


PULL-TYPE SPREADER

Fertilizer Spreader for ATV - Mod. ITS-300, 300S

OPERATOR'S MANUAL

 Please Read this operator's manual before operating the machine



1715 South Slappey Blvd
Albany, Georgia 31701

Ph 229-639-1775 or Fax 229-446-8333

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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) 3 Kinds of hoppers are available in powder painted steel(300), stainless steel(300S) and plastic(180P,300P).
- 5) It can spread by ATV and compact tractor.
- 6) Stainless Steel Vanes and Disc.

2. Technical data

Model	ITS-300	ITS-300S	ITS-180P	ITS-300P
HOPPER CAPACITY(ℓ)	300/79.3	300/79.3	180/47.6	300/79.3
WEIGHT OF THE MACHINE (kg/lbs)	80/176.4	80/176.4	76/167.5	80/176.4
WIDTH(outside side) (mm/inch)	1120/44	1120/44	1100/43.3	1120/44
LOADING HEIGHT(mm/inch)	1440/56.7	1440/56.7	1250/49.2	1440/56.7
LENGTH(mm/inch)	1650/65	1650/65	1630/64	1650/65
HOPPER WIDTH(mm/inch)	1120/44	1120/44	990/39	1120/44
SPREADING WIDTH(m/ft)	2-12/6.5-39.5	2-12/6.5-39.5	2-12/6.5-39.5	2-12/6.5-39.5
POWER	GROUND DRIVEN	GROUND DRIVEN	GROUND DRIVEN	GROUND DRIVEN

3. Parts

Pull-Type Spreader(ITS-300,300S)



- | | | |
|--------------------|---------------------------------|-----------|
| ① Hopper | ② Frame | ③ Tires |
| ④ Tongue | ⑤ Rod for tongue adjustment | |
| ⑥ Lever | ⑦ Shutter & Spreading Direction | |
| ⑧ Vanes | ⑨ Disc | ⑩ Gearbox |
| ⑪ Prevention Plate | | |

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

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9. Parts sales & Trouble shootings

Parts sales

- 1) **The parts list provided is in compliance with ITS-300,300S,180P,300P 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
ITS-300	1	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

Table 1

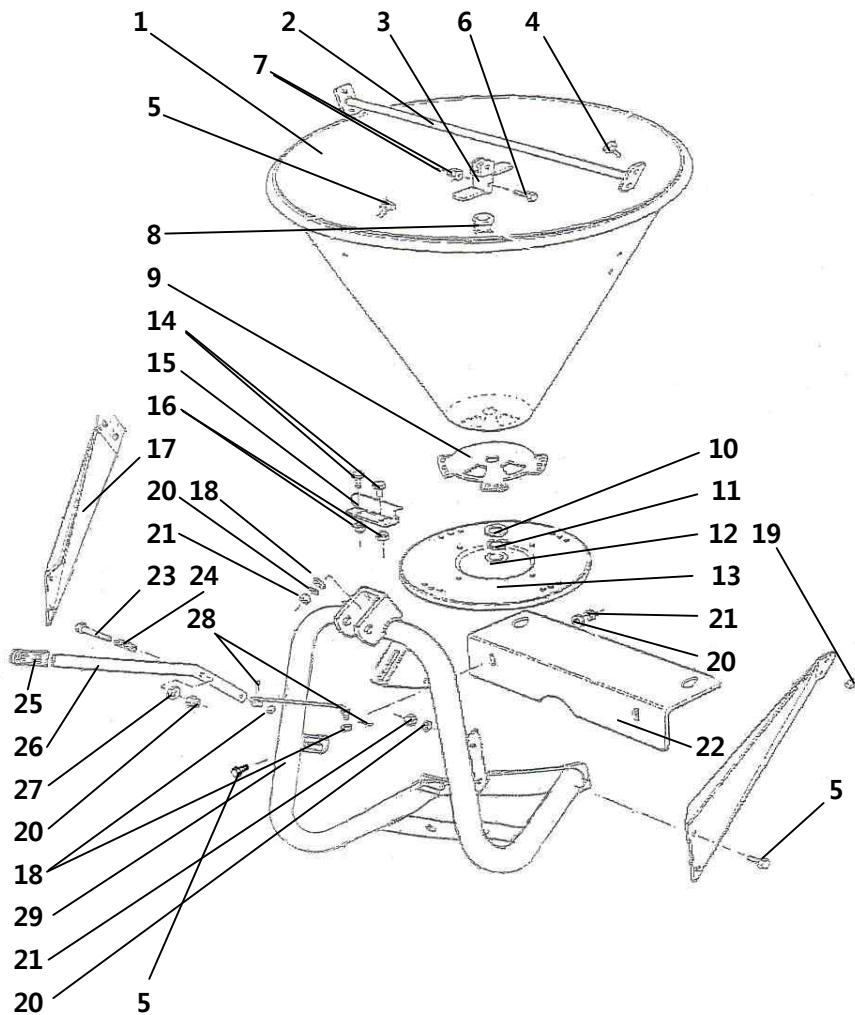
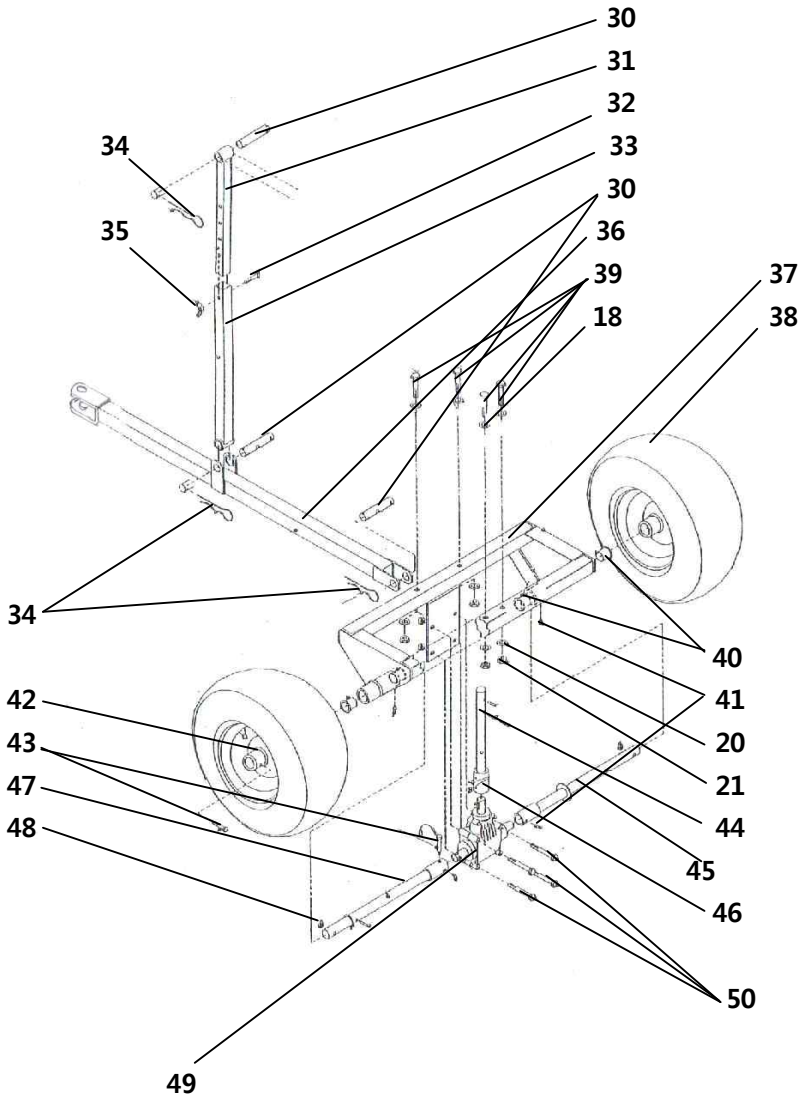


Table 2



PART NO.	QTY	DESCRIPTION
1	1	Hopper
2	1	Hopper Supporter(IN)
3	1	LOWER AGITATOR
4	4	Screws, Carriage Head M10X25
5	7	Screws, Hex Head M10X25
6	1	Screws, Hex Head M8X45
7	2	Nut, Hex M8
8	1	Lock Screws
9	1	Shutter & Spreading Direction
10	1	Washer, M34
11	1	Star Washer
12	1	Lock Nut
13	1	Spreading Disk
14	8	Screws, Hex Head M8X20, SUS
15	4	Vane
16	8	Nut, Hex M8, SUS
17	2	Hopper Supporters(OUT)
18	9	Washer M10
19	4	Nut, Self-locking, M10
20	12	Spring Lock Washer, M10
21	11	Nut, Hex M10
22	1	Prevention Plate
23	1	Screws, Hex Head, M10X65
24	1	Spring
25	1	Rubber Handle
26	1	Lever
27	1	Washer
28	2	Hair Pin
29	1	Frame
30	3	Pivot \varnothing 22
31	1	Inner Tube Level Stop With Bushing
32	1	Screws, Hex Head, M8X40
33	1	Outer Tube Level Stop With Bushing
34	3	Hair Pin
35	1	Nut, Tongue, M8
36	1	Tongue

PART NO.	QTY	DESCRIPTION
37	1	Support Frame
38	2	Tire, 15x6-6 or 18x8.5x8
39	4	Screws, Hex Head, M10X70
40	4	Smooth Bearing W/Flange
41	4	Grease Nipple PT1/8
42	2	Wheel Flange
43	3	Screws, Hex Head, M8X50
44	1	Output shaft
45	1	Left Axle
46	1	Output shaft Bushing
47	1	Right Axle
48	2	Nut, Self-locking, M8
49	1	Gear Box Without PTO
50	4	Screws, Hex Head, M10X100
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12. Assembling instructions for ITS MODEL



1) GEARBOX AND AXLE



2) FRAME



3) SPREADING SHAFT ASSY'



4) DISC AND VANES



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

B) Tighten





C)



C)

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



D) Fix the disk on the proper bracket of the spreading shaft assembly by 3 SUS SCREWS M8x20, 3 SUS LOCK NUTS M8



E) Tighten



1) HOPPER



2) SHUTTER AND LOCK SET



A)



B)



C)



D)



E)



F)



G)



1) HOPPER SUPPORTERS(OUT)



2) HOPPER SUPPORTER(IN)



3) SQUARE WASHER SET



- A)** Fix the hopper supporters(out) on the proper bracket of the frame by 4 SCREWS M10x25, 4 LOCK NUTS M10 and



- B)** Place the hopper into the frame by centering it according to the position of both the entrainer and the five holes(ITS-300,300S) holes for the fastening with hopper supporter(in)



- C)** Fix the square washer on the proper bracket of the frame and hopper by 1 SCREWS M10x25(ITS-300) or 1 SUS SCREWS M10x25(ITS-300S) and 1 LOCK NUTS M10(ITS-300) or 1 SUS LOCK NUTS M10(ITS-300S)



- D)** Fix the hopper supporter(in) on the proper bracket of the frame and hopper by 4 SHANK SCREWS M10x25(ITS-300) or 4 SUS SHANK SCREWS M10x25(ITS-300S) and 4 LOCK NUTS M10(ITS-300) or 4 SUS LOCK NUTS M10(ITS-300S)



E) Keep the gap over 105mm between hopper and disk



F) Tighten



G) Tighten



H) Tighten



1) LOWER AGITATOR



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



B) Tighten



1) PREVENTION PLATE



- A)** Fix the prevention plate on the proper bracket of the frame
by 2 SCREWS M10x25(ITS-300) or 2 SUS SCREWS M10x25(ITS-300S)
,2 SPRING LOCK WASHERS M10(ITS-300)
or 2 SUS SPRING LOCK WASHERS M10(ITS-300S),
,2 NUTS M10(ITS-300) or 2 SUS NUTS M10(ITS-300S)
and 4 WASHERS M10(ITS-300) or 4 SUS WASHERS M10(ITS-300S)



- B)** Tighten



1) LEVER SET AND ADJUSTING BAR



A) Assemble the lever set



B) Tighten



C) Fix the adjusting bar on the proper hole of the lever and shutter by 2 WASHER M10 and 2 RPIN



D)





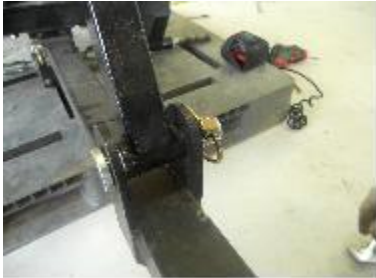
1) DRAWBAR SET



A) Fix the drawbar tube on the proper bracket of the gearbox and axle by 1 PIN $\varnothing 22 \times 90$ and 1 LOCK PIN $\varnothing 10$



B) Fix the drawbar brace on the proper bracket of the frame by 1 PIN $\varnothing 19 \times 90$ and 1 LOCK PIN $\varnothing 10$



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



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



A) Insert the tire&wheel assy' and then
fix the tire&wheel assy' on the shaft of axle
by 2 SCREWS 8x45 and 2 FLANGE NUTS M8



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

LMC_{Ag}