

## ORDS CARTRIDGE KIT

# KTM SX50

120-012-155/050

2012>



Please read this instruction manual before installing the cartridge kit.



This cartridge kit should only be installed by an authorised K-Tech Dealer.



# IMPORTANT NOTES

**KEY**



**NOTE!**



**CAUTION!**



**WARNING!**



The front forks are a very important part of the motorcycle and will affect the safety and stability.



Read the instructions carefully and make sure you understand them before you proceed. If you have any queries please contact your nearest supplier or K-Tech Suspension Ltd. immediately: [enquiries@ktechsuspension](mailto:enquiries@ktechsuspension).

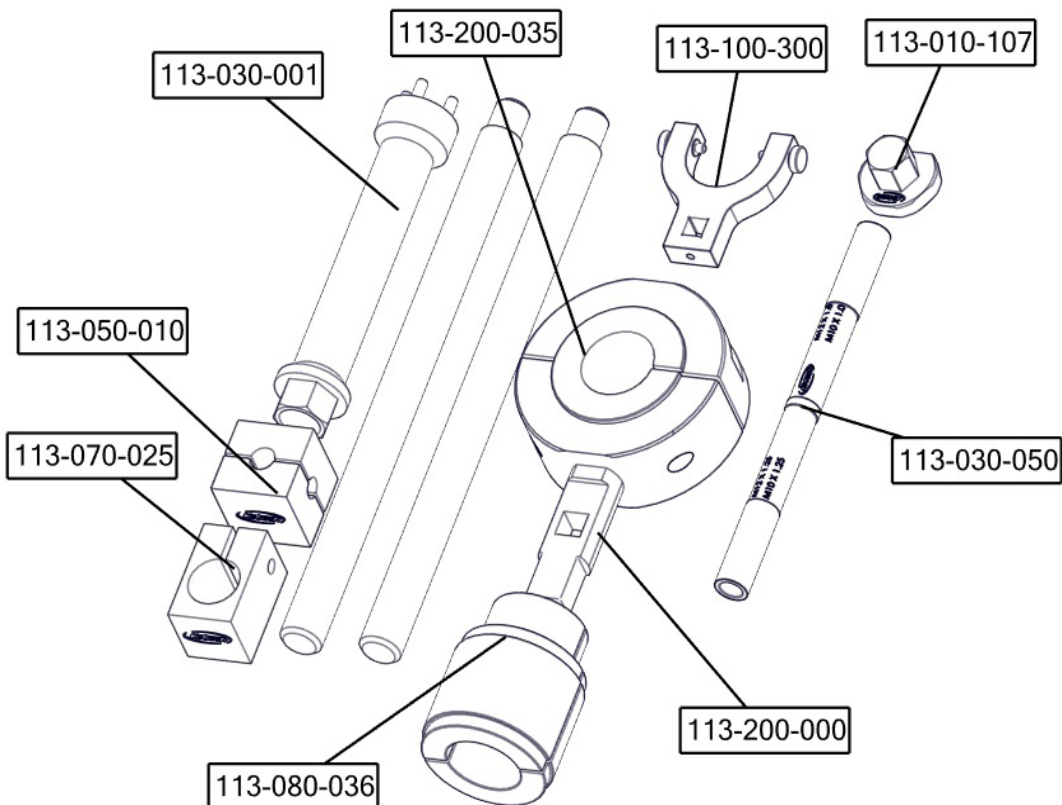


K-Tech Suspension Ltd. cannot be held responsible for any damage to vehicle, front fork, personal injury or property if the installation instructions are not followed exactly.



Not all tools will be required for installation. Please refer to section B of fitting instructions for specific tool requirement

# Tool Kit: 113-100-115 - FF Tool Kit ORDS KTM KTM

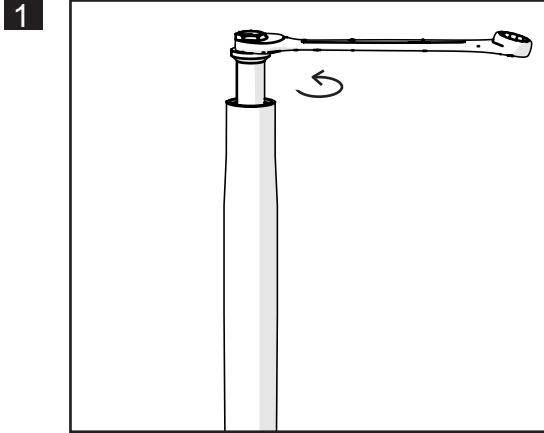


Part No.	Qty	Description
113-010-107	1	FF COMPRESSION VALVE TOOL KYB/SHOWA SFF/SAFF 36mm ALUMINIUM
113-030-001	1	FF DAMPER ASSEMBLY TOOL KTM SX50 65
113-030-050	1	FF PISTON ROD PULL UP TOOL M10/M12X1.00P M10/M12X1.25P
113-050-010	1	FF PISTON ROD CLAMP 10.00/12.00mm
113-070-025	1	FF CARTRIDGE TUBE CLAMP 25mm
113-080-036	1	FF SEAL HAMMER 35/36mm
113-100-300	1	FF DDS CARTRIDGE PIN SPANNER
113-200-000	1	FF TUBE CLAMPING TOOL
113-200-035	1	FF TUBE CLAMPING TOOL INSERT (35mm)

## SECTION A

- 1** This cartridge kit was designed and developed for a specific motorcycle model and should only be installed onto the recommended model in its original condition.
- 2** After this product has been installed you should take a low speed test ride to check stability of the vehicle has been maintained.
- 3** This product needs specialised tools to fit correctly and should only be fitted by a K-Tech dealer or a person with the correct tools and trained in the art to install the front fork cartridge kits to ensure the performance of this product.
- 4** When Fitting the kit, fit only one leg at a time to avoid confusion. Always fit the compression cartridge into the left hand leg and the rebound into the right.
- 5** Remove the front forks from the motorcycle using the manufacturers workshop manual.

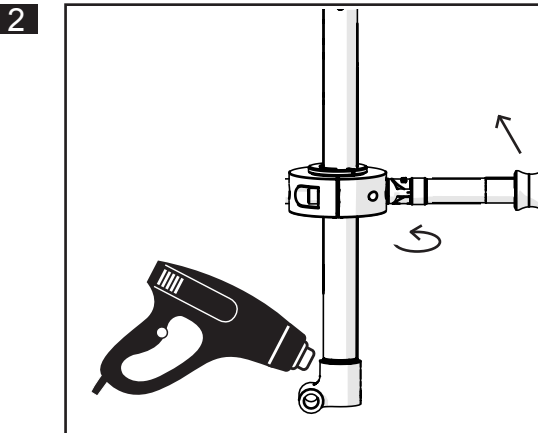




Remove standard cartridge using tool No. 113-030-001 and a 24mm spanner.



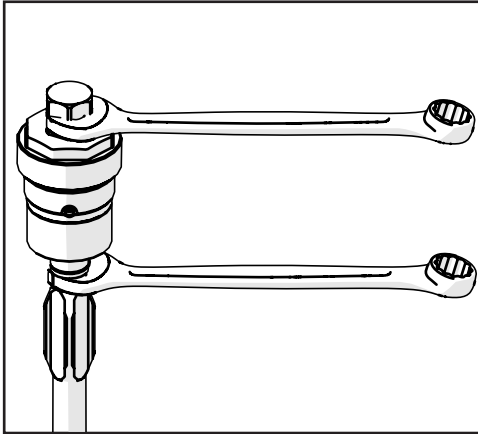
You may need to heat around the top of the inner tube to break the seal of the loctite.



Heat Axle bracket with heat gun, And remove inner tube, using tools No. 113-200-000 and 113-200-035

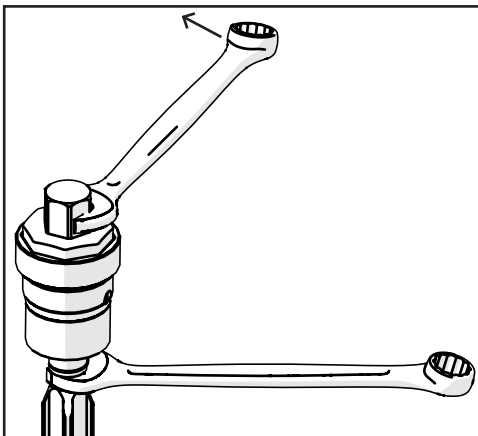
## SECTION B

3



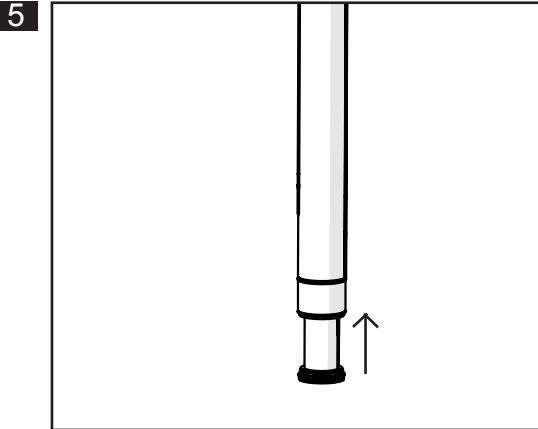
Remove the top cap from the cartridge by holding a 14mm spanner on the piston rod locking nut and unscrewing the top

4



Remove the top cap assembly from the piston rod.

5



Fit the compression cartridge to the left hand leg (Brake side).



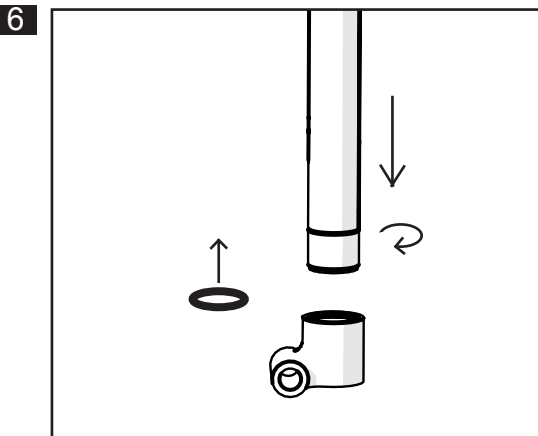
Fit the rebound cartridge to the right hand leg.



Grease O-ring before fitting.



Place the new cartridge into the inner tube, making sure not to damage the O-Ring at the bottom of the cartridge.



Remove standard O-Ring from the axle bracket. This is not needed with the new cartridge.

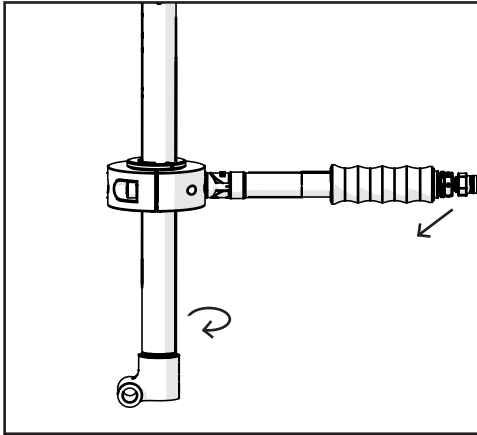


Use Loctite 2701 on the thread of the tube.



Screw the inner tube into the foot until it comes to a stop.

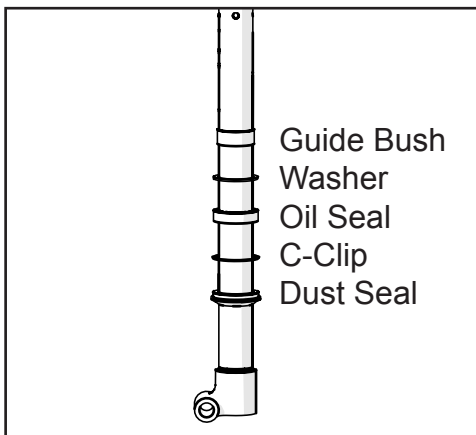
7



Torque the inner tube to 140Nm  
using tools No.:

- 113-200-000
- 113-200-107
- 113-200-035

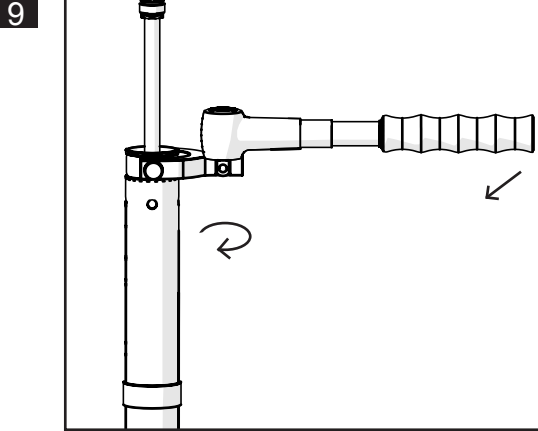
8



Grease seals before  
fitting.

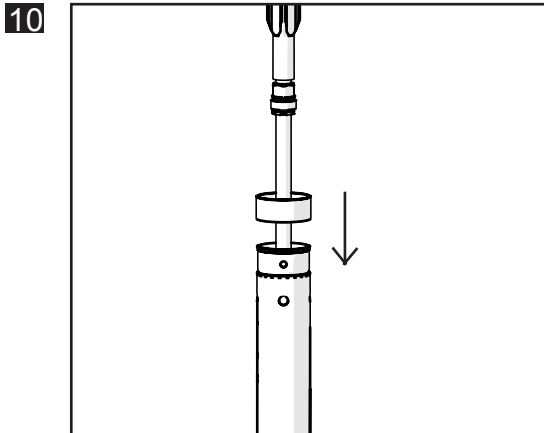
Slide the seals and bushes onto the  
inner tube in the same order as they  
came off. Except the slide bush.





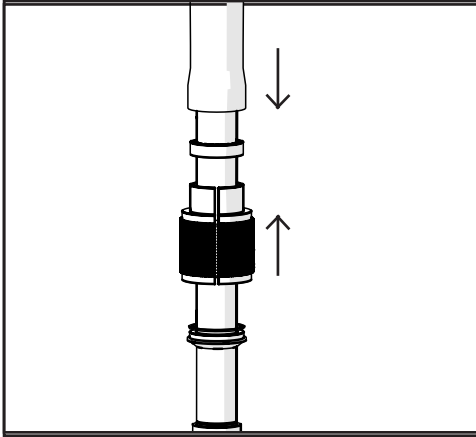
Use Loctite 2701 on the thread of the bush holder.

Fit the new bush holder into the top of the inner tube and torque at 45Nm at 90° using tool No. 113-100-300 and a torque wrench.



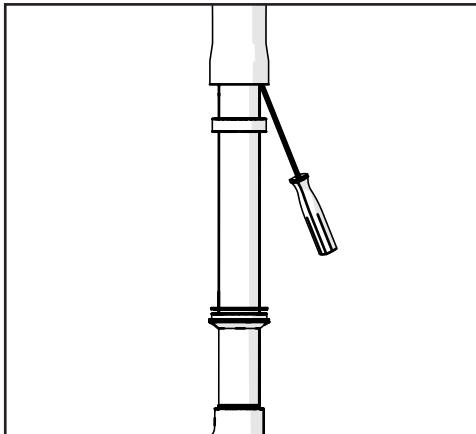
Fit the slide bush onto the new bush holder.

11



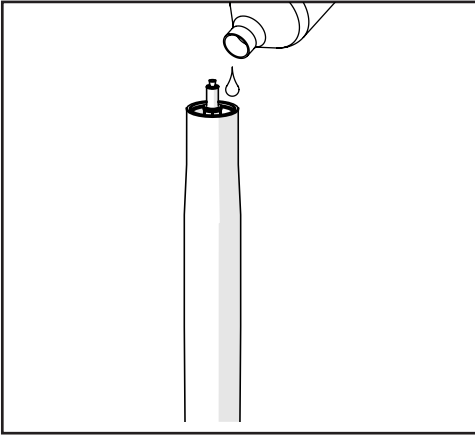
Re-fit guide bush and seal using 35mm seal driver, No. 113-080-036

12



Locate the C-Clip into the groove and check it is correctly seated. And re-fit dust seal.

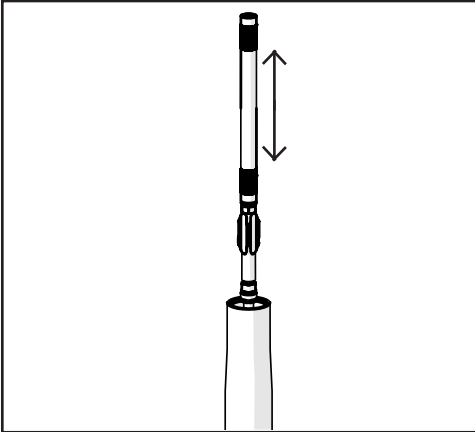
13



Pour 5wt oil into the fork to cover the top of the damper tube assembly.

K-Tech recommend  
**MOTUL** Factory Line 5wt.

14



Pump the piston rod up and down using tool No. 113-030-005. Pump the rod up and down approximately 20 times until it feels smooth with no air bubbles in the oil.

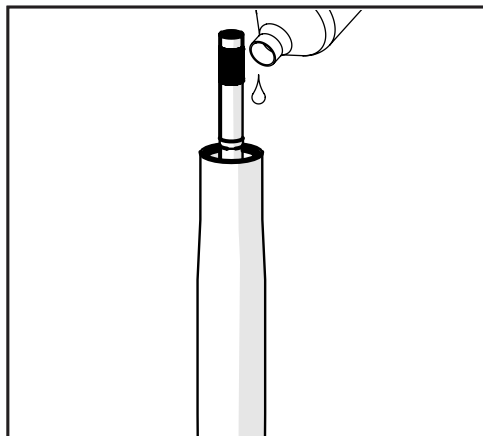


Make sure the oil always covers the top of the damper tube assembly.



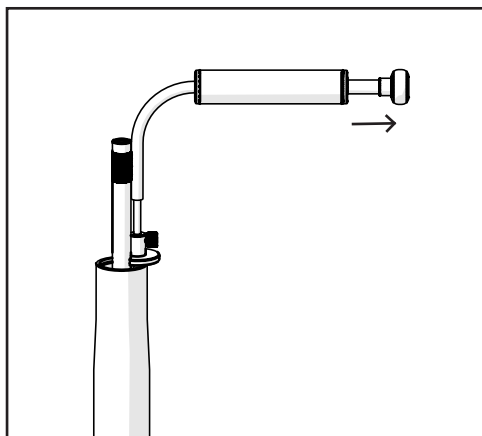
There will be much more resistance when bleeding the compression leg (Left ) due to the design of the system.

15



completely fill the fork leg with oil.

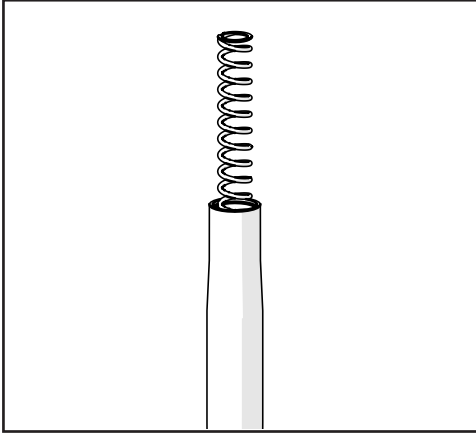
16



When setting oil level  
make sure the piston  
rod is fully down.

Set your oil level using tool No.  
113-030-500. Set your tool to 100mm  
and suck the excess oil out.

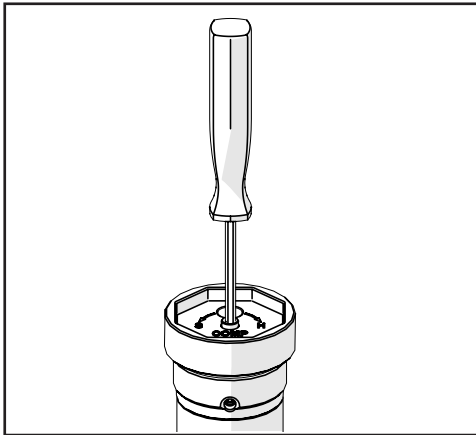
17



It is advised to use K-Tech springs as these are a smaller diameter and give a smoother action to the fork.

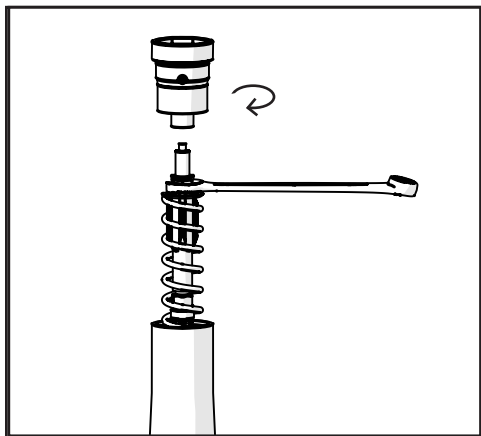
Install the spring you have chosen to use.

18



Before fitting the top cap, set the adjuster screw using a 3mm allen key. Wind the adjuster fully out (Anti-Clockwise), then wind it back in 4 turns / 32 clicks (Clockwise). Your top cap is now set.

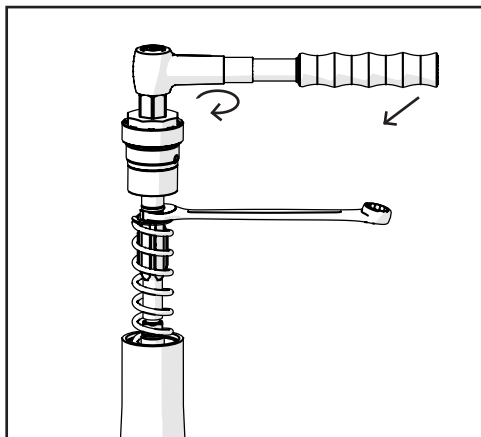
19



Before fitting the top cap make sure the lock nut is screwed fully down onto the spring guide.

Pull the spring down and hold it down by placing a 14mm spanner onto the lock nut. whilst holding the spring is down screw the top cap onto the piston rod until it comes to a stop. Using the 14mm spanner tighten the lock nut up to the top cap.

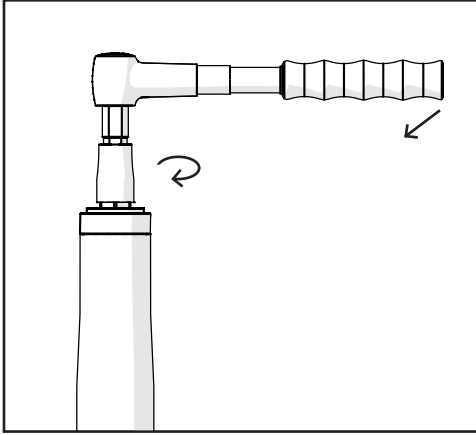
20



Using top cap tool No.113-010-105, a 14mm spanner and torque wrench with a 14mm hex. Hold the lock nut with the 14mm spanner and torque the top cap to 12Nm.

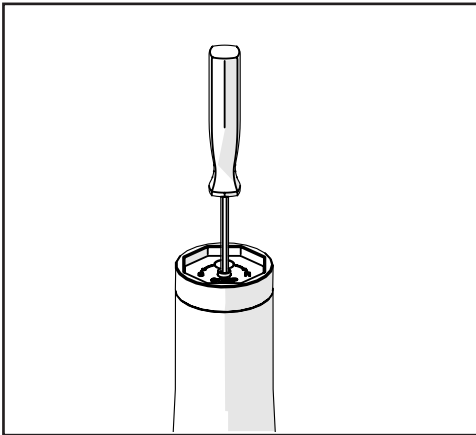
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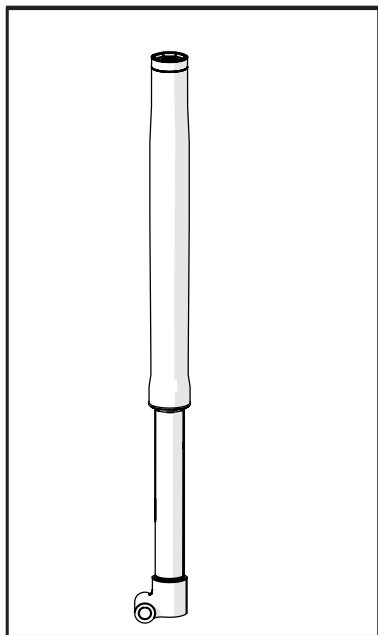
Tighten top cap into outer tube using tool No. 113-010-105 and torque to 10Nm.

22



Set your adjuster clicks by winding your adjuster needle out to the recommended setting (16 Clicks) using a 3mm allen key.

23



Wipe any oil or grease that is on the fork legs and clean with a cloth. Your K-Tech cartridge is now fitted and ready to be mounted onto the bike.

24 Set the compression and rebound damping according to the setting data in this manual.

25 Reinstall the fork onto the motorcycle in accordance with the manufacturers workshop manual.

### Set up data

#### Recommended settings

Cartridge stroke	205mm
Cartridge length	685mm
Compression:	-16 clicks out
Rebound:	-16 clicks out
Air gap:	100mm (Range 90-110mm)
Spring rate:	29.5-330-
Fork position:	Set to owners manual



NOTES

NOTES

Lined writing area for notes.

# NOTES

NOTES

**DESIGNED  
WINNING** WITH  
DRIVEN  
IN MIND

YOUR K-TECH SUSPENSION DEALER: