

Main Reasons for a Clutch Failure

Clutch failure can be caused by many things. It is always best to pin point the reason for a failure. Clutch failure is usually caused by high pressure, voltage issues or a combination of both.

Checking Procedures:

- Check the refrigerant in the system. With an improper charge, the pressure switches will cause the compressor to constantly engage and disengage. If there is not enough charge, the compressor will over heat due to a lack of oil circulating. If there is too much refrigerant, the head pressure will run higher, causing overheating, leading to clutch failure.
- Check for a restriction in the system, such as a blocked condenser. This may cause the clutch to lock up and/or slip. The belt's tension adds force to the overheating compressor and will cause the clutch to overheat.
- Check the fan clutch or the electric fan assembly. An incorrect performing fan clutch or assembly can raise head pressure due to not enough air flow over the condenser. For vehicles with variable electric fans, check the ohm resistance to make sure it is performing correctly. There are usually more than one relay on these models too.

Remember: just because it is turning, does not mean it is working correctly!

- Correct oil levels. Make sure the system has the correct amount of oil. An insufficient amount going to the compressor will cause it to lock up. The belt tension adds extra force to the compressor, causing the clutch to overheat. Too much oil is just as bad when trying to circulate through the system.
- Check voltage to the coil. An incorrect voltage to the compressor will cause the clutch to slip and cause excessive wear on the clutch coil and hub. Check the voltage to the compressor and also the relays.

