

Stem Electrically Powered Retractable Step User Guide

For part numbers

6141 (GE-3)

6141-1

6141-2



**ELECTRICALLY POWERED
PATENTED RETRACTABLE STEP
FOR PROFESSIONAL USE**

GE-3



INSTRUCTIONS FOR USE

Congratulations for your choice!

STEM S.r.l.-unipersonale thanks you for choosing one of its products and reminds you that it is in the vanguard for emergency transportation technology.

Our company tradition and reliability ensure the technical quality of your choice, in fact, all of our products are manufactured with first quality materials and are based on criteria guaranteeing reliability, solidity, and functionality so as to satisfy the most demanding customers' requirements.

Please do not hesitate to contact us for any question, both a of technical and commercial nature; we are glad to be at your disposal for any clarification and detail.


E-mail: stem@stem.it

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1. GENERALS

1.1 WARNINGS



	<p>Upon reception, the purchaser has to make sure that the delivered material complies with that ordered by verifying the transport papers, shipped material and ordered material.</p> <p>Furthermore, the purchaser must make sure that the material has not been damaged during transportation by checking the packaging integrity and the absence of breakage or deformations.</p> <p>Both the carrier and STEM have to be immediately informed of any possible anomaly. In the absence of a special agreement the goods travel at the purchaser's risk.</p>
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This technical document addresses all operators authorised to use the product: please carefully and completely read this manual before any intervention.

STEM declines every responsibility in case of damages to people and/or objects deriving from the non respect of instructions contained in this manual.

STEM reserves the right to make useful technical and/or commercial modifications at any moment and without notice. Hence reported data and details may be modified and/or updated.

1.2. USED SYMBOLS

	<p><i>Important warnings to avoid damages to the users or to the device</i></p>
	<p><i>General information</i></p>

1.3 WARRANTY

Warranty terms and conditions are set in the following points unless differently agreed in the order confirmation.

WARRANTY OBJECT

The device has been conceived and manufactured for a multi-annual use without trouble; however, should anomalies occur during the specified warranty period STEM commits itself to replace, free of charge, parts that have broken or worn prematurely due to: defective materials, processing defect, or incorrect mounting. The warranty is not recognized for those parts whose premature wear and tear or breakage is due to:

- non respect of instructions contained in this use and maintenance manual;
- tampering or modifying interventions performed or required without special approval by STEM;
- use of non original spare parts
- lack of or incorrect maintenance;
- use of unsuitable tools for routine and extraordinary maintenance;

As to mounted electric material and commercial material purchased from external vendors, STEM acknowledges the purchaser the same warranty STEM is granted by its vendors.

WARRANTY TERMS

The warranty lasts **24 months from delivery date**; the term is exclusive and not subject to delays following replacements or repairs performed during the warranty period.

APPLICATION

In order to define the causes of the anomalies and to apply the warranty, defective components have to be sent to STEM. Warranty repair or replacement interventions will be carried out, on STEM's decision, at its own factory, by a third party, or on-site. As to on-site interventions, the customer will be charged for the power supply costs, extraordinary equipment, ancillary staff, STEM staff travel and lodge and boarding expenses.

MATERIAL RETURN

Before shipping parts to be replaced or repaired under warranty the written approval by the STEM Technical Service is needed.

Defective parts have to be packed correctly to avoid damages during transportation and returned at the customer's expense accompanied by:

- serial number and model from the identification plate (§ 2.1);
- code number and component position from the spare parts list;
- accurate description of the defect and how it occurred.

Parts that are recognized under warranty are delivered carriage free; replaced parts remain the property of STEM.

EXCLUSIONS

The warranty does not include parts and material subject to ordinary wear and tear and those whose life cannot be set in advance.



The absence of the identification plate on the product implies the immediate expiry of any kind of warranty.

1.4 DECLARATION OF CONFORMITY**S.r.l.-unipersonale**

Strada Ghiaie, 12/D
43014 MEDESANO (PR)
ITALY

DECLARATION OF CONFORMITY

OBJECT	Electric retractable step
TYPE	GRAD-AU
MODELS	GE-360 GE-380 GE-3110 GE-2015 GE-2015-S SHINING10_4A
HOMOLOGATION	(E₃) 10 R – 05 6517

This is to certify that the above device is manufactured in compliance with:

- Directive 2006/42/CE of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC

UN/ECE Regulation No 10 Rev.5 of the Economic Commission for Europe of the United Nations— Uniform provisions concerning the approval of vehicles with regard to electromagnetic compatibility

- The technical file is kept at the offices of STEM and the person authorized to compile that file is:

Gotri Ilaria

Medesano,

The Legal Representative
Menna Ezio



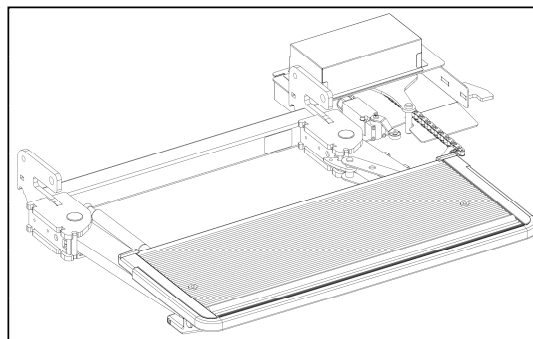
2. STEP FEATURES AND TECHNICAL DATA

2.1 IDENTIFICATION

The step is identified through a self-sticking label on the fixed frame (pict. 1).

 Strada Ghiaie, 12/D I-43014 MEDESANO (Parma) ITALIE	
TYPE	GRAD-AU 
MODEL	GE-3110
 10 R – 05 6517	
Serial N° 16 XXXXX	19.5 kg DC 10,5/12,5 V 18 A

fig. 1

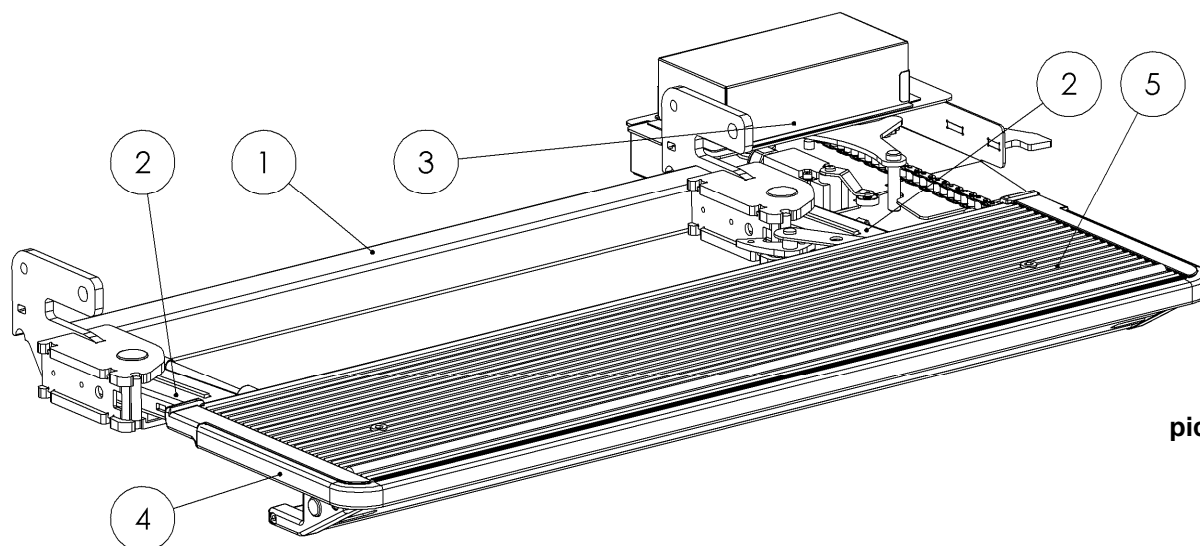


Do not remove the label. In case of damage contact STEM and ask for a duplicate. The step cannot be sold without such a plate.

2.2 DESCRIPTION

The retractable step “GE-3” is comprised of (pict. 2):

1. A fixed structure connected to the vehicle chassis
2. A mobile frame powered by an electric motor (3)
4. A retractable foot-board with refractive edge equipped with anti-slip layer (4) equipped with a rubber band anti shock (5)



pict. 2

2.3 TECHNICAL FEATURES

MECHANICAL FEATURES

OVERALL DIMENSIONS	Vedi pag.8-9
WEIGHT 360	15 kg
WEIGHT 380	17.4kg
WEIGHT 3110	19.5kg
CYCLE TIME (OUT+IN)	2s + 2.5s
MAXIMUM CAPACITY	300 kg



Reported data do not bind the manufacturer; they can be modified without notice. In any case STEM is at the customer's disposal for any detail or clarification (see 7.1.).

CONVERSION TABLE OF UNITS OF MEASUREMENT

Length	1 inch = 1" = 25.4 mm	Power	1 kW = 1.36 CV = 1.34 BHP
Volume	1 litre = 1 l = 0.260 gallons	Weight	1 kg = 2.204 pounds
Temperature	$T (K) = t (°C) + 273$ / $t (°F) = 1.8 t (°C) + 32$	Pressure	1 bar = 100 kPa = 14.5 psi

- **MINIMUM TEMPERATURE USE:** -20°C
 - **MAXIMUM INCLINATION -20°C:** 5% (~3°)
- Technical report Nr. 123 12 12 206 TÜV

2.4 ALLOWABLE USE

The GE-3 is a device used to facilitate the access to vehicles whose platform height exceeds 40 cm.



- **DO NOT USE the step before the opening stroke is completed.**
- **While using the step the user has to grasp the safety handle the vehicle is equipped with.**



While using the step people with motory handicap must be helped by an assistant.



ATTENTION : DO NOT MOVE THE STEP MANUALLY

3. HANDLING

3.1 PACKAGING AND TRANSPORT

The step is delivered to the customer completely assembled. The packaging includes a cardboard box containing a polystyrene sheet preventing the step from shaking inside the box.



During handling the step must be in the closed position.

3.2 STORAGE

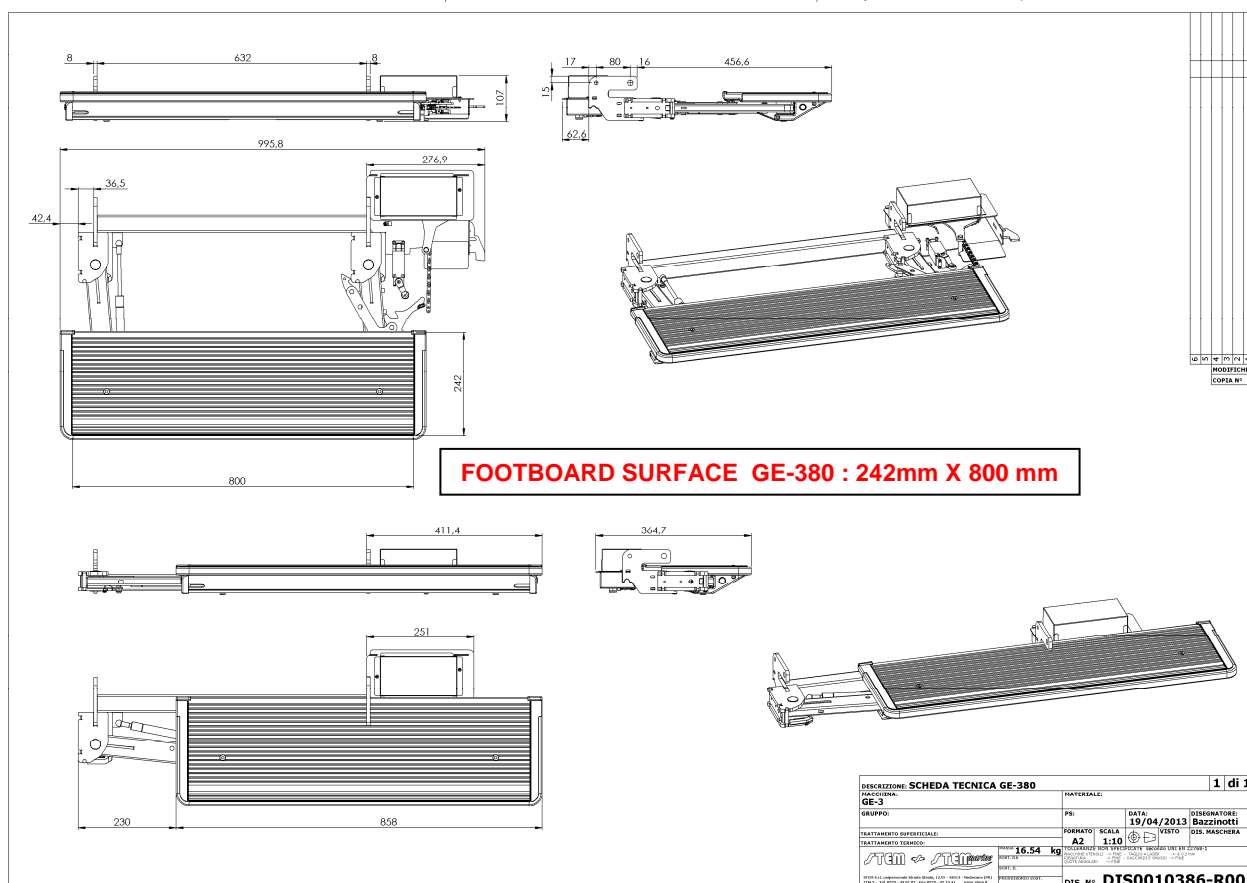
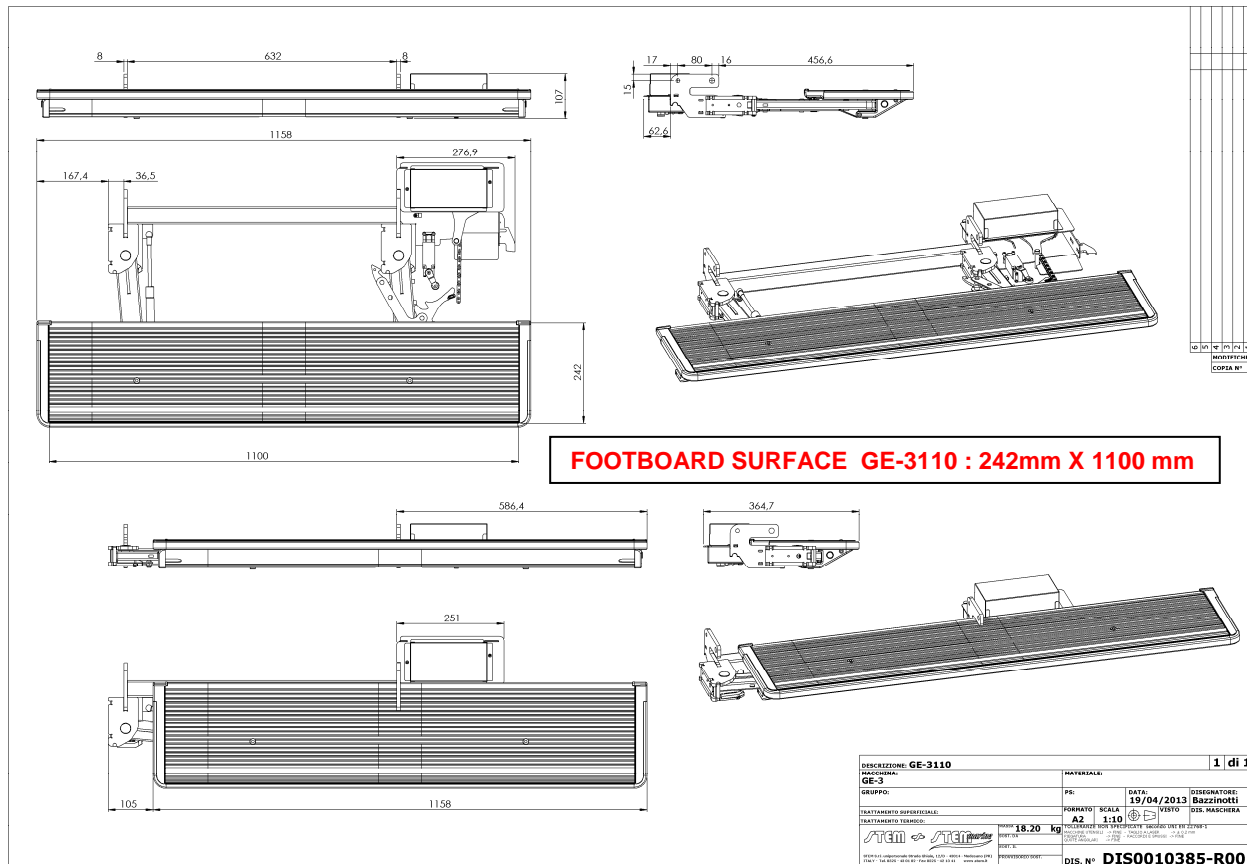
In case the step is not installed immediately it must be stored indoors in a dry and clean place, and be positioned at about 100 to 150 mm from the ground for perfect preservation and performance of parts composing it. Do not expose to sun rays. Relative humidity must be lower than 80% and temperature must be between - 10 °C -10 °C ≤ t ≤ + 50 °C.

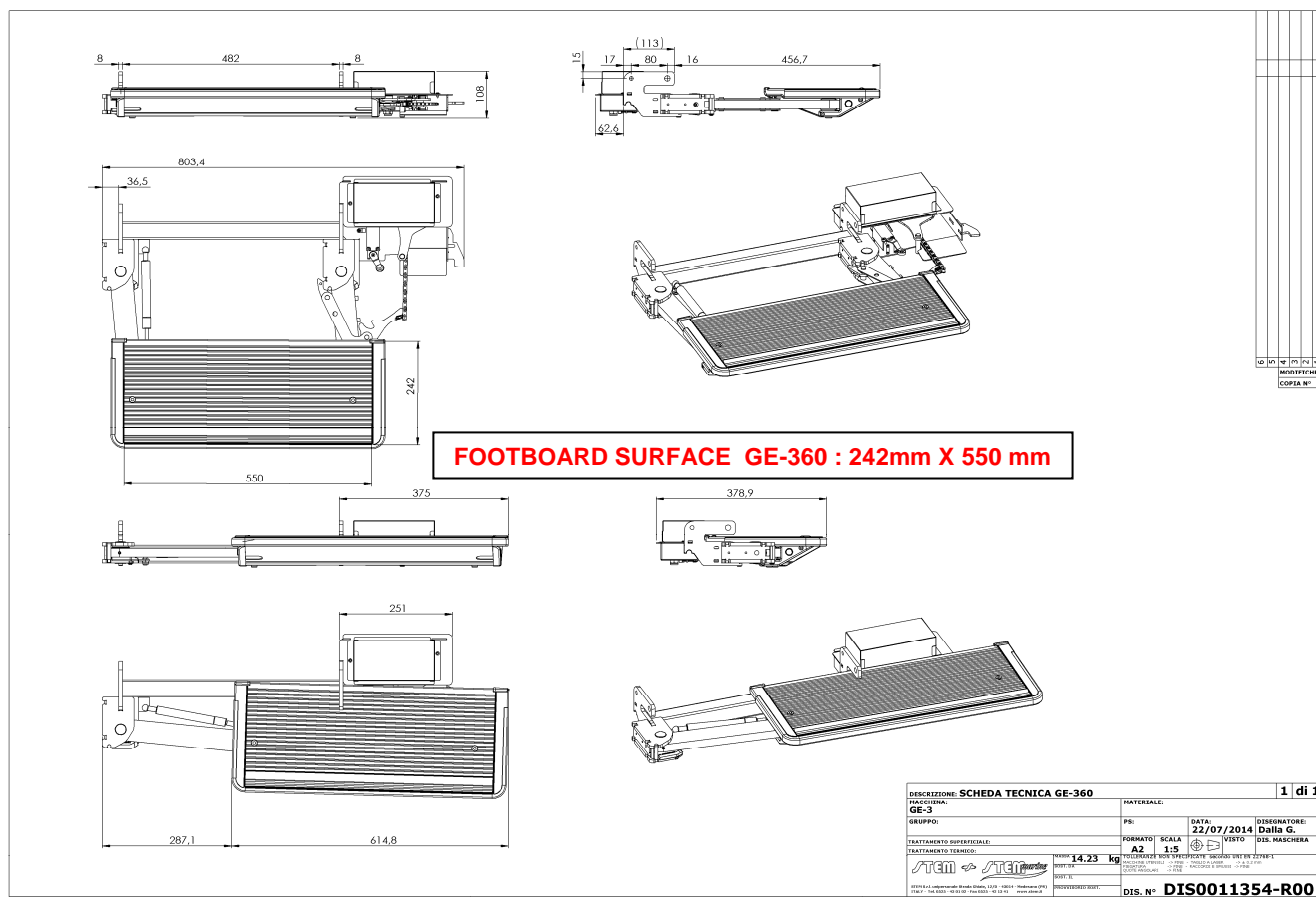


Stacking is allowed up to a maximum of 4 steps.

4. INSTALLATION

The GE-3 can be installed on every type of vehicle whose body dimensions are compatible with the overall dimensions.





4.1 ELECTRIC CONNECTIONS

- The electronic control unit has to be mounted in the interior compartment.



WARNING: the degree of protection of the electronic unit is IP20.

INSTALL THE UNIT IN A DRY PLACE

- The control unit connections have to be at a distance of at least 20 cm away from any motor or solenoid valve, as well as from supply cables of other consuming appliances.
- The electronic unit connecting cables (+E-12V) have to be connected directly to the battery terminals by interposing a 20 A fuse.
- The above mentioned cables section has to be of 4 sq mm.
- The warning light STEP OPEN has to be positioned in a visible place for the driver.
- The light MUST NOT be supplied by the same supply cable as the motor and it turns off after the step has completely closed.

To check connections see diagram in § 6.3

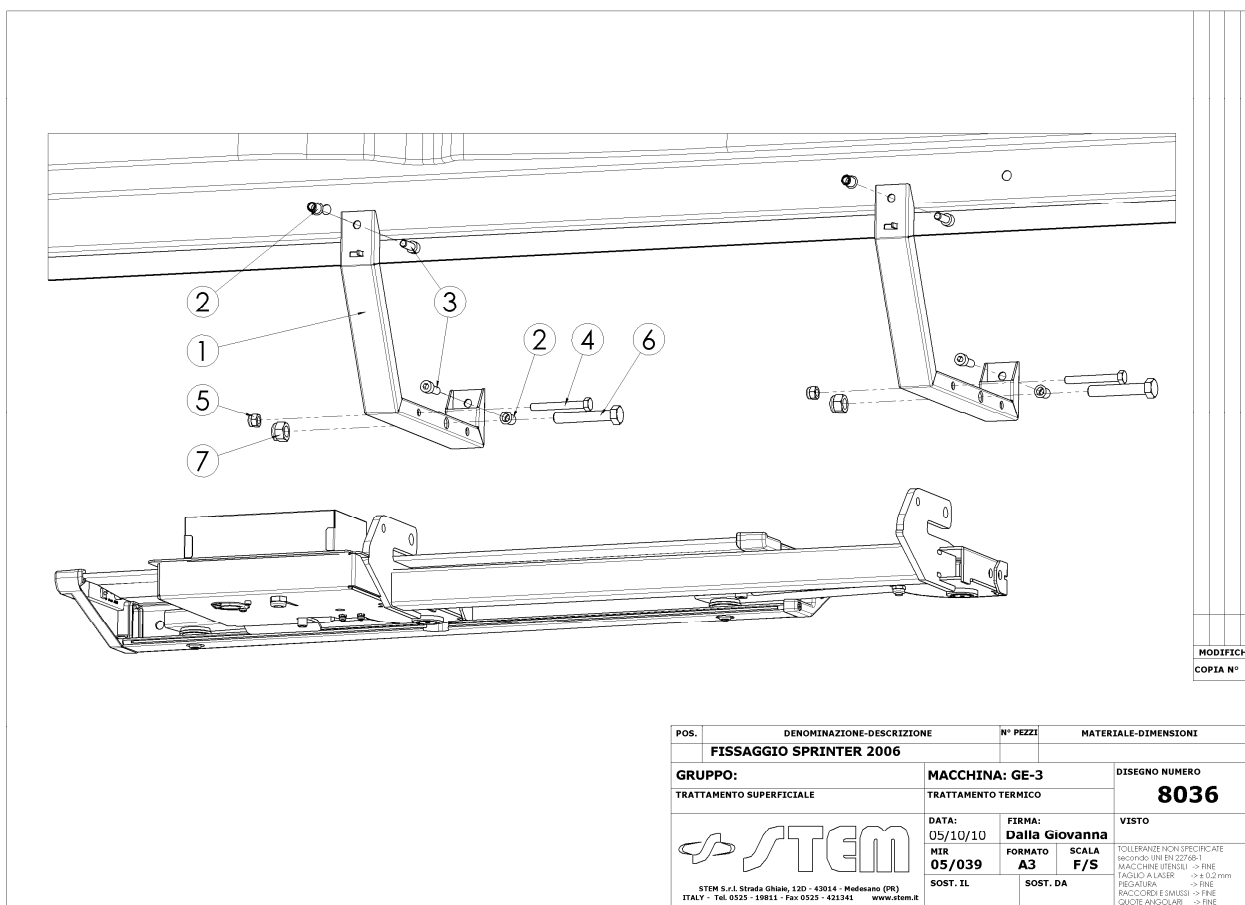
STEM has a number of brackets to adapt.

4.2.1 MERCEDES SPRINTER 2006 – VOLKSWAGEN CRAFTER

STAFSH4ASP06

DIS. 8036

Pos	Code	Description	Q.ty	Pos	Code	Description	Q.ty
1	DIS0004919	Bracket	2	5	DAAU08	Nut	2
2	INSCFTSCM8	Insert	4	6	TE012070P	Screw	2
3	TCEI08025	Screw	4	7	DAAU012	Nut	2
4	TE08065P	Screw	2				


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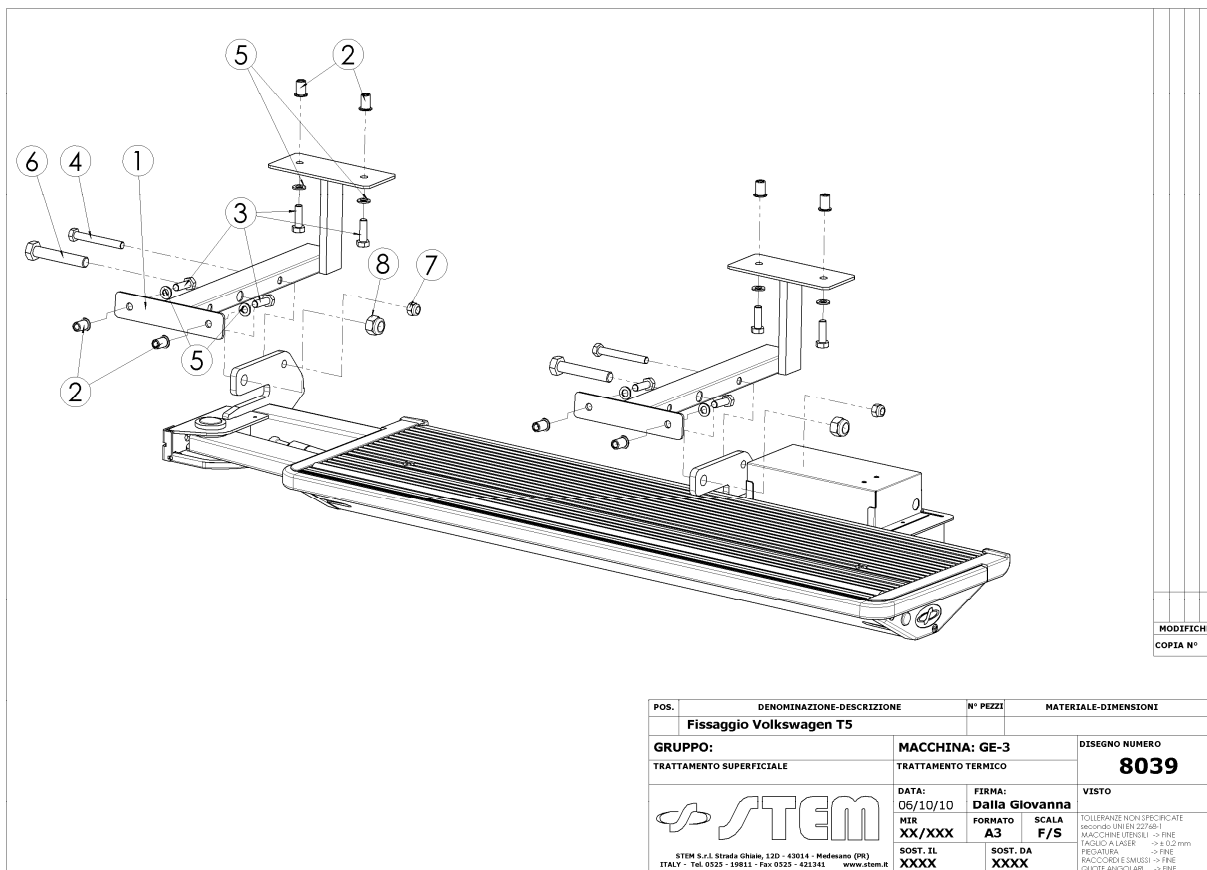
POS.	DENOMINAZIONE-DESCRIZIONE	N° PEZZI	MATERIALE-DIMENSIONI
FISSAGGIO SPRINTER 2006			
GRUPPO:		MACCHINA: GE-3	DISEGNO NUMERO
TRATTAMENTO SUPERFICIALE		TRATTAMENTO TERMICO	8036
 STEM S.r.l. Strada Ghisla, 120 - 43014 - Modugno (PR) ITALY - Tel. 0525 - 19811 - Fax 0525 - 421341 - www.stem.it		DATA: 05/10/10	FIRMA: Dalla Giovanna
		MIR 05/039	FORMATO A3
		SCALA F/S	VISTO
		SOST. IL	SOST. DA

QUESTO DISEGNO E' DI PROPRIETA' DELLA STEM S.r.l. CHE SE NE RISERVA I DIRITTI SANCITI DALLA LEGGE

4.2.2 VOLKSWAGEN T5 STAFSHVWT5 4A

DIS. 8039

Pos	Code	Description	Q.ty	Pos	Code	Description	Q.ty
1	DIS0003826	Bracket	2	5	RO08	Washer	8
2	INSCFTTEM8	Insert	8	6	TE012070P	Screw	2
3	TE08025	Screw	8	7	DAAU08	Nut	2
4	TE08065P	Screw	2	8	DAAU012	Nut	2



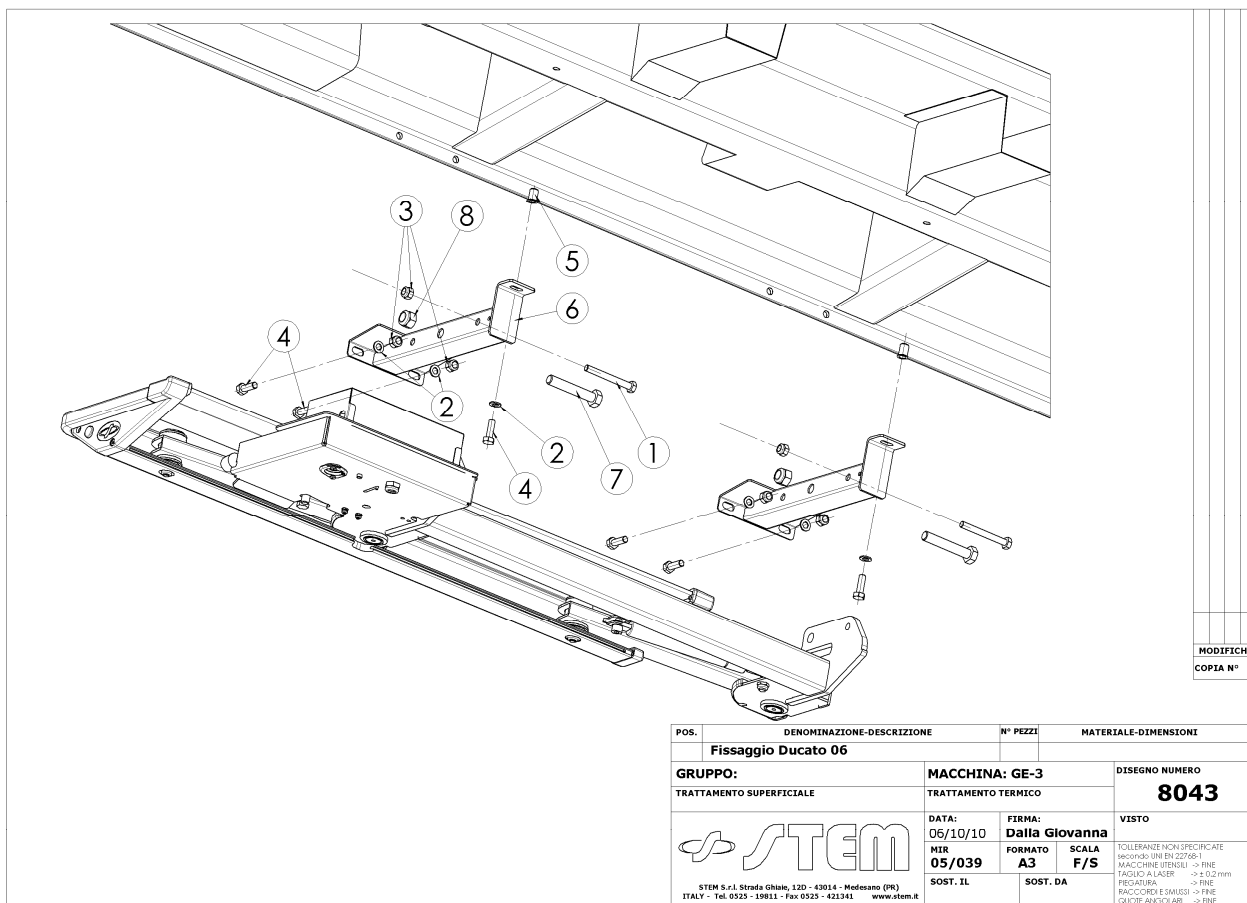
MODIFICHE
COPIA N°

POS.	DENOMINAZIONE-DESCRIZIONE	N° PEZZI	MATERIALE-DIMENSIONI
Fissaggio Volkswagen T5			
GRUPPO:		MACCHINA: GE-3	DISEGNO NUMERO
TRATTAMENTO SUPERFICIALE		TRATTAMENTO TERMICO	8039
DATA: 05/10/10		FIRMA: Dalla Giovanna	VISTO
MIR XX/XXX		FORMATO A3	SCALA F/S
SOST. IL XXXX		SOST. DA XXXX	
<p>STEM S.r.l. Strada Olivo, 120 - 43014 - Modenano (PR) ITALY - Tel. 0525 - 19811 - Fax 0525 - 421341 - www.stem.it</p> <p>QUESTO DISEGNO E' DI PROPRIETA' DELLA STEM S.r.l. CHE SE NE RISERVA I DIRITTI SANCITI DALLA LEGGE</p>			

4.2.3 FIAT DUCATO 2006 STAFSH4ADU06

DIS. 8043

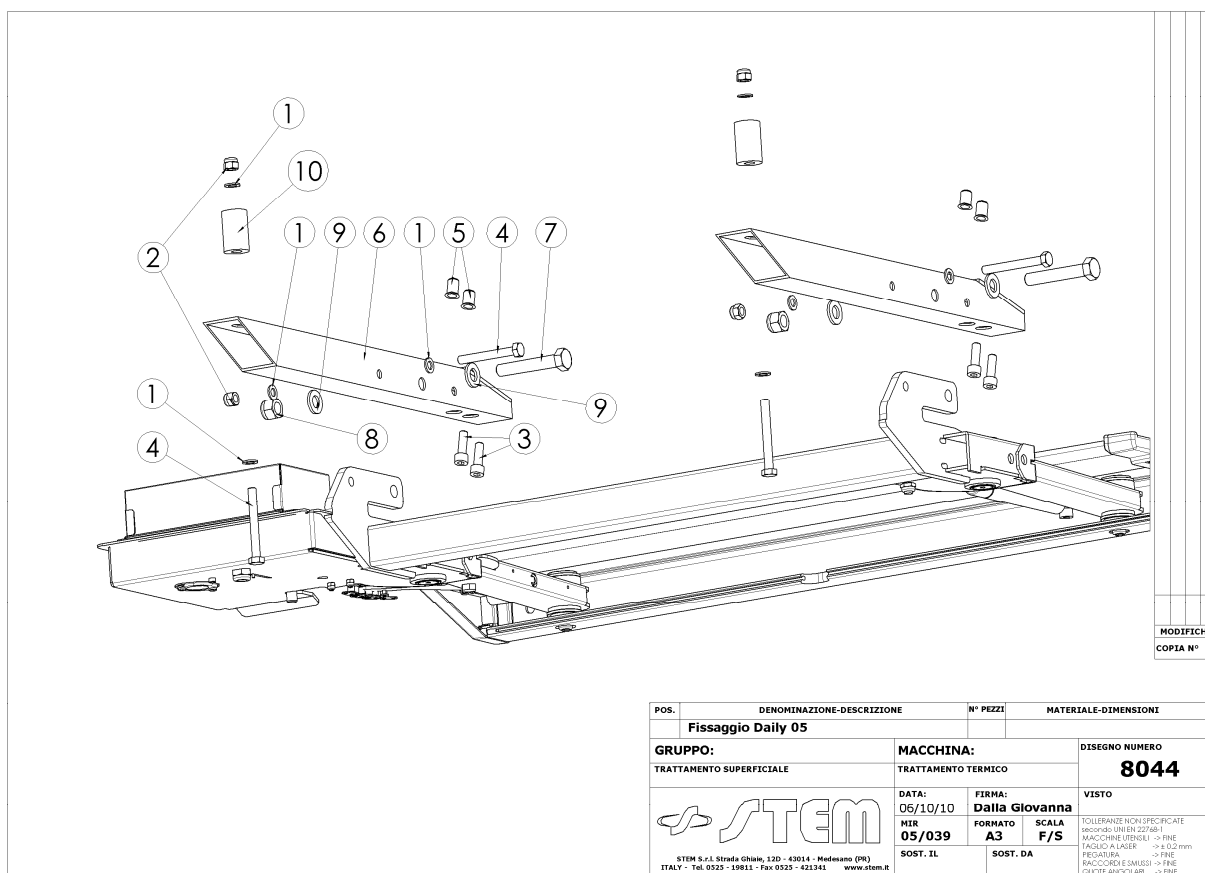
Pos	Code	Description	Q.ty	Pos	Code	Description	Q.ty
1	TE08070P	Screw	2	5	INSCFTSCM8	Insert	2
2	RO08	Washer	6	6	DIS0006046	Bracket	2
3	DAAU08	Nut	6	7	TE012070P	Screw	2
4	TE08025	Screw	6	8	DAAU012	Nut	2



4.2.4 IVECO DAILY MY 2005 STAFSHDAIL 4A

DIS. 8044

Pos	Code	Description	Q.ty	Pos	Code	Description	Q.ty
1	RO08	Washer	8	6	DIS0004182	Bracket	2
2	DAAU08	Nut	4	7	TE012070P	Screw	2
3	TCEI08025	Screw	4	8	DAAU012	Nut	2
4	TE08070	Screw	4	9	RO12	Washer	2
5	INSCFTSCM8	Insert	4	10	DIS0008517	Spacer	2

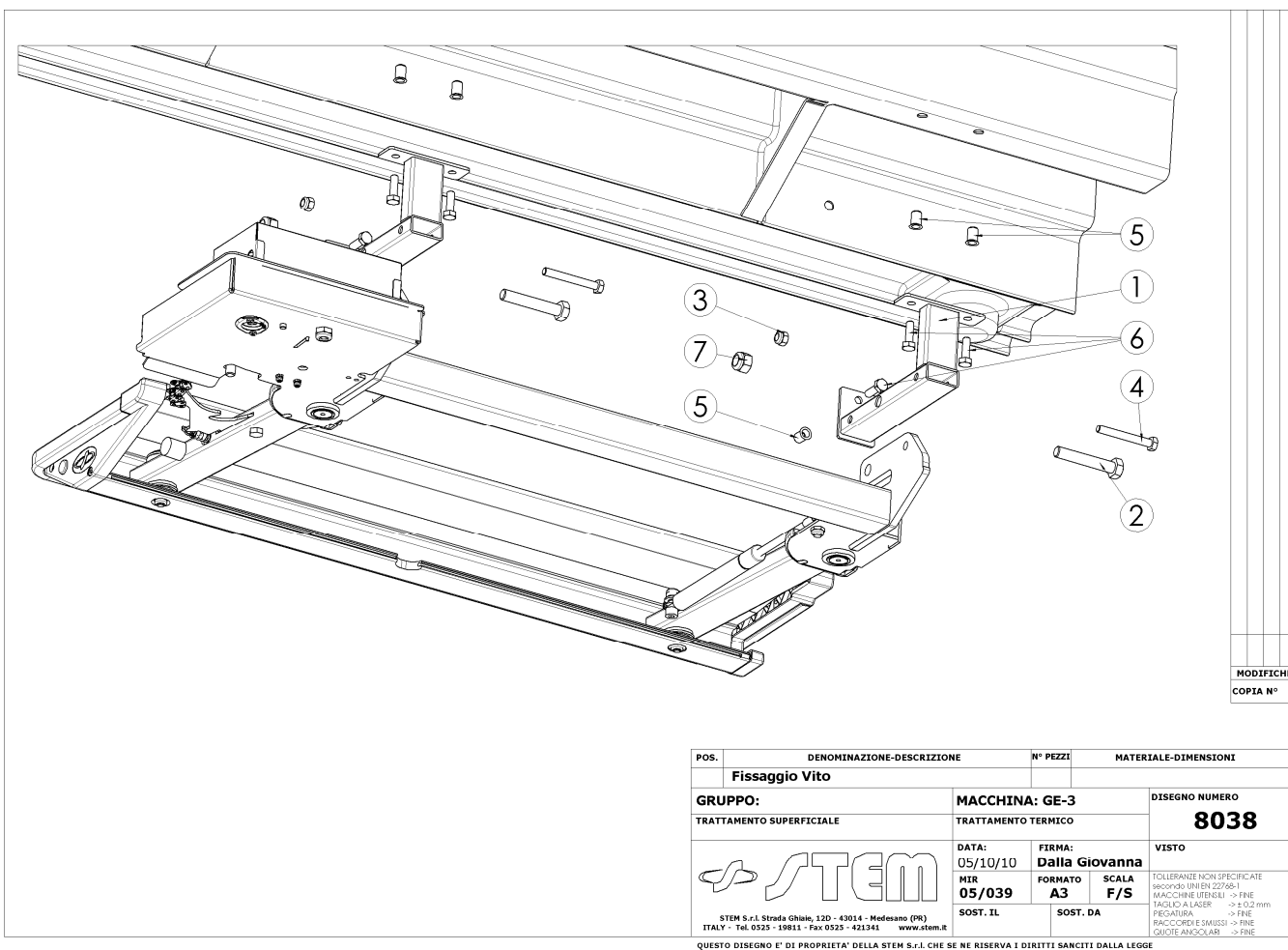


4.2.5 MERCEDES VITO

STAFGE3VITO

DIS. 8038

Pos	Code	Description	Q.ty	Pos	Code	Description	Q.ty
1	DIS0004835	Bracket	2	5	INSCFTSCM8	Insert	6
2	TE012070PI	Screw	2	6	TE08025I	Screw	6
3	DAAU08I	Nut	2	7	DAAU012I	Nut	2
4	TE08065I	Screw	2				

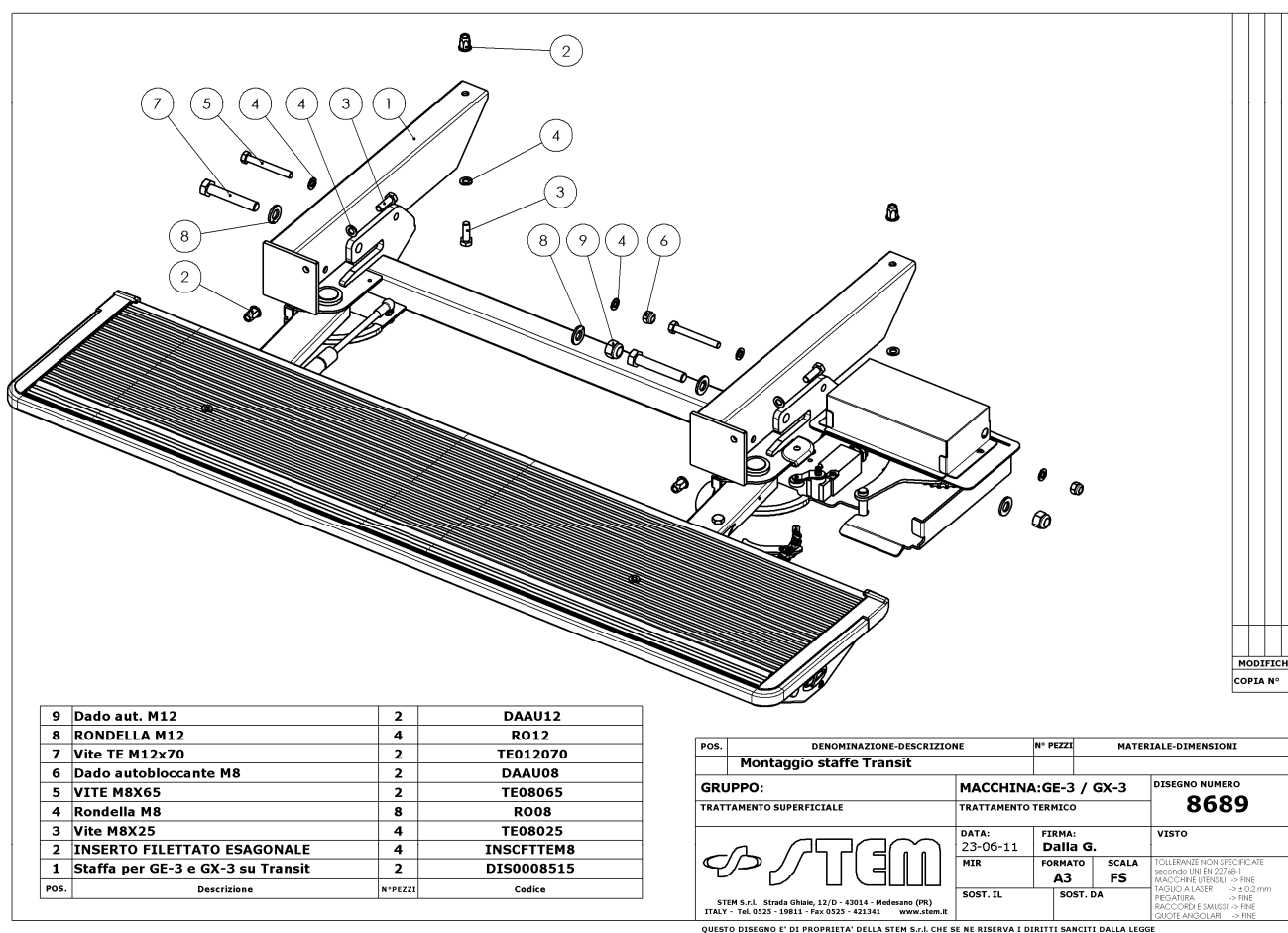


4.2.6 FORD TRANSIT

STAFGE3TRAN

DIS. 8689

Pos	Code	Description	Q.ty	Pos	Code	Description	Q.ty
1	DIS0008515	Bracket	2	6	DAAU08	Nut	2
2	INSCFTTEM8	Insert	4	7	TE12070	Screw	2
3	TE08025	Screw	4	8	RO12	Washer	4
4	RO08	Washer	8	9	DAAU12	Nut	2
5	TE08065	Screw	2				

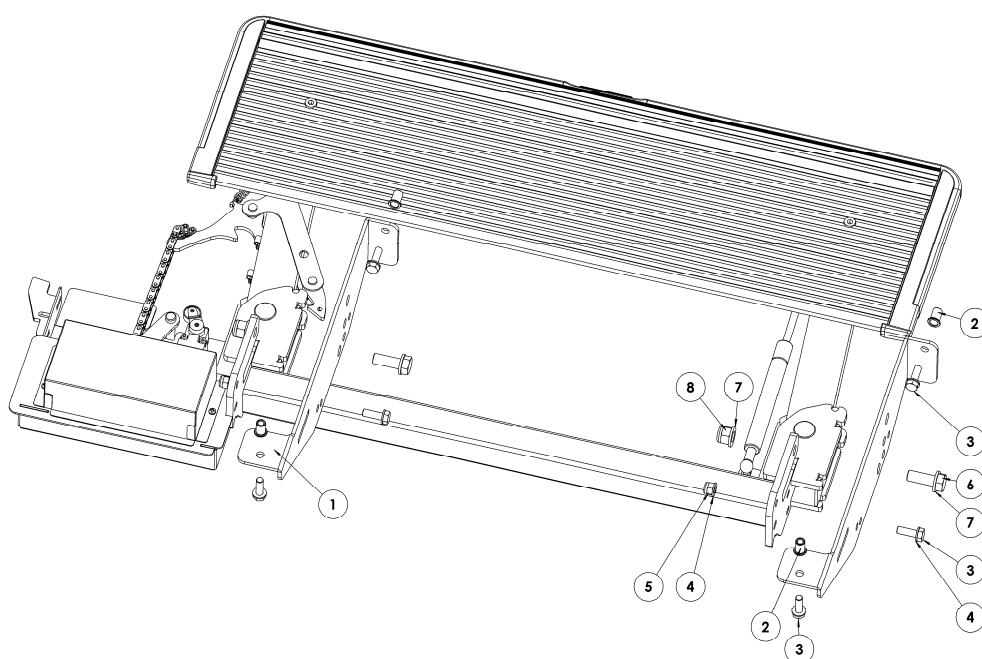


4.2.7 FORD TRANSIT 2015 – TRANSIT CUSTOM

STAFGE3TRANCUS

DIS. 12814

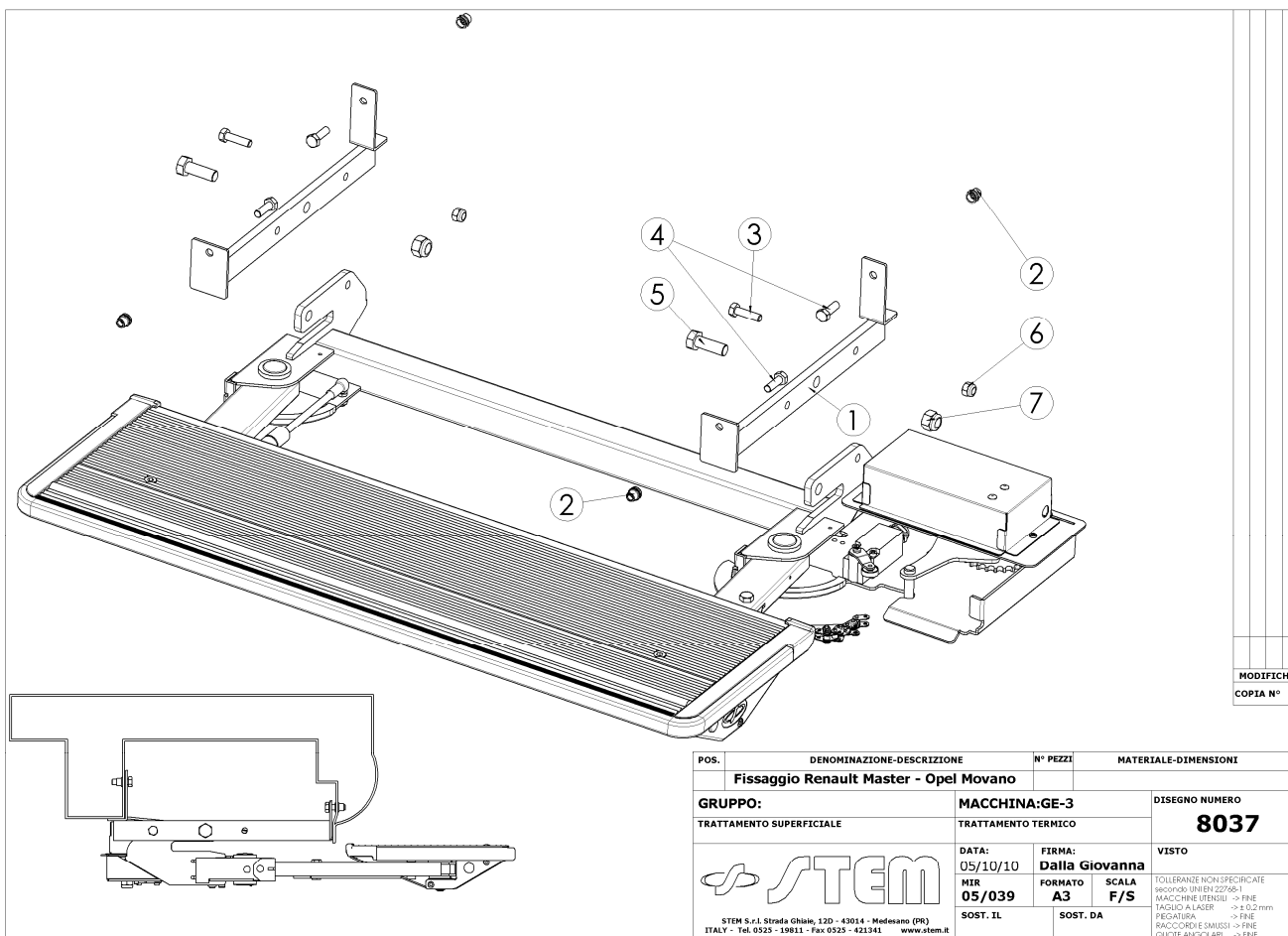
Pos	Code	Description	Q.ty	Pos	Code	Description	Q.ty
1	DIS0010340	Bracket	2	6	TE12035I	Screw	2
2	INSCFTTEM8	Insert	4	7	RO12I	Washer	4
3	TE08025I	Screw	6	8	DAAU12I	Nut	2
4	RO08I	Washer	8				
5	DAAU08I	Nut	2				

[illegible]

4.2.8 RENAULT MASTER – OPEL MOVANO STAFSHMAST

DIS. 8037

Pos	Code	Description	Q.ty	Pos	Code	Description	Q.ty
1	DIS0001803	Bracket	2	5	TE012035	Screw	2
2	INSFTSCM8	Insert	4	6	DAAU08	Nut	2
3	TE08030	Screw	2	7	DAAU012	Nut	2
4	TE08025	Screw	4				


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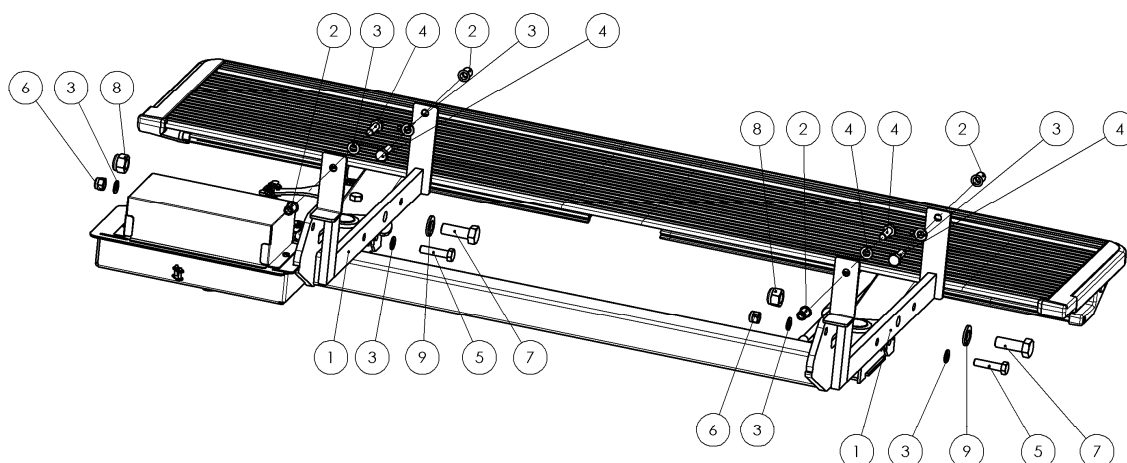
POS.	DENOMINAZIONE-DESCRIZIONE	N° PEZZI	MATERIALE-DIMENSIONI
	Fissaggio Renault Master - Opel Movano		
GRUPPO:	MACCHINA:GE-3	DISEGNO NUMERO	
TRATTAMENTO SUPERFICIALE	TRATTAMENTO TERMICO	8037	
 STEM S.p.A. Strada Ghiale, 12D - 43014 - Medesano (PR) ITALY - Tel. 0525 - 19811 - Fax 0525 - 421341 - www.stem.it	DATA:	FIRMA:	VISTO
	05/10/10	Dalla Giovanna	
	WIR	FORMATO	SCALA
	05/039	A3	F/S
SOST. IL	SOST. DA	TOLLERANZE NON SPECIFICATE secondo UNI EN 22768-1 MACCHINE UTENSILI -> FINE TAGLIO AL LASER -> +0.2mm PIGATURA -> FINE RACCORDI E SMISSE -> FINE QUOTE ANGOLARI -> FINE	

QUESTO DISEGNO E' DI PROPRIETA' DELLA STEM S.p.A. CHE SE NE RISERVA I DIRITTI SANCITI DALLA LEGGE

4.2.9 RENAULT NUOVO MASTER 2010 STAFGE3MA10

DIS. 8280

Pos	Code	Description	Q.ty	Pos	Code	Description	Q.ty
1	DIS000116	Bracket	2	6	DAAU08	Nut	2
2	INSFTSCM8	Insert	4	7	TE12035	Screw	2
3	RO08	Washer	8	8	DAAU012	Nut	2
4	TE08025	Screw	4	9	RO12	Washer	2
5	TE08035	Screw	2				



9	RONDELLA M12	2	RO12
8	Dado aut. M12	2	DAAU12
7	VITE M12	2	TE12035
6	Dado autobloccante M8	2	DAAU08
5	Vite M8x35	2	TE08035
4	Vite M8x25	4	TE08025
3	Rondella M8	8	RO08
2	Inserto filettato M8 svasato	4	INSFTSCM8
1	Staffa Nuovo Master 2010	2	DIS 8116
POS.	Descrizione	Q.tà	Codice

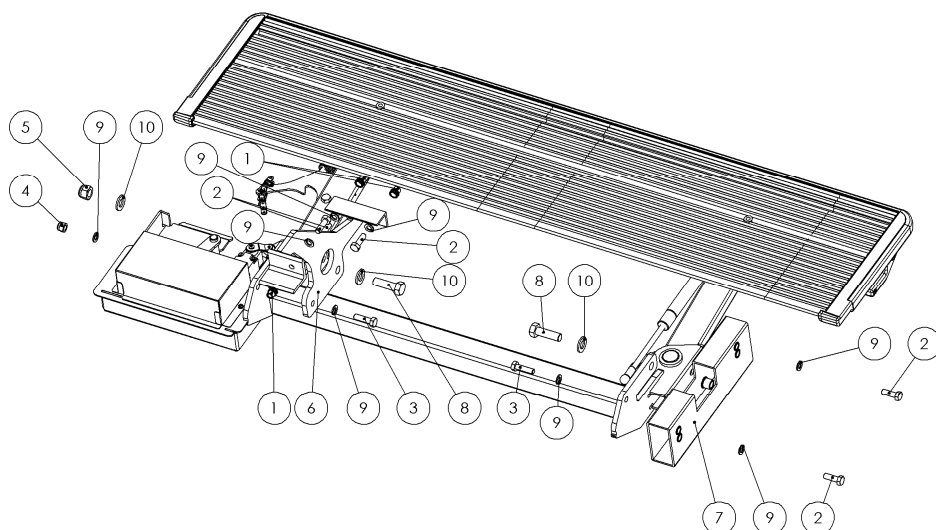
POS.	DENOMINAZIONE-DESCRIZIONE	N° PEZZI	MATERIALE-DIMENSIONI
	Fissaggio Nuovo Master 2010		
GRUPPO:	MACCHINA:GE-3	DISEGNO NUMERO	
TRATTAMENTO SUPERFICIALE	TRATTAMENTO TERMICO	8280	
 STEM S.r.l. Strada Ghiale, 12/D - 43014 - Medesano (PR) ITALY - Tel. 0525 - 19811 - Fax 0525 - 421341 - www.stem.it	DATA: 27-05-11	FIRMA: Dalla G.	VISTO
	MIR	FORMATO A3	SCALA F.S.
SOST. IL	SOST. DA	TOLLERANZE NON SPECIFICATE secondo UNI EN 22768-1 MACCHINE UTENGLI -> FINE TAGLIO AL LASER -> ±0.2 mm PEGATURA RACCORDI E SWISS -> FINE QUOTE ANGOLARI -> FINE	

QUESTO DISEGNO E' DI PROPRIETA' DELLA STEM S.r.l. CHE SE NE RISERVA I DIRITTI SANCITI DALLA LEGGE

4.2.10 RENAULT NUOVO TRAFIC 2010 STAFGE3VT

DIS. 8233

Pos	Code	Description	Q.ty	Pos	Code	Description	Q.ty
1	INSCFTSCM8	Insert	3	6	DIS0008333	Bracket right	1
2	TE08025	Screw	6	7	DIS0008373	Bracket left	1
3	TE08030	Screw	1	8	TE012040	Screw	2
4	DAAU08	Nut	1	9	RO08	Washer	8
5	DAAU12	Nut	1	10	RO12	Washer	3



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COPIA N°

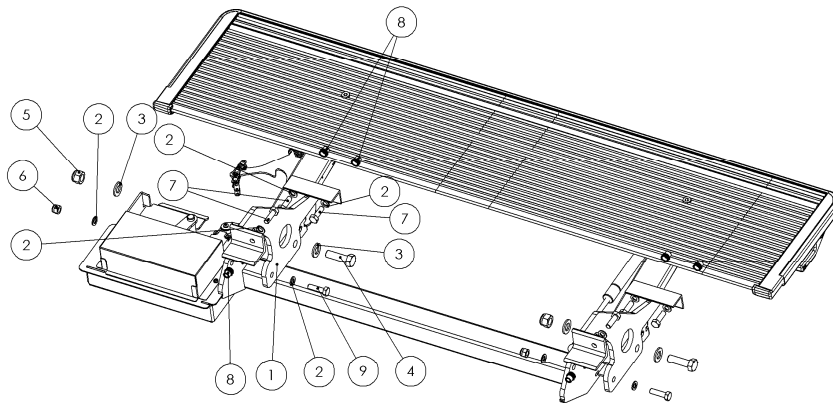
POS.	DENOMINAZIONE-DESCRIZIONE	N° PEZZI	MATERIALE-DIMENSIONI
	Fissaggio nuovo Trafic 2010		
GRUPPO:		MACCHINA:	DISEGNO NUMERO
TRATTAMENTO SUPERFICIALE		TRATTAMENTO TERMICO	8233
 <small>STEM S.r.l. Strada Ghiale, 12/D - 43014 - Modenano (PR) ITALY - Tel. 0525 - 10811 - Fax 0525 - 421341 www.stem.it</small>		DATA: 29/02/12	FIRMA: Dalla G.
		MIR	FORMATO A3
		SOST. IL	SOST. DA
			SCALA 1:10
<small>TOLLERANZE NON SPECIFICATE secondo UNI EN 22766-1 MACCHINE UTENSILI -> FINE TAGLIO AL LASER -> ±0.05mm FIDUCIARIA -> FINE MACCHINE UTENSILI -> FINE QUOTE ANGOLARI -> FINE</small>			

QUESTO DISEGNO E' DI PROPRIETA' DELLA STEM S.r.l. CHE SE NE RISERVA I DIRITTI SANCITI DALLA LEGGE

4.2.11 RENAULT NUOVO TRAFIC 2010 L STAFGE3VT-L

DIS. 9183

Pos	Code	Description	Q.ty	Pos	Code	Description	Q.ty
1	DIS0008333	Bracket right	2	6	DAAU08	Nut	2
2	RO08	Washer	10	7	TE08025	Screw	6
3	RO12	Washer	4	8	INSCFTTCM8	Insert	6
4	TE012040	Screw	2	9	TE08030P	Screw	2
5	DAAU12	Nut	2				



MODIFICHE
COPIA N°

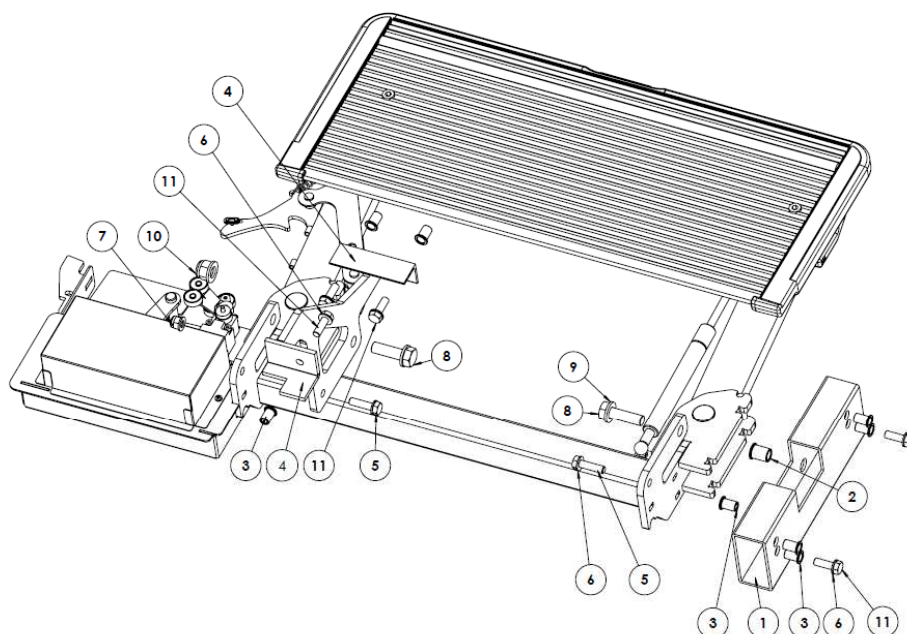
POS.	DENOMINAZIONE-DESCRIZIONE	N° PEZZI	MATERIALE-DIMENSIONI
	Fissaggio nuovo Trafic 2010 L		
GRUPPO:		MACCHINA:	DISEGNO NUMERO
TRATTAMENTO SUPERFICIALE		TRATTAMENTO TERMICO	9183
DATA: 29/02/12		FIRMA: Dalla G.	VISTO
MIR		FORMATO A3	SCALA 1:10
SOST. IL		SOST. DA	
<p>STEM S.r.l. - Strada Chiavio, 12/D - 43014 - Modenano (PR) ITALY - Tel. 0522 - 59811 - Fax 0522 - 421246 - www.stem.it</p> <p>QUESTO DISEGNO E' DI PROPRIETA' DELLA STEM S.r.l. CHE SE NE RISERVA I DIRITTI SANCITI DALLA LEGGE</p>			

4.2.12 RENAULT TRAFIC 2015

STAFGE GXVT15

DIS. 12811

Pos	Code	Description	Q.ty	Pos	Code	Description	Q.ty
1	DIS0008373	Bracket right	1	6	RO08I	Washer	8
2	INSCFTTC12	Insert	1	7	DAAU08I	Nut	1
3	INSCFTTCM8	Insert	8	8	TE12040I	Screw	2
4	DIS0012108	Bracket	1	9	RO12I	Washer	3
5	TE08030I	Screw	2	10	DAAU12I	Nut	1
				11	TE08025I	Screw	5



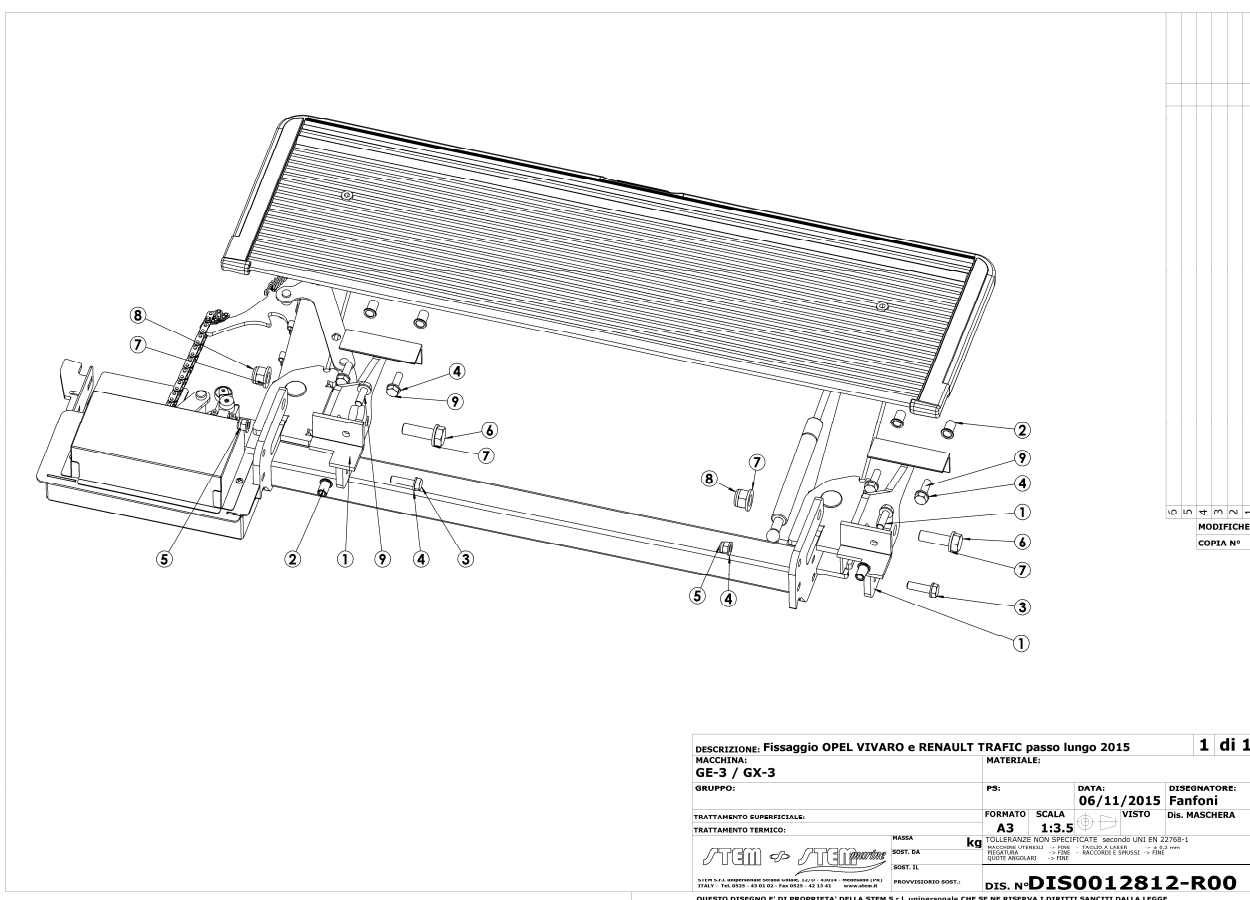
DESCRIZIONE: Fissaggio OPEL VIVARO e RENAULT TRAFIC passo Corto e Medio 2015		1 di 1	
MACCHINA: GE 3 / GX-3		MATERIALE:	
GRUPPO:	PS:	DATA: 06/11/2015	DESEGNATORE: Fanfoni
TRATTAMENTO SUPERFICIALE:	FORNATO A3	SCALA 1:3,5	VISTO MATER. MASCHERA
TRATTAMENTO TERMICO:	 TOLLICANCE NON SPECIFICATE. Secondo UNI EN 22768-1 MACCHIE UTILITY: > 5% TIRAZZO A3: > 0,5 mm QUOTE INDICATE: > 0,5 mm		
 		MARCA BODY: SA kg PROVVISORIO SOST.	
ATEM S.p.A. - Sede e stabilimento: Strada 10/10, 51012 - CROCIERA (PR) ATEM S.p.A. - Tel. 0521 461000 - Fax 0521 461001 - E-mail: info@atem.it		DIS. N°: DIS0012811-R00	

4.2.13 RENAULT TRAFIC L 2015

STAFGEGXVT15L

DIS. 12812

Pos	Code	Description	Q.ty	Pos	Code	Description	Q.ty
1	DIS0012108	Bracket	2	6	TE12040I	Screw	2
2	INSCFTTCM8	Insert	6	7	RO12I	Washer	4
3	TE08030I	Screw	2	8	DAAU12I	Nut	2
4	RO08I	Washer	10	9	TE08025I	Screw	6
5	DAAU08I	Nut	2				



5. FUNCTIONING

.1 FUNCTIONING

GE-3 is completely automatic and is controlled by an electronic circuit.

The OPEN and CLOSE inputs derive respectively from the release and the pressure of a button triggered by the vehicle door at its opening and closing.

5.2 SAFETY – STEM LOCK System

-In the event of a Power Failure:
Step in the open position

If the Step fails to operate whilst in the open position it can be closed and then re-opened manually using the levers 1 & 3 as shown in the adjacent diagrams

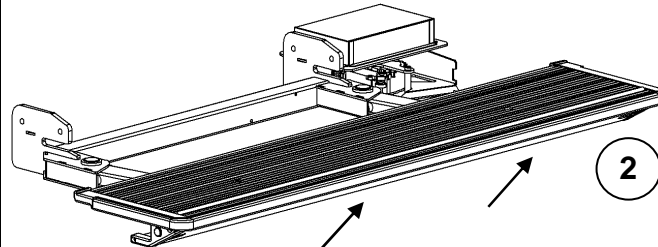
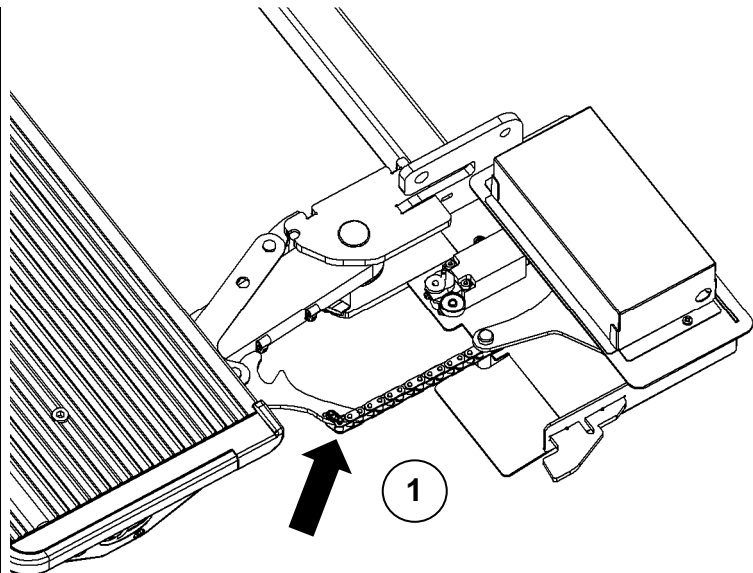
To Close the Step

- 1/. Unlock safety lever 1
- 2/. Push the step inward until it locks into the closed position 2

To Open the Step

- 1/. Unlock safety lever 3
- 2/. The Step will deploy automatically and lock into the open position when fully extended.

Please contact your Service Center for technical assistance

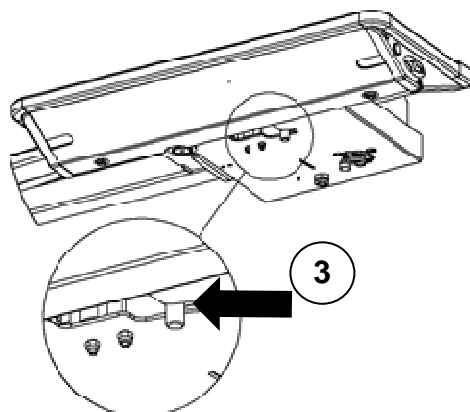


-In the event of a Power Failure:
Step in the closed position

If the step is in the closed position and there is a power failure.

Do not under any circumstances try to open the step manually. You will damage the motor drive mechanism

Please contact your Service Center for technical assistance



-In the event that the step encounters an obstacle whilst opening

The step edge stops against the obstacle with a force of a few kg, without compromising the functionality of the motor or causing injury to people

5.3 ANOMALIES



- Interventions have to be performed by authorised and trained staff, mainly as to electric parts.
Should the problem persist, do not try personal solutions, but contact STEM's technical service (see 7.1) In case of any anomalies that are not mentioned in the following tables please contact STEM'S technical service

PROBLEM	CHECK	INTERVENTION
The step <u>DOES NOT OPEN</u>	<ul style="list-style-type: none"> The SLIDING PARTS have to be cleaned The BATTERY charge The FUSE (20A) integrity The BUTTON ON THE DOOR: <ul style="list-style-type: none"> electric connections contacts The CONTROL UNIT: <ul style="list-style-type: none"> electric connections inlet voltage motor supply cables voltage The MOTOR: <ul style="list-style-type: none"> electric connections functioning with 12V dc direct supply The SAFETY LEVER must be unlocked the SPRING'S integrity 	If the problem persists after checks contact our service
The step <u>DOES NOT CLOSE</u>	<ul style="list-style-type: none"> The BUTTON ADJUSTMENT on the door rabbet The integrity of the CHAIN and of the CROWN The BATTERY charge The FUSE (20A) integrity The BUTTON ON THE DOOR: <ul style="list-style-type: none"> electric connections contacts The CONTROL UNIT: <ul style="list-style-type: none"> electric connections inlet voltage motor supply cables voltage The MOTOR: <ul style="list-style-type: none"> electric connections functioning with 12V dc direct supply 	If the problem persists after checks contact our service
The warning light <u>DOES NOT TURN ON</u>	<ul style="list-style-type: none"> The BULB integrity (if necessary replace) POWER SUPPLY The FUSE (1A) integrity The SWITCH adjustment (if necessary replace) 	If the problem persists after checks contact our service

5.4 MAINTENANCE



- ♦ *Maintenance interventions have to be performed by authorised and trained staff, particularly to electric parts*
- ♦ *In case of a nonconformity with regards to the original product do not use the device until the component is repaired or replaced.*
- ♦ *For service and spare parts directly contact STEM (§ 6.1. / 6.2).*

ORDINARY MAINTENANCE:

- Wash the step with a not aggressive water jet, avoiding to focus the water jet directly on the electric parts and the motor group
- Wash the step with a soft brush and a not aggressive detergent
- Rinse abundantly with water

EXTRAORDINARY MAINTENANCE:

- Wash the step with a not aggressive water jet, avoiding to focus the water jet directly on the electric parts and the motor group
- Treat the electric steps' chain with a protective lubricating spray
- Treat the slot guide of the pedal of the mechanical steps with a protective lubricating spray

Examples of suitable products:

Protective lubricating spray for chains : WÜRTH HHS-Lube Sprühfett

CONDITIONS	MAINTENANCE	PERIODICITY
Summer time with not particularly dirty streets	ORDINARY	EVERY MONTH
	EXTRAORDINARY	1 TIME per season
Summer time with dirty streets (mud,rubble ecc) or Winter time without the streets' treatment with salt	ORDINARY	EVERY WEEK
	EXTRAORDINARY	EVERY 2 MONTHS
Places with polluted environment, with salty or humid air (coast areas) or Winter time with the streets' treatment with salt	ORDINARY	EVERY DAY
	EXTRAORDINARY	EVERY WEEK

6. TECHNICAL SERVICE

6.1 ADDRESSES FOR TECHNICAL SERVICE

For service during the warranty period and/or the need for maintenance or fixing service, or for information, the customer may use the STEM technical assistance service by contacting:



STEM S.r.l. – Strada Ghiaie, 12/D
43014 Medesano – (Parma) – Italy

	TELEPHONE	FAX	E-MAIL
STEM ITALIA (EUROPE-ASIA-AFRICA)	0525-430102 +39-0525-430102	0525-421341 +39-0525-421341	stem@stem.it

Many of the technical problems can be solved through minor operations, therefore we suggest to consult this manual thoroughly before contacting our technical service.

Should technical assistance be needed, you must specify the following:

- Model and identification number (§ 2.1).
- Type of problem encountered, so that the necessary answers can be given.

6.2 SPARE PARTS

To order a spare part, please contact our technical service staff and provide them with the support's model and the identification number together with the code and description of the part:

e.g **Automatic step GE-3110 XXX/10 Motor cover DIS0008209-R03**

The shipping will be taken care of by STEM ex works and cash upon delivery.

STEM grants the supply of all spare parts in the shortest time possible in compatibility with storage availability and the complexity of the part itself.

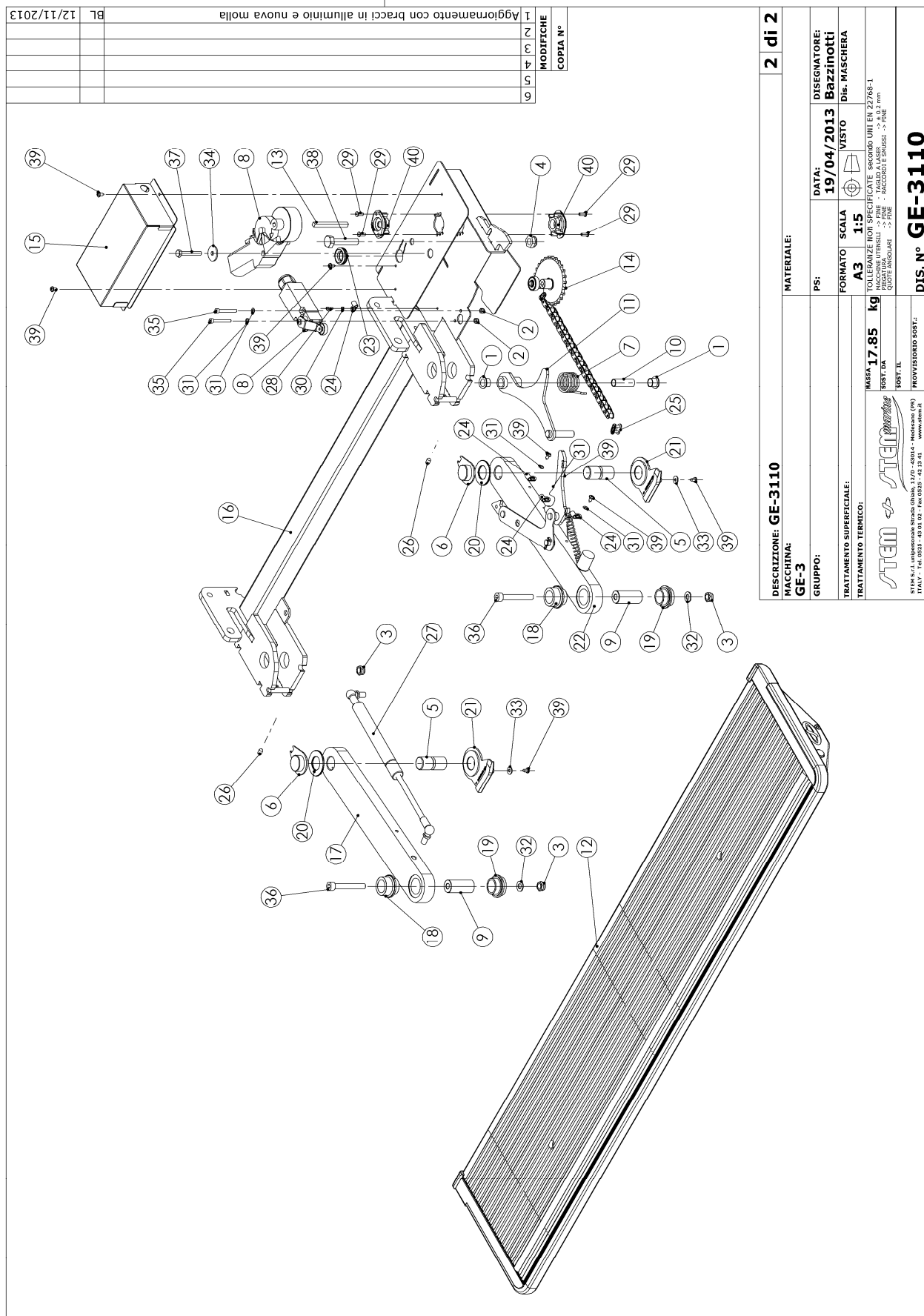


Use original spare parts only. By substituting the original components with poor quality or self-produced ones, the users may be seriously injured and/or may permanently impair the support's functions..

RIF. GE-3110-R00

GE-3110

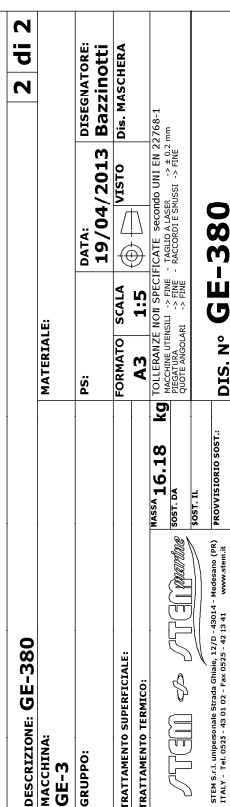
Pos.	Code	Description	Q.ty	Pos.	Code	Description	Q.ty
1	BOC1214188	Bushing	2	21	DIS0010538-P00	Bushing	2
2	DAAUBA04I	Nut	2	22	DIS0010539-P00	Right arm	1
3	DAAUBA08I	Nut	3	23	EPASCAV302	Skip Cable	1
4	DAAUBA10I	Nut	1	24	FASCETT006	Clamp collar	4
5	DIS0004042-R03	Pin back	2	25	GIUCASS121I	Connecting link	1
6	DIS0004066-R04	Bushing rear Sup	2	26	GRPU0610I	Grain Pointed M6x10	2
7	DIS0005898-R01	Torsion spring GE-3	1	27	MOLGAS200NC110TS	Gas spring	1
8	DIS0006134-R00	Motor	1	28	RIVE2.911A	Rivet	1
9	DIS0006183-R00	Pin Ø20 platform	2	29	RIVE3.911I	Rivet	4
10	DIS0006657-R00	Tube	1	30	RO03I	Washer	1
11	DIS0006660-R03	Cam release	1	31	RO04I	Washer	5
12	DIS0006664-R02	Platform 1100	1	32	RO08I	Washer	2
13	DIS0007484-R00	HUB 6X6 L=64	1	33	RO0412I	Washer	2
14	DIS0007487-R02	Mounting crown	1	34	RO06024I	Washer	1
15	DIS0008209-R03	Carter	1	35	TCEI04035	Screw	2
16	DIS0009872-R02	Base Frame GE-3	1	36	TCEI08060I	Screw	2
17	DIS0010463-P00	Left arm	1	37	TE06040I	Screw	1
18	DIS0010535-P00	Bushing	2	38	TE10050I	Screw	1
19	DIS0010536-P00	Bushing	2	39	VATC4295I	Screw	8
20	DIS0010537-P00	Bushing	2	40	DIS0005874-R02	Compass	2



RIF. GE-380-R00

GE-380

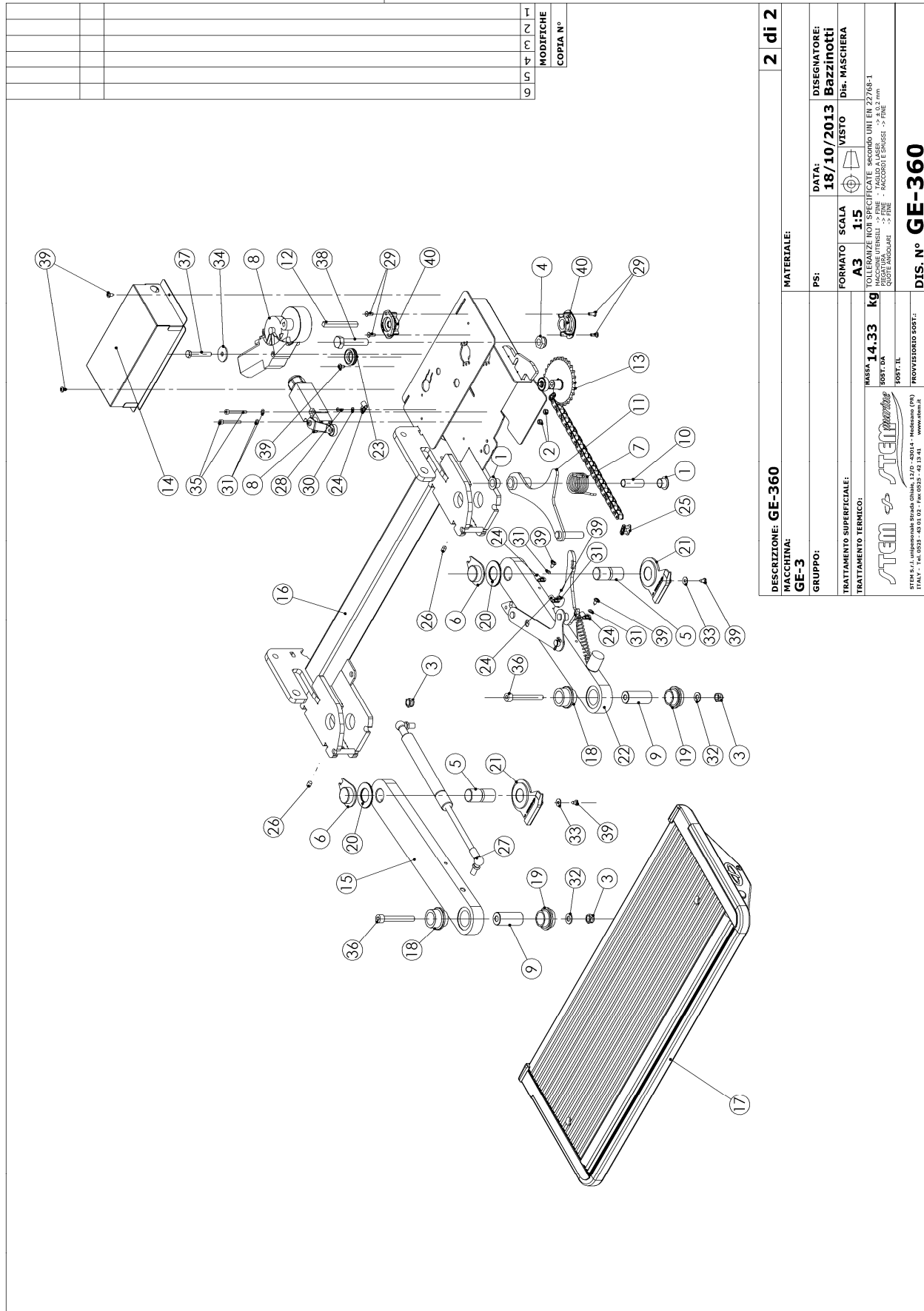
Pos.	Code	Description	Q.ty	Pos.	Code	Description	Q.ty
1	BOC1214188	Bushing	2	21	DIS0010538-P00	Bushing	2
2	DAAUBA04I	Nut	2	22	DIS0010539-P00	Right arm	1
3	DAAUBA08I	Nut	4	23	EPASCAV302	Skip Cable	1
4	DAAUBA10I	Nut	1	24	FASCETT006	Clamp collar	4
5	DIS0004042-R03	Pin back	2	25	GIUCASS121I	Connecting link	1
6	DIS0004066-R04	Bushing rear Sup	2	26	GRPU0610I	Grain Pointed M6x10	2
7	DIS0005898-R01	Torsion spring GE-3	1	27	MOLGAS200NC110TS	Gas spring	1
8	DIS0006134-R00	Motor	1	28	RIVE2.911A	Rivet	1
9	DIS0006183-R00	Pin Ø20 platform	2	29	RIVE3.911I	Rivet	4
10	DIS0006657-R00	Tube	1	30	RO03I	Washer	1
11	DIS0006660-R03	Cam release	1	31	RO04I	Washer	5
12	DIS0006665-R02	Platform 800	1	32	RO08I	Washer	2
13	DIS0007484-R00	HUB 6X6 L=64	1	33	RO0412I	Washer	2
14	DIS0007487-R02	Mounting crown	1	34	RO06024I	Washer	1
15	DIS0008209-R03	Carter	1	35	TCEI04035	Screw	2
16	DIS0009872-R02	Base Frame GE-3	1	36	TCEI08060I	Screw	2
17	DIS0010463-P00	Left arm	1	37	TE06040I	Screw	1
18	DIS0010535-P00	Bushing	2	38	TE10050I	Screw	1
19	DIS0010536-P00	Bushing	2	39	VATC4295I	Screw	8
20	DIS0010537-P00	Bushing	2	40	DIS0005874-R02	Compass	2



RIF. GE-360-R00

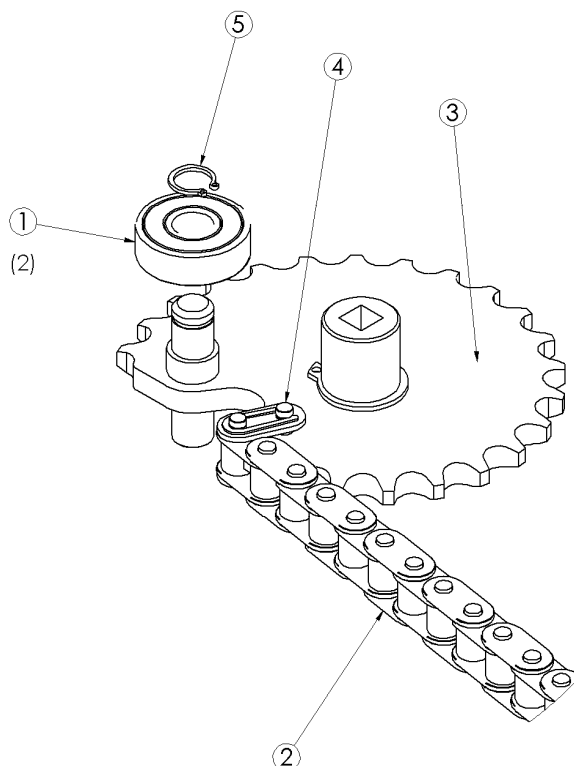
GE-360

Pos.	Code	Description	Q.ty	Pos.	Code	Description	Q.ty
1	BOC1214188	Bushing	2	21	DIS0010538-P00	Bushing	2
2	DAAUBA04I	Nut	2	22	DIS0010539-P00	Right arm	1
3	DAAUBA08I	Nut	3	23	EPASCAV302	Skip Cable	1
4	DAAUBA10I	Nut	1	24	FASCETT006	Clamp collar	4
5	DIS0004042-R03	Pin back	2	25	GIUCASS121I	Connecting link	1
6	DIS0004066-R04	Bushing rear Sup	2	26	GRPU0610I	Grain Pointed M6x10	2
7	DIS0005898-R01	Torsion spring GE-3	1	27	MOLGAS200NC110TS	Gas spring	1
8	DIS0006134-R00	Motor	1	28	RIVE2.911A	Rivet	1
9	DIS0006183-R00	Pin Ø20 platform	2	29	RIVE3.911I	Rivet	4
10	DIS0006657-R00	Tube	1	30	RO03I	Washer	1
11	DIS0006660-R03	Cam release	1	31	RO04I	Washer	5
12	DIS0007484-R00	HUB 6X6 L=64	1	32	RO08I	Washer	2
13	DIS0007487-R02	Mounting crown	1	33	RO0412I	Washer	2
14	DIS0008209-R03	Carter	1	34	RO06024I	Washer	1
15	DIS0010463-P00	Left arm	1	35	TCEI04035	Screw	2
16	DIS0010483-R01	Base Frame GE-3	1	36	TCEI08060I	Screw	2
17	DIS0010484-R00	Platform 600	1	37	TE06040I	Screw	1
18	DIS0010535-P00	Bushing	2	38	TE10050I	Screw	1
19	DIS0010536-P00	Bushing	2	39	VATC4295I	Screw	8
20	DIS0010537-P00	Bushing	2	40	DIS0005874-R02	Compass	2



DESCRIZIONE: GE-360		MATERIALE:		2 di 2	
MACCHINA: GE-3		PS:		DATA: 18/10/2013	
GRUPPO:		FORMATO: A3		DISEGNATORE: Bazzinotti	
TRATTAMENTO SUPERFICIALE:		SCALA: 1:5		VISTO: Di. MASCHERA	
TRATTAMENTO TERMICO:		MASSA: 14.33 kg		TOLLERANZE NON SPECIFICATE secondo UNI EN 22768-1	
STEM S.p.A. unipersonale Strada Oliva, 5/7 - 43014 - Madonna (PR)		TOLLERANZE NON SPECIFICATE secondo UNI EN 22768-1		TOLLERANZE NON SPECIFICATE secondo UNI EN 22768-1	
ITALY - Tel. 0532 - 42 01 02 - Fax 0532 - 42 13 41		TOLLERANZE NON SPECIFICATE secondo UNI EN 22768-1		TOLLERANZE NON SPECIFICATE secondo UNI EN 22768-1	
www.stem.it		TOLLERANZE NON SPECIFICATE secondo UNI EN 22768-1		TOLLERANZE NON SPECIFICATE secondo UNI EN 22768-1	
PROVVISORIO 5057.1		TOLLERANZE NON SPECIFICATE secondo UNI EN 22768-1		TOLLERANZE NON SPECIFICATE secondo UNI EN 22768-1	
QUESTO DISEGNO E' DI PROPRIETA' DELLA STEM S.p.A. unipersonale CHE SE NE RISERVA I DIRITTI SANCITI DALLA LEGGE		TOLLERANZE NON SPECIFICATE secondo UNI EN 22768-1		TOLLERANZE NON SPECIFICATE secondo UNI EN 22768-1	
DIS. N° GE-360		TOLLERANZE NON SPECIFICATE secondo UNI EN 22768-1		TOLLERANZE NON SPECIFICATE secondo UNI EN 22768-1	

Mounting crown DIS0007487-R02



6			
5			
4			
3			
2	Tolta la rotella in plastica e messo il cuscinetto a sfere	CC	15/04/2011
1	Cambiata la rotella in plastica	CC	16/03/2011

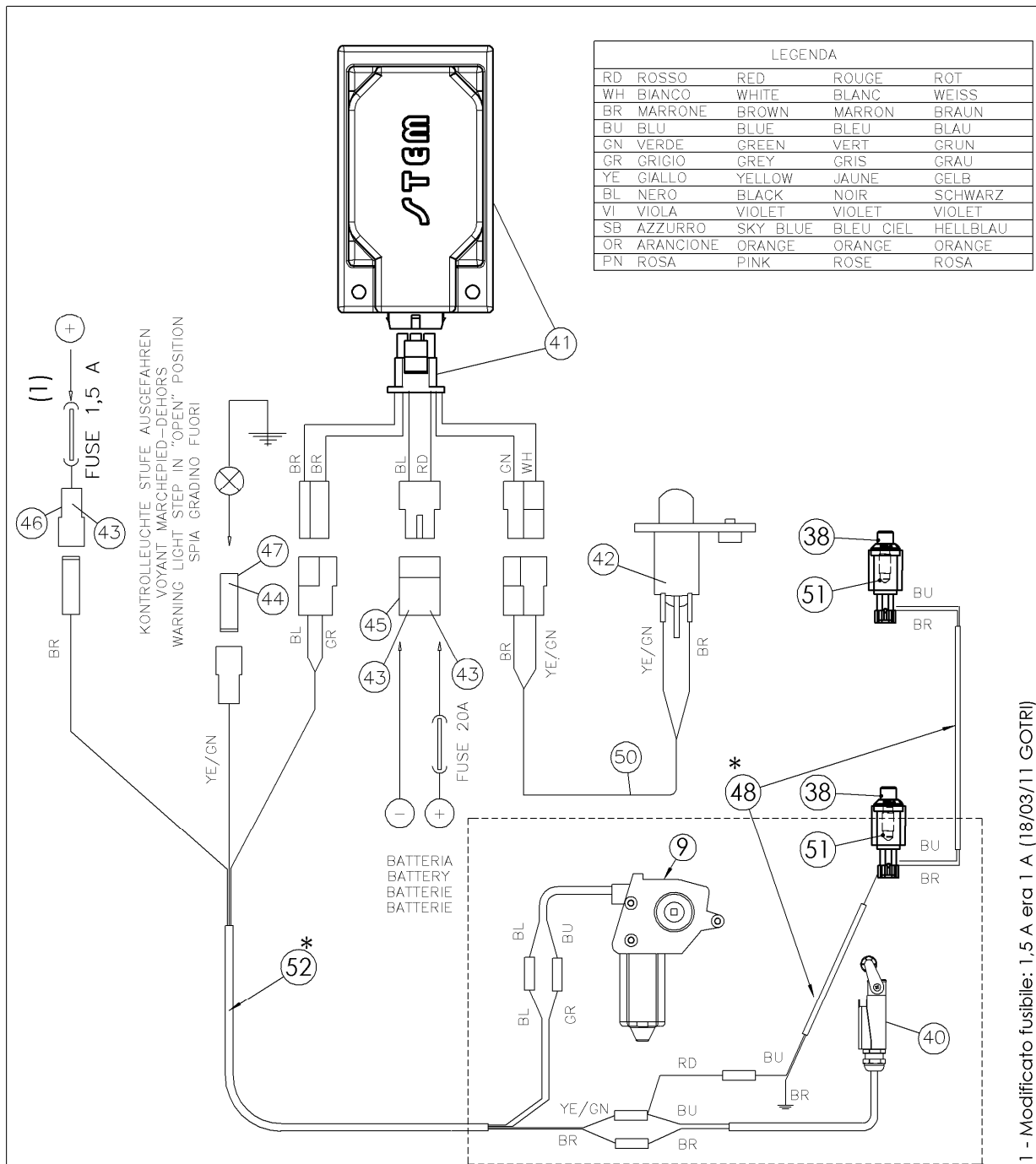
(2)

DESCRIZIONE: Montaggio corona GE-3		1		di 1	
MACCHINA: GE-3		MATERIALE:			
GRUPPO: MOTORIZZAZIONE		PS:		DATA: 18/05/2010	
TRATTAMENTO SUPERFICIALE:		FORMATO		DISEGNATORE: Cavagna	
TRATTAMENTO TERMICO:		SCALA A4		VISTO	
		MASSA 0.32			
		kg		TOLLERANZE NON SPECIFICATE secondo UNI EN 22768-1	
		SOST. DA		MACCHINE UTENSILI -> FINE PRESSIONE -> FINE QUOTE ANGOLARI -> FINE	
STEM S.r.l. unipersonale Strada Ghiale, 12/D - 43014 - Madonico (PR) ITALY - Tel. 0525 - 19 8 11 - Fax 0525 - 42 13 41 - www.stem.it		SOST. IL		- TAGLIO A LASER - RACCORDI E SMUSI -> FINE	
		DIS. N°		DIS0007487-R02	

QUESTO DISEGNO E' DI PROPRIETA' DELLA STEM S.r.l. unipersonale CHE SE NE RISERVA I DIRITTI SANCITI DALLA LEGGE

Pos.	Code	Description	Q.ty
1	CUS6082RS1	Bearing 608-2RS1	1
2	DIS0006136-R00	Assembly chain GE-3	1
3	DIS0007486-R01	Assembly crown GE-3	1
4	GIUCASS121I	Joining shackle F 3/8	1
5	SEGAL08I	Seeger ø8 UNI 7435	1

6.3 ELECTRIC CONNECTIONS AND PARTS



POS.	DENOMINAZIONE-DESCRIZIONE	N° PEZZI	MATERIALE-DIMENSIONI
	SCHEMA CONNESSIONI ELETTRICHE		X
GRUPPO:		MACCHINA: GE-3	DISEGNO NUMERO 6134
TRATTAMENTO SUPERFICIALE		TRATTAMENTO TERMICO	
<p>STEM S.r.l. Strada Ghiaie, 12/D - 43014 - Medesano (PR) ITALY - Tel. 0525 - 19811 - Fax 0525 - 421341 www.stem.it</p>		DATA: 03/04/08	VISTO TOLLERANZE NON SPECIFICATE secondo UNI EN 22768-1 MACCHINE UTENSILI -> FINE TAGLIO A LASER -> ± 0.2 mm PIEGATURA -> FINE RACCORDI E SMUSSI -> FINE QUOTE ANGOLARI -> FINE
		FIRMA: GOTRI	
MIR XX/XXX		FORMATO A4	SCALA F.S.

QUESTO DISEGNO E' DI PROPRIETA' DELLA STEM S.r.l. CHE SE NE RISERVA I DIRITTI SANCITI DALLA LEGGE

REF. DIS. 6134

Pos.	Code	Description	Q.ty
9	Motor	EMBOSCHAHC	1
38	Bulb holder	DIS0007012	1
40	Limit switch	EFINCPASSAGX3	1
41	Control unit	CENTRAMBU1	1
42	Door switch	EPULS4209530	1
43	Fast-on male	EFASTONMAS	3
44	Fast-on female	EFASTONFEM	1
45	Fast-on holder	EPORFASM2V	1
46	Fast-on holder	EPORFASM1C	2
47	Fast-on holder	EPORFASFCG	2
48	Cable	DIS0006124	1
49	Fast-on holder	EPORFASM2T	1
50	Cable	ECAVCOD012	1
51	Bulb	ELAMPADINA	2
52	Cable	DIS0008027	1

7. DISMANTLING AND DISPOSAL

7.1 PUTTING OUT OF SERVICE AND DISMANTLING

At the end of its life the step has to be put out of service. All of the operation for the dismantling and demolition have to be performed after disconnecting the battery's electric system. This procedure can be performed by ordinary but trained mechanic staff.



The step identification plate must be destroyed. It is absolutely prohibited to use such plate for other steps, even if identical.

7.2 SELECTIVE SEPARATION OF MATERIALS

The materials listed below have to be separated and stored to be recovered or disposed in full compliance with environment rules in force.

MATERIAL	COMPONENTS
Aluminium	Anti-slip footboard
Common steel (painted, galvanized and chromium-plated)	Pins, frames, and bolts and nuts
Copper and its alloys	Electric wires, electric motor winding
Plastic and rubber	Buffers and casings

7.3 DISPOSAL

All of these materials have to be disposed of in full compliance with rules in force in the Country where demolition is to take place. For a correct disposal use special and authorised services for disposal and treatment or apply to relevant authority to get details about disposal methods and places.



You must not dispose the materials into the environment under any circumstance..

REVISION	DATE	REVISIONED PAGES
140718	18/07/2014	/
161120	20/11/2016	5,6,23



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