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#### YAMAHA: <u>WR450F/YZ450FX (2024)</u> <u>TANK ID: YZ-31</u> <u>IMS PART#</u> 117344/217344

2.9 Gallon

#### PARTS LIST

- (1) Fuel tank
- (1) Gas Cap \*(\*322100\*)\*
- (1) Seal \*(\*322101\*)\*
- (1) 5x18 Button Head Bolts (MTP-7380105018)
- (2) Zip Ties
- (4) 5x12 Button Head Bolts (MTP-73801F05012)
- (6) 5x12 Big Flange Bolts (MTP-1189105012)
- (2) 6x12 10mm Head Flange Bolts (MTP-1189106012)
- (2) 1/2" Pinch Clamps (MCM-5435K14)
- (2) 13x3 Spacers (MCM-94669A158)
- (1) Long Sit Washer (BRK-SITWASH-L)
- (1) Rear Strap Hook (BRK-IMS-TRX-08)
- (2) CR28 L Bracket (BRK-IMS-CR28-L)
- (1) Aluminum L Bracket with Rubber Sleeve (BRK-KX-20-24)
- (1) YZ-31 Bracket (BRK-YZ-31)
- (3") Sections Adhesive Strip (MCM-93745K73)
- (1) 4x7 Rubber Flap (MCM-8568K381)
- (1) Seat Hook (BRK-IMS-CR-29)
- (1) 5mm Lock Nut (MCM-90576A104)
- (1) 5x15 Washer (MTP-9028105001)
- (16") 5/16" Fuel Injection Line (PA-27340)
- (3) 5x16 Allen Bolts (MTP-91290F016)
- (1) YZ-31 Retainer EFI Ring (BRK-YZ-31-RETAINER)

# Excluded On Dry Break Tanks (\*)

#### STOCK ITEMS TO USE

- Fuel Pump & Hardware
- Tank Rear Mounting Hardware
- Shroud Mounting Hardware
- Seat Hook Fixture
- Seat Cap/Cover Hardware (For Dry-Break & Screw Cap Tanks)

### **WARNING!**

Prior to Installation Clean IMS Tank Interior Thoroughly
Install This Fuel Tank ONLY In a Well Ventilated Area, As Gasoline Fumes Are
EXTREMELY Dangerous. DO NOT START OR OPERATE THE VEHICLE IF

THERE ARE ANY FUEL LEAKS!

IMS Recommends That Installation Be Performed By a Licensed Mechanic.

Improper Installation May Result in Severe Bodily Injury or Death.

Prior to Installation Read All Instructions.

#### **TANK REMOVAL**

Drain the fuel from stock tank into approved gasoline container. Remove the seat, radiator shrouds, and OEM seat hook with bolt. Raise the tank up, disconnect the fuel line and power cable from the fuel pump and remove tank. Disconnect the OEM fuel line from the fuel injector above the engine. Remove the OEM Plastic disconnects from the OEM Fuel line. Connect the injector side (Closest to the engine) to the supplied 16" Fuel injection line using the supplied ½" pinch Clamps (the other disconnect will be attached at a later stage). Reattach Fuel line to Fuel injector. Route to rear of bike.

## \*STOCK/OEM Metal Ring For Fuel Pump Is Not Used With IMS Tank – Only Use New EFI Pump Ring Provided By IMS\* (See Fig. 9 & 10) TANK INSTALLATION

Remove the Battery box from the bike, detaching all components. After removing the tray, remove the bracket seen in "FIG. 1A" from the OEM battery tray by drilling out the 2 rivets. Reattach the OEM relay to this bracket as seen in "FIG. 1B". Bolt the supplied CR-29 bracket to the supplied YZ-31 bracket using 1 5x12 button head flange bolt, 1 5x15 Washer and 1 5mm lock nut. Place (2) 13x3 spacers under the CR-29 bracket and reinstall the OEM Fuel pump using (2) of the OEM fuel pump bolts with the above assembly on top of the pump (SEE FIG. 2 For Example). Secure the remaining pump bolt locations using the supplied 5x16 Allen bolts. Remove the rubber cover from the CDI and install onto the YZ-31 bracket as seen in Fig 3. The other black piece attached to this CDI is the Solenoid, and that will be relocated and zip tied where the CDI was before (See Fig. 4). At this time put a small amount of fuel in the tank and check the pump area for any leaks. Be careful to not spill the fuel in future steps.

Remove the OEM Grounding cable. Take note, as this cable will be reinstalled at the next threaded position in the frame toward the front of the bike at a later time. Install the (2) CR-28 L Brackets using 6x12 10mm head flange bolts on the front of the frame as seen in Fig. 7 (Note: leave loose at this time). Attach the two included adhesive strips to the rear of the frame as seen in Fig. 4 on both sides. Set the tank into the frame, checking alignment of the L brackets. Once L Brackets are properly aligned, carefully remove the tank and tighten the brackets. Set the tank into the frame ensuring it is fully seated. Route Fuel line to Fuel pump attachment location. Identify if any trimming is needed, and trim line if necessary, noting that plastic disconnect must still be attached. Attach OEM disconnect to fuel line using supplied pinch clamp. Attach installed disconnect to OEM Fuel Pump. Attach Fuel pump electrical connector. Reattach grounding cable to previously identified position.

Route Main power line to battery location as seen in Fig 1b. Install supplied rubber mat into bottom of battery location in the Fuel tank. Install supplied sit washer through the OEM battery strap to your fuel tank using supplied 5x18 button head bolt at the front of the battery location (Fig 6). Install the supplied Rear strap hook to the rear of the battery location using supplied 5x12 button head (Fig 6). Attach the Relay bracket to the side of the fuel tank using supplied 5x12 flange bolts as seen in Fig 4. Remove the OEM Zip ties securing the CDI Harness. Slide the CDI into the OEM Rubber Boot (Fig 5). Resecure harness using supplied Zip Ties. Check all wires at this time to ensure proper routing, and clearance. Zip tie or otherwise secure as necessary.

Attach the front of the tank to the previously installed L Brackets using supplied 5x12 flange bolts (Fig 7). Install supplied L Brackets with rubber underneath the frame as seen in Fig 8. Be sure that the tank is mounted securely and does not bind or in any way inhibit the controls or function of the vehicle. Trim rubber flap as needed to fit in the bottom of the battery location of your IMS Tank. Install flap and then reinstall and attach the OEM Battery in the provided position of your new tank. Ensure that there are no sharp objects that rub against the tank that may eventually puncture the tank and that the fuel line is not kinked or touching anything that could get hot. Fill the fuel tank, reinstall your shrouds using supplied 5x12 button head bolts. Reinstall seat. CHECK FOR ANY LEAKS AND ENJOY YOUR RIDE!!

"FOR COMPETITION USE ONLY"

"Legal in California ONLY for racing vehicles which may never be used upon a highway."

**DISCLAIMER:** 

Due to uncontrolled variables in the manufacturing process of rotationally molded fuel tanks, the fuel tank may vary in size

Fig. 1A Fig. 1B





Fig. 2

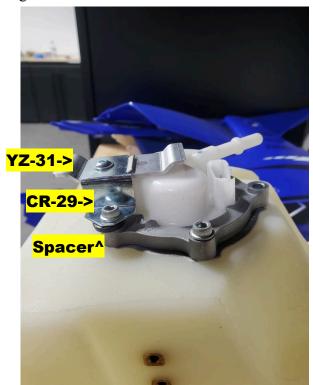


Fig. 3



Fig 4



Fig. 5 Fig. 6





Fig. 7



Adhesive Strip-->

KX-20-->

Fig. 8

Fig. 9 (Stock/EFI Metal Ring –NOT USED)



Fig. 10 (IMS Metal EFI Ring - New Outlet Position)

