Assembly Instructions

Assembly Preparation

Your feeder comes with all parts and hardware needed to completely assemble it. As you remove the packaging wrap, be sure to set out all the parts on a surface where you can easily locate them during the assembly process. Below is a checklist of what you should have in the Feed Smart assembly kit.

- Hopper-Shaft w / Control Box-Solar Panel
- Hopper Lid
- Lifting Arm for Lid
- Feed Trough
- 4-Way Trough Brace
- 4 Feeder Legs
- 4 Foot Pads
- 12 Volt Battery
- Digital Timer
- Miscellaneous Hardware Bag (contents listed below)

Hardware Bag contents:
- 4 Screw Clamps (for leg braces)
- 4 Self-Tapping Screws
- 4 Stabilizer Rods (to hang Feed Trough)

You will need these tools to assemble your Feed Smart automatic pasture feeder:

- 5/16" and 7/16" sockets w / 1/4" or 3/8" drive Ratchet (wrenches can be substituted for all applications, except when installing Self-Tapping Screws)
- Cordless Drill, w / 5/16" (3/8" drive) Socket Adapter (to install Self-Tapping Screws)
- 1/2" Wrench (for tightening Legs in Leg Sleeves)
- Hammer to install Lid Arm in Lid Elbow (Rubber Hammer is recommended)
- Small Level / 6 ft. Step Ladder

Selecting a suitable location to assemble your feeder is important. If possible, a clean, dry surface, where you can find any hardware dropped during assembly is best. The surface should be as level as possible. Shop floors and paved driveways are great assembly locations, but your new feeder may also be assembled in the pasture where it will be used.

Assembling Your Feeder

1. Turn the Hopper upside down on a dry, mostly level surface. The pallet your feeder was shipped on is suitable for the assembly process.
2. Back hardened Bolts out of Leg Sleeves, and insert two Legs, side by side (as shown). Place the Feed Trough, upside down, on top of the Motor Shaft. Insert the remaining legs into their Leg Sleeves, but do not tighten the bolts yet.

3. Find the four Stabilizer Rods in the Hardware Bag. Rotate the Trough on top of the Motor Shaft until all 4 holes line up with the Bolt / Washer sets near the top of the Shaft.

**There is only ONE way all 4 holes will line up properly.**

Once you line them up, insert a Stabilizer Rod in each Trough hole. Unscrew the corresponding Bolt / Washer set from the Motor Shaft (do this one at a time), and put the end of the bolt through the looped end of the Stabilizer Rod (open end of loop should point to your left). Make sure the angled end follows the angle of the Trough surface. The Stabilizer Rod should be against the Motor Shaft when Bolt / Washer set is in back the Shaft. Tighten each Bolt only “Hand Tight”.

4. Place the 4-Way Trough Brace on top of the Feed Trough (center plate facing downward). With the Trough levelled by eye, open all Screw Clamps (located in Hardware Bag) and use them to attach each arm of the Trough Brace to the corresponding Feeder Leg. Make sure the tightening bolt on each Screw Clamp is pointing outward. Tighten all Screw Clamps with a socket or wrench.

5. Tighten the Leg Sleeve bolts completely, using the 1/2 inch wrench, securing the Legs to the Hopper.
6. Next, upright your Feed Smart feeder and locate it on the 4- 4x6 Mats as shown in the diagram you received with the “Setting Up your Feeder” email when you purchased your new feeder. Once you have it set up in the desired location, put the Foot Pads on the Legs.

7. Loosen all Screw Clamps at Legs and push the Feed Trough down until it hangs from the Stabilizer Rods, equally all around. Position the 4-Way Trough Support Assembly so that it just touches the Trough bottom and tighten the Screw Clamps. Attach the Feed Trough to the Trough Support Assembly using the 4 remaining Self-Tapping Screws, putting each near the middle of the Trough bottom. It's now time to tighten the Bolt / Washer sets holding the Stabilizer Rods in the Motor Shaft.

8. To install the Lid, remove the Self-Tapping Screw from the Elbow Bracket on the Lid and insert the Lid Arm into the bracket, using a Rubber Hammer to tap it in. On the side of the Hopper, remove the Bolts / Wing Nuts from the handle brackets. Put the Lid on top of the Hopper, with the handle pointing away from where the Control Box is located, while fitting the Lid Arm in the brackets on the side panel. Make sure the Lid seats completely in place, and re-attach the Bolts / Wing Nuts. Tighten Wing Nuts snuggly, while still allowing the handle to move up and down easily. Once you have the Handle pointing parallel to the side panel of the Hopper, use your Cordless Drill to re-install the Self-Tapping screw at the top in the Elbow Bracket, and tighten the bolts in the Lid Elbow.
Completing the Feeder Set Up

You will need to level your new Feed Smart feeder as best possible for the terrain. Do this by setting the level on the Shaft Plate at various locations to determine which Legs need to be adjusted. Loosen Leg Sleeve Bolts and Screw Clamps (where needed) so legs can slide up or down to complete the leveling procedure. When finished with each, check that all Bolts and Screw Clamps are tightened completely. After filling your feeder’s hopper, you should hear a “CLANK” sound when you close the lid. Check around it, to be certain it isn’t hung up on one of the bolt heads. Improper lid closure could result in wet feed.

Installing Electronic Components

Put the Battery inside the Control Box against the back wall, closest to the Hopper, with Terminal Posts to the left. Using the wiring included with Timer, plug together the white, 2 pin, plastic in-line coupler (from motor), then attach the wires with piggyback terminals to the 12 Volt Battery – Red is positive / Black is negative (ground). Attach the wire connectors from the Solar Panel to the piggyback terminals on the battery – Red is positive / Black is negative (ground).

Setting the Timer is covered in Section 4 (Using the “Test” Function) and Section 5 (Set Current Time / Set Feed Times). We suggest you read those sections before putting your feeder in operation.

If not installing stock panels with your feeder, we strongly suggest you anchor it to the ground. The simplest way to do this is with an auger-style earth anchor (not included). The anchor needs to be put into the ground, beneath the center of the 4-Way Trough Brace, under the feed trough. Once you have the anchor in place, simply attach the feeder to it with a length of chain and a Quick Link (not included).

Note: While we have never had any horses attempt to tip a feeder over, we did have 70 mph straight-line winds move a feeder about a foot from its original location once. For the health and safety of your horses, please follow all instructions included in this manual.