

NEW TRUCK UNIT FOR DODGE AUTOS

Special Truck Builder Designed for Use in Making Two-Ton Truck Out of Dodge.



A new field for truck enthusiasts has recently been opened through the manufacture of a truck builder for Dodge automobiles. This unit, manufactured by Graham Brothers of Evansville, Ind., is specially constructed for attaching to the Dodge "front end" or power plant, thus making a complete truck.

According to E. A. Bullock, manager of the Graham Bros. Sales company, Omaha distributors, this new unit is causing a considerable amount of comment and the general opinion is that the Dodge power plant will provide an excellent propelling force for trucks.

Good Climbing Record. In a recent test at Hiawatha, Kan., a truck built by combining a Dodge power plant with a Graham truck builder outpulled four other two-ton trucks in a hill climbing contest. Each truck was required to carry a load of two tons, start up the hill, stop half way up and then drive to the summit. The Dodge-Graham was the only one which reached the top.

A Torbensen internal gear drive is used in this new unit and according to Mr. Bullock the capacity is one and one-half and two tons. This, in view of the fact that the price is several hundred dollars lower than complete trucks of a similar capacity, offers an unusual value.

Ample Power Furnished. "The power and serviceability of the Dodge motor," asserts Mr. Bullock, "will make the combination truck a great favorite with truck fans and will throw into the balance a number of serviceable two-ton trucks."

"The Dodge Brothers have sanctioned the use of their power plant in the construction of trucks and have already offered to ship as many of their 'front ends' to dealers for this purpose as production will permit."

"KING" FIRST OUT WITH MANY NEW AUTO FEATURES

The King Motor Car company has been one of the leaders in the development of the American passenger car, both in originality of mechanical construction and in body design, asserts W. L. Killy of the Noyes-Killy Motor company.

"You may recall that in the very earliest days of the motor car's development, a King appeared on the streets with the en bloc motor, left side steer and center control, causing no end of wonder and comment."

"Doubtless you remember also, the debut of the four-cylinder King and the stir it created along automobile row because it embodies a rear spring suspension that was new to America."

Today, cantilever rear spring suspension, pioneered by the King, is used by numerous makes of passenger cars, both here and in foreign lands.

"Talking of old times! Do you remember the coupe body brought out by the King some seven or eight years ago—the one wherein the back of the body and the roof were gracefully blended into a handsome streamline effect from rear deck to windshield uprights? The curved glass front was also an innovation. This adaptation of old colonial ideas met with instant favor and was the forerunner of the streamline effect for all types of bodies."

"The King was the second American car to adopt the eight-cylinder motor and today it is recognized as one of the leaders in the multicylinder field."

"Possibly it has escaped your notice," further commented Mr. Killy, "that the sport type of body now so popular with many drivers was also introduced by the King at the New York Automobile show in January of 1917. The King Foursome, a copy-righted name for the King sport type, was exhibited for the first time at this show. And no greater compliment can be paid to any car than to have its style and design widely copied by other manufacturers."

CARE OF HORSES REQUIRES MUCH VALUABLE TIME

"Through the saving in time and work which the motor truck effects, labor can be released for other work without affecting the nation's haulage and deliver program," says Carl Changstrom of the Standard Motor Car company.

"I was recently talking with a man, who was finding it extremely hard to not only secure sufficient help, but the right kind of help to handle his teams. He had practically decided to give them up and invest in motor trucks, because he was convinced, after a thorough investigation, that he only needed about half the number of trucks and men as compared to his horse-drawn equipment to handle the same amount of business."

"Along this line the following newspaper clipping shows that this scarcity of help is being offset by the motor truck quickly and economically and without hardly any interruption while making the change:

"For Sale—Fourteen horses, three mares and four colts, which we have been using in city and country cartage work. We wish to sell them immediately as we cannot secure help necessary to drive and take care of them. We find it necessary to invest in motor trucks to take care of our business. These horses are sound, good stock, etc."

"All of which proves that not only has the motor truck created new transportation standards, but, with the growing scarcity of other equipment, it fills the vacancy in a made-to-order fashion."

How do you measure specific gravity of different gasolines? What is the real significance of the gravity of gasoline or kerosene?

If either fuel is heated too much won't it lose its pep altogether?—B. T. L.

I presume you mean determine its Baume gravity which is different from its specific gravity. The specific gravity is the weight of liquid compared with an equal quantity of pure water. Thus a cubic centimetre of water weighs one gram and water is said to have a specific gravity of unity. All comparisons are made with water as 1. Thus a specific gravity of three means the substance weighs three times as much as water. It is usual to measure gravities by means of a hydrometer which may be had with regular or Baume scale. The gravity has little significance. The initial and final cooling points are the real factors. If heated too much under pressure it will crack or split up into other compounds.

I am going to do some touting this summer and need a few tips. Is it a good idea if lots of traveling is done in the day and none at night to have the generator fixed so it won't overcharge the battery. Also is well water good to put in the battery or should I carry some distilled water along?

You can have the service station alter the charging rate for you. Also you might own the lamps a certain period during the day or use the starter a few times to partly discharge the battery.

Some well water is all right. Better take some distilled water along.

What can be done in an emergency if a pressure pump goes bad on the road and there is no oil feed? Looks to me like the bearings will burn if you keep going. I mean if the pump can't be fixed.—John Oleson.

The safe way is to so fill the crankcase with oil that you get splash oiling. Of course, there may be much

smoking, but rather a great deal of smoking and overloading than burned bearings and scored cylinders.

I have a Ford car and am going to hook up some batteries for starting. How many dry cells should I use? I have a six cell storage battery. How many cells should I use and how do you connect them?—E. Santini.

Four dry cells will do. Three cells of the battery connected in series will do the work.

Are liners for the tires the right thing? Seems to me as though they are all right but imagine they make the tire kind of stiff.—Novice.

Liners are excellent for worn tires, making it possible to get much additional mileage from them. They are not usually recommended for new tires.

What factor of safety is used in the average car's front axle spindle? Do these parts break very often?

What would you give as the common cause?—A. B. Doyle.

The factor of safety will vary between wide limits ranging from say about nine to as high as 50. A good average of all cars is about 27. I have heard of few cases of breakage. Crystallization is the usual cause.

Do they really use platinum for breaker points and vibrators? I thought that this stuff was so dear that it cost more than gold. Then how can they sell the points so cheap? Why would they use platinum anyway?—Doubtful.

They are not made of platinum, but often platinum tipped. Platinum is ideal because of all metals it is least affected by changes in temperature and therefore will not feel the result of continued arcing. Most points now are of an alloy steel.

Sometimes I will be driving along the road and I get good results with the spark advanced to a certain point. Then if I should move the spark lever for a hill and put it back where it

was before it will not run as it did. It don't always do that, but why should it change?—Adams.

The first thing to do is to lift the hood and watch the interrupter housing or distributor head (you do not say whether battery or magneto ignition) while someone moves the spark lever. Usually excess wear in the linkage cause this, but the trouble might be anywhere in the spark advance mechanism. What make of ignition system have you?

My motor runs fine at low speed and up to 35 miles an hour and when it gets up that far it seems to get so noisy and pull as if there was sand in it. It isn't so bad at 40 but then I can't keep it at that long enough and anyway I don't like to drive so fast. What makes it so noisy at 35?—S. Wolfe.

I do not know the make of engine, but usually in a case of this kind we say that the critical speed of the engine is reached. It often is called a "rough spot." You cannot eliminate it, but you will find that going slightly above or below that speed eliminates the vibration. It is caused by shaft vibration.

A says that it is possible to shift gears even from high to second without throwing out the clutch. B says the clutch must be thrown out for the gears will hit and maybe strip. Who is right? Also is it possible to have a five-speed transmission?—Amos B.

It is possible to shift without disengaging the clutch. It requires expert knowledge of the particular car being driven so that the gears can be brought to gear when their speeds are approximately correct. It is possible to have almost any number of speeds you want them, if the transmission is made large enough. Four speeds is the limit right now.

Rapid Fire Grease Gun.

Here is a method of putting lubricant into the rear axle in double quick time. Put a common funnel in the filler hole of the axle. Remove the cap and nozzle from the end of the grease gun, opening the whole front end of the gun. Put the end of the grease gun in the wide end of the funnel and hold it firmly, while screwing up the handle in the ordinary way. The grease will shoot into the axle in jig time and a rinsing with kerosene and wiping with a bit of waste will remove all traces of the operation from the funnel.

AS AN EDUCATIONAL FACTOR

"So Writes John J. Cobry From 'Over There' After Making 'Tour' of Bonnie Scotland.

UNCLE SAM'S ARMY IS BEST

"As an educational factor, Uncle Sam's army can't be beat," writes John J. Cobry, member of the 25th aero squadron, with the expeditionary forces abroad, to his mother, Mrs. Mary Cobry, 2821 Davenport street. In explanation, he details the following in his letter, dated April 24:

It was pretty hard to leave old Ayr. As I certainly did enjoy myself there for the last three months.

"We are quartered in nice barracks. 30 men in a house, with plenty of heat, seven blankets and most and best of all, a regular spring cot, a real mattress and two pillows. Not bad, eh? We are so close to the sea that I understand the sun shines very little and it is misty and dreary nearly all the time."

"All the beauties of Bonnie Scotland were certainly placed before us on our

trip. The country is beautiful at present and everything looks fresh and thriving. The whole country for miles on each side of the railroad track is plowed up and great flocks of sheep are in evidence everywhere. I have never seen so many foundries and blast furnaces as there are in England. I had no idea they were as large or covered as much ground as they do.

"In sending mail or other articles make the notation, 'via London' in the address. Will tell you where I am at the end of this letter, so if it is censored and cut out it won't hurt the letter."

True to his "hunch," the address was cut from the letter.

Irregular Firing.

Moisture gathering on the exposed part of the porcelain of the spark plug will loosen cause irregular firing. This trouble may be cured by greasing the porcelain with vaseline or hard grease.

Allen
New Series 41

What Allen Owners Say—

In the files of The Allen Motor Company are hundreds of unsolicited letters from owners.

These few expressions are typical. With 22,000 miles service Kansas owner says:

"Its performance has been consistent and reliable. The engine runs as quietly as the day I purchased the car."

After 3,734-mile tour through The Adirondacks, the Green and White Mountains, the Cumberland and Alleghanies, a Chicago owner says:

"My Allen ran like a deer all the way there and back, never for a moment falling in any way to perform its full duty. This car is certainly a wonder."

North Dakota man, after 5,000 miles ownership, says:

"I believe it to be the best on the market at the price. It is durable, not difficult to manage, and one of the easiest riding cars I ever was in."

Mississippi Gas Engineer adds his approval:

"tried out under all kinds of conditions, in mud, rain and sleet, and has never been found wanting * * * with a ten month average of 19 1/2 miles per gallon."

For people who must get about and get things done, Allen cars are giving maximum service at minimum cost.

If you want and need this brand of service, call today for an Allen demonstration.

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CARL CHANGSTROM, President, Western Distributor,
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DEALERS—If you can handle a big territory our proposition is of unusual interest to you.
We have cars and can make immediate delivery.
Factory Address The Allen Motor Company, Fostoria, Ohio

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THE Iowa COMMERCIAL CHASSIS

for DODGE BROTHERS' CAR

Built Especially for the Dodge Not a Universal Unit

PRICE \$520
f. o. b. Ottumwa

Owing to the wonderful "lasting qualities of the Dodge Brothers Motor Car and its abundant power, it is holding a great deal of attention as a unit for truck construction. There is a very steady, growing demand for a truck assemblage using the Dodge Power Plant.

Specifications

AXLE—Russel Internal Gear Driven—using for the load carrying axle solid steel 2 1/4 inches in diameter. All mechanism enclosed, affording perfect cleanliness, quiet working and efficient lubrication.

GEAR RATIO—7-8-10.

DRIVE SHAFT—2 1/2 inches, special tubular 4-point insuring flexibility, durability and protection against jar.

WHEELS—14 spokes, 2 inches square.

TIRES—34x4 or 32x4, optional.

SPRINGS—12 leaves, 3 inches wide, 54 inches long.

SPRING SHACKLE BOLTS—3/4 inch nicked steel, made with oil way. Grease cups provided.

FRAME—Laps 4 feet on Dodge car.

WHEEL BASE—Standard, 140 inches.

Fits the Dodge Perfectly

The Iowa Motor Truck Co. has constructed a truck building unit especially for Dodge cars, which can be attached in a few hours by anyone. It fits the Dodge chassis perfectly and requires no mechanical skill to convert it into a two-ton truck.

Extra Heavy Axle

A feature in the construction of the Iowa unit for Dodge cars is the extra heavy solid steel axle, 2 1/4 inches in diameter. This assures ample strength and will permit overloading at least 10%.

In addition to the Dodge unit we build a unit for all cars except cars with a rear axle transmission.

Prices of Ford and Universal Units

1-Ton Ford Unit, 116-inch Wheel Base, 32x3 1/2-inch Tires	\$420.00
1-Ton Ford Unit, 144-inch Wheel Base, 32x3 1/2-inch Tires	\$445.00
2-Ton Ford Unit, 116-inch Wheel Base, 32x3 1/2-inch Tires	\$520.00
2-Ton Ford Unit, 144-inch Wheel Base, 32x3 1/2-inch Tires	\$545.00
1-Ton Universal, Internal Brakes, 130 to 140-inch Wheel Base, 32x3 1/2-inch Tires	\$435.00
2-Ton Universal, Internal Brakes, 130 to 140-inch Wheel Base, 32x3 1/2-inch Tires	\$535.00
34x3 1/2-inch Tires and Wheels, \$15.00 additional.	
34x4-inch Tires and Wheels, \$25.00 additional.	

Get in Touch With Us for Full Information

Iowa Motor Truck Company

Ottumwa, Iowa.
Omaha Branch, 606 First National Bank Bldg.
Phone Tyler 38 and 39.

Henney Commercial and Truck Bodies

No. 225 Henney Commercial Body—Just the body for the grocery and meat market. HIGH GRADE MEDIUM PRICE. Will fit your Ford chassis.

No. 405 Henney Truck Body for the Ford Ton Truck—A high-grade body at a reasonable price. We have twenty-four other styles to fit any Ford car, and we mount them while you wait.

Come in and see our line and get our prices.

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Leavenworth Street, Between 8th and 9th. Phone Douglas 2648.