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User's Manual and Instructions

Installation instructions	04
Warranty	04
Wheels package	07
Wheelset installation	08
Wheel Preload Hub Adjustment	09
Technical specifications	11
Spoke replacement and lacing	12
Replacement of the freehub body	13
Maintenance recommendations	14
Wheel replacement parts	15

INSTALLATION INSTRUCTIONS

Congratulations on your Vision product. Please read these instructions and follow them for correct use. Failure to follow the warnings and instructions could result in damage to product which is not covered under warranty, damage to bicycle or cause an accident resulting in injury or death. Since specific tools and experience are necessary for proper installation, it is recommended that the product be installed by a qualified bicycle technician.

WARRANTY

Full Speed Ahead (FSA) warrants all FSA, Gravity, Vision and RPM products to be free from defects in materials or workmanship for a period of two years after original purchase unless otherwise stated in the full warranty policy. The warranty is non-transferable and valid to the original purchaser of the product only. Full warranty policy is available at:

FULLSPEEDAHEAD.COM

Regularly check the wheels to be certain they are fastened securely to the bicycle fork. If the Quick Release is not installed correctly, the wheel may become separated from the fork and result in an accident, personal injury or death.

Tires mounted on clincher wheels should not be inflated above 125 psi. (8.5 bar). Tires mounted on tubular wheels should be inflated per tire manufacturer recommendations.

Carbon fiber rims require special brake pads to guarantee proper braking performance. Use only Vision brake pads with Vision wheels. Using other brands of brake pads can damage the rim and cause an accident, personal injury or death. Using other brands of brake pads will void the Vision Warranty.

⚠ WARNING Inspect the brake pads frequently for metal ships or other foreign debris. Metal debris and foreign objects in the brake pad will cause compromised braking performance and severe rim damage that may result in wheel failure and cause accident.

A WARNING Rims wear with use. Check the braking surface of rim frequently and replace if worn. Replace the rim if this layer has been worn off. Riding with a worn rim may cause wheel failure and serious accident resulting in injury.

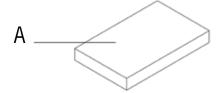
VISION TRIMAX 30 (VT-603)



PRODUCT	ITEM CODE
TriMAX 30 VT603 Wheelset Shimano Red Decal	710-0014031010
TriMAX 30 VT603 Wheelset Shimano Gray Black Decal	710-0014031011
TriMAX 30 VT603 Wheelset Campagnolo Red Decal	710-0014032010
TriMAX 30 VT603 Wheelset Campagnolo Gray Black Decal	710-0014032011
TriMAX 30 VT603 Front Wheel Red Decal	71000014083010
TriMAX 30 VT603 Front Wheel Gray Black Decal	71000014083011
TriMAX 30 VT603 Rear Wheel Shimano Red Decal	71000014054010
TriMAX 30 VT603 Rear Wheel Shimano Gray Black Decal	71000014054011
TriMAX 30 VT603 Rear Wheel Campagnolo Red Decal	71000014055010
TriMAX 30 VT603 Rear Wheel Campagnolo Gray Black Decal	71000014055011

ACCESSORY BAG CONTAINING:

- A- Instruction
- B- Quick Release (QR)
- C- Spoke Protector









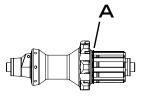
<u>A WARNING</u> Vision Spoke Protector is intended to prevent the chain from falling down in the spokes. Please install it on the rear wheel before riding.

7

WHEELSET INSTALLATION

1.For mounting tires, carefully follow the instructions provided by the tire manufacturer.

2.Apply light grease onto the Freehub Body. Install the cassette per manufacturer's recommendations. The Shimano freehub body is compatible with S11 cassette. A spacer (A) is required when mounting S9 & S10 cassette. The Campagnolo Freehub Body is compatible with C10 and C11 cassettes.



The rims of Trimax30 are tubeless ready rims.

A tube must be installed when using the rim spoke protector (rim tape) supplied together with the weel. If you want use tubeless type tires, use a proper rim tape (after removing the rim tape supplied with the wheels) and sealant. Follow installation instructions of tubeless tire manufacturer.



⚠ WARNING

Do not use Vision carbon specific pads with non carbon (alloy) rims.

3. Insert the Quick Releases into the wheel. The lever of the Quick Releases should go on the non-drive side. Thread the Quick Release nut. but do not tight.

Note: Front Quick Release is shorter than rear.

- 4. Install the Front and Rear Wheel into the drop-outs of the fork and frame. With the QR lever in the open position, tighten the QR until it is in contact with the frame or fork dropouts. Close the QR lever. The QR lever should require substantial effort to close the last 25-30 degrees. If it closes with only moderate hand pressure, the QR must be readjusted by opening the QR lever, then turning the QR nut clockwise until the closing action of the QR lever requires the recommended force.
- ▲ WARNING

 If you are unfamiliar with Quick Release assembly it is recommended to ask for advice from your local bike shop. Riding with an improperly assembled Quick Release can cause the wheel to shift while in use resulting in accident and injury.
- Regularly check the QR adjustment. If the Quick Release is not installed correctly, the wheel may become separated from the fork and result in an accident, personal injury or death.
- Always close the skewer lever completely. Do not allow a frame or fork tube or any other member to inhibit full lever travel when closing. Failure to close the lever completely will limit cam engagement and the skewer's ability to hold the wheel in place.

Note: The QR must be periodically lubricated at the pivot points so it can exert maximum sideways force.



WHEEL PRELOAD HUB ADJUSTMENT

Specification

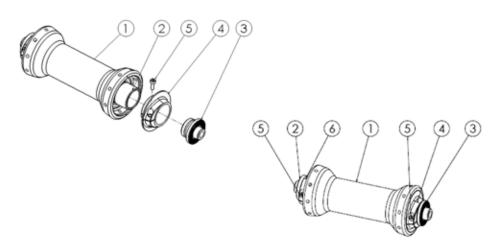
Model Name Vision PRA Hubs Model No. VT-603 PRA Hubs

Front Hub ASM:

1. Front Hub Shell 4. Threaded Preload Collar

2. Front Hub Axle3. Axle End Cap5. M3 Pinch Bolt6. Alignment Collar

Front Hub Adjustment



- 1.Unscrew the Pinch Bolt (5) in the Threaded Preload Collar (4) using a 2.5mm Allen Key.
- 2. Tighten the Threaded Preload Collar (4) by-hand until it stops, then back-off (loosen) by 1/8th turn.
- 3. Screw in the Pinch Bolt (5) and tighten with the Allen Key to 2Nm.
- 4.Install the wheel in the bike and ensure that there is no lateral (side-to-side) movement and that the wheel rotates freely.

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Rear Hub ASM:

7. Rear Hub Shell

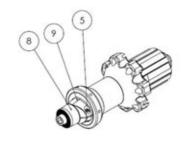
10. Rear Axle

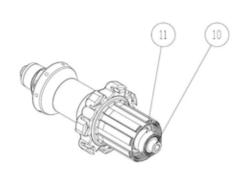
8. Axle End Nut

11. Freehub Preload Nut

9. Threaded Preload Collar

Rear Hub Adjustment





- 1. Unscrew the Pinch Bolt (5) in the Threaded Preload Collar (9) using a 2.5mm Allen Key.
- 2. Tighten the Threaded Preload Collar (9) by-hand until it stops, then back-off (loosen) by 1/8th turn.
- $3.\mbox{Screw}$ in Pinch Bolt (5) and tighten with Allen Key to 2Nm.
- 4.Install the wheel in the bike and ensure that there is no lateral (side-to-side) movement and that the wheel rotates freely.

TECHNICAL SPECIFICATIONS

Wheel Description	Vision Trimax 30		
Model number	VT-603		
Rim size	700 x 19C		
Rim width / height	24 mm / 30 mm		
Tire type	Clincher		
Spokes Lengths / Number x Pattern (Front 281mm/16x0 – Rear Left 28 Rear right 283mm/14x2)			
Spokes Gauge / End	AE-14 / Direct Pull		
Nipples	15mm ABS Brass, external		

MARNING
Use original Vision spare parts only for your service. Use of incorrect spoke types and lengths may cause failure of the wheel resulting in accident and person injury.

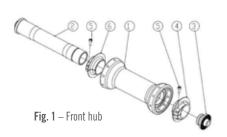
WHEEL TRUING

Bicycle wheels are straight, round, and stable because of a balance of spoke tension. The rim's shape can be changed by tightening and loosening spoke's nipples. Wheel truing should be performed by persons with adequate wheel truing experience or training. If you do not have confidence or experience with wheel truing, take the wheels to a qualified technician for service.

SPOKE REPLACEMENT AND LACING

- A CAUTION Before replacing a spoke, please check the above technical specifications for the correct spoke length and type. Always use original Vision spare parts before proceeding with the replacement.
- 1. Remove the spoke and nipple to be replaced
- 2.**Front hub**: unscrew the axle end cap (3) using a 5mm Allen wrench and the Threaded Preload Collar (4) using a 2.5mm Allen wrench; and remove the axle end cap by hand (Fig.1)
- 3. Remove the Threaded Preload Collar (4) and the front axle (2)
- 4.Slide the new spoke in the flange hub hole and re-mount the hub internals following the sequence shown in Fig.1
- 5.**Rear hub non drive side:** unscrew the Pinch Bolt (5) in the Threaded Preload Collar (9) using a 2.5 Allen Key (Fig.2) and the unscrew the Threaded Preload Collar (9)
- 6.Using a 5mm Allen wrench unscrew and remove the rear Axle End Nut (8) together with Threaded Preload Collar (9)
- 7. Slide the new spoke in the flange hub hole and re-mount the hub internals following the sequence shown in Fig.2
- 8.**Rear hub drive side:** replace the spoke in accordance with the original position and install it with proper positioning to adjacent spokes.
- 9. Secure the spoke to the rim by tightening the nipple
- 10.Use a spoke tension measuring device to follow the recommended tension as in the chart below
- 11. After replacing the spoke, tensioned and centered the wheel, check that the flat spoke (aero) is oriented in an aerodynamic position.
- Maximum spoke tension must not exceed the tension specification (see chart below). Using tension above max recommended tension will void warranty and cause wheel failure resulting in serious accidents and injury. If tension above maximum is necessary to true the wheel, the rim may be damaged and should be replaced.

Always avoid the rotation of the spoke (spoke wind-up) when the nipple is tightened or loosened by using an anti-rotation spoke tool.



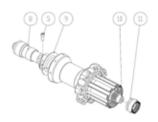


Fig. 2 - Rear hub

REPLACEMENT	OF THE	FREEHUB	BODY

RECOMMENDED SPOKE TENSION

Left Side

80-100 Kgf

Rear Wheel

Right Side

100-120 Kgf

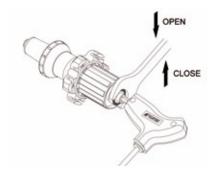
- 1.Unscrew the fixing nut by turning it clockwise with a 17 mm wrench while holding the axle steady with by a 5 mm Allen key.
- 2. Remove the freehub body from the axle carefully to avoid damaging the spring or ratchet pawls.
- 3.Insert the new freehub body on the axle and turn the body till the all ratchet pawls are in line with the pawl seats in the hub, and then fully insert the freehub body.
- 4.If necessary, add low-friction grease to preserve the freehub body mechanism.

Front Wheel

Left&Right Side

85 -100 Kgf

- 5. Holding the axle steady by 5 mm Allen key, tighten the fixing nut with a 17 mm wrench to an approximate torque of 8 Nm.
- 6.It is recommended to apply a thin layer of medium strength thread locker on the axle then tighten the fixing nut that hold the freehub body.



NOTE: Vision Wheels can be changed from Shimano to Campagnolo compatible (and vice versa) by replacing the freehub body.

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WARNING
Using wheels that have not been installed or centered correctly, present broken, damaged, or has missing parts may fail or cause rider to lose control of bicycle leading to accident, resulting in personal injury or death.

HUB MAINTENANCE

Vision hubs are equipped with high grade, precision, sealed cartridge bearings. Due to varying factors it is important to have the hub bearings inspected and maintained periodically. The recommended service intervals are:

- Inspection after each riding season, one calendar year, or 8,000 to 10,000 Km, whichever comes first.
- After use in rain, storm, muddy, and wet conditions
- Anytime rotational smoothness, signs of corrosion, damage to rubber seals and bearing covers is apparent.

Tech Tips:

- Avoid getting solvents, aerosol lubricants (as for chain), and strong cleaning solutions on the hubs. The solvent can wick passed the seals and break down the bearing grease.
- When washing the bike, use only mild soap and a gentle stream of water for rinsing. Always avoid pressure washing. Such systems can direct super heated water with special wetting agents at 10X atmospheric pressure, forcing water passed the bearing seal and removing vital bearing grease.

A CAUTION Since specific tools and experience are necessary for hub maintenance, it is recommended that the service should be done by a Vision Authorized Service Center.

Please contact the Authorized Vision Distributors and Warranty Service Centers closest to your country of residence. A list of Authorized is posted at **VISIONTECHUSA.COM**.

RIM MAINTENANCE

- -Carbon fiber rims are complex composite structures. Please ride them thoughtfully and inspect them regularly for damage and wear.
- -Vision Carbon rim's brake surface has a special layer to resist brake heat and abrasion. Discontinue use and replace rim when the layer has worn off.
- -When braking, especially during descents, use both front and rear brakes. Front and Rear brakes have different benefits and limitations, so use them according to instructions from an experienced rider. It is important that both rims are employed during descents to properly dissipate heat.
- -When riding in wet or dirty conditions, listen for scraping sounds that might indicate soil or grit is trapped in the brake pad. If so, the pad will be less effective for stopping and extra abrasive against the rim. Stop, remove the wheel and inspect the pad surface. Remove any debris before it damages the rim brake surface.
- -Water on the rim and brake pads will reduce brake effectiveness. In the wet, allow extra distance for stopping.
- -Vigorous braking will cause brake pads to melt and mark the rim brake track. Do not allow melted pad material to accumulate on the rim surface. Pad deposits should be removed with care using a slightly abrasive pad and alcohol. Be careful to keep solvents from reaching the tire or the rim cement that securing the tire. Pad material on the rim brake track can interfere with brake response, cause vibration, and create hot spots that could damage the rim.
- -If, during frequent inspections, noticeable impact damage or any other deformation of the rim is apparent, discontinue use and immediately seek advice from an experienced mechanic. If an experienced mechanic is unavailable, contact Vision directly at VISIONTECHUSA.COM.

MARNING In the event of a bicycle accident, discontinue riding the bicycle until it has been thoroughly examined by a qualified bicycle mechanic, and any damaged parts replaced.

WHEEL REPLACEMENT PARTS:

Replacement parts are available for purchase through all bicycle service and retail locations. If the bicycle shop does not stock the necessary parts, it can be ordered by the retail location from a VISION distributor or VISION directly. A list of distributors is available at **VISIONTECHUSA.COM**.

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If you have questions, please visit our web site contact page at: **VISIONTECHUSA.COM**.

Notes: Specifications of product may be changed or improved for performance. Please refer to website periodically for technical updates and revised instructions.