

### SAFETY WARNINGS

**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 your 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 2.2mm. 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 TEKTRONIC 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.

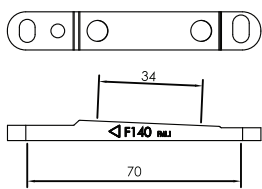
TRP hydraulic disc brakes are warranted against manufacturing defects in materials and / or workmanship for a period of two years from the date of original retail purchase.

Not covered under this warranty is damage resulting from improper installation, adjustment or maintenance, lack of maintenance, alterations, crashes or use judged by Tektro to be excessive or abusive. For warranty related questions or more information please contact a TRP Service Center or e-mail at info@trpcycling.com

### ADAPTER AND HARDWARE

#### HYWIRE/HYLEX Adapter Orientations

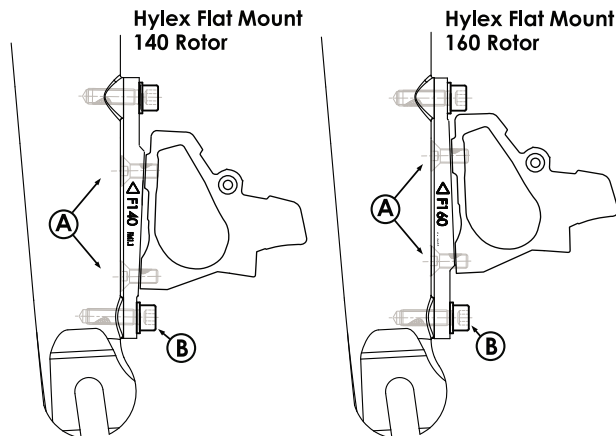
FM1.1 F140/F160 Adapter



(A) M5x13, 2pcs  
(B) M5x14, 2pcs

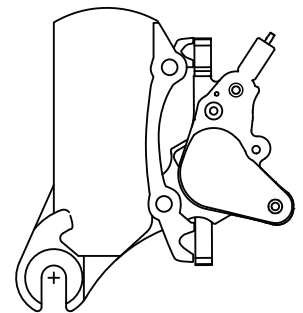


Torque Spec:  
FlatMount bolts: 5-7Nm (44-62 In-lb)  
Disc Rotor bolts: 4-6Nm (35-53 In-lb)



#### HYWIRE/HYLEX IS Mount

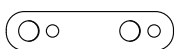
For IS or PM adapters, hold the adapter so that the stamped "UP" is oriented upwards, or furthest from the hub axle.



Torque Spec:  
Mounting bolts: 6-8Nm (53-71 In-lb)  
Disc Rotor bolts: 4-6Nm (35-53 In-lb)

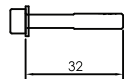
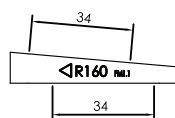
#### HYWIRE/HYLEX Flat Mount Rear Adapter & Bolt Lengths

FM1.1 R160 Adapter

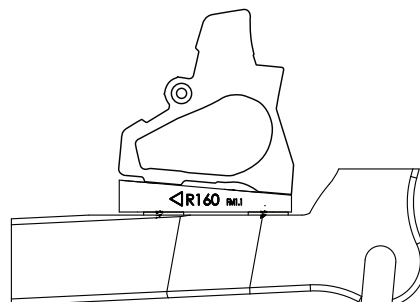


M5x13, 2pcs

M5x32, 2pcs



also available  
M5x17 M5x37  
M5x22 M5x42  
M5x27

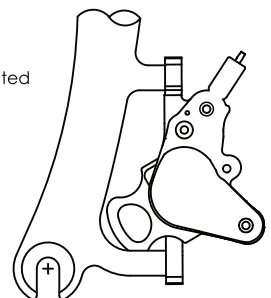


Hylex Flat Mount Rear 160 Rotor

Torque Spec:  
Flat Mount bolts: 5-7Nm (44-62 In-lb)  
Disc Rotor bolts: 4-6Nm (35-53 In-lb)

#### HYWIRE/HYLEX IS Mount

For Post Mount adapters, hold the adapter so that the stamped 'UP' is oriented upwards, or furthest from the hub axle.



Torque Spec:  
Mounting bolts: 6-8Nm (53-71 In-lb)  
Disc Rotor bolts: 4-6Nm (35-53 In-lb)

## INSTALLATION & ADJUSTMENT

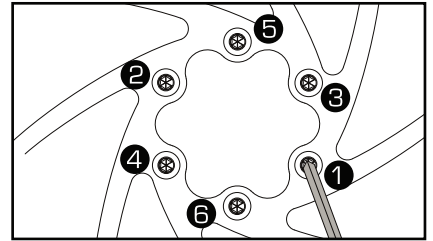
### TOOLS AND EQUIPMENT REQUIRED

The following tools are necessary to install the Tektro hydraulic disc brake:

- 2mm hex wrench
- 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: 4-6 Nm(35-53 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.



A-1. Rotor torquing sequence

### INSTALLING FLAT MOUNT ADAPTORS

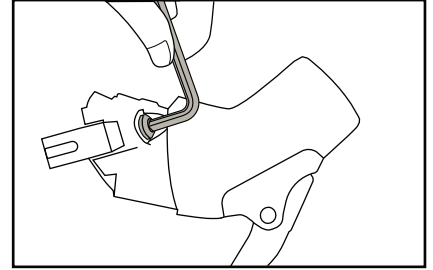
- Select the correct adapter (front or rear) for the size of rotor.

#### Front caliper -

- Attach the adapter to the caliper in correct direction for 140mm or 160mm rotor. Tighten the two M5x13® bolts to a torque of 5-7Nm.
- Attach the adapter to fork using the two M5x14® bolts. Align the caliper to the rotor, (using an gap or alignment tool,) and tighten to a torque of 5-7Nm.

#### Rear caliper -

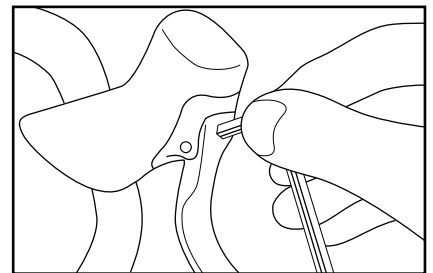
- With 140mm rotor : Insert mounting bolt® into the frame and make sure it is protruding 7mm through the frame. Attach the caliper to bolt®
- With 160mm rotor : Attach F-6 adapter to brake caliper and tighten bolt® to a torque of 5-7Nm(44-62 in-lb). Then attach adapter to the frame with mounting bolt®
- 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).



B-1. Tighten clamp nut with 5mm hex wrench

### MOUNTING THE BRAKE LEVERS

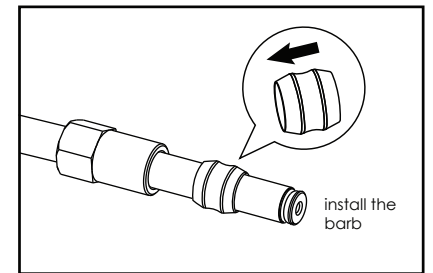
- Pull back the rubber hood to expose the 5mm hex head clamping nut - loosen and slide onto bar.
- Place the levers in an appropriate position and tighten to 4-6 Nm (35-53 in-lb). [ref. B-1]
- Route the brake hose along the handlebar. As with all hydraulic hose, there should be no kinks or bends that collapse the housing.
- Once you have the lever assembly positioned appropriately, you can adjust the reach of the blade by 2mm Allen wrench to suit your preference. [ref. B-2]



B-2. Adjust lever reach

### MODIFYING HOSE LENGTH

- Measure the new hose length, making sure you have enough free length for full rotation of your handlebars. Cut the hose to the desired length using a hydraulic hose cutter.
- Important: Slide on the compression nut, followed by the olive. [ref. C-1]
- Install the barb ensuring that it is fully seated within the cut end of hydraulic tubing.
- Reinsert the hose into the caliper and tighten the compression nut to 4-6 Nm (35-53in-lbs).



C-1. Install cap,nut and olive before installing the barb!

## GENERAL MAINTENANCE

### ■ PAD REPLACEMENT

Pads should be replaced if they become contaminated or have less than 2.2mm thickness. (Pad friction material & metal backing plate). [ref. D-1]

### ■ BEFORE RIDING

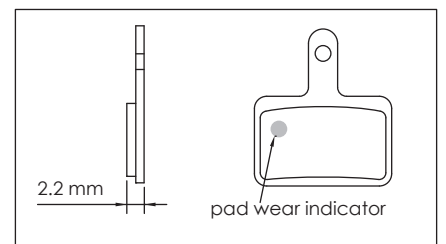
- Check the pads for wear or contamination.
- Check the hose for cracking, wear or deformation. Replace if necessary.
- Check that the brake system is operating correctly.

### ■ 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.



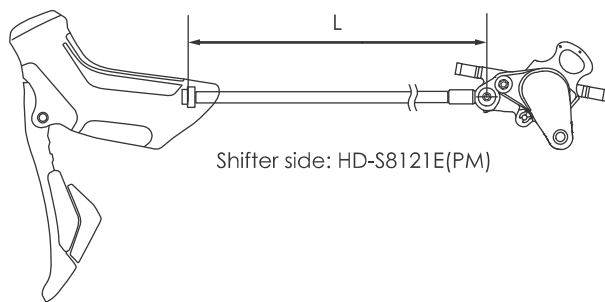
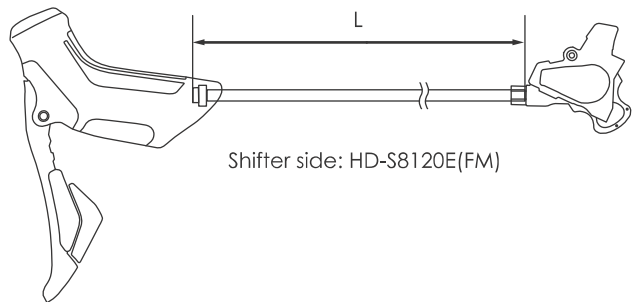
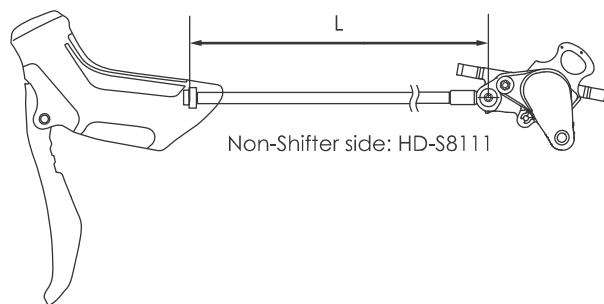
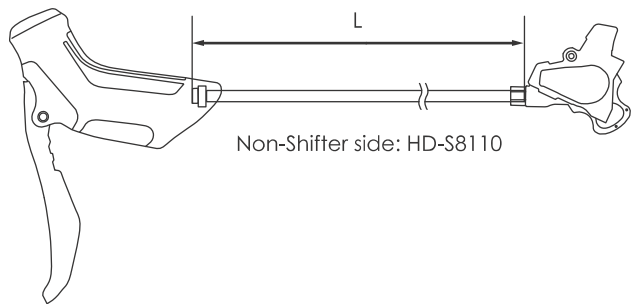
D-1. Replace new pad

For further information regarding hydraulic disc brake, please contact:

www.trpcycling.com  
info@trpcycling.com  
www.tektro.com  
service@tektro.eu

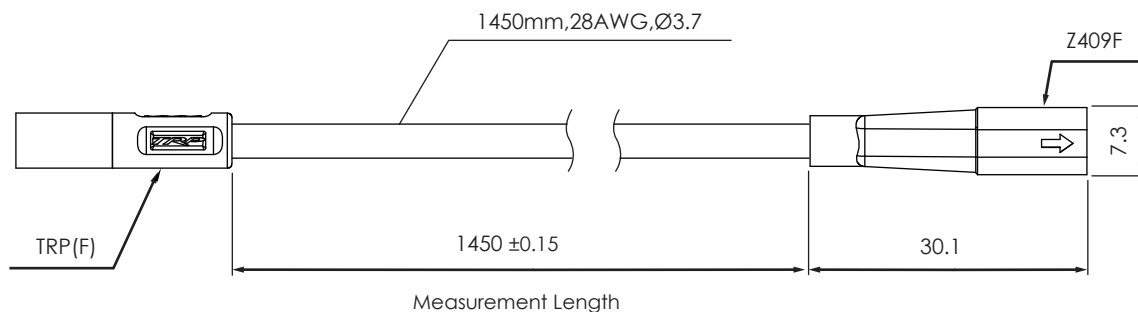
For any questions or further information regarding Pinion system, please contact:

www.pinion.eu



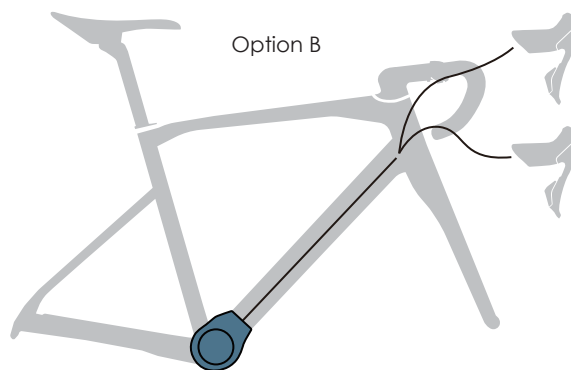
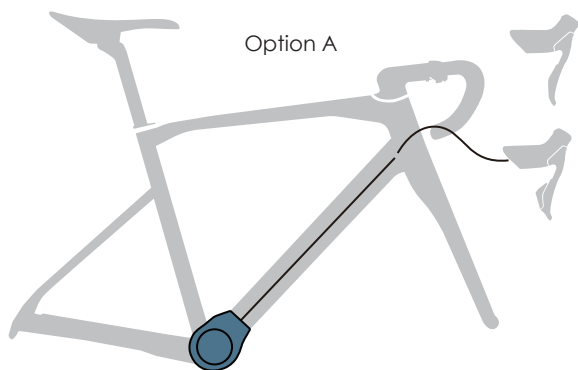
The Shifting Wire and Connector Specification for TRP HYWIRE x PINION SMART.SHIFT System:

EWL-10 / EWY-10 Cable Length Measurement:



The Shifting Wire Specification for PINION SMART.SHIFT Gear Box Application

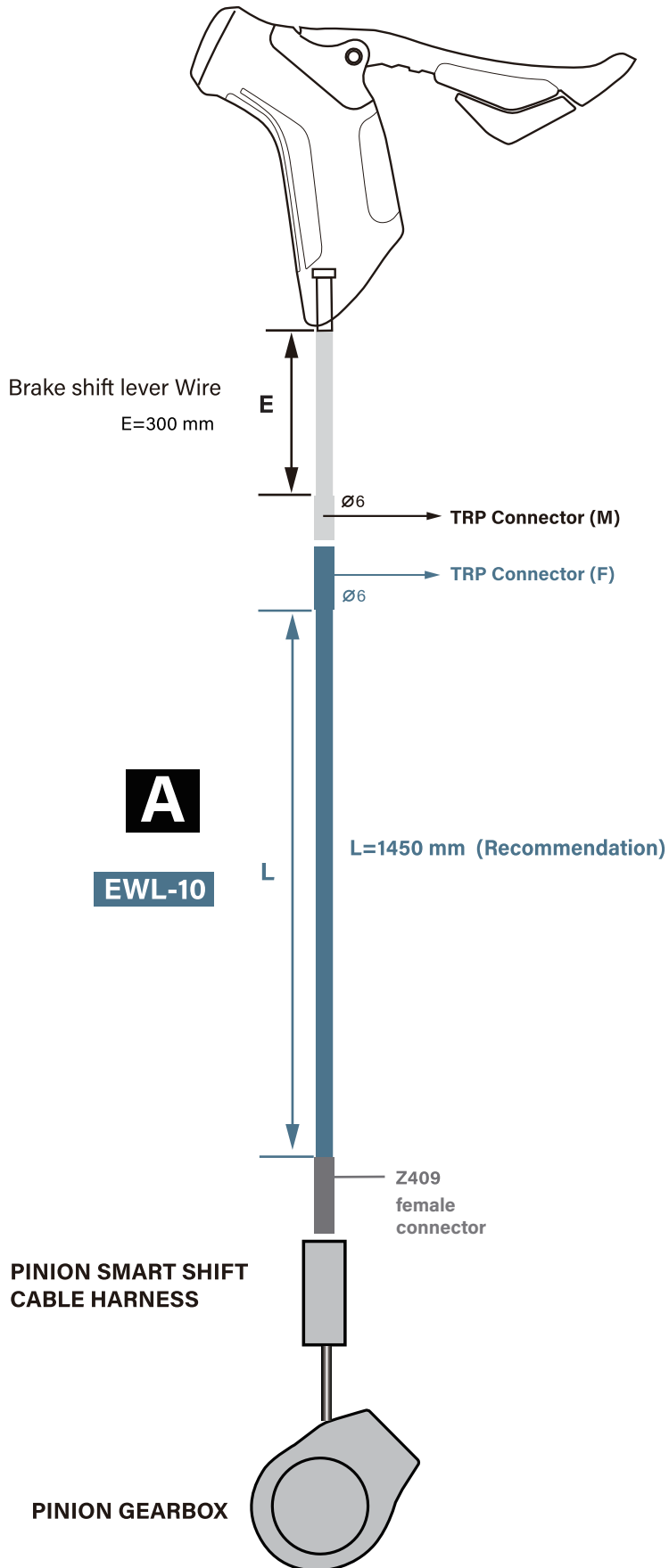
Wire Routing for TRP x PINION SMART.SHIFT System



## The Shifting Wire Specification for PINION Smart.Shift Gear Box Applllication

### Option **A**

- This diagram is intended for setups requiring a brake / shift lever on only one side, as opposed to setups requiring brake / shift lever on both sides.
- Before proceeding with the setup based on this diagram, please consult with PINION to ensure the system is compatible with the specific TRP model in question.
- For the PINION MGU System, the cable harness does not exist, and EWL-10 plugs into the MGU system directly.



## The Shifting Wire Specification for PINION Smart.Shift Gear Box Applllication

### Option B

- This diagram is intended for setups requiring a brake / shift lever on two side, as opposed to setups requiring brake / shift lever on one sides.
- Before proceeding with the setup based on this diagram, please consult with PINION to ensure the system is compatible with the specific TRP model in question.
- For the PINION MGU System, the cable harness does not exist, and EWP-10 plugs into the MGU system directly.

