Make sure that all protective covers are in place and that the canopy/doors are closed during operation.

The specification of this machine is such that the machine is not suitable for use in flammable gas risk areas. If such an application is required then all local regulations, codes of practice and site rules must be observed. To ensure that the machine can operate in a safe and reliable manner, additional equipment such as gas detection, exhaust spark arrestors, and intake *(shut–off)* valves may be required, dependant on local regulations or the degree of risk involved.

Compressed air

Compressed air can be dangerous if incorrectly handled. Before doing any work on the unit, ensure that all pressure is vented from the system and that the machine cannot be started accidentally.

Ensure that the machine is operating at the rated pressure and that the rated pressure is known to all relevant personnel.

All air pressure equipment installed in or connected to the machine must have safe working pressure ratings of at least the machine rated pressure.

If more than one compressor is connected to one common downstream plant, effective check valves and isolation valves must be fitted and controlled by work procedures, so that one machine cannot accidently be pressurised / over pressurised by another.

Compressed air must not be used for a direct feed to any form of breathing apparatus or mask.

The discharged air contains a very small percentage of compressor lubricating oil and care should be taken to ensure that downstream equipment is compatible.

If the discharged air is to be ultimately released into a confined space, adequate ventilation must be provided.

When using compressed air always use appropriate personal protective equipment.

All pressure containing parts, especially flexible hoses and their couplings, must be regularly inspected, be free from defects and be replaced according to the Manual instructions.

Avoid bodily contact with compressed air.

The safety valve located in the separator tank must be checked periodically for correct operation.

Materials

The following substances *may* be produced during the operation of this machine:

. brake lining dust
. engine exhaust fumes

AVOID INHALATION

Ensure that adequate ventilation of the cooling system and exhaust gases is maintained at all times.

The following substances are used in the manufacture of this machine and *may* be hazardous to health if used incorrectly:

. anti-freeze
. compressor lubricant
. engine lubricant
. preservative grease
. rust preventative
. diesel fuel
. battery electrolyte

AVOID INGESTION, SKIN CONTACT AND INHALATION OF FUMES

Components of a non-metallic fibrous material may contain small quantities of white asbestos. When handling, dismantling or assembling these components, the following must be observed:

. *Always operate in a well ventilated area.*
. *Dispose of waste in a sealed container.*
. *Use water to damp down dust.*
. *Avoid inhalation of dust particles.*

XHP760 2T
MoD

Should compressor lubricant come into contact with the eyes, then irrigate with water for at least 5 minutes.

Should compressor lubricant come into contact with the skin, then wash off immediately.

Consult a physician if large amounts of compressor lubricant are ingested.

Consult a physician if compressor lubricant is inhaled.

Never give fluids or induce vomiting if the patient is unconscious or having convulsions.

Safety data sheets for compressor and engine lubricants should be obtained from the lubricant supplier.

Battery

Batteries contain corrosive liquid and produce explosive gas. Do not expose to naked lights. Always wear personal protective clothing when handling. When starting the machine from a slave battery ensure that the correct polarity is observed and that connections are secure.

DO NOT ATTEMPT TO SLAVE START A FROZEN BATTERY SINCE THIS MAY CAUSE IT TO EXPLODE.

Radiator

Hot engine coolant and steam can cause injury. Ensure that the radiator filler cap is removed with due care and attention.

Engine starting fluid (ether)

This machine is fitted with an ether cold starting aid.

AVOID INGESTION, INHALATION, HOT SURFACES AND NAKED LIGHTS

Transport

When loading or transporting machines ensure that the specified lifting and tie down points are used.

When loading or transporting machines ensure that the towing vehicle, its size, weight, towing hitch and electrical supply are all suitable to provide safe and stable towing at speeds either, up to the legal maximum for the country in which it is being towed or, as specified for the machine model if lower than the legal maximum.

Before towing the machine, ensure that:-

- the tyres and towing hitch are in a serviceable condition.
- the canopy is secure.
- all ancillary equipment is stored in a safe and secure manner.

When parking always use the handbrake and, if necessary, suitable wheel chocks.

2.0 CONTENTS / ABBREVIATIONS

XHP760 2T
MoD

ABBREVIATIONS

*	Not illustrated
†	Option
AR	As required
AUS	Australia
D	Germany
DK	Denmark
E	Spain
F	France
GB	Great Britain
I	Italy
N	Norway
NL	Netherlands
P	Portugal
S	Sweden
SA	Saudi Arabia
SF	Finland

3.0 FOREWORD

The contents of this manual are considered to be proprietary and confidential to Ingersoll-Rand and should not be reproduced without the prior written permission of Ingersoll-Rand.

Nothing contained in this document is intended to extend any promise, warranty or representation, expressed or implied, regarding the Ingersoll-Rand products described herein. Any such warranties or other terms and conditions of sale of products shall be in accordance with the standard terms and conditions of sale for such products, which are available upon request.

This manual contains instructions and technical data to cover all routine operation and scheduled maintenance tasks by operation and maintenance staff. Major overhauls are outside the scope of this manual and should be referred to an authorised Ingersoll-Rand service department.

The design specification of this machine has been certified as complying with EC directives. As a result:

(a) Any machine modifications are strictly prohibited, and will invalidate EC certification.

(b) This machine must not be used in USA/Canada. (Where EC certification is not valid, and other certification will be required.)

All components, accessories, pipes and connectors added to the compressed air system should be:

- of good quality, procured from a reputable manufacturer and, wherever possible, be of a type approved by Ingersoll-Rand.
- clearly rated for a pressure at least equal to the machine maximum allowable working pressure.
- compatible with the compressor lubricant/coolant.
- accompanied with instructions for safe installation, operation and maintenance.

Details of approved equipment are available from Ingersoll-Rand Service departments.

The use of repair parts other than those included within the Ingersoll-Rand approved parts list may create hazardous conditions over which Ingersoll-Rand has no control. Therefore Ingersoll-Rand cannot be held responsible for equipment in which non-approved repair parts are installed.

Ingersoll-Rand reserves the right to make changes and improvements to products without notice and without incurring any obligation to make such changes or add such improvements to products sold previously.

The intended uses of this machine are outlined below and examples of unapproved usage are also given, however Ingersoll-Rand cannot anticipate every application or work situation that may arise.

IF IN DOUBT CONSULT SUPERVISION.

3.2 FOREWORD

XHP760 2T
MoD

This machine has been designed and supplied for use only in the following specified conditions and applications:

- Compression of normal ambient air containing no known or detectable additional gases, vapours. or particles
- Operation within the ambient temperature range specified in the *GENERAL INFORMATION* section of this manual.

The use of the machine in any of the situation types listed in table 1:-

a) Is not approved by Ingersoll-Rand,
b) May impair the safety of users and other persons, and
c) May prejudice any claims made against Ingersoll-Rand.

TABLE 1

Use of the machine to produce compressed air for: a) direct human consumption b) indirect human consumption, without suitable filtration and purity checks.
Use of the machine outside the ambient temperature range specified in the *GENERAL INFORMATION SECTION* of this manual.
Use of the machine where there is any actual or foreseeable risk of hazardous levels of flammable gases or vapours.
Use of the machine fitted with *non Ingersoll-Rand approved components.*
Use of the machine with safety or control components missing or disabled.

The company accepts no responsibility for errors in translation of this manual from the original English version.

DEXRON is a registered trademark of General Motors Corporation.

3.4

XHP760 2T
MoD

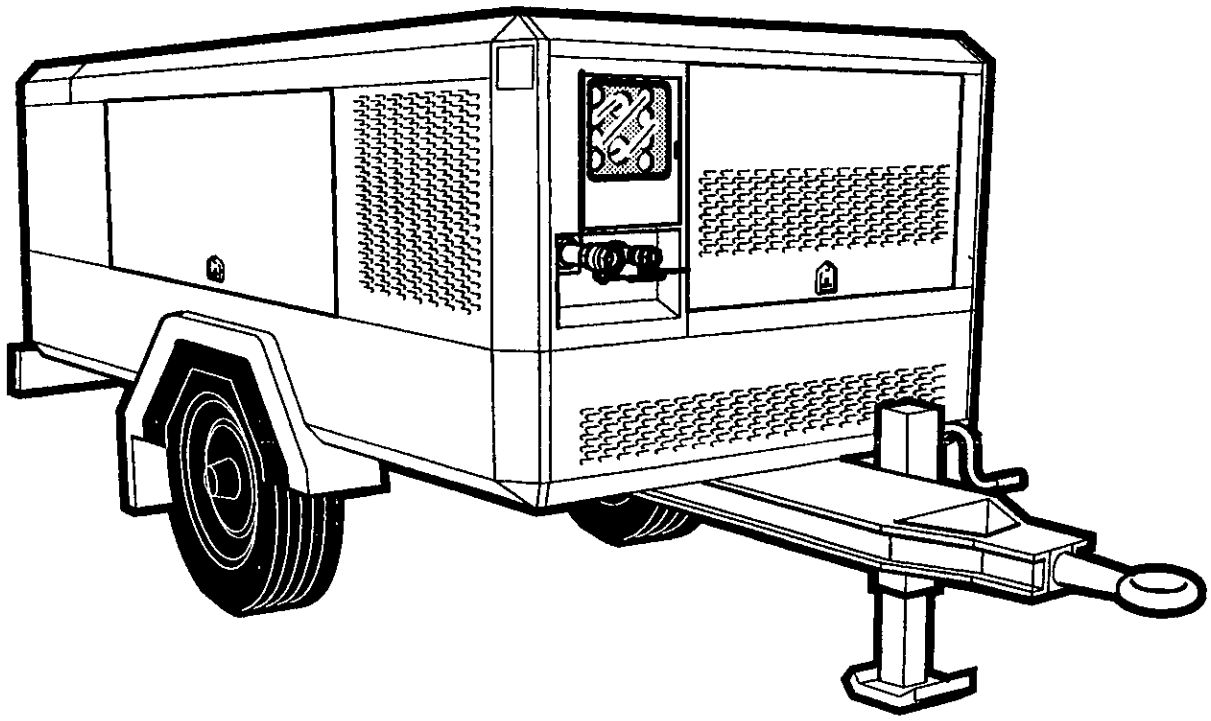
INGERSOLL-RAND®

Revision 00
05/98

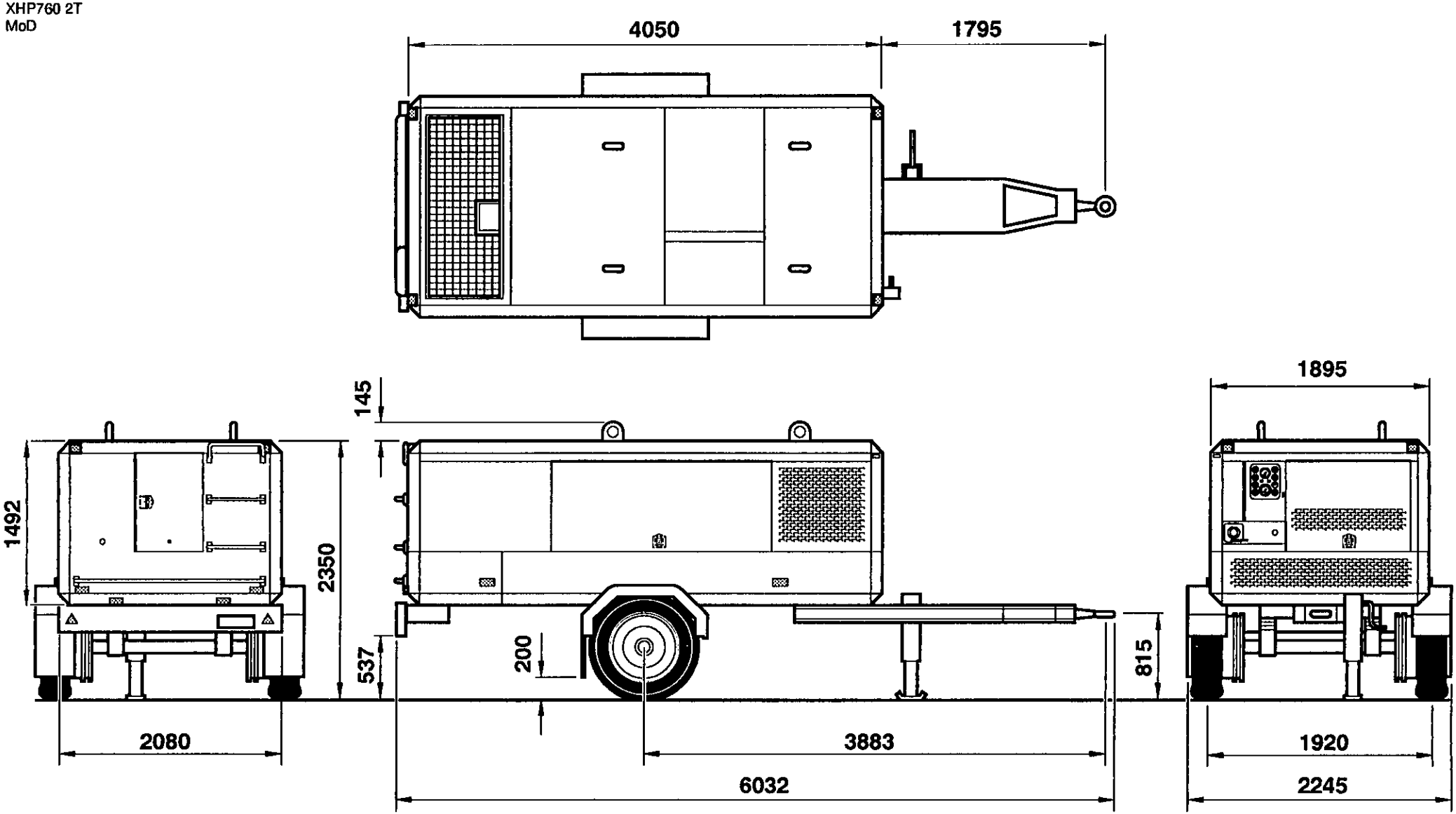
INGERSOLL-RAND®

XHP760 2T MoD

OPERATION AND MAINTENANCE MANUAL



XHP760 2T
MoD



T1990
Revision 00
05/98

XHP760 2T
MoD

COMPRESSOR

Model.	**XHP760**
Actual free air delivery.	21,2 m^3 min^{-1}.
Normal operating discharge pressure.	20,7 bar
Maximum allowable pressure	27 bar
Safety valve setting	28,5 bar
Maximum pressure ratio (absolute)	18,9:1
Operating ambient temperature.	-10°C to +46°C
Maximum discharge temperature	120°C
Cooling system.	Oil Injection
Oil capacity.	100 litres
Maximum oil system temperature	120°C
Maximum oil system pressure	29,5 bar

Note: use this for temperatures -23°C to +52°C

LUBRICATING OIL SPECIFICATION (for the specified ambient temperatures).

XHP760
DEXRON or DEXRON II automatic transmission fluid
or
Ingersoll-Rand XHP505 synthetic lubricant.

Safety data sheets can be obtained on request from the lubricant supplier.

For temperatures outside the specified ambient range, consult Ingersoll-Rand.

Revision 00
05/98

XHP760 2T MoD

ENGINE

Type/model.	Caterpillar 3306DITA
Number of cylinders.	6
Oil capacity.	34 litres
Speed at full load.	1850 revs min^{-1}
Speed at idle.	1300 revs min^{-1}.
Electrical system.	24V negative earth
Power available at 1850 revs min^{-1}	231 kW
Fuel tank capacity.	500 litres

SOUND LEVEL DATA
('W' model)

A) To Pneurop code PN8NTC2

Equivalent continuous sound pressure level

. Rated load	83dB(A)
. No load	81dB(A)

Sound power level (84/533/EEC) 102dB(A)

(Operator position :- 1m from machine)

B) In compliance with 86/188/EEC

Average sound pressure level at 10m to 79/113/EEC 74dB(A)

(*Machine only :- at maximum load in open site conditions

XHP760 2T
MoD

Shipping weight.	5300 kg
Maximum gross weight.	5700kg
Maximum horizontal towing force.	4714 Kgf

WHEELS AND TYRES

Number of wheels.	2
Tyre size.	385 / 65 R $22^{1}/_{2}$
Tyre pressure.	6,4 bar (94lbf in^{-2})

TOWING SPEED

Maximum towing speed	80 km h^{-1}
	50 mi h^{-1}

Further information may be obtained by request through Ingersoll-Rand customer services department.

Revision 00
06/98

COMMISSIONING

Upon receipt of the unit, and prior to putting it into service, it is important to adhere strictly to the instructions given below in *PRIOR TO STARTING.*

Ensure that the operator reads and *understands* the decals and consults the manuals before maintenance or operation.

Ensure that the position of the *emergency stop* device is known and recognised by its markings. Ensure that it is functioning correctly and that the method of operation is known.

Before towing the unit, ensure that the tyre pressures are correct (refer to the *GENERAL INFORMATION* section of this manual) and that the park brake is functioning correctly (refer to the *MAINTENANCE* section of this manual). Before towing the unit during the hours of darkness, ensure that the lights are functioning correctly (where fitted).

ANCHORLOK BRAKING SYSTEM

1) CHARGING

The trailer air reservoir is charged by the air compressor on the tractor unit. Disconnection from the tractor unit will apply the brakes.

The brake reservoir may be charged by the compressor by opening the valve located on the side of the fan cowl while the machine is operating.

2) SERVICE BRAKES

Application of the brake on the tractor unit applies the trailer brakes.

The brakes default default to park mode when the service lines are disconnected from the tractor unit.

3) SHUNTING

If it is required to move the trailer by a vehicle without air brake connections, the air brakes can be released as follows:

a) Ensure that the trailer air reciever is charged.
b) Press the *shunt* valve located in the control box on the left hand side of the towbar.

4) The supply must only be from the supply point approved by the tractor manufacturer for the operation of air brakes. For highway operation, the trailer brake system **must** be supplied from such an approved point.

5) Charging air to the trailer unit must be in the range 5 bar to 7 bar and be free of oil and water content. Rated trailer pressure is 6,3 bar.

Ensure that all transport and packing materials are discarded.

Ensure that the correct fork lift truck slots or marked lifting / tie down points are used whenever the machine is lifted or transported.

When selecting the working position of the machine ensure that there is sufficient clearance for ventilation and exhaust requirements, observing any specified minimum dimensions (to walls, floors etc.).

Adequate clearance needs to be allowed around and above the machine to permit safe access for specified maintenance tasks.

Ensure that the machine is positioned securely and on a stable foundation. Any risk of movement should be removed by suitable means, especially to avoid strain on any rigid discharge piping.

XHP760 2T MoD

Attach the battery cables to the battery(s) ensuring that they are tightened securely.

WARNING: All air pressure equipment installed in or connected to the machine must have safe working pressure ratings of at least the machine rated pressure, and materials compatible with the compressor lubricant (refer to the *GENERAL INFORMATION* section).

WARNING: If more than one compressor is connected to one common downstream plant, effective check valves and isolation valves must be fitted and controlled by work procedures, so that one machine cannot accidently be pressurised / over pressurised by another.

WARNING: If flexible discharge hoses are to carry more than 7 bar pressure then it is recommended that safety retaining wires are used on the hoses.

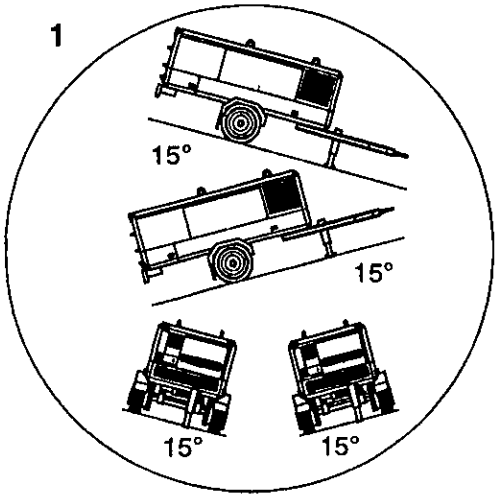
INGERSOLL-RAND®

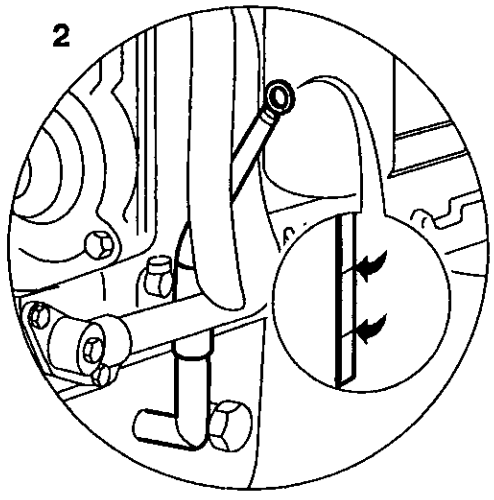
USE ONLY GENUINE INGERSOLL–RAND PARTS

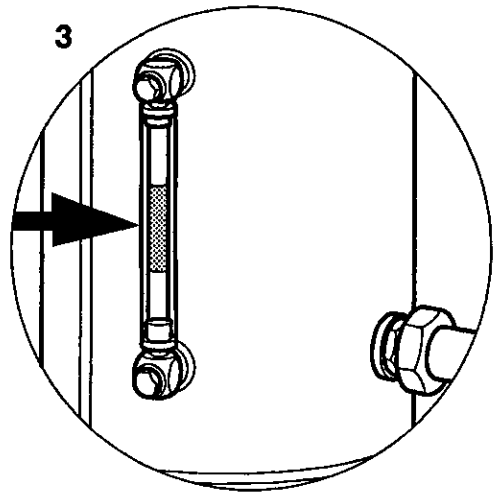
Revision 00
05/98

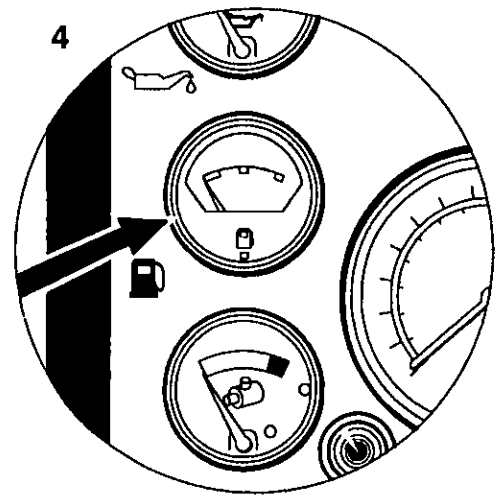
5.4 OPERATING INSTRUCTIONS

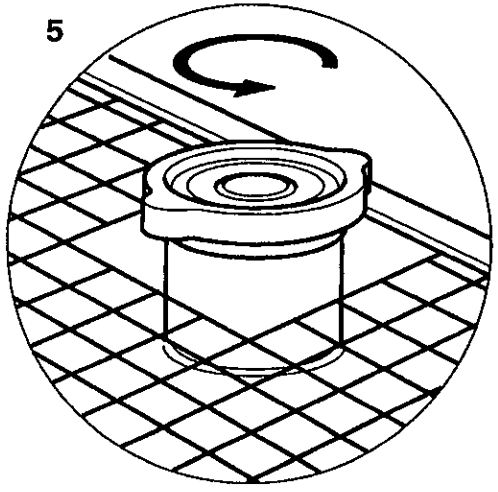
XHP760 2T
MoD

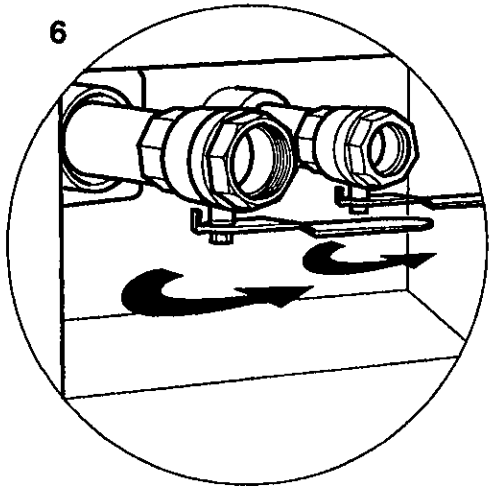


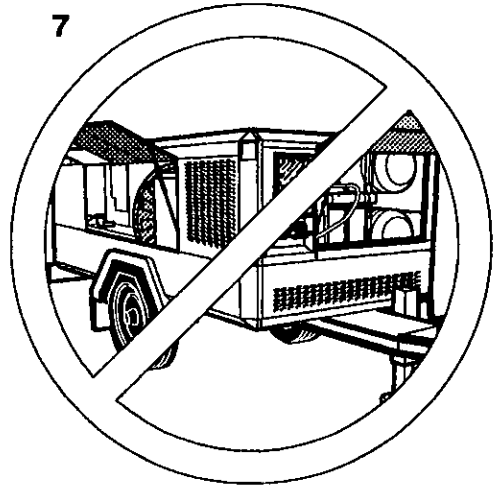


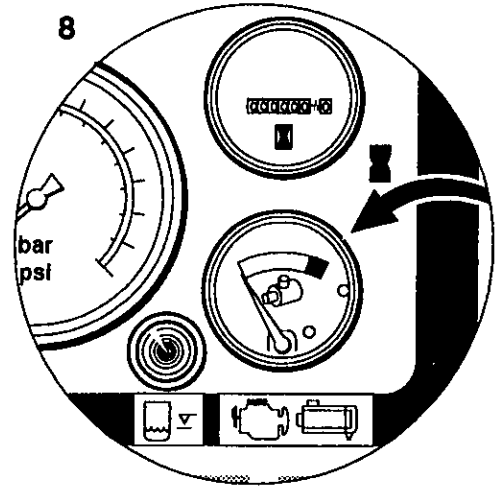












T1955
Revision 00
06/98

PRIOR TO STARTING

1. Place the unit in a position that is as level as possible. The design of the unit permits a 15 degree lengthways and sideways limit on out of level operation. It is the engine, not the compressor, that is the limiting factor.

When the unit has to be operated out of level, it is important to keep the engine oil level near the high level mark (with the unit level).

CAUTION: *Do not overfill either the engine or the compressor with oil.*

2. Check the engine lubrication oil in accordance with the operating instructions in the *Engine Operator's Manual.*

3. Check the compressor oil level in the sight glass located on the separator tank.

4. Check the diesel fuel level. A good rule is to top up at the end of each working day. This prevents condensation from occurring in the tank.

CAUTION: *Use only a No. 2–D diesel fuel oil with a minimum octane number of 45 and a sulphur content not greater than 0,5%.*

CAUTION: *When refuelling:–*

- *switch off the engine.*
- *do not smoke.*
- *extinguish all naked lights.*
- *do not allow the fuel to come into contact with hot surfaces.*
- *wear personal protective equipment.*

5. Check the radiator coolant level (with the unit level).

XHP760 2T MoD

6. Open the service valve(s) to ensure that all pressure is relieved from the system. Close the service valve(s).

7. ***CAUTION:*** *Do not operate the machine with the canopy/doors in the open position as this may cause overheating and operators to be exposed to high noise levels.*

8. Check the air restriction indicator(s). Refer to the *MAINTENANCE* section of this manual.

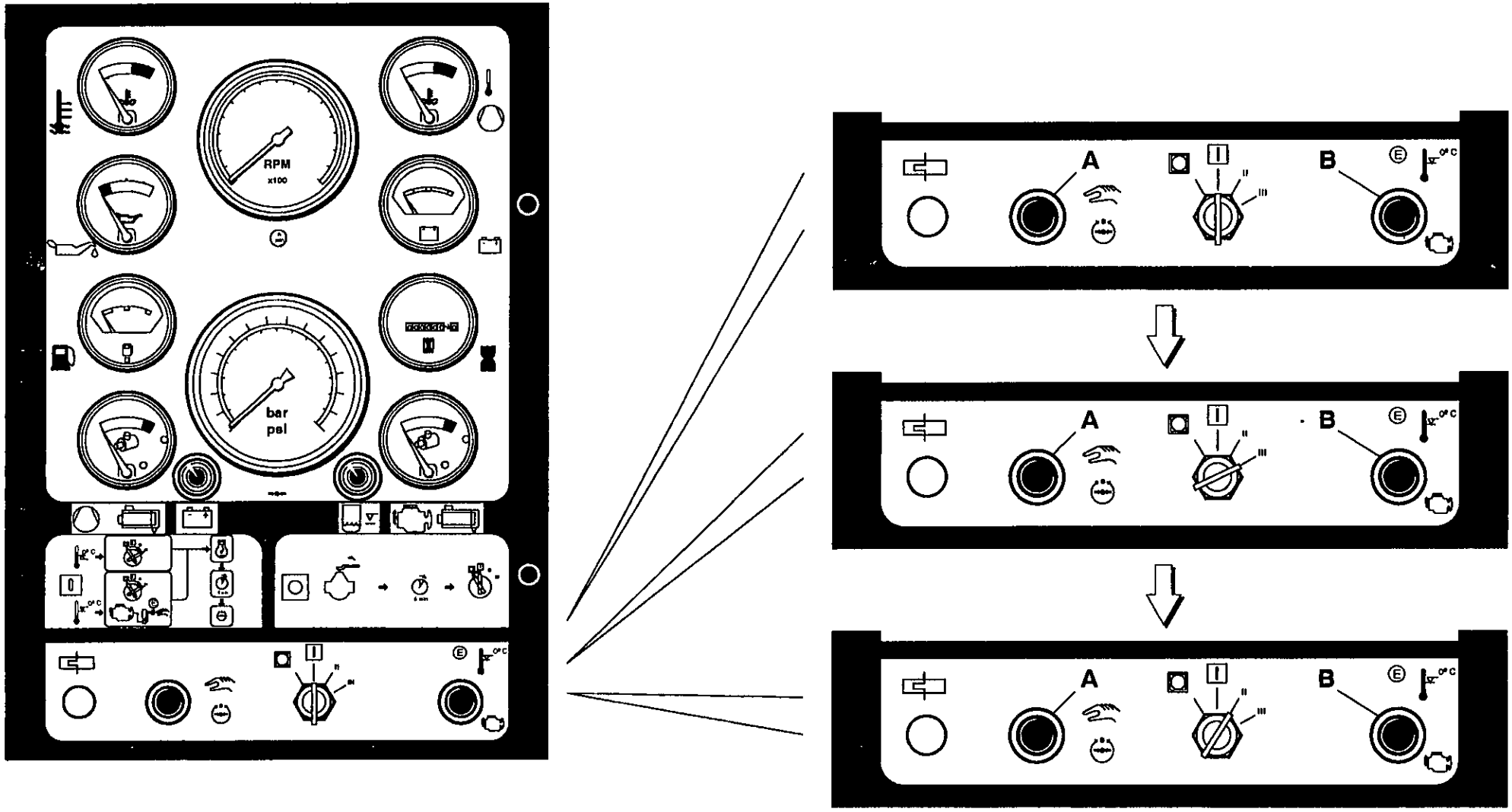
Close the manual relief valve adjacent to the regulator.

INGERSOLL-RAND®

USE ONLY GENUINE INGERSOLL-RAND PARTS

Revision 00
05/98

XHP760 2T
MoD



STARTING THE MACHINE

All normal starting functions are incorporated in the key operated switch.

. Turn the key switch to position *1*, the alternator charge light will illuminate.

. Turn the key switch to position *3* (engine start position).

Release to position *2* when the engine starts and the engine oil pressure gauge indicates green. The engine will now be running at a reduced speed.

NOTE: In order to allow the machine to start at a reduced load, a valve, which is operated by a button located on the instrument panel, is incorporated in the regulation system. (The valve automatically returns to the start position when the machine is switched off and air pressure relieved from the system).

. Allow the engine to reach its operating temperature - then press the button (**A**).

. At this point in the operation of the machine it is safe to apply *full load* to the engine.

COLD WEATHER STARTING

When starting or operating the machine in temperatures below or approaching 0°C, ensure that the operation of the regulation system, the unloader valve, the safety valve, and the engine are not impaired by ice or snow, and that all inlet and outlet pipes and ducts are clear of ice and snow.

This machine is fitted with an ether cold starting aid.

XHP760 2T
MoD

WARNING: Do not use any liquid except Ether when refilling the cold start device.

WARNING: Ether is highly flammable, do not store in open or unmarked containers. When handling or storing ether, ensure that there is adequate ventilation, no smoking, no naked lights and no inhalation of ether fumes.

In cold weather the following procedure should be adhered to:

. Turn the keyswitch to position *3*. (Engine start position) and simultaneously press the control button (**B**) (Ether cold start). The measured amount of ether is then metered into the engine.

. Release to position *2* when the engine starts and the engine oil pressure gauge indicates green.

. Allow the engine to reach its operating temperature - then press the button (**A**).

CAUTION: *If the engine does not start, repeat the above procedure after waiting for a minimum of one minute.*

If the engine fails to start, refer to the *MAINTENANCE* section of this manual, and to the *ENGINE MANUFACTURER'S MANUAL*..

. At this point in the operation of the machine it is safe to apply *full load* to the engine.

STOPPING THE MACHINE

. Close the service valve.

. Allow the machine to run unloaded for a short period of time to reduce the engine temperature.

. Turn the start switch to the *0* (off) position.

NOTE: As soon as the engine stops, the automatic blowdown valve will relieve all pressure from the system,except for the discharge pipe / manifold area. This area should be depressurised by opening the discharge valve, keeping clear of any airflow from it.

If the automatic blowdown valve fails to operate, then pressure must be relieved from the system by means of the service valve(s).

WARNING: When relieving system pressure by means of the service valve(s), a small amount of pressure will remain in the system. No maintenance work should be carried out whilst this situation exists. This pressure may be relieved by *slowly* operating the manual *blowdown* valve.

CAUTION: *Never allow the machine to stand idle with pressure in the system.*

EMERGENCY STOPPING

In the event that the unit has to be stopped in an emergency, **TURN THE KEY SWITCH LOCATED ON THE INSTRUMENT PANEL TO THE *0* (OFF) POSITION.**

RE-STARTING AFTER AN EMERGENCY

If the machine has been switched off because of a machine malfunction, then identify and correct the fault before attempting to re-start.

If the machine has been switched off for reasons of safety, then ensure that the machine can be operated safely before re-starting.

Refer to the *PRIOR TO STARTING* and *STARTING THE UNIT* instructions earlier in this section before re-starting the machine.

MONITORING DURING OPERATION

Should any of the safety shut-down conditions occur, the unit will stop. These are:

- Low engine oil pressure
- High air discharge temperature
- High engine water temperature
- Low water level
- Separator tank thermal fuse failure

CAUTION: *To ensure an adequate flow of oil to the compressor at low temperature, never allow the discharge pressure to fall below 3,5 bar.*

DECOMMISSIONING

When the machine is to be permanently decommissioned or dismantled, it is important to ensure that all hazard risks are either eliminated or notified to the recipient of the machine. In particular:-

. Do not destroy batteries or components containing asbestos without containing the materials safely.

. Do not dispose of any pressure vessel that is not clearly marked with its relevant data plate information or rendered unusable by drilling, cutting etc

. Do not allow lubricants or coolants to be released into land surfaces or drains.

. Do not dispose of a complete machine without documentation relating to instructions for its use.

INGERSOLL-RAND®

USE ONLY GENUINE INGERSOLL–RAND PARTS

Revision 00
05/98

6.0 MAINTENANCE

XHP760 2T MoD	**Daily.**	*Oil level.*	Check and refill as required.
		Radiator.	Refer to the *Engine Manufacturer's Manual.*
		Air filter(s).	Clean the dust collector box(es).
		Fuel tank.	Refill to prevent condensation.
		Emergency stop.	Test the operation of the device.
	Weekly/ 50 hours.	*Safety shutdown system.*	Check the electrical connections.
		Engine.	Refer to the *Engine Manufacturer's Manual.*
		Compressor oil filter.	Replace after the first 50 hours from new.
		Fan belt.	Check for correct tension and excessive wear. Re-tension/replace as necessary.
	Monthly/150 hours.	*Oil cooler.*	Check for the build up of foreign matter. Clean if necessary by blowing out with air or pressure wash.
		Radiator.	Check for the build up of foreign matter. Clean if necessary by blowing out with air or pressure wash.
		Compressor oil filter.	Replace after the first 150 hours from new.
		Hoses.	Inspect.
		Running gear	Apply grease to all grease points.
	3 months/ 250 hours.	*Safety shutdown system.*	Test the operation of the switches.
		Safety valve.	Operate the safety valve manually to verify that the valve mechanism is functioning correctly and that a small amount of air is released.
		Running Gear.	Check the bolts securing the running gear to the chassis and re-tighten where necessary (Refer to the *TORQUE SETTING TABLE* in this manual). Reset the tab washer. Check and adjust the brakes and brake cables. Adjust and grease the linkages. Drain the air brake reservoir.

XHP760 2T MoD	**3, 6, 30 months / 250, 500, 2500 hours.**	*Engine.*	Refer to the *Engine Manufacturer's Manual.*
	6 months/ 500 hours.	*Compressor oil filter.*	Replace.
		Hoses.	Inspect.
		Scavenge line.	Clean if necessary.
		Fan drive belt(s).	Replace.
		Pressure system.	Inspect all components for damage, deterioration or leaks. Replace as necessary.
	1 year/1000 hours.	*Air filter elements.*	Replace.
		Engine breather.	Clean the element.
		Safety shutdown system.	Test the operation of the switches.
		Compressor oil.	Replace.
		Pressure gauge	Remove from the machine and check the calibration. Replace if necessary.
		Pressure regulator	Check that the regulator functions correctly.
		Running gear.	Major brake overhaul - refer to specialist.
	1 year/1000 hours or as defined by local or national legislation.	*Separator tank*	Fully inspect all external surfaces, welds and fittings. Report any excessive corrosion, mechanical or impact damage, leakage or other deterioration..
	2 years/2000 hours.	*Safety valve*	Remove from the machine and check for correct operating pressure. Adjust as necessary.
		Separator element.	Replace.

XHP760 2T
MoD

4 years/4000 hours.	*Hoses.*	Replace.
6 years/6000 hours or as defined by local or national legislation.	*Separator tank*	Remove the cover plate and any necessary fittings. Clean the interior thoroughly and inspect all internal surfaces and welds.
As required.	*Separator element.*	Replace if damaged.
	Battery.	Clean and grease terminals.
	Fuel filter water separator.	Refer to the *Engine Manufacturer's Manual.*
	Cooling system.	Add anti-freeze and inhibitors.

ROUTINE MAINTENANCE

This section refers to the various components which require periodic maintenance and replacement.

The *SERVICE/MAINTENANCE CHART* indicates the various components' descriptions and the intervals when maintenance has to take place. Oil capacities, etc., can be found in the *GENERAL INFORMATION* section of this manual.

For any specification or specific requirement on service or preventative maintenance for the engine, refer to the *Engine Manufacturer's Manual.*

Compressed air can be dangerous if incorrectly handled. Before doing any work on the unit, ensure that all pressure is vented from the system and that the machine cannot be started accidentally.

If the automatic blowdown fails to operate, then pressure must be gradually relieved by operating the manual blowdown valve. Suitable personal protective equipment should be worn.

Ensure that maintenance personnel are adequately trained, competent and have read the Maintenance Manuals.

Prior to attempting any maintenance work, ensure that:-

. all air pressure is fully discharged and isolated from the system. If the automatic blowdown valve is used for this purpose, then allow enough time for it to complete the operation.

NOTE: Pressure will always remain in the part of the system between the minimum pressure valve and the discharge valve after operation of the auto blowdown valve.

XHP760 2T
MoD

THIS PRESSURE MUST BE RELIEVED BY CAREFULLY;

(a) DISCONNECTING ANY DOWNSTREAM EQUIPMENT.

(b) OPENING THE DISCHARGE VALVE TO ATMOSPHERE.

(USE HEARING PROTECTION IF NECESSARY.)

. the machine cannot be started accidently or otherwise, by posting warning signs and/or fitting appropriate anti-start devices.

. all residual electrical power sources (mains and battery) are isolated.

Prior to attempting any maintenance work on a *running* machine, ensure that:-

. the work carried out is limited to only those tasks which require the machine to run.
. the work carried out with safety protection devices disabled or removed is limited to only those tasks which require the machine to be running with safety protection devices disabled or removed.

. All hazards present are known (e.g. pressurised components, electrically live components, removed panels, covers and guards, extreme temperatures, inflow and outflow of air, intermittently moving parts, safety valve discharge etc.).

. Appropriate personal protective equipment is worn.
. Loose clothing, jewellery, long hair etc. is made safe.

. Warning signs indicating that *Maintenance Work is in Progress* are posted in a position that can be clearly seen.

Upon completion of maintenance tasks and prior to returning the machine into service, ensure that:-

. the machine is suitably tested.

. all guards and safety protection devices are refitted.

. All panels are replaced, canopy and doors closed.

. Hazardous materials are effectively contained and disposed of.

Prior to opening or removing panels or covers to work *inside* a machine, ensure that:-

. anyone entering the machine is aware of the reduced level of protection and the additional hazards, including hot surfaces and intermittently moving parts.

. the machine cannot be started accidently or otherwise, by posting warning signs and/or fitting appropriate anti-start devices.

PROTECTIVE SHUTDOWN SYSTEM

Comprises:

. Low engine oil pressure switch

. High engine water temperature switch

. High discharge air temperature switch

. Low water level switch.

. Separator tank thermal fuse.

XHP760 2T
MoD

Low engine oil pressure switch

At twelve month intervals, test the engine oil pressure switch as follows:

- Remove the switch from the machine.
- Connect it to an independent low pressure supply (either air or oil).
- The switch should operate at 1,0 bar.

Temperature switch(es)

At three month intervals, test the temperature switch circuit(s) as follows:

- Start the machine.
- Disconnect each switch in turn, the machine should shutdown.
- Re-connect the switch.

NOTE: Do not press the load button.

High engine water temperature switch

At twelve month intervals, test the water temperature switch by removing it from the machine and immersing in a bath of heated oil. The switch should operate at 100°C.

High discharge air temperature switch

At twelve month intervals, test the air discharge temperature switch by removing it from the machine and immersing in a bath of heated oil. The switch should operate at 120°C.

CAUTION: *Never remove or replace switches when the machine is running.*

Separator tank thermal fuse.

At three month intervals, test the thermal fuse circuit as follows:

- Disconnect the fuse, the unit should shut down.
- Re-connect the fuse.

Low water level switch.

The low water level switch should be tested annually by draining approximately 10 litres of water from the radiator via the drain plug. The low water level light should then illuminate when the key switch is turned to position *1*.

CAUTION: *Do not drain water from the radiator whilst the machine is running.*

SCAVENGE LINE

The scavenge line runs from the combined orifice/drop tube in the separator tank, to the orifice fitting located in the airend.

Examine the orifice check valve and hoses at every service or in the event of oil carryover into the discharge air.

It is good preventative maintenance to check that the scavenge line and tube are clear of any obstruction each time the compressor lubricant is changed as any blockage will result in oil carryover into the discharge air.

COMPRESSOR OIL FILTER

Refer to the *MAINTENANCE CHART* in this section for the recommended servicing intervals.

XHP760 2T
MoD

Removal

WARNING: Do not remove the filter(s) without first making sure that the machine is stopped and the system has been completely relieved of all air pressure. (Refer to *STOPPING THE UNIT* in the *OPERATING INSTRUCTIONS* section of this manual).

Clean the exterior of the filter housing and remove the *spin–on* element by turning it in a counter–clockwise direction.

Inspection

Examine the filter element.

CAUTION: *If there is any indication of the formation of varnishes, shellacs or lacquers on the filter element, it is a warning that the compressor lubricating and cooling oil has deteriorated and that it should be changed immediately. Refer to LUBRICATION later in this section.*

COMPRESSOR OIL SEPARATOR ELEMENT

Refer to the *SERVICE / MAINTENANCE CHART* in this section for service intervals.

Removal

WARNING: Do not remove the filter(s) without first making sure that the machine is stopped and the system has been completely relieved of all air pressure. (Refer to *STOPPING THE UNIT* in the *OPERATING INSTRUCTIONS* section of this manual).

Disconnect all hoses and tubes from the separator tank cover plate. Remove the drop–tube from the separator tank cover plate and then remove the cover plate. Remove the separator element.

Inspection
Examine all hoses and tubes, and replace if necessary.

Reassembly
Thoroughly clean the orifice/drop tube and filter gasket contact area before reassembly. Install the new element.

Reassembly
Clean the filter gasket contact area and install the new element by screwing in a clockwise direction until the gasket makes contact with the filter housing. Tighten a further $^{1}/_{2}$ to $^{3}/_{4}$ of a revolution.

CAUTION: *Start the machine (refer to PRIOR TO STARTING and STARTING THE UNIT in the OPERATING INSTRUCTIONS section of this manual) and check for leakage before the machine is put back into service.*

WARNING
Do not remove the staple from the anti-static gasket on the separator element since it serves to ground any possible static build-up. Do not use gasket sealant since this will affect electrical conductance.

Reposition the cover plate, taking care not to damage the gasket, and replace the cover plate screws tightening in a *criss-cross* pattern to the recommended torque (refer to the *TORQUE SETTING TABLE* later in this section).

Replace the drop-tube and reconnect all hoses and tubes to the separator tank cover plate.

Replace the compressor oil (refer to *LUBRICATION* later in this section).

XHP760 2T
MoD

CAUTION: *Start the machine (refer to PRIOR TO STARTING and STARTING THE UNIT in the OPERATING INSTRUCTIONS section of this manual) and check for leakage before the machine is put back into service.*

COMPRESSOR OIL COOLER AND ENGINE RADIATOR

When grease, oil and dirt accumulate on the exterior surfaces of the oil cooler and radiator, the efficiency is impaired. It is recommended that each month the oil cooler and radiator be cleaned by directing a jet of compressed air, (carrying if possible a non-flammable cleaning solvent) over the exterior core of the cooler/radiator. This should remove any accumulation of oil, grease and dirt from the exterior core of the cooler so that the entire cooling area can radiate the heat of the lubricating and cooling oil/water into the air stream.

WARNING: Hot engine coolant and steam can cause injury. When adding coolant or antifreeze solution to the engine radiator, stop the engine at least one minute prior to releasing the radiator filler cap. Using a cloth to protect the hand, slowly release the filler cap, absorbing any released fluid with the cloth. Do not remove the filler cap until all excess fluid is released and the engine cooling system fully depressurised.

WARNING: Follow the instructions provided by the antifreeze supplier when adding or draining the antifreeze solution. It is advisable to wear personal protective equipment to prevent skin and eye contact with the antifreeze solution.

AIR FILTER ELEMENT

The air filter should be inspected regularly (refer to the *SERVICE/MAINTENANCE CHART*) and the element replaced when the restriction indicator shows red or every 1000 hours, whichever comes first. The dust collector box(es) should be cleaned daily (more frequently in dusty operating conditions) and not allowed to become more than half full.

The safety element should be renewed every 3000 hours or every third change of the main element, whichever comes first.

Removal

CAUTION: *Never remove and replace element(s) when the machine is running.*

Clean the exterior of the filter housing and remove the filter element by releasing the nut.

If the safety element is to be renewed, thoroughly clean the interior of the filter housing prior to removing the safety element.

Inspection

Check for cracks, holes or any other damage to the element by holding it up to a light source, or by passing a lamp inside.

CAUTION: *If inspection reveals damage to the main element, the safety element* ***must*** *be replaced.*

Check the seal at the end of the element and replace if any sign of damage is evident.

Reassembly

Assemble the new element into the filter housing ensuring that the seal seats properly.

Secure the element in the housing by hand tightening the nut.

XHP760 2T
MoD

Assemble the dust collector box parts, ensuring that they are correctly positioned.

Before restarting the machine, check that all clamps are tight.

NOTE: In the event that a new filter element is not readily available, the element can be re-used after cleaning. In this case the following procedure must be carried out:

Clean the element by directing a jet of clean, dry compressed air, no more than 5 bar, at an angle of 45 degrees to the outside of the element. Carefully blow any dust from each fold of the element.

Compressed air cleaning is only recommended when a new element is not available.

CAUTION: *Safety elements must not be cleaned and re-used.*

VENTILATION

Always check that the air inlets and outlets are clear of debris etc.

CAUTION: *NEVER clean by blowing air inwards.*

COOLING FAN DRIVE

Periodically check that the fan mounting bolt in the fan hub has not loosened. If, for any reason, it becomes necessary to remove the fan or re-tighten the fan mounting bolt, apply a good grade of commercially available thread locking compound to the bolt threads and tighten to the torque value shown in the *TORQUE SETTING TABLE* later in this section.

The fan belt(s) should be checked regularly for wear and correct tensioning.

FUEL SYSTEM

The fuel tank should be filled daily or every eight hours. To minimise condensation in the fuel tank(s), it is advisable to top up after the machine is shut down or at the end of each working day. At six month intervals drain any sediment or condensate that may have accumulated in the tank(s).

Removing air from the fuel system

If it is suspected that air is present in the fuel system, then, with the machine stopped proceed as follows:

Refill the fuel tank. Loosen the fuel injector nuts. Operate the hand pump located on the engine and observe fuel being pumped out. Continue pumping until a constant flow of fuel is emitted from the loose connections and contains no air bubbles.

Tighten the loose connections and nuts and prime with the hand pump until the fuel pressure gauge pointer (located on the engine) is in the green sector.

FUEL FILTER WATER SEPARATOR

The fuel filter water separator contains a filter element which should be replaced at regular intervals (see the *SERVICE/MAINTENANCE CHART*).

HOSES

All components of the engine cooling air intake system should be checked periodically to keep the engine at peak efficiency.

At the recommended intervals, (see the *SERVICE/MAINTENANCE CHART*), inspect all of the intake lines to the air filter, and all flexible hoses used for air lines, oil lines and fuel lines.

Periodically inspect all pipework for cracks, leaks, etc. and replace immediately if damaged.

XHP760 2T
MoD

ELECTRICAL SYSTEM

WARNING: Always disconnect the battery cables before performing any maintenance or service.

Inspect the safety shutdown system switches and the instrument panel relay contacts for evidence of arcing and pitting. Clean where necessary.

Check the mechanical action of the components.

Check the security of electrical terminals on the switches and relays i.e. nuts or screws loose, which may cause local hot spot oxidation.

Inspect the components and wiring for signs of overheating i.e. discolouration, charring of cables, deformation of parts, acrid smells and blistered paint.

BATTERY

Keep the battery terminals and cable clamps clean and lightly coated with petroleum jelly to prevent corrosion.

The retaining clamp should be kept tight enough to prevent the battery from moving.

PRESSURE SYSTEM

At 500 hour intervals it is necessary to inspect the external surfaces of the system (from the airend through to the discharge valve(s)) including hoses, tubes, tube fittings and the separator tank, for visible signs of impact damage, excessive corrosion, abrasion, tightness and chafing. Any suspect parts should be replaced before the machine is put back into service.

TYRES/TYRE PRESSURE

See the *GENERAL INFORMATION* section of this manual.

RUNNING GEAR/WHEELS

Check the wheel nut torque 20 miles (30 kilometres) after refitting the wheels. Refer to the *TORQUE SETTING TABLE* later in this section.

The bolts securing the running gear to the chassis should be checked periodically for tightness (refer to the *SERVICE/MAINTENANCE CHART* for frequency) and re-tightened where necessary. Refer to the *TORQUE SETTING TABLE* later in this section.

LUBRICATION

The engine is initially supplied with engine oil sufficient for a nominal period of operation (for more information, consult The *Engine Manufacturer's Manual*).

CAUTION: *Always check the oil levels before a new machine is put into service.*

If, for any reason, the unit has been drained, it must be re-filled with new oil before it is put into operation.

ENGINE LUBRICATING OIL

The engine oil should be changed at the engine manufacturer's recommended intervals. Refer to the *Engine Manufacturer's Manual.*

ENGINE LUBRICATING OIL SPECIFICATION

Refer to the *Engine Manufacturer's Manual.*

ENGINE OIL FILTER ELEMENT

The engine oil filter element should be changed at the engine manufacturer's recommended intervals. Refer to the *Engine Manufacturer's Manual.*

XHP760 2T
MoD

COMPRESSOR LUBRICATING OIL

Refer to the *SERVICE/MAINTENANCE CHART* in this section for service intervals.

NOTE: If the machine has been operating under adverse conditions, or has suffered long shutdown periods, then more frequent service intervals will be required.

WARNING: DO NOT, under any circumstances, remove any drain plugs or the oil filler plug from the compressor lubricating and cooling system without first making sure that the machine is stopped and the system has been completely relieved of all air pressure (refer to *STOPPING THE UNIT* in the *OPERATING INSTRUCTIONS* section of this manual).

Completely drain the receiver/separator system including the piping and oil cooler by removing the drain plug(s) and collecting the used oil in a suitable container.

Replace the drain plug(s) ensuring that each one is secure.

NOTE: If the oil is drained immediately after the machine has been running, then most of the sediment will be in suspension and will therefore drain more readily.

CAUTION: *Some oil mixtures are incompatible and result in the formation of varnishes, shellacs or lacquers which may be insoluble.*

NOTE: Always specify INGERSOLL-RAND compressor lubricating oil (refer to the *PARTS CATALOGUE* section of this manual for details).

COMPRESSOR LUBRICATING OIL SPECIFICATION

Ingersoll-Rand lubricating oil is recommended for use in all Ingersoll-Rand portable compressors.

See the *GENERAL INFORMATION* section of this manual.

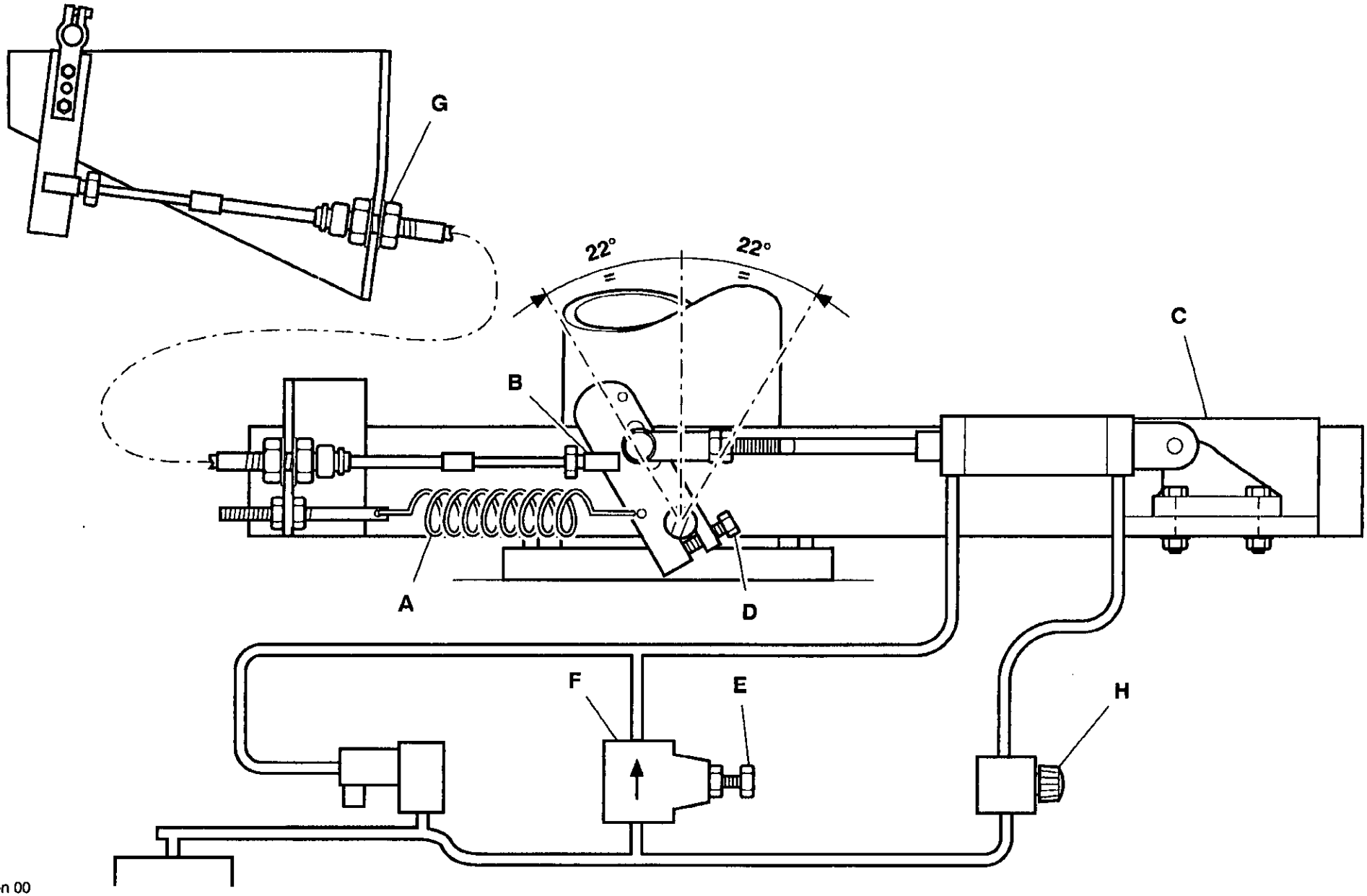
COMPRESSOR OIL FILTER ELEMENT

Refer to the *SERVICE / MAINTENANCE CHART* in this section for service intervals.

RUNNING GEAR WHEEL BEARINGS

Wheel bearings should be packed with grease every 6 months. The type of grease used should conform to specification *MIL-G-10924.*

XHP760 2T
MoD



SPEED AND PRESSURE REGULATOR ADJUSTMENT

Normally regulation requires no adjustment but if correct adjustment is lost proceed as follows:-

BEFORE STARTING THE MACHINE

With the unit stopped, disconnect ballast spring **'A'** and unclip the ball joint **'B'** from the butterfly lever. Loosen the two screws securing bracket **'C'** to main bracket.

With butterfly valve held closed, position the lever approximately 22° before vertical and tighten with screw **'D'**.

Hold the butterfly lever in the closed position and with the the air cylinder fully contracted tighten the screws holding bracket **'C'** to the main bracket.

Reconnect the ballast spring **'A'** and the control cable ball joint **'B'**.

Start engine: Note receiver pressure. Warm up pressure should be 3,5-5,0 bar (50-70 p.s.i.).

To increase warm up pressure, turn air cylinder rod in anti-clockwise direction to open butterfly valve.

To reduce warm up pressure, turn air cylinder rod in clockwise direction to close butterfly valve.

Remove nylon tube at the push in connector on the air cylinder.

When the engine is warmed up, press the 'Load' button to commence normal regulation.

XHP760 2T
MoD

Set pressure by adjusting the screw **'E'** on the pressure regulator **'F'**. Turn the screw clockwise to increase pressure and anticlocwise to reduce pressure.

To adjust top speed ensure the machine is running in a loaded condition.

Set speed using cable locknuts **'G'**.

Reconnect nylon tube to the fitting on the control cylinder.

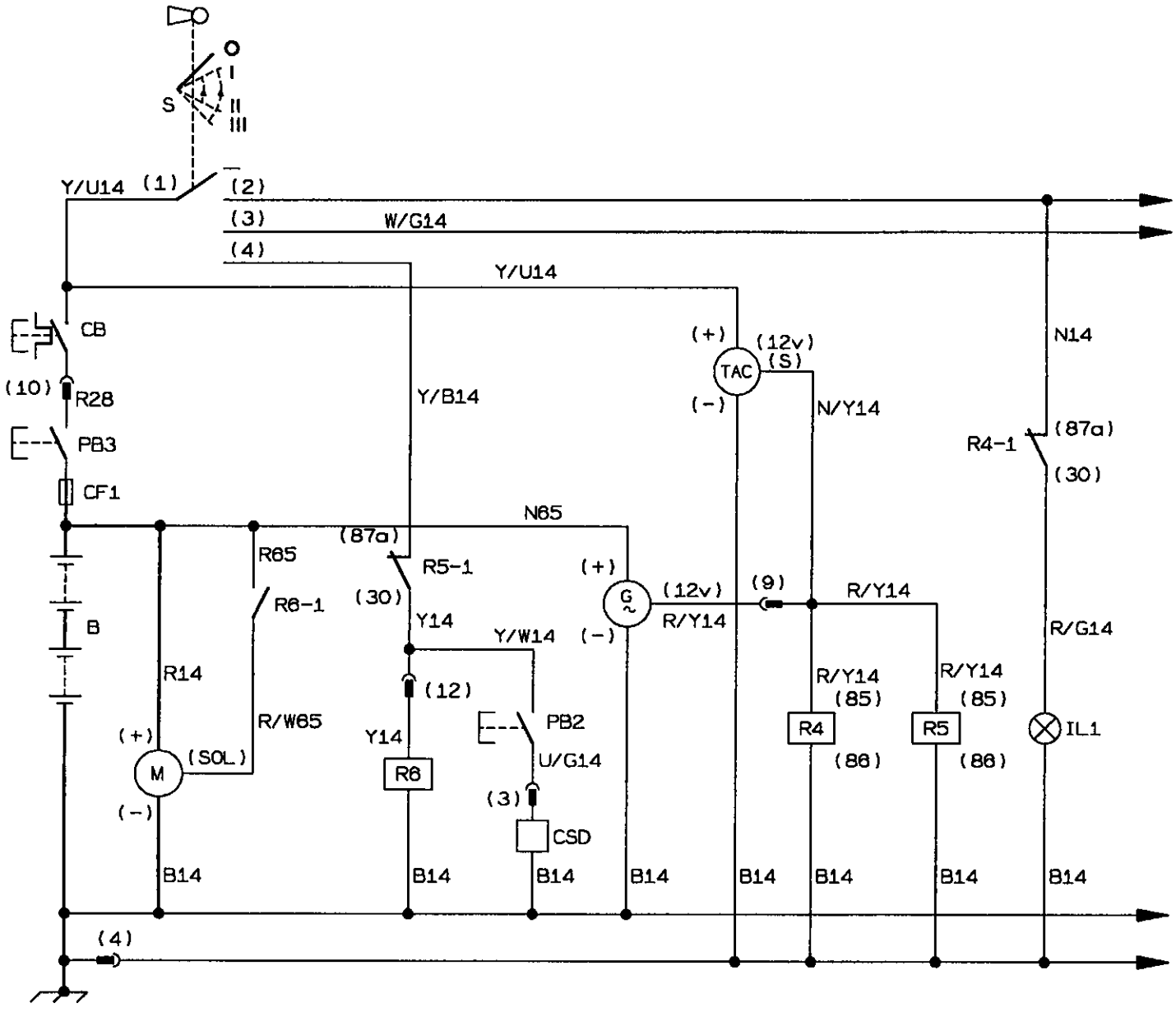
If surging occurs at low discharge air flows, a light compensating air pressure can be applied behind the control air cylinder piston.

WARNING: Too high an air pressure applied to the piston will cancel out the regulation system and cause the safety valve to blow.

	ft lbf	Nm
Air Cylinder to bracket	18-22	24-30
Air intake to airend	158-192	214-260
Discharge pipe to airend	87-105	118-142
Drive ring to flywheel	29-35	39-47
Fan hub to engine pulley	28-34	38-46
Lifting bail assembly	126-154	170-208
Mounting bracket to airend	234-286	316-387
Resilient mount to frame	126-154	170-208
Separator tank to frame	52-64	70-86
Spring shackles to frame	126-154	170-208
Wheel nuts	504	680

	ft lbf	Nm
Airend to engine	44-54	59-73
Axles to springs	80-90	108-122
Discharge pipe to separator tank	87-105	118-142
Exhaust manifold	31-39	42-53
Fan mounting plate to engine	130-158	175-214
Lifting bail to frame	140	190
Pintle box to frame	126-154	170-208
Separator tank cover	158-192	214-260
Exhaust silencer to bracket	45-55	61-74
Starter motor terminals	11-13	15-18

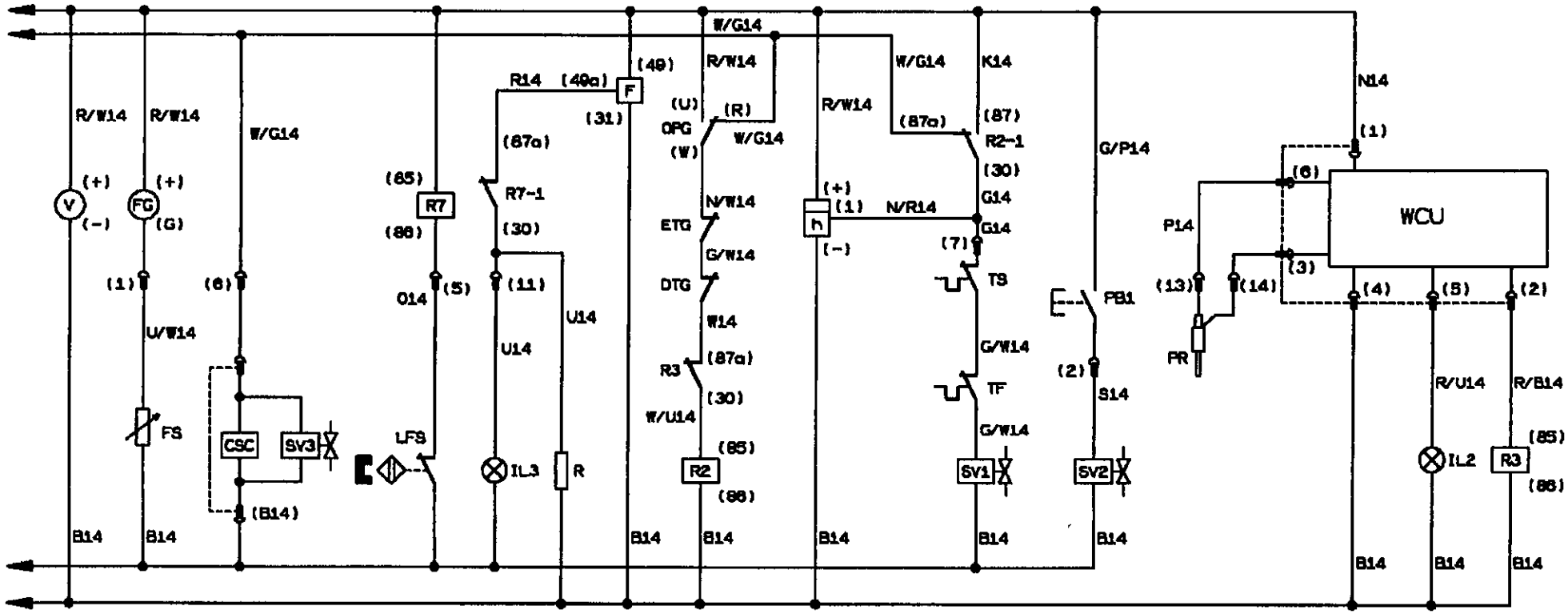
XHP760 2T
MoD



KEY

B	Battery 24 Volt
CB	Pushbutton, reset (circuit breaker)
CF1	Control fuse
CSD	Cold start device
G	Alternator
IL1	Lamp, alternator charge
M	Starter motor
PB2	Pushbutton, cold start
PB3	Pushbutton, emergency stop
R4	Relay, alternator charge
R5	Relay, start inhibit
R6	Relay, engine start
S	Key-switch
TAC	Tachometer

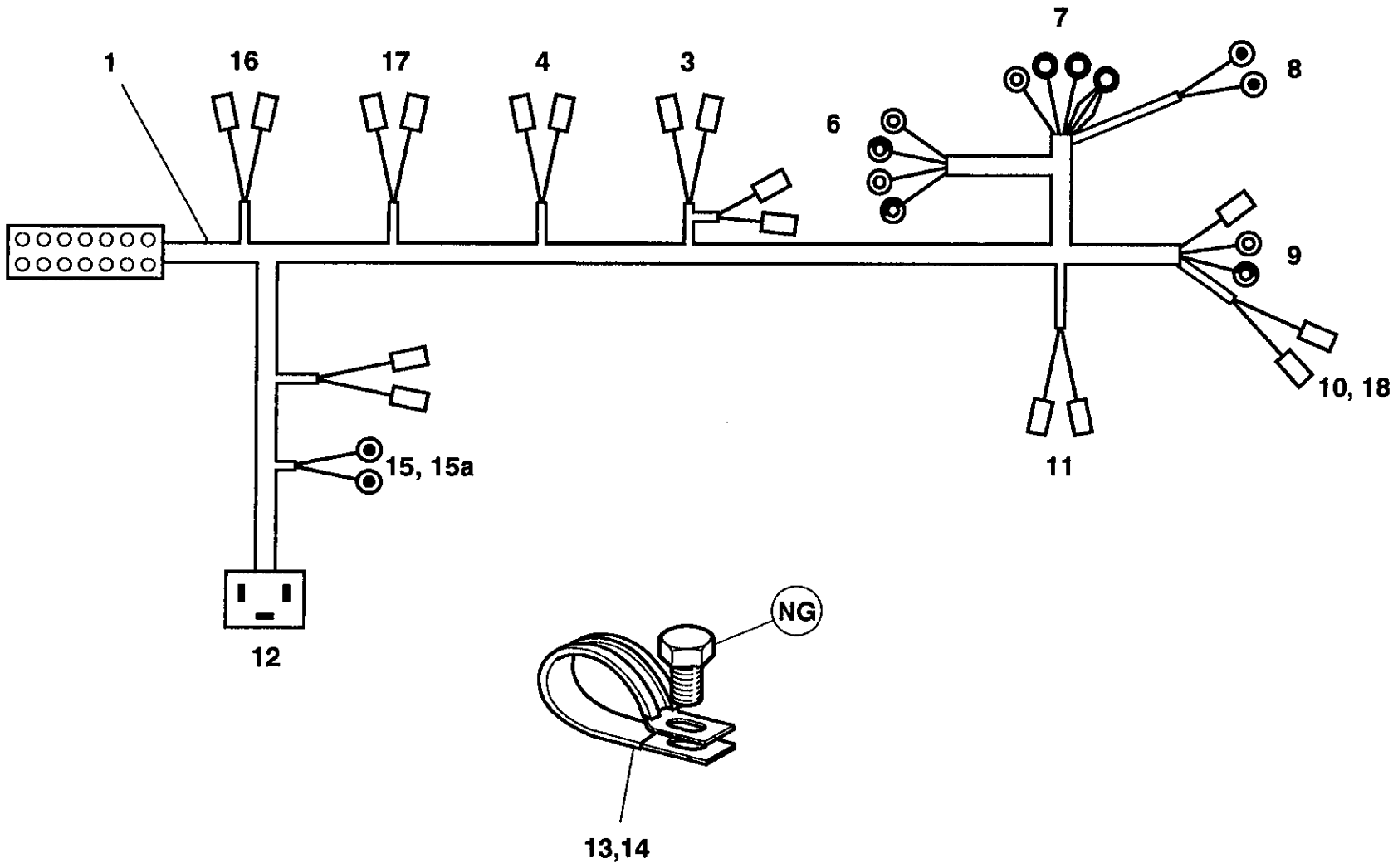
B	Black
G	Green
K	Pink
N	Brown
O	Orange
P	Purple
R	Red
S	Grey
U	Blue
W	White
Y	Yellow


R/W14
R/W14
W/G14
(+)
(-)
V
(+)
FG
(G)
(1)
(6)
U/W14
FS
CSC
SV3
(B14)
B14
B14
(65)
R7
(86)
014
(5)
LFS
R14
(49a)
F
(49)
(31)
(87a)
R7-1
(30)
(11)
U14
U14
IL3
R
B14
W/G14
R/W14
(U)
(R)
OPG
(W)
W/G14
N/W14
ETG
G/W14
DTG
W14
R3
(87a)
(30)
W/U14
(85)
R2
(86)
B14
B14
R/W14
W/G14
(87a)
K14
(87)
R2-1
(30)
G14
(+)
(1)
N/R14
h
(-)
G14
(7)
TS
G/W14
TF
G/W14
SV1
B14
G/P14
PB1
(2)
S14
SV2
B14
N14
(1)
(6)
WCU
P14
(13)
(14)
(3)
(4)
(5)
(2)
PR
R/U14
R/B14
IL2
R3
(85)
(86)
B14
B14
B14

KEY

CSC	Cold start compressor
DTG	Gauge, discharge temperature
ETG	Gauge, engine temperature
F	Flasher, fuel warning
FG	Gauge, fuel
FS	Sender unit, fuel gauge
h	Hour meter
IL2	Lamp, engine temperature
IL3	Lamp, fuel warning
LFS	Switch, fuel
OPG	Gauge, oil pressure
PB1	Pushbutton, load
PR	Probe, low water level
R	Resistor, flasher
R2	Relay, safety shut-down
R3	Relay, low water level
R7	Relay, fuel warning
SV1	Solenoid, engine stop
SV2	Solenoid, load
SV3	Solenoid, cold start
TF	Thermal fuse, separator tank
TS	Air temperature switch (discharge)
V	Voltmeter
WCU	Water level control module

XHP760 2T
MoD

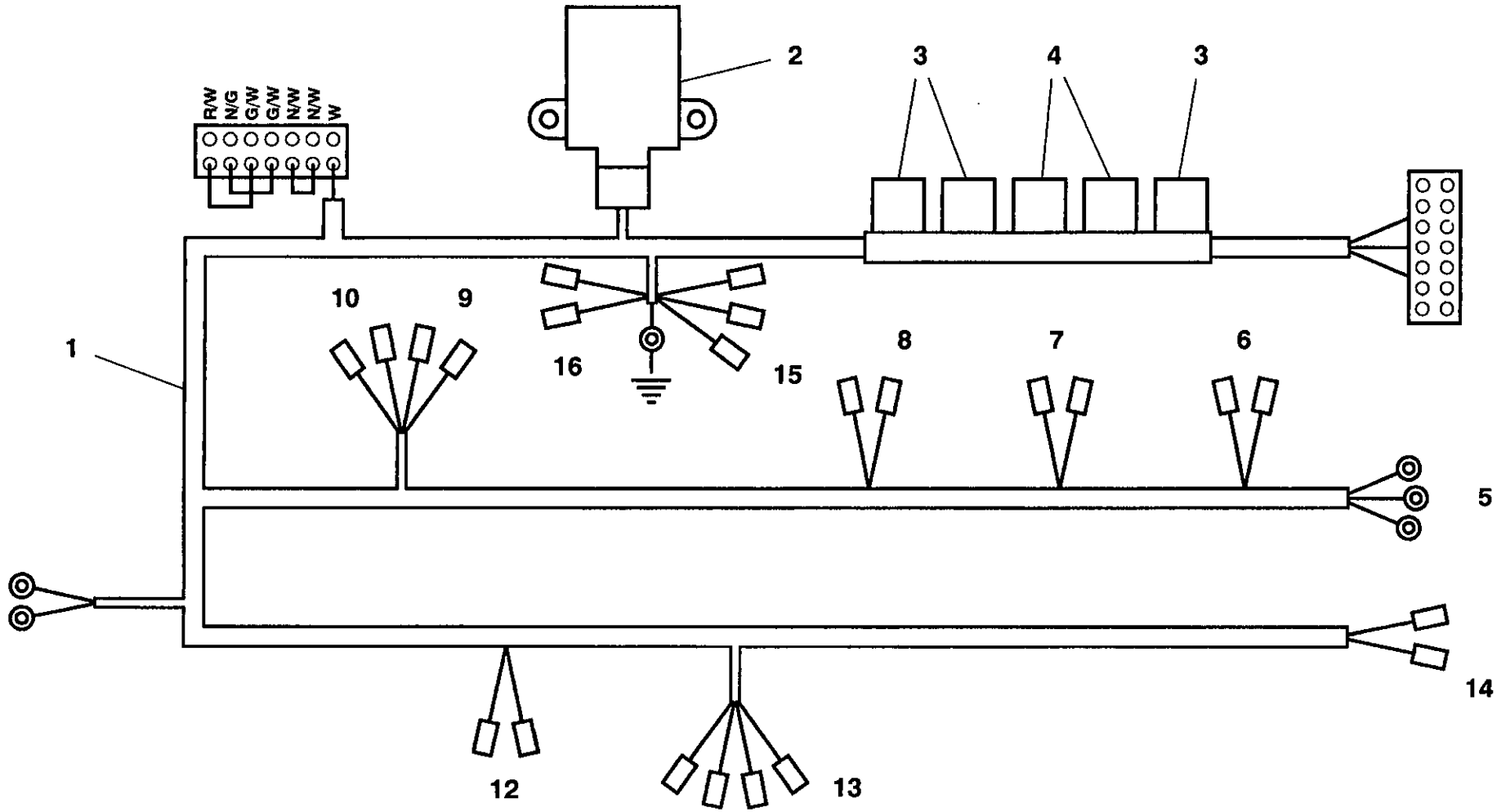


KEY

1Harness

2 Switch, temperature (discharge pipe)
3 Switch, temperature (separator tank)
4 Sensor, water detection
5 Ether, cold start
6 Relay, start
7 Motor, starter
8 Solenoid, stop
9 Alternator
10 Switch, low fuel level
11 Sender unit, fuel gauge
12 Solenoid, start/run
13 Clip, retaining
14 Clip, retaining
15 Compressor cold start
15a Solenoid valve, cold start
16 Lamp, fuel warning
17 Pushbutton, emergency stop
18 Harness, low fuel

XHP760 2T
MoD



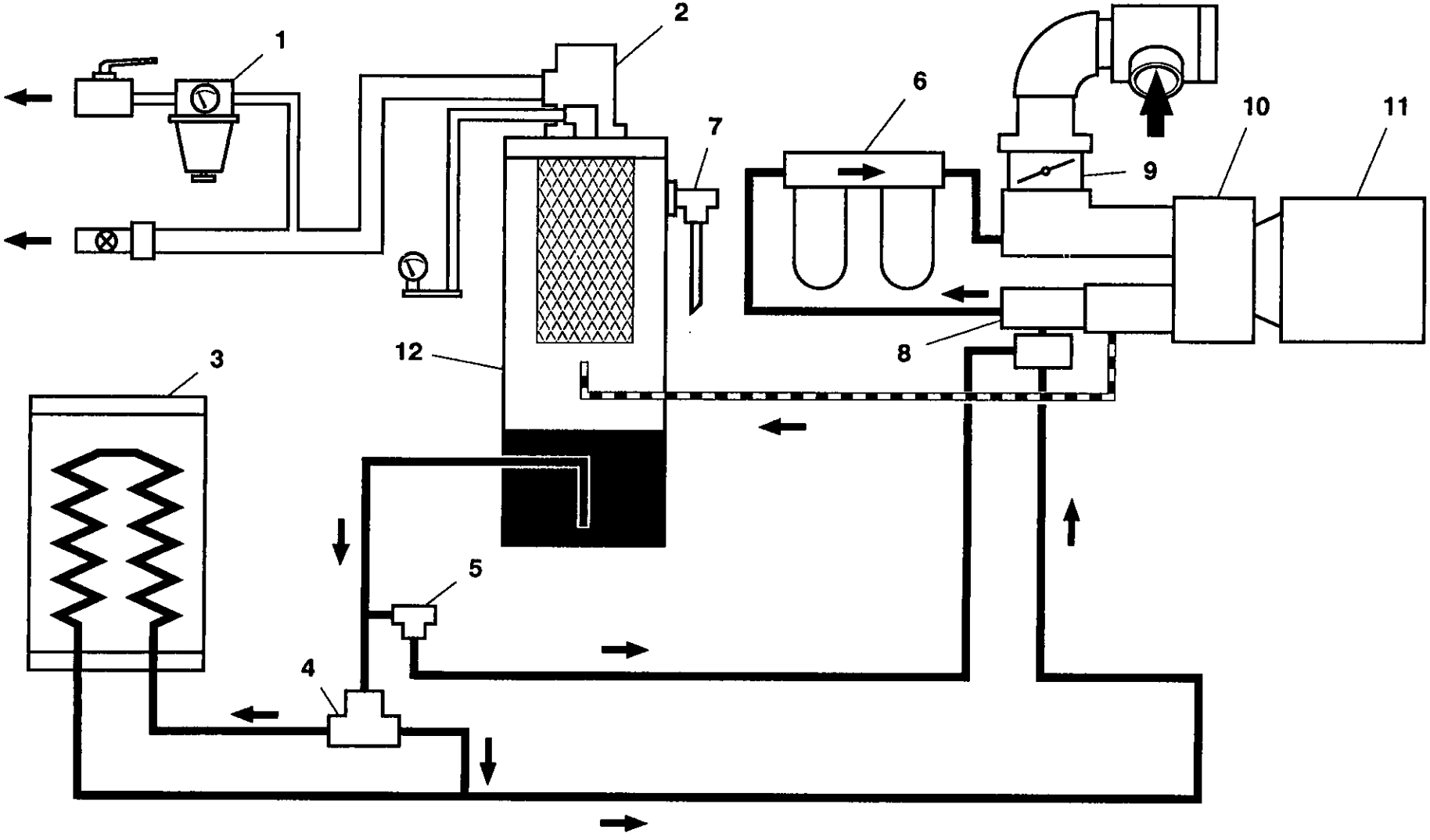
T1993
Revision 00
05/98

KEY

1 Harness, instrument panel
2 Relay (Indicator, low water level)
3 Relay
24V
4 Relay
12V
5 Tachometer
6 Hourmeter
7 Voltmeter
8 Gauge, fuel
9 Indicator, low water level
10 Indicator, no charge
11 Circuit breaker
12 Button, start/run
13 Switch, start
14 Switch, cold start
15 Flasher, fuel warning
16 Resistor, flasher

B Black
G Green
K Pink
N Brown
O Orange
P Purple
R Red
S Grey
U Blue
W White
Y Yellow

XHP760 2T
MoD



KEY

1 Pressure reducer

2 Minimum pressure valve

3 Oil cooler

4 Temperature bypass valve

5 Oil bypass valve

6 Oil filter

7 Safety valve

8 Oil pump

9 Butterfly valve

10 Compressor

11 Engine

12 Separator tank

Air

Oil

Air/Oil

8.0 FAULT FINDING

XHP760 2T MoD	FAULT	CAUSE	REMEDY
	Engine fails to start.	*Low battery charge.*	Check the fan belt tension, battery and cable connections.
		Bad earth connection.	Check the earth cables, clean as required.
		Loose connection.	Locate and make the connection good.
		Fuel starvation.	Check the fuel level and fuel system components. Replace the fuel filter if necessary.
		Fuel starvation.	Pump the fuel manually until the fuel pressure gauge shows green.
		Relay failed.	Replace the relay.
		Engine control not in 'run' position.	Check the speed cylinder and stop position.
		Circuit breaker out	Reset the circuit breaker
		Fusible plug blown.	Check the fusible plug on top of the separator tank
		Faulty stop solenoid	Check the stop solenoid
	Engine stops while in service or is reluctant to start.	*Low fuel level.*	Fill fuel tank and bleed air from fuel system if necessary. (Refer to *MAINTENANCE SECTION*).

XHP760 2T MoD	FAULT	CAUSE	REMEDY
	Engine starts but stalls when the switch returns to position *I*.	*Electrical fault*	Test the electrical circuits.
		Low engine oil pressure.	Check the oil level and the oil filter(s).
		Low water level	Check if the low water lamp is extinguished.
		Faulty relay	Check the relays.
		Faulty key–switch	Check the key–switch.
	Engine starts but will not run or engine shuts down prematurely.	*Electrical fault.*	Test the electrical circuits.
		Low engine oil pressure.	Check the oil level and oil filter(s).
		Safety shut-down system in operation.	Check the safety shut-down switches.
		Fuel starvation.	Check the fuel level and fuel system components. Replace the fuel filter if necessary.
		Switch failure.	Test the switches.
		High compressor oil temperature.	Check the compressor oil level, oil cooler and by-pass valve. Check the fan drive.

8.2 FAULT FINDING

XHP760 2T MoD	FAULT	CAUSE	REMEDY
		Water present in fuel system.	Check the water separator and clean if required.
		Faulty relay.	Check the relay in the holder and replace if necessary.
	Engine Overheats	*Low water level*	Check the level and replenish if necessary.
		Blocked radiator.	Stop the machine and clean the cooling fins with compressed air or steam. Use reduced pressure for cleaning the fins.
		Reduced cooling air from fan.	Check the fan and the drive belts. Check for any obstruction inside the cowl.
		Faulty thermostat	Check the thermostat and replace if necessary.
	Engine speed too high.	*Incorrect throttle arm setting.*	Check the engine speed setting.
		Faulty regulator valve.	Check the regulation system.
	Engine speed too low.	*Incorrect throttle arm setting.*	Check the throttle setting.
		Blocked fuel filter.	Check and replace if necessary.
		Blocked air filter.	Check and replace the element if necessary.
		Faulty regulator valve.	Check the regulation system.
		Premature unloading.	Check the regulation and the operation of the air cylinder.
	Excessive vibration.	*Engine speed too low.*	See "*Engine speed too low*"

XHP760 2T MoD	FAULT	CAUSE	REMEDY	
	Leaking oil seal.	*Improperly fitted oil seal.*	Replace the oil seal.	
		Refer also to the *Engine Manufacturer's Manual.*		
	Air discharge capacity too low.	*Engine speed too low.*	Check the air cylinder and air filter(s).	
		Blocked air cleaner.	Check the restriction indicators and replace the element(s) if necessary.	
		High pressure air escaping.	Check for leaks.	
		Incorrectly set regulation system.	Reset the regulation system. Refer to *SPEED AND PRESSURE REGULATION ADJUSTMENT* in the *MAINTENANCE* section of this manual.	
	Compressor overheats.	*Low oil level.*	Top up the oil level and check for leaks.	
		Dirty or blocked oil cooler.	Clean the oil cooler fins.	
		Incorrect grade of oil.	Use Ingersoll-Rand recommended oil.	
		Defective by-pass valve.	Check the operation of the element and replace if necessary.	
		Recirculation of cooling air.	Move the machine to avoid recirculation.	
		Faulty temperature switch.	Check the operation of the switch and replace if necessary.	

8.4 FAULT FINDING

XHP760 2T MoD	FAULT	CAUSE	REMEDY
		Reduced cooing air from fan.	Check the fan and the drive belts. Check for any obstruction inside the fan cowl.
	Excessive oil present in the discharge air.	*Blocked scavenge line.*	Check the scavenge line, drop tube and orifice. Clean and replace.
		Perforated separator element.	Replace the separator element.
		Pressure in the system is too low.	Check the minimum pressure valve or sonic orifice.
	Safety valve operates.	*Operating pressure too high.*	Check the setting and operation of the regulator valve piping.
		Incorrect setting of the regulator.	Adjust the regulator.
		Faulty regulator.	Replace the regulator.
		Inlet valve set incorrectly.	Refer to *SPEED AND PRESSURE REGULATION ADJUSTMENT* in the *MAINTENANCE* section of this manual.
		Loose pipe/hose connections.	Check all pipe/hose connections.
		Faulty safety valve.	Check the relieving pressure. Replace the safety valve if faulty. **DO NOT ATTEMPT A REPAIR.**
	Oil is forced back into the air filter.	*Incorrect stopping procedure used*	Always employ the correct stopping procedure. Close the discharge valve and allow the machine to run on idle before stopping.
		Faulty inlet valve.	Check for free operation of the inlet valve(s).

FAULT	CAUSE	REMEDY
	Faulty discharge check valve.	Remove the valve from the discharge pipe and check the operation.
Machine goes to full pressure when started.	*Inlet valve set incorrectly.*	Refer to *SPEED AND PRESSURE REGULATION ADJUSTMENT* in the *MAINTENANCE* section of this manual.
Machine fails to load when the load button is pressed.	*Faulty load solenoid.*	Replace the solenoid. Check the electrical circuit by feeling for movement whilst depressing the load button.

INGERSOLL-RAND®

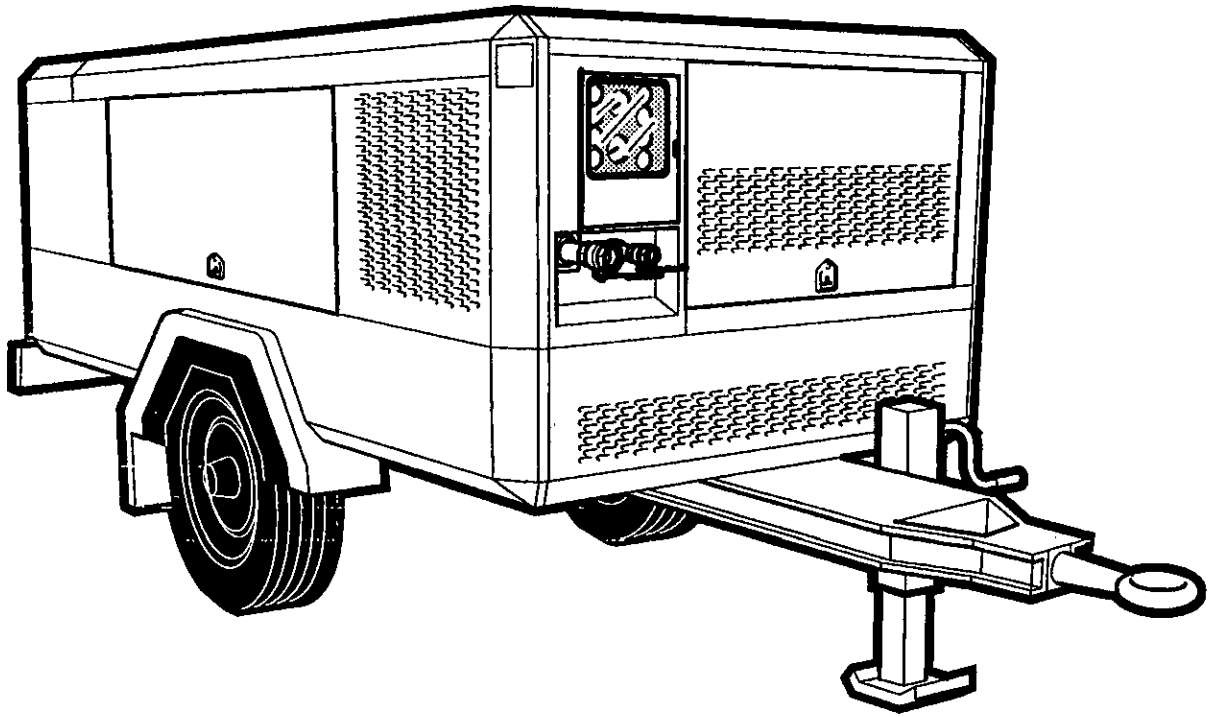
USE ONLY GENUINE INGERSOLL-RAND PARTS

Revision 00
05/98

INGERSOLL-RAND®

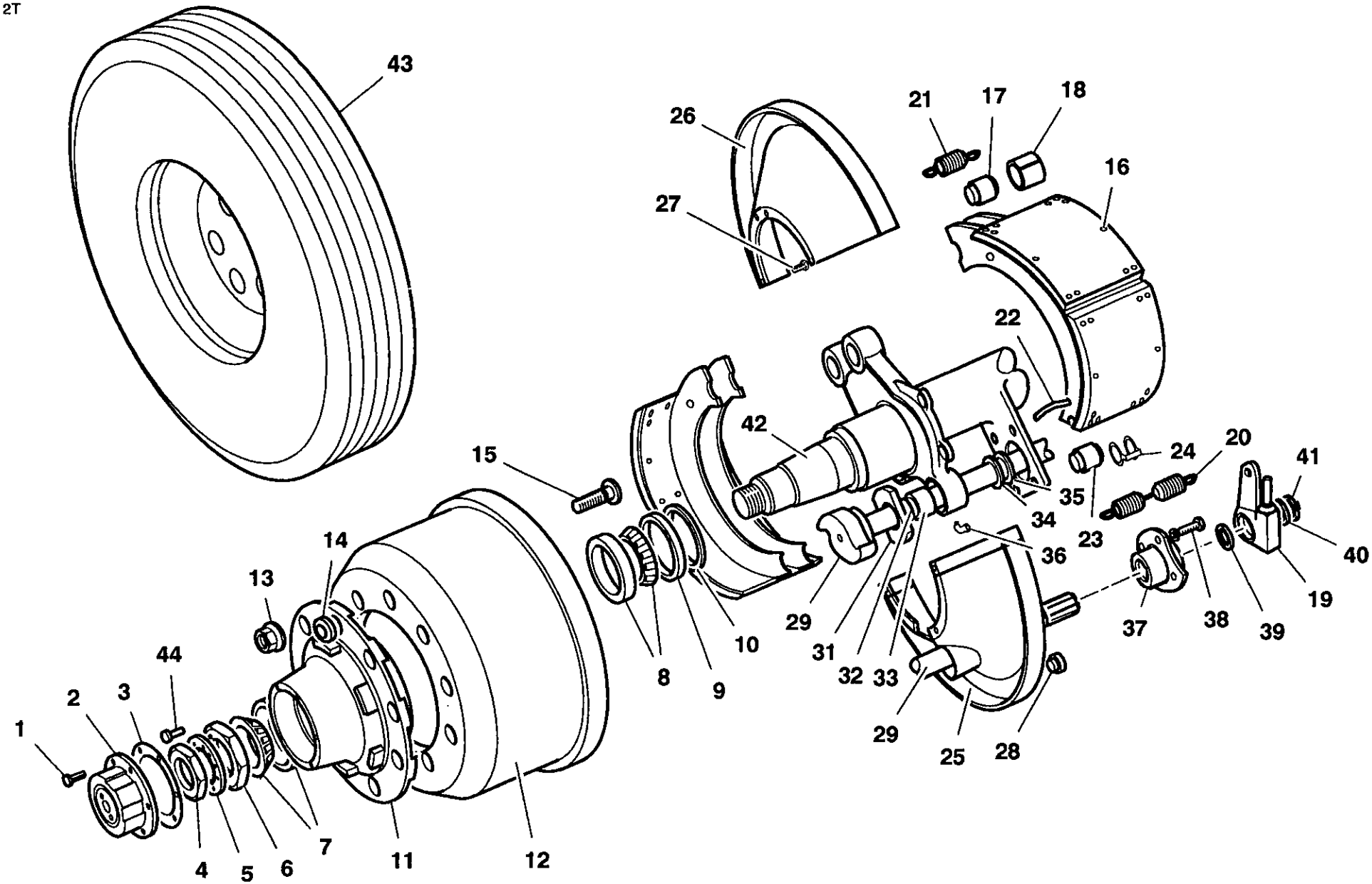
XHP660 XHP760

PARTS CATALOGUE



10.0.0 RUNNING GEAR

XHP760 2T
MoD

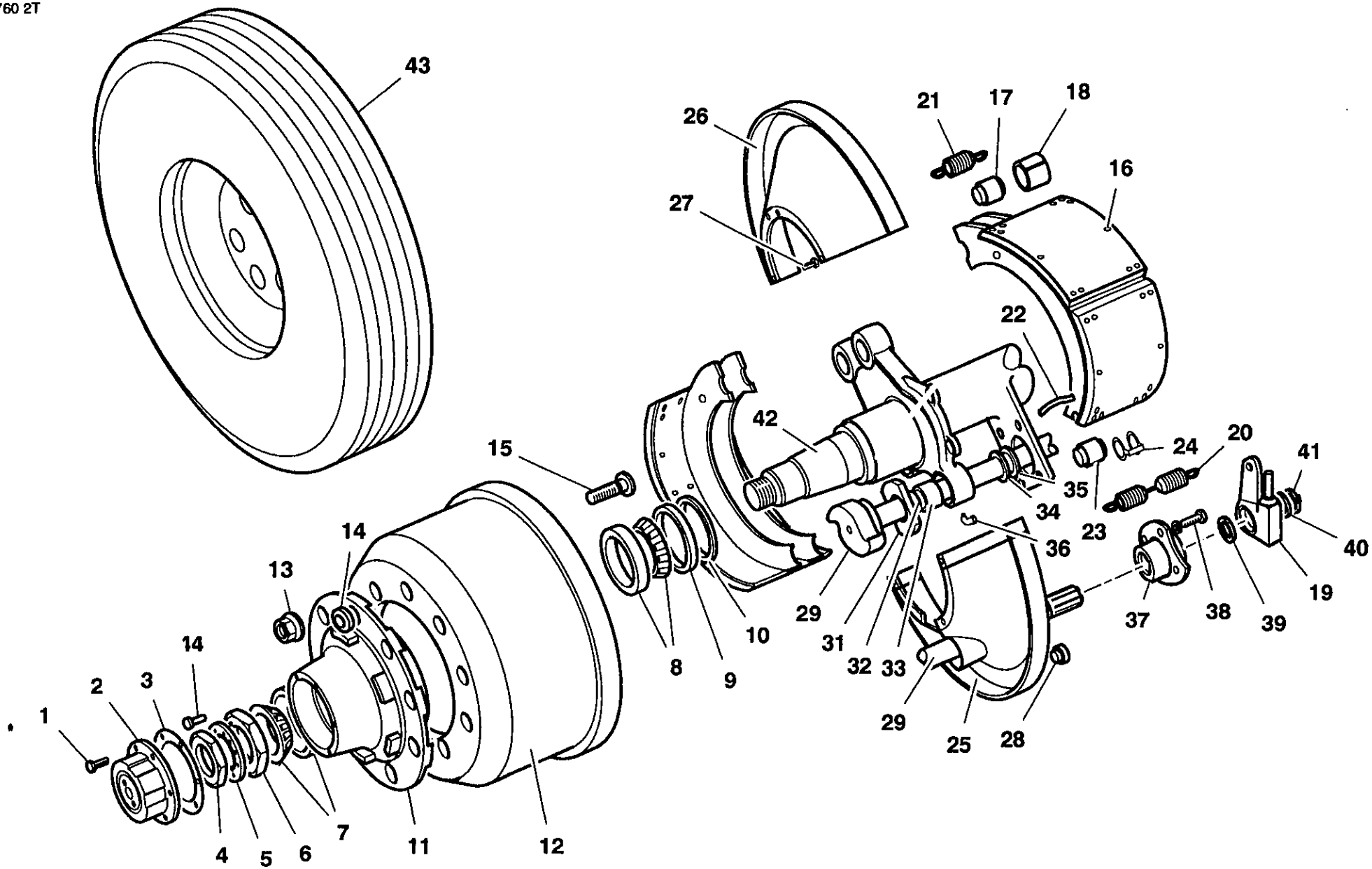


T1957
Revision 00
06/98

	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	1	89259733	12	Screw
	2	89259741	2	Cover
	3	89259758	2	Gasket
	4	89259766	2	Nut
	5	89259774	2	Lockwasher
	6	89259782	2	Locknut
	7	89259790	2	Bearing
	8	89259808	2	Bearing
	9	89259816	2	Seal carrier
	10	89253824	2	Seal
	11	89259832	2	Hub
	12	89259840	2	Drum
	13	89259857	20	Nut
	14	89259865	20	Collar
	15	89259873	20	Stud
	16	89259881	4	Shoe
	17	89259899	4	Pin, locating
	18	89259907	4	Bush
	19	89260491	4	Adjuster
	20	89259923	2	Spring
	21	89259931	2	Spring
	22	89259949	4	Pin
	23	89259956	4	Pin
	24	89259964	4	Retainer
	25	89259972	2	Guard lower
	26	89259980	2	Guard upper
	27	89259998	20	Screw
	28	89260004	2	Plug
	29	89260012	1	Shaft LH
Revision 00 06/98	30	89260020	1	Shaft RH

10.0.2 RUNNING GEAR

XHP760 2T
MoD

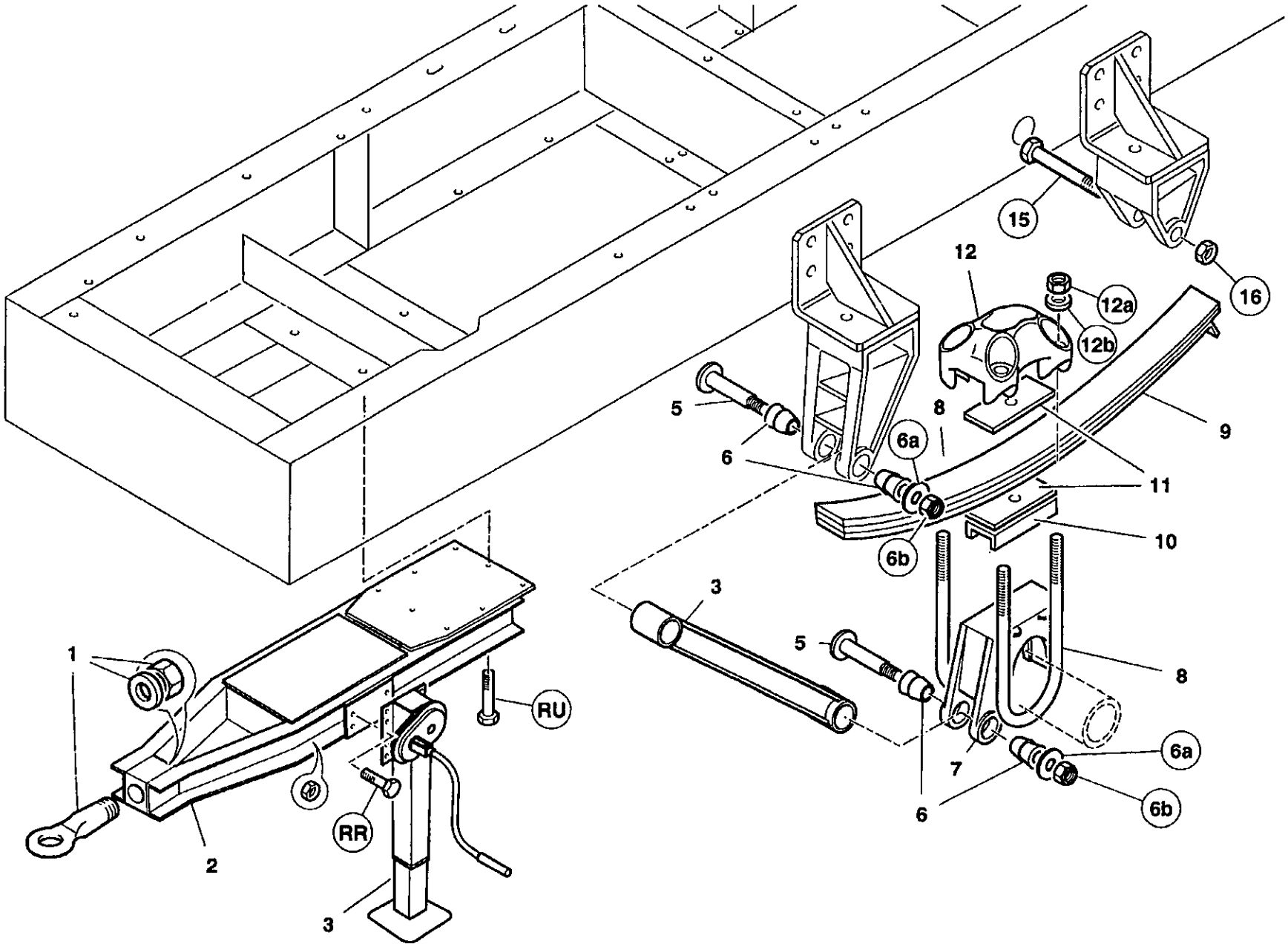


T1957
Revision 00
06/98

	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	31	89260038	2	Seal
	32	89260046	2	'O' Ring
	33	89260053	2	Bush
	34	89260061	2	Seal
	35	89260079	2	Ring, retaining
	36	89260087	2	Nipple
	37	89260095	2	Bush
	38	89260103	8	Screw
	39	89260111	2	Seal
	40	89260129	2	Seal
	41	89260137	2	Circlip
	42	89260145	1	Axle, stub
	43	92972389	2	Wheel & tyre assembly
	44	89259915	1	Pin, locking

10.0.4 RUNNING GEAR

XHP760 2T
MoD

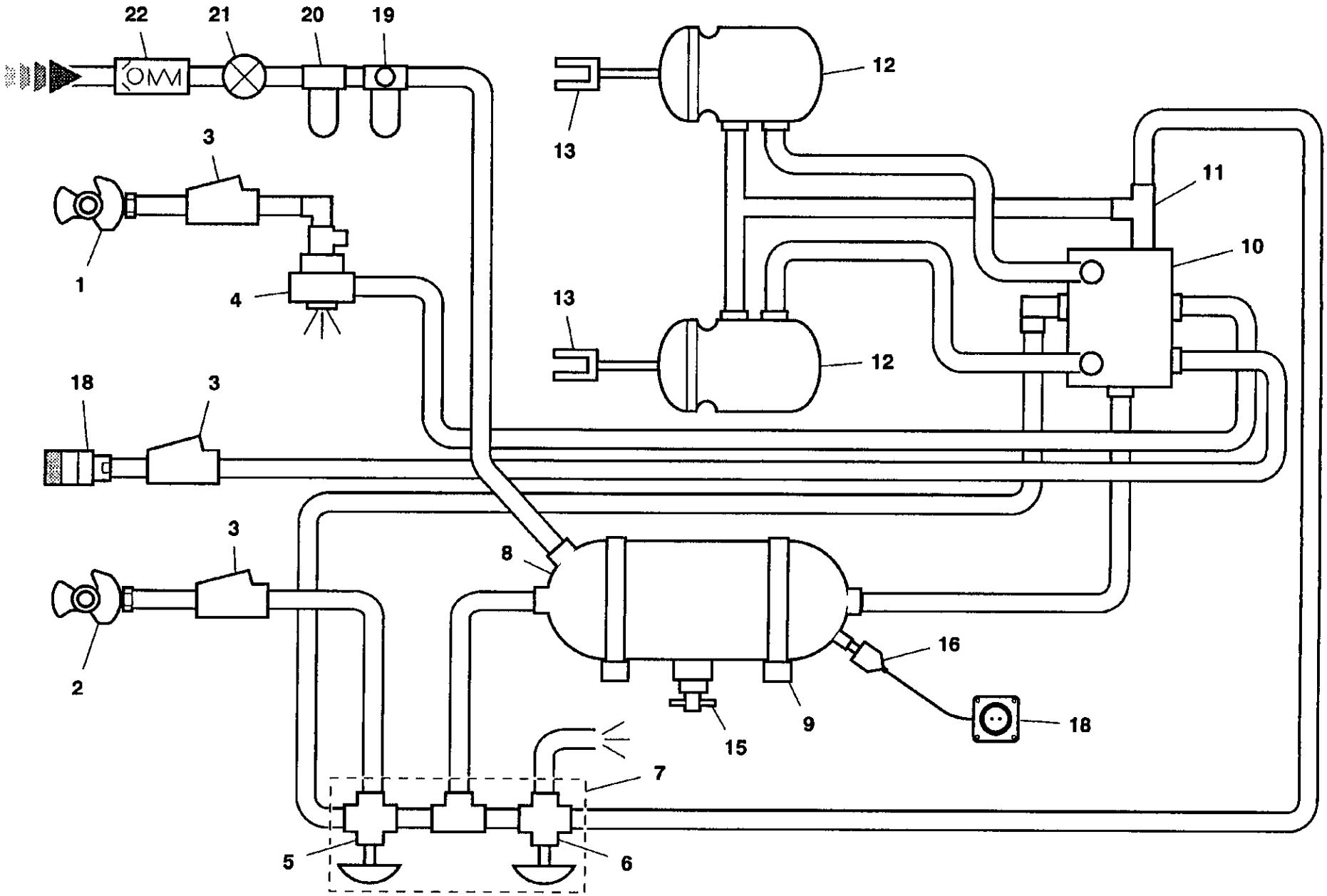


T1956
Revision 00
06/98

	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	1	88120464	1	Eye assembly NATO
	2	89260178	1	Drawbar
	3	93194306	1	Propstand assembly
	4	89260194	2	Torque arm
	5	89260202	4	Bolt
	6	89260210	8	Bush
	6a	89260228	4	Washer
	6b	89260236	4	Nut
	7	89260244	2	Axle carrier
	8	89260251	4	Bolt, U
	9	89260681	2	Leafspring
	10	89260269	2	Spacer
	11	89260152	4	Liner
	12	89260160	2	Plate
	13	89260186	8	Washer
	14	89260277	8	Nut
	15	89260285	2	Bolt
	16	89260293	2	Nut
	17	89251672	1	Frame

10.0.6 RUNNING GEAR

XHP760 2T
MoD

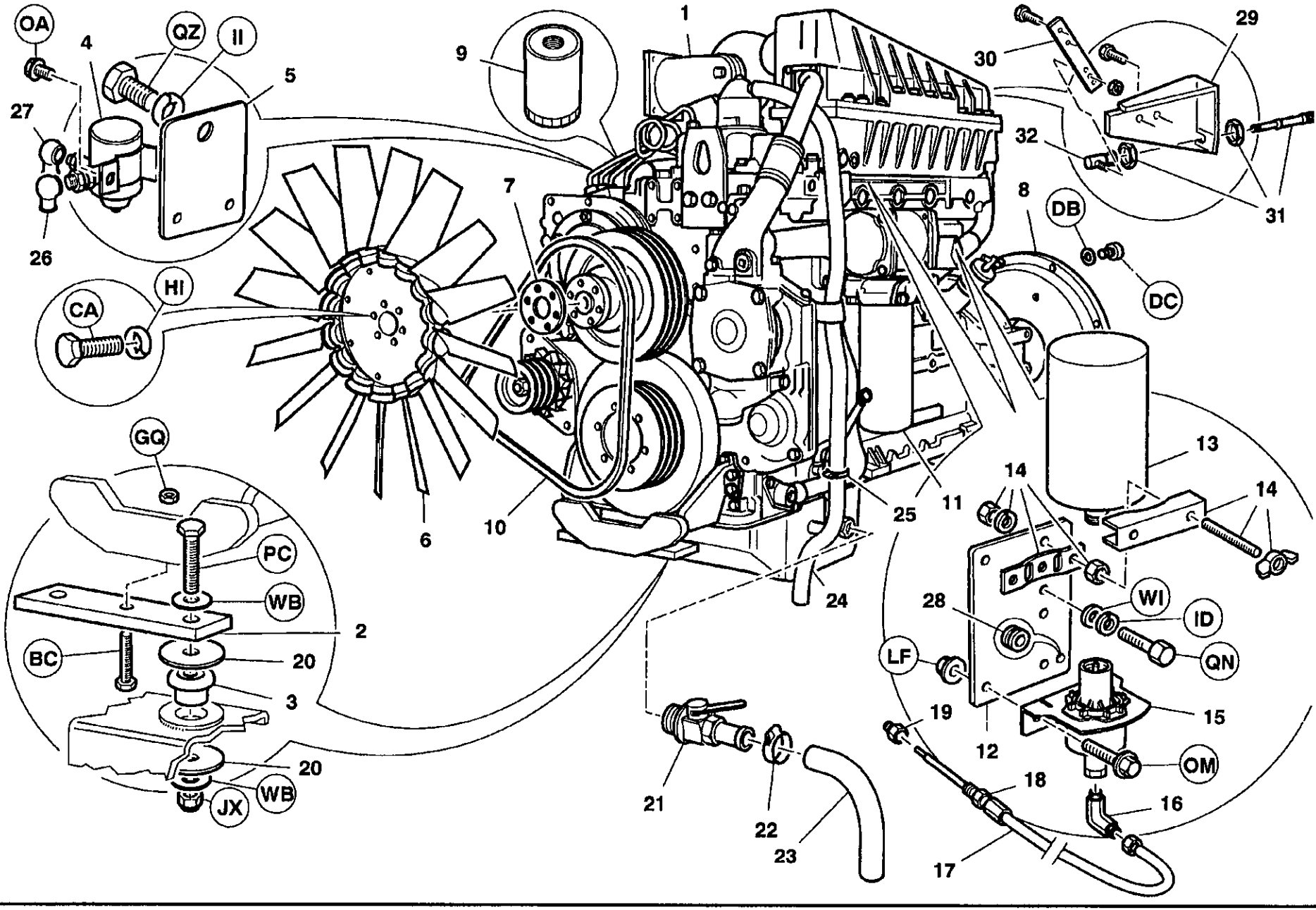


T1945
Revision 01
06/98

	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	1	89260368	1	Coupling service
	2	89260376	1	Coupling emergency
	3	89260384	3	Filter line
	4	89260392	1	Valve pressure proportioning
	5	89260400	1	Valve shunt
	6	89260418	1	Valve park
	7	89260426	1	Box Valve
	8	89260434	1	Tank 30 litre
	9	89260442	2	Strap
	10	89260459	1	Relay emergency valve (AS3250)
	11	89260467	1	Valve double check
	12	89260475	2	Spring brake unit
	13	89260483	2	Yoke
	14	-		
	15	89260509	1	Valve, drain
	16	89259139	1	Switch, pressure
	17	89260517	1	Coupling secondary line
	18	89253306	1	Connector & Harness
	19	92974856	1	Regulator
	20	93488690	1	Filter
	21	92911742	1	Valve, ball
	22	92101054	1	Valve, check

10.1.0 ENGINE ASSEMBLY

XHP760 2T
MoD

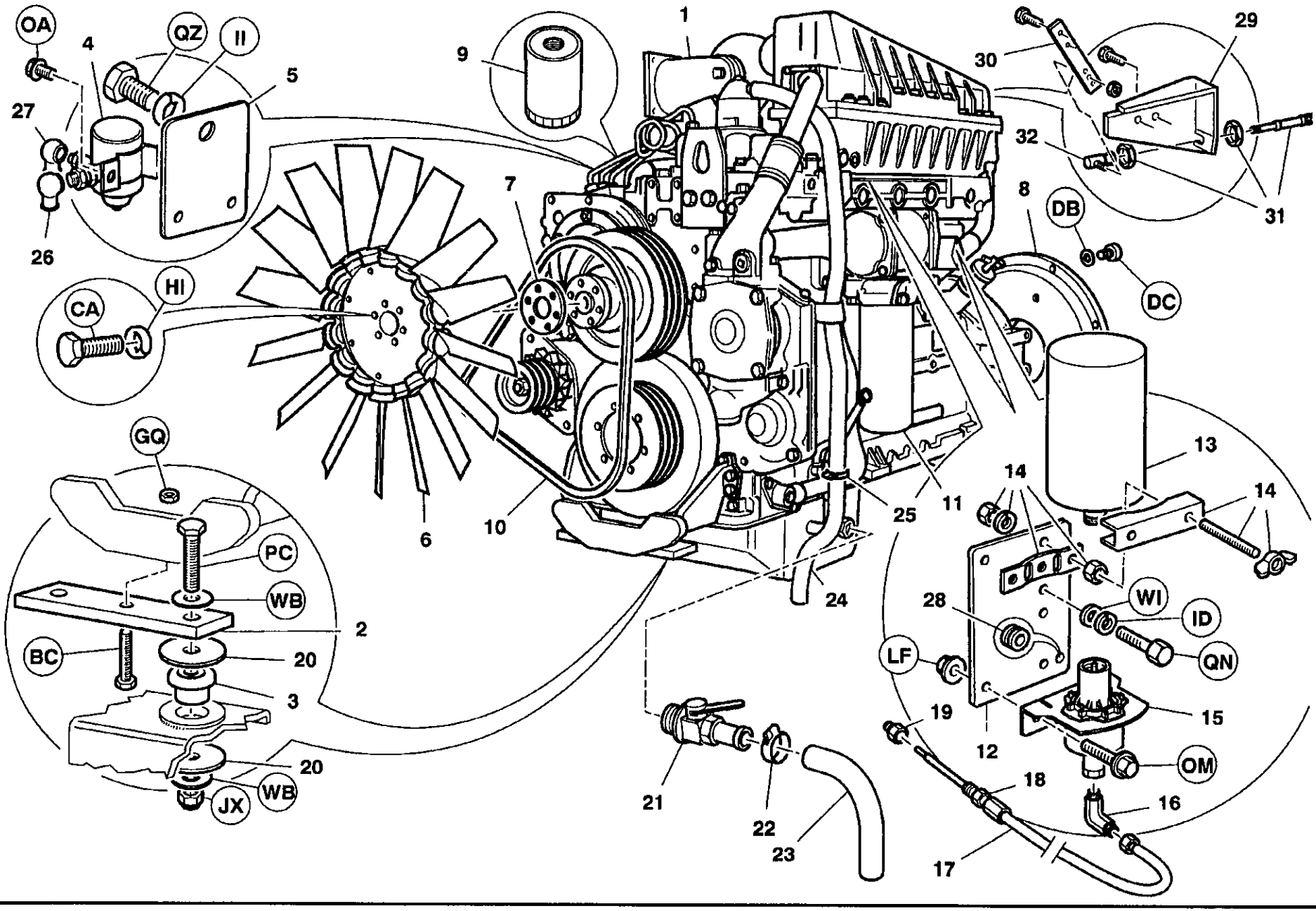


T2043
Revision 05
09/97

	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	1	92865666	1	Engine
	2	92919497	1	Plate, adaptor
	3	92062157	2	Bush
	4	35577873	1	Switch
	5	92517739	1	Bracket
	6	92893254	1	Fan
	7	92865518	1	Spacer
	8	92895507	1	Plate, drive
	9	92744523	1	Filter, fuel
	10	92976299	3	Belt, drive
	11	92658095	1	Filter,oil
	12	92955293	1	Bracket
	13	92473297	1	Cylinder
	14	92955277	1	Clamp
	15	92955269	1	Valve
	16	92955285	1	Elbow
	17	92397702	1	Tube (Nylon)
	18	92419514	1	Atomiser
	19	92354364	1	Bush, reducing
	20	35273937	2	Washer, snubber
	21	92899863	1	Valve, drain
	22	92803998	1	Clip, retaining
	23	92886399	1	Tube
	24	92823012	1	Hose
	25	92803998	1	Clip, retaining
	26	92860394	1	Cover
	27	92860402	1	Cover
	28	92499391	1	Grommet

10.1.2 ENGINE ASSEMBLY

XHP760 2T
MoD

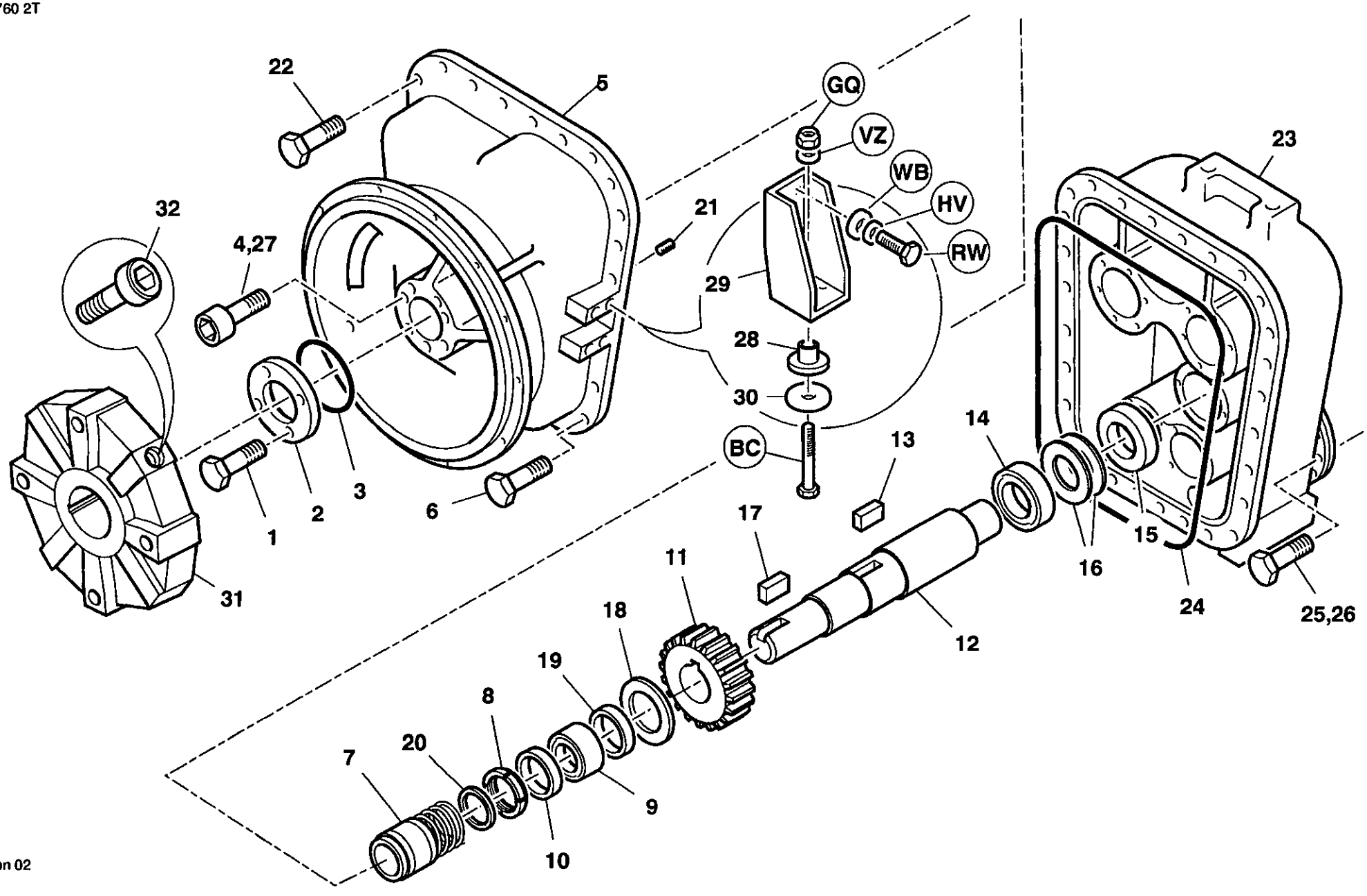


T2043
Revision 05
09/97

	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	29	89252829	1	Bracket
	30	89201792	1	Lever
	31	89201800	1	Cable
	32	89201834	1	Ball-joint

10.1.4 AIREND ASSEMBLY

XHP760 2T
MoD

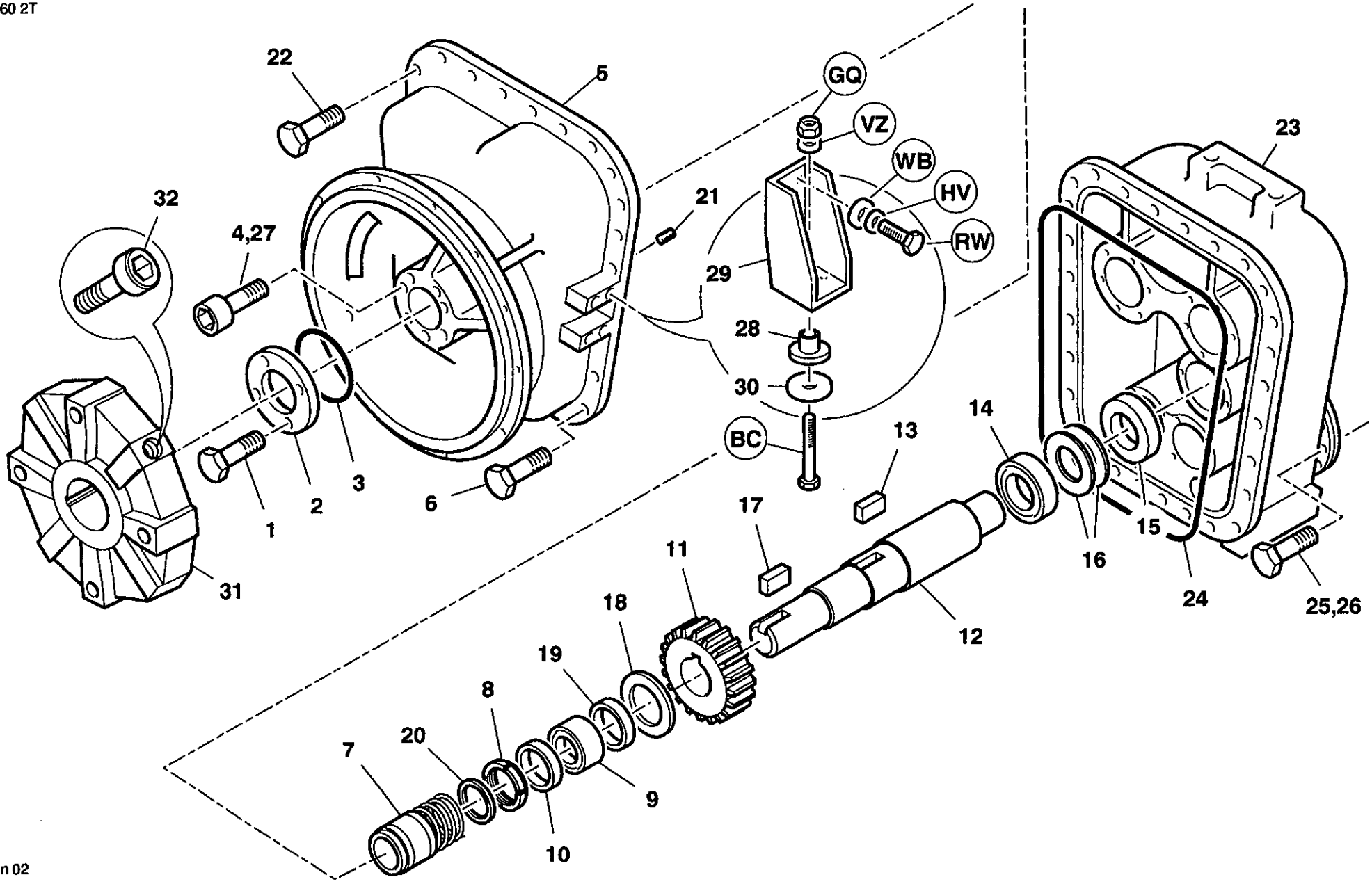


T2044
Revision 02
01/94

	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	1	92304435	4	Bolt
	2	35856467	1	Cover
	3	95358073	1	'O' Ring
	4	35361286	3	Bolt
	5	36750909	1	Gearcase
	6	35318146	18	Bolt
	7	35593516	1	Seal
	8	35104082	1	Locknut
	9	35610195	1	Bearing
	10	35372002	1	Spacer
	11	36763183	1	Gear-set
	11	36746410	1	Gear-set
	12	36504116	1	Driveshaft
	13	35355809	1	Key
	14	35610203	1	Bearing
	15	35372010	1	Spacer
	16	35372028	1	Shim set

10.1.6 AIREND ASSEMBLY

XHP760 2T
MoD



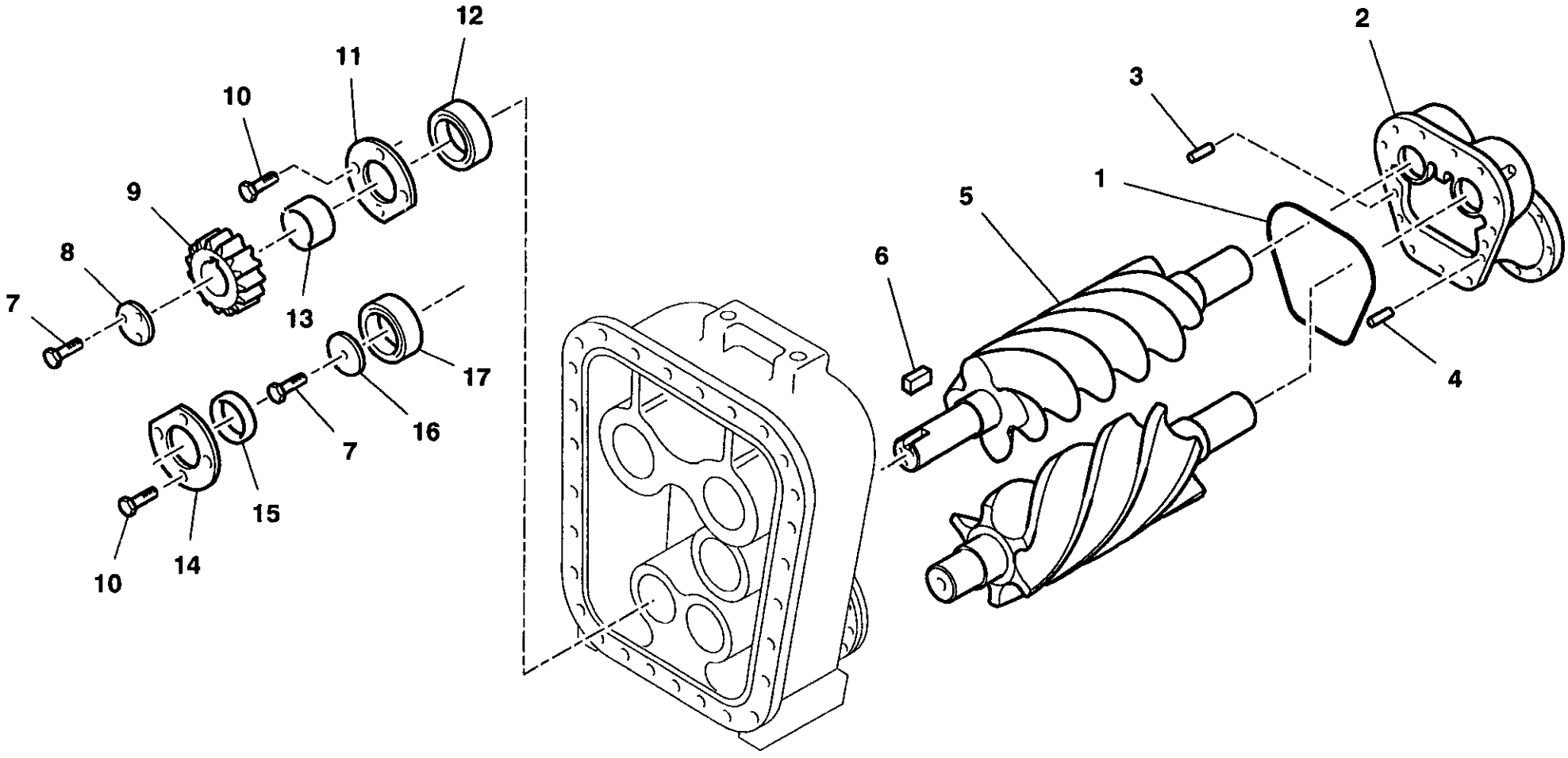
T2044
Revision 02
01/94

	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	17	92707801	1	Key
	18	35610153	1	Plate, retaining
	19	35371996	1	Spacer
	20	35337583	1	Spacer
	21	35336122	1	Pin, locating
	22	35272541	1	Bolt
	23	36737161	1	Housing
	24	35355775	1	'O' Ring
	25	35271139	1	Bolt
	26	35272533	1	Bolt
	*27	39101449	4	Plug
	28	92894518	2	Mount
	29	92893114	2	Bracket
	30	35273937	2	Washer, snubber
	31	92901214	1	Element
	32	92041466	4	Bolt

* Not illustrated

10.1.8 AIREND ASSEMBLY

XHP760 2T
MoD

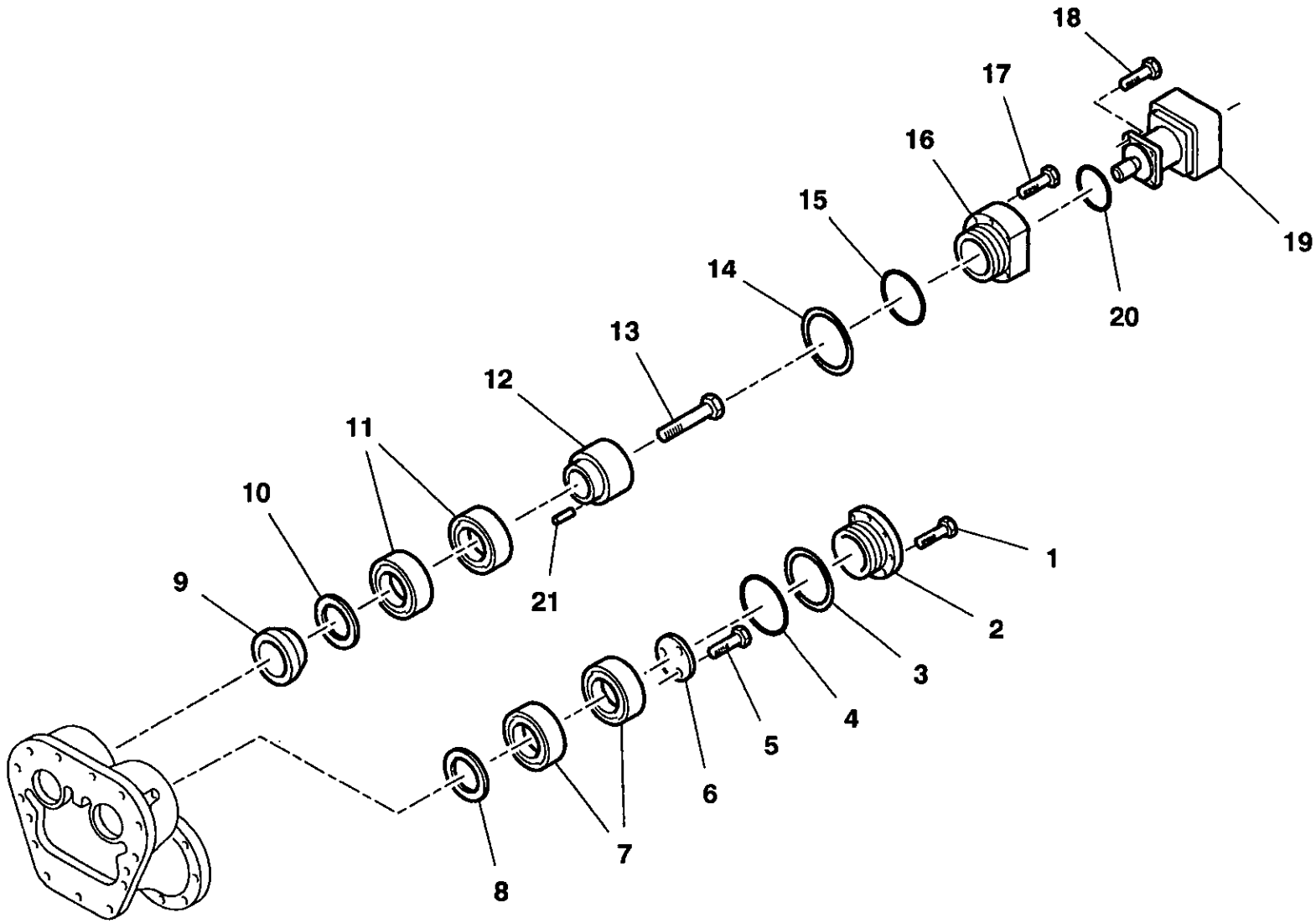


T2045
Revision 00
10/92

	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	1	35355791	1	'O' Ring
	2	36738128	1	Housing
	3	35336122	1	Dowel
	4	35336130	1	Dowel
	5	36006732	1	Rotor set
	6	35355817	1	Key
	7	35311463	4	Bolt
	8	35300193	1	Plate
	9	36763183	1	Gear-set
	9	36746410	1	Gear-set
	10	35273408	8	Bolt
	11	35355965	1	Plate, retaining
	12	35600022	1	Bearing
	13	35355866	1	Spacer
	14	35355999	1	Plate, retaining
	15	35355973	1	Spacer
	16	35300201	1	Plate
	17	35600014	1	Bearing

10.1.10 AIREND ASSEMBLY

XHP760 2T
MoD

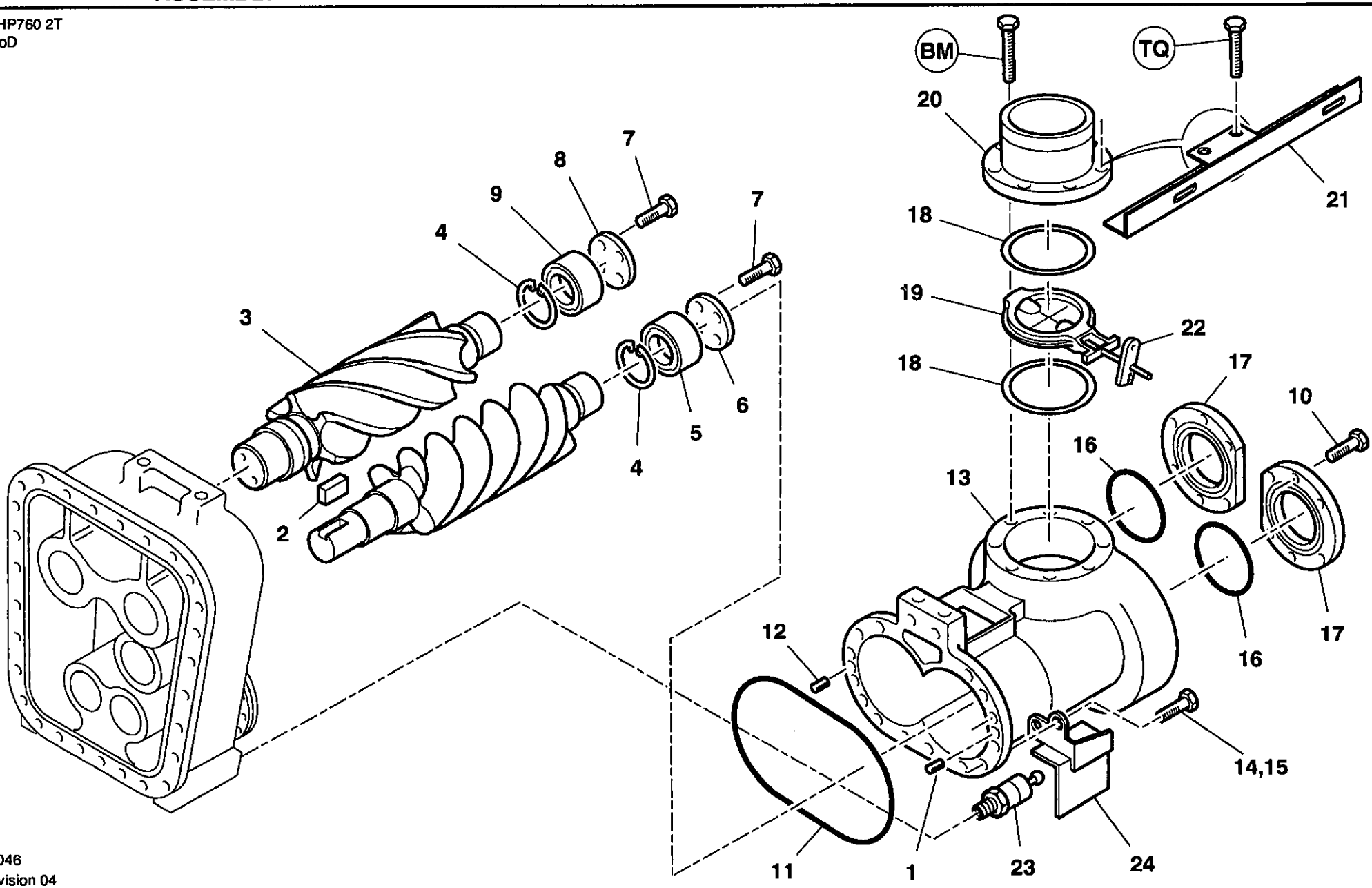


T2058
Revision 00
10/92

	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	1	35271188	1	Bolt
	2	35856350	1	Cover
	3	35355924	1	Shim set
	4	95026290	1	'O' Ring
	5	35311463	1	Bolt
	6	35355957	1	Plate
	7	35600113	1	Bearing
	8	35355874	1	Shim set
	9	35355940	1	Piston
	10	35355874	1	Shim set
	11	35600113	1	Bearing
	12	35864644	1	Coupling
	13	35369438	1	Bolt
	14	35355916	1	Shim set
	15	95026290	1	'O' Ring
	16	36500734	1	Cover
	17	39125000	1	Bolt
	18	35272533	1	Bolt
	19	35366657	1	Pump
	20	95000410	1	'O' Ring
	21	95069522	1	Dowel

10.1.12 AIREND ASSEMBLY

XHP760 2T
MoD

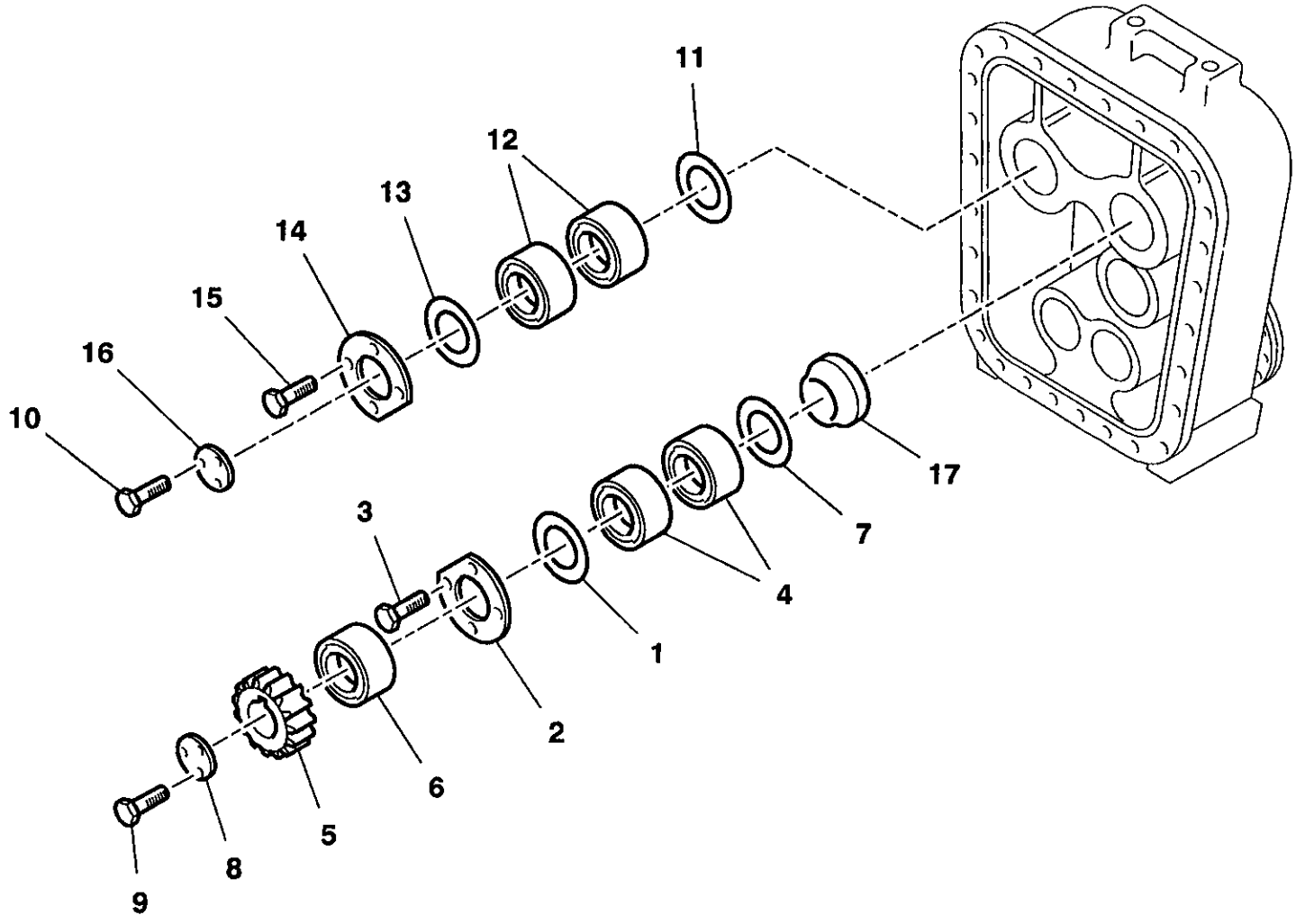


T2046
Revision 04
10/97

	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	1	35336122	1	Dowel
	2	35355817	1	Key
	3	35082114	1	Rotor set
	4	95223178	2	Circlip
	5	35600030	1	Bearing
	6	35300193	1	Plate
	7	35311463	8	Bolt
	8	35300193	1	Plate
	9	35600022	1	Bearing
	10	35366251	12	Bolt
	11	35355783	1	'O' Ring
	12	35336130	1	Dowel
	13	36738797	1	Housing
	14	35356039	16	Bolt
	15	35295344	16	Bolt
	16	35355502	1	'O' Ring
	17	35331883	2	Plate
	18	95214524	2	Gasket
	19	35285626	1	Valve
	20	92962356	1	Flange
	21	89201768	1	Bracket
	22	89201784	1	Lever
	23	36845030	1	Valve, safety
	24	36845048	1	Cover

10.1.14 AIREND ASSEMBLY

XHP760 2T
MoD

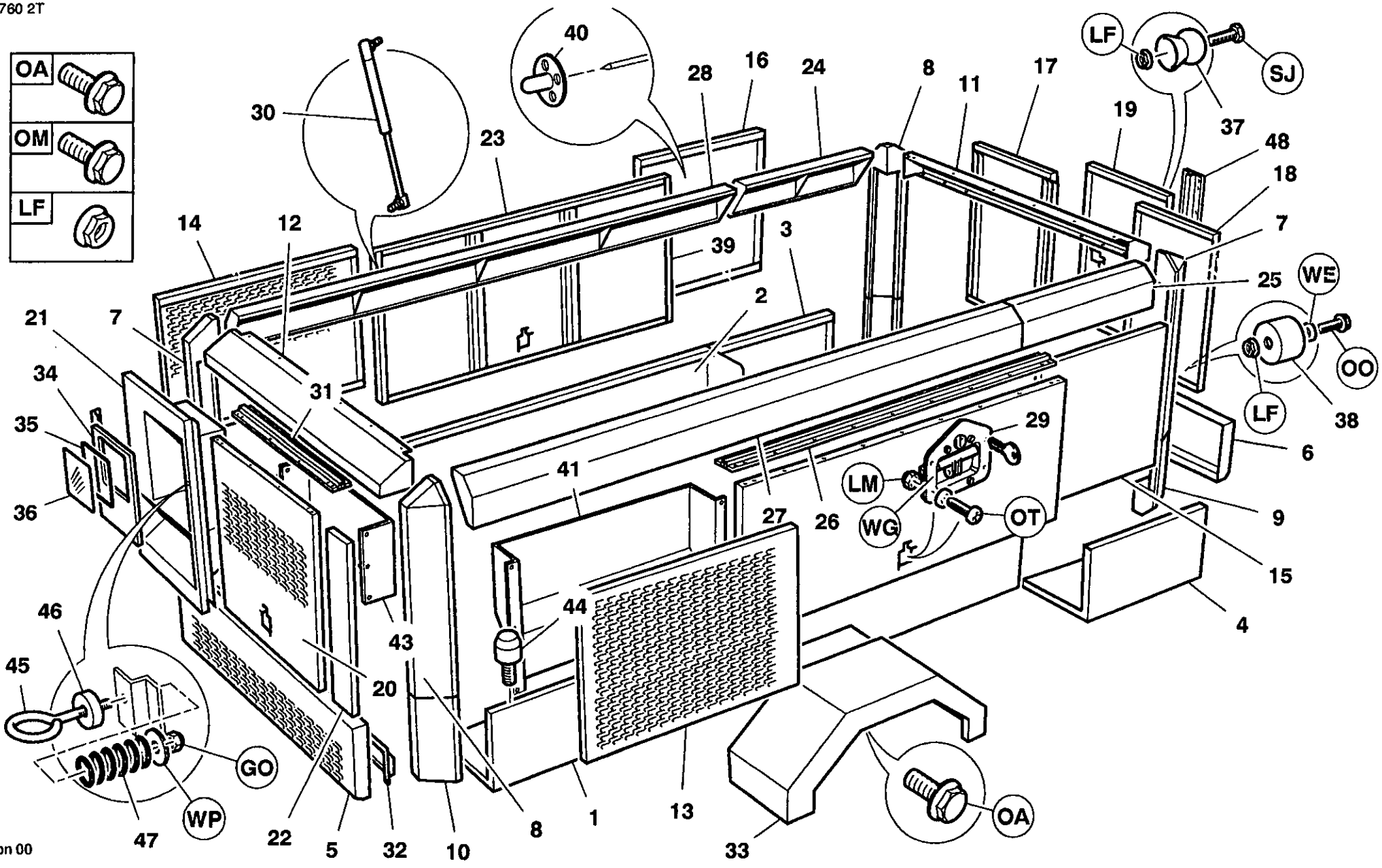


T2059
Revision 00
10/92

	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	1	35355767	1	Shim set
	2	36501013	1	Plate
	3	35271154	6	Bolt
	4	35605203	2	Bearing
	5	36763183	1	Gear-set
	6	35355841	1	Spacer
	7	35355825	1	Shim set
	8	35355858	1	Plate
	9	36763704	3	Bolt
	10	35311463	3	Bolt
	11	35355833	1	Shim set
	12	35600105	2	Bearing
	13	35355767	1	Shim set
	14	35856418	1	Plate, retaining
	15	92304393	6	Bolt
	16	35300193	1	Plate
	17	35602457	1	Piston

10.2.0 ENCLOSURE

XHP760 2T
MoD



T1988
Revision 00
05/98

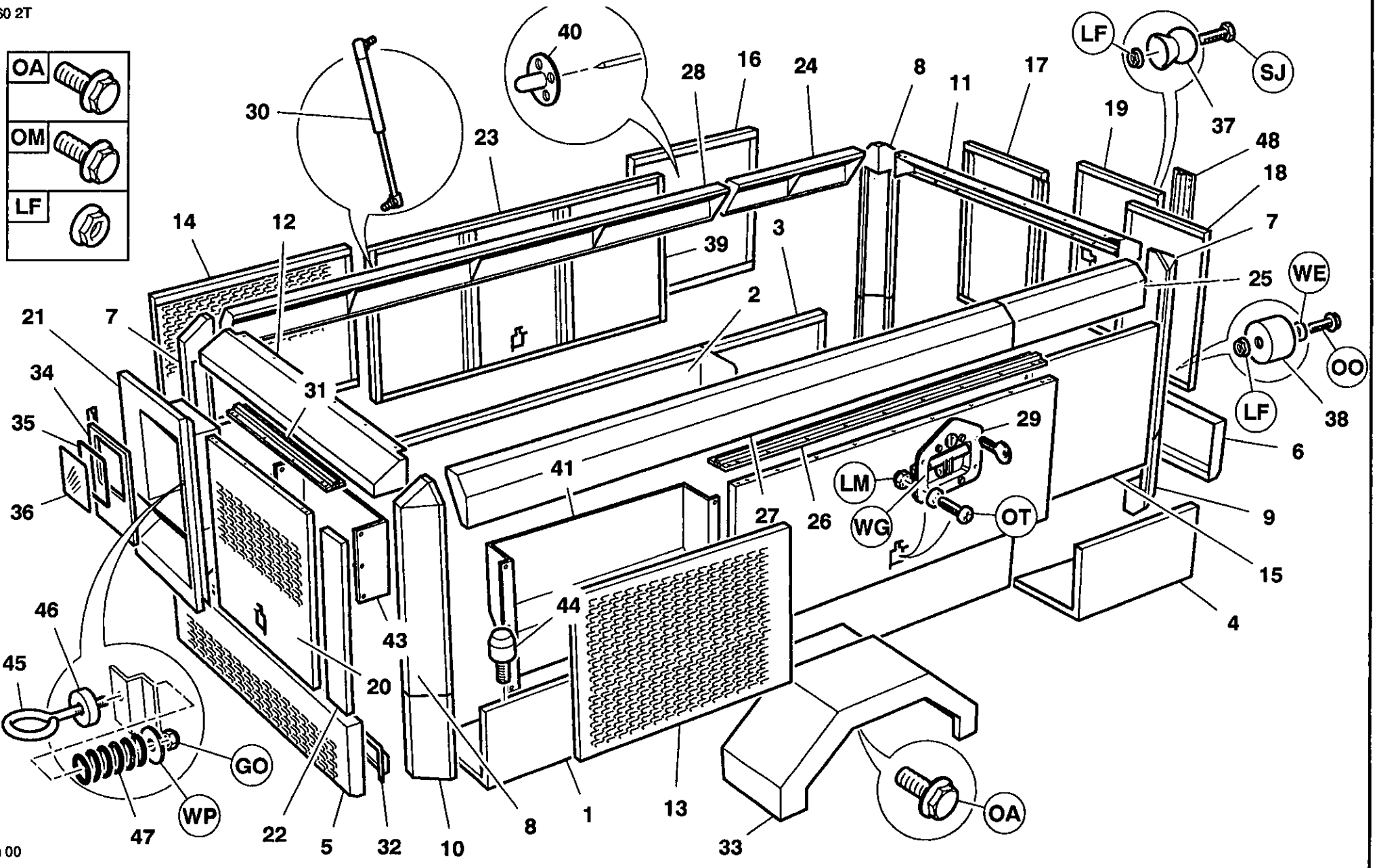
	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	1	89249098	1	Panel
	2	89249106	1	Panel
	3	89249122	1	Panel
	4	89249114	1	Panel
	5	89249163	1	Panel
	6	89249130	1	Panel
	7	89249148	2	Panel
	8	89249155	2	Panel
	9	89249171	2	Panel
	10	89249189	2	Panel
	11	89249205	1	Panel
	12	89249197	1	Panel
	13	89249221	1	Panel
	14	89249213	1	Panel
	15	89249304	1	Panel
	16	89249296	1	Panel
	17	89249247	1	Panel
	18	89249254	1	Panel
	19	89249445	1	Door
	20	89249478	1	Door
	21	89249239	1	Panel, instrument
	22	89249312	1	Panel
	23	89249445	2	Door
	24	89249288	1	Panel
	25	89249270	1	Panel
	26	92912419	1	Hinge
	27	89249262	1	Panel
	28	89249262	1	Panel
	29	92962026	4	Latch
	30	35584036	5	Spring, gas
	31	92923929	2	Hinge

Revision 00
05/98

10.2.1 ENCLOSURE

10.2.2 ENCLOSURE

XHP760 2T
MoD



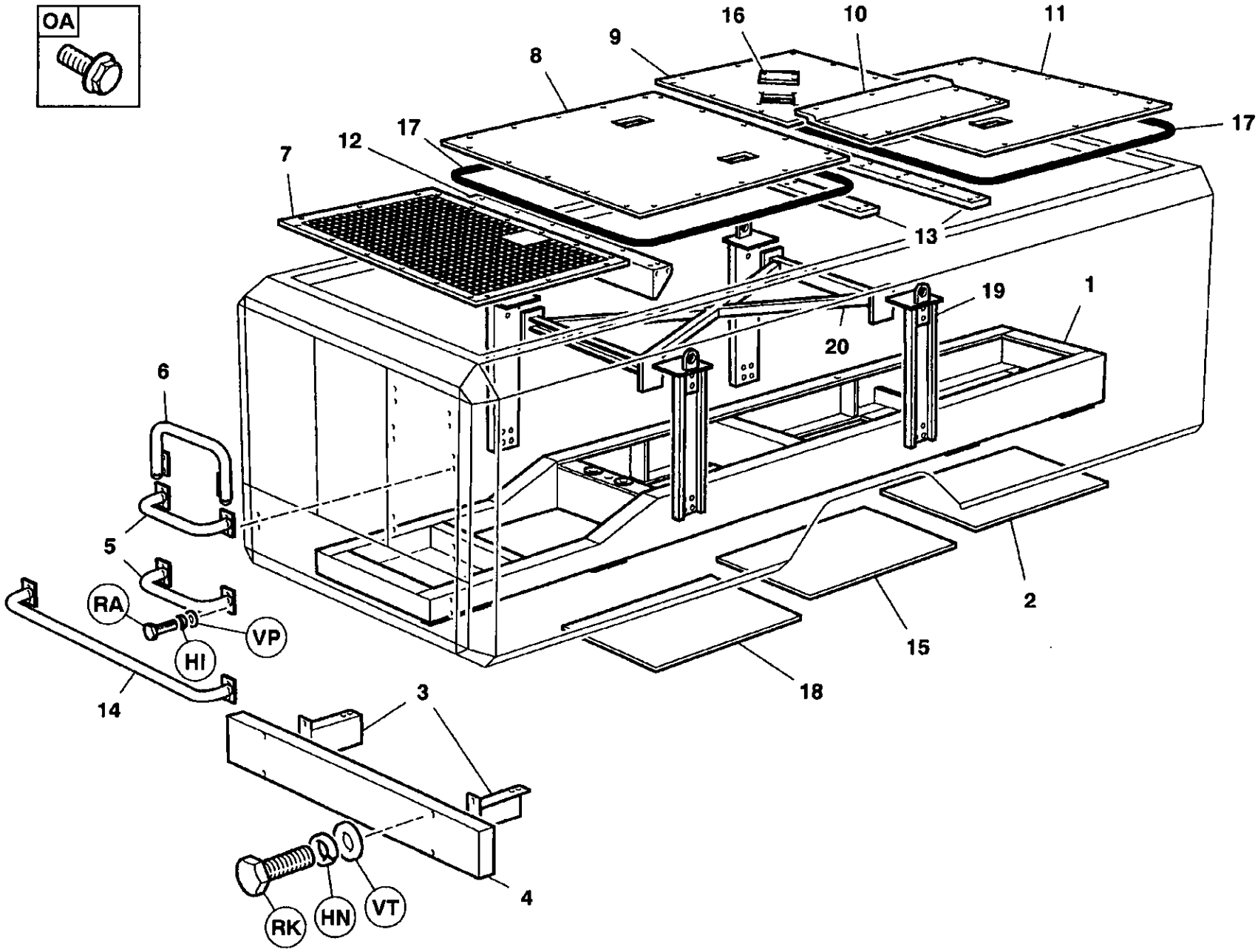
T1988
Revision 00
05/98

	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	32	89249452	1	Panel
	33	89249486	2	Mudguard
	34	89257927	1	Door
	35	35251800	1m	Seal
	36	93174027	1	Window
	37	92922863	1	Catch (Male)
	38	92922855	1	Catch (Female)
	39	92973478	12m	Seal
	40	92972090	80	Protector
	41	89252738	1	Panel LH
	42	89252720	1	Panel RH
	43	89252746	1	Panel
	44	92035187	1	Pin, locating
	45	92964279	1	Bolt, eye
	46	92799527	1	Spacer
	47	92799840	1	Spring
	48	92912427	1	Hinge

* Not illustrated

10.2.4 ENCLOSURE

XHP760 2T
MoD

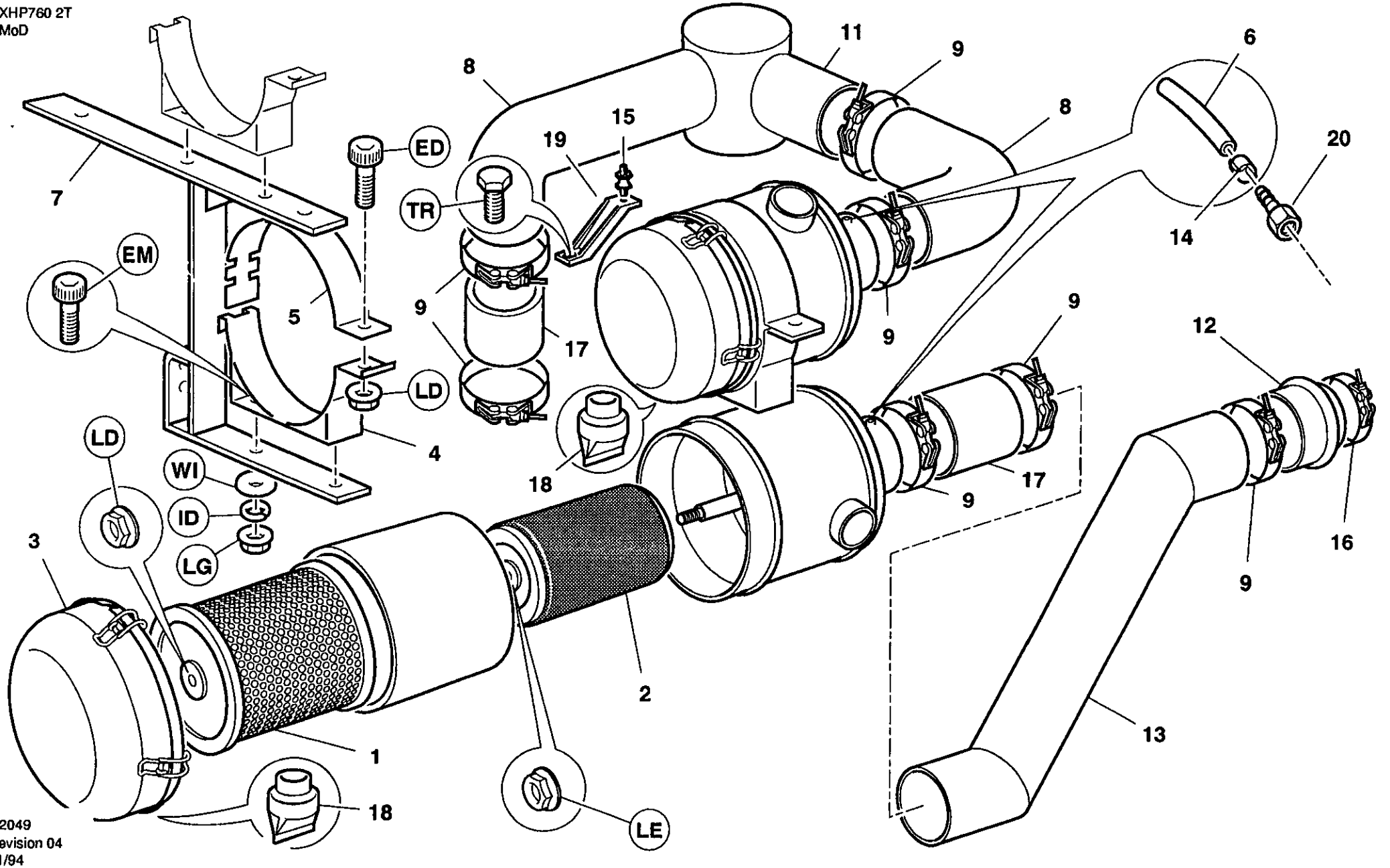


T1987
Revision 00
05/98

	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	1	92868850	1	Chassis
	2	89252803	1	Panel
	3	88114095	1	Bracket
	4	92975234	1	Bar, bumper
	5	92912054	2	Step
	6	92912062	1	Handrail
	7	92898998	1	Grille
	8	89249403	1	Panel
	9	89249379	1	Panel
	10	89249395	1	Plate, cover
	11	89249379	1	Panel
	12	89249361	1	Support
	13	89249353	2	Support
	14	92983428	1	Step
	15	89252811	1	Cover, battery
	16	89260350	1	Plate
	17	92337690	15m	Seal
	18	89252795	1	Bracket
	19	89251680	4	Post, lifting
	20	89251698	1	Brace, lifting

10.3.0 AIR INTAKE SYSTEM

XHP760 2T
MoD

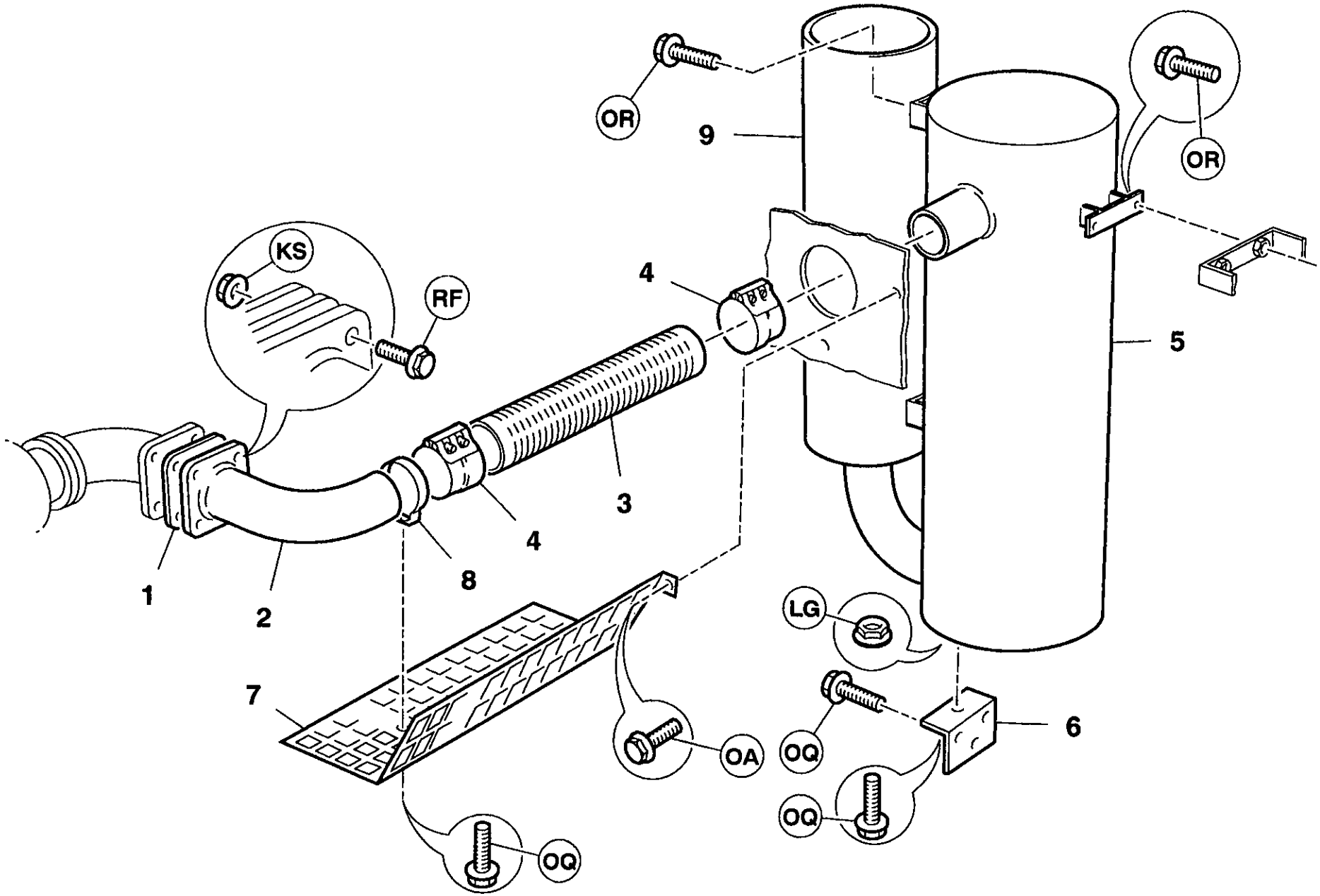


T2049
Revision 04
01/94

	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	1-3	92055300	2	Filter assembly
	1	92035948	2	Element, air filter
	2	92035955	2	Element, safety
	3	92035963	2	Cover
	4	92920313	2	Mount
	5	92920321	2	Strap
	6	92111335	1	Hose
	7	92951045	1	Bracket
	8	35281336	1	Elbow
	9	92275239	7	Clamp
	10	92951060	1	Pipe
	11	89259048	1	Duct
	12	35264415	1	Hose
	13	92951060	1	Pipe
	14	92895473	1	Clip, hose
	15	92276096	1	Mount
	16	92085885	1	Clamp
	17	92952050	2	Hose
	18	92971977	2	Valve
	19	92972504	1	Bracket
	20	92055235	1	Tailpiece

10.3.2 ENGINE
EXHAUST SYSTEM

XHP760 2T
MoD

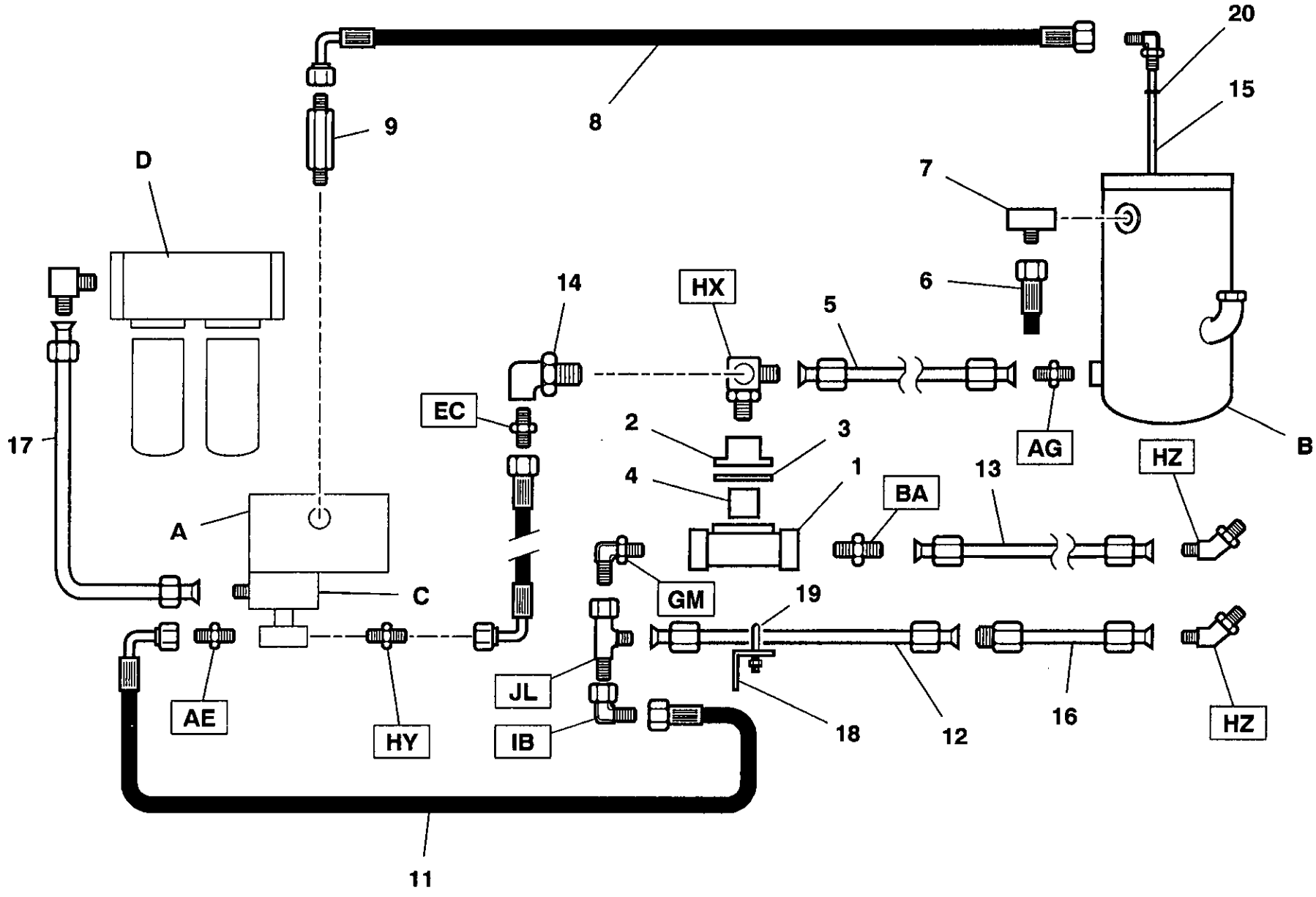


T2050
Revision 01
02/93

	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	1	92517846	1	Gasket
	2	92893908	1	Pipe
	3	92814045	1	Pipe
	4	92814052	2	Clamp
	5	92893189	1	Silencer
	6	92956820	1	Bracket
	7	92964295	1	Guard
	8	92964303	1	Support
	9	92893205	1	Guard

10.4.0 OIL PIPING

XHP760 2T
MoD



T2051
Revision 03
01/94

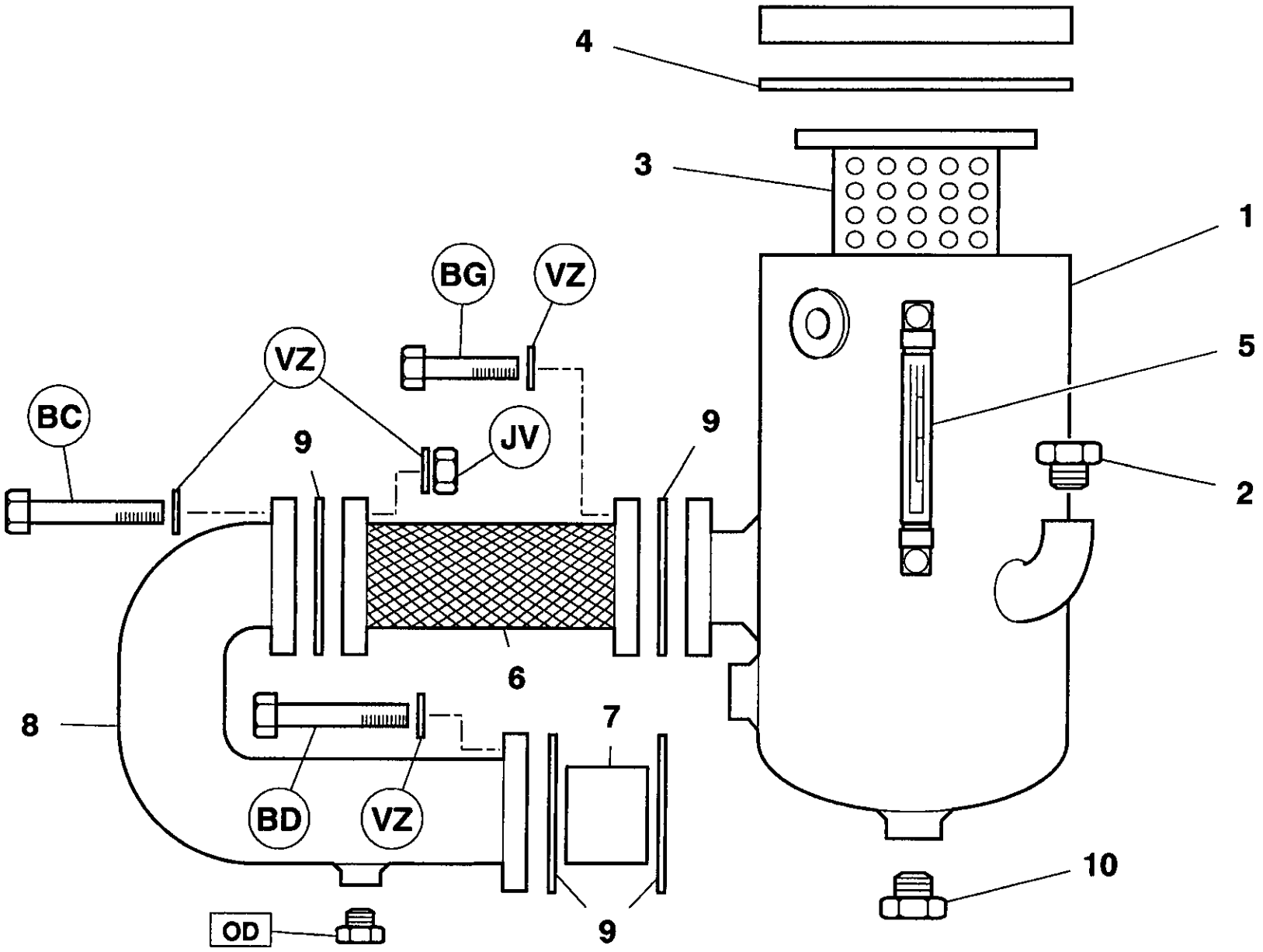
	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	1–4	92752203	1	Valve, temperature bypass
	1	92707512	1	Body
	2	92707520	1	Cover
	3	92707538	1	Gasket
	4	35288117	1	Valve
	5	89259055	1	Tube assembly
	6	92895267	1	Hose assembly
	7	92892934	1	Valve, safety
	8	92690593	1	Hose assembly
	9	92955244	1	Valve, check
	10	92899368	1	Hose assembly
	11	92899350	1	Hose assembly
	12	92951953	1	Tube assembly
	13	92896174	1	Tube assembly
	14	92892942	1	Valve, relief
	15	92895168	1	Drop-tube
	16	92951896	1	Tube assembly
	17	36758357	1	Tube assembly
	18	92963552	1	Bracket
	19	92898576	1	Clamp
	20	92338946	1	Seal

	KEY
A	Airend
B	Tank, separator
C	Pump
D	Filter assembly

T2051
Revision 02
01/94

10.4.2 OIL PIPING

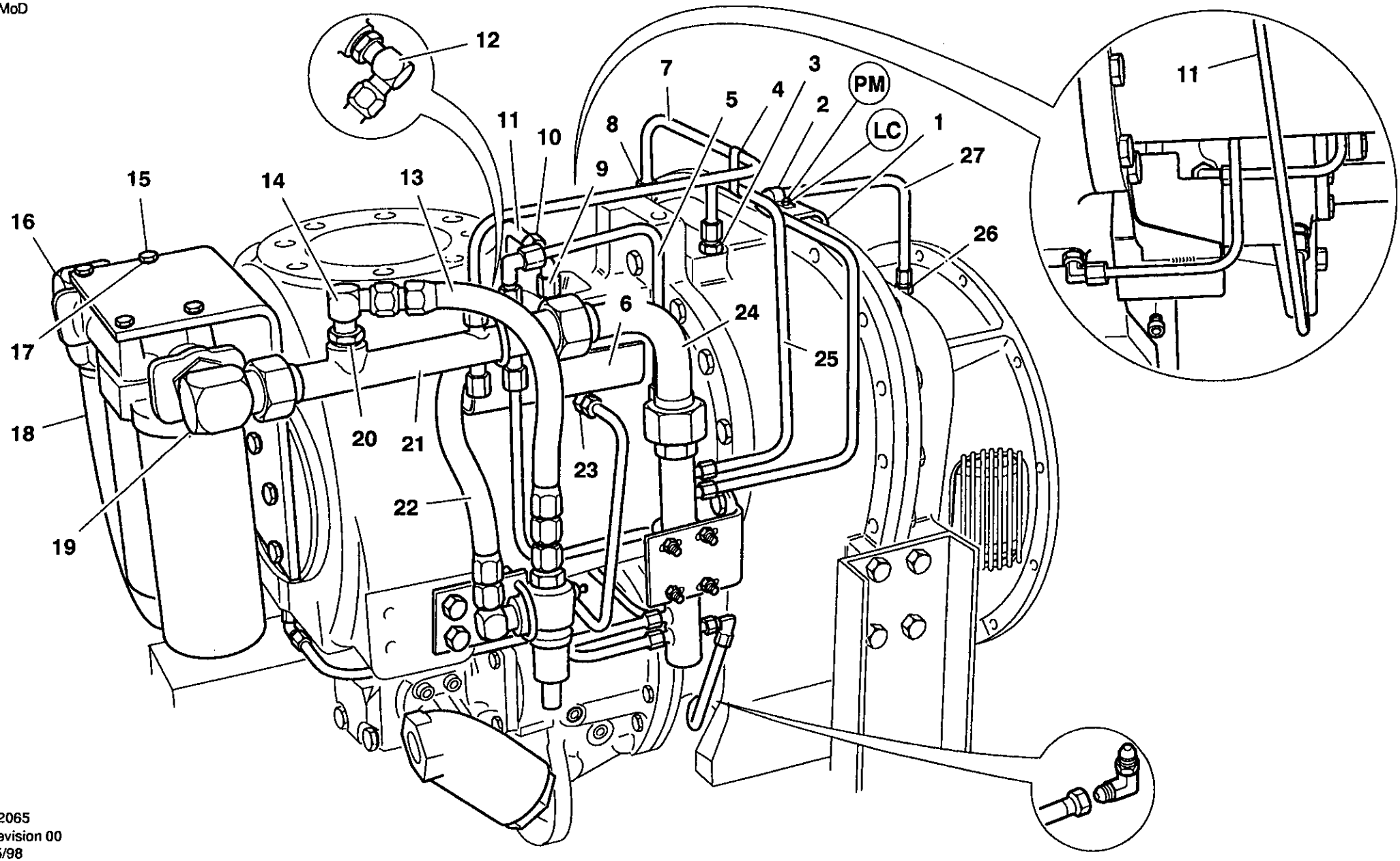
XHP760 2T
MoD



	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	1	92865815	1	Tank, separator
	1	92882075	1	Tank, separator (Euronorm)
	1	92982669	1	Tank, separator (AUS)
	2	35579630	1	Cap
	3	92963396	1	Element, oil filter
	4	92765189	1	Gasket
	5	92892967	1	Sight-glass
	6	92893221	1	Pipe
	7	36843720	1	Valve, check
	8	92962430	1	Pipe
	9	92982875	4	Gasket
	10	92823624	1	Plug
	11	92354661	1	Plug

10.5.0 AIREND PIPEWORK

XHP760 2T
MoD

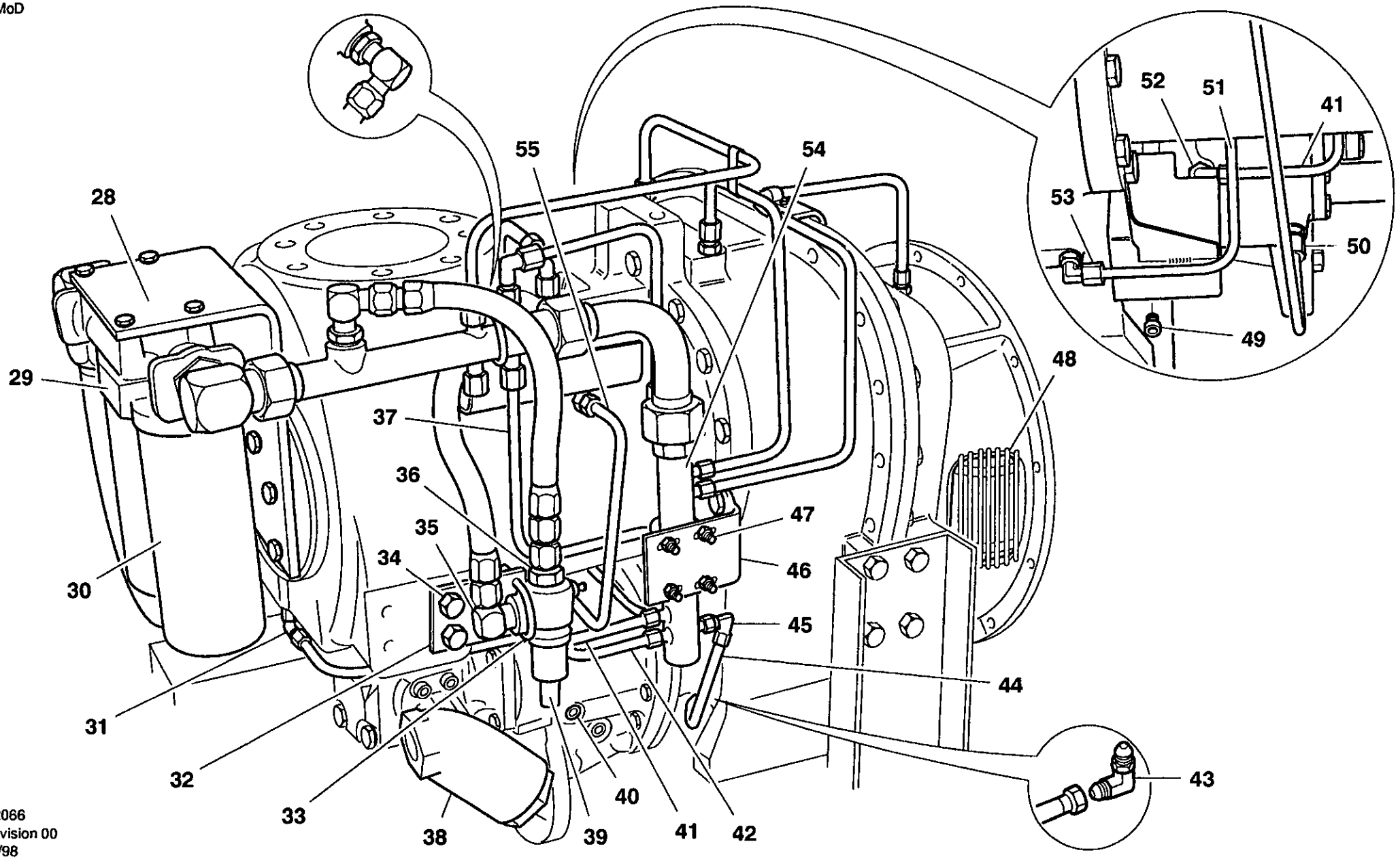


T2065
Revision 00
05/98

	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	1	35863885	1	Bracket
	2	35253038	1	Clamp
	3	35364991	1	Connector
	4	35253038	2	Clamp
	5	36743797	1	Tube assembly
	6	36746626	1	Bracket
	7	36850584	1	Tube assembly
	8	35287895	1	Connector
	9	35294156	1	Connector
	10	35287911	1	Elbow
	11	36743896	1	Tube assembly
	12	35294727	1	Elbow
	13	35287721	1	Hose assembly
	14	35294735	1	Elbow
	15	92272368	4	Setscrew
	16	95431292	1	Elbow
	17	92304617	4	Washer
	18	36758357	1	Tube assembly
	19	95431292	1	Elbow
	20	95038048	1	Bush, reducing
	21	36743722	1	Tube assembly
	22	35294677	1	Hose assembly
	23	35288166	1	Connector
	24	35861137	1	Elbow
	25	36743870	1	Tube assembly
	26	35364991	1	Connector
	27	36745669	1	Tube assembly

10.5.2 AIREND PIPEWORK

XHP760 2T
MoD

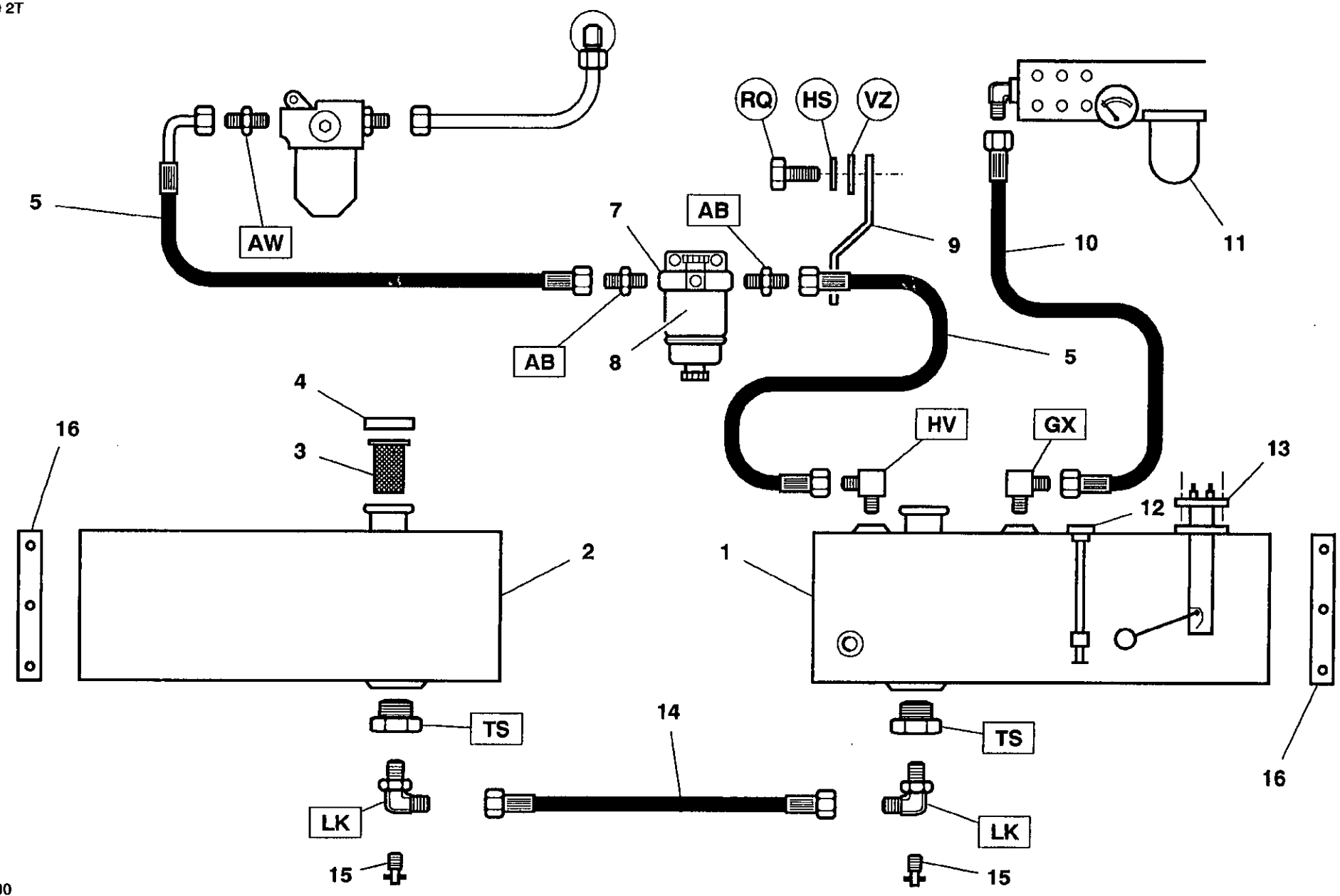


T2066
Revision 00
05/98

	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	28	36759447	1	Bracket
	29-30	36756120	1	Filter assembly
	30	36860336	2	Element
	31	35606490	1	Elbow
	32	36846517	1	Bracket
	33	36506756	1	Bolt, U
	34	35309715	2	Screw
	35	35294735	1	Elbow
	36	95293320	1	Connector
	37	36743805	1	Tube assembly
	38	35092279	1	Filter assembly
	39	36846707	1	Valve, safety
	40	35287556	1	Plug
	41	36743912	1	Tube assembly
	42	36743920	1	Tube assembly
	43	35606490	1	Elbow
	44	36748093	1	Tube assembly
	45	35283068	1	Elbow
	46	36745792	1	Bracket
	47	35306638	2	Bolt, U
	48	36798205	1	Cover
	49	35287556	1	Plug
	50	35287895	1	Connector
	51	36743904	1	Tube assembly
	52	35279827	1	Elbow
	53	35279827	1	Elbow
	54	36743961	1	Manifold
	55	36748101	1	Tube assembly

10.6.0 FUEL SYSTEM

XHP760 2T
MoD

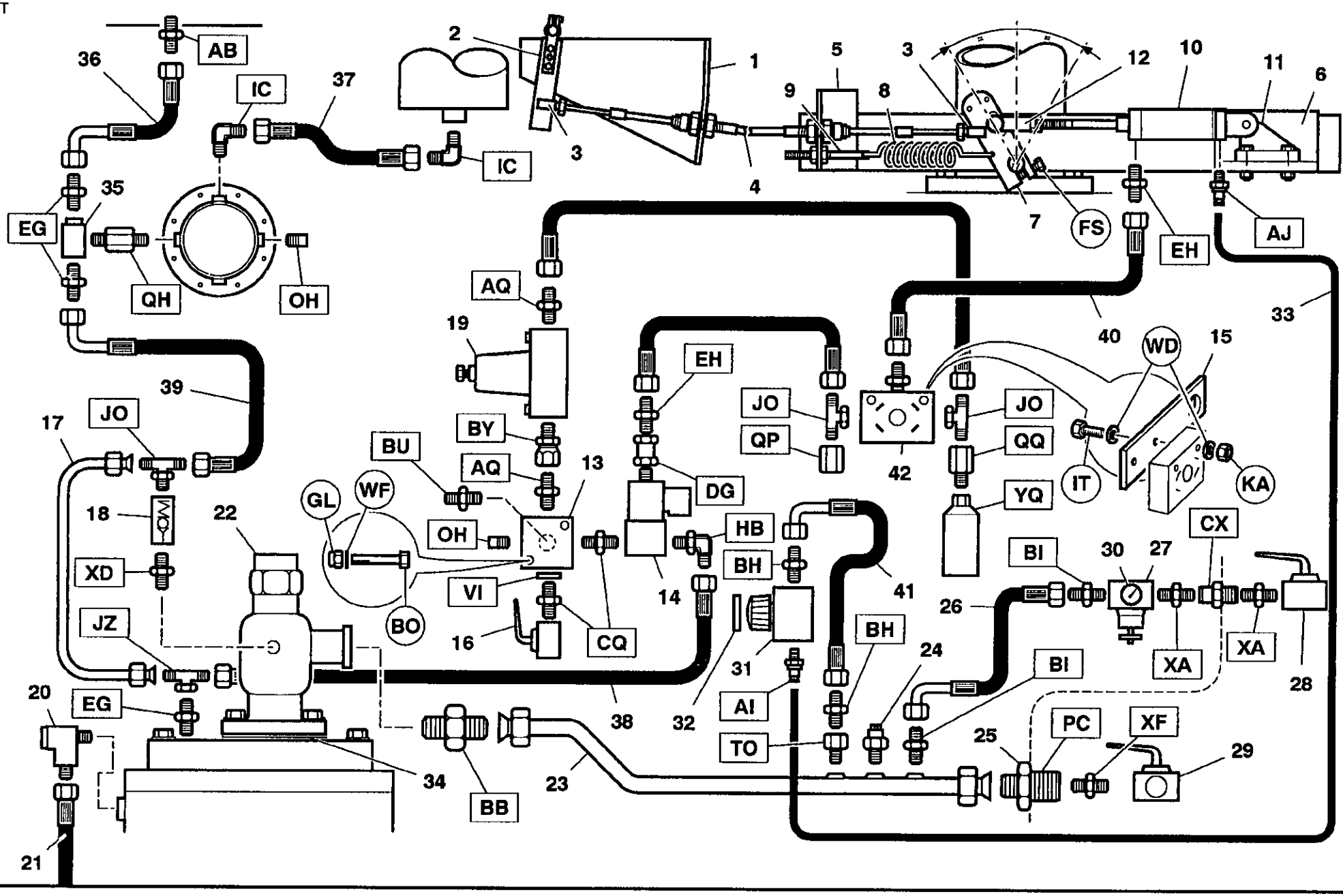


T1986
Revision 00
05/98

	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	1	89249528	1	Tank, fuel
	2	89249510	1	Tank, fuel
	3	92043058	2	Filter, fuel
	4	92120013	2	Cap, fuel filler
	5	93489128	2	Hose assembly
	6	-		
	7	92894930	1	Filter, fuel
	8	92894989	1	Element, fuel filter
	9	92961614	1	Bracket
	10	92911957	1	Hose assembly
	11	92744523	1	Element, fuel filter
	12	88109954	1	Switch
	13	92062124	1	Sender unit, fuel gauge
	14	89253983	1	Hose assembly
	15	92258706	2	Valve, drain
	16	92894120	2	Bracket

10.7.0 REGULATION SYSTEM

XHP760 2T
MoD

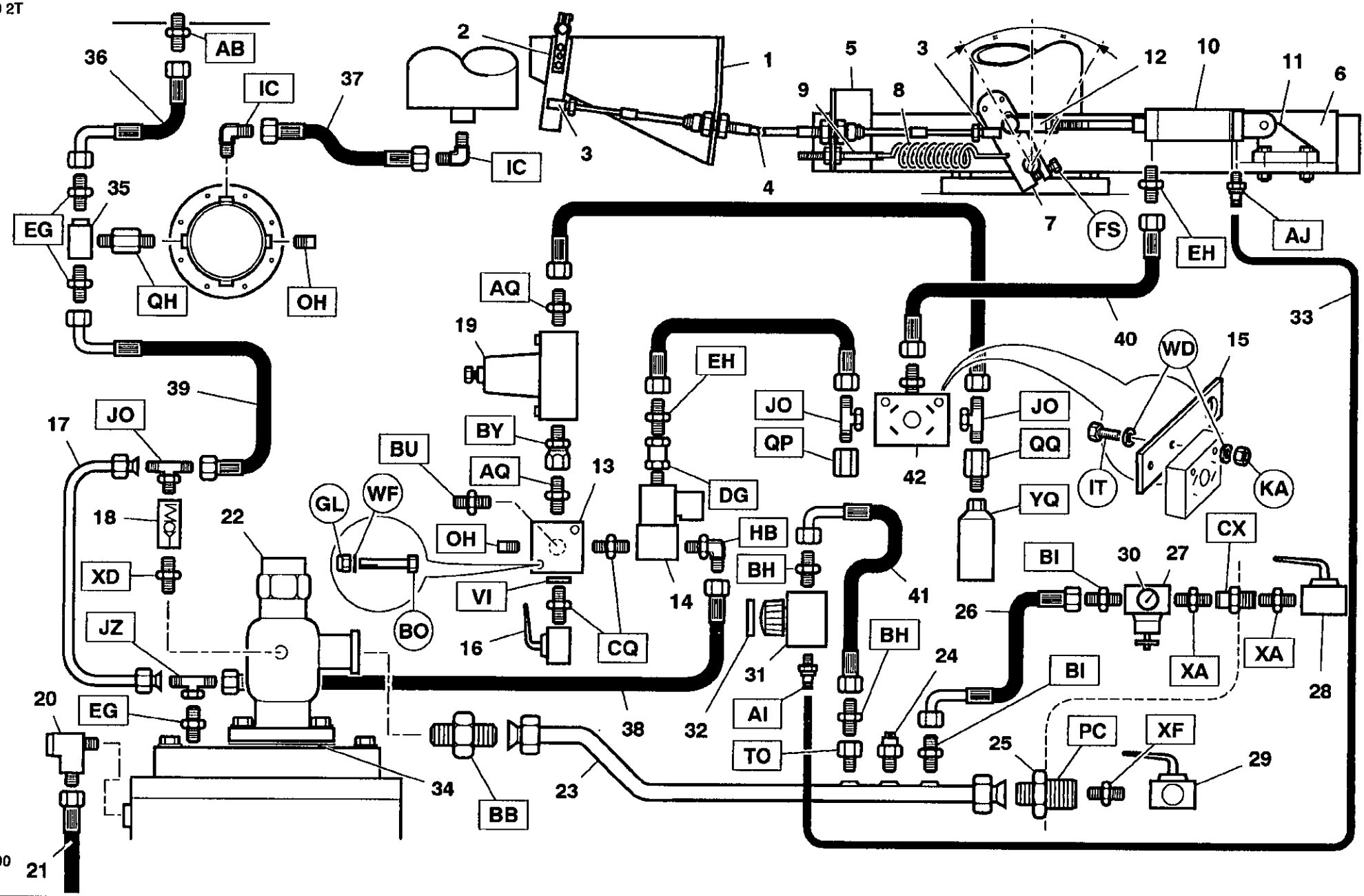


T1985
Revision 00
05/98

	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	1	89201776	1	Bracket
	2	89201792	1	Lever
	3	89201834	2	Ball-joint
	4	89201800	1	Cable
	5	89202170	1	Bracket
	6	89202188	1	Bracket
	7	89201784	1	Lever
	8	35317700	1	Spring
	9	92912021	1	Rod
	10	89201941	1	Cylinder, pneumatic
	11	89201958	1	Support
	12	89201966	1	Ball-joint
	13	89202014	2	Manifold
	14	92956135	1	Valve, solenoid
	15	89252852	1	Bracket
	16	92911742	1	Valve, ball
	17	89203848	1	Tube assembly
	18	92101054	1	Valve, check
	19	92956093	1	Regulator
	20	92892934	1	Valve, safety
	21	92895267	1	Hose assembly
	22	92892975	1	Valve, minimum pressure
	23	92956515	1	Pipe
	24	92762756	1	Switch, temperature
	25	92893148	1	Flange
	26	92094580	1	Hose assembly
	27	92956952	1	Valve, pressure
	28	92294461	1	Valve, ball
	29	92530047	1	Valve, ball
	30	92957091	1	Gauge

10.7.2 REGULATION SYSTEM

XHP760 2T
MoD

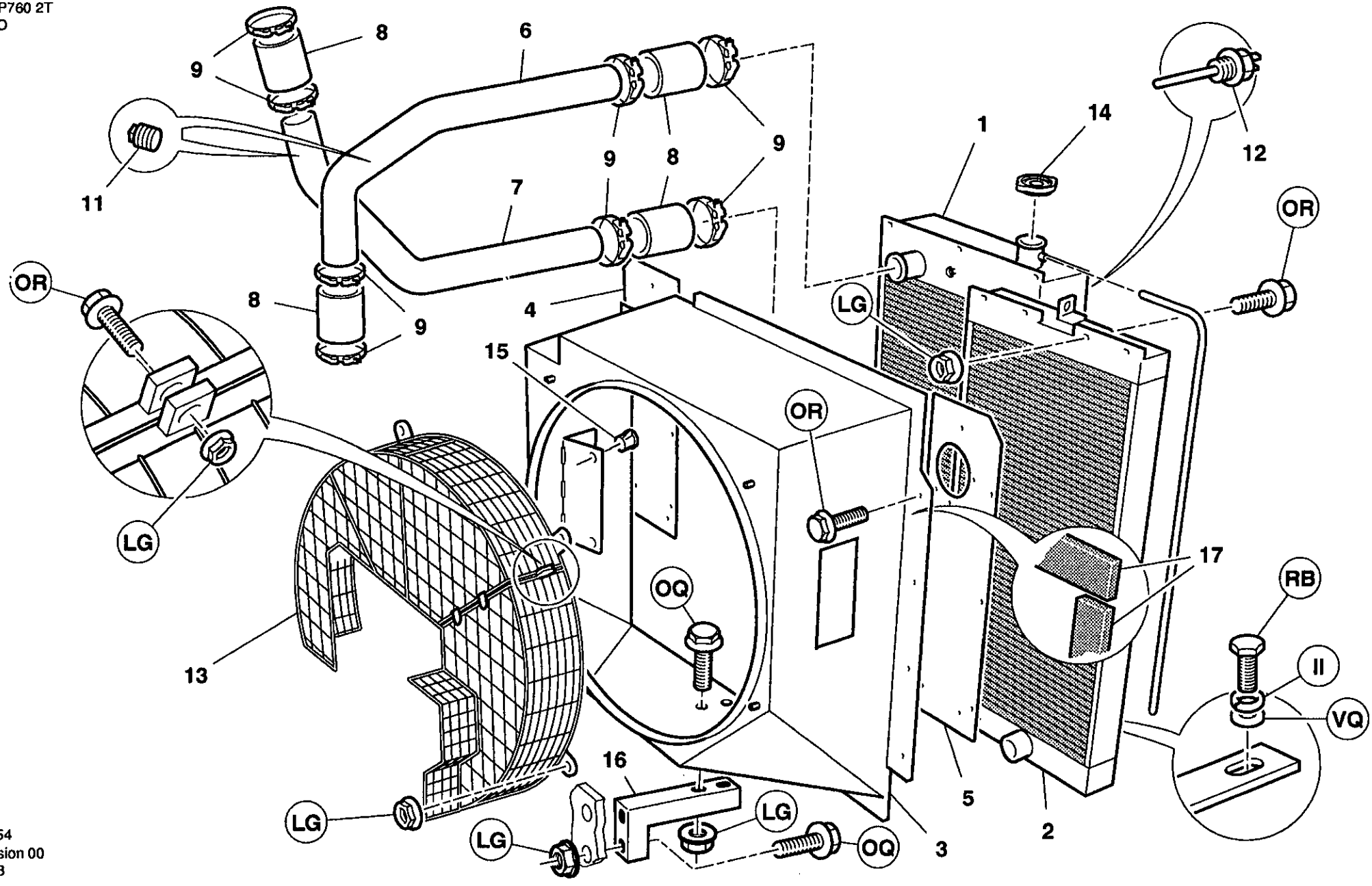


T1985
Revision 00
05/98

	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	31	89201974	1	Valve, pressure
	32	89201982	1	Ring, retaining
	33	92490358	0,5m	Tube (Nylon)
	34	92765189	1	Gasket
	35	92892959	1	Valve, blowdown
	36	92079474	1	Hose assembly
	37	92898709	1	Hose assembly
	38	92963529	1	Hose assembly
	39	88110341	1	Hose assembly
	40	92049097	2	Hose assembly
	41	92720994	1	Hose assembly
	42	92964170	1	Valve, shuttle

10.8.0 COOLING SYSTEM

XHP760 2T
MoD



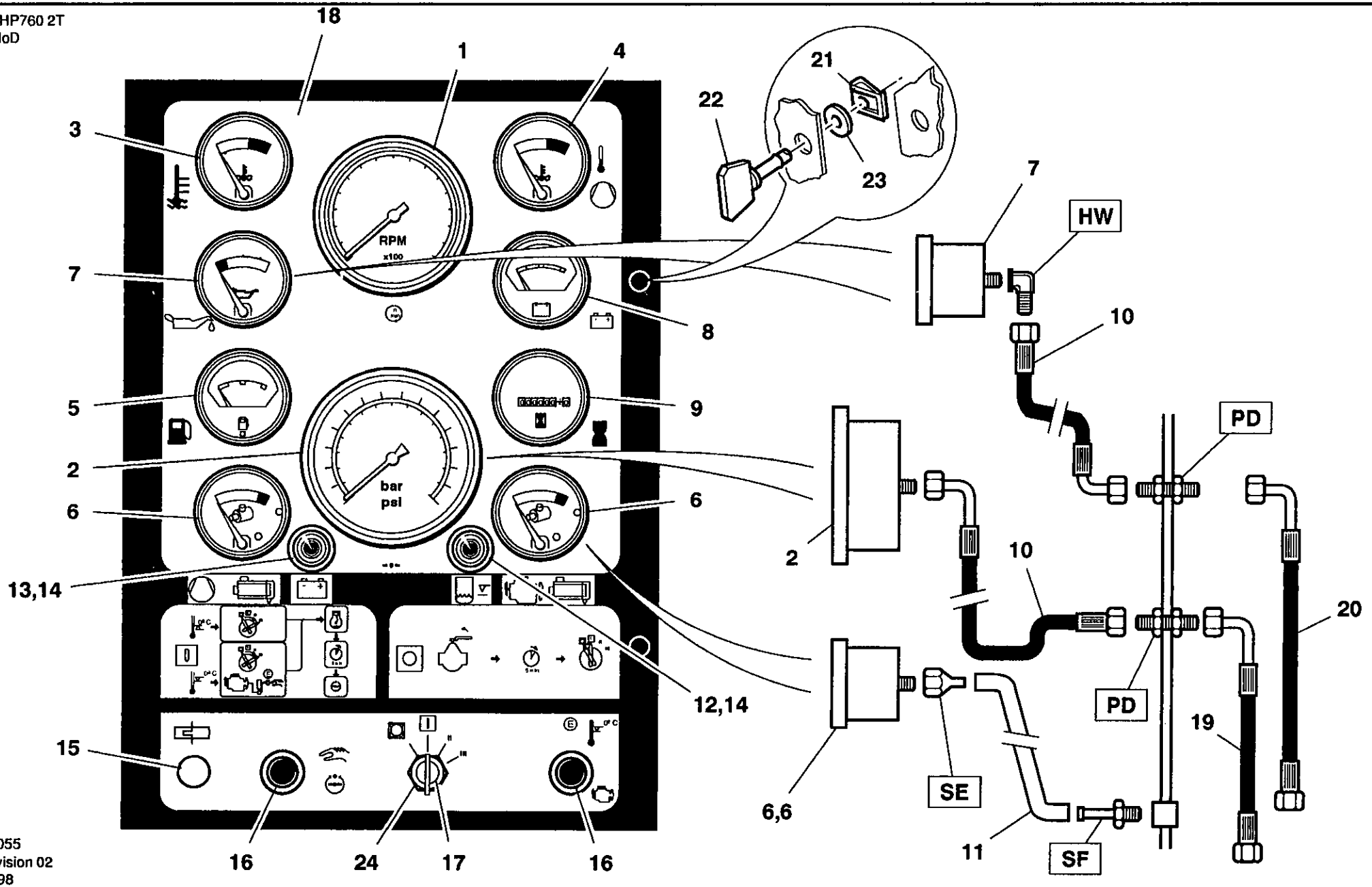
T2054
Revision 00
05/98

	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	1	93177806	1	Radiator
	2	92886092	1	Cooler
	3	89249429	1	Cowl
	4	89249338	1	Baffle
	5	89249346	1	Baffle
	6	92905900	1	Pipe
	7	92905918	1	Pipe
	8	92347459	4	Hose
	9	92040765	8	Clamp
	*10	92037464	1	Valve, drain
	11	92354653	2	Plug
	12	92175405	1	Probe
	13	92894096	1	Guard
	14	92691674	1	Cap
	15	92951466	4	Catch, magnetic
	16	92972447	1	Support
	17	92337690	1	Tape, adhesive

* Not illustrated

10.9.0 INSTRUMENTATION/ ELECTRICAL SYSTEM

XHP760 2T
MoD

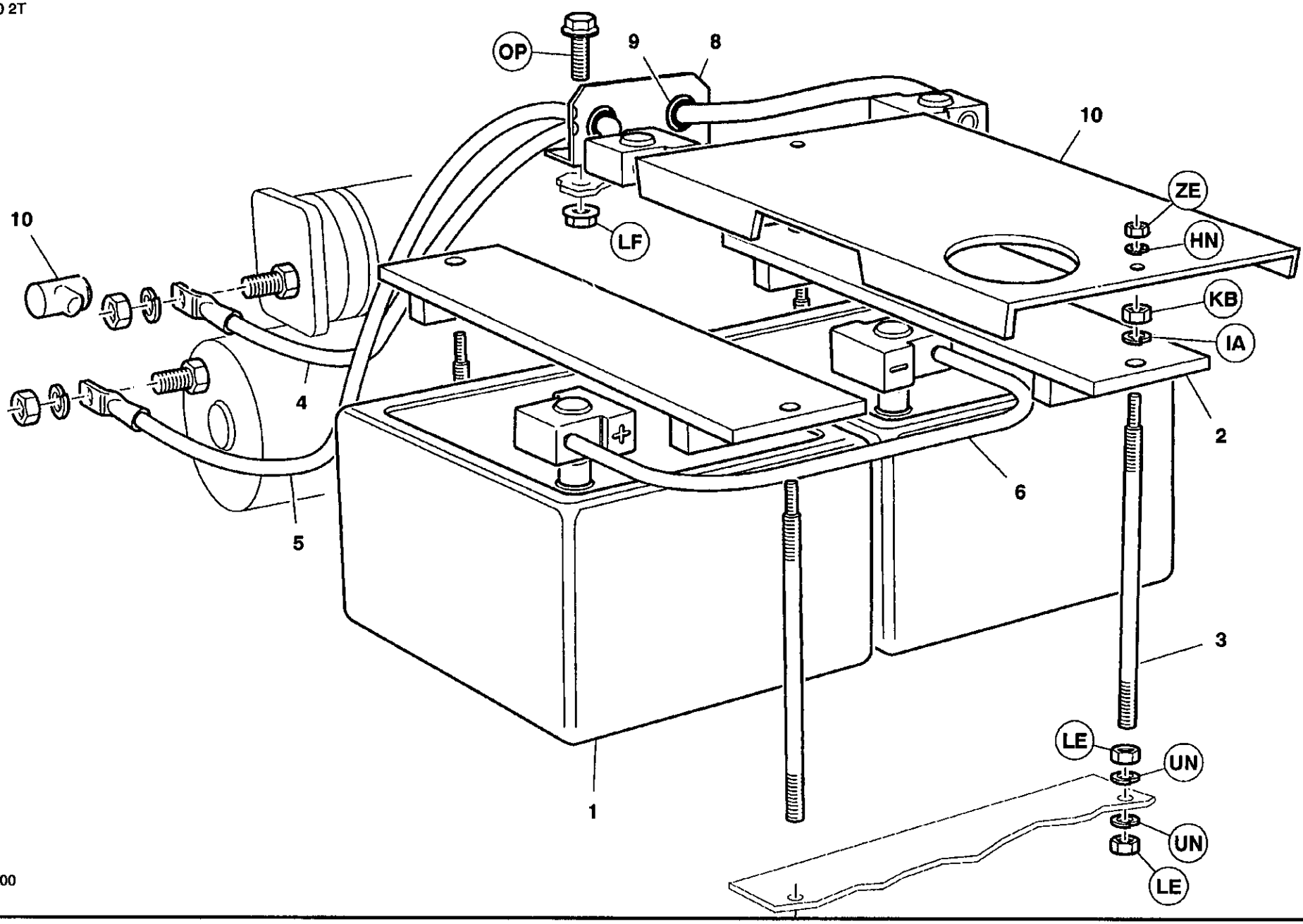


T2055
Revision 02
02/98

	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	1	92956937	1	Gauge, R.P.M.
	2	92894492	1	Gauge, pressure
	3	92951276	1	Gauge, water temperature
	4	92951284	1	Gauge, temperature
	5	92057967	1	Gauge, fuel
	6	92960673	2	Gauge, vacuum
	7	92951268	1	Gauge, oil pressure
	8	92062116	1	Gauge, voltmeter
	9	92867209	1	Hourmeter
	10	92956846	2	Hose assembly
	11	92111335	1	Tube
	12	92955376	1	Indicator (Amber)
	13	92955384	1	Indicator (Red)
	14	92455351	2	Bulb, light
	15	93478147	1	Circuit breaker
	16	35255553	2	Pushbutton
	17	92086719	1	Key-switch
	18	92951706	1	Facia
	19	92956606	1	Hose assembly
	20	92962208	1	Hose assembly
	21	92058726	1	Retainer
	22	92058734	1	Fastener
	23	92058742	1	Washer, retaining
	24	95213427	1	Lockwasher

10.9.2 INSTRUMENTATION/ ELECTRICAL SYSTEM

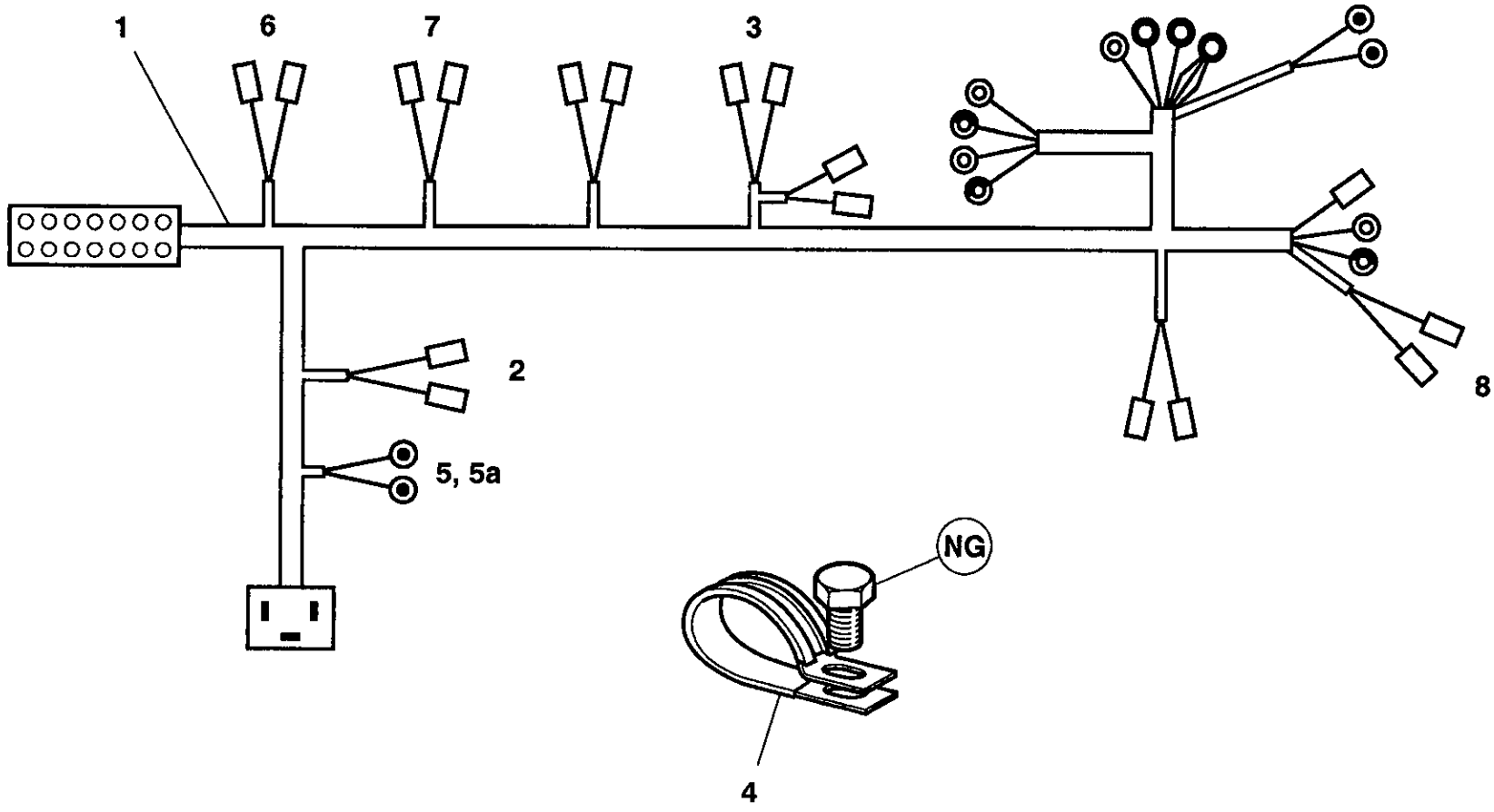
XHP760 2T
MoD



T1958
Revision 00
05/98

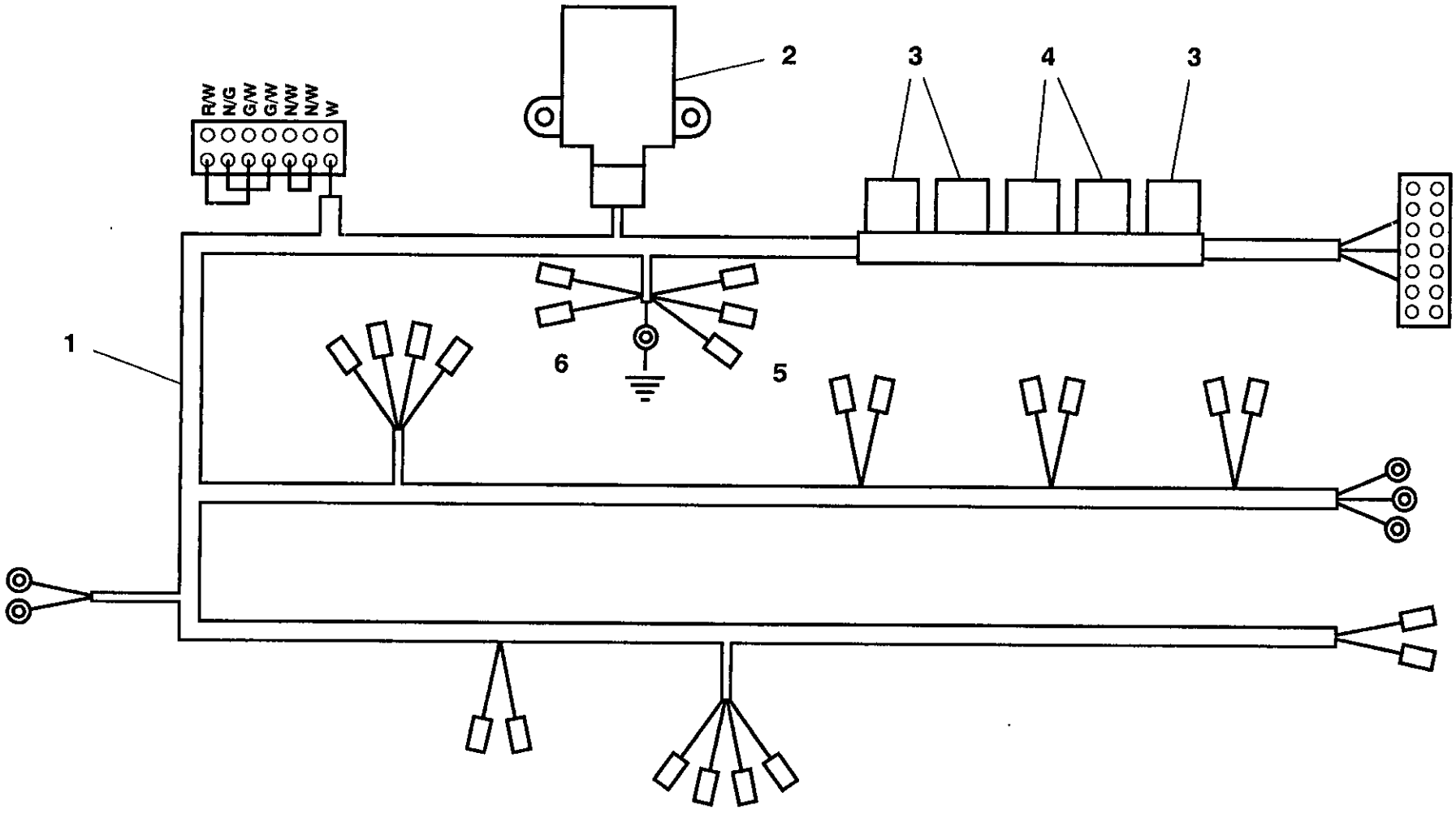
	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	1	89252712	2	Battery
	2	89252753	2	Frame
	3	89253579	4	Stud
	4	89252878	1	Cable
	5	89252886	1	Cable
	6	89252894	1	Cable
	7	-		
	8	92039064	1	Bracket
	9	92254887	2	Grommet
	10	89252761	2	Cover

XHP760 2T
MoD



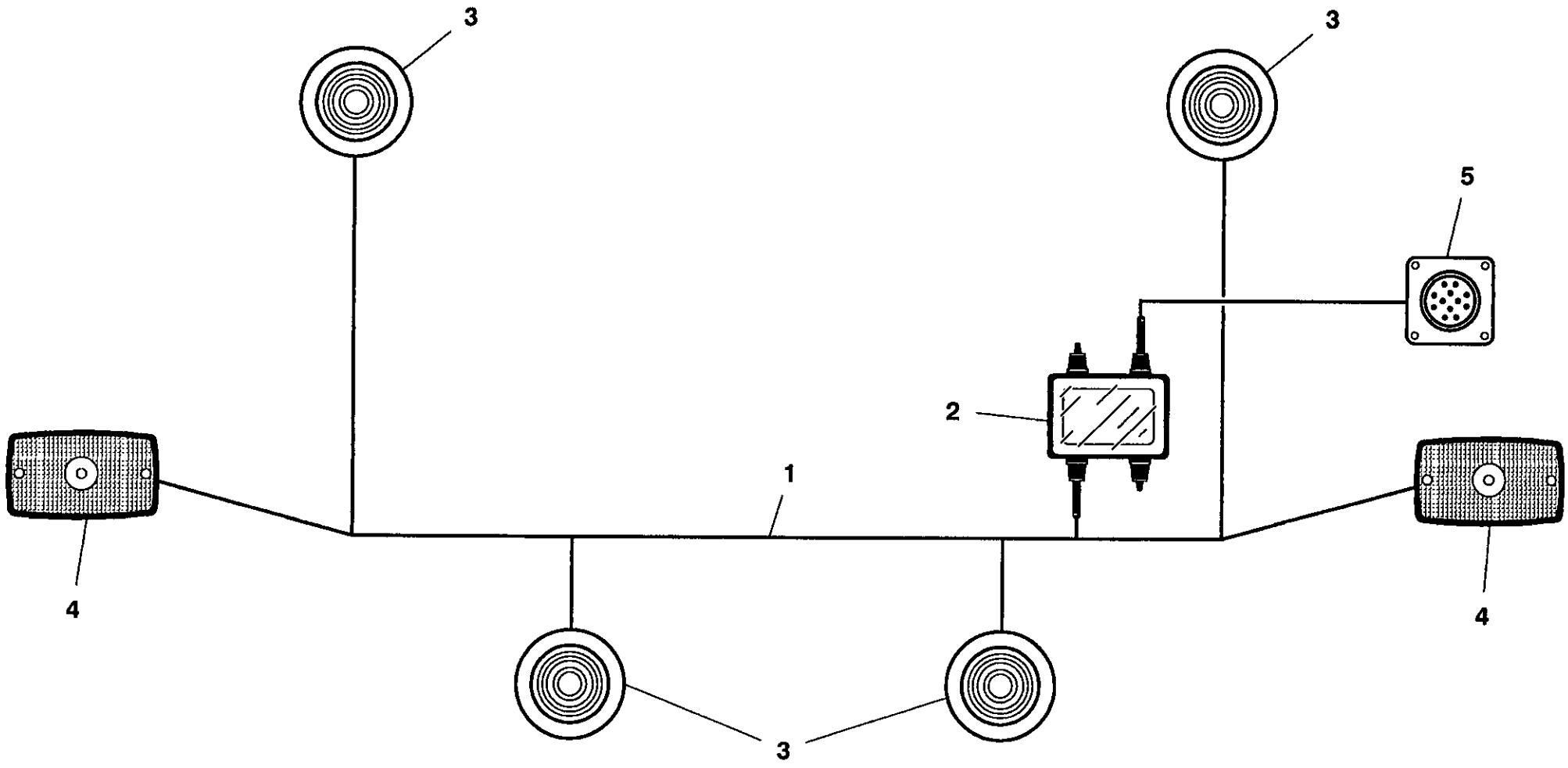
	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	1	89249734	1	Harness main
	2	92762756	1	Switch, temperature (discharge pipe)
	3	92762756	1	Switch, temperature (separator tank)
	4	92253202	2	Clip, retaining
	5	XXXXXXXX	1	Compressor, cold start
	6	XXXXXXXX	1	Valve, solenoid cold start
	7	92121250	1	Lamp, Low fuel
	8	92583782	1	Pushbutton emergency stop
	9	89254049	1	Harness low fuel

XHP760 2T
MoD



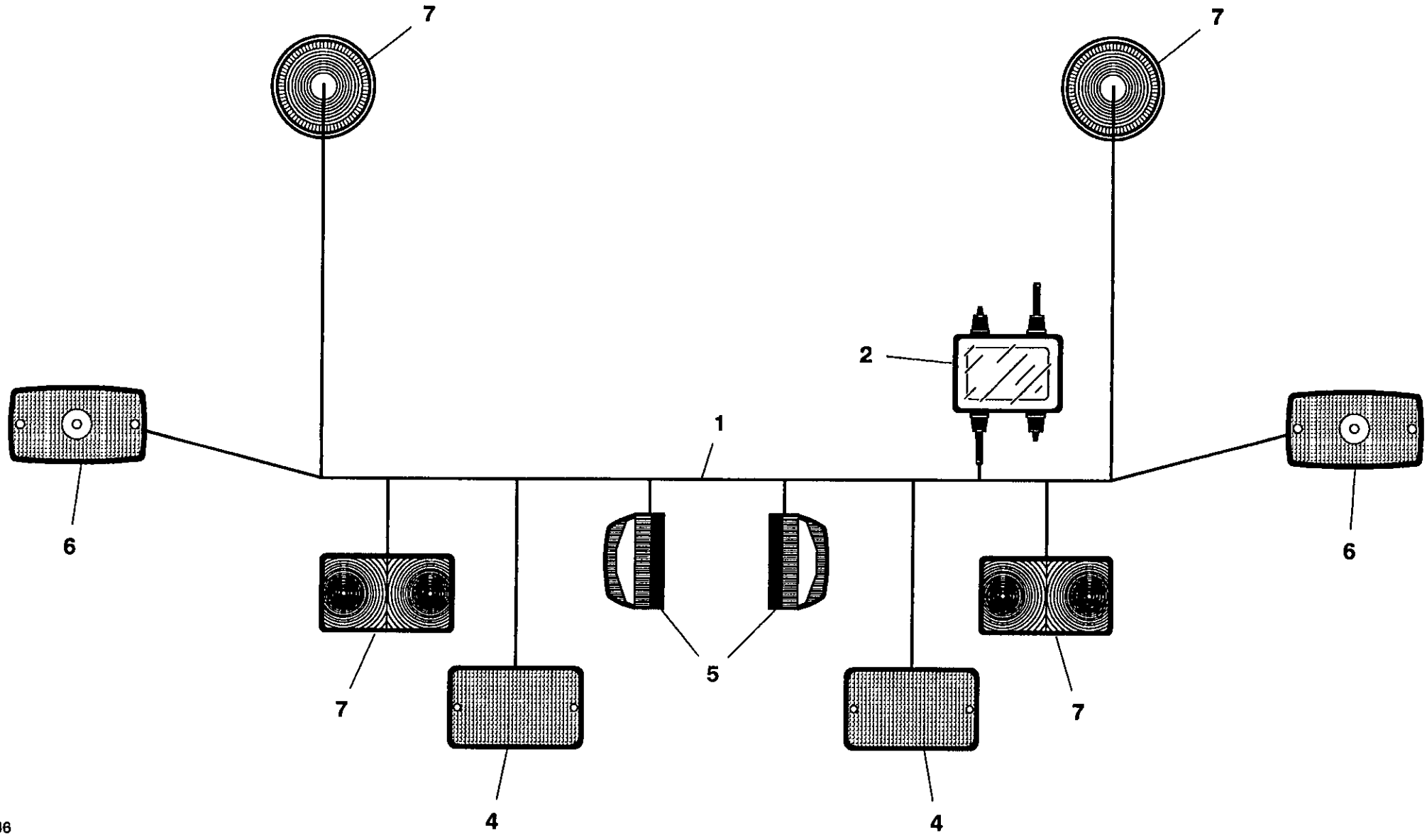
	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	1	89249742	1	Harness, instrument panel
	2	92499888	1	Control unit, water level
	3	92064567	3	Relay 24V
	4	92076173	2	Relay 12V
	5	89251854	1	Flasher, fuel warning
	6	89251821	1	Resistor, flasher

XHP760 2T
MoD



	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	1	92975572	1	Harness
	2	89260830	1	Box, terminal
	3	92121250	4	Light, side
	4	89230775	2	Light & Reflector (amber)
	5	89253058	1	Connector & Harness

XHP760 2T
MoD



	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	1	92975580	1	Harness
	2	89260830	1	Box, terminal
	3	92975507	2	Light assembly
	4	93477388	2	Light, fog
	5	92975556	2	Light registration
	6	89230775	2	Light & Reflector (amber)

10.11.0 LITERATURE

XHP760 2T
MoD

1	89259089	1	Manual, Operation and Maintenance, with parts catalogue
2	92861509	1	Holder, manual
3	92975184	1	Manual, engine
4	92975176	1	Manual, engine parts

INGERSOLL-RAND®

USE ONLY GENUINE INGERSOLL–RAND PARTS

Revision 00
05/98

11.0 RECOMMENDED PARTS

	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD	1-45	**92988351**	1	**KIT - SERVICE**
	1	35288117	1	Valve, thermostatic
	2	92744523	1	Element, fuel filter
	3	92894989	1	Element, fuel filter water separator
	4	92956093	1	Regulator
	5	92892959	1	Valve, blowdown
	6	92035948	2	Element, air filter (main)
	7	92035955	2	Element, air filter (safety)
	8	92892934	1	Valve, safety
	9	92057967	1	Gauge, fuel
	10	92062116	1	Gauge, voltmeter
	11	92064567	1	Relay 24V
	12	92976299	3	Belt, drive
	13	36860336	2	Element, oil filter
	14	92076173	1	Relay 12V
	15	92086719	1	Key-switch
	16	92892967	1	Sight-glass
	17	92120013	1	Cap, fuel filler
	18	35577873	1	Switch
	19	36845030	1	Valve, safety
	20	92971977	2	Valve
	21	92955376	1	Indicator (Amber)
	22	92955384	1	Indicator (Red)
	23	92455351	2	Bulb, light
	24	93478147	1	Circuit breaker
	25	92294461	1	Valve, hand
	26	92956937	1	Tachometer

	Item	CPN	Qty	DESCRIPTION			
XHP760 2T MoD	27	92956937	1	Gauge, R.P.M.			
	28	92960673	1	Gauge, vacuum			
	29	92530047	1	Valve, ball			
	30	92658095	1	Element, oil filter			
	31	92894492	1	Gauge, pressure			
	32	92951268	1	Gauge, oil pressure			
	33	92951276	1	Gauge, water temperature			
	34	92951284	1	Gauge, temperature			
	35	92988369	1	Gasket set			
	36	92867209	1	Hourmeter			
	37	92951078	1	Kit, minimum pressure valve			
	38	92960970	1	Switch, low fuel level			
	39	35255553	1	Pushbutton			
	40	92762756	1	Switch, temperature (discharge pipe)			
	41	92762756	1	Switch, temperature (separator tank)			
	42	92175405	1	Relay, fuel			
	43	92762756	1	Switch, temperature			
	44	92957091	1	Gauge			
	45	92963396	1	Element, separator			
	1	35365170		Oil, Compressor (XHP 505)	(XHP 505)	(XHP 505)	(XHP 505)
	2	35300516		Oil, Compressor (XHP 1001)	(XHP 1001)	(XHP 1001)	(XHP 1001)

11.2 RECOMMENDED PARTS

	Item	CPN	Qty	DESCRIPTION
XHP760 2T MoD		**92988369**	1	**KIT – GASKET/'O' RING**
		95358073	1	'O' Ring, driveshaft seal cover
		35355775	1	'O' Ring, cover/gearcase
		35355791	1	'O' Ring, rear bearing housing
		95026290	2	'O' Ring, rear bearing cover
		92982875	1	Gasket
		35355783	1	'O' Ring, rotor housing
		35355502	2	'O' Ring, rear bearing cover
		95214524	2	Gasket, butterfly valve
		92517846	1	Gasket, exhaust manifold
		92707538	1	Gasket, temperature bypass valve
		92765189	2	Gasket separator element
		92095413	2	'O' Ring, sight glass
		92095421	2	'O' Ring, sight glass
		92293661	4	Seal, sight glass
		95000410	1	'O' Ring

INGERSOLL-RAND®

USE ONLY GENUINE INGERSOLL–RAND PARTS

Revision 00
06/98

12.0 FASTENERS INDEX

	Item	CPN	Ref	DESCRIPTION
XHP760 2T MoD	**BC**	92311703	T2043 T2044 T2060	Bolt M16 x 100
	BM	92391358	T2046	Bolt M20 x 90
	BZ	95775037	T2060	Bolt $^{1}/_{4}$" UNC X 10"
	CA	95792321	T2043	Bolt $^{3}/_{8}$"UNC x 2"
	CQ	92398601	T2043	Bolt M16 x 60
	DB	95264149	T2043	Capscrew Socket Head $^{3}/_{8}$"UNC x 2"
	DC	39100565	T2043	Capscrew Socket Head $^{5}/_{8}$"UNC x 1$^{1}/_{2}$"
	ED	35299353	T2049	Capscrew Socket Head M10 x 60
	EM	92421403	T2049	Capscrew Socket Head M8 x 20
	FS	92421353	T1985	Capscrew Socket Head M6 x 25
	GL	92879260	T1985	Locknut M6
	GO	92304559	T1988	Locknut M8
	GQ	92311695	T2044	Locknut M16
	HI	92061332	T1958 T1987 T2043	Lockwasher M10
	HN	92061472	T1987	Lockwasher M12
	HV	92391374	T2044	Lockwasher M20
	IA	92304658	T1958	Lockwasher M6
	ID	92304666	T2049 T2043	Lockwasher M8

	Item	CPN	Ref	DESCRIPTION
XHP760 2T MoD	II	92304674	T2043 T2054	Lockwasher M10
	JV	92484880	T2060	Nut M16
	JX	92391366	T2043	Nut M20
	KA	92304492	T1985	Nut M5
	KB	92304500	T1958	Nut M6
	KS	92304575	T2050	Nut M12
	LC	35252600	T2065	Nut $^{5}/_{16}$" UNC
	LD	92473594	T2049	Nut M10
	LE	92398643	T1958	Nut M12
	LF	92398106	T1958 T1988 T2043	Nut M6
	LG	92398114	T2049 T2050 T2054	Nut M8
	NG	92272293	T1994	Screw $^{5}/_{16}$" UNC x $^{1}/_{2}$"
	OA	92368687	T1987 T1988 T2043 T2050	Screw M6 x 12
	OM	92184811	T1988 T2043	Screw M6 x 12
	OO	92398122	T1988	Screw M6 x 20
	OP	92179043	T2056	Screw M6 x 25
	OQ	92398130	T2050	Screw M8 x 20
	OR	92101112	T2050 T2054	Screw M8 x 25

12.2 FASTENERS INDEX

	Item	CPN	Ref	DESCRIPTION
XHP760 2T MoD	**OT**	92722990	T1988	Screw M6 x 12
	PC	50763325	T2043	Bolt M20 x 70
	PM	35144336	T2065	Screw $^{5}/_{16}$" $^{3}/_{4}$" UNC
	QN	95214938	T2043	Setscrew $^{5}/_{16}$" UNC x 1"
	QZ	92304401	T2043	Setscrew M10 x 25
	RA	92280981	T1987	Setscrew M10 x 30
	RB	92304419	T2054	Setscrew M10 x 40
	RF	90103185	T2050	Setscrew M12 x 30
	RK	35278977	T1987	Setscrew M12 x 75
	RW	39136346	T2044	Setscrew M20 x 35
	SJ	92339688	T1988	Setscrew M6 x 35
	TQ	92764372	T2046	Screw M20 x 80
	TR	92764364	T2049	Screw M20 x 25
	UN	92923861	T1958	Screw, Pan head M6 x 16
	VP	92061498	T1987	Washer M10
	VQ	92304617	T2054	Washer M10
	VT	92061506	T1987	Washer M12
	VZ	92359363	T2044 T2060	Washer M16

	Item	CPN	Ref	DESCRIPTION
XHP760 2T MoD	**WB**	92391382	T2043 T2044	Washer M20
	WD	92304583	T1985	Washer M5
	WE	39145008	T1988	Washer M6
	WF	92304591	T1985	Washer M6
	WG	92341981	T988	Washer M6
	WI	92304609	T2043 T2049	Washer M8
	WP	92042241	T1988	Washer M6
	ZE	35256429	T1958	Stud

13.0 TUBE FITTINGS INDEX

	Item	CPN	Ref	DESCRIPTION
XHP660 CA XHP760 CA	AB	35283076	T1985 T1986	Adaptor
	AE	95310116	T2051	Adaptor
	AG	92877836	T2051	Adaptor
	AI	92788959	T1985	Adaptor
	AJ	92715051	T1985	Adaptor
	AQ	92713780	T1985	Adaptor
	AW	95288166	T1986	Adaptor
	BA	92087840	T2051	Adaptor
	BB	92895317	T1985	Adaptor
	BH	35295880	T1985	Adaptor
	BI	92106210	T1985	Adaptor
	BU	92104132	T1985	Adaptor
	BY	93152593	T1985	Adaptor
	CQ	92344423	T1985	Adaptor
	CX	92956945	T1985	Adaptor
	DG	92258110	T1985	Connector
	EC	92123223	T2051	Connector
	EG	92492800	T1985	Connector
	EH	92441294	T1985	Connector
	GM	92087832	T2051	Elbow
	GX	92395458	T1986	Elbow
	HB	92123207	T1985	Elbow
	HV	92477207	T1986	Elbow

	Item	CPN	Ref	DESCRIPTION
XHP660 CA XHP760 CA	HW	35301225	T2055	Elbow
	HX	92918978	T2051	Elbow
	HY	35294750	T2051	Elbow
	HZ	92716034	T2051	Elbow
	IB	95414223	T2051	Elbow
	IC	92876283	T1985	Elbow
	JL	92791854	T2051	Tee
	JO	92971803	T1985	Tee
	JZ	35283092	T1985	Tee
	LK	89259071	T1986	Elbow
	OD	92354661	T2060	Plug
	OH	39483888	T1985	Plug
	PC	92899855	T1985	Connector, bulkhead
	PD	92955251	T2055	Connector
	QH	92971811	T1985	Adaptor, orifice
	QP	89252845	T1985	Adaptor, orifice
	QQ	89252837	T1985	Adaptor, orifice
	SE	92962067	T2055	Fitting, barbed
	SF	92956556	T2055	Fitting, barbed
	TO	92354380	T1985	Bush
	TS	92018381	T1986	Bush
	VI	92293661	T1985	Seal

13.2 TUBE FITTINGS INDEX

	Item	CPN	Ref	DESCRIPTION
XHP660 CA XHP760 CA	XA	92255934	T1985	Nipple
	XD	92415363	T1985	Nipple
	XF	92255942	T1985	Nipple
	YQ	92513183	T1985	Silencer

INGERSOLL-RAND®

USE ONLY GENUINE INGERSOLL-RAND PARTS

14.0 PARTS INDEX

XHP760 2T MoD