Smart Sifter Coupler Installation Instructions

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We have made the following update to the installation instructions for the horizontal shaft couplers that attach to the gearboxes below our Smart Sifter units. All new couplers for the 1.00" diameter shaft will now be provided with ¼-28 Torx screws in order to be able to more accurately tighten the fasteners to the recommended torque specifications.

Once the horizontal guard assembly, shaft, and old couplers are removed, clean the ends of the 1.00" shaft of any corrosion or grease that may be on the shaft. Repeat the cleaning procedure on the horizontal shafts at the gearboxes in the same manner.

Remove the new couplers from their containers, loosen the Torx screws, and wipe away any protective coating or oil that may be in the bore of the couplers. Once you have the shaft and couplers clean, you will be ready to assemble the shaft assembly.

At this time you can assemble the couplers and the shaft to the gearboxes. Do not forget to slip the horizontal guard assembly over the shaft BEFORE you put the couplers into position. Do NOT tighten the Torx screws on the couplers at this time. You are only using the couplers to hold the shaft in place temporarily so that the Loctite 680 retaining compound can be applied.

Make sure the weight buckets are aligned properly on the Smart Sifter. The buckets must ALWAYS be pointed in the same direction. The weight buckets can be pointed east, west, north, or south, but NEVER toward each other.

Take the package of Loctite 680 out of the bag, remove the cap, and cut the tip off the end of the container so the compound can be applied. Be sure to follow the manufacturer's safety instructions for the use of the Loctite 680 retaining compound.

While supporting one end of the 1.00" horizontal shaft, slide the new coupler back toward the center of the horizontal shaft far enough to allow you to place a bead of the retaining compound the length of the coupler on top the horizontal gearbox shaft and the

1.00" shaft. Then slide the coupler into position and rotate coupler 2 full revolutions to spread the compound evenly between the shafts and the coupler. Make sure the coupler is centered over the shaft ends and then tighten the (8) Torx screws until they are snug. One at a time, remove the Torx screws and place red Loctite on the threads, then reinstall the screw and tighten again. Once all (8) Torx screws are coated with Loctite, tighten them to a torque value of 175 inch pounds. Alternate tightening the fasteners from side to side as you bring them to final torque.

Repeat the coupler installation & tightening procedure at the opposite end of the horizontal shaft. Wipe away any excess retaining compound at the ends of the couplers with a paper towel and discard the towel in a trash receptacle.

Once this is complete you can slide the ends of the horizontal shaft guards back over the gearbox snout at each end and tighten the clamps. Your Smart Sifter should now be ready to place back into production.

Should you need to remove the couplers from the shaft at a later date, loosen the (8) Torx screws, slip a large flat blade screwdriver into the joint between the two halves of the coupler, and give the screwdriver a tap with a small hammer. The coupler will easily spread apart and allow you to slide the coupler back away from the end of the shaft.



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