

AI-04653 Problem-2009 Chevy Colorado Fuel Leak in FL

I need a battlefield ddx and repair of a 2009 Chevy Colorado V8 4WD leaking fuel underneath the driver side area. At the parking lot, there was no leak but the moment the car started, it was pouring gasoline. I was told that my MD son just recently top off the truck since it was near empty, there was no problem before that. Create a step by step procedure on what to do.

Yes. **Treat this as a major active gasoline leak and do not start the truck again.** The fact that it was dry with the engine off but **"pouring" as soon as the engine started** is a very important diagnostic clue: the electric fuel pump is pressurizing the system, so a leak in the **pressurized fuel supply circuit** is high on the list.

For the 2009 Colorado 4WD V8 5.3L, the fuel system normally runs at about **50–60 psi**, and the service information specifically says to inspect for external leaks before proceeding. ([Workshop Manuals](#))



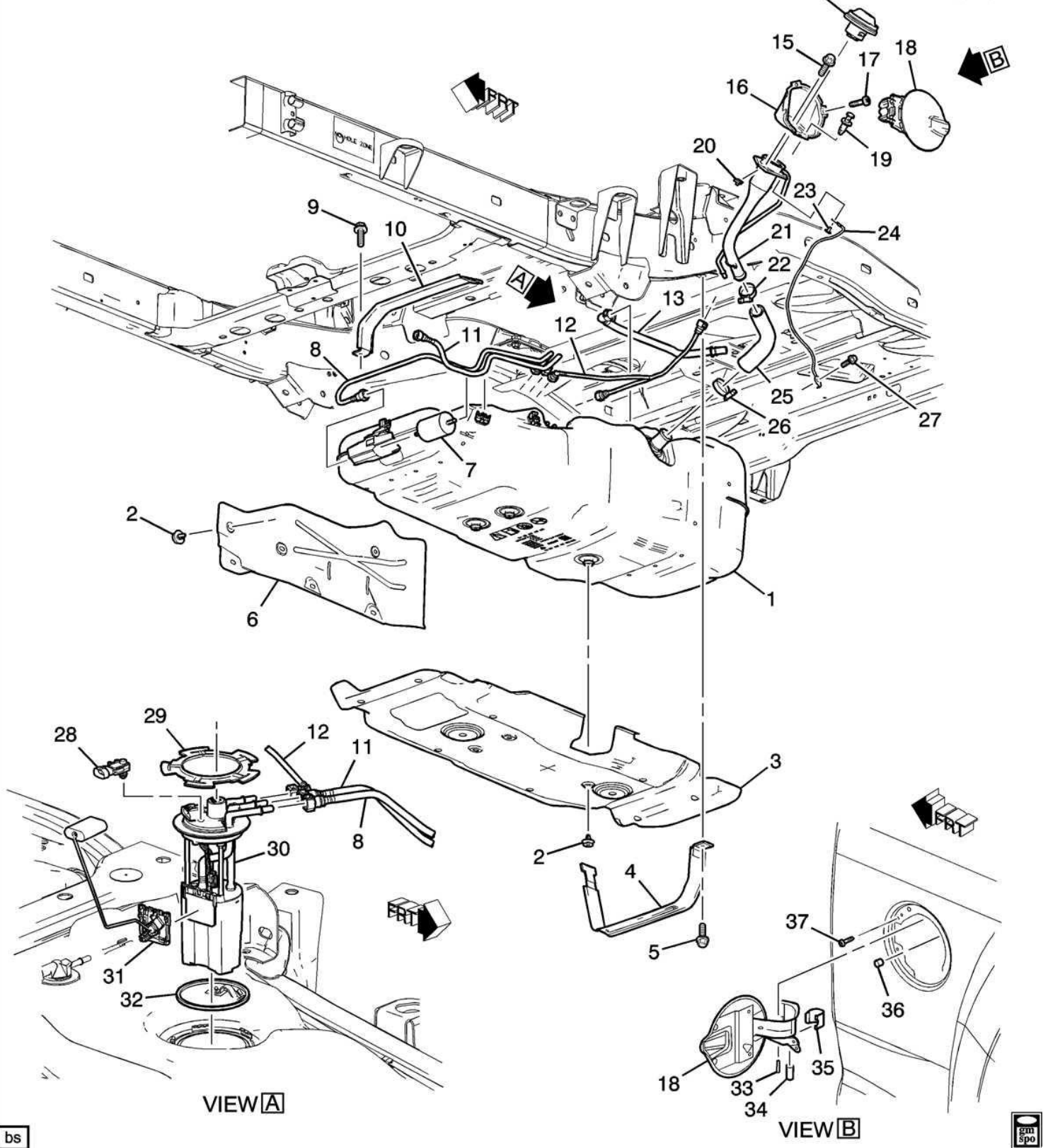
BATTLEFIELD RULE #1 — DON'T START IT AGAIN

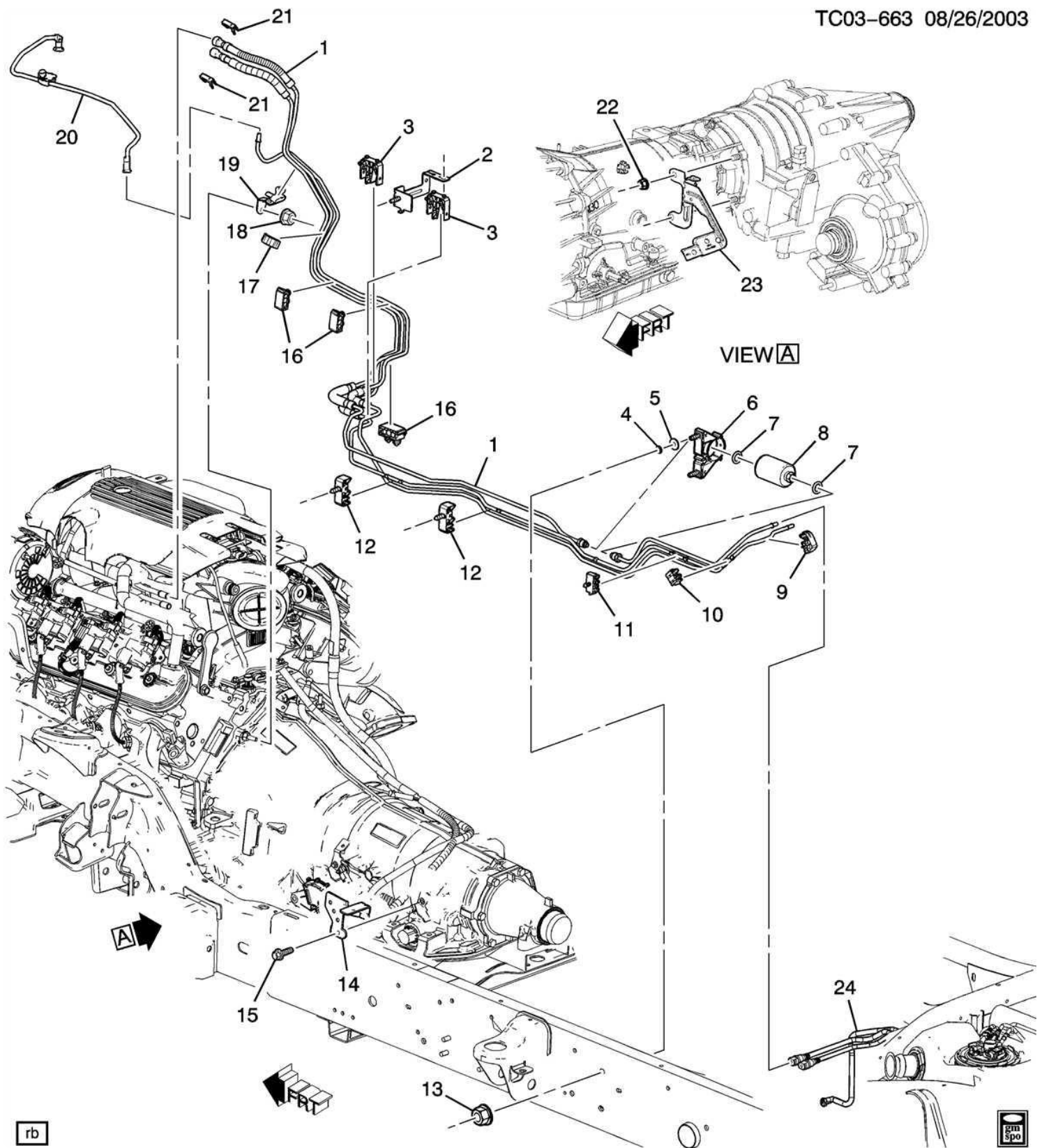
Do not:

- Start the engine "just to see where it leaks."
- Drive it to a repair shop.
- Crawl underneath while someone starts the engine.
- Use a lighter, work light with a hot bulb, torch, grinder, etc.
- Smoke anywhere near it.
- Disconnect fuel lines while the system is pressurized.
- Assume the fuel cap is the problem.

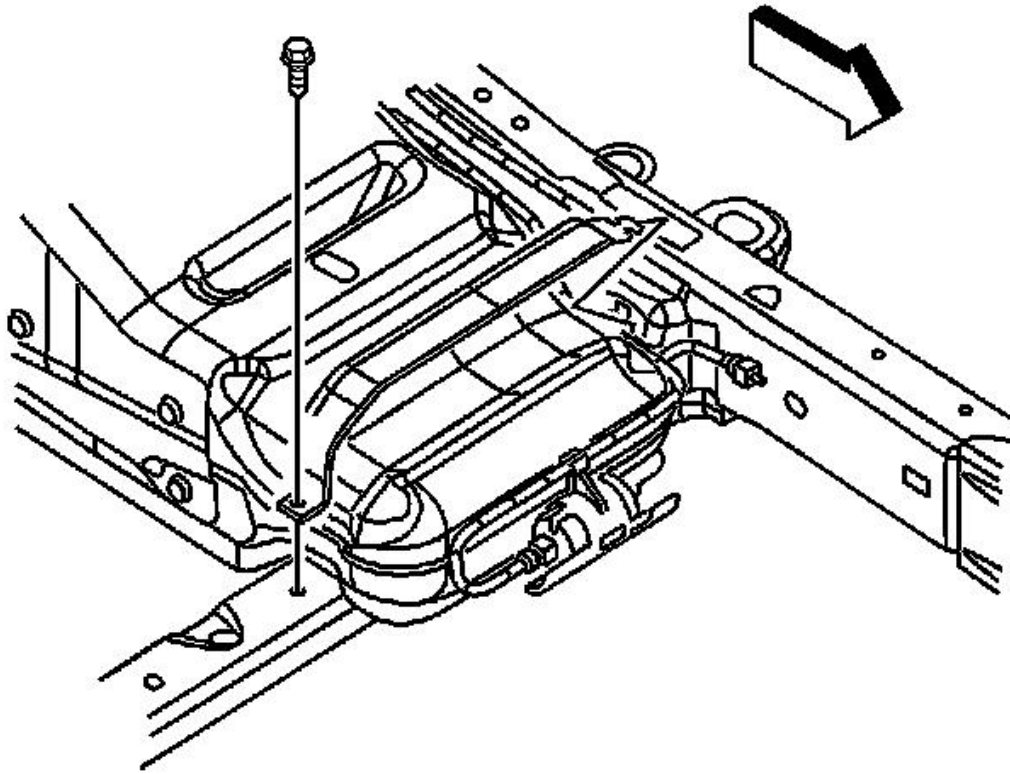
If gasoline is actively pouring out, **tow it** if you cannot safely diagnose it with the vehicle stationary.

2009 Colorado V8 4WD — Battlefield Fuel-Leak DDX











The symptom gives us a useful differential diagnosis:

Pressurized fuel supply line / connection Suspect	● Very high Likelihood	Why Leak appears when pump builds pressure
Fuel pump module/top seal/connection	● High	Recently filled tank makes this especially suspicious

Fuel line rust/corrosion	● High on 2009 truck	Steel chassis fuel line is exposed underneath
Fuel tank crack	● Possible	More likely to leak even with engine off when tank is full
Fuel filler neck/hose	● Possible	Top-off can reveal a problem, but normally doesn't produce a pressure-dependent "pour"
EVAP line	● Possible	Usually vapor/liquid issue rather than massive pressurized flow
Fuel rail/injector leak	● Possible	But driver-side-underbody location makes it less likely
Fuel cap	● Unlikely	Wouldn't cause gasoline to pour underneath when pump runs

The Colorado uses a returnless fuel system with the pump inside the tank. The fuel feed system includes a rear section, a steel chassis section underneath the vehicle, and a front section going to the engine. ([Charm](#))

STEP 1 — KILL THE FUEL PUMP

If the truck is currently parked and leaking:

Do this first

1. **Turn ignition OFF.**
2. Remove the key.
3. **Do not cycle the ignition again.**
4. Open the hood.
5. Locate the fuse/relay center.
6. Remove the **fuel pump fuse or relay** if you know which one it is.
7. If you're unsure, **don't randomly pull fuses**—just leave the ignition OFF and proceed with visual inspection.

The factory procedure itself recommends removing the fuel-pump fuse to prevent fuel spillage when servicing the fuel system. ([Workshop Manuals](#))

If gasoline is actively pooling:

Keep people away and eliminate ignition sources.

If the amount is substantial or gasoline is flowing toward a storm drain, **call the fire department/non-emergency authority rather than trying to wash it away.**

STEP 2 — USE THE "FULL TANK" CLUE

This part of your story is extremely important:

Truck was almost empty → son filled it → no previous leak → now gasoline pours when started.

That moves the **tank/top-of-tank/fuel-line area** way up the differential.

The fuel tank is on the **left side of the Colorado**, secured by two straps. ([Charm](#))

So your first battlefield inspection should be:

Driver-side fuel tank area

Look underneath the truck around:

Fuel filler → top/left side of tank → rear fuel line → chassis fuel line → front fuel line.

Don't immediately remove anything.

STEP 3 — DON'T CRAWL UNDER A JACK-ONLY TRUCK

This is important.

If you need to inspect underneath:

Use properly rated jack stands on a hard, level surface.

Never put your body underneath a vehicle supported only by a hydraulic floor jack.

If the leak is already obvious from outside, **don't even get underneath yet.**

Use a flashlight from the side.

STEP 4 — DETERMINE WHERE THE GASOLINE FIRST APPEARS

This is the most important diagnostic step.

You want to find:

FIRST WET POINT → then follow the fuel upstream toward the tank.

Gasoline runs downhill and can travel along the frame, crossmember, hoses, etc.

Therefore:

Where gasoline is dripping ≠ necessarily where the leak originates.

Start at the driver-side area and inspect:

A. Fuel tank

Look for:

- Wet tank surface
- Gasoline coming from top of tank
- Wet fuel pump/sender area
- Wet fuel-line connection
- Cracked hose
- Fuel dripping from tank strap area

B. Fuel lines

Look for:

- Rust
- Pinholes
- Corrosion
- Cracked nylon line
- Broken plastic connector
- Disconnected quick-connect fitting
- Wet line
- Fuel spraying from a tiny hole

C. Filler neck

Inspect:

- Large filler hose
- Small vent hose
- Hose clamps
- Connection at tank
- Connection at filler neck

D. Front portion

Follow the fuel line forward toward the engine.

The Colorado's fuel feed system has a **rear nylon section, steel chassis section and front steel/flexible section.** ([Charm](#))

STEP 5 — THE MOST IMPORTANT TEST

Once you've identified the approximate location:

DO NOT START THE ENGINE.

Instead, if you've safely disabled the fuel pump:

No pressure = no useful leak test.

The factory diagnostic procedure uses a fuel-pressure gauge and commands the fuel pump on while monitoring pressure. Normal pressure is approximately:

50–60 psi. ([Workshop Manuals](#))

But because your truck is **pouring gasoline**, I would **not recommend deliberately pressurizing the system yourself just to locate the leak** unless you have the proper equipment and experience.

A shop can safely do this.

STEP 6 — MY FIRST THREE SUSPECTS

Given your exact story, I'd investigate these in this order:

#1 — Fuel line / quick-connect near the tank

This is my first suspect.

The pump pressurizes the system.

If a connection, nylon line, or steel line has failed:

Engine OFF

- fuel pump OFF
- no pressure
- little/no leak

Engine START

- pump ON
- ~50–60 psi
- fuel starts pouring out.

That is almost a textbook **pressure-dependent leak**.

#2 — Fuel pump module connection/top of tank

This becomes especially interesting because the truck was just filled.

The fuel pump module is mounted in the fuel tank and contains the pump, fuel filter, fuel-level components and other fuel-system components. ([Charm](#))

If gasoline is coming from **above the tank**, you may have:

- damaged pump-module seal
- damaged fuel connection
- cracked module outlet
- damaged fuel pipe
- failed fitting

If the leak only becomes obvious with the pump running, the module/outlet area deserves very close attention.

#3 — Rusted chassis fuel line

A 2009 truck has had **17 years of exposure**.

The steel chassis fuel pipe runs underneath the vehicle. ([Charm](#))

A corrosion pinhole can behave exactly like this:

No pump pressure → barely anything

Pump pressure → gasoline sprays/pours

Look particularly closely at:

- rusty sections
- line retaining clips

- bends
 - areas where the line contacts brackets/frame
 - transitions between steel and flexible/nylon sections.
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STEP 7 — WHY THE "TOP OFF" MAY HAVE TRIGGERED IT

This doesn't necessarily mean your son did anything wrong.

More likely:

Low fuel level

↓

weak/failed component not obvious

↓

Tank filled

↓

fuel reaches higher level / fuel-system conditions change

↓

engine started

↓

fuel pump pressurizes system

↓

major leak appears

So I would **not assume the fuel station caused it.**

The timing may simply have exposed an existing failure.

STEP 8 — IF THE LEAK IS AT THE FUEL LINE

Repair strategy

If you find a damaged **steel chassis fuel line**, don't patch it with:

- duct tape
- electrical tape
- rubber hose clamped over rust
- random compression fittings
- household tubing
- epoxy

This is a **pressurized gasoline system.**

The factory information specifically warns that damaged nylon fuel pipes should be replaced rather than repaired. ([Charm](#))

A proper repair is:

Replace the damaged fuel-line section with the correct fuel-system-rated replacement line/fittings.

If the line has extensive corrosion, I'd replace the **entire affected section** rather than repairing one pinhole.

STEP 9 — IF THE LEAK IS AT A QUICK CONNECT

This is potentially a much easier repair.

The Colorado uses quick-connect fuel fittings with internal O-rings and locking mechanisms. ([Charm](#))

Possible failures:

- connector not fully seated
- broken locking mechanism
- damaged O-ring
- damaged male pipe
- cracked connector

Repair

1. Relieve fuel pressure.
2. Disconnect fitting.
3. Inspect both sides.
4. Replace damaged connector/O-ring/line as appropriate.
5. Reconnect.
6. Verify the locking mechanism is fully engaged.
7. Pressure-test.
8. Inspect for leaks.

Do not disconnect it while pressurized.

The factory procedure explicitly calls for fuel-pressure relief before servicing fuel-system components. ([Workshop Manuals](#))

STEP 10 — IF THE LEAK IS ON TOP OF THE TANK

This becomes a bigger job.

You may need to:

1. Drain/reduce fuel level.
2. Relieve fuel pressure.
3. Disconnect battery as appropriate.
4. Support the tank.
5. Remove tank straps.
6. Lower tank.
7. Inspect fuel-pump module.
8. Inspect fuel lines.
9. Inspect tank opening/seal.

- |0. Replace failed component.
- |1. Reinstall tank.
- |2. Reconnect fuel lines.
- |3. Pressure-test before starting.

The factory procedure for the fuel module involves removing the tank and disconnecting the EVAP and fuel-feed connections. It also specifies replacing the fuel-module seal when the module is reinstalled. ([Charm](#))

STEP 11 — IF THE TANK ITSELF IS CRACKED

Replace the tank.

Do not attempt to repair a gasoline tank with epoxy or plastic welding unless you're using a professionally approved tank-repair procedure.

Given the severity of your leak, replacement is the sensible battlefield solution.

STEP 12 — AFTER THE REPAIR

Before starting the engine:

Static inspection

- No visible gasoline
- No wet fuel lines
- Fuel connections fully seated
- Tank/module area dry
- Filler hose secure
- EVAP hoses secure
- No damaged wiring
- No gasoline pooled on frame
- Fuel pump fuse/relay installed

Then:

Prime without starting

Cycle:

KEY ON → OFF

Wait.

Repeat a couple of times.

This allows the pump to pressurize the system without running the engine.

Watch the repair area.

If gasoline appears:

STOP.

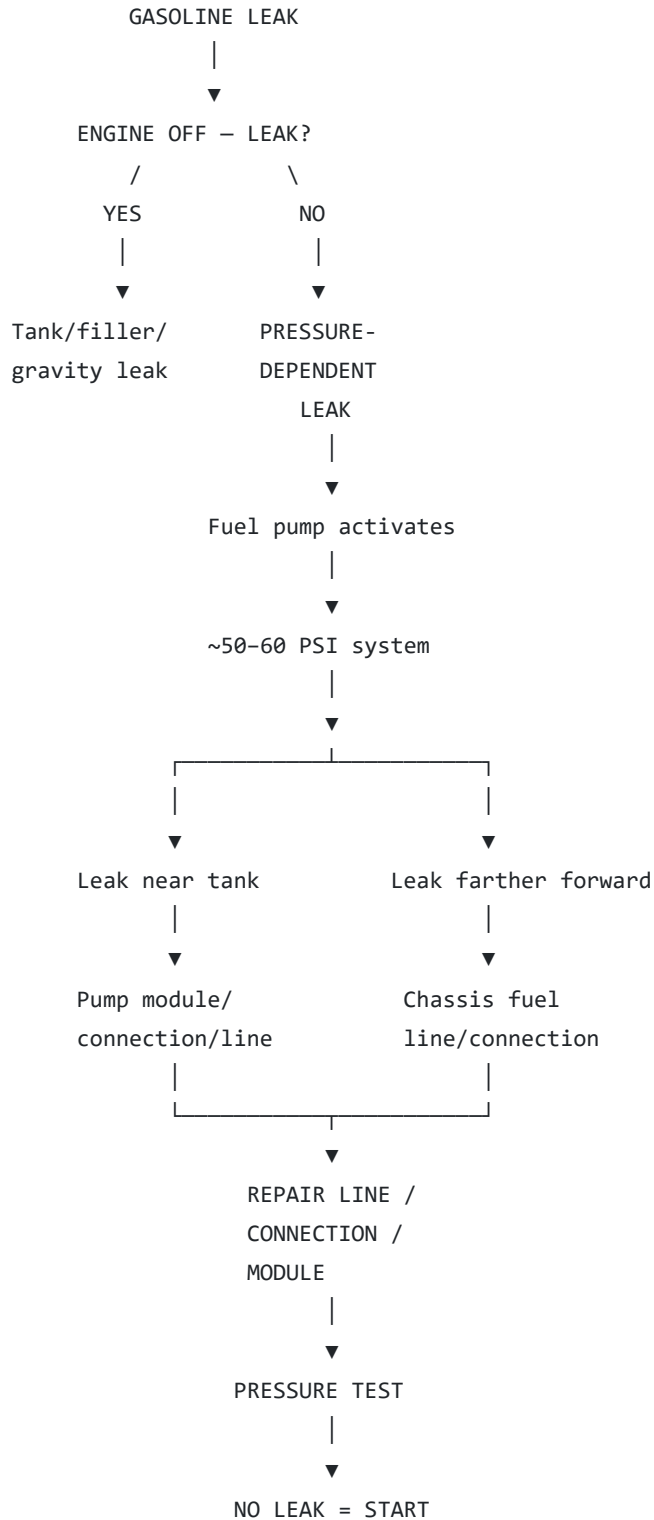
Do not start the engine.

If it remains dry, inspect again.

Then, only after the system remains dry, start the truck while observing from a safe position.



FIELD DIAGNOSTIC FLOWCHART



My battlefield diagnosis

Based **specifically on your sequence**:

Nearly empty → filled → no leak while parked → start engine → gasoline pours underneath driver's side

I'd put my money on:

- 1. Pressurized fuel line/connection near the tank**
- 2. Fuel pump module/outlet connection on top of the tank**
- 3. Corroded chassis fuel line**
- 4. Filler/vent hose or tank problem**

The fact that it **doesn't pour with the engine off but does when running** strongly favors a **pressurized fuel-supply leak** over a simple fuel-tank leak.

And because the Colorado's fuel tank is on the left side and its fuel-feed plumbing runs along the chassis, the driver's-side underside is exactly where I'd start the visual investigation. ([Charm](#))

One thing I'd like to see

If you can safely do so **without starting the truck**, take **3–5 photos underneath the driver's side**:

1. Wide shot from driver's door toward rear wheel
2. Fuel tank area
3. Fuel lines running along the frame
4. Area where gasoline is actually dripping
5. Filler-neck/tank area

I can then walk you through the DDX visually and tell you which line/component you're looking at and what I would replace first.