


PULL-TYPE SPREADER

Fertilizer Spreader for ATV – Mod. IPS-200,200D,340,340D

OPERATOR'S MANUAL

 Please Read this operator's manual before operating the machine



ISO 9001, ISO 14001, 50 Patents For Spreader

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1. Introduction

- 1) Power source is not necessary since it is operated by rotating the wheel.
- 2) The spreading angle can be adjusted. (Three spreading patterns)
- 3) Adjust the spreading amount by adjusting lever.
- 4) Yellow poly hopper makes rust free and visible inside
- 5) It can spread by ATV and compact tractor.
- 6) Stainless steel vanes, Disc and prevention plate
- 7) Electric control Shutter (IPS-200D, 340D)



- 8) Optional
 - Agitator
 - Spreading direction
 - Side Conveyor
 - Power clutch



2. Technical data

Model	IPS-200	IPS-200D	IPS-340	IPS-340D
HOPPER CAPACITY(ℓ)	200/79.3		340/89.8	
Outlet Shutter Control	Mechanic	Electric control	Mechanic	Electric control
WEIGHT OF THE MACHINE (kg/lbs)	76/167.5		80/176.4	
WIDTH(outside side) (mm/inch)	1150/45.2(Tire 15x6-6)		1230/48.4(Tire 18x8.5-8)	
LOADING HEIGHT(mm/inch)	1175/46.2		1400/55.1	
LENGTH(mm/inch)	1650/65			
SPREADING WIDTH(m/ft)	2-12/6.5-39.5			
POWER	GROUND DRIVEN			



IPS-200

3. Parts

Pull-Type Spreader(IPS-200,200D,340,340D)



- | | | |
|-----------------------------|--------------------|---------|
| ① Ex/Hopper | ② Hopper | ③ Frame |
| ④ Vanes | ⑤ Disc | ⑥ Tires |
| ⑦ Lever | ⑧ Prevention Plate | |
| ⑨ Rod for tongue adjustment | ⑩ Tongue | |

4. How to Operate

- 1) Connect the links of spreader to the links of ATV or a small tractor.
- 2) Check for horizontality after fastened the equipment to ATV or a tractor.
- 3) If the horizontality is not maintained, use the horizontality-maintaining pole to do so.
- 4) Close the outlet and pour fertilizer into the hopper.
- 5) Adjust spread rate by using adjusting lever.
- 6) Spread fertilizer by hauling through ATV or a small tractor.
- 7) Three spreading patterns :

A simple adjustment of shutter level allows direction of distribution towards the righthand side or towards the lefthand side.



8) You may require an additional adjustment by moving the individual vanes when the condition of fertilizer changes(weight, condition(wet or dry), etc) Moving the vane tips forward(No.1) will carry more material to the lefthand side.

Moving the vane tips backward(No.3) will allow more material to be spread to the righthand side

Please have a test spreading after each adjustment.



5. Important safety information

- 1) Safety gear must be worn while operating the machine.
- 2) If more than two people are operating the machine, observe the others' movement carefully. .
- 3) Make sure there is NO one or no obstacle within the operating area and its range.
- 4) Do NOT overload or apply excessive force to the equipment.
- 5) Perform "pre-operation"procedures. In particular, check for loosen nuts and bolts, connecting pins, and Lubricant
- 6) If any trouble occurs while operating the equipment, turn off the engine of ATV or tractor and apply the break, then refer to "Trouble Shooting."
- 7) Comply with all local traffic regulations while driving.

6. Checkup

- 1) **Make sure to apply Lubricant where needed and check for loosen nuts and bolts before operating.**
- 2) **Check for air pressure on the tires.**
- 3) **Test drive the equipment before actual use.**

7. Storage

- 1) **When the equipment is to be stored for a long time, apply lubricants to the area where it is likely to have corrosion.**
- 2) **Firmly secure the fertilizer spreader on the flat surface to prevent any possible fall off.**
- 3) **Keep it away from children to prevent any safety hazard.**
- 4) **When the equipment is to be stored for a long time, store it in indoor. If it is to be stored outside, place it on the flat surface and cover it with protectors to prevent any source of damages from rain and snow.**

8. SPREADING CHART FOR FERTILIZER – METERS

FERTILIZER TYPE	SPREAD WIDTH (METERS)	VEHICLE SPEED (km/h)	QUANTITY TO BE SPREAD, IN KGS PER HECTARE AT CONTROL LEVER SETTING INDICATED							
			1	2	3	4	5	6	7	8
Coarse Grain Fertilizers	8	5.0	-	193.5	895.5	1237.5	1980	2461.5	3132	3600
	14	8.0	-	100.1	257.5	456.3	764.7	1170.2	1198.8	1216.3
	18	12.0	-	51	135.2	277	391.2	588.8	625.5	717.6
Medium Grain Fertilizers	7	5.0	-	112.2	427.5	846.4	1333.8	1713.4	2067.3	2072.5
	11	8.0	-	85	222.3	385.5	585.4	765	869	893.5
	15	12.0	-	24.7	75.2	164.3	266.3	364.3	458.3	488
Fine Grain Fertilizers	6.5	5.0	-	149.5	355.2	693.7	1104.4	1409.7	1753.8	1792.6
	8	8.0	-	75.3	153.4	368.2	530.1	714.2	948.6	1001.6
	12	12.0	-	34	97	148.68	306.1	405.7	468.7	473.7

SPREADING CHART FOR FERTILIZER – FT

FERTILIZER TYPE	SPREAD WIDTH (METERS)	VEHICLE SPEED (km/h)	QUANTITY TO BE SPREAD, IN KGS PER HECTARE AT CONTROL LEVER SETTING INDICATED							
			1	2	3	4	5	6	7	8
Coarse Grain Fertilizers	8	5.0	-	193.5	895.5	1237.5	1980	2461.5	3132	3600
	14	8.0	-	100.1	257.5	456.3	764.7	1170.2	1198.8	1216.3
	18	12.0	-	51	135.2	277	391.2	588.8	625.5	717.6
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	8	8.0	-	75.3	153.4	368.2	530.1	714.2	948.6	1001.6
	12	12.0	-	34	97	148.68	306.1	405.7	468.7	473.7

9. Parts sales & Trouble shootings

Parts sales

- 1) **The parts list provided is in compliance with IPS-200,200D,340,340D standards. Refer to this list when order any parts.**
- 2) **Follow next steps as below when order parts:**
ex) We would like to order 1 unit of hopper

Model	Number	Description	Quantity
IPS-340	2-1	Extention Hopper	1

- 3) **To purchase the parts, contact the dealer where you purchased the equipment or our main office.**

Trouble shootings

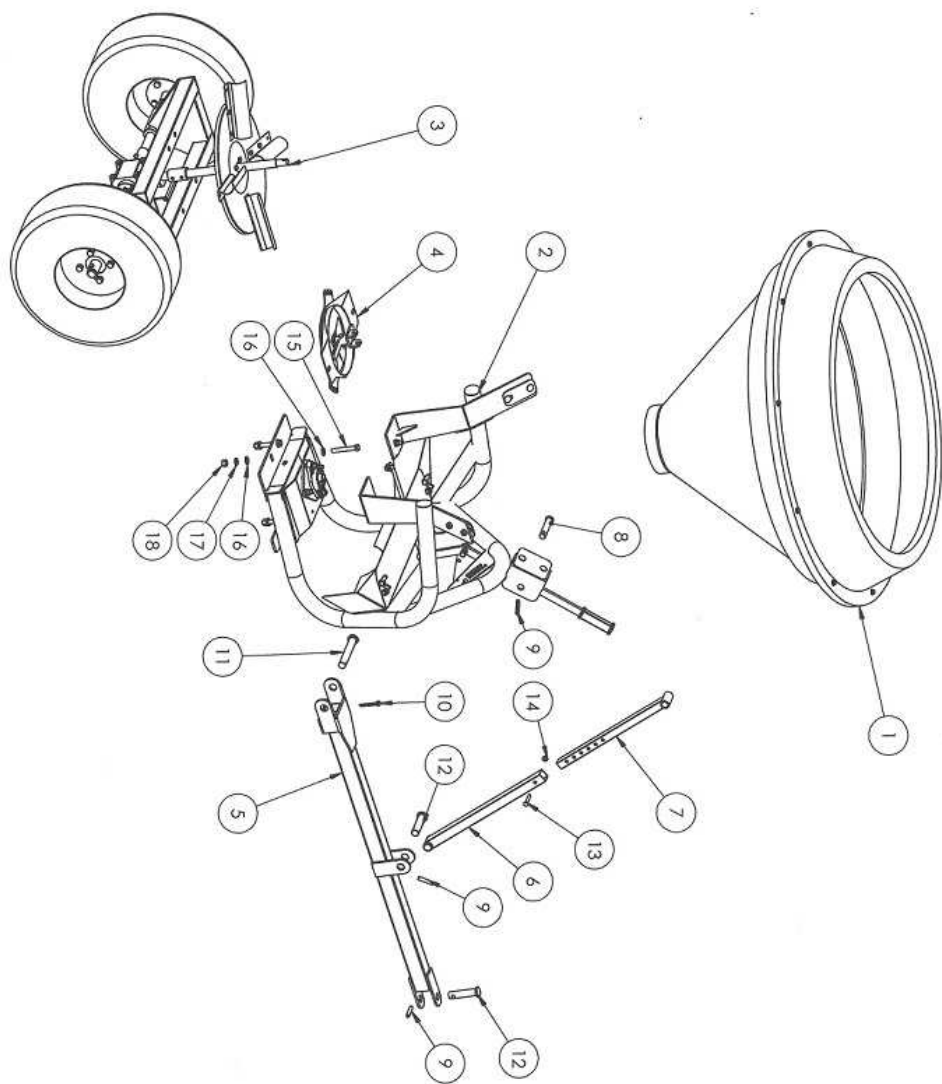
- 1) **If any malfunction occurs, please refer to “Trouble Shooting” section first.**
- 2) **If “Trouble Shooting” does not solve the issue, contact authorized dealer or manufacturer’s Customer Service.**

10. Warranty/complimentary check up & Repair

- 1) **The warranty is for one year from the date of delivering to the customer**
- 2) **Even after one-year warranty period, we would gladly check up and repair the equipment at a reasonable price.**
- 3) **We would continue to take care of our products for you until it lasts.**

11. Part list

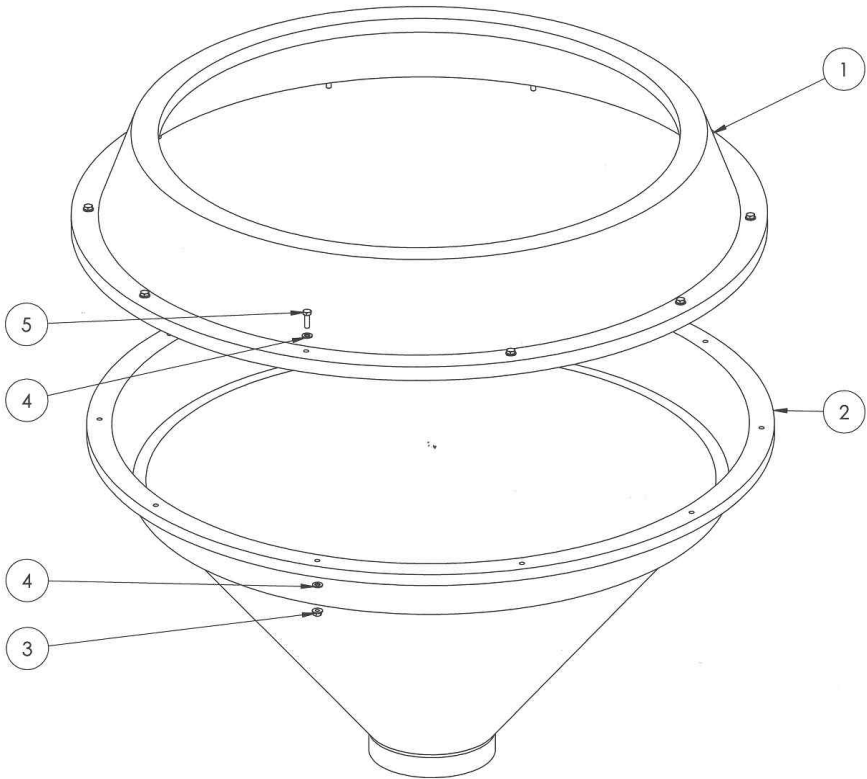
1-Full Layout



1-Full Layout

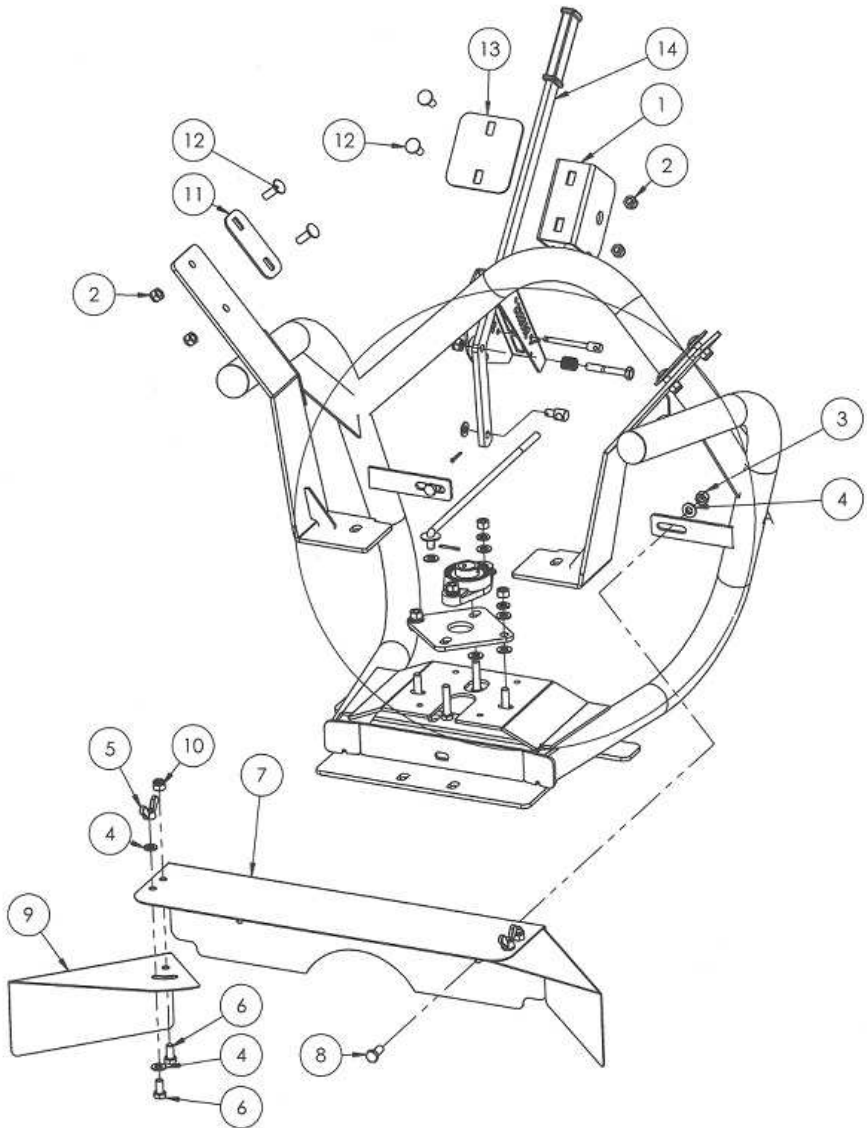
PART NO.	QTY	DESCRIPTION
1	1	Hopper Parts
2	1	Frame Parts
3	1	Alxe&Gearbox Parts
4	1	Shutter Parts
5	1	Drawbar
6	1	Drawbar brace A
7	1	Drawbar brace B
8	1	Pin \varnothing 19x90
9	3	Lock Pin A \varnothing 10
10	1	R Pin \varnothing 22
11	1	Pin \varnothing 22x143
12	2	Pin \varnothing 22x90
13	1	SUS Bolt, Hex Head M8x45
14	1	SUS Flange Nut, M8
15	4	Bolt, Hex Head M12x80
16	8	Washer, M12
17	4	Spring Washer, M12
18	4	Nut, M12

2-Hopper Parts Layout

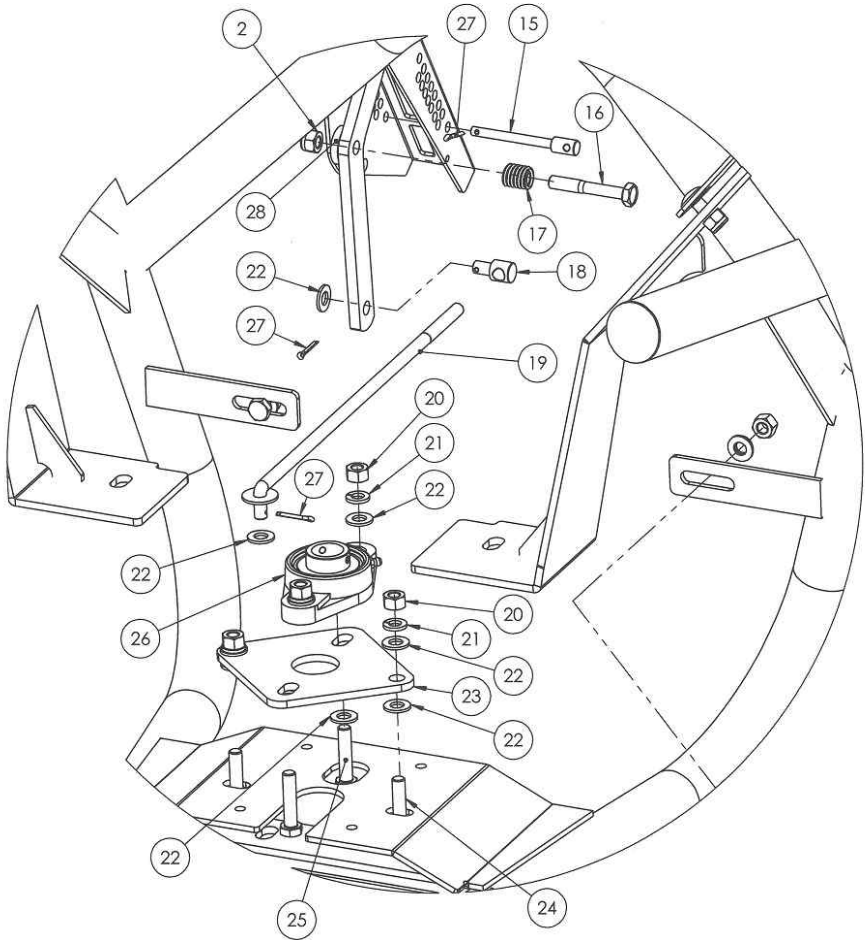


PART NO.	QTY	DESCRIPTION
1	1	Extension Hopper
2	1	Hopper
3	10	Flange Nut, M8
4	20	Washer, M8
5	10	Bolt, Hex Head M8X25

3-Frame Parts Layout



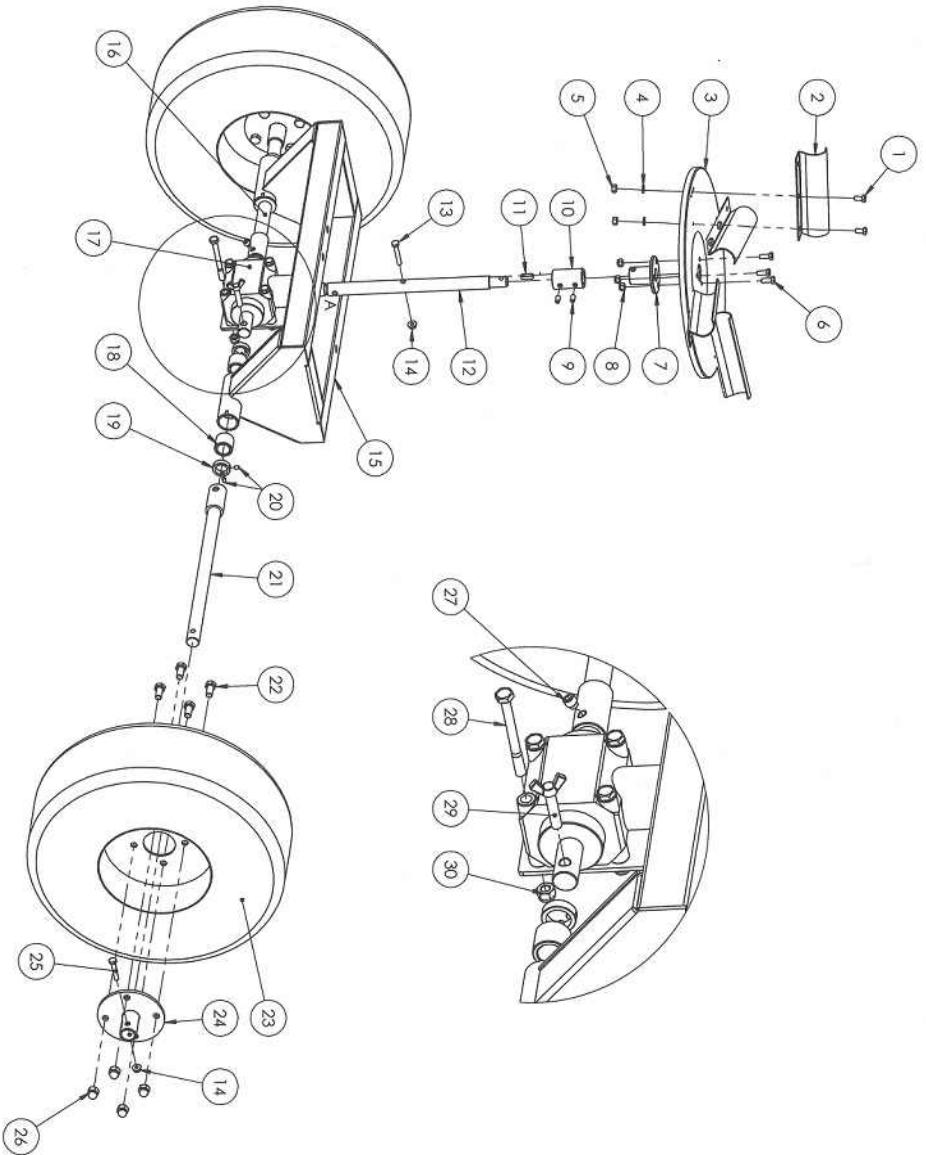
3-Frame Parts Layout



3-Frame Parts Layout

PART NO.	QTY	DESCRIPTION
1	1	Frame
2	7	Lock Nut, M10
3	2	SUS Nut, M10
4	2	SUS Spring Washer, M10
5	2	SUS Wing Nut, M10
6	2	SUS Bolt, Hex Head M10X20
7	1	Spreading Prevention Plate
8	2	SUS Bolt, Hex Head M10X25
9	2	Spreading Direction Left and Right
10	2	SUS Lock Nut, M10
11	2	Small Square Washer
12	6	Carriage Bolt M10X30
13	1	Big Square Washer
14	1	Lever
15	1	Lever Fixing Pin
16	1	Bolt, Hex Head M10X65
17	1	Lever Tension Spring
18	1	Lever Link Pin Connector
19	1	Lever Link Pin
20	4	Nut, M10
21	4	Spring Washer, M10
22	10	Washer, M10
23	1	Bearing Plate
24	2	Bolt, Hex Head M10X35
25	2	Bolt, Hex Head M10X45
26	1	Bearing FL205
27	2	R Pin
28	1	Lever Gap Washer, M10

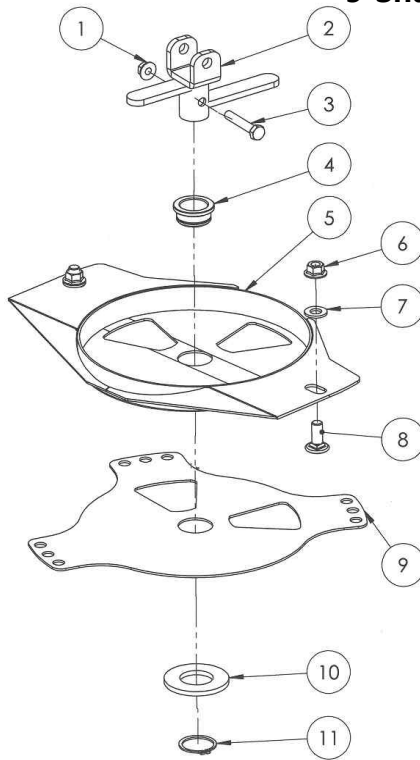
4-Axle&Gearbox Parts Layout



4-Axle&Gearbox Parts Layout

PART NO.	QTY	DESCRIPTION
1	8	SUS Bolt, Hex Head M8X15
2	4	Vane
3	1	Spreading Disc
4	8	SUS Spring Washer, M8
5	8	SUS Nut, M8
6	3	SUS Bolt, Hex Head M8X20
7	1	Spreading Disc Holder
8	3	SUS Lock Nut, M8
9	2	Socket Set Bolt M8x16
10	1	Spreading Shaft Fixing Bushing
11	2	Key 8x7x25mm
12	1	Spreading Shaft
13	1	SUS Bolt, Hex Head M8X50
14	3	SUS Flange Nut, M8
15	1	Axle&Gearbox Frame
16	1 / 1	Idle Shaft_200 / Idle Shaft_340
17	1	Gearbox
18	4	Oilless Bearing 35x25x30
19	3	Power Shaft Fixing Busing
20	6	Socket Set Bolt M6x6
21	1 / 1	Power Shaft_200 / Power Shaft_340
22	8	Bolt, Hex Head M12X25 P1.25
23	2 / 2 / 2	Tire 15x6-6 / 18x8.5-8 / 20x10-8
24	2	Wheel Flange
25	2	SUS Bolt, Hex Head M8X45
26	8	Wheel Nut, M12
27	1	Grease Nipple
28	4	Strong Bolt, Hex Head M10X100
29	1	Lock Pin B \varnothing 10
30	4	Lock Nut, M10

5-Shutter Parts Layout



PART NO.	QTY	DESCRIPTION
1	1	SUS Flange Nut, M8
2	1	Lower Agitator
3	1	SUS Bolt, Hex Head M8X45
4	1	SUS Nocking Bushing
5	1	Fertilizer Discharger
6	2	SUS Flange Nut, M10
7	2	SUS Washer M10
8	2	SUS Carriage Bolt M10X30
9	1	Shutter
10	1	Washer M30
11	1	Snap ring S-32

12-1. Assembling instructions for IPS MODEL



1) AXLE&GEARBOX



2) FRAME



3) DRAWBAR SET



- A) Fix the drawbar tube on the proper bracket of the axle&gearbox
by 1 PIN $\varnothing 22 \times 143$ and 1 R PIN $\varnothing 22$



- B)** Fix the drawbar brace A on the proper bracket of the drawbar tube by 1 PIN $\varnothing 22 \times 90$ and 1 LOCK PIN $\varnothing 10$



- C)** After put the frame on the axle&gearbox frame Fix the drawbar brace B on the proper bracket of the frame by 1 PIN $\varnothing 19 \times 90$ and 1 LOCK PIN $\varnothing 10$



- D)** Fix the frame on the proper bracket of axle&gearbox by 4 SCREWS M12x80, 4 SPRING LOCK WASHERS M12, 4 NUTS M12 and 8 WASHERS M12



1) SPREADINGSHAFT ASSY'



2) DISC AND VANES



- A)** Fix the disk on the proper bracket of the spreading shaft assy' by 3 SUS SCREWS M8x20, 3 SUS LOCK NUTS M8



- B)** Tighten





- A)** Fix the spreading shaft& disc assy'
with the gearbox
by 2 SOCKET SET SCREW M8



- B)** Tighten

Be careful !!

When you assemble, the wings are sharp



1) DISCHARGER&SHUTTER



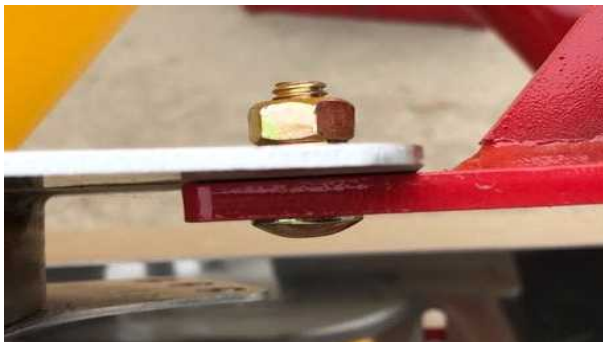
2) LOWER AGITATOR



A) Fix the Discharger&Shutter on the proper bracket of the frame by

- 2 SUS CARRIAGE SCREWS 10x25,
- 2 SUS FLANGE NUTS M10,
- 2 SUS WASHERS M10,

B) Tighten





- C) Insert the lower agitator and then fix the lower agitator on the shaft by 8 SUS SCREWS 8x45 and 1 SUS FLANGE NUTS M8



- D) Tighten



- E) Fix the Bearing fixing plate on the proper bracket of the frame by 2 SCREWS M10x35, 2 NUTS M10 2 SPRING LOCK WASHERS M10 4 WASHERS M10,



- F) Tighten



G) Tighten



1) PREVENTION PLATE



2) LEVER SET



3) LEVER SET



- A)** Fix the prevention plate on the proper bracket of the frame by 2 SUS SCREWS 10x25, 2 SUS SPRING LOCK WASHERS M10, 2 SUS NUTS M10

B) Tighten





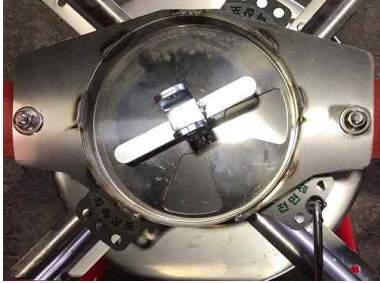
C) Assemble the lever set



D) Fix the adjusting bar on the proper hole of the shutter by 1 WASHER M10 and 1 RPIN



E) Pull the lever all the way up



F) Close the shutter



G) Turn the lever pin to set the distance of adjusting bar between shutter and lever by 1 WASHER M10 and 1 RPIN



1) EXTENSION HOPPER & HOPPER

2) BIG SQUARE WASHER & SMALL SQUARE WASHER & SCREWS&NUTS



A) Place the hopper on the Fertilizer Discharger and Hoper Braces centering



B) If the holes do not fit, drill these with a drill



- C)** Fix the hopper on the proper bracket of the frame
by 6 SHANK SCREWS M10x30, 6 LOCK NUTS M10,
1 BIG SQUARE WASHER, 2 SMALL SQUARE WASHERS
(Big square washer → Small square washers)



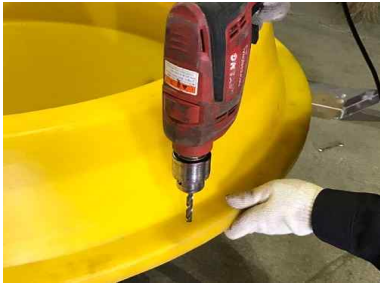
- D)** Tighten center first



- E)** Tighten others



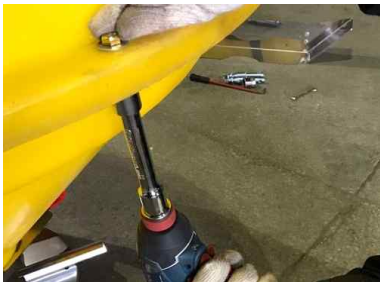
F) Place the extension hopper on the hopper



G) Make 10 hole for M8 to fix extension hopper on hopper by a drill machine with hole jig



H) Fix the extension hopper on the hopper by 10 SCREWS M8x25,
10 FLANGE NUTS M8,
20 WASHERS M8



I) Tighten



1) TIRE 15X6-6 or 18X8.5-8 or 20x10-8



A) Insert the tire&wheel assy' and then
fix the tire&wheel assy' on the shaft of axle
by 2 SUS SCREWS M8x45 and 2 SUS FLANGE NUTS M8

12-2. Assembling instructions for Electric Control



1) Frame

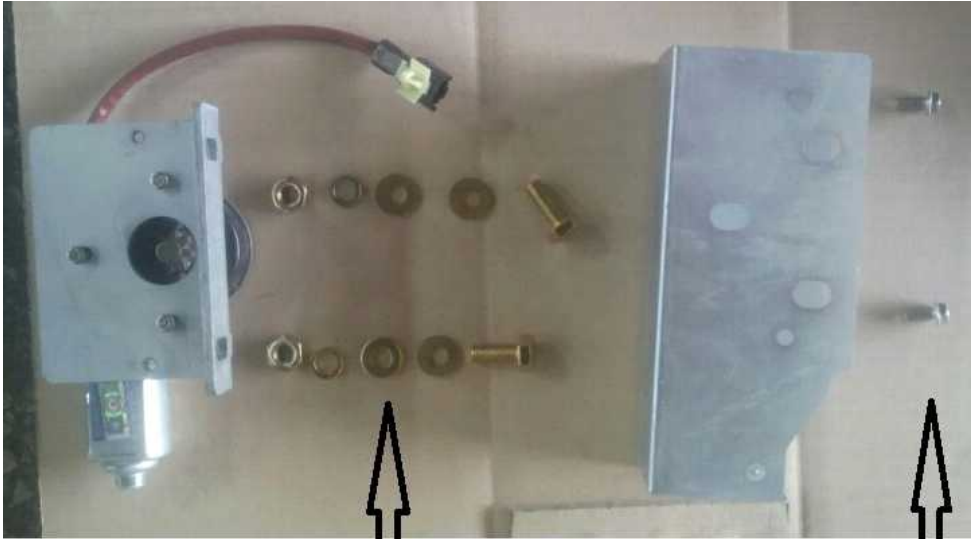
2) Gear lever and DC motor



SUS BOLT M6X20 2EA
SUS FLANGE NUT M6 4EA

BOLT M6X35 1EA
SUS FLANGE NUT M6 1EA
NUT M10 1EA
WASHER M10 1EA

BOLT M10X65 1EA
LOCK NUT M10 1EA
WASHER M10 1EA
WASHER 10X30X6T 1EA
SPRING 1EA



BOLT M10X25 2EA
WASHER M10 4EA
SPRING WHASHER M10 2EA
NUT M10 2EA

SUS BOLT M6X15 2EA



A) Paint the grease on the hole left side and right side



B) Separate Bolt M10x65, Lock nut M10, Washer M10, Washer 10x30x6t and Spring from gear lever



C) Assemble the gage pin with Bolt M10x65 and spring on the frame such as the left photo

D) Assemble the Washer 10x30x6t the frame such as the right photo





E) Paint the grease on Washer



F) Assemble the gear lever



G) Paint the grease on gear lever



H) Assemble the washer M10



I) Assemble the Lock nut M10 and tighten

(If too tight, the gear lever may not move)





J)



K)



L)



M)



N) Assemble the DC motor upper hole on the frame with Bolt M10x25, Washer M10, Spring washer M10 and Nut M10



O) Paint the grease on gear teeth



P) Align gear teeth and assemble the DC motor lower hole on the frame with Bolt M10x25, Washer M10, Spring washer M10 and Nut M10



Q) Tighten



R) Connect DC motor connector to controller connector and battery



S) Fix the adjusting bar on the proper hole of the shutter by 1 WASHER M10 and 1 RPIN



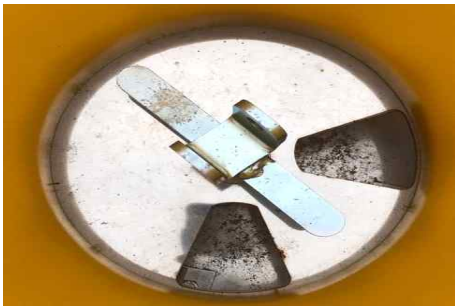
T) Close the shutter



U) Turn the lever pin and operate controller to set the distance between shutter and gear lever and fix adjusting bar by 1 WASHER M10 and 1 RPIN



V) Tighten stopper



W) Open the shutter and tighten stopper





X) Set gage pin on gage level and tighten(Closing)



Y) Tighten DC motor cover



CERTIFICATE OF QUALITY ASSURANCE

All products manufactured and sold by IRIS SPREADERS, Co. are designed and assembled in accordance with regulations on farm machinery under very strict quality management. If the product is managed and used in accordance with instructions on regular check-ups and maintenance schedule provided in the owner's operation manual then we assure you that the product always will be at its best condition and outstanding performance, and safely maintained. Thus, we are pleased to offer you the assurance terms as below.

1. SCOPE OF WARRANTY

If the product you purchased was managed and used in accordance with instructions on regular check-ups and maintenance schedule provided in the owner's operation manual AND the product is still within warranty period and used less than allowed usage time for warranty AND technical analysis reveals that the malfunction was caused by quality of the parts or manufacturing defects, we will repair it or exchange with our qualified replacement parts.

- ▶ On delivery the customer should check the machine that the machine has not been damaged in transit, and that it complies with that ordered as that it is complete with all the accessories as specified in the purchase contract. If it is found defective, a written complaint should be sent within 8 days of receipt of the same.

2. WARRANTY PERIOD: 1 FULL YEAR

When the product requires complementary repairs or maintenance, simply Present “Certificate of Warranty” to an authorized dealer or our main office for inspections and repairs.

3. RESPONSIBILITIES OF THE OWNER

Since any unauthorized inspections or use of non-genuine parts that are not prescribed in Owner’s Operation Manual may decrease the performance of the parts or cause fatal damages to the product, it is very critical to follow all the instructions prescribed in the Owner’s Operation Manual and Certificate of Quality Assurance.

4. EXCLUSIONS (Even within Warranty Period)

- 1) Items to be checked frequently for management :
cleaning fuel-related parts,
Items to be checked on regular basis :
inspection of breaks and adjustment
- 2) Wear and Tear parts
(except manufacturer’s defect):
filters, elements, rubber parts, vinyl parts, fuse, and wires.

3) Any malfunction or defect caused by using unspecified fuel (low quality fuel or contaminated fuel)

4) Any malfunction caused by not complying with instructions prescribed in Owner's Operation Manual or Warning Signs

5) Any defect caused by unauthorized modification of the product or use of non-genuine parts.

6) Any defect caused by negligence in storing and managing such as damages due to extreme weather conditions.

7) Minor issues not related with the function (smell, vibrations, shape, sensitivity)

8) Major discrepancies between the parts and its serial numbers recorded in our data base.

9) Malfunction caused by natural calamities.

5. PROCEDURE FOR WARRANTY REPAIR

Warranty repair will be provided in our authorized Customer Service Centre by qualified warranty repair technician during business hours.

6. In case we upgrade the specifications of certain model, we do not have any responsibility to upgrade the already-sold-equipments.

7. TRANSFER OF WARRANTY

Since we honor the remaining warranty time even after the transfer of ownership through sale or donation, it is very important to acquire the Certificate of warranty when transfer of the product takes place.

※ We will honor all the terms prescribed above. However if you are not satisfied with the service provided to you, you may contact our customer service center directly and we will do our best to support you.

WARRANTY INFORMATION

○ In order for us to guarantee our highest quality on our products, we offer complimentary inspections in designated agencies. If any malfunction occurs caused by manufacturing defect during warranty period, we will repair or replace the parts at free of charge.

○ WARRANTY EXCLUSIONS:

1. **Modified products**
2. **Missed or skipped check-ups and measures**
3. **Damages or malfunction caused by negligence**

Certificate of Warranty (1)

Please bring this certificate within 1 year from the date of purchase to have routine inspection.

Name		Address		
Model Name		Model #	Serial #	
Date of Purchase		Date of Service	Used Time	

This certificate should be submitted when you request an inspection.

Certificate of Warranty (2)

Please bring this certificate within 1 year from the date of purchase to have routine inspection.

Name		Address		
Model Name		Model #	Serial #	
Date of Purchase		Date of Service	Used Time	

This certificate should be submitted when you request an inspection.

After Service Execution Report

DATE	PERFORMED	TECHNICIAN	CONFIRMED



ISO 9001, ISO 14001, 50 Patents For Spreader

IRIS SPREADERS, CO.

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