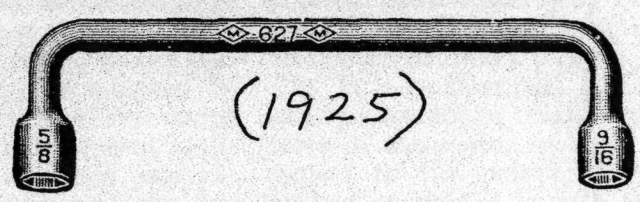


National
FORD TOOL
Collectors

NOVEMBER	2009
VOLUME	12
ISSUE #	4

1

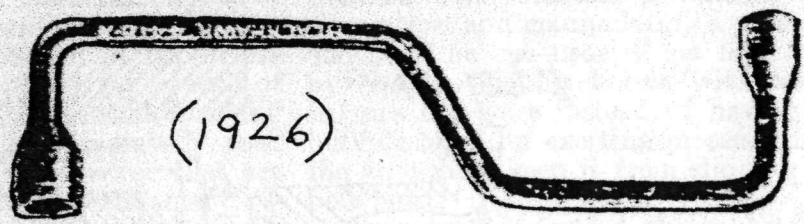
**No. 627 MOSSBERG CARBURETOR BOLTS AND
GENERATOR SCREWS
DOUBLE END WRENCH FOR FORD CARS**



Specially adapted for carburetor bolts and generator screws and fits 32 other adjustments on Ford cars.
 Openings: $\frac{5}{8}$ and $\frac{9}{16}$ inch hex.
 Construction: Chrome manganese steel. Deep sockets and $\frac{1}{2}$ -inch bar of one-piece construction.
 Finish: Burnished nickel. Length: $10\frac{1}{4}$ inches.
 Shipping Weight: Six wrenches in carton, $4\frac{1}{2}$ pounds.
 No. 627 Double End Wrench.....each \$**.90**

Editor :

The Ford parts catalogs for 1925, 1926, and 1927 list a 5Z-817 double end socket wrench, 9/16" and 5/8", for carburetor and generator bolts. The examples I have seen are exactly like the Mossberg wrench shown above. They have the Ford script, the Mossberg "M inside a diamond" manufacturers mark, and the Ford part number 5Z-817.



Diameter handle $\frac{1}{2}$ in., socket sizes $\frac{9}{16}$ and $\frac{5}{8}$ in.
 Specially designed for Ford generator head bolts and carburetor flange bolts.
 No. 4418X—Each\$**1.00**
 Weight 1 lb.

Feb. 15, 1927.

1,618,046

R. W. BARB

SOCKET WRENCH FOR FORD AUTOMOBILES.

Filed Sept. 4, 1924

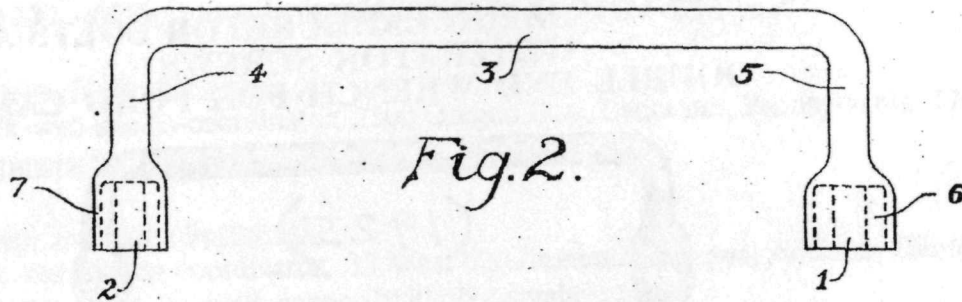


Fig. 2.

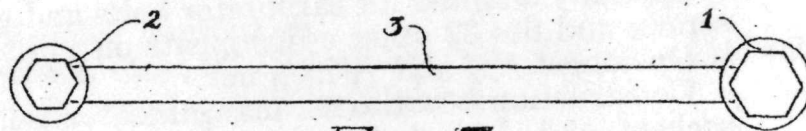


Fig. 3.

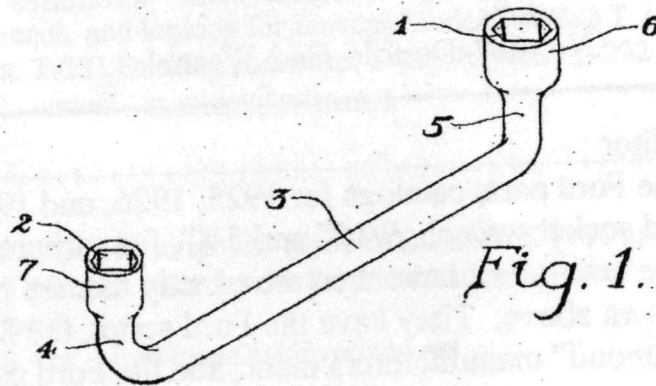
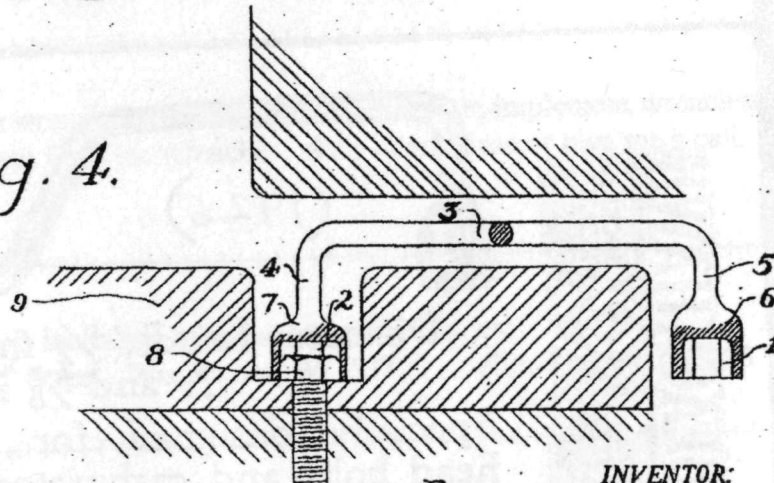


Fig. 1.

Fig. 4.



Witnesses:

1. Josephine D. Rose
 2. Helen M. Call

INVENTOR:
Roscoe W. Barb.

BY
A. B. McCall.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

ROSCOE W. BARB, OF SPRINGFIELD, ILLINOIS.

SOCKET WRENCH FOR FORD AUTOMOBILES.

Application filed September 4, 1924. Serial No. 735,801.

This invention relates to a class of combination socket wrench such as may be ordinarily needed about automobile motors for manipulating bolts and nuts on the same.

5 A particular object of my invention is to provide a combination socket wrench of the character herein described and claimed and which in its merited design is adapted to provide easy access to several of the more difficult recesses about the more recent models of Ford automobiles and more particularly such places as the retaining bolts for the carbureter and the starter generator.

10 A further object of my invention is to provide a combination socket wrench of the character herein described which in the nature of its design is adapted to provide an arrangement whereby the hand power controlling the movement of the wrench may be applied in the same pivotal plane in which the point of application of the wrench to the bolt or nut is the center thus removing the usual cause for socket wrenches slipping off the bolt head or nut; especially in such inaccessible places about the car motor as may make it impossible to get any extra hand pressure on top of the wrench to help hold the wrench from slipping.

20 The desired object of my invention is attained by the socket wrench for Ford automobiles, described in the annexed specifications, recited in the claim and illustrated in the accompanying drawings in which like reference numerals indicate the same structural parts in the several figures.

30 In the drawings Fig. 1 is a perspective of the wrench of my invention. Fig. 2 is a side elevation of the wrench of my invention. Fig. 3 is a top view of the wrench of my invention. Fig. 4 is a sketch showing how the wrench may be successfully used in close places about a car motor that are not easily accessible where satisfactory results may be obtained with this wrench without any difficulty.

45 The preferred embodiment of my invention is illustrated in the several figures above mentioned and the desired means of operating the same will be clearly set forth in the instructions which follow.

50 Referring now to the structural detail of my invention it will be observed that the sockets on opposite ends of the wrench for the sake of convenience should be of unlike size and a size in each case which will be the most practical for the greatest number of

bolts or nuts that are likely to be found about the motor of a well known automobile and more particularly such bolts and nuts as are not easily accessible because of some mechanical obstruction that may stand in the way of securing a satisfactory grip with a wrench of ordinary design.

60 It is a matter of common experience among automobile mechanics to find certain parts of the motor in such a position with respect to the bolt or nut desired to be worked on that it is with the greatest difficulty that the mechanic is able to secure a firm wrench grip on the head of a bolt or nut without the wrench slipping off and it is with this difficulty in mind that the inventor who is a practical mechanic has designed the wrench which is the subject of this application.

75 In this connection it seems that where previous efforts have been made to design a socket wrench which would reach the more inaccessible bolts and nuts that the handles for such wrenches have been formed in such a way that where the hand power is applied for normally turning the bolt that the direction of movement and the relative position of the hand in turning the wrench has had a tendency to cause the wrench socket to slip off of the bolt head even in spite of efforts that have been commonly made in such cases to hold the wrench down securely on the bolt head by means of the hand not used in turning the wrench.

80 It is to be further observed in this respect that when the mechanic is working in such close places and manipulating a wrench with one hand he can usually get better results by having one hand free with which to balance his poise instead of having to use his free hand for exerting pressure down on the wrench to keep it from slipping off the bolt head.

85 The novel design of the socket wrench of my invention will prevent the difficulties above mentioned for the reason that it is designed on scientifically correct mechanical principles of operation.

90 Referring to the details of construction, a method of manufacture of a wrench of this character would be to form the knobs 6 and 7 and sockets 1 and 2 at corresponding ends of a straight handle after which handle 3 is bent near the ends to form the wrench necks 4 and 5 respectively parallel with each other and at right angles to the handle

—3— and on the same side of the straight body portion.

It will now be noted that when the wrench is thus formed and ready for use the mechanic may use the wrench with great satisfaction in difficult situations about the type of car for which it is best adapted.

For instance referring to Fig. 4 if the mechanic desires to tighten a cap screw 8 with this wrench in a difficult place about the motor 9 he may for example place wrench socket 2 over the head of cap screw 8 where wrench neck 4 and handle 3 make integral connection with neck 5 and knob 6 at the opposite end of the wrench which are jointly used normally as a hand grip for the mechanic when turning the cap screw 8 in which case the knob 6 is adapted to normally fit snugly into the mechanic's hand in manipulating the wrench.

It will be seen from the foregoing description of the wrench of my invention that when the hand power of the mechanic is applied to knob 6 moving the wrench in an arc about a central axis located at the longitudinal center of cap screw 8 that the exerted hand pressure being in the same pivotal plane with the said cap screw head will properly poise the wrench socket over the cap screw head and thus have a tendency to hold the wrench on the cap screw without the necessity of exerting extra pressure on the wrench in order to hold it down on the cap screw, a thing which is very difficult to do in places that are not easily accessible about the car motor.

It will be observed that when a mechanic

is working in close places under or around a Ford car motor and is using a wrench he usually needs one hand on the wrench and the other for stabilizing his poise and this is particularly true where it becomes necessary to manipulate the retaining cap screws holding the carbureter, the starter generator, connecting rod nuts, crank case bolts and nuts, manifold studs, dust pan nuts, differentials, housing nuts, universal joint bolts and nuts and so on.

I do not wish to be confined to the use of hexagonal sockets as shown for sake of convenience and existing use on present car models but it will be seen that the same merits will hold good where square sockets are used or square headed bolts, nuts and studs.

Having thus described the nature of my invention what I claim as new and useful and desire to secure by Letters Patent is:

A wrench comprising a straight body portion having integral arms carried by the ends of said body portion at substantially right angles thereto in parallel relation to each other on the same side of said straight body member and in the same plane as the body portion and provided with nut receiving recesses in their ends, said arms of equal length forming handle members when either arm is in engagement with a nut, whereby a leverage action may be applied to the nut in the plane of the nut.

In witness whereof, I hereunto set my hand and seal, this 21st day of August A. D., 1924.

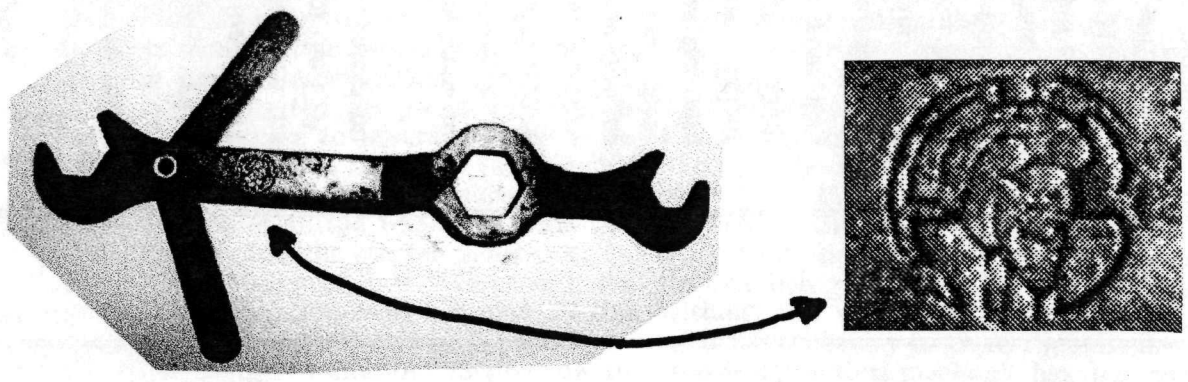
ROSCOE W. BARB. [L. S.]

SO.....WHAT DO WE HAVE ???

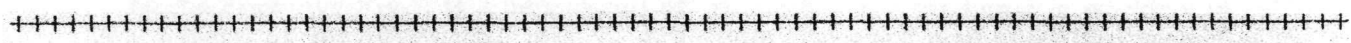
1. An ad from Mossberg in 1925.
2. Ford parts book entries starting in 1925 for the same wrench, manufactured by Mossberg.
3. An ad from Blackhawk in 1926 for virtually the same wrench with the handle Shaped differently.
4. A patent application dated 1924 for the same type of wrench as the Mossberg/Ford wrench.

It is interesting to note that the patent was finally granted in 1927, the very year that production of the Model T ceased, thus making the wrench of value only to those folks who worked on "older cars". Keep in mind that the advertisement dates are only for what ads we have available to us. Blackhawk and/or Mossberg could have been in production before those dates. Also, fixed socket type wrenches were on the decline by the late 1920's and detachable socket sets were becoming more available and would soon make fixed socket wrenches obsolete. AND, who was Roscoe Barb? Did he work for one of the companies or was he just a solo inventor? Who had the original idea? Was there industrial espionage involved? OK, you tool detectives, get to work !!!

In FTT, November 2006, we published a small (bad) image taken from a Fordson parts catalog of a magneto wrench # N-17023 (old number S-1543) . This wrench was for the American Bosch magneto that was used starting in 1929 in place of the old flywheel magneto . We asked readers for any further info. Dale Radiel has responded saying he has a wrench, pictured below, that appears to be like the catalog image. His wrench has the old American Bosch logo (enlarged below) : a rounded AB with a drawing of a pilot's head, with helmet and goggles, called "Fritz the Flyer", capitalizing on the great success Bosch had in producing aircraft magnetos. Now the questions are : is this wrench from the earlier days, or did Bosch supply this same wrench with the Fordson magnetos, and are there versions that were actually stamped with the Fordson part number ? Time will tell, maybe.



Dale Radiel also asks questions about the 01A 17017B wrench for sparkplug and cylinder head nuts. Regarding the number following the part number, was this anything other than a forging number ? Is there any way to identify the particular wrenches that came with the cars ? From 32 to 92, I am lacking number 33. Was there a 33 made ? Were there any numbers before 32 or after 92 ? Editor: The parts catalogs we have available indicate the wrench was issued with tractors 9N, 2N, 8N, and NAA from 1939 to 1954. It was issued with the 85 and 95 horsepower cars from 1938 to 1948. For dating purposes we know that # 69 and prior had Ford script, and # 70 and above had Fomoco script and the Fomoco logo was adopted around 1950. We have not uncovered any information as to certain numbers being issued to either cars or tractors. Anyone with further information, please submit it.



WANTED TO BUY : Tim Daley, 810-724-2866 or email to : daleynews4@yahoo.com

1. Ford tractor spark plug socket and handle issued with the NAA (Jubilee) Ford tractor. The September 1952 Master Parts Catalog lists the tool as : 2C 17017-A Wrench (spark plug socket) and 2C 17094-A Handle (spark plug wrench). This tool was issued in a kit with a new tractor. The kit part number is NAA 17003-A and also included the 01A-17017-B spark plug/head bolt wrench. I am looking for just the socket and handle.
2. Original grease gun for Ford 9N tractor. Part number 9N-17125-A.
3. An original Ford 9N tractor jack part number 9N-17078, assembly. Individual part numbers : Jack 9N-17080 and Jack handle 9N-17081.

FOR SALE : complete, original N-series Ford tractor tool kits w/new reproduction tool bag. \$ 150.00 plus shipping. Also have Model A tool kits available. Individual tools also available as well as some Model A and T tools. Email me with what you need. Also WANT circle M Moore logo and Ford logo plow wrenches with 9N17014 part number and mold/die/lot numbers 1,2,3,4,6,7,8,30, and 31.

Proper repairs cannot be made without the use of this set of tools

THE F. B. Generator and Motor Repair Tool Set consists of a number of high grade tools as illustrated in this folder. They are specially designed for quickly and easily making repairs on the generator and motor of the F. A. starting and lighting system on the Ford car.

This set of tools has been designed, with the assistance of Ford engineers, after a thorough study of the entire subject. Careful trials of various designs of tools were made and these have been selected as the ones that will give the most efficient and satisfactory results. They are ideally suited for your use. Every tool in the outfit is needed and the time and money saved by their use will quickly pay for their installation. We recommend the purchase of the complete set, as you will eventually need all of them. However, if you are equipped with some of these tools, you can purchase only those additional ones that you need.

The price of the complete outfit is \$96.95. The price of each separate tool is shown with description under the large illustration. A special discount is allowed to Ford Service Stations.

This outfit enables you to make your electrical repairs in an economical, modern, uniform manner, and that means more profit to you out of the same job. Shipment can be made at once.

Order should be accompanied by check or money order.

Other F. B. Products

- F. B. Motor Generator Sets
- F. B. Charging Panels
- F. B. Discharge Rheostats
- F. B. Battery Cover for Fords
- F. B. Battery Tester
- F. B. Coil and Magneto Tester
- F. B. Test Set

Write for Bulletins

Ask us for information on any of your electrical problems.

F. B. Electric & Manufacturing Co.
DETROIT, MICHIGAN

F. B. Motor and Generator Repair Tool Set

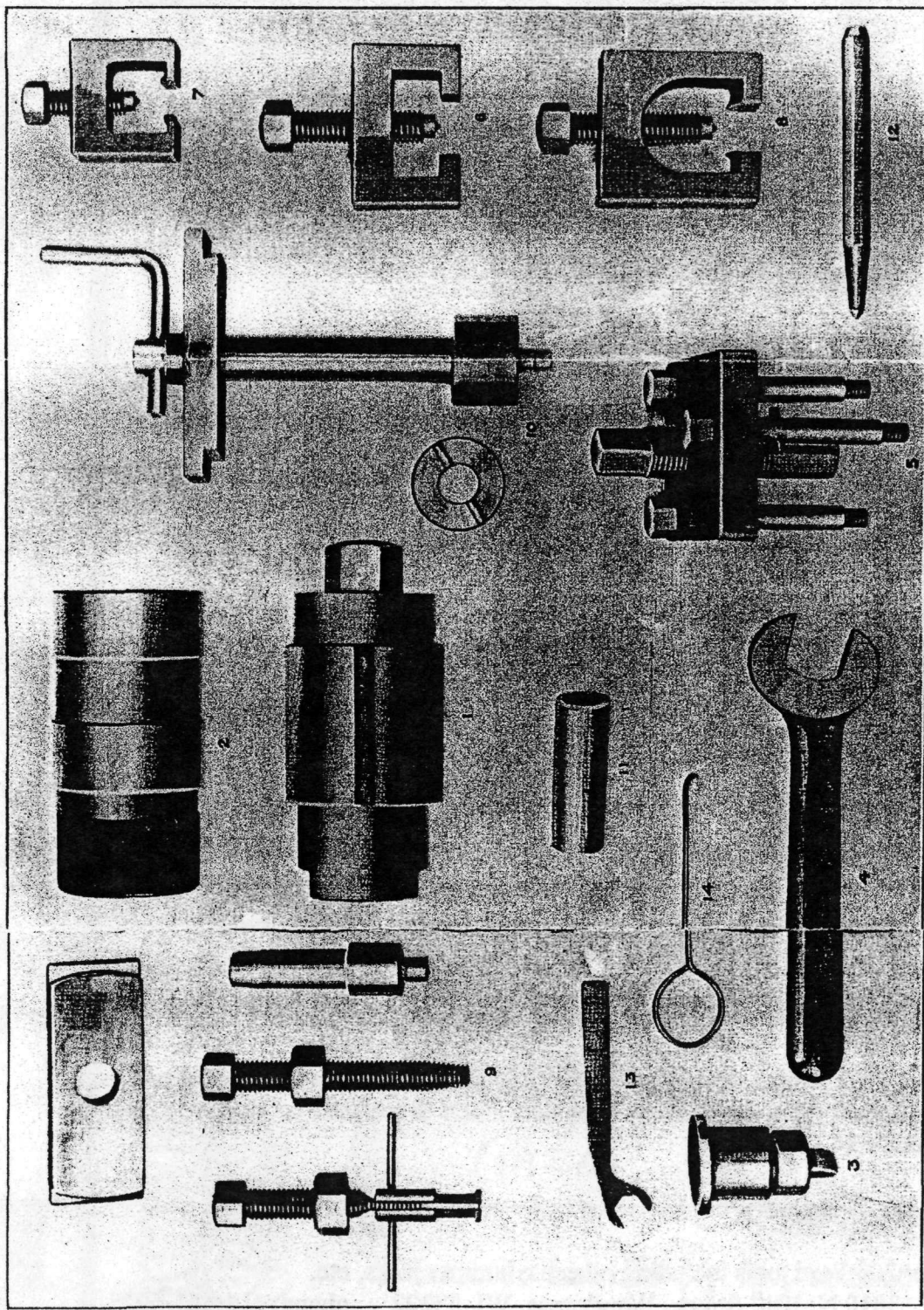
for use on the Ford F. A.
Lighting and Starting
System

1920



Here is a set of time and money saving tools built specially for the Ford Service Station.

Sold and manufactured by the
F. B. Electric & Manufacturing Co.
DETROIT, MICHIGAN



- 1—Pole Piece Spreader.....\$19.00
For expanding motor and generator frame so as to get the proper air gap between the armature and pole piece, which air gap must be maintained within a few thousandths of an inch in order to give the best performance.
- 2—Pole Piece, Double Gauge.....\$15.00
A special "Go" and "No Go" gauge for measuring the polar diameter of generator and motor and for checking up the air gap.
- 3—Pole Piece Screw Driver.....\$ 7.00
A specially designed fixture for disassembling and re-assembling the pole pieces from motor and generator frame.
- 4—Screw Driver Wrench.....\$.70
A standard wrench for operating pole piece screw driver.
- 5—Armature Ejector.....\$12.25
Special tool for pushing armature assembly and beating out of drive end bonnet.
- 6—Pinion Puller.....\$ 3.75
Used for pulling generator drive pinion of generator shaft.
- 7—Small Bearing Puller.....\$ 7.25
Used for pulling small ball bearing off generator shaft.
- 8—Large Bearing Puller.....\$ 9.50
Used for pulling large ball bearing off generator shaft.
- 9—Combination Bonnet Fixture.....\$13.25
A combination of three separate tools used to pull the ball bearing out of the generator end bonnet and to pull U. C. bushing from motor end bonnet. It is also used to accurately insert a new bushing in the motor end bonnet.
- 10—Brush Sander.....\$ 7.50
A combination sander for both generator and motor brushes complete with one extra drum. Made with two diameter bearing to accurately center sander in.
- 11—Bearing Driver.....\$.95
Used for driving ball bearing on generator shaft.
- 12—Pole Screw Punch.....\$.25
Used for locking pole screws in frame.
- 13—Third Brush Wrench.....\$.30
Used for setting generator third brush.
- 14—Brush Lifter.....\$.25
Used for lifting brushes on generator and motor.

This F.B. Company Motor and Generator Repair Tool Set brochure from 1920 was submitted by Douglas Skinner, who obtained it from the oldest Ford dealer in Vermont, Ted Green Ford.



CLUB CONTACT PERSONS

Club business, dues, back issues, etc.

Steve Thompson, secretary – treasurer, 6620 East Outer Road, Norwood, Missouri 65717
Phone (417) 746 – 0255 email steveth41@centurytel.net

Research material for the Ford Tool Reference Manual

Don Geddis, manual editor, 116 Ashland Road, Summit, New Jersey 07901
Phone (908) 277 – 6259 email drgeddis@comcast.net

Web site www.fordtoolcollector.org

Jim Summers, web site co-coordinator, 2500 Oregon Pike, Lancaster, Pennsylvania 17601-4823
Email jrsommers@comcast.net

Web site www.fordtoolcollector.org

Dan Manola, web site co-coordinator, 19 West 520 Stonemill Avenue, Addison, Illinois 60101
Phone (630) 543-8744 email sponge19501924@yahoo.com

Articles, letters to the editor, classified ads

Phil Anderson, newsletter editor, 1420 Hidden Lake Drive, Placerville, California 95667
Phone (530) 622-1343 email soquili@earthlink.net

+++++

WANTED: Ford 5-Z-821 wrench, and looking for Stevens Model T tools : T-121 Driver, T-122 Puller, T-150 Driver, T-213 Fore-out, T-231 Bushing Extractor, T-290 Refacer, T-292 Refacer.
Jeff Humble, (231) 780-5609. email humblej@gdls.com

+++++

WANTED: T-4069 tire iron with Ford script and Made in Canada. T-1917 open end wrench with Ford script and Made in Canada. Open end wrench with Ford script on side 1 and 01A17016 V8 on side 2.
Enfo 01A17016 open end wrench.
Jim Koons 717-838-1998 or JimKoons208@verizon.net

+++++

FOR SALE : Ford and Fordson wrenches. Also many different farm implement wrenches and companies. I also have 3 different Cadillac wrenches. Stop in any time or give me a call.
Dusty Hanan 608-884-0413

+++++

FOR SALE. Over 200 Ford tools including oil cans, bumper jacks, etc.
Warren J. Baier 3810 N. 101st Street, Wauwatosa, WI 53222 phone 414-461-6925

+++++

CHECK OUT OUR WEBSITE. Extensive work has been done with more to come.
www.fordtoolcollector.org