Part 1 of 2: Installing the Arm Bracket to the Tail Section

#### **Horsch Maestro Planters**

Before working on your planter or drill

**DANGER:** When storing or working on the planter always install cylinder stops or place the planter on stands to prevent personal injury or damage to the attachments. **PLEASE:** Read instructions completely and verify all package contents before beginning installation.

**NOTE:** There are **left-hand** and **right-hand** G2, G3, and G4 units. Lefts and rights are determined facing planter from the back.

NOTE: WHEN YOU PICK THE PLANTER UP, THE GAUGE WHEEL WILL HIT THE PRESS WHEEL. When you set the planter back down, the gauge wheel will go forward and the tail section will go backward so that they will not hit while running in the field. WHEN INSTALLING THE G2/G3/G4 EITHER TIE THE GAUGE WHEEL FORWARD OR THE TAIL SECTION UP.

#### Installing the Fertilizer Bracket & Disc to the Arm Bracket

- 1. Remove both press wheels from tail section of planter.
- 2. Bolt the mounting bracket using the four 5/8" button head bolts and jam nuts to the tail section, placing blue spacers between the tail section and mounting bracket.
- 3. Position the different arms in between the mounting bracket, as follows:
  - **G2:** With the single prong of the arm bracket pointing to the front and the double prongs pointing out the back.
  - **G3:** With the cut-out end of the arm pointing to the front.
  - **G4:** With the thicker end for fastening the disc mounting plate pointing to the back.

Center the hole of the arm with the openings at the base on the mounting bracket, and slide the stainless axle bolt through both the mounting bracket and arm bracket. Thread the 5/8" fine thread nut on the outside of the axle bolt.

**4.** Use a hammer to seat the knurled end of the bolt in the bracket and tighten bolt and nut with two 15/16 wrenches.

# Part 1 of 2 Parts List Horsch

Fertilizer Disc Package Contents (per single row)

# Item Quantity Arm. 1 Mounting Bracket. 1 (continued on part 2)

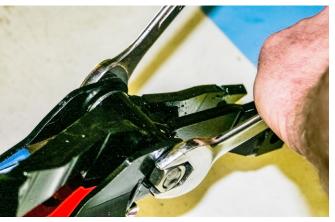
Horsch Maestro Wheel Bolt Package Contents (per single row)

Item	Quant	İ
Stainless Steel Axle Bolt	1	
with 5/8" fine thread nut		
Blue 3/8" Spacer	2	
Blue 3/8" Spacer	4	
5/8" Jam Nut (Half Nut)	4	
(continued on part 2)		

#### Corresponds with PART#:

G2HL, G2HR, G2HLPT, G2HRPT, G3HL, \_G3HR, G4HL, G4HR, G4HLPT, G4HRPT \_

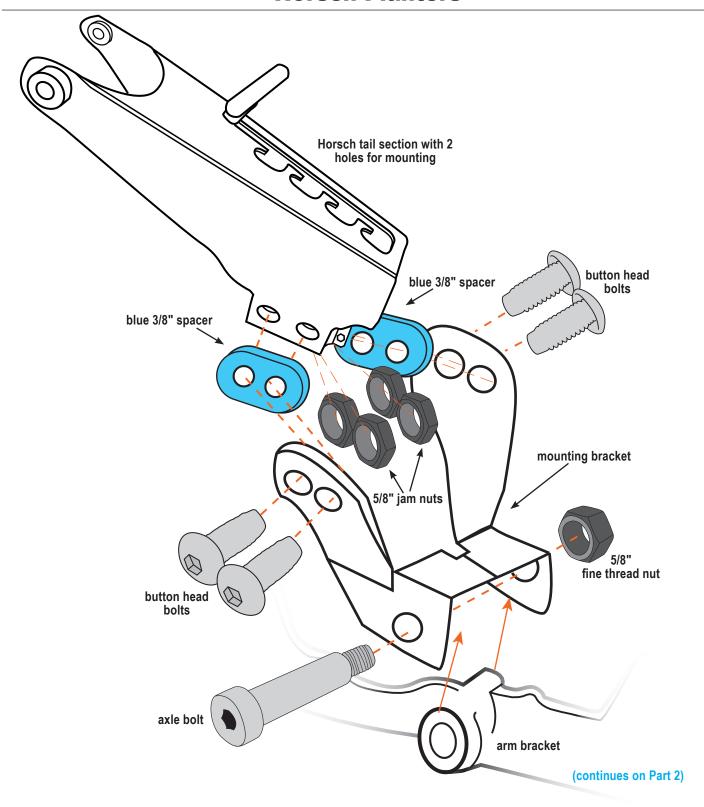






Part 1 of 2: Installing the Arm Bracket to the Tail Section

#### **Horsch Planters**



For additional mounting instructions on Installing the Fertilizer Bracket & Disc to the Arm Bracket and Installing Closing Wheels to the Arm Bracket, please see Part 2: Mounting Instructions.

Part 2 of 2: Installing Fertilizer Bracket, Disc, and Closing Wheels to Arm Bracket

**G4** 

Before working on your planter or drill

**DANGER:** When storing or working on the planter always install cylinder stops or place the planter on stands to prevent personal injury or damage to the attachments.

PLEASE: Read instructions completely and verify all package contents before beginning installation.

NOTE: There are left-hand and right-hand G2 units (determined facing planter from the back.).

WHEN YOU PICK THE PLANTER UP, THE GAUGE WHEEL WILL HIT THE PRESS WHEEL.

When you set the planter back down, the gauge wheel will go forward and the tail section will go backward so that they will not hit while running in the field. **WHEN INSTALLING THE** 

G2/G3/G4 EITHER TIE THE GAUGE WHEEL FORWARD OR THE TAIL SECTION UP.

#### Continued from Part 1: Mounting Instructions.

For additional mounting instructions on Installing the Arm Bracket to the Tail Section, please see Part 1.

#### Installing the Fertilizer Bracket & Disc to the Arm Bracket

- Attach disc mounting plate to the arm bracket using 3/8" bolts; one through the elongated hole, the other through the top hole of the set of three holes.
  - **OPTIONAL:** Insert 3/8" flat washers as needed to change the pitch on the disc. The washers should be placed on the outside of the disc mounting plate, under the 3/8" bolt heads.
- 2. Place the shim on the disc mounting plate, aligning the set of holes, with the lip of the shim resting on top of the bolted disc mounting plate.
- 3. Slide the diamond-shaped wedge end of the fertilizer bracket up into the slotted notch on the backside of the shim, over the two holes. Insert the 5/8" x 3" bolt through the fertilizer bracket first, then the shim and disc mounting plate.

**NOTE:** There are two holes of adjustment for the fertilizer disc on the arm bracket. From the top down, they are 1" and 1-3/4" disc depth. **Most producers use the bottom hole.** If using the top hole, you may have to reverse the bolt to fit.

4. Slide 1/2" spacer, the fertilizer disc assembly (with hub and nuts facing out, away from the arm bracket), and the 1/4" spacer over the bolt. Thread 5/8" lock nut on bolt and tighten into place.

**NOTE:** IF USING NOTCHED FERTILIZER DISC, assemble with the notches on the disc pointing DOWN IN THE BACK.

- 5. Position the trash deflector over the square hole on the topside of the fertilizer bracket using the 1/4" x 3/4" carriage bolt and whiz nut to tighten so that one can adjust the deflector in or out to keep disc from plugging with residue or mud. The carriage bolt should be threaded from the underside of the bracket so that the nut is on the topside of the trash deflector, and tightly secured. The trash deflector blade runs parallel with the G2 disc blade (approximately 3/8"-1/2" away). If you are in muddy conditions or have a lot of fine residue build-up, you may want to adjust trash deflector further out (1/2"-1") away from disc blade.
- 6. **REFER TO PIVOTABLE FERTILIZER KIT MOUNTING INSTRUCTIONS** for installing the adjustable pivot brackets, injector orifice\*, and threaded tube guide to the fertilizer bracket.

\*Low pressure 5# to 25# will place fertilizer about 3/4" to 1" deep into the soil. High pressure 25# to 40# will inject

the fertilizer from 1-1/2" to 2" deep into the soil. The high pressure injector orifice puts on from 2 to 40 GPA of fertilizer by injecting it deeper into the soil. Caution when using high pressure, it may cause fertilizer to splash on the planter.

7. Slide rubber boot up over bottom end of fertilizer tube guide. Secure in place with hose clamp.

#### **Installing the Closing Wheels to the Arm Bracket**

- 1. Bolt the closing wheels to the arm bracket using 5/8" x 3-1/2" carriage bolts and nuts. **FRONT CLOSING WHEEL WILL REST ON THE GAUGE WHEEL.** Use your 1/2" or 1/4" spacers on inside of wheels if needed to position wheels in or out from seed furrow to suit your preference for proper closing.
  - \*Two Mohawk or Zipper wheels can be run the same as regular press wheels and will give better seed to soil contact. See Mohawk or Zipper Mounting Instruction sheet when installing these closing wheels.



#### Part 2 of 2 Parts List G4

G4 Fertilizer Disc Package Contents (per single row)

(continued from part 1)

ltem `	Quantity	
G4 Arm	1	
Bearing, Disc, Hub (Assembly)	1	
Disc Mounting Plate	1	
3/8" x 7/8" Bolt	2	
3/8" flat washer	8	
Injector Orifice Package	1	

# G2/G4 Wheel Bolt Package Contents (per single row)

(continued from part 1)

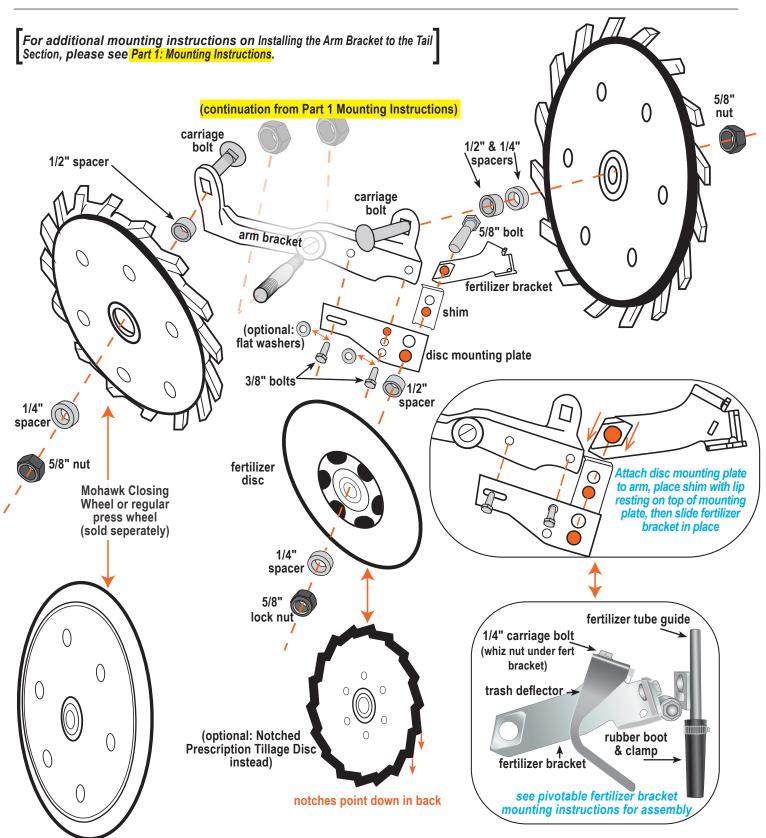
ltem	Quantity
5/8" x 3-1/2" Carriage Bolt	2
5/8" Nut	2 +2
	(except Horsch)
Hose Clamp	2
1/2" Spacer	2
1/4" Spacer	2

# G4 Trash Deflector Package Contents (per single row)

Item Quantity
Shim1
G4 Fertilizer Bracket 1
Trash Deflector
Adjustable Threaded Tube Guide 1
1/4" x 3/4" Carriage Bolt 2
1/4" Whiz Nut 2
1/2" Spacer 1
1/4" Spacer 1
5/8" x 3" Bolt 1
5/8" Lock Nut 1
Rubber Boot1
Instruction Sheet 1
Pivotable Fertilizer Kit
(See Package Contents) 1

Part 2 of 2: Installing Fertilizer Bracket, Disc, and Closing Wheels to Arm Bracket

**G4** 



#### PIVOTABLE FERTILIZER KIT MOUNTING INSTRUCTIONS

#### G2/G4 Fertilizer Disc

Before working on your planter or drill

**DANGER:** When storing or working on the planter always install cylinder stops or place the planter on stands to prevent personal injury or damage to the attachments. **PLEASE:** Read instructions completely and verify all package contents before beginning installation.

**NOTE:** There are left-hand and right-hand units. Shown are right-hand units.

Screw injector orifice into the end of the adjustable threaded tube guide that will be pointing down. The orifice end with the small hole is screwed in towards the inside of the tube, with the color coated end towards the outside. Tighten orifice with 5/32" Allen wrench.



Using one of the carriage bolts and whiz nuts provided, bolt the adjustable bracket with center swivel piece and welded nut to the rear section of the fertilizer bracket on your G2 or G4. The welded-on nut should be on the

same side of the b racket as the disc.

The adjustable bracket with swivel piece towards the outside should be attached next, held in place with the bolt provided. Make sure the head of the bolt is on the opposite side of the bracket as the disc. Do not tighten bolt until after final adjustments have been made.



Before you begin, verify all "package contents" items

NOTE: There are left-hand and right-hand G2/G4 units.

# G2/G4 FAB Bracket Package Contents (per single row)

Item	Quantity
1/4" x 3/4" Carriage Bolt	2
1/4" Whiz Nut	2
Fertilizer Adjustable Bracket	
Center pivot with welded nut	1
Outer pivot	
3/8" x 1-3/4" SS Bolt	
Instruction Sheet	1
If Purchased Individually (PA	art# G2FAB):
Adjustable Threaded Tube Guide .	1
Rubber Boot	1
Hose Clamp	2

Injector Orifice Package Contents (per single row—use if needed)

# Item Quantity Injector Orifice (High Pressure Nozzle)\* 1 \*Orifice sizes vary according to planned gallons per acre (gpa) and speed (mph).

Use the other carriage bolt and whiz nut to attach the adjustable threaded tube guide to the back (outside) of the adjustable bracket with outer swivel piece. Make sure the end with the injector orifice is pointed down.

Adjust the brackets in and out so that the threaded tube guide lines up directly behind the G2 or G4 fertilizer disc. Angle the back adjustable bracket so that the fertilizer shoots in the desired distance from the G2/G4 disc.

Slide the thicker end of the rubber boot up over the bottom end of the threaded tube guide. Secure in place with hose clamp.

#7 Tighten all bolts and nuts





## **ORIFICE MOUNTING INSTRUCTIONS**

#### **Injector Orifice**

Before working on your planter or drill

**DANGER:** When storing or working on the planter always install cylinder stops or place the planter on stands to prevent personal injury or damage to the attachments. **PLEASE:** Read instructions completely and verify all package contents before beginning installation

**DO NOT RUN ORIFICES WITH SQUEEZE PUMPS.** This cannot be done because squeeze pumps do not put out enough pressure for an orifice system. Squeeze pumps only put out 2-3 pounds of pressure.

**NOTE:** We normally recommend using only 1 orifice under pressure when running 7-15 lbs of pressure. However, using 2 orifices under pressure can be beneficial because it will help eliminate fertilizer splatter or misting/volatilization of fertilizer when done in the following manner:

- Use the correct size orifice above for 15-30 psi pressures
- Use 2-3 times size orifice below, creating 5-7 lbs pressure to stream fertilizer into the soil
- NEVER USE 2 OF THE SAME SIZE ORIFICES IN YOUR SYSTEM!

The injector orifice is used for applying liquid fertilizer 2x2 with either the G2's high pressure kit or the 2x2 fertilizer tube for Case IH.

Use an Allen wrench to screw orifice inside threaded 3/8" stainless steel tube.







HEX END





#### Troubleshooting the 2x2 Fertilizer Tube & Injector Orifice

PROBLEM	SOLUTIONS
Filings and crud in tubes and fertilizer application system from the manufacturing process	USE WATER TO FLUSH your entire fertilizer application system and the fertilizer tubes out before use and before installing injector orifices. This will clean out all the crud and filings left over from the manufacturing process and also test for leaks.
2x2 fertilizer tubes are plugging	Use 50 or 80 mesh filters ahead of the tubes to keep them from plugging.
Injector orifice will not thread into 2x2 fertilizer tube	Use a 5/16-24 standard tap threader to clean out the tube's threads. During the manufacturing process, filings and crud can get lodged in the threads.