

CARPET BOOSTER / MANUFACTURER EVALUATION

One host. A decision backed by evidence.

A proposed evaluation of a separately activated carpet-agitation mechanism. Ordinary brush cleaning and suction continue. Physical performance remains unvalidated.

The customer use case

For the person working on a stubborn carpet patch, a deliberate boost would add a second cleaning action while ordinary brush cleaning and suction continue. The benefit to test is additional captured embedded soil at matched cleaning time.

Why it may belong on a roadmap

A demonstrable carpet feature could support a premium head, a carpet-focused accessory or a selected platform. The product team should test whether customers understand and value the action. No consumer preference, price premium or sales increase has been established.

What the venture brings

Cited research, a proposed mechanism, engineering schematics, test definitions and a prior-art landscape for controlled review. A funded scope would develop samples, produce raw data and define transfer support. Finished hardware and results are not available yet.

What the OEM contributes

One candidate head and vacuum, platform limits, relevant carpet/soil priorities, an engineering sponsor, a product decision-maker and agreed evaluation resources.

The licensing objective

Develop and transfer the mechanism to the manufacturer. A later agreement could combine development fees, milestones and per-unit royalties for defined U.S. rights and know-how. Commercial terms and any exclusivity would be negotiated after technical and rights review.

Start after bench feasibility

The first research fixture would establish controlled motion, contact loads and credible collection measurement. Compact OEM packaging and vibration isolation are subsequent tasks, informed by those data.

Proposed evaluation scope

One host and an agreed carpet/soil matrix. Compare the ordinary brush, installed inactive module, stationary contact and active agitation. Hold cleaning time and travel constant; run matched-flow and fixed-source-setting comparisons separately.

Deliverables at the decision gate

1. Documented samples, settings, calibration and baseline.
2. Repeated-trial raw data, collected and residual soil, and uncertainty.
3. Findings on airborne release, wear, sound, handling, normal-mode pickup and energy.
4. Host-interface risks, service needs and an estimate supported by actual quotations.
5. A proceed, redesign or stop recommendation against pre-agreed criteria.

Timing, funding and scope control

Plan an 8-12 week evaluation after initial bench feasibility and agreement on host, samples, resources and disclosure terms. This is a planning target, not a delivery promise. Set the fee from a statement of work and actual engineering/lab quotations; no price is offered here.

Before technical transfer

Agree permitted use, confidentiality, sample and data access, background rights, improvement ownership and the end-of-evaluation decision. Patent drafts are unfilled. No patent protection, legal clearance or performance result is asserted.

Proposed next step

Identify the candidate platform, the minimum useful improvement, product limits and the people authorized to sponsor the work. Detailed enabling material remains in a separately controlled package.

Research starting points

- [Textile mechanical-disturbance research](#) - adjacent textile evidence; not a performance result for this head.
- [ASTM F608-24](#) - embedded-dirt removal method reference. No compliance testing has been performed.