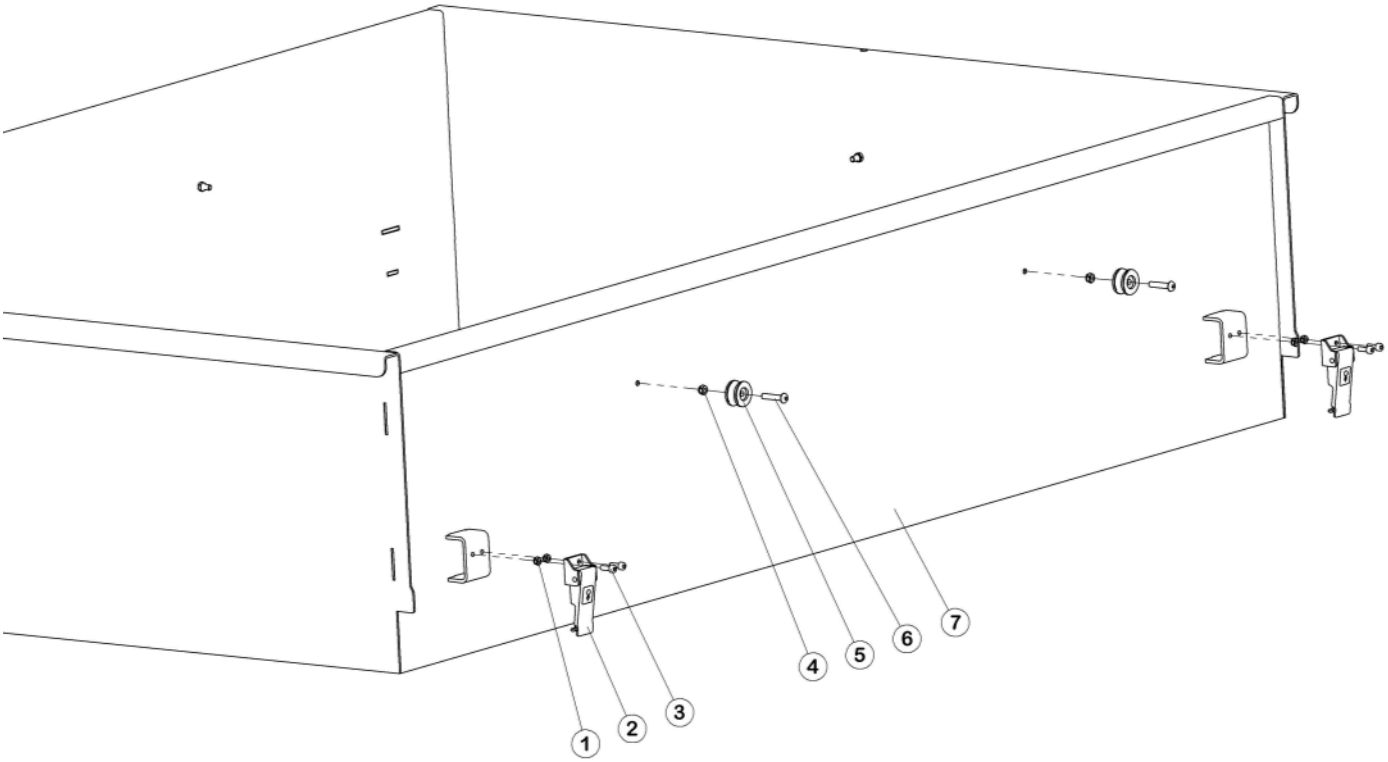
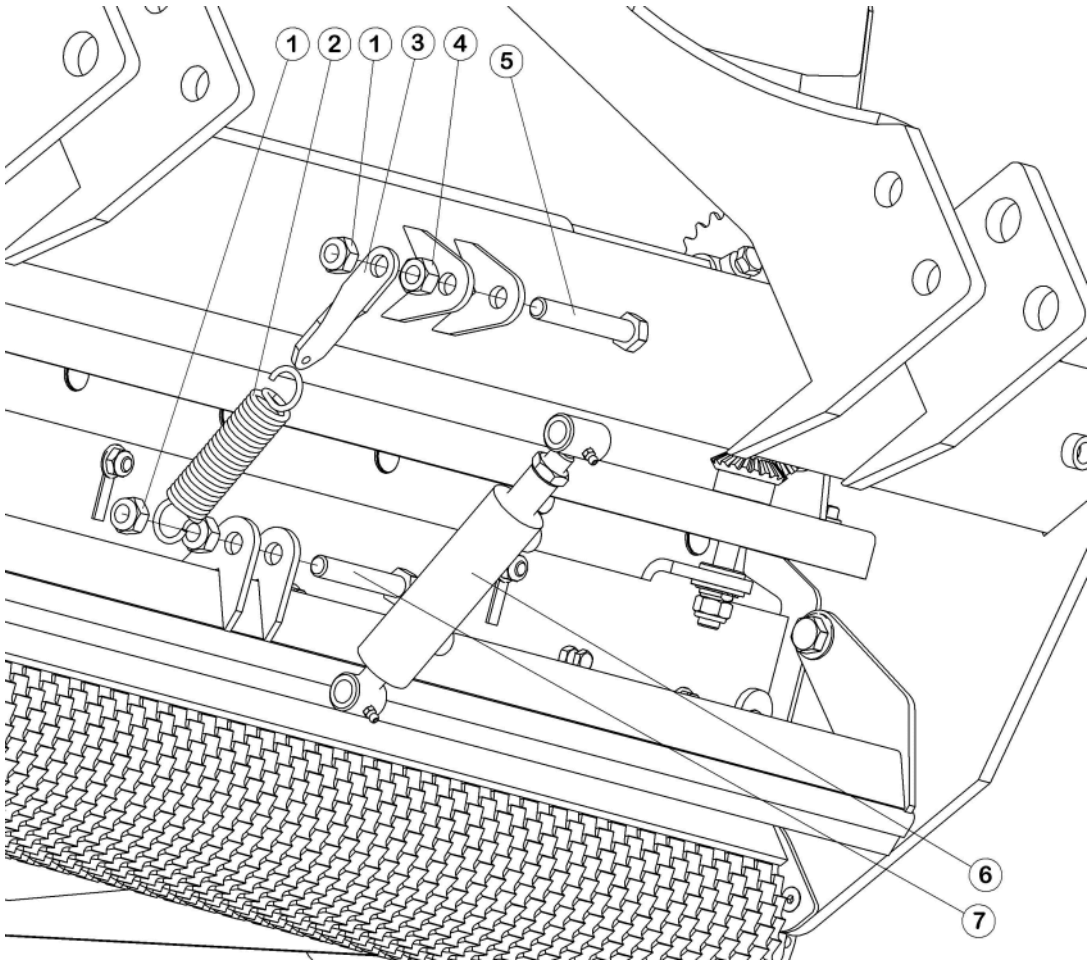
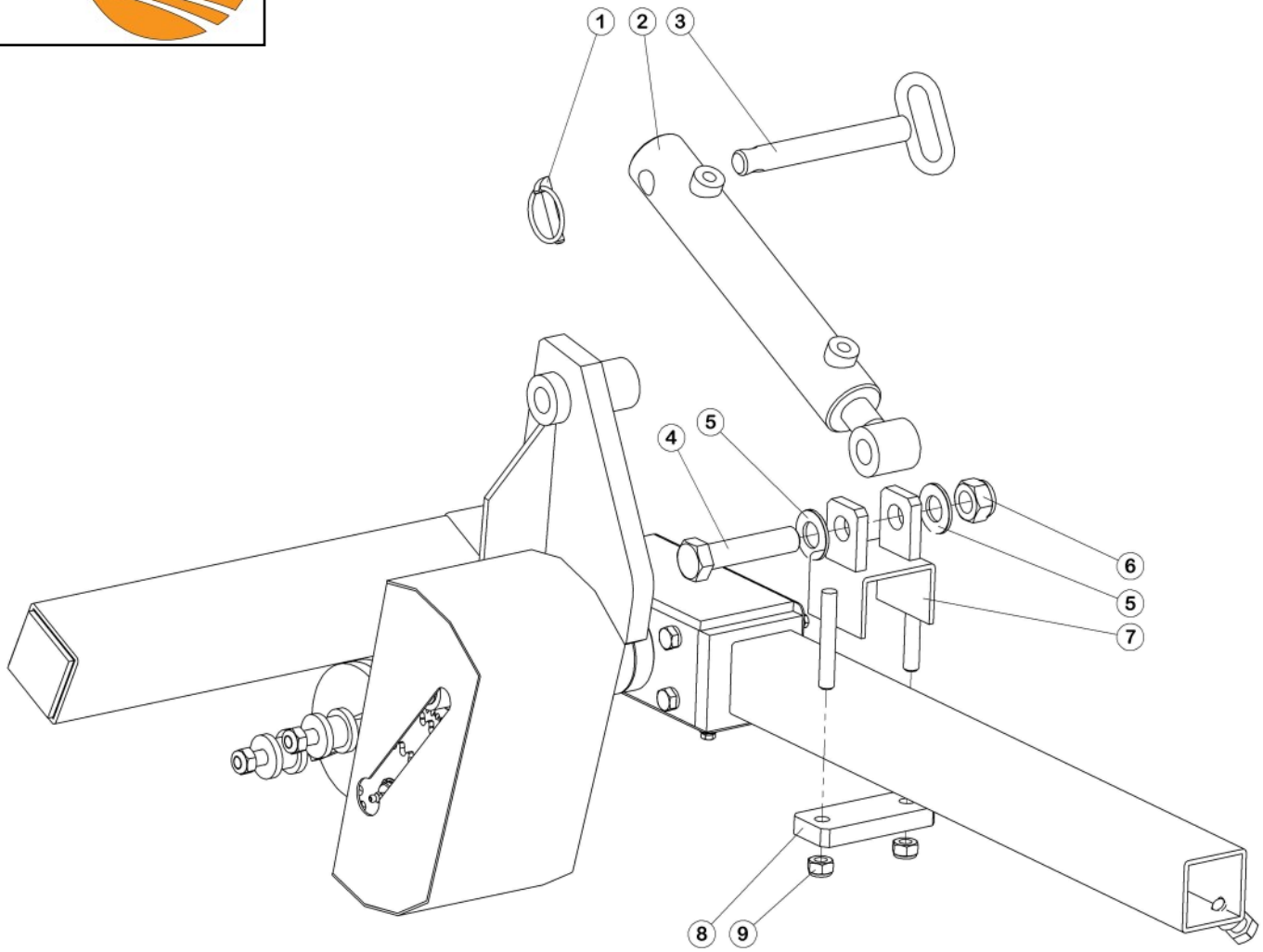
## OPTION: Raise case



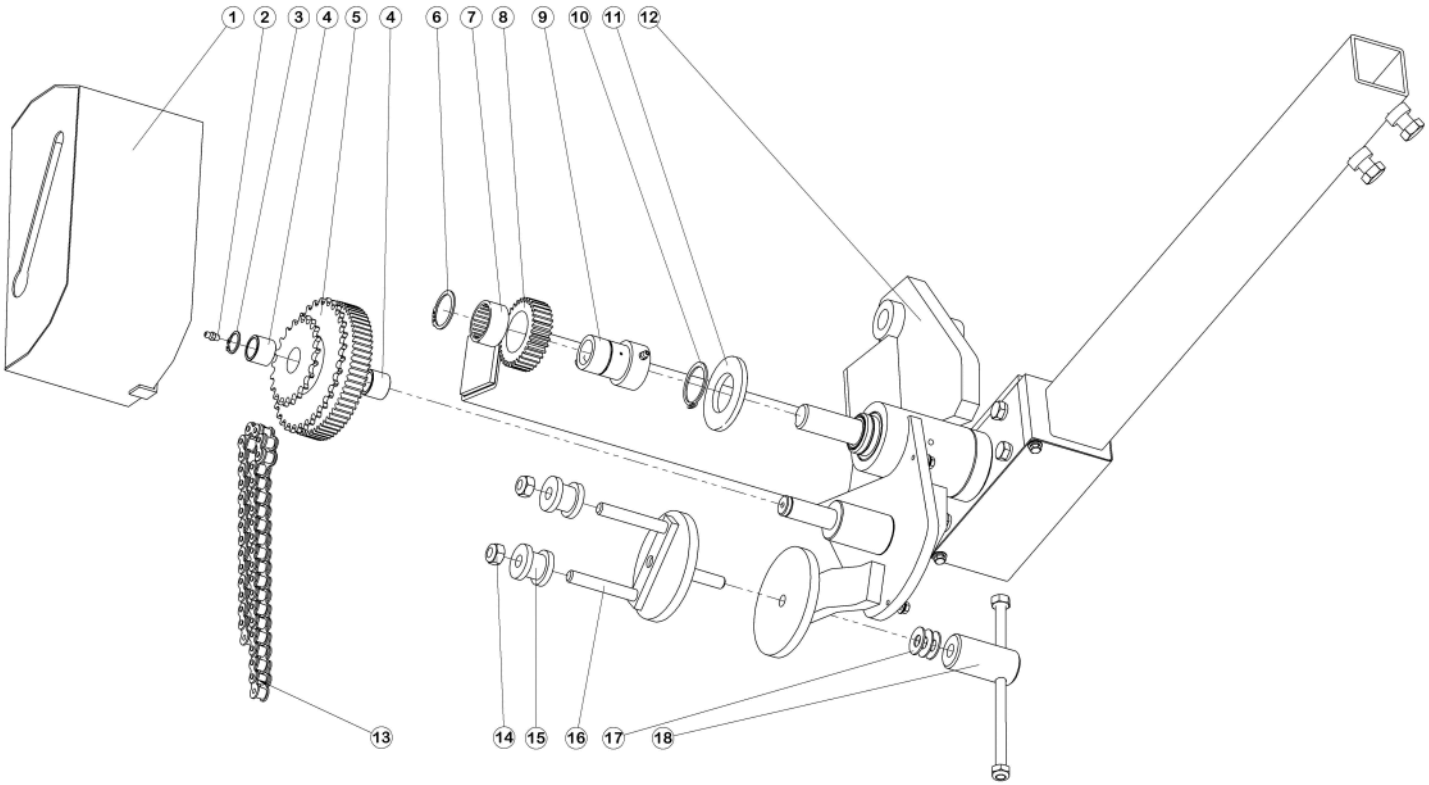

| Rep | Qty | Designation | Reference |
|---|---|---|---|
| 1 | 8 | Self-locking nut | CM112207 |
| 2 | 4 | Splashes | CM112208 |
| 3 | 8 | Screw TCHC | CM112209 |
| 4 | 6 | Self-locking nut | CM112210 |
| 5 | 6 | Black plastic pulley | CM112211 |
| 6 | 6 | Screw TBHC | CM112212 |
| 7 | 1 | Raise 1m25 | CM112213-1 |
| | 1 | Raise 1m55 | CM112213-2 |
| | 1 | Raise 1m65 | CM112213-3 |



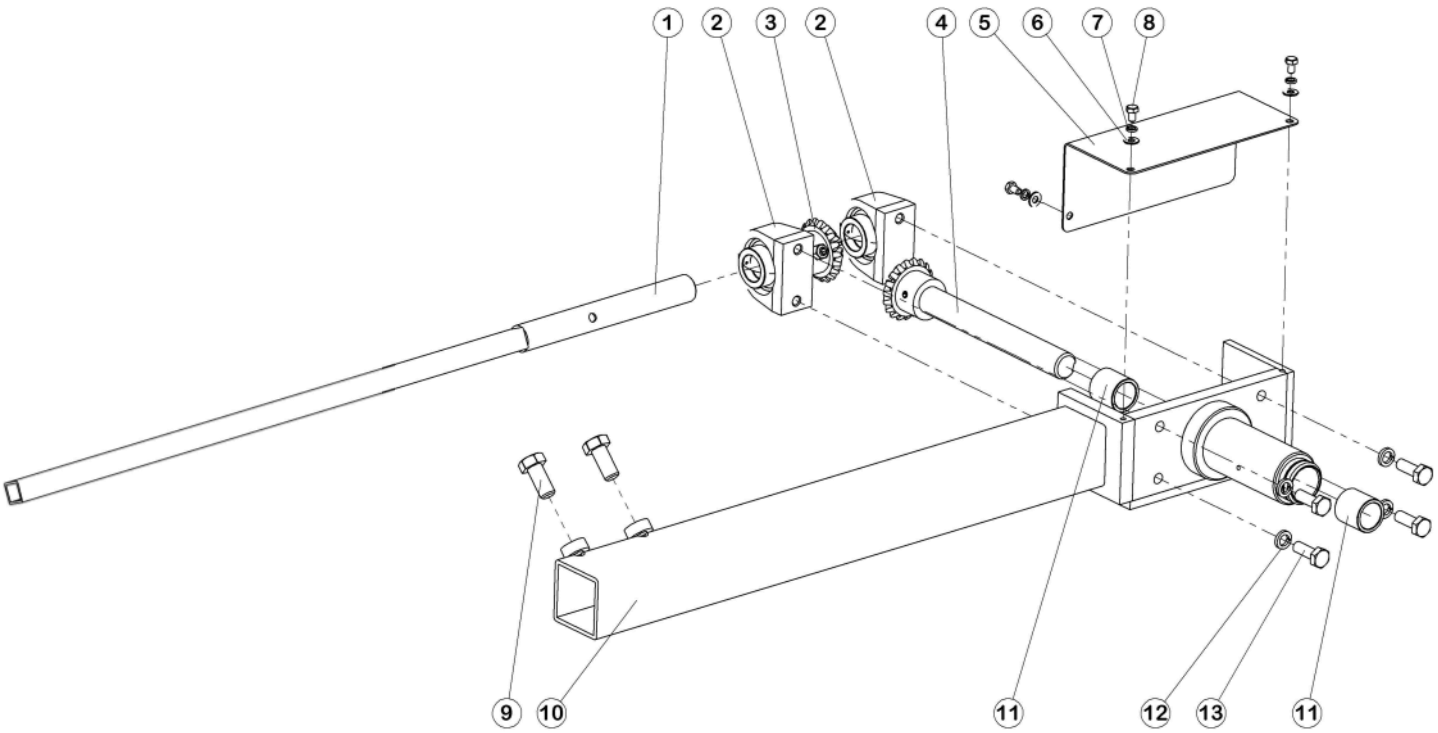

| Rep | Qty | Designation | Reference |
|---|---|---|---|
| 1 | 3 | Self-locking nut | CM112200 |
| 2 | 1 | Spring | CM112201 |
| 3 | 1 | Nut | CM112202 |
| 4 | 1 | Screw | CM112203 |
| 5 | 1 | Jack of door foams | CM112204 |
| 6 | 1 | Self-locking nut | CM112205 |
| 7 | 1 | Screw | CM112206 |



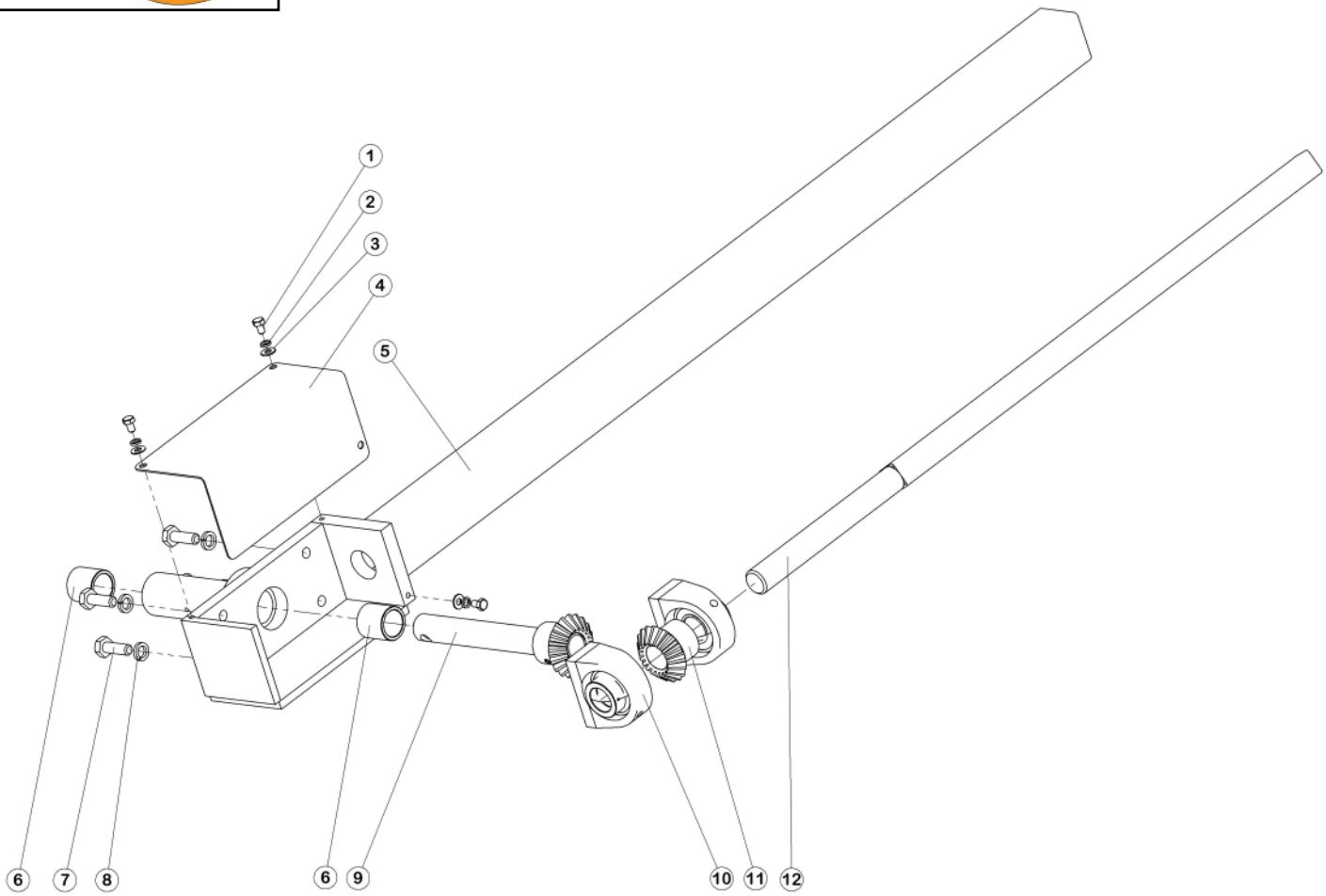

| Rep | Qty | Designation | Reference |
|---|---|---|---|
| 1 | 1 | Pin clips | CM112191 |
| 2 | 1 | Jack | CM112192 |
| 3 | 1 | Jack stitch | CM112193 |
| 4 | 1 | Screw | CM112194 |
| 5 | 2 | Disc punt | CM112195 |
| 6 | 1 | Self-locking nut | CM112196 |
| 7 | 1 | Adjustable support of jack | CM112197 |
| 8 | 1 | Laminate | CM112198 |
| 9 | 4 | Self-locking nut | CM112199 |



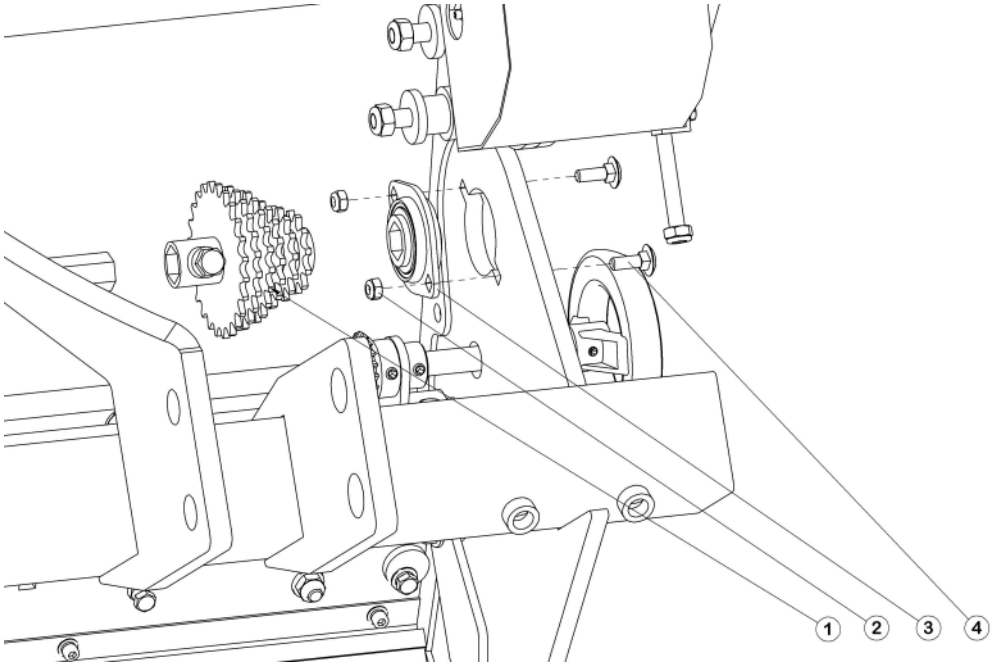

| Rep | Qty | Designation | Reference |
|---|---|---|---|
| 1 | 1 | Casing | CM112173 |
| 2 | 1 | Greasing device | CM112174 |
| 3 | 1 | Circlips | CM112175 |
| 4 | 2 | Ring bronze | CM112176 |
| 5 | 1 | Reducing pinion | CM112177 |
| 6 | 1 | Circlips | CM112178 |
| 7 | 1 | Free wheel | CM112179 |
| 8 | 1 | Driving pinion | CM112180 |
| 9 | 1 | Free wheel axle | CM112181 |
| 10 | 1 | Circlips | CM112182 |
| 11 | 1 | Disc punt | CM112183 |
| 12 | 1 | Support of APS | CM112184 |
| 13 | 1 | Chain + fast Attache | CM112185 |
| 14 | 2 | Nylstop self-locking nut | CM112186 |
| 15 | 2 | Idler roller | CM112187 |
| 16 | 1 | Tensioner of chain | CM112188 |
| 17 | 3 | Belleville spring washer | CM112189 |
| 18 | 1 | Blocking of tensioner of chain | CM112190 |



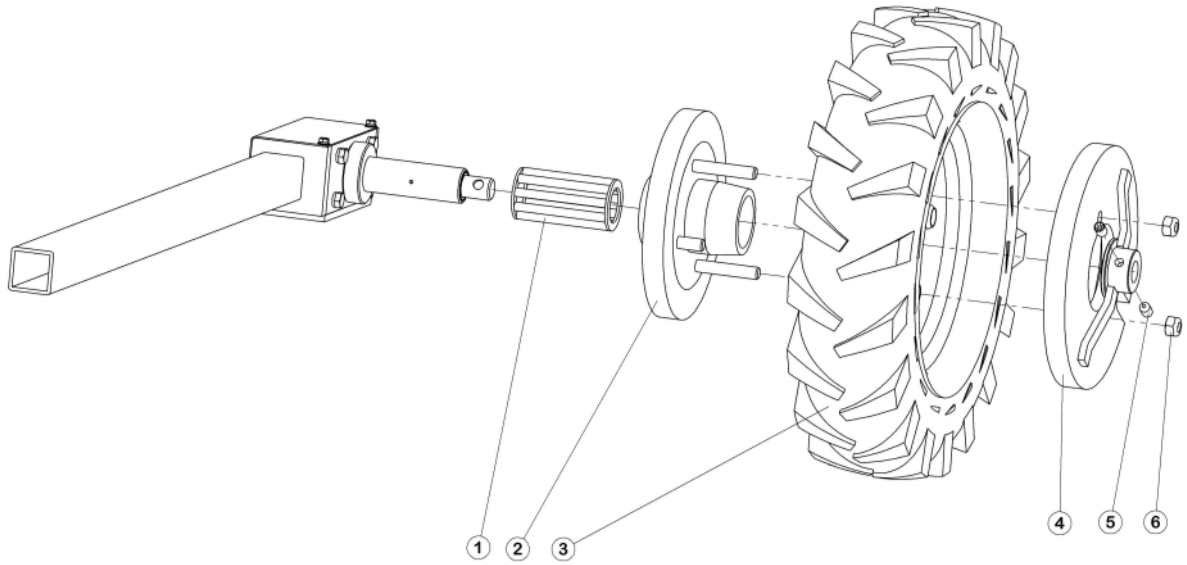

| Rep | Qty | Designation | Reference |
|---|---|---|---|
| 1 | 1 | Lower driveshaft | CM112160 |
| 2 | 2 | Shaft bearing | CM112161 |
| 3 | 1 | Pinion of lower conical couple | CM112162 |
| 4 | 1 | Tree of lower conical couple | CM112163 |
| 5 | 1 | Casing | CM112164 |
| 6 | 3 | Disc punt | CM112165 |
| 7 | 3 | Spring lock washer | CM112166 |
| 8 | 3 | Screw | CM112167 |
| 9 | 2 | Screw | CM112168 |
| 10 | 1 | Amount lower by APS | CM112169 |
| 11 | 2 | Ring bronze | CM112170 |
| 12 | 4 | Spring lock washer | CM112171 |
| 13 | 4 | Screw | CM112172 |




| Rep | Qty | Designation | Reference |
|---|---|---|---|
| 1 | 3 | Screw | CM112148 |
| 2 | 3 | Spring lock washer | CM112149 |
| 3 | 3 | Disc punt | CM112150 |
| 4 | 1 | Casing | CM112151 |
| 5 | 1 | Higher amount of APS | CM112152 |
| 6 | 2 | Ring bronze | CM112153 |
| 7 | 4 | Screw | CM112154 |
| 8 | 4 | Spring lock washer | CM112155 |
| 9 | 1 | Tree of higher conical couple | CM112156 |
| 10 | 2 | Shaft bearing | CM112157 |
| 11 | 1 | Pinion of higher conical couple | CM112158 |
| 12 | 1 | Higher driveshaft | CM112159 |

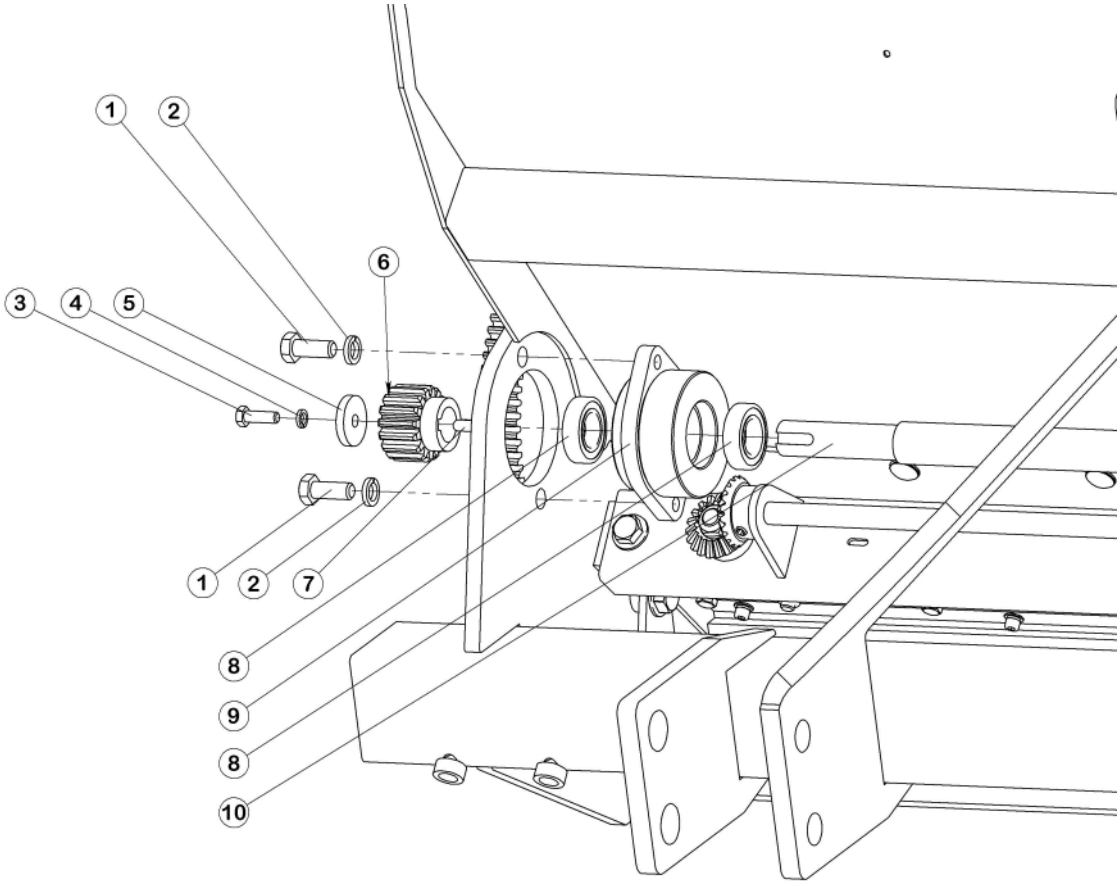



| Rep | Qty | Designation | Reference |
|---|---|---|---|
| 1 | 1 | Wandering pinion | CM112138 |
| 2 | 2 | Self-locking nut | CM112139 |
| 3 | 1 | Hexagonal shaft bearing | CM112140 |
| 4 | 2 | Screw TRCC | CM112141 |



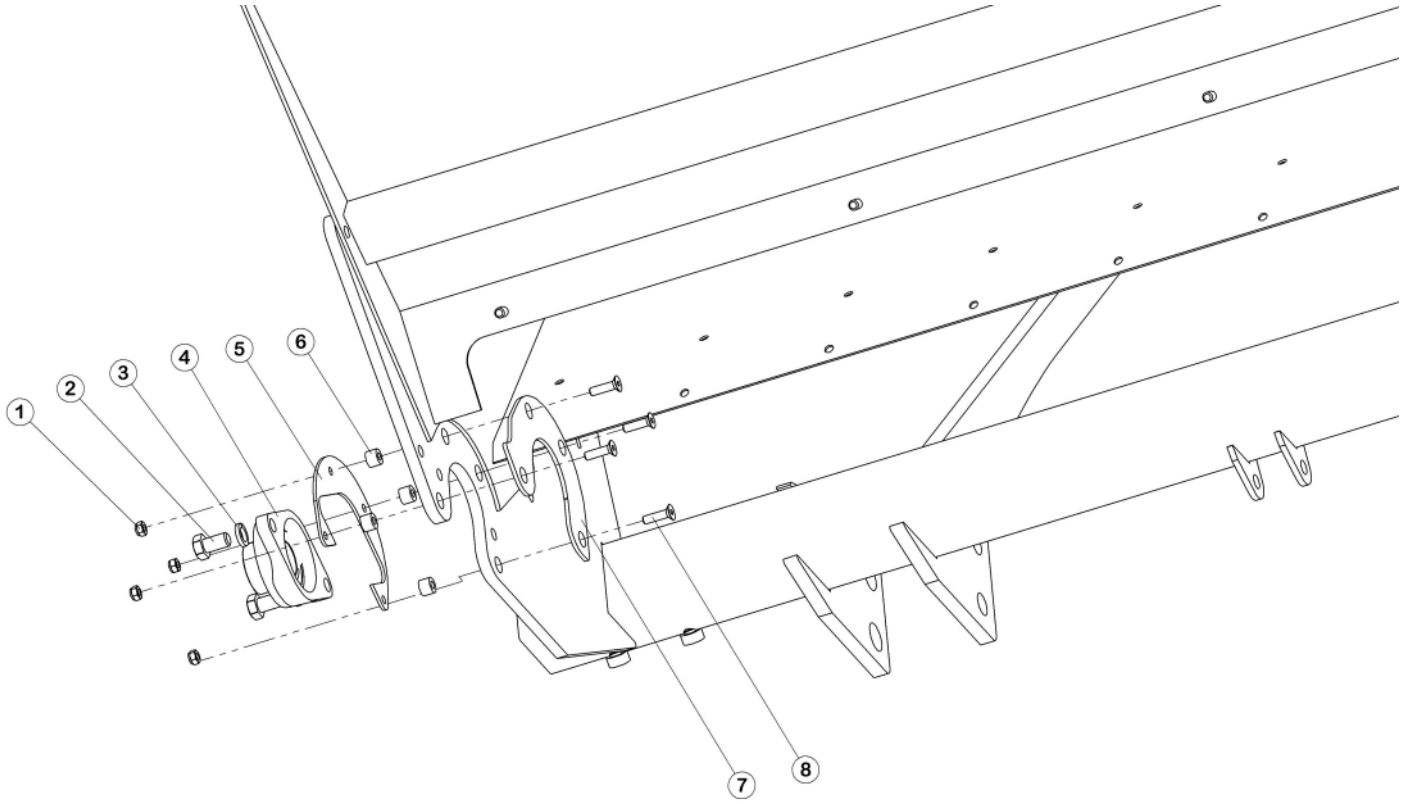

| Rep | Qty | Designation | Reference |
|---|---|---|---|
| 1 | 1 | Roller bearing | CM112142 |
| 2 | 1 | Hub | CM112143 |
| 3 | 1 | Complete wheel | CM112144 |
| 4 | 1 | Training of wheel | CM112145 |
| 5 | 2 | Screw STHC | CM112146 |
| 6 | 2 | Self-locking nut | CM112147 |

**OPTION: APS**



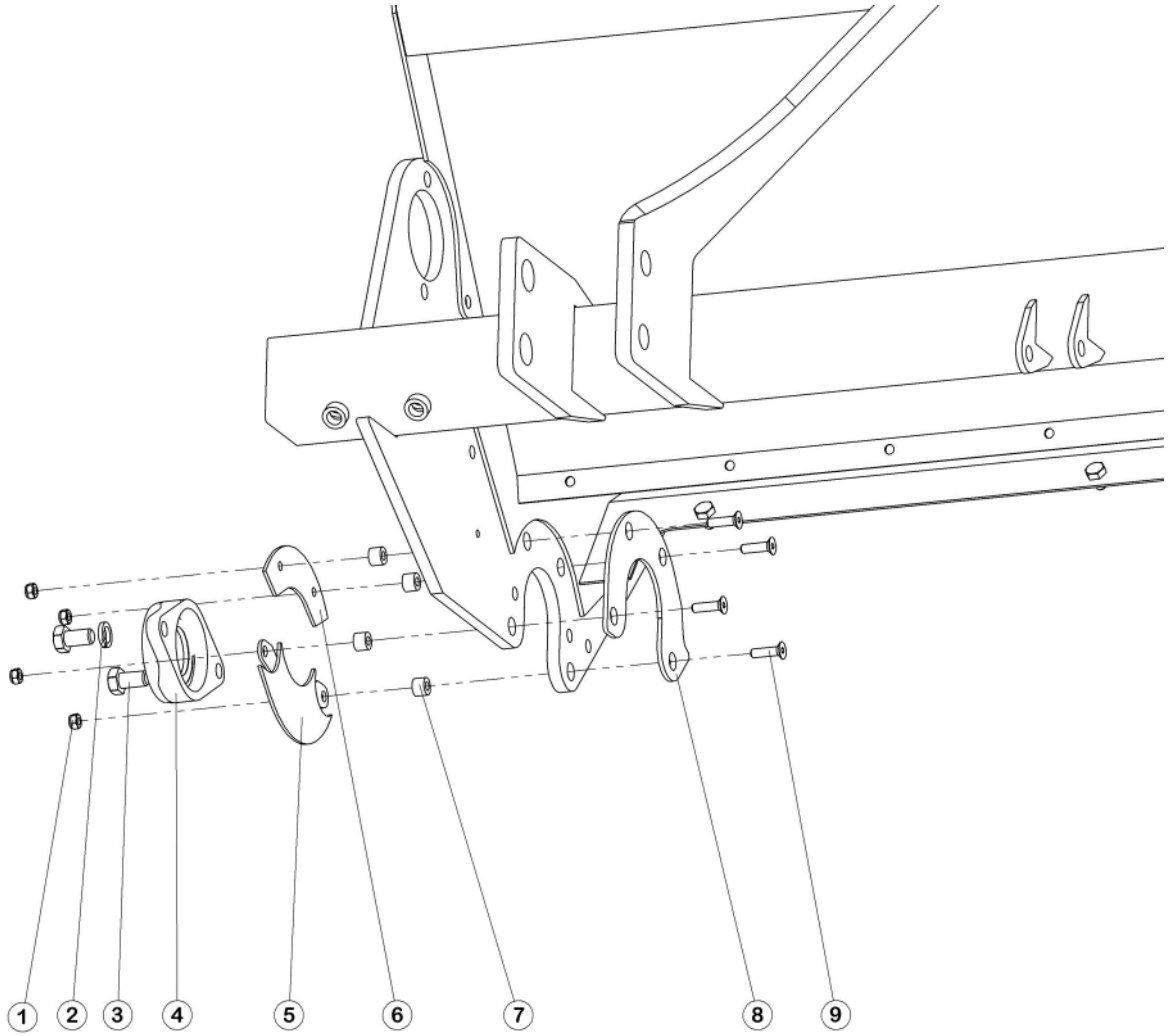

| Rep | Qty | Designation | Reference |
|---|---|---|---|
| 1 | 2 | Screw | CM112128 |
| 2 | 2 | Spring lock washer | CM112129 |
| 3 | 1 | Screw | CM112130 |
| 4 | 1 | Spring lock washer | CM112131 |
| 5 | 1 | Disc of driving shaft end | CM112132 |
| 6 | 1 | Driving pinion | CM112133 |
| 7 | 1 | Key | CM112134 |
| 8 | 2 | Bearing | CM112135 |
| 9 | 1 | Shaft bearing of transmission | CM112136 |
| 10 | 1 | Tree transmission 1m25 CM112137-1 / 1m35 CM112137-2 / 1m65 CM112137-3 | |

Shaft bearing with dimensions free




| Rep | Qty | Designation | Reference |
|---|---|---|---|
| 1 | 4 | Self-locking nut | CM112120 |
| 2 | 2 | Screw | CM112121 |
| 3 | 2 | Spring lock washer | CM112122 |
| 4 | 1 | Stage | CM112123 |
| 5 | 1 | Blocking of stage | CM112124 |
| 6 | 4 | Brace of turn of stage | CM112125 |
| 7 | 1 | Interior left protection of case | CM112126 |
| 8 | 4 | Screw | CM112127 |

Shaft bearing with dimensions driving

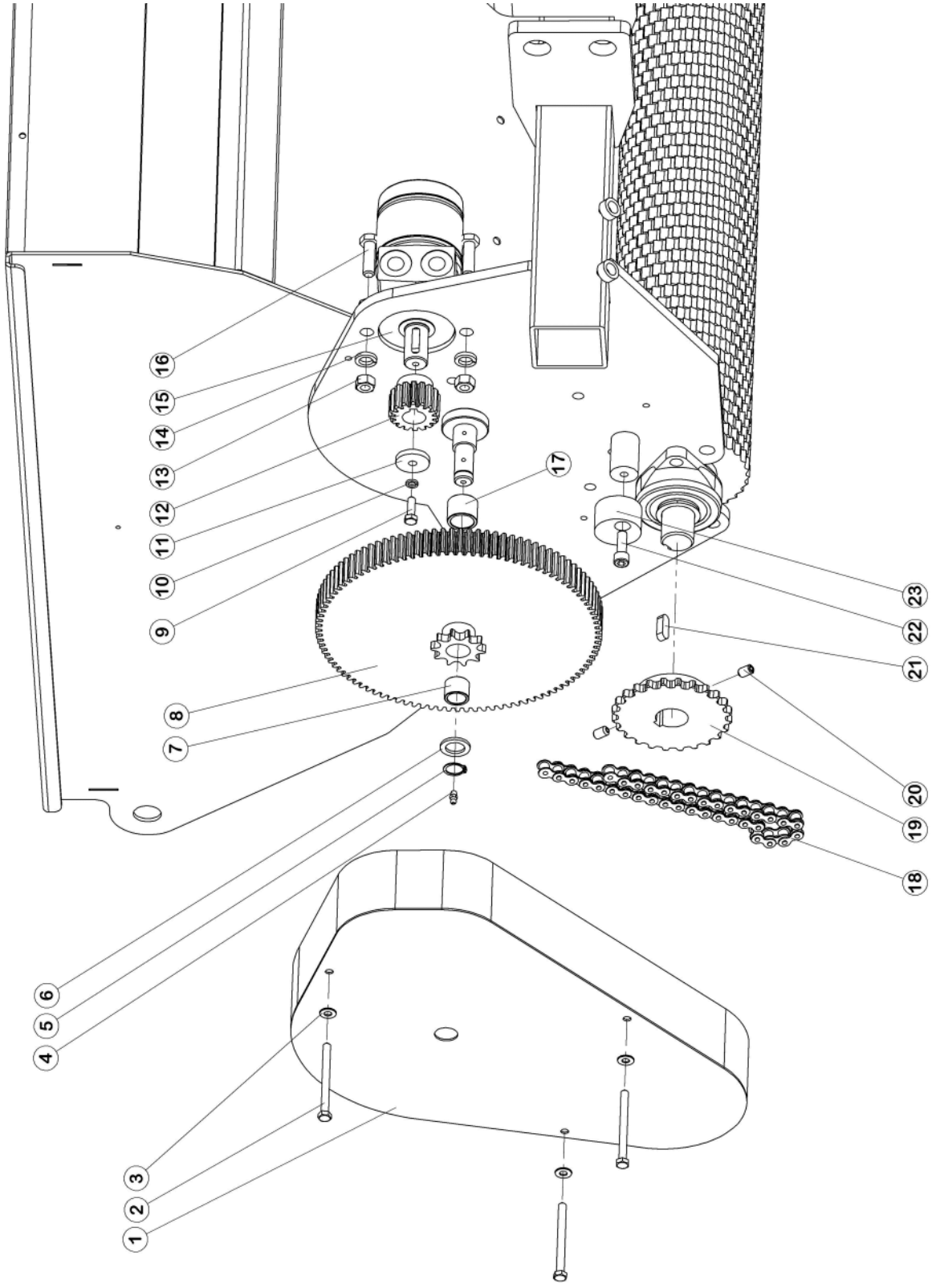



| Rep | Qty | Designation | Reference |
|---|---|---|---|
| 1 | 4 | Self-locking nut | CM112111 |
| 2 | 2 | Spring lock washer | CM112112 |
| 3 | 2 | Screw | CM112113 |
| 4 | 1 | Stage | CM112114 |
| 5 | 1 | Obturator of bottom of casing | CM112115 |
| 6 | 1 | Higher blocking of stage with dimensions driving | CM112116 |
| 7 | 4 | Brace of turn of stage | CM112117 |
| 8 | 1 | Interior right protection of case | CM112118 |
| 9 | 4 | Screw | CM112119 |

| Rep | Qty | Designation | Reference |
|---|---|---|---|
| 1 | 1 | Casing | CM112088 |
| 2 | 3 | Screw | CM112089 |
| 3 | 3 | Disc punt | CM112090 |
| 4 | 1 | Greasing device | CM112091 |
| 5 | 1 | Circlips | CM112092 |
| 6 | 1 | Disc of reducing pinion | CM112093 |
| 7 | 1 | Ring bronze | CM112094 |
| 8 | 1 | Intermediate pinion | CM112095 |
| 9 | 1 | Screw | CM112096 |
| 10 | 1 | Spring lock washer | CM112097 |
| 11 | 1 | Disc of driving shaft end | CM112098 |
| 12 | 1 | Driving pinion | CM112099 |
| 13 | 2 | Nut | CM112100 |
| 14 | 2 | Spring lock washer | CM112101 |
| 15 | 1 | Hydraulic engine | CM112102 |
| 16 | 2 | Screw | CM112103 |
| 17 | 1 | Ring bronze | CM112104 |
| 18 | 1 | Chain 15.875 lg: 778 + fast Fastener n°28 | CM112105 |
| 19 | 1 | Pinion of rotor | CM112106 |
| 20 | 2 | Screw | CM112107 |
| 21 | 1 | Key | CM112108 |
| 22 | 1 | Screw | CM112109 |
| 23 | 1 | Tensioner of chain | CM112110 |

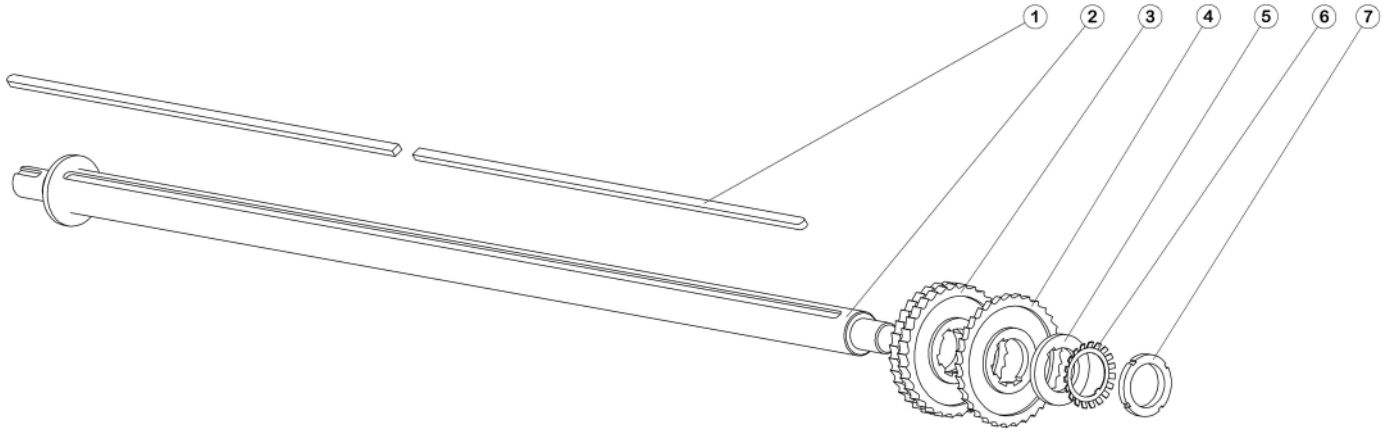
CM REGERO INDUSTRIES

Transmission



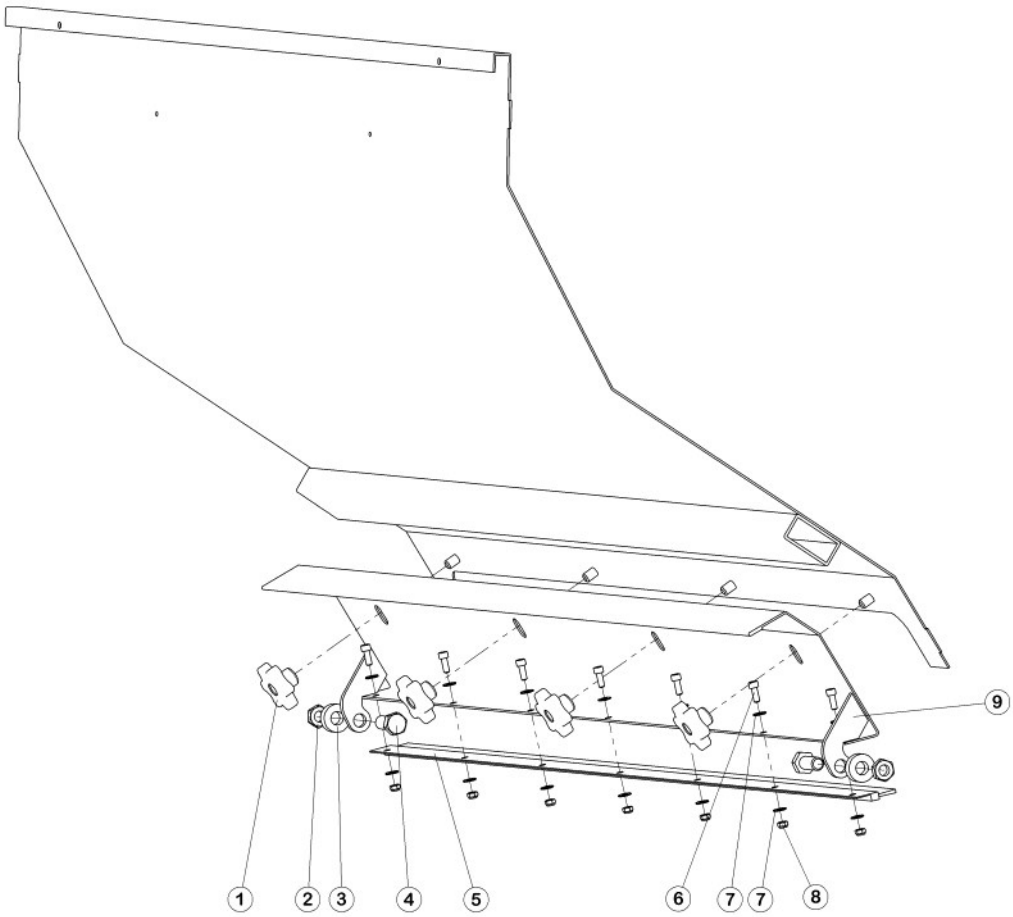

References following page

Rotor



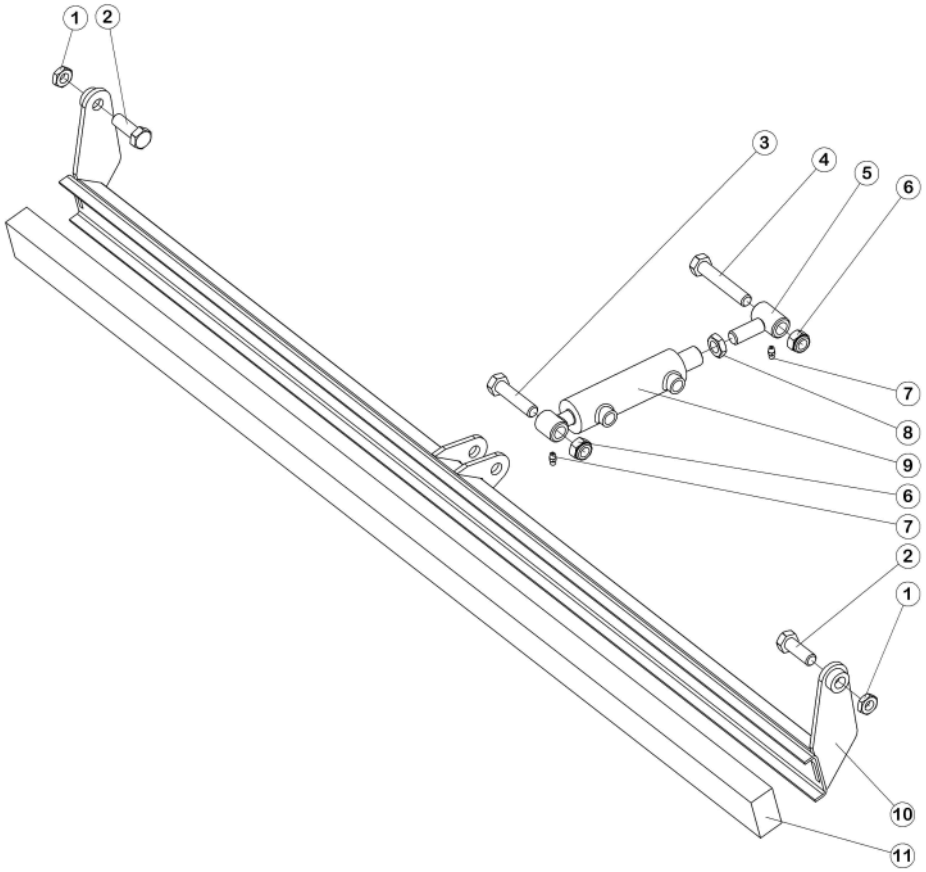

| Rep | Qty | Designation | Reference |
|---|---|---|---|
| 1 | 2 | Key rotor 1m25 | CM112081-1 |
| | 2 | Key rotor 1m35 | CM112081-2 |
| | 2 | Key rotor 1m65 | CM112081-3 |
| 2 | 1 | Runner shaft 1m25 | CM112082-1 |
| | 1 | Runner shaft 1m35 | CM112082-2 |
| | 1 | Runner shaft 1m65 | CM112082-3 |
| 3 | 84 | Disc of distribution 33 teeth (1m25) | CM112083 |
| | 91 | Disc of distribution 33 teeth (1m35) | CM112083 |
| | 112 | Disc of distribution 33 teeth (1m65) | CM112083 |
| 4 | 1 | Disc of compensation 1m25 | CM112084-1 |
| | 1 | Disc of compensation 1m35 | CM112084-2 |
| | 1 | Disc of compensation 1m65 | CM112084-3 |
| 5 | 1 | Disc of support of elements | CM112085 |
| 6 | 1 | Disc | CM112086 |
| 7 | 1 | Nut | CM112087 |

Traps of draining



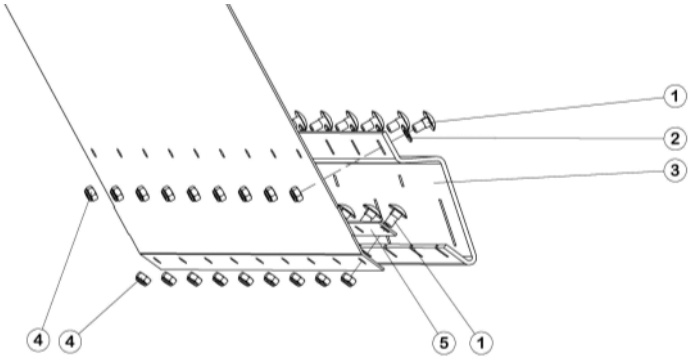

| Rep | Qty | Designation | Reference |
|---|---|---|---|
| 1 | 4 | Serrated roller | CM112072 |
| 2 | 2 | Nut | CM112073 |
| 3 | 2 | Coughs up of trap door of draining | CM112074 |
| 4 | 2 | Screw | CM112075 |
| 5 | 1 | Brush back 1m25 | CM112076-1 |
| | 1 | Brush back 1m35 | CM112076-2 |
| | 1 | Brush back 1m65 | CM112076-3 |
| 6 | 7 | Screw | CM112077 |
| 7 | 14 | Disc punt | CM112078 |
| 8 | 7 | Nylstop self-locking nut | CM112079 |
| 9 | 1 | Traps of draining 1m25 | CM112080-1 |
| | 1 | Traps of draining 1m35 | CM112080-2 |
| | 1 | Traps of draining 1m65 | CM112080-3 |

Foam door



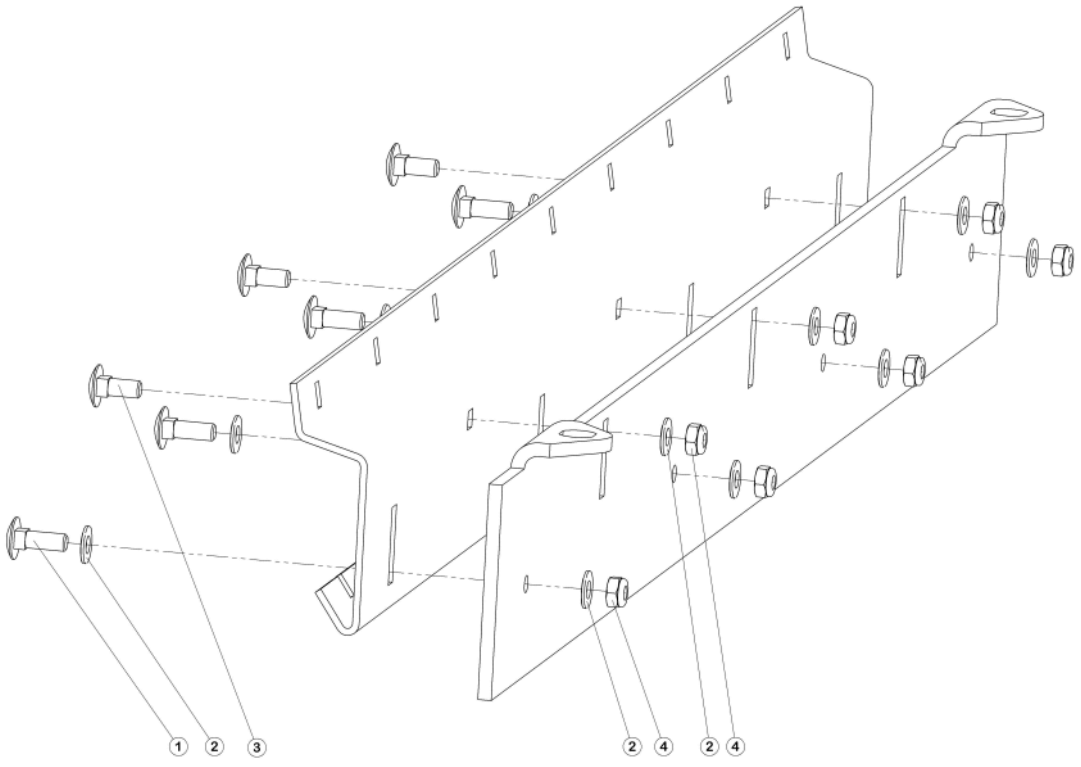

| Rep | Qty | Designation | Reference |
|---|---|---|---|
| 1 | 2 | Nut | CM112061 |
| 2 | 2 | Screw | CM112062 |
| 3 | 1 | Screw | CM112063 |
| 4 | 1 | Screw | CM112064 |
| 5 | 1 | Adjustable casing | CM112065 |
| 6 | 2 | Self-locking nut | CM112066 |
| 7 | 1 | Greasing device | CM112067 |
| 8 | 1 | Nut | CM112068 |
| 9 | 1 | Jack | CM112069 |
| 10 | 1 | Door closing foams 1m25 | CM112070-1 |
| | 1 | Door of closing foams 1m35 | CM112070-2 |
| | 1 | Door of closing foams 1m65 | CM112070-3 |
| 11 | 1 | Foam neoprene 1m25 | CM112071-1 |
| | 1 | Foam neoprene 1m35 | CM112071-2 |
| | 1 | Foam neoprene 1m65 | CM112071-3 |

## Reinforcement of front panel




| Rep | Qty | Designation | Reference |
|---|---|---|---|
| 1 | 18 | Screw square | CM112052 |
| 2 | 9 | Disc punt | CM112053 |
| 3 | 1 | Support of door 1m25 CM112054-1/1m35 CM112054-2/1m65 CM112054-3 | |
| 4 | 18 | Self-locking nut | CM112055 |
| 5 | 1 | Screw maintains 1m25 CM112056-1/1m35 CM112056-2/1m65 CM112056-3 | |

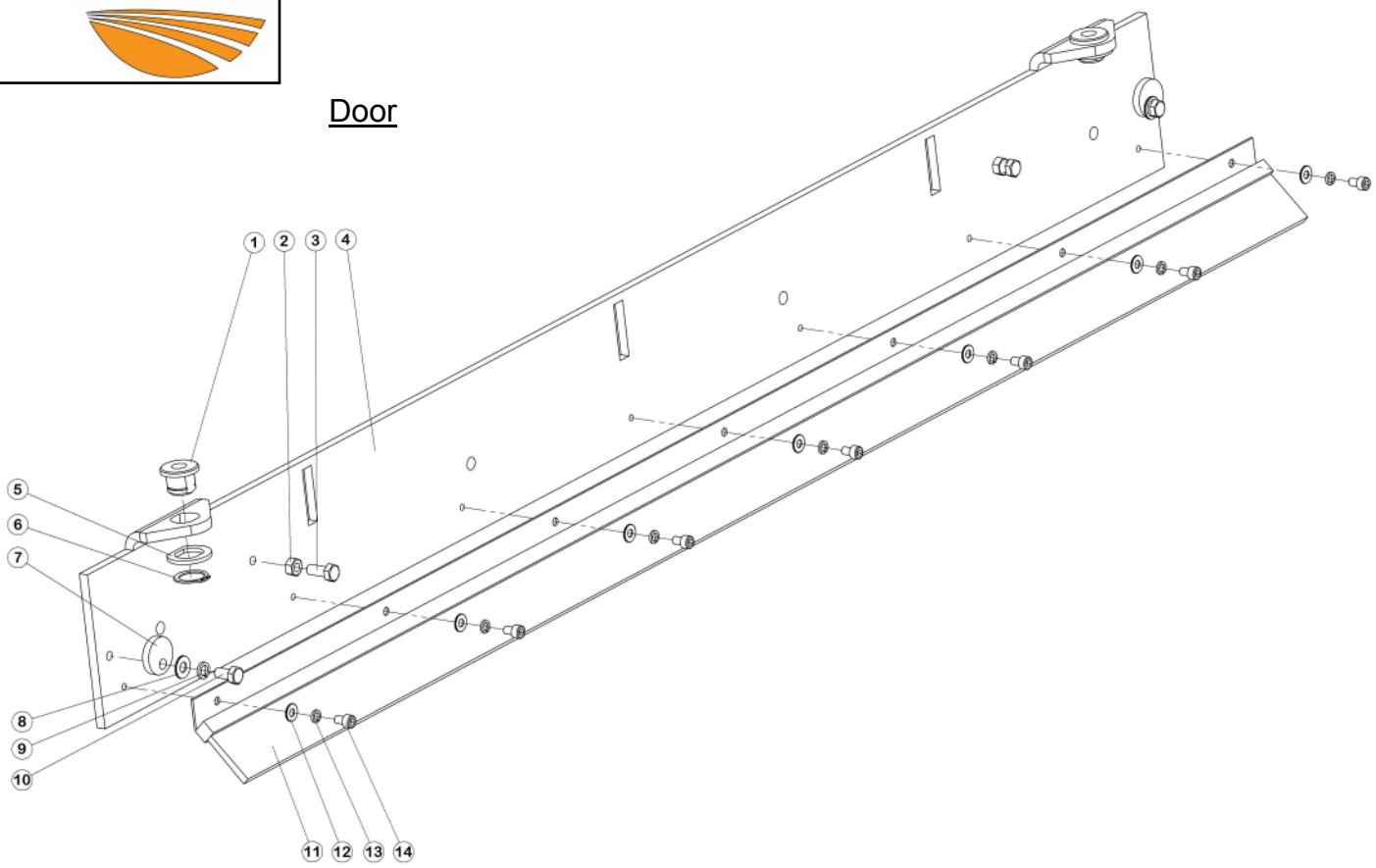
## Assembly of door




| Rep | Qty | Designation | Reference |
|---|---|---|---|
| 1 | 4 | Screw TRCC M10x30 stainless | CM112057 |
| 2 | 11 | Disc punt diameter 10 stainless | CM112058 |
| 3 | 3 | Screw TRCC M10x25 stainless | CM112059 |
| 4 | 7 | Self-locking nut HM10 stainless | CM112060 |

CM REGERO INDUSTRIES

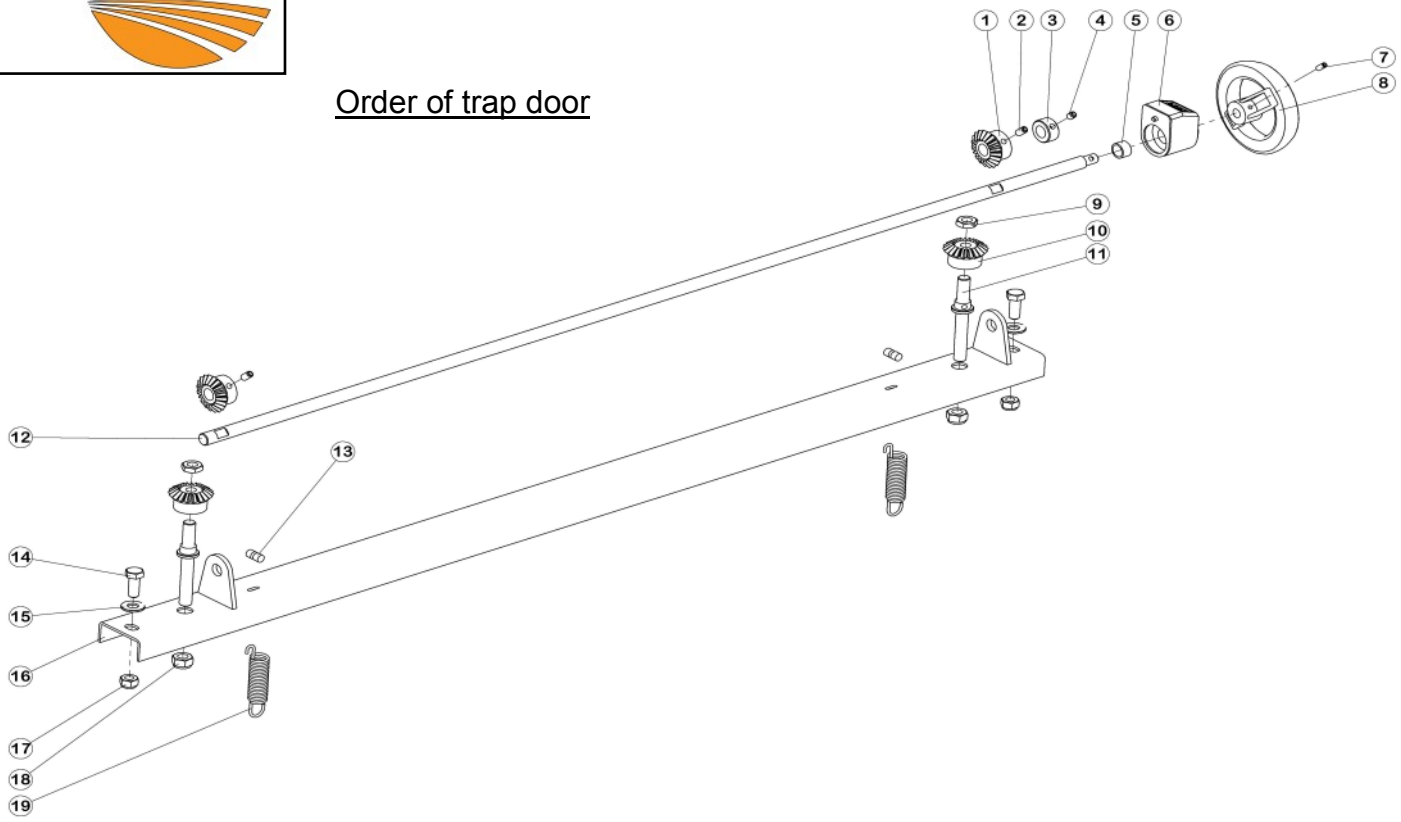
Door




| Rep | Qty | Designation | Reference |
|---|---|---|---|
| 1 | 2 | Coughs up of door operation system | CM112038 |
| 2 | 2 | Nut | CM112039 |
| 3 | 2 | Screw | CM112040 |
| 4 | 1 | Carry 1m25 | CM112041-1 |
| | 1 | Carry 1m35 | CM112041-2 |
| | 1 | Carry 1m65 | CM112041-3 |
| 5 | 2 | Disc of ordering of trap door | CM112042 |
| 6 | 2 | Circlips | CM112043 |
| 7 | 2 | Guide of door | CM112044 |
| 8 | 2 | Disc punt | CM112045 |
| 9 | 2 | Spring lock washer | CM112046 |
| 10 | 2 | Screw | CM112047 |
| 11 | 1 | Brush before 1m25 | CM112048-1 |
| | 1 | Brush before 1m35 | CM112048-2 |
| | 1 | Brush before 1m65 | CM112048-3 |
| 12 | 7 | Disc punt | CM112049 |
| 13 | 7 | Spring lock washer | CM112050 |
| 14 | 7 | Screw | CM112051 |

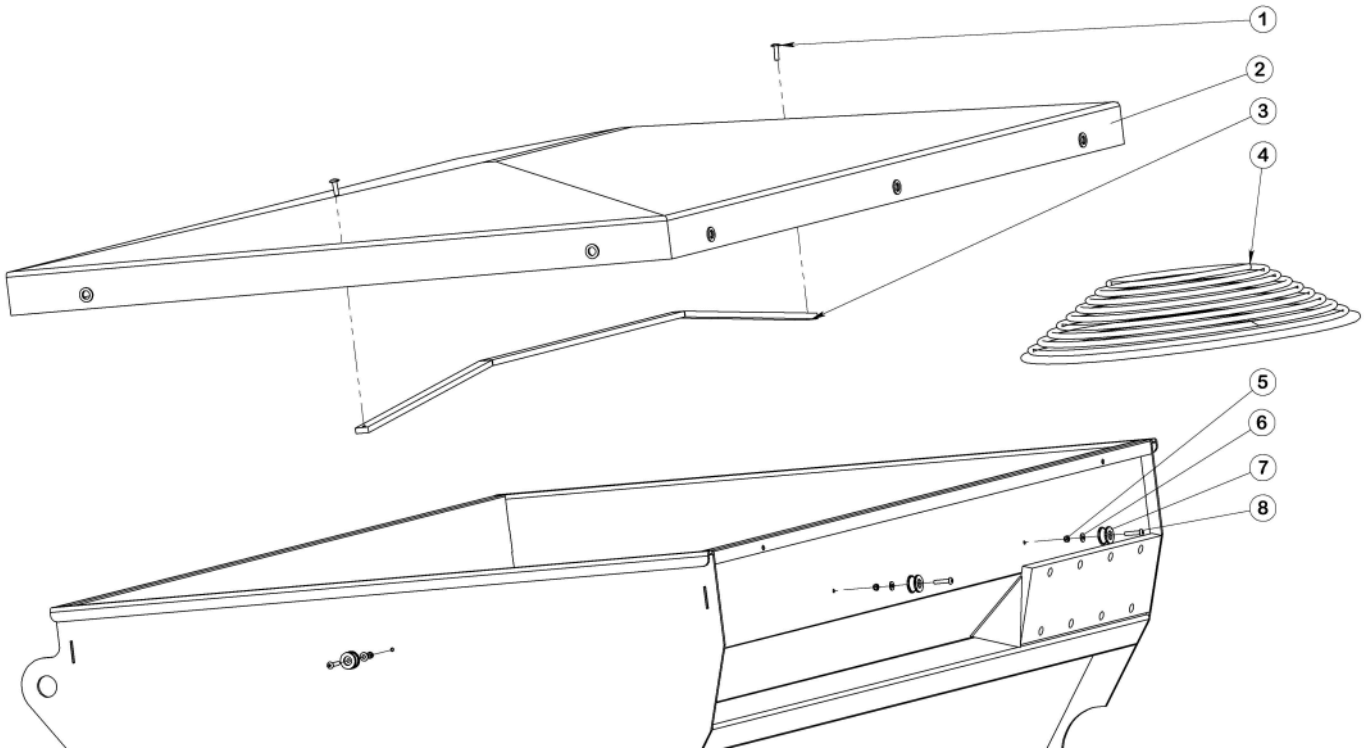
CM REGERO INDUSTRIES

Order of trap door




| Rep | Qty | Designation | Reference |
|---|---|---|---|
| 1 | 2 | Pinion of reference of door operation system | CM112019 |
| 2 | 2 | Screw | CM112020 |
| 3 | 1 | Coughs up of blocking of driving shaft | CM112021 |
| 4 | 1 | Screw | CM112022 |
| 5 | 1 | Coughs up | CM112023 |
| 6 | 1 | Indicator | CM112024 |
| 7 | 1 | Screw | CM112025 |
| 8 | 1 | Flying | CM112026 |
| 9 | 2 | Nut | CM112027 |
| 10 | 2 | Driving pinion of door | CM112028 |
| 11 | 2 | Threaded rod of door operation system | CM112029 |
| 12 | 1 | Center 1m25 CM112030-1 / 1m35 CM112030-2 / 1m65 CM112030-3 | |
| 13 | 2 | Pawn of spring of door | CM112031 |
| 14 | 2 | Screw | CM112032 |
| 15 | 2 | Disc punt | CM112033 |
| 16 | 1 | Rail 1m25 CM112034-1 / 1m35 CM112034-2 / 1m65 CM112034-3 | |
| 17 | 2 | Self-locking nut | CM112035 |
| 18 | 2 | Self-locking nut | CM112036 |
| 19 | 2 | Spring | CM112037 |

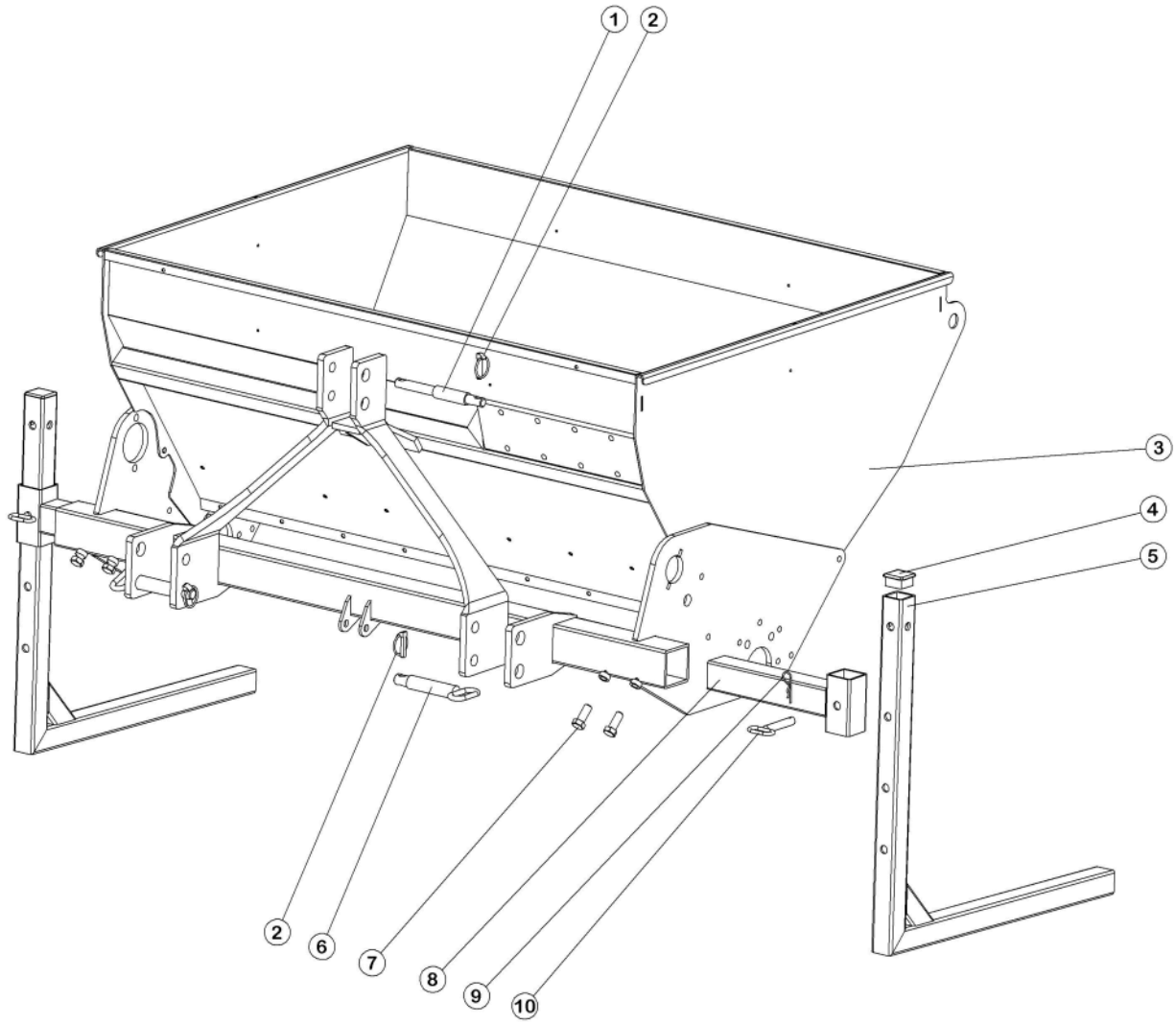
Cover




| Rep | Qty | Designation | Reference |
|---|---|---|---|
| 1 | 2 | Screw | CM112011 |
| 2 | 1 | Cover 1m25 | CM112012-1 |
| | 1 | Cover 1m35 | CM112012-2 |
| | 1 | Cover 1m65 | CM112012-3 |
| 3 | 1 | Cover 2m00 | CM112013-1 |
| | 1 | Tensioner of cover 1m25 | CM112013-2 |
| | 1 | Tensioner of cover 1m35 | CM112013-3 |
| 4 | 1 | Tensioner of cover 1m65 | CM112014 |
| 5 | 6 | Tensioner of cover 2m00 | CM112015 |
| 6 | 6 | Tensioner ø8 lg: 6000 | CM112016 |
| 7 | 6 | Self-locking nut | CM112017 |
| 8 | 6 | Disc punt | CM112018 |

# CATALOG SPARE PARTS

Case



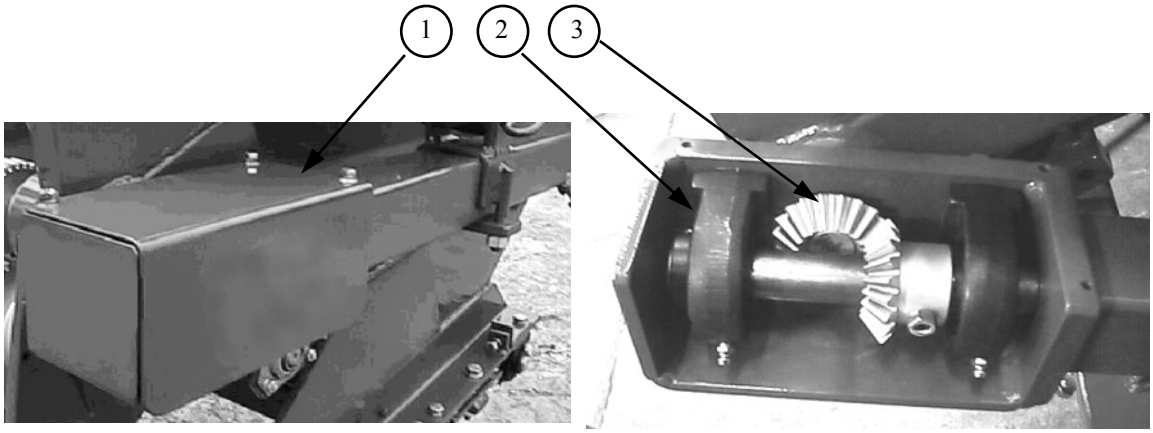

| Rep | Qty | Designation | Reference |
|---|---|---|---|
| 1 | 1 | Stitch 3rd point | CM112001 |
| 2 | 3 | Pin clips | CM112002 |
| 3 | 1 | Case 1m25 | CM112003-1 |
| | 1 | Case 1m35 | CM112003-2 |
| | 1 | Case 1m65 | CM112003-3 |
| 4 | 2 | Case 2m00 | CM112004 |
| 5 | 2 | Stopper for square tube of 50 Crutch | CM112005 |
| 6 | 2 | Stitch attachment | CM112006 |
| 7 | 4 | Screw | CM112007 |
| 8 | 2 | Support of crutch | CM112008 |
| 9 | 2 | Pin | CM112009 |
| 10 | 2 | Stitch crutch | CM112010 |

## MAINTENANCE OF THE TRANSMISSION

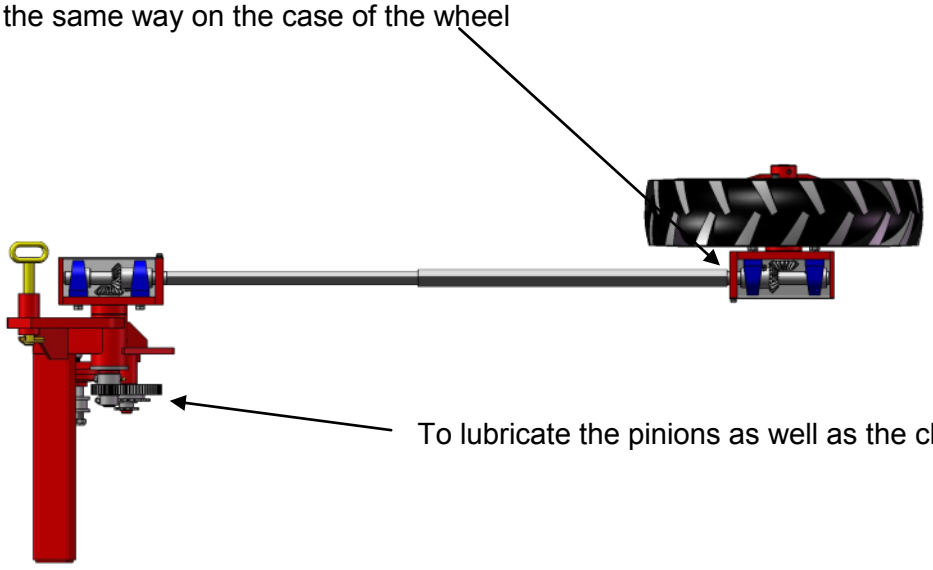
The transmission since the wheel to the gear train is carried out by conical couples. If the gears and the stages are not maintained regularly, there can be a premature wear which risks creates constraints. If the constraints of training of the transmission are too high, the wheel is likely to slip on the ground and will not be able to actuate the carpet of distribution any more systematically.

In order to preserve the best proportionality of distribution, it is imperative to very regularly lubricate the conical couples as well as the stages.

- To dismount the housing rep.1
- To lubricate the 2 stages rep.2
- To lubricate the conical couple directly rep.3
- To make turn the wheel in order to lubricate the conical couple completely
- To go up the casing




To proceed in the same way on the case of the wheel



To lubricate the pinions as well as the chain

## MAINTENANCE

From its design, the muck-spreader does not require that one maintains limited but it is preferable to clean it after each use.

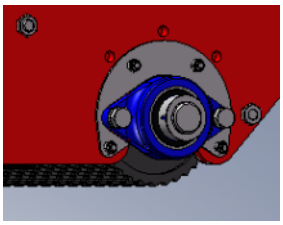
The interior of the hopper can be cleaned with the fountain

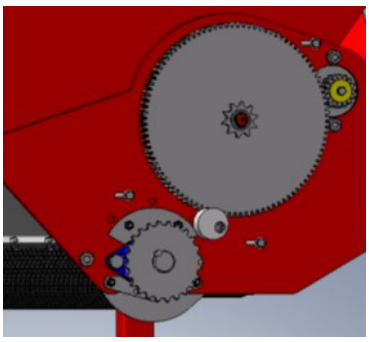
After each cleaning, to dismount the transmission casing in order to lubricate the two stages of the rotor as well as the pinions and the chain.

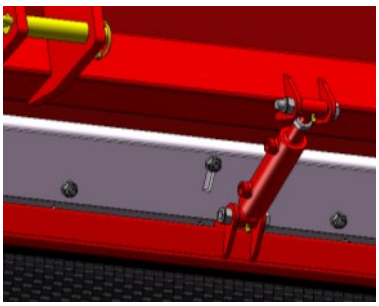
To lubricate the two casings of the jack of door foams

Not to lubricate nor to oil all the part of door operation system

- Never not to let manure remain in the hopper

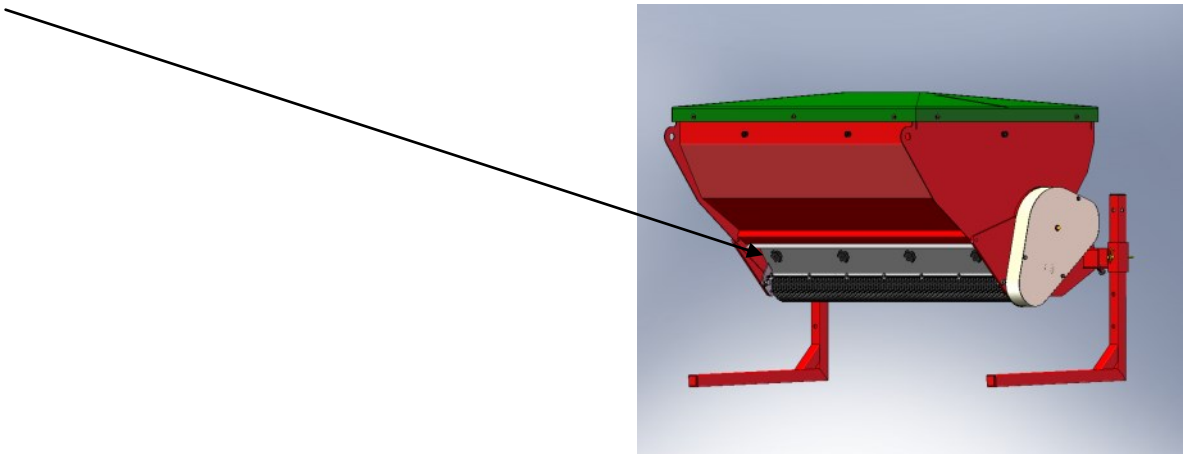






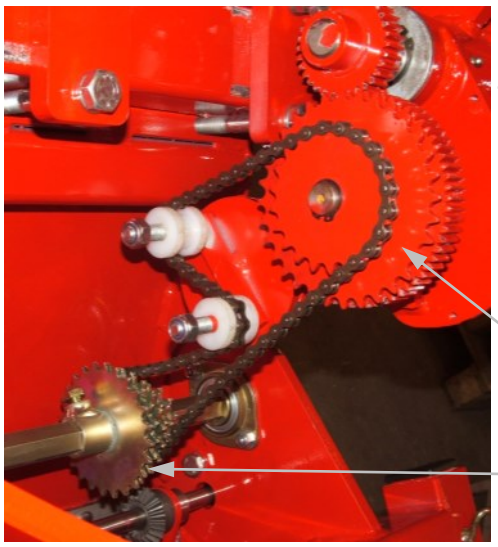
## DRAIN HOPPER

To lay out a cover under the fertlizer spreader in order to collect manure remaining in the hopper. To unscrew the 4 serrated rollers of the trap door of draining and to make it swivel.



## INSTALLATION OF THE RATIO OF REDUCTION GEARING

**This operation must be carried out by a qualified personnel in order to avoid any risk of deterioration of the transmission.**



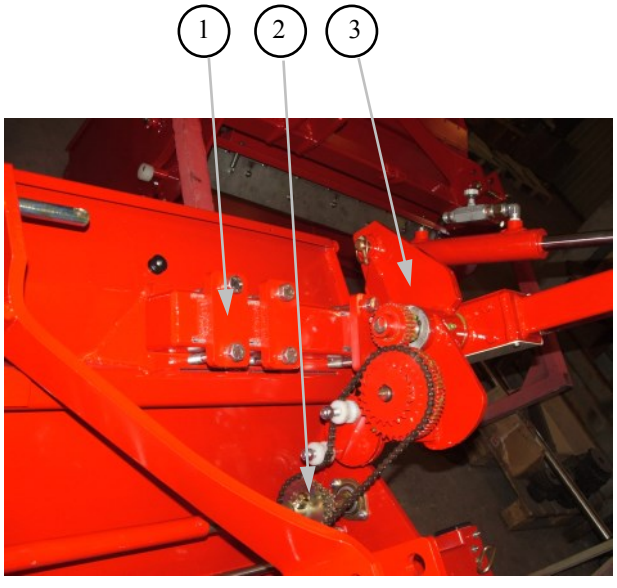
- To dismount the casing in order to have access to the gear train
- To loosen the screw which maintenance places the pinion of transmission from there
- To slacken the tensioner of chain
- To pass the chain on teeth corresponding to the report of desired flow
- To retighten the chain
- To tighten the screw of maintenance in position of the pinion
- To carry out a test of rotation in order to check the good performance
- To go up the casing

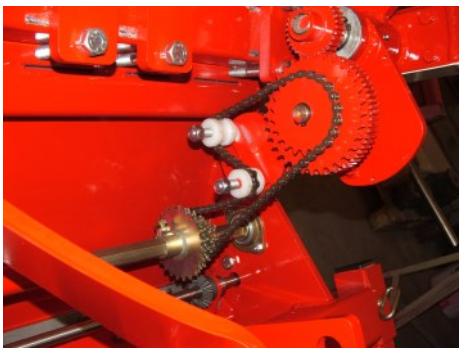
Gear of reduction

Gear of transmission

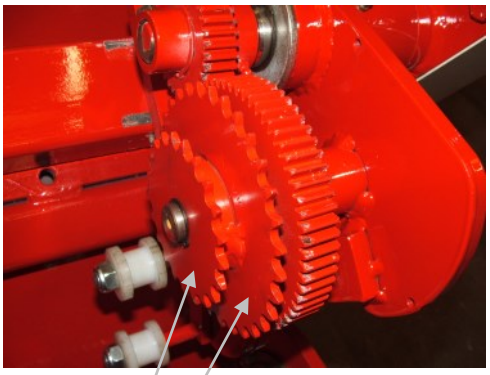
## ALIGNMENT OF THE WHEEL OF TRAINING

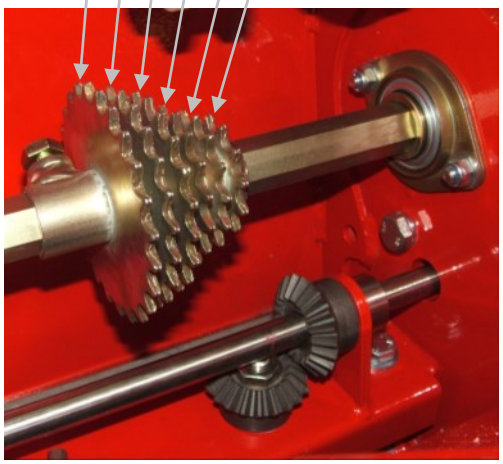
- To dismount the casing in order to have access to the gear train
- To slacken the chain
- To loosen the screw which maintenance places the pinion rep.2 from there
- To loosen the supports rep.1
- To move the rep.3 unit in order to precisely align the wheel in the workway (or on the wheel of the tractor for the attachment with before)
- To move if necessary the supports rep.1 and to tighten the screws
- To align the pinion rep.2 then to tighten the latch-tightening screw
- To retighten the chain
- To carry out a test of rotation in order to check the good performance
- To go up the casing





*Fertilizer Spreader with APS*






Door adjustment

| Gear n°1 | | |
|---|---|---|
| | A | B |
| 0 | 414 | 532 |
| 1 | 566 | 708 |
| 2 | 648 | 812 |
| 3 | 712 | 892 |
| 4 | 798 | 1002 |
| 5 | 930 | 1166 |
| 6 | 1150 | 1440 |

Door adjustment

| Gear n°2 | | |
|---|---|---|
| | A | B |
| 0 | 364 | 456 |
| 1 | 484 | 608 |
| 2 | 554 | 696 |
| 3 | 610 | 764 |
| 4 | 684 | 858 |
| 5 | 798 | 1000 |
| 6 | 984 | 1234 |

Door adjustment

| Gear n°3 | | |
|---|---|---|
| | A | B |
| 0 | 318 | 400 |
| 1 | 424 | 535 |
| 2 | 486 | 608 |
| 3 | 534 | 668 |
| 4 | 600 | 752 |
| 5 | 698 | 874 |
| 6 | 862 | 1080 |

Door adjustment

| Gear n°4 | | |
|---|---|---|
| | A | B |
| 0 | 254 | 320 |
| 1 | 340 | 426 |
| 2 | 388 | 486 |
| 3 | 426 | 534 |
| 4 | 480 | 600 |
| 5 | 558 | 700 |
| 6 | 690 | 864 |

Door adjustment

| Gear n°5 | | |
|---|---|---|
| | A | B |
| 0 | 232 | 290 |
| 1 | 308 | 386 |
| 2 | 354 | 442 |
| 3 | 388 | 486 |
| 4 | 436 | 546 |
| 5 | 508 | 636 |
| 6 | 626 | 786 |

Door adjustment

| Gear n°6 | | |
|---|---|---|
| | A | B |
| 0 | 212 | 266 |
| 1 | 282 | 354 |
| 2 | 324 | 406 |
| 3 | 356 | 446 |
| 4 | 400 | 500 |
| 5 | 466 | 584 |
| 6 | 574 | 720 |

The table gives values theoretical of spreading in kg/hectare for a manure of density 1.15 kg/dm3 (generally noted median value).

<u>base calculation:</u>
width 1m35 -> 1 hectare = way 1m80 x 5555 m
width 1m25 -> 1 hectare = way 1m65 x 6060 m

*To obtain real proportionings of treated culture, it is necessary to multiply the data of the table per 1.33*

These values are indicative and will have to be refined by the user after checking on large surfaces of spreadings.

## STARTUP

1) To each time harness the machine with the tractor (tight handbrake) via the 3 points of fixing while checking the good state of the attachment and the presence of the stop pins.

2) To couple the flexible device hydraulics on the corresponding outlet side of the tractor. The tractor will have to be equipped with a distributer simple effect with notching in floating position.

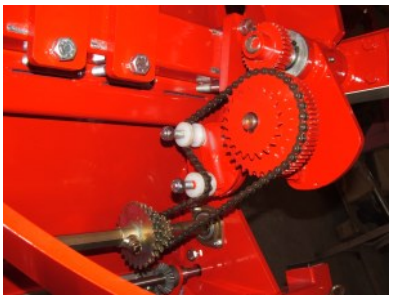
In the notched direction, the door foams opens and the wheel goes down resting against the wheel from the tractor. In the contrary direction the door foams is closed thus avoiding any loss of manure during displacements and the wheel gets clear.

**It is imperative to release the wheel before carrying out the operations in entry and the end of the board. The wheel must be only lowered when the tractor is in line with work.**

with APS, the flow/hectare is dependant on 2 parameters:

1) Opening of trap door, adjustable with the wheel. The indicator makes it possible to regulate the passage of manures precisely. The posted value corresponds to the distance between the rotor and the door in mm. The adjustment of the door is important because it must be adapted to the granulometry of manures. It is preferable to privilege a small opening of trap door in order to have a finer calibration of the flow.

2) Choice of the report of reduction between the number of revolutions of the wheel and that of the rotor. The choice is carried out thanks to the gear box.



Before going on the ground to carry out spreading, it is preferable to make an approach of the adjustments. Table following page gives the theoretical adjustments.

CM REGERO INDUSTRIES

## *Hydraulic fertilizer spreader*

The table gives values theoretical of spreading in kg/hectare for a manure of density 1.15 kg/dm3 (generally noted median value).

base calculation:
width 1m35 -> 1 hectare = way 1m80 x 5555 m
width 1m25 -> 1 hectare = way 1m65 x 6060 m

*To obtain real proportionings of treated culture, it is necessary to multiply the data of the table per 1.33*

| Adjustment of door O | | | | | |
|---|---|---|---|---|---|
| | 1 km/h | 2 km/h | 3 km/h | 4 km/h | 5 km/h |
| 2 | 220 | 110 | 73 | 55 | 44 |
| 4 | 538 | 269 | 179 | 135 | 108 |
| 6 | 952 | 477 | 317 | 238 | 191 |
| 8 | 1397 | 699 | 466 | 350 | 280 |
| 10 | 1904 | 953 | 635 | 476 | 381 |

| Adjustment of door 1 | | | | | |
|---|---|---|---|---|---|
| | 1 km/h | 2 km/h | 3 km/h | 4 km/h | 5 km/h |
| 2 | 293 | 146 | 98 | 73 | 59 |
| 4 | 716 | 358 | 239 | 179 | 143 |
| 6 | 1267 | 634 | 422 | 317 | 254 |
| 8 | 1859 | 930 | 620 | 465 | 372 |
| 10 | 2534 | 1268 | 845 | 634 | 507 |

| Adjustment of door 2 | | | | | |
|---|---|---|---|---|---|
| | 1 km/h | 2 km/h | 3 km/h | 4 km/h | 5 km/h |
| 2 | 335 | 168 | 112 | 84 | 67 |
| 4 | 820 | 410 | 273 | 205 | 164 |
| 6 | 1451 | 726 | 484 | 363 | 290 |
| 8 | 2129 | 1065 | 710 | 533 | 426 |
| 10 | 2902 | 1452 | 967 | 726 | 581 |

| Adjustment of door 3 | | | | | |
|---|---|---|---|---|---|
| | 1 km/h | 2 km/h | 3 km/h | 4 km/h | 5 km/h |
| 2 | 368 | 184 | 123 | 92 | 74 |
| 4 | 901 | 451 | 300 | 225 | 180 |
| 6 | 1594 | 798 | 531 | 399 | 319 |
| 8 | 2339 | 1171 | 780 | 585 | 468 |
| 10 | 3188 | 1595 | 1063 | 797 | 638 |

| Adjustment of door 4 | | | | | |
|---|---|---|---|---|---|
| | 1 km/h | 2 km/h | 3 km/h | 4 km/h | 5 km/h |
| 2 | 413 | 207 | 138 | 103 | 83 |
| 4 | 1012 | 506 | 337 | 253 | 203 |
| 6 | 1790 | 896 | 597 | 448 | 358 |
| 8 | 2627 | 1315 | 876 | 657 | 526 |
| 10 | 3580 | 1792 | 1193 | 896 | 717 |

| Adjustment of door 5 | | | | | |
|---|---|---|---|---|---|
| | 1 km/h | 2 km/h | 3 km/h | 4 km/h | 5 km/h |
| 2 | 481 | 241 | 160 | 120 | 96 |
| 4 | 1178 | 590 | 393 | 295 | 236 |
| 6 | 2084 | 1043 | 695 | 521 | 417 |
| 8 | 3059 | 1531 | 1020 | 765 | 612 |
| 10 | 4168 | 2086 | 1389 | 1043 | 834 |

| Adjustment of door 6 | | | | | |
|---|---|---|---|---|---|
| | 1 km/h | 2 km/h | 3 km/h | 4 km/h | 5 km/h |
| 2 | 595 | 298 | 198 | 149 | 119 |
| 4 | 1455 | 728 | 485 | 364 | 291 |
| 6 | 2575 | 1288 | 858 | 644 | 515 |
| 8 | 3778 | 1891 | 1259 | 945 | 756 |
| 10 | 5149 | 2577 | 1716 | 1288 | 1031 |

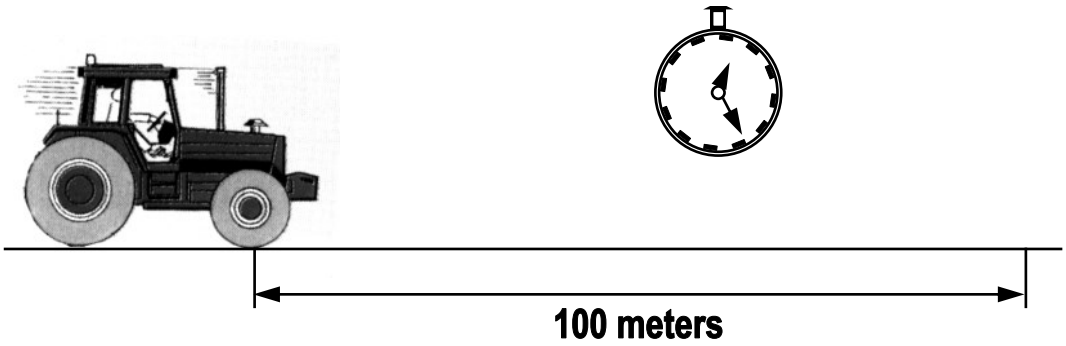
Adjustment of the divider of flow

These values are indicative and will have to be refined by the user after checking on large surfaces of spreadings.

# CALCULATION THE REAL SPEED OF ADVANCE FOR THE TRACTORS HAVING UNDERGOES A MODIFICATION OF TIRE

1) To measure a distance of 100 meters on a ground preferably flat. To locate the starting point and of easily visible arrival by two posts.

2) To advance the tractor with a fixed mode. To note the speed posted on the meter of the tractor. To engage the stop watch with the passage of the first post then to start it with the passage of the second.




3) Calculation allowing to know real speed:

$$\textbf{Calculated speed} = \frac{\textbf{360}}{\textbf{Timed time (in seconds)}} \textbf{ Km/h}$$

If calculated speed does not correspond at the speed posted on the meter, calculation making it possible to know the relationship between the real speed of the tractor and posting is:

$$\textbf{Relationship} = \frac{\textbf{Calculated speed}}{\textbf{Posted speed}}$$

Example: Time to traverse 100 meters: 80 seconds.
Speed posted with the meter: 3 km/h

Calculated speed = 360/80 = 4,5 Km/h

Relationship : 4,5 / 3 = **1,5**

Thus, for this tractor, the speed posted with the meter will have to be multiplied by 1.5 to have the real speed of advance

## STARTUP

1) To each time harness the machine with the tractor (tight handbrake) via the 3 points of fixing while checking the good state of the attachment and the presence of the stop pins.

2) To couple hydraulic pipings on the corresponding outlet sides of the tractor.
The tractor will have to be equipped with two exits in double effect.

Note: The hydraulic distributer feeding the oil absorption of the tractor must be provided with a notching in a direction to maintain the lever in position permanent flow. The flow of the pump should not be lower than 20 liters/minute.

In the direction notched on permanent flow, the door foams opens and the rotor turns, in the contrary direction the door foams is closed thus avoiding any loss of manure during displacements.

The flow/hectare is dependant on 3 parameters:

1) Opening of trap door, adjustable with the wheel. The indicator makes it possible to regulate the passage of manures precisely.
The posted value corresponds to the distance between the rotor and the door in mm. The adjustment of the door is important because it must be adapted to the granulometry of manures.
It is preferable to privilege a small opening of trap door in order to have a finer calibration of the flow.

2) Number of revolutions of the hydraulic engine of training of the rotor, adjustable with the divider of flow.

3) Rate of advance of the tractor. It is important to make sure that the meter in cabin posts a value right. If the size of the tires at summer modified, posting with the meter is erroneous. In this case, to make a calibration (see following page) in order to calculate the coefficient to be applied.

## GENERAL INFORMATION

The fertilizer spreader “CM “is designed for the spreading of all types of granulated products, stopper…. (with constant homogeneity).
Its principle of distribution to rotor toothed in fact an apparatus of a high degree of accuracy, as well concerning desired volume as the distribution on the ground.

## TECHNICAL DATA

Model 1m25 (220DE10 - 225DE10)
- Attachment 3 points category 1 or 2
- Overall width: 1m60
- Overall length 1.30 m without APS
- Weight approximately 400 kg
- Capacity of the hopper: 550 liters
- Spraying width 1.25 m

Model 1m35 (230DE10 - 235DE10)
- Attachment 3 points category 1 or 2
- Overall width: 1m70
- Overall length 1.30 m without APS
- Weight approximately 450 kg
- Capacity of the hopper: 600 liters
- Spraying width 1.35 m

Model 1m65 (240DE10 - 245DE10)
- Attachment 3 points category 1 or 2
- Overall width: 2m
- Overall length 1.30 m without APS
- Weight approximately 500 kg
- Capacity of the hopper: 700 liters
- Spraying width 1.65 m

## DESCRIPTION

The fertilizer spreader is made up:
- of a frame with attachment 3 points and of two supports to be garaged
- of a sheet tack welded steel hopper provided with a cover
- of a trap door of opening with wheel of adjustment and bill-poster
- of a device of distribution by toothed rotor pulled by APS or hydraulic engine according to model
- of an ordering of hydraulic opening of trap door

**in option :**
- of a device of spreading located, for spreading enters the lines of sowing
- of a pair of wheels of support
- of a spillplate of case
- interior deflectors of hopper

# GENERAL SAFETY STANDARDS

Equipment conforming with the Ministry of Labor regulations

Before using the machine, please read the instructions contained in the maintenance book carefully and also make sure that persons using the equipment have read them. Always take special care to respect personnel safety when using the equipment.

Use a stable and flat location for storage and for unhitching of the machine. When in the fields, make sure that the configuration and nature of the ground cannot cause an unbalance of the machine under any circumstances.

Do not hitch the machine before making sure that the machine hitch points and the tractor hitch points are in good condition. Switch the tractor engine off before hitching the machine to make sure that the clutch cannot be accidentally engaged and that no mechanical movement can endanger personnel.

Before moving the machine, make sure that there is no risk in moving it, by carefully checking the size of the machine, and signal before you start moving by sounding the horn.

The machine must not be approached or climbed on while it is moving on the road or when working in the field.

Do not start the machine without firstly making sure that it can be done without danger.

Never bring your hands close to any mechanisms or moving parts. If there is any blockage or jamming or for any technical problem whatsoever, stop the tractor to analyse the causes and correct them. Do not make any modifications to the machine without the written permission of the manufacturer.

Machines are supposed to move about during the day and under good visibility conditions. They must not conceal tractor lights, therefore if necessary install a lighting strip to display a second set of stop lights, indicating lights, etc. Whenever moving at night, make sure that the lights comply with the highway code in force in the country of use.

# C.E. DECLARATION OF CONFORMITY

For equipment subject to autocertification

The undersigned manufacturer:

**CM REGERO Industries**
62 Rue Jean Monnet
Z.I. de la Sensive
44450 LA CHAPELLE BASSE MER
Tél 02 40 49 38 20

declares that the new equipment denoted below:

**FERTILIZER SPREADER with Spreading Rotor**

Type :
Serial number :

complies with the Labor Health and Safety Rules applicable to it.

Prepared in La Chapelle Basse Mer, date

Signature,

CM REGERO
INDUSTRIES

*FERTILIZER SPREADER with Spreading Rotor*

# INSTRUCTIONS

**March 2007 Edition**


**__ CM REGERO Industries __**
**62 Rue Jean Monnet**
**Z.I. de la Sensive**
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**Tél 02 40 49 38 20 - Fax 02 40 93 19 79**