



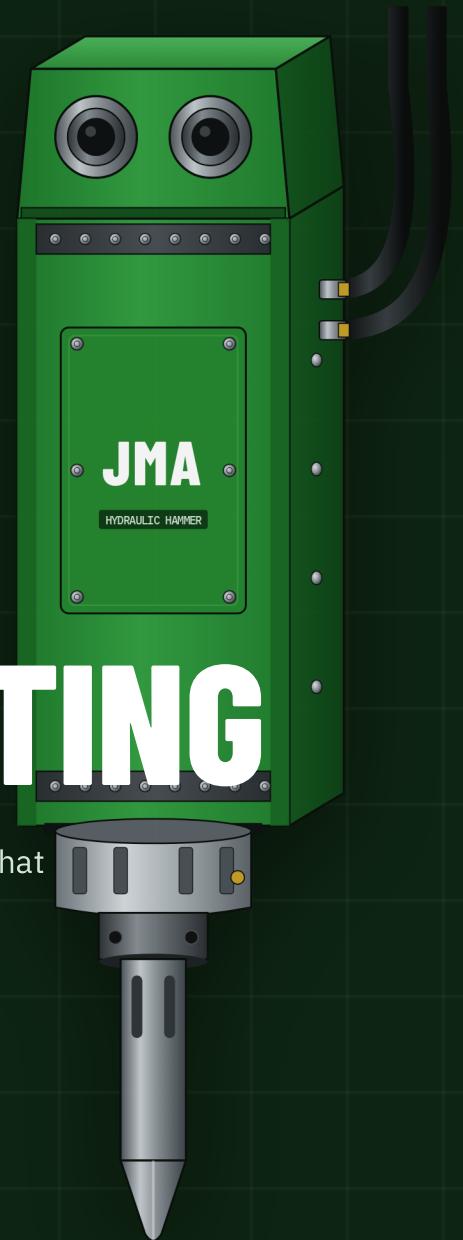
FIELD GUIDE

HAMMER TROUBLESHOOTING

The checks to run before you call for service. Most hammers that "won't work" only need commissioning.



Release all nitrogen before loosening any bolt on the hammer or accumulator. Stored gas can kill.



01

60-second checks

02

Won't strike

03

Weak blows

04

Other faults

05

Reference tables

01 START HERE

THE 60-SECOND CHECKS

Run these six checks first. They solve most "the hammer stopped working" calls, and you will need the answers if you do contact us.

CHECK	WHAT TO DO	SHOULD BE
Hoses	Confirm the pressure line is on IN and the return on OUT , and that both shut-off valves on the arm are fully open.	Correct way round, valves open
Oil level and condition	Check the carrier's tank level and look at the oil.	Full, clean, not milky
Oil temperature	Read the carrier's gauge after 10 minutes of work.	60–80 °C, never above 90 °C
Nitrogen	Check the back head charge with the gauge from the kit (section 05).	16–17 kg/cm ² (230–240 psi) cold
Grease	Press the chisel up into the front head and pump grease.	Greased every 2 hours of work
Chisel	Check that the chisel slides freely in the bush and that the pins are not bent or mushroomed.	Free, no cracks or burrs

NOTICE

A new hammer that will not strike is almost always a commissioning problem: pressure, nitrogen or flow, not a fault in the hammer. Work through section 02 before anything is taken apart.

02 NO BLOWS

THE HAMMER WILL NOT STRIKE

Follow these steps in order. Stop as soon as the hammer starts working.

STEP 1 • CHECK THE CARRIER'S PRESSURE AND FLOW

Measure the pressure in the hammer line with a gauge, or read the carrier's own gauge. Compare it with the model table in section 05. Too little pressure or flow is the most common cause.

STEP 2 • RE-COMMISSION THE NITROGEN

- 1 Release the nitrogen in the back head down to **3–10 kg/cm²** (43–142 psi), or empty it.
- 2 Press the chisel down onto the material and test-fire the hammer.
- 3 When it strikes normally, recharge the back head in steps of **2 kg/cm²** until it reaches **16 kg/cm²** (230 psi), testing as you go.

STEP 3 • REVERSE THE LINES BRIEFLY

- 1 Empty the nitrogen from the back head.
- 2 Swap the IN and OUT hoses and fire the hammer for **no more than 1 minute**. This can clear a stuck valve.
- 3 Put the hoses back the correct way round and test again, then recharge the nitrogen as in step 2.

▲ CAUTION

Never run the hammer reversed for longer than a minute, and never leave it connected that way. Nobody may stand in front of the chisel during these tests.

STEP 4 • IF IT STILL WILL NOT STRIKE

Dirt has probably reached the control (reversing) valve. The valve must be flushed or replaced by a hydraulic technician. Stop here and contact JMA with the details in section 06.

03 WEAK BLOWS

THE HAMMER HITS WEAKLY

Weak or slow blows nearly always come from nitrogen, carrier pressure or hot oil, in that order.

CAUSE	HOW TO CHECK	FIX
Low nitrogen in the back head	Read the charge cold with the gauge from the kit.	Raise to the value in section 05, in 2 kg/cm ² steps.
Low carrier pressure	Measure at the hammer line; compare with section 05.	Have the relief and pump pressure adjusted by a technician.
Oil too hot	Read the oil temperature after 10 minutes of work.	Keep 60–80 °C. Above 90 °C, stop and cool. Replace tired oil; use the right viscosity (VG 46 cold, VG 68 hot).
Frequency valve closed too far	Models from the JMASB81EBH up have a frequency (FM) adjuster.	Turn a quarter turn at a time: clockwise slows the blow rate, counterclockwise speeds it up.
Not enough down-force	Watch the carrier's front while breaking.	Press down until the front just starts to lighten, and keep the chisel at 90°.
Worn chisel or bush	Check the gap between chisel and front bush.	Replace the bush over 6 mm gap (small models) or 8 mm (large).

NOTICE

A mismatch between hammer and carrier pressure is normal on a new install and is not a fault in the hammer. It is corrected by commissioning.

04 OTHER FAULTS

OTHER COMMON FAULTS

SYMPTOM	LIKELY CAUSE	FIX
Oil leaking after the hammer has stood	The main oil seal was crushed because the hammer was stored wrongly, or the seal is old.	Store it correctly (below). Replace the seal: expect a change after 800–1,000 hours or 3–6 months of work, depending on conditions.
Hoses shake violently	Low nitrogen in the back head or accumulator; damaged accumulator diaphragm.	Stop work. Check and recharge the gas; replace the diaphragm if the charge will not hold.
Irregular or stuttering blows	Too little down-force, hot oil, high return-line back pressure, worn chisel or bush.	Correct the technique first, then check the oil cooler, filter and bush wear.
Gas will not hold	Damaged charging-valve O-ring, back head O-ring or gas seal.	Replace the O-rings from the seal kit; check with soapy water.
Chisel sticks or breaks	No grease, angled blows, prying, worn bush, blank firing.	Grease every 2 hours, keep the chisel square, never pry, replace the bush.
Hammer overheats	Engine speed too high, flow above the hammer's range, dirty cooler.	Run at rated rpm, set flow to the model range, clean the cooler.

STORING A HAMMER SO THE SEALS SURVIVE

- 1 Release all the nitrogen from the back head (and the accumulator on large models).
- 2 Remove the chisel.
- 3 Push the piston fully in with a round bar, then grease the front head well.
- 4 Lay the hammer flat on timber, cap the hoses, and keep it under cover.

▲ DANGER

Before any disassembly: empty the nitrogen from the back head, and from the accumulator before its screws are touched. Only then remove side bolts and through bolts. When refitting an accumulator, oil it lightly, tighten the screws in a diagonal pattern, then charge the gas.

REFERENCE TABLES

OPERATING FLOW AND PRESSURE AT THE HAMMER

MODEL	CHISEL Ø (MM)	FLOW (L/MIN)	FLOW (GPM)	OPERATING PRESSURE (KG/CM²)	OPERATING PRESSURE (PSI)	NEVER EXCEED (KG/CM²)
JMASB20EBH	45	20–30	5.3–7.9	90–120	1,280–1,707	140
JMASB30EBH	53	25–50	6.6–13.2	90–120	1,280–1,707	140
JMASB40EBH	68	40–70	10.6–18.5	110–140	1,565–1,991	160
JMASB43EBH	75	50–90	13.2–23.8	120–150	1,707–2,133	160
JMASB50EBH	100	80–110	21.1–29.1	150–170	2,133–2,418	200
JMASB60EBH	125	90–120	23.8–31.7	150–170	2,133–2,418	220
JMASB81EBH	140	120–180	31.7–47.6	160–180	2,276–2,560	240
JMASB121EBH	155	180–240	47.6–63.4	160–180	2,276–2,560	260
JMASB131EBH	165	200–260	52.8–68.7	160–180	2,276–2,560	260
JMASB200EBH	200	280–350	74.0–92.5	240–260	3,414–3,698	280

Operating flow and pressure are the factory specifications shown on each product page. The last column is the ceiling from the factory commissioning sheet: never set the circuit so the hammer runs above it.

BACK HEAD NITROGEN (COLD)

JMASB20 – SB50 16–17 kg/cm² · max 18
230–240 psi

JMASB60 – SB81 17–18 kg/cm² · max 19
240–255 psi

JMASB121 – SB200 17–19 kg/cm² · max 23
240–270 psi

Standard value for all models: 16.5 kg/cm² (235 psi).
Adjust in 2 kg/cm² steps. A large carrier with a small hammer may run up to 20 kg/cm².

ACCUMULATOR NITROGEN

Fitted on the JMASB121EBH, SB131EBH and SB200EBH. The accumulator cushions the oil pressure and protects the carrier's pump.

Standard 60 kg/cm² (855 psi), adjustable between 55 and 65 kg/cm² as needed.

STILL NOT FIXED?

Send us these six things and we can usually tell you what is wrong without the hammer leaving the job.

1

Model and serial number
from the data plate

2

Carrier make, model and
operating weight

3

Hours on the hammer

4

Measured flow, pressure
and oil temperature

5

Back head (and
accumulator) nitrogen
reading

6

A short video of the
hammer running

WARRANTY CLAIMS

Stop using the hammer as soon as a fault appears. Email **warranty@jmattachments.com** with the subject "WARRANTY CLAIM – [Order number] – [Model]". We acknowledge claims within 2 business days and decide within 5. JMA hammers carry a 24-month warranty with coverage that varies by component; the warranty card lists each part.

▲ CAUTION

Damage from blank firing, prying, running outside the rated flow or pressure, missing grease or contaminated oil is not covered. Keep your service log up to date; it supports your claim.



PARTS ON THE SHELF

Seal kits, bushes, chisel pins, chisels and nitrogen kits for every JMA hammer, at jmattachments.com.

ONLINE

jmattachments.com

WARRANTY

warranty@jmattachments.com