

Service Letter

Service Letter No. 420
December, 1994

SUBJECT: Check Valve Assemblies

MODELS AFFECTED: 349 and 349A

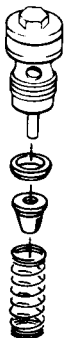
New Check Valve Group

Jacobs released a redesigned check valve group, P/N 019957, in January, 1994. The new design incorporates a ball and cone design to make the valve more tolerant to any small debris that may be present in the housing. This group replaces the check valve body assembly, P/N 018606, as well as the check valve group, P/N 019564, used to replace damaged valves, seats or springs.

Check valve leakage caused by debris can be detected by inspecting the check valve seating surfaces during check valve replacement or during other housing disassembly procedures. Any scratches or scoring on these surfaces that can be detected with a fingernail will cause leakage. Jacobs recommends that when a failed check valve is found during inspection of the housing assembly, all three of the check valve assemblies in that housing be replaced. The housing should also be cleaned according to Service Letter No. 414.

Any inventory of the check valve body assembly, P/N 018606, or group, P/N 019654, should be used until supply is exhausted. Any new orders for these parts should be replaced by the check valve group, P/N 019957. The check valve group, P/N 019957, may be mixed with the older design groups on the same engine, but the individual parts of the groups cannot be mixed.

This is a Jacobs product improvement and not subject to campaign.



Old Check Valve Group
P/N 019564



New Check Valve Group
P/N 019957

Check Valve Body Removal

If the check valve body assembly, P/N 018003, in a Model 349/349A fails so that the sealed portion of the body is broken away from the threaded portion, the threaded portion of the body remaining in the engine brake housing should be removed in order to avoid replacement of the whole housing. To facilitate this, use a 1/2" x 4-1/8" screw extractor (Easy-Out #7 or equivalent). Jacobs will not warrant the replacement of housings when no attempt to remove the remaining portion of the check valve body has been made. If one check valve body is broken, all three check valve assemblies in that housing should be replaced.

Note that a new check valve group is available as a replacement (P/N 019957). Be sure to refer to the Model 349A Installation Manual, P/N 018312, or Maintenance Manual, P/N 018151, for proper installation of the check valve assembly. The check valve should be tightened to no more than 35 lb.-ft. (48 N•m) of torque.