



TIM'S TECH TIPS



Case Drain Filter Assemblies

In our [Rotation Circuits Requiring a Case Drain Tech Tip](#), we discuss how important proper case drain line installation is for keeping an attachment running.

We also state the case drain line needs to run through its own 12 gpm, 10 micron return filter and directly into the suction side of the excavator hydraulic tank.

This led many of you to ask, "Which case drain filter should I use, and where do I purchase?"

Below is a list of case drain filter/ head assemblies with which we're familiar. Any of these will work, and not to favor any one supplier, but most of what we've seen used in the field is supplied by Parker.

Case Drain Filter Heads and Filters

Napa 4034 adapter 1551 filter

Baldwin OB8711 filter base BT8844 filter

Cross 158019 adapter base with filter found online

Parker 12AT10CN15MMH base with filter

And remember, failing to properly plumb the case drain can, and likely will, lead to motor and gearbox output shaft seal failures and lost time for repairs.

Rotation Circuits Requiring a Case Drain

The rotation circuit case drain line is a critical piece of the plumbing picture when it comes to keeping an attachment running trouble free. Incorrectly connecting the case drain line at the excavator, an issue we see all too often, results in costly repairs and downtime.

When the rotation circuit is connected to another return circuit, case drain line or anything running back through the excavator return filters, it is only a matter of time before the circuit pressure exceeds the level the rotation motor case seal can handle. When the pressure goes beyond this amount, it back-pressurizes the case drain line and seal, causing the seal to blow out. Oil then bypasses the seals, and because it has nowhere else to go, fills and pressurizes the gear box and blows out the gearbox prior seal.



Incorrectly installing a case drain line costs time and money. If you have questions, contact Tim at 218-349-5755, talseth@genesisattachments.com, or Loren at 715-919-8316, llagesse@genesisattachments.com