

SHAFT SEAL SERVICING

The shaft seal assembly of the CCI compressor is of a simplified design, yet tight sealing, long lasting and, when necessary, easily and quickly replaced. CCI seals are machined to 3 helium light bands of flatness. The carbon is lapped to the seal plate and the fit becomes even better as the seal assembly is "run in" during operation.

The tendency to condemn a seal assembly because of very slight leakage is an error that is often committed. Few if any mechanical seal assemblies are 100% tight. The rubbing surfaces of the seal are separated by a very fine film of oil.

Oil carries refrigerant and minute quantities which seep to the outside may be detected with ultra sensitive leak detectors which are capable of sensing leakage totalling one ounce of refrigerant over a twenty year period. Such sensitivity serves a useful purpose in critical applications but for leak testing compressor joints or seal, a leak detector will pick up any leak of sufficient magnitude to require correction. Refer to comments on leak detector equipment, page 8.

Do not be too prone to condemn and replace a seal assembly until the seal has been given an opportunity to "run in" and until there is definite proof that replacement is really necessary.

If a refrigerant leak from the area behind the compressor clutch is verified with a refrigerant leak detector, replacement of the compressor shaft seal is recommended. Note: Up to a few drops of compressor oil may normally be found in the area under the front seal. Do not replace a seal based on the presence of small amounts of oil. Verify a leak with a refrigerant leak detector before replacement, then proceed as follows:

REMOVAL

1. Remove the compressor and place on work bench.



2. Brush off debris and dirt.



3. Use a clean lint free shop cloth to wipe clean the exposed end of the crankshaft.



4. Use Climate Control Seal Kit 488-25274



5. Caution! Prior to removing the seal plate screws, be certain that any compressor internal pressure has been relieved!

Remove the screws that hold the seal plate in place and lift plate from the compressor.



6. Using a flat blade screw driver, or similar tool, pry up and remove the seal retainer assembly. Use care not to scratch or mar the crankshaft or the machined face of the compressor.



7. In nearly every case the friction ring (boot) will not come off with the seal retainer assembly.