

**2018 MOTOTRAX**  
**TRACK KIT**  
**INSTALLATION MANUAL**

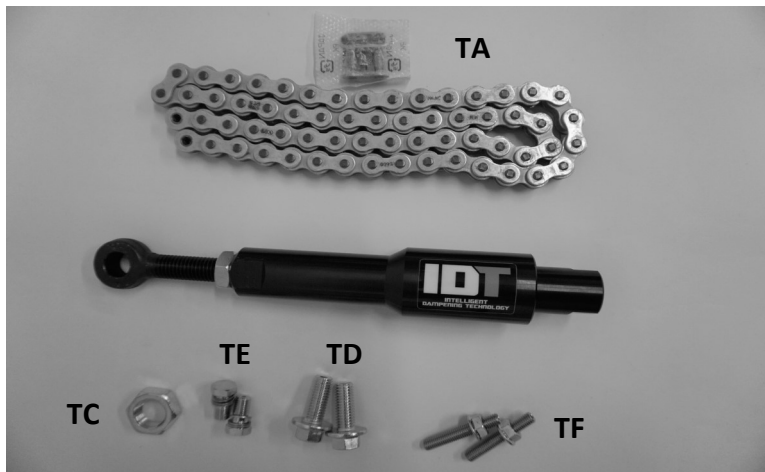
# **PREPARING THE BIKE**

- 1) Put the motorcycle on a stand.
- 2) Remove stock drive chain
- 3) Remove the rear wheel
- 4) Remove the mud flap
- 5) Disconnect the suspension linkage from the lower shock and bike frame (if your bike does not have a linkage then disconnect the lower shock from the swing arm)
- 6) If you are using the foot brake disconnect the brake line from the foot brake master cylinder, if you are using a hand brake then completely disconnect the foot brake master cylinder and brake lever from the frame.
- 7) Remove the kickstand if equipped.
- 8) Remove the swing arm from the bike, clean and lightly grease the swing arm axle as it will be re-used for kit installation.
- 9) Remove the shock, note on some bike models it may be necessary to remove the exhaust and/or loosen the lower sub frame bolts to get the shock out.

**Note: consult your motorcycles owner's manual if you need assistance on any of the above steps!**

# **UNBOXING THE MOTOTRAX**

## **SKI BOX 2 - TRACK PARTS**



TA — Primary Chain And Masterclip

TB — IDT Strut

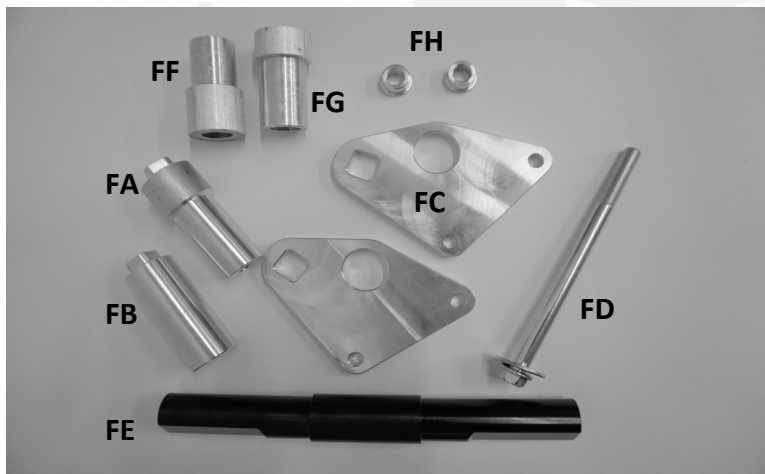
TC — IDT Jam Nut

TD — Front Link Bolts (2X)

TE — Banjo Bolts & Washers (2X)

TF — Track Stay Studs & Nuts (2X)

## **SKI BOX 3 - FIT KIT**



FA — Stepped Fork Spacer

FB — Strait Fork Spacer

FC — Ski Brackets (2X)

FD — Ski Axle Bolt & Washer

FE — Fork Brace

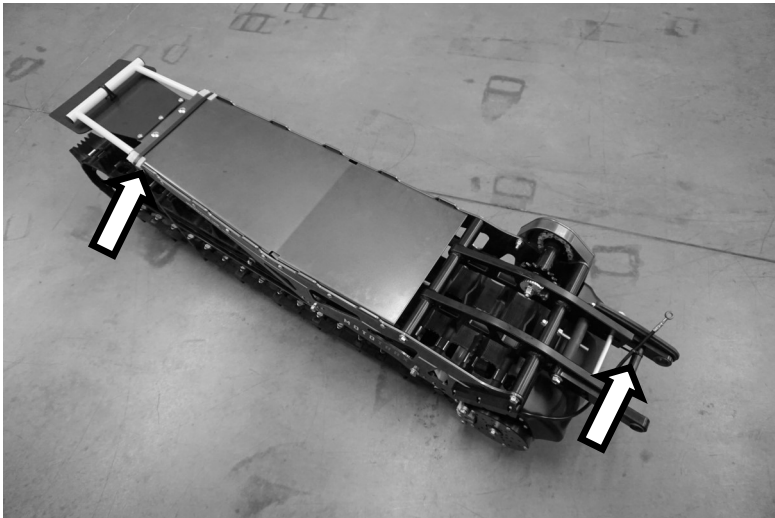
FF — Left Swingarm Spacer

FG — Right Swingarm Spacer

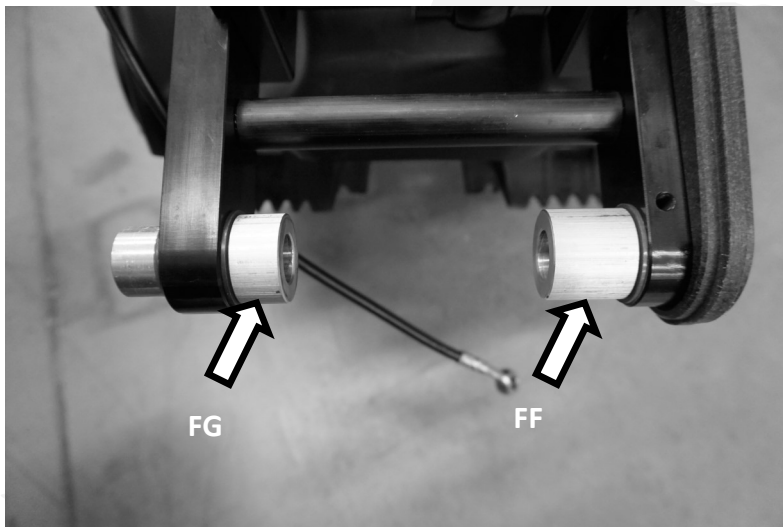
FH — Strut Spacers (2X)

## **TRACK BOX - TRACK ASSEMBLY**

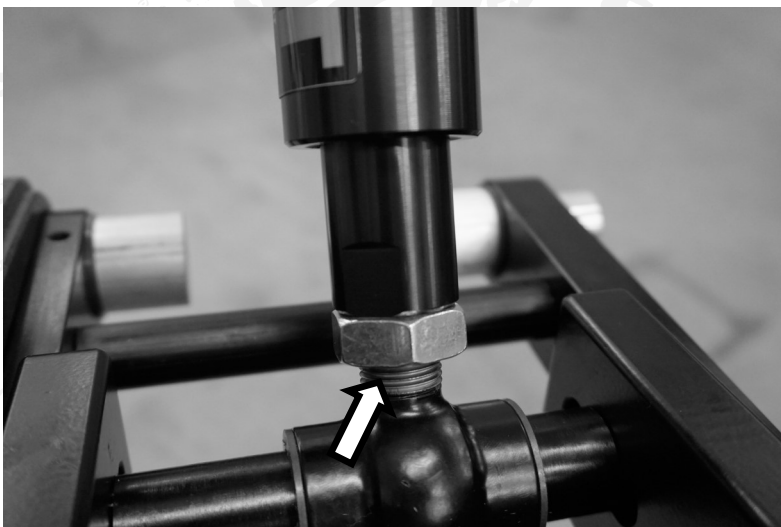




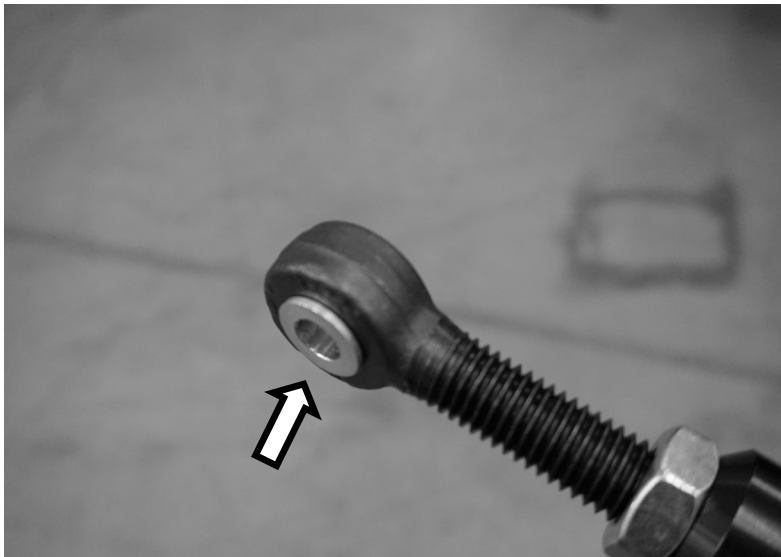
- ⇒ After removing the track assembly from the box, cut the rear banding and zip tie holding the brake line secure.
- ⇒ Locations of banding and zip tie are shown in image.



- ⇒ Slide swingarm collars (FF) and (FG) (from fit kit box) into swingarm mounts as shown with the flange resting on the inside over the bulkhead.
- ⇒ Note: Apply a liberal amount a waterproof grease to the bushings in the bulkhead before slider the spacers into position.

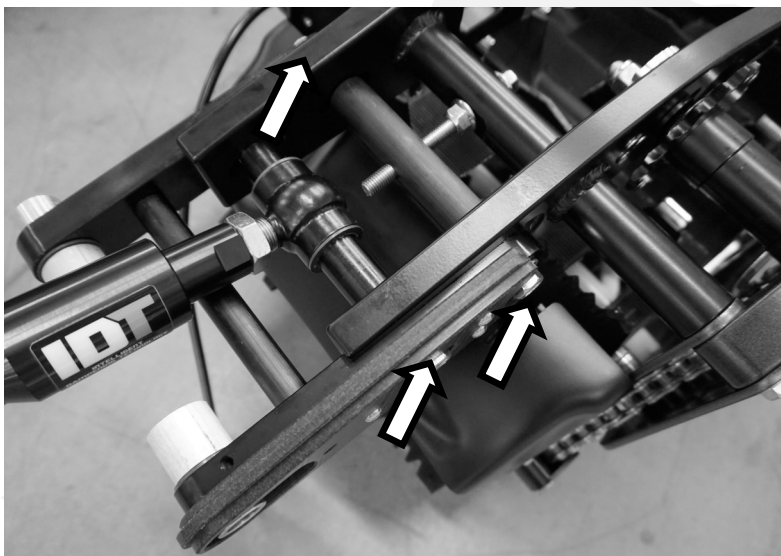


- ⇒ Spin the IDT strut (TB) onto the strut end as shown, leave about 1/4" of visible threads showing below the jam nut, securely tighten the jam nut at this point.



⇒ Insert the shock strut spacers (FH) as shown.

⇒ Note: Apply a liberal amount a waterproof grease to the bushing in the eyelet before slider the spacers into position.



⇒ Loosen all three slider bolts so that they have some free play, this will make fitting the track kit to the motorcycle much easier.

⇒ You are now ready to install your track kit.

## **INSTALLING THE MOTOTRAX UNIT**



- ⇒ With help slide the kit into place as shown behind the bike. The more aligned the kit is at this step the easier it will be to mount the kit.



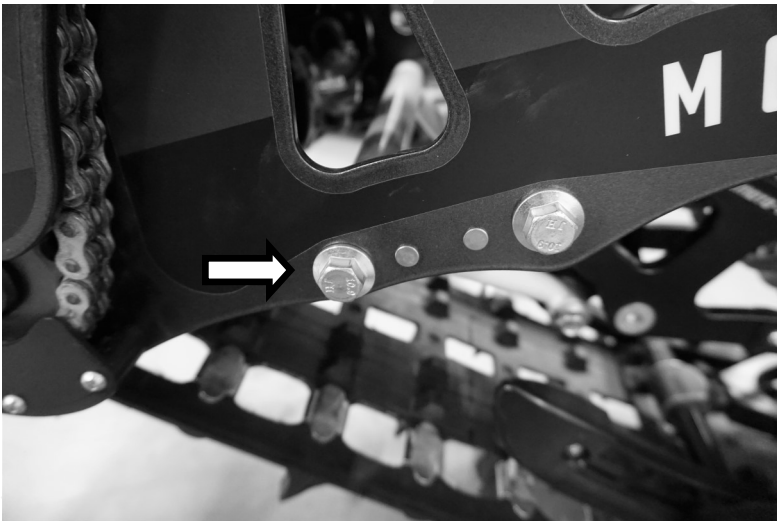
- ⇒ Lift the kit from both sides using two people and slide the swingarm mounts and collars into the swingarm axle location, secure using the stock greased swingarm axle.
- ⇒ Note: a rubber mallet may be required to get the axle to go through the collars.
- ⇒ Note: Make sure that the collars stay aligned as you are inserting the swingarm axle or you may damage the collars or swingarm axle.



- ⇒ Once the axle is in, secure it using your OEM axle nut and torque values.



- ⇒ Mount the strut into the upper shock hole as shown, torque bolt to OEM specs.



- ⇒ Install the front link bolts (TD) and torque to specs below.
- ⇒ Note: Installing the front link bolts is much easier with help. One person can line up the front link and install the bolt while the helper is lifting the kit from the rear grab bar as needed.
- ⇒ Torque: NM: 80.0 F/LBS: 59.0
- ⇒ Use red locking compound.



- ⇒ Now install the primary drive chain (TA) from the kit to the bike, if the chain is very loose check to see if you can remove two links, the chains are intentionally sent long so that we can accommodate different counter sprocket size and gearing options.
- ⇒ Once the chain is installed, install the master clip (TA) as shown, it is important to make sure the clip is fully seated and oriented as shown to reduce risk of master clip and chain failure.

## **SETTING UP BRAKES — FOOT BRAKE**



- ⇒ Install the brake line to the rear master cylinder. The kit includes a fine thread and course thread banjo bolt (TE) to fit any bike so make sure you use the correct thread for your application.
- ⇒ Make sure the brake line is routed in a manner that it will not hit the drive chain, exhaust, or anything that can cause damage to the line.
- ⇒ Once the line is fully secured you can start the bleeding process.
- ⇒ When bleeding the brakes loosen the top most bleed bolt on the brake caliper.



## **SETTING UP BRAKES — HAND BRAKE**



- ⇒ Route the brake line through the track system and around the strut as shown making sure it is clear of the drive chain, exhaust and anything else that may snag, tear, or burn the line and cause future failure.

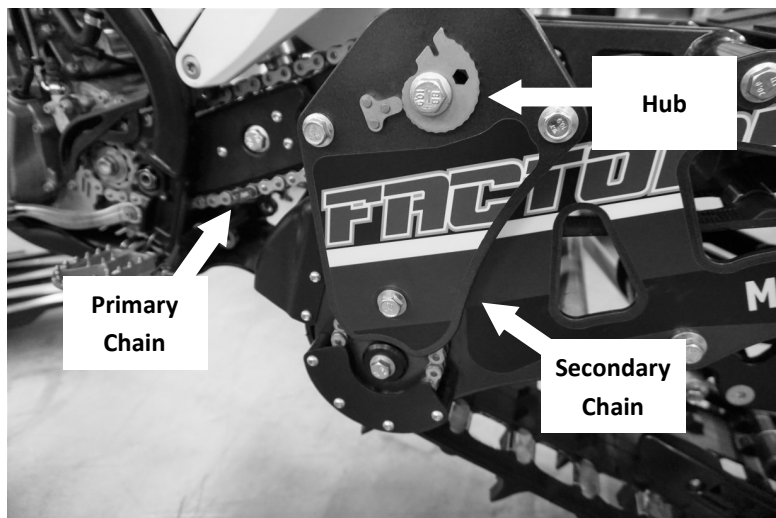


- ⇒ When routing through the steering head make sure that you turn the bars fully both directions and confirm that the line will not snag or kink on anything. Cable ties may and should be used to hold the line in place to prevent the line from shifting during use.



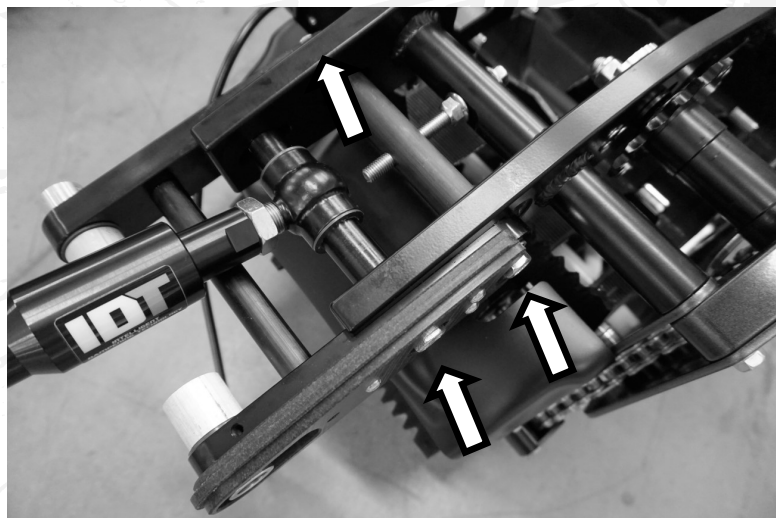
- ⇒ Install the brake line to the front master cylinder. The kit includes a fine thread and course thread bolt to fit any bike so make sure you use the correct thread for your application. You may also reuse the stock bolt but we do recommend using new copper crush washers.
- ⇒ Once the line is fully secured you can start the bleeding process.
- ⇒ When bleeding the brakes loosen the top most bleed bolt on the brake caliper.

## **ADJUSTING THE CHAINS**

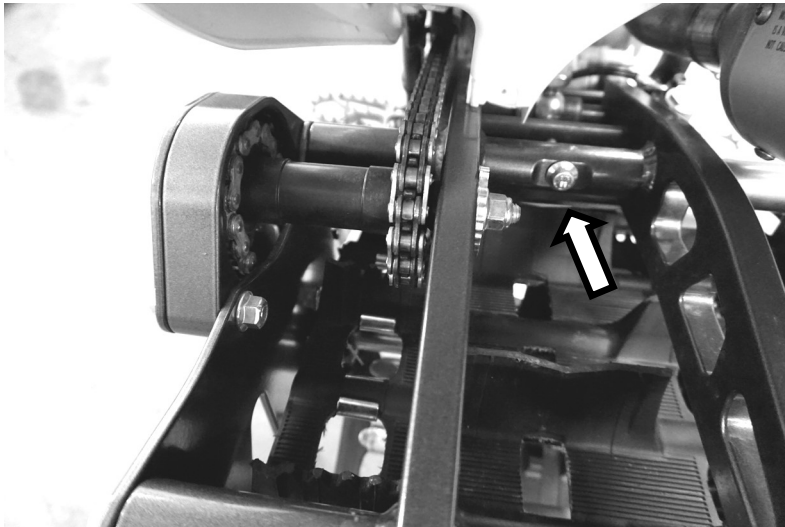


- ⇒ First and foremost, understanding how the chain system works is key, there are two drive chains to run the MotoTrax track systems. The PRIMARY chain runs from the motorcycle engine to a hub located at the top of the MotoTrax kit. The SECONDARY chain runs from the hub down to the drive shaft.
- ⇒ It is critical to keep both adjusted correctly for reliable drivetrain performance.

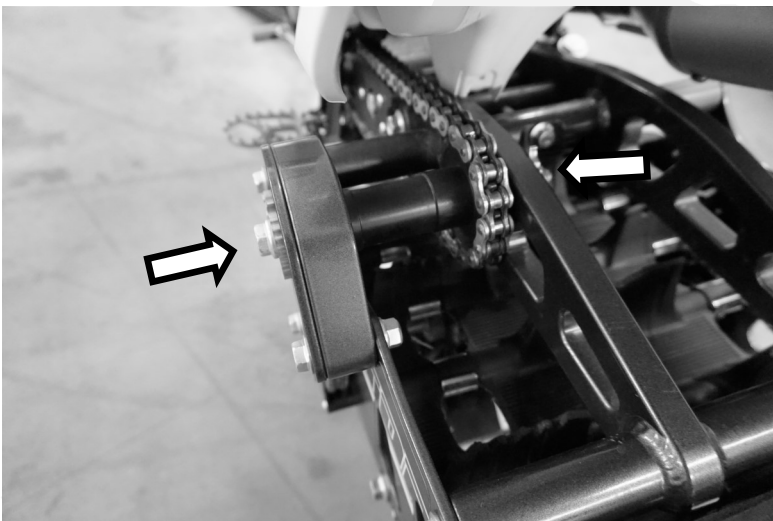
- ⇒ First if you adjust the hub using the clamshell adjusters it will adjust both the primary chain (the chain coming from the engine) and the secondary chain (the outer most chain running to the driveshaft)
- ⇒ If you adjust the chain using the swingarm mount adjuster, then you ONLY adjust the primary chain, the secondary chain will remain unchanged.
- ⇒ You should always adjust both chains at the same time.



- ⇒ First loosen the primary chain.
- ⇒ To do this loosen all three of the bulkhead slider bolts as shown.
- ⇒ Note: Loosen them so that you can fit a figure nail between the bolt head and the swingarm mount.



- ⇒ Spin the adjuster bolt clockwise until the adjuster bottoms out. Do not force it past the point when it becomes difficult to turn.
- ⇒ This will loosen the primary chain.
- ⇒ Note: If the adjuster bolt binds up at all it means that you did not loosen all of the slider bolts properly.



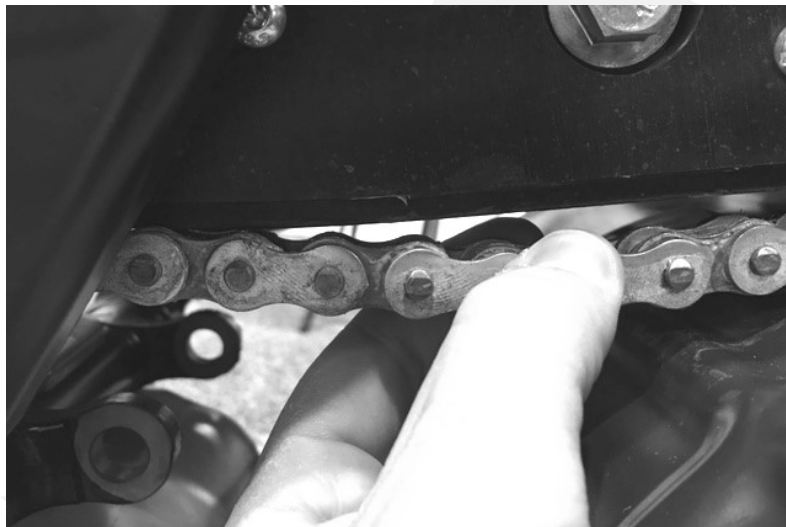
- ⇒ Now loosen the drive hub
- ⇒ Once the drive hub is loose, again one finger nail between bolt head and clamshell, use a 10mm Allen to spin the clamshell out until the side chain is fully tightened. Note: Make sure both clamshells are in the same configuration, you may need to count the number of divots from fully rested to confirm this.
- ⇒ Note: Do not overtighten the size chain, there should be at least  $\frac{1}{8}$ " of play when pressing the center of the chain as shown.



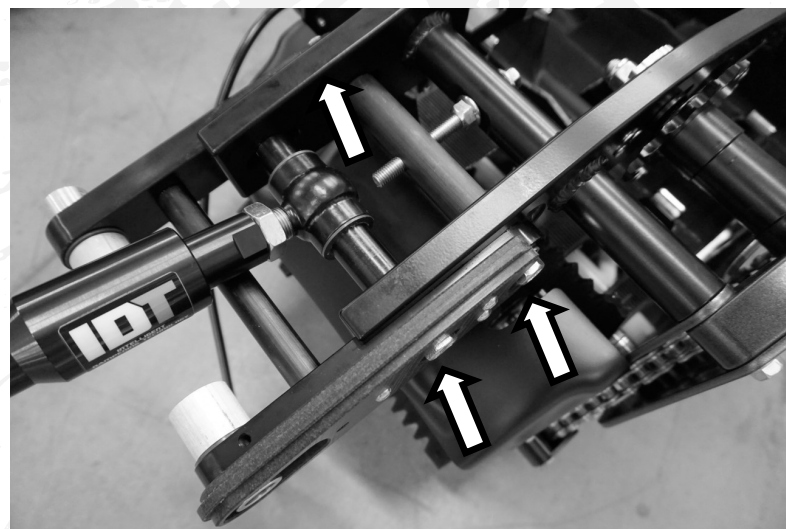
- ⇒ Tighten the hub from the outside holding the nut on the inside, this will ensure that the clamshells do not spin during the tightening process.
- ⇒ Torque: NM: 80.0 F/LBS: 59.0



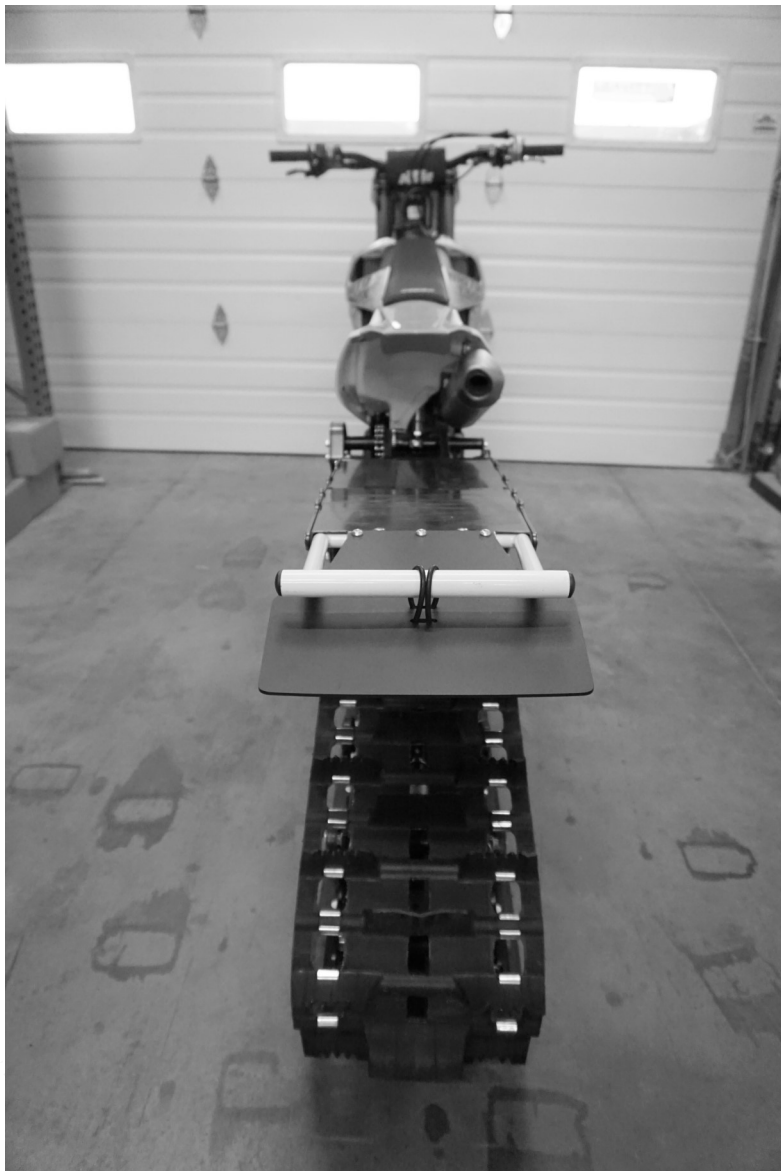
- ⇒ Once the secondary chain is correctly adjusted and the hub is fully torqued, you need to adjust the primary chain.



- ⇒ Spin the adjusting bolt counter clockwise to tighten the primary chain. The chain should be tight enough that you can only get 1/4" to 1/2" of play between the chain guide and chain if you are pulling down on it.



- ⇒ Once the chain is at the correct tension torque the 3 slider bolts as shown to 80NM.
- ⇒ Torque: NM: 80.0 F/LBS: 59.0



- ⇒ Take a look from the rear of the kit as shown and make sure the kit is aligned and looks straight with the bike. If you are experiencing any issues or the kit does not line up with the motorcycle please contact MotoTrax Inc or your local dealer before using your MotoTrax kit to avoid issues or damage.
- ⇒ At this point your chains are fully adjusted and ready to ride.
- ⇒ Chains should be checked before each ride.

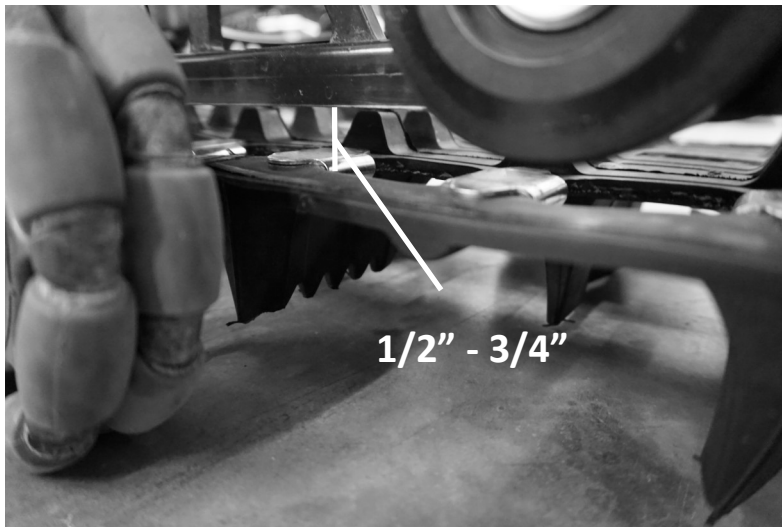
## **ADJUSTING THE TRACK TENSION**



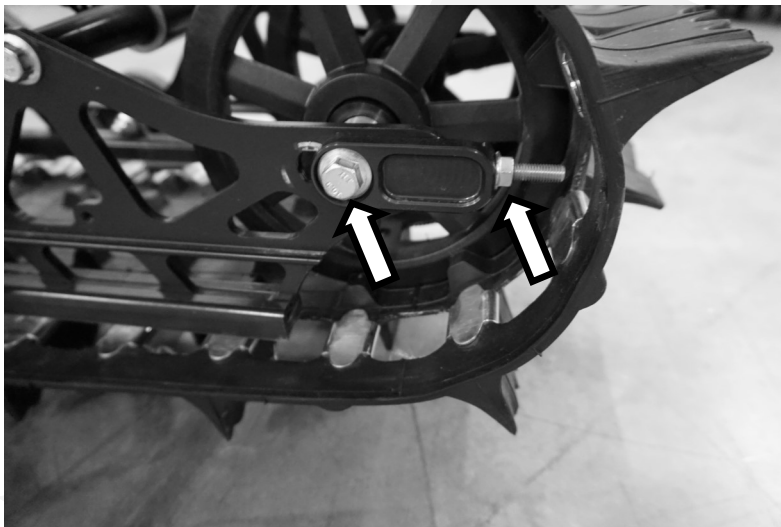
- ⇒ Your new MotoTrax kit comes with a VERY loose track to ease initial setup and packaging.
- ⇒ It is important that you always maintain proper track tension to maintain reliability and minimize excessive wear on the track system.
- ⇒ You need to loosen the two rear idler axle bolts shown.
- ⇒ Note: They only need to be backed out about 1/8" to allow for adjustment of the track tension.



- ⇒ Install the track stay studs, (TF) from ski box 2.
- ⇒ Note: Remove the nuts from the studs if threaded on already.



- ⇒ Now thread in the track stay studs evenly to tension the track.
- ⇒ With the track system suspended off the ground you need to adjust the track so that there is approx. 1/2" - 3/4" of distance between the rail slide material and track clips as shown.
- ⇒ Once both sides of the track have the proper clearance move on.
- ⇒ Note: The MotoTrax rear track stand is a great tool for adjusting the track. It elevates the track off the ground as well as makes moving the kit very easy.



- ⇒ Torque the rear idler bolts to the following torque.
- ⇒ Then install and tighten the track stay nuts securely.
- ⇒ Verify that the track stay studs will not hit the track clips by spinning the track by hand.
- ⇒ Torque: NM: 80.0 F/LBS: 59.0

- ⇒ Now you need to start the bike and run the track as slow speed for 1 min to warm the track up.
- ⇒ Turn the bike off.
- ⇒ Now remeasure the track sag as shown before. If the track sag has changed you need to readjust the track tension as shown previously.
- ⇒ Tracks can stretch and wear out over time.
- ⇒ You should check for proper track tension before each use.



## **ADJUSTING THE SHOCK ABSORBER** **(MX MODEL)**



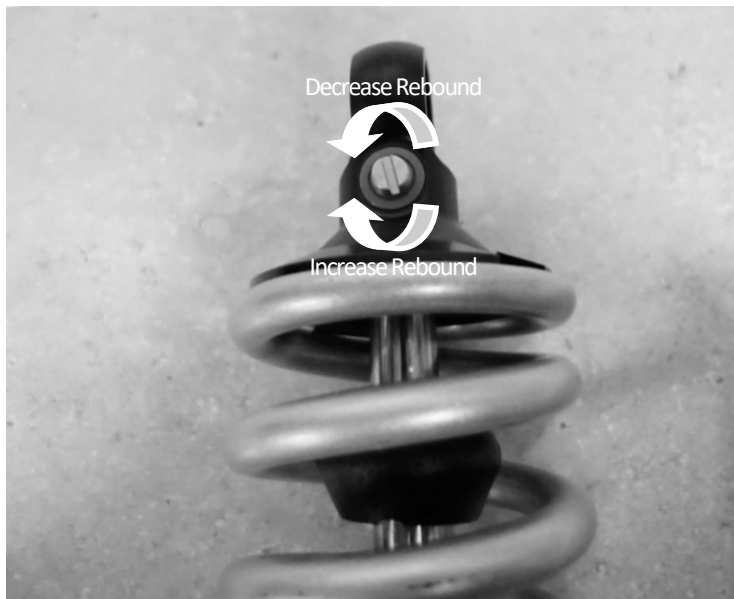
On the Motocross model there is a FOX RC2 shock. The shock is equipped with many forms of adjustment.

- ⇒ Spring Preload – This is used to set ride height. ONLY adjust spring preload for small amount of ride height adjustment, if major adjustment is needed you should install a different spring rate.
- ⇒ Turning the adjuster right increases the preload
- ⇒ Turning the adjuster left decreases the preload



- ⇒ High Speed Compression – This is used to adjust the compression damping effect of high speed impacts, note this is high shock shaft speed and not necessarily high speed riding.
- ⇒ Turning the adjuster right increases the damping
- ⇒ Turning the adjuster left decreases the damping
- ⇒ Low Speed Compression – This is used to adjust the compression damping effect of low speed impacts, note this is low shock shaft speed and not necessarily low speed riding.
- ⇒ Turning the adjuster right increases the damping
- ⇒ Turning the adjuster left decreases the damping





- ⇒ Rebound damping – Used to adjust the rate at which the shock rebounds or extends after an impact.
- ⇒ Turning the adjuster right increases the damping
- ⇒ Turning the adjuster left decreases the damping

### **Internal Shock Valving**

The FOX RC2 shock is able to be fully rebuilt and has adjustable internal valving, major suspension changes can be accomplished by changing the valving. Please contact an authorized Fox service center for any internal valving. DO NOT try to disassemble the shock without proper training or tools.

### **Fox Factory Settings**

RC2 PN 951-03-001

Low Speed Comp – 12

High Speed Comp—12

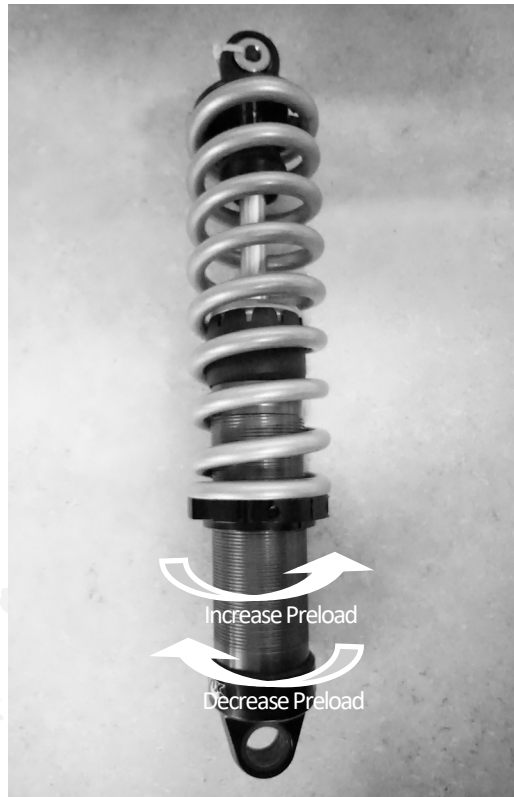
Rebound—12

Spring Preload— 8.74"

### **Spring Rate Chart**

120lbs—175lbs	325lbs/in
175lbs—225lbs	350lbs/in
225lbs—280lbs	375lbs/in

## **ADJUSTING THE SHOCK ABSORBER** **(ENDURO AND MOUNTAIN MODELS)**



⇒ On the Enduro and Mountain model there is a FOX IFP shock. The shock has two forms of adjustment.

⇒ Spring Preload – This is used to set ride height. **ONLY** adjust spring preload for small amount of ride height adjustment, if major adjustment is needed you should install a different spring rate.

⇒ Turning the adjuster right Increases the preload

⇒ Turning the adjuster left Decreases the preload

### **Internal Shock Valving**

The FOX RC2 shock is able to be fully rebuilt and has adjustable internal valving, major suspension changes can be accomplished by changing the valving. Please contact an authorized Fox service center for any internal valving. **DO NOT** try to disassemble the shock without proper training or tools.

### **Fox Factory Settings**

Spring Preload— 8.74"

### **Spring Rate Chart**

120lbs—175lbs	325lbs/in
175lbs—225lbs	350lbs/in
225lbs—280lbs	375lbs/in

# **TRACK SYSTEM TORQUE VALUES**

Rail Slide Lock	M5 Allen	Torque	NM: 7.0	F/LBS: 5.0	Red
Brake Rotor	M6 Allen	Torque	NM: 9.0	F/LBS: 6.5	Red
Plastic Guards	M6 Allen	Torque	NM: 5.0	F/LBS: 3.5	Red
Rail Cap	M6 Hex	Torque	NM: 12.0	F/LBS: 9.0	NA
Brake Caliper Pin	M8 Allen	Torque	NM: 20.0	F/LBS: 14.8	Red
Tunnel Cover	M8 Allen	Torque	NM: 30.0	F/LBS: 22.0	NA
Snow Flap Bolt	M8 Allen	Torque	NM: 30.0	F/LBS: 22.0	NA
Bearing Carrier	M8 Allen	Torque	NM: 30.0	F/LBS: 22.0	Red
Banjo Bolt	M10 Hex	Torque	NM: 30.0	F/LBS: 22.0	NA
Bulkhead/Tunnel	M10 Hex	Torque	NM: 60.0	F/LBS: 44.0	Red
Rear Arm Upper	M10 Hex	Torque	NM: 60.0	F/LBS: 44.0	Red
Rear Arm Lower	M10 Hex	Torque	NM: 60.0	F/LBS: 44.0	Red
Skid Brace	M10 Hex	Torque	NM: 60.0	F/LBS: 44.0	Red
Rear Slider	M10 Hex	Torque	NM: 60.0	F/LBS: 44.0	Red
Shock Upper	M10 Hex	Torque	NM: 60.0	F/LBS: 44.0	NA
Shock Lower	M10 Hex	Torque	NM: 60.0	F/LBS: 44.0	Red
Driveshaft	M10 Hex	Torque	NM: 60.0	F/LBS: 44.0	Red
Chain Case with Locknut	M10 Hex	Torque	NM: 60.0	F/LBS: 44.0	NA
Chain Case to Bulkhead	M10 Hex	Torque	NM: 60.0	F/LBS: 44.0	Red
Rail Pivot	M12 Hex	Torque	NM: 80.0	F/LBS: 59.0	NA
Upper Swingarm	M12 Hex	Torque	NM: 80.0	F/LBS: 59.0	Red
Upper Front Link	M12 Hex	Torque	NM: 80.0	F/LBS: 59.0	Red
Mid Link Front/Back	M12 Hex	Torque	NM: 80.0	F/LBS: 59.0	Red
Rear Idler Axle	M12 Hex	Torque	NM: 80.0	F/LBS: 59.0	Blue
Hub Axle	M12 Hex	Torque	NM: 80.0	F/LBS: 59.0	NA
Primary Chain Adjuster	M12 Hex	Torque	NM: 80.0	F/LBS: 59.0	Blue