Last modified: 23/08/2023 18:38:34

Desiccant (Heat Pump) (Remove and Replace)

Correction code 18202012 FRT 1.20

NOTE: Unless otherwise explicitly stated in the procedure, the above correction code and FRT reflect all of the work required to perform this procedure, including the linked procedures. Do not stack correction codes unless explicitly told to do so.

NOTE: See Flat Rate Times to learn more about FRTs and how they are created. To provide feedback on FRT values, email LaborTimeFeedback@tesla.com.

NOTE: See Personal Protection to make sure wearing proper PPE when performing the below procedure.

Revision History:

- 2023-04-04: Updated A/C oil type to be used with reference to Fluids and Capacities for A/C oil specifications.
- 2023-08-23: Added remindings of wearing PPEs.

CAUTION

Model 3 thermal management components operate under very tight specifications and can malfunction if Service procedures are not carefully followed. DO NOT rely on past experience with other thermal management systems; read through the Service Manual and do not deviate from the

Torque Specifications

Table 1. Torque Specifications: Desiccant (Heat Pump) (Remove and Replace)

Description	Torque Value	Recommended Tools	Reuse/Replace	Notes
Accumulator dust cap	NaN Nm (NaN lbs-ft)	Torx T30 socket Tilde Ratchet/torque wrench	Replace	

Remove

- 1 Remove the underhood storage unit. See Underhood Storage Unit (Remove and Replace) O.
- 2. Recover the A/C refrigerant. See Recovery (Heat Pump Model 3) O.
- Remove AC hoses from vehicle.
- 4. Carefully depress the schrader valves (x2) to release vacuum from AC lines.



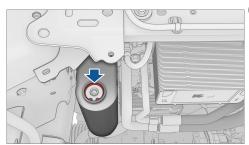
5. If present, remove and discard the dust cap from the accumulator.



Note

Use of the following tool(s) is recommended:

- Torx T30 socket
- 3 in extension
- Ratchet/torque wrench

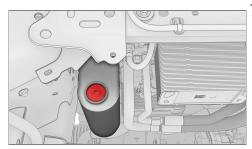


6. Use snap ring pliers to remove and discard the accumulator cap snap ring.



Warning

Please ensure to wear the Face Shield throughout the entire process to prevent foreign objects from flying out.



7. Use long nose locking pliers to remove and discard the accumulator cap.



Warning

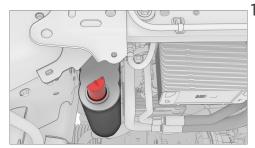
Please ensure to wear the Face Shield throughout the entire process to prevent foreign objects from flying out.



8. Use needle nose pliers to remove the desiccant bag from the accumulator.

- 9. Weigh the desiccant bag. This is considered the "wet weight."
- 10. Determine the "dry weight" of the desiccant bag: Inspect the bag for a label that contains the Part Number (P), Serial Number (S), and Dry Weight (W). If the label is missing, or if the dry weight is not visible, assume the dry weight is 90.4 grams.
- 11. Subtract the dry weight from the wet weight. This is the amount of oil that must be added to the system in addition to the oil that was removed during refrigerant recovery. Note this amount for later.

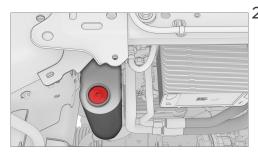
Install



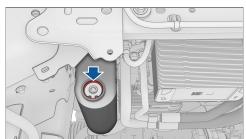
Install the desiccant bag in the accumulator.



Make sure the tab on the desiccant bag faces upward.



 $2. \ \ \text{Lubricate the new accumulator cap O-rings with the }$ appropriate A/C oil. See Fluids and Capacities O for A/C oil specifications. Then install the cap on the



3. Use the snap ring pliers to install the new accumulator cap snap ring.

Warning

Please ensure to wear the Face Shield throughout the entire process to prevent foreign objects from flying out.



Make sure the snap ring is fully seated in the groove on the inside of the accumulator



4. Hand-tighten the new dust cap to the accumulator.



NaN Nm (NaN lbs-ft)



Screw the dust cap until it bottoms out on the accumulator.



Use of the following tool(s) is recommended:

- Torx T30 socket
- 3 in extension
- Ratchet/torque wrench
- 5. Install AC hoses to the vehicle.
- 6. Initiate and complete the vacuum leak test, then return to this procedure. See Vacuum Leak Test and Oil Injection (Heat Pump Model 3) O.
- 7. Remove the low side AC hose from the supermanifold to HVAC AC line assembly.
- 8. Inject the amount of oil that was lost to:

- Removal of the old desiccant bag. See step 11.
- Refrigerant recovery. See Vacuum Leak Test and Oil Injection (Heat Pump Model 3).

▲ CAUTION

DO NOT forget to inject the amount of oil that was lost to removal of the old desiccant bag. Failure to do so might cause catastrophic damage to the thermal system.

- 9. Install the low side AC hose to the supermanifold to HVAC AC line assembly.
- 10. Recharge the A/C refrigerant. See Recharge (Heat Pump Model 3) O .



Note

Do not disconnect the laptop from the vehicle yet.

- 11. In Toolbox, select the Actions/Autodiag tab, and then search for "Thermal".
- 12. Click TEST-SELF_VCFRONT_X_THERMAL-PERFORMANCE, and then click Run.
- 13. After the routine ends, click the "X" at the upper right corner of the prompt.
- 14. Disconnect the laptop from the vehicle.
- 15. Install the underhood storage unit. See Underhood Storage Unit (Remove and Replace) O .