

Customer Instructions for a Successful Deployment of North Star's RASSL (Globalstar) Tracker Collars

1. There can be as many as 3 different components on your collar – all of which are completely independent and have their own batteries and controllers: these are (1) the GPS/Globalstar terminal; (2) a VHF transmitter, and (3) a drop-off mechanism.

1a. If you ordered a **drop-off mechanism** with your collar, we will have programmed it with a calendar date for drop-off, and we ship them “armed” and ready to deploy. You can confirm this by looking for the blinking red LED under the cover (look carefully for a long time, as it only blinks every 10 seconds). If the LED is blinking any color OTHER than red, please call Blake Henke to remedy; or just place a strong magnet over the cover and wave it back and forth closely, and that should arm the unit. You want it blinking red before you deploy.

1b. If you ordered a VHF unit with your collar, you will see it attached to your collar with its own magnet attached and with a display area noting the EXACT frequency that it is outputting. Please make a note of this frequency for later reference. To turn ON the VHF unit, you will need to remove the magnet and listen for the VHF signal on your corresponding VHF receiver. The VHF transmitter unit should turn ON fairly quickly after you remove the magnet, but if it does not you will need to resolve a sticky magnetic switch. To do so, you will need to heat the VHF unit in your hand or with a blow dryer and/or slap it smartly against something hard with the magnet removed. **Please note:** you may want to test the VHF unit second, after first testing the Globalstar portion of the collar. If you are using a small receiver provided by North Star to test your collar in the field, you DEFINITELY want to test the Globalstar portion of the collar **first** and the VHF transmitter **second**. See below for more clarification.

1c. The most important part of your collar is the GPS/Globalstar portion, and this part is – unfortunately – not as easy to test as the others. It does not blink a colored LED nor does it emit a signal that you can hear. What you need to do to test the GPS/Globalstar component of your collar is to remove the magnet OUTSIDE in an open place away from any buildings, and leave the collar there for about 30 minutes with the antennas pointed upward toward the sky. If you can, you might want to hang the collar from a wood fence post or the branch of a tree, again with the antennas pointed upwards. Make sure you test the collar in the ROUND shape rather than laying it flat on the ground as the wires inside the collar can flex and bend when moving from the flat to the round shape, and you want to test your collar in the round since it will be on the animal that way. Please be sure that there are no buildings nearby nor heavy canopy (tree) cover. Also, be sure there is nothing metal in the vicinity, like a metal fence. After you have removed the magnet and left the collar OUTSIDE for 30 minutes, log into your account via www.sensorlink.biz and access your data. Your collar should have a new location from today on the www site. If it does, then the collar is ON and working properly. If you will be deploying

the collar soon, the best thing to do is to leave the collar outside and ON and deploy it as soon as you can. In other words, let it run outside until you can deploy. If you MUST turn it OFF again prior to deployment, bear in mind that the ONLY way to test this collar to be SURE it is ON is to turn it ON (by removing the magnet) outside and to check the www site 30 minutes later. [NOTE: an alternate procedure is described below, but the alternate method should ONLY be used in extreme cases.] If your collar does not report when you remove the magnet, chances are you have a sticky magnetic switch. To remedy this situation, you need to re-apply the magnet to the collar where the "magnet" sticker is located and hold it there for about 10-15 seconds. Then remove the magnet quickly and bang the collar enclosure smartly against something hard. Then leave the collar outside for 30 minutes with the antennas pointed upward and check the www site to see if the collar has reported. If so, you are fine to deploy. If not, please repeat the procedure up to 5 more times. If this does not resolve the matter, please contact North Star.

If you plan to deploy your collar in a remote area and have no way of accessing the www to verify that your collar is, in fact, turned ON when you deploy it, first try to pre-arrange a colleague that you can call to verify for you. You may be able to phone your colleague via cell phone or satellite phone 30 minutes after you have removed the magnet from your collar, and in this manner verify that the collar has turned ON and is ready to deploy.

If the above procedures are not possible, there is a final (though extreme) alternative. North Star can provide a small and quite simple receiver that will pick up the transmissions from our collars to the Globalstar satellites. To use this device, pull out the antenna and hold it over the TRANSMIT antenna on the top of the collar. [NOTE: there are 2 antennas on the top of the collar; one that receives the GPS signals – and this one is typically black or dark gray in color and encased in a plastic shell underneath the roxolite antenna cover; and the other is the transmit antenna – this one is usually smaller in appearance and has no plastic cover underneath the roxolite antenna cover.] Turn the sensitivity of the receiver up to the maximum setting and remove the magnet. [NOTE: this is a broad spectrum receiver, and it will pick up virtually anything that transmits a signal – so be sure that all VHF units are OFF, cell phones are OFF, and anything that transmits a signal is OFF when you try to use this device.] Take special note of the time when you remove the magnet on the collar, and within 2.5 minutes of removing the magnet, you should feel the unit vibrate and also see all of the lights light up on the front face of the unit. When it does this, you now KNOW that the collar is ON and that it just received a new GPS location and transmitted it to the Globalstar satellites. You can now safely deploy your collar. At this point, go ahead and test the VHF portion of your collar and make any other necessary preparations to deploy.

Let me say this in no uncertain terms for all to understand: under NO CIRCUMSTANCES should you deploy a collar on an animal without FIRST making sure it is turned ON and operating properly. This requires advanced testing of all components of the collar; and this ALSO requires that you VERIFY

that the collar (all parts of the collar) is ON and OPERATING when you deploy the collar. This is your responsibility as a field user of this technology. North Star is not responsible for collars that are deployed on animals that either were not tested prior to use OR were not verified to be ON when deployed. Believe me, we have had more than enough instances of collars being fitted to animals and the animals turned loose with nothing more than neck ornaments around their necks. If the collar does not turn ON, do not deploy it, PERIOD.