

Flat Plate Maintenance Procedure

1. Check date on plate & motor--match against warranty
2. Ask for service record. Warranties depend on annual professional inspection. At this point tell customer if this problem is under warranty or a billable service call
3. Check unit for neglect--no grease on teeth or missing parts
4. Inspect piling alignments for anything that will put extra stress on the gear. This stress is analagous to torque.
5. Check weight being lifted to rated capacity

The common reasons that cause plates to squeal:

1. Lack of grease
2. Misalignment
3. Overweight
4. The back collar holding bull gear in place has come loose. Several things over time can loosen this collar. Sudden impact to gear, overload, out of alignment, etc.
Check with hand over back of bull gear to see if it moves. If there is Significant, front to back movement in the Bull Gear, the plate has experienced "Shock Load" or is acting as a bearing. This will cause the plate to turn in an oval pattern, over time creating misalignment. Noise, binding, or pre-mature wear will develop, particularly while going down if gear is turning and engaging the side of block set. The center sleeve, going through the Bull Gear, can be realigned. With the load off the lift, and the Bull Gear pulled back, using a vice or quick grip, loosen 3/8 set screw, and from the back of plate slide sleeve forward until back collar is flush with plate collar.

Re-tightening the collar will correct problem except if this condition has existed for a long period of time. If the hole in the plate is worn excessive out of round, then tightening the collar will not correct problem and new plate is required.

5. If bull gear is fine (no wobble) and problem is overload, take pressure off plate by using larger drive pulley (12 inch) or smaller motor pulley (2 inch instead of 2.6). This is actually very effective even when something is misaligned.
6. AMS has a special lubricant that can be applied to bronze bearing and worm that also relieves friction, but this alone is not a solution.
7. Plates that have been squealing for some time in one direction (usually down) can be serviced and tightened. This may correct the problem or it may continue because of the damage to the plate collar--much like a car with the front end out of alignment. If run in this condition for a long period of time the rubber on the tires disappears and cannot be replaced. A possible solution to a plate in this condition would be to reverse the cable pull which means up is down and down is up. Sometimes this transfers the torque from the worn part of the plate sleeve.
8. Plates under warranty can be sent back to the factory for repair or replacement at manufacturer's option. Not under warranty customer has these two options at their expense.