

WHEELS AND TYRES

FOR INFORMATION.

No. CB.1.

DUNLOP WHITE SIDEWALL TYRES.

It has been remarked that the white sidewall of the above tyres can appear to become discoloured and turn yellow.

This yellowing is the direct result of the effects of exposure to light, and the degree of yellowing is dependent on the length of time of exposure and the intensity of light.

The colour change is very superficial and can quite easily be removed by the use of any of the proprietary brands of whitewall tyre cleaner.

The condition is usually confined to showroom cars, since, once a car is prepared for the showroom, and whilst every other part of the car receives regular cleaning, the tyres receive no further attention other than the removal of the original protective blue paint.

In Service, the condition is not usually encountered, due to a regular cleaning and washing, which the whole car and wheels receive.

The following points should be noted:-

1. Initially, the protective blue paint must be removed by vigorous washing using soap powder and a brush having brass bristles.
2. When the car is standing in the Showroom, the tyres must be cleaned once a week with Simonize or some other proprietary whitewall cleaner.
3. For owner use, Brillo soap pads or other soap impregnated wire wool pads are convenient for quick whitewall cleansing whilst the car is being washed.

Adherence to the above points will obviate any discolouration of white sidewall tyres in the future.

FOR INFORMATION.

TYRE PRESSURES FOR ROLLS-ROYCE SILVER CLOUD
AND BENTLEY "S" TYPE COACHBUILT MOTOR CARS.

Certain coachbuilt cars appreciably exceed the weight of standard models, sufficiently to require higher tyre pressures in order that the required standard of handling and comfort can be maintained.

To determine the correct tyre pressure the vehicle should be in "kerbside" condition, i.e. without passengers or luggage, and not more than five gallons of fuel in the tank.

Both front wheels are run onto a weighbridge and the weight noted, then both rear wheels are weighed similarly.

When these two figures are obtained, refer to the table which gives the tyre pressure in pounds per square inch, for front and rear tyres, for weights either in pounds only, or hundredweights, quarters and pounds.

If a fifth passenger and between one and two hundred pounds of luggage are carried, the rear tyre pressures should be increased by three lbs per square inch to compensate for the additional weight.

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Pressure lb/sq.in.	Kg/Sq.cm.	Front Wheels Load.							
		lb.	cwt. qtr. lb.			cwt. qtr. lb.			
18	1.27	- 2034	-	-	-	18	0	18	
19	1.34	2035 - 2090	18	0	19	-	18	2	18
20	1.41	2091 - 2146	18	2	19	-	19	0	18
21	1.48	2147 - 2230	19	0	19	-	19	3	18
22	1.55.	2231 - 2312	19	3	19	-	20	2	16
23	1.62	2313 - 2396	20	2	17	-	21	1	16
24	1.69	2397 - 2480	21	1	17	-	22	0	16

Pressure lb/sq.in.	Kg/Sq.cm.	Rear Wheels Load.							
		lb.	cwt. qtr. lb.			cwt. qtr. lb.			
24	1.69	- 2050	-	-	-	18	1	6	
25	1.76	2051 - 2134	18	1	7	-	19	0	6
26	1.83	2135 - 2218	19	0	7	-	19	3	6
27	1.90	2219 - 2302	19	3	7	-	20	2	6
28	1.97	2303 - 2358	20	2	7	-	21	0	6
29	2.04	2359 - 2442	21	0	7	-	21	3	6
30	2.11	2443 - 2526	21	3	7	-	22	2	6

FOR INFORMATION

TYRE PRESSURES - POWER ASSISTED STEERING ONLY

With the additional weight increase involved where standard Bentley 'S' Type and Rolls-Royce Silver Cloud cars are fitted with Power Assisted Steering, it has become necessary to increase the front tyre pressures to obviate over-loading of the front tyres. These pressures also apply to cars fitted with refrigeration.

The following tyre pressures are applicable :-

Front 21 lbs/sq.in.

Rear 26 lbs/sq.in.

Owners should be notified, and the handbooks of cars amended where appropriate, as the opportunity occurs.

FOR INFORMATION.

FITTING AND REMOVING TUBELESS TYRES.

Road wheels are now in production with a modified contour on the outer portion of the rim. This has been evolved to improve characteristics on the more heavily loaded side of the wheel.

When fitting tubeless tyres, it is essential that the bead seats correctly and makes an efficient seal. In order to facilitate this, the Dunlop Tyre and Rubber Co., are marketing a special lubricant, known as the Dunlop Tyre Bead Lubricant, in 1 gall tins and 5 gall drums. (Dunlop codes TBL1 and TBL2 respectively). These will also be available from The Service Department, Hythe Road, Willesden, London, N.W.10. under part numbers RH.652 (1 gall tin) and RH.653 (5 gall drum).

This lubricant will be found to facilitate fitting and removal of all tyres whether tubeless or otherwise.

The procedure recommended for changing tubeless tyres is as follows :-

Mounting.

Remove any existing rivet burrs from the wheel rim centre and high spot from the rim butt weld with a smooth file. Wire brush off any apparent scaling of the outer rim, particular attention being paid to the tyre bead seating.

Lightly smear valve seating with the lubricant and install. Lubricate tyre beads, rim flanges and bead ledge areas liberally.

Carry out the normal mounting procedure with the narrow edge of the rim upwards, fitting the tyre beads in the usual way.

Inflate the tyre to a maximum of 50 lbs/sq.inch.

N.B. IT IS IMPORTANT THAT THE INITIAL INFLATION PRESSURE OF 50 LBS PER SQ. INCH IS NOT EXCEEDED.

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If the beads do not seat correctly at this pressure, deflate, re-lubricate the beads and re-inflate, centralising the tyre beads before inflation.

After the beads are correctly seated, reduce inflation pressure to the required value.

Liberal applications of the lubricant is essential in ensuring correct seating of the tyre beads.

Demounting.

Demount in the usual way, with the narrow bead seating (near side of the wheel) upwards. Use a liberal amount of lubricant on the tyre levers and tyre beads during demounting.

Lever beads over the flat contour and off the bead seating gradually an inch or two at a time.

It is advantageous to use one lever with the "spoon" upwards towards the flange pushing the bead slightly away from the flange, and so permitting entry for the second lever which should have the "spoon" downwards, pressure being extended on the bead. Alternate round the bead with the two levers in turn, and finally remove the tyre.

Push out valve from rim.

FOR INFORMATION.

WHEEL BALANCE WEIGHTS.

When carrying out road wheel balancing, it is essential that only balance weights obtained from the Rolls-Royce Service Depot be used.

The standard weights generally available are intended for use on 12 gauge rims and are not suitable for heavier gauge wheels. Insecurity at high speed may result in considerable damage, should these be used.

The recommended weights incorporate a strengthened securing clip of larger dimensions to accommodate the heavier gauge wheel, and may be identified by the letters "HG" on the left of the outer face. These are only available from the Service Depot, Hythe Road, Willesden, London, N.W.10., in the following range:-

UG 1460	$\frac{1}{2}$ ozs.
UG 1461	1 ozs.
UG 1462	$1\frac{1}{2}$ ozs.
UG 1463	2 ozs.
UG 1464	$2\frac{1}{2}$ ozs.
UG 1465	3 ozs.

No. CB.74.

CANCELS SERVICE BULLETIN NO.74
Issued: 18.10.57 ref. SB/TJ.

FOR INFORMATION.

TYRES.

The following TUBELESS tyres have been approved with black or white sidewall, for use on the Bentley 'S' Type and Rolls-Royce 'Silver Cloud' cars.

Avon "AIRSEAL".
NATURAL rubber
H.M. Ribbed.
Rayon 6-ply rating.
Size: 8.20" x 15".

Avon "AIRSEAL".
SYNTHETIC rubber
H.M. Ribbed.
Rayon 6-ply rating
Size: 8.20" x 15".

These two covers are similar in appearance. The 'Synthetic' rubber cover is identified by the letter 'S' moulded into the sidewall.

'S' TYPE CONTINENTAL TYRE PRESSURES.

Since the introduction of the 'S' Type Continental in June 1955, the kerbside weight of the car has increased. This is due to added refinements, Power Assisted Steering and other personal additions at the Owners instructions.

The standard tyre pressure recommendations in the Owner's Handbook for the 7.60" x 15" tyres are satisfactory for cars weighing less than 37 cwt. under kerbside conditions, i.e. with full petrol tank and complete ready to receive luggage, and occupants.

For cars weighing more than this figure the standard recommendations should be increased by 1 lb/sq.in. front and 3 lbs/sq.in. rear when cold.

Later, cars will be equipped with 8.00" x 15" tyres and the tyre pressures should then be set as follows cold:-

1. For all normal English running, with maximum speed for intermittent periods:- Front 22 Rear 26
2. For continuous high speed running on straight roads under light traffic conditions:- Front 27 Rear 32
3. For sustained maximum speeds: Front 30 Rear 37

The 8.00" x 15" tyre cannot be fitted retrospectively due to there being inadequate clearance in the wheel arches and valances on the early cars.

FOR INFORMATION.

TYRES FOR THE CONTINENTAL.

A new synthetic rubber tubeless tyre, named "High Drag Speed Special", has been developed and produced by the India Tyre Co., for use on the "Continental".

The most advantageous feature of the tyre is an appreciably improved adhesion to wet road surfaces. A longer tread life may also be expected.

This 7.60 x 15 tyre, recognised by a red India medallion on the sidewall, is recommended for general motoring where high speeds in excess of 105 m.p.h. are NOT sustained for long periods.

Spasmodic bursts of acceleration up to or approaching maximum m.p.h. are quite permissible. Although this characteristic is unlikely to cause any restriction of use in the United Kingdom, the tyre cannot be suggested as an alternative to the India "Super Speed Special" in all cases, on account of the top speed limitation.

The recommended tyre pressures are 23 lbs./sq. in. front and 27 rear. Some drivers may find these are too soft for their own personal comfort, in which case they may be increased to 28 front and 33 rear. All pressures are measured when the tyres are cold.

FOR INFORMATION.

TYRES.

The following tyre, in black or white-sidewall construction, has now been approved for use on Bentley 'S' Type and Rolls-Royce 'Silver Cloud' cars:-

Firestone tubeless P.300 ORB. 4-ply Rayon synthetic tread. Size: 8.20 x 15.

This cover is manufactured in the U.S.A. under the name:- Firestone Delux Champion P.300 4 ply.

FOR INFORMATION.

TYRES.

Dunlop "Weathermaster" tyres are approved for use in snow and inclement weather conditions; these are the equivalent of the earlier "Wintergrip" tyre mentioned in the Owners Handbook.

Tyres having this tread and construction must not be subjected to sustained speeds in excess of 80 m.p.h. Short periods up to maximum speed are, however, permissible.

FOR INFORMATION.

TYRE EQUIPMENT.

All Rolls-Royce and Bentley cars are delivered today on tubeless tyres unless the customer specifically asks for conventional (tubed equipment). It may be asked what are the special virtues of tubeless tyres to cause us to standardise them.

The primary aim is increased tyre reliability with reduced maintenance. How this is achieved by throwing away the inner tube will be apparent from the following facts.

About 75% of all roadside stops due to tyre trouble on conventional equipment are caused by loss of air owing to either:-

- (a) Perforation of the inner tube by
a nail or similar sharp object
- or
- (b) Chafing of the tube by the cover
around the toe of the bead.

Either way, air escapes from the tube but there is no external seal to atmosphere since the valve stem is a clearance fit in the hole in the rim, and air escapes freely at that point. It is common experience to observe that in the case of an ordinary puncture by a nail, the sound of air escaping is never at the point of puncture but always at the valve hole. This is because the tyre casing at the point of penetration is usually sufficiently strong and resilient to form a good air seal round the nail.

It is a fact that largely by accident the design of the modern tyre bead and rim is ideally suited to forming an efficient air seal, therefore the tyre has only required detail development to form a complete air seal and to enable the tube to be thrown away.

Early attempts to make a self-sealing tyre by introducing a plastic substance as a lining for the cover failed due to problems of heat transference and to out of balance difficulties; in any case it was later shown to be unnecessary because as already mentioned the conventional cover is already reasonably self-sealing due to the tight fit of any nail in the hole which it has pierced.

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The conventional natural rubber inner tube is not airtight, as loss of air occurs due to porosity of the rubber and to the absorption of nitrogen. The same would occur to a lesser degree in a tubeless tyre, but it is prevented by the addition of a synthetic rubber lining vulcanised to the inside of the cover, also the construction of the bead is modified slightly to prevent the exposure of strands of cotton at the junction with the rim so as to seal off any capillary escape route.

The cover and rim being therefore virtually airtight, it is possible to assess what has been gained:-

- (1) The vulnerability of the tube to chafing or perforation does not exist.
- (2) The gradual loss of pressure usual with conventional equipment is eliminated.
- (3) Statistics over many millions of miles show that tubeless equipment is four times as reliable as conventional equipment, i.e. roadside stops are four times less frequent.
- (4) Tyre life is increased due to the more constant maintenance of recommended pressures.
- (5) There is less build up of temperature due to lower internal friction, and therefore less pressure rise on a long journey.

The foregoing does not mean that all tyre troubles or failures are eliminated. The tubeless tyre is still vulnerable to impact or concussion damage, i.e. failure of the casing due to breakdown of the canvas plies by severe damage or by penetration by a large irregular object. Such failures however are exceptional in ordinary motoring and do not detract from the other virtues of tubeless equipment.

In spite of the foregoing, some customers still have a preference for conventional tubed tyres, either due to ignorance of what is involved or by attraction to some particular piece of advertising. In such cases we will fit the tyres requested by the customer.

FOR INFORMATION.

TYRES.

The Avon Tyre Co. has produced a tyre, fitted with a tube, which is similar in character and construction to the Tubeless Avon Airseal. These new 8.20" x 15" tyres are approved for use on the Bentley 'S' Type and the Rolls-Royce 'Silver Cloud', when the demand is for a tyre fitted with a tube.

Avon 8.20" x 15" tyre (tubed)
NATURAL rubber.
H.M. ribbed.
Rayon. 6-ply rating.

FOR INFORMATION.

TYRES.

The following tubeless tyres have been approved for use on the 'S' type Bentley and Rolls-Royce 'Silver Cloud' cars.

Dunlop Rayon 4-ply Synthetic
tread - Size 8.20-15.

Dunlop Nylon 4-ply Synthetic
tread - Size 8.20-15.

These covers are available in black or white sidewall and will be identified as synthetic rubber treads by the Dunlop Medallion being painted red.

The two covers are identical in external appearance, but the nylon cover will have the letter 'N' as a suffix to the serial number.

The rayon cover is for use on cars domiciled in the United Kingdom, North America, Canada, and Europe.

Outside these territories, it is considered that the general road conditions are such that a heavier duty cover is required. For this reason the 4-ply nylon cover has been approved for use in countries other than those detailed above.

TYRES.

Certain complaints have been made regarding the road holding of the 'S' Type car, particularly on wet or greasy roads, and suggestions have been made that a particular make of tyre is better or worse than others. It has even been suggested that adverse criticism is so prevalent as to affect sales. We do not believe this is so, but it would obviously be to the benefit of all concerned if the true facts could be set out and discussed.

1. What are the requirements of a tyre?

All tyre design is a compromise, therefore the order in which various requirements are set out is a matter of engineering policy or opinion; also the priority is affected by improvements in the performance of the car. Tyres approved by the Company are usually made specially to conform with a specification of requirements, and the Tyre Companies interpret these requirements in the way they think best. As most of the tyres made for us are hand made, it is very easy for a Tyre Company to switch over to a change in specification overnight, therefore at any given moment a recommendation that this or that tyre is better than another is valid only for as long as it takes another company to make a similar change in specification.

Until a few years ago, the highest requirements in a tyre were silence under straight ahead running conditions, comfort, and reliability. More recently, great efforts have been made to reduce the power absorption factor (it may not be out of place to mention that not long ago 40% of all the power developed by the engine was absorbed by the tyres, leaving only 60% of the power available to propel the car). Today, the performance of the 'S' Series car and its cornering capabilities have high-lighted the need for better wet hold characteristics than formerly, even possibly at the expense of other virtues, and consequently the list of priorities in a tyre specification have altered. The list may now be expressed as follows:

- Good wet hold properties.
- Reliability up to the maximum speed of the car.
- Reduced drag, or power absorption.
- Reduced squeal on cornering and braking.
- Comfort (reduced knobbliness).
- Increased tyre mileage.

Cont'd.....

Low slip angle (the difference in angle between the direction in which the tyre is pointing and the direction in which it travels).

Reasonable but not excessive self-centring torque.

Reduced "tram-line" consciousness (this is a factor of tread stiffness).

Some of these factors necessarily go together, others are in direct conflict, hence the necessity for compromise.

2. What can be done to meet these requirements?

Although, as mentioned, tyre design and manufacture is very flexible, the means whereby significant changes in performance can be made are limited. The manufacturer can juggle with the following variables:-

a) Rubber mix.

(i) Natural rubber.

(ii) Synthetic rubber.

(iii) A mixture of both.

For a great many years, the leading tyre manufacturers stuck to the opinion that for maximum tyre safety (not the same thing as car safety), natural rubber was essential. Early attempts to bond synthetic rubber to cotton were not very successful, and it was not uncommon for treads to be thrown off at high speeds. Apart from the problem of bonding synthetic rubber to the casing, temperature problems arise as synthetic rubber runs hotter than natural rubber, and this causes 'chucking' or bits of the tread coming out after prolonged high speeds. Therefore one line of development in synthetic tyres is the use of alternatives to cotton in the construction of the casing.

Synthetic rubber has the property of better grip on wet roads than natural rubber, also squeal is less on braking or cornering. These virtues have to be balanced against the greater ability of natural rubber to withstand high temperatures, and the anomaly is created that the more one develops tyres to go faster, the more difficult it becomes to go round corners.

American manufacturers have had much greater experience of synthetic tyres than British manufacturers, and some of the problems of bonding and vulcanising have been overcome, with the result that today synthetic tyres can be made which are safe up to the maximum speed of the car, subject to certain limitations in respect of continuous high speeds.

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Synthetic rubber mixes also wear better than natural rubber, and increased tyre mileages can be expected. Power absorption is greater, and there is therefore some sacrifice in the maximum speed attainable.

b) Tread design.

It is probably true to say that every conceivable tread pattern has, at some time, been experimented with, but little more is to be gained in this direction. The tendency is towards a ribbed pattern to get the best sideways control, with a zig-zag design to improve forward traction; the zig-zag pattern is always non-linear (not repeating itself at equal intervals), so as not to provoke noise. Knife cuts diagonally in the ribbed pattern are now popular and give a worthwhile improvement in the wet hold. The tread design tends to be more a recognisable trade mark than possessing special non-skid properties, although, of course, certain designs do have virtues in this direction.

The width of the tread pattern, also the width of the side ribs and buttressing to the sidewalls, has an affect on squeal on cornering. The contour of the tread affects lightness of steering and, to a small degree, the non-skid properties. The contour, of course, changes with wear.

c) Casing design and materials.

The casing consists of four or more plies of rubberised fabric each consisting of parallel strands of material which constitute the strength of the casing. The material may be either:

- (i) Cotton
- (ii) Rayon
- (iii) Nylon

The strands of each ply are arranged at an angle to the centre line of the tyres; this is the bias angle. Each ply is laid alternately at the opposite angle. A small bias angle gives the most comfort but the maximum power absorption, a larger angle reduces drag but increases harshness. A compromise has to be effected between various requirements.

The smaller the number of plies, the greater the comfort but the less the resistance to concussion damage. Six plies are usually chosen for strength if cotton is used, but by using rayon and making adjustments to the bias angle it is possible to make a tyre with four plies having the same rating (carrying capacity) as six plies.

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Nylon offers certain advantages, chiefly greater strength and cooler running due to reduced temperature rise under continued flexing; therefore it is attractive for use with synthetic rubber in tyres intended for very high speeds. The disadvantages are increased cost, also a tendency to form a flat at the area of contact with the ground when the car has been left with hot tyres and then cooled down. This "flatting" disappears again when the tyre is warmed up, only to form again when the car is left standing. This disease is thought not to outweigh the other advantages for very high speed tyres.

3. What should be the attitude of Sales and Service to the foregoing.

Enough has been said to make it clear that all the variables discussed are capable of being manipulated by any Tyre Manufacturer at short notice to produce totally different characteristics, and it is misleading to say that such and such a make of tyre is better than another, seeing that most of them have access to the same materials and can manipulate the design and construction easily. The make of tyre is usually an indication of quality and reliability, not performance. The latter is dependent on the interpretation of technical research and testing, and on the success of the compromise achieved for certain purposes.

The tyre manufacturers we have been closely associated with in the past stuck for a long time to 100% natural rubber tyres for reasons of reliability. The increase in speed and cornering capabilities of our cars has made it desirable to offer synthetic tread tyres to improve the wet hold characteristics at the expense of certain other features. The chief penalty is a slight sacrifice in the maximum speed attainable, and a limitation on the sustained speed over long distances. It is recommended that 95 miles per hour should not be maintained for longer periods than 10 miles.

Several different makes of tyre have been tested and approved for production cars; the choice of these for any given car may be quite arbitrary or accidental, and the Company has complete liberty of action in regard to this choice.

4. Tyres now approved.

The tyres currently approved for use on the 'S' type in the 8.20-15 size are:-

Avon Airseal Rayon Synthetic
6-ply Rating H.M. Ribbed
8.20" x 15" White or Black Sidewall.

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Dunlop Tubeless Rayon Synthetic
4-ply Mod. AA.
8.20" x 15" White or Black Sidewall.

Firestone Tubeless P.300 ORB.
4-ply Rayon Synthetic
8.20" x 15" White or Black Sidewall.

Dunlop Fort Nylon Synthetic
4-ply Mod AA.
8.20" x 15" White or Black Sidewall.

For winter use, there are many advantages in using a tyre designed to provide adequate traction in snow or mud. It is usual to fit such tyres at the beginning of the winter, and to leave them on until the Spring, thus ensuring preparedness for a sudden fall of snow. Such tyres, usually referred to as all-weather tyres, are a compromise between a conventional tyre and an out-and-out snow tyre. They enable one to motor normally in ordinary weather, subject to a limitation of 80 m.p.h. as a sustained speed, although short bursts up to the maximum speed may be indulged in, and they provide much better traction in soft snow or mud. No rubber tyre is of very much use on ice or frozen snow.

Tyres approved for the 'S' Type are:-

Firestone 'Town and Country'
Black or White Sidewall.

Dunlop 'Weathermaster'
Black or White Sidewall

The situation regarding the Continental Bentley is a little bit different, as greater sacrifices have to be made in regard to maximum sustained speeds if one wants to take advantage of the special properties of synthetic tread tyres. The special features of the tyres originally developed for the Continental are low tractive resistance (low drag) and a high speed at which the standing wave develops. The tyres developed to meet these requirements are:-

/ India Super Speed Special 7.60-15
Tubed or Tubeless
Black or White Sidewalls

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Dunlop Road Speed RS.3. 7.60-15
Tubeless
Black or White Sidewalls.

/ Identified by letter 'N' on sidewall.

To meet the increased weight of Continentals weighing more than 37 cwt. (kerbside weight), the following tyre has been approved:-

India Super Speed Special 8.00-15.
6-ply Tubeless
Black or White Sidewalls.

In order to improve the wet hold characteristics, the following synthetic tread tyres have been developed for the Continental cars.

The India Company have developed an equivalent to the natural rubber 7.60-15 Super Speed Special Cover.

It is designated:-

/ India Speed Special 7.60-15
Tubeless
Black Sidewall.

/ Identified by letter 'S' on Sidewall.

This is a cotton carcass construction cover and for the reasons already explained, the maximum speed has to be restricted. A sustained figure of 105 m.p.h. must not be exceeded, although short bursts are permissible up to the maximum.

The Firestone Company have developed a synthetic treaded speed tyre with a nylon carcass in the 8.00-15 size. It is designated:-

8.00-15 Firestone Super Sports 170. ORB.
Tubeless Nylon
Black or White Sidewall.

As already explained, this cover with its nylon cord carcass has no speed restriction, although the phenomenon described as "flatting" may possibly be experienced.

It should be realised that the maximum attainable speed will be slightly less with this tyre than with its natural rubber equivalent.

This Bulletin cancels previous
Service Bulletin No. CB.106
dated 6.6.58.

FOR INFORMATION.

TYRES.

The following tubeless tyres have been approved for use
on the 'S' Type Bentley and Rolls-Royce Silver Cloud cars.

8.20-15 Dunlop 'C' (4 ply Rayon Carcass/
Synthetic Tread)

8.20-15 Dunlop Fort 'C' (4 ply Nylon Carcass/
Synthetic Tread)

These covers are available in black or white sidewall
and have in the past been identified as synthetic rubber treads by
the Dunlop Medallion being painted red. It is now considered
unnecessary to continue this special identification practice as
stocks of natural rubber tyres are now exhausted. Future
supplies from the Manufacturer will not be marked, but of course,
the tyres will be to the latest specification.

The two covers are identical in external appearance, but
the Fort 'C' Cover will now have the word 'NYLON' included in
the sidewall engraving details.

The rayon cover is for use on cars domiciled in the United
Kingdom, North America, Canada and Europe.

Outside these territories, it is considered that the general
road conditions are such that a heavier duty cover is required.
For this reason the 4 ply nylon cover has been approved for use
in countries other than those detailed above.

This Bulletin cancels
CB.110 dated 16.9.58.

FOR INFORMATION.

RECOMMENDED TYRE PRESSURES.

The tyre pressures quoted below are for tyres when cold.

Recommended tyre pressures are as follows:-

Silver Cloud and Bentley 'S' Type.
with Manual Steering.

Front	19 lbs/sq.in. (1.33 Kg/sq.cm.)
Rear	26 lbs/sq.in. (1.82 Kg/sq.cm.)

With Power-assisted Steering.

Front	21 lbs/sq.in. (1.47 Kg/sq.cm.)
Rear	26 lbs/sq.in. (1.82 Kg/sq.cm.)

Silver Cloud and Bentley 'S' Type.
Long Wheelbase.

Front	22 lbs/sq.in. (1.54 Kg/sq.cm.)
Rear	28 lbs/sq.in. (1.96 Kg/sq.cm.)

Note:- It is not necessary to alter the recommended tyre pressures on cars fitted with refrigeration.

FOR INFORMATION.

TYRES.

FOR BENTLEY 'S' TYPE CONTINENTAL CARS.

The following Tubeless tyre in natural rubber with black or white sidewall, has been approved for use on Bentley 'S' Type Continental Cars.

Dunlop "Road Speed".
Size 8.00" x 15".

The tread pattern of this tyre is identical to that on the previously approved India "Super Speed Special", 8.00 x 15", in natural rubber, which was quoted in Bulletin CB.105; therefore one is an alternative to the other.

FOR INFORMATION

DUNLOP SYNTHETIC TYRES FOR
BENTLEY 'S' TYPE CONTINENTAL CARS

In conjunction with the Manufacturers we are, for the first time, in a position to approve Dunlop Synthetic rubber tyres for use on Bentley 'S' Type Continental cars. In the past, we have not been able to approve synthetic tyres without imposing a speed restriction, this being due to the fact, that the internal friction on a synthetic rubber tyre creates so much more heat than natural rubber that it is difficult to ensure an adequate adhesion of the synthetic rubber tread to a cotton or rayon carcass. Thus it has been necessary to impose speed restrictions in order to prevent the possibility of the rubber parting from the carcass.

The Dunlop tyre which has now been approved has a nylon carcass, which is a thermoplastic with which it is possible to achieve an adequate adhesion of the synthetic rubber, we are therefore able to approve the following tyre without imposing a speed restriction.

8.00 x 15 in. Dunlop 'C' Road Speed Nylon WH.2 Synthetic Tread.

This tyre is of tubeless construction and is available with black or white sidewall.

The pressures for this tyre are as follows:-

For normal speed running as in the United Kingdom

Front	...	20 lb/sq. in)
Rear	...	25 lb/sq. in) cold

For maximum speed running as on the Continent.

Front	...	25 lb/sq. in)
Rear	...	30 lb/sq. in) cold

FOR INFORMATION

FIRESTONE SYNTHETIC TYRES FOR
BENTLEY 'S' TYPE CONTINENTAL CARS

The following Firestone Tyre has now been approved for use on Bentley 'S' Type Continental Cars:-

8.00 x 15 in. Firestone Sports O.R.B. Nylon Synthetic Tread.

This tyre is of tubeless construction with a Nylon Carcass, and is available with black or white sidewall.

The pressures for this tyre are as follows:-

For normal speed running as in the United Kingdom

Front	...	20 lb/sq.in.)	cold
Rear	...	25 lb/sq.in.)	

For maximum speed running as on the Continent

Front	...	25 lb/sq.in.)	cold
Rear	...	30 lb/sq.in.)	

The 8.00 x 15 in. Firestone Sports O.R.B. tyre now supersedes the equivalent Firestone Super Sports 170 which is no longer obtainable.