

**Attn** Make sure the side hopper panel folding arm hinge bolts have been installed threaded ends in, facing each other.

**Tools needed**, Ratchet and 13mm socket and 13mm wrench, Drill (cordless preferably), 11/32 + 7/32 drill bits. Also helpful (Sharpie marker, Flashlight, Extendable magnet to fish dropped hardware from auger trough)

## Power Hopper Topper 50 bu Kit for S680/690

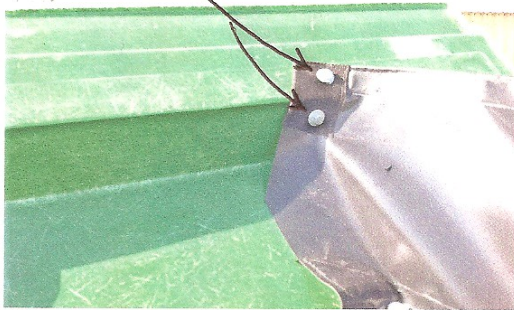
### Installation Instructions

1. Open combine hopper cover and access hopper from engine compartment. Front and rear extensions are identical using the same hardware and installation process.
2. Remove top two nuts and washers where existing flex corners of the hopper are attached to the rigid sides and middle (4 locations front and back).
3. Start installing the Power Hopper Topper extension at one of the side mounting locations where nuts and washers were removed, **(with horizontal reinforcement webbing on the extension facing out and on the top)**, reinstall nuts and washers once grommets are matched to bolts.
4. Match the next set of grommets to the bolts in middle rigid panel, **add standup brackets, installed inside the extensions with twisted end down**, mounted to the top bolts on the middle rigid and reinstall nuts and washers. (It may be necessary to install the nut without the washer on the standup bracket and tighten to compress grommet before the washer is installed).
5. Install nuts and bolts (5/16 x 1) to the top of the standup brackets and the top grommet in the extension.
6. Match next set of grommets to the other side panel install nuts and washers
7. The upper ends of the extensions are attached on 2 sides of the reinforcement beam (see picture below) that runs the upper length of the hopper sides using 5/16 x 11/2" lag screws. Hold the end of the extension up to the hopper side so as to remove all slack from extension then pull the end back (if front extension, forward if rear extension) until upper-end grommet is pulled 1/4 to 3/8 of an Inch away from hopper side, (this is so that when the lag screw is tightened the extension has some tension on it when the hopper is open). Mark and pre drill (7/32 drill) this location and install lag screw with washer and tighten until snug, (Don't over tighten lag screws) Then mark and pre drill lower - end grommet, install lag screw with washer and tighten. Follow this process for the opposite end of extension.

**Retighten all hardware locations!!!**

8. The grain sample slide channel needs to be relocated or removed. (see picture below) To relocate, remove mounting bolt and move channel forward and the bottom end towards the outside of the combine, this will put the new mounting hole (11/32 drill), about 5 3/4 inch up from the original hole and on the outer edge of the channel bottom, this allows the front of the folding hopper with extension to fold down unobstructed.

*Lag Screw Locations inside Panel*



*Sample Slide Relocation*



*For Further Installation Help Call Gilles (765) 348-9201*

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There have been occasions where adding extensions to the Power folding grain tank have caused the power fold to open too slowly. This can be resolved by adding a gas strut to the left rear folding arm as pictured below. You can use JD part # AXE 17977, which is the same gas strut that helps raise the clean grain auger in the grain tank for this purpose.

### **Install Gas strut with rod end down.**

If stud balls are not already install in gas strut, install the stud balls in the Gas strut ends by pulling wire pins from the strut ends, installing the stud balls then reinstalling the wire pins.

Drill a 5/16" or slightly bigger hole in the Auger cover bracket between the top edge and first slotted hole and install the rod end nut.

Hold the other end of the strut to the folding arm and mark the location for the top hole in the folding arm.

Drill a 5/16 or slightly bigger hole in the folding arm.

Before installing the top end of the strut, it may be necessary to turn around the top bolt at the base of the folding arm for strut clearance when installed.

Install the top end of the strut and install nut.



**For kit installation on 700 S series Combines**, there is a change in the installation that you need to be aware of. Where the vinyl is attached to the side panel the top lag screw location in all 4 locations needs to be drilled all the way through the side with a 5/16 drill bit and the lag screw replaced with a 5/16x4" bolt, washers and nut.

The lower lag screw location needs a smaller pilot hole, 1/8 drill bit, then the lag screw is tightened just enough to hold the vinyl to the side, don't over tighten and strip out the hole!!

**On both 600 and 700 S series Combines** I've found that the factory has often over tightened the control rod that runs from the right front folding arm to the tank auger lift mechanism as a result there is often excessive slack in the right front corner of the extension. This is resolved by loosening the control rod adjusting bolt so that there is no tension on the rod when open.

**There has been the odd occasion in windy conditions** and harvesting very dry grain/corn that grain can spill between the extension vinyl and the factory vinyl corners, usually from one of the front corners. This can be resolved by drilling a small hole (1/4inch) through both the extension vinyl and midway in the factory vinyl corner just above the clear plastic window and use a 1/4 bolt, washers and nut to hold the 2 layers of vinyl together. A zip tie and 2 small holes can also be used to hold the 2 layers of vinyl together