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RHINO
CLEANING MACHINES

AS-690

BATTERY WALK-BEHIND SWEEPER

OPERATION & PARTS MANUAL

Rhino Cleaning Machines | Rev. 06-2026

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OVERVIEW

The Rhino AS-690 is a battery-powered, walk-behind floor sweeper built for commercial and industrial use. It pairs a 400 mm main brush with dual side brushes for a full 1,000 mm sweeping path, collecting dust and light debris into a 22 L hopper. A maintenance-free 12V battery delivers roughly five hours of run time per charge, and an integrated filter with a manual dust-shaker keeps suction strong throughout the shift.

SPECIFICATIONS

Product Model	AS-690
Battery	12V 100Ah / approx. 5 hr run time
Main brush length	400 mm
Side brush diameter	400 mm
Total sweeping width	1,000 mm
Cleaning rate	4,000 m²/hr
Total power	270 W / 340 W
Dust filter area	1.5 m²
Hopper capacity	22 L
Optional water tank	12 L

WHAT'S IN THE BOX

Sweeper unit, 12V 100Ah battery, charger, and ignition key (the key ships inside the manual's plastic bag to prevent loss in transit). Inspect the carton on arrival; if there is visible shipping damage, keep the packaging and file a claim with the freight carrier right away.

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OPERATION

CONTROLS

- Key switch (ignition)
- Main brush button
- Side brush button
- Battery charge display
- Charging port
- Main brush height adjuster
- Handle height adjuster
- Side brush height adjuster
- Hopper handle & dust-shaker handle
- Water spray pump button (if equipped)

STARTING

- Insert the key and turn it to ON.
- Confirm the hopper and covers are closed.
- Switch the main brush and side brushes to the ON ("I") position.
- Guide the machine over the floor at a steady walking pace.

STOPPING

- Switch the brushes to OFF ("0").
- Turn the key to OFF and remove it.
- Empty the hopper after every use.

OPERATING TIPS

- Empty the hopper as soon as it fills — a full hopper or blocked filter stops debris pickup.
- Work the dust-shaker handle (about ten pulls) periodically to clear the filter and maintain suction.
- For larger debris, briefly tip the front wheels up as you advance over it.
- Don't park the machine with the brushes spinning in one spot; it can mark the floor.
- In freezing conditions, dry the hopper after use to prevent ice damage.

SAFETY

- Only trained, authorized operators should run this machine. Keep children away.
- Turn the key OFF and remove it before any cleaning, adjustment, or repair.
- Do not use on slopes that exceed the machine's rated incline, or as a means of transport.
- Do not sweep burning, smoking, flammable, toxic, or sharp/stringy material (rope, belts, standing water).
- Operate and store between -10°C and 40°C.

Battery safety: Charge in a well-ventilated area away from open flame — charging produces hydrogen gas. Disconnect the negative (−) lead first, then the positive (+). Never rest tools or metal across the terminals. Do not touch the battery terminals or DC plug pins during charging.

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MAINTENANCE

Routine maintenance protects the service life and safe operation of the sweeper. Always stop the machine and remove the key before servicing; remove the battery if required.

MAIN BRUSH HEIGHT

Bristles should contact the floor by 3–5 mm — more is not better. As the brush wears, turn the right-side rotary handle counter-clockwise one notch (about 2 mm) to lower it. When the handle reaches its last position, reset it and adjust via the nut behind the front cover.

REPLACING THE MAIN BRUSH

- Remove the housing screws and detach the left/right linkage rods.
- Support the machine and slide the main brush out.
- Move the left/right fixing sleeves to the new brush in the same positions.
- Reinstall, fasten, and reset the height to 3–5 mm. Wear gloves — bristles can cut.

SIDE BRUSHES

Adjust with the left-side rotary handle when the side brushes no longer reach the floor cleanly. To replace, power off, lift the machine, remove the three bolts under the brush plate, fit the new brush, and reset height.

FILTER & HOPPER

- Pull the dust-shaker about ten times whenever suction drops.
- To deep-clean, remove the hopper and gently scrape the filter base with a smooth (burr-free) edge.
- Never wash the filter with water or detergent. Replace it if cracked.

BATTERY

Recharge when the warning light/alarm activates and at least once every two months. Power off the AC side before disconnecting the DC plug.

MAINTENANCE SCHEDULE (TYPICAL)

- **Every 10 hrs:** Check brush height; inspect brushes for wear or tangled debris; check filter cleanliness; check apron height.
- **Every 50–100 hrs:** Inspect drive belt; tighten screws and nuts.
- **Every 200–500 hrs:** Inspect brush and belt wear; replace the main brush drive belt as needed.

Warranty note: Consumable wear parts (main brush, side brushes, belts, pulleys, filter) and damage from improper use, neglect, or unauthorized modification are not covered. Source replacement parts only through Rhino or an authorized distributor.

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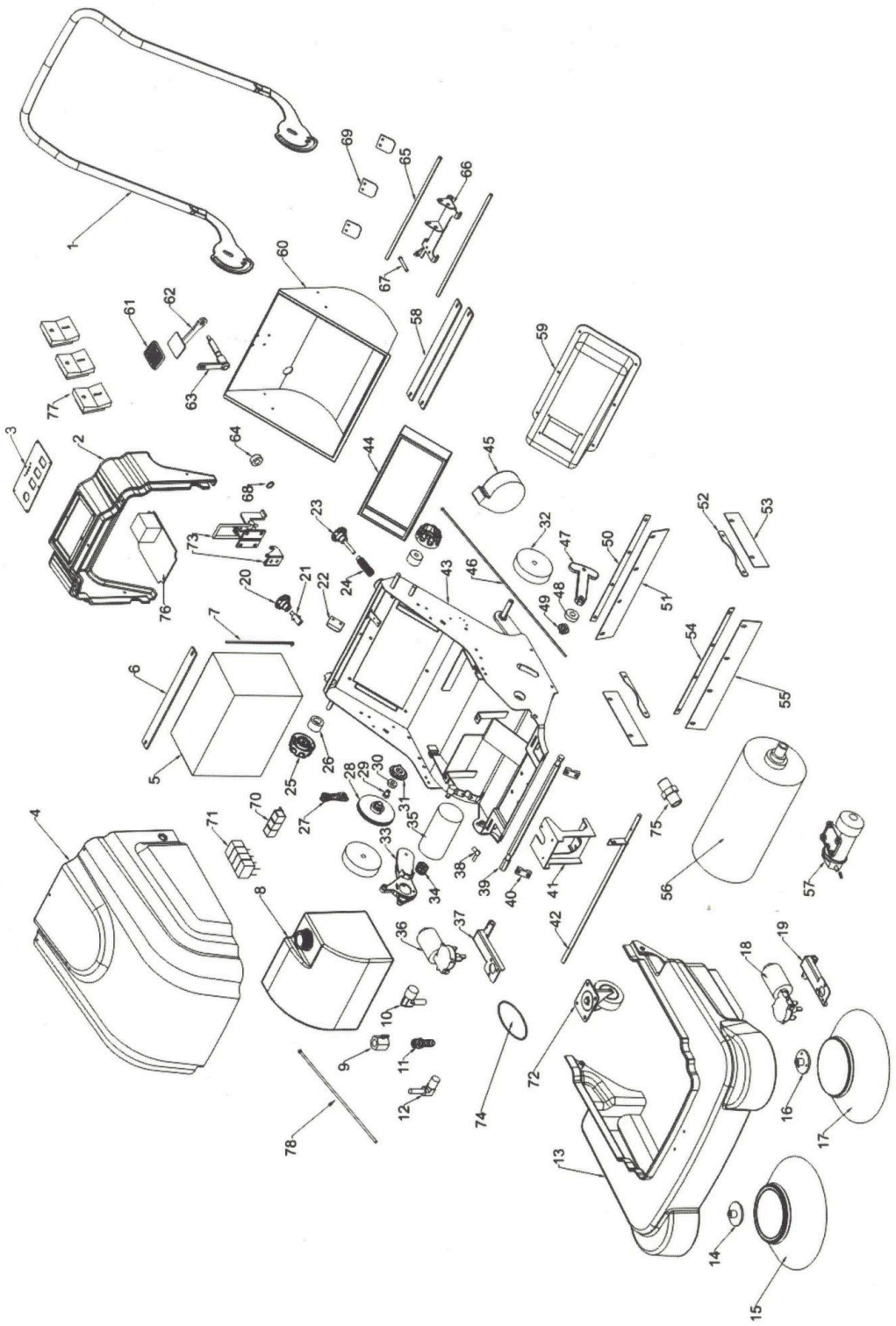
EXPLODED VIEW

Numbered callouts (1–78) correspond to the Ref. column in the Parts List on the following page.



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PARTS LIST

Reference numbers (Ref.) correspond to the callouts on the exploded-view schematic. When ordering, please provide the Rhino part number.

REF.	PART NUMBER	DESCRIPTION	QTY
1	RHAS-PSHAND	Push-handle	1
2	RHAS-RRCVR	Rear cover	1
3	RHAS-SWPNL	Switch panel	1
4	RHAS-TPCVR	Top cover	1
5	RHAS-100BATT	12V 100Ah battery	1
6	RHAS-BATTPRES	Battery press (piece)	1
7	RHAS-BATSCREW	Battery hold-down screw	2
8	RHAS-WATANK	Water tank	1
9	RHAS-BALLVLV	4-point internal/external thread ball valve (optional)	1
10	RHAS-10BRELB	4-point φ10 barb elbow (optional)	1
11	RHAS-10BRSTR	4-point φ10 barb straight fitting (optional)	1
12	RHAS-6BRELB	1-point φ6 barb elbow (optional)	1
13	RHAS-FRAME	Frame	1
14	RHAS-SDBRHUB	Side brush hub	1
15	RHAS-SDBRUSH	Side brush	1
16	RHAS-SDBRHUB	Side brush hub	1
17	RHAS-SDBRUSH	Side brush	1
18	RHAS-BRSHMTRA	Side brush motor (right) A	1
19	RHAS-BRSHMTRB	Side brush motor (right) B	1
20	RHAS-M10KNOB	M10 knob nut	1
21	RHAS-MBRSHSCW	Adjusting screw for main brush	1
22	RHAS-CHRGSKT	50A Charging socket	1
23	RHAS-1030KNBNT	M10 x 30 knob nut	1
24	RHAS-SBRSHSCW	Adjusting screw for side brush	1
25	RHAS-M12KNOB	M12 knob nut	1
26	RHAS-RBPDPSHHD	Rubber pad for push handle	2
27	RHAS-BRAKEARM	Brake arm	1
28	RHAS-LGDRVPULL	Driven pulley (large)	1
29	RHAS-BEARSLEEVE	Driven pulley bearing sleeve	1
30	RHAS-6001BEAR	6001 bearing	2
31	RHAS-FXSLVMNBRH	Fixing sleeve of main brush (left)	1
32	RHAS-AXLEWHEEL	6-inch dual-axle wheel	2
33	RHAS-MTRFRAME	Mounting frame of main brush motor	1
34	RHAS-SMDRVPULL	Drive pulley (small)	1
35	RHAS-MNBRUSHMTR	Main brush motor	1
36	RHAS-SDBRSHMTR	Side brush motor (left)	1
37	RHAS-SDBRSHSPT	Side brush motor support (left)	1
38	RHAS-RODEND	Rod-end bearing	2
39	RHAS-HEXROD	Hex rod	1
40	RHAS-THREADLCK	Thread-locker	2
41	RHAS-APBRACK	Apron bracket	1
42	RHAS-SDBRSHROD	Adjusting tie rod of side brush	1
43	RHAS-MAINFRAME	Main frame	1
44	RHAS-DUSTSCREEN	Dust filter screen	1
45	RHAS-12VFAN	12V fan	1
46	RHAS-SDBRSHWIRE	Wire drawing for lifting of side brush	1
47	RHAS-MAINROD	Connecting rod of main brush	1
48	RHAS-6203BEAR	6203 bearing	1
49	RHAS-FIXSLEEVE	Fixing sleeve of main brush (right)	1
50	RHAS-RRBRSTRIPR	Rear rubber strip retainer	1
51	RHAS-RRBRSTRIP	Rear rubber strip	1
52	RHAS-LFTRTRETAIN	Left/right rubber strip retainer	2
53	RHAS-LFTRTRBBR	Left/right rubber strips	2
54	RHAS-RBBRCLIP	Front rubber strip retainer	1
55	RHAS-RBBRSTRIP	Front rubber strip	1
56	RHAS-MAINBRSH	Main brush	1
57	RHAS-WATERPUMP	12V water pump (optional)	1
58	RHAS-FIXEDPLATE	Fixed plate of dust filter screen	2
59	RHAS-FANCVR	Fan cover	1
60	RHAS-DUSTBIN	Dustbin	1
61	RHAS-PEDALPLT	Pedal rubber plate	1
62	RHAS-PEDALROD	Dust-shaker pedal rod	1
63	RHAS-PEDALJNT	Dust-shaker movable joint	1
64	RHAS-INTERSPACE	Intermediate spacer	1
65	RHAS-DUSTROD	Connecting rod of dust-shaker rack	2
66	RHAS-DUSTSHAKER	Dust-shaker rack	1
67	RHAS-757PIN	7*57 pin	1
68	RHAS-16AXCLIP	Circlip for φ16 axle	1
69	RHAS-DUSTSHAKEF	Dust-shaker film	1
70	RHAS-12VRELAY	12V relay	3
71	RHAS-FUSEHOLD	Fuse holder	4
72	RHAS-BTMCASTER	4-inch flat-bottom caster	1
73	RHAS-DUSTBUCK	Dustbin buckle	1
74	RHAS-BELT	Belt	1
75	RHAS-NOZZLE	Nozzle (optional)	2
76	RHAS-CIRCUITBRD	Battery level circuit board	1
77	RHAS-SWITCH	Switch	3
78	RHAS-WIREROPE	Wire rope	1

Items marked "(optional)" are available depending on configuration (e.g., the water-spray system). Specifications and parts are subject to change without notice.

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United States Commercial Limited Warranty

Model	Rotationally-Molded Components	Parts	Battery	Labor	Travel	Hour Meter Limit
Backpack Vac 4 qt	5 Years	1 Year	N/A	6 Months	N/A	N/A
19" Pad Drive	5 Years	1 Year	1 Year Pro-Rated	6 Months	30 Days	1000 Hours
28" Traction Drive	5 Years	1 Year	1 Year Pro-Rated	6 Months	30 Days	1000 Hours
AS-690 Sweeper	5 Years	1 Year	1 Year Pro-Rated	6 Months	30 Days	1000 Hours

New Machine Warranty

Rhino Cleaning Machines (Rhino) warrants to the original purchaser, for the above-stated periods (whichever occurs first), that machines will be free from defects in workmanship and material, provided that machines are installed, operated, and maintained in accordance with Rhino written manuals and other instructions. This warranty does not apply to damage or failure caused by accident, freight damage, misuse negligence, abuse, improper repair, or maintenance of the machines. Please refer to the Operator Manual for proper machine operation and maintenance instructions. The warranty period begins on the date the unit is delivered to the end-user site. A Warranty Registration Checklist must be filled out electronically via the Shipping notification email. Rhino will require credit card information for all warranty service dispatch requests unless there is an open account in good standing on file with Rhino or an authorized distributor. In the event that a warranty claim is denied due to the aforementioned reason, Rhino reserves the right to charge your credit card or account for the full amount of any labor, travel and parts costs incurred due to the equipment repair. Rhino will not reimburse or compensate any customer expense for parts or service. While under warranty, all parts supplied and services rendered must be transacted through Rhino or an authorized distributor; any parts or service determined to be covered under warranty will be provided on behalf of the customer. Warranty does not cover items considered wear parts unless determined to be defective in parts or workmanship.

Labor and Travel Warranty

Rhino will, at its option, provide labor and travel or pay for outside repair for the above stated periods.

Parts Warranty

Parts replaced or repaired under this warranty are guaranteed for the remainer of the warranty period. Consumable parts, expected to wear from normal use, are not covered under the parts warranty.

Service Labor Warranty

Labor performed by Rhino or an authorized service representative is warranted for thirty (30) days from the date the repairs are completed. This policy does not cover work performed by any service company other than Rhino or an authorized Rhino distributor or service center and is restricted to the specific repair operation, component, or concern for which the claim is made.

Disclaimer

Rhino will not be liable for any indirect, special, consequential, or punitive damages (including lost profits) arising out of or relating to this agreement or the transactions it contemplates (whether for breach of contract, tort, negligence, or other form of action) and irrespective of whether it has been advised of the possibility of any such damage. In no event will Rhino's liability exceed the price the Buyer paid for the specific Goods giving rise to the claim or cause of action. All Sales Are Final. However, if we decide to waive any part of our policy, by our sole determination, there will be a 25% restocking fee plus all freight costs incurred. If we have shipped the wrong item or there was shipping damage, please contact us. Rhino hereby disclaims any and all other warranties express or implied, including, but not limited to, any implied warranty of merchantability and/or fitness for a particular purpose

Rhino Cleaning Machines reserves the right to change its warranty policy without notice.

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