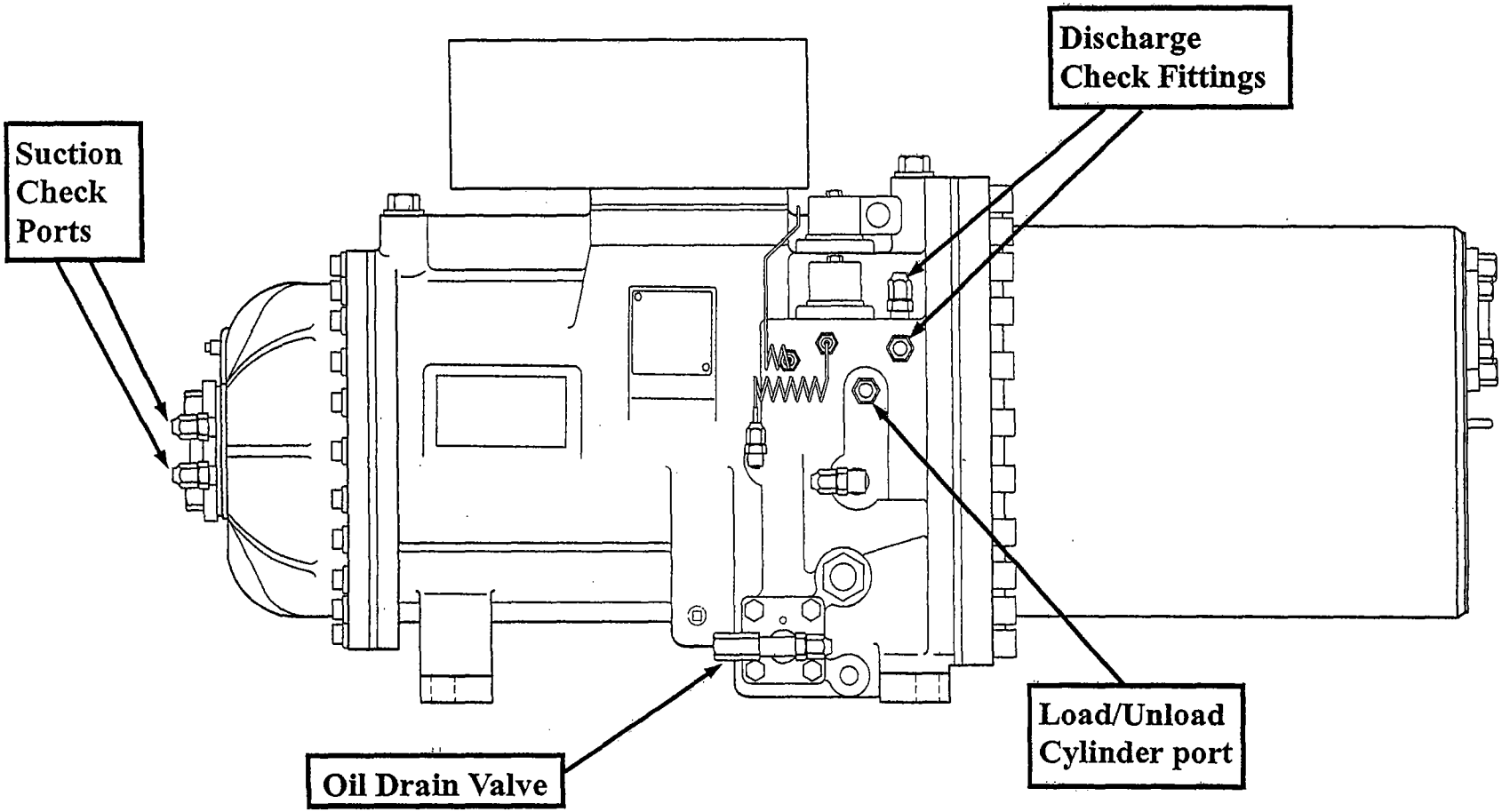
HITACHI – SRM HORIZONTAL SCREW COMPRESSOR MODELS: 4000, 5000 & 6000 SERIES

LOCATION OF FIELD SERVICE PRESSURE CHECK PORTS



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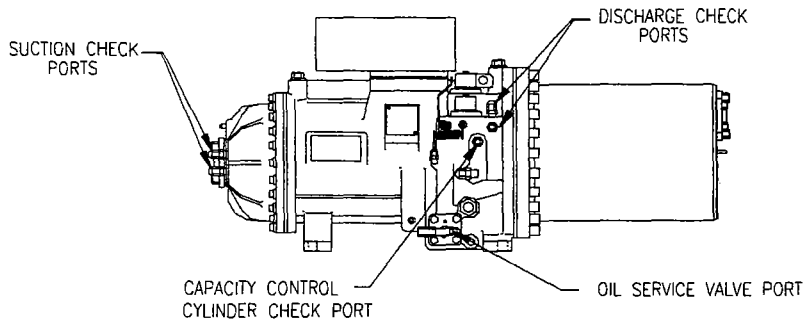
Authorized Nationwide HITACHI *Screw Compressor and Replacement Parts Distributor*

HITACHI – SRM HORIZONTAL SCREW COMPRESSOR

FIELD SERVICE PRESSURE CHECKS

FIGURE 1



The HITACHI Horizontal Screw Compressor is provided with a series of service check ports. These ports have been made available for use by a qualified service technician when service or maintenance to the compressor becomes necessary. These ports are identified in **Figure 1** above. On the suction end of the compressor, adjacent to the flanged connection for the suction piping, two suction pressure service ports are found in a horizontal position. There are two discharge service ports located very close to the capacity control solenoid valves. One of these ports is oriented horizontally, the other vertically as shown. In addition, a port is also provided that senses the pressure internal to the capacity control cylinder. A final port is located on the oil service valve.

ACCS Service Bulletin AC-01-003-03-0010 has been designed as an aid in the utilization of these service ports for service trouble shooting and maintenance of the HITACHI Horizontal Screw Compressor.

When the compressor is in operation, the following pressure readings will apply:

1. If there is greater than 5 PSIG differential between a discharge pressure check port reading and the pressure reading at the oil service valve, the 150 mesh oil strainer (located behind the four bolt oil valve plate) may be obstructed. Service to the oil strainer should be scheduled.
2. If there is more than 5 PSIG differential between a suction pressure check port and the pressure at a check port upstream of the flanged suction piping connection, service to the 80 mesh suction basket (located behind the four bolt suction piping connection) should be scheduled.
3. The pressure reading at the capacity control cylinder pressure port will be as follows:
    a. When the compressor is fully loaded, the pressure at the cylinder port will approximate suction pressure.
    b. When the compressor is fully unloaded, the pressure at the cylinder port will approximate discharge pressure.
    c. When operation of the compressor is in between fully loaded and fully unloaded, the pressure at the cylinder port will be at an intermediate pressure between suction and discharge pressure.
    d. The pressure reading should remain fairly constant at the cylinder port while the compressor is in a stable operational condition and all capacity control solenoids are de-energized.