Replacing an Alliance Gear Reducer
Part No: 5964

It is very important that the gear reducer is installed correctly onto the motor. The gear reducer must be installed so that it is square to the motors base. This will allow the line shaft to install into the gear reducer properly. It would be best to assemble the gear reducer onto the motor on a level surface. When attaching the new gear reducer, use a level to ensure the gear reducer is level also. This should ensure that the bore of the gear reducer is square to the motor. After the gear reducer is attached to the motor it is also very important to make sure the drive shaft will align properly with the motor assembly. Please make sure each unit is square and level before replacing any shafts or shaft guards.

To remove the old Gear Reducer:
- Remove the expanding bolt from the top shelf of your Alliance Mixing Machine.
- Remove the shafts and shaft guards from the machine.
- Remove the thumb screws that secure the Motor Assembly (motor, gear reducer, and motor mount) to the machine.
- Remove the Motor Assembly from the machine. (It is easier to repair the gear reducer with the motor removed.)
- Loosen and remove the four bolts that secure the gear reducer to the motor.
- Carefully slide the gear reducer away from the motor. If the gear reducer does not easily separate from the motor, use a long handled screw driver on each side to help pry the gear reducer from the motor. Take care to not damage the motor as you will need to reuse it.
- Once the gear reducer is separated from the motor you may discard the old gear reducer.
- Be sure to keep the motor shaft key that is in the shaft of the motor, and the bolts. You will need these when you install the new gear reducer.

To install the new Gear Reducer:
(Note it is easier to assemble the gear reducer and motor while the motor is removed from the machine.)
- Begin on a level surface, place the motor shaft key in the channel in the motor shaft.
- Slide the new gear reducer onto the motor shaft, aligning the motor shaft, key (into the key slot), and gear reducer as shown.
- Using a level, level the gear reducer before securing it to the motor using the original four bolts.
- Install the motor assembly in the Alliance Mixing Machine using the thumb screws.
- Make sure the mixing machine is square and level, and adjust the motor alignment as described below.
- Replace the drive shafts, shaft guards, and expanding bolt as needed.

To align the motor and gear reducer:
- Begin by ensuring that the floor is level across the length of the machine.
- If the drive shaft does not smoothly drop into the gear reducer, realignment is necessary.
- To do so, remove the drive shaft, then partially unscrew the two thumb screws located in each foot assembly.
- Push or pull the upper mixing unit until the shaft aligns with the gear box.
- While holding the machine in place, retighten the thumb screws on the right and on the left.