

DAKOTA™ 440 MIXER INSTALLATION AND USAGE INSTRUCTIONS

Form No.16926

NOTE: Prior to starting the procedure, read and understand these instructions thoroughly. Save these instructions for future reference.

INSTALLING DOOR GAUGE

1. Remove the bolt and lock nut securing the door to the hydraulic cylinder; then slide the door up and out of the channels.



2. Place the pointer arm on top of the side support and secure with two 1/4 in. bolts and nuts. Place the assembly on the top of the center door support and mark the position of the two mounting holes. Using a long 3/8 in. drill bit, drill the two holes in the center door support.

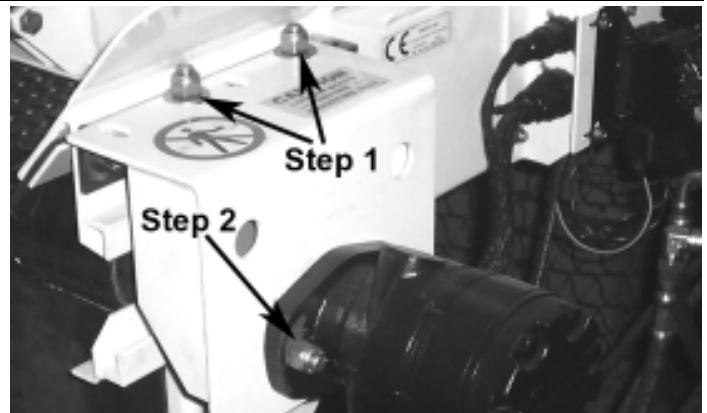
NOTE: Whenever instructed to drill a hole throughout these instructions, always use a center punch to mark the center of the hole prior to drilling.

3. Place the assembly into position on the door and secure with two 3/8 in. bolts and nuts; tighten securely. Slide the door back into the channels and secure the door to the hydraulic cylinder with the existing bolt and lock nut.

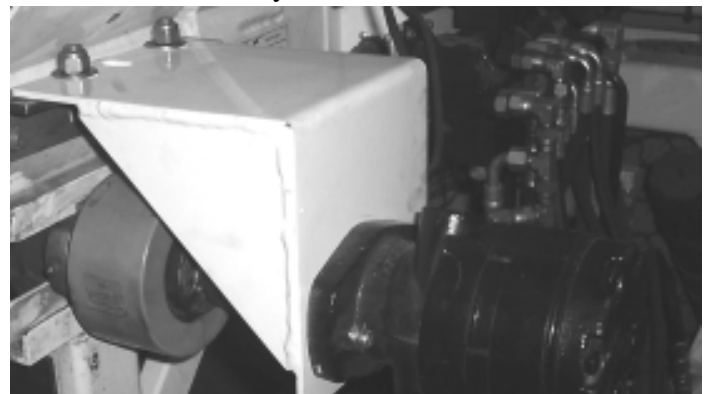


DRIVE MOTOR

1. Loosen the set screw securing the drive motor to the shaft coupling; then remove the two bolts, washers, and nuts securing the motor mounting bracket to the hopper. Slide the motor assembly off the front roller.
2. Remove the two bolts and nuts securing the drive motor to the bracket; then separate the bracket from the motor.

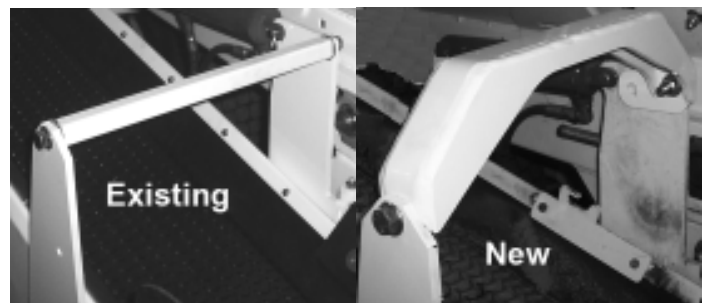


3. Place the drive motor into the new bracket and secure with existing hardware.
4. Place the shaft extension onto the end of the front roller; then slide the motor assembly into position making sure the drive motor key aligns with the keyway in the shaft extension. Secure the mounting bracket to the hopper with existing hardware. Tighten securely; then tighten the two set screws of the shaft extension securely.

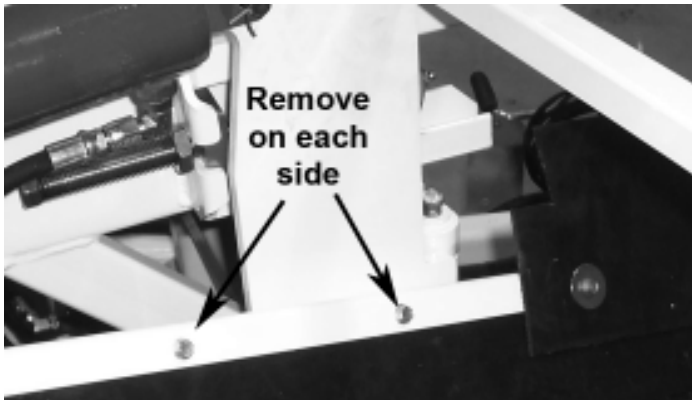


SIDE CONVEYOR

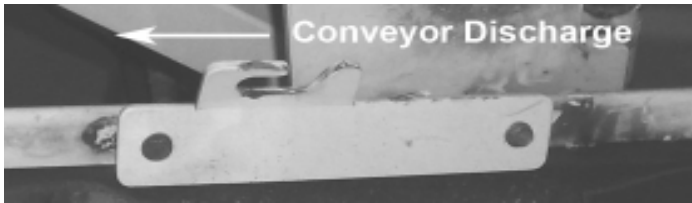
1. Remove and replace the existing upper side conveyor support. Use new 1/2 in. bolts and nuts. Tighten securely.



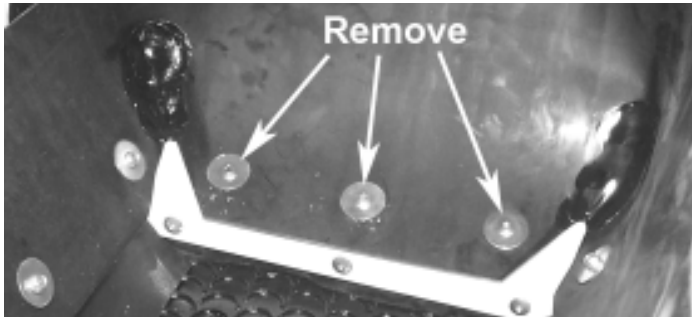
2. On each side of the side conveyor, remove the first and second belting bolts; then place the mixer upper mounting brackets into position over the existing holes and secure with existing bolts.



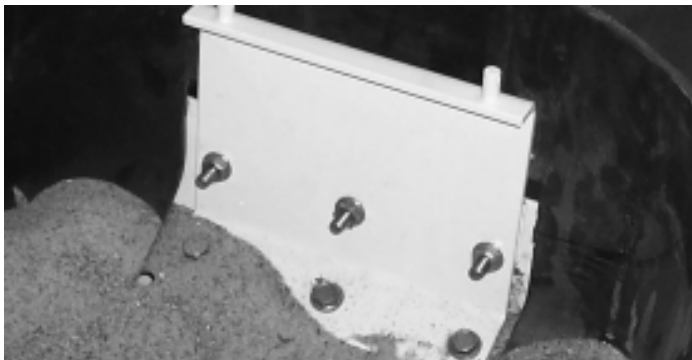
NOTE: The notched end of each upper bracket must be positioned on the discharge end of the conveyor.



3. Grind and then remove the three rivets securing the belting at the base of the side conveyor.

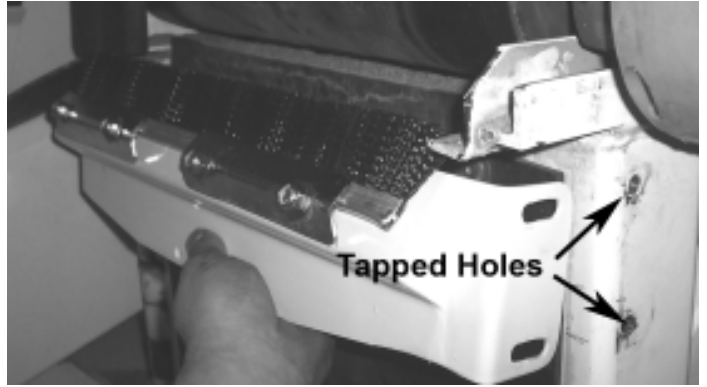


4. Center the lower mixer mounting bracket at the base of the side conveyor. On the belting, mark the perimeter of the bracket where it makes contact. Remove the bracket; then using a sharp utility knife, cut and remove the belting where the bracket is to be placed. Place the bracket back into position making sure to match the contour of the bracket with the contour of the base. Mark the location of the six mounting holes; then using a 3/8 in. drill bit, drill the six holes. Secure the lower mixer mounting bracket with six 3/8 in. flange head bolts and nuts. Tighten securely.



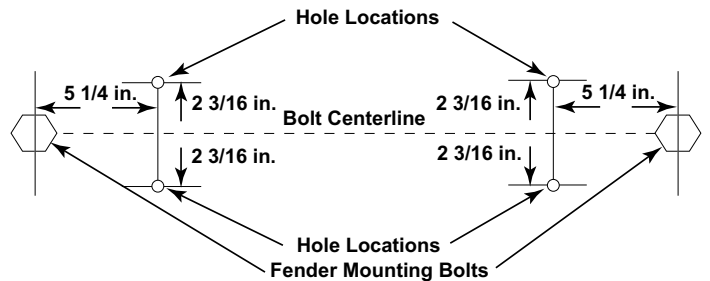
CONVEYOR WIPER

1. Remove the upper nut securing the conveyor hinge to the frame. Place the wiper onto the end of the bolt, level, and mark the position of the two left-hand mounting holes. Using a 5/16 in. drill bit, drill the two holes through the outside of the square tube. Using a 3/8x16 tap, thread the two holes.
2. Place the wiper back into position. Secure the right-hand side with the upper nut of the conveyor hinge; secure the left-hand side with two 3/8 in. bolts.



STORAGE CRADLE

1. Check the clearance between the outside edge of the left-hand fender and the four inch square tube of the frame. At least 3/8 in. must be present. If not, slightly loosen the two bolts securing the fender to the frame, pry the fender outward until proper clearance is present, and tighten the bolts.
2. Using the the fender mounting bolts as a reference and the following illustration as a guide, mark the location of the four mounting holes that are to be drilled; then using a 3/8 in. drill bit, drill the four holes.



3. Place the storage cradle into position and secure through the fender to the frame with two U-bolts and four nuts.



NOTE: If desired, the storage cradle may be attached directly to the frame. Simply remove the fender from the left-hand side of the Turf Tender; then place the storage cradle into position on the frame and secure with two U-bolts and four nuts.
HOPPER

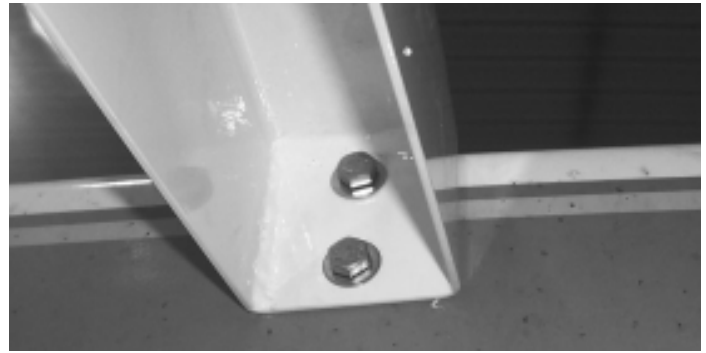
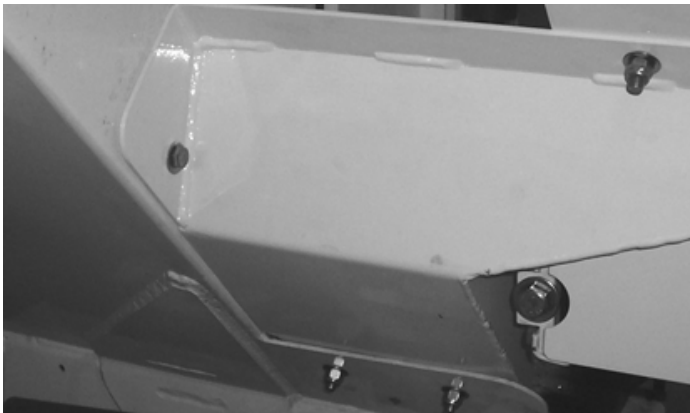
1. Place the supports into position on the hopper; then secure each of the four supports with 3/8 in. bolts and nuts. Tighten securely.

NOTE: Installation of the mixer hopper requires a minimum of three people.

CAUTION

Be sure to have the required amount of people to prevent personal injury and damage to the mixing hopper.

2. Lift the hopper into position on the front of the Turf Tender. Allow the hopper to center itself on the angled extensions of the main conveyor. While firmly supporting the hopper and making sure it is level, mark the position of all holes that need to be drilled into the hopper and the angled extensions.
3. Remove the hopper: then drill each of the 3/8 in. holes.
4. Lift the hopper back into position and secure with 3/8 in. bolts and nuts.



DOOR GAUGE

1. Place the arm extension into position on the pointer arm and secure with a shoulder bolt and lock nut.



2. From the front, on the left side of the mixer hopper, slide the gauge rod into the first bearing, install two lock collars onto the rod, and continue to slide the rod through the second bearing and into the arm extension. Slide the pointer onto the end of the rod.



3. With the door fully closed and pointer indicating 0, tighten the set screws on arm extension and pointer. Slide a lock collar up against each of the two bearings; then tighten the set screws.



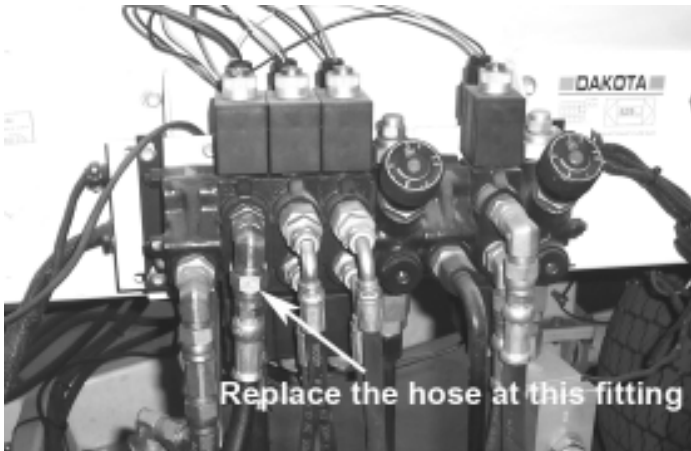
HYDRAULIC HOSE INSTALLATION

CAUTION

Be sure to keep all hose ends and connections clean. Contamination of the hydraulic system may cause failure of components on the Turf Tender.

Route the new hoses for the mixer along the frame next to the existing hoses and over to the valve bank area. Once the hoses have been routed properly and installed, use the included cable ties to keep the hoses secure.

1. Remove the existing hose routed to the front, upper valve bank fitting. To this fitting, connect the hose connected to the female quick coupler for the mixer. Tighten securely.



2. Connect the hose from the male quick coupler to the hose previously removed from the valve bank. Tighten securely.
3. Secure all hoses with cable ties.

CONTROL BOX

1. Following the same routing as the existing power cord, route the power cord from the battery over to the existing control box location. Make sure the cord does not contact any hot or moving parts and will not be pinched under the fender. Leave some slack in the cord at the control box end so that the cord will not pull loose if the control box shifts or moves.

USAGE INSTRUCTIONS

1. Remove the mixer from the cradle and place into position on the side conveyor. Lock in position with the two washers and cotter pins.
2. Clean the quick coupler fittings of the mixer; then connect the hose quick couplers to the mixer drive motor.
3. Set the mixer door at the desired door height and secure with the knob; then fill the hoppers.



2. Using cable ties, attach the cord to the tractor in several places. Make sure the cord will not come loose and move into a position to become pinched or cut.
3. Attach the red wire eyelet to the positive terminal and the black wire eyelet to the negative terminal on the tractor battery.
4. Place the control box into position behind the existing control box and secure the two control box plates with 1/4 in. bolts and nuts.



5. Route the new wiring harness along the existing wiring harness and up to the valve bank area. Connect the wiring harness to the mixer conveyor motor and the vibrator. Route all wiring away from all moving components and secure with cable ties.

NOTE: As a starting point, the mixer door should be open approximately 3/8 in. and the main door should be open approximately 3 1/4 in. When both conveyors (main conveyor of the Turf Tender and mixer conveyor) are running full speed and the doors are set accordingly, the resultant ratio will be approximately 90/10. Be sure to test your output to determine if it is within the desired specification. Adjust conveyor speeds or door heights accordingly.

STORAGE

If use of the mixer is not desired, the mixer should be placed in the storage cradle. Be sure to secure the mixer with the washers and cotter pins. The quick coupler fittings previously connected to the mixer must be connected together. The side conveyor will not operate if the fittings are not connected. Using a tarp strap, secure the hoses to the frame of the Turf Tender.