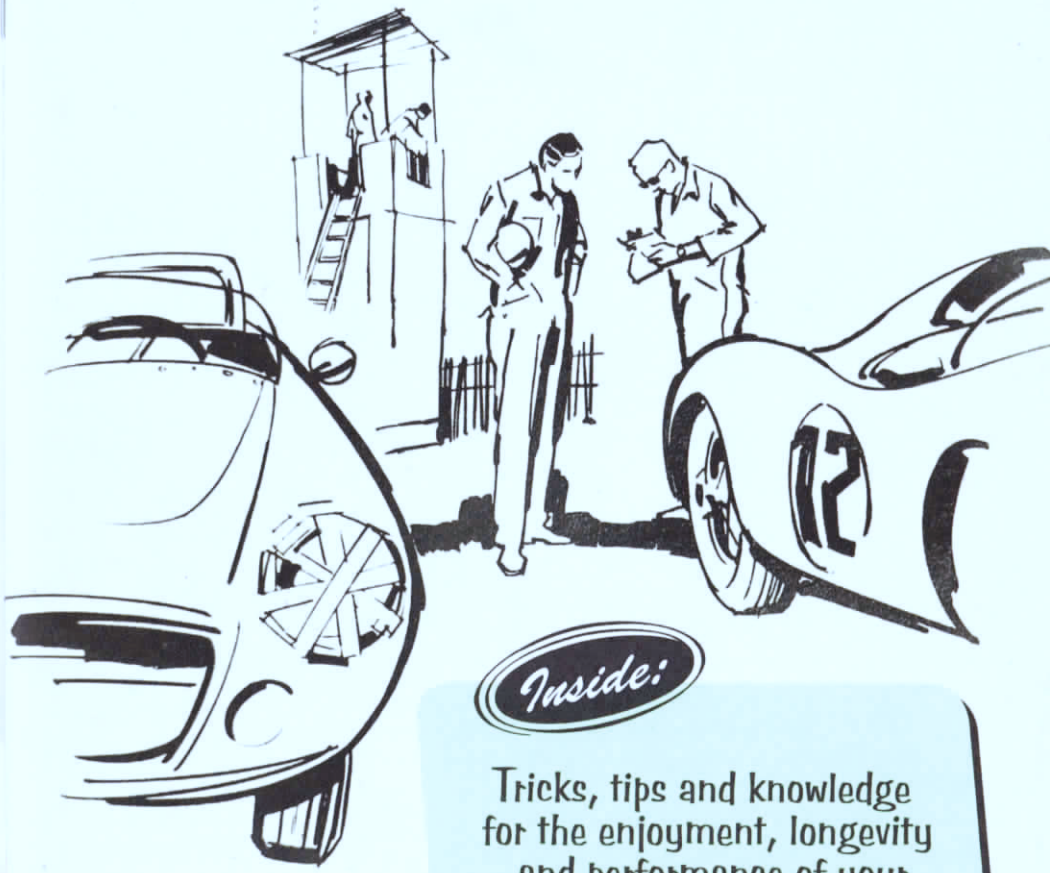
The Classic Motorsports Glovebox Companion



Inside:

Tricks, tips and knowledge for the enjoyment, longevity and performance of your classic sports car

Presented by:

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WELCOME

to the

Classic Motorsports Glovebox Companion!

Congratulations, you're one of the lucky ones who understands the joy of owning and driving a cool classic car. Why be boring, right?

To maximize that experience and continue our mission of being your personal guide to the sports car world, the *Classic Motorsports* magazine staff presents ourGlovebox Companion. Use it to diagnose problems, prepare for events, and track your adventures. And if you ever need another copy for yourself or a friend, just let us know.

This Glovebox Companion contains decades' worth of knowledge from some of the sharpest minds in the scene. Alongside insights from the *Classic Motorsports* staff, you'll find wisdom from tech whiz Carl Heideman, detail master Tim McNair and driving ace Andy Hollis. Thanks, guys.

We also need to thank you, our loyal readers, who constantly push us to deliver the finest product possible. To sign up for the coolest classic car magazine ever, just visit classicmotorsports.com or call (877) 677-6878.

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What to Do When Your Car Stops Running

To run, a car only needs fuel and spark–although that spark has to occur at roughly the right time. To repair most breakdowns, you just need some simple hand tools, a friend and a 12-volt test light.

Most breakdowns are caused by an ignition problem.

Step 1: Try to park in a safe, dry place.

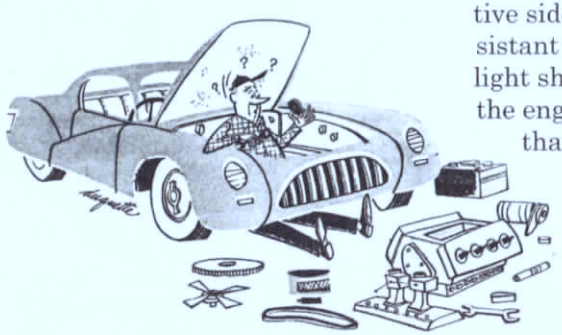
Step 2: Pull a spark plug and ground its threads on the block to see if you have spark. An assistant needs to crank the starter.

Step 3: If there is a spark, move to the fuel system. If no spark, check whether you're getting spark from the coil to the distributor. Pull the coil wire from the distributor and hold it near a ground. Again, have your assistant crank the starter. Look for spark from the coil lead. Note: Coils are blamed for most ignition problems but seldom are the culprit.

Step 4: If you have spark at the coil lead, you likely have a problem with your distributor rotor or cap. Carry replacements. In recent years, rotor problems have been much more common than car problems, so start with a rotor.

If you don't have spark from the coil lead, then you'll need your test light. Attach the ground clip of the light to a good ground, then touch the point to the positive side of the coil while the ignition switch is turned on. (This is assuming a negative-ground car.)

The light should glow. If not, trace this part of the ignition circuit to determine why the coil isn't getting power. Notes: For positive-ground cars, switch the polarity on this test procedure. The coil is marked with a + and – on either side where the wires attach.



Step 5: Does the ignition switching mechanism work? Assuming you have power to the coil, hold the pointer of your light to the negative side of the coil while your assistant cranks the engine. Your light should flash on and off as the engine spins over, telling you that the switching mechanism in the distributor is working. (This is true whether the car has points or an electronic ignition.)

If the light glows steady or not at all, it's time to get into the distributor. If working with a positive-ground car, don't forget to switch the polarity on this test procedure as well.

To determine why your distributor isn't providing the switching for the coil, you'll need to get out the manual for your car (or your ignition system if it's aftermarket) to go through the testing procedure for your points or electronic switching mechanism.

If it's not an ignition problem, then it's likely a fuel delivery issue.

Step 1: Make sure that the throttle linkage hasn't become disconnected or fouled up.

Step 2: If you have an electric fuel pump, determine if it's working or not. Note: Mechanical fuel pumps seldom fail while en route. If the fuel pump is working, proceed to Step 4.

Step 3: If the fuel pump is not working, then make sure its fuse is good and check that neither the positive nor negative wires have become disconnected, pinched or pulled off.

Step 4: Check that fuel is getting to the carburetor or fuel injection. Fuel is pressurized to 3-5 psi on a carbureted car and upward of 35-40 psi on a fuel-injected car. DO NOT ALLOW FUEL TO SPRAY ON A HOT ENGINE OR ANY OTHER HOT COMPONENTS. Carefully pull the fuel line off the carburetor or injection. Aim the line at a suitable catch can. Have an assistant crank the engine. If fuel comes out of the line, then you have a carburetor or fuel injection issue and should proceed to Step 6.

Step 5: Check your fuel filter. If you can blow through the filter, then you might have a clog elsewhere in the delivery system. Follow the fuel system back to a possible second filter and finally the tank. Sometimes the tank's pickup can get clogged, and you can remove the blockage by either blowing back through the outlet tube or running a rod or piece of wire through the tube. Be prepared to reattach the line very quickly, and remember that fuel and its vapors are very flammable. Do not work with fuel around hot engines, hot exhaust systems or other hot components.

Step 6: Some carburetors, like Webers, pass the incoming fuel through a screen. These screens can get clogged but are easily cleaned.

Step 7: Car still not running? Now that you've ruled out all of usual culprits, you have to delve deeper. On a carbureted engine, it could be a sunk float or a clogged jet. On an injected car, you might have a disconnected crank angle sensor, clogged fuel injectors or another failed or disconnected electrical component. Check all grounds, too.

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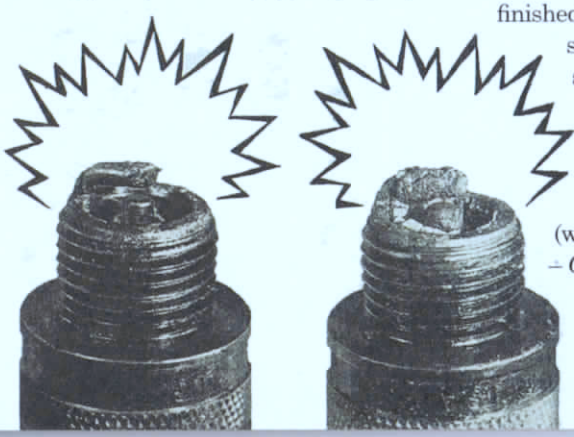
How to Do a Comprehensive Ignition Tune-Up

- Start by looking for problems–obvious or not. Ensure fresh spark plugs, spark plug wires and distributor cap.
- Set spark plug gap to factory specifications.
- Remove the points, condenser and the plates these attach to and inspect the advance mechanism. Twist the points cam to ensure it has not seized, and check that it has fairly uniform resistance throughout its operating range. If it is sloppy at the beginning of the range, suspect weak or improper springs.
- Before reinstalling the points plates, check that they are parallel to each other.
- Use a vacuum tool to ensure the vacuum advance is still operational.
- Install the new points and condenser, setting the gap to the factory spec using a feeler gauge.
- Inspect the distributor housing for cracks or other physical damage.
- Reassemble and install distributor.
- Find, clean and mark the timing tabs on the engine and the mark on the front balancer pulley.
- Start the engine and check the dwell with a tach/dwell meter, ensuring your points are gapped properly.
- Have an assistant run the engine through the meat of its operating range–usually 1000 to 4000 rpm–while checking the timing and advance with a dial-back timing light.
- Set ignition timing according to factory manual by rotating distributor as necessary. If factory spec is given above idle, adjust carburetor's idle screw as necessary. Recheck the speed several times throughout the process.
- With vacuum advance still disconnected, use a dial-back timing light to check and record the timing at 500-rpm increments from 1500 to at or near redline. All cars are different, but with most classic British sports cars the timing light should show near 30 degrees before 4000 rpm. If much more or less advance than this is shown, or if it happens too soon or too late, you have distributor problems and it's time to send the distributor off for service.
- Assuming the advance curve looks okay, reconnect the vacuum advance and take the car for a test drive. Listen carefully for any pinging sounds indicating pre-ignition (easy to hear) or detonation (hard to hear).
- If the car runs fine and pinging sounds aren't heard, consider the job finished. If we heard the pinging sounds, we'd either consider a switch to higher octane fuel (if possible), or we'd start retarding the timing a degree at a time until the pinging sounds go away (which is not always possible).

– Carl Heideman



Are Your Tires Safe?

MAYBE. MAYBE NOT!

Even if they don't wear out from use, our tires are aging out due to the simple fact that the components used in their manufacture don't last forever.

We once compared a brand-new set of Vredestein Sprint Classic tires against a set of never-used Michelin X tires–the catch, of course, being that the Michelins had spent 32 years in dry storage. Our testing, done on a Triumph TR6, included both an emergency lane change maneuver as well as braking from 60 mph.

The Vredestein tires felt neutral during the emergency lane change maneuver while delivering safe, confident stops. The old tires? They were downright scary: snap oversteer when asked to change lanes while requiring 20 extra feet to stop from 60 mph. That can easily be the difference between life and death.

How old is too old for a tire? Our friends at Tire Rack offer this advice:

"Our experience has been that when properly stored and cared for, most street tires have a useful life in service of between six to ten years. And while part of that time is spent as the tire travels from the manufacturing plant to the manufacturer's distribution center, to the retailer and to you, the remainder is the time it spends on your vehicle."

So, a follow-up question: How old are the tires on your classic?

Tire Rack again offers this handy advice:

"Since 2000, the week and year the tire was produced has been provided by the last four digits of the Tire Identification Number with the 2 digits being used to identify the week immediately preceding the two digits used to identify the year."

In their example, a tire marked with DOT U2LL LMLR 5107 was built during the 51st week of 2007.

If your tires were built before 2000, then Tire Rack offers this information:

"The Tire Identification Number for tires produced prior to 2000 was based on the assumption that tires would not be in service for ten years. While they were required to provide the same information as today's tires, the week and year the tire was produced was contained in the last three digits. The 2 digits used to identify the week a tire was manufactured immediately preceded a single digit used to identify the year."

Plus Proper Tire Storage Tips

While tires naturally age over time, a few environmental factors can accelerate the aging process:

- UV light and radiant heat
- Excess humidity
- Wide temperature swings
- Underinflation and overinflation
- Ozone-producing electric motors

10 Tips for Safe, Sure-Footed Brakes

1. Pick the Right Compound
Racing compounds go on a race car, while street compounds go on a street car.

2. Look for Leaks
If anything is leaking in your braking system, fix it immediately. Make a visual inspection of all brake components and look for wet areas–you should find none.

3. Make Sure They're Assembled Correctly
If a car has had at least one previous owner, assume that someone with a lack of mechanical ability has touched the brakes.

4. Bleed Them Correctly
We've always preferred the two-person way: One person goes to each wheel and bleeds the brake according to the shop manual instructions, while another person works the pedal.

5. Adjust the Drums
After making sure the adjusters are not frozen, adjust the brakes so they just start to drag.

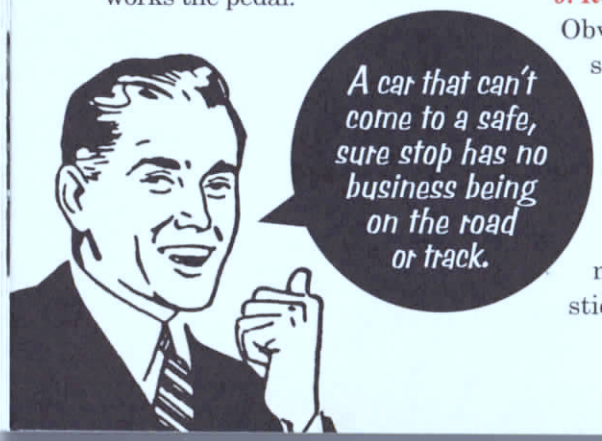
6. Adjust the Parking Brake
Stuck parking brakes can quickly make brakes feel and act funny, plus wear out things out quickly.

7. Check the Hoses
A visual inspection of flexible brake hoses is pretty easy–look for leaks and cracks, discarding any hose with either.

8. Check the Linkages
After you've checked that all the components are not leaking and are in good shape, look for wear (and therefore compliance) in the pedal/master cylinder linkage and in the rear brake/parking brake linkages.

9. Rotor & Drum Surfaces Matter
Obviously, grooves are bad, but so is glazing.

10. Do You Really Need Those Big Brakes?
If you can lock up your wheels and tires, you don't need bigger brakes–you need stickier tires.–*Carl Heideman*



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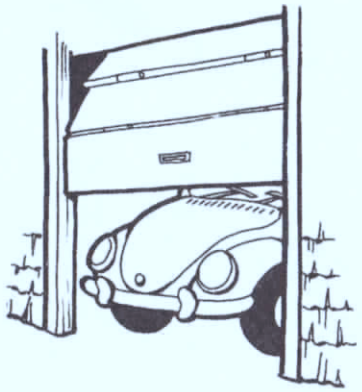
Winter Storage Checklist

Before you put your classic into winter storage, here's some practical advice:

- ❒ Wash and wax the exterior.
- ❒ Clean up the interior.
- ❒ Park in a clean, dry place.
- ❒ Put the windows up.
- ❒ If it's a convertible, raise the top.
- ❒ Change the oil.
- ❒ Replace the coolant if it's weak.
- ❒ Bleed and flush the brake fluid as needed.
- ❒ Top off the other fluids.
- ❒ Inflate the tires to their proper pressures.
- ❒ Park in gear and don't set the parking brake.
- ❒ Remove or at least disconnect the battery.
- ❒ Put the battery on a trickle charger.
- ❒ Have a plan to prevent rodents.
- ❒ Decide if a car cover is for you.
- ❒ Make sure the car and storage site are insured.
- ❒ Don't start the car until spring.

Springtime Storage Removal Checklist

After a few months of slumber in the garage, your car needs a once-over before it hits the great highways.



• Open up the hood and inspect your engine. Look for anything amiss–check your fluid levels and make sure everything looks shipshape.

• Check for puddles of fluid under the car. Repair any issues before the car hits the road. Brake calipers and cylinders can leak onto the wheels themselves, so look carefully.

• Clean the battery terminals and reconnect the wires after you make sure that the battery is fully charged.

• Check and set your tire pressures.

• Unplug the coil wire and crank the engine for about 30 seconds. This will build oil pressure throughout the engine and help lubricate the now-dry engine.

• Make sure that fuel is getting to the carburetor or fuel injection. Check for any fuel leaks and repair if necessary.

• Now plug in the coil wire and start the engine. Then allow it to idle at a fast 1500 to 2000 rpm for a minute or so. Go back around the car while looking for leaks or issues.

• Give the brake and clutch pedals a push or two to make sure they feel normal. Double check for any leaks from the master cylinder, wheel cylinders and clutch cylinder after your footwork.

• Go for a short drive around your neighborhood and return home after a few miles. Go back over the car and look for any new issues, leaks or problems.

• Now it's time to put on some miles. After a few drives, give the car another once-over. Make sure everything is working correctly–parts like thermostats in the cooling system have a habit of getting sticky after a long nap. Finish up by adjusting the carbs and bleeding the brakes to make sure that everything is ready for a pleasant season of driving.

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What's That NOISE?

NOISE	COULD BE...
Tapping or ticking from top end of engine	Loose valves or other valvetrain issues
Tapping or ticking from bottom end of engine	**Main or rod bearing issues**
Rushing air sound that increases with engine speed	Loose component in the intake tract
Screeching that changes with engine speed	**Worn or loose drive belts**
Pinging under acceleration	Ignition timing off and/or not high-enough octane fuel
Engine roaring sound (in a bad way)	**Exhaust leak**
Screaming from front of engine	Worn coolant pump
Ticking from rear of car	**Electric fuel pump issues**
Bad bearing/rattling sound that goes away when transmission is in neutral and clutch pedal is depressed	Worn input shaft bearing
Whirring that changes with car speed as well as side-to-side suspension loading	**Bad wheel bearing**
Whirring that changes with car speed	Tire issue
Squeaking or groaning over bumps	**Dry or worn anti-roll bar bushings or suspension bushings**
Clanking from underneath over bumps	Loose suspension component or worn suspension bushings
Clanking, hollow sound from underneath over bumps	**Loose exhaust system**
Scraping or ticking sound that changes with car speed	Worn brake pads
Screaming from passenger seat	**Driving too fast or erratically**

How to Properly Tow Your Classic

- Tongue weight should be 10 to 15 percent of your total trailer weight–no more or less. If 10 percent of the trailer's weight exceeds the tongue weight rating for your tow vehicle, don't tow with that vehicle.

- Trailers are fairly simple machines, so there's no excuse for not maintaining them.

- Don't have time to maintain your trailer? Just pay somebody–trailer repairs are priced far below Ferrari repairs. What's worse, a $100 trailer repair bill or being the cause of a giant accident?

- If something does go wrong, be gentle and gradual with your driving inputs. Often the best solution is to come to a gradual stop.

- When in doubt, add redundancy. This goes for wheels, straps, safety devices and so on. Always use at least two tie-downs on each end of the towed car.

- If you can't figure something out, call a professional. Dealers are usually happy to help, even if you didn't buy a trailer from them.

Plus

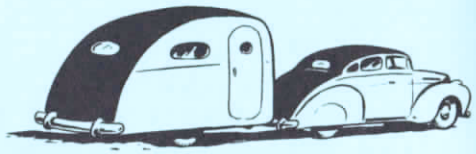
Trailer Hookup How-To

Step 1: Install the proper-size ball on your tow vehicle. "Close enough" is never close enough.

Step 2: With someone's help, back up your vehicle to the trailer.

Step 3: Lower the trailer onto the ball, then immediately latch the coupler.

Step 4: Hook up both safety chains, making sure to cross them under the tongue. If the chains drag on the ground, shorten them.



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How to Test and Troubleshoot Your Alternator

Step 1: First, connect a voltmeter's negative lead to a good ground and attach the positive lead to a positive source in the wiring harness. While many people go directly for the battery, we find that almost any ground and positive source will do.

Step 2: With the engine off, the voltmeter should read close to 12 volts. Once the engine is running, the voltmeter should show 13.5 to 13.8 volts. If the voltmeter stays at 12 volts, then something isn't working. It's usually as simple as that.

Step 3: If you don't see that 13.5-13.8 volt reading, don't blame the alternator right away. Alternators are often replaced unnecessarily when a bad connection is the real culprit. Look for issues at the battery and the main wiring connections to the battery, including the starter solenoid. Carefully and thoroughly clean all of these connections, making sure the cables are terminated with quality, properly sized terminals. If these connections aren't good, then the alternator won't work correctly.

Has the wiring been modified? If it has, look for bad connections or incorrect modifications. Consult a manual to see how the wiring should be handled and make sure your system is hooked up that way. You may need to talk to a marque expert to confirm that it's in order.

Step 4. With some Lucas alternators, it's possible to attach the plug upside down. Does yours check out? *–Carl Heideman*

Step 5: Hook the trailer brake breakaway cable to the tow vehicle.

Step 6: Plug the trailer's electrical cable into the tow vehicle's outlet.

Step 7: Hold the trailer's electrical cable and the brake breakaway cable over the coupler's latch. Then, place the pin in the coupler, making sure its latch captures both cables. This method keeps them aligned and safe.

Step 8: Test the trailer's lights and brakes. These systems are remarkably simple, so there's no excuse for not fixing them if they're broken. For most issues, a permanent repair is just 5 minutes in a hardware store parking lot away.*–Tom Suddard*

CAR CRASH?

• If medical assistance is needed, get it right away.

• Contact the police and get a police report.

• During the aftermath, keep all involved parties safe and out of danger.

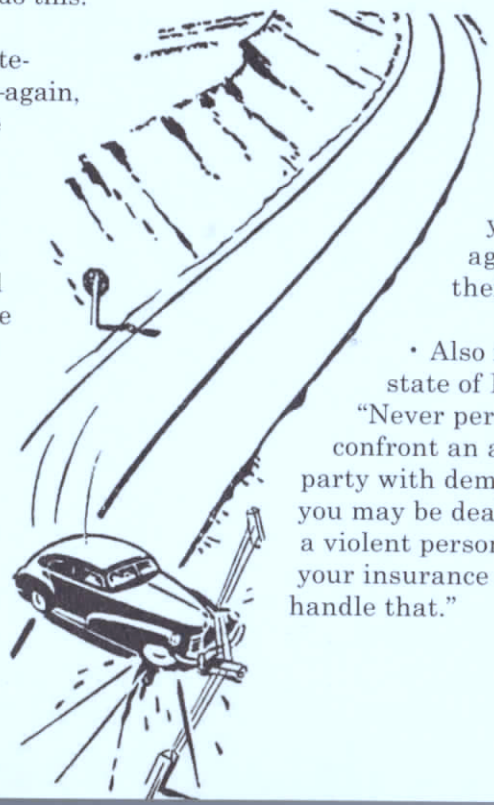
• Preserve the scene with photos and video–don't forget that your smart phone can do this.

• Get witness statements if possible–again, your smart phone can record them.

• Contact your insurance company right away and determine a course of action.

• If your classic has to be towed from the scene, ensure that it will be done so gingerly and without causing further damage.

• Advice from the state of Florida: "We advise you not to negotiate a payment agreement with the other parties to settle damages. Doing it on your own without a crash report from a law enforcement officer could result in your not being fully compensated for damages and can expose you to personal liability since no official report of the crash exists and circumstances become your word against theirs."



• Also from the state of Florida: "Never personally confront an at-fault party with demands as you may be dealing with a violent person. Allow your insurance company to handle that."

Road Tour and Rally Preparation Tips

Before hitting the open road, take the time for a mechanical once-over.

Electrics

- Battery is tied down.
- Horn is loud and works every time.
- All lights and accessories work.
- Charging system works; belt is tight.
- Proper fuses everywhere.
- No dangling or unterminated wires.

Brakes and Suspension

- Hand brake works properly–able to safely slow the car, hold the car on a hill, and release completely.
- Pedal free play is properly adjusted.
- No sponginess in pedal and never any pumping necessary.
- No pulling in either direction.
- No inappropriate lockup under hard braking.
- Shock absorbers work correctly.
- Ride height is correct.
- No binding, especially the anti-roll bars.
- Wheel bearings are lubed and adjusted; all split pins are installed.
- Suspension and steering are lubed.

Engine and Drivetrain

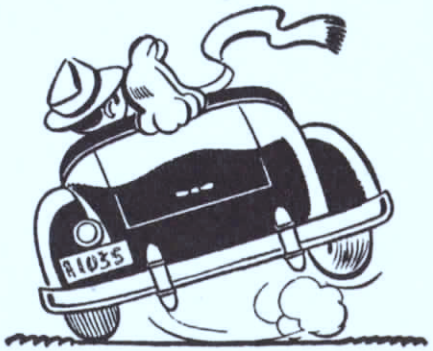
- Compression is within 10 percent on each cylinder.
- Good oil pressure, minimal or no leaks.
- Proper oil level in engine, gearbox and rear axle.
- Engine idles well and at a consistent rpm.
- Car accelerates smoothly.
- Engine shuts off without dieseling.
- No exhaust leaks.
- Coolant is completely topped off and no air bubbles are present.

Interior

- Seat belts work properly and are new enough to be safe.
- Seats slide freely.
- Gauges and dash lights work.
- Mirrors hold adjustment and don't rattle.
- Steering wheel is on straight.
- No unplugged holes in firewall.

Exterior

- Panel gaps are appropriate.
- Doors latch properly on primary and secondary latch points.
- Hood and trunk releases are properly adjusted, tightened and lubed.
- Door handles, bumpers and any other bolt-ons are tight and rattle-free.–*Carl Heideman*



How to Pack an Effective Detail Kit

If you have some detail supplies in the car and something bad happens–bug splatter, bird droppings or the like–you can take care of that little problem before it becomes a big one.

What to carry? Detail pro Tim McNair recommends the following:

- **Quick detail and glass cleaner:** To save space, carry them in 4-ounce spray bottles.
- **Microfiber cloths:** For quick detail wipe-up, dusting and more.
- **Pastry brushes:** Great for dusting.
- **Masking tape:** Use the sticky side for picking up lint, tiny pebbles, etc.
- **Bamboo skewers:** Perfect for dislodging crud from any crevice.

For a stylish carrying case...

Check out the shave kits offered by Couch Guitar Straps. Each leakproof bag is made from NOS automotive vinyl upholstery.

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14 Steps to a Successful Concours

1. Find and Fix Issues
Walk around the car and look at it carefully. Any blemished trim, visible nicks or obvious flaws must be corrected. If you can see the problem, so can the judges.

2. Gather Your Supplies
Start with a good, multiple speed orbital buffer and foam pads: firm for serious buffing work, medium for general polishing work, and soft for delicate jobs like applying wax and fine polishing finishes. You'll also need plastic polish, quick detailer, glass cleaner and a good general-purpose cleaner wax. Finally, gather up some soft microfiber cloths and bamboo sticks.

3. Know the Score
Before the event, try to get a judge's sheet and score your car yourself. Why? To identify any issues before the big show.

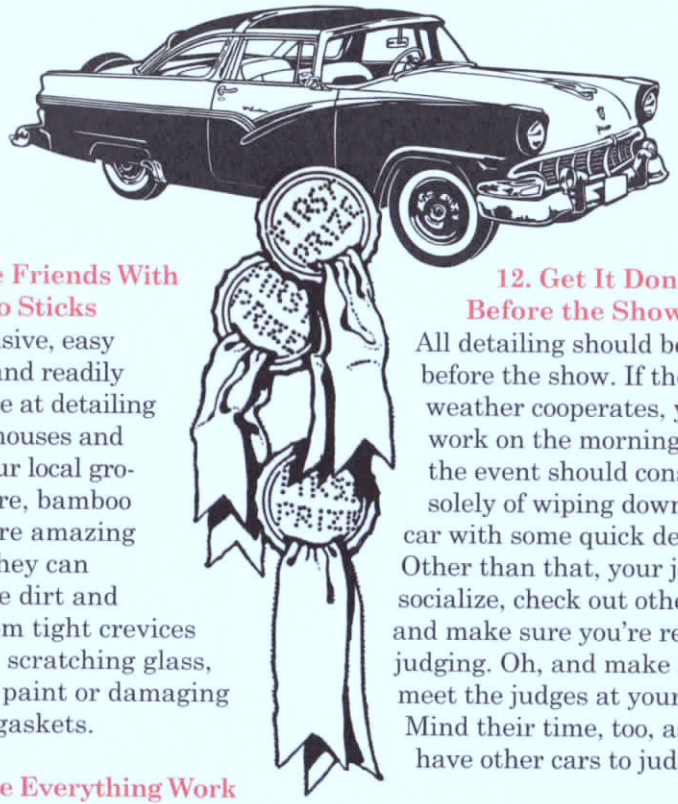
4. Get Your Paint in Order
Assuming you're preparing a nicely painted car and not a barn find, start the process with a clay bar. Use a quick detailer to lubricate the bar.

5. Know the Power of Polish
Contrary to popular belief, polishing–not waxing–is the single most important step in properly detailing a car.

6. Protect With Wax
Automotive wax's primary purpose is to make your polish job last longer. Properly applied wax also makes subsequent cleanup easier, as the wax provides a layer of protection that keeps dust and dirt from sticking.

7. Pump Up the Contrast
Humans subconsciously pick up on sharp delineations and prefer contrast. Blacks should be saturated black. Chrome should shine. There should be few, if any, gray areas on your car.

8. Make the Difference With Details
When every car is nearly perfect, concours judges are looking for subtle differences between each one. Fix those chips. Other things that judges like: factory markings in the engine compartment, correct hose clamps, and batteries that appear period-correct.



9. Make Friends With Bamboo Sticks

Inexpensive, easy to use, and readily available at detailing supply houses and even your local grocery store, bamboo sticks are amazing tools. They can excavate dirt and crud from tight crevices without scratching glass, nicking paint or damaging rubber gaskets.

10. Make Everything Work

We've seen concours entries dinged for flaws as seemingly minor as an inoperable license plate light. That's the way the game is often played. Before leaving for the show, make sure that every item–both electrical and mechanical–works.

11. Bring Everything With You

People have lost concours events because they left original components at home–like side curtains, the spare tire or the factory tool kit. In a close contest, which most usually are, these details matter.

12. Get It Done Before the Show

All detailing should be done before the show. If the weather cooperates, your work on the morning of the event should consist solely of wiping down the car with some quick detailer. Other than that, your job is to socialize, check out other cars, and make sure you're ready for judging. Oh, and make sure to meet the judges at your car. Mind their time, too, as they have other cars to judge.

13. Tell a Story

When rows of cars have all been detailed to the *n*th degree, it's usually the backstory that serves as a tiebreaker. Judges typically award additional points to cars restored by their owners. Likewise, cars with race cred, famous owners or even interesting family histories often beat similar cars without as much personality.

14. Have Fun

This is supposed to be about having fun and enjoying time with your car. More often than not, just making the show field is an achievement. Savor it.

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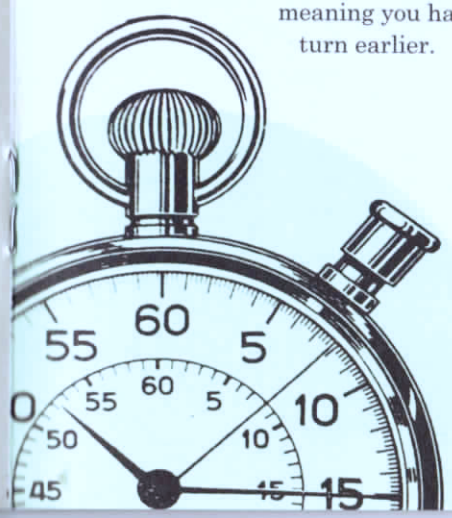
10 Steps to Autocross Success

When it comes to autocross, longtime *Grassroots Motorsports* contributor and multi-time national champion Andy Hollis has probably forgotten more than most of us will ever learn. He has some tips for lower times and increased success.

1. Position First, Then Speed: Positioning the car perfectly is more important than trying to attain the highest potential speed. For example, you will drop more time by correctly positioning the car closer to slalom cones than by adding 1 or 2 more miles per hour. Same with sweepers and 90-degree turns–use all of the track. Position is a prerequisite for speed: If you are not in the correct place, you will not be able go faster. Or at least not for very long.

2. Turn Earlier–and Less: To go faster, your arc through a turn must be bigger. A bigger arc requires less steering. To make a bigger arc that is centered in the same place, the arc must start sooner, meaning you have to turn earlier.



3. Brake Earlier–and Less: Waiting until the last possible moment before dropping anchor for a turn is extremely difficult to consistently execute. Add in the fact that there are no practice runs and the surface is constantly changing. It's better to start braking a little earlier to give some margin of error. And by braking less, you can either add or subtract braking effort as you close in on the turn-in point. This will make you consistent and smooth.

4. Lift Early Instead of Braking Later: Continuing with the philosophy of No. 3 on our list, when you need to shed only a little speed, try an early lift off the throttle instead of a later push of the brake. This doesn't upset the car as much, plus it's easier to execute and allows for more precise car placement when entering the maneuver.

5. It's Easier to Add Speed Than Shed It: If you are under the limit while turning, a slight push of the right foot will increase your speed with no additional side effects. On the other hand, if you are going too fast and the tires have begun slipping, you can only reduce throttle and wait until the tires turn enough of that excess energy into smoke and heat. Don't use your tires as brakes!

6. Use Your Right Foot to Modulate Car Position, Not the Steering Wheel: In a steady-state turn, once you have established the correct steering input to maintain the needed arc, lifting the throttle slightly will let the car tuck in closer to the inside cones. Conversely, slightly increasing the throttle will push the car out a bit farther to

avoid inside cones. For making small corrections in vehicle position, it's much easier to use the throttle than the steering wheel.

7. Unwind the Wheel, Then Add Power: If the car is using all of the tires' capacity to corner, there is none left for additional acceleration. As you unwind the wheel at corner exit, more traction becomes available. If you do not unwind the wheel, the tires will start to slide and the car will push out.

8. Attack the Back: As covered earlier, for slaloms and most offsets, getting close to the cones is critical for quick times. To get close, you must move the car less, which means bigger arcs. Bigger arcs come from less steering and require earlier turning.

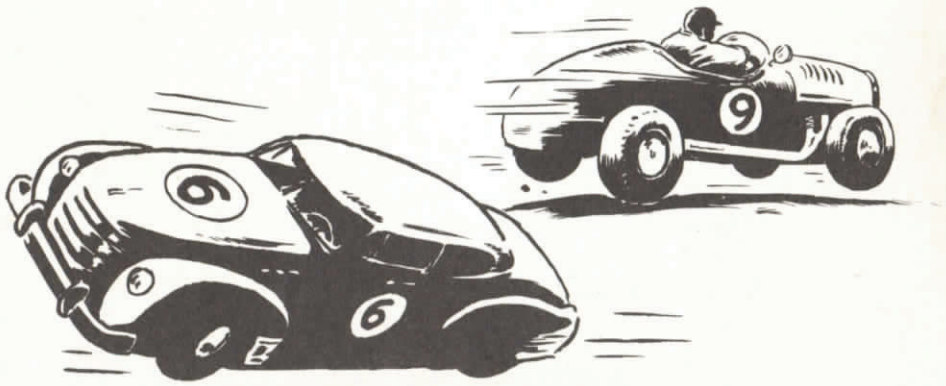
Now for the fun part: When you go by a slalom cone and start turning the steering wheel back the other way, when does the car start to actually change direction? Answer: when the steering wheel crosses its center point. How long does that take? If you are smooth, it takes a quarter- to half-second. Now, how long is a typical person's reaction time? Answer: about a half-second. Finally, how long does it take to go between slalom cones? Answer: typically on the order of a full second.

Given all of this information, your brain must make the decision to begin turning the steering wheel back the other way just before you go by the previous cone. Since this is a mental issue, here's a good visualization of this technique: Try to run over the backside of each slalom cone with your inside-rear tire. In order to hit the cone with the rear tire, the car must be arcing well before the cone and the arc must be shallow. Attack the back!

9. Hands Follow the Eyes, the Car Follows the Hands: 'Nuf said.

10. Scan Ahead, Don't Stare: Keep the eyes moving. Looking ahead does not mean staring ahead. Your eyes must be constantly moving forward and back, and sometimes left and right. Glance forward, glance back. Your brain can only operate on the information you give it.

Bonus Tip. Don't Forget the Stuff Between the Marked Maneuvers: Too often we think of a course as a series of discrete maneuvers. There is typically more to be gained or lost in the areas in between. Pay special attention to the places where there are no cones.
–Andy Hollis

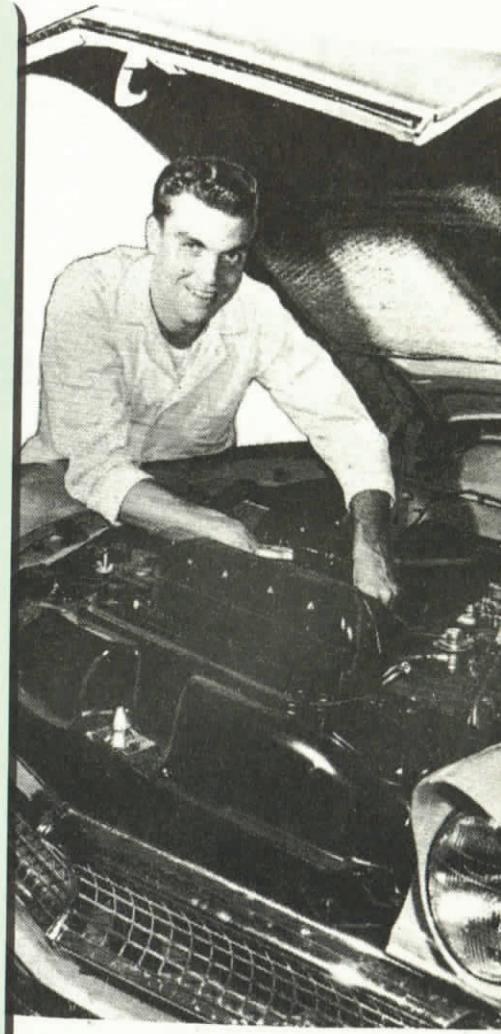


Classic Motorsports magazine

How to Mechanically Inspect That Potential Purchase

To pay or to walk away? THAT IS THE QUESTION.

- Do the lights, turn signals and horn work?
- Check the heater, too, if you're at all likely to use it.
- Check the wheel bearings.
- A compression test and even a leak-down test are not out of the question.
- Before changing them, look at all the fluids. Are the fluids relatively fresh or do they look as if they've gone a long time without being changed? Do they smell bad? If the car has an automatic, does the transmission fluid smell burnt? Does the engine oil look milky or filthy black?
- Look for leaks underneath the car. What is leaking and why? Is it minor, like the valve covers or the differential cover or major, like a crack in the differential or a rear main seal gone bad?
- Inspect the steering, brakes and suspension.
- Are the ball joints, tie rods and ends good?



6

Steps to a Smart Online Transaction

• Several police departments now offer their lobbies and parking lots as safe places for online transactions.

• Cash is still king when it comes to quick transactions, but be smart about it.

• The title is present, clean and in the seller's name, right? And the VIN on the car matches the title?

• Once both parties agree on a price and terms of the sale, write up a bill of sale and sign it–and, ideally, have a witness sign it. A proper bill of sale lists the names and addresses of both the buyer and seller plus the date of the sale, the selling price, the car's serial number, any balance due, any warranties offered, and anything else that could impact the sale. Each party should leave with a signed copy.

• Some states will issue a temporary license plate to those purchasing a car in their state. Contact the seller's local DMV or tax collector's office for details.

• Most insurance companies automatically cover new purchases for a short period of time, but to be safe contact them and add the car to the policy.

• Get the car off the seller's property as soon as possible–ideally before the ink on the bill of sale has dried.

Classic Motorsports magazine

What to Carry When Driving Home That Car You Just Purchased

You've decided you just must try driving something home that you have bought. First, bring common sense, a sense of humor and some open-ended extra time. You can't just get in most classic cars, no matter how well they have been restored, and expect to drive them 800 to 1000 miles a day. First, they are usually just not that comfortable and second, you need to stop and smell the roses some on a trip like this. If nothing else, allow yourself an extra day or two in case something does go wrong.

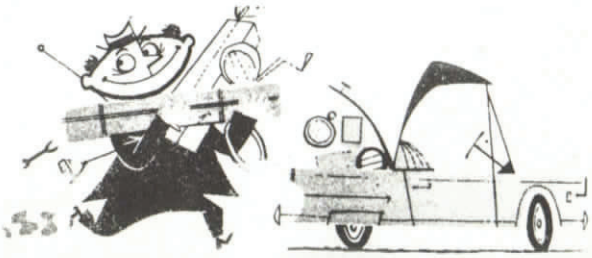
Next, bring a friend who is easy to hang out with and handles adversity well. At least then you have someone to keep you company when the engine conks out and you coast to the side of the road 50 miles out of East Overshoe with the next town another 50 miles down the road.

Tools are important. A good set of basic hand tools is essential. Make sure the jack works, and a jack stand or two will make roadside repairs less dangerous.

In addition, some nuts and bolts, wire ties, duct tape, a test light and multimeter are essential. Extra parts are good, if you can carry them. Starters, generators, fuel pumps, carburetors and voltage regulators are the types of things that go bad. Naturally, the rarer or rougher your purchase is, the more stuff you should bring. Don't forget the simple things, like some extra windshield wiper blades, a roll of electrical wire, and an appropriate assortment of light bulbs.

If the tires are the least bit suspect, install fresh ones before setting out. Eliminating tire problems is a quick way to make the trip a lot more fun and a lot safer.

Finally, take the car out for an hour's test drive while you're still in range of a set of tools, a parts store, and a comfortable place to work. A drive around the block may be enough to satisfy yourself that the car is worth buying, but 50 miles, with at least half at freeway speeds and the other half on some bumpy roads, is a good idea. In that distance, you may be able to decide which noises are the sounds of an old car and which ones can make a trip agony or bring it to an abrupt halt.



ABOUT Reliable Carriers

Shipping cars here, there and everywhere.

Need to move a car from here to there–and would rather someone else handle everything, including the loading, unloading and all of the driving? Fortunately, there are companies that specialize in moving classic cars, and Reliable Carriers is considered the 800-pound gorilla in the field. As Bob Sellers, the company's vice president and COO, explains, between concours cars, corporate clients and auction lots, they move more than a thousand vehicles in and out of Monterey every year–and that's just one event on the calendar.

Reliable's story began with a single tractor trailer and a lasting commitment more than 50 years ago: to transport cars and trucks to any location the client demands with an unparalleled level of care and an untouchable degree of professionalism.

Today, Reliable Carriers is the country's largest enclosed auto transport company, serving the 48 contiguous United States and the farthest reaches of Canada.

Whether it's transport for a concours event, auto auction, or corporate event, and whether you're shipping an antique auto, classic car, or the car of your dreams from one location to another, Reliable Carriers, Inc. provides fully enclosed, door-to-door auto transport, in our air ride-equipped transporters with a standard $5 million worth of insurance on every single load, and GPS satellite tracking.

Is This Risky?

Hagerty Insurance handles around 40 percent of the cars involved in the Monterey festivities, and the company's Jonathan Klinger reports that they see very few losses. "Less than 1 percent of our claims on an annual basis happen during transport," he says. "Of the transportation-related claims, the most common ones are something falling or spilling on the vehicle."

Classic Motorsports magazine

EXPERT TRUCKING TIPS

Bob Sellers, vice president and COO for Reliable Carriers, has some practical advice for those shipping a car:

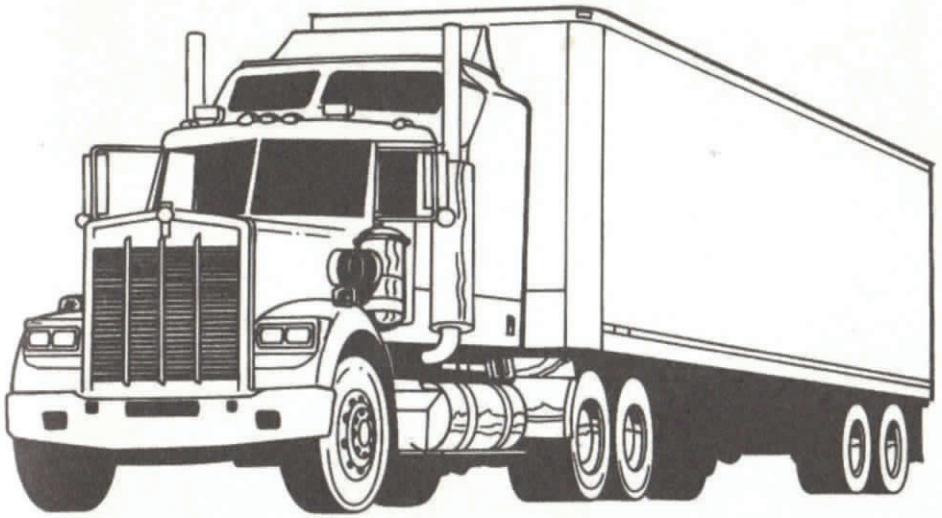
- Be sure the delivery location can accommodate a tractor-trailer. The driver is coming in the biggest truck you have ever seen.

- Please return the driver's call in a timely manner. He or she is trying to schedule your pickup or delivery while being on time for the other folks sharing your truck.

- If you are paying with a credit card, this needs to be done with one of our offices over the phone. Our drivers do not carry credit card machines with them in their trucks.

- If you are shipping personal items in the vehicle, please ensure that they are secure. We are not responsible for personal items inside a vehicle.

- Please tell us if the vehicle does not run. It must roll and steer.



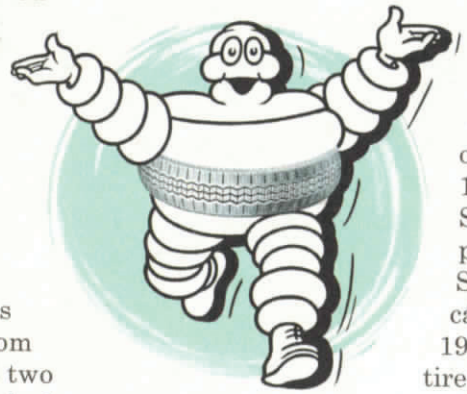
ABOUT
Michelin North America

Michelin has been a part of the tire industry in the United States since 1907, when it purchased the International Rubber Company in Milltown, New Jersey. The facility made tires and tubes until 1930, when the Great Depression took its toll on what had become the fourth-largest tire manufacturer in the country with 2000 employees.

The Michelin North America we know today took form in March of 1950. When five people started Michelin Tire Corporation in New York City, the company's only products were truck tires made with metallic plies; customers could choose from three sizes and two different tread designs.

As the global demand for radial tires accelerated, Michelin responded with an expansion plan that opened 23 new plants, all producing radials. Michelin made the decision in the early '70s to make only radial tires and eliminate production of the old-style bias-ply tires.

After building two plants in Nova Scotia in 1971, the company began to put down roots in what would become its base of operations in North America: South Carolina. Two more plants opened in the western part of the state in 1975: One plant, US2 in Anderson, South Carolina, built semi-finished products that the other plant used to make tires.



The very first radial passenger tire came off the line at US1 in Greenville, South Carolina, on March 10, 1975. A third South Carolina plant, US3 in Spartanburg, came online in 1978, producing tires for the trucking industry's rapidly growing radial market.

Today, Michelin employs 22,850 people in North America alone, with 9510 working in South Carolina.

Learn more: michelinman.com

About HAGERTY

Classic Car Insurance!

Based in Traverse City, Michigan, Hagerty is the world's leading insurance provider for classic vehicles and hosts the largest network of classic car owners. Hagerty offers insurance for classic cars, trucks, motorcycles and motorcycle safety equipment, tractors, automotive tools and spare parts, and even automobilia (any historic or collectible item linked with motor vehicles).

Valuation Tools!

Hagerty also offers overseas shipping and touring insurance coverage, business coverage, and club liability coverage. Plus, the company's online Valuation Tools (hagerty.com/valuationtools) and "Hagerty Price Guide" are the premier value guides for postwar collectible automobiles.

Shipping Insurance!

Price Guides!

Learn more: Call (877) 922-9701 or visit hagerty.com

MAINTENANCE LOG SHEET

DATE _____ MILEAGE _____

SERVICE PERFORMED	PARTS INSTALLED
NOTES	

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DATE _____ MILEAGE _____

SERVICE PERFORMED	PARTS INSTALLED
NOTES	

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DATE _____ MILEAGE _____

SERVICE PERFORMED	PARTS INSTALLED
NOTES	

_____

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EVENT LOG SHEET

EVENT _____

DATE _____ LOCATION _____

MAKE _____ MODEL _____ CAR No. _____

SURFACE _____ WEATHER _____

Vehicle Specs

	LF	RF	LR	RR
CASTER (DEG.)				
CAMBER (DEG.)				
TOE				
TREAD DEPTH (BEG. EVENT)				
TREAD DEPTH (END EVENT)				
SHOCK SETTING				
ANTI-ROLL BAR SETTING				
TIRE PRESSURE				
TIRE PRESSURE				
TIRE PRESSURE				

Tire Temps

LEFT FRONT	RIGHT FRONT

LEFT REAR	RIGHT REAR

notes: _____

LEFT FRONT	RIGHT FRONT

LEFT REAR	RIGHT REAR

notes: _____

LEFT FRONT	RIGHT FRONT

LEFT REAR	RIGHT REAR

notes: _____

LEFT FRONT	RIGHT FRONT

LEFT REAR	RIGHT REAR

notes: _____

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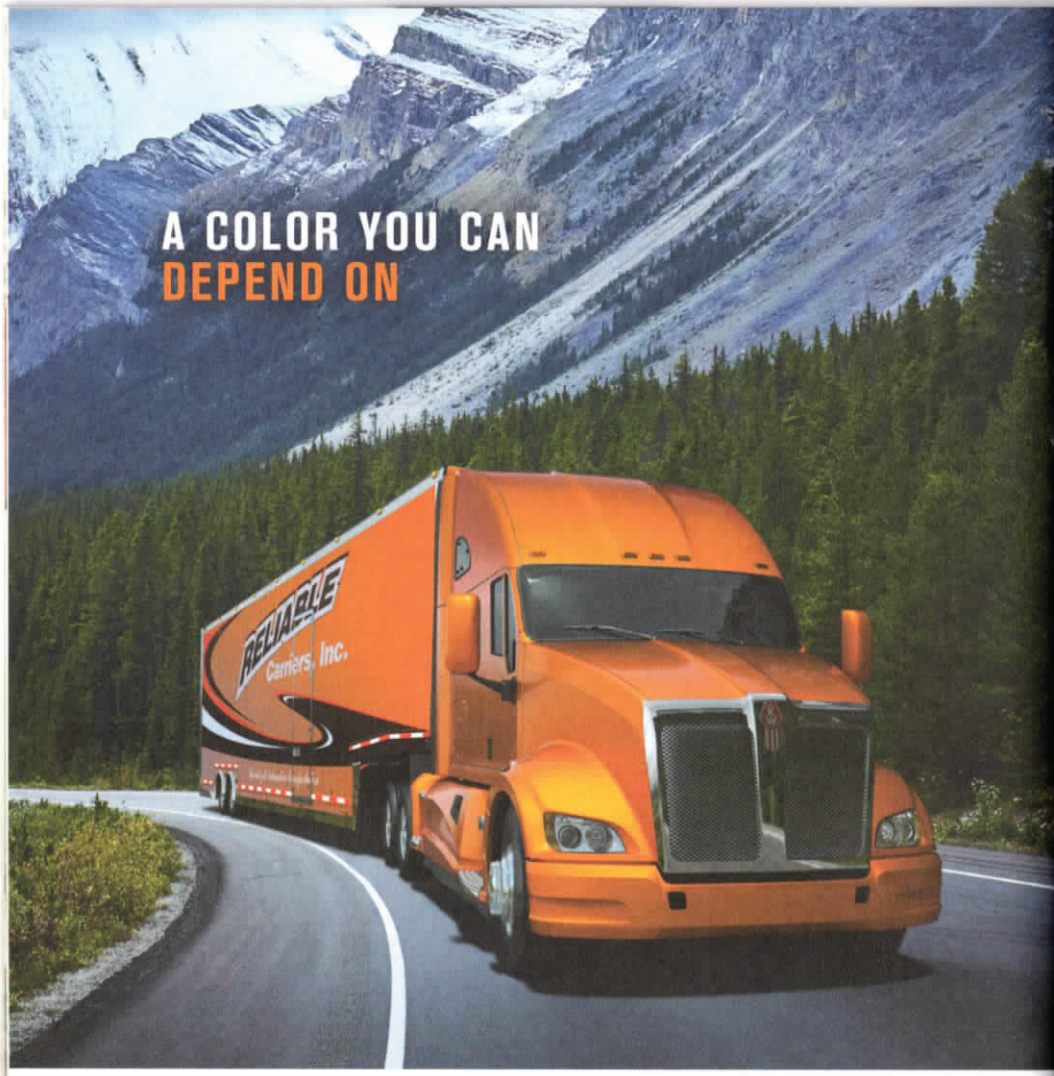

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To some, orange is just a color. To us, it represents coast-to-coast coverage. Reliable Carriers, the largest enclosed auto transport company in the U.S., commands over 400 air-ride-equipped trucks that travel the 48 contiguous states and into Canada. Reliable drivers average 10+years of experience transporting valuable vehicles and corporate fleets, delivering confidence and security with every load. Reliable Carriers. Vehicles taken seriously.