

## **STANDARD AND TRIUMPH VEHICLES**

## (NOT FOR PUBLICATION)

No.	EIGHT/2/M	SUPPRESSION OF RADIO AND TELEVISION	Date	JANUARY 1954	
(A)	ND OTHER MODELS)	INTERFERENCE			

This Information Sheet should be cross referenced on the respective Index Sheets for the other Models, as VANGUARD/1/M and SPORTS/1/M.

The Wireless Telegraphy (Control of Interference from Ignition apparatus) Regulations 1952 demand a standard of suppression on any new vehicle sold after July 1st. 1953 of 34 dB above 1 microvolt per metre (50 microvolts per metre) field strength limit. This standard to be assessed on the official Post Office R.I.2 set at a frequency between 40 Mc/s and 70 Mc/s, measured at a distance of not less than 33 feet with the approved dipole aerial arrangement.

There is no positive rule by which a type, or number of suppressors, can be assessed for a degree of suppression with different kinds of vehicles. All the Standard Motor Company's products have been batch tested in conjunction with Messrs. Joseph Lucas Limited and the General Post Office to ensure the required degree of suppression for the respective types of vehicles.

It will be apparent from the foregoing remarks that, to meet the regulations satisfactorily, the suppression of the vehicle must be maintained as delivered from the factory and any change from that specification may place the vehicles outside existing legal requirements.

The following are the specified suppressors for the Standard Motor Company range of vehicles to comply with regulations:

Standard "Eight"	– DM 2 Model Distributor, Part No. 201908
	(This distributor incorporates the desired
	suppressor in the center carbon brush.
Vanguard Series II	– DM 2 Model Distributor, Part No. 201666
Triumph "Sports" (TR2)	– DM 2 Model Distributor, Part No. 201871
Triumph "Renown"	– DM 2 Model Distributor, Part No. 201666



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(AND OTHER MODELS) INTERFERENCE	No.	EIGHT/2/M SUPPRESSION	OF RADIO AND TELEVISION	Date	JANUARY 1954
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Note:

The DVX4A Model Distributor without the integral suppressor may be used in place of the D M 2 if the screw in type of suppressor, Part No. 102556 is used at the H.T. feed on the centre terminal of the distributor cap.

Some of your customers may desire to bring earlier vehicles within the regulations and the following specification details of suppressors should prove satisfactory:

Vanguard Series I	-DVX4A Model Distributor, Part No.200130
	(Initial Equipment) and Suppressor, Part No.
	102556 and 4 individual plug suppressors,
	Part No. 108216.
Triumph "Mayflower"	-DKYH4A Model Distributor, Part No.
	200326 (Initial Equipment) and Suppressor,
	Part No. 52200 and 4 individual plug
	suppressors, Part No. 108216.

The fitting of wireless to a vehicle, especially short wave, will call for a standard of suppression, for effective reception, which will be specified by the manufacturers of the model selected. The degree of additional suppression to the recognised legal requirement should be carried out to the instructions of the manufacturer concerned.



# **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	EIGHT/4/N	APPROVED ADHESIVES FOR SERVICE WORK	Date	JANUARY 1954	
(A	ND OTHER MODELS)				

This Information sheet should be cross referenced on the respective Index Sheets for the Other Models, as VANGUARD/4/N and SPORTS/1/N.

Requests are frequently received for information as to the supply and use of adhesives for Repair Shop use.

Messrs. Lea Bridge Industries Ltd., Priory Works, Arterial Road, Southend–on–Sea, whose adhesives we use in production, have developed a range of non–inflammable adhesives, which are eligible for air transportation and have equivalent properties to the range we employ in normal manufacture. Naturally, there will be other firms, who manufacture adhesives of this type, which will prove equally suitable for the purposes required, but our investigations have necessarily been confined to the range we normally use in these Works. Home Distributors will, on the score of economy, naturally utilise the normal range of inflammable adhesives.

Supplies of these adhesives may be obtained directly from the manufacturers concerned, and will be put up in convenient quantities and sizes of tins to fulfill all possible requirements.

The following are the approved adhesives with details of their

applications:

L 5 E (N.F.)

 Suitable for attaching sponge strip to car doors and boot lids, also for sticking other rubber or fabric to bare or cellulose sprayed metal, where a high degree of adhesion is required.

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

**Colour Black** 



# **STANDARD AND TRIUMPH VEHICLES**

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No. EIGHT/4/N (AND OTHER MODELS)	APPROVED ADHESIVES	FOR SERVICE WORK <b>Date</b> JANUARY 1954
L 15 (N.F.)	Colour Brown semi–transparent	<ul> <li>Suitable for most interior fabric work, also for self-adhesion of leather cloth, leather and most covering fabrics and for attaching these materials to fibre board and wood.</li> </ul>
L 16 (N.F.)	Colour White	<ul> <li>Suitable for the adhesion of leather cloth, leather and most covering fabrics to metal in addition to fulfilling the functions of L 15. Clean in use and easily applied with a brush.</li> </ul>
NOTE:		

Suffix "N.F" indicates non-inflammable type of adhesive.

Details of prices, sizes of tins etc. may be obtained from Messrs. Lea Bridge Industries Ltd. at the address given.



# **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/2/A	SERVICE INFORMATION BINDERS PART NO. 501716	Date	JANUARY 1954	
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Supplies of these Binders are now available from our Spare Parts Department under the Part No. quoted, at 7/6d. each, subject to normal Spare Parts discount.

Each Binder will be supplied complete with a set of index sheets and three tacky labels overprinted respectively "VANGUARD", "EIGHT" AND "SPORTS." The three tacky labels supplied with each Binder will ensure suitability for any one of these Models and simplify ordering procedure.

The tacky labels are best stuck to the back of the spring clip, as when attached to the binder cloth permanency of attachment is not always obtained.





# **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/3/A	NUT TIGHTENING TORQUES	Date	JULY 1954	
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It is intended to incorporate this information in the Service Manual with any additional information in this connection which may be available at the time of publication.

The nut tightening torques attached are recommended for the units ted.

as stated.



## **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

**No.** SPORTS/3/A

NUT TIGHTENING TORQUES

Date JULY 1954

TRIUMPH SPORTS T.R.2

### NUT TIGHTENING TORQUES

### <u>ENGINE</u>

Operation	Description	Detail No.	Specified Torques	Remarks
Cylinder Head	1/2" UNF & UNC Stud	106960 106959	100 - 105	Tighten nut with engine cold.
Connecting Rod Caps	7/16" UNF Bolt	105312	55 - 60	
Main Bearing Caps	1/2" x 13 NC Setscrew	57121	85 - 90	
Flywheel Attach- ment to Crankshaft		102065	42-46	
Timing Chain Wheel to Camshaft	5/16" x 18 NC Setscrew	56370	24 - 26	
Manifold Attachment	3/8" NC Stud	58688 102475 107055	22 - 44	
Oil Pump Attachments	5/16" x 24 UNF Stud	HN.2008	12 – 14	
Rear Oil Seal Attachment	1/4" x 20 UNC Setscrew	UN.0755	8-10	
Clutch Attachment	5/16" x 18 UNC Setscrew	HU.0856	20	
Attachment of End Plates	5/16" x 18 UNC Bolt	HU.0856	14 – 16	Tapped into Aluminium.



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**No.** SPORTS/3/A

NUT TIGHTENING TORQUES

Date JULY 1954

TRIUMPH SPORTS T.R.2

### NUT TIGHTENING TORQUES

### <u>ENGINE</u>

Operation	Description	Detail No.	Specified Torques	Remarks
Attachment of Oil Filters	5/16" x18x24 UNC Bolts Cap Nut Bolt	HB.0874 HB.0882 DN.3408 HB.0856	18 - 20	
Timing Cover	5/16" x 18 x 24 NC Setscrew	HU.0805 HU.0857	16 - 18	
Sump Attachment	5/16" x 18 NC Setscrew	100749	16-18	
Pulley to Water Pump Spindle	5/16" x 24 UNF Simmonds Nyloc Nut	TN.3208	16-18	
Dynamo Bracket to Block	5/16" x 18 UNC Setscrew	HU.0856	16 - 18	
Dynamo to Bracket and Pedestal	5/16" x 24 UNF Setscrew and Bolt	59115 HU.0808	16 - 18	
Rocker Pedestal	3/8" NF & NC Stud	108205	24 - 26	
Oil Gallery Plugs	7/16" x 14 UNC 3/8" x 16 UNC	102785 HU.0954	32 - 36 24 - 26	Tighten onto copper washer.
Attachment of Starter Motor	3/8" x 24 NF Bolt	HB.0915	25 - 28	



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NUT TIGHTENING TORQUES

Date JULY 1954

TRIUMPH SPORTS T.R.2

### NUT TIGHTENING TORQUES

### <u>GEARBOX</u>

Operation	Description	Detail No.	Specified Torque	Remarks
Front Cover to Gearbox	5/16" x 18 NC Setscrew	55771	14 – 16	
Extension to Gearbox	5/16" x 18 UNC Bolt	HB.0866 HB.0858	14 – 16	
Top Cover to Gear- box	3/8" x 18 Bolts and Setscrews	HU.0851 HB.0871 HB.0873	14 – 16	
Attachment of En- gine to Gearbox	5/16" x 18 NC & NF Bolt and Stud	HB.0858 125C056	14 – 16	
Rear Mounting to Gearbox Exten- sion	1/2" x 20 UNF Bolt	HB.1112	50 - 55	
Shock Absorber to Frame Bracket	Setscrew	HU.0908	26 - 28	
	3/8" x 24 Nyloc Nut	TN.3209		



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**No.** SPORTS/3/A

NUT TIGHTENING TORQUES

Date JULY 1954

TRIUMPH SPORTS T.R.2

### NUT TIGHTENING TORQUES

### FRONT SUSPENSION

Operation	Description	Detail No.	Specified Torque	Remarks
Back Plate and Tie Rod Levers to Ver- tical Link	3/8" x 24 UNF Bolts and Set- screws	HB.0925 HB.0922 HB.0905	24 - 26	
Wheel Studs and Nuts	7/16" NF	100869	45 – 55	
Ball Pin to Vertical Link	1/2" x 20 UNF Nut – Slotted	2211 LN	55 - 65	To suit pin hole.
Top Wishbone to Fulcrum Pin	7/16" x 20 UNF Nut – Slotted	2211 LN	26-40	To suit pin hole.
Spring Pan to Wishbone	3/8" x 24 UNF Stud 3/8" x 24 UNF Bolt		26 - 28	
Tie Rod to Idler Le- ver and Drop Arm	3/8" x 24 UNF Simmonds Nyloc Nut	TN.3209	26-28	
Top Inner Fulcrum Pin to Chassis	3/8" x 24 UNF Bolt 3/8" x 24 UNF Set- screw		26-28	
Lower Fulcrum Bracket to Chassis	5/16" x 24 UNF Bolt	HB.0805	16 – 18	



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No.	SPORTS/3/A	NUT TIGHTENING TORQUES	Date	JULY 1954	
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TRIUMPH SPORTS T.R.2

### NUT TIGHTENING TORQUES

### FRONT SUSPENSION

Operation	Description	Detail No.	Specified Torque	Remarks
	7/16" x 20 UNF Nyloc Nut	TN.3210	26 - 28	
Front Hub to Stub Axle	1/2" x 20 UNF Nut – Slotted	LN.2211	Tighten up & un- screw one flat.	

### REAR AXLE

Operation	Description	Detail No.	Specified Torques	Remarks
Bearing Caps to Housing	3/8" x 24 UNF Setscrew	100878	34 - 36	
Hypoid Pinion Flange	5/8" x 18 UNF	100892	85 - 100	To suit split pin holes.
Crown Wheel to Differential Case	5/16" x 24 UNF 3/8" x 24 UNF	107880 109735	22 - 24 35 - 40	Orig. equipment. Current equipment
Rear Cover Attachment	5/16 x 24 UNF Setscrew	HU.0805	16 – 18	
Backing Plate Attachment	3/8" x 24 UNF Setscrew	HU.0908	26 - 28	
Hub to Axle Shaft	5.8" x 18 UNF Nut – Slotted	100812	110–125	



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**No.** SPORTS/3/A

NUT TIGHTENING TORQUES

Date JULY 1954

TRIUMPH SPORTS T.R.2

### NUT TIGHTENING TORQUES

### **REAR SUSPENSION**

Operation	Description	Detail No.	Specified Torque	Remarks
Spring Front End to Frame	1/2" x 20 UNF Bolt	106251	28 - 30	
Spring Shackle (Nut to Pin)	3/8" x 24 UNF Nut Shackle Pin	HN.2009 104953	26 - 28	
Road Spring to Rear Axle	Clip Nyloc Nut 3/8" x 24 UNF	107688 YN.2909	28-30	
Shock Absorber to Frame Bracket	3/8" x 24 UNF Setscrew 3/8" x 24 Nyloc Nut	HU.0908 TN.3209	26 - 28	



# **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

#### No. SPORTS/1/B FAILURE OF R.P.M. INDICATOR INSTRUMENT OR Date APRIL 1954 INNER DRIVE CABLE

There have been instances of instrument failure Which, upon examination, have been found to be due to excessive end loading of the operating mechanism.

This has generally been caused by the fit of the square ends of the inner cable being too tight, either in the instrument, or in the engine drive attachment.

The inner cable should be checked for free fitting at both ends and particularly so at the engine drive. It will be necessary to ease or replace the engine drive socket if the square recess in the socket is undersize.

There have been cases of inner cable fracture due to sharp bends in the "run" of the outer cable on R.H.S. Models. The "run" has now been improved in factory assembly to minimise the possibility of such a condition and the modified "run" is shown in the illustration.

It is most important that both the cable for this instrument, and also that for the speedometer, are not "kinked" during installation, as once distortion of the inner cable has taken place early failure is inevitable, however correct is the subsequent run of the cable. It should be general practice to finally check the run of the cable to ensure the maximum possible radius for each bend, especially where it is "clipped" or passes through bulkheads.

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.

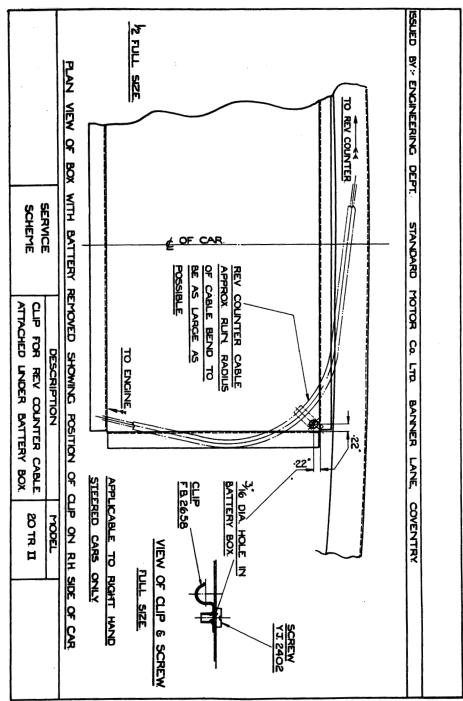
1 ILLUSTRATION.





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## (NOT FOR PUBLICATION)





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## (NOT FOR PUBLICATION)

#### No. SPORTS/2/B EXCESSIVE LOSS OF OIL FROM THE CRANCASE Date APRIL 1954 BREATHER PIPE

It has been found that under sustained top speed condition that the oil splash in certain engines allows considerable loss of oil through the crankcase breather pipe, Part No. 201650.

The crankcase was modified at Commission No. TS.972E. to incorporate in the casting a baffle to shield the breather pipe aperture. A new breather pipe, Part No. 202126., must be used with the modified crankcase.

To deal with complaints of excessive loss of oil at this point, with cars prior to the Commission Number quoted, the end shield shown in the illustration can be quite easily fabricated and fitted.

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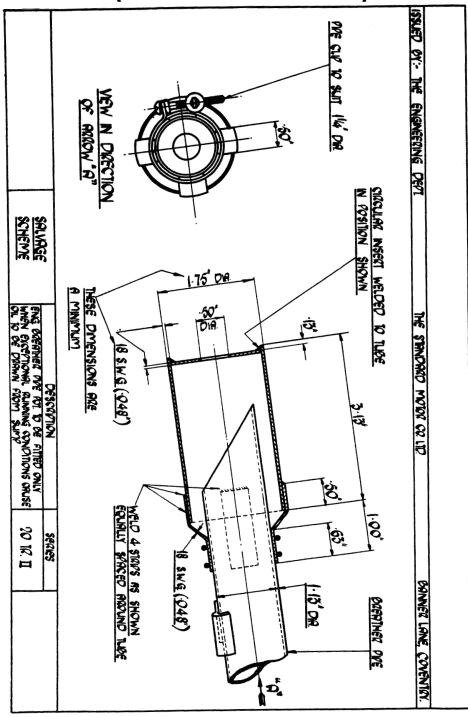
1 ILLUSTRATION.





## **STANDARD AND TRIUMPH VEHICLES**

### (NOT FOR PUBLICATION)





# **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/3/B	REINFORCED CAMSHAFT	Date	JUNE 1954
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Development work on this engine has shown that at high speeds the deflection of the camshaft, Part No. 301230, under heavy valve spring loading, is a limiting factor in valve clatter speed.

The camshaft has now been stiffened at the front section to reduce this deflection to a minimum, and this provides a greater reserve against over–revving in competition work. This reinforced camshaft, Part No. 301466, was fitted to all engines after Engine No. TS.1636E.

The base radius of all the cams had to be increased with this stiffening of the front section of the shaft, but the lift remains unchanged. The push rod, Part No. 106968, has been decreased in length from 10.37 inches to 10.34 inches, this dimension being measured as shown in the illustration. Although the shorter push rod is being used in production with the reinforced camshaft to provide the widest range of adjustment it is not necessary to change push rods when replacing the earlier camshaft by the modified one.

The modified camshaft is obviously an added precaution against valve clatter through "over–revving" when the vehicle is used on any high speed circuit. work.

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.

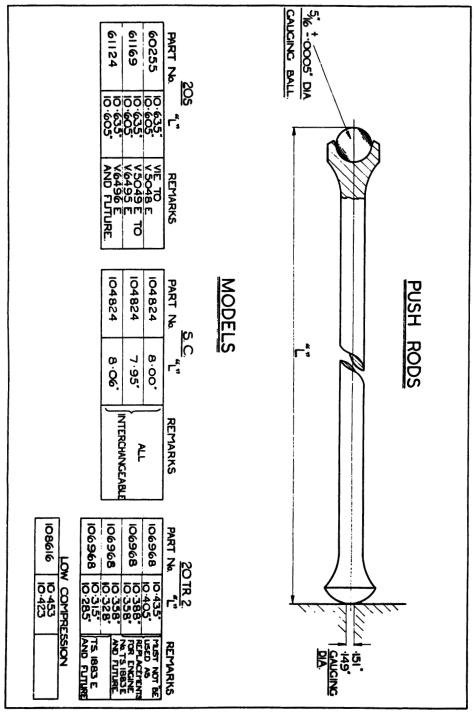
1 ILLUSTRATION.





# **STANDARD AND TRIUMPH VEHICLES**

(NOT FOR PUBLICATION)







# **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/5/B	ENGINE DIMENSIONS	Date	NOVEMBER 1954
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Attached hereto is a summary of the engine dimensions and clearances which may be found of use in your Service Department when dealing with normal repair and reconditioning work.



## **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/5/B	ENGINE DIMENSIONS	Date	NOVEMBER 1954

TRIUMPH SPORTS T.R.2

### **ENGINE DIMENSIONS**

Part and Description	Dimensions – New	Clearance – New	Remarks
Crankshaft:			
Journal Diameter	2.4795"– 2.4790"		
		0.0010" to 0.0025"	
Bearing Internal Diameter	2.4815"– 2.4805"		
Bearing Housing Internal Diameter	2.6255"– 2.6250"		
Crankshaft End Float:			
Intermediate Journal Length	1.7507"– 1.7498"		
		0.0048" to 0.0117"	Clearance of 0.004" to 0.006" is specified and obtained by selective as- sembly of Thrust wash- ers.
Intermediate Bearing Cap Width (Plus Thick- ness of two Thrust Washers)			
Main Bearing Cap Width	1.5050"– 1.4950"		

Undersize bearings are available in the following sizes: -010" -020" -030" -040"



## **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/5/B	ENGINE DIMENSIONS	Date	NOVEMBER 1954	

TRIUMPH SPORTS T.R.2

### **ENGINE DIMENSIONS**

Part and Description	Dimensions – New	Clearance – New	Remarks
Big End:			
Crank Pin Diameter	2.0866"– 2.0860"		
		0.0016" to 0.0035"	
Bearing Internal Diameter	2.0895"– 2.0882"		
Internal Diameter of Bearing Housing	2.2335"– 2.2327"		
Bearing Width	0.9670"– 0.9650"		
Big End Float:			
Crankpin Width	1.1915"– 1.1865"		
		0.007" to 0.014"	
Connecting Rod Width	1.1795"– 1.1775"		

Undersize bearings are available in the following sizes: -010" -020" -030" -040"

Small End:			
Bore for Bush	1.0000"– 0.9950"	Press fit in	
Bush External Diameter	1.0005"– 0.9950"	Connecting Rod	



## **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/5/B	ENGINE DIMENSIONS	Date	NOVEMBER 1954
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TRIUMPH SPORTS T.R.2

### ENGINE DIMENSIONS

Part and Description	Dimensions – New	Clearance – New	Remarks
Small End (Cont.):			
Internal Diameter of Bush	0.8752"– 0.8748"		
		0.0002" at 68° F	
Gudgeon Pin Diameter	0.87510"– 0.87485"		
Piston Rings:			
Compression Ring Width	0.062"– 0.061"		
		0.0015" to 0.0035"	
Groove Width	0.0645"– 0.0635"		
Scraper Ring Width	0.156"– 0.0155"		
		0.001" to 0.003"	
Groove Width	0.158"– 0.157"		
Ring Gap in Cylinder Liners		0.003" to 0.016"	

Piston rings are obtainable in the following oversizes: +010" +020" +030" +040"



## **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/5/B	ENGINE DIMENSIONS	Date	NOVEMBER 1954

TRIUMPH SPORTS T.R.2

### ENGINE DIMENSIONS

Part and Description	Grade "F"	Grade "G"	Grade "H"
Piston and Cylinder Sleeves:			
Bore Diameter	3.2676"-3.2673	3.2680"-3.2677	3.2684"-3.2681
Top Dia. of Piston Skirt	3.2626"-3.2622	3.2630"-3.2626	3.2634"-3.2630
Bot. Dia. of Piston Skirt	3.2641"-3.2639	3.2645"-3.2641	3.2649"-3.2645
Top–Skirt Clearance (All Grades)	0.0057"– 0.0054"		
Bot.–Skirt Clearance (All Grades)	0.0039"– 0.0032"		
Height of Cyl. Sleeves above Cylinder Block Face (All Grades)			

Piston are obtainable in the following oversizes: +020" +030" +040"

Part and Description	Dimensions – New	Clearance – New	Remarks
Camshaft:			
Front Journal Diameter	1.8720"– 1.8710"		
		0.0028"-0.0047"	
Front Journal Bearing Bore	1.8757"– 1.8748"		



### **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/5/B	ENGINE DIMENSIONS	Date	NOVEMBER 1954

TRIUMPH SPORTS T.R.2

### **ENGINE DIMENSIONS**

Part and Description	Dimensions – New	Clearance – New	Remarks
Camshaft (Cont.):			
External Diameter of Front Bearing	2.2498"– 2.2493"	Push fit in Cylinder Block	
Bore in Block for Front Bearing	2.2507"– 2.2493"		
Diameter of 2nd, 3rd and Rear Camshaft Jour- nals			
		0.0026" to 0.0046"	
Bore in Cylinder Block for 2nd, 3rd and Rear Journals			
End Float		0.004" to 0.012"	
Valves and Valve Guides:			
Inlet Stem Diameter	0.3110"– 0.3100"		
		0.001" to 0.003"	
Inlet Guide ID	0.3130"– 0.3120"		



### **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/5/B	ENGINE DIMENSIONS	Date	NOVEMBER 1954
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TRIUMPH SPORTS T.R.2

### **ENGINE DIMENSIONS**

Part and Description	Dimensions – New	Clearance – New	Remarks
Valves and Valve Guides (Cont.):			
Exhaust Stem Diameter	0.3715"– 0.3705"		
		0.003" to 0.005"	
Exhaust Guide ID	0.3755"– 0.3745'		
Included Angle of Valve Faces	90°		
Inlet Valve Head Diameter	1.5620"– 1.5530"		
Width of Inlet Valve Seating	0.0469" (approx.)		
Exhaust Valve Head Diameter	1.3030"– 1.2990"		
Width of Exhaust Valve Seating	0.0469" (approx.)		



### **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/5/B	ENGINE DIMENSIONS	Date	NOVEMBER 1954

TRIUMPH SPORTS T.R.2

### **ENGINE DIMENSIONS**

Part and Description	Dimensions – New	Clearance – New	Remarks
<u>Oil Pump:</u>			
Outer Rotor Outside Diameter	1.5975"– 1.5965"		
		0.0055" to 0.0075"	
Housing Internal Diameter	1.6040"– 1.6030"		
Depth of Rotor	1.4995"– 1.4985"		
		0.0005" to 0.0025"	
Housing Depth	1.5010"– 1.5000"		
Bush in Cylinder Block	0.5010"– 0.5005"		
		0.0015" to 0.0030"	
Distributor Driving Shaft	0.4990"– 0.4980"		
Oil Pump Inner Rotor:			
Major Diameter	1.1720"– 1.1710"		
Minor Diameter	0.7310"– 0.7290"		



### **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

**No.** SPORTS/5/B

ENGINE DIMENSIONS

Date NOVEMBER 1954

#### TRIUMPH SPORTS T.R.2

### **ENGINE DIMENSIONS**

Part and Description	Dimensions – New	Clearance – New	Remarks
Oil Pump Inner Rotor (Cont.):			
Rotor Depth	1.4995"– 1.4985"		
		0.0005" to 0.0025"	
Housing Depth	1.5010"– 1.5000"		
Clearance on Rotors		0.0005"-0.0025" Min. 0.001"-0.004" Max.	
Valve Springs:			
Outer Springs (Inlet & Exhaust), Fitted Length	1.560"		
Outer Springs (Inlet & Exhaust), Fitted Load	38 lbs.		
Outer Springs (Inlet & Exhaust), Free Length	1.980" (approx.)		
Inlet Inner Spring, Fitted Length	1.560"		
Inlet Inner Spring, Fitted Load	33 lbs.		
Exhaust Inner Spring, Fitted Length	1.450"		
Exhaust Inner Spring, Fitted Load	36.5 lbs.		



# **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

TRIUMPH SPORTS T.R.2

**ENGINE DIMENSIONS** 

Part and Description	Dimensions – New	Clearance – New	Remarks
Valve Springs (Cont.):			
Inner Inlet Spring, Free Length	2.080" (approx.)		
Inner Exhaust Spring, Free Length	2.080" (approx.)		
Auxiliary Inner Exhaust Spring, Fitted Length	1.140"		
Auxiliary Inner Exhaust Spring, Fitted Load	10 lbs.		
Auxiliary Inner Exhaust Spring, Free Length	1.540"		



# **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/6/B	MODIFIED PISTONS	Date	DECEMBER 1954	

Whilst the original pistons have been found quite satisfactory for all normal conditions, there have been some indications of piston crowns cracking when a car is extensively used for Rally work.

A modified piston has recently been introduced in normal manufacture with a reinforced crown. This piston is provided with a lattice reinforcement on the underside of the crown. The modification, which was introduced at Eng. No. TS.4882E, will render these pistons satisfactory for normal use and Rally work.

A racing type of piston is in the course of development and should shortly become available for owners who wish to use their cars exclusively for racing purposes. This racing type of piston, which has large clearances, is not suitable for normal use owing to the danger of heavy oil consumption, which is normally associated with any racing piston.

The reinforced type of piston now used in normal manufacture is supplied under Part No. 110516.

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.



# **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/1/C	RADIATOR BLOCK AND THERMOSTAT HOUSING	Date	JUNE 1954	
-----	------------	---------------------------------------	------	-----------	--

The Thermostat Housing, Part No. 201522, was replaced by Part No.202033 for convenience of manufacture. This change was incorporated at Commission No. TS.1201.

When the new Thermostat Housing was introduced the water outlet was off-set from the centre line and the original Radiator, Part No. 400311, was replaced by Radiator, Part No. 400412.

The Thermostat Element, Part No. 107590, the Top Water Hose, Part No. 101571, and By Pass Hose, Part No. 105598, are unaffected by this change.

The Bottom Water Pipe Assembly of Rubber Hose, Part No. 107292 (2 off) and steel Connection Pipe, Part No. 201795, fitted up to Commission No. TS.414, or the later Assembly of Rubber Hose, Part No. 108422 (2 off) and steel Connection Pipe, Part No. 108423, are also unaffected by this change of Thermostat Housing and Radiator Block.

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.



# **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/2/C	RADIATOR THERMOMETER	Date	OCTOBER 1954

There have been instances of failure of this unit, owing to the cracking of the capillary tube, where it enters the thermometer bulb, with consequent loss of filling fluid.

Tests have shown that the run of the capillary tube adjacent to the thermometer can cause a pronounced vibration period at certain engine speeds. This period, apart from normal handling damage, has been responsible for the majority of failures examined.

The illustration shows the correct "run" for the capillary tube when fitting replacements and should be used, where a car is found not to conform with this arrangement of the capillary tube, when carrying out normal servicing operations.

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.

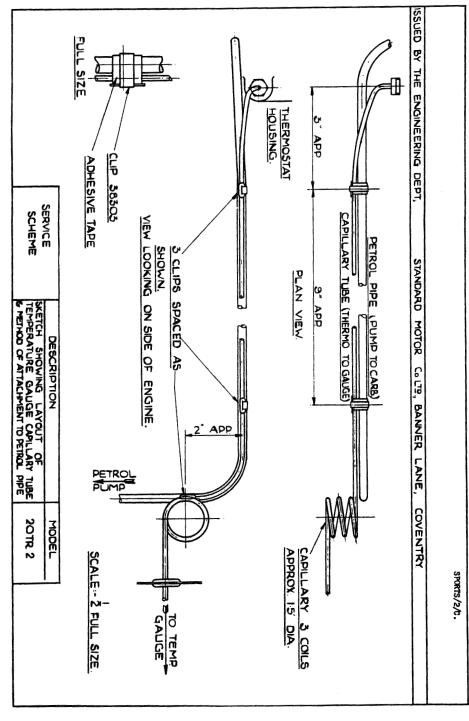
**1 ILLUSTRATION** 





## **STANDARD AND TRIUMPH VEHICLES**

## (NOT FOR PUBLICATION)





# **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/1/D	CLUTCH OPERATING SHAFT, PART NO. 108887	Date	JUNE 1954	
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The clutch operating shaft originally specified for use on R.H.S. cars had the same reduced diameter to accommodate the fixing bolt as formally had the Series II Vanguard.

The modifications explained by Service Information Sheet No. VANGUARD/2/D were incorporated with the T.R.2. Model, at Commission No. TS.411.

For this model, as in the case of the Vanguard, only the modified shaft, Part No. 108887, will in future be available from our Spares Department and should be fitted for replacement purposes, as explained in the quoted Vanguard Information Sheet.

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.



# **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

#### No. SPORTS/1/E SOLENOID FOR THE ELECTRICAL CONTROL OF Date MARCH 1954 THE OVERDRIVE

There have been complaints of failure of the operating solenoid for the control mechanism due to water entry into this solenoid.

There are several points at which water can enter the solenoid assembly and the following points are recommended for attention:

- (a) The joint between the solenoid flange and mounting bracket should be sealed with a paper washer, Part No. 108791. This washer can affect "earthing" and one attachment bolt must be fitted with the star shaped shake proof washers, Part No. WN.0705, under both the head of the bolt and the nut.
- (b) The joint of the cap on the solenoid body, cap attachment screws, wire grommet and rubber plug, can also allow water entry and it is proposed ultimately to seal these with a moulded rubber cover. As an interim measure pending the manufacture of the moulded rubber cover, vehicles from Commission No. V.238623 and TS.1075 are being sealed as shown in the illustration. (Triumph Renown from Commission No. TDC.2580)
- 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.

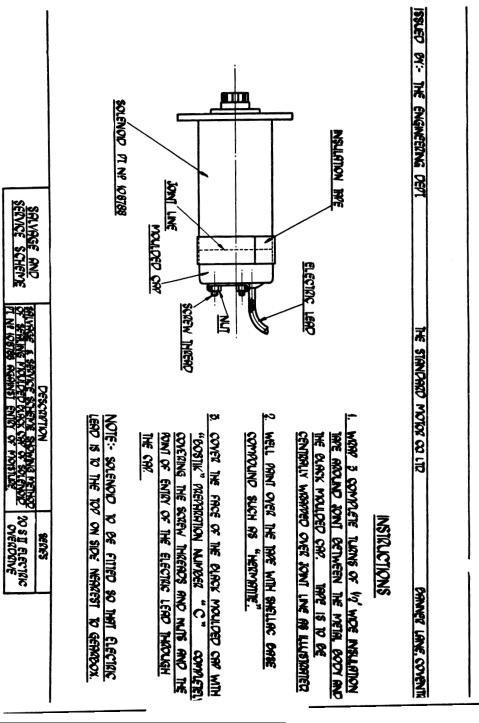
### 1 ILLUSTRATION.





# **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)





# **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/2/E	JUMPING OUT OF SECOND GEAR	Date	APRIL 1954	
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Difficulty has been experienced on some cars with jumping out of "Second" gear when on "over-run."

The "Second" gear dog teeth are backed off on the "over-run" side on all dog teeth except eight to give a peg drive effect and prevent a tendency to work out of mesh, when the gears are tipped under load.

On earlier gearboxes it was possible, with certain combinations of limits, to have inadequate engagement on the flank of the dog teeth. This condition, apart from the crushing and bruising, owing to the small bearing area which permitted overdrive load to be carried on all dog teeth, allowed the gear to slip out when subjected to any appreciable over-run load.

Increased depth of gear engagement has been obtained by a modified selector shaft, Part No. 109136, with an altered locating groove, but the original selector rod, Part No. 106046, may be modified as shown in the illustration.

The extra movement of the 1st. mainshaft gear, Part No. 105628, to engage more fully the "Second" gear dog teeth, will reduce the shrouding of the interlock plungers and synchro mesh balls. The effective length of the "First" gear his been increased in a modified gear under Part No. 109137 to allow for this movement.

It will sometimes be possible to use the original "First" gear with the new selector shaft, if the combination of limits in the box is favourable, but if doubt exists as to the possibility of plungers or balls becoming displaced, the now lengthened gear should be fitted.



# **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/2/E	JUMPING OUT OF SECOND GEAR	Date	APRIL 1954

The "Second" speed mainshaft gears will generally have to be replaced owing to the dog teeth having been previously damaged by inadequate meshing.

The modified mainshaft gear was incorporated in normal production at Commission No. TS.971 and the new selector shaft at Commission No. TS.1265.

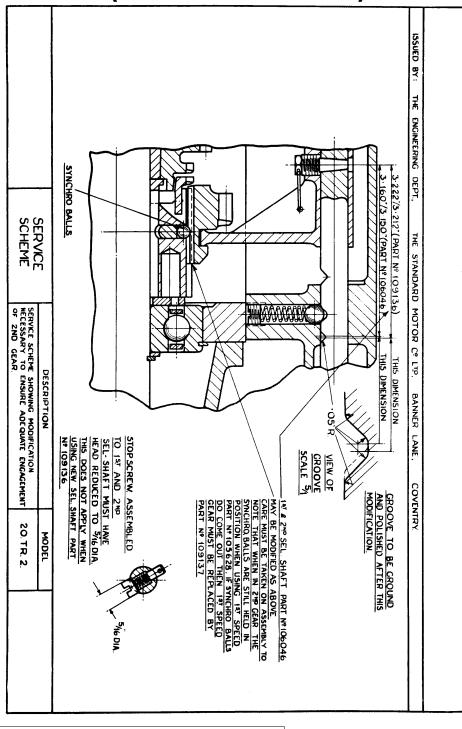
NOTE: These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.

**1 ILLUSTRATION** 





### (NOT FOR PUBLICATION)





#### **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/3/E	JUMPING OUT OF REVERSE GEAR	Date	APRIL 1954	

Where these cars are used under severe rally test conditions it has been found that "Reverse" gear can jump out when the car is being used on "drive." Once this has happened "jumping out" will occur under normal driving conditions.

Investigations have shown that this working out of gear, when subjected to heavy loading, is caused by deflection of the gears. This action is quite controllable providing the gears are kept fully engaged, but once the gears commence to work out of mesh, very heavy pressure on the gear change knob will be required to prevent disengagement.

The gear lever spherical can sometimes wedge in the turret top, when the lever is lifted for "Reverse" engagement, and give the impression of being fully engaged when the gears are only partially meshed. This characteristic can be established by trying the change without the engine running, keeping the lever raised throughout the change. The seat in the turret has now been modified in normal manufacture and any gearboxes suffering from this complaint may be modified as indicated in the illustration.

The location of the "Reverse" gear has been improved by increasing the depth of the groove on the selector shaft to provide a more pronounced register in the actuator, and the original ball and spring have been replaced by a plunger, spring and packing. The modified selector locking details are shown on one of the illustrations.

The modified selector shaft and plunger was introduced in production at Commission No. TS.1201 and this modification can be carried out retrospectively where cases of difficulty arise, as shown in the appropriate illustration.

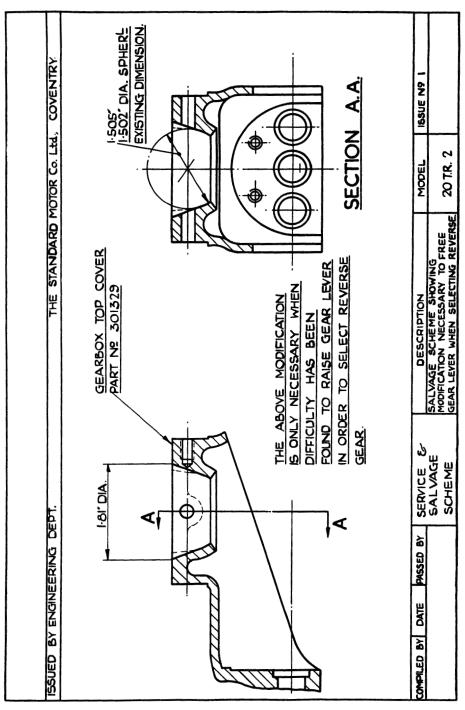
NOTE: These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.

2 ILLUSTRATIONS.





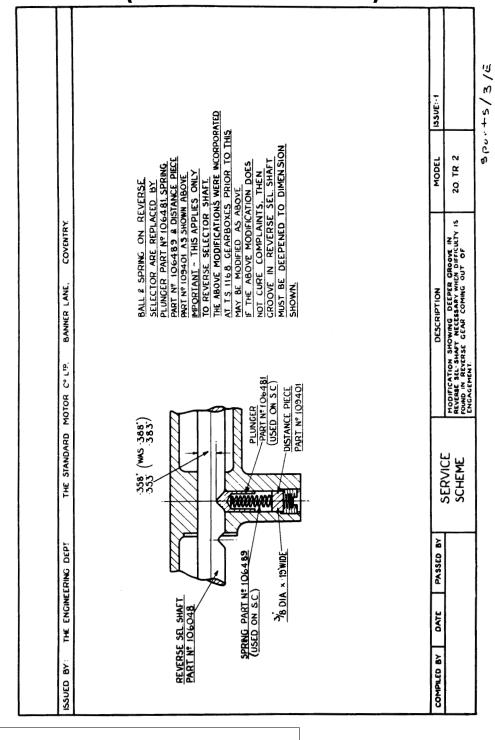
#### (NOT FOR PUBLICATION)







### (NOT FOR PUBLICATION)





# **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/4/E	ACCIDENTAL ENGAGEMENT OF REVERSE GEAR	Date	APRIL 1954	
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There have been cases, especially after rally tests involving rapid gear changing, of insufficient "baulking" against accidental engagement of "Reverse."

Investigation has shown that this accidental engagement of "Reverse" is made possible owing to wear on the step in the phosphor bronze "Reverse" actuator.

The material for the "Reverse" actuator is specified for ultimate change to case-hardened steel, but until supplies become available it is intended to continue to use the phosphor bronze material with a hardened steel insert, Part No. 109365.

Where difficulty with accidental engagement of "Reverse" is experienced the hardened insert may be fitted to the selector, as shown in the illustration.

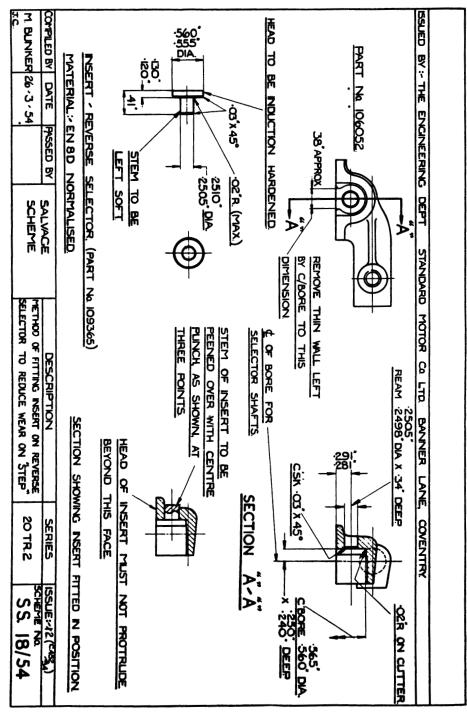
NOTE: These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.

1 ILLUSTRATION.



#### **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)





#### **STANDARD AND TRIUMPH VEHICLES**

### (NOT FOR PUBLICATION)

#### **No.** SPORTS/5/E SOLENOID FOR ELECTRICAL CONTROL OF OVERDRIVE **Date** OCTOBER 1954

Difficulty is still being reported with regard to the entry of water into the Overdrive operating solenoid on Vanguard Models, in spite of the exercise of the precautions described in Service Information VANGUARD/2/E.

A considerable number of complaints have been reported of faulty operation of the "Overdrive" and these difficulties have, upon investigation, generally found to have been caused by inadequate water sealing (on the Vanguard) or incorrect adjustment of the solenoid.

The correct methods for adjustment and water sealing of the solenoid are shown in the illustration, and it is particularly important that these instructions are carefully followed when fitting replacement solenoids. With the T.R.2. Model the solenoid lever stop is not adjustable.

The proofing of the rubber grommets mentioned in the Service Scheme may present a little difficulty to Distributors and Dealers, and for this reason it has been decided to change the rubber for these to one which will not require water proofing. The change of material in the case of Part No. 109521 is not accompanied by an alteration of Part No., but in the case of Part No. 108786, this will now be supplied by our Spares Department under Part No. 110868.

There have been no reports of water sealing difficulties with the T.R.2 Model, but the lever setting instructions given in the Service Scheme may be used for this Model, apart from the fact that a fixed stop is provided for the solenoid lever.

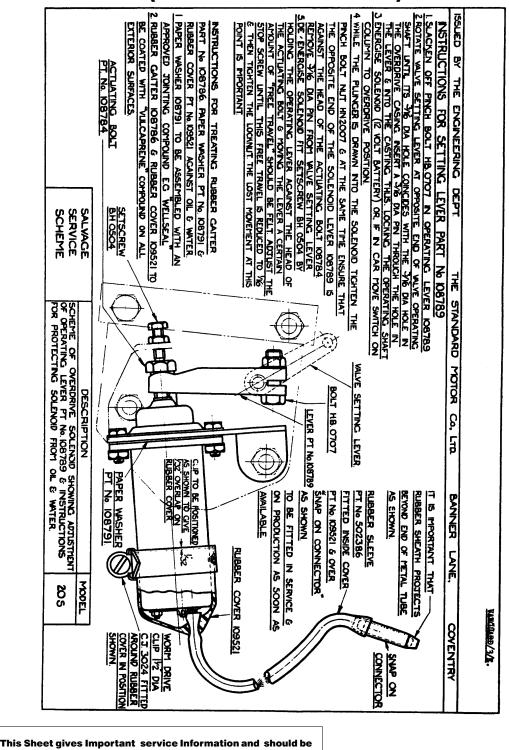
NOTE: These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.

#### 1 ILLUSTRATION.



### **STANDARD AND TRIUMPH VEHICLES**

#### (NOT FOR PUBLICATION)



filed by your Service Dept. in the Service Information Folder.





# (NOT FOR PUBLICATION)

No.	SPORTS/7/E	OVERDRIVE SERVICE MANUAL	Date	DECEMBER 1954	
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The Service Instruction Manual for the Laycock de Normanville Overdrive Unit, Part No. 502274, is now available through normal spares channels at 5/–d. subject to normal Spares discount.



#### **STANDARD AND TRIUMPH VEHICLES**

#### (NOT FOR PUBLICATION)

#### No. SPORTS/1/F REAR HUB – PRESSED STEEL AND KNOCK-OFF TYPE Date MAY 1954 WIRE WHEELS

Reports from competitors in high speed work have shown that there is a tendency for the rear hubs to work loose on their splines, which also allows oil to leak along these splines.

This loosening of the hubs is due to a "fretting" action between the splined locking collar and inner locating boss and has now been eliminated in production by cyanide hardening the locating collar, Part No. 108608, and increasing the size of the splines on the axle shaft with part No. 201933, to provide an interference fit.

In future it is only intended to carry the axle shaft with the increased spline size and the hardened locking collar in our Spares Department, and these new parts should be used for any persistent case where retightening of the axle hub nut to 110-125 lbs.ft. is not successful.

The removal of the hubs fitted to the axle shafts which provide an interference fit will require the use of an extractor. The tools recommended for this purpose are described in Service Information Sheet SPORTS/1/Q.

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.



#### **STANDARD AND TRIUMPH VEHICLES**

#### (NOT FOR PUBLICATION)

<b>No.</b> SPORTS/2/F REAR AXLE CROWN WHEEL ATTACHMENT <b>Date</b> JUNE 1954	
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The crown wheel has shown a tendency to work loose on the differential housing after exacting rally forward and reversing tests, and it is recommended that the bolts should be checked for tightness to 22-24 lbs. ft. after the vehicle has competed in this type of event.

The attachment bolts are being increased from 5/16" to 3/8" diameter which, with the higher tightening torque of 35-40 lbs.ft. provides a far stronger clamping load. The Part Number of the new 3/8" Bolt is 109735 (8 off) and the Tab Washer, Part No. 109736 (2 off) and 109737 (2 off).

It is only intended to supply future crown wheel (with pinion) assemblies to suit the 3/8" diameter bolts, and these will be supplied under Part No. 502127. The original differential housing bolt holes should be opened out as shown in the illustration.

The original differential housing to suit the 5/16" bolts was supplied under Part No. 301016, and the later type to suit the 3/8" bolts will be sold under Part No. 301607.

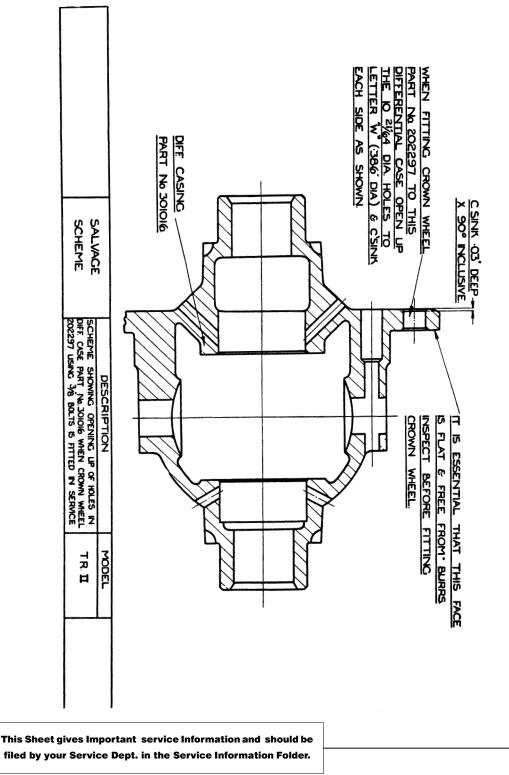
NOTE: These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.

1 ILLUSTRATION.





# (NOT FOR PUBLICATION)





### **STANDARD AND TRIUMPH VEHICLES**

#### (NOT FOR PUBLICATION)

No.	SPORTS/3/F	FITTING AND ASSEMBLY OF REAR HUBS	Date	AUGUST 1954
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The fit of the rear hubs on the axle shaft now provides an interference, as was indicated in Service Information Sheet SPORTS/1/F.

It has been brought to our notice that the changing of rear hubs, without removal of the half shaft and brake backing plate, has led to damage of the hub bearing and to their subsequent failure in service.

Messrs. V.L. Churchill & Co. Ltd. are preparing a special tool for the fitting of either the pressed steel or the knock–on type hubs. Until the envisaged tool, or a suitable alternative, is available no hubs should be fitted onto the axle shafts, with the interference fit, unless the complete half shaft assembly is removed and the fitting load carried on the end of the axle shaft.

It will similarly be possible to cause damage when removing hubs, where an interference fit is provided, and as was indicated in SPORTS/I/Q tools are being prepared for their removal. In the absence of such a hub puller, the complete half shaft assembly must be removed, as when fitting, and the extraction carried out without any loading on the bearing.

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.



# **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/4/F	REAR HUB BEARING FAILURE	Date	NOVEMBER 1954	

A few instances of this type of trouble have occurred, which could .not be explained by damage due to the incorrect method of assembling the press fit rear hub described in Service Information Sheet SPORTS/3/F.

A careful investigation has been carried out, as to a possible explanation for those failures, and we are satisfied that they have been caused by the washing action of the axle oil on the grease when cornering. This washing action his left the bearing running with only a thin film of back axle oil.

Rear axles are to be modified in normal production to incorporate a grease trap similar to that shown in the illustration. This baffle serves a double purpose, it minimises the wishing effect of the axle oil on the grease and ensures that a certain amount of the lubricant is always retained under the lower lip under any conditions of cornering to which the car is likely to be subjected.

This improvement can be incorporated retrospectively by modifying the axle as shown in the illustration and such an incorporation may be considered worthwhile by owners of vehicles not so equipped, using those for Rally purposes.

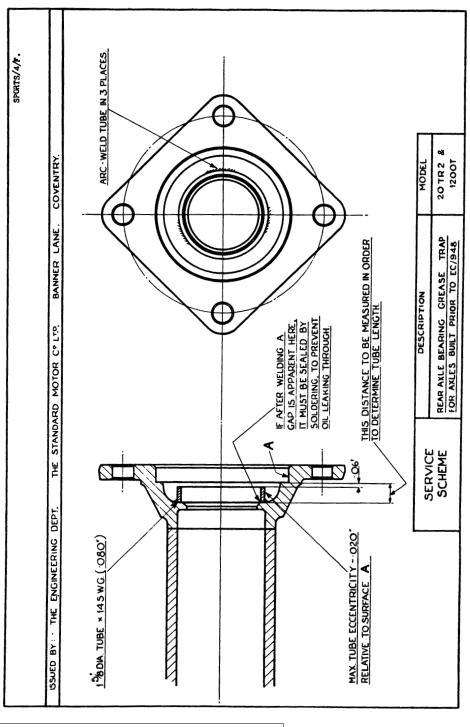
NOTE: These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.

1 ILLUSTRATION.





#### (NOT FOR PUBLICATION)





#### **STANDARD AND TRIUMPH VEHICLES**

#### (NOT FOR PUBLICATION)

No.	SPORTS/5/F	REAR AXLE CROWN WHEEL ATTACHMENT BOLTS	Date	DECEMBER 1954
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Although no complaints have been received since the introduction of the 3/8" diameter attachment bolts, Part No. 109735, mentioned in Information Sheet SPORTS/2/F, following our practice of incorporating all possible improvements, a further small modification has been introduced.

It has been found that when tightening crown wheel bolts there is a tendency for the head of the bolt to cut into the tab washers and release small slivers of steel into the axle.

A plain washer, Part No. WP.0020, has now been introduced in normal manufacture and is used in conjunction with a longer bolt, Part No. 110737. It is extremely important that the bolt, Part No. 110757, SHOULD NOT BE FITTED WITHOUT THE WASHER WP.0020. This also applies in the reverse case and the shorter bolt, Part No. 109735, should not be fitted when using the washer, Part No. WP.0020.

The bolt, Part No. 110737, and washer, Part No. WP.0020, were incorporated on production Axle TS.4731 and 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.



#### **STANDARD AND TRIUMPH VEHICLES**

#### (NOT FOR PUBLICATION)

No.	SPORTS/1/G	FRONT HUBS FOR PRESSED STEEL TYPE WHEELS	Date	MAY 1954
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The front hubs on this Model are similar to a previous Model and retain the same Part No. 102696.

It has been found desirable in view of the competition work to which this vehicle is being subjected, to raise the strength of the hub and considerable development work has now been carried out.

The hub, Part No. 102696, is supplied from two sources which are identified as shown in the illustration. The hub marked "LEYS" is far superior in strength and only this type, or the still stronger type, Part No. 109975 (which is similarly identified), should be used for any replacement.

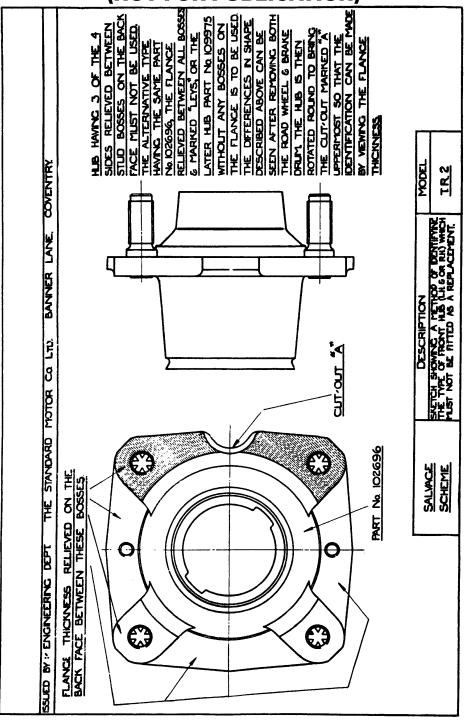
NOTE: These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.

1 ILLUSTRATION.



# **STANDARD AND TRIUMPH VEHICLES**

(NOT FOR PUBLICATION)





# **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/2/G	STEERING COLUMN BRACING	Date	JUNE 1954

There is a tendency with some cars of this type to develop excessive sideways movement of the steering wheel under certain road conditions.

This tendency for sideways movement of the steering wheel has been improved in normal manufacture by fitting an extra bracing strut, Part No.602790, under the facia, as shown in the illustration.

It is also proposed, as soon as practicable, to lengthen the attachment bracket from the bulkhead to permit clamping to be carried out nearer the steering wheel, but the same bracing stay, Part No. 602790, will continue to be used when this longer bracket is introduced in normal manufacture.

The extra bracing strut was introduced in normal manufacture at Commission No. TS.1390, but it may be fitted retrospectively as shown in the illustration.

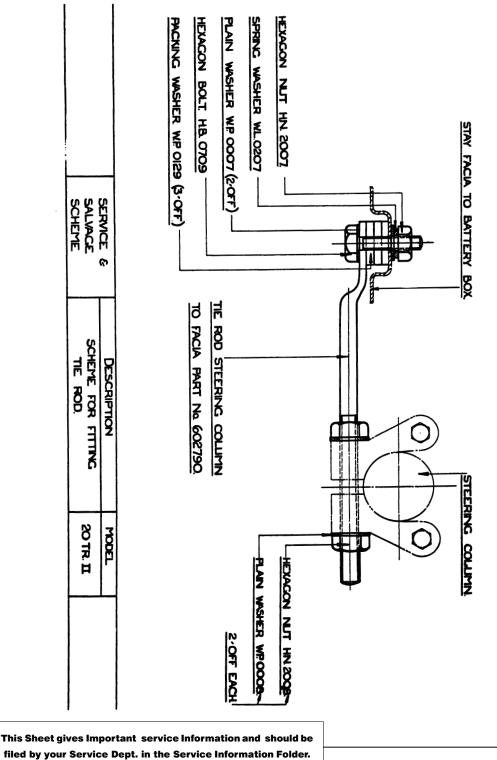
NOTE: These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.

1 ILLUSTRATION.





### (NOT FOR PUBLICATION)





### **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/3/G	FITTING OF OIL RETAINING FELTS TO FRONT HUBS	Date	JULY 1954	
		TO FRONT HUBS			

Instances of Front Hub Oil leakage indicate that the correct method of fitting the felt sealing washer, Part No. 58271 (Vanguard) and 100867 (Sports and Eight) is not generally appreciated.

The felt sealing washer should be assembled in its retainer, Part No. 58272 (Vanguard) and 100868 (Sports and Eight) as shown in the illustration. This method of assembly will ensure that the felt washer and retainer will revolve together thus ensuring that the revolving sealing face will be provided by the bore of the felt washer and prevent the seepage of grease between the retainer and the felt washer due to centrifugal action.

It will be appreciated that the illustration shows the Vanguard parts, and parts for the Sports and Eight must be ordered under the quoted part numbers. The method of fitting for the latter models will be identical.

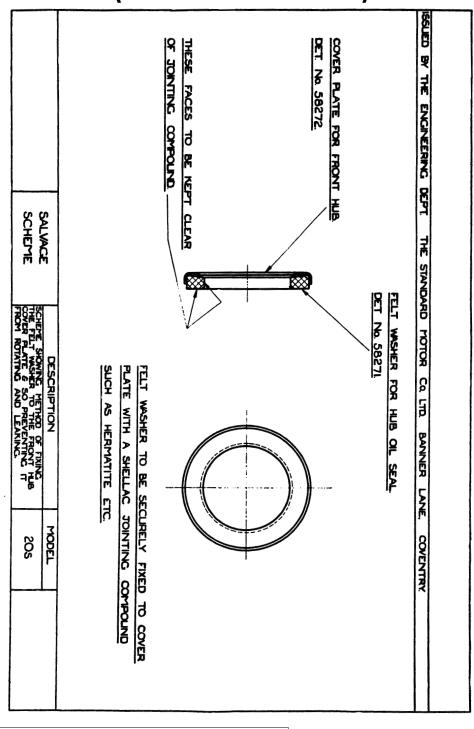
NOTE: These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.

1 ILLUSTRATION.





### (NOT FOR PUBLICATION)





# **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

#### No. SPORTS/4/G FRONT SUSPENSION – TRUNNION FOR VERTICAL LINK Date AUGUST 1954 AND LOWER WISHBONES

Two eases of fracture of the screwed portion of the vertical link have been reported, which have been caused by over-tightening the outer wishbone pivots. This over-tightening permits severe bending to take place in the vertical link and resulted, in one case, in failure within 5 miles running.

The construction of this pivot is shown in the illustration and it is essential to have .004" - 012" end float for the boss of each wishbone arm. It will not be possible to measure this float owing to the grease retaining seals and the following procedure must be regarded:

- (a) The pivot pin should be chocked for centralisation in the bronze trunnion. This pivot pin is a press fit in the trunnion, located in the bronze against turning by self-cutting splines and may be centralised by the use of a press or a suitable soft metal drift.
- (b) The parts should be assembled as shown in the drawing and tightened up equally on each nut to prevent alteration of the relation of the pivot with the bronze trunnion. The outer washer is also located against radial movement by self-cutting splines on the pivot pin and equal tightening should be continued until the assembly is solid.
- (c) The nuts should next be slackened back 1/2 to 1–1/2 flats and then split–pinned. The wishbone arms should than be lightly tapped outwards to displace the splined outer washers and here again this should be carried out alternatively on each arm to avoid altering the relationship of the pivot and the trunnion.
- (d) This should give the recommended clearance to the bushes, but as a final precaution the assembly should be checked for freedom of movement over its full range of operation before fitting the road spring.



# **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

#### No. SPORTS/4/G FRONT SUSPENSION – TRUNNION FOR VERTICAL LINK Date AUGUST 1954 AND LOWER WISHBONES

This need for adjustment should only occur when the front suspension is disturbed but as a precautionary measure any possibility of tightness at this point should be checked during normal routine maintenance.

Apart from damage at this point, tightness can appreciably affect the ride of the vehicle.

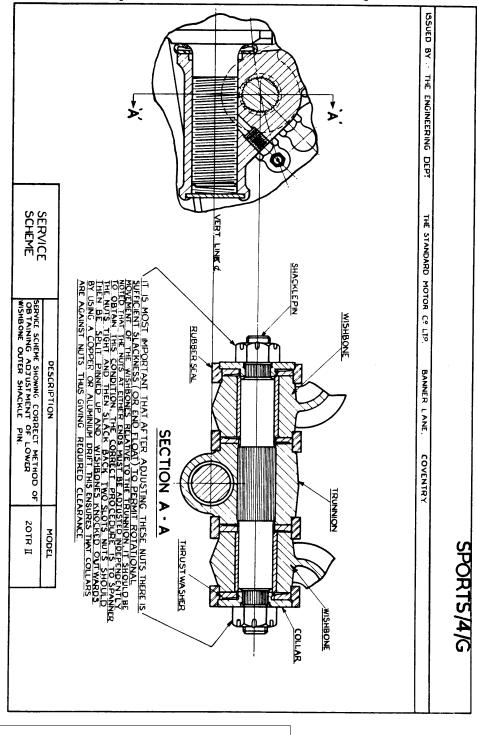
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1 ILLUSTRATION.





# (NOT FOR PUBLICATION)





### **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/1/J	SKID PLATE FOR RALLY WORK	Date	JULY 1954

This consists of a heavy gauge plate fitted under the front of a car, as shown in the illustration, to prevent rocks, etc. on rough roads damaging the under structure, and may be required by owners contemplating entry for this type of Rally.

The Plate Assembly, Part No. 301644, may be drawn from Spares, or manufactured as detailed in the illustration.

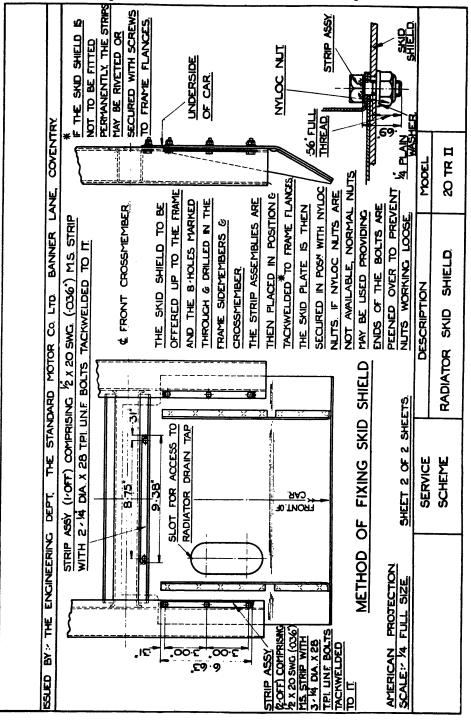
NOTE: These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.

2 ILLUSTRATIONS.





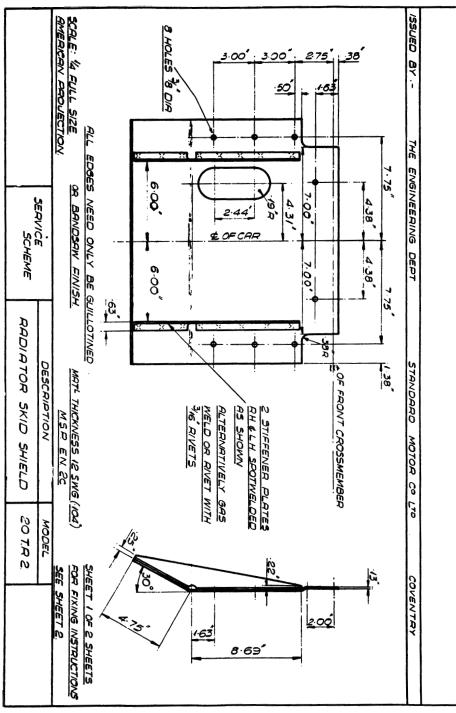
#### (NOT FOR PUBLICATION)







# (NOT FOR PUBLICATION)





# **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/2/J	REAR SHOCK ABSORBER BRACKETS	Date	NOVEMBER 1954	

It has been found that under arduous conditions, such as is entailed by Rally work, especially with the competition type of shock absorber, the rear absorber attachment bracket can crack.

This cracking of the attachment brackets can occur in two ways, either spreading from the mounting bolts, or by lifting of the complete bracket from the chassis frame member.

We are following our policy in this case of incorporating all improvements in normal current manufacture and stiffening modifications were incorporated from Commission No. TS.4699.

It will be possible to modify, to the order of any customer, earlier vehicles as shown in the illustration. The incorporation of this improvement retrospectively should be discussed with any of your customers who are seriously entering their cars for Rallies, as they may consider the reinforcement a worthwhile precaution. It must be quite clearly understood that the modification must be made at the customer's expense and that no financial assistance can be expected from this Company.

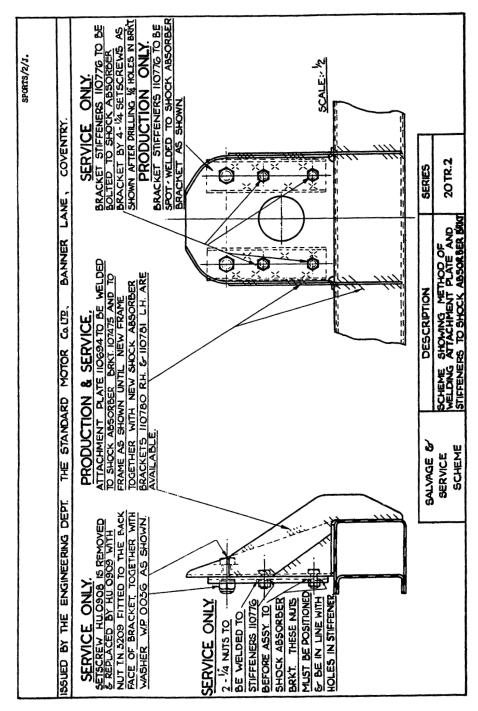
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I ILLUSTRATION.





# (NOT FOR PUBLICATION)





### **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/1/L	ROAD WHEEL BALANCE	Date	APRIL 1954

Tests carried out in conjunction with Messrs. Dunlop have shown that this car is mainly susceptible to static balance, although it would be advisable for any vehicles being entered for high speed competition work to have their wheels and tyres checked for both static and dynamic balance.

Static balancing of road wheels and tyres to fine limits is now carried out during initial assembly, but the wheels and tyres fitted to earlier vehicles were balanced only to normal production limits.

It will be appreciated that any replacement or disturbance of the original relation of tyre, wheel and tube will necessitate re-balancing.

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.



### **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/2/L	ROAD WHEEL ATTACHMENT NUTS	Date	MAY 1954

The tightening torque for the wheel attachment nut, Part No. 100870, is 45 to 55 lbs.ft., but it has been found this figure is being exceeded, and the cutting edges formed by the chamfering of the 11/16" A/F hexagon nut are damaging the attachment recess in the wheel nave plate.

In one case this damage permitted the wheel to pull over the nuts during competition work, and as a precautionary measure the nut hexagon size has now been increased to 7/8" A/F for all vehicles from Commission No. TS.1634.

These larger hexagon nuts are supplied under Part No. 109586 and whilst the chamfering angle is unchanged it is on one side only and care must be taken to fit them correctly.

These latest wheel nuts will naturally be advantageous for any competition work and may be fitted retrospectively if desired, but it should be realised that the wheel brace, Part No. 101761, will also require replacing by the Vanguard wheel brace, Part No. 59428.

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.



# **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/2/M	FLASHING SIGNAL LIGHTS	Date	FEBRUARY 1954

This vehicle is fitted with flashing type indicator lights and trouble has been experienced with the failure of the flasher control unit, Part No.107594.

This unit has been fitted horizontally and investigation by Messrs. Lucas has shown that the heat given off by the resistance is affecting the hinge of the contact strip, causing distortion and incorrect operation.

This unit is now fitted vertically (terminals pointing down the scuttle panel) and any replacement units must be fitted in this manner. It is possible to do this without modifying fixing bolts or harness and the latest position is shown in the illustration.

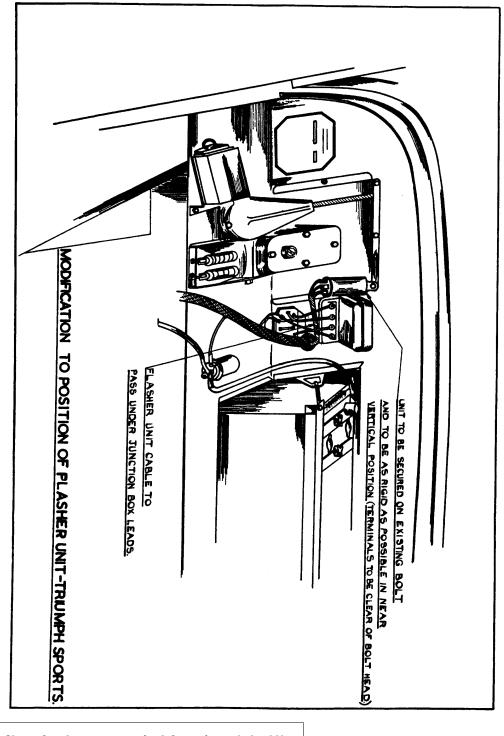
This change was incorporated in production during the month of February, but it is unfortunately impossible to quote a Commission Number at which the change was introduced.

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.





# (NOT FOR PUBLICATION)





# **STANDARD AND TRIUMPH VEHICLES**

# (NOT FOR PUBLICATION)

No.	SPORTS/3/M	WINDSCREEEN WIPER INSTALLATION	Date	JUNE 1954	
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The centres of the windscreen wiper spindle attachments in the body were increased from 10-1/2" to 14-1/2" to widen the area of the wiped glass. This modification was incorporated at Commission No. TS.995.

The Windscreen Wiper Assembly, Part No. 106141, was similarly replaced at TS.995, by Assembly, Part No. 109101, to suit the increased body centres.

The Arm and Blade Assembly, Part No. 107962 and Part No. 107964, for R.H. and L.H. steering respectively, remain unchanged for use with either wiper assembly.

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.





### (NOT FOR PUBLICATION)

No. SI	PORTS/4/M	REV. COUNTER CABLE FOULING OVERDRIVE RELAY	Date	DECEMBER 1954
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The Rev. Counter Cable was recently lowered in order to improve its "run." In its new position the cable was brought nearer to the relay, where overdrive is fitted, and thus introduced the possibility of an electrical "short" giving overdrive on all gears.

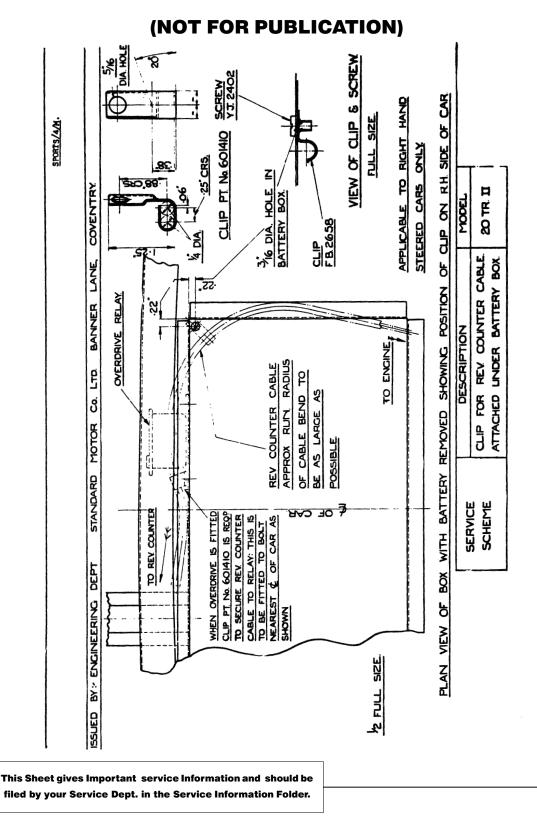
A new Rev. Counter Cable Securing Clip, Part No. 601410, is now fitted, and located on one of the relay securing screws and positioned so as to prevent electrical contact with the relay. The correct positioning of this clip is shown in the illustration.

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.



### **STANDARD AND TRIUMPH VEHICLES**





### **STANDARD AND TRIUMPH VEHICLES**

### (NOT FOR PUBLICATION)

## **No.** SPORTS/2/N WATER LEAKAGE THROUGH THE STITCHING ON HOOD, **Date** OCTOBER 1954 SIDESCREENS AND TONNEAU COVER

In some cases trouble has been experienced with water leakage through the hood of this car. Owing to this leakage it has, not unnaturally, been claimed that the material was porous. Judging by the cars examined, whilst only one had faulty hood material, with all the other inspected water was leaking through the stitching. The inner backing material can act like a wick and spread water, which enters from a stitched portion of the hood. Generally, however, the water entry is directly from a seam.

The seams are sealed during the stitching operation, but as a further precaution a sealing compound is applied after stitching to fill any oversize holes made by needles, etc.

The stitch sealing we recommend after extensive testing is "Everflex" Stitch Sealing Lacquer, which can be obtained in 4 oz. containers from our Spares Department under Part No. 552895. This sealing compound should be ordered in small quantities as it will deteriorate in storage, even in sealed tins.

The seams to be treated should be first carefully scrubbed with a small nail brush using soap and water and then allowed to dry.

The "Everflex" Stitch Sealing Lacquer must be applied in a warm shop, on dry material, to both sides of seams, but under no circumstances must it be allowed to come into contact with the transparent plastic windows in the side curtains and hood owing to its solvent effect upon such a material.

The recommended Stitch Sealing Lacquer is highly inflammable and as such must comply with the limitations imposed upon the transport of such materials.

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.



### **STANDARD AND TRIUMPH VEHICLES**

### (NOT FOR PUBLICATION)

No.	SPORTS/3/N	BATTERY BOX DRAIN	Date	DECEMBER 1954

Isolated cases of water entering the Battery container box have been reported, where cars are used in thunderstorms, or under similar conditions of rainfall experienced in some tropical areas. The water finds its way, under such conditions, into the battery box owing to "build up" at the rear of the bonnet.

A battery box drain tube has now been incorporated in normal manufacture and was introduced at Commission No. TS. 3288. Retrospective action can be taken with earlier cars, if desired, as shown in the illustration.

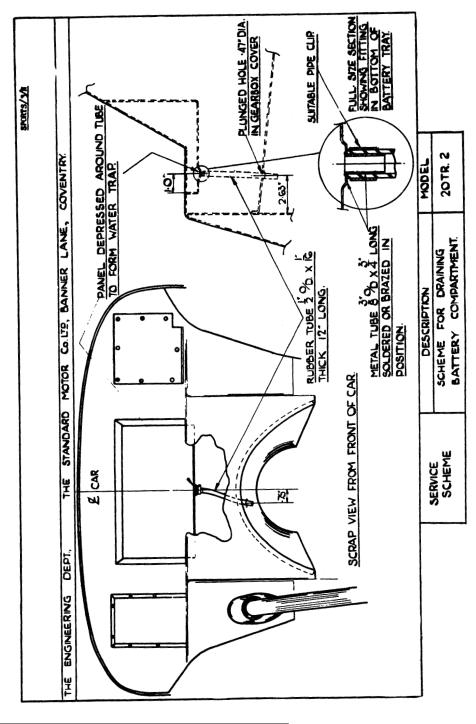
NOTE: These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.

1 ILLUSTRATION.





### (NOT FOR PUBLICATION)





### **STANDARD AND TRIUMPH VEHICLES**

### (NOT FOR PUBLICATION)

# No. SPORTS/1/P ADJUSTMENTS AND MAINTENANCE OF S.U. CARBURETTOR TYPE H.4 Date AUGUST 1954

The complete information on this carburettor will be covered in the normal way by the Service Instruction Manual but the following preliminary information should enable the majority of work to be carried out. The S.U. Agent in your district should have more comprehensive data available and in cases of doubt it would be wise to make direct contact.

<u>Carburettor Tuning</u> –This should be carried out without the Air Cleaners as we find they have no effect on balance or performance.

The clamping bolts on the throttle universal joint should be slackened off and the carburettors set independently. The rich mixture starting control linkage should also be disconnected by removing the clevis pin.

The suction chamber (4) and piston (3) should be removed and the jet needle (6) position checked. The needle shoulder, as shown in the illustration, should be flush with the base of the recess in the piston.

The jet (14) position should be the same for each carburettor and it is recommended that the adjusting nut (18) is screwed fully home and then slackened back one and a half turns (nine flats) as an initial setting.

The throttle adjusting screw (2) on each carburettor should be adjusted until it will just hold a thin piece of paper between the screw and the stop when the throttle is held in the closed position. The throttle butterfly (1) on each carburettor should then be opened by one complete turn of the screw.

The engine is now ready for starting and, after thoroughly warming up, the speed should be adjusted by turning each adjusting screw an equal amount until the idling speed is approximately 500 R.P.M. The synchronisation of the throttle setting should now be



### **STANDARD AND TRIUMPH VEHICLES**

### (NOT FOR PUBLICATION)

No.	SPORTS/1/P	ADJUSTMENTS AND MAINTENANCE OF S.U. CARBURETTOR TYPE H.4	Date	AUGUST 1954	

checked by listening to the hiss of each carburettor, either directly or by means of a piece of rubber tubing held near the intake. The intensity of noise should be equal and if one carburettor is louder than the other its throttle adjusting screw should be turned back until the intensity of hiss is equal.

After satisfactory setting of the throttle, the mixture should then be adjusted by screwing the jet adjusting nuts up or down to the same extent on each carburettor until satisfactory running is obtained. The lever tension spring should be connected, or, alternatively, the jets held hard up against the nuts during this operation. This mixture adjustment may increase the engine idling speed and each throttle adjusting screw must be altered by the same amount in order to reduce speed to 500 R.P.M.

The balance of the mixture strength should be checked by independently lifting the piston of each carburettor approximately 1/16" to 1/8". The mixture is correct when this operation causes the engine beat to become irregular from excessive weakness. When the engine stops with this operation it indicates the mixture is too weak and it should be enriched by unscrewing the jet adjusting nut. An increase of engine speed for this operation indicates that the mixture is too rich and, consequently, it should be weakened off by screwing up the jet adjusting nut. The mixture setting should now give a regular and even exhaust beat, if it is irregular with a "splashy" type of misfire and a colourless exhaust, the mixture is too weak and both carburettors should be richened by unscrewing the jet adjusting nut a similar amount. A regular or rhythmical type of misfire in the exhaust note, possibly with a blackish exhaust, indicates the mixture is too rich and, again, both carburettor jet adjusting nuts should be screwed in a similar amount until the setting is satisfactory.

The jets of both carburettors should be held against the adjusting nuts before replacing the mixture control linkage, which should be adjusted if necessary, and similarly the throttles should be held tight against their respective idling stop before retightening the interconnecting clamp bolt.



### **STANDARD AND TRIUMPH VEHICLES**

### (NOT FOR PUBLICATION)

# No. SPORTS/1/P ADJUSTMENTS AND MAINTENANCE OF S.U. CARBURETTOR TYPE H.4 Date AUGUST 1954

Replacement of Jet Needle.

This should be carried out by removing the suction chamber (4), piston (3), and replacing the needle (6) in its socket. The needle is located by the clamping screw (7). It is most important that the location of the jet needle in the piston is correct as shown in the illustration and the paragraph on 'Carburettor Tuning,' and also that the jet needle is checked for eccentricity and altered if necessary as shown in the Paragraph on 'Carburation Defects.'

It must be realised that the replacement of jet needles will require the carburettors to be re-tuned.

Carburation Defects.

The following are the main defects that could occur with the

carburettor:

<u>Pistons Sticking</u>. The symptoms are stalling and a refusal to run slowly, or lack of power and heavy fuel consumption.

a) The piston (3) is designed to lift the jet needle (6) by the depression transferred to the top side from the passage facing the butterfly. This depression overcomes the weight of the piston and a light spring (8), and to prevent any oscillation the centre of the piston is filled with engine oil in which the damper rod (26) operates. The piston should move freely over its entire range and rest on the bridge piece (28) when the engine is not running.



### **STANDARD AND TRIUMPH VEHICLES**

### (NOT FOR PUBLICATION)

No.	SPORTS/1/P	ADJUSTMENTS AND MAINTENANCE OF S.U. CARBURETTOR TYPE H.4	Date	AUGUST 1954	

This should be checked by gently lifting the piston with a small screwdriver and any tendency for binding generally indicates one of the following faults:

- a) The damper rod may be bent causing binding and this can be checked by removing it completely. If the piston is now free the damper rod should be restraightened until satisfactory action is obtained when it is refitted.
- b) The piston is meant to be a fine clearance fit at its outer diameter in the suction chamber and a sliding fit in the central bush. The suction chamber should be removed, complete with piston, and the freedom of movement checked after removal of the damper rod. The assembly should be washed clean and very lightly oiled where this slides in the bush and then checked for any tendency of binding. It is permissible to carefully remove, with a hand scraper, any high spots on the outer wall of the suction chamber, but no attempt should be made to increase the clearance by increasing the general bore of the suction chamber or decreasing the diameter of the piston. The fit of the piston in its central bush should be checked under both rotational and sliding movement.
- 2) Eccentricity of Jet and Needle.

The jet (14) is a loose fit laterally in its recess and must always be centred by the needle before locking up the clamping ring (15).

a) The needle should be checked in the piston to see that it is not bent. It will be realised that it does not matter if it is eccentric as the adjustment of the jets allows for this, but a bent needle can never have the correct adjustment.



### **STANDARD AND TRIUMPH VEHICLES**

### (NOT FOR PUBLICATION)

#### No. SPORTS/1/P ADJUSTMENTS AND MAINTENANCE OF Date AUGUST 1954 S.U. CARBURETTOR TYPE H.4

b) The jet adjustment nut (18) should be screwed in to its fullest extent and the jet head (21) raised to its highest position by hand. The locking ring should now be slackened to allow the jet and bush assembly to move laterally and then centred to the jet needle by raising the piston to its highest position and allowing it to drop. This should be repeated once or twice and the locking ring retightened. Allow the piston to drop and check that it is still free for lifting with no signs of sticking. Repeat these operations until correct centralisation has been achieved.

#### 3) <u>Flooding from Float Chamber or Mouth of Jet.</u>

(9) or its seat. These items can be readily cleaned after removal of the float chamber cover.

4) <u>Leakage from Bottom of Jet adjacent to Adjustment Nut.</u>

Leakage in this vicinity is most likely due to defective sealing by the upper and lower sealing gland assemblies (17). There is no remedy other than removing the whole jet assembly after disconnecting the operating lever and cleaning or replacing the faulty parts. It is very important that all parts are replaced in their correct sequence, as shown in the illustration, and it must be realised that centralisation of the jet and needle and re-tuning will be necessary after this operation.

5) <u>Dirt in the Carburettor</u>.

This should be checked in the normal way by examining and cleaning the float chamber, but it may be necessary if excessive water or dirt is present to strip down and clean all parts of the carburettor with petrol

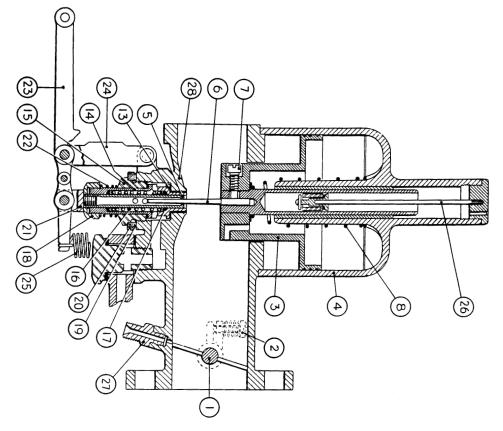
NOTE: These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.

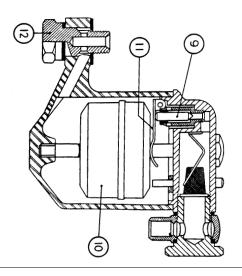
1 ILLUSTRATION.

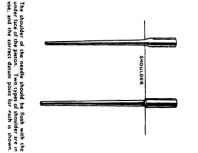




### (NOT FOR PUBLICATION)







SPORTS/I/P





### (NOT FOR PUBLICATION)

No.	SPORTS/1/Q	REAR HUB EXTRACTOR	Date	MAY 1954	
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It is necessary to use a hub extractor to deal with the wheel hubs fitted to this car, and where the normal type of disc wheel is fitted an existing Churchill Tool, No. M–86, may be used. The extractor should be ordered direct from Messrs. V.L. Churchill & Company Limited, Walnut Tree Walk, Lambeth North, London. S.E.ll.

As far as the knock on type wire wheels arc concerned, arrangements are being made to prepare an adaptor for use in conjunction with Tool No. M—86.



### **STANDARD AND TRIUMPH VEHICLES**

### (NOT FOR PUBLICATION)

No.	SPORTS/2/Q	SPECIALISED TOOLS	Date	NOVEMBER 1954	

A list of Specialised tools is attached for servicing this Model. It should be noted that a number of these tools also apply to other Models and may be already in your possession.

Many of the tools are obtainable from Messrs. V.L. Churchill & Co. Ltd's stock, but a few have only recently been approved and there will be a little delay before they become available.

The prefix numbers for the Various types indicate the Models on which the tools can be used, but with the exception of TS1, which is applicable only to the Triumph T.R.2. Model, these numbers have not been altered to show their suitability for use on the latter cars.

Messrs. V.L. Churchill propose, in due course, to adopt a slightly different method of coding to indicate additional suitability for the "Sports" Model without making the prefix too unwieldy.

All these tools are applicable to the Triumph "Sports" Models and the Models on which they may be used may be recognised as follows:

<u>Prefix</u>	Model
S	Standard Models generally
Μ	Mayflower
20S	Vanguard
TS	Triumph Sports
FT	Ferguson Tractor

These tools should be ordered direct from Messrs. V.L. Churchill & Co. Ltd., Walnut Tree Walk, Lambeth North, London. S.E.ll.



### **STANDARD AND TRIUMPH VEHICLES**

### (NOT FOR PUBLICATION)

No.	SPORTS/2/Q	SPECIALISED TOOLS	Date	NOVEMBER 1954

#### LIST OF SPECIALISED SERVICE TOOLS FOR TRIUMPH SPORTS MODEL T.R.2.

#### REAR AXLE

1.	Half Shaft Bearing Remover	S.4615 Codes 8 & 10
	Use with Frame:	S.4221
2.	Half Shaft Bearing Replacer	M.92
3.	Differential Casing Spreader	S.101
4.	Propellor Shaft Flange Coupling Wrench	20S.M.90
5.	Pinion Bearing Outer Cup Removing Driver/Replacer	20S.M.FT.71
6.	Pinion Head Bearing Inner Cone Remover/Replacer	TS.1
	Use with Frame:	S.4221
	and Slave Ring:	C.4615
7.	Differential Bearing Remover	S.103
8.	Differential Bearing Replacer	M.89
9.	Pinion Bearing Outer Cup and Oil Seal Replacer	M.70
10.	Pinion Setting Gauge and Dummy Pinion	M.84
11.	Rear Hub Oil Seal Replacer	M.29
12.	Pinion Bearing Pre-Load Gauge	20S.M.98
13.	Pinion Oil Seal Replacer	M.100
14.	Rear Hub Extractor (pressed wheels)	M.86
15.	Rear Hub Extractor (wire wheels)	S.132
16.	Rear Hub Replacer	S.123
<u>GEARBOX</u>		
1.	Gearbox Mainshaft Remover	20S.M-1
2.	Mainshaft Circlip Installer	20S.M.46
3.	Front Cover Oil Seal Installer	20S.M-47
4.	Gearbox Extension Remover	20S-63
5.	Constant Pinion Shaft Remover	20S.M-66
6.	Countershaft Needle-Roller Retainer Ring Driver	20S.M-68
7.	Mainshaft Circlip Remover	20S-69
8.	Clutch Plate Centraliser	20S-72
9.	Front Cover Oil Seal Installer	20S.M-73



### **STANDARD AND TRIUMPH VEHICLES**

### (NOT FOR PUBLICATION)

No.	SPORTS/2/Q	SPECIALISED TOOLS	Date	NOVEMBER 1954
	<u>BOX (CONT.)</u>		-	
10.		Countershaft Assembly Pilot	2	20S.M–76
11.		Assembly Pilot for Gearbox Countershaft	2	20S.M–77
12.		Gearbox Rear Bearing Replacer	2	20S-78
13.		Gearbox Mainshaft Rear Oil Seal Replacer	2	20S-87
14.		Constant Pinion, Mainshaft and Halfshaft Bearing	S	
		Remover and Replacer (use with S.4221 Fran	ne) S	5.4615
MISC	ELLANEOUS			
1.		Clutch Assembly Fixture	9	99A
2.		Propellor Shaft Coupling Wrench	2	20S.M.90



### **STANDARD AND TRIUMPH VEHICLES**

### (NOT FOR PUBLICATION)

No.	SPORTS/1/R	BRAKE BACKING PLATE ATTACHMENT BOLTS	Date	APRIL 1954	
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Under competition conditions there is a tendency for the rear brake backing plate attachment bolts to work loose.

The original brake backing plate bolt was replaced at Commission No. TS.740 by a plain shank bolt, Part No. 59056, Nyloc Nut, YN.2909 and Plain Washer, WP.0009. The new details should be fitted where complaints of bolts working loose are experienced.

The front brake backing plate has a different attachment which is provided by two short bolts and spring washers tapped into the vertical link and two long bolts with distance collars and Nyloc Nuts which also secure the steering tie rod lever.

There has been no evidence to show that the front backing plates work loose, but as a precautionary measure the spring washers for the short bolts fitting into the vertical link have been replaced by tab washer, Part No. 106641. This modification should be incorporated if any complaint of these backing plates working loose is experienced.

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.



### **STANDARD AND TRIUMPH VEHICLES**

### (NOT FOR PUBLICATION)

<b>No.</b> SPORTS/2/R ATTACHMENT OF BRAKE PIPES AN	ND HOSES <b>Date</b> JULY 1954
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A case has been brought to our notice where the steel bundy brake tubing along the rear axle had been displaced either when initially assembled or during subsequent servicing operations. This displacement permitted the bundy tubing to be chafed by the shock absorber link with a possibility of subsequent failure.

It is most important when carrying out servicing operations likely to alter the proper positioning of this bundy tubing to check that proper clearance exists and pipes should be set if necessary. This check should be carried out wherever normal maintenance checks arc being made.

It is possible to impart sufficient distortion of the front brake hoses by twisting during tightening operations to permit this to be chafed by the bump" bracket. This possibility should be investigated after refitting the hose and during all normal routine maintenance checks.

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.



### **STANDARD AND TRIUMPH VEHICLES**

### (NOT FOR PUBLICATION)

No.	SPORTS/3/R	FRONT AND REAR BRAKE LININGS	Date	SEPTEMBER 1954

The brake linings first specified for use on the Sports Model were of the D.M.7. type. These linings, apart from an early batch which were released with incorrect limits, have given no trouble with "grab" or "pulling to one side" under normal operating conditions. It appears, however, to be a characteristic of this type of lining that it can be unstable under the extreme heat of heavy braking conditions and distort giving subsequent trouble with "pulling to one side."

The D.M.7. type of lining has now been superseded by the D.M.8. type, which have proved stable under all heat conditions. The Part Numbers for the two types of lining with their colour coding are given below :

	D.M.7. Linings	D.M.8. Linings
	( <u>4 Stripes, Powder Blue</u> )	( <u>3 Stripes, Powder Blue</u> )
R.H. Front Brake Assembly	201766	202458
L.H. Front Brake Assembly	201767	202459
Front Brake Shoe	501376	502239
R.H. Rear Brake Assembly	201511	202460
R.H. Rear Brake Assembly	201512	202461
Rear Brake Shoe	501378	502240

It should be appreciated that the change in lining material has been made with a view to avoiding any tendency for "pulling to one side" or "grab" and its introduction will have little effect on the fade characteristics of the brakes.

The tendency of a brake to "pull to one side" is a combination of the type of brake lining and the finish of the brake drum. There were a few cases, with early vehicles of this type, where the finish of the brake drums was below the required standard, or alternatively, where distortion had occurred causing drum ovality. Such a condition of ovality can normally be checked from the brake drum spigot accommodating diameter, but in some cases may only be apparent with the clamping effect of the road wheel.



### **STANDARD AND TRIUMPH VEHICLES**

### (NOT FOR PUBLICATION)

No.	SPORTS/3/R	FRONT AND REAR BRAKE LININGS	Date	SEPTEMBER 1954

To meet the conditions mentioned in the previous paragraph either a new drum must be fitted, or the existing one fine machined up to 0.005" oversize. The machining of drums is very critical on a vehicle of this type and if the original drums are to be salvaged, it is most important that a very fine and concentric finish is maintained.

The modified linings were introduced in production for the Front Brakes at Commission No. TS.3212 and TS.3248 for disc and wire wheels respectively, and for the Rear Brakes at Commission No. TS. 3190 and TS.3200.

Each type of linings must be used in matched sets, preferably on all four wheels or alternatively paired for use at the front or rear of a vehicle.

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.



### **STANDARD AND TRIUMPH VEHICLES**

### (NOT FOR PUBLICATION)

No. SI	PORTS/1/S	EXHAUST SILENCER	Date	MAY 1954
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The exhaust system was originally designed for the high audible noise level generally accepted for this type of vehicle in order to keep the loss of horse power to a minimum.

There have been some customers, continually operating in built up areas, who have expressed a preference for greater silencing even at the cost of some loss of power.

The present 18" silencer, Part No. 201600, will be superseded in production by a 24" silencer, Part No. 202320, which is the greatest production compromise which can be made without seriously affecting power. The same front and rear pipes will still be used.

A 12" silencer with an integral tail pipe, as is shown in the illustration, has now been made available under Part No. 202285 to give the greater silencing desired by particular customers. The tail pipe extension, Part No. 108555, is completely interchangeable with either length of main silencer and may be fitted retrospectively if required.

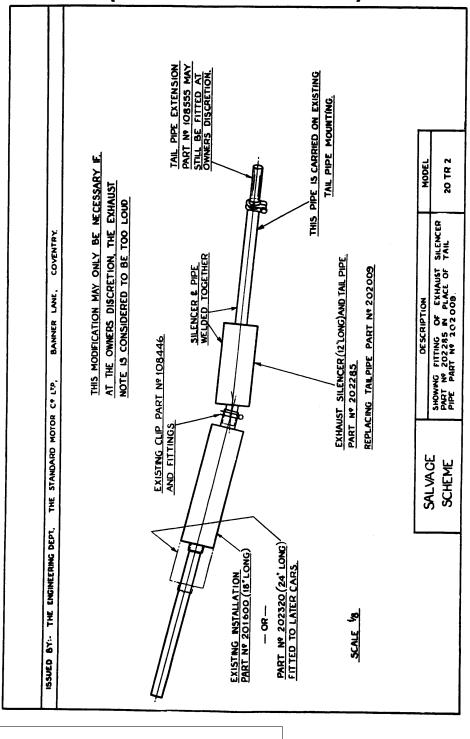
NOTE: These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.

1 ILLUSTRATION.





### (NOT FOR PUBLICATION)





### **STANDARD AND TRIUMPH VEHICLES**

### (NOT FOR PUBLICATION)

No.	VANGUARD/3/B	ENGINE VENTILATION – SERIES II DESIGN	Date	AUGUST 1954	
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This Information Sheet should be cross referenced on the Index Sheet for the "SPORTS" Model as SPORTS/4/B.

The Cylinder Block for the Vanguard, Part No. 301138, has been modified to incorporate a baffle, integral with the main casting, adjacent to the breather pipe, in order to prevent any possibility of oil loss. The modified block incorporating this baffle is supplied under Part No. 301487.

The introduction of the cast baffle has necessitated a new Breather Pipe Assembly, Part No. 202126, alternatively, the original Pipe, Part No. 201650, may be modified, as shown in the illustration. The modification necessitates shortening the projection of the pipe beyond its locating dimples from 2.53" to 1.22".

The Cylinder Block, Part No. 301140, on the Sports Model was similarly modified, without change of Part No. at Eng. No. TS.972E and the Breather Pipe Assembly is affected in a similar manner to the Vanguard (See also Service Information Sheet "SPORTS/2/B").

The latest cylinder Block and Breather Pipe were incorporated at Eng. No. V.235245E for the Vanguard and at Eng. No. TS.972E as quoted above for the Sports.

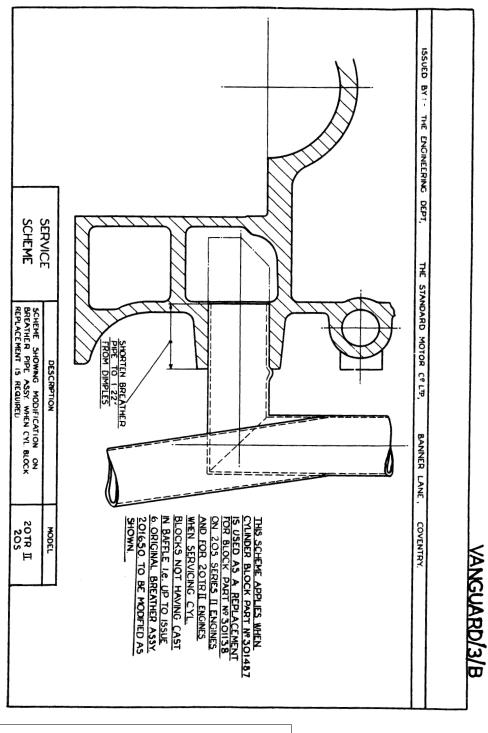
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1 ILLUSTRATION.





### (NOT FOR PUBLICATION)





### **STANDARD AND TRIUMPH VEHICLES**

### (NOT FOR PUBLICATION)

No.	VANGUARD/3/E	SOLENOID FOR ELECTRICAL CONTROL OF OVERDRIVE	Date	OCTOBER 1954	
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This Information Sheet should be cross referenced under SPORTS/5/E.

Difficulty is still being reported with regard to the entry of water into the Overdrive operating solenoid on Vanguard Models, in spite of the exercise of the precautions described in Service Information VANGUARD/2/E.

A considerable number of complaints have been reported of faulty operation of the "Overdrive" and these difficulties have, upon investigation, generally found to have been caused by inadequate water sealing (on the Vanguard) or incorrect adjustment of the solenoid.

The correct methods for adjustment and water sealing of the solenoid are shown in the illustration, and it is particularly important that these instructions are carefully followed when fitting replacement solenoids. With the T.R.2. Model the solenoid lever stop is not adjustable.

The proofing of the rubber grommets mentioned in the Service Scheme may present alittle difficulty to Distributors and Dealers, and for this reason it has been decided to change the rubber for these to one which will not require water proofing. The change of material in the case of Part No. 109521 is not accompanied by an alteration of Part No., but in the case of Part No. 108786, this will now be supplied by our Spares Department under Part No. 110868.

There have been no reports of water sealing difficulties with the T.R.2 Model, but the lever setting instructions given in the Service Scheme may be used for this Model, apart from the fact that a fixed stop is provided for the solenoid lever.

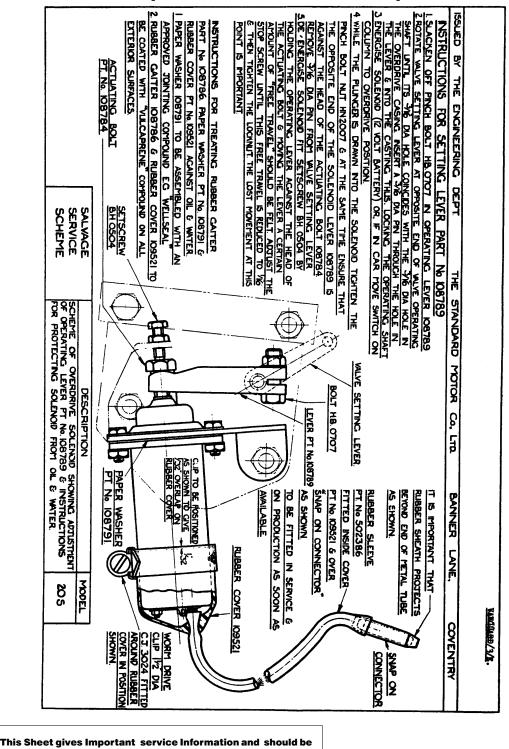
NOTE: These instructions are for information only and do not constitute an authority to carry out modifications at the expense of The Standard Motor Company Limited.

1 ILLUSTRATION.



### **STANDARD AND TRIUMPH VEHICLES**

### (NOT FOR PUBLICATION)



filed by your Service Dept. in the Service Information Folder.



### **STANDARD AND TRIUMPH VEHICLES**

### (NOT FOR PUBLICATION)

## No. VANGUARD/4/E LUBRICANTS APPROVED FOR LAYCOCK DE NORMANVILLE OVERDRIVE DAte OCTOBER 1954

This Information Sheet should be cross referenced under SPORTS/6/E.

It has been our practice to permit the use of Hypoid Oils in our gearboxes as an alternative to a normal Mineral Oil for hot operating conditions.

An instance of overdrive failure, when employing hypoid oil, has been brought to our notice and the overdrive manufacturers have stated that this type of oil is not suitable for use with these units.

The "Recommended Lubricants –Overseas" chart in our Instruction Books and Service Manual gives the alternative of either Hypoid or normal Mineral oils for gearboxes operating in the "over 10° Fahrenheit" and "over 70° Fahrenheit" ranges. This recommendation is not applicable where overdrive units are fitted and your garage personnel, and customers where necessary, should be advised of the fact.

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.