motoworks

FMI (Fuel Management Interface)
Part# 80-6001
2008 Can-Am DS450

FMI kit bill of materials

1	Instruction sheet
1	Adhesive backed Velcro square
1	FMI
3	Zip ties
2	Motoworks stickers

Caution: LET MOTORCYCLE COOL DOWN AT LEAST 1 HOUR BEFORE BEGINNING INSTALLATION.

Note: READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION.

Installation of Motoworks FMI

1. Remove the seat.
2. Remove bolts holding the side plastics to the frame on the left and right side (figure 1-3)
3. Remove bolts holding down the lower portion of the coolant tank. (figure 4)
4. Remove the fender bracket bolt on the left and right sides. (figures 5&6)
5. Remove the left and right side head lights. (figures 7-10)
6. Remove the two bolts holding the grill to the front plastics. (figure 11)
7. Remove screws connecting the top portion of the grill to the front plastics. (figure 12&13)
8. Remove gas cap.

9. Remove the upper and lower black plastic covers, the lower piece will slide out. To remove the upper portion if the plastic cover, remove bolt, lift up the bottom half and slide the upper half out towards the back of the quad.(figure 14)
10. Replace gas cap.
11. Remove bolt on the upper portion of the coolant tank. (figure 15)
12. Lift up and turn the coolant tank sideways. (its is not necessary to remove coolant tank)
13. Locate the grey fuel injector plug and disconnect. (figure 16)
(There are two grey plugs next to one another, disconnect the grey plug with the blue and orange wires)
14. Connect the FMI's grey plug to fuel injector. (figure 17)
15. Connect the FMI's black plug to the original grey plug. (figure 18)
16. Ground wire to either bolt by the air box. Place ground between the head of the bolt and washer.
17. Reassemble the quad.

Operating Instructions

1. It is recommended that the pre-programmed settings of the Motoworks FMI be used. However, the Motoworks FMI can be adjusted to suite different engine modifications, states of tune and environmental conditions. To begin this process, press the mode button. To enter each successive mode, just press the mode button again. ***Note that every mode will be identifiable by the color(s) of the flashing LED(s) on the LED display***. There are six modes that are distinguished by an LED color or color combination. The six modes are as follows, respectively: Green, Yellow, Red, Yellow-Blue and Red-Blue.

2. You are now ready to manually program each mode. Consult the base settings supplied with the unit.

   To program the Motoworks FMI, the bike must be running in order to supply power to the Motoworks FMI.

   Simply press the mode button to activate the first mode. If at anytime you stay in an adjustment mode for longer than 5 seconds without pressing any buttons, the Motoworks FMI will exit the adjustment mode and will return to the ready state.

   To save settings in a particular mode press the MODE button which goes to the next adjustable mode or wait for the Motoworks FMI to exit back to the ready state.

The settings in each mode are adjusted be pressing the (+) and (-) buttons located on the right and left side of the mode button, respectively. For easy reference, the LEDs are numbered 1 through 8. However, the LEDs can be adjusted to the following positions: 0, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8. For example, in particular mode, if LED 4 is flashing then the LED displays is set to 4 in that mode. If the (+) button is pressed once then LEDs 4 and 5 will flash simultaneously and the LED display is set to 4.5. If the (+) button is pressed once again, only LED 5 will flash and the LED display is set to 5. The LED display can also be set to 0 by pressing the (-) button once more until the LED in position 1 is flashing twice as fast as normal.

I. The first mode (Green Mode) represents an additional amount of fuel added under <u>cruise conditions</u>. A flashing green LED should appear on the LED display. To add **more** fuel, scroll the flashing green LED to the right using the (+) button. To add **less** fuel, scroll the flashing green LED to the left using the (-) button. If you set the flashing green Led to the 0 position on the LED display, no fuel will be added to the stock fuel curve.

II. The second mode (Yellow Mode) represents an additional amount of fuel added during **acceleration**. A flashing yellow LED should appear on the LED display. To add **more** fuel, scroll the flashing yellow LED to the right using the (+) button. To add **less** fuel, scroll the yellow LED to the left using the (-) button. If you set the flashing yellow LED to the 0 position on the LED display, no fuel will be added to the stock fuel curve.

III. The third mode (Red Mode) represents an additional amount of fuel added during <u>full throttle conditions</u>. A flashing red LED should appear on the LED display. To add **more** fuel, scroll the flashing red LED to the right using the (+) button. To add **less** fuel, scroll the red LED to the left using the (-) button. If you set the flashing red LED to the 0 position on the LED display, no fuel will be added to the stock fuel curve.

Note: If the flashing green, yellow and red LEDs in modes 1 thorough 3 (Green, Yellow and Red) are set to the 0 on the LED display then the Motoworks FMI will not add any fuel to the bike's stock fuel curve. This setting will essentially turn off the Motoworks FMI even though it is still attached to the bike's fuel injection system. The bike will run as though the Motoworks FMI is not installed. The Motoworks FMI LEDs will still operate normally even though no fuel is being added.

IV. The fourth mode (Yellow-Blue Mode) is an adjustment to determine the time when the acceleration/Yellow Mode fuel amount turns on. A flashing yellow LED appears on the LED display while at the sane time a flashing blue LED appears on the 8th LED. To **increase** the sensitivity and therefore cause the Yellow Mode fuel to turn on sooner, scroll the flashing yellow LED to the left using the (-) button. To **decrease** the sensitivity and therefore cause the Yellow Mode fuel to turn on later, scroll the flashing yellow LED to the right using the (+) button.

V. The sixth mode (Red-Blue Mode) is an adjustment to determine the time when the full throttle/Red Mode fuel amount turns on. A flashing red LED appears on the LED display while at the same time a flashing blue LED appears on the 8th LED. To **increase** the sensitivity and therefore cause the Red Mode fuel to turn on sooner, scroll the flashing red LED to the left using the (-) button. To **decrease** the sensitivity and therefore cause the Red Mode fuel to turn on later, scroll the flashing red LED to the right using the (+) button.

The Motoworks FMI is pre-programmed for a Motoworks exhaust with a normal core size and with the air box lid removed. If you are using a quiet core baffle and/or the air box lid on you will then need to lean out the entire fuel curve. The FMI is pre-programmed with the following settings:

Fuel Management Interface settings:

> Green: 1.5
> Yellow: 4
> Red: 2.5
> Green/Blue: 8
> Yellow/Blue: 4
> Red/Blue: 4

Note: The Motoworks FMI comes with the preprogrammed setting above. The FMI may need to be fine tuned for your altitude, engine modifications, etc.

Cleaning

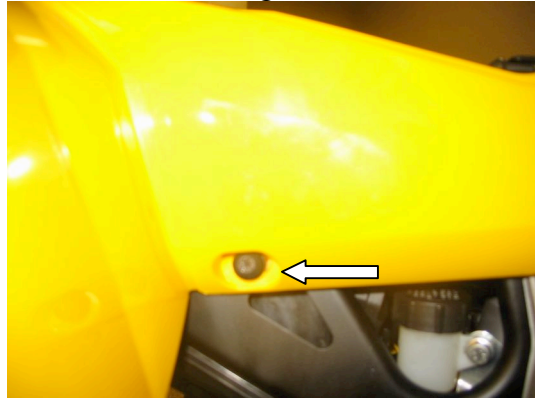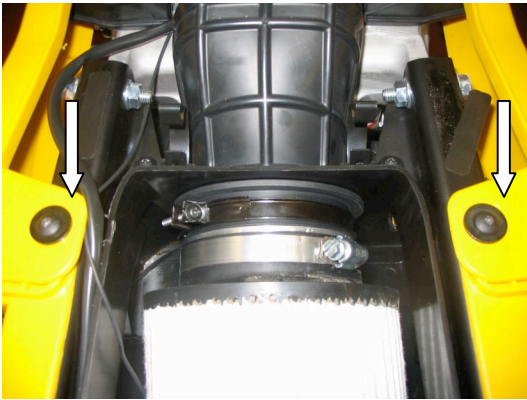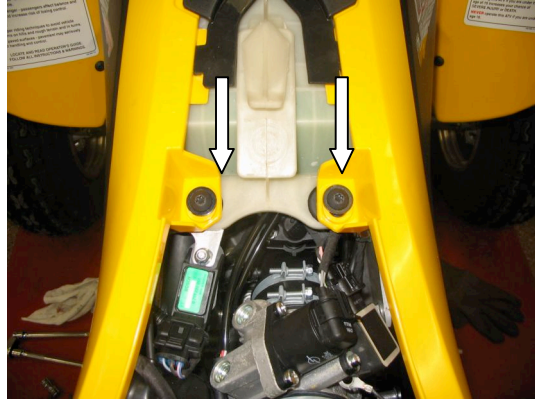If the unit requires cleaning, use a cloth that is only lightly dampened with water or mild detergent.
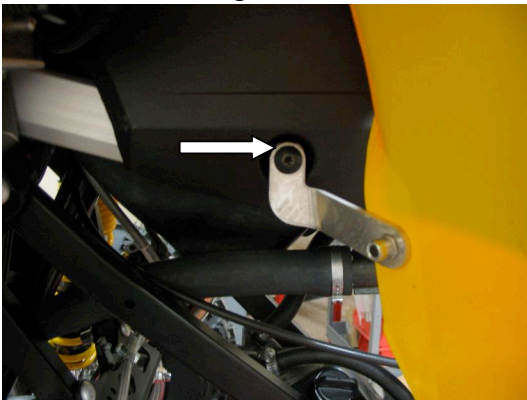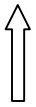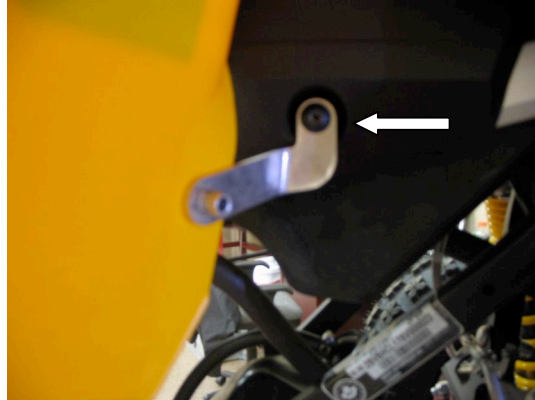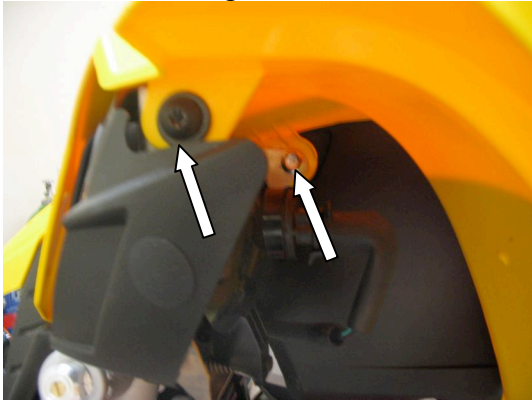
Figure 1
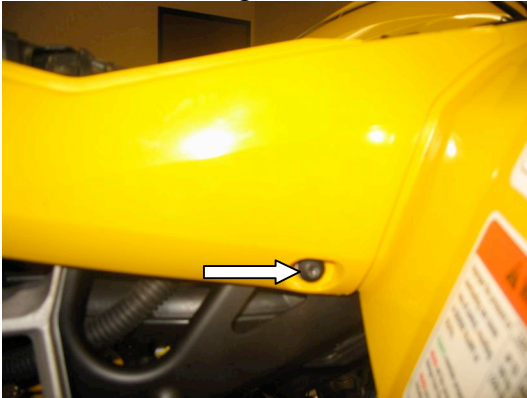
Figure 2

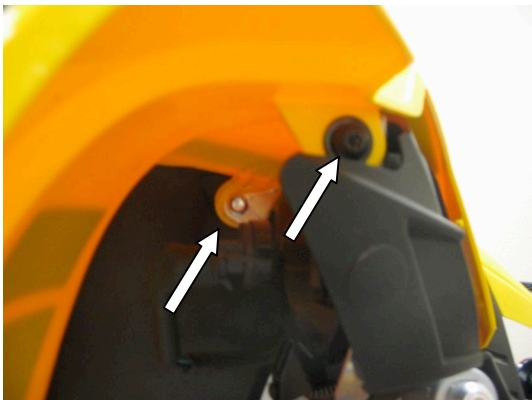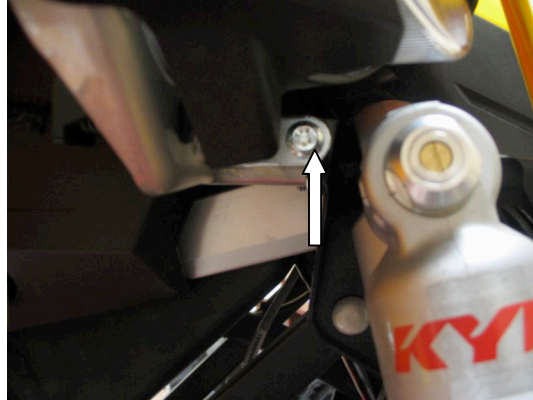Figure 3

Figure 4

Figure 5

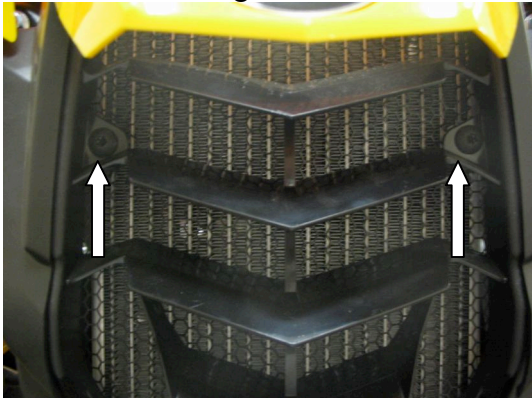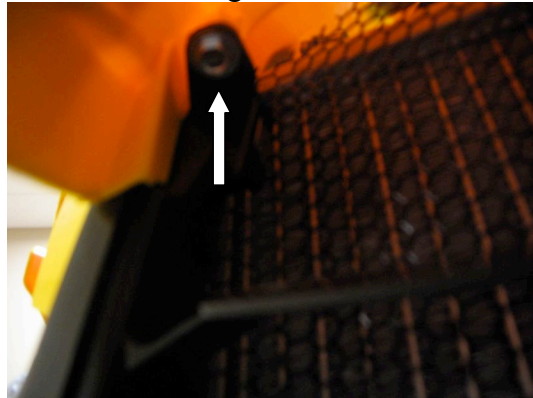Figure 6

Figure 7

Figure 8
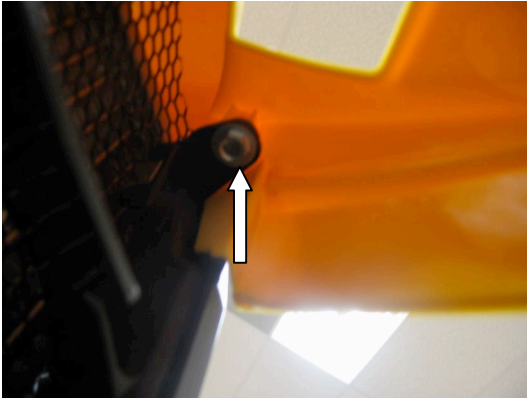
Figure 9

Figure 10

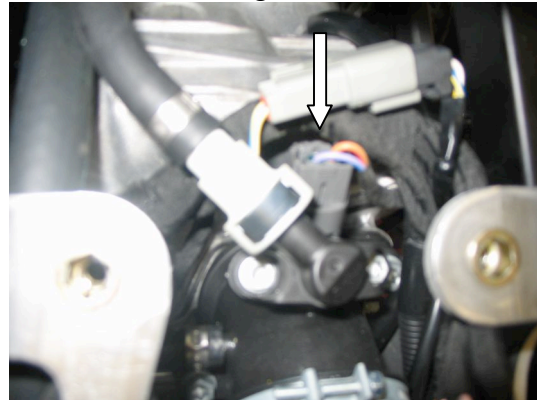Figure 11
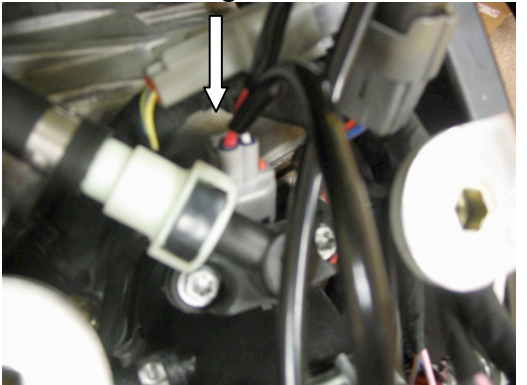
Figure 12

Figure 13

Figure 14

Figure 15

Figure 16

Figure 17

Figure 18

Warranty

Motoworks warrants that this product carries a warranty for 2 years form date of purchase against original defects in material and workmanship. Should this product fail to perform for either of the above reasons, Motoworks will repair or replace it with an equivalent product at no charge. To obtain the benefits of this warranty, the retail purchaser must send the product with proof of purchase to:

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Lake Elsinore, CA 92530
Phone 951-587-9222   or   email motoworks@motoworks.com