

PlaneSkate™

The Original Aircraft Flat Tire Dolly



15K


Instruction and Maintenance Manual

West Metro Aviation, LLC.
1313 County Road 134
Buffalo, MN 55362

Phone 763-682-1516 (office) 612-812-3873 (cell)

Safety

The purpose of this safety section of this manual is to inform operators and maintenance personnel of the precautions to be taken while operating or servicing the machine. The following are just a few basic guidelines to follow up, but as with any type of machinery good judgment and a safe attitude should be applied at all times.

1. Always wear safety clothing, including eye protection and protective footwear, while operating or servicing the machine.
2. Keep all body parts and foreign objects away from the wheels and the winch while operating or servicing the machine. Be aware there are several pinch points located on the machine. 
3. To reduce the risk of injury to operator or bystanders and damage to aircraft, always inspect strap, hook and clip, and axle strap for any signs of wear or damage prior to use.
4. The machine should be operated and maintained by properly trained, authorized personnel.
5. Replacement parts should have the same specification and operation as the original parts on the machine.
6. DO NOT – tow the aircraft on the PlaneSkate™ faster than 5mph/8kph.
7. DO NOT – make sharp turns when towing the aircraft on the PlaneSkate™.
8. DO NOT – tow the aircraft on the PlaneSkate™ over grass or soft surfaces.
9. DO NOT – tow the aircraft on the PlaneSkate™ over concrete hanger floor lips or bumps greater than 1 inch.
10. DO NOT – tow the aircraft on the PlaneSkate™ over large cracks or failed pavement.

MAXIMUM AIRCRAFT WEIGHT: 15,000 lbs. / 6803.0 kg
THE PLANESKATE™ MAXIMUM CAPACITY: 6000 lbs. / 2721 kg

NOTE: These safety rules are for your benefit to help prevent injury to yourself and/or your coworkers. Review all set up and operating procedures, whether covered or not, in this manual to help ensure safe operation of the machine.

INSTRUCTIONS FOR LOADING THE 15K PLANESKATE™

GENERAL NOTES:

There are three methods for loading the aircraft on to the PlaneSkate™. Select the appropriate method based on the aircraft weight.

- ✓ **Method 1** – for aircraft weighing less than 2,000 lbs./907.0 kg.
- ✓ **Method 2 or 3** – for aircraft weighing between 2,000 lbs to 15,000 lbs (907.0 to 6,803 kg)

The final location of the distressed gear on the PlaneSkate™ is when it is positioned (front to back) between the second and third caster. To accomplish this, blocks of wood or chocks between the tire and front end of the PlaneSkate™ may be required.

METHOD 1 – for aircraft weighing less than 2,000 lbs./907.0 kg

1. Roll the ramp of the PlaneSkate™ up to the front of the flat tire. Chock the front wheels of the PlaneSkate™.
2. Wrap the axle strap around the gear leg. Be cautious not to damage hardware mounted to the strut assembly. (See figure 1)
3. Attach the winch strap hook to the axle strap.
4. Operate the winch carefully to tighten the winch cable.
5. Continue to use the winch to pull the aircraft on to the PlaneSkate™. Stop winching when the position of the gear is approximately centered (front-to-rear) on the PlaneSkate™ tray.
6. Using extra ratchet straps secure the strut to the PlaneSkate™.



Figure 1

METHOD 2:

1. Roll the ramp of the PlaneSkate™ up to the front of the flat tire. Chock the front wheels of the PlaneSkate™.
2. Attach the hook end of the winch strap to the PlaneSkate™ along the area shown in *figure 2*.
3. Take the length of strap from the hooked end and lay it flat on the ground next to the flat tire. Continue wrapping the strap behind the tire and follow it up and over the tire. (*figure 3*)
4. Operate the winch to tighten the strap. Once the strap is tight continue to operate the winch to pull the aircraft onto the PlaneSkate™ and approximately position the gear centered (front to rear) on the PlaneSkate™ tray. (*figure 4*)



Figure 2

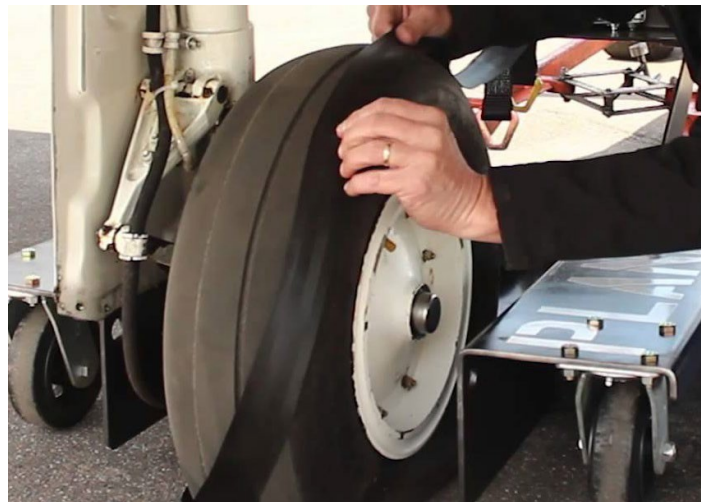


Figure 3



Figure 4

METHOD 3:

With this method a tug is used to assist in loading the aircraft onto the PlaneSkate™. A crew of two is ideal. See the [Amended Procedure](#) notes below for loading aircraft with one person.

1. Roll the ramp of the PlaneSkate™ up to the front of the flat tire. Chalk the front wheels of the PlaneSkate™.
2. Wrap the axle strap around the gear leg. Be cautious not to damage hardware mounted to the strut assembly.
3. Attach the winch strap to the axle strap. (See Figure 1, Method 1)
4. Tighten the winch strap.
5. Coordinate moving the aircraft forward with the tug while a separate operator is using the winch to keep the winch strap tight. Approximately position the gear centered front to rear on the PlaneSkate™ tray.

AMENDED PROCEDURE:

With one operator –

1. Roll the ramp of the PlaneSkate™ up to the front of the flat tire. Chock the front wheels of the PlaneSkate™.
2. Wrap the axle strap around the gear leg. Be cautious not to damage hardware mounted to the strut assembly.
3. Using the tug move the aircraft onto the PlaneSkate™. Approximately position the gear centered (front-to-rear) on the PlaneSkate™ tray.
4. Attach the winch strap hook on to the axle strap and tighten the winch strap to secure the aircraft to the PlaneSkate™.

TOWING WITH THE 15K PLANESKATE™

Towing must always be done from the nose of the aircraft. Under no circumstance should you try to move the aircraft by pulling or pushing on the PlaneSkate™ while it is attached to the main landing gear! The PlaneSkate™ is equipped with holes to attach a tow bar. If there is clearance above the winch, you may use the aircraft tow points to tow the aircraft once it is secured to the PlaneSkate™.

1. Always start out towing the aircraft with great caution and slowly increase your speed up to 5mph/8kph. Never exceed this limit.
2. While towing, do not make sharp turns. As you make a gentle turn, make certain the aircraft is fully secured to the PlaneSkate™ and that it is following the intended path.
3. While recovering the aircraft, do not tow over grass or soft surfaces.
4. Plan and decide the best path to take. You cannot tow the aircraft over large cracks or failed pavement.
5. Be aware that you cannot go over concrete hanger floor lips or bumps greater than 1 inch.

REMOVING THE AIRCRAFT FROM THE 15K PLANESKATE™

The preferred method of removing the aircraft from the PlaneSkate™ is to jack the aircraft wing to clear the PlaneSkate™ and pull the PlaneSkate™ out.

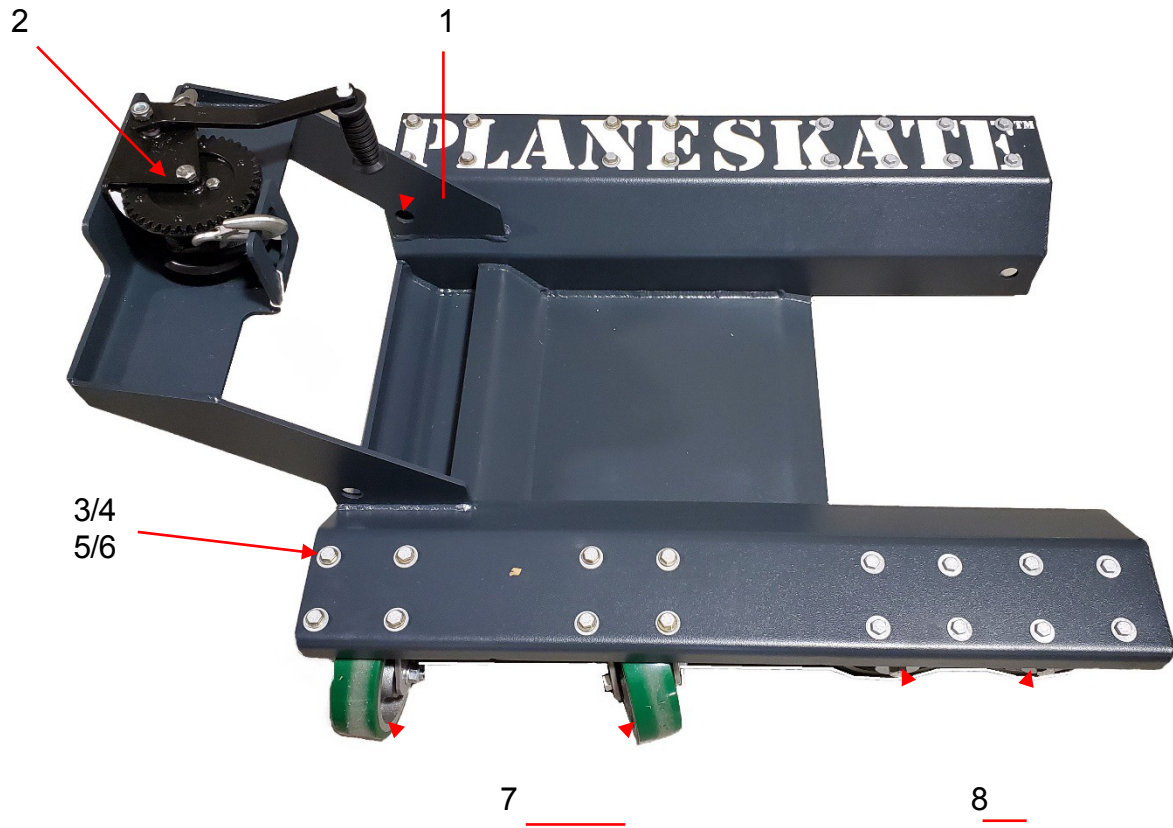
An alternate method is to chock the wheels on the aircraft and attach the tug and tow bar to the PlaneSkate™ to pull the PlaneSkate™ away from the aircraft.

OR

You can chock the wheels on the PlaneSkate™ then using the tug, push the aircraft off the PlaneSkate™.

If you have questions, concerns, or comments about the use of the PlaneSkate™.

Contact: [West Metro Aviation](#) in Buffalo, Minnesota.
Email: info@westmetroaviation.com
Phone: 763-682-1516



1. Tow Bar Attach Points
2. 1500 lb. Capacity Winch
3. Bolts 3/8"-16x1-1/4"
4. Flat Washers 3/8"
5. Lock Washers 3/8"
6. Nuts 3/8"-16
7. (4) Swivel Casters S-WH-6DB
8. (4) Rigid Casters R-WH-6DB
9. Axle Strap

Maintenance and Inspection



- The swivel wheels have a grease zerk. They require regular monthly service depending on use.



- Winch strap should be inspected after every use to ensure no damage had occurred during the previous use.



- Axle strap should be replaced if there are any cuts, abrasions, or fraying of any kind.