



Telair

GENERATORS



ENERGY 2504D

***USER'S OPERATING INSTRUCTION
AND INSTALLATION MANUAL***



V. 007 – February 2008

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Via E. Majorana , 49 48022 Lugo (RA) ITALY

"CE" COMPLIANCE STATEMENT

Under Machine Directive 89/392/EEC, attachment II A

We hereby represent that the generator-set, the data concerning which appear below, has been designed and built to correspond to the essential safety and health requirements laid down by the European Directive on Machine Safety.

This statement shall not be valid any longer if any changes are made on the machine without our written approval.

Machine: GENERATOR-SET

Model: ENERGY 2504 D

Serial number:

Directive of reference:

Machine Directive (89/392/EEC) in version 91/31/EEC

Low Voltage Directive (73/23/EEC)

Electro-magnetic Compatibility (89/336/EEC) in version 93/31/EEC

Harmonised standards applied, especially: EN 292-1; EN 292-2; EN 60204-1

DATE07/02/2008.....

THE PRESIDENT

1 FOREWORD



MANUAL

Refer carefully to this manual before performing any operation on the generator.

1.1 Purpose and scope of this manual

This manual has been drawn up by the Manufacturer in order to provide information and instructions for installing servicing and using the generating set in a proper and safe manner.

It is an integral part of the generating set equipment and should be kept clean and safe throughout its working life.

It must follow the generating set if the latter is installed on a new vehicle, or if its ownership changes hands.

The information in this manual is addressed to the persons installing the generating set, and to all those involved in its maintenance and use.

This manual sets out the purpose the machine was designed for, and contains all the information required to guarantee that it is used in a safe and proper fashion.

Constant attention to the instructions laid down here will guarantee the safety of the user, economy and longer life of the machine.

To facilitate reference, this manual has been subdivided into chapters which specify the main notions; for quick consultation, refer to the table of contents.

The most important parts of the text are in bold letters preceded by symbols described below.

Please read the contents of this manual and of the reference document carefully. This is the only way to ensure that the generator will work properly through time and be reliable, while safeguarding people and things.

Note: *The information contained in this publication was correct at the time it went to print, but may be modified without advance notice.*

1.2 Symbols and Definitions

"Graphic safety symbols" have been employed in this booklet to identify different levels of danger or important information.



DANGER

This means that you must pay attention to avoid serious consequences which might lead to serious accidents or damage the health of the operators.



WARNING

This means a potentially hazardous situation which could lead to accidents or to damage to property.



INFORMATION

This calls the user's attention to a potentially dangerous situation which could cause malfunction or damage to the machine.

The drawings are only provided by way of example.

Even though the machine you actually have may differ from the illustrations contained in this manual, safety and information about the same are guaranteed.

The manufacturer, as part of his policy of constant product development and updating, may effect changes without providing advance notice.

1.3 General Information

The **ENERGY** generating set has been designed for installation on vehicles. It can deliver power at a voltage of 230 VAC 50 Hz.

The **ENERGY 2504 D** model must be fed with Diesel fuel.

In order to achieve a low noise level, the **ENERGY 2504D** generating set is provided with an internally insulated sound-proofing box.

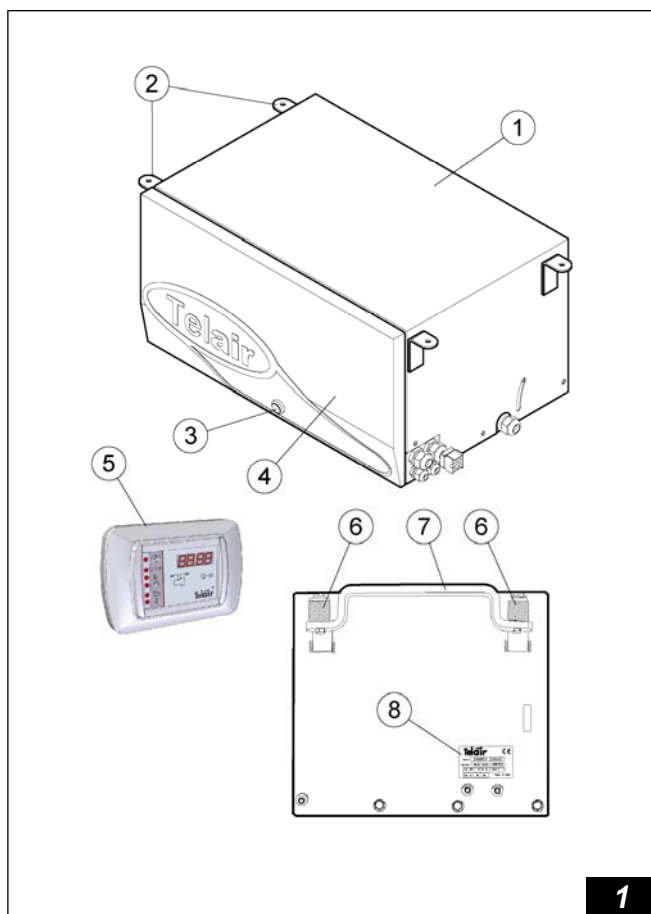
It can be accessed easily in order to perform maintenance work, and is provided with a remote control panel to be installed inside the vehicle.

The generating set can be connected to the tank of the vehicle as long as the fuel type is compatible. Otherwise, install a special tank which can be supplied as an optional part.

2 GENERATING SET IDENTIFICATION DATA

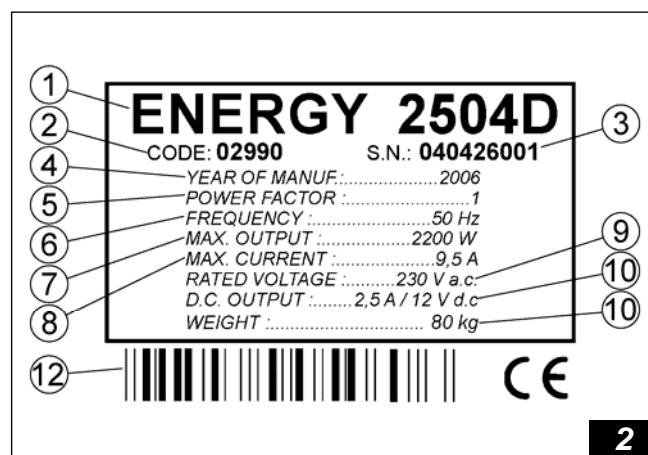
2.1 Components (Fig. 1)

- 1 Sound-proofing box
- 2 Supporting brackets
- 3 Access door locks
- 4 Access door
- 5 Electronic control panel
- 6 Anti-vibration support
- 7 Anchoring bracket
- 8 Identification label



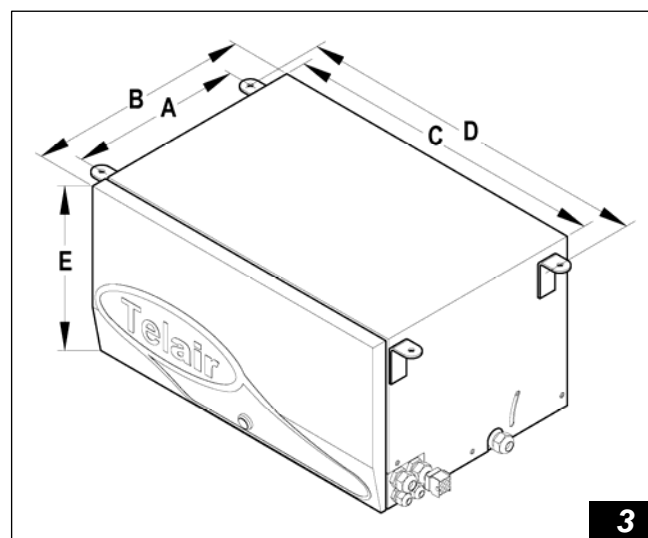
2.2 Identification label (Fig. 2)

- 1 Generating set model
- 2 Model code number
- 3 Serial number
- 4 Date of manufacture
- 5 Power factor
- 6 Frequency
- 7 Maximum electric power
- 8 Maximum current
- 9 Rated voltage 230 V AC
- 10 Current delivered at 12 V DC
- 11 Weight
- 12 Bar code



2.3 Dimensions

Figure 3 shows the dimensions of the generating set: *Energy 2504 D*.



	A	B	C	D	E
mm	295	405	660	710	365

2.4 Caratteristiche tecniche

		ENERGY
ENGINE		2504 D
Type		Diesel single cylinder air cooling
Engine		Hatz 1B20V
Displacement	cm ³	232
Bore x Stroke	mm	69 x 62
Consumption	gkW / h	260
Fuel supply		Diesel fuel
Oil sump capacity	litres	0,950
Speed governor		Masse centrifughe
ALTERNATOR		2504 D
Type		Synchronous, single phase, self-adjusting, two poles, brushless
Max power	kW	2,2
Continuous power	kW	2
Voltage/ Frequency	V / Hz	230 / 50
Continuous current output	A / Vdc	10 / 12
Rotor insulation class		H
Stator insulation class		F
Cooling		Centrifugal fan
GENERATOR		2504 D
Overall weight	kg	90
Dimensions (L x W x H)	mm	660 x 405 x 365
Starting		Electrical
Fuel supply		Electrical
Noise level		85 LW _A (65 dB _A 7 m)
Operation Hours	h	7

3 SHIPPING, HANDLING, STORAGE

3.1 Storage

The generating set is protected during shipping by suitable packaging. It must be stored horizontally, in a covered, dry and ventilated area.

INFORMATION Do not turn the package upside down. The right way up is the one shown by the symbol printed on the packaging (↑).

3.2 Weight

Total weight including packing:

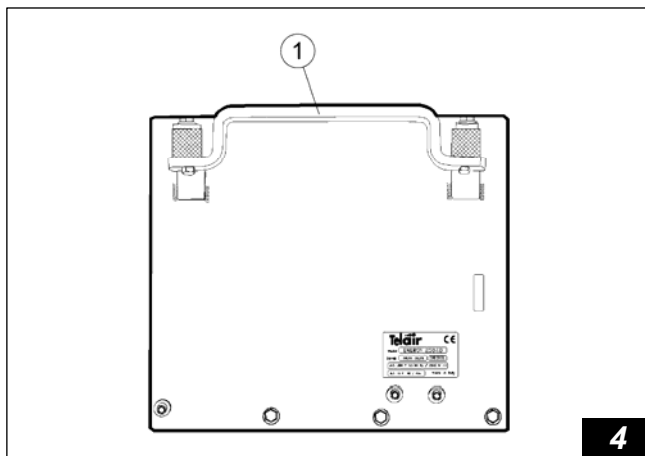
ENERGY 2504 D 90 kg

3.3 Handling

The generating set, complete with packaging, can be moved using common lifting and transport equipment.

The boxes are provided with spacers in order to allow for the introduction of transpallet forks.

! DANGER During lifting and transport, comply with accident prevention and safety regulations. Use lifting and transport equipment with a capacity greater than the load to be lifted.



4 INSTALLATION

4.1 Preliminary information

MANUAL Before installing the generating set, it is essential to read these instructions, in order to avoid errors during installation.

! WARNING The generator must be installed so as to prevent water seeping directly into the alternator through the inlet holes; it must therefore be protected.

Improper installation of the generating sets can cause irreparable damage to the equipment and compromise the safety of the installation engineer, and invalidate guarantee

Should the generating sets be installed in a manner which does not comply with the instructions in this manual, the Manufacturer shall be held blameless for malfunctions or for the safety of the generating set, under D.M. 89/392/EEC. Furthermore, he shall be held blameless for any damage or injury to persons or things.

! DANGER Installation must be performed by qualified and properly trained personnel only.

4.2 Installing the generating set

The **ENERGY 2504 D** energy set is provided with anchoring brackets extra vibration dampers (Fig. 4, Ref. 1) and a fuel filter to be fitted in the fuel line. The brackets are designed for hanging assembly.

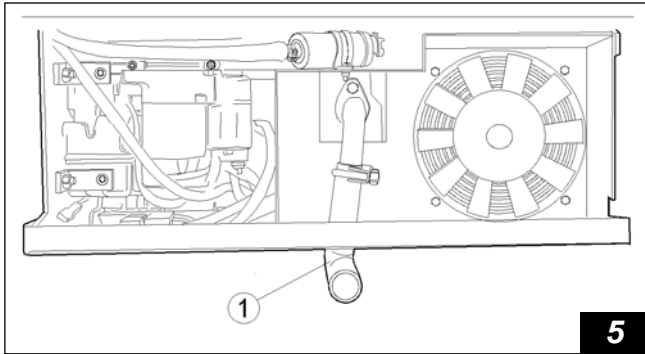
This kind of assembly provides the following advantages: less room taken up, quick installation, easy access for routine and unscheduled maintenance.

Make sure that there is enough space around the hood of the generating set to allow cooling air to pass; also leave 20 mm free space between the hood and the surrounding parts.

Should the generating set air intake be behind a wheel of the vehicle, care should be taken to prevent water from being sprayed into the generating set.

4.2.1 Exhaust connection

The **Energy 2504 D** generating set comes standard with a 2 metre long exhaust pipe and a silencer which must be located in a suitable position under the platform of the vehicle. Connect the pipe to the exhaust manifold of the generating set as shown on (Fig. 5 ref. 1).



4.3 Wiring connections

To connect to the 230 V voltage terminal board (Fig. 6 ref. 1), use a cable suitable cross-section, see Table 1.

A relay or change-over switch (accessory code 05423) (Fig. 7) must be installed in the vehicle wiring system. This isolates the generating set when it is connected to external mains.

Connect the relay proceeding as follows:

- Connect both wires of the 230 V line of the generating set to the PINS 1 & 3
- Connect the user line to the PINS 7 & 9
- Connect the outside line to the PINS 6 & 4
- Bridge the PINS 4 & A
- Bridge the PINS 6 - B

4.4 Battery connection

To start up the generating set, you must connect the positive terminal (Fig. 6 ref. 3) to the positive pole of the vehicle battery using a sheathed cable of suitable cross-section, see Table 1.

The ground cable (negative pole) (fig. 6 ref. 2) must have the same cross section as the positive cable and is to be connected to the vehicle chassis.

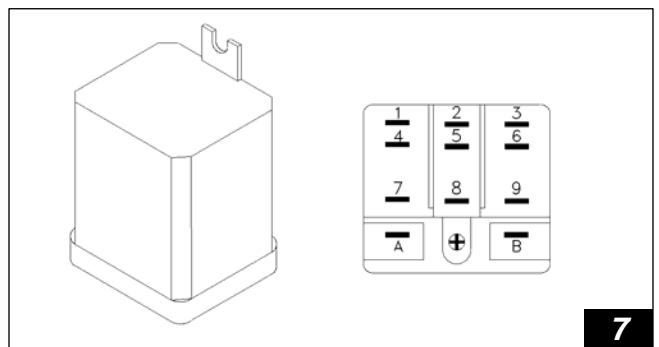
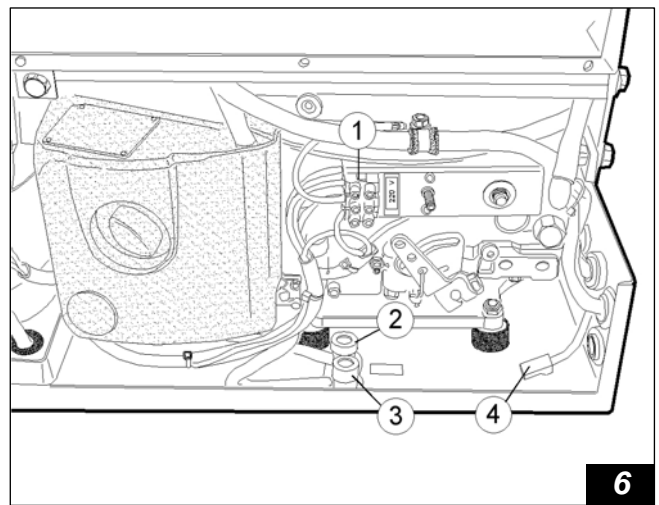
The contact must be good, remove any paint or rust or corrosion from the surface, and protect the connection with grease.

The starter batteries must have a capacity of at least 80 A/h.

4.5 Electronic control panel connection

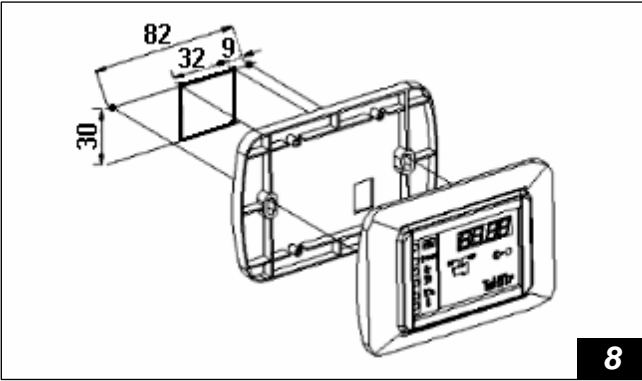
Choose a suitable location inside the vehicle and make a rectangular hole, 30x32 mm. Fasten the electronic control panel (Fig. 8) using self-tapping screws 3 x 20 mm. Do not over tight to fasten the plastic frame.

The electronic control panel is supplied with a 5 metre long connecting cable which must be attached correctly to the generating set using the relevant connector (Fig. 9 ref. 1).



Model	Cross Sec. mm ²	Cross Sec. mm ²	Cross Sec. mm ²
	line 230 V	Length < 6 m	Length > 6 m
2504D	2,5	25	36
230 V LINE CONNECTION		BATTERY CONNECTION	

TAB. 1



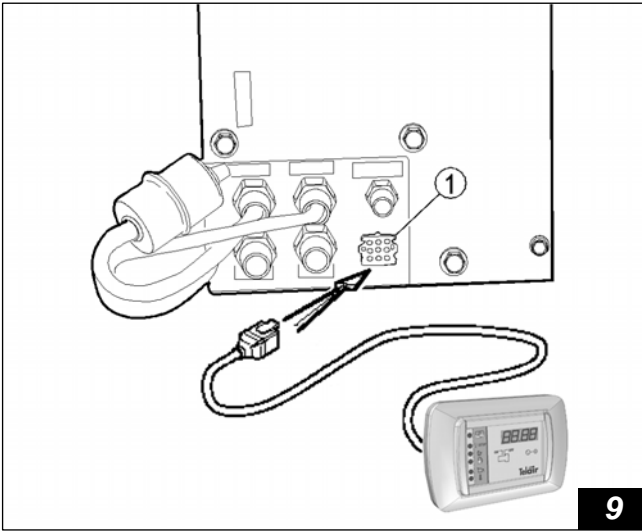
8

4.7 Fuel reserve

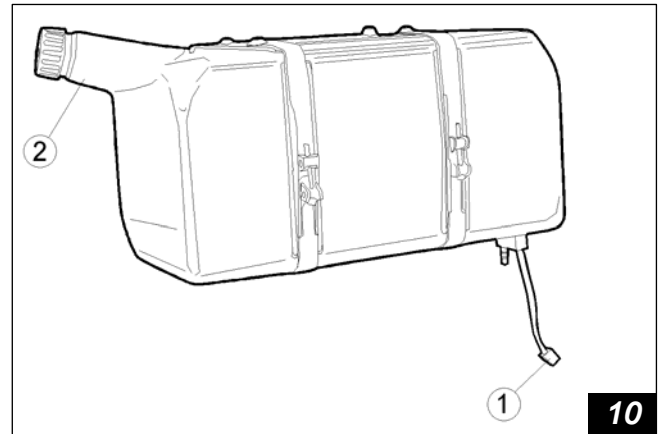
The tank is provided with an electrical reserve. To connect use a suitable electrical cable to join tank and generator set. (fig. 10 ref. 1 to fig. 6 ref. 4) Cable not supplied.

The fuel tank (code 05421) has reserve of about 4 litres.

The warning light on the control panel (Fig. 11 ref. 1) will light up to indicate when the fuel level inside the tank has gone below the reserve level.



9



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4.6 Optional fuel tank installation

For Diesel-fuel powered generating sets, you can connect two lines (delivery and return) directly to the tank by means of fuel pipes having an inside diameter of 7 mm.

The fuel tank must be located so the fuel hose is as short as possible. Ensure that nor must the cross-section of the hose be diminished by squeezing, bending. We also suggest you install the tank at the same height as the generating set; if you do place it at a lower position, there must never be more than 20 cm level difference. Never place the fuel tank near heat sources; protect it from any outside infiltration of water.

To connect the tank to the generating set, use a flexible hose suitable for green petrol, having an inside diameter of 5 mm (petrol sets).

Filling the fuel tank should be via a 50 mm ID pipe or house, suitable for green petrol (fig. 10 ref. 2)



11

5 OPERATING INSTRUCTIONS

The **ENERGY** ranges of generating sets consist of endothermic Diesel motors connected to an alternator able to produce alternating and continuous electric power. The generating sets are assembled inside a steel casing, insulated and sound-proofed using special sound absorbing materials.

The fuel is fed to the endothermic motor by a pump assembled in the generating set.

5.1 Machine safety

The generating sets come with sealed casings, so there is no danger of contact with any rotating parts, high temperatures or live cables.

The door is secured with lock and key. Keys must not be left within the reach of children or unauthorized persons.



DANGER

The generating sets must be used only and exclusively with their doors shut.

Remove any flammable substance from near the generating set, for example: petrol, paint, solvents, etc.

Never fill up the fuel tank while the generator is running.

Never touch the generating sets or the wiring connections with wet hands.

Never replace the fuses or the thermal switches using others having a higher amperage.

Should you have to check any electrical part, this must be done only with the motor turned off and by specialised personnel.

The generating sets were made in compliance with the safety standards listed in the statement of compliance.

6 USING THE GENERATING SET

6.1 Starting up

The generating set is provided with a remote electronic control panel which allows you to perform start up / turn off operations and to check the running conditions.

The elements making them up are (fig. 12):

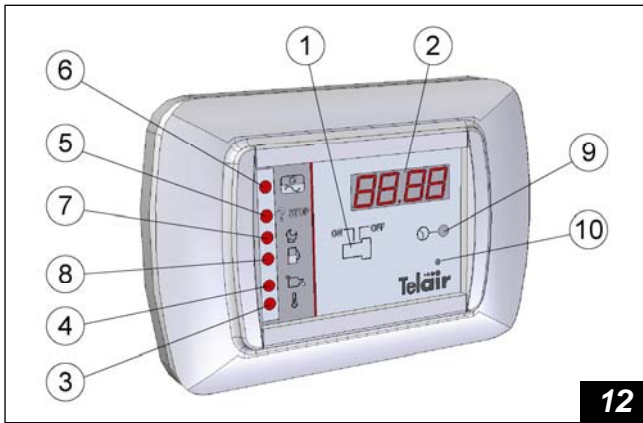
- 1 ON/OFF switch
- 2 Display
- 3 High temperature indicator
- 4 Motor minimum oil level indicator
- 5 Start fail
- 6 Generator running
- 7 Motor oil change indicator
- 8 Petrol reserve indicator
- 9 Display changeover switch
- 10 Reset

Position the start switch (Fig. 12 Ref. 1) the "ON" position. The word "WAIT" will appear on the display for 8". When these have run out, the electronic control panel will start the first automatic procedure for starting the generator set. If the motor starts at the end of this phase, then "generator running" indicator (Fig. 12 ref. 6) will flash.

Should the motor not start, this automatic procedure will be repeated, up to 4 times. If the motor has not started at the end of this complete cycle, the "start-up failed" indicator (Fig. 12 ref. 5) will light up to say that the generating set has failed to start.

If only the "startup failed" indicator (Fig. 12 ref. 5) stays lit, you should repeat the above procedure several times.

If the generating set has not started at all even after many attempts, you must contact your local service agent.



6.2 Turning off the generating set

To stop the generating set, place the “ON/OFF” switch in its OFF position (Fig. 12 ref. 1)



The generating set has an internal combustion engine; therefore the fuel used is highly flammable.

The exhaust gases are conveyed under the casing; their temperature, inevitably, is quite high, even though they are mixed with cooling air.

Do not touch the casing near the exhaust, and do not put your hands or other objects inside the casing.

6.3 Forbidden use



The generating set must be installed and used only by qualified personnel, authorised according to the manufacturer’s instructions. The generating set must be used only and exclusively to produce electrical power on vehicles provided with an electrical system made according to standards and depending on the quantity of power delivered.

6.4 Advice

To make the best use of the generating set, remember that even small overloads - if they last for some time - will make the temperature cut-off contact open (Fig. 13 ref. 1).

During the running-in period, do not subject the new motor to a load higher than 70% of the rated load, at least for the first 50 running hours.

6.5 Control and alarm functions (Fig. 14)

2 Display: when the generating set has start the total running hours will be displayed. Press the changing key Fig. 14 ref. 9 to display the partial running hours of the generating set after the last change of the motor oil.

3 High temperature indicator: this warning light will light up when the temperature of the generating set goes over its safety value; the motor will also stop.

4 Motor oil minimum pressure indicator: this warning light will light up to indicate that the level of oil in the motor has gone below the minimum level.

5 Motor start-up failed: this warning light will light up to indicate that the generating set has not started, after all four attempts at starting have failed.

7 Change oil: this warning light will light up when the motor has reached 100 running hours after the last change of oil. Every time the oil is changed, the After-sales service must reset the timer at zero.

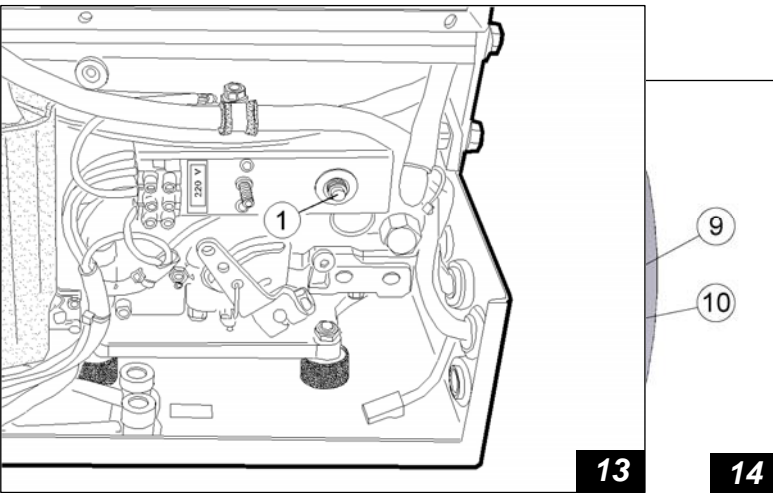
8 Fuel reserve: this warning light will light up when the fuel level inside the tank has gone below its reserve level (about 4 litres). Only applied when optional tank is fitted

9 Display changeover switch: press this to display the running hours which have elapsed since the last time the motor oil was changed.

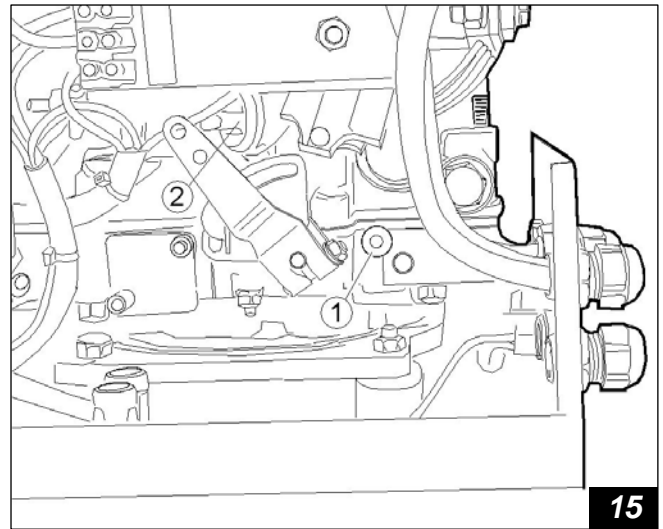
10 Reset: When the display shows any characters without logic, the panel is to be reinitialised. Press the Reset key and, holding it down, switch on the panel. When 4 zeroes (0000) are shown on the display, the panel is reinitialised.

7 MAINTENANCE INSTRUCTIONS

INFORMATION Use only original spare parts. The use of spare parts of non-equivalent quality may damage the generating set. Routine control and adjustments are of the essence in preserving a high level of performance. Routine maintenance also ensures long life of the generating set.



through the filler (Fig. 15 ref. 2); (refer to the motor user and maintenance manual).



INFORMATION Every motor oil level checking operation must be performed with the generating set in a perfectly horizontal position.

7.1 Maintenance list

See table at the bottom of the page.

7.2 Non specialist maintenance

To perform this kind of operation, it will be necessary to open the door of the generating set. The following precautions must therefore be taken:

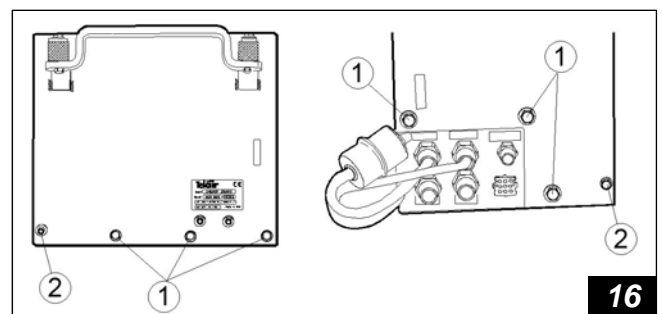
- 1) The generating set must not be running, and all its parts must be cold.
- 2) Let the generating set cool down.

7.3 Checking the motor oil level

- Unscrew the motor oil level reference cap (Fig. 15 ref. 1).
- If the oil level has not reached the edge of the hole, restore the oil level by topping up

7.4 Maintenance operations requiring specialised personnel

With certain maintenance operations, it is possible to lower the motor-alternator unit, removing the hexagonal-headed screws (Fig. 16 ref. 1) and loosening the two studs (Fig. 16 ref. 2). This will make it easier to access all the inside parts of the generating set for unscheduled maintenance or repair operations.

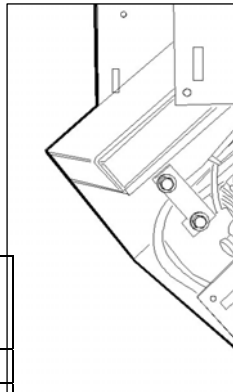


companies specialising in disposal and/or recycling according to the laws current in the country where such operations are performed.

7.4.1 Motor oil replacement

Use multigrade detergent oil for Diesel motors having an SAE viscosity suited to the climate the generating set is working in (see table and detailed instructions shown on the motor use and maintenance manual).

To make it easier to drain the motor oil out, it is best to heat the motor for 3 - 5 minutes; this way, the oil will be more fluid and draining will be quicker and more complete.



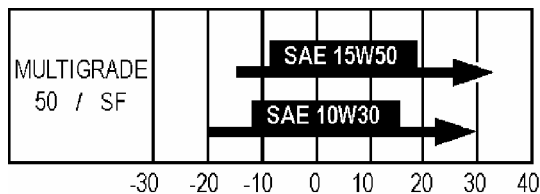
ROUTINE MAINTENANCE SCHEDULE		For hot climates		
		Every 3 months or 50 hours	Every 6 months or 100 hours	Every Year or 100 hours
Engine oil	Inspection	•		
	Change		• (2)	
Air filter	Cleaning	(1) • (2)		
Valve adjustment	Check-adjust			• (2)
Tank and fuel filter.	Cleaning		• (2)	• (2)
Engine r.p.m.'s or frequency	Adjust	• (2)	• (2)	
Vibration damper suspension	Check			• (2)
Alternator belt	Check			• (2)
Alternator belt	Replace	Every 1000 hours		
Fuel pipes	Check (replace if necessary)	Every two years		

7.4.2 Air filter maintenance

INFORMATION

A dirty air filter will

NOTES: (1) Clean more frequently if you use it in a very dusty environment.
 (2) These operations must be performed by specialised personnel only



reduce the air flow to the carburettor. To prevent carburettor malfunction, check the air filter regularly. If the motor is used in an especially dusty environment, we suggest you check it every time before starting up.

Loosen the drain plug on the sump by a few turns, and let all the oil run out into a collection container (Fig. 18 ref. 1).

When this has been done, screw the cap back on again and restore the oil level inside the motor, using the filler (Fig. 15 ref. 2).

The engine oil capacity is 0.95 L, refill to correct level as per section 7.3.

! DANGER

Never use Diesel fuel or solvents with a low evaporation point for cleaning the air filter cartridge.

Never run the motor without the air filter Paper cartridge (Fig. 19 ref. 3); the motor would wear down quickly.

! DANGER

- Hot oil can scald.
- Running the motor when the oil level is too low can damage it seriously.
- Check the oil level when the motor has been turned off.

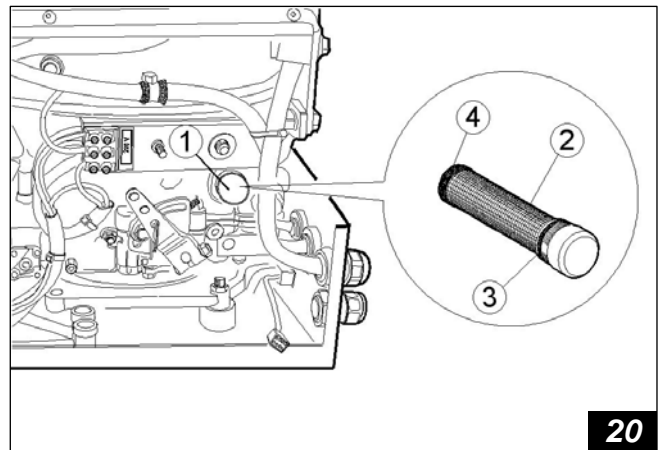
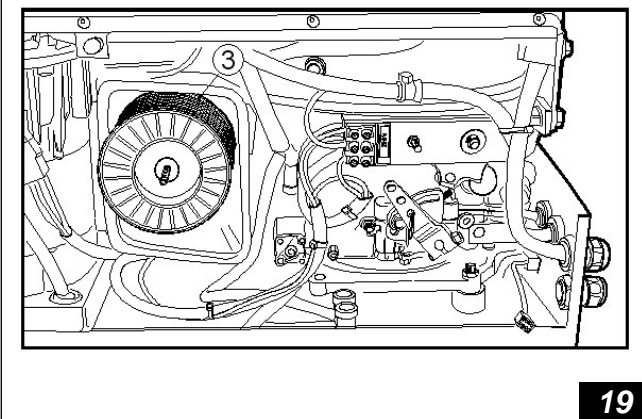
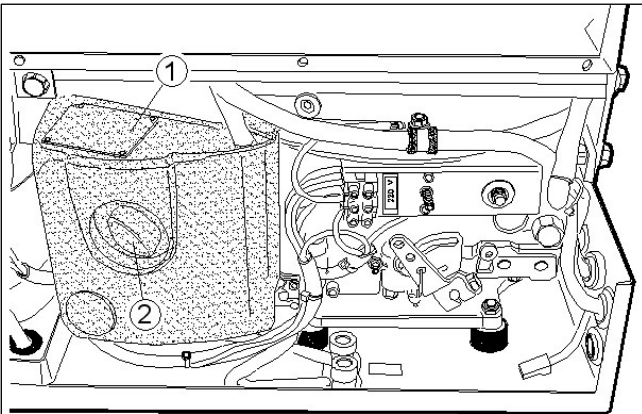
! INFORMATION

Used oil must not be disposed of in the open, but handed over to

Strike the cartridge lightly a few times against a hard surface in order to remove the dust, or use compressed air to blow from inside out. Never brush the cartridge. Brushing drives the dust into the fibres. Replace the cartridge if very dirty.

The cartridge is located inside a plastic container (Fig. 20 ref. 1). To remove the cartridge, open the container lid unscrewing the knob (Fig. 20 ref. 2).

INFORMATION Service the oil filter every 500 working hours.



7.4.3 Replacing the oil filter

WARNING Perform maintenance operations only with the motor off.

To clean the motor oil filter cartridge, you must remove it.

Unscrew the sealing cap (Fig. 20 ref. 1).

Remove filter (Fig. 20 ref. 2).

WARNING Scalding hazard due to boiling oil. Recover the used oil and dispose of it without polluting the environment, according to current laws.

Clean the oil filter cartridge using compressed air to blow from inside out.

Make sure the sealing ring (Fig. 20 ref. 3) has not been damaged, and is firmly in place.

Make sure the sealing ring (Fig. 20 ref. 4) has not been damaged, and is firmly in place. Change the oil filter if necessary.

Use oil to lubricate the sealing before fitting a new cartridge.

Reassemble and refit oil filter.

8 INSTRUCTIONS ON PUTTING OUT OF WORK AND DISMANTLING

8.2 Dismantling

Decommissioning / dismantling of the generator set should only be undertaken by specialist workshops.



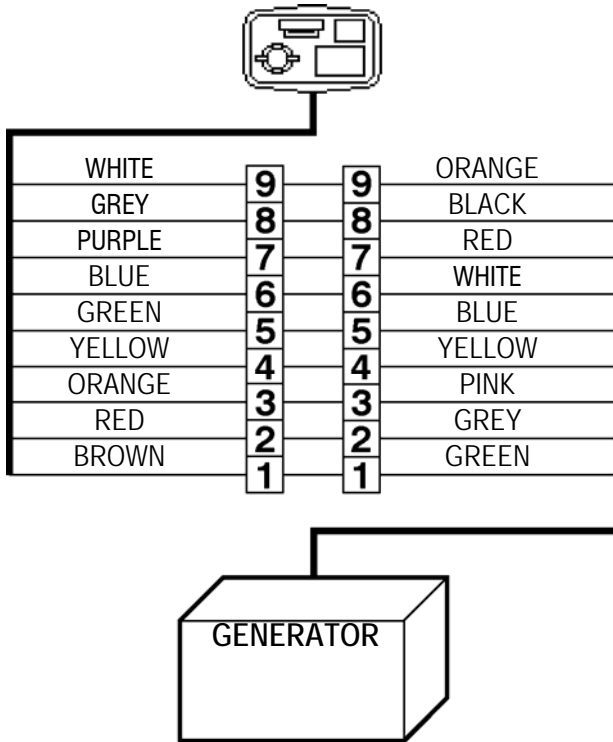
9 FIRE - IN CASE OF

In case of fire, never open the hood of the generating set and use only approved type fire extinguishers.

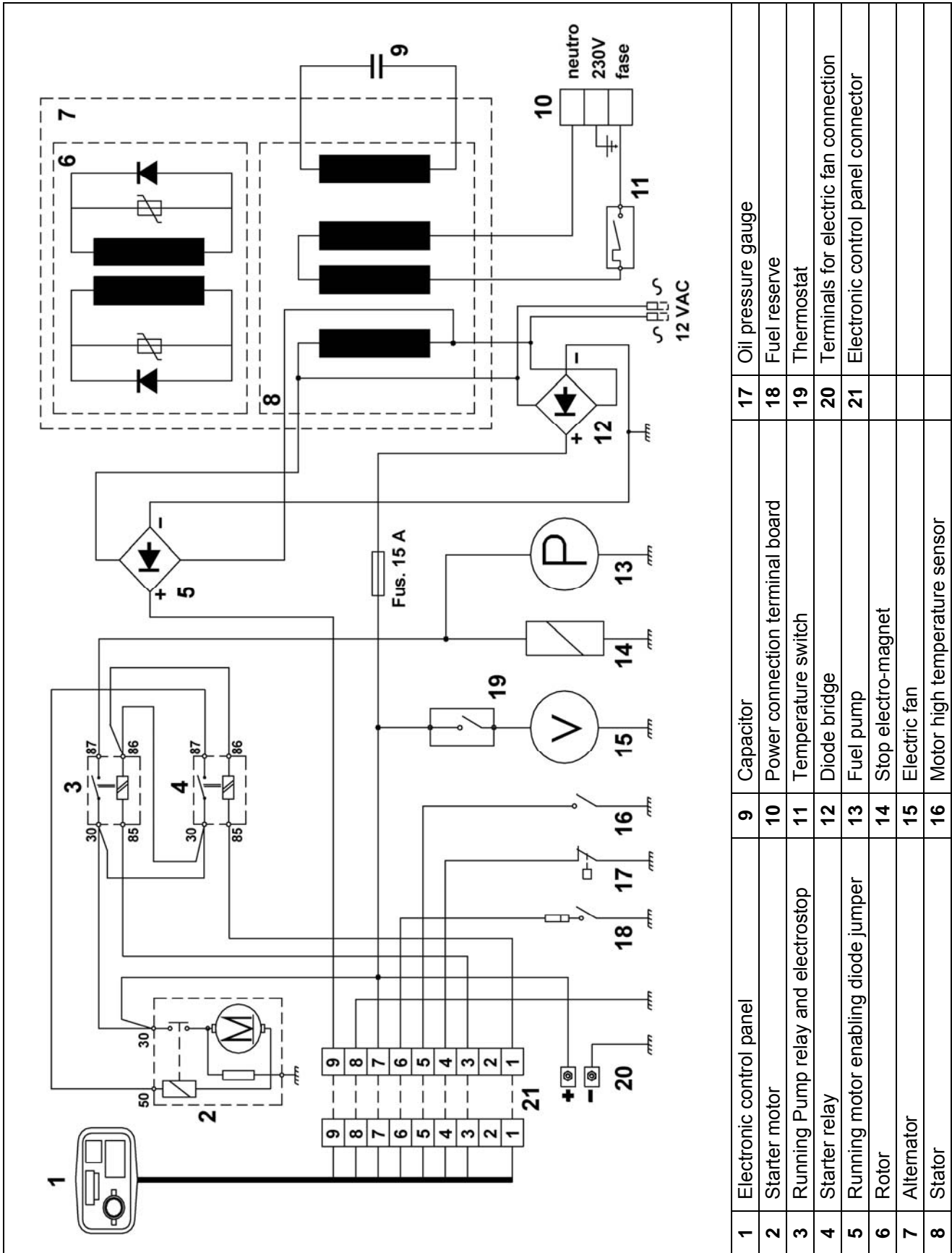


Never use water to put out flames in the generating unit.

Electronic control panel connector

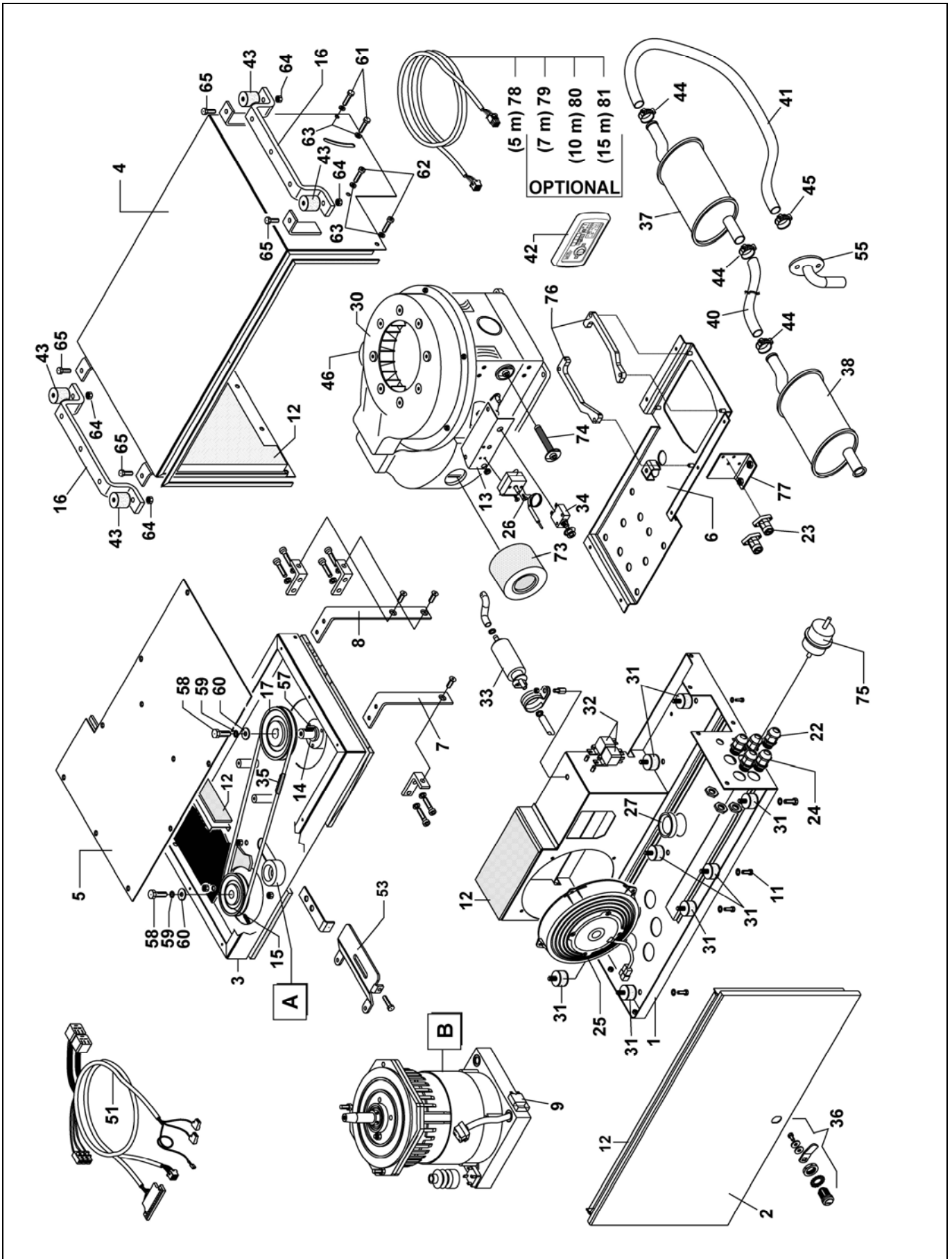


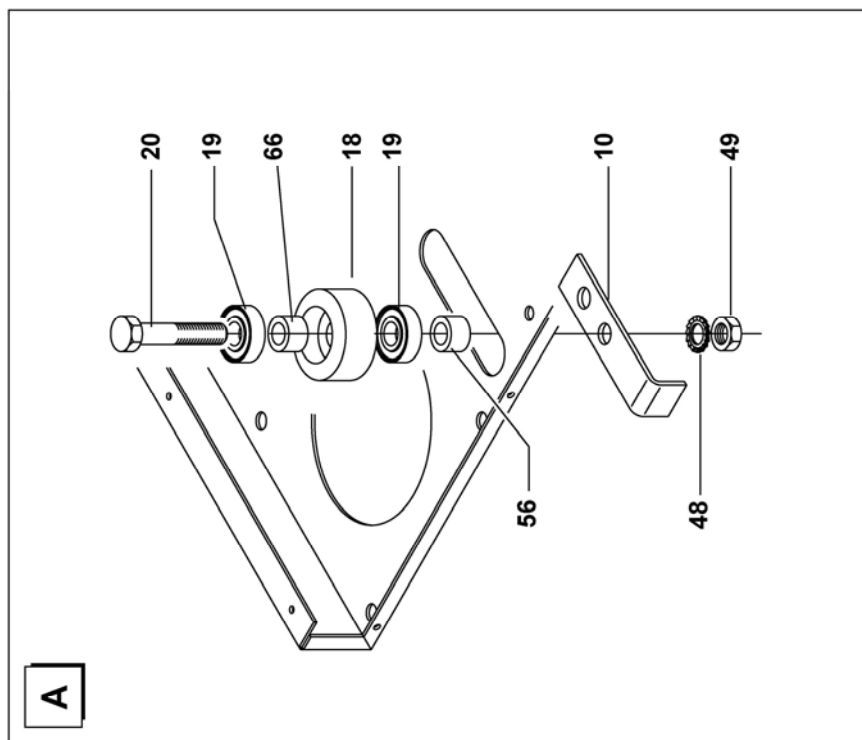
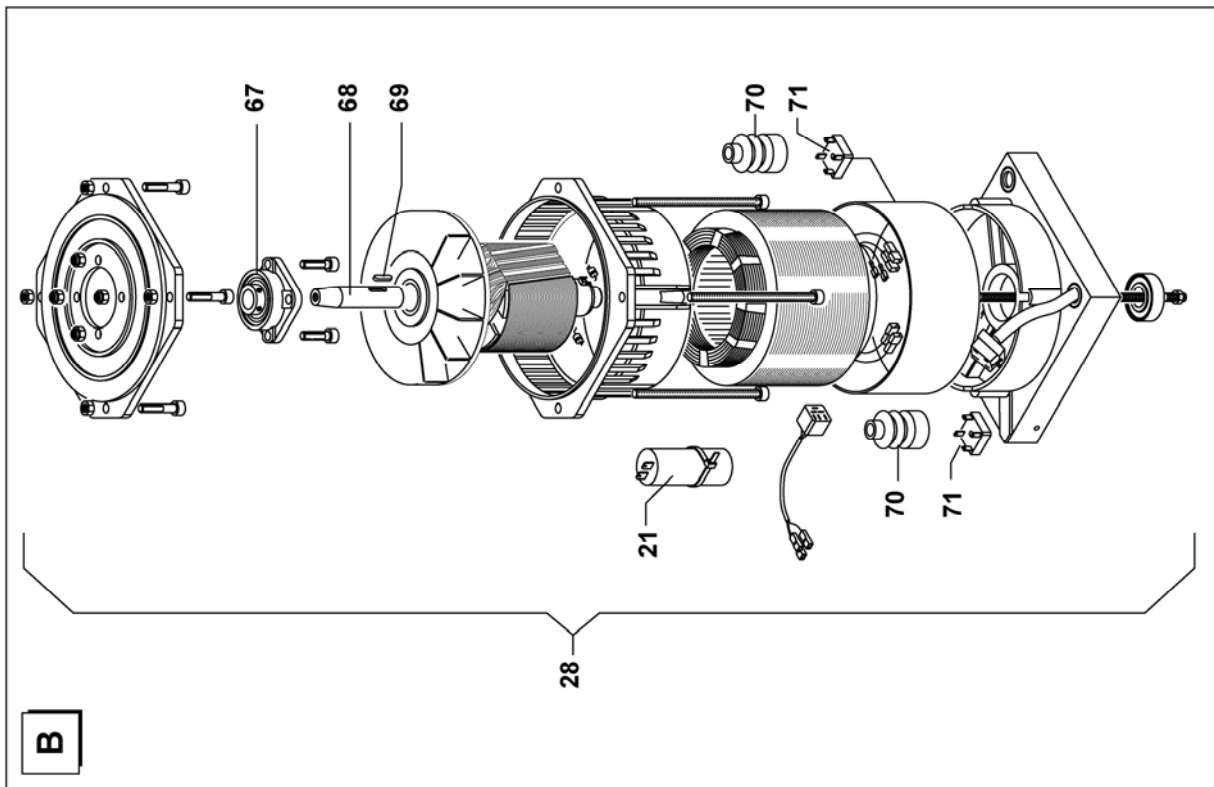
WIRING DIAGRAM ENERGY 2504 D





DRAWING FOR SPARE PARTS LIST ENERGY 2504 D













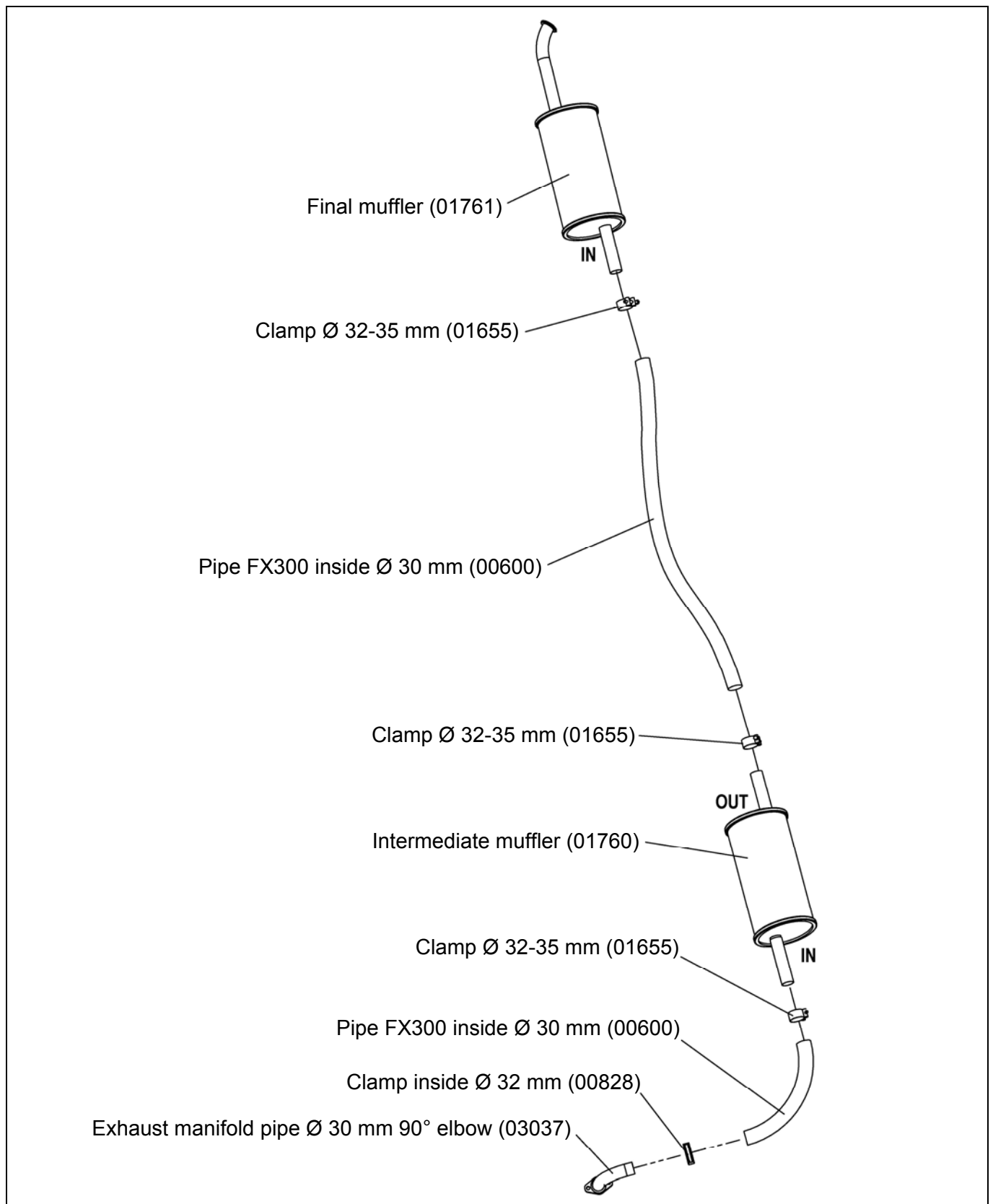
Pos.	Code	Q.tà	 Descrizione Description		 Désignation Bezeichnung		 Denominacion Descripcion				
			1	02940	N. 1	Fondo cassa Case bottom	Fond du boîtier Gehäuseboden	Onderkant kast Fondo caja	2	02944	N. 1
3	02956	N. 1	Carter pulegge Pulley casing	Carter poulies Abdeckung der Riemenscheiben	Riemschiffafscherming Cárter poleas	4	03028	N. 1	Cofano superiore Upper cowling	Capot supérieur Obere Haube	Bovenste kap Capo superior
5	02950	N. 1	Coperchio scatola pulegge Pulley box lid	Couvercle boîtier poulies Gehäusedeckel Riemenscheiben	Deksel riemschijfkast Tapa caja poleas	6	02946	N. 1	Piastra motore-alternatore Motor-alternator plate	Plaque moteur-alternateur Platte für Motor und Lichtmaschine	Plaat motor-dynamo Chapa motor-alternator
7	02955	N. 1	Staffa SX LH bracket	Bride G. Bügel, li	Linkerbeugel Estribo IZQ	8	02954	N. 1	Staffa DX RH Bracket	Bride D. Bügel, re	Rechterbeugel Estribo DER
9	01605	N. 1	Portafusibile Fuse holder	Tableau/fusible Sicherunghalter	Zekeringhouder Porta fusibile	9	01607	N. 1	Fusibile 15 A Fuse 15 A	Fusible 15 A Sicherung 15 A	AZekering 15 A Fusible 15 A
10	02905	N. 1	Staffa puleggia tendicinghia Tightener pulley clamp	Bride poulie tend./courr. Riemenspannbügel	Beugel riemschijf Estribo polea tensor correa	11	00578	N. 8	Vite M8x16 UNI 5739 Screw M8x16 UNI 5739	Vis 8x16 UNI 5739 Schraube M8x16 UNI 5739	Schroef M8x16 UNI 5739 Tornillo M8x16 UNI5739
12	03000	N. 1	Kit coibentazione Insulation kit	Kit de calorifugeage Isolierset	Isolatieset Kit aislamiento termico	13	01674	N. 1	Cruscotto Dashboard	Logement parties électr. Innenwand	Dashboard Panel de instrumentos
14	02069	N. 1	Flangia mozzo puleggia Pulley hub flange	Bride du moyeu de poulie Flansch der Riemenscheibennabe	Flens riemschijfnaaf Brida cubo polea	15	02907	N. 1	Puleggia alternatore Alternator pulley	Poulie alternateur Riemenscheibe Alternator	Dynamoschijf Polea alternador
16	01671	N. 2	Staffa ancoraggio Anchor clamp	Bride de fixation Befestigungsbügel	Verankeringsbeugel Estribo de anclaje	17	01720	N. 1	Puleggia motore Motor pulley	Poulie moteur Antriebsscheibe	Aandrijvende riemschijf Polea motor
18	02904	N. 1	Puleggia tendicinghia Tightener pulley	Poulie tend./courroie Riemenspannscheibe	Riemschijf Polea tensor correa	19	00510	N. 2	Cuscinetto 6201 2RS Bearing 6201 2RS	Palier 6201 2RS Lager 6201 2RS	Lager 6201 2RS Rodamiento 6201 2RS
20	01623	N. 1	Vite M12x60 UNI5737 Screw M12x60 UNI5737	Vis M12x60 UNI5737 Schraube M12x60 UNI5737	Schroef M12x60 UNI5737 Tornillo M12x60 UNI5737	21	00524	N. 1	Condensatore 13 µF 450 V Condenser 13 µF 450 V	Condens. 13 µF 450 V Kondensator 13 µF 450 V	Condensator 13 µF 450 V Condensador 13 µF 450 V
22	00863	N. 1	Passacavo SKINTOP PG 9 SKINTOP PG 9 fairlead	Serre-câble SKINTOP PG 9 Kabeldurchführung SKINTOP PG 9	Kabeldoorvoer SKINTOP PG 9 Pasacable SKINTOP PG 9	22	00864	N. 1	Dado plastica PG 9 PG 9 plastic nut	Ecrou plastique PG 9 Kunststoffmutter PG 9	Moer plastic PG 9 Tuerca plástico PG 9
23	01209	N. 2	Morsetto LEGRAND 2x10 Clamp LEGRAND 2x10	Borne LEGRAND 2x10 Klemme LEGRAND 2x10	Aansluitklem LEGRAND 2x10 Borne LEGRAND 2x10	24	00370	N. 4	Passacavo SKINTOP PG16 SKINTOP PG16 fairlead	Serre-câble SKINTOP PG16 Kabeldurchführung SKINTOP PG16	Kabeldoorvoer SKINTOP PG16 Pasacable SKINTOP PG16
24	00369	N. 4	Dado plastica PG16 PG16 plastic nut	Ecrou plastique PG16 Kunststoffmutter PG16	Moer plastic PG16 Tuerca plástico PG16	25	00624	N. 1	Ventola 12 V 1 velocità 1-speed 12 V fan	Ventilat. 12V 1 vitesse Lüfterrad 12V 1 Geschw.	Ventilator 12 V 1 snelh. Rueda de álabes 12 V 1 vel.
26	00747	N. 1	Termostato Thermostat	Thermostat Thermostat	Thermostaat Termóstato	27	01388	N. 1	Passacavo Fairlead	Serre-câble Kabeldurchführung	Kabeldoorvoer Pasacable
28	03032	N. 1	Alternatore SE100E 3,5 kVA Alternat. SE100E 3,5 kVA	Alternateur SE100E 3,5 kVA Lichtmaschine SE100E 3,5 kVA	Dynamo SE100E 3,5 kVA Alternador SE100E 3,5 kVA	30	00701	N. 1	Motore Hatz 1B20-6V.151 Diesel Hatz 1B20-6V.151 Diesel engine	Moteur Hatz 1B20-6V.151 Diesel Hatz 1B20-6V.151 Dieselmotor	Hatz 1B20-6V.151 Dieselmotor Motor Hatz 1B20-6V.151 Diesel
31	01443	N. 8	Antiv.30x40 I M8 MF SH 45 ANTIOLIO Vib. damper ANTIOIL	Anti-ibr. 30x40 I M8 MF SH 45 ANTIHUILE Schwing.dämpf.30x40 I M8 MF SH 45 ÖLABW.	Trillingsdemp.30x40 I M8 MF SH 45 OLIEWEREND Silenc.30x40 I M8 MF SH 45 ANTIACEITE						

Pos.	Code	Q.tà	 Descrizione	 Désignation	 Denominacion
			 Description	 Bezeichnung	 Descripcion
32	00513	N. 2	Relè 12 V 40 A Relay 12 V 40 A	Relais 12 V 40 A Relais 12 V 40 A	Relais 12 V 40 A Relé 12 V 40 A
33	00507	N. 1	Pompa carburante Fuel pump	Pompe à essence Benzinpumpe	Benzinepomp Bomba gasolina
34	01584	N. 1	Protezione termica Thermal protection	Protection thermique Wärmeschutz	Thermische beveiliging Protección térmica
35	03025	N. 1	Cinghia trapezoidale 13x1160 V belt 13x1160	Courroie trapéz. 13x1160 Keilriemen 13x1160	V-snaar 13x1160 Correa trapezoidal 13x1160
36	01224	N. 1	Serratura Lock	Serrure Schloss	Slot Cerradura
37	01760	N. 1	Marmitta intermedia Middle Muffler	Pot d'échappement Auspuff	Knaldemper Silenciador de escape
38	01761	N. 1	Marmitta finale Final Muffler	Pot d'échappement Auspuff	Knaldemper Silenciador de escape
40	03161	N. 1	Tubo flessibile ø30 L=0,42 m Flex pipe ø30 L=0,42 m	Tuyau flex ø30 L=0,42 m Schlauch ø30 L=0,42 m	Flexibele pijp ø30 L=0,42 m Tubo flexible ø30 L=0,42 m
41	00705	N. 1	Tubo flessibile ø30 L=2 m Hose ø30 L=2 m	Tuyau souple ø30 L=2 m Schlauch ø30 L=2 m	Slang ø30 L=2 m Tubo flexible ø30 L=2 m
42	03789	N. 1	Pannello di controllo ENERGY ENERGY control panel	Tableau/contrôle ENERGY Bedienpanel ENERGY	Schakelpaneel ENERGY Panel de control ENERGY
43	03381	N. 4	Antiv.30x40 I M8 MF SH 60 ANTIOLIO Vib.damper ANTIOI	Anti-ibr. 30x40 I M8 MF SH 60 ANTIHUILE Schwing.dämpf.30x40 I M8 MF SH 60 ÖLABW.	Trillingsdemp.30x40 I M8 MF SH 60 OLIEWEREND Silenc.30x40 I M8 MF SH 60 ANTIACEITE
44	01655	N. 3	Fascetta acc. speciale 32-35 Special st. clamp 32-35	Collier acier spéc. 32-35 Schelle Spezialstahl 32-35	Bandje speciaal staal 32-35 Abrazadera acero espec. 32-35
45	00828	N. 1	Fascetta mar D.I.32 mm Clamp id 32 mm	Collier pot/éch. D.I.32 mm Schelle Innendurchm. 32 mm	Bandje knaldemper inw. diam. 32 mm Abrazadera mar. D.I. 32 mm
46	00114	N. 1	Motore avviamento Starter	Démarrreur Anlasser	Startmotor Motor de arranque
48	00517	N. 1	Rondella 12 DIN 6798A C70 Washer 12 DIN 6798 C70	Rondelle 12 DIN 6798A C70 Scheibe 12 DIN 6798A C70	Onderlegging 12 DIN6798A C70 Arandela 12 DIN6798A C70
49	01934	N. 1	Dado M12X1.75 UNI 5587 Nut M12X1.75 UNI 5587	Ecrou M12 UNI 5587 Mutter M12 UNI 5587	Moer M12 UNI 5587 Tuerca M12 UNI 5587
51	00846	N. 1	Cablaggio ENERGY ENERGY harness	Câblage ENERGY Verkabelung ENERGY	Bedrading ENERGY Cableado ENERGY
53	02867	N. 1	Staffa tendicinghia Tightener clamp	Bride tend./courroie Riemenspannbügel	Riemsanbeugel Estribo tensor correa
55	01774	N. 1	Tubo collettore di scarico Exhaust manifold	Collecteur d'échappement Auspuffkrümmer	Uitlaatspruitstuk Colector de descarga
56	01784	N. 1	Distanziale Spacer	Entretoise Distanzstück	Afstandshouder Riostra
57	01996	N. 1	Linguetta UNI 6604/A Tongue UNI 6604/A	Languette UNI 6604/A Federkeil UNI 6604/A	Spie UNI 6604/A Chaveta UNI 6604/A
58	00578	N. 2	Vite M8x16 UNI 5739 Screw M8x16 UNI 5739	Vis 8x16 UNI 5739 Schraube M8x16 UNI 5739	Schroef M8x16 UNI 5739 Tornillo M8x16 UNI5739
59	00575	N. 2	Rondella M8x14 DIN 6798A Washer M8x14 DIN 6798A	Rondelle M8x14 DIN 6798A Scheibe M8x14 DIN 6798A	Onderlegging M8x14 DIN 6798A Arandela M8x14 DIN 6798A
60	00374	N. 2	Rondella M8x24 UNI 6593 Washer M8x24 UNI 6593	Rondelle M8x24 UNI 6593 Scheibe M8x24 UNI 6593	Onderlegging M8x24 UNI 6593 Arandela M8x24 UNI 6593
61	00642	N. 4	Vite M6x16 UNI 5739 Screw M6x16 UNI 5739	Vis M6x16 UNI 5739 Schraube M6x16 UNI 5739	Schroef M6x16 UNI 5739 Tornillo M6x16 UNI 5739
62	00858	N. 4	Vite M6x16 UNI 5931 Screw M6x16 UNI 5931	Vis M6x16 UNI 5931 Schraube M6x16 UNI 5931	Schroef M6x16 UNI 5931 Tornillo M6x16 UNI 5931
63	05505	N. 8	Rondella 6x18x1 UNI 6593 Washer 6x18x1 UNI 6593	Rondelle 6x18x1 UNI 6593 Scheibe 6x18x1 UNI 6593	Onderlegging 6x18x1 UNI 6593 Arandela 6x18x1 UNI 6593
64	01005	N. 4	Dado M8x1.25 UNI 5588 Nut M8x1.25 UNI 5588	Ecrou M8x1.25 UNI 5588 Mutter M8x1.25 UNI 5588	Moer M8x1.25 UNI 5588 Tuerca M8x1.25 UNI 5588
65	00578	N. 4	Vite M8x16 UNI 5739 Screw M8x16 UNI 5739	Vis 8x16 UNI 5739 Schraube M8x16 UNI 5739	Schroef M8x16 UNI 5739 Tornillo M8x16 UNI5739
66	01893	N. 1	Distanziale Spacer	Entretoise Distanzstück	Afstandshouder Riostra
67	01723	N. 1	Supporto UCF bearing	Support UCF Halter UCF	Steun UCF Soporte UCF
68	02906	N. 1	Albero alternatore Alternator shaft	Arbre de l'alternateur Welle Lichtmaschine	Dynamoas Eje alternador



Pos.	Code	Q.tà	Descrizione 	Désignation 	Denominación 
			Description 	Bezeichnung 	Descripción 
69	01995	N. 1	Linguetta 6X6X25 UNI6604/4 Tongue 6x6x25 UNI6604/4	Langnette 5x5x25 UNI6604/4 Federkeil 5x5x25 UNI6604/4	Spie 6x6x25 UNI6604/4 Chaveta 6x6x25 UNI6604/4
70	02046	N. 2	Gommino protezione ponte di diodi Diode bridge protection grommet	Protection en caoutchouc du pont de diodes Gummiteil zum Schutz der Diodenbrücke	Beschermrubbertje gelijkrichterbrug Proteccion de caucho puente de diodos
71	01251	N. 2	Diodo ponte raddrizzatore Bridge rectifier diode	Diode redresseur en pont Gleichrichterbrückendiode	Diode gelijkrichterbrug Diodo puente rectificador
73	01197	N. 1	Filtro aria Air cleaner	Filtre à air Luftfilter	Luchtfilter Filtro aire
74	02332	N. 1	Filtro olio Oil filter	Filtre olie Oilfilter	Oilfilter Filtro aceite
75	01059	N. 1	Filtro gasolio Diesel filter	Filtre diesel Dieselfilter	Dieselfilter Filtro diesel
76	02947	N. 2	Distanziale fissaggio motore Motor connection spacer	Entretoise fixat. moteur Distanzstück Motorbefestigung	Afstandshouder bevest. motor Riostra suj. Motor
77	03030	N. 1	Supporto morsetti 12 Volt 12 Volt board support	Support 12 Volt Halterung Steuertafel 12 Volt	Steun schakelpaneel 12 Volt Soporte 12 Volt
78	03830	N. 1	Cavo 5 m da generatore a Pannello di controllo 5 m cable from generating set to control panel	Câble 5 m du Générateur au Panneau de Contrôle 5 m Kabel von Generator zu Bedienpanel	5 m kabel van generator naar bedieningspaneel Cable 5 m de generador a panel de control
79	03831	N. 1	Cavo 7 m da generatore a Pannello di controllo 7 m cable from generating set to control panel	Câble 7 m du Générateur au Panneau de Contrôle 7 m Kabel von Generator zu Bedienpanel	7 m kabel van generator naar bedieningspaneel Cable 7 m de generador a panel de control
80	03941	N. 1	Cavo 10 m da generatore a Pannello di controllo 10 m cable from generating set to control panel	Câble 10 m du Générateur au Panneau de Contrôle 10 m Kabel von Generator zu Bedienpanel	10 m kabel van generator naar bedieningspaneel Cable 10 m de generador a panel de control
81	03832	N. 1	Cavo 15 m da generatore a Pannello di controllo 15 m cable from generating set to control panel	Câble 15 m du Générateur au Panneau de Contrôle 15 m Kabel von Generator zu Bedienpanel	15 m kabel van generator naar bedieningspaneel Cable 15 m de generador a panel de control

MUFFLE CONNECTION DIAGRAM





GENERAL WARRANTY TERMS

TELAIR guarantees its products against any material and/or manufacturing faults and defects.

The entitlement to warranty cover for new engines is valid for a period of 24 months from the time of handing over to the end user, or for a maximum of 2000 operating hours, whichever of these limits is reached first. In all cases the warranty period shall lapse no later than 26 months (28 months if delivered outside Europe) after delivery ex factory.

For electric and hydraulic components, pipes, belts, sealing elements, injection nozzles, clutches, gear boxes, the warranty term is 12 months from the time of handing over to the end user, or for a maximum of 2000 operating hours, whichever of these limits is reached first. In all cases the warranty period shall lapse no later than 14 months (16 months if delivered outside Europe) after delivery ex factory.

In any case, the costs of lubricants and consumables shall be charged. Any transport expenses shall be intended as to be covered by the purchaser; the same applies to any expenses connected with inspections requested by the customer and accepted by **TELAIR**.

In any case, the costs of lubricants and consumables shall be charged.

The manufacturer's warranty shall only be valid if:

- the customer has carried out any routine maintenance according to the recommended schedule and has promptly visited the nearest after-sale centre if required.
- the customer can produce a document showing the date of sale (invoice or receipt).

Such document will have to be kept with care and be intact when produced to the **TELAIR** After-Sales centre on requesting service.

In any case, the purchaser shall not be entitled to:

- terminate the contract;
- claim damages to persons or property;
- ask that the warranty be extended in the event of product defects or malfunctioning.

Notes

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