KEENAN

an Alltech company

Operators Manual

KEENAN MechFiber380+

Effective from models MF38N107

Revision E01 November 2022 EN

CONTENTS

Contents: MechFiber380+ service and maintenance section

The MechFiber380+ operator's manual presents information on model-specific maintenance, specifications and spare parts.

Part 1: Service and maintenance, MechFiber380+ model

1 Introduction

1.1 Purpose of this manual

This manual has been designed to present the specific information you need to operate and maintain the KEENAN MechFiber380+ model. Further information on general service and maintenance is included in the general KEENAN MechFiber operator's manual.

> ⚠ **WARNING:**
> **Prior to carrying out any maintenance on the machine, always ensure that the tractor engine is stopped, and disconnect the P.T.O. and hydraulic hoses from the tractor. Observe safety precautions at all times when working on the machine. Read Section 4 in the general machine information manual on safety before attempting to work on the machine.**

1.2 Maintenance checklist

Daily	
Cleaning:	Clean all old feed from around the body to prevent corrosion and damage to the paint.
VFC door:	Before using the machine, check that the door opens and shuts fully and operates smoothly.
Wheel nuts:	Check the torque settings.
Oil sump:	Check the oil level, and replenish with Total/Finol Chainac MP oil as required.
Weekly (40 hours)	
PTO input shaft:	Grease the universal joints (two fittings) and the sliding half shafts (smear grease on surfaces). For further information, please refer to the PTO Maintenance Booklet supplied with the PTO.
Drive (gear) box:	Grease the drive input-shaft bearings (two fittings).
Rotor bearings:	Grease the front and rear rotor bearings (two fittings).
Feed discharge auger:	Grease the front and rear auger bearings (two fittings).
Idler shaft:	Grease the front and rear idler shaft bearings (two fittings).
Drive chains:	Check the condition of the primary and secondary chains.
Chain tensioners:	Grease the pivot points on the primary and secondary chain tensioner mechanisms.

VFC door:	Grease the door's hydraulic cylinders (four fittings) and the slide plates (smear food-grade grease on surfaces). The recommended grease is Ceran FG, supplied by TOTAL Lubricants, or similar food and feed industry-grade grease.
Chassis:	Grease the hitch pivot tube (where the swivel hitch is fitted).
Single axle:	Grease all six pivot points listed below: - Two on each brake rod (four in total) - One on each brake arm (two in total)
Tandem axle (if fitted):	Grease all 14 pivot points listed below: - Two on each brake rod (eight in total) - One on each brake arm (four in total) - One on each spring bogie pivot pin (two in total)
Axle U-bolts:	Check axle U-bolt torque settings (tandem only).
Tyres:	Check that tyres are inflated to the recommended pressures, and make sure the wheel nuts are tight.
Monthly	
Bale handler:	Grease each tine pivot and check the tines for looseness. Check tine buffers for cracks, splits or degradation.
Yearly (end of season or 450 hours)	
Drive system:	Open oil bath drain bung and drain off existing oil. Wash off all dirt and old oil using paraffin, then dry. Refill bath with new oil to required level (see Section 1.5) and run machine for 5 to 10 minutes to ensure that all chains have been lubricated.
Overall machine:	Before storage, wash the complete machine, then grease or oil all weekly lubrication points as outlined above. Open the drain bung in the mixing hopper. Check tyre pressures. Store the machine under a cover or tarpaulin, if possible.
Electronic weigh-box:	If the machine is to be stored, remove the weigh box unit from the machine and keep it in a dry place. Lightly grease the load cell cable connector end and place it into a plastic bag.
Wheels:	Remove and inspect wheel hub. Replace worn parts, redress and re-fit.
Blades:	Blades need to be kept sharpened. This will have to be done without taking the temper from (i.e., overheating) the blades. If the machine is operated with blunt blades, it will place major stress on the drive system. Blades may have to be replaced when it is not practical to sharpen them.

Table 1: Maintenance checklist

WARNING:

Due to hazards involved in entering the mixing chamber, it is recommended that all blade replacement is carried out by a KEENAN-authorized service agent who is specially trained to do so. Contact your local agent (see back cover for details).

1.3 Chains

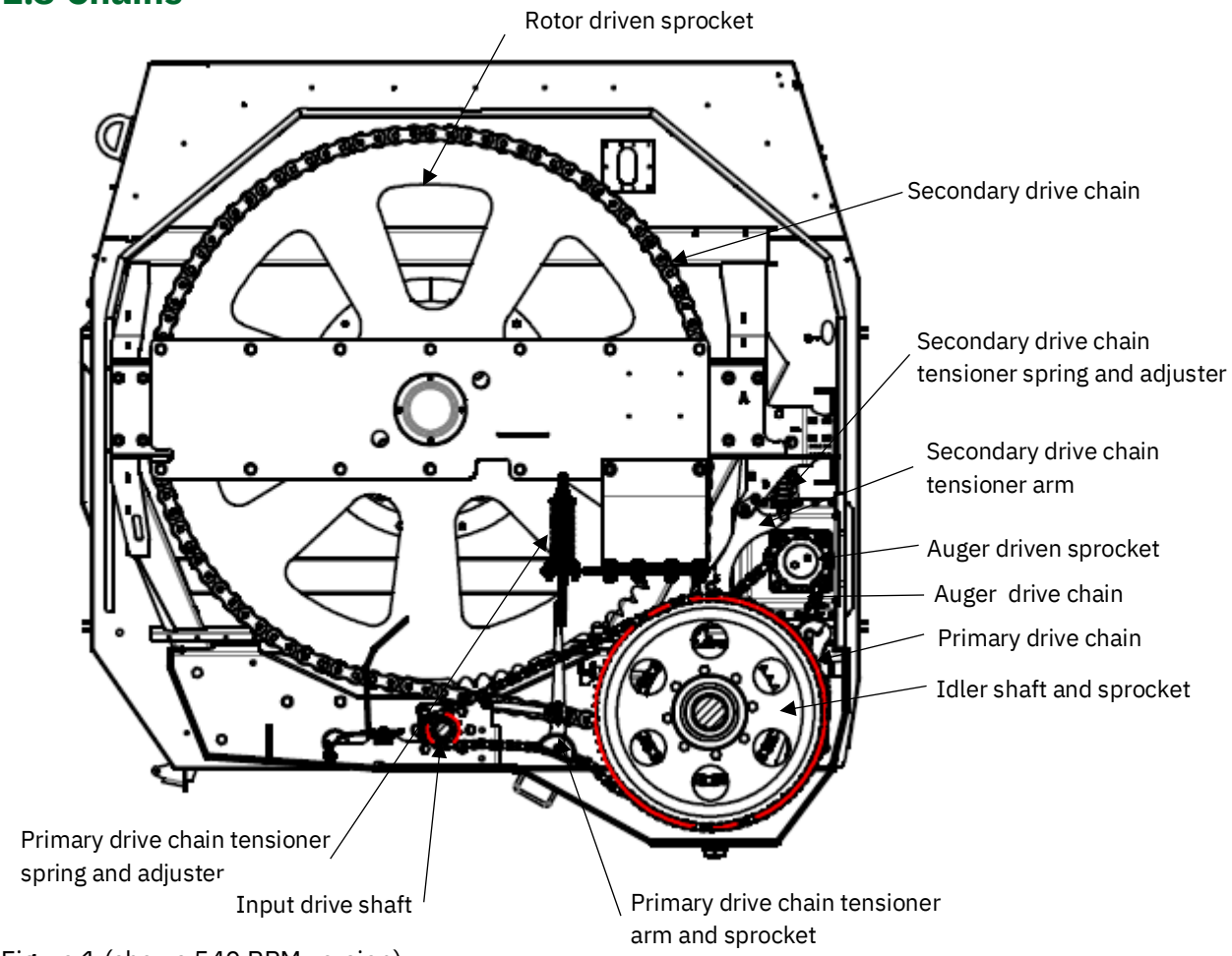


Figure 1 (shows 540 RPM version)

Each week, check the condition of the chain tension arms and adjust as required. There are three chains used on the KEENAN MechFiber380+ model. The primary drive chain (ASA100 Duplex) drives the idler shaft, the auger shaft is driven by a chain (ASA120) from the idler shaft and the secondary chain (ASA200) drives the rotor. All chains are tensioned by spring assemblies on the slack side of the chain.

Primary drive chain	**ASA100 Duplex**	**ASA100 Duplex**
	540 RPM Driveline	**1,000 RPM Driveline**
Links	110 including joiner	140 including joiner
Pitch (mm)	31.75	31.75
Pitch (inches)	1.25	1.25
Chain length (mm)	3,492.5	4,445.0
Chain length (inches)	137.5	175
Rotor drive chain	**ASA200**	***Same as 540 RPM***
Links	108 including joiner	
Pitch (mm)	63.50	
Pitch (inches)	2.5	
Chain length (mm)	6858	
Chain length (inches)	270	
Auger drive chain	**ASA120**	***Same as 540 RPM***
Links	62 including joiner	
Pitch (mm)	38.1	
Pitch (inches)	1.5	
Chain length (mm)	2362.5	
Chain length (inches)	93	

Table 2: MechFiber380+ drive chains

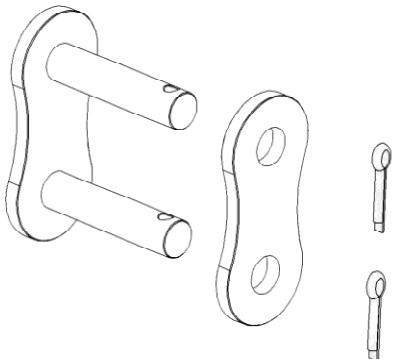


Figure 2: Chain joiner link

Note: *The ASA120 chain uses split pins in the joiner link, as shown, while the ASA200 chain uses roll pins due to the high loads involved.*

CAUTION:

Failure to maintain oil on the chains may reduce their working life by 90%. Chain damage is not covered by factory warranty. See the warranty section for more details.

It is also essential to monitor and maintain the required chain tension. Chain tension is adjustable for both the primary and secondary chains. (See section on chain tensioning.)

CAUTION:

For the first month of ownership (i.e., during the chain bedding-in period), it is recommended to check chain tension daily. (See section on chain tensioning.)

1.4 Oil level

The oil reservoir (or sump) is located on the left side of the drive system. Each day, check the level of the oil reservoir. Before checking the oil level, ensure that the machine is sitting level (both front to rear and left to right). An oil-level viewing window has been fitted to the front panel of the drive system and can be viewed through a recess in the lower face of the left-side front cover. The recommended oil level should be midway along this window. This represents 30 litres of oil in the sump. The minimum level is -15 mm from the centre, which represents an oil level of 20 litres in the sump. The maximum level is +15 mm from the centre, which represents an oil level of 30 litres in the sump.

If the oil level is low, top it up with chain-bar oil (the properties of which allow it cling to the chains longer). Use Total/Finol Chainac MP if available or a suitable equivalent (volumetric mass of 879 kg/m^3 @ 15°C and viscosity rating of 150mm^2/s @ 40°C). Do not use grease on the chains, as it is unsuitable for the application and will not allow for the lubrication of the vital internal parts of the chain.

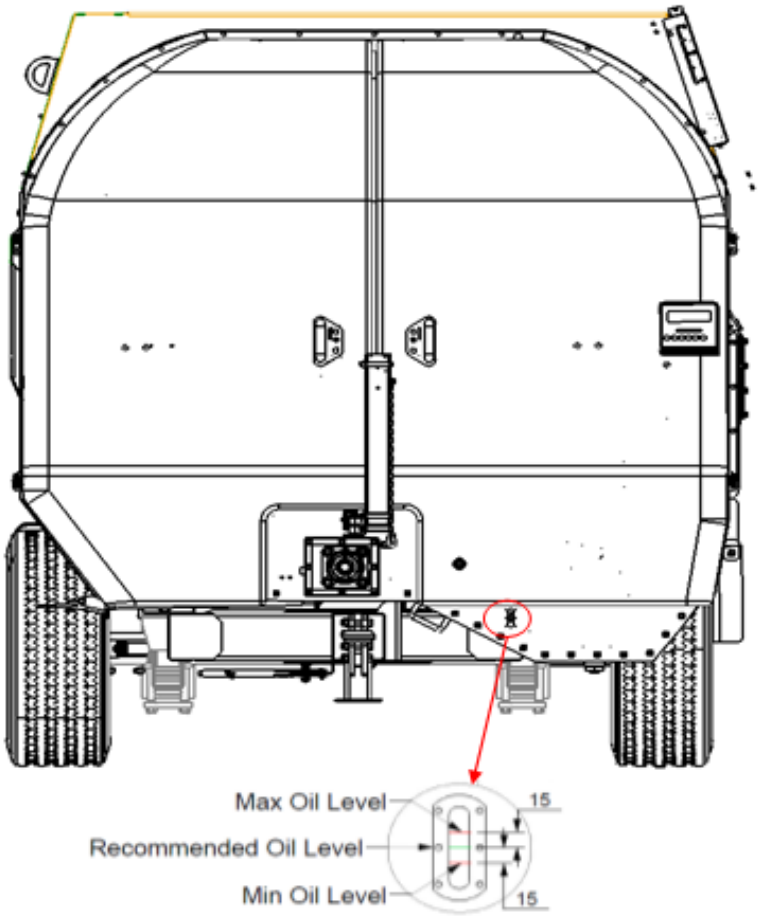


Figure 3

1.5 Chain tensioning (540 RPM)

With use, the drive chains will extend slightly over time. To compensate for this, all KEENAN MechFiber machines are fitted with a tensioner mechanism on the slack side of the chain. The primary chain tensioner comprises a linear tension arm, which is held in position with a lower connecting arm. A pull rod at the top of the tensioner arm passes through a shoulder plate on the drive system housing. Tension is achieved by use of a compression spring seated above the shoulder plate. The preload can be adjusted using the threaded upper spring seat.

The rotor & auger chains tensioners comprises a pivoting tension arm connected to a compression spring strut. The preload can be adjusted using the threaded upper spring seat. In order to prevent the chain from jumping and premature wear, the chain must be held at the correct preload tension at all times and should be checked weekly.

1. Setting tension on the primary chain

The primary chain preload tension is set by adjusting the upper spring seat above the tensioner arm. The spring assembly is fitted with an adjustment indicator, which uses the upper edge of the spring as its marker. When it aligns with the green or “OK” portion of the decal, then the tension is set correctly and does not require adjustment. But if the upper edge of the spring is outside of this section or in the red, then adjustment is required. The decal arrow indicates the direction in which to adjust.

The upper spring seat is an internally threaded sleeve that sits on the guide shaft. It has a shoulder for the spring to sit against and a 40-mm A/F hexagon section at the top for adjustment. A standard M20 nut is used to lock the seat in position.

To adjust, first remove the two wrenches from their storage location on the front left face of the drive system reduction gearbox.

Swing the tensioner indicator downwards to allow full access to the spring seat nuts. Using the 40-mm wrench and the 30-mm wrench, open the locknut (top nut) and screw clear of the spring seat. The spring seat can now be adjusted up or down to set the compressed length to 165 mm (its free length is 200 mm). The upper edge of the spring should now be positioned in the centre of the green section of the indicator. This provides the correct tension of approximately 70 kg to the chain. To lock the setting, hold the spring seat in position with the 40-mm wrench and tighten the locknut against it with the 30-mm wrench.

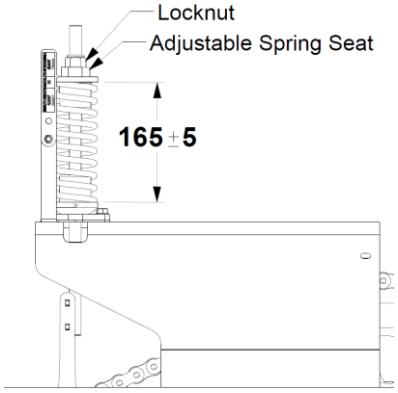


Figure 4: Primary chain tensioner spring setting (540 RPM driveline)

2. Setting tension on the Rotor and auger chain

The tension is set by adjusting the upper spring seat above the tensioner arm. The spring assembly is fitted with an adjustment indicator that uses the upper edge of the spring as its marker. When it aligns with the green or “OK” portion of the decal, then the tension is set correctly and does not require adjustment. But if the upper edge of the spring is outside of this section in the red, then adjustment is required. The decal arrow indicates the direction in which to adjust.

The upper spring seat is an internally threaded sleeve that sits on the guide shaft. It has a shoulder for the spring to sit against and a hexagon section at the top for adjustment. A similarly sized hexagon nut is used to lock the seat in position.

To adjust, first remove the two wrenches from their storage location on the front left face of the drive system reduction gearbox.

Swing the tensioner indicator downwards to allow full access to the spring seat nuts. Using the wrenches, open the locknut (upper nut) and screw clear of the spring seat. The spring seat can now be adjusted up or down to set the compressed length to 250 mm (its free length is 280 mm). The upper edge of the spring should now be positioned in the centre of the green section of the indicator. This provides the correct tension of approximately 360 kg to the chain. To lock the setting, hold the spring seat in position with one of the wrenches and tighten the locknut against it with the other.

It is recommended to check the tension weekly in the first few weeks of operation, as the chain, sprockets and tensioner “beds in” and may need to be adjusted

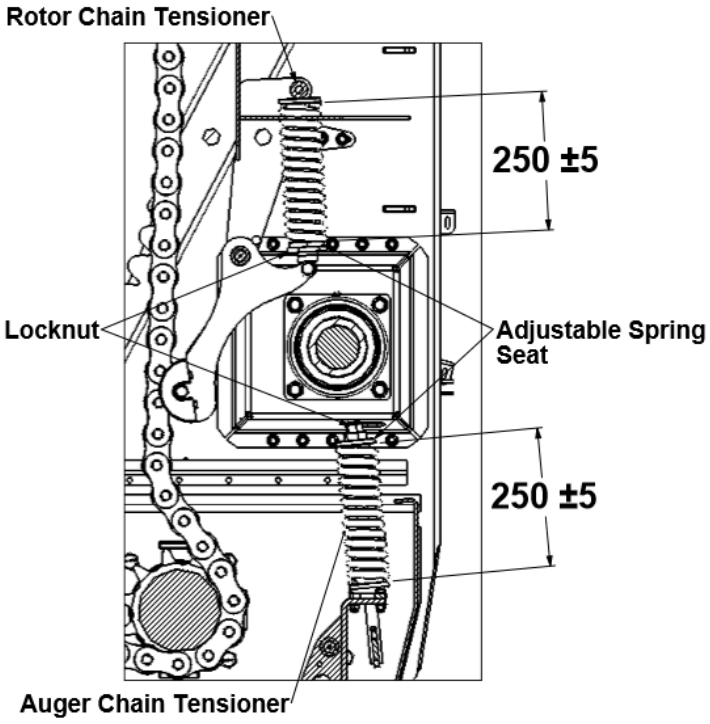


Figure 5: Rotor and auger chain tension spring setting (540 RPM driveline)

1.6 Chain tensioning (1000 RPM)

Primary chain: This preload tension can be set by loosening the locknut and adjusting the upper spring seat. The correct tension will be applied to the chain when the compression spring is compressed to 165 mm, as shown below on the right.

Secondary chain: This preload tension can be set by loosening the locknut and adjusting the upper spring seat. The correct tension will be applied to the chain when the compression spring is compressed to 165 mm, as shown below on the left.

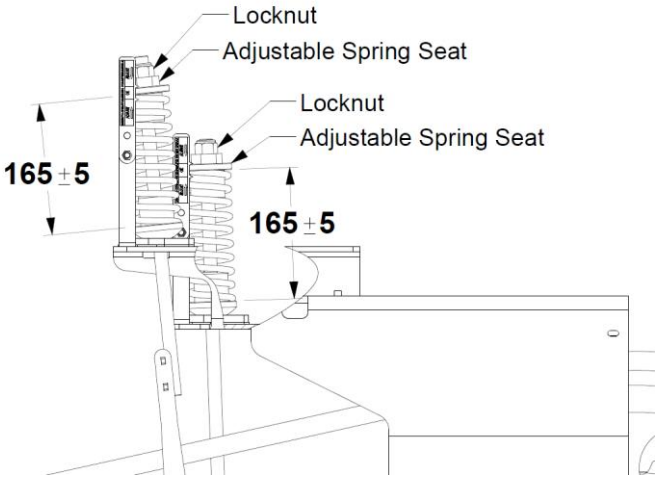


Figure 6: Primary & secondary chain tensioner spring setting (1000 RPM driveline)

Rotor and auger chain: This preload tension can be set by loosening the locknut and adjusting the spring seat. The correct tension will be applied to the chain when the compression springs are compressed to 250 mm, as shown below.

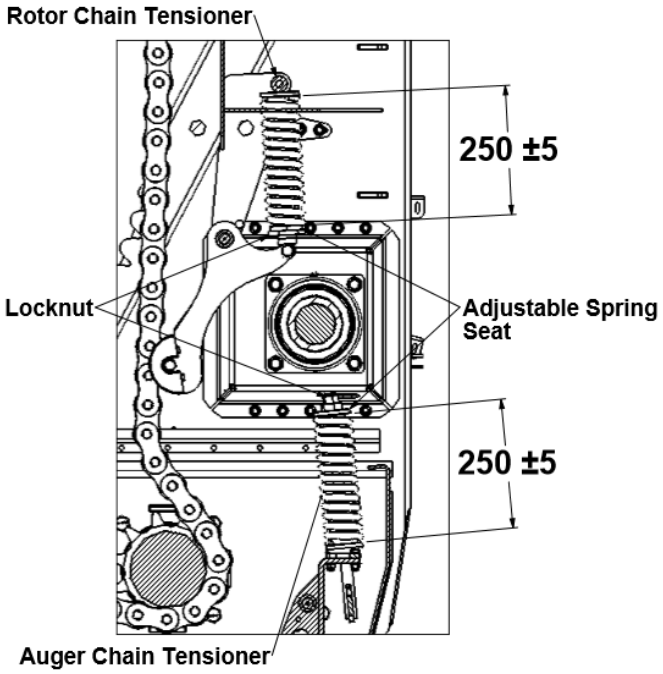


Figure 7: Rotor and auger chain tension spring setting (1000 RPM driveline)

1.7 Greasing

The KEENAN MechFiber380+ is fitted with a 10-port central greasing manifold as standard, located at the upper left side of the machine inside the front cover. It allows for the greasing of all the inaccessible grease points of the drive system of the machine from that one location.

The tables below outlines the points where greasing should be practiced at regular intervals and where particular grease points are located.

1. Bearings

Grease point	2
Grease point	3
Grease point	5
Grease point	4
Grease point	6
Grease point	7
Grease point	8
Grease point	12

2. Pivot points

Pivot point	11
Pivot point	10
Pivot point	9
Pivot point	1

3. VFC-door

Check that the VFC-door is able to move freely each day and grease external slides as appropriate.

Pivot point	16

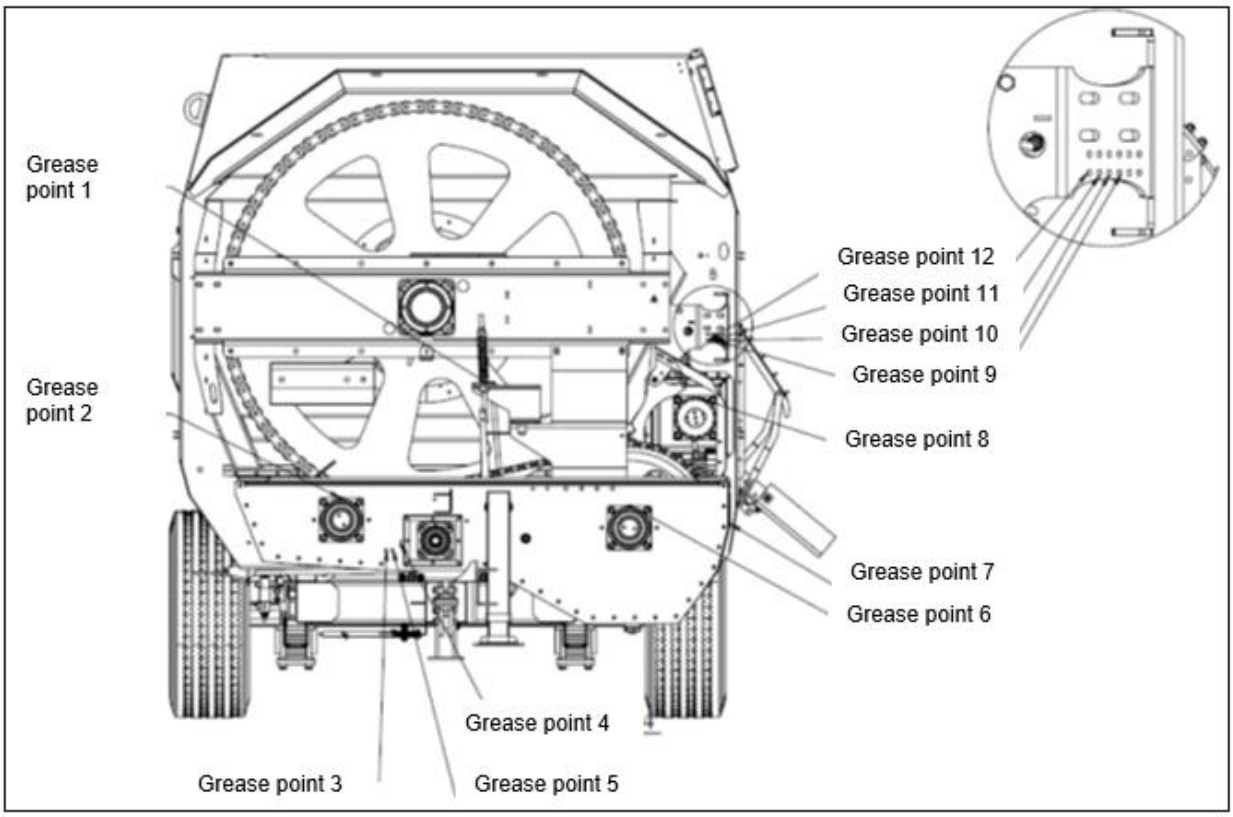


Figure 8: Front greasing points 1000 RPM

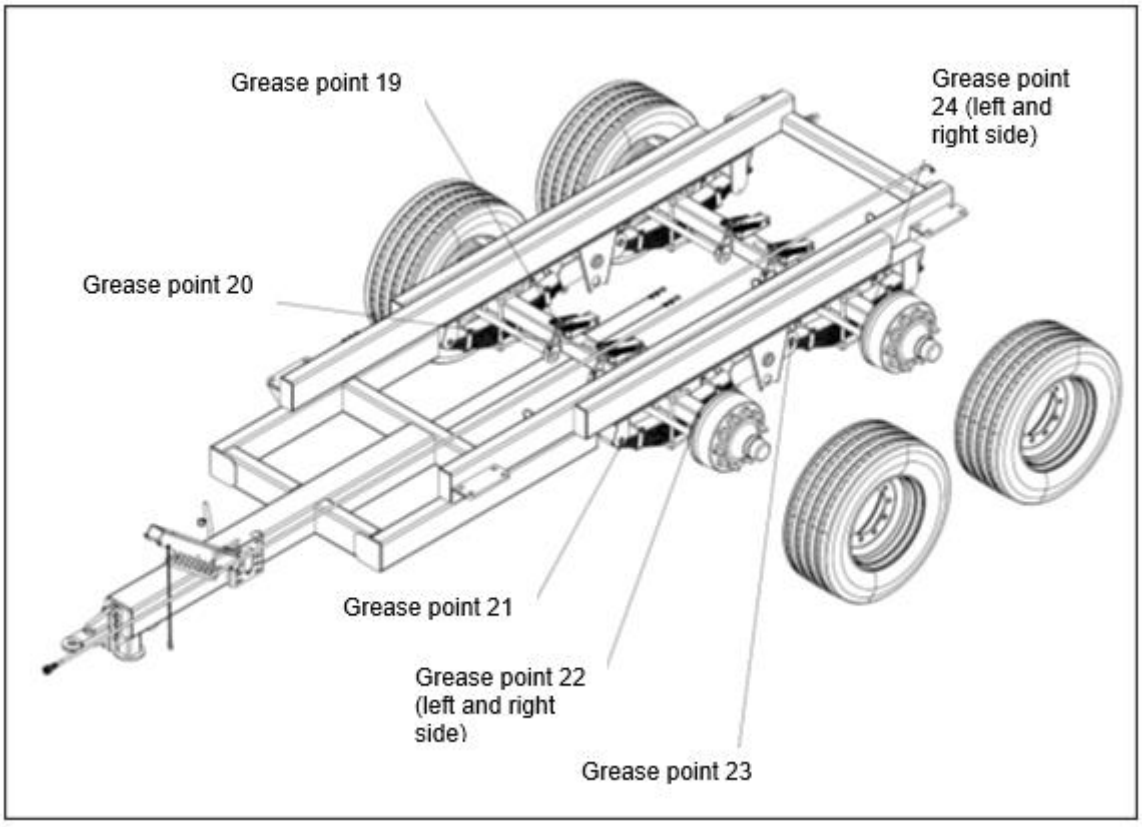


Figure 9: Chassis grease points

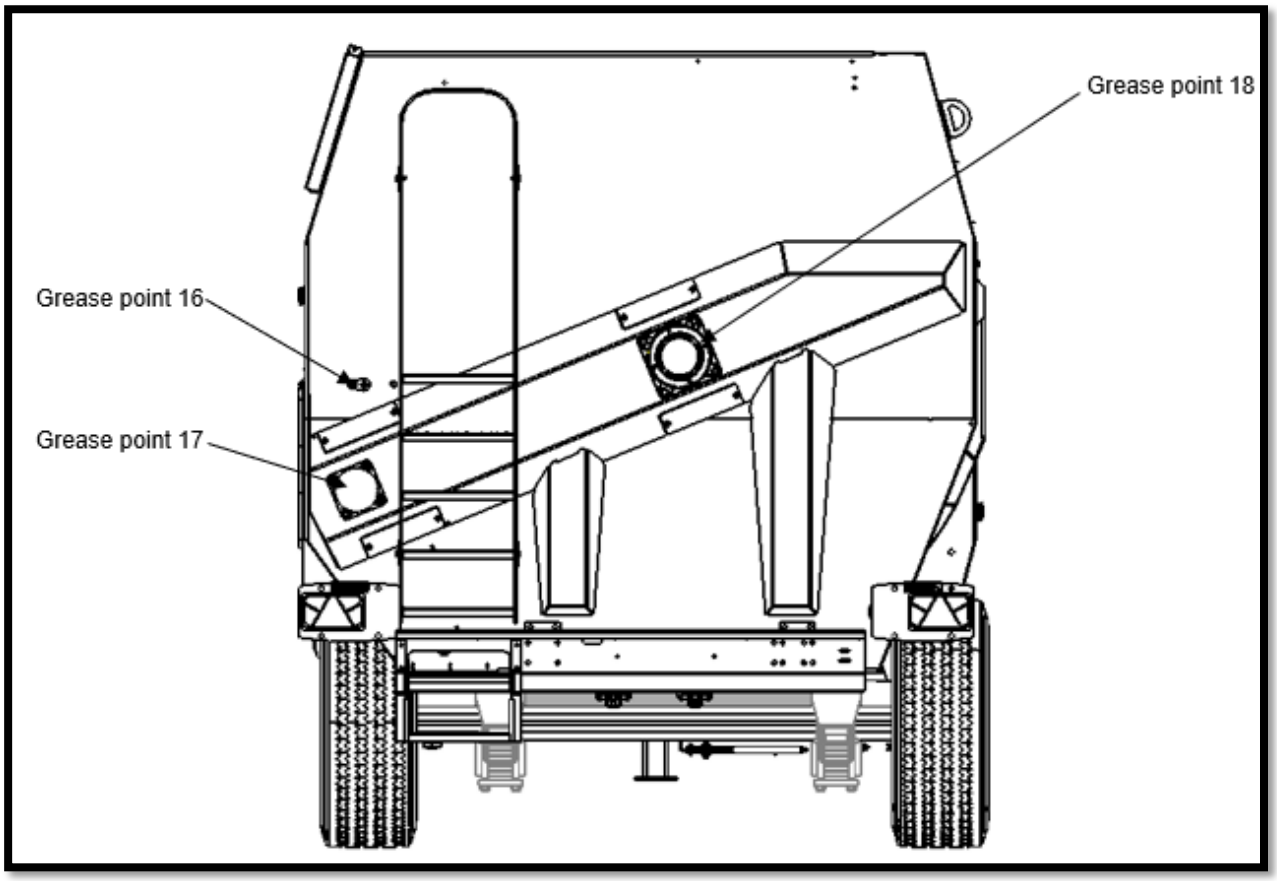


Figure 10: Rear grease points

1.8 Blade maintenance

Blade sharpening and/or replacement: It is recommended that only KEENAN-trained and/or qualified maintenance personnel should perform this task.

Blades need to be kept sharp. Blunt blades will increase power requirements. Sharpening must be done without taking the temper from the blades (i.e., without overheating). Blades can be sharpened many times, but when they reach the point where this is no longer practical, they must be replaced.

1.9 Shear bolts

The following are the recommended shear bolts to be used with the KEENAN MechFiber380+.

Machine type	PTO shaft	Shear bolt	Colour code
540 RPM input	T80 and V80	M12 x 70 x 5.6	Blue
1000 RPM input	T60 and V60	M10 x 60 x 4.6	Green

Table 3: Shear bolt size and grade

> **CAUTION:**
> Failure to use the correct grade of shear bolt can result in overload failure of the machine and will invalidate your warranty.

1.10 Nuts and bolts

1. After the first day, and regularly thereafter, inspect wheel nuts and tandem-axle U-bolts (where fitted).
2. After the first week, and each week thereafter, check all nuts and bolts, including bearing nuts, for tightness.

General torque

Stud/bolt type	FT/LB	N.M
M22	335	450
M20	260	350
M18	200	270

Table 4: General torque for wheel studs

U-bolt diameter (mm)	Tightening torque (Nm)
18	230
22	450
24	500
27	600

Table 5: Recommended torque for U-bolts for tandem axles (where fitted)

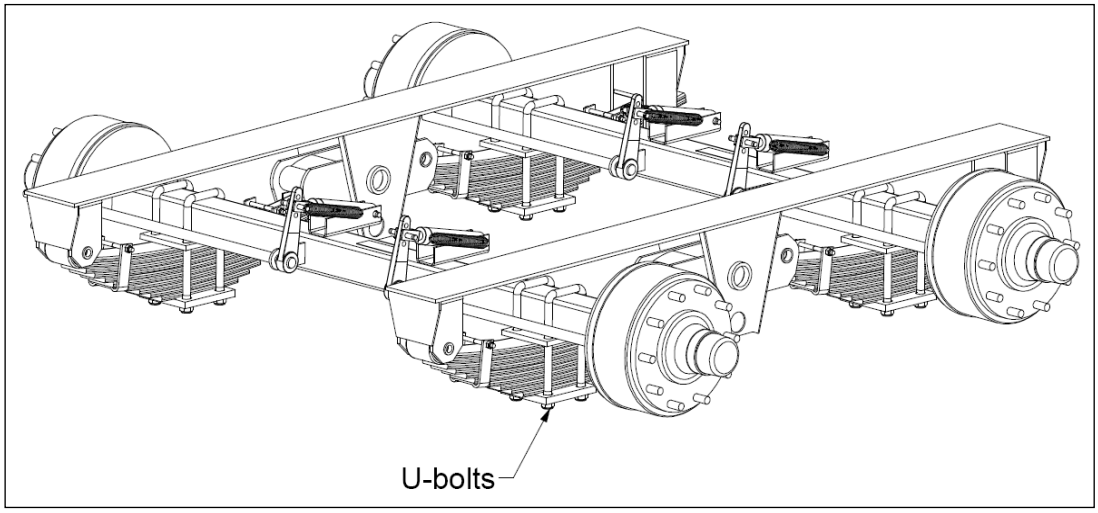


Figure 11: U-bolt position on bogie axle

1.11 Tyres

1. Each week, check the tyres for wear and damage.
2. Each week, check the tyre pressure. Optimal tyre pressures are shown in Table 6.

This information is given as guidance. If in doubt, please contact your KEENAN service partner.

> ⚠ **WARNING:**
> When refitting and re-inflating tyre/wheel assemblies, a safety cage should be used to prevent possible injury. Incorrectly fitted tyres are dangerous. Please make sure tyre repairs are carried out by experienced tyre fitters.

Type	Bar	PSI
385/65 R 22.5	9.0	132
385/55 R 22.5	9.0	132
445/45 R 19.5	9.0	132

Table 6: Tyre pressure

1.12 Hitch height adjustment

The hitches of the KEENAN MechFiber380+ have been designed to allow for a number of various hitch height options with the same components used. The hitch height is normally selected for the application and set at the factory per the options below.

The main standard hitch assembly is a bolt-on assembly, and once the main setting is completed at the factory, it may also be adjusted on-farm by moving the assembly up or down within the bolt holes or turning the complete hitch over, as it is suitable to operate facing either way up.

Note:
*1: A minimum of four M20 x 100-mm **grade 8.8** bolts must be used to secure the swivel ring hitch and the clevis hitch to the drawbar.*
2: Care must be taken when adjusting the hitch height so that there is adequate PTO clearance and that there is enough ground clearance below the stand.

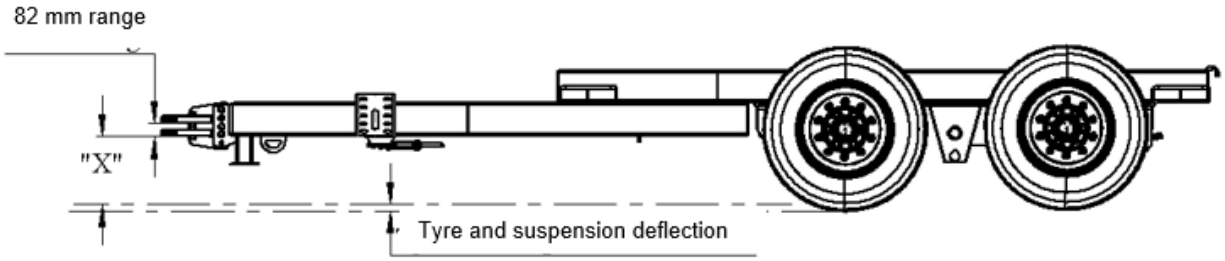


Figure 12.1: Standard hitch adjustment

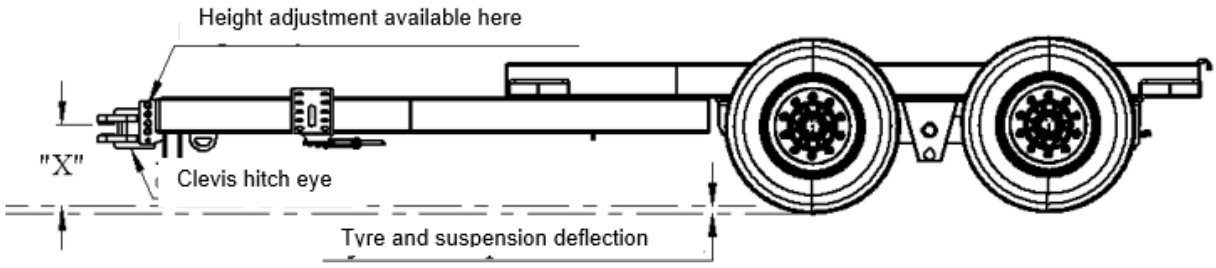


Figure 12.2: Clevis hitch adjustment

1.13 Specifications

Model		MechFiber380+	
		Non-Bale Handler	Bale handler
Unladen	kgs	12,750	13,750
	lbs.	28,110	30,314
Payload	kgs	9,000	
	lbs.	19,840	
Gross	kgs	21,750	22,750
	lbs.	47,950	50,154

Table 7: Machine weights

1. Weights may vary depending on the exact specifications.

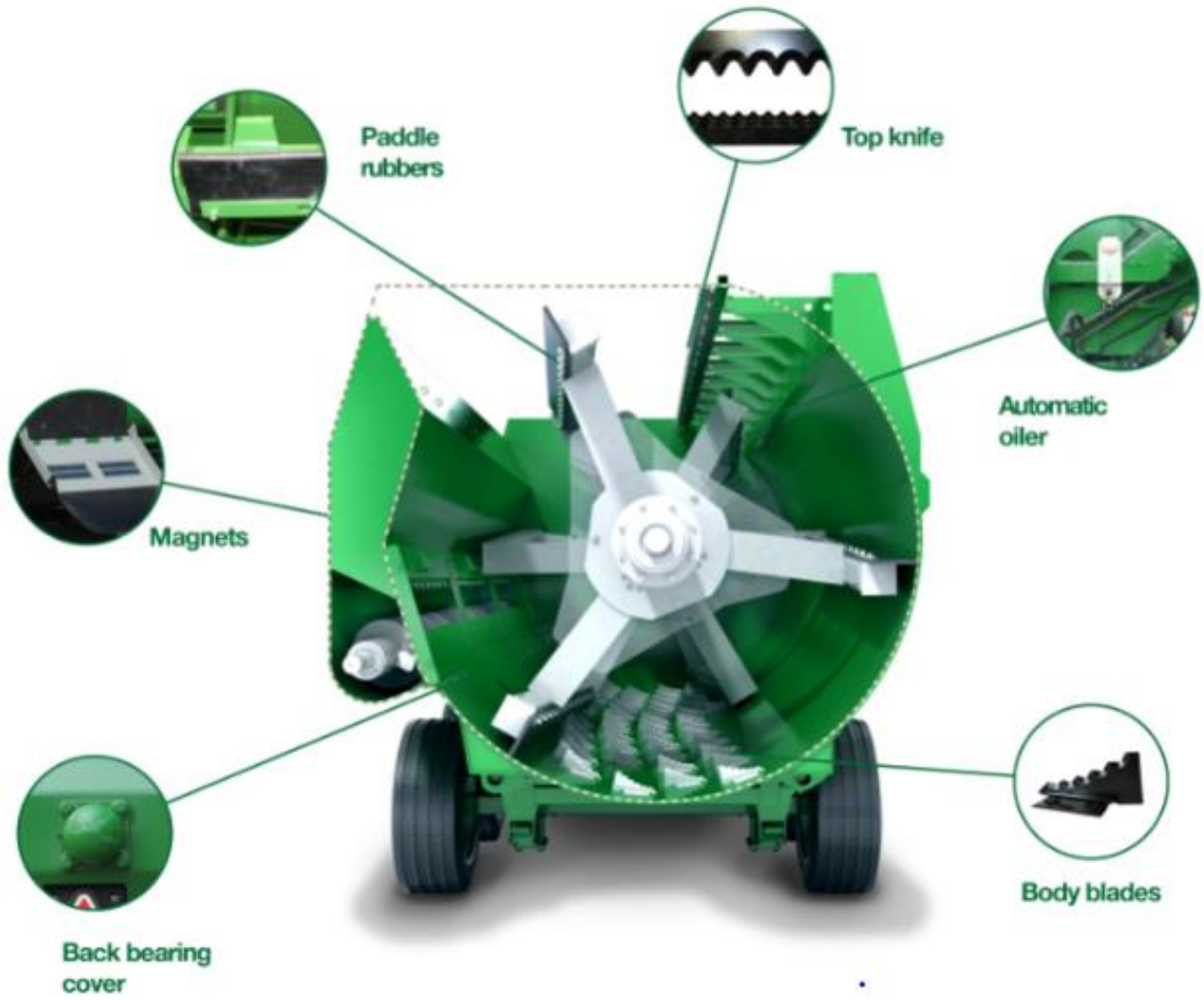
1.14 Soda grain

Additional safety instructions and warnings are available and covered in the soda grain leaflet, which should be read carefully before soda-treating grain. When you are finished treating the grain, clean out any remaining material in the mixing and/or auger chamber by loading in 200–300 kg of silage or 50 kg of straw, and allow the machine to mix before unloading in the normal manner.

Note that when mixing soda grain, the maximum gross load that can be mixed in the KEENAN MechFiber380+ is 7,500 kg.

The soda-grain process can be completed using a KEENAN mixer, but before completing treatment on your farm, make sure you are adhering to the local animal feed legislation and health and safety guidelines involving the treatment of grain.

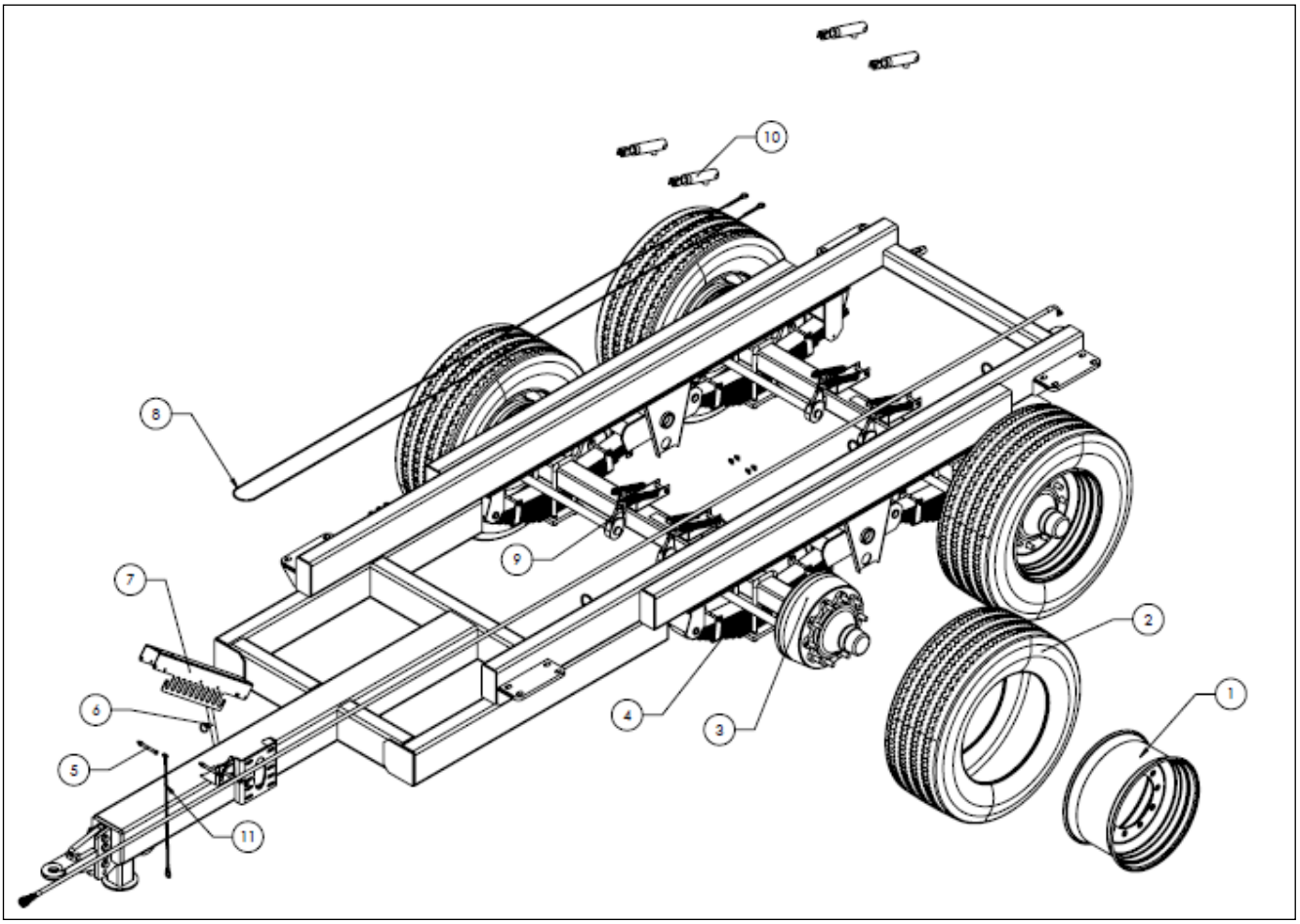
Part II: Parts list



List of abbreviations:

P/N	Part number
Qty	Quantity
ID	Inner diameter
OD	Outer diameter
N/A	Not applicable
c/w	Complete with

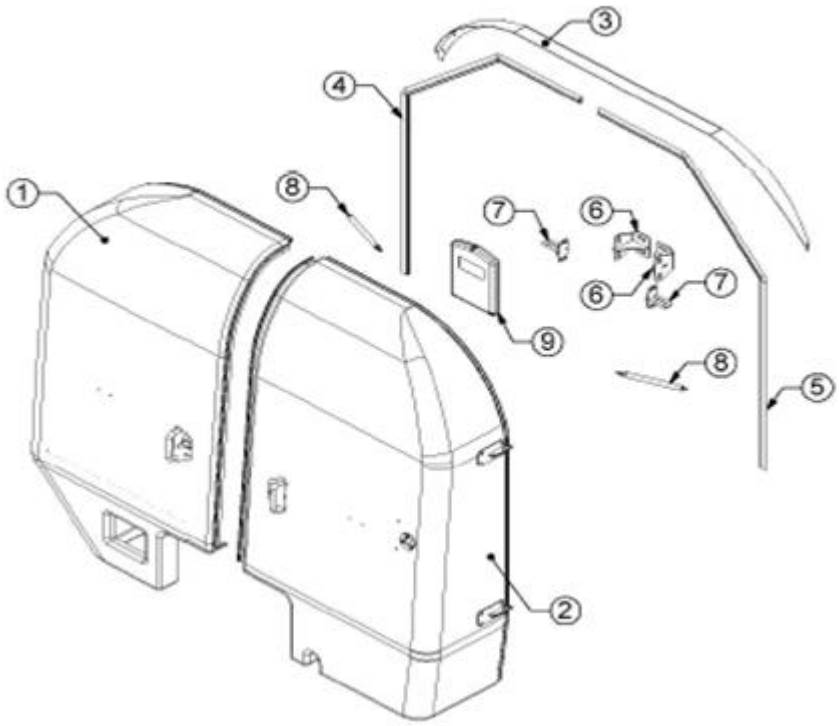
2.1 Chassis parts

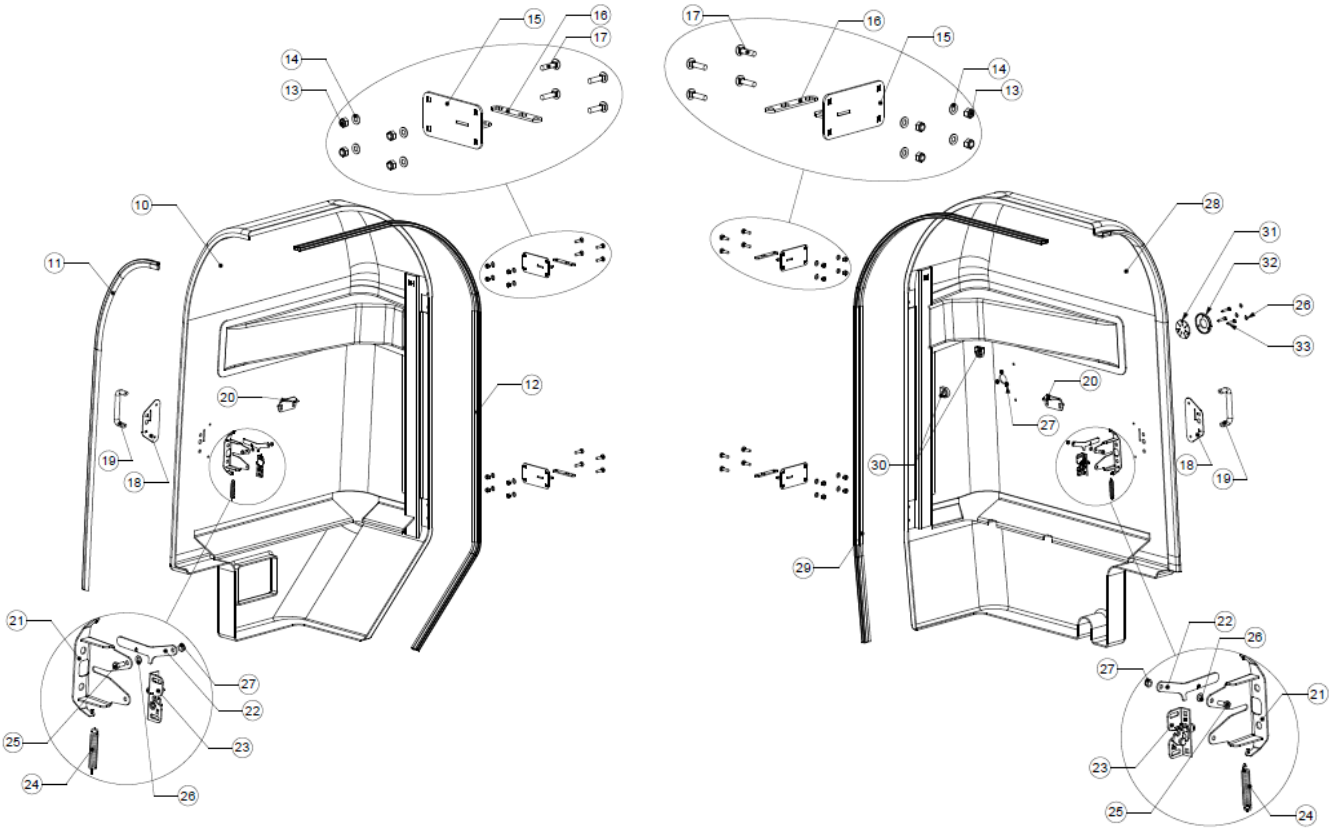


Item	P/N	Qty	Description
1	702309	4	Wheel rim 11.75” x 22.5”, 10 stud
2	702774	4	385/55 R 22.5 remould tyre
3	705949	2	2,300-mm x 130-mm 10 stud straight axle (ADR)
4	705970	2	Suspension assembly (ADR)
5,7,11	FP160-001-0095	1	Hose holder assembly arm
6	FP300-001-0089	2	Handbrake assembly
8	702038	1	Handbrake cable
9	N/A	4	Brake arm, part of axle
10	N/A	4	Brake ram, part of axle
12	FP380-001-0024	1	Hitch assembly
13	700290	4	Bolt M20 x 100-mm (grade 8.8)
14	700733	8	M20 flat washer
15	700305	4	M20 locknut
14	700729	16	M10 flat washer

Table 8: Chassis

2.2 Front cover parts

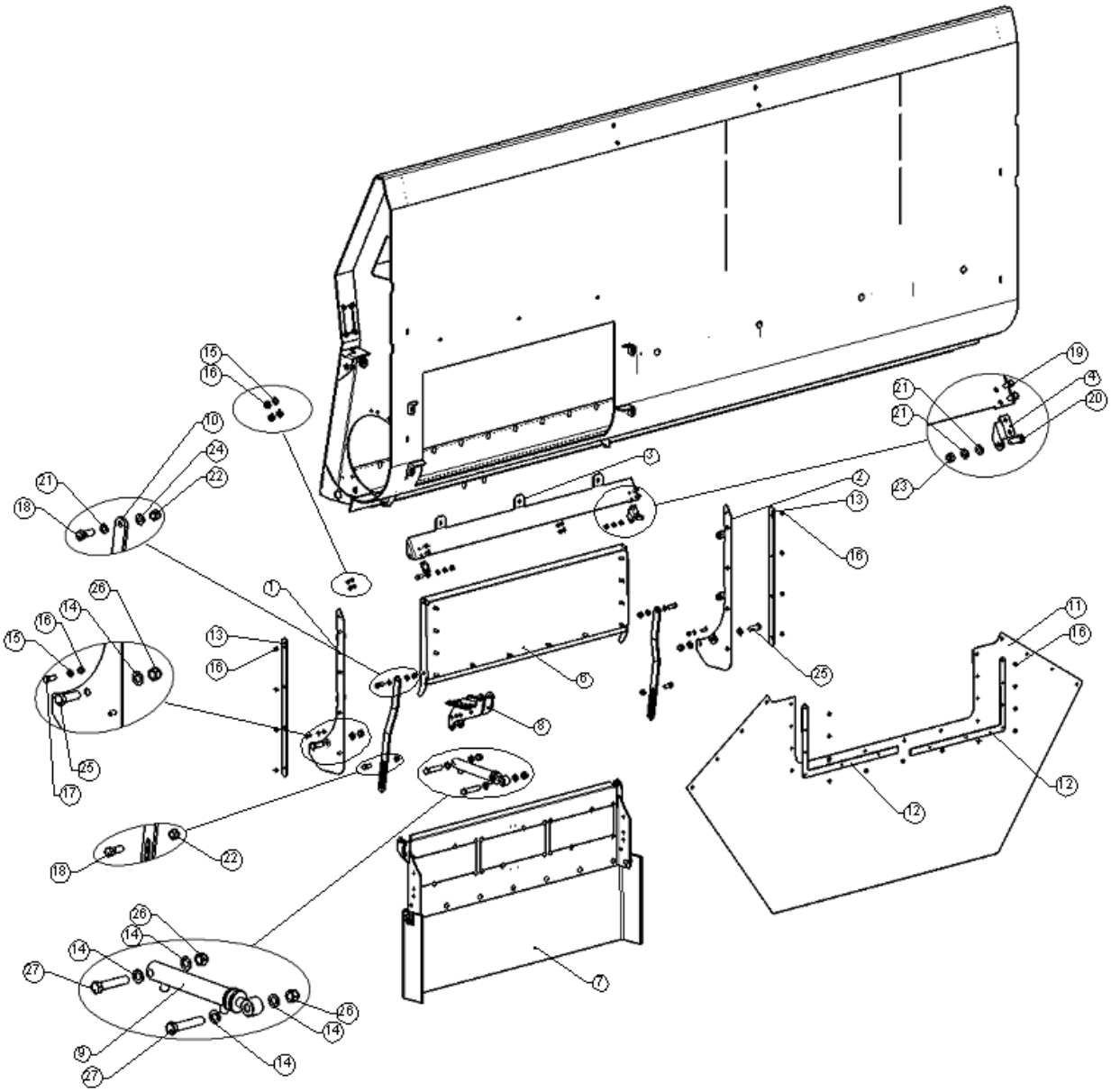


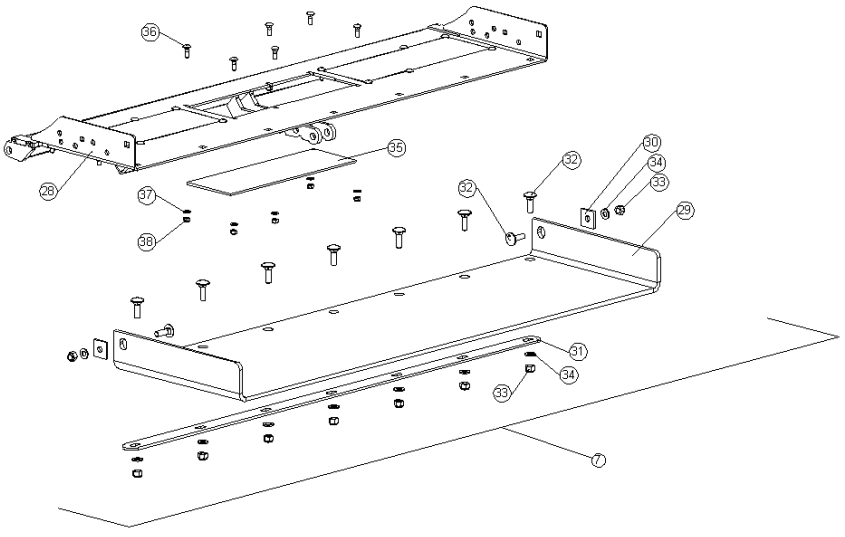


Item	P/N	Qty	Description
1	FP380-038-0029	1	Right side cover assembly (black)
2	FP380-037-0093	1	Left side cover assembly (black)
3	FP380-002-0072	1	Front panel curved rain channel assembly — top section
4	-		Not required on this Model
5	-		Not required on this Model
6	FP380-038-0022	2	MF380 door latch bracket
7	FP200-048-0244	2	Camlock striker plate assembly
8	706101	2	Gas strut CA102911 (600 mm open, 200 N, 250 stroke)
9	706086	1	A4 flat document box
10	FP380-038-0029	1	MF380 GRP front cover (right side)
11	FP380-038-0025	1	MF380 front cover inner seal (L = 2,110)
12	FP380-038-0026	1	MF380 front cover outer seal — RH (L = 3,575)
13	700241	16	M10 locknut
14	700729	16	M10 flat washer
15	FP200-037-0064	4	Front cover hinge mount assembly
16	FP380-037-0057	4	GRP hinge adjustment plate
17	700251	16	M10 x 40 cuphead bolt
18	FP200-037-0095	2	Camlock outer plate
19	701363	2	Handle
20	FP200-037-0113	2	Gas strut outer mounting bracket
21	FP200-037-0093	2	Camlock mounting bracket
22	FP200-037-0094	2	Secondary fail-safe latch
23	706015	2	Fibreglass door camlock unit
24	701277	2	3" spring
25	700208	2	M8 x 20-mm setscrew
26	700736	8	M8 flat washer
27	700223	5	M8 locknut
28	FP380-037-0092	1	MF380 GRP front cover (left side)
29	FP380-037-0089	1	MF380 front cover outer seal — LH (L = 3,280)
30	705826	3	Adaptaflex conduit clip 28 mm
31	FP200-037-0114	1	Weighing cable gland seal (7-hole)
31a	FP200-037-0149	1	Weighing cable gland seal (1-hole)
32	FP200-037-0115	1	Weighing cable gland seal outer retainer
33	700214	3	M8 x 40-mm setscrew (8.8 grade)

Table 9: Front covers

2.3 Standard feed-out tray parts





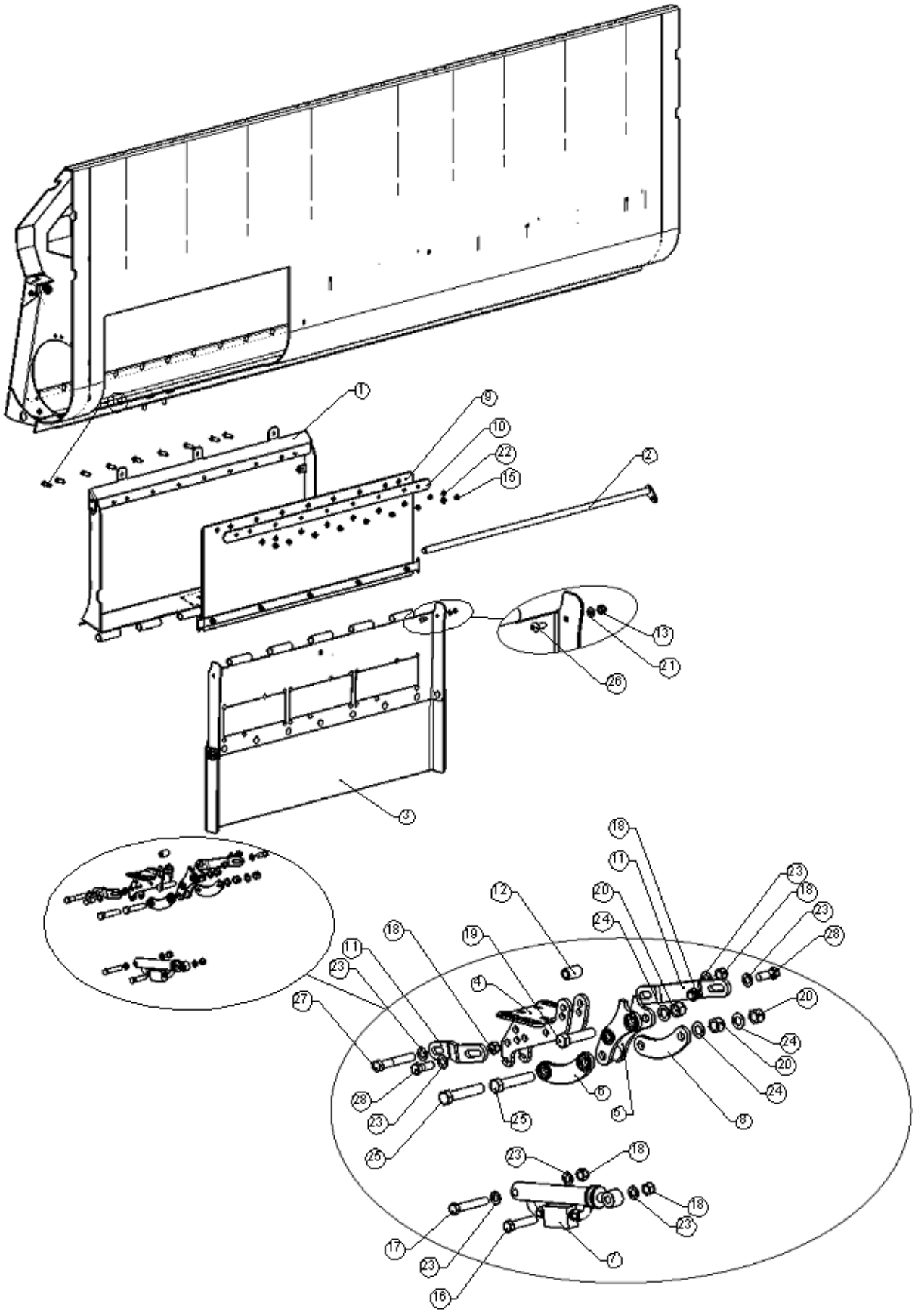
Item:	P/N:	Qty:	Description:
1	FP160-006-0429	1	Feed-out shroud front side plate assembly
2	FP160-006-0430	1	Feed-out shroud rear side plate assembly
3	FP160-006-0432	1	Feed-out shroud top plate
4	FP160-006-0088	1	Hinge bracket, feed-out door, right-hand side
5	FP160-006-0087	1	Hinge bracket, feed-out door, left-hand side
6	FP160-006-0090	1	Feed-out door assembly
7	FP160-006-0123	1	Tray assembly with rubber extension (standard)
8	FP160-006-0044	1	Feed-out tray ram mounting plate assembly
9	703591	1	6” stroke hydraulic ram (KEEN-63)
10	FP080-006-0012	2	Feed-out door link arm
11	FP160-006-0072	1	Feed-out rubber shroud, rubber curtain
12	FP300-006-0095	2	Feed-out door shroud retainer
13	FP300-006-0096	2	Feed-out door shroud side retainer
14	700732	7	M16 flat washer
15	700736	6	M8 flat washer
16	700223	26	M8 nylock nut
17	700210	2	M8 x 25 setscrew (HT)
18	700249	4	M12 x 35 setscrew
19	700208	4	M8 x 20 setscrew
20	702111	2	M10 x 30 setscrew
21	700729	6	M10 flat washer
22	700266	4	M12 locknut
23	700241	2	M10 locknut
24	700730	2	M12 flat washer
25	700275	2	M16 x 50 bolt
26	700283	4	M16 locknut
27	700281	2	M16 x 90 bolt
28	FP160-006-0124	1	Feed-out tray assembly (standard)
29	701403	1	Feed-out rubber extension (standard)
30	EF106-79	2	Feed-out tray side rubber retainer
31	FP160-006-0224	1	Rubber retainer
32	705405	9	M12 x 40 cuphead bolt
33	700266	9	M12 locknut
34	700730	9	M12 flat washer
35	FP160-006-0270	3	Tray magnet hole blanking plate (standard)
35a	701366	3	Magnet plate (OE)
36	702256	18	M8 x 25 cuphead bolt
37	700736	18	M8 flat washer
38	700223	18	M8 nylock nut

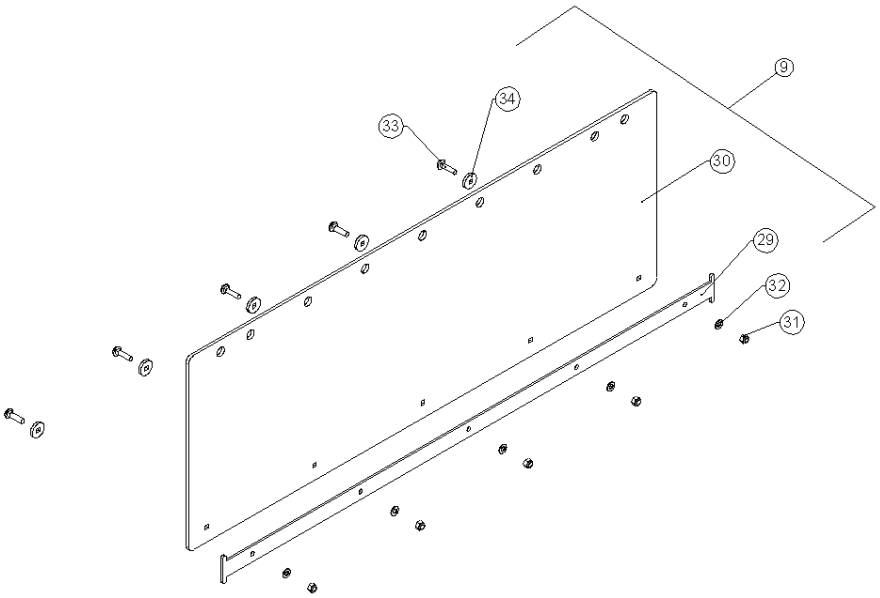
Table 10: Feed-out tray details

Note:
Complete standard feed-out kit P/N FP160-006-0428

Feed-out tray can be supplied with the magnet assembly P/N FP160-006-0071

2.4 Fold-down tray parts (optional extra)

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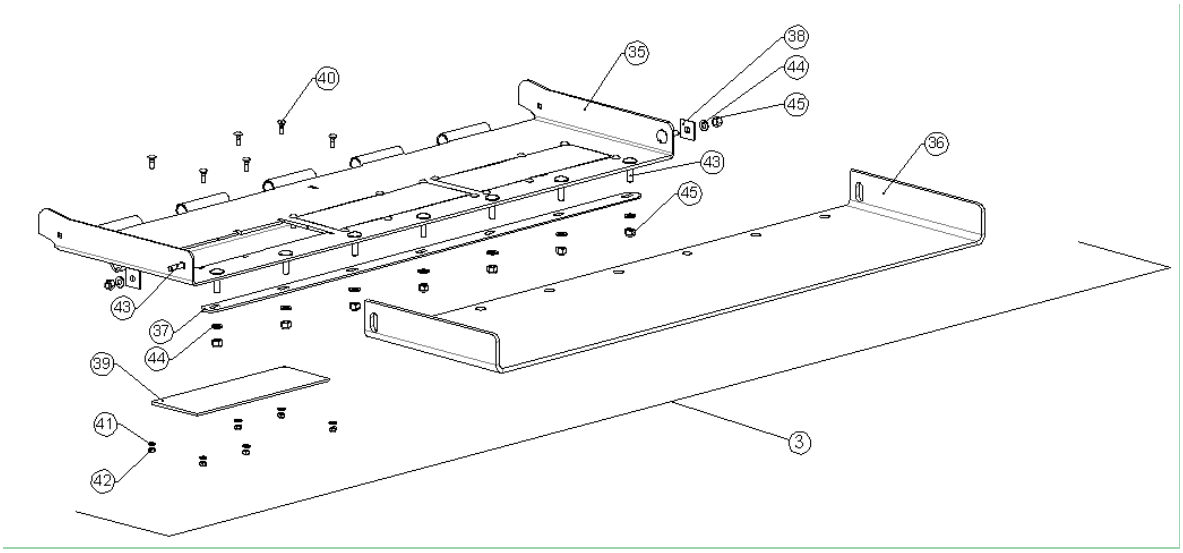
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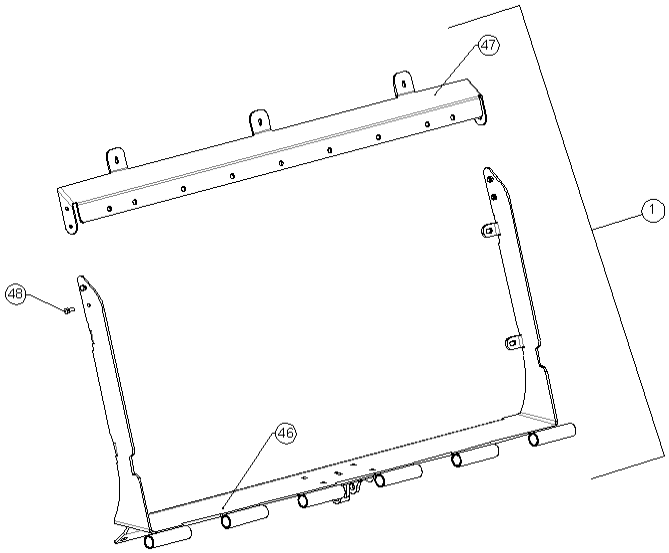
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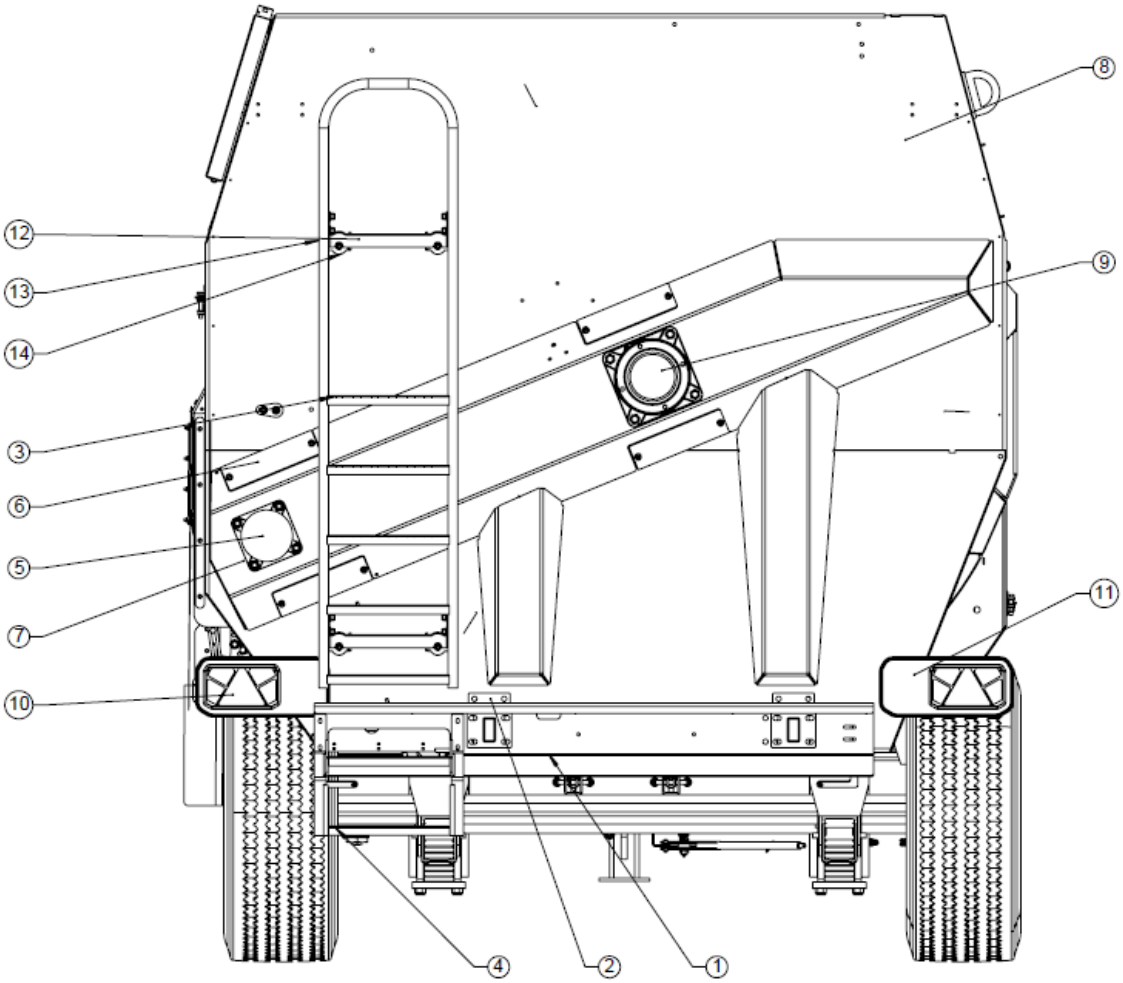
Item:	P/N:	Qty:	Description:
1	FP160-006-0417	1	Fold-down tray shelf assembly
2	FP170-006-0182	1	Fold-down tray hinge bar assembly
3	FP170-006-0191	1	Fold-down tray assembly and rubber
4	FP160-006-0044	1	Fold-down tray mounting plate assembly
5	FP170-006-0162	1	Fold-down tray inner link arm assembly
6	FP200-006-0340	1	Fold-down tray outer link arm assembly
7	705268	1	6” ram assembly with check valve (KEEN-63SP)
8	FP200-006-0332	1	Fold-down tray outer link arm — 127-mm centres
9	FP160-006-0427	1	Feed-out shroud rubber assembly
10	FP160-006-0061	1	Rubber retainer 1,400 mm wide
11	FP160-006-0420	2	Fold-down tray shelf to auger chamber tie plate
12	FP170-006-0156	1	Feed-out tray ram bracket spacer bush
13	700241	1	M10 lock nut
14	700250	9	M12 x 40 setscrew
15	700266	9	M12 lock nut
16	700280	1	M16 x 80 bolt
17	700268	1	M16 x 100 bolt
18	700283	5	M16 locknut
19	700302	1	M20 x 90 bolt HT
20	700305	3	M20 nylock nut
21	700729	1	M12 locknut
22	700730	18	M12 flat washer
23	700732	7	M16 flat washer
24	700733	3	M20 flat washer
25	701488	2	M20 x 110 bolt HT
26	700226	1	M10 x 30 cuphead bolt
27	700269	1	M16 x 110 bolt
28	700274	2	M16 x 45 bolt
29	FP170-006-0187	1	Feed-out shroud rubber lower retainer plate
30	FP160-006-0422	1	Feed-out shroud rubber
31	700241	5	M10 lock nut
32	700729	5	M10 flat washer
33	700251	5	M10 x 40 cuphead bolt
34	FP170-006-0188	5	Retainer plate washer
35	FP170-006-0178	1	Fold-down tray assembly
36	FP170-006-0186	1	Fold-down tray rubber extension
37	FP160-006-0224	1	Rubber retainer
38	EF106-79	2	Side rubber retainer plate
39	FP160-006-0272	3	Tray magnet hole blanking plate (standard)
39a	701366	3	Magnet plate (optional extra)
40	700212	18	M8 x 30 bolt
41	700736	18	M8 flat washer
42	700223	18	M8 nylock nut
43	702500	9	M12 x 45 cuphead bolt
44	700730	9	M12 flat washer
45	700266	9	M12 lock nut
46	FP160-006-0418	1	Fold-down tray shelf assembly
47	FP160-006-0421	1	Fold-down tray shelf top plate
48	700208	4	M8 x 20 setscrew
49	700223	4	M8 nylock nut

Table 11: Fold-down-tray parts

Note:
Complete fold-down tray kit (standard): P/N FP160-006-0416
Complete fold-down tray kit (OE-100): P/N FP160-006-0423

Fold-down tray can be supplied with the magnet assembly P/N FP170-006-0177.

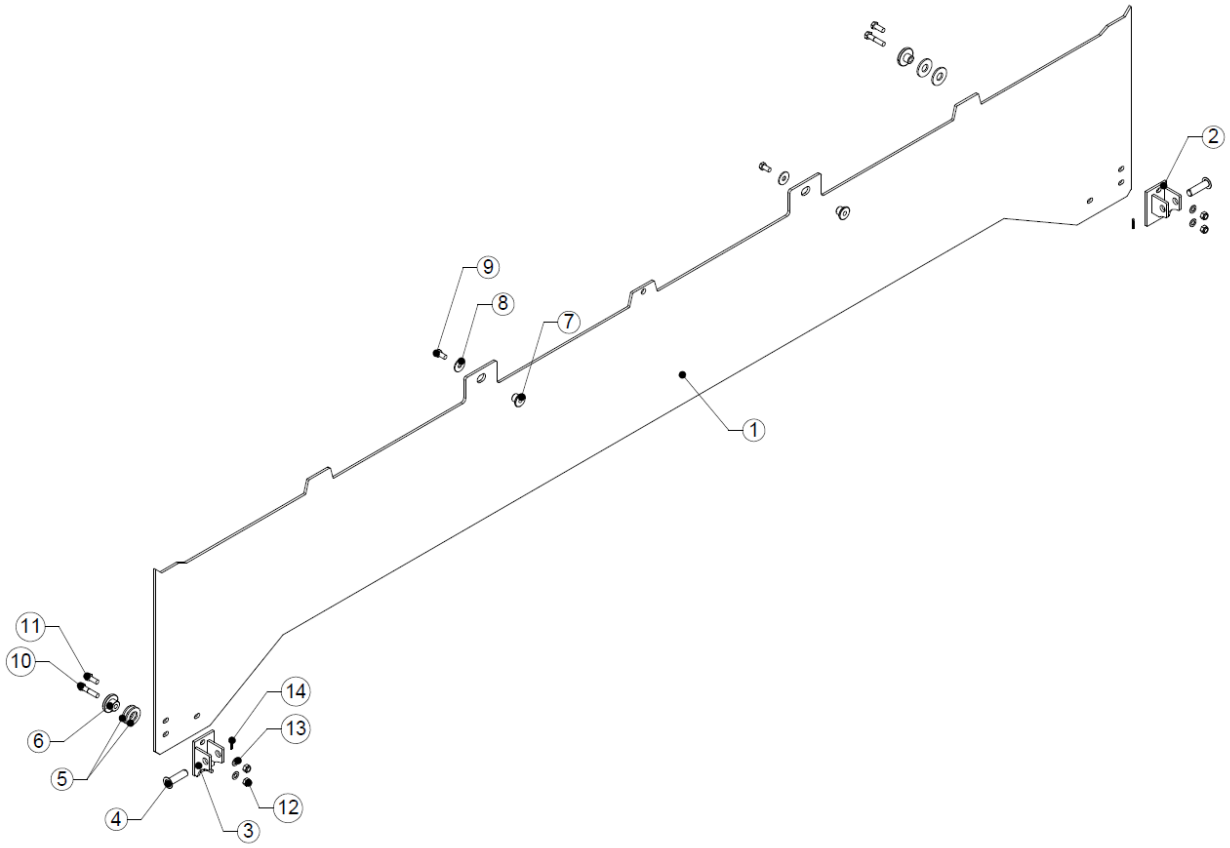
2.5 Rear parts



Item:	P/N:	Qty:	Description:
1	FP280-003-101	1	Bumper bar
2	FP380-003-0015	2	Bumper bar mounting bracket
3	FP280-013-0020	1	Viewing ladder (tubular frame)
4	FP280-013-007	1	Viewing ladder (lower section)
5	701273	1	Bearing cover
6	FP160-003-0015	4	Access panel
7	700842	1	UCF X14, 70-mm bearing, cast housing
8	-	1	Machine body (reference)
9	FP280-007-0085	1	Rotor bearing assembly
10	FP200-003-0261	1	Rear LED light cluster (left hand side)
11	FP200-003-0262	1	Rear LED light cluster (right hand side)
12	FP200-013-0025	2	Ladder arm assembly
13	FP200-013-0015	8	Ladder pivot bush
14	704416	4	Rubber buffer

Table 12: Rear parts

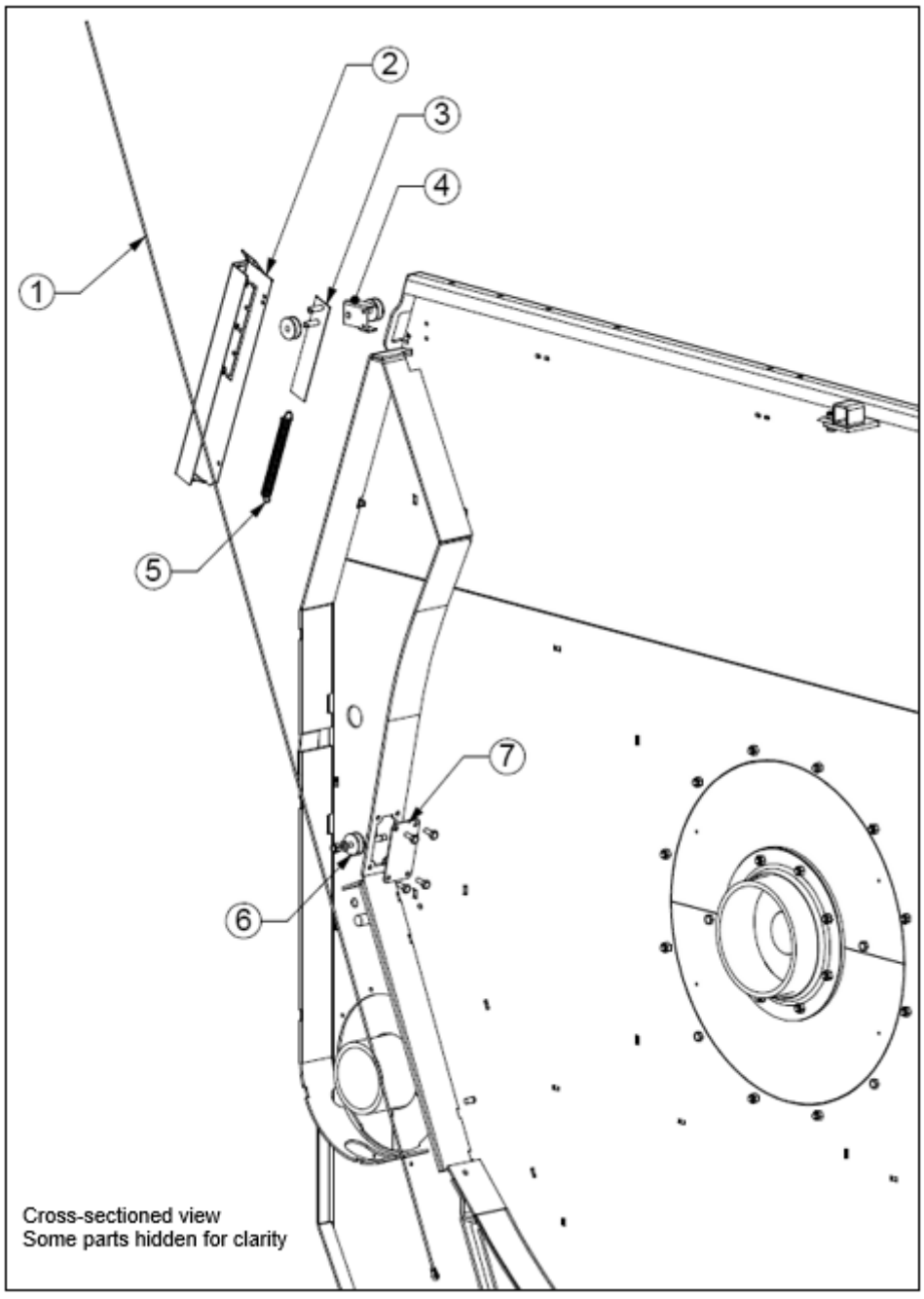
2.6 VFC door parts



Item:	P/N:	Qty:	Description:
1	FP200-010-0102	1	VFC door plate
2	FP160-010-0006	1	VFC door rear ram bracket assembly
3	FP160-010-0005	1	VFC door rear ram bracket assembly
4	701591	2	VFC door lower ram pin assembly
5	FP160-010-0015	4	VFC door front end guide collar wear washer
6	FP160-010-0014	2	VFC door front end guide collar
7	701504	2	VFC door centre stepped collar
8	702453	2	17-mm ID x 50-mm OD x 4-mm thick flat washer
9	701519	2	M16 x 30-mm setscrew
10	700279	2	M16 x 75-mm bolt
11	703148	2	M16 x 40-mm setscrew
12	700283	4	M16 locknut
13	700732	4	M16 flat washer
14	701111	2	Split pin – 3/16” diameter x 1.5”

Table 13: VFC door parts

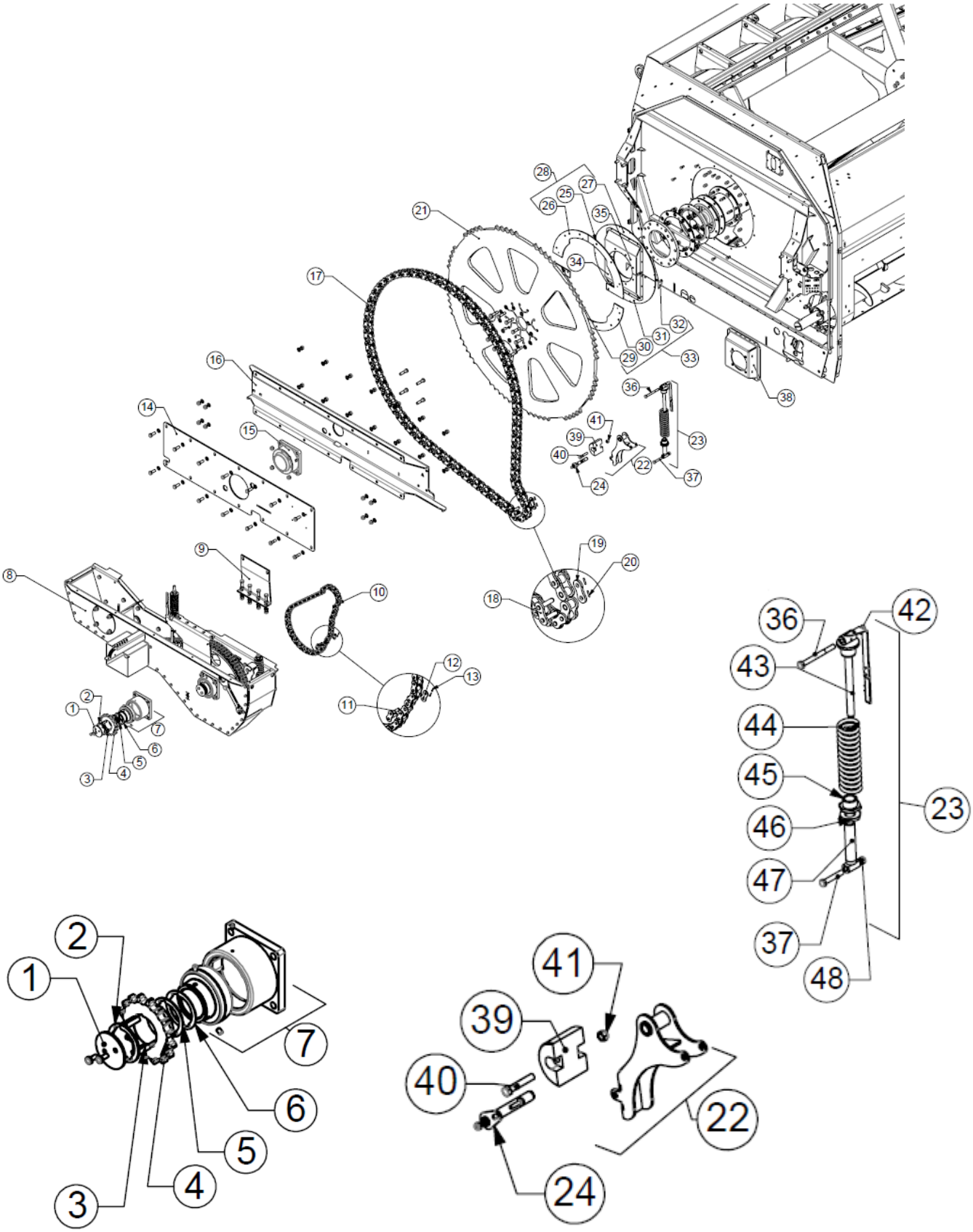
2.7 VFC door indicator parts



Item:	P/N:	Qty:	Description:
1	FP280-010-0022	1	VFC door indicator wire rope assembly (2,970 mm)
2	RD8010-58	1	VFC door indicator cover
3	RD8010-61	1	VFC door indicator slider assembly
4	FP280-010-0021	1	VFC door indicator pulley wheel plate assembly 1
5	703625	1	6” extension spring 22-mm OD, 2-mm wire
6	701559	3	VFC door indicator pulley wheel (50-mm OD, 20-mm wide)
7	FP280-006-0179	2	VFC door indicator cable access slot cover plate

Table 14: VFC door indicator parts

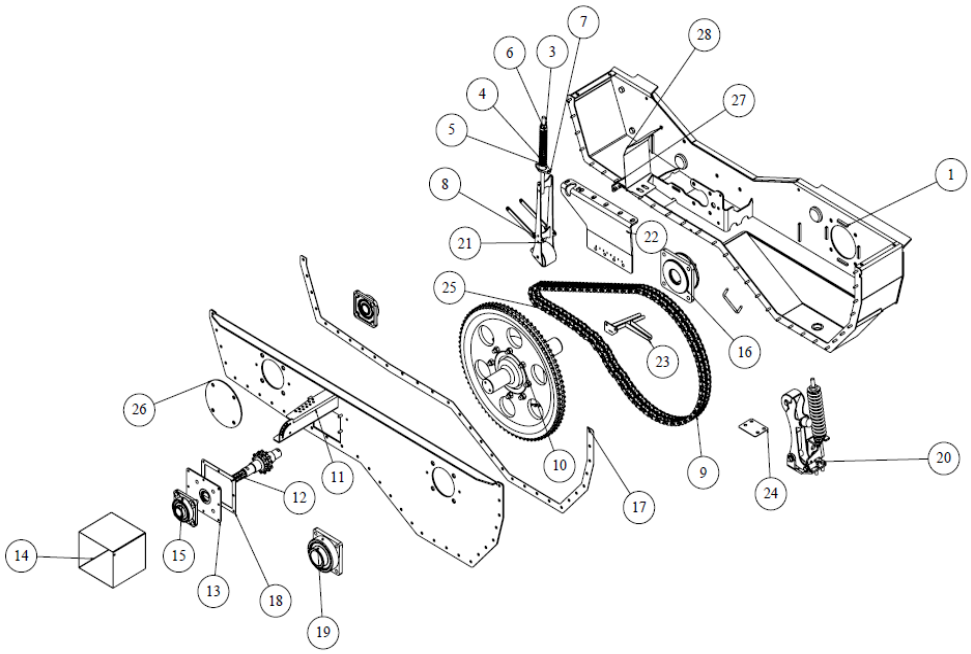
2.8 Driveline parts



Item	P/N	Qty	Description
1	FP280-048-0395	1	Idler shaft thrust washer
2	FP380-048-0075	1	Auger drive sprocket thrust shim (6mm)
3	FP200-009-0020	2	Auger drive shaft key bar
4	FP200-048-0046	1	Sprocket, 16 tooth, ASA120, 90mm double keyed
5	FP380-048-0074	2	Auger drive sprocket thrust shim (3mm)
6	FP380-048-0073	1	Auger drive sprocket thrust shim (2mm)
7	FP380-002-0043	1	90mm bearing assembly, flange mount, UCF X18
8	FP380-048-0008	1	Chain drive reduction gearbox assembly 2 (540 rpm input)
9	FP380-048-0037	1	Support plate for drive line
10	704773	1	Chain assembly, ASA120, 62 pitches (61+slip fit joiner) Sapphire
11	702420-1	1	ASA120 chain joiner link plate with pins
12	702420-2	1	ASA120 chain joiner link plate
13	ASA100	2	ASA100 joiner link split pin 22mm x 3mm
14	FP380-017-0002	1	Plate, for front channel support, 10mm
15	FP280-007-0085	1	F522A rotor bearing complete assembly
16	FP380-017-0001	1	Front channel, front bearing support
16	FP200-007-0006	1	Front rotor stub shaft thrust collar assembly
17	705038	1	Chain assy, ASA140SH, 118 pitches (117+slip fit joiner) Sapphire
18	704297-4	1	ASA200 drive chain joiner link pin plate
19	704297-5	1	ASA200 dirve chain joiner link plate
20	702415-1	2	6mm x 30mm roll pin
21	FP280-007-0126	1	97-tooth ASA200 sprocket (rotor driven) – 139mm bore
22	FP380-048-0046	1	Tensioner assembly
23	FP200-048-0070	1	Rotor chain tensioner compression spring & seat assembly
24	FP280-048-0445	1	Secondary chain tensioner pivot pin assembly
25	FP280-002-0210	1	Rotor cover flange plate
26	FP280-002-0262	1	Rotor cover flange plate
27	FP280-002-0211	1	Top rotor cover base plate
28	FP280-002-0208	1	Rotor front cover plate assembly (Top section)
29	FP280-002-0210	1	Rotor cover flange plate
30	FP280-002-0262	1	Rotor cover flange plate
31	FP280-002-0212	1	Lower rotor cover base plate
32	FP280-002-0220	1	Lower rotor cover shroud plate
33	FP280-002-0209	1	Rotor front cover plate assembly (Lower section)
34	FP280-002-0217	1	Rotor cover outer box top section assembly
35	FP280-002-0213	1	Rotor cover outer box lower section assembly
36	705320	1	M16 bolt x 160mm long, 50mm M20 thread
37	700281	1	M16 x 90 bolt
38	FP200-002-0055	1	Auger support plate, folded, 6mm plate
39	FP280-048-0452	1	Rotor drive chain tensioner wear block
40	700281	1	M16 x 90 bolts
41	700283	1	M16 locknut
42	700283	1	M16 locknut
43	FP200-048-0086	1	Rotor chain tensioner upper spring seat assembly
44	704196	1	Compression spring – 12mm wire, 80mm OD, 280mm long
45	FP160-048-0148	1	ASA120 chain tensioner lower spring seat
46	FP160-048-0147	1	ASA120 chain tensioner lower spring seat locking nut
47	FP160-048-0145	1	ASA120 chain tensioner lower spraing seat adjuster tuber assembly
48	700283	1	M16 locknuts

Table 15: Drive system parts

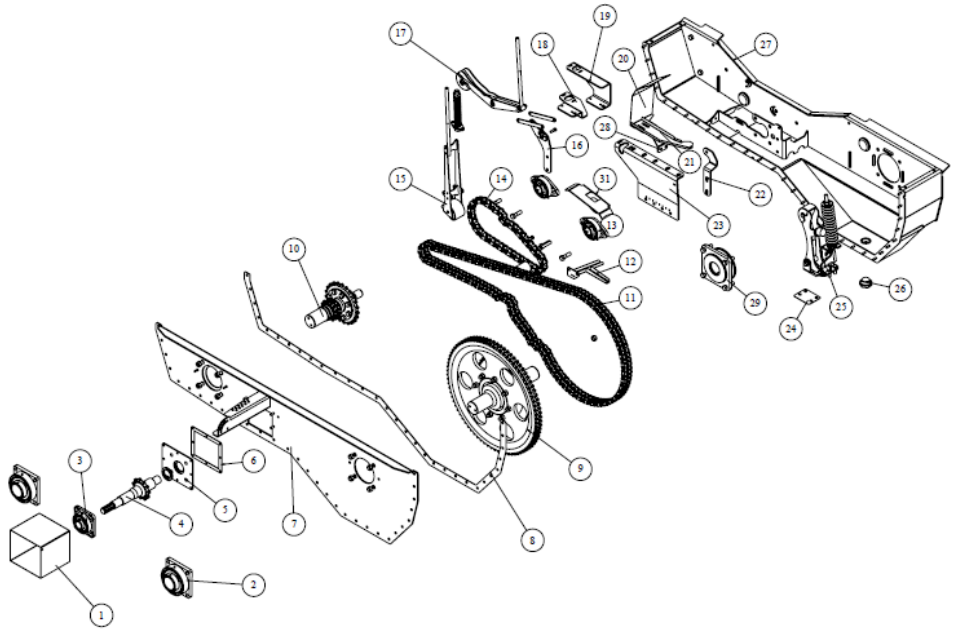
2.8.1 540 RPM Driveline



Item	P/N	Qty	Description
1	FP380-048-0078	1	Base assembly, MF380 drive line
2	700298	4	M20 x 70 mm bolt
3	700305	2	M20 locknut
4	FP200-048-0024	1	Primary chain tensioner inner spring seat
5	704882	1	Compression spring – 9.53 mm wire, 54 mm ID, 200 mm long, 11 coils
6	FP280-048-0101	1	Chain tensioner spring top seat
7	FP200-048-0082	1	Spring seat plate
8	FP380-048-0025	2	Link arm, 225 mm between centres
9	704780	1	Chain, ASA100 duplex, 110 pitches (109 + joiner)
10	FP380-048-0007	1	Idler shaft assembly, MF380
11	FP380-048-0005	1	Front body plane weld assembly
12	FP280-048-0411	1	Spline shaft, 1-3/4” Z6 spline with 11 tooth ASA100 duplex sprocket
13	FP280-048-0604	1	Bearing mounting plate and seal assembly
14	FP280-037-0135	1	PTO shroud
15	704410	2	UCF310, 50 mm 4 bolt flange mount bearing
16	FP280-048-0723	1	90 mm taper lock bearing assembly
17	FP380-048-0030	1	Gasket, rubber, for drive line
18	FP280-037-0156	1	Gasket, for mounting plate
19	702294	1	UCF X18, 90 mm bearing assembly, 4 bolt flange mount
20	FP380-048-0060	1	Tensioner assembly, for auger chain
21	FP380-048-0039	1	Tensioner assembly, for primary chain
22	FP380-048-0038	1	Support plate, for drive line
23	FP380-048-0051	1	Oil channel
24	FP380-048-0052	1	Gasket, rubber, for drive line
25	700265	1	M12 locknut
26	FP380-048-0100	1	Cover plate
27	FP380-048-0107	1	Bracket, for oil channel
28	FP380-048-0103	1	Splash plate, for chain drive
29	FP380-048-0121	1	Oil level window

Table 16: Drive system parts (540 RPM)

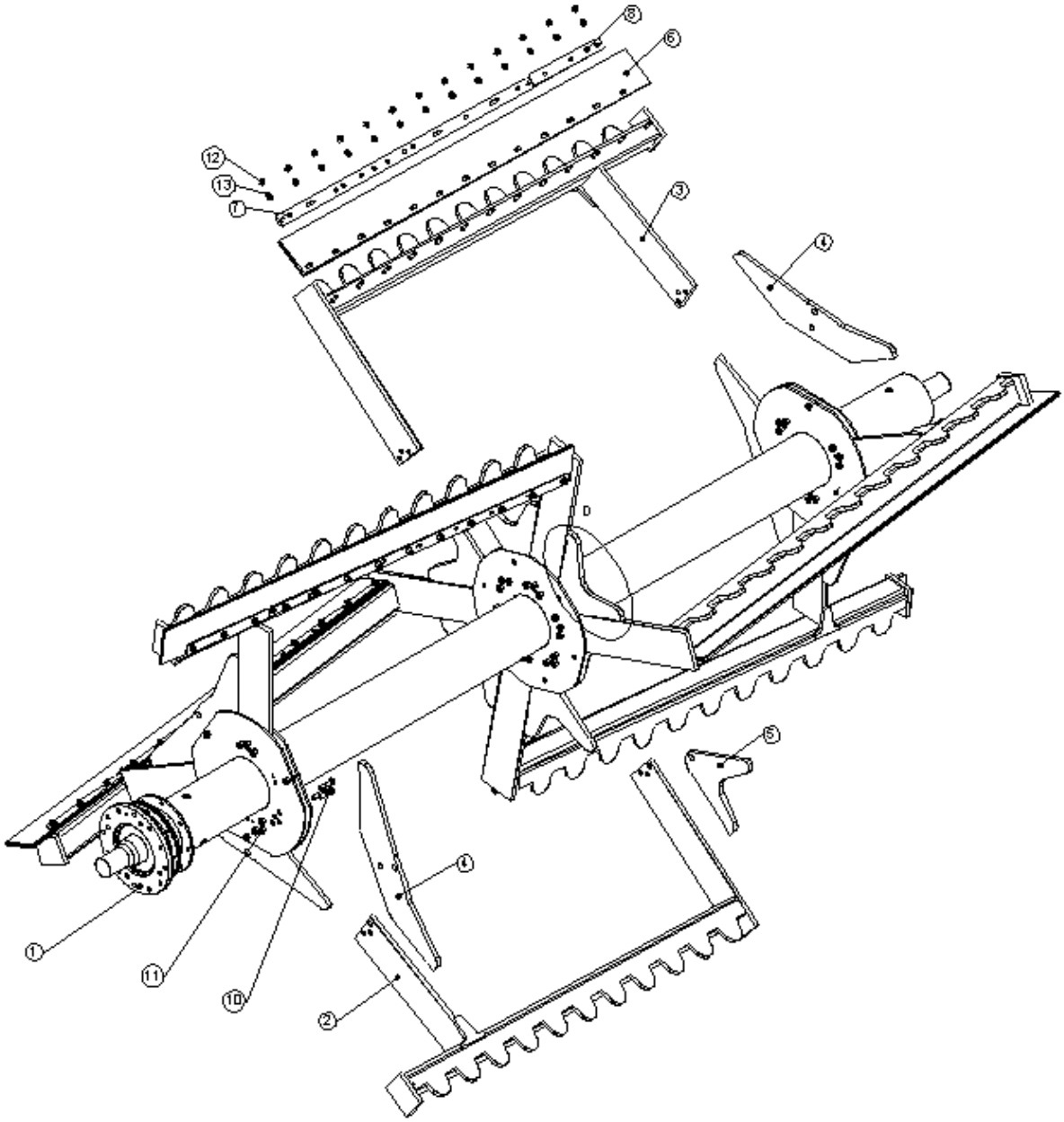
2.8.2 1000 RPM Driveline



Item	P/N	Qty	Description
1	FP280-037-0135	1	PTO shroud
2	702294	2	UCF X 18, 90 mm bearing assembly, 4 bolt flange mount
3	704410	1	UCF310, 50 mm 4 bolt flange mount bearing
4	FP380-048-0080	1	Spline shaft, 11 tooth ASA120, 1-3/4" Z6 spline
5	FP280-048-0604	1	Bearing mounting plate and seal assembly
6	FP280-037-0156	1	Gasket, for mounting plate
7	FP380-048-0005	1	Drive line, front plate weld assembly
8	FP380-048-0030	1	Gasket, rubber, for drive line
9	FP380-048-0007	1	Idler shaft assembly, MF380
10	FP380-048-0083	1	Lay shaft weld assembly, 13 tooth ASA100D sprocket
11	704787	1	Chain assembly, ASA100 duplex, 140 pitches (139 + joiner)
12	FP380-048-0051	1	Oil channel weld assembly
13	704786	2	UCFL 310, 50 mm 2 bolt flange mount bearing
14	704788	1	Chain assembly, ASA120, 42 pitches (41 + joiner)
15	FP380-048-0175	1	Secondary drive chain tensioner arm assembly 2 (1000 RPM)
16	FP380-048-0148	1	Primary drive chain tensioner front mounting plate assembly
17	FP380-048-0133	1	Primary drive chain tensioner arm assembly 2
18/19	FP380-048-0177	1	Secondary drive chain tensioner shoulder plate assembly
20	FP380-048-0160	1	Drive chain oil tray assembly — right side
21	FP380-048-0098	1	Oil drain channel, 2 mm plate
22	FP380-048-0093	1	Tensioner bracket
23	FP380-048-0038	1	Support plate, for drive line
24	FP380-048-0052	1	Gasket, rubber, for MF380 drive line
25	FP380-048-0060	1	Tensioner assembly, for auger chain
26	FP280-037-0200	1	Drain plug, for oil bath
27	FP380-048-0078	1	Base assembly, MF380 drive line
28	FP380-048-0157	1	Drive chain right side oil tray mounting plate assembly
29	FP280-048-0723	1	90 mm taper lock bearing assembly
30	FP380-048-0102	1	Bearing cover plate

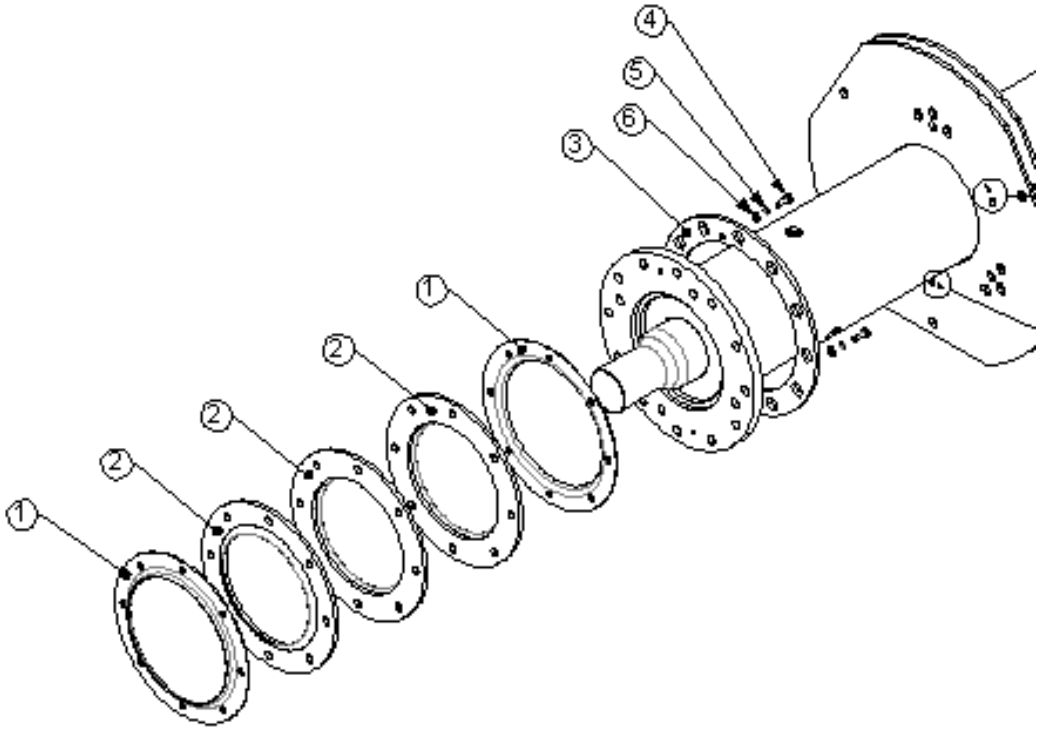
Table 17: Drive system parts (1000 RPM)

2.9 Rotor and paddle parts



Item:	P/N:	Qty:	Description:
1	FP380-007-0009	1	Rotor welded assembly (6 degree angle)
2	FP380-008-0013	3	Front paddle assembly
3	FP380-008-0014	3	Rear paddle assembly
4	FP280-007-0091	6	End paddle block
5	FP280-007-0090	6	Centre paddle block
6	702290	3	Rear paddle rubber
7	FP140-008-0009	6	Paddle rubber retainer
8	FP200-008-0010	6	Paddle rubber retainer (short)
9	702289	3	Front paddle rubber
10	700298	42	M20 x 70-mm bolt, grade 8.8, hex head
11	700305	42	M20 Nylock nut
12	700283	78	M16 Lock nut
13	700732	78	M16 flat washer

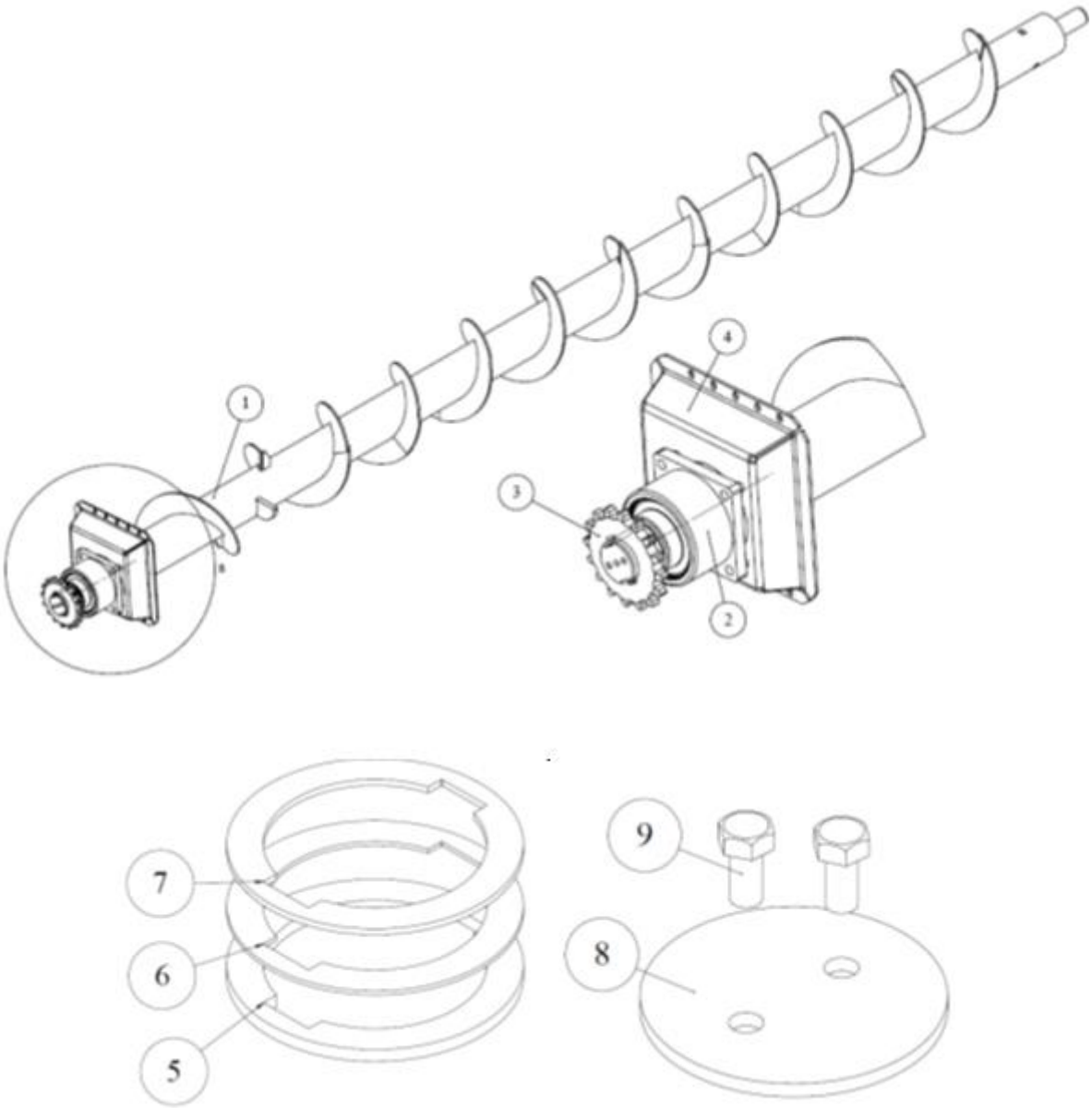
Table 18: Rotor assembly



Item:	P/N:	Qty:	Description:
1	FP280-007-063	2	Rotor seal pressed retainer
2	703655	3	Rotor rubber seal
3	FP280-007-0166	1	Rotor sprocket nut retainer
4	700227	2	M10 x 30-mm setscrew, grade 8.8
5	700737	2	CM10 srping washer
6	700729	2	M10 flat washer

Table 19: Rotor front seals

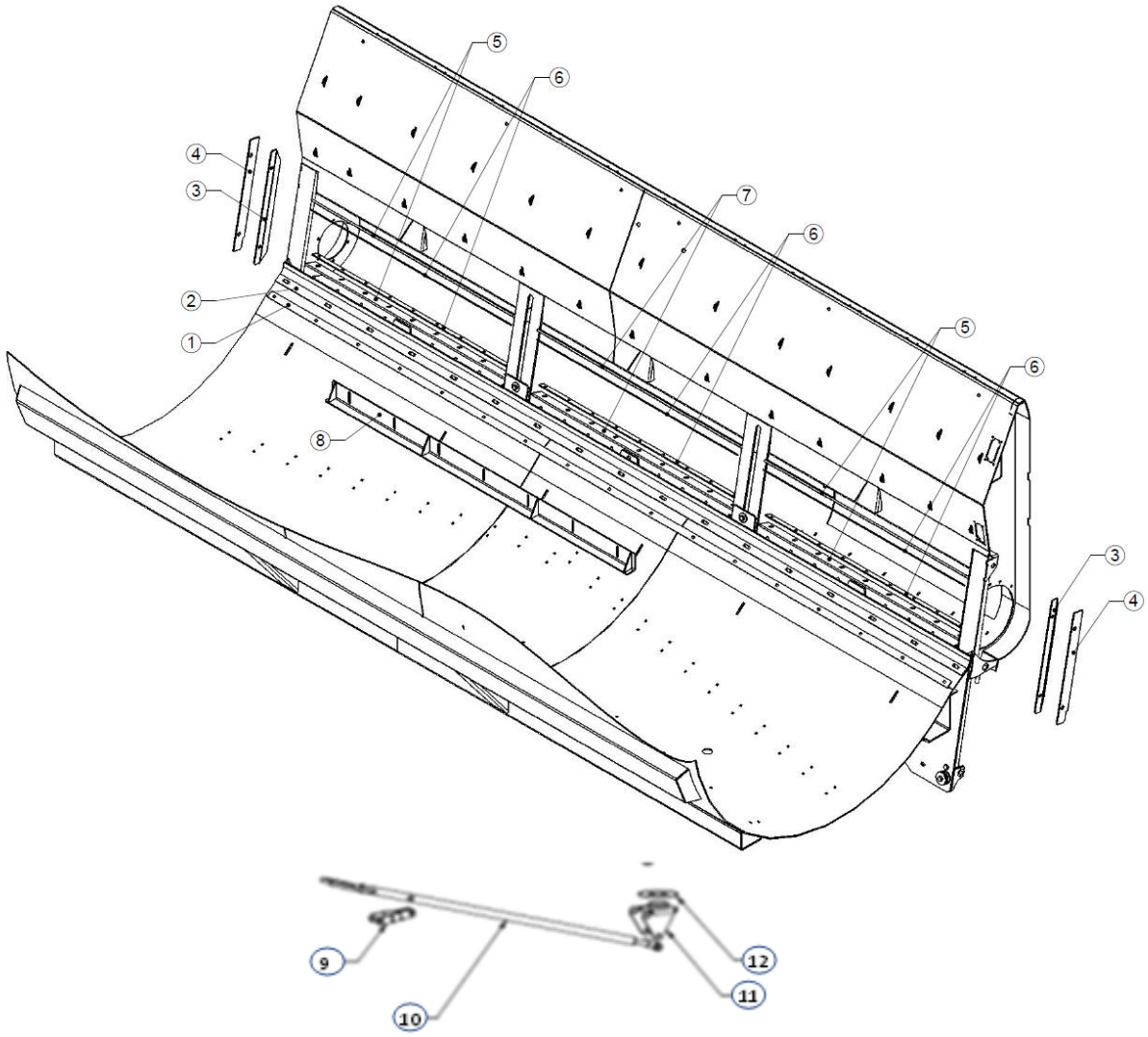
2.10 Auger parts



Item:	P/N:	Qty:	Description:
1	FP380-009-0001	1	Auger welded assembly
2	FP380-002-0043	1	90-mm bearing assembly, flange mount UCF X18
3	FP200-048-0046	1	Sprocket, 16 tooth, ASA120, 90-mm double keyed bore
4	FP200-002-0055	1	Auger support plate
5	FP380-048-0075	As reqd	Auger drive sprocket thrust shim (6-mm)
6	FP380-048-0074	As reqd	Auger drive sprocket thrust shim (3-mm)
7	FP380-048-0073	As reqd	Auger drive sprocket thrust shim (2-mm)
8	FP380-048-0395	1	Thrust washer
9	700246	2	M12 x 25 bolt
10	FP200-009-0267	2	Auger seal (Lip type) not shown

Table 20: Auger assembly

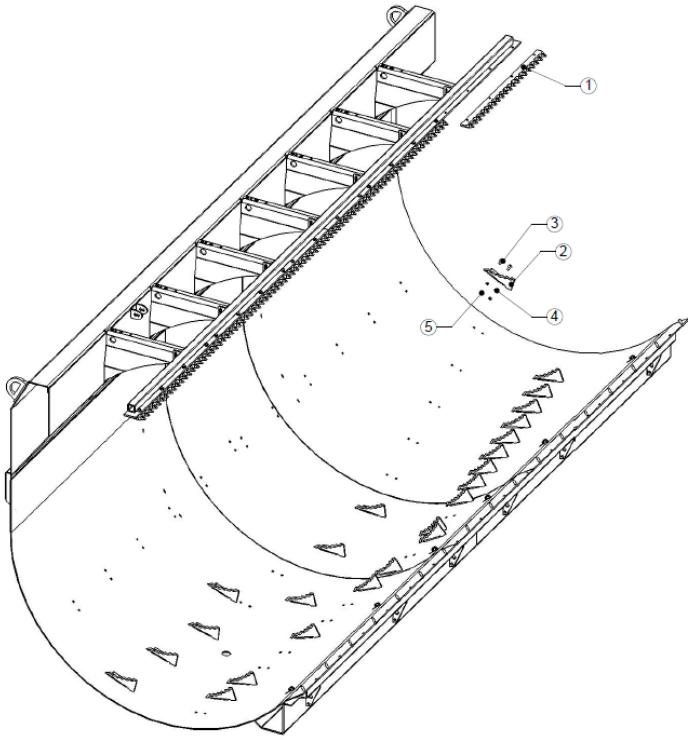
2.11 Body sealing parts



Item:	P/N:	Qty:	Description:
1	FP200-004-0028	1	VFC door inner seal retainer
2	701293	1	VFC door inner rubber seal — 5,005 mm
3	FP280-010-009	2	VFC door front and rear end retainer
4	704876	2	VFC door front and rear end seal
5	701199	4	VFC door outer seal rubber
6	FP200-006-0076	6	VFC door shroud seal retaining flat
7	701199	2	VFC door outer seal rubber
8	FP160-006-0093	1	Auger chamber material deflector
9	FP280-004-029	2	Drain bung lever toggle link
10	FP280-004-021	1	Drain bung lever assembly 2
11	FP280-004-0041	1	Drain bung cover plate assembly 1
12	703246	1	Drain bung rubber seal

Table 21: Body seals

2.12 Body blade parts

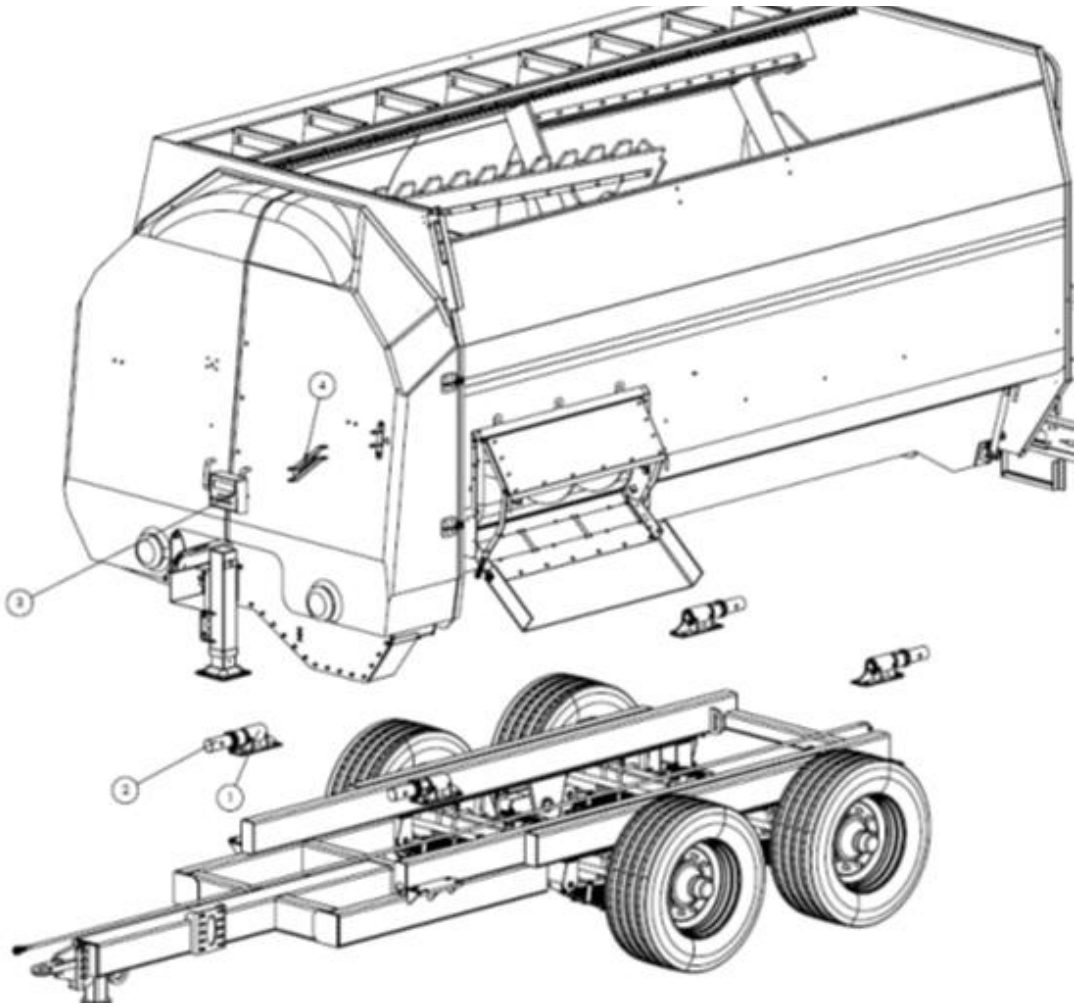


Item:	P/N:	Qty:	Description:
1	701518	5	Top knife blade — 990 mm long
	704229	5	Top knife blade — 990 mm long — deep serrations
2	703955	38*	Body blade — 5 mm thick
	703957	38*	Body blade — 6.25 mm thick
3	700226	76	M10 x 30-mm cuphead bolt (8.8 grade)
	705405**	76	M10 x 40-mm cuphead bolt (8.8 grade)
4	700241	76	M10 hex nut
5	700737	76	M10 spring washer

Table 22: Blades

*There are 24 blades used as the standard on the MechFiber380+.
Extra blades may be added depending on the machine specifications.
**Used only in conjunction with body liner.

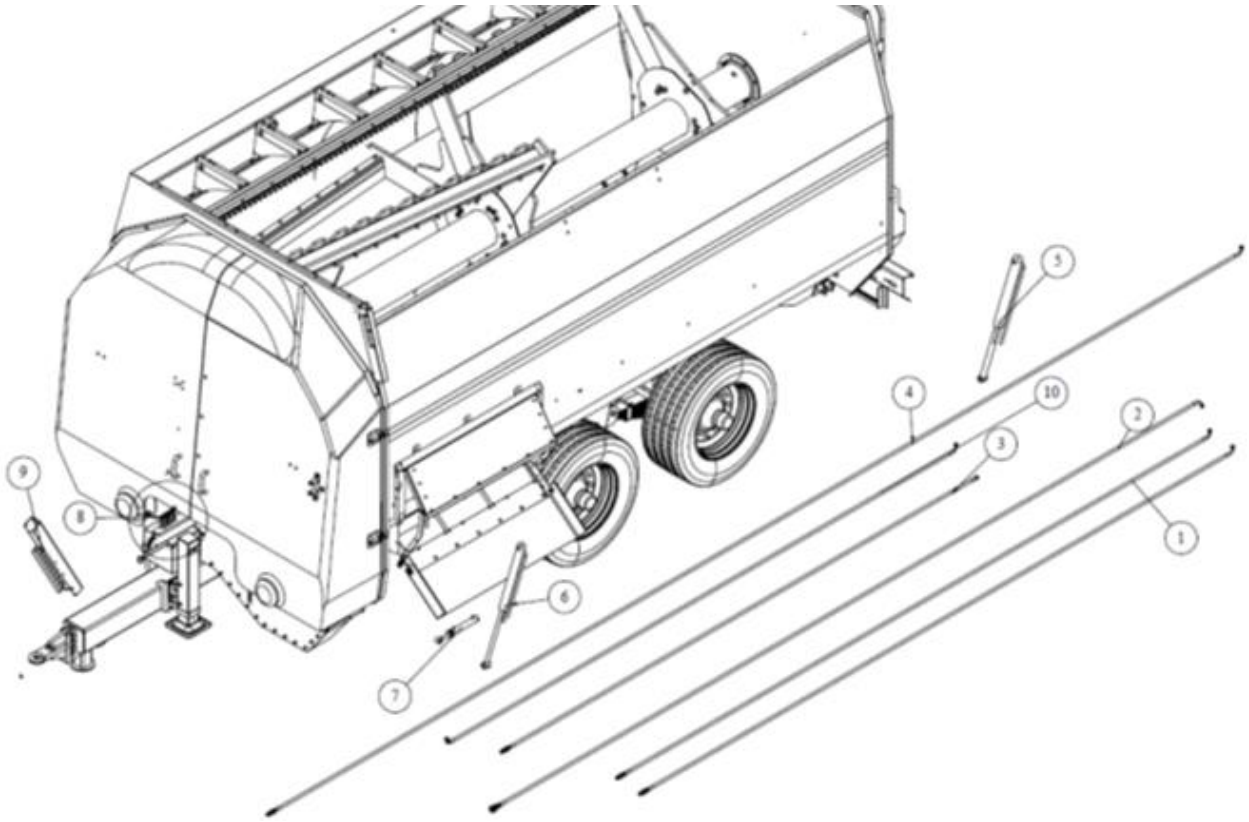
2.13 Weighing system



Item:	P/N:	Qty:	Description:
1	FP380-001-0014	1	Weight bar bracket assembly
2	705671	1	Weigh cell – 2.875” diameter – 9.35-m cable (DG 969-0127)
3	703353	1	Weight display box
4	EF102-117	2	Cranked weighbox arm
5	FP380-037-0082	1	Weight display box mounting bracket

Table 23: Weighing system

2.14 Hydraulic system parts



Item	P/N	Qty	Description
1	703145	2	1/2" male–3/8" female 90-degree X 5,700 mm hydraulic hose
2	704622	1	Hydraulic hose assembly, 6,850 mm long
3	701514	1	VFC-door hose assembly – 4,560 mm – tractor to front ram
4	701515	1	VFC-door hose assembly – 9,450 mm – tractor to rear ram
5	704954	1	Rear VFC-door ram (Keen 51)
6	704955	1	Front VFC-door ram (Keen 52)
7	703591	1	6" stroke feed-out tray ram assembly
8	702869	10	M12 x 70 (4.6 grade) shear bolt
9	FP160-001-0094	1	Hydraulic hose arm
10	701513	1	VFC-door – 4,930 mm – front ram to rear ram

Table 24: Hydraulic system

2.15 Axle Parts

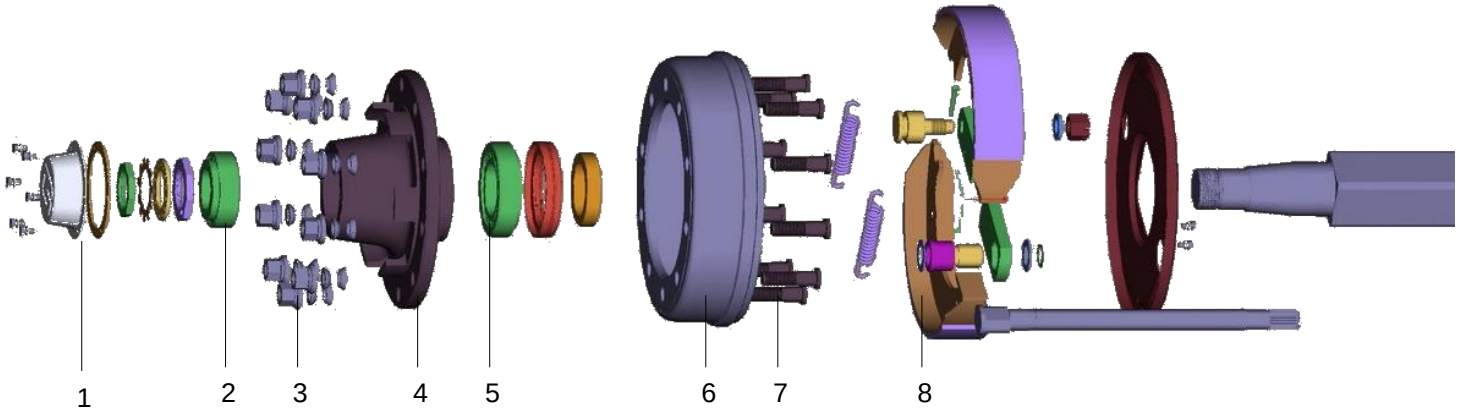


Figure 14: Typical axle (exploded view)

Axle options

Axle types				
Axle application	MechFiber380+			
Axle type	Non-steering	steering	Non-steering	steering
Axle width (mm)	2300	2400	2300	2400
Axle specification	EBB 130 (Colaert)		D120-4012 (HO's)	
Brake type/dimensions (Type/diameter x width, mm)	412E, 406 x 120		S406 x 120	
No. studs	10		10	
Nut size	M22 x 1.5		M22 x 1.5	

Axle spare parts	
Item No:	**Description:**
1	Hub cap
2	Outer bearing
3	Nut (with washer)
4	Hub
5	Inner bearing
6	Brake drum
7	Stud
8	Brake shoe

Table 25: Axle types and axle spare parts

*Note: *Supplied as a kit*

2.16 Ancillary parts

PTO Shaft		
P/N	**Qty**	**Description**
704355	1	PTO, T80 shaft, 1-3/8” Z6 x 1-3/4” Z6. M12 x 5.6 shear bolt
704356	1	PTO, V80 wide-angle shaft, 1-3/8” Z6 x 1-3/4” Z6. M12 x 5.6 shear bolt
Grease fittings		
P/N	**Qty**	**Description**
704913	1	Grease tube swivel connector – 90-degree bend – M6 thread
704914	1	Grease tube connector – straight – M6 thread
704915	1	Grease fitting connector – straight – 1/8" BSP to M6
704941	1	Grease tube connector – straight – 6-mm thread
704942	1	Grease tube connector – straight – 8-mm thread
704943	1	Grease tube connector – straight – 1/8" BSP thread
704944	1	Grease tube connector – 90-degree bend – 1/8" BSP thread
704945	1	Grease tube connector – 90-degree bend – M6 thread
704946	1	Grease tube swivel connector – 90-degree bend – 1/8" BSP thread
704947	1	Grease fitting connector – straight – 1/8" BSP to M6
Spool valve parts		
P/N	**Qty**	**Description**
701215	1	2 bank with detent
701216	1	2 bank without detent
701218	1	3 bank with detent
701219	1	3 bank without detent
702269	1	4 bank with detent
701208	1	4 bank without detent
702450	1	5 bank with detent
704447*	1	Electro-hydraulic spool valve kit, 4 bank (contains 704445 and 704446)
704525	1	Electro-hydraulic spool valve kit, 5 bank
Diverter valve parts (used on French machines)		
P/N	**Qty**	**Description**
704139	1	Diverter valve kit (contains 703535 and 704394)
703894	1	Electro-hydraulic diverter valve kit (6 port)
Heavy-duty top knife (standard on all bale handlers)		
P/N	**Qty**	**Description**
704229	5	Top knife blade, 990 mm long, deep serrations
Mechanical adjuster		
P/N	**Qty**	**Description**
FP280-006-0180	1	Mechanical adjuster complete assembly

Table 26: Ancillary parts

*4 bank can be reduced to 3 bank if required using the same part number.

3 Annexes

3.1 EC Declaration of Conformity

EC Declaration of Conformity.

In accordance with Directive 2006/42/EC.

Manufacturer:

Alltech Farming Solutions Ltd.

Borris

Co. Carlow

Ireland

Certifies that the KEENAN MechFiber380+ comply with the essential safety requirements of the Directive 2006/42/EC.

To conform to these essential health and safety requirements, the provisions of the following harmonized standards were particularly considered:

BS EN ISO 12100, I.S. EN ISO 13857, I.S. EN ISO 5674, EN349, EN703, I.S. EN ISO 4254-1, ISO 11684, ISO 12140

Date: April 2022

Signed: _____

Robert Walker, CEO

3.2 UKCA Declaration of Conformity

UKCA Declaration of Conformity.

In accordance with UK SMSR 2008.

Manufacturer:

Alltech Farming Solutions Ltd.

Borris

Co. Carlow

Ireland

Certifies that the KEENAN MechFiber380+ comply with the essential safety requirements of the UK SMSR 2008.

To conform to these essential health and safety requirements, the provisions of the following harmonized standards were particularly considered:

BS EN ISO 12100, I.S. EN ISO 13857, I.S. EN ISO 5674, EN349, EN703, I.S. EN ISO 4254-1, ISO 11684, ISO 12140

Date: April 2022

Signed: _____

Robert Walker, CEO

3.2 International Patents

The KEENAN MechFiber diet feeder and the KEENAN MechFiber bale handler machines are subject to international patents, including the following:

Europe:	E0, 833,558	USA:	5,967,433
Japan:	Pending	Canada:	Pending
Australia:	691418	New Zealand:	305943
South Africa:	96/3148		

4 KEENAN Contact Details

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