Up to two questions “Funnel the Spec” to one product type.

Start at the top, follow the path down, end on the recommendation. Designed for distributors to send a customer ahead of a quote call.

QUESTION 1

What is the compressor doing wrong?

WON'T LOAD · WON'T UNLOAD · PRESSURE SWINGS

QUESTION 2A

Is the symptom on the capacity-control side or the load/unload side?

IF WON'T MATCH OUTPUT TO DEMAND · RUNS FULL-LOAD ALL DAY

RECOMMEND

Inlet Control Valve

Inlet valve stuck open is the leading suspect on a rotary-screw that can't unload. Confirm with the intake housing off: if the solenoid clicks but the valve doesn't move, the valve is the part. Quote the cross.

IF WON'T START UNLOADED · HARD-STARTS · OVERLOAD TRIPS

RECOMMEND

Unloader Valve

Failed unloader on the startup-vent function. The motor is starting against full stored system pressure because the head isn't being vented. Quote the cross: same-day fix.

RUNNING HOT · RUNNING COLD · WATER IN THE OIL

QUESTION 2B

Is the cooler side already verified clear (fan, fins, water-cooled supply)?

IF YES · COOLER IS HEALTHY · STILL OUT OF BAND

RECOMMEND

Thermostatic Valve

Running hot with cooler verified = stuck bypassed. Running cold in normal ambient = stuck full-flow to cooler. Capture the original setpoint and quote the matching aftermarket cross: setpoint mismatch shifts the whole operating band.

IF NO · COOLER NOT VERIFIED YET

RECOMMEND

Thermostatic Valve

Verify cooler airflow / water flow first: fan, fins, and supply lines are cheaper eliminations. Then return to the thermostatic cross. Customers who've already replaced the cooler fan and are still hot are the warmest leads.

ELECTRIC BILL SPIKED · RUNS CONTINUOUSLY · OIL OUT THE INTAKE

QUESTION 2C

Continuous full-load with no unload cycle, or oil dripping at the intake housing?

IF CONTINUOUS FULL-LOAD · WON'T DROP TO UNLOAD CURRENT

RECOMMEND

Unloader Valve

Stuck-closed unloader is the leading suspect on a 50%+ bill jump. Clamp-meter the motor: if current never drops to unload state, the unloader (or its pilot signal) has failed. Bundle with the rest of the control-valve set.

IF OIL DRIPPING AT THE INTAKE FILTER HOUSING ON SHUTDOWN

RECOMMEND

Inlet Control Valve

Inlet-valve seal failure: pressurized oil-laden air blowing backward through the air-end on shutdown. Quote the cross plus a new intake filter element (the old one is oil-soaked and unusable).

None of the three valves on this page is a customer-installed item: they ship inside the compressor package the day the OEM built it, and they only come up again when the compressor stops behaving. **Every quote on this page starts with the compressor nameplate**

(make, model, HP, serial) and ends with a bundled service event: separator, oil filter, intake filter, and oil on the same PM. The cross-reference math wins on price (40–60% of OEM list) and on logistics (same-day vs. multi-week lead). The diagnostic step in the middle is what separates the SPC quote from a generic parts retailer.

“The customer doesn't buy these valves: they fail them. The conversation is diagnostic-first, nameplate-second, and a bundled service kit on the same lockout.”

SPC DISTRIBUTOR PLAYBOOK COMPRESSOR INTERNAL VALVES · HOW TO CROSS-REFERENCE IN ONE CALL