

# 1 / CAREFULLY !!!

Read this installation manual carefully and use the appropriate procedures:

\*Fits easily in place and plug-in of your IAC servomotor located above the injection body just behind your air filter.

\*Easily adjustable: Simply Unscrew the Maltese cross to increase the RPM, or Screw down the Maltese cross to decrease the RPM.

\*Reduces fuel consumption.

\*Does not affect OEM settings or motors prepared in Stages I, II, III or IV.

Once installed, no engine malfunction will be detected by your ECM; The auto-diagnostic orange LED of the engine management will naturally turn off as usual once the RPM is adjusted. It shows that our "potato" does not alter in any way the proper functioning of your injection Vtwin or your oil pump.

**WARNING!**  
**THE BLACKPEARL INNOVATIONS COMPANY**  
will not be responsible for any alterations done on our product.



## INSTRUCTION MANUAL



OUR "BLACK POTATO" HAS BEEN DESIGNED TO WORK ON THE FOLLOWING MODELS:



- ALL 2006 MODELS SPORTSTER 883 R + 883 AND 1200 FROM 2007 TO 2016
- ALL DYNA MODELS UNTIL 2005
- ALL TOURING MODELS UNTIL 2005
- ALL SOFTAIL MODELS UNTIL 2005
- ALL MODELS / VROD AND XR WITH EFI INJECTION

OUR "SILVER POTATO" HAS BEEN DESIGNED TO WORK ON THE FOLLOWING MODELS :

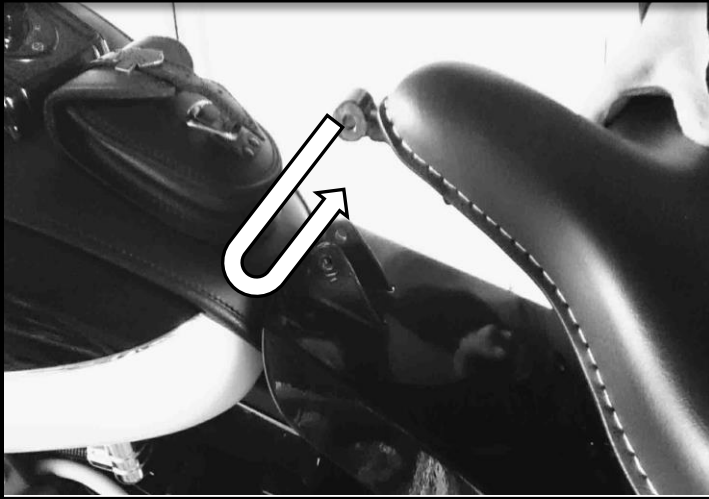


- ALL DYNA MODELS FROM 2006 UNTIL 2015
- ALL SOFTAIL MODELS FROM 2006 UNTIL 2015
- ALL TOURING MODELS FROM 2006 UNTIL 2007

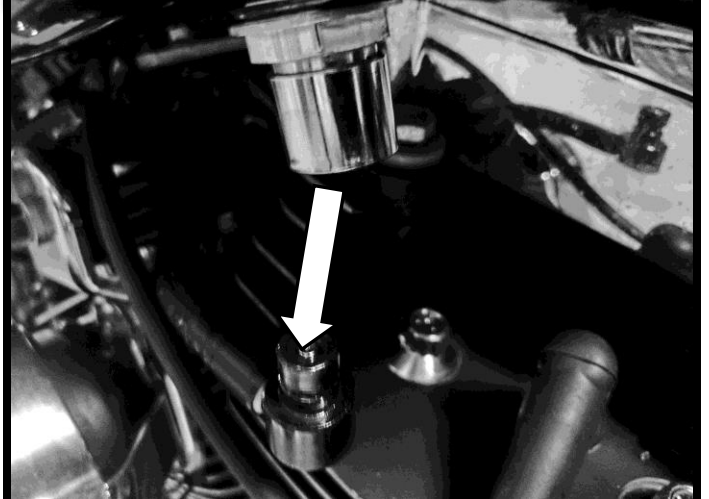
*When disassembling your original screws, Fire Up your VTwin for a while to expand the aluminium; This will make it easier for you to unscrew your bolts and AVOID BREAKING!!*

Installation vidéos on <https://www.blackpearl-garage.com/>

1 / Remove your seat :



2 / Disconnect the gas supply :



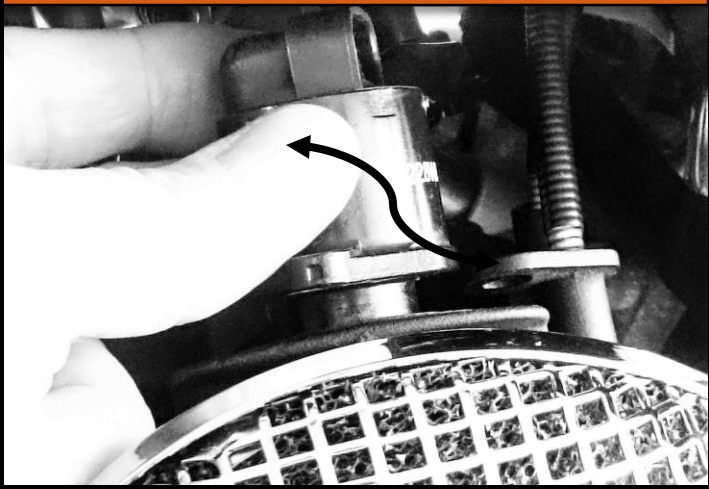
3 / Lift or Quit if necessary your tank on :  
TOURING / SOFTAIL / DYNA



4 / Remove the IAC : 2 bolts



5 / Unplug the plug & Remove the servomotor  
¼ turn to dislodge it from the throttle plate



6 / Remove the original O-ring :



Find all our safe videos: <https://www.blackpearl-garage.com/videos/>

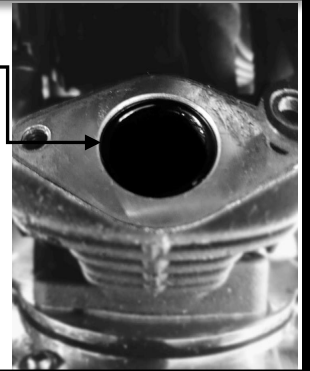


7 / Use the new O-ring supplied with your « POTATO IDLE » :



8 / Reinstall the new O-Ring after it has been coated with silicone grease.

NEW ORING



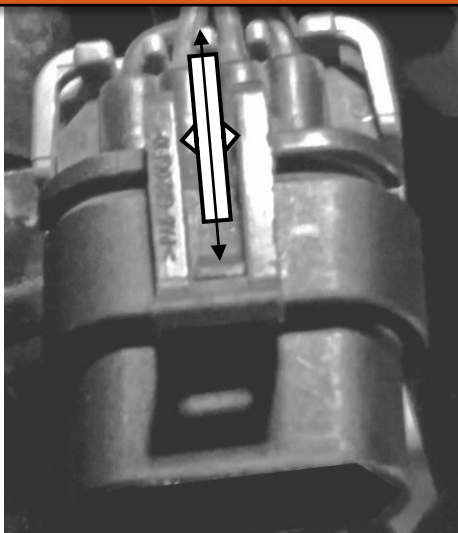
9 / Position your « POTATO » : The small threaded rod nut inwards if possible :



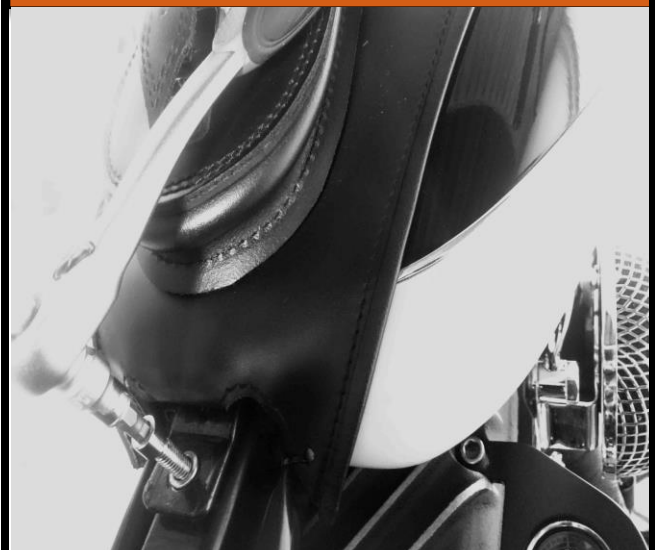
10 / Unscrew the "Maltese Cross" upwards BEFORE bolting !



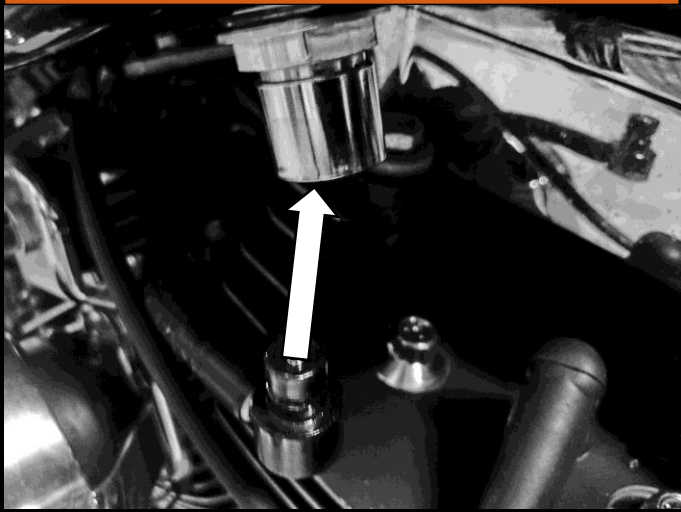
11 / Insulate the 4-pin plug with the waterproof plug. Tie everything under the tank with the provided rilsan



12 / Fasten your tank :



## 12 / Reconnect the fuel supply :



## 13 / Reinstall your seat :



Before starting your VTwin, make sure that the Maltese cross adjustment knob is unscrewed upwards and then back by 2 to 3 X ¼ turn.

After starting, let your engine warm up for about 1 minute (depending on the outside temperature) and then gradually turn the control dial in Maltese cross ¼ turn per ¼ turn. As the engine warms up, reduce idle speed by turning the Maltese cross down. The orange "Engine Diag " warning light will go out naturally when stopped or in running order.

However, if we reduce the idle too much until the engine has reached its operating temperature, it will turn back on / Our "Potato" thus provides a visual indication of a good adjustment according to the temperature, power however - Stage I, II, III, IV.

Once the engine is at a good temperature (about 3 minutes depending on the outside temperature or 30/40 ° C on your oil temperature gauge) go ride for about ten miles passing all your reports without accelerating strongly.

Personally, and by habit I do not settle it down before having ridden several miles with my Springer and never go up or down or up.

Once the engine has reached a good operating temperature (60 ° / 70 ° C) when stopped (stop or red light) I go down a notch or two by passing my hand under the tank and do not screw it never fully / 2 or even 3 ¼ turns. \* Existing notches on the axis of rotation to better facilitate the adjustment and note 1/4 turns.

DO NOT SCREW INTO YOUR POTATO, leave the adjustment wheel a margin of 2 or even 3 ¼ turn.

Usage Tips: Once your engine has reached its operating temperature (around 70 ° C) you can go down your idle a quarter of a turn to take full advantage of your "POTATO"

In the city or on the road during frequent stops and when the engine is hot, you do not need to touch the Maltese cross any more. When the engine is cold it will again unscrew the Maltese cross to increase your idle again before starting

Our system is neither more nor less than a starter but it is thanks to him that you will be able to adjust your idling according to your machine and your sense of listening to get closer to the sound of the past "Potatop , potatop, potatop "And the advantage is that it is reversible: The day you change STAGE (I, II, III, IV) just reassemble your original IAC servo motor - Make changes and ECM box settings and then re install your "potato". After a long stop, it will be necessary to restart your VTwin by increasing the idle speed by unscrewing the Maltese cross up again.

[Vidéos d'installation sur https://www.blackpearl-garage.com/](https://www.blackpearl-garage.com/)