



# INSTRUCTIONS

The PAN-CRUISE "EVOLUTION" oleopneumatic shock absorbers are delivered fully inflated by the factory in Quint (France) and are ready to use without any further adjustment. They have been tuned for an average load and will accomodate from 70 kgs to 150 kgs without need for adjustment.

The factory set-up also aims at maximum comfort.

The P1 pressure (P1 is the main spring pressure supporting the weight of the bike and the load) has been set at 25 bars (365 psi). The air valve is situated at the front of the unit, on the main body of the damper.

The P2 pressure (P2 is the ride height adjuster pressure) has been set at 12 bars (175 psi) giving the bike the same ride height set by the HD factory. The air valve is situated at the rear of the unit, on the eye fixing.

**NOTE :** Adjusting the ride height can only lower the ride height.

**CAUTION :** Do not check or alter the pressures in P1 & P2, when first fitting the PAN-CRUISE "EVOLUTION" on your H.D. SOFTAIL EVO.

### Running in :

Every seals used in the FOURNALES PAN- CRUISE "EVOLUTION" meet stringent aeronautic standards and are designed to resist very high pressures in excess of 200 bars (2.900 psi).

Being very hard wearing, it will take around 1.500/2.500 kms for them to be in properly before giving a more beautiful compliant and comfortable ride.

There is no need to check either P1 or P2, even after 30/50.000 kms.

**IMPORTANT :** Before adjusting either P1 or P2, ensure that your bike is on a flat level and hard surface supported so as to allow the rear wheel to be completely free from the ground. The point of support must not interfere with the free movement and access to both the swing arm and the oleopneumatic suspension units. Best is to use a center stand that lift the bike under the frame loop under the engine.

### Adjustment :

The 4 high pressure aeronautical standards air valves can be inflated as much as needed using a pump or a nitrogen from a bottle. Connection must be done either with a quick fitting or screw on, coupling.

Please note : what ever device (s) you choose to adjust the PAN-CRUISE"EVOLUTION" it must be able to deliver a minimum of 30 bars (450 psi) for normal adjust. Please check before using any device.

### 1/ How to modify the bike ride height, acting solely on P2 pressure (do not touch P1 pressure).

\* The lower the pressure (minimum 8 bars / 116 psi), the higher the bike.

\* The higher the pressure (maximum 30 bars / 440 psi), the lower the bike.

Front valve P1	Rear valve P2	below standard height and without rider	below standard height and with a 75 kgs rider
25 bars/365 psi	12 bars/175 psi	0/0 inch	- 21 mm/0,83 inch
25 bars/365 psi	15 bars /220 psi	-3 mm/0,12 inch	- 26 mm/1,03 inch
25 bars/365 psi	20 bars/290 psi -	-19 mm/0,75 inch	- 32 mm/1,30 inch
25 bars/365 psi	25 bars/365 psi -	-27 mm/1,17 inch	- 40 mm/1,58 inch
25 bars/365 psi	30 bars/440 psi -	-40 mm/1,58 inch	- 51 mm/2,00 inch

**IMPORTANT :** Lower the ride height will reduce the rear wheel clearance against the fender/mudgard. The exhaust pipes also get near the ground and can get scraped in bends, road holding is modified and comfort is lessened.

2/ How to modify adjustment of the main spring stiffness : by deflating P2, you alter P1 pressure. But this is only justified when riding your bike with special load (either heavy or very light).

\* The higher P1 pressure, to obtain a hard main spring load is 35 bars (507 Psi) maximum.

\* The lower P1 pressure, to obtain a soft hard main spring load is 23 bars (333 Psi) minimum.

Adjust P1 pressure in each shock absorber after deflating P2.

ALWAYS REFIT THE SCREW CUP ON EACH AIR VALVE.

# « PAN CRUISE EVOLUTION » OLEOPNEUMATIQUE SUSPENSION

Harley Davidson Softail, 1984 to 1999 model

## NOTICE OF INSTRUCTION

### Introduction :

On the "Softail" model, the oleopneumatic shock absorbers work in extension. They are in permanent stretching under high loads. They self align along the axle binding the front and rear supports.

In order to enable their self alignment these ones must be completely free in lateral translation on their front fixing axles. Correctly-sized O-rings maintain the shock absorbers adjusted on their mounting bolts and allow a possibility of self alignment required for their good functioning..

### ASSEMBLY

- Remove the original shock absorbers.
- In order this operation to be easily and safely performed, the motor bike must be steady under its frame so that the rear wheel does not touch the ground (wheel hanging).
- Release and unscrew the front nuts and rear bolts and lift the wheel at the last bit of tread.
- Install the Pan-Cruise in the right side, with the rear valve towards the ground.
- Use the original shouldered axles without any spacer or washer. This means the original 27/17/1.5mm washer must be removed from the hexagonal head.
- On the rear and front bolts, transversal clearance of the yokes is 2mm. Insert the two O-rings (OR16x3.5) on both sides of the yokes. Do not insert any washer.
- Grease the cylindrical spans of the bolts and screw them until the locking on their shoulders. The threads can receive removable lock thread (blue).
- Grease the silent-blocs and their cups and fix the rod to the swing arm as originally (sketch herein).
- Tighten the locknut by holding the rod with a 7mm spanner.

