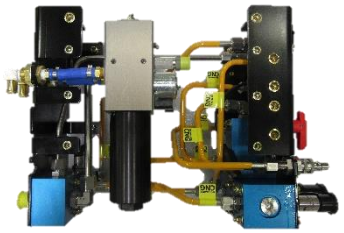
FMM Coolant Connection and Checks

MOMENTUM

Regulator Coolant Flow

- The regulator reduces the CNG pressure from 3,600 PSI to around 125 PSI for introduction into the engine. This is the point in the system where the *high-side is changed to the low-side. To perform correctly regulator needs to receive 450 psi.*

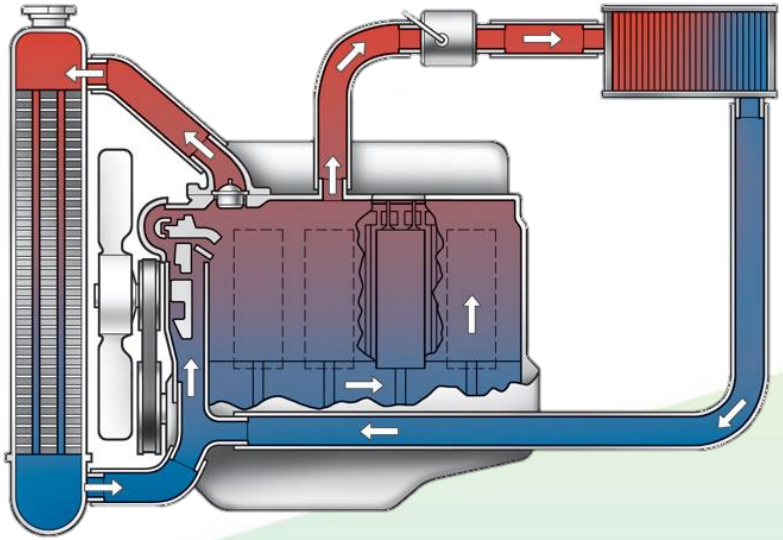
- As CNG expands it gets very cold known as the *Joule-Thomson* effect. Moisture in CNG can form ice and hydrate deposits. To prevent icing inside regulator engine coolant is cycled through the regulator.



MOMENTUM

Proper Coolant Flow

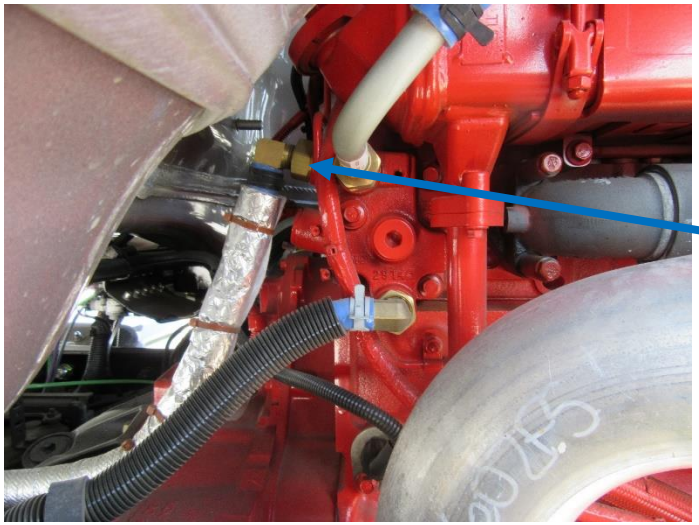
To prevent icing inside the regulator engine coolant is cycled through the regulator. Ensure coolant supply flow goes to the **IN** connector on the back of the FMM, and the coolant comes from the hot-side (red). Coolant return flow is connected to the **OUT** connector, and returned to the cool-side (blue).



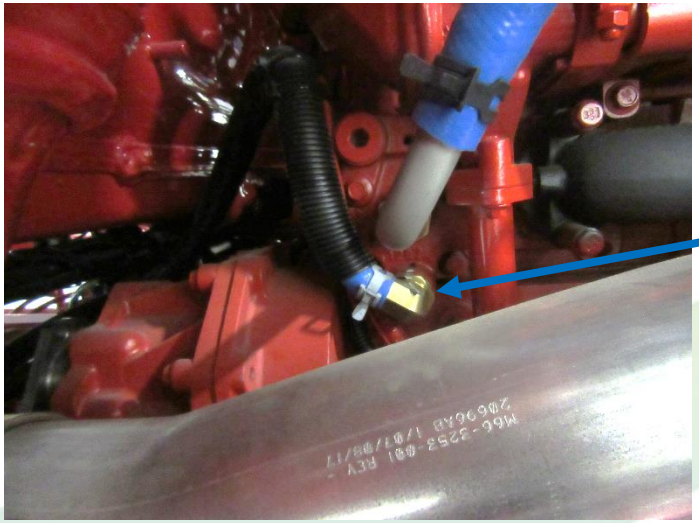
MOMENTUM

ISX12G Supply Connection

As seen from the passenger side rear of engine



Coolant Supply Port correct tie-in point can be either one of the ports on the Hot/High Side of the engine.



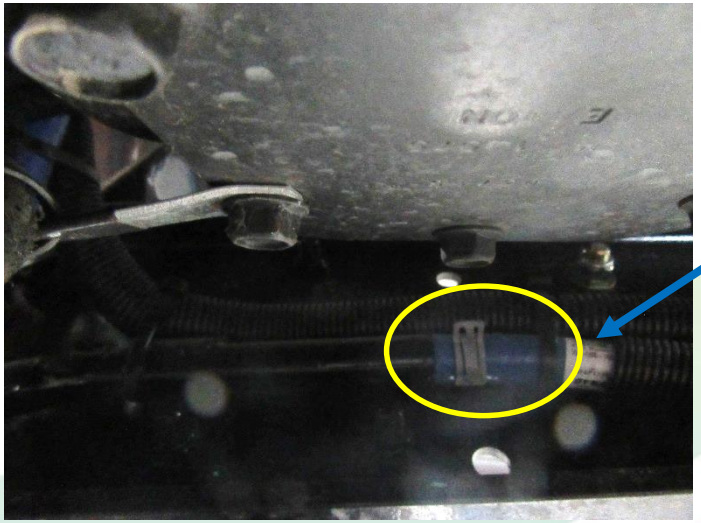
On a different truck a different port was used, but the port was on the Hot/High Side of the engine.

MOMENTUM

ISX12G Return Connection

As seen from the passenger underside in frame rail

Coolant Return Port correct tie-in point is located between the frame and transmission on the passenger side.



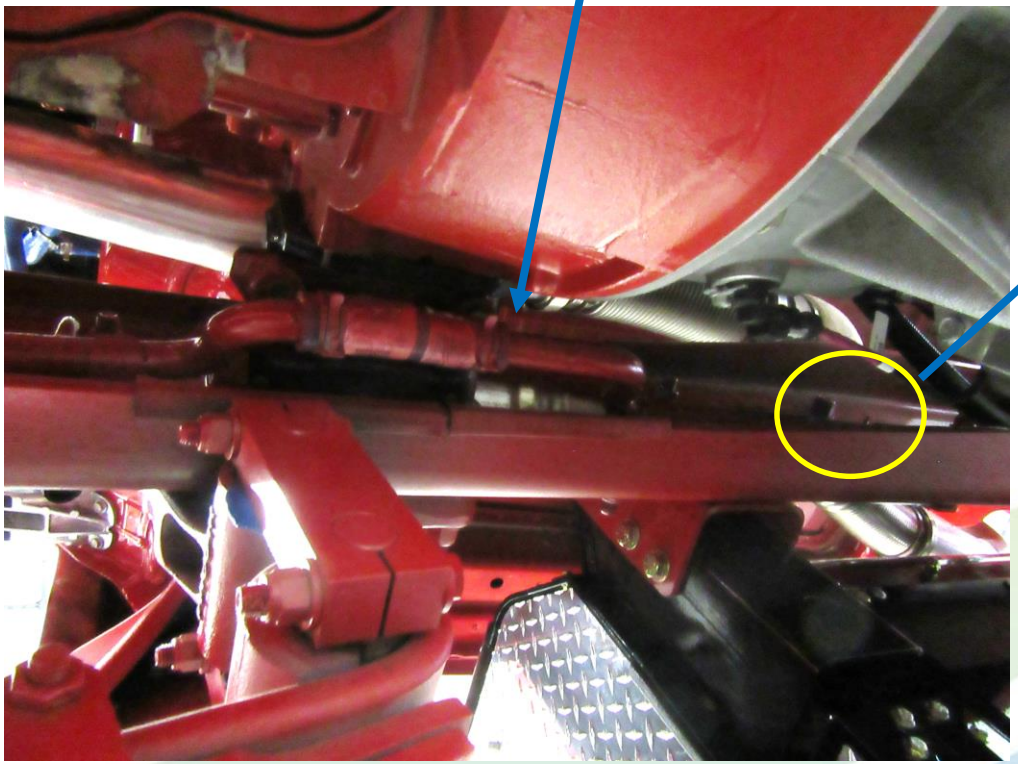
Coolant hose hooks to the metal tubing.

MOMENTUM

ISX12G Return Connection

As seen from the passenger underside in frame rail

Coolant Return Port seen on a different truck. Coolant hose hooks to the metal tubing.

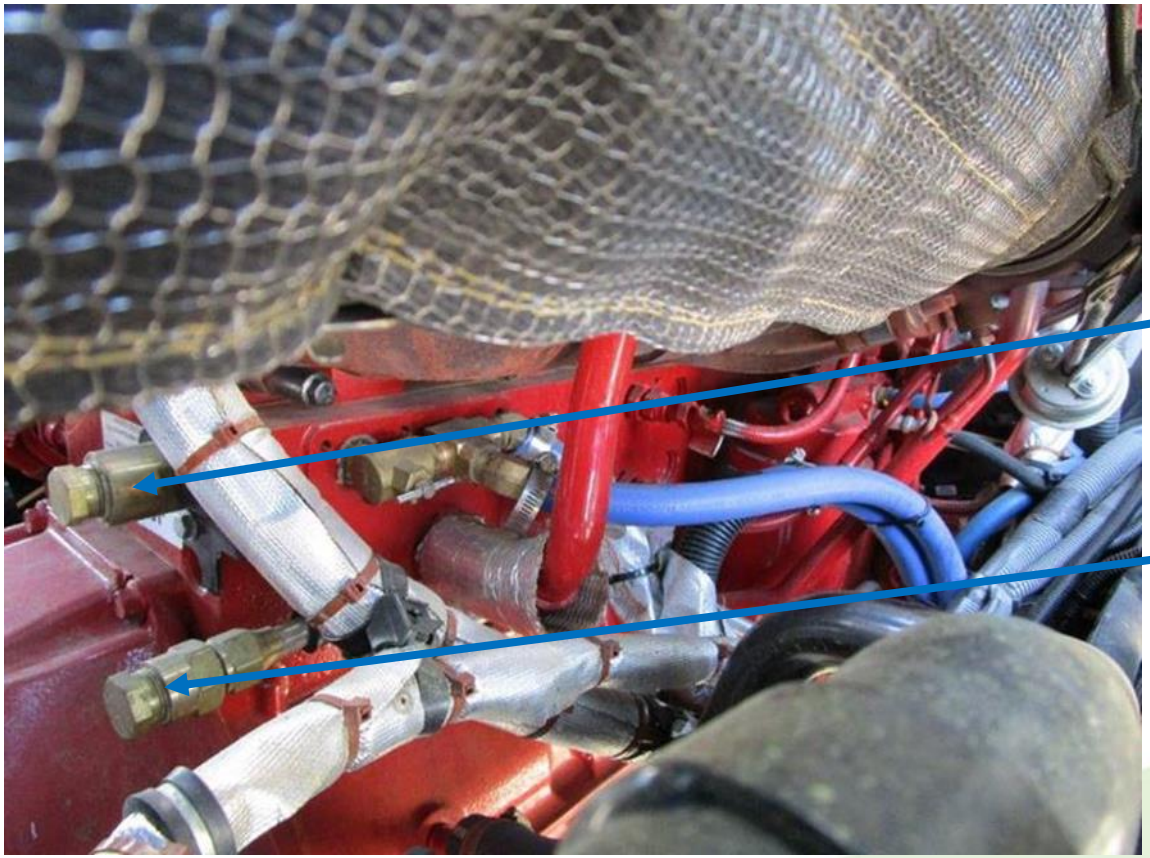


Coolant hose hooks to the metal tubing.

MOMENTUM

ISL G

As seen from the passenger side rear of engine



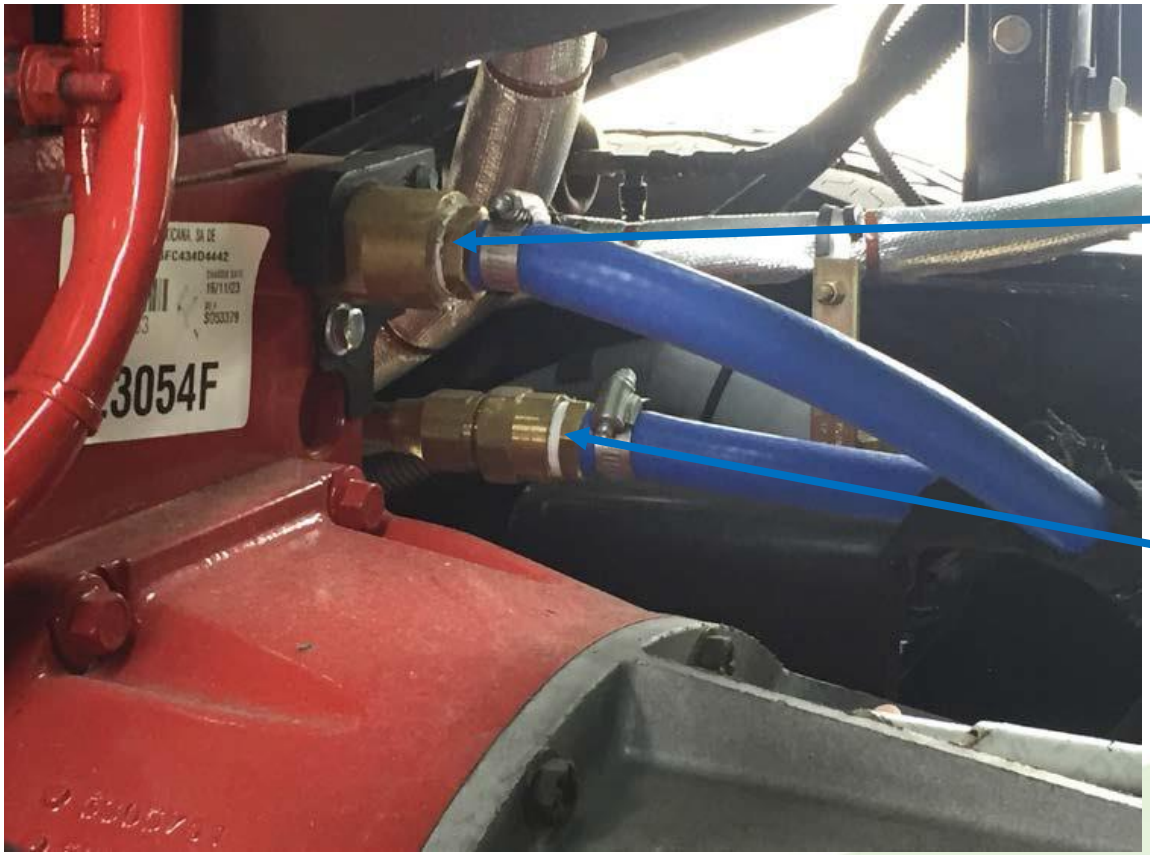
Coolant Supply Port – correct tie-in point

Coolant Return Port – correct tie-in point

MOMENTUM

ISL G

As seen from the driver side rear of engine



Coolant Supply Port – correct tie-in point

Coolant Return Port – correct tie-in point

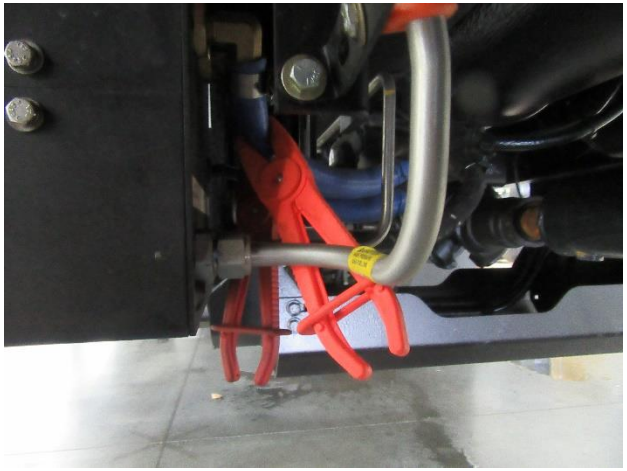
MOMENTUM

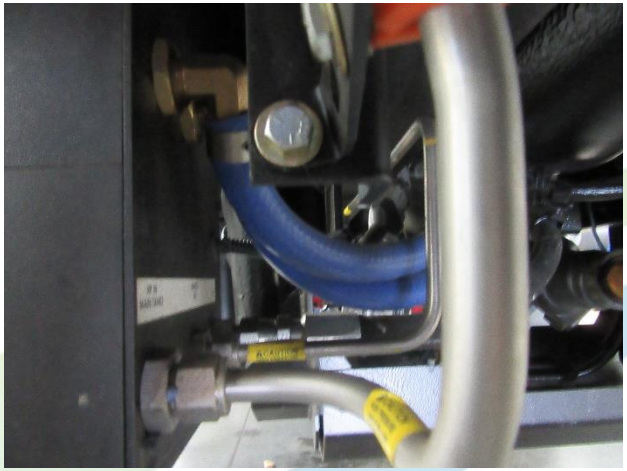
Connecting Hose to FMM

Attach coolant hose using worm gear clamps to hold the coolant hose emplace.

After coolant is tighten, pull on coolant hose to ensure good connection.

After both coolant hose are connected remove Line Clamp Plier.

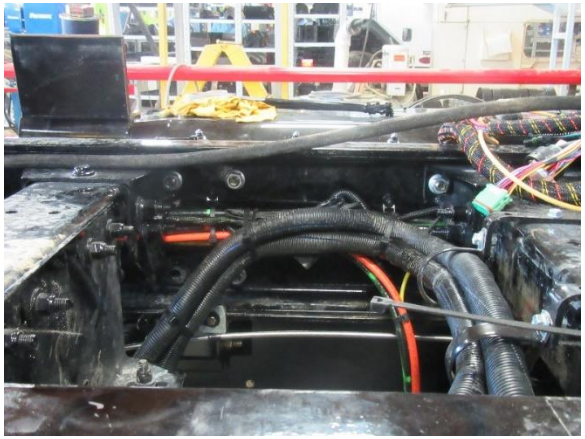


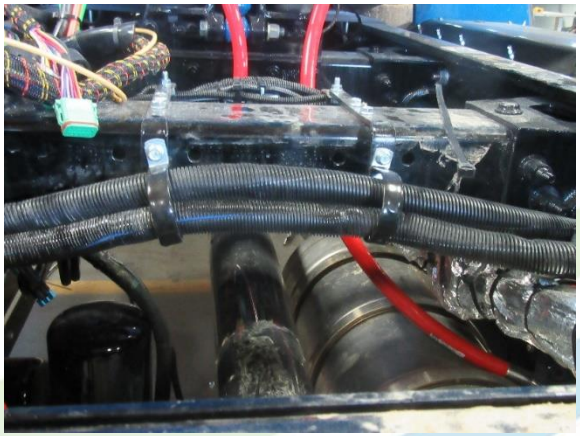


MOMENTUM

Secure Coolant Hoses

Make sure coolant hoses are secured with no flow being slowed or cut off due to clamps or zip ties that are too tight.





MOMENTUM

Coolant to Regulator Check

Before releasing the truck to the customer ensure you run truck to check the coolant flow.

Continuous flow regulator for vehicle heating systems checks. Run engine until you feel warm air coming out of the heater vents then check the regulator, should feel as warm.

Turn off the heater and make sure there is not a drop in temperature in the regulator.

One could also use a Infrared Thermometer.

MOMENTUM

MOMENTUM