

USE AND CARE GUIDE

For best results using your Minimax Aircraft Tug please read and understand the following:

- Aircraft must not exceed 4,000 lbs. gross weight. (Unless tug specifically engineered by Minimax)
- Always make sure the tires on your aircraft are aired to the manufacturer's specifications. **Low aircraft tire pressure is the number one reason for poor towing performance.**
- Given maximum aircraft gross weight, 2% (2.5" rise in 10' run) grade is maximum towing capacity using our Milwaukee 28v cordless power system.
- Our tractor tire driven tugs are most effective "pushing" your aircraft due to simple mechanical advantage. This is a benefit as most aircraft are hangared tail first up-slope to the hangar. Pulling your plane uphill will require extra down pressure on the handle. As our tugs are light weight, some force may be required to maintain tire traction while towing.
- Always keep your battery charged. New Lilon battery technologies have improved that batteries are unaffected by overcharging and will accept 2000 charges. A fully charged battery will provide enough power to move your aircraft (*depending on model*) on a hard level surface the length of a football field!
- Maintain tug tire pressure as noted on tires or instructions at all times. Tractor tire driven tugs are NOT for use on turf unless equipped with snow tires or chains. Turf must be hard, level and dry.
- Our tugs are designed for use on hard level surfaces such as asphalt or concrete. Our Dewalt 20v Lilon system will provide plenty of power as such. Grades up to 2% may require our Milwaukee 28v cordless power system depending upon the weight of your aircraft.
- Curbs or door tracks up to 1" high may require ramps at main wheel crossing points. Please read our [Performance Checklist](#) to determine if our product is suitable for your particular towing needs. Cracks in the surface wider than 3" should be filled in with like material. Gritty and sandy surfaces should be swept clean for adequate tire traction. Tires will roughen after a few uses and provide better traction as they wear.
- Our Milwaukee 28v cordless power system will provide ample power crossing curbs as high as 1" at 90 degrees ([ramps may be required](#)) with a gradient not higher than 2%.
- Ours and all tugs of this design category are considered "assist" tugs and are not designed for continuous sharp turn towing as they do not have transaxles. Lifting tug to adjust nose wheel position in turns may be required. Our tugs will provide on average 6 or more cycles (1 cycle= 50') of continuous towing on a hard, level surface on one battery charge depending on the weight of your aircraft.
- Please remember operating your Aircraft tug on inclines can pose a risk of serious personal injury and/or property damage! Always use good judgment while operating your tug, NEVER leave attached to aircraft while not in use.
- On drive roller style tugs, keep the chain and sprockets free from grit and grime and oiled with a good quality chain lube. Failure to keep chain and sprockets lubricated will result in premature chain breakage. Lubricate bushings with 20 weight non detergent oil. Check grease in gear box after 10 hours continuous use. Use grease zirc on underside to re-fill with "VALVOLINE-Crimson" HD grease or equivalent. NEVER use low viscosity lubricants such as WD40 on drive chain, bearings, or any moving parts. Doing so will void your warranty.
- The transmission on our two-wheeled tug is filled with synthetic gear oil and should not require any maintenance.
- The transmission drive shaft receiver socket is packed with grease. Re-grease every 10 hours of continuous use.
- Clean tug with products such as ArmorAll multi-purpose cleaner and keep dry for long service life.

Understanding these operational tips will make moving your aircraft easy and enjoyable.