

# installation instructions

THIS PRODUCT IS FOR OFFROAD USE ONLY

# **WATCH THE INSTALLATION VIDEO AT TUBLISS.COM**



#### WHAT'S INCLUDED

- RED Inner-Liner with Rim Lock
- Black Inner-Bladder (packaged inside the RED Inner-Liner)
- Installation Guide Plate
- Rim Tape
- Rim Stickers

#### TOOLS NEEDED

- Drill and 11mm or 7/16" bit (a smaller 6mm or 1/4" bit may be needed for a pilot hole)
- Small tip knife (Xacto or pocket knife)
- 3 Tire irons (spoon type recommended)
- Soapy water in a squirt or spray bottle
- "Armor All" or equivalent type of tire dressing
- Valve stem core remover
- 15mm deep socket or wrench
- TUbliss Rim Guide Plate (supplied)
- Tire pump or air source capable of 110psi.

#### **QUICK TIPS BEFORE YOU BEGIN**

It's worth noting that TUbliss installation is rather simple, but because it is completely different than what you're used to, we STRONGLY urge you to take 10 minutes, watch the online video, and read these instructions completely so you understand the concepts and procedure of proper installation. The



10 minutes you invest now will spare you hours of frustration later. Do not take any 'shortcuts' during installation. THERE IS A REASON FOR EVERY STEP! LET US GUIDE YOU THROUGH! The video can be seen at: www.Tubliss.com

- We recommend installing TUbliss with new tires that have not been mounted for
  the reason that STOCK rim locks leave impressions at the inside bead area of a
  tire where the TUbliss must seal against and these impressions can cause leaks.
  HOWEVER on this same note, if a tire has initially been mounted with a TUbliss it
  CAN be remounted or turned around without any issues as the rim lock is above the
  sealing surface inside of the tire.
- First time installation will require either drilling a new hole in your rim or enlarging an existing one to 11mm or 7/16" for the new rim-lock / tire inflation valve.
- A warm tire is MUCH easier to install, we HIGHLY recommend letting the tire sit in the direct sunlight for 20 minutes if possible.
- MAKE SURE the edges of your tire spoons do NOT have any sharp edges as these
  can cut and damage the casing cords at the bead of the RED Inner-Liner during
  installation if too much force is used resulting in failure of the system.
- When using where even the slightest concern of a tire puncture might exist we strongly suggest using a "tubeless type" tire sealant such as SLIME, as it works excellent (much better as compared to standard inner tubes).
- Do not use tire machines to install a TUbliss Core or when changing tires with the TUbliss – they WILL damage the system.

## 1) RIM PREP

- **A.** Remove existing tire, tube, rim lock, and rim strip from wheel. Thoroughly clean inside of rim.
- **B.** CAREFULLY inspect the outer lip of the rim (SEE PIC A) for burrs, nicks or rough spots and if you find any:
- **C.** Sand smooth with a fine grit sand paper or scotch pad. Failure to fix the damaged areas of the rim may result in damage to, and failure of, the red inner liner to be installed in step 5.

# REMOVE NICKS AND BURRS

PIC. A

## 2) DRILL HOLE

- A. For first time installations, you will need to drill an 11mm or 7/16" hole (or open up an existing 8mm hole to 11mm). Failure to adhere to the orientation of the rim-lock and high pressure valve stem as shown in PIC B will likely cause the inner bladder to tear and fail as it is more prone to damage during tire changes.
- **B.** After the hole is drilled carefully inspect both holes and remove any burs or sharp edges with a file or sandpaper. Note that an 8mm hole MUST be used for the valve stem.
- C. If you end up with an extra hole that is not being used, we recommend placing one of the small 1"x 2" TUbliss stickers from the supplied sticker kit over the hole INSIDE the rim for extra support and covering it with the supplied rim strip tape. And also placing one on the outside of the rim to keep dirt and mud out of it.



# PAGE 2 3) RIM STRIP

- A. Apply two full wraps of the supplied rim tape around the inside of the rim. Firmly press it into the center of the rim and be sure to keep it centered so the spoke nipples are completely covered. Do not stretch it on to the rim as it will want to stretch back and move causing issues. The tape does not help seal, but is there to protect the inner bladder from the nipples.
- **B.** Carefully cut and remove the tape covering the rim lock and valve stem holes with a small knife. The purpose of the tape is to protect the inner-bladder from the spoke nipples. It does not function as a seal at all.

## 4) INNER BLADDER ALIGNMENT

**NOTE:** Lubing the outside of the RED inner liner with slippery tire dressing, like "Armor All" will help with its installation onto the rim and also aide in sealing. NOW is a good time to do this!

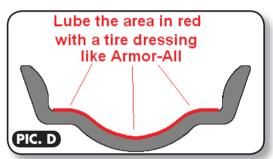
- A. Remove the black inner-bladder from inside of the RED inner-liner and check to make sure that the valve stem has a hex nut with a rubber washer tightened down under it against the base of the valve stem and bladder itself. These go inside the wheel. The small knurled nut goes on the outside of the rim to keep it from pulling back through during the installation process.
- B. Lay the rim on its side and center the red inner-liner on the outer edge of the rim lip and align the 11mm hole in the rim with the rim lock. Note: A five gallon bucket works great for keeping the wheel up and off the ground and also prevents damage to the disc and sprocket.
- **C**. Now position the inner-bladder so the gold valve stem aligns with the 8mm hole in the rim and fit it back into the RED inner liner. Be careful that the position of the valve stem does not move as you do this. At the rim lock route the inner-bladder around one side of a small triangular rubber piece on the rim lock stem (PIC. C).
- **D.** Double check that the stem and hole alignments are still okay after fully placing the inner-bladder into the RED inner-liner. AGAIN, PROPER ALIGNMENT IS CRITICAL.



# 5) INSTALL RED INNER LINER AND INNER BLADDER ON RIM

READ THIS STEP COMPLETELY BEFORE BEGINNING THE INSTALLATION.

- **A.** Lube the center of the rim with an "Armor All" type tire dressing" as shown in (PIC. D).
- **B.** Insert the rim lock and valve stems into their respective holes on the Rim.
- **C.** Tighten the rim lock bolt until the triangular rubber piece comes into contact with the rim and has slight tension on it.
- **D.** Secure the small knurled round nut onto the first ½" of threads of the gold inner-bladder valve stem so it will not pull back through the rim, do NOT tighten it against the rim.
- **E.** Starting at the rim lock, begin pulling the red inner liner onto the rim working your way around and finishing back at the rim lock. When it starts to get tight use a spoon-type tire iron to reach across BOTH beads see (PIC. E) pulling them together over the lip of the rim a couple inches at a time (small bites are best!!). Also make sure that 180 degrees from where you are prying it on that the liner is in the low center spot of the rim (this is the trick to making it easy). Also keep an eye on the inner bladder to make sure it does not bulge out and get caught on the rim as you pull the liner on, as this will cut and or damage it.





**NOTE:** If the Inner-Liner is not going onto the rim easily you need to re-lube it with the tire dressing and MAKE SURE it is FULLY in the recessed area of the rim OPPOSITE of where you are pulling it on with the tire spoons (KEEPING IT IN THE DROP CENTER OF THE RIM IS THE "TRICK" TO IT'S EASY INSTALLATION). **THIS SHOULD ONLY REQUIRE MINIMAL EFFORT. DO NOT FORCE IT ONTO THE RIM OR YOU WILL CAUSE DAMAGE TO THE RED INNER LINER'S SEAL AND OR CASING CORDS RESULTING IN LEAKS OR COMPLETE FAILURE OF THE SYSTEM.** 

## 6) TIRE INSTALLATION

- A. Place the tire between your feet with it leaning back against you and insert the supplied "Guide Plate" so it hangs from the back bead of the tire shown in (PIC. F). This plate will act like a "shoe horn" helping guide the rim down inside the tire.
- **B.** Spread the tire open and place the rim lock at the bottom against the guide plate (PIC. G). Then use the spoons to pry the tire open (working back and forth a couple inches at a time) While at the same time pushing the rim down into the tire. KEEPING CONSTANT DOWNFORCE ON THE RIM is the trick to making this go smooth. If you release pressure from the rim it will jump back out of the tire.
- **C.** When the rim is completely inside of the tire remove the guide plate.
- **D.** Starting opposite from the rim lock begin pulling the tires beads onto the rim and FINISH pulling the last of the tires bead onto the rim at the rim lock.
- **E.** Flip the wheel over and repeat the same procedure again. Start opposite the rim lock and FINISH pulling the last of the tires bead onto the rim at the rim locks location.
- **F.** Tighten the rims lock too so it is very SNUG before inflating. It is recommended to use a torque wrench to properly torque the rim lock nut to (11 foot pounds) or (15 Newton Meters).





## 7) TIRE INFLATION

- A. First inflate the Inner-bladder through the gold 8mm valve stem to 110 PSI. This will seat the tire's bead. Note: that the Inner-liner has a very small volume and a compressor can fill it quickly, so pay attention not to over inflate it.
- **B.** Second inflate the tire to 15psi through the rim lock valve. If the bead is not seating fully on the rim, it may be necessary to add air into the tire also and bounce the wheel in order to help it seat. If this doesn't work, deflate your tire and TUbliss, re-lube the bead with soapy water, and re-inflate. Also know that a warm tire will seat MUCH easier then a cold one, letting it set in direct sun light will help warm it even on a cool day.
- **C.** After it's seated, wait 5-10 minutes for trapped air to escape from the rim and check to make sure you have a good seal by pouring soapy water around the high pressure valve stem and the rim. If you see bubbles it is not fully sealed. Please refer to the "trouble shooting" section for help on how to correct it.
- **D.** Adjust the air in the tire to the desired operating pressure and install the valve caps. Tighten the small round knurled nut on the gold high pressure valve stem against the valve cap, do NOT tighten it against the rim.

**NOTE:** Failure to have a minimum of 100PSI in the inner liner may result in leaking or a flat tire. Always check pressure before every ride! Never inflate over 125 PSI.

### TIRE REMOVAL

REMEMBER: After TUbliss is installed on the rim, it stays on the rim It's neither necessary, nor recommended to remove it when changing tires.

- A. Remove the valve cores to deflate both the tire and TUbliss.
- B. Loosen the nuts on the valve stem and rim lock and back off to the last few threads.
- C. Using tire spoons start next to the rim lock and begin dismounting the tire bead working away from the rim lock and around the rim. The KEY to easy tire removal is making sure the tire is pushed well into the drop center of the rim 180 degrees opposite from where you are prying the bead off with the spoons. After one side is done, flip the wheel over and do the same on the other side.
- **D.** With both beads off the rim push the wheel down into the center of the tire and pull it through the side as shown in the photo (PIC. H).



- A. Squirt soapy water or an armor all type tire dressing around both sides of the RED inner liner where they sit against the rim.
- **B.** Starting 90° from the rim lock, (away from the valve stem) reach across BOTH beads of the Inner-Liner with a tire spoon, applying tension to pull on the red inner liner, while at the same time on the opposite side of the rim pinch the red liner together and push it into the drop center of the rim so you get more slack at the tire spoon.
- **C.** Now pry the red inner liner over the lip and off the rim working your way away from the rim lock. If the red inner liner is positioning correctly in the drop center of the rim opposite where you are removing it with the tire spoons, it will come off easily. Using too much force will damage the liner.

**NOTE:** ALWAYS inspect both beads on the full circumference of the RED inner liner for any damage to the rubber, frayed or cut casing cords. If any visible damage is found, do NOT use it again. Replacement parts can be purchased directly from the nuetech online store.



### TROUBLESHOOTING LEAKS

The quickest easiest way to check and make sure you have a good seal is by pouring soapy water around the gold high pressure valve stem where it comes through the rim and checking for bubbles. However immediately after inflation a small amount of trapped air will seep out around the spokes and valve stems for 5-10 minutes, this is normal. However if after 5-10 minutes you are still detecting bubbles, here is the best way to correct it.

- A. Pull both valve stem cores and completely deflate the inner liner and tire.
- **B.** Break both of the tires of the beads off the rim and re-lube BOTH SIDES with soapy water. DO NOT loosen the rim lock! Take your time to make sure the lube gets past the tire and rim and gets down onto the RED inner liner itself so the full circumference of the RED inner liner is saturated on both sides.
- C. Bounce the wheel on the ground a few times while rotating it. This is done to help unseat and center the inner liner.
- **D.** Re-install the valve cores and Inflate the red liner to 110 PSI, then inflate the tire to 15psi. Wait a few minutes for the trapped air to escape. In the rare occurrence this does not fix the leak, repeat the process again.

If after following the above you can still detect bubbles at the rim around the high pressure valve stem, then you most likely have damage at the inside bead of the tire or to the bead of the RED inner liner. Remove the tire and carefully inspect the sides of the RED LINER for damage such as missing rubber at the bead or torn casing cords. Also CLOSELY INSPECT the INSIDE of tire bead itself for any damage from the tire irons, such as missing or small flaps of rubber that may get pushed into the sealing surface. Your tire bead should be clean and free from damage. **NOTE**: the inside of some tires are pretty rough. This is fine as long as there is no damage or missing rubber at the bead. If you do have damage at the inside of the tires bead, it may be fixable using an RTV type silicone that's available at most auto parts stores. NOTE: it must be fully cured (typically 24 hours) before you can work with it. If you find damage to the bead of the red inner liner it must be replaced, and can be purchased directly from the Nuetech online store.

**IF NO BUBBLES ARE VISIBLE AT THE HIGH PRESSURE VALVE STEM**, but you have a leaky tire, then you most likely have a hole in the tire. If the hole is large enough, you may be able to hear air seeping from it. If not you may be able to locate it by spraying soapy water over the entire surface of the tire looking for bubbles or the best method is to submerge the entire wheel under water to check for leaks.

After the hole is located it can be fixed with TUBELESS TYPE "tire rope plugs" or with the use of a TUBELESS tire sealant like SLIME. Both are available at most auto parts store. Please also check tire manufactures recommendations on tire repair – most advise against any attempts to make any repairs to a damaged side wall.

We hold customer satisfaction in the highest regard and will do our best to address any and all concerns! PLEASE contact Nuetech directly with any questions or warranty issues.



Having installation or removal problems or questions? Check out the installation video online and see how it's done! www.TUbliss.com

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