

4/5 Harford Street Penrith NSW 2750 P 02 4732 2626

sales@teknikmotorsport.com

WP XPLOR FORK KIT 30-160-01

This kit has been developed and validated using our dynamometer to ensure it performs as well as it looks. This kit was designed to last and is machined from aerospace grade aluminum then hard anodized in Europe. It will deliver suspension feel and adjustability equivalent to a full cartridge replacement at a fraction of the price.

These kits were designed to make installation as easy as possible so any suspension specialist or even an advanced backyard mechanic is able to perform the installation. However this kit will require the disassembly of the fork and cartridge which requires advanced technical skills and improper installation is dangerous. We recommend you have this product installed by an experienced professional.

| | CAUTION! PERSONAL HARM OR INJURY MAY OCCUR |
|---|--|
| | Take extra care in this step |
| X | Check service components |

You will require the following tools to complete this installation:

- 17 mm Hex Wrench
- 10mm Open Spanner
- 17mm Open Spanner
- 24mm Open Spanner
- 32mm Open Spanner
- 50mm Spanner
- 12mm Shaft Clamp
- 32mm Shaft Clamp
- Bench vice
- Fork Bleed Tool
- Philips Head Screw Driver
- Blow torch (Optional)

You will also need:

- Thread lock
- 2L of Fork Oil
- Brake Cleaner
- Degreaser

- Precision torque wrench (5Nm–20 Nm)
- Vernier Calipers

| QTY | Part | |
|-----|--------------------------|-------------|
| | | |
| 1x | Bottoming Cone | |
| 2x | Compression Bolt | |
| 2x | Rebound Tower | 1 Alexandre |
| 2x | Compression Pis- ton | |
| 2x | Rebound Piston | AN AN |
| 2x | M6 Fuji Nut | |
| 2x | Compression Top Hat | |
| 2x | Piston Bands | |
| 2x | BS021 O-ring | |
| 2x | Needle O-Ring | RL |
| 2x | Rebound Needle | |
| 2x | Rebound Needle Spring | |
| 1x | Rebound Knobs | |
| 2x | Fork Stickers | |
| 1x | Shim Kit | |
| 4x | Check Plate Shims | |
| 4x | 1.6mm Clamp Washers | |
| 1x | Specification Card | |
| | | |



Step 1:

Begin by preparing a work area and assembling all the parts and tools you will need. Then remove the forks from your motorcycle according to the owners manual. Step 2:

After the forks are removed place them somewhere safe, We will be preparing the valves first.

Step 3:

Decide on which setting you would like to use on the attached settings card. If you intend to use the clubman setting, then you can skip to step 13, as the kit comes set up and ready in this configuration. Otherwise begin by disassembling the compression assembly with a 17mm hex wrench and a 17mm spanner.



Step 4:

Lay the shims out neatly on a clean worksurface in the order specified on the settings card keeping in mind the settings start with the shim on the piston face.



Step 5:

Begin by placing the aluminum backing plate on the compression bolt, then proceed to build the shim stack.

Step 6:

Place the piston on top of the shim stack with the trench face up.

Step 7:

Ensure the compression bolt is clean then apply a small dab of thread lock to the end.

Step 8:

Place the spring on the threaded top hat in the orientation shown. Now slide the 8.20.30 check plate on and hold it in place as you screw the top hat on so it fits into the pistons trench.

Step 9:

Torque the top hat down to 5N/m.



If you are happy you can now move onto the rebound piston.





Step 10:

Using a 17 and 10mm spanner remove the nut on the rebound tower then like with the compression bolt lay the components out neatly on a clean work surface.

Step 11:

Lay out your shims in the order specified then build the midvalve as from your chosen setting.

Step 12:

You can now fit the piston, make sure the larger ports are placed down touching the face shim of the midvalve and the small ports are facing up. After you install the piston you can install the rebound shims, the backing plate and finally the fuji nut which should be tightened to 7N/m.



Small ports facing up



Like the compression assembly, hold the rebound assembly up to the light to make sure there are no gaps between the shims and they sit flush against each other.



Also pull back the check plate on the midvalve to ensure there is some free float and make sure it snaps back into position once you let go.

Over the page are photos of the completed assemblies for comparison.

If you're happy with your work you can now continue onto disassembly of the forks and the installation of the kit.



Finished Compression Assembly.



Finished Rebound Assembly.





Step 13:

Begin by removing the top cap of the fork. And draining the oil.



Step 14:

Using a 24mm spanner hold the jam nut on the spring guide, then remove the fork cap and spring.





Be carful when removing the fork cap as the spring will be under tension.

Step 15:

Using the 17mm hex wrench remove the OEM compression adjuster.



Step 16:

You will now be able to remove the cartridge. Once you have removed the cartridge from the fork tube pump it a few times to remove any oil left inside.



Now would be a good time to inspect/change the oil seals and bushings on your motorcycle. We have both available on our website or give us a call.





Take note of how one bottoming cone has holes in it and the other doesn't. This will be important later.

Step 17:

Clamp the end of the cartridge in the 32mm shaft clamp and use the 32mm open spanner to remove the bottoming cone. This will allow you to remove the piston rod and piston. For the bottoming cone with holes, remove the spring guide also and replace it with the black bottoming cone provided.

If you have difficulty with removal of the bottoming cone the application of heat may make it easier to remove. Be sure to practice caution if you choose to use heat to remove the part.



Step 18:

Clamp the piston rod in a 12mm shaft clamp and using a 17mm spanner remove the piston, needle and spring.







Step 19:

You can now apply thread lock to the new tower, install the new needle and spring then screw in the new tower and tighten.





Step 20:

Clamp the end of the cartridge in the 32mm shaft clamp again. Then while holding the piston band in its groove, install the piston into the cartridge then apply thread lock to the bottoming cone and tighten it onto the cartridge.

Step 21:

Slide the cartridge back into the fork

tubes and make sure it engages with the splines in the axles lug. You'll know it has if the cartridge body cannot rotate.

Step 22:

Apply thread lock to the compression bolt and tighten it into the cartridge through the axel foot. You will need to hold the axel foot in a vice or with the axel itself to stop it rotating as you torque the bolt to 65N/m



Step 23:

You are now ready to refill your oil and bleed the forks. Refer to the spec card for oil weight and height.

Step 24:

Replace the springs, we recommend changing the springs to suit your weight however the decision is yours if you want to keep the OEM springs.

Step 25:

Replace the fork caps and apply the stickers and new knobs.



Step 26:

Refit the forks to the motorcycle as per the owners manual and congratulations you have finished the installation.



Be aware you have just made a large change to your motorcycle suspension and it may take some getting use to. Take it for an easy test ride to make sure the install has been done properly and ride well within your abilities until you become acquainted with the new suspension feel.