



The compressor oil level should never be permitted to go below the minimum oil level of 6 fluid ounces (177 ml). If oil must be added, the oil should be added until the level is 12 fluid ounces (355 ml). An excessive amount of oil is detrimental to the proper functioning of the entire system.

If a compressor replacement is made on a system which has been in operation, the oil charge of the new compressor should not exceed 12 fluid ounces (355 ml), unless specified by the OEM manufacturer.

When inserting the oil fill plug, the sealing "O" ring is slipped over the oil fill plug threads in such a manner that the "O" ring is not twisted. Insert the oil plug in the oil fill opening and tighten the plug snug. If the plug leaks, do not attempt to stop the leak by over tightening the oil check plug. A leak may be caused by dirt under the "O" ring or on the seat, a fractured "O" ring, or a damaged seat on the oil fill plug or oil fill opening. To stop leaks at the oil fill plug, correct the mechanical damages and insert a new "O" ring.

It must be remembered that the 206, 209 and 210 models are high speed compressors and satisfactory operation depends on proper lubrication.

LEAK CHECK EQUIPMENT

Most of the electronic leak checkers now on the market are capable of locating very small refrigerant leaks. Since open type bolted and flanged compressors have a permissible leak rate of one ounce per year, it then becomes quite important that the leak check equipment used be calibrated to pick up only those leaks which are in excess of the permissible one ounce per year limit. Since shaft seals depend upon oil for lubrication and sealing, it is quite natural to find oil in the shaft cavity.

This oil is heavily laden with refrigerant and electronic equipment would pick up this refrigerant and indicate it as a leak. When checking the shaft seal for leakage, the refrigerant-laden oil must first be flushed from the seal cavity with a solvent which does not affect the operation of the electronic leak equipment. Caution: some of the more common solvents contain chemical compositions which affect the operation of the leak detector equipment.

The major point to consider in any electronic type leak detection equipment is to be able to positively calibrate the equipment to the permissible leak rate and then to use the equipment as explained by its manufacturer. The speed at which the probe is moved is very important in locating the larger than permissible leaks.

EVACUATION, LEAK TESTING, ADJUSTMENT

The instructions contained in the installation and service manual of the air conditioning system manufacturer should be followed in evacuating and charging the system and for adjustment of all controls.

After charging, the entire system should be checked for leaks with a leak detector.

ROTATION-SPEED

The compressor may be operated in either a clockwise or counter-clockwise direction of rotation. No field adjustments are necessary. The compressor is designed for operation between 500 and 6,000 rpm maximum. (4000 rpm continuous rating).