

# TOOL USE INSTRUCTION

<b>RIVIAN</b>	TOOL NUMBER	TSN00457-102-A & TSN00457-104-A
	TITLE	AC flush setup TUI for SNAP ON NEXT ONE & MAHLE ACX2280
	REV - DATE	REV A - 03/24/2025

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## DOCUMENT FUNCTION:

This document is a guidance on how to setup the Mahle ACX2280 and Snap On NEXT ONE Ecotechnics when used to do an AC flush on the vehicle.

This **DOES NOT** cover the Robinair AC machine (TSN00457-100-A)

**NOTE: Document is for Rivian Service Center reference ONLY**





**WARNING**

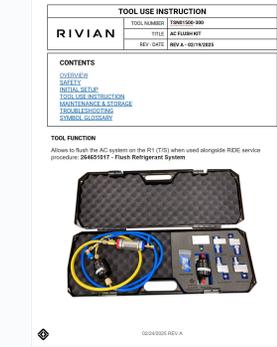
Do not perform procedure if tool is damaged or missing parts. Consult the Rivian Service Tool Catalog for replacement components.

Failure to follow guidelines outlined in this document could result in injury and/or property damage.

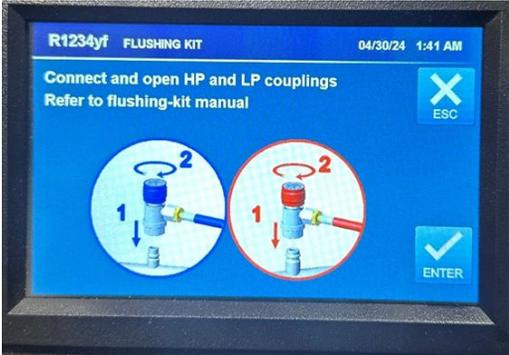
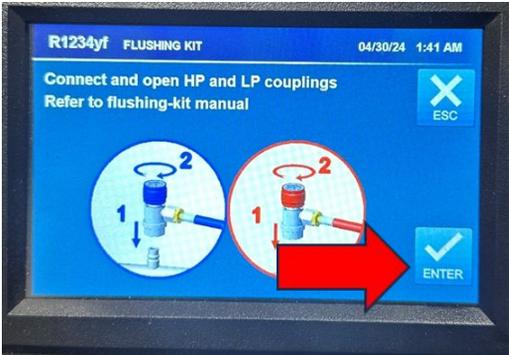
**SAFETY GUIDELINES**

<p><b>1</b></p>	<ul style="list-style-type: none"> <li>● eye protection</li> <li>● closed toe shoes</li> <li>● gloves</li> <li>● ear protection</li> <li>● ASTM class 0 electrical-protection gloves</li> </ul>	
<p><b>2</b></p>	<p>Risk of:</p> <ul style="list-style-type: none"> <li>● damage to vehicle or property</li> <li>● voiding warranty</li> </ul> <p>If process isn't done correctly on vehicle</p>	
<p><b>3</b></p>	<p>Risk of major injury such as:</p> <ul style="list-style-type: none"> <li>● chemical or poison</li> <li>● skin irritation if refrigerant oil gets on skin</li> <li>● system under pressure</li> </ul>	

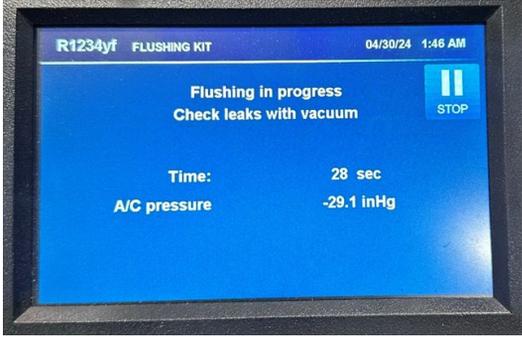
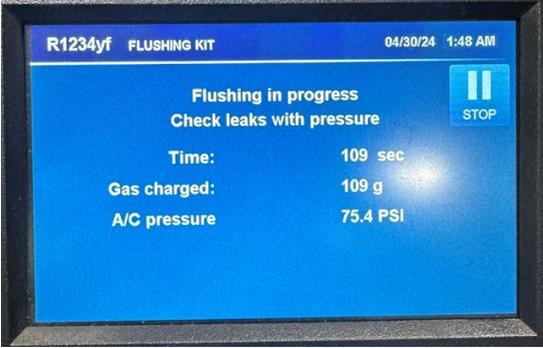
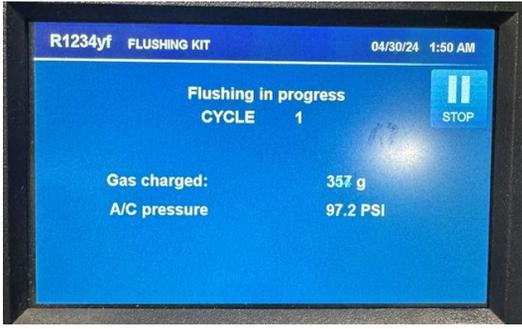
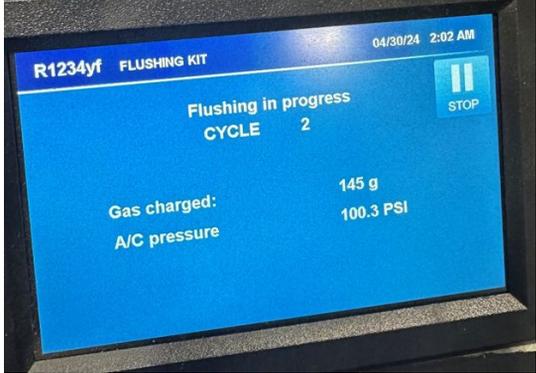


<p>1</p>	<p>Check the AC machine filter life prior to using the machine for a flush.</p> <p>Some AC machines will not allow the flush to be performed if the filter life is not adequate</p>	
<p>2</p>	<p>Make sure the fill tank of the AC machine has the minimum amount needed to perform a flush on the vehicle.</p> <p>This will vary from AC Machine to AC machine.</p> <p>If the amount is not sufficient, a flush will not be allowed.</p>	
<p>3</p>	<p>Only use the approved adapters from the <b>TSN01500-300 AC flush kit</b> when performing a flush on a Rivian vehicle.</p>	
<p>4</p>	<p>Follow the instructions Tool Use Instructions for TSN01500-300 AC flush Kit for setup and procedure.</p> <p><a href="#"><u><b>TSN01500-300 AC Flush kit</b></u></a></p>	

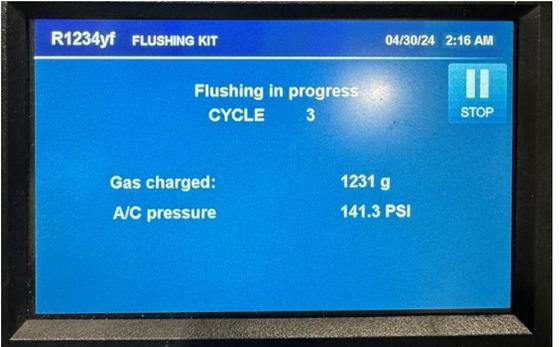
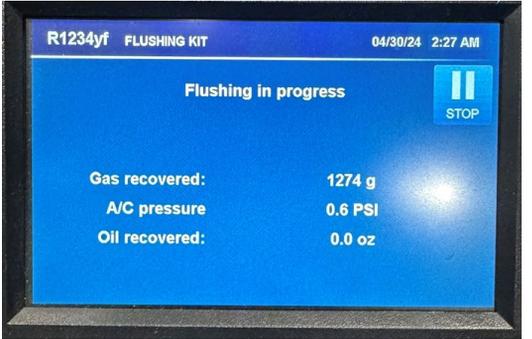
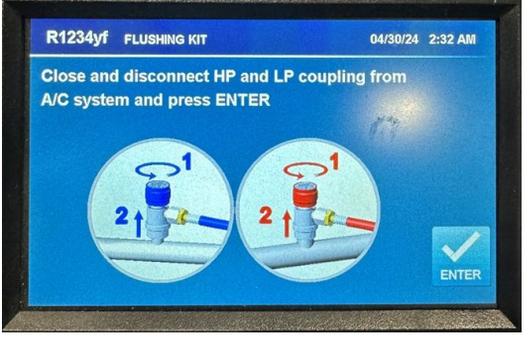


<p>1</p>	<p><i>Note: Images used are for reference, be sure to follow the machine's text directions.</i></p> <p>Select <b>Additional Functions (3 Squares)</b> in the main menu</p>	
<p>2</p>	<p>Select <b>Flushing Kit</b></p>	
<p>3</p>	<p>Connect couplers (if not already done) and open the valves as shown</p>	
<p>4</p>	<p>Select <b>ENTER</b> to continue to the flush process</p>	



<p><b>5</b></p>	<p>Flushing process will start with a leak check utilizing Vacuum</p>	 <p>R1234yf FLUSHING KIT 04/30/24 1:46 AM</p> <p>Flushing in progress Check leaks with vacuum</p> <p>Time: 28 sec A/C pressure -29.1 inHg</p> <p>STOP</p>
<p><b>6</b></p>	<p>The procedure will then move to leak check utilizing pressure</p>	 <p>R1234yf FLUSHING KIT 04/30/24 1:48 AM</p> <p>Flushing in progress Check leaks with pressure</p> <p>Time: 109 sec Gas charged: 109 g A/C pressure 75.4 PSI</p> <p>STOP</p>
<p><b>7</b></p>	<p>After pressure check, the process will move into Cycle 1 of 3 of flushing</p>	 <p>R1234yf FLUSHING KIT 04/30/24 1:50 AM</p> <p>Flushing in progress CYCLE 1</p> <p>Gas charged: 357 g A/C pressure 97.2 PSI</p> <p>STOP</p>
<p><b>8</b></p>	<p>After Cycle 1, it will automatically move to Cycle 2 in the flushing process</p>	 <p>R1234yf FLUSHING KIT 04/30/24 2:02 AM</p> <p>Flushing in progress CYCLE 2</p> <p>Gas charged: 145 g A/C pressure 100.3 PSI</p> <p>STOP</p>

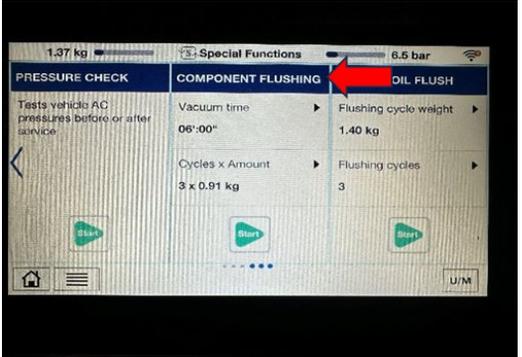
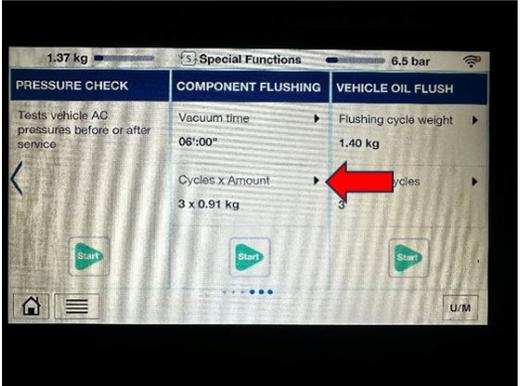
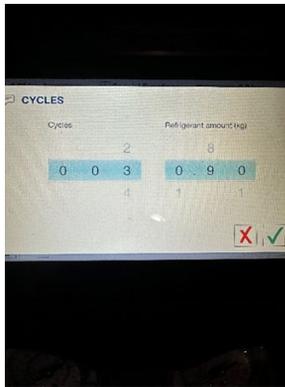


<p>9</p>	<p>After Cycle 2, it will automatically move to Cycle 3 in the flushing process</p>	
<p>10</p>	<p>Once Cycle 3 is done, you will need to wait for the AC machine to depressurize the system (this may take a few minutes)</p> <p>Once completed you will get a notification that the procedure is completed</p>	
<p>11</p>	<p>At the end of the procedure, you will be prompted to disconnect the HP and LP couplings. This is <b>NOT NECESSARY</b> when moving to the next flushing phase.</p>	
<p>12</p>	<p>If there is too much pressure remaining in the system to move to the next Flush Phase, go back to the <b>MAIN MENU</b> and perform a <b>RECOVERY/RECYCLE</b> to remove any residual refrigerant in the system.</p>	

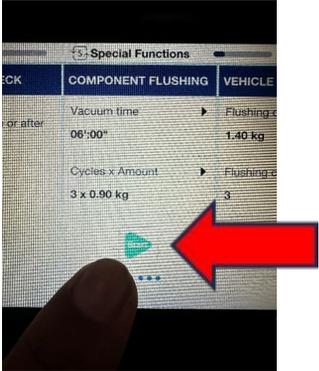
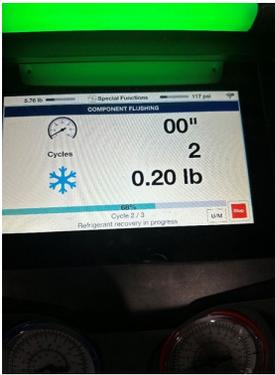


	<p><b>Repeat Steps 1-10 for each of the Phases required in RiDE:</b></p> <p><b>R1T:</b> 3 Phases  <b>R1S:</b> 4 Phases  <b>Underbody line flush:</b> 1 flush procedure with the AC machine (No RiDE procedure)</p>	
<p><b>13</b></p>	<p>After phases have been completed, you will get the report of the flushing process</p>	
<p><b>14</b></p>	<p><b><u>IMPORTANT</u></b>          After the AC flush is performed on the vehicle, perform <b>264650024 - Refrigerant Evacuate and Recharge</b> to clear any residual refrigerant/pressure left in the vehicle before disconnecting AC machine and removing adaptors</p>	<p>Procedure          264650024 - Refrigerant Evacuate and Recharge          Thermal Management / Refrigerant System</p>
<p><b>15</b></p>	<p><b>Only disconnect from the vehicle when all necessary flushing phases have been completed and an EVAC/RECOVER has been performed on the vehicle.</b></p>	

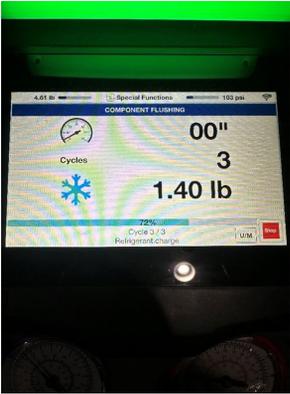
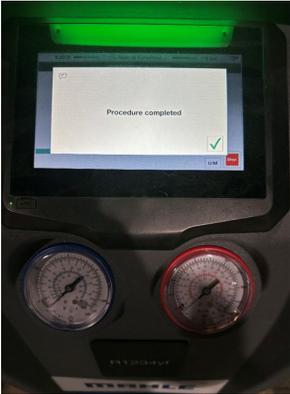
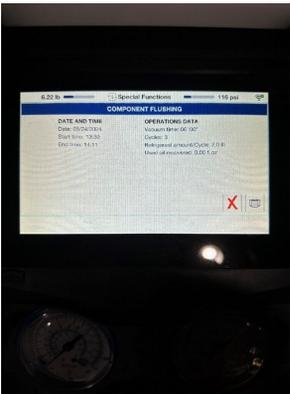


<p>1</p>	<p><i>Note: Images used are for reference, be sure to follow the machine's text directions.</i></p> <p>Select <b>Special functions</b> menu</p>	
<p>2</p>	<p>Scroll to the left until you reach <b>Component Flushing</b></p>	
<p>3</p>	<p>Select <b>Cycles x Amount</b> &gt; tab to adjust the values</p>	
<p>4</p>	<p>Adjust values to:  <b>3 Cycles and 4.0kg - 5.0kg for Phase 1,2 and 4</b>  <b>Set Phase 3 to 3.0kg (6.6 lbs)</b>          Once done, confirm with <b>green</b> check mark</p>	



<p>5</p>	<p>Go back to main Special functions screen and select <b>START</b> under Component Flushing to begin process</p>	
<p>6</p>	<p>Process will begin with a Vacuum test</p>	
<p>7</p>	<p>After Vacuum test, the process will continue into Cycle 1 of 3 for flushing</p>	
<p>8</p>	<p>After Cycle 1, it will automatically move to Cycle 2 in the flushing process</p>	



<p>9</p>	<p>After Cycle 2, it will automatically move to Cycle 3 in the flushing process</p>	
<p>10</p>	<p>Once Cycle 3 is done, you will need to wait for the AC machine to depressurize the system (this may take a few minutes)</p> <p>Once completed you will get a notification that the procedure is completed</p>	
<p>11</p>	<p>At the end of the procedure, you will get a report of the flushing process performed on the vehicle</p>	
<p>12</p>	<p><b>Repeat Steps 1-11 for each of the Phases required in RiDE:</b></p> <p><b>R1T:</b> 3 Phases  <b>R1S:</b> 4 Phases  <b>Underbody line flush:</b> 1 flush procedure with the AC machine (No RiDE procedure)</p>	<p>There is <b>NO NEED</b> to disconnect the AC machine High side and Low side couplers from the adapters when performing flushes between phases.</p>



<p><b>13</b></p>	<p><b><u>IMPORTANT</u></b>                  After the AC flush is performed on the vehicle, perform <b>264650024 - Refrigerant Evacuate and Recharge</b> to clear any residual refrigerant/pressure left in the vehicle before disconnecting AC machine and removing adaptors</p>	<p>Procedure                  264650024 - Refrigerant Evacuate and Recharge                  Thermal Management / Refrigerant System</p> <hr/>
<p><b>14</b></p>	<p>Only disconnect from the vehicle when all necessary flushing phases have been completed on the vehicle and a EVAC/RECOVER has been performed on the vehicle</p>	



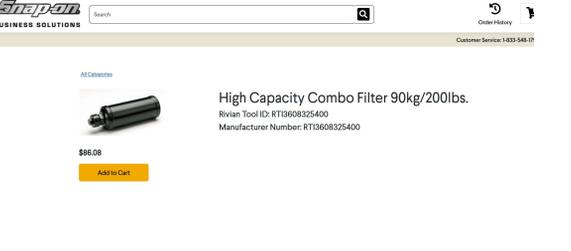
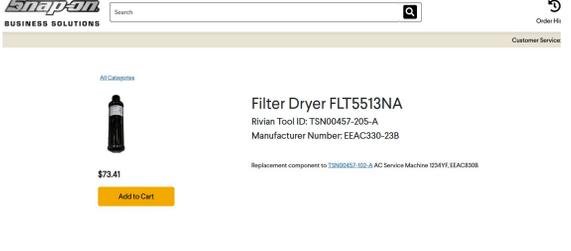
**BASIC MAINTENANCE GUIDE**

<b>TASK</b>	<b>FREQUENCY</b>
Check AC machine internal filter for service life capacity. This is an operation that is present in the Main Menu of the machine.	Before Each Use
Check new tank capacity to ensure capacity requirement is sufficient to perform the flush	Before Each Use
Inspect couplers prior to usage of the AC machine	Before Each Use
Put AC machine back to storage location and route hoses on machine back on holders	After Each Use



# SERVICE & REPLACEMENT COMPONENTS

FOR OTHER ITEMS NOT SHOWN, CONTACT RIVIAN SERVICE TOOL ENGINEERING

ITEM	DESCRIPTION	SUPPLIER + PART NUMBER
1	Mahle ACX2280 Filter	 <p><b>Rivian Tool ID:</b> RTI3608325400 <b>Manufacturer number:</b> RTI3608325400</p>
2	Snap On NEXT ONE Ecotechnics Filter	 <p><b>Rivian Tool ID:</b> TSN00457-205-A <b>Manufacturer Number:</b> EEAC330-23B</p>



## TROUBLESHOOTING

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PROBLEM	SOLUTION
Flush process won't start on the AC machine	<ul style="list-style-type: none"><li>● Check the internal filter service life and replace if necessary</li><li>● New tank capacity is not adequate. Fill the tank if necessary</li></ul>
Little or no fluid is flowing through the flush kit sight glass	<ul style="list-style-type: none"><li>● Check refrigerant amount inputted into machine</li><li>● Valve may be closed on the flush kit assembly</li><li>● Screw down coupler valves are not open</li></ul>
Pressure is present (gauges) prior to disconnecting the AC machine couplers from the adapters.	<ul style="list-style-type: none"><li>● Be sure to recover/evacuate the system prior to any disconnecting of the adapters</li></ul>
Pressure is in the system after the Phase flush is complete and the AC machine wont allow you to move to next step.	<ul style="list-style-type: none"><li>● Go back to Main Menu screen and perform a Recover/Evac on the system</li></ul>
Contaminated refrigerant when performing a recover/evacuation after a flush.	<ul style="list-style-type: none"><li>● inspect ac machine gas analyzer</li><li>● possible small leak at one of the seals or connection points.</li></ul>





**DANGER**

Risk of electrocution or electric shock



**WARNING**

Risk of minor injury



**DANGER**

Risk of major injury such as

- fire
- chemical or poison
- crushing / maiming
- death



**CAUTION**

Risk of

- damage to vehicle or property
- data disruption
- voiding warranty



**CAUTION**

Risk of Pinch Point

- keep hands and fingers clear of all moving parts.



**PPE REQUIRED**

**REVISION LOG**

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REV	DATE	CHANGE DESCRIPTION
A	03/24/2025	Initial release

