



10-Row Seeder

OWNER'S MANUAL



WARNING:

Read carefully and understand all **ASSEMBLY AND OPERATION INSTRUCTIONS** before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

Item# FTF-603PTS

Thank you very much for choosing this product! For future reference, please complete the owner's record below:

Model: FTF-603PTS Purchase Date: _____

Save the receipt, warranty and these instructions. It is important that you read the entire manual to become familiar with this product before you begin using it.

This product is designed for certain applications only. The manufacturer cannot be responsible for issues arising from modification. We strongly recommend this product not be modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, DO NOT use the product until you have first contacted us to determine if it can or should be performed on the product.

For technical questions please call **1-218-943-6296**.


INTENDED USE


This 60" seeder has 10 rows to seed corn, beans, oats, etc. There are two boxes with closeable slides for each row. The seeder has adjustable slots to use for different types of seed. This seeder is also able to seed grain.


TECHNICAL SPECIFICATIONS

| | |
|---------------------|---------------------------------|
| Weight | 485 lbs |
| Rated Horse Power | Minimum 20 HP |
| Seeding rows | 10 |
| Row spacing | 6 inches |
| Seed/Fertilize rate | Each hole up to 20 lbs per acre |
| Sowing depth | 3/4"– 2" |

GENERAL SAFETY RULES

 **WARNING:** Read and understand all instructions. Failure to follow all instructions listed below may result in serious injury.

 **CAUTION:** Do not allow persons to operate or assemble this seeder until they have read this manual and have developed a thorough understanding of how the seeder works.

 **WARNING:** The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions or situations that could occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

SAVE THESE INSTRUCTIONS

WORK AREA

- **Keep work area clean**, free of clutter and well lit. Cluttered and dark work areas can cause accidents.
- **Keep children and bystanders** away while operating a seeder. Distractions can cause you to lose control, so visitors should remain at a safe distance from the work area.
- **Be alert of your surroundings.** Using a seeder in confined work areas may put you dangerously close to cutting tools and rotating parts.

PERSONAL SAFETY

- **Stay alert**, watch what you are doing and use common sense when using a seeder. Do not use a seeder while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating a seeder may result in serious personal injury.
- **Dress properly.** Do not wear loose clothing, dangling objects, or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
- **Use safety apparel and equipment.** Use safety goggles or safety glasses with side shields which comply with current national standards, or when needed, a face shield. Use a dust mask if working in dusty work conditions. This applies to all persons in the work area. Also use non-skid safety shoes, hardhat, gloves, dust collection systems, and hearing protection when appropriate.

SEEDER USE AND CARE

- **Do not modify the seeder in any way.** Unauthorized modification may impair the function and/or safety and could affect the life of the equipment. There are specific applications for which the seeder was designed.
- **Always check for damaged or worn out parts before using the seeder.** Broken parts will affect the seeder operation. Replace or repair damaged or worn parts immediately.
- **Do not exceed the seeder load capacity.**
- **Distribute the load evenly.** Uneven loads may cause the seeder to tip, resulting in personal injury to the operator or others.
- **Use the seeder on flat and level surfaces** capable of supporting the seeder and its maximum load. Pulling or pushing a load on a slanted or uneven surface can result in loss of control.
- **Store idle seeder.** When seeder is not in use, store it in a secure place out of the reach of children. Inspect it for good working condition prior to storage and before re-use.

INTENDED USE

1. Suitable for drilling and fertilizing corn, beans, oats, etc. in level or gently rolling fields.
2. The double disc coulters create an opening to fertilize and seed easily in tilled soil.
3. The depth of seeding can be adjusted. Seeding quantity can be adjusted.
4. The seeder can plant seeds, fertilize, roll and drag all at the same time.

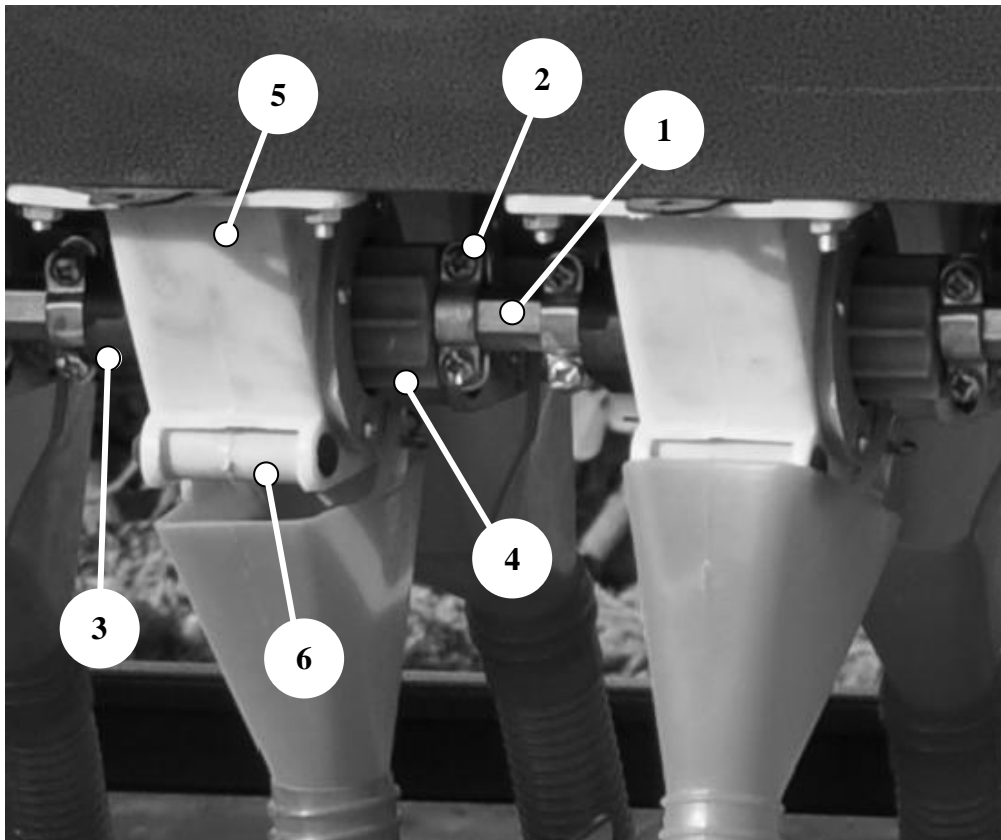
SAFETY PRECAUTIONS AND OPERATION RULES

1. Note the following in order to avoid fertilizer burn:
 - a. The fertilizing rate should be controlled according to your field condition.
 - b. Choose the proper fertilizer for the seed.
2. Always inspect, maintain or adjust the seeder after each use.
3. While operating the seeder, keep area clean, free of clutter and well lit. Keep children and bystanders away. Distractions can cause you to lose control, so bystanders should remain at a safe distance from the work area.
4. The seeder should raise and lower smoothly. Avoid quick height adjustments as it could damage the machine.
5. The seeder should be inspected prior to each use. Carefully check all bolts, nuts, chains sprockets etc. to make sure they are in good condition and properly tightened.
6. Keep the hopper clean and make sure there is no moisture inside before you fill with seed and fertilizer.
7. Working speed can be 1 -3 miles/hr.
8. Do not stand/sit between the seeder and the tractor while operating.
9. Do not go in reverse or turn sharply while seeder is in the ground.
10. During planting, avoid unnecessary stopping in the field to maintain consistent sowing space.
11. Driver should have experience and be familiar with using this type of equipment.
12. The tractor should be stopped when adding seed/fertilizer, performing maintenance, adding gas and cleaning up debris, etc.
13. Do NOT go under the seeder for inspecting or repairing while seeder is raised by tractor.

SEEDING/FERTILIZING ADJUSTMENT DEVICE

(Pre-installed under the top hopper case)

The seeding adjustment device is mainly composed of the seeding/fertilizing device, seeding/fertilizing box and the seeding/fertilizing wheels. The Seeding/Fertilizing Box is attached on the Seeding/Fertilizing Axis by two clips and the seed rate is adjustable by controlling the position of this seed/fertilizer wheel.



Seeding/Fertilizing Adjustment Device (Figure 1)

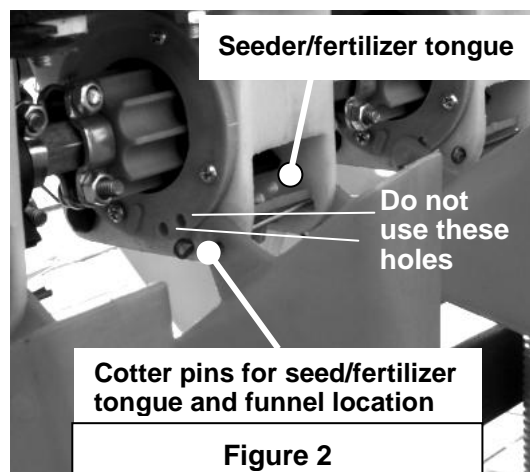
There are devices total pre-installed under the hopper

| Part # | Description | Part # | Description |
|--------|--------------------------|--------|-------------------------|
| 1 | Seeding/Fertilizing axis | 5 | Seed/Fertilizing box |
| 2 | Clip | 6 | Seed/Fertilizing Tongue |
| 3 | Block wheel | | |
| 4 | Seed/Fertilizer Wheels | | |

1. Weight, size, relative humidity, and moisture content can affect seeding rates. Lock the position of the seed/fertilizer tongue as figure 2 shows, ignore other 2 holes beside.

(See Figure 2)

2. Frequently check each seed/fertilizing wheel **(Figure 1-Part 4)** and make sure all are the same size.



TO INSTALL FUNNELS AND HOSES

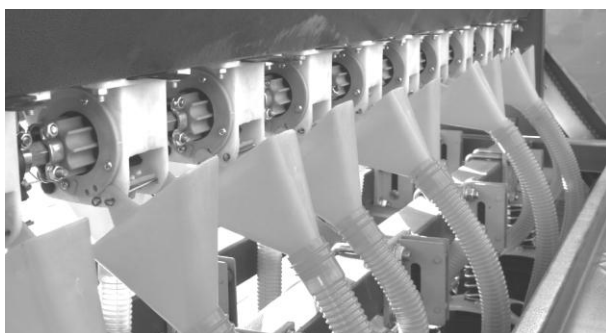
Hoses and funnels are pre-installed on the seeder before you purchased

If you want to replace the old hose or funnel, please follow below instruction.

Install the funnel by cotter pin

Use the cotter pin pre-installed under each seed box to mount the funnel into position.

(See picture on the right side and Figure 2 in the manual)



Connect hose to the round end of funnel

Connect hose and funnel together, make sure the two grooves on the hose fit in the grooves on the funnel.

(See picture on the left side)

Insert the bottom end of hose into coulter shield, There are two holes on the top of the coulter, please note the front hole is for fertilizers and the rear hole is for seeds (along planting direction), make sure hoses are connected to correct hopper outputs, hopper is divided into 2 boxes, the front box is for the fertilizers and the rear box is for seeds, same position as hoses on coulter shields.

Hose length is adjustable.

(See picture on the right side)

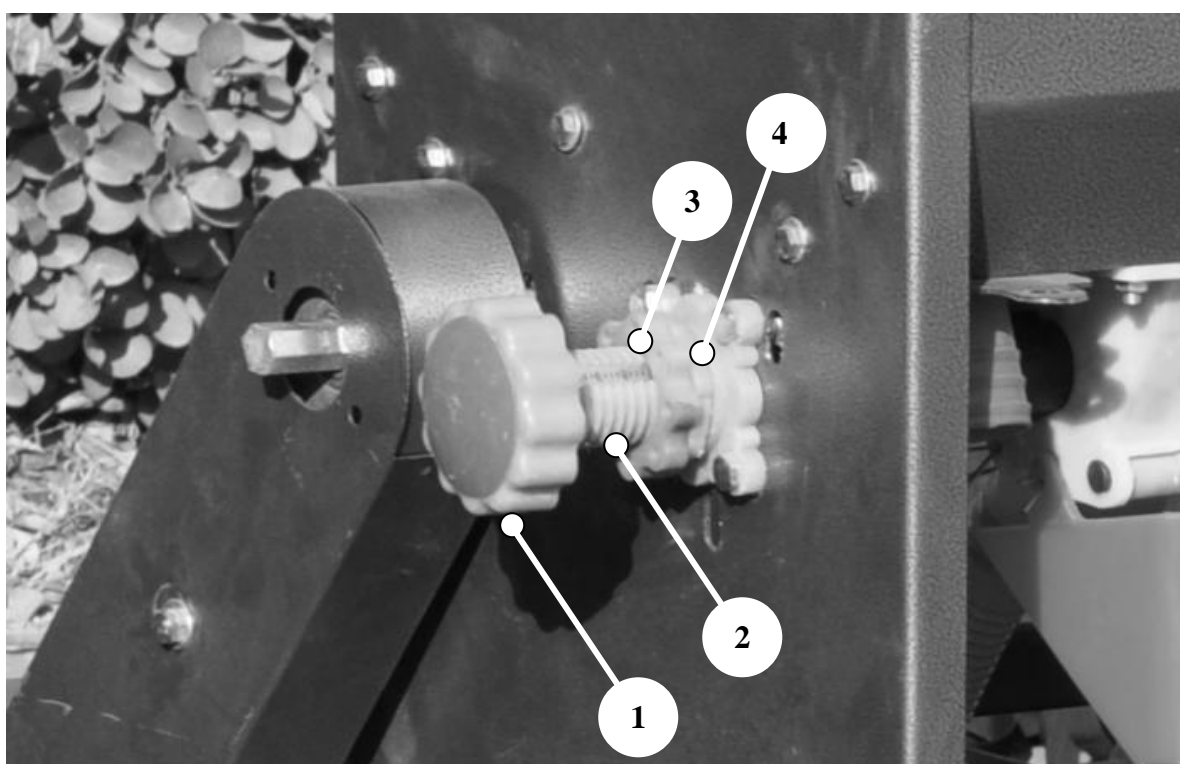


SEEDING/FERTILIZING RATE ADJUSTMENT HANDLE

(Pre-installed on the top hopper case)

To adjust the fertilizer rate, you will need to adjust hand wheels (on each side of hopper). The seed/fertilize rate depends on the seed/fertilizer you want to plant, please refer to your seed/fertilizer supplier's instruction to get the proper seed/fertilize rate.

Before adjusting the seed rate, return the rate to zero by rotating the hand wheel, then check and make sure all seeding/fertilizing wheels are fully closed on all 20 seeding/fertilizing boxes. If not, you need to loosen the clips on both sides of the seeding/fertilizing wheel and push the wheel into the box. Tighten the clips (See Figure 1). When the seeding/fertilizing box is closed and the meter indicates "0". Adjust fertilizing rate by rotating the hand wheel. The meter has 9 numbers from 0-8, from zero to Maximum.



Seeding/Fertilizing Rate Adjustment Handle (Figure 3)

There are 2 Regulators (Handles) on both side of the hopper

| Part # | Description |
|--------|------------------------------------|
| 1 | Hand wheel |
| 2 | Seeding/Fertilizing Rate Indicator |

| Part # | Description |
|--------|--------------------|
| 3 | Butterfly nut |
| 4 | Plastic hold plate |

Before you adjust the hand wheel, loosen the butterfly nut first, and then pull out the plastic hold plate. Rotate the hand wheel to meet the seeding/fertilizing rate you require. After you have adjusted the seeding/fertilizing rate, insert the plastic hold plate then tighten the butterfly nut to lock the seeding/fertilizing rate.

SEEDING/FERTILIZING RATE CHART

| Set Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Units |
|-----------------|-------|-------|-------------|-------------|-------|-------|-------|-------|-----------------|
| Wheat | 9.6 | 17.50 | 25.30 | 33.00 | 41.00 | 49.00 | 56.50 | 64.50 | lbs/acre |
| Oats | 9.00 | 16.50 | 24.00 | 31.00 | 38.50 | 46.00 | 53.30 | 60.50 | lbs/acre |
| Rye | 11.00 | 20.00 | 29.00 | 38.00 | 47.00 | 56.00 | 65.00 | 74.00 | lbs/acre |
| Perennial Grass | 5.20 | 9.50 | 13.75 | 18.00 | 22.00 | 26.60 | 30.70 | 35.00 | lbs/acre |
| Annual Grass | 5.80 | 10.50 | 15.20 | 19.50 | 24.60 | 29.50 | 34.00 | 38.70 | lbs/acre |
| Soybeans | | | Recommended | Recommended | | | | | Seed count/acre |
| Corn | | | Recommended | Recommended | | | | | Seed count/acre |

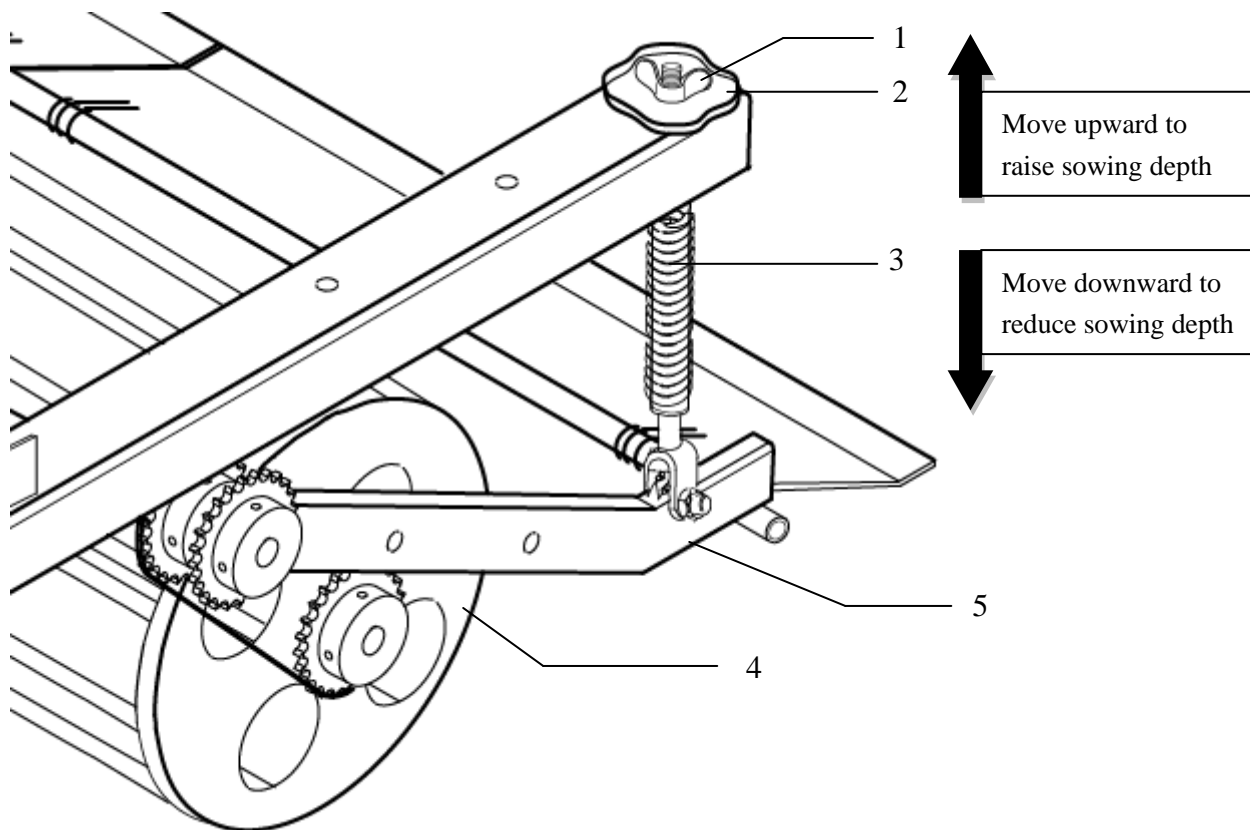
For soybeans and corn, set the number on the Hand Wheel related to the seed size. You may want to do a test run before seeding.

To perform a test run:

1. In order to save the seed from a test run, cover the test area with plastic or a tarp before doing a test run.
2. The Hand Wheel controls the slot opening and amount of seed dropped (see chart above). Set the Hand Wheel to the proper position for your type of seed.
3. Use one hopper (plug the other 9 hoppers) to do a test run.
4. The determination of your row spacing depends on your local condition of soil, weather, etc. (for example, 3 feet).
5. Perform a test run for approximately 30 feet of distance.
6. Collect all the seeds you "seeded" in the test run.
7. Calculate the seed count per acre as follows:

| |
|---|
| $ \begin{array}{l} \text{Seeds Count} \\ \text{per Acre} \end{array} = \frac{43650 \text{ sq.ft.}}{3\text{ft. X } 30\text{ft.}} \times 80 \text{ seeds} = 38800 $ |
|---|

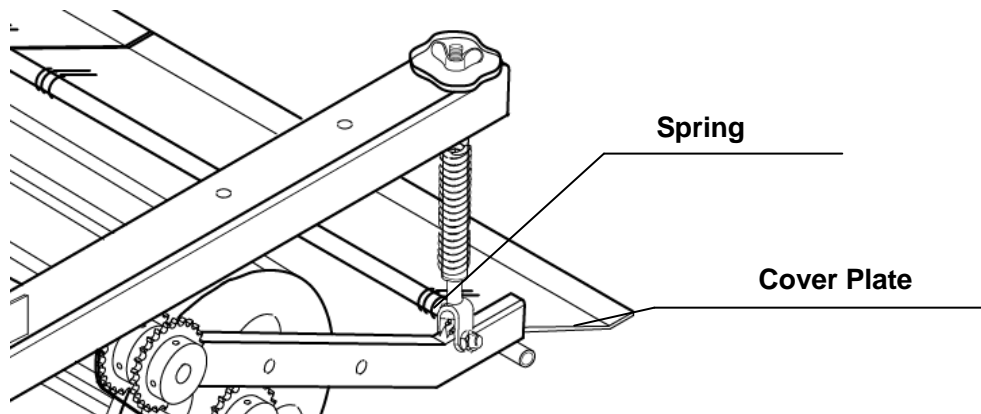
SOWING DEPTH CONTROL DEVICE (Figure 4)



1. To level the 3-Point Seeder, adjust the top link on the tractor.
2. To adjust the sowing seeds depth, loosen the wing nut located on each side of the Adjustment Handle. Then rotate the Adjusting Screw clockwise. This will bring the rear roller upward to get deeper sowing depth, or rotate the nut counter-clockwise to get a shallow sowing depth. Tighten the wing nut after each adjustment.

| Part # | Description |
|--------|------------------------|
| 1 | Wing Nut |
| 2 | Adjustment Handle |
| 3 | Pressure Spring |
| 4 | Rear Roller |
| 5 | Oblique stretching arm |

SOIL COVER PLATE (Figure 5)



1. The soil cover plate is located at the end of the seeder. There are 2 sets of springs on each plate that add down pressure.
2. This can be removed if not needed.

Adjustment Before Each Use

1. Adjust the sowing depth and level of the Seeder by using the 3-point link top on your tractor.
2. Adjust coulters by loosening the u-bolts mounted on the planter main frame. Make sure distance between each opener is the same. All 10 coulters are pre-mounted on this seeder.
3. Check all 4 chains and sprockets on both side of the seeder.
4. Adjust the seeding/fertilizing rate according to previous instructions.

Maintenance

1. Lubricate each chain sprocket, axis and all friction parts every four working hours. Do NOT lubricate on the chain and disc directly.
2. Check all bolts. Tighten before and/or after each use.
3. Clean and check after each use.

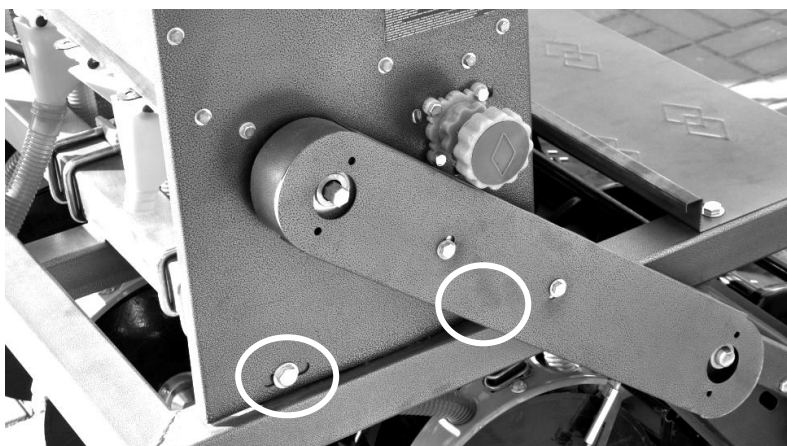
Maintain your seeder. It is recommended that the general condition of any seeder be examined before it is used. Keep your seeder in good repair by adopting a program of conscientious repair and maintenance. If any abnormal vibrations or noise occurs, have the problem corrected before further use. Have necessary repairs made by qualified service personnel.

Trouble Shooting and Solutions

1. **Close mechanism disc does not rotate:** Clean, lubricate or change the disc.
2. **Sowing depth not even:**
 - a. Main Frame not level: Adjust the 3-point link.
 - b. Rear wheel not level: Adjust the handle on each side.
3. **Coulters not working:**
 - a. Tractor tire mark doesn't cover: Add the close mechanism (optional) and adjust properly.
 - b. Rear roller not working properly: Adjust the height of rear roller to a proper height.
4. **Seeding volume not even:** Check the seeding/fertilizing box and adjust according to the manual.
5. **Chain:**

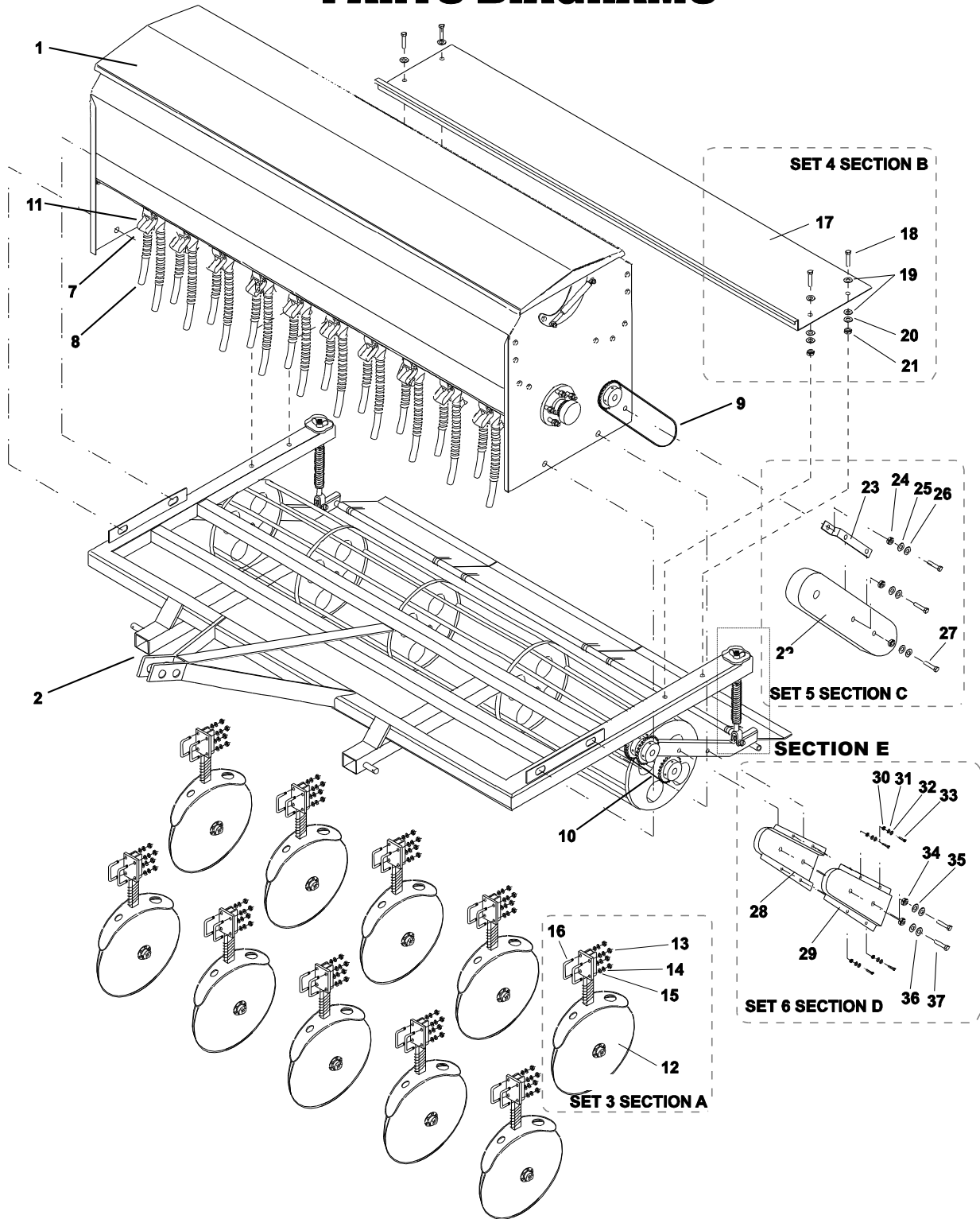
- a. Chains too tight or too loose:

There are 2 waist-form holes on each side of the hopper (see below pic.) which connect the hopper to the main frame. To tighten or loosen the chain, loosen all those nuts a little bit, move the hopper forward to the 3-point hitch side (tighten) or backward (loosen), until the chain tension to a proper range. Tighten the nuts.



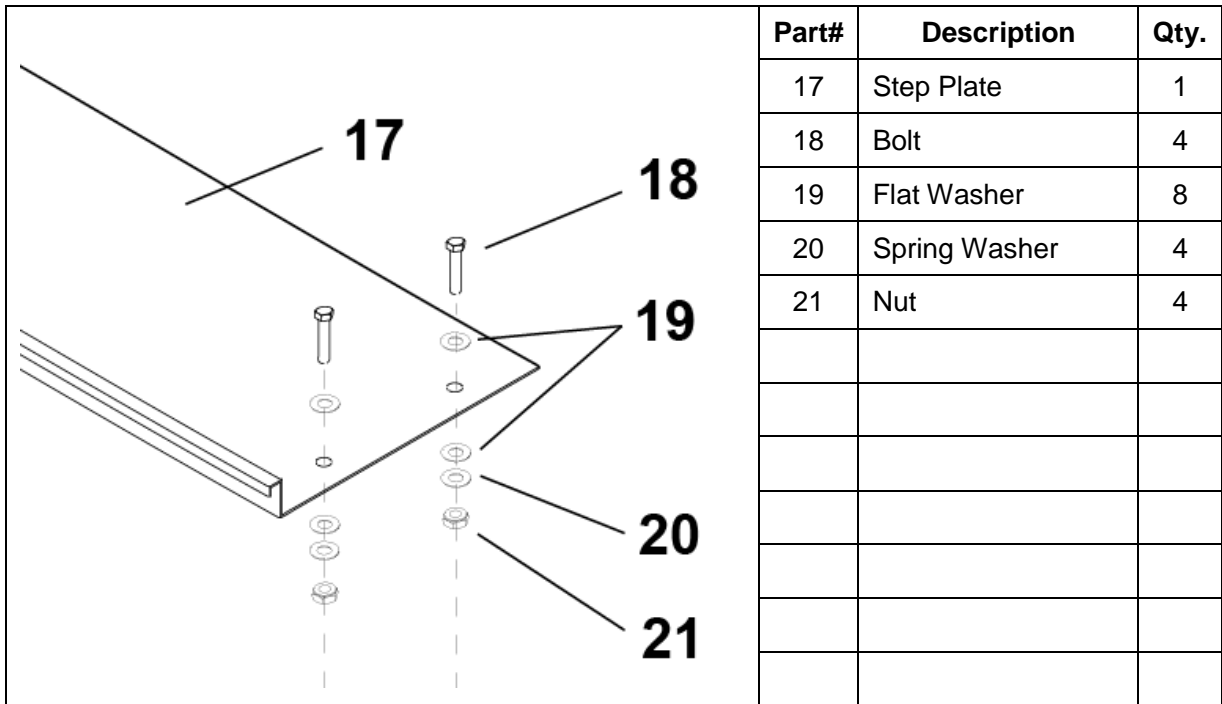
- b. Chain sprocket not in line: Adjust the sprocket alignment.
6. **Rear Roller not working:** Check the adjust handle and loosen the chain.

PARTS DIAGRAMS

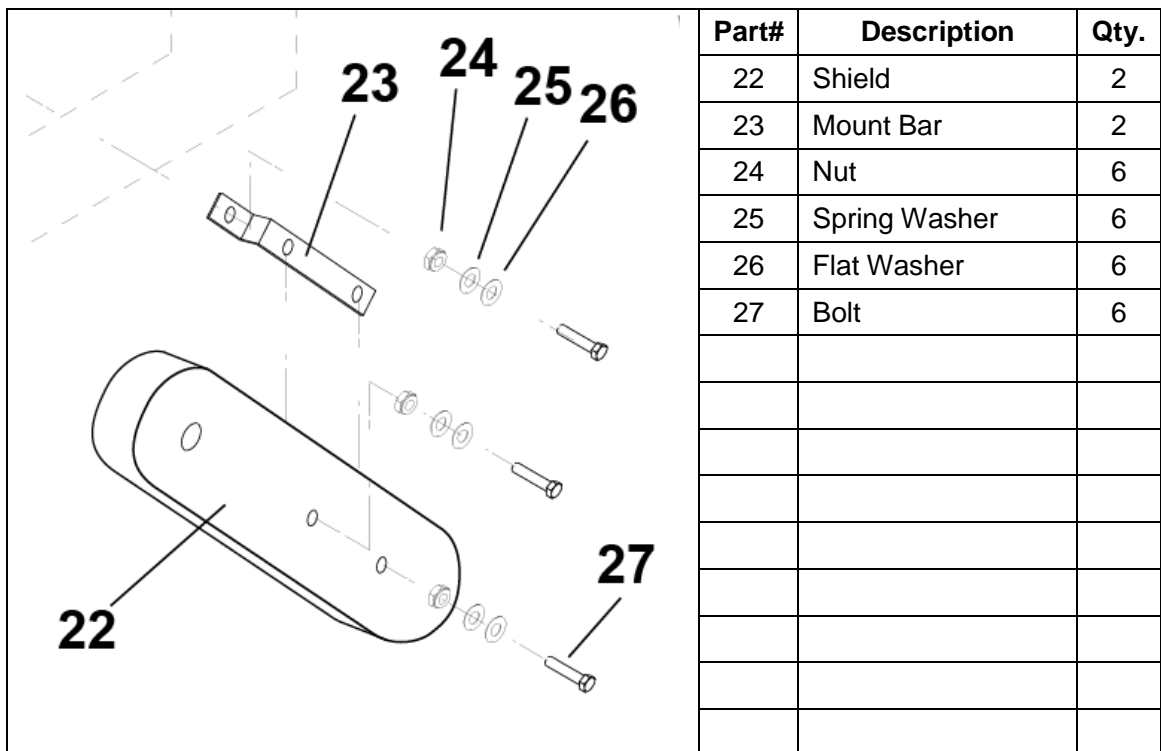


Product comes fully assembled and this diagram is for maintenance and spare parts replacement only!
 Due to continuously improvement, product may not look same as diagrams shows.

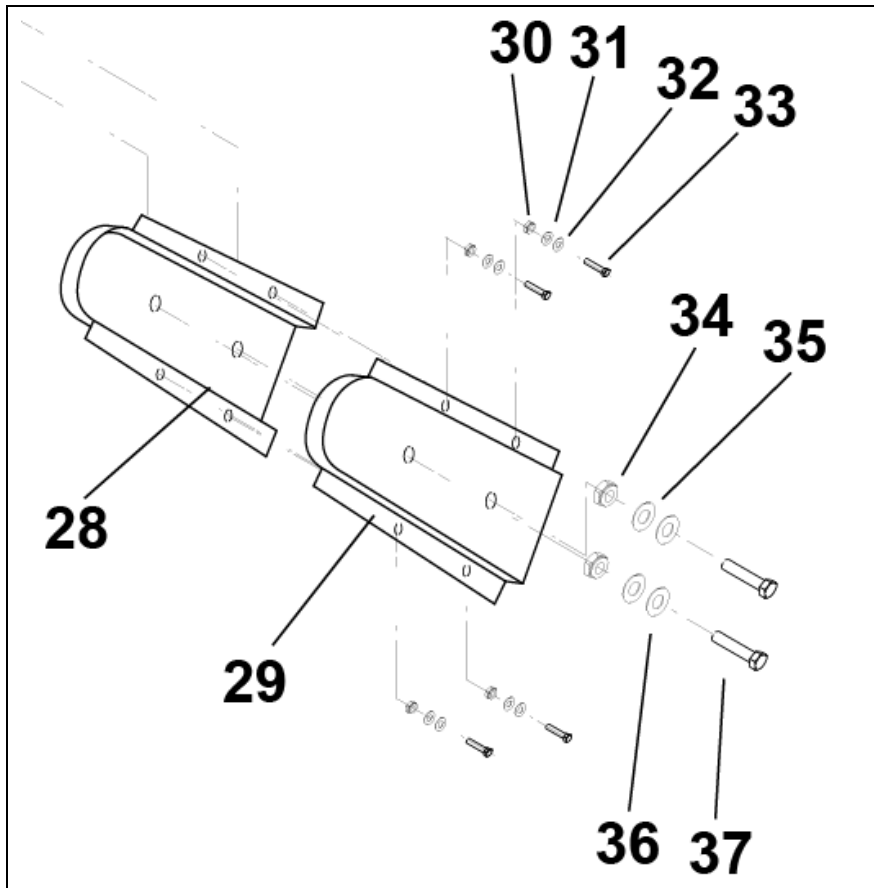
Exploded Parts Diagram Section B



Exploded Parts Diagram Section C

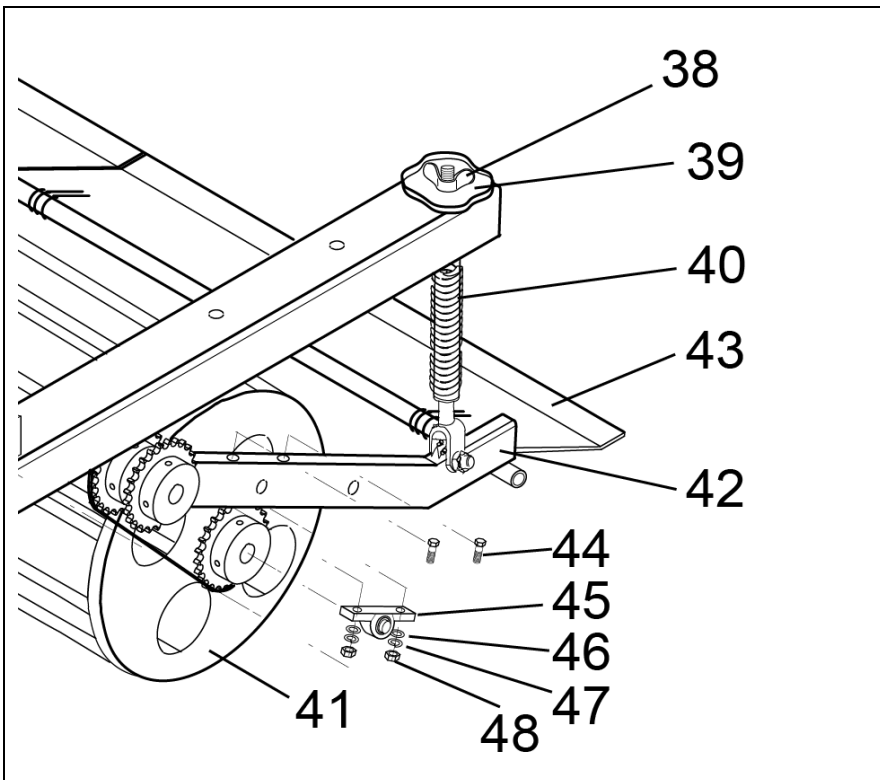


Exploded Parts Diagram Section D



| Part# | Description | Qty. |
|-------|---------------------|------|
| 28 | Shield A | 2 |
| 29 | Shield B | 2 |
| 30 | Small Nut | 8 |
| 31 | Small Spring Washer | 8 |
| 32 | Small Flat Washer | 8 |
| 33 | Small Bolt | 8 |
| 34 | Large Nut | 4 |
| 35 | Large Spring Washer | 4 |
| 36 | Large Flat Washer | 4 |
| 37 | Large Bolt | 4 |
| | | |
| | | |
| | | |
| | | |

Exploded Parts Diagram Section E



| Part# | Description | Qty. |
|-------|----------------|------|
| 38 | Wing Nut | 2 |
| 39 | Adj.Handle | 2 |
| 40 | Press Spring | 2 |
| 41 | Rear Roller | 1 |
| 42 | Oblique Arm | 2 |
| 43 | Cover Plate | 3 |
| 44 | Bolt | 4 |
| 45 | Roller Bearing | 2 |
| 46 | Flat Washer | 4 |
| 47 | Spring Washer | 4 |
| 48 | Nut | 4 |
| | | |
| | | |
| | | |

ACCESSORIES: Covering discs sold separately.

For replacement parts and technical questions, please call **1-218-943-6296**.

WARRANTY

One-year limited parts warranty



TG
PO BOX 203
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