

**SMART  
ENGINE**  
BREAK IN BOX

# INSTRUCTION MANUAL

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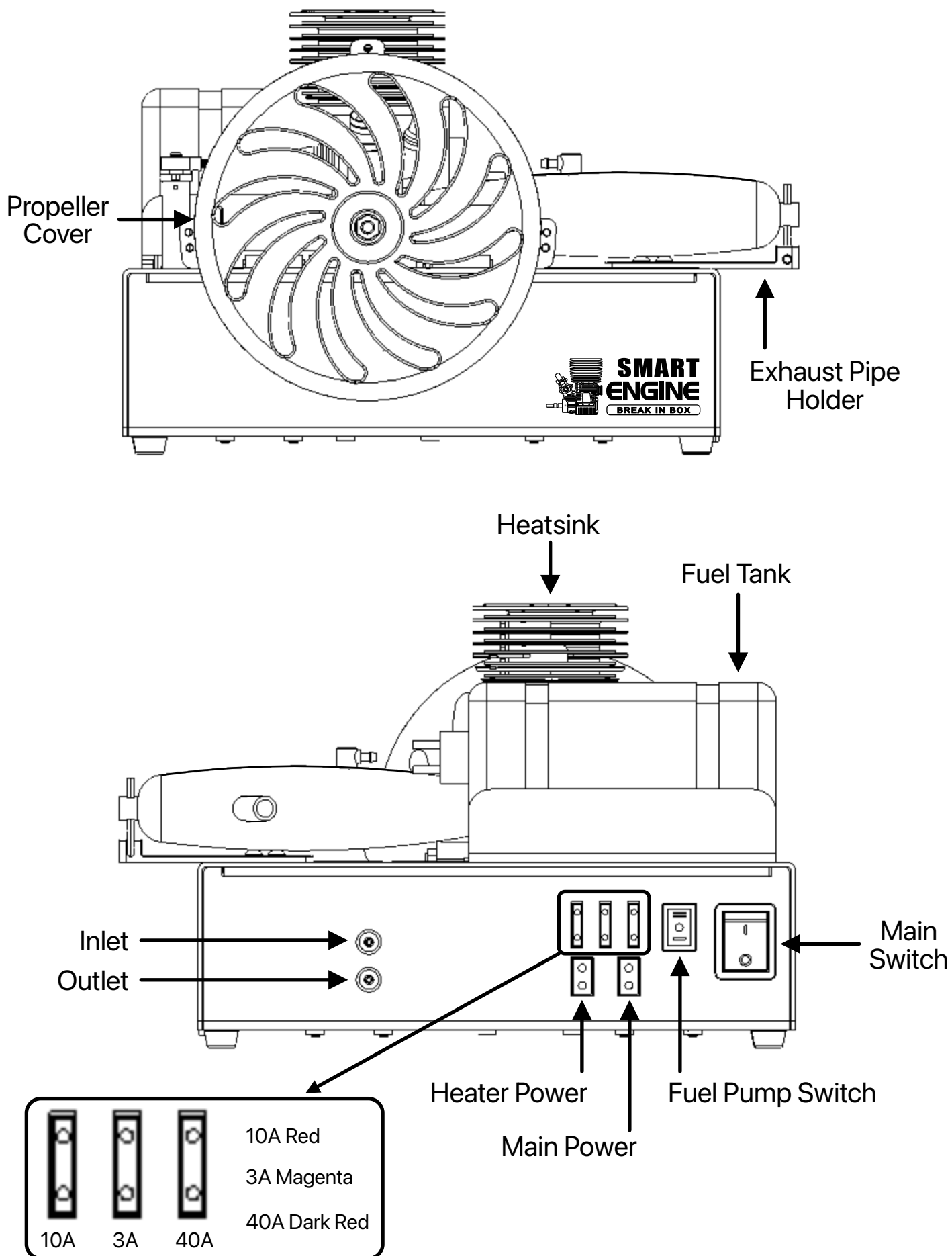
# Item List

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SMART Engine Break In Box	X 1
Heatsink	X 1
Propeller	X 1
Propeller Safety Cover	X 1
Fuel Tank	X 1
Fuel Tank Holder	X 1
Exhaust Pipe Holder	X 1
Flywheel	X 1
Fuel Line with stopper	X 1
Anti Vibration Leg	X 4
Power Cord	X 1
Fuses 40A	X 1
Fuses 10A	X 1
Fuses 3A	X 1

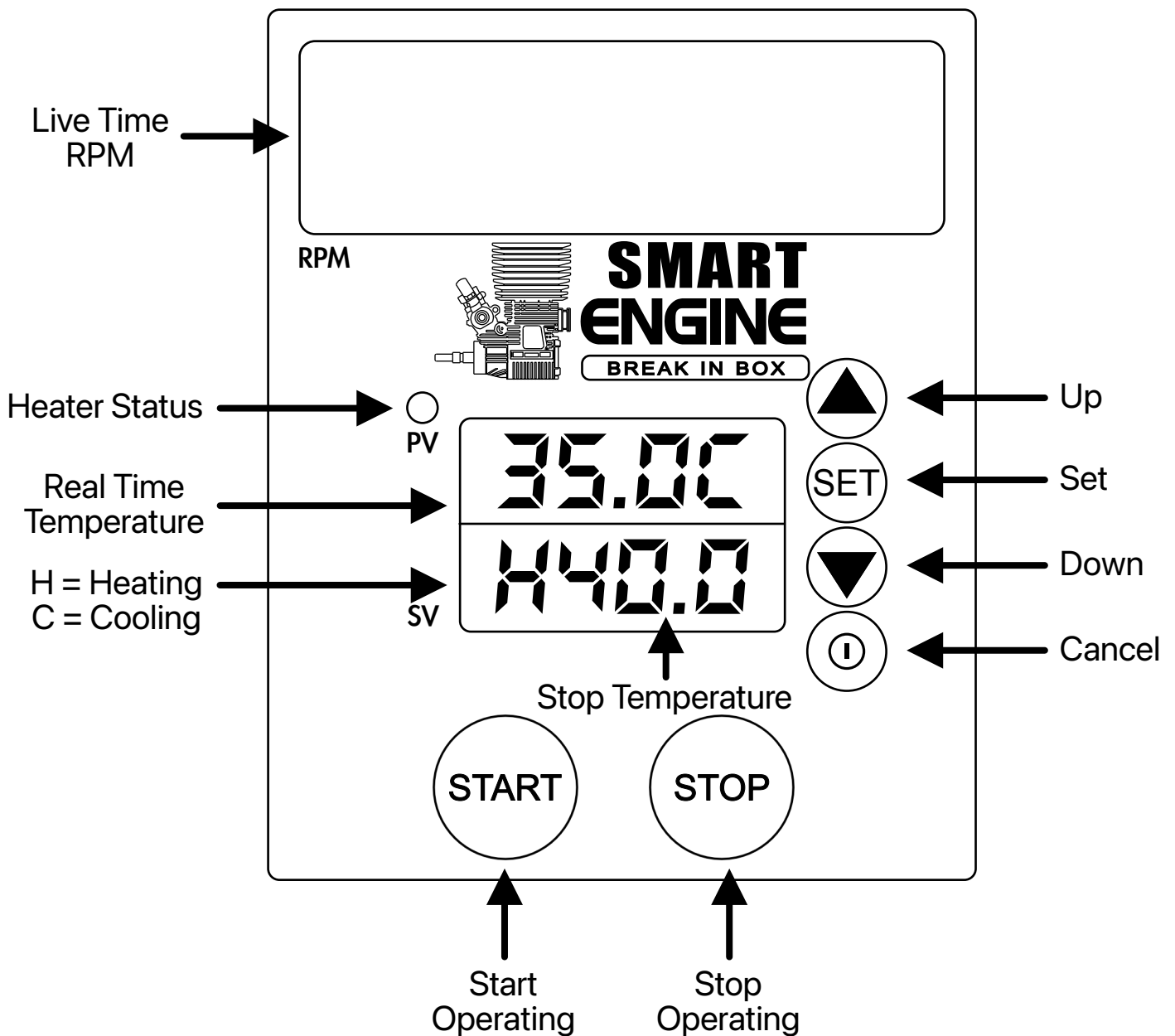
# Product Guide

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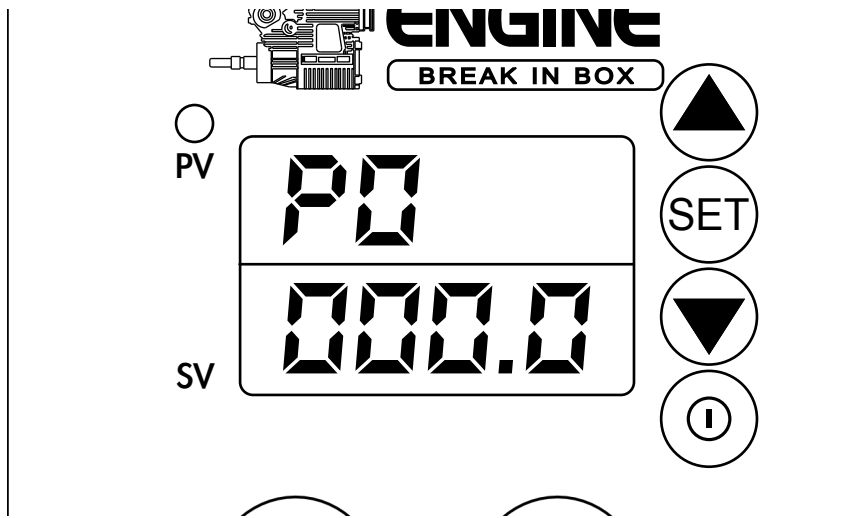
# Control Panel Description

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# Parameter Description

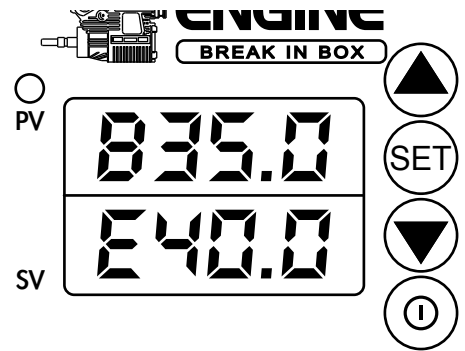
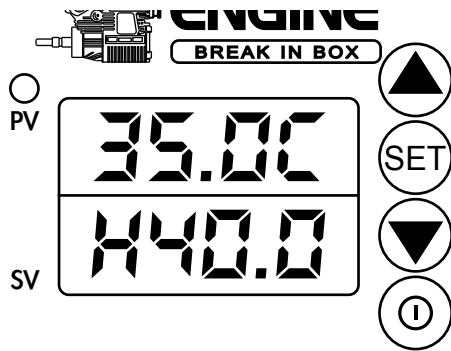
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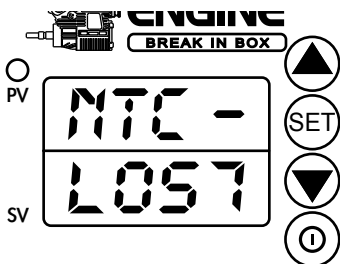
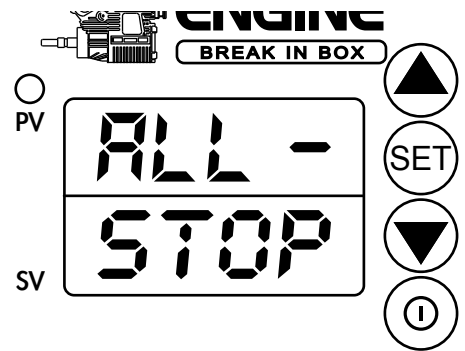
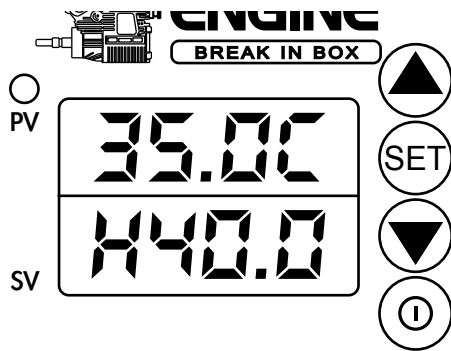
Hold the SET button for 2 seconds to enter parameter page

P0	Heater On Temperature
P1	Heater Off Temperature
P2	Upper Temperature Limit
P3	Lower Temperature Limit
P4	Temp-Correction
P5	Delayed Start
P6	High Temperature Warning
P7	Low Temperature Warning
P8	Temperature Unit C/F
P9	Data Lock

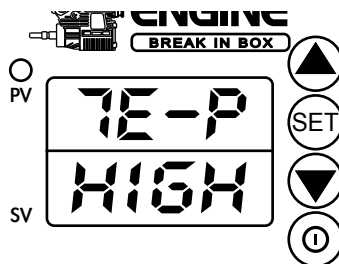
# Control Panel Page Guide



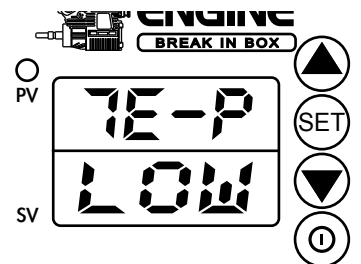
B = Start Temperature  
E = Stop Temperature



Cannot detect sensor



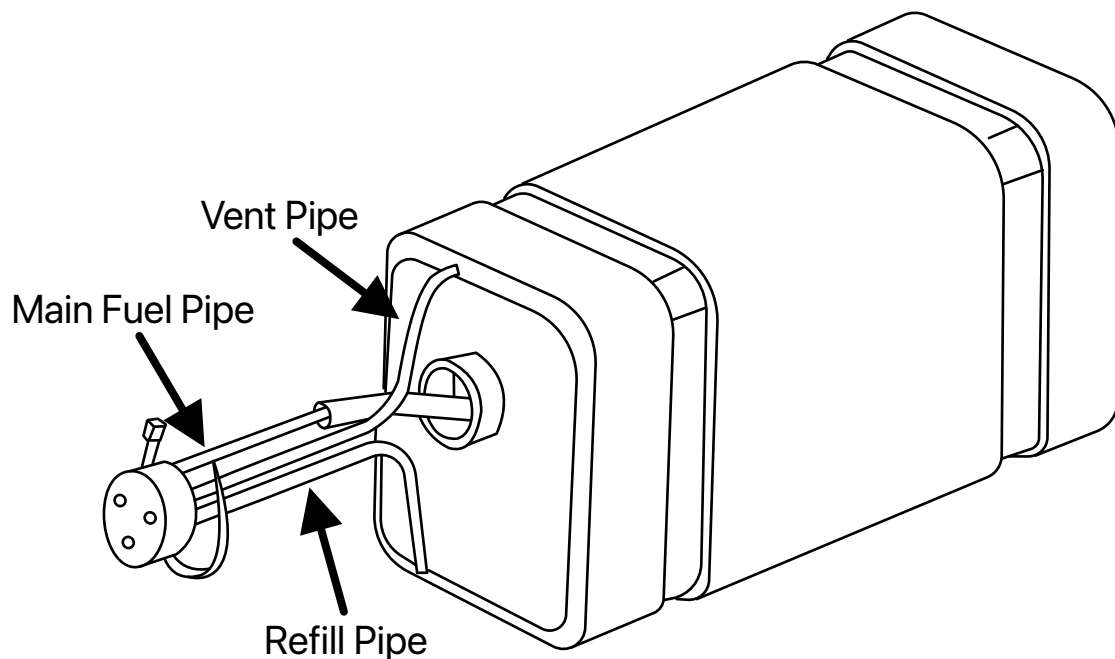
High temperature alarm



Low temperature alarm

# 1. Fuel Tank Installation

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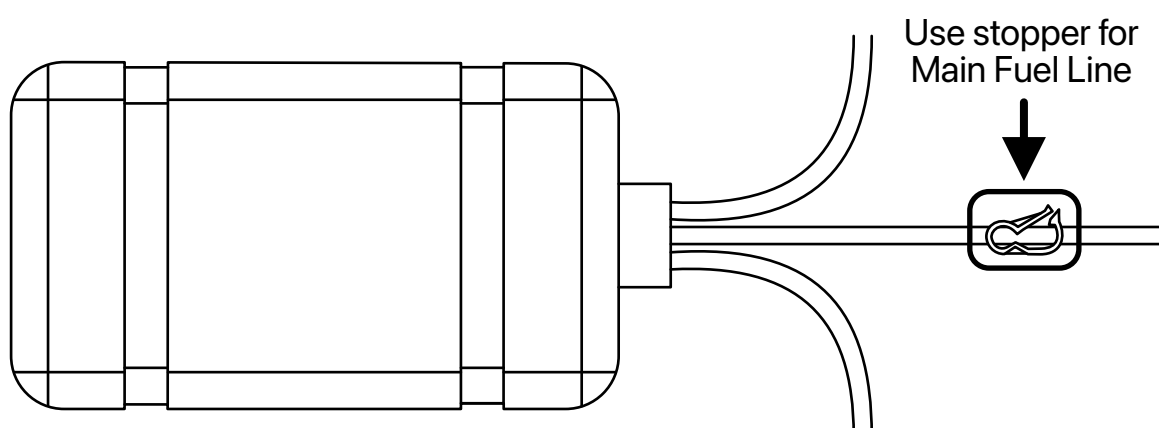


- Assemble the pipes in the correct direction as the above diagram
- Use the provided cable tie to tighten up the rubber cover

**Main Fuel Pipe - Connect to engine carburetor**

**Vent Pipe - Connect to exhaust pipe**

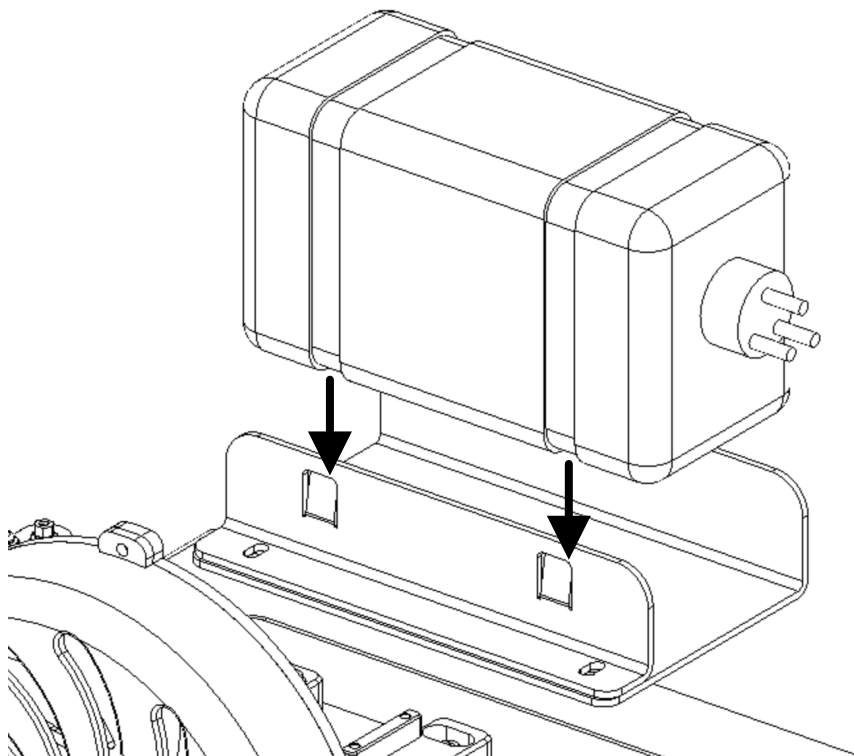
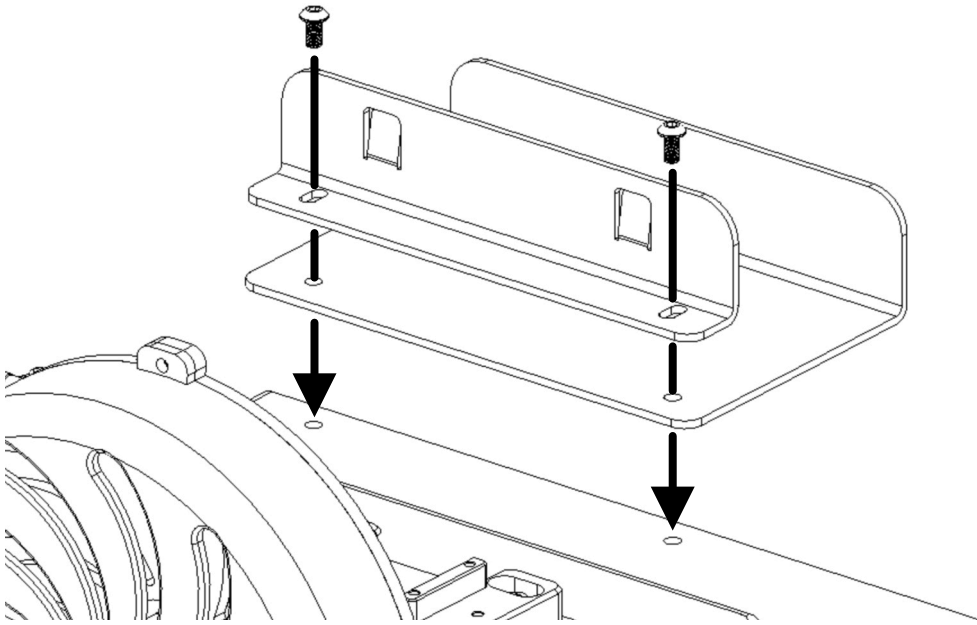
**Refill Pipe - Connect to Outlet**





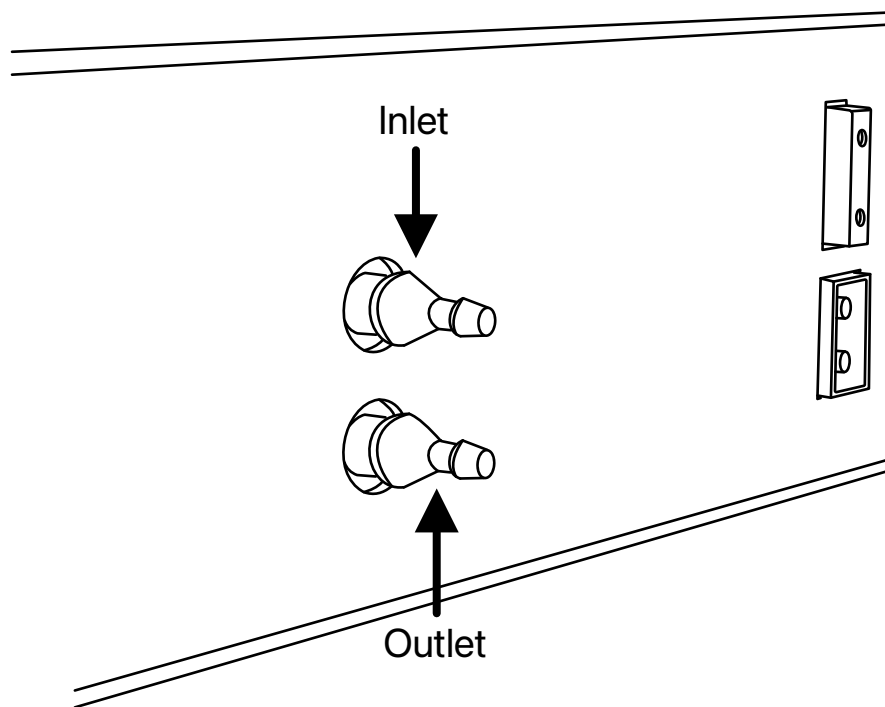
# 1. Fuel Tank Installation

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# 1. Fuel Tank Installation

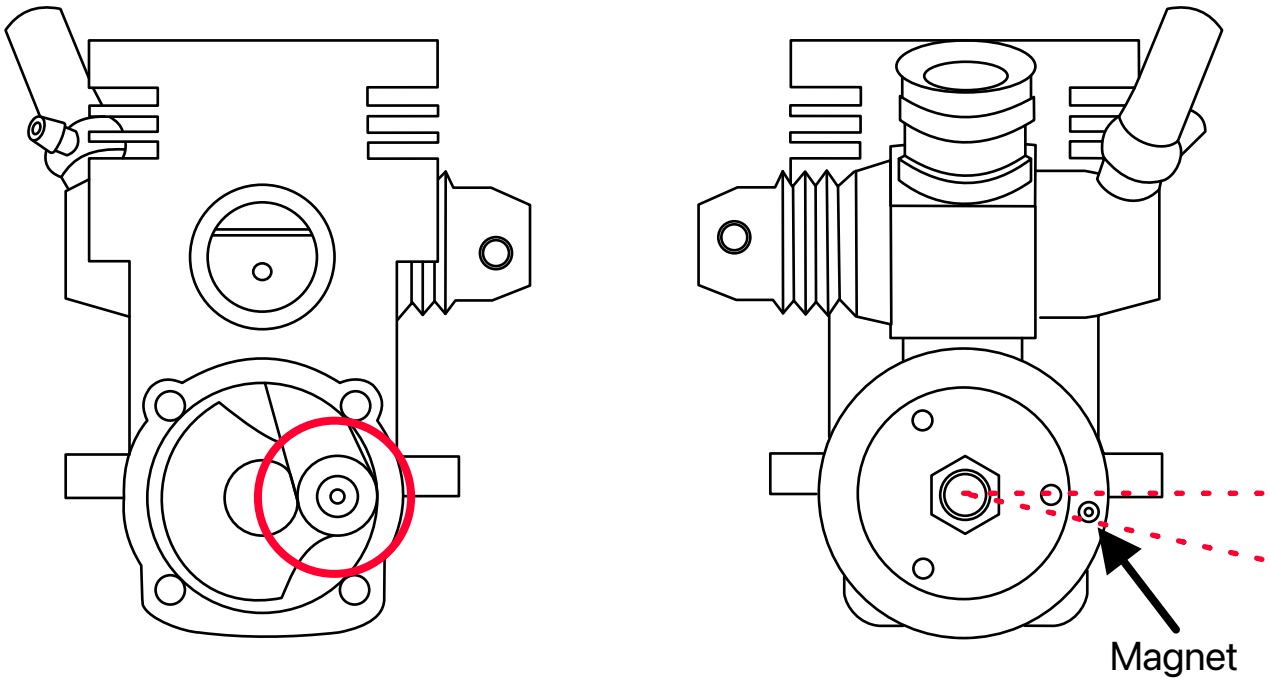
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- The Outlet should connect to Refill Pipe on the fuel tank
- The Inlet is for external fuel line to the Fuel Bottle
- Use the Fuel Pump Switch to Refill/Drain the fuel

## 2. Flywheel Installation

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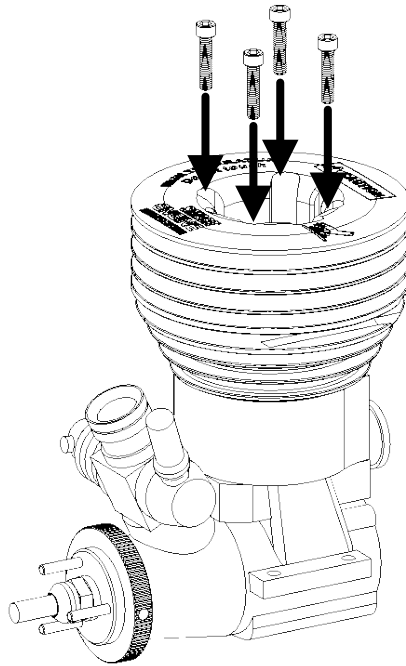


- Turn the piston to top position as the above diagram
- Attach the flywheel in to the crankshaft and make sure the magnet is located at the horizontal right position

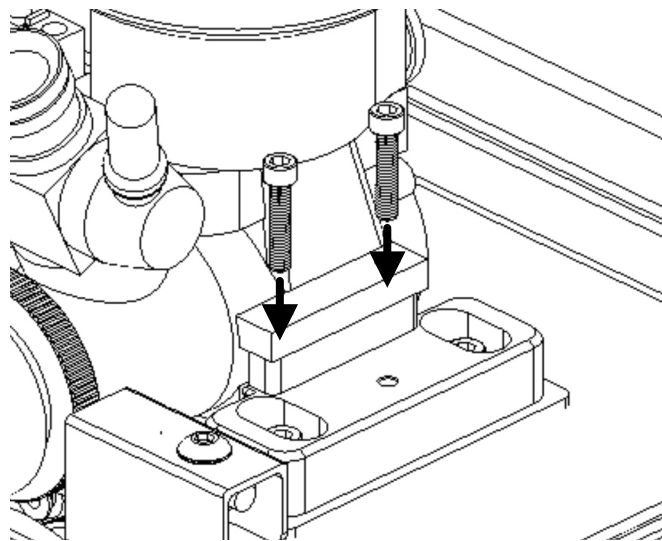
**Important: Please ensure the flywheel magnet position is correct after tighten up the flywheel**

### 3. Engine Installation

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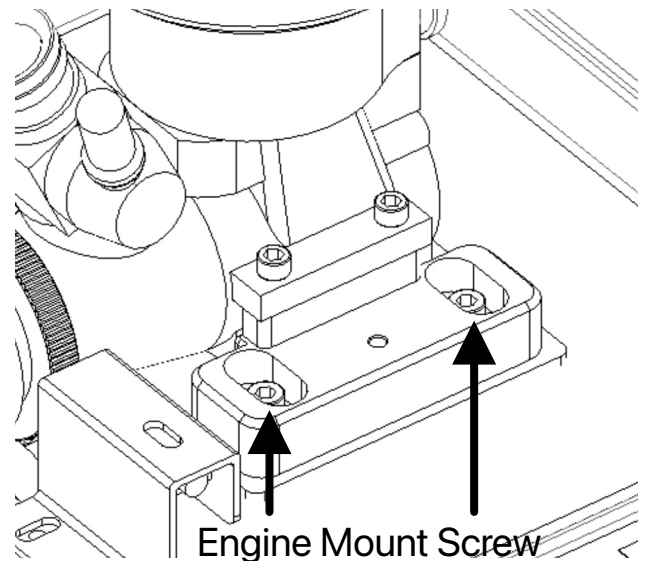
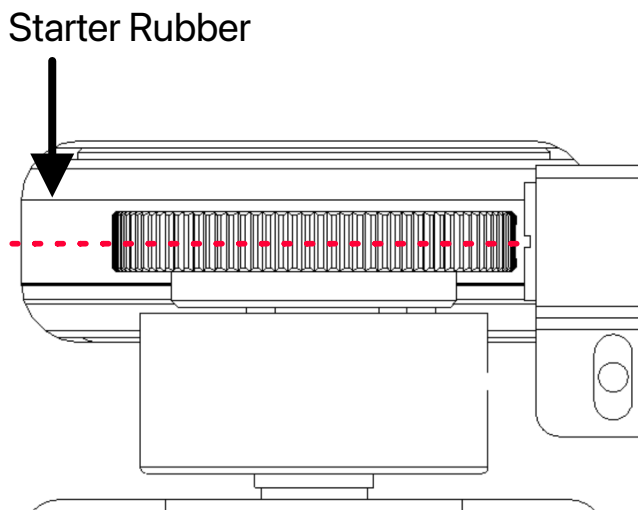
- Install the heatsink which come with the system
- Connect to Heater and Temperature Sensor connector on the left side



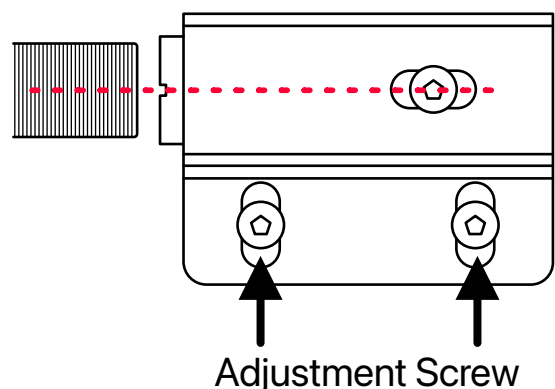
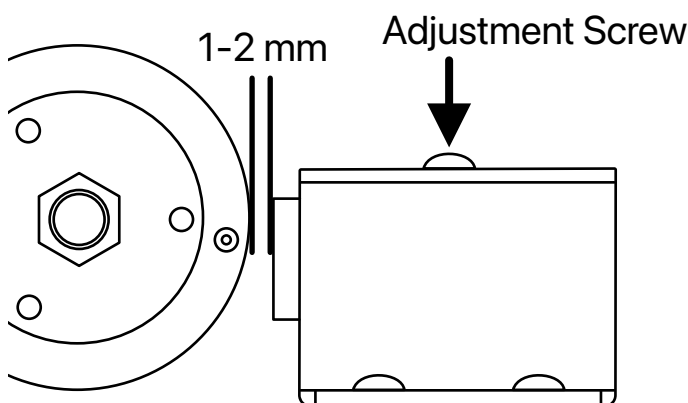
- Screw the engine on the engine mount

# 3. Engine Installation

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- Please ensure the Flywheel is horizontal with the Starter Rubber, the engine mount can be adjust with the 4 x Screws

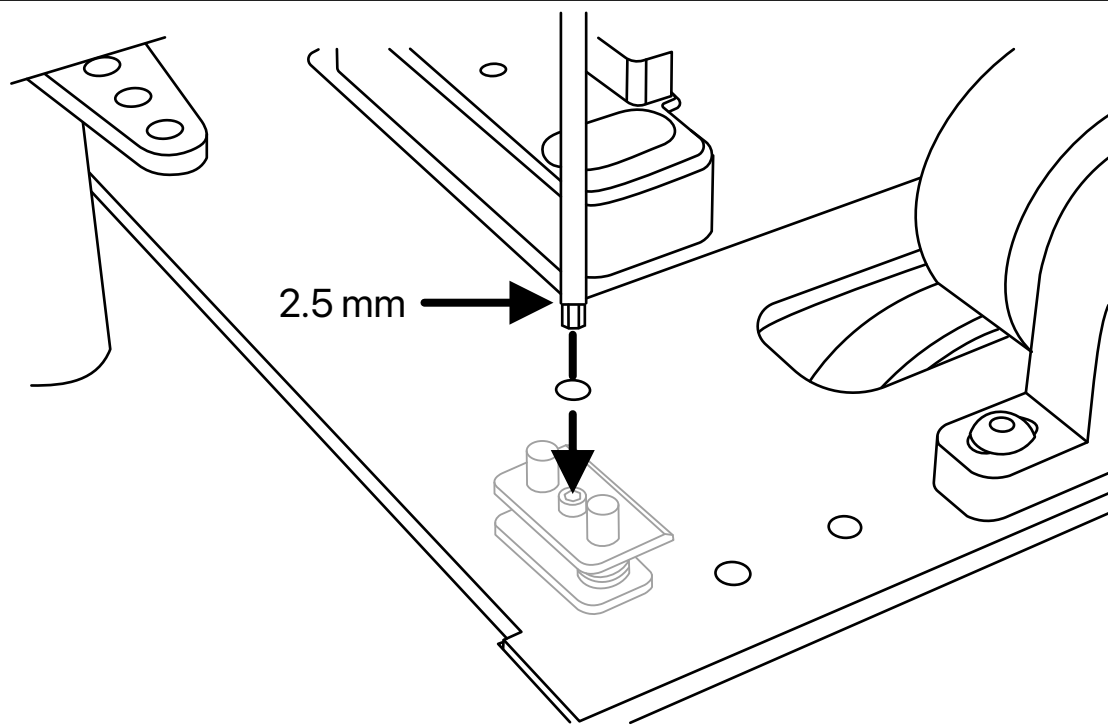


- Please make sure there is a 1-2mm gap and horizontal with the flywheel and RPM sensors

- After adjust the RPM Sensors, ensure the RPM sensors is working by rotate the flywheel manually

## 4. Starter Rubber Height Adjustment

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- Press STOP button while the system not operating, the starter will rise up automatically
- Check the flywheel and starter rubber gap by rotate the flywheel manually
- Use a 2.5mm screw driver to adjust the height of Starter Rubber

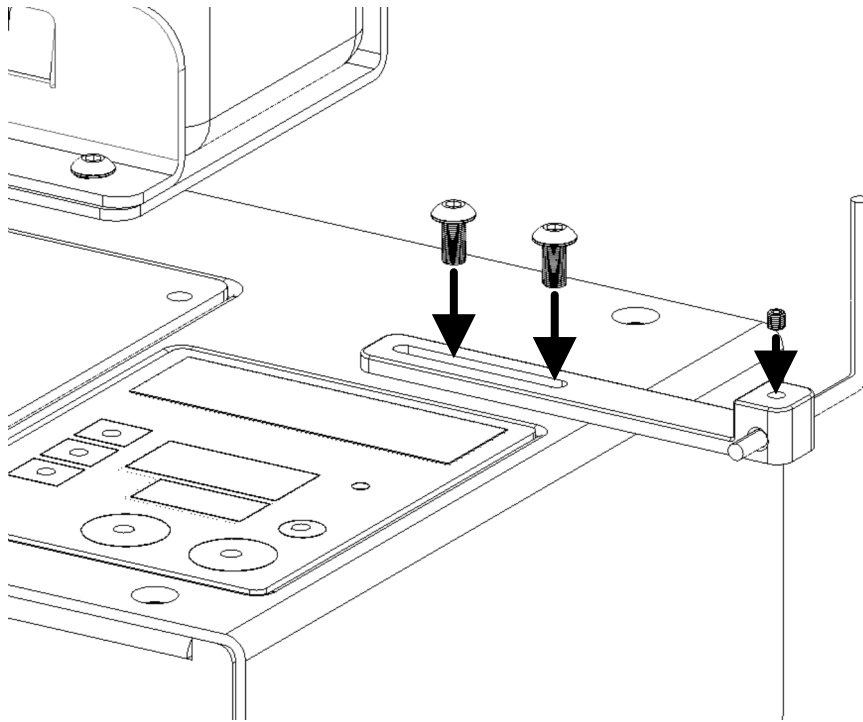
Anticlockwise = Increase the starter rubber height

Clockwise = Decrease the starter rubber height

**Important: Please adjust this before first time operate the system or after switched to a different engine**

## 5. Exhaust Pipe Holder Installation

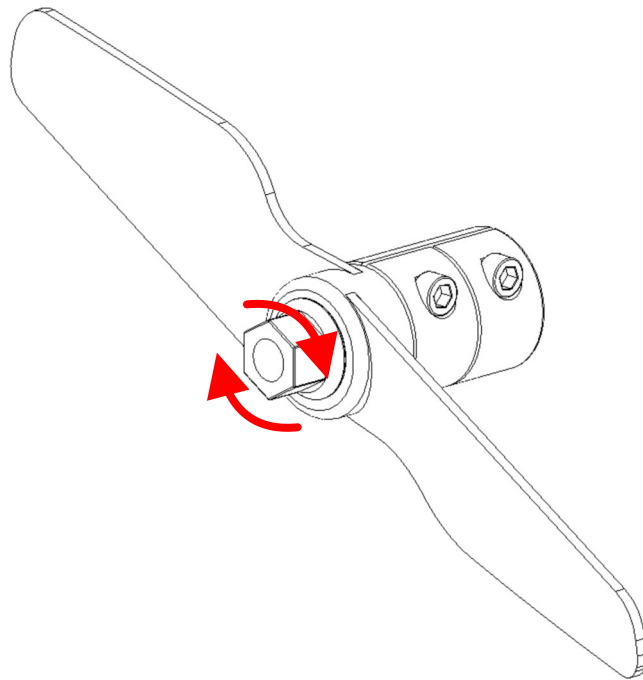
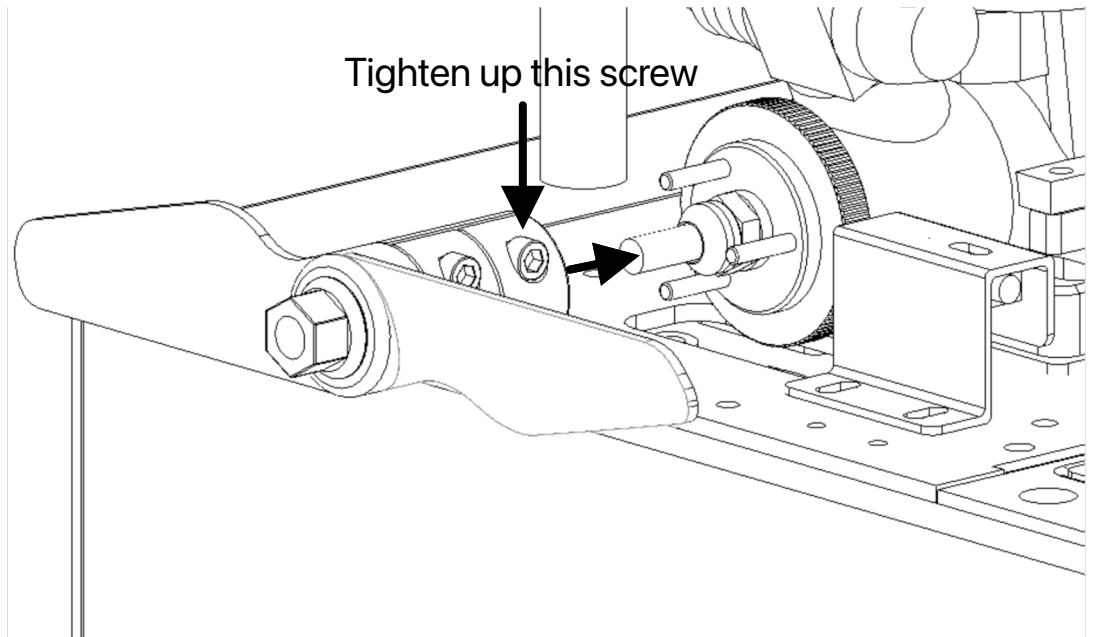
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- Mount the Exhaust Pipe Holder on the system
- You may only tighten up the mount after attach exhaust pipe

# 6. Propeller Adapter Installation

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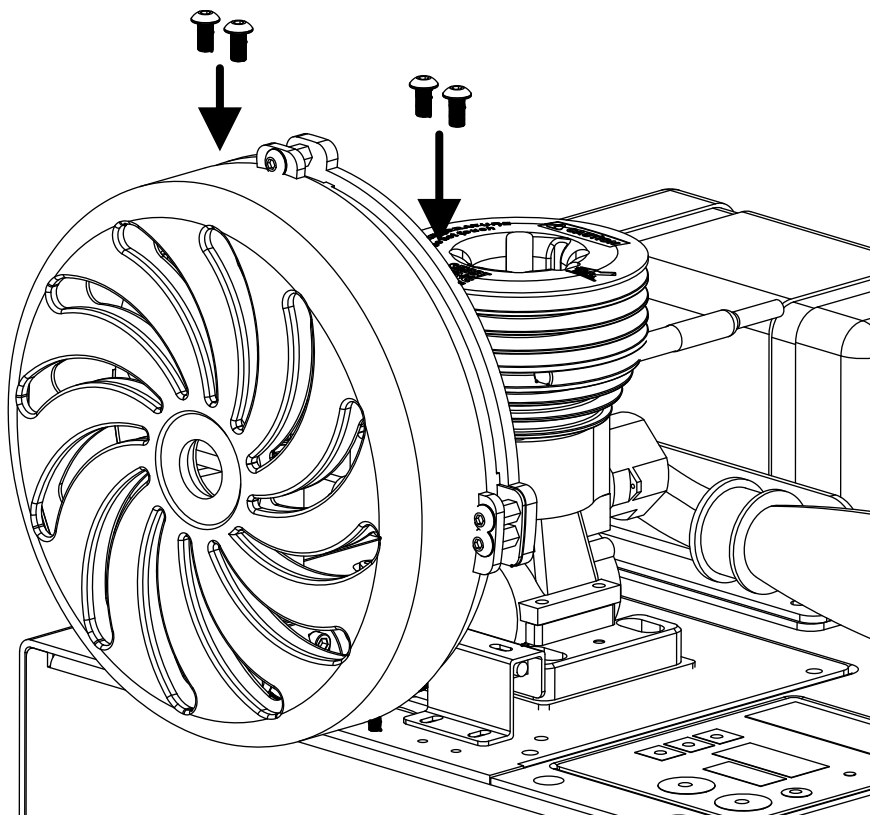
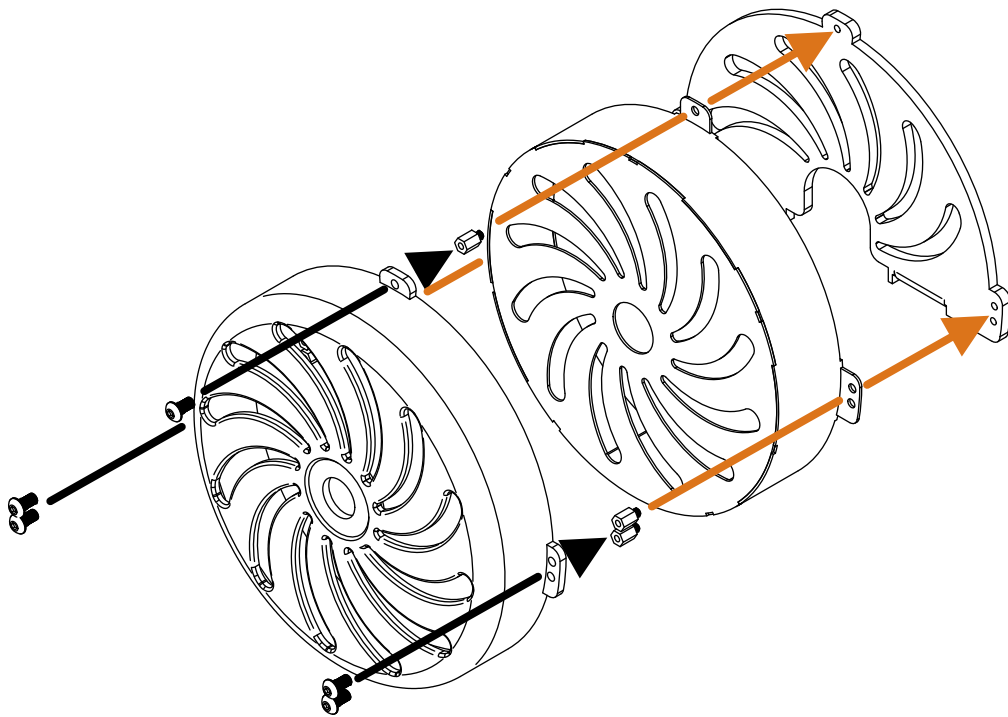
Please ensure the propeller nut is fully tighten before operate

**Important: The shaft may broke if not fully tighten**



# 7. Propeller Safety Cover Installation

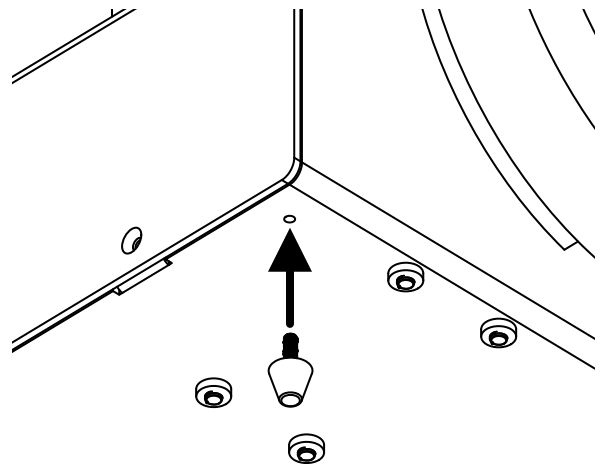
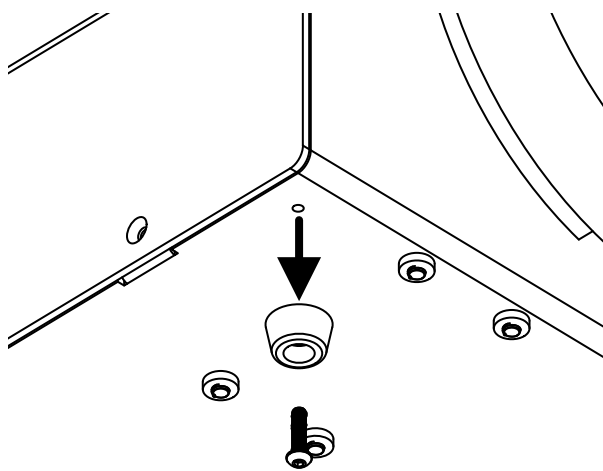
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- Attach the Propeller Safety Cover on the system

## 8. Anti Vibration Leg Installation

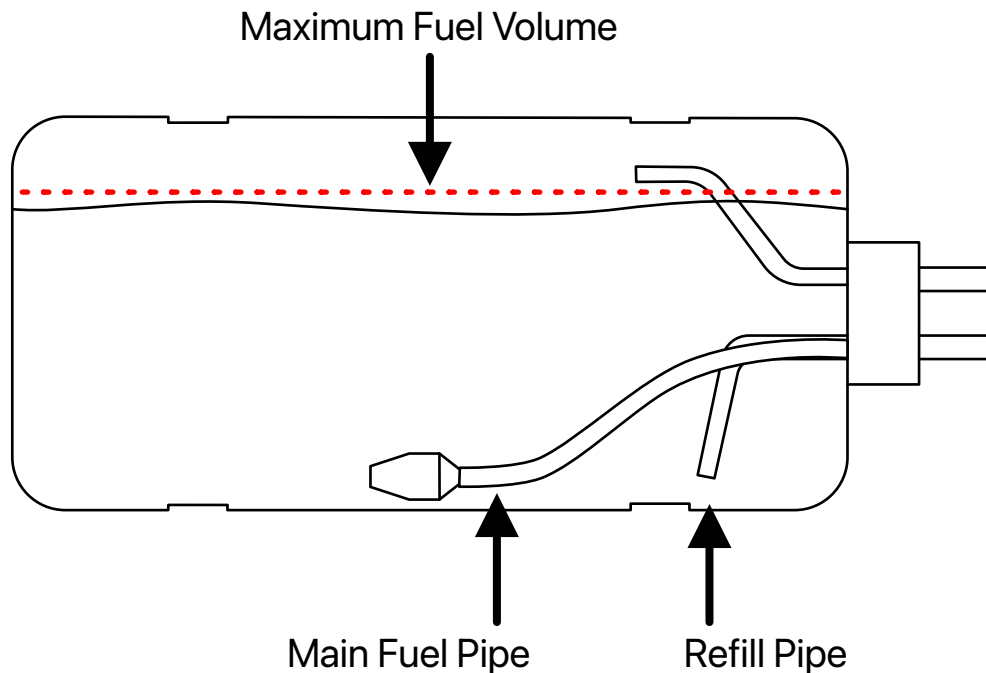
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- Remove the included leg on the bottom, replace it with the Anti-Vibration leg.

# 9. How to Refill / Drain Fuel Tank

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## Refill Fuel Tank

- Lock the Main Fuel Line Stopper
- Switch the Fuel Pump Switch to In
- The fuel pump will start to pump the fuel into fuel tank

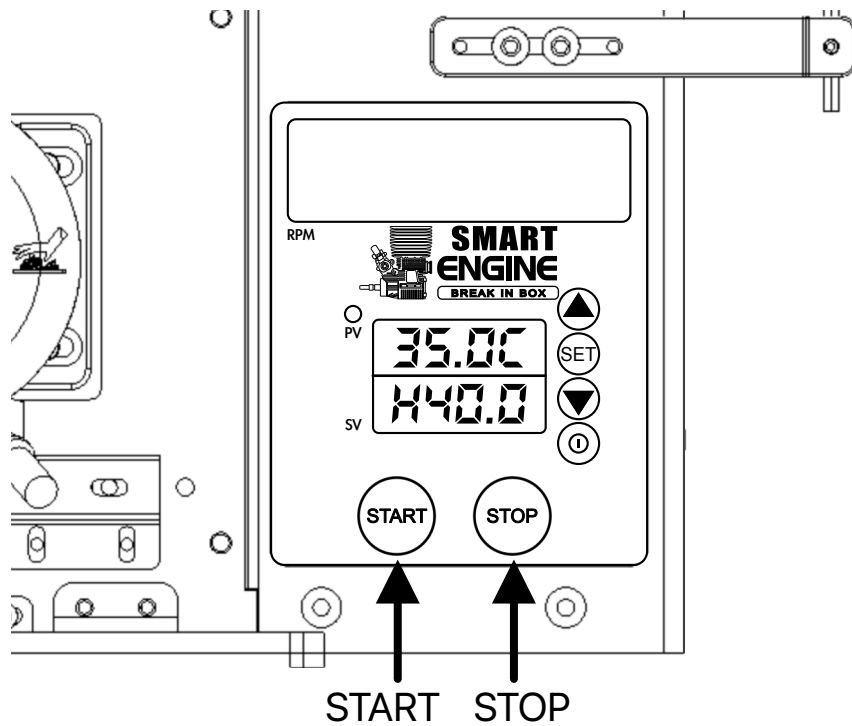
## Drain Fuel Tank

- Connect the Main Fuel Line to Outlet
- Unlock the Main Fuel Line Stopper
- Switch the Fuel Pump Switch to Out
- The fuel pump will start to drain the fuel tank

**Important: Please refill / drain the tank when engine stop operating**

# 10. Start Operating

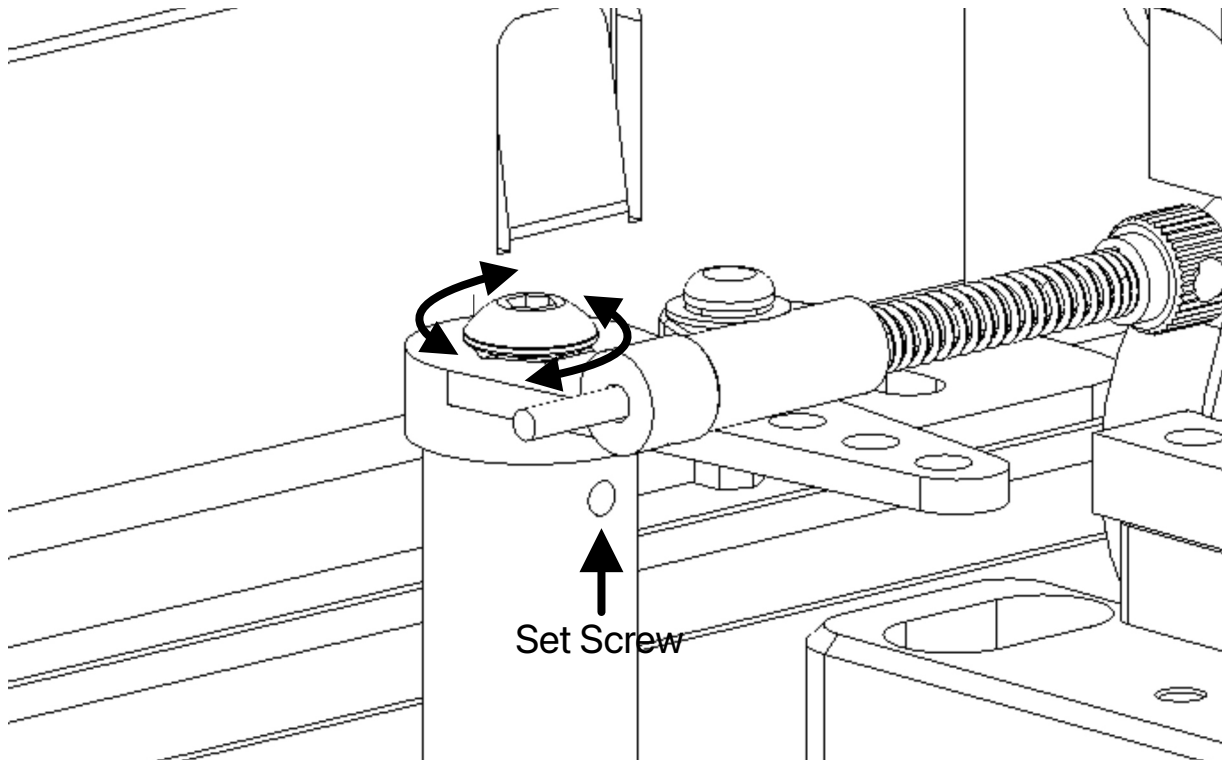
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- Using the **START** button to start your engine
- Using the **STOP** button to stop the system operating

# Throttle Horn Adjustment

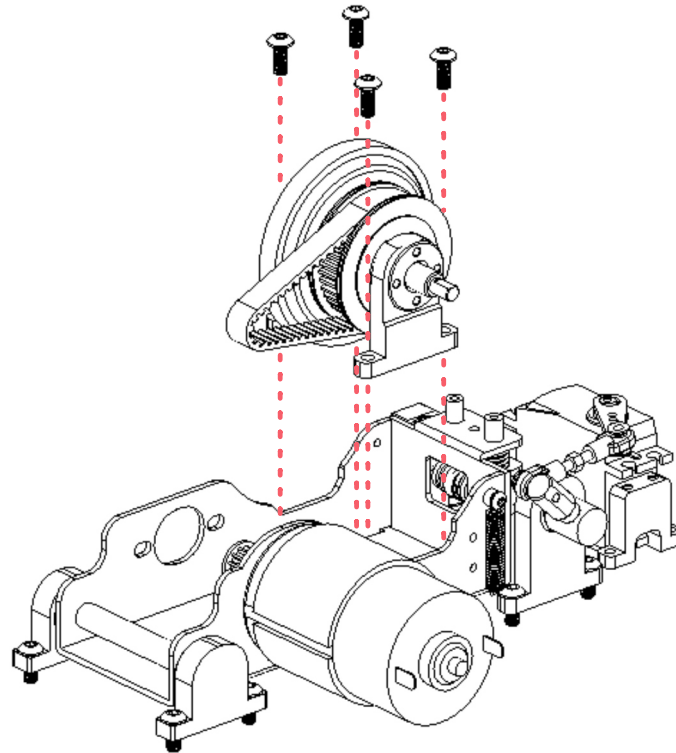
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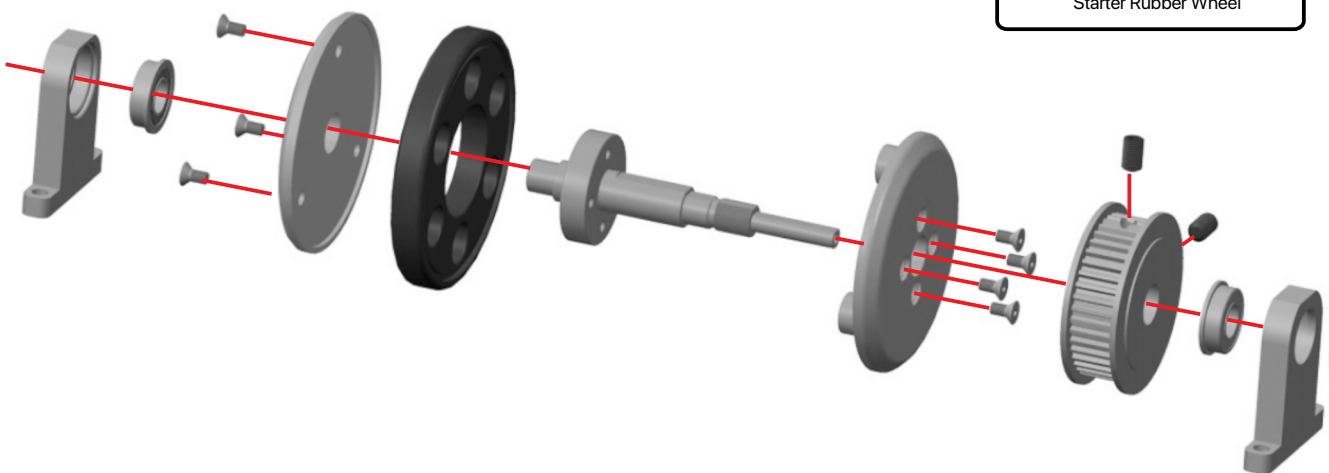
- Please unscrew the Set Screw before adjusting the throttle tension
- Tighten up the set screw after finished the throttle tension adjustment

# Changing Starter Rubber

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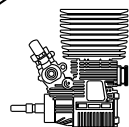


- Remove the Starter Block



- Assemble or Disassemble the starter block as the diagram





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