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Easier Farming. Better Life

EMM INC.

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OFFSET MOWER

SFM 120-140-160 165-185-205 180-200-220-240

MANUAL SFM SERIES

Conception hollandaise conçue pour le marché nord américain.

EMM Inc.

Version: A000001-EN

CONTENT

PREFACE

Dear users:

Thank you very much for purchasing the products produced by AWON Group, and we will provide you with long-term, reliable and stable service.In order to help you use our products correctly and safely and maximize the use value of the equipment,please read this manual and keep it properly. Correct equipment operation and daily maintenance will effectively improve the service life of the equipment,prevent the equipment from being damaged and avoid casualties.

To this end, I hope that you can cooperate with us to do the following points:

- Comply with the operating specifications, operate and maintain this product correctly;
- Ensure that all relevant operators read the operating manual and fully understand the correct installation, use and maintenance procedures;
- Ensure that the equipment is prepared for relevant settings before use, and regularly check whether the settings are correct;
- Read and understand the warranty policy in this operating manual to ensure that the equipment is in good working condition;

In the process of compiling this user manual,we strive to be accurate and complete, and try to avoid errors and omissions. AWON will also make unremitting efforts to optimize and improve our products and services. If you have better suggestions for our products,or you want to get more information about our products, welcome to give us a call **(+86 513-6877-3358)** or letter **(info@awonchina.com)**, we will serve you whole heartedly!

Finally, all AWON staff warmly welcome you to join our family!

PREFACE

1.2 Warranty Policy

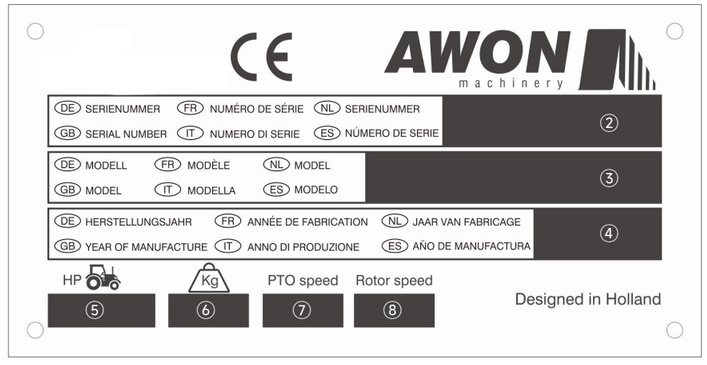
AWON will continue to provide you with service and care. For any quality problems, please contact our dealer for the appropriate after-sales service.

◎ Warranty Regulations

If you have any questions during the use of the product, please first call the dealer when you purchased for consultation,and provide valid proof according to the guidance(such as invoice, product guarantee maintenance service sheet),you can enjoy the relevant repair or debugging services. In compliance with the return and exchange under the warranty; the consumer bear maintenance costs out of warranty. For more details, please see the Guarantees Policy on pages 56.

1.3 Product Nameplate

The factory nameplate is usually located on the front side of the mechanical products. This nameplate is like a person's ID card,withthe unique identification of each factory product. The factory nameplate is the sign indicating the basic characteristics of the equipment, mainly including:



② Serial Numbers ③ Model ④ Date of Manufacture

⑤ Tractor Horsepower ⑥ Gross Weight ⑦ PTO Speed ⑧ Rotor Speed

When each of our products is ith a nameplate, this nameplate will accompany the product through its sale, regular repair and mainte it is recycled or scrapped.

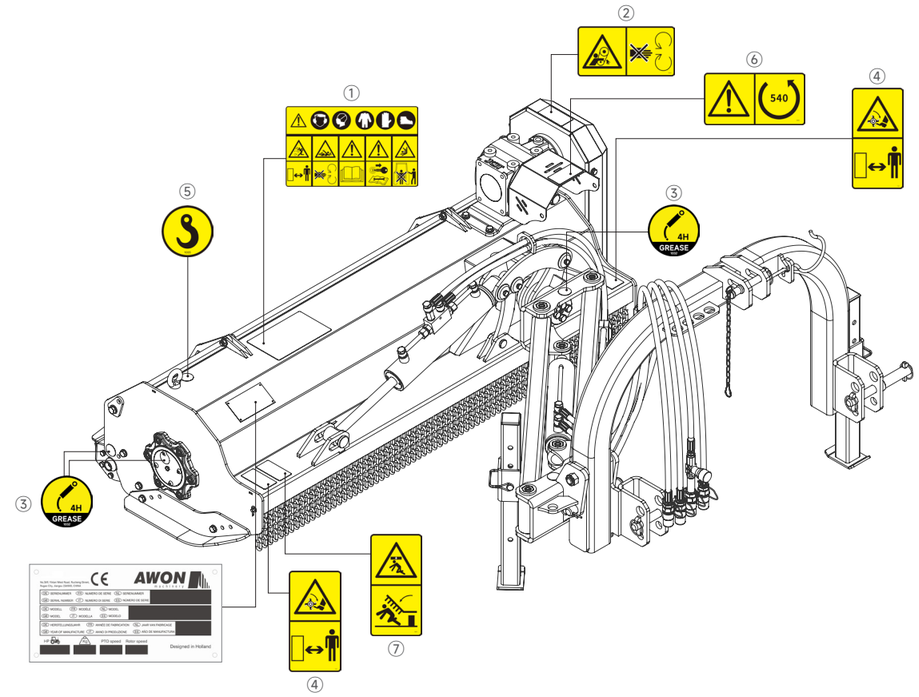
2.1 Interpretation of Safety Identification

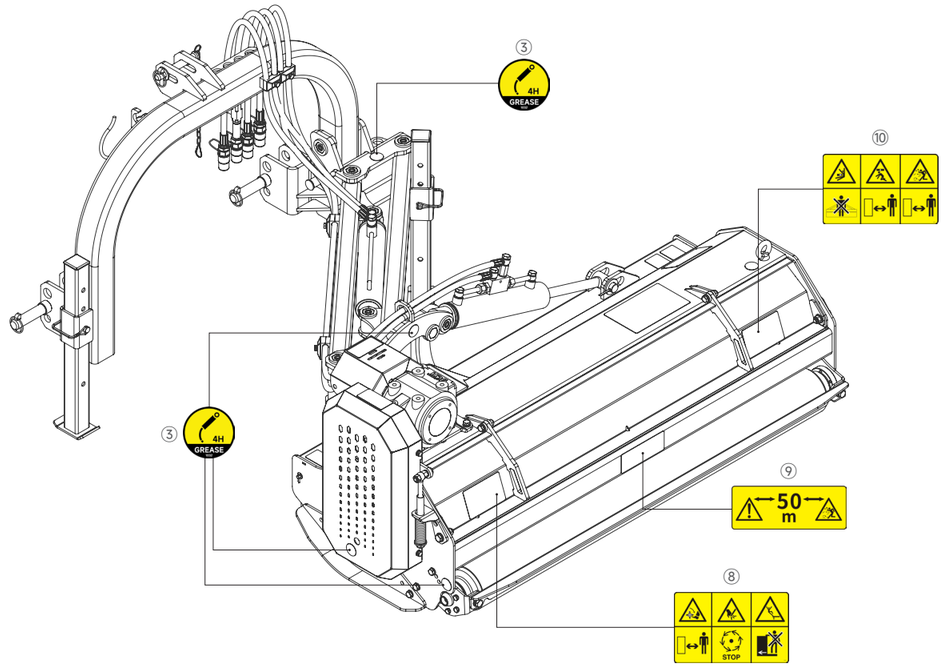
Timely discovery of problems or dangerous situations and taking appropriate measures can effectively prevent accidents from happening.

Please read this operation manual carefully, familiarize yourself with the relevant controls and correct operating specifications; master the emergency treatment methods after misoperation, so as to quickly find out the cause of the fault, eliminate the fault as soon as possible, and resume operation.

◎ The Hazard Signs In This Manual Can Express Three Different Meanings

CAUTION	Caution: Indicates that failure to perform the above operations correctly may cause damage to the equipmen.
WARNING	Warning sign: Indicates a potential hazard.
DANGER	Danger sign: Indicates that such behavior may threaten the life and safety of individuals or others.





This section focuses on the labeling locations and labeling meanings. Please be familiar with these labels. If the labels are damaged, please replace them in time. Please contact the dealer where you purchased the machine to purchase the corresponding labels for replacement and paste them in the original location.

SECURITY

①

- Pay attention to personal safety protection, such as: wearing earplugs, masks, protective shoes, protective gloves, safety work clothes, etc.;
- To avoid the danger of throwing or flying objects, please keep a safe distance from the equipment;
- To avoid the danger of the drive shaft being involved, do not get close to the equipment when it is operating;
- Before operating the equipment, please read the instructions carefully;
- Before maintenance or adjustment, stop the machine, brake the tractor and readthe operating manual carefully;
- To avoid the danger of being hit, please do not stand behind the equipment;

②

- Please keep a safe distance from the equipment belt wheel mechanism;
- Please avoid hand involvement,at risk of injury;

③

- Fill grease;
- Add gear oil;

④

- Please avoid foot involvement,with the risk of injury;Add gear oil;
- Please keep a safe distance from the equipment;

⑤

- Hoisting position;

SECURITY

⑥

- Operating speed;

⑦

- The equipment may dangerous when it is unfolded, so keep a safe distance from it;

⑧

- To avoid the risk of your feet being caught and injured, please keep a safe distance from the device;
- To avoid hand injuries, do not touch the blade before the device is completely still;
- To avoid the risk of falling and being injured, do not stand on the device when it is working;

⑨

- Please keep a safe distance of more than 50m from the working equipment to avoid being hit by flying objects;

⑩

- Avoid standing behind the device as there is a risk of collision;
- To avoid the risk of being crushed, please keep a safe distance from the device;
- To avoid the risk of thrown or flying objects, please keep a safe distance from the device;

2.2 Suggestions For Safe Use

◎ Before Operating The Flail Mower, The Following Inspections Are Required:

1.Ensure that all fasteners are tightened and the locking pin is fixed in place;
2.Ensure that the protective devices such as the baffle or chain are fixed;
3.Ensure that the blade is firmly installed.If the machine has been used, it is necessary to check whether the blade is seriously worn or broken and deformed,etc.,and replace the blade if necessary;
4.Since the center of gravity will shift after the installation of the equipment,it is recommended to increase the counterweight at the front of the tractor to balance the overall center of gravity(Fig.1).

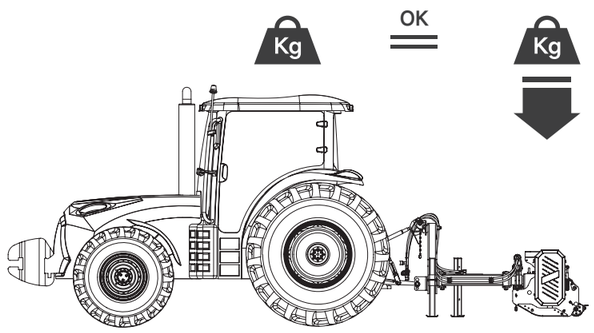


Fig.1

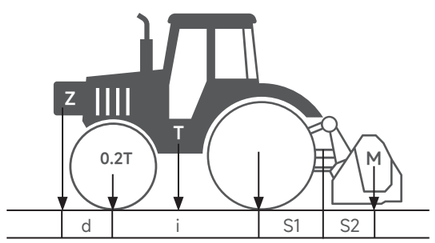
◎ Tractor Counterweight

After the implements are installed on the tractor, the tractor's center of gravity will change. Therefore, it is recommended to add counterweights to the front of the tractor to balance the tractor's center of gravity. The required counterweight is calculated as follows:

$$Z \geqslant \frac{M \times S - 0.2 \times T \times i}{d + i}$$

$$S = S1 + S2$$

$$M < 0.3 \times T$$



i	Tractor Wheelbase (cm)
d	Distance between front axis and counterweight (cm)
T	Weight of tractor + operator (kg)
Z	Counterweight weight (kg)
M	Machine weight (kg)
S	Horizontal distance from machine center of gravity to rear axle (cm)
S1	Distance from rear axle to the center hole of three-point suspension (cm)
S2	Distance from the center of gravity hole of the three-point suspension to the center of gravity of the machine (cm)

◎ When Operating The Flail Mower, Pay Attention To The Following Requirements:

1. Lift the mower after the PTO drive shaft is stably connected to the mower;
2. First mow at a slow forward speed to check whether the mowing depth is appropriate. If the cutting is too deep or too shallow, stop the mower and adjust (Chapter 3.5 Cutting Height Adjustment);
3. Do not make sharp turns or reverse rapidly during the operation of the mower;
4. When the drive shaft is started, non-operating personnel should not approach;
5. Start the PTO drive shaft and control the speed below 540RPM.

◎ After The Mower Stops Working, Do The Following:

1. After the mower finished working, prepare an open and flat area in advance, slowly lower the mower to the ground, and adjust the support feet to the ground;
2. Loosen the transmission safety chain and disengage the PTO;
3. Disassemble the suspension, remove the connecting pin and locking pin in order, and install the pin shaft on the flail mower for next use.

◎ Before Hoisting The Mower, Perform The Following Operations:

Before hoisting the equipment, please refer to "Product Technical Parameters" (page 55) for the weight and dimensions of the equipment. Hoist at the hoisting point marked with "Hoisting Position" (page 4), and the hoist must be used according to its working load and scope of use. Overloading is strictly prohibited.

CAUTION Before starting the hoisting operation, make sure that all moving parts of the equipment are fixed; Make sure to use hoisting equipment with sufficient lifting capacity, lift the equipment slowly, transfer slowly, and do not stop or move suddenly.

DANGER Be very careful during hoisting and transportation operations, otherwise it may be very dangerous; Irrelevant personnel should stay away from the operating area, check the status of the equipment, and do not collide with heavy objects.

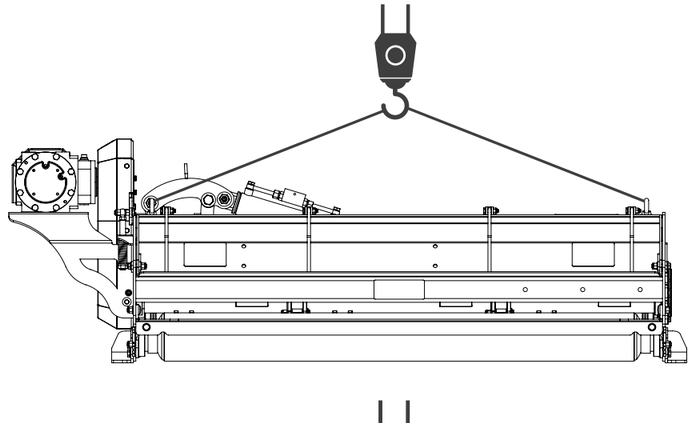
◎ It Needs To Be Further Clarified That:

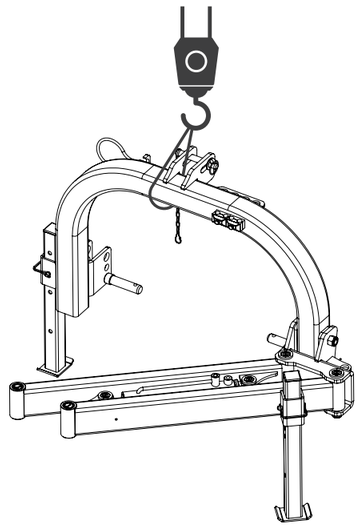
- Hoisting requires an open and safe area, and there should be no obstacles in the area, and there should be enough "escape space";
- The ground where the equipment is placed must be level to prevent the equipment from moving;
- When the equipment is placed on the vehicle, make sure that the equipment is securely fixed;
- After transportation, remove the fixing device on the equipment while ensuring that the equipment is intact.

3.1 Hoisting and Tran Sportation

◎ Hoisting

Carefully lift the mower with a lifting device to level it and prevent it from moving.
Note: The mower can be disassembled into two parts for transportation: the body and the suspension. If they are transported separately, lift them separately with a lifting straps and then assemble them.





◎ Transportation

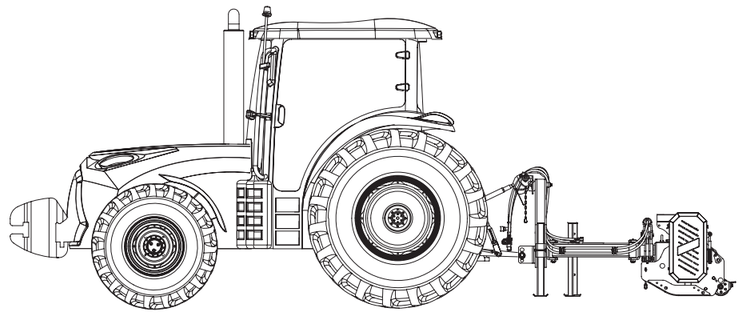
- Before lifting the mower to the transport height, disconnect the PTO shaft to prevent damage to the shaft due to excessive pulling;
- When transporting the flail mower, do not carry people on it to avoid casualties.

3.2 Tractor Mounting

◎ Tractor Horsepower

25-50hp	60-80hp	90-120hp
SFM120/140/160	SFM165/185/205	SFM180/200/220/240

◎ PTO Speed

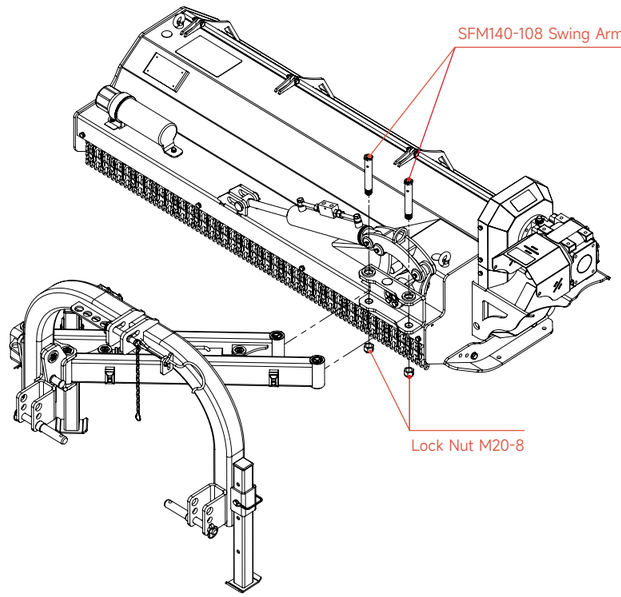


- The tractor horsepower range should be selected to meet the product technical parameters;
- Equipped with a stable three-point suspension arm to prevent the mower from moving left and right.

◎ Suspension And Body Assembly:

- The suspension and main body assembly method is as follows:
- Insert the suspension swing arm into the corresponding hole, fix it with a pin, and tighten the nut.
  (Fig.2 on page 11)

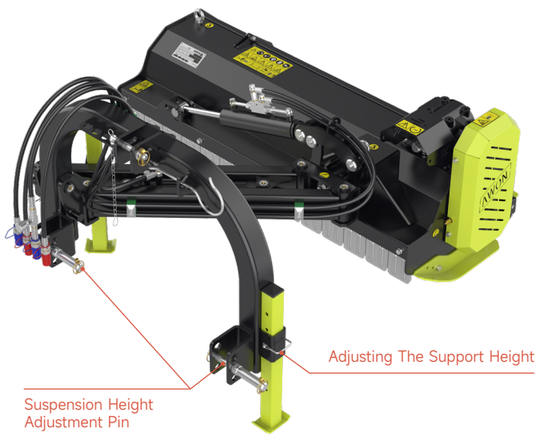
Fig.2



When Mounting The Equipment To The Tractor , It Must Be Done On Flat Ground. The Equipment Must Be Installed On The Tractor's Three-Point Suspension. The Operation Steps Are As Follows:

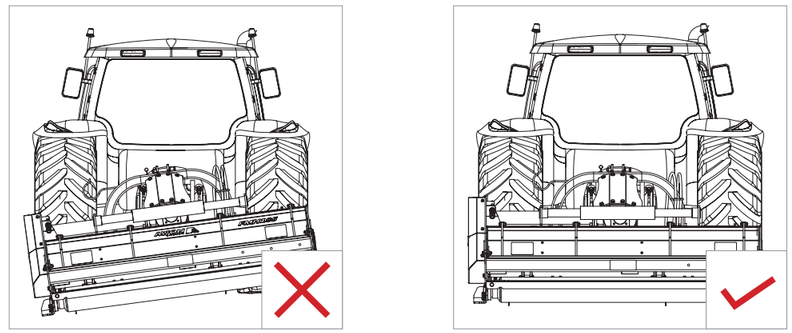
1. Adjust the height of support to make the mower is fixed upright on the ground; (Fig.3)
2. Place the front (rear) suspension of the tractor close to the mower. Connect the three-point suspension arm of the tractor to the three-point connection on the mower suspension accurately; the suspension height is set to 3 levels,select the appropriate height, insert the suspension pin, and fix it with the lock ring; (Fig.3)

Fig.3



3. Fix the top suspension in the same way;
4. Adjust the screw rod at the tractor suspension to make the equipment hang horizontally. (Fig.4)

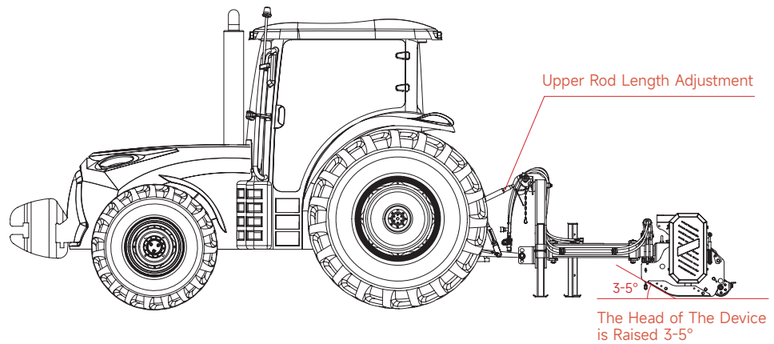
Fig.4



Left-right Balance

5. Connect the PTO shaft to the tractor and the mower gearbox to ensure a tight connection;
6. Park the tractor on a level surface and slowly lift the mower. When adjusting the length of the pull rod on the equipment, it is recommended to slightly raise the head of the equipment by about 3-5 degrees to prevent grass and debris from accumulating on the slide. (Fig.5)

Fig.5



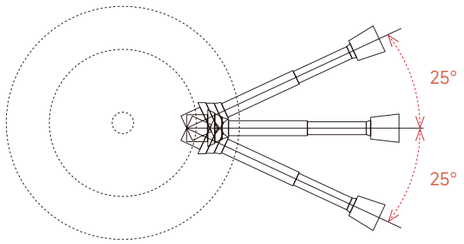
3.3 Transmission System Adjustment

◎ A Transmission System Adjustment

The drive shaft that equipped with the equipment is of standard length. Depending on the tractor, the drive shaft length and the type of spline installation may need to be adjusted. The steps for adjusting the drive shaft length are as follows:

1、Connect the inner drive shaft to the mower gearbox and the outer drive shaft to the tractor PTO. The drive shaft connection must be ensured to be tight;
2、A small chain is attached to the drive shaft, connected to the flail mower and tractor respectively, to prevent the guard from rotating;
3、Start the tractor and slowly raise or lower the mower to find the maximum extension length of the transmission system. The running transmission system should not exceed 25 degrees up and down. Measure the distance between the tractor output shaft and the mower gearbox input shaft and record the data.

Fig.7



- When the transmission shaft is in working state, the minimum overlap length of the inner and outer tubes (maximum extension state) shall not be less than 1/3 of the tube length and greater than 15 cm; (Fig.8)
- When the transmission shaft is in working state, the maximum overlap length of the inner and outer tubes (minimum contraction state) and the minimum gap are not less than 4 cm; (Fig.8A)

Fig.8

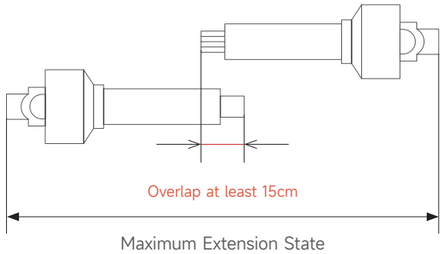
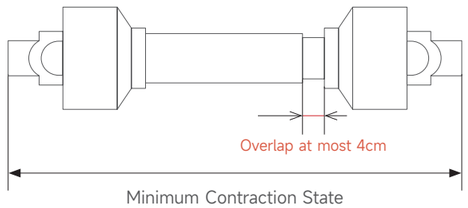


Fig.8A



If you do not get the above two gap results, adjust as follows:

- Please shorten the drive shaft connecting tube by the same length (Fig.9,10), deburr and trim (Fig.11), and then lubricate the inside of the outer tube and the outside of the inner tube (Fig.12). Make sure the upper and lower connections are as parallel as possible;
- It is recommended to try to adjust the connecting rod connected to the tractor to ensure that the drive shaft meets the operating requirements.

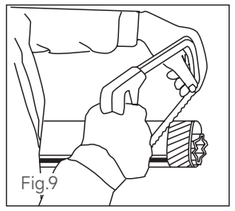


Fig.9

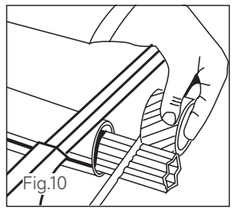


Fig.10

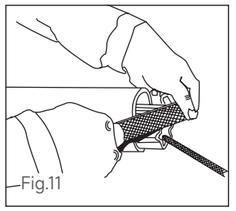


Fig.11

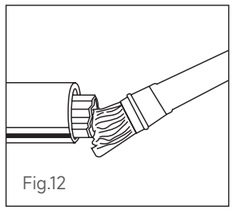


Fig.12

CAUTION When the implement needs to be hooked up to another tractor, the above inspection and adjustment work needs to be repeated.

◎ B Belt Tension Adjustment

The power is transmitted to the blade shaft through a belt, and the belt tension can be adjusted as required.

◎ It Is Recommended To Adjust The Belt Tension According To The Following Process

- Remove the bolts fixing the pulley cover (Fig.13) and open the pulley cover;
- Check whether the belt tension meets the requirements (Fig.14);
- If the belt tension does not meet the requirements (Fig.15); adjust the spring (Fig.15B) pressure by tightening the tensioning rod (Fig.15A) until the requirements are met;
- After the belt is tightened, check the consistency of the belt length (Fig.16).

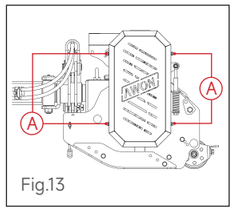


Fig.13

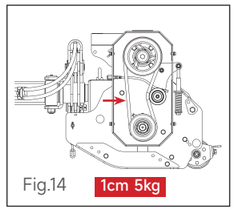


Fig.14 1cm 5kg

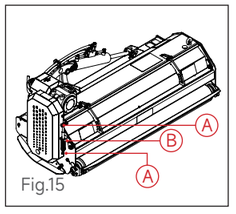


Fig.15

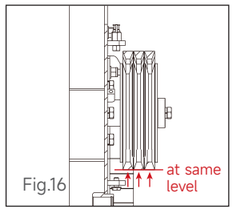


Fig.16

The working condition of the belt needs to be checked regularly to prevent the belt from becoming longer due to wear, slipping or other failures.
In order to distribute power correctly, all belts must be replaced at the same time if the above problems occur.

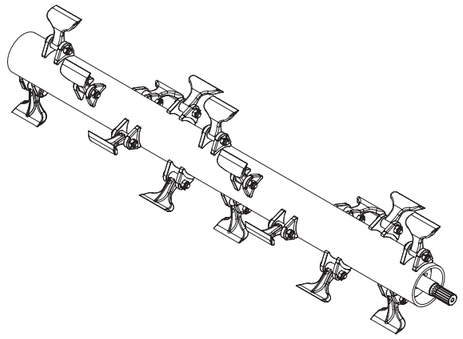
3.4 Blade Usage Guide

As the blade shaft is one of the main working parts, we recommend that you check the blade wear and bolt looseness before using the equipment. (Fig.17)

CAUTION

- If a single blade is found to be worn or damaged, it can be replaced individually;
- If most of the blades on the blade shaft are found to be severely worn, all the blades on the blade shaft need to be replaced;
- When replacing the blade, it is recommended to use the original blade;
- After replacing the blade, if the equipment is found to vibrate significantly, the rotor dynamic balance check must be performed on the blade shaft to prevent equipment damage;
- To check the dynamic balance, it is necessary to contact the manufacturer's designated dealer for on-site dynamic balance check service;
- When the blade shaft encounters a violent impact during operation, it must be stopped for inspection.

Fig.17



Hammer Blade

Y Blade

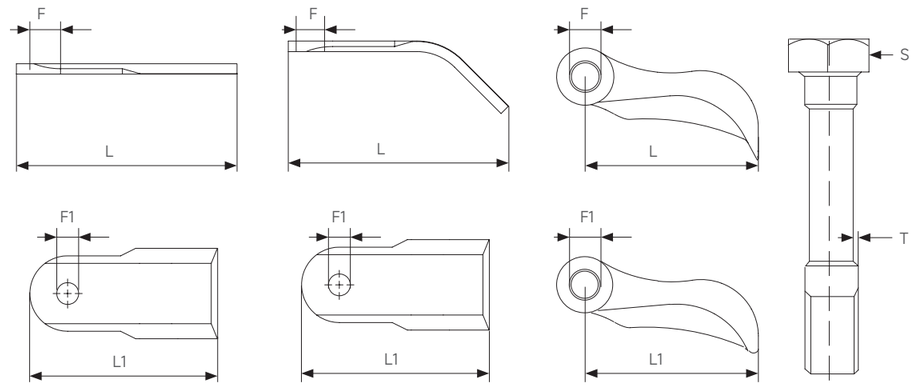
Bolt Tightening Torques（N.M）				
Bolt Grade / Fine Thread Bolts	6.8	8.8	10.9	12.9
M8×1	15	26	36	44
M10×1.25	30	52	74	88
M12×1.25	51	91	127	153
M14×1.5	81	143	201	241
M16×1.5	120	214	301	361
M18×1.5	173	308	433	520
M20×1.5	242	431	606	727
M22×1.5	321	571	803	964
M24×2	411	731	1028	1234
M27×2	601	7070	1504	1806
M30×2	832	1480	2081	2498

◎ Blade Wear

The following is a table of the main parameters of the blades that meet the requirements. Please refer to the following parameter table to evaluate the degree of blade wear.

- The diameter of the fixing hole F is not worn more than 2 mm; (Fig.18)
- The length of the blade L is not worn more than 5 mm; (Fig.18)
- The wear of the bolt side T and the bolt head S is not worn more than 1 mm; (Fig.18)

Fig.18



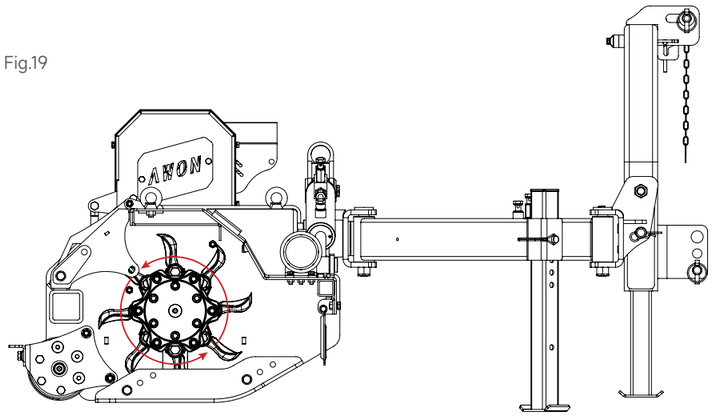
Model	SFM120/140/160	SFM165/185/205	SFM180/200/220/240
Hole Diameter F（mm）	12.5	14.5	16.5
Hole Diameter F1（mm）	14.5	16.5	18.5
Blade length L（mm）	80	100	100
Min blade length L1（mm）	75	95	95
Bolt size Sand T wear（mm）	1	1	1

◎ Blade Replacement

1、When the blade is broken or worn, it needs to be replaced with a new blade. Choose the appropriate blade type (Y-type blade or Hammer blade) according to your needs.

2、When replacing the blade, pay attention to the rotation direction of the blade and replace it according to the direction shown in the figure. (Fig.19)

Fig.19



CAUTION

- Before making any adjustments, slowly lift the mower with the tractor hydraulic lift arm until the mower is 20-30cm from the ground;
- Cut off the PTO and prohibit the drive shaft from rotating to avoid accidents.

3.5 Cutting Height Adjustment

◎ Adjust The Roller Height To Achieve The Appropriate Cutting Depth.

◎ The Roller Adjustment Process Is As Follows:

1. Loosen the 4 pcs of mounting bolts at both ends of the roller; (Fig.20)
2. Raise or lower both sides of the roller to the same height;
3. Tighten the roller fixing bolts;
4. Slowly place the mower on the ground and check the blade position. If the blade touches the ground, readjust the roller height according to the above 1-3 methods until the blade does not touch the ground;
5. Synchronously adjust the height of the slide plates at both ends, loosen the fixing bolts at both ends, and adjust the gear position in accordance with the roller adjustment. Tighten the nuts after adjustment. (Fig.21)

Fig.20

Fig.21

Before Restarting A Machine That Has Been Out Of Service For A Long Time, You Should First Perform The Following Operations:

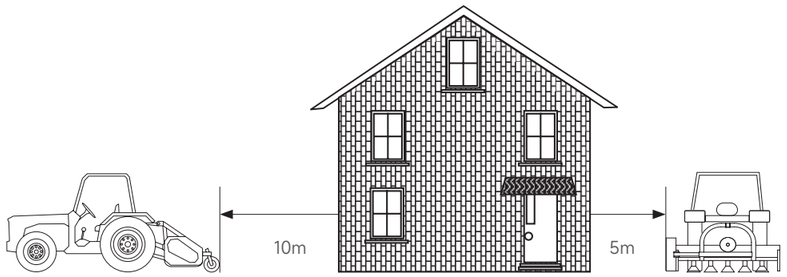
CAUTION

- Check the gearbox oil level. If it is below the warning line, add oil in time.
- Clean the dirt near the oil filling port and add lubricating grease.
- Check whether all fasteners are tightened.
- Check the hydraulic joints and hoses to see if there is oil leakage. If so, tighten them or replace the hoses / joints if necessary.

3.6 Mowing Operations

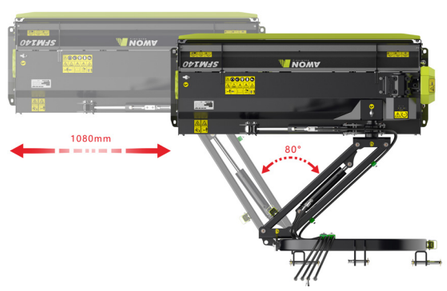
Before formal mowing operations, for safety reasons, first confirm that there are no people or animals in the working area, ensure that there is a safe distance between the working range of the equipment and buildings and roads (Fig.22), and run the equipment at standard speed and no load for a few minutes to ensure that there are no abnormal sounds or phenomena that affect the normal operation of the equipment.

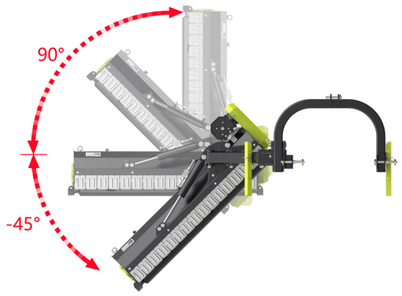
Fig.22

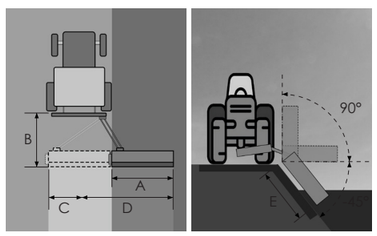


◎ Maximum Working Range of The Equipment:

- The offset mower can achieve horizontal side shifting, with a maximum side shift distance of 1080mm;
- The cutter can be flipped to achieve tilting operation within the range of -45° ~90° and multi-angle cutting.







MODEL		A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
SFM	SFM120	1200	1520	460	1943	930
	SFM140	1400	1520	460	2143	1130
	SFM160	1600	1520	460	2343	1330
	SFM165	1650	1600	265	2616	1600
	SFM185	1850	1600	265	2816	1800
	SFM205	2050	1600	265	3016	2000
	SFM180	1800	1914	380	3150	1700
	SFM200	2000	1914	380	3350	1900
	SFM220	2200	1914	380	3550	2100
	SFM240	2400	1914	380	3750	2300

- A Working Width
- B Max Extension Distance (F&R)
- C Max Side Swing Distance (L)
- D Max Side Swing Distance (R)
- E Slope Working Width

◎ During The Operation, We Have The Following Suggestions:

- Avoid operating the equipment in wetlands;
- Strictly avoid overspeed operation;
- Avoid using reverse gear (Fig.23) and S-shaped movement (Fig.24) during operation. When reversing or changing direction, the equipment needs to be lifted;
- The recommended speed of the equipment is no more than 10km/h. Too fast speed will affect the crushing quality;
- To avoid collision and damage to the equipment, please lower the equipment slowly;
- Before lifting the equipment, please make sure to disconnect the power output.

Fig.23

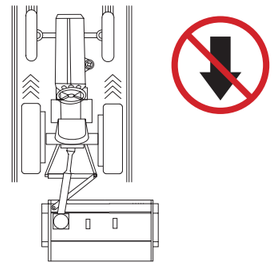
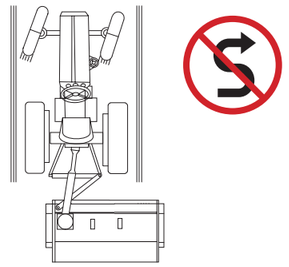


Fig.24



◎ When The Equipment Vibrates Abnormally, Please Check As Follows:

- Check if there is any foreign matter stuck on the blade or shaft;
- Check if all blades are installed correctly;
- Check if all blades are excessively worn;
- Check if the shaft is deformed or bent due to impact.

In Order To Improve The Service Life and Efficiency Of The Equipment, Please Set it According To The Parameters We Recommend:

- Place the equipment on the ground steadily, adjust the rear output gear of the tractor to (540rpm), and slowly increase the transmission shaft speed to 540rpm;
- Reasonably adjust the grass crushing height, the height from the ground should not be less than 3 cm, and soil breaking operations are strictly prohibited; (Fig.25)
- The equipment operating speed shall not exceed 10km/h (Fig.26). When the operating speed exceeds this, the equipment life will drop sharply;
- If you need to improve the crushing performance, it is recommended to reduce the operating speed.

Fig.25

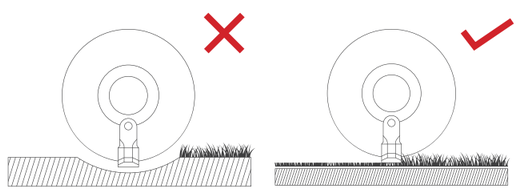
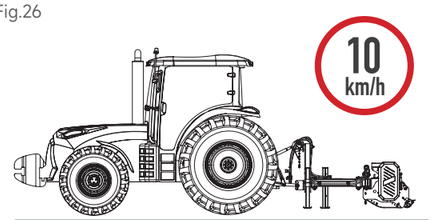


Fig.26



4.1 Belt Replacement

Belts are rubber products and are prone to aging, so they have a limited service life. Depending on the operating conditions, the belts need to be replaced from time to time.

◎ Replacement Methods Are As Follows:

1. Remove the pulley cover;
2. Loosen the tensioning rod to adjust the spring tension so that the tensioning wheel is in a relaxed state;
3. Use professional tools to remove the belt;
4. Replace the new belt, tighten the tensioning rod, and adjust according to (Section 3.3 Belt Tensioning on page 14).

4.2 Trouble Shooting

FAQ	Solution
Belt Failure	1. Adjust transmission tension; 2. Replace belt;
Missed Mowing Uneven Cutting	1. Check whether the blade is worn or broken. If it is, replace the blade; 2. Adjust the mower to a level position;
Excessive Vibration	1. Check whether the blade is worn or broken. If so, replace the blade; 2. Clear the windings in the transmission system;
Gearbox is Noisy	1. Check the gearbox lubricating oil. If the liquid level is too low, add the gearbox lubrication; 2. Check the transmission bearing;
Cutting Too Deep	1. Adjust the rolling height to increase the cutting height;

4.3 Maintenance

Regular maintenance will increase the service life of the equipment. The maintenance cycles listed in this manual are determined based on normal operating conditions.

◎ The Maintenance Process Is As Follows:

1. First, make sure the grease meets the requirements. It is recommended to use heavy-duty gear lubricant;
2. Lubricants and grease should be kept away from children to avoid direct contact with the skin;
3. Thoroughly clean the equipment of foreign matter such as weeds, mud, dust, etc. to prevent mixing with lubricants and lubrication failure;
4. Check whether there is leakage in the lubrication pipeline. If there is leakage, please replace it in time;
5. When filling the gear lubricant, do not exceed the overflow port to ensure that the oil volume is moderate.

After The Season is Over or When The Equipment is Not Used For A Long Period of Time; Please Do The Following:

1. Place the mower on the ground and keep the support balanced;
2. Clean the debris inside the mower, the residual grass and dust inside the mower shaft and the hood;
3. Tighten all loose bolts and nuts, check whether the blade is cracked or worn, and replace as needed;
4. Loosen the tension rod to make the belt loose;
5. Cover the equipment with a waterproof tarpaulin and store it in a dry place.

4.4 Maintenance Suggestions

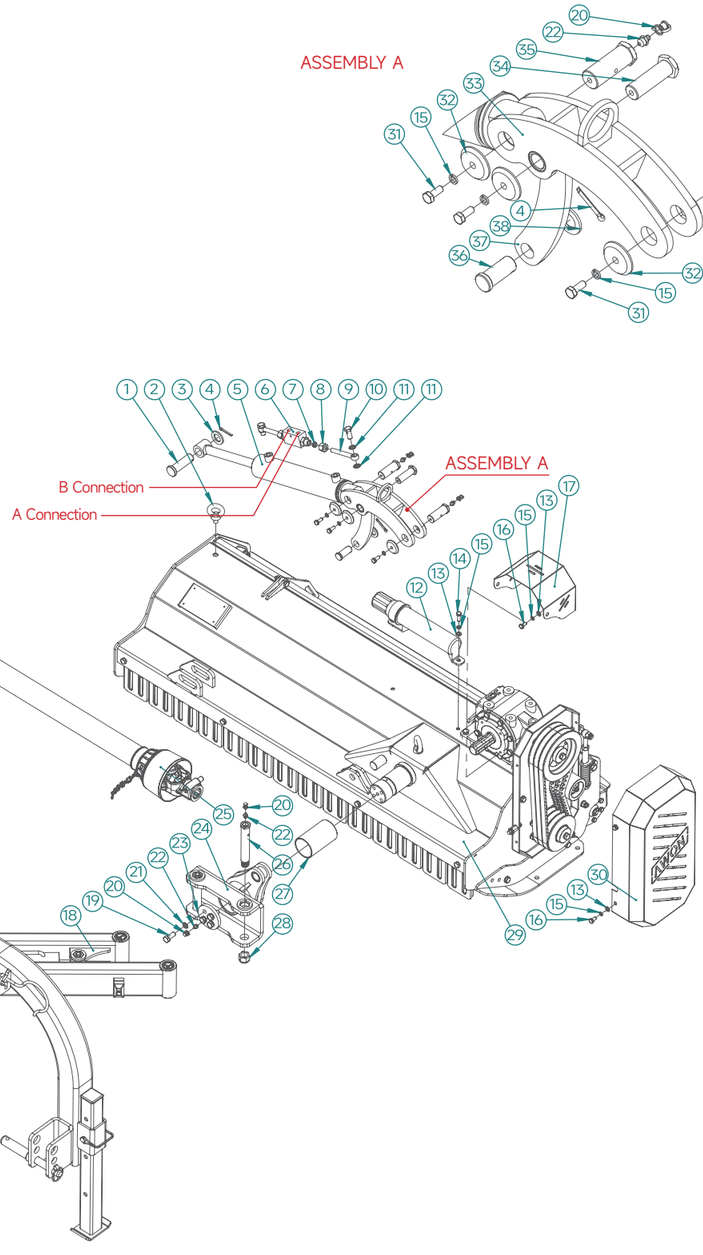
Initial Working Time of 8 Hours	▸ Check whether the blade is worn; ▸ Check whether all bolts are worn or loose; ▸ Check whether the belt is worn and adjust the tension according to (Section 3.3 Belt Tensioning on page 14);
Every 4 Working Hours	▸ All bearings are filled with grease;
Every 8 Working Hours	▸ Add grease to the cross shaft of the drive shaft; ▸ Add grease to all bearings; ▸ Check whether fastening bolts of blades are worn or loose; ▸ Open the rear cover, check whether there are foreign objects entangled in the blade shaft, and clean them in time;
Every 50 Working Hours	▸ Check the oil level in the gearbox and add oil to 1/2 of the oil glass if necessary; ▸ Check the belt wear;
Every 400 Working Hours	▸ Change the oil in the gearbox, the oil drain port is located below the gearbox;

SFM SERIES

OFFSET MOWER

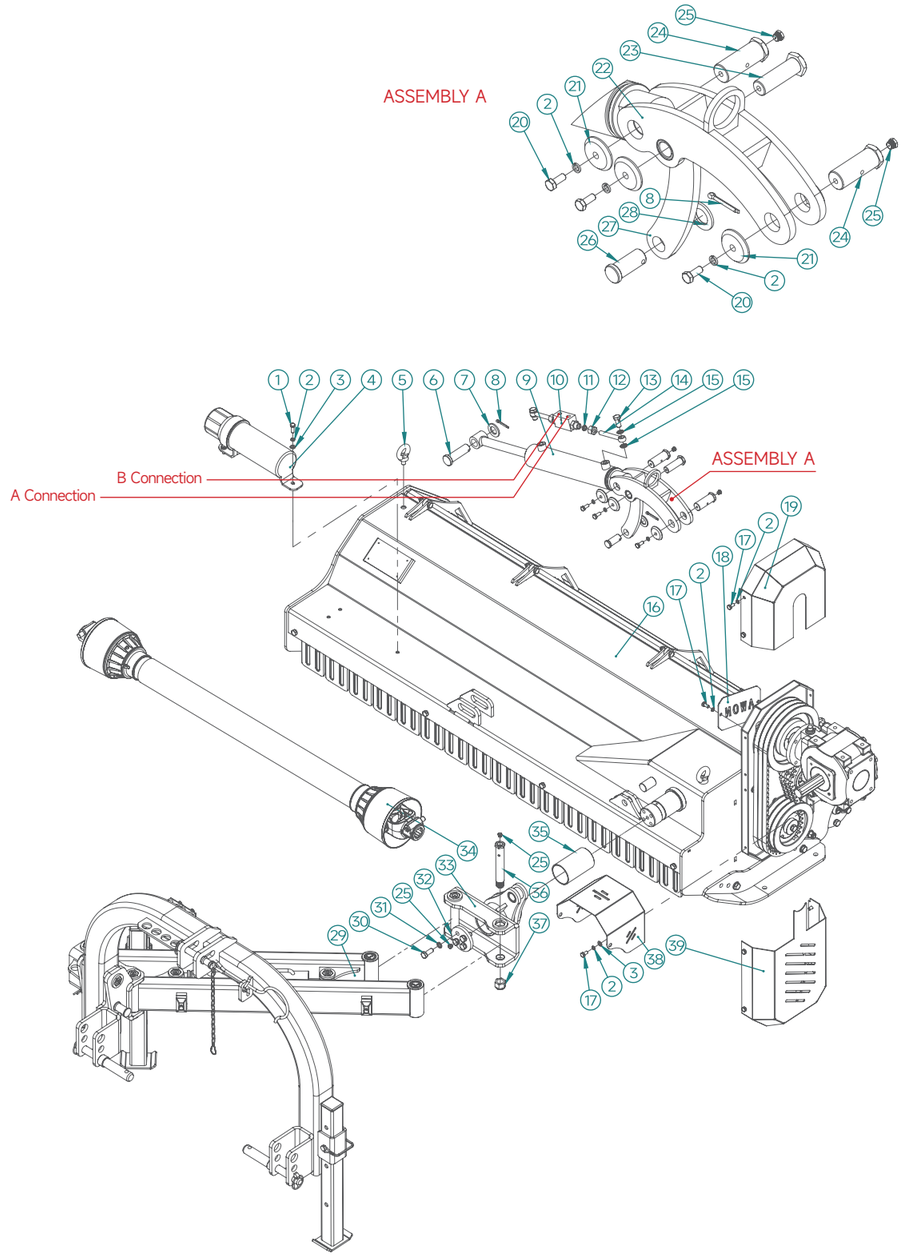
Product Structure Manual

5.1 Final Assembly（SFM120/140/160）



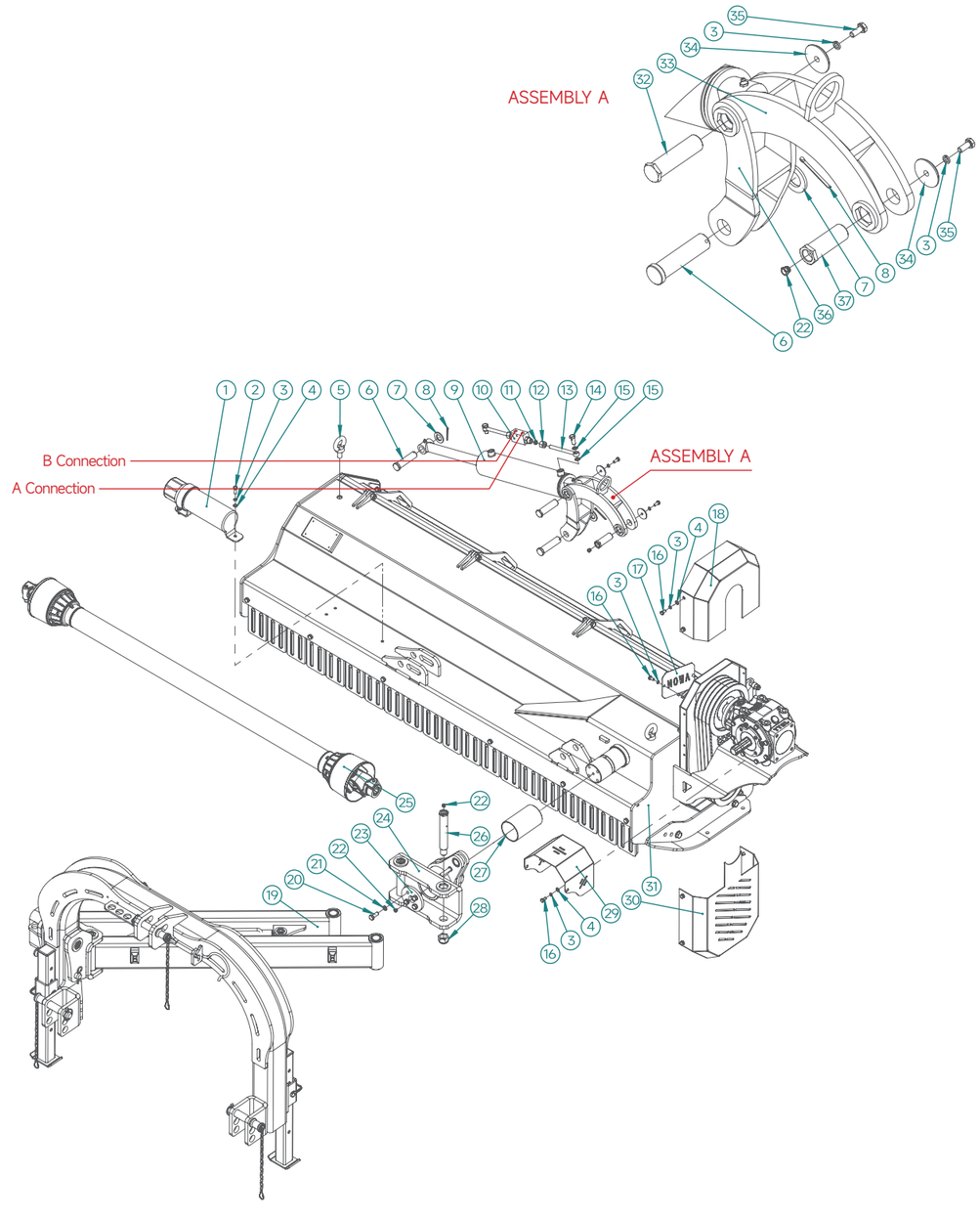
No.	Parts Code	Name	SFM120	SFM140	SFM160
			Qty		
1	SFM140-118	Movable Cylinder Pin	1	1	1
2	04040700001	Eyebolt M12 Galvanized Passivated	2	2	2
3	04020300008	Flat Washer Class C 24x4	1	1	1
4	04110200019	Cotter Pin 5x36	2	2	2
5	SFM140-115	Tilting Cylinder	1	1	1
6	VRDD-G1/4-12L	Bi-Directional Hydraulic Lock	1	1	1
7	03050050047	RL Sleeve（RL-12）	2	2	2
8	03050050073	NL Nut（NL-18）	2	2	2
9	SFM140-131	G1/4 Articulated Joint	2	2	2
10	03050050027	Hollow Bolts G1/4	2	2	2
11	03050050004	Combination Washers G1/4	4	4	4
12	03040050462	Small Manual Bucket（01-473c）	1	1	1
13	04020300013	Flat Washer Grade C8x1.6	10	10	10
14	04060700042	Hexagon Head Bolt Full Thread M8x25	2	2	2
15	04020200002	Standard Elastic Washers 8x2.1	13	13	13
16	04060700040	Hexagon Head Bolt Full Thread M8x16	8	8	8
17	FM140-106	PTO Cover	1	1	1
18	SFM140-581	Suspension Hydraulic Assembly	1	1	1
19	04060700013	Hexagon Head Bolt Full Thread M12x30	4	4	4
20	03040050470	Oil Cup Sleeve M10	5	5	5
21	04020200004	Standard Elastic Washer 12x3.1	4	4	4
22	04100100006	Straight-Through Pressure Injection Oil Cup M10x1	5	5	5
23	SFM140-117	Tilting Shaft Fixing Plate	1	1	1
24	SFM140-014	Tilting Frame Welding Parts	1	1	1
25		PTO Shaft	1	1	1
26	SFM140-108	Swing Arm Pin	2	2	2
27	04121000012	SF-1 Composite Bearing 63x68x112	1	1	1
28	04050500021	Type 1 Non-Metallic Insert Hexagonal Lock Nut M20-8	2	2	2
29	SFM120-541	Transmission Parts Assembly	1		
	SFM140-541	Transmission Parts Assembly		1	
	SFM160-541	Transmission Parts Assembly			1
30	FM140-112	Pulley Cover	1	1	1
31	04060700041	Hexagon Head Bolt Full Thread M8x20	3	3	3
32	SFM140-128	Shaft Head Pressure Plate	3	3	3
33	SFM140-017	Tilting Connection Plate Weldment	1	1	1
34	SFM140-112	Long Support Plate Pin	1	1	1
35	SFM140-114	Tilting Cylinder Pin	2	2	2
36	SFM140-116	Support Plate Pin	1	1	1
37	SFM140-107	Support Plate	1	1	1
38	04020300006	Flat Washer Grade C 20x3	1	1	1

5.1 Final Assembly (SFM165/185/205)



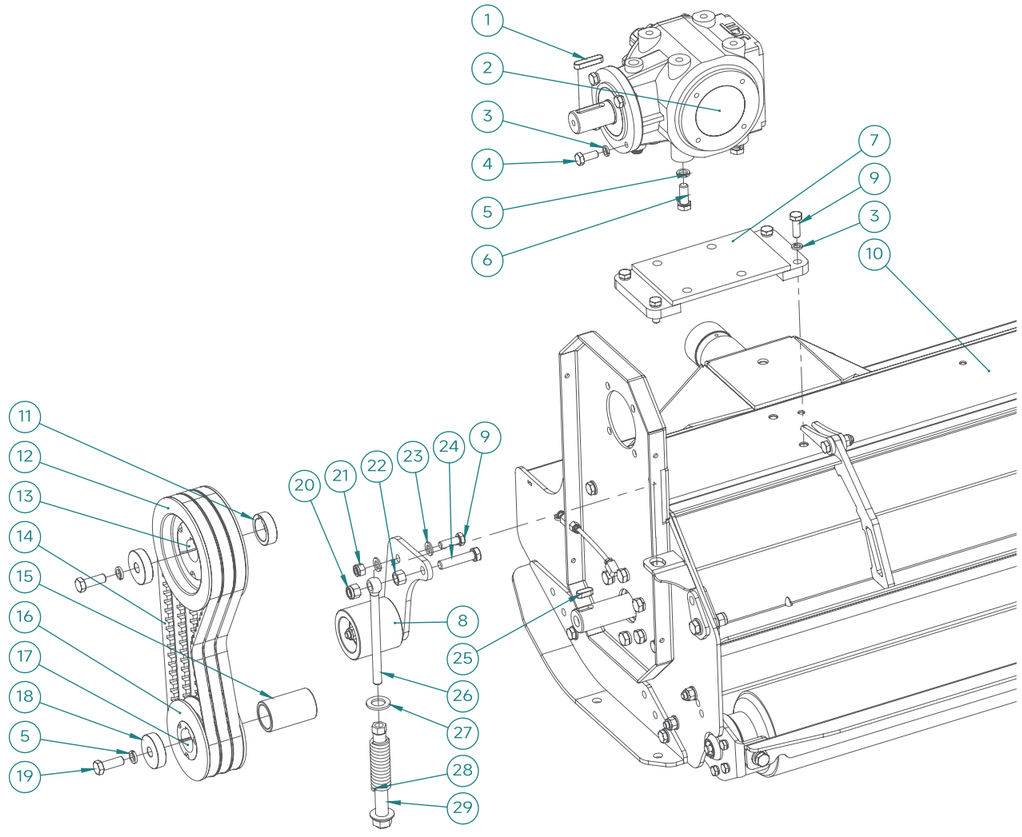
No.	Parts Code	Name	SFM165	SFM185	SFM205
			Qty		
1	SFM140-118	Movable Cylinder Pin	1	1	1
2	04040700001	Eyebolt M12 Galvanized Passivated	2	2	2
3	04020300008	Flat Washer Class C 24x4	1	1	1
4	04110200019	Cotter Pin 5x36	2	2	2
5	SFM140-115	Tilting Cylinder	1	1	1
6	VRDD-G1/4-12L	Bi-Directional Hydraulic Lock	1	1	1
7	03050050047	RL Sleeve (RL-12)	2	2	2
8	03050050073	NL Nut (NL-18)	2	2	2
9	SFM140-131	G1/4 Articulated Joint	2	2	2
10	03050050027	Hollow Bolt G1/4	2	2	2
11	03050050004	Combination Washer G1/4	4	4	4
12	03040050462	Small Manual Bucket (01-473c)	1	1	1
13	04020300013	Flat Washer Grade C 8x1.6	10	10	10
14	04060700042	Hexagon Head Bolt Full Thread M8x25	2	2	2
15	04020200002	Standard Elastic Washer 8x2.1	13	13	13
16	04060700040	Hexagon Head Bolt Full Thread M8x16	8	8	8
17	FM140-106	PTO Cover	1	1	1
18	SFM140-581	Suspension Hydraulic Assembly	1	1	1
19	04060700013	Hexagon Head Bolt Full Thread M12x30	4	4	4
20	03040050470	Oil Cup Sleeve M10	5	5	5
21	SFM140-128	Shaft Head Pressure Plate	3	3	3
22	SFM140-017	Tilting Connection Plate Weldment	1	1	1
23	SFM140-112	Long Support Plate Pin	1	1	1
24	SFM140-114	Tilting Cylinder Pin	2	2	2
25	04100100002	Concave Pressure Oil Filling Cup M10x1	5	5	5
26	SFM140-116	Support Plate Pin	1	1	1
27	SFM140-107	Support Plate	1	1	1
28	04020300006	Flat Washer Grade C 20x3	1	1	1
29	SFM140-581	Suspension Hydraulic Assembly	1	1	1
30	04060700013	Hexagon Head Bolt Full Thread M12x30	4	4	4
31	04020200004	Standard Elastic Washer 12x3.1	4	4	4
32	SFM140-117	Tilting Shaft Fixing Plate	1	1	1
33	SFM140-014	Tilting Frame Weldment	1	1	1
34		PTO Shaft	1	1	1
35	04121000012	SF-1 Composite Bearing 63x68x112	1	1	1
36	SFM140-108	Swing Arm Pin	2	2	2
37	04050500021	Type 1 Non-Metallic Insert Hexagonal Lock Nut M20-82	2	2	2
38	FM165-102	PTO Cover	1	1	1
39	SFM165-102	Lower Pulley Cover	1	1	1

5.1 Final Assembly（SFM180/200/220/240）



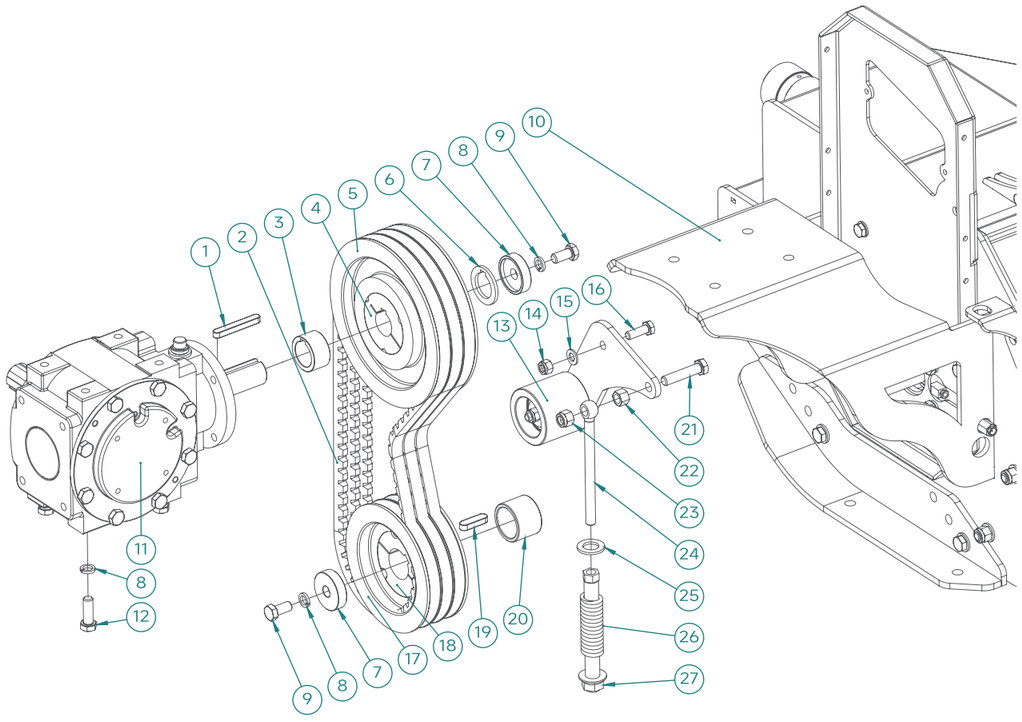
No.	Parts Code	Name	SFM180	SFM200	SFM220	SFM240
			Qty			
1	03040050463	Medium Manual Bucket (01-315c)	1	1	1	1
2	04060700042	Hexagon Head Bolt Full Thread M8x25	3	3	3	3
3	04020200002	Standard Elastic Washer 8x2.1	19	19	19	19
4	04020300013	Flat Washer Grade C 8x1.6	15	15	15	15
5	04040700002	Eyebolt M16 Galvanized Passivated	2	2	2	2
6	SFM200-112	Tilting Cylinder Pin	2	2	2	2
7	04020300008	Flat Washer Class C 24x4	2	2	2	2
8	04110200008	Cotter Pin 4x50	2	2	2	2
9	SFM200-109	Tilting Cylinder	1	1	1	1
10	VRDD-G1/4-12L	Bi-Directional Hydraulic Lock	1	1	1	1
11	03050050047	RL Sleeve（RL-12）	2	2	2	2
12	03050050073	NL Nut（NL-18）	2	2	2	2
13	SFM200-116	Articulated Tube Fitting	2	2	2	2
14	03050050027	Hollow Bolt G1/4	2	2	2	2
15	03050050004	Combination Washer G1/4	4	4	4	4
16	04060700040	Hexagon Head Bolt Full Thread M8x16	14	14	14	14
17	SFM165-106	Belt Pulley Cover Sealing Plate	1	1	1	1
18	SFM200-118	Upper Pulley Cover	1	1	1	1
19	SFM200-581	Suspension Hydraulic Assembly	1	1	1	1
20	04060700013	Hexagon Head Bolt Full Thread M12x30	4	4	4	4
21	04020200004	Standard Elastic Washer 12x3.1	4	4	4	4
22	04100100002	Concave Pressure Oil Filling Cup M10x1	4	4	4	4
23	SFM200-113	Tilting Shaft Pressure Plate	1	1	1	1
24	SFM200-015	Tilting Frame Weldment	1	1	1	1
25		PTO Shaft	1	1	1	1
26	SFM200-105A	Fixed Pin	2	2	2	2
27	04121000011	SF-1 Composite Bearing 80x85x137	1	1	1	1
28	04050500026	Type 1 Non-Metallic Insert Hexagonal Lock Nut M24-8	2	2	2	2
29	FM165-102	PTO Cover	1	1	1	1
30	SFM200-106	Lower Pulley Cover	1	1	1	1
31	SFM180-541	Transmission Parts Assembly	1			
	SFM200-541	Transmission Parts Assembly		1		
	SFM220-541	Transmission Parts Assembly			1	
	SFM240-541	Transmission Parts Assembly				1
32	SFM200-111	Tilting Connecting Plate Long Pin	1	1	1	1
33	SFM200-017	Tilting Connection Plate Weldment	1	1	1	1
34	SFM140-128	Shaft Head Pressure Plate	2	2	2	2
35	04060700041	Hexagon Head Bolt Full Thread M8x20	2	2	2	2
36	SFM200-018A	Support Plate Weldment	1	1	1	1
37	SFM200-110	Tilting Connecting Plate Pin	1	1	1	1

5.1.1 Transmission Components (SFM120/140/160)



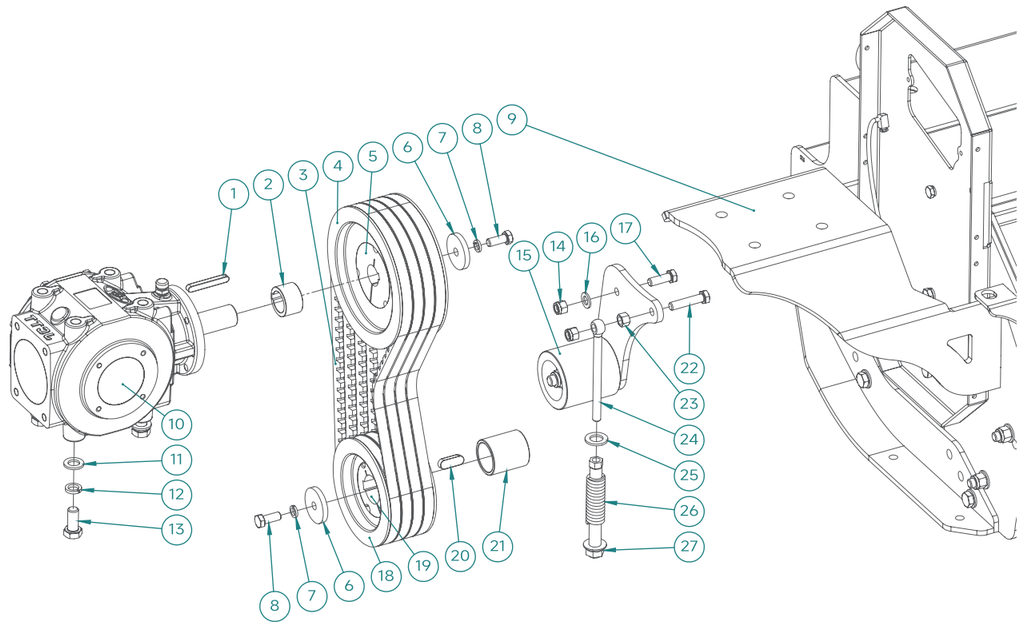
No.	Parts Code	Name	SFM120	SFM140	SFM160
			Qty		
1	04030100004	Ordinary Flat Key Type A 10x45	1	1	1
2	03070050033	Jiangling Gearbox (Xh30.300z.02w 30hp)	1	1	1
3	04020200003	Standard Elastic Washer 10x2.6	8	8	8
4	04060700003	Hexagon Head Bolt Full Thread M10x25	4	4	4
5	04020200004	Standard Elastic Washer 12x3.1	6	6	6
6	04060700013	Hexagon Head Bolt Full Thread M12x30	4	4	4
7	SFM140-019	Gearbox Mounting Plate Weldment	1	1	1
8	FM140-509	Tensioner Assembly	1	1	1
9	04060700004	Hexagon Head Bolt Full Thread M10x30	5	5	5
10	SFM120-521	Blade Shaft Roller Assembly	1		
	SFM140-521	Blade Shaft Roller Assembly		1	
	SFM160-521	Blade Shaft Roller Assembly			1
11	SFM140-124	Shaft Sleeve	1	1	1
12	03070050076	Belt Pulley (SPB160-3-2517)	1	1	1
13	03070050069	Cone Sleeve (2517-33)	1	1	1
14	03100200006	Belt (XPB-1065 Ld)	3	3	3
15	FM140-133	Long Sleeve	1	1	1
16	03070050075	Belt Pulley (SPB112-3-1610)	1	1	1
17	03070050068	Cone Sleeve (1610-35)	1	1	1
18	FM140-111	Shaft Head Pressure Plate	2	2	2
19	04060700015	Hexagon Head Bolt Full Thread M12x35	2	2	2
20	04050500016	Type 1 Non-Metallic Insert Hexagonal Lock Nut M12-8	1	1	1
21	04050500017	Type 1 Non-Metallic Insert Hexagonal Lock Nut M10-8	1	1	1
22	04050100002	Hexagonal Nut Grade C M12	1	1	1
23	04020300001	Flat Washer Grade C 10x2	2	2	2
24	04060700019	Hexagon Head Bolt Full Thread M12x55	1	1	1
25	04030100014	Ordinary Flat Key Type A 10x25	1	1	1
26	FM140-136A	Adjusting Screw Rod	1	1	1
27	04020300005	Flat Washer Grade C 18x3	1	1	1
28	FM165-121	Spring	1	1	1
29	FM140-023	Tension Rod Weldment	1	1	1

5.1.1 Transmission Components（SFM165/185/205）



No.	Parts Code	Name	SFM165	SFM185	SFM205
			Qty		
1	04030100007	Ordinary Flat Key Type A 10x70	1	1	1
2	03100200007	Belt（XPB-1315 Ld）	3	3	3
3	SFM165-104	Large Belt Pulley Sleeve	1	1	1
4	03070050069	Cone Sleeve（2517-33）	1	1	1
5	03070050078	Belt Pulley（SPB212-3-2517）	1	1	1
6	SFM165-110	Belt Pulley Spacer	1	1	1
7	FM140-111	Shaft Head Pressure Plate	2	2	2
8	04020200004	Standard Elastic Washer 12x3.1	6	6	6
9	04060700012	Hexagon Head Bolt Full Thread M12x25	2	2	2
10	SFM165-521	Blade Shaft Roller Assembly	1		
	SFM185-521	Blade Shaft Roller Assembly		1	
	SFM205-521	Blade Shaft Roller Assembly			1
11	03070050083	Jiangling Gearbox（Xh50.300z.03w 50hp）	1	1	1
12	04060700015	Hexagon Head Bolt Full Thread M12x35	4	4	4
13	SFM165-501	Tensioner Assembly	1	1	1
14	04050500017	Type 1 Non-Metallic Insert Hexagonal Lock Nut M10-8	1	1	1
15	04020300001	Flat Washer Grade C 10x2	1	1	1
16	04060700004	Hexagon Head Bolt Full Thread M10x30	1	1	1
17	03070050076	Belt Pulley（SPB160-3-2517）	1	1	1
18	03070050070	Cone Sleeve（2517-40）	1	1	1
19	04030100013	Ordinary Flat Key Type A 12x40	1	1	1
20	FM165-112	Sleeve	1	1	1
21	04060700019	Hexagon Head Bolt Full Thread M12x55	1	1	1
22	04050100002	Hexagonal Nut Grade C M12	1	1	1
23	04050500016	Type 1 Non-Metallic Insert Hexagonal Lock Nut M12-8	1	1	1
24	FM140-136A	Adjusting Screw Rod	1	1	1
25	04020300005	Flat Washer Grade C 18x3	1	1	1
26	FM165-121	Spring	1	1	1
27	FM140-023	Tension Rod Weldment	1	1	1

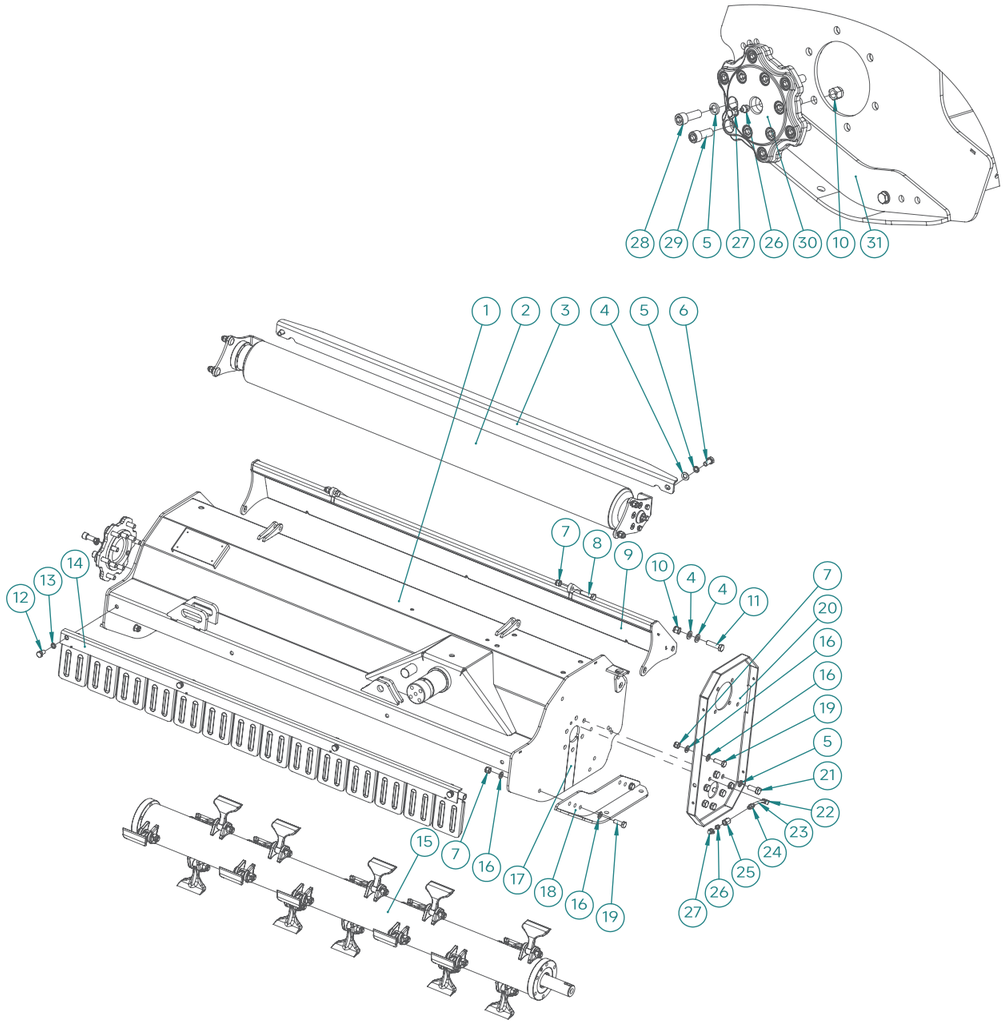
5.1.1 Transmission Components（SFM180/200/220/240）



No.	Parts Code	Name	SFM180	SFM200	SFM220	SFM240
			Qty			
1	04030100007	Ordinary Flat Key Type A 10x70	1	1	1	1
2	SFM200-120	Large Belt Pulley Bushing	1	1	1	1
3	03100200008	Belt（XPB-1360 Ld）	4	4	4	4
4	03070050079	Belt Pulley（SPB212-4-3020）	1	1	1	1
5	03070050072	Cone Sleeve（3020-33）	1	1	1	1
6	FM200-108	Shaft Head Pressure Plate	2	2	2	2
7	04020200004	Standard Elastic Washer 12x3.1	2	2	2	2
8	04060700013	Hexagon Head Bolt Full Thread M12x30	2	2	2	2
9	SFM180-521	Blade Shaft Roller Assembly	1			
	SFM200-521	Blade Shaft Roller Assembly		1		
	SFM220-521	Blade Shaft Roller Assembly			1	
	SFM240-521	Blade Shaft Roller Assembly				1
10	03070050044	Jiangling Gearbox（Xh65.300z.03ww 65hp）	1	1	1	1
11	04020300004	Flat Washer Grade C 16x3	4	4	4	4
12	04020200006	Standard Elastic Washer 16x4.1	4	4	4	4
13	04060900005	Hexagon Head Bolt Full Fine Thread M16x1.5x35	4	4	4	4
14	04050500016	Type 1 Non-Metallic Insert Hexagonal Lock Nut2 M12-8	2	2	2	2
15	SFM200-501	Tensioner Assembly	1	1	1	1
16	04020300002	Flat Washer Grade C 12x2.5	1	1	1	1
17	04060700015	Hexagon Head Bolt Full Thread M12x35	1	1	1	1
18	03070050077	Belt Pulley（SPB160-4-2517）	1	1	1	1
19	03070050071	Cone Sleeve（2517-45）	1	1	1	1
20	04030100020	Ordinary Flat Key Type A 14x40	1	1	1	1
21	FM200-113	Sleeve	1	1	1	1
22	04060700019	Hexagon Head Bolt Full Thread M12x55	1	1	1	1
23	04050100002	Hexagonal Nut Grade C M12	1	1	1	1
24	FM140-136A	Adjusting Screw Rod	1	1	1	1
25	04020300005	Flat Washer Grade C 18x3	1	1	1	1
26	FM165-121	Spring	1	1	1	1
27	FM140-023	Tension Rod Weldment	1	1	1	1

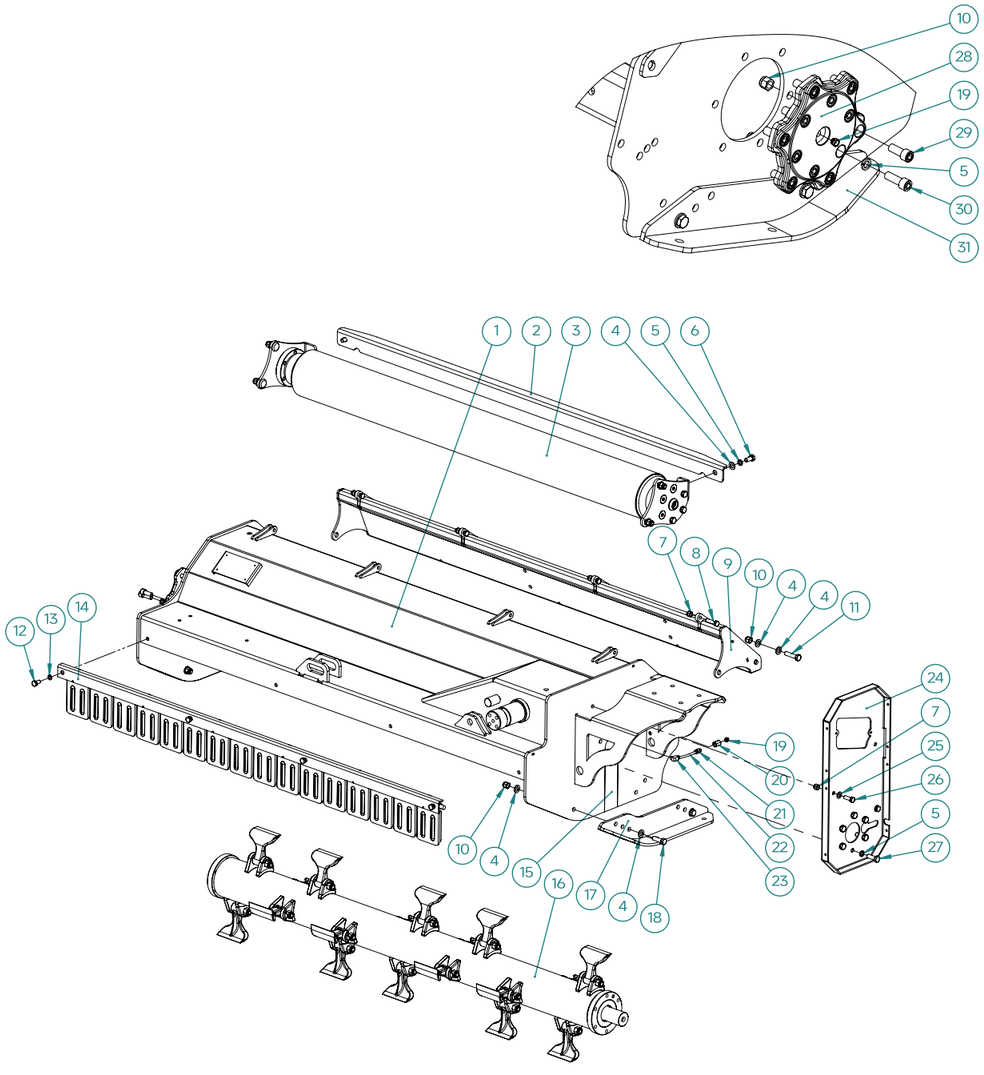
STRUCTURE

5.1.2 Blade Shaft & Roller Components (SFM120/140/160)



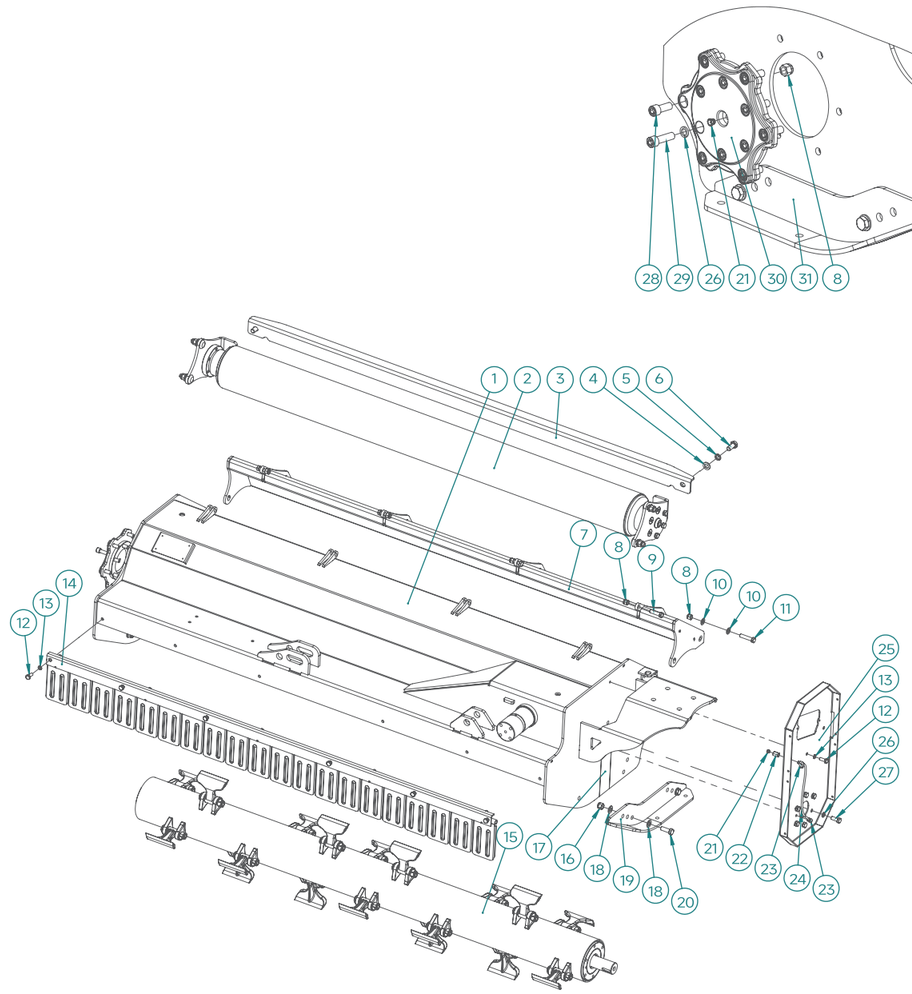
No.	Parts Code	Name	SFM120	SFM140	SFM160
			Qty		
1	SFM120-011	Hood Weldment	1		
	SFM140-011	Hood Weldment		1	
	SFM160-011	Hood Weldment			1
2	FM120-013T	Roller Assembly	1		
	FM140-013T	Roller Assembly		1	
	FM160-013T	Roller Assembly			1
3	FM120-108	Scraper	1		
	FM140-108	Scraper		1	
	FM160-108	Scraper			1
4	04020300002	Flat Washer Grade C 12x2.5	6	6	6
5	04020200004	Standard Elastic Washer 12x3.1	14	14	14
6	04060700012	Hexagon Head Bolt Full Thread M12x25	2	2	2
7	04050500017	Type 1 Non-Metallic Insert Hexagonal Lock Nut M10-8	8	8	8
8	04060700056	Hexagon Head Bolt Full Thread M10x40	2	2	2
9	FM120-017	Cover Bonnet Weldment	1		
	FM140-017	Cover Bonnet Weldment		1	
	FM160-017	Cover Bonnet Weldment			1
10	04050500016	Type 1 Non-Metallic Insert Hexagonal Lock Nut M12-8	8	8	8
11	04060700017	Hexagon Head Bolt Full Thread M12x45	2	2	2
12	04060700002	Hexagon Head Bolt Full Thread M10x20	4	4	4
13	04020200003	Standard Elastic Washer 10x2.6	4	4	4
14	FM120-504	Baffle Assembly	1		
	FM140-504	Baffle Assembly		1	
	FM160-504	Baffle Assembly			1
15	FM120-502T	Blade Shaft Assembly	1		
	FM140-502T	Blade Shaft Assembly		1	
	FM160-502T	Blade Shaft Assembly			1
16	04020300001	Flat Washer Grade C 10x2	12	12	12
17	FM140-128	Side Panel Sealing Plate	1	1	1
18	FM140-020	Sliding Plate 2 Weldment	1	1	1
19	04060700004	Hexagon Head Bolt Full Thread M10x30	6	6	6
20	SFM140-123	Belt Pulley Cover Side Plate	1	1	1
21	04060700013	Hexagon Head Bolt Full Thread M12x30	6	6	6
22	04100100003	Grease Nozzle Transition Joint 90° M10x1	1	1	1
23	03050050182	Lubricating Hose	1	1	1
24	04100100005	Grease Nozzle Transition Joint M10x1	1	1	1
25	04100100004	Grease Nozzle Transition Joint Internal Thread M10x1	1	1	1
26	04100100006	Straight-Through Pressure Oil Filling Cup M10x1	2	2	2
27	03040050470	Oil Cup Sleeve M10	2	2	2
28	04040100005	Hexagon Socket Head Screw M12x35	6	6	6
29	04040100004	Hexagon Socket Head Screw M12x30	6	6	6
30	FM140-131	Bearing Cover	1	1	1
31	FM140-019	Sliding Plate 1 Weldment	1	1	1

5.1.2 Blade Shaft & Roller Components (SFM165/185/205)



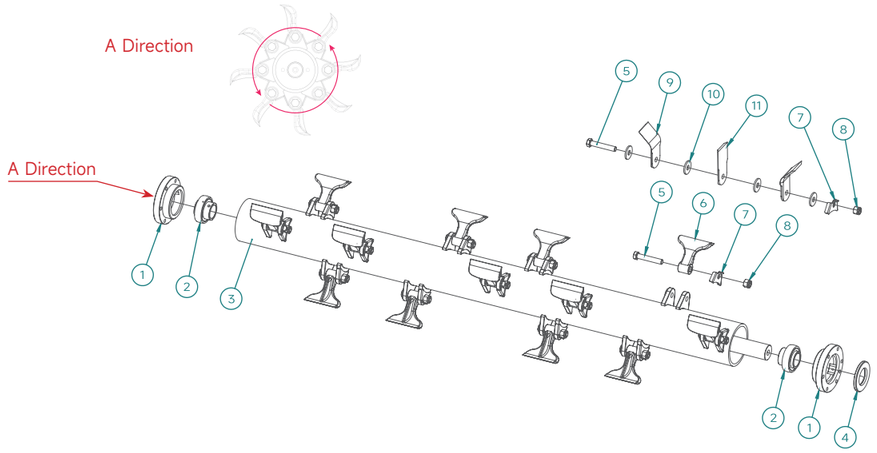
No.	Parts Code	Name	SFM165	SFM185	SFM205
			Qty		
1	SFM120-011	Hood Weldment	1		
	SFM140-011	Hood Weldment		1	
	SFM160-011	Hood Weldment			1
2	FM165-108	Scraper	1		
	FM185-108	Scraper		1	
	FM205-108	Scraper			1
3	FM165-013T	Roller Assembly	1		
	FM185-013T	Roller Assembly		1	
	FM205-013T	Roller Assembly			1
4	04020300002	Flat Washer Grade C 12x2.5	14	14	14
5	04020200004	Standard Elastic Washer 12x3.1	14	14	14
6	04060700012	Hexagon Head Bolt Full Thread M12x25	2	2	2
7	04050500017	Type 1 Non-Metallic Insert Hexagonal Lock Nut M10-86	6	6	6
8	04060700056	Hexagon Head Bolt Full Thread M10x40	4	4	4
9	FM165-017	Cover Bonnet Weldment	1		
	FM165-017	Cover Bonnet Weldment		1	
	FM205-017	Cover Bonnet Weldment			1
10	04050500016	Type 1 Non-Metallic Insert Hexagonal Lock Nut M12-8	12	12	12
11	04060700018	Hexagon Head Bolt Full Thread M12x50	2	2	2
12	04060700002	Hexagon Head Bolt Full Thread M10x20	4	4	4
13	04020200003	Standard Elastic Washer 10x2.6	4	4	4
14	FM165-504	Baffle Assembly	1		
	FM185-504	Baffle Assembly		1	
	FM205-504	Baffle Assembly			1
15	FM165-117	Side Panel Sealing Plate	1	1	1
16	FM165-502T	Blade Shaft Assembly	1		
	FM185-502T	Blade Shaft Assembly		1	
	FM205-502T	Blade Shaft Assembly			1
17	FM165-015	Sliding Plate Weldment 2	1	1	1
18	04060700016	Hexagon Head Bolt Full Thread M12x40	4	4	4
19	04100100002	Concave Pressure Oil Filling Cup M10x1	2	2	2
20	04100100004	Grease Nozzle Transition Joint Internal Thread M10x1	1	1	1
21	04100100005	Grease Nozzle Transition Joint M10x1	1	1	1
22	03050050182	Lubricating Hose	1	1	1
23	04100100003	Grease Nozzle Transition Joint 90° M10x1	1	1	1
24	SFM165-105	Belt Pulley Cover Side Plate	1	1	1
25	04020300001	Flat Washer Grade C 10x2	2	2	2
26	04060700004	Hexagon Head Bolt Full Thread M10x30	2	2	2
27	04060700015	Hexagon Head Bolt Full Thread M12x35	6	6	6
28	FM165-126	Bearing Cover	1	1	1
29	04040100004	Hexagon Socket Head Screw M12x30	6	6	6
30	04040100005	Hexagon Socket Head Screw M12x35	6	6	6
31	FM165-014	Sliding Plate Weldment 1	1	1	1

5.1.2 Blade Shaft & Roller Components (SFM180/200/220/240)



No.	Parts Code	Name	SFM180	SFM200	SFM220	SFM240
			Qty			
1	SFM180-011	Hood Weldment	1			
	SFM200-011	Hood Weldment		1		
	SFM220-011	Hood Weldment			1	
	SFM240-011	Hood Weldment				1
2	FM180-015T	Roller Assembly	1			
	FM200-015T	Roller Assembly		1		
	FM220-015T	Roller Assembly			1	
	FM240-015T	Roller Assembly				1
3	FM180-103	Scraper	1			
	FM200-103	Scraper		1		
	FM220-103	Scraper			1	
	FM240-103	Scraper				1
4	04020300004	Flat Washer Grade C 16x3	2	2	2	2
5	04020200006	Standard Elastic Washer 16x4.1	2	2	2	2
6	04060700028	Hexagon Head Bolt Full Thread M16x35	2	2	2	2
7	FM180-016	Cover Bonnet Weldment	1			
	FM200-016	Cover Bonnet Weldment		1		
	FM220-016	Cover Bonnet Weldment			1	
	FM240-016	Cover Bonnet Weldment				1
8	04050500016	Type 1 Non-Metallic Insert Hexagonal Lock Nut12 M12-8	12	12	12	12
9	04060700017	Hexagon Head Bolt Full Thread M12x45	4	4	4	4
10	04020300002	Flat Washer Grade C 12x2.5	4	4	4	4
11	04060700019	Hexagon Head Bolt Full Thread M12x55	2	2	2	2
12	04060700003	Hexagon Head Bolt Full Thread M10x25	7	7	7	7
13	04020200003	Standard Elastic Washer 10x2.6	7	7	7	7
14	FM180-504	Baffle Assembly	1			
	FM200-504	Baffle Assembly		1		
	FM220-504	Baffle Assembly			1	
	FM240-504	Baffle Assembly				1
15	FM180-502T	Blade Shaft Assembly	1			
	FM200-502T	Blade Shaft Assembly		1		
	FM220-502T	Blade Shaft Assembly			1	
	FM240-502T	Blade Shaft Assembly				1
16	04050500015	Type 1 Non-Metallic Insert Hexagonal Lock Nut4 M14-8	4	4	4	4
17	FM200-114	Guard Plate	1	1	1	1
18	04020300003	Flat Washer Grade C 14x2.5	8	8	8	8
19	FM200-014	Sliding Plate Weldment 2	1	1	1	1
20	04060700024	Hexagon Head Bolt Full Thread M14x40	4	4	4	4
21	04100100002	Concave Pressure Oil Filling Cup M10x1	2	2	2	2
22	04100100004	Grease Nozzle Transition Joint Internal Thread M10x1	1	1	1	1
23	04100100003	Grease Nozzle Transition Joint 90° M10x1	2	2	2	2
24	03050050182	Lubricating Hose	1	1	1	1
25	SFM200-102	Belt Pulley Cover Bottom Plate	1	1	1	1
26	04020200004	Standard Elastic Washer 12x3.1	12	12	12	12
27	04060700013	Hexagon Head Bolt Full Thread M12x30	6	6	6	6
28	04040100004	Hexagon Socket Cylindrical Head Screw M12x30	6	6	6	6
29	04040100006	Hexagon Socket Cylindrical Head Screw M12x40	6	6	6	6
30	FM200-115	Bearing Cover	1	1	1	1
31	FM200-013	Sliding Plate Weldment 1	1	1	1	1

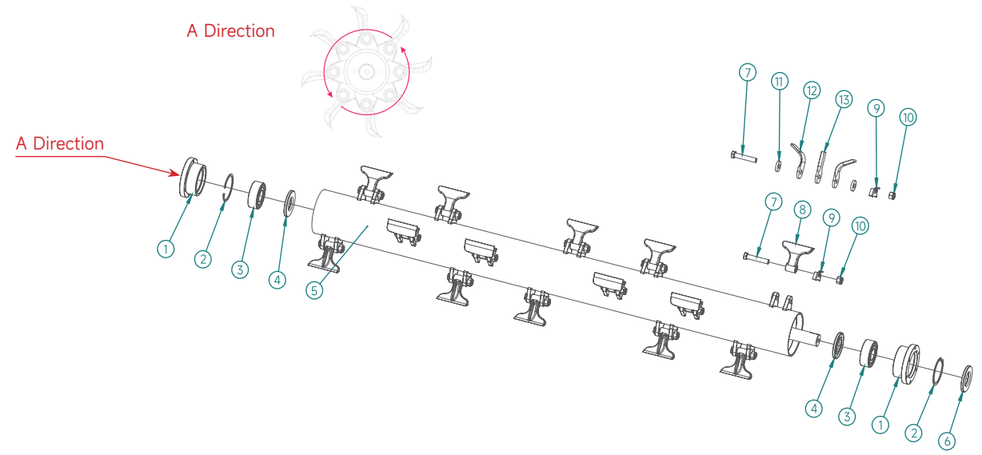
5.1.2.1 Blade Shaft Components (SFM120/140/160/165/185/205)



No.	Blade options	Parts Code	Name	SFM120	SFM140	SFM160
				Qty		
1		03040050135	Bearing Steel Seat C207	2	2	2
2		04120700001	Uc207 Spherical Ball Bearing With Top Thread	2	2	2
3		FM120-012	Blade Shaft Weldment	1		
		FM140-012	Blade Shaft Weldment		1	
		FM160-012	Blade Shaft Weldment			1
4		04090200025	Tc Oil Seal 45x80x7	1	1	1
5		04060600042	Hexagon Head Bolts Grade A And B M12x60 Grade 12.9	20	24	26
6	T Blade	FM140-118	Small Hammer Blade 80	20	24	26
7		FM140-134	Lock Plate	20	24	26
8		04050500016	Type 1 Non-Metallic Insert Hexagonal Lock Nut M12-8	20	24	26
9	Y Blade	FM140-145	Light Y-Curved Blade	40	48	52
10		FM140-147	Spacer 4mm	80	96	104
11		FM140-146	Light Y-Type Straight Blade	20	24	26

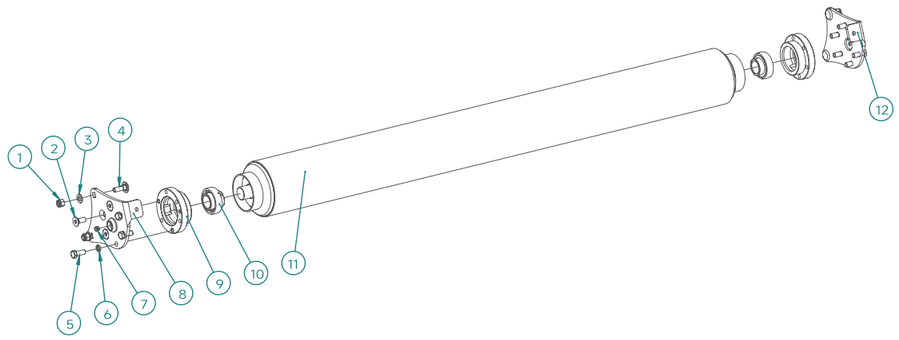
No.	Blade options	Parts Code	Name	SFM165	SFM185	SFM205
				Qty		
1		03040050136	Bearing Steel Seat C208	2	2	2
2		04120700002	Uc 208 Spherical Ball Bearing With Top Thread	2	2	2
3		FM165-012	Blade Shaft Weldment	1		
		FM185-012	Blade Shaft Weldment		1	
		FM205-012	Blade Shaft Weldment			1
4		04090200013	Tc Oil Seal 50x90x8	1	1	1
5		04060600006	Hexagon Head Bolts Grade A And B M14x80_12.9	22	24	26
6	T Blade	FM165-101	Medium Hammer Blade 100	22	24	26
7		FM165-115	Lock Plate	22	24	26
8		04050500015	Type 1 Non-Metallic Insert Hexagonal Lock Nut M14-8	22	24	26
9	Y Blade	BFM165-131	Curved Blade	44	48	52
10		FM165-127	Y Blade Washer 4mm	88	96	104
11		BFM165-102	Straight Blade	22	24	26

5.1.2.1 Blade Shaft Components (SFM180/200/220/240)



No.	Blade options	Parts Code	Name	SFM180	SFM200	SFM220	SFM240
				Qty			
1		FM200-111	Bearing Steel Seat	2	2	2	2
2		04010100001	Circlip For Hole Type A 100	2	2	2	2
3		04120200004	Aligning Ball Bearing 2309	2	2	2	2
4		04090200010	Tc Oil Seal 50x100x10	2	2	2	2
5		FM180-012	Blade Shaft Weldment	1			
		FM200-012	Blade Shaft Weldment		1		
		FM220-012	Blade Shaft Weldment			1	
		FM240-012	Blade Shaft Weldment				1
6		04090200014	Tc Oil Seal 55x100x10	1	1	1	1
7	T Blade	04060600009	Hexagon Head Bolts Grade A And B M16x90_12.9	20	22	24	26
8		FM200-112	Big Hammer Blade 120	20	22	24	26
9		FM200-102	Lock Plate	20	22	24	26
10		04050500014	Type 1 Non-Metallic Insert Hexagonal Lock Nut M16-8	20	22	24	26
11	Y Blade	FM200-136	Blade Washer	40	44	48	52
12		FM200-134	Y-Type Blade	40	44	48	52
13		FM200-135	Straight Blade	20	22	24	26

5.1.2.2 Roller Components

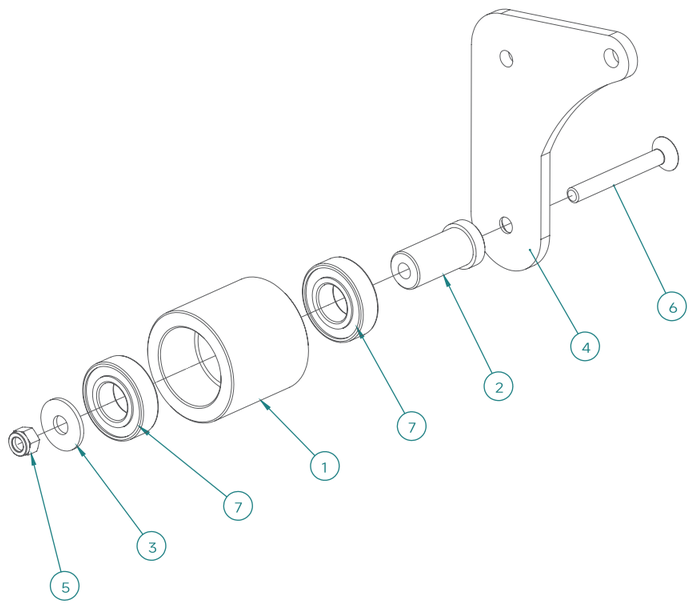


No.	Parts Code	Name	120	140	160	165	185	205	180	200	220	240
			Qty									
1	04050500017	Type 1 Non-Metallic Insert Hexagonal Lock 4 Nut M10-8	4	4	4							
	04050500016	Type 1 Non-Metallic Insert Hexagonal Lock Nut M12-8				4	4	4				
	04050500015	Type 1 Non-Metallic Insert Hexagonal Lock Nut M14-8							4	4	4	4
2	04040300013	Hexagon Socket Countersunk Screw M8x20	6	6	6							
	04040300004	Hexagon Socket Countersunk Screw M12x30				6	6	6	6	6	6	6
3	04020300001	Flat Washer Grade C 10x2	4	4	4							
	04020300002	Flat Washer Grade C 12x2.5				4	4	4				
	04020300003	Flat Washer Grade C 14x2.5							4	4	4	4
4	04060300003	Reinforced Semicircular Head Square Neck 4 Bolt M10x3	4	4	4							
	04060300002	Reinforced Semicircular Head Square Neck Bolt M12x35				4	4	4				
	04060300004	Reinforced Semicircular Head Square Neck Bolt M14x45							4	4	4	4

5.1.2.2 Roller Components

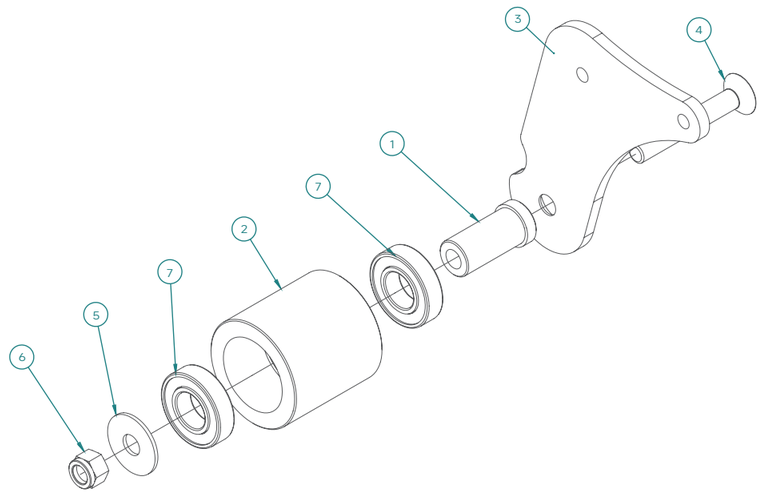
No.	Parts Code	Name	120	140	160	165	185	205	180	200	220	240
			Qty									
5	04060700042	Hexagon Head Bolt Full Thread M8x25	6	6	6							
	04060700013	Hexagon Head Bolt Full Thread M12x30				6	6	6				
	04060700015	Hexagon Head Bolt Full Thread M12x35							6	6	6	6
6	04020200002	Standard Elastic Washer 8x2.1	6	6	6							
	04020200004	Standard Elastic Washer 12x3.1				6	6	6	6	6	6	6
7	04100100002	Concave Pressure Oil Filling Cup M10x1	2	2	2	2	2	2	2	2	2	2
8	FM140-021	Roller Connecting Plate Weldment 2	1	1	1							
	FM165-025	Roller Connecting Plate Weldment 2				1	1	1				
	FM200-022	Roller Connecting Plate Weldment 2							1	1	1	1
9	03040050206	Bearing Steel Seat C205	2	2	2							
	03040050135	Bearing Steel Seat C207				2	2	2	2	2	2	2
10	04120700003	Uc 205 Spherical Ball Bearing With Top Thread	2	2	2							
	04120700001	Uc 207 Spherical Ball Bearing With Top Thread				2	2	2	2	2	2	2
11	FM120-013	Roller Weldment	1									
	FM140-013	Roller Weldment		1								
	FM160-013	Roller Weldment			1							
	FM165-013	Roller Weldment				1						
	FM185-013	Roller Weldment					1					
	FM205-013	Roller Weldment						1				
	FM180-015	Roller Weldment							1			
	FM200-015	Roller Weldment								1		
	FM220-015	Roller Weldment									1	
	FM240-015	Roller Weldment										1
12	FM140-018	Roller Connecting Plate Weldment 1	1	1	1							
	FM165-024	Roller Connecting Plate Weldment 1				1	1	1				
	FM200-021	Roller Connecting Plate Weldment 1							1	1	1	1

5.1.2.3 Tension Pulley Components (SFM120/140/160/165/185/205)



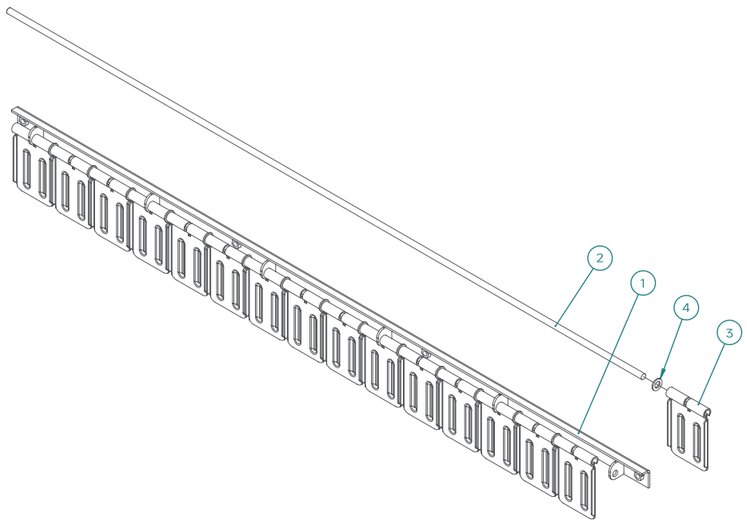
No.	Parts Code	Name	SFM120	SFM140	SFM160	SFM165	SFM185	SFM205
			Qty					
1	FM140-113	Tensioner	1	1	1	1	1	1
2	FM140-123	Tensioner Shaft	1	1	1	1	1	1
3	FM140-124	Pressure Plate	1	1	1	1	1	1
4	FM140-114	Tensioner Plate	1	1	1			
	SFM165-109	Tensioner Plate				1	1	1
5	04050500017	Type 1 Non-Metallic Insert Hexagonal Lock 1nut M10-81	1	1	1	1	1	1
6	04040300014	Hexagon Socket Countersunk Screw M10x85	1	1	1	1	1	1
7	04120100033	Deep Groove Ball Bearing 6205-2rs	2	2	2	2	2	2

5.1.2.3 Tension Pulley Components (SFM180/200/220/240)



No.	Parts Code	Name	SFM180	SFM200	SFM220	SFM240
			Qty			
1	FM200-106	Tensioner Shaft	1	1	1	1
2	SFM200-103	Tensioner	1	1	1	1
3	SFM200-104	Tension Plate	1	1	1	1
4	04040300041	Hexagon Socket Countersunk Screw Half Thread M16x110	1	1	1	
5	04020400003	Big Washer Grade C 16x3				1
6	04050500014	Type 1 Non-Metallic Insert Hexagonal Lock Nut M16-8	1	1	1	1
7	04120100003	Deep Groove Ball Bearing 6206-2rs	1	1	1	1

5.1.2.4 Baffle Components



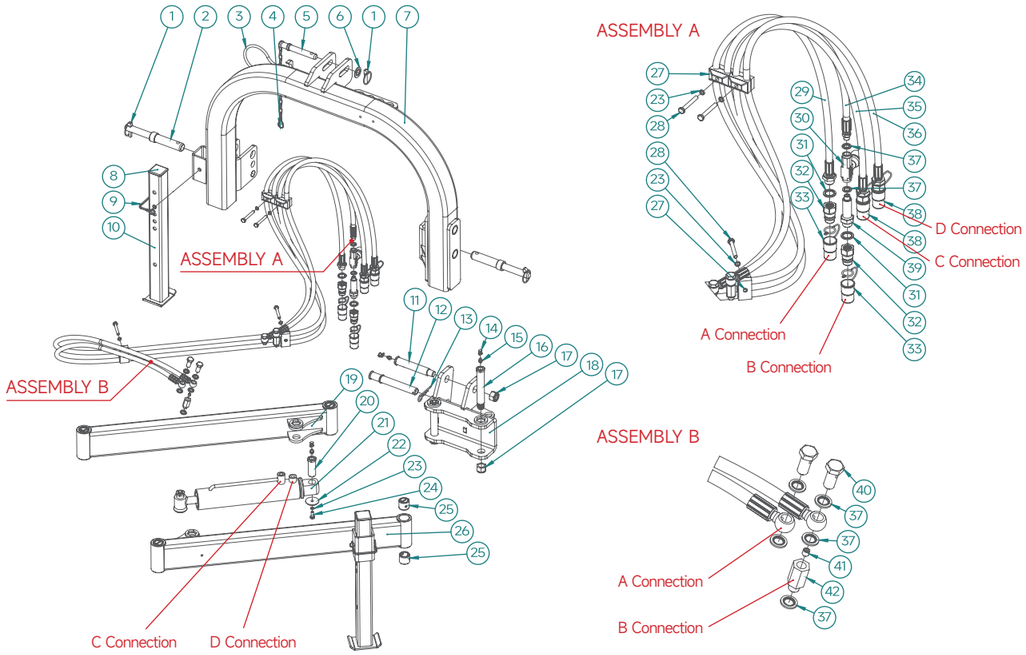
No.	Parts Code	Name	120	140	160	165	185	205	180	200	220	240
			Qty									
1	FM120-015	Baffle Shaft Fixing Plate Weldment	1									
	FM140-015	Baffle Shaft Fixing Plate Weldment		1								
	FM160-015	Baffle Shaft Fixing Plate Weldment			1							
	FM165-018	Baffle Shaft Fixing Plate Weldment				1						
	FM185-018	Baffle Shaft Fixing Plate Weldment					1					
	FM205-018	Baffle Shaft Fixing Plate Weldment						1				
	FM180-020	Baffle Shaft Fixing Plate Weldment							1			
	FM200-020	Baffle Shaft Fixing Plate Weldment								1		
	FM220-020	Baffle Shaft Fixing Plate Weldment									1	
	FM240-020	Baffle Shaft Fixing Plate Weldment										1
	FM260-019	Baffle Shaft Fixing Plate Weldment										

5.1.2.4 Baffle Components

No.	Parts Code	Name	120	140	160	165	185	205	180	200	220	240
			Qty									
1	FM280-019	Baffle Shaft Fixing Plate Weldment										
	FM300-019	Baffle Shaft Fixing Plate Weldment										
2	FM120-132	Baffle Shaft	1									
	FM140-132	Baffle Shaft		1								
	FM160-132	Baffle Shaft			1							
	FM165-124	Baffle Shaft				1						
	FM185-124	Baffle Shaft					1					
	FM205-124	Baffle Shaft						1				
	FM180-124	Baffle Shaft							1			
	FM200-124	Baffle Shaft								1		
	FM220-124	Baffle Shaft									1	
	FM240-124	Baffle Shaft										1
3	FM140-109	Baffle	12	14	16	16	18	20				
	FM200-120	Baffle							18	20	22	24
4	04020300002	Flat Washer Grade C 12x2.5	11	13	15	15	17	19	17	19	21	23

STRUCTURE

5.1.3 Suspension Hydraulic Components (SFM120/140/160/165/185/205)



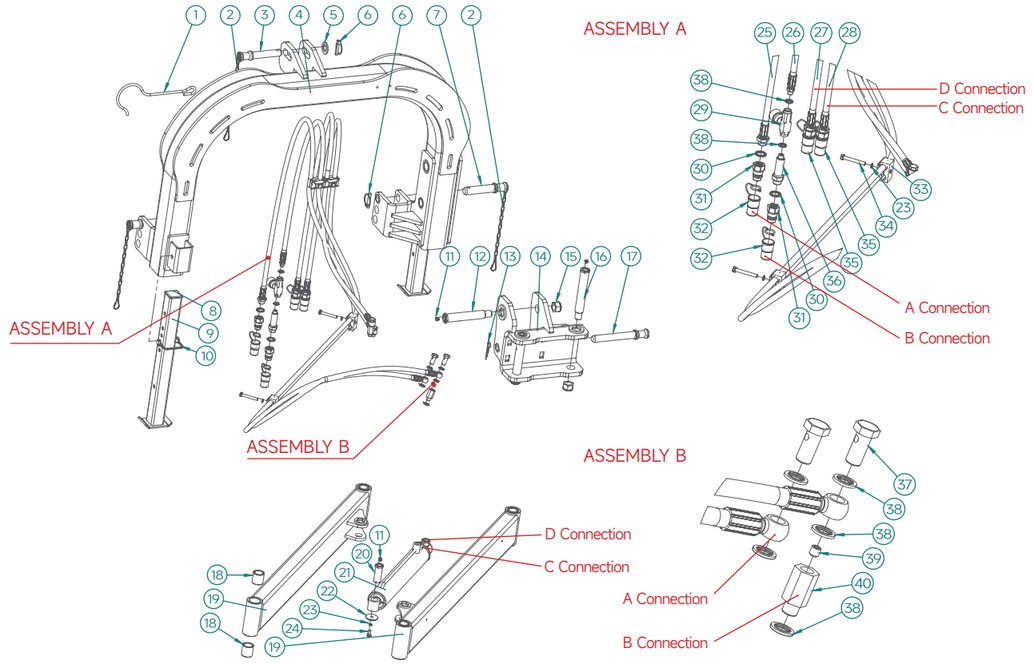
No.	Parts Code	Name	SFM120/140/160/165/185/205
			Qty
1	03040050137	Lock Pin Assembly 10 Φ10x45 Flat Rod	3
2	SFM140-113	Dual-Purpose Lower Suspension Pin	2
3	FMH140-107	Drive Shaft Hook	1
4	03040050074	Hanging Chain 2x10x16	1
5	FM140-115	Upper Suspension Pin	1
6	04020300006	Flat Washer Grade C 20x3	1
7	SFM140-012	Suspension Weldment	1
8	03040050055	Support Cover 50x50	2
9	04110500002	D-Type Safety Pin D12x80	2
10	SFM140-018	Support Weldment	2
11	SFM140-109	Fixed Pin	1
12	SFM140-110	Insurance Pin	1
13	04110600002	R Pin Φ4	1

5.1.3 Suspension Hydraulic Components (SFM120/140/160/165/185/205)

No.	Parts Code	Name	SFM120/140/160/165/185/205
			Qty
14	03040050470	Oil Cup Sleeve M10	5
15	04100100006	Straight-Through Pressure Oil Filling Cup M10x1	5
16	SFM140-108	Swing Arm Pin	2
17	04050500021	Type 1 Non-Metallic Insert Hexagonal Lock Nut M20-8	3
18	SFM140-013	Suspension Connecting Frame Weldment	1
19	SFM140-016	Swinging Square Tube Weldment	1
20	SFM140-114	Tilting Cylinder Pin	2
21	SFM140-106	Swing Cylinder	1
22	SFM140-128	Shaft Head Pressure Plate	2
23	04020200002	Standard Elastic Washer 8x2.1	6
24	04060700041	Hexagon Head Bolt Full Thread M8x20	2
25	5108130B	Ordinary Steel Sleeve 25x35x30	8
26	SFM140-015	Swing Square Tube Weldment	1
27	03050050049	Double-Joint Double-Hole Pipe Clamp (Sxtpg16-216)	4
28	04060700044	Hexagon Head Bolt Full Thread M8x60	4
29	SFM140-125	Tilting Oil Pipe	1
30	03050050048	One-Way Throttle Valve (Stu-G1/4)	1
31	03050050002	Combination Washer G1/2	4
32	03050050001	G1/2 Quick-Change Connector (M)	4
33	03040050130	A-Type Protective Sleeve (For Male Connector) Blue G1/2 (A-G1/2 Blue)	2
34	SFM140-130	Tilting Oil Pipe (High)	1
35	SFM140-126	Side Shift Oil Pipe	1
36	SFM140-126	Side Shift Oil Pipe	1
37	03050050004	Combination Washer G1/4	12
38	03040050115	A-Type Protective Sleeve (For Male Connector) Red G1/2 (A-G1/2 Red)	2
39	SFM140-127	Throttle Valve Adapter	1
40	03050050027	Hollow Bolt G1/4	4
41	03040050138	Throttle Hole M8x8-0.8	2
42	SFM140-129	Adapter Base	2

STRUCTURE

5.1.3 Suspension Hydraulic Components（SFM180/200/220/240）



No.	Parts Code	Name	SFM180/200/220/240
			Qty
1	FMH140-107	Drive Shaft Hook	1
2	03040050074	Hanging Chain 2x10x16	3
3	FM200-117	Upper Suspension Pin Type Ii	1
4	SFM200-014A	Suspension Weldment	1
5	04020300008	Flat Washer Class C 24x4	1
6	03040050137	Lock Pin Assembly 10 Φ10x45 Flat Rod	3
7	FM200-110	Lower Suspension Pin Type Ii	2
8	03040050055	Support Cover 50x50	2
9	SFM140-018	Support Weldment	2
10	04110500002	D-Type Safety Pin D12x80	2
11	04100100002	Concave Pressure Oil Filling Cup M10x1	5
12	SFM200-107	Lifting Frame Pin Shaft	1
13	04110600002	R Pin Φ4	1

5.1.3 Suspension Hydraulic Components（SFM180/200/220/240）

No.	Parts Code	Name	SFM180/200/220/240
			Qty
14	SFM200-016	Lifting Frame Weldment	1
15	04050500026	Type 1 Non-Metallic Insert Hexagonal Lock Nut M24-8	3
16	SFM200-105A	Fixed Pin	2
17	SFM200-101	Limiting Pin	1
18	5108135A	Steel Sleeve 30x40x40	8
19	SFM200-013	Swing Arm Weldment	2
20	SFM140-114	Tilting Cylinder Pin	2
21	SFM200-108	Swing Cylinder	1
22	SFM140-128	Shaft Head Pressure Plate	2
23	04020200002	Standard Elastic Washer 8x2.1	6
24	04060700041	Hexagon Head Bolt Full Thread M8x20	2
25	SFM200-115	Tilting Oil Pipe (Low)	1
26	SFM200-119	Tilting Oil Pipe (High)	1
27	SFM200-114	Side Shift Oil Pipe	1
28	SFM200-114	Side Shift Oil Pipe	1
29	03050050048	One-Way Throttle Valve (Stu-G1/4)	1
30	03050050002	Combination Washer G1/2	4
31	03050050001	G1/2 Quick-Change Connector (M)	4
32	03040050130	A-Type Protective Sleeve (For Male Connector) Blue G1/2 (A-G1/2 Blue)	2
33	03050050049	Double-Joint Double-Hole Pipe Clamp (Sxtpg16-216)	4
34	04060700044	Hexagon Head Bolt Full Thread M8x60	4
35	03040050115	A-Type Protective Sleeve (For Male Connector) Red G1/2 (A-G1/2 Red)	2
36	SFM140-127	Throttle Valve Adapter	1
37	03050050027	Hollow Bolt G1/4	4
38	03050050004	Combination Washer G1/4	12
39	03040050138	Throttle Hole M8x8-0.8	2
40	SFM140-129	Adapter Base	2

STRUCTURE

5.2 Product Technical Parameters

SFM 120-140-160 165-185-205 180-200-220-240

A01

A04

MODEL		A-B-C(mm)	mm/Inch	rmp	Hp-kw	No	kg/lb	A01	A04
SFM	SFM120	1354x1544x888	1200/47	540	25-40/19-30	3	360/794	20	20
	SFM140	1554x1544x888	1400/55	540	30-50/22-37	3	380/838	24	24
	SFM160	1754x1544x888	1600/63	540	30-50/22-37	3	400/882	26	26
	SFM165	2152x1677x954	1650/65	540	60-80/45-60	3	530/1169	22	22
	SFM185	2352x1677x954	1850/72	540	60-80/45-60	3	554/1222	24	24
	SFM205	2552x1677x954	2050/80	540	60-80/45-60	3	585/1290	26	26
	SFM180	2281x1962x1048	1800/71	540	90-120/67-90	4	740/1632	20	20
	SFM200	2481x1962x1048	2000/79	540	90-120/67-90	4	774/1707	22	22
	SFM220	2681x1962x1048	2200/87	540	90-120/67-90	4	790/1742	24	24
	SFM240	2881x1962x1048	2400/95	540	90-120/67-90	4	885/1952	26	26

6.0 Guarantees Agreement

To ensure that you can get high-quality services and relieve you of your worries, Jiangsu AWON Machinery and Equipment Co., Ltd. makes the following commitments to you:

◎ National Joint Guarantee Unified Warranty

- The warranty starts on the date of the purchase invoice and is valid for 12 months from the date the user issues the invoice.
- If you cannot produce a valid purchase invoice, guarantee certificate, or the time informationrecorded on the warranty certificate does not match the purchased product, or the time information recorded on the warranty certificate is altered or unrecognizable, our company will not provide relevant warranty services.

◎ Parts Warranty Period:

For the warranty period of related parts, please refer to the Parts Maintenance Manual of the relevantproducts. The warranty period of important parts will be implemented in accordance with the "Regulations on the Responsibility for Repair, Replacement and Return of Agricultural Machinery Products" (issued by the General Administration of Quality Supervision, Inspection and Quarantine on March 13, 2010).

◎ Warranty Period After Maintenance:

Products and parts within the product warranty scope shall continue to enjoy the promised service within the period promised in this warranty agreement after being repaired by our company's certified service agency. If the repaired parts are less than 90 days from the date of repair to the end of the promised service period in this warranty agreement, the service period of the parts will be automatically extended by 90 days.

◎ After-Sales Service

In order to provide you with quality after-sales service, the registration information must be complete and accurate. When the equipment needs to be repaired or parts replaced, qualified personnel must serve you. Replacement parts must be original parts of our company or parts certified by our company. Otherwise, our company will not bear any responsibility for any accidents caused by this.

When you need to order parts or provide technical support, please show the product certificate (such as: purchase invoice, guarantee agreement, etc.) according to the information on the product nameplate. We will determine whether to provide you with free service or charge a certain fee based on the certificate shown. For detailed regulations, please refer to the "Regulations on the Responsibility of Repair, Replacement and Return of Agricultural Machinery Products".