teknik

OFFROAD SUSPENSION SETUP GUIDE

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ABOUT TEKNIK

Teknik Motorsport is a manufacturer and importer of motorcycle suspension products. We also have a workshop dedicated to developing and testing new products. Teknik is a family owned Australian company that is enthusiastic about motorcycling and is staffed by people who are passionate motorcyclists, and our products are manufactured in Australia wherever possible.

Teknik has been operating since 2001. We have been involved with Enduro legend Geoff Ballard, and the Ballards Yamaha Offroad team from 2001 and Lyndon Heffernan's Academy Of Off-Road Riding since 2003. We have also built the suspension for the GHR Honda Off Road Team, in Enduro, off road and the Australian Safari, culminating with an outright win in the 2004 Safari.

In 2006 we ran two Kawasaki KX250F's in our own MX Nationals Pro Lite MX team in conjunction with ADB magazine. A solid success, and team rider Mike Phillips has since gone on to much higher success.

For 2007/2008 we went road racing, attending every round of the ARRC, supporting a number of privateer riders in the Supersport class, and we performed major setup and development work for Craig McMartin on the 1098 and 1198 Ducati in Pro Twins. How'd he go? Two more CHAMPIONSHIPS! Lap records at every track, and nearly 2 seconds off his PB around his home track of Eastern Creek. Thats a win for Teknik and a win for you as all our development work from the track goes into your suspension.

All our parts and kits have been extensively tested in the field by both our own race team and riders we support.

Opening hours:
8:30am - 5:00pm AEST Monday - Friday
8:30am - 12:00pm AEST Saturday
Sunday - Closed

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INTRODUCTION

Today's motorcycles are very advanced. Gone are the days of the owner having to finish the manufacturing. However, they are not perfect, they never can be. The nice folks who build your bike don't know you. They don't know if you weigh 60 kilos or 120 kilos. They don't know whether you carry a bunch of gear. They don't know if you ride SX, or natural terrain MX, or enduros.

Getting your suspension dialled in for your riding style is one of your first priorities when you take your new bike out on the track. However, it is an on-going process, and what worked today might not suit the next track conditions you encounter next week. Therefore, you have to take on the role of test rider yourself and learn to identify problem areas. Never stop testing and thinking about what your bike is doing. Read your owners manual too, it's full of good stuff.

This booklet is full of practical information that can help people with both revalved or standard suspension, and has been complied from archival material, conversations with race engineers, input from Suspension Tech NZ and our own ongoing experience working with top riders throughout Australia.

The figures we have come up with have generally worked very well but individual riders may get better results with alternative personalized settings. Our experience and personal education is ongoing and we hope these notes will assist in your set up, speed and safety. We will continue to offer our on track service at selected meetings and continue to develop our settings to the benefit of our clients.

When using this manual, it is intended that you start at the clickers section and work your way through. It is of little use making suspension and geometry adjustments when you have no idea of the basics: where your clickers are, ride height, springs rate, shock length. Remove the set-up sheet at the back of this manual and photocopy it. Keep the notes as a record for each track, and to give you direction when reviewing settings. If you don't keep records, you will chase your tail all weekend.

To get started, I've included a quote from Ross Maeda of Enzoracing in California. Ross has a way of making complex systems seem simple…

"To understand how to start adjusting your suspension, you have to understand the basic components. Both the forks and shock have two key elements: the spring and dampening.

The spring is load or position-sensitive, which basically means it's job is to hold the rider's weight.
The dampening -- which is what the clickers control -- is a speed-sensitive element.

The spring is really just a dumb piece of metal that's bending. It's like a trampoline, if you stand on a trampoline, it holds you up; but if you jump on it, it goes down a lot deeper and throws up equally as high. If you just had a spring on a motorcycle -- and no dampening -- it would be like a car going down the freeway without shocks; it would bounce up and down for miles.

Adding dampening to the suspension is like putting that trampoline in water. It will still support your weight, but you don't get the springy, bouncing effect."

Note: All clicker settings are referred to from the fully hard (clockwise) position.

Often we call a client on Monday after a race to see how they went. Occasionally we're met with the response "it was too soft" or "it was to stiff". Our next question is always "What clicker position did you start out at and where did you end up? Did your adjustments help?" Sometimes the answer is:

"I DIDN'T TOUCH THEM, I LEFT THEM RIGHT WHERE YOU PUT THEM."

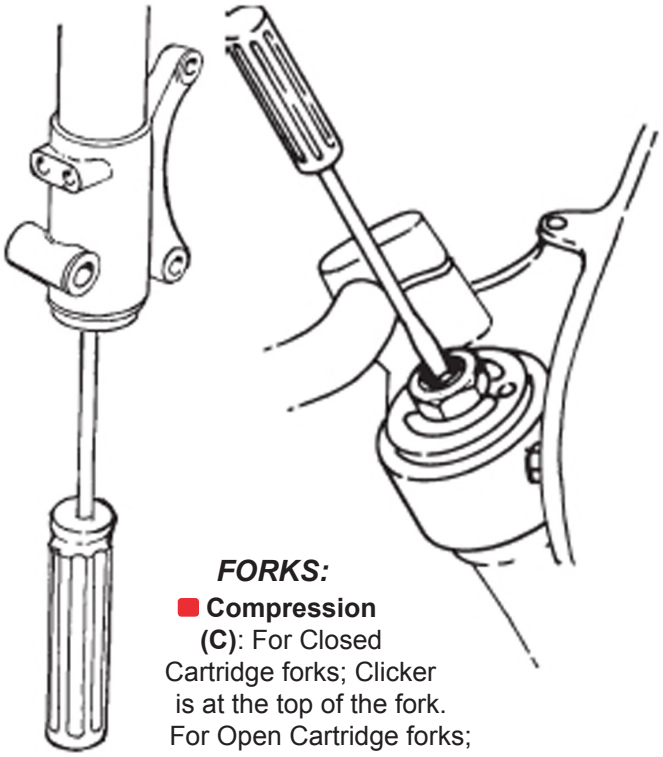
Anyone who knows a suspension tuner will realise how much this drives them nuts. Find your suspension's adjusters (commonly called clickers), and adjust them yourself. One adjustment at a time so you know what it is doing. Keep a note of where you started form, so if you get lost you can go back.

Adjusters are like a tap, closing off the tap to restrict the flow of oil and produce a firmer dampening character. *When we turn the adjuster we are not adjusting the valving!* We are simply changing the quantity of oil that bleeds past the valving. If you have the wrong valving setting for your application, you will not get an optimum set-up by just turning clickers, however you can improve the motorcycle and make it "the best it can be". Likewise, even with a perfect shock specification, poor clicker settings will ruin the whole farm.

Turn the adjusters clockwise, counting the clicks or turns. Be gentle; don't keep turning the screw or knob once it stops. Turn the adjusters back out to the original position. Write the number of clicks or turns down on the set-up sheet.

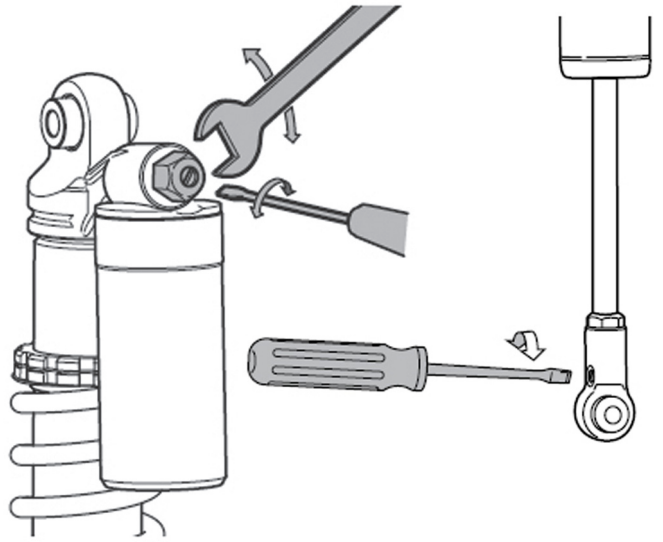
If in doubt, 10C (compression) and 10R (rebound) is a good place to start for forks with over 20 clicks total adjustment. 1 ½ turns for those forks with no clicks. Units with less total clicks, use a midway position.

For Shocks, again check they are in the suggested positions, and if in doubt, 1 turn out HSC,10 LSC, 10 R are good places to start for most dampers.



FORKS:

- **Compression (C)**: For Closed Cartridge forks; Clicker is at the top of the fork. For Open Cartridge forks; Adjuster is at the bottom of the fork, sometimes covered by a rubber plug.
- **Rebound (R)**: For Closed Cartridge forks; Flat blade screw at the base of the fork. For Open Cartridge forks; screw is at the top of the fork.



SHOCK:

- **Low Speed Compression (LSC)**: Flat blade screwdriver fitting at the top of the shock.
- **High Speed Compression (HSC)**: Large hex nut at the top of the shock (it moves independently of the low speed). Some brands have clicks, others you need to count turns
- **Rebound (R)**: Flat blade screwdriver fitting at the bottom of the shock

BASIC GEOMETRY

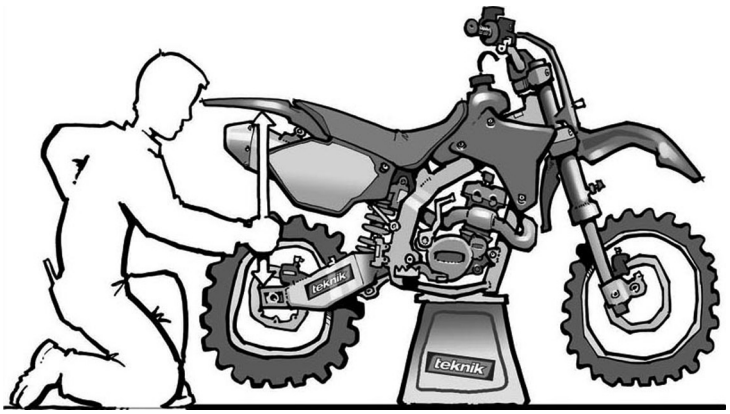
This can be broken down into sections.

- Fork travel / length, usually left standard.
- Fork height, the position of the fork in the triple clamps. This can be measured in lines above the top triple clamps. I personally prefer to measure length of fork between the bottom of the lower triple clamp and the end of the fork tube. This eliminates the question of do we measure from the front of back of the clamps and gets you used to making small changes, as one line on the clamps will often be 3mm
- Triple clamp offset and rake, again usually left standard.
- Rear shock length, including any raising spacers. A tremel bar is perfect for this. Measure the shock out of the bike with a spring on it to compress the internal top out spring
- Linkage adjustments (or different length pull rods)
- Swingarm length.
- Tyre height if you use different profiles.

SAG

Before you start making adjustments it's best to know where you are starting from. First job is to check the suspension sag settings. This will allow you to check if you have the right springs and get used to making some adjustments. The "average" target weight for a full size motorcycle is a 75kg rider. Therefore, if that is how much you weigh, and if you have a MX or current technology enduro bike, chances are the spring rates will at least be close for you. Of course, you will need to check and adjust your sag to be sure.

There are however some exceptions. If you ride in sand or mud a lot, you might want to run heavier springs. Pro class riders on four strokes will also go for stiffer rates, as will x-treme jumpers. Often, OEM springs will loose some free length over time, so if you feel the motorcycle is not handling how it did, recheck the sag.

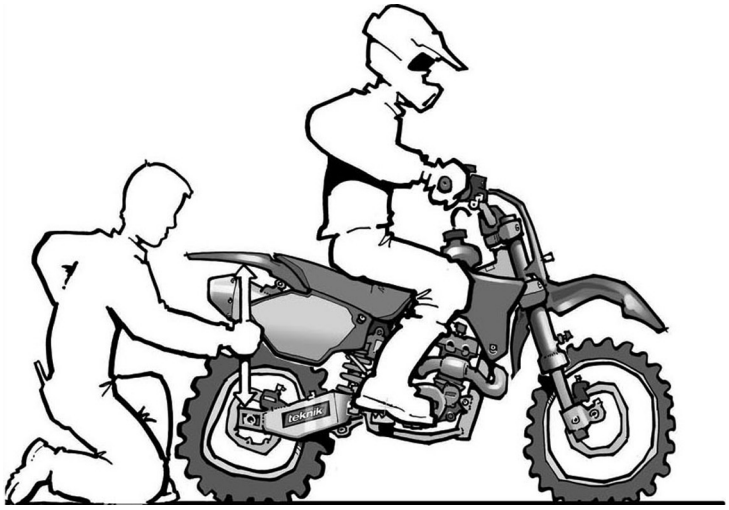


To start, raise the bike on a stand so both front and rear wheels are off the ground, and wind the clickers all the way to full soft so they don't interfere with the results.

Measure from the rear axle to any fixed point on the rear side cover or muffler. You might find it easier to make a mark with a felt tipped pen at a convenient number.

We'll use 500mm as an example. You need to be quite accurate as a few mm will make a difference.

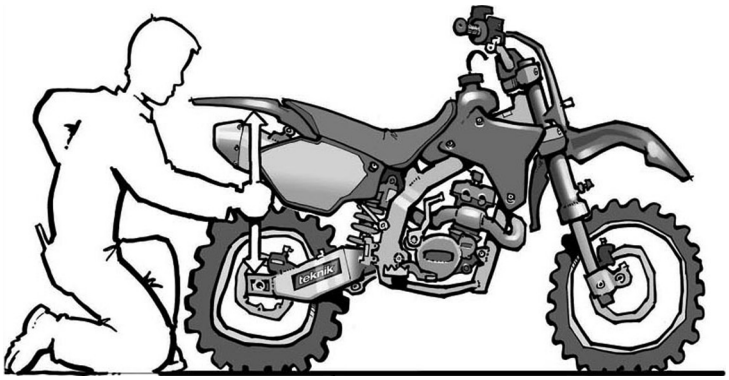
Measure the forks using the same process.



Put the machine back down on the ground and have the rider sit in their normal riding position.

Wearing riding gear is preferable but you can estimate the measurement by adding 5mm to account for the extra weight.

In our example the measurement is now 380mm, therefore we have a ride height, or rider sag, of 120mm (500 minus 380).



Lastly we measure the height with no rider to determine how much the machine sags under it's own weight. Our measurement is 480mm, so we have 20mm "static" sag.

If the machine we are measuring is a motocross bike and we require 100mm rider sag, we would need to wind a lot more preload onto the rear spring to achieve this. However as we only have 20mm static sag if we wind more preload on we will have no static sag, so we need to go to a stiffer spring. See the following tables for a general guideline.

- If you have too much rider sag or too little, increase or decrease the amount of spring preload to get it closer.
- Then if static sag is correct, Rider sag less than minimum – spring is too firm (or if rider correct & static more than max)
- Static sag correct, rider sag more than max – spring is too soft (or if rider correct & static less than min)

FORK SAG

	125 / 250 / 450 MX & Enduro with 300+mm suspension travel	80 / 85cc Mini MX	50 / 65cc Mini MX	KTM PDS	XR 250 / 400 / 600 / 650, KLX 250 / 300, DR650	DRZ / KLX 400
Static Sag	30 +/- 10 mm	15 +/- 5 mm	15 +/- 5 mm	30 +/- 10 mm	30 +/- 10 mm	30 +/- 10 mm
Rider Sag	50 +/- 10 mm	40 +/- 5 mm	30 +/- 5 mm	50 +/- 10 mm	50 +/- 10 mm	50 +/- 10 mm

Note:

1) Soft springs require more preload, hard springs less preload. Final selection is not only dependent on final figures but also personal preference. Very often a firmer spring rate will be more complaint in the first part of the stroke because it requires a lot less preload.

2) Excessive pre-load on overly soft front fork springs will cause harsh feel and poor mechanical grip.

3) "Normal" preload range is 3 - 14mm. Lighter springs require more preload, heavier springs require less.

4) For a given rider there will usually be 2 or perhaps 3 spring rates that could be used, depending on the track and personal preference.

5) To minimize front fork stiction (commonly used term to describe the level of force needed to over come friction) it is very important that axle pinch clamps are only tightened **after** the forks have been compressed several times to 'neutralize' their position. Failure to do so can sometimes result in substantial stiction.

REAR SAG

- Equates to normally 1/3rd of full stroke as a starting point

	125 / 250 / 450 MX & Enduro with 300+mm suspension travel	80 / 85cc Mini MX	50 / 65cc Mini MX	KTM PDS	XR 250 / 400 / 600 / 650, KLX 250 / 300, DR650	DRZ / KLX 400
Static Sag	30 +/- 8 mm	10 +/- 3 mm	10 +/- 5 mm	38 +/- 3 mm	25 +/- 5 mm	25 +/- 5 mm
Rider Sag	100 +8/- 3 mm	85 +/- 3 mm	65 +/- 5 mm	110 +8/-5 mm	85 +/- 3 mm	85 +/- 3 mm

Note:

1) The above settings are guidelines only, and some riders may have better 'feel' and speed with alternative settings.

2) The PDS system is very sensitive to rear height changes. We suggest 105mm ride height to begin with, however 90 - 110mm is a practical working range

3) Machines with less suspension travel like the Honda XR use 85mm rear ride height.

4) KTM 85's work best with near 100mm of rider sag.

5) Soft springs require more preload, hard springs less preload. Final selection is not only dependent on final figures but also personal preference. Very often a firmer spring rate will be more complaint in the first part of the stroke because it requires a lot less preload.

6) As with the forks there are usually 3 spring rates that can be used and still be "correct". We suggest that you measure your springs off the shock and then measure the installed length so you know the preload in mm. For example, if you are using a 90Nm shock spring but wish to fit a 95Nm spring, and you know that you are using 13mm of preload on the 90Nm spring then a reduction of 1mm in spring preload to 12mm will get you a similar starting point to maintain geometry but the 95Nm will "ramp up" more as you use more travel.

FORK TUNING

SETTING THE COMPRESSION

1) The forks should react to all track variations. If the forks seem harsh on small bumps or holes, soften the compression (turn clicker out). If they aren't, stiffen the compression (turn clicker in) until they do feel harsh and then turn back a click or two.

2) Now find the rough part of the track again. The forks should bottom over the worst obstacle. If harsh bottoming occurs, add oil in 5mm increments.

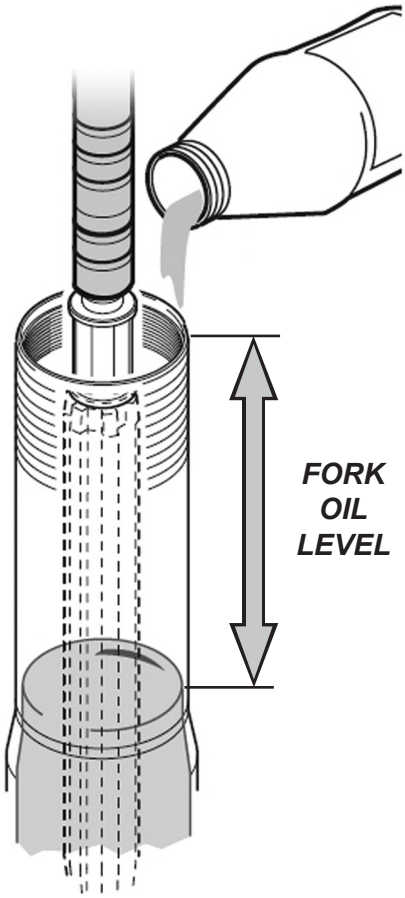
SETTING THE REBOUND

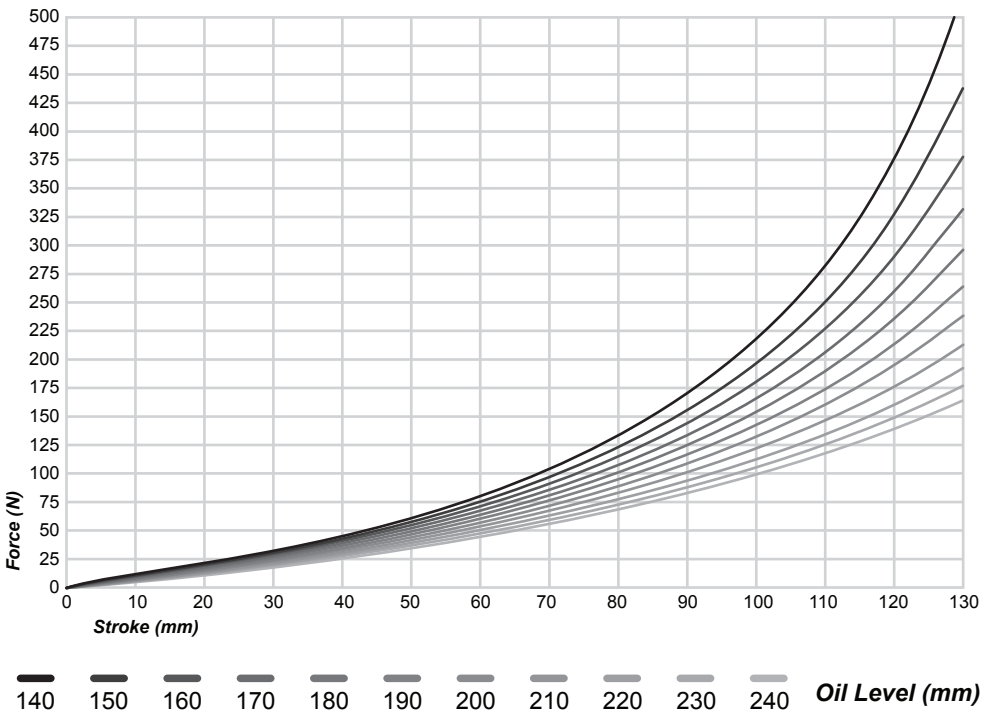
The rebound damping is responsible for the stability and the cornering characteristics of the motorcycle.

1) Find a short sweeper. When the forks compress for the turn, the speed at which the forks return is the energy that pushes your front wheel into the ground. If the forks rebound too quickly, the energy will be used up and the bike will drift wide, or wash. If the rebound is too slow, the bike will tuck under and turn too soon to the inside. Find the appropriate balance for each track.

2) With the bike turning well, the wheel should return to the ground quickly yet not deflect off berms or bounce off jumps.

FORK OIL LEVEL





Note: Oil height is measured from the top of the outer leg, with the top nut off, the fork fully compressed and no preload washer or spring installed.

OIL LEVEL RAISED: Forks firmer towards the end of the stroke
OIL LEVEL LOWERED: Forks softer towards the end of the stroke

There are 2 forms of spring in every fork, the wire coil springs, and the air trapped in the fork above the oil. Both springs are sensitive to their position in the stroke, but not to speed (the dampening character is sensitive to the speed the fork compresses but not to position).

If you are using linear or straight wound springs, they will provide a linear progression in stiffness as the fork compresses. The air spring or air gap character is not linear; as you can see from the graph below, it has little influence in the first 1/2 of the stroke, but has a dramatic influence in the last 1/3. Too low and the fork will bottom too easily, too high and the fork will loose it's compliance in the last part of the stroke.

Twin chamber forks are also sensitive to oil height in a different way, the spring perch causes a secondary dampening effect when it plunges into the oil, raising the oil height beings this secondary effect in sooner.

FORK TROUBLESHOOTING

FRONT END FALLS INTO THE CURVES (OVERSTEERING) ESPECIALLY IN SAND

Steep front fork angle. Front end too low in comparison to rear end.

1) Increase the front fork compression damping.

2) Change to harder springs.

3) Lower fork leg approximately 5 mm in the triple clamp.

FRONT END UNSTABLE DURING DECELERATION

Front fork angle too steep during braking. Front end too low or rear end to high.

1) Increase the oil level in the front fork.

2) Change to harder fork springs.

3) Increase the fork compression damping.

FORK TRAVEL IS NOT USED TO ITS FULL CAPACITY, HARSH FEELING, UNSATISFACTORY FRONT WHEEL GRIP IN BUMPY TURNS

Suspension is too hard.

1) Decrease the fork compression damping.

2) Change to softer springs.

SUSPENSION BOTTOMING, BUT CAN HANDLE SMALLER BUMPS

Damping force not progressive enough.

1) Increase oil level.

CAN HANDLE SMALLER BUMPS BUT IS TOO HARD DURING THE LAST PART OF TRAVEL

Damping force is too progressive.

1) Decrease oil level.

FRONT END FEELS LOW, INITIALLY FEELS SOFT, BUT IS NOT BOTTOMING

Too much spring preload, or too much compression damping.

1) Increase the oil level or change to softer springs.

2) Decrease the compression damping.

3) Decrease the spring preload.

4) Clean the oil seals and scrapers.

CAN HANDLE THE FIRST IN A SERIES OF BUMPS BUT FEELS HARD AFTER A FEW MORE BUMPS, FRONT GRIP INSUFFICIENT IN ROUGH & BUMPY TURNS

Too much rebound damping.

1) Decrease the rebound damping.

FRONT END REBOUND TOO FAST AFTER A BUMP, FRONT WHEEL GRIP INSUFFICIENT IN BUMPY TURNS

Not enough rebound damping, or too much spring preload.

1) Increase the rebound damping.

2) Decease the spring preload.

HEADSHAKE

Too much or too little weight on the front wheel, springs or dampening incorrect.

1) Be sure the fork is not abnormally soft or hard. If it is, go through the steps above.

2) Reduce the rebound dampening.

3) Check the fork springs are correct for your weight.

4) Check the steering head bearings, be sure there is a slight amount of preload on the bearings and they are well greased.

BIKE DOES NOT WANT TO TURN

Not enough weight on the front wheel

1) Try increasing the rear shock preload. Don't go under 15mm of static sag.

2) Slide the forks up in the triple clamps 5mm.

3) If the rear is not too stiff try increasing the rear compression dampening (low speed if you have a 2-way compression adjuster).

4) If you have no problem with headshake, try increasing the forks rebound dampening two clicks at a time.

5) If you have no problem with the fork bottoming, try decreasing the forks compression dampening 2 clicks at a time.

6) Are the forks centred in the axle, has this problem just occurred after removing and refitting the forks?

7) If possible, reduce the amount of fork spring preload, or go to a softer spring as a last resort.

SHOCK TUNING

SETTING THE COMPRESSION

1) Find a corner with acceleration bumps on the exit. The rear of the motorcycle should follow the ground. If the rear end "breaks up", soften the compression. (turn clicker out) (If this fails, soften the rebound two clicks).

2) Find some rough sections, a large jump and a couple of "G-Outs". The shock should bottom on the roughest section but it should not be a slamming sensation. Add compression to fight bottoming (turn clicker in). But avoid going to far as small bump ride will be sacrificed in the trade. Remember the adjusters have a primary effect on the low speed, so even a large change in setting may only affect bottoming resistance slightly. Bottoming your suspension is not necessarily a bad thing. You should strive to bottom off the biggest bottoming load obstacle on the track. If you don't, you're not getting maximum plushness from your suspension.

SETTING THE REBOUND

1) Find a relatively fast straight with braking bumps leading into the entrance of a corner. Reduce (turn clicker out) the rebound damping until the rear end begins to hop or feel loose. Finally, increase (turn clicker in) the rebound damping until the sensation goes away.

2) Find a jump that tends to launch the motorcycle out. The rear end should absorb and then smoothly lift the motorcycle into the air. If the rear end bounces up, add rebound (turn clicker in).

3) Find some large whoops. The motorcycle should track straight through the whoops with the rear wheel extending to the ground before the next impact. If it does not perform as described as above, it is packing and the rebound damping should be reduced! (turn clicker out).
(Please note the guide for sand set-up, as these rules don't apply for sand).

TOO MUCH LOW SPEED REBOUND DAMPING

Rear end tends to wash out or slide-out on hard packed sweeper turns with small bumps especially off-camber "washboard" sections does not develop good braking power.

Poor rear wheel hook up when accelerating over series of small bumps or "washboard" sections.

In general, rear end seems to be well controlled in the situations it is not oscillating up and down too much but it just doesn't seem to develop good traction.

Note: All these problems arise because the excess damping keeps the rear wheel from extending fast enough to follow the low spots between the small bumps the result is poor traction.

TOO LITTLE LOW SPEED REBOUND DAMPING

The symptoms here are similar to the left; a tendency to slide out on "washboard" turns and poor braking over washboard sections, but the critical difference in this case is that the back of the bike is bouncing up and down too much.

Not enough rebound damping causes too much kicking up, especially noticeable when braking on downhill sections with small bumps or over a washboard surface.

SHOCK TROUBLESHOOTING

REAR END DOES NOT HOOK UP

1) Re-check the rear suspension sag. Not enough preload can cause this.

2) Reduce the rear's rebound dampening, this allows the rear wheel to get back on the ground faster and increase traction.

3) Check the rear axle position, if it has been moved all the way rearward, then shorten or replace the chain.

4) Re-check your HSC adjuster if the problem is more predominant on rocks and roots. Decrease (wind out) the HSC adjuster.

CAN'T HANDLE THE WHOOPS

1) Try increasing the rear compression dampening, especially high speed if you have it.

2) Increase the rebound dampening but not so much that it "packs" in repeated bumps.

EXCESSIVE REAR END KICK UNDER POWER

1) Check for packing, which is identified by kick to side in hard to loam conditions. If you observe packing, soften rebound (turn clicker out). This cannot be avoided if you brake improperly and lock the rear wheel up and/or pull in the clutch, on the entrance to corners.

2) Often rear end kicking under power is bottoming; try going stiffer on compression or increasing rear spring preload.

REAR END BOTTOMS OUT

1) Increase compression dampening.

2) Increase spring preload but don't go more than 5mm under the recommended rider sag for your model.

3) Decrease rebound dampening.

GOING TO DIFFERENT TRACKS

Keep a record of the different settings you used at each track. That way you can start at a point that worked well the previous times. Remove the set-up sheet at the back of this manual and photocopy it.

The following are some tips that will help you set up for particular types of terrain.

Hard Pack to intermediate:
Set the compression softer (turn clicker out), both front and rear to help get maximum wheel contact and plushness.

Sand tracks: *(Non-square edged bumps)*
More low speed compression and rebound are necessary. Start by adding 1 - 2 clicks (turn clicker in) of rebound and as the track gets rough, add 1 - 4 clicks (turn clicker in) of compression. Harshness is a result of packing in forks. Remember to add compression (turn clicker in) to help keep the front end from packing. The rear suspension will exhibit packing by swapping. To eliminate swapping, begin adding compression (turn clicker in) until the bike tracks straight, and then add rebound (turn clicker in) to keep the rear following the terrain of each whoop. Don't be concerned if your clickers are nearly maxed out in sand conditions. Unless of course you have had your bike revalved for sand.

Supercross: *(G-load, curb hits)*
G-loads produce slow piston speeds. This means that less dampening is produced by the shock and forks in a situation that causes more of a bottoming load. To set your bike up for Supercross, adjust the compression stiffer (turn clicker in) on the suspension (2 - 6 clicks), and in some circumstances raise oil level and/or change to stiffer springs.

DAMPENING SYSTEMS SUMMARY

Dampening Adjustment	Best places on track for testing	Perfect When
Low Speed Rebound Dampening	■ Small bumps ■ Sweeper turns over washboard sections ■ Off-camber washboard turns ■ Braking on washboard surfaces	Heavy enough to prevent rear end bouncing or oscillation yet light enough to allow rear wheel to extend. Fast enough to maintain good contact with ground. Rear end tracks well on washboard sweeps and off-camber washboard turns; brakes well on washboard.
High Speed Rebound Dampening	■ Series of medium or large rolling type bumps on high speed sections ■ Fast downhill sections with deep rolling bumps	Heavy enough to prevent rear end kicking up, yet light enough to prevent "packing down" on series of bumps.
Low Speed Compression Dampening	■ Small bumps and medium bumps ■ Deep rolling sand whoops ■ Washboard sections ■ Deep smooth gullies	Heavy enough to prevent bottoming out on bumps or rising sand whoops at the bottom of deep smooth gullies, yet light enough to allow shock to stroke smoothly on small bumps and avoid skipping when braking on washboard surfaces.
High Speed Compression Dampening	■ Big square edges bumps in fast sections ■ Big jumps	Heavy enough to prevent excess bottoming out off jumps or over large square edged bumps yet light enough to stroke deeply to absorb these bumps without harshness or rigidity.

WASHING & BIKE CARE

Wash your bike after every ride so you can inspect the fork chrome tubes for knicks or scratches that will lead to seal failure. For upside down forks keep the chrome tubes free of dry mud that the dust scrapers will not be able to dislodge. After the wash, a light coating of water dispersing oil (WD-40) will keep the seals and wipers lubricated. To maintain optimum performance, lever the fork dust scraper down and clean the dust build up from around the seal and wiper. Then apply general purpose grease lightly, and refit the wiper.

For the shock, lift the bump stop up periodically with a screwdriver and wash under the bump stop. This is a common area where shock shaft corrosion starts. If the flap that protects the shock becomes damaged, replace it; or the roost off the rear wheel will damage the shaft.

READ THIS BEFORE YOU REFIT YOUR FORK & SHOCK

FRONT SUSPENSION

Triple clamps: Wipe the clamps out with a solvent, they must be clean and oil free. Use a “scotchbrite” pad if you need to remove any hard deposits. Feel the steering head bearings while you are at it do they move freely?

Axle: Check the axle for any nicks or burrs. NEVER HIT YOUR AXLE WITH ANYTHING HARDER THAN BRASS OR PLASTIC. If your axle cannot centre in the axle foot, you will have a harsh feeling fork that you cannot remedy with clicker adjustment.

Install the forks and torque the triple clamps to manufacturer’s specification. Over tightening will cause binding in the upper tubes.

Set the fork projection through the top clamps to the stock position. If you have a projection preference and have not changed fork settings, set it to your previous figure.

Lubricate the axle with thin oil or WD40, run it through the feet and wheel bearings to ensure it is smooth. Install the wheel and the axle, but leave the pinch bolts loose.

After all the other assembly work is done, drop the bike off the stand, hold the front brake and “pump” the forks several times, to centre the axle and the fork legs. Tighten the pinch bolts while the bike is sitting on the ground. THIS STEP IS CRITICAL.

Look through the tuning notes and go ride.

After riding, raise the front wheel off the ground and release the air that builds up in the forks.

REAR SUSPENSION

Start tuning at standard ride height

Move the swing arm up and down to check for binding in the linkages.

Fit the shock, and torque the bolts to specifications.

Again, look at the tuning notes before riding.

On your first ride, start riding carefully. If you have had a major change to your suspension settings your bike will react differently on the track and you may crash as a result.

TEKNIK SUSPENSION SETTINGS

Date:	Event:	Rider:	Bike:

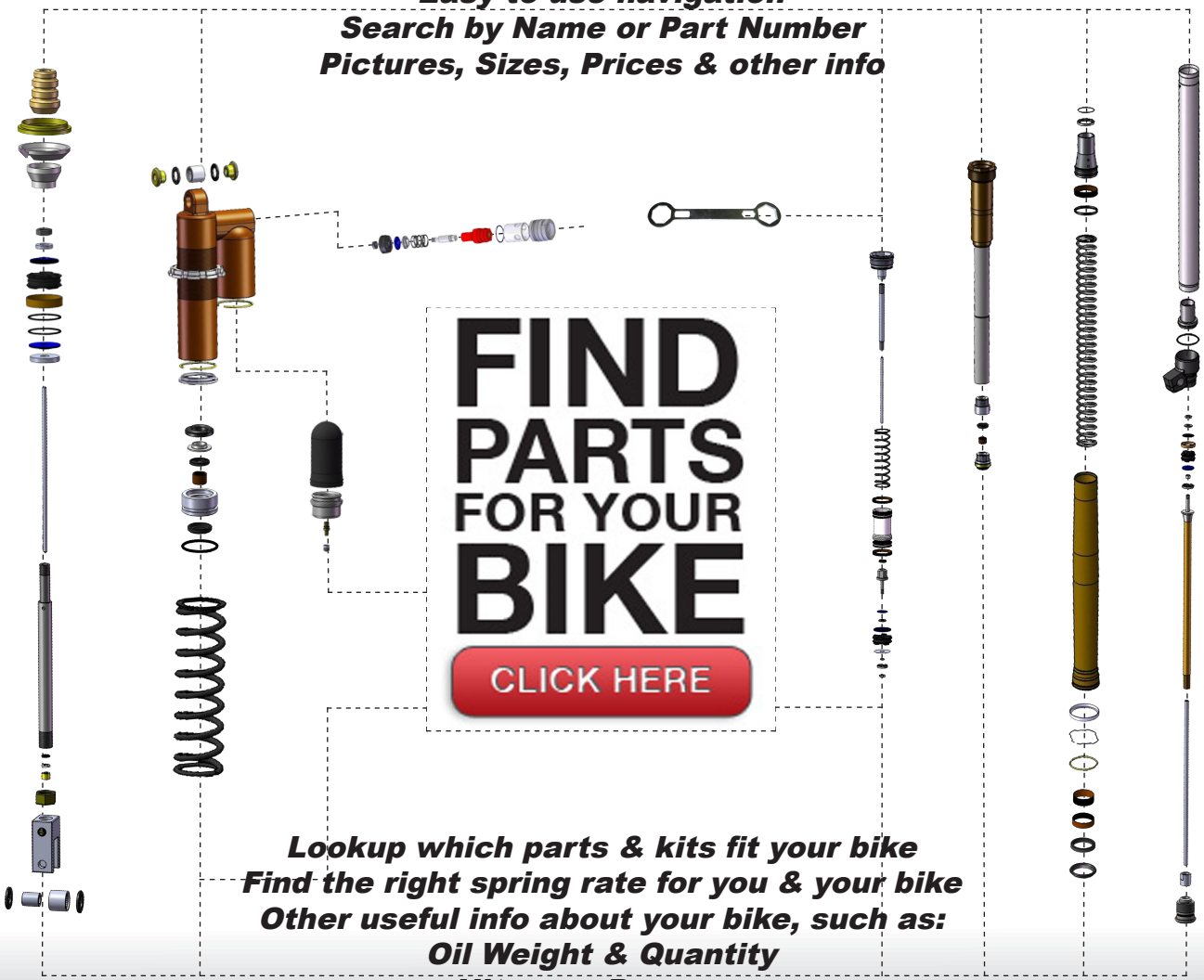
	Session	1	2	3	4	5	6
	Track Temp						
Bike	Front Tyre PSI						
	Rear Tyre PSI						
	Gearing						
	Wheelbase						
	Fastest Time						
Front	Offset						
	Angle						
	Fork Type & #						
	HYD SPEC						
	Fork Height						
	Compression						
	Rebound						
	Spring Rate						
	Preload (mm)						
	Oil Level (mm)						
	Top Out Spring						
Rear	Shock Type & #						
	Link						
	HYD SPEC						
	Compression (LS, HS)						
	Rebound						
	Spring Rate						
	Preload (mm)						
	Top Out Spring						
	Shock Length						
	Swing Arm Length						
	Notes & Comments						

Don't know which parts will fit your bike?

go to:

WWW.TEKNIKMOTORSPORT.COM

All Upgrade kits
Complete parts list by category
Easy to use navigation
Search by Name or Part Number
Pictures, Sizes, Prices & other info



Lookup which parts & kits fit your bike
Find the right spring rate for you & your bike
Other useful info about your bike, such as:
Oil Weight & Quantity
Nitrogen Pressure
Fork & Shock Manufacturer
Fork & Shock Sizes

(02) 4732 2626

teknik

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