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Fuel Fill Cup Replacement Procedure on older C2s.

Carolina Thomas Bus Buzz #123 provides pictorial information to accompany our YouTube training video to demonstrate the Fuel Fill Cup Replacement upgrade.

Older buses have had fuel spilled over the fuel fill nozzle when fueled locally and it can eventually contact the plywood subfloor in this area. This repair procedure demonstrates an easy repair and closes off the fuel fill opening to prevent this from happening.

Click this link to watch the exclusive Carolina Thomas YouTube training video.

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Fuel Fill Cup Replacement Parts

Call us at 800-440-3492 and ask for Parts.

For convenience here are the part numbers:

TBB 25310365	**Qty. 2 Rubber stops**
TBB 133128	**Qty. 1 Latch Pocket**
TBB 69005071	**Qty. 6 ¼” Rivets**
TBB 68152444	**Qty. 1 Manus Bond**
TBB 134158	**Qty. 1 Fuel Fill Cup**

Procedure Describes How To:

Replace the old-style fuel fill cup to prevent fuel slosh from contacting plywood subfloor exposed in this area.

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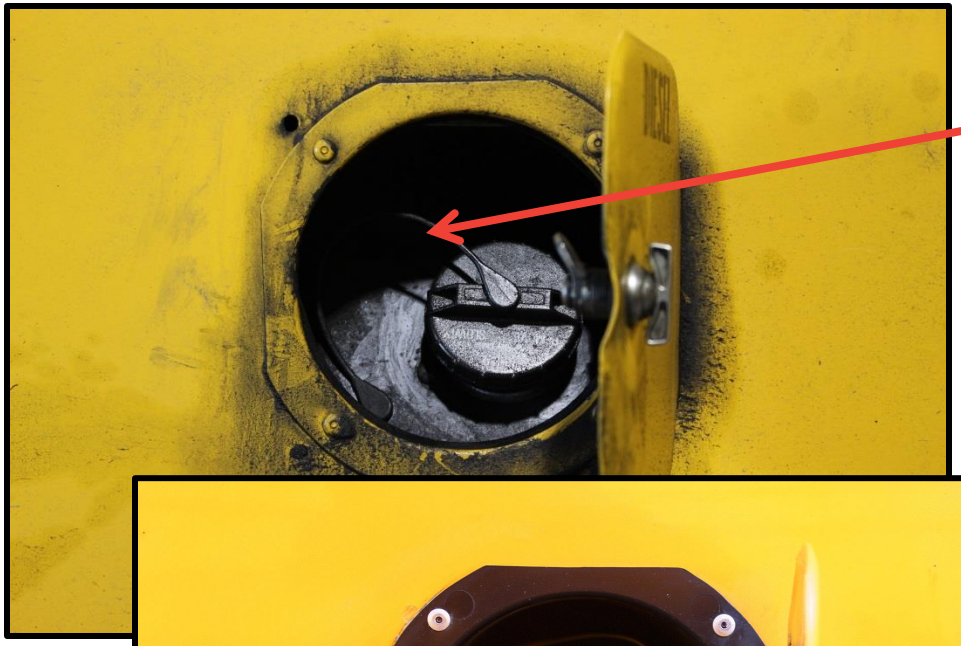
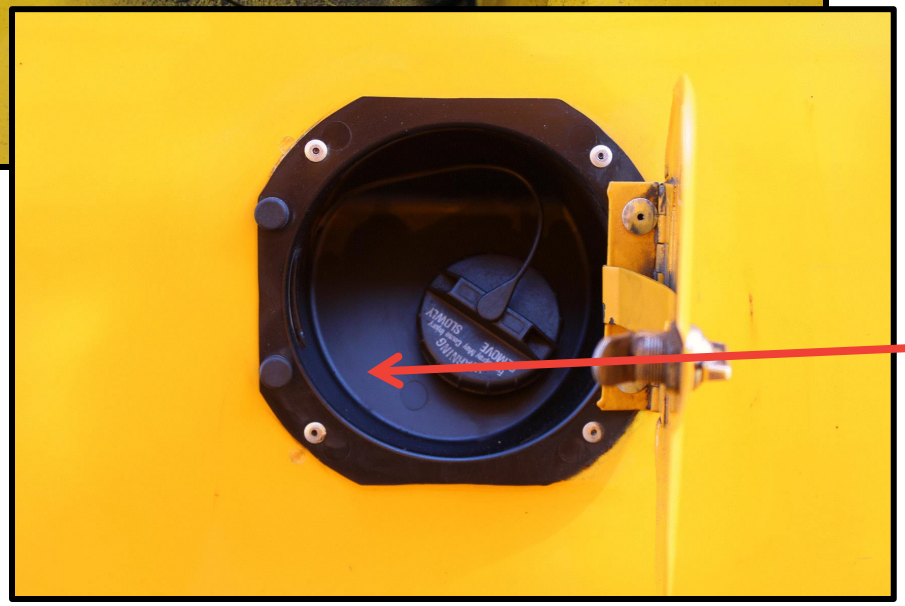


BEFORE

Open Fuel Neck Design- Shows fuel spilled from fueling operation. Inspect bus first and if the neck is closed cup design this procedure is not needed.



AFTER

Closed Cup Design- Seals opening to outside of bus.

***Quick Fact*:** All new Thomas C2s are equipped with fast fill fuel tanks and fuel necks that have been tested to receive up to 60 gallons of fuel/minute even when the bus is setting on a downhill slope. This was specifically designed for North Carolina customers. The state's specifications require 25 gallons/minute and the Thomas bus far exceeds that.

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Step 1: Please use proper PPE to protect yourself while working on a vehicle (I.e. safety glasses, etc.)

Step 2: Secure the vehicle with proper lock out – tag out procedures for safety. Remove the ignition key and tag the vehicle, chock the vehicles wheels and disconnect the batteries to prevent the vehicle from moving while you perform the following procedures. Use all proper safety procedures while making repair.

Step 3:
Clean the area around the fuel fill with alcohol based cleaner to remove spilled fuel and dirt that may have collected in this area.

Step 4: Keep fuel cap on the fuel fill neck to prevent contamination to fuel supply. Center punch the two (2) rivets that secure fuel door to bus and four (4) rivets that secure the old metal ring to side of bus.

Step 5: Carefully drill old rivets out of fuel fill door (2) and fuel fill ring (4). Set fuel fill door aside for later re-use.

Four (4) fuel fill ring rivets shown for convenience.

Two (2) fuel fill door rivets shown for convenience.

Step 6: Remove fuel fill cap and tether as shown and insert protective rag into fuel neck to prevent contamination. Test fit the NEW composite fuel fill cover into opening in the bus. If the cup fits perfectly skip to step 8 now.

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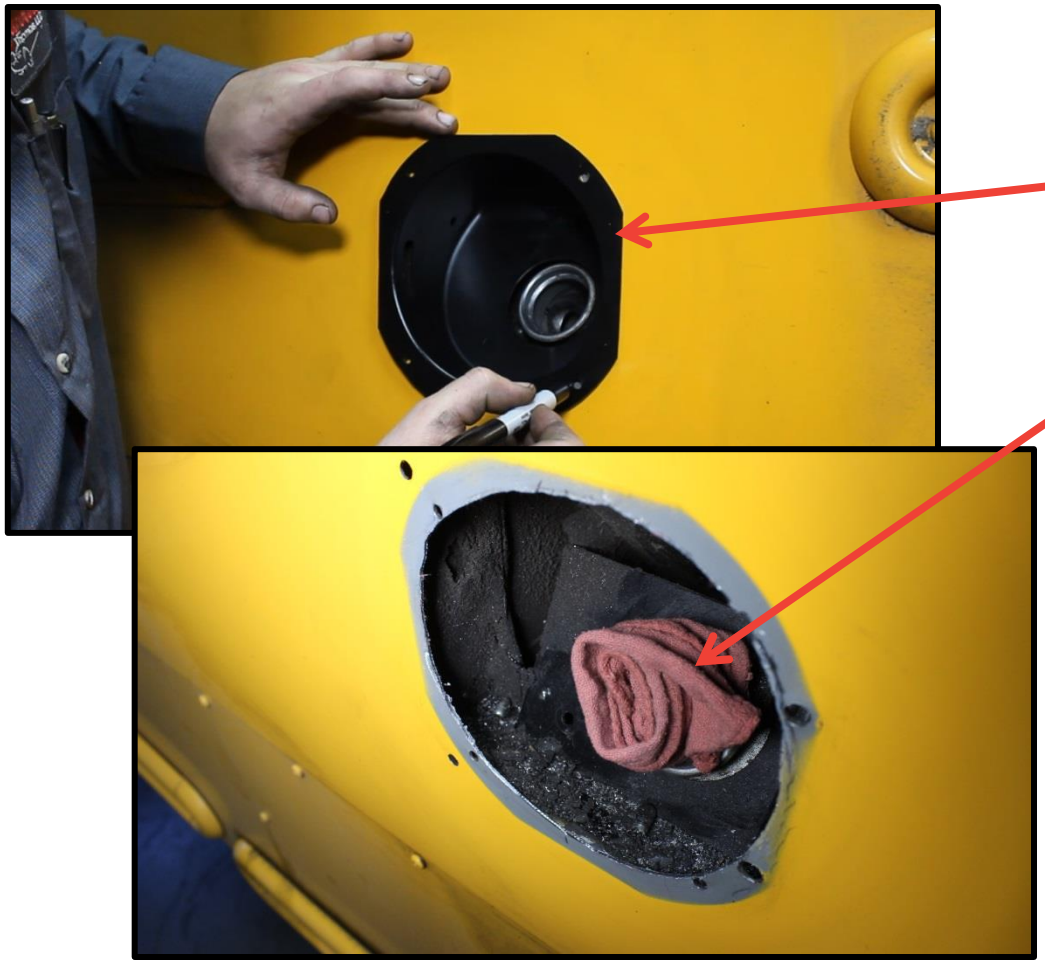

Photo depicts new cover fitting perfectly in the old opening.

Photo depicts rag in fuel neck to prevent contamination once cap is removed. This is an important step.

Step 7: After test fitting the NEW composite fuel fill cup into the opening in the bus you will determine if any modifications are needed to the opening. If so, use a die grinder and only remove enough material so the cup will fit without tension. **NOTE:** Any bare metal edge should be treated with primer now to prevent corrosion.

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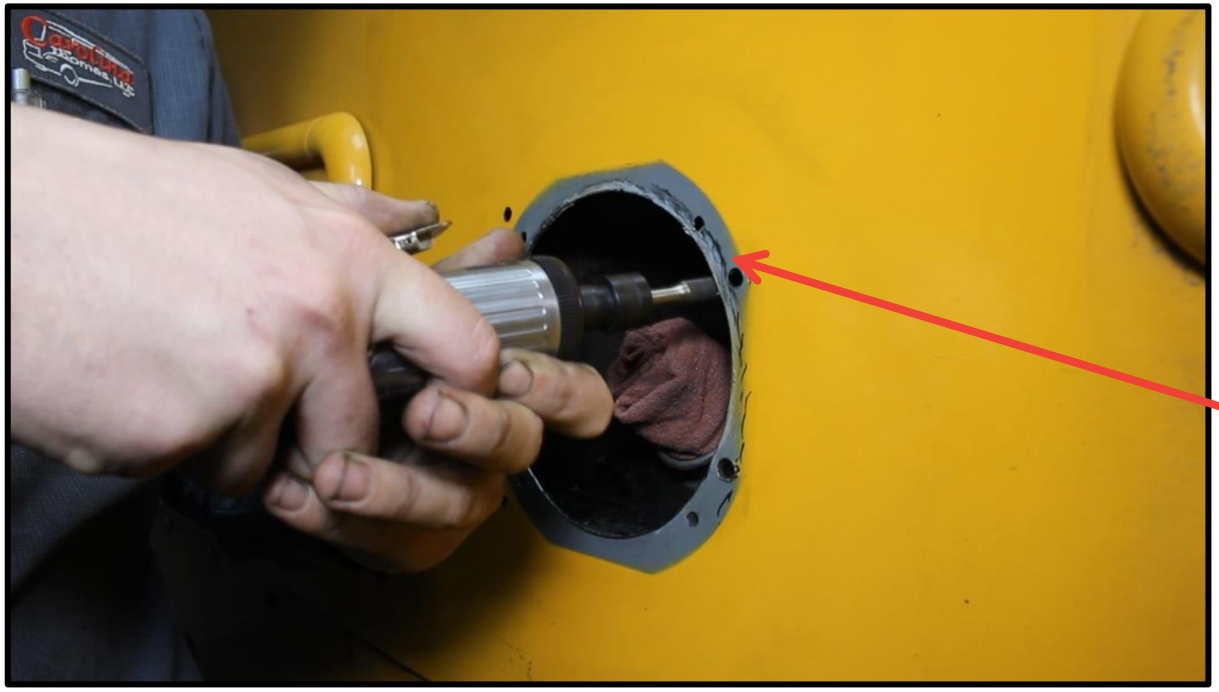


Photo depicts the body marked with a permanent marker and slight modifications being made with die grinder so the new cup will fit. **NOTE:** protective rag in fuel fill opening to prevent fuel tank contamination.

Step 8: After you determine that the new cup fits the opening, temporarily place the cup into the bus and make sure it is in place and level and then mark the four new holes that need to be drilled into the side of the body with a permanent marker as shown. Drill holes where marked but DO NOT install rivets yet.

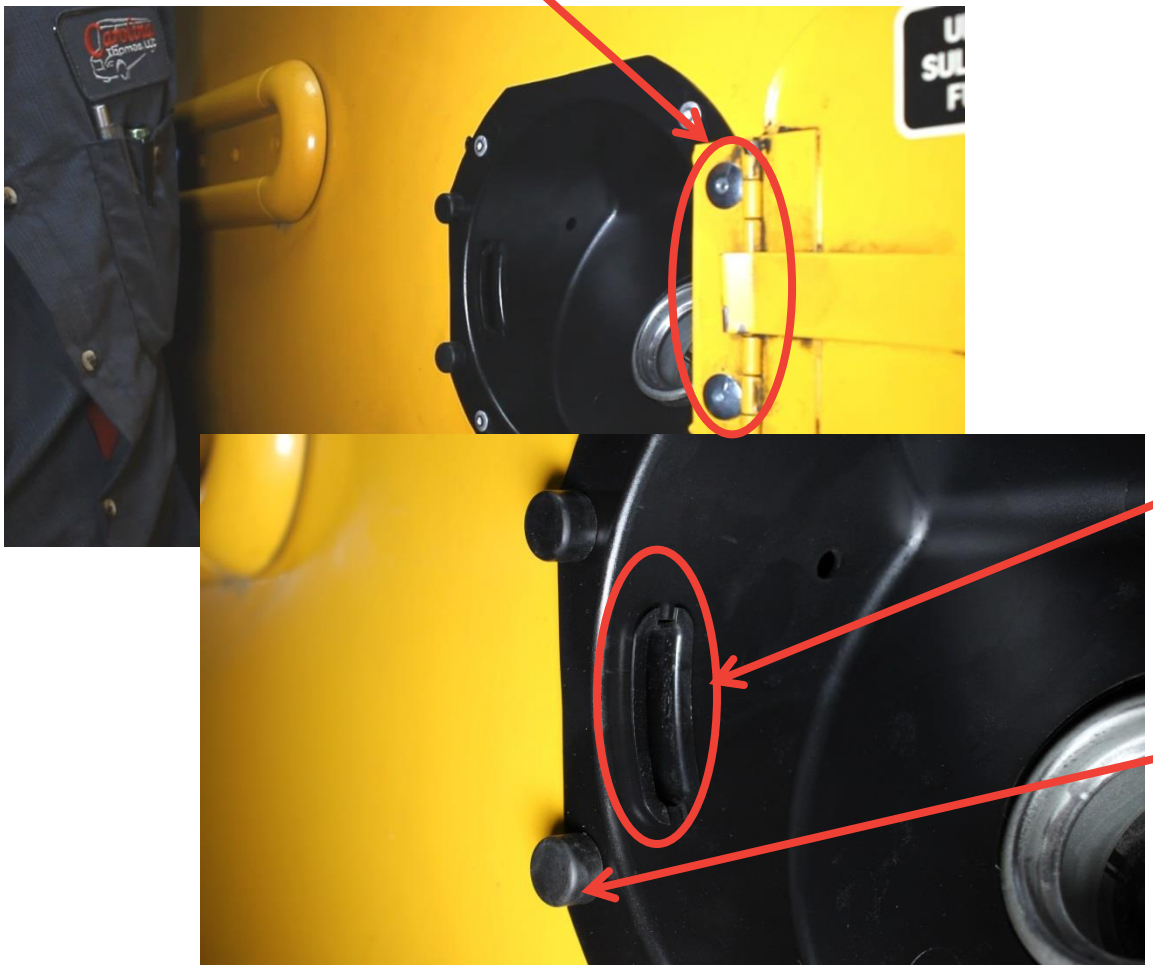
Photo shows rag removed from filler neck just for clarity. You must replace when doing any drilling to prevent contamination.

Step 9: After the cup has been test fitted remove the cup while you drill the four (4) holes in the bus side sheet. Now, apply a continuous bead of Manus Bond to the back side of the filler cup as shown. This prevents fuel that might be spilled from getting behind the cup.

Step 10: Install cup and install the four (4) rivets provided into the holes you drilled. Clean excess Manus Bond off as necessary.

Step 11: NEW Cup has indentations to drill for fuel fill door cover installation. Verify fit and drill two (2) holes for fuel door. (Notice rag still protecting fuel neck.)

Step 12: Install two (2) rivets in fuel fill door as shown.



Step 13: Snap new latch receiver from kit into opening.

Step 14: Push two (2) rubber stops into holes for fuel door.

Step 15: Neatly, use Manus Bond to fill any unused holes in body from previous fuel fill ring.

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Click this link to watch the Carolina Thomas YouTube training video.

Step 16: Install fuel cap tether as shown. Remove rag from opening and install fuel fill cap and verify fit and finish.