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Email: info@trpbrakes.com Web: www.trpcycling.com

#### SAFETY WARNINGS & INFORMATION

**WARNING** - This braking system was designed for use on a single rider bicycle. Use of this system on any other vehicle or apparatus will void the warranty, possibly causing you great personal harm or injury.

**WARNING** - Disc brakes, calipers and rotors get VERY HOT during regular use. DO NOT touch or attempt to service the rotor or caliper assembly until you've allowed for sufficient cooling to occur.

**WARNING** - These disc brakes offer a significant increase in performance over traditional cable actuated systems. Follow the break-in recommendations listed in this manual, allow yourself time to learn and become accustomed to the braking characteristics.

**WARNING** - Leaking oil indicates a potential BRAKE FAILURE. If you're system is leaking oil stop immediately and determine the nature of the problem. DO NOT continue to ride a leaking system.

**WARNING** - If your bike is involved in a fall or crash, fully check the brake function including: the lever, caliper and rotor are securely attached to the bike, pads are correctly installed and functioning, the cable, (if applicable) is operating smoothly and the lever feels firm when applying the brake. Always have a qualified mechanic check the brakes if you have any doubts.

**WARNING** - Pad thickness must be at least 0.8mm of pad material. Confirm this before each ride. Keep pads clean and free of oil or hydraulic fluid. If pads become contaminated, discard and replace.

**CAUTION** - Read this manual completely before attempting to install or work on your TRP brakes. If you are unfamiliar with any element of assembly or maintenance of this braking system please consult a qualified mechanic for assistance.

**CAUTION** - Only use TRP or TEKTRO branded replacement Mineral Oil when servicing the brakes. Other disc brake fluids, ESPECIALLY DOT based oils, will harm the system and compromise braking performance.

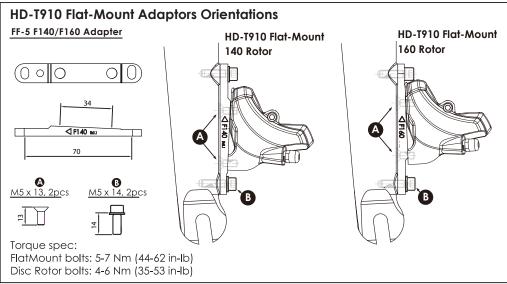
**CAUTION** - Cleanliness is a very important part of any maintenance of a TRP disc brake. If the pads or rotor become contaminated with oil, or if the system becomes contaminated with impurities, braking performance will be greatly impaired.

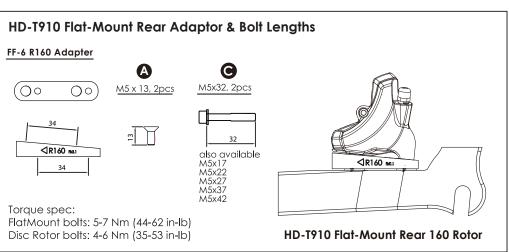
**CAUTION** - As with any oil, precautions in handling and clean up of any spills should be handled according to accepted best practices as governed by your state or country. Our Mineral oil is non-toxic, but clean up any spills promptly and completely.

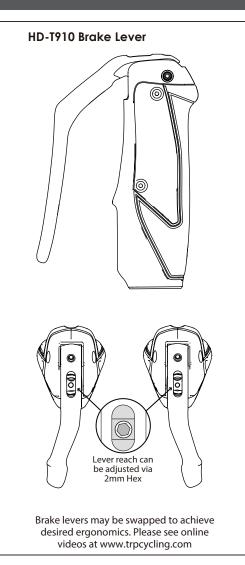
If Mineral Oil gets in your eyes IMMEDIATELY FLUSH WITH WATER for several minutes and go to the hospital. If Mineral oil gets on your skin RINSE IMMEDIATELY with soap and water. Do not inhale Mineral Oil, it is harmful. If inhaled move to a well ventilated environment and proceed to the hospital for appropriate care. If you ingest Mineral oil it may cause vomiting and/or diarrhea.

TRP hydraulic disc brakes are warranteed against manufacturing defects in materials and / or workmanship for a period of two years from the date of original retail purchase. Not covered under this warranty is damage resulting from improper installation, adjustment or maintenance, lack of maintenance, alterations, crashes or use judged by TRP to be excessive or abusive. For warranty related questions or more information please contact a TRP Service Center or email at info@trpbrakes.com

## Adaptors and Hardware







#### **TOOLS AND EQUIPMENT REQUIRED**

2mm, 3mm, 5mm hex wrench, T25 Torx® wrench, 8mm open end wrench, Birzman Pad Gap Tool (optional)

### MOUNTING THE ROTOR TO THE HUB

Attach the rotor to the hub with the supplied Torx® bolts and tighten in an alternating pattern with a T25 Torx® wrench. Final tightening torque: 3-4 Nm (26-35 in-lb). [ref. A-1]

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

#### **INSTALLING FLATMOUNT ADAPTORS**

Select the correct adapter (front or rear) for the size of rotor.

Front caliper:

Attach the FF-5 adapter to the caliper in correct orientation for 140mm or 160mm rotor.

Tighten the two M5x13  $\triangle$  bolts to a torque of 5-7 Nm (44-62 in-lb).

Attach the adapter to fork using the two M5x14 (3) bolts. Align the caliper to the rotor, (using a gap or alignment tool.) and tighten to a torque of 5-7 Nm (44-62 in-lb). Rear caliper:

With 140mm rotor: Insert mounting bolt into the frame and make sure it is protruding 7mm through the frame. Attach the caliper to bolt .

With 160mm rotor: Attach F-6 adapter to brake caliper and tighten bolt (A) to a torque of 5-7Nm (44-62 in-lb). Then attach adapter to the frame with mounting bolt (G).

Make sure the pads are correctly positioned in the caliper. Do not tighten the bolts at this stage.

With the caliper mounting bolts still loose, squeeze the brake lever. The caliper will correctly center itself to the rotor. You may also use a disc brake gap or alignment tool. Maintaining pressure on the brake lever, tighten the caliper mounting bolts. Final tightening torque: 6-8Nm (53-71 in-lb).

## MOUNTING THE BRAKE LEVERS

Route the hydraulic hose through the handle bar and attach the brake lever to the bar. (Depending on your style of base bar, some hose length modification may be needed.)

After installed onto the bar, lightly tighten both clamp screws on the bottom of the lever using a 3mm allen wrench. (Do not tighten bolt until brake lever is on the bar as this may affect clamp performance.)

Test out the rider position on the bike – your base bar length may need to be adjusted. Cut the handle bars in small increments (up to 10mm at a time) until position is comfortable. [ref. B-1]

Remove the coupler plug using a 6mm allen wrench. Try not to move the hose too much to prevent fluid loss. Remove the EZ plug from the barb in the caliper line using a 2mm allen wrench. Install the hose into the coupler, ensuring the barb has seated fully.

Using an 8mm wrench on the coupler and another 8mm wrench on the compression nut, tighten the compression nut to connect the lines. Tighten the compression nut to 5-7 Nm (44-62 in-lbs). Tighten clamp bolts to 3-4 Nm (26-35 in-lbs) to finish installation [ref. B-2]

### MOUNTING THE BRAKE CALIPERS

The brakes will come from the factory with a barb pre-installed in the hose. There is also a 2mm allen screw installed into the barb. Do not remove the screw until after the hydraulic hose is routed to prevent fluid loss. Mount the caliper to the frame/fork using the appropriate bolts and necessary flat mount adapter. [see Flat-mount Adapters Orientation.] Insert the brake hose into the frame/fork and route it according to your frame/fork manufacturer's specification.

Install the compression nut onto the hose with the threaded portion pointing away from the caliper. Install the olive with the tapered portion pointing toward the compression nut.

### MODIFYING HOSE LENGTH

Disconnect the hose coupler from the caliper line. Pull the hose back away from the coupler. Some fluid may drip out. Measure your hose length and determine how much hose to cut off. Make sure you leave enough hose for full rotation of your handlebars.

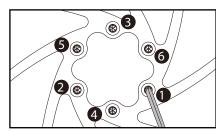
Cut the hose to the determined length using a hydraulic hose cutter.

Using a new compression nut, olive, and barb, slide the compression nut onto the hose with the threaded portion pointing towards the coupler. Install the olive with the tapered portion facing the compression nut. Install the barb ensuring that it is fully seated within the cut end of the hydraulic hose. [ref. C-1] Reinsert the hose into the coupler and tighten the compression nut to 5-7 Nm (44-62 in-lbs).

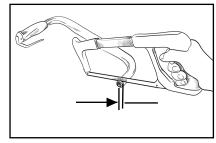
The process can be repeated at the lever side of the coupler following the steps outlined above. If cutting the hose near the brake lever, be sure to leave a minimum of 25mm of hose to reconnect the coupler.

# PAD AND ROTOR BREAK-IN PROCESS

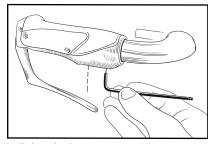
Ride slowly and apply the brakes 10-20 times to seat the pads flat with the rotors. If there is rubbing on the rotor, recenter the caliper on the rotor as outlined above.



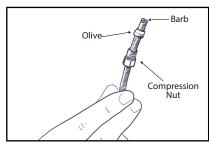
A-1. Rotor torquing sequence



B-1 Cut the bars sections at a time and recheck rider fit with new brake lever position.



B-2 Tighten the clamp screws to 3-4 NM.



C-1 Install cap, nut and olive before installing the barb. Note that the olive has a flat end and a tapered end. The flat end is oriented up, toward the brake lever; the tapered end goes into the compression nut

# GENERAL MAINTENANCE

#### PAD REPLACEMENT

Pads should be replaced if they become contaminated or have less than 2.5mm thickness (Pad friction material & metal backing plate). (See D-1)

# **BEFORE RIDING**

Check the pads for wear or contamination.

Check the hose for cracking, wear or deformation. Replace if necessary.

Check that the brake system is operating correctly.

#### **AFTER RIDING**

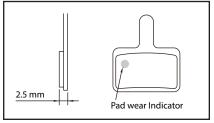
Remove any mud or contamination from the rotor slot on the caliper. Clean the caliper body with a cloth.

# AT REGULAR INTERVALS

Check the oil level 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.



D-1. Replace new pad

Instructions on bleeding the brakes can be found on www.trpcycling.com or on www.youtube.com/user/TRPBrakes