



SAFE MOUNTAIN DRIVING



Winter mountain driving presents unique problems and situations that require greater attention to driving skills and planning for a safe winter trip

Here are some necessary precautions to be aware of before making your next mountain visit to Steward Observatory telescope site.

- Loaded vehicles and mountain roads are the perfect recipe for tough handling. **SLOW DOWN!**
- Use lower gears when driving down the mountain. This keeps your brakes from over heating and possibly failing.
- Watch for animals crossing the road.
- Be prepared and carry winter supplies in your vehicle such as, blankets, shovel, bag of kitty litter, water, food, and a flashlight.
- Be aware, during the winter the road surface can become extremely hazardous , it can be covered in “black” ice or packed snow. Shady spots can hide ice and are very slippery.
- Make sure you have the right type of vehicle for mountain and snow driving.
- If you are driving to Mt. Lemmon or Kitt Peak, chains are required with two-wheeled vehicles. Make sure the chains are installed correctly, (see below for instructions on how to install tire chains).
- Rental cars do not come with tire chains.
- If traveling to Mt. Graham, **BOTH** four-wheel drive vehicle and chains are required. **No two-wheel drive vehicles to Mt. Graham are allowed.** Upon arrival to Mt. Graham, log in and obtain a radio at base camp.
- Travel after dark is **strongly discouraged**. If you leave the telescope site on a weekend and/or after hours **tell someone in the facility you are leaving**.
- Radio usage is required for Mt. Graham and for communicating with snow plow operators.
- Be aware that the snow plowing operation produces “soft” shoulders on both sides of the road surface. The road may seem wider because of the soft shoulders. To avoid getting stuck, stay “centered” on the road surface and be alert to oncoming traffic.
- During snow plowing operations, when you leave the MGIO site or when you are heading to the site and pass through the gate at the end of the paved road, please advise all MGIO personnel via radio that you are traveling on the unpaved road.
- If you should come upon a snow plow, **STOP**. Give the snow plow plenty of room (>100 feet) until you have made **POSITIVE** contact with the plow driver. The driver will wave you through when the plow has been stopped and safely secured.
- Anyone driving recklessly or endangering other employees will be reported.

HOW TO INSTALL TIRE CHAINS:

1. Determine whether your car has front-wheel or rear-wheel drive. Tire chains always go on the driving wheels.
2. Lay the chains flat on the ground so each side is parallel. Make sure there aren't any twists in the links.
3. Drape the chains over each back tire, keeping the "speed hook" (or "J hook") fastener on the inside. The other side of the chains has a lever fastener with a "keeper" link.
4. Make sure the smooth side of the cross member end hooks is lying against the tires.

5. Reach behind each tire and fasten the speed hooks by inserting the J hooks through the third link from the other end of the chain. Pull the slack toward the outside edge of the tire.
6. Pull your car forward several feet and pull the rest of the slack toward you. Insert the lever fasteners through the third links from the opposite ends of the outside chains and pivot the levers back on themselves, then fasten them under the keeper links.
7. Drive forward several feet, then pull all the slack out of the chains and refasten them as tightly as possible. There should be about the same number of loose links on each side of the chains.
8. Secure these extra links with zip ties, or remove them with bolt cutters.

Mountain driving requires a high level of concentration, respect for the terrain, and respect for your co-workers.

