



# SERVICE MANUAL BMS-220ADB

VERSION 1.4

**EC DECLARATION OF CONFORMITY**

in accordance with Appendix II sub A of Directive 2006/42/EC

**BLASTRAC B.V.**

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The Netherlands

Declare under our sole responsibility that the machine as described below conforms with the Health and Safety requirements of the European Directive of the machine Safety.

In case of changes to the machine without our written authorization this declaration loses its validity.

**Model:**            **BLASTRAC    BMS-220ADB-0600**

**Serial number:** .....

1. satisfies the conditions set out in the Machine Directive (Directive 2006/42/EC); Low voltage directive (2006/95/EC, as last amended; EMC directive 2004/108/EC, as last amended)
2. satisfies the following harmonized standards:  
NEN-EN 349, NEN-EN 418, NEN-EN 294 and NEN-EN 60204

Nieuwegein .....

  
Michiel Kalisvaart



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# 1. Spare parts

Fig. 01

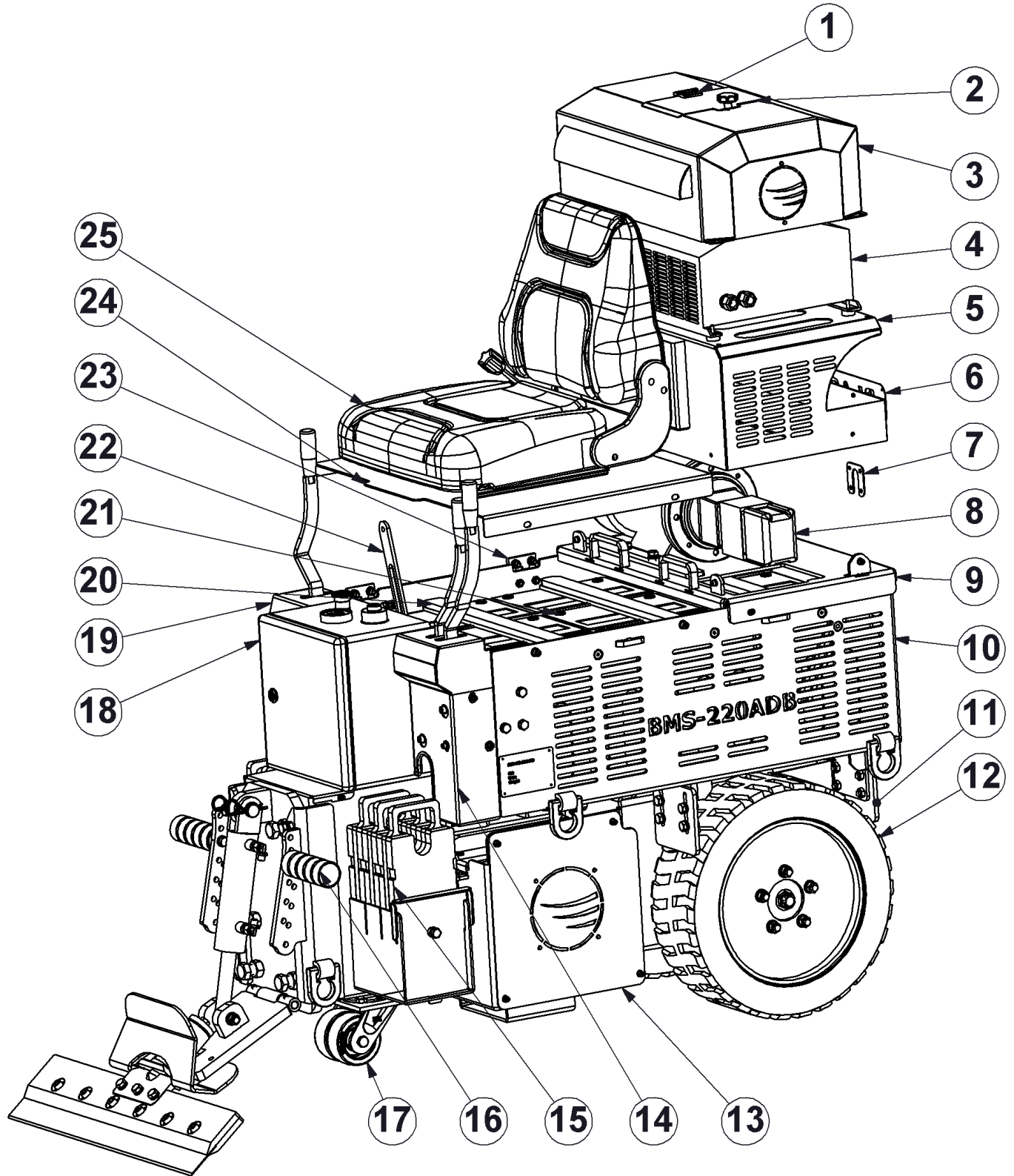


Fig. 01

Item	Part number	Description	Qty.
1	E11124	Hinge 40x40	1
2	E11123	Charger panel cover	1
3	E11122	Charger cover	1
4	E10152	Battery charger	1
5	E11168	Upper battery cover	1
6	E09998	Blastrac logo BMS-220	1
7	E09940	Plug plate	1
8	E09720	Motor with pumps	1
9	E11261	Tube cover back	1
10	E11260	Tube weldmet	1
11	E09716	Scraper	4
12	E09169	Wheel complete BMS-220ADB	2
13	E09942	Side cover LH	1
14	E09702	Spool cover	1
15	E03185-1	Weight welded version of E03185	6
16	E08622	Foot support	2
17	E09277	Front wheel	1
18	E09376	Electrobox	1
19	E09704	Single spool cover	1
20	E08632	Battery hold down strip	3
21	E09721	BMS-220 battery	12
22	E09838	Protection plate	1
23	E11255	Hinge 60x60	4
24	E11262	Tube cover front	1
25	E09169	Seat	1

Fig. 02

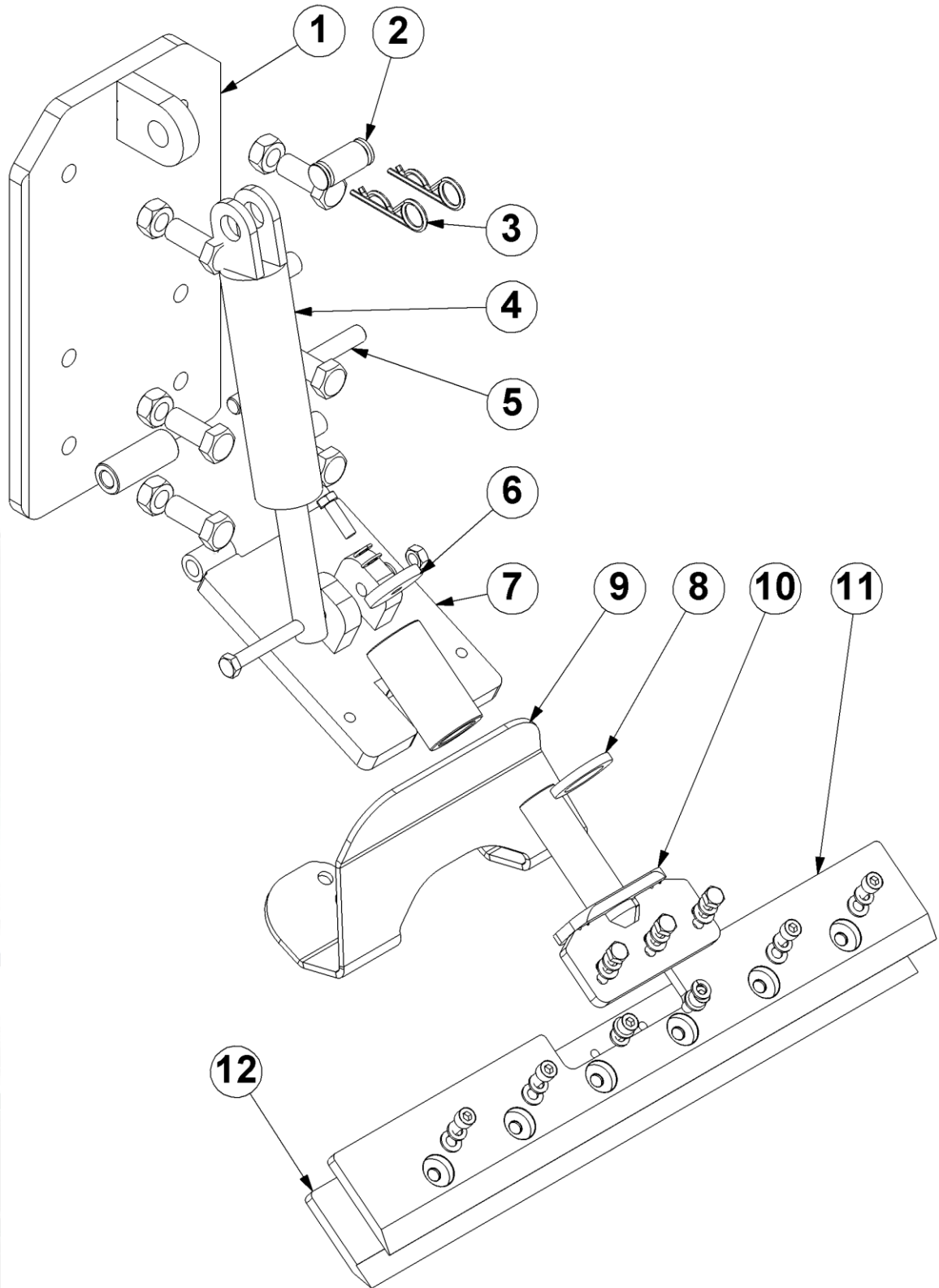


Fig. 02

Item	Part number	Description	Qty.
1	E08623	Slide plate	1
2	E09711	Cylinder connecting rod	1
3	BE0234	Locking Clip double 4,5mm	2
4	E09171	Hydraulic cylinder	1
5	E08624	Cutting head hinge pin	1
6	E09949	Tool holder plate	1
7	E09537	Universal lower cutting head support	1
8	E09953	Tool holder washer	1
9	E09950	Debris deflector - new holder shape	1
10	E09538	Tool holder	1
6+8 +10	E09664	Tool holder complete	1
11+ 12	E09635	Blade holder 686mm(27")	1
	E09630	Blade holder 152mm(6")	1
	E09631	Blade holder 203mm(8")	1
	E09632	Blade holder 254mm(10")	1
	E09633	Blade holder 305mm(12")	1
	E09634	Blade holder 355mm(14")	1

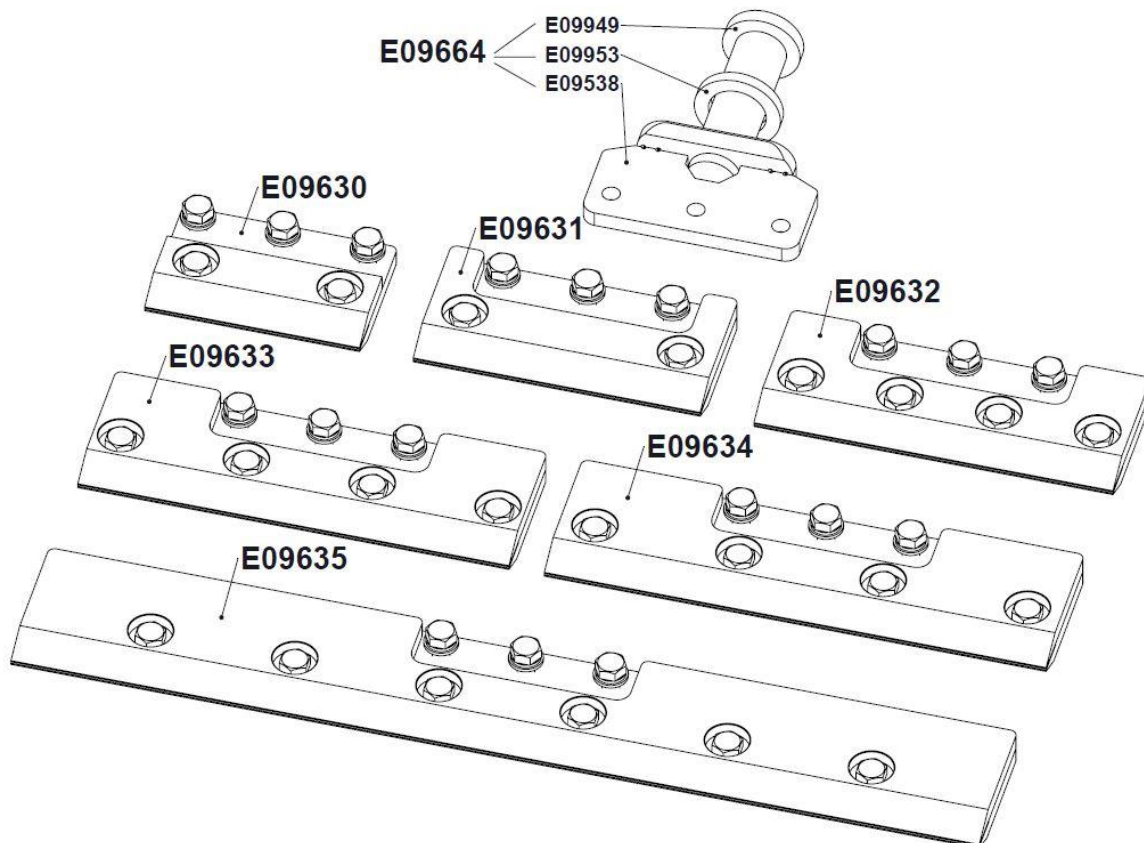


Fig. 03

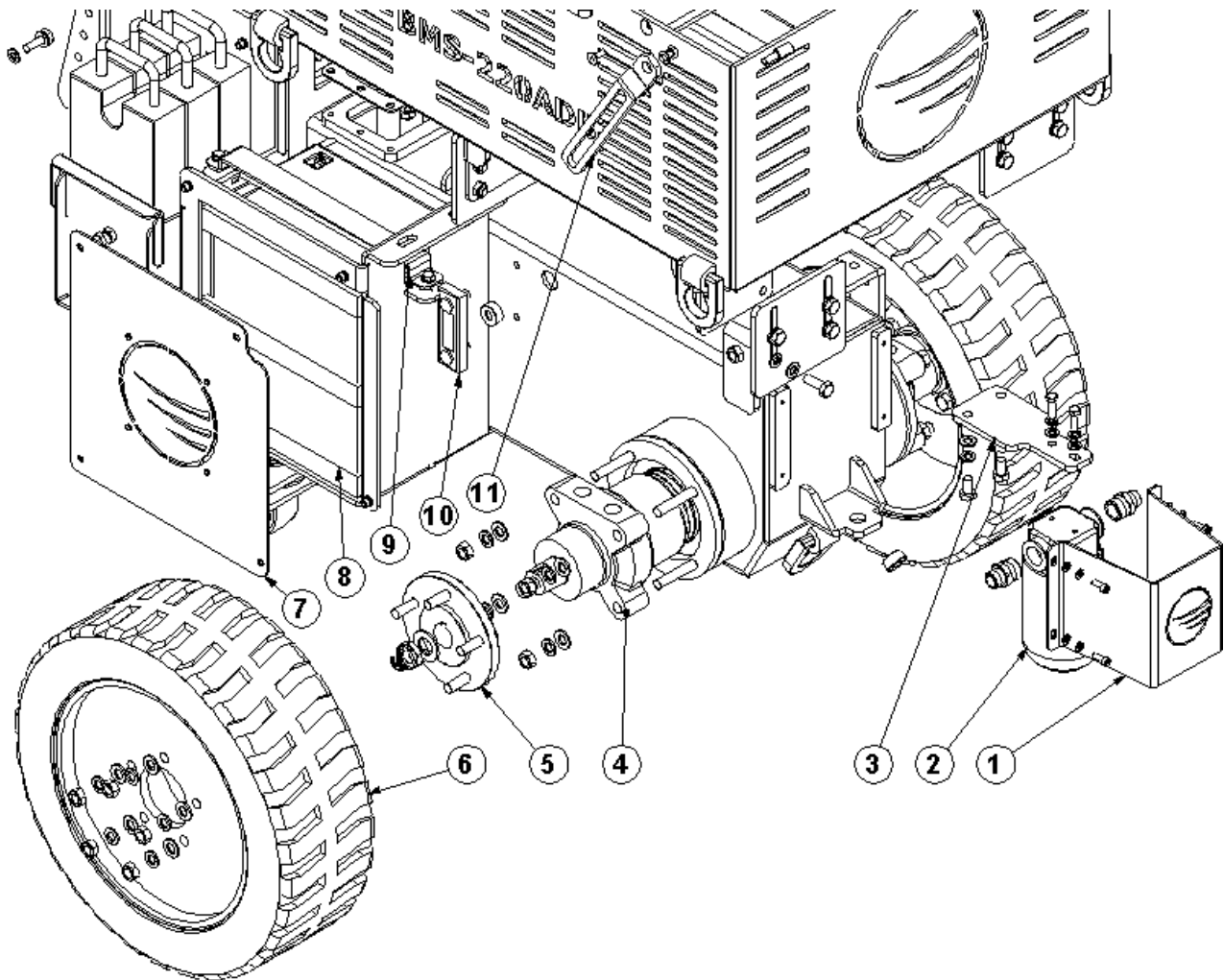


Fig. 03

Item	Part number	Description	Remarks	Qty.
1	E09709	Filter cover		1
2	E09722	Oil filter		1
3	E09708	Filter bracket		1
4	E07732	Hydraulic motor		2
5	E09170	Wheel hub		2
6	E09169	Wheel complete -BMS 220ADB		1
7	E09942	Side cover LH		1
8	E09715	B21188 adhesive rubber seal 30x20mm long -260mm		6
9	E09796	Battery holder plate		2
10	350-4172-S	Level gauge with thermo		1
11	E09805	Hinge plate		1
	E00481	Hydraulic oil HV46		40



Fig. 04

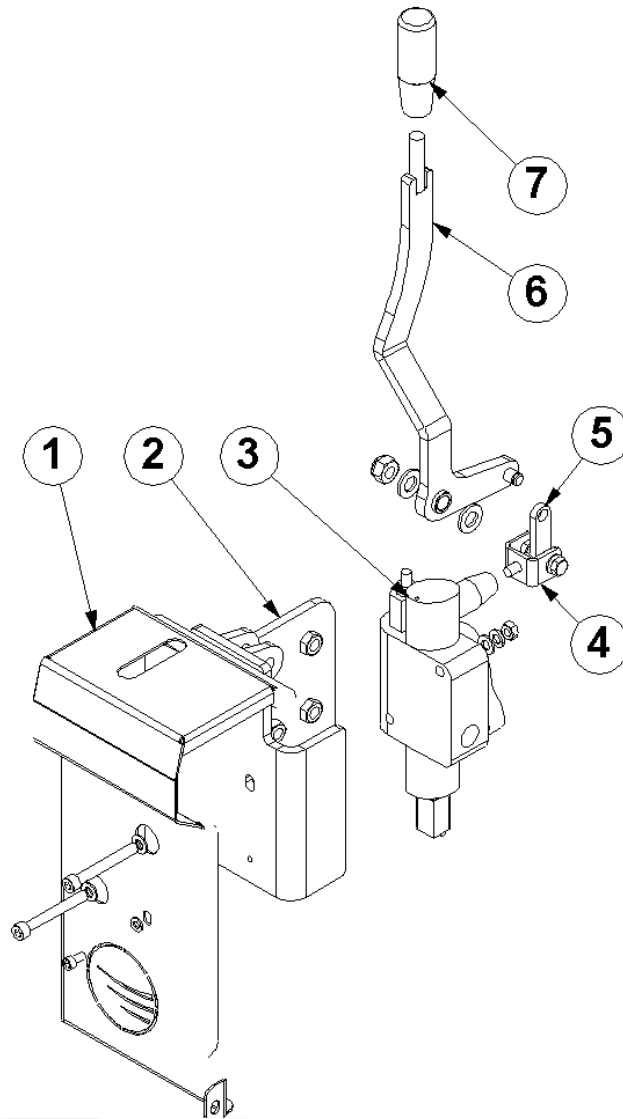


Fig. 04

Item	Part number	Description	Qty.
1	E09704	Single spool cover	1
2	E09703	Single spool bracket	1
3	E10351	Single spool control	1
4	E09717	Spool lever bracket	1
5	E09718	Spool tie	1
6	E09707	Steering handle RH	1
7	E09701	Handle grip	1

Fig. 05

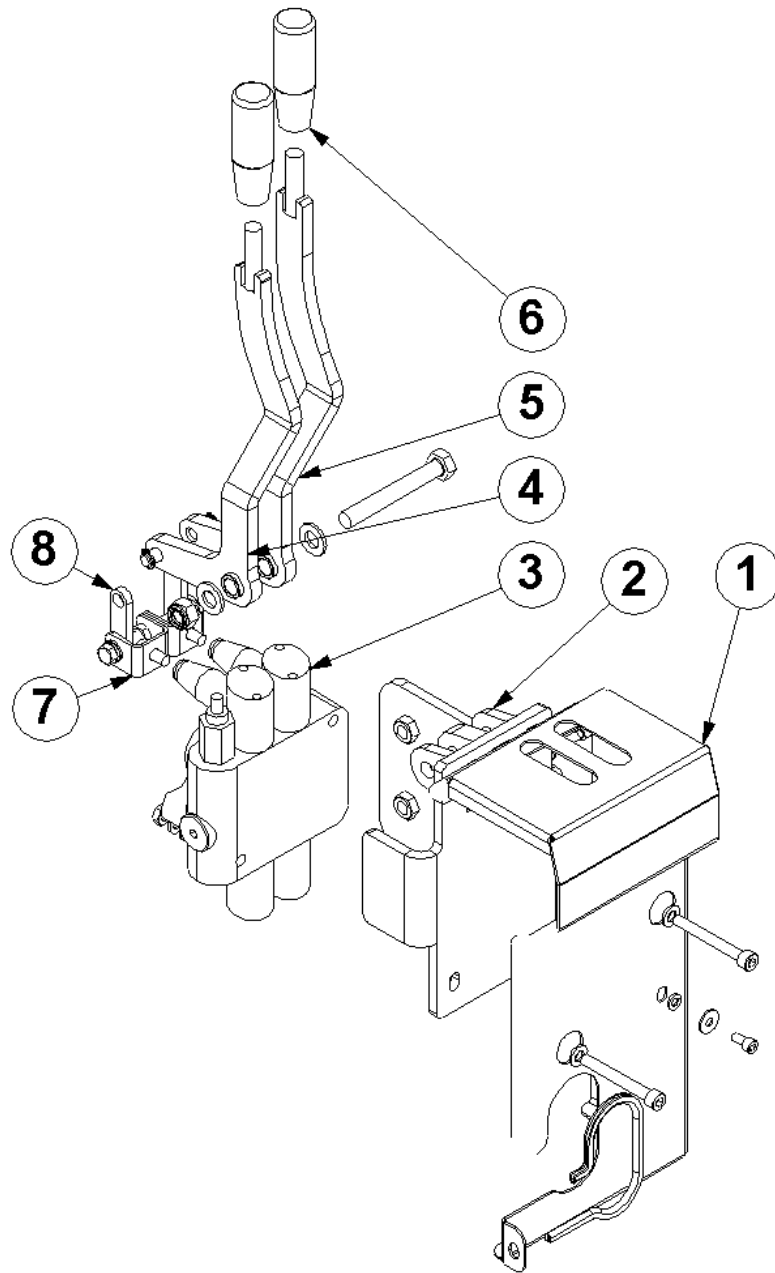


Fig. 05

Item	Part number	Description	Qty.
1	E09702	Spool cover	1
2	E08638	Double spool bracket	1
3	E10352	Double spool control	1
4	E09706	Lifting handle	1
5	E09700	Steering handle LH	1
6	E09701	Handle grip	2
7	E09717	Spool lever bracket	2
8	E09718	Spool tie	2

**Fig. 06**

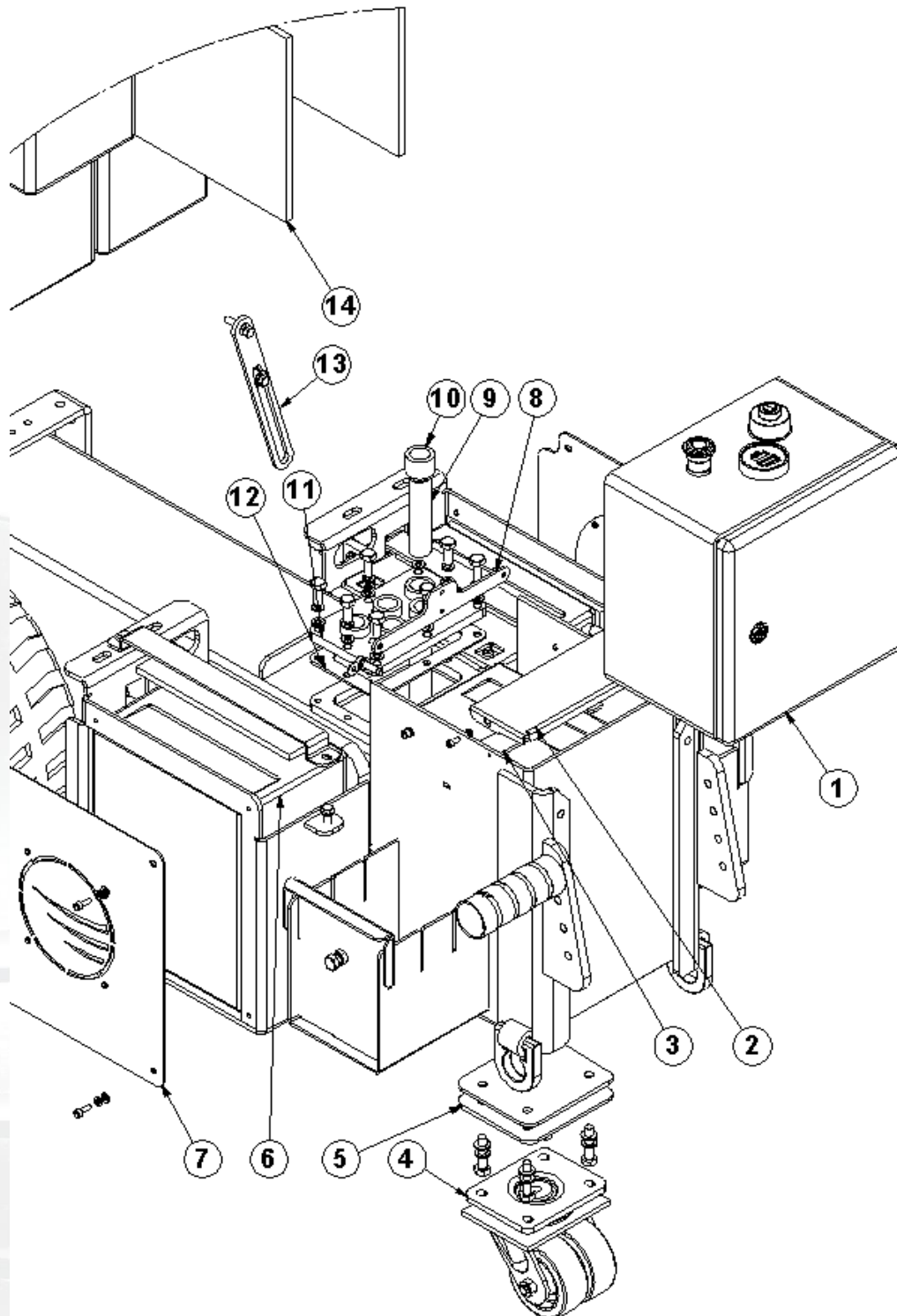
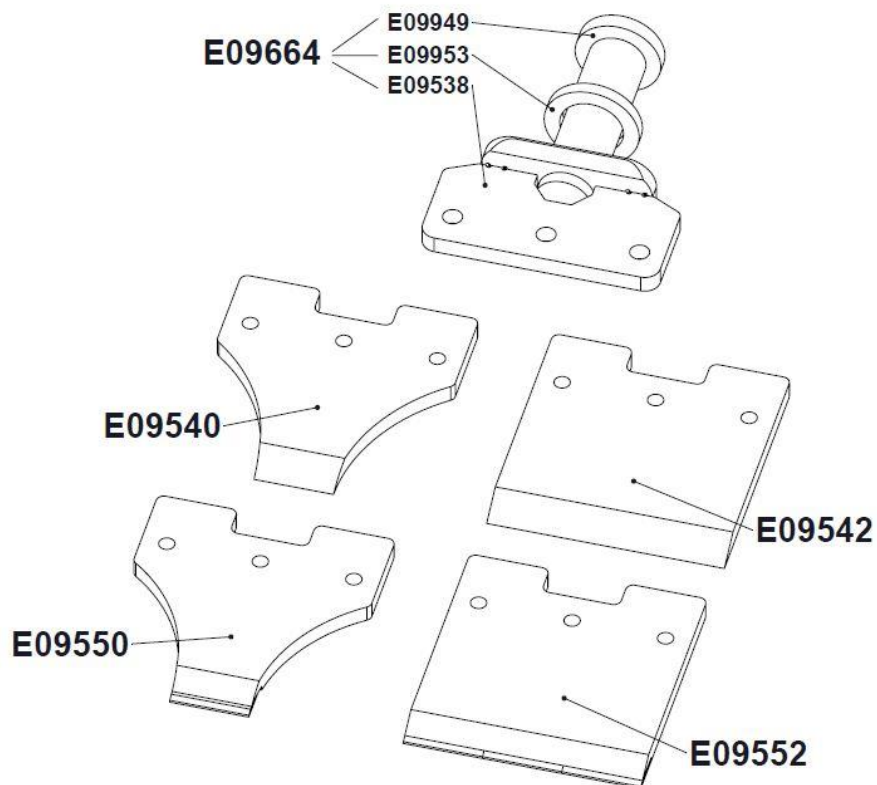


Fig. 06

Item	Part number	Description	Qty.
1	E09376	Electro box	1
2	E08628	Front cover	1
3	E08629	Front battery tight plate	1
4	E09277	Front wheel	1
5	E09712	Wheel spacer	2
6	E09721	Battery – BMS-220	12
7	E09710	Side cover - RH	1
8	E08632	Battery hold down strip	1
9	E09837	Breather pipe	1
10	E09939	Breather mounting bush	1
11	E09705	Hose connection plate	1
12	E09172	Oil tank seal	1
13	E09838	Protection plate	1
14	E09175	Battery spacer	2

Fig. 07



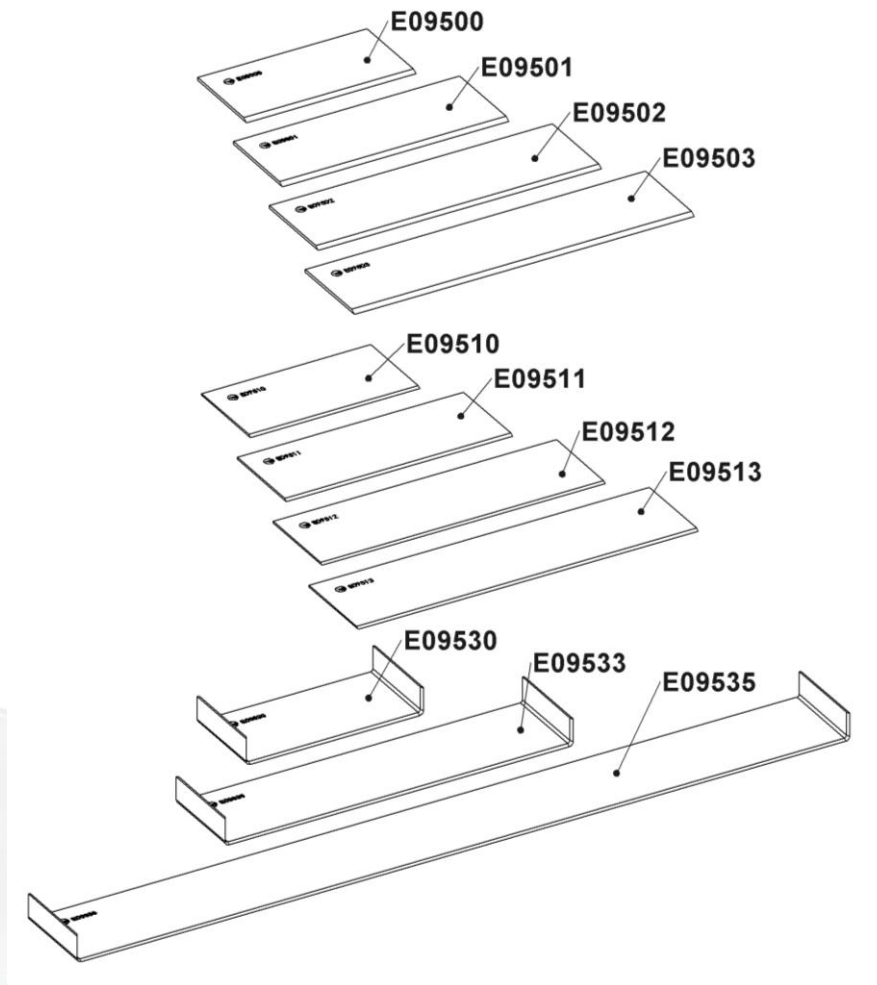
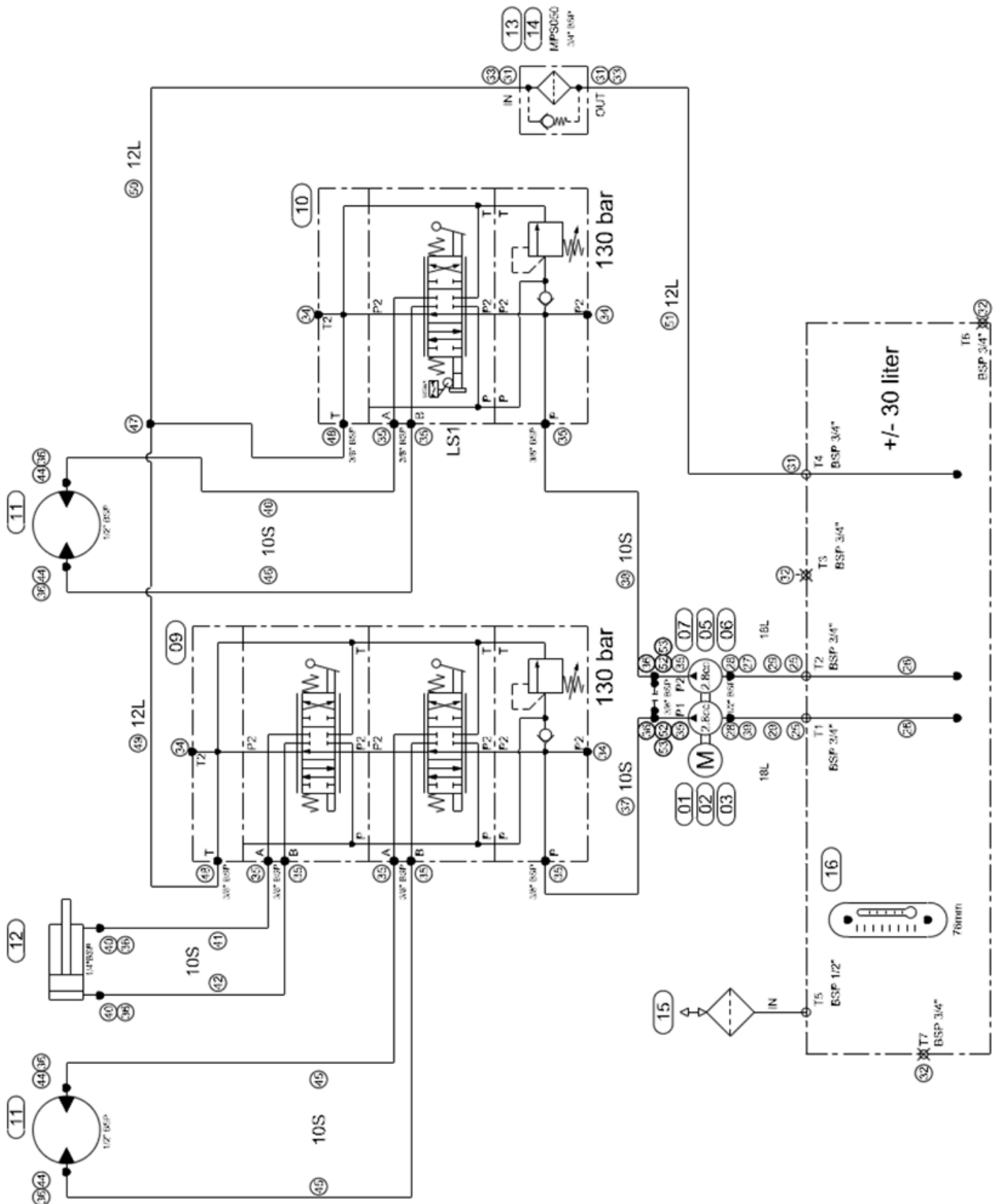


Fig. 07

Item	Part number	Description	Qty.
	E09540	Premium chisel 51x12 (2")	1
	E09542	Premium chisel 152x12 (6")	1
	E09550	Heavy duty chisel 51x12 (2")	1
	E09552	Heavy duty chisel 152x12 (6")	1
	E09500	Heavy duty blade 152x76x2.5 (6")	1
	E09501	Heavy duty blade 203x76x2.5 (8")	1
	E09502	Heavy duty blade 254x76x2.5 (10")	1
	E09503	Heavy duty blade 305x76x2.5 (12")	1
	E09510	Premium blade 152x76x2.5 (6")	1
	E09511	Premium blade 203x76x2.5 (8")	1
	E09512	Premium blade 254x76x2.5 (10")	1
	E09513	Premium blade 305x76x2.5 (12")	1
	E09530	Self-Scoring blade 152x76x2.5 (6")	1
	E09533	Self-Scoring blade 305x76x2.5 (12")	1
	E09535	Self-Scoring blade 686x76x2.5 (27")	1

## 2. Hydraulic schedule



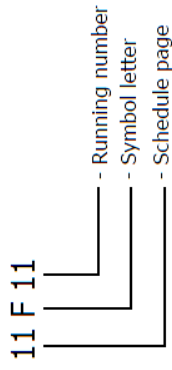


### 3. Electric schedule

Colour abbreviations IEC 60757

BK	Black
BN	Brown
BU	Blue
GD	Gold
GN	Green
GNYE	Green/Yellow
GY	Grey
OG	Orange
PK	Pink
RD	Red
SR	Silver
TQ	Turquoise
VT	Violet
WH	White
YE	Yellow

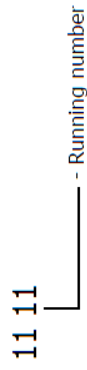
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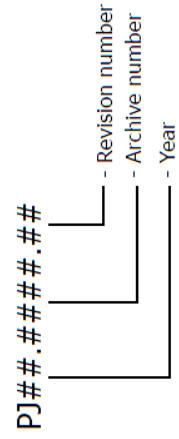
#### WIRE COLOR

Plus (24VDC)	-RED
Hook-up wire	--
Minus / Ground (24VDC)	BLACK

#### CORE CODE

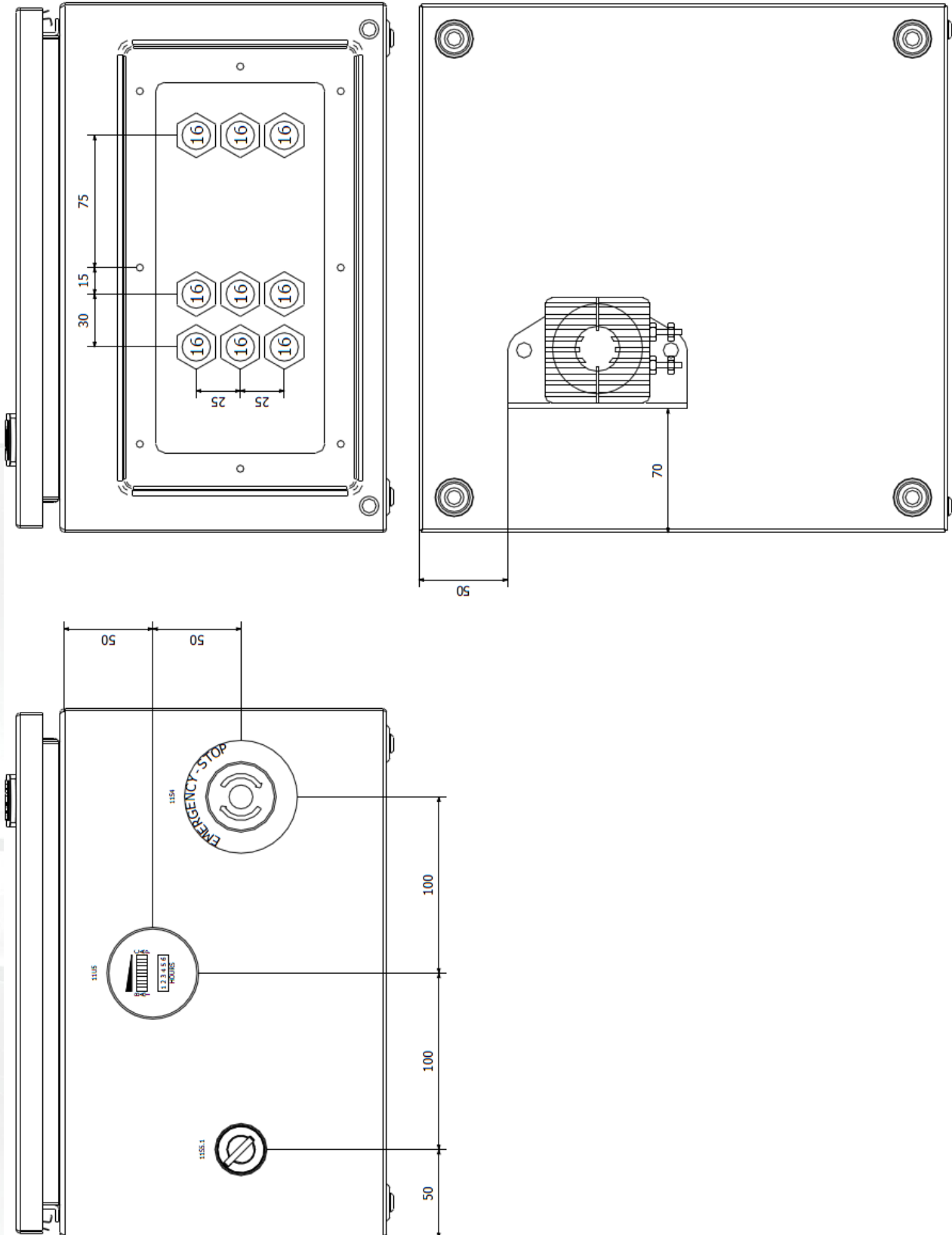


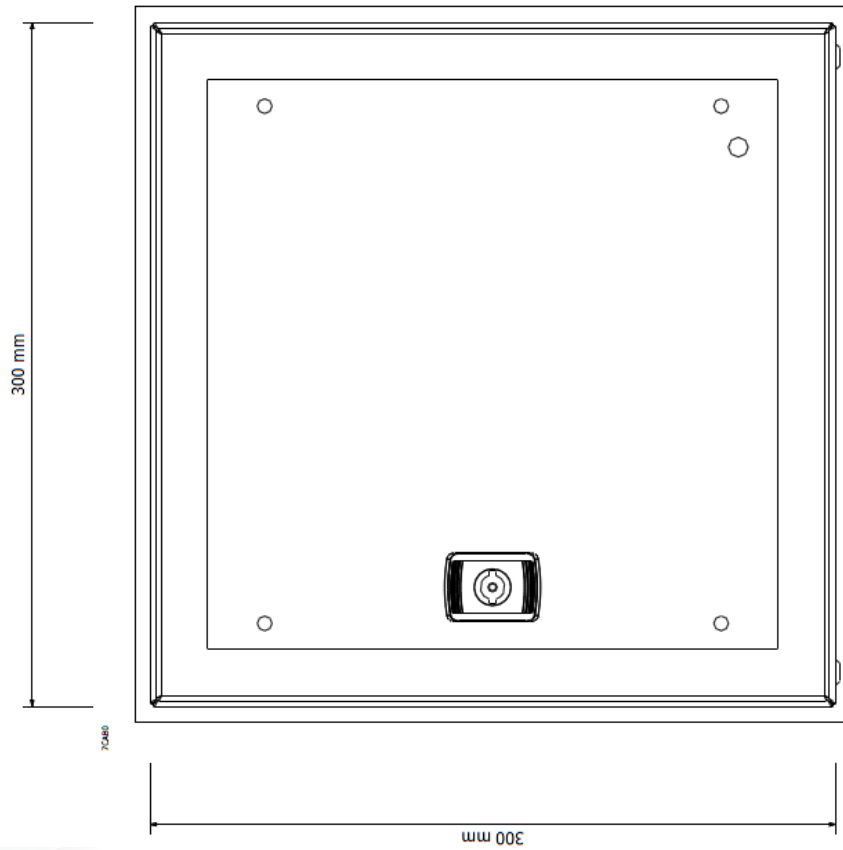
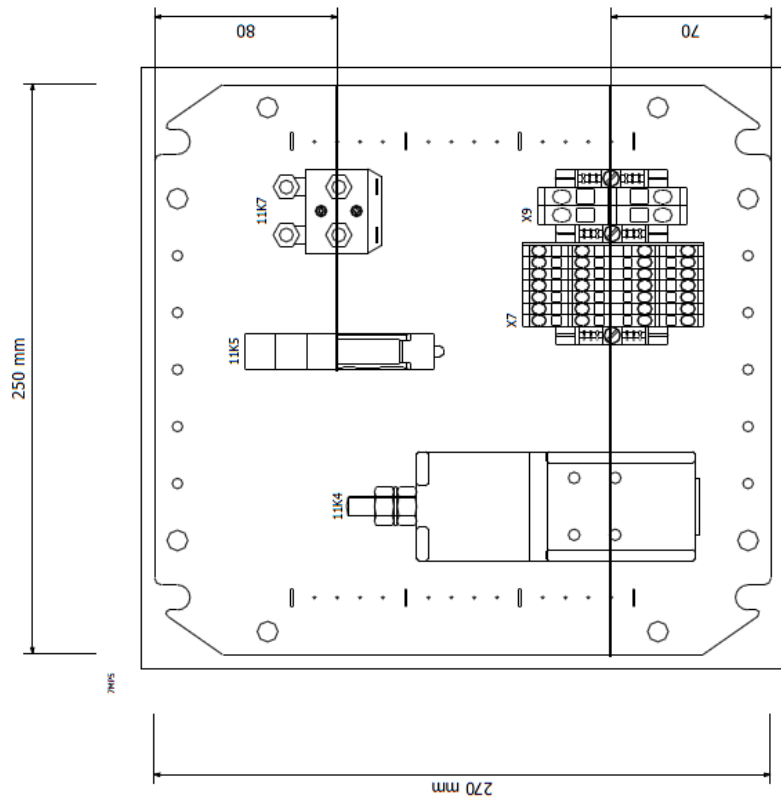
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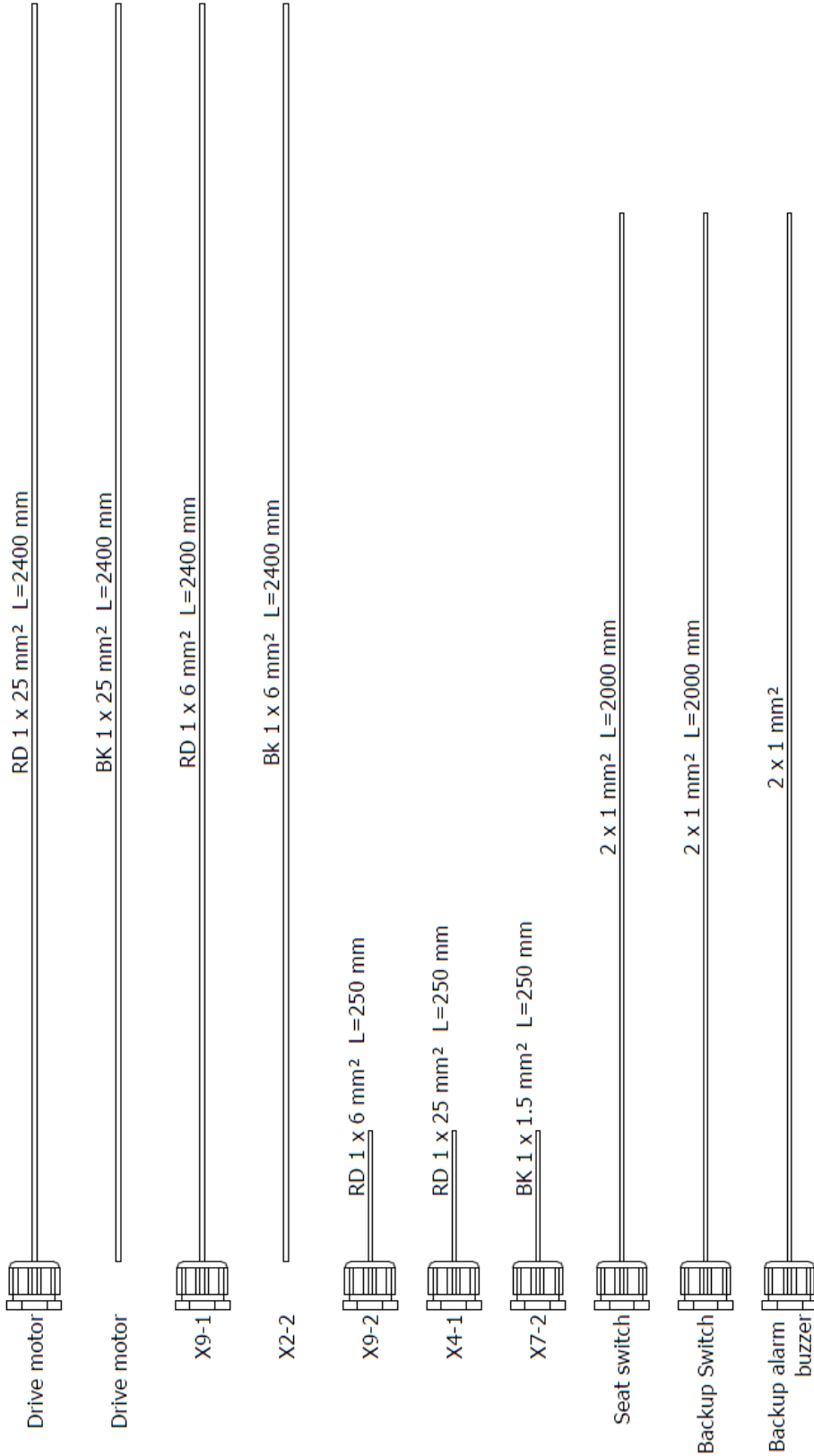
	auxiliary contact	hulpcontact		signallamp		Safety fuse	smeltveiligheid
	Power contact	vermogenscontact		hoorn		Fused switch, three-pole	schakelbare scheid- er
	NO contact, opens with time delay	maakcontact, vertraagd open		apm.meter		Fused disconnect, three-pole	scheider "kapbak"
	NO contact, closes with time delay	maakcontact, vertraagd sluitend		running hour counter		Main switch	hoofdschakelaar
	NC contact, opens with time delay	verbreekcontact, vertraagd open		transformer		Circuit breaker, single-pole	installatieautomaat 1-polig
	NC contact, closes with time delay	verbreekcontact, vertraagd sluitend		Contactor coil relay coil		Circuit breaker, two-pole	installatieautomaat 2-polig
	Pushbutton rebound	drukknop terugnervend		Contactor/relay coil, with pick-up delay		Circuit breaker, three-pole	installatieautomaat 3-polig
	Pushbutton locking	drukknop blijvend		Contactor/relay coil, with drop-out delay		Power circuit breaker motor overload switch with switch mechanism	motorbeveiligingsschakelaar
	Rotary switch rebound	tip draaischakelaar		Contactor pulse coil relay pulse coil,		Valve	elektrisch bediende klep
	Rotary switch locking	draaischakelaar		Tube light		Resistor with movable contact	regelbare weerstand
	Emergency stop rotary unlock	noodstop met draaibare vrijgave		Resistor / Heating		Terminal	rijglem
	Thermostatic switch	thermostaat hygrostaat		Socket		Terminal with fuse	rijglen met zekering
	Pressure switch	drukschakelaar		Current transformer		Rectifier	gelijkrichter
	Limit switch	eindschakelaar					
	Proximity switch	naderingsschakelaar					
	Pull or pulcord switch	Trek of trekkoord schakelaar					



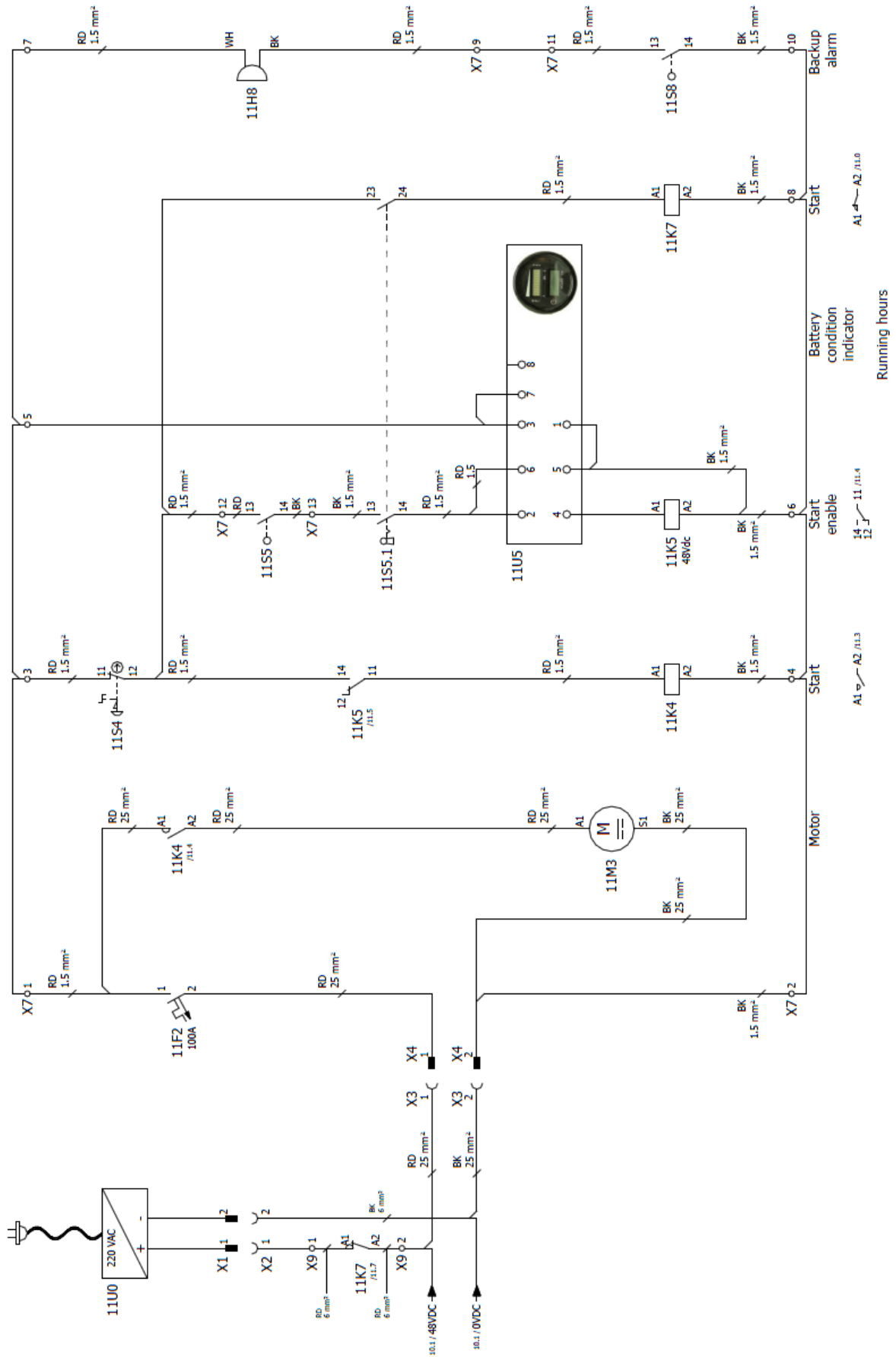




Wire / Cable length measured from cable gland











# IMPORTANT!

## TO THE DELIVERING DISTRIBUTOR OR END USER

To ensure the proper warranty coverage is extended to the owner of this machine, fill in the necessary information below **COMPLETELY** and **ACCURATELY** and retain for your records. **Go to [www.blastrac.com](http://www.blastrac.com) and register online.** Click on the Register icon in the left column of the homepage, and fill out the product registration form with the same information that will be recorded here.

**The warranty period will start upon the delivery date of the machine.**

The distributor or the end user must provide the machine warranty information when the machine is delivered. Registration of the machine will extend the warranty period from the recorded delivery date entered with product registration. **Failure to comply will make any and all warranties on the equipment void after 6 months.**

### OWNER/END USER'S REFERENCE INFORMATION

Delivery Date _____	Machine Model No. _____
Delivering Distributor's Name and Address _____	Machine Serial No. _____
_____	Modifications _____
_____	_____
_____	_____
_____	_____
_____	_____

Signature of Delivering Distributor's Representative

Blastrac is a registered trademark of Blastrac,NA  
Fold and Detach Here if Mailing

## Warranty Registration

**IMPORTANT!** To ensure that your Blastrac® machine is covered under warranty, please provide the information recorded here by registering online at [blastrac.com](http://blastrac.com), or complete this page and fax to 866-485-1046, or if you prefer, detach and mail to:

**Blastrac, 13201 North Santa Fe Avenue, Oklahoma City, OK 73114-9901**

(Please print legibly)

Company \_\_\_\_\_

Address \_\_\_\_\_

City, State, & Zip \_\_\_\_\_

Telephone No. \_\_\_\_\_ Contact Person \_\_\_\_\_

Date of Purchase \_\_\_\_\_ Date Received \_\_\_\_\_

Machine Model No. \_\_\_\_\_ Serial No. \_\_\_\_\_

Distributor Name \_\_\_\_\_

End User Name \_\_\_\_\_

End User E-mail \_\_\_\_\_



13201 North Santa Fe Avenue • Oklahoma City, OK 73114 • Ph: 800-256-3440 • F: 405-478-8608 [blastrac.com](http://blastrac.com)

## Product Warranty

### Standard Equipment Products:

Blastrac warrants its Blastrac Standard Equipment Products against defects in quality of material and workmanship, under normal and proper use for a period of **1 Year** from the date of delivery, as noted on the returned warranty registration card, or, in the case of **Rental Fleet Machines, 180 Days** from the date of assignment to Rental Fleet. This warranty is non-transferable and is extended to machines purchased and entered into the normal service of surface preparation by a recognized professional or qualified contractor. Blastrac makes this warranty only to the buyer who purchases the products directly from Blastrac or its Authorized Distributor. This warranty does not include expendable parts such as, but not limited to, blades, blast wheels, wear plates, liners, seals, and electrical components. All purchased parts utilized in the manufacture will be honored to the original manufacturer's specified warranty.

If the buyer does not return the warranty card or register the product online at [www.blastrac.com](http://www.blastrac.com) within 30 days after taking delivery of Blastrac Standard Equipment Products, the warranty period is limited to 6 months from the date of delivery noted on shipping receipt.

### Hand Tool Products:

Blastrac warrants its BLASTRAC Hand Tool Products, including hand grinders and accessories, against defects in material and workmanship under normal and proper use for a period of **90 days** from the date of delivery or, in the case of Rental Fleet Machines, from the date of assignment to a Rental Fleet. Blastrac makes this warranty only to the buyer who purchases the products directly from Blastrac or its authorized distributor. This warranty does not include expendable parts such as blades.

If the buyer does not return the warranty card, or register online at [www.blastrac.com](http://www.blastrac.com) within 15 days after taking delivery of Blastrac Hand Tool Products, the warranty period is limited to 30 days from the date of delivery noted on shipping receipt.

## WARRANTY TERMS AND CONDITIONS:

1. Blastrac's obligation under this warranty is limited to the replacement or repair, at Blastrac's option, of products and does not include, labor, the cost of transportation, loss of operating time, or normal maintenance services.
2. This warranty does not apply to failure occurring as a result of abuse, misuse, negligence, corrosion, erosion, normal wear and tear, alterations or modifications made to products without the express written consent of Blastrac.
3. The buyer must submit all warranty claims no later than thirty (30) days after buyer becomes aware of the basis for any such claim, or should have become aware of the basis for any such claim in the exercise of reasonable diligence.



To return parts for warranty consideration, please call Blastrac Customer Service at **800-256-3440**. Your customer service representative will obtain the necessary information to complete the Blastrac Returned Merchandise Authorization (RMA) Form. Blastrac will then send the RMA form to the customer authorizing the return of the parts for warranty evaluation. The parts must be received within sixty (60) days following the RMA origination date or the warranty claim will be denied. Once the parts are received they will be evaluated for warranty.

If the customer cannot wait for the evaluation/replacement of the parts during this process, the customer must issue a new purchase order to Blastrac for the replacement parts before they can be shipped. Once the evaluation process is complete and parts are deemed a valid warranty claim, a credit will be issued against this invoice.

**4.** The buyer may not return Blastrac products without written authorization to do so through a Blastrac RMA.

**5.** Blastrac reserves the right to inspect and determine the scope of its warranty responsibilities for any returned Blastrac products.

**6.** Blastrac makes no warranty with respect to accessories it does not manufacture, including but not limited to, engines, motors, batteries, tires and all other parts. See component manufacture warranty.

**7.** Blastrac reserves the right to make product changes or improvements without prior notice and without undertaking any obligation for such changes or improvements on previously sold products.

**8.** The above warranty conditions can only be altered by Blastrac. Blastrac must confirm alterations in writing for each specific transaction.

**9.** Blastrac reserves the right to modify this warranty for used or demo products on an individual transaction basis. Blastrac will include warranty modifications on its invoices for used or demo products.

**10.** BLASTRAC DOES NOT AUTHORIZE ANY PERSON, REPRESENTATIVE, SERVICE OR SALES OUTLET TO MAKE ANY WARRANTY DIFFERENT FROM THIS PRODUCT WARRANTY.

**11.** EXCEPT FOR ITS PRODUCT REPAIR OR REPLACEMENT OBLGATIONS DESCRIBED IN THIS PRODUCT WARRANTY, UNDER NO CIRCUMSTANCES SHALL BLASTRAC BE LIABLE TO THE BUYER, OR ANY OTHER PERSON, FOR ANY DIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THE BLASTRAC PRODUCT, OR FOR ANY SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY CHARACTER, INCLUDING WITHOUT LIMITATIONS, DAMAGES FOR ANY LOSS OF GOODWILL, WORK STOPPAGE, OR ANY AND ALL OTHER COMMERCIAL DAMAGES OR LOSSES.

**12.** BLASTRAC MAKES NO OTHER PRODUCT WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.



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