



**2005 Trance SERIES
DUAL-SUSPENSION BIKE
TECHNIC MANUAL**





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Trance Product feature

This bike falls between XC race-inspired NRS and XC super long travel VT . the category name is Trail /Enduro .

The rear suspension system is a new design which is called maestro , this maestro feature is vpp design and to get the overall suspension behavior to the best not only one point is the best .

1. Minimal power loss
2. Low kickback
3. Minimal brake lockout
4. Linear rising rate suspension design
5. Best traction

The trance is for trail using so some feature is design as below

1. 4.2” rear travel and 4” front fork
2. Full cartridge bearing design
3. Diamond shape frame design for light weight and better rigidity
4. Full seat post adjustment
5. Full range size (14”~22”)
6. Aluxx SL tube



1. Sizing

The actual frame measurements and geometries are listed below.

Size	14.5"	16"	18"	20"	22"
Top Tube (mm)	555	570	590	613	630
Seat Tube (mm)	369	406	457	508	559
Seat Angle	73.5°	73.5°	73.5°	73.5°	73.5°
Head Angle	70.5°	70.5°	70.5°	70.5°	70.5°
B.B. Drop (mm)	10	10	10	10	10
Rear Center (mm)	433	433	433	433	433
Wheel Base (mm)	1045	1062	1085	1110	1130.7



2.Rear shock

The Trance series is all purpose dual suspension cross country bike. The Trance bike is capable of climbing and descent the most technical of trails. Trance 1 offer three ProPedal damping setting to reduces pedal induced suspension bob. You can find s setting that suits your riding style. Please follow the guidelines below in setting up and maintaining your Giant Trance bike.

Shock spec:

eye to eye : 165.1mm(6.5")

shock travel: 38.1mm(1.5")

hard ware: 22.2x6mm/40x6mm

Setup for Trance 1 (See Drawing #1) :

1. Adjusting Air Pressure

The air pressure needed is determined by the rider's weight and riding conditions. Increasing air pressure will make the shock stiffer. Decreasing the air pressure will make the shock softer. The shock should be set to sag 9mm or 1/4 of its stroke while the rider is seated on the bike in riding gear. See table 1 for recommend air pressure:

TABLE 1 : AIR PRESSURE CHART		
Rider Weight		Air pressure
lbs	kg	PSI
90-100	41-45	82-90
100-110	45-50	90-100
110-120	50-54	100-108
120-130	54-60	108-120
130-140	60-64	120-128
140-150	64-68	128-136
150-160	68-73	136-146
160-170	73-77	146-154
170-180	77-82	154-164
180-190	82-86	164-172
190-200	86-91	172-182
200-210	91-95	182-190
210-220	95-100	190-200
220-230	100-104	200-208
230-240	104-109	208-218
240-250	109-113	218-226
250-265	113-120	226-241
265-280	120-127	241-255
280-295	127-134	255-269

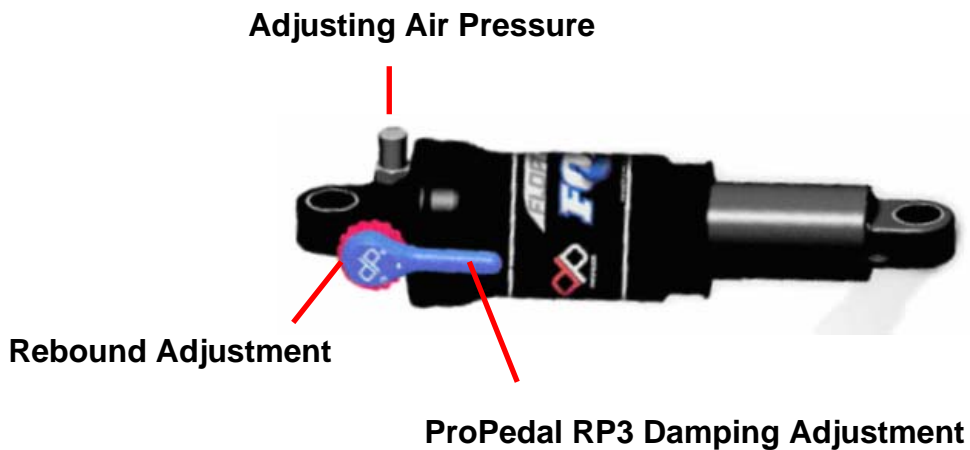


2. Rebound Adjustment

Rebound damping controls the rate at which the shock returns after it has been compressed. The red adjuster dial can be turned clockwise for slower rebound and counter-clockwise for faster rebound. The proper rebound setting is a personal preference and varies depending on rider weight, riding style and riding conditions.

3. ProPedal RP3 Damping Adjustment

ProPedal damping reduces pedal induced suspension bob. The three settings of the lever are full ProPedal, light ProPedal and Plush. Use the different settings to tune the shock to different riding conditions and situations. For example, use the full ProPedal position for riding to the top of the mountain and then switch to the Plush position for the descent. Switch between positions and select the one that reduces suspension movement most effectively while providing the desired amount of bump absorption.

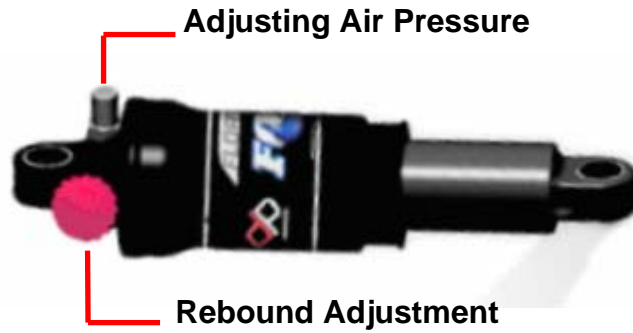


Drawing #1



Setup for Trance 2 ~ Trance 4 (See Drawing #2)

1. Adjusting Air Pressure
Please refer to Adjusting Air Pressure and Sag for Trance 1.
2. Rebound Adjustment
Please refer to Rebound Adjustment for Trance 1.



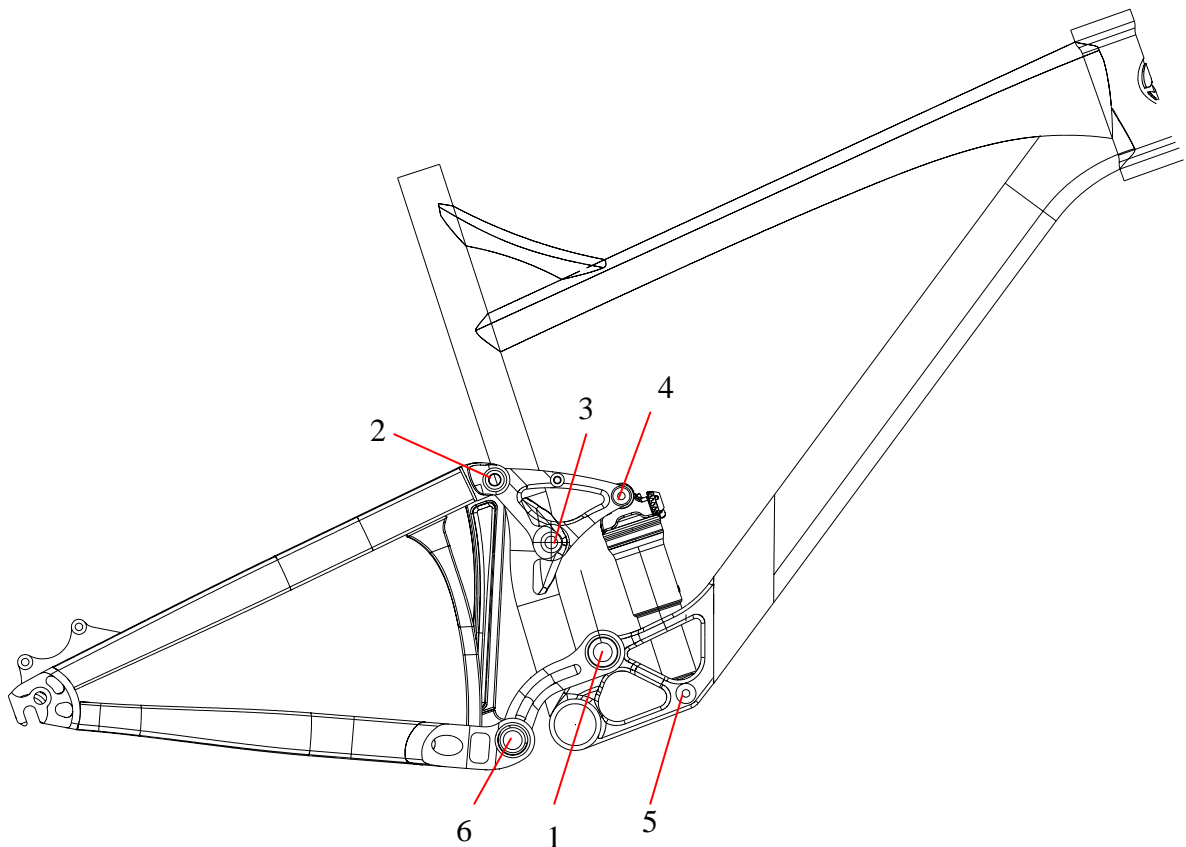
Drawing #2

3. Torque settings

The bolts used to attach the rear suspension unit are very high grade products factory installed to specific torque specification. If it becomes necessary to remove or tighten the pivot bolts extreme care should be taken when re-tightening them.

All bolts should be cleaned and re-set using LocTite Primer (# 243)

All bolts location and tighten torque please refer to the illustration below.



Torque settings:

1. Main pivot	120 -150 Kgf/cm. or 104 -130 in-lbs.
2. Seatstay pivot	120 -150 Kgf/cm. or 104 -130 in-lbs.
3. Main linkage pivot	90 -110 Kgf/cm. or 78 - 95 in-lbs.
4. Upper shock mount	90 -110 Kgf/cm. or 78 - 95 in-lbs.
5. Lower shock mount	90 -110 Kgf/cm. or 78 - 95 in-lbs.
6. Chainstay pivot	120 -150 Kgf/cm. or 104 -130 in-lbs.

4. Explode Drawing

THE DRAWING BELOW SHOWS RELATIONS OF EVERY PARTS AND FRAME

