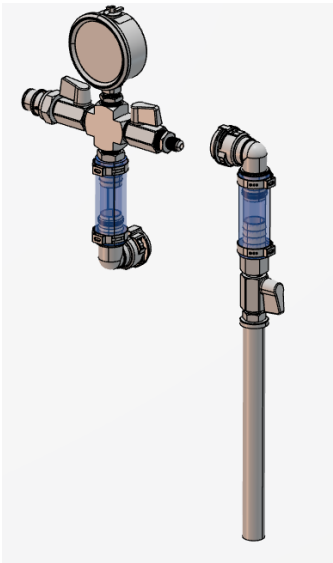
	TOOL USE INSTRUCTION	
	TOOL NUMBER: TSN01304	DATE: 09/20/24
	TITLE: ESS COOLANT PRE-FILL KIT	DOC REV: 1




**Tool Function:**

To evacuate and fill coolant into ESS packs. **Only used for ESS remove and replace only.**  
For complete system evac and fill routines, see the usage instructions for the full evac and fill kits:  
**TSN00787-300-B**

Contents

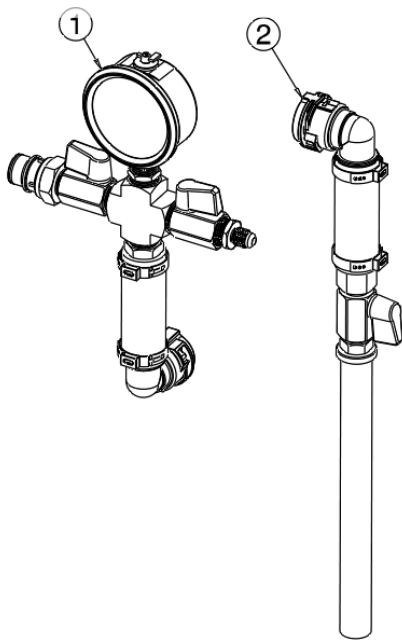
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	<b>TOOL USE INSTRUCTION</b>	
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OVERVIEW

Tool Components

THESE ITEMS ARE INCLUDED IN THE COOLANT EVAC AND FILL KIT, **TSN00787-300-B**



ITEM	DESCRIPTION
1	PRE-FILL ADAPTER
2	DRAIN HOSE

 <b>RIVIAN</b>	<b>TOOL USE INSTRUCTION</b>	
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## Vacuum Intake Catch Bowl



### ⚠ WARNING ⚠

ALWAYS CHECK THE VACUUM INTAKE CATCH BOWL BEFORE, DURING AND AFTER OPERATION OF THE VACUUM PUMP

## SAFETY GUIDELINES

### ⚠ WARNING ⚠

Be aware of the maximum capacity of the ESS being serviced.  
Stop and diagnose if filling volume exceeds the expected capacity.



## TOOL USE INSTRUCTION

**TOOL NUMBER:** TSN01304

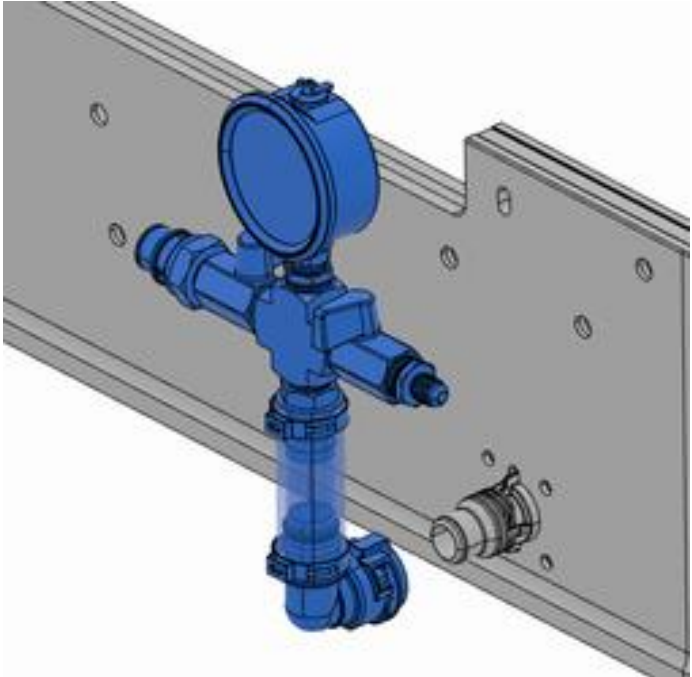
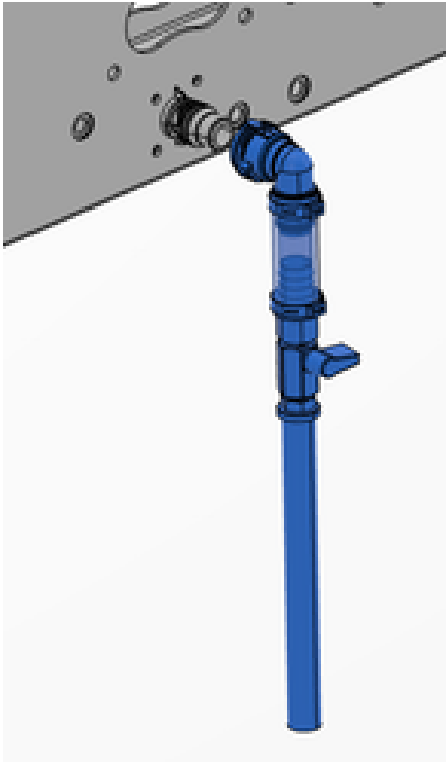
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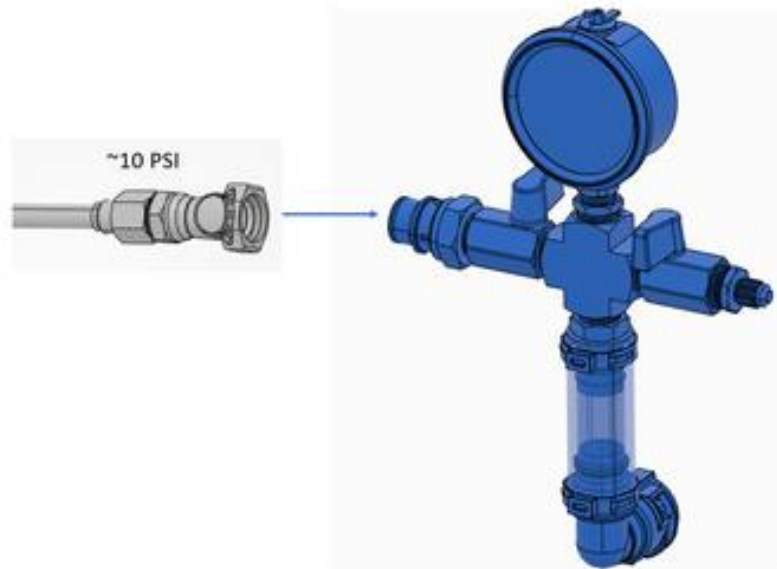
## TOOL USAGE

### Draining and Evacuating Coolant

Step		
1	Attach the pre-fill adapter to the INLET of the ESS pack. Ensure all valves are in the closed position	
2	Attach the drain hose to the OUTLET of the ESS pack. Ensure the valve is closed, and place the open end into a drain container	

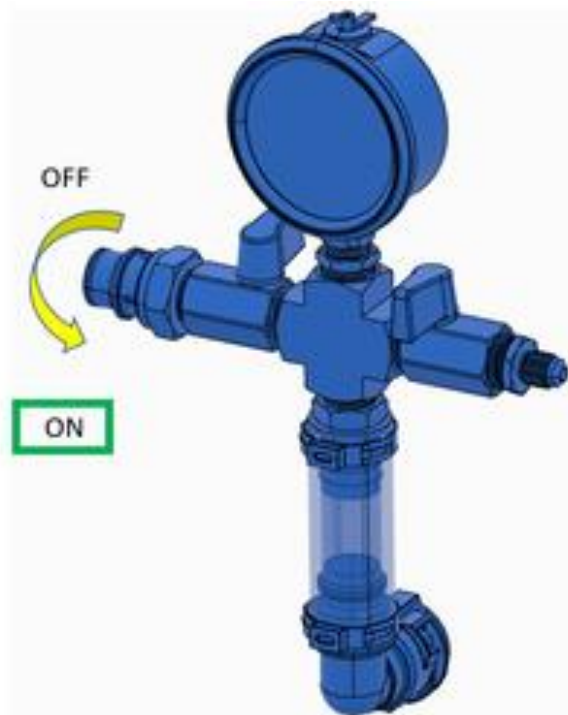
3

From the coolant evac & fill tool, attach the regulated air to hose to the pre-fill adapter set to **~10psi**



4

Open the coolant side valve on the pre-fill adapter





## TOOL USE INSTRUCTION

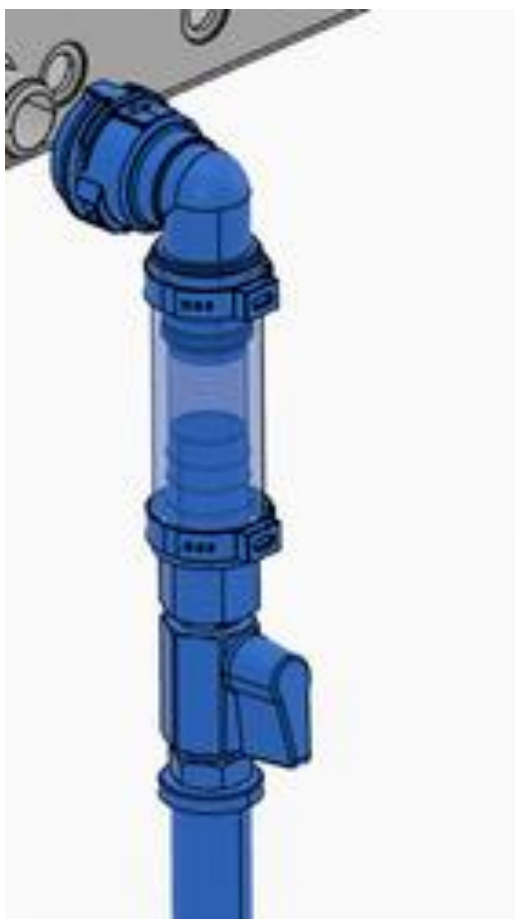
**TOOL NUMBER:** TSN01304

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5 Open the valve on the drain hose



6 Purge coolant from the ESS until no coolant comes out of the drain hose



## TOOL USE INSTRUCTION

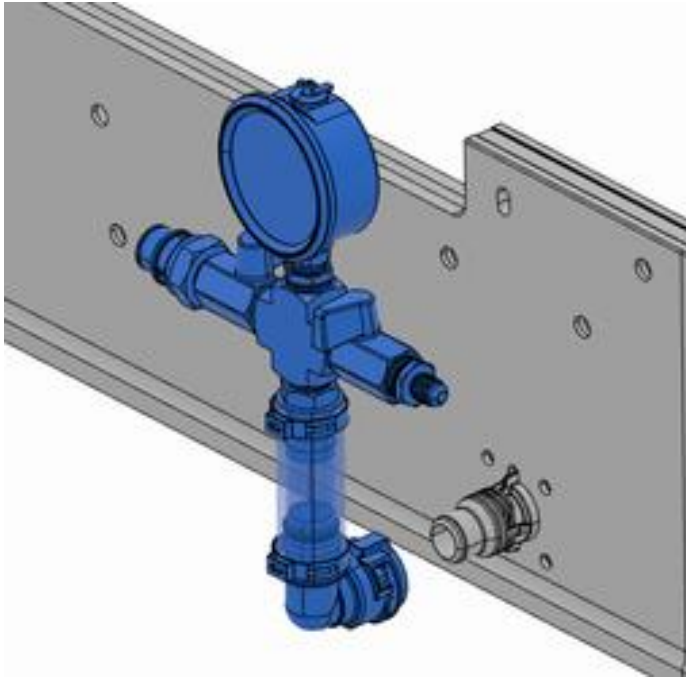
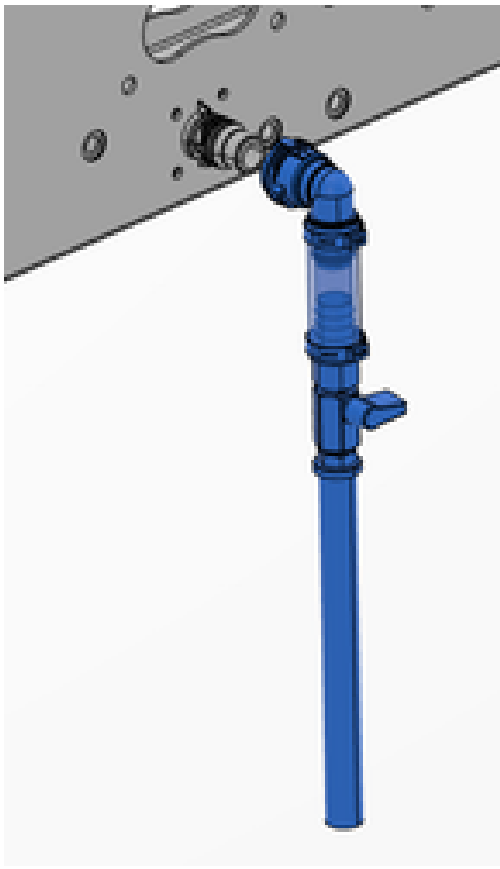
**TOOL NUMBER:** TSN01304

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### Pressure Leak Testing

Step		
1	Attach the pre-fill adapter to the INLET of the ESS pack. Ensure all valves are in the closed position	
2	Attach the drain hose to the OUTLET of the ESS pack. Ensure the valve is closed	



## TOOL USE INSTRUCTION

TOOL NUMBER: TSN01304

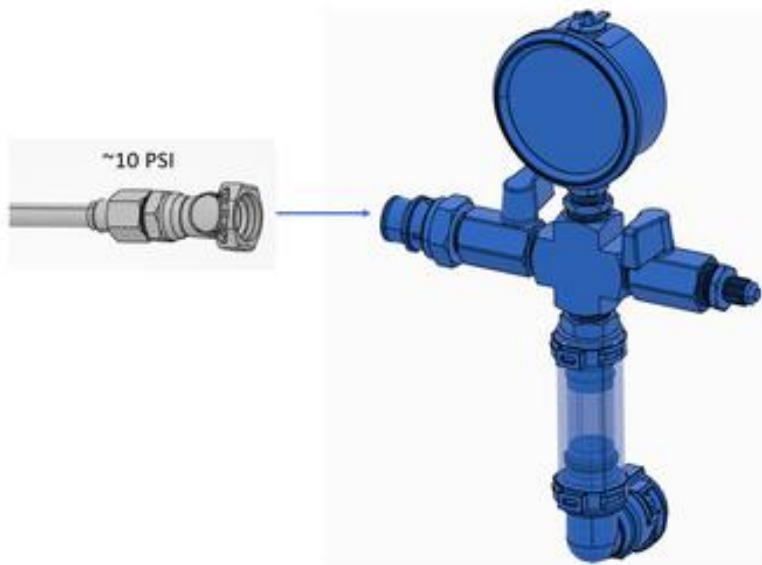
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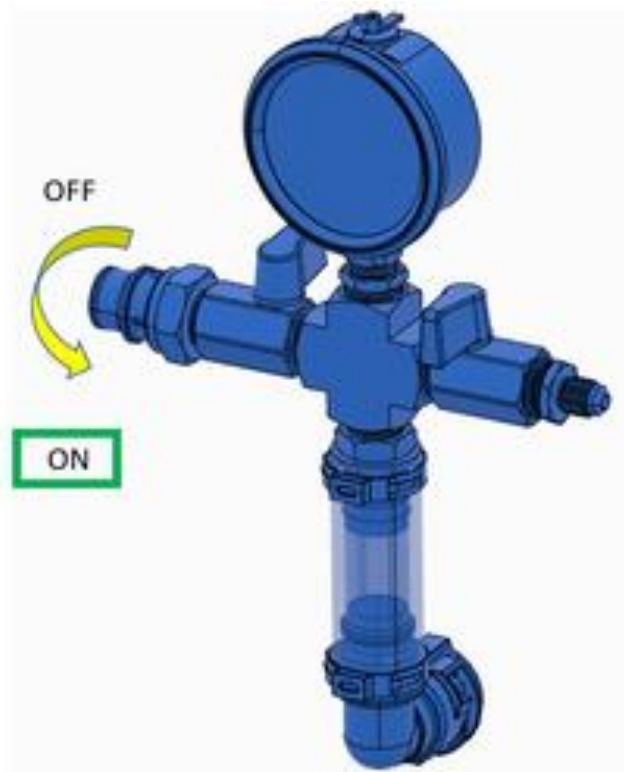
3

From the coolant evac & fill tool, attach the regulated air to hose to the pre-fill adapter set to **~10psi**



4

Open the coolant side valve on the pre-fill adapter



5

Pressure should reach ~10psi

6

Close the coolant side valve on the pre-fill adapter

7

Hold for 60 seconds, pressure should not drop





## TOOL USE INSTRUCTION

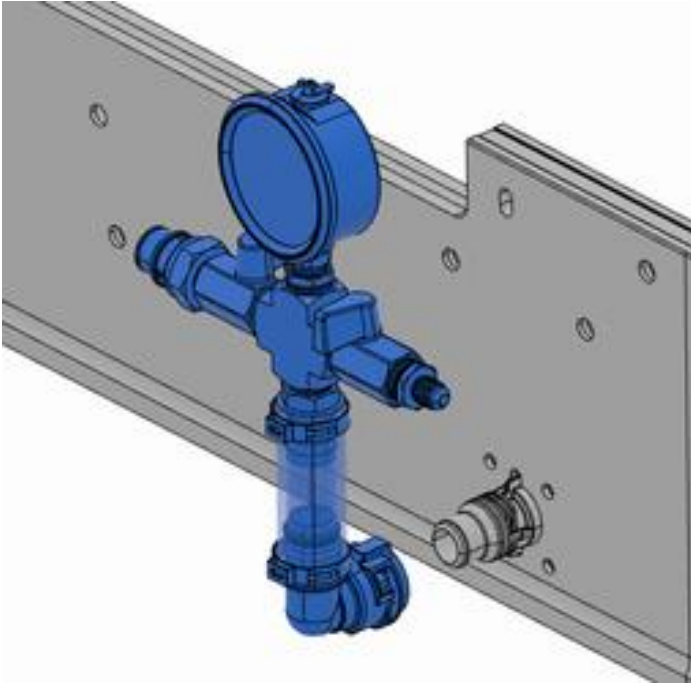
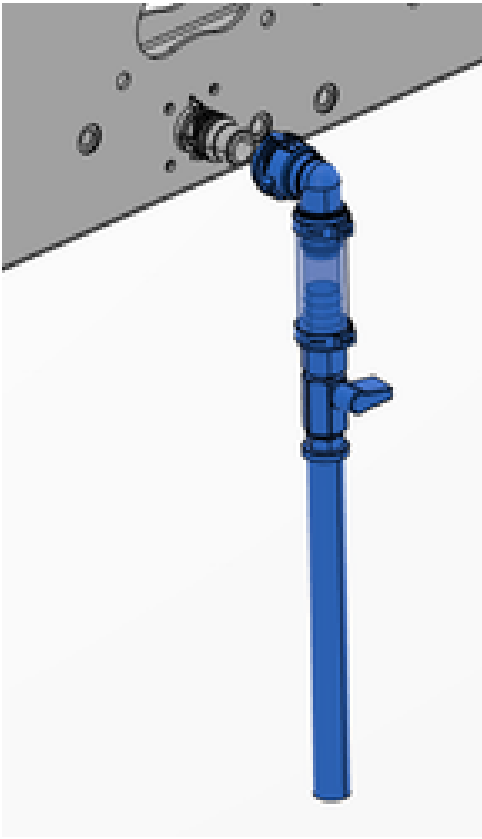
**TOOL NUMBER:** TSN01304

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**DOC REV:** 1

### Filling

Step		
1	Attach the pre-fill adapter to the INLET of the ESS pack. Ensure all valves are in the closed position	
2	Attach the drain hose to the OUTLET of the ESS pack. Ensure the valve is closed	



## TOOL USE INSTRUCTION

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3

From the coolant evac & fill tool, attach the vacuum pump and hose to the vacuum side of the pre-fill adapter



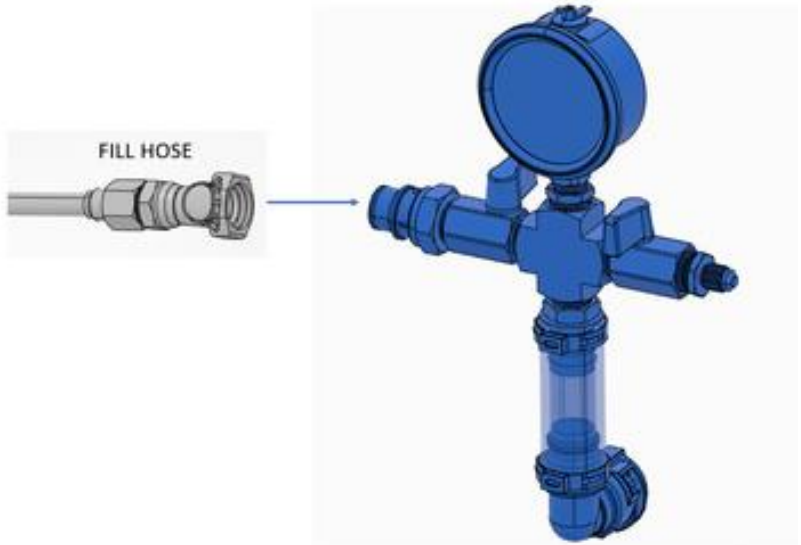
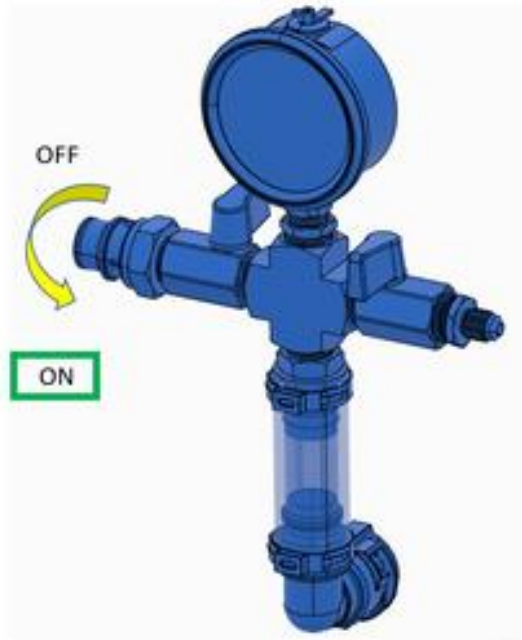
4


Turn on the vacuum pump, and open the vacuum side valve



5

Once ~28-29 inHg is reached, close the vacuum side valve and turn off the vacuum pump

6	Hold for 60 seconds, vacuum should not drop	
7	Attach the filling hose from the coolant evac & fill tool to the pre-fill adapter	
8	Open the coolant side valve on the pre-fill adapter	
9	Coolant will begin to fill the ESS pack	
10	Once vacuum has dropped and coolant is no longer filling, the ESS pack is now filled	

 <b>RIVIAN</b>	<b>TOOL USE INSTRUCTION</b>	
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**REVISION LOG**

REV	REASON FOR CHANGE	DATE
1.0	Initial Release	9/20/24