Cross refer to VANGUARD III/11/B, TEN/4/B, SPORTSMAN/5/B, SPORTS/24/B.

The static ignition timing settings quoted in the Owners Instruction handbook are average figures arrived at from the results obtained on a large number of individual engines. It will be appreciated that if the best performance is to be obtained from individual engines, the quoted setting may have to be modified to compensate for any slight variations in the particular ignition distributor’s timing curve.

The most satisfactory method of obtaining the correct setting on an individual engine is to set the ignition timing at a pre-determined road speed to “trace detonation” (“pinking”) using a known fuel mixture.

The fuel mixtures and road speeds for models and compression ratios stated, which should be used when carrying out these “trace detonation” adjustments are as follows:

<table>
<thead>
<tr>
<th>Model</th>
<th>Compression Ratio</th>
<th>Fuel Mixture</th>
<th>Road Speed (mph)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eight – Ten</td>
<td>7.5 to 1 low comp. 7.00 to 1</td>
<td>1 of regular + 1 of premium Regular</td>
<td>30-35</td>
</tr>
<tr>
<td>Vanguard III</td>
<td>7.5 to 1 low comp. 7.0 to 1</td>
<td>1 of regular + 1 of premium Regular</td>
<td>50-55</td>
</tr>
<tr>
<td>Vanguard Sportsman</td>
<td>8 to 1 low comp. 7.0 to 1</td>
<td>1 of regular + 1 of premium Regular</td>
<td>38-42</td>
</tr>
<tr>
<td>Eight (Gold Star)</td>
<td>8.25 to 1</td>
<td>Premium</td>
<td>13-15</td>
</tr>
<tr>
<td>T.R.3</td>
<td>8.5 to 1 low comp. 7 to 1</td>
<td>Premium</td>
<td>20-35</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>with 3.7 – 1 rear axle.</td>
</tr>
</tbody>
</table>
Note:
In the case of the Gold Star Eight the ignition timing should be retarded 1/2 a division on the distributor (1° on crankshaft), after the “trace detonation” setting has been obtained.

The following octane ratings have been taken for the two grades of fuel:

- Regular: 80 Octane (Research Method)
- Premium: 95 Octane ( " " )

The fuel mixture in the tank can be adjusted to provide the specified ratio, or alternatively this can be supplied from an auxiliary tank connected to the fuel pump intake.

When carrying out this adjustment the ignition should be set to the datum figure quoted in the handbook and modified on the vernier to provide “trace detonation” at speeds specified on level road with a fully open throttle.

NOTE: These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.
Cross refer to TEN/6/B, SPORTS/26/B, SPORTSMAN/7/B.

From the end of August, The Champion Sparking Plug Co. Ltd., are revising the type numbers of their sparking plug range.

Although there will be no change in our own part numbers, the alterations are listed below to prevent any confusion.

<table>
<thead>
<tr>
<th>S.M. CO.</th>
<th>CHAMPION REFERENCE</th>
<th>MODELS AFFECTED.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PART NO.</td>
<td>Old.</td>
<td>New.</td>
</tr>
<tr>
<td>500736.</td>
<td>NA8.</td>
<td>N.5.</td>
</tr>
</tbody>
</table>

NOTE: These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.
Cross refer to VANGUARD III/6/E, SPORTSMAN/3/E, SPORTS/13/E.

It is most important when this difficulty is experienced that as well as replacing the instrument, steps are taken to investigate the reasons for the complaint.

It is obviously necessary to thoroughly clean the speedometer inner and outer drive and in addition to ensure that the driving shaft oil seal is in good order. If doubt exists as to the condition of the oil seal it should be replaced by a new one. It also should be ensured that the air vents are free from obstruction.

When replacing the oil seal fitted to the “Eight” and “Ten”, it is necessary to remove the gearbox extension and furthermore to use the assembly sleeve illustrated, when passing the speedometer driving shaft through the oil seal for entry into the nylon gear. The oil seal must be fitted with its rubber lip inwards. Failure to use an assembly sleeve similar to that shown will allow certain sharp cutting edges on the driving shaft to damage the rubber lip of the seal.

The illustration gives the dimensions of the speedometer shaft assembly sleeve, which should enable self manufacture. This manufacture is not likely to present any difficulty and will obviate the delay which outside manufacturing arrangements necessarily entails.

In order to remove the extension it is not necessary to disturb the engine mountings, hose connections, etc. The gearbox should be supported on a jack and after removal of the rear mounting bolt from its bracket on the underframe, the unit can be lowered sufficiently (approximately 1”) to enable the seven extension attachment bolts to be withdrawn and the unit withdrawn rearwards.
The Part Nos. of Speedometer Driving Shaft Oil Seals for the current Models are as follows:

<table>
<thead>
<tr>
<th>Model</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eight and Ten</td>
<td>108757</td>
</tr>
<tr>
<td>Vanguard III</td>
<td>60247</td>
</tr>
<tr>
<td>Sportsman</td>
<td>60247</td>
</tr>
<tr>
<td>Sports</td>
<td>50247</td>
</tr>
</tbody>
</table>

NOTE: These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.

1 ILLUSTRATION.
This Sheet gives Important service Information and should be filed by your Service Dept. in the Service Information Folder.
Cross refer to SPORTSMAN/4/E, SPORTS/14/E, VANGUARD III/7/E, TEN/4/E.

A few cases of damage to the overdrive uni-directional clutch have occurred which have been attributed to a fault in the operation of the isolator switch, permitting overdrive to be engaged in reverse gear.

When the electrical components are functioning correctly the Solenoid can be heard to “click” in and out on selection of various gears, and the following tests will enable you to check whether the isolator switches are operating correctly or not.

Vanguard III and all Small Cars.

Switch on the engine, but do not start up. In turn select each gear and whilst in the gear move the overdrive switch to the “on” and “off” positions. The solenoid should not be heard to “click” in first or reverse gears, but should be heard in all remaining positions of the gear lever including neutral, as the circuit is alive in every position except first and reverse.


The same conditions also apply to this Model except that whilst the lever is in the neutral position the unit will not be heard to “click,” the circuit being dead until 2nd. 3rd. and top gears are selected.

“Ensign”.

Switch on the engine, but do not start up. In turn select each gear and whilst in the gear, move the overdrive switch to the “on” and “off” positions. The solenoid should not be heard to “click” in reverse, 1st. and 2nd. gears but should be heard in 3rd. and top only.
With the overdrive switch in the “on” position it should also be heard to operate when the gear lever is moved across the gate in neutral.

The above tests should be carried out in a reasonably quiet area to enable the clicking of the unit to be audible inside the car.

It should be noted that on all Models except the 8 and 10 and Pennant range, the pressing of the isolator switch plunger closes the circuit and makes it alive, whereas on the small car range the pressing of the isolator switch has the reverse effect and opens the circuit making it dead.

Should the overdrive solenoid be heard to “click” in first or reverse on any Model it indicates a fault in the switch or the wiring circuit, which in turn can bring about the operation of the overdrive in reverse gear with resultant severe damage to the overdrive itself.

NOTE: These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.
Cross refer to VANGUARD III/17/N, SPORTS/9/N, SPORTSMAN/3/N.

The paintwork on all cars for shipment overseas, (a number of the new “Eight” Models delivered to the Home Market were also so treated) are given a protective wax coating. With all such cars a tin of “Stripalene” wax solvent is included with the tool kit.

It appears that, in some cases, difficulty is being experienced in removing this wax coating and the following procedure is therefore recommended:

1. Remove wiper blades.

2. Remove surplus dirt either by using a soft brush, hosing off with water or blowing off with an air line. If washed off be sure to remove all surplus water before applying solvent.

3. Divide the vehicle into separate sections, e.g. roof, boot lid, wings, etc. and treat each section in turn.

4. Liberally apply “Stripalene” wax solvent with a soft cloth at the same time working the wax surface into an emulsified state. Only light hand pressure is required for this operation.

5. When the surface of the particular section being dealt with is softened, use a well soaked cloth to sponge away the emulsified wax. Do not use a hose for this purpose or difficulty may be experienced in completely removing the wax. Similarly deal with the remaining sections of the paintwork.
6. A final wipe down with a dampened cloth should completely clean the surface.

7. Dry and polish the car in normal manner and refit wiper blades.

Note:

Although the tin of ‘Stripalene” supplied with the affected car should prove ample for the vehicle, if the contents are accidentally spilt White Spirit or Paraffin may be substituted.

NOTE: These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.
Under Service Information Sheet No. EIGHT/7/A issued in October, 1957, charts were printed showing the latest oils and greases recommended and approved for all Models except the T.R.2. and T.R.3, recommendations for which are illustrated overleaf.

These revised charts will be printed in future editions of the “Owners Handbooks” for the T.R.3. Models.

The same recommendations which apply to the dash pots of the carburettors of the T.R.3. apply to the Sportsman, which is also fitted with S.U. carburettors.

2 ENCLOSURES. [Ed. note: Only one enclosure was included in the bulletin copies, and applies to cars for British domestic market]
This Sheet gives important service Information and should be filed by your Service Dept. in the Service Information Folder.
With further reference to SPORTS/19/B, which announced the introduction of Big End Bearing, Part No. 113381, in normal manufacture, it has now been decided to increase the running clearance between the bearing face and the crank pin thus increasing the flow of oil.

This increase in oil supplied to the big end bearings has proved beneficial when cars are subjected to arduous conditions such as are encountered in rallies or closed circuit events.

Although the general construction of the bearing, apart from its internal dimensions, remains unaltered it has been given a new Part Number 117590 for identification purposes. All future supplies of T.R.3. replacement connecting rod bearings should be ordered under this detail number.

The new bearings were introduced on production at No. TS.20780E.

NOTE: These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.
A splined hub adaptor for wire wheels has been introduced, which is attached to the normal hub used with disc wheels. This adaptor is now used for all cars equipped with wire wheels and was introduced in normal manufacture from Commission No. TS.13000.

This adaptor can be used on all Sports Cars which have been manufactured, where it is desired to fit wire wheels. If, however, it is wished to fit this adaptor to hubs which have previously been used for disc wheels, the wheel studs will have to be shortened by 5/16” to prevent them fouling the back of the road wheels.

The Part Numbers involved are:

- Hub Adaptor Right Hand 202446 (2 off)
- Hub Adaptor Left Hand 202447 (2 off)
- Attachment Nuts 110366 (16 off)

It is most important that the attachment nuts are initially tightened to a torque of 65 lbs. ft. after which the vehicle should be run approximately 10 miles and the torque tightness rechecked. This should normally allow any settlement between the surfaces of the hubs and adaptors to be accommodated and prevent subsequent loosening of nuts after further running, but additional checks should be carried out as detailed below.

Although the tightness of attachment nuts are double checked in production on cars fitting these adaptors (introduced after TS.13000), it is nonetheless important that this attention should be still given, as specified, during Pre-Delivery Check and First Service (500 miles attention). Equivalent checks should also be carried out with cars converted to accommodate wire wheels after despatch from the Factory.

NOTE: These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.
In order to facilitate the removal of the rear shock absorbers a hole has been added to each side of the Body to permit the use of a socket spanner on the forward attachment of each unit.

This modification makes the forward attachment of shock absorbers accessible from the inside of the car behind the front seats.

There is no intention that this alteration should be carried out retrospectively, but the modification is scheduled to be introduced in manufacture in the near future.

NOTE: These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.
In order to prevent the headlining “festooning” when the adhesive fails after a period of service and to obviate the necessity for removing and refining the trim a service scheme for the introduction of a listing stick has been prepared.

The listing stick should be covered with the same material as the headlining and although fitted on the underside of the lining and visible is in no way unsightly.

The listing stick should be fitted as explained in the illustration and the necessary items can be obtained from our Spares Division as per the following details:

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Item.</th>
</tr>
</thead>
<tbody>
<tr>
<td>605740</td>
<td>Listing stick (1 off).</td>
</tr>
<tr>
<td>554929</td>
<td>C.1. rubber solution for cloth.</td>
</tr>
<tr>
<td>554928</td>
<td>C.2. compound for use on metal (Goodliff).</td>
</tr>
</tbody>
</table>

NOTE: These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.

1 ILLUSTRATION.
This Sheet gives Important service Information and should be filed by your Service Dept. in the Service Information Folder.

TO BE COVERED IN MATCHING
HEAD CLOTH SECURED BY:
554929 - C1 RUBBER SOLUTION ON CLOTH
554928 - G2 COMPOUND ON METAL (GOODLIFE)

SECTION THRO LISTING STICK AT A

NOTE: WHERE NECESSARY, THAT IS IF LISTING STICKS HAVE INSUFFICIENT TENSION DUE TO VARYING ROOF PANEL CONDITIONS, SUITABLE PACKINGS MAY BE INSERTED IN CANT RAIL UNDER END OF LISTING STICK

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>MODEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>FITTING OF LISTING STICK</td>
<td>TR. III</td>
</tr>
</tbody>
</table>
It has been found that these grommets tend to be affected by certain grades of petrol becoming oxidised when in transit by ship for long periods, owing to the combined effects of the fuel in the carburettor, and the high humidity and temperature of the ship’s hold. This type of attack can also occur as a result of any long period of storage, when the grommet may be in contact with petrol which has been allowed to stagnate.

Owing to the possibility of early deterioration of these grommets, under the stated conditions, it has been decided to include, a spare set of four of these grommets in the kits of all cars of this type, after approximately Commission No. TS.18800.

Experimental work is now being carried out with a view to finding a more satisfactory material for these grommets and due notice will be given as to the results of these investigations.

Distributors and Dealers should take suitable steps to inspect the condition of these grommets ensuring that no cracking of the grommet or leakage of the fuel is present before handing the car over to an owner.

NOTE: These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.
In Service Information Sheet SPORTS/10/R mention was made of the effect badly adjusted wheel bearings had on the brake pedal travel.

In order to reduce excessive pedal travel to a minimum, particularly after cornering, a restrictor valve has now been incorporated in the brake circuit, the function of which is to retain slight line pressure for a few seconds after release of the brake pedal.

The temporary retaining of this pressure causes the pads to maintain a light contact with the disc and follow it if any “rock” is present, so preventing the pads from being pushed back into the caliper resulting in excessive lost pedal movement.

The valve is fitted in the main feed from the master cylinder to the 5-way connector located on the right hand side frame member behind the front suspension lower inner fulcrum. In order to accommodate the new restrictor valve it is necessary for a shorter pipe to be fitted from the master cylinder to the 5-way connector.

Fitting instructions are as follows:

(a) Remove the brake pipe assembly from the master cylinder to the 5–way connector.

(b) Screw the restrictor valve in the 5-way connector.

(c) Fit the new brake pipe between the master cylinder and the connector (Part Nos. 505442 R.H. or 505443 L.H.)

(d) Bleed the complete system.
The new parts required for the conversion are:

Brake Pipe Assembly for R.H. Steering Models – 505442.

Brake Pipe Assembly for L.H. Steering Models – 505443.

Restrictor Valve – 505443.

The restrictor valve has been incorporated in normal production from Commission No. TS.20320.

NOTE: These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.
The wheel rim finishers approved by the Company for fitting to the Triumph Sports and available from the Spares Division under Part No. 502160, are of a type which are self-gripping, i.e. retained by spring fingers spragging in the inside of the wheel rim.

Your attention is directed to other types of rim finishers on the market which are secured by four worm drive clips. When these are fitted to the T.R.3.’s having disc front brakes (after Commission No. TS.13046), the securing clips pass very close to the brake bridge pipe on the caliper housing, and in a few instances have been known to foul and cut the pipe.

Any Triumph T.R.3.’s found fitted with this type of wheel trim should be examined. The minimum permitted clearance between the clips and the brake pipe is 1/4”. ON NO ACCOUNT MUST THE CLEARANCE BE RECTIFIED BY RE-SETTING THE BRIDGE PIPE. The wheel rim finishers should be removed and the fault referred to the manufacturers for correction.

NOTE: These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.
Following the introduction of the restrictor valve in the brake system (see Information Sheet SPORTS/11/R), a few cases have been reported of heavy binding of the disc brake only.

This has been traced to incorrect adjustment of the brake pedal stop screw, which prevents the master cylinder piston with its base valve from completely returning, thus stopping the displaced fluid from getting back into the reservoir.

With the restrictor valve in the circuit the mass of fluid displaced by the stroke of the pedal returns to the master cylinder slightly below the speed of normal lubrication, which results in an additional charge of fluid being drawn from the cylinder if the pedal is depressed twice in quick succession. Thus the volume of fluid then held in the system is greater than that displaced by one normal application, and unless the master cylinder piston is completely withdrawn bringing the base valve off its seating, a line pressure is retained which keeps the front brakes applied. The rear brakes are unaffected as the residual line pressure is restricted by the action of the brake shoe pull off springs.

As the master cylinder design is similar to the small car installation, on which a stop screw had been found to be unnecessary, it has been decided to delete this item on future production to prevent any possibility of mal-adjustment occurring.

A thorough check on a number of cars leaving the Factory revealed that all were provided with a 1/16” to 1/8” free play at the master cylinder which is sufficient to prevent the above complaint occurring.
<table>
<thead>
<tr>
<th>No.</th>
<th>SPORTS/13/R</th>
<th>BINDING OF DISC BRAKES</th>
<th>Date</th>
<th>DECEMBER 1957</th>
</tr>
</thead>
</table>

Should, therefore, any instances of severe front brake binding come to your notice the pedal stops should be re-set to give this amount of free play or completely removed altogether. The line pressure referred to in paragraph 3 must not be confused with the temporary line pressure caused by the restrictor valve which is necessary to provide “follow up” of the pads if slight disc deflection occurs when driving hard through bends.

**NOTE:** These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.
Cross refer to SPORTSMAN/3/B, SPORTS/23/B, VANGUARD/16/B.

In order to release any pressure build up between the rear of the camshaft and the core plug, a 1/8" diameter hole is now drilled in the rear camshaft journal, as shown in the illustration.

Pressure build up at this point can cause leakage round the core plug and, in extreme cases, the complete displacement of this plug, resulting in really serious loss of oil.

It is not proposed to modify existing stocks held by our Spares Division, but you are recommended to drill any replacements before these are fitted to an engine, whether received from this Factory, or drawn from your own Spares Department.

Parts affected by this modification:

Camshaft, Part No. 301814 (Vanguard and Sportsman)
Camshaft, Part No. 301466 (Sports T.R.3.)

This modification was incorporated in normal manufacture on the various Models at the following engine numbers:

- Vanguard II V.283325E
- Vanguard III V.322052E
- Sportsman TDD.451E
- Sports (TR3) TS.13476E

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1 ILLUSTRATION.
This Sheet gives Important service Information and should be filed by your Service Dept. in the Service Information Folder.
Cross refer to VANGUARD/4/D, SPORTSMAN/1/D, SPORTS/2/D.

As a result of a certain number of complaints of clutch “judder” a driven plate with different facing material has been introduced in normal manufacture on the Vanguard, Sportsman and T.R.3. Models.

The clutch plate with the modified facings was introduced in normal manufacture at Engine Nos. V.326028E, TDD.732E, TS.18478E and V.284885E respectively on Vanguard III, Sportsman, T.R.3. and Vanguard Series II (Commercial) Models.

The modified clutch centre plate, Part No. 116638, is already available from our Spares Division and should be fitted where complaints of clutch judder are experienced with the Models in question. When dealing with such complaints, however, the other factors likely to contribute to such a difficulty should not be ignored.

NOTE: These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.
Cross refer to SPORTSMAN/1/F and SPORTS/11/F.

A number of rear axle units have been unnecessarily changed to deal with a knock or click, which emanates from the transmission when taking up the drive.

Investigation of such cases has shown that this click or knock has been explained by relative movement between the splines on the flange and pinion shank which has been caused by a slightly loosened attachment nut.

The loss of attachment nut tightness has been found to be explained by the tendency of the plain washer to deform under the load of initial tightening. This difficulty has now been overcome in normal manufacture by the introduction of a thicker washer and a nut of improved material with an increased contact area.

The modified washer and nut were introduced in normal manufacture at the following Rear Axle Nos. on the Models concerned:

Vanguard III V.322615.
Sportsman TDD.644.
Triumph Sports TS.15510.

The Part Numbers affected by this change are:

Washer, Part No. 101607, replaced by Washer, Part No. 115990.
Nut, Part No. 100892, replaced by Nut, Part No. 112635.

NOTE: The new nut, Part No. 112635, has the washer face removed.
In order to fit the thicker washer and nut to the rear axle pinion it is necessary to re-position the split pin hole in the pinion shank and this should be carried out in accordance with the illustration, using the existing nut as a drilling jig.

Whenever the propellor shaft is removed for any reason on vehicles prior to the Rear Axle Numbers quoted, the torque tightness of the flange nuts should be checked and should be 85 lbs. ft. – 100 lbs. ft. If the rear axle flange nut is found to be below the figure specified the new nut and washer should be fitted.

Another point from which a similar click is transmitted is between the splines on the gearbox flange and mainshaft and when dealing with this complaint should also be checked for correct tightness which should be a minimum of 85 lbs. ft.

A third possible explanation of a click or knock of this description is a loose rear axle shaft hub nut which should be tightened to 125 – 140 lbs. ft.

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