# Tektro Auriga & Auriga Comp

Hydraulic Disc Brake Owner's manual (English)

Congratulations and thank you for your purchase of the Tektro Auriga or Auriga Comp hydraulic dual-piston disc brake. Hydraulic disc brakes offer several advantages over traditional cable actuated rim brakes-higher braking efficiency without cable stretch or friction, better braking in wet or muddy conditions, less braking power "fade" over extended downhill braking, and the ability to continue braking even with a bent rim.

This hydraulic disc brake product is Tektro's exciting new hydraulic disc brake. This open system dual piston brake takes advantage of our experiences manufacturing disc brakes, by featuring many of the popular advantages of some of our other available brakes.

The high performance product's excellent responsiveness and power is combined with easy installation and adjustment for our highly praised Automatic Calliper Adjustment system. The hydraulic disc brake uses environmentally friendly mineral oil, high performance compound pads, and is available with 180mm or 203mm rotor (160mm standard).

To gain full advantage of all the features of the hydraulic disc brake and to ensure safe, trouble-free riding, please read this manual thoroughly before use.

WARNING- The Tektro hydraulic disc brake offers a significant increase in braking performance over cable-actuated rim-brake

Test your Tektro hydraulic disc brakes gradually on a flat surface until you become accustomed to the braking power. If you lend your bike to another person, make sure that they are also properly accustomed to the brake power before riding.

WARNING-Read instructions thoroughly before attempting any work on The Tektro hydraulic disc brake. If you are in any doubt, you should seek the advice of a Tektro Service Center or other qualified mechanic

WARNING-Disc brake calipers, rotors and pads get extremely hot when used. Serious injury could result from contact with a hot brake. Care should be taken not to touch the caliper, rotor or disc brake while it is hot. Be sure to allow the brake to cool before attempting to service it in any way.

WARNING-Stop riding the bike immediately if the oil is leaking. Please carry on the proper repair, if you continue to ride with the oil spilling, the brake system may suddenly lose braking power.

WARNING-The Tektro Auriga & Auriga Comp hydraulic disc brake offers considerable braking power.

CAUTION- Be sure to confirm before riding the pads thickness must be more than 0.8mm

Pads also must be kept clean and free from oil or hydraulic fluid. If the pads become contaminated you must discard them and replace them with a new set. The brake pads are specifically formulated to achieve optimum use with the Tektro hydraulic disc brake

CAUTION-Only use mineral with Tektro Auriga or Auriga Comp, other disc brake fluids may harm the system.

### Precautions

### Methods for using mineral oil

(1) If the mineral oil enters your eyes, it may cause inflammation to your eyes.. Please wear glasses while using mineral oil for protecting your eyes and preventing it from entering your eyes. (2)If the mineral oil comes into contact with your skin, it may cause inflammation. Please put protective gloves while using. (3)If you inhale the fumes of the oil, it may be harmful to your health. Please make sure the room has good ventilation. (4)Please make sure not to drink the mineral oil, otherwise it will cause you to suffer from diarrhea and vomiting. (5)Please keep the oil away from children. (6)Please don't cut the mineral oil container.

### **Emergency processing**

(1) If the mineral oil gets into your eyes, please wash your eyes with clean water immediately and go to the hospital (2)If the mineral oil comes in contact with your skin, please wash it off

Heat, welding or pressure may cause the oil to explode or catch fire.

with soap and water. (3)If you inhale the mineral oil, please move the person outside for better ventilation and keep their body warm. Then send them to the

(1)Please deal with it according to the laws of your country.

### How to store the mineral oil

hospital to receive proper treatment.

(1)Please keep it under normal room temperature and in a dark

(2)Keep it out of direct contact from the sun.

### a. Tools and equipment required.

The following tools and parts are necessary to install the Tektro

Auriga &: Tektro Auriga Comp

1. A 2mm Allen wrench 2. A 4mm Allen wrench

3 .A 5mm Allen wrench 4. A T25 Torx® wrench

### b. Mounting the rotor to the hub

1. Remove the wheel from the bike. Attach the rotor to the hub with the supplied Trox® bolts and tighten it with a T25 Trox®wrench

Final tightening torque: 4-6Nm. (see photo b-1)

NOTE: The rotor must be installed with the "rotation" arrows pointing the same direction as the forward rotation of the wheel.

2. Replace the wheel onto the bike, according to the manufacturers' instructions.

### c. Mounting the brake levers for Auriga

I. Slide the brake lever onto the handlebars with the brake hose pointing towards the center of the handlebar. In general, thumb-type shifters should go on before and twist-type shifters after the brake lever.(see photo c-1)

2. Tighten the shifters and install the grips according to the manufacturers' instructions.

3. After tightening the shifters, tighten the brake lever clamp in the desired position by tightening it with the 5 mm Allen bolt.Final tightening torque should be 6-8Nm.(see photo c-2)

4. The reach of the brake lever may be adjusted closer to the handlebar by tightening the 2 mm reach-adjuster c-3. After the reach adjuster bolt on the lever(see photo c-3). If you adjust the reach after you have already set up the rest of the brake system, you may find that you need to readjust the brake pads (see Section on adjusting pads).

### c1-1. Mounting the brake levers for Auriga Comp

I. Place the brake lever with the half clamp onto the handlebars with the brake hose pointing towards the center of the handlebar. (see photo c1-1)

2. Place the other half clamp onto the handlebar towards the center of the brake lever already on the handlebar.

3. Tighten the brake lever clamp in the desired position by tightening it with the 4mm Allen bolt. Final tightening torque should be 5-7Nm. (see photo c1-2)

4. The reach of the brake lever may be adjusted closer to the handlebar by tightening the 2 mm reach-adjuster c1-3. After the reach adjust











the half clamp onto the handlebars



c1-2. Tighten the brake lever clamp



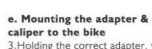
bolt on the lever(see photo c1-3). If you adjust the reach after you have already set up the rest of the brake system, you may find that you need to readjust the brake pads (see Section on adjusting pads).

CAUTION- Do not completely remove any of the bolts on the lever.

### d. Mounting the adapter & caliper to the bike

I.Before installing the calipers, ensure each wheel axle is correctly seated in the dropouts (the brake rotor should be on the caliper mounting side.)

2.Select the correct adapter(front or rear) for the disc brake position on the bike. If installing the Tektro Auriga or Auriga Comp at the rear of the bike, you should use the adapter marked with an 'R'. If installing at the front forks with international standard d-1. Adapters F (left) and R (right) mounts, you should use the adapter marked with an 'F' (see photo d-1)



3. Holding the correct adapter, with the engraved 'F' or 'R' facing toward you.(away from the rotor and wheel), position it behind the frame/fork mounting holes. Bolt the adapter in

this position to the frame/fork mounts. The engraved 'F' or 'R' should not now be visible behind the mounts. Tighten the bolts to a final tightening torque of 6-8Nm.(see photo e-1)

4. Make sure that the pads are correctly positioned in the caliper (See Section on installing & removing pads), then place the caliper over the rotor with the bleed screw facing away from the

Final tightening torque should be 6-8Nm.

wheel. Attach the caliper to the adapter using the supplied Allen bolts. Do not tighten the bolts at this stage. (see photo e-2) 5. With the caliper mounting bolts still loose, depress the brake lever. The caliper will correctly center itself to the rotor

Keeping the brake lever depressed, tighten the caliper mounting bolts.

Auriga & Tektro Auriga Comp system. I.The Tektro Auriga & Tektro Auriga Comp pads and pad holders are held in place by a 3mm pad retainer bolt on the caliper. To remove the pads and pad holder, unscrew the retainer bolt (see photo f-1).

f. Removing the brake pads.

CAUTION - Pads must be kept clean and free from oil or

them and replace them with a new set. The brake pads are

hydraulic fluid. If the pads become contaminated you must discard

specifically formulated to achieve optimum use with the Tektro



f-1. Unscrew pad retainer bolt Then gently push out the pads and

achieve by using the Allen wrench. 2.Once free of the caliper, the pads

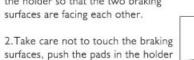
may be easily removed from the pad

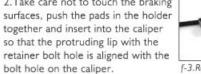
holder - this may be easiest to

holder.



g. Installing the brake pads. 1. Position each pad opposite side of f-2. Pads with holder and spacer the holder so that the two braking







f-3.Replace pads and holde

3.Insert the retainer bolt and tighten it with a 3mm Allen wrench. Final tightening torque should be 3-5Nm.

NOTE - New pads require about 30-40 full stops to achieve their optimum braking power. This process is called bedding-in.

WARNING: The Tektro Auriga & Tektro Auriga Comp hydraulic disc brake offers considerable braking power. Test your Tektro Auriga or Tektro Auriga Comp hydraulic disc brake gradually on a flat surface until you become accustomed to the braking power. If you lend your bike to another person, make sure that are also properly accustomed to the brake power before riding.

# a. When to bleed the system

You should always bleed the system after you have shortened or replaced the hose or have opened the system to the air at any time. Additionally, if the brake action feels spongy, you may improve performance by bleeding the system

# b. Tools and equipment required

- I. A 5mm Allen wrench
- 2. A 2mm Allen wrench 3. A 7mm Allen wrench
- 4. A T25 Torx® wrench
- 5. A 20cc syringe (supplied in service kit)
- A pieces of tubing (supplied in service kit) 7. A bottle of unused Tektro brake fluid (supplied in service kit)
- 8. A piston holder (Supplied in service kit)
- 9. A clean, empty bottle or plastic bag 10. A cleaning towel

# Bleeding the System for Tektro Auriga only (con-

CAUTION: Cleanliness is a very important part of any maintenance of the Tektro Auriga disc brake. If the pads or rotor become contaminated with oil, or if the hydraulics become contaminated with impurities, braking performance will be greatly impaired.

CAUTION: Use only Tektro Brake Fluid with the Tektro Auriga

Other brake fluids may not be compatible and may damage the

# c. step by step guide

I. With the brake correctly installed, place the bike in a stand or similar to hold it securely parallel to the ground. Remove the rubber cover from the bleed outlet valve on the brake caliper. (see photo g-1)

2. Firmly attach a long plastic tube (supplied in the service kit) over the outlet valve, placing the other end into a clean, dry empty bottle, or plastic bag (see photo g-2)

Note: You will probably find it convenient to place the bottle somewhere safe, so as to free both hands for later operations. A rubber band is often useful for holding the bottle or bag.



bracket retaining bolt. Turn the brake lever so that the reservoir tank is parallel to the ground. (see photo g-3)

4. Using a star screwdriver, remove the two bolts that hold the reservoir cover in place. Remove the reservoir cover to allow access to the mineral oil inside. (see photo g-4)

5. Open the outlet valve on the caliper slightly (1/8 turn to 1/4 turn) Brake fluid should now appear in the plastic tube connected to it . You may also notice air bubbles in the tube. (see photo g-5)

6. Start filling the reservoir with new mineral oil. Depress the brake lever gently a few times while adding oil to the reservoir. Air bubbles may come out the tube from the outlet valve on the caliper. Be sure to keep the reservoir filled with oil so that no air gets into the system. (see photo g-6 & g-7)

7. When no more air bubbles appear to be coming out of the outlet valve, tighten the valve. Final tightening torque should be 4-6Nm. Depress the brake lever again. The action should feel stiff and not spongy. (see photo g-7)

8. Fill the reservoir oil to the top with Replace the reservoir cover, and bolt it down with the cover retaining bolts.

Remove the tube from the outlet valve taking care not to any spill oil. Replace the rubber outlet valve cover. g-7. Depress the brake lever



10. Wipe the lever, caliper, and hose with a cleaning towel.

leeding the System for Tektro Auriga Comp or

# a. When to bleed the system

You should always bleed the system after you have shortened or replaced the hose or have opened the system to the air at any time. Additionally, if the brake action feels spongy, you may improve its performance by bleeding the system.

### b. Tools and equipment required I. A 2mm Allen wrench

2. A 8mm Spanner

g-2. Attach a bag or a bottle to

3. A T15 Torx® wrench

- 4. A 20cc syringe (supplied in service kit)
- 5. A pieces of tubing (supplied in service kit)
- 6. A bottle of unused Tektro brake fluid (supplied in service kit) 7. A piston holder (Supplied in service kit)
- 8. A clean, empty bottle or plastic bag

CAUTION: Cleanliness is a very important part of any maintenance

of the Tektro Auriga Comp disc brake. the pads or rotor become contaminated with oil, or if the hydraulics become contaminated with impurities, braking performance will be greatly impaired.

c. step by step guide

caliper. (see photo h-1)

(supplied in the service kit)

3. Using a T15 Torx® wrench

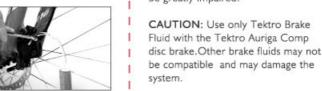
(see photo h-2)

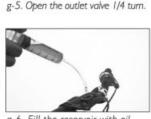
Remove the rubber cover from the

bleed outlet valve on the brake

2. Firmly attach a long plastic tube

(supplied in the service kit) over the





g-6. Fill the reservoir with oil

remove the bolt that is inside of the reservoir tank. (see photo h-3).

5. Open the outlet valve on the caliper slightly (1/8 turn to 1/4 turn) Brake fluid should now appear in the plastic tube connected to it. You may

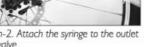
(see photo h-5)

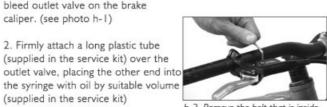
also notice air bubbles in the tube.



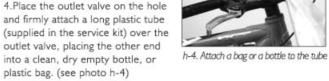
h-1. Remove the cover from outlet valve



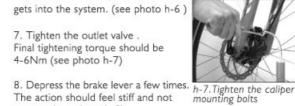




h-3. Remove the bolt that is inside of the reservoir tank



6. Start filling the reservoir with new mineral oil by pushing the syringe. Air bubbles may come out the tube from the outlet valve on the reservoir tank of the brake lever's bracket. Be sure to fill the oil by pushing the syringe until the oil is out of the outlet h-6. Fill the reservoir with oil by valve on the reservoir tank of the bushing on the syringe brake lever's bracket, so that no air



spongy. (see photo h-8) 9. When no more air bubbles appear to be coming out of the outlet valve, then remove the outlet valve from the bracket and using a T15 Torx® wrench tighten the bolt on that side



of reservoir tank(Final tightening



# Pad replacement

Pads should be replaced if they become contaminated have less than an 0.8mm thickness. (See the Installation section)

\* Check the pads for wear or contamination.

\* Check the hose for cracking, wear or deformation. Replace if \* Check if the brake system is operating correctly.

# After riding

\*Remove any mud or contamination from the rotor slot on the caliper. \* Clean the caliper body with a cloth.

# At regular intervals

- \* Check the lever of the oil in the reservoir.
- \* Lubricate the brake lever pivot with grease. \* Check to make sure that all the bolts are tightened to the correct torque specifications.

The Tektro Auriga & Tektro Auriga Comp hydraulic disc brakes is warranted against manufacturing defects in materials and /or

installation, adjustment or maintenance, lack of maintenance, alterations, crashes or use judged by Tektro to be excessive or



# Tektro Auriga & Tektro Auriga Comp Warranty

Not covered under this warranty is damage resulting from improper

Center, or contact us directly at : Tektro Technology Corporation



workmanship for a period of one year from date of original retail purchase or two years from the date of manufacturing, whichever

For warranty related questions or more information on the Tektro Auriga or Auriga Comp disc brake please contact a Tektro Service

infor@tektro.com.tw www.tektro.com

English version - May 2006



