

MEKFARMER 100



ERPICE ROTANTE FISSO



Manuale d'uso e manutenzione "Istruzioni Originali"

- Prima di iniziare ad operare, leggere attentamente le istruzioni per l'uso
- Conservare il presente manuale per futura consultazione



Operating and Maintenance Manual "Original Instructions"

- Read these operating instructions carefully before using the machine
- Keep this manual for future reference

Manuel d'utilisation et d'entretien "Instructions Originales"

- Avant de commencer le travail, lisez attentivement les consignes d'utilisation
- Conservez ce manuel pour référence future

Betriebs- und Wartungsanleitung "Originalbetriebsanleitung"

- Bevor Sie mit der Arbeit beginnen, lesen Sie diese Betriebsanleitungen aufmerksam durch
- Bewahren Sie dieses Handbuch zum Nachschlagen

Manual de empleo y mantenimiento "Instrucciones Originales"

- Antes de empezar a operar con la máquina, leer atentamente las instrucciones para el empleo
- Mantenga este manual como referencia futura

Questo manuale è valido dalla matricola - This manual is valid from serial number - Ce manuel est valable à partir du numéro de série - Diese Handbuch ist gültig ab Seriennummer - Este manual es válido a partir del número de serie 2016E0302269

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BREVIGLIERI S.P.A. via Labriola, 2 - 37054 Nogara (Verona) Italia



I - DICHIARAZIONE DI CONFORMITÀ «CE»

Il costruttore dichiara che la macchina è conforme ai requisiti di sicurezza e salute previsti dalle Direttive Europee 2006/42/CE, alle norme EN ISO 4254-1, EN ISO 12100 ed alle norme EN ISO 4254-5 (erpic, zappatrici, sarchiatrici), EN ISO 4254-12 (trinciatrici), EN ISO 4254-13 (falciatrici), EN 10408 (semiatrici).

BG - ДЕКЛАРАЦИЯ ЗА СЪОТВЕТСТВИЕ «ЕО»

Производителят декларира, че машината отговаря на изискванията за безопасност и здраве, предвидени от европейска директива 2006/42/ЕО, EN ISO 4254-1, EN ISO 12100 и от стандарти EN ISO 4254-5 (Почвообработващи машини със задвижвани работни органи), EN ISO 4254-12 (Ротационни дискови и барабани косачки и раздробители), EN ISO 4254-13 (косачки), EN 10408 (сеялки).

CS - PROHLÁŠENÍ O SHODĚ «CE»

Výrobce prohlašuje, že stroj odpovídá všem příslušným požadavkům na bezpečnost a ochranu zdraví podle Směrnice 2006/42/ES, podle směrnice EN ISO 4254-1, EN ISO 12100 a směrnice EN ISO 4254-5 (kultivátory, brány, odplevelovače), EN ISO 4254-12 (drtiče), EN ISO 4254-13 (sekačky), EN 10408 (sečí stroje).

HR – «EZ» IZJAVA O SUKLADNOSTI

Proizvođač izjavljuje da je stroj u skladu sa sigurnosnim i zdravstvenim zahtjevima koje predviđa europska direktiva 2006/42/EZ, s normama HRN EN ISO 4254-1, HRN EN ISO 12100 te s normama HRN EN ISO 4254-5 (pokretani strojevi i oruđa za obradu tla), HRN EN ISO 4254-12 (kružne vertikalne kosilice i sitilnice), EN ISO 4254-13 (rotacione kosilice), EN 10408 (sijačice).

DK - «EF»-OVERENSSTEMMELSESERKLÆRING

Producenten erklærer, at maskinen er i overensstemmelse med kravene til sikkerhed og sundhed i EF-direktiv 2006/42/EF, standarderne DS/EN ISO 4254-1, DS/EN ISO 12100 og standarderne DS/EN ISO 4254-5 (harver, hakkere, radrensere), DS/EN ISO 4254-12 (snittere), DS/EN ISO 4254-13 (mejemaskiner), DS/EN ISO 11073-10408 (såmaskiner).

ET – «EÜ» VASTAVUSDEKLARATSIOON

Tootja deklareerib, et masin vastab tervisekaitse- ja ohutusnõuetele, mis on sätestatud Euroopa direktiivis 2006/42/EÜ, standardites EN ISO 4254-1, EN ISO 12100 ja standardites EN ISO 4254-5 (äkked, free-aid, reasharimismasinad), EN ISO 4254-12 (vasartrumluga niidukhekseldid), EN ISO 4254-13 (niidukiid), EN 10408 (seemnekülvikud).

FI – «EU»-VAATIMUSTENMUKAISUUSVAKUUTUS

Valmistaja vakuuttaa, että kone vastaa Euroopan parlamentin ja neuvoston direktiivin 2006/42/EU turvallisuus- ja terveysvaatimuksia sekä standardeja EN ISO 4254-1, EN ISO 12100 ja standardeja EN ISO 4254-5 (aurat, karhit, harat), EN ISO 4254-12 (silppurit), EN ISO 4254-13 (niittokoneet), EN 10408 (kylvökoneet).

F - DÉCLARATION "CE" DE CONFORMITÉ

Le constructeur déclare que la machine est conforme aux exigences essentielles de sécurité et de santé pour l'opérateur prévues par la directive européenne 2006/42/CE, ainsi qu'aux normes NF EN ISO 4254-1, NF EN ISO 12100 et aux normes NF EN ISO 4254-5 (herse, fraises rotatives, bineuses), NF EN ISO 4254-12 (broyeurs), NF EN ISO 4254-13 (tondeuses), NF EN 10408 (semoirs).

GR - ΔΗΛΩΣΗ ΣΥΜΜΟΡΦΩΣΗΣ «ΕΚ»

Ο κατασκευαστής δηλώνει ότι το μηχάνημα συμμορφώνεται με τις απαιτήσεις ασφάλειας και υγείας που προβλέπονται από την ευρωπαϊκή οδηγία 2006/42/ΕΚ, τα πρότυπα EN ISO 4254-1, EN ISO 12100 και τα πρότυπα EN ISO 4254-5 (σβάρνες, τσάπες, σκαλιστήρια), EN ISO 4254-12 (τεμαχιστές), EN ISO 4254-13 (χαρτοκοπτικά μηχανήματα), EN 10408 (μηχανήματα σποράς).

EN - «EC» DECLARATION OF CONFORMITY

The manufacturer declares that the machine complies with the health and safety requirements laid down in European Directive 2006/42/EC, the standards EN ISO 4254-1, EN ISO 12100 and standards EN ISO 4254-5 (harrows, tillers, inter-row tillers), EN ISO 4254-12 (flail mowers), EN ISO 4254-13 (mowers), EN 10408 (seed drills).

GA - DEARBHŪ COMHRÉIREACHTA «CE»

Dearbhaíonn an déantúisóir go gcomhlíonann an gléas leis na riachtanais sábháilteachta agus slándála mar a leagtar síos sa Treoir Eorpach 2006/42/CE, sna caighdeáin EN ISO 4254-1, EN ISO 12100 agus caighdeáin EN ISO 4254-5 (brácaí, saothróirí, saothróirí idirlinte), EN ISO 4254-12 (buainteoírí sústeacha), EN ISO 4254-13 (buainteoírí), EN 10408 (sioladóirí).

LV - «EK» ATBILSTĪBAS DEKLARĀCIJA

Ražotājs paziņo, ka mašina atbilst veselības un drošības prasībām, kas norādīti Eiropas direktīvā 2006/42/EK, EN ISO 4254-1 standartos, EN ISO 12100 standartos un EN ISO 4254-5 standartos (ecēšas, kultivators, starprindu kultivators), EN ISO 4254-12 (plaujmašīna), EN ISO 4254-13 (plīvēji), EN 10408 (rindsējmašīna).

LT - «EB» ATITIKTIES DEKLARAVIMAS

Gamintojas patvirtina, kad mechanizmas atitinka sveikatos ir saugos reikalavimus, išdėstytus Europos Direktivoje 2006/42/EB, standartuose EN ISO 4254-1, EN ISO 12100 ir standartuose EN ISO 4254-5 (akėtios, kultivatoriai, sukamieji kultivatoriai), EN ISO 4254-12 (šienapjovės smulkintuvai), EN ISO 4254-13 (šienapjovės), EN 10408 (sėjamosios).

MT - DIKJARAZZJONI TA' KONFORMITÀ «KE»

Il-manifattur jiddikjara li l-magna hi konformi mar-rekwiżiti tas-sigurtà u s-saħħa previsti mid-Direttiva Ewropea 2006/42/KE, mal-istandards EN ISO 4254-1, EN ISO 12100 u mal-istandards EN ISO 4254-5 (harrows, mghażaqa, weeding machines), EN ISO 4254-12 (shredders), EN ISO 4254-13 (mowers), EN 10408 (seeders).

NL - «EG»-VERKLARING VAN OVEREENSTEMMING

De fabrikant verklaart dat de machine voldoet aan de vereisten inzake de veiligheid en de gezondheid European door de Europese richtlijn 2006/42/EG, de normen NEN-EN-ISO 4254-1, NEN-EN-ISO 12100 en de normen NEN-EN-ISO 4254-5 (eggen, landbouwvrezers, schoffelmachines), NEN-EN-ISO 4254-12 (hakselaars), NEN-EN-ISO 4254-13 (maaimachines), NEN-EN-ISO 10408 (zaaimachines).

PL - DEKLARACJA ZGODNOŚCI «WE»

Producent deklaruje, że maszyna spełnia wymogi bezpieczeństwa i zdrowia określone w Dyrektywie 2006/42/WE, w normach PN-EN ISO 4254-1, PN-EN ISO 12100 oraz w normach PN-EN ISO 4254-5 (brony, glebogryzarki, opielacze), PN-EN ISO 4254-12 (kosiarzki bijakowe), PN-EN ISO 4254-13 (kosiarzki), PN-EN 10408 (siewniki).

PT - DECLARAÇÃO DE CONFORMIDADE «CE»

O fabricante declara que a máquina está em conformidade com os requisitos de segurança e saúde previstos na Directiva Europeia 2006/42/CE, as normas EN ISO 4254-1, EN ISO 12100 e as normas EN ISO 4254-5 (grades, fresas, sachadores), EN ISO 4254-12 (tritadoras), EN ISO 4254-13 (gadanheiras), EN 10408 (semeadores).

RO - DECLARAȚIE DE CONFORMITATE «CE»

Producătorul declară faptul că utilajul respectă cerințele de sănătate și siguranță prevăzute în Directiva europeană 2006/42/CE, standardele EN ISO 4254-1, EN ISO 12100 și standardele EN ISO 4254-5 (grape, motocultivatatoare, motocultivatatoare între rânduri), EN ISO 4254-12 (secerători laterale), EN ISO 4254-13 (secerători), EN 10408 (semănători).

SK - VYHLÁŠENIE O ZHODE S PREDPISMI «ES»

Výrobca vyhlasuje, že stroj zodpovedá požiadavkám na zdravie a bezpečnosť uvedeným v Európskej smernici č. 2006/42/ES, normám EN ISO 4254-1, EN ISO 12100 a normám EN ISO 4254-5 (brány, kultivátory, mediáridávkové kultivátory), EN ISO 4254-12 (cepové žacie stroje), EN ISO 4254-13 (žacie stroje), EN 10408 (vysivacie riadkové stroje).

SI - «ES» IZJAVA O SKLADNOSTI

Proizvajalec izjavlja, da je stroj izdelan v skladu z zahtevami glede zdravja in varnosti, ki so navedene v evropski direktivi 2006/42/ES, standardih EN ISO 4254-1, EN ISO 12100 in standardih EN ISO 4254-5 (brane, kultivatorji, medvrstni kultivatorji), EN ISO 4254-12 (mulčerja), EN ISO 4254-13 (kosilnice), EN 10408 (sejalnice).

ES - DECLARACIÓN DE CONFORMIDAD «CE»

El constructor declara que la máquina cumple los requisitos de seguridad y salud según las Directivas Europeas 2006/42/CE, las normas EN ISO 4254-1, EN ISO 12100 y las normas EN ISO 4254-5 (gradas, binadoras, cultivadadores), EN ISO 4254-12 (picadoras), EN ISO 4254-13 (segadoras), EN 10408 (sembradoras).

S - FÖRSÄKRAN OM ÖVERENSSTÄMMELSE MED «EG»-DIREKTIV

Tillverkaren försäkras att maskinen är tillverkad i överensstämmelse med säkerhets- och hälsoföreskrifterna i Europadirektiv 2006/42/EG, enligt standard EN ISO 4254-1, EN ISO 12100, och enligt standard EN ISO 4254-5 (harvar, jordfråsar, rullharvar), EN ISO 4254-12 (fålhackar), EN ISO 4254-13 (slättermaskiner), EN 10408 (såningsmaskiner).

DE - «EG»-KONFORMITÄTSEKTLÄRUNG

Der Hersteller erklärt, dass die Maschine den Vorschriften zur Sicherheit und Gesundheit der EU-Maschinenrichtlinie 2006/42/EG, der Normen EN ISO 4254-1, EN ISO 12100 sowie der Normen EN ISO 4254-5 (Eggen, Bodenfräsen, Hackmaschinen), EN ISO 4254-12 (Kreiselmäherwerke und Schlegelmäher), EN ISO 4254-13 (Mähmaschinen) und EN 10408 (Sämaschinen) entspricht.

HU - «EK»-MEGFELELŐSÉGI NYILATKOZAT

A gyártó kijelenti, hogy a gép megfelel a 2006/42/EK irányelv egészségvédelmi és biztonsági követelményeinek, valamint az EN ISO 4254-1, EN ISO 12100 és EN ISO 4254-5 (boronák, kapálógépek, gyomlálógépek), továbbá az EN ISO 4254-12 (szárzúzó), EN ISO 4254-13 (kaszálógépek) és EN 10408 (vetőgépek) szabványoknak.

Tipologia:
Mod.:
Matr.:
Nogara:

Breviglieri Spa
Presidente e A.D.
Luciano Paola



CONGRATULATIONS

Dear Customer, thank you for the trust you have put in us by choosing one of the quality products of the **BREVIGLIERI** range. Upon receiving the machine, please check to see if there are any shipping damages or missing parts; also check the integrity of the machine and the accessories you purchased. Immediately report any defects to the manufacturer. Read and comply with the instructions in this manual before the initial startup; pay particular attention to the safety instructions. After carefully reading the manual, you can take full advantage of your new machine. Please make sure all machine operators read this manual before starting up the machine. If you have any questions or problems, please consult this manual or call the Service Center.



Contents

1	OVERALL INFORMATION	33	6	MAINTENANCE	49
1.1	INTRODUCTION	33	6.1	SAFETY WARNINGS	49
1.2	WARRANTY	33	6.2	MACHINE IN SAFETY POSITION	50
1.3	WARRANTY EXCLUSIONS	33	6.3	SCHEDULED MAINTENANCE	50
1.4	MANUFACTURER AND AFTER-SALES SERVICE CONTACT INFORMATION	33	6.3.1	AFTER THE FIRST 8 HOURS SERVICE	50
1.5	MANUAL UPDATE	33	6.3.2	EVERY 8 HOURS/1 DAY SERVICE	50
1.6	CE PLATE	33	6.3.3	EVERY 20 HOURS SERVICE	50
1.7	HOW TO READ THE MANUAL	34	6.3.4	AFTER 100 HOURS SERVICE	50
1.8	DECALS USED IN THE MANUAL	34	6.3.5	EVERY 500 HOURS/1 YEAR SERVICE	50
1.9	GLOSSARY	34	6.3.6	PTO SHAFT MAINTENANCE	51
2	GENERAL WARNINGS AND DESCRIPTION OF THE MACHINE	34	6.3.7	CHECKING GUARDS	51
2.1	GENERAL SAFETY WARNINGS	34	6.3.8	REPLACING BLADE	51
2.2	DESCRIPTION	35	6.3.9	REPLACING HYDRAULIC SYSTEM TUBES (OPT)	52
2.3	OPERATING PRINCIPLE	35	6.3.10	CHANGING THE ROTATING SPEED OF THE BLADES	52
2.4	ACCESSORIES	35	6.3.11	CHECK/CHANGE OIL IN THE GEARBOX	52
2.4.1	STANDARD (STD)	35	6.3.12	CHECK/CHANGE OIL IN THE FLAT PAN	53
2.4.2	OPTIONAL (OPT)	36	6.4	LUBRICATION	53
2.5	DECALS APPLIED ONTO THE MACHINE	36	6.4.1	LUBRICATION POINTS	53
2.6	TECHNICAL SPECIFICATIONS	37	6.4.2	RECOMMENDED LUBRICANTS	54
2.7	OVERALL DIMENSIONS	37	6.5	CLEANING	54
2.8	NOISE LEVEL	37	6.6	TROUBLESHOOTING	54
2.9	VIBRATIONS	37	7	DISMANTLING AND DISPOSAL	55
3	TRANSPORT AND HANDLING	37	8	SPARE PARTS	55
3.1	SAFETY WARNINGS	37	8.1	LIST OF SPARE PARTS CRITICAL FOR SAFETY	55
3.2	HANDLING	38	8.2	HOW TO ORDER SPARE PARTS	55
3.2.1	HANDLING OF THE MACHINE	38			
3.2.2	HANDLING ACCESSORIES	38			
3.3	TRANSPORT OF PACKAGING	39			
3.4	STORAGE	40			
4	INSTALLATION	40			
4.1	SAFETY WARNINGS	40			
4.2	ASSEMBLING THE MACHINE	40			
4.2.1	FITTING PTO GUARDS	41			
4.2.2	FITTING OPTIONAL ROLLERS (OPT)	41			
4.2.3	FITTING HITCH FOR FRONTAL USE OF THE MACHINE	41			
4.2.4	FITTING TRACK ERADICATOR (OPT)	42			
5	OPERATING	42			
5.1	SAFETY WARNINGS	42			
5.2	RECOMMENDED USE	42			
5.3	PREDICTABLE IMPROPER USE	42			
5.4	RESIDUAL RISKS AND DANGEROUS ZONES	42			
5.5	DESCRIPTION OF THE SAFETY DEVICES	43			
5.6	OPERATING	43			
5.6.1	HITCHING THE MACHINE TO THE TRACTOR	43			
5.6.2	SETTING LOWER ATTACHMENTS POINTS	44			
5.6.3	INSTALLING THE PTO SHAFT	44			
5.6.4	HYDRAULIC CONNECTION (OPT)	45			
5.6.5	INSTALLING HYDRAULIC SEEDER LINKAGE (OPT)	45			
5.6.6	SEED DRILL HYDRAULIC CONNECTION (OPT)	45			
5.6.7	CIRCULATE ON THE PUBLIC ROADS	45			
5.6.8	SETTING WORKING DEPTH	46			
5.6.9	SETTING THE SCRAPERS	47			
5.6.10	STARTING WORK	47			
5.6.11	SETTING THE POSITION OF THE REAR BAR	48			
5.6.12	SETTING THE SIDE SHIELD	48			
5.6.13	STOPPING	48			
5.6.14	PROCEDURES IN CASE OF ACCIDENTS OR MECHANICAL FAILURES	48			
5.6.15	UNHITCHING THE MACHINE FROM THE TRACTOR	49			
5.6.16	PREPARING FOR STORAGE	49			



1 OVERALL INFORMATION

1.1 INTRODUCTION

This manual contains all the information you need to know for proper use and normal maintenance of the **MEKFARMER100** (hereinafter also called “machine”), produced by **BREVIGLIERI S.P.A.** of Nogara (VR) Italy, hereinafter also called «manufacturing company». The statements herein do not constitute a complete description of the various parts, nor a detailed ex position of their operation. However, the user will find al the information that is normally provided for the safe use and the proper keeping of the machine. Failure to observe the indications in this manual, operational negligence, incorrect use of the machine and the execution of unauthorized modifications, can be grounds for cancellation of the warranty given by the manufacturer to the machine. The manufacturer declines all responsibility for damages due to negligence and failure to comply with the instructions in this manual. For any repairs or revisions involving operations of a certain complexity, contact an authorized Service Center that has specialized staff or directly contact the manufacturer, who is at your complete disposal to provide prompt and accurate technical support and everything that can be useful for the operation and the maximum machine efficiency. This manual must be kept in a safe place to allow its preservation and consultation throughout the lifetime of the machine. In order to develop and upgrade this product, **BREVIGLIERI** reserve the right to make changes without notice. In case of dispute, the text of the instructions for use, to which reference will be made, shall be exclusively in Italian. Some of the images shown may differ from the machine in your possession: they are shown here only for illustration to explain the operations to be performed.

1.2 WARRANTY

The Manufacturer guarantees brand new products for a period of 12 (twelve) months from the date of delivery. When the machine is delivered, make sure that both it and the accessories are complete and in a perfect condition. Complaints should be presented in writing within 8 (eight) days from receipt of the machine. The warranty merely covers the repair or replacement, free of charge, of those parts which, after thorough examination by the Manufacturer, are recognized as being defective (with the exclusion of tines). Expenses concerning replacement of lubricants, transport costs, customs duties and VAT remain at the purchaser's charge in any case. Replacement or repair of parts under guarantee shall in no case extend the warranty terms. The Manufacturer will not accept returned goods without prior written authorization. The purchaser shall only be able to exercise his rights in relation to the warranty when he has complied with the conditions governing warranty performance, as indicated in the supply contract.

1.3 WARRANTY EXCLUSIONS

(Besides the circumstances indicated in the supply contract) the warranty becomes void:

- When the damage can be ascribed to insufficient maintenance.
- When, following repairs made by the user without the Manufacturer's consent or owing to the installation of spurious spare parts, the machine has been subjected to changes and the damage is ascribable to these changes.
- When the machine has been hitched to tractors whose power rating exceeds the value given in the “2.6 Technical specifications” table in this manual.
- When the user has failed to comply with the instructions in this manual. Damage deriving from negligence, carelessness, bad and improper use of the machine or incorrect manoeuvres by the operator are also excluded from the warranty. Removal of the safety devices with which the machine is equipped shall automatically void the warranty and relieve the Manufacturer from all relative liability. The warranty also becomes void if spurious spare parts are used.

Even when covered by the warranty, the machine must be returned Carriage Free.

1.4 MANUFACTURER AND AFTER-SALES SERVICE CONTACT INFORMATION

Breviglieri Spa
Via Labriola 2 - 37054 NOGARA (Verona) - ITALY
Tel. 0039 0442 537411 r.a. - Fax 0039 0442 537444
www.breviglieri.com - info@breviglieri.com

1.5 MANUAL UPDATE

The information, descriptions and figures contained in this Manual reflect the state of the art at the moment of the sale of the machine. The Manufacturer reserves the right to make changes, at any time, to the machine for technical or commercial reasons These changes do not compel the Manufacturer neither to make changes to machines already sold until then nor to consider this present Manual inadequate. Any integrations that the Manufacturer will consider worthwhile will have to be kept along with the Manual and will be considered as part of it.

1.6 CE PLATE



FIG. 1

- A Machine model
- B Machine version
- C Serial number
- D Weight (in Kg)
- E Year of manufacture



1.7 HOW TO READ THE MANUAL

The Manual has been divided into single chapters, each one is addressed to one of more types of operators (SKILLED STAFF OR OPERATOR) whose necessary skills for operating the machine safety have been defined. The sequence of the chapters meets the temporal logic of the life of the machine.


To make the text easier to understand, the meanings of the words, abbreviations and pictographs used in this Manual are indicated in the consecutive chapters.


In the Manual, in chapter 2 there is a paragraph called “General safety warnings”. These warnings refer to the machine in general, during its life and its running.


At the start of each chapter you will find the paragraph “Safety warnings”. These warnings are addressed to the operator to protect themselves when performing the operations described in the paragraph itself. You might also find inside the paragraph, safety warnings addressed to the operator for protecting themselves when performing the operations described in the paragraph itself. Always read the safety warnings at the beginning of the chapter before performing any operation described in a paragraph.


1.8 DECALS USED IN THE MANUAL


 **DANGER**
 Serious or fatal injuries.

 **WARNING**
 Possible serious or fatal injuries.

 **CAUTION**
 Possible slight or negligible injuries or damages to the machine.

 **NOTE**
 USEFUL INFORMATION.

 **SKILLED STAFF**
 Manufacturer or After Sales service centre’s staff.

 **OPERATOR**
 User of the machine.

 **ALWAYS WEAR GLOVES TO PROTECT YOUR HANDS**

 **ALWAYS WEAR GOGGLES TO PROTECT YOUR EYESIGHT**

 **ALWAYS WEAR PROTECTIVE CLOTHING TO PROTECT YOUR BODY**



 **ALWAYS WEAR A HELMET**

 **ALWAYS WEAR EAR PROTECTORS TO PROTECT YOUR HEARING**

 **ALWAYS WEAR SAFETY BOOTS**


 **ALWAYS WEAR A MASK TO PROTECT YOUR FACE**

1.9 GLOSSARY

Term/icon	Meaning
PTO	power take-off (PDF)
DPI	Personal protective equipment
STD	Standard equipment
OPT	Optional equipment
 in.	Working depth
	PTO rpm

2 GENERAL WARNINGS AND DESCRIPTION OF THE MACHINE

2.1 GENERAL SAFETY WARNINGS

 **DANGER**
 Read the instructions carefully before using the machine.

The Manufacturer declines all and any liability for not complying with the safety and prevention instructions provided for in this Manual.

It is recommended not to operate on the machine with procedures, operators or qualifications different from the ones indicated in this Manual.

Never deactivate or alter in any way the safety components on the machine. Doing so will automatically make the warranty void.

In case of malfunction of a safety component, contact the After Sales centre immediately to order the spare part.

Always put the machine in a safety position before carrying out the handling, installation and maintenance phases (See “6.2 Machine in safety position”).

Pay attention to the clothing worn by anyone operating the machine. Do not wear loose or flapping garments that could become caught up in moving parts. Avoid wearing big rings or bracelets that could make your hands caught up in the machine parts.



i NOTE

KEEP THIS INSTRUCTION MANUAL FOR ANY FUTURE CONSULTATION

IN CASE OF THE SALE OF THE MACHINE TO A THIRD PARTY, THIS INSTRUCTION MANUAL MUST BE GIVEN IN INTACT AND LEGIBLE.

2.2 DESCRIPTION

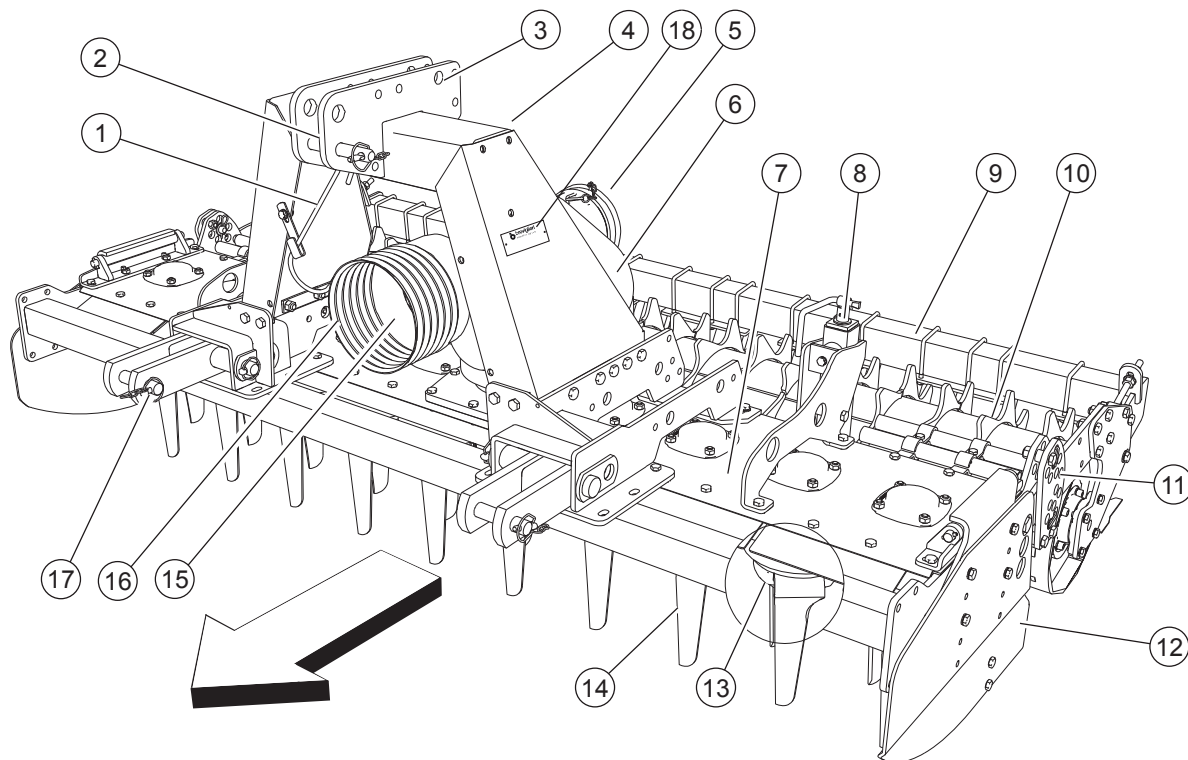


FIG. 2

- 1 PTO shaft support
- 2 Upper 3-point hitch
- 3 Hitch point for lifting the machine
- 4 Three point hitch frame
- 5 Rear PTO shield (OPT)
- 6 Gearbox
- 7 Flat pan
- 8 Levelling bar adjusting jack
- 9 Roller scraper holder
- 10 Roller unit
- 11 Working depth adjustment unit
- 12 Side shield
- 13 Rotor
- 14 Blades
- 15 Power take off (PTO)
- 16 Tractor PTO protection
- 17 Lower hitch
- 18 Position of CE plate

2.3 OPERATING PRINCIPLE

The machine **MEKFARMER100** rotary harrow consists of a central framework (2 "Fig. 2"), with three-point coupling that hitches to a harrow unit. The machine only operates

when hitched to a tractor with an adequate power rating (see technical specifications for the specific power). The power required to operate the machine is transmitted by the tractor through the driveline (with CE marking) which engages with the central transmission unit (6 "Fig. 2") and operates the various tine rotors (13 "Fig. 2").

2.4 ACCESSORIES

2.4.1 STANDARD (STD)

- Pin roller adjustment.
- PTO shaft with shear bolt.
- 540 rpm gearbox unit.
- Rear levelling bar adjustable with hydraulic rams.
- CAT II three-point hitch.
- Adjustable floating side shields.
- Adjustable front floating hitches.
- Blades 270x12 mm.



2.4.2 OPTIONAL (OPT)

Spiked roller

- It can be used on damp, clay soils and in difficult working situations. It does not compact the soil but levels it at the rear of the machine.

Cage roller

- This is used for soil of medium consistency and when the degree of humidity is low. It prepares the soil for seeding but does not compact the surface.

Packer roller

- This is used to crumble the soil worked by the tines to a further degree and to guarantee a compact surface, optimum for seeding. It has a bearing effect if the seed drill is mounted in a combined configuration. It is excellent for dry and hard soil.

Crumbling roller

- Like the packer roller, it is used for further crumbling of the surface clods. It does not compact the soil excessively and leave it levelled. It can also be used as load-bearing roller with a combine seeder.

Coil roller

- This type of roller consists of a bar wound as a coil around a central axis. It is particularly recommended for light and sandy soils.

Gearbox gears

A	B	540 rpm	1000 rpm	Cod.
18	17	310	-	8201435
17	18	276	-	8201435
19	16	347	-	8201431
16	19	246	-	8201431
13	22	-	320	8201538
14	21	-	361	8201432

Roller adjustment system

- Mechanical rams
- Hydraulic rams

PTO shaft

- With slip clutch
- With cam clutch

Hydraulic seeder linkage(MAX LOAD= 2000 Kg)

Seeder linkage lifting clamp

Track eradicator

Hitching kit for frontal use of the machine

Gearbox 540rpm single speed (324rpm)

2.5 DECALS APPLIED ONTO THE MACHINE

The machine has been designed and built in compliance with all possible safety standards able to safeguard those who work with it. Despite this, there may still be residue hazards which are signalled on the machine by decals. These decals (pictograms) are affixed to the machine and indicate the various situations of insecurity and danger in a brief form.



Keep the decals clean. Replace the decals if there are damaged or detached.

Pos	Decal	Meaning of decal
1		Carefully read the instruction manual before beginning work. cod. 9364670
2		Before proceeding with maintenance operations, stop the machine, lower it to the ground and consult the instruction manual. cod. 9364671
3		Danger of upper limbs being cut off. Do not remove the guards and keep well away from moving parts. cod. 9364662
4		Danger of being caught up by the driveline. It is absolutely forbidden to get near the driveline when it is operating. cod. 9364672
5		Danger of falling. It is absolutely forbidden to climb on to the machine. cod.9364673
6		Danger of lower limbs being cut off. Keep at a safety distance from the machine when it operates. cod. 9364675



Pos	Decal	Meaning of decal
7		Hitching points to lift the machine. cod. 9364668
/		Lubricating point cod. Z1700002

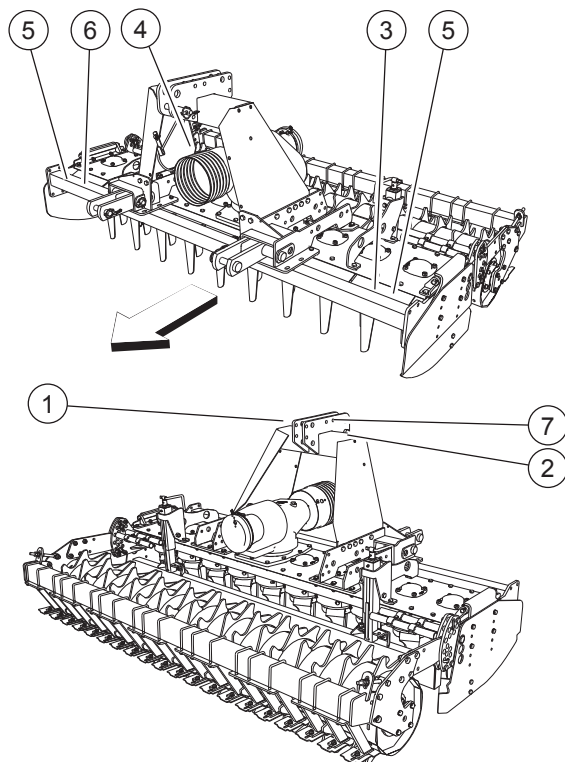


FIG. 3 Position of the decals

2.6 TECHNICAL SPECIFICATIONS

- Data valid for 540 rpm and 1000rpm model.

Version	Tractor		Blades n°	in.
	Kw	HP		
180	40-74	55-100	18	4-12
200	44-74	60-100	20	4-12
230	48-74	65-100	22	4-12
250	52-74	70-100	24	4-12
300	59-74	80-100	28	4-12

- PTO shaft: 1" 3/8 Z6
- CAT II three point hitch.

Gearbox (STD)

		540 rpm	1000 rpm	Code
18	17	310	-	8201435
17	18	276	-	8201435

2.7 OVERALL DIMENSIONS

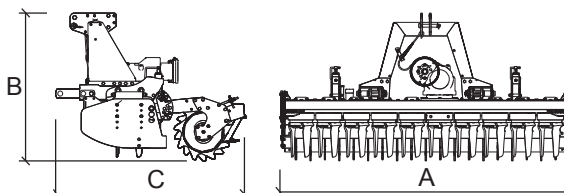


FIG. 4

Version	A		B		C	
	cm	inch	cm	inch	cm	inch
180	195	77	118	46.5	135	53
200	215	85	118	46.5	135	53
230	235	93	118	46.5	135	53
250	255	100	118	46.5	135	53
300	295	116	118	46.5	135	53

2.8 NOISE LEVEL

- Acoustic pressure LpAm (A): dB 82.1
- Acoustic power LwA (A): dB 98,6



CAUTION
Danger of loud noise when operating the machine.



ALWAYS WEAR EAR PROTECTORS TO PROTECT YOUR HEARING

2.9 VIBRATIONS

During its normal working, the machine does not transmit significant vibrations to the tractor and therefore to the operator. These vibrations are less than 8,2 ft/s² for the operator's upper limbs and less than 1,6 ft/s² for the sitting part of the operator's body.

3 TRANSPORT AND HANDLING

3.1 SAFETY WARNINGS



NOTE
READING THIS CHAPTER IMPLIES THAT, FOR A SAFE USE OF THE MACHINE, WHAT IS CONTAINED IN THE PARAGRAPH "2.1 GENERAL SAFETY WARNINGS" HAS BEEN FULLY UNDERSTOOD.



⚠ DANGER

Never allow access to unauthorised and/or unqualified staff in the area of handling and packaging of the machine.

The handling and packaging phases of the machine must be carried out by staff specialised in operating cranes and forklift trucks.

⚠ CAUTION

Always use CE lifting equipment (straps, cranes, forklift trucks..) for handling the machine and the packaging.

The lifting equipment for the machine or the packaging must have a capacity higher than the load weight.



ALWAYS WEAR GLOVES TO PROTECT YOUR HANDS



ALWAYS WEAR PROTECTIVE CLOTHING TO PROTECT YOUR BODY



ALWAYS WEAR SAFETY BOOTS

3.2 HANDLING

3.2.1 HANDLING OF THE MACHINE



ALWAYS WEAR A HELMET

Version	Weight		Hoisting equipment
	Kg	lb	
180	520	1147	crane/lifting straps
200	580	1279	crane/lifting straps
230	610	1345	crane/lifting straps
250	640	1411	crane/lifting straps
300	700	1543	crane/lifting straps

The weights refer to the machine without roller.

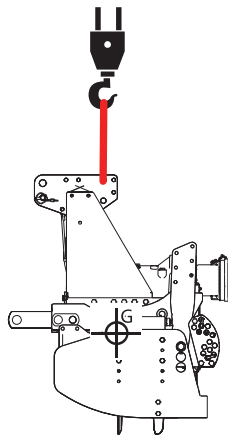


FIG. 5 Handling machine without roller

Make sure that the zone in which the operations take place

is uncluttered and that there is a sufficient «escape route», i.e. a clear and safe zone to which the operators can quickly move if the load should fall.



CAUTION

When handling with a forklift insert the forks between the blades. Place the forks under the rotor.

Beware of the sharp edges as they can damage the lifting straps.

To lift the machine with roller you have to hitch it in different places: a lift point is indicated on the machine, near the upper three-point hitch. Hitch the straps on the scraper holder bar too. Check the balance and the positioning of the load on the forks in case of a forklift and of the assembly hook-straps-machine in case of a crane. When handling, loads must not be hoisted no more than 8 inches from the ground

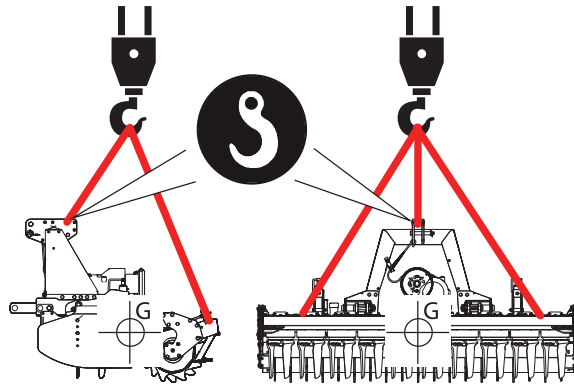


FIG. 6 Handling machine with roller

Lift the machine with the utmost care and move it slowly without jolting on to the truck or railway car. The surface on to which the machine is to be loaded must be perfectly horizontal, to prevent the load from shifting.

If the machine has been placed on a wooden pallet, use a forklift to handle the pallet. The forklift forks must be as distant as possible from each other.

3.2.2 HANDLING ACCESSORIES

Accessories with a weight less than 44 lbs can be handled by a single operator. The rollers must be handled with a crane and lifting straps (“Fig. 7”). Fix two hoisting shackles, one on each side. Insert the shackle pin in the hole of the roller holder plate (“Fig. 7”). Hitch the lifting straps. Lift the roller of few centimetres. Check the roller balance



CAUTION

Crash risk. The roller is fitted on freely rotating supports. Connect a strap to the centre of the roller.

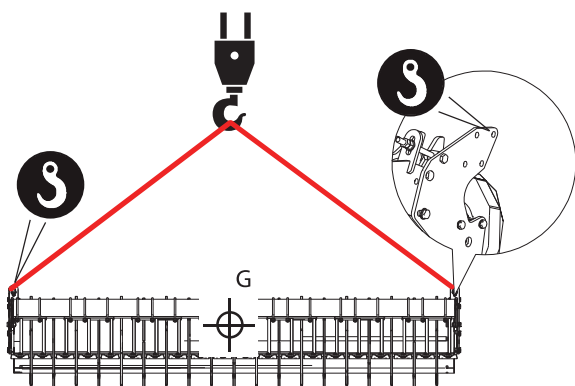




FIG. 7

Spiked roller

	Ø 477		Øi 102	
Version	Kg	lb		
180	640	1411		
200	710	1565		
230	755	1664		
250	800	1764		
300	890	1962		


Weights refer to the machine with roller.

Cage roller

	Ø 405		Ø 450	
Version	Kg	lb	Kg	lb
180	630	1389	642	1415
200	700	1543	713	1572
230	735	1620	748	1649
250	770	1698	783	1726
300	860	1896	873	1925


Weights refer to the machine with roller.

Packer roller

	Ø 406		Ø 464	
Version	Kg	lb	Kg	lb
180	700	1543	730	1609
200	780	1720	810	1786
230	830	1830	865	1907
250	880	1940	915	2017
300	980	2161	1020	2249


Weights refer to the machine with roller.

Crumbling roller

	Ø 412	
Version	Kg	lb
180	695	1532
200	770	1698
230	818	1803
250	866	1909
300	962	2121

Weights refer to the machine with roller.

Coil roller

	Ø 460	
Version	Kg	lb
180	665	1466
200	735	1620
230	770	1698
250	805	1775
300	895	1973

Weights refer to the machine with roller.

HANDLING OF SEEDER LINKAGE (OPT)

Model	Weight (lb)	Hoisting equipment
2000kg capacity	463	crane/lifting straps

The seeder linkage has a hoisting point ("Fig. 8").



FIG. 8

3.3 TRANSPORT OF PACKAGING

 **CAUTION**

Never dispose of the packaging waste in the environment. The disposal of waste must be in compliance with the regulations in force in the country where the machine is installed.



The machine can be delivered wrapped in a plastic film.

i NOTE

UPON DELIVERY, CHECK (VISUALLY WITH THE CARRIER) THE PERFECT CONDITION OF THE PACKAGING. FURNISH PROOF AND REPORT ANY FOUND ANOMALIES TO THE MANUFACTURER.

If the machine must be transported over a long distance, it can be loaded on a truck or railway car. Once the machine has been moved on to the truck or wagon, make sure that it remains blocked in position. Fix the machine firmly to the surface on which it rests. After transport and before freeing the machine check the solidity of the packaging and the position of the machine. Remove the fastening systems of the load. Unload the machine following the handling operations.

3.4 STORAGE

Storing wrapped machines must be done in places protected from bad weather and sun. Storage time must be limited to the strict minimum; for machine wrapped in plastic film the storage time is 12 months whereas the ones protected with a plastic sheet, storage time must be limited to the minimum (EU or neighbouring countries). For further information regarding storage time and methods contact the Manufacturer After-Sales service. The Manufacturer does not guarantee the condition of the content for periods of time longer than the recommended ones.

4 INSTALLATION

4.1 SAFETY WARNINGS

i NOTE

READING THIS CHAPTER IMPLIES THAT, FOR A SAFE USE OF THE MACHINE, WHAT IS CONTAINED IN THE PARAGRAPH “2.1 GENERAL SAFETY WARNINGS” HAS BEEN FULLY UNDERSTOOD.

READING THIS CHAPTER IMPLIES THAT, FOR A SAFE USE OF THE MACHINE, WHAT IS CONTAINED IN PARAGRAPH “3 TRANSPORT AND HANDLING” HAS BEEN FULLY UNDERSTOOD.

⚠ DANGER

For transport needs, the safety guards may have been removed from the machine. Upon delivery of the machine the user will have to proceed with their proper fitting tightening properly the fastening elements (see “4.2.1 Fitting PTO guards”).

Never use the machine without any of the guards provided for and delivered.



ALWAYS WEAR GLOVES TO PROTECT YOUR HANDS



ALWAYS WEAR PROTECTIVE CLOTHING TO PROTECT YOUR BODY



ALWAYS WEAR SAFETY BOOTS

4.2 ASSEMBLING THE MACHINE

The machine may be delivered with the roller disassembled from the supports and hitched with iron clamps (1, “Fig. 9”) on the machine.

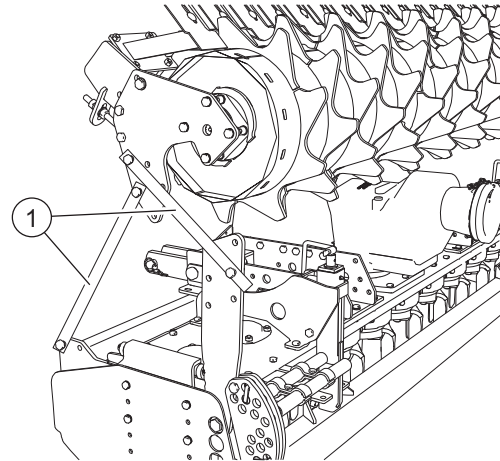


FIG. 9

To release the roller and prepare it to be fitted onto the machine proceed as follows:

- Secure the roller with the appropriate hoisting straps having a minimum capacity equal to the roller weight (for weights, see paragraph “3.2.2 Handling accessories”).
- Pull the hoisting straps.
- Loosen the screws fixing the clamps (1, “Fig. 9”) to the roller.
- Impede the rotation of the scraper holder bar (1).
- Place the roller on the ground with the support plates (2, “Fig. 10”) set in the assembly direction.

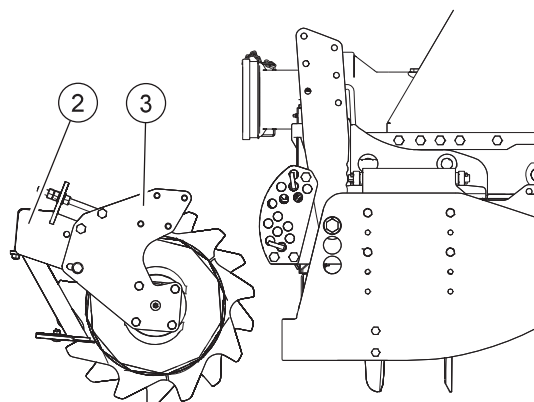


FIG. 10

- Loosen the bolts (6, “Fig. 11”). Remove the spacer (7). Remove the split pin and the upper pin (5). Lower the arm (4) until it rests onto the lower pin (5). Insert the upper pin (5) into the first free hole on the arm. Tighten pins with the split pin.

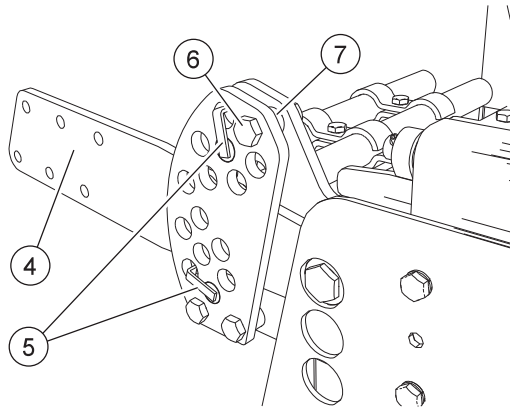


FIG. 11

- Fit the roller unit. Loosen the screws (8, “Fig. 12”) of the roller supports to the arm (4).

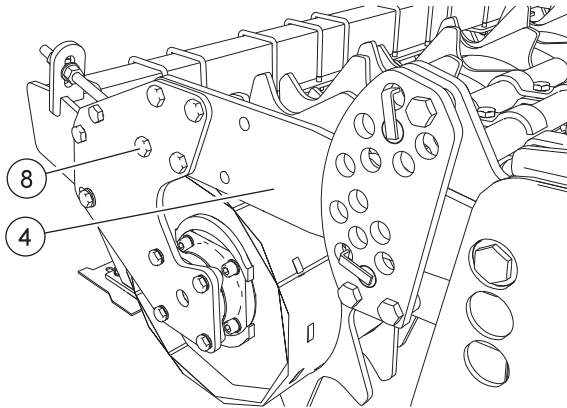


FIG. 12

4.2.1 FITTING PTO GUARDS

- Fitting rear PTO guards (OPT).
- Put the guard into place (1, “Fig. 13”). Loosen the screws (2). Fit the cap (3).

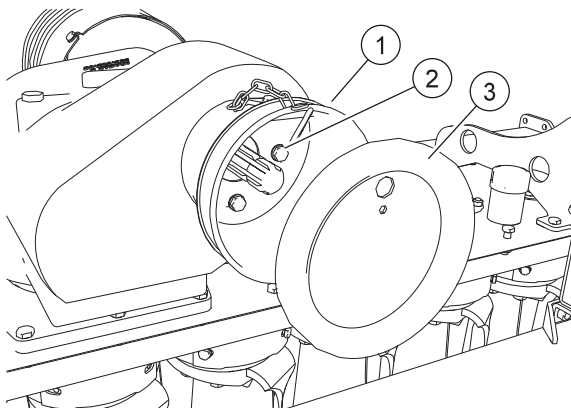


FIG. 13

- Fit the PTO guard tractor side.
- Put the guard into place (1, “Fig. 14”). Loosen the screws (2). Loosen the bolt (3).

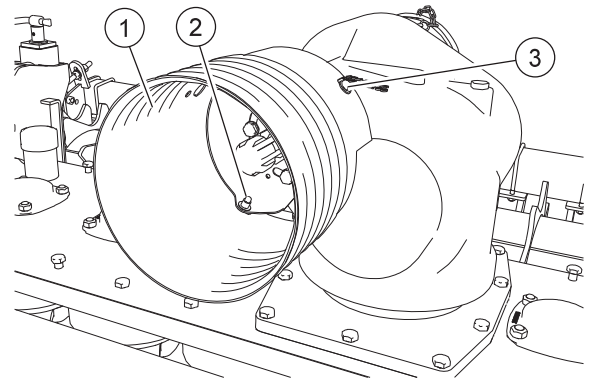


FIG. 14

4.2.2 FITTING OPTIONAL ROLLERS (OPT)

To fit optional rollers proceed as described in paragraph “4.2 Assembling the machine”.

4.2.3 FITTING HITCH FOR FRONTAL USE OF THE MACHINE

Weight: 353 lb

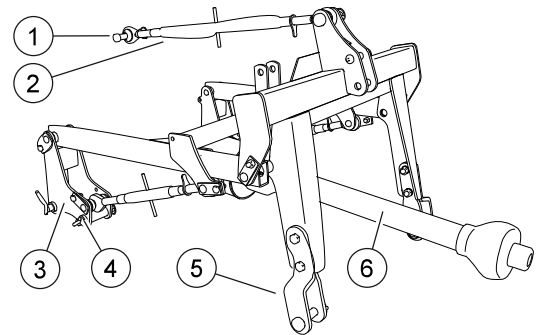


FIG. 15

- 1 Three point hitch pin
 - 2 Tie rod
 - 3 Lower support
 - 4 Pin
 - 5 Lower hitch for power-lift
 - 6 PTO shaft (OPT)
- Place the hitch onto the machine: insert the lower hitches (3, “Fig. 16”) onto the plates at the basis of the three point hitch frame.
 - Fasten the lower hitches with the pins (4).
 - Connect the tie rod (2) to the machine three-point hitch.
 - Fasten the tie-rod with the pin (1).

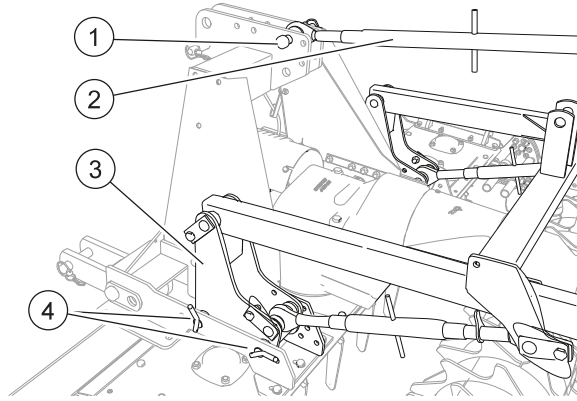


FIG. 16

4.2.4 FITTING TRACK ERADICATOR (OPT)

Fit the track eradicator support (1, "Fig. 17") onto the front bar. Insert track eradicator (2) between the plates (3). Adjust height from the ground. Tighten nuts (4).

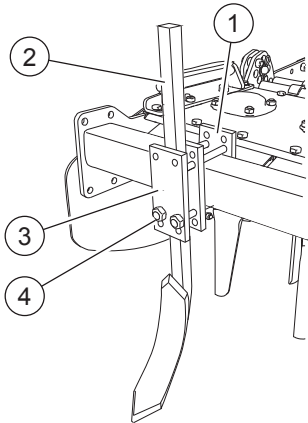


FIG. 17

5 OPERATING

5.1 SAFETY WARNINGS

i NOTE

READING THIS CHAPTER IMPLIES THAT, FOR A SAFE USE OF THE MACHINE, WHAT IS CONTAINED IN THE PARAGRAPH HAS BEEN FULLY UNDERSTOOD "2.1 GENERAL SAFETY WARNINGS".

! DANGER

Before operating the machine always check all the connections and check that there are no operators in the working area. Also make sure that the guards are correctly positioned.

Never touch blades and moving parts.

! CAUTION

Before beginning work, make sure that the machine is in order, that the lubricating oils are at the right level and that all parts subject to wear and deterioration are fully efficient.



ALWAYS WEAR GLOVES TO PROTECT YOUR HANDS



ALWAYS WEAR SAFETY BOOTS

5.2 RECOMMENDED USE

The machine **MEKFARMER100**, rotary harrow is solely designed for use in agriculture in order to prepare, work and break up the soil.

The machine has been designed for being used by a single operator. During work the operator must be driving the tractor. The machine can work on soils with small stones.

i NOTE

ANY OTHER USE OF THE MACHINE DIFFERING FROM THE EXPLANATIONS GIVEN IN THIS MANUAL RELIEVES FOR MANUFACTURER FROM ALL AND EVERY LIABILITY FOR DERIVING DAMAGE TO PERSONS, ANIMALS OR PROPERTY.

THE MANUFACTURER IS NOT LIABLE FOR DAMAGES RESULTING FOR THE USE OF THE MACHINE IN DIFFERENT WAYS FROM THE RECOMMENDED ONES.

ONLY USE THE MACHINE WITH ORIGINAL ACCESSORIES OR AUTHORISED BY THE MANUFACTURER.

5.3 PREDICTABLE IMPROPER USE

! CAUTION

It is absolutely forbidden to operate the tractor or have it operated, with the machine hitched, by persons who are not in possession of an adequate driving license, by inexperienced persons or by those whose psycho-physical conditions of health are not good

Never use parts of the machine as a ladder to climb up. Never use the control levers or flexible tubes as grips.

Never remove the safety guards when the machine is working, for no reason whatsoever.

Beware of breakage of the blades. Never operate on soils with large stones.

It is absolutely forbidden to transport things, persons or animals on the machine.

5.4 RESIDUAL RISKS AND DANGEROUS ZONES

! DANGER

Danger of being crushed. Zone between machine, trac-



tor and three-point hitch, during the phases of hitching, unhitching, use of the machine and machine stop with the tractor engine on.

Danger of being crushed. Zone between the machine and the ground surface when lowering the machine for work, parking and routine maintenance.

Danger of objects thrown. When operating some objects or stones could be thrown from the rear side of the machine. Keep the machine at a 50 yards distance from passers-by, roads, paths, inhabited areas etc...

Danger of tilting over. Never park or stop on sloping ground.

Danger of being burnt. As a secondary effect, lengthy use of the machine can cause the gearbox and of some parts of the hydraulic circuit to heat. Never touch these hot parts during or immediately after use.

Read carefully the instructions manual of the PTO shaft attached to the PTO shaft itself. If there is any doubt regarding its working, if it is without any guards and is worn or broken, replace it with a new PTO shaft marked «CE» having the same specifications.

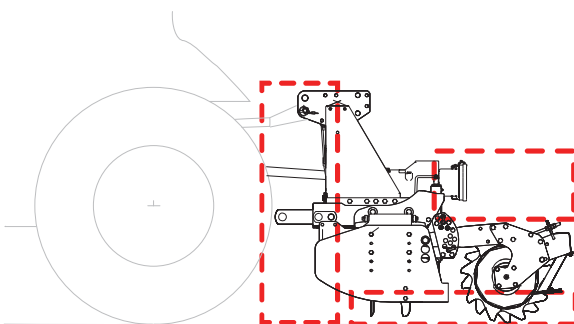


FIG. 18

5.5 DESCRIPTION OF THE SAFETY DEVICES

- Guards on the PTO shaft tractor side (1, "Fig. 19") and machine side (2) including the restraining chains.

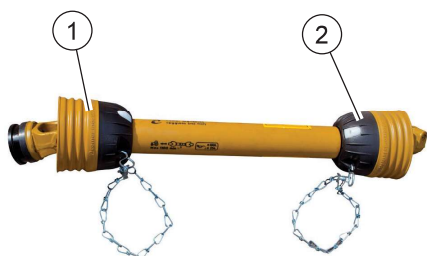


FIG. 19

- PTO guard tractor side (4, "Fig. 20"),
- Protective side shield (1, "Fig. 21").
- Protections against access to the blades area (2, "Fig. 21").

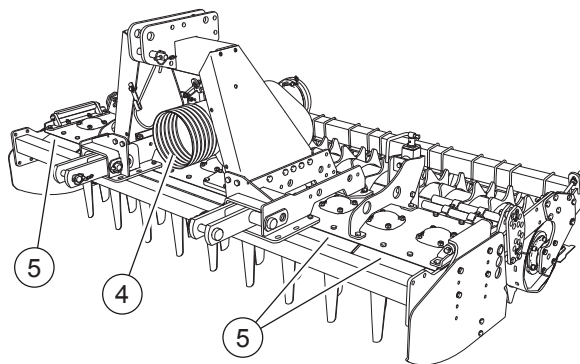


FIG. 20

- PTO guard, rear side (3, "Fig. 21").
- Protective plate for preventing access to the blades (5, "Fig. 20").

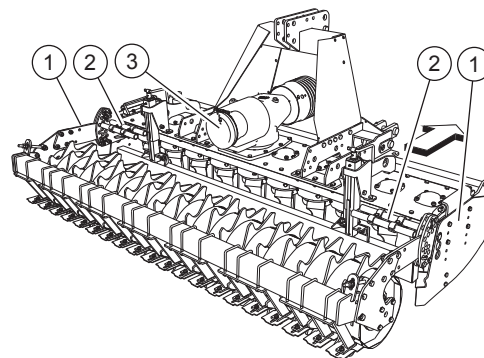


FIG. 21

5.6 OPERATING

5.6.1 HITCHING THE MACHINE TO THE TRACTOR

⚠ DANGER

Danger of being crushed. Keep hands and feet away from the blades and the machine.

⚠ CAUTION

The hitching and unhitching operations of the machine from the tractor must be carried out on stable and horizontal ground.

During the hitching and unhitching operations, never stand between the machine and the tractor.

⚠ CAUTION

Hitching a machine to a tractor means a different distribution of weights on the axis. Check the stability of the machine-tractor assembly. Observe the maximum indicated weight on the tractor axles.

Hitch the machine to a tractor with appropriate HP.



Before hitching or unhitching the machine from the three-point hitch, lock the control lever of the power-lift.

The class of the machine's coupling pins must correspond to that of the power lift hitch.

- Make sure that there are no objects, bystanders and/or animals in the immediate vicinity of the machine and that the PTO is disengaged.
- Back up the tractor towards the machine. Drive the tractor near to the implement with caution and adapt the height of the lift links to the height of the hitching pins.
- Turn off the tractor and put the parking brake on.
- Move the power-lift bars to the lower hitches ("Fig. 22"). Insert the attachment pins (1). Fasten the pins with the trigger pins (2) part of standard equipment.

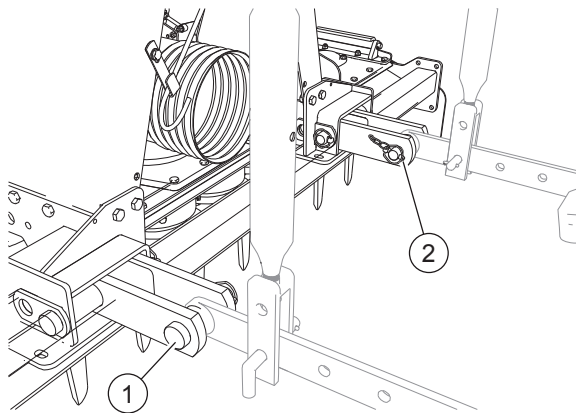


FIG. 22

- Move the tie-rod of the power-lift to the three-point hitch ("Fig. 23"). Set the tie rod so that the machine stays on the ground. Insert the attachment pin (1). Lock the pin with the trigger split pin (2), part of standard equipment.

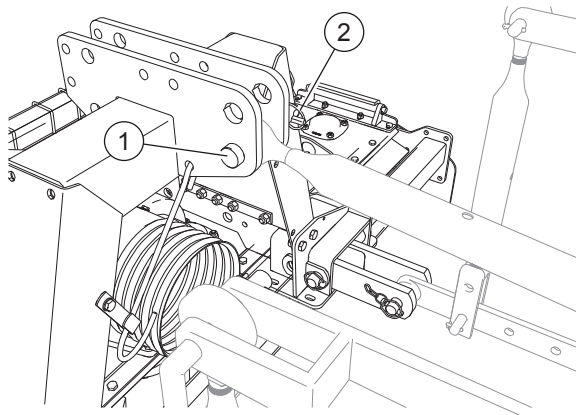


FIG. 23

- Lock the power lift bars with the relative chains and parallel idlers on the tractor. This must be done to prevent the machine from swinging sideways
- Start the tractor. Start lifting the machine from the ground. Turn off the tractor. Remove the keys from the dashboard.
- Set the arms of the tractor power-lift so that the machine is levelled.

The blades have to be at the same distance from the ground on both sides of the machine.

5.6.2 SETTING LOWER ATTACHMENTS POINTS

- Remove the split pin (1, "Fig. 24").
- Take out the pin (3).
- Take out and rotate at 180° the tractor hitch (2).
- Insert again the hitch into its seat.
- Insert the pin (3).
- Fasten the pin with the split pin (1).

The hitch can also be fitted into the hole (4).

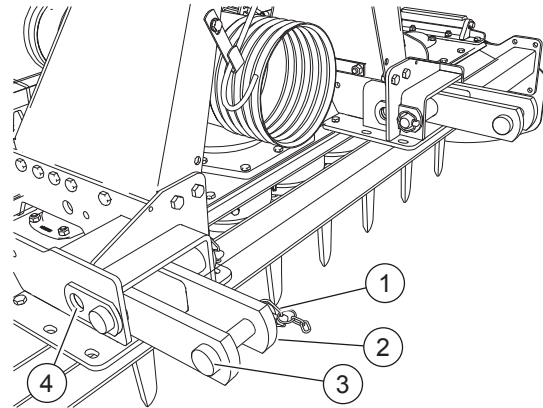


FIG. 24

5.6.3 INSTALLING THE PTO SHAFT



DANGER

Installing and uninstalling the PTO shaft must always be done when the tractor is off.



CAUTION

When hitched to the tractor, the machine can only be operated with the driveline complete with shields fixed by their chains. Keep well away from the spinning driveline.

Prevent the shields from turning by means of the relative chains and always read the operation and maintenance manual supplied with the driveline

Only used a PTO shaft marked «CE», equipped with guards and locking chains.

- Fit the driveline into the machine's power take-off and make sure that it is perfectly locked in the correct position.
- Fit the driveline into the tractor's power take-off and make sure that it is perfectly locked in the correct position. Make sure that the shield is free to turn.
- Fasten the shield with the relative chain. Remove the support from the driveline (4 Fig. 1) and fix it on the relative hook.
- Lift and lower the machine to check if the length of the PTO shaft is correct.



i NOTE

IF THE PTO SHAFT IS TOO LONG YOU CAN SHORTEN IT FOLLOWING THE INSTRUCTIONS GIVEN IN THE INSTRUCTION MANUAL OF THE PTO SHAFT.

IF YOU LOSE THE PTO SHAFT INSTRUCTION MANUAL, CONTACT THE PTO SHAFT MANUFACTURER OR BREVIGLIERI AFTER-SALES SERVICE.

5.6.4 HYDRAULIC CONNECTION (OPT)

There is a hydraulic connection on models with hydraulic setting of the roller position.

- Maximum pressure: 2610 psi
- Tube diameter: 1/4"

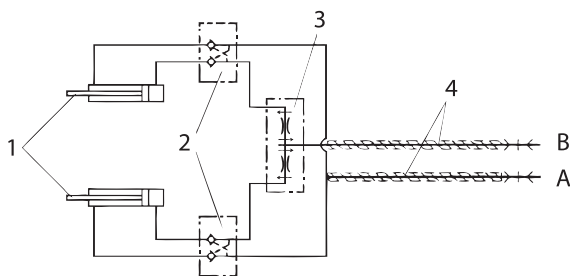


FIG. 25

- A Rear roller lowering.
- B Rear roller lifting.

The two cylinders (1, "Fig. 25"), have an automatic release valve (2"Fig. 25").

- 1 Roller control cylinders.
- 2 3/8" gas locking valve.
- 3 Flow divider valve.
- 4 Sheath to protect the hydraulic pipes.

! CAUTION

Check proper tightening of fittings and hydraulic tubes.

5.6.5 INSTALLING HYDRAULIC SEEDER LINKAGE (OPT)

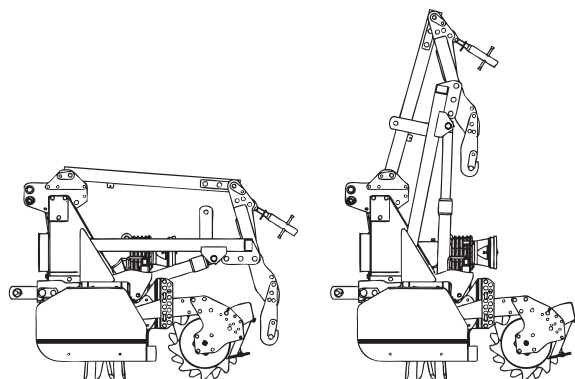


FIG. 26

- Once the frame is fitted on the machine, make sure that to lift the seeder with the seeds, the overall weight of the combine does not exceed the one indicated in the instruction and maintenance manual of the tractor.

- Make sure that the coupling, and the working of the seeder when lifted, is correct and that there is no inference with the hydraulic tubes.
- Make sure that the mechanical parts of the seeder do not interfere with the machine roller or with the machine itself.
- When transporting the machine on public roads, make sure that no blunt object sticks out from the contour of the machine.
- Make sure that the visual signals at the rear of the combine machine can be seen properly or otherwise proceed as required by the Highway code of the country where the machine is being used.

! CAUTION

During transport on public roads the seeder hopper must always be emptied of any product.

5.6.6 SEED DRILL HYDRAULIC CONNECTION (OPT)

After installing the linkage to the machine, to check proper operating of the lift, connect the linkage hydraulic tube to the tractor PTO and put pressure so as to allow the activation of the structure on the machine. Carry out this operation load-less two or three times making sure that everything works properly and that there is no mechanical or hydraulic hindrances. Before carrying out these operations, make sure there is no-one near the machine. The descent of the seeder linkage is spontaneous when there is no pressure in the system as the cylinder is at single effect. It is equipped with a check valve in case of a sudden breakage of the tubes.

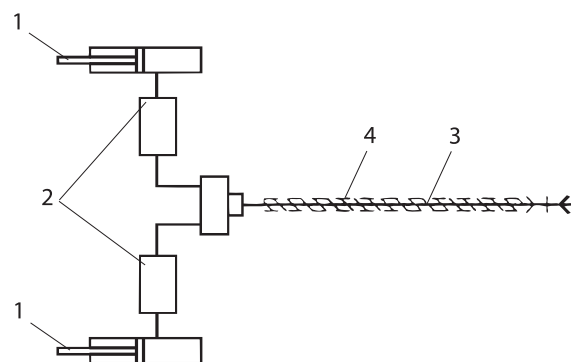


FIG. 27

- 1 Seeder linkage control cylinder.
- 2 Check valve.
- 3 Hydraulic tubes from 3/8" gas.
- 4 Gaiter.

5.6.7 CIRCULATE ON THE PUBLIC ROADS

i NOTE

COMPLY WITH THE HIGHWAY CODE REGULATIONS IN FORCE IN YOUR COUNTRY WHEN TRAVELLING ON PUBLIC ROADS.

CONSULT "2.7 OVERALL DIMENSIONS" FOR THE WEIGHT AND



DIMENSIONS. THIS WILL ALLOW YOU TO MAKE SURE THAT THE MACHINE CAN PASS THROUGH TUNNELS OR LOW CONSTRUCTIONS WITHOUT DIFFICULTY.

CAUTION

When required by road regulations, on-road transport must be carried out with reflex reflectors, flashing lights, slow vehicle and protruding load signals. Put these signals on the rear side of machine in a well visible manner. When transporting at night or with poor visibility install warning and side marker lights.

It is absolutely forbidden to transport persons or animals on the machine.

When driving round bends with and without the machine, take care of the centrifugal force exercised when the center of gravity is in a different position.

Set the control lever of the tractor's hydraulic lifting control in the locked position when driving on the roads with the machine raised.

When transporting the machine disengage PTO and disconnect the PTO shaft from the tractor.

The machine must be raised at least 16 inches from the ground for road transport.

Ensure that the tractor-machine assembly is stable.

The following expressions must be observed to ensure that the tractor-machine assembly is stable:

$$M \times s \leq 0,2T \times i + Z \times (d+i)$$

$$M \leq 0,3T \text{ (prudential value)}$$

$$Z \geq \{[(M \times s) - (0,2T \times i)] / (d + i)\} \text{ (for calculating the ballast)}$$

where:

- i = tractor's wheelbase
- d = horizontal distance between the center of gravity of the front ballast and the tractor's front axle
- s = horizontal distance between the center of gravity of the machine and the tractor's rear axle
- T = weight of the tractor in running order
- Z = ballast weight
- M = weight of the machine

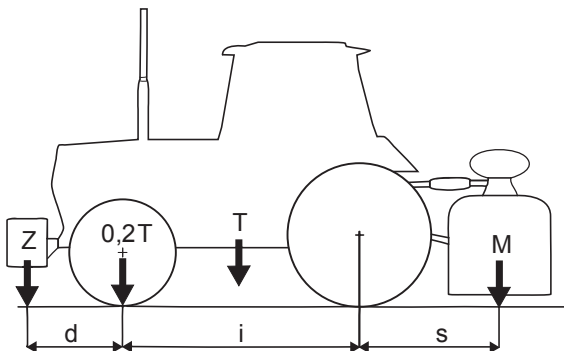


FIG. 28

5.6.8 SETTING WORKING DEPTH

DANGER

Park the machine on a horizontal and stable surface. Disconnect PTO. Turn off the tractor. Put the parking brake on.

NOTE

CHANGING THE POSITION OF THE REAR ROLLER IMPLIES A NEW ADJUSTEMENT OF THE LEVELLING BAR.

The adjustment of the machine working depth depends on the position of the rear roller.

Setting with side pins

This solution ("Fig. 29"), not only permits depth adjustment, but also having a floating rear roller (ideal when there are stones). When the roller is lowered, working depth decreases.

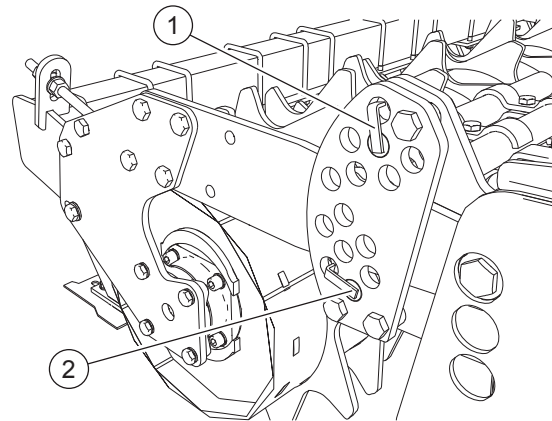


FIG. 29

The machine is on the ground. The roller arm is between the pins (1) and (2).

To lower the roller and reduce the working depth:

- Remove the pin (2).
- Activate the machine power-lift and lift the machine.
- Move pin (2) into the lowest hole.
- Move pin (1) into the lowest hole.

To lift the roller and increase the working depth:

- Remove the pin (1).
- Activate the tractor power-lift and lower the machine. The roller holder arm goes up.
- Move pin (1) into the highest hole.
- Move pin (2) into the highest hole: the roller must not swing too much when operating.
- Lock the pins: insert the retainer into the nearest hole.

Setting with screw jacks (OPT)

This solution ("Fig. 30") requires two screw jacks at the ends of the machine and adjustable by means of a graduated rod. When the roller is raised, working depth increases. When the roller is lowered, working depth decreases.

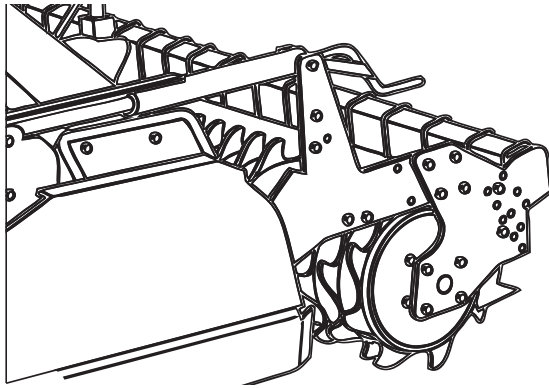


FIG. 30

Setting with hydraulic cylinders (OPT)

This solution ("Fig. 31") for adjusting work depth with hydraulic control cylinders can be implemented from the driving seat, by means of the hydraulic mechanism which controls the two hydraulic cylinders that regulate the rear rollers (8 Fig. 1) thus determining the work depth. Both hydraulic cylinders feature stop valves. When the roller is raised, working depth increases. When the roller is lowered, working depth decreases.

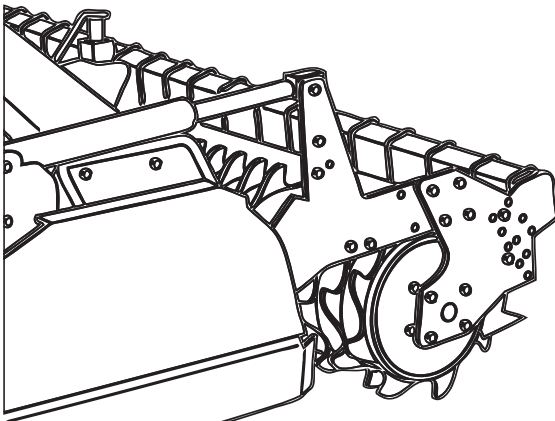


FIG. 31

5.6.9 SETTING THE SCRAPERS



CAUTION

Danger of being crushed. Do not put your finger between the scraper and the roller.

Scrapers allow to free the roller from clods.

The first setting is carried out on the roller scraper bar:

- Loosen nut (2, "Fig. 32").
- Loosen nuts (1) until the scraper is at the desired distance from the roller.
- Tighten all the nuts.

The second setting is carried out on the scraper:

- Loosen nut(4).
- Bring the scraper(3) close to the roller.
- Tighten nut (4).

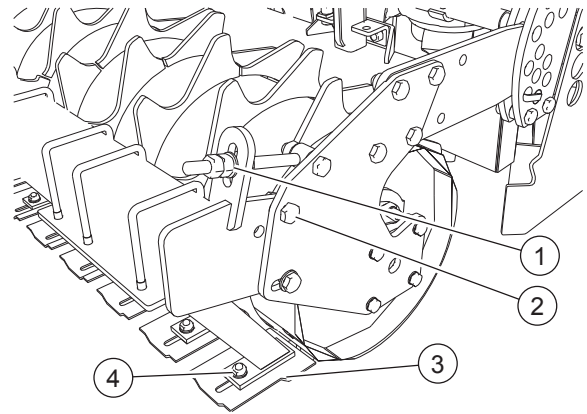


FIG. 32

5.6.10 STARTING WORK



DANGER

Before starting the machine, make sure that the safety devices are in perfect condition.

Never start the machine if there is a suspected mechanical failure. Contact the technical assistance centre.

Before starting work, get familiar with the control devices and their functions.

Check the working area so as to be confident with the soil and check for any possible excessive slopes. Make sure that there are no objects in the area that could be picked up and thrown at a distance. Clear the area of these objects. Check constantly that there are no people, children or pets in the working range of the machine.

Check the rpm rate before engaging the power take-off. Do not switch the 540 rpm rate with the 1000 rpm one.

It is absolutely forbidden to linger within the range of action of the machine when this is operating.

It is absolutely forbidden to get between the tractor and machine while the engine is running and the driveline engaged.

Never engage PTO when the tractor engine is off. Danger of sudden movements when restarting the tractor.

The operator must never leave the driver's seat when the tractor engine is on and/or the machine is running.

Disengage PTO when the machine is not used.

Lower the machine to bring the blades close to the ground, without touching it. Engage PTO. Lower the machine gradually and bring it into working position. The tractor power-lift must be completely lowered.

Begin work with the PTO at full rate. Gradually dig the implement into the ground. Do not depress the accelerator pedal too much with the PTO engaged. To break up the soil to the required degree, you must consider several factors, i.e.:

- the nature of the soil (medium consistency, sandy, clayey, etc.)



- the work depth
- the ground speed of the tractor
- optimum machine adjustment

Soil crumbling is obtained at a low tractor ground speed, with the rear bar lowered and the blades spinning at 300 rpm. Besides holding back the clods already broken up by the blades, the rear bar also obtains a well levelled and uniform surface after the soil has been worked. Adjust the roller (8 Fig. 1) to suit the degree to which the soil must be crumbled, engage the PTO and begin to move forward with the tractor, progressively lowering the implement. Cover a short distance, then check to make sure that the work depth, soil crumbling and ground levelling operations have been carried out in the required way.

CAUTION

The speed of the tractor when the machine is operation must not exceed 3-4 mph or components could be broken or damaged.

Always disengage PTO when lifting the machine to prevent the PTO shaft working at a too big angle (see PTO shaft instruction manual).

Lift the machine from the ground when working in curve or in reverse.

5.6.11 SETTING THE POSITION OF THE REAR BAR

DANGER

Park the machine on a horizontal and stable surface. Disengage PTO. Turn the tractor off. Put the parking brake on.

CAUTION

Danger of breakage. Never lower the rear bar more than the length of the blades. The rear bar must never touch the ground.

To level and crumble the soil to a greater degree, the harrow has a levelling bar (1, "Fig. 33") positioned behind the tines. It can be adjusted in height by means of crank screws (2, "Fig. 33"). Make the adjustments by keeping the bar at the same distance from the soil as far as possible. Avoid using the bar at depth as it could be damaged. It is recommended to start working with the levelling bar in a high position. Set gradually the position of the bar by rotating the crank(3) until the desired position is reached.

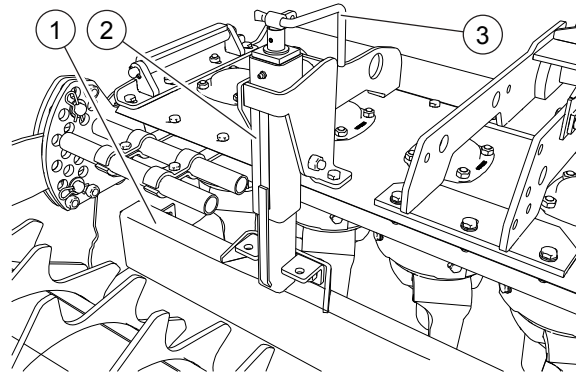


FIG. 33

5.6.12 SETTING THE SIDE SHIELD

DANGER

Danger of being caught up, being cut or having objects thrown. The side shield must cover completely the part of the blade which comes out of the ground.

After setting the position of the roller, set the height of the side shields from the ground.

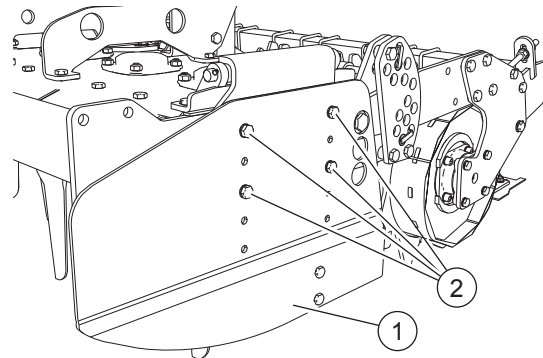


FIG. 34

Loosen screws (2, "Fig. 34"). Raise and lower the side shield (1). Tighten screws (2).

► **OPT** The side shield with connecting rods does not need any setting.

5.6.13 STOPPING

At the end of work the operator must:

- Park the machine on a horizontal and stable surface.
- Disengage the tractor PTO.
- Lower the machine to the ground.
- Stop the tractor and engage the parking brake.
- Make sure that all parts of the machine have come to a standstill.

Only after the above mentioned operations have been carried out may the operator leave the tractor unattended.

5.6.14 PROCEDURES IN CASE OF ACCIDENTS OR MECHANICAL FAILURES

In case of accident you must always:

- Turn the tractor off. Put the parking brake on.



- Move the injured person away and check their conditions. According to the seriousness of the accident call the casualty department.
- If the person has caught up their clothes in parts of the machine cut the clothes to free them.
- Inform the competent authorities.

In case of shutdown of the machine or following any malfunction or breakdown, always do as follows:

- Turn the tractor off. Put the parking brake on.
- Identify the cause of the shutdown or the malfunction. According to their assigned tasks the operator can carry out simple operations of removing caught up material. For disassembling the machine contact the Technical assistance centre.
- After returning to the normal efficiency conditions you can restart.

In case of smoke coming out or obvious signs of fire in any point of the machine proceed as follows:

- Turn the tractor off. Put the parking brake on.
- Put out the fire using only CO₂ extinguishers.
- To reactivate the machine contact the Technical assistance centre.

5.6.15 UNHITCHING THE MACHINE FROM THE TRACTOR

DANGER

Park the machine on a horizontal and stable surface. Disengage PTO. Turn off the tractor. Take the key out of the dashboard.

CAUTION

Danger of being hit and crushed. Before disconnecting the machine from the tractor power-lift check that the machine is stable on the ground.

- Check that there are no foreign bodies in the parking area of the machine.
 - Move to the parking area of the machine.
 - Turn off the tractor.
 - Lower completely the machine to the ground.
 - Turn off the tractor engine and apply the parking brake.
- **OPT** With the tractor stopped, its engine off and the components at a complete standstill, operate the levers of the hydraulic circuit so as to relieve the pressure from inside the pipes. This will allow you to re-connect the quick couplings with greater ease.
- **OPT** Disconnect the quick couplings
- Pull out the PTO shaft from the tractor PTO and place it on its support.
 - Disconnect the top link rod.
 - Disconnect the power lift links.
 - Switch on the tractor engine and move away.

NOTE

ONCE UNHITCHED FROM THE TRACTOR, THE MACHINE MUST BE KEPT IN A DRY PLACE, SHELTERED FROM ADVERSE WEATHER CONDITIONS.

PREVENT ANIMALS, CHILDREN OR UNAUTHORIZED PEOPLE FROM FREE ACCESS TO THE MACHINE.

5.6.16 PREPARING FOR STORAGE

At the end of the working season or if the machine is to remain idle for a long period of time, proceed as follows:

- Wash the machine and most of all wash off fertilizers and chemical products and dry it.
- Carefully check the machine and replace any damaged or worn parts if necessary.
- Fully tighten all the screws and bolts, and particularly the ones fixing the blades.
- Thoroughly grease the machine and then cover it with a tarpaulin and store it in a dry place.

NOTE

IF THESE OPERATIONS ARE CARRIED OUT WITH CARE, IT WILL BE ALL TO THE USER'S ADVANTAGE AS THE EQUIPMENT WILL BE IN OPTIMUM CONDITIONS WHEN NEEDED AGAIN

6 MAINTENANCE

6.1 SAFETY WARNINGS

NOTE

READING THIS CHAPTER IMPLIES THAT, FOR A SAFE USE OF THE MACHINE, WHAT IS CONTAINED IN THE PARAGRAPH HAS BEEN FULLY UNDERSTOOD "2.1 GENERAL SAFETY WARNINGS".

LOWER RUNNING COSTS AND A LONGER MACHINE LIFE DEPEND ON CONSTANT OBSERVANCE OF THESE INSTRUCTIONS.

SERVICING FREQUENCIES INDICATED IN THIS MANUAL ARE INDICATIVE AND REFER TO NORMAL WORKING CONDITIONS. ANYHOW THEY MAY VARY ACCORDING TO THE TYPE OF USE, WHETHER THE ENVIRONNEMENT IS DUSTY OR NOT, SEASONAL FACTORS ETC. SERVICING OPERATIONS MUST OBVIOUSLY BE CARRIED OUT MORE FREQUENTLY IN HEAVIER DUTY CONDITIONS. AS TIME PASSES IT IS NECESSARY TO INCREASE THE FREQUENCY OF THE ROUTINE MAINTENANCE OPERATIONS.

DANGER

Observe the safety instructions, the intervals and the procedures indicated in the routine maintenance.

Proceed with maintenance and cleaning operations always after putting the machine in a safety position (see "6.2 Machine in safety position").

Leave at least a one meter space around the machine when performing maintenance operations.



Before starting the machine, after repairs, for testing, check that no-one stands or passes in the working zone of the blades. Always clamp the raised component to prevent it from falling.

Never work alone under the machine or when carrying out repair or maintenance operations.

It is not proper that, in case of breakdown or malfunction, operators not properly trained and qualified, try to find out the causes of the malfunction or the failure.

**CAUTION**

Never carry out welding, grinding and drilling operations without prior authorization and instructions from the Manufacturer.



ALWAYS WEAR GLOVES TO PROTECT YOUR HANDS



ALWAYS WEAR PROTECTIVE CLOTHING TO PROTECT YOUR BODY



ALWAYS WEAR SAFETY BOOTS

6.2 MACHINE IN SAFETY POSITION**DANGER**

Park the machine on a horizontal and stable surface.

Disengage PTO. Turn the tractor off. Put the parking brake on. Remove the keys from the dashboard.

Remove the PTO shaft from the tractor PTO. Place the PTO shaft on its support.

Unhitch the machine from the tractor power-lift unit.

6.3 SCHEDULED MAINTENANCE

The hours refer to the working of the machine. The days and years refer to the solar cycle.

6.3.1 AFTER THE FIRST 8 HOURS SERVICE

Maintenance operations	Qualifications	State of the machine	n° of oper.
Overall check of the machine	Operator	Machine in a safety position	1
Check tightening of all nuts and bolts	Operator	Machine in a safety position	1

6.3.2 EVERY 8 HOURS/1 DAY SERVICE

Maintenance operations	Qualifications	State of the machine	n° of oper.
Check efficiency and wear and tear of the guards	Operator	Machine in a safety position	1
Check fastening of all guards	Operator	Machine in a safety position	1
Check/reset the existence and connections of pins, split pins and retainers	Operator	Machine in a safety position	1
Check lubricant leaks	Operator	Machine in a safety position	1
Greasing	Operator	Machine in a safety position	1

6.3.3 EVERY 20 HOURS SERVICE

Maintenance operations	Qualifications	State of the machine	n° of oper.
Check that the blade screws are fully tightened	Operator	Machine in a safety position	1
Check wear of the blades	Operator	Machine in a safety position	1
Greasing of the PTO shaft	Operator	Machine in a safety position	1

6.3.4 AFTER 100 HOURS SERVICE

Maintenance operations	Qualifications	State of the machine	n° of oper.
Check/change oil in the flat pan	Operator	Machine in a safety position	1
Check/change oil in the gearbox	Operator	Machine in a safety position	1

6.3.5 EVERY 500 HOURS/1 YEAR SERVICE

Maintenance operations	Qualifications	State of the machine	n° of oper.
Change oil in the gearbox	Operator	Machine in a safety position	1



6.3.6 PTO SHAFT MAINTENANCE

CAUTION

As per the PTO shaft maintenance, follow scrupulously the instructions given in the instruction manual of the PTO shaft.

6.3.7 CHECKING GUARDS



Operator

CAUTION

Any changes in colour or any signs of cracks or fissures indicate that the guard has lost its original features and immediately replace it with an original spare part.

- Check for the presence or the wear and tear of the PTO guards.
- Check the wear and tear of the PTO shaft guards.
- Check for the restraining chains.

6.3.8 REPLACING BLADE



Operator

DANGER

Before carrying out maintenance regarding cutting blades put the machine in a safety position (see “6.2 Machine in safety position”).

When servicing or replacing blades with the lifted machine, put stands under the machine. Prevent risk of being crushed if the machine falls.

The blades fitted on the implement are suitable for soil of a normal consistency. If the blades should accidentally bend (or break) during work, they must be immediately replaced. Make sure that the new blades are mounted in exactly the same positions as the old ones. If several blades must be replaced, it is advisable to demount and remount them one at a time in order to avoid positioning errors. The sharp side of the blades must point towards the direction in which the blade rotor turns.

To replace blades, put the machine in a safety position (see “6.2 Machine in safety position”):

- Unhitch the machine from the tractor (see “5.6.15 Unhitching the machine from the tractor”).
- Lift the machine (see “3.2 Handling”).
- Put two bearing stands at the sides of the machine (for machine weight, see “3.2 Handling”). Place the machine on the stands. Do not remove the lifting hook.
- Place yourself under the machine.
- Remove the collar clamp.
- Loosen the two bolts (2, “Fig. 35”).
- Remove the block (1).

- Remove the blade (3) sideways.
- Replace the worn blade with a new one.

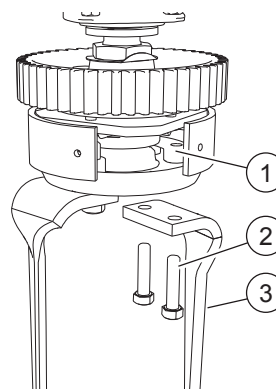


FIG. 35

To fit back the blade do the same procedure in reverse order.

NOTE

THE BLADES ARE RIGHT AND LEFT. CHECK THE DIRECTION OF ROTATION OF THE ROTOR AND FIT THE BLADES PROPERLY.

TO REMOVE THE OTHER BLADE BRING IT TO THE OPENING WHERE THE COLLAR CLAMP IS TIGHTENED. INSERT A LEVER BETWEEN THE TWO BLADES. ROTATE FORCEFULLY UNTIL YOU BRING THE BLOCK OF THE OTHER BLADE IN FRONT OF THE OPENING, ON THE ROTOR.

CAUTION

Danger of falling. When rotating the rotor with a lever, the blades could hit the stands. Leave the machine hitched to the lifting hook. Proceed carefully and plan all the working phases.

CAUTION

The bolts that holding the tools must have their heads on the side of the tool, and the nut on the side of the support. Comply the driving torque value.

Bolt driving torque (Nm)

Classe	6.6	8.8	10.9	12.9
M8x1	15	26	36	44
M10x1,25	30	52	74	88
M12x1,25	51	91	127	153
M14x1,5	81	143	201	241
M16x1,5	120	214	301	361
M18x1,5	173	308	433	520
M20x1,5	242	431	606	727
M22x1,5	321	571	803	964
M24x2	411	731	1028	1234



6.3.9 REPLACING HYDRAULIC SYSTEM TUBES (OPT)

	Operator
--	----------

CAUTION

Before removing a pipe fitting, a hydraulic pipe or a part of the hydraulic system, release the pressure in the circuit.

Injury risk. Do not use your hands for searching hydraulic leaks. Use a piece of cardboard or a piece of wood.

ALWAYS WEAR GOGGLES TO PROTECT YOUR EYESIGHT

ALWAYS WEAR GLOVES TO PROTECT YOUR HANDS

6.3.10 CHANGING THE ROTATING SPEED OF THE BLADES

	Operator
--	----------

DANGER

Park the machine on a horizontal and stable surface. Disengage PTO. Turn off the tractor. Put the parking brake one. Remove keys from the dashboard.

CAUTION

Danger of hot surfaces. The gearbox can reach very high temperatures. Wait for the parts and the oil in the gearbox to cool down.

Dispose of used oil in compliance with the directives of anti-pollution laws.

NOTE

TAKE CARE NOT TO MISTAKE GEARS AS YOU CANNOT FIT GEARS WITH TORQUES DIFFERENT FROM THE ONES INDICATED IN THE TABLE.

The tine rotors can spin at various speeds, depending on the gear pairs mounted in the gearbox. It also allows the soil to be broken up to various degrees depending on its nature, the amount of moisture it contains, the ground speed, etc.

Only use the pairs indicated in the table:

GEARBOXES - PTO 540 RPM

A (PTO)	18	17	19	16
B	17	18	16	19
Speed (RPM)	310	276	347	246

GEARBOXES - PTO 1000 RPM

A (PTO)	13	14
B	22	21
Speed (RPM)	320	361

The faster the rotors spin, the more the soil is crumbled, but tractor power draw and blade wear will also be greater. You are advised to use the lowest rotation speed able to work the soil in the required way.

To change speed of the blades do as follows:

- Remove the guard of the rear PTO.
- Loosen screws (2, "Fig. 36"). Remove the cap (4).
- Take out the gears from the shafts.
- Exchange the two gears or insert another couple of gears.
- Fit back the cap (4). Tighten bolts and nuts.
- Fit back the PTO guard.

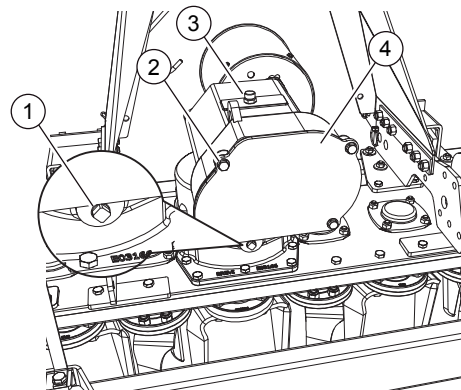


FIG. 36

6.3.11 CHECK/CHANGE OIL IN THE GEARBOX

	Operator
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To check the oil level in the gearbox loosen the filler cap with dipstick (3, "Fig. 36"). Check the level with the dipstick. If necessary fill with oil up to the right level.

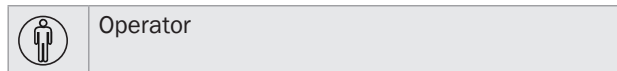
To change oil:

- Place a basin under the oil drain plug (1).
- Loosen the oil drain plug.
- Loosen the level indicator cap (3). Drain all the oil contained in the gearbox.
- Tighten the oil drain plug (1).
- Fill the gearbox with oil.
- Loosen the level indicator cap (1).
- Loosen the filler cap (3).
- Fill with oil up to level.
- Tighten the level indicator cap (3).

For the type of oil to use see paragraph "6.4.2 Recommended lubricants".



6.3.12 CHECK/CHANGE OIL IN THE FLAT PAN



Loosen the oil filler cap on the trough (1, “Fig. 37”).
The proper level is 1cm under the upper surface of the rotor gear.

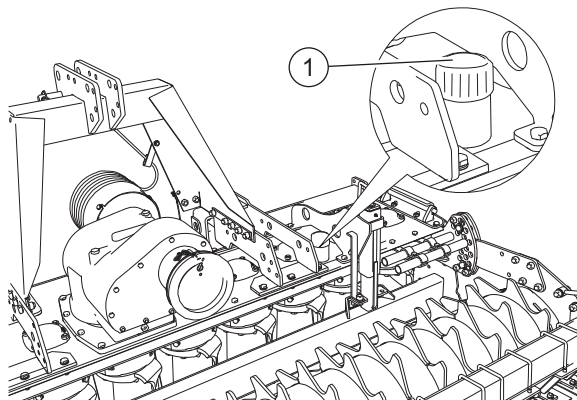


FIG. 37

To replace oil in the trough remove the side shield on the left or the right side.

- Loosen the bolts (2, “Fig. 38”).
- Loosen the nuts (1).
- Remove unit with the side shield.

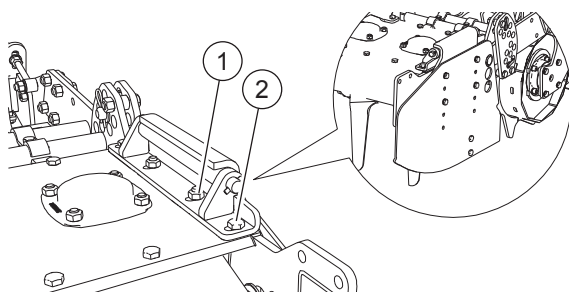


FIG. 38

- Place a basin under the oil drain plug (3, “Fig. 39”).
- Loosen the oil drain plug.
- Loosen the oil filler cap (“Fig. 37”).
- Drain all the oil contained in the flat pan.
- Tighten the oil drain plug (3).
- Pour oil up to level.

For the type of oil to use see paragraph “6.4.2 Recommended lubricants”.

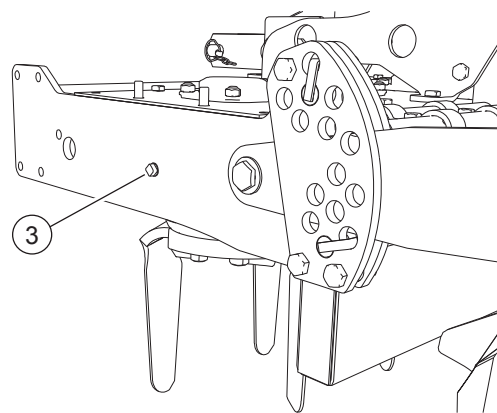


FIG. 39

6.4 LUBRICATION

DANGER

Proceed with maintenance and cleaning operations only after putting the machine in a safety position (see “6.2 Machine in safety position”).

Keep lubricants out of children reach.

CAUTION

Lubricate and grease all the required points.

Read carefully warnings and caution on the lubricant containers.

Wash hands thoroughly after use.

Dispose of used oil in compliance with the directives of anti-pollution laws.

NOTE

ALWAYS USE THE SAME TYPE OF RECOMMENDED OIL WHEN TOPPING UP OR CHANGING.

6.4.1 LUBRICATION POINTS

The servicing frequencies indicated in this manual refer to normal conditions of use in normal environment. If the machine is used in more severe environmental conditions servicing operations will have to be carried out more frequently. Before injecting lubricating grease into the lubricator, carefully clean the grease nipples to prevent mud, dust or foreign bodies from mixing with the grease thus reducing or even annull the lubricating effect.



LUBRICATING POINTS OF THE MACHINE ARE INDICATED ON THE SPECIFIC DECAL.

- Grease gun on screw jack (1, “Fig. 40”).
- Roller support grease gun (2).

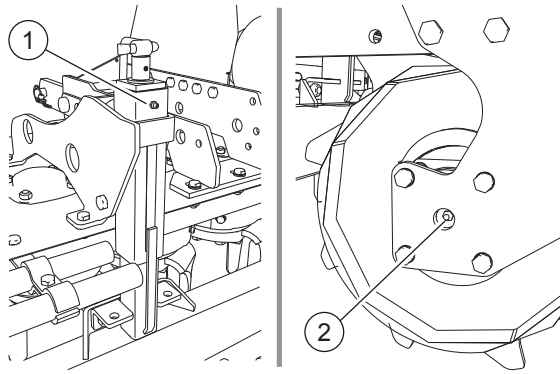


FIG. 40

i NOTE

INJECTING A LARGE QUANTITY OF OIL INTO THE GREASING POINTS AT HIGH PRESSURE CAN DAMAGE THE BEARING PROTECTIONS.

6.4.2 RECOMMENDED LUBRICANTS

Group	Type	Litres	U.S. gal.
Flat pan Version 180	Oil COLUMBIA V.V. GEAR EP460	13	3.43
Flat pan Version 200	Oil COLUMBIA V.V. GEAR EP460	15	3.96
Flat pan Version 230	Oil COLUMBIA V.V. GEAR EP460	17	4.49
Flat pan Version 250	Oil COLUMBIA V.V. GEAR EP460	19	5.02
Flat pan Version 300	Oil COLUMBIA V.V. GEAR EP460	21	5.55
Gearbox	Oil SAE 85W/140, specifich API- GL5/MIL-L-2105C	5,4 (2,4 v.230)	1.43 (0.63 v.230)
Gearbox single speed	Oil SAE 85W/140, specifich API- GL5/MIL-L-2105C	1,1	0.29
All greasing points	Lithium grease	/	/

6.5 CLEANING

	Operator
--	----------

! DANGER

In case of material clogging between blades, never try to clean the machine when running. First put the machine in a safety position (see “6.2 Machine in safety position”). Wait until all the parts of the machine are completely still and perform cleaning carefully.

! CAUTION

The decals on the machine must always be visible. Keep decals clean. Replace decals if they are worn. Ask the Manufacturer for spare parts (see “8.1 List of spare parts critical for safety”).

Using pressure washers or air guns can detach decals.

! ALWAYS WEAR GOGGLES TO PROTECT YOUR EYESIGHT

Clean off the machine of fertilizers and chemicals and dry it. Only use commercial inflammable and non toxic solvents.

6.6 TROUBLESHOOTING

Problem	Solution
Depth too shallow	<ul style="list-style-type: none"> • Check the depth adjustment. • Move forward more slowly. There may be insufficient tractor power. Raise the rear roller. • Further runs will be required if the soil is too hard. • The blades slide over the ground instead of digging into the soil: advance more slowly.
Soil crumbled too finely	<ul style="list-style-type: none"> • Lower the speed of the blade rotors. • Increase the tractor ground speed.
Soil insufficiently worked	<ul style="list-style-type: none"> • Increase the speed of the blade rotors. • Reduce the ground speed. • Do not work if the soil is too wet. • If the levelling bar is installed, try lifting or lowering it.
Clogged rotors	<ul style="list-style-type: none"> • Soil too wet to work. • Raise the levelling bar. • Reduce the ground speed. • Do not work where the grass is too tall
The machine jolts over the ground or vibrates	<ul style="list-style-type: none"> • Foreign bodies locked between the blades. • Blades incorrectly mounted in the wrong positions. • Worn or broken blades. • Blades bent during work after hitting stones or having worked excessively hard soil.



Problem	Solution
The machine vibrates too much	<ul style="list-style-type: none"> • Reduce the ground speed of the tractor. • Adjust the machine in the correct way, as described in the instructions. • Clean the rotors. They could be clogged. • Check whether any blades are broken. Replace them if this is the case.
The rotors turn in an uneven way	<ul style="list-style-type: none"> • Make sure that the driveline clutch is regulated correctly. • Excessively elastic clutch springs. Replace the springs.
The gearboxes overheat	<ul style="list-style-type: none"> • Check the oil level and top up if necessary.
The driveline clutch overheats	<ul style="list-style-type: none"> • Check the clutch plates for wear. Have them replaced by an authorized workshop if necessary. • Excessively elastic clutch springs. Replace the springs.

7 DISMANTLING AND DISPOSAL

i NOTE

OBSERVE LAWS IN FORCE IN THE COUNTRY WHERE THE MACHINE IS BEING USED WITH REGARD TO THE USE AND THE DISPOSAL OF PRODUCTS USED FOR CLEANING AND SERVICING THE MACHINE, AS WELL AS OBSERVE THE INDICATIONS GIVEN BY THE PRODUCER OF THESE PRODUCTS.

IN CASO DI DISMANTLING OF THE MACHINE, OBSERVE THE ANTI-POLLUTION LAWS IN FORCE IN THE COUNTRY WHERE THE MACHINE IS BEING USED.

When dismantling the machine comply with anti-pollution laws and in particular dispose of used lubricants and various elements according to their different structures.

8 SPARE PARTS

8.1 LIST OF SPARE PARTS CRITICAL FOR SAFETY

The codes of the decals are indicated in the table in paragraph “2.5 Decals applied onto the machine”.

Description	Code
Front guard	E1300100
Rear guard	
	v.180 E0300288
	v.200 E2015005
	v.230 E2017005
	v.250 E2015005

Description	Code
	v.300 E2020005
PTO guard tractor side	0049301
PTO guard rear side	3179158
PTO guard cap seed drill side	0054333
Left side shield (STD)	5202319
Right side shield (STD)	5202318

8.2 HOW TO ORDER SPARE PARTS

⚠ CAUTION

Spare parts must comply with the requirements established by the Manufacturer. Only use genuine spare parts.

All the parts forming the machine can be ordered from the Manufacturer, specifying:

- Machine model.
- The serial number of the machine.
- The year of manufacture.
- The serial number of the required part (indicated in the spare parts catalogue), a description of the part and the required quantity.

Transport way: if this is not specified, the Manufacturer will dedicate particular care to the service but shall not be liable for delays in shipment due to unforeseen circumstances. The shipping costs are always at the consignee’s charge. The goods travel at the purchaser’s risk and peril even when sold carriage paid.

BREVIGLIERI SPA is always at your disposal for any assistance and/or spare parts you may require.



TAVOLE RICAMBI • SPARE PARTS TABLES • PLANCHES DES PIÈCES DETACHÉES • LAMINAS REPUESTOS • ERSATZTEILTAFELN

ITALIANO - TAVOLE RICAMBI

Tav. 1	Castello a tre punti.....	138
Tav. 2	Vasca macchina.....	139
Tav. 3	Gruppo scatola cambio v.230.....	140
Tav. 4	Gruppo scatola cambio v.250-350.....	141
Tav. 5	Gruppo scatola cambio v.200-300.....	142
Tav. 6	Gruppo scatola mono velocità.....	143
Tav. 7	Trasmissione centrale.....	144
Tav. 8	Trasmissione laterale.....	145
Tav. 9	Regolazione rullo.....	146
Tav. 10	Barra livellatrice.....	147
Tav. 11	Kit spondina standard.....	148
Tav. 12	Ancora rompitraccia rigida.....	149
Tav. 13	Rullo Packer.....	150
Tav. 14	Rullo Gabbia.....	151
Tav. 15	Rullo Dentato.....	152
Tav. 16	Kit idraulico regolazione rullo.....	153
Tav. 17	Protezioni CE.....	154

ENGLISH - SPARE PARTS

Tav. 1	Three-point hitch.....	138
Tav. 2	Machine tank.....	139
Tav. 3	Gearbox unit v.230.....	140
Tav. 4	Gearbox unit v.250-350.....	141
Tav. 5	Gearbox unit v.200-300.....	142
Tav. 6	Single speed gearbox unit.....	143
Tav. 7	Central transmission (final drive unit).....	144
Tav. 8	Side transmission (final drive unit).....	145
Tav. 9	Roller adjustment.....	146
Tav. 10	Levelling bars.....	147
Tav. 11	Side panel kit standard.....	148
Tav. 12	Rigid finisher tine.....	149
Tav. 13	Packer roller.....	150
Tav. 14	Cage roller.....	151
Tav. 15	Sprocket roller.....	152
Tav. 16	Hydraulic kit for roller adjustment.....	153
Tav. 17	CE protections.....	154

FRANÇAIS - PLANCHES DES PIÈCES

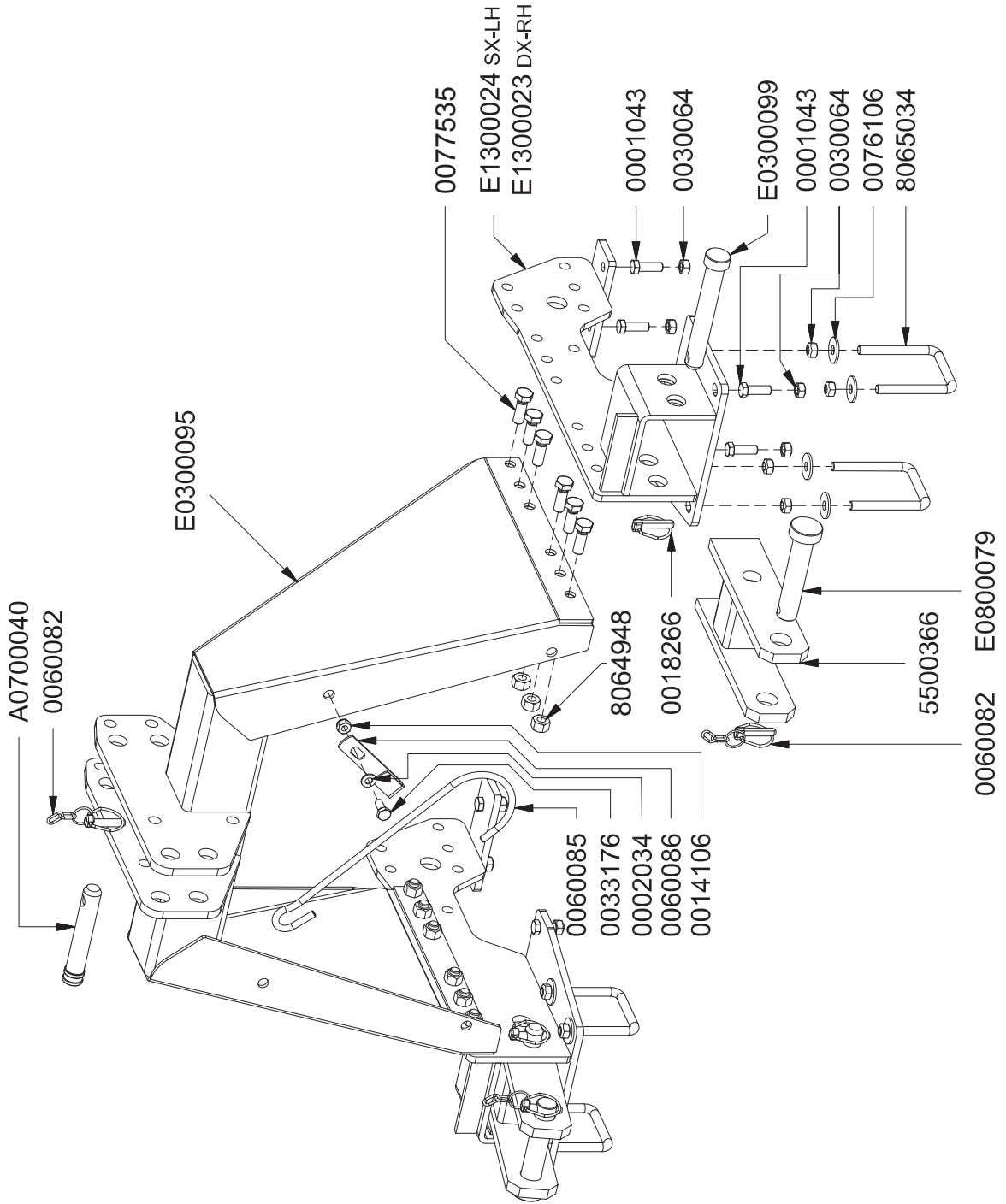
Tav. 1	Bâti à trois points.....	138
Tav. 2	Cuve machine.....	139
Tav. 3	Ensemble boîte de vitesses v.230.....	140
Tav. 4	Ensemble boîte de vitesses v.250-350.....	141
Tav. 5	Ensemble boîte de vitesses v.200-300.....	142
Tav. 6	Ensemble boîte mono vitesse.....	143
Tav. 7	Ensemble transmission centrale.....	144
Tav. 8	Ensemble transmission latérale.....	145
Tav. 9	Réglage rouleau.....	146
Tav. 10	Barres de nivellement.....	147
Tav. 11	Kit ridelle standard.....	148
Tav. 12	Ancre efface trace rigide.....	149
Tav. 13	Rouleau Packer.....	150
Tav. 14	Rouleau à cage.....	151
Tav. 15	Rouleau hérissé.....	152
Tav. 16	Kit hydraulique réglage rouleau.....	153
Tav. 17	CE protections.....	154

DEUTSCH - ERSATZTEILTAFELN

Tav. 1	Gerätedreieck.....	138
Tav. 2	Maschinenwanne.....	139
Tav. 3	Gruppe Getriebegehäuse v.230.....	140
Tav. 4	Gruppe Getriebegehäuse v.250-350.....	141
Tav. 5	Gruppe Getriebegehäuse v.200-300.....	142
Tav. 6	Einganggetriebe.....	143
Tav. 7	Gruppe Seitenantrieb Zentrales.....	144
Tav. 8	Gruppe Seitenantrieb.....	145
Tav. 9	Radeinstellung.....	146
Tav. 10	Planierbalken.....	147
Tav. 11	Bausatz Seitenwand Standard.....	148
Tav. 12	Anker für Spurbrecher gefedert/starr.....	149
Tav. 13	Packwalze.....	150
Tav. 14	Käfigwalze.....	151
Tav. 15	Stachelwalze.....	152
Tav. 16	Hydraulischer Bausatz Walzeneinstellung.....	153
Tav. 17	CE schutzvorrichtungen.....	154

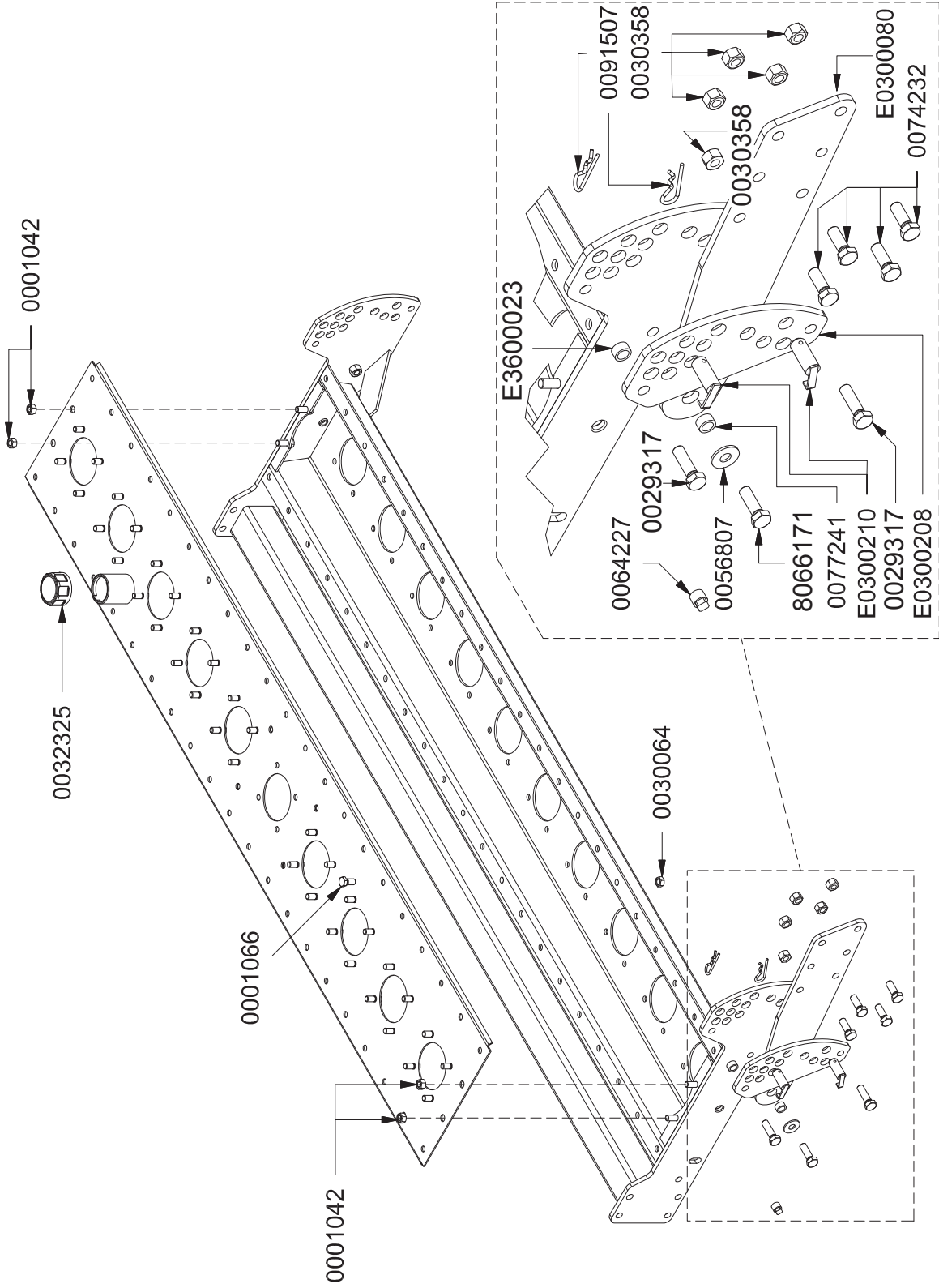
ESPAÑOL - LAMINAS REPUESTOS

Tav. 1	Armazón de tres puntos.....	138
Tav. 2	Tanque máquina.....	139
Tav. 3	Grupo caja velocidades v.230.....	140
Tav. 4	Grupo caja velocidades v.250-350.....	141
Tav. 5	Grupo caja velocidades v.200-300.....	142
Tav. 6	Grupo caja a una velocidad.....	143
Tav. 7	Grupo transmisión central.....	144
Tav. 8	Grupo transmisión lateral.....	145
Tav. 9	Regulación rodillo.....	146
Tav. 10	Barras niveladoras.....	147
Tav. 11	Kit lateral standard.....	148
Tav. 12	Anclaje borrasurcos rígido.....	149
Tav. 13	Rodillo Packer.....	150
Tav. 14	Rodillo de jaula.....	151
Tav. 15	Rodillo dentado.....	152
Tav. 16	Kit hidráulico regulación rodillo.....	153
Tav. 17	CE protecciones.....	154



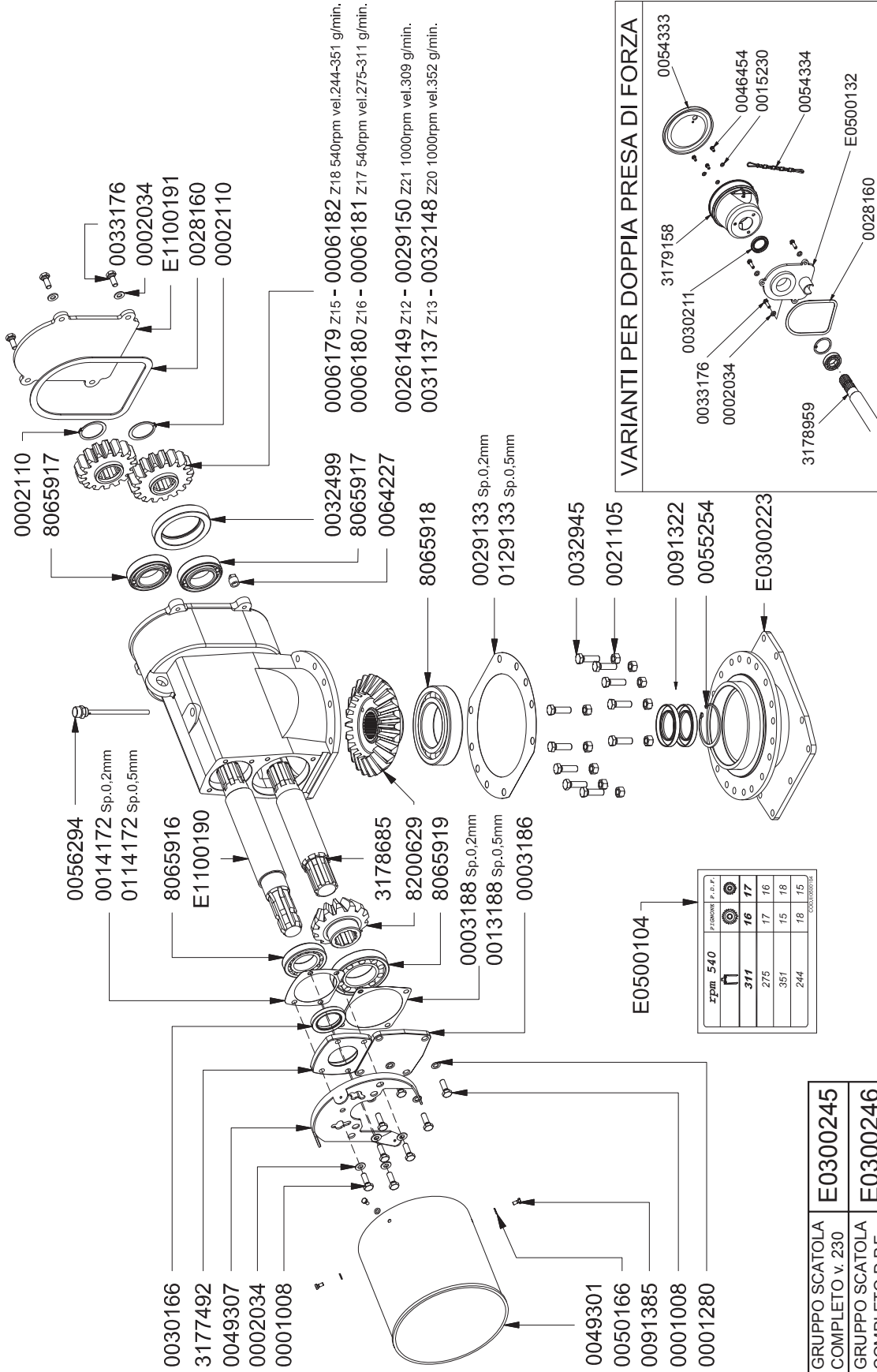


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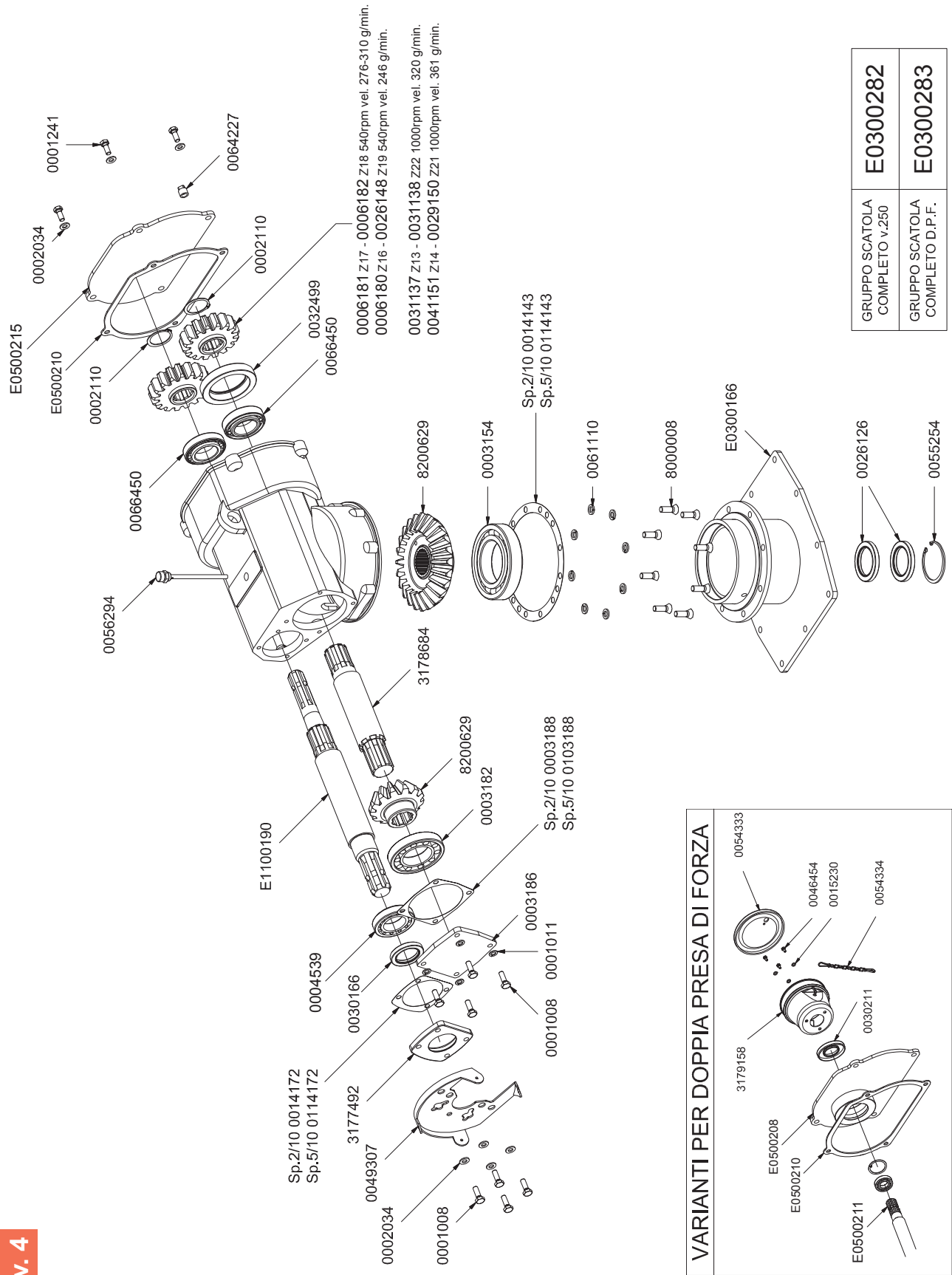


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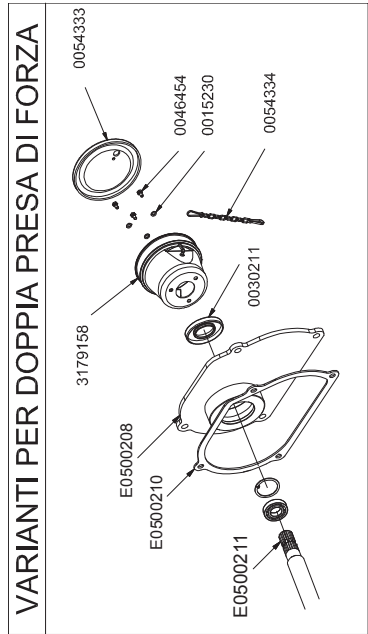




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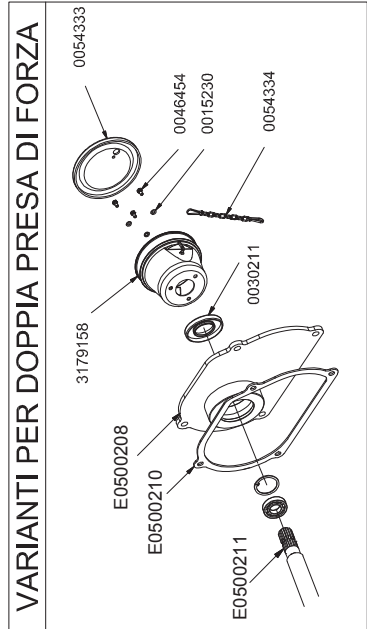
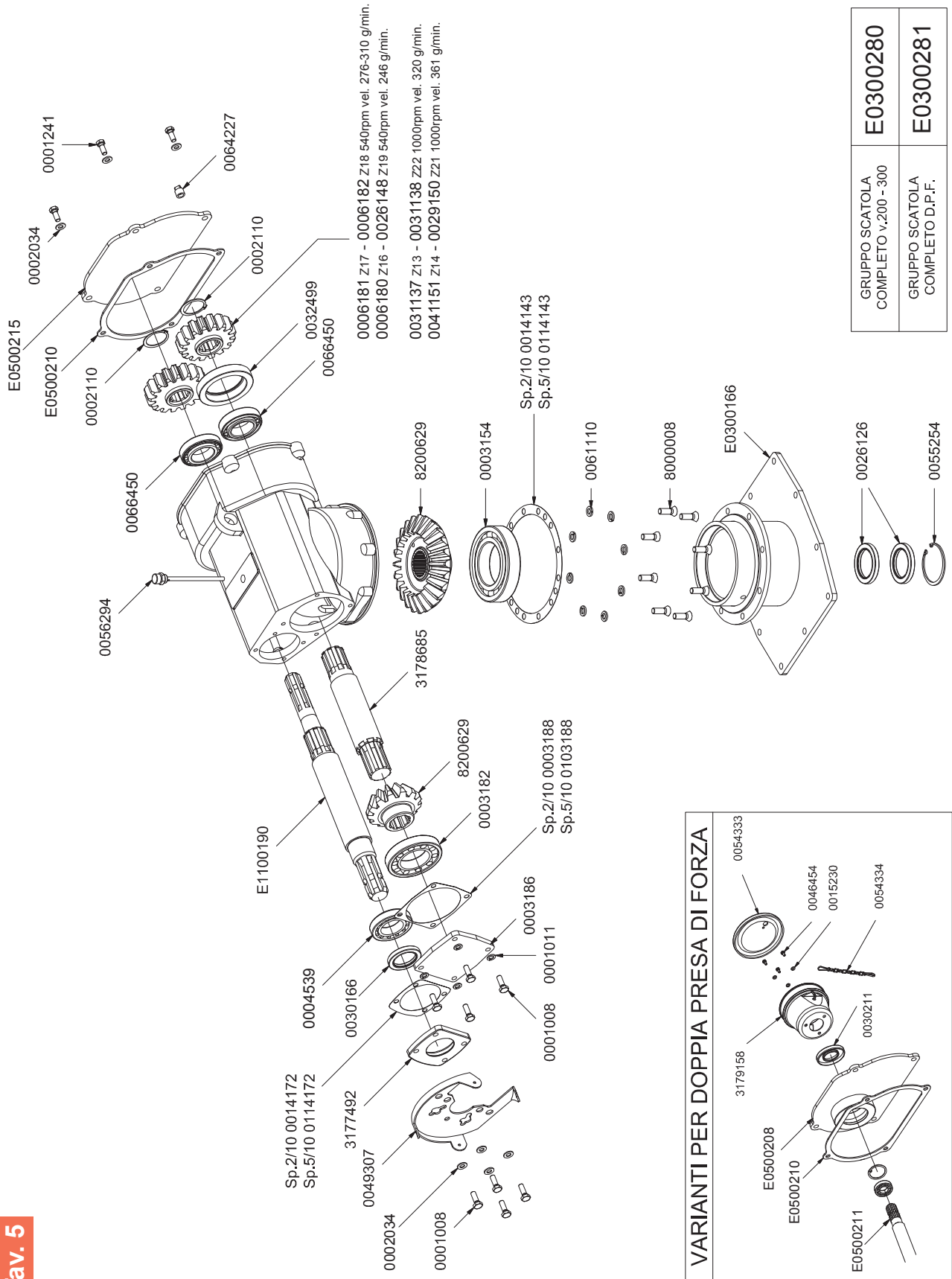


GRUPPO SCATOLA COMPLETO v.250	E0300282
GRUPPO SCATOLA COMPLETO D.P.F.	E0300283





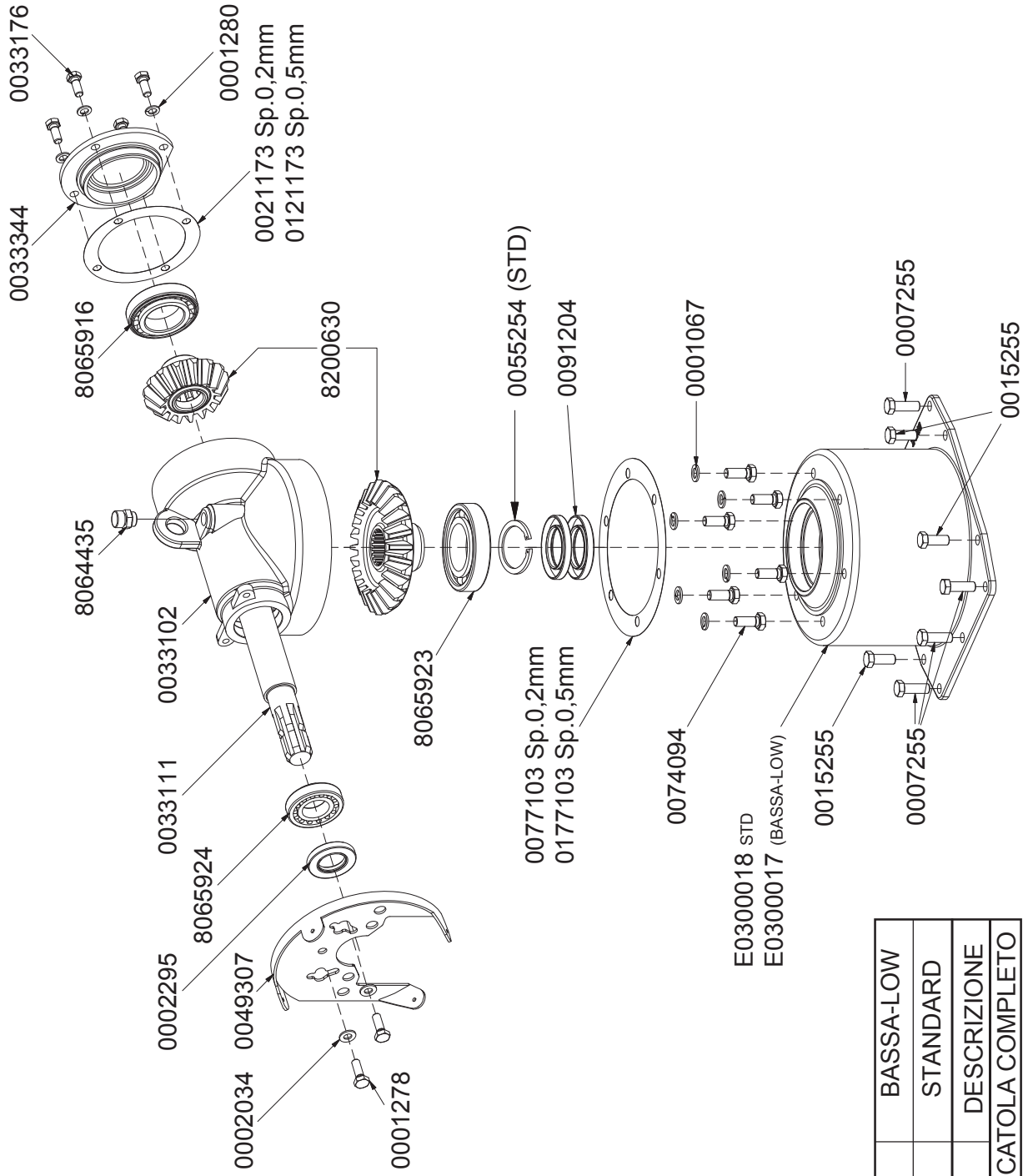
Tav. 5



GRUPPO SCATOLA COMPLETO v.200 - 300	E0300280
GRUPPO SCATOLA COMPLETO D.P.F.	E0300281



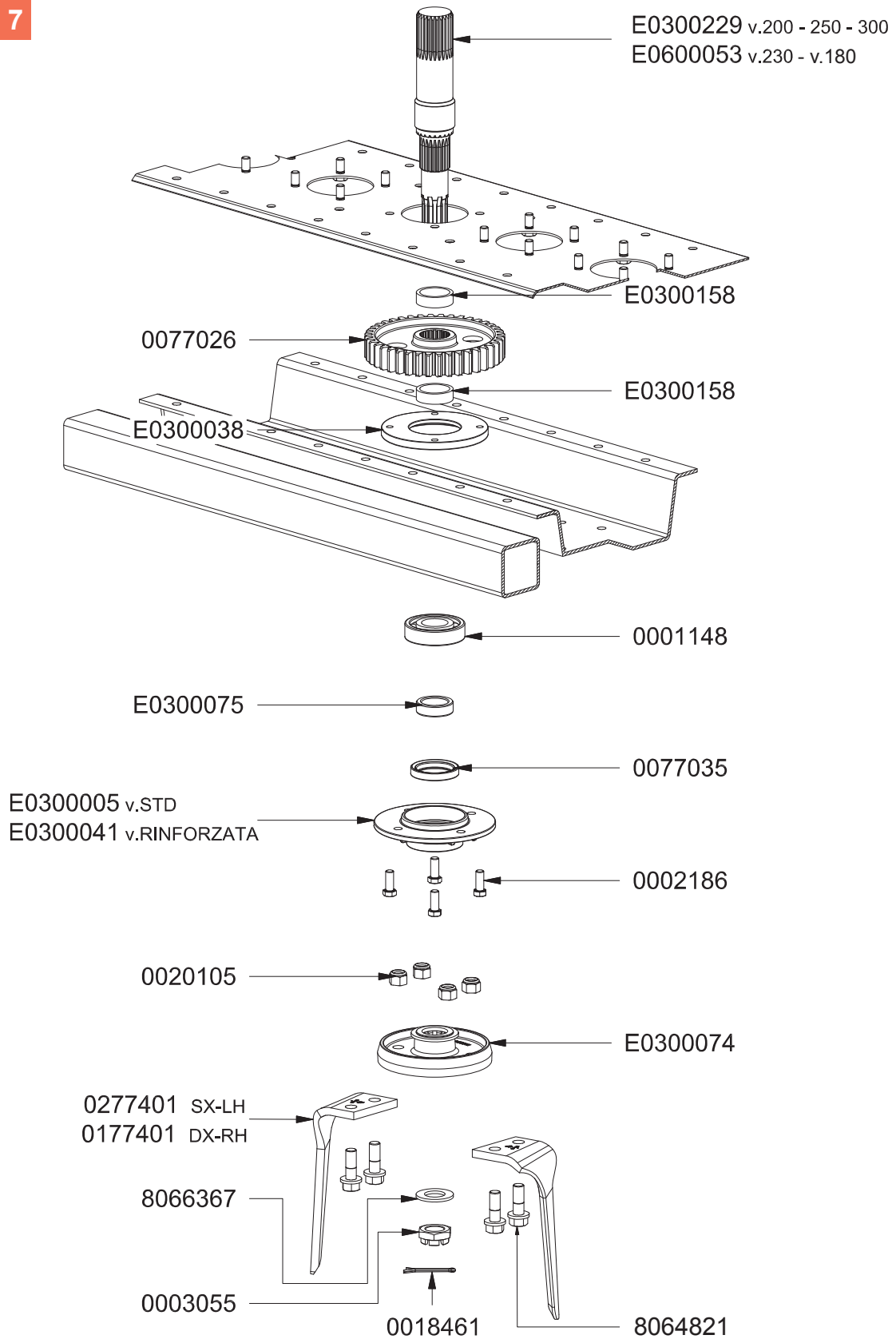
Tav. 6



E1300017	BASSA-LOW
E0300076	STANDARD
CODICE	DESCRIZIONE
GRUPPO SCATOLA COMPLETO	

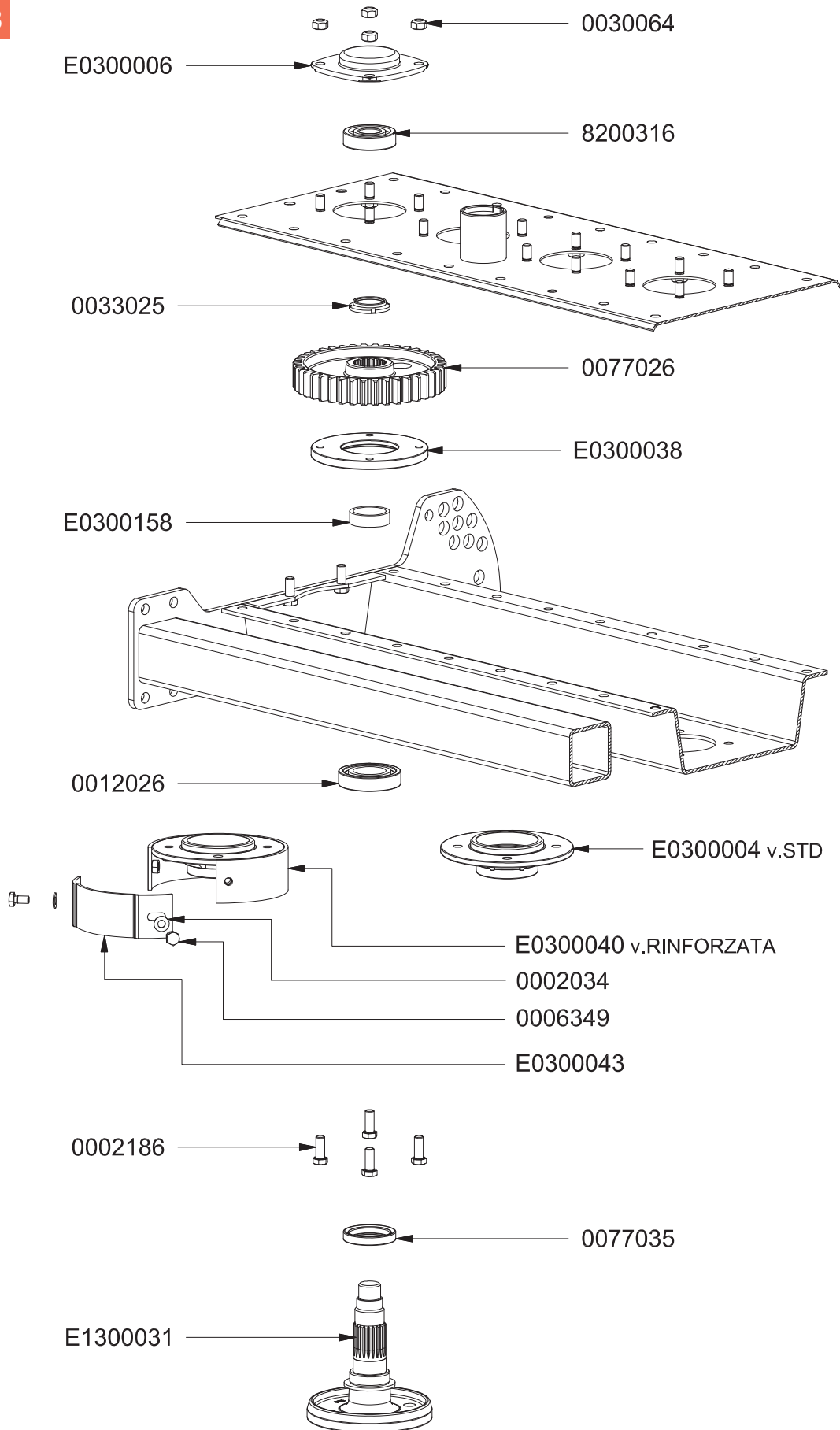


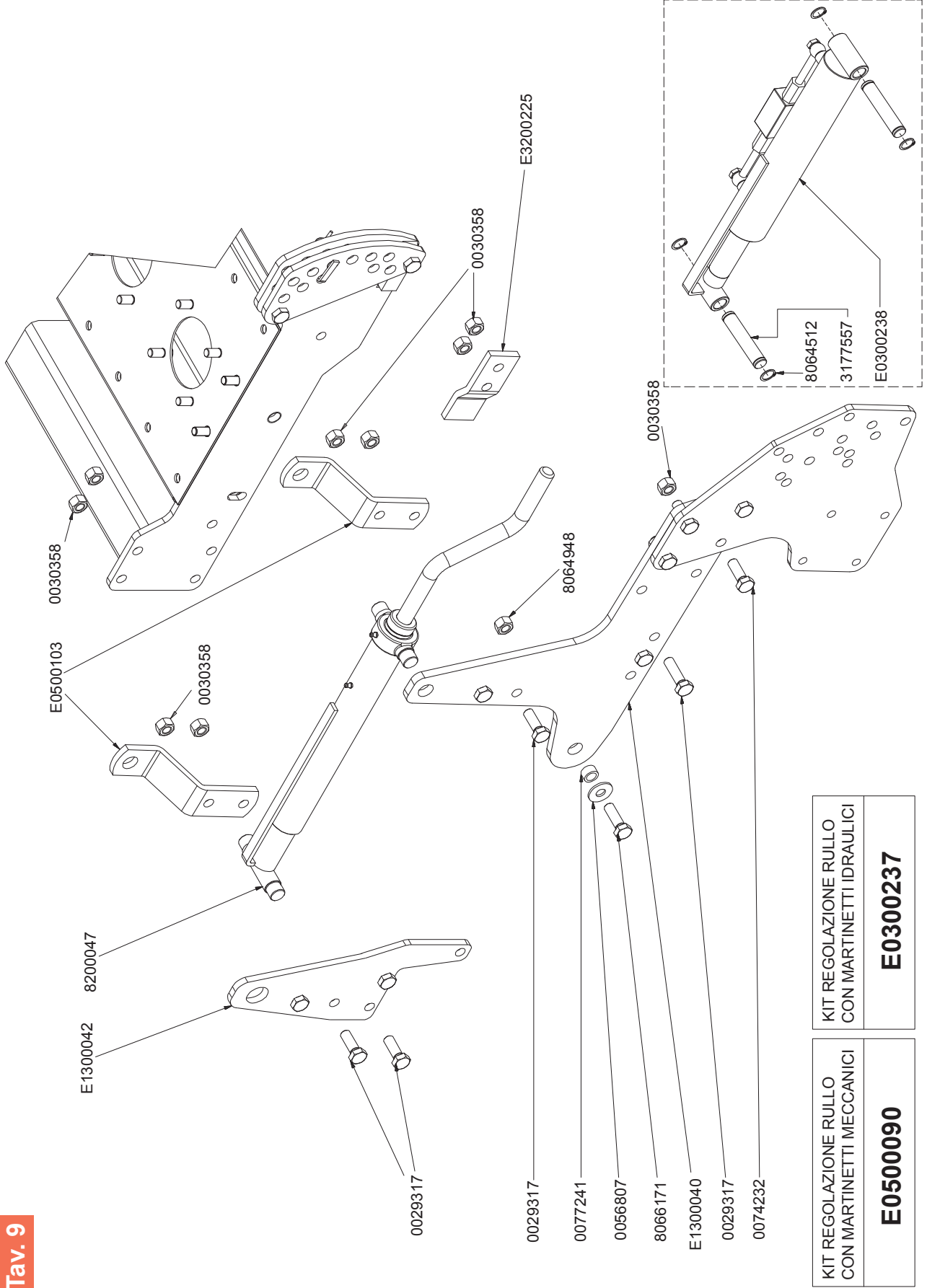
Tav. 7





Tav. 8

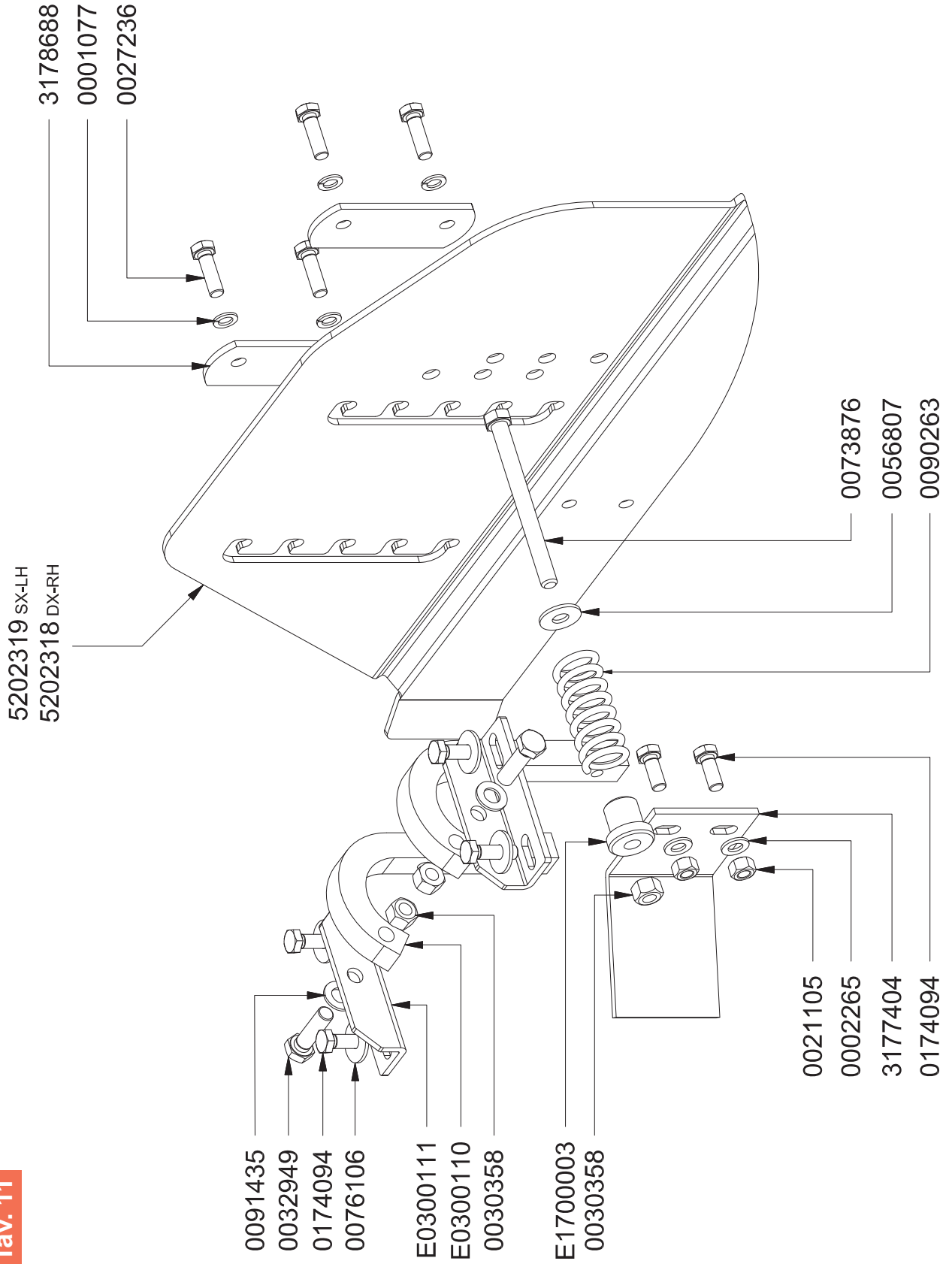




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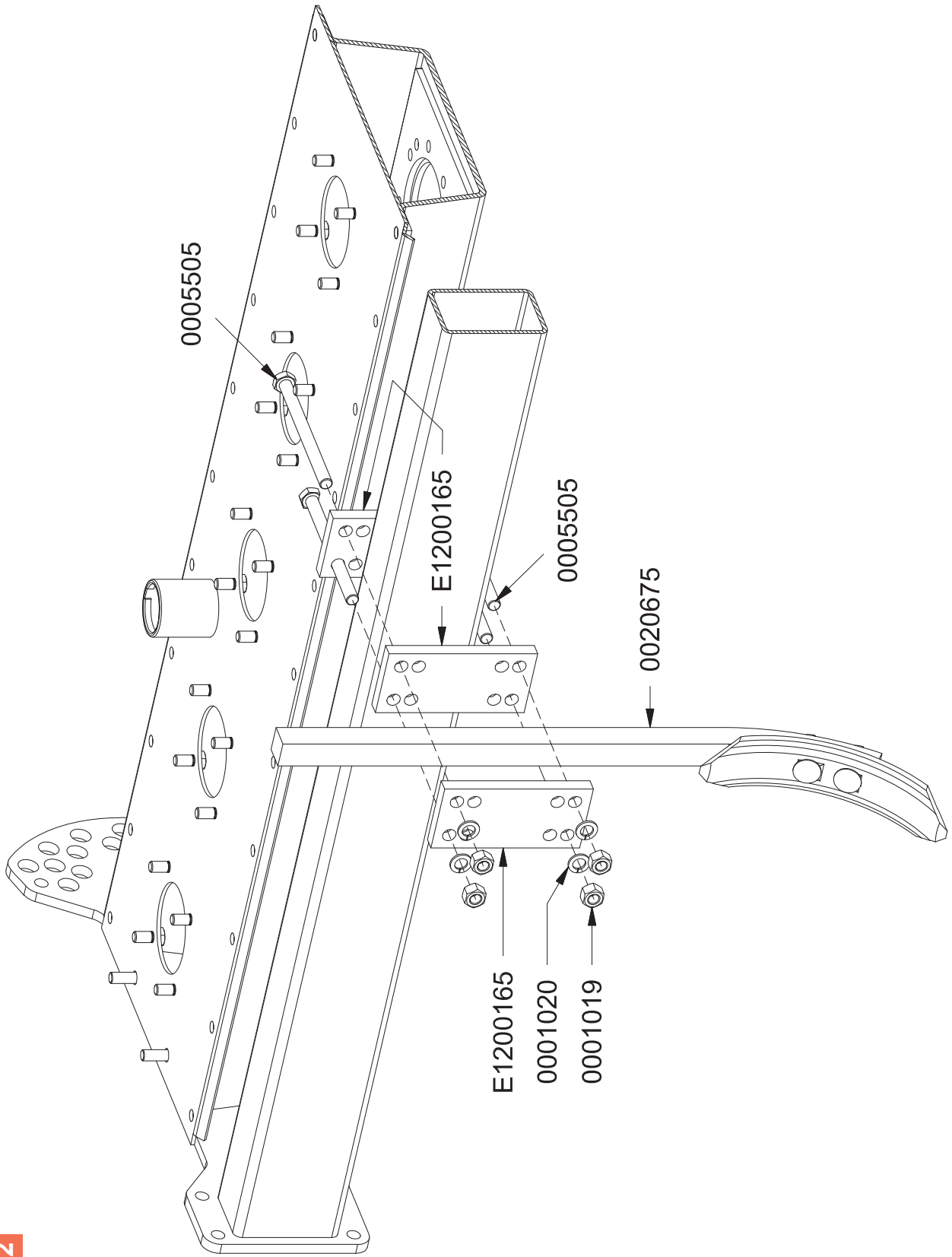


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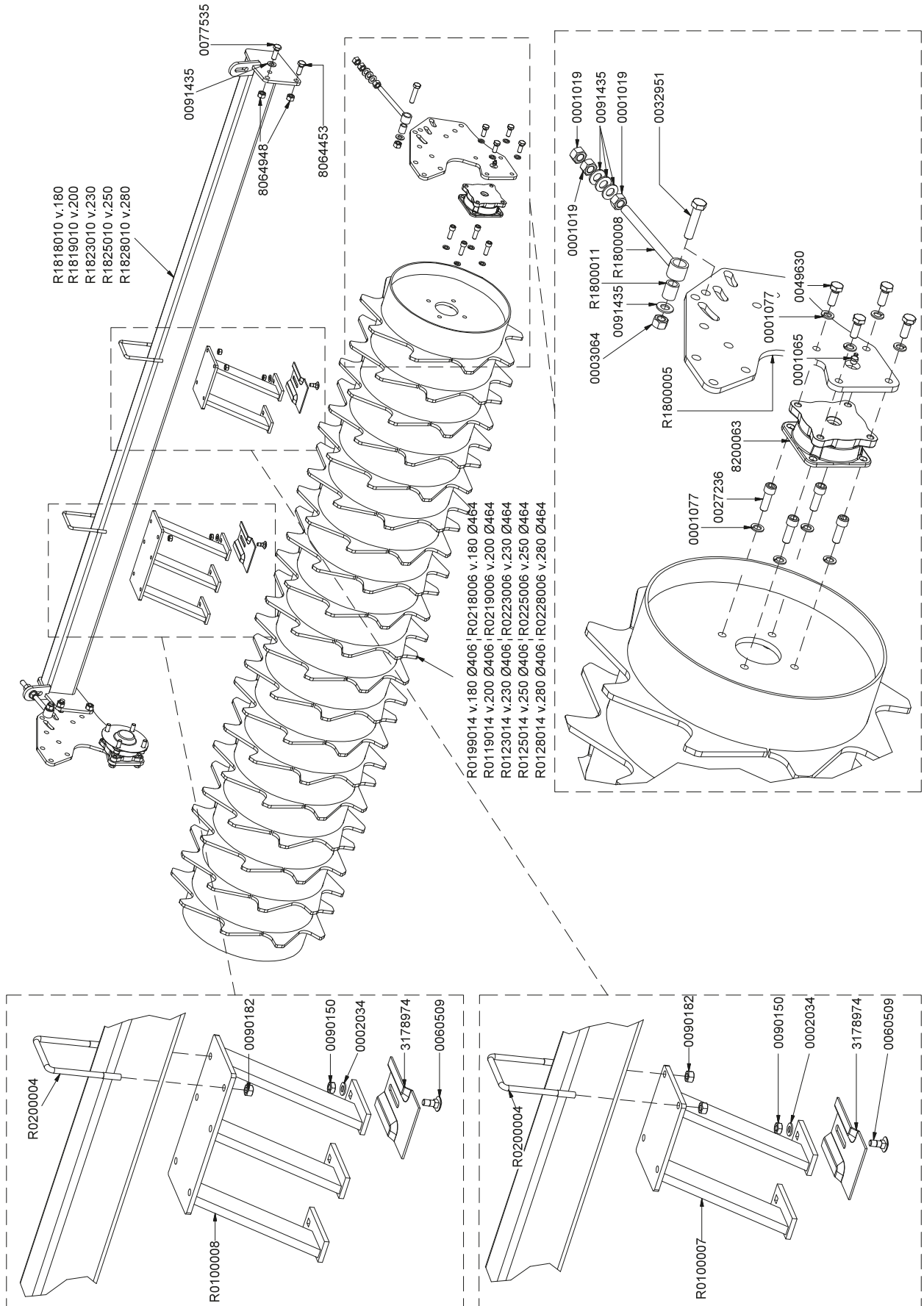


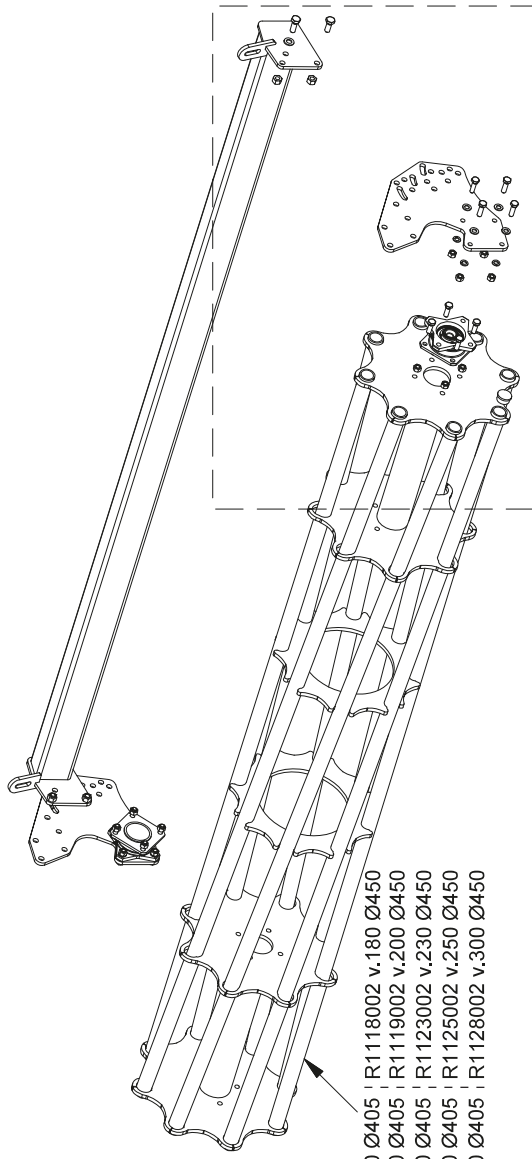
Tav. 12



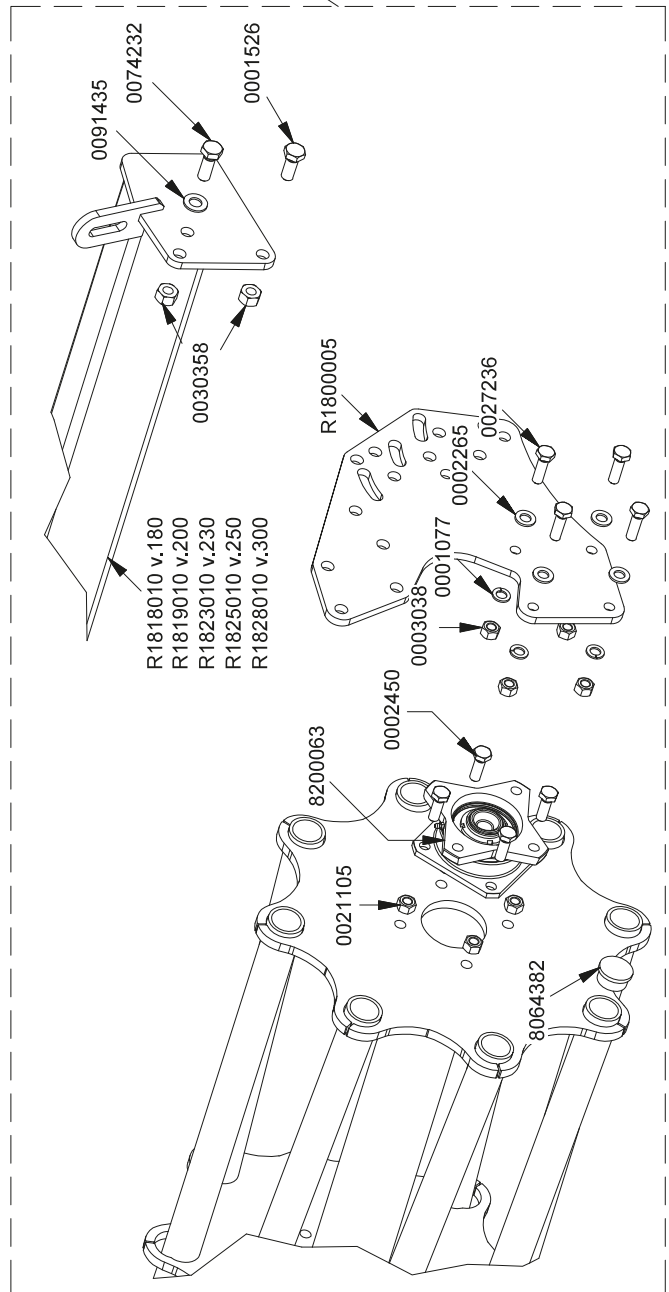


Tav. 13





- R1018002 v.180 Ø405 | R1118002 v.180 Ø450
- R1019002 v.200 Ø405 | R1119002 v.200 Ø450
- R1023002 v.230 Ø405 | R1123002 v.230 Ø450
- R1025002 v.250 Ø405 | R1125002 v.250 Ø450
- R1028002 v.300 Ø405 | R1128002 v.300 Ø450



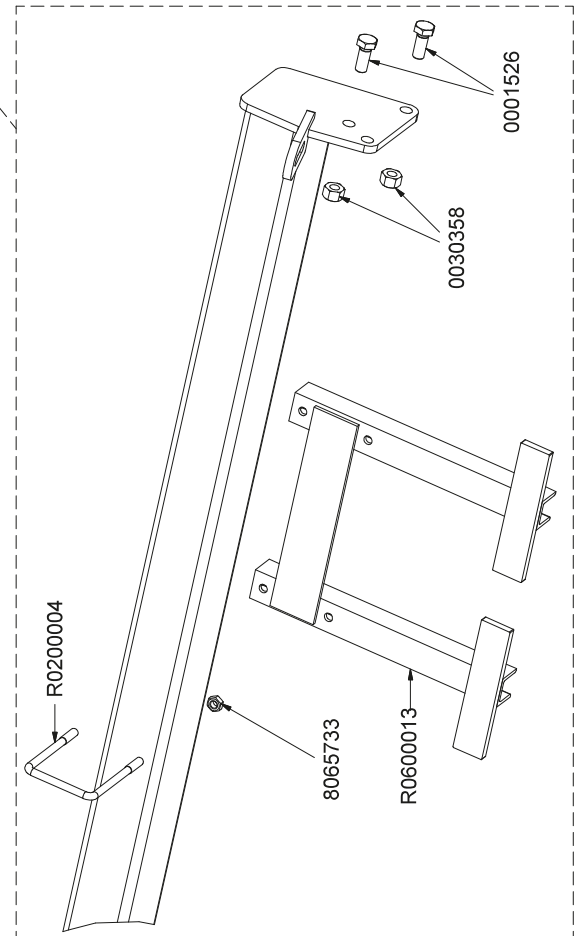
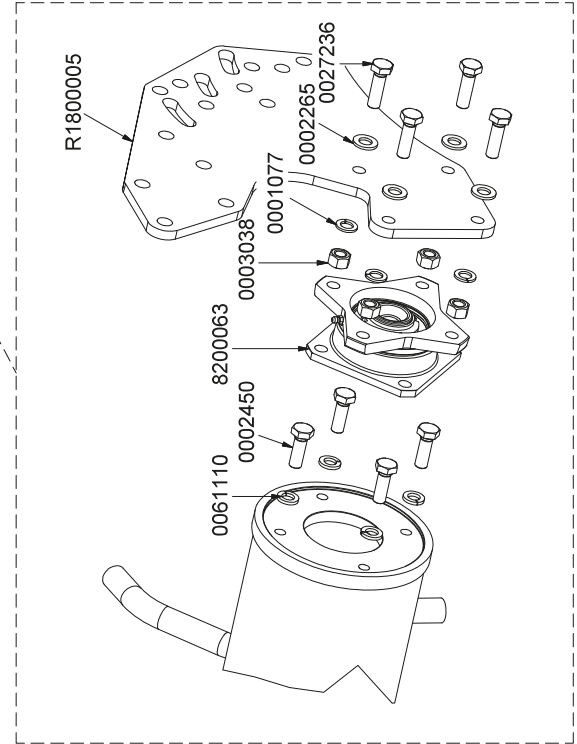
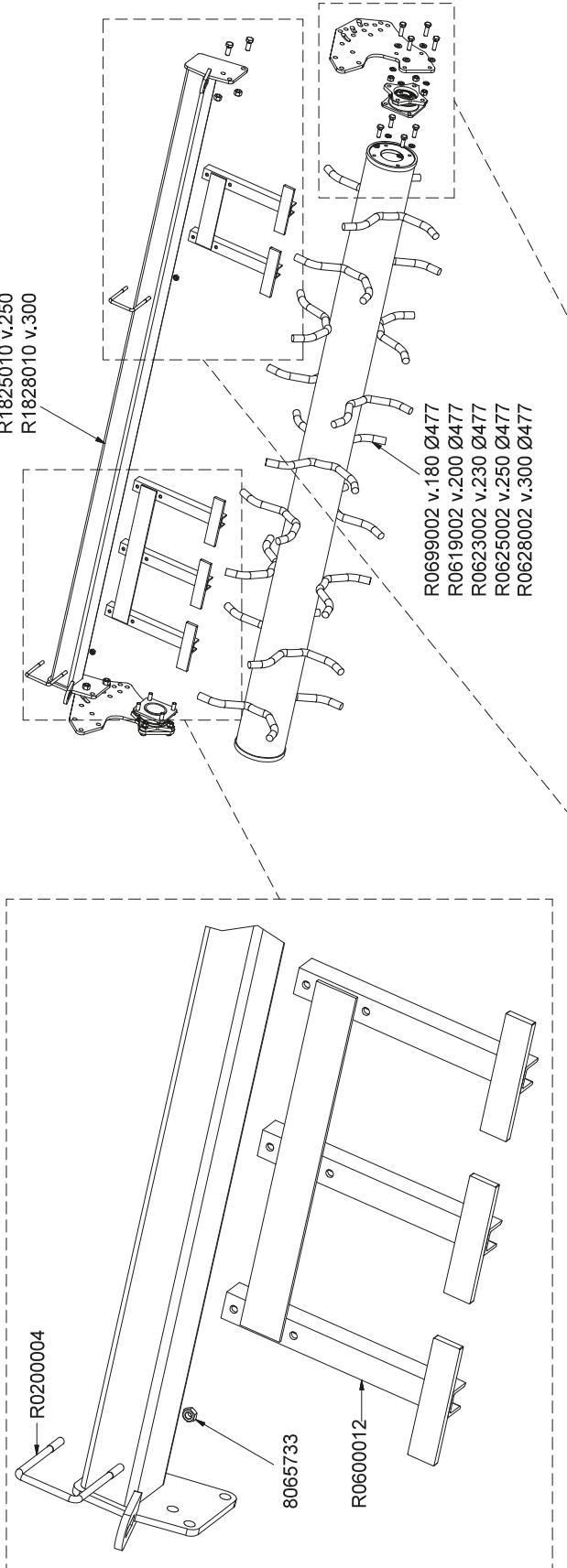
- 0091435
- 0074232
- 0001526
- 0030358
- R1818010 v.180
- R1819010 v.200
- R1823010 v.230
- R1825010 v.250
- R1828010 v.300

- R1800005
- 0003038
- 0001077
- 0002265
- 0027236

- 8200063
- 0002450
- 0021105
- 8064382

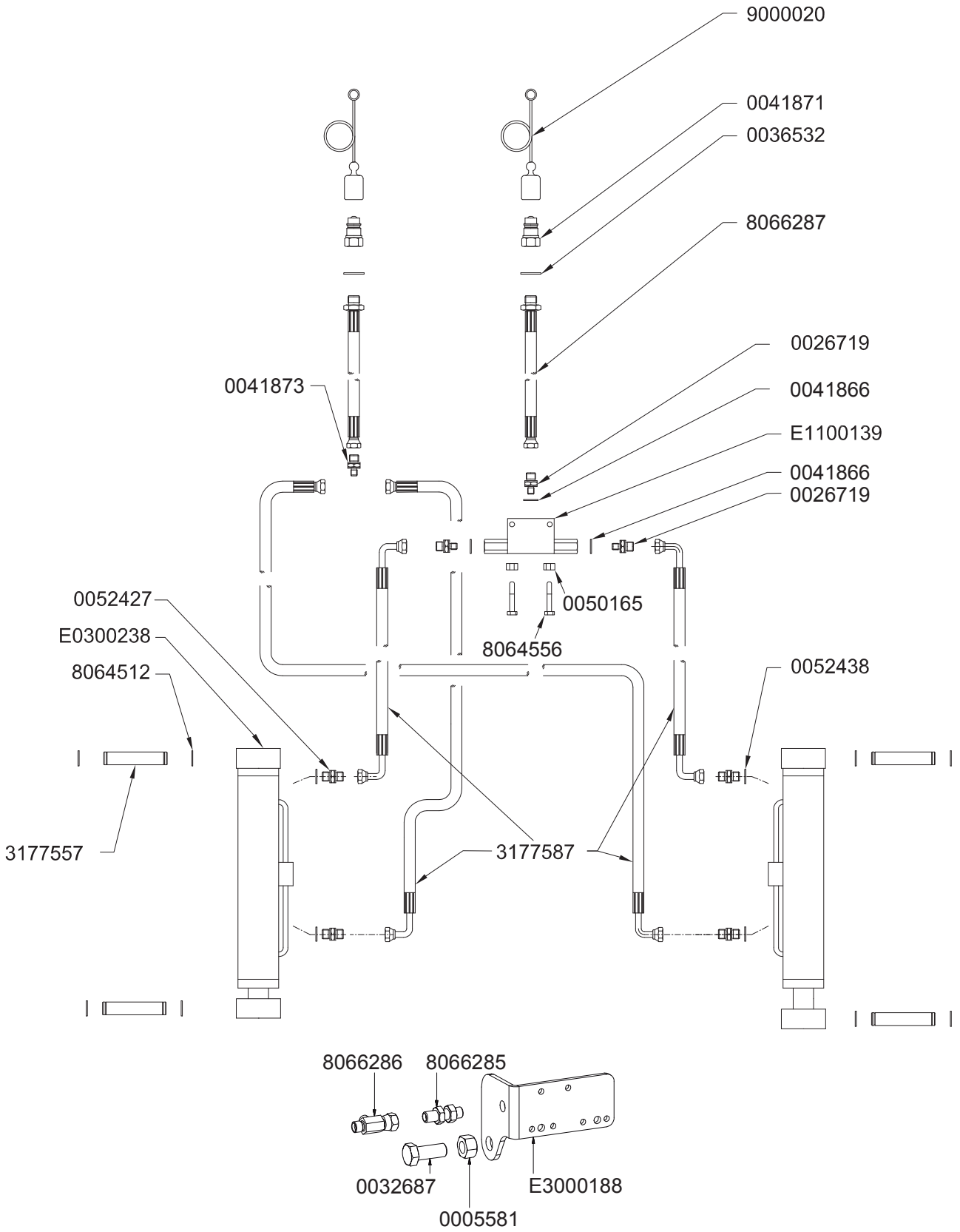


R1818010 v.180
R1819010 v.200
R1823010 v.230
R1825010 v.250
R1828010 v.300



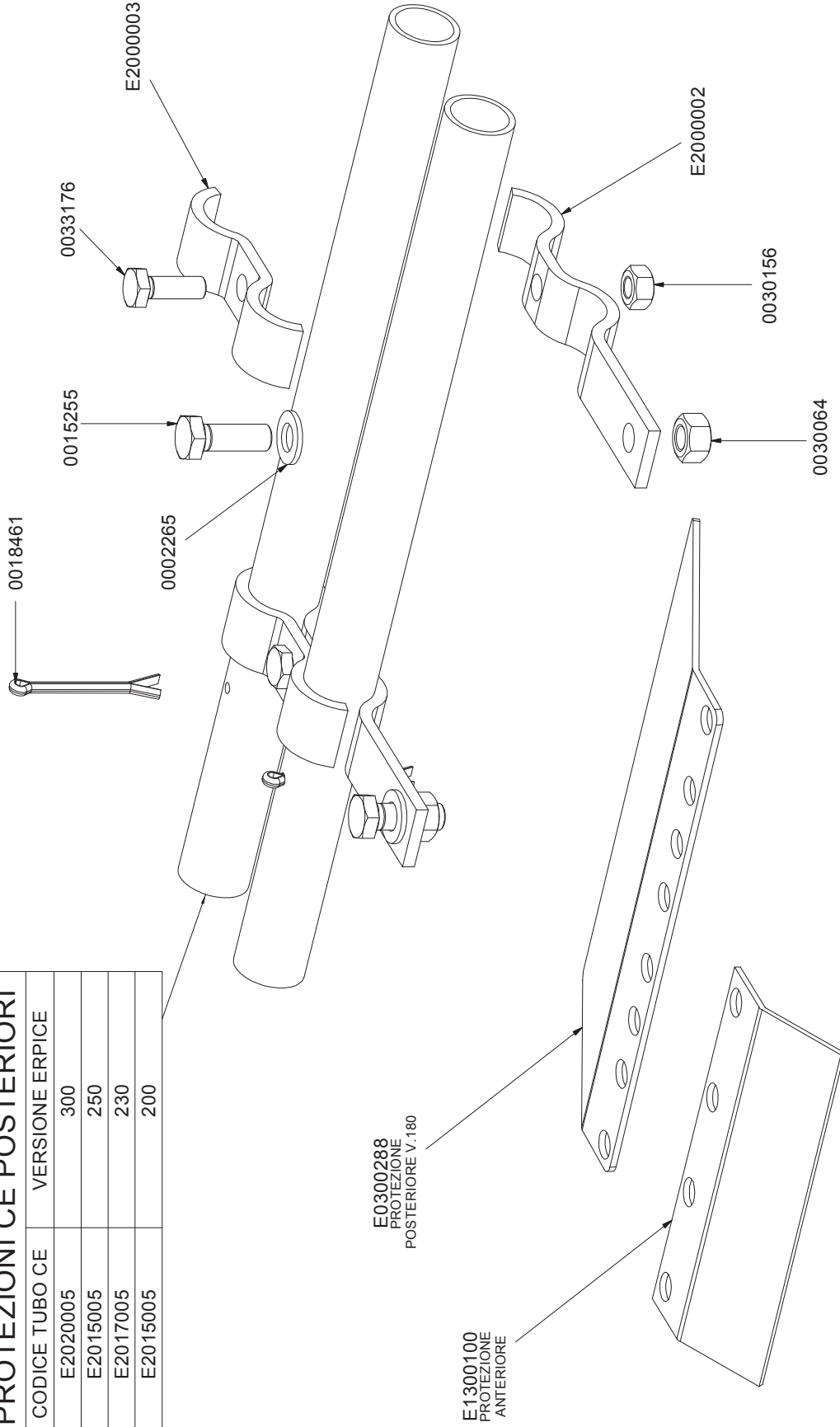


Tav. 16







































































PROTEZIONI CE POSTERIORI	
CODICE TUBO CE	VERSIONE ERPICE
E2020005	300
E2015005	250
E2017005	230
E2015005	200



SCHEDA DI MANUTENZIONE - maintenance card - fiche de maintenance -
Wartungskarte - Ficha de mantenimiento

	DATA					
	8hr	20hr	100hr	500hr		
Controllo del fissaggio di tutte le protezioni Check fastening of all guards Contrôle du fixage de toutes les protections Kontrolle der Befestigung aller Schutzvorrichtungen Control del cierre de protecciones					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
Verifica / ripristino presenza e collegamento di perni, copiglie e fermi Check/reset the existence and connections of pins, split pins and retainers Vérification de la présence des axes, des goupilles et des arrêts. Kontrolle der Verbindung der Pins, Splinte und Verriegelungen Verificar/restablecer presencia y conexión de pernos, pasadores y cierres					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
Controllo perdite di lubrificante Check lubricant leaks Contrôle pertes de lubrifiants Kontrolle des Ölverlustes Control pérdida de aceite					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
Ingrassaggio Greasing Graissage Schmierung Engrasado					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
Controllo serraggio delle viti di fissaggio degli utensili Check that the blade screws are fully tightened Contrôle des vis de fixation des lames Kontrolle der Spannschrauben der Werkzeuge Control de tornillos de fijación de utensilios					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
Ingrassaggio dell'albero cardanico Greasing of the PTO shaft Graissage de l'arbre à cardan Schmierung der Gelenkwelle Engrasado del eje					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
Controllo / sostituzione olio nella vasca Check/change oil in the flat pan Contrôle/vidange huile dans le lamier Kontrolle/Ersetzen des Öls in der Wanne Control/sustituir aceite del bastidor					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
Controllo / sostituzione olio nella scatola del cambio Check/change oil in the gearbox Contrôle/vidange huile dans la boîte de vitesse Kontrolle/Ersetzen des Öls im Getriebegehäuse Control/sustituir aceite en caja cambio					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
Sostituzione olio scatola del cambio Change oil in the gearbox Vidange huile boîte de vitesse Ersetzen des Öls im Getriebegehäuse Substituir aceite caja de cambio					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
					1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	



Via Labriola, 2 - 37054 NOGARA (Verona) - ITALY

Tel. 0039 0442537411 r.a. - Fax 0039 0442537444

Export: Tel. 0039 0442537402

www.breviglieri.com - export@breviglieri.com