

AUTO COMPUTER SPECIALIST

WIRING HARNESS RESTORATION SERVICES

Keeping Your Classic, Restomod, or Custom Build Wired Right

WHY RESTORE YOUR WIRING HARNESS?

The wiring harness is the central nervous system of your vehicle — and like any critical system, it is not immune to the relentless effects of time. Decades of thermal cycling, mechanical vibration, moisture intrusion, rodent damage, and well-intentioned but undocumented field repairs leave even the finest factory harnesses in a compromised state. Brittle insulation, corroded terminals, melted conduit, and unauthorized splices are not merely cosmetic inconveniences — they represent genuine fire hazards and the root causes of the electrical gremlins that rob owners of the driving experience they deserve. At Auto Computer Specialist, we return your harness to a verified, documented, and reliable condition — no guesswork, no hidden repairs, and no compromises.

- **Reliability** — Permanently eliminate intermittent failures, mysterious no-starts, and elusive electrical gremlins that defeat conventional diagnosis.
- **Safety** — Remove aged insulation, overloaded circuits, and exposed conductors that present a genuine fire and electrical shock hazard.
- **Resale Value** — A professionally restored harness with full documentation meaningfully increases buyer confidence and commands a premium at sale.
- **Originality** — Factory wire colors, period-correct loom materials, and OEM connector bodies restored to concours-correct presentation.
- **Peace of Mind** — Know precisely what is inside your vehicle: every circuit verified, every connection documented, backed by the ACS warranty.

WHY CHOOSE AUTO COMPUTER SPECIALIST?

ACS is not a general-purpose repair facility — automotive electrical systems are our singular discipline, and wiring harness restoration is one of our defining competencies. Every technician brings deep, hands-on experience with factory wiring diagrams, OEM sourcing, and the period-correct techniques that distinguish a true professional restoration from a cosmetic patch.

Our Commitment to Quality

- All work performed exclusively with OEM-grade or superior wire, terminals, connector bodies, and loom materials.
- Period-correct tape and conduit precisely matched to your vehicle's production year, application, and factory specification.
- Comprehensive before-and-after photographic documentation delivered with every completed project.
- Every harness subjected to a full bench continuity and short-circuit test prior to shipment — zero exceptions.
- Transparent, written scope-of-work approval at every stage — no work proceeds without your explicit authorization.

Experience That Matters

- Extensive, documented experience across domestic, import, and European vehicle platforms spanning multiple decades.
- In-depth command of factory assembly methods, OEM wire color specifications, and authentic connector sourcing.
- Comprehensive in-house terminal and connector library spanning hard-to-source factory plugs across multiple decades.
- Nationwide service capability — the majority of harnesses are shipped both ways without issue.

THE ACS EIGHT-STEP HARNESS RESTORATION PROCESS

1. Intake & Initial Assessment

Every harness is logged, tagged, and photographed in its as-received condition upon arrival. Vehicle year, make, model, engine application, and all customer-supplied concerns are documented before the restoration process begins. Each project is then assigned a unique ACS job number for full traceability throughout service.

2. Complete Disassembly & Exposure

All existing loom, tape, conduit, shielding, and protective coverings are carefully removed to fully expose the harness structure. Original routing, branch points, and connector orientation are documented to preserve OEM layout and ensure accurate reassembly.

3. Precision Cleaning & Ultrasonic Decontamination

Connectors, terminals, and affected harness sections undergo detailed cleaning and ultrasonic bath treatment to remove corrosion, oxidation, fluid contamination, and embedded debris. Processing time varies depending on the severity of harness damage, environmental exposure, and contamination levels.

4. Customer Review & Written Approval

Once inspection and cleaning are completed, ACS provides the customer with a detailed overview of the harness condition, recommended repairs, projected scope-of-work, and final service cost. No restoration work proceeds without written customer authorization — ensuring complete transparency with no unexpected charges or unauthorized repairs.

5. Repair & OEM-Level Restoration

Damaged wiring is repaired or replaced according to approved scope. Connector bodies are sourced and installed to OEM specifications whenever available. Terminals are cleaned, replaced, or re-pinned as necessary, and all circuit modifications, extensions, or custom integrations are performed to professional restoration

6. Re-Loom & Final Dressing

The restored harness is re-loomed using application-specific materials matched to the selected service tier. Depending on the package, this may include OEM-style tape and conduit, high-temperature split loom, braided sleeving, or premium mil-spec protective materials for enhanced durability and appearance.

7. Comprehensive Bench Validation

Upon completion, the harness undergoes extensive bench validation to confirm proper continuity, resistance values, ground integrity, and overall circuit functionality. Every ACS harness is tested prior to shipment — no exceptions.

8. Documentation & Delivery

Completed harnesses are packaged securely and returned with detailed before-and-after photo documentation along with applicable ACS workmanship warranty coverage. Customers receive a professional record of the restoration work performed for future reference and service history documentation.

SERVICE TIER COMPARISON?

Every tier includes before-and-after photo documentation and full bench testing. All projects begin with a free assessment.

Features (what's included)	Tier 1 Standard	Tier 2 Advanced	Tier 3 Severe	Tier 4 Aesthetics
Full Inspection & Written Condition Report	✓	✓	✓	✓
Before & After Photo Documentation	✓	✓	✓	✓
Complete Loom & Tape Removal	✓	✓	✓	✓
Terminal Cleaning & Corrosion Treatment	✓	✓	✓	✓
Continuity & Short-Circuit Bench Test	✓	✓	✓	✓
Broken Wire Repair & Replacement	✓	✓	✓	✓
Burned Wire Repair & Replacement		✓	✓	✓
Connector / Plug Sourcing & Replacement		✓	✓	✓
Harness Extensions Fabricated & Integrated			✓	✓
Major Section Re-Manufacture				✓
Color Loom & Premium Mil-Spec Braid				✓
Period-Correct Specialty Tape & Cloth				✓
Concours-Level Presentation & Dressing				✓
Labeled Connectors & Branch Identifiers				✓

TIER 1 — STANDARD RESTORATION

Structural integrity confirmed. Age-related deterioration addressed.

IDEAL RESTORATIONS FOR THIS TIER

Tier 1 is the appropriate entry point for harnesses that retain their structural integrity but exhibit the predictable age-related deterioration common to stored or lightly driven vehicles. Insulation may be brittle, cracked, or flaking; loom and tape materials have deteriorated; terminal surfaces show oxidation and corrosion — yet all connector plugs remain intact and wires are uncut. This tier delivers a fully verified, properly re-loomed harness that restores confidence and eliminates the hidden hazards that accumulate silently over decades. Ideal for driver-quality restorations and vehicles returning from extended storage.

WHAT'S INCLUDED

- Full visual inspection and comprehensive written condition report covering every circuit and connector.
- Complete removal of all existing loom, tape, conduit, and wrapping materials.
- Thorough cleaning and degreasing of all wiring throughout the harness.
- Insulation integrity testing performed on every circuit to identify hidden deterioration.
- Full replacement of all deteriorated tape, loom, and conduit with period-correct, OEM-matched materials.
- Terminal cleaning and professional corrosion treatment on all connector bodies and pin contacts.
- Re-loom to factory routing specifications and factory appearance using correct materials.
- Comprehensive before-and-after photographic documentation of the complete restoration.
- Full bench continuity and short-circuit test on every circuit prior to delivery

WHAT'S NOT INCLUDED

- Broken, cracked, or physically damaged connector plug bodies (addressed in Tier 2).
- Burned, severed, or missing wires requiring replacement (addressed in Tier 2).
- Wire extensions, harness modifications, or circuit additions of any kind (addressed in Tier 2).
- Color loom, premium mil-spec braid, or aesthetic presentation upgrades (available as Tier 4 add-on).

PRICING & TURNAROUND

Tier 1 pricing is project-specific, based on harness complexity and vehicle application; however, **a Tier 1 Restoration averages \$888.88**. Typical turnaround is 2–4 weeks from receipt. Contact ACS to initiate your complimentary assessment and receive a written quote.

FREQUENTLY ASKED QUESTIONS

How do I ship my harness safely?

Most harnesses ship without issue in a large flat-rate box with branches coiled loosely and protected with paper. Avoid sharp bends or compression of connector bodies.

Will my restored harness look OEM again?

Our goal is to restore the harness to an OEM-style appearance and routing using proper looming, tape, branch points, and protection materials whenever possible.

Can you repair aftermarket-modified harnesses?

Yes. We can often correct poor previous repairs, aftermarket wiring modifications, splices, or improperly installed accessories.

TIER 2 — ADVANCED RESTORATION

Structural damage repaired. History documented. Harness rebuilt to spec.

IDEAL RESTORATIONS FOR THIS TIER

Tier 2 is designed for harnesses that have sustained structural damage beyond age-related deterioration — broken or burned wires, missing or damaged connector plug bodies, unauthorized amateur splices, unknown modification history, or circuits requiring extension for engine swaps and accessory upgrades. This tier delivers a comprehensively repaired, fully documented harness in which every circuit has been verified, every connector restored or replaced, and every prior unauthorized intervention properly addressed. Ideal for project vehicles, barn finds, engine swap builds, and any harness whose history cannot be confirmed.

WHAT'S INCLUDED

- Everything included in Tier 1 — full inspection, loom removal, cleaning, insulation testing, and re-loom.
- Repair or replacement of all broken, burned, severed, or missing wires to OEM wire gauge specification.
- Connector plug body sourcing and replacement for all damaged, missing, or incorrect plugs.
- Full terminal replacement and complete re-pinning of affected connector bodies.
- Harness extensions fabricated and seamlessly integrated for engine swaps, accessory additions, and routing modifications.
- Documentation and correction of all previously performed unauthorized splices, repairs, and modifications.
- Comprehensive before-and-after photographic documentation of the complete restoration.
- Full bench continuity and short-circuit test on every circuit prior to delivery.

WHAT'S NOT INCLUDED

- Re-manufacture of destroyed harness branches using original routing and circuit layout as reference.
- Complete re-wire of individual circuits where original conductors are unrecoverable.
- Color loom, premium mil-spec braid, or aesthetic presentation upgrades (available as Tier 4 add-on).
- Ground-up harness fabrication in the complete absence of any original harness to reference.

PRICING & TURNAROUND

Tier 2 pricing is determined by the scope of structural damage, the number of circuits requiring repair, and connector sourcing requirements. Typical turnaround is 3–6 weeks, reflecting time required for parts procurement and comprehensive circuit mapping. Contact ACS to initiate your complimentary assessment and receive a written quote..

FREQUENTLY ASKED QUESTIONS

What if ACS discovers damage I was not aware of?

All work stops immediately upon discovery of unexpected damage. ACS documents the findings in full, photographs every affected area, and contacts you with a written description, our recommendation, and a revised scope-of-work quote. Nothing proceeds until you provide explicit written approval. Transparency is non-negotiable at ACS.

Can ACS fabricate extensions for an engine swap?

TIER 3 — SEVERE DAMAGE RESTORATION

Catastrophic damage triaged. Destroyed sections re-manufactured. Full function restored

IDEAL RESTORATIONS FOR THIS TIER

Tier 3 is reserved for harnesses that have sustained catastrophic damage — fire, flood, severe rodent destruction, major crash damage, or race-build modifications that have left large sections of the harness unrecoverable. ACS performs a full salvage triage, recovers what remains of the original harness as a routing and circuit reference, and re-manufactures destroyed branches and circuits from the ground up. The original harness — even in severely degraded condition — must be present as a reference. Tier 3 is the definitive solution when no lesser tier can deliver a safe, functional result.

WHAT'S INCLUDED

- Everything included in Tiers 1 & 2 — full inspection, loom removal, circuit testing, structural repair, and re-loom.
- Full salvage triage and systematic damage assessment of the severely compromised harness.
- Re-manufacture of destroyed harness branches using original routing and circuit layout as reference.
- Complete re-wire of individual circuits where original conductors are unrecoverable.
- Connector body sourcing and replacement for all melted, burned, or destroyed plug bodies.
- Full re-pin of all retained connector bodies where terminal contacts are beyond restoration.
- Comprehensive damage documentation with photographic record of pre- and post-restoration condition.
- Full bench continuity and short-circuit test on every circuit prior to delivery.

WHAT'S NOT INCLUDED

- Color loom, premium mil-spec braid, or aesthetic presentation upgrades (available as Tier 4 add-on).
- Ground-up harness fabrication in the complete absence of any original harness to serve as a routing and circuit reference.
- Engine management systems, aftermarket ECU installations, or major electrical system additions (quoted separately).

PRICING & TURNAROUND

Tier 3 projects are individually quoted based on the extent of damage and the number of circuits requiring reconstruction. Photographic documentation of the harness is required prior to quoting. Project timelines are established at the assessment stage and communicated in writing. Rush service is available for an additional fee. Contact ACS to schedule your damage assessment consultation.

FREQUENTLY ASKED QUESTIONS

Does the original harness need to be present for Tier 3?

Yes — the original harness must be present for ACS to proceed. Even in severely damaged condition, it serves as the essential reference for circuit identification, branch routing, and connector placement. Without a reference harness, ACS cannot faithfully reconstruct the factory electrical architecture.

Is Tier 3 available for race builds with major missing sections?

Yes. Race and performance builds where large sections have been removed, rerouted, or modified are well-suited to Tier 3 where the core harness remains present as a reference. ACS can re-manufacture missing sections, document all circuits, and deliver a harness that is both race-ready and fully traceable.

TIER 4 — CUSTOM AESTHETIC RESTORATION

Museum-quality finish. Concours presentation. Built to be seen.

IDEAL RESTORATIONS FOR THIS TIER

Tier 4 is an aesthetic excellence upgrade applied on top of any base service tier. It is the appropriate choice when the harness will be visible, judged, or must complement the overall aesthetic of the build. Show cars and concours entries demand a museum-quality, judge-ready standard that only bespoke color loom, premium mil-spec braid, and precision hand-dressing can deliver. Restomods, pro-touring builds, and custom performance vehicles expect wiring as purposeful in appearance as it is in function. Tier 4 is the definitive answer to both demands.

WHAT'S INCLUDED

- Applied on top of any selected base tier (Tier 1, 2, or 3) — Tier 4 is not a standalone service.
- Bespoke color loom matched to factory-correct period specifications or a fully custom color theme.
- Premium mil-spec expandable braided sleeving in customer-specified colors and finishes.
- Period-correct cloth or premium tape in the correct color and grade for the specific application.
- Concours-level loom dressing, routing, and branch presentation executed to show-car standards.
- Heat-shielded and weatherproof routing solutions for high-performance engine bay and exhaust-adjacent applications.
- Fully labeled connectors and branch identifiers for clean, professional serviceability.
- Comprehensive before-and-after photographic documentation of the completed aesthetic restoration.

WHAT'S NOT INCLUDED

- Ground-up harness fabrication in the complete absence of any original harness to reference.
- Engine management systems, aftermarket ECU installations, or major electrical system additions (quoted separately).
- Base-tier restoration services — Tier 4 must be combined with a Tier 1, 2, or 3 base service.

PRICING & TURNAROUND

Tier 4 pricing is based on harness complexity and specific material selections made in consultation with the customer. Material lead times may affect overall project turnaround, particularly for specialty braid colors and period-correct cloth tape. Contact ACS to discuss your vision and aesthetic goals — we will develop a combined base-tier and Tier 4 quote tailored to your build.

FREQUENTLY ASKED QUESTIONS

Can ACS match factory wire colors exactly for a concours restoration?

For the majority of domestic vehicles produced from the 1950s through the 1990s, ACS can source or accurately match factory wire colors using period-correct materials. For rare or low-volume applications, exact factory wire may require special-order procurement — ACS advises on this during the assessment phase so there are no surprises at delivery..

Can Tier 4 be applied to a race car or performance build?

Absolutely. Tier 4 is equally at home in competition and performance applications. ACS has extensive experience delivering color-coded, mil-spec wiring harnesses for race cars and high-performance builds where clean, serviceable, clearly identified wiring is as operationally important as it is visually compelling.

READY TO BEGIN YOUR RESTORATION? Great! Simply [Click Here](#) and complete a Wire Harness Restoration Form. Once complete you will receive an email with your shipping options and next steps!