



LSW-CG-02 - VERSION 1.0

Forged Wheel Care Manual

Use cool surfaces, neutral products, soft tools and timely cleaning to protect finishes and reveal developing damage.

Scope	General care for LSW forged aluminium wheels
Published	August 2026
Important	Not vehicle-specific engineering or repair approval

HOW TO USE THIS MANUAL

Identify the finish before choosing care products

Finishes are not interchangeable

LSW wheels may use powder coat, paint, clear coat, brushed or machined surfaces, anodising, polished aluminium or special matte finishes. If uncertain, use cool water, soft tools and a confirmed pH-neutral automotive cleaner, then test an inconspicuous area.

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Purpose

This manual supports appearance care and basic condition checks. It does not replace instructions for tyres, valves or TPMS, brakes, the vehicle or the exact finish.

Care objective

Remove brake dust, road salt, mud and contamination promptly, reduce scratching and corrosion, and use cleaning as an opportunity to find cracks, deformation, loose hardware or continuing air loss.

01 / CARE PRINCIPLES

Cool - neutral - soft - timely

Suggested frequency

Environment	Timing	Focus
City and highway	Clean according to contamination and inspect during normal washing.	Brake dust, tar, valves and fastener recesses.
Rain, mud or construction roads	Rinse promptly after visible contamination; do not let mud harden.	Pre-rinse fully and never dry-wipe grit.
Winter salt or coastal salt	Rinse thoroughly with fresh water after exposure and increase frequency.	Inner barrel, spoke backs, valves, seats and drainage traps.
Track, mountain or high brake load	Clean only after full cooling and inspect after each event.	Hot brake dust, weights, tyres and heat signs.
Long-term storage	Clean, rinse and dry before storage; inspect periodically.	Moisture, salt, chemicals and tyre condition.

Seven-step cleaning

01 Cool completely

Let wheels and brakes return close to ambient temperature.

02 Pre-rinse

Flush loose grit, salt and dust from top to bottom; avoid direct high pressure on valves, TPMS, bead seals or damaged coating.

03 Confirm the product

Use a pH-neutral automotive cleaner approved for aluminium and the specific finish. Dilute as labelled and spot-test.

04 Use soft contact

Use clean microfibre or a soft non-metal brush, with separate tools for body and wheels.

05 Work by zone

Clean face, spokes, inner barrel, valve and seat recesses while keeping surfaces wet.

06 Rinse completely

Remove all cleaner and loosened dirt, especially at spoke junctions and nut holes.

07 Dry softly

Blot with clean microfibre or filtered low-risk air, then inspect.

02 / PROHIBITED METHODS

Fast cleaning is not always correct

Category	Do not use or do	Reason
Corrosive chemicals	Strong acid or alkali, hydrofluoric or fluoride wheel cleaner, or unknown heavy-duty cleaner.	Can attack aluminium, coatings, hardware and valves.
Solvents and household chemicals	Petrol, thinner, brake cleaner, oven cleaner or bleach on the wheel surface.	May soften coatings and seals.
Abrasive tools	Wire brushes, steel wool, scouring pads, sandpaper, metal scrapers or dirty brushes.	Scratch coatings and embed debris.
Cleaning while hot	Water or chemicals immediately after braking or on sun-heated surfaces.	Increases thermal shock, spotting and uneven reaction.
Uncontrolled pressure	Nozzle too close or directly at valves, bead seals, chips or peeling edges.	Can drive water into sensitive areas and enlarge damage.
Automatic wheel brushes	Unknown brush and chemical condition.	Hard contaminated brushes may scratch the finish.

Never mix chemicals

Mixing products may create dangerous reactions or unpredictable finish damage. Read labels and safety data, use required PPE, ventilate the area and keep products away from children and ignition sources.

Pressure-washer boundary

Use pressure only to assist removal of loose contamination, with a wide fan, sensible distance and an oblique sweep. Stop if coating is peeling, a stone chip is open, a valve is aged or the bead seal is suspect.

03 / WINTER AND SEVERE ENVIRONMENTS

Salt hides where it is hard to see

Road and sea salt retain moisture in crevices, behind spokes and in the inner barrel. Brake dust, grit and damaged coating increase corrosion risk. The answer is timely fresh-water rinsing and complete drying, not stronger chemicals.

High-exposure checklist

- After salt water, sea mist, beach roads or de-icing salt, let the wheel cool and rinse the complete wheel with plenty of fresh water.
- Have a competent person rotate or remove the wheel to clean the inner barrel, spoke backs, rim flange, valve base and fastener recesses.
- Use a pH-neutral product for contact cleaning and do not allow salty water or cleaner to air-dry.
- After drying, inspect for white bloom, black pitting, coating bubbles or peeling, hardware corrosion, valve corrosion and bead-area air loss.
- Use only non-abrasive protection confirmed for the finish. Keep it away from tyre tread, brakes, mounting faces and fastener seats.

After high brake temperature

After mountain driving, track use or brake drag, allow full natural cooling. If there is discolouration, a burnt smell, tyre heat damage or valve abnormality, stop use and inspect.

Quick exposure log

Date	Exposure	Rinsed/cleaned	Finding/action
_____	Salt / sea / mud / heat	Yes / No	_____
_____	Salt / sea / mud / heat	Yes / No	_____
_____	Salt / sea / mud / heat	Yes / No	_____

04 / CARE BY FINISH

Different surfaces have different limits

Finish	Routine care	Do not / reminder
Powder coat, paint, clear coat	Cool-water pre-rinse, pH-neutral wash, soft tools, full rinse and dry.	No abrasive polish, strong solvent or cutting cleaner. Assess coating chips promptly.
Brushed or machined + clear coat	Treat as coated; work gently with the grain.	Metal polish may cut through clear coat and change texture or gloss.
Anodised	Use mild neutral products confirmed for anodised aluminium, with short dwell and full rinse.	Acid, alkali and abrasion can cause irreversible fading or patchiness.
Bare or polished aluminium	Only after confirming no coating, use a suitable low-abrasion automotive aluminium product.	Never use metal polish on coated or anodised surfaces; avoid beads, seats and brakes.
Matte, satin or special colour	Use a neutral product that adds no gloss and leaves no wax or filler.	Polish, gloss wax and hard local rubbing can create permanent bright spots.
Unknown	Cool-water pre-rinse, gentle pH-neutral wash, soft dry and spot-test.	No polish, iron remover, tar remover or repair coating until LSW or dealer confirms.

Protectants and coatings

Protection products can change gloss, friction, future repair and warranty assessment. Confirm compatibility with the finish and operating temperature. Keep them off the mounting face, centring surface, fastener seats and threads, tyre tread, discs and pads.

05 / DAMAGE AND AIR LOSS

Judge structure before appearance

Minor cosmetic and structural damage can look similar at first. After cleaning, inspect the face, spoke roots, rim edges, bead seats, mounting face and bolt holes under good light. Do not sand or touch up before depth, location and cause are understood.

Condition	Immediate action	Next step
Surface stain or removable transfer	Use neutral cleaner and soft tools; no metal scraper or sandpaper.	Recheck coating integrity after cleaning.
Fine scratch without exposed metal	Record it and keep clean and dry; do not repeatedly polish.	Ask whether local care is permitted and watch for spread or colour change.
Coating broken, bare aluminium, bubbling or lifted edge	Avoid strong cleaner and direct high pressure; rinse salt and dry.	Arrange professional assessment and a compatible repair plan.
White bloom, black pitting, filiform corrosion or bead corrosion	Clean, photograph and mark area; stop if air loss occurs.	Professional tyre removal may be needed to check sealing and structure.
Crack, bend, deep gouge or deformed seat	Stop use; do not inflate or road-test.	No welding, heating or straightening. Contact LSW, dealer or qualified specialist.
Continuing air loss	Inspect tyre, valve or TPMS, bead and rim; do not only add air.	Have a tyre specialist locate the leak.

Mandatory stop-use conditions

- Vibration, pulling, noise, steering shake or visible deformation after pothole or kerb impact.
- Any crack, structural notch, bent rim, elongated bolt hole or damaged mounting face.
- Repeated pressure loss, bead bubbles, corroded valve or unexplained slow leak.
- Fire, severe brake heat, corrosive chemical immersion, crash impact or suspected unapproved repair.

No structural DIY repair

Welding, heating, cold straightening, cutting, drilling or changing mounting geometry alters material and load paths. Do not use unless LSW has approved the exact wheel in writing.

06 / CLEANING OFF THE VEHICLE AND STORAGE

Clean, dry, isolate and trace

Storage process

01 Remove and label

Use a competent person and the vehicle lifting procedure. Record position, direction, mileage and abnormalities; keep matched hardware and wheel-lock key.

02 Deep clean

After cooling, pre-rinse and use compatible pH-neutral cleaner on face, barrel, spoke backs, valve and recesses. Rinse fully.

03 Dry completely

Remove water from holes, bead areas and spoke junctions. Never bag or stack a wet wheel.

04 Inspect and record

Check cracks, deformation, corrosion, coating damage, tyre and valve or TPMS under bright light. Photograph items needing service.

05 Isolate and protect

Use clean breathable wheel bags and colourfast soft separators. Do not stick tape directly to the finish.

06 Choose environment

Store cool, dry and ventilated, away from UV, heat, ozone equipment, salt mist, pool chemicals, battery acid and solvents.

07 Position safely

Store tyre assemblies as the tyre maker recommends; keep bare wheels stable and free from point loading.

08 Before refitting

Inspect again and follow the LSW Installation and Torque Guide. Never reuse an unverified old torque record.

CARE RECORD

Care and inspection record

Keep product, environmental-exposure, damage and action records so a technician can distinguish chemical, impact, heat and long-term salt effects.

Date/mileage	Environment	Product and pH/dilution	Finding/action
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Final storage check

- No cleaner, water spots, salt or trapped grit remains; the wheel and cover are fully dry.
- Photos and abnormal-condition records are saved; structural doubts, leaks or serious corrosion are isolated and marked DO NOT USE.
- Fasteners, centring rings, valve caps and wheel-lock key are labelled to prevent mixing.
- The refitting technician has vehicle fitment records, torque source and first-recheck requirement.

Reference principle

This manual reflects generally accepted alloy-wheel care principles. Because finishes and chemical formulas differ, confirmation for the exact finish and product label remains controlling.