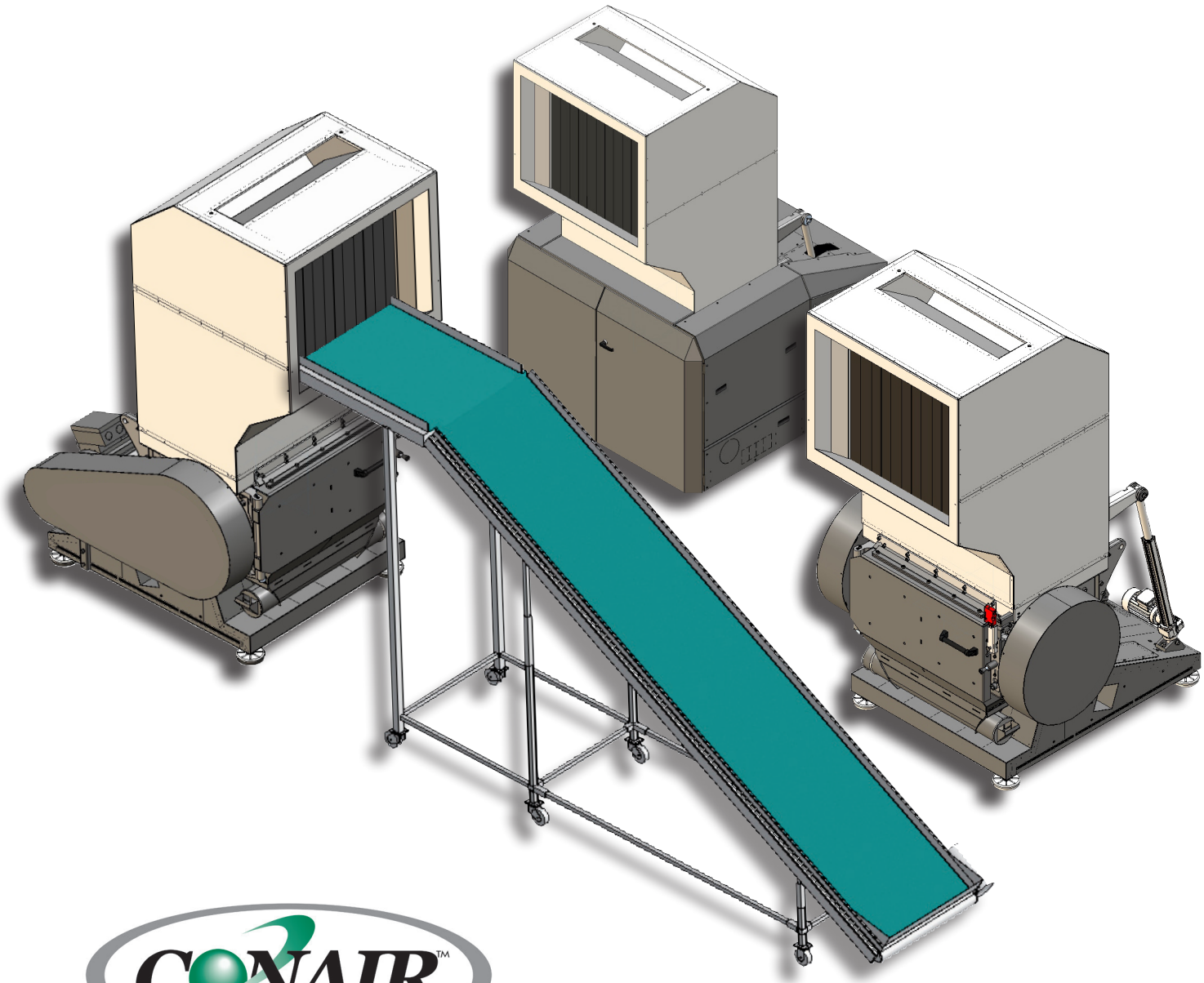
USER GUIDE
UGG038-0714

CKW Series Granulators

CKW-2436, CKW-2448, CKW-2460



We reserve the right to change designs, material and specifications without prior notice.

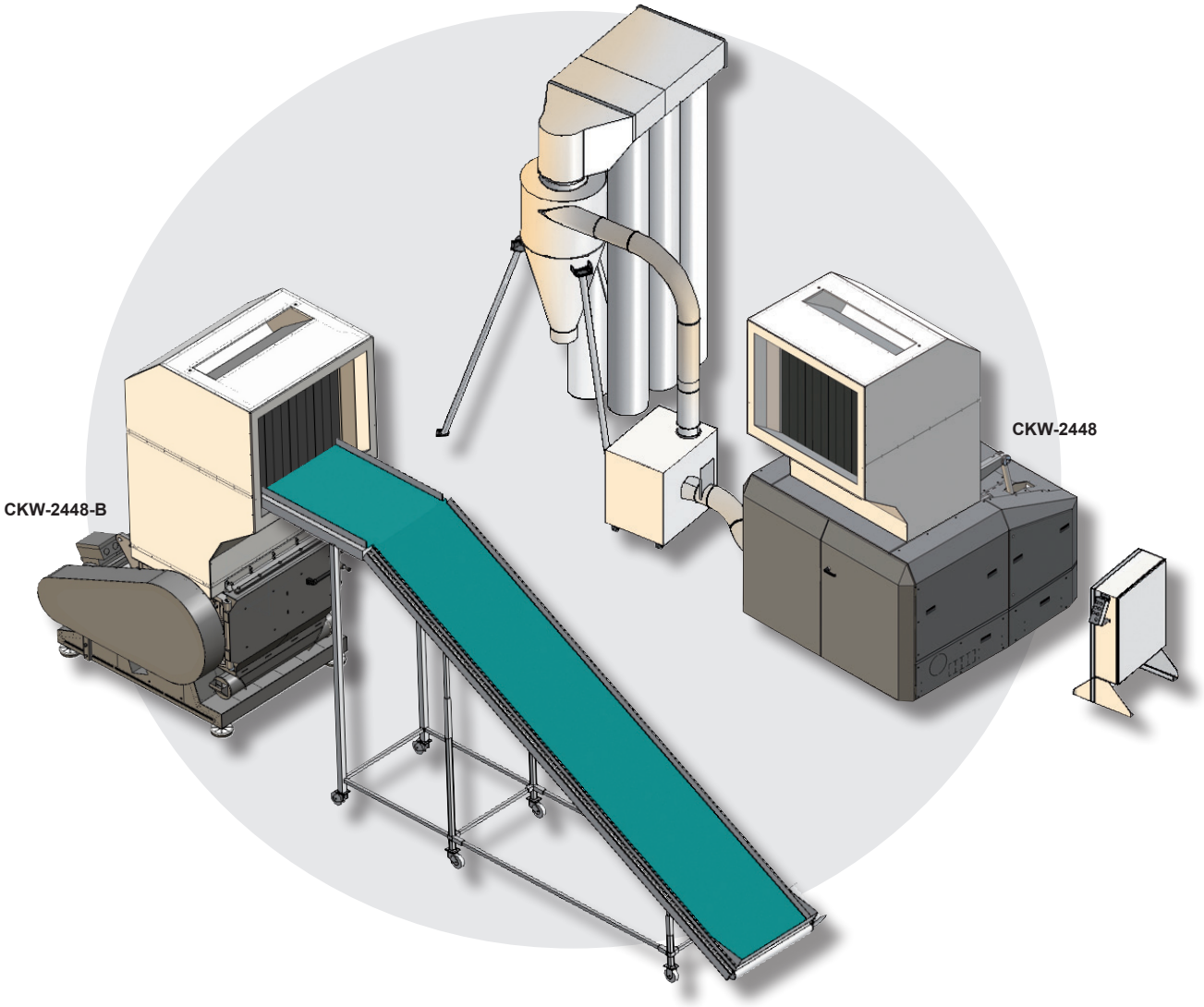
This instruction manual belongs to:

Introduction

Note! All users must study the instruction manual before installing, operating or maintaining the machine.

This instruction manual contains instructions how to install, operate and maintain the standard versions of the CONAIR CKW-series granulators, Model number -2436, -2448 and -2460.

The performance of your supplied machine may vary from the standard machines described in this instruction manual. In event of any questions, please contact Conair's local distributor or Conair's Corporate office.



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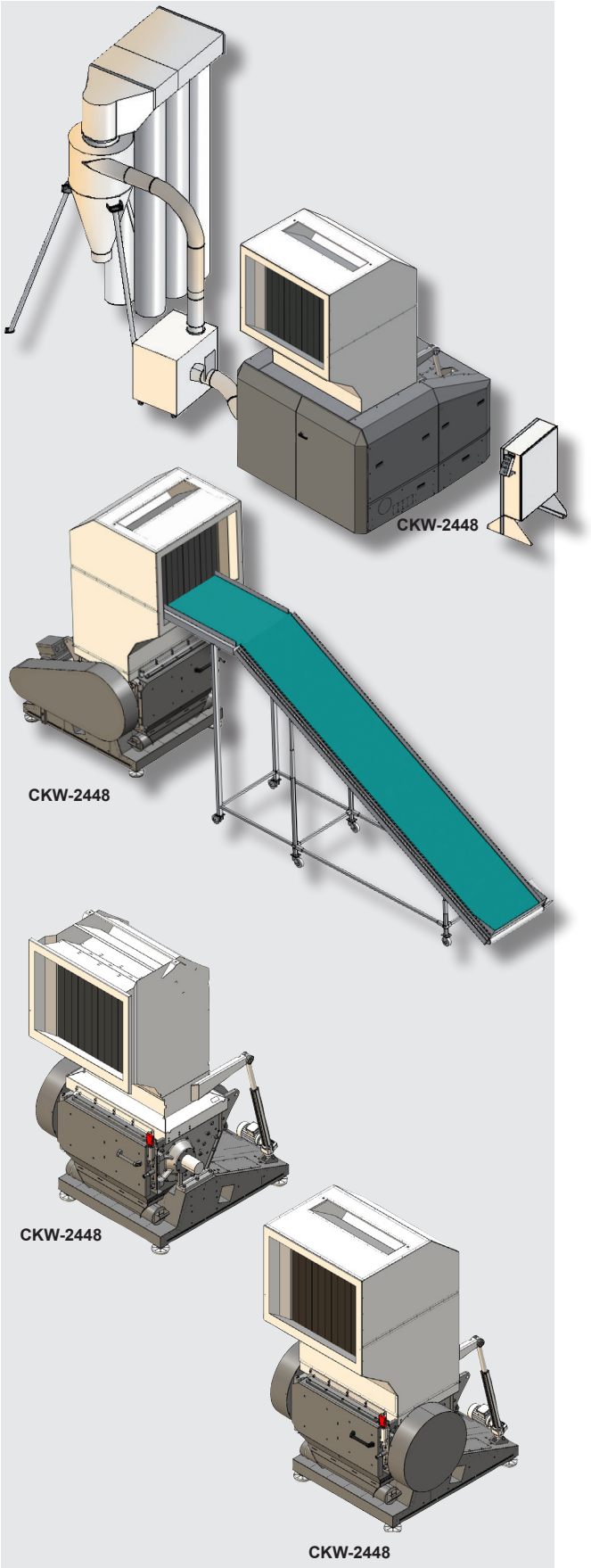


General rules, Safety

Conair designs granulators, shredders, guillotines and accessory equipment for processing injection moulded, blow moulded or extruded plastics. The machines are designed and adapted to the type of plastic residue that the customer has specified before order.

The machines are manufactured in accordance to the state of the art and legal safety regulations (guidelines, harmonized standards), which demand a very low safety risk. But, if the machines are incorrectly operated, unexpected dangers can arise. Therefore it is very important that all instructions are carefully observed and attended to. All users must study the instruction manual before installing, operating or maintaining the machine. In event of any questions, please contact Conair's local distributor or Conair's corporate office.

Danger! It is not permissible to feed the machine with explosive material or material contaminated with explosive or easily ignited substances. It is not permissible to feed the machine with wood products, household or garden waste, pharmaceutical products or substances which present a health danger, unless a written approval has been obtained from Conair's corporate office. If any materials are processed that are not contractually agreed upon, Conair is absolved of any liability and guarantee for safety and functioning of the machine.

Danger! No modifications or alterations to Conair's products are permissible unless a written approval has been obtained from Conair's corporate office. This is to prevent injury, to maintain the machinery warranty valid, and to guarantee that Conair can fully assume their product liability. If any modifications are done, Conair is absolved of any liability and guarantee for safety and functioning of the machine.

Symbols on the machine

Danger! Risk of cutting or pinch injuries! This symbol is placed anywhere there is a risk of cutting or pinch injuries.

Danger! Dangerous voltage! This symbol is placed on electrical cabinet hatches and on any junction boxes.

Request! All users must study the instruction manual before installing, operating or maintaining the machine.

Symbols in the instruction manual

Danger! Personal injury! This symbol is used to indicate risk of personal injury. The symbol inside the triangle may have different appearances, depending on the type of danger.

Danger! Machinery damage! This symbol is used to indicate risk of machinery damage.

Information! This symbol is used to highlight useful information.

Safety rules, During installing

- The machine must be installed by authorized, trained personnel.
- The machine must be disconnected from the mains before electrical repairs or electrical installing is begun.
- The instruction manual must be carefully observed to avoid personal injury and machinery damage.
- The machine must be installed and connected to other equipment so that the entire installation complies with the stipulations of the Machinery Directive 98/37/EEC.

Safety rules, During start and operation

- The instruction manual must be carefully observed to avoid personal injury and machinery damage.
- National environmental and employee safety regulations must be followed.
- The machine must be installed in accordance with this instruction manual.
- All covers must be installed. All hatches to electrical cabinet, transmission and pneumatics (if supplied) must be closed and locked. The key must be kept by the personnel responsible for the machine's service and safety.
- The screen must be installed.
- The screen box must be closed.
- The granule bin must be closed.
- The cutter housing must be closed.
- The hopper must be closed.
- All safety switches and magnet switches must be installed.
- All outer safety equipment such as protective screens, bars, covers, plates, nets etc must be installed.
- Body with wheels (optional): The wheels must be locked.

- Be very careful. The machine contains knives. Risk of cutting or pinch injuries!
- Never place any part of your body into any opening. Risk of cutting or pinch injuries!
- Use ear defenders. Risk of loud, damaging noise!
- Use protective goggles. Risk of granulate splashing!
- Do not tread on the machine.

- A granulator with optional soune enclosure):
  - The enclosure must be closed.

- A granulator with optional blower):

- Be very careful. The blower has a very powerful suction and blowing ability. Never place any parts of your body into or near any blower openings.
- Blowers must not be used in ambient temperatures above +104°F {+40°C}, in ambient temperatures below -4°F {-20°C}, in explosion hazard atmospheres or unprotected outdoors.
- The temperature of the transported material must never increase +176°F {+80° C}.

Safety rules, During start and operation

• A granulator with optional belt conveyor):
- Be very careful. Clothing and parts of your body can be dragged along the conveyor belt.
- Do not tread on the belt conveyor.
- If hot material is to be transported on the belt, this must be placed in the middle of the belt. Uneven heating of the belt can make the belt pull to one side.

Safety rules, During service

- The instruction manual must be carefully observed to avoid personal injury and machinery damage.
- National environmental and employee safety regulations must be followed.
- First aid and eye shower must be within reach.
- Daily service and daily checks may be done by the operator. All other service and inspections must be done by authorized, trained personnel.
- Always work alone when service actions is performed.
- Use protective goggles and gloves.
- The machine must be stopped.
- The machine's main switch must be locked in position "0". Never insert any part of your body into any opening, unless the main switch is locked in position "0".
- The machine must be disconnected from the mains before electrical repairs or electrical installing is begun.

- Be very careful – When opening and closing the machine. Risk of cutting or pinch injuries!
- Be very careful – When checking and changing drive belt(s). Risk of cutting or pinch injuries!
- Be very careful – When the machine is opened the knives are accessible. The knives are sharp, and they may cause personal injuries even when they are not rotating. The rotor can rotate by itself. Always lock the rotor with a piece of wood to prevent the rotor from self-rotating. Risk of cutting or pinch injuries!
- Be very careful – When pulling the rotor or the rotor pulley manually. Risk of cutting or pinch injuries!
- Be very careful – When cleaning. Granulate and plastic residue can make the floor slippery.
- Be very careful – When working on high level. Only use specially installed and fastened steps, stairs and platforms. It is not permissible to remove any outer safety equipment such as protective screens, bars, nets etc.
- After service / check is done all covers must be reinstalled. All hatches to electrical cabinet, transmission and pneumatics (if supplied) must be closed and locked. The key must be kept by the personnel responsible for the machine's service and safety.

- A granulator with optional belt conveyor:
  - The belt conveyor's main switch must be locked in position "0".
  - The belt conveyor's mains plug must be disconnected from the mains.

Risk of machinery damage

- If incorrect material is fed into the machine.
- If the belt tension is incorrect or if the drive belt(s) is/are worn.
- If the screen in the screen box is worn or incorrectly installed.
- If the knives' tightening screws are tightened with incorrect tightening torque.
- If the knife clearance is wrong.
- If the knives are blunt.
- If the instructions in the instruction manual are not followed accurately.

Technical specifications

General data, Supplied machine:

Fill in correct information, so that the data corresponds with the machine sign on your supplied machine:

Machine type: .....

Serial no:..... Manufacturing year: .....

Motor: ..... V ..... Hz ..... kW Electrical circuit diagram: .....

General data, Conair CKW-series:

Mark the correct alternatives, so that the data corresponds with your supplied machine:

Model number: ..... ☐ CKW-2436 ☐ CKW-2448 ☐ CKW-2460

Cutter housing: ..... ☐ 1st ☐ 5th ☐ 3rd

Cutter housing, (Ø x Width): ..☐ 24 x 36 in{600x900mm}(CKW-2436) ☐ 24 x 48 in{600x1200 mm}(CKW-2448) ☐ 24 x 60 in {600x1500mm}(CKW-2460)

Rotor: ..... ☐ 3-blade ☐ 3-blade, Beam ☐ 5-blade, Beam ☐ 7-blade, Beam

Rotating knives: ..... ☐ V-cut, Grindable, 2 pcs / blade

Fixed knives .... ☐ Reversible, Grindable V-cut, 2 pcs/knife seat (1st, 5th, 2nd, 4th) ☐ Grindable, Straight, 2 pcs/knife seat (3rd)

Screen, Ø: ..... ☐ 0.24 in{6 mm} ☐ 0.32 in {8 mm} ☐ 0.39 in {10 mm} ☐ 0.47 in {12 mm} ☐ 0.67 in {17 mm} ..... ☐ 0.98 in {25 mm}

Capacity: ..... ☐ 1,102.3-3,511.6 lb/h{500-2500 kg/h}

Rotor speed / Motor speed: ..... ☐ 390 rpm /1500 rpm (50 Hz) ☐ 470 rpm / 1800 rpm (60 Hz)

Motor power: ..... ☐ 55 kW ☐ 75 kW ☐ 90kW ☐ 110 kW ☐ 132 kW ☐ 160 kW ☐ Flywheel

Drive belt(s): ..... ☐ 5 pcs (55kW) ☐ 6 pcs (75kW) ☐ 7 pcs (90kW) ☐ 9 pcs (110 kW) ☐ 10 pcs (132 kW, 160kw))

Weight*:..☐ 14,330 lb {6500 kg}(CKW-2436) ☐ 16,534 lb {7500 kg} (CKW-2448) ☐ 19,841{9000 kg} (CKW-2460)
*Note! The weight can vary dependent on hopper size, type of cutter housing, type of rotor, motor size, enclosures etc.

Sound level, Idle operation**: ..... ☐ dBA (Optional sound enclosure)
**(The specified sound level is dependent on granulator size, capacity, temperature etc).

Options: ..... ☐ Grinding fixture ☐ Presetting fixture "Long"

.....☐ Level switch, Paddle type ☐ Hours counter

☐ Current relay Current transformer: ..... (1/A) LV%: ..... H%: ..... ☐ LVA, Y/D-start: Rated current ..... A / √3 = ... A ☐ LVA, Direct-start: Rated current ..... A / 1 = ... A

Material transport:..... ☐ Blower F37S ☐ Blower F40

..... ☐ Belt conveyor ☐ Metal detector "Tunnel" ☐ Metal detector "Area"

..... ☐ Cyclone AX 20

Personnel responsible for the machine's service and safety:

Name:..... Phone: .....

Name:..... Phone: .....

Overview

The performance of your supplied machine may vary from the standard machines described in this instruction manual. In event of any questions, please contact Conair's local distributor or Conair's corporate office.

Hopper ..... (1)

Flap(s) ..... (2)

Cover, Transmission ..... (3)

Rotor pulley ..... (4)

Drive belt(s) ..... (5)

Motor pulley ..... (6)

Motor ..... (7)

Tightening screws, Motor ..... (8)

Tightening screws, Motor mounting bracket ..... (9)

Adjusting screws, Belt stretcher ..... (10)

Safety switch, Hopper / Cutter housing ..... (11)

Jack, Hopper ..... (12)

Cutter housing ..... (13)

Rotor, Rotating knives ..... (14)

Front fixed knives ..... (15)

Front door / Screen box ..... (16)

Catch, Front door ..... (17)

Magnet switch, Granule bin ..... (18)

Granule bin, Single ..... (19)

Granule bin, Divided ..... (20)

Screen box ..... (21)

Screen ..... (22)

Start-button ..... (23)

Stop-button ..... (24)

Button "Reset safety relay" ..... (25)

Emergency stop ..... (26)

Button "Operate 1" ..... (27)

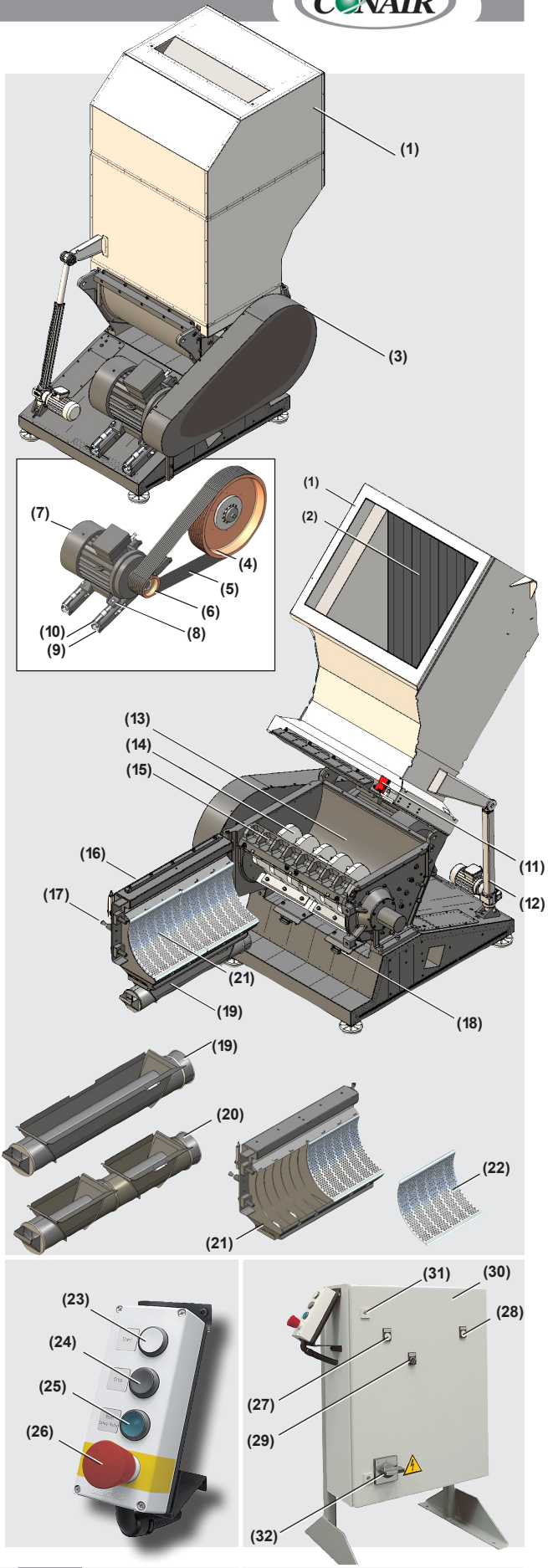
Button "Operate 2" ..... (28)

Knob "Hopper, Open / Close" ..... (29)

Hatch, Electrical cabinet ..... (30)

Lock, Electrical cabinet ..... (31)

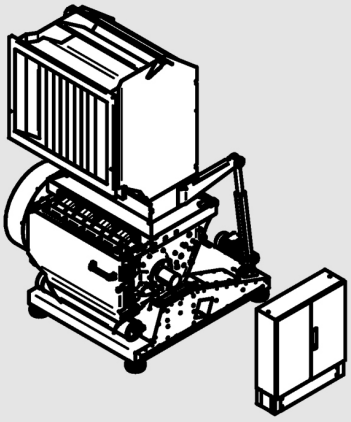
Main switch ..... (32)

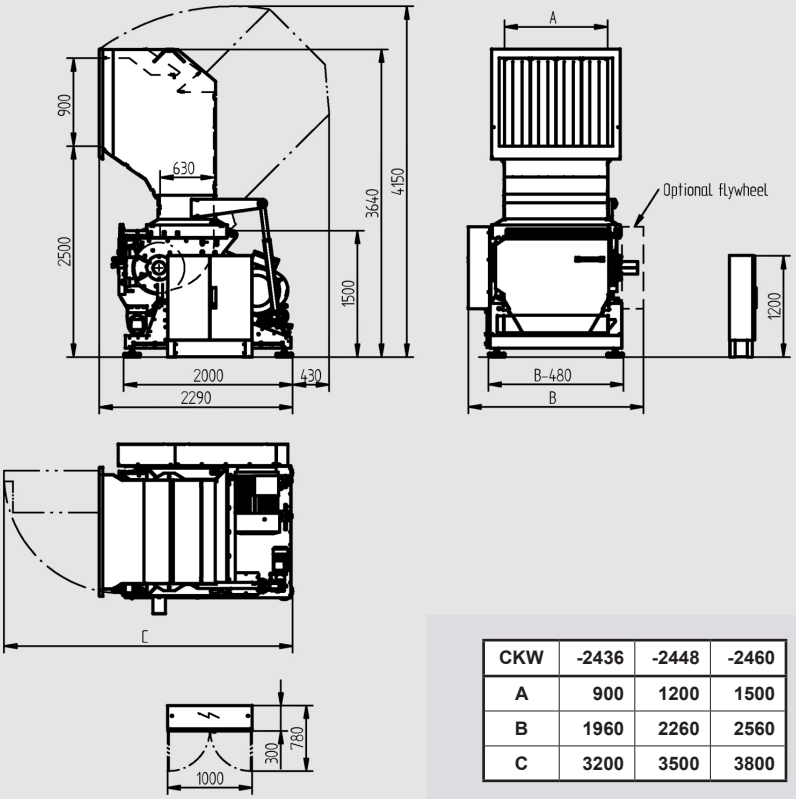


Layout

CKW
HOPPER FRONT

LAYOUT NO: 4-60000-C01

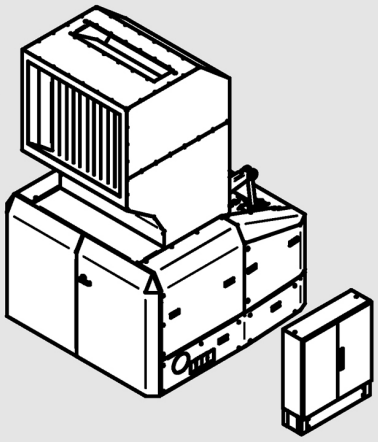


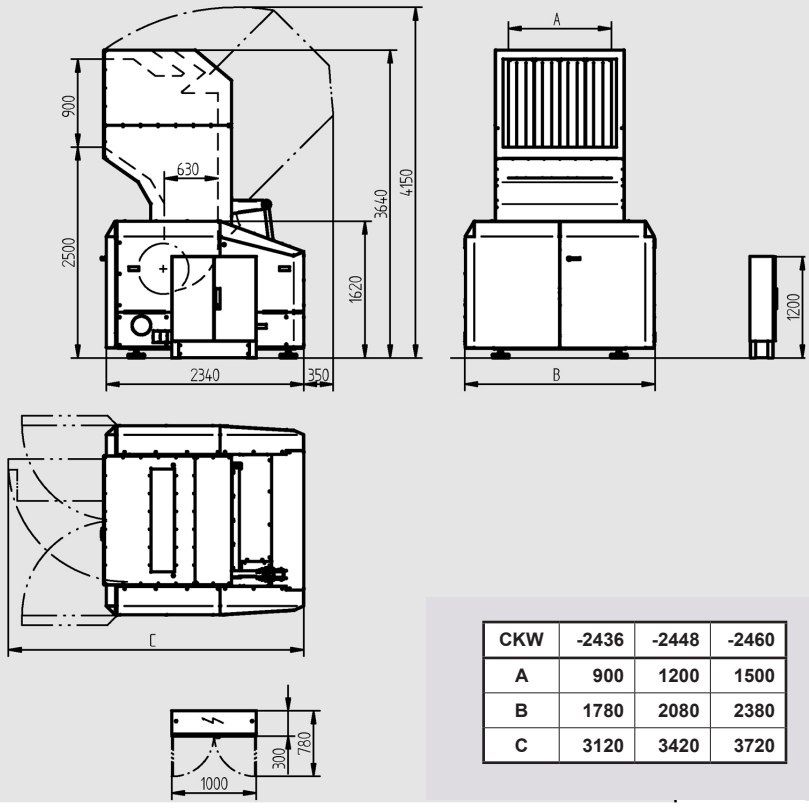


CKW	-2436	-2448	-2460
A	900	1200	1500
B	1960	2260	2560
C	3200	3500	3800

CKW-OPTIONAL SOUND ENCLOSURE
HOPPER FRONT

LAYOUT NO: 4-60001-C01

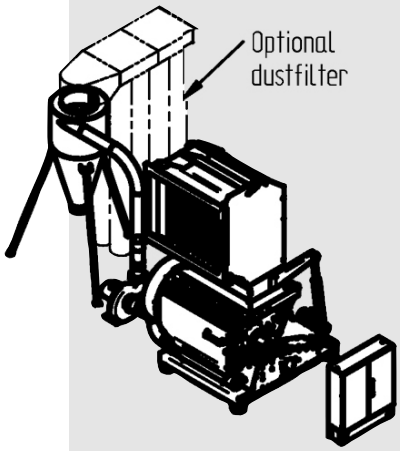


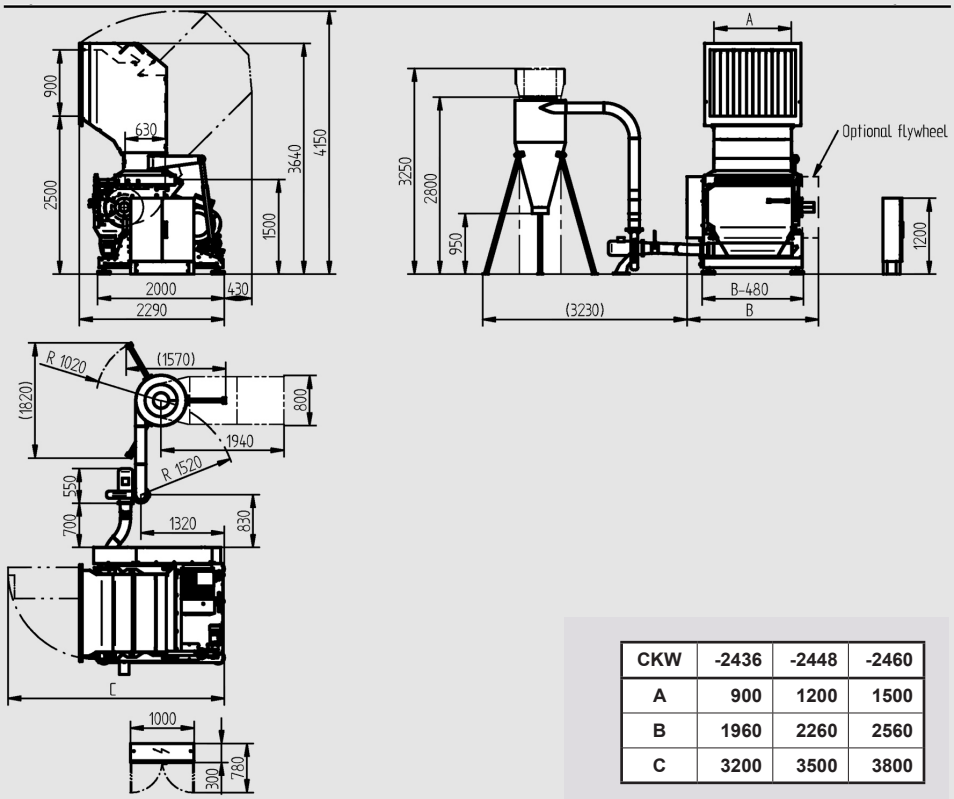


CKW	-2436	-2448	-2460
A	900	1200	1500
B	1780	2080	2380
C	3120	3420	3720

CKW-OPTIONAL BLOWER
HOPPER FRONT, F40, AX20

LAYOUT NO: 4-60002-C01

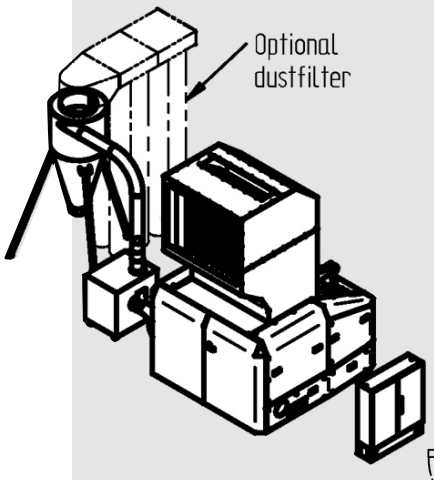


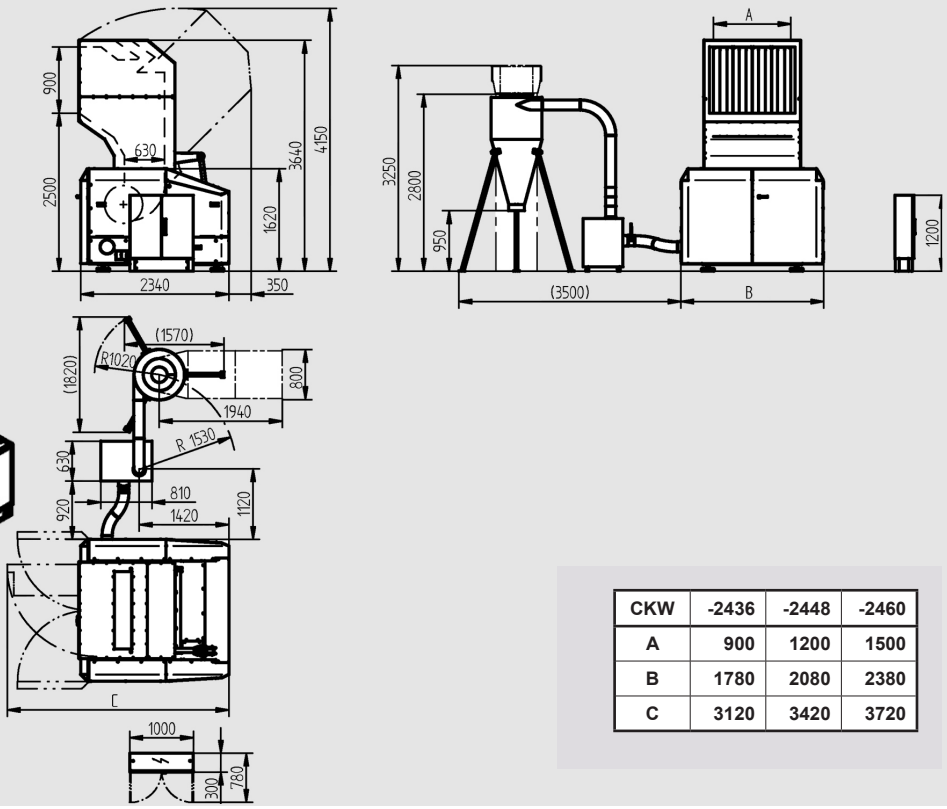


CKW	-2436	-2448	-2460
A	900	1200	1500
B	1960	2260	2560
C	3200	3500	3800

CKW-OPTIONAL SOUND ENCLOSURE / BLOWER
HOPPER FRONT, F40, AX20

LAYOUT NO: 4-60003-C01

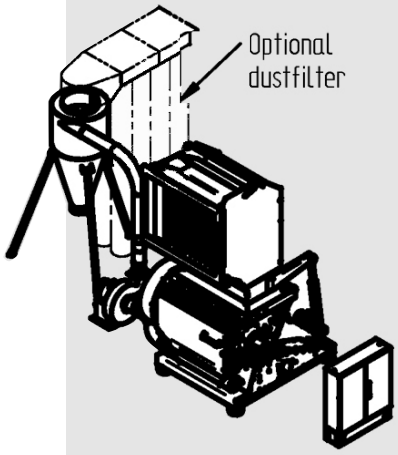


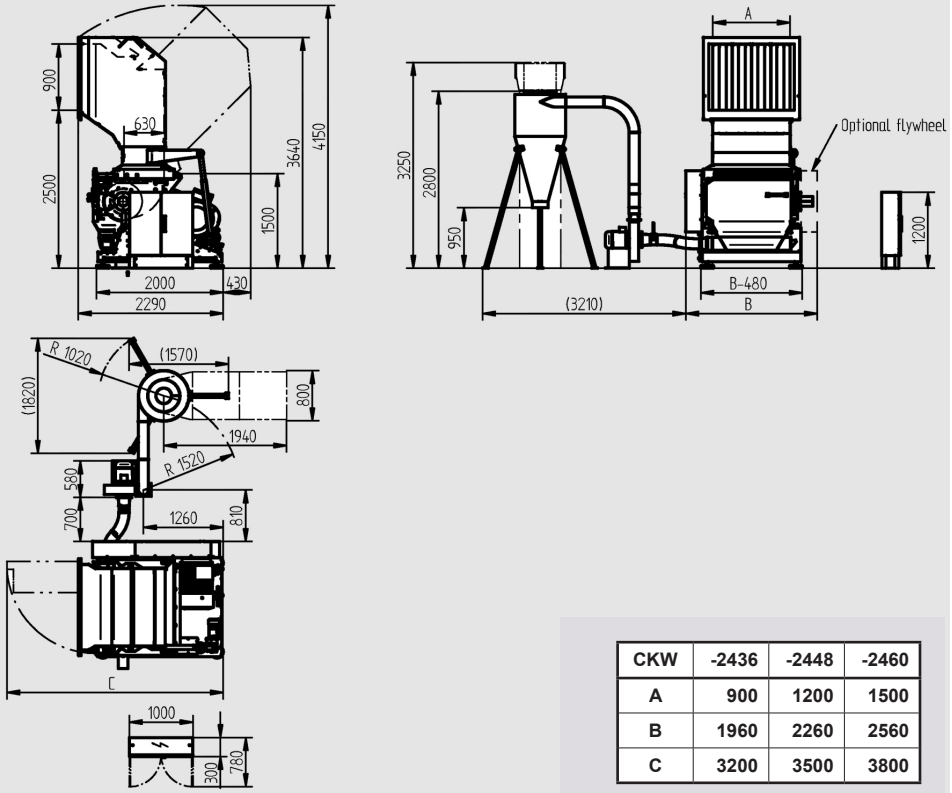


CKW	-2436	-2448	-2460
A	900	1200	1500
B	1780	2080	2380
C	3120	3420	3720

CKW-OPTIONAL BLOWER HOPPER FRONT, F37S, AX20

LAYOUT NO: 4-60004-C01

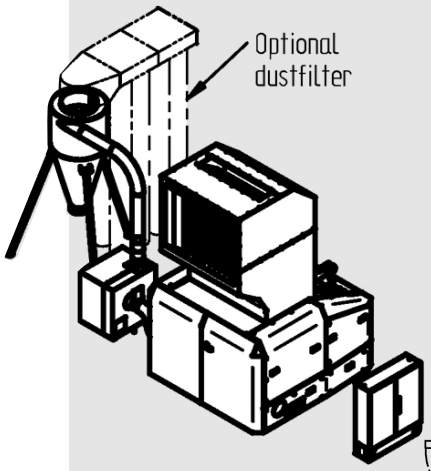


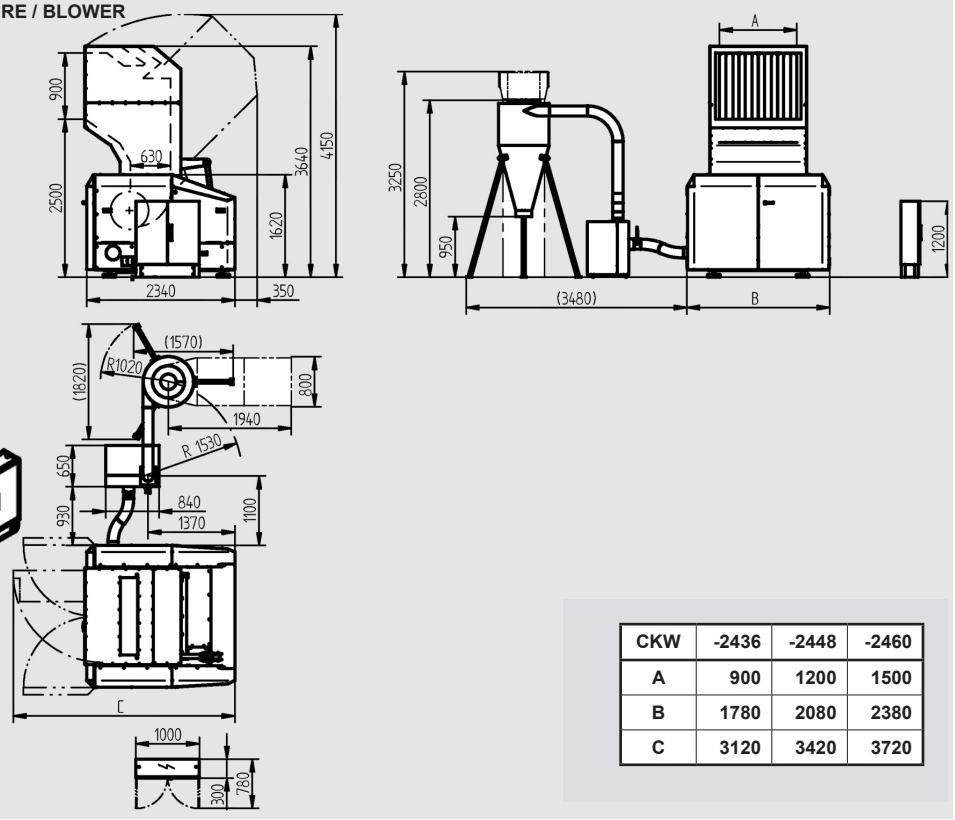


CKW	-2436	-2448	-2460
A	900	1200	1500
B	1960	2260	2560
C	3200	3500	3800

CKW-OPTIONAL SOUND ENCLOSURE / BLOWER HOPPER FRONT, F37S, AX20

LAYOUT NO: 4-60005-C01

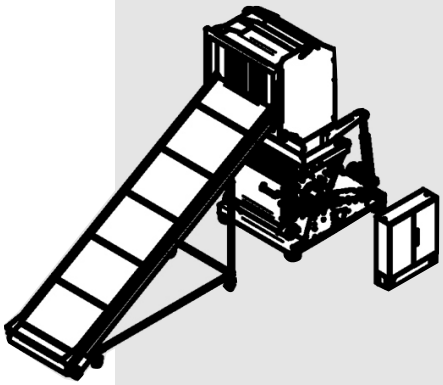


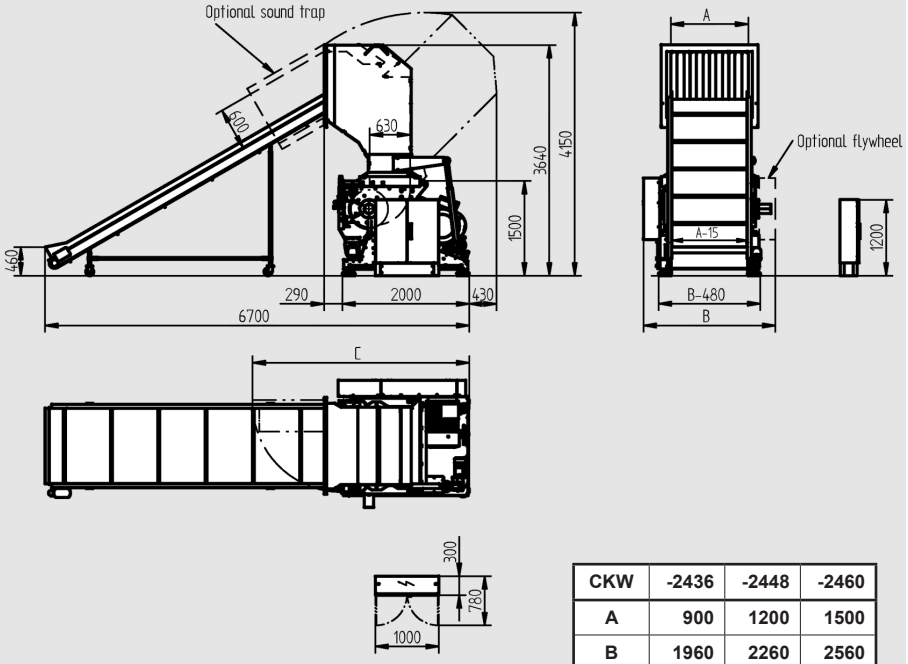


CKW	-2436	-2448	-2460
A	900	1200	1500
B	1780	2080	2380
C	3120	3420	3720

CKW-OPTIONAL BLOWER
BELT CONV FRONT

LAYOUT NO: 4-60006-C01

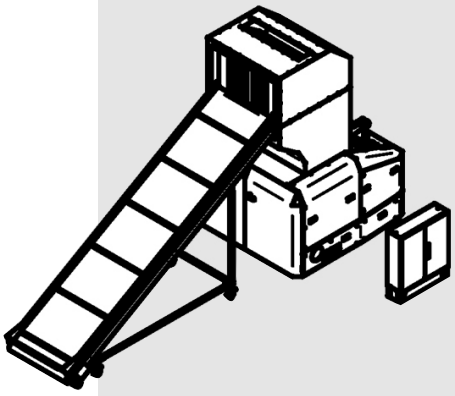


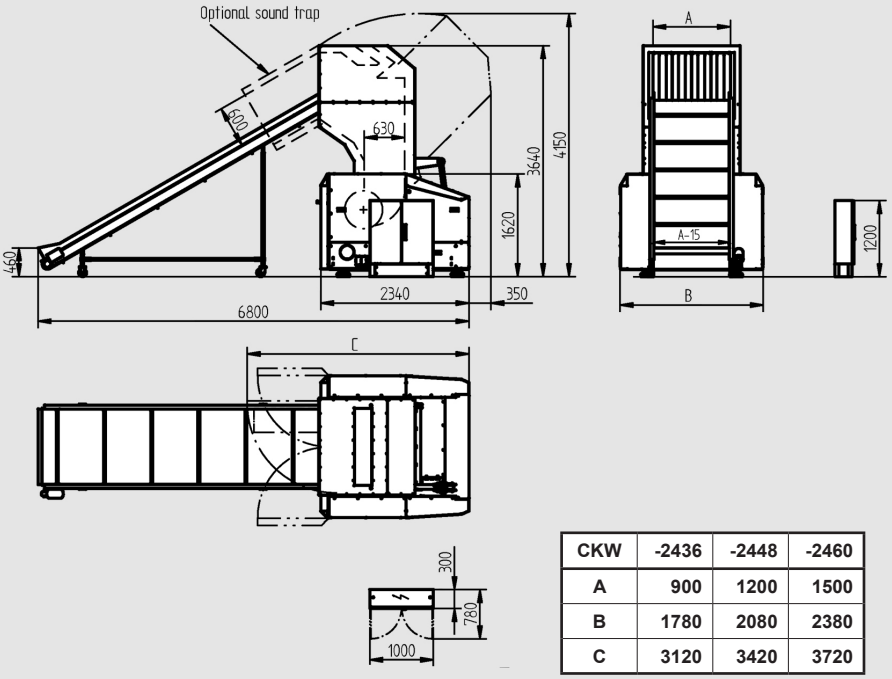


CKW	-2436	-2448	-2460
A	900	1200	1500
B	1960	2260	2560
C	3200	3500	3800

CKW-OPTIONAL SOUND ENCLOSURE / BLOWER
BELT CONV FRONT

LAYOUT NO: 4-60007-C01



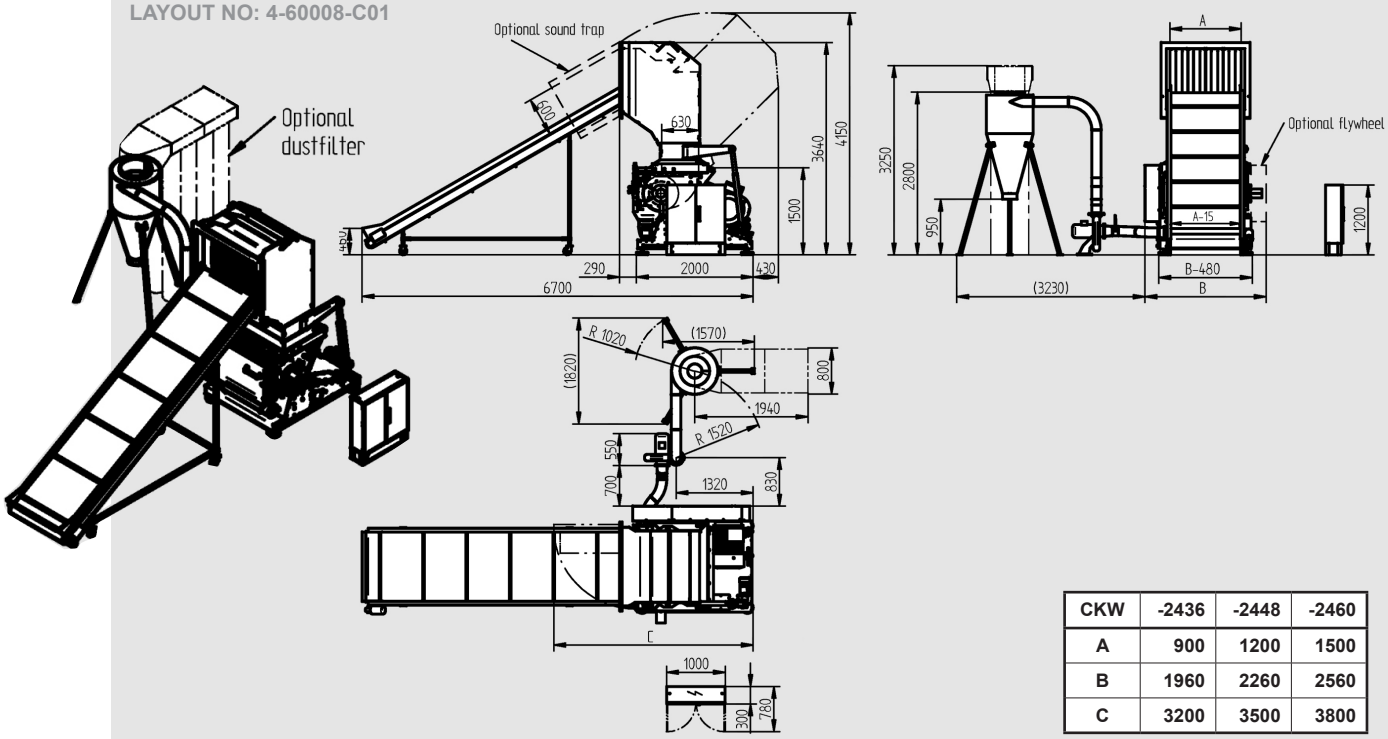


CKW	-2436	-2448	-2460
A	900	1200	1500
B	1780	2080	2380
C	3120	3420	3720

Layout

CKW-OPTIONAL BLOWER / BLOWER
BELT CONV FRONT, F40, AX20

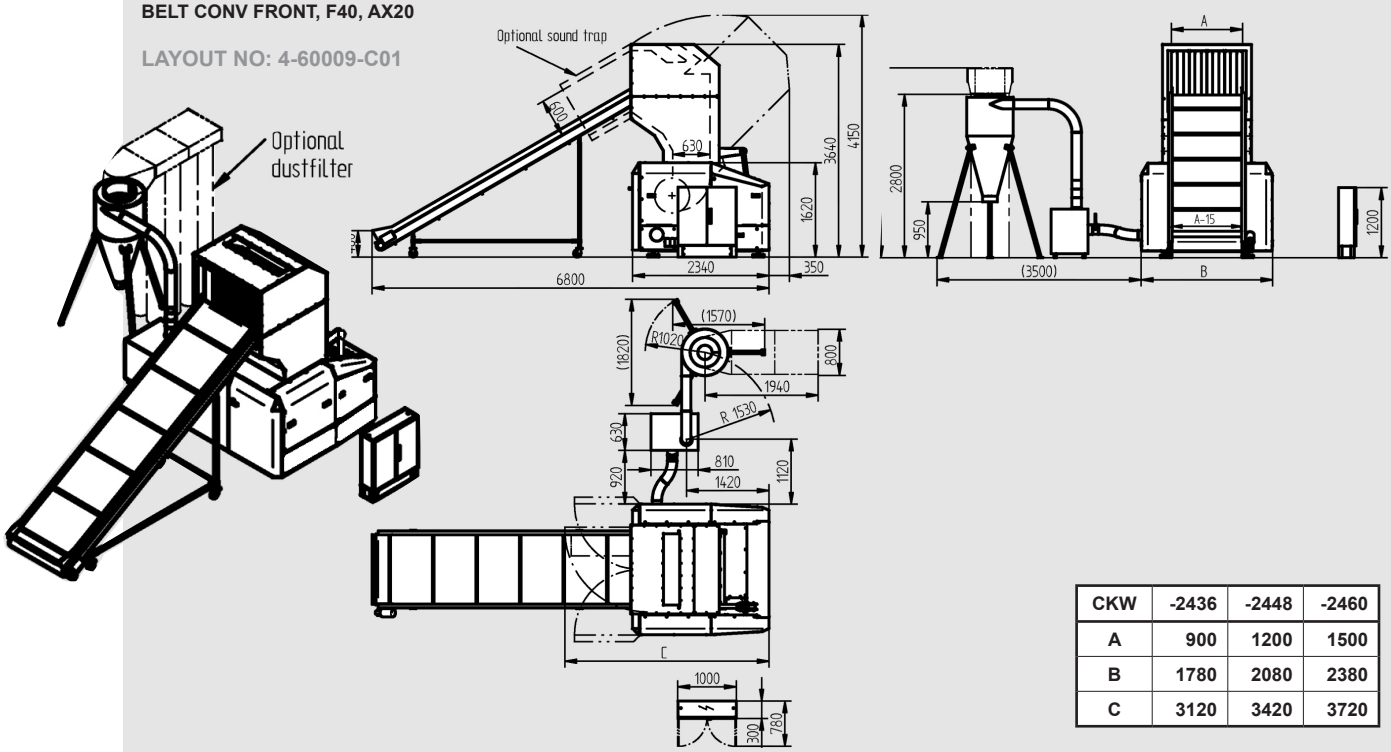
LAYOUT NO: 4-60008-C01



CKW	-2436	-2448	-2460
A	900	1200	1500
B	1960	2260	2560
C	3200	3500	3800

CKW-OPTIONAL SOUND ENCLOSURE / BLOWER /
BELT CONVEYOR
BELT CONV FRONT, F40, AX20

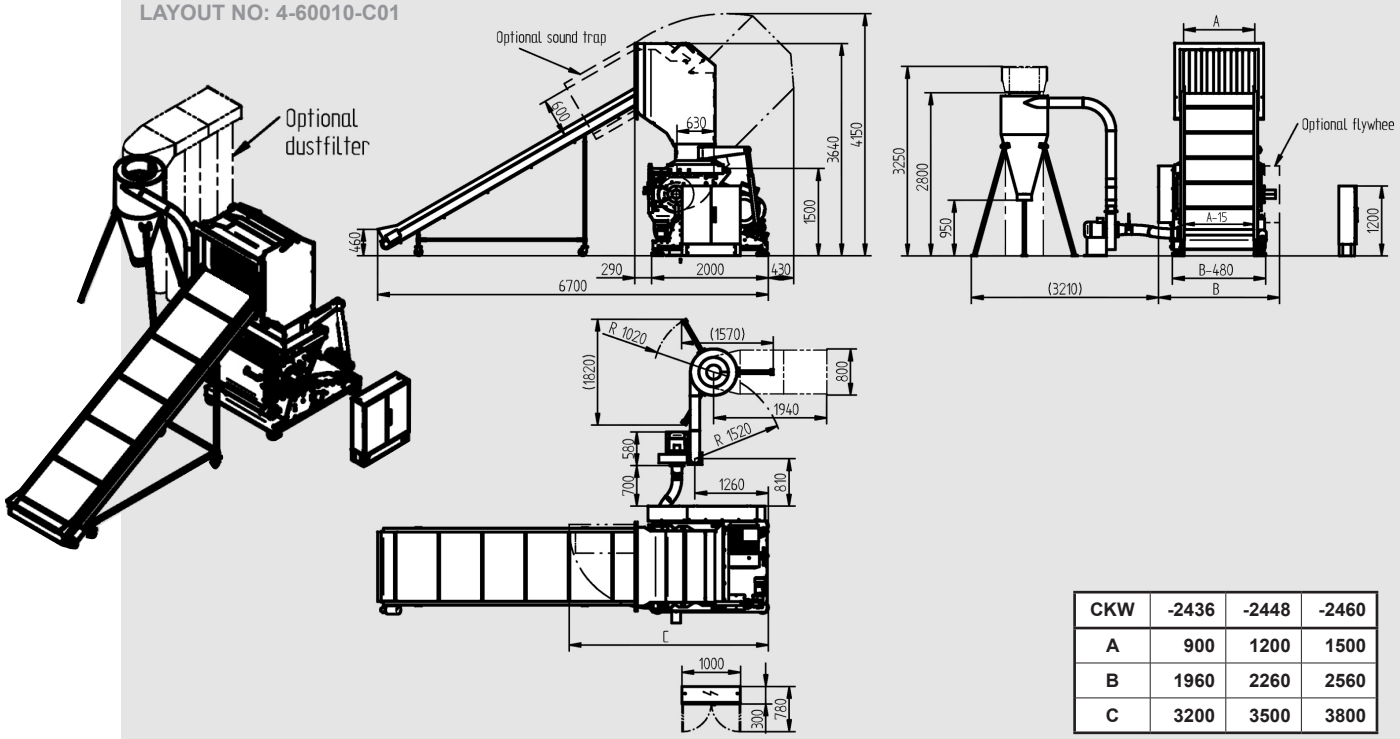
LAYOUT NO: 4-60009-C01



CKW	-2436	-2448	-2460
A	900	1200	1500
B	1780	2080	2380
C	3120	3420	3720

CKW-OPTIONAL BLOWER / BELT CONVEYOR
BELT CONV FRONT, F37S, AX20

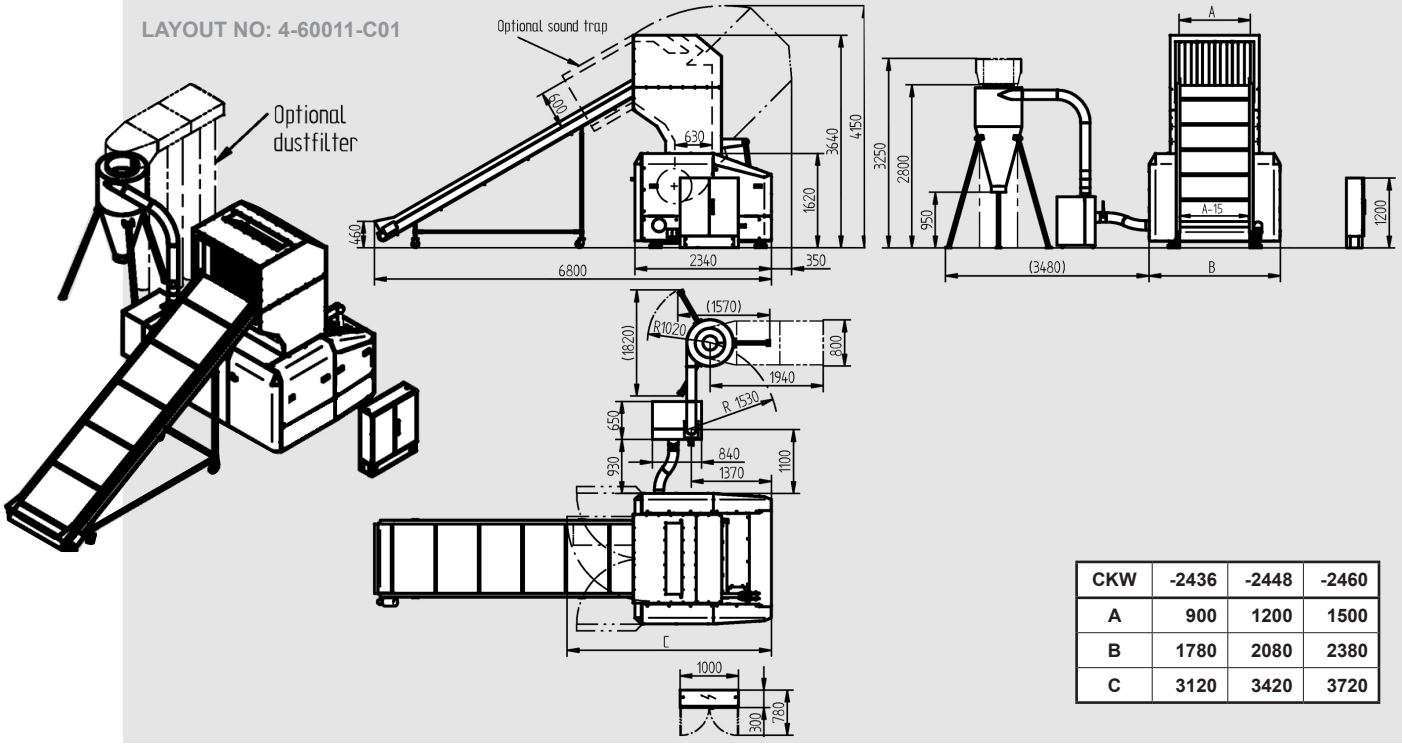
LAYOUT NO: 4-60010-C01



CKW	-2436	-2448	-2460
A	900	1200	1500
B	1960	2260	2560
C	3200	3500	3800

CKW-OPTIONAL SOUND ENCLOSURE / BLOWER /
BELT CONVEYOR
BELT CONV FRONT, F37S, AX20

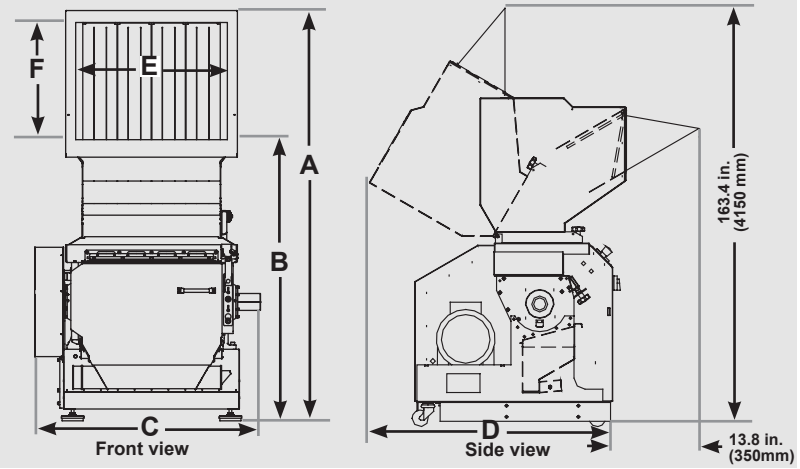
LAYOUT NO: 4-60011-C01



CKW	-2436	-2448	-2460
A	900	1200	1500
B	1780	2080	2380
C	3120	3420	3720

Specifications

Granulator with standard hand feed hopper



MODELS	CKW-2436	CKW-2448	CKW-2460
Performance characteristics			
Maximum throughput* lb/hr {kg/hr}	up to 5511 {2500}	up to 6614 {3000}	up to 8818 {4000}
Super tangential	35.4 x 31.5	47.2 x 31.5	59.0 x 31.5
cutter chamber opening in. {mm}	{900 x 800}	{1200 x 800}	{1500 x 800}
Tangential	35.4 x 24.8	47.2 x 24.8	59.0 x 24.8
cutter chamber opening in. {mm}	{900 x 630}	{1200 x 630}	{1500 x 630}
Pre-cut	35.4 x 23.6	47.2 x 23.6	59.0 x 23.6
cutter chamber opening in. {mm}	{900 x 600}	{1200 x 600}	{1500 x 600}
Rotor speed rpm	470	470	470
Cutting circle in. {mm}	23.6 {600}	23.6 {600}	23.6 {600}
Motor power Hp {kW}	100 {75}	100 {75}	100 {75}
Rotor type	3-blade standard		
Screen hole sizes in. {mm}	5/16 {8} (3/8, 1/2, 5/8, 1 {10,12,17, 25} - optional)		
Knives			
Number of rotating knives	3-blade open (3-blade beam, 5-, 7-blade optional)		
Number of fixed knives	Super tangential 2 standard {3 optional); Tangential 3 standard {up to 4 optional} Restricted standard {up to 4 optional}		
Dimensions inches {mm}			
A - Overall height	143.3 {3640}	143.3 {3640}	143.3 {3640}
B - Height to hopper opening	98.4 {2500}	98.4 {2500}	98.4 {2500}
C - Width	77.2 {1960}	88.9 {2260}	100.8 {2560}
D - Depth	125.9 {3200}	137.8 {3500}	149.6 {3800}
E - Feed hopper opening - width	35.4 {900}	47.2 {1200}	59.0 {1500}
F - Feed hopper opening - height	35.4 {900}	35.4 {900}	35.4 {900}
Weight lb {kg}			
Installed	14330 {6500}	16534 {7500}	19841 {9000}
Shipping	14661 {6650}	16865 {7650}	20172 {9150}
Voltages Total amps based on motor size			
Motor power Hp {kW}	100 {75}	100 {75}	100 {75}
208V/3 phase/60 Hz	268	268	268
230V/3 phase/60 Hz	242	242	242
460V/3 phase/60 Hz	121	121	121
575V/3 phase/60 Hz	97	97	97
Noise level†			
With standard hopper	95 dbA		
With optional soundproofing	90 dbA		

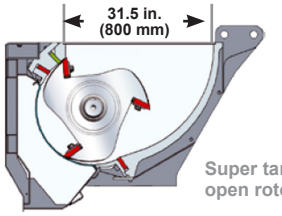
SPECIFICATION NOTES:

* Throughputs are provided as a capacity guideline only. Throughput will vary according to the size, shape, thickness and properties of the material to be cut, as well as the desired size of the granulate. Consult Conair for a material test or help determining the correct granulator model for your application.

† Noise level will vary according to material type being processed and the granulator configuration. These ranges are based on tests using SPI standards.

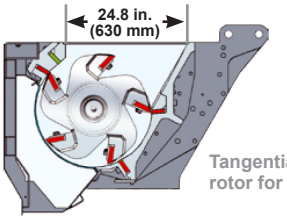
Specifications may change without notice. Check with a Conair representative for the most current information.

Cutting chamber configurations



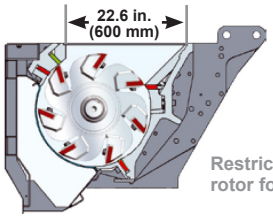
Super tangential with 3-blade open rotor for bulk waste

Standard configuration includes two (2) fixed knives. Typical applications are bulky parts and scrap.



Tangential with 5-blade beam rotor for thick bulk waste

Three (3) fixed knives are standard on tangential chambers for increased throughputs. Typical applications are thick-walled, heavy-cross section parts and scrap.



Restricted with 5- or 7-blade beam rotor for thick-walled waste

Three (3) fixed knives are standard on chambers for thorough material granulation. Typical applications are thick-walled, heavy-cross section parts and scrap.

Motor options

●=standard o=optional	CKW-2436	CKW-2448	CKW-2460
100 Hp {75 kW}	●	o	o
125 Hp {93 kW}	o	●	●
150 Hp {110 kW}	o	o	o

Evacuation blower options

o=optional	CKW-2436	CKW-2448	CKW-2460
10 Hp {7.5 kW}	o	NA	NA
15 Hp {11.1 kW}	o	o	o
25 Hp {18.6 kW}	NA	o	o

Function

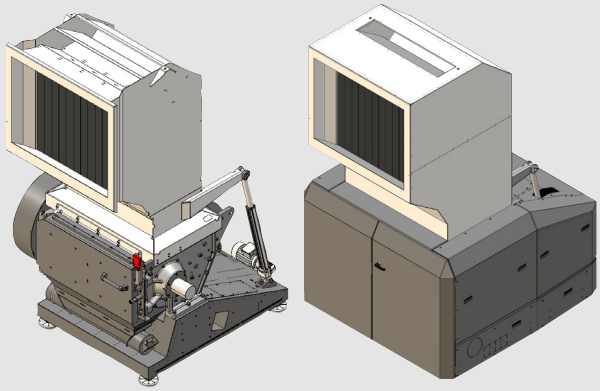
Conair CKW-series

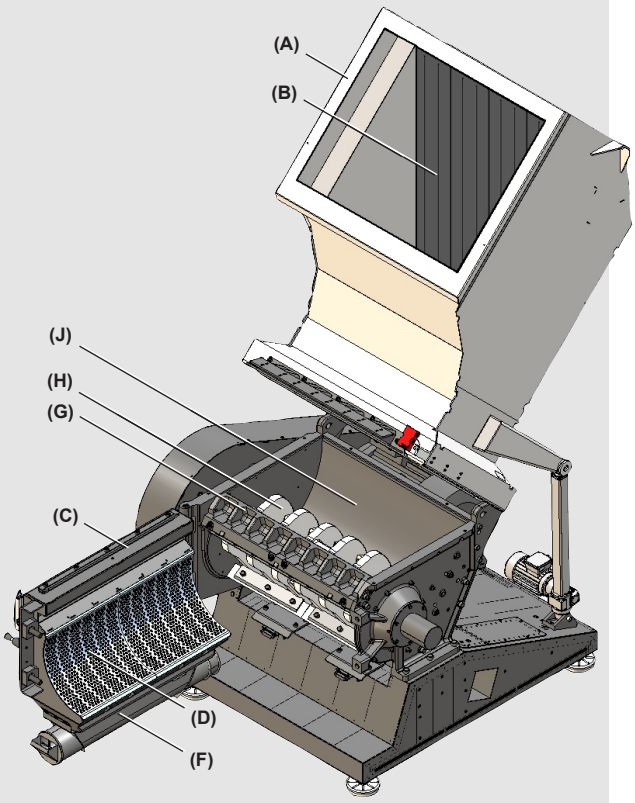
Conair CKW-series granulators are designed for granulating injection moulded, blow moulded or extruded plastic residue. The function of the granulator can be described as follows:

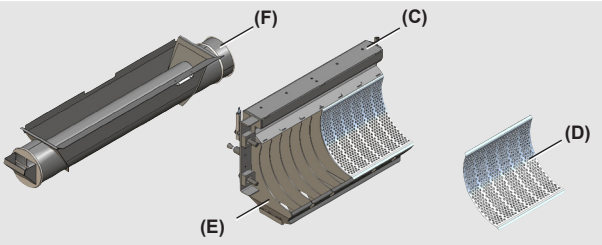
1. The plastic residue, which must be free from metal and contamination, is fed into the granulator's hopper.
2. The plastic residue falls through the hopper and down into the cutter housing. The cutter housing contains fixed knives and a rotor.
3. Rotating knives are mounted on the rotor. The plastic residue is granulated (cut up) between the rotating knives on the rotor and the fixed knives in the cutter housing. Both rotating knives and fixed knives must be replaced or grinded as necessary.

Important! The granulator must never be used with blunt knives. Blunt knives cause abnormal wear and damages the granulator.

4. The size of the granulate (the cut up plastic residue) is determined by the screen. The screen is installed in the screen box in the base of the cutter housing. The screen can easily be changed to give the required granulate size.
5. The granulate passes through the screen down into the granule bin, which collects the finished granulate.
6. The granule bin can be emptied manually or by means of a blower.







(A) = Hopper
(B) = Flap(s)
(C) = Front door
(D) = Screen
(E) = Screen box
(F) = Granule bin
(G) = Front fixed knife
(H) = Rotating knives, Rotor
(J) = Cutter housing

Suffix -2436, -2448 and -2460

The additional suffix -2436, -2448 and -2460 refers to the cutter housing's width.

Sound Enclosure Option

Your granulator may be equiped with an optional sound insulating enclosure. >Page 9:26 "Enclosure".

Blower Option

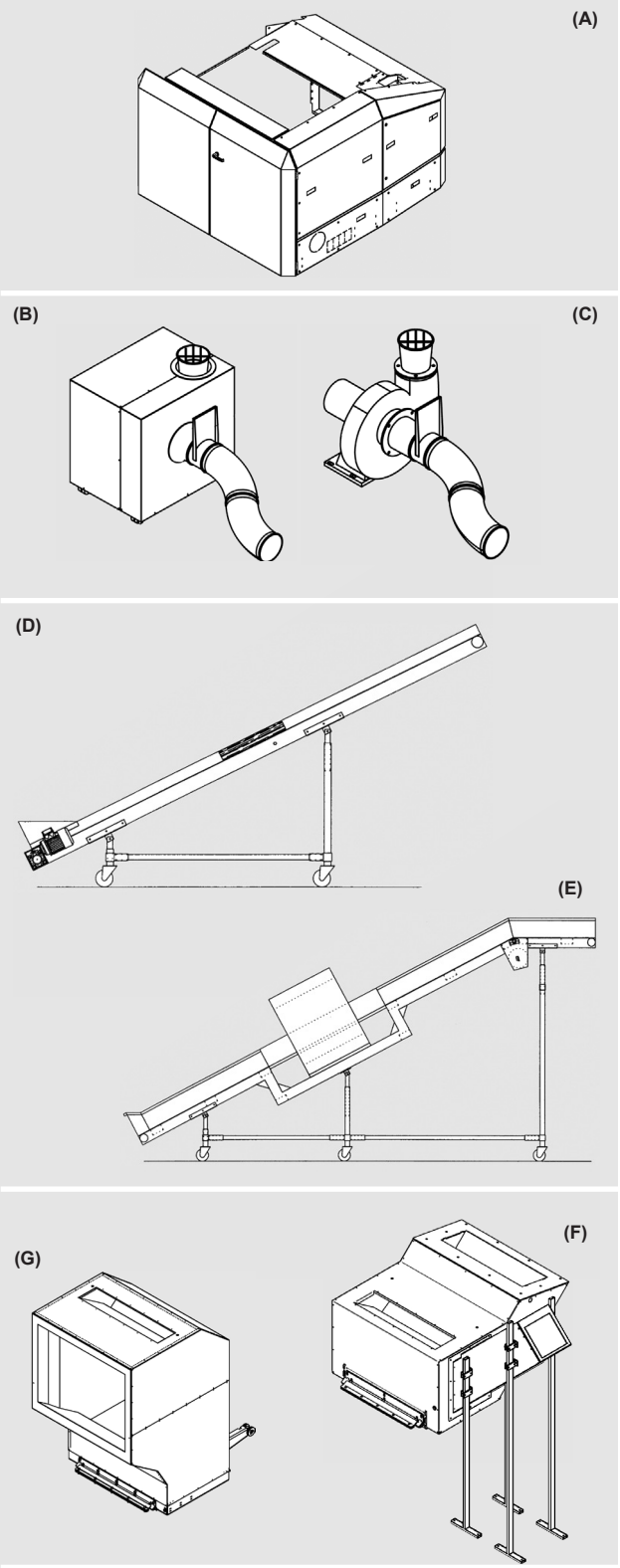
The blower transports granulate on from the granule bin to units such as a dust separator system or a granulate container for later use. Blowers are available with or without sound insulating enclosure. Optional blowers; F25, F37S, F40. >Page 9:32 "Material transport".

Belt Conveyor Option

The belt conveyor transports plastic residue to the granulator's inlet / hopper. The belt conveyor can be provided with a metal detector. >Page 9:32 "Material transport".

Pipe/Profile Hopper Option

Your granulator may be provided with a hopper that is adapted for granulation of pipes and profiles. >Page 9:3–9:4 "Hopper".



(A) = Enclosure
(B) = Blower, With enclosure
(C) = Blower, Without enclosure
(D) = Belt conveyor, With area detector (MDA)
(E) = Belt conveyor, With tunnel detector (MDTD)
(F) = Hopper, For pipes
(G) = Hopper, For enclosure

Roll Feed Option

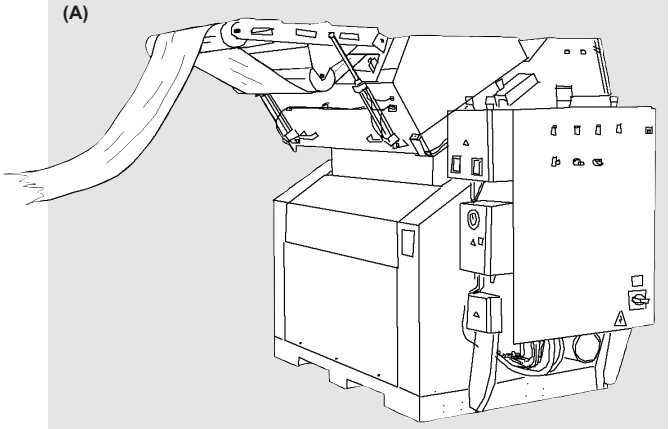
The roller feeder contains rotating rollers which feed plastic residue into the granulator's cutter housing. Optional roller feeders; RFL, RFS, RFM. >Please refer to separate instruction manual "Roller feeder".

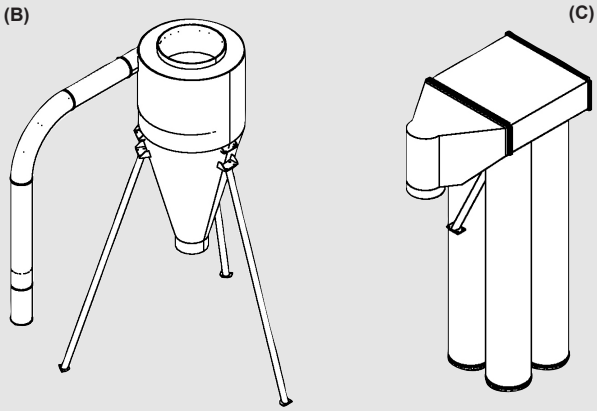
Cyclone Option

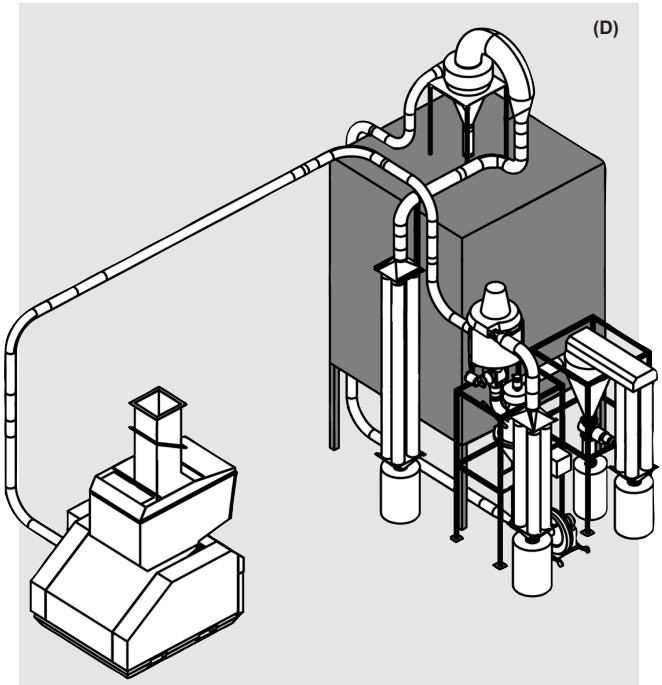
The cyclone separates air from finished granulate. The cyclone's air outlet can be provided with a filter. Optional cyclones; AX16, AX20.

Dust Separator Option

The dust separator system cleans the finished granulate. Optional dust separator systems; DS-400 or TRACS. >Please refer to separate instruction manual "DS-400" or "TRACS".







(A) = Roller feeder
(B) = Cyclone
(C) = Air filter, Cyclone
(F) = Dust separator system

Rotor

General rules, Rotor

The rotor is designed and adapted to the type of plastic residue that the customer has specified before order. The Conair CKW Series Granulator can be provided with several types of rotors. >Page 9:10–9:11 “Rotor”.

3-blade rotor, 3-blade beam rotor

The 3-blade rotor has three knife rows with two rotating knives per row. Totally six rotating knives.

The 3-blade rotor is available in two editions, “3-blade rotor” and “3-blade beam rotor”.

5-blade beam rotor

The 5-blade rotor has five knife rows with two rotating knives per row. Totally ten rotating knives.

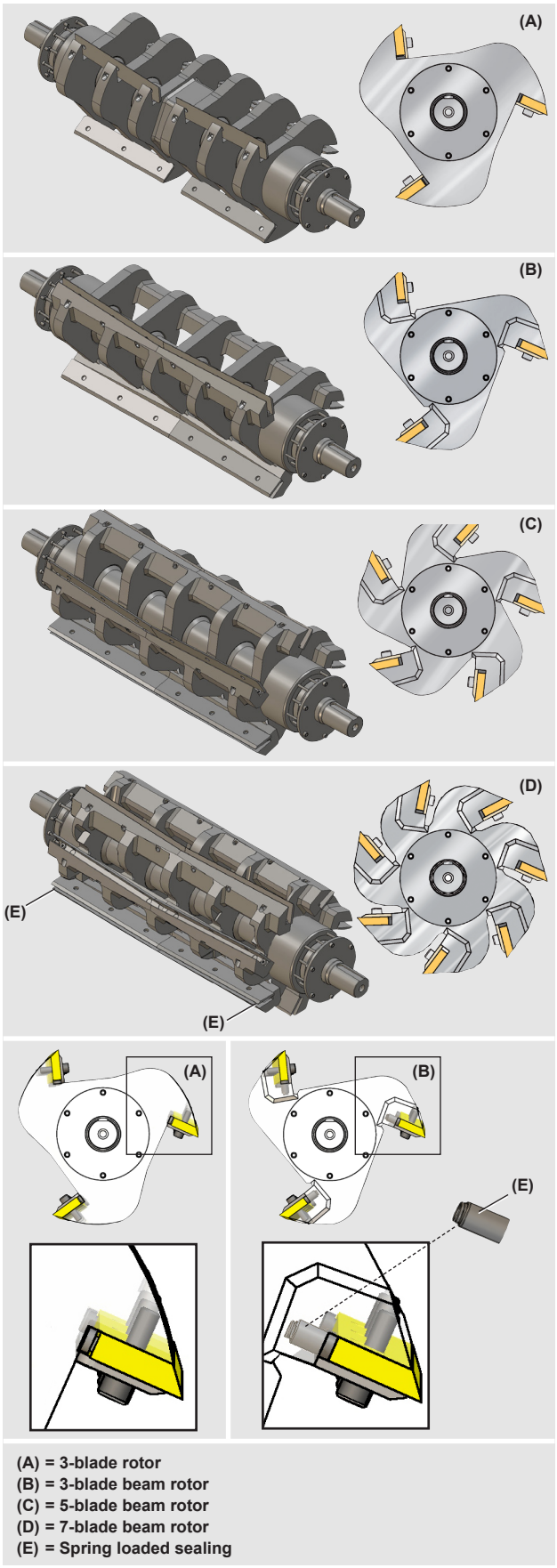
7-blade beam rotor

The 7-blade rotor has seven knife rows with two rotating knives per row. Totally fourteen rotating knives.

Beam rotor

The beam rotor is provided with welded beams. The beams strengthen the rotor and make it more powerful.

The beam rotor is provided with spring loaded sealings in the outer ends of each knife row. The spring loaded sealings prevents granulate from jamming under the beams.



(A) = 3-blade rotor
(B) = 3-blade beam rotor
(C) = 5-blade beam rotor
(D) = 7-blade beam rotor
(E) = Spring loaded sealing

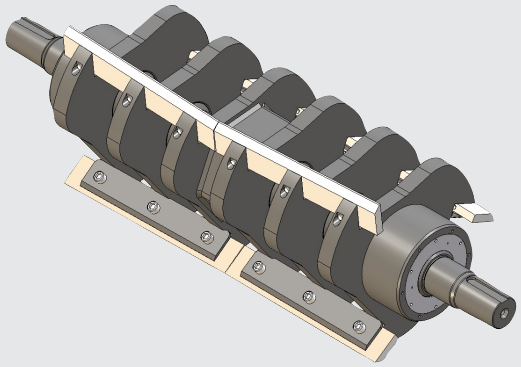
Rotating knives

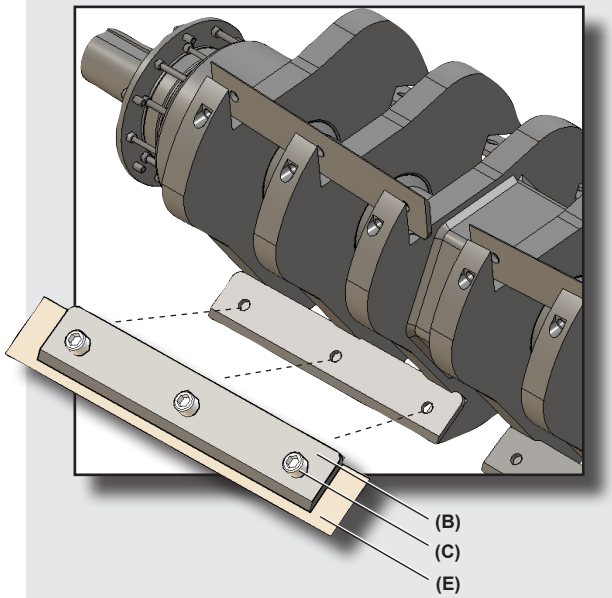
Rotating knives are mounted on the rotor. There are two rotating knives in each knife seat. The rotating knives are installed in a V-formation. The rotating knives are fixed with support rules and tightening screws.

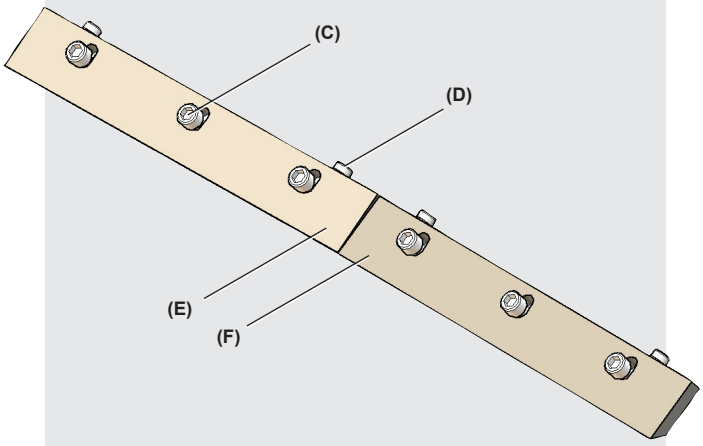
The knives are provided with adjusting screws which facilitates presetting of the knife clearance.
>Page 7:22 “Preset the knives”.

The granulator must never be used with blunt knives. Blunt knives cause abnormal wear and damages the granulator. The rotating knives must be replaced or grinded as necessary.

>Page 7:21 “Grind the rotating knives”.
>Page 9:12–9:13 “Knives”.







(A) = Rotor with knives
(B) = Support rule, Rotating knife
(C) = Tightening screw, Rotating knife
(D) = Adjusting screw, Rotating knife
(E) = Rotating knife, Left
(F) = Rotating knife, Right

Cutter housing

General rules, Cutter housing

The cutter housing is designed and adapted to the type of plastic residue that the customer has specified before order. The cutter housing can be provided with two, three or four fixed knives, depending on type of cutter housing. There are three types of cutter housings, cutter housing 1st “First”, cutter housing 3rd “Third” and cutter housing 5th “Fifth”. >Page 9:6–9:9 “Cutter housing”.

Cutter housing 1st

Cutter housing 1st has a tangential back. Cutter housing 1st has four knife seats: 1st, 5th, 2nd and 4th.

Cutter housing 5th

Cutter housing 5th has a super tangential back. Cutter housing 5th has three knife seats: 2nd, 4th and 5th.

Cutter housing 3rd

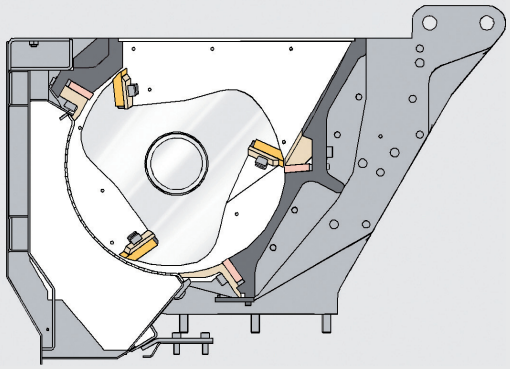
Cutter housing 3rd has a pre-cut back. Cutter housing 3rd has four knife seats: 3rd, 5th, 2nd and 4th.

Possible configurations

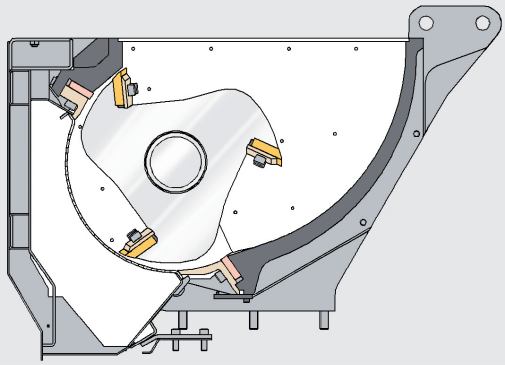
Possible configurations: Refer to table below:

CUTTER HOUSING	FIXED KNIVES
1st	1st, 2nd
	1st, 2nd, 4th
	1st, 2nd, 5th
	1st, 2nd, 4th, 5th
3rd	3rd, 2nd
	3rd, 2nd, 4th
	3rd, 2nd, 5th
	3rd, 2nd, 4th, 5th
5th	5th, 2nd
	5th, 2nd, 4th

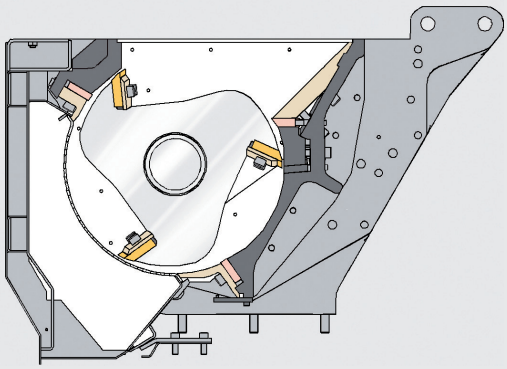
Cutter housing 1st, “First”, “Tangential”



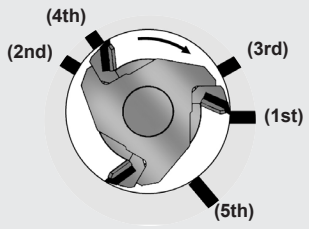
Cutter housing 5th, “Fifth”, “Super tangential”



Cutter housing 3rd, “Third”, “Precut”



Knife seat, Fixed knives



Fixed knives

The front fixed knife/knives is/are installed in the cutter housing's front side. The front fixed knives are called; 2nd and 4th.

The rear fixed knife/knives is/are installed in the cutter housing's back side. The rear fixed knives are called; 3rd, 1st and 5th.

There are two fixed knives in each knife seat. The fixed knives are installed in pairs. The front fixed knives 2nd and 4th and the rear fixed knives 1st and 5th are installed in a V-formation. The rear fixed knives 3rd are installed straight.

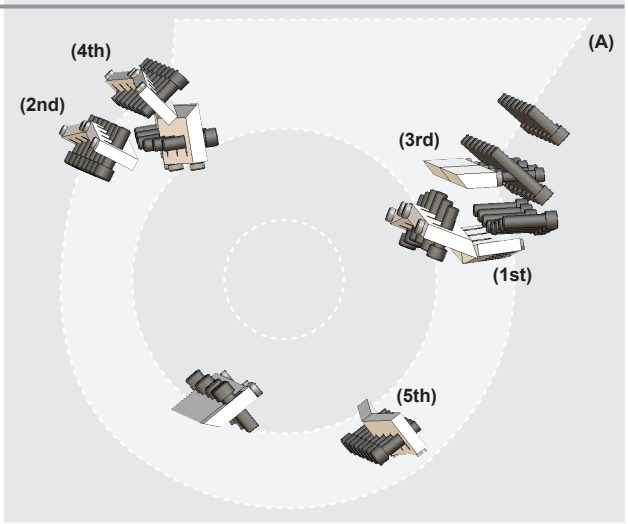
The fixed knives are fixed with support rules and tightening screws. The knives are provided with adjusting screws which facilitates presetting of the knife clearance. >Page 2:17 "Knife clearance".

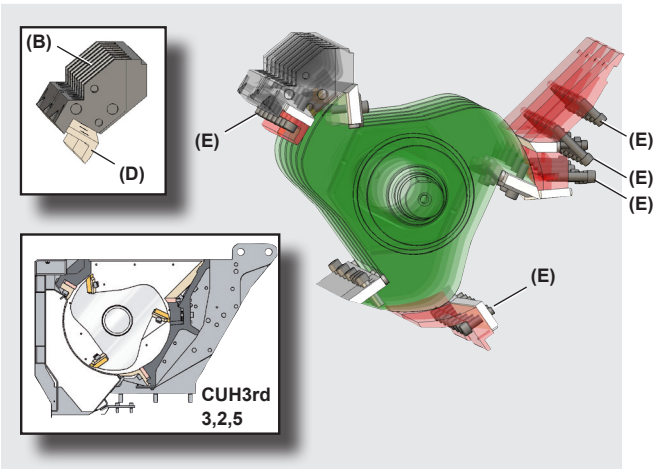
The granulator must never be used with blunt knives. Blunt knives cause abnormal wear and damages the granulator. The fixed knives must be replaced, grinded or reversed as necessary.

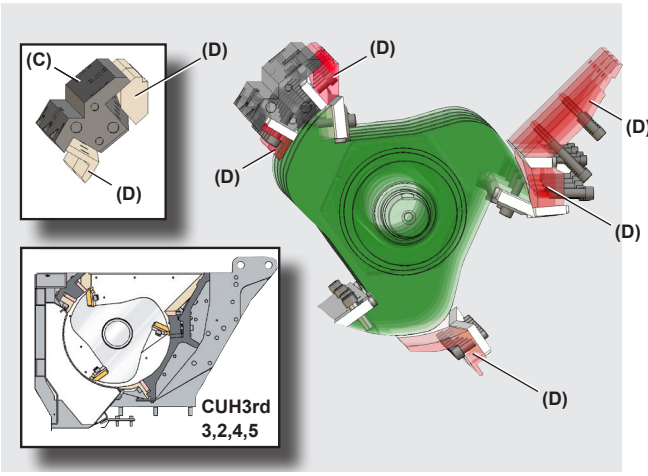
The fixed knives 1st, 5th, 2nd and 4th are reversible. This means that the fixed knife has two cutting edges and can be reversed once before grinding or discarding is necessary. Fixed knife 3rd is not reversible.

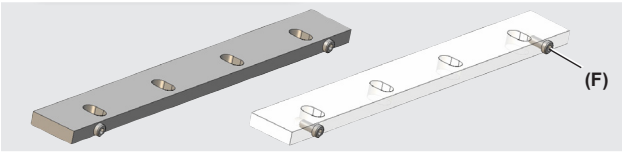
Note! If a fixed knife is left out, it must be replaced by an original distance supplied by Conair.

Note! The frontal knife holder is available in two editions, "Knife holder for fixed knife 2nd" and "Knife holder for fixed knife 2nd & 4th". If a front fixed knife is left out, the existing knife holder must be replaced with an appropriate knife holder supplied by Conair.









(A) = Fixed knives
(B) = Knife holder, Fixed knife 2nd
(C) = Knife holder, Fixed knife 2nd & 4th
(D) = Support rule, Fixed knife
(E) = Tightening screw, Fixed knife
(F) = Adjusting screw, Fixed knife

Grinding fixture

The grinding fixture (option) is used when grinding the knives.
>Page 7:20 “General rules, Grind the knives”.
>Page 9:31 “Options”.

Knife clearance

The knife clearance is the gap between the fixed knife and the rotating knife. Correct knife clearance is .02–.03 in.{0.40–0.70 mm}. The knife clearance is checked with a feeler gauge. The knife clearance must be checked regularly. >Page 7:19 “Knife clearance”.

The knife clearance is adjusted by tightening / unscrewing the knife’s adjusting screws.

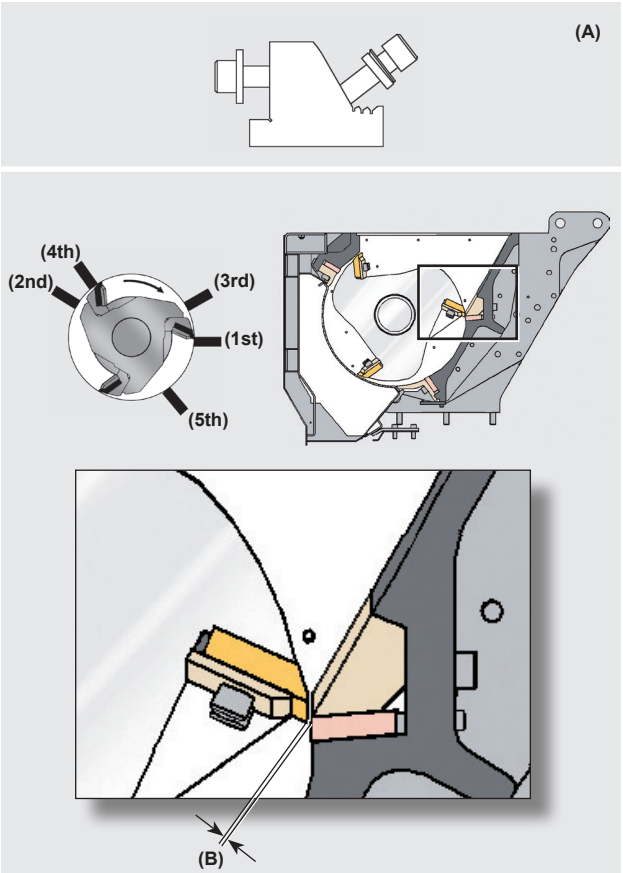
The adjusting screws, can be adjusted in a presetting fixture. >Page 2:17 “Presetting fixture”.

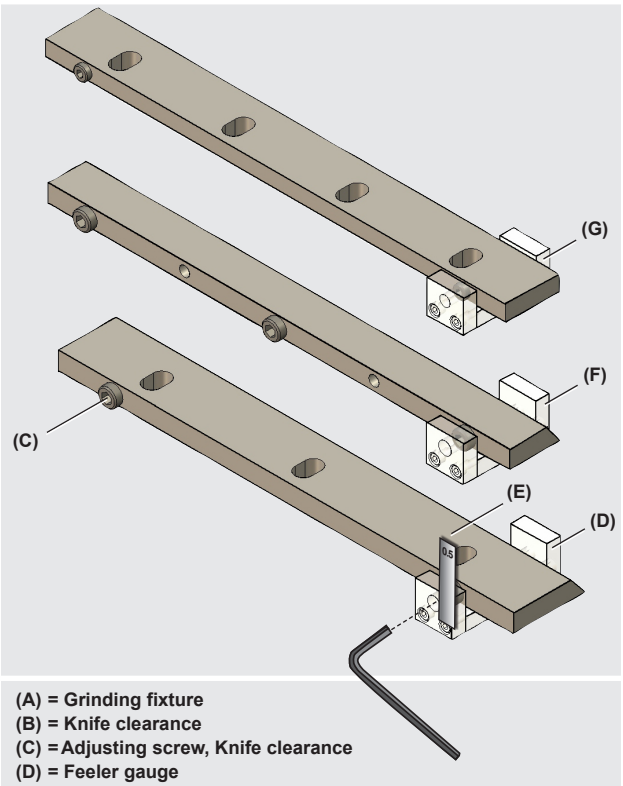
Presetting fixture

The presetting fixture is used when presetting the knives’ adjusting screws.
>Page 7:22 “General rules, Preset the knives”.
>Page 9:31 “Options”.

Presetting fixtures are attached at delivery.

There are three presetting fixtures available. One for presetting the rotating knives, one for presetting fixed knife 3rd and one for presetting fixed knife 1st/2nd/4th/5th.





(A) = Grinding fixture
(B) = Knife clearance
(C) = Adjusting screw, Knife clearance
(D) = Feeler gauge
(E) = Presetting fixture, Rotating knife
(F) = Presetting fixture, Fixed knife 3rd
(G) = Presetting fixture, Fixed knife 1st/2nd/4th/5th

Transmission

Motor

The granulator is driven by an electric motor. The motor is installed on a motor mounting bracket.

Optional motor speed / rotor speed:
1500 rpm / 390 rpm (50 Hz) or
1800 rpm / 470 rpm (60 Hz).
Optional motor power:
55 kW, 75 kW, 90 kW, 110 kW, 132 kW, 160 kW.
>Page 9:9:18–9:21 “Transmission”.

Motor power and motor frequency are specified on the motor’s machine plate.

Drive belt(s), Motor pulley, Rotor pulley

The granulator is provided with 5, 6, 7, 9 or 10 drive belts depending on the motor power. The drive belts are tensioned between the motor pulley and the rotor pulley.

The drive belt(s) must be checked regularly. The granulator must not be driven with worn drive belt(s) nor with incorrect belt tension. The belt tension is adjusted by tightening / unscrewing the belt stretcher’s adjusting nuts.
>Page 7:24 “Adjust the belt tension”.

Flywheel

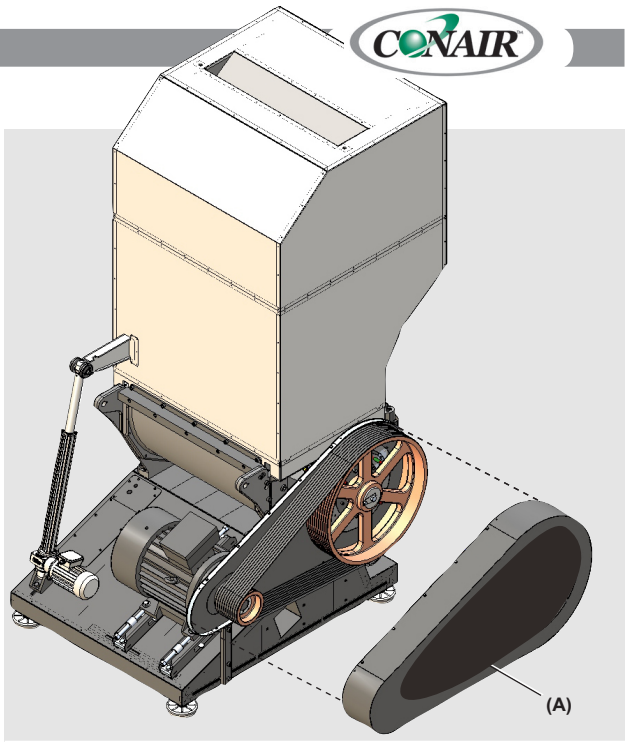
The granulator can be provided with a flywheel (option). The flywheel is installed on the opposite side of the rotor pulley. The flywheel optimizes the kinetic energy and makes the granulator even more powerful.
>Page 9:20 “Flywheel”.

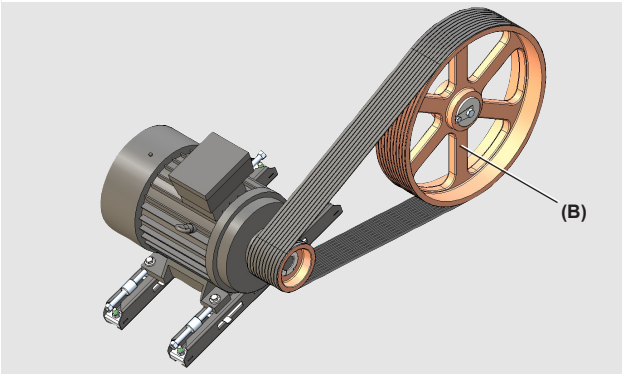
Friction coupling

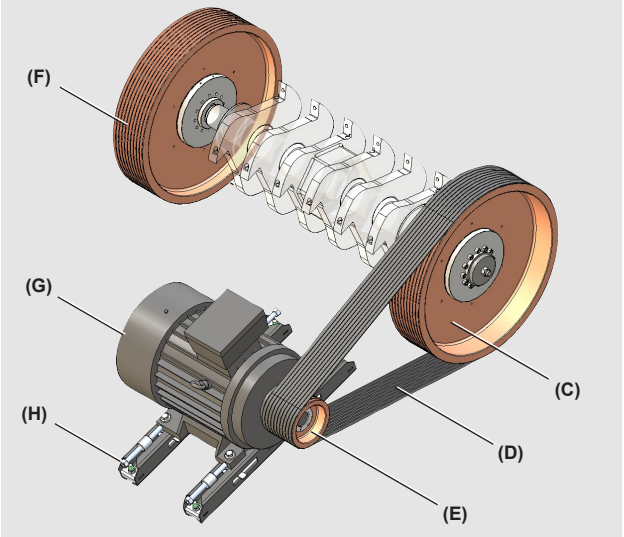
The granulator can be provided with a friction coupling (option). The friction coupling is installed in the rotor pulley. A granulator with flywheel might also have a friction coupling installed in the flywheel.
>Page 9:20 “Flywheel”.

The friction coupling brakes the rotor and minimizes the damage if the rotor get stuck. At delivery the granulator’s friction coupling is set to transmit a torque which corresponds to normal granulating.

The friction coupling must be checked regularly. A granulator with friction coupling must not be driven with worn friction discs. >Page 7:25 “Friction coupling”.







(A) = Transmission cover,
(B) = Rotor pulley without friction coupling
(C) = Rotor pulley with friction coupling
(D) = Drive belts
(E) = Motor pulley
(F) = Flywheel
(G) = Motor
(H) = Adjusting nuts, Belt stretcher

Safety equipment

General rules, Safety equipment

Inside the granulator, knives rotate at high speed. For this reason, there is safety equipment which is intended to prevent access to hazardous components during operation.

The safety equipment must not be changed or modified under any circumstances. If any part of the safety equipment is changed or left out, the machine can be dangerous to use.

The safety equipment must be checked regularly. No part of the safety equipment may be replaced by components other than spare parts supplied by Conair.

If any part of the safety equipment is changed or left out, Conair's responsibility under the Machinery Directive ceases to apply.

The safety equipment consists of:

- Hopper
- Flap(s)
- Screen
- Screen box
- Granule bin
- Main switch
- Emergency stop
- Stand still monitor
- Safety switch
- Magnet switch
- Rotor locking
- Safety relay

Note! All these parts must be installed during start and operation.

- In addition, the key for the electrical cabinet, transmission and pneumatic cabinets (if supplied), is part of the safety equipment.

Safety equipment

Hopper

The hopper prevent access to hazardous components during operation. The hopper must be closed during start and operation.

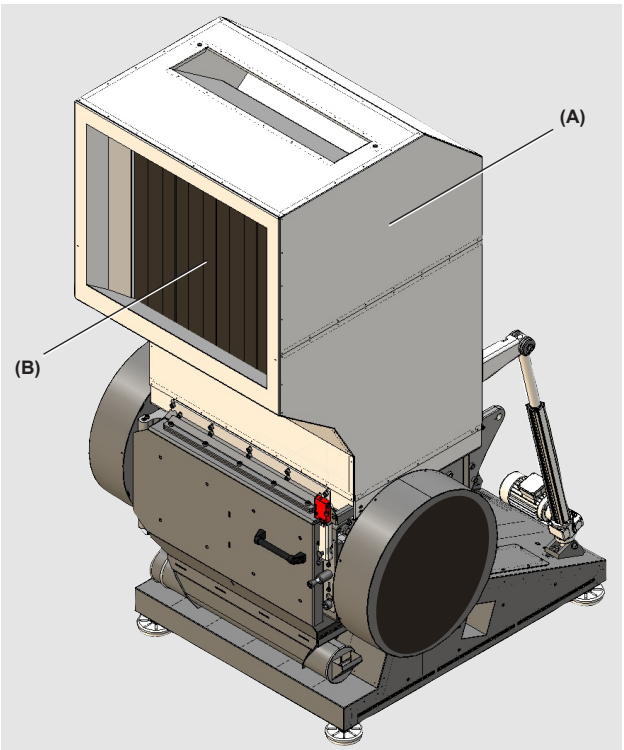
The hopper is designed and adapted to the type of plastic residue that the customer has specified before order. >Page 9:3–9:4 “Hopper”.

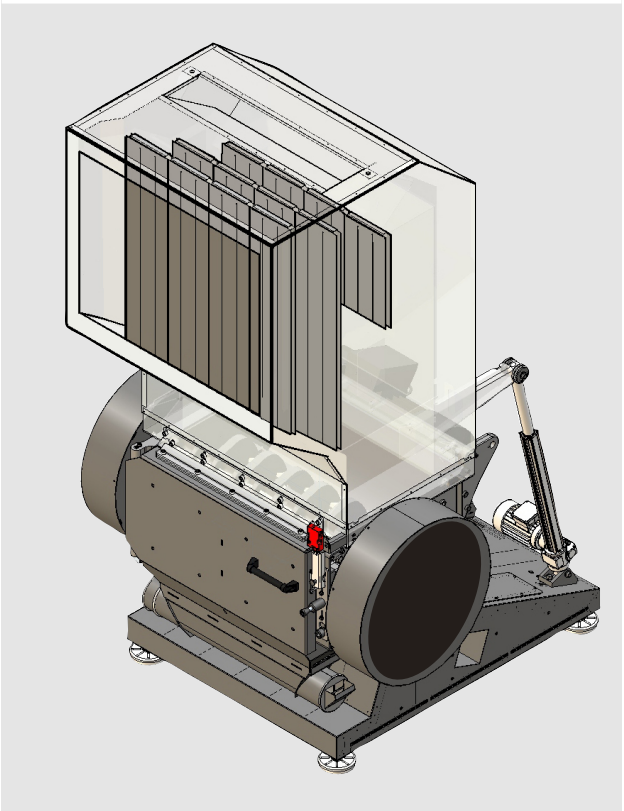
Flap(s)

The flap(s) prevents fed material from rejecting. The flap(s) also prevents half-finished granulate from stenching out of the inlet. The flap(s) must be installed during start and operation.

The flap(s) is/are designed and adapted to the type of plastic residue that the customer has specified before order. >Page 9:2 “Flap(s)”.

The flap(s) must be regularly checked and replaced as necessary. >Page 7:1 “Flap(s)”.





(A) = Hopper
(B) = Flap(s)

Screen, Screen box

The screen prevents access to hazardous components during operation. The screen must be installed during start and operation. The screen is installed in the screen box in the base of the cutter housing. The screen box must be closed during start and operation.

The screen is designed and adapted to the type of plastic residue that the customer has specified before order. The screen can easily be changed to give the required granulate size.

>Page 9:14 “Front door / Screen box”.
>Page 9:15 “Screen”.

Granule bin

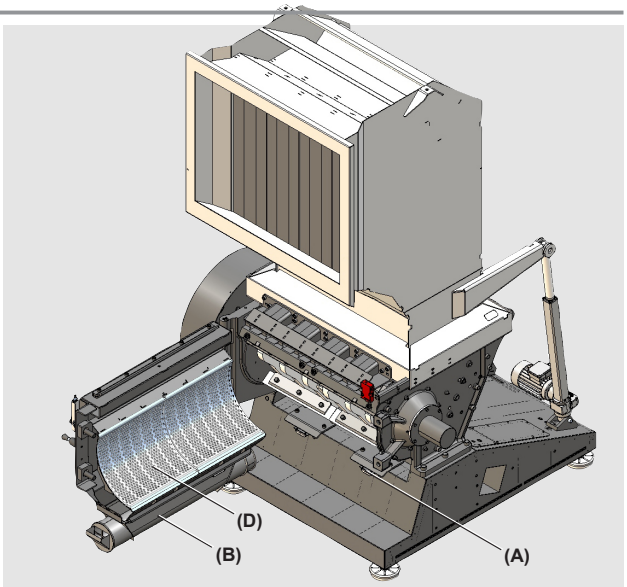
The granule bin collects the finished granulate. The granule bin must be closed during start and operation.

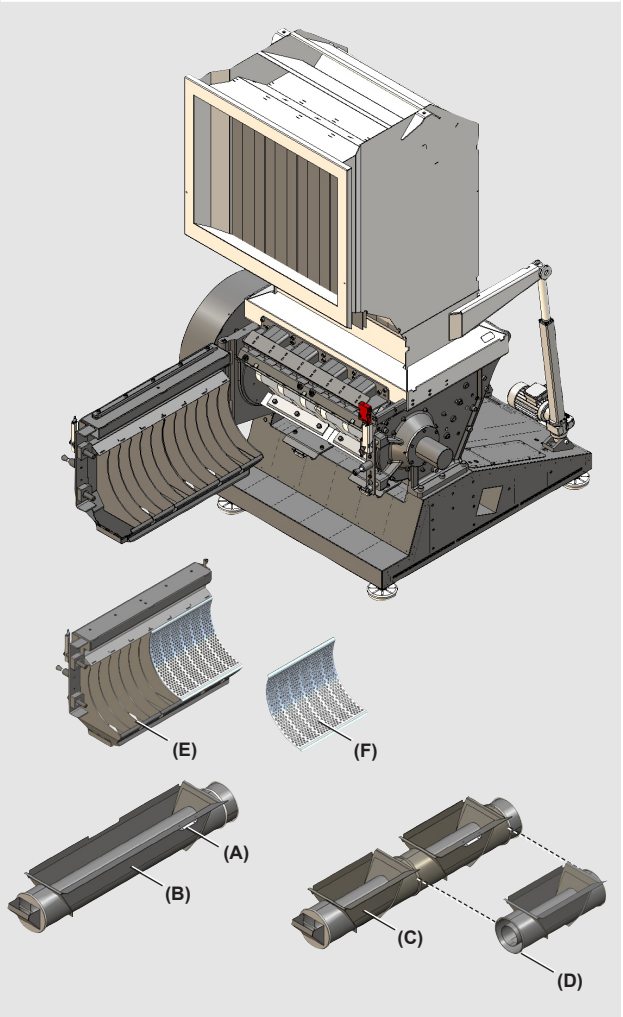
The granule bin is designed and adapted to the type of plastic residue that the customer has specified before order. >Page 9:16–9:17 “Granule bin”.

The granule bin can be provided with a level switch (option). >Page 2:27 “Level switch”.

The granule bin can be provided with a blower (option). >Page 2:11 “Blower Option”.

The granule bin is provided with a magnet switch. >Page 2:22 “Magnet switch”.





(A) = Magnet switch, Granule bin
(B) = Granule bin, Single
(C) = Granule bin, Divided
(D) = Quick coupling
(E) = Screen box
(F) = Screen

Safety equipment

Sensor(s)

The machine can be provided with several sensors. There is one sensor located at the left side of the front door. The sensor at the left side of the front door, monitors whether the front door is opened or closed. To be able to open / close the hopper, the front door must be wide opened. It is not possible to open / close the hopper if the cutter housings' front door is closed.

Examples of where sensors might be located can be seen in the figure on the right. The electrical circuit diagram shows the number of sensors installed in the supplied machine.

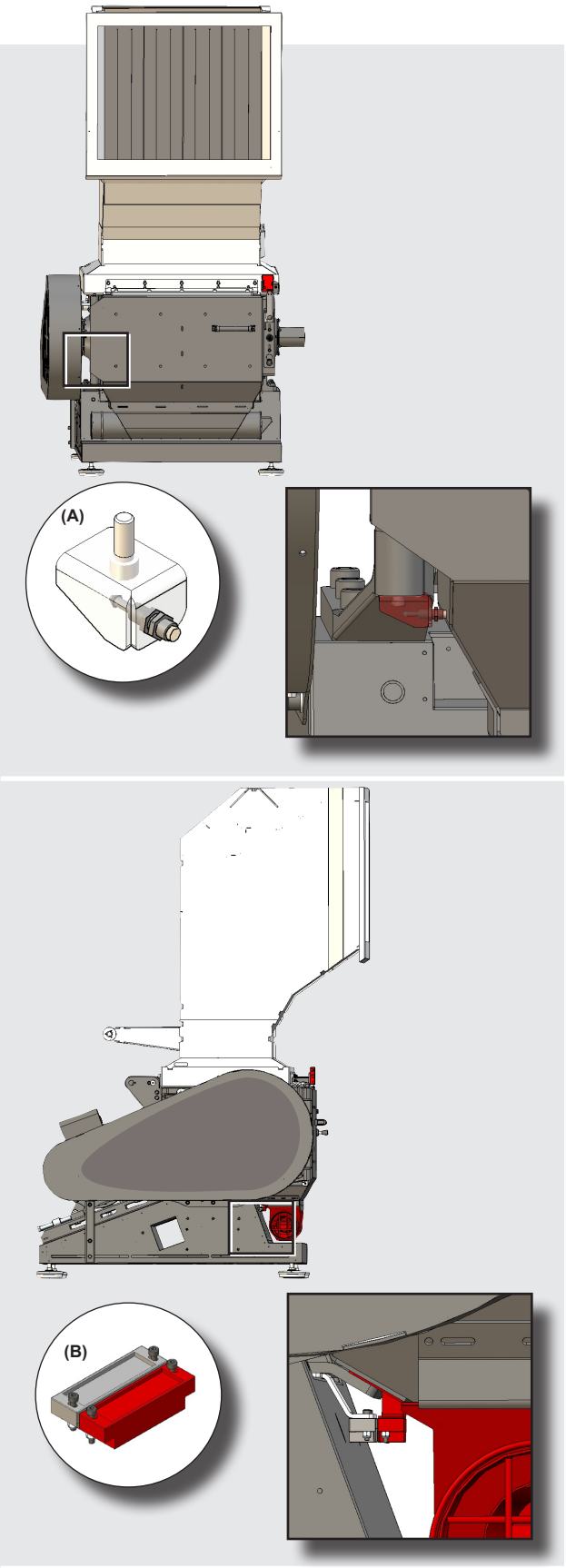
The sensor(s) must be checked regularly.
>Page 7:3 point 5 "Safety equipment".

Magnet switch

The machine can be provided with several magnet switches. The magnet switch stops the machine if the two magnets are separated. To be able to start the machine, the two magnet halves must mate up close to each other.

Examples of where magnet switches might be located can be seen in the figure on the right. The electrical circuit diagram shows the number of magnet switches installed in the supplied machine.

The magnet switch(es) must be checked regularly.
>Page 7:3 point 6 "Safety equipment".



(A) = Sensor, Front door / Screen box
(B) = Magnet switch / Granule bin

Stand still monitor

The machine is provided with a stand still monitor. The stand still monitor is located inside the transmission cover on the left side of the machine. The stand still monitor monitors if the rotor is rotating or if it stands still.

The stand still monitor affects the switch key inside the safety switch. >Page 2:23 “Safety switch”. As long as the rotor is rotating the switch key will be locked inside the safety switch. (This means that it is not possible to open the machine immediately after stopping the machine. After stopping the machine the rotor keeps rotating for some minutes before it slows down and stands completely still.) As the rotor stands still, the switch key is released and the green LED on the safety switch is lit.

The stand still monitor also affects the lamp in the button “Operate 1” (option). The button “Operate 1” is lit when the rotor stands still. The button “Operate 1” is only used on granulator with heavy hopper. The button “Operate 1” is used when opening a heavy hopper”. >Page 6:3 “Open the hopper”.

The buttons “Operate 1” and “Operate 2” are integrated in the electrical cabinet’s hatch. >Page 2:25 “Electrical cabinet, Operating panel”.

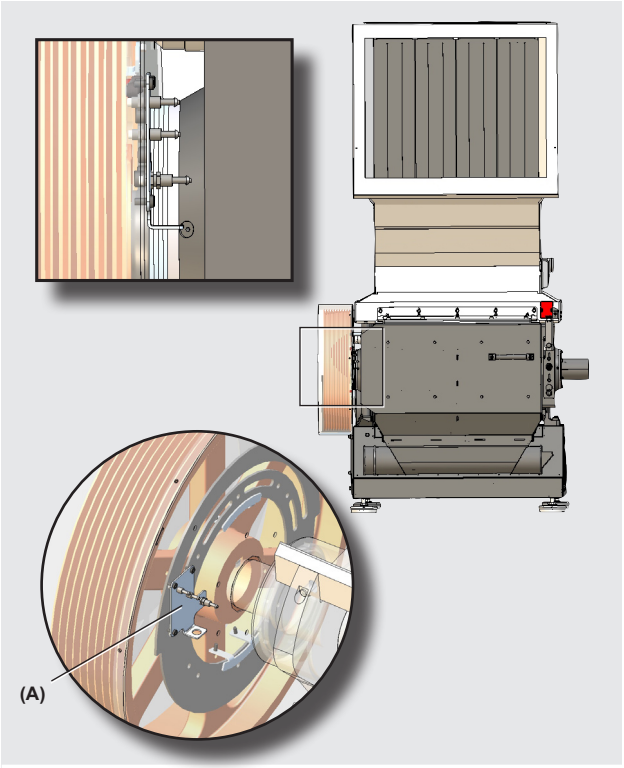
Safety switch

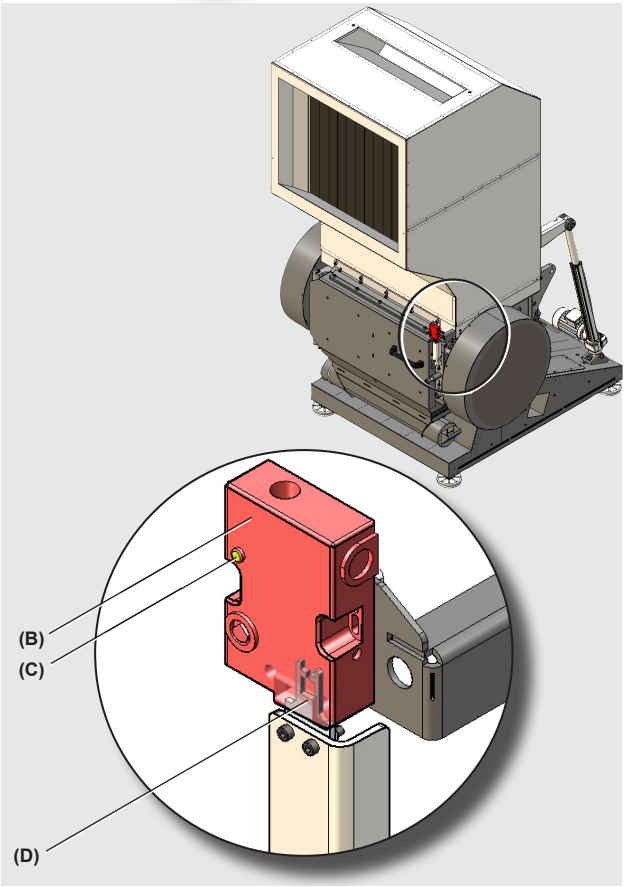
The machine can be provided with several safety switches. The safety switch stops the machine if its switch key is disconnected. To be able to start the machine, the switch key must be installed inside the safety switch.

To be able to release the switch key from the safety switch, the green LED on the safety switch must be lit. >Page 2:23 “Stand still monitor”.

The design and location of safety switches can vary. Examples of where safety switches might be located can be seen in the figure on the right. The electrical circuit diagram shows the number of safety switches installed in the supplied machine.

The safety switch(es) must be checked regularly. >Page 7:2 point 3 “Safety equipment”.





(A) = Stand still monitor
(B) = Safety Switch
(C) = Green LED, Safety switch
(D) = Switch key

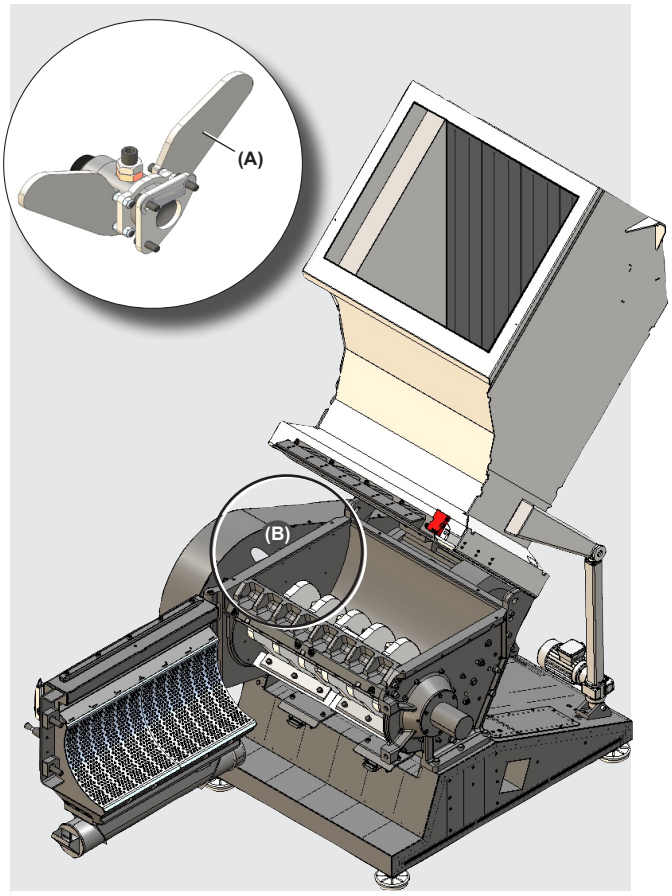
Rotor locking

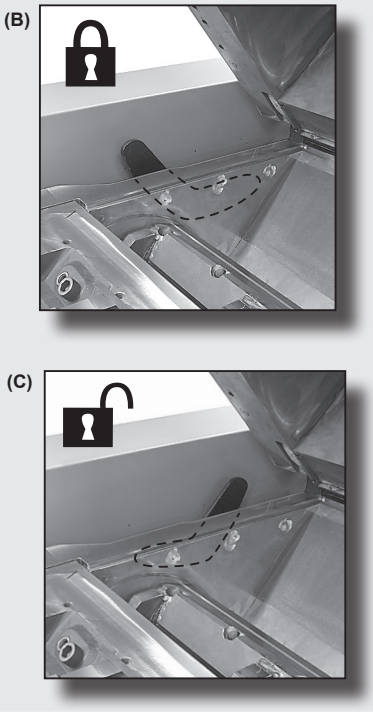
The machine is provided with a rotor locking. The rotor locking automatically locks the rotor pulley and the rotor, as the hopper is opened. As the hopper closes, the rotor locking automatically releases the rotor pulley and the rotor.

To be able to rotate the rotor pulley or the rotor while the hopper is opened, the rotor locking must be manually unlocked. The rotor locking is manually unlocked by putting the rotor locking's hand lever into the unlocked position. Refer to figure on the right.

Note! Immediately after rotating rotor pulley or rotor, the rotor locking must be manually locked. Lock the rotor locking by pulling the rotor locking's hand lever into the locked position. Refer to figure on the right.

The rotor locking must be checked regularly.
>Page 7:2 point 4 "Safety equipment".
>Page 9:25 "Safety, Rotor locking".





(A) = Handle, Rotor locking
(B) = Hand lever in manually locked position
(C) = Hand lever in manually unlocked position

Key to electrical cabinets, transmission and pneumatics

All hatches to electrical cabinet, transmission and pneumatics (if supplied) must be closed and locked during start and operation. The key must be kept by the personnel responsible for the machine's service and safety.

Electrical cabinet, Operating panel

The machine's control knobs are found on an operating panel. The machine can be provided with several operating panels. The operating panel(s) can be integrated with the electrical cabinet's hatch and/or detached. The design and location of the operating panel(s) and the knob(s) can vary. Type of operating panel and type of electrical cabinet, depends on motor power and whether any optional equipments have been selected. Refer to the electrical circuit diagram.

Main switch

The main switch cuts all 3 phases of the supply voltage. The design and location of the main switch can vary. The granulator's main switch must be locked in position "0" during service.

Emergency stop(s)

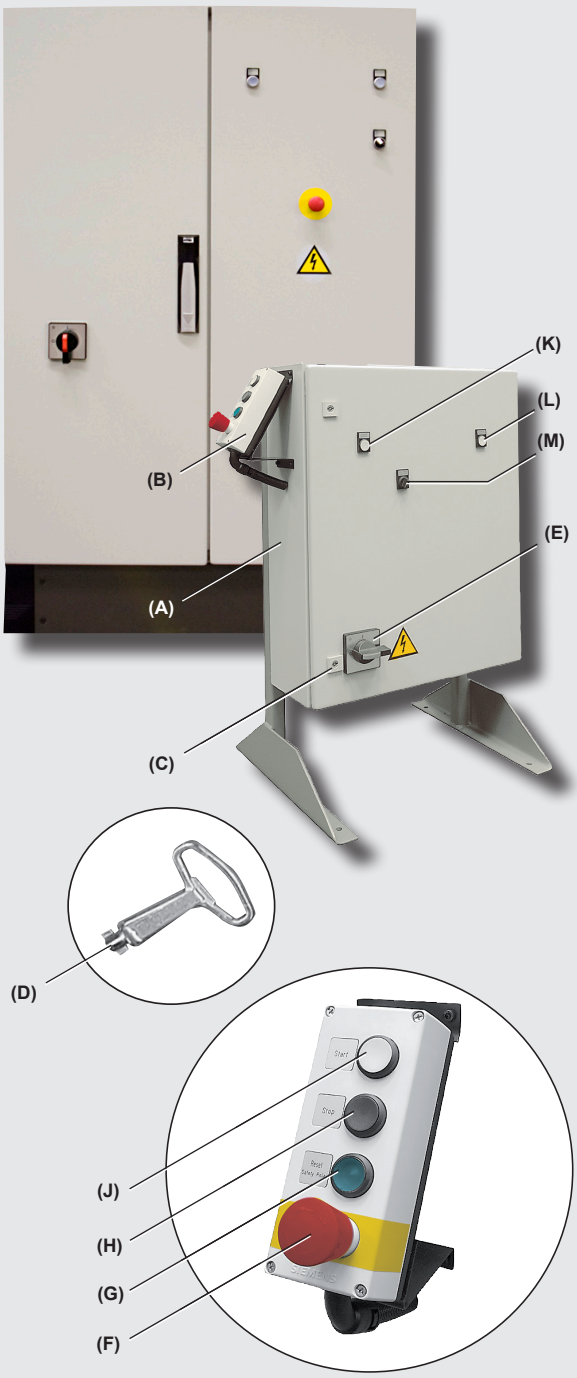
The emergency stop stops the machine in case of emergency. The machine can be provided with several emergency stops. The emergency stop(s) must be checked regularly. >Page 7:1 "Emergency stop(s).

The design and location of the emergency stop(s) can vary. The electrical circuit diagram shows the number of emergency stop(s) installed in the supplied machine.

Safety relay

The machine is provided with a button "Reset safety relay". The button "Reset safety relay" is installed on the operating panel. To be able to start the granulator the button "Reset safety relay" must be pressed and lit. >Page 5:1 "Start the granulator" point 5.

If the button "Reset safety relay" do not light up, the safety relay has to be checked. >Page 7:4 "Safety relay".



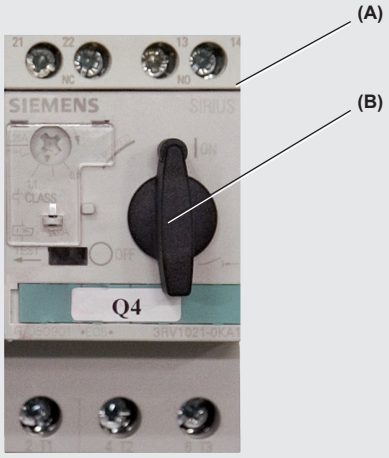
(A) = Electrical cabinet
(B) = Operating panel
(C) = Lock, Electrical cabinet
(D) = Key to electrical cabinet
(E) = Main switch
(F) = Emergency stop
(G) = Button "Reset safety relay"
(H) = Stop-button
(J) = Start-button
(K) = Button, "Operate 1"
(L) = Button, "Operate 2"
(M) = Knob, "Hopper, Open / Close"

Overload protection

The machine can be provided with several overload protections. The electrical circuit diagram shows the number of overload protections installed in the supplied machine. The overload protection(s) is/are installed inside the electrical cabinet.

The overload protection trips if the granulator or any optional equipment is overloaded. Before resetting an overload protection and before restarting the machine, the reason why the overload protection tripped must be determined. Take necessary actions (for example clean the machine) to prevent the overload protection from immediate tripping when restarting the machine.

If the reset knob is in position “0” the overload protection has tripped. The overload protection is reset by turning the reset knob to position “1”.



(A) = Overload protection
(B) = Reset knob
(C) = Electrical cabinet

Level switch

General rules, Level switch

The granule bin can be provided with a level switch (option). The level switch monitors the granulate level in the granule bin. As the granulate level gets too high, the level switch takes one or several of the below listed actions:

- Stops the granulator.
- Stops optional feed equipment (such as a band conveyor or a roller feeder).
- Lights up a warning lamp (option).
- Starts up a siren (option).
- Resets the level switch and restarts the granulator and/or the feed equipment as the granulate level in the granule bin has sunk.

The electrical circuit diagram specifies the actual function of the level switch in the supplied machine.

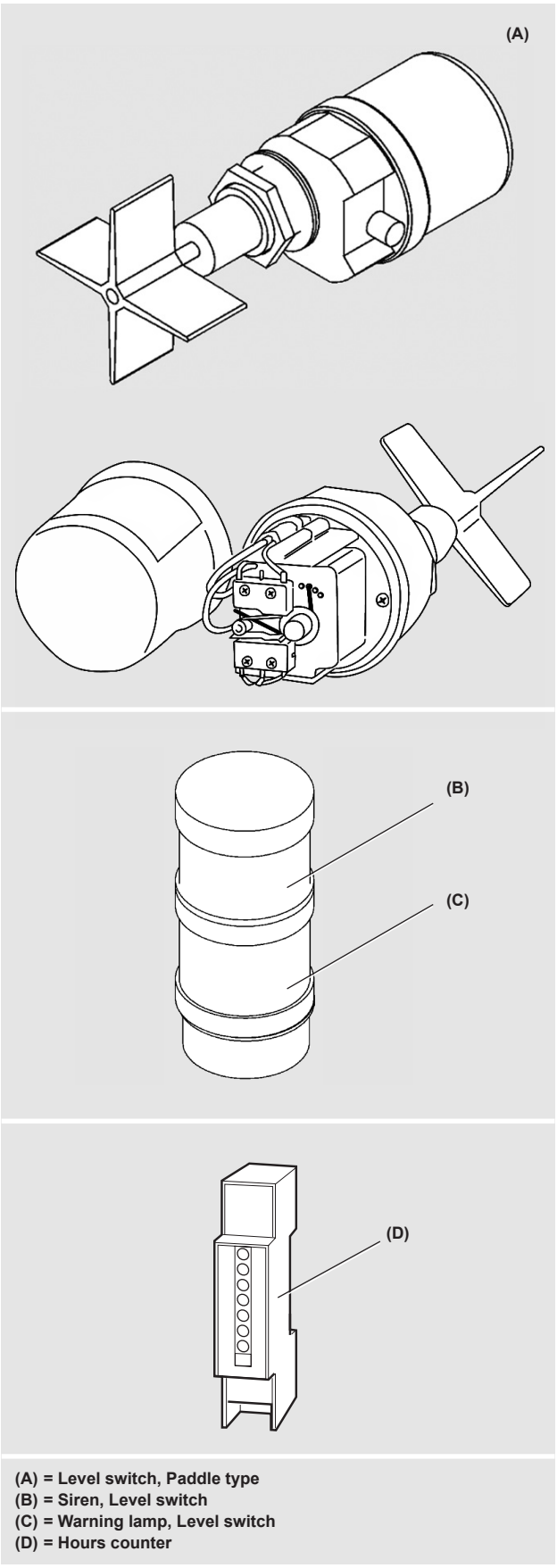
Level switch, Paddle type

A level switch of paddle type, is provided with rotating paddles. When the granulator is started the paddles starts rotating. If the granulate level gets too high, the paddles will stop rotating. As the paddles stands still, the level switch is activated.

The sensitivity is adjusted by changing the position of the torsion spring. On delivery the torsion spring is installed in the second hole from the left.
>Page 7:5 point 4 “Level switch”.

Hours counter

The granulator can be provided with an hours counter (option). The hours counter counts the time the rotor is rotating. The hours counter has no reset.



(A) = Level switch, Paddle type
(B) = Siren, Level switch
(C) = Warning lamp, Level switch
(D) = Hours counter

Current relay

General rules, Current relay

The granulator can be provided with a current relay (option). The current relay monitors the granulator's current consumption.

As the granulator's current consumption exceeds the upper current level "LVA", the current relay trips and stops the feed equipment (such as a band conveyor or a roller feeder).

The current relay is preset to automatically restart the feed equipment as the current consumption has sunk to the lower current limit "HA".

The current relay is adjustable. >Page 7:4.

Limit value "LVA"

"LVA"– The limit value, is the preset current consumption level where the current relay trips and stops the feed equipment.

The limit value is adjustable. The knob that adjusts the limit value is graded 0–100%.

"LVA" – The limit value in Ampere is calculated as shown in the LVA-formulas on the right. Note! LVA is calculated differently as the granulator is "Y/D-started" or "Directstarted".

"LV%" – The limit value in percentage is calculated as shown in the LV% -formula on the right.

The electrical circuit diagram shows the rated current and the size of the current transformer, in the supplied machine.

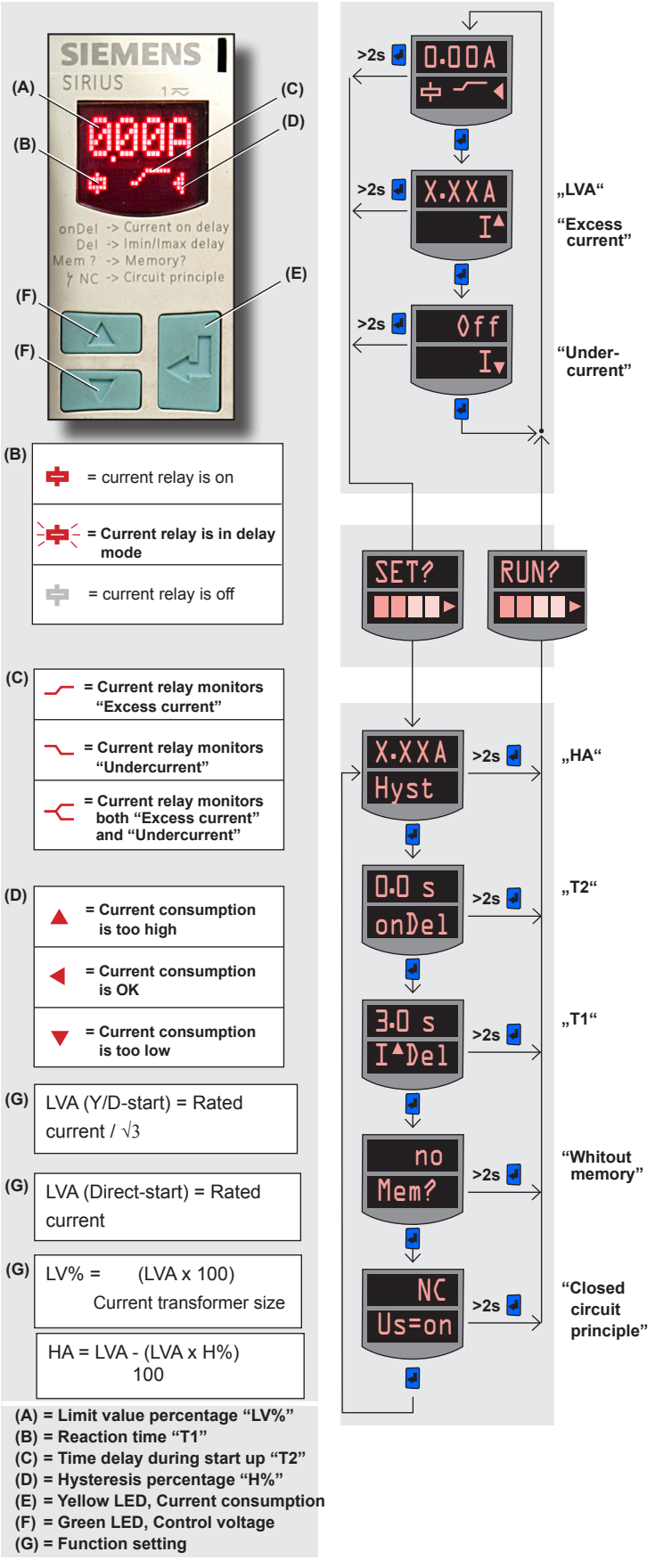
Hysteresis "HA"

"HA" – The hysteresis, is the preset current consumption level which determines when the current relay shall reset and restart the feed equipment.

The hysteresis is adjustable. The knob that adjusts the hysteresis is graded 5–50%.

"H%" – The hysteresis percentage value is percent of the limit value.

The hysteresis in Ampere is calculated as shown in the HA-formula on the right.



(A) = Limit value percentage "LV%"
(B) = Reaction time "T1"
(C) = Time delay during start up "T2"
(D) = Hysteresis percentage "H%"
(E) = Yellow LED, Current consumption
(F) = Green LED, Control voltage
(G) = Function setting

Reaction time “T1”

“T1” – The reaction time, is the preset period of time that determines how long the current consumption shall exceed the upper current level “LVA” before the current relay shall trip and stop the feed equipment.

The reaction time is adjustable. The knob that adjusts the reaction time is graded 0.1–3.0 sec.

Time delay during start up “T2”

“T2” – The time delay during start up, is the preset period of time that determines how long the current consumption is allowed to exceed the upper current level during start. When starting a machine the current consumption may temporarily exceed the upper current level “LVA”.

The function “Time delay during start up” is not used on Conair granulators. The knob that adjusts the time delay during start up should always be set to 0 seconds.

Yellow LED

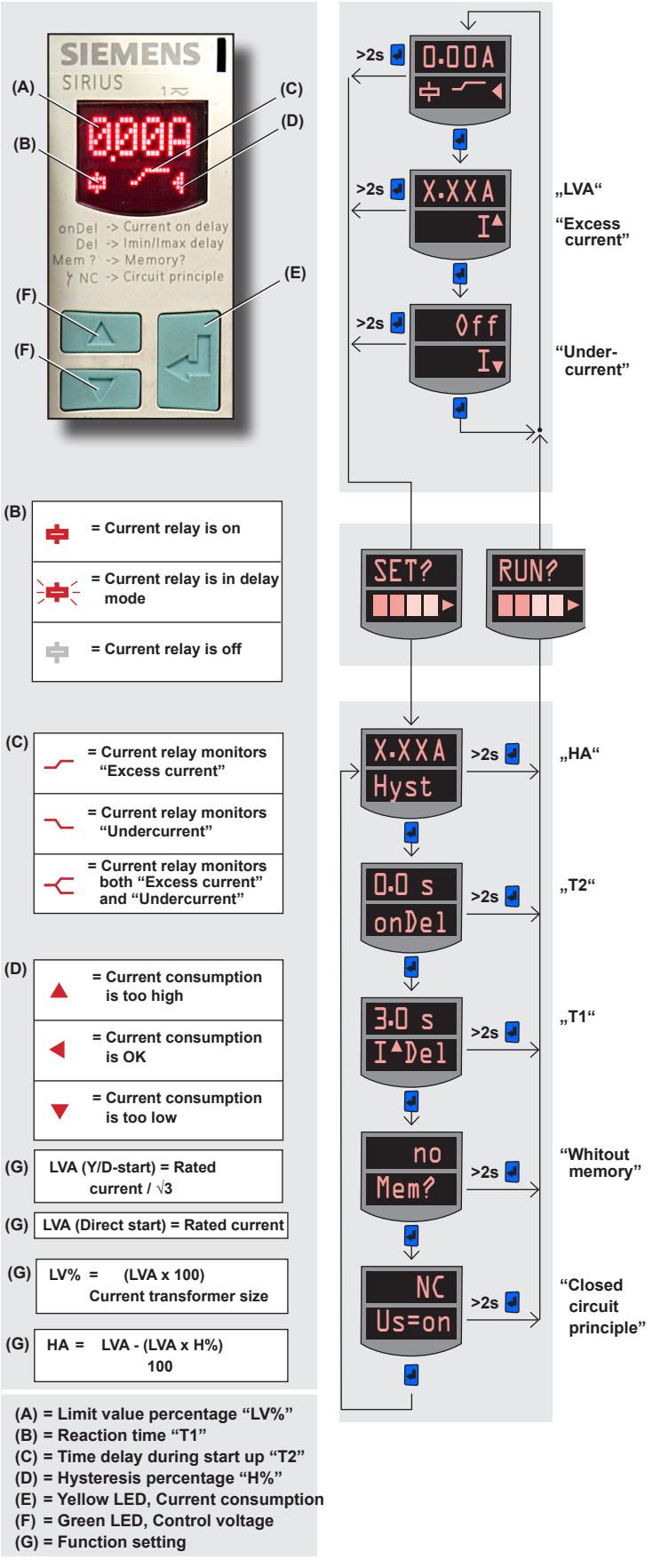
The yellow LED indicates the status of the current consumption.

- Steady light = The current consumption lies below the upper current level “LVA”.
- Flashing light = The current consumption exceeds the upper current level “LVA”.
- Light is out = The current relay has tripped, the feed equipment is stopped.

Green LED

The green LED indicates the status of the control voltage.

- Steady light = The control voltage is on.



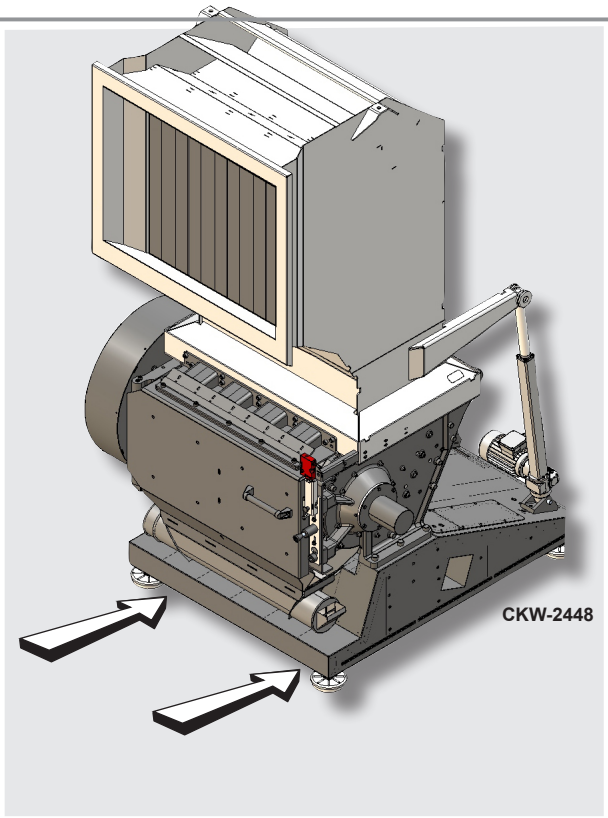
Transport / Lift

General rules, Transport / Lift

The machine must only be transported / lifted by trained personnel. All instructions must be observed to avoid personal injury and machinery damage.

Transport

1. If the machine will be transported exposed to weather and wind: Treat all components that could rust with a rust preventer. Wrap the machine in plastic foil.
2. If the machine will be transported a longer distance or on uneven ground: Fix the machine to a transport pallet with tension straps. Transport / lift the pallet with a fork lift.



Lift the body

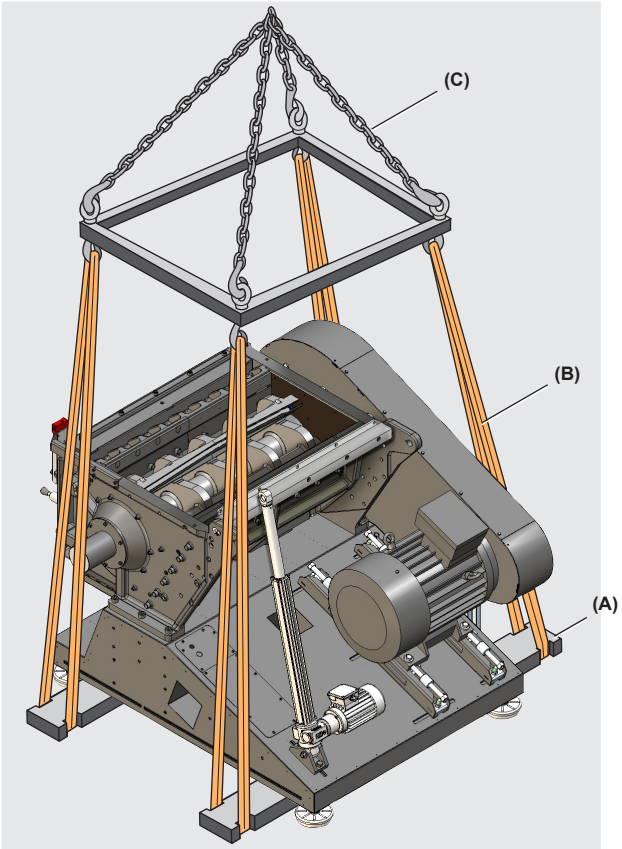
1. Close the granulator. >Page 6:4.
2. a) Use a fork lift:
   Insert the forks as shown in figure on the right. Adjust the forks to maximum width. The forks must tangent the inside of the granulator's machine shoes to prevent the granulator from overbalancing when lifted.

   or

   b) Use lifting strops and lifting beams:
   Install two lifting beams under the body. Make sure that the beams have sufficient capacity to lift the body. Install lifting strops. Make sure that lifting strop have sufficient capacity to lift the granulator. Attach the lifting strops to a lifting device. Refer to figure to the right.

Note! Make sure that the lifting strops nor the beams will slip when lifting. Make sure that the granulator does not overbalance when lifted.

3. Check that no cables or any parts of the granulator are pinched when lifting.
4. Lift the granulator. For information about machine weight, refer to page 2:1 "Technical specifications".



(A) = Lifting beam
(B) = Lifting strop
(C) = Lifting device

Lift the hopper

1. Read page 4:2 point 6-7 "Install the hopper".

Actions before first start

General rules, Installing

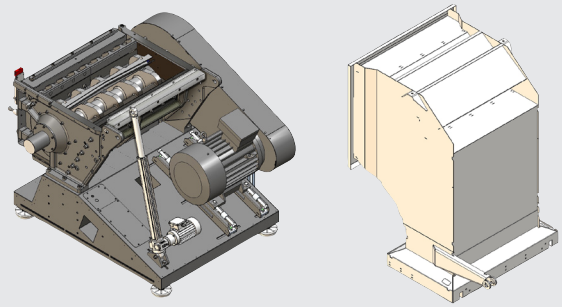
1. Read page 1:2 “Safety rules, During installing”.
2. Read all of chapter 4 before installation is started.
3. Sign the completed installation, in the end of this chapter.

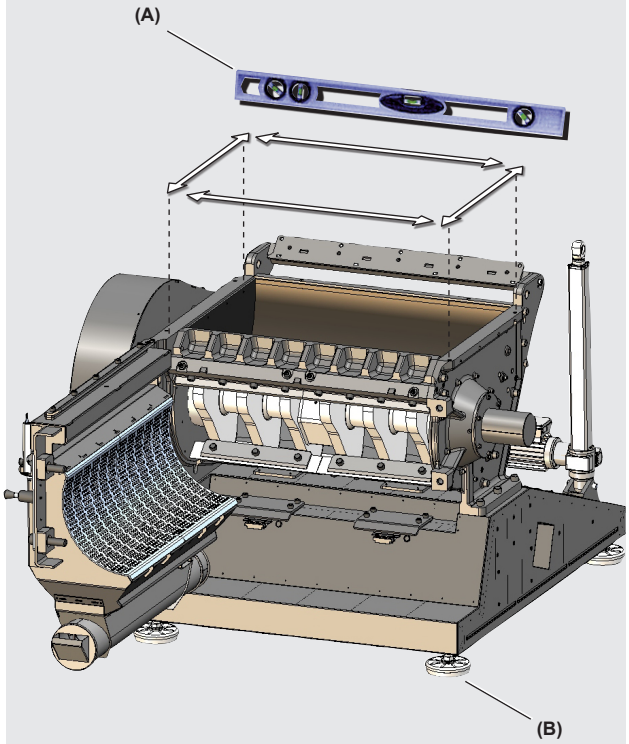
Reception inspection

1. Check the dispatch note to ensure that the delivery is complete.
2. Check that the machine has not been damaged during transport. Any damage must be reported to the forwarding agents.

Put the machine in its working place

1. Refer to layout for required working space. >Page 2:3–2:8 “Layout”.
2. Transport / lift the machine to its working area. >Page 3:1 “Transport / Lift”.
3. Check that the machine stands horizontal and steady. Use a spirit level. Refer to figure to the right. Adjust the machine shoes as necessary.





(A) = Spirit level
(B) = Machine shoes

Install the hopper

A granulator with a heavy voluminous hopper may (due to lack of space during transport) be delivered with uninstalled hopper and/or inlet.

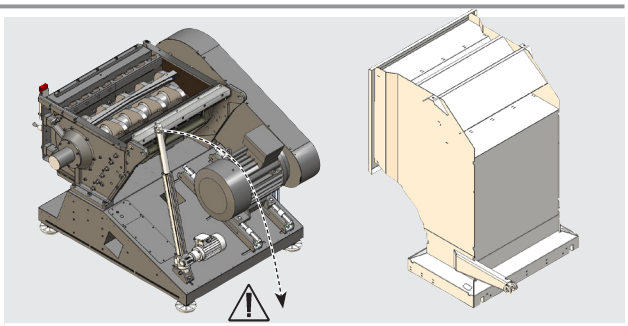
The following instructions only applies to a granulator that have been delivered with uninstalled hopper and/or inlet.

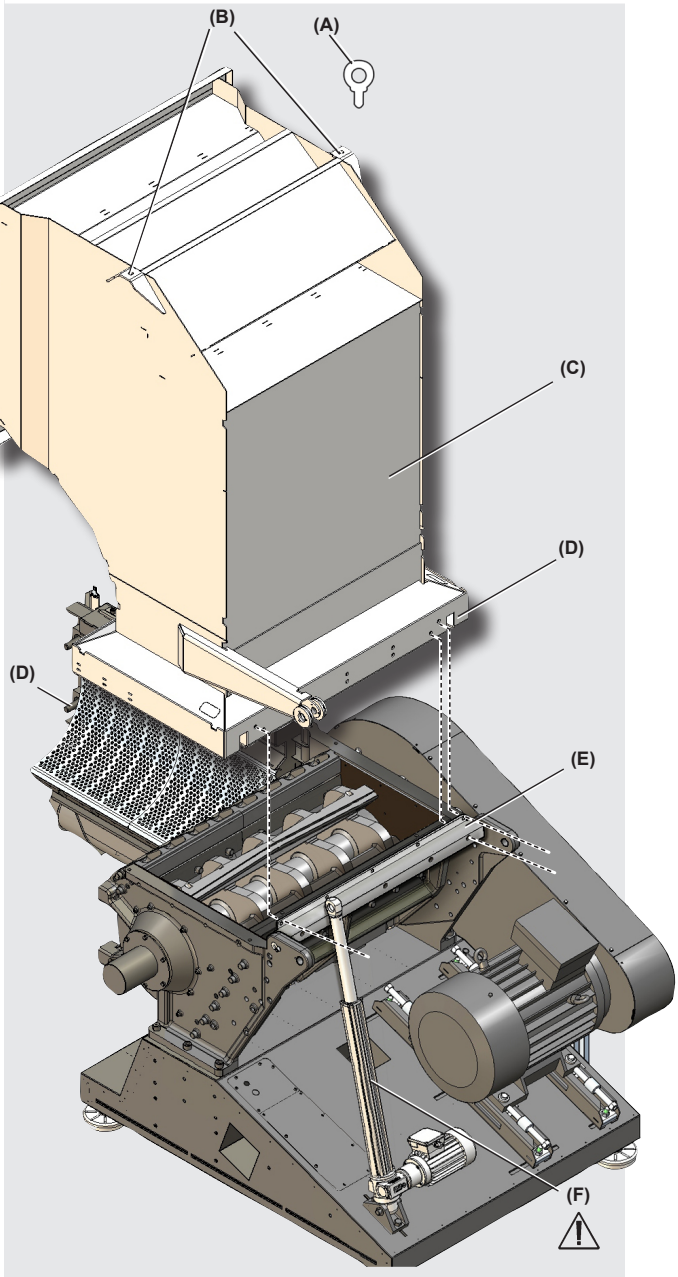
1. Put the machine in its working place. >Page 4:1.
2. Note! Ensure that the jack do not fall backwards uncontrolled. If the jack falls backwards, a personal injury might occur, or the jack's cables might get seriously damaged.
3. Open the sound enclosure. >Page 6:2.
4. Open the cutter housing. >Page 6:2 point 1–3 & 8–10.
5. Install two eye bolts on top of the hopper.
6. Install a lifting strop in the eye bolts. Make sure that the lifting strop have sufficient capacity to lift the hopper.

Note! Eye bolts and lifting strops are only permitted to be used when lifting hopper or inlet. When lifting the entire machine – use a fork lift. >Page 3:1.

7. Lift the hopper on top of the cutter housing. Align the screw holes in the back side of the hopper with the screw holes in the cutter housing's hinge bracket.
7. Lower the hopper so that it rests on the cutter housing.
8. Fix the hopper on the cutter housing. Tighten the hopper with tightening screws. 5 tightening screws M16x100, 5 tightening screws SHS M16x40. Tightening torque 162.26 ft.lb.{220 N·m}.
9. The hopper is fixed.

The instruction continues on next page.
>Page 4:3 "Install the hopper".

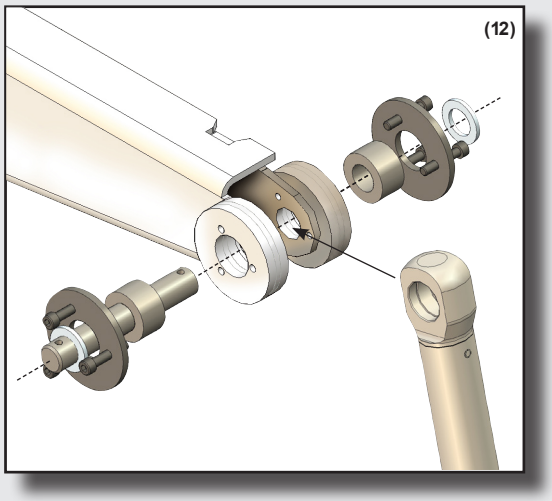


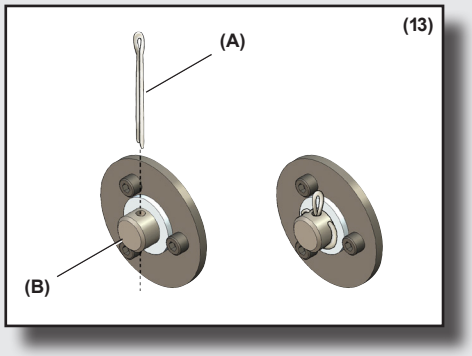


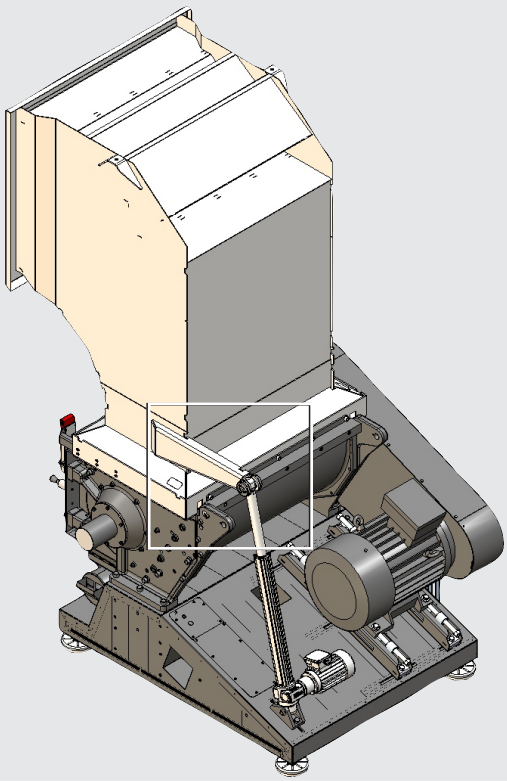
(A) = Eye bolt
(B) = Hole, Eye bolt
(C) = Hopper
(D) = Screw holes, Hopper
(E) = Hinge braket, Cutter housing
(F) = Jack

Install the hopper

10. Before the jack can be installed, the granulator must be connected to the mains.
    >Page 4:5 “Connect the granulator to the mains”.
11. Operate the jack. >Page 6:3 “Open the hopper” point 2–6. Adjust the jack so that it aligns with the holes in the hopper’s jack bracket.
12. Fix the jack on the hopper. Assemble the jack’s upper bracket. Refer to figure to the right.
13. Lock the shaft’s position by installing a split pin in each end of the shaft. Refer to figure to the right.
14. The jack is installed.
15. Connect the safety switch to the electrical cabinet.
    >Page 2:23 “Safety switch”.
    >Refer to the electrical circuit diagram.
16. Check the flap(s). >Page 7:1.
17. Close the hopper. >Page 6:4.
18. Close the cutter housing. >Page 6:6.
19. Remove the hopper’s eye bolts.
20. The hopper is installed.







(A) = Split pin, Upper jack bracket
(B) = Shaft, Upper jack bracket

Remove the rust preventer

Un-painted components are treated with rust preventer before delivery and transport. Remove the rust preventer before operating the machine.

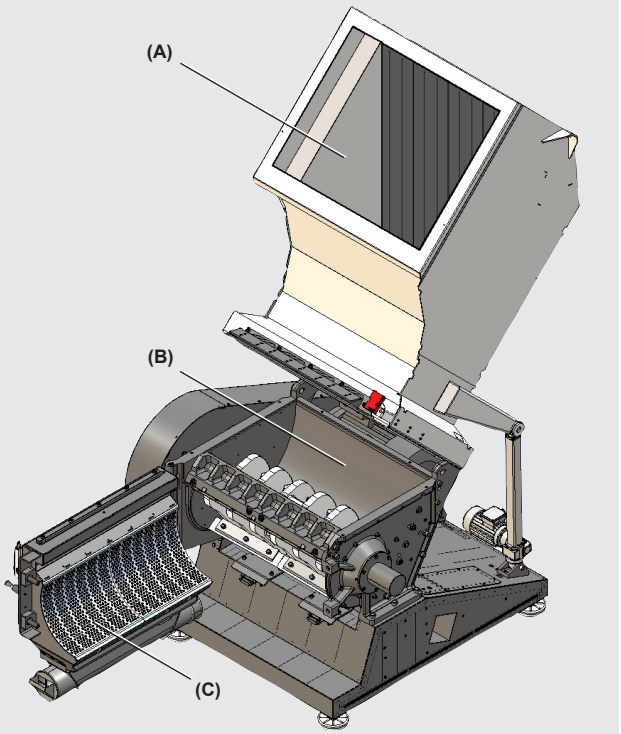
1. Read page 7:10 “Cleaning”.
2. Clean following parts inside and outside: Hopper, Cutter housing, Rotor, Knives, Screen, Screen box, Granule bin. Use a low aromatic alkaline degreaser or a gentle solvent. Wipe clean with lint-free rags.

Check the knife clearance

1. Check the knife clearance. >Page 7:19.

Technical specifications

1. Fill in correct information, on page 2:1 “General data, Supplied machine”, so that the data corresponds with the machine sign on your supplied machine.
2. Mark the correct alternatives, on page 2:1 “General data, CKW-series”, so that the data corresponds with your supplied machine.
3. Sign the personnel responsible for the machine’s service and safety, on page 2:1.



(A) = Hopper
(B) = Cutter housing, Rotor, Knives
(C) = Screen, Granule bin

Electrical connection

General rules, Electrical connection

1. Read page 4:1 “General rules, Installing”.
2. The machine must be disconnected from the mains before electrical repairs or electrical installing is begun.
3. The machine must be installed in accordance to EN 954-1 Category 3. This means that all cables must be installed so that they will not get damaged during operation.
4. All electrical service, must be done by authorized, trained personnel. No modifications or alterations of the basic electrical settings are permissible unless a written approval has been obtained from Conairs\’s head office. Refer to the electrical circuit diagram.
5. When replacing electrical components, only use original spare parts supplied by Conair. >Page 9:1 “Spare parts”.

Emergency stop(s)

1. Read page 4:5 “General rules, Electrical connection”.
2. Check that the supplied emergency stop is within reach at all positions in the machine’s workplace.
3. If the supplied emergency stop is not accessible from all positions in the workplace, the machine must be provided with further emergency stops.

   In event of any questions, please contact Conair’s local distributor or Conair’s head office.

Connect the granulator to the mains

1. Read page 4:5 “General rules, Electrical connection”.
2. Check the phase sequence of the electric mains with a phase sequence display. The granulator is connected for a right-hand turning field. The electric circuit diagram specifies the connection voltage (Volt) and fuse size (Ampere).
3. Connect the granulator to the electrical cabinet.
4. Connect the electrical cabinet to the mains.

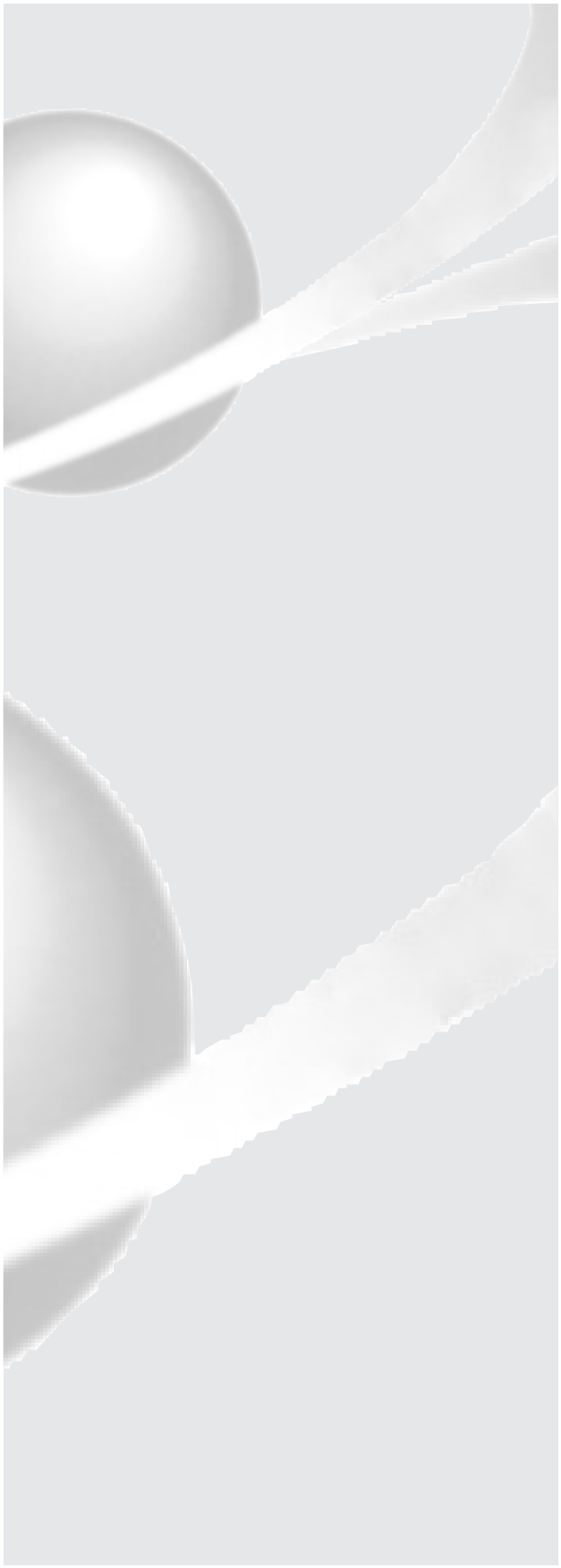
Start the granulator

1. Check that all actions in page 4:1–4:5 are done.
2. Check that all parts of the safety equipment are installed. >Page 2:19.
3. Close the granulator. >Page 6:4.
4. Start the granulator. >Page 5:1.

Checks immediately after first start

1. Check that the rotating direction of the granulator's motor corresponds to the arrow on the motor.
2. Additional blower option:

   Check that the blower's rotating direction corresponds to the arrow on the blower. The blower is functioning even when the rotation direction is wrong, but if the blower's capacity decreases considerably.
3. If the rotating direction is wrong:
   a) Stop the granulator. >Page 5:1.
   b) Read page 4:5 "General rules, Electrical connection".
   c) Switch over two incoming phases.
   d) Start the granulator. >Page 5:1.
4. Additional belt conveyor option
   Check the belt conveyor. >Page 7:7.
5. Check the emergency stop(s). >Page 7:1.
6. Check the safety equipment. >Page 7:2.
7. Check the knife clearance. >Page 7:19.
8. Level switch (option): Check that the level switch's setting is satisfying. Adjust as necessary. >Page 7:5.
9. Current relay (option): Check that the current relay's setting is satisfying. Adjust as necessary. >Page 7:6.



Checks 30 hours after first start

1. Stop the granulator. >Page 5:1.
2. Check the knife clearance. >Page 7:19.
3. Check the drive belt(s). >Page 7:23.
5. Check the tightening torque on important machine parts. >Page 7:8.

Installing complete

The machine has been installed and checked in accordance with the instructions in chapter 4.

Date: ..... / ..... 20 .....

Name:.....

Start the granulator

1. Read page 1:2 “Safety rules, During start and operation”.
2. Check that there is no material in hopper or cutter housing.

Important! The granulator must not be started if there is material left in the hopper and cutter housing. When starting, remaining material may brake the rotor and overload the motor. The overload protection will trip and the granulator will stop.

Important! A granulator with blower must not be started if there is material left in granule bin, outlet pipe or blower. When starting, remaining material in the blower, outlet pipe or granule bin can cause serious and irreparable damage to the blower.

3. Put the main switch in position “1”.
4. Reset the emergency stop(s).
5. Press the button “Reset safety relay”.

   When the button “Reset safety relay” has lit up, the granulator is ready to be started.

If the button “Reset safety relay” do not light up, the safety relay has to be checked. >Page 7:4.

6. Start the granulator. Press the start-button.
7. When the start-button has lit up, the granulator is started and ready for operation.

Information! If the granulator or optional equipment does not start once the above points have been attended to, read page 7:26 “Fault tracing”.

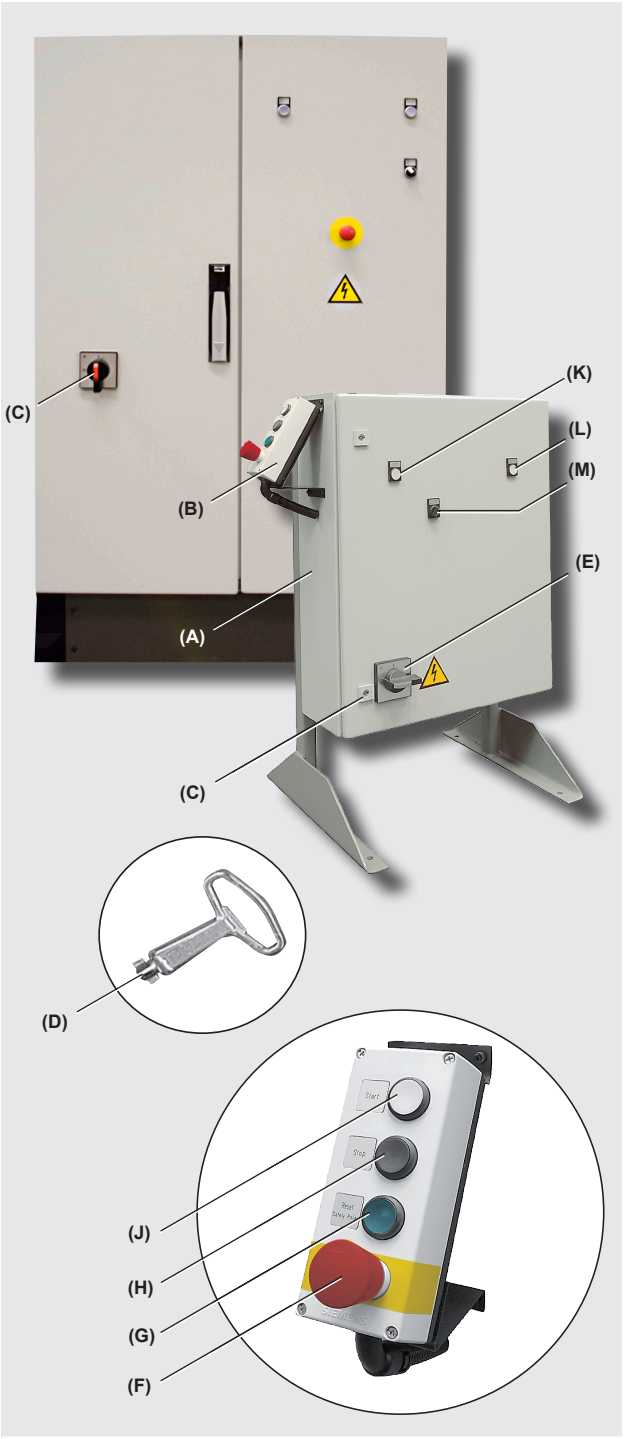
Stop the granulator

1. Stop feeding material. Wait until all material has been fully granulated.

Important! Never stop the granulator until all material in hopper and cutter housing have been fully granulated.

Important! A granulator with blower must not be stopped until all material have been transported out of the granule bin and the blower.

2. Stop the granulator. Press the stop-button.
3. Press the emergency stop(s).
4. Lock the main switch in position “0”.
5. The granulator is stopped.



(A) = Electrical cabinet
(B) = Operating panel
(C) = Lock, Electrical cabinet
(D) = Key to electrical cabinet
(E) = Main switch
(F) = Emergency stop
(G) = Button, “Reset safety relay”
(H) = Stop-button
(J) = Start-button
(K) = Button, “Operate 1”
(L) = Button, “Operate 2”
(M) = Knob, “Hopper, Open / Close”

Open the granulator

General rules, Open the granulator

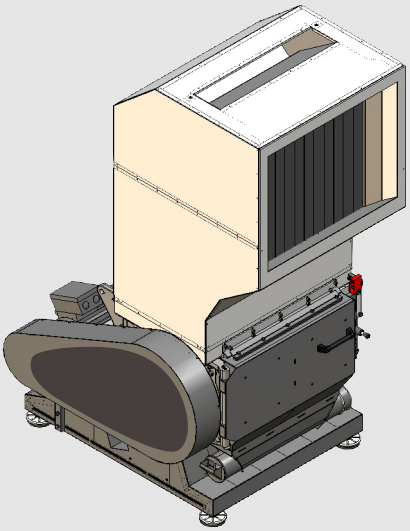
1. Read page 1:4 ”Safety rules, During service”.
2. Stop the granulator. >Page 5:1.
3. Conveyor Belt Option: Remove the belt conveyor.

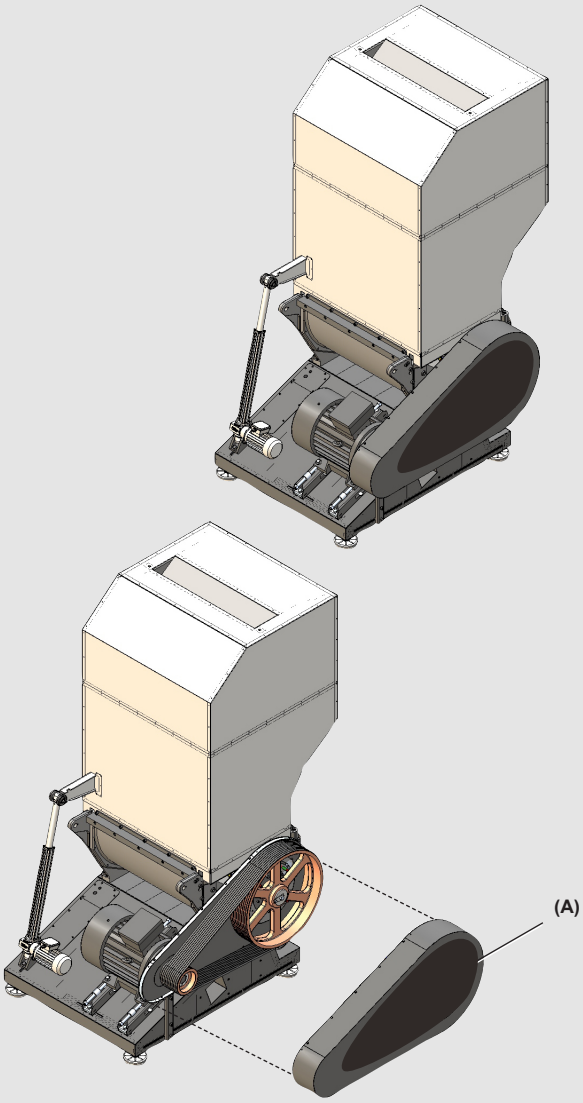
Open the transmission

1. Read page 6:1 “General rules, Open the granulator”.
2. Remove the transmission cover. Unscrew the transmission cover’s tightening screws.
3. The transmission is available.

Close the transmission

1. Read page 6:4 “General rules, Close the granulator”.
2. Install the transmission cover. Tighten the transmission cover’s tightening screws.
3. The transmission is closed.

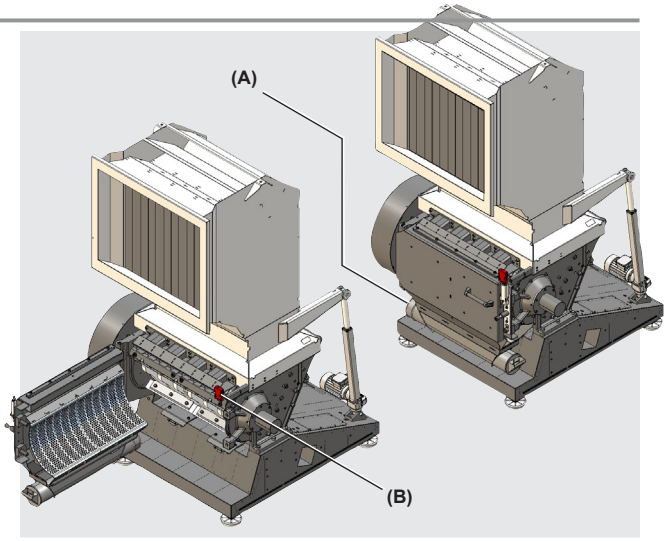


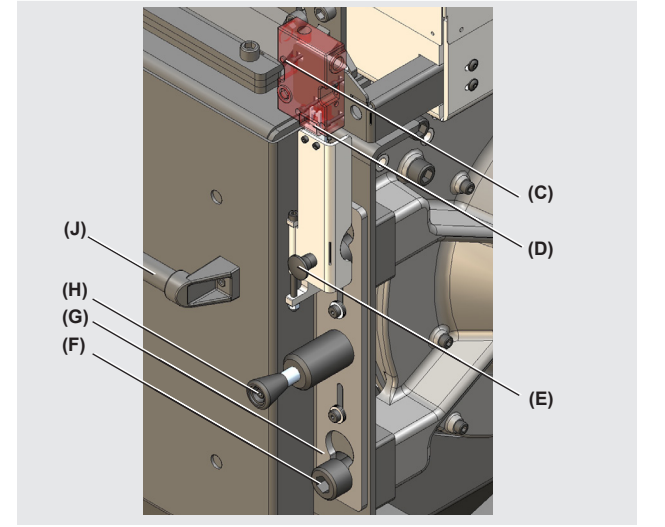


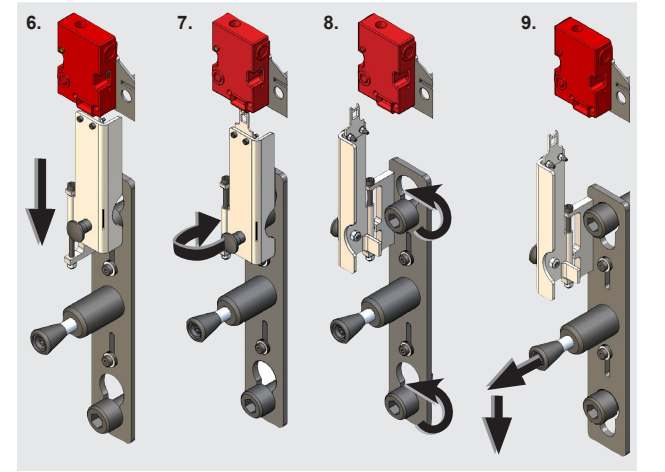
(A) = Cover, Transmission

Open the cutter housing

1. Read page 6:1 “General rules, Open the granulator”.
2. A granulator with sound enclosure:
   Open the enclosure’s door(s).
3. Remove the granule bin’s quick coupling ring.
4. Start the granulator’s current supply.
   >Page 5:1 “Start the granulator” point 3–5.
5. Check that the safety switch’s green LED is lit.
   >Page 2:23 “Stand still monitor”.
6. Release the switch key from the safety switch. Pull the switch key’s handle down.
7. Swing the switch key’s handle to the side.
8. Unscrew the locking bolts. Use a telescope wrench. A telescope wrench is enclosed on delivery.
9. Pull the cutter housing’s catch straight out and then down. Check that the locking bolts can pass through the holes in the locking clip.
10. Swing the cutter housing’s front door aside. Pull the cutter housing’s handle until the cutter housing’s front door is fully opened.
11. Stop the granulator’s current supply.
    >Page 5:1 “Stop the granulator” point 3–4.
12. The cutter housing is open.







(A) = Quick coupling ring, Granule bin
(B) = Safety switch
(C) = Green LED, Safety switch
(D) = Switch key
(E) = Handle, Switch key,
(F) = Locking bolts
(G) = Locking clip
(H) = Catch, Cutter housing
(J) = Handle, Cutter housing’s front door

Open the granule bin

1. Open the cutter housing. >Page 6:2.
2. Read page 2:21 “Granule bin”.
3. Remove the granule bin. Move the granule bin along the grooves in the cutter housing’s front door.
4. The granule bin is opened.

Remove the screen

1. Open the granule bin.
2. Remove the screen.

Open the hopper

1. Open the cutter housing. >Page 6:2.
2. Start the granulator’s current supply. >Page 5:1 “Start the granulator” point 3–5.
3. Put the knob “Hopper, Open / Close” in position “Open”. (Refer to figure on page 6:4).

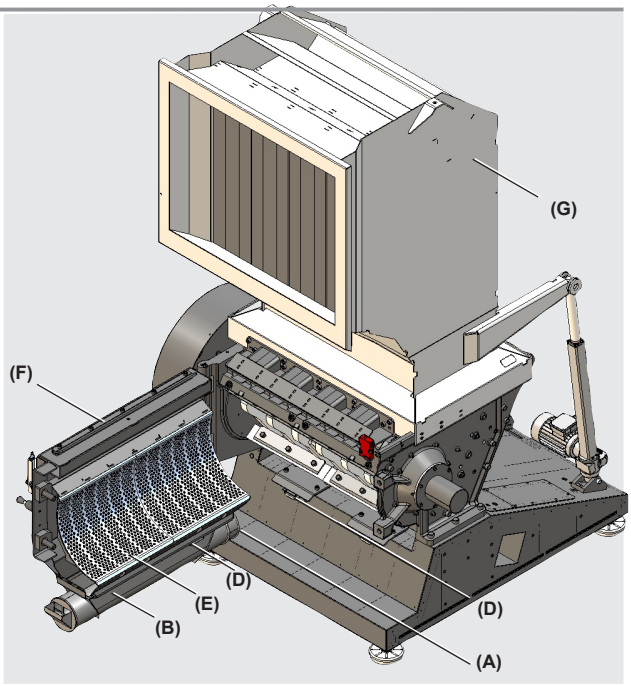
Information! The machine’s control knobs are found on an operating panel. >Page 2:25 “Electrical cabinet, Operating panel”.

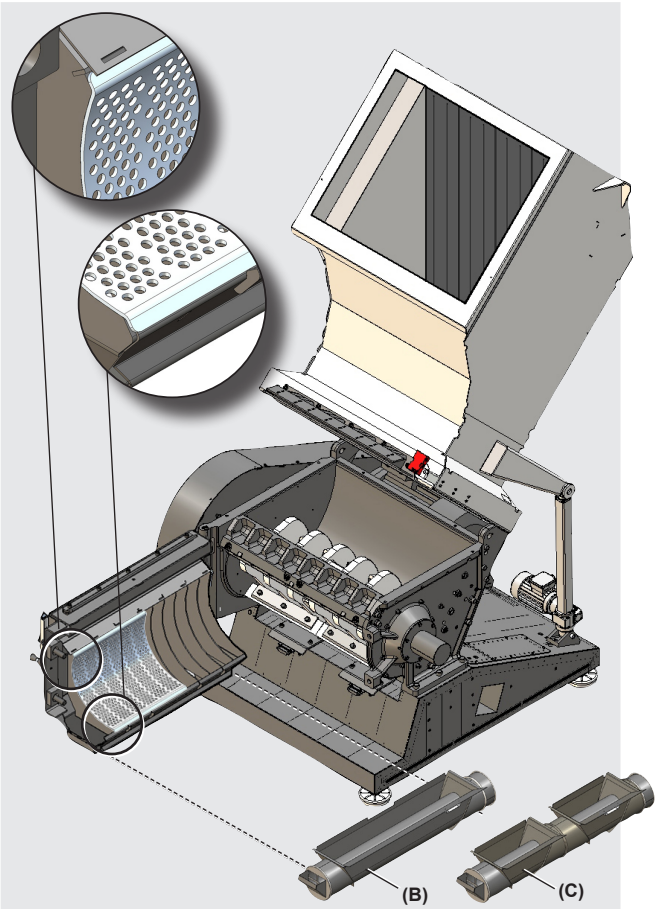
4. Check that the buttons “Operate 1” and “Operate 2” is lit.

Note! The button “Operate 1” is lit when the rotor stands still. It is not possible to open / close the hopper if the rotor is rotating.

Note! The button “Operate 2” is lit when the cutter housing is opened. It is not possible to open / close the hopper if the cutter housing’s front door is closed.

5. At the same time (two hand operation), press the buttons “Operate 1” and “Operate 2”. Keep the buttons depressed until the jack has opened the hopper.
6. Stop the granulator’s current supply. >Page 5:1 point 3–4 “Stop the granulator”.
7. The hopper is opened.





(A) = Quick coupling ring, Granule bin
(B) = Granule bin, “Single”
(C) = Granule bin “Divided”
(D) = Magnet switch, Granule bin
(E) = Screen
(F) = Front door, Cutter housing
(G) = Hopper

General rules, Close the granulator

1. Read page 1:3 “Safety rules, During service”.
2. Check that all surfaces which are going to touch are clean before closing.
3. Optional belt conveyor: After closing the granulator, put the band conveyor close to the granulator’s hopper / inlet.

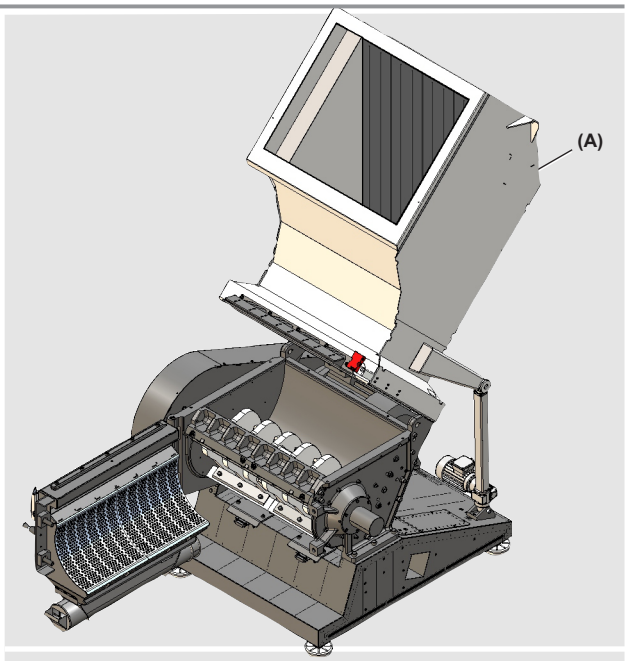
Close the hopper

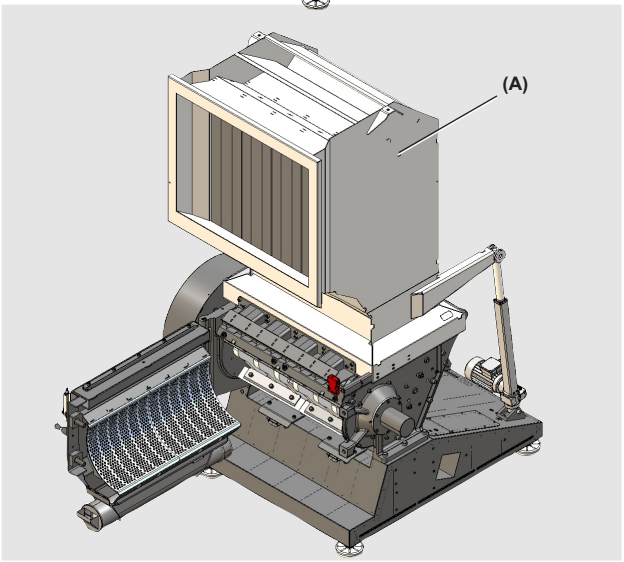
1. Read page 6:4 “General rules, Close the granulator”.
2. Open the cutter housing. >Page 6:2.
3. Start the granulator’s current supply. >Page 5:1 “Start the granulator” point 3–5.
4. Put the knob “Hopper, Open / Close” in position “Close”.
5. Check that the buttons “Operate 1” and “Operate 2” is lit.

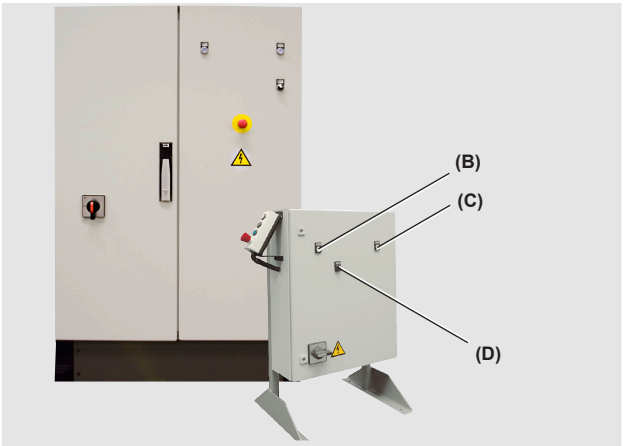
Note! The button “Operate 1” is lit when the rotor stands still. It is not possible to open / close the hopper if the rotor is rotating.

Note! The button “Operate 2” is lit when the cutter housing is opened. It is not possible to open / close the hopper if the cutter housing’s front door is closed.

6. At the same time (two hand operation), press the buttons “Operate 1” and “Operate 2”. Keep the buttons depressed until the jack has closed the hopper.
7. Stop the granulator’s current supply. >Page 5:1 “Stop the granulator” point 3–4.
8. The hopper is closed.







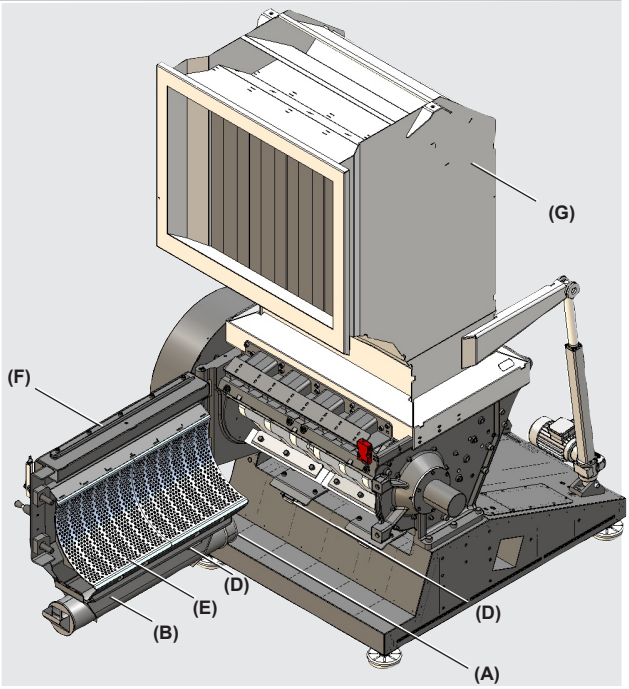
(A) = Hopper
(B) = Button, “Operate 1”
(C) = Button, “Operate 2”
(D) = Knob, “Hopper, Open / Close”

Install the screen

1. Read page 6:4 “General rules, Close the granulator”.
2. Install the screen. Lift in / up the upper border of the screen. Make sure that the screen’s upper border is installed in the uppermost position. Push in the screen’s lower border. Make sure that the screen’s lower border rests upon the screen box’s lip. Refer to figure on the right. Give the screen a firm push to force it in place.

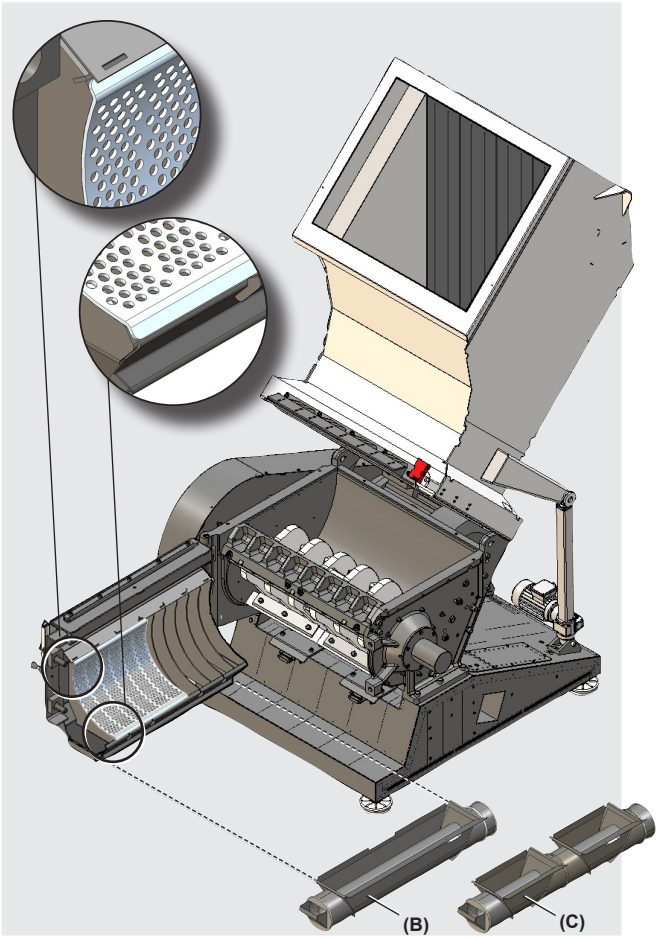
Note! It is most important that the screen is correctly installed. If the screen is incorrectly installed – the screen, the screen box and/or the front door could get seriously or irreparably damaged when trying to close the cutter housing’s front door.

4. The screen is installed.



Close the granule bin

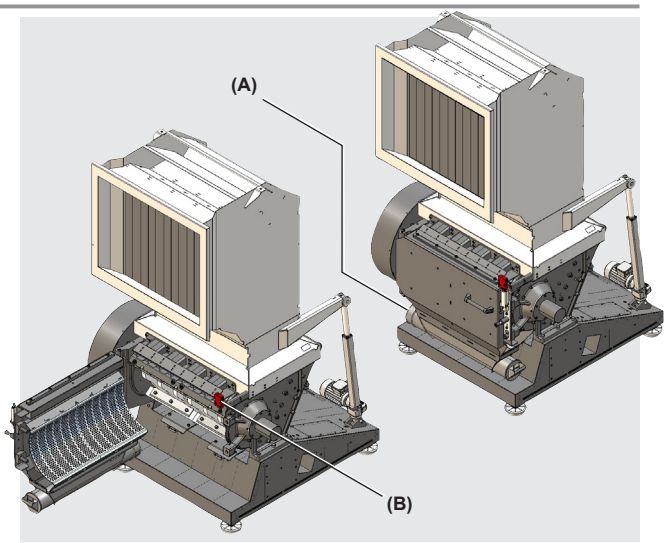
1. Install the screen.
2. Read page 2:21 “Granule bin”.
3. Install the granule bin. Move the granule bin along the grooves in the cutter housing’s front door.
4. The granule bin is closed.

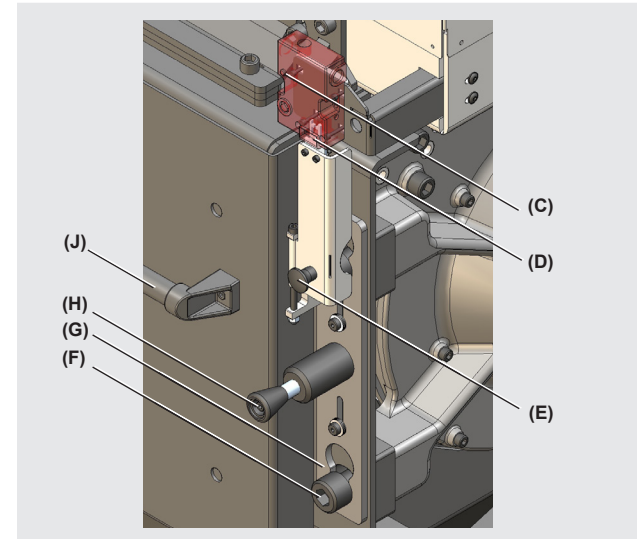


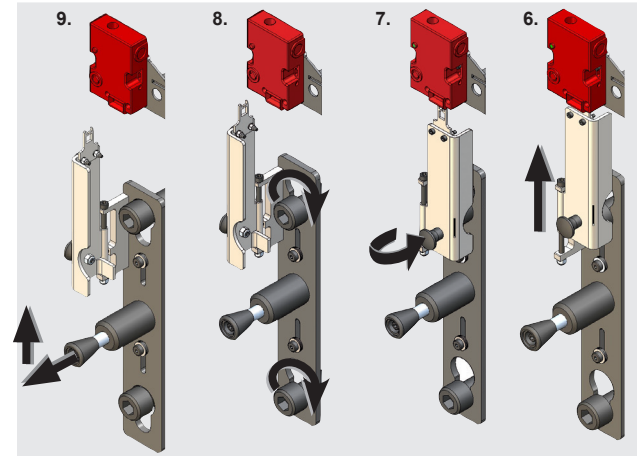
(A) = Quick coupling ring, Granule bin
(B) = Granule bin, “Single”
(C) = Granule bin “Divided”
(D) = Magnet switch, Granule bin
(E) = Screen
(F) = Front door, Cutter housing

Close the cutter housing

1. Read page 6:4 “General rules, Close the granulator”.
2. A granulator with optional sound enclosure):
   Open the enclosure’s door(s).
3. Close the hopper. >Page 6.4.
4. Close the granule bin. >Page 6:5.
5. Install the screen. >Page 6:5.
6. Start the granulator’s current supply.
   >Page 5:1 “Start the granulator” point 3–5.
7. Check that the safety switch’s green LED is lit.
   >Page 2:23 “Stand still monitor”.
8. Close the cutter housing’s front door. Let the locking bolts pass through the holes in the locking clip. Push the cutter housing’s handle until the cutter housing’s front door is properly closed.
9. Pull the cutter housing’s catch straight out and then up.
10. Tighten the locking bolts. Use a telescope wrench. A telescope wrench is enclosed on delivery.
11. Swing the switch key’s handle up front.
12. Pull the switch key’s handle up. Fit the switch key into the safety switch.
13. Stop the granulator’s current supply.
    >Page 5:1 “Stop the granulator” point 3–4.
14. Install the granule bin’s quick coupling ring.
15. The cutter housing is closed.







(A) = Quick coupling ring, Granule bin
(B) = Safety switch
(C) = Green LED, Safety switch
(D) = Switch key
(E) = Handle, Switch key,
(F) = Locking bolts
(G) = Locking clip
(H) = Catch, Cutter housing
(J) = Handle, Cutter housing’s front door

General rules, Service

1. Read page 1:4 “Safety rules, During service”.
2. Check / maintain the machine in accordance with the service schedule.
3. Always sign inspections / service in a service report. Copy the original service report, sign the copy and save it in a separate service binder. >Page 8:1 “Service report”.

Emergency stop(s)

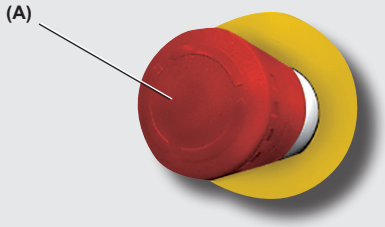
1. Read page 7:1 “General rules, Service”.
2. Read page 2:25 “Emergency stop(s)”. Check the emergency stop(s):
   a) Start the granulator. >Page 5:1.
   b) Stop feeding material. Wait until all material have been fully granulated.
   c) Press the emergency stop. Check that the granulator stops. If the granulator stops, the emergency stop can be reset and the granulator can be operated again.
   d) Danger! If the granulator continues working, although the emergency stop has been pressed, the granulator must be stopped manually at once. >Page 5:1. There is a serious risk of personal injury! Contact the personnel responsible for the machine’s service and safety.

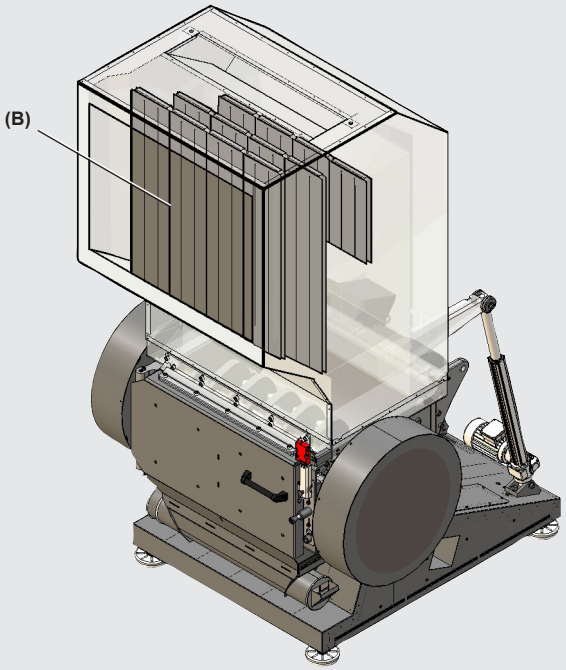
Flap(s)

1. Read page 7:1 “General rules, Service”.
2. Read page 2:20 “Flap(s)”.
3. Check the flap(s).
4. Change as necessary.
   a) Pull the front and the rear stripes out.
   b) Re-install the opposite way. >Page 9:2.

Service schedule

Interval	Done by	Check
Once every day	Operator	• Emergency stop(s) • Flap(s)
Once every week	Trained personnel	• Electrical components • Safety equipment • Safety relay • Rotor locking
Once every month	Trained personnel	• Knife sharpness • Knife clearance • Screen
Once every 6th month	Trained personnel	• Drive belt(s) • Important tightening torques • Thorough inspection





(A) = Emergency stop(s)
(B) = Flap(s)

Safety equipment

1. Read page 7:1 “General rules, Service”.
2. Read page 2:19 “General rules, Safety equipment”. Check that all parts of the safety equipment are installed.

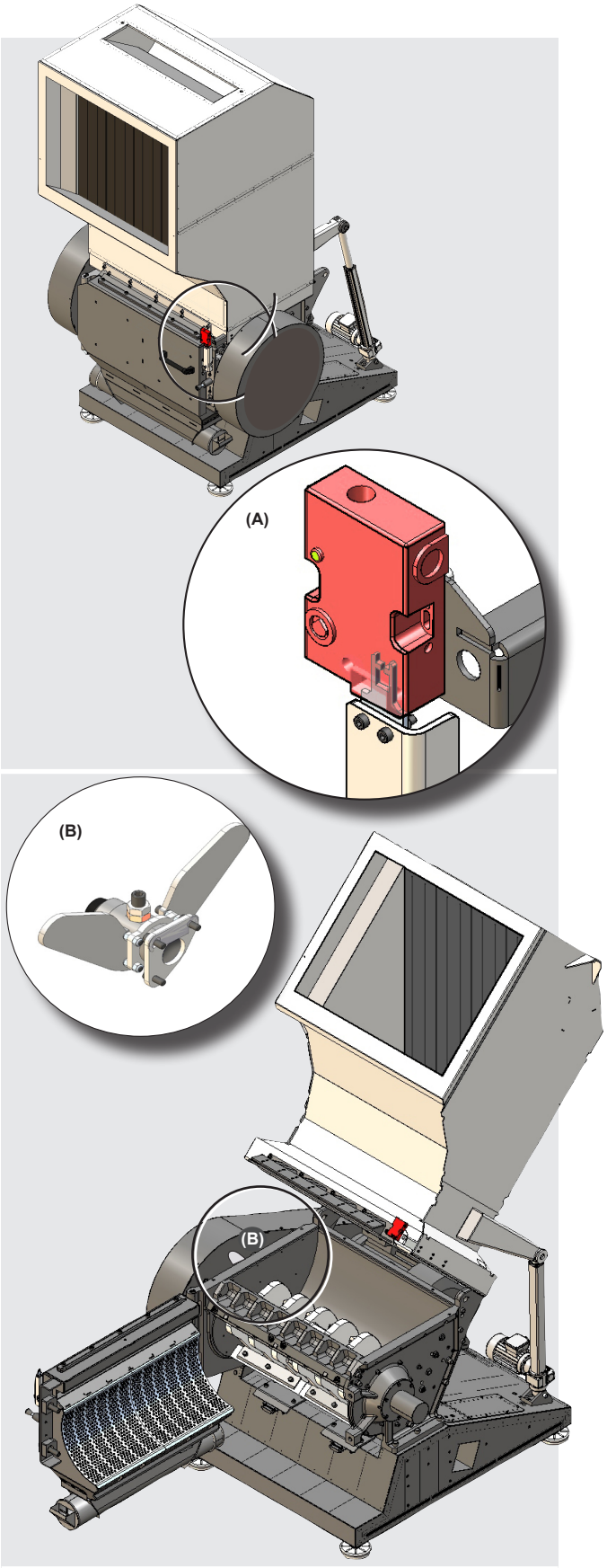
3. Read page 2:23 “Safety switch”. Check that the safety switch(es) is/are functioning:
   a) Start the granulator. >Page 5:1.
   b) Stop feeding material. Wait until all material have been fully granulated.
   c) Gently try to release the switch key from the safety switch. >Page 6:2 point 6. Note! It should be impossible to pull out the switch key. If the switch key remains locked inside the safety switch, the safety switch is functioning and the granulator can be operated again.

Danger! If it is possible to release the switch key from the safety switch although the granulator is in operation, the granulator must be stopped manually at once. >Page 5:1. There is a serious risk of personal injury! Contact the personnel responsible for the machine’s service and safety.

4. Read page 2:24 “Rotor locking”. Check that the rotor locking is functioning:
   a) Start the granulator. >Page 5:1.
   b) Stop feeding material. Wait until all material have been fully granulated.
   c) Open the hopper. >Page 6.3.
   d) Check that the rotor stands still. If the rotor stands still, the rotor locking is functioning and the granulator can be operated again.

Danger! If the rotor rotates although the hopper is opened, the granulator must be stopped manually at once. >Page 5:1. There is a serious risk of personal injury! Conair’s distributor or Conair’s head office must be contacted for service.

The instruction continues on next page. >Page 7:3 “Safety equipment”.



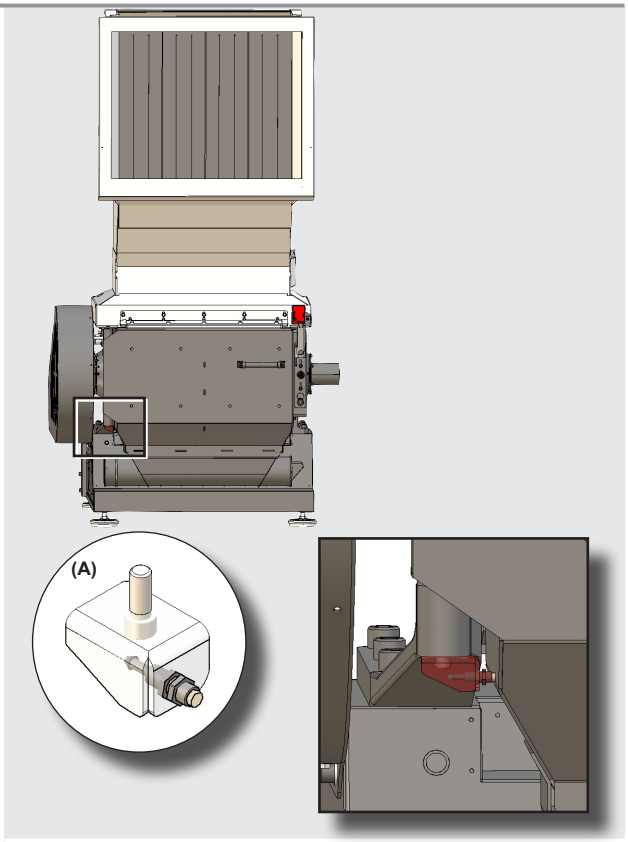
(A) = Safety switch
(B) = Rotor locking

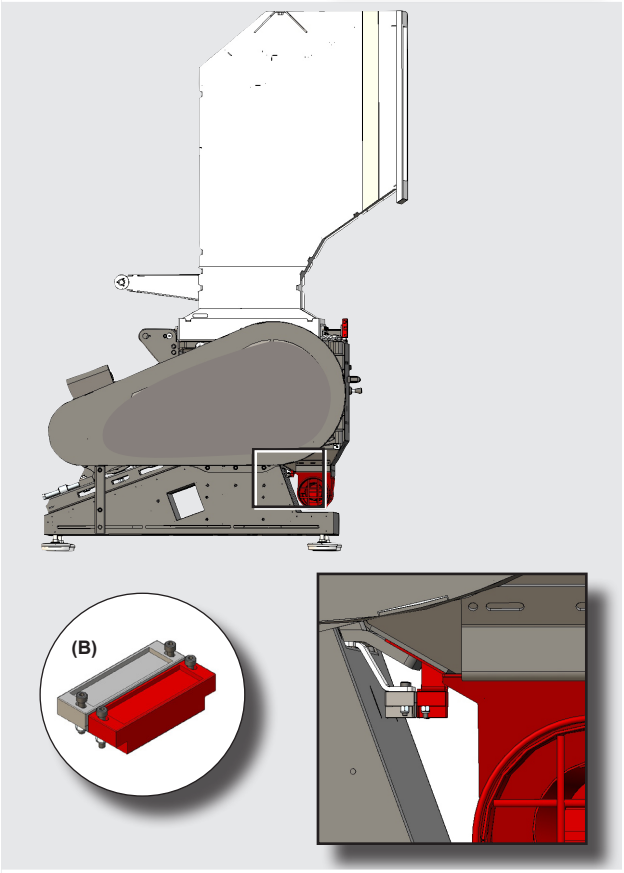
5. Read page 2:22 “Sensor(s)”. Check that the sensor(s) is/are functioning:
   a) Open the cutter housing’s front door. >Page 6:2.
   b) Open the hopper. >Page 6:3.
   c) Close the cutter housing’s front door. >Page 6:2.
   d) Try to close the hopper. Note! It should not be possible to close the hopper. If it is impossible to close the hopper, the sensor is functioning. The granulator can be operated again.

⚠ Danger! If it is possible to close the hopper, although the cutter housing’s front door is closed, the granulator must be stopped manually at once. >Page 5:1. There is a serious risk of personal injury! Conair’s distributor or Conair’s head office must be contacted for service.

6. Read page 2:22 “Magnet switch”. Check that the magnet switch(es) is functioning:
   a) Remove the granule bin. Page 6:3.
   b) Close the cutter housing’s front door. >Page 6:6.
   c) Try to start the granulator. >Page 5:1.
   Note! It should not be possible to start the granulator. If it is impossible to start the granulator, the magnet switch is functioning. The granule bin can be re-installed. The granulator can be operated again.

⚠ Danger! If it is possible to start the granulator, although the granule bin has been removed, the granulator must be stopped manually at once. >Page 5:1. There is a serious risk of personal injury! Conair’s distributor or Conair’s head office must be contacted for service.





(A) = Sensor, Front door / Screen box
(B) = Magnet switch, Granule bin

Safety relay

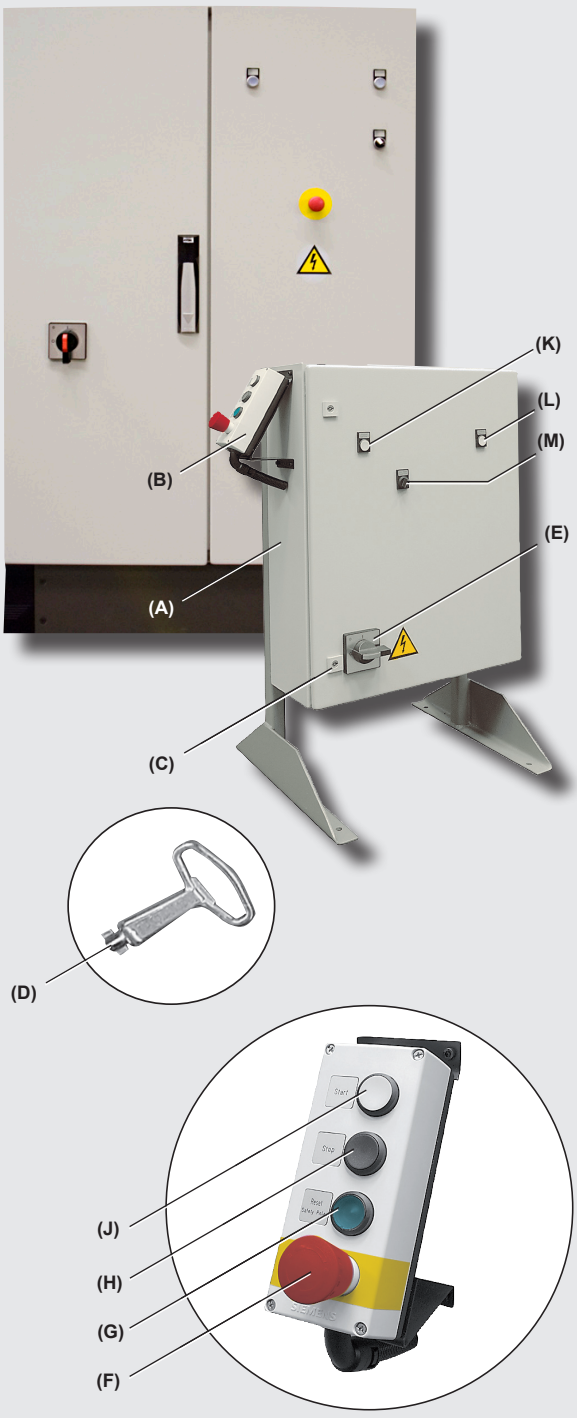
1. Read page 7:1 “General rules, Service”.
2. Read page 2:25 “Safety relay”.
3. Reset the emergency stop(s).
   >Page 2:25 “Emergency stop(s)”.
4. Check that the main switch is in position “1”.
5. Press the button “Reset safety relay”.
6. Check that the button “Reset safety relay” is lit.

   Note! If the button “Reset safety relay” lights up, the safety relay is functioning and the granulator can be operated again.

⚠ Danger! If the button “Reset safety relay” do not light up, this indicates a safety failure. Note! Do not put the main switch in position “0”. (When the main switch is put in position “0”, the button “Reset safety relay“ resets, but a possible failure remains). There is a serious risk of personal injury! Contact the personnel responsible for the machine’s service and safety.

Electrical components

1. Read page 7:1 “General rules, Service”.
2. Read page 4:5 “General rules, Electrical connection”.
3. Check all the cables. If there are any damaged or loose cables, connectors or components, authorized personnel must be called at once to do repairs.



(A) = Electrical cabinet
(B) = Operating panel
(C) = Lock, Electrical cabinet
(D) = Key to electrical cabinet
(E) = Main switch
(F) = Emergency stop
(G) = Button “Reset safety relay”
(H) = Stop-button
(J) = Start-button
(K) = Button “Operate 1”
(L) = Button “Operate 2”
(M) = Knob “Hopper, Close / Open”

Level switch

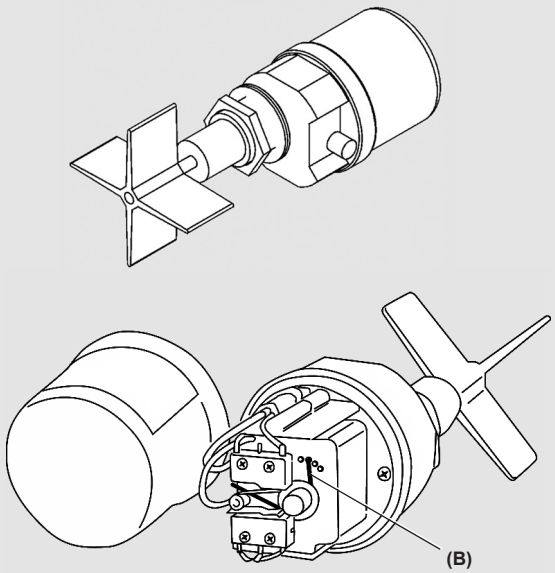
1. Read page 7:1 “General rules, Service”.
2. Read page 2:27 “Level switch”.
3. Open the granule bin. >Page 6:3.
4. Adjust the level switch’s sensitivity.

   Level switch, Paddle type:
   a) Unscrew the level switch’s cover.
   b) Adjust the torsion spring. Use a pair of needle nosed pliers or a tweezers.

   To decrease the sensitivity: Move the torsion spring to the left.

   To increase the sensitivity: Move the torsion spring to the right.

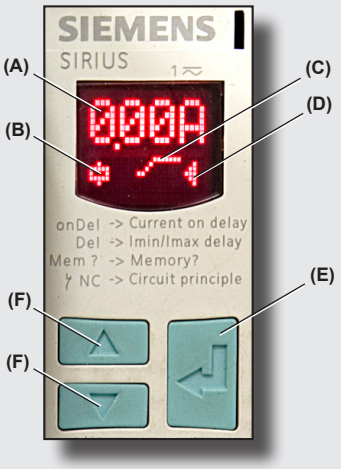
   c) Close the level switch’s cover.
5. Close the granule bin. >Page 6:5.
6. Close the cutter housing’s front door. >Page 6:6.



(A) = Level switch, Paddle type
(B) = Torsion spring, Level switch, Paddle type

Adjust the current relay

1. Read page 7:1 “General rules, Service”.
2. Read page 2:28 “Current relay”.
3. Check following points in the electrical circuit diagram:
   - Rated current.
   - Current transformer size.
   - Y/D-start or Direct-start.
4. Adjust the limit value “LVA”:
   a) Calculate the limit value in Ampere “LVA”.
   b) Press the enter-button until the display “Excess current” (I▲) appears.
   c) Press the edit-buttons until the calculated limit value has been entered.
5. Deactivate “Undercurrent”:
   a) Press the enter-button until the display “Undercurrent” (I▼) appears.
   b) Press the edit-buttons until “Off” has been entered.
6. Adjust the hysteresis “HA”:
   a) Calculate the hysteresis in Ampere “HA”.
   b) Keep the enter-button depressed for 2 seconds or until the display “HA” (Hyst) appears.
   c) Press the edit-buttons until the calculated hysteresis value has been entered.
7. Deactivate the time delay during start up “T2”.
   a) Press the enter-button until the display “T2” (OnDel) appears.
   b) Press the edit-buttons until the “0.0 s” has been entered.
8. Adjust the reaction time “T1”.
   a) Press the enter-button until the display “T1” (I▲Del) appears.
   b) Press the edit-buttons until the “3.0 s” has been entered.
9. Select memory function “Without memory”.
   a) Press the enter-button until the display “Memory” (Mem?) appears.
   b) Press the edit-buttons until “no” has been entered.
10. Select relay function “Closed circuit principle”.
    a) Press the enter-button until the “Relay function” display appears.
    b) Press the edit-buttons until “NC”, “Us=on” has been entered.
11. Accept entered values / parameters by pressing the enter-button for 2 seconds.



(B)
- = Current relay is on
- = Current relay is in delay mode
- = Current relay is off

(C)
- = Current relay monitors “Excess current”
- = Current relay monitors “Undercurrent”
- = Current relay monitors both “Excess current” and “Undercurrent”

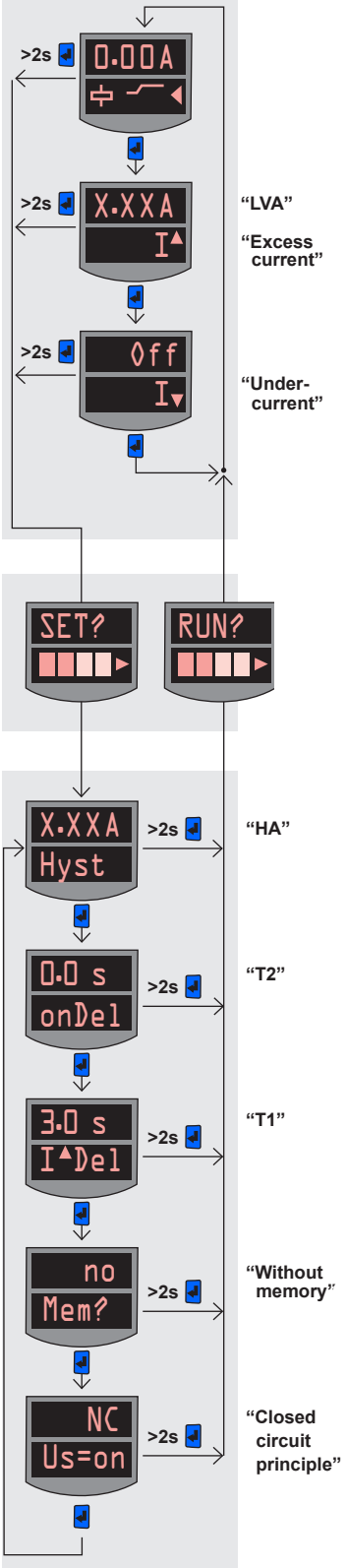
(D)
- = Current consumption is too high
- = Current consumption is OK
- = Current consumption is too low

(G) LVA = Rated current / √3

(H) LVA = Rated current

(J) HA = LVA x 0.67

(A) = Present current consumption
(B) = Status, Current relay
(C) = Present setting, Current relay
(D) = Status, Current consumption
(E) = Enter-button
(F) = Edit-button
(G) = LVA Formula, Y/D start
(H) = LVA Formula, Direct start
(J) = HA Formula

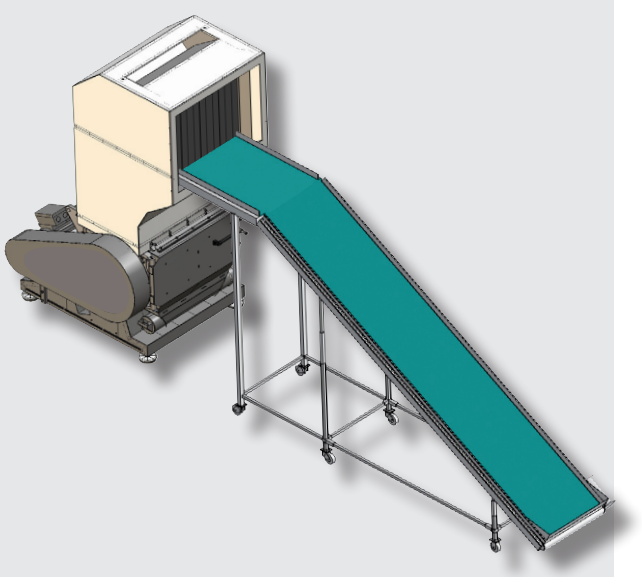


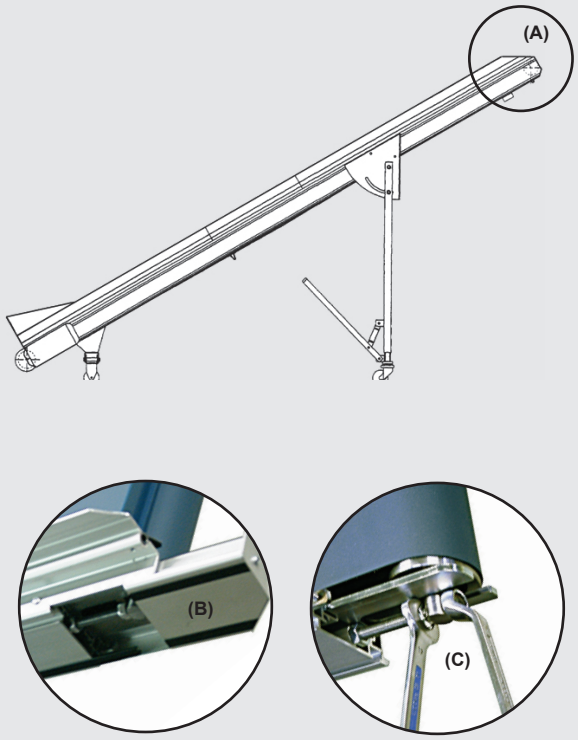
Belt conveyor

1. Read page 7:1 “General rules, Service”.
2. Read page 2:11 “Belt Conveyor Option”.
3. Check the belt’s rotation direction.
   If the rotating direction is wrong:
   a) Stop the granulator. >Page 5:1.
   b) Read page 4:5 “General rules, Electrical connection”.
   c) Switch over two incoming phases.
   d) Start the granulator. >Page 5:1.
4. Check that the band runs straight.
   If the belt runs obliquely:
   a) Stop the belt conveyor.
   b) Open the covers at the belt’s turn drum.
   c) Adjust the belt’s adjusting screws a 1/4 turn at a time.
   d) Start the belt conveyor. Let the belt run for a few minutes. Check that the belt runs straight.
   If the belt still runs obliquely, repeat point 4 a–d until the belt runs straight.

Note! The belt’s length has a tolerance of 1%. The adjusting screws’ tightening torque must never exceed 3.69 ft.lb.{5 N·m}.

5. Close the covers at the belt’s turn drum.



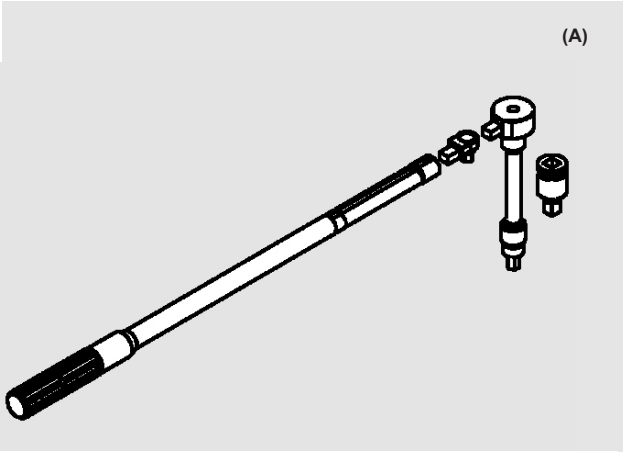


(A) = Turn drum,Belt conveyor
(B) = Cover, Turn drum
(C) = Adjusting nuts, Belt conveyor

Important tightening torques

Check the tightening torque of important machine parts 30 hours after installation and then regularly every 6 months. Respect specified tightening torques.
Use a torque wrench.

1. The knives' tightening screws.
   Tightening torque 442.54 ft.lb.{600 N·m}.
2. The hopper's tightening screws.
   Tightening torque 162.26 ft.lb.{220 N·m}.
3. The motor's tightening screws.
   Tightening torque 295.02 ft.lb.{400 N·m}.

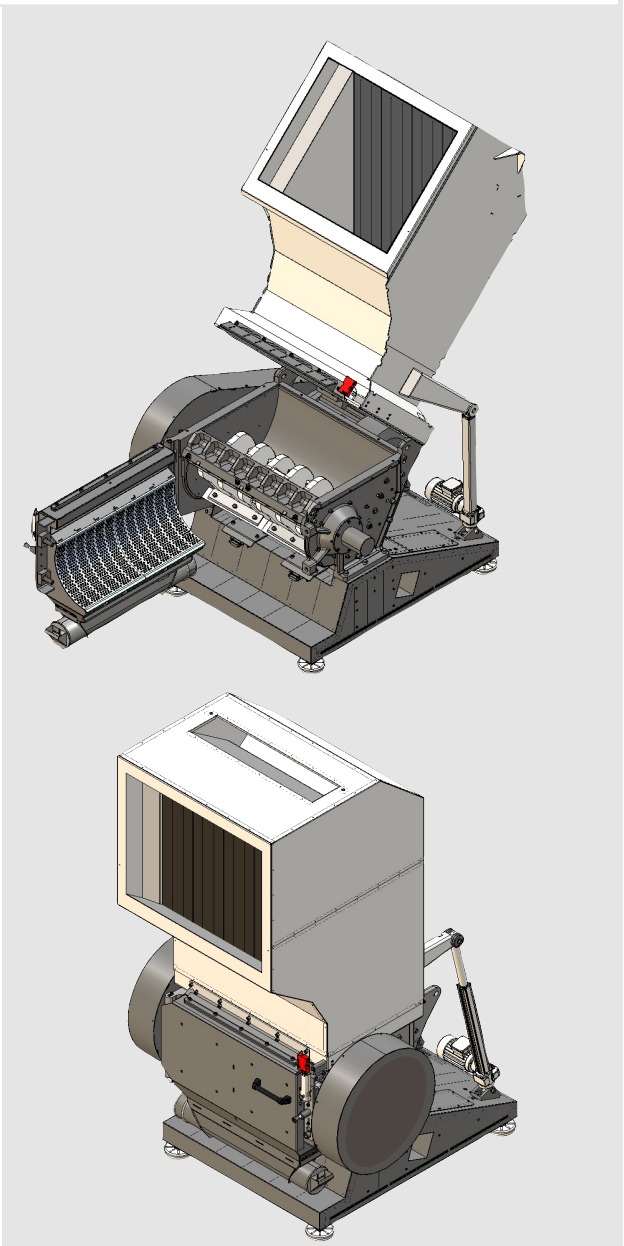


Thorough inspection

Make a thorough inspection of the entire installation once every 6 month. Check granulator and (if supplied) optional equipment.

1. Read page 7:1 "General rules, Service".
2. Execute the inspections specified in the service schedule in the column "Once every day".
   >Page 7:1 "Service schedule".
3. Execute the inspections specified in the service schedule in the column "Once every week".
   >Page 7:1 "Service schedule".
4. Execute the inspections specified in the service schedule in the column "Once every month".
   >Page 7:1 "Service schedule".
5. Execute the inspections specified in the service schedule in the column "Once every 6th month".
   >Page 7:1 "Service schedule".
6. Make a general inspection. Check that there are no loose parts, screws, nuts or components on the machine. Check the wear on all internal and external machine parts. Also check machine parts which not normally are subjected to wear.

Note! When replacing machinery parts, only use original spare parts supplied by Conair. In event of any questions, please contact Conair's local distributor or Conair's head office.



(A) = Torque wrench

Lubrication

When the rotor bearing housings are equipped with grease nipples, the bearings needs re-lubrication, see also separate instruction. Re-lubrication must only be applied when advised by Conair Granulator. Contact the Conair headquarters for further information.

If the rotor bearing housings do not have grease nipples (standard) the rotor bearings are lubricated for life and do not need re-lubrication.

Re-lubrication of motor bearings is valid for the motor sizes per below:

Motor power [kW]	Article number	Siemens article number.	Re-lubrication interval [h]	Grease [g]
90	9-93124, 9-94687	1LG4 283-…	8000 h	DE: xx NDE: xx
75 or 90	9-10289-IE2, 9-91054-IE2	1LE1501-2D…	8000 h	DE: xx NDE: xx
110 or 160	9-90372-IE2, 9-93041-IE2	1LE1501-3A…	6000 h	DE: xx NDE: xx
132	9-92467	1LG4 313-…	8000 h	DE: xx NDE: xx
110	9-91311, 9-94623	1LG4 310-…	6000 h	DE: xx NDE: xx
(DE = Drive end), (NDE = Non-drive end)				

Do not use different types of grease. Type of grease to be used is Esso Unirex N3. When re-lubricating; clean the grease nipples and press in the amount of grease specified on the motors rating plate. DE = Drive end side, NDE = Non-drive end side.

Motors not listed in table are lubricated for life.

Storage

1. Treat all components that could rust with rust preventer for long-term rust protection.
2. Store the machine in a dry area with even temperature.
3. Rotate the rotor manually every 3 months.

Cleaning

1. Read page 7:1 “General rules, Service”.
2. When granulating material that generates dust:
   – Clean the granulator’s parts once every day or at least once every week.

   In normal operation:
   – Clean the granulator’s parts at color change or at least once every 300 hours.
3. Open the granulator. >Page 6:1.
4. Clean the granulator parts. Use a vacuum cleaner. Clean following parts inside and outside: Hopper, Flap(s), Cutter housing, Screen, Screen box, Granule bin, Enclosure.

Important! Do not use compressed air and a blow gun, since granulate and plastic residue could be blown into safety switches. Granulate and plastic residue can make the floor slippery.

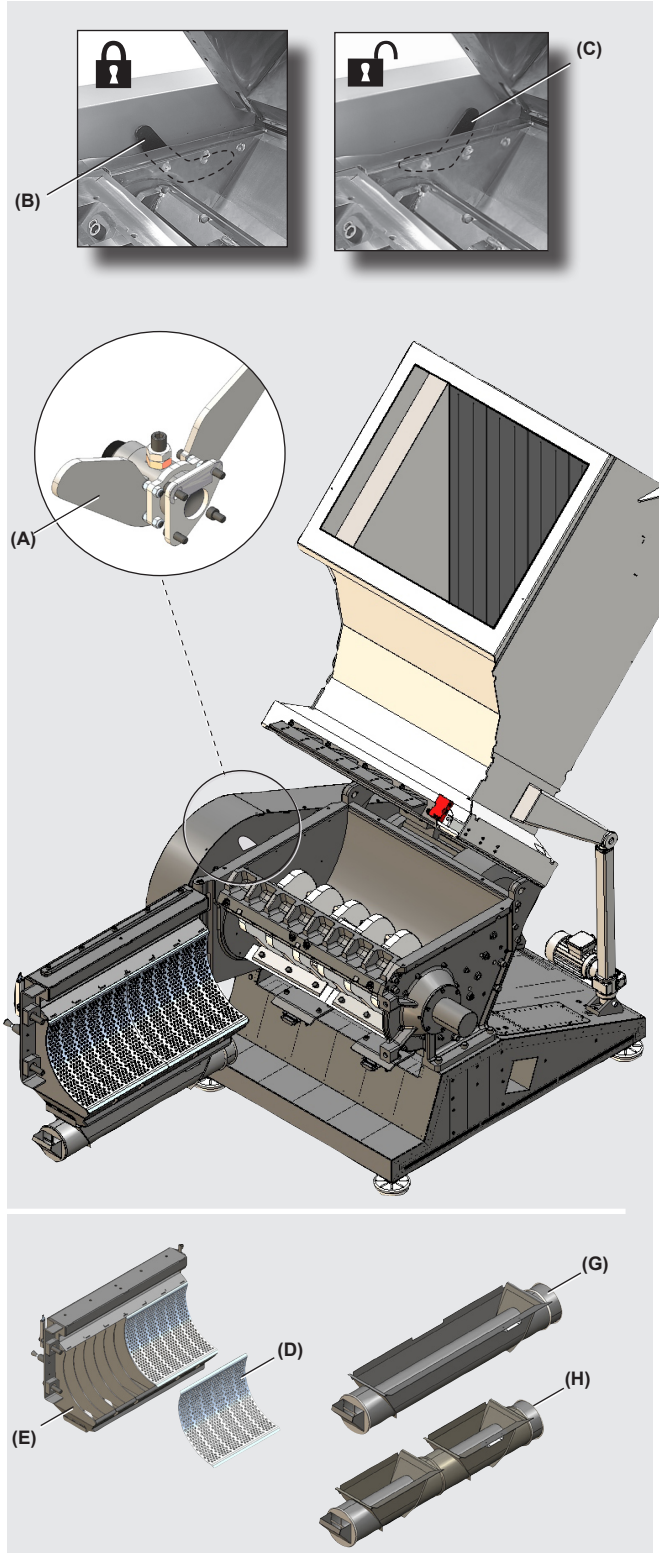
5. Optional Blower: Clean the blower, outlet pipe and granule bin very carefully. Use a vacuum cleaner.

Note! When starting, remaining material in the blower, outlet pipe or granule bin can cause serious and irreparable damage to the blower.

6. Optional belt conveyor: Clean the belt. Use a gentle detergent. Strong detergents can damage the belt. Wipe clean with lint-free rags.
7. Close the granulator. >Page 6:4.

Important! If the rotor is stuck:
a) Read page 2:24 “Rotor locking”.
b) Unlock the rotor locking.
c) Rotate the rotor in the reverse direction, if necessary tap carefully with a piece of wood. Never use any metal object when trying to release the rotor.
d) Note! Immediately after rotating rotor pulley or rotor, the rotor locking must be manually locked. Lock the rotor locking by pulling the rotor locking’s hand lever into the locked position. Refer to figure on the right.

Important! If the hopper, cutter housing, screen box and/or granule bin are filled with compact, melt plastic residue, Conair’s distributor or Conair’s head office must be contacted for service.



(A) = Hand lever, Rotor locking
(B) = Hand lever in manually locked position
(C) = Hand lever in manually unlocked position
(D) = Screen
(E) = Screen box
(G) = Granule bin “Single”
(H) = Granule bin “Divided”

Knives

General rules, Knives

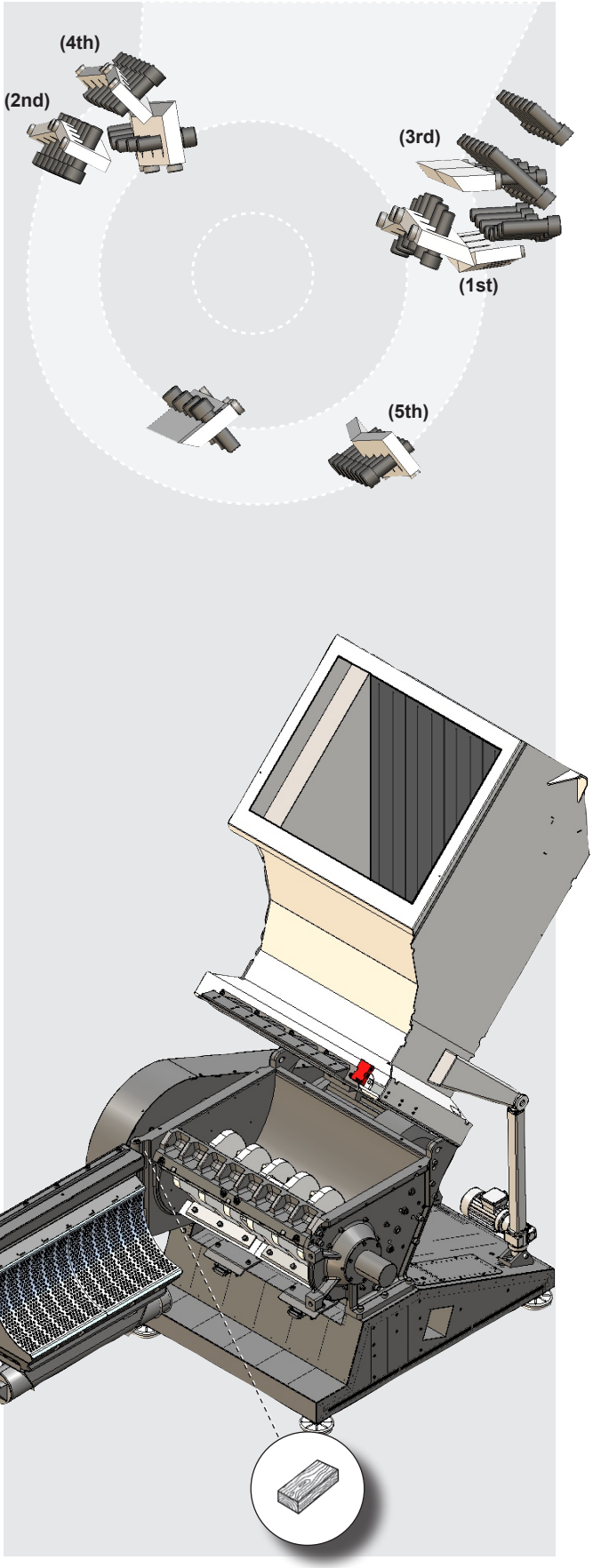
1. Read page 7:1 “General rules, Service”.
2. Read page 2:13 “Rotor”.
3. Read page 2:14 “Rotating knives”.
3. Read page 2:15 “Cutter housing”.
4. Read page 2:16 “Fixed knives”.
5. Read page 2:17 “Grinding fixture”, “Knife clearance” and “Presetting fixture”.
6. Read page 2:24 “Rotor locking”.

   Note! The rotor locking shall lock the rotor, but as an extra precaution, also lock the rotor’s position with a piece of wood while changing the knives.
7. Always lock the cutter housing’s front door with a piece of wood while changing the knives. Refer to the lower figure on the right.
8. All screws and nuts that are sealed with red paint, are permanently set and glued. These screws and nuts must under no circumstances be unscrewed, tightened or changed.
9. Knife sharpness and knife clearance must be checked regularly. The granulator must never be used with blunt knives. Blunt knives cause abnormal wear and damages the granulator. The rotating knives must be replaced or grinded as necessary. The fixed knives must be replaced, grinded or reversed as necessary.

   Note! For information regarding blunt knives and knife clearance, read page 7:19 “Knife clearance”.
10. Every second time tightening screws are unscrewed they must be replaced with new ones.
11. When replacing knives, washers, support rules and tightening screws only use original spare parts supplied by Conair.
12. Respect specified tightening torques. Use a torque wrench.
13. Respect specified measures.

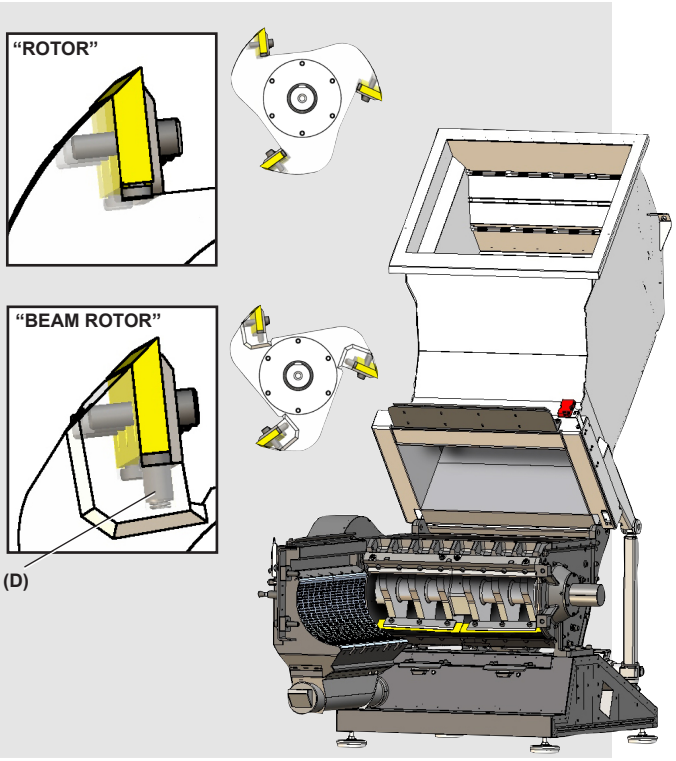
If any of the above listed rules are left unattended, Conair’s responsibility under the Machinery Directive ceases to apply.

In event of any questions, please contact Conair’s local distributor or Conair’s head office.



Remove the rotating knives

1. Read page 7:11 “General rules, Knives”.
2. Open the cutter housing’s front door and the hopper. >Page 6:2–6:3.
3. Remove the knives on one knife row at the time.
4. Release the rotor. Unlock the rotor locking. Rotate the rotor to an appropriate position. Lock the rotor’s position with a piece of wood. Lock the rotor locking. >Page 2:24.
5. Unscrew the rotating knife’s tightening screws. Hold the knife and the support rule while unscrewing the tightening screws.
6. Remove the rotating knife and the support rule.
7. Beam rotor: Remove the spring loaded sealing.
8. Repeat point 4–8 until all rotating knives have been removed.

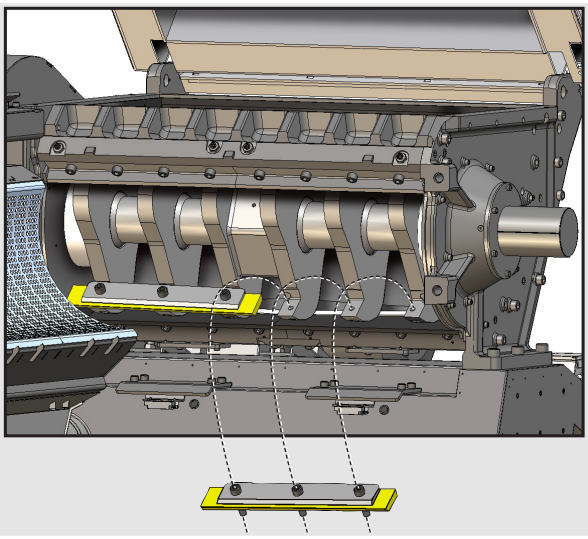


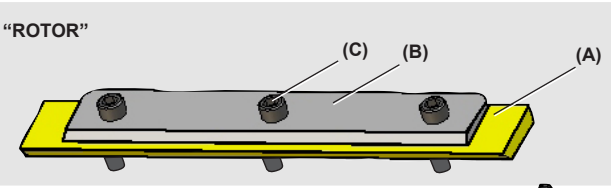
Install the rotating knives

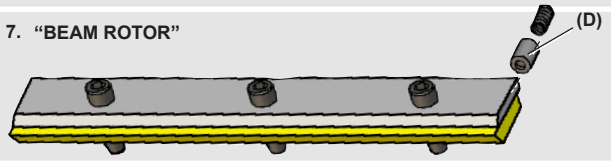
1. Read page 7:11 “General rules, Knives”.
2. Preset the knives. >Page 7:22.
3. Open the cutter housing’s front door and the hopper. >Page 6:2–6:3.
4. Install one knife at the time.
5. Release the rotor. Unlock the rotor locking. Rotate the rotor to an appropriate position. Lock the rotor’s position with a piece of wood. Lock the rotor locking. >Page 2:24.
6. Check that the knife seat is clean.
7. Beam rotor: Install the spring loaded sealing.
8. Install the rotating knife, the support rule and the tightening screws.
9. Press the knife firmly to the bottom of the knife seat.
10. Tighten the knife’s tightening screws. Tightening torque 442.54 ft.lb.{600 N·m}.

Note! Use a rubber head mallet and give the knife a firm punch every now and then meanwhile the tightening torque gradually is increased. This is to ensure that the knife is installed in the very bottom of the knife seat.

11. Release the rotor. Unlock the rotor locking. Rotate the rotor to an appropriate position.
12. Check the knife clearance. >Page 7:19.
13. Repeat point 5–13 until all rotating knives have been installed.







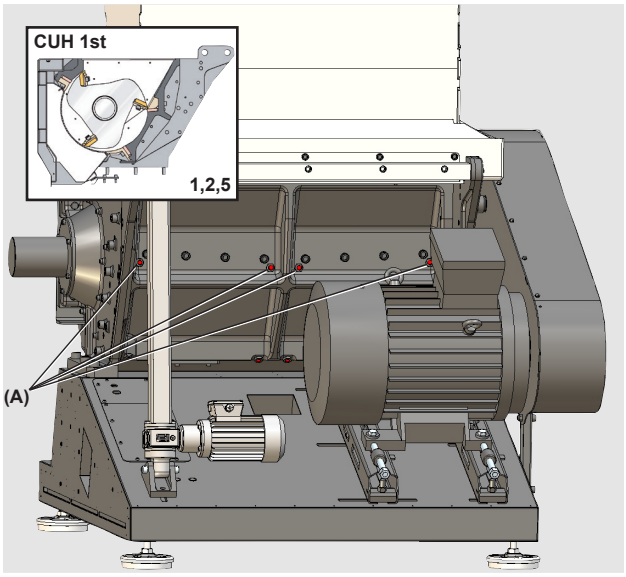
(A) = Rotating knife
(B) = Support rule, Rotating knife
(C) = Tightening screws, Rotating knife
(D) = Spring loaded sealing, Beam rotor

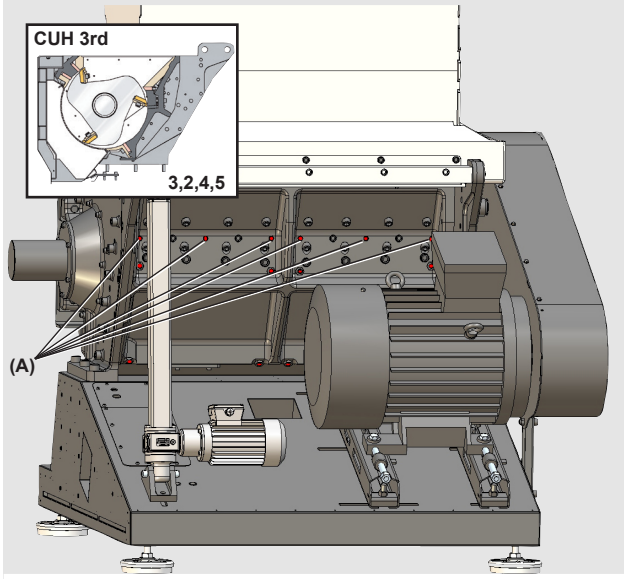
SERVICE

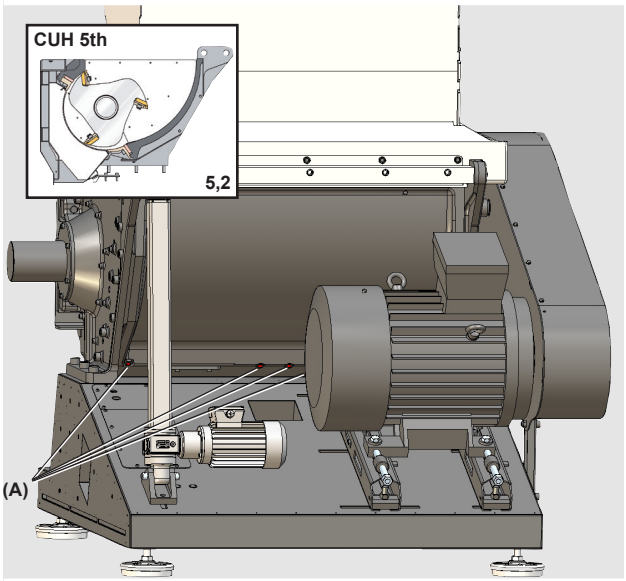
General rules, Remove / Install the fixed knives

1. Read page 7:11 “General rules, Knives”.
2. Open the cutter housing. >Page 6:2.
3. Open the hopper. >Page 6:3.
4. Release the rotor. Unlock the rotor locking. Rotate the rotor to an appropriate position. Lock the rotor’s position with a piece of wood. Lock the rotor locking. >Page 2:24.
5. Remove / Install the knives on one knife row at the time.
6. The tightening screws to rear fixed knife 1st and 3rd are tightened / unscrewed from the back side of the granulator.

Note! Do not tighten / unscrew any screws sealed with red paint. These screws are permanently set and glued!







(A) = Red painted grub screws

Remove the fixed knife 2nd

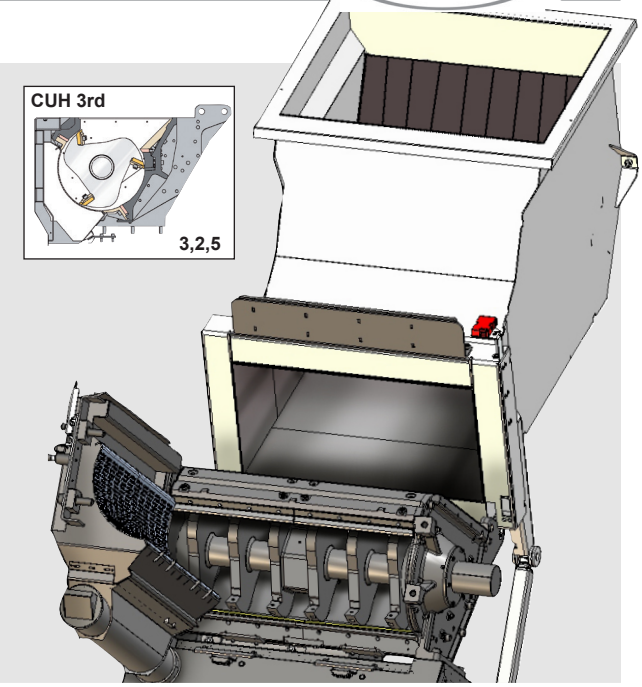
1. Read page 7:13 “General rules, Remove / Install the fixed knives”.
2. Remove the fixed knife 2nd. Refer to figure on the right.
3. Unscrew the fixed knife’s tightening screws. Hold the knife and the support rule while unscrewing the tightening screws.
4. Remove the fixed knife and the support rule.
5. Repeat point 2–5 until both fixed knives 2nd have been removed.

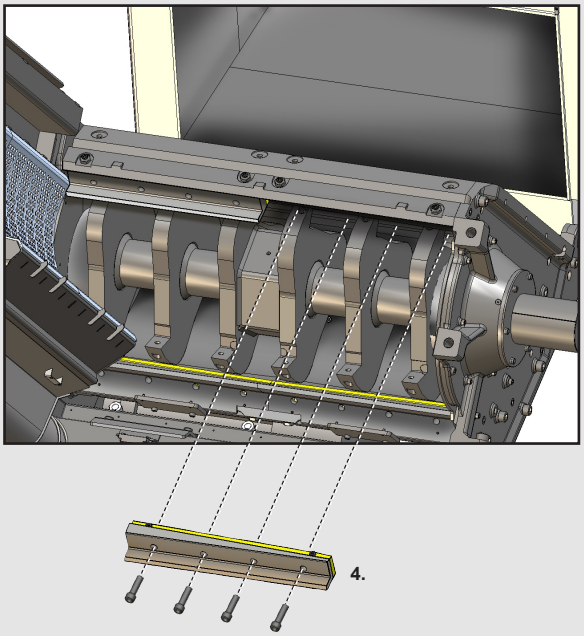
Install the fixed knife 2nd

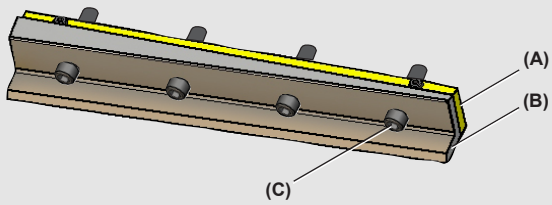
1. Read page 7:13 “General rules, Remove / Install the fixed knives”.
2. Preset the fixed knives. >Page 7:22.
3. Check that the knife seat is clean.
4. Install the fixed knife, the support rule and the tightening screws. Refer to figure on the right.
5. Press the knife firmly to the bottom of the knife seat.
6. Tighten the knife’s tightening screws. Tightening torque 442.54 ft.lb.{600 N·m}.

Note! Use a rubber head mallet and give the knife a firm punch every now and then meanwhile the tightening torque gradually is increased. This is to ensure that the knife is installed in the very bottom of the knife seat.

7. Release the rotor. Unlock the rotor locking. Rotate the rotor to an appropriate position.
8. Check the knife clearance. >Page 7:19.
9. Repeat point 3–9 until both fixed knives 2nd have been installed.





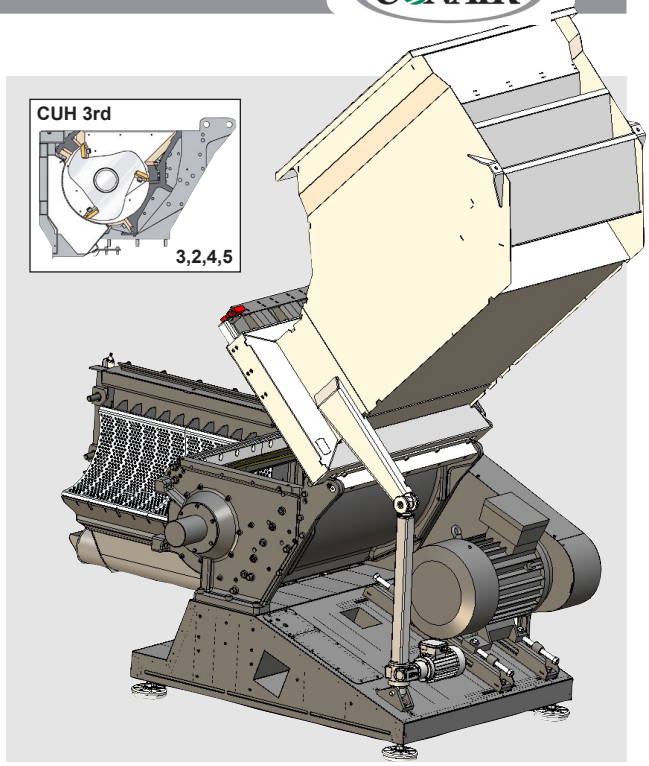


(A) = Front fixed knife 2nd
(B) = Support rule, Front fixed knife 2nd
(C) = Tightening screws, Front fixed knife 2nd

Remove the fixed knife 4th

Information! Fixed knife 4th is optional.
>Read page 2:16 “Fixed knives”.

1. Read page 7:13 “General rules, Remove / Install the fixed knives”.
2. Remove the fixed knife 4th. Refer to figure on the right.
3. Unscrew the fixed knife’s tightening screws. Hold the knife and the support rule while unscrewing the tightening screws.
4. Remove the fixed knife and the support rule.
5. Repeat point 2–5 until both fixed knives 4th have been removed.



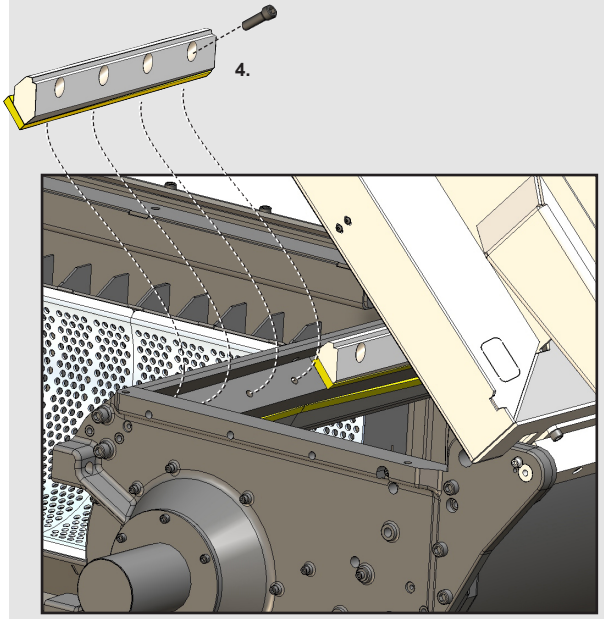
Install the fixed knife 4th

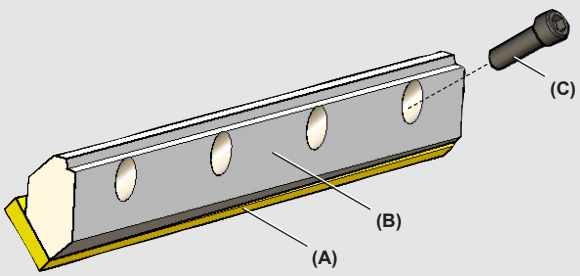
Information! Fixed knife 4th is optional.
>Read page 2:16 “Fixed knives”.

1. Read page 7:13 “General rules, Remove / Install the fixed knives”.
2. Preset the fixed knives. >Page 7:22.
3. Check that the knife seat is clean.
4. Install the fixed knife, the support rule and the tightening screws. Refer to figure on the right.
5. Press the knife firmly to the bottom of the knife seat.
6. Tighten the knife’s tightening screws. Tightening torque 442.54 ft.lb.{600 N·m}.

Note! Use a rubber head mallet and give the knife a firm punch every now and then meanwhile the tightening torque gradually is increased. This is to ensure that the knife is installed in the very bottom of the knife seat.

7. Release the rotor. Unlock the rotor locking. Rotate the rotor to an appropriate position.
8. Check the knife clearance. >Page 7:19.
9. Repeat point 3–9 until both fixed knives 4th have been installed.



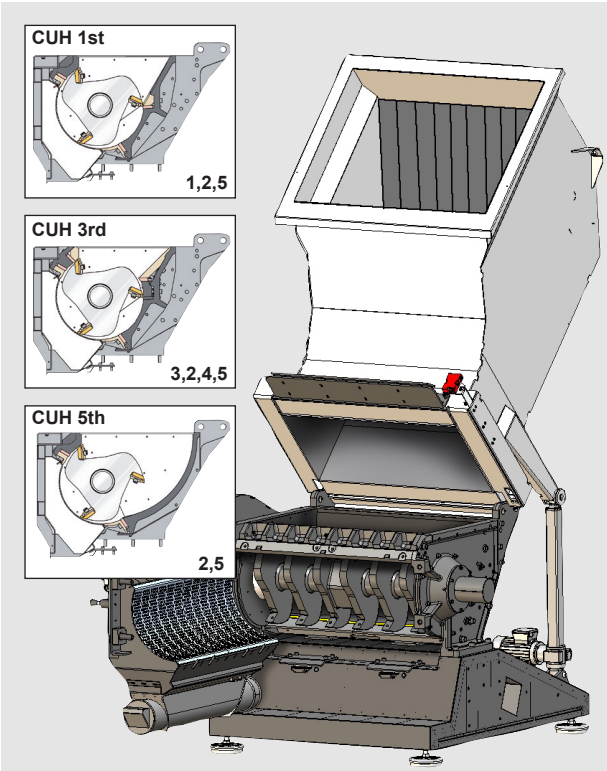


(A) = Front fixed knife 4th
(B) = Support rule, Front fixed knife 4th
(C) = Tightening screws, Front fixed knife 4th

Remove the fixed knife 5th

Information! Fixed knife 5th is optional.
>Read page 2:16 “Fixed knives”.

1. Read page 7:13 “General rules, Remove / Install the fixed knives”.
2. Remove the fixed knife 5th. Refer to figure on the right.
3. Unscrew the fixed knife’s tightening screws. Hold the knife and the support rule while unscrewing the tightening screws.
4. Remove the fixed knife and the support rule.
5. Repeat point 2–5 until both fixed knives 5th have been removed.



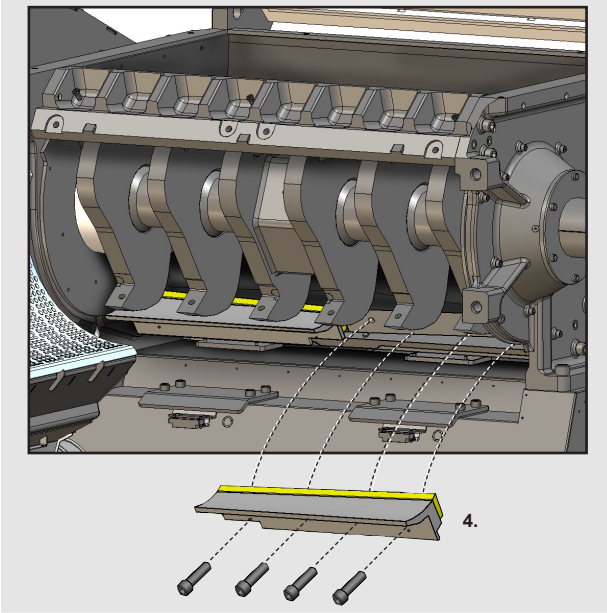
Install the fixed knife 5th

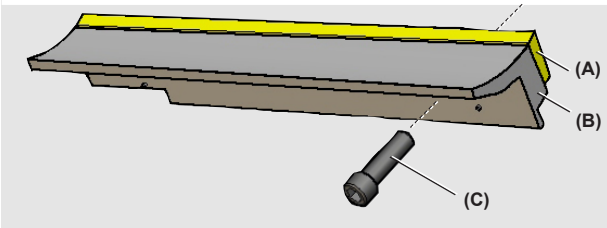
Information! Fixed knife 5th is optional.
>Read page 2:16 “Fixed knives”.

1. Read page 7:13 “General rules, Remove / Install the fixed knives”.
2. Preset the fixed knives. >Page 7:22.
3. Check that the knife seat is clean.
4. Install the fixed knife, the support rule and the tightening screws. Refer to figure on the right.
5. Press the knife firmly to the bottom of the knife seat.
6. Tighten the knife’s tightening screws. Tightening torque 442.54 ft.lb.{600 N·m}.

Note! Use a rubber head mallet and give the knife a firm punch every now and then meanwhile the tightening torque gradually is increased. This is to ensure that the knife is installed in the very bottom of the knife seat.

7. Release the rotor. Unlock the rotor locking. Rotate the rotor to an appropriate position.
8. Check the knife clearance. >Page 7:19.
9. Repeat point 3–9 until both fixed knives 5th have been installed.





(A) = Rear fixed knife 5th
(B) = Support rule, Rear fixed knife 5th
(C) = Tightening screws, Rear fixed knife 5th

Knives

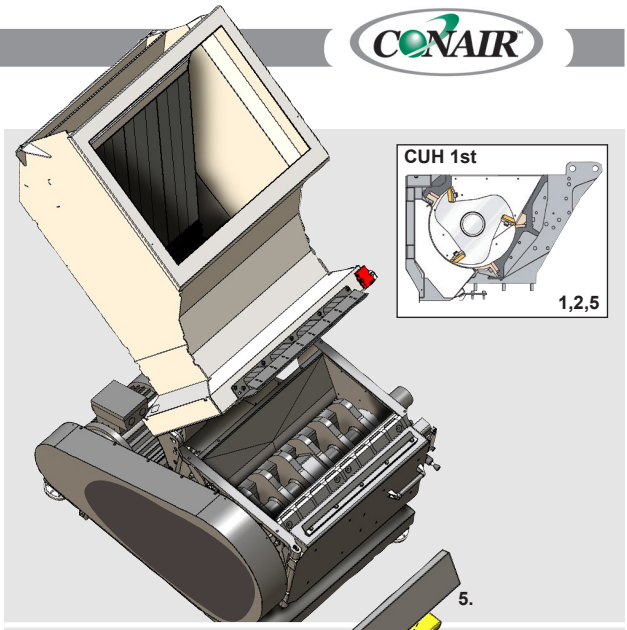
Remove the fixed knife 1st

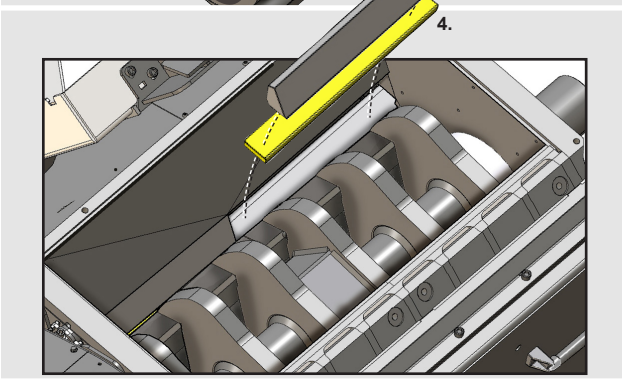
Information! Fixed knife 1st is optional.
>Read page 2:16 “Fixed knives”.

1. Read page 7:13 “General rules, Remove / Install the fixed knives”.
2. Remove the fixed knife 1st. Refer to figure on the right. Unscrew the support rule’s tightening screws. Hold the knife and the support rule while unscrewing the tightening screws.

Note! The tightening screws are tightened / unscrewed from the back side of the granulator.

3. Remove the fixed knife and the support rule.
4. Repeat point 2–4 until both fixed knives 1st have been removed.





Install the fixed knife 1st

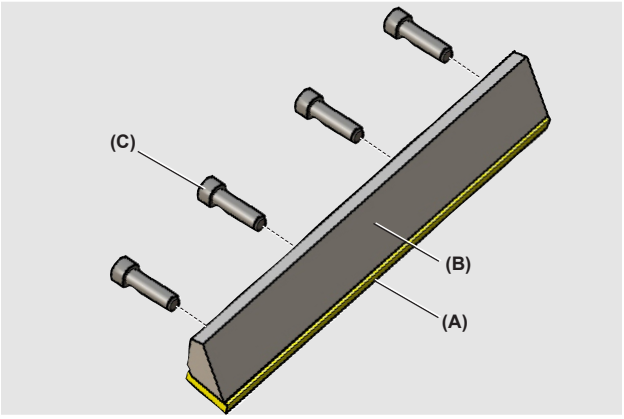
Information! Fixed knife 1st is optional.
>Read page 2:16 “Fixed knives”.

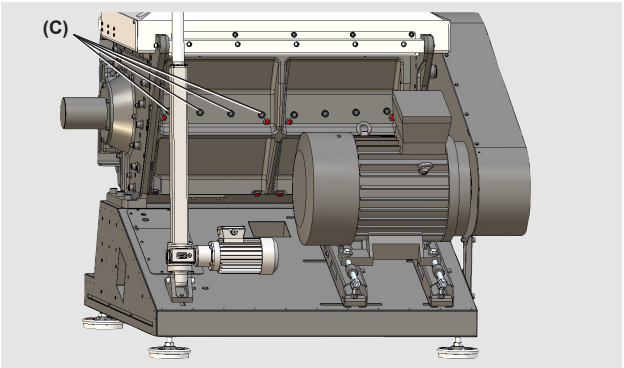
1. Read page 7:13 “General rules, Remove / Install the fixed knives”.
2. Preset the fixed knives. >Page 7:22.
3. Check that the knife seat is clean.
4. Install the fixed knife. Press the knife firmly to the bottom of the knife seat.
5. Install the support rule and the tightening screws.
6. Tighten the support rule’s tightening screws. Tightening torque 442.54 ft.lb.{600 N·m}.

Note! The tightening screws are tightened / unscrewed from the back side of the granulator.

Note! Use a rubber head mallet and give the knife a firm punch every now and then meanwhile the tightening torque gradually is increased. This is to ensure that the knife is installed in the very bottom of the knife seat.

7. Release the rotor. Unlock the rotor locking. Rotate the rotor to an appropriate position.
8. Check the knife clearance. >Page 7:19.
9. Repeat point 3–9 until both fixed knives 1st have been installed.





(A) = Rear fixed knife 1st
(B) = Support rule, Rear fixed knife 1st
(C) = Tightening screws, Rear fixed knife 1st

Knives

General rules, 3rd

Information! Fixed knife 3rd is optional.
>Read page 2:16 “Fixed knives”.

Note! The tightening screws are tightened / unscrewed from the back side of the granulator. Refer to figure on the right.

Remove the fixed knife 3rd

1. Read page 7:13 “General rules, Remove / Install the fixed knives”.
2. Remove the fixed knife 3rd:
   a) Unscrew the support rule’s tightenings screws. Remove the support rules.
   b) Unscrew the fixed knife’s tightening screws. Remove the fixed knife.
3. Repeat point 2–3 until both fixed knives 3rd have been removed.

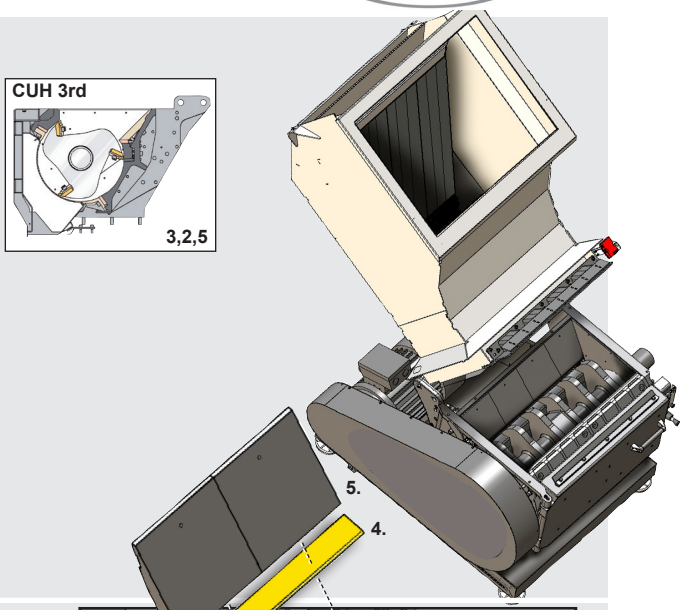
Install the fixed knife 3rd

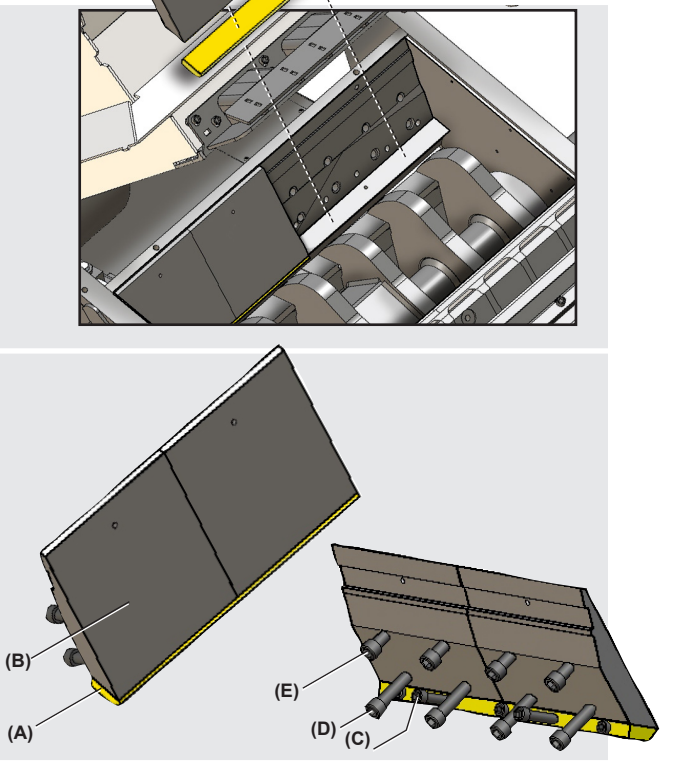
1. Read page 7:13 “General rules, Remove / Install the fixed knives”.
2. Preset the fixed knives. >Page 7:22.
3. Check that the knife seat is clean.
4. Install the fixed knife and its tightening screws. Press the knife firmly to the bottom of the knife seat.
5. Install the support rule and its tightening screws.
6. Tighten all tightening screws. Tightening torque 442.54 ft.lb.{600 N·m}.

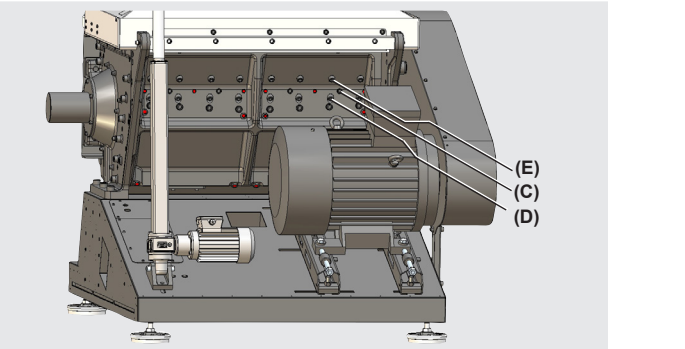
Note! The tightening screws to fixed knife 3rd are tightened / unscrewed from the back side of the granulator.

Note! Use a rubber head mallet and give the knife a firm punch every now and then meanwhile the tightening torque gradually is increased. This is to ensure that the knife is installed in the very bottom of the knife seat.

7. Release the rotor. Unlock the rotor locking. Rotate the rotor to an appropriate position.
8. Check the knife clearance. >Page 7:19.
9. Repeat point 3–9 until both fixed knives 3rd have been installed.







(A) = Rear fixed knife 3rd
(B) = Support rule, Rear fixed knife 3rd
(C) = Tightening screws, Rear fixed knife 3rd
(D),(E) = Tightening screws, Support rule 3rd

Knife clearance

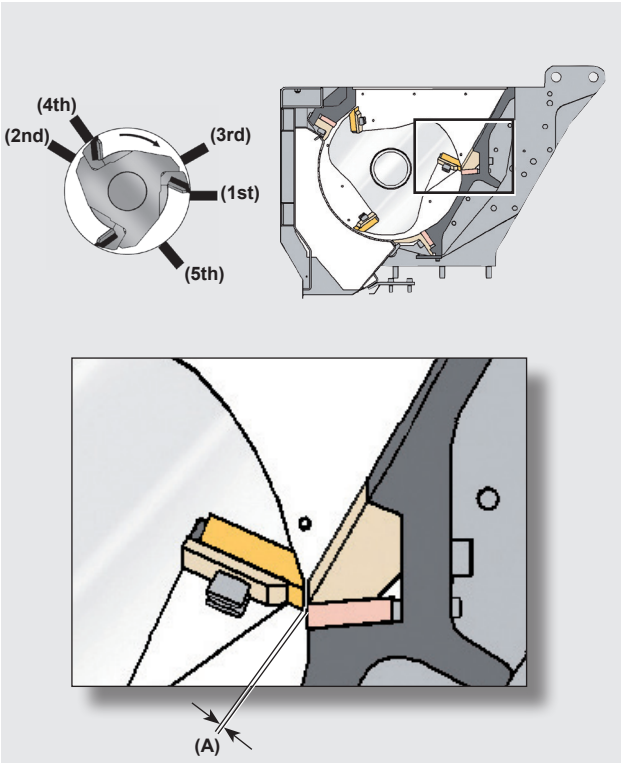
1. Read page 2:17 “Knife clearance”.
2. Read page 7:11 “General rules, Knives”.
3. Open the cutter housing. >Page 6:2.
4. Open the hopper. >Page 6:3.
5. Check the knife clearance. Check the knife clearance at one knife seat at the time.
   a) Release the rotor. Unlock the rotor locking. >Page 2:24 “Rotor locking”.
   b) Rotate the rotor to an appropriate position. Lock the rotor’s position with a piece of wood. Lock the rotor locking.
   c) Put a feeler gauge between the fixed knife and the rotating knife. Put the feeler gauge alternately to the right, to the left and in the middle. Correct knife clearance is 0.02 – 0.03 in{0.40 – 0.70 mm}.
6. Repeat point 5 above, until the knife clearance has been checked at all knife seats.

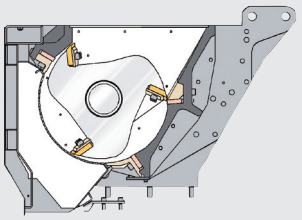
Note! If the knife clearance is wrong:
a) Remove the knife.
b) Preset the knife in a presetting fixture. >Page 7:22.
c) Re-install the knife.
d) Re-check the knife clearance.

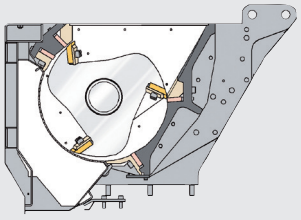
7. Close the hopper. >Page 6:4.
8. Close the cutter housing. >Page 6:6.

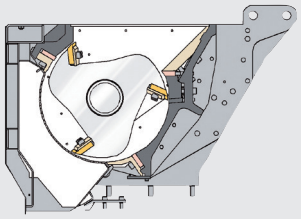
Knife clearance				
	Correct knife clearance standard in.{mm}	Correct knife clearance film in.{mm}	Maximal knife clearance standard in. {mm}	Maximal knife clearance film in.{mm}
CKW 2436	0.02-0.03 {0,40-0,70}	0.01-.02 {0,30-0,40}	0.03 {0,80}	0.02 {0,40}
CKW 2448	0.02-0.03 {0,40-0,70}	0.02-0.03 {0,40-0,70}	0.03 {0,80}	0.04 {1,0}
CKW 2460	0.02-0.03 {0,40-0,70}	0.02-0.03 {0,50-0,70}	0.03 {0,80}	0.04 {1,0}

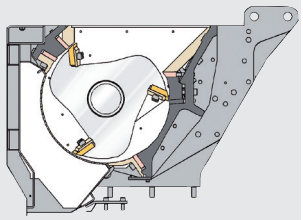
Note! Correct knife clearance and maximal knife clearance depends on type and form of the material to grind. The values above are guidelines.

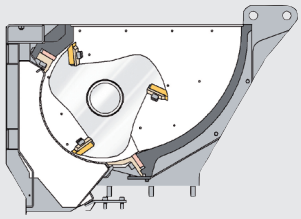


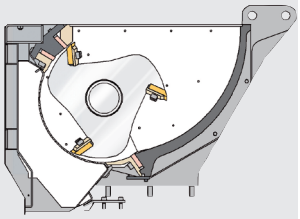

Cutter housing 1st,
Fixed knives 1st,2nd,5th


Cutter housing 1st,
Fixed knives 1st,2nd,4th,5th


Cutter housing 3rd,
Fixed knives 3rd,2nd,5th


Cutter housing 3rd,
Fixed knives 3rd,2nd,4th,5th


Cutter housing 5th,
Fixed knives 5th,2nd


Cutter housing 5th,
Fixed knives 5th,2nd,4th

(A) = Knife clearance

SERVICE

General rules, Grind the knives

1. Read page 7:11 “General rules, Knives”.
2. Always begin grinding the worst and most blunt knife.
3. Grind the knives with accurate precision. It is very important that the relief angle and the cutting angle becomes correct. Respect specified measures.
4. Always cool the knives during grinding. Grind slowly. Make sure that no heat is developed. Knives that are overheated when grinded, loose their hardness, strength and durability. Knives that have been burned or quenched blue, are irreparable and must be discarded.
5. A surface grinder with magnetic table and a grinding fixture ensures that the cutting angles and the relief angles becomes correct.

Grind the fixed knives

1. Read page 7:20 “General rules, Grind the knives”.
2. Remove the fixed knives. >Page 7:13–7:18.
3. **Fixed knife 2nd/4th/1st/5th:**
   Install the fixed knife in the grinding fixture. Refer to the upper figure on the right.

   Fixed knife 3rd:
   Install the fixed knife in the grinding fixture. Refer to the lower figure on the right.
4. Install the grinding fixture’s washer(s). Tighten the knife with the grinding fixture’s tightening screws.
5. Grind the fixed knife’s cutting edge. Use a surface grinder. Grind until all irregularities have disappeared.

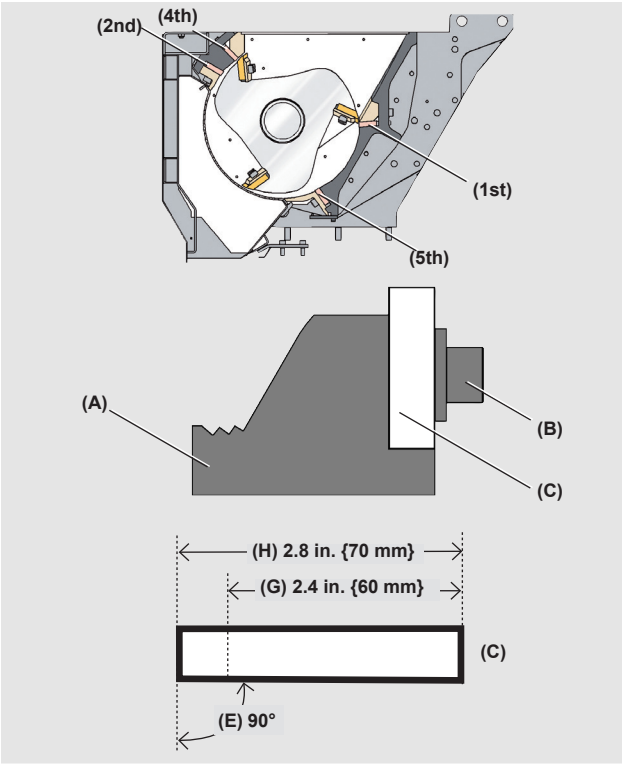
   Fixed knife 2nd/4th/1st/5th:
   A correct cutting angle on the fixed knife is 90°.

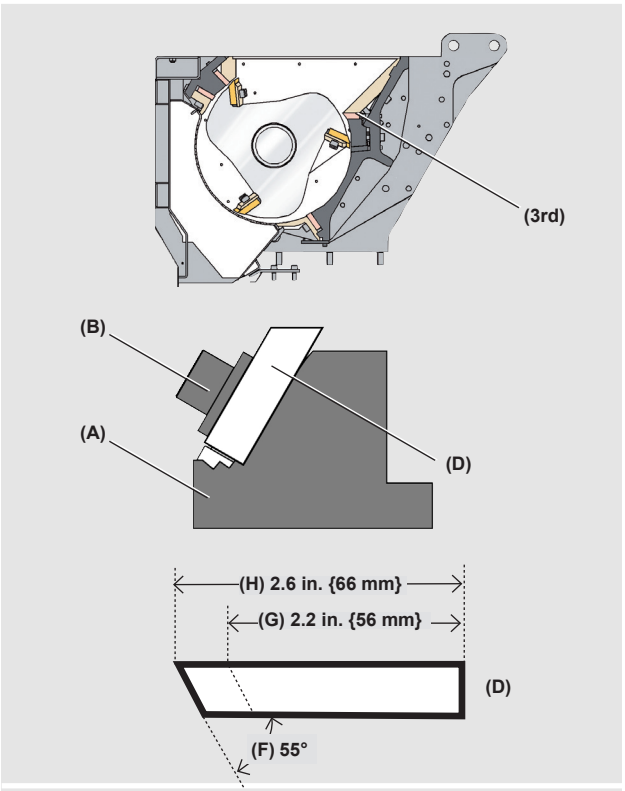
   Fixed knife 3rd:
   A correct cutting angle on the fixed knife is 55°.
6. Remove the knife but keep the settings on the surface grinder.
7. Measure the knife’s length after grinding.

Fixed knife 2nd/4th/1st/5th: If the fixed knife’s length is less than 2.4 in.{60 mm}, the old fixed knife must be discarded and replaced by a new fixed knife.

Fixed knife 3rd: If the fixed knife’s length is less than 2.2 in.{56 mm}, the old fixed knife must be discarded and replaced by a new fixed knife.

8. Repeat point 3–8 until all fixed knives have been grinded.





(A) = Grinding fixture
(B) = Tightening screw, Grinding fixture
(C) = Fixed knife 2nd/4th/1st/5th
(D) = Fixed knife 3rd
(E) = Relief angle, Fixed knife 2nd/4th/1st/5th)
(F) = Relief angle, Fixed knife 3rd
(G) = Minimum length, grinded fixed knife
(H) = Length, new fixed knife

Grind the rotating knives

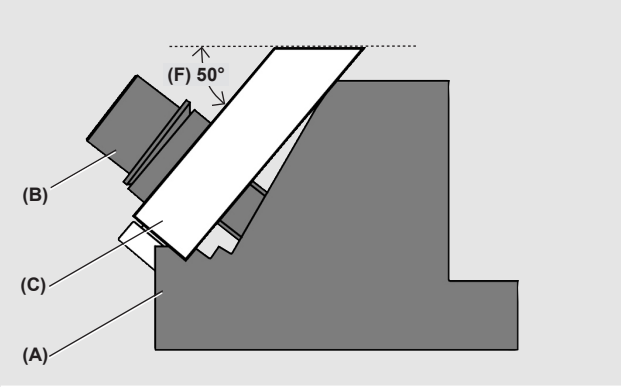
1. Read page 7:20 “General rules, Grind the knives”.
2. Install the rotating knife in the grinding fixture. Refer to the upper figure on the right. Install the grinding fixture’s washer(s). Tighten the knife with the grinding fixture’s tightening screws and spherical washers.
3. Grind the rotating knife’s second relief angle. Use a surface grinder. A correct second relief angle on the rotating knife is 50°. Grind until all irregularities have disappeared.
4. Remove the knife but keep the settings on the surface grinder.

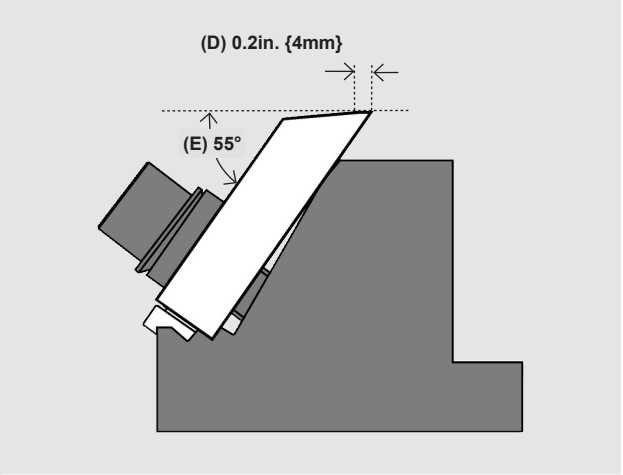
Note! All rotating knives must be grinded equally to maintain the rotor balance. All rotating knives must have the same measure and weight (within a gramme).

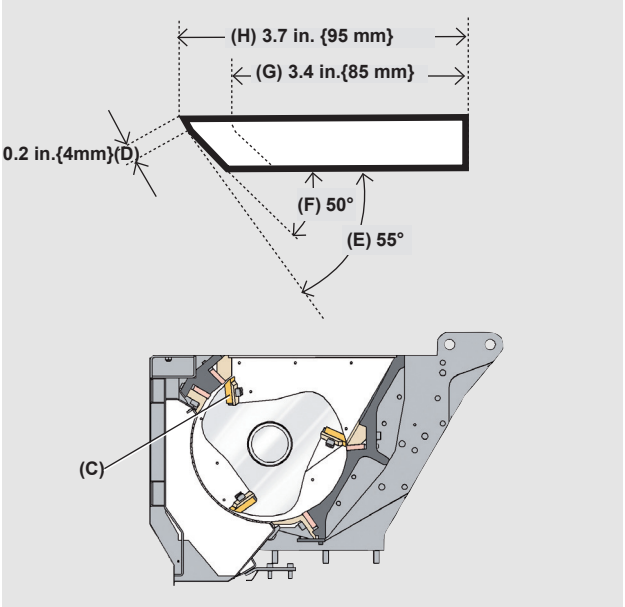
5. Repeat point 2–4 until all rotating knives’ second relief angles have been grinded.
6. Install the rotating knife in the grinding fixture. Refer to the middle figure on the right. Install the grinding fixture’s washer(s). Tighten the knife with the grinding fixture’s tightening screws and spherical washers.
7. Grind the rotating knife’s cutting edge and first relief angle. Use a surface grinder. A correct first relief angle on the rotating knife is 55°. Grind until the first relief surface becomes .12 in.{3 mm}.
8. Remove the knife but keep the settings on the surface grinder.
9. Measure the knife’s length after grinding.

Note! If the rotating knife’s length is less than 3.4 in.{85 mm}, the old rotating knife must be discarded and replaced by a new rotating knife.

10. Repeat point 6–10 until all rotating knives’ cutting edges have been grinded.







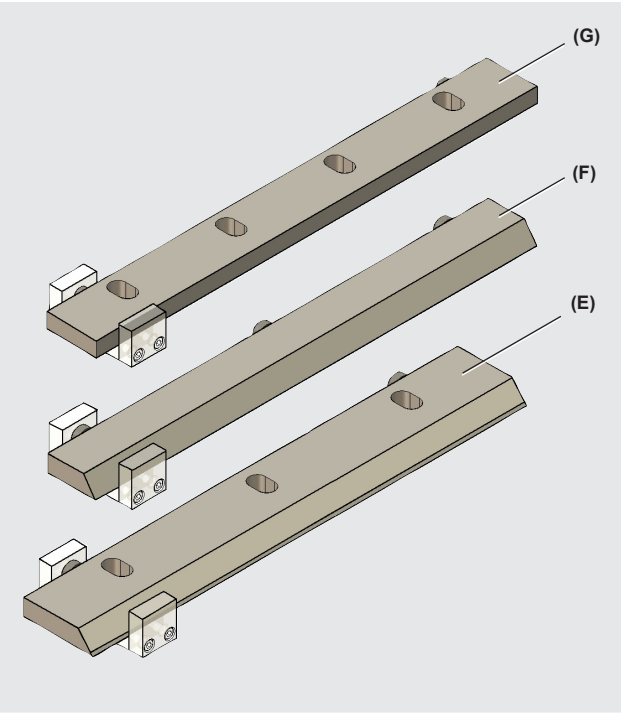
(A) = Grinding fixture
(B) = Tightening screw, Grinding fixture
(C) = Rotating knife
(D) = Relief surface, Rotating knife
(E) = First relief angle, Rotating knife
(F) = Second relief angle, Rotating knife
(G) = Minimum length, grinded rotating knife
(H) = Length, new rotating knife

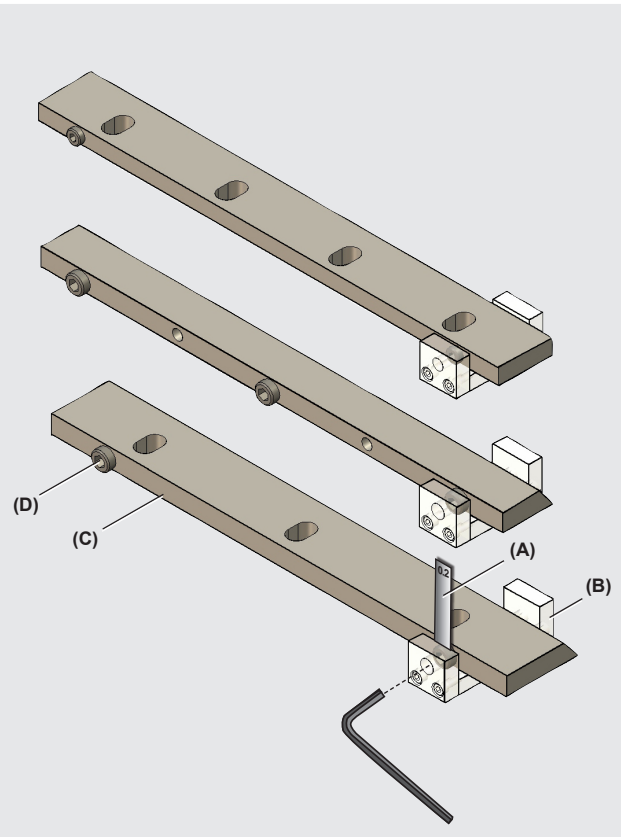
General rules, Preset the knives

1. Read page 7:11 “General rules, Knives”.
2. Only preset new or newly grinded knives.
3. The adjusting screws can be adjusted in a presetting fixture. >Page 2:17 “Presetting fixture”.

Preset the knives

1. Read page 7:22 “General rules, Preset the knives”.
2. Tighten the knife’s adjusting screws.
3. Install the knife in the presetting fixture. Refer to the lower figure on the right.
4. Adjust the knife’s adjusting screws. Use an Allen key. Install a feeler gauge between the presetting fixture and the knife’s adjusting screws. Tighten / unscrew until the feeler gauge begins to bind.
5. Gently remove the feeler gauge and the knife.
6. Repeat point 2–6 until all knives have been preset.





(A) = Feeler gauge
(B) = Presetting fixture
(C) = Knife
(D) = Adjusting screw
(E) = Rotating knife
(F) = Fixed knife 3rd
(G) = Fixed knife 1st/2nd/4th/5th

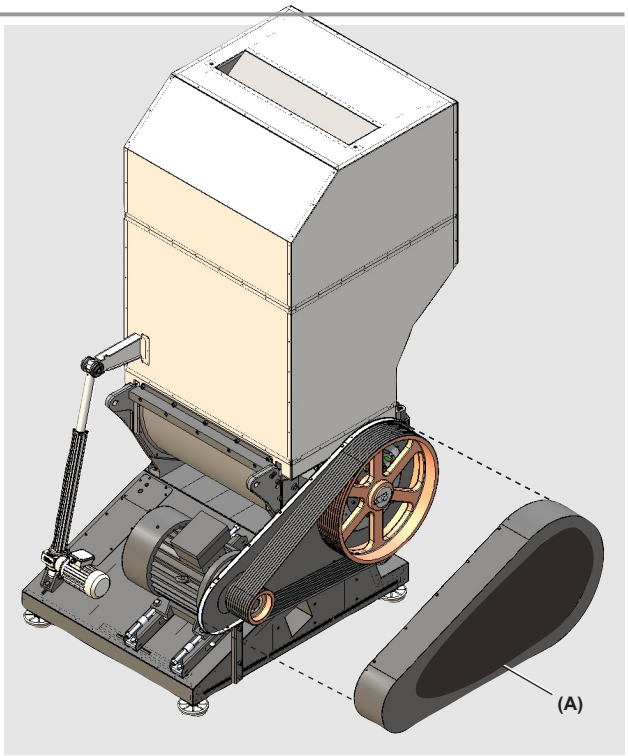
Drive belt(s)

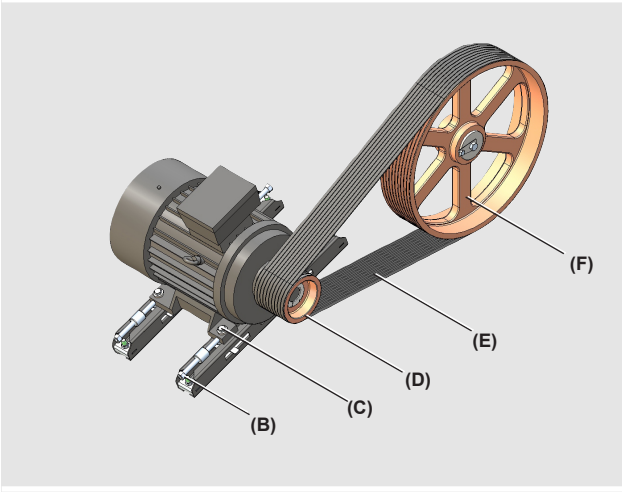
General rules, Drive belt(s)

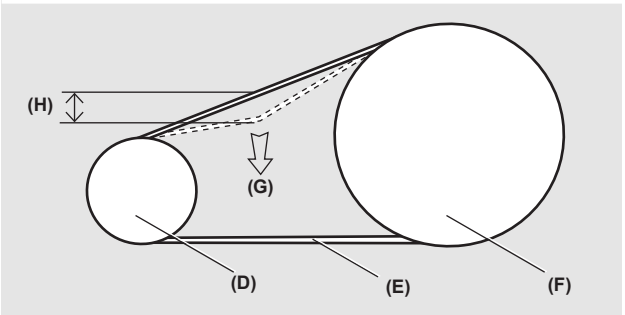
1. Read page 7:1 “General rules, Service”.
2. Read page 2:18 “Transmission”.
3. Open the transmission. >Page 6:1.

Check the drive belt(s)

1. Read page 7:23 “General rules, Drive belt(s)”.
2. Read page 2:24 “Rotor locking”. Release the rotor. Unlock the rotor locking.
3. Check the condition of the drive belt(s). Rotate the rotor pulley a few turns. Check that the drive belt(s) is/are intact and does/do not have any cracks.
4. Lock the rotor locking.
5. Check the belt tension.
   Check one drive belt at the time.
   a) Load the drive belt in the middle between the rotor pulley and the motor pulley. Load the drive belt with the deflection force 55.32 ft.lb.{75 N·m}.
   b) Measure the deflection depth. Refer to table below.
6. Adjust the belt tension / replace drive belt(s) as necessary. >Page 7:24.
7. Close the transmission. >Page 6:1.







(A) = Cover, Transmission
(B) = Adjusting nuts, Belt stretcher
(C) = Tightening screws, Motor
(D) = Motor pulley
(E) = Drive belt(s)
(F) = Rotor pulley
(G) = Deflection force
(H) = Deflection depth

BELT TENSION TABLE

kW	Hz	Deflection depth: New drive belt in. {mm}	Deflection depth: Old drive belt in. {mm}
55	50	1.02 {26}	1.30 {33}
	60	1.10 {28}	1.78 {35}
75	50	1.22 {31}	1.50 {38}
	60	1.02 {26}	1.30 {33}
90	50	1.02 {26}	1.30{33}
	60	1.02 {26}	1.30 {33}
110	50	0.83 {21}	1.10 {28}
	60	1.02 {26}	1.30 {33}
132	50	0.91 {23}	1.22 {31}
	60	1.02{26}	1.30 {33}
160	50	0.71{18}	0.94 {24}
	60	0.83 {21}	1.10 {28}

Drive belt(s)

Adjust the belt tension

1. Read page 7:23 “General rules, Drive belt(s)”.
2. Check the drive belt(s). >Page 7:23.
3. Unscrew the motor’s tightening screws.
4. Adjust the belt tension.
   The belt tension is adjusted by moving the motor forwards / backwards. The motor is moved by tightening / unscrewing the two adjusting nuts on each belt stretcher.

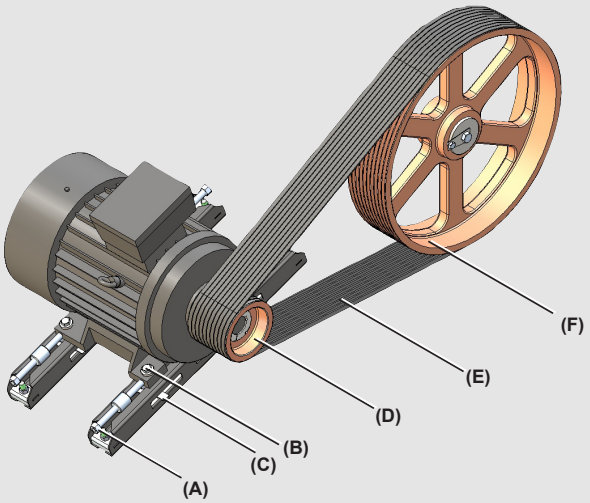
Decrease the belt tension: Move the motor forwards.
Increase the belt tension: Move the motor backwards.

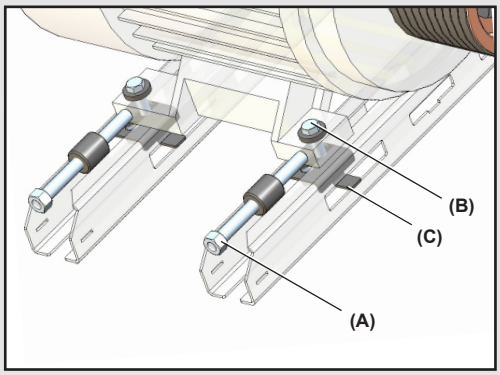
5. Check that the rotor pulley and the motor pulley are in line (tolerance .02 in.{0.5 mm}). Check that the motor and the rotor are parallel. Adjust the belt stretchers’ adjusting nuts as necessary.
6. Tighten the motor’s tightening screws. Tightening torque 295.02 ft.lb.{400 Nm}.

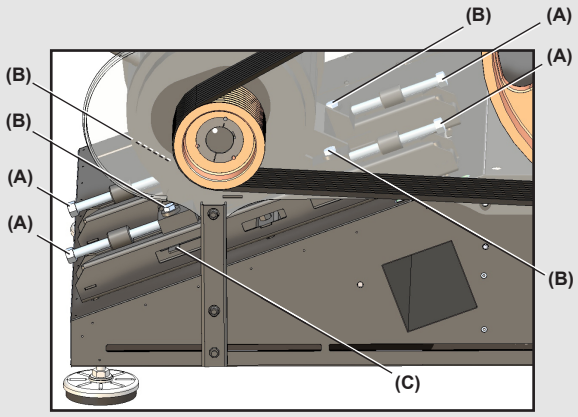
Note! The tightening screw is screwed down into a nut that is welded on a holding-up tool. The holding up tool’s position can be changed by pulling the handle. Refer to figure on the right.

7. Check the belt tension. >Page 7:23 “Check the drive belt(s)” point 3.
8. Close the transmission cover.

Note! When drive belts have been adjusted they must be re-checked after 20 hours of operation.







(A) = Adjusting nuts, Belt stretcher
(B) = Tightening screws, Motor
(C) = Holding-up tool, Motor
(D) = Motor pulley
(E) = Drive belt(s)
(F) = Rotor pulley

Friction coupling

1. Read page 7:1 “General rules, Service”.
2. Read page 2:18 “Friction coupling”.
3. Check the friction coupling:

   Granulator with friction coupling in the rotor pulley:
   – Remove the transmission cover. >Page 6:1.

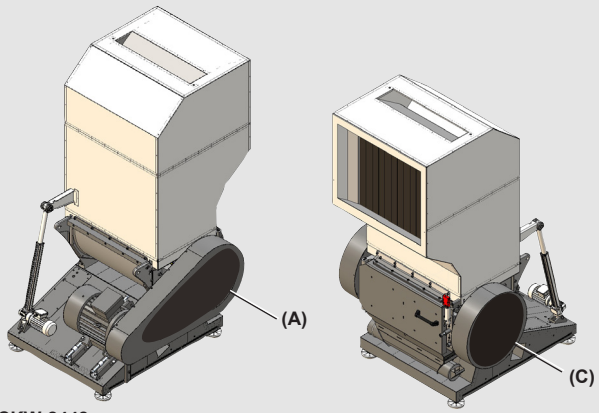
   Granulator with friction coupling in the flywheel:
   – A granulator with sound enclosure: Remove the enclosure’s right cover.
   – Granulator without enclosure but with flywheel protection: Remove the flywheel protection.
4. Use a marker pen. Draw a straight line on the clamping washer. Draw a straight line on the rotor pulley.

   Note! Make sure that the two lines are drawn in front of each other.

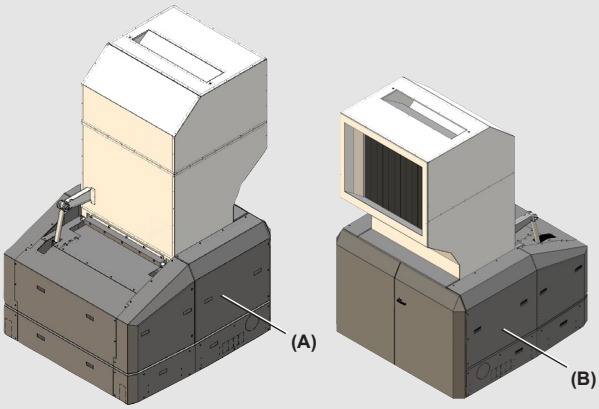
   If the granulator is provided with a flywheel, draw two similar straight lines on the flywheel and its clamping washer.
5. Granulator with friction coupling in the rotor pulley:
   – Install the transmission cover. >Page 6:1.

   Granulator with friction coupling in the flywheel:
   – A granulator with sound enclosure): Install the enclosure’s right cover.
   – Granulator without enclosure but with flywheel protection: Install the flywheel protection.
6. Start the granulator. >Page 5:1.
7. Let the granulator run with normal load a couple of hours.
8. Stop the granulator. >Page 5:1.
9. Repeat point 3 and then proceed to point 10.
10. Check the lines on the rotor pulley and the clamping washer. If the granulator is provided with a flywheel, check the lines on the flywheel and its clamping washer.
11. If the lines still are in front of each other, the friction coupling is functioning and the granulator can be closed and operated again. Repeat point 4.

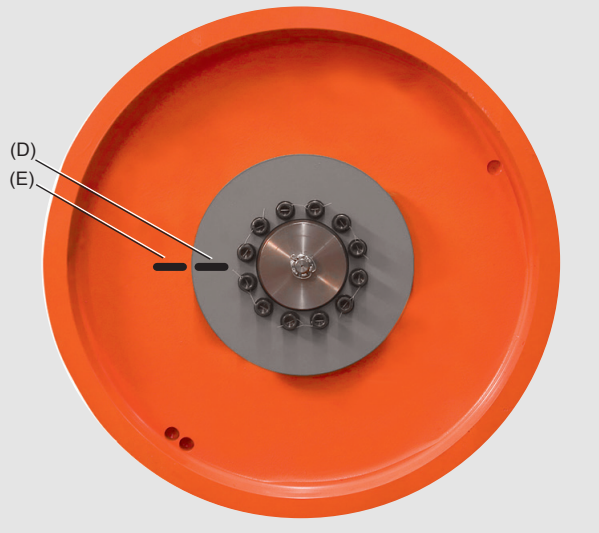
Important! If the lines are not in front of each other, the friction coupling’s tightening screws needs to be adjusted or the friction discs needs to be replaced. Conair’s distributor or Conair’s head office must be contacted for service.



CKW-2448



CKW-2448 w/sound enclosure



(A) = Cover, Transmission
(B) = Right cover, Enclosure
(C) = Flywheel protection
(D) = Check line, Clamping washer
(E) = Check line, Rotor pulley / Flywheel

Fault tracing

Fault	Probable cause	Actions taken
The granulator or any optional equipment does not start or stops unexpectedly.	The emergency stop is activated.	1. Reset the emergency stop(s). >Page 5:1.
	The granulator / the optional equipment is/are not connected to the mains.	1. Connect the granulator to the mains. >Page 4:5. 2. Connect the mains plug on the belt conveyor. (Belt conveyor = option).
	The main switch is in position “0”.	1. Put the main switch in position “1”. >Page 5:1.
	The button “Reset safety relay” has not been pressed.	1. Press the button “Reset safety relay”. >Page 5:1 “Start the granulator”
	Screen, screen box, granule bin, hopper, enclosure and/or optional equipment are not properly closed, or their safety switch(es) / star knob(s) is/are open.	1. Close the granulator. >Page 6:4-6:6. 2. Check that all safety switches / star knobs are properly installed. >Page 7:2–7:3 “Safety equipment”.
	The granulator’s overload protection has tripped since the granulator has been overloaded. or Belt conveyor (option): The belt conveyor’s overload protection has tripped since the band has got stuck or the granulator has been overloaded. or Blower (option): The blower’s overload protection has tripped since the blower has been overloaded.	1. Reset the overload protection. >Page 2:26 “Overload protection”. Before restart: 2. Clean the granulator. >Page 7:10 3. Check the drive belt(s). Adjust the belt tension / replace drive belt(s) as necessary. >Page 7:23. 4. Check knife sharpness and knife clearance. >Page 7:19.
	The level switch (option) has stopped the granulator / the optional equipment. or The level switch’s mains plug is disconnected.	1. Check the level switch. >Page 7:5. 2. Connect the mains plug on the level switch.
	The current relay has stopped the granulator / the optional equipment.	1. Check the current relay. >Page 7:6.
The rotor still rotates even if the hopper is opened.	The drive belt(s) is/are worn or the belt tension is wrong. or The safety equipment is not functioning.	1. Check the drive belt(s). Adjust the belt tension / replace drive belt(s) as necessary. >Page 7:23. 2. Check the rotor locking. >Page 7:2 point 4. 3. Check the safety switch. >Page 7:2 point 3.
The granulator or any optional equipment does not start after normal fault tracing.		1. Lock the main switch in position “0”. 2. Press the emergency stop(s). 3. Contact the personnel responsible for the machine’s service and safety. 4. In event of any questions, please contact Conair’s local distributor or Conair’s head office.

Service actions, Once every day

Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.
Day ...... /	20	Sign:............	☐ Emergency stop(s), Approved.	Flap(s):	☐ Approved.	☐ Replaced.

Service actions, Once every week

Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.
Week ...... 20.....	Sign:.........................	☐ Safety equipment, Approved.	☐ Electrical components, Approved.

Service actions, Once every month

Month .... 20 .... Sign:..

Rotating knife: ☐ Existing knives, Approved. ☐ Knives and screws, Replaced. ☐ Support rules, Replaced.

Fixed knife: ☐ Existing knives, Approved. ☐ Knives and screws, Replaced. ☐ Support rules, Replaced.

Screen: ☐ Existing Screen, Approved. ☐ Screen, Replaced. ☐ **Other remarks:**...

Month .... 20 .... Sign:..

Rotating knife: ☐ Existing knives, Approved. ☐ Knives and screws, Replaced. ☐ Support rules, Replaced.

Fixed knife: ☐ Existing knives, Approved. ☐ Knives and screws, Replaced. ☐ Support rules, Replaced.

Screen: ☐ Existing Screen, Approved. ☐ Screen, Replaced. ☐ **Other remarks:**...

Month .... 20 .... Sign:..

Rotating knife: ☐ Existing knives, Approved. ☐ Knives and screws, Replaced. ☐ Support rules, Replaced.

Fixed knife: ☐ Existing knives, Approved. ☐ Knives and screws, Replaced. ☐ Support rules, Replaced.

Screen: ☐ Existing Screen, Approved. ☐ Screen, Replaced. ☐ **Other remarks:**...

Month .... 20 .... Sign:..

Rotating knife: ☐ Existing knives, Approved. ☐ Knives and screws, Replaced. ☐ Support rules, Replaced.

Fixed knife: ☐ Existing knives, Approved. ☐ Knives and screws, Replaced. ☐ Support rules, Replaced.

Screen: ☐ Existing Screen, Approved. ☐ Screen, Replaced. ☐ **Other remarks:**...

Month .... 20 .... Sign:..

Rotating knife: ☐ Existing knives, Approved. ☐ Knives and screws, Replaced. ☐ Support rules, Replaced.

Fixed knife: ☐ Existing knives, Approved. ☐ Knives and screws, Replaced. ☐ Support rules, Replaced.

Screen: ☐ Existing Screen, Approved. ☐ Screen, Replaced. ☐ **Other remarks:**...

Month .... 20 ....Sign:..

Rotating knife: ☐ Existing knives, Approved. ☐ Knives and screws, Replaced. ☐ Support rules, Replaced.

Fixed knife: ☐ Existing knives, Approved. ☐ Knives and screws, Replaced. ☐ Support rules, Replaced.

Screen: ☐ Existing Screen, Approved. ☐ Screen, Replaced. ☐ **Other remarks:**...

Service actions, Once every 6th month

Date .... / .... 20 .... Sign:..

Drive belt(s): ☐ Drive belt(s) / Belt tension, Approved. ☐ Belt tension, Adjusted. ☐ Drive belt(s), Replaced.

Rotor locking: ☐ Rotor locking, Approved. ☐ Rotor locking's rubber damper, Replaced

Important tightening torques: ☐ Approved ☐ Adjusted: ....

Other remarks

Date .... / .... 20 .... Sign:..

Other remarks:..

....

Date .... / .... 20 .... Sign:..

Other remarks:..

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Date .... / .... 20 .... Sign:..

Other remarks:..

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Date .... / .... 20 .... Sign:..

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Other remarks:..

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Date .... / .... 20 .... Sign:..

Other remarks:..

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Date .... / .... 20 .... Sign:..

Other remarks:..

....

General rules, Spare parts

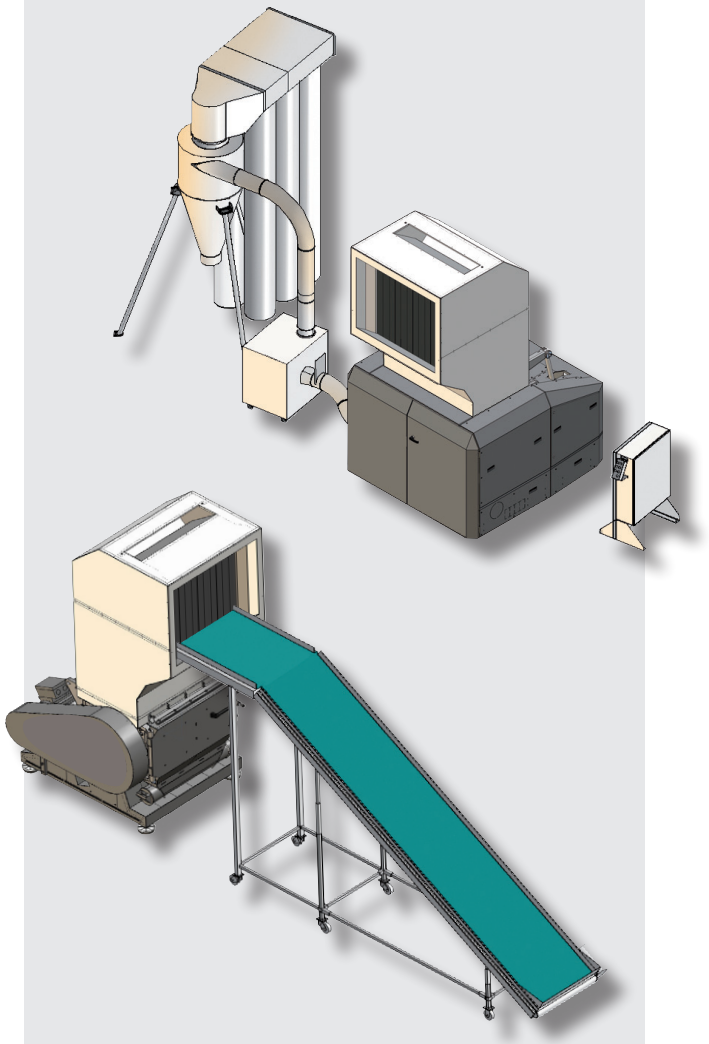
Note! When replacing machinery parts, only use original spare parts supplied by Conair. Spare parts orders should be sent to Conair's local distributor. The following must be specified when spare parts are ordered:

- Serial No according to the machine's type plate.
- Machine type according to the machine's type plate.
- Manufacturing year.
- GB-detail, Specification, Article No and Q according to this spare part catalogue.

The performance of your supplied machine can vary from the standard machines described in this instruction manual. In event of any questions, please contact Conair's local distributor or Conair's head office.

Overview

Flap(s) 9:2
Hopper 9:3–9:4
Hopper device 9:5
Cutter housing 9:6–9:9
Rotor 9:10–9:11
Knives 9:12–9:13
Front door / Screen box 9:14
Screen 9:15
Granule bin 9:16–9:17
Transmission, Motor, Motor pulley, Drive belt(s) 9:18–9:19
Transmission, Rotor pulley, Flywheel 9:20–9:21
Safety, Transmission 9:22–9:23
Safety, Lock, Hopper & Cutter housing 9:24
Safety, Rotor locking 9:25
Safety, Enclosure 9:28
Safety, Electrical cabinet 9:29
Body 9:30
Options 9:31
Material transport 9:32
List of drawings 9:33



Note! Article numbers in grey color (MF006...) are only for internal use, i.e. grey article numbers can not not be used as a customer article number.

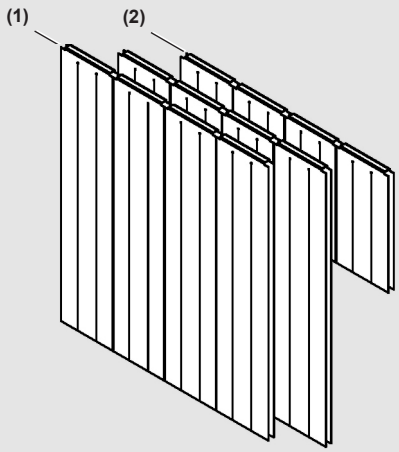
Designations in the spare part catalogue

P	SE	DE	FR	GB-DETAIL	SPECIFICATION	Art No	Q	M	V
(A	KUTTER	ROTOR	ROTOR	ROTOR	COMPLETE SET	MF0060102	1	120	3BL
1	SKRUV	SCHRAUBE	VIS	SCREW	SHS MC6S 5X14	838151	5	60	
					SHS MC6S 5X14 HARDENED	832257*	5	60	
					SHS MC6S 6X20	834521	10	90	
					SHS MC6S 6X20 HARDENED	834522*	10	90	
2	MUTTER	MUTTER	ÉCROU	NUT		9-40213	9	XX	-S

P = Position number Art. No. = Article number Q = Quantity M = Model number V = Variant

If anything has been specified in the M "Model No" column, the item only applies to that model No.
If anything has been specified in the V "Variant" column, the item only applies to that machinery variant.

Flap(s)

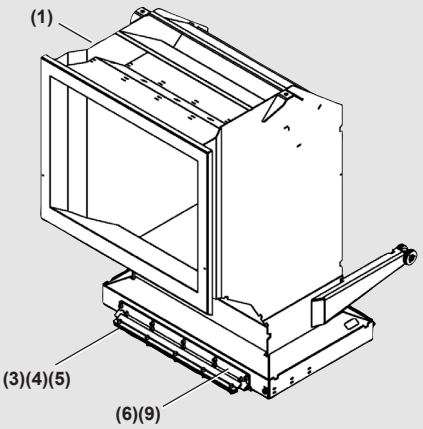


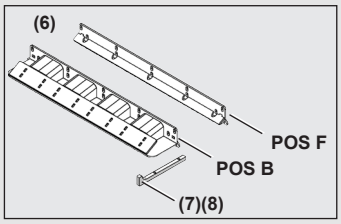
(A) = FLAPS FRONT -B
3-60180, 3-60105, 3-60154

P	SE	FR	DE	GB - DETAIL	SPECIFICATION	ART NO	Q	M	V
(A)	KLAFF	VOLET	KLAPPEN	FLAP	COMPLETE SET	MF0060105	1	2436	
						MF0060105	1	2448	
						MF0060154	1	2460	
1	KLAFF	VOLET	KLAPPEN	FLAP	310X1400 PUR STRIPE	8345794 *	6	2436	*
							8	2448	
							10	2460	
2	KLAFF	VOLET	KLAPPEN	FLAP	310X600 PUR STRIPED	8345786 *	3	2436	
							4	2448	
							5	2460	

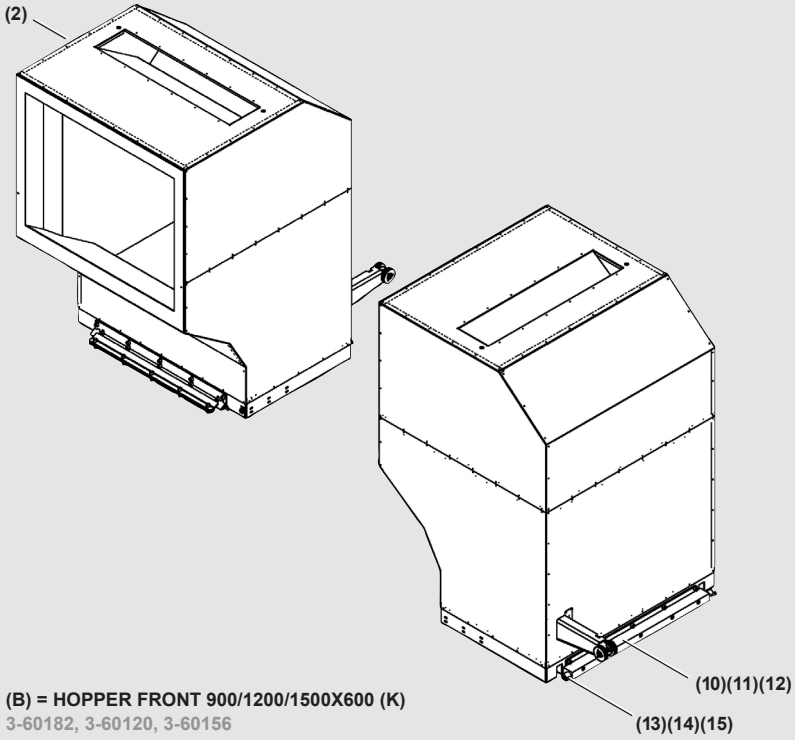
* WHEN ORDERING THIS DETAIL SPECIFY: GB-DETAIL Y SPECIFICATION + THE SERIAL NO OF YOUR GRANULATOR.

Hopper





(A) = HOPPER FRONT 900/1200/1500X600 (WE)
3-60181, 3-60104, 3-60155



(B) = HOPPER FRONT 900/1200/1500X600 (K)
3-60182, 3-60120, 3-60156

P	SE	FR	DE	GB - DETAIL	SPECIFICATION	ART NO	Q	M	V
(A)	INMATNING	ALIMENTATIO	TRICHTER	HOPPER	COMPLETE SET	MF0060181-*	1	2436	WE
						MF0060120-*	1	2448	
						MF0060155-*	1	2460	
(B)	INMATNING	ALIMENTATIO	TRICHTER	HOPPER	COMPLETE SET	MF0060182-*	1	2436	K
						MF0060104-*	1	2448	
						MF0060156-*	1	2460	
1	INMATNING	ALIMENTATIO	TRICHTER	HOPPER	FRONT 900X600	80061641	1	2436	WE
					FRONT 1200X600	80060425	1	2448	
					FRONT 1500X600	80060473	1	2460	
2	INMATNING	ALIMENTATIO	TRICHTER	HOPPER	900X600	80061633	1	2436	K
					1200X600	80060592	1	2448	
					1500X600	80061624	1	2460	
3	LINJAL	RÈGLE	LINEAL	RULER	FRONT UPPER	8345232	1	2436	ALL
						8345319	1	2448	
						80061613	1	2460	
4	LINJAL	RÈGLE	LINEAL	RULER	FRONT LOWER	8345231	2	2436	ALL
						8345318	2	2448	
						80061612	2	2460	
5	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 16X55	9-40506	5	XX	ALL

(XX =2436,2448,2460) (ALL = ALL VARIANTS)

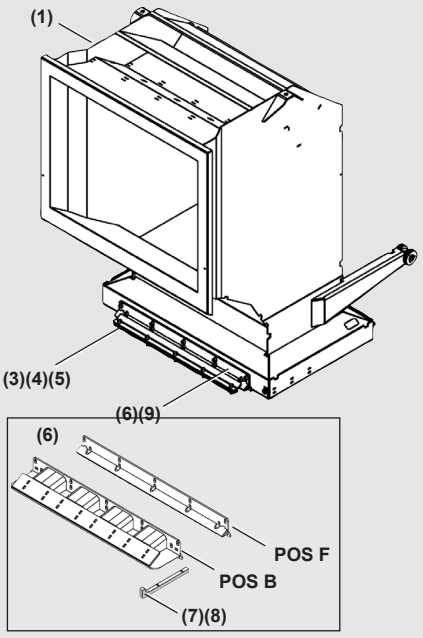
(WE = WITHOUT ENCLOSURE) (K = WITH ENCLOSURE)

(* = ADD -1 OR -2) (-1 = POSF) (-2 = POSB)

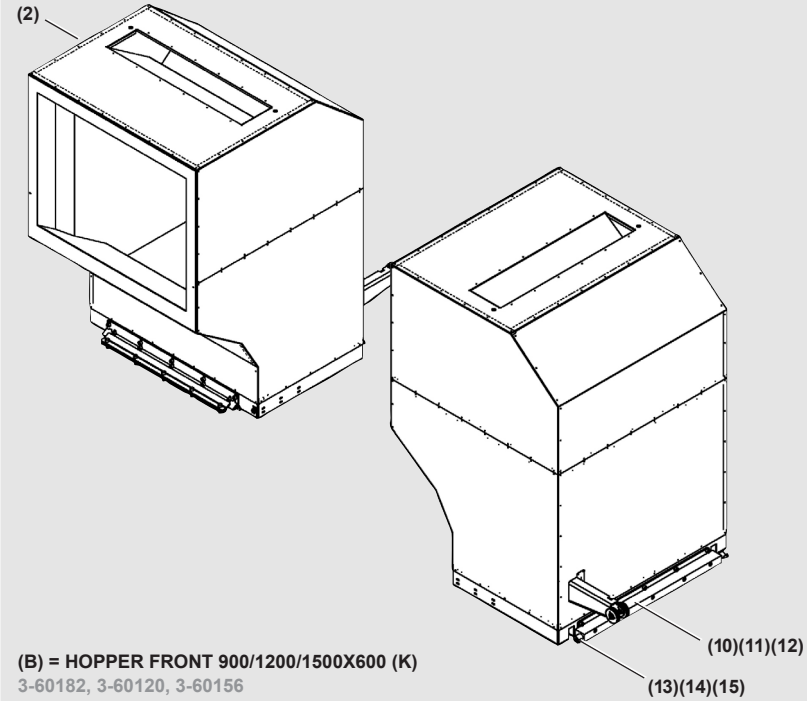
(POSF = HOPPER INSTALLED IN FRONT HINGE HOLE OF CUH 1ST/3RD/5TH)

(POSB = HOPPER INSTALLED IN REAR HINGE HOLE OF CUH 5TH)

Hopper



(A) = HOPPER FRONT 900/1200/1500X600 (WE)
3-60181, 3-60104, 3-60155



(B) = HOPPER FRONT 900/1200/1500X600 (K)
3-60182, 3-60120, 3-60156

P	SE	FR	DE	GB - DETAIL	SPECIFICATION	ART NO	Q	M	V
6	TÄTNING	ÉTANCHÉITÉ	DICHTUNG	SEALING	FRONT	8345235	1	2436	POSF
						8345320	1	2448	
						80061608	1	2460	
						80061656	1	2436	POSB
						80060451	1	2448	
						80061618	1	2460	
7	TÄTNING	ÉTANCHÉITÉ	DICHTUNG	SEALING	FRONT PIECE	80060466	2	XX	
8	SKRUV	VIS	SCHRAUBE	SCREW		9-40853	4	XX	
9	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 5X12	9-41002	6	2436	ALL
							10	2448	
							10	2460	
10	TÄTNING	ÉTANCHÉITÉ	DICHTUNG	SEALING	BACK	80061654	1	2436	ALL
						80060438	1	2448	
						80061614	1	2460	
11	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 16X100	9-40082	3	2436	ALL
							5	2448	
							5	2460	
12	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 5X25	9-41002	3	2436	ALL
							5	2448	
							5	2460	
13	AXEL	ARBRE	ACHSE	SHAFT	D=40X100 HOPPER	80060440	2	XX	ALL
14	BRICKA	RONDELLE	SCHEIBE	WASHER	BRB 13,0	9-40155	2	XX	
15	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 12X25	9-40051	2	XX	

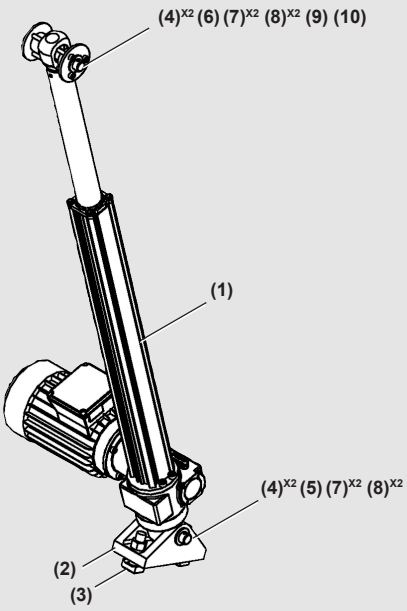
(XX=2436,2448,2460) (ALL = ALL VARIANTS)

(WE = WITHOUT ENCLOSURE) (K = WITH ENCLOSURE)

(POSF = HOPPER INSTALLED IN FRONT HINGE HOLE OF CUH 1ST/3RD/5TH)

(POSB = HOPPER INSTALLED IN REAR HINGE HOLE OF CUH 5TH)

Hopper device

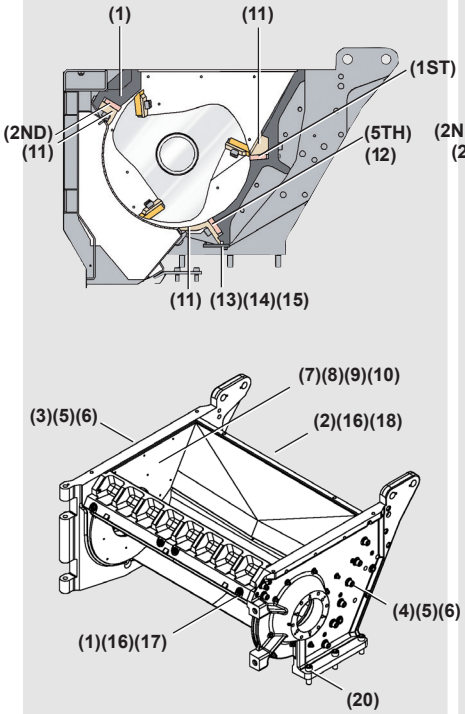


(A) = HOPPER DEVICE, JACK 4000N
3-60106

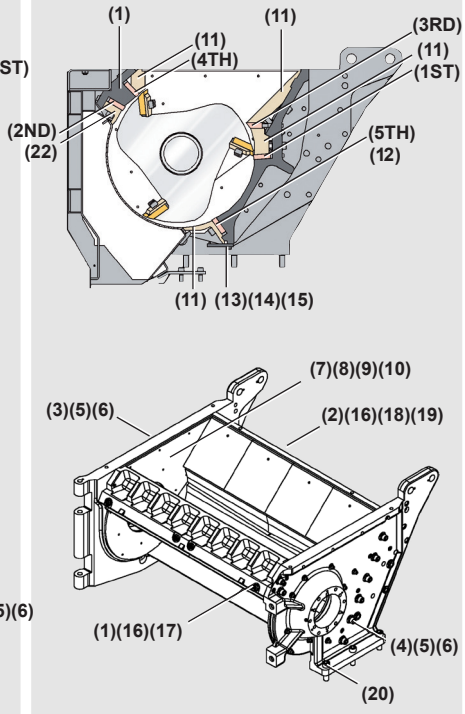
P	SE	FR	DE	GB - DETAIL	SPECIFICATION	ART NO	Q	M	V
(A)	DOMKRAFT	CRIC	HEBER	JACK	COMPLETE SET	MF0060106	1	XX	
1	DOMKRAFT	CRIC	HEBER	JACK	1,5 KW SL=400 AL 15-1	9-12257	1	XX	
2	FÄSTE	FIXATION	BEFESTIGUN	BRACKET	HOPPER DEVICE LOW	80060388	1	XX	
3	SKRUV	VIS	SCHRAUBE	SCREW	HALFEN M20X75 +BAR	9-50886	2	XX	
4	BUSSNING	DOUILLE	BÜCHSE	DAMPER	---	8420369	4	XX	
5	AXEL	ARBRE	ACHSE	SHAFT	D=25X140 JACK LOWE	80060423	1	XX	ALL
6	AXEL	ARBRE	ACHSE	SHAFT	D=25X160 JACK UPPE	80060437	1	XX	
7	BRICKA	RONDELLE	SCHEIBE	WASHER	BRB 24,0	9-40412	4	XX	
8	SAXPINNE	GOUPILLE F	STIFT	SPLIT PIN	ISO1234 6,3X40 FZB	9-50775	4	XX	
9	LOCK	COUVERCLE	DECKEL	COVER	BUSHING RUBBER	80060436	2	XX	
10	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 8X40	9-40200	6	XX	
11*	BRYTARE	INTERUPTEU	SCHALTER	SWITCH	REED 0830100380	9-93134	2	XX	

(XX=2436,2448,2460) (ALL = ALL VARIANTS) (* = NOT SHOWN IN FIGURE)

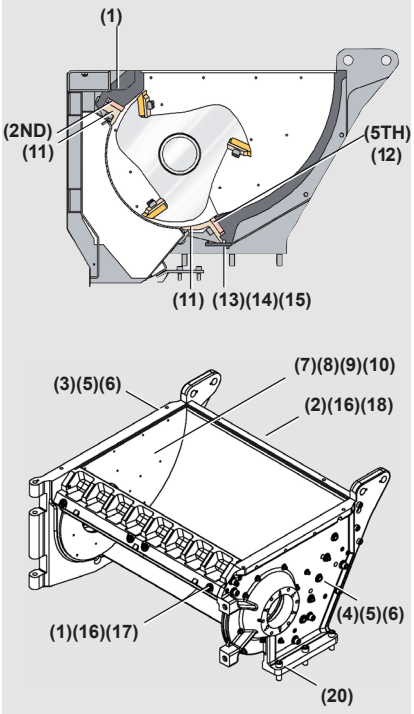
Cutter housing



(A) = CUTTER HOUSING 1ST
"TANGENTIAL"
3-60170, 3-60116, 3-60140



(B) = CUTTER HOUSING 3RD
"PRE-CUT"
3-60172, 3-60125, 3-60142



(C) = CUTTER HOUSING 5TH
"SUPER TANGENTIAL"
3-60171, 3-60101, 3-60141

P	SE	FR	DE	GB - DETAIL	SPECIFICATION	ART NO	Q	M	V
(A)	KUTTERHUS	CHAMBRE B	MAHLGEHÄ	CUTTER HOUSING	COMPLETE SET	MF0060170-*	1	2436	CU1ST
						MF0060116-*	1	2448	
						MF0060140-*	1	150	
(B)	KUTTERHUS	CHAMBRE B	MAHLGEHÄ	CUTTER HOUSING	COMPLETE SET	MF0060172-**	1	2436	CU3RD
						MF0060125-**	1	2448	
						MF0060142-**	1	150	
(C)	KUTTERHUS	CHAMBRE B	MAHLGEHÄ	CUTTER HOUSING	COMPLETE SET	MF0060171-***	1	2436	CU5TH
						MF0060101-***	1	2448	
						MF0060141-***	1	150	
1	FRONTSIDA	CÔTÉ AVANT	VORDERSEITE	FRONTSIDE	2ND	80060755	1	2436	2
						80060309	1	2448	
						80060687	1	2460	
					2ND 4TH	80060756	1	2436	2+4
						80060302	1	2448	
						80060688	1	2460	

(XX =2436,2448,2460) (CU1ST = CUTTER HOUSING 1ST) (CU5TH = CUTTER HOUSING 5TH) (CU3RD = CUTTER HOUSING 3RD)

* = ADD 125 O 1245. ** = ADD 325, OR 3245. *** = ADD 52 OR 524.

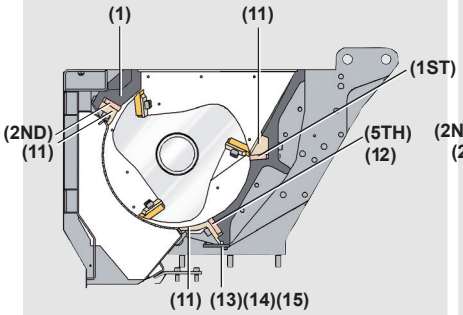
(2 = KONFIG 125, 325 OR 52) (2+4 = KONFIG 1245, 3245 O 524)

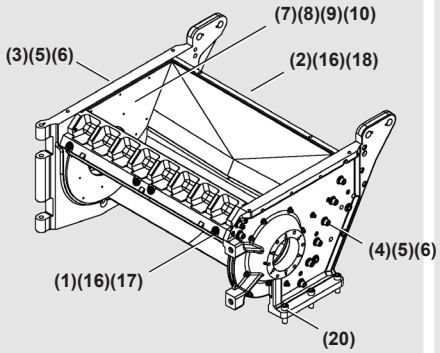
(125 = CU1ST + FIXED KNIFE 1ST, 2ND & 5TH) (1245=CU1ST CON FIXED KNIFE 1ST, 2ND, 4TH & 5TH).

(325 = CU3RD + KNIFE 3RD, 2ND & 5TH) (325 = CU3RD + KNIFE 3RD, 1ST, 2ND & 5TH) (3245 = CU3RD + KNIFE 3RD, 1ST, 2ND, 4TH & 5TH)

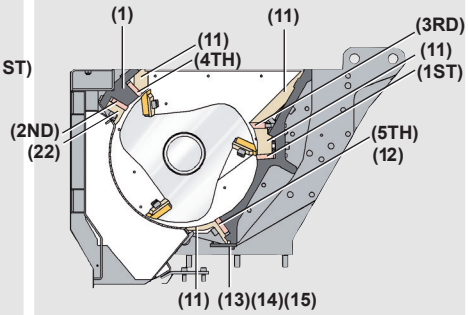
(52 = CU5TH + KNIFE 5TH & 2ND) (524 = CU5TH + KNIFE 5TH, 2ND & 4TH)

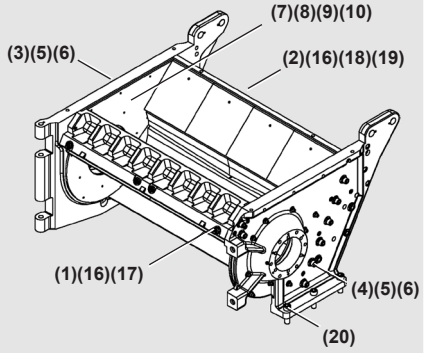
Cutter housing



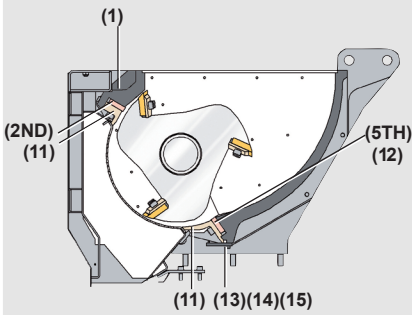


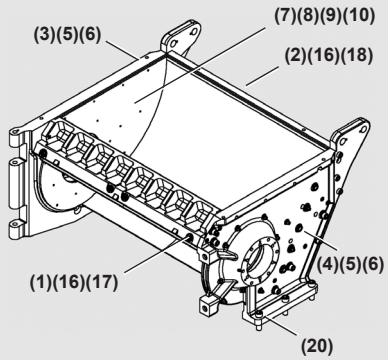
(A) = CUTTER HOUSING 1ST
"TANGENTIAL"
3-60170, 3-60116, 3-60140





(B) = CUTTER HOUSING 3RD
"PRE-CUT"
3-60172, 3-60125, 3-60142





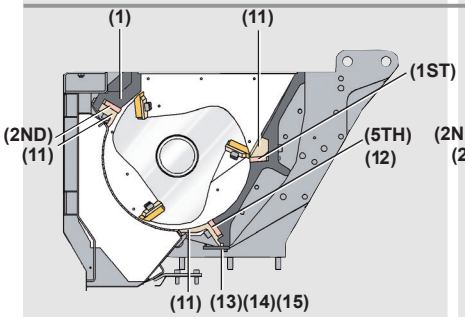
(C) = CUTTER HOUSING 5TH
"SUPER TANGENTIAL"
3-60171, 3-60101, 3-60141

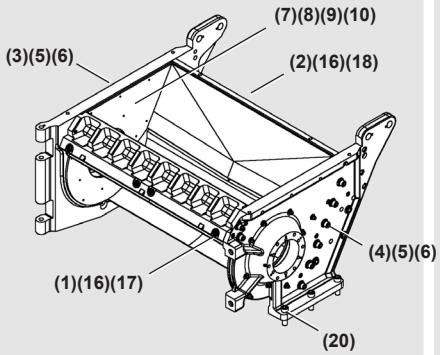
P	SE	FR	DE	GB - DETAIL	SPECIFICATION	ART NO	Q	M	V
2	BAKSIDA	CÔTÉ ARRIÈ	RÜCKSEITE	BACK SIDE	1ST	80060741	1	2436	CU1ST
						80060300	1	2448	
						80060673	1	2460	
					3RD	80060743	1	2436	CU3RD
						80060567	1	2448	
						80060675	1	2460	
					5TH	80060742	1	2436	CU5TH
						80060301	1	2448	
						80060674	1	2460	
3	SIDA V	CÔTÉ G	SEITE L	SIDE L	(LEFT)	80060303	1	XX	ALL
4	SIDA H	CÔTÉ D	SEITE R	SIDE R	(RIGHT)	80060304	1	XX	
5	CYLINDR PIN	GOUPILLE C	ZYLIND STIF	PARALLELL PIN	25X60 ISO8735	9-50667	12	XX	
6	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 20X70 12,9	9-40970	18	XX	
7	SIDA INRE	CÔTÉ INTÉRIEU	SEITE INNER	SIDE INNER	1ST UPPER	80060308	2	XX	CU1ST, CU3RD
					1ST LOWER	80060307	2	XX	
					5TH UPPER	80060306	2	XX	CU5TH
					5TH LOWER	80060305	2	XX	
8	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 10X50	9-40003	28	XX	
9	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 10X55	9-40293	6	XX	CU5TH
10	BRICKA	ÉCROU	SCHEIBE	WASHER	HARDENED M10 AMF DIN	9-40020	6	XX	

(XX=2436,2448,2460) (ALL = ALL VARIANTS)

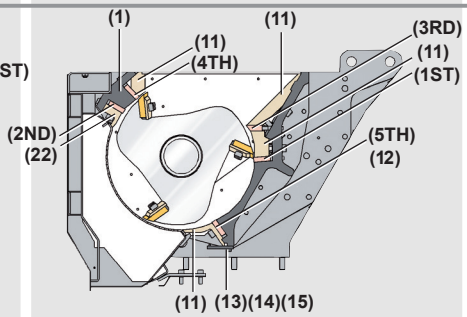
(CU1ST = CUTTER HOUSING 1ST) (CU5TH = CUTTER HOUSING 5TH) (CU3RD = CUTTER HOUSING 3RD)

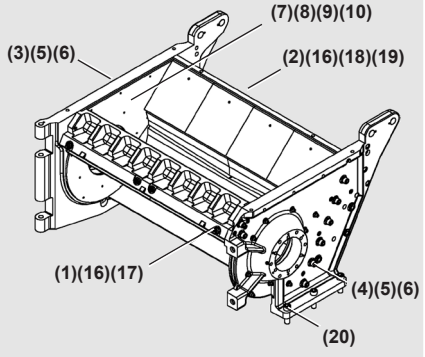
Cutter housing



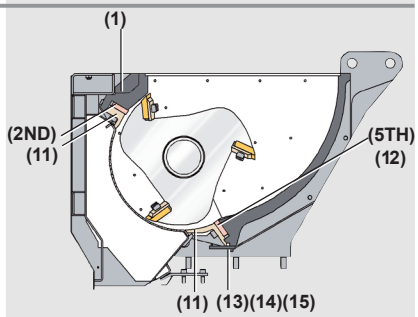


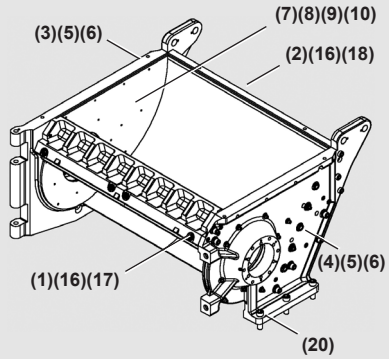
(A) = CUTTER HOUSING 1ST "TANGENTIAL"
3-60170, 3-60116, 3-60140





(B) = CUTTER HOUSING 3RD "PRE-CUT"
3-60172, 3-60125, 3-60142





(C) = CUTTER HOUSING 5TH "SUPER TANGENTIAL"
3-60171, 3-60101, 3-60141

P	SE	FR	DE	GB - DETAIL	SPECIFICATION		ART NO	Q	M	V
11	STÖDLINJAL	RÈGLE D'AP	KLEMMLEISTE	SUPPORT RULE	1ST	L	80060744	1	2436	1ST 1ST
						R	80060745	1		
						L	80060322	1	2448	
						R	80060323	1		
						L	80060676	1	2460	
						R	80060677	1		
					1ST	L	80060752	1	2436	1ST 3RD
						R	80060753	1		
						L	80060568	1	2448	
						R	80060569	1		
						L	80060684	1	2460	
						R	80060685	1		
					2ND	L	80060746	1	2436	2ND
						R	80060747	1		
						L	80060324	1	2448	
						R	80060325	1		
						L	80060678	1	2460	
						R	80060679	1		
					3RD		80060754		2436	3RD
							80060570	4	2448	
							80060686		2460	

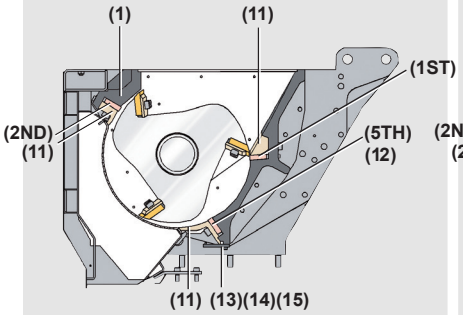
(XX =2436,2448,2460) (CU1ST = CUTTER HOUSING 1ST) (CU3RD = CUTTER HOUSING 3RD) (CU5TH = CUTTER HOUSING 5TH)

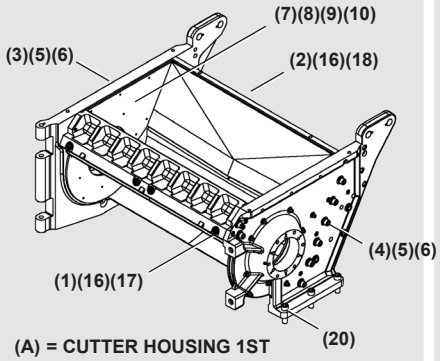
(1ST 1ST = KNIFE SEAT 1ST IN CONFIG 125) (1ST 3RD = KNIFE SEAT 1ST IN CONFIG 325 Y 3245)

(2ND = KNIFE SEAT 2ND) (3RD = KNIFE SEAT 3RD) (4TH = KNIFE SEAT 4TH) (5TH = KNIFE SEAT 5TH)

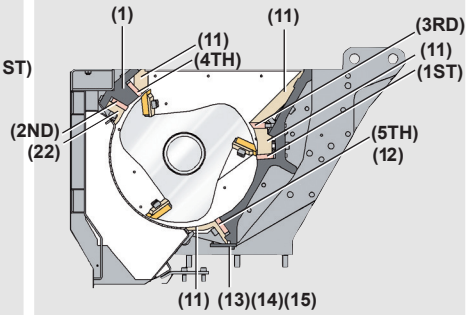
(125 = CU1ST + KNIFE 1ST, 2ND & 5TH) (325 = CU3RD + KNIFE 3RD, 2ND & 5TH) (3245 = CU3RD + KNIFE 3RD, 2ND, 4TH & 5TH)

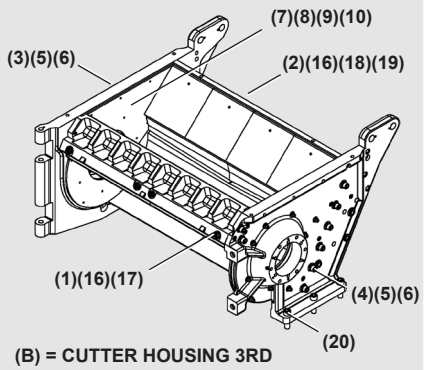
Cutter housing



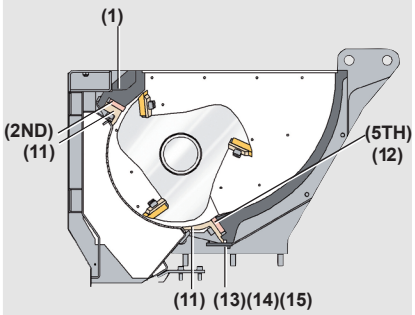


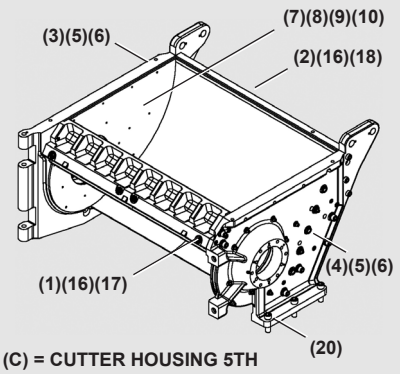
(A) = CUTTER HOUSING 1ST "TANGENTIAL"
3-60170, 3-60116, 3-60140





(B) = CUTTER HOUSING 3RD "PRE-CUT"
3-60172, 3-60125, 3-60142





(C) = CUTTER HOUSING 5TH "SUPER TANGENTIAL"
3-60171, 3-60101, 3-60141

P	SE	FR	DE	GB - DETAIL	SPECIFICATION		ART NO	Q	M	V
11	STÖDLINJAL	RÈGLE D'AP	KLEMMLEIS	SUPPORT RULE	4TH	L	80060748	1	2436	4TH
						R	80060749	1		
						L	80060328	1	2448	
						R	80060329	1		
						L	80060680	1	2460	
						R	80060681	1		
					5TH	L	80060750	1	2436	5TH
						R	80060751	1		
						L	80060334	1	2448	
						R	80030335	1		
						L	80060682	1	2460	
						R	80060683	1		
12	SPÄNN STIFT	GOUPILLE C	SPANNSTIFT	SPRING PIN	FRP 6 X 20		9-50243	8	XX	5TH
13	STÖD	SUPPORT	ABSTÜTZUN	SUPPORT	SUPPORT RULE 5TH		80060336	2	XX	5TH
14	CYLINDR PIN	GOUPILLE	ZYLINDSTIF	PARALLELL PIN	FRP 6 X 20		9-50243	2	XX	
15	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 10X30 12.9		9-40845	4	XX	
16	MUTTER	ÉCROU	MUTTER	NUT	LOW ML6M M 20		9-40295	Y	XX	1ST,5TH, 2ND,4TH
17	SKRUV	VIS	SCHRAUBE	GRUB SCREW	T6SS 45H M20X40		9-50777	Y	XX	2ND,4TH
18	SKRUV	VIS	SCHRAUBE	GRUB SCREW	T6SS 45H M20X50		9-50776	Y	XX	1ST, 5TH
19	SKRUV	VIS	SCHRAUBE	GRUB SCREW	P6SS 20X60		9-40738	6	XX	3RD
20	SKRUV	VIS	SCHRAUBE	SCREW	HS MC6S 24X75 ISO 4762		9-41088	6	XX	ALL

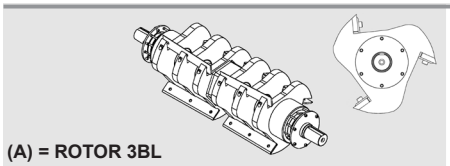
(XX =2436,2448,2460) (ALL = ALL VARIANTS)

(CU1ST = CUTTER HOUSING 1ST) (CU3RD = CUTTER HOUSING 3RD) (CU5TH = CUTTER HOUSING 5TH)

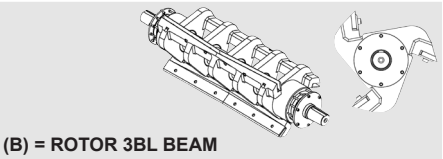
(Y = 4 ST. / KNIFE SEAT) (2ND = KNIFE SEAT 2ND) (3RD = KNIFE SEAT 3RD) (4TH = KNIFE SEAT 4TH) (5TH = KNIFE SEAT 5TH)

(125 = CU1ST + KNIFE 1ST, 2ND & 5TH) (3125 = CU3RD + KNIFE 3RD, 1ST, 2ND & 5TH) (31245 = CU3RD + KNIFE 3RD, 1ST, 2ND, 4TH & 5TH)

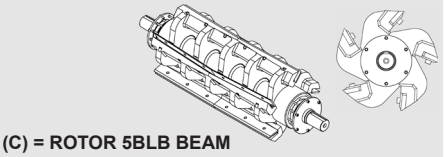
Rotor



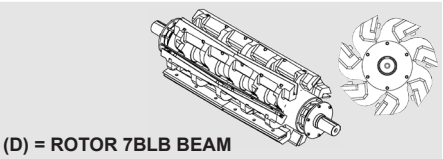
(A) = ROTOR 3BL
3-60173, 3-60102, 60143



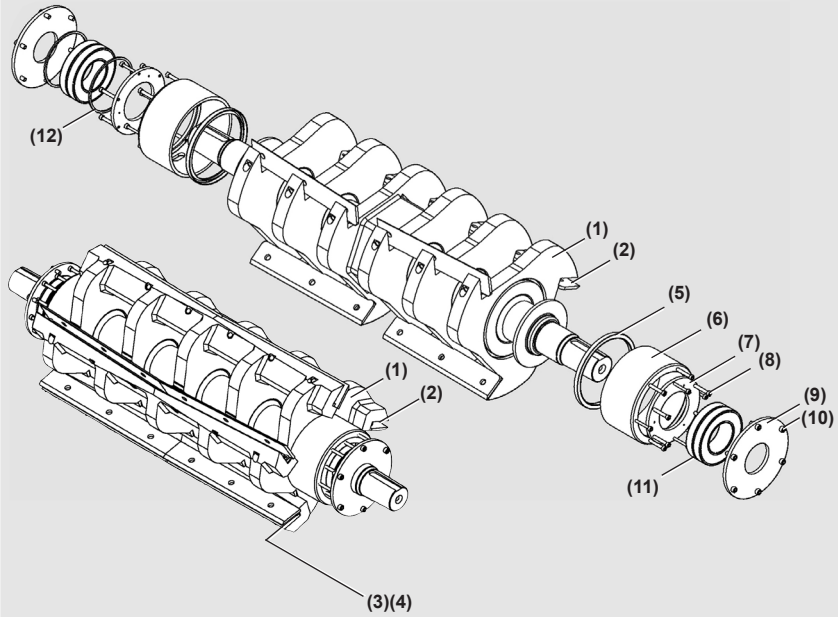
(B) = ROTOR 3BL BEAM
3-60174, 6-60118, 3-60144



(C) = ROTOR 5BLB BEAM
3-60175, 3-60117, 3-60145



(D) = ROTOR 7BLB BEAM
3-60176, 3-60119, 3-60146

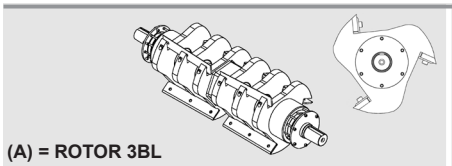


P	SE	FR	DE	GB - DETAIL	SPECIFICATION	ART NO	Q	X	V
(A)	KUTTER	ROTOR	ROTOR	ROTOR	COMPLETE SET	MF0060173	1	2436	3BL
						MF0060102	1	2448	
						MF0060143	1	2460	
(B)	KUTTER	ROTOR	ROTOR	ROTOR	COMPLETE SET	MF0060174	1	2436	3BLB
						MF0060118	1	2448	
						MF0060144	1	2460	
(C)	KUTTER	ROTOR	ROTOR	ROTOR	COMPLETE SET	MF0060175	1	2436	5BLB
						MF0060117	1	2448	
						MF0060145	1	2460	
(D)	KUTTER	ROTOR	ROTOR	ROTOR	COMPLETE SET	MF0060176	1	2436	7BLB
						MF0060560	1	2448	
						MF0060146	1	2460	
1	KUTTER	ROTOR	ROTOR	ROTOR	3BL	80060733	1	2436	3BL
						80060310	1	2448	
						80060665	1	2460	
					3BL BEAM	80060736	1	2436	5BLB
						80060558	1	2448	
						80060668	1	2460	
					5BL BEAM	80060739	1	2436	5BLB
						80060554	1	2448	
						80060671	1	2460	
					7BL BEAM	80060740	1	2436	7BLB
						80060560	1	2448	
						80060672	1	2460	

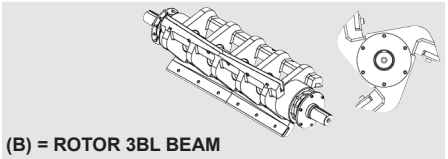
(3BL = 3-BLADE ROTOR) (3BLB = 3-BLADE BEAM ROTOR) (5BLB = 5-BLADE BEAM ROTOR) (7BLB =7-BLADE BEAM ROTOR)

(BLB = BEAM ROTOR, 3BLB, 5BLB O 7BLB) (Y= 2 PCS / BLADE) (XX = 90,120,150)

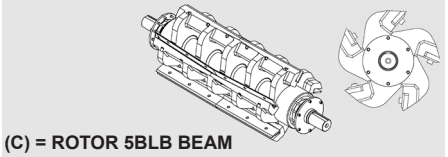
Rotor



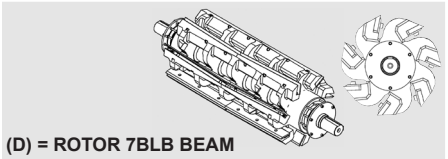
(A) = ROTOR 3BL
3-60173, 3-60102, 60143



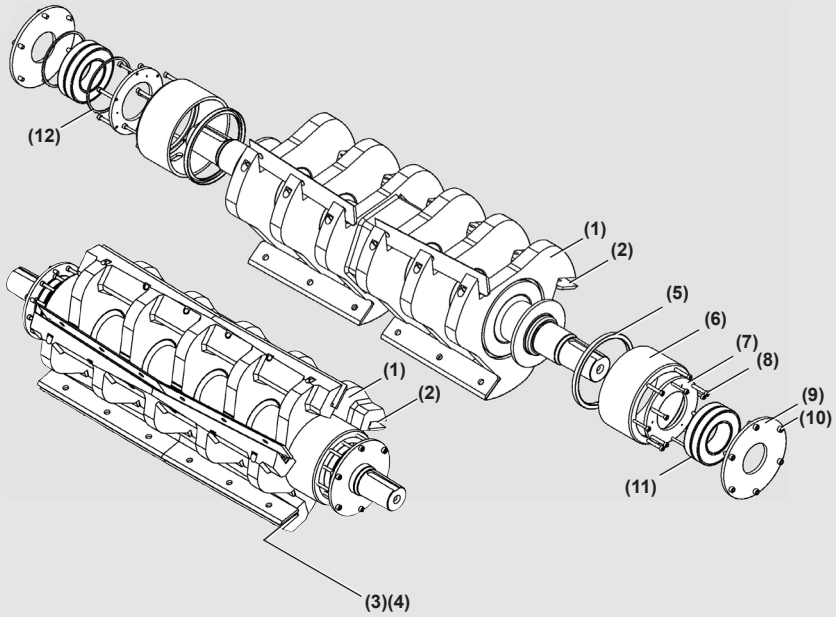
(B) = ROTOR 3BL BEAM
3-60174, 6-60118, 3-60144



(C) = ROTOR 5BLB BEAM
3-60175, 3-60117, 3-60145



(D) = ROTOR 7BLB BEAM
3-60176, 3-60119, 3-60146

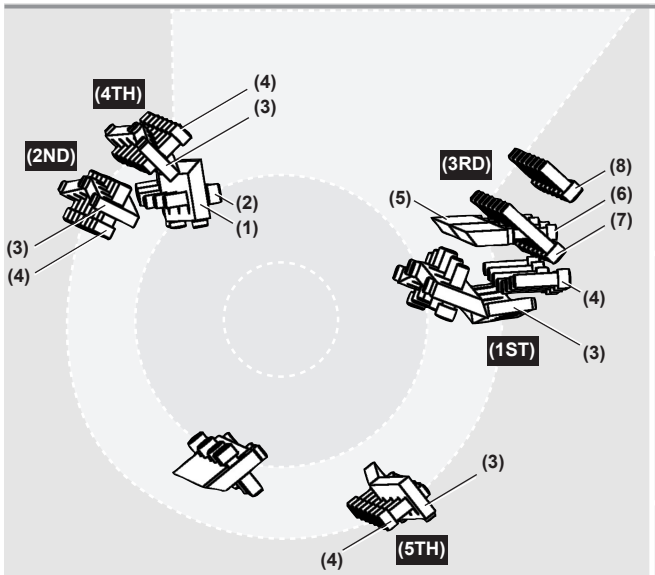


P	SE	FR	DE	GB - DETAIL	SPECIFICATION	ART NO	Q	X	V
2	STÖDLINJAL	RÈGLE D'APP	KLEMLEISTE	SUPPORT RULE	ROT	80060735	6	2436	3BL
						80060337	6	2448	
						80060667	6	2460	
					ROT BEAM	80060738	Y	2436	BLB
						80060557	Y	2448	
						80060670	Y	2460	
3	TÄTNING	ÉTANCHÉITÉ	DICHTUNG	SEALING	BACK KNIFE ROT BEAM	80060562	Y	XX	BLB
4	TRYCKFJÄDER	RESSORT PRE	DRUCKFEDER	COMPRESSION SPRIN	2X14X75	9-50890	Y	XX	
5	TÄTNINGSRING	BAGUE ÉTANC	DICHTUNGSRIN	SEALING RING	CR24027015	9-60240	2	XX	ALL
6	LABYRINTRING	BAUGE LABYR	LABYRINTHRIN	LABYRINTH RING	----	80060319	2	XX	
7	LAGERLOCK	CHAPEAU PAL	LAGERDECKE	BEARING COVER	INNER	80060318	2	XX	
8	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 10X75	9-40179	24	XX	
9	LAGERLOCK	CHAPEAU PAL	LAGERDECKE	BEARING COVER	OUTER	80060320	2	XX	
10	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 12X30	9-40106	12	XX	
11	LAGER	PALIER	LAGER	BEARING	BS2-2222-2CS5/VT143	9-92877	2	XX	
12	STYRRING	BAGUE GUIDE	LENKERRING	GUIDE RING	RING GUIDE	80060321	2	XX	

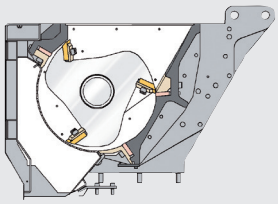
(3BL = 3-BLADE ROTOR) (3BLB = 3-BLADE BEAM ROTOR) (5BLB = 5-BLADE BEAM ROTOR) (7BLB =7-BLADE BEAM ROTOR)

(BLB = BEAM ROTOR, 3BLB, 5BLB O 7BLB) (Y= 2 PCS / BLADE) (XX =2436,2448,2460) (ALL = ALL VARIANTS)

Knives

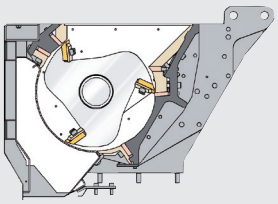


(A) = KNIVES 3BL
3-60177
3-60103
3-60147



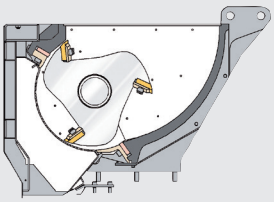
CUTTER HOUSING 1ST (TANGENTIAL)

(B) = KNIVES 5BL
3-60178
3-60126
3-60148



CUTTER HOUSING 3RD (PRECUT)

(C) = KNIVES 7BL
3-60179
3-60127
3-60149



CUTTER HOUSING 5TH (SUPER TANGETIAL)

P	SE	FR	DE	GB - DETAIL	SPECIFICATION	ART NO	Q	X	V
(A)	KNIVAR	COUTEAUX	MESSER	KNIVES	COMPLETE SET	MF0060177-**	1	2436	3BL
						MF0060103-**	1	2448	
						MF0060147-**	1	2460	
(B)	KNIVAR	COUTEAUX	MESSER	KNIVES	COMPLETE SET	MF0060178-**	1	2436	5BL
						MF0060126-**	1	2448	
						MF0060148-**	1	2460	
(C)	KNIVAR	COUTEAUX	MESSER	KNIVES	COMPLETE SET	MF0060179-**	1	2436	7BL
						MF0060127-**	1	2448	
						MF0060149-**	1	2460	

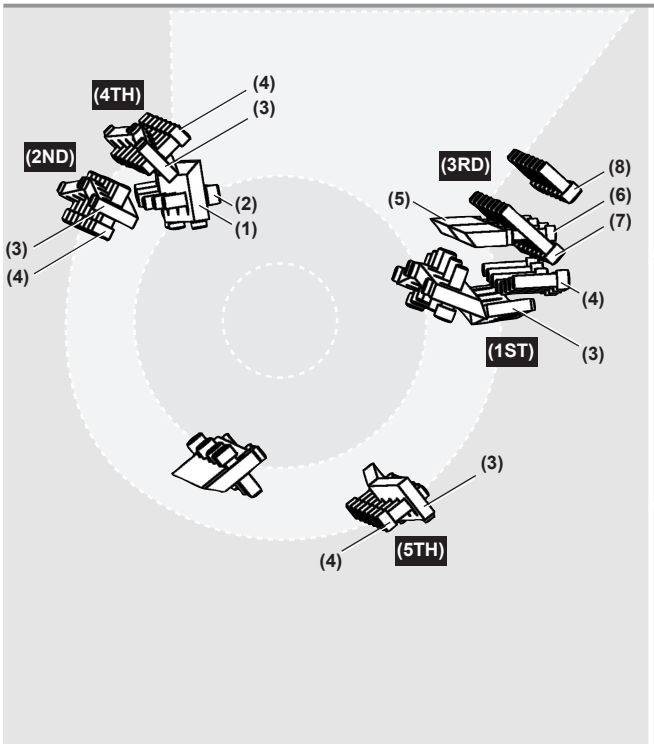
(3BL = 3-BLATT-ROTOR O 3-BLADE BALKENROTOR) (5BL= 5-BLADE BEAM ROTOR) (7BL= ROTOR RENFORCÉ 7 AUBES)

** = ADD 12, 124, 1245, 125, 52 O 524. (REFER TO TABLE BELOW:)

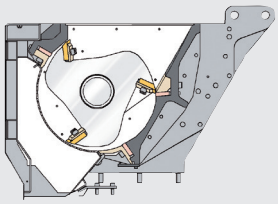
KNIFE KIT COMPLETE		
CUH 1ST	12	1ST 2ND
	124	1ST 2ND 4TH
	1245	1ST 2ND 5TH
	125	1ST 2ND 4TH 5TH
CUH 3RD	32	3RD 2ND
	324	3RD 2ND 4TH
	3245	3RD 2ND 4TH 5TH
	325	3RD 2ND 5TH
CUH 5TH	52	5TH 2ND
	524	5TH 2ND 4TH

EXAMPLE:
MF0060103-124 = COMPLETE KIT CON ROTATING KNIVES, FIXED KNIVES E SCREWS FOR A GRANULATOR CON CUTTER HOUSING 1ST WITH FIXED KNIVES IN KNIFE SEAT 1ST, 2ND E 4TH.

Knives

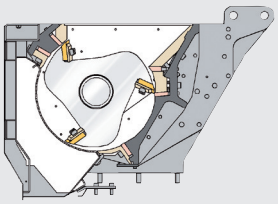


(A) = KNIVES 3BL
3-60177
3-60103
3-60147



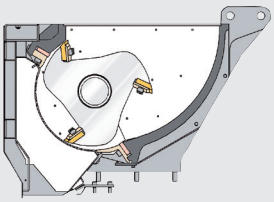
CUTTER HOUSING 1ST (TANGENTIAL)

(B) = KNIVES 5BL
3-60178
3-60126
3-60148



CUTTER HOUSING 3RD (PRECUT)

(C) = KNIVES 7BL
3-60179
3-60127
3-60149



CUTTER HOUSING 5TH (SUPER TANGETIAL)

P	SE	FR	DE	GB - DETAIL	SPECIFICATION	ART NO	Q	M	V
1	KNIV	COUTEAUX	MESSER	KNIFE	ROT	80060731	2*	2436	ALL
						80060330	2*	2448	
						80060663	2*	2460	
2	SKRUV	VIS	SCHRAUBE	GRUBSCREW	SHS MC6S 20X70 UNBR	9-40072	3S*	90	
							3S*	2448	
							4S*	2460	
3	KNIV	COUTEAUX	MESSER	KNIFE	FIXED	8345170	2*	2436	1ST,2ND 4TH,5TH
						8345181	2*	2448	
						80060659	2*	2460	
4	SKRUV	VIS	SCHRAUBE	GRUBSCREW	SHS MC6S 20X70 UNBR	9-40072	4S*	XX	
5	KNIV	COUTEAUX	MESSER	KNIFE	FIXED	80060729	2*	2436	3RD
						80060565	2*	2448	
						80060661	2*	2460	
6	SKRUV	VIS	SCHRAUBE	GRUBSCREW	SHS MC6S 20X55 UNBR	9-40096	8	XX	
7	SKRUV	VIS	SCHRAUBE	GRUBSCREW	SHS MC6S 16X90 UNBR	9-40266	8	XX	
8	SKRUV	VIS	SCHRAUBE	GRUBSCREW	SHS MC6S 20X100	9-40583	4	XX	
9*	DISTANS	ENTRETOISE	ABSTANDSTÜ	DISTANCE	SUPPORT RULE	8345150	2D*	2436	1ST,5TH
						8345480	2D*	2448	
						80060618	2D*	150	

(XX =2436,2448,2460) (ALL = ALL VARIANTS) (3BL = 3-BLADE ROTOR (1ST = KNIFE POSITION 1ST)

(5BL = 5-BLADE ROTOR) (2ND = KNIFE POSITION 2ND)

(2S* = 2 SCREWS PER KNIFE IS REQUIRED) (3RD = KNIFE POSITION 3RD)

(3S* = 3 SCREWS PER KNIFE IS REQUIRED) (4TH = KNIFE POSITION 4TH)

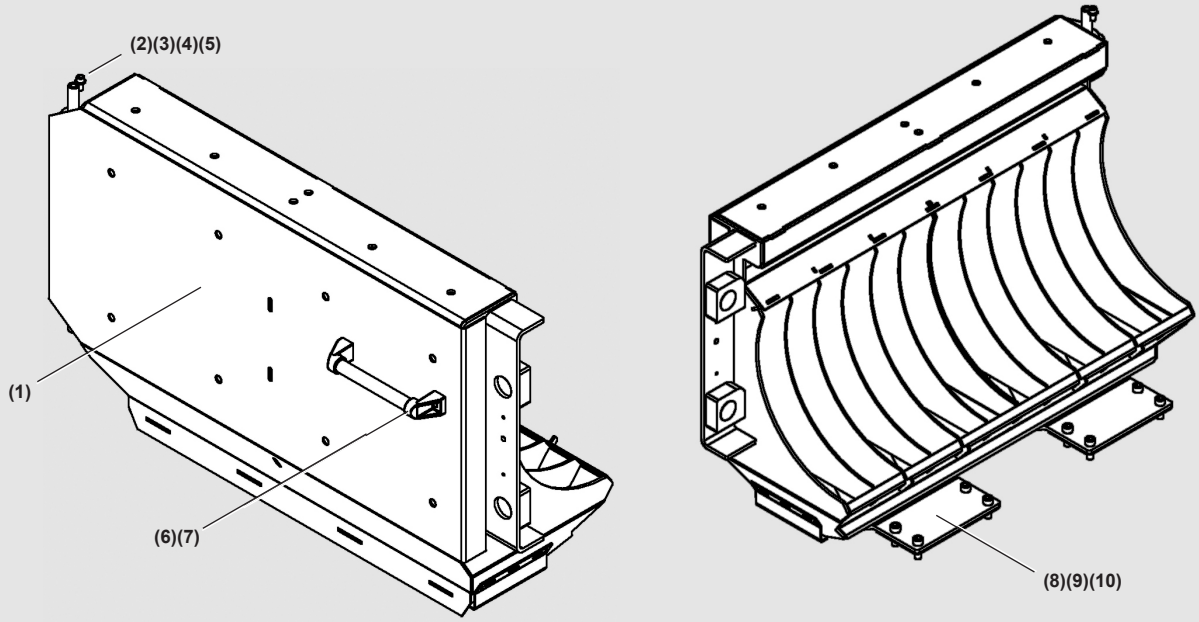
(4S* = 4 SCREWS PER KNIFE IS REQUIRED) (5TH = KNIFE POSITION 5TH)

(2* = 2 KNIVES PER KNIFE SEAT IS REQUIRED)

(9* = DISTANCE "KNIFE DUMMY" IS NOT SHOWN IN FIGURE)

(2D* = 4 DISTANCES PER EMPTY KNIFE SEAT IS REQUIRED)

Front door / Screen box

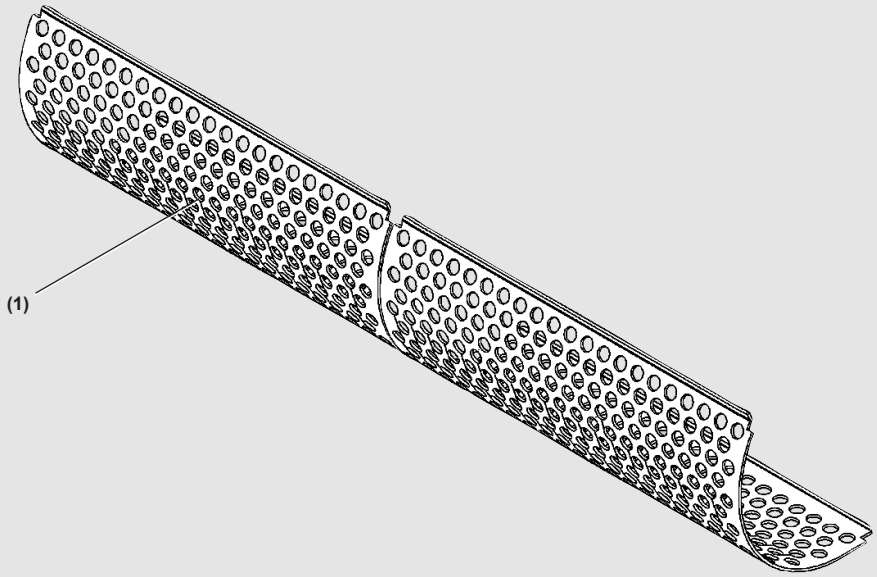


(A) = SCREEN BOX
3-60183, 3-60108, 3-60150

P	SE	FR	DE	GB - DETAIL	SPECIFICATION	ART NO	Q	M	V
(A)	GALLERLÅDA	BOÎTE DE TAM	SIEBKASTEN	SCREEN BOX	COMPLETE SET	MF0060183	1	2436	ALL
						MF0060108	1	2448	
						MF0060150	1	2460	
1	DÖRR	PORTE	TÜR	DOOR	SCREEN BOX	80062007	1	2436	ALL
						80060340	1	2448	
						80060720	1	2460	
2	AXEL	ARBRE	ACHSE	SHAFT	HINGE FRONT SIDE	8345149	2	XX	ALL
3	GLIDLAGER	PALIER LISSE	GLEITLAGER	SLIDE BEARING	25/28X25	9-60220	8	XX	
4	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 12X25	9-40051	2	XX	
5	BRICKA	RONDELLE	SCHEIBE	WASHER	BRB 13,0	9-40155	2	XX	
6	HANDTAG	POIGNEE	GRIFF	HANDLE	D=30X300 BLACK	9-50645	1	XX	
7	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 8X20	9-40070	2	XX	
8	STÖD	SUPPORT	STÜTZE	SUPPORT	SCREEN BOX	80060546	2	XX	
9	FÄSTE	FIXATION	BEFESTIGUN	BRACKET	SWITCH	80060547	2	XX	
10	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 16X45	9-40674	8	XX	

(XX=2436,2448,2460) (ALL = ALL VARIANTS)

Screen



(A) = SCREEN
2-60757, 2-60360, 2-60605

P	SE	FR	DE	GB - DETAIL	SPECIFICATION	ART NO	Q	M	V
(A)	GALLER	TAMIS	SIEB	SCREEN	COMPLETE SET YY MM	MF0060757-**	1	2436	ALL
						MF0060360-**	1	2448	
						MF0060605-**	1	2460	
1	GALLER	TAMIS	SIEB	SCREEN	YY MM	80060757-**	2	2436	ALL
						80060360-**	2	2448	
						80060605-**	2	2460	

(= ADD SCREEN HOLE DIAMETER)** **(ALL = ALL VARIANTS)**

EXAMPLE: 80060360-08 = STANDARD SCREEN FOR G600-120 CON HOLE Ø 8MM

(= ADD SCREEN HOLE DIAMETER Y "N" FOR HARDENED SCREEN)**

EXAMPLE: 80060360-08N = HARDEND SCREEN FOR G600-120 CON HOLE Ø 8MM

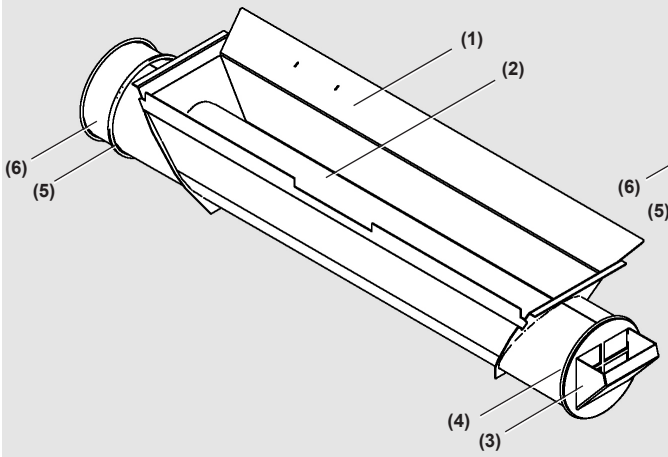
(TD11 = ADD SCREEN HOLE DIAMETER Y "TD11" FOR OPEN AREA SCREEN)

EXAMPLE: 80060360-08TD11 = OPEN AREA SCREEN FOR G600-120 CON HOLE Ø 8MM

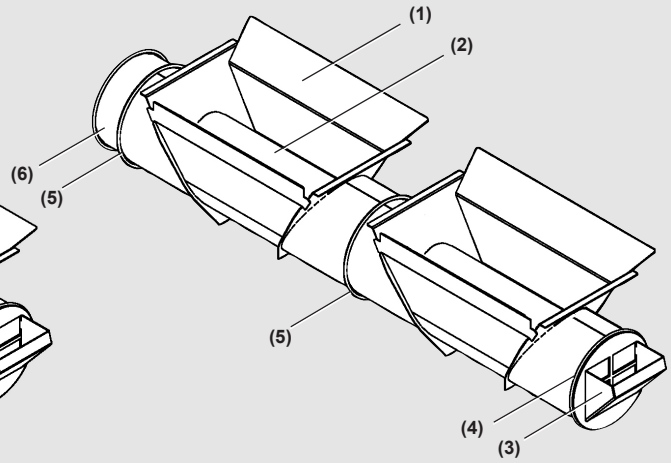
-** STANDARD SCREEN		
D	TD	OPEN %
6	9	40
8	12	40
10	15	40
12	17	45
17	26	39
25	39	38

-** OPEN AREA SCREEN		
D	TD	OPEN %
6	8	50
8	11	48
10	14	46
12	16	51
17	24	45
25	36	44

Granule bin



(A) = GRANULE BIN / DISCHARGE "SINGLE"
3-60185, 3-60110, 3-60152



(A) = GRANULE BIN / DISCHARGE "DIVIDED"
3-60185, 3-60110, 3-60152

P	SE	FR	DE	GB - DETAIL	SPECIFICATION	ART NO	Q	M	V
(A)	GRANULATLÅD	BAC À GRANU	MAHLGUTKAS	GRANULE BIN	COMPLETE SET	MF0060185-**	1	2436	ALL
						MF0060110-**	1	2448	
						MF0060152-**	1	2460	
1	GRANULATLÅD	BAC À GRANU	MAHLGUTKAS	GRANULE BIN	OK200	80060784	1	2436	SINGLE (A,B,E,F, I,J)
						80060643	1	2448	
						(----------)	1	2460	
					OK200	(----------)	2	2436	DIVIDED (C,D,G,H, K,L)
						80060363	2	2448	
					OK200 L	80064095	1	2460	
					OK200 R	80064097	1		
2	FÖRDELN PLÅ	PLAQUE	VERSCH PLAT	DISTRIBUTION PLATE	D=120 GRANU	80060786	1	2436	SINGLE (A,B,E,F, I,J)
						80060645	1	2448	
						(----------)	1	2460	
					D=120 GRANU	(----------)	2	2436	DIVIDED (C,D,G,H, K,L)
						80060543	2	2448	
						80060764	2	2460	

(XX =2436,2448,2460) (ALL = ALL VARIANTS)

** = ADD A,B,C,D,E,F,G,H,I,J,K, OR L, TO SPECIFY TYPE OF GRANULE BIN. REFER TO EXAMPLE AND TABLES BELOW.

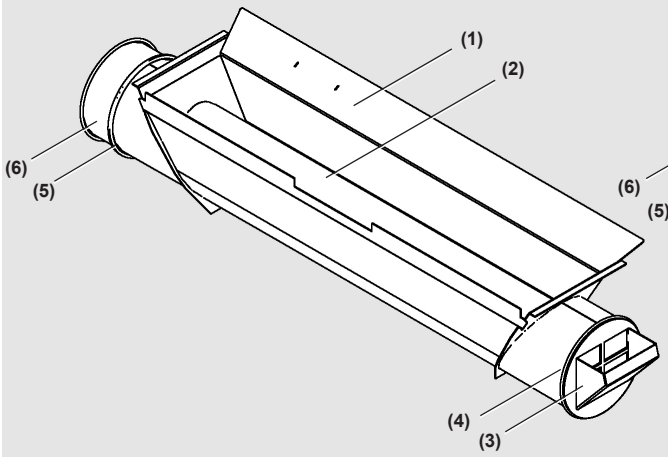
EXAMPLE: MF0060110-8 = COMPLETE DISCHARGE SET WITH ALL PARTS TO GRANULE BIN OK200 DIVIDED ENCLOSURE

	GRANULE BIN OK160
A	OK160
B	OK160K
C	OK160 DIVIDED
D	OK160K DIVIDED

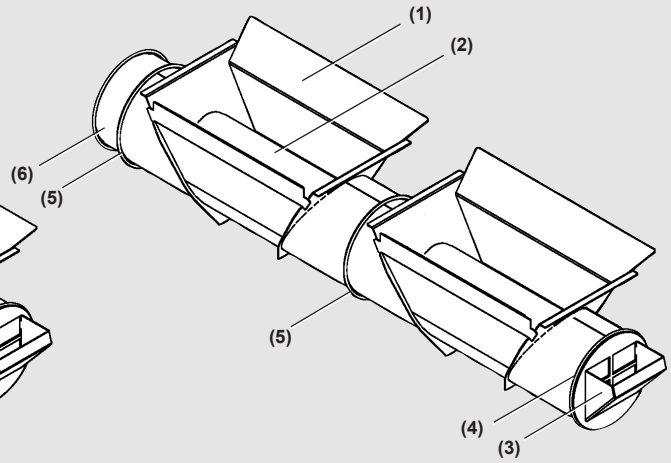
	GRANULE BIN OK200
E	OK200
F	OK200K
G	OK200 DIVIDED
H	OK200K DIVIDED

	GRANULE BIN RP200
I	RP200
J	RP200K
K	RP200 DIVIDED
L	RP200K DIVIDED

Granule bin



(A) = GRANULE BIN / DISCHARGE "SINGLE"
3-60185, 3-60110, 3-60152



(A) = GRANULE BIN / DISCHARGE "DIVIDED"
3-60185, 3-60110, 3-60152

P	SE	FR	DE	GB - DETAIL	SPECIFICATION	ART NO	Q	M	V
3	LUFTINTAG	ENTRÉE D'AIR	LUFTEINLASS	AIR INLET	OK200	80060390	1	XX	ALL
4	BULTKOPPL	BOULON ASS	BOLZEN KUP	BOLT COUPLING	OK200	9-20273	2	XX	
5	SNABBKOPPL	RACCORD RA	SCHNELLKUP	QUICK COUPLING	OK200	9-20540	1	XX	A,F,G,I,J
							2	XX	B,C,H,K,L
							3	XX	D
6	RÖR	TUYAU	ROHR	PIPE	OK200 L=81	80060650	1	XX	ALL
7	REDUCERARE	REDUCER	REDUCER	REDUCER	OK160-OK200 L=118	9-20114	1	XX	A
					OK160-OK200 L=118 NOA	8417785	1	XX	B,D
					OK200-RP200 L=65	8420320	1	XX	I,K
						(----------)	1	XX	J,L
8	STOS		AUSLASS	FLANGE OUTLET	OK200X480	80061664	1	XX	B,D,F,H
					RP200X480	80061667	1	XX	J,L
9	SKRUV	VIS	SCHRAUBE	SCREW	TAPPING TAPTITE 8X16	9-40444	3	XX	B,D,F,H, J,L

(XX =2436,2448,2460) (ALL = ALL VARIANTS)

** = ADD A,B,C,D,E,F,G,H,I,J,K, OR L, TO SPECIFY TYPE OF GRANULE BIN. REFER TO EXAMPLE AND TABLES BELOW.

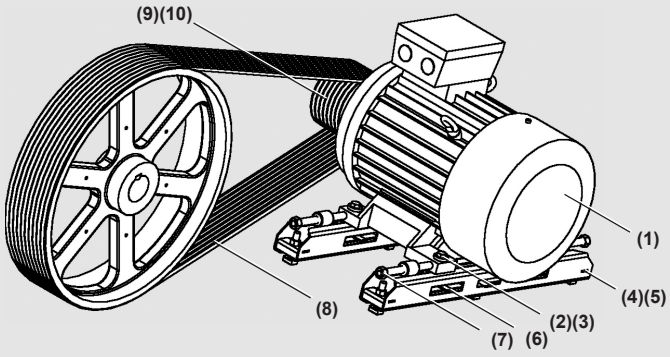
EXAMPLE: MF0060110-8 = COMPLETE DISCHARGE SET WITH ALL PARTS TO GRANULE BIN OK200 DIVIDED ENCLOSURE

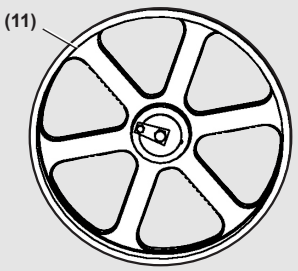
	GRANULE BIN OK160
A	OK160
B	OK160K
C	OK160 DIVIDED
D	OK160K DIVIDED

	GRANULE BIN OK200
E	OK200
F	OK200K
G	OK200 DIVIDED
H	OK200K DIVIDED

	GRANULE BIN RP200
I	RP200
J	RP200K
K	RP200 DIVIDED
L	RP200K DIVIDED

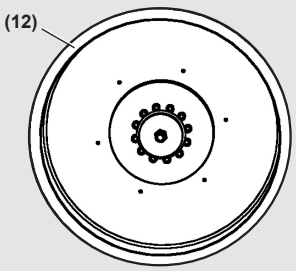
Transmission, Motor, Motor pulley, Drive belt(s)





(A) = TRANSMISSION
50 HZ
3-60109

(C) = TRANSMISSION
60 HZ
3-60123



(B) = TRANSMISSION
FRICTION COUPLING 50 HZ
3-60122

(D) = TRANSMISSION
FRICTION COUPLING HZ
3-60124

P	SE	FR	DE	GB - DETAIL	SPECIFICATION	ART NO	Q	V	
(A)	TRANSMISSION	TRANSMISSION	TRANSMISSION	TRANSMISSION	50HZ COMPLETE	MF0060109-*	1	A1-F3*	
(B)	TRANSMISSION	TRANSMISSION	TRANSMISSION	TRANSMISSION	50 HZ FRICT COMPLETE	MF0060123-*	1	A1-F3*	
(C)	TRANSMISSION	TRANSMISSION	TRANSMISSION	TRANSMISSION	60 HZ COMPLETE	MF0060122-*	1	A1-F3*	
(D)	TRANSMISSION	TRANSMISSION	TRANSMISSION	TRANSMISSION	60HZ FRICT COMPLETE	MF0060124-*	1	A1-F3*	
1	MOTOR	MOTEUR	MOTOR	MOTOR	REFER TO MOTOR TABLE BELOW		1	A1-F3*	
2	SKRUV	VIS	SCHRAUBE	SCREW	HHS M6S 20X90 10,9	9-40482	4	A,B,C	
					HHS M6S 24X100 10,9	9-40386	4	D,E,G	
3	BRICKA	RONDELLE	SCHEIBE	WASHER	D=50/21-10 MOTOR MOUN	8445248	4	A,B,C	
					D=25/60-8	80060464	4	D,E,G	
4	LINJAL			RULER	MOTOR 55-160KW	80060456	2	ALL	
5	SKRUV	VIS	SCHRAUBE	SCREW	HALFEN SCREW M20X100	9-50883	6		
6	MOTHÅLL			HOLDING-UP TOOL	M20 M24	80060462	4	ALL	
7	REMSTRÄCK	TENDEUR CO	KEILRIEMSPA	TENSOR DE CORREA	M24X244	80060460	4		

POS (1) MOTOR		50 HZ MF0060109- (Add A,B,C,D,E,F OR G) 50 HZ FRICT MF0060122- (Add A,B,C,D,E,F OR G)			60HZ MF0060123- (Add A,B,C,D,E,F OR G) 60 HZ FRICT MF0060124- (Add A,B,C,D,E,F OR G)		
		1	2	3	1	2	3
		(200-219V / 50HZ)	(220-240V / 50HZ)	(380-420V / 50HZ)	(200-220V / 60HZ)	(440-480V / 60HZ)	(380V / 60HZ)
A	(55 KW)	9-93161	9-93161	9-10113N	9-93161	9-10113N	9-93165
B	(75 KW)			9-10289N		9-10289N	
C	(90 KW)	9-93124		9-91054N		9-91054N	
D	(110 KW)			9-90372N		9-90372N	9-91311
E	(132 KW)			9-92467		9-92467	
F	(160KW)			9-93041		9-93041	

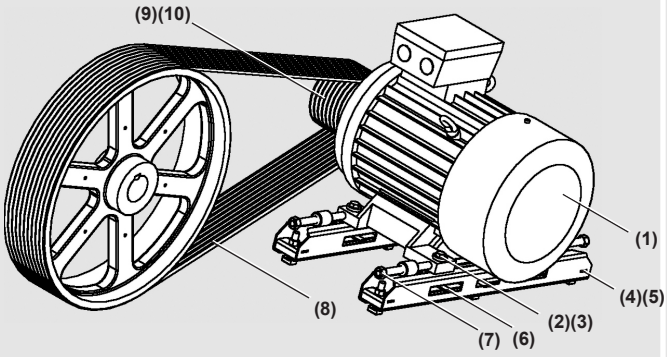
* = ADD A1-F3. COMPARE CON TABLE ABOVE Y EXAMPLES BELOW. (WF = WITOUT FRICTION COUPLING)

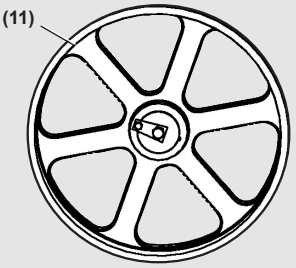
EXAMPLE: MF0060109-A1 = COMPLETE TRANSMISSION 55KW, 200-219V / 50HZ (FR = CON FRICTION COUPLING)

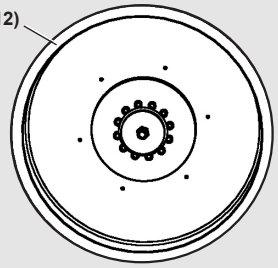
EXAMPLE: MF0060122-B3 = COMPLETE TRANSMISSION FRICTION COUPLING 75KW, 380-420V / 50HZ

(ALL = ALL VARIANTS)

Transmission, Motor, Motor pulley, Drive belt(s)







(A) = TRANSMISSION 50 HZ 3-60109

(B) = TRANSMISSION FRICTION COUPLING 50 HZ 3-60122

(C) = TRANSMISSION 60 HZ 3-60123

(D) = TRANSMISSION FRICTION COUPLING HZ 3-60124

P	SE	FR	DE	GB - DETAIL	SPECIFICATION	ART NO	Q	V	
8	KILREM	COURROIE TR	KEILRIEMEN	V-BELT	ROFLEX RE-X XPB 4250	9-30334	5	A	WF
							6	B	
							7	C	
							9	D	
							10	E,G	
					SPB 4250 LW RED POWER	9-30329	5	A	FR
							6	B	
							7	C	
							9	D	
							10	E,G	
9	REMSKIVA	POULIE	RIEMENSCHEI	PULLEY	MOTOR 10 SPB 236	9-30331	1	ALL	
10	KLÄMBUSSN	COUSSINET S	KLEMMBÜCH	EXPANDING BUSHING	3535 D 65	9-30332	1	A, B,C	
					3535 D 80	9-30333	1	D,E,F	
11	REMSKIVA	POULIE	RIEMENSCHEI	PULLEY	ROTOR	REFER TO PAGE 9:20			
12	REMSKIVA	POULIE	RIEMENSCHEI	PULLEY	ROTOR FRICTION COUPL	REFER TO PAGE 9:20			

POS (1) MOTOR		50 HZ MF0060109- (Add A,B,C,D,E,F OR G) 50 HZ FRICT MF0060122- (Add A,B,C,D,E,F OR G)			60HZ MF0060123- (Add A,B,C,D,E,F OR G) 60 HZ FRICT MF0060124- (Add A,B,C,D,E,F OR G)		
		1	2	3	1	2	3
		(200-219V / 50HZ)	(220-240V / 50HZ)	(380-420V / 50HZ)	(200-220V / 60HZ)	(440-480V / 60HZ)	(380V / 60HZ)
A	(55 KW)	9-93161	9-93161	9-10113N	9-93161	9-10113N	9-93165
B	(75 KW)			9-10289N		9-10289N	
C	(90 KW)	9-93124		9-91054N		9-91054N	
D	(110 KW)			9-90372N		9-90372N	9-91311
E	(132 KW)			9-92467		9-92467	
F	(160KW)			9-93041		9-93041	

* = ADD A1-F3. COMPARE CON TABLE ABOVE Y EXAMPLES BELOW. (WF = WITOUT FRICTION COUPLING)

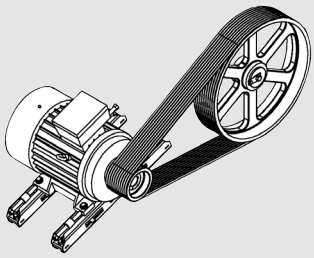
EXAMPLE: MF0060109-A1 = COMPLETE TRANSMISSION 55KW, 200-219V / 50HZ (FR = CON FRICTION COUPLING)

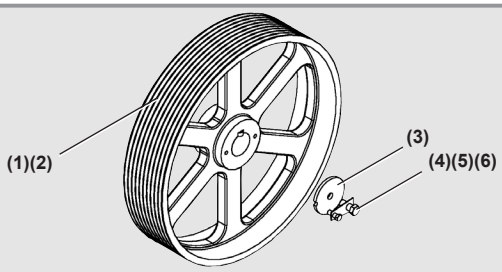
EXAMPLE: MF0060122-B3 = COMPLETE TRANSMISSION FRICTION COUPLING 75KW, 380-420V / 50HZ (ALL = ALL VARIANTS)

Transmission, Rotor pulley, Flywheel

(A) = TRANSMISSION
50 HZ
3-60109

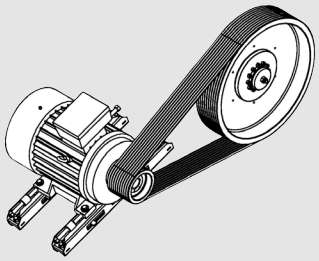
(C) = TRANSMISSION
60 HZ
3-60123

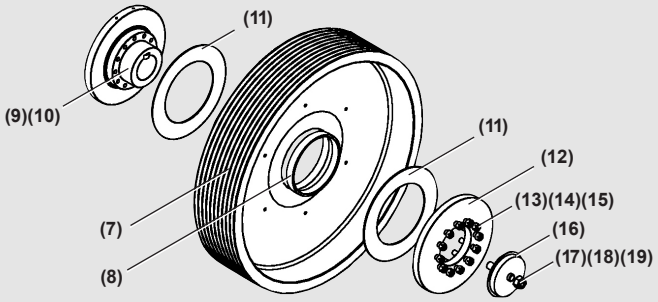




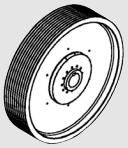
(B) = TRANSMISSION
FRICTION COUPLING 50 HZ
3-60122

(D) = TRANSMISSION
FRICTION COUPLING HZ
3-60124





(E) = FLYWHEEL
FRICTION COUPLING HZ
3-60129



P	SE	FR	DE	GB - DETAIL	SPECIFICATION	ART NO	Q	V	
(A)	TRANSMISSION	TRANSMISSION	TRANSMISSION	TRANSMISSION	50HZ COMPLETE	REFER TO PAGE 9:18			WF
(B)	TRANSMISSION	TRANSMISSION	TRANSMISSION	TRANSMISSION	50 HZ FRICT COMPLETE	REFER TO PAGE 9:18			
(C)	TRANSMISSION	TRANSMISSION	TRANSMISSION	TRANSMISSION	60 HZ COMPLETE	REFER TO PAGE 9:18			FR
(D)	TRANSMISSION	TRANSMISSION	TRANSMISSION	TRANSMISSION	60HZ FRICT COMPLETE	REFER TO PAGE 9:18			
(E)	SVÄNGHJUL	VOLANTE	SCHWUNGRAD	FLYWHEEL	FRICT COMPLETE	MF3-60129-*	1		
1	REMSKIVA	POULIE	RIEMENSCHEI	PULLEY	SPB10-900 ROTOR	80060455	1		
2	KIL	CLAVETTE	KEIL	KEY	RK 28X16X140 H7	9-50031	1		
3	BRICKA	RONDELLE	SCHEIBE	WASHER	SHAFT END	8445191	1		
4	BRICKA	RONDELLE	SCHEIBE	WASHER	LOCKING SHAFT END	8445192	1		WF
5	SKRUV	VIS	SCHRAUBE	SCREW	HHS M6S 16X45	9-40033	1		
6	SKRUV	VIS	SCHRAUBE	SCREW	HHS M6S 24X60	9-40399	1		

* = ADD A-F. COMPARE CON TABLE Y EXAMPLES BELOW.

EXAMPLE: MF0060129-B = COMPLETE FLYWHEEL, FOR 75 KW MOTOR

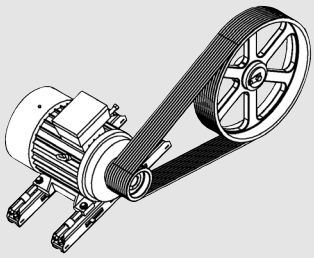
A	(55 KW)
B	(75 KW)
C	(90 KW)
D	(110 KW)
E	(132 KW)
F	(160KW)

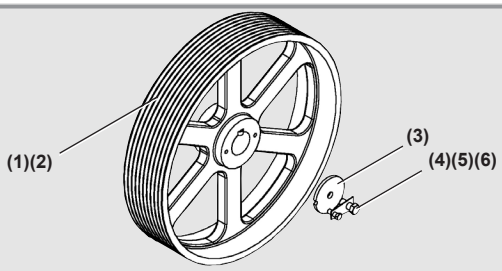
(WF = SIN FRICTION COUPLING) (FR = CON FRICTION COUPLING) (ALL = ALL VARIANTS)

Transmission, Rotor pulley, Flywheel

(A) = TRANSMISSION
50 HZ
3-60109

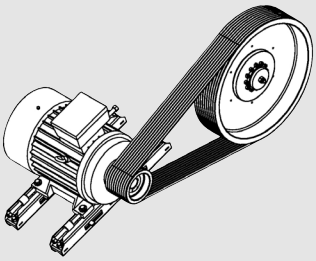
(C) = TRANSMISSION
60 HZ
3-60123

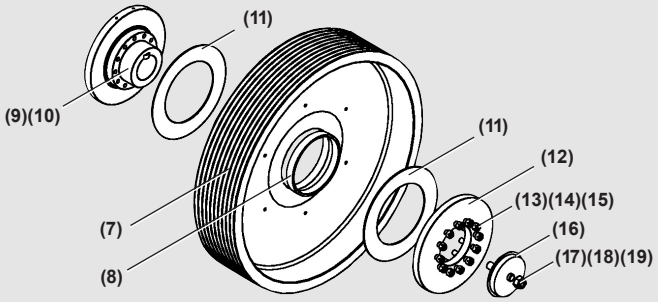




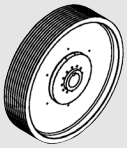
(B) = TRANSMISSION
FRICTION COUPLING 50 HZ
3-60122

(D) = TRANSMISSION
FRICTION COUPLING HZ
3-60124





(E) = FLYWHEEL
FRICTION COUPLING HZ
3-60129

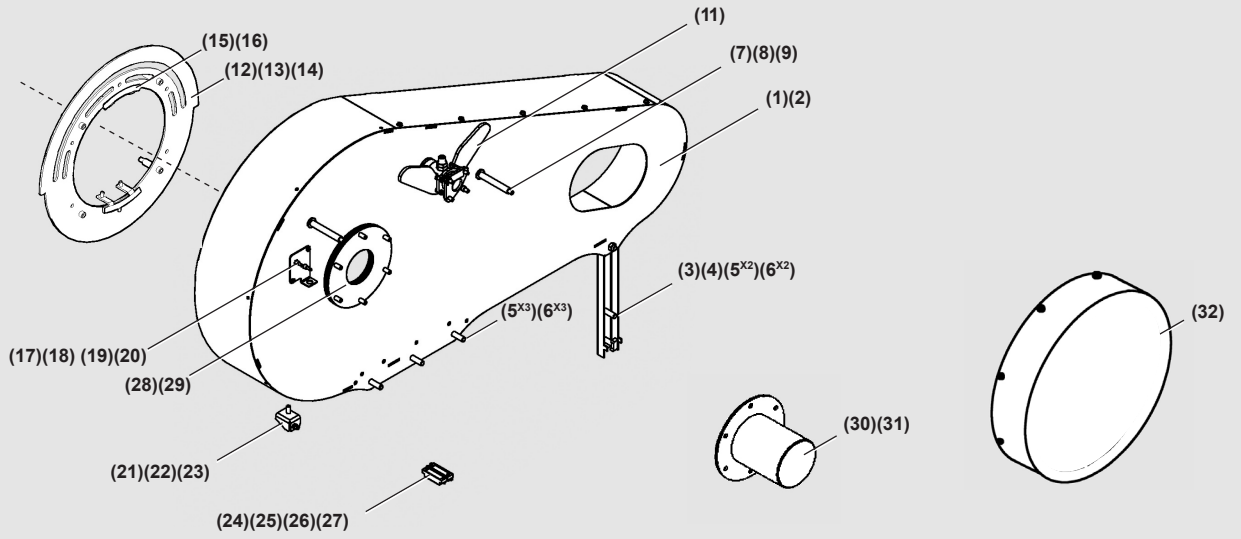


P	SE	FR	DE	GB - DETAIL	SPECIFICATION	ART NO	Q	V	
7	REMSKIVA	POULIE	RIEMENSCHEI	PULLEY	SPB10-900 ROTOR FRICTI	80060465	1		
8	BUSSNING	DOUILLE	BÜCHSE	BUSHING	FRICTION COUPLING	8406524	1		
9	NAV	MOYEU	NABE	HUB	FRICTION COUPLING	8206448	1		
10	KIL	CLAVETTE	KEIL	KEY	RK 28X16X140 H7	9-50031	1		FR
11	FRIKTIONSDISK			FRICTION DISC	ASBESTFRITT	9-50127	2		
12	BRICKA	RONDELLE	SCHEIBE	CLAMPING WASHER	FRICTION COUPLING	8206449	1		
13	SKRUV	VIS	SCHRAUBE	SCREW	M16X70 LOCK FRICT.COU	8402775	12	A,B	
					M16X80 LOCK FRICT.COU	8440646	12	C,D	
14	TALLRIKSFJÄD	ROND ELASTIQ	TELLERFEDER	DISC SPRING	SCHNORR A 31.5	9-40087	36	A,B	
							72	C,D	
15	STÅLTRÅD	WIRE	STAHLDRAHT	WIRE	T=0,8 STAINLESS	9-92819	1		
16	LÅSBRICKA	ARRÊTOIR	ARRET SCHEIB	LOCKING WASHER	PULLEY	8402260	1		
17	LÅSBULT	BOULON VERR	SPERRBOLZEN	LOCKING BOLT	COUPLING PULLEY	8402087	1		
18	MUTTER	ÉCROU	MUTTER	NUT	CASTLE MHKM M24	9-40089	1		
19	SAXPINNE	GOUPILLE F	STIFT	SPLIT PIN	SP 5,0 X 63	9-40943	1		
20	SPÄNNSTIFT	GOUPILLE C	SPANNSTIFT	SPRING PIN	FRP 5 X 20	9-50030	1		

A	(55 KW)
B	(75 KW)
C	(90 KW)
D	(110 KW)
E	(132 KW)
F	(160KW)

(WF = SIN FRICTION COUPLING) (FR = CON FRICTION COUPLING) (ALL = ALL VARIANTS)

Safety, Transmission



(A) =SAFETY TRANSMISSION WITHOUT ENCLOSURE, WITHOUT FLYWHEEL

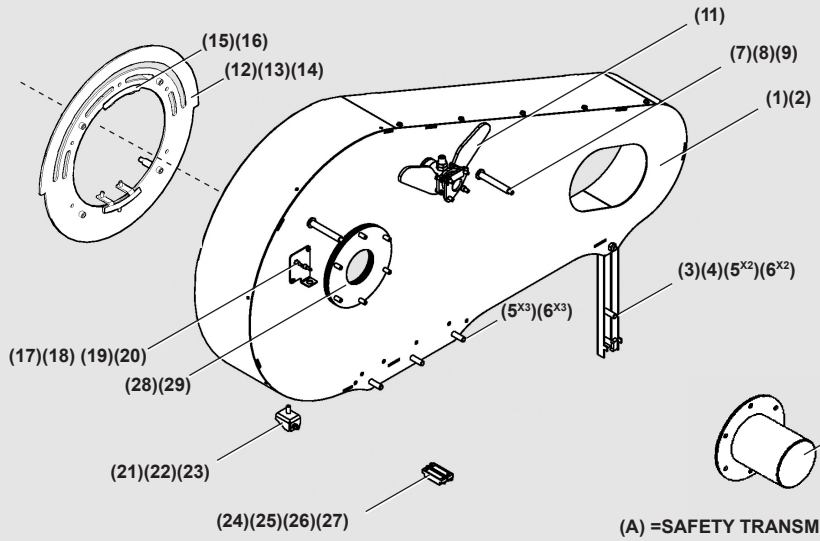
3-60111

(B) = SAFETY TRANSMISSION WITHOUT ENCLOSURE, WITH FLYWHEEL

3-60128

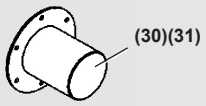
P	SE	FR	DE	GB - DETAIL	SPECIFICATION	ART NO	Q	M	V
(A)	SÄKERHET	PROTECTION	SCHUTZ	SAFETY	COMPLETE SET	MF0060111-*	1	XX	WE
(B)	SÄKERHET	PROTECTION	SCHUTZ	SAFETY	COMPLETE SET	MF0060128-*	1	XX	WEF
1	REMSKYDD	PROTECTION	SCHUTZ	BELT GUARD	---	80060624	1	XX	ALL
2	SKRUV	VIS	SCHRAUBE	SCREW	TAPPING TAPTITE 8X16	9-40444	18	XX	
3	FÄSTE	FIXATION	BEFESTIGUN	BRACKET	BELT GUARD	80060630	1	XX	
4	SKRUV	VIS	SCHRAUBE	SCREW	HALFEN M16X60	9-50885	1	XX	
5	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 16X55	9-40506	5	XX	WE
							6	XX	WEF
6	BRICKA	RONDELLE	SCHEIBE	PASADOR DE ALETAS	BRB 17,0	9-40035	5	XX	WE
							6	XX	WEF
7	DISTANS	ENTRETOISE	ABSTANDSTÜ	DISTANCE	BLANK D19X3 L=130	80060413	2	XX	WE
							3	XX	WEF
8	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 12X160 ISO 4	9-41085	2	XX	WE
							3	XX	WEF
9	BRICKA	RONDELLE	SCHEIBE	PASADOR DE ALETAS	HARDENED M12 AMF DI	9-40060	4	XX	WE
							6	XX	WEF
10	LÅS	VERROU	ARRETIERUN	LOCK	HOPPER & CUTTER HO	REFER TO PAGE 9:21			ALL
11	KUTTERLÅS	VERROU ROT	ROTORARRET	ROTOR LOCKING	---	REFER TO PAGE 9:22			
12	GIVARE	TRANSMITTE	GEBER	TRANSMITTER	STAND STILL MONITO	80060640	1	XX	ALL
13	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 12X75	9-40154	4	XX	
14	DISTANS	ENTRETOISE	ABSTANDSTÜ	DISTANCE	BLANK D=19X3 L=47	80060642	4	XX	
15	GIVARE	TRANSMITT	GEBER	TRANSMITTER	STAND STILL MONIT	REFER TO TABLE		XX	
16	SKRUV	VIS	SCHRAUBE	SCREW	SHS K6S 8X20	REFER TO TABLE		XX	
17	SENSOR	SENSOR	SENSOR	SENSOR	IA12DSN04PO-5M	REFER TO TABLE		XX	
18	SENSOR	SENSOR	SENSOR	SENSOR	IA12DSN08PO-5M	REFER TO TABLE		XX	

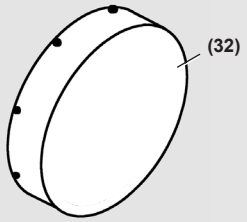
(XX=2436,2448,2460) (ALL = ALL VARIANTS) (WEF= SIN ENCLOSURE BUT CON VOLANTE) (WE = WITHOUT ENCLOSURE)



(A) =SAFETY TRANSMISSION WITHOUT ENCLOSURE, WITHOUT FLYWHEEL

3-60111





(B) = SAFETY TRANSMISSION WITHOUT ENCLOSURE, WITH FLYWHEEL

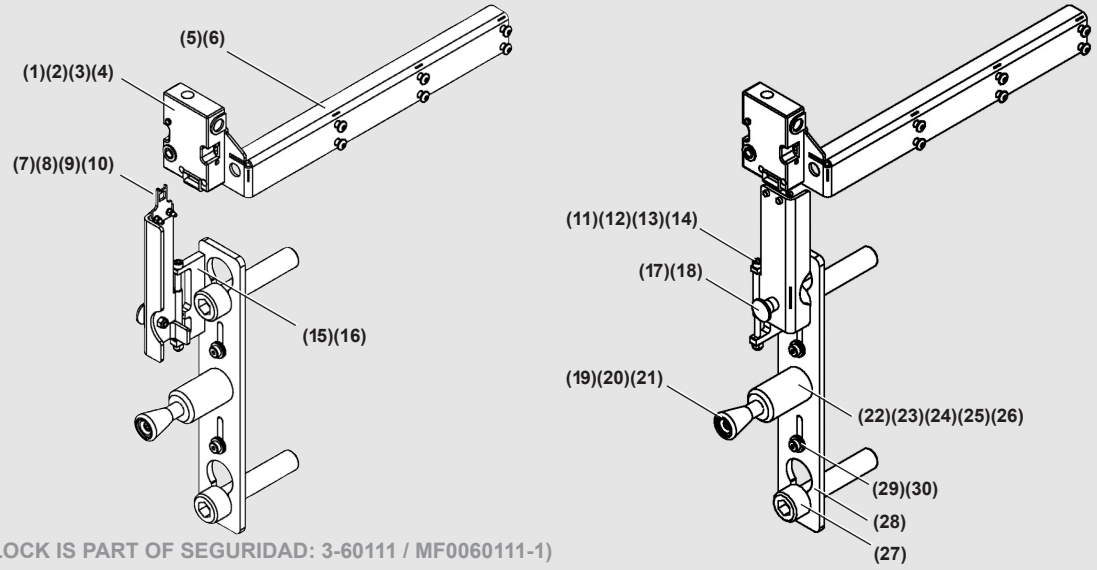
3-60128

P	SE	FR	DE	GB - DETAIL	SPECIFICATION	ART NO	Q	M	V
19	HÅLLARE	FIXATION	HALTER	HOLDER	STAND STILL MONITOR	80060641	1	XX	ALL
20	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6LS 8X16	9-40579	3	XX	
21	SENSOR	SENSOR	SENSOR	SENSOR	IA12DSN04PO-5M	9-11758	1	XX	
22	FÄSTE	FIXATION	BFESTIGUNG	BRACKET	SENSOR	80060527	1	XX	ALL
23	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 12X30	9-40106	1	XX	
24	BRYTARE	INTERUPTEUR	SCHALTER	SWITCH	MAGNET BNS 33-12Z	REFER TO TABLE		XX	
25	BRYTARE	INTERUPTEUR	SCHALTER	SWITCH	MAGNET FOR, BPS 33-2	REFER TO TABLE		XX	
26	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 4X25	REFER TO TABLE		XX	
27	MUTTER	ÉCROU	MUTTER	NUT	LOC-KING M 4 LOW	REFER TO TABLE		XX	
28	SKYDD	PROTECTION	SCHUTZ	PROTECTION	SHAFT BLANK	80060520	4	XX	WE
							8	XX	WEF
29	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 12X55	9-40125	6	XX	WE
							12	XX	WEF
30	SKYDD	PROTECTION	SCHUTZ	PROTECTION	SHAFT	80060519	1	XX	WE
31	SKRUV	VIS	SCHRUABE	SCREW	SHS MC6S 12X35	9-40075	6	XX	
32	SKYDD	PROTECTION	SCHUTZ	PROTECTION	SHAFT	80060414	1	XX	WEF

(XX =2436,2448,2460) (ALL = ALL VARIANTS) (WEF= SIN ENCLOSURE BUT CON VOLANTE) (WE = WITHOUT ENCLOSURE)

	POWER	FRICT COUP	GRANULE BINS	(25) SWITCH 9-11728	(24) SWITCH 9-11727	(26) SCREW 9-40638	(27) NUT 9-40315	(18) SENSOR 9-112275	(17) SENSOR 9-11758	(15) TRANSM 2 PÇS	(16) SCREW 9-40662
1	55-110KW	X	1 PÇS	1 PÇS	1 PÇS	4 PÇS	4 PÇS	2 PÇS	2 PÇS	80060709	4 PÇS
2	55-110KW	X	2 PÇS	2 PÇS	2 PÇS	8 PÇS	8 PÇS	2 PÇS	2 PÇS	80060709	4 PÇS
3	55-110KW	-	1 PÇS	1 PÇS	1 PÇS	4 PÇS	4 PÇS	-	3 PÇS	-	-
4	55-110KW	-	2 PÇS	2 PÇS	2 PÇS	8 PÇS	8 PÇS	-	3 PÇS	-	-
5	132-160KW	X	1 PÇS	1 PÇS	1 PÇS	4 PÇS	4 PÇS	2 PÇS	2 PÇS	80060582	4 PÇS
6	132-160KW	X	2 PÇS	2 PÇS	2 PÇS	8 PÇS	8 PÇS	2 PÇS	2 PÇS	80060582	4 PÇS
7	132-160KW	-	1 PÇS	1 PÇS	1 PÇS	4 PÇS	4 PÇS	-	3 PÇS	-	-
8	132-160KW	-	2 PÇS	2 PÇS	2 PÇS	8 PÇS	8 PÇS	-	3 PÇS	-	-

Safety, Lock, Hopper & Cutter housing

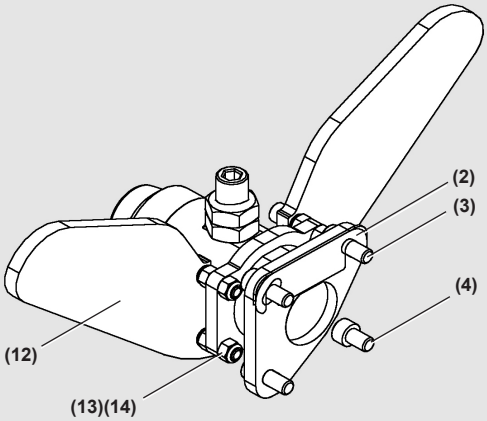


LOCK
2-60370 (LOCK IS PART OF SEGURIDAD: 3-60111 / MF0060111-1)

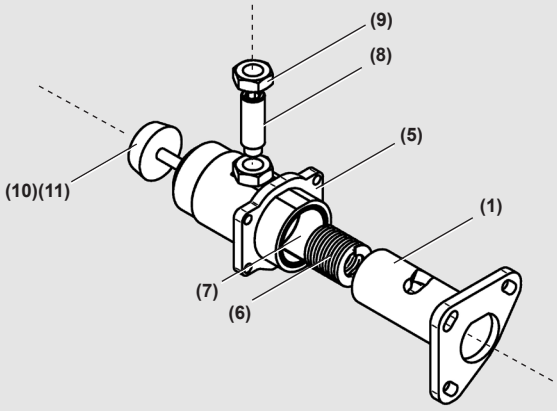
P	SE	FR	DE	GB - DETAIL	SPECIFICATION	ART NO	Q	M	V
1	BRYTARE	INTERRUPTEUR	SCHALTER	SWITCH TUMBLER	LOCK TLS1-GD2	9-93207	1	XX	
2	BRICKA	RONDELLE	SCHEIBE	WASHER	KROSV	8453504	1	XX	
3	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 5X22	9-40217	2	XX	
4	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 5X35	9-40174	2	XX	
5	HÅLLARE	FIXATION	HALTER	HOLDER	SWITCH	80060377	1	XX	
6	SKRUV	VIS	SCHRAUBE	SCREW	SHS K6SF 8X25 10.9	9-40955	6	XX	
7	NYCKEL	CLÉ	SCHLÜSSEL	KEY	FLAT GUARD MASTER	9-11649	1	XX	
8	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 5X22	9-40217	2	XX	
9	BRICKA	RONDELLE	SCHEIBE	WASHER	BRB 5,3 FZB	9-40243	2	XX	
10	MUTTER	ÉCROU	MUTTER	NUT	LOC-KING M 5	9-40267	2	XX	
11	SKYDD	VIS	SCHRAUBE	PROTECTION	LOCKING CLIP	80060376	1	XX	
12	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 8X140	9-40355	1	XX	
13	FJÄDRANDE TR	ELASTIQUE	FEDERNDE	SPRUNG BOLT	GN614 D=6	9-50763	1	XX	
14	MUTTER	ÉCROU	MUTTER	NUT	LOC-KING M 8	9-40317	1	XX	
15	GÅNGJÄRN	CHARNIÈRE	SCHARNIER	HINGE	HINGE	80060374	1	XX	ALL
16	SKRUV	VIS	SCHRAUBE	SCREW	SHS MF6S 5X18	9-40611	3	XX	
17	KNOPP	POIGNÉE	KNOPF	KNOB	LN11 GS 33-M8	9-50778	1	XX	
18	MUTTER	ÉCROU	MUTTER	NUT	LOC-KING M 8	9-40317	1	XX	
19	HANDTAG	POIGNÉE	GRIFF	HANDLE	KNOB	80060638	1	XX	
20	KNOPP	POIGNÉE	KNOPF	KNOB	WN 41 40-8	9-50681	1	XX	
21	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 8X40	9-40200	1	XX	
22	HÅLLARE	FIXATION	HALTER	HOLDER	SPRING HANDLE KROS	8453401	1	XX	
23	SKRUV	VIS	SCHRAUBE	SCREW	SHS MF6S 5X18	9-40611	2	XX	
24	TRYCKFJÄDER	RESSORT PRE	DRUCKFEDER	COMPRESSION SPRIN	DY=24,77 DT=2,16 LO=50	9-50697		XX	
25	BRICKA	RONDELLE	SCHEIBE	WASHER	21X32X4 DIN 1441 FZB	9-40960	1	XX	
26	LÅSBRICKA	RONDELLE	SCHEIBE	LOCK WASHER	FOR SHAFTS RSM	9-40944	1	XX	
27	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 30X140 ISO47	9-41084	2	XX	
28	LÅSBLECK	LAME VERRO	SCHLOSSBLE	LOCKING CLIP	LOCK	80060371	1	XX	
29	SKRUV	VIS	SCHRAUBE	FITTING BOLT	M 8 X 10 X 16MM	9-50745	2	XX	
30	BRICKA	RONDELLE	SCHEIBE	WASHER	SPRING 23X10,2X0,9	9-40961	12	XX	

(XX =2436,2448,2460) (ALL = ALL VARIANTS)

Safety, Rotor locking



LOOSE PARTS FOR ROTOR LOCKING
(PART OF SEGURIDAD: 3-60111 / MF0060111-1)

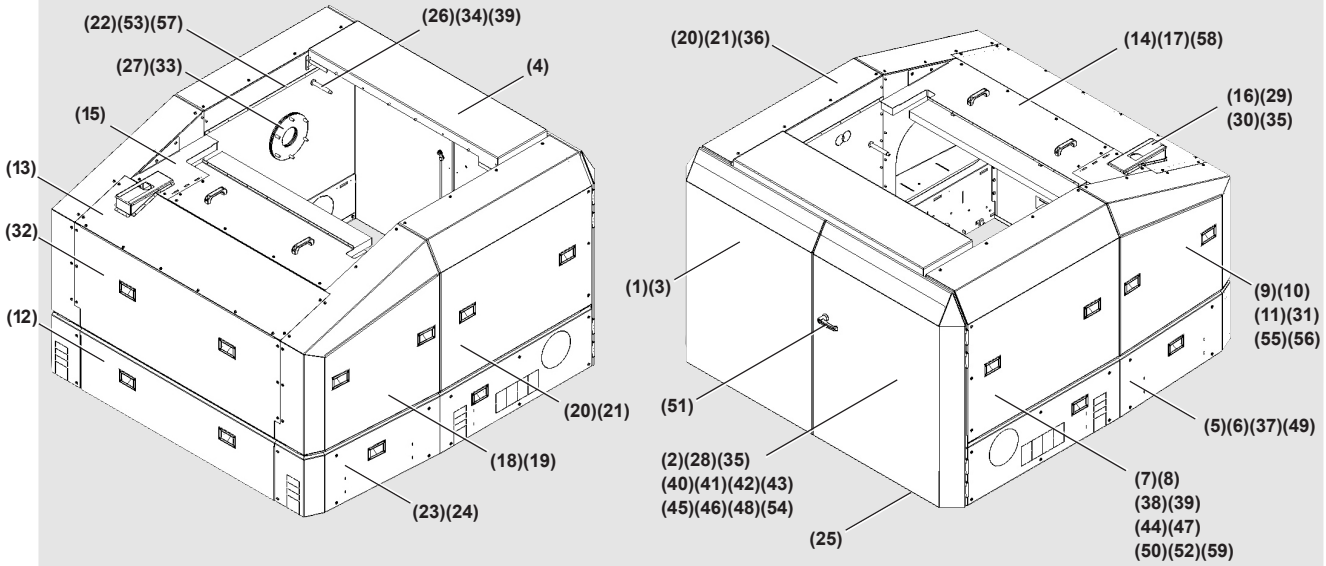


ROTOR LOCKING
3-60610
(PART OF SEGURIDAD: 3-60111 / MF0060111-1)

P	SE	FR	DE	GB - DETAIL	SPECIFICATION	ART NO	Q	M	V
1	KUTTERLÅS	VERROU ROT	ROTORARRITE	ROTOR LOCKING	FIXED	80060612	1	XX	ALL
2	DISTANS	ENTRETOISE	ABSTANDSTÜC	DISTANCE	T=2 ROTOR LOCKING	80060617	4	XX	WE
							2	XX	WEF
3	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 10X25	9-40573	3	XX	
4	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 10X16	9-40201	1	XX	
5	KUTTERWLÅS	VERROU ROT	ROTORARRITE	ROTOR LOCKING	MOVABLE	80060611	1	XX	
6	TRYCKFJÄDER	RESSORT	DRUCKFEDER	COMPRESSION SPRIN	----	9-50685	2	XX	
7	GLIDLAGER	PALIER LISSE	GLEITLAGER	SLIDE BEARING	PCM 505530 M	9-60221	1	XX	
8	SKRUV	VIS	SCHRAUBE	GRUB SCREW	T6SS 20X60X1,5	9-40862	1	XX	
9	MUTTER	ÉCROU	MUTTER	NUT	LOW ML6M M 20 STIG	9-40392	1	XX	ALL
10	DÄMPARE	DAMPER	DAMPFER	DAMPER	D=50 X 17 M10X28	9-50687	1	XX	
11	MUTTER	ÉCROU	MUTTER	NUT	M6M M 10 FZB	9-40030	1	XX	
12	HANDAG	POIGNE	GRIFF	HANDLE	ROTOR LOCKING	80060615	1	XX	
13	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 8X40	9-40200	4	XX	
14	MUTTER	ÉCROU	MUTTER	NUT	LOC-KING M 8	9-40317	8	XX	

(XX =2436,2448,2460) (ALL = ALL VARIANTS) (WE = SIN ENCLOSURE) (WEF = SIN ENCLOSURE CON FLYWHEEL)

Safety, Enclosure

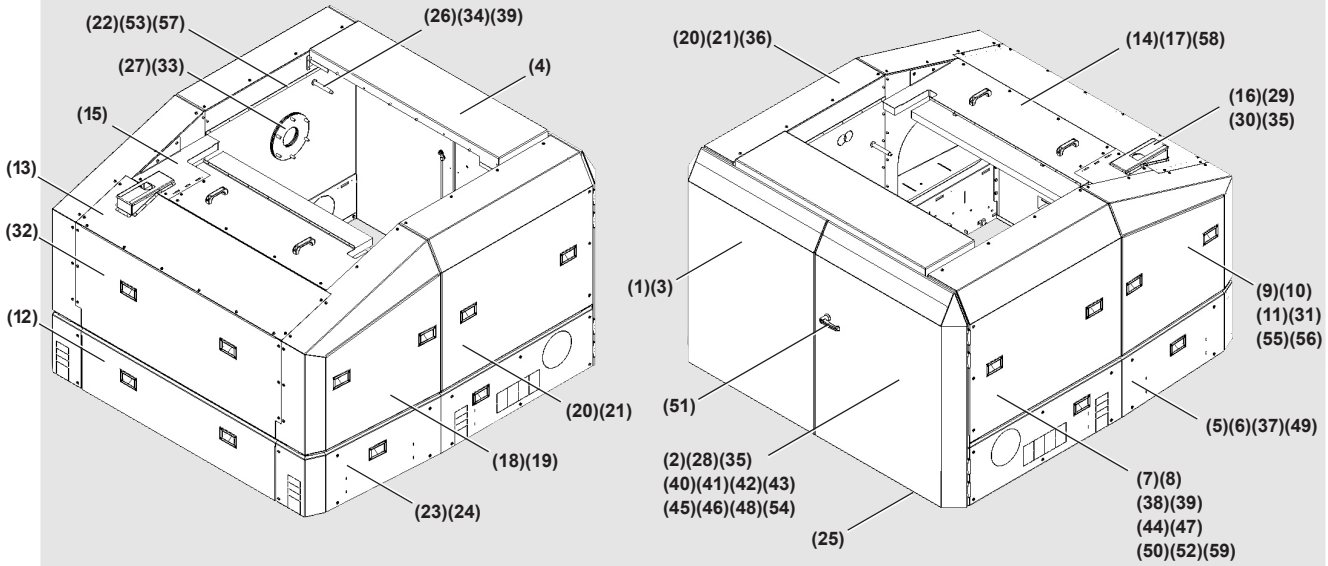


(A) = ENCLOSURE
3-60186, 3-60113

P	SE	FR	DE	GB-DETAIL	SPECIFICATION	ART NO	Q	M	V
(A)	KAPSLING	ENCAPSULAGE	KASPELUNG	ENCLOSURE	COMPLETE SET	MF0060186-*	1	2436	
						MF0060113-*	1	2448	
1	DÖRR	PORTE	TÛR	DOOR		80063249	1	2436	
					L	80060484	1	2448	
2	DÖRR	PORTE	TÛR	DOOR		80063250	1	2436	
					R	80060485	1	2448	
3	BAKPLÅT	PLAQUE AR	BLECH HINT	BACK PLATE		80063251	2	2436	
					DOOR	80060486	2	2448	
4	DISTANS	ENTRETOISE	ABSTANDSTÜ	DISTANCE		80063258	1	2436	B
					HOPPER	80062470	1	2448	
						80063260	1	2436	F
						80060469	1	2448	
						80063260	1	2436	M
						80060469	1	2448	
5	KÅPA	CAPOT	HAUBE	COVER	R LOWER	80060492	1	XX	
6	KAPSLING	ENCAPSULAGE	KASPELUNG	ENCLOSURE	COVER R LOWER	80060501	1	XX	
7	KÅPA	CAPOT	HAUBE	COVER	FRONT R	80060488	1	XX	
8	KAPSLING	ENCAPSULAGE	KASPELUNG	ENCLOSURE	COVER R FRONT	80060506	1	XX	
9	KÅPA	CAPOT	HAUBE	COVER	BACK R	80060490	1	XX	
10	KAPSLING	ENCAPSULAGE	KASPELUNG	ENCLOSURE	COVER R BACK	80060507	1	XX	
11	FÖRSTÄRKNI	RENFORCEME	VERSTÄRKUNG	REINFORCEMENT	COVER	80060518	2	XX	
12	KAPSLING	ENCAPSULAGE	KASPELUNG	ENCLOSURE		80063252	1	2436	
					BACK LOWER	80060510	1	2448	
13	KAPSLING	ENCAPSULAGE	KASPELUNG	ENCLOSURE		80063253	1	2436	
					BACK UPPER	80060511	1	2448	

(XX = 2436,2448,2460) (F= ENCLOSURE FRONT) (B= ENCLOSURE BACK) (M = ENCLOSURE MAX)
(-* = ADD -A, -B O -C) (-A = FRONT, -B = BACK, -C = MAX)

Safety, Enclosure

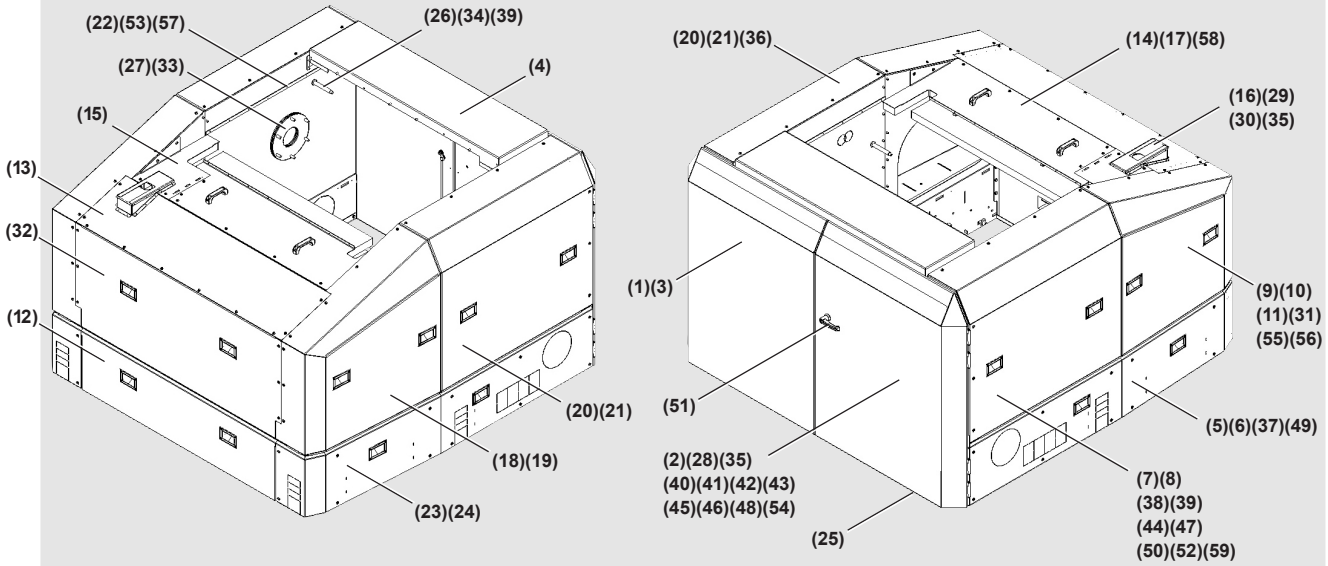


(A) = ENCLOSURE
3-60186, 3-60113

P	SE	FR	DE	GB-DETAIL	SPECIFICATION	ART NO	Q	M	V
14	BAKPLÅT	PLAQUE AR	BLECH HINT	BACK PLATE		80063255	1	2436	B
						80062066	1	2448	
						80063256	1	2436	F
					BACK L TOP PART	80060512	1	2448	
						80063255	1	2436	M
						80062066	1	2448	
15	KAPSLING	ENCAPSULAGE	KASPELUNG	ENCLOSURE	BACK R TOP PART	80060513	1	XX	
16	FÄSTE	FIXATION	BEFESTIGUNG	BRACKET	SEALING HOPPER DEVIC	80060517	1	XX	
17	HANDTAG	POIGNÉE	GRIFF	HANDLE	CLAMP WN 130 132-M8	9-91984	2	XX	
18	KÅPA	CAPOT	HAUBE	COVER	L BACK	80060491	1	XX	
19	KAPSLING	ENCAPSULAGE	KASPELUNG	ENCLOSURE	COVER L BACK	80060509	1	XX	
20	KÅPA	CAPOT	HAUBE	COVER	L FRONT	80060489	1	XX	
21	KAPSLING	ENCAPSULAGE	KASPELUNG	ENCLOSURE	COVER L FRONT	80060508	1	XX	
22	HÅLLARE	FIXATION	HALTER	HOLDER	LIST	80060526	2	XX	
23	KÅPA	CAPOT	HAUBE	COVER	L LOWER	80060493	1	XX	
24	KAPSLING	ENCAPSULAGE	KASPELUNG	ENCLOSURE	COVER L LOWER	80060502	1	XX	
25	BOTTENPLÅT	PLAQUE	BODENBLECH	BOTTOM PLATE		80063257	1	2436	
					---	80060516	1	2448	
26	DISTANS	ENTRETOISE	ABSTANDSTÜ	DISTANCE	BLANK D19X3 L=130	80060413	4	XX	
27	SKYDD	PROTECTION	SCHUTZ	PROTECTION	SHAFT BLANK	80060520	8	XX	
28	DISTANS	ENTRETOISE	ABSTANDSTÜ	DISTANCE	LOCK DOOR, BLACK	8345341	1	XX	
29	FÄSTE	FIXATION	BEFESTIGUNG	BRACKET	SEALING HOPPER DEVIC	80062456	1	XX	
30	TÄTNING	ÉTANCHÉITÉ	DICHTUNG	SEALING	HOPPER DEVICE	80062457	1	XX	
31	ABSORBENT		ABSORBENT	ABSORBENT		80062472	1	2436	
						80062093	1	2448	
32	KAPSLING	ENCAPSULAGE	KASPELUNG	ENCLOSURE		80063254	1	2436	
						80060791	1	2448	

(XX =2436,2448,2460) (F= ENCLOSURE FRONT) (B= ENCLOSURE BACK) (M = ENCLOSURE MAX)

Safety, Enclosure

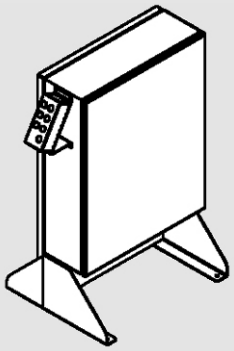


(A) = ENCLOSURE
3-60186, 3-60113

P	SE	FR	DE	GB-DETAIL	SPECIFICATION	ART NO	Q	M	V
33	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 12X55	9-40125	12	XX	
34	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 12X160	9-41085	4	XX	
35	SKRUV	VIS	SCHRAUBE	SCREW	MONTAGE DRILW 4,8X16	9-40750	70	XX	
36	SKRUV	VIS	SCHRAUBE	SCREW	SHS K6SF 8X16 10.9	9-40885	135	XX	
37	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 16X30 12.9	9-41073	16	XX	
38	BRICKA	RONDELLE	SCHEIBE	WASHER	BRB 17,0	9-40035	6	XX	
39	BRICKA	RONDELLE	SCHEIBE	WASHER	HARDENED M12 AMF D	9-40060	8	XX	
40	MUTTER	ÉCROU	MUTTER	NUT	BLIND RIVET M 6 HEX	9-50550	3	XX	
41	LIST	BAGUETTE	LEISTE	LIST	CLIPS ART. NR. 53	9-70156	1	XX	
42	LIST	BAGUETTE	LEISTE	LIST	SEALING NR. 099063	9-70157	1	XX	
43	MUTTER	ÉCROU	MUTTER	NUT	LOC-KING M 6	9-40316	3	XX	
44	HANDTAG	POIGNÉE	GRIFF	HANDLE	135X88 KH38-1006	9-50782	16	XX	
45	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 6X16	9-40039	3	XX	
46	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 6X30	9-40077	3	XX	
47	SKRUV	VIS	SCHRAUBE	SCREW	SHS MF6S 4X16	9-40610	64	XX	
48	DISTANS	ENTRETOISE	ABSTANDSTÜ	DISTANCE	SLEEVE D=30/8,5X8,5	8422129	1	XX	
49	SKRUV	VIS	SCHRAUBE	SCREW	HALFEN SCREW M16X40	9-50884	6	XX	
50	MUTTER	ÉCROU	MUTTER	NUT	LOC-KING M 4 LOW	9-40315	64	XX	
51	LÅS	VERROU	SCHLOSS	LOCK	DOOR	9-50755	1	XX	
52	HÅLLARE	FIXATION	HALTER	HOLDER	LIST	80062455	2	XX	
53	LIST	BAGUETTE	LEISTE	LIST	RUBBER EPDM 55 X 35	9-70346	1	XX	
54	GÅNGJÄRN	CHARNIÈRE	SCHARNIER	HINGE	STAINLESS STEEL BLA	9-50585	8	XX	
55	MUTTER	ÉCROU	MUTTER	NUT	BLIND RIVET M 8 STEEL	9-50750	51	XX	
56	SKRUV	VIS	SCHRAUBE	SCREW	TAPPING TAPTITE 8X16	9-40444	30	XX	
57	POPNIT	RIVET	NIET	POP-RIVET	STEEL D 4,8X20,0	9-40704	24	XX	
58	SKRUV	VIS	SCHRAUBE	SCREW	SHS MC6S 8X25	9-40097	4	XX	
59	LIST	BAGUETTE	LEISTE	LIST	EPDM BLACK	9-90922	1	XX	

(XX = 2436,2448,2460) (F= ENCLOSURE FRONT) (B= ENCLOSURE BACK) (M = ENCLOSURE MAX)

Safety, Electrical cabinet

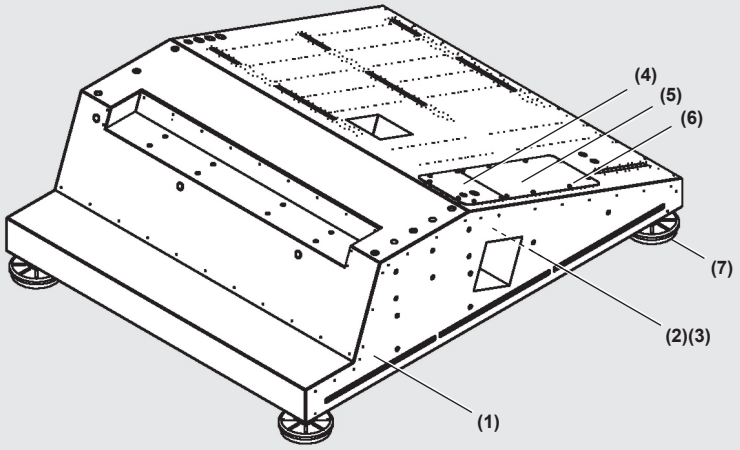


(A) = ELECTRICAL CABINET 55KW
3-60130

P	SE	FR	DE	GB - DETAIL	SPECIFICATION	ART NO	Q	M	V
(A)	ELKOMPONENT	ÉLECTRIQUES	EL. BAUTEILE	ELECTR COMP 55 KW	COMPLETE SET	MF0060130	1	XX	55
(B)	START UTRUST	ÉQUIP DÉMAR	START AUSRÜS	START EQUIPMENT	COMPLETE SET	MF-SE600	1	XX	
1	STATIV	BÂTI	GESTELL	STAND	EL.CABINET 600X760	8242136	1	XX	55
2	FÄSTE	FIXATION	BEFESTIGUN	BRACKET	OPERATING BOX BLACK	8320942	1	XX	
3	MANÖVERPAN	TABLEAU COM	BEDIENPULT	OPERATING BOX	3 SB 3804-0AA	9-11502	1	XX	
4	SKRUV	VIS	SCHRAUBE	SCREW	TAPPING TAPTITE 6X10	9-40552	4	XX	

(XX = 2436,2448,2460) (ALL = ALL VARIANTS) (55 = ELECTRICAL CABINET FOR 55 KW MOTOR)

Body



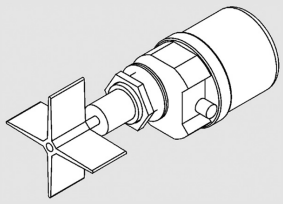
(A) = BODY CAST
3-60184, 3-60112, 3-60153

P	SE	FR	DE	GB - DETAIL	SPECIFICATION	ART NO	Q	M	V
(A)	UNDERREDE	CHÂSSIS	UNTERSTELL	BODY	COMPLET SET	MF0060184	1	2436	ALL
						MF0060112	1	2448	
						MF0060153	1	2460	
1	STATIV	BÂTI	GESTELL	STAND	---	80062018	1	2436	ALL
						80060534	1	2448	
						80060779	1	2460	
2	LOCK	COUVERCLE	DECKEL	COVER	ELECTRICAL CABINET	80060542	1	XX	ALL
3	SKRUV	VIS	SCHRAUBE	SCREW	SHS K6S 5X16	9-40796	4	XX	
4	LOCK	COUVERCLE	DECKEL	COVER	ELECTRICAL CABINET	80060541	1	XX	
5	LOCK	COUVERCLE	DECKEL	COVER	ELECTRICAL CABINET	80060389	1	XX	
6	SKRUV	VIS	SCHRAUBE	SCREW	SHS K6S 8X16	9-40806	14	XX	
7	MASKINSKO	SEMELLE	MASCHFUSS	MACHINE SHOE	OSM 5	9-50774	4	XX	

(XX =2436,2448,2460) (ALL = ALL VARIANTS)

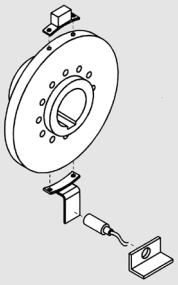
Options, Level switch, Hours counter, Stand still monitor, Current relay, Tools

(1)



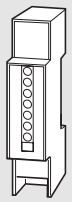
LEVEL SWITCH, PADDLE TYPE

(2)



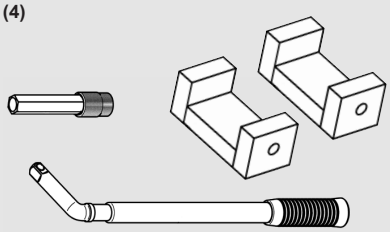
STANDSTILL MONITOR / SPEED MONITOR

(3)



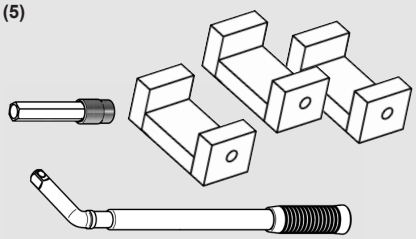
HOURS COUNTER

(4)



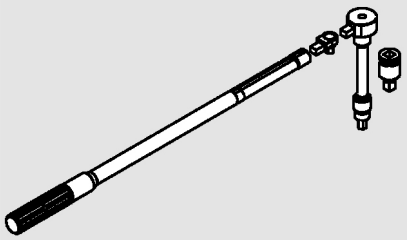
TOOL 1ST 2ND 4TH 5TH
3-60115

(5)



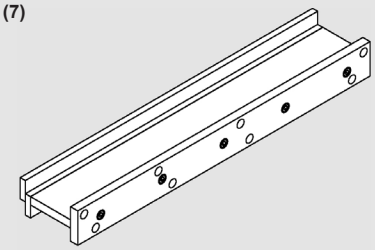
TOOL 1ST 2ND 3RD 4TH 5TH
3-60121

(6)



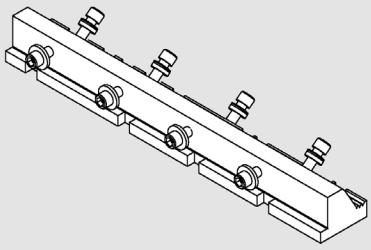
TOOL TORQUE WRENCH
3-47893

(7)



PRESETTING FIXTURE
3-60132

(8)



GRINDING FIXTURE
3-60133

(9)

CURRENT RELAY

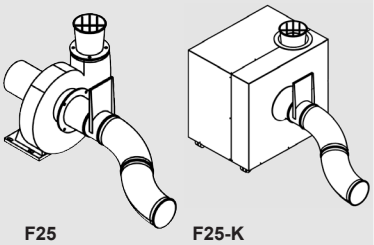
P	SE	FR	DE	GB - DETAIL	SPECIFICATION	ART NO	Q	M	V
1	NIVÅVAKT	INDIC. NIV	NIVÅWÄCHT	LEVEL INDICATOR	PADDLE SWITCH	*	1	XX	
2	STILLES.VAK	INDIC. ARRET	STILL.WÄCH	STAND STILL WA	----	*	1	XX	ALL
3	TIMRÄKNARE	COMPT. HOU	STUNDENZÄH	HOURS COUNTER	----	*	1	XX	
4	VERKTYG	OUTIL	WERKZEUG	TOOL	1A 2A 4E 5E	MF0060115	1	XX	1ST, 5TH
5	VERKTYG	OUTIL	WERKZEUG	TOOL	1A 2A 3E 4E 5E	MF0060121	1	XX	3RD
6	VERKTYG	OUTIL	WERKZEUG	TOOL		8347893	1	XX	
7	FÖRINSTÄLL	DISPOSITIF C	VOREINSTELL	PRESET	TOOL	80060132	1	XX	ALL
6	SLIPFIXTUR	DISPOSITIF A	SCHLEIFVOR	GRINDING	TOOL	80060133	1	XX	
9	STRÖMRELÄ	RELAI SÉLEC	STROMRELAI	CURRENT RELAY	CROUZET	*	1	XX	

(XX = =2436,2448,2460) (ALL = ALL MODELS) (1ST = CUTTER HOUSING 1ST) (5TH= CUTTER HOUSING 5TH) (3RD = CUTTER HOUSING 3RD)

* WHEN ORDERING THIS DETAIL : SPECIFY GB-DETAIL AND SPECIFICATION + THE SERIAL NO OF YOUR GRANULATOR.

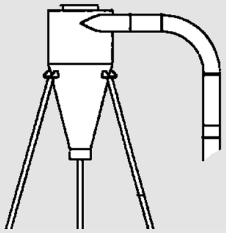
Material transport, Blower, Belt conveyor, Dust separator system

(A) = BLOWER



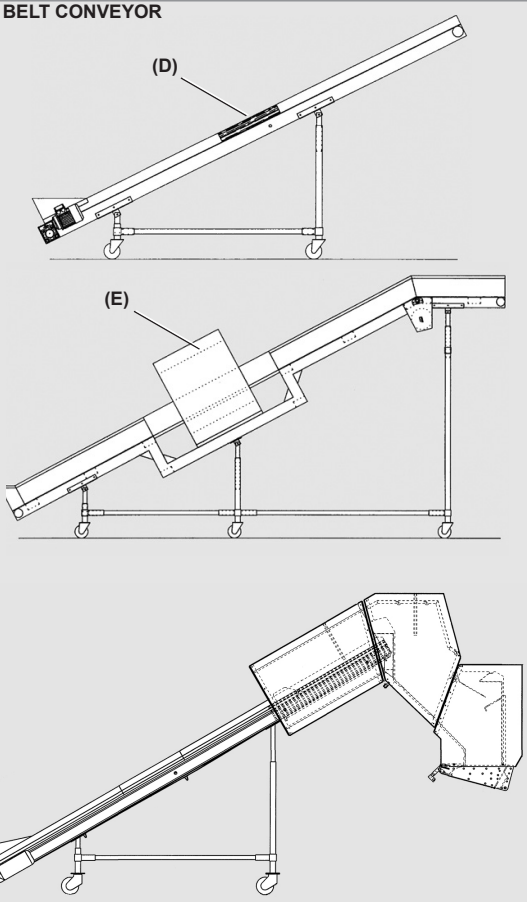
F25 3-52913
F25-K 3-29249
F40 3-52921
F40-K 3-40638
F37S 3-46772
F37S-K (HZS18/45K) 3-40315

(B) = CYCLONE



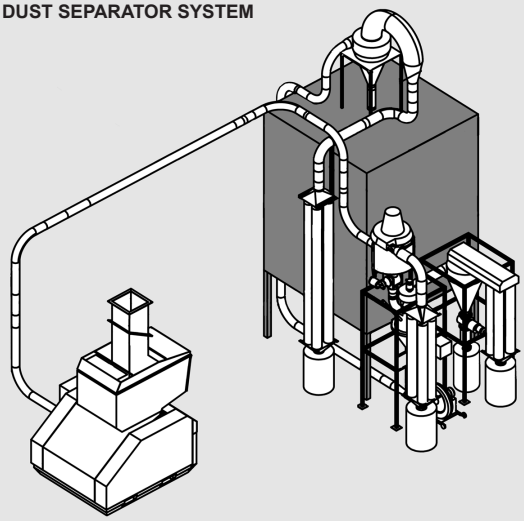
AX16 3-25862
AX20 3-36427

(C) = BELT CONVEYOR



BELT CONVEYOR
X-XXXXX

(F) = DUST SEPARATOR SYSTEM



P	SE	FR	DE	GB - DETAIL	SPECIFICATION	ART NO	Q	M	V
(A)	FLÄKT	VENTILATEUR	GEBLÄSE	BLOWER	F25	MF352921-*	1	XX	U
					F25K	MF329249-*	1	XX	
					F37S	MF346772-*	1	XX	
					F37S K	MF340315-*	1	XX	
					F40	MF352921-*	1	XX	
					F40K	MF340638-*	1	XX	
(B)	CYKLON	CYCLONE	CYKLON	CYCLONE	AX16	MF325862-*	1	XX	AX
					AX20	MF336427-*			
(C)	BANDTRANS	CONV BAND	BANDFÖRDE	BELT CONV COMPLET	B600	(----------) *	1	XX	B
					B900	(----------) *	1		
					B1500	(----------) *			
(D)	MET DETEKT	DÉT MÉTAL	MET DETEKT	METAL DETECTOR	AREA	(----------) *	1		B
(E)	MET DETEKT	DÉT MÉTAL	MET DETEKT	METAL DETECTOR	TUNNEL	(----------) *	1		
(F)	DAMMSEP SY	FILTR POUSS	STAUBFILTER	DUST SEPARATOR SY	DS50	*	1	XX	DS
					DS400	*	1		
					TRACS	*	1		

* WHEN ORDERING THIS DETAIL SPECIFY: GB-DETAIL Y SPECIFICATION + THE SERIAL NO OF YOUR GRANULATOR.

(XX =2436,2448,2460) (U = BLOWER) (AX = CYCLONE) (B = BELT CONVEYOR) (DS = DUST SEPARATOR SYSTEM)

List of drawings

Note! The articles in the spare parte catalogue in the previous pages are specified according to below listed drawings. CONAIR reserve the right to change designs, material and specifications without prior notice. In event of any questions, please contact CONAIR's local distributor or CONAIR's head office.

PART	SPECIFICATION	G600-90	G600-120	G600-150
FLAPS	FLA	3-60180	3-60105	3-60154
HOPPER	HOP	3-60181	3-60104	3-60155
	HOP ENCLOSURE	3-60182	3-60120	3-60156
HOPPER DEVICE	HOPD JACK	3-60106	3-60106	3-60106
CUTTER HOUSING	CUH 1ST	3-60170	3-60116	3-60140
	CUH 3RD	3-60172	3-60125	3-60142
	CUH 5TH	3-60171	3-60101	3-60141
ROTOR	ROT 3BL	3-60173	3-60102	3-60143
	ROT 3BL BEAM	3-60174	3-60118	3-60144
	ROT 5BL BEAM	3-60175	3-60117	3-60145
	ROT 7BL BEAM	3-60176	3-60119	3-60146
KNIVES	KNI 3BL	3-60177	3-60103	3-60147
	KNI 5BL	3-60178	3-60126	3-60148
	KNI 7BL	3-60179	3-60127	3-60149
FRONT DOOR / SCREEN BOX	SCRB	3-60183	3-60108	3-60150
SCREEN	SCR	2-60757	2-60360	2-60605
	SCR HA	NOT RELEASED	NOT RELEASED	NOT RELEASED
GRANULE BIN	DIS	3-60185	3-60110	3-60152
TRANSMISSION	TRA 50HZ	3-60109	3-60109	3-60109
	TRA 50HZ FRICT COUPL	3-60122	3-60122	3-60122
	TRA 60HZ	3-60123	3-60123	3-60123
	TRA 60HZ FRICT COUPL	3-60124	3-60124	3-60124
FLY WHEEL	FWH FRICT COUPL	3-60129	3-60129	3-60129
SAFETY	SAFE	3-60111	3-60111	3-60111
	SAFE FWH-GUARD	3-60128	3-60128	3-60128
	SAFE ENCLOSURE	3-60131	3-60131	3-60131
ENCLOSURE	ENC	3-60186	3-60113	3-60157
ELECTRICAL COMPONENTS	ELC 55KW	3-60130	3-60130	3-60130
BODY	BODY MACHINE SHOE	3-60184	3-60112	3-60153
OPTIONS	BLO F25	3-52913	3-52913	3-52913
	BLO F25K	3-29249	3-29249	3-29249
	BLO F40	3-52921	3-52921	3-52921
	BLO F40K	3-40638	3-40638	3-40638
	BLO F37S	3-46772	3-46772	3-46772
	BLO F37SK (HZS18/45)	3-40315	3-40315	3-40315
	ATR AX16	3-25862	3-25862	3-25862
	ATR AX20	3-36427	3-36427	3-36427
TOOLS	TOOL 1245	3-60115	3-60115	3-60115
	TOOL 12345	3-60121	3-60121	3-60121
	TOOL MOMENT	3-47893	3-47893	3-47893
	TOOL FIXTURE	3-60132	3-60132	3-60132
	TOOL GRINDING FIX	3-60133	3-60133	3-60133