

1936

General Technical Policies
and
Information Bulletins

1936 Bulletin Series

I N D E X

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GENERAL TECHNICAL POLICIES AND INFORMATION

No. 2

No. _____

1936 BULLETIN SERIES

10/4/35

Date _____

Effective October 1st

DONATED BY

PHIL ROSKI'S ESTATE

SUBJECT

TO ALL DEALERS:

PRODUCT PERFORMANCE REPORT

This is bulletin #2 of the 1936 Mechanical and Technical series which we deal with the Product Performance Report and touch upon the other activities of the Technical Division of the Service Department. The form and the paper on which this bulletin is printed will be used by this division during the 1936 season. Bulletin #1 of "General Technical Policies and Information" which is being prepared in printed book form, will cover the subject in greater detail and will be ready, in from three to four weeks' time.

Through the medium of the Product Performance Report and close cooperation between the Technical Division and the field organization, we are able to keep posted regarding the manner in which our cars are standing up in the hands of owners and the corrective measures needed should difficulty be encountered. Naturally, its effectiveness and the speed with which we are able to develop remedies for conditions which arise, are largely dependent on the assistance we receive from the field, and to this end we ask your continued earnest cooperation in sending these reports in to us promptly.

During the early stage of 1936 production, when it is especially important that we have immediate information in connection with any service difficulties which might exhibit themselves in the new models, we are going to ask you to report them to us by wire, sending in a complete Product Performance Report by mail later.

Attached is a sample of the Product Performance Report which we are sending to all Distributors and Dealers. These are put up in pad form in duplicate and should only be used in connection with the 1936 cars. Reports should be made cut and the original copy mailed in to the Technical Division of the Service Department daily, retaining the duplicate copy for your files. Make out separate reports covering each car.

It should be borne in mind that the Product Performance Report is to be used only to call to our attention the condition reported by the owner, your own findings and the correction you have applied. If you require information regarding the condition, it will be necessary to supplement this report with a letter covering the situation in complete detail.

(OVER)

OWNER'S
MANUAL

Compilation and preparation as well as the printing of the owners' manuals or instruction book has been completed and copies are being included with the printed material accompanying each car as heretofore. In order to acquaint yourself with the mechanical and other features of the new models, we suggest that you road -these through at your earliest opportunity.

REFERENCE
SHEET

For 1936, we plan on expanding the use of the Service Reference sheet as a means of disseminating information to the field covering the servicing of our cars. We have had some requests from the field. to include in this form, as complete subjects, articles covering the servicing of the various units such as have recently appeared in the monthly Service Magazine. In its broadened scope, we will increase our mailing to reach all mechanics and other members of our service field organization, who have been receiving the monthly Service Magazine.

INSPECTION
CARDS

The Pre-delivery, 500 mile and 1500 mile inspection cards covering the lubrication, inspection and tune-up procedure which should be followed in preparing new cars for delivery and in carrying out the owner inspections, have been revised for the 1936 models and are now available. Samples of the cards will be mailed within the next few days.

FLAT RATE
MANUAL

Preliminary work in connection with the flat rate manual for the 1936 Hudson and Terraplane Models will begin immediately, and within the next week or so we expect to have the actual service operations under way of our service experimental cars to permit making time studies and compilation. Due to the fact that the 1935 issue of the flat rate manual was a composite one covering the models from 1932 to 1935 inclusive, we do not of course, plan on duplicating this information for 1936 but instead will devote this issue entirely to the new 1936 Hudson and Terraplane Models. The new manual will follow the same style and size as heretofore, and will be available for distribution late in November.

TUNE-UP
AND LUB-
RICATION
CHARTS

Two wall charts measuring approximately 28" by 38" in size, will be available for the 1936 cars, one covering our recommended tune-up procedure, supplemented by illustrations and the other a very complete and illustrated lubrication chart. These will be printed. and mailed during the latter part of November.

SERVICE
MANUAL

Because of the advancement of the presentation. dates for the new models this year, the Service Manual on Which we have been working for some time will cover the recommended factory procedure on servicing the forthcoming new models together with the 1934 and 1935 cars. This will be a complete and comprehensive work generously illustrated and will include flat rate and special tool and equipment reference throughout. Publication and distribution of the Service Manual is to take place during January.

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TOOL
MANUAL

Work involved in the development of special tools and other service station equipment items necessary for servicing our 1936 cars will begin at once. On this basis our tool and service station equipment source, the Hinckley-Myers Company, Jackson, Michigan, will be in a position to supply everything in this category by November 15th. A complete and fully illustrated tool and equipment catalog will cover all of these items and will be ready late in November or early in December.

MONTHLY
MAGAZINE

The service magazine "Terraplane-Hudson Service and Technical Information", with which you are all familiar, will be continued for 1936 as heretofore, on a monthly basis. The material presented in this magazine and its scope will in general remain the same, with the exception that such subjects as are in the nature of a complete service write-up or treatise on a given unit, will be covered in separate issues of the Service Reference sheet. Your assistance and cooperation in extending the usefulness of this medium of service information is solicited and we will appreciate your sending in to us any material in the way of shop practices, short cuts, merchandising hints and anything else which would prove valuable if passed on to the field at large.

The foregoing covers in a general way, the principal activities of the Technical Division with the exception of the service field clinics which distributors will hold for their dealers. For the 1936 season as during the past year, we plan on holding two of these, one to be completed during December 1935 and the other to be held during April 1936. Work on the material for the first of these clinics will begin soon and you will be advised of the subject matter and other details as soon as our plans are completed.

E. J. Blum,

Technical Supervisor
Service Department.

GENERAL TECHNICAL POLICIES AND INFORMATION

1936 BULLETIN SERIES

Effective October 1st

SUBJECT

TO ALL DEALERS:

HYDRAULIC
BRAKE FLUID
FOR HUDSON
AND TERRA-
PLANE CARS

We certainly owe the entire field organization an impressive message as related to Hydraulic Brake Fluid, to be used with our 1936 Hydraulic Brakes. THERE IS NOTHING OF MORE IMPORTANCE AS RELATED TO BRAKE MAINTENANCE THAN THE USE OF THE PROPER FLUID.

There is only one fluid for application to our Hydraulic Brakes end, it is for this reason, that we are sending a special bulletin to our distributors and dealers covering the subject. The fluid is manufactured for us and labeled under the name of "Hudson Hydraulic Brake Fluid" in the following quantities and at the resale schedules noted:

	<u>Part No.</u>	<u>Name</u>	<u>List Price</u>	<u>Dealer Net</u>
RESALE	151105	Hudson Hydraulic Brake Fluid - Pints Case of 24 Pints	\$.75	\$.56
	151105	Hudson Hydraulic Brake Fluid - Quarts Case of 12 Quarts	1.25	.94
	151105	Hudson Hydraulic Brake Fluid - Gallons Case of 5 Gallons	4.25	3.19

MANY SO
CALLED
BRAKE
FLUIDS ON
THE MARKET

This is a special patented fluid which has proven its worth over years of actual application and, under no circumstances, should any substitute be used.

There are between fifty and sixty so-called brake fluids on the market today under various names. Many claims will be made for them and, in all probability, some of them can be purchased at lower prices than those sold under our name. Many attempts have been made, both to duplicate and imitate our fluid, and with the customary exaggerated advertising which goes with such attempts.

This is another case of Clutch Oil, the story of which you are all familiar with, and the importance of its use is indelibly impressed in every Hudson service man's mind. Please look at brake fluid in the same light and do not, under any circumstances, permit owners to use anything but your fluid.

A MAINTEN-
ANCE OPPOR-
TUNITY

You can see the big advantage in leaving this impression with your owners, because with CLUTCH COMPOUND, SHOCK ABSORBER FLUID AND HYDRAULIC BRAKE FLUID, you have a real merchandising opportunity to get your owners back into your Service Station, to take care of all their lubrication requirements, and thereby place you in a position to get their entire maintenance business.

We wish to advise that the fluid which is appearing under our

(OVER)

label is the same fluid as is merchandised by the Wagner Hydraulic Brake Service Stations under the name "Lockheed." In justice to this organization, this information should be in the field. Your purchases on Hydraulic Brake Fluid, however, should be confined to the Hudson Motor Car Company in order to benefit by the name "Hudson" on the containers and its natural effect on owners.

No. 5 Hudson Hydraulic Brake Fluid will, in the main, take care of all other requirements throughout the year in the United States. Some unusually severe cold weather may necessitate the temporary use of No. 1 fluid in certain sections of the extreme northern states.

A very important thing to remember is the destruction of the cans after all the fluid has been removed from the container. It has been known that these cans have been picked up and used again by certain unethical brake fluid distributors handling a fluid very detrimental to Hydraulic Brakes.

The destruction should take place for another reason and of equal importance. When a can is emptied, we are inclined to use it momentarily for gasoline, kerosene, or some other liquid. Another man in the shop might not know this and, because of the indication on the can, certain liquids might get into the Hydraulic Brake system unintentionally which, of course, would cause havoc with the brakes and endanger the lives of operators.

E. J. Blum

Technical Supervisor,
Service Department

DESTROY CANS
TO PREVENT
REFILLS AND
MISTAKES

**GENERAL TECHNICAL POLICIES
AND INFORMATION**

1936 BULLETIN SERIES

No. 4

Date 10/25/35

Effective October 1st

SUBJECT

DISTRIBUTORS AND DEALERS

FRONT END GEOMETRY

FRONT END
GEOMETRY

In order that all owners may secure the full benefits of our new Radial Safety Control and Tru-line Steering, we want the field organization to be governed by the following instructions on new cars below the numbers noted in this bulletin. Also, when owners' cars under such numbers come in for their 500-Mile Inspection and governor removal, it is necessary to make the checks noted on these cars as well, if not previously done.

LOAD

LOAD

(1) Make all checks with road load only consisting of a full tank of gasoline, oil, water and spare tire.

TIRE PRESSURE IMPORTANT

TIRE
PRESSURE

(2) Check pressure with an accurate gauge. Front tires of all Hudson and Terraplane models should carry 24 pounds, and rear tires 30 pounds. We want to emphasize this point, not only as related to the time of delivery, but at various inspections later. The owners should be told at the time of car delivery that these pressures should be maintained in their tires at all times.

TOE-IN

TOE-IN

(3) Toe-in must range from zero to 1/8" maximum measured 10" from the ground and at the wheel rim. Adjust if necessary by loosening tie rod end clamp bolts and turning tie rod to lengthen or shorten. Tighten clamp bolts.

CASTER

FRONT END
GEOMETRY

(4) Car must set on level floor and only equipment of known accuracy should be used. Adjust caster from 2 degrees to 3 degrees, aiming at an average of 2 1/2 degrees, but never less than 2 degrees. Caster correction is accomplished by loosening nuts at bottom of front ends of radial arms, and removing cap screws and shims at top. Decrease shim thickness to increase caster and increase thickness to decrease caster. Be sure shim bolt is tight before making caster check.

STEERING GEAR WORM AND SECTOR MESH

STEERING
GEAR WORM
AND SECTOR
MESH

(5) Check with front wheels in dead straight ahead position by rolling car. Disconnect rear end of drag link from pitman arm. Hold pitman arm with one hand and have someone turn steering wheel gradually until position of minimum play between

(OVER)

sector is reached. If play at this point is noticeable, adjust mesh by loosening steering gear case cover and eccentric nuts slightly and turning eccentric to right until play is eliminated. Re-tighten case cover stud nuts.

HIGH POINT AND STEERING WHEEL POSITION

HIGH POINT
AND STEER-
ING WHEEL
POSITION

(6) When the steering gear is on the "high point" or position of minimum back lash the steering wheel spoke which is trademarked underneath (both standard and steel spoke wheels) should be at the bottom, and point straight up and down.

When checking the "high point" with the front wheels in the ahead position, connect the rear end of the drag link to the pitman arm. If after doing this, the trade-marked spoke of the steering wheel is more than 2" from the center line on either side correction should be made by bending the pitman arm so that the "high point" will exactly coincide with the front wheels in this position.

LUBRICA-
TION

LUBRICATION

(7) Make sure that the steering gear, spindle pivot pins and other front axle parts, as well as the drag link, are properly lubricated and work freely.

CARS AFFECTED

CARS
AFFECTED

(8) (a) Serial numbers of the cars to which special checking refers are as follows:

(b) All Terraplane DeLuxe models below No. 611916.

(c) All Terraplane Custom models below No. 62845.

(d) Should the operation of any other Terraplanes or Hudsons indicate the need of checking, these same instructions should be followed.

(9) Should any Dealer not have caster checking equipment, we recommend that he have his cars checked by a local organization specializing in this type of work.

E. J. Blum,

Technical Supervisor,
Service Department

(THIS BULLETIN BEING MAILED TO DISTRIBUTORS FOR DISTRIBUTION
TO DEALERS)

No. 5Date 11/6/35

GENERAL TECHNICAL POLICIES AND INFORMATION

No. 5

1936 BULLETIN SERIES

10/14/35

Effective October 1st

SUBJECT

1936
SPECIFI-
CATIONS
FOR LI-
CENSING
PURPOSES

Following are brief specifications and license data covering the 1936 Hudson and Terraplane models. Additional information and car weights of other body types will be released as soon as available:

	Serial <u>No.</u>	No. of <u>Cyl.</u>	<u>Bore</u>	<u>Stroke</u>	A.M.A. H.P. <u>Rating</u>	Seatg. Cap.	Wheel <u>Base</u>	Weight <u>Lbs.</u>
<u>TERRAPLANE 6 - Deluxe</u>								
Brougham	61,101	6	3"	5"	21.6	5	115"	2,715
Touring Brougham		6	3"	5"	21.6	5	115"	2,715
Sedan		6	3"	5"	21.6	5	115"	2,770
Touring Sedan	&	6	3"	5"	21.6	5	115"	2,770
4 Pass. Coupe		6	3"	5"	21.6	4	115"	2,695
2 Pass. Coupe	Up	6	3"	5"	21.6	2	115"	2,615
<u>TERRAPLANE 6 - Custom</u>								
Brougham	62,101	6	3"	5"	21.6	5	115"	2,755
Touring Brougham		6	3"	5"	21.6	5	115"	2,755
Sedan		6	3"	5"	21.6	5	115"	2,810
Touring Sedan	&	6	3"	5"	21.6	5	115"	2,810
4 Pass. Coupe		6	3"	5"	21.6	4	115"	2,750
2 Pass. Coupe	Up	6	3"	5"	21.6	2	115"	2,665
<u>HUDSON 6 - Custom</u>								
Brougham	63,101	6	3"	5"	21.6	5	120"	2,830
Touring Brougham		6	3"	5"	21.6	5	120"	2,830
Sedan		6	3"	5"	21.6	5	120"	2,880
Touring Sedan	&	6	3"	5"	21.6	5	120"	2,880
4 Pass. Coupe		6	3"	5"	21.6	4	120"	2,810
2 Pass. Coupe	Up	6	3"	5"	21.6	2	120"	2,730
<u>HUDSON 8 - Deluxe</u>								
Brougham	64,101	8	3"	4½"	28.8	5	120"	2,985
Touring Brougham		8	3"	4½"	28.8	5	120"	2,985
4 Pass. Coupe	&	8	3"	4½"	28.8	4	120"	2,965
2 Pass. Coupe	Up	8	3"	4½"	28.8	2	120"	2,865

(OVER)

1936
SPECIFI-
CATIONS
FOR LI-
CENSING
PURPOSES

	<u>Serial No.</u>	<u>No. of Cyl.</u>	<u>Bore</u>	<u>Stroke</u>	<u>A.M.A H.P. Rating</u>	<u>Seatg. Cap.</u>	<u>Wheel Base</u>	<u>Weight Lbs.</u>
<u>HUDSON 8 - Custom</u>								
Brougham	64,101	8	3"	4½"	28.8	5	120"	3,030
Touring Brougham		8	3"	4½"	28.8	5	120"	3,030
4 Pass. Coupe	&	8	3"	4½"	28.8	4	120"	3000
2 Pass. Coupe	Up	8	3"	4½"	28.8	2	120"	2915
<u>HUDSON 8 - Deluxe</u>								
Sedan	66,101	8	3"	4½"	28.8	5	127"	3,110
Touring Sedan	& up	8	3"	4½"	28.8	5	127"	3,110
<u>HUDSON 8 - Custom</u>								
Sedan	66,101	8	3"	4½"	28.8	5	127"	3,140
Touring Sedan	& up	8	3"	4½"	28.8	5	127"	3,140

The system of numbering 1936 Terraplane and Hudson models is the same as last year, namely, -

The first digit of the car serial number will be the digit "6" indicating "1936" production. The second digit of each serial number will be the digits "1" to "7" inclusive which will designate the models in the same order as they are listed above. The first two digits will not be separated by a dash in listing the car serial number but will be a part of the complete number. and when 999 cars of any model have been built, the serial number will, of course, contain six digits instead of five. For example - after Terraplane 6 - DeLuxe serial number 61,999 was built, the next car bore serial number 611,000.

E. J. Blum

Technical Supervisor,
Service Department

(THIS BULLETIN AS WRITTEN IS BEING MAILED DIRECTLY TO ASSOCIATE DEALERS AS BULLETIN NO. 1).

HUDSON MOTOR CAR COMPANY, DETROIT, MICHIGAN

DONATED BY
PHIL ROSKIE'S ESTATE

GENERAL TECHNICAL POLICIES AND INFORMATION

1936 BULLETIN SERIES

No. 6Date 11/21/35

Effective October 1st

SUBJECT TO ALL MASTER DEALERS:

PUNCTURE
PROOF
TIRES

It is important that we call your attention to the results which may be encountered by the substitution of Puncture Proof Tubes for the regular type equipment furnished by the Factory.

Casings and Tubes are shipped to us by the tire manufacturer in balanced sets. Tubes have already been installed in the casings when received by our Factory and the two tires which are installed on the front wheels have both been balanced to within 5 inch ounces.

We bring this point to your attention in order that you may know what care we exercise in securing proper front wheel balance on our cars. We think it is an important point as related to the installation of these special tubes which have recently gone on the market and, if used, consideration has to be given to wheel balancing at the time of installation.

Puncture Proof Tubes are being sold by a very dependable company and the product gives evidence of their conscientious effort to meet what they believe is a need for that type of construction. We believe they advocate when tubes of this kind are purchased, that the installation be made with new casings rather than worn casings, because of the difficulty in getting complete balance on all four tires and wheels.

We would say to you that if you have owners who want to make such installations on their new cars, or later, the matter of wheel balancing should be left entirely as a responsibility of the tire . Distributor or Dealer selling you or the owner those tubes. You or we, of course, cannot accept responsibility for later results or satisfaction of owners when our equipment is changed. The owner should understand this rather thoroughly, where Puncture Proof Tubes are installed on our cars. In the meantime should anybody make such substitution on our cars, they do it entirely on their own responsibility.

We must take this definite position in the interests of our Distributors, Dealers and Owners.

E. J. Blum

Technical Supervisor,
Service Department.

(THIS BULLETIN AS WRITTEN IS BEING MAILED TO ASSOCIATE DEALERS
AS BULLETIN NO. 2)

HUDSON MOTOR CAR COMPANY, DETROIT, MICHIGAN

**GENERAL TECHNICAL POLICIES
AND INFORMATION**
1936 BULLETIN SERIES

No. 7Date 11-22-35

Effective October 1st

SUBJECT TO ALL MASTER DEALERS:

UP-TO-DATE INFORMATION ON FRONT END ADJUSTMENTSUP-TO-DATE
INFORMATION
ON FRONT END
ADJUSTMENTS

We want to give you a brief summing up of the situation on 1936 cars as related to information on wandering, body roll and too sensitive steering. In order that all previous advices and conversations may be reconciled in one final and conclusive explanation, we ask that the instructions in this present bulletin be accepted and used as your proper guide. In other words, this bulletin takes the place of all previous information which may have been passed on to you.

GENERAL
REMEDYGENERAL REMEDY

In a discussion of Camber, Caster, Toe-in, et cetera, with instructions issued in the terms of degrees (0) and inches, one can become confused as to what procedure to follow because a given instruction is sometimes assumed to mean that every car must be sent through the whole routine to effect a correction, when actually two or three minor adjustments would absolutely give the answer to most of the cars. So it is important to you to know that primarily the introduction of Stabilizers on our 1936 cars is a big factor in getting satisfactory operation.

5/8" STABILIZERS
AS STANDARD
EQUIPMENT5/8" STABILIZERS AS STANDARD EQUIPMENT

You have been advised that Stabilizers would go on all cars in production as of November 18th. This was done for the best interests of the field and ourselves and we are certain their application to our cars is the final contribution to give us and our owners all we have vouched for in the operation of our cars.

7/8" STABILIZERS
AS STANDARD
EQUIPMENT AS
SOON AS
POSSIBLE7/8" STABILIZERS AS STANDARD EQUIPMENT AS SOON AS POSSIBLE

While arriving at these conclusions we decided to go a step further with reference to Stabilization, and are changing the bar from a 5/8" to a 7/8" size to be installed on all production cars as soon as available, with the exception of Convertibles and Coupes.

5/8" STABILIZERS
FOR CONVERT-
IBLES AND
COUPES5/8" STABILIZERS FOR CONVERTIBLES AND COUPES

The 5/8" bar will continue as the equipment for Convertibles and Coupes, in that with their use we get just as smooth an operation because of the difference in body area and center of gravity, as we do with the other body models using the 7/8" bar.

SHIPPING 7/8" BARS THROUGH SERVICE NOW

SHIPPING
7/8" BARS
THROUGH
SERVICE
NOW

The decision as to the use of the 7/8" bar naturally has been so close to the writing of this bulletin that, of necessity, we cannot supply Production and Service requirements at the same time, so we will get into production on them as soon as is possible and, in the meantime, we will continue to ship cars with the 5/8" Stabilizer Bar.

COMPLETE STABILIZER INFORMATION

COMPLETE
STABILIZER
INFORMATION

A Claims Bulletin, No. 10, covering the policy on Stabilizer Bars is likewise being mailed to you with this bulletin, so please refer to it for more complete details in handling the Stabilizer situation.

GENERAL POINTS

GENERAL
POINTS

With the use of the Stabilizer, whether it be 5/8" or 7/8" and, we stress this as an important factor in the whole picture, you should be sure that the Spindle Pins are free and that the Tie Rod Ball Ends rotate without too much friction. Remove the shims from the Radial Arms, tighten up the Arm and Yoke again and be sure to set the Steering Gear on High Point. We want to caution you about the Tires and also to see that the Pitman Are Nut is tight, as well as the Radial Arm Yoke to Axle Bolt. This is the vertical bolt or pin which goes through the Yoke End and Axle.

We believe it is safe to say that in the main, unless there is something exceptionally wrong in a particular car, the removal of the shires would automatically give sufficient caster for satisfactory results in most cases. Be sure to RE-TIGHTEN, the Radial Arm Yoke to Axle Bolt. It being remembered, of course, that the Steering Gear must be placed on the High Point when the shims are removed.

REMARKS

REMARKS

We have given you the above information to offset any feeling you might have about securing adjustments without going through a long routine of caster chocking with fine instruments, on your cars. We do believe, however, you would like to know the several points in regard to checking when you get an obstinate case.

FREE SPINDLE PINS IMPORTANT

FREE
SPINDLE
PINS
IMPORTANT

We very definitely know that tight Spindle Pins play a very important part in the reaction to steering. For example, the Pins may have a film of lubrication when you started to drive the car and, after 50 or 60 miles of steady driving, your reaction to

**GENERAL TECHNICAL POLICIES
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1936 BULLETIN SERIES

No. 7
Date 11-28-35

Effective October 1st

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your steering might be that the gear was hard to control. This is the result of the Spindle Pins tightening up during the process of your driving, and very definitely affects the entire feel of the car. Therefore, we wish to stress the need of continuous lubrication for a while. It may be necessary in some cases to remove the Pins and emery off any graded condition which might exist on either the Pin or in the Bushing.

TIE ROD BALL ENDS

TIE ROD
BALL ENDS

You may find Tie Rod Ball Ends very stiff in some of the cars on which you work, and we think you can reduce the stiffness of their operation by lifting the seal and working them with penetrating oil. We want to stress that front end lubrication is important.

TIGHTEN RADIAL ARM YOKE TO AXLE PIVOT PIN

TIGHTEN
RADIAL ARM
YOKE TO
AXLE
PIVOT PIN

Merely as a precaution, be sure to see that the vertical pin in the Radial Arm is tight.

CASTER

We find in the main, that Castor settings at between $3\frac{1}{2}^\circ$ and $4\frac{1}{2}^\circ$ are generally the most satisfactory.

CASTER

ADJUST STEERING GEAR AFTER CASTER SETTING

ADJUST
STEERING
GEAR AFTER
CASTER
SETTING

When shims are removed from the Radial Arms, always adjust the Steering Gear to the High Point after you have tightened the Yoke and the Arm together again. Be sure to get the Bolt absolutely tight.

STEERING GEAR AND SECTOR MESH

STEERING
GEAR AND
SECTOR
MESH

Merely as a precaution, the following information is given you in regard to setting the Gear on High Point: Disconnect Drag Link from Pitman Arm. Turn Steering Wheel to mid-position of its complete travel or turning limits. Play in worm and sector can only be determined by shaking Pitman Arm while having some one turn Steering Wheel slowly until point of minimum play is located. If play at this point is noticeable, adjust mesh by loosening Steering Gear Case Cover and turn Eccentric to right until play is eliminated. Re-tighten Case Cover Studs.

HIGH POINT, FRONT WHEEL POSITION

HIGH POINT,
FRONT WHEEL
POSITION

With Steering Gear held in position of adjustment obtained in the previous operation (High Point Setting), connect Drag Link to Pitman Arm; if after Crag Link has been connected, the front wheels are not in the straight ahead position, correction can be made by heating Pitman Arm to a dull cherry red, just until it begins to show color, and bending to correct position. Care must be exercised in this heating operation, with the Ball protected by wet rags, and the Pitman Arm must be permitted to cool gradually.

TIGHTEN PITMAN ARM NUTS

TIGHTEN
PITMAN ARM
NUTS

It probably is not necessary for us to stress that Pitman Arm Nuts should be tight.

TOE-IN

TOE-IN

For your information, Toe-in ranges from zero to 1/8" maximum measured 10" from the ground and at the wheel rim. Adjust if necessary, by loosening Tie Rod End Clamp Bolts and turning Tie Rod to lengthen or shorten. Tighten Clamp Bolts.

TIRE PRESSURES

Tire Pressures are, many times, not given sufficient consideration. Our 1936 cars have been sent into filling stations and we find that attendants seem to be totally ignorant of the proper pressures. When checked later, these cars showed tire pressures from 32 pounds to 45 pounds. Tires should be frequently checked and, the fronts kept as near 24 pounds as is possible and the rears at 30 pounds.

E. J. Blum

Technical Supervisor,
Claims Department

HUDSON MOTOR CAR COMPANY, DETROIT, MICHIGAN

GENERAL TECHNICAL POLICIES AND INFORMATION

1936 BULLETIN SERIES

No. 8Date 1/6/36

Effective October 1st

SUBJECT TO ALL MASTER DEALERS:

1936
SPECIFICA-
TIONS
FOR LICENS-
ING
PURPOSES

This supplements Bulletin No. 5 and provides additional License data and Specifications of several new models which have been added to the 1936 Hudson and Terraplane line. Those include Sedans and Touring Sedans on the 120 inch wheelbase, Hudson-Eight models in both the DeLuxe and Custom series and Convertible Coupes in the Terraplane DeLuxe and Custom, Hudson-Six Custom, and Hudson-Eight DeLuxe and Custom lines.

	Serial Nos.	No. of Cyl.	Bore	Stroke	A.M.A. H.P. Rating	Seatg. Cap.	Wheel Base	Weight Lbs.
<u>TERRAPLANE 6 - DELUXE</u>								
Brougham	61,101	6	3"	5"	21.6	5	115"	2,715
Touring Brougham		6	3"	5"	21.6	5	115"	2,715
Sedan		6	3"	5"	21.6	5	115"	2,770
Touring Sedan	&	6	3"	5"	21.6	5	115"	2,770
4 Pass. Coupe		6	3"	5"	21.6	4	115"	2,695
2 Pass. Coupe		6	3"	5"	21.6	2	115"	2,615
Convertible Coupe	Up	6	3"	5"	21.6	4	115"	2,740
<u>TERRAPLANE 6 - Custom</u>								
Brougham	62,101	6	3"	5"	21.6	5	115"	2,755
Touring Brougham		6	3"	5"	21.6	5	115"	2,755
Sedan		6	3"	5"	21.6	5	115"	2,810
Touring Sedan	&	6	3"	5"	21.6	5	115"	2,810
4 Pass. Coupe		6	3"	5"	21.6	4	115"	2,750
2 Pass. Coupe		6	3"	5"	21.6	2	115"	2,665
Convertible Coupe	Up	6	3"	5"	21.6	4	115"	2,755
<u>Hudson 6 - Custom</u>								
Brougham	63,101	6	3"	5"	21.6	5	120"	2,830
Touring Brougham		6	3"	5"	21.6	5	120"	2,830
Sedan		6	3"	5"	21.6	5	120"	2,880
Touring Sedan	&	6	3"	5"	21.6	5	120"	2,880
4 Pass. Coupe		6	3"	5"	21.6	4	120"	2,810
2 Pass. Coupe		6	3"	5"	21.6	2	120"	2,730
Convertible Coupe	Up	6	3"	5"	21.6	4	120"	2,870
<u>Hudson 6 - Deluxe</u>								
Brougham	64,101	6	3"	5"	21.6	5	120"	2,985
Touring Brougham		6	3"	5"	21.6	5	120"	2,985
Sedan		6	3"	5"	21.6	5	120"	3,045
Touring Sedan		6	3"	5"	21.6	5	120"	3,045

(OVER)

1936
SPECIFICATIONS
FOR LICENSING
PURPOSES

-2-

	<u>Serial Nos.</u>	<u>No. of Cyl.</u>	<u>Bore</u>	<u>Stroke</u>	<u>A.M.A. H.P. Rating</u>	<u>Seatg. Cap.</u>	<u>Wheel Base</u>	<u>Weight Lbs.</u>
4 Pass. Coupe	&	8	3"	4-1/2"	21.6	4	120"	2,965
2 Pass. Coupe		8	3"	4-1/2"	21.6	2	120"	2,865
Convertible Coupe	Up	8	3"	4-1/2"	21.6	4	120"	3,000
<u>HUDSON 8 - CUSTOM</u>								
Brougham	65,101	8	3"	4-1/2"	21.6	5	120"	3,030
Touring Brougham		8	3"	4-1/2"	21.6	5	120"	3,030
Sedan		8	3"	4-1/2"	21.6	5	120"	3,075
Touring Sedan	&	8	3"	4-1/2"	21.6	5	120"	3,075
4 Pass. Coupe		8	3"	4-1/2"	21.6	4	120"	3,000
2 Pass. Coupe		8	3"	4-1/2"	21.6	2	120"	2,915
Convertible Coupe	Up	8	3"	4-1/2"	21.6	4	120"	3,045
<u>Hudson 8 - DELUXE</u>								
Sedan	66,101	8	3"	4-1/2"	28.8	5	127"	3,110
Touring Sedan	& Up	8	3"	4-1/2"	28.8	5	127"	3,110
<u>Hudson 8 - CUSTOM</u>								
Sedan	67,101	8	3"	5"	28.8	5	127"	3,140
Touring Sedan		8	3"	5"	28.8	5	127"	3,140

E. J. Blum

Technical Supervisor,
Service Department

(THIS BULLETIN IN REVISED FORM IS BEING MAILED DIRECTLY TO MASTER DEALERS AS BULLETIN NO. 8, AND TO ASSOCIATE DEALERS AS BULLETIN NO. 3)

**GENERAL TECHNICAL POLICIES
AND INFORMATION**

1936 BULLETIN SERIES

No. 9Date 2/4/36

Effective October 1st

SUBJECT

TO ALL MASTER DEALERS:

FLOODED
MANIFOLDS

All carburetors used on Hudson and Terraplane cars equipped with Climatic control have the choke valve and throttle valve so inter-connected that the choke is opened when the throttle is wide open. By cranking the engine with the accelerator pedal held down, the cylinders and manifold can be cleared if a flooded condition should occur.

Reports reaching the factory indicate that owners are not making use of this means of clearing the manifold and in some instances have continued cranking with the choke closed until sufficient fuel had accumulated in the manifold to permit it to run down into the Electric Hand power unit.

Where an owner has trouble after being acquainted with the proper method of clearing a flooded manifold, a drain can be installed in the manifold which will automatically drain off any excess gasoline which may accumulate. Intake Drip Pipe Service Kit Number 152002 covered in General Parts Policies and Information Bulletin No. 19 dated January 30, 1936, should be used for this purpose.

The kit consists of a ball check valve which is screwed into the bottom of the manifold and a drain tube from the check to a point below the engine side pan.

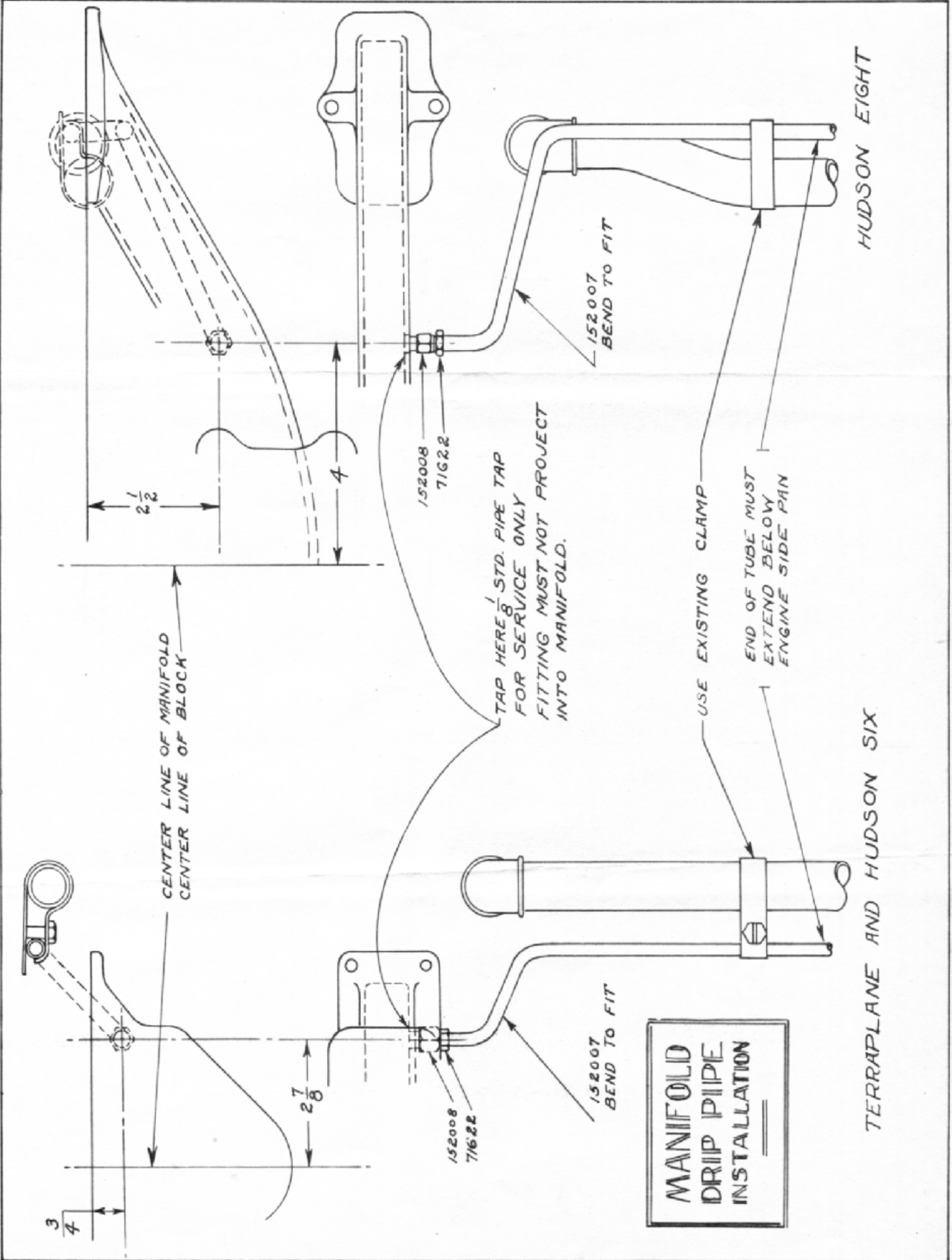
When the engine is being cranked or is running, the vacuum in the manifold closes the valve. When the engine stops the valve opens and any gasoline accumulated in the manifold will drain off. This will also take care of manifold flooding due to percolation when the engine is stopped after a fast run in hot weather.

Instructions for installation are included in each kit.

M. S. Bald

Technical Division Ser-
vice Department

(THIS BULLETIN AS WRITTEN IS BEING MAILED DIRECTLY TO ASSOCIATE
DEALERS AS BULLETIN NO. 4)



HUDSON EIGHT

TERRAPLANE AND HUDSON SIX

**MANIFOLD
DRIP PIPE
INSTALLATION**

TAP HERE $\frac{1}{8}$ STD. PIPE TAP
FOR SERVICE ONLY
FITTING MUST NOT PROJECT
INTO MANIFOLD.

USE EXISTING CLAMP
END OF TUBE MUST
EXTEND BELOW
ENGINE SIDE PAN

152007
BEND TO FIT

152007
BEND TO FIT

152008
71622

152008
71622

CENTER LINE OF MANIFOLD
CENTER LINE OF BLOCK

$\frac{1}{2}$

4

$\frac{7}{8}$

$\frac{3}{4}$

HUDSON MOTOR CAR COMPANY, DETROIT, MICHIGAN

**GENERAL TECHNICAL POLICIES
AND INFORMATION**
1936 BULLETIN SERIES

No. 10Date 2/4/36

Effective October 1st

SUBJECT TO ALL MASTER DEALERS:

PUNCTURE-
PROOF
INNER
TUBES

PUNCTURE-PROOF INNER TUBES

In Technical Bulletin No. 6, dated November 21, 1935, your attention was called to the care used in balancing the tires used on our cars and to the possibility of getting into difficulty on this score if special inner tubes of the so-called puncture-proof type were substituted for our regular equipment.

Since issuing this bulletin, our Engineering Department has done considerable experimental testing of the Life Guard Inner Tube made by the Goodyear Tire and Rubber Company and our findings indicate that the improvements made in the manufacture of these inner tubes have eliminated the difficulty previously encountered in obtaining proper balance of the tire and tube assemblies. As a result, this equipment is approved for use in Hudson and Terraplane cars which will enable you to supply this type of inner tube to those owners who desire added protection against blow-outs.

Considerable knowledge and skill are necessary, however, to properly assemble and balance tires equipped with these inner tubes and we accordingly recommend that the initial installation and any necessary servicing, be handled by your local Goodyear branch or dealer.

E. J. Blum

Technical Supervisor
Service Department

(THIS BULLETIN AS WRITTEN IS BEING MAILED DIRECTLY TO ASSOCIATE
DEALERS AS BULLETIN NO. 5)

HUDSON MOTOR CAR COMPANY, DETROIT, MICHIGAN

**GENERAL TECHNICAL POLICIES
AND INFORMATION
1936 BULLETIN SERIES**

No. 11Date 3/11/36

Effective October 1st

SUBJECT TO ALL MASTER DEALERS:

INSTALLA-
TION OF
STABILIZER
KITS AND
BARS

In the latter part of November, and at the urgent request of our Distributors and Dealers, we made 7/8" Stabilizer Bars and Rubbers standard equipment on all cars except Convertibles and Coupes -- these last two models having 5/8" Bars and Rubbers applied to them. This information was passed to the Field Organization in Technical Bulletin No. 7 to Distributors and Dealers, as well as in General Service Policies Bulletin Distributor No: 13 and Dealer No. 10, all dated November 22 and 23, 1935. The very clear and fair policies and procedures on installations were outlined in the General Service Policies Bulletins.

ORDERS NOT
IN RATIO
TO NUMBER
OF CARS
SHIPPED

If the urgency for their need was as great as was stressed by the Field, it would seem that the demand upon us for them would be indicated by a greater number of orders received by us so far. This applies particularly to orders for 7/8" Bars and Rubbers to be used in replacing the 5/8" Bars and Rubbers on cars where the original 5/8" Stabilizer Kit had been installed at the Factory or in the Field. It also applies, to some extent, to the 7/8" Stabilizer Kits for cars on which no Kit had been installed.

POLICY STILL
IN
EFFECT

The Factory has been at a loss as to the possible time limits which should be placed on the Policy so we could have some idea as to when the special account should be closed out. The policy is still in effect.

ADJUSTMENTS
NOT COM-
PLETED

The mention of other items in this connection is as important as the preceding reference on Bar installations. Earlier owner cars traveling to points in the south, particularly Florida and also California, when arriving at destination show a lack of adjustments so completely covered in Technical Bulletin-No. 7. Perhaps some of these cars had been delivered prior to the time our last instructions were received. Let's be sure all of the earlier cars are checked.

REAR TIRES
INFLATE TO 32
POUNDS

We cannot repeat too often that Tire Pressures must be kept up. This point has been so overlooked and is of SO MUCH IMPORTANCE we have decided that it must be stressed and have raised the pressure specifications for the REAR TIRES to 32 POUNDS. The front tires are to remain at 24 pounds.

LET'S FACE THE TRUE GENERAL FACTS IN REGARD TO TIRE PRESSURES, WHETHER THEY HAVE TO DO WITH OUR CARS OR ANYBODY ELSE'S CARS IN THE INDUSTRY. TIRE PRESSURES MUST BE KEPT UP IN ACCORDANCE WITH THE SPECIFICATIONS GIVEN AND SHOULD BE CHECKED FREQUENTLY. AND LET'S UNDERSTAND THOROUGHLY THAT THE DIFFERENCE BETWEEN THE PRESSURES IN THE FRONT AND REAR TIRES IS FOR A DEFINITE PURPOSE, AND HAS AN IMPORTANT BEARING ON CAR HANDLING. THEREFORE, BE SURE THAT FRONT TIRES ARE INFLATED TO 24 POUNDS AND REAR TIRES 32 POUNDS. IT WOULD BE WELL ALSO TO HAVE TIRE PRESSURE GAUGES CHECKED FOR ACCURACY.

(OVER)

LUBRICATION OF FRONT AXLE SPINDLE PINS

SPINDLE PIVOT PINS MUST BE LUBRICATED THOROUGHLY. THIS POINT IS VERY IMPORTANT AND VIE URGE THAT IT NOT BE OVERLOOKED OR SLIGHTED.

USING UNLIMITED CASTER ADJUSTMENTS AS IMPROPER SUBSTITUTE

That Caster Limit instructions have not been. followed in all cases is evidenced by instances recently brought to our attention, in which the castor angle has been increased considerably beyond our recommended 3 to 4½ degrees, in an endeavor to obtain better handling and to improve the car's roadability. This is a practice which we do not recommend since excessive caster frequently leads to other difficulties such as excessive front tire wear and the possibility of introducing shimmy after the front axle parts have assumed their normal wear. Cars with this high caster will be particularly sensitive to high cross winds at high speeds.

THE RIGHT THINGS TO DO

A checkup of these tourist cars in every instance disclosed that such measures were unnecessary as some of the cars were still equipped with -the 5/8" Stabilizer Bar, while others were not even fitted with any Stabilizer. Incorrect Tire Pressures, Wrong Caster, Tight or Unlubricated Spindle Pivot Pins and Tie Rod Ends and Steering Gears out of Adjustment and off the High Point were the offenders, either wholly or in part, in the balance of the cases investigated.

MUST LAY EMPHASIS

We feel, therefore, that there is a definite need at this time to further emphasize the necessity of carefully following the instructions given in the above mentioned bulletin, especially in connection with the installation of the 7/8" Stabilizer Bar, THE FREE OPERATION OF THE FRONT AXLE SPINDLE PIVOT PINS AND TIRE INFLATION PRESSURES. SPINDLE PIVOT PINS MUST BE FREED UP IF THEY ARE TIGHT AND MUST BE WELL LUBRICATED AT ALL TIMES.

SPRING CAMPAIGN OPPORTUNITY

The Spring Maintenance Campaign will serve a very useful purpose in thoroughly checking these various items. We should not miss any opportunity, however, of doing this on any occasion when an owner's car comes to the Service Station.

TOURIST OR OUT-OF-TOWN CARS

Let us not be short sighted in connection with giving tourists or out-of-town owners the same attention as those owners who purchased their cars from you. The reputation of the product through good or bad service rendered in one section of the country affects the car sales of every Distributor or Dealer no matter where his location. The National Standing of any motor car company is influenced through the treatment received by the traveling owners.

POLICY ON TOURIST CARS

The policy on the handling of Tourist or Out-of-Town owners is fully covered in paragraphs (d) to (j) inclusive, Page 13 of the General Service Policies Manual.

M. J. Blum

Technical Supervisor,
Service Department.

SPRING SERVICE FLASHES

No. 1

MARCH 9th, 1936

WHAT IS THE SPRING CAMPAIGN?

It is a definite program to assist Dealers in securing Spring Conditioning Work as a basis for a Permanent Service Business.

What is the Factory's Part in the Program?

1. To bring out to you the importance of Lubrication as the basis of both the Spring Campaign and your Permanent Service Plan.
2. Furnishing you with the new lubrication and tuneup charts.
3. Special February Issue of Service Magazine.
This issue was designed primarily to start everyone thinking along the lines of Spring Maintenance.
4. Slide Film, on "Service Plans for Spring".
This film is now being shown in each Distributor's territory.
5. Procedure Book.
Outlining in detail a definite procedure for developing the Spring Service Campaign and future Maintenance Volume.
6. Weekly Flashes.
Timely Suggestions issued frequently during the campaign.
7. Continuous helps and suggestions in the Monthly Service Magazine.

DON'T DELAY! Complete your plans **Now** for an effective Spring Program. **Lubrication Is the Key.**

HUDSON MOTOR CAR CO.
DETROIT, MICH.

HUDSON MOTOR CAR COMPANY, DETROIT, MICHIGAN

**GENERAL TECHNICAL POLICIES
AND INFORMATION
1936 BULLETIN**

A Well Equipped Lubrication Department Properly Manned And Carefully Operated Is The Answer Not Only To Spring Business But To Constant High Levels In Maintenance Volume. You Can Easily Get The Proof Of This Statement By A Few Contacts.

No. 12
Date 3/13/36

Effective October

SUBJECT TO ALL MASTER DEALERS:

LUBRICATION SPECIFICATIONS

LUBRICATION SPECIFICATIONS

The selection of lubricants should be one of the first concerns of the car owner, as the life of the automobile is to a great extent dependent upon the use of the proper lubricants. The Lubricants should not only be of high quality but the viscosity and other characteristics or properties must be suited to the purpose for which they are to be used.

The viscosity of a lubricant is simply a measure of its body or fluidity. The S. A. E. viscosity numbering system constitutes a classification of lubricants in terms of viscosity at only one temperature but without reference to any, other characteristics or properties. In setting up this system sufficient latitude was given to include oils which are refined from all types of crudes available with the result that the classification is necessarily broad and does not indicate the quality of the oil. THE REFINER OR MARKETER SUPPLYING THE OIL IS RESPONSIBLE FOR THE QUALITY OF ITS PRODUCT. IN THE FINAL ANALYSIS, THE REPUTATION OF THE MANUFACTURER IS THE USER'S BEST GUIDE AS TO THE QUALITY OF THE LUBRICANT.

ENGINE OILS

ENGINE OILS

In the matter of engine oils, it is felt that a great amount of oil has been sold solely on the strength of the S. A. E. viscosity marking on the containers which carried weight with the car owner and lead him to believe that such marking was an index of quality and afforded him protection. As a matter of fact, the broadness of this numbering system makes necessary the careful selection of engine oils since some oils coming within a certain classification will flow more readily than others at low temperatures, provide easier cranking, greater protection to the engine because of more rapid distribution when the engine is cold as well as better lubrication when it is operating at high temperatures. Other factors of great importance and which vary considerably in different oils are their ability to resist oxidation and the formation of sludge, and to give reasonable mileage under high speed operating conditions. In connection with the latter it should be borne in mind that higher oil consumption at the higher car speeds must be expected with the lighter oils which are recommended and necessary for cold weather driving. The proper S. A. E. grades of engine oil recommended for various temperatures are as follows:

- Minimum temperature + 40° F. - S. A. E. 30
- “ “ 0° F. - 20 W - Pour test 0° F.
- “ “ - 15° F. - 10 W - Pour test under 0° F.
- “ “ below - 15° F. - 10 W + 10% kerosene

(OVER)

TRANSMIS-
SION DIFFER-
ENTIAL AND
STEERING
GEAR LUBR-
CANTS

TRANSMISSION DIFFERENTIAL AND STEERING GEAR LUBRICANTS

As in the case of motor oils, the specifications which we have given covering lubricants to be used in the transmissions, differentials and steering gears of our cars should be accepted only as a guide to the viscosity and the general characteristics of this type of lubricant. The compounding and preparation of the lubricant is of the utmost importance and must be taken into consideration. For the lubrication of the transmission, differential and steering gear we call for a high grade mineral gear oil having extreme pressure characteristics and the following S. A. E. viscosities:

TRANSMISSION

Summer - S. A. E. - 90 E.P.

Winter - S. A. E. - 80 E.P. (700 - 800 seconds G 100° F.)

DIFFERENTIAL AND STEERING GEAR

Summer - S. A. E. - 110 E.P.

Winter - S. A. E. - 90 E.P.

In making a selection of these lubricants we must consider the broadness of the S.A.E. numbering system when used as a yard stick to determine the fluidity of an oil. Taking our winter recommendation of S. A. E. - 80 oil for transmissions we call for a 700 to 800 second oil at 100° F. However, the S. A. E. have no low limit and oils as light as kerosene fit in this class. At the other end of the range it is possible for these oils to have a viscosity as high as 800000 seconds at zero. Some of the better S. A. E. 90 gear oils available have viscosities lower than 130000 seconds at this temperature and from this standpoint would obviously do a better job of lubricating than many oils falling in the S. A. E. 80 range.

In the matter of S. A. E. - 90 gear oils which we recommend for summer transmission and winter differential and steering gear use, this classification calls for viscosities of from 800 to 1500 seconds at 100° F. Such oils, however, can range from 15000 to 100000 seconds at 32° F. In the case of the S. A. E. - 90 specification for winter lubrication of the differential and steering gear, it will be soon that at zero or sub-zero temperatures the higher viscosity oils will not provide proper lubrication.

On the other hand, a good grade S. A. E. 160 oil could be used in place of the S. A. E. 90 lubricant specified for summer transmission use since some of those have viscosities as low as 80000 seconds at 32° F.

For summer lubrication of the differential and steering gear, the S. A. B. 110 specification gear oils called for may have viscosities ranging from 33000 seconds to 280000 seconds at 32° F., a possible variation of over. 8 to 1. These requirements can be satisfactorily met in many instances by the higher grade S. A. E. 160 gear oils, some of which as previously mentioned have viscosities as low as 80000 seconds at 32° F.

HUDSON MOTOR CAR COMPANY, DETROIT, MICHIGAN

**GENERAL TECHNICAL POLICIES
AND INFORMATION**
1936 BULLETIN SERIES

No. 12Date 3/13/36

Effective October 1st

SUBJECT

- 3 -

All of the viscosities referred to are Saybolt viscosities and the lubricants are of the extreme pressure type.

In dealing with these oils we wish to emphasize that the S. A. E. classifications relate to viscosity at a single temperature only - 100 degrees - and that no other factor of quality or character is considered, although many are involved in the satisfactory performance of lubricants. Hence the only real protection for the customer lies in the good name of the refiner and the reputation of his products.

CLUTCH LUBRICANT

CLUTCH
LUBRICANT

Proper operation of the oil cushioned and lubricated type clutch used on Hudson and Terraplane cars is largely dependent upon the use of the correct oil. Hudsonite clutch compound which is prepared in our own laboratory was developed after exhaustive investigation and research and has definitely proven itself to be the best mixture available for this purpose. It is supplied by the factory parts department and we urge that you use nothing else in servicing our clutches. We call attention here to the importance of using the correct quantity - 1/3 pint, no more or less. Too much oil may cause clutch slippage, too little clutch chatter.

WHEEL BEARING LUBRICANTS

WHEEL
BEARING
LUBRICATION

The important requirements of wheel bearing lubrication call for the selection of a grease which will distribute and afford efficient lubrication at the low temperatures encountered in winter operation and at the same time be able to withstand, without separating or melting, the high temperatures often met in the continuous use of the brakes during hot weather. Following are the specifications of the lubricant which we recommend for this purpose for both front and rear wheel bearings:

Calcium soap - 18 - 20%
Mineral oil - 80 - 82%
Oil viscosity - 500 - 525 seconds at 100° F.
with zero pour test.
Melting point of grease - 210° F. minimum

Wheel bearing lubricants conforming to these specifications and which will give satisfactory service in our cars are available from a number of the better known refiners.

(OVER)

WATER PUMP LUBRICANTWATER PUMP
LUBRICANT

In the lubrication of the water pumps used on the previous models the action of water on the lubricant was of little or no importance since the bearing which was lubricated was not contacted by the cooling water. In the 1936 pump this has been changed but due to the use of an efficient water seal incorporated in the new design which eliminates the use of a packing gland, we are able to continue our former lubrication recommendation for this unit. Following are the specifications for this type of grease:

Aluminum soap - 7.50 - 8.50g
 Mineral oil - 91.50 - 92.50g
 Oil viscosity - 400 seconds at 100° F. - zero pour test
 Ash content - not over 1.5g
 Separating point of grease - 425° F. minimum
 Grease must be workable at zero

No particular difficulty should be experienced in getting this lubricant since there are on the market high grade lubricants meeting these requirements.

CHASSIS PRESSURE FITTING LUBRICANTCHASSIS
PRESSURE
FITTING
LUBRICANT

The parts lubricated by these fittings are subjected to shock and the action of water and dirt and should be protected by a high grade viscous lubricant. The specifications of a satisfactory grease for this application are given here:

Calcium soap - 3½ %
 Mineral oil - 96;
 Oil viscosity - 400-450 seconds at 100° F. with a zero
 pour test.
 Melting point of grease - 160° F. minimum.
 Available from several of the larger refiners.

CHASSIS SPRING COVER LUBRICANTCHASSIS
SPRING
COVER
LUBRICANT

The fabric spring covers fitted to all 1936 models except the 61 series cars are packed during assembly with a graphite grease. Approximately once a season they should be removed and repacked with a lubricant of these specifications.

Calcium soap - 12-14g 9-10%
 Graphite of 200 mesh and containing 93g graphite carbon -
 9-10%
 Mineral oil - 76-79g
 Oil viscosity - 80-90 seconds at 100° P. with zero pour test.
 Melting point of grease - approximately 200° F.

HUDSON MOTOR CAR COMPANY, DETROIT, MICHIGAN

**GENERAL TECHNICAL POLICIES
AND INFORMATION**
1936 BULLETIN SERIES

No. 12Date 3/13/36

Effective October 1st

SUBJECT

- 5 -

The entire matter of lubrication is receiving the closest scrutiny of our Engineering laboratory at present and as a result of their research work it is possible that we will make slight changes and revisions in our recommendations from time to time.

In summarizing let us reiterate that specifications are simply a guide and that the skill and care exercised in the manufacture and compounding of lubricants and greases is of far greater importance in determining their value than the mere fact that they contain the proper amounts of the specified ingredients set up as a standard.

THE REPUTATION OF THE REFINER AND HIS PRODUCTS IS YOUR BEST ASSURANCE OF QUALITY, therefore take no chances with oils or greases of unknown or questionable merit.

E. J. Blum

Technical Supervisor
Service Department

HUDSON MOTOR CAR COMPANY, DETROIT, MICHIGAN

DONATED BY
PHIL ROSKIE'S ESTATE

GENERAL TECHNICAL POLICIES AND INFORMATION

1936 BULLETIN SERIES

13

No. _____

Date 6/2/36

Effective October 1st

SUBJECT TO ALL MASTER DEALERS:

CHANGES IN PRODUCT

During the past couple of weeks a number of changes and improvements have been incorporated in the production of Hudson and Terraplane cars which we felt advisable to bring to your attention at this time.

SPINDLE PIVOT PIN LUBRICATORS

For some little time the industry has recognized the need for something which would provide more efficient and consistent lubrication for the front axle spindle pivot pins, and toward this end a special type of lubricator has been developed, which we are now using in production. In principle, grease is introduced into a large reservoir from which it is automatically fed to the pin working surfaces by means of a plunger and spring. This assures a slow, constant flow of lubricant between the recommended 1000-Mile Lubrication periods.

CASTER

Because of the efficiency of the new spindle pivot pin lubricators, the need for the relatively high caster angle of $3\frac{1}{2}^{\circ}$ to $4\frac{1}{2}^{\circ}$ formerly specified, no longer exists and, coincident with the adoption of these parts, a reduction in caster has been made on all Hudson and Terraplane models. The new caster ranges from 2° minimum to 3° maximum and is obtained by introducing a shim pack. .102" thick between the radial arm and axle yoke on Terraplane models and a .164" thick pack on all Hudson models. The Terraplane shim pack is made up of 2 shims .020" thick and 1 shim .062" thick, while the Hudson pack consists of 2 .020" and 2 .062" shims.

LOW SPEED SHIMMY

When any cases of low speed shimmy are reported, they are to be corrected through reduction of caster to these now angles. Removal of any shims already in the axle and the introduction of the shim packs mentioned in the preceding paragraph will correct the condition in the majority of cases, without taking instrument measurements.

MANIFOLD HEAT VALVE SETTING

With the advent of warm weather the exhaust manifold heat control valve on the Terraplane DeLuxe models is being set in the center position on all cars leaving the Factory. For best operation in warm weather it is essential that the valve setting should be changed from the winter position to a point where the arrow cast on the valve body points straight up or midway between the letters "W" and "3". This will cut down the flow of exhaust gas around the intake manifold and reduce the possibility of overheating the carburetor and fuel.

(OVER)

EXHAUST
PIPE
COVER

To assist in lowering the air temperature under the hood and inside the body, heavy molded asbestos covers are now being fitted to the exhaust pipe on all Hudson Six and Terraplane models. Those covers are similar in design to those which we have been using on the eight cylinder engines, being made in two halves and held in place by three metal straps.

HEATER
THERMOSTAT

On those cars which have had heater thermostats installed in the water outlet hose, we recommend that they be removed during the summer months and replaced again in the fall. This will further assist in lowering the engine temperature and promote greater comfort inside the car.

STOP
LIGHT
SWITCH

The design of the stop light switch was recently changed and all cars are now being equipped with switches of the mechanical instead of the hydraulic type. In the new construction the switch is attached to the brake master cylinder bracket and actuated by the master cylinder operating rod. For service replacements the hydraulic type switch will still be available from the Factory Parts Department.

QUARTER
WINDOW
DRAIN
TROUGH

To eliminate the possibility of the quarter window drain trough interfering with the window operation on the Brougham bodies, a change has been made and a wire is now used to support the upper side of the trough in place of the fibre board strip heretofore used. This construction may be duplicated in the Field in making service corrections by simply removing the fibre board strip and substituting a piece of galvanized wire in the loop of the trough, stretching it tight, and fastening it in place with staples at each end.

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