



AUTOMOTIVE
DEALERS' CATALOG

STEWART-WARNER CORPORATION
CHICAGO, ILL.
U. S. A.

Printed in U. S. A.

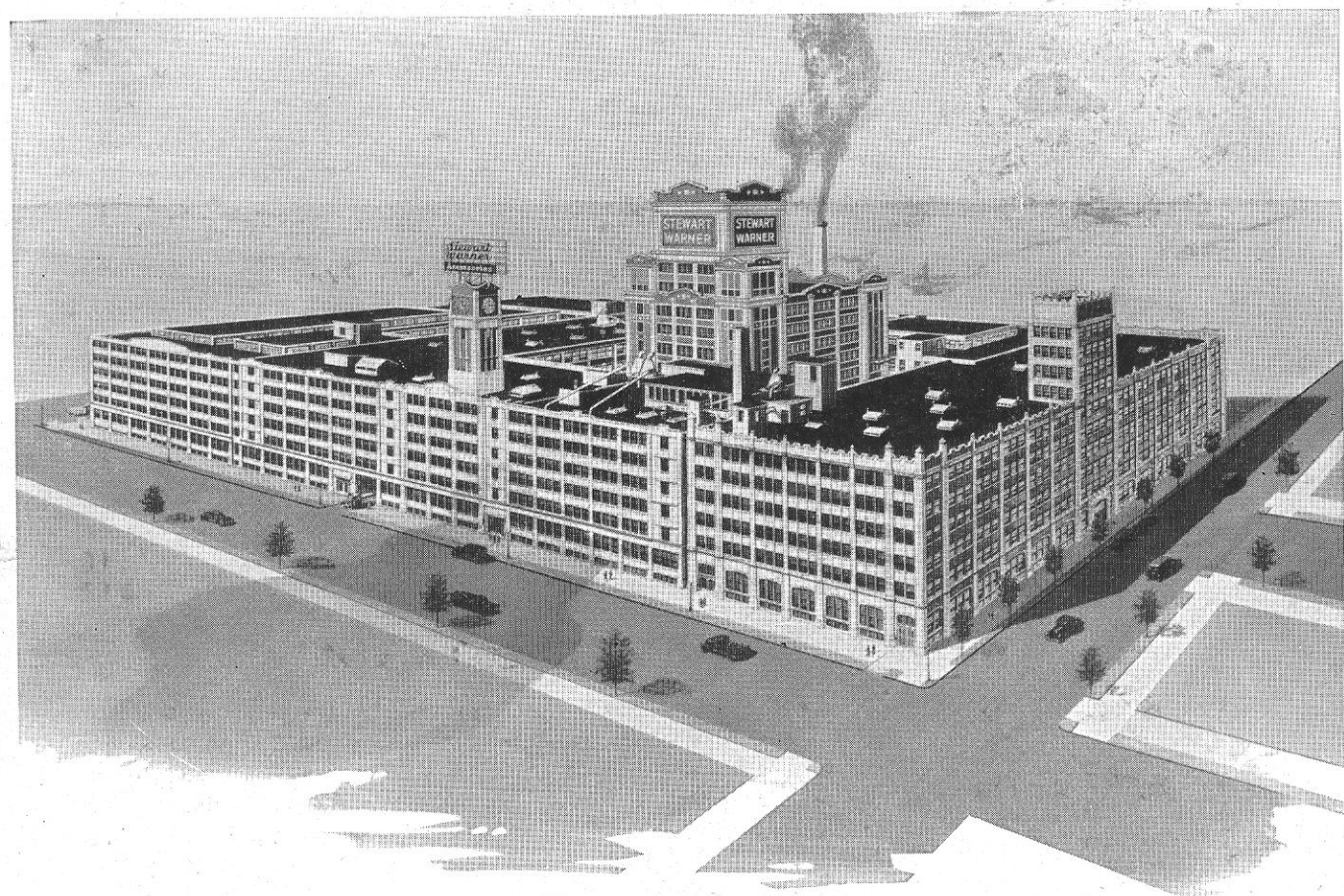


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The Largest Accessory Manufacturing Plant in the World Stands Behind You, as a STEWART-WARNER Dealer



"The Home of Stewart-Warner Accessories"

JUST above is shown the great Stewart-Warner factory at Chicago; the largest of its kind in the world. It contains nearly one million square feet of floor space; employs over five thousand skilled workers and is completely equipped with the most modern machinery operating under the most advanced methods of production. It is here that the complete line of Stewart-Warner Better Accessories for Automobiles is made, under conditions that assure quality merchandise at the lowest possible price. Stewart-Warner pioneered the accessory field twenty-six years ago and, by the constant manu-

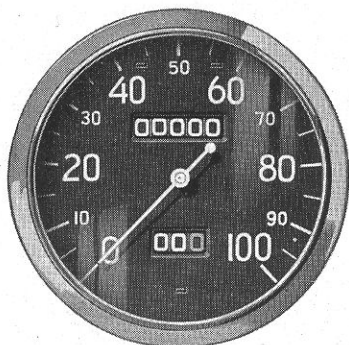
facture of quality merchandise, they have become world leaders in the automotive field today.

Then, too, Stewart-Warner now controls as subsidiary organizations The Stewart Die Casting Corporation, Bassick-Alemite Corporation, Alemite Corporation (Formerly The Bassick Mfg. Co.), The Bassick Company and the Stewart-Warner Alemite Corporation of Canada, Ltd. Each of these concerns is also a leader in its particular field, so that products for which Stewart-Warner is directly responsible are now used the world over. You, the Stewart-Warner Dealer, are backed by one of the largest manufacturing organizations in the world.

See Special Price List for Western and Canadian Prices

SPEEDOMETERS

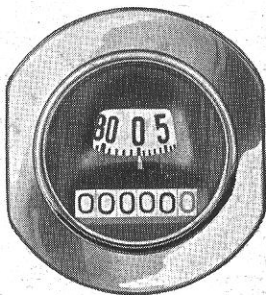
IN ordering a Stewart-Warner Speedometer for replacement, give model number stamped on back of one on car, or give make, model and year of car for which it is intended.



Model 509 Speedometer

Model 509 Speedometer is equipped with the new pointer type indicator and dial, making it not only easy to read, but also imparting to the instrument a smart appearance in perfect harmony with other new panel units of the car. Magnetic type, with temperature compensator. The dial is available either with white figures on a black ground, or the reverse. Any speed range required. Season and trip odometers.

Model 509 Speedometer.....\$12.00



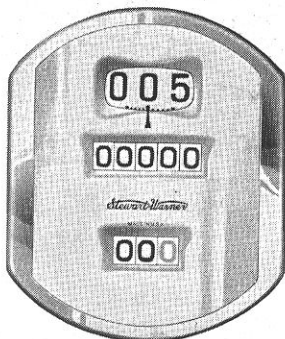
Models 413 and 366

These two models are similar to Model 600 except that they are not equipped with a trip odometer, and are slightly smaller in size. Magnetic type, with speed range from zero to eighty miles per hour. Compensated for all temperature variations. Model 413 differs from Model 366 in that it operates with a small diameter casing and tipless cable. Model 366 utilizes the standard cable with attached tip.

413-F used on Ford 1931.

Model 413 Speedometer (tipless cable).....\$6.00

Model 366 Speedometer..... 6.00



Models 600 and 417

These models have achieved recognition as one of the most sturdy and satisfactory instruments ever produced. They are standard equipment on many modern cars. Speed range to seventy-five miles per hour. Compensator for temperature regulations. Model 600 utilizes the standard cable with attached tip; Model 417 has a small diameter casing and tipless cable. Model 600-A used on Model "A" Ford cars 1930.

Model 600—Speedometer. For cars other than Ford "A".....\$12.00

Model 600-A—Speedometer. For Ford "A" installation..... 8.00

Model 417—Speedometer—(Tipless cable)..... 12.00

Model 280 Speedometer may be replaced with this later type—Model 600.

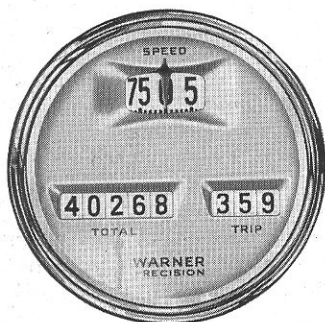


Model 131 Speedometer

This popular instrument has been used for years as standard equipment on most U. S. cars and is a big replacement item. Operates on magnetic principle, insuring accuracy at all speeds.

Model 131—Speedometer.....\$15.00

SPEEDOMETERS



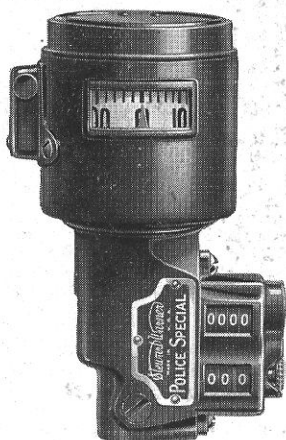
Model 79 Speedometer

The Warner Precision—a speedometer of supreme accuracy. Fully compensated for precise operation at all temperatures. Speed cup pivots supported by sapphire jewels. Admirably adapted for use on large highway busses and trucks. Specify make, model, year, axle ratio and tire size of car when ordering.

Model 79.\$48.00

Truck Speedometer, Model 74-A

The heavy, durable, black enameled case of this instrument is sealed to prevent tampering with mileage odometers, a distinct advantage to fleet owners. Dash mounting tilts upward for easy reading. Trip odometer can be reset to any tenth of mile. Specify make, model, year, axle ratio and tire size of car.



Model 74-A. Complete with driving equipment\$35.00



Motorcycle Speedometer, Model 84

Made to withstand the inherent shock and vibration of motorcycles and retain its accuracy. Speed dial locks at touch of button. Pivot shaft on sapphire bearings; compensated for temperature changes; indirect electric illumination. Finished in glareproof black enamel. Total and trip odometers. Rear wheel sprocket drive. (Speed range, 100 miles.) Specify make, model, year, tire size.

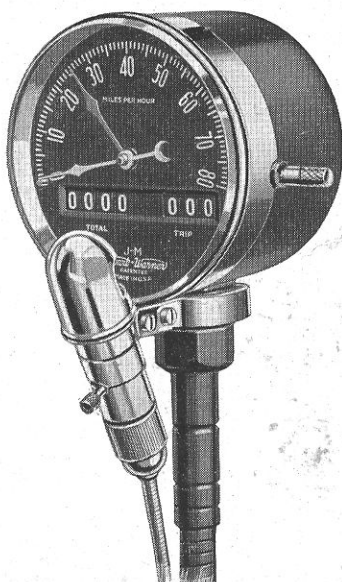
Model 84-A. For general use, complete with driving equipment. \$40.00

Model 84-B. Same, except with "Police Special" name plate . . . \$40.00

J-M Motorcycle Speedometer, Model 298

Centrifugal type; hand free from oscillation at all speeds. Maximum hand records highest speed attained and can be reset at will. Electrically lighted. 100-mile speed range. Sprocket drive from rear wheel. Easily installed.

Model 298. J-M Speedometer for motorcycles, complete with driving equipment.\$20.00
With lights.\$22.00

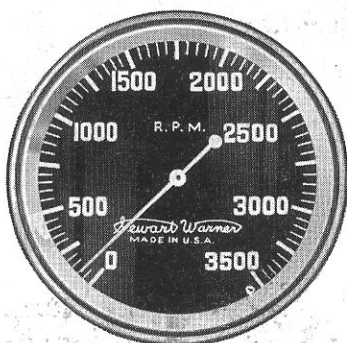


Warner Truck Odometer, Model 76-A

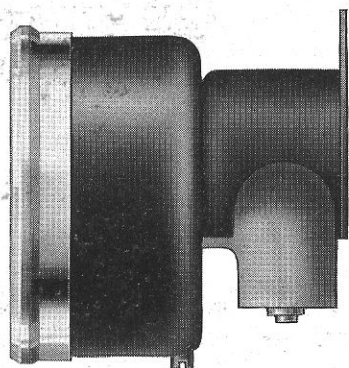
Provides check on gas, oil and tire mileages. Total mileage, 100,000 miles. Trip, 100 miles. Heavy aluminum case in black enamel finish. Dash mounting. Specify make, model, year, axle ratio and tire size of car.

Model 76-A. Complete with driving equipment.\$18.00

TACHOMETERS



Tachometer Models 521, 522 and 523 all house the same type of mechanism—the magnetic type fully compensated for temperature changes and the same as that of the 509 type speedometer now standard equipment on so many automobiles. These have proven to be the finest instruments ever made in large production, not only as to accuracy but as to durability and reliability. Lubrication for a long period is supplied by an oil wick in the die cast frame. Each of these models is available with dial similar to that shown at the left $2\frac{3}{32}$ " in diameter graduated from 0 to 500, 0 to 1500, 0 to 2500, 0 to 3500, 0 to 5000 or 0 to 8000. Other dials can be supplied on orders for large quantities at somewhat higher prices. These are also available to read either clockwise or counter clockwise. Shaft No. 63300 is used with all these. As shaft length and type of drive varies with conditions of use they are not included in the prices listed here.



Model 521 Tachometer

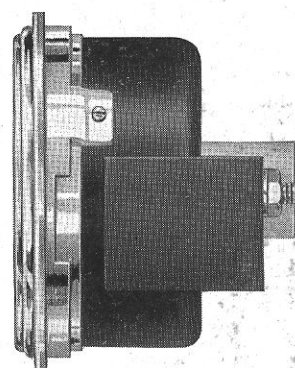
For front of board mounting with three screws, one on the vertical center line and two on the horizontal center line. The angle joint can be turned to the right or left to avoid sharp bends in the flexible shaft that drives it. The bracket can be attached open-side-up and the joint turned up to meet a shaft coming from above.

Model 521—Tachometer.....\$15.00

Model 523 Tachometer

Same as Model 522, except with an angle joint that may be rotated to any angle to avoid sharp bends in the flexible shaft by which it is driven.

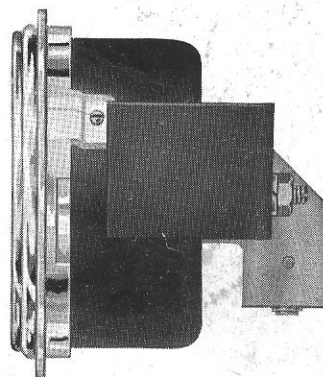
Model 523—Tachometer.....\$15.00



Model 522 Tachometer

For flush mounting from the front through a $3\frac{7}{16}$ " hole in instrument board from $\frac{1}{8}$ " to $\frac{3}{4}$ " thick. The U shaped clamp is detached, the instrument inserted, then the clamp placed over two studs on the back is drawn up by nuts so it clamps the board between it and the front flange. Used where the shaft can come from the back in a long radius (8" or over) bend.

Model 522—Tachometer.....\$14.00



TACHOMETERS



Model 424 Aircraft Tachometer

A centrifugal instrument of the most advanced design, approved and used by the U. S. Navy, Bureau of Aeronautics. Indicates crank shaft speed from 500 to 3,000 R.P.M. (in evenly spaced graduations of 20 R.P.M.) when driven at one-half crank shaft speed. Pointer and dial figures luminous. Sturdy and dependable; weighs but $11\frac{3}{4}$ oz. Not affected by temperatures or vibration. Braided, waterproof whipcord shaft, illustrated on page 26. Also suitable for any installation requiring a precision-type instrument.

Model 424, Aircraft Tachometer.....\$60.00

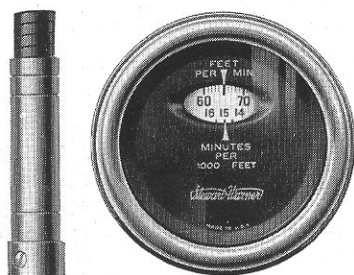
Model 83 Tachometer

The Warner Precision—a tachometer of supreme accuracy—Embodying all the quality features of the Warner Precision Speedometer—fully compensated for precise operation at all temperatures. Speed cup pivoted in sapphire jewels.

Model 83—Warner Tachometer.....\$48.00



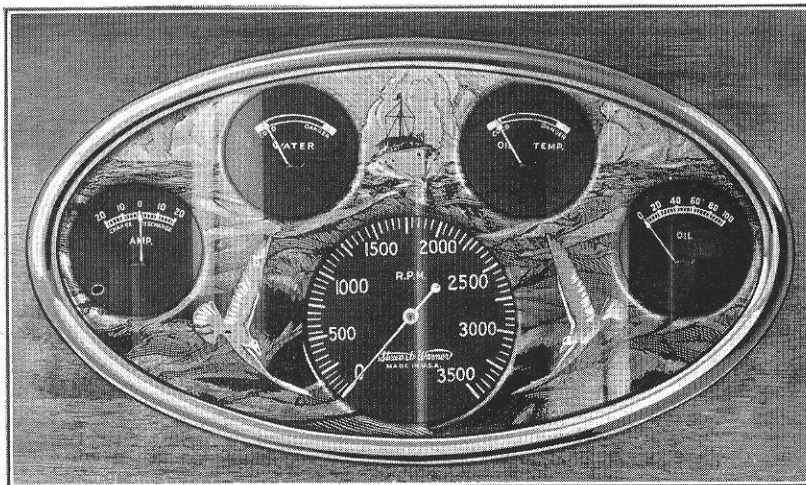
Motion Picture Tachometer—Model 314-H



Shaft attaches to shutter shaft of projection machine—head mounts conveniently on wall. Dial calibrated for both "Feet Per Minute" and "Minutes Per 1,000 Feet," enabling operator to take either reading at a glance. Attractive black enamel and nickel finish. Supplied with No. 60400—36" shaft, illustrated.

Model 314 H—Complete with Shaft.....\$15.00

MARINE INSTRUMENTS



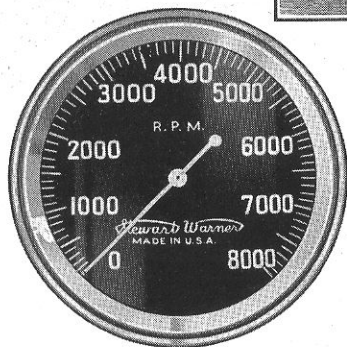
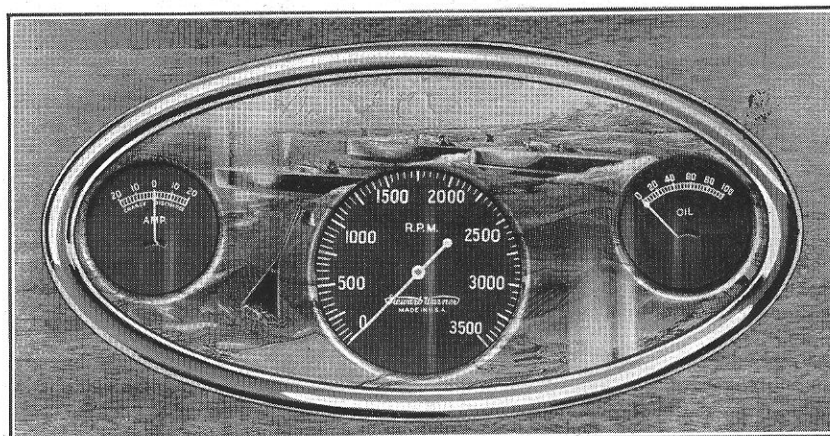
The New "Gulls" Marine Panel (Model 519)

Stewart-Warner introduces an artistic new note in marine panels in the "Gulls." It mounts five standard marine instruments: a pointer-type tachometer (choice of 1500, 2500, 3500 and 5000 maximum R.P.M.), ammeter, water temperature gauge, oil temperature gauge (with 12ft. capillary tubing) and oil pressure gauge. Indirect lighting. Panel measures 10 $\frac{7}{8}$ " long, 5 $\frac{13}{16}$ " wide. Instruments cadmium plated. Easily installed. Specify make, model and year of motor, length of shaft, direction of rotation of tachometer drive outlet. **Model 519 Marine Panel...\$47.50**

The New "Regatta" Marine Panel (Model 518)

Includes three essential marine instruments: pointer-type tachometer (choice of 1500, 2500, 3500 and 5000 maximum readings), an ammeter and an oil pressure gauge. Measures 10" long, 5 $\frac{1}{8}$ " wide. Easily mounted. Instruments cadmium plated. When ordering, specify make, model and year of motor, length of shaft, and direction of rotation of tachometer drive outlet.

Model 518 Marine Panel. \$35.00



Model 521-M

A new waterproof, magnetic, pointer type instrument, adaptable to both inboard and outboard motors. Dependable and accurate. Pointer-type indicator, with maximum scale of 8000 R.P.M. Outside diameter, 3 $\frac{1}{4}$ inches. Complete with 60-inch shaft, special nut and adaptor. When ordering, specify make model and year of motor.

Model 521-M Tachometer, complete.....\$20.00

OUTBOARD MOTOR TACHOMETERS



Model 314

One of the most popular Stewart-Warner tachometers, used by thousands of owners everywhere. Magnetic type. Calibration from 0 to 7000 R.P.M. Supplied with 60-inch flexible shaft and special detachable swivel joint. When ordering, specify make, model and year of motor.

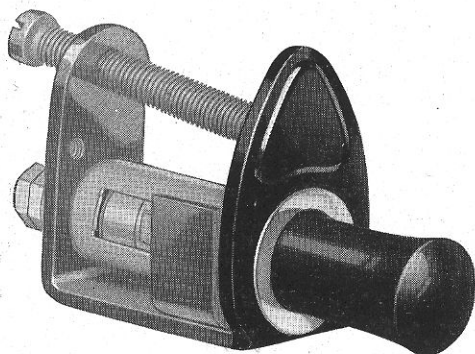
Model 314-B Tachometer, complete.....\$18.00

"PASS-A-LITE"

The Wireless Electric Lighter for Pipes, Cigars and Cigarettes Through-the-Board Model 421-A

\$1.75

In this new "Pass-a-Lite," Stewart-Warner combines all the dependable features of the rosette bowl type—plus exceptional smartness! It is installed as standard equipment through a $\frac{5}{8}$ -inch hole in the instrument board. Visible metal parts are chromium plated. Choice of six colorful handles as described below to match the trim of new car interiors. Connect only one wire and it's ready to use—permanently!



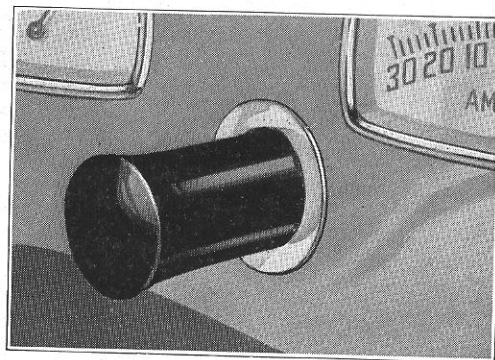
Model for Fords Only 421-B, -E **\$1.75**

For Ford Models 1928-29 and early 1930, Model 421-B. For 1930 and later Ford cars, Model 421-E. Both "Pass-a-Lites" are attached by simply loosening the two screws at the bottom of the instrument board and sliding the bracket under the heads. Tighten, attach the wire to ammeter post—and the installation is complete! The same selection of handles is provided with these, as with other models described above.

This Handsome Display Carton FREE!

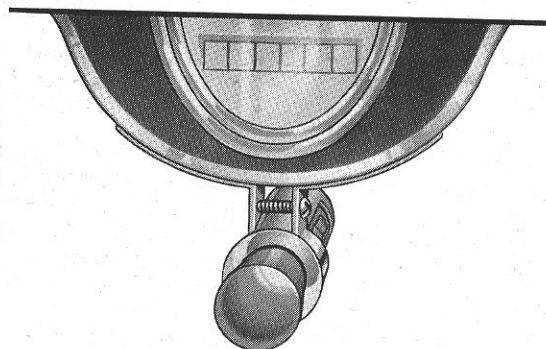


Attractively colored—holds 12 "Pass-a-Lite" boxes. Placed upon the counter, the carton displays to great advantage the colored "Pass-a-Lite" handles—and invites closer inspection. Helps sales!



Clamp-on Model 421-D **\$1.90**

A popular model "Pass-a-Lite" that clamps, by a single screw, to the instrument board of any car. The bracket is finished in baked black enamel with a handsome chromium plated bezel for contrast. Choice of six colorful handles in plain or cloudy effects as listed below. Connected by one wire to the ammeter—the work of a moment!



Your Choice of Six Colorful Handles

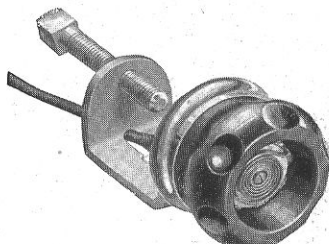
Chinese Red—Jet Black—Ivory—Jade Green—
Pearl—Canary Yellow

"Pass-a-Lite" **always** has been one of the most useful accessories for personal use available to the car owner. Now, personal preference is further extended! With added **color** in car finishes, comes "Pass-a-Lite" with the six colorful handles above, for **personal** choice!

"PASS-A-LITE"

The Wireless Electric Lighter for Pipes, Cigars and Cigarettes

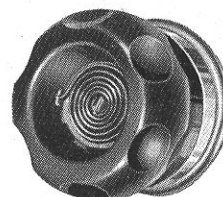
Pass-a-Lite Model 379-D



Model 379-D is one of the most popular Pass-a-Lite styles. No drilling is necessary—simply tighten the clamp by the screw at rear, and attach the one wire to the ammeter. Cupped Insulite bowl insulates long-wearing nichrome heating element. Also supplied with special pipe lighter element if desired.

Model 379-D. Clamp-on Pass-a-Lite
Price, \$1.50

Pass-a-Lite Model 379-B



The standard Pass-a-Lite model. Beautifully polished black molded knob with cupped finger grip. Finest nichrome heating element; lasts indefinitely. Handsome buffed nickel base to match car fittings. For permanent installation through hole drilled in panel. Can be furnished with special pipe-lighter element if desired.

Model 379-B. Pass-a-Lite
Price, \$1.50

INSIDE CONTROL SPOTLIGHT MODEL 362

**Easy, Natural Control—Mounts Through Hole
Used for Older Spotlights Without Extra
Drilling—Adaptable to All Closed Cars.**

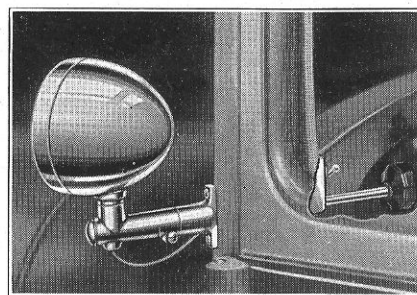
Closed car drivers have long demanded a **better** spotlight—one that would respond quickly and **naturally** to control, provide satisfactory illumination of the road and enhance the beauty of their cars. Now comes Stewart-Warner with a **NEW** spotlight—with instantaneous, **natural** control, superior lighting qualities and beauty far beyond commonplace spotlights of its price!

EASY, Natural Control

The one universal control knob rests easily in the palm of the driver's hand. An effortless turn of the wrist swings the light beam up or down, **exactly** as desired—a slight forward push on the knob releases the vertical control; then a smooth turn of the knob directs the light to the right or left through its full arc of 270 degrees. There can be **no** confusion in the use of this remarkable spotlight, even to the novice!

The Unique "Thumb-Tip" Switch

Unlike commonplace switches that jut out and catch the sleeve—or some inconveniently mounted on the instrument board—the Stewart-Warner "thumb-



tip" switch is "out of the way," yet always handy for use. Mounted on the inside shaft bracket, it is just at the tip of the thumb. Pressure downward lights the spotlight; a flip upward extinguishes the beam.

Universal Adaptor Bracket

This outside bracket will fit the corner post of practically all closed cars without filing, sawing or other shaping. The shaft of the spotlight is one of the smallest (in diameter) made and can be mounted for replacement in the same hole as the old spotlight without extra drilling.

Model 362. Inside Control Spotlight
Price, \$13.00

POLISHES, CLEANERS and TOP DRESSING



Polish

For regular use to keep that like-new look. Stewart-Warner Body Polishes cleans and polishes in one operation with amazing ease and speed. Even dingy, clinging "road scum," the dull film of combined oil and dirt that water will not affect, yields speedily to this remarkable polish! The polish can also be used for cleaning and polishing chromium plated metals, furniture and other highly finished surfaces. It leaves a dry, lustrous finish that will not catch dust.

Polish— 8 oz. Bottle.....\$0.60
16 oz. Bottle.....\$1.00 1 gal. Can..... 5.50

Finish Cleaner and Polish Wax

To give your car a LASTING lustrous finish, use this effective Stewart-Warner combination—Finish Cleaner and Polish Wax. Water will remove dirt and mud, but it cannot clean off "road scum" that dulls the lustre of a car's finish. However, an application of Finish Cleaner removes both dirt AND "road scum"—quickly and easily. Makes your car spick and span, ready for an application of Stewart-Warner Polish Wax, which adds a protective, waterproof, high lustre finish to your car. Easy to apply—lasts for months between applications.

Finish Cleaner— 8 oz. Can.....\$0.60
16 oz. Can.....\$1.00 1 gal. Can..... 5.50
Polish Wax—8 oz. Can......60



Top Dressing

Worn and "grayed-out" tops and side-curtains can be made to look like new in just a few minutes' time with Stewart-Warner Top Dressing. It imparts a brilliant black finish that lasts for months—each coat forming a tough, "rubbery" coating that is water and weatherproof. Protects the fabric. Dries very quickly. Also effective for tires, tire covers, trunk covers, etc.

Top Dressing—1 pint Can.....\$1.00

Metal Polish

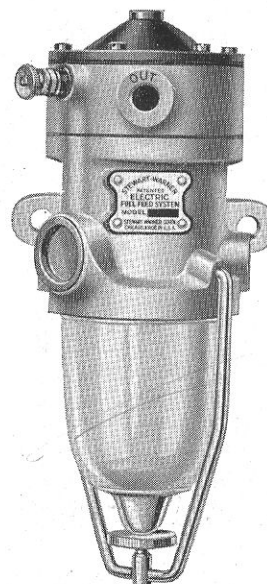
Here is **one** metal polish that safely removes disfiguring spots from the polished metal surfaces of the car—without danger to the plating! Gently burnishes away the dulled areas and restores the entire surface to lustrous brilliancy! It is just as good for aluminum, copper, brass and plated domestic ware—a remarkable labor-saver!



Metal Polish— 8 oz. Can.....\$0.60
21 oz. Can..... 1.25

ELECTRIC FUEL PUMPS

This electric fuel pump affords a fuel feed system adaptable to more conditions and embodying more desirable characteristics than any automotive engine fuel feed system available heretofore. It is by far the most desirable for large vehicles such as busses and trucks carrying large loads at high speed, over long distances, without stops, especially where several supply tanks are required; for motor boats and other engines requiring unusually large amounts of fuel, and for any vehicles operating in mountainous districts; in districts of extreme heat or extreme cold or conditions of greatly varying temperatures. It is also very desirable for all passenger cars, isolated lighting plants, and oil burners for home and industrial furnaces.



Model 409

RELIABILITY

First, laboratory break-down tests, and then thousands of these in actual service have demonstrated that this pump has inherent reliability equal to or greater than any other fuel feed system. Having a metal piston with eight long-wearing piston rings, this pump has the same reliability characteristics as the well known double-acting steam-engine-operated boiler feed-water pump. In this respect it differs radically from other mechanical or electrical fuel pumps using metal bellows or fabric diaphragm. Where in other electrically-operated devices depending upon a make and break contact in which the contacts are the most frequent cause of trouble, this pump has operating contacts one hundred and fifty times greater in area than is usual in such devices. These contacts, being immersed in the fuel, are freed from the destructive action of arcing, which in this pump is entirely suppressed because the heat is dissipated so rapidly as to make arcing impossible. The National Board of Fire Underwriters' laboratory's approval embodied in their report Automotive No. 1189 is assurance of its absolute safety.

DELIVERY RATE

Being double acting, this pump has about double the pumping ability of any similar pump unit. With ten feet of $\frac{5}{16}$ in. tubing (outside diameter) on the suction end with a twelve-inch lift, and two feet of $\frac{5}{16}$ in. tubing between the pump and carburetor and a twelve-inch lift, it will deliver in excess of twenty gallons per hour. This will vary, of course, with the length and size of tubing used. Any higher delivery rate of fuel desirable may be obtained by connecting two or more of these pumps to the same suction and delivery lines.

CONSTANT DELIVERY PRESSURE

The most economical delivery of fuel is assured by the automatic regulator integral with the pump. This maintains a constant pressure at the carburetor, regardless of how great or how little are its requirements, without flooding or without starving under any conditions. The usual adjustment is for two and a half pounds shut-off pressure usual with carburetors

supplied by mechanical fuel pumps. For replacing gravity or vacuum tank feeds, a one pound to one and a half pound shut-off pressure adjustment can be had as specified.

INSTANT RESPONSE

In the coldest weather full fuel flow at the carburetor is instantly available when the switch is turned on. Neither is there the slightest delay when the throttle is quickly wide opened, and it pumps only what is required as it is required.

MOST ADAPTABLE

Being less than seven inches by three inches over all it is mountable with two screws on many surfaces in a variety of positions, easily accessible, away from the engine and exhaust, without previous machining of the engine or any other parts.

EASILY SERVICED

It is easily and quickly replaceable as a whole or in parts. Only a screw driver is needed to disassemble and reassemble it, with no difficult adjustments.

It can be easily installed with other systems to be used as a reserve, or installed in duplicate at little cost.

CURRENT CONSUMPTION

The twelve-volt pump uses but three-quarters of an ampere and the six-volt but one-half an ampere.

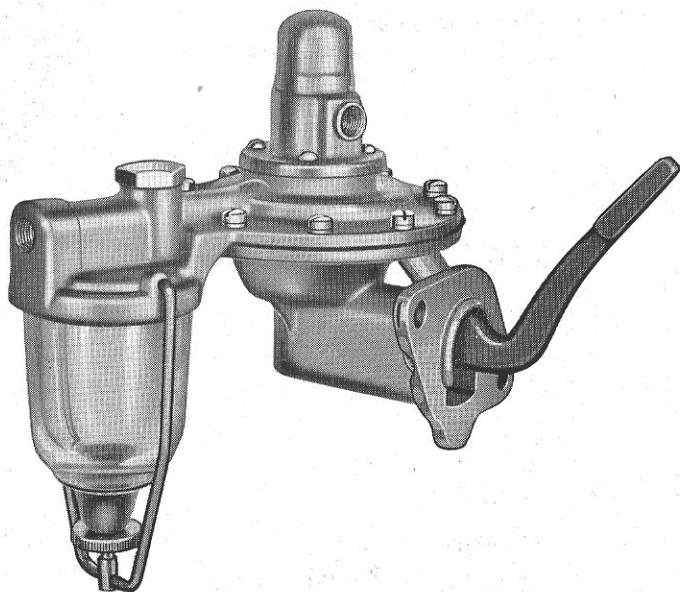
Standard windings for six-volt and twelve-volt.

Specially wound for any D. C. voltage up to 110.

MODEL 409-A	6-VOLT	STANDARD, \$15.00. —
MODEL 409-B	12-VOLT	
MODEL 409-M	12-VOLT	MARINE, \$16.00. —
MODEL 409-N	6-VOLT	

PRICES ON REQUEST ON TWO, THREE OR FOUR ASSEMBLED TO MANIFOLDS. GIVE FULL INFORMATION AS TO MAKE AND MODEL OF ENGINE AND ITS USE.

MECHANICAL FUEL PUMP



The desirable features of the mechanically-operated fuel pump that have led to its wide adoption are:
Low cost completely installed.

Delivery rate increased with the speed of the engine up to the pump's capacity, which is proportional to the speed at which it is operated.

It permits a very "Clean" installation, as it is located on the engine crank case out of the way and requires a minimum length of tubing.

A notable and exclusive feature of the Stewart-Warner pump is the curved plate above the diaphragm. This plate so guides the undulating diaphragm motion as to greatly increase the delivery rate. It greatly reduces the strain on the diaphragm, and prevents destructive radial wrinkles.

The air dome design on these pumps contributes much to their high delivery rate feature. The dome never fills with liquid. It always retains under all conditions its cushion of vapor which cushions the pressure on the diaphragm, making for longest wear.

In addition to the long list of cars and trucks on Pages 31 and 32 on which these pumps are standard equipment a great many other engines of well known makes have been adapted for the use of these pumps.

When ordering a new or replacement equipment give make, model and year of engine or vehicle for which it is wanted.

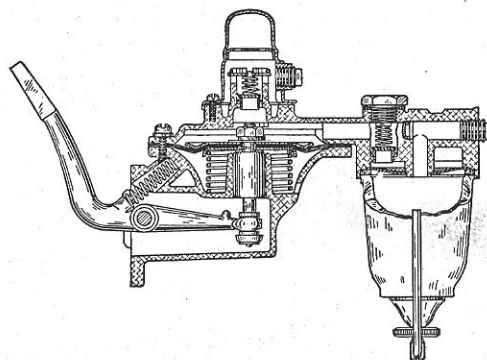
Prices vary from \$10.00 to \$12.00 for the small sizes and from \$12.00 to \$15.00 for the larger standard models. A few special models list higher.

OPERATION CONSTANT IN ALL TEMPERATURES

See list of users on pages 31-32

Due to the design of the lower frame and location of the lever actuating spring above the lever, this case does not form a pocket on the outside of the crank case for moisture to collect and condense in cold weather where its freezing has been the greatest cause of troubles in other designs of pumps. The body of the casting now provides a means for draining into the crank case any moisture and oil which may collect.

Due to the size and shape of the upper diaphragm it has the ability to start pumping very quickly, ordinarily requiring only twelve or thirteen strokes of the lever, greatly reducing the priming time.



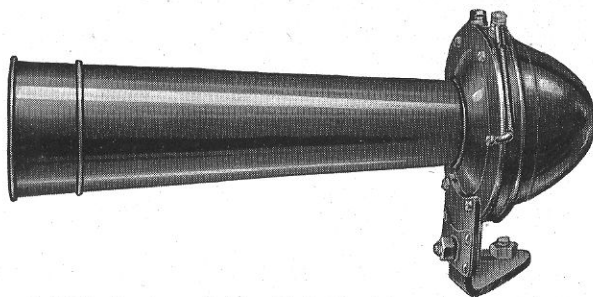
Above: Sectional view of Model 407 Fuel Pump. (Angle of pump body to strainer portion not shown for clarity.)

The diaphragm actuating mechanism is most simple and the operating lever down stroke is cushioned by a leather bumper, which makes for quiet operation and minimum wear.

The frame is very sturdy and the whole design is such that no special tool is required for its disassembly, repair and reassembly.

AUTO HORNS

Electric Vibrator Horn, Model 488



14 $\frac{3}{4}$ inches long, finished in battle ship gray enamel. Furnished complete with mounting bracket, adjustable for any installation.

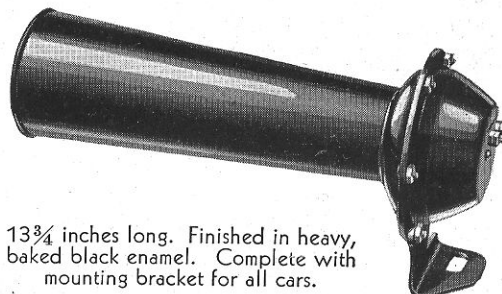
The slightest touch of the button produces a clear, vibrant warning note of exceptional carrying power with Model 488 horn. The pitch remains constant regardless of time sounded. Large diaphragm; durable Tungsten-tipped breaker points. This is a horn of highest quality, suitable for use on the finest motor cars. Universal steel mounting bracket.

Model 488. Stewart-Warner electric vibrator horn with mounting bracket, \$6.50.

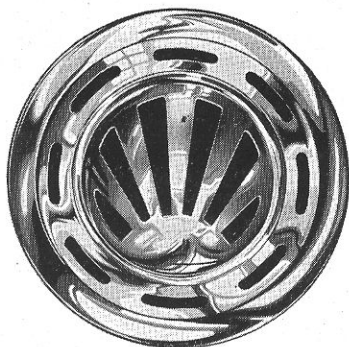
Electric Vibrator Horn, Model 423

For general use, Model 423 horn satisfies every requirement for reliability, continuous and long service. It is precision-built of high-grade materials—priced to represent maximum value. Adjustable mounting bracket for all cars.

Model 423. Stewart-Warner vibrator horn with mounting bracket, \$4.25.



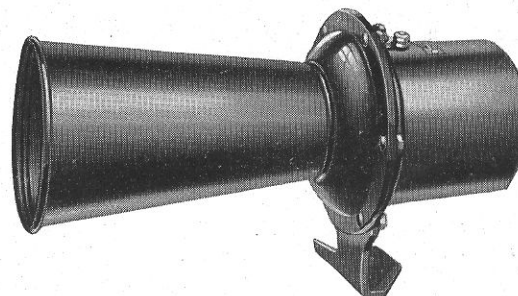
13 $\frac{3}{4}$ inches long. Finished in heavy, baked black enamel. Complete with mounting bracket for all cars.



Disc Type Horn, Model 541

The wide variety of installations possible to this new horn and its novel appearance make it extremely popular wherever accessories are sold. Vibrator type; long wearing tungsten points. Adjustable bracket fits any shape rod from $\frac{1}{2}$ -inch to 1 $\frac{1}{4}$ -inch diameter. Chromium screen and baked enamel body. Outside diameter, 5 $\frac{1}{4}$ inches.

Model 541. Stewart-Warner Disc Horn, \$3.00.

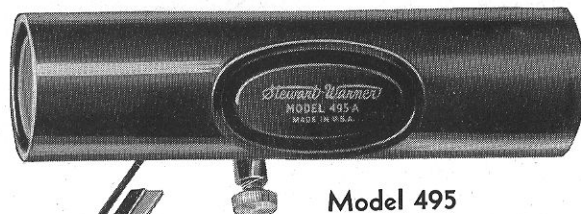


Motor-Driven Horn, Model 317-B

This horn offers the absolute maximum in sturdy, rugged construction, quality workmanship and materials. Deep, resonant tone. Molded Bakelite commutator; flexible braided brush lead wires; self-lubricating commutator brushes. Large wick oiler bearings. Eleven inches long; all steel shell finished in lustrous, hard-baked black enamel. Adjustable steel bracket fits all cars.

Model 317-B. Stewart-Warner motor-driven horn with mounting bracket, \$4.00.

WINDSHIELD CLEANERS



Model 495

Model 495-A, B, C: Inside mounting for swinging windshield.
Model 495-D: Outside mounting for Vertical lift windshield (Fisher Body).

Vacuum Windshield Cleaner

This Stewart-Warner windshield cleaner represents a great improvement over commonplace types in that the vacuum is harnessed at **both** ends—giving a **double** impulse stroke as compared to the usual "one lunger" types on the market.

Double Impulse for Ample Power in Snow or Sleet

Being **doubly powerful**, Model 495 works equally as well in snow or sleet as in rainy weather—the wiper blade sweeps swiftly and steadily across the windshield, keeping the glass crystal-

clear. The mechanism is simple, sturdy and dependable, protected from dust and dirt by a felt air filter in the air vent. Easily and quickly installed. Baked black enamel. For all cars and trucks.

Model 495. Stewart-Warner Vacuum Windshield Cleaner. Price, \$4.25, complete with fittings. Specify make, model and year of car when ordering.

Electric Windshield Cleaner

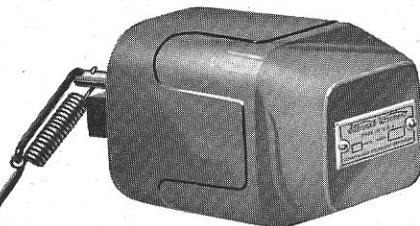
The outstanding advantage of this cleaner is that it is not dependent upon the car's motor for its power supply and therefore can be operated when the car engine is not running. This cleaner is one of the smallest and most compact types on the market, yet it is very powerful and dependable in all weathers. The case is water and dustproof, offering permanent protection to the mechanism. It is finished in hard baked gray enamel.

Easily and Quickly Installed

No special tools are needed to install this cleaner. It is made for mounting on all cars and on all types of windshields. Furnished complete with electric cord, switch and mounting screws. When ordering, give make, model and year of car.

Model 497. Stewart-Warner electric windshield cleaner complete with cord, switch, and mounting screws. Price, \$8.50.

Model 497

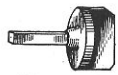


Model 497-A, for open cars (also Ford touring and roadsters).
Model 497-B, for closed cars.
Model 497-D, for cars with Fisher body.
Model 497-E, for Fords—sedans and coupe.

Above models furnished complete with electric cord, switch and mounting screws.

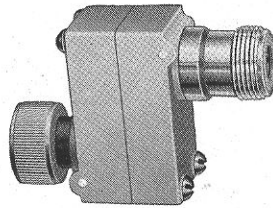
Wiper Arm Assembly (including Arm and Wiper) No. G-35299. Price, \$0.55.

Push-and-Pull Switch No. 19999. Price, \$0.50.



No. 64702
Adaptor Clutch . . 50c

Used with adaptors for Type B Cable only. Must be ordered separately.



BOX TYPE ADAPTOR—PRICE, \$4.25

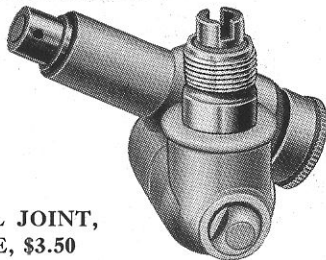
This adaptor is designed for installation at the lower end of the flexible shaft and can be installed on practically all passenger cars where the clearance at the transmission permits. When interference is found the 90° type may be usable. Box type adaptors are available in the ratios below.



Type A				Type B				Type C			
Ratio	For Type A Cable	† For Type B Cable	For Type C Cable	Ratio	For Type A Cable	† For Type B Cable	For Type C Cable	Ratio	For Type A Cable	† For Type B Cable	For Type C Cable
.468	31679	68213	30593	1.04	14100	65282	13000				
.500	31678	68212	30594	1.071	21932	65099	14411				
.518	21918	68211	17833	1.114	21933	65180	14419				
.555	21919	68210	18598	1.155	21934	65098	14412				
.578	21920	68209	17834	1.213	21935	65476	14418				
.604	21921	68208	14401	1.266	21936	68194	14413				
.625	21922	68207	17835	*1.266	62927	.....	.....		
.648	21923	68206	17836	1.300	21937	.....	14414				
.674	21924	68205	14402	1.339	21938	68085	14421				
.694	21925	68204	14403	1.383	21939	68193	14415				
.722	21926	68203	14417	1.440	21940	68192	16670				
.747	21927	68202	14404	1.483	21941	68191	14416				
.769	21928	68201	14405	1.543	21942	68190	14423				
.790	21929	68199	14406	1.600	21943	68189	18599				
.824	17340	68198	14407	1.656	21944	68188	18491				
.866	21930	68197	14408	1.731	21945	68187	14422				
.898	17520	68196	14409	1.800	21946	68186	18601				
.934	16522	68195	14420	1.879	21947	68185	18602				
.962	21931	64693	14410	2.100	.....	.....	61158				

*For standard S. A. E. shaft.

† These parts numbers cover special adaptor only. Order clutch No. 64702 separately.



**SWIVEL JOINT,
PRICE, \$3.50**

This joint has been designed for use with a pinion and is driven by a spur gear attached to the wheel or universal joint. It is also suitable for tachometer drives.

Swivel Joint No.			Swivel Joint No.		
Ratio	For Wire Cable Shaft	For Link Shaft	Ratio	For Wire Cable Shaft	For Link Shaft
1-15	.....	1966	‡ 2-1	37899	.....
‡ 1-1	.....	1967	‡ 2.5-1	.....	1913
1-1	31875†	.....	‡ 2.5-1	.....	1959
1-1	.....	61650*	2.5-1	.....	14200*
1-1	62044	.....	3-1	.....	7778
1.5-1	.....	13900	‡ 3-1	.....	18474
2-1	31876†	.....	3-1	34468	.....
‡ 1.5-1	.....	13999	‡ 3.75-1	.....	38650*

See Special Price List for Western and Canadian Prices

ADAPTOR AND JOINTS

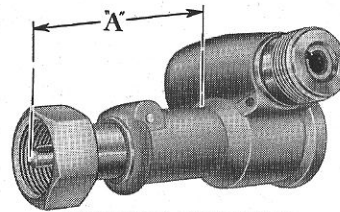
SWIVEL JOINT (Continued)

Swivel Joint No.			Swivel Joint No.		
Ratio	For Wire Cable Shaft	For Link Shaft	Ratio	For Wire Cable Shaft	For Link Shaft
4-1	.....	1960	‡ 8-1	.....	1965
‡ 4-1	.....	1961	‡ 8-1	33300	.....
‡ 4-1	17700	.....	12-1	.....	9607
‡ 4-1	19000*	.....	‡ 12-1	.....	9608
6-1	.....	1962	‡ 12-1	.....	14900*
‡ 6-1	.....	1963	‡ 12-1	34941*	.....
6-1	16160	.....	‡ 16-1	.....	10547
‡ 6-1	.....	31683*	16-1	.....	10562
8-1	.....	1964	‡ 16-1	34942*	.....

*These swivel joints use G-31836 (for Alemite fitting). All the other swivel joints use grease cup G-31837.

†These swivel joints have a smaller hole in driven shaft gear for standard S. A. E. shaft.

‡Reverse rotation.



**90° TYPE ADAPTOR
PRICE, \$3.50**

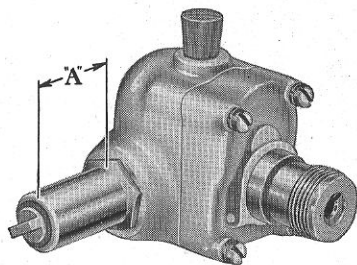
This type has but one set of gears and permits the use of a shorter shaft by eliminating a shaft bend at the transmission. It is available in the ratios and lengths shown below.

Ratio	Adaptor No.	Dimension A	Ratio	Adaptor No.	Dimension A
.181	39250	1 "	.909	30794	1 "
.250	62807	1 "	.909	33499	3 1/4 "
.266	62810	1 "	.923	18400	2 "
.364	62667	1 "	.923	38180	3 1/4 "
.400	61905	1 "	.937	30422	2 "
*.500	34299	1 9/16 "	.937	38098	3 1/4 "
.588	35400	2 "	.5833	62806	1 "
.600	35200	2 "	.6383	62805	1 "
.611	35350	2 "	1-1	18200	2 "
.647	34900	2 "	1-1	30635	1 "
.647	38099	3 1/4 "	1-1	30880	2 1/2 "
.666	35100	2 "	1-1	33487	3 1/4 "
*.666	35899	1 1/16 "	1-1	33609	1 1/16 "
.687	61918	3 1/4 "	‡ 1-1	*38942	1 "
.692	19300	2 "	‡ 1-1	61051	1 1/16 "
.714	30423	2 "	1.077	37800	2 "
.714	36499	3 1/4 "	1.077	38181	3 1/4 "
.733	34222	2 "	1.100	17500	2 "
.750	19400	2 "	1.100	30802	1 "
.750	36500	3 1/4 "	1.100	33497	3 1/4 "
.769	30421	2 "	1.166	17030	2 "
.769	61923	3 1/4 "	1.166	36549	3 1/4 "
.785	18100	2 "	1.200	18700	2 "
.785	36864	3 1/4 "	1.200	30801	1 "
.800	30424	2 "	1.200	33495	3 1/4 "
.800	63653	3 1/4 "	1.250	64029	2 "
.818	33000	2 "	1.272	30806	1 "
.818	38179	3 1/4 "	1.272	33496	3 1/4 "
.833	17900	2 "	1.272	61500	2 "
.833	37600	3 1/4 "	‡ 1.300	63500	3 1/4 "
.857	19600	2 "	1.363	30804	1 "
.857	30803	1 "	1.363	33493	3 1/4 "
.857	33498	3 1/4 "	1.363	64028	2 "
.866	33900	2 "	1.400	30805	1 "
.866	37599	3 1/4 "	1.400	33494	3 1/4 "
.909	18500	2 "	1.500	61600	3 1/4 "

*For standard S. A. E. shaft.

‡Reverse rotation.

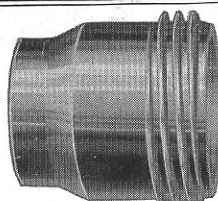
ADAPTOR AND GEARS



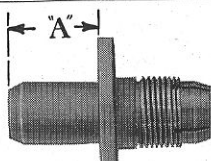
HEAVY DUTY ADAPTOR
Price, \$10.00

This adaptor is designed for busses and trucks and is standard equipment with some of the largest truck and bus manufacturers. It is available in the ratio and lengths shown below.

Ratio	Adaptor No.	Dimension "C"	Ratio	Adaptor No.	Dimension "C"
.500	63687	1 3/16"	1.083	35502	1 3/16"
.529	63688	1 3/16"	1.114	35503	1 3/16"
.549	63796	1 3/16"	1.155	35504	1 3/16"
.576	63797	1 3/16"	1.213	35505	1 3/16"
.600	63689	1 3/16"	1.235	35506	1 3/16"
.625	63798	1 3/16"	1.266	35507	1 3/16"
.648	36047	1 3/16"	1.333	35508	1 3/16"
.694	36049	1 3/16"	1.384	62877	1 3/16"
.694	38421	1 13/16"	1.420	35509	1 3/16"
.722	36048	1 3/16"	1.500	35510	1 3/16"
.722	63743	1 3/16"	1.560	35511	1 3/16"
.747	36046	1 3/16"	1.600	35512	1 3/16"
.790	37100	1 3/16"	1.670	35513	1 3/16"
.790	38422	1 13/16"	1.700	36044	1 3/16"
.824	35500	1 3/16"	1.731	35514	1 3/16"
.846	63744	1 3/16"	1.777	35515	1 3/16"
.866	36042	1 3/16"	1.855	35516	1 3/16"
.898	35501	1 3/16"	1.900	35517	1 3/16"
.934	36043	1 3/16"	1.950	35518	1 3/16"
.934	38423	1 13/16"	2.009	35519	1 3/16"
.962	36045	1 3/16"	2.046	35520	1 3/16"
1-1	34700	1 3/16"	2.100	35521	1 3/16"
1-1	38400	1 13/16"	2.164	35522	1 3/16"
1.041	36099	1 3/16"	2.318	35523	1 3/16"



DRIVE GEAR



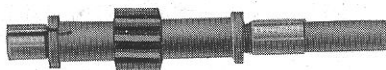
SLEEVE



NUT



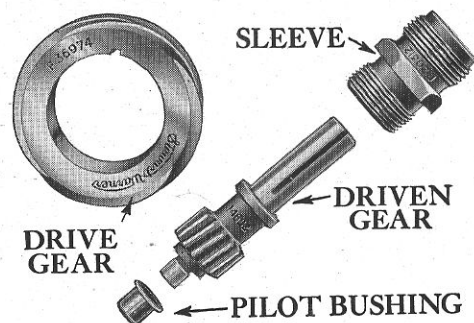
BUSHING



DRIVEN GEAR

HEAVY DUTY GEARS, SLEEVE AND BUSHING Used with above adaptors

Part No.	Name	
34671	Bushing	Prices quoted on request Specify make, model and year of transmission.
34673	Nut	
37785	Sleeve "A" = 1 1/2"	
63716	Sleeve "A" = 3"	
See Car Specification	Drive Gear	
	Driven Gear	



STANDARD TRANSMISSION GEARS

All standard drive gears.....	\$2.50
All standard driven gears.....	1.75
Sleeve.....	.50
Pilot Bushing.....	.10

These parts should be ordered by the number stamped on them. If this number is illegible, learn the correct number by referring to the specification sheets on that make and model car. It is not necessary to give the number of teeth nor the pitch of the gears. If the gear number cannot be learned, give the make, model number, gear, tire size and axle ratio of the car.

How to Correct Speed Indication

When the transmission gears do not give the correct speedometer reading, it is not necessary to change them, as the speedometer reading can be corrected by installing an adaptor at the lower end of the flexible shaft.

How to Figure Ratio of Adaptor to Correct Reading

$$\frac{\text{Tire Dia.} \times .05 \times \text{Number Teeth in Driven Gear}}{\text{Axle Ratio} \times \text{Number Teeth in Drive Gear}} = \left\{ \begin{array}{l} \text{Adaptor} \\ \text{Ratio} \end{array} \right.$$

Example: $\frac{29" \text{ Tire} \times .05 \times 12\text{-Teeth}}{3.72 \text{ Axle Ratio} \times 4\text{-Teeth}} = 1.16$ Ratio that will correct reading.

Explanation: Multiply all the figures above the line and then multiply all the figures below the line, and divide the product of the figures above the line by the product of the figures below the line.

Use actual rolling tire diameter in inches with the normal load on the car. Twice the distance from center of hub to floor will be close to it. Refer to the equipment specifications of the car for the number of teeth in the drive, driven gears, and the axle ratio.

After finding the ratio of the adaptor necessary, consult the adaptor chart. On this chart (box type) opposite ratio are shown numbers of three adaptors, two for wire core shafts and the other for link shafts. Select an adaptor that will give the nearest ratio to the one required.

FLEXIBLE SHAFTS

The shafts illustrated below are special purpose shafts, made on special order. For standard shafts (not illustrated), see car specifications for car make and model used on.

SPECIAL PURPOSE SHAFTS



24700
Used on aircraft. Has standard S. A. E. upper and lower ends. .130 diameter cable braided, whipcord casing.



31772
Standard Stewart upper end, S.A.E. lower end. .187 diameter cable.



39100
Extension shaft used on Ford Trucks.



60400
Stewart upper end, lower end suitable for attaching to 5/8 diameter round shaft. Generally used with motion picture tachometers.



*63600
FOR POINTER TYPE MAGNETIC TACHOMETER

* For driving from engine outlets with new S. A. E. (.161 hole), use 63600 shaft. For old S. A. E. (.191 hole), use 68500 shaft. For driving from V. S. driven gear or S.-W. ADAPTORS (with .213 hole), use 63300 shaft.



63800
Extension shaft for standard Stewart Shafts, has special grease fitting used for heavy duty busses and trucks, etc., can be used in multiples.



65000
Same as 39100, except square end cable.



68000
For motorcycle speedometer—J-M upper end—Stewart lower.

Complete Shaft No.	Price Up to 72" See Notes	Price per Ft. Additional	Cable and Tips	Price Up to 72" See Notes	Price Per Ft. Additional
1799	\$3.50	\$0.70	(Chain)		
13600	3.50	.45	13637	\$1.50	\$0.25
13700	3.50	.50	13910	1.50	.30
14000	3.50	.45	14486	1.50	.25
17777	3.50	.50	14911	1.50	.30
18600	3.50	.45	18703	1.50	.25
24700	Price on request		24800	Price on request	
31772	9.50	.95	31780	3.00	.45
34200	†2.50	.45	34184	†1.00	.25
34300	3.50	.45	34413	1.50	.25
36100	†3.00	.50	37735	†1.00	.30
37700	†2.50	.50	37735	†1.00	.30
38000	†3.00	.45	37905	†1.00	.25
39000	7.00	.65	32911	3.00	.45
39100	†2.60	.65	39043	†1.35	.45
60187	3.50	.45	24100	1.00	.25
60300	3.50	.45	34411	1.50	.25
60400	5.00	.75	60463	1.50	.25
60600	6.50	.70	32911	3.00	.45
61100	6.50	.70	32377	3.00	.45
63300	†2.25	.45	63325	†1.00	.30
63600	†2.25	.40	63685	†1.00	.25
63800	†2.60	.70	39043	†1.35	.45
64200	†3.00	.45	64105	†1.00	.25
64250	†2.25	.40	**64207	†1.00	.25
64900	†3.00	.40	64879	†1.00	.25
65000	2.60	.65	65003	†1.35	.30
65200	†3.00	.35	65125	†1.00	.25
65300	3.50	.45	65291	1.50	.25
65700	4.00	.50	65809	1.50	.30
65999	7.20	.65	65974	3.00	.45
68000	9.50	.95	68001	3.00	.45
68500	†2.25	.45	68496	†1.00	.25

†Price up to 62".

**This is a cable and collar assembly.

‡Price up to 12"

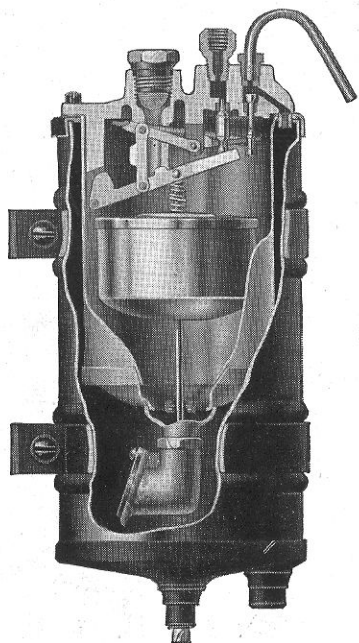
HOW TO ORDER

Orders for cable and tips assemblies **must specify length of casing** between the outer ends of ferrules, not the actual length of the cable and tips assembly. The length of the cable and tips assembly specified in the car specifications is the length between the outer ends of the casing and ferrule assembly. See car specifications for shaft part number.

Obsolete shafts not listed will be supplied at about 50% over former prices.

VACUUM TANKS

Since 1913, when the Stewart-Warner vacuum fuel feed system was first introduced, no other system of supplying fuel to automotive engines has yet proven its equal in reliability. It is the system in most general use on the latest model busses, tractors, and America's finest passenger cars. Where first cost is secondary to maximum reliability, no other system is now so generally endorsed by both operators and manufacturers. It is the system especially preferred on all vehicles going into regions remote from any service facilities.



VACUUM TANK

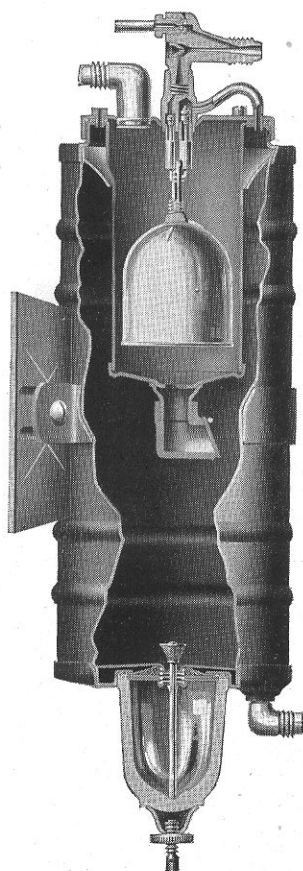
Cast Top Two-Spring Lever Type

Most generally known vacuum tank. This type tank is made in the models and sizes listed below. Factory equipment on millions of cars. The vacuum tank which because of its supreme reliability brought about the universal adoption of the Stewart-Warner vacuum fuel system.

Model	Price	Capacity Pints	Diameter	Over-All Length	*See Note	REMARKS
147	\$17.00	3.95	6"	9 ⁷ / ₈ "		Model N, Special D-shape
178	14.50	5.25	6 ¹ / ₈ "	10 ⁵ / ₁₆ "		D-shape
187	13.50	3.95	6 ¹ / ₈ "	9 ⁷ / ₈ "		Model 187AE, special with Booster
215	13.50	2.343	4 ¹ / ₂ "	10 ¹³ / ₆₄ "		
216	13.50	3.375	4 ¹ / ₂ "	12 ¹³ / ₆₄ "		Model 216AU, special with Booster and Strainer
278	20.00	13.2	6 ¹ / ₈ "	16 ⁷ / ₈ "		D-shape
343	14.50	3.95	6"	10 ³ / ₄ "		
359	14.50	5.00	6"	10 ¹ / ₄ "		D-shape
359E	20.00	5.00	6"	17 ³ / ₄ "		With Booster
483	18.75		4 ¹ / ₄ "	8 ⁷ / ₁₆ "		Special for Rolls Royce
427	20.00	3.25	4 ¹ / ₂ "	13 ³ / ₄ "		D-shape with Strainer—Special Cadillac
498	14.00	4.4	4 ¹ / ₂ "	14 ¹³ / ₆₄ "		

Model 343 and 359 have 215 type mechanism, except with double air valve for quick dumping. Model 147 has same type mechanism as 215, except has 6" cast iron cover and large monel lever pins, used for tractors, trucks, and on salt water.

*Unless so specified Tanks furnished without Booster or Strainer, which are not included in above prices.



VACUUM TANK

Leverless Type

Used at present or in past on such cars as Hudson, Essex, Chevrolet, Willys-Overland, etc. Made in models and sizes listed below. Is equipped with vacuum booster to prevent draining at high speeds. Air valve protected from dust by tube to outer shell. Inlet elbow integral with top. Specify size of pipe thread or car model to be used on. Equipped with gasoline strainer; automatic valve prevents draining when strainer is removed for cleaning.

Model	Price	Capacity Pints	Diameter	Over-All Length	REMARKS
309	\$10.00	2.222	4 1/2"	10 9/16"	With Booster and Strainer With Booster and Strainer With Strainer—No Booster
368	8.00	1.00	3 7/16"	12 15/16"	
373	8.50	3.5	4 1/2"	16 1/2"	
396	8.00	.58	3 7/16"	10 5/8"	
493	10.00	2.343	4 1/2"	10 3/4"	

VACUUM TANK

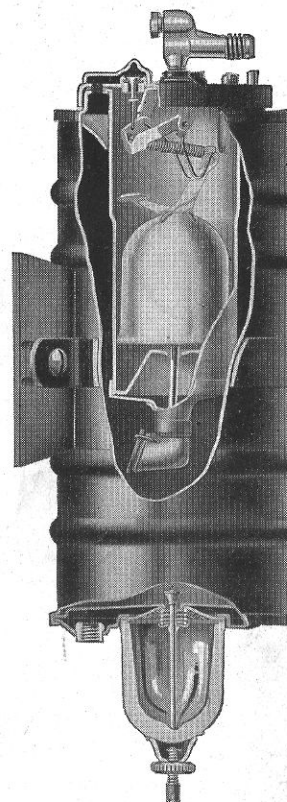
Constant Suction Type

The new constant suction single valve, single spring lever type vacuum tank. This latest development in vacuum tanks is standard equipment on notable passenger cars, trucks and busses. Its more simple construction has proven in service quite as reliable as any other types.

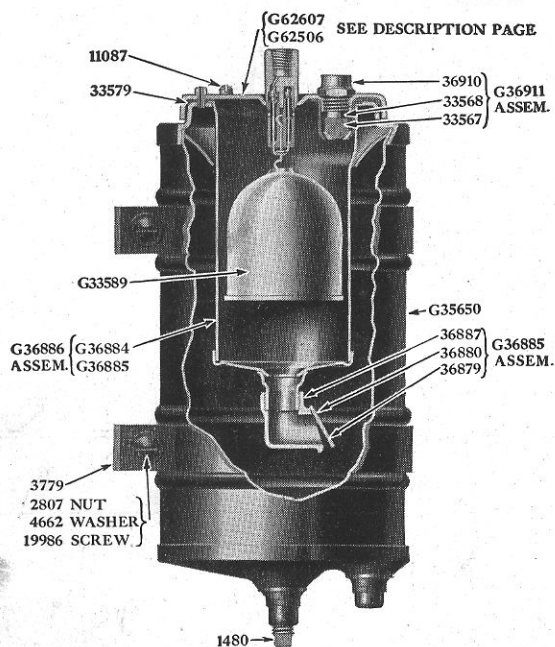
Has a higher delivery rate and will operate on lower manifold vacuum than other types. Its large, perfect seating air valve is completely protected from dust.

The most universal replacement tank. Made in sizes listed below with and without boosters and strainers.

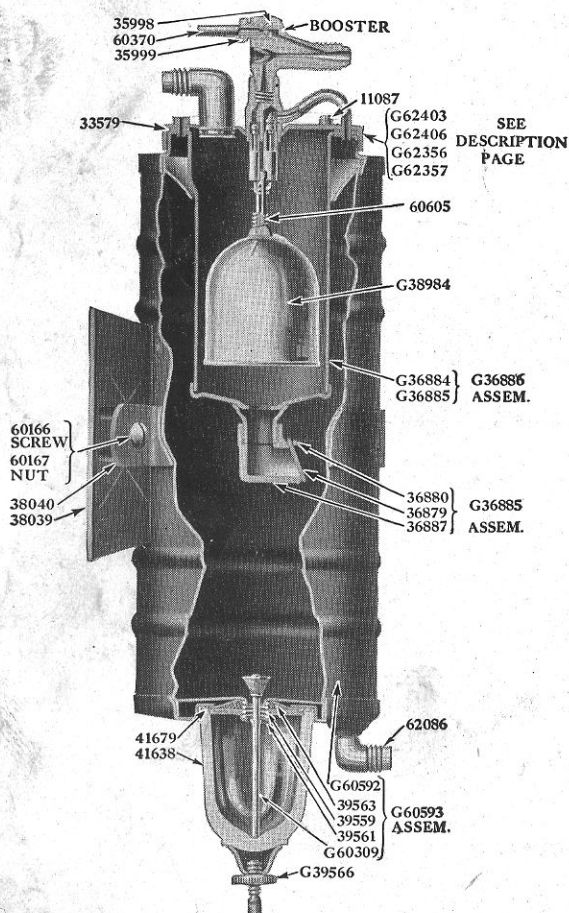
Model	Price	Capacity Pints	Diameter	Over-All Length	REMARKS
377	\$ 8.50	3.5	4 1/2"	15 11/16"	With Booster and Strainer
411	10.00	5.0	7 "	11 1/2"	D-shape with Booster
412	11.50	13.20	7 "	18 1/8"	D-shape with Booster
416A	7.00	2.222	4 1/2"	9 7/8"	No Booster or Strainer
416B	8.50	2.222	4 1/2"	13 3/4"	With Strainer
416D	7.75	2.222	4 1/2"	10 1/2"	With Booster
416F	8.50	2.222	4 1/2"	13 7/8"	With Booster and Strainer
428	7.00	1.00	3 7/16"	8 "	No Booster or Strainer



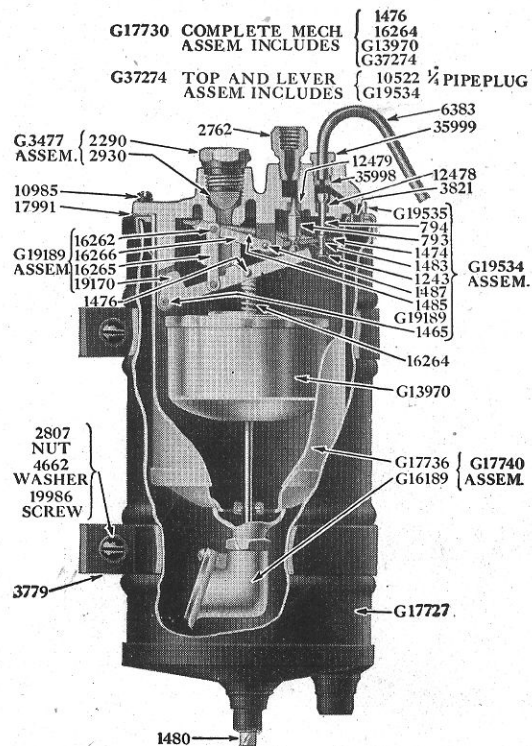
VACUUM TANK PARTS



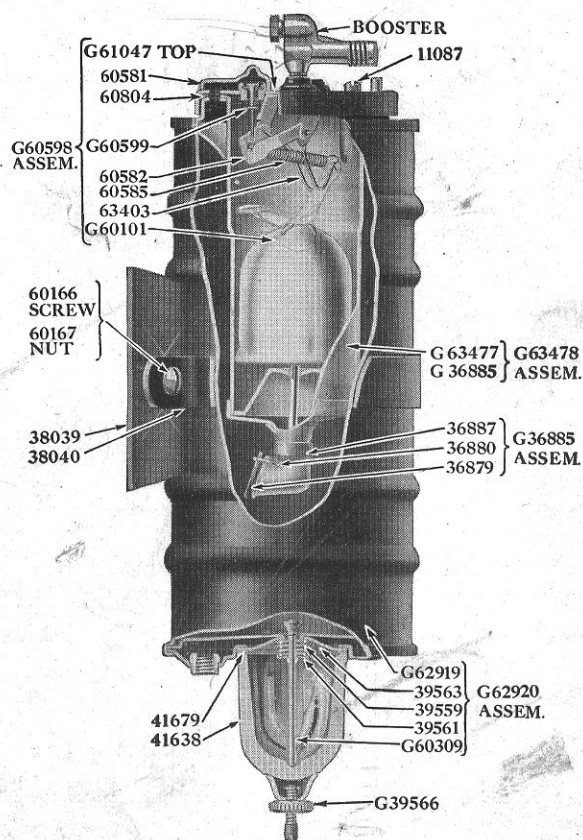
309—Leverless—TYPE 1



373—Leverless—TYPE 3

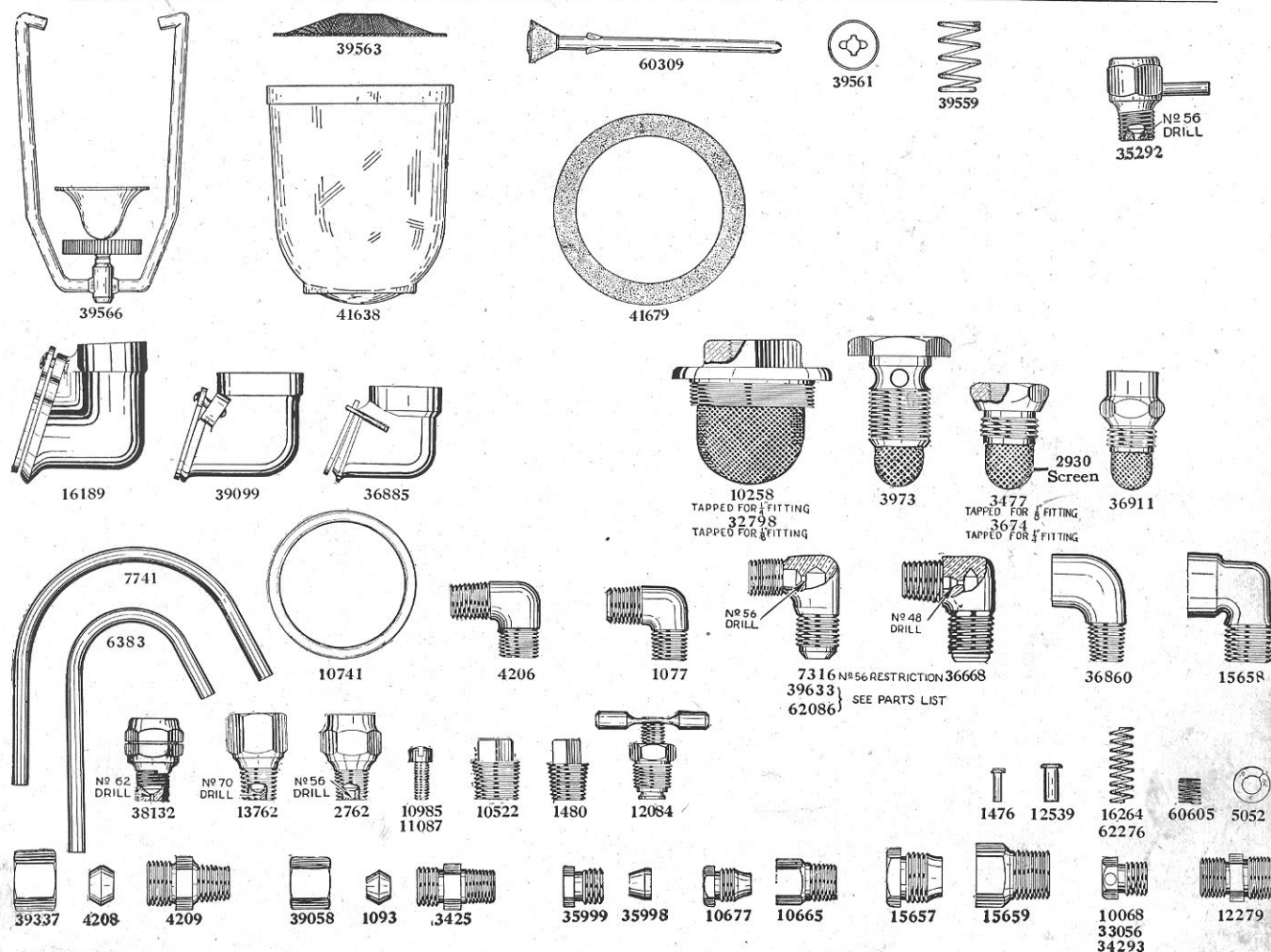


215—Two Spring Lever—TYPE 2



377—Single Spring Lever—TYPE 4

WORLD'S LARGEST MANUFACTURER OF AUTOMOBILE ACCESSORIES



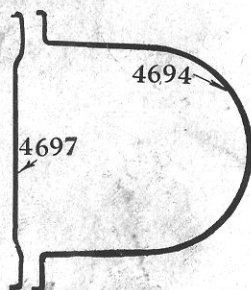
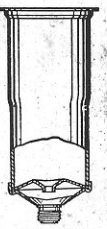
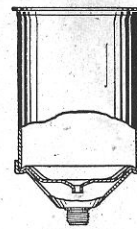
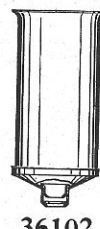
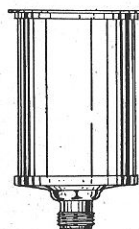
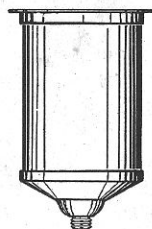
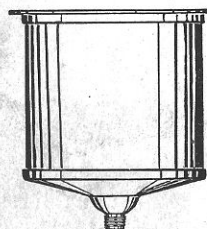
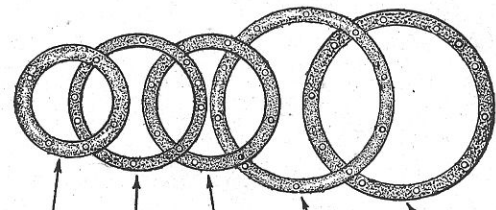
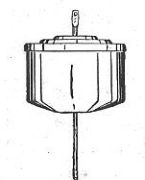
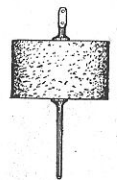
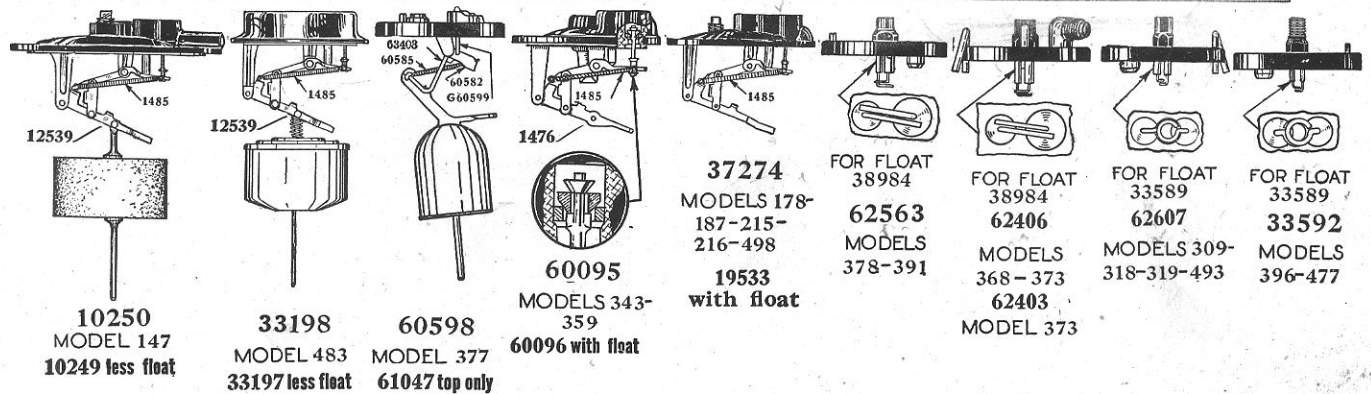
Illustrations One Half Actual Size—NUMERICAL PARTS LIST

Part No.	List Price	Description	Part No.	List Price	Description
1077	\$0.27	Elbow $\frac{1}{16}$ "—20, $\frac{1}{8}$ " Pipe Threads	3973	\$1.50	Gasoline Inlet Bushing (Use with Models 178C—190)
1093 Dz.	.30	Compression Collar (For $\frac{1}{4}$ " Tubing)	4206	.25	Elbow, $\frac{1}{2}$ "—24, $\frac{1}{8}$ " Pipe Threads
1476 C	.50	Float Pin (Used on all lever type but Models 147 and 483)	4208 Dz.	.30	Compression Collar (For $\frac{5}{16}$ " Tubing)
1480	.04	$\frac{1}{8}$ " Pipe Plug	4209	.20	Union, $\frac{1}{2}$ "—24, $\frac{1}{8}$ " Pipe Threads
1485	.05	Float Spring (Use with all Model 215 lever type)	4662 C	1.25	$\frac{1}{4}$ " Lock Washer
2762	.25	Vacuum Connection Nipple (No. 56 Restriction)	4694	.50	Band Bracket (Use with Models 178—278—359)
2807 C	1.25	$\frac{1}{4}$ "—20 Hexagon Nut	4697	.50	Band Bracket (Use with Models 178—278—359)
2815	.30	$\frac{5}{16}$ " Connector (For $\frac{5}{16}$ " Tube)	5052 C	.20	$\frac{3}{16}$ " Lock Washer (Use with 33556 Band Bracket)
2930	.10	Screen	6383	.15	Standard Vent Extension Tube ($\frac{3}{16}$ " Tubing)
3425	.20	Union, $\frac{1}{16}$ "—24, $\frac{1}{8}$ " Pipe Threads	6835	.30	$\frac{1}{4}$ " Connector (For $\frac{1}{4}$ " Tube)
3477	.50	Gasoline Inlet Bushing ($\frac{1}{8}$ " Pipe Tap)	7003	.02	Screw, $\frac{1}{4}$ "—20 x $2\frac{3}{4}$ " (Use with 7422—32552 Band Brackets)
3674	.50	Gasoline Inlet Bushing ($\frac{1}{4}$ " Pipe Tap)	7316	.45	Elbow, $\frac{1}{2}$ "—20, $\frac{1}{8}$ " Pipe Threads (No. 56 Restriction)
3779	.50	Band Bracket (Use with Models 215—309—493—498)	7422	.50	Band Brkt. (Mat'l $\frac{1}{64}$ " x $\frac{1}{8}$ " Wide) (Use with Models 147—187)
3830	.04	Cover Gasket (Use with Models 178—187—190—278)			

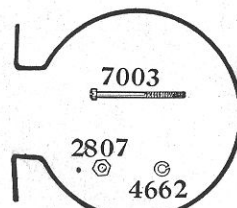
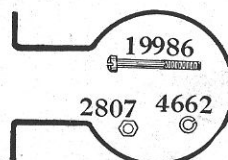
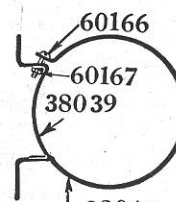
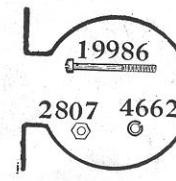
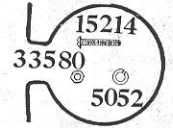
Prices subject to change without notice. C—per 100. Dz.—per 12.

Revised 4-1-31

See Special Price List for Western and Canadian Prices



MODELS 178-278

7422 MODELS 147-187
32552 MODEL 14739290
MODEL 30938040
61380
38040 MODELS
373-377-384
61380 SERVICE ONLY3779
MODELS
215-309-493-49833556
MODEL 477

Illustrations One Sixth Actual Size

Part No.	List Price	Description	Part No.	List Price	Description
7741	\$0.30	Vent Extension Tube	10250	\$8.75	Top and Float Assembly (Use with Models 147-A to F)
10068	.20	Vent Plug, $\frac{1}{8}$ " Pipe Threads	10258	1.50	Gasoline Outlet Bushing (Use with Models 147-A to F)
10235	3.50	Inner Shell (Use with Model 147)	10262 Dz.	.90	Cover Gasket (Lower) (Use on Model 147)
10249	6.50	Top Cover, Bush. and Levers Assem. (Use with Models 147-A to F)	10365 Dz.	.90	Cover Gasket (Upper) (Use on Model 147)

Revised 4-1-31

Prices subject to change without notice. C—per 100. Dz.—per 12.

See Special Price List for Western and Canadian Prices

WORLD'S LARGEST MANUFACTURER OF AUTOMOBILE ACCESSORIES

VACUUM TANK PARTS

Part No.	List Price	Description	Part No.	List Price	Description
10418	\$2.00	Cork Float (Use on Model 178-M)	33195	\$2.50	Inner Shell (Same as 17736, except heavily tinned)
10522	.05	1/4" Pipe Plug			(Used on Models 215AD-AF—483A)
10665	.20	Lower "Dole" Fitting (1/8" Pipe, 3/8"—24 Tap)	33197	17.50	Top, Bush. and Levers Assembly (Used on Model 483)
10677	.06	Upper "Dole" Fitting (3/8"—24 Threads, for 3/16" Tubing)	33198	18.75	Top and Float Assembly (Used on Model 483)
10741	.05	Gasoline Outlet Gasket (Use on Model 147)	33556	.50	Band Bracket (Used on Model 477)
10985 C	.25	Cover Screw (Use on all lever type tanks)	33579	.04	Cover Gasket (Used on Models 309—318—319—368—373—378—391—396—477—493)
11087 C	.40	Cover Screw No. 8—32 x 1/4" (Use on all leverless type tanks)	33580 C	2.50	No. 10—32 Nut (Used with 33556 Band Bracket)
12084	.25	Drain Cock, 1/8" Pipe Threads	33589	1.25	Metal Float (Used on Models 309—318—319—396—477—493)
12279	.08	Union, 7/16"—24 Thds. (Both Ends)	33592	3.00	Top Cover and Valves (Used on Models 396—477)
12539	.05	Float Pin (Use on 147—483-A)	34293	.25	Vent. Plug (Same as 10068, except for nickel finish)
13762	.25	Vacuum Connection Nipple (No. 70 Restriction)	35292	.15	Nipple and Tube Connection (No. 56 Restriction)
13970	1.00	Standard Metal Float for Lever Type Tanks	35998 C	2.60	Compression Collar (Vent) (For 3/16" Tubing)
15214	.01	Screw, No. 10—32 x 1 1/4" (Use with 33556 Band Bracket)	35999	.04	Compression Nut (For 3/16" Tubing)
15657	.10	Upper "Dole" Fitting, 9/16"—20 Threads (For 3/8" Tubing)	36102	1.50	Inner Shell (Used on Models 319—396—477—493)
15658	.20	Elbow, 9/16"—20 Tap, 1/4" Pipe Threads	36668	.45	Elbow, 1/2"—20, 1/8" Pipe Threads (No. 48 Restriction)
15659	.15	Lower "Dole" Fitting, 9/16"—20 Tap (1/4" Pipe Thread)	36860	.15	Elbow, 1/8" Pipe Thread and Tap
16189	1.50	Flapper Valve	36884	1.25	Inner Shell (Used on Models 309—318—368—373—378—391)
16191	3.00	Inner Shell (Use with Models 178A—187A—190A—278)	36885	.75	Flapper Valve (Used on Models 309—318—368—373—377—378—391)
16264	.05	Float Tension Spring (Used on all lever type tanks)	36911	.50	Gasoline Inlet Bushing, 1/8" Tap (Used on Models 309—318—319—378—391)
17736	2.50	Inner Shell (Use with Models 215 (all, except AF)—216—498)	37274	5.00	Top Cover and Levers (Service top for 178—187—215—216—498)
17991	.04	Cover Gasket (Use with Models 215—216—483—498)	38039	.30	Mounting Bracket (Used with Models 373—377—384—391)
19533	6.50	Top and Float Assembly (Service Top for 178—187—215—216—498)	38040	.35	Mounting Strap—1/16" Stock (Used with Models 373—377—384—391)
19986 C	2.50	Screw, 1/4"—20 x 2 5/8" (Use with Models 215—309—493—498)	38132	.25	Vacuum Connection Nipple (No. 62 Restriction)
32552	.75	Band Bracket (Same as 7422, except material 1/8" x 1 1/8" wide) (Used with Model 147F)	38984	1.00	Metal Float (Used on Models 368—373—378—391)
32798	1.75	Gasoline Outlet Bushing (Use with Model 147G)	39058	.06	Compression Nut, 7/16"—24 Thds. (For 1/4" Tubing)
33056	.16	Vent. Plug, 3/8"—20, S. A. E. Threads (Same as 10068, except thread)			

Prices subject to change without notice.

C—per 100. Dz.—per 12.

See Special Price List for Western and Canadian Prices

VACUUM TANK PARTS

Part No.	List Price	Description	Part No.	List Price	Description
39093	\$3.00	Inner Shell (Used on Models 343A—359A)	60166 C	\$0.60	1/4"—20 x 5/8" Rd. Hd. Mach. Screw (Use with 38039, 38040 and 61380)
39099	1.50	Flapper Valve (Used on Models 343A—359A)	60167 C	.50	1/2"—20 Square Nut (Use with 38039, 38040 and 61380)
39290	.60	Band Bracket (Used with Model 309N)	60309	.15	Drain Valve (Used on Models 216AU—368—373—377—391—396)
39337	.06	Compression Nut, 1/2"—24 (For 5/16" Tubing)	60582	.05	Atmospheric Valve Lever (Used on Models 377—411—412—416—426—428)
39559 C	.50	Spring (Drain Valve) (Used on Models 216AU—368—373—377—391—396)	60585 C	1.50	Atmospheric Valve Spring (Used on Models 377—411—412—416—426—428)
39561 C	1.30	Drain Valve Retainer (Used on Models 216AU—368—373—377—391—396)	60598	2.50	Top and Float Assembly (Used on Models 377—411—412—416—426—428)
39563	.10	Screen (Used on Models 216AU—368—373—377—391—396)	60599	.05	Atmospheric Valve (Used on Models 377—411—412—416—426—428)
39566	.30	Chin Strap (Used on Models 216AU—368—373—377—391—396)	60605 C	.50	Float Tension Spring (Used on Models 368—373—378—391)
39633	.25	Elbow, 7/16"—20, 1/8" Pipe Thread (Similar to 7316, except has no Restriction) (For 1/4" Tubing)	61047	1.25	Top Only (Used on Models 377—411—412—416—426—428)
41638	.15	Glass Bowl (Used on Models 216AU—368—373—377—391—396)	61380	1.00	Mounting Strap—3/32" Stock (Service only)
41679	.02	Cork Gasket (Used on Models 216AU—368—373—377—391—396)	62086	.25	Elbow, 1/2"—20, 1/8" Pipe Thread (Similar to 7316, except has no Restriction) (For 5/16" Tubing) (Used on Model 373)
60095	5.00	Top Cover and Levers (Used on Models 343B and 359B)	62276 C	1.50	Float Spring (Used on Models 343-D—359-E—483)
60096	6.50	Top and Float Assembly (Used on Models 343B and 359B)	62403	2.75	Replacement Top (For Models 368 and 373A)
60153		Flapper Valve (Use 36884 and 36885) (Was used on Models 368A—373A—378A)	62406	2.75	Replacement Top (For Model 373-B)
60155		Inner Shell (Use 36884) (Was used with Models 368A—373A—378A)	62563	2.50	Top Cover and Valves (Used on Models 378 and 391)
60156		Flapper Valve Lever (Use 36884 and 36885) (Was used on Models 368A—373A—378A)	63403	.05	Float Lever (Used on Models 377—411—412—416—426—428)
60157		Flapper Valve Support (Use 36884 and 36885) (Was used on Models 368A—373A—378A)	63477	1.50	Inner Shell (Used on Models 377—411—412—416—426—428)
			62607	2.00	Replacement Top (For Models 309—318—319—493)
			63766	3.00	Inner Shell (Used on Models 215-AK—427)

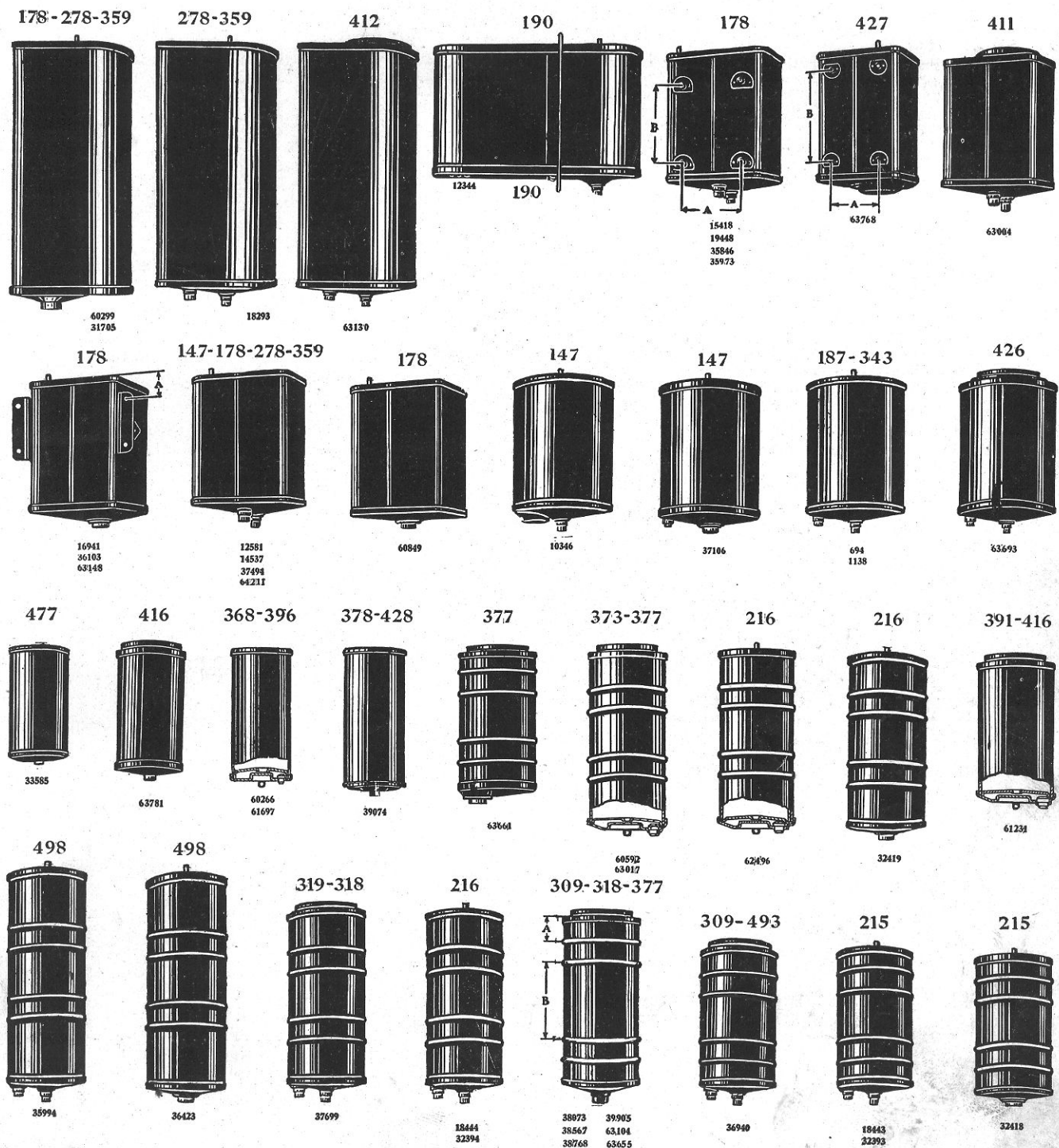
Prices subject to change without notice. C—per 100. Dz.—per 12.

Revised 4-1-31

See Special Price List for Western and Canadian Prices

WORLD'S LARGEST MANUFACTURER OF AUTOMOBILE ACCESSORIES

VACUUM TANK PARTS



Illustrations One Ninth Actual Size

When Two or More Numbers are Shown Below an Outside Shell, see Parts List on Next Page for Description.
The Numbers Above the Outside Shells are Those of Tank Models on Which Shells are Used.

Revised 4-1-31

See Special Price List for Western and Canadian Prices

VACUUM TANK PARTS OUTER SHELLS NUMERICAL PARTS LIST

Part No.	List Price	Description	Model Used On	Part No.	List Price	Description	Model Used On
694	\$4.00	$\frac{1}{8}$ " Gas Outlet; Reserve Capacity, 3.95 Pts.....	187-A—343-B and D	32393	\$3.50	(Same as 18443, except $\frac{1}{8}$ " Gas Outlet [Long Neck Type]); Reserve Capacity, 2.343 Pts.....	All 215, except as otherwise indicated
1138	4.00	(Same as 694, except $\frac{1}{4}$ " Gas Outlet); Reserve Capacity, 3.95 Pts.....	343-A and C	32394	3.50	(Same as 18444, except $\frac{1}{8}$ " Gas Outlet [Long Neck Type]); Reserve Capacity, 3.375 Pts.....	All 216, except as otherwise indicated
10346	4.00	(For 10258 Style Outlet Bushing); Reserve Capacity, 3.95 Pts..	All 147, except H and N	32418	3.50	$\frac{3}{8}$ " Gas Outlet; Reserve Capacity, 2.343 Pts.....	215-T-U-AA-AB-AK
12344	10.00	$\frac{1}{4}$ " Gas Outlet; Reserve Capacity, 7.5 Pts.....	190-A	32419	3.50	$\frac{3}{8}$ " Gas Outlet; Reserve Capacity, 3.375 Pts.....	216-U-Y-Z-AF-AR
12581	5.00	$\frac{1}{4}$ " Gas Outlet; Length $7\frac{13}{16}$ "; Reserve Capacity, 5.25 Pts.....	178-A-B-D-G-J-V-AD—359-A-B-C	33585	1.75	$\frac{1}{8}$ " Gas Outlet; Reserve Capacity, .5866 Pt.....	All 477
14537	5.00	(Same as 12581, except $\frac{1}{8}$ " Gas Outlet); Reserve Capacity, 5.25 Pts.....	178-C-H-N-P-S	35846	6.00	(Same as 15418, except $\frac{1}{8}$ " Gas Outlet; Dim. A— $3\frac{5}{8}$ "; B— $4\frac{11}{16}$ "; Reserve Capacity, 5.25 Pts.....	178-X
15418	6.00	$\frac{1}{4}$ " Gas Outlet; Dim. A— $3\frac{5}{8}$ "; B— $4\frac{11}{16}$ "; Reserve Capacity, 5.25 Pts.....	178-E and M	35973	6.00	(Same as 15418, except $\frac{3}{8}$ " Gas Outlet; Dim. A— $3\frac{5}{8}$ "; B— $4\frac{11}{16}$ "; Reserve Capacity, 5.25 Pts.....	178-Y
16941	10.00	$\frac{1}{4}$ " Gas Outlet; Dim. A— $1\frac{5}{16}$ "; Reserve Capacity, 5.25 Pts..	178-F	35994	3.50	$\frac{1}{8}$ " Gas Outlet; Reserve Capacity, 4.4 Pts.....	498-A-B
18293	8.00	$\frac{1}{4}$ " Gas Outlet; Reserve Capacity, 13.2 Pts.....	278-A-C-D—359-E	36103	7.00	(Same as 16441, except $\frac{3}{8}$ " Gas Outlet; Dim. A— $1\frac{5}{16}$ "; Reserve Capacity, 5.25 Pts.....	178-Z and AA
18443	3.50	$\frac{1}{4}$ " Gas Outlet; Reserve Capacity, 2.343 Pts.....	215-B and K	36423	3.50	$\frac{3}{8}$ " Gas Outlet; Reserve Capacity, 4.4 Pts.....	498-C
18444	3.50	$\frac{1}{4}$ " Gas Outlet; Reserve Capacity, 3.375 Pts.....	216-B-J-M-AD-AM-AP	36940	3.50	$\frac{1}{8}$ " Gas Outlet (Long Neck Type); Reserve Capacity, 2.282 Pts..	All 309, except J-P-L—All 493
19448	6.00	(Same as 15418, except $\frac{1}{8}$ " Gas Outlet; Dim. A—4"; B—4"); Reserve Capacity, 5.25 Pts.....	178-R	37106	4.00	$\frac{1}{8}$ " Gas Outlet ($\frac{1}{4}$ " Drain Outlet); Reserve Capacity, 3.95 Pts.....	147-H
31705	4.50	(Same as 60299, except only $7\frac{13}{16}$ " Long); Reserve Capacity, 5.25 Pts.....	178-T-W-AB—359D				

Prices subject to change without notice.

Revised 4-1-31

See Special Price List for Western and Canadian Prices

WORLD'S LARGEST MANUFACTURER OF AUTOMOBILE ACCESSORIES

VACUUM TANK PARTS

OUTER SHELLS

NUMERICAL PARTS LIST

Part No.	List Price	Description	Model Used On	Part No.	List Price	Description	Model Used On
37494	\$5.00	(Same as 12581, except $\frac{1}{8}$ " Gas Outlet; Length $14\frac{3}{8}$ "; Reserve Capacity, 13.2 Pts.....)	278-B	61697	\$2.50	(Same as 60266, except only $6\frac{13}{32}$ " Long); Reserve Capacity, .58 Pt.....)	396-A
37699	3.50	$\frac{1}{8}$ " Gas Outlet (Long Neck Type); Reserve Capacity, 3.5 Pts....	318-A-B-D-E-H—319-A	62496	3.50	$\frac{1}{8}$ " Gas Outlet; Reserve Capacity, 3.375 Pts.....	216-AU
38073	3.00	$\frac{3}{8}$ " Gas Outlet; Dim. A — $1\frac{13}{32}$ "; B — $2\frac{25}{32}$ "; Length $8\frac{1}{2}$ "; Reserve Capacity, 2.222 Pts.....	309-J and P	63004	5.00	$\frac{1}{8}$ " Gas Outlet; Reserve Capacity, 5 Pts.	411-A
38567	3.00	(Same as 38073, except $\frac{1}{8}$ " Gas Outlet; Dim. A — $1\frac{13}{32}$ "; B — $2\frac{25}{32}$ "; Reserve Capacity, 2.222 Pts.)	309-L	63017	3.50	(Same as 60592, except Outlet has $\frac{1}{4}$ " Male Pipe Thd.); Reserve Capacity, 3.5 Pts.....	377-D
38768	3.00	(Same as 38073, except $\frac{1}{8}$ " Gas Outlet; Dim. A — $2\frac{13}{32}$ "; B — $2\frac{25}{32}$ "; Length $10\frac{1}{2}$ "; Reserve Capacity, 3.5 Pts.....)	318-C	63104	3.50	(Same as 38073, except Dim. A — $1\frac{17}{32}$ "; B — $4\frac{1}{2}$ "; Length $10\frac{1}{2}$ "; Reserve Capacity, 3.5 Pts.....)	377-E
39074	2.50	$\frac{1}{8}$ " Gas Outlet; Reserve Capacity, 1 Pt.	378-A—428-A	63130	8.00	$\frac{1}{4}$ " Gas Outlet; Reserve Capacity, 13.2 Pts.....	412-A
39905	3.00	(Same as 38073, except $10\frac{1}{2}$ " Long; Dim. A — $2\frac{13}{32}$ "; B — $2\frac{25}{32}$ "; Reserve Capacity, 3.5 Pts....)	318-F and G	63148	7.00	(Same as 16941, except $\frac{3}{8}$ " Gas Outlet; Dim. A — $2\frac{13}{16}$ "; Reserve Capacity 5.25 Pts.....)	178-AE and AF
60266	2.50	$\frac{1}{8}$ " Gas Outlet; Length $7\frac{1}{2}$ "; Reserve Capacity, 1 Pt.....	368-A-B-C	63655	3.50	(Same as 38073, except $\frac{1}{8}$ " Gas Outlet; Dim. A — $1\frac{17}{32}$ "; B — $4\frac{1}{2}$ "; Length $10\frac{1}{2}$ "; Reserve Capacity, 3.5 Pts.....)	377-H
60299	8.00	$\frac{3}{8}$ " Gas Outlet; Length $14\frac{3}{8}$ "; Reserve Capacity, 13.2 Pts.....	278-E	63661	3.50	$\frac{3}{8}$ " Gas Outlet; Reserve Capacity, 3.5 Pts.....	377-J
60592	3.50	$\frac{1}{8}$ " Gas Outlet; Reserve Capacity, 3.5 Pts.....	All 373 — All 377, except D-E-H-J	63693	4.00	$\frac{1}{4}$ " Gas Outlet; Reserve Capacity, 3.95 Pts.....	426-A
60849	5.00	$\frac{3}{8}$ " Gas Outlet; Reserve Capacity, 5.25 Pts.....	178-U	63768	14.00	(Has Special Bottom for Sediment Bowl); Reserve Capacity, 3.25 Pts.....)	427-A-B
61231	3.00	$\frac{1}{8}$ " Gas Outlet; Reserve Capacity, 2.222 Pts.....	391-A-B—416-B-F	63781	2.75	$\frac{1}{8}$ " Gas Outlet; Reserve Capacity, 2.222 Pts.....	416-A-C-D-E-G
				64211	5.00	(Same as 12581, except $\frac{1}{8}$ " Gas Outlet; Top Ring made for 147 Mech.); Reserve Capacity, 5.25 Pts.....)	147-N

Prices subject to change without notice.

Revised 4-1-31

See Special Price List for Western and Canadian Prices

VACUUM BOOSTERS

Provide Unvarying Fuel Supply at All Engine Speeds

PURPOSE OF THE VACUUM BOOSTER

These Boosters are intended for use on engines in which the vacuum in the manifold becomes too low under certain conditions to lift gasoline into the vacuum tank. This condition exists on some passenger cars in mountainous districts and previously has been overcome by equipping the car with a tank of larger capacity. With the vacuum booster, the larger tank will no longer be necessary.

The condition is also experienced on busses and trucks having large motors and which frequently have to run for considerable periods with the throttle wide open. Under these conditions the vacuum tank would be drained, as the vacuum in the engine manifold is so low that gasoline could not be lifted to the vacuum tank.

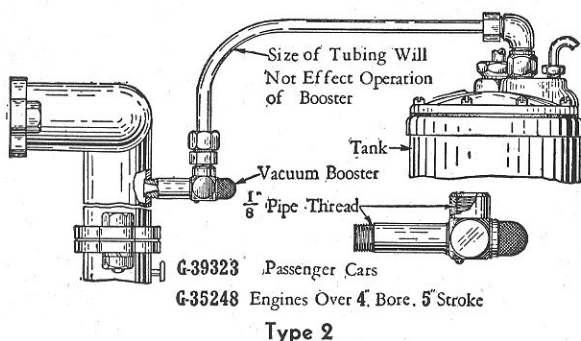
MANIFOLD TYPE

Price, \$1.00

G-39323 For Passenger Cars

G-35248 For Busses and Tractors

Model G-35248 is most suitable for use on large bore engines, such as in busses, tractors, etc. They will usually increase the vacuum at the vacuum tank about 300% of minimum manifold vacuum.

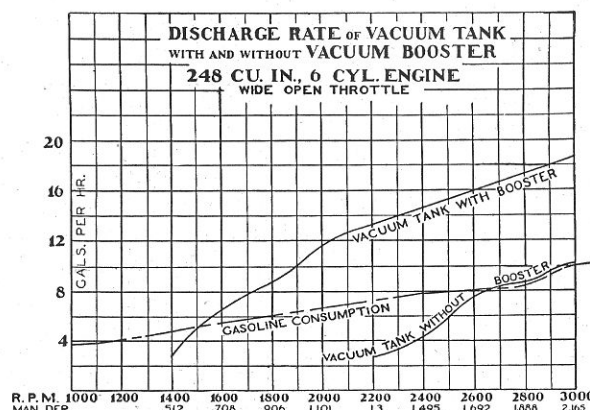


DIRECTIONS FOR INSTALLING

Type 2 should always be installed in the manifold as shown and never in the tank.

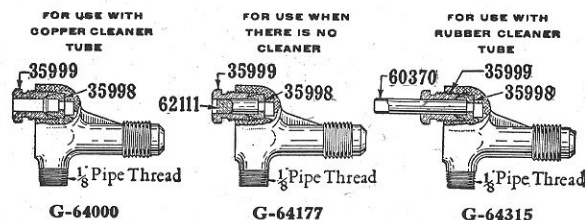
Some adjustment of the carburetor to insure proper motor idling may be necessary after either of these boosters is installed. This adjustment in no way affects the economy if properly made.

No attempt should be made to disassemble the booster, as the relation of all parts is fixed and should not be varied.

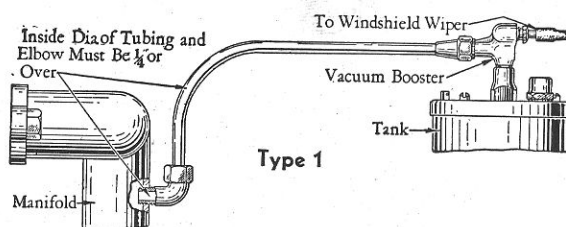


Curves Showing Delivery Rate of Vacuum Tank with and without Vacuum Booster, Positioned in the Manifold in This Instance.

VACUUM TANK TYPE



Price, \$0.75



DIRECTIONS FOR INSTALLING

Type 1 is primarily for installation by car factories where vacuum windshield cleaners are standard equipment. Where the installation is made by others, the tube to the manifold usually must be changed to a larger size, which in no case shall be less than 1/4" inside diameter. In all cases this tube must be bent or attached in such a manner as to prevent vibration or movement being transmitted by it from the engine to the booster, or else the latter may be broken from vibration.

WORLD'S LARGEST MANUFACTURER OF AUTOMOBILE ACCESSORIES

CAR FACTORY SPEEDOMETERS EQUIPMENT 1931
PASSENGER VEHICLES

Specifications for truck equipment and the number of other users of limited distribution require so much space that they must be omitted from this catalog. Dealers desiring these may obtain them by writing their nearest Stewart-Warner distributor or our factory.

Name of Car	Model of Car	Speedo. *Inst. Panel	Axle Ratio	Tires		Shaft	Cable Assembly	Drive Gear	T	Driven Gear	T
				Size	RPM						
Auburn	Cord (1st 5000 only) Taxicab	393-B 369-B	..... 5.12	32x7.00	657	{37700-90" 34200-54"	37735-90" 34184-54"	60868 36036	18 5	60869 19430	12 17
	8-98..... Free Wheeling....	+509-C	{4.7 4.45 4.45 4.7 5.1 5.1	{29x6.50 29x6.50 29x6.00 29x6.00 29x6.00 29x6.50		+64900-58"	Tipless Cable +64879-52"	+65478	5	{65480 +65479 +65480 +65481 +65482 65481	16 15 16 17 18 17
Checker	M.....	413-L	{5.09 5.6 Opt.	30x6.50	677	64250-61"	Tipless Cable 64207-61"	{65185 65487	5 4	65186 65488	17 15
Duesen- berg	J.....	{79-AF 83-C Tach.	3.78	33x7.00	645	13700-58" 62100-15 1/4"	13910-58" 62073-15 1/4"	61613	5	61614	12
Elcar	120 } Big Eight 130 }	600-AN	{4.82 3.9	31x6.50	657	34200-48"	34184-48"	15895	5	14338	16
Ford	"A"	413-F	3.77	28x4.75	721	64250-61"	64207-61"	.....	7	.....	19
	"A" Export (R. H. Drive)	413-F	4.55	28x4.75	721	64250-55"	64207-55"	.....	7	.....	23
	"AA" Truck 131 1/2" W. B. (Domestic Trade)	413-F	{5.142 6.6	{32x6 32x6.00 Dual 32x6 32x6.00 Dual	{622 649 622 649	{64250-81" 64250-81"	64207-81"	.....	4	.....	13 17
	"AA" Truck 131 1/2" W. B. (Export R. H. Drive)	413-F	{5.142 6.6	{32x6 32x6.00 Dual 32x6 32x6.00 Dual	{622 649 622 649	{64250-77" 64250-77"	64207-77"	.....	4	.....	13 17
	"AA" Truck 157" W. B. (Domestic Trade)	413-F	5.142	32x6 32x6.00 Dual	622 649	64250-110"	64207-110"	.....	4	.....	17
	"AA" Truck 157" W. B. (Export R. H. Drive)	413-F	5.142	32x6 32x6.00 Dual	622 649	64250-103"	64207-103"	.....	4	.....	17
	20 D..... 30 C..... 44 D Ambulance..	600-AU	{4.45 4.9 5.1	{32x7.00 30x6.50 32x7.50	{664 677 645	34200-50"	34184-50"	35800 61074 65323	4 3 4	14602 34835 19026	12 10 13
	Dover Truck.....	+413-J	5.4	29x5.00	717	+63300-58"	+63325-58"	18108	4	18109	15
	Essex, 1931.....	+413-J	{5.1 5.4 5.89	29x5.00	717	+63300-58"	+63325-58"	{17512 18108 +64513	4 4 5	{17513 18109 +64514	14 15 21
	Hudson.....	+417-E	{4.63 5.1	28x5.50	714	+63300-58"	+63325-58"	{35202 17512	5 4	{35203 17513	16 14
Hupmo- bile	C-1.....	280-DP	{4.55 4.9	31x6.00	682	13600-67"	13637-67"	{+65439 +65445	6 6	{+65440 +65446	18 20
	H and U.....	280-DP	{4.08 4.58	31x6.50	656	13600-67"	13637-67"	{+65315 +65317	6 6	{+65316 +65318	13 15
	L-1.....	413-D	{4.09 4.55 4.9	29x5.50	693	65250-62"	64207-62"	{+65447 +65441 +65451	6 6 5	{+65448 +65442 +65452	17 19 17
	S-6 Cyl..... (Free Wheeling)	413-D	{4.3 4.7 5.22	29x5.50	695	64250-62"	64207-62"	{+65496 +65498 +65501	5 5 5	{+65497 +65499 +65502	15 16 18

Parts preceded by † are used for the first time on the cars designated.

CAR FACTORY SPEEDOMETERS EQUIPMENT 1931
PASSENGER VEHICLES.

Name of Car	Model of Car	Speedo. *Inst. Panel	Axle Ratio	Tires		Shaft	Cable Assembly	Drive Gear	T	Driven Gear	T
				Size	RPM						
Meteor	.....	.....	4.55	34x7.00	626	.....	.....	+65436	5	+17513	14
Nash	8 Cyl. (Milwaukee)	413-E	{ 4.46 4.7 5.1	28x5.50	.....	64900-50"	64879-50"	65009	4	{ 65010 65011 65012	{ 12 13 14
	8 Cyl. (Kenosha)	509-A	{ 4.153 4.5 4.9	31x6.50	.....	64900-55"	64879-55"	64863	5	{ 64864 64865 64866	{ 13 14 15
Reo	25-6 Cyl.	417-D	.....	.....	.....	63600-62"	63685-62"	Fur- nished by Reo		Fur- nished by Reo	
	30-8 Cyl.	417-D	.....	.....	.....	63600-62"	63685-62"				
	35.	509-B	.....	.....	.....	63600-72"	63685-72"				
Rolls- Royce	Phantom.	79-AG	3.7	{ 33x6.75 34x7.00	.....	13700-69"	13910-69"	.....	13	.....	22
	Silver Ghost.	79-AG	3.7	{ 33x5 33x6.75	.....	13700-69"	13910-69"	.....	5	.....	11
Stude- baker	"54" Studebaker 6 (Free Wheeling)	{ 413-A *504-A	{ 4.73 Std. 5.11	29x5.25	696	63300-69"	63325-69"	+65693	6	+65694 65695	{ 20 21
	"61" Dictator 8 (Free Wheeling)	{ 417-C *507-A	{ 4.73	29x5.25	.....	64250-72"	64207-72"	64577	6	65174	20
	"70" Comm. 8 Cyl. (Free Wheeling)	{ 417-C *502-A	{ 4.36 4.73	31x6.00	675	64250-72"	64207-72"	64470	7	{ 64471 64515	{ 22 20
	"80" and "90" Pres. 8 Cyl. (Free Wheeling)	417-C *503-A	{ 3.47 4.08 4.31 4.64	31x6.50	660	64250-78"	64207-78"	64562	7	64563	16
			.....	31x6.50	660	64250-78"	64207-78"	64472	6	{ 64564 64462 64561	{ 16 17 18
			.....	.....	.....	64250-72"	64207-72"	64694	5	64695	16
	"S-20" and "S-30" 1½ Ton Trucks	{ 413-G *508-A	5.14	.....	.....	64250-72"	64207-72"	64694	5	{ 64695 64696 64697	{ 16 17 18
			5.66	.....	.....	64250-72"	64207-72"	64694	5	{ 64698 64974	{ 20 19
			6.6	32x6.00	.....	64250-72"	64207-72"	64694	5	64695	16
	"S-40", "S-50" and "S-60" 2 Ton Trucks	413-G *508-A	4.857	.....	.....	64250-72"	64207-72"	64694	5	{ 64695 64696 64697	{ 16 17 18
			5.833	.....	.....	64250-72"	64207-72"	64694	5	{ 64698 64699 64974	{ 20 20 19
			6.8	.....	.....	64250-72"	64207-72"	64694	5	64695	16
Stutz	"M" Big 8.	393-C	{ 4.25 4.5 4.75 5.1	{ 32x6.50 32x6.50 32x7.00 32x6.50 32x7.00 32x6.50 32x7.00	{ 635 635 627 635 627 635 627	34200-52"	34184-52"	60658	5	{ 60659 60659 60659 60660 60660 60661 60660	{ 14 14 14 15 15 16 15
		
		
		
Stutz	M and L.	393-C	{ 4.25 4.5 4.75 5.00 5.1	{ 32x6.50 32x6.50 32x6.50 34x7.00 32x6.50 34x7.00 31x6.00	{ 635 635 635 627 635 627 700	34200-56"	34184-56"	64445	5	{ 60247 60247 60248 60248 60811 60248 62028	{ 14 14 15 15 16 15 17
		
		
		

Parts preceded by * are used for the first time on the cars designated.

WORLD'S LARGEST MANUFACTURER OF AUTOMOBILE ACCESSORIES

CAR FACTORY FUEL FEED EQUIPMENT 1931

This list is necessarily incomplete because of constant changes in specification and increase in number of users of Stewart-Warner fuel pumps.

Limited space also requires the omission of many other classes of users of Stewart-Warner fuel feed systems.

Stewart-Warner mechanical and electric fuel pumps are now available for use on nearly all engines.

If your vehicle or engine is not listed here just state what type pump or what vacuum tank is wanted and give make, model and year of vehicle or engine.

E—Electric Fuel Pump.

M—Mechanical Fuel Pump.

V—Vacuum Tank.

Y—Vacuum Pump

	Model		Model
American Car Foundry		Ford	
160-230 W. B. Bus.....	V {	Lincoln.....	M 527-A
601-2 (Street or Parlor Car Bus).....		Gotfredson	
602-1 (Parlor Car Bus).....		56 and 66 (Buda "BA" Motor).....	M 403-L
701-1 and 701-2.....		RB-24, RB-26, RB-36 (Cont. 18 E Motor).....	M 403-M
		RB-36, RB-46, RB-56, RW-46.....	M 403-N
American LaFrance		RW-56 (Hercules WX Motor).....	M 403-N
217 Chain Drive.....	V {	RW-66, RW-86 (Hercules YX Motor)....	M 403-N
218 Worm Drive.....		Gramm	
Auburn		Lycoming ASA Motor.....	M 403-U
Taxicab.....	V	Cont. 21 R Motor.....	M 506-B
6-85 (6 Cyl.).....	V	Harnischfeger	
8-95 (Small 8).....	M	Excavators.....	V {
Autocar			{ 147-N
Truck.....	V		{ 377-M
Available			{ 343-D
Cont. 18 E Motor.....	M	Henney	
Cont. 16 C Motor.....	M	20D and 44D AMB.....	M 403-K
Brockway		10 Hearse.....	M 403-K
120 and 140.....	M	30C Hearse.....	M 403-E
Conf. 16 C Motor.....	M	Hudson	
Cont. 22A, 25A, 26A.....	M	Dover Truck.....	V 373-B
Cadillac		Essex 1931.....	V 373-B
12 Cylinder.....	V	Hudson 1931.....	V 373-H
452-16 Cyl. (R. H. Side).....	V	Hug Co.	
452-16 Cyl. (L. H. Side).....	V	Buda BA-6.....	M 403-AP
Chicago Truck		Buda GF-6.....	M 407-T
Waukesha 6ML.....	M	Hupmobile	
Waukesha 6TL.....	M	"S"-6 Cyl. Std. Ratio.....	V {
Checker		"S"-6 Cyl. Mt. Ratio.....	V {
"K" Production.....	V	Small "C"-8 Cyl. Std. Ratio.....	M {
"K" Optional.....	V	Small "C"-8 Cyl. Mt. Ratio.....	M {
	M	"H"-8 Cyl., large.....	M {
Chrysler		"U"-8 Cyl., large.....	M {
	M	"L"-8 Cyl.....	M {
Climax Eng. Co.		"S-2"-6 Cyl.....	V {
Climax Engineering N Series R81.....	M		{ 403-R
Corbitt			{ 377-B
Continental W-10.....	M	Indiana Truck	
Continental 26-A, 25-A, 22-A.....	M	Hercules WXC Motor.....	M 403-F
Cunningham		120 and 140 (Cont. 16 R Motor).....	M 403-G
V-9.....	V	Inter. Harvester	
Diamond T		Tractor (10-20 Tractor).....	M 506-C
Hercules JXA.....	M	Inter. Motor	
Hercules YX-WX.....	M	Own Make Model BC.....	M 506-H
Divco-Detroit		Jordan	
"B" and "G" Delivery Trucks.....	V	G-8 Cylinder.....	M 376-A
Duesenberg		Kenworth	
"J".....	E	Hercules YX, WX.....	M 403-F
Fageol		Buda HI-73, HI-99, J214, H260, H298....	M 403-J
6 Cyl. Std. Tread Coach.....	V	Koehring Co.	
340-365-370-445-485.....	V	Waukesha 6 SRL.....	M 506-D
100-130-135-250-255.....	V	Wisconsin D12.....	M 407-H
Federal		Wisconsin E.....	M 407-G
X-8 (Calif. Territory).....	V	Kohler	
Four Wheel Drive		Big Engines (Farm Lighting Plant).....	V 416-H
Waukesha 6 KS Motor.....	M	Little Engines (Farm Lighting Plant)....	V 416-J
Waukesha 6 MS Motor.....	M		
Waukesha 6RB, 6AB, 6HB.....	M		

CAR FACTORY FUEL FEED EQUIPMENT 1931

La France Republic Corporation			Model						Model	
Lycoming ASD.....	M	506-J			Republic					
Lycoming TS.....	M	506-M			A-1, C-1, D-1, F-2, L-1, M-1.....	V	377-N			
Waukesha 6SRL.....	M	506-L			Rolls-Royce					
Waukesha 6AB.....	M	414-H			Phantom.....	V	483-A			
Lawton Co.					Sanford					
Fuller Johnson 4 Cyl. "BC".....	M	506-K				V	377-H			
Le Roi					Smith, A. O.					
RX Engine.....	M	506-A			Portable Welder.....	M	403-P			
RXS Engine.....	M	506-A			Standard					
8 Cyl. V Type.....	M	407-B			Continental W10 and W20.....	M	506-G			
Lincoln					¾ Ton Truck.....	V	377-N			
All Models.....	M	527-A			16 A—1½ Ton.....	V				
Maccar					28 A.....	V				
Buda BA6 Motor.....	V	428-A			Fisher Jr. Express.....	V				
	Y	346-F			Sterling					
Hercules YXC-3 Motor.....	V	428-A			Waukesha 6KS, 6SRS, 6SRL.....	M	403-Y			
	Y	346-E			Waukesha 6AB, 6HB, 6RB.....	M	407-V			
36A and 40A (Buda H 298 Motor).....	M	403-AG			Waukesha 6MS, 6ML, 6MK.....	M	403-AF			
Mack					Continental 17E.....	M	403-M			
AB 6 Cyl. Truck, BC-DR, BC-CD.....	V	428-A			Continental 25A.....	M	403-AB			
	Y	346-B			Continental 16C.....	M	403-AD			
BC Bus, BG and BL Trucks.....	V	428-A			Stewart					
	Y	346-B			18X-19X-26XW-33X (Lycoming TF&TS					
2 BC-375.....	V	416-L			Motors).....	M	403-X			
Meteor					19X-28X-29X-29XW-30-30X.....	V	377-N			
6 Cyl. and 8 Cyl.....	V	377-A			29X29XS-32X (Lycoming ASA).....	M	403-W			
Cont. 12K Motor.....	V	416-K			Lycoming AE Motor.....	M	407-K			
	Y	346-C			Lycoming AFE Motor.....	M	506-E			
Cont. 15S Motor.....	V	416-K			Lycoming TS Motor.....	M	407-P			
	Y	346-D			Lycoming WTG Motor.....	M	514-A			
National Motor					Lycoming 4SL Motor.....	M	514-B			
	V	377-N			Studebaker					
Cont. 16C Motor.....	M	403-AD			61 Dictator 8.....	M	414-B			
Cont. 16R and 18R Motors.....	M	403-AA			70 Comm. 8 Cyl.....	M	414-B			
Cont. 25A Motor.....	M	403-AB			80 and 90 Pres. 8 Cyl.....	M	414-C			
Nelson Le Moon					S-20X30—1½ Ton Truck.....	M	414-A			
Waukesha 6 MK—6 MS.....	M	403-AS			54 Studebaker 6.....	M	414-B			
Waukesha 6 AB and 6 RB Motors.....	M	407-L			Super Oil Heater Company					
Northwest Eng.					Oil Burner.....	V	215-AL			
Twin City TA and BE Motors.....	M	407-M			Thew Shovel Company					
Wisconsin B & BS, K & KS Series Motors.....	M	407-R			Waukesha WL.....	M	407-F			
Oshkosh					Thorne					
Hercules YXC Motor.....	M	403-AE			Buda H-173, H-199, J-214, H-260, H-298.....	M	403-H			
Packard					Ward La France					
Big 8.....	M	407-E			Waukesha ML Motor.....	M	403-V			
726 and 733—Small 8 Cyl.....	M	407-D			Westinghouse					
926 and 933.....	M	407-AE			Farm Lighting Equipment.....	M	397-C			
740 and 745—Large 8 Cyl.....	M	407-D			Farm Lighting Equipment.....	M	397-B			
940 and 945.....	M	407-AB			Willys-Overland					
Pierce-Arrow					Overland 98-B.....	V	416-D			
	M	414-E			Overland C-101 Light Delivery Truck.....	V	416-E			
	M	414-F			Whippet 96-A.....	V	416-G			
Plymouth					Whippet 98-B.....	V	416-D			
Overseas.....	V	377-K			Willys-Knight (Willys Eight 8-80).....	V	377-H			
Rayfield					Zenith Carb. Co.					
Oil Burner.....	V	215-AN			Test Fixture.....	E	409-B			
Relay										
15-A and 100-A.....	V	377-N								
60 C and Z.....	V	216-Z								
Buda BA-6.....	M	403-AK								