Triumph Register of America

Concours d'Elegance

Judge's Guidelines

TR2 – TR3B

CHASSIS

Introduction

The annual Triumph Register of America (TRA) Concours d'Elegance has been the highlight of *National Meets* for over fifty years. These *Judging Standards and Restoration Guidelines* serve both concours judges and enthusiasts undergoing restorations.

About TRA

TRA is a nonprofit organization established to assist TR2 -TR4A owners in the restoration, maintenance, preservation, and enjoyment of their cars with over twenty-five *Local Centers* from coast to coast. Online communication, local technical workshops, and driving events provide the binding glue for our national organization. More information regarding TRA may be found at www.TriumphRegister.com.

About TRA Concours

Concours competition requires significant commitments of research, time, and cost, and is taken seriously by those involved. Conducting a concours d'elegance also requires significant commitments in planning and preparation. TRA recognizes both, and strives to improve the experience by establishing practical standards subject to periodic review, and recruiting and training judges to employ them.

A successful concours d'elegance requires:

Consistency Across the Event: Evaluations should be consistent across the show field.

***Consistency Between Judging Teams*:** Evaluations should be consistent between judges and judging teams.

Consistency between Successive Events: Evaluations should be consistent from year to year, regardless of judging personnel. Components correctly adjusting deduction notations on *Judging Scoresheets* should not receive further deductions on that account.

Proper Time Management: TRA concours evaluations should take only three hours, though this may prove difficult with crowded show fields. In such cases, increased staffing, or procedure changes consistent with established practice, may be required.

About this Document

The *Judging Standards and Restoration* guidelines result from years of assembling information from factory reference materials, contemporary third parry publications, TRA member experience and expertise, and TRA judging school presentations and reviews.

Each section within this guide includes specific cautions regarding the accuracy of provided information which, despite intensive research, often lacks conclusive supporting documentation. This is further complicated by persistent errors in existing supporting documentation because of the mass production methods used by Standard-Triumph. The *Spare Parts Catalogue* often cites changes at specific commission numbers that occurred over several weeks of production, with cars produced during that time having either the early or later configuration. Therefore, judges and restorers should not conclude that a car fitted with components inconsistent with a cited *Service Bulletin* or *Spare Parts Catalogue* parts or engineering change is in error before conducting further research or consulting with experts.

General Rules for Concours Competition

Scope

Judging comprises two elements:

> ***Originality:*** The components match those specified for the model and commission number.
>
> ***Restoration Quality:*** The condition of various components.

Scoring

Cars begin the judging process with 100 points, with deductions made for deviations in *Originality* and *Restoration Quality.*

The 100 points are divided into four sections, with a detailed breakdown of components and their point allocations provided within each judging section. The judging sections include:

Exterior	25 points
Interior	30 points
Underhood	30 points
Chassis	15 points

Examples:

A car receives a single point deduction in *Underhood-Hydraulics,* which is recorded on the *Underhood Scoresheet*.

As *Underhood* contributes 30 points toward the maximin of 100 points, or thirty percent, the weighted value of the deduction is 0.3 points, which is recorded on the *Master Scoresheet*.

Half-Point Deductions: While *Originality and Restoration Quality* deductions are made at full points, judging categories or components within a category assigned a single point require an exception allowing judges a choice beyond awarding full points or deducting as though the component within the category was missing entirely. An example is *Underhood,* where 81 percent of evaluated components are assigned a single point. Therefore, ***components assigned a single point may be judged in half-point increments.***

Car Classes: The TRA has established the following classes of cars for concours judging events:

> *Standard Class:* Comprised of TR2 through TR4A cars being judged how well they compare to original new cars when they left the showroom floor. They are judged on both originality and restoration quality. The highest score of the participants in this class will be declared the Best of Show winner along with First Place in their individual class.

Premier Class: Comprised of cars that have won Best of Show at a previous TRA Concours event. Generally, the *Premier Class* car has the fewest originality issues and the focus of judging is the level of restoration quality. Entrants are awarded certificates, as detailed below.

At the conclusion of the judging and with time permitting, the scoresheets will be reviewed by the Chief Judge and all team leaders. In the event of limited time, at a minimum, the review will comprise the top three cars in each of the Standard Class. This supplemental judging review is designed to ensure consistency among and between judging teams.

Scoring Results: Scoring within each class is based upon the score attained by each car against these standards. A minimum score of 70 is required to earn third place, a minimum score of 80 to earn second place and a minimum score of 90 to earn first place. The highest score among all concours entrants in the Standard class is awarded "Best of Show" for that event.

Additionally, each entrant in concours is usually awarded a certificate documenting their concours score. Cars scoring at least 70 points are awarded a Bronze Certificate; at least 80 points, a Silver Certificate and 90 points and above, a Gold Certificate.

Examples: Five cars score the following: three TR3As score 97, 78 and 75 and two TR3Bs score 89 and 85. The scoring results are as follows:

TR3A Standard Class	**TR3B Standard Class**
TR3A **97** First Place Trophy, Gold Certificate, **Best of Show**	*No First Place*
No Second Place	TR3B **89** Second Place, Silver Certificate
TR3A **78** Third Place Trophy, Bronze Certificate	TR3B **85** Third Place, Silver Certificate
TR3A **75** Did Not Place, Bronze Certificate	

Scoresheets

Scoring is recorded on scoresheets for each judging section, with the totals of each section transferred to the *Master Scoresheet.* Judging area scoresheets are provided in the corresponding sections of this document. *The Master Scoresheet* and judging section scoresheets are also included in the *Appendix.*

Exterior Scoresheet: This applies to body and exterior components originality and condition.

Exterior Scoring, Body, Paint and Alignment Worksheet: This supplement to the *Exterior Scoresheet* applies to the quality of bodywork, paint, and alignment of major body panels.

***Underhood Scoresheet*:** This applies to the quality and originality of the engine compartment, including the bulkhead (firewall) and inner fenders.

Interior Scoresheet: This applies to the passenger compartment, hood (convertible top), side-screens (sidecurtains), boot (trunk), jack, required tools, and *Instruction Book*.

Chassis Scoresheet: This applies to the chassis frame, inner fenders, suspension, exhaust, and road wheels.

Master Scoresheet: This records the 'weighted' points awarded for the individual scoring sections and calculates a total final score.

Rules for Concours Participants

Driven Onto Field: To be eligible for concours judging, a car must be driven onto the show field.

Hood (convertible top) Fitted: Hoods must be fitted to the car or full points will be deducted for the hood.

Sidecurtains: Sidecurtains are displayed adjacent to the car., typically to the rear. In the event of rain, the Chief Judge may permit sidecurtains to be fitted.

Boot (trunk): The jack, required tools and owner's handbook are displayed in the boot. Period accessories such as advertisements are allowed, but discouraged as they clutter or conceal the display area. Personal items and mementos, such as previous trophies and restoration documents and photographs, should be removed.

Spare Tire Compartment and Cubby Box: These areas are considered 'personal' space and may remain closed during judging.

Judges' Access to Car: The bonnet (hood) and boot lid should be initially raised for judging access. Judges will require the lowering of the bonnet and boot to access alignment and the opening of doors. Owners may perform these tasks. ***Absent owners will be deemed as having provided implicit consent for judges to do so. Judges are not required to seek absent owners.***

Interaction With Judges: Judges may request owners to open or close body panels to evaluate alignment. Circumstances may require a judge to ask an owner a question, but conversation between judges and participants should be avoided to the extent possible. Questions involving *Originality* or other judging matters should be addressed to the Chief Judge.

Dispute with Standards: If a participant notices an *Originality* discrepancy between the *Judging Standards* and a component demonstratively original to his or her car, the discrepancy should be addressed at the Judges Meeting preceding each concours for discussion and resolution.

Rules for Concours Judges

Contact With Cars: Judges should avoid unnecessary contact with cars, though sometimes this is unavoidable. *Interior* judges will require access to interior components, and *Exterior* judges may be required to open or close bonnets, boot lids and doors should the owner be absent.

Interaction Prior to Event: Judges must avoid inspecting cars or discussing participants' cars with other judges or participants prior to the time of the event.

Interaction With Participants: Judges should avoid interacting with participants. Typically, this would be limited to requesting owners to open and close bonnets, boot lids, and doors. Participants with questions regarding the judging process should be referred to the Chief Judge.

Interaction With Spectators: Judges should avoid interaction with spectators while judging, particularly with matters regarding *Originality.* Spectator questions should be referred to the Chief Judge for later discussion.

Judging Teams

The number of cars being judged influences the number of judges required and the extent of each judge's duties. Ideally, the same judges should judge each section throughout the concours classes, with multiple teams judging sections with many components such as *Underhood* to further enhance consistently and reduce the burden of individual judges. The ideal judging effort would be to have four judging teams each comprised of a lead judge, assistant judge, staff or novice judge and a scribe. At a minimum, a team should be comprised of an experienced lead judge, an assistant judge and a scribe for each of the four section areas to be judged.

Judging Team Selection Guidelines: Judges are enthusiasts with varied experiences and interests volunteering to preserve the marque, and while no specific credentials are required, criteria developed over many years have proven useful.

> ***Attendance at Two Judging Schools:*** Prior exposure to the judging process and judging material is of significant benefit to potential judges, regardless of the materials covered in a particular judging school.
>
> ***Encourage Prospective Judges to Serve as Assistants During Judging:*** Prospective judges recording scores and judges' notes on scoresheets during the judging process trains them while reducing judges' burdens.
>
> ***Mix Judges with Varied Experience:*** Pairing new judges with more experienced ones improves consistency while reducing newcomer anxiety.
>
> ***Demonstrated Knowledge of the Cars and Judging Area:*** Members with demonstrated knowledge of the cars and the restoration process are favored prospects, though

'knowledgeable' does not equate with 'expertise.' Expertise will not make a candidate an excellent judge, nor lesser knowledge a poor one.

The same applies to judging sections. Candidates more experienced in mechanicals or bodywork are better assigned to judging sections suited to their skills.

General Judging Guidelines

Begin With the Premier Class: Judges should begin with the *Premier Class*, as these entrants are typically the finest examples from previous years. The primary focus of *Premier Class* judging is the evaluation of their restoration upkeep. *Originality* deductions are potentially minimal, offering experienced judges the opportunity to highlight originality aspects of various components to less experienced judges before evaluating other classes.

Components Before Scoresheet: Judges should evaluate vehicle components before recording deductions on the scoresheet rather than using the scoresheet as a deduction checklist.

Clearly Mark Scoresheets: Scoresheets should be marked as clearly as possible to avoid scoring confusion. When circumstances require or allow, judges should provide short explanatory comments in the space provided on the scoring sheet to assist owners in correcting flaws.

Underhood Judges: Judging the large number of items in this category is best accomplished by establishing two judge teams simultaneously working side-by-side. One team covers *Identification Plates* though *Hydraulics* and the other team covers *Engine* through *Cooling System*. This arrangement is conditioned upon the availability of judges and is to be implemented at the sole discretion of the Chief Judge.

Accessory Items:

> ***Factory Replacement Accessories:*** Factory accessories replacing standard equipment such as hard tops and adjustable steering assemblies specifically cited in the *Judging Standards* should be judged for *Originality* according to the description provided in the Standards.
>
> Fitted factory 'replacement' accessories listed in the *Spare Parts Catalogue* such as aluminum sumps and anti-dazzle mirrors not specifically described in the *Judging Standards* should be judged according to the standards applied to the replaced items to the extent possible. When this results in the deletion of required components, the missing components should be fully deducted.
>
> *Examples:*
>
> 'Factory' anti-dazzle mirrors are deemed original for *Originality* judging and are judged for *Quality* per the *Judging Standards*.

'Factory' aero windscreens fitted as replacements for the standard windscreen are deemed original for *Originality* judging are judged for *Restoration Quality* per the *Judging Standards.* If the hood (convertible top) is not fitted, the hood should receive full deductions.

Supplemental Factory Accessories: Supplemental factory accessories listed in *the Spare Parts Catalogue* such as 'pre TS42400' ashtrays, wing mirrors, fog/driving lamps, badge bars and 'factory supplied' luggage grids should not be judged.

Supplemental Third-Party Accessory Items: Fitted supplemental accessories such as radios and wind-wings provided by third party purveyors should not be judged.

All concerns regarding accessory judging should be addressed to the Chief Judge.

Exceeding the Standards: The Judging Standards set both the minimum and maximum *Restoration Quality* and *Originality* standards established for TRA concours. Judges should neither evaluate components nor elements of components not cited in the Judging Standards. For example, a component cited as painted semi-gloss black should warrant deductions if painted gloss black, but an item cited as painted black should not be deducted for varied levels of gloss.

Official Scorer

Completed *Judging Scoresheets* are submitted to the Official Scorer, who checks scoring arithmetic, calculates total scores, and transcribes *Judging Scoresheets t*o the *Master Scoresheet*. When completed, the *Master Scoresheets* are presented to the Chief Judge for recording. The Official Scorer will then provide copies of the assembled section *Judging Scoresheets* and *Master Scoresheet* to participants upon request to the extent practicable.

Chief Judge

The Chief Judge assigns judges, presides over *Judging Schools*, communicates rules, resolves questions or differences between judges, monitors judging, and addresses participants' questions.

Chassis Contents

Chassis Judging

Scope

Chassis judging evaluates the quality and originality of the underside of the car and the road wheels. Deductions are based on condition and originality deviations, as outlined in the *Chassis Scoresheet*. This category of scoring accounts for fifteen percent of the total score.

General Evaluation and Scoring Guideline

Inspections should reflect that the cars have been driven and that some components cannot indefinitely remain in showroom condition. For example, mild steel exhausts rapidly oxidize when exposed to the elements, and only scaling or serious fatigue should cause concern. Mildly over-restored components warrant neither more nor less *Restoration Quality* point deductions as those in 'factory' condition, though extreme over-restoration may warrant *Originality* deductions such as chrome plated suspension components or mirror polished exhausts.

General Scoring Principles

The weights allocated to some chassis *Originality* faults are set low to reflect reasonable alterations or updates improving the car's safety or roadability without violating the spirit of the marque. Examples include zero deductions for early TR2s lacking the dangerous 'narrow rimed' wheels and only 5-point deductions for TR2s fitted with the more sensible TR3A exhaust.

Restoration *Quality* points are deducted in increments of full points.

> ***No Point Deductions:*** Components are properly fitted and in excellent condition without obvious wear, excessive leakage, surface oxidation, or foreign matter
>
> ***Partial Point Deductions:*** Components display varied levels of repair with some signs of leakage, neglect, or lack of attention to detail or upkeep
>
> ***Maximum Point Deductions:*** Components are missing entirely or have neglected repairs, many minor flaws, consistently poor workmanship, or excessive wear or leakage.

Multiple Component Scoring

Restoration Quality points are evenly distributed between components within a scoring category. For example, if three road wheels are in excellent condition and receive no deductions and the fourth is in very poor condition and receives full deductions, the points should be divided between the four.

Quality Point Inspection: Inspections include but are not limited to:

> ***Installation:*** Components do not fit neatly, as designed, or are visibly loose
>
> ***Appearance:*** Components are neglected, finished poorly, leaking, or covered in leakage from another component, heavily oxidized or undercoated, excessively worn, filthy, or display evidence of unrepaired or poorly repaired collision damage
>
> ***Fitting and Sundry Parts Condition:*** Small fittings such as clips, exhaust hangers, brake and fuel lines, and attachment hardware are excessively grimy, pitted or oxidized

TR2-TR3B	Class:	Reg #:
CHASSIS	Year/Model:	
Score Sheet	Commission #:	
	Owner(s):	

Quality Deductions	Max Ded. Allowed		Chassis - 15 Points	Max Ded. Allowed	Originality Deductions
	10	**Frame**	Assembly	10	
	2		Finish	2	
	2	**Radiator Crosspiece**	Component	2	
	1		Finish	1	
			Exhaust System - 8 Points		
	5	**Exhaust System**	Component Type (number & size of silencers)	5	
	2		Attachment Hardware	2	
	1		Finish	1	
			Fuel & Brake Lines - 6 Points		
	2	**Fuel Lines**	Lines	2	
	1		Routing, Mounting Hardware, Finish	1	
	2	**Brake Lines**	Lines	2	
	1		Routing, Mounting Hardware, Finish	1	
			Front End - 10 Points		
	5	**Brakes**	Lockheed vs. Girling	5	
	1		Finish	1	
	1	**Suspension**	Period	1	
	1		Finish	1	
	1	**Lower Steering**	Period (Castellated)	1	
	1		Finish	1	
			Rear End - 9 Points		
	2	**Brakes**	Lockheed vs. Girling, Size	2	
	1		Finish	1	
	2	**Suspension**	Assembly	2	
	1		Finish	1	
	2	**Rear Axle Assembly**	Mayflower vs. Vanguard	2	
	1		Finish	1	
			Drive Train - 9 Points		
	2	**Propeller Shaft**	Assembly	2	
	1		Finish	1	
	3	**Transmission**	Assembly	3	
	2		'LO' Car without overdrive	2	
	1		Finish	1	

TR2-TR3B	Class:	Reg #:
CHASSIS	Year/Model:	
Score Sheet	Commission #:	
	Owner(s):	

Quality Deductions	Max Ded. Allowed		Road Wheels - 32 Points	Max Ded. Allowed	Originality Deductions
	6	**Wheel**	Assembly	6	
	2		Finish	2	
	6	**Hub Caps & World Globe**	Hub Caps, Medallions	6	
	2		Finish	2	
	6	**Wire Wheel Knockoffs**	Component	6	
	2		Finish	2	
	6	**Tires**	Period	6	
	2		Finish	2	
			Other - 11 Points		
	6	**Wheel Arches**	Panels	6	
	2		Front Sealer Plates and Rubber Seals	2	
	1		Finish/Coating	1	
	1	**Underbody**	Panels	1	
	1		Finish/Coating	1	

Comments:

Total Originality Deductions	0
Total Quality Deductions	0
Total Deductions	0

Chassis Originality Guide

Documented engineering and specification changes are subject to significant margins of error because of the mass production processes used in TR assembly. Reference materials are not absolute gospel. Unless otherwise excluded for specific components, ***a margin of error of 100 commission numbers should be applied throughout.***

The structure of the *Chassis Originality Guide* follows the *TR2-3B Chassis Scoresheet.* Engineering changes are noted in each section where appropriate. A summary of these changes is provided below.

Originality Deductions

The scoresheet outlines the maximum points per category that may be deducted for deviation from originality.

> ***Incorrect Component:*** The (or a) primary component is not original to the model.
>
> ***Major Assembly Deviation:*** A portion of the assembly is not original. A wrong variation of the component is installed or an improper substitute is installed.
>
> ***Minor Deviations:*** A minor portion of the assembly is incorrect or missing.
>
> ***Judges may not remove or disassemble components and must avoid contact with the car.***

Chronological Summary of Chassis Engineering Changes

TR2

January 1954: Optional wire wheels available

TS1869: Upgraded disc wheels

TS1927: Upgraded lug nuts

TS2532: Exhaust silencer increased to 24”

TS3174: Rear spring change

TS3512: Radiator protection crosspiece fitted

TS4310: Infill stiffening plates added to chassis, exhaust mounting altered

TS4699: Frame bracket for rear shock changed

TS5443: Rear brakes increased to 10” diameter

TS5777: Steering column brace added from column to chassis cross-tube

TR3

TS9122: Front lower suspension A-frame bearings changed to nylon with steel sleeves

TS11385: Rear silencer added to exhaust

TS13046: Brake system now Girling, rear axle now 'Vanguard III' type, wire wheel hub adaptor added

TS15497: Fuel line around fuel tap simplified. fuel tap eliminated

TS15706: Tailpipe changed possibly from chromed to aluminum finisher

TR3A

TS22014: Stiffening bracket added between trunnion and bumper mounting bolt, disc wheels now painted silver

TS26904: Softer rear springs fitted to passenger side

TS27689: Front disc brake dirt shield added

TS56377: Front brake calipers change to Girling split "B" for wire wheel cars. Rear drums decreased to 9"

TS56384: "B" type front calipers fitted to disc wheeled cars

TS60000: Change in body tooling causes change in fuel tank design and fuel line routing.

Chassis

From TS3512, a cross-piece was added to protect the vulnerable lower radiator tank. This was painted black.

From TS4310, the chassis was stiffened by infill plates at the center of the cruciform frame.

From TS4699, reinforcing plates were added to the rear shock mounting brackets (*Service Bulletin Sports/2/J*: *Nov.1954).*

Chassis Finish: The chassis may be painted black or in a body color contemporary to the car.

Exhaust System

From TS2532, the 18" exhaust silencer was lengthened to 24."

From TS4310, the forward mounting assembly was changed to accommodate the chassis improvements.

From TS11385, a second silencer or resonator was added to the rear of the system to further reduce noise.

From TS15706, tailpipe and tailpipe extensions were changed without detail *(SPCEd.4, pg. 62).* Period photographs support the long-held assertion that an internally fitted chromed tailpipe extension was superseded by one of externally fitted aluminum *(HWC, pg. 5).*

Although the *Spare Parts Catalogue* does not specify the deletion of tailpipe finishers, the number of surviving original cars and New Old Stock (NOS) exhaust systems with longer tailpipes observed over the years suggests these were not always fitted to sidecurtain cars. When this practice began is unknown, or at least undocumented by primary sources. Piggott suggests this occurred from TS22014, *(Piggott 2015, pg. 84)*, but it likely occurred much earlier.

Uncertainty persists regarding tailpipes and tailpipe finishers. For this reason, no deductions should be made for the presence, absence, or type of tailpipe finisher, so long as the tailpipe extends sufficiently beyond the body.

Exhaust Finish: Exhausts were of mild steel, initially left raw or sprayed with black paint. Later, the black paint changed to dull silver-aluminum. These applied finishes were of little value beyond minimizing oxidation during storage.

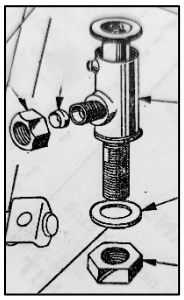
Do not deduct for correctly configured exhausts left in natural mild or stainless steel, painted black, or painted silver.

Fuel and Brake Lines

Chassis judging covers fuel and brake lines from the bulkhead (firewall) back and the brake lines of Girling front disc calipers. Lines within the engine compartment are covered by *Underhood.*

Unless specifically noted, in-depth scrutiny of individual fuel and brake line clips and sundry attachment hardware is beyond the purview of *Chassis* judging unless the hardware radically differs from factory practice or threatens the vehicle's safety.

Fuel Lines: Two notable changes in fuel routing occurred around the fuel tap when the surrounding fuel lines were simplified, and then ostensibly from TS15497 with the elimination of the fuel tap, though the fitting of fuel taps persisted well into TR3A production.



Fuel Tap

The second set of notable changes was from TS60000, when the body retooling required a routing change around the redesigned fuel tank.

Fuel Tank Ventilation Pipe: A steel ventilation tube ran from the top of the fuel tank through a fuel line clip mounted on the outboard side of the chassis on the passenger's side forward of the rear fender stay support bracket to extend below the lower surface of the chassis.

Brake Lines: The most notable braking line routing change occurred from TS13046, when the braking system changed from Lockheed to Girling.

Do not further deduct if the brake lines run consistently with a previously deducted incorrect braking system or braking system change (Lockheed vs Girling.)

Brake and Fuel Line Finish: Hard brake and fuel lines were bright steel, with bright or natural fittings. Soft lines remained in the suppliers' finish. Clips were bright, brass, or black.

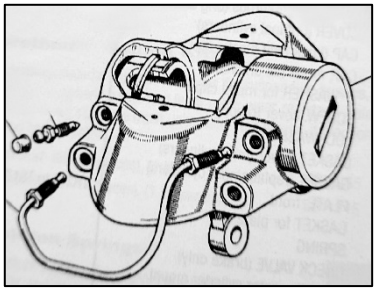
Front Brakes, Suspension, and Lower Steering

This section combines some component finishes with engineering changes.

***Front Brakes*:** *From TS1*, the front brakes were 10" Lockheed drums sprayed black. Brake lines and mounting hardware remained in the suppliers' finish. Brake drum inspection plugs were black or bright.

From TS13046, Girling discs replaced the Lockheed front drums. Calipers, rotors, and hard lines remained unfinished. Soft lines and attachment hardware remained in the suppliers' finish.

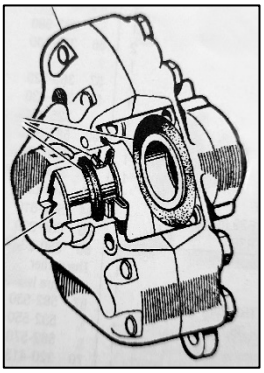
Do not deduct for discreetly applied finishes to major components approximating natural metal.



Pre-TS56377 Girling Disc

From TS27689 (wire wheel) and TS276858 (disc wheel), dirt shields were added to disc brake units *(TSOAHb, pg. 115).*

From TS56377 (wire wheel) and TS56384 (disc wheel), smaller and more efficient Girling split 'B' calipers replaced the earlier units. These also remained natural.



Girling Split "B"

Front Suspension: Three notable front suspension changes occurred:

From TS5777, an added brace to the chassis cross-tube stiffened the lower steering column.

From TS9122, the rubber lower control arm bushes were replaced by nylon bearings with steel sleeves.

Upgrades to earlier cars are accepted.

From TS22013, a stiffening bracket was added between the lower steering trunnion bracket and the bumper mounting bolt.

Front Suspension Finish: Front suspension and lower steering components were sprayed black, though some steering idlers may have remained in natural cast metal. Bushings, rubber components, and spring packings were natural. Shock absorbers remained in the suppliers' finishes, typically black or blue. Identifying markings may be present.

Mounting hardware remained in the suppliers' finish. Black oxide or similar is recommended for 'Grade 8' equivalent setscrews and specialty bolts, and natural or clear cadmium for others.

Do not deduct for black, bright, or stainless-steel hardware of correct configuration. Original markings are not required.

Castellated Nuts: Slotted castellated nuts secured some lower suspension components including the ball joint, upper wishbone, and lower trunnion. The spring pans were bolted to the lower wishbones with castellated nuts until the late TR3A and TR3B when Nyloc nuts were used *(SPCAd3, pg. 2).*

Rear Brakes, Rear Suspension, and Rear Axle Assembly

Rear Brakes: The rear brakes were drums.

From TS1, the rear brakes were Lockheed, with 9" drums.

From TS5443, the Lockheed rear drums increased to 10" diameter.

From TS13036, the braking system changed to Girling with 10" diameter drums.

From TS56377, the Girling rear drums were reduced to 9" corresponding to the change to 'B' front calipers.

Rear Suspension: The rear suspension changed little during production.
From TS3174, the front portion of the rear springs was stiffened "to meet the demands of rally conditions" *(Service Bulletin Sports/1/ H: Feb. 1955)* notable by the addition of a second clip.

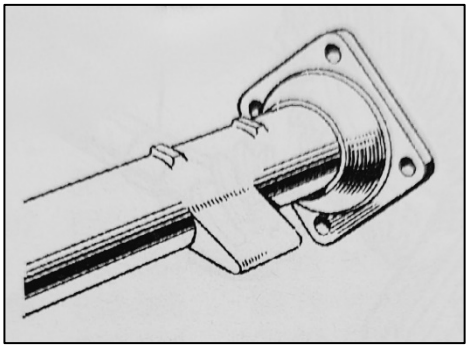
Retrofitting of newer springs to early cars is acceptable;
fitting earlier springs to later cars is not.

From TS26904, a softer rear spring replaced the one on the passenger's side to balance increased wear to the driver's side spring.

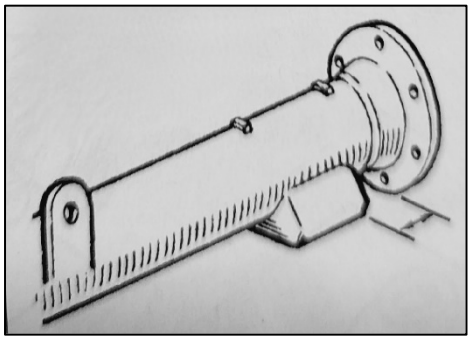
Rear Suspension Finish*:* Rear suspension components were sprayed black except the rear shock absorbers, which might be black, natural, or natural with black painted arms. Mounting hardware and sundry parts remained in the supplier's finish, bright, natural, or black. Markings may be present, such as leaf springs stenciled with part numbers in red or white, or slashes of red paint on 'soft' springs.

Rear Axle Assembly**:** *From TS1*, the rear axle assembly was the 'Mayflower' type identified by its squared flange with four mounting bolts.

From TS13046, the sturdier 'Vanguard III' rear axle replaced the fragile 'Mayflower' axle concurrently with the braking system change, and is easily identified by its round flange with six mounting bolts.



"Mayflower" type rear axle



"Vanguard III" type rear axle

Rear Axle Finish: Rear axles were sprayed black with identifying markings possible, such as green paint splotches (3.7:1 ratio) and green and white splotches (4.1:1 ratio) on the rear cover. Attachment hardware and sundry parts remained in the original suppliers' finish.

Propeller Shaft and Transmission

Alternate propeller shafts are listed (Part Numbers 201940, 201946) without detail *(SPCEd.4, pg. 40).* The sleeved yoke should be mounted forward, on the transmission end.

Cars with 'LO' commission numbers should have overdrive transmissions; cars with 'L' commission numbers may be retrofitted with overdrive transmissions. Transmissions should be clean and reasonably free of leaks or grime.

Propeller Shaft and Transmission Finishes*:* Propeller shafts were painted black. Universal joints may be black or natural. Transmissions were natural aluminum, though some early TR2 units have been painted silver.

Make no further deductions if previous deductions have been made for incorrect transmission paint.

Road Wheels and Tires

Wheels: *From TS1*, the road wheels were 15x4 inch disc wheels painted to match the body of the car.

From January 1954, wire wheels were optioned. These were 15x4 inch 48 spoke Dunlops typically painted 'Dunlop Wheel Siver' though lacquer, aluminum, bright and dull chrome are listed in the *Spare Parts Catalogue.*

Evidence supports the dealer spraying of wire wheels in body color.
Make no deductions for wire wheels painted body color.

During TR3A production, 60 spoke wire wheels were offered as high-speed equipment finished in lacquer, aluminum, bright and dull chrome *(SPCEd4, pg. 143).*

Do not deduct for 60 spoke wire wheels.

From TS1869 and TS1927, stronger wheels and lugs were introduced to improve the original wheels that could fracture under hard use.

From TS13046, a simpler bolt-on adapter with shorter lug nuts replaced the earlier 'hub, peg, and collar' wire wheel attachment arrangement.

From TS22014, disc wheels were ostensibly finished in 'Dunlop Wheel Silver' rather than body color, though the earlier practice persisted into TR3A production.

Do not deduct for post TS22014 cars fitted with body color disc wheels.

Knave Plates (Hub Caps): Chrome knave plates fitted to disc wheeled cars remained the same throughout production. An unspecified change occurred with the 'globe' center medallions from TS13046 *(SPCEd.4, pg. 40),* which has long been held to be the change from chrome and cloisonne (enamel) finish to painted alloy. This seems more likely a reflection of alternate suppliers than a complete supersession, as the vast majority of undisturbed original sidecurtain cars fitted with disc wheels have chromed and enameled medallions.

Pre TS13046 cars should have enameled medallions; post TS13046 cars may have enameled or painted medallions.

Wire Wheel Locking Nuts (Knockoffs)*:* These remained the same throughout production, two-eared, chrome over brass and deeply stamped with text and arrows to signify right or left 'hand.' The markings should not be filled in with black paint.

Tires: An exhaustive review of the tires offered during sidecurtain TR production is beyond this document. Various 5.50x15 Dunlops predominated until superseded by 5.90x15s in 1958. Whitewalls were optional, as well as Michelin 155-15 'X' radials from 1955.

Tires are consumable and critical to the safety of the car. Any tires approximating those fitted originally are acceptable, including 165-15 radials. Whitewalls should approach the style of the period.

Redline tires are unacceptable.

Wheel Arches and Underbody Paneling

Underbody Finish: Wheel arches and underbodies were sprayed in body color, including the bulkhead sealer plates and rubber seals, though some late cars may have had these attached after painting. In such cases, the plates were painted black with natural black rubber seals and attachment hardware remained in the suppliers' finish.

Underbody paint was often applied sparingly, and rarely possessed the depth or gloss of the upper body. Some cars (TR3As in particular) had a thin line of brownish/yellowish/blackish 'Waxoyl' or a similar coating applied along the seams between the fenders and the wheel arch sections of the body tub. Factory build records occasionally cite 'Waxoyl coating', which may refer to this practice, though some 'documented' survivor cars having this coating lack such a reference on their records.

Judges should not deduct for underbody panels with thin or uneven paint, or traces of underlying red primer or black sealer. Excessive or universal 'aftermarket' undercoating is unacceptable.

Radiator Overflow Tube Clip*:* Some cars had a 'barrel type' line clip attached to the inboard right front inner fender to steady and position the lower end of the radiator overflow drain tube. The attachment 'wings' of the clip protrude through the hole in the inner fender and are visible from outside the car.

Make no deductions for the presence or absence of this clip.

Some Notes on Chassis Accessories

Myriad factory and aftermarket high speed and handling accessories were available to TR enthusiasts when the cars were new. ***Do not deduct for accessories contemporary with or consistent with the era of the car's manufacture. Examples include but are not limited to:***

Front Anti-roll Bars

Torsion Bars

Undershield Kit

Uprated shock absorbers

Skid Plate

Aluminum Sump

Rear Wheel Spats (wheel arch covers)

Rim Embellishers (trim rings)

Stiffer Front Springs

Aluminum (Al-fin) Brake Drums