

Compressor Installation Insert

Please Read the Following Information Before Installing Compressor

The logo for Global Parts Distributors, LLC (gpd) features the lowercase letters "gpd" in a bold, sans-serif font. To the right of the text is a stylized graphic of three concentric, curved lines that resemble a signal or a fan, all contained within a white circular shape that is partially cut off by the blue background.

The compressor you are replacing failed for a reason. It is important that you find out why the compressor failed before installing the new unit. This process will keep you from replacing the compressor multiple times. 80% of compressor failure is due to lack of lubrication (oil) or a restriction in the system. Remember, 60% of the oil in the A/C system should stay in the compressor. Therefore, if the total amount of oil in the system is 6 ounces, then the compressor should contain 4 ounces of oil. As the refrigerant circulates through the system it carries the oil and returns it to the compressor. If the old compressor that failed has no oil or insufficient oil, the system has a refrigerant leak or a restriction which is preventing the return of the oil to the compressor. Debris and restrictions in the system prevent the correct amount of oil from reaching the compressor. If you do not repair the leak or correct the restriction, the new compressor will fail.

Use the following steps when installing the new compressor:

1. Verify the amount of oil that should be in the vehicle according to OEM specifications. If the vehicle has rear A/C, the amount of oil will be increased. Please check OE specifications.
2. Once the old compressor is removed, drain the oil. To do this, turn the compressor upside down. Rotate the front hub of the compressor to pump the old oil out. Drain the used oil into a clean cup and inspect for debris and contaminants. Variable or Sanden style compressors have an oil plug which must be removed in order to drain the used oil.
3. If the old oil removed from the compressor is clean of debris and contains 60% or more of the OEM specified amount, Flush the remaining oil out of the system. At this point determine why the original compressor failed. Is the clutch burnt? Does the system have proper voltage to the clutch? Does the compressor shaft seal or body gasket leak? If yes to any of these questions, high pressure could be the problem. The fan clutch or electric condenser fan, if malfunctioning, can cause poor airflow over the condenser which prevents the required heat transfer for the A/C system.
4. If there is no oil or insufficient oil in the old compressor, the system could have a Freon leak. Find the leaking component and repair or replace it. Do not use sealant in the system.
5. If the vehicle is 1996 or newer and the compressor oil is dirty or contains metal flakes, you should replace the condenser. Flush the evaporator and hoses with a solvent based flush. Do not use oil based flush. Ensure the system is as clean as possible before installing the new compressor.
6. Next, check the oil level of the new compressor. Remove the oil from new compressor by rotating the hub and emptying it into a clean cup and ensure it is the required amount specified by OEM specifications. After you have removed all the oil from the system, refill the compressor with the factory recommended amount of oil. If you have oil left in the system, subtract that amount of oil. Having too much or not enough oil in the system can cause compressor failure.
7. 7.Evacuate the system for at least 45 minutes. This process will remove the remaining flush and moisture.

It does take time to find out why the old compressor failed; however, it is important to find the reasoning behind the failure. If the original problem is not corrected, the A/C system will still have the same issues. Not properly diagnosing and repairing the problem will cost you time and money.

Do it right the first time.

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