

Breville[®]

Barista Express Impress (BES876)



Grind ■ Dose ■ Tamp ■ Extract ■ Enjoy

Fault Tree Analysis (FTA)

Low Espresso Output



What is Low Espresso Output?

- Lower than expected volume (e.g., less than target weight)
- Very slow dripping or no flow
- Normal flow but small volume
- Weak body or crema
- Inconsistent results



Target Reference (Example)

Common starting point: 18 g coffee → ~36 g espresso
Exact target depends on beans, basket, and personal taste.

OR

A Coffee Puck Restriction



Water cannot pass through the coffee puck at the intended rate.

OR

A1



Grind too fine

Puck permeability too low

A2



Excessive dose

Too much coffee in basket

A3



Excessive tamping

Puck too resistant

A4



Uneven distribution

Inconsistent flow

A5



Stale or unsuitable beans

Poor extraction behavior

B Water-Path Restriction



Adequate water is not reaching the group head or cannot pass through the brewing path.

OR

B1



Blocked basket

Outlet holes clogged

B2



Blocked group screen

Coffee residue or oils

B3



Scale buildup

Internal restriction

B4



Water tank issue

Empty, misseated, or filter restriction

C Machine Delivery Failure



The machine cannot deliver the required water volume or pressure.

OR

C1



Pump pressure

Low pump pressure or flow

C2



Airlock

Air in hydraulic system

C3



Valve issue

Solenoid or internal restriction

C4



Flow meter / control

Flow measurement or electronic issue

D Extraction Program / Operation



The machine is capable, but the extraction is stopped or configured incorrectly.

OR

D1



Shot volume too low

Programmed low volume

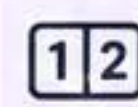
D2



Stopped early

User stopped extraction

D3



Wrong button

1-cup vs 2-cup selection

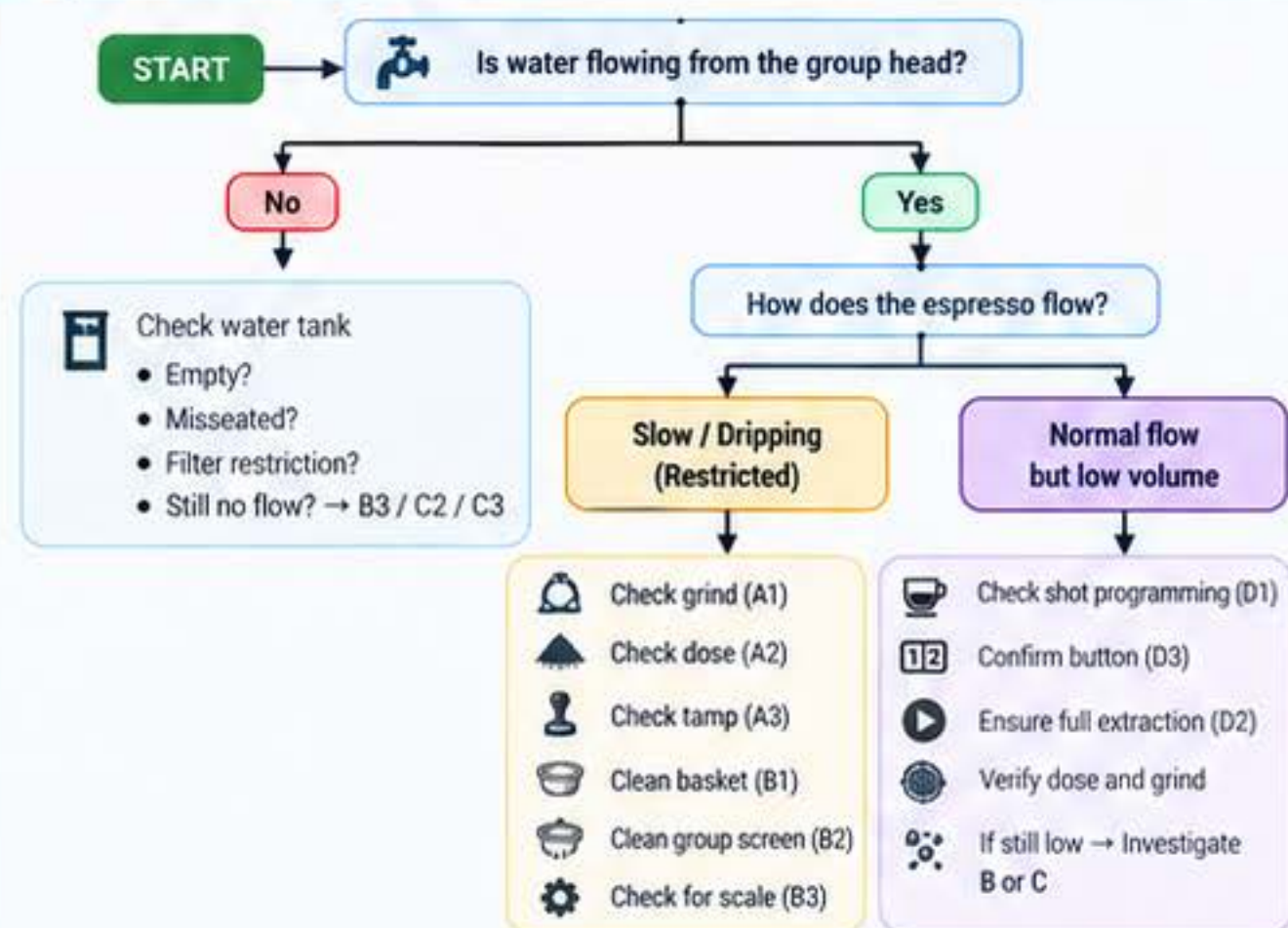
D4



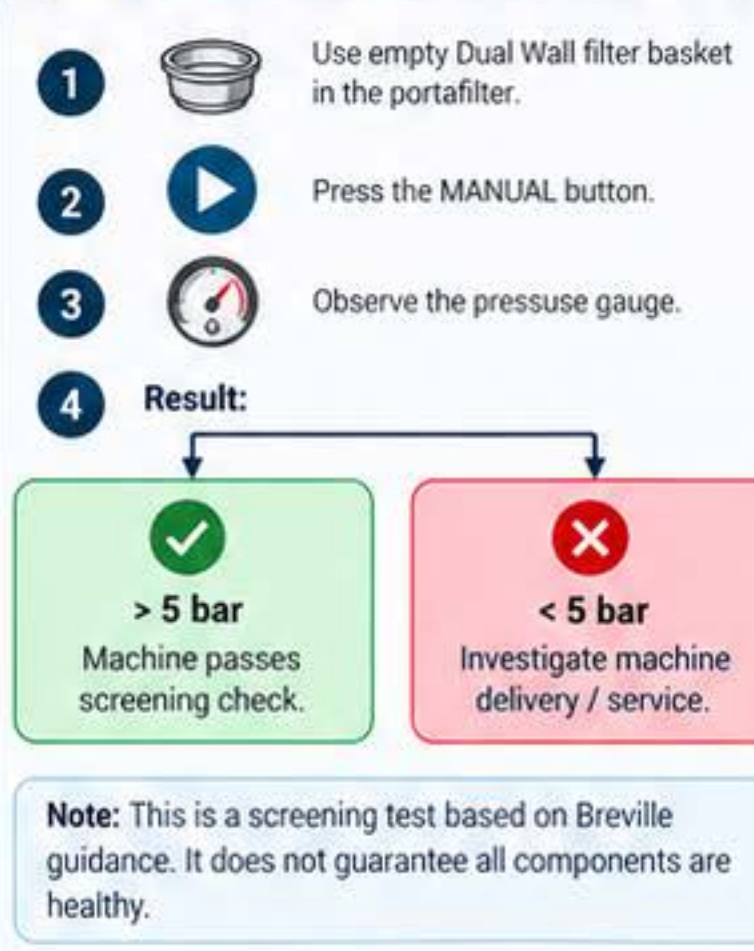
Incorrect setup

Operating mode or procedure

Diagnostic Flowchart



Key Diagnostic Test (Machine Check)



Troubleshooting Steps (Recommended Order)

- 1 Define and measure the problem (use a scale).
- 2 Check coffee setup (grind, dose, tamp, distribution).
- 3 Inspect and clean flow path (basket, group screen, tank).
- 4 Perform machine isolation test (empty basket).
- 5 Verify shot volume programming and button selection.
- 6 If unresolved, investigate internal hydraulic or electronic issues.

Common Symptoms and Likely Causes

Symptom	Most Likely Causes
Very slow dripping	A1, A2, A3, B1
Normal flow but low volume	D1, D2, D3 (or underdosing)
No water from group head	B4, B3, C2, C3
Low output even with empty basket	C (machine delivery)
One-cup low, two-cup normal	D1 / D3 (programming)
Both one-cup and two-cup low	B, C, or global setup issue

Preventive Maintenance

- Use fresh beans
- Keep grinder clean
- Clean basket regularly
- Clean group screen
- Descale as recommended
- Use filtered water
- Follow proper dosing & tamping
- Check and maintain tank and filter

Key Takeaways

- ✓ Most low output issues are related to grind, dose, tamp, or blockages.
- ✓ Use the empty basket manual test to separate machine vs. coffee issues.
- ✓ Verify shot volume programming if flow is normal.
- ✓ Clean regularly and use fresh beans.
- ✓ Change one variable at a time.

References

- Breville Barista Express Impress User Manual (BES876)
- Breville Troubleshooting Guide
- Breville Product Support
- General Espresso Brewing Best Practices