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Figure 1



Figure 2



Figure 3



Figure 4



Figure 5

# **Sub-frame Tank Installation**

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#### PLEASE READ THROUGH ENTIRE INSTRUCTIONS PRIOR TO INSTALLATION

- 1. Remove the radiator shrouds.
- 2. Disconnect the fuel line located on left side under tank.
- 3. Remove the air filter and disconnect electrical connector at the rear of air filter.
- 4. Remove the hold down bolt, between gas cap and air filter, lift up on front of tank while pinching intake boot as shown in Fig 1. Careful not to rub radiator fins. \* Note: If running a cooling fan, you may do step 6 and relax the sub-frame as shown in fig 5.
- 5. Remove the rear fender, silencer and mud-flap.
- 6. Remove the sub-frame truss. Fig 2.
- 7. Remove the five screws holding the ECU cover, battery tray and the electrical harness P-clamp.
- 8. Lay the battery and etc on top of the upper shock mount as shown in Fig 3.
- 9. Remove the sub-frame.
- 10. Block off the vent on the OEM tank, fold it over and zip tie it.
- 11. Stand the tank up on its front, cap down.
- 12. Remove the four bolts and slowly pull the fuel pump cover out of the bottom of the tank.
- 13. Depress the locking tabs and remove the cover.
- 14. Remove the o-ring and place it on the supplied billet fuel pump cover adaptor.
- 15. Install the adaptor. Fig 4.
- 16.Install the 70 Degree Racing tank with the stock 8mmx30mm countersink bolts on the lower left side and right side but do not tighten yet. Let it hang as in Fig 5.
- 17. Lay the battery assembly back in place and use five of the 5mm x 12mm bolts supplied to secure the ECU cover, battery tray and the electrical harness P-clamp. **Do not over tighten or use lock tight!**
- 18. Insert vent line along the left side of the intake boot, and under the tank front hold down bracket, so the end of the vent line will come out in front of the tank. Fig 6 and Fig 14.
- 19.Lay tank in place routing fuel line and vent line as shown in Fig 7. Do not install zip tie or secure intake boot yet.
- 20. Lift up on tank slightly and reach down and connect the fuel quick disconnect. If you have a 2010 model, connect the low fuel level connector. Hold the connector up at the battery cables as you set the tank in place. Fig 8. \*Note: Any fuel that was already in the main tank will begin to flow into the 70 Degree Racing sub-frame tank as soon as the fuel quick disconnect is connected. This is normal. The fuel quick disconnect has a auto shut off valve on both sides, so that when the disconnect is parted there will be no fuel flow.
- 21. Secure intake boot, connect fuel line, fuel pump electrical connector (install zip tie as shown in Fig 7), air filter and hold down bolt.
- 22. Raise the sub-frame tank and install stock upper left 8mm  $\times$  30mm countersink mounting bolt and tighten all three. Fig 5.



Figure 6



Figure 7





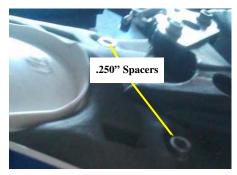


Figure 8 Figure 9

Figure 10

- 23. Scribe the last tab on the right side of the sub-frame truss with a knife blade a couple times and then break off. Fig 9.
- 24. Set truss in place and install the mounting bolts in the frame and OEM tank. Place the provided 8mm x .250" spacers between the truss and sub-frame tank and secure with the supplied 8mm x 30mm counter sink bolts. Fig 10 \*Note: Make sure that the seat release loop is behind the keeper boss. Fig 11.
- 25.Install the mud flap and silencer.
- 26.Install the rear fender, using the last two 5mm x 12mm bolts supplied first (Do not over tighten or use lock tight!)
  - Fig 12. Then install the supplied 25mm plastic (wood type) screws at the rear of sub-frame to secure the rear fender. Fig 13. If you are using the tail light holder use your stock 20mm plastic (wood type) screws to secure the tail light holder closest to the end of the rear fender.
- 27.70 Degree Racing recommends that if you are running the stock gas cap, you remove the ball check valve inside the cap to keep pressure from building inside the tank.
- 28.Install the T fitting at the tank vent and secure vent line zip ties.
  Fig 14. Please note the position of all zip ties and vent line. The vent line must have a gradual curve from vent nipple on the sub-frame tank. Fig 15.
  Trim vent line if necessary to achieve gradual curve in vent line, and install vent line onto vent nipple on sub-frame tank. This vent line routing has only been tested with an OEM seat. If you are running an aftermarket seat, make sure it does not pinch the vent line. It may be necessary to relieve the rib in this area in some cases, 70 Degree Racing recommends doing this anyway.
  Fig 16.
- 29. The 70 Degree Racing sub tank auxiliary fill cap was installed at the factory, make sure it is still secure. **Do not over tighten!** Fill the main tank with fuel. As the main tank is filled it will begin to gravity fill the sub-frame tank, this happens quickly. Once the main tank is full, you will notice the fuel level dropping in the main tank as the sub-frame tank continues to gravity fill. You will be able to see the fuel level in the 70 Degree Racing sub-frame tank climb as it gravity fills. Check for leaks. If no leaks are found, continue to top off the main tank until the fuel level no longer drops, and you are ready to go riding. \*Note: The sub-frame auxiliary fill cap should not be removed unless you have determined that the fuel level is below the cap level. When filling the main tank, the sub-frame tank cap must be secure, as the fuel level will be above this cap when the main tank is full.

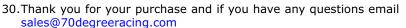




Figure 11



Figure 12

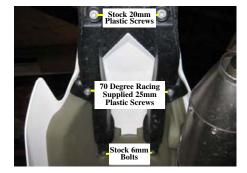


Figure 13







Figure 14 Figure 15 Figure 16

# Additional 70 Degree Racing Racing Products



70 Degree Racing Fuel Tank



70 Degree Mapping Switcch



BPD Radiator Guard



BPD Swingarm Guard



BPD Disk Guard



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## **70 Degree Racing Warranty**

\* The 70 Degree Racing fuel tank features a 90 Day Warranty against any defect in materials or workmanship. Should there be a problem with your new tank, please contact us ASAP for a return authorization at sales@70degreeracing.com

\* Warranty claims must be requested within 90 days of the purchase date. 70 Degree Racing reserves the right to inspect all warranty claim products before a new replacement is shipped. If you have ANY questions or concerns about installing any of our products, PLEASE contact us before attempting installation.

### Sales & Support

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