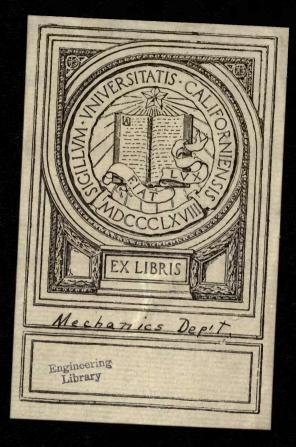
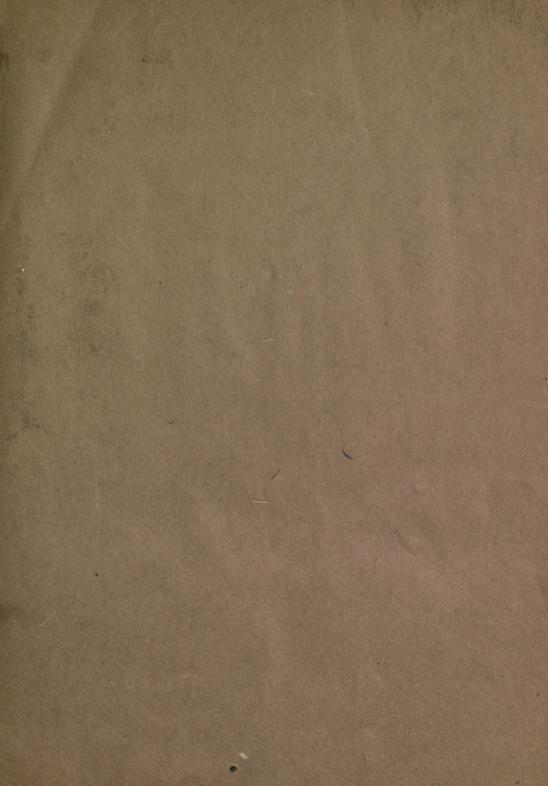
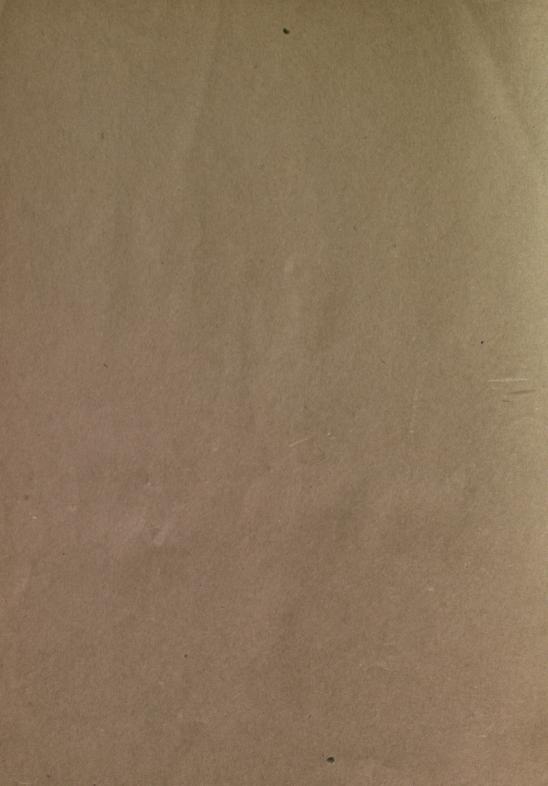




YD 07533







1917-1918-1919 AUTOMOBILE WIRING DIAGRAMS



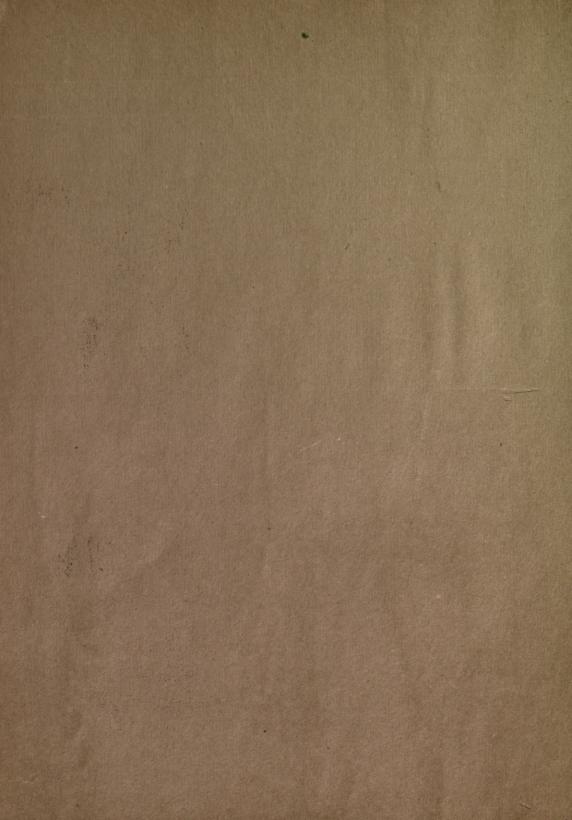
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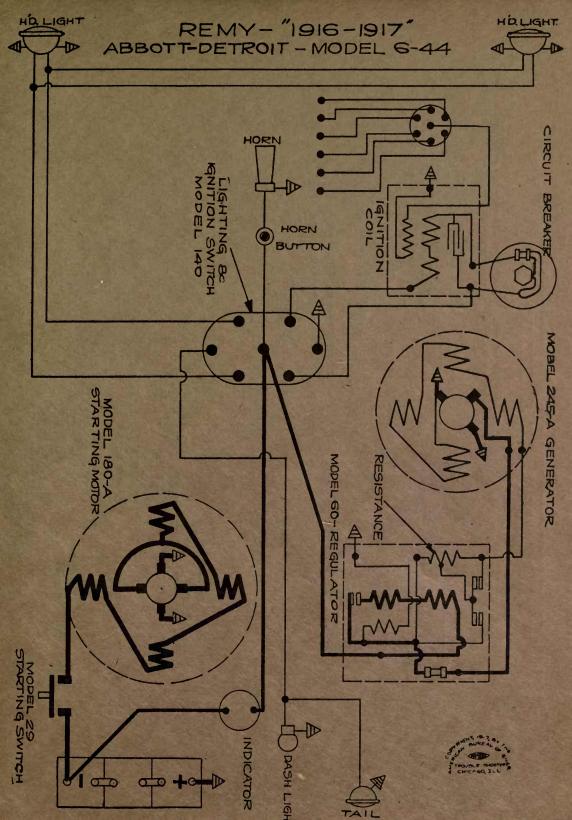
		Murche Har	Cases will be logged
NAME OF CAR	MODEL	YEAR	SYSTEM
		0101	
Daniels	···8''	1918	Westinghouse
Davis	6J	1917-18-19	
Davis	6H, 6I, 6K	1917-18-19	
Denby Motor Truck		1918	Bijur G lit lenf Arloo
Deneen Truck		1917	Splitdorf-Aplco
Dixie Flyer	2200 and above	1916-1917	Dyneto
Dixie Flyer—Cars 3,500 and up		1917-18-19	Dyneto
Dodge	Passenger Cars	1017 10 10	Manthaant
Domia	and Trucks "6-80"		Northeast
Dorris	"K-4"	1919	Westinghouse
		1919	Westinghouse
Dort—First half of Season	6 & 9	1917	Westinghouse
Dort Elcar	11,11T D F F C	1918 1917	Westinghouse
Elcar	D, E, F, G	1917	Dyneto Dyneto
Elgin "Six"	D, E, G	1918-1919	Wagner
Elgin	······	1917-1918	Wagner
Empire	50, 51, 70, 70A	1918-1919	Autolite
Essex		1919-1919	Delco
Ford	(im))	1918	Heinze Springfield
Ford	TUS TRACT TO DATE OF	All Years	
Ford Lights & Ignition System	All	init i cars	fromize springerout
Franklin—After 11,700 Cars.	Ser. 9	1918-1919	Dyneto
Franklin - Light and Horn		- 16 HOURS	and a bar a little of the little
Wiring	Ser. 9	1918-1919	Dyneto
Franklin - Light and Horn		FREPAR BUR	2.4.8.1.1956.11 日
Wiring	Ser. 9	1918-1919	Dyneto
Glide-Cars 9,000 to 10,255	6-40	1916-1917	Westinghouse
Glide	···6-40''	1918-1919	Westinghouse .
Grant	6	1917	Wagner
Grant	"G"	1918-1919	Wagner
Grant Truck	10-11-15-16	1919	Remy
H-A-L—Twelve	21	1917	Westinghouse
Harroun		1917-18-19	
Haynes	36, 37, 37R	1916-1917	Leece-Neville
Haynes	40, 40R-41	1917	Leece-Neville
Holmes	38, 39 & 45 All	1918-1919	Leece-Neville
Hollier	"176"	1919	Dyneto Allis-Chalmers
Hollier		1916-7-8-9	Splitdorf-Apleo
Hudson	Super Six	All Years	
Hupmobile—Cars After 75,000	N	1917	Westinghouse
Hupmobile	R	1917-1918	Bijur
Interstate	T, TR	1917-1918	Remy
Jackson	349	1917-1918	
Jeffery	671	1917	Bijur
Jeffery Truck	2017	1918	Bijur
Jordan	В	1917	Bijur
Jordan	"C"	1918-1919	Bijur
King	E, EE	1916-1917	Robbins & Meyers
King	"EE," "F"	1917-18-19	Bijur

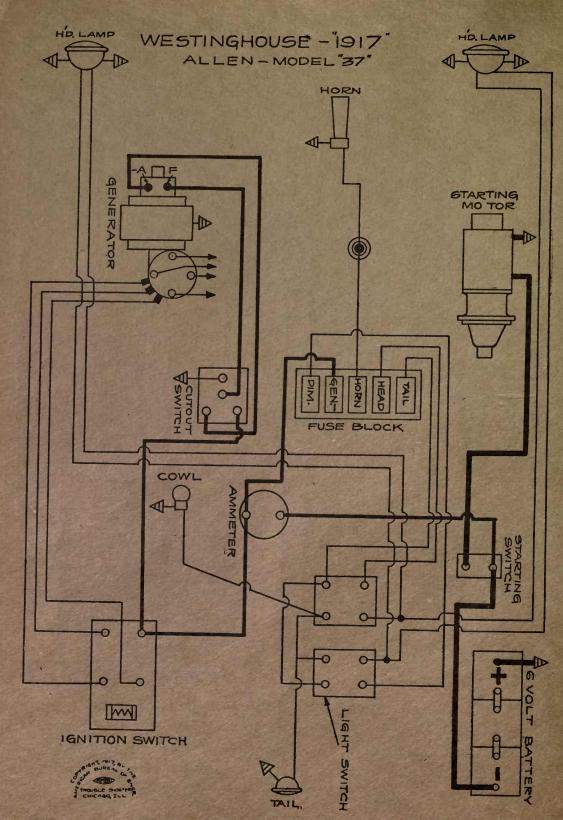
NAME OF CAR	MODEL	YEAR	SYSTEM
Kissel	100 Pt. Six	1917	Remy
Kissel	100 Pt. Six	1918	Remy
Kissel	12 cyl.		Delco
Kline	6-36	1917	Westinghouse
Lawson Truck		1917	Splitdorf-Aplco
Lexington	6-0-17	1917	Westinghouse
Lexington		1918-1919	Westinghouse
Liberty	6	1916-7-8-9	Delco
Liberty	10B ''M2''	1919	Wagner
Lippard-Stewart Truck	W12	1917	Remy
Locomobile	···6-40"	1917-18-19 1919	Westinghouse
Madison Maibohm	A-4 cyl.		Remy Disco
Maibohm	B-6 cyl.	1918-1919	Wagner
Marion—Handley	6-40	1917	Westinghouse
Marmon	34	1918-1919	Bijur
Maxwell—Early model	25	1917	Simms-Huff
Maxwell-Late model	25	1917	Simms-Huff
Maxwell	1T Truck	1917-1918	Autolite
Maxwell	25	1918-1919	Simms-Huff
McFarlan		1917-1918	Westinghouse
McFarlan	Six	1919	Westinghouse
Mercer		1917-1918	U. S. L.
Mercer	Ser. 4	1918-1919	Westinghouse
Metz	25	1919	Gray & Davis
Michigan Hearse		1917-18-19	Delco
Mitchell—Cars 5000 to 11,500		1917	Westinghouse
Mitchell-Lewis		1917-1918	Splitdorf-Apleo
Mitchell	E40-E42	1919	Remy
Moline-Knight	G-MK50, C-MK40	1917-18-19	Wagner
Moon (2 Button Switch)	6-66	1918-1919 1918-1919	Delco
Moon (4 Button Switch)		1918-1919	Delco
Monitor	•••••	1919	Dyneto Remy
Nash	671	1918	Bijur
Nash	681, 82, 83, 84	1918-1919	Delco
National		1918	Westinghouse
National—First 125 cars	Ser. AF3	1919	Westinghouse
National—After first 125 cars.	Ser. AF3	1919	Westinghouse
National	''12''	1917	Bijur
National	12 cyl.	1918-1919	Bijur
Nelson		1917-1918	U. S. L.
Oakland	32B, 34	1917	Delco
Oakland Old Hickory Trucks — Dixie	34B	1918-1919	Remy
Cars to No. 2,200	No. State of the state of the state	1916-17-18	Dyneto
Oldsmobile	37	1917-1918	Delco
Oldsmobile	37	1918	Remy
Oldsmobile	45 & 45A	1918-1919	Delco
Overland	75B	1916-1917	Autolite
Overland, 4 cyl	83 DE	1917	Autolite

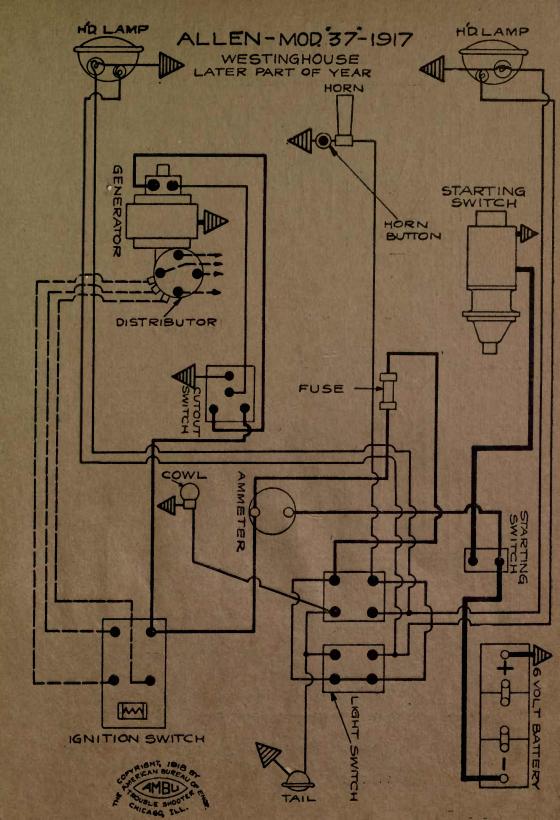
NAME OF CAR	MODEL	YEAR	SYSTEM
Overland, 4 cyl	854 SN C T R	1917	Autolite
Overland, 6 cyl		1917	Autolite
Overland, 4 cyl	88T, SN, Lim.	1917	Autolite
Overland, 4 cyl	Sol. SN, LIIII.		the second s
Overland, 8 cyl	88T, SN 89CLR, T, 86B	1917	Autolite
Overland, 6 cyl	89CLR, T, 86B	1917	Autolite
Overland, 4 cyl	90R, OEX, T, PLD	1917	Autolite
Overland, 4 cyl	88-4-SN	1918	Autolite
Overland, 6 cyl	89	1918	Autolite
Overland, 4 cyl	90	1918	Autolite
Packard	2-25, 2-35	1917	Bijur
Packard		1918-1919	Bijur
Packard (Body Wiring)	325, 335	1918-1919	Bijur
Packard (Body Wiring)	325, 335	1918-1919	Bijur
Packard (Body Wiring)	325, 335	1918-1919	Bijur
Paige—Detroit	6-38	1917	Gray & Davis
Paige	39	1918-1919	Gray & Davis
Paige	6-55	1919	Remy
Panhard Truck	"A-B"	1919	Autolite
Partin Palmer	32	1917	Disco
Peerless	56	1917	Gray & Davis
Peerless	56	1917	Autolite
Peerless	56	1918-1919	Autolite
Phianna		1917	W'd Leonard
Pierce-Arrow		1919	Westinghouse
Pierce-Arrow Truck	2-Ton	1919	Westinghouse
Pierce-Arrow	All Cars	1916-7-8-9	Westinghouse
Premier	6C & 6B	1918-1919	Delco
Pullman	"4-24"	1918	Splitdorf-Aplco
Regal	J	1917 .	Heinze
Regal	J	1917	Autolite
Reo	4 & 6, M & N	1917-18-19	Remy
Reo	T & U		Remy
Reo Truck-No 12789 to date	F	1918	Remy
Riker Truck—with headlamps	3 & 4-Ton		Westinghouse
Riker Truck-with Search-		19 3 V	
_ lights	3 & 4-Ton		Westinghouse
Roamer		1917	Bijur
Roamer Cars 14,005 to 15,736		1917	Bijur
Roamer Cars—15,737 and up	"D-4-75," "C-6-54"	1918-1919	Bijur
Ross	8	1917	Robbins-Meyers
Saxon	4	1917	Wagner
Saxon	6	1916-1917	Detroit
Saxon		1916-7-8-9	Wagner
Sayers & Scovill, 6 cyl		1916-1917	Delco
Sayers & Scovill	6 cyl.	1917-18-19	Delco
Scripps-Booth	"4" & "8"		Wagner
Scripps-Booth	···6-39'' & ···40''	1918	Remy
Service Truck			Westinghouse
Seneca	D & H	1919	Allis-Chalmers
Simplex	5		Rushmore
Standard	E	1917	Westinghouse

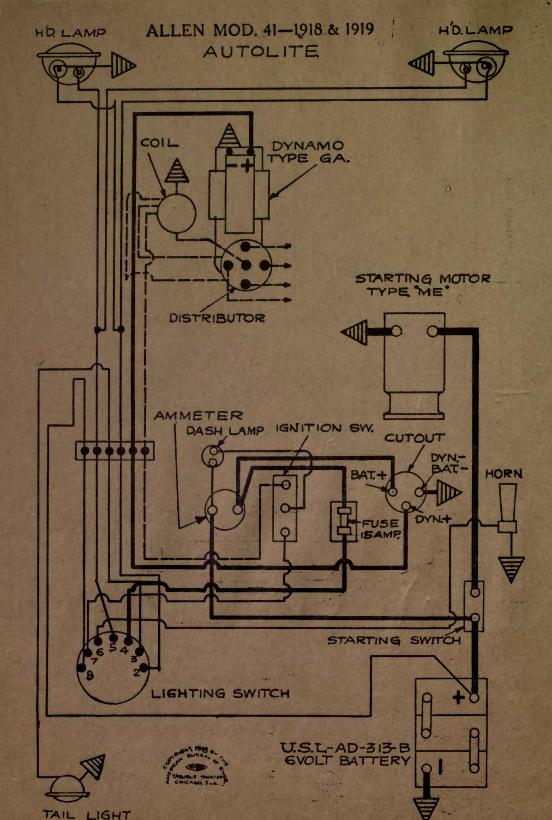
NAME OF CAR	MODEL	YEAR	SYSTEM
Standard	"F"	1917	Splitdorf-Apleo
Standard	8	1919	Westinghouse
Stearns-Knight "Four"	Series 32	1917	Westinghouse
Stearns-Knight "Eight"	Series 32	1917	Westinghouse
Stephen	60, 65	1917	Autolite
Stephens Salient Six	70 & 75	1918-1919	Delco
Stewart		1917	Westinghouse
Studebaker		1916-17-18	Wagner
Studebaker	4 & 6	1918-1919	Wagner
Stutz		1918-1919	Remy
Sun Light Six		1917	Remy
Velie	27	1917	Remv
Velie	28	1917	Remy
Velie	38 & 39	1918-1919	Remy
Westcott	17 & 18	1917-18-19	
White		1917-1918	Leece-Neville
Winton	22	1916-7-8-9	Bijur
Winton	22A		Bijur
Winton - Body Wiring for			Distances of Bu
Limousine	22 & 22A	1916-7-8-9	Bijur

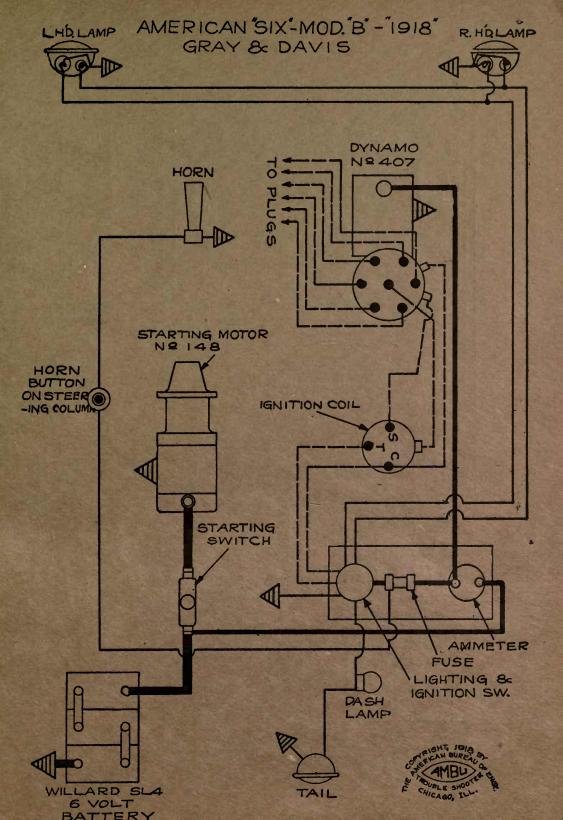


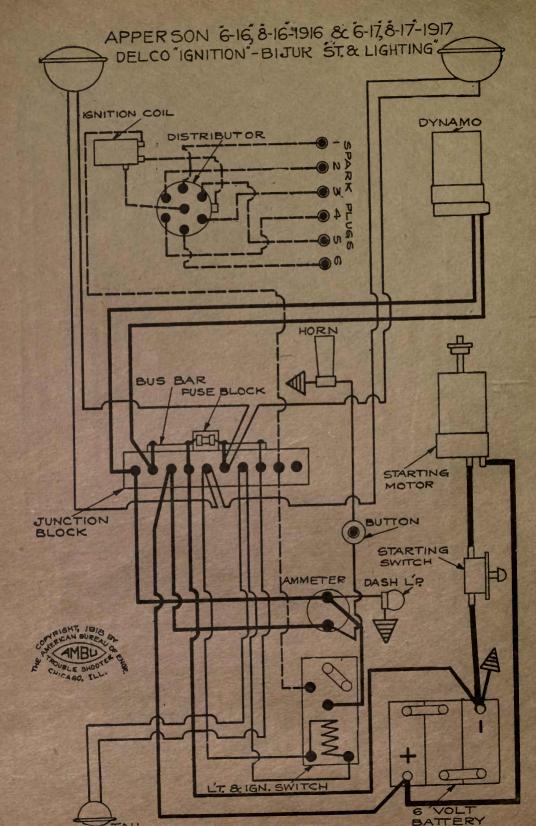


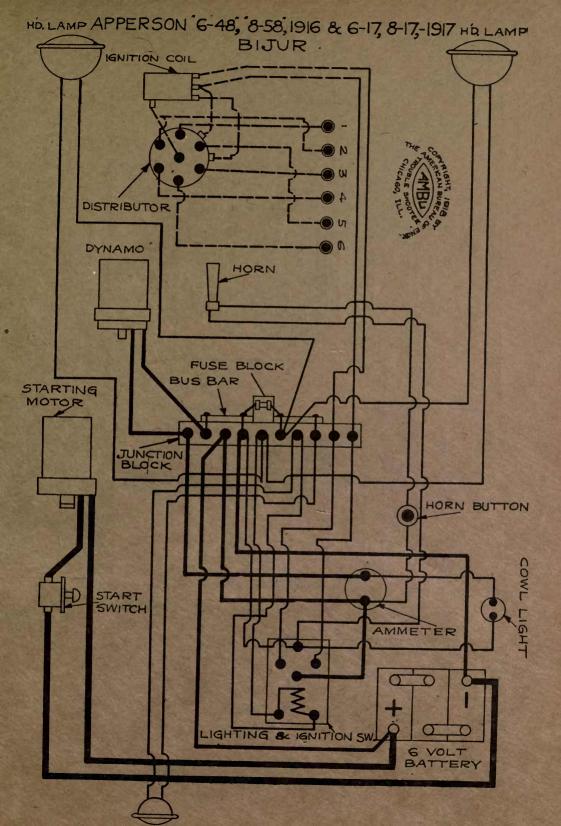


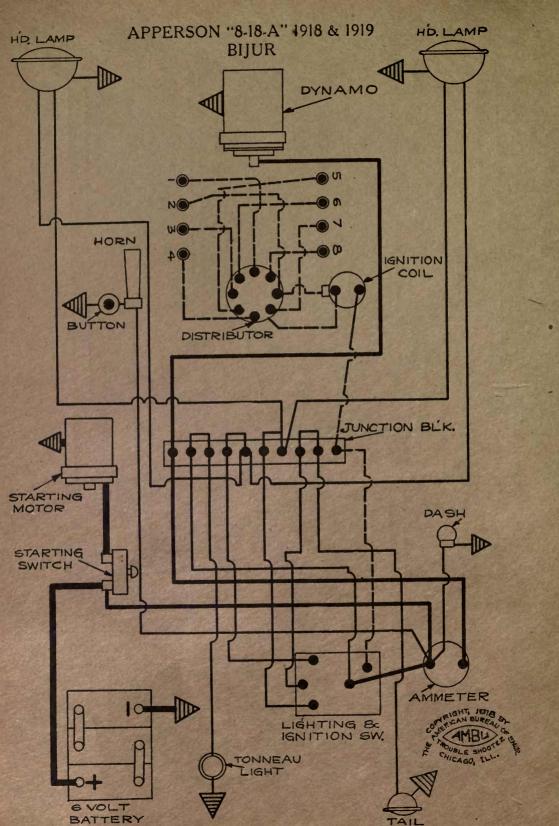


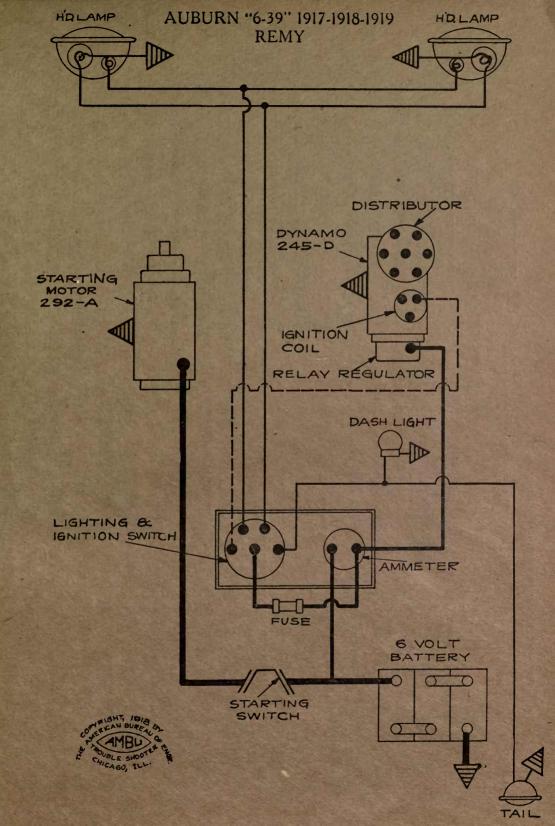


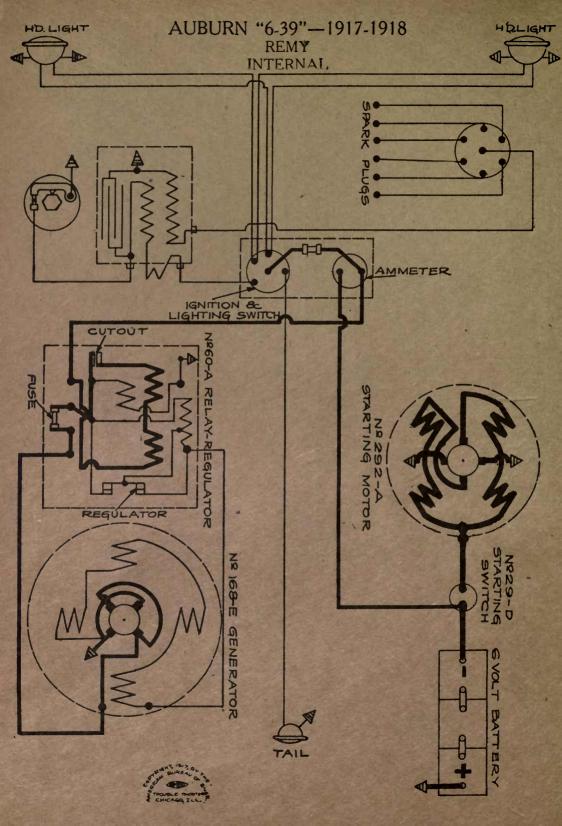


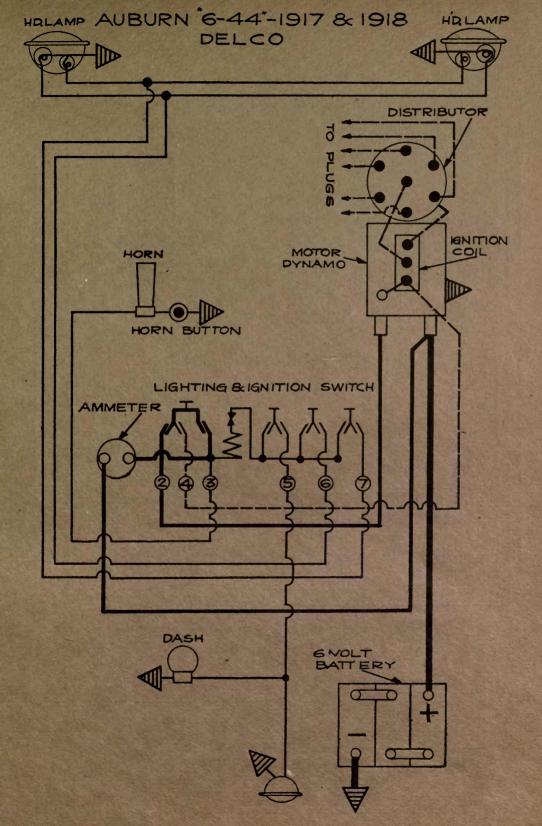


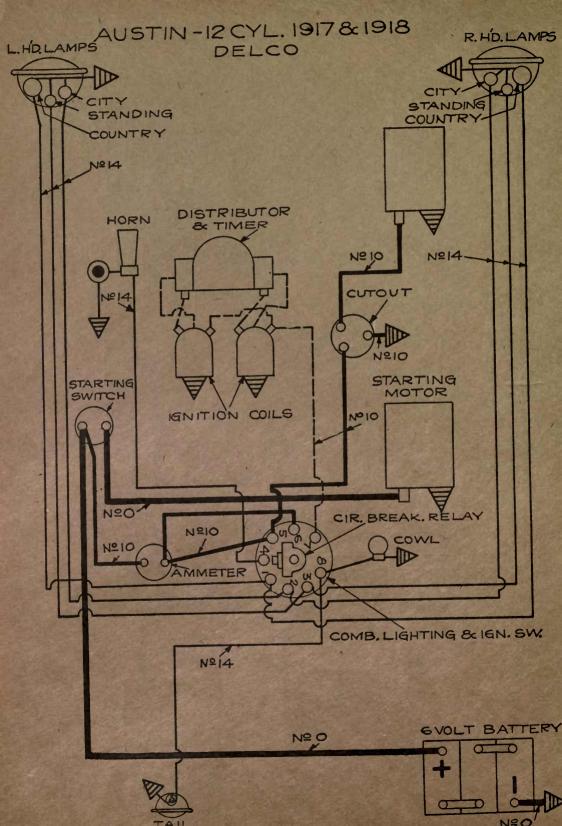


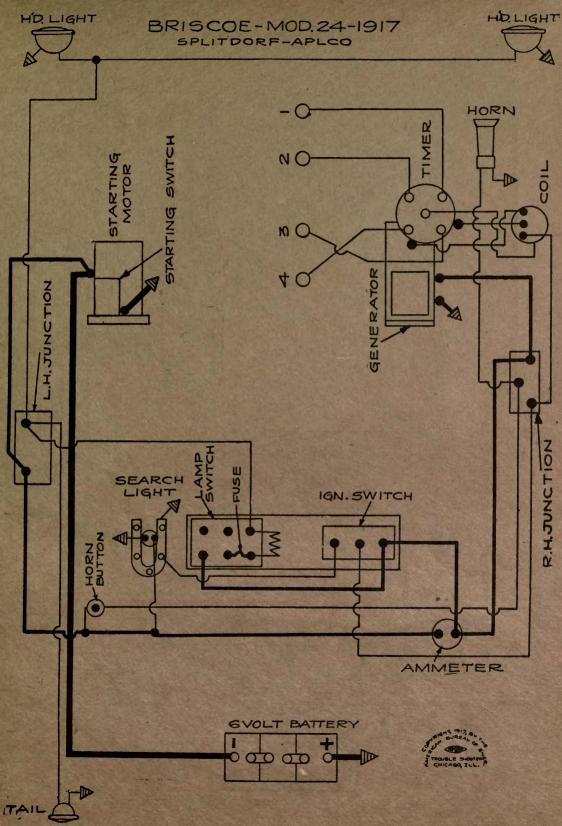


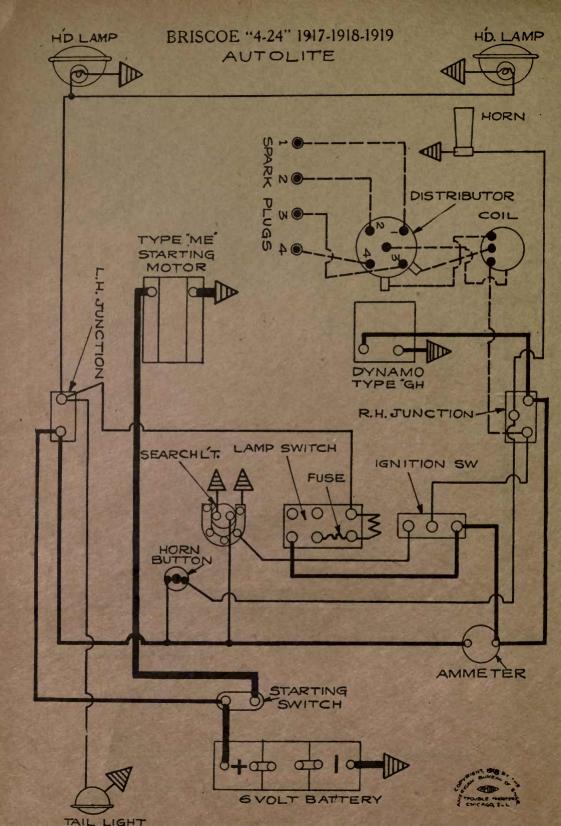


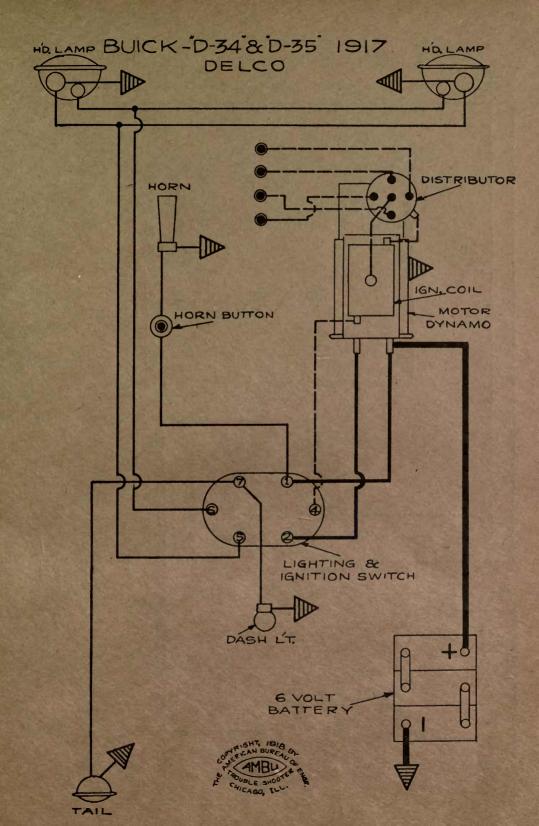


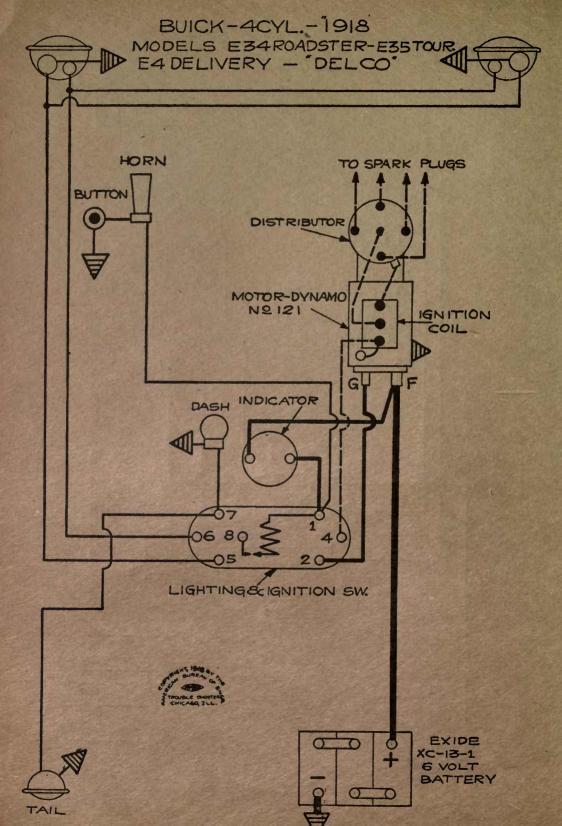


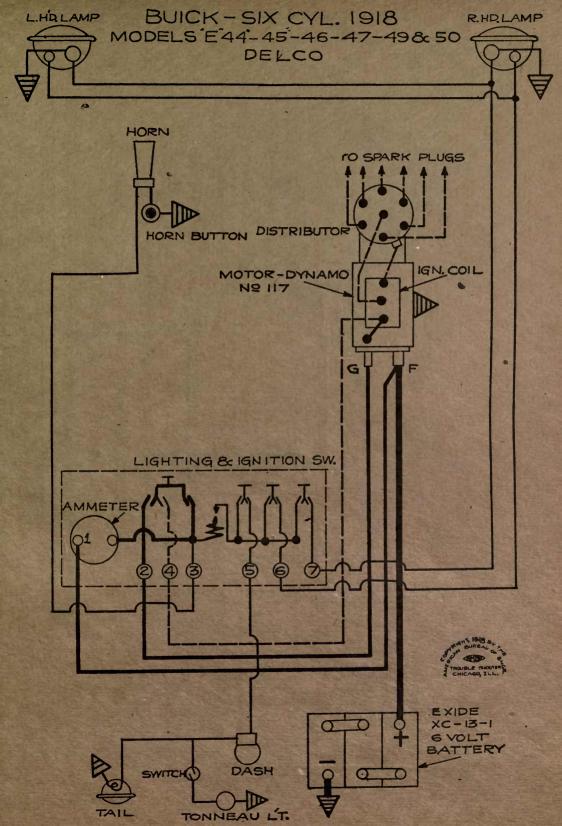


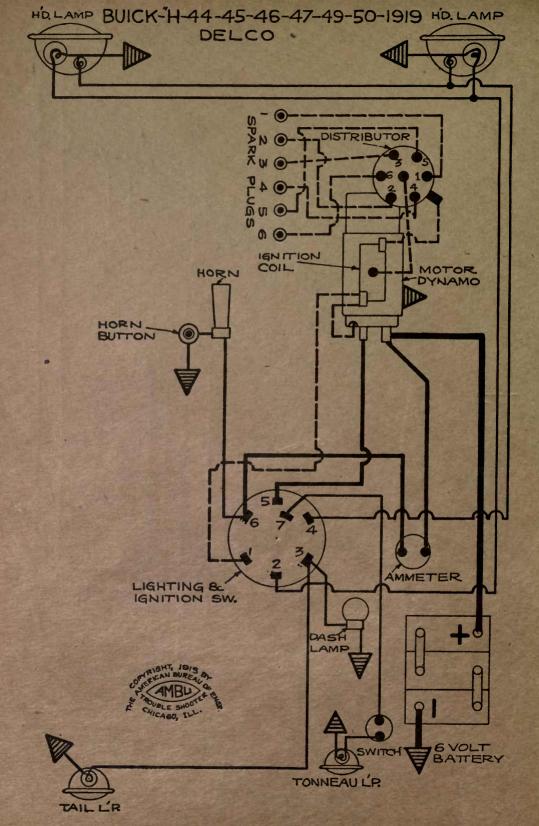


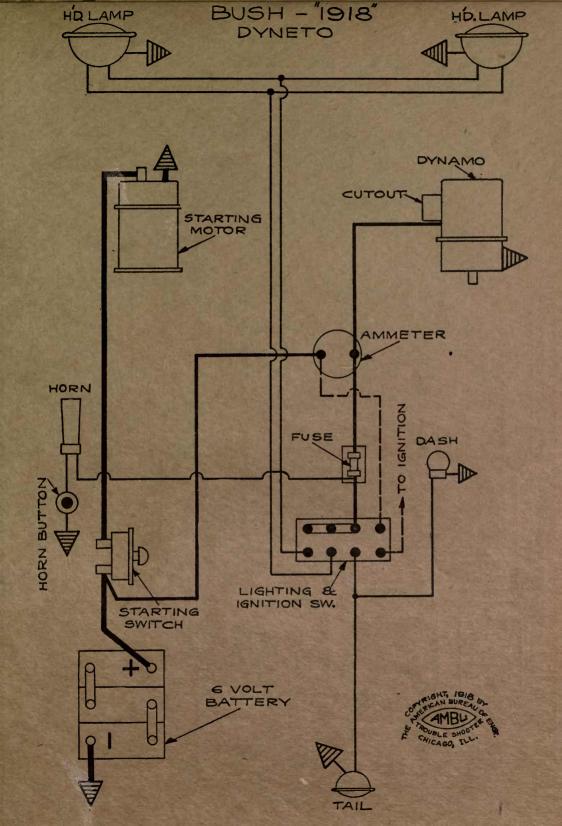


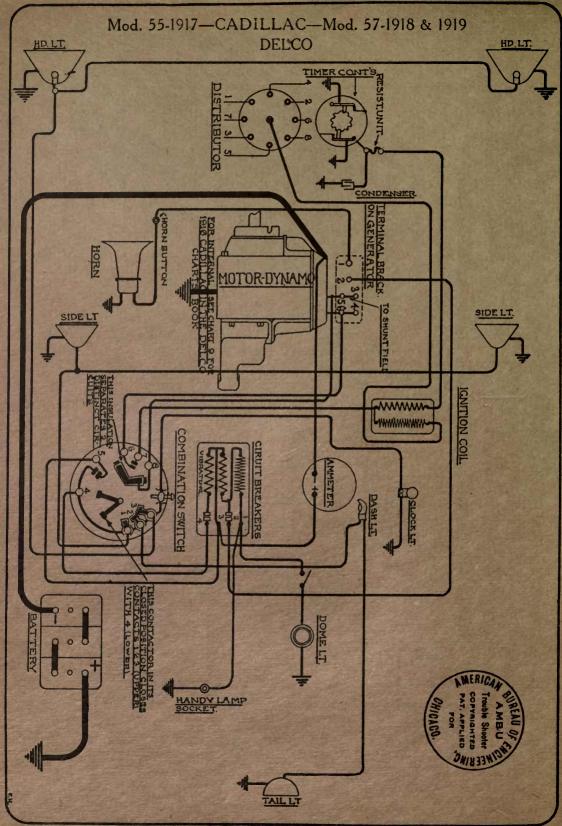


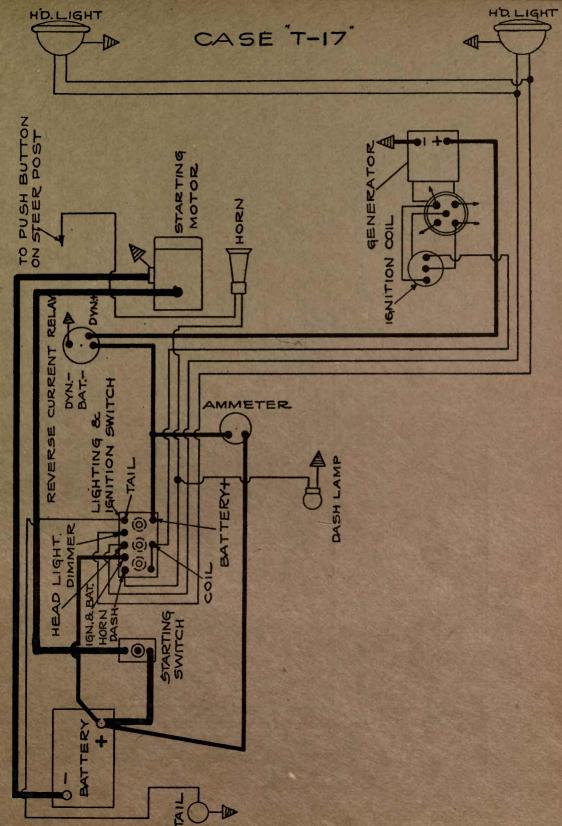


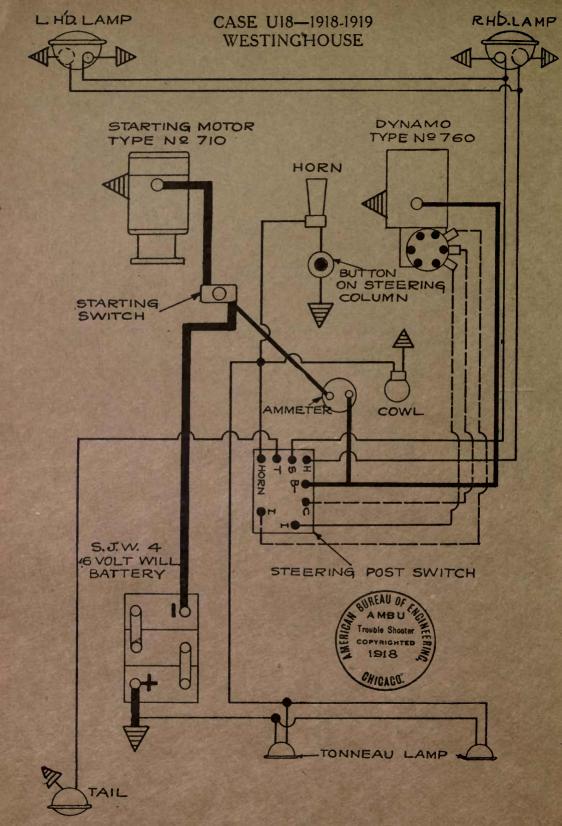


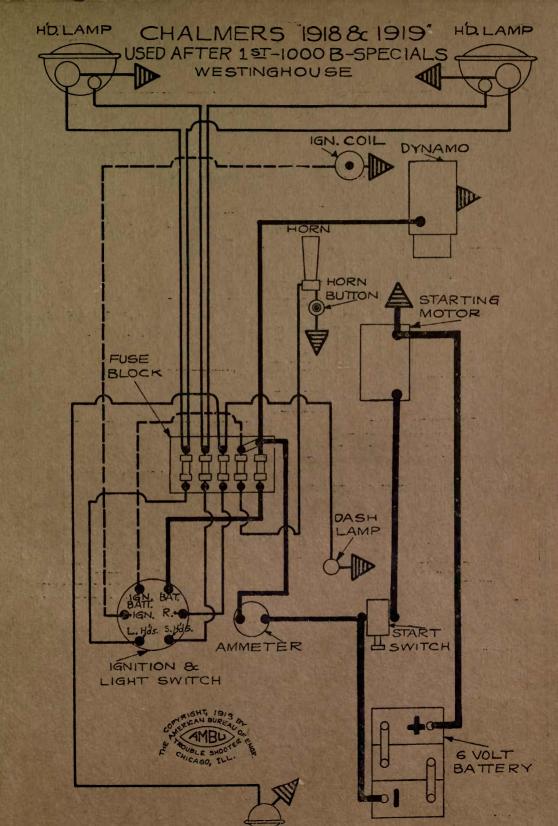


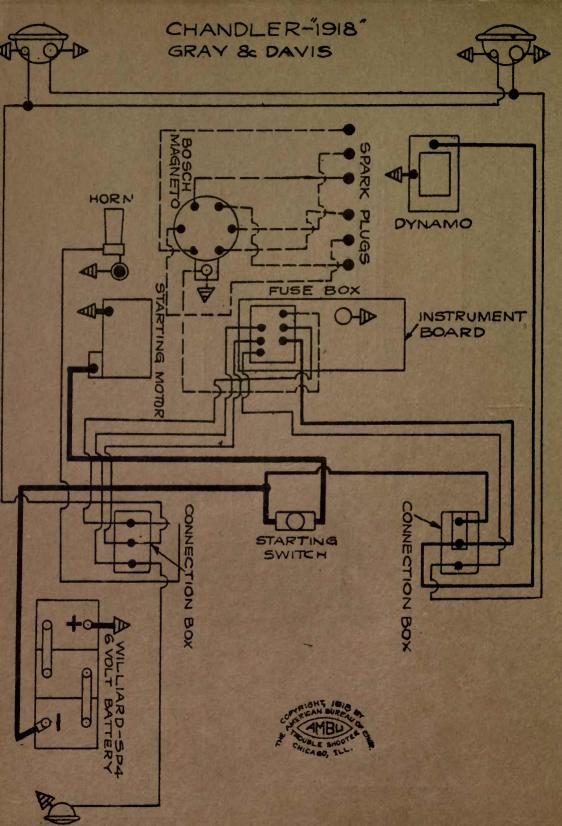


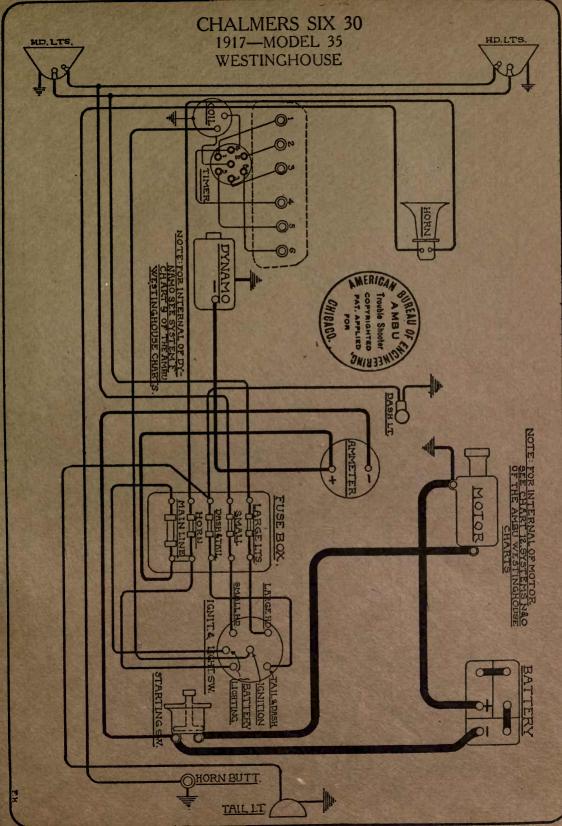


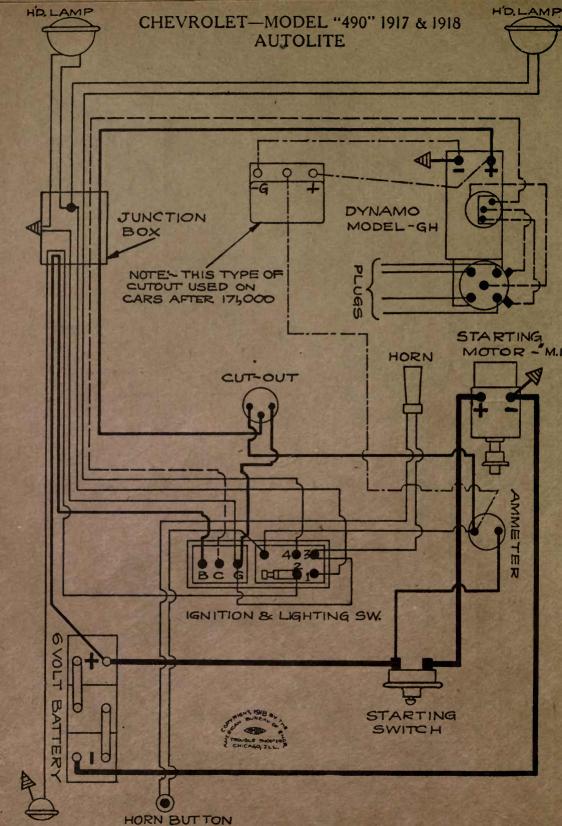


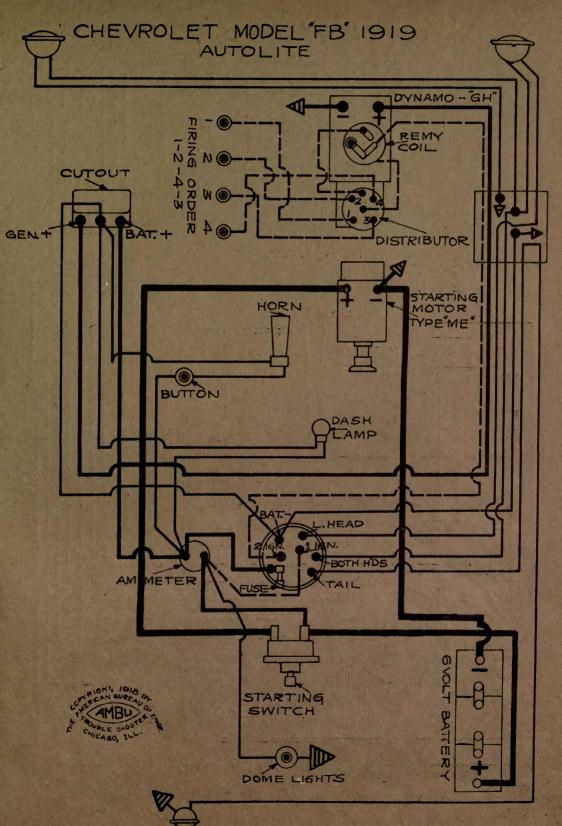


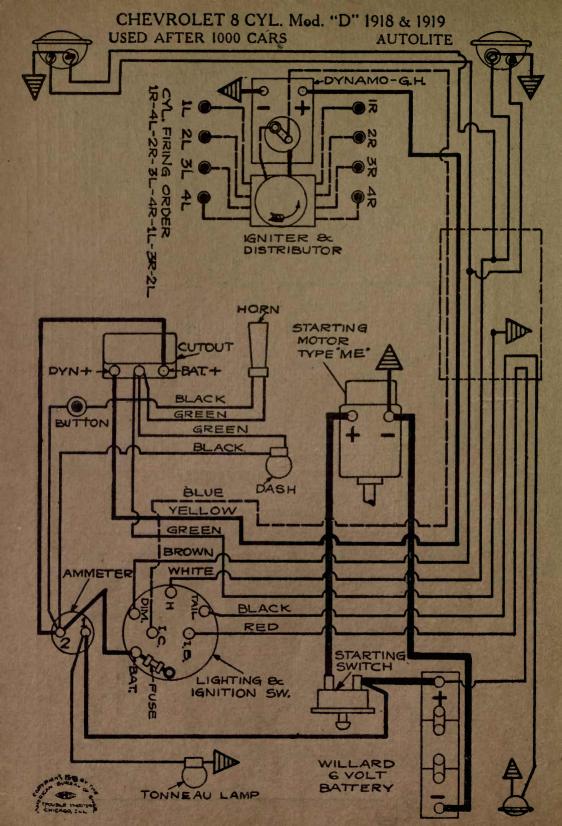


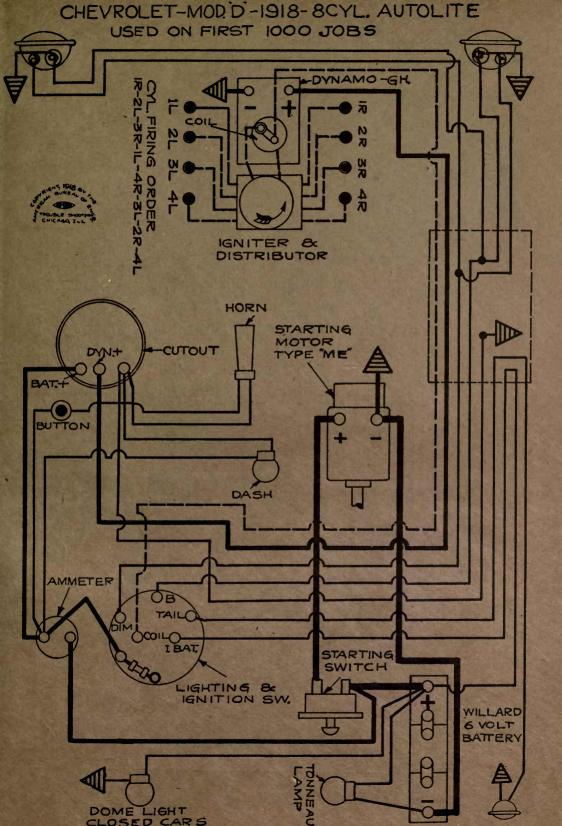


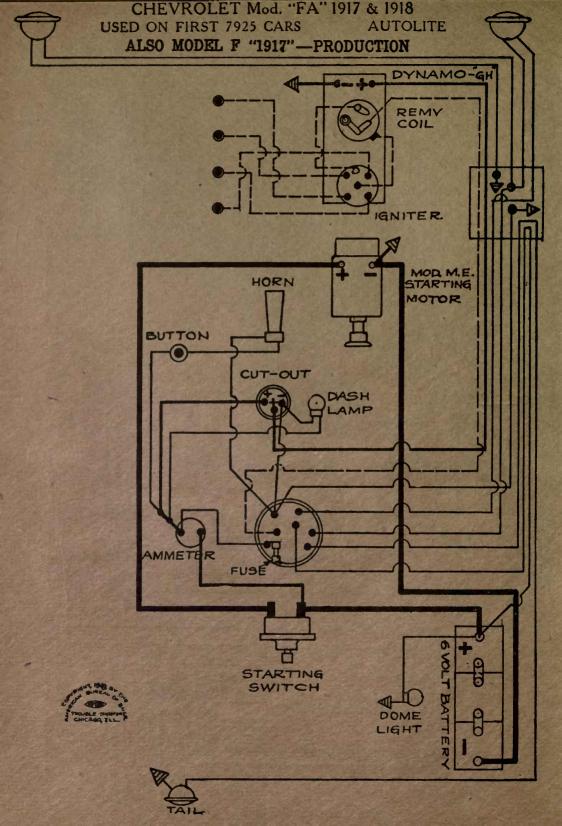


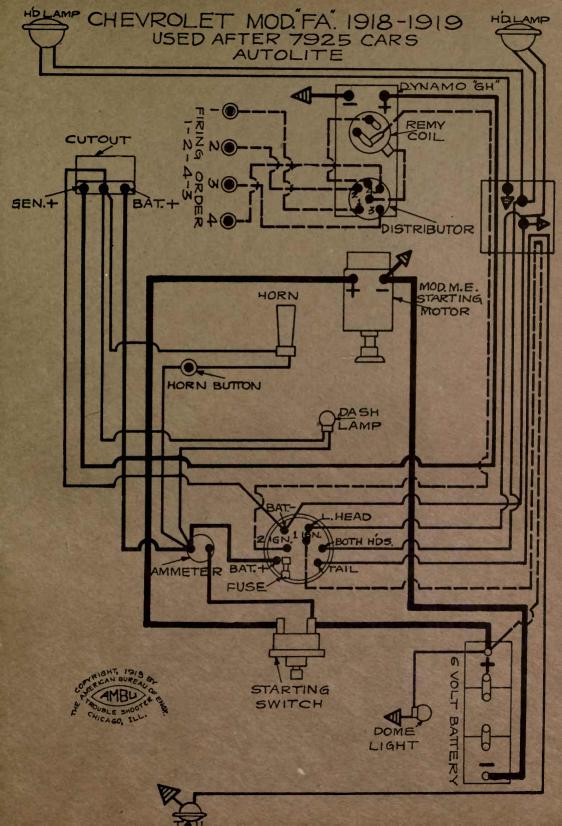


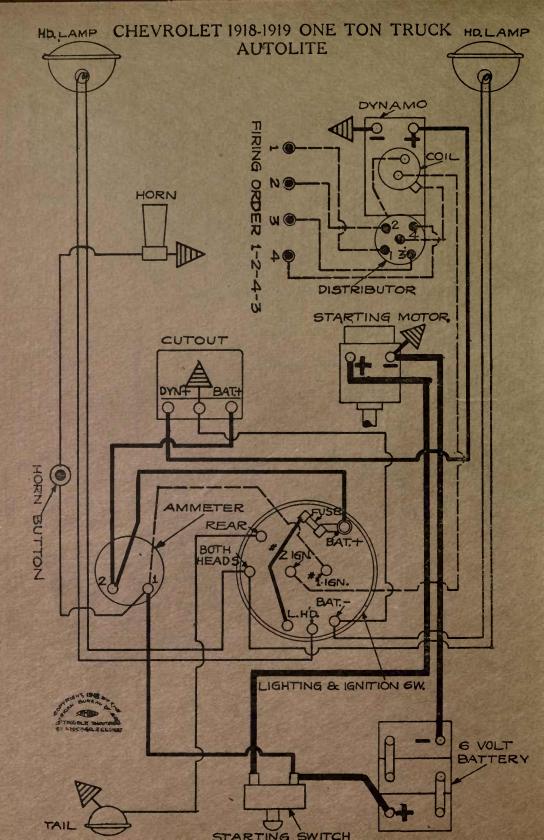


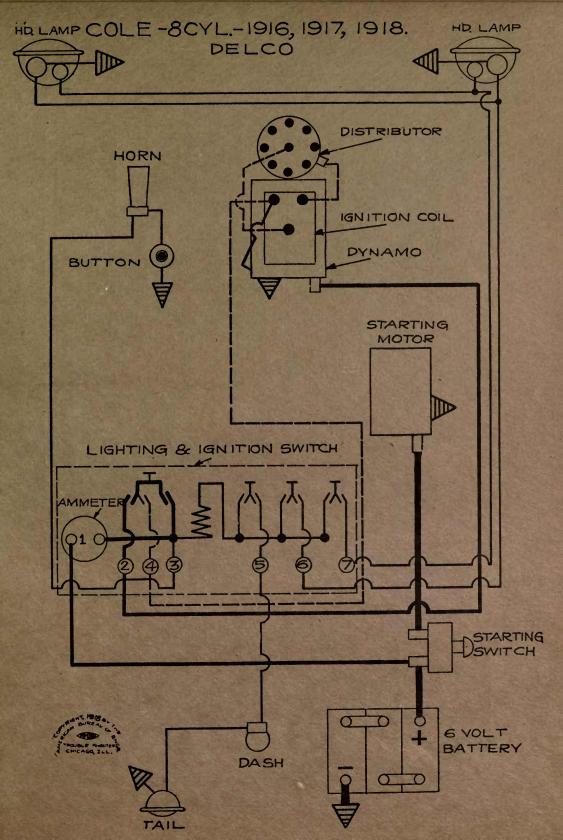


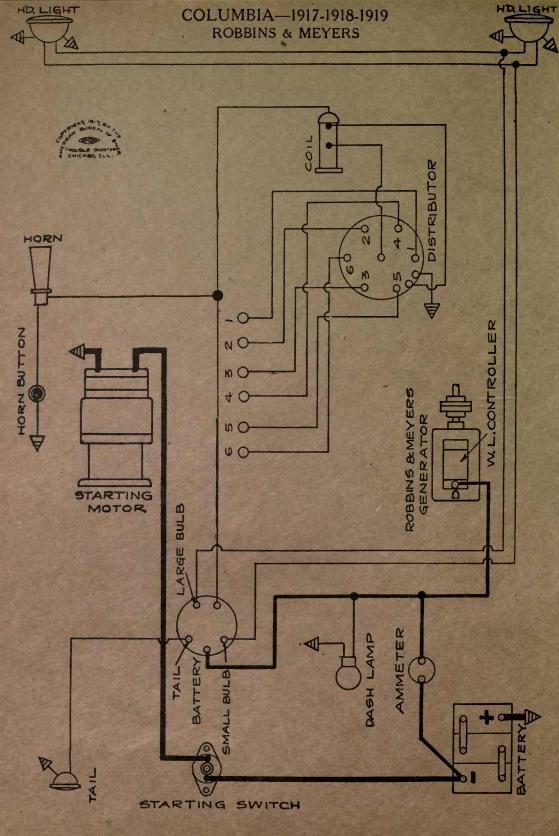


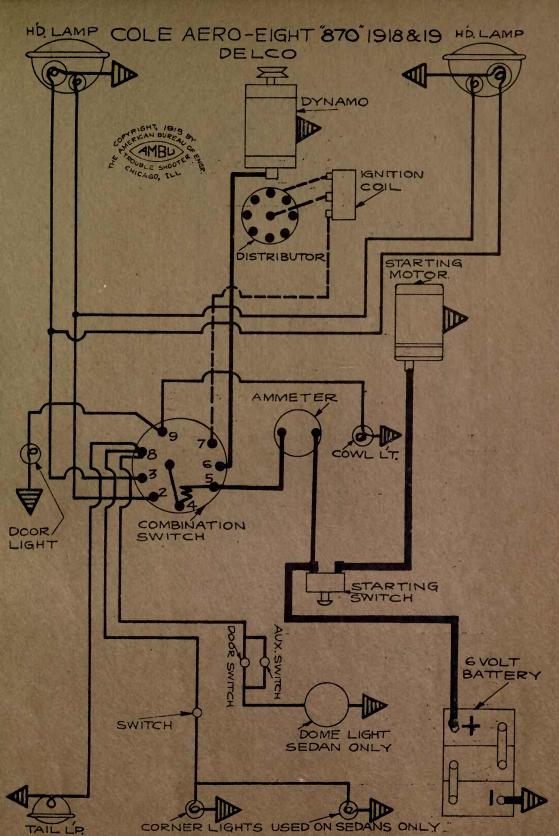


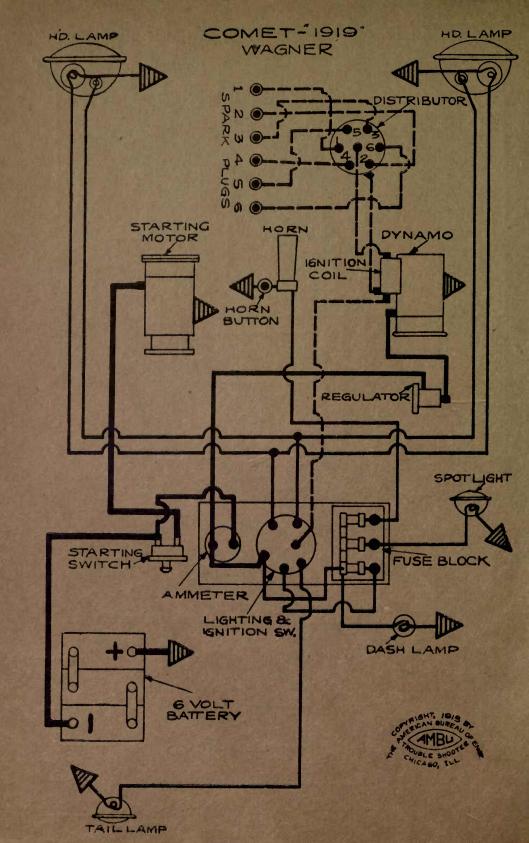


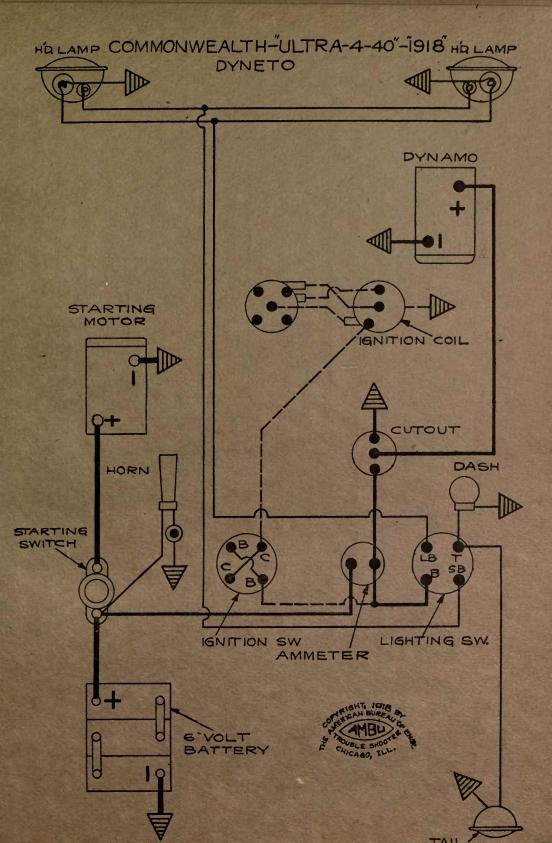


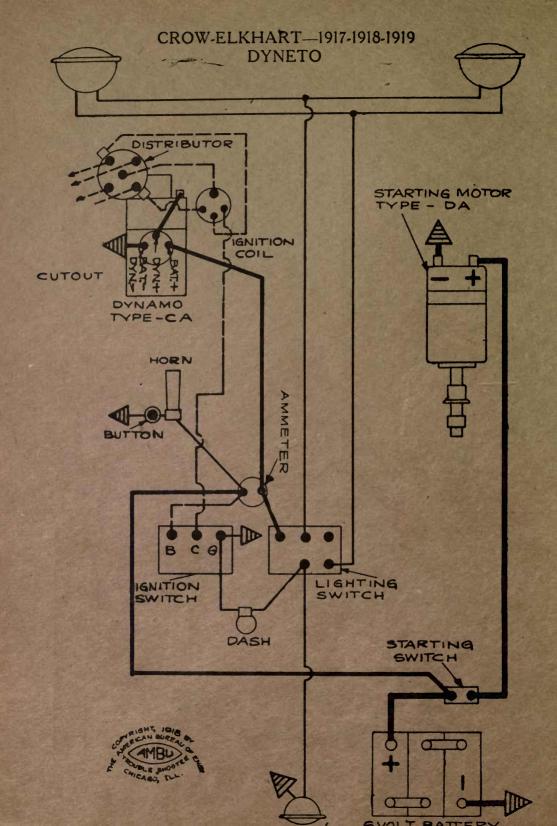


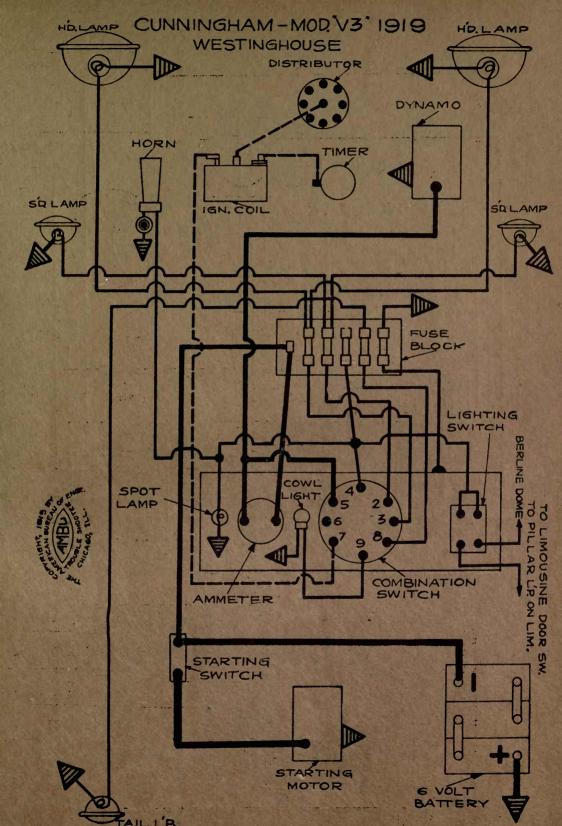


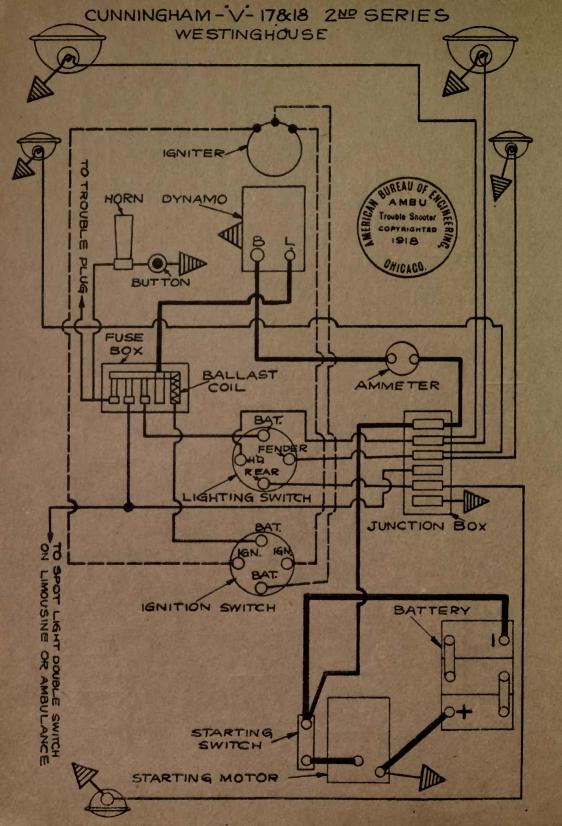


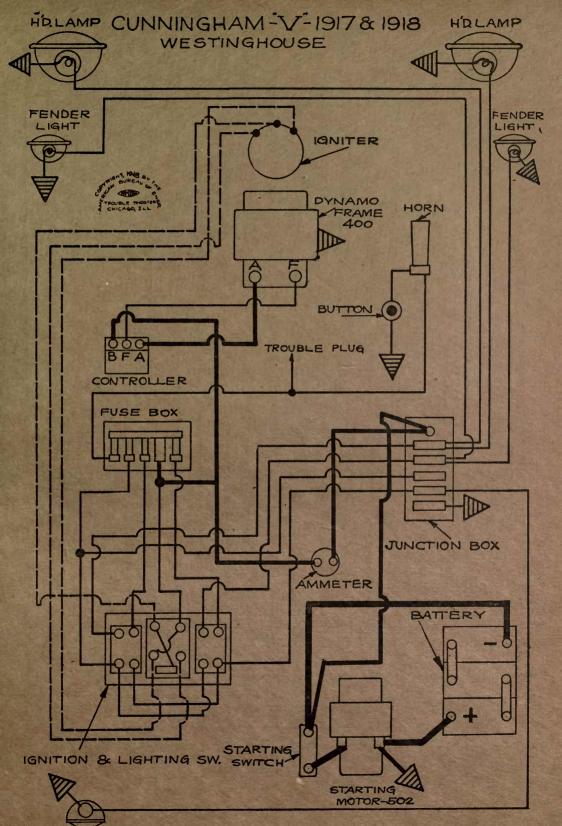


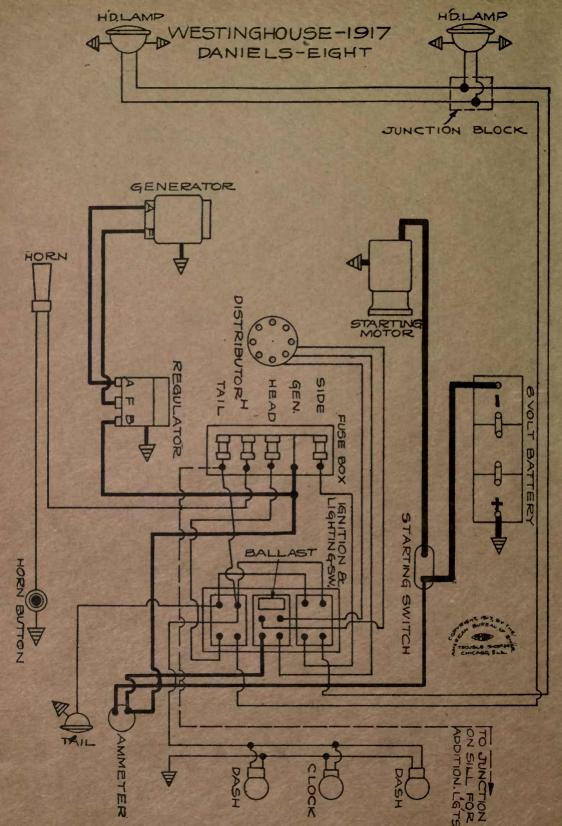


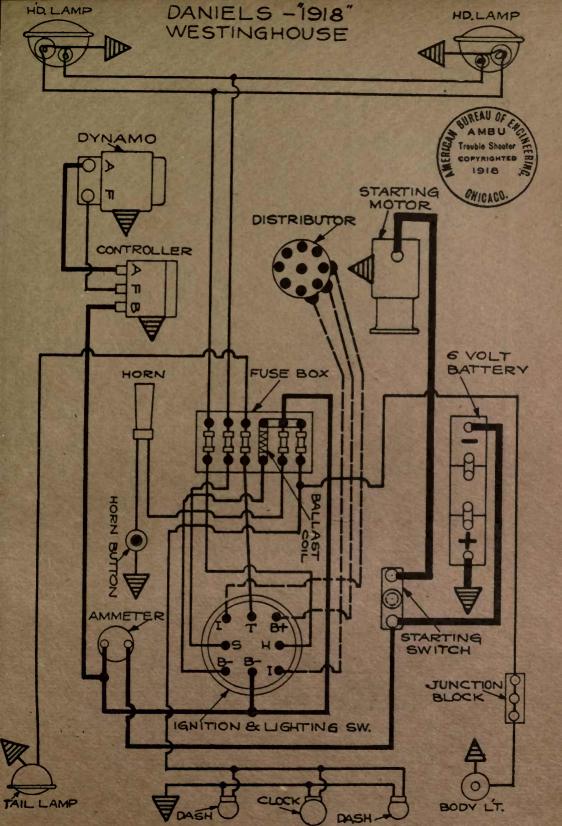


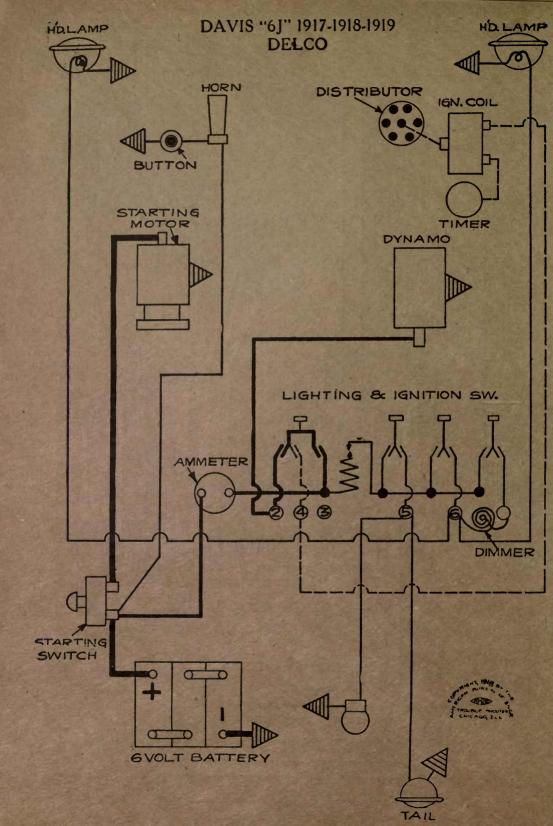


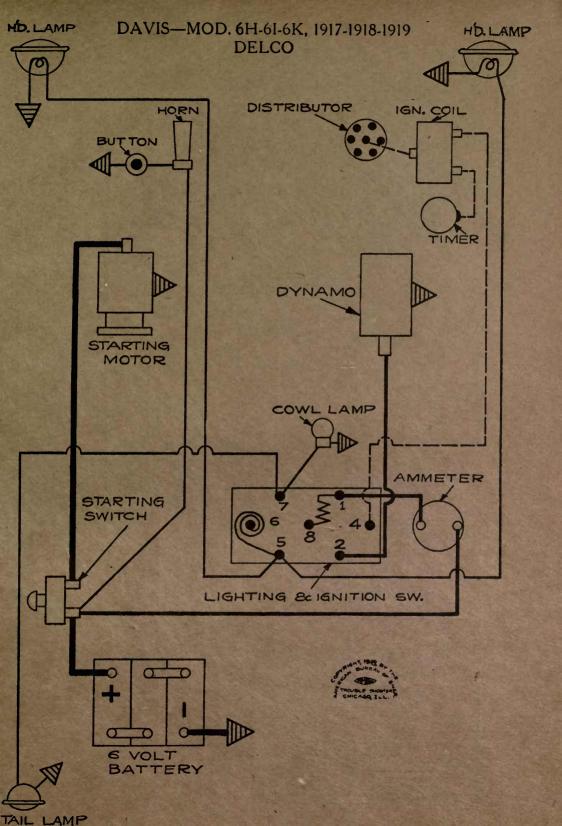


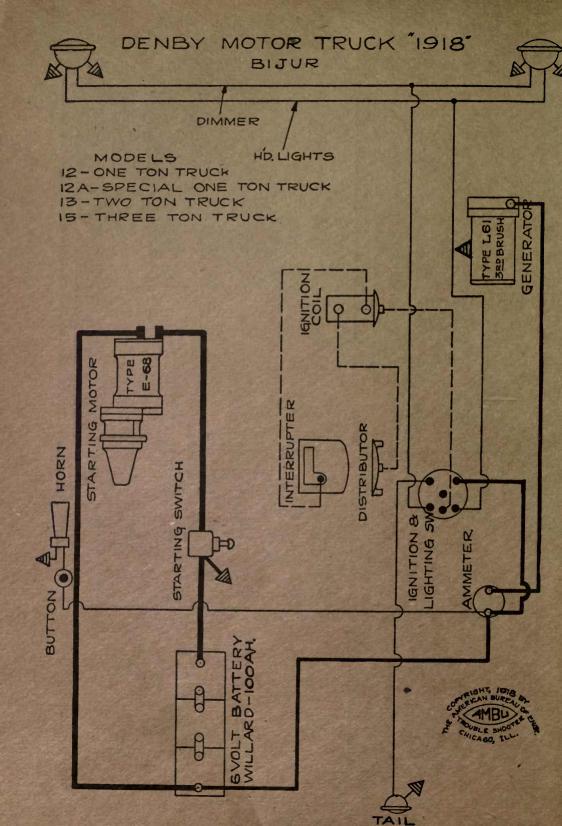








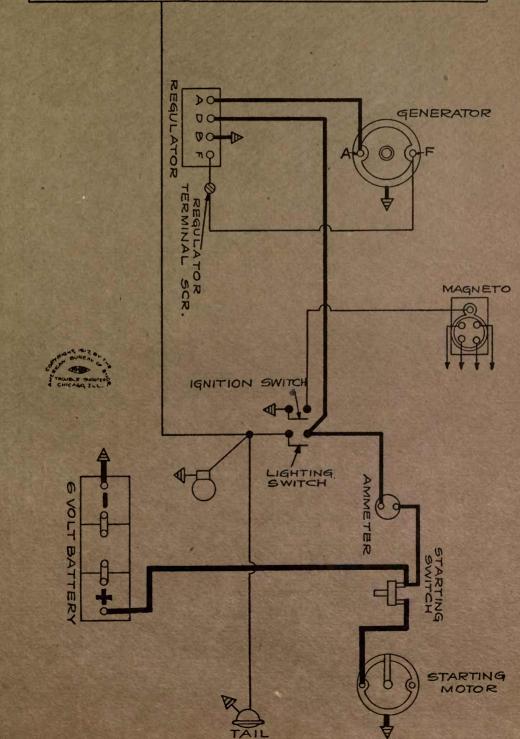


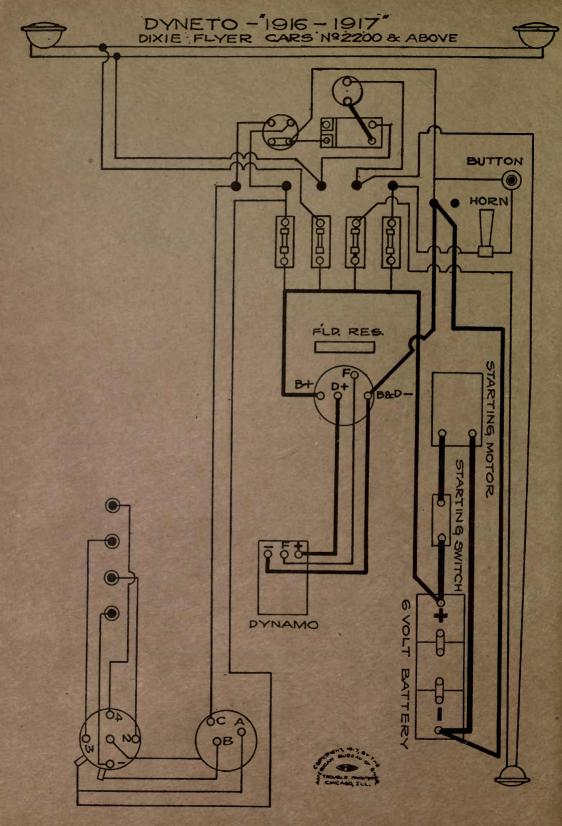


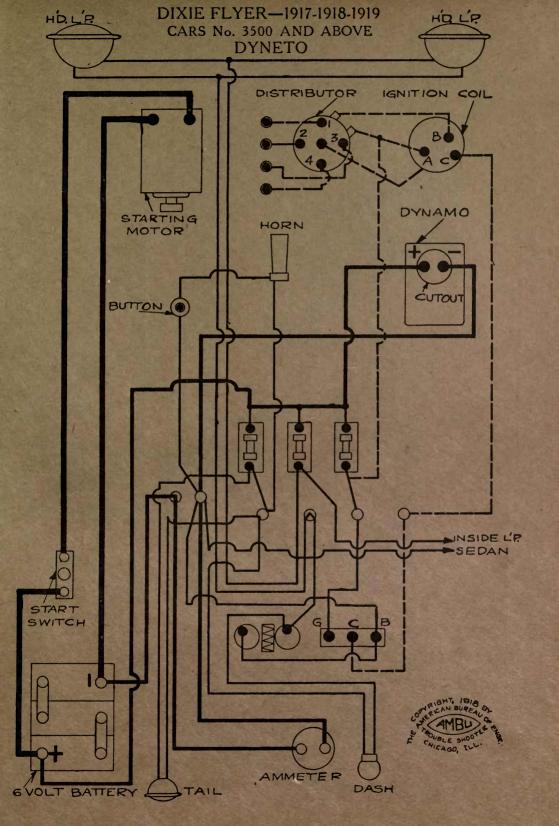
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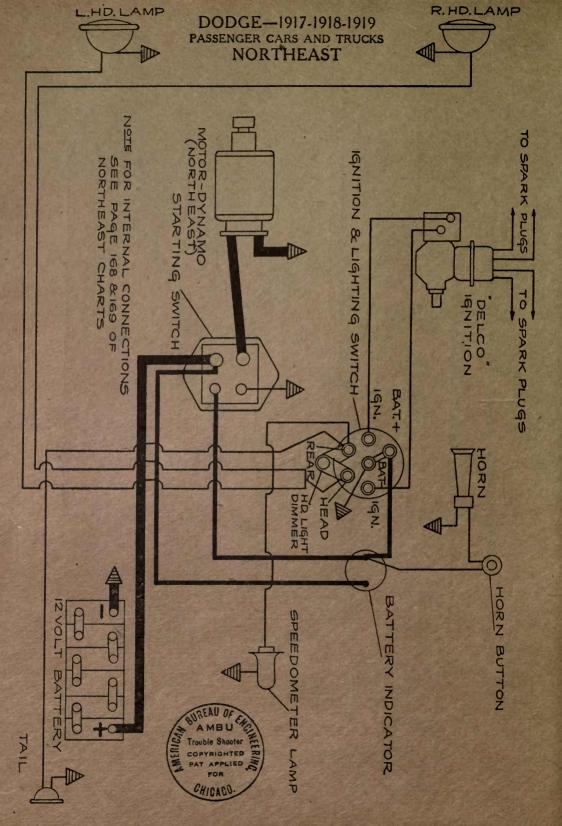
SPLITDORF-APLCO - 1917 DENNEEN - TRUCKS

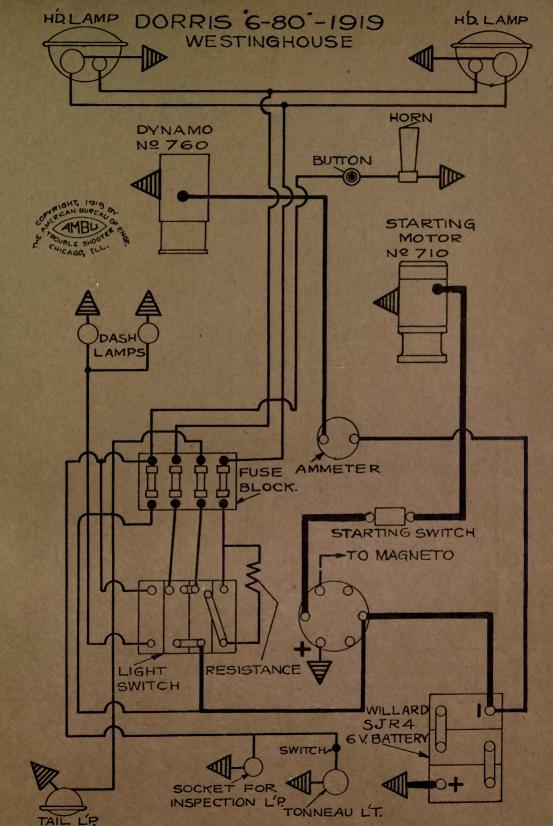


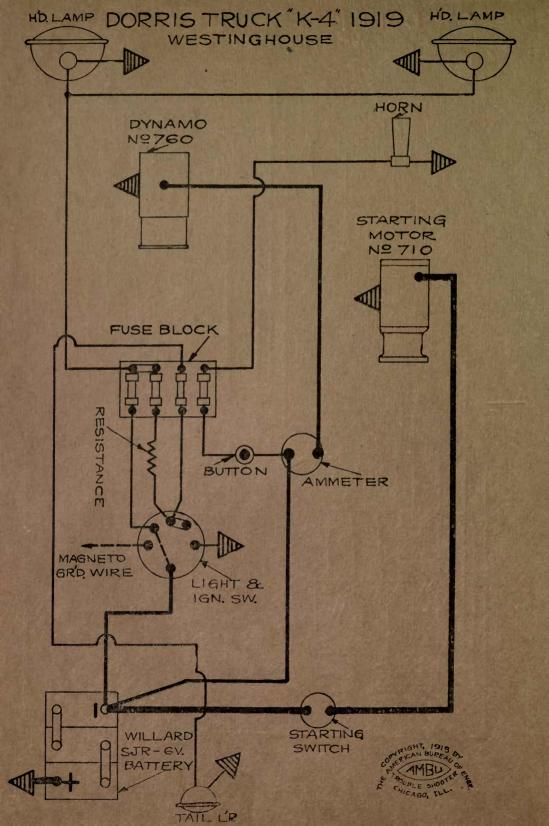


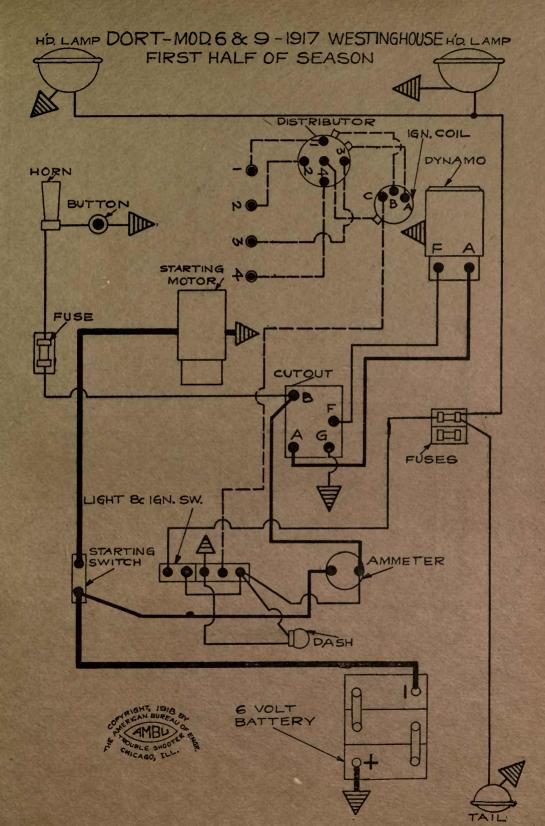


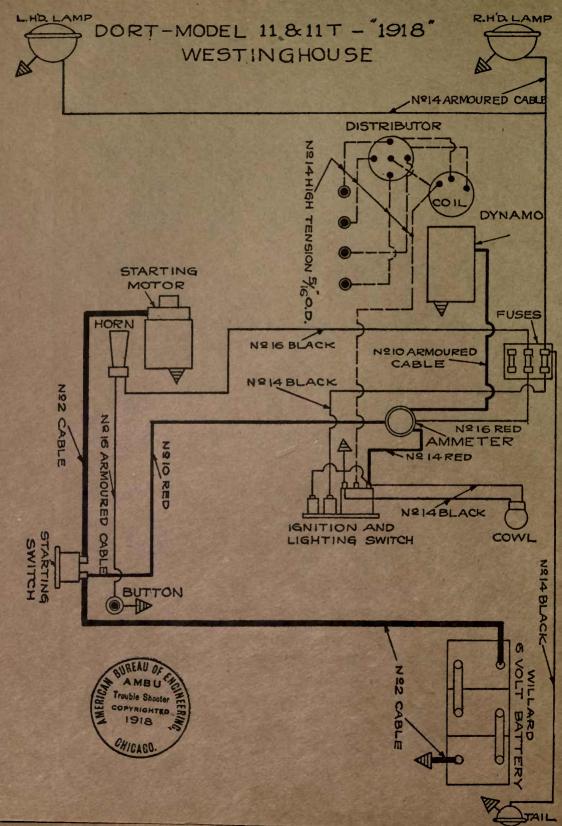


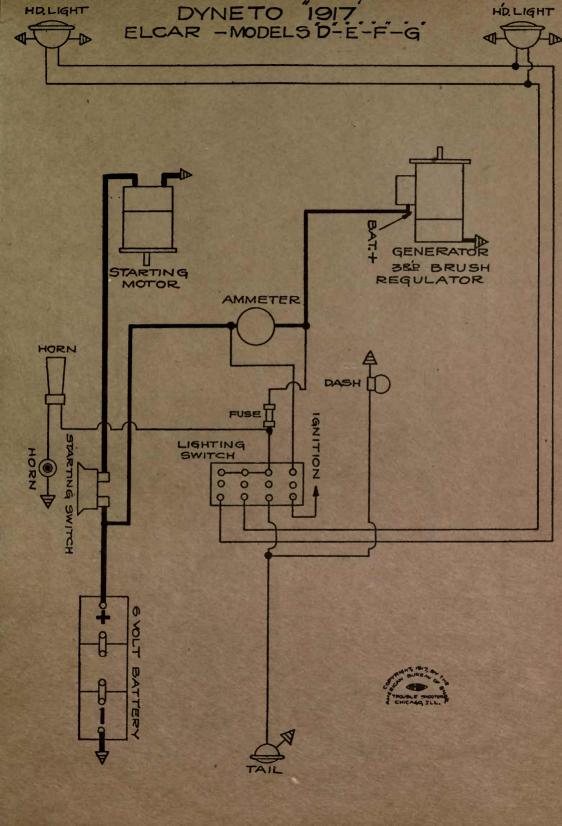


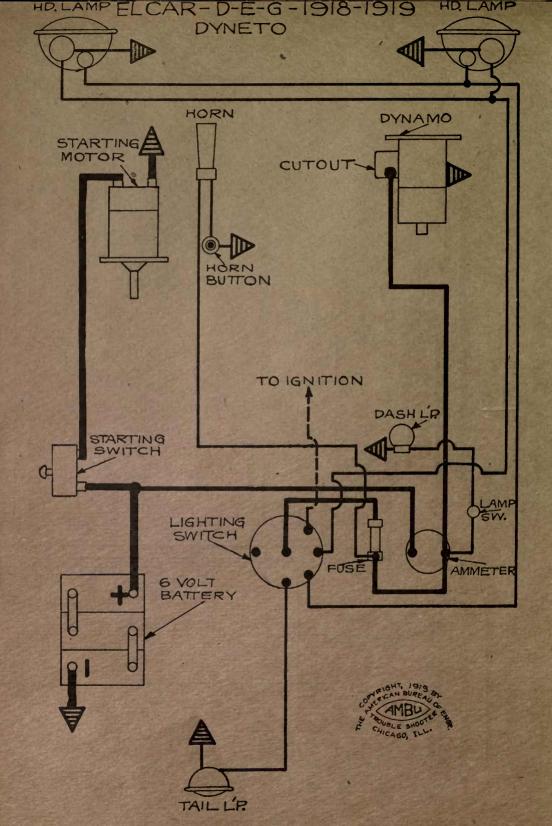


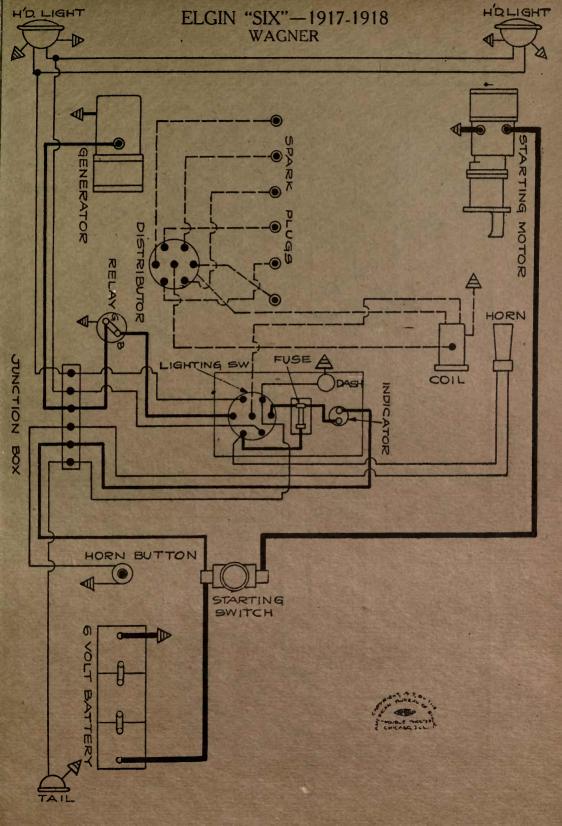


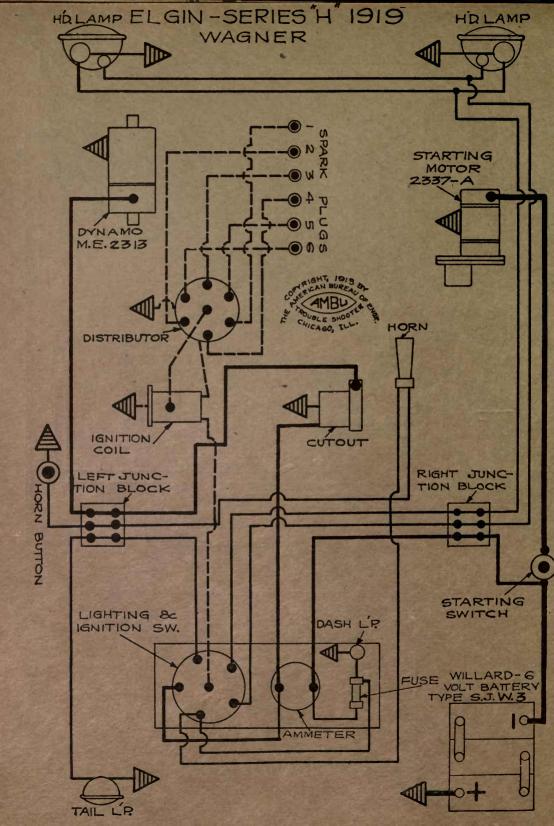


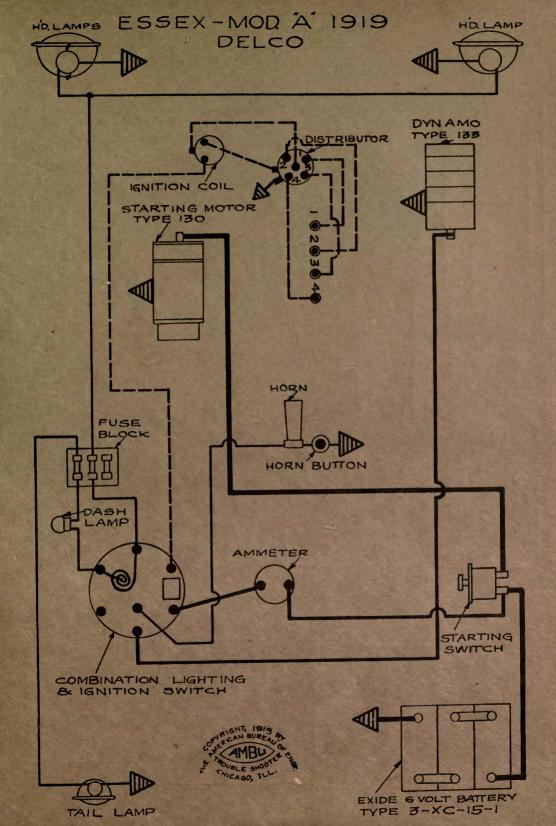


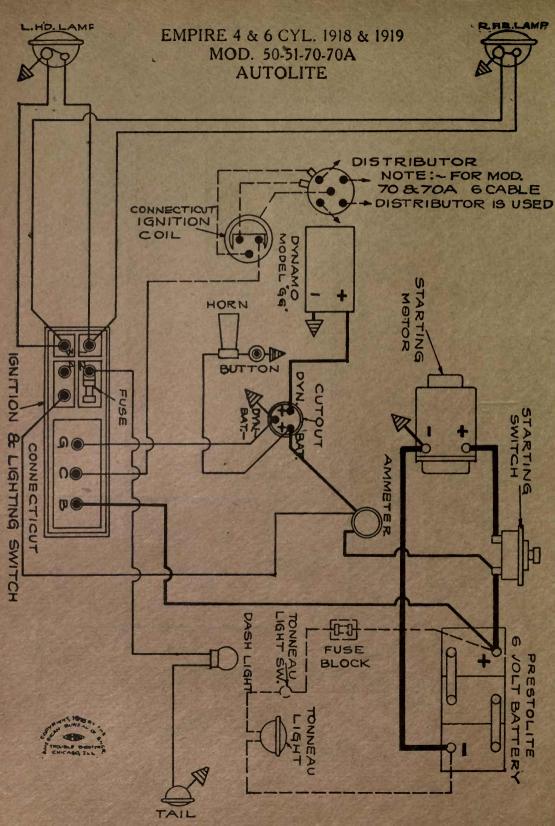


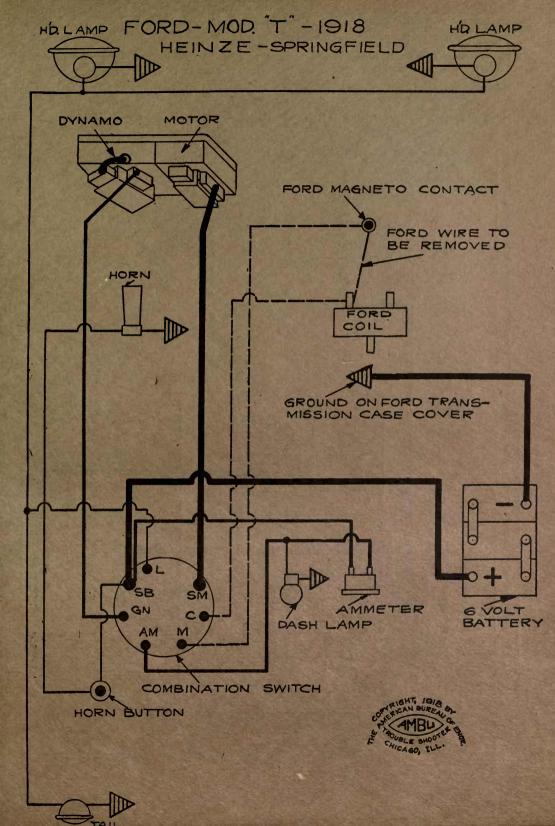


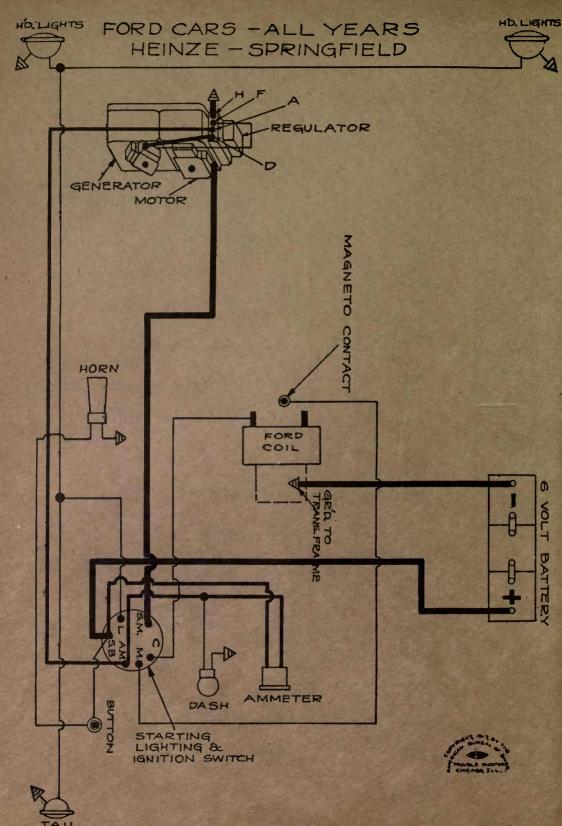


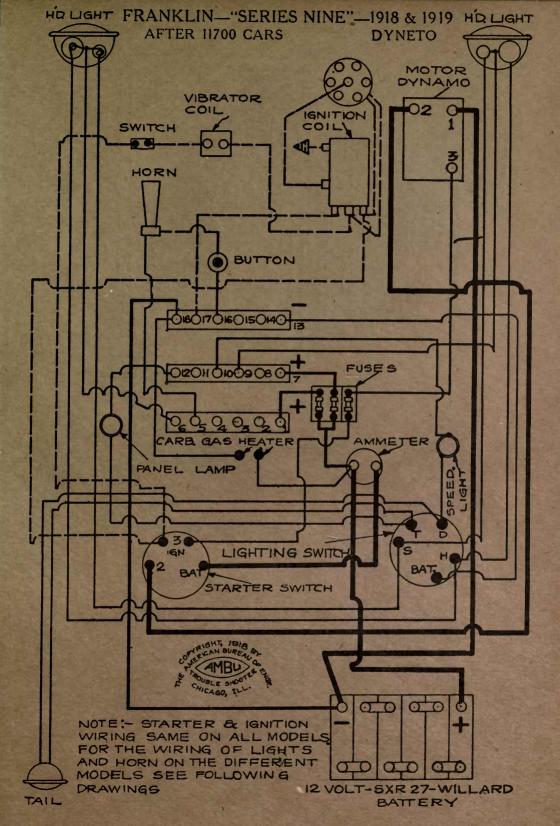


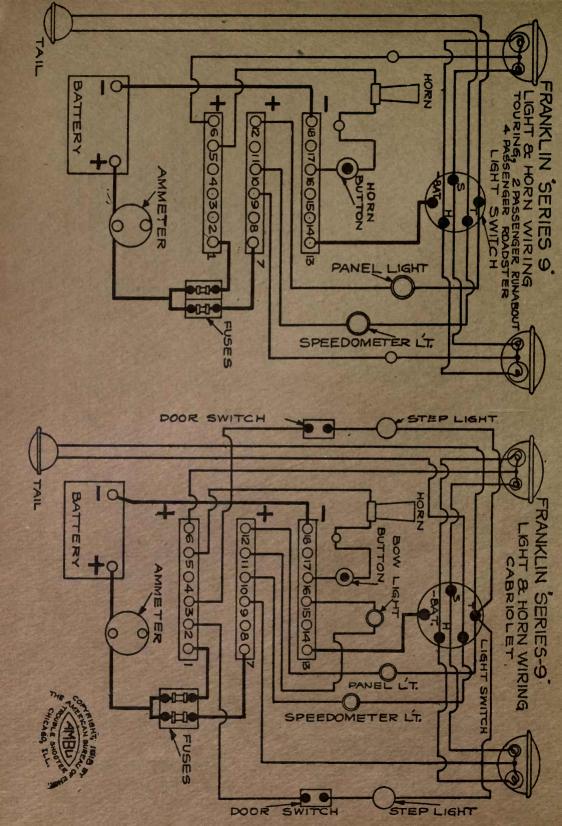


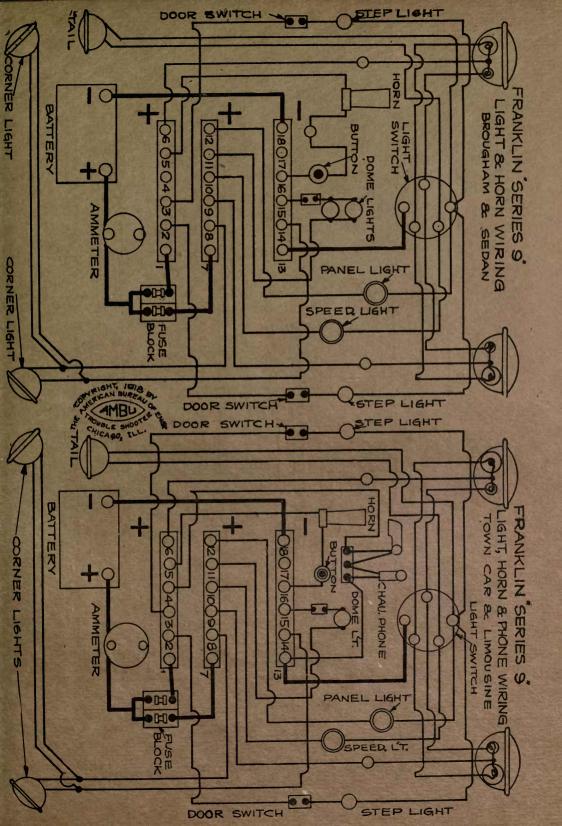


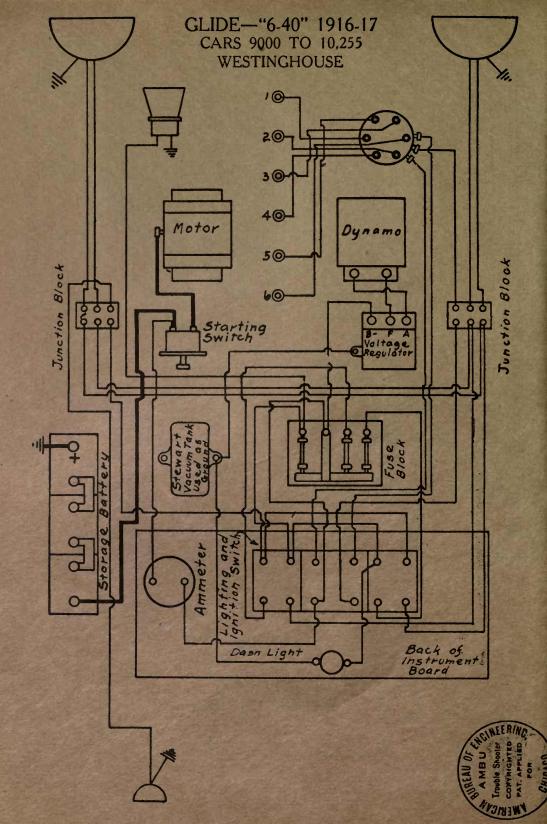


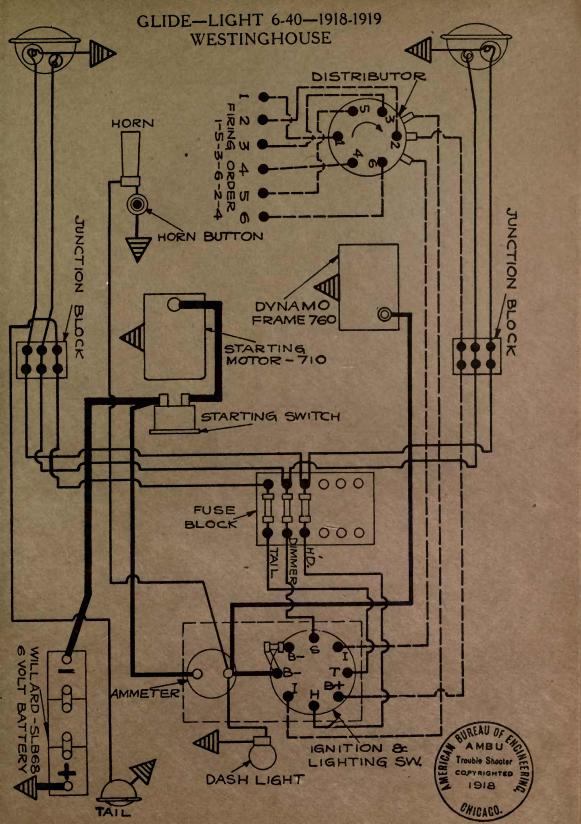


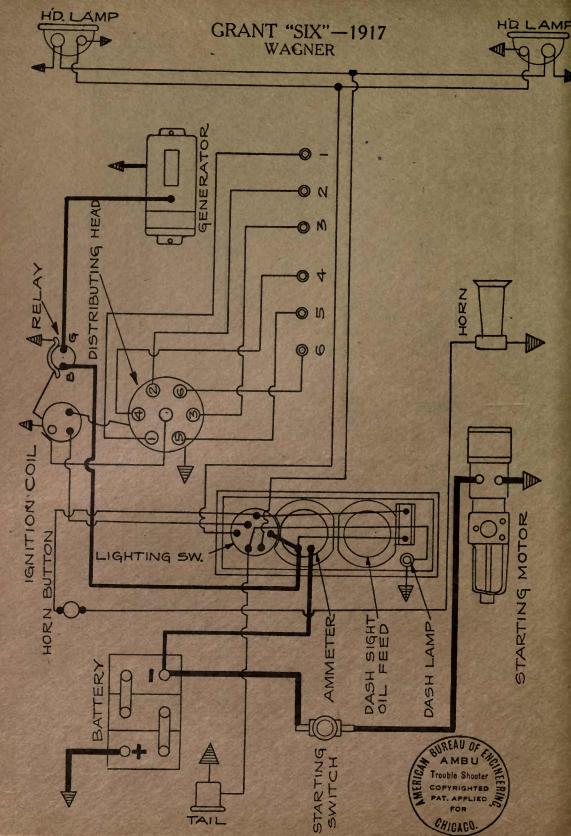


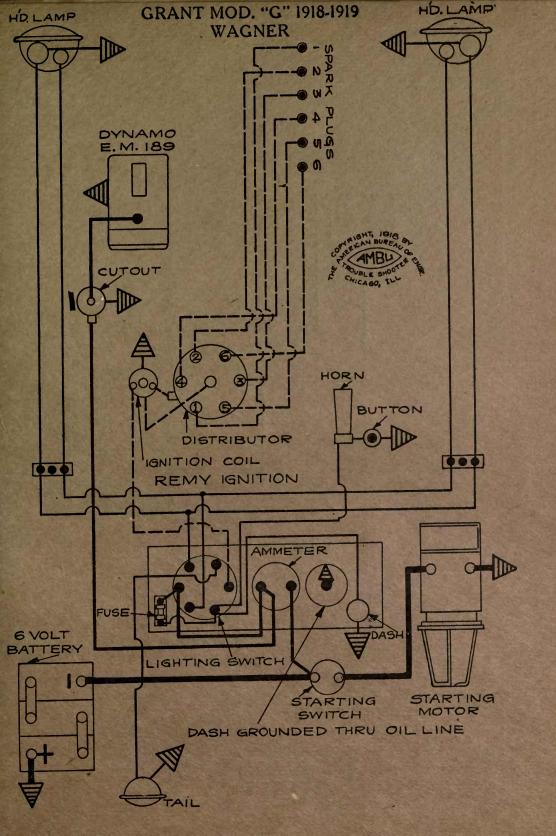


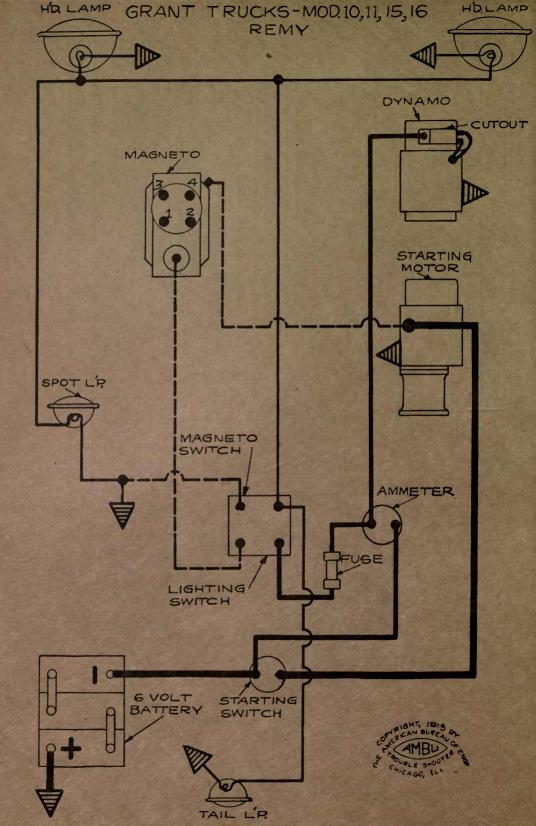


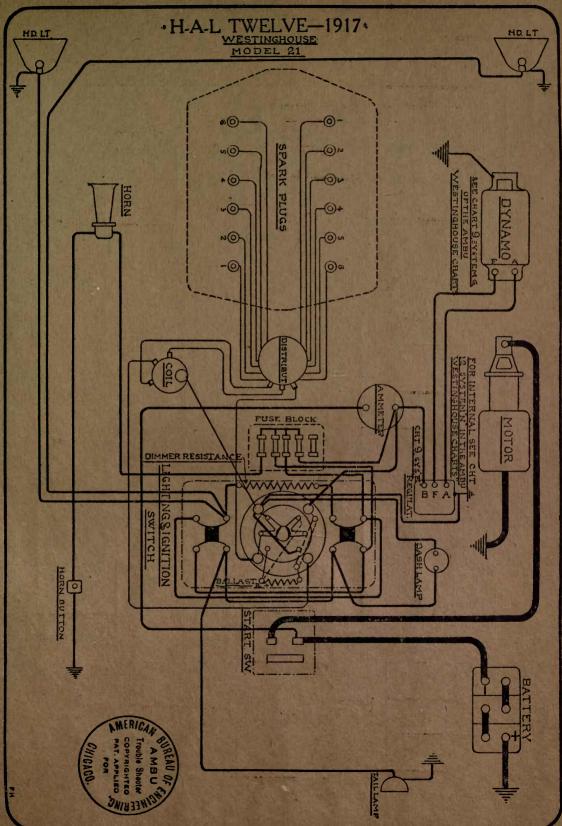


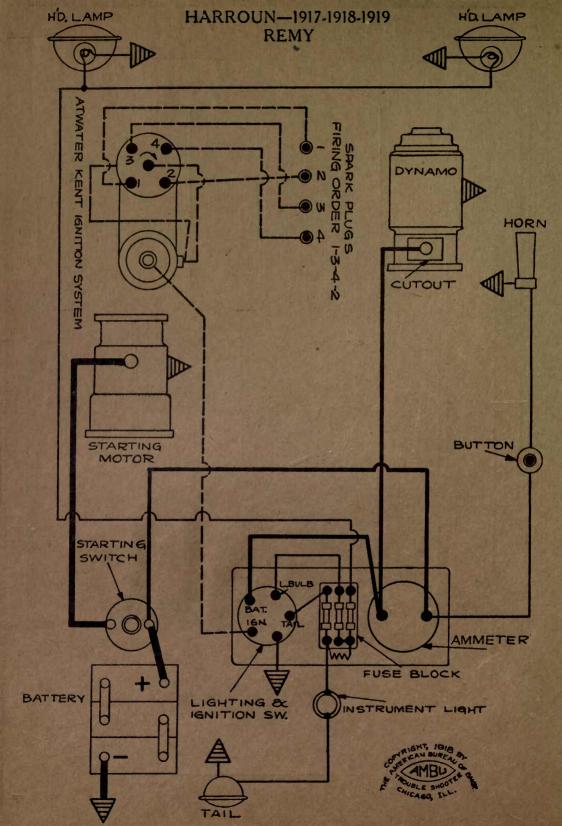


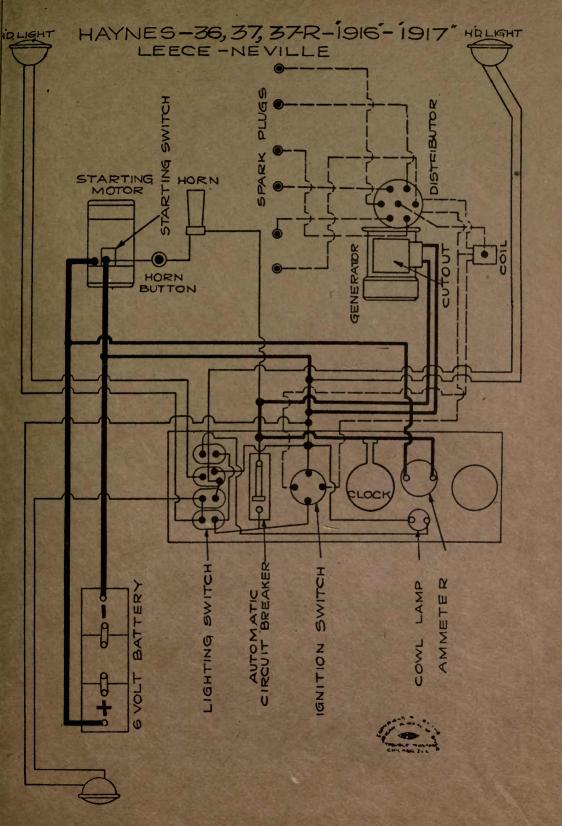


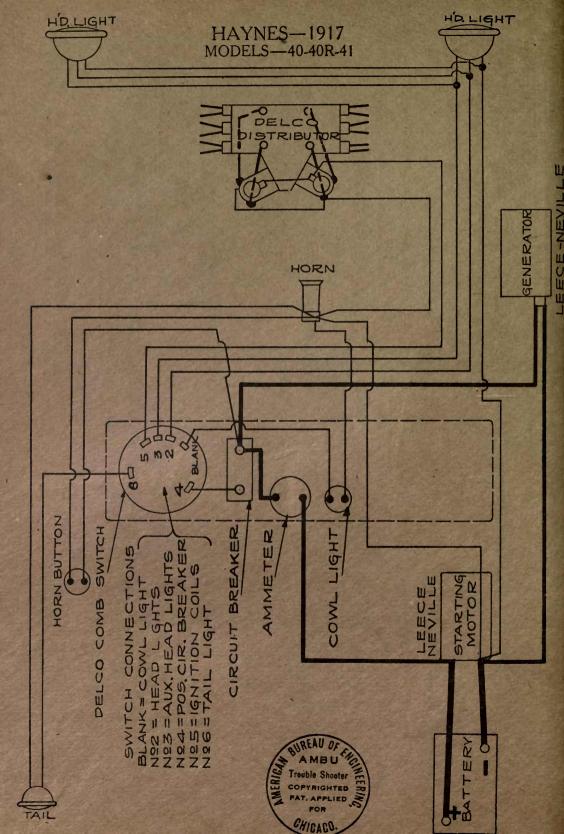


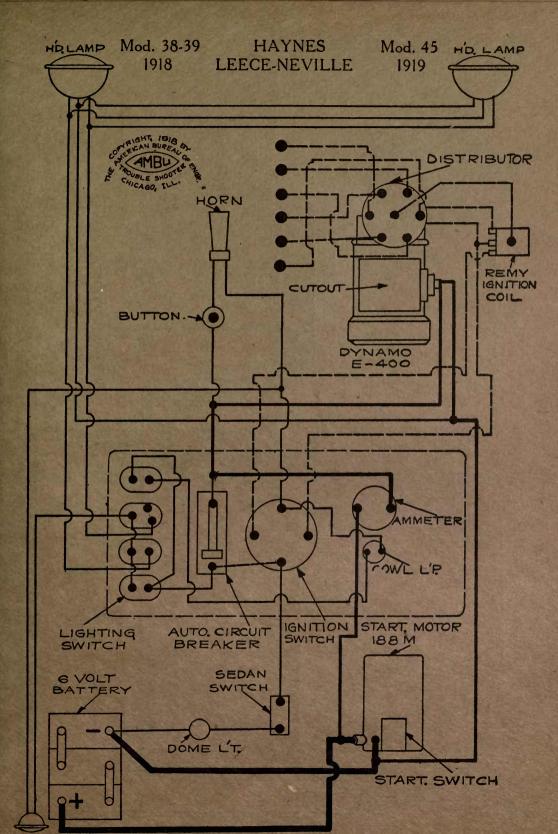


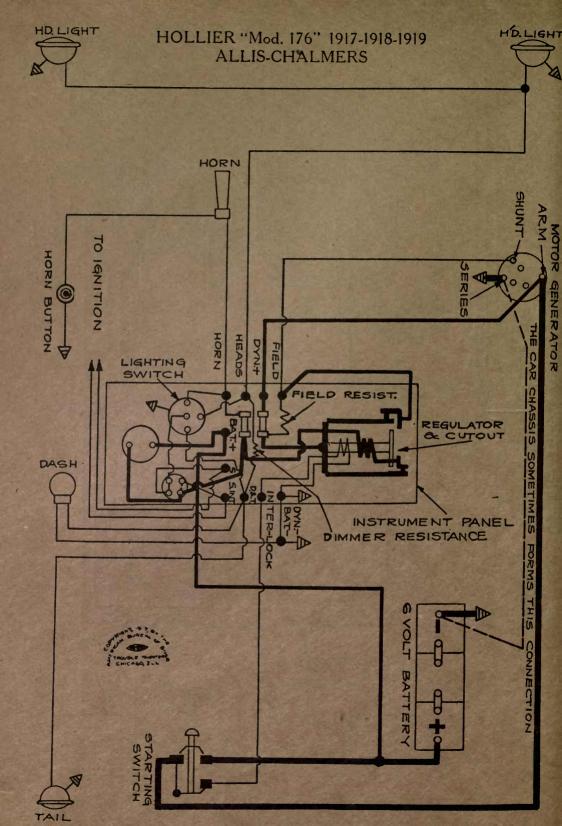


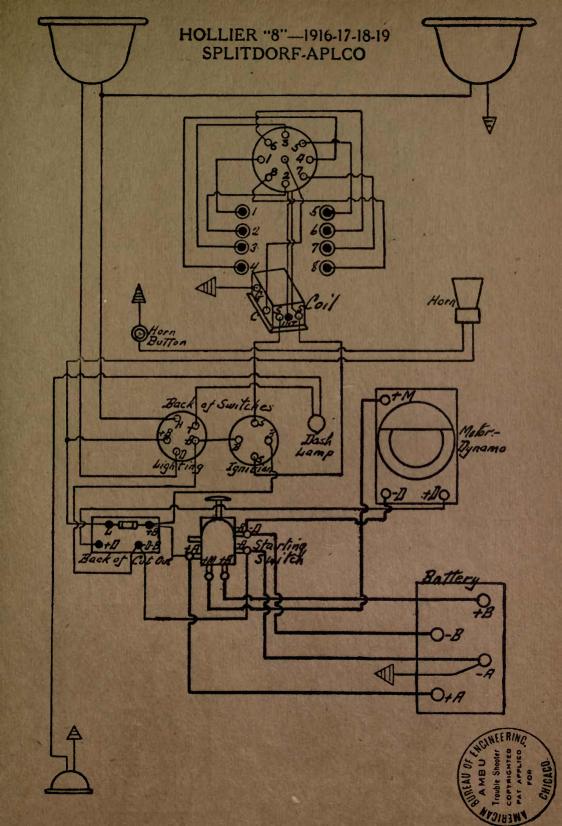


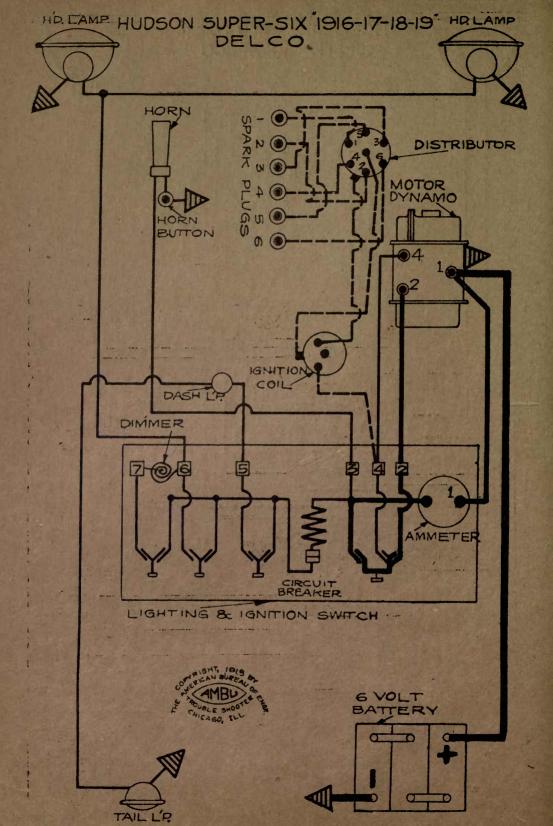


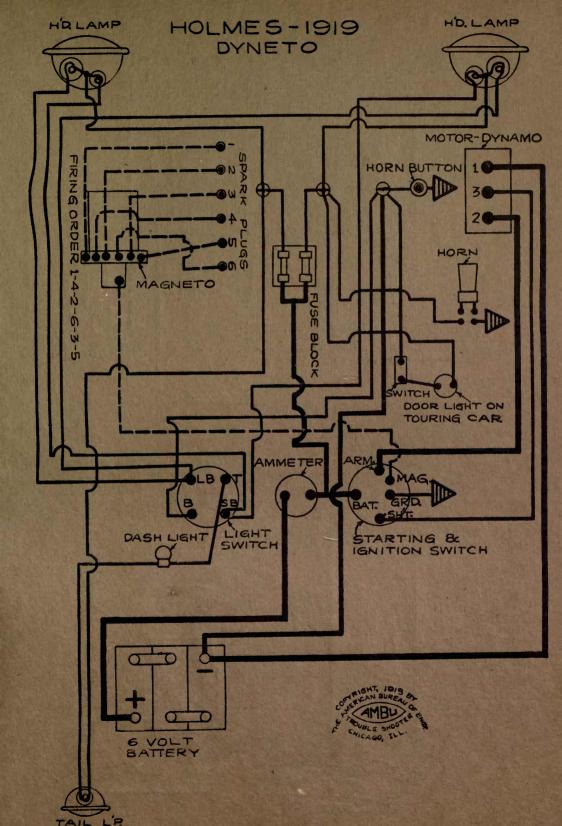


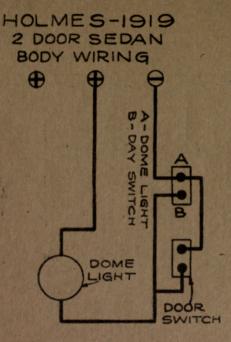


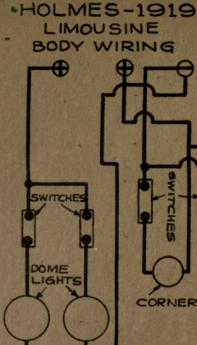


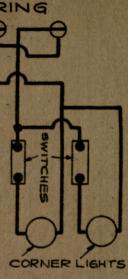










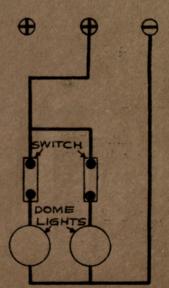




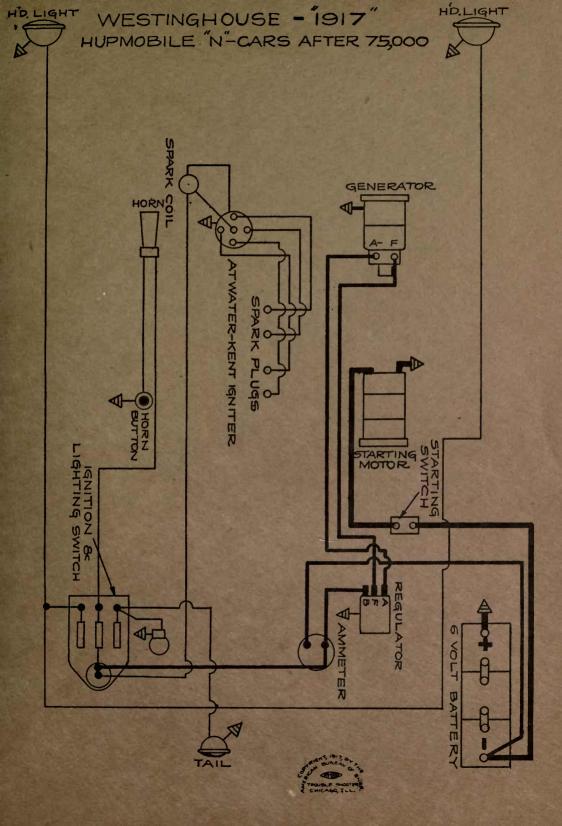
HOLMES-1919 CABRIOLET BODY WIRING

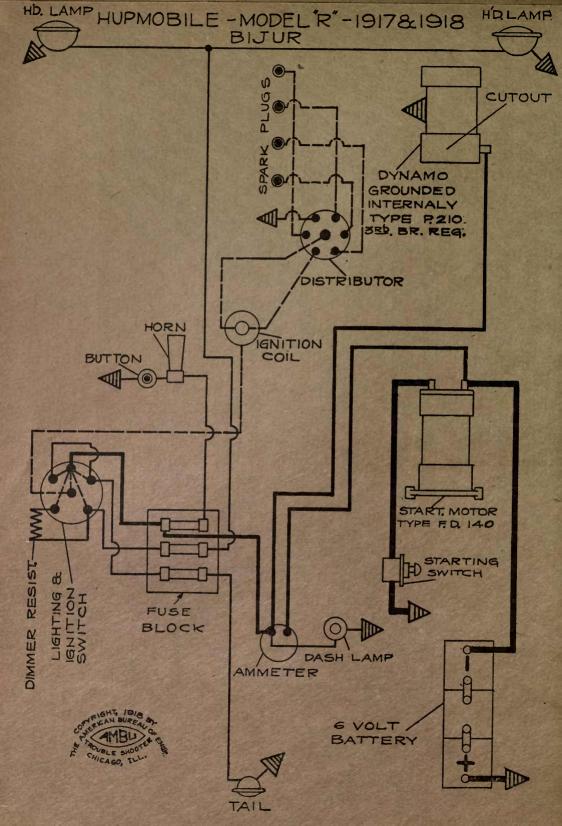


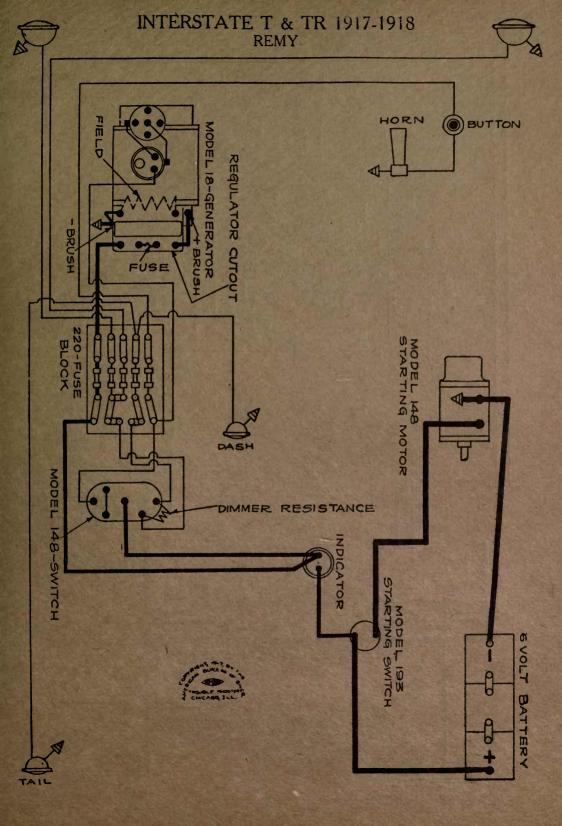
HOLMES-1919 FOUR DOOR SEDAN BODY WIRING

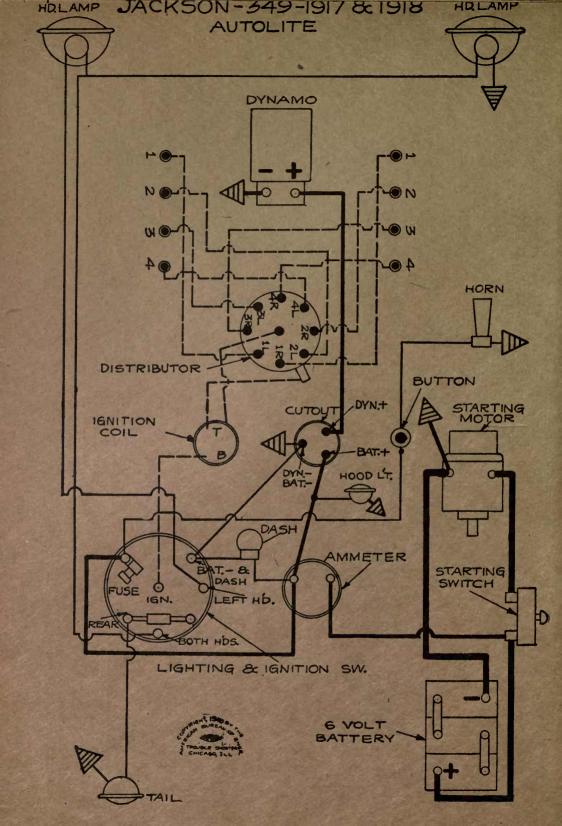


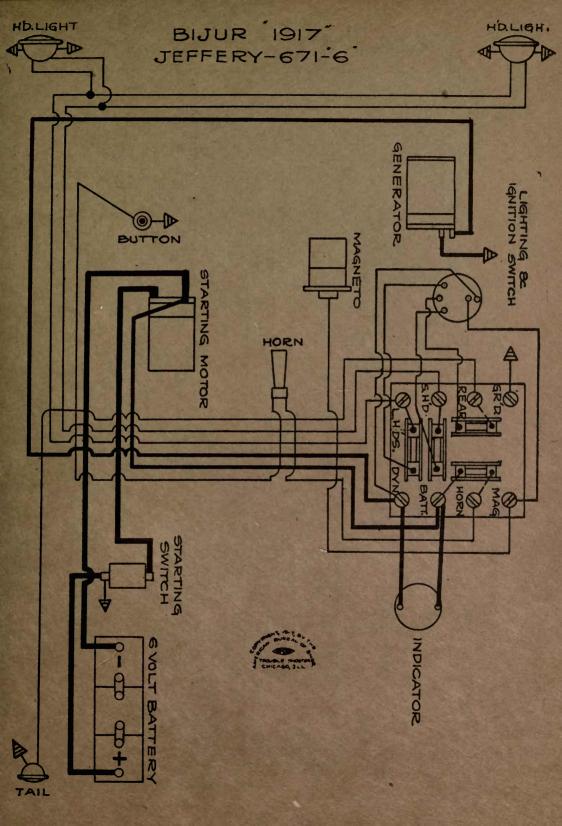
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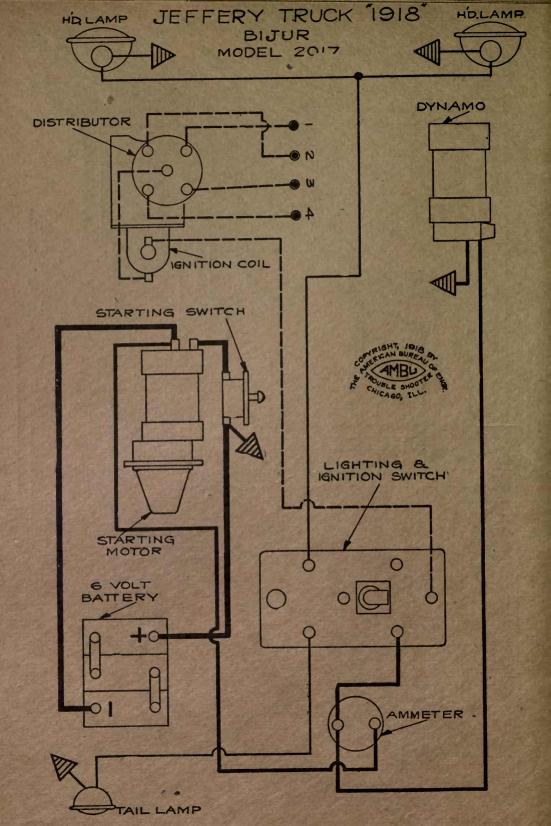


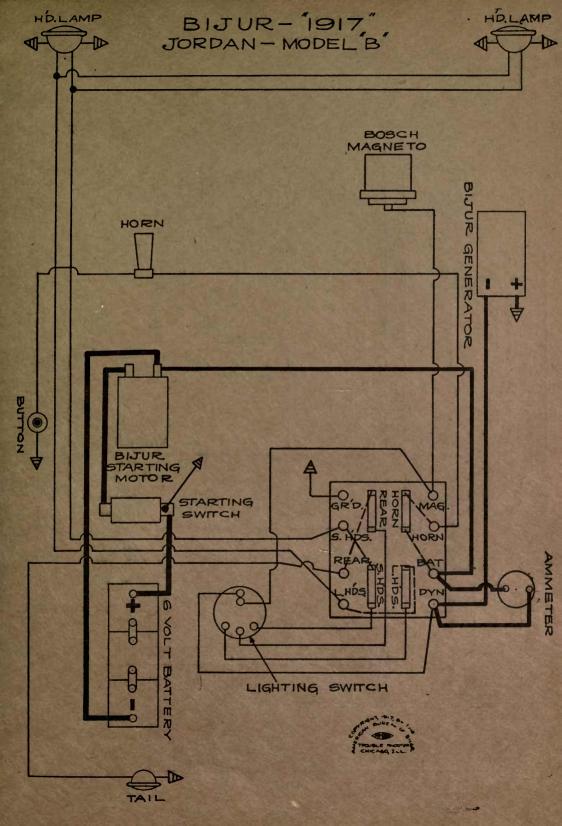


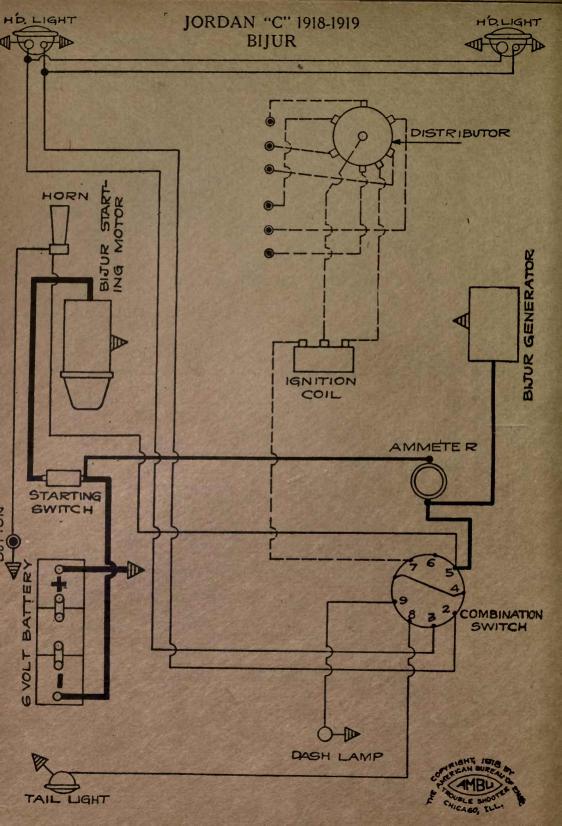


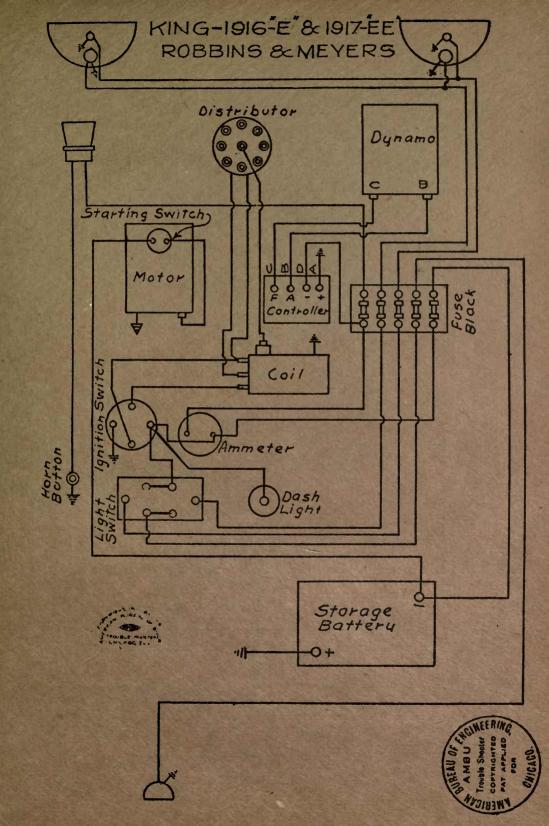


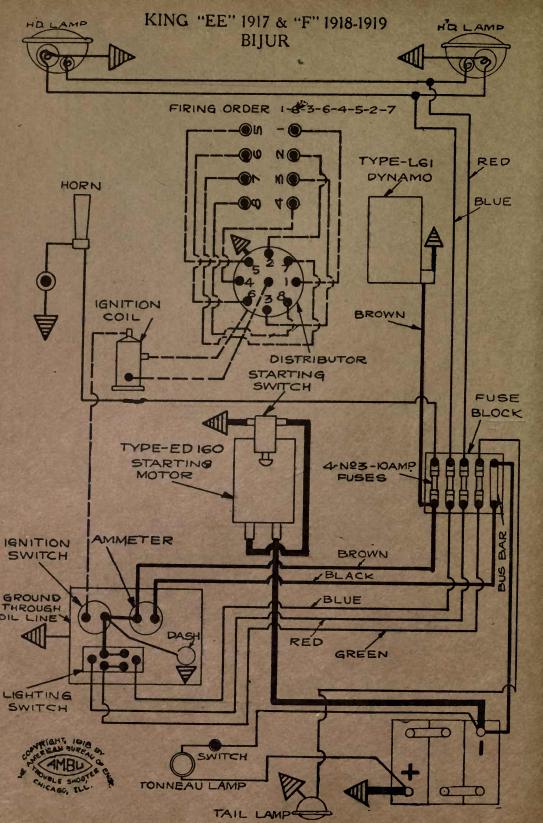


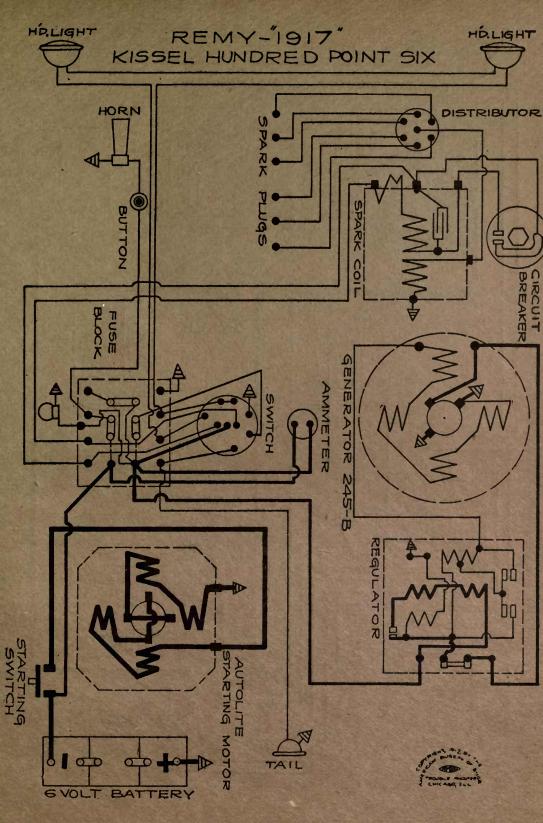


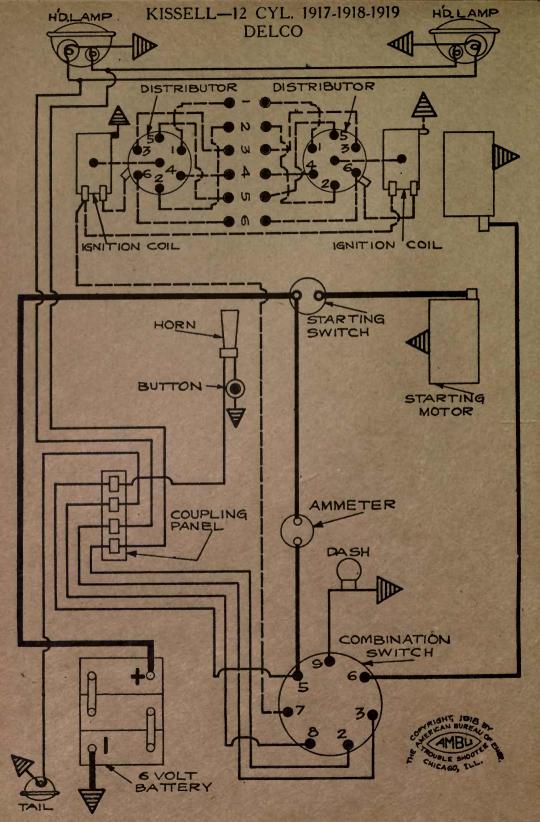


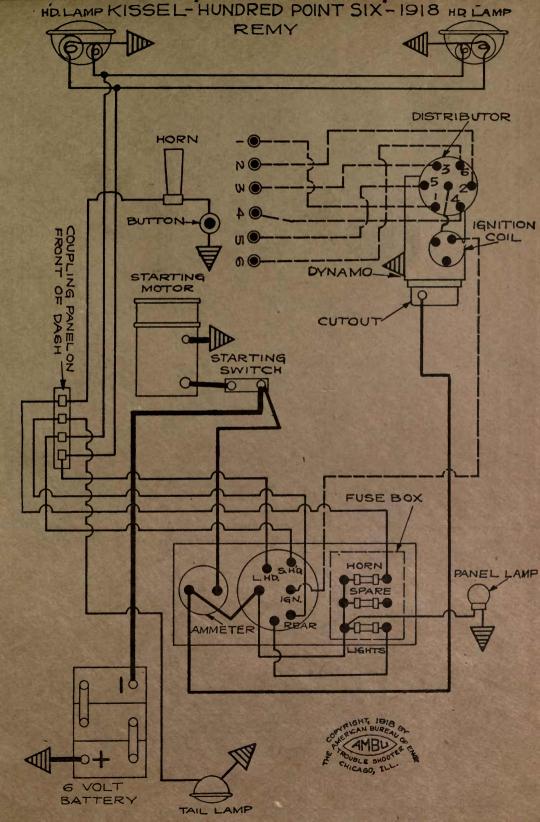


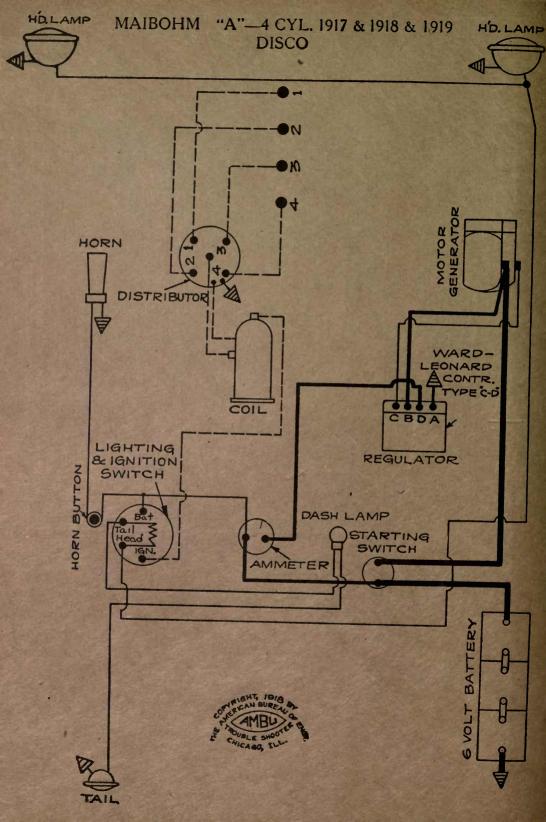


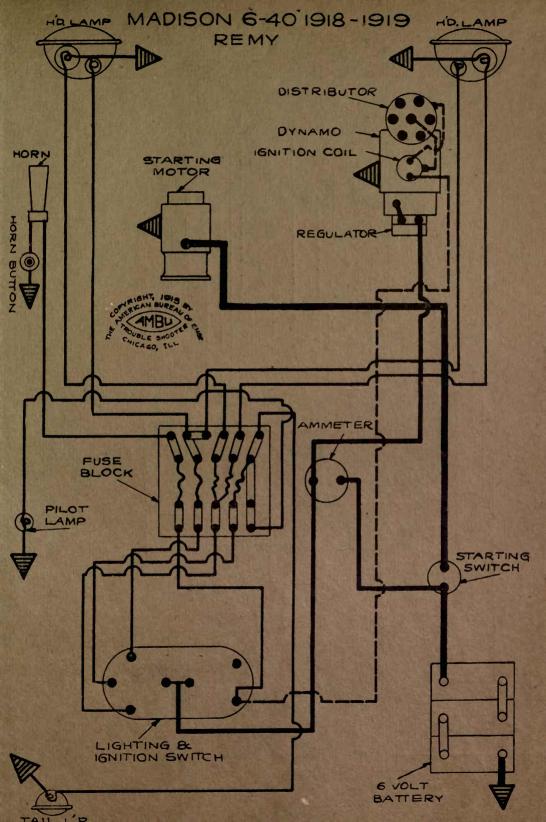


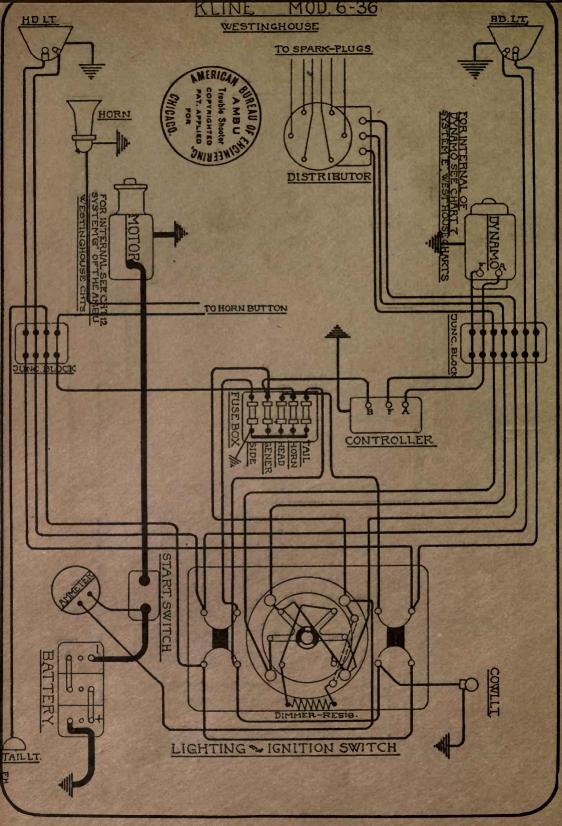


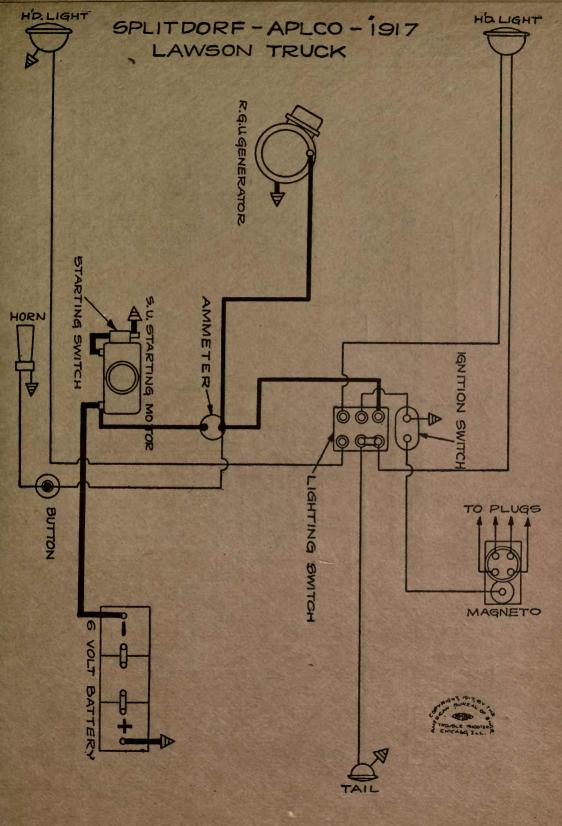


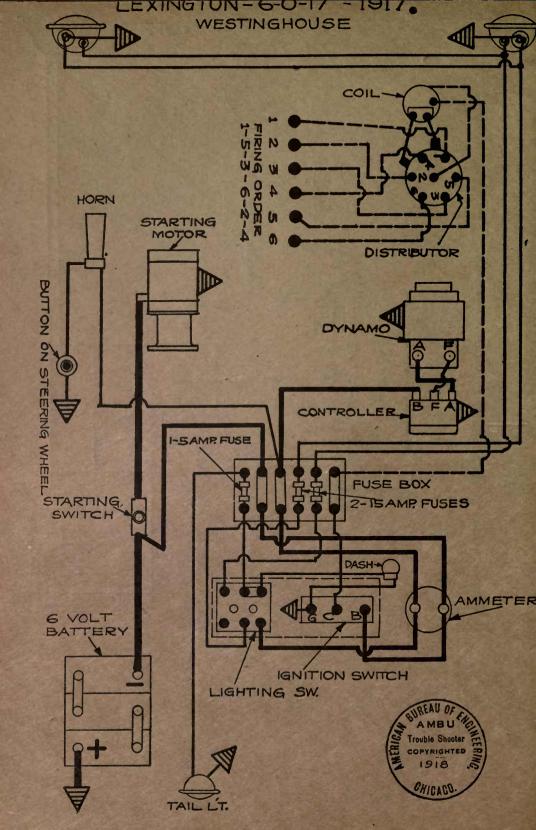


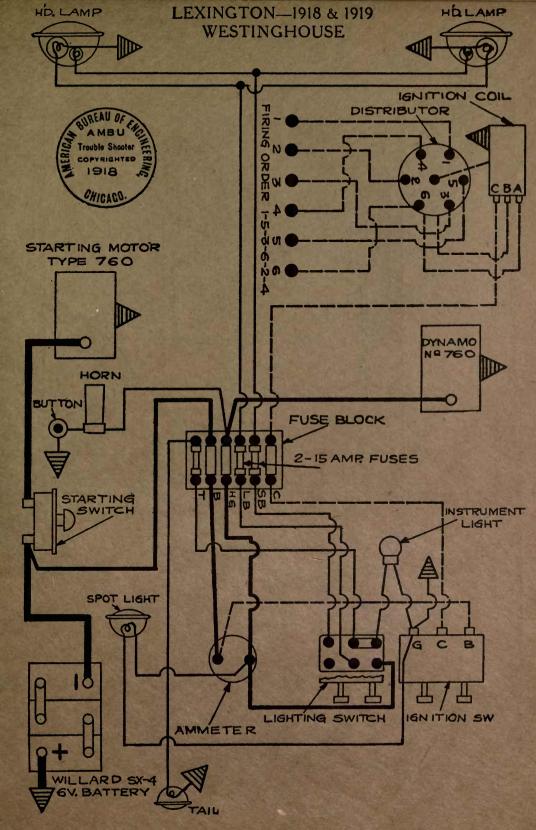


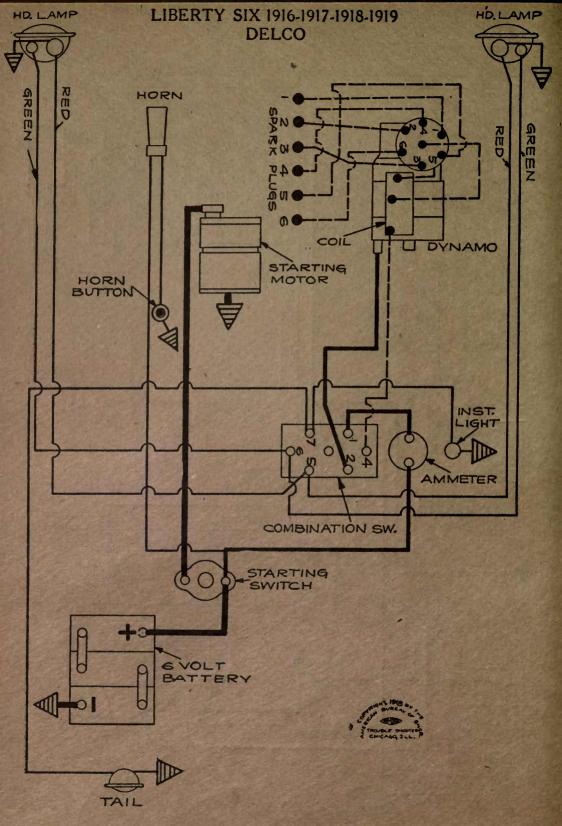


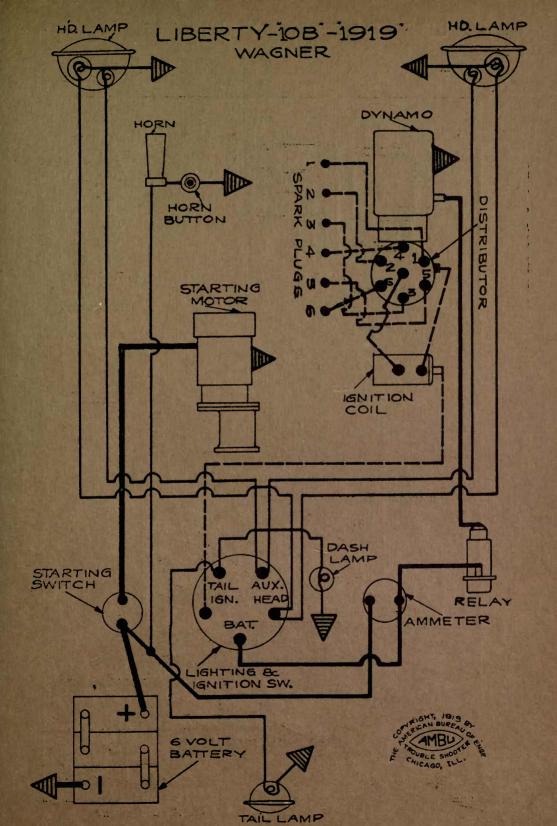


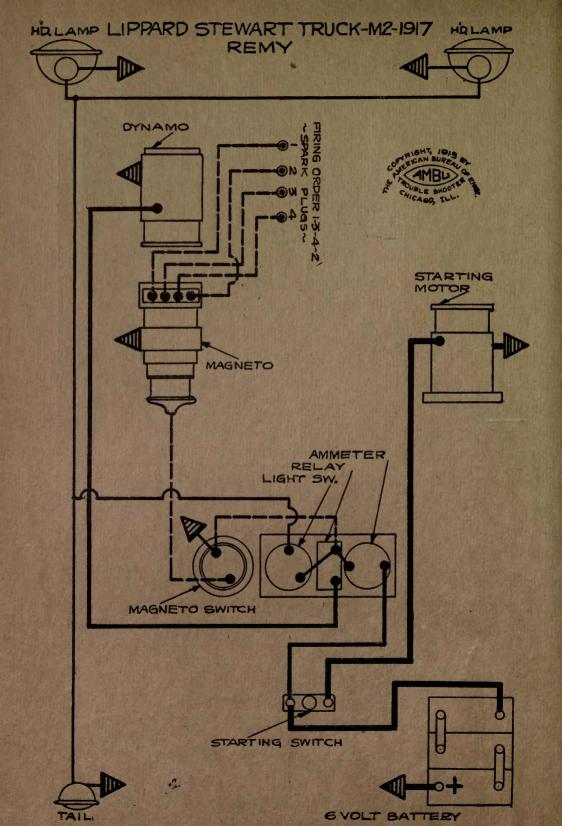


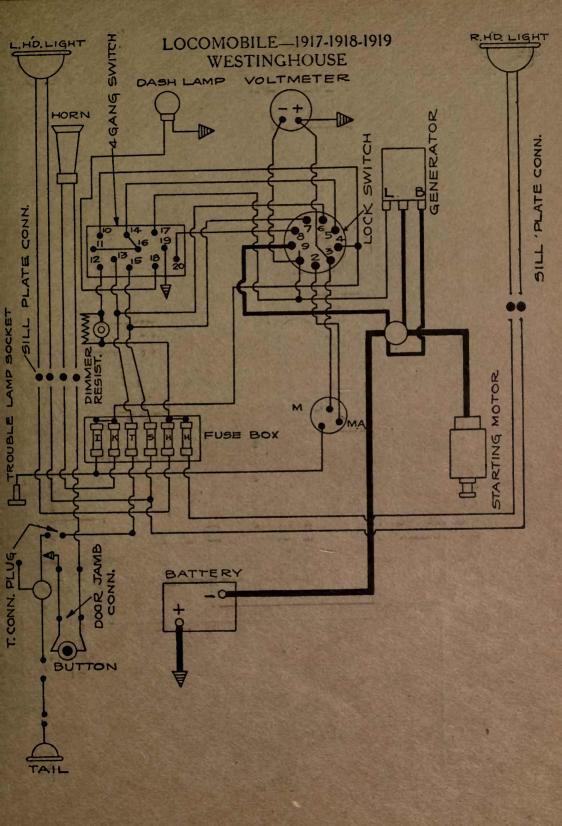


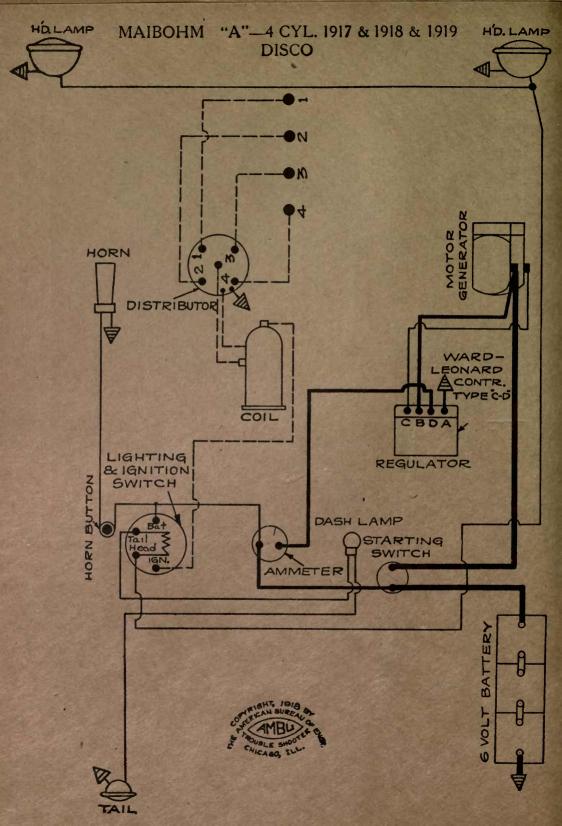


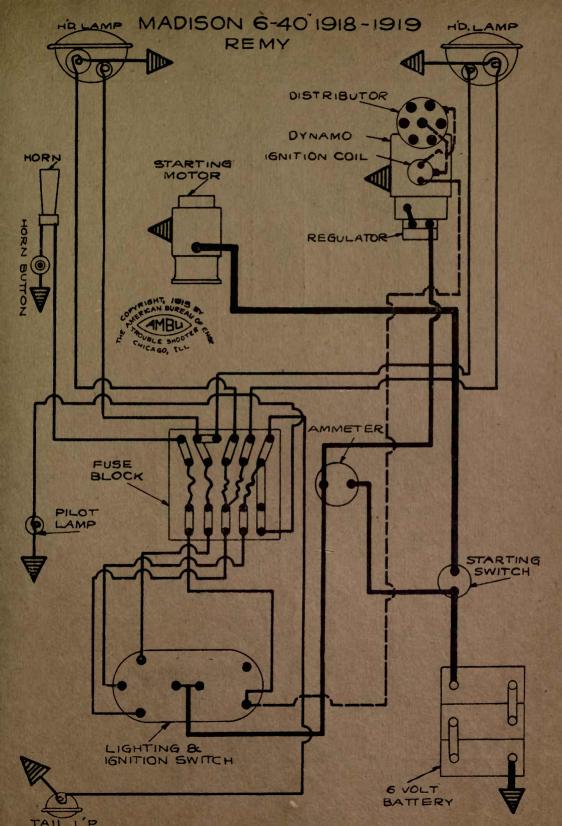


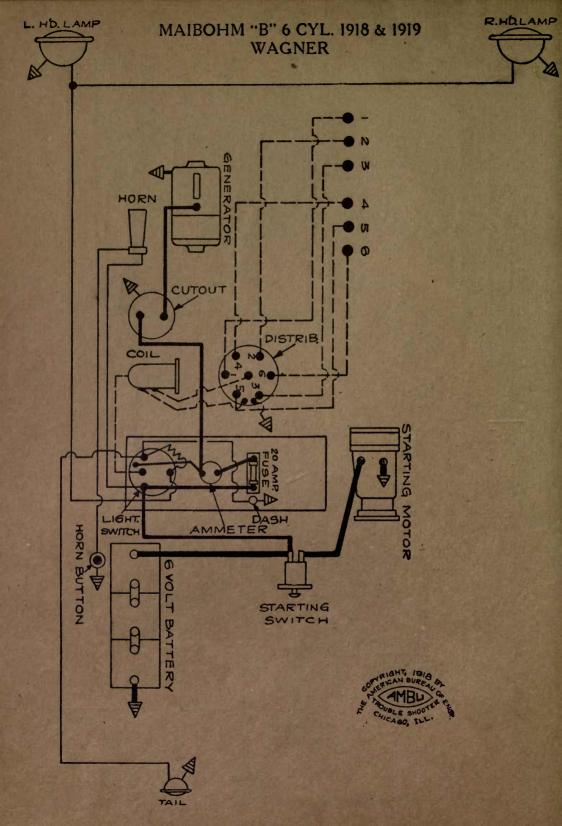


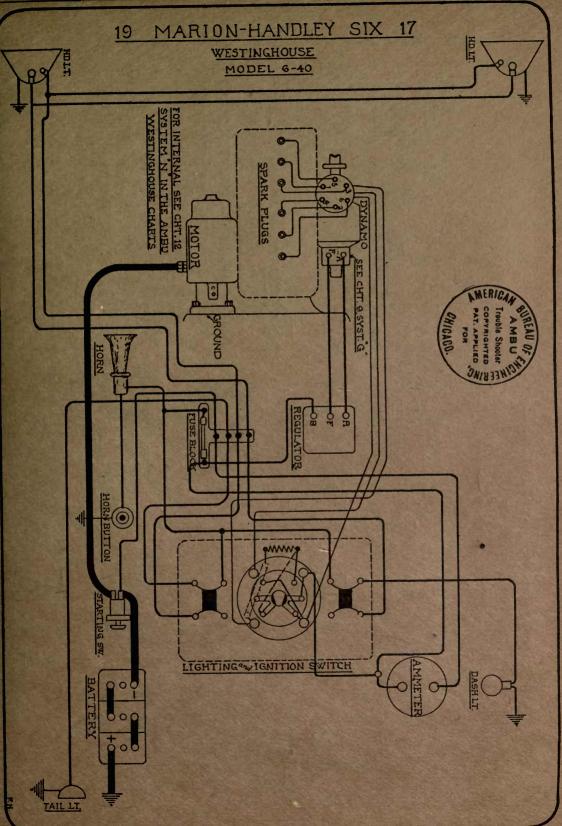


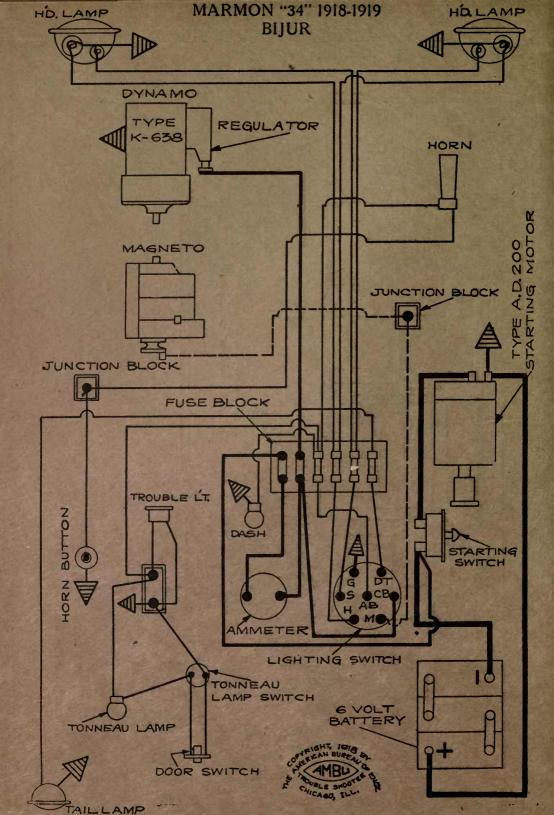


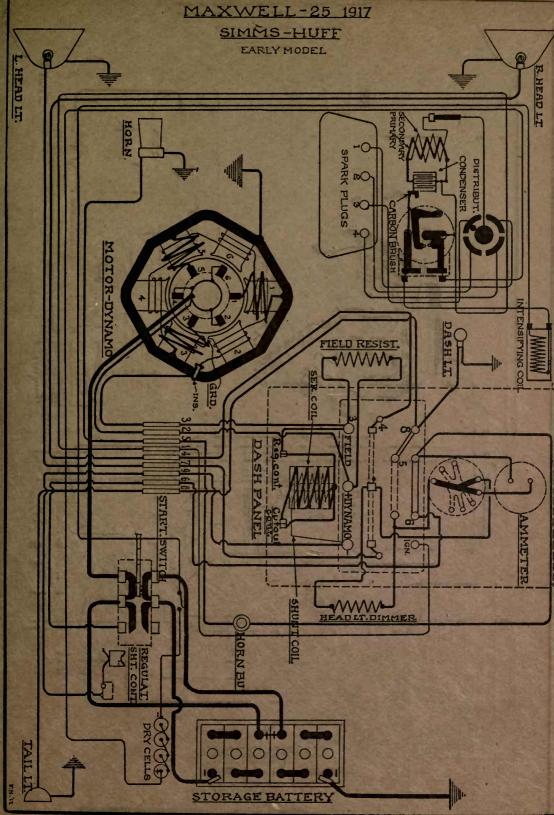


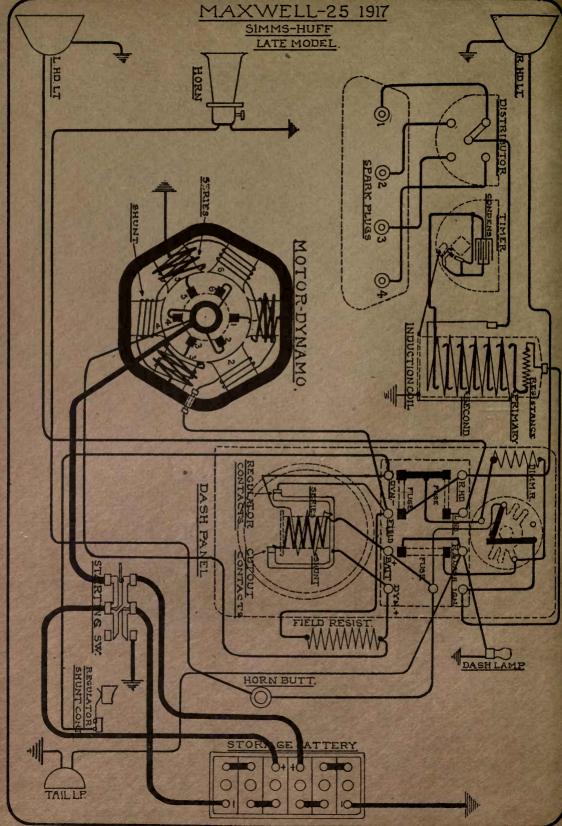


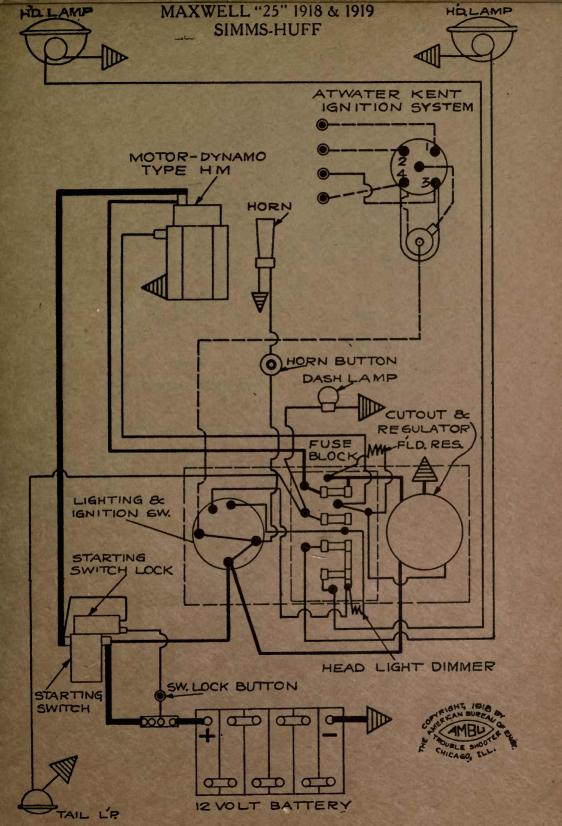


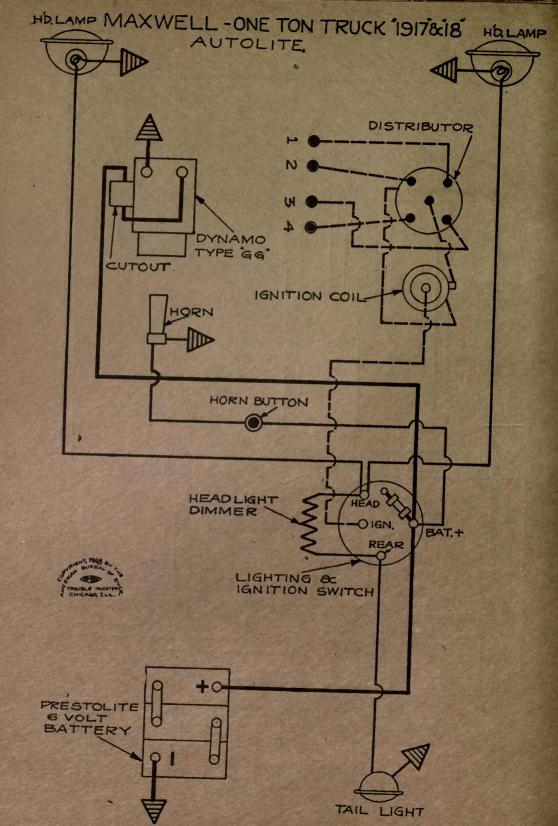


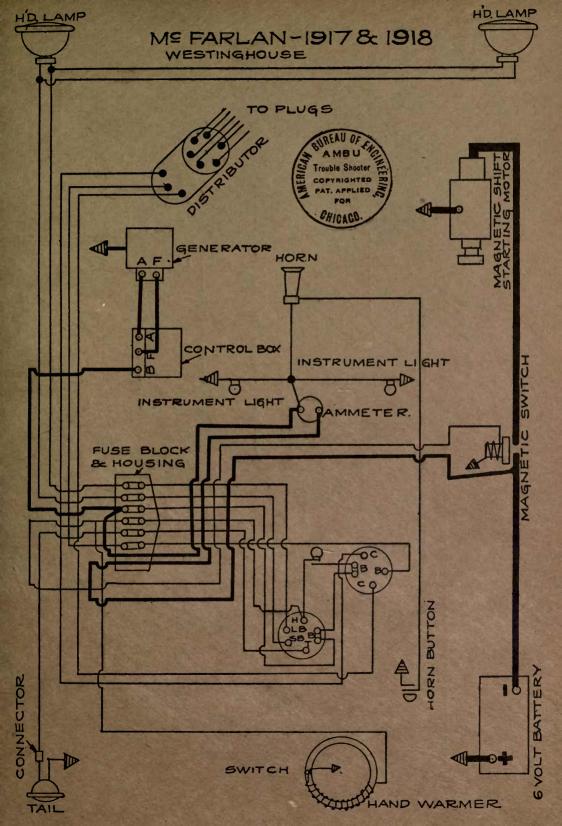


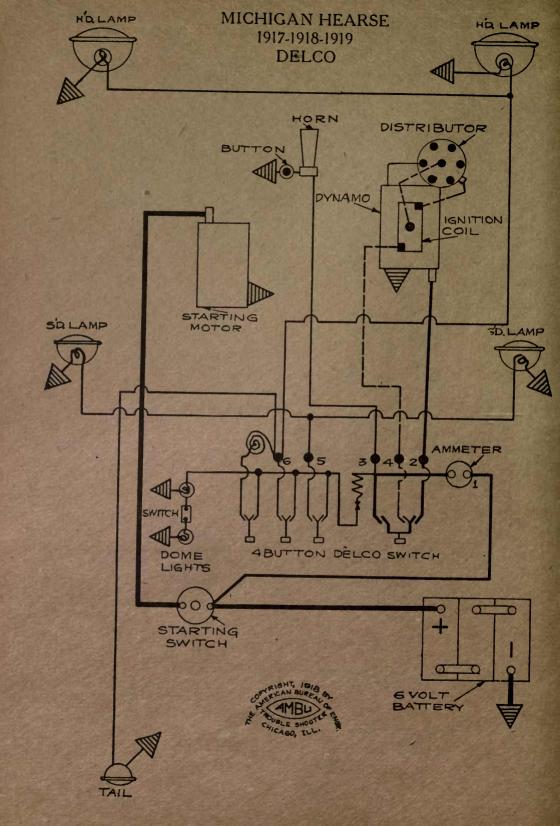


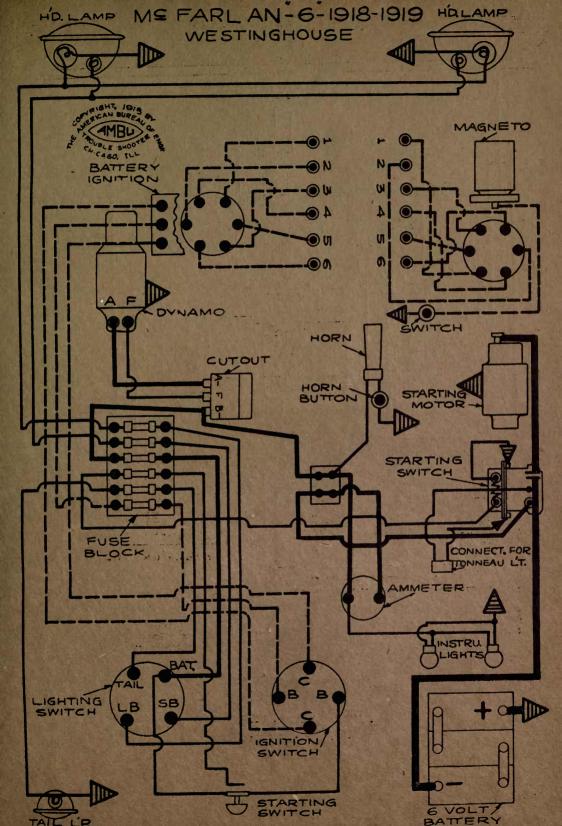


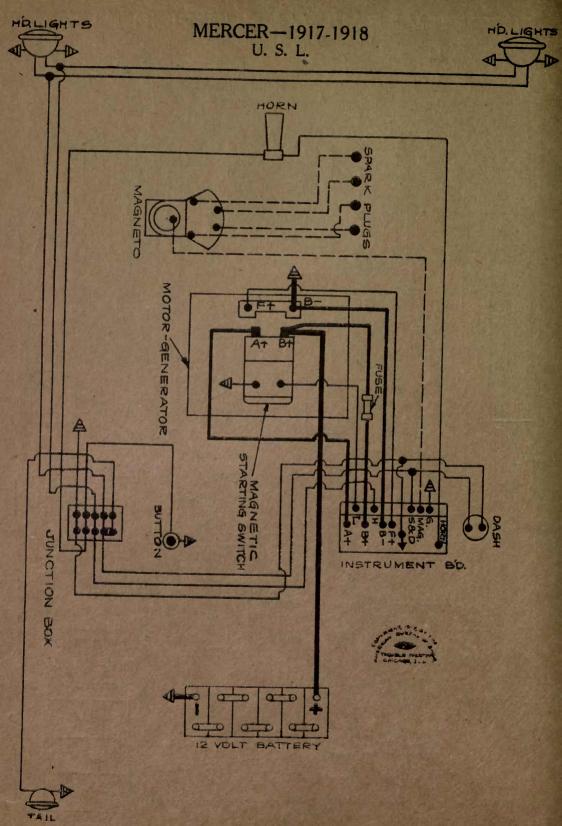


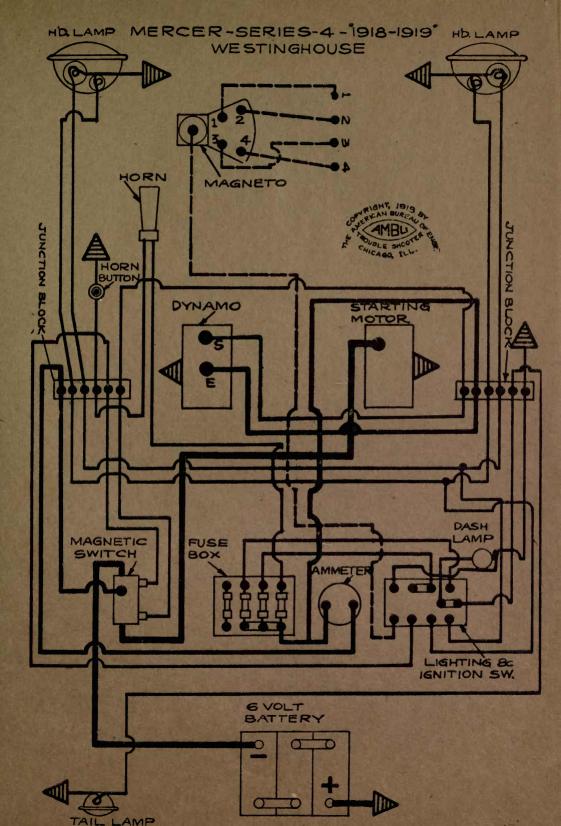


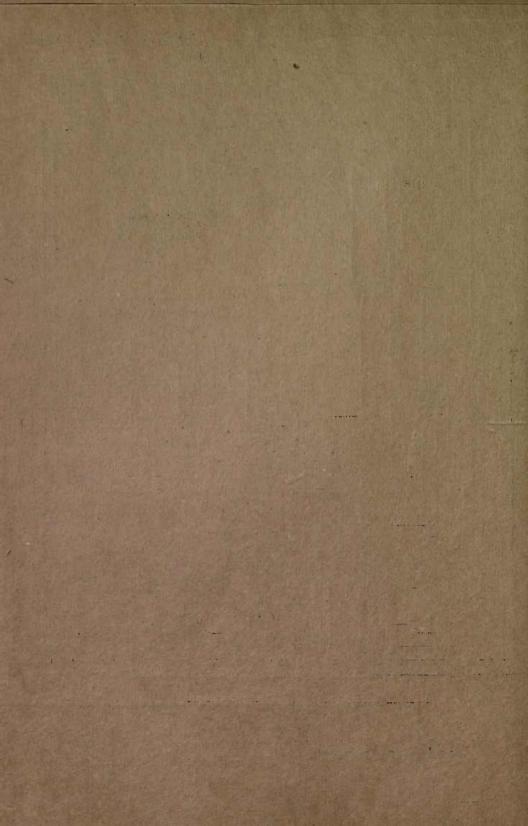


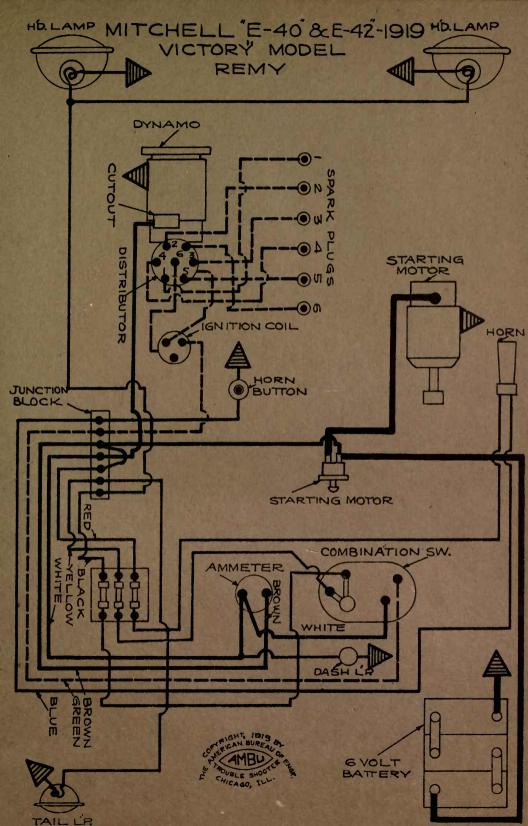


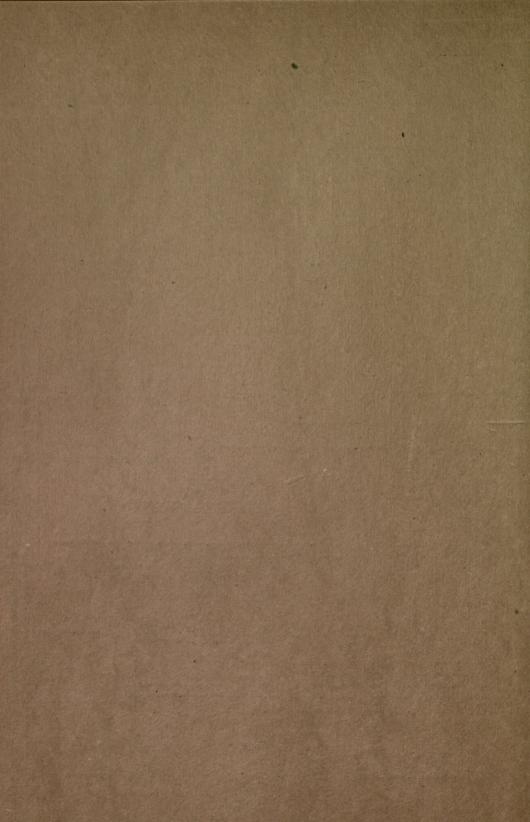


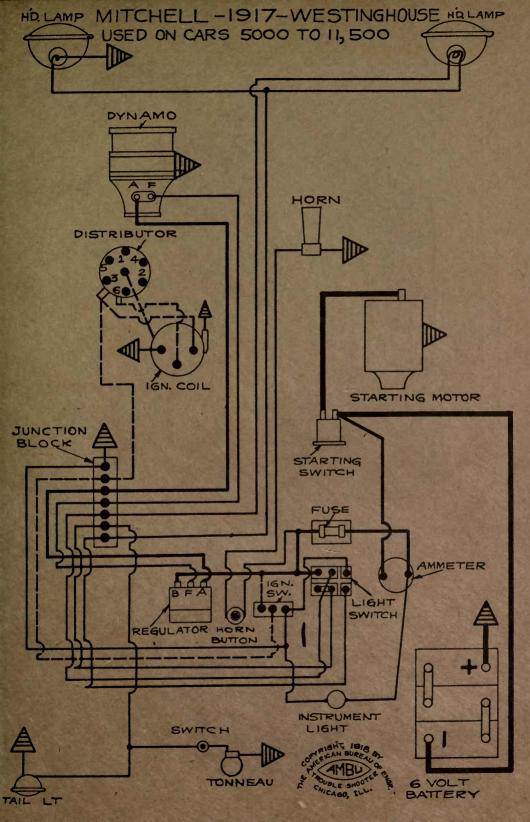


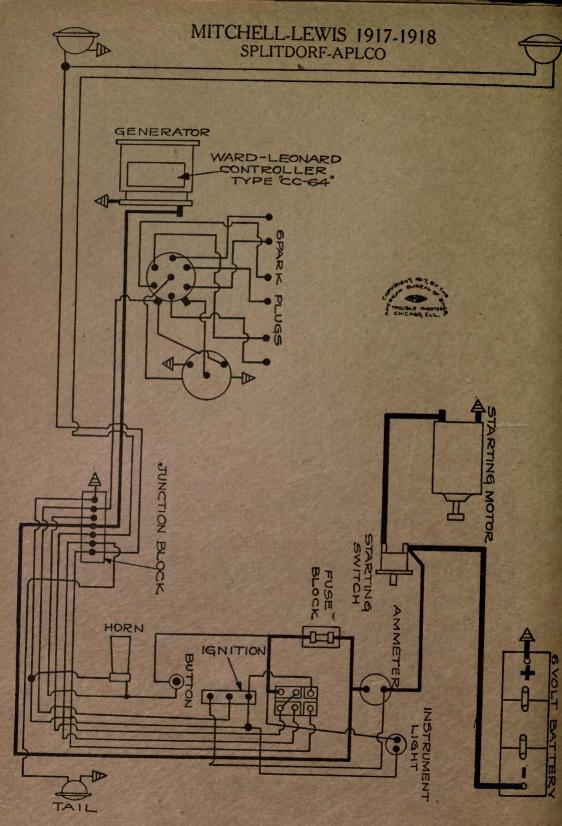


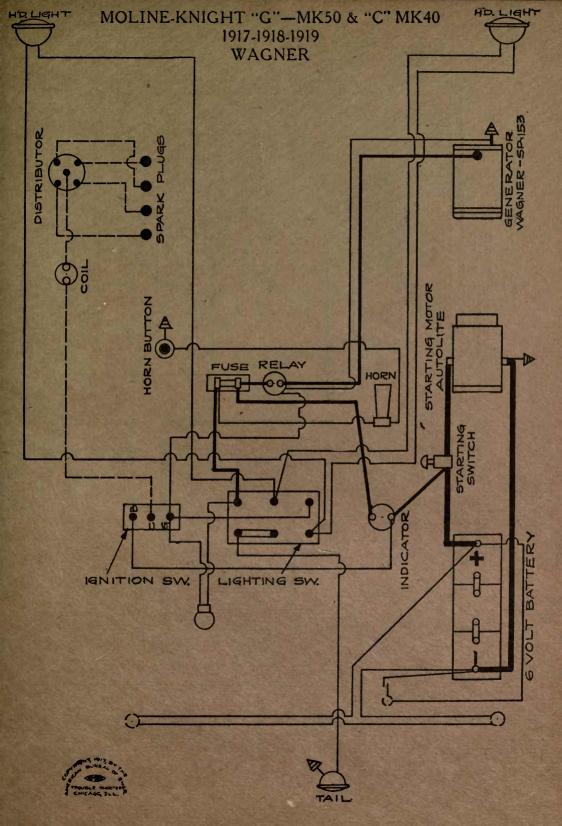


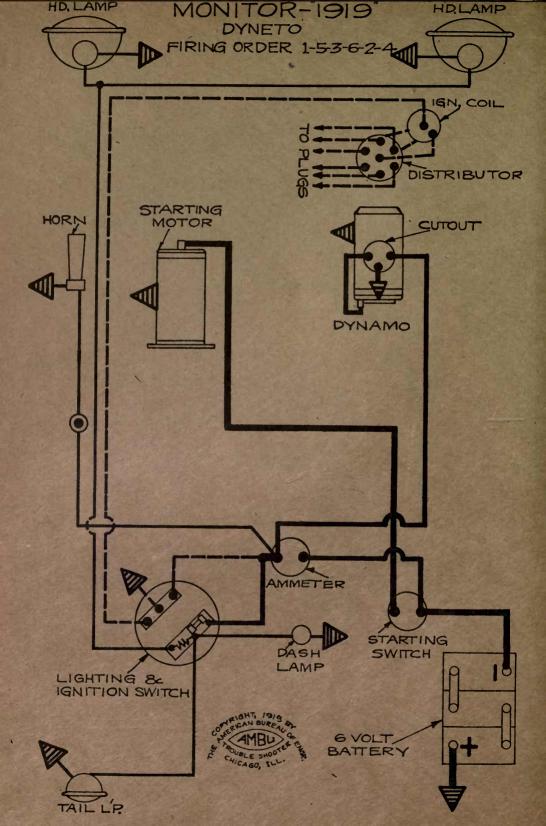


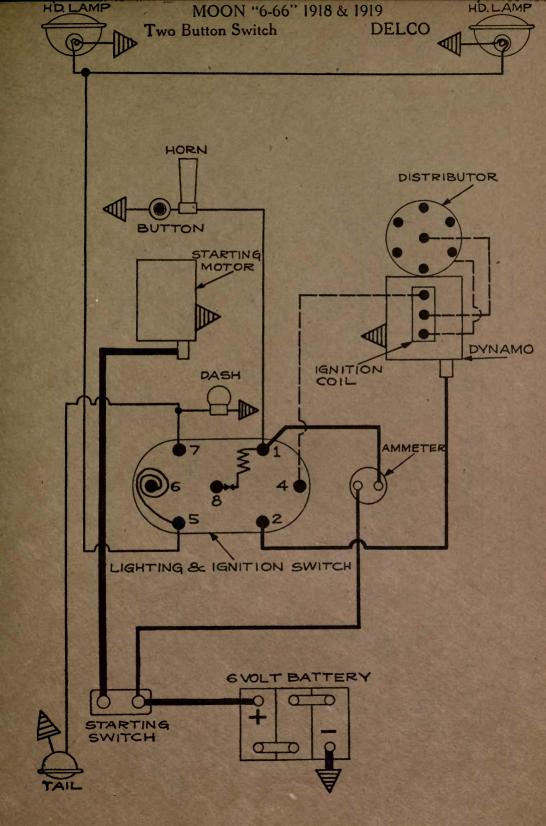


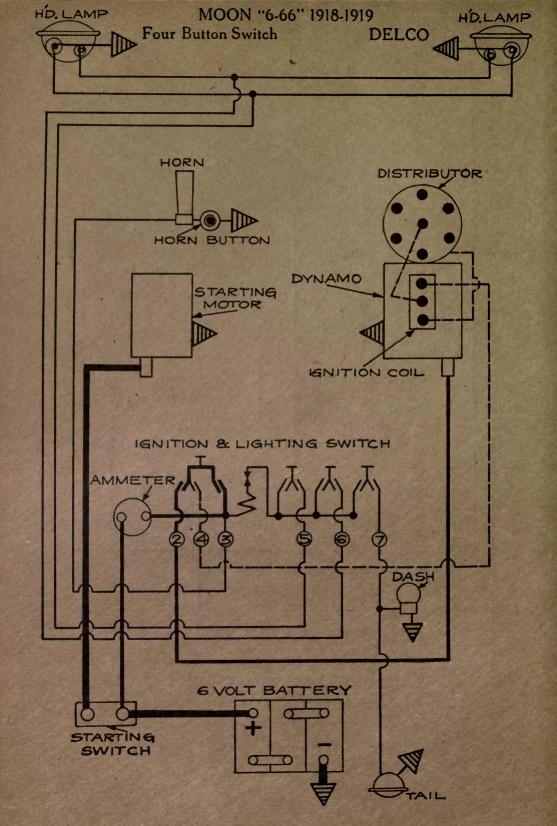


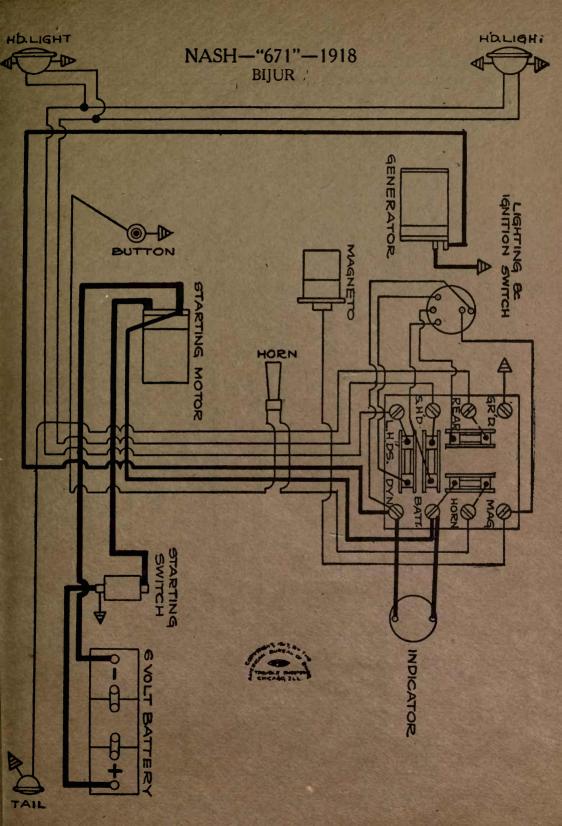


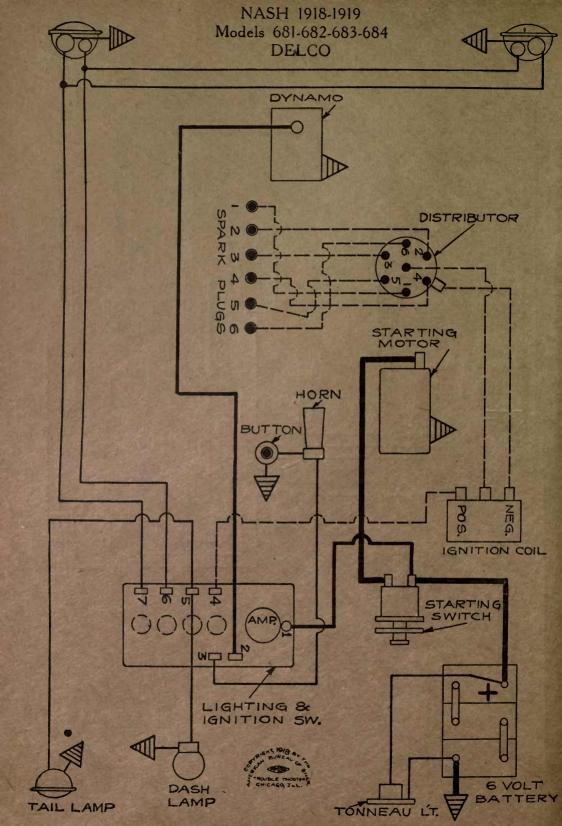


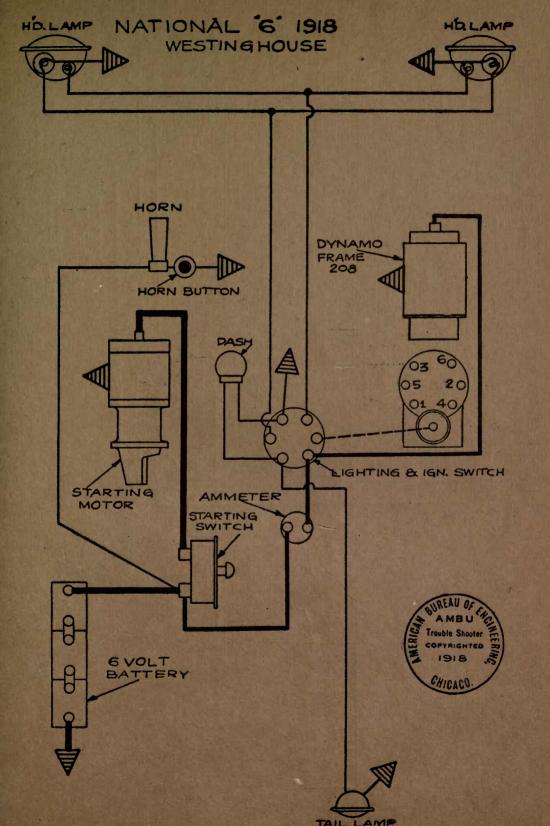


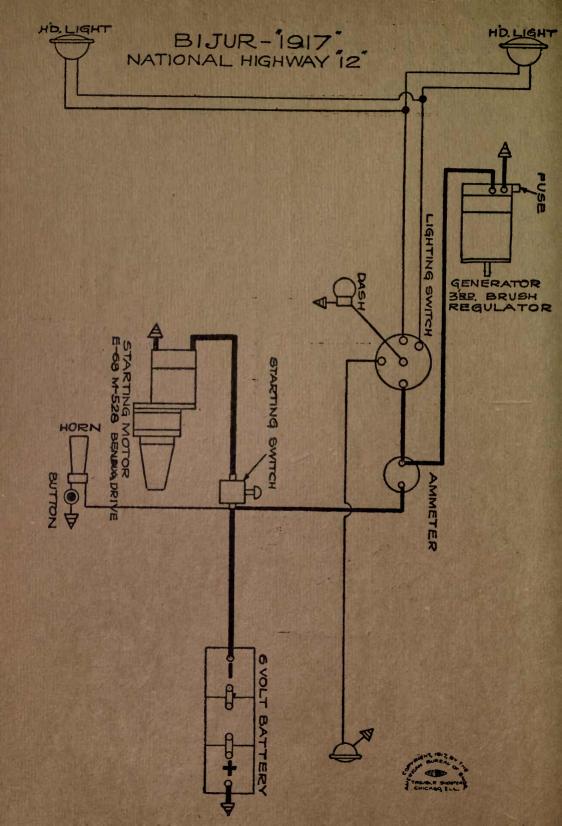


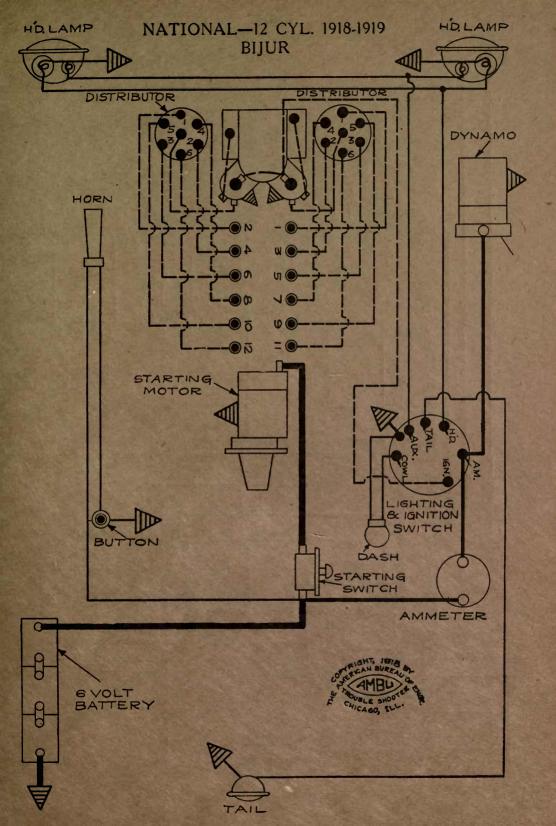


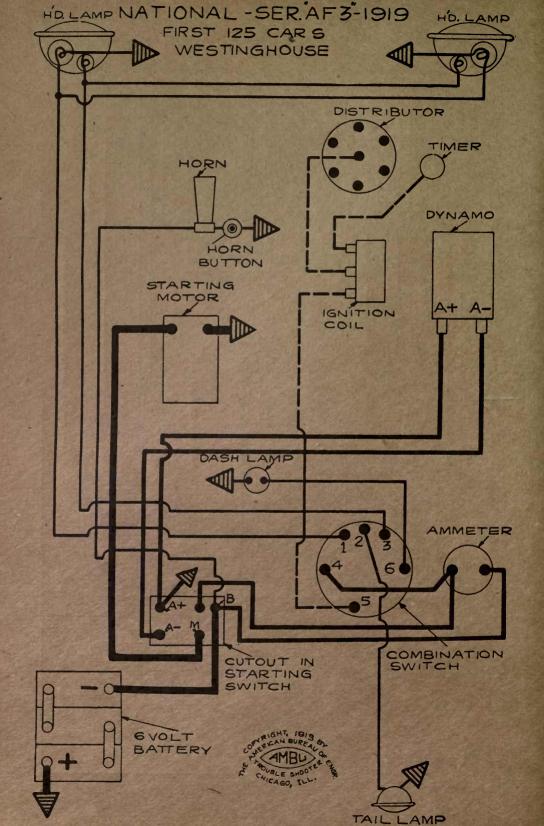


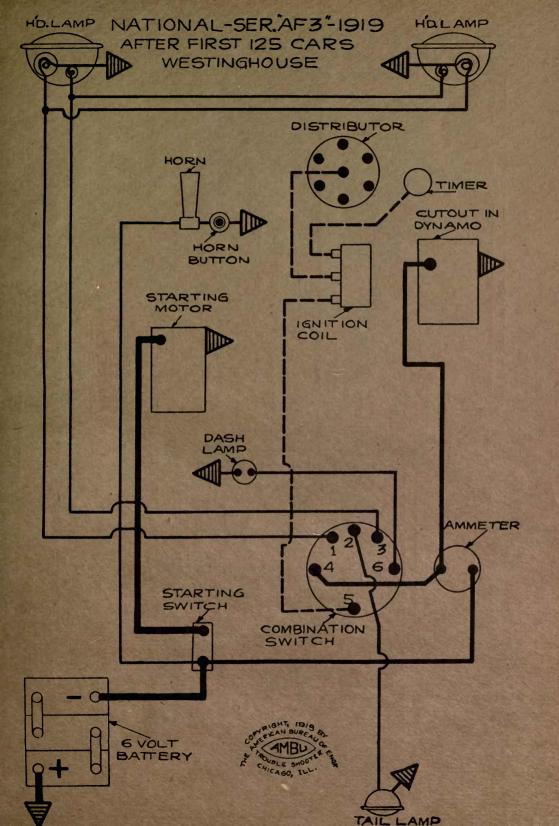


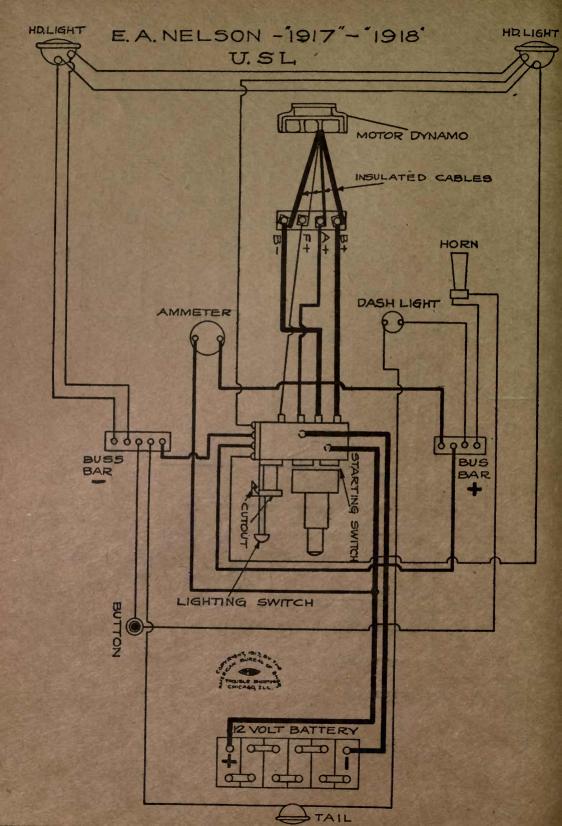


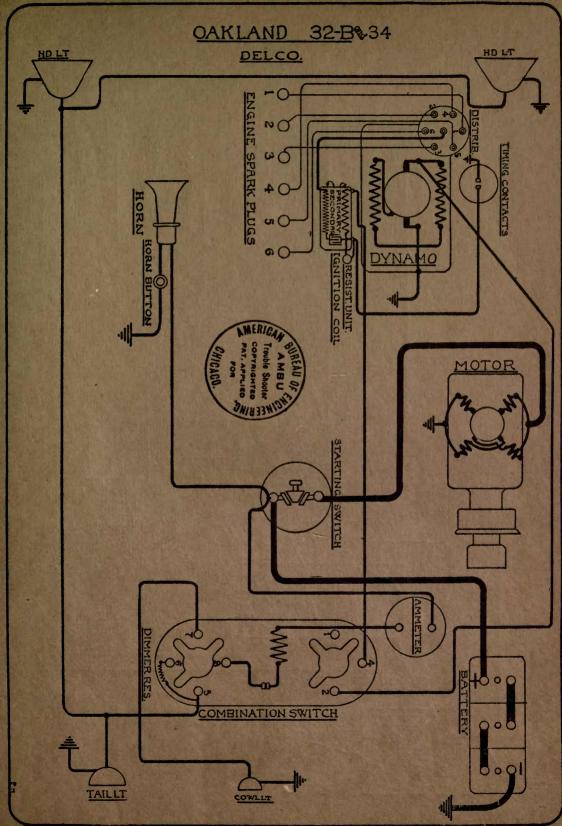


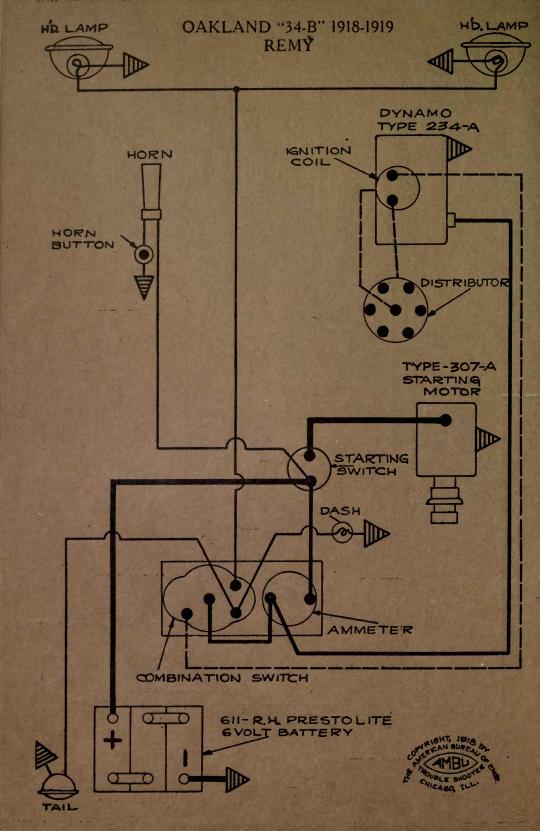


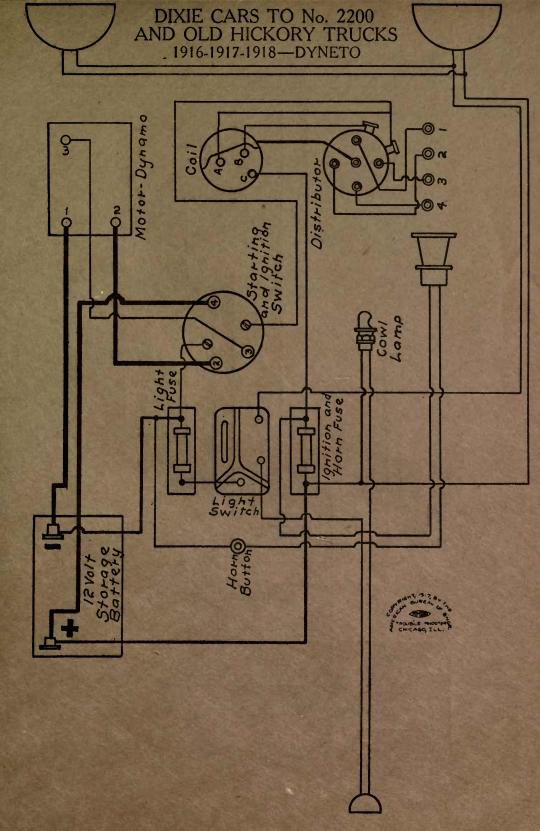


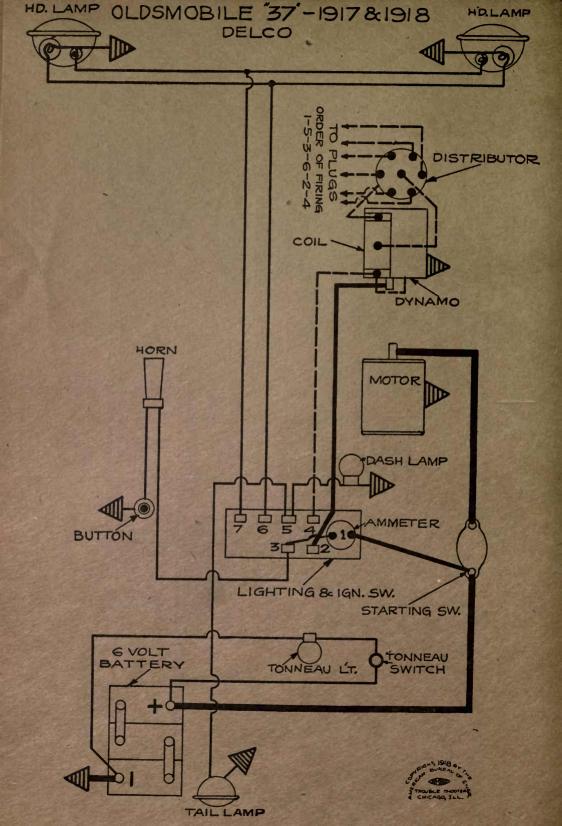


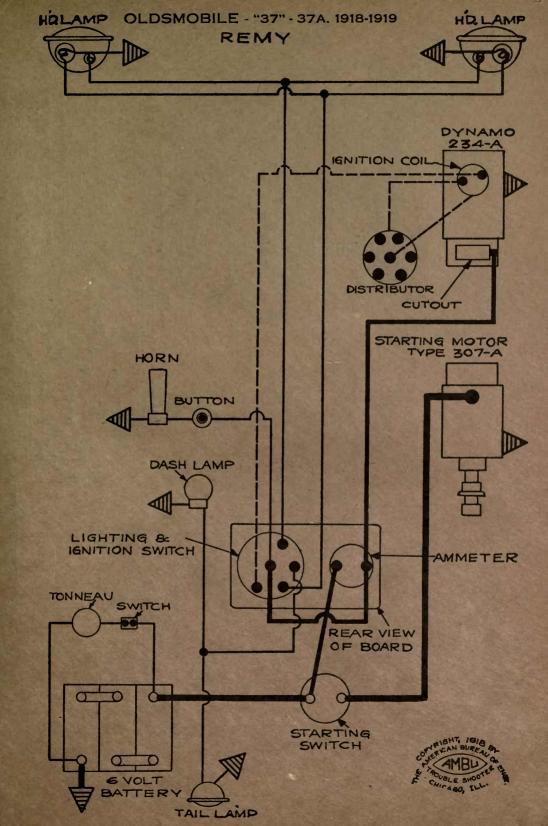


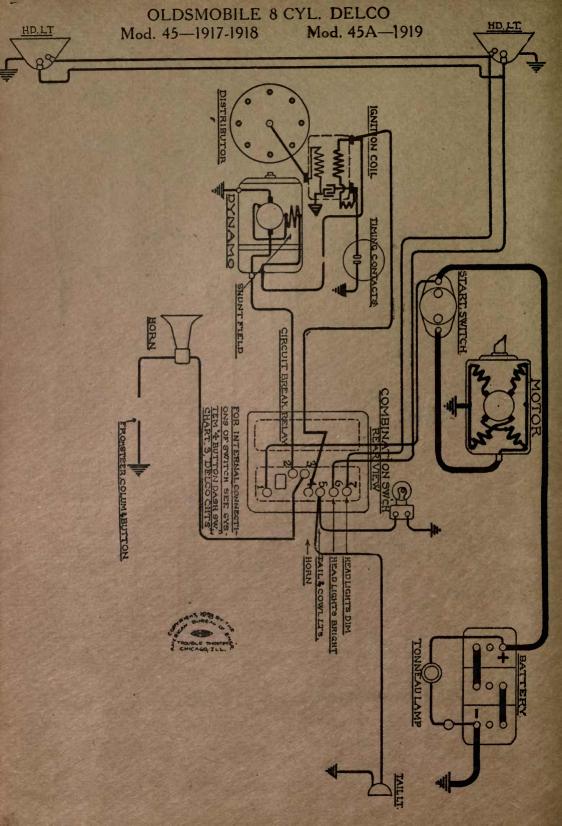


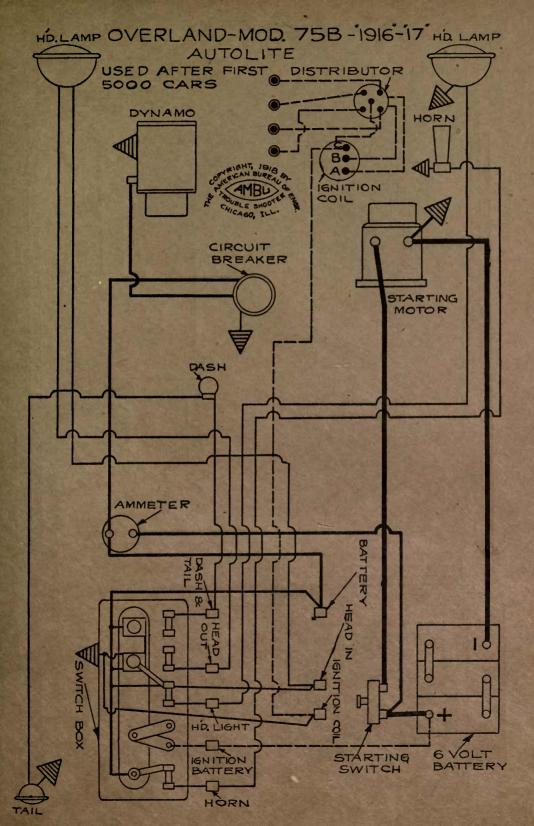


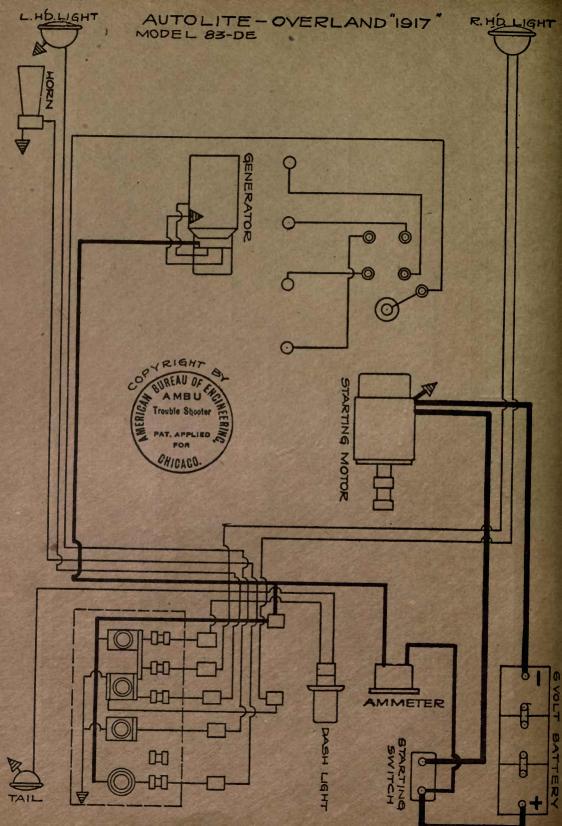


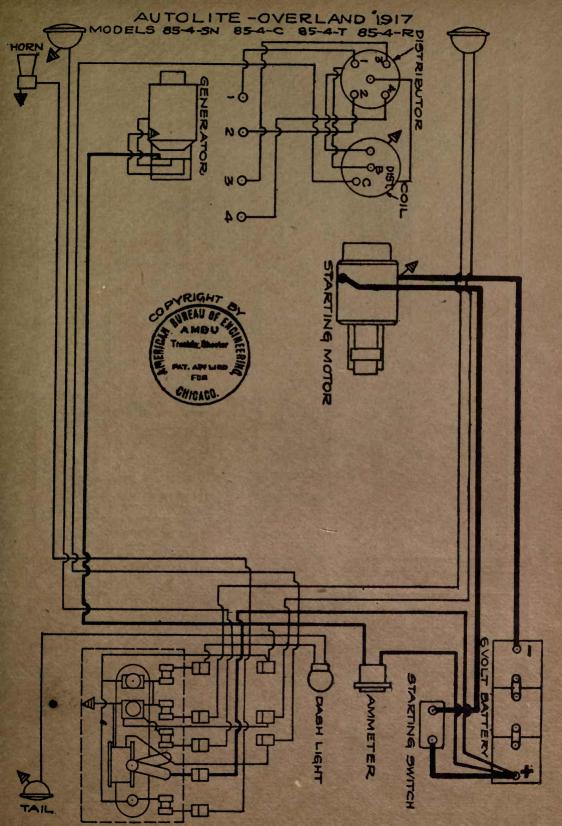


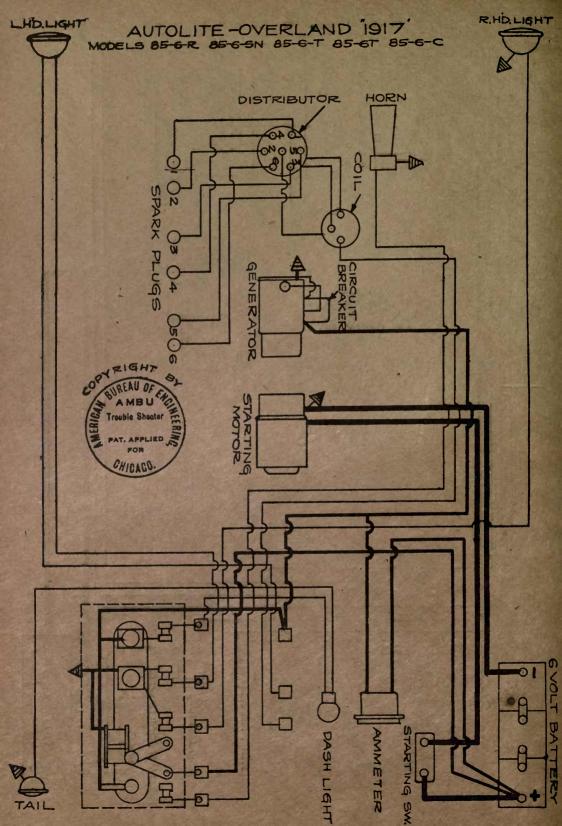


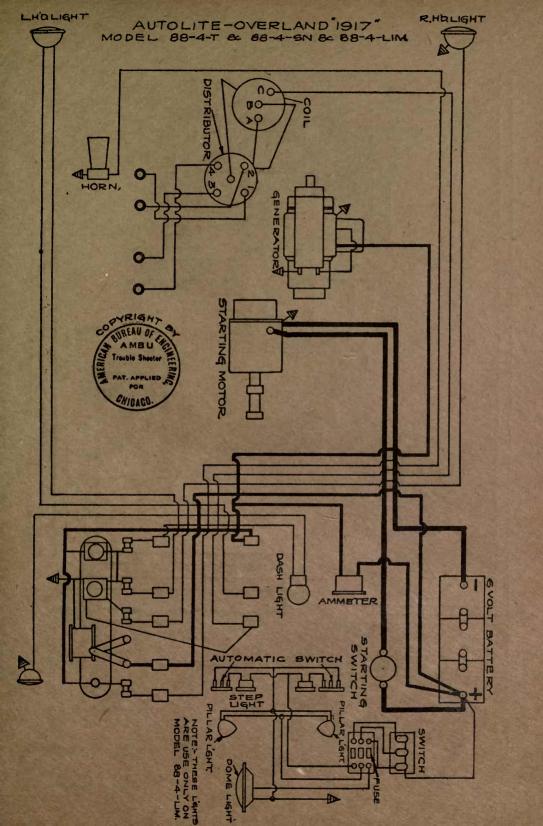


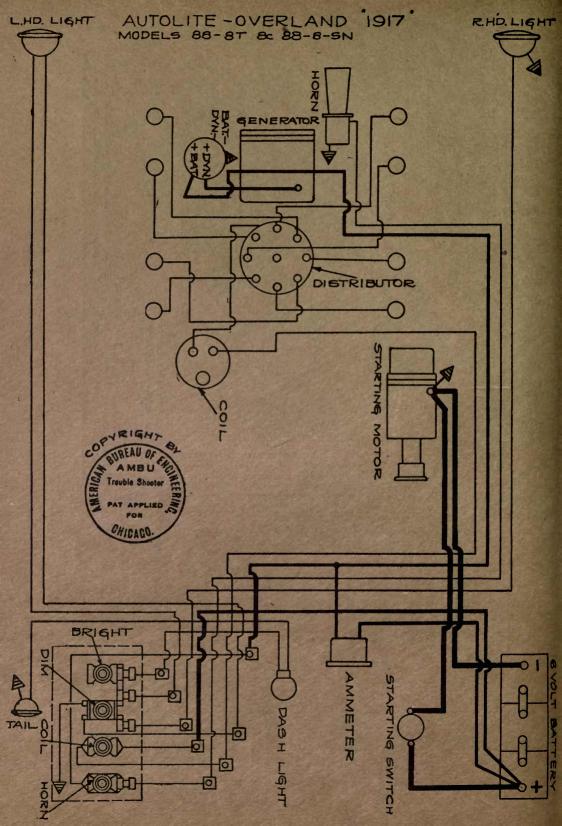


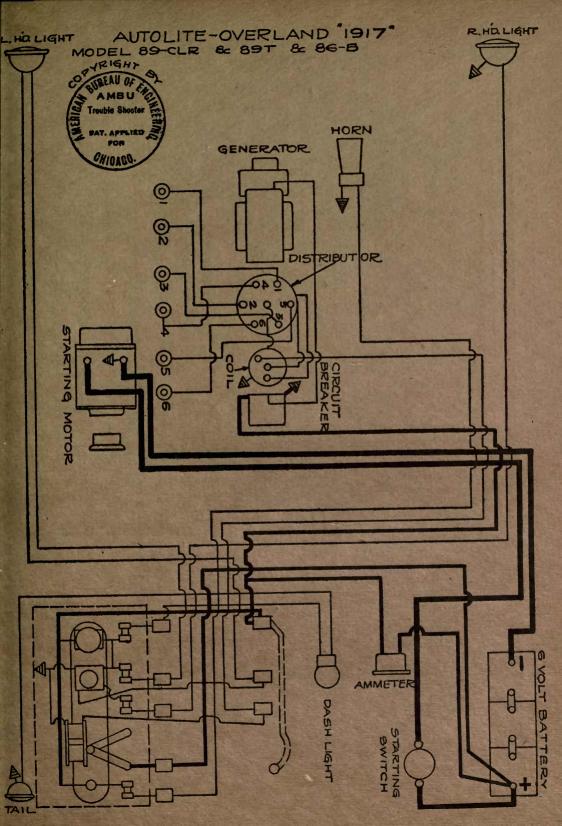


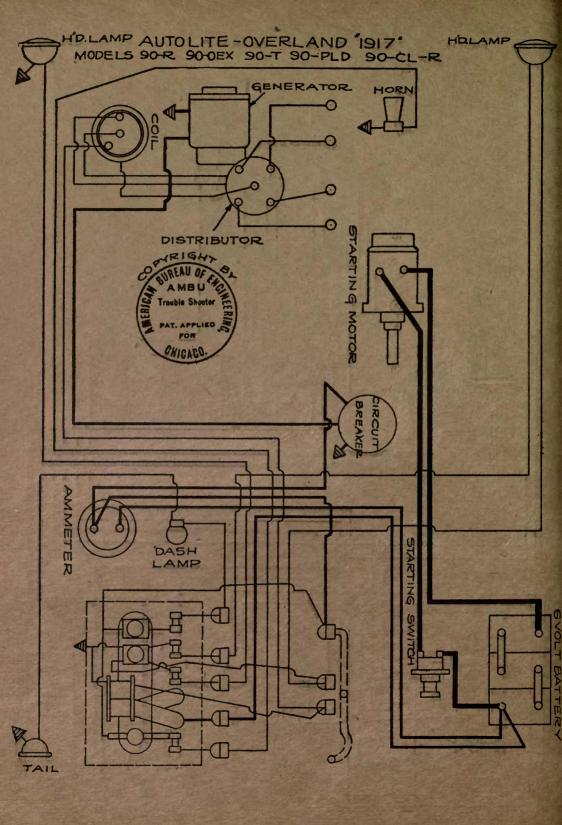


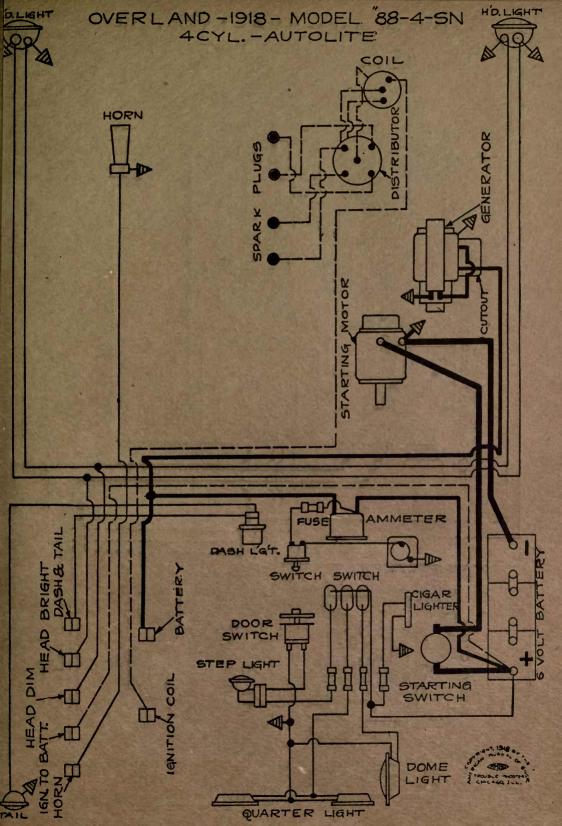


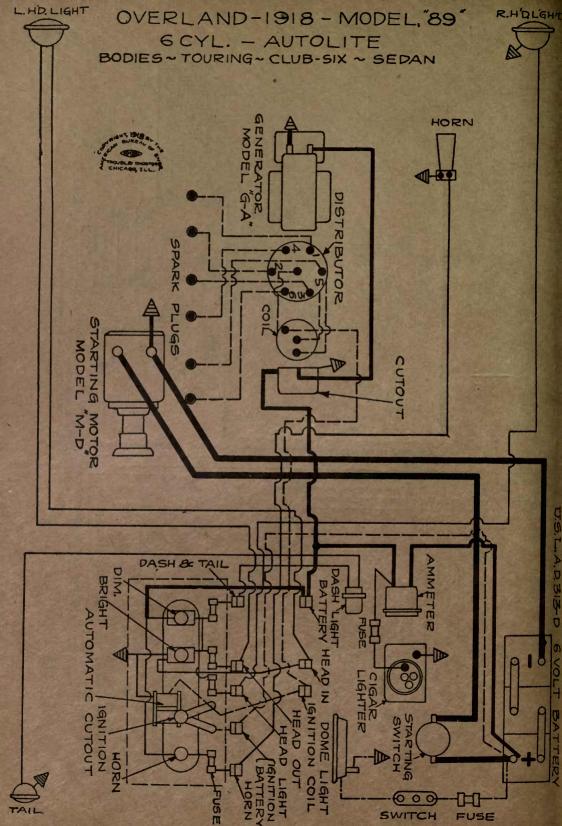


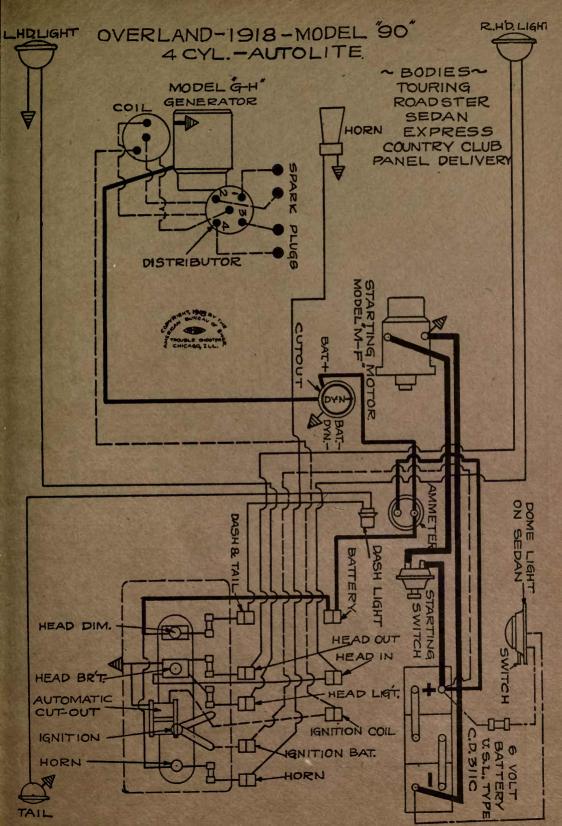


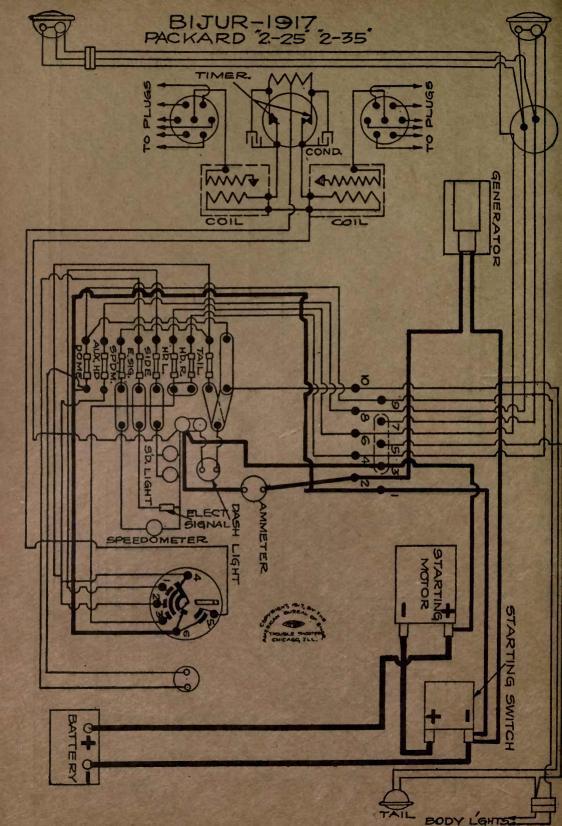


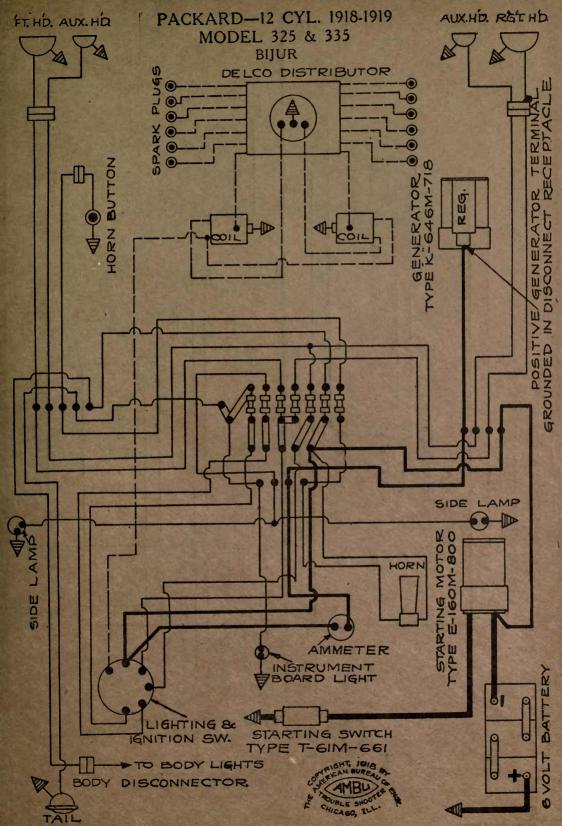


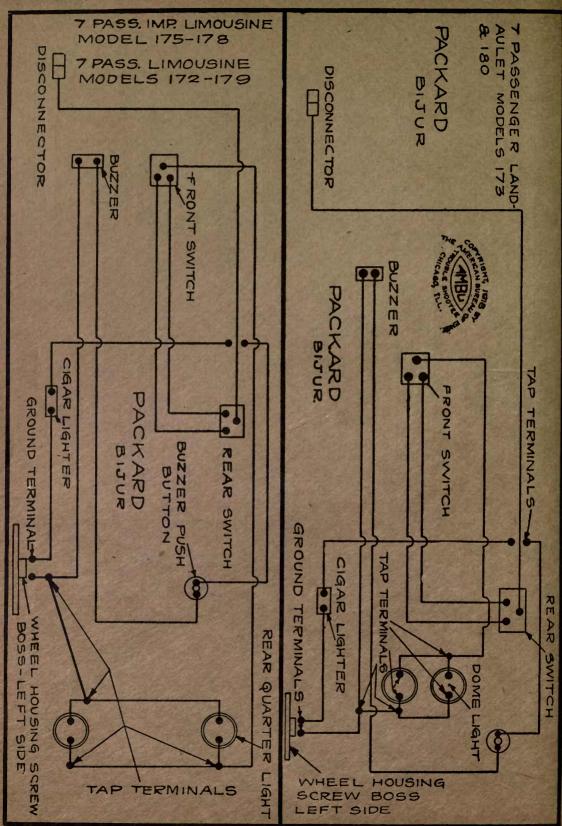


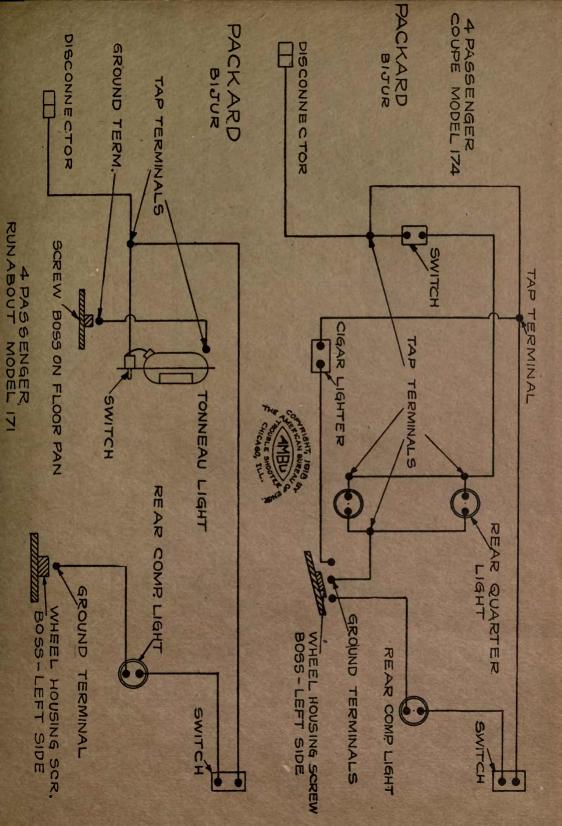


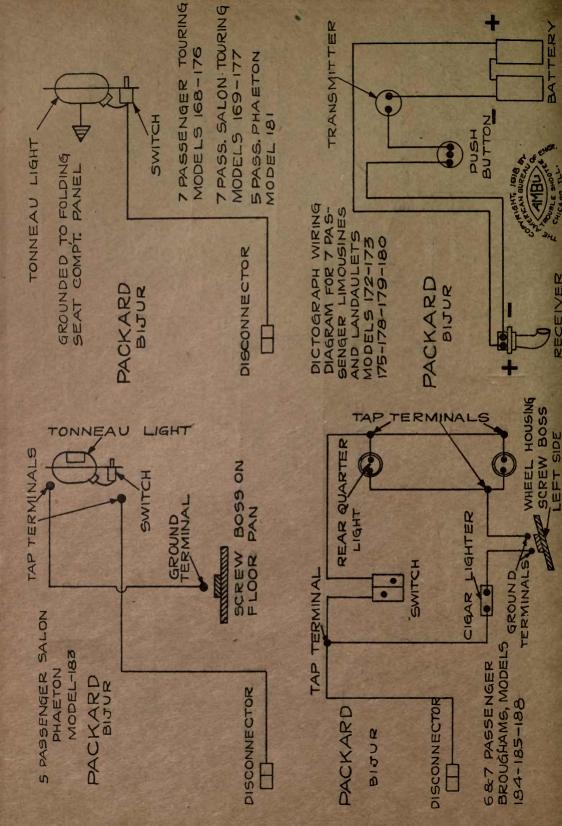


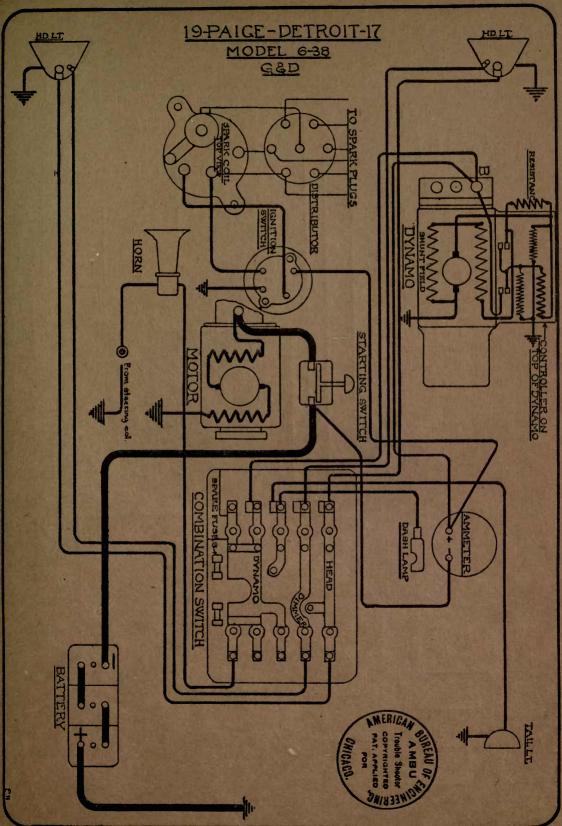


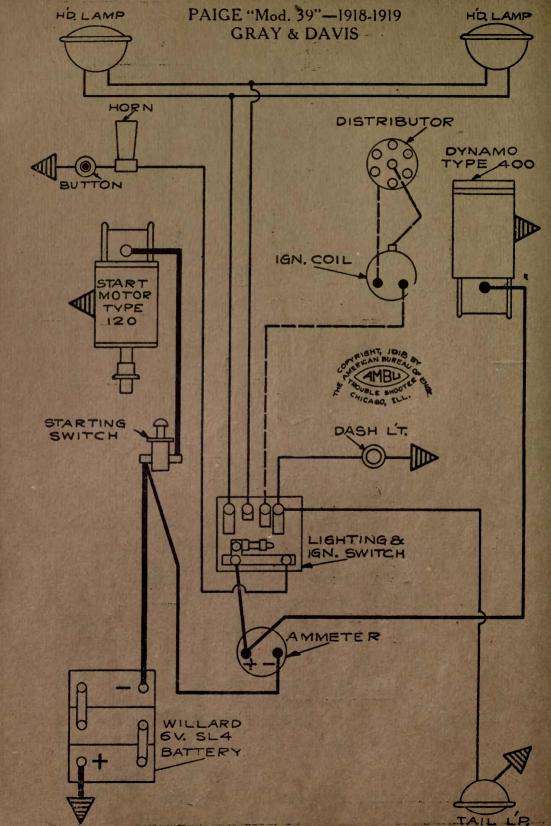


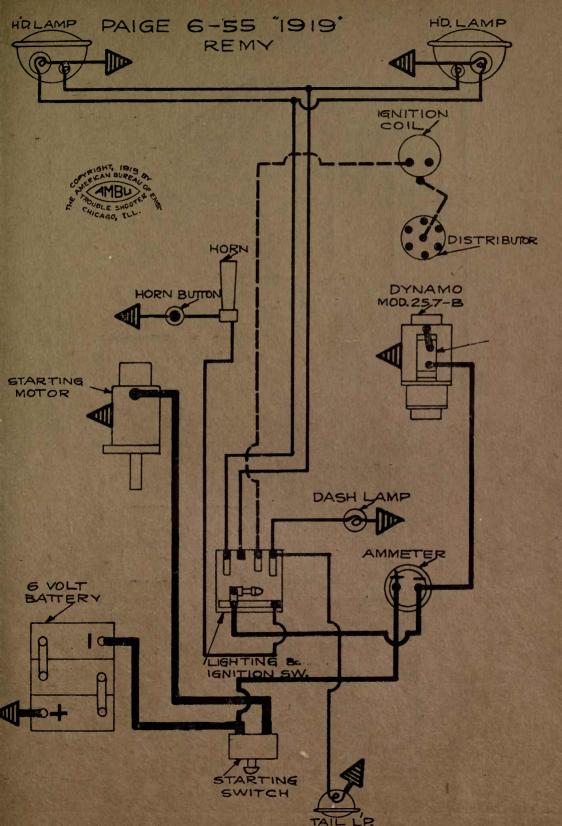


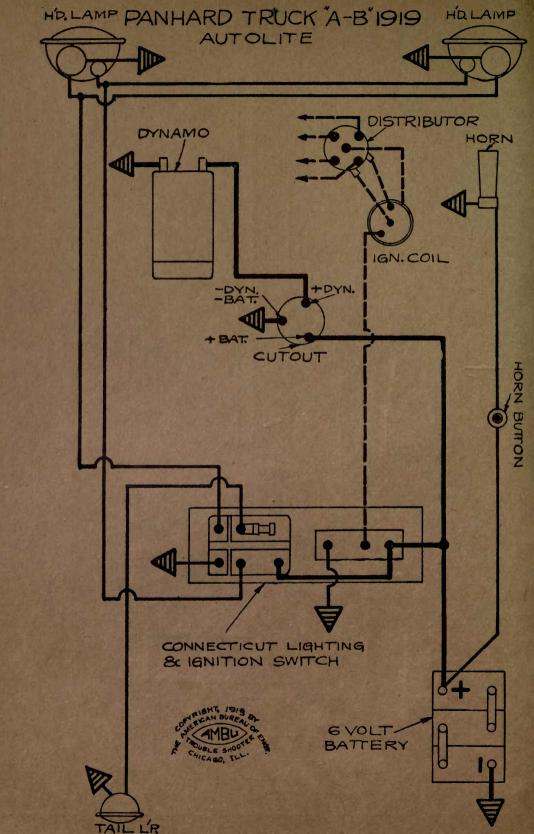


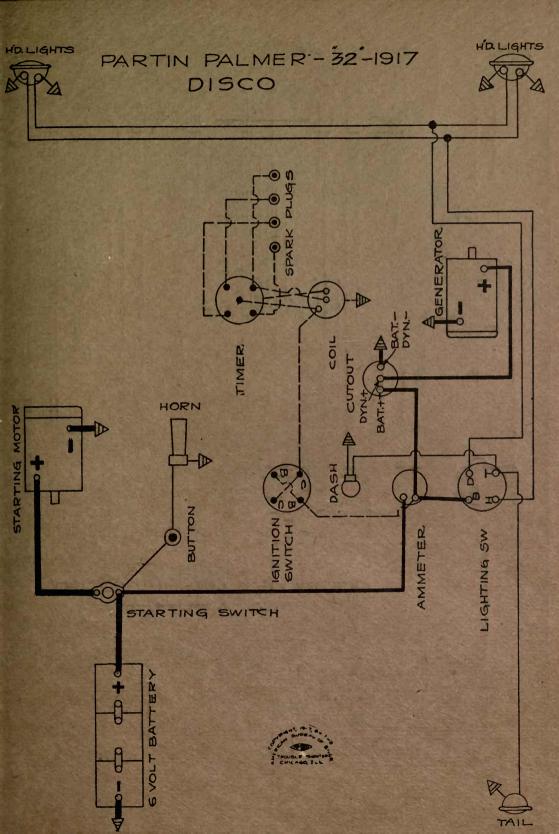


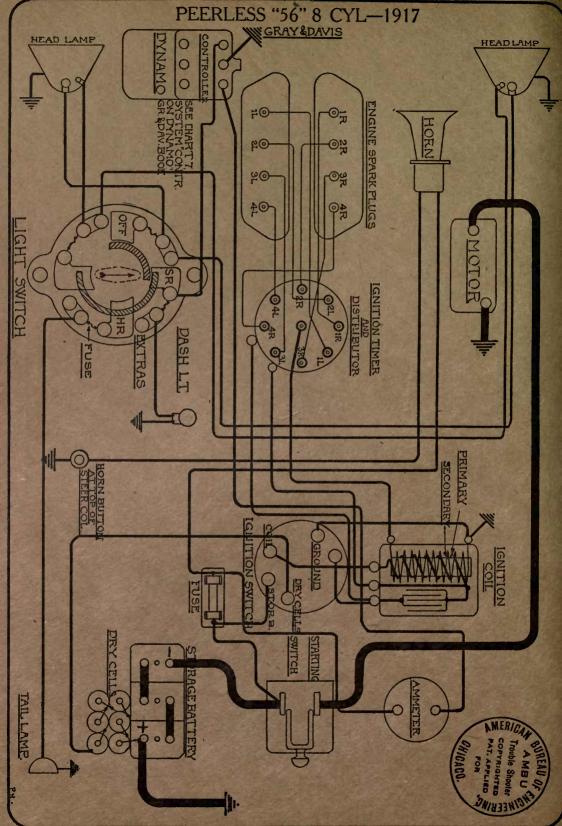


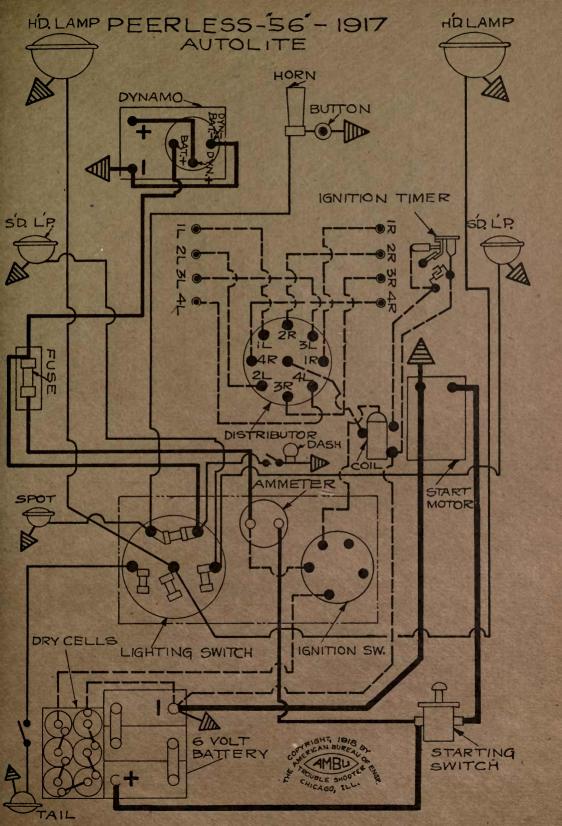


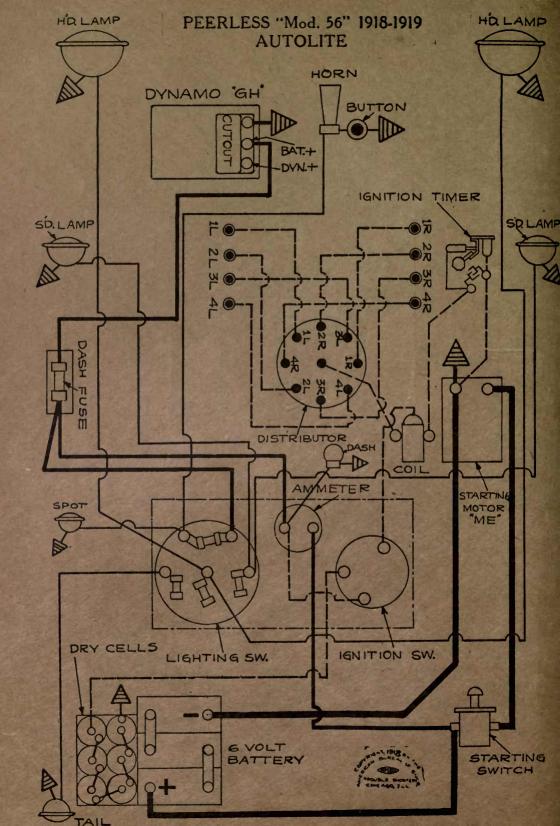


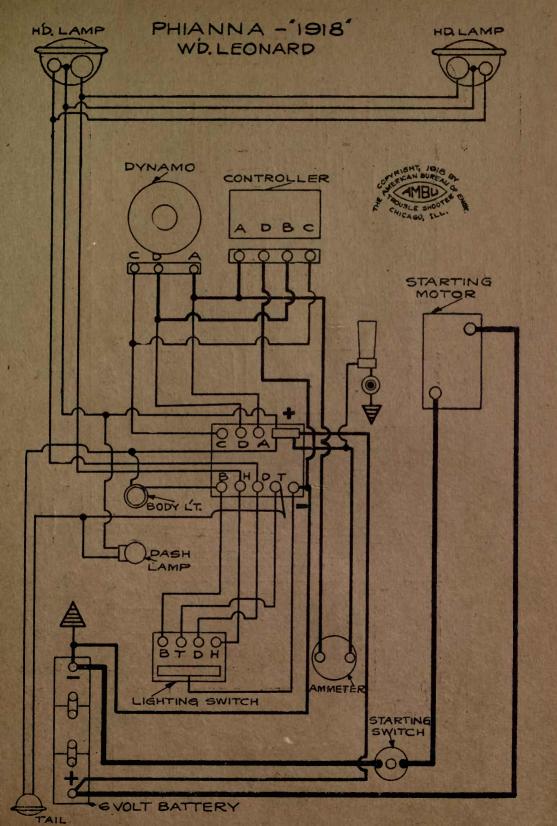


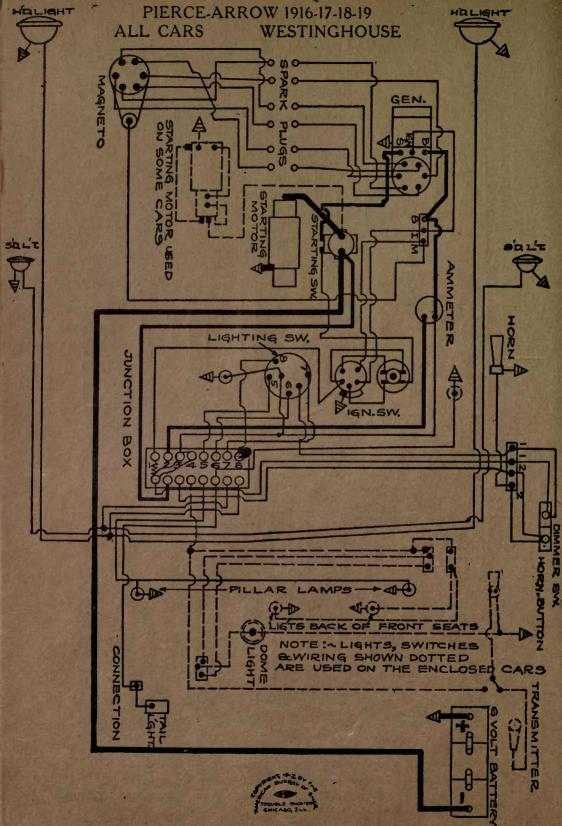


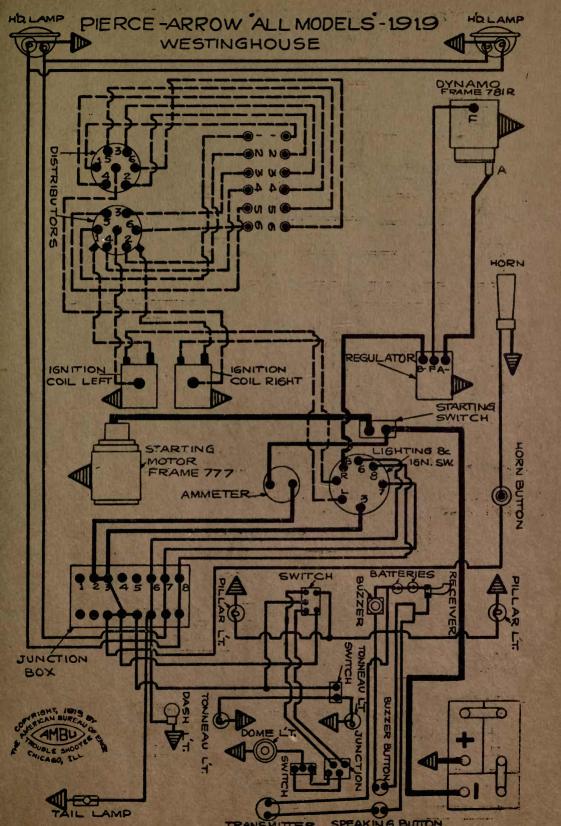


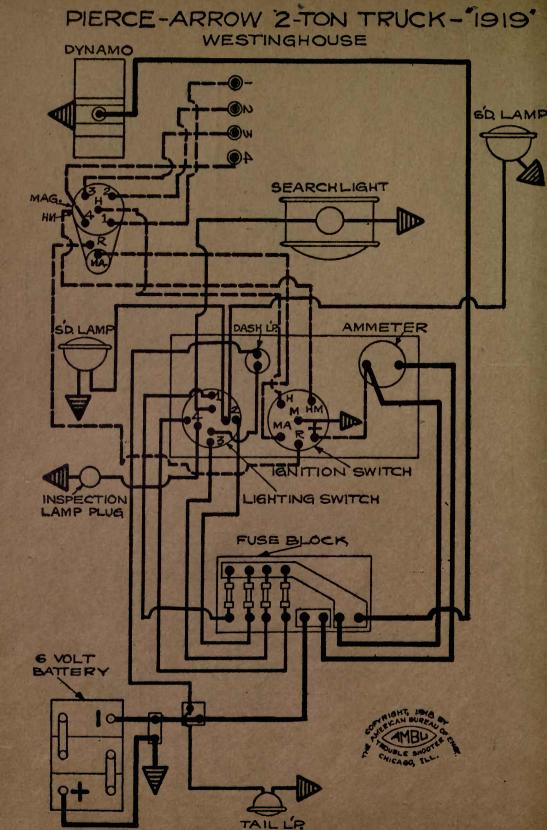


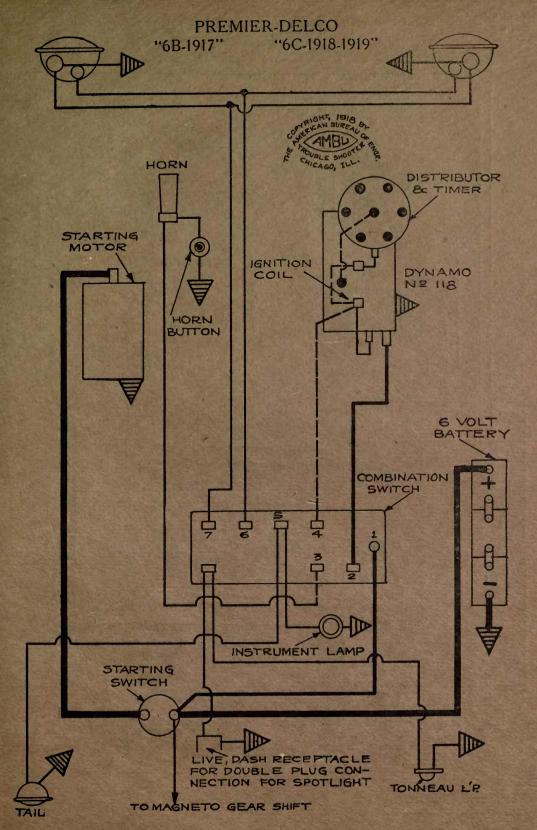


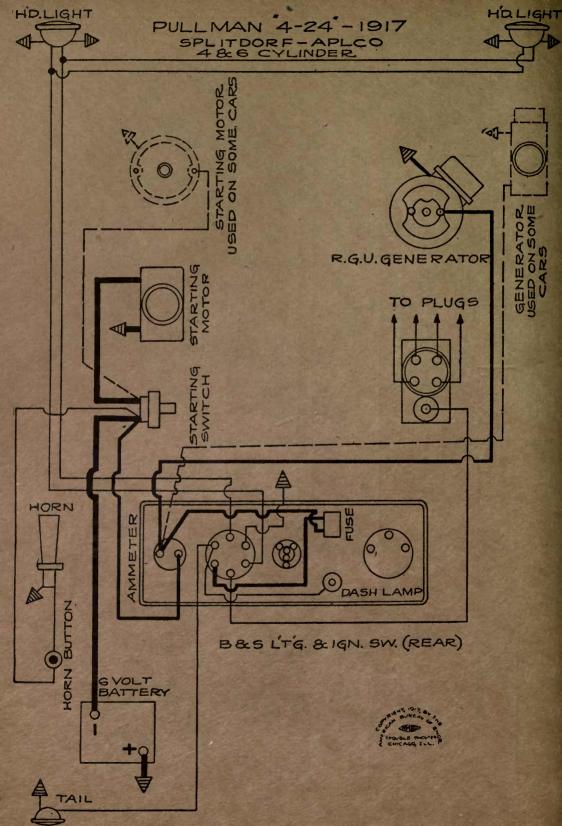


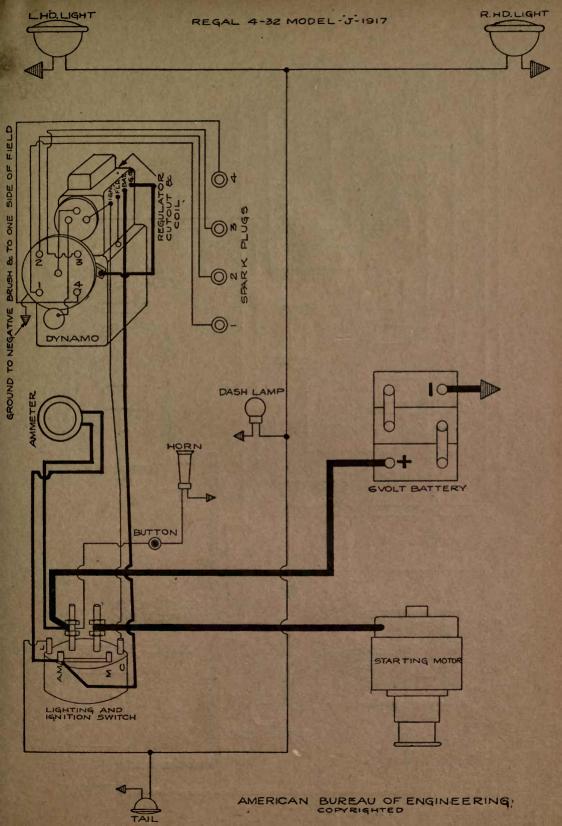


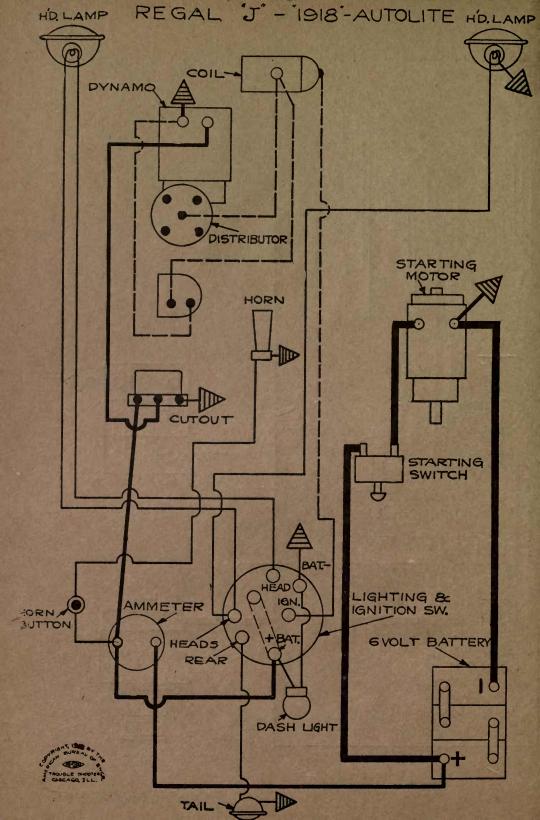


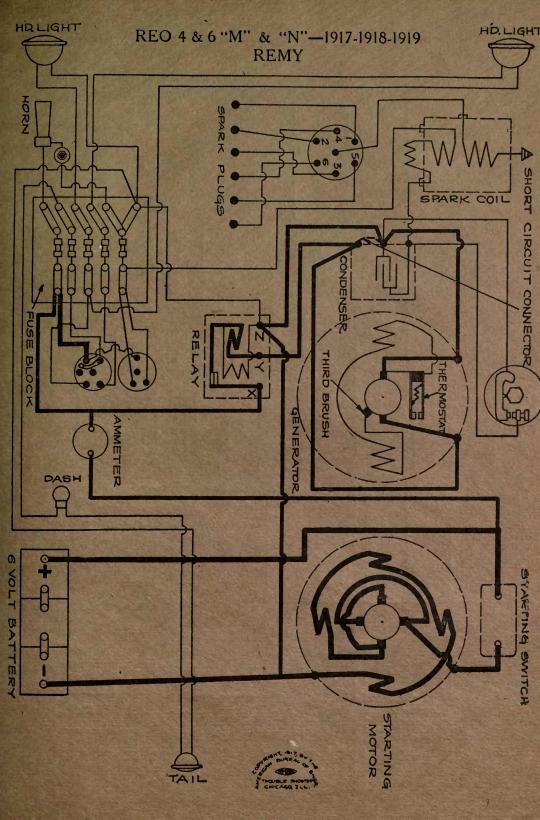


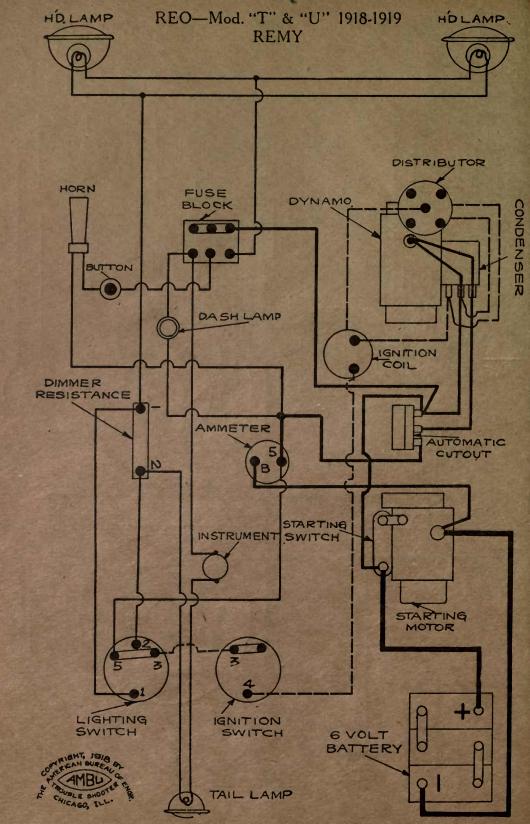


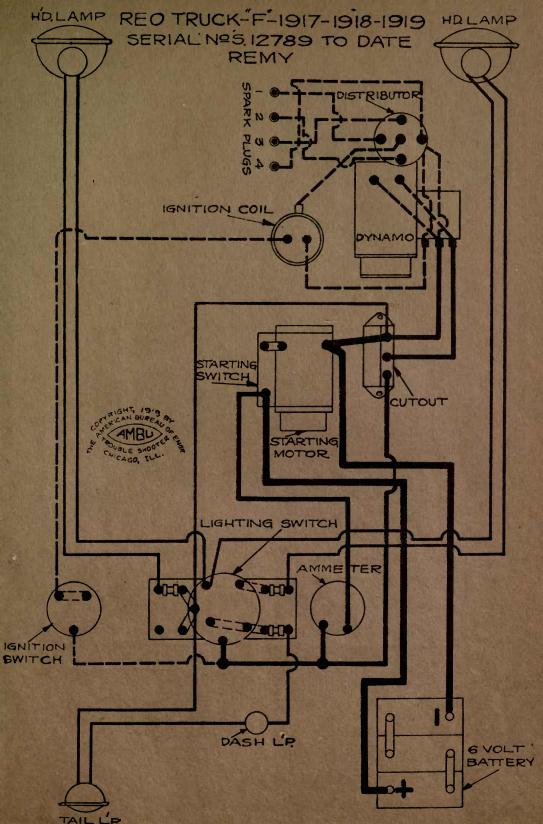


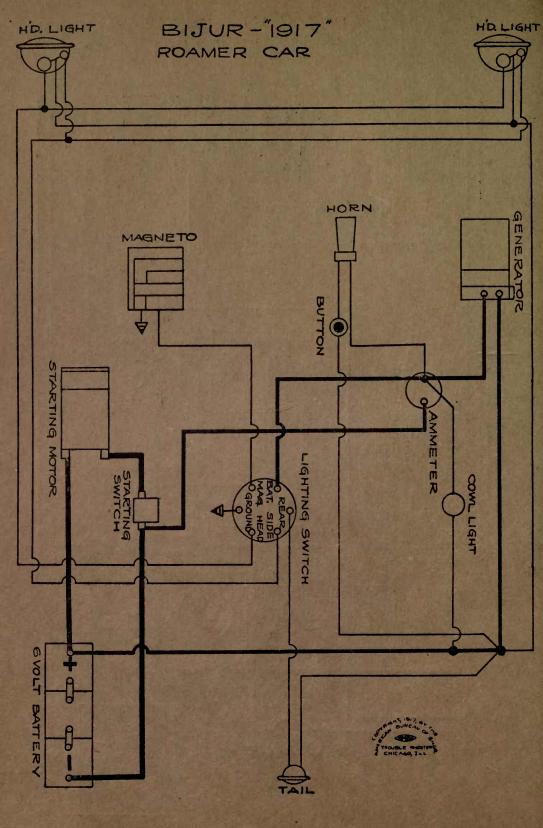


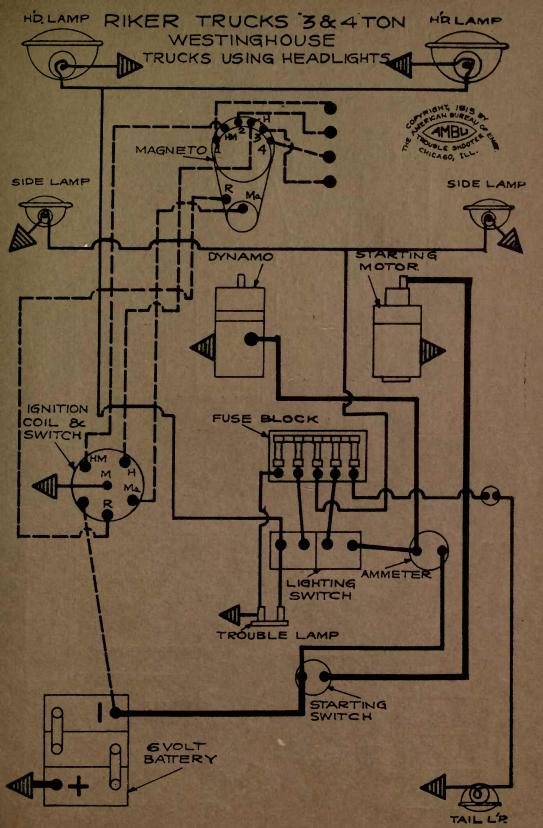




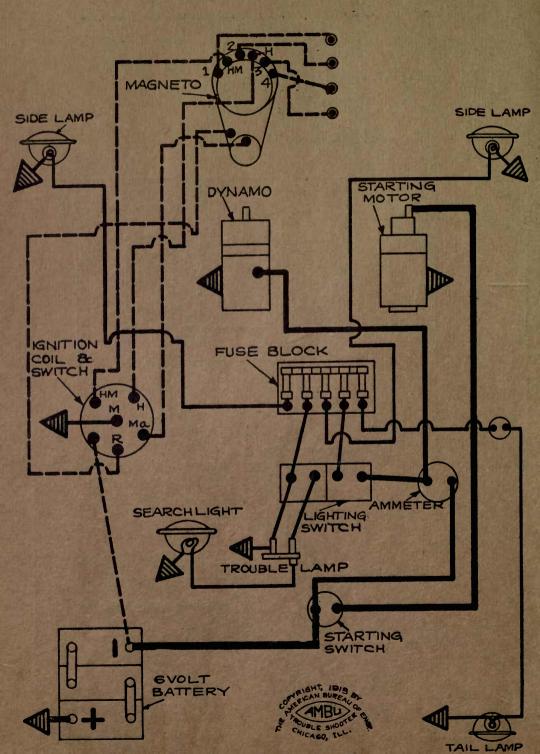


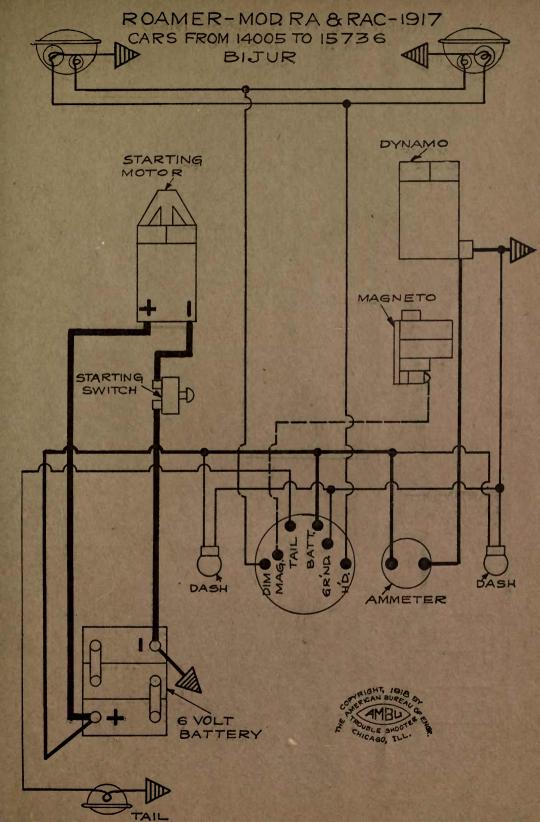


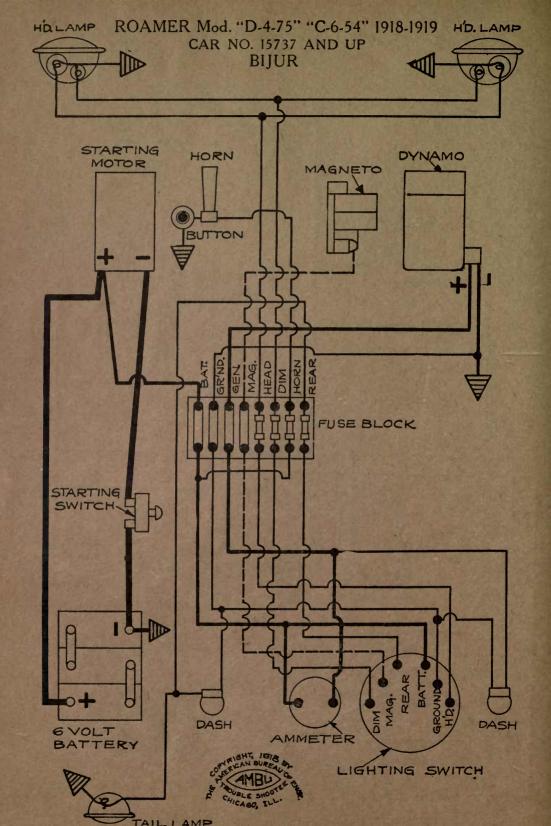




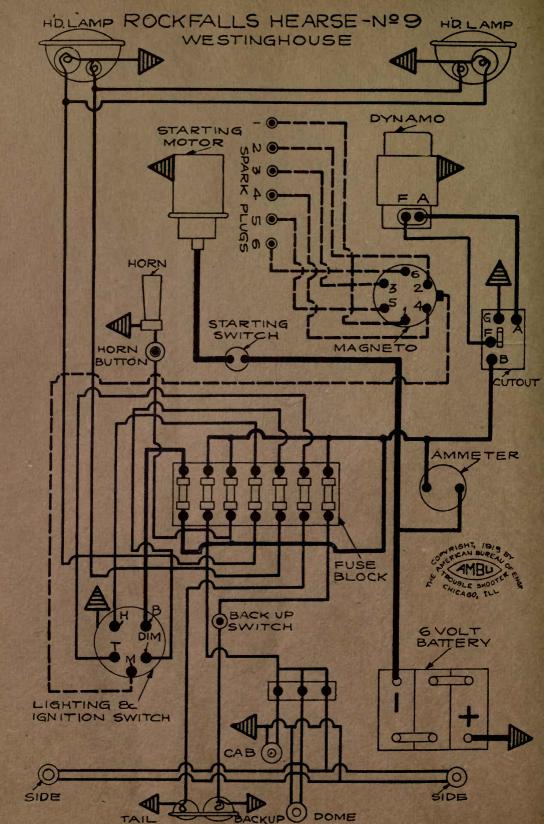
RIKER TRUCKS 3& 4 TON WESTINGHOUSE TRUCKS USING SEARCHLIGHTS

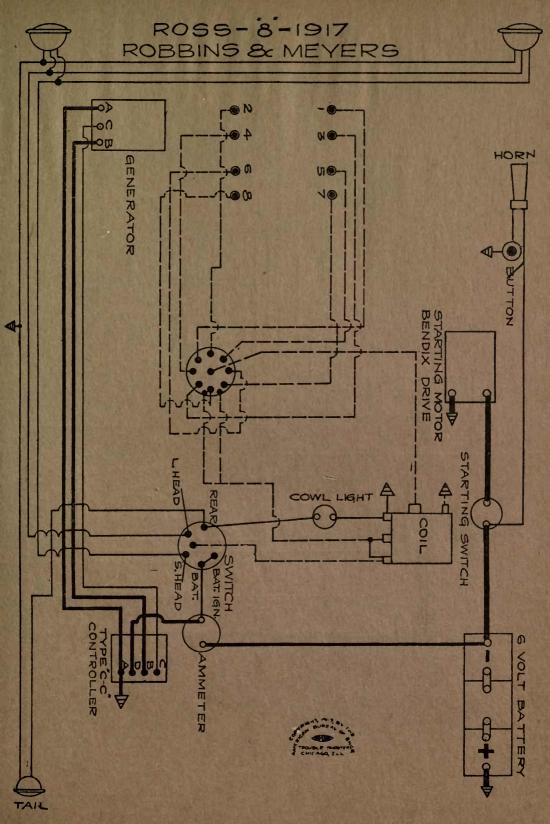


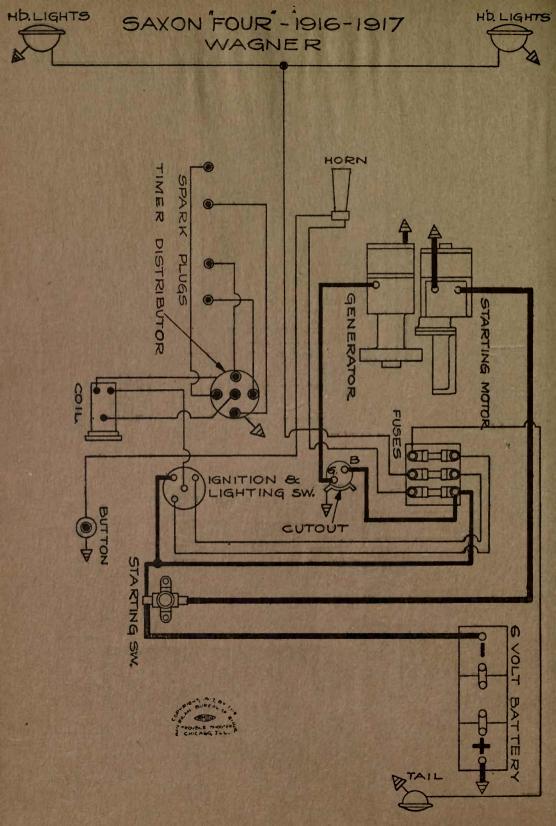


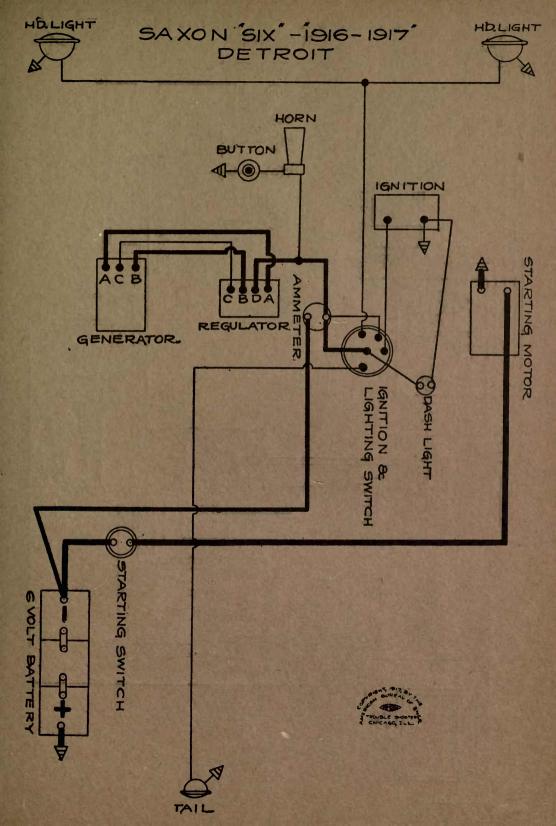


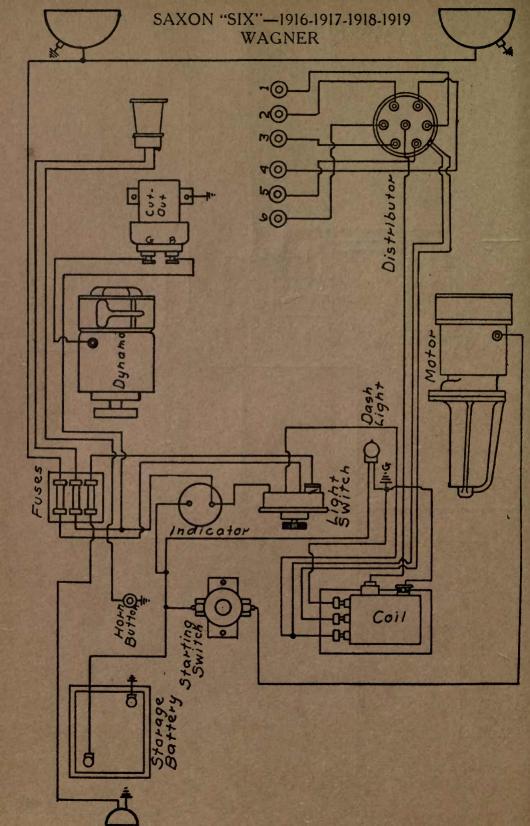


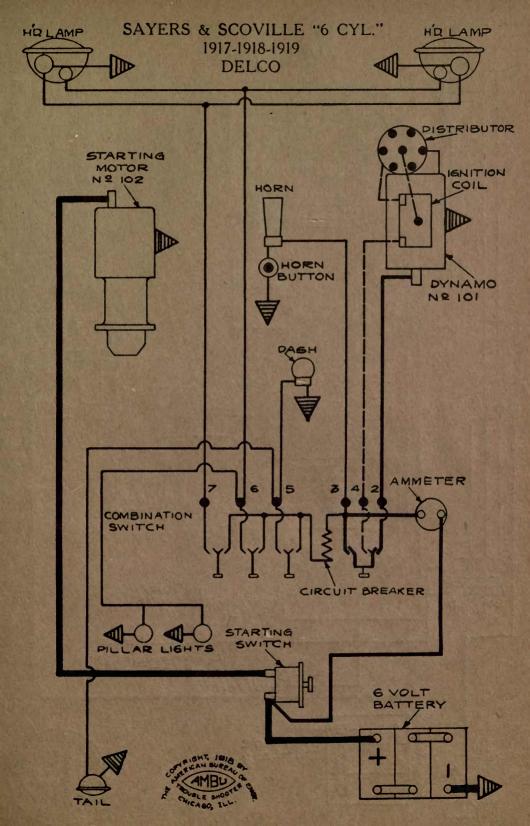


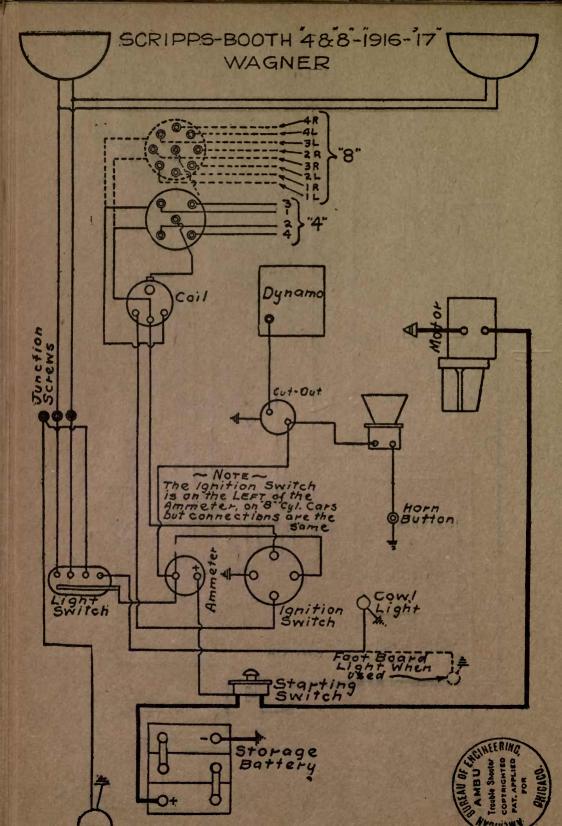


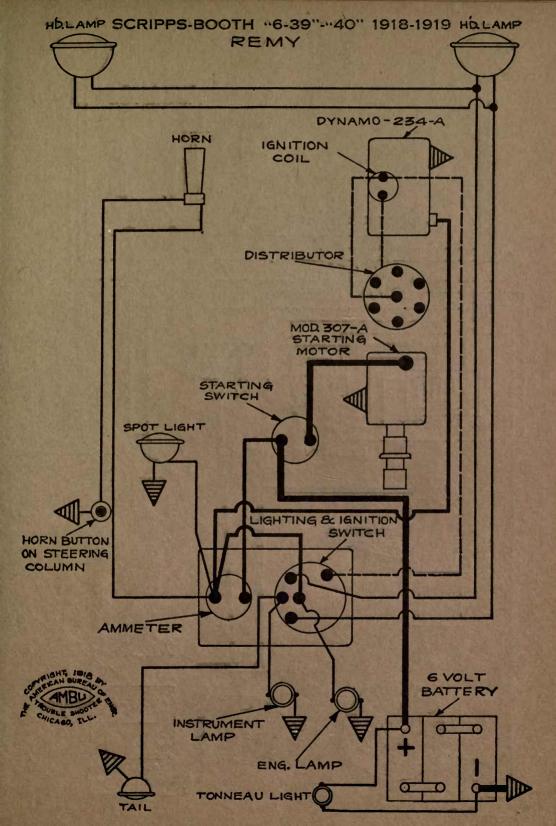


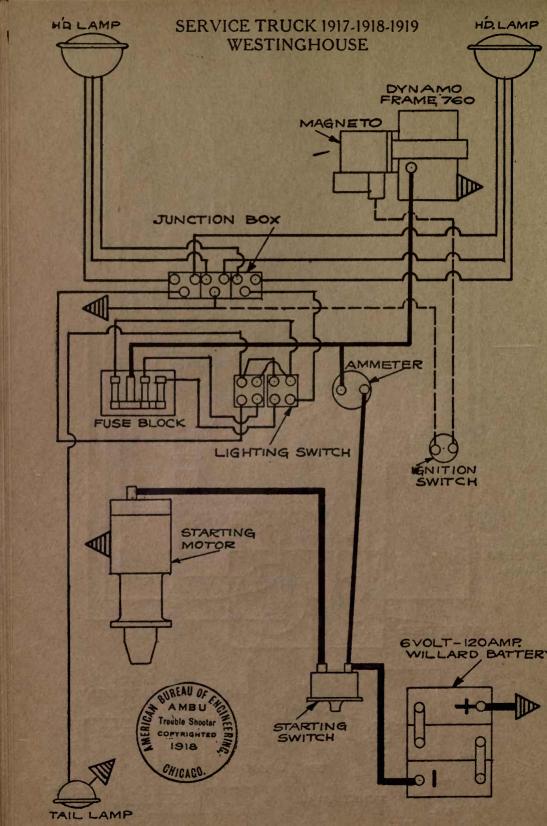


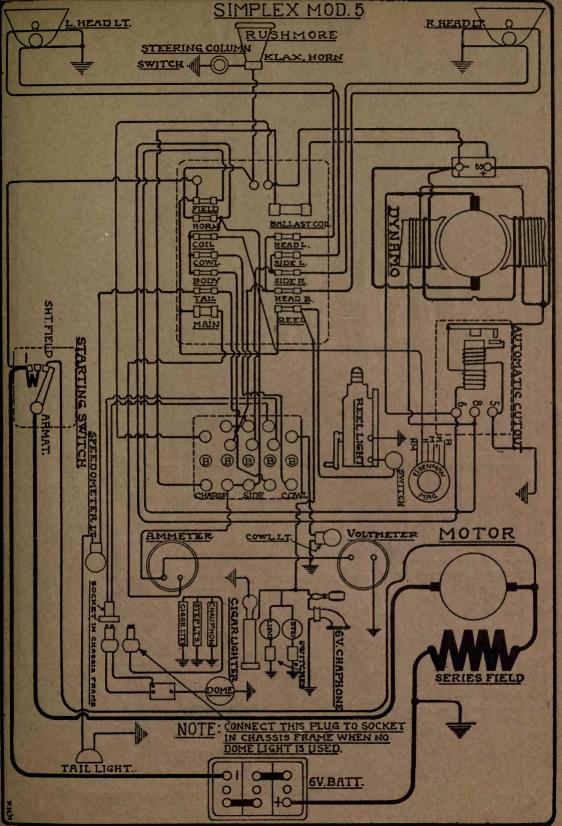


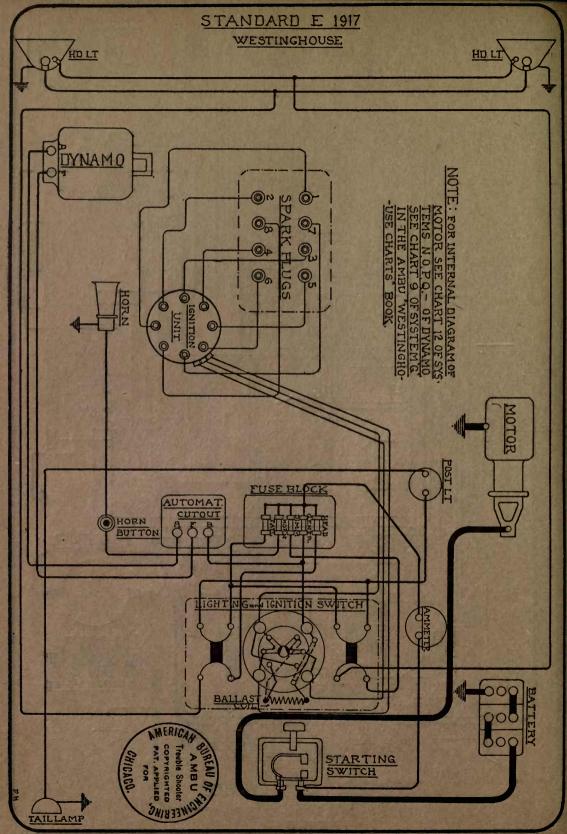


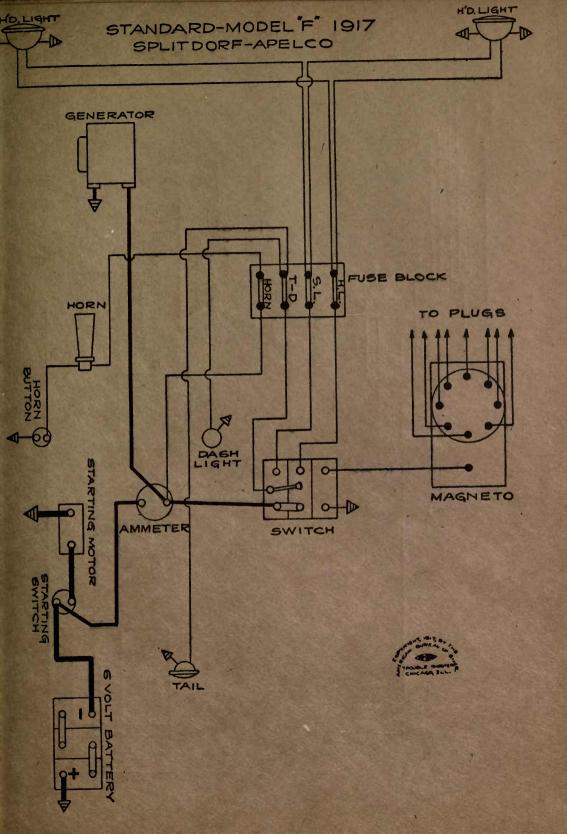


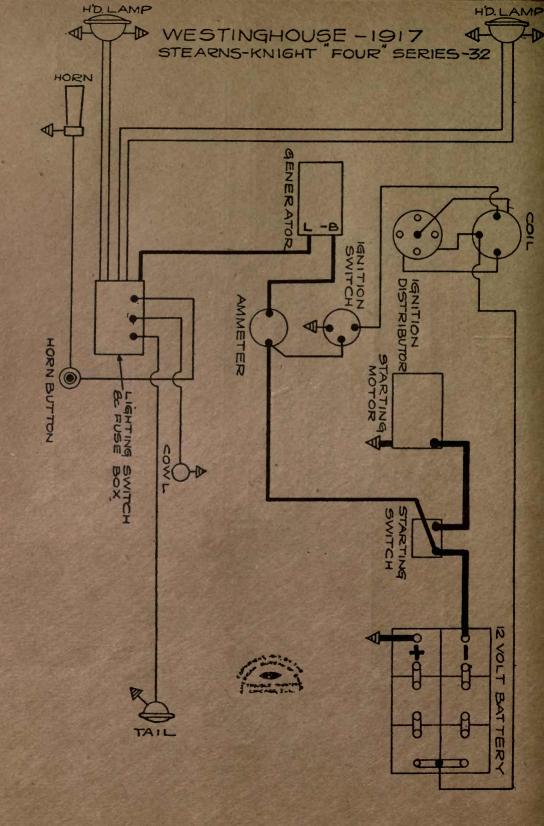


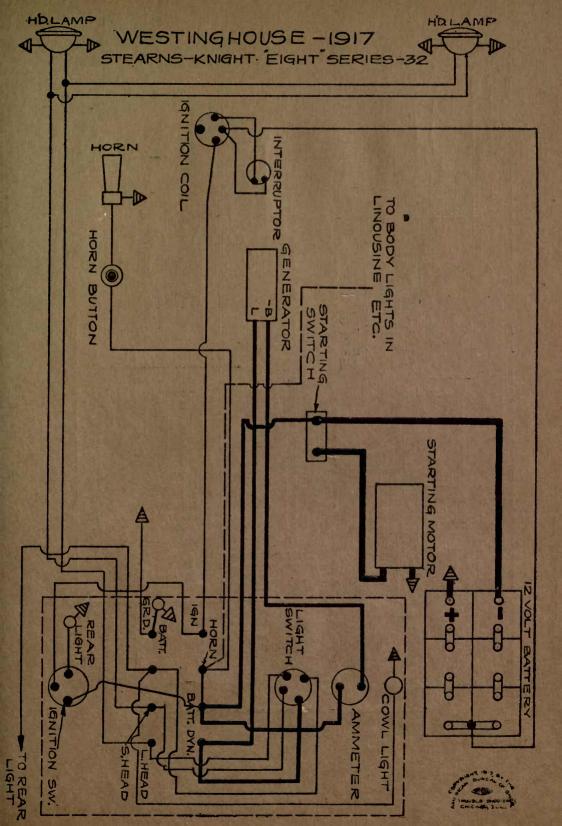


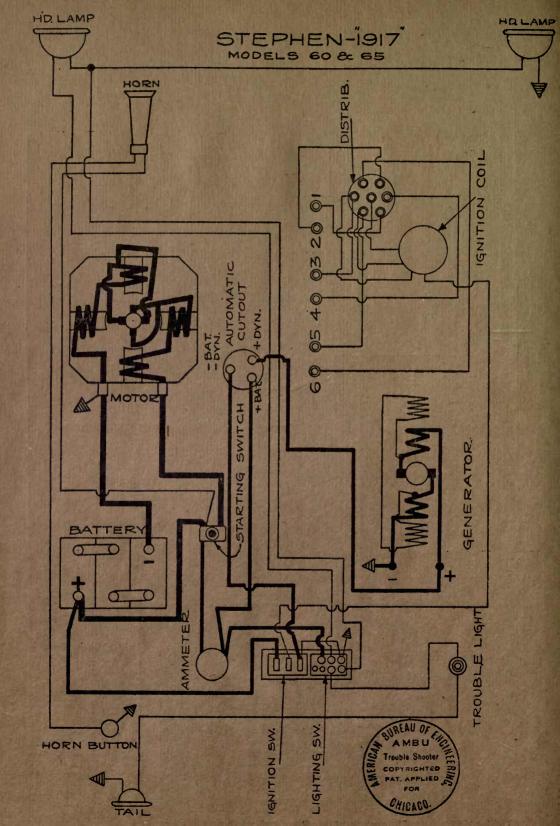


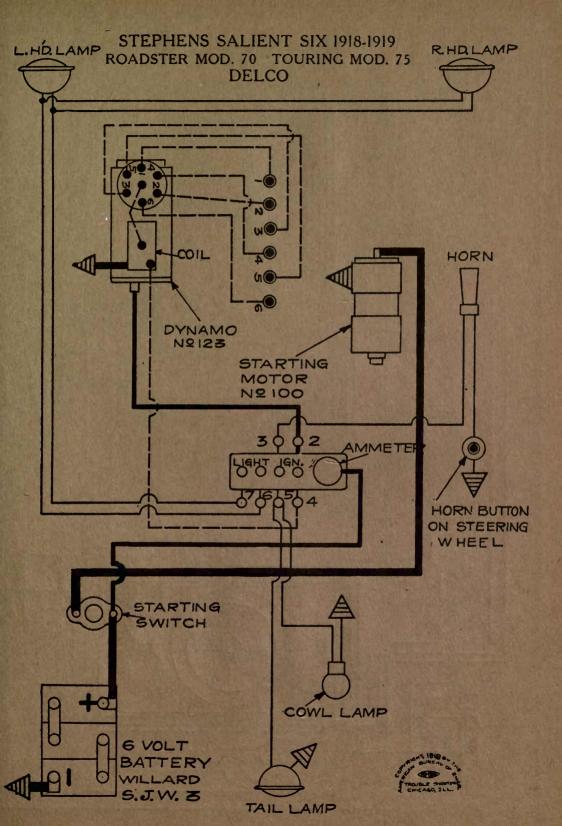


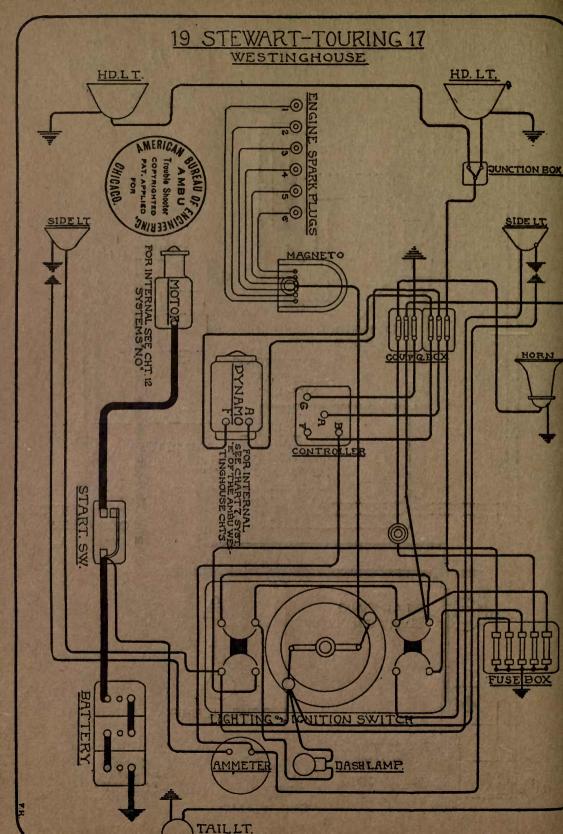


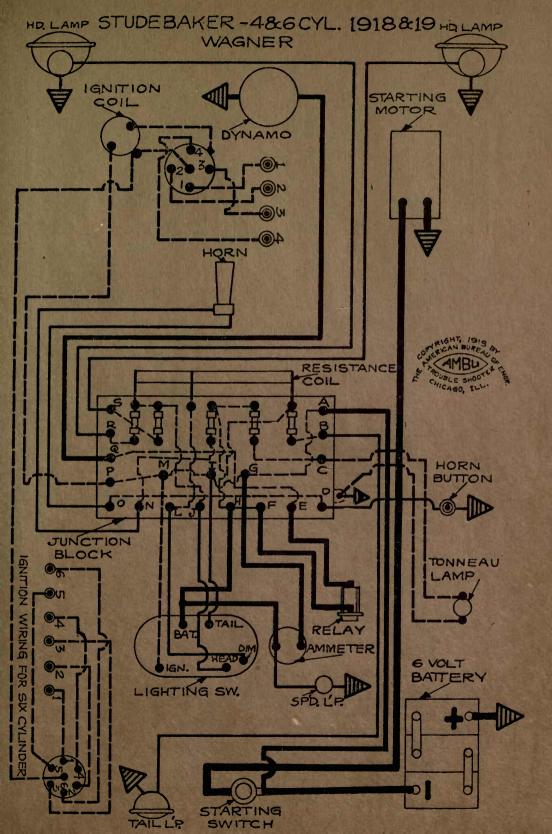


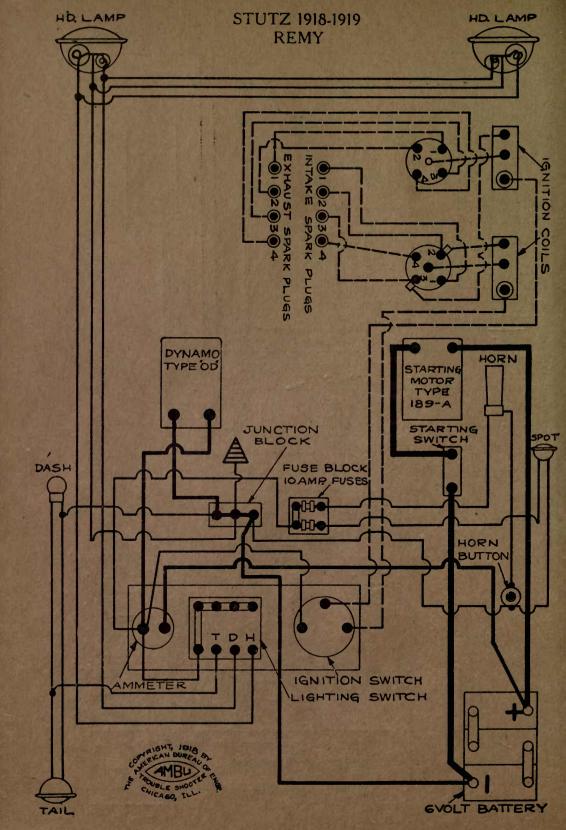


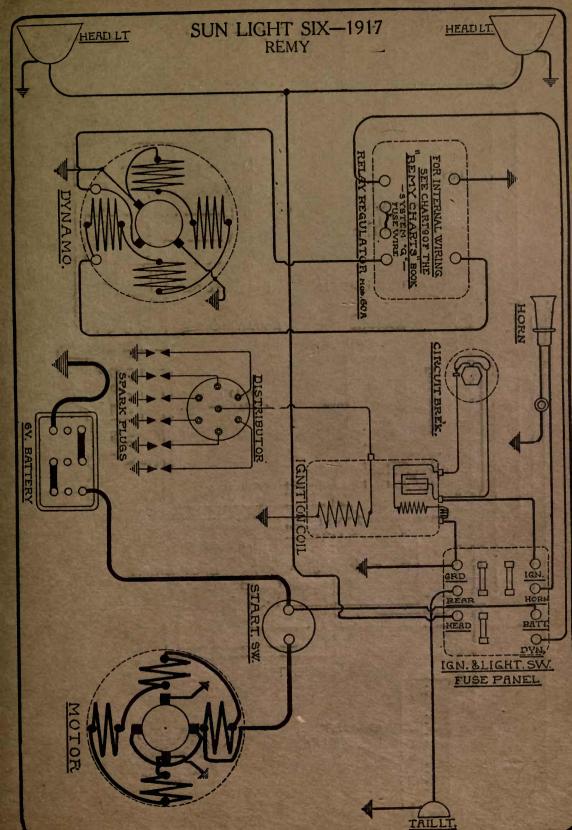


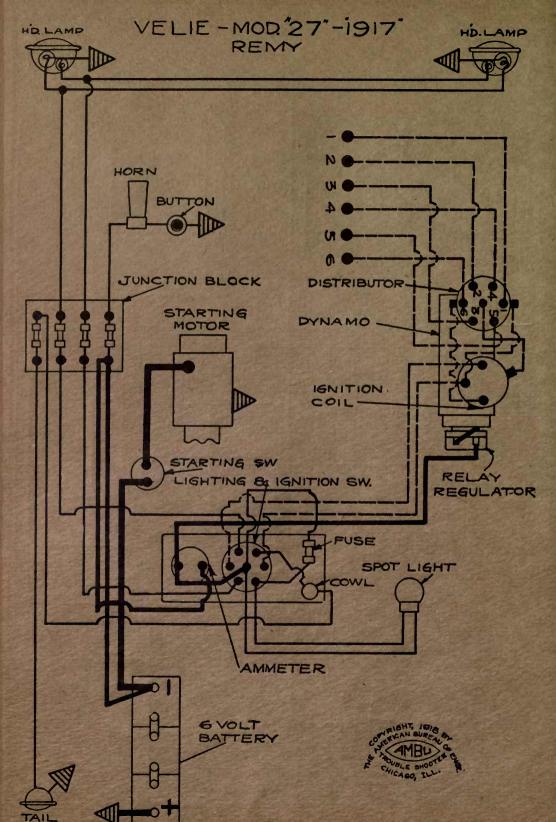


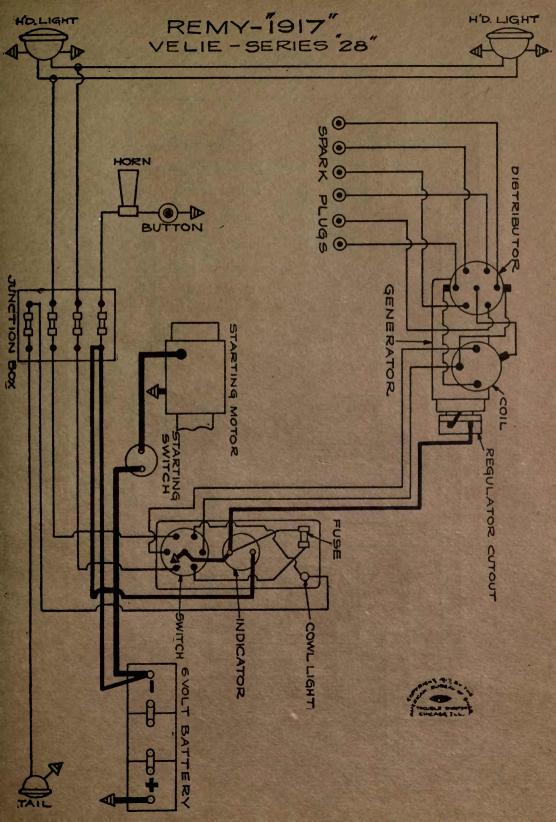


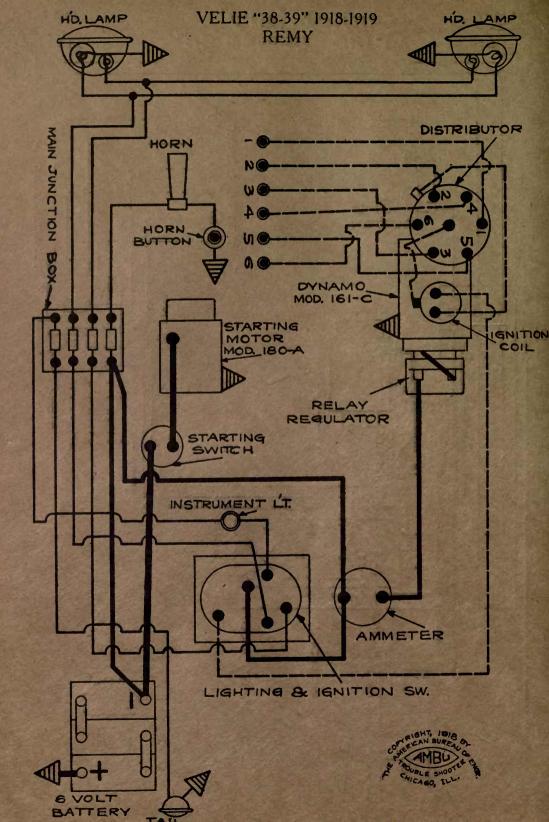


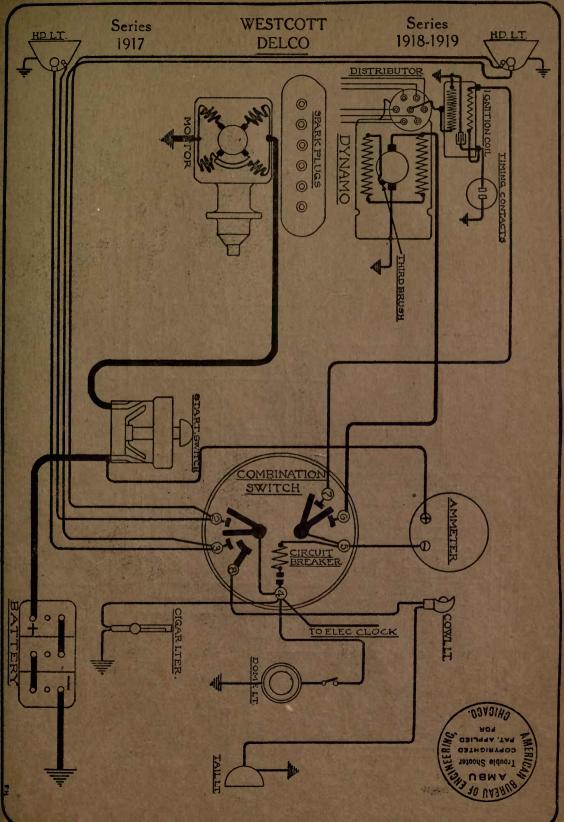


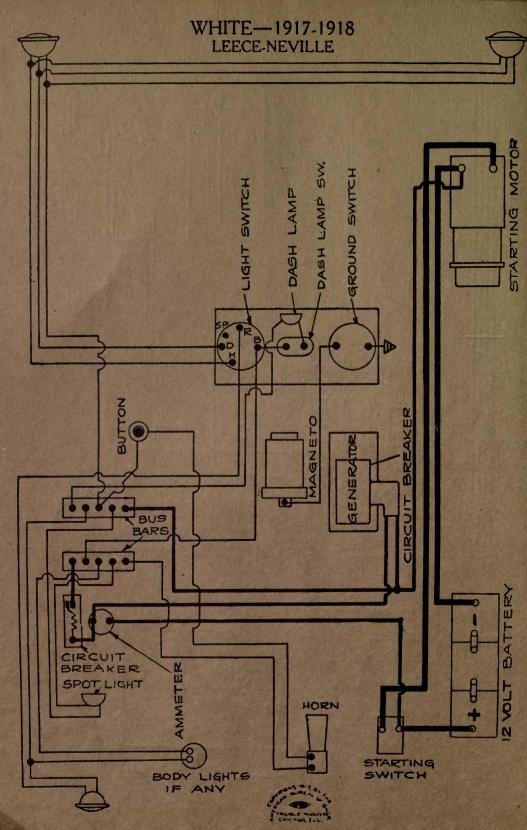


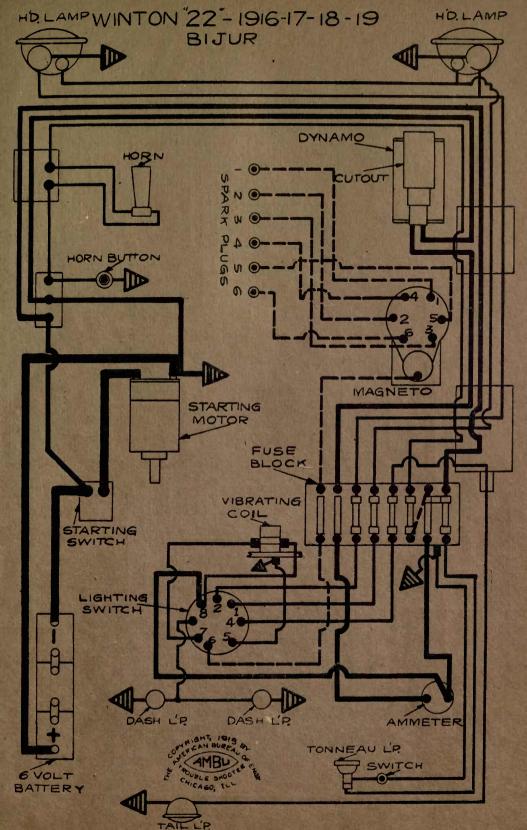


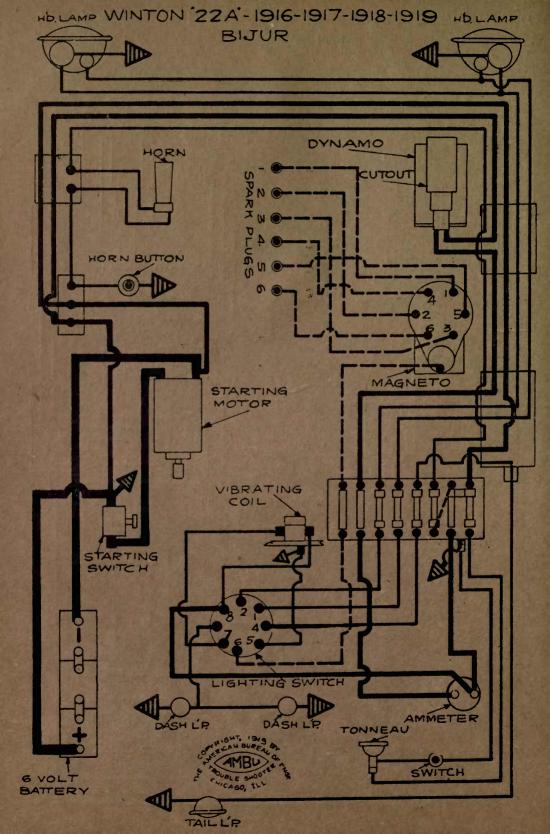


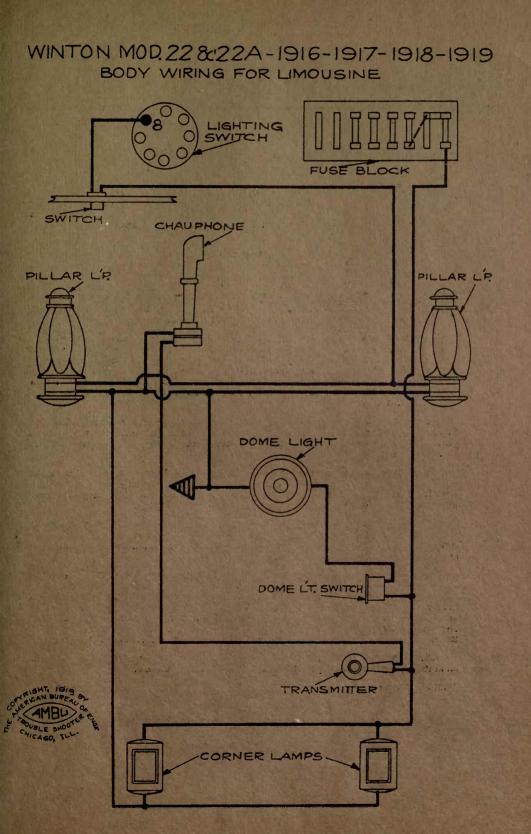












BUSINESS BUILDING PRODUCTS

Trouble Shooter



The TROUBLE SHOOTER consists of three main parts, forming a complete and invaluable system for quickly diagnosing and locating any trouble in the Electric Starting and Lighting Systems of all American made Automobiles.

These parts are:

(1) The Ambu Instrument. This is a combined ammeter and voltmeter which has a special patented set of movable dials by which trouble is quickly diagnosed. This instrument may also be used as an ordinary ammeter or voltmeter. The ammeter has three scale readings 1.0-5; 5.0-25; 100-0-500. The voltmeter readings 0.3-0-3; 3-0-30; 15-0-150. It is of a very rugged construction designed for use in the repair shop.

(2) Instruction Charts. Tells you the location of every unit. Fourteen volumes of a convenient size, containing over 3000 pages of accurate, systematized instructions for quickly finding trouble; over 200 wiring diagrams, showing exact internal connections of generators, motors, regulators, cutouts, etc.; lamp equipment tables; battery equipment tables; and complete descriptions of construction and design of the various makes of generators and motors, including a 150 page book giving complete information on the new F. A. starting and lighting equipment on Ford cars.

(3) Over 700 Wiring Diagrams, showing the complete external connections of the Starting, Lighting and Ignition circuits on ears made in the United States since 1911. All parts are placed in the same relative positions they occupy on the cars, and are clearly labeled and explained.

In addition to these three main parts, there is also a 300 page book telling all about automobile batteries, their theory maintenance and manufacture, and giving complete and practical instructions for making any repairs, charging, etc. This book is profusely illustrated by especially made drawings and photographs.

A set of Cadmium Test leads is also included; also a twelve chapter clearly written and easily understood course of Ignition, Starting and Lighting; a complete set of suggestions for advertising your shop in local newspapers, with the loan of cuts and illustrations; and expert consultation on any electrical subject.

Ambu is as Essential to You as An Engine Is to An Automobile. The claim made by Ambu is that it is the repairmen's best friend. There is indisputable evidence to prove that this claim is correct. Men who have installed the AMBU TROUBLE SHOOTER Service in their shops, say they could not handle half the jobs they do now if they did not have it. Not only do they get the trade which comes from those who need efficient electrical repair service, but they are also able to make many hundreds of dollars through the sale of accessories to the car owners with whom they are brought into contact by AMBU.

If you want to be able to handle any electrical repair job, if you want to make more money and greater profit, get the AMBU plan, become an AMBU man.

Complete Trouble Shooter

.....Price on request

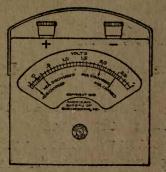
American Bureau of Engineering, Inc.

Automobile Department

1603 S. Michigan Avenue

Chicago, Ill.

BUSINESS BUILDING AMBD PRODUCTS



Cadmium Voltmeter

In order to make accurate Cadmium Tests, you must have a fine reading voltmeter. Most ordinary voltmeters are not suitable for this purpose, and to get a voltmeter of sufficient accuracy, you usually pay from \$50.00 to \$100.00.

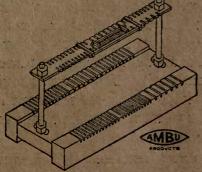
The AMBU CADMIUM VOLTMETER is made especially for Cadmium Tests, and is therefore absolutely certain to give you accurate results.

A complete instruction book for making Cadmium Tests, goes with each instrument.

Voltmeter only.			 	\$22.50
Voltmeter with	Cadmium I	Leads	 	\$25.00

Your jobber can supply you now. If not write direct.

Plate Burning Racks



When you burn-in new plates, or attach a whole group of plates to a plate strap, you need a burning rack to hold the plates in position while the lead is melted in.

WHAT THEY ARE. The Ambu Plate Burning Racks have guiding slots cut in the base as well as in the iron bar, or "comb." In this way the plates are held at exactly the right distance apart both at the top and bottom. Bases are made of hardwood. The small rack will take care of practically all $\frac{1}{16}$ inch plates made by Willard, Gould, Philadelphia, and U. S. L. It will also accommodate all thin plates such as the Exide 3XC, Willard, and Gould. The large rack will take care of many other types, being de-signed to accommodate fully 95 per cent of all the types of plates which are made at present.

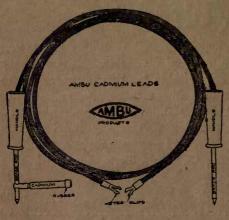
Special iron fittings are furnished which are splaced around the plate lugs on the comb so as to hold the plates firmly in position, and to prevent the hot lead from running off. WHAT IT DOES. Enables you to burn in plates in half the time required when using the ordinary rack. Plates are held at exactly the correct distance apart. The hot lead cannot run off. No iron touches the bottoms of the wet plates. Shipping weight of small rack, 10 lbs. Shipping weight of large rack, 15 lbs.

Price of small	rack\$ 7.50
Price of large	rack

Order through your jobber or direct. B. Unicago.

BUSINESS BUILDING MED PRODUCTS

Cadmium Leads



How often you have said, "If I only had some way of knowing which set of plates is in a bad condition, without first opening up the whole battery!" That is precisely what you can do with the CADMIUM LEADS. These Cadmium Leads consist of t w o heavily insulated flexible wires, each four feet long, at one end of which are brass prods with wooden handles, and at the other

end of which are forked terminals for attaching to the voltmeter. Fastened at right angles to one of the brass prods is a rod of chemically pure cadmium.

With these CADMIUM LEADS you can make absolutely reliable tests in a few moments, and you must have the means to make such tests if you want to know whether each set of plates is functioning properly, and able to give good service while under load. The Cadmium Test will show up a poor set of plates, be they positive or negative plates, instantly. No battery should be taken off the charging bench, or sent out of your shop until a Cadmium Test shows that both positive and negative plates are fully charged and ready to give good service.

Give this matter your immediate consideration. Order now. Can be used with any voltmeter that has readings as fine as five hundredths volts.

CADMIUM LEADS......Per pair \$3.25 Complete, easily understood instructions furnished with each pair of leads

Order through your Jobber or direct.

BUSINESS BUILDING MBD PRODUCTS

Burning Lead Mold

Here's a convenient, inexpensive lead mold which will be quite welcome to you in these days of conservation. Every battery shop has an accumulation of scrap lead from post drillings, old connecting straps, and old plates.



F. O. B. Chicago. Order through your Jobber or direct. Such scrap makes good burning lead, and should be saved until enough has accumulated to be melted and poured off in molds.

The AMBU BURNING LEAD MOLD is made of heavy sheet iron, diestamped into six slots into which the lead is poured. The mold gives very handy sized bars for lead burning. The slotted iron is mounted on a strong wooden base which has a handle at one end, making it possible to handle the mold when full of hot lead. A sheet of asbestos protects the wooden base from the heat of the melted lead.

The sheet-iron construction absorbs very little heat, making it easy to pour the lead. This is a decided advantage over a cast-iron mold, which absorbs so much heat that the lead cools quickly and is hard to pour.

Price, each	\$1.75
Price, per pair	\$3.25

Battery Turn Table

When you once lift a battery up on the work bench, you do not want to move it around any more than necessary. It is too heavy for easy handling. Yet in lead burning, sealing, repairing the handles, repairing the case, or painting the case, you often must be able to get at all sides of the battery.

To eliminate the back-breaking lifting and turning around of the battery, the BATTERY TURNTABLE was designed. Every battery man should have at least one of these handy turntables. A battery on this turntable can be turned around with one finger.

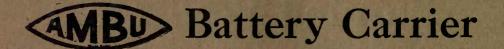


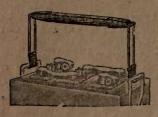
BATTERY TURN TABLE

The turntable is not fastened to the work bench, and may be taken to the battery, instead of carrying the heavy battery to it.

It is made of well-seasoned hardwood, is ball bearing, and will last for years.
Price, each......\$4.00

F. O. B. Chicago. Your Jobber can supply you now. If not, write to us direct.





"Carry a Battery Like a Suitcase."

You would not think of carrying a heavy suitcase by holding it in front of you with both hands. Yet that is the way a battery is generally carried, not because it is heavy, but because of the way the handles are attached to the battery box.

WHAT IT IS. The Ambu Battery Carrier consists of a stout hardwood handle having a swinging steel arm at each end to which is attached a strong steel hook for engaging the handles on the battery box.

WHAT IT DOES. The construction is such that the terrific strain on the handles of the battery is lessened to a minimum. A strap with hooks should never be used, because there is a side pull that soon causes the handles on the battery to give way. Enables you to carry a battery like a suitcase, with the least strain on your arms. One man can carry two batteries at once because he can hold them down at his side. Also useful in lifting a battery out of the car, and putting the battery back in the car. Shipping weight, 1 lb. each, or 2 lbs. per pair.

Price,	each	 \$1.75
Price,	per pair	

The Automobile Storage Battery



Price ...

Its Care and Repair

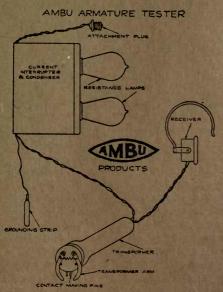
A 300-page book devoted entirely to starting and lighting batteries. Gives theory, manufacture, and maintenance. Complete instructions on running a battery shop, tools needed, shop equipment, charging methods, opening batteries, work on plates, jars, case. Profusely illustrated with especially made etchings and half tones. The most complete and authoritative book on the subject.

F. O. B. Chicago. Order through your jobber or direct.

....\$5.00

BUSINESS BUILDING AMB PRODUCTS

Armature Tester



This is an accurate, positive device for quickly detecting and accurately locating open circuits, short-circuits, grounds, and reversed commutator connectors on the armatures of motors or generators which are equipped with commutators.

Will Test Any Sized Armature.

Any sized armature, no matter how small or large, no matter what its resistance, may be tested with equal facility. No connections are made to the armature, and the armature need not be removed from the machine if it is possible to get at the commutator.

May Be Used on Any A. C. or D. C. Circuit.

The AMBU ARMATURE TESTER may be used on any direct or alternating current circuit, and on any voltage from 6 to 220. No change or adjustment is necessary in changing from a direct to an alternating, or from

alternating to direct, current circuit. For the various voltages, it is only necessary to use lamps of the proper voltage or no lamps at all, as the case may be.

Construction Is Very Simple.

Carrent from the supply circuit is led through a current interrupter, which is bridged by a condenser. This current is sent into each consecutive pair of segments through the Contact Making Pins shown in the illustration. The two Transformer Arms shown in the illustration touch the commutator also, and lead to the telephone receiver circuit through a specially designed transformer coil.

Indications Are Positive.

The variation in the sound heard in the receiver tells what the nature of the trouble is, and just where it is. In making a test, the contact making pins are brought down on each pair of consecutive segments, the Transformer arms resting on the commutator several segments on either side of the contact making pins. This testing is all done with one hand. An open circuit is indicated by a sudden and marked louder sound, a short-circuit by a sudden and marked dimmer sound, reversed com-mutator connections by louder sounds on every second pair of segments as long as they last. Grounds are located by testing between each segment and the armature core or shaft. The segment which is nearest the grounded point of the winding is indicated by a sudden dimming of the sound in the receiver. dimming of the sound in the receiver. THE AMBU ARMATURE TESTER has been in daily use in a large armature repair

shop for over three years, and has been given a thorough and severe tryout. There is nothing to get out of order, no delicate or adjustable parts. The entire outfit weighs less than seven pounds, and may easily be carried about.

\$30.00 Price each....

F. O. B. Chicago. Your Jobber can supply you now, or order direct.

BUSINESS BUILDING

Battery Plate Press



The most common fault of negative battery plates is the bulging out of the active material caused by the formation of lead sulphate as the battery discharges. This active material must be pressed back flush with the grids if the battery is to give good service again. Moreover, both positive and negative plates become bent out of shape, and buckled, and must be straightened.

Many battery men use an ordinary iron bench vise, for this purpose, but this is a poor practice. The iron vise soon becomes corroded and rusted from the acid squeezed out of the plates. It also becomes stiff and hard to operate. Moreover, there is always danger that particles of iron will get on the plates from the vise, and iron is the worst enemy of battery plates, because it

causes the battery to lose its charge quickly and it is almost impossible to remove this iron.

The AMBU BATTERY PLATE PRESS is designed to do away with all the disadvantages of the iron vise. Three sets of plates may be pressed at once between the large wooden jaws. No iron or any other metal can touch the plates. The upper jaw is movable and is operated by a large hand-wheel. No acid can drip on the operating screw. A trough is placed so as to catch the acid squeezed from the plates, thus eliminating the rotted, acid soaked floor which results from the use of the iron bench vise, and which ruins

shoes and clothes.

Fittings with instructions are furnished with the Press for mounting it on the wall of the shop. The press may also be mounted on a stand, which is not, however, furnished with the Press. This stand can be easily made.

The lower jaw is removable, and may be lifted out and replaced if it becomes acid soaked. All parts are coated with acid-proof paint.

A complete set of transite boards of the proper thickness for placing between the plates are included in the cost price.

Price, with transite boards, and fittings, for mounting on wall......\$32.50 Transite Boards only-set complete 5.90

F. O. B. Chicago. Order through your Jobber, or direct from us.

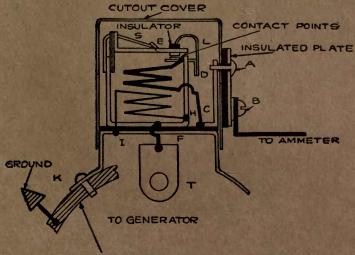
American Bureau of Engineering, Inc. Automobile Department

1603 S. Michigan Avenue

Chicago, Ill., U. S. A.

THE FORD STANDARD ELECTRICAL EQUIPMENT

This is one of the 47 illustrations showing details of Ford starting and lighting system.



GENERATOR FRAME

Price

INTERNAL CONNECTIONS OF CUT-OUT MOUNTED ON GENERATOR

This book of 150 pages gives in detail everything about the new Ford Electrical equipment, including starting and lighting, battery and ignition. It is highly illustrated with 47 photos, written for the every-day man in easily understood English. Describes the construction and installation of the F-A system—now standard equipment on Fords. Also complete instruction on how to locate and correct starting and lighting troubles. Ford ignition with tests fully given. No man attempting to handle electrical repairs on Ford cars should be without this book. Bound in leather.

\$2.50

BUSINESS BUILDING PRODUCTS

Battery Steamer and Still

BATTERY STEAMER AND CONDENSER.

Softens Battery Compound Within Fifteen Minutes. Will Give 5½ Gallons Dis-

tilled Water in 7 Hours.

You can easily open any battery without the use of a gas flame or blow torch with an AMBU BATTERY STEAMER And while the Steamer is working away. softening the sealing compound, the repairman does some other work. From five to thirty minutes and the sealing compound is so soft that it can easily be removed with the point of a screw driver, and this will take only five minutes, because of the thorough job done by the steamer.



Steamer Cuts Dirt and Grease.

Another big advantage of the steamer is that the steam cuts all the dirt and grease on the battery box so that it can be wiped off with a cloth, making the box look like new.

Needs No Attention After Stove Is Lighted.

In the average battery shop the water supply tank needs to be filled but once a day. After that the stove is lighted and the entire steaming apparatus requires absolutely no attention. The level of the water in the boiler is automatically maintained at one inch. An automatic, float-controlled valve keeps the water at this level and admits just enough water to replace that which boils away. This is a tremendous advantage, as steam is quickly obtained, and a weaker flame may be used to boil the water.

The condenser is made of copper block, tin lined and needs only to be connected with running water for cooling purposes.

When used with the condenser—see illustration—it will give five and onehalf gallons distilled water in seven hours.

Water tank, boiler, steaming box and condenser\$35.00	
Water tank, boiler, steaming box and condenser	
F. O. B. Chicago. Order through your jobber or direct	

LIST OF MBD WIRING DIAGRAMS IN STOCK

The following list of wiring diagrams are obtainable from your jobber — or the American Bureau of Engineering, 1601-03 South Michigan Avenue, Chicago—at 25 cents each. When placing order be sure to mention the diagram number as well as model and make of car.

Drawing Number	Name of Car	Year	Model	System
201 Al	bott-Detroit	1913-1914		Autolite
202 A 203 A	bbott-Detroit	1916	8''	Autolite
		1916-1917	6-44	Remy Delco
204 A1 205 A 206 A	irens Fox Fire Engine	1914		Autolite
		1914-1915 1916		Autolite Westinghouse Westinghouse
207 A1	len—Dimmer Bulbs len—Resistance Dimmer len—Resistance Dimmer len	1916		Westinghouse
08 A1	len-Resistance Dimmer	1916	First 375 cars	Westingnouse
09 A1 10 A1	len	1916 1917	37 37	Westinghouse Westinghouse Autolite
11 AI	len	1918-1919	41	Autolite
12 Al	ter	1916		Remy
13 Ar 14 Ar	len ter nerican nerican nerican	1914	6–''B''	Disco
34 Ar	nerican	1918 1919	B	Gray & Davis Westinghouse
15 Ar	person	1913	45-55	Grav & Davis
16 AI	person	1914		Bijur
17 Ar	person	1915 1916	"4"-"6"	Gray & Davis Bijur Bijur Westinghouse
18 AI 19 AI	operson	1916	6-18 8-08 8 18 9 16	Bijur
20 AI	person	1917	6-17 8-17	Bijur
21 AT	person	1916	6-48 8-58	Bijur Bijur Bijur
22 AI	person	1916 1917	"4""6" "6-48" "8-58" 6-16 8-16 6-17 8-17 6-48 8-58 6-17 8-17 6-18 8-58 6-17 8-17 "8-18A" 45.55	Bijur
AI AI	operson	1918-1919	45-55	Bijur Grout & Davis
85 A1	burn	1913	60-05	Anico
25 Au 26 Au	burn	1913 1915		Gray & Davis Aplco Remy
26 Au	nerican nerican nerican person person person person person person person burn	1915	"4-36" "6" "4-38" "6-38"	Remy
17 Au 18 Au	burn	1915		Delco
29 A1	thurn_"Inton"	1916	4-38 6-38	Remy Autolite
SO Au	iburn-Internal	1916 1916 1917-1918 1917-1918 1917-1918 1917-1918 1916	6-39 6-39	Remy
11 Au	burn	1917-18-19	6-39	Remy
12 Au	burn	1917-1918	from 6 4	Delco Delco
38 At 01 Be	15tin	1917-1918	12 cyl. "16"	Disco
16 Bo	sch Magneto Dynamo	1910	GINI	Disco
17 Bc	sch Magneto Dynamo		G4-Ed1 G4-Ed2	
18 Bo	sch Magneto Dynamo		G4-Ed2	
02 Br	iscoe	1915		Splitdorf-Apelco Splitdorf-Apelco
03 Br 04 Br	ISCOG	1916 1916	4	Splitdorf Splitdorf
05 Br	iscoe	1916	4-38 8-38 24 4-24	Splitdorf
06 Br	iscoe	1916 1917	24	Splitdorf Splitdorf-Apelco
07 Br 08 Bu	iscoe	1917-18-19	4-24	Autointe
09 Bu	lick	1914	36-37 "54-55" 36-54	Delco
10 B1	lick	1914 1915	36-54	Delco Delco
11 Bu	lick	1916	"D44" "D45" "C_4" E4, E34, E35 E44, 45, 46, 47, 49, 50	Delco
12 Bu	lick, Truck	1918 1918 1918 1918	THE TOOL TOOL	Delco
13 Bu 14 Bu	lick	1918	E44 45 46 47 49 50	Delco Delco
15 Bi	ish	1918	1311, 10, 10, 11, 10, 00	Dyneto
01 Ca	dillac	1912		Dyneto Delco
02 Ca 03 Ca	dillac	1914		Delco Delco
1 1 1 1 1 1 1 1	dillac-Type 53	1916 1917-18-19	55-57	Delco
5 Ca	rter car	1915	"9" "N"	Delco
6 Ca	se	1913	"N"	Westinghouse Westinghouse Westinghouse
7 Ca	se	1914		Westinghouse
)8 Ca)9 Ca	se	1914 1915	"35" "25"	Westinghouse
0 Ča	80	1916	tullos	Westinghouse
1 Ca	se	1917	"T17"	Westinghouse Autolite
2 Ca	se	1918-1919	U18	Westinghouse
	almers	1913-1914	30	Entz Gray & Davis
5 Čh	almers	1914	"17"-"18"-"19" "24"	Entz
6 Ch	burn istin il. sch Magneto Dynamo sch Magneto Dynamo iscoe ise ise ise ise ise ise ise is	1914 1915	"26"	Entz Entz
7 Ch	almers almers almers almers-Master Six	1915	"29"	Entz
	almers	1916	"32" and "6-40"	Gray & Davis Gray & Davis Westinghouse Autolite
i Ch	almers Alter 1st 3000 cars	1916	02B (135')	Westinghouse
a cr	almers	1916	32B "35" 35A	Autolite
22 Ch	almers	1917	-35	Westinghouse
Ci	almers andler andler	1913	••••••	Westinghouse Westinghouse
	anuler	1915		Westinghouse Gray & Davis Westinghouse
24 Ch 25 Ch	andler	1915	the second se	Gray & Davia

527 Chandler 191-1917 Gray & Davies 525 Chevrolet, List Models. 1915 1915 525 Chevrolet. 1915 1915 1915 525 Chevrolet. 1915 1915 1915 1915 525 Chevrolet. 1915 <	Drawir Numbe	er Name of Car	Year	Model	System
650 Cherrolet, Late Models 1915 1915 1917 Attollie 651 Cherrolet, With recover dails 1915 1917 1917 Attollie 653 Cherrolet, Used 1000 corr, 1918 1918 "12" "12", "11" Attollie 653 Cherrolet, Used 1000 corr, 1918 1918 "D" 8 cyl. Attollie 654 Cherrolet, Used and ter 1925 1918 "D" 8 cyl. Attollie 655 Cherrolet, Used and ter 1925 1917 1918 "D" 8 cyl. Attollie 655 Cherrolet, Used and ter 1925 1917 1918 "D" 8 cyl. Attollie 656 Cherrolet, Used and ter 1925 1918 1917 1918 "D" 8 cyl. Attollie 656 Cherrolet, Used and ter 1925 1918 "106" Ton, Truck Attollie 656 Cherrolet, Used and ter 1925 1918 "106" Ton, Truck Attollie 656 Cherrolet, Used and ter 1925 1918 "106" Ton, Truck Attollie 656 Corrolet, Anno	627	Chandler	1916-1917		Gray & Davis
650 Chevrolet, Late Models 1915	628 629	Chevrolet, First Models	1915		Autolite
222 Chevrolet, with armoved cable 233 ************************************	630	Chevrolet, Late Models	1915		Autolite
323 Chevrolet 3235	631	Chourolat with armored cable	1915	"H2" H2½" H4"	
636 Chevrolet	633	Chevrolet	1916	"4-90"	Autolite
656Chevrolet, First 1000 cars 1016 church and on Cars after Chevrolet used on first 722 Chevrolet used after 725 cars Chevrolet used after 725 cars 	634			"H2½" "H4"	
655 Conversion Const.Carst. Carst.Description Description Description Townow Description Townow Townow Conversion Conversi		Chevrolet First 1000 cars	1917-1918	"D" 8 cvl.	
659 Chevrolet 1937-1939 1'1'0'n 1'n'ck Autolite 660 Chevrolet 1935-1939 1'1'0'n 1'n'ck Autolite 661 Chevrolet 1935 1937 1939 1'1'0'n 1'n'ck Autolite 661 Cole 1935 1937		Chevrolet, used on Cars after 1000 Jobs.	1918-1919	The state of the state of the second state of	A DALESS AND A DESCRIPTION
659 Chevrolet 1937-1939 1'1'0'n 1'n'ck Autolite 660 Chevrolet 1935-1939 1'1'0'n 1'n'ck Autolite 661 Chevrolet 1935 1937 1939 1'1'0'n 1'n'ck Autolite 661 Cole 1935 1937	638	Chevrolet, used on first 7925 Cars	1917-1918	"F-A"	Autolite
980 Chevrolet 1312 130 Delice 641 Cole 1313 ''6-5'' Delice 642 Cole 1314 ''6-5'' Delice 643 Cole 1316-17-18 ''6-5'' Delice 644 Columbia 1317-18-19 ''870'' Delice 645 Columbia 1317-18-19 ''870'' Delice 646 Conthits Michigan, 16 Volt. 1313-144 ''870'' Westinghouse 646 Cawford 1316 ''870'' Westinghouse Dynate 651 Crow-Elkhart 1316 ''870'' Westinghouse Dynate 652 Crow-Elkhart 1317-1818 Dynate Dynate 653 Cunningham 1917-1818 'Y'' Westinghouse 653 Cunningham 1917 ''' 'Y'' Westinghouse 654 Cunningham 1917 ''' '''' Westinghouse 655 Cunningham </td <td></td> <td>Chevrolet</td> <td>1918-1919</td> <td>1 Ton Truck</td> <td></td>		Chevrolet	1918-1919	1 Ton Truck	
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Bit Cois First Fi	661	Chevrolet	1919	230	Autolite
646 Commonwealth 1918 Ultra 4-40 North East 646 Corane Simplex. 1918 1916 North East 647 Crane Simplex. 1918 Westinghouse Westinghouse 648 Crawford 1918 Westinghouse Westinghouse 648 Crawford 1918 Westinghouse Disco 648 Crawford 1918 Westinghouse Disco 648 Conv-Eikhart 1917-1915 Dyneto Dyneto 651 Cov-Eikhart 1917-1918 "M" North East 652 Conningham 1917-1918 "V" Westinghouse 653 Counlingham 1917-1918 "V" Westinghouse 653 Counlingham 1917-1918 "V" Westinghouse 654 Counlingham 1917 8 Westinghouse 655 Danlels 1917 8 Westinghouse 656 Danlels 1917 8 Westinghouse 657<	640 641	Cole	1913		Delco
646 Commonwealth 1918 Ultra 4-40 North East 646 Corane Simplex. 1918 1916 North East 647 Crane Simplex. 1918 Westinghouse Westinghouse 648 Crawford 1918 Westinghouse Westinghouse 648 Crawford 1918 Westinghouse Disco 648 Crawford 1918 Westinghouse Disco 648 Conv-Eikhart 1917-1915 Dyneto Dyneto 651 Cov-Eikhart 1917-1918 "M" North East 652 Conningham 1917-1918 "V" Westinghouse 653 Counlingham 1917-1918 "V" Westinghouse 653 Counlingham 1917-1918 "V" Westinghouse 654 Counlingham 1917 8 Westinghouse 655 Danlels 1917 8 Westinghouse 656 Danlels 1917 8 Westinghouse 657<	642	Cole, External	1915	"6-50"	Delco
646 Commonwealth 1918 Ultra 4-40 North East 646 Corane Simplex. 1918 1916 North East 647 Crane Simplex. 1918 Westinghouse Westinghouse 648 Crawford 1918 Westinghouse Westinghouse 648 Crawford 1918 Westinghouse Disco 648 Crawford 1918 Westinghouse Disco 648 Conv-Eikhart 1917-1915 Dyneto Dyneto 651 Cov-Eikhart 1917-1918 "M" North East 652 Conningham 1917-1918 "V" Westinghouse 653 Counlingham 1917-1918 "V" Westinghouse 653 Counlingham 1917-1918 "V" Westinghouse 654 Counlingham 1917 8 Westinghouse 655 Danlels 1917 8 Westinghouse 656 Danlels 1917 8 Westinghouse 657<		Cole Fight	1916-17-18	8 cyl.	Delco
640 Crawford 1916	644	Columbia	1917-18-19		Robbins & Meyers
640 Crawford 1916		Commonwealth	1918	Ultra 4-40	Dyneto North Fort
640 Crawford 1916		Crane Simplex	1913-1914		Rushmore
650 Crow - Eikhart 1915 -'4' Beny 651 Crow - Eikhart 1916 CE20-33 Disco 652 Crow - Eikhart 1916 CE20-33 Disco 653 Cumingham, Hearse & Am 1917-1918 'M' North East 654 Cumingham, Hearse & Am 1917-1918 'W' Westinghouse 655 Cunningham 1917-1918 ''W' Westinghouse 6563 Cunningham 1917-1918 ''W' Westinghouse 6563 Cunningham 1919 3''W' Westinghouse 6563 Cunningham 1917 8'W' Westinghouse 6563 Cunningham 1919 ''W' Westinghouse 6563 Dariels 1917 ''S' Westinghouse 6564 Dari Truck 1915 ''B' Distoor 657 Daris 1917/18-19 ''A' Blur 658 Denben Truck 1915 ''A' Blur 659 Denken Truck 1916 ''A' Blur 660	648	Crawford	1915		Westinghouse
651 Crow-Bithart 1916 CE30-33 Disco 652 Crow-Bithart 1917-1918 "M" Dorth East 655 Cumingham 1917-1918 "M" North East 656 Cumingham 1917-1918 "M" North East 657 Cumingham 1917-1918 "M" North East 658 Cumingham 1917-1918 "V Westinghouse 653 Cumingham 1917-1918 "V Westinghouse 653 Cumingham 1917-1918 "V Westinghouse 653 Cumingham 1917 1918 "S" Westinghouse 653 Cumingham 1917 1918 "S" Westinghouse 801 Daniels 1917-18-19 64, 61, 64K Delco Delco 804 Dart Truck 1917 1915 "G" Delco Delco 806 Davis Denby M toor Truck 1915 "G" Delco Delco Delco 810 Dentrolter 1916 1916 "G" Disco Disco </td <td></td> <td>Crawford</td> <td>1916</td> <td></td> <td>Remy</td>		Crawford	1916		Remy
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804 Dart Truck 1916 "D" and "C" D'' Disco 805 Davis Motorcycle. 1916 "D" Disco 806 Davis Splitdorf 807 Davis 1917-18-19 6-J 808 Denby Motor Truck. 1917 6-J Delco 809 Denneen Truck. 1917 6-J Biluer Splitdorf 809 Dernoter 1915 "4" Remy Splitdorf 811 Detrolter 1915 "4" Remy Remy 812 Detrolter 1916 "4" Remy 813 Detrolter 1916-17-18 Dyneto Dyneto 814 Dixle Flyer, Cars 3500 and up 1917-18-19 North East North East 815 Dodge 1916 "Ad" Westinghouse Westinghouse 820 Dorris, Cars 5219 and above. 1916 "Ad" Westinghouse Westinghouse 821 Dorris, Cars 5219 and above. 1916 "Ad" Westinghouse Westinghouse 822 Dorris Cars to f season. 1916	802	Daniels	1918		Westinghouse
307 Davis 1917-18-19 6H, 6I, 6K Delico 808 Denneen Truck. 1917 1918 Bijur Bijur 810 Detneen Truck. 1917 1917 Remy Remy 811 Detroiter 1916 "8" Remy Remy 812 Detroiter 1916 "4" Remy 813 Detroiter 1916 "4" Remy 814 Dixie Flyer 2200 and above. 1916-1917 Dyneto Dyneto 815 Dixie Flyer, Cars 3500 and up 1917-18-19 Dyneto Dyneto 816 Dodge, Com. Lights & Ing. 1916 North East North East 817 Dodge, Com. Lights & Ing. 1916 "Ad" Westinghouse 819 Dodge, Cars 5218 1916 "Ad" Westinghouse 822 Dorris. Cars 5218 1916 "Ad" Westinghouse 822 Dorris 1916 "Ad" Westinghouse Splitdorf-Aplco 824 Dort 1917 1917 Stad" Meestinghouse Splitdorf-Aplco </td <td>803</td> <td>Dart Truck</td> <td>1916</td> <td>"B" and "C"</td> <td></td>	803	Dart Truck	1916	"B" and "C"	
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310Detroiter13.14				6-J	Delco
310Detroiter13.14		Denby Motor Truck	1918	011, 01, 01	Bijur
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1006 Empire 1916 ''33' Remy 1007 Empire 1916 ''40'' Autolite 1008 Empire 1916 ''46'' Autolite 1009 Empire 1916 ''46'' Autolite 1009 Empire 1916 ''60'' Autolite 1010 Empire 1918-1919 50, 51, 70, 70A Autolite 1013 Essex 1919 ''A'' Delco 1011 Excelsior Motorcycle	1005	Elgin "Six"	1917-1918		Wagner
1007 Empire 1916 "40" Autolite 1008 Empire 1916 "46" Autolite 1009 Empire 1916 "46" Autolite 1009 Empire 1916 "60" Autolite 1010 Empire 1918-1919 50, 51, 70, 70A Autolite 1013 Essex 1919 "A" Delco 1011 Excelsior Motorcycle 1916 Splitdorf 1201 Fargo Truck 1916 Splitdorf		Elgin	1919	H (1991)	Wagner
1008 Empire 1916 "46" Autolite 1009 Empire 1916 "60" Autolite 1010 Empire 1918 "60" Autolite 1010 Empire 1918 "60" Autolite 1011 Excelsior Motorcycle 1919 "A" Delco 1011 Excelsior Motorcycle 1916 "Splitdorf 1201 Fargo Truck 1916 Splitdorf	1007	Empire	1916	**40**	Autolite
1010 Empire 1918-1919 50, 51, 70, 70A Autolite 1013 Essex 1919 "A" Delco 1011 Excelsior Motorcycle 1916 Splitdorf 1201 Fargo Truck		Empire		"45"	Autolite
1011 Excelsior Motorcycle 1916		Empire		50. 51, 70, 70A	
1201 Fargo Truck 1916	1013	Essex	1919	"A"	Delco
1202 Farmack 1916 Bijur	1201	Fargo Truck	1916		Splitdorf
		Farmack	1916		Bijur

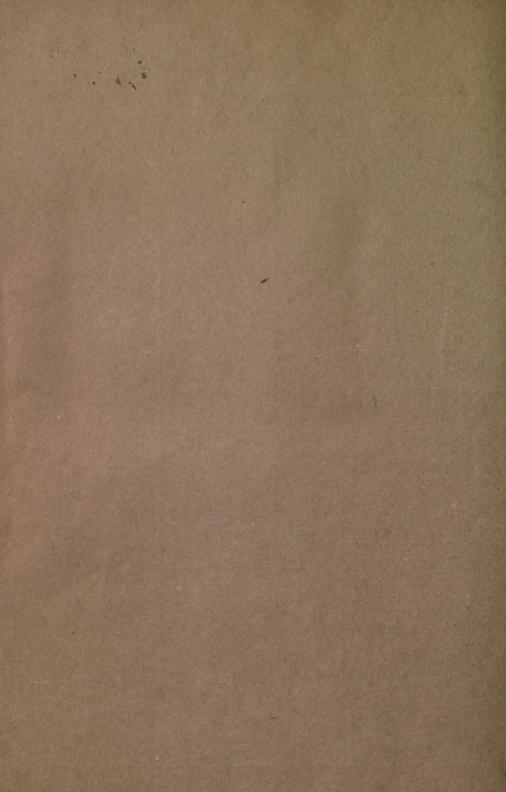
Draw	ing ber	Name of Car	Year	Model	System
1203	Fiat		1914]	Gray & Davis
1204 1205	Fiat	Lighting. Starting and Lighting.	1914		Westinghouse
1206	That	***************************	1910		Rushmore
1207 1208	Fiat Ford	 Starting and Lighting stem Lighting only. —Double Deck 3rd Brush Regulation. —Motor-Dynamo —Two Unit System. —Lighting System. —Starting Motor. —Standard Wiring. —Lighting and ignition item Wheel Drive Tractor. 	1916	R. S. R. S. M. S. M. S. M.	Rushmore
1209	Sy	, Starting and Lighting stem			A-B-C
1210	Ford	• • • • • • • • • • • • • • • • • • • •		*****	American Ever Ready Disco
1211 1212	Ford	-Double Deck		•••••	Fisher Fisher
1213 1214	Ford	•••••••••••••••••••••••••••••			Genemotor
1215	Ford	-3rd Brush Regulation.			Gray & Davis Gray & Davis Gray & Davis Gray & Davis Heinze Springfield Heinze Springfield Kemco Kemco
1216 1217	Ford	-Motor-Dynamo		• • • • • • • • • • • • • • • • • • • •	Gray & Davis
1218	Ford		1918	*"T"	Heinze Springfield
1219 1220	Ford	-Fan Dynamo	All Years		Heinze Springfield
1220 1221	Ford	-Two Unit System			Kemco
1222 1223	Ford	-Lighting System		• • • • • • • • • • • • • • • • • • • •	Kemco
1224 1225	Ford		1915	••••••••••••••••••••••••	Kemco North East
1226	Ford	-Standard Wiring			Splitdorf-Apelco Westinghouse
1239	Ford	-Lighting and ignition			Westinghouse
1227	Four	Wheel Drive Tractor klin klin		ALL "D" "D" "H" "M"	North East
1228 1229	Fran	klin	1913	"D" "H" "M"	Entz
1230	Fran	klin	1913 1913 1915	Serles No. 4 Serles No. 5	Entz Entz
1231 1232	Fran	klin	1915	Series 7 and 8	Dyneto Dyneto
1233 1234	Fran	klin klin—Berline klin—After 11700 Cars klin—Light and Horn	1916	Series "8"	Dyneto
1235	Fran	klin—After 11700 Cars.	1916 1918-1919	Series "8" Ser. 9	Dyneto Dyneto
1236	Fran	klin-Light and Horn	1010-1010		Dyneto
1237	Fran	klin-Light and Horn ring m Truck.	1918-1919	Ser. 9	Dyneto
1238	Fulto	ring	1918-1919	Ser. 9	Dyneto
1401	S. G.	Gay & Co	•••••	******************	Bijur Allis-Chalmers
1402 1403	11100	-Cars 5000 to 5282 -Cars 5282 and up	1010 1010	36-42	Ward-Leonard
1404				36-42 ''30''	Wootinghouse
1405 1406	Glide	-Cars up to 7388	1915	**30**	Westinghouse
1407	Glide	-Cars up to 7388 -Cars 7389 and above -Cars up to 9049	1915 1916	"30" "6-40"	Westinghouse Westinghouse Westinghouse Westinghouse
1408 1409	Glide	-Cars 9000 to 10255	1916	"6-40"	Westinghouse Westinghouse
1410 1411	ando	*******	1916-1917 1918-1919	6-40 "6-40"	Westinghouse Westinghouse
1412	Gran	Bernstein Truck	1915-1916		Westinghouse Allis-Chaimers
1413 1414	Gran	the second state of the second state of the second state of the	1915-1916	"6"	Allis-Chalmers
1415	Gran	••••••	1917 1918-1919	6-40 ''G''	Wagner
1416 1601	Gran	Truck	1919	10, 11, 15, 16,	Wagner Remy
1634	H-A- Halla	L	1917	21	Westinghouse
1602 1603	Halla	day day-Hearse	1914 1915-1916	0 "S"	Westinghouse Autolite
1604			1916 1916		Autolite
1605 1606	Halla	day y-Davidson Motorcycle,	1916	1. 2.	Westinghouse Westinghouse
	Swi	tch in Lamps			Splitdorf
1607	Harle	y-Davidson Motorcycle, hbination Switch.	Star Star		
1608 1609	Harle	v-Davidson	1915		Splltdorf Remy
1610	riavn	es	1917-18-19	···30''_··33''	Remy
1611 1612	Trayn	es	1915 1916	***** *****	Leece-Neville
1613	Havn	Ag	1916-1917	86, 37, 37R 40, 40R-41 Mod. 38, 39, 45	Leece-Neville
1614 1615	Hayn	es erson—First Models	1917 1918-1919	Mod. 38, 39, 45	Leece-Neville Leece-Neville Ward Leonard Ward Leonard
1616	Hend	erson-Later Models	1914 1914		Ward Leonard
1617 1618	Hollie		1916	"8"	Splitdori-Apelco
1619	Hollie	************************	1917-18-19 1916-17-18-19	"176" "8"	Allis-Chalmers
1635 1620		es Caterpillar Tractor	1919	ALL "L"	Splitdorf-Apelco Dyneto North East
1621	Howa	rd	1913		North East Electro
1622 1623	TIOWA	rd	1914	"6"	Jesco
1624	TTUUS		1913 1916	"54-37" "6"	Delco Delco
1625 1626	11uus	on	All Years	Super Six	Delco
Ser.			1915 .	·····	Westinghouse

Drawin		Year	Mođel	System
		1016	"K"	
1627 1628	Hupmobile	191 5 1915	412911	Westinghouse
1629		1016	11N10	Westinghouse Bijur
1630	Hupmobile Hupmobile with ammeter- cars 60,000 to 75,000. Hupmobile Cars after 75,000. Hupmobile	1916	"N"	Westinghouse
1631	cars 60.000 to 75.000	1916	"N"	Westinghouse
1632	Hupmobile Cars after 75,000	1917	N	Westinghouse
1633 1801	Hupmobile	1917-1918	R	Bijur Splitdorf
1801	International Motor Truck		"D"	North East
1803	International Motor Truck		"G" "L"	North East North East
1804 1805	Hupmobile Indian Motorcycle International Motor Truck International Motor Truck Interstate Interstate	1913		Apelco
1806	Interstate	1913	"40" "41" "42"	Apelco
1807	Interstate	1913	"45" "50" "51" "52"	Apelco
1808 1809	Interstate	1310	·····	Apelco Remy
1810	Intoratoto	1915	the second se	Remy
1811 1812	Interstate Interstate	1916 1917-1918	T, TR "43"	Remy Remy
2001	Jackson	1913	"43"	Autolite
2002	Jackson	1915 1916	"44" "68"	Autolite Autolite
2003 2004	Jackson	1916	"348"	Autolite
2005	Jackson	1916	"4-34"	Autolite
2006 2007	Jackson	1917-1918 1914	849 "6"	Autolite U. S. L.
2008	Jeffery Jeffery Jeffery	1915	"4"	U. S. L.
2009	Jeffery	1915	" 6 "	U. S. L. U. S. L.
2010 2011	Jeffery	1915 1916		Bijur Bijur
2012	Jeffery Jeffery Jeffery Jeffery Jeffery Truck. Jones Jones	1917	671	Bijur
2013 2014	Jeffery Truck	1918 1915	2017	Bijur
2014	Jones	1916		Leece-Neville Gray & Davis
2016	Jordan	1911	В	Bijur
2017	Jordan		•.C.,	Bijur
2201 2202	Kelly-Springfield Truck King	1914	"B"	Westinghouse
2203 2204	King	1915	"C-4"	Ward Leonard
2204	King	1915	"g" "g"	Ward Leonard
2205 2206	King	1915 1916-1917	E EE	Ward Leonard Ward Leonard Ward Leonard Ward Leonard
2207	King	1917-18-19	E, EE "EE," "F"	Robbins & Meyers Bijur
2208 2209	Kissell	1913-1914 1913-1914	··· <u>4</u> -40'' ·· <u>6</u> -48'' ·· <u>6</u> -60''	Esterline
2210	Kissell	1915	444 9017	Esterline Westinghouse
2211 2212	Kissell	1915	"6-42"	Westinghouse
2213	Kissell	1916 1917	"6-42" "4-32" "4-36" 100 Pt. Six 100 Pt. Six 12 Cyl.	Westinghouse
2214	Kissell	1918	100 Pt. Six	Remy Remy
2220 2215	Kissell	1917-18-19 1917	12 Cyl.	Delco
2216	Knox Tractor		6-36	Bijur
2217	Krit	1914		Disco
2218 2219	Krit	1915 1915	"M"	Disco
2401	Tambant	1015	272	North East Briggs
2402	Lambert	1916		Remy
2403 2404	Lawson Truck	1917 1915	••••••	Splitdorf-Apelco
2404	Lambert Lawson Truck. Lewis Motor-Generator Lewis, Motor-Generator	1915		Remy Remy
2406 2407	L'OAINGLUM	1914	51	Jesco
2408	Lexington	1915-1916	6M "6L"	Jesco Westinghouse
2409	Lexington	1916	"6-N"	Westinghouse
2410 2411	Lexington	1916 1917	"O" 6-0-17	Westinghouse Westinghouse
2412	Lexington	1918-1919	0-0-17	Westinghouse
2413 2414	Liberty	1916-17-18-19	6	Delco
	Lippard-Stewart Truck, At- water Kent Ignition	14 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Dyneto
2415	Lippard-Stewart Truck, Mag-	and the second		
2428	neto Ignition	1911-1912	M1, M2, & R1	Dyneto Rushmore
2416	Locomobile	1911-1912	WII, MZ, OZ RI	Westinghouse
2417	Locomobile	1911-12-13		Rushmore Electric
2418	Locomobile-Closed Cars	1914-1915		Lighting System
2419	Locomphile_All Models	1914-1915 1913		Westinghouse
2420 2421	Locomobile	1913	30-38-48 ''38'' ''48''	Adlake
2422	Locomobile	1915 1915	"38" "48"	Westinghouse
2422 2423	Locomobile	1915-1916		Westinghouse Westinghouse
2424 2425	Locomobile	1917-18-19 1913-1914	"77"	Westinghouse Gray & Davis
2120		1919-1913		

Draw Numb		Year	Model	System
2426	Lozier Lyons-Knight Madison	1914 1914-1915	"84"	Gray & Davis North East
2427 2603	Madison	1914-1915		Remy
2604		1 1910		Remy
2644 2601	Madison Maibohm	1919	6-40 A-4cyl. Becord	Remy Disco
2602	Malhohm	1 191X-1919	B-6cyl.	Wagner
2645	Marion Marion-Handley Marmon, 6 cyl	1916	B-6cyl, "K"	Wagner Westinghouse Westinghouse
2605 2606	Marmon, 6 cyl	1917 1913	6-40	North East
2607	Marmon	1914	"48"	Jesco
2608	Marmon	1915 1916	" <u>41</u> " " <u>41</u> "	Bosch Bosch
2610	Mermon	1916	"34"	Bosch
2611	Marmon Maxwell Maxwell	1918-1919	"34"	Bijur
2646 2647	Maxwell	1914 1915	A-35	Deaco Gray & Davis
2612	Maxwall	1915		Simms-Huff
2613	Maxwell	1916		Simms-Huff
2614 2615	Maxwell Maxwell—Early Model Maxwell—Late Model	1917 1917	25 25	Simms-Huff Simms-Huff
2616	Maxwell	1918-1919 1917-1918	25	Simms-Huff
2617 2618	Maxwell Late Model Maxwell McFarlan McFarlan Mercer	1917-1918 191 7-1918	1 T Truck	Autolite Westinghouse
2618	McFarlan	1919	Six "35" "22–70"	Westinghouse
2619	Mercer	1914	**35**	Rushmore
2620 2621	Mercer	1915 1916	"22-70" "22-72"	U. S. L. U. S. L. U. S. L.
2622	Mercer	1917-1918		U.S.L.
2623	Metz	1914		North East
2624 2649	Metz	1915-16-17 1919	"25" 25	Gray & Davis Gray & Davis Delco
2625	Metz Michigan—Hearse Mitchell	1917-18-19		
2626 2627	Mitchell	1913		Esterline
2628	Mitchell	1914 1915	• • • • • • • • • • • • • • • • • • • •	Remy Remy
2629	Mitchell	1915-1916		Splitdorf-Apelco Splitdorf-Apelco Westinghouse
2630 2631	Mitchell	1916 1916	1.8"	Splitdorf-Apelco
2632	Mitchell Mitchell-Lewis Mithell-Lewis Moline-Knight	1917-1918	0	Splitdorf-Apelco
2633	Moline-Knight	1914	First Series	Women
2634	Moline-Knight	1914-1915	First Series MK 40 Second Series MK 50 "MK 40" "40" G-MK50, C-MK40	Wagner
0.007			MK 40	Wagner Wagner Wagner Wagner Wagner Remy Dyneto
2635 2636	Moline-Knight-12 volts	1914-15-16	MK 50	Wagner
2637	Moline	1915	"40"	Wagner
2638 2639	Moline-Knight—12 volts Moline-Knight Moline-Knight Moline-Knight Moline Tractor. Monitor Monroe Mooroe	1916	**40**	Wagner
2650	Moline Tractor	1917-18-19	G-MK50, C-MK40	Remy
2651	Monitor	1919 1919		
2640 2641	Monroe	1915	"42"	Autolite
2642	Moon-2 Button Switch	1914 1918-1919	6-66	Delco Delco
2643	Moon Moon-2 Button Switch Moon-4 Button Switch Nash	1918-1919	6-66	Delco
2801 2802	Nash Nash	1918	671	Bijur Delco
2803 2804	National National	1918-1919 1914-1915	681, 82, 83, 84	Remy
2804 2805	National	1916		Westinghouse
2806	National National	1916 1918	" <u>12</u> " "6"	Westinghouse
2807 2808	National	1917	"12"	Westinghouse Bijur
2808	National	1918-1919 1917-1918	12cyl.	Bijur U. S. L.
2810	New Era.	1916		Allis-Chalmers
2811	New Era. Northeast—Single unit sys- tem used on power boats Oakland	IT LAST RATE	Second and the second se	
3001	Oakland	1913	"G"	Deaco
3002	Uakland	1913	"35-42" "42"-"6-60"	Delco
3003 3004	Oakland	1914	"35-42"	Deaco
8005	Oakland	1914 1915	"48-62-43"	Delco Delco
3006 3007	Oakland	1916	32	Remy
3008	Oakland	1916 1917	"50" 32B-34	Delco Delco
3009	Oakland Oakland Old Hickory Trucks—Dixie Cars to No. 2200	1918-1919	34B	Remy
8010	Cars to No area Dixle	It was a set of the se	Call Base - Call	
		1916-17-18 1913	**53**	Dyneto Delco
	Oldsmobile	1915	"42"	Delco
8012		1916	"4-43" "8-44"	Delco
8012 8013	Oldsmobile	1010		Delco
8012 8013 8014 8015	Oldsmobile Oldsmobile Oldsmobile	1916 1917-1918		
8012 8013 8014 8015 8016	Oldsmobile Oldsmobile Oldsmobile Oldsmobile	1917-1918 1918	37 37	Delco Remy
3011 8012 8013 8014 8015 8016 3017 8018	Oldsmobile Oldsmobile Oldsmobile Oldsmobile Oldsmobile Overland	1917-1918 1918 1918-1919	37 37	Delco Remy Delco
8012 8013 8014 8015 8016	Oldsmobile Oldsmobile Oldsmobile Oldsmobile	1917-1918 1918	37	Delco Remy

Drawi		Year	Model	System
3021	Overland	1915	**80-82**	Autolite
3022 3023	Overland	1915 1916	**82'' **81''	Autolite Autolite
3024	Overland		"\$3"	Autolite
3025 3026	Overland—First 5000 cars Overland—4 cyl	1916-1917 1917	*"75" 991) F	Autolite Autolite
3020	Overland-4 cvl	1017	83DE 85-4-SN, C. T. R	Autolite
3028	Overland-6 cyl	1917	85-R, Sn, T, C	Autolite
3029 3030	Overland—6 cyl. Overland—4 cyl. Overland—8 cyl.	1917 1917	85-4-SN, C, T, R 85-R, SN, T, C 88T, SN, Lim 88T, SN 89CLR, T, 86B 90R, 0EX, T, PLD 88-4-SN	Autolite Autolite
\$031	Overland—6 cyl	1917	89CLR. T, 86B	Autolite
3032 3033	$\begin{array}{c} \text{Overland} & = 6 \text{ cyl}.\\ \text{Overland} & = 4 \text{ cyl}.\\ \text{Overland} & = 4 \text{ cyl}.\\ \text{Overland} & = 6 \text{ cyl}.\\ \text{Overland} & = 6 \text{ cyl}.\\ \text{Overland} & = 4 \text{ cyl}.\\ \end{array}$	1917 1918	90R, OEX, T. PLD	Autolite Autolite
3034	Overland—6 cyl	1918	89	Autolite
3035	Overland-4 cyl	1918	90	Autolite
3201 3202	Packard	1912 1913		Bijur Bijur
3203	Packard	1913	"48" "138"	Delco
\$235	Packard	1913-1914	"138" "6"	Delco Bijur
3204 3205	Packard	1915 1916	"12"	Bijur
3206 3207	Dealeand		2-25, 2-35	Bijur
3207 3208	Packard Body Wiring	1918-1919 1918-1919	325, 335	Bijur
3209	Packard-Body Wiring	1918-1919	325, 335 325, 335	Bijur Bijur
3210 3211	Packard-Body Wiring	1918-1919	325, 335	Bijur Grav & Davis
3212	Packard Packard—Body Wiring Packard—Body Wiring Packard—Body Wiring Paige-Detroit, "Little Six" Paige.Detroit	1918	39	Gray & Davis Gray & Davis Gray & Davis
3213	Paige-Detroit Paige, without side lamps Paige, with side lamps	1917	6-38	Gray & Davis Disco
3236 3237	Paige, with side lamps	1913-1914 1913-1914	25 25	Disco
3214	raige	1918-1919	39	Gray & Davis
3238 3240	Paige Panhard Truck	1919	6-55	Remy Autolite
3215	Partin-Palmer	1919 1915	A-B	Allis-Chalmers
3216 3217	Partin-Palmer	1917	32	Disco
3218	Paterson	1914 1915	"32-33"	Delco Delco
3219	Pathfinder	1914	"6"	Deaco
3220 3239	Pathfinder Pathfinder	1915 1916		Westinghouse
3221	Peerless	1916		Westinghouse Gray & Davis Gray & Davis Autolite
3222 3223	Peerless	1917	56	Gray & Davis
3224	Phianna	1918	56	Ward Leonard
3225	Pierce Arrow Pierce Arrow	1913	48-B	Westinghouse
3226 3227 3228	Pierce Arrow	1914 1915	48-B2 48-B3	Westinghouse Westinghouse
3228 3229	Pierce Arrow	1015		Westinghouse
\$241	Pierce Arrow Pierce-Arrow—Truck Premler	1916-17-18-19	All Cars 2 Ton	Westinghouse Westinghouse
3230 3231	Premler	1914	2 1011	The second second
3231	Premier Premier	1915 1915	Model "M" Generator Model "MJ" Generator 6C & 6B 4-36, 44, 55, 6-66 "4-24"	Remy Remy
3244	Premier	1918-1919	6C & 6B	Delco
3242 3243	Pullman Pullman	1913	4-36, 44, 55, 6-66	Westinghouse Splitdorf
3233	Pullman	1915 1916	**4-24**	Splitdorf-Apelco
3234	Pullman	1917	**4-24**	Splitdorf-Apelco
3601 3602	Regal	1915	E	Dyneto
3603	Regal	1915 1915	RR, R. RD, D	Rushmore Dyneto
3604 3605	Regal	1915-1916	"4" and "8"	Dyneto
3606	Regal	1917 1918	5 J	Heinze Autolite
3623 3607	Regal Regal Remy Tractor Equipment Renault Reo			Remy
3608	Reo	1914		S. E. V. Remy
3609	Reo	1915		Remy
3610 3611	ReoReo	1915 1916		Remy Remy
3612	Reo	1017 10 10	4 & 6. M&N	Remy
3613 3624	Reo Reo Truck. Republic Motor Truck. Republic Motor Truck. Riker Truck (with headlights) Riker Truck (with search-	1918-1919 1916	T & U 11000 to 12789	Remy
3614	Republic Motor Truck			Remy Westinghouse
3615 3625	Republic Motor Truck	•••••	3 & 4 Ton	Remy
3626		•••••	3 & 4 Ton	Westinghouse
	light)		3 & 4 Ton	Westinghouse
3627 3628	Roamer	1916 1916	No. 3 Cont. Mag. Ign.	Gray & Davis Gray & Davis
3628 3616	Roamer	1917	The become mag. 1911.	Bijur
3617 3618	Roamer-Cars 14005 to 15736. Roamer-Cars 15737 and up.	1917 1918-1919	RA, RAC	Bijur Bijur
3619	Rockfalls Hearse		RA, RAC "D-4-75," "C-6-54" No. 7 "8"	Westinghouse
3620 3621	Ross	1916	···8··	Detroit, W. L. Robbins & Meyers
0021	Ross	1917	8	Robbins & Meyers

Drawl Numb	ng er Name of Car	Year	Model	System
\$622	Russell Saxon "Four"	1915	"32""48"	Bijur
3801 3802			**6**	Detroit Gray & Davis
3803	Saxon Saxon	1915-1916 1916-1917 1916-1917	4	Wagner
3804	Saxon	1916-1917	6	Detroit
3805 3806	Savers & Scoville 6 evi	1917-18-19	6cyl.	Wagner Delco
8807	Saxon Sayers & Scoville, 6 cyl Scripps Booth Cars above	1011 10-13	0031.	
3808	1101 Scripps-Booth Scripps-Booth Scripps-Booth Scripps-Booth	1915-1916		Bljur Bljur
3809	Scripps-Booth	1916-1917	"4" "8" "6-39" "40" D, & H	Wagner
8810 8841	Scripps-Booth Seneca	1918 1919	-39" 40"	Remy AllisChalmers
3811	Seneca Service Fire Truck Service Truck all models Service Truck Simplex, cars 2440 and up Simplex Simplex Simplex Simplex	1313	D, & H	Westinghouse
3812	Service Truck, all models	1915		Westinghouse
3813	Service Truck	1917-18-19		Westinghouse Bosch-Rushmore
3814 3815	Simplex, cars 2440 and up	1914-1915	"38" "50" Serles "E" 5	Rushmore
3816	Simplex	1915	Serles "E"	Rushmore
1817	Simplex	1916	5	Rushmore
3818 3819	Sphinx Standard—Touring & Limou- sine	1910		Splitdorf-Apelco
1013	sine	1915		Westinghouse
3820	Standard Standard Standard Standard Stanley Steam Car Stearns	1917	E "F"	Westinghouse
8821 3842	Standard	1917	"F"	Splitdorf-Apelco
3822	Stanley Steam Car	1919	8	Westinghouse Splitdorf-Apelco
8823	Stearns	1913		Gray & Davis Gray & Davis Gray & Davis Westinghouse
8824	Stearns	1914-1915		Gray & Davis
3825 3826	Stearns Stearns-Knight Four Stearns-Knight Eight Stephen Stephens Salient Six. Stevens-Duryea, External. Stevens-Duryea, Internal Stewart Tourist Studebakar	1914-1915 1917	Serles 32	Gray & Davis
3827	Stearns-Knight Eight	1917	Sories 39	Westinghouse
3828	Stephen	1917	60, 65 70 & 75 "D"	Autolite
3829	Stephens Salient Six	1918-1919	70 & 75	Delco
3830 3831	Stevens-Duryea, External	•••••	"D"	Delco Delco
3832	Stewart Tourist	1917		Westinghouse
3833		1010	"35" "EG"	Wagner
3834 3835	Studebaker	1913 1914	"35" "EG"	Westinghouse Wagner Wagner Wagner Wagner Wagner Wagner Berry
3836	Studebaker	1914		Wagner
3837	Studebaker Studebaker Studebaker	1915		Wagner
3838 3839	Studebaker	1916-17-18		Wagner
3840	Stutz	1915 1918-1919		Remy Remy
4001	Thomas	1916		Leece-Neville
4401 4402	Velie	1914-1915		Gray & Davis Gray & Davis
4403	Velle	1915 1916		Remy & Davis
4404	Talia	1017	"22" 27 28	Remy
4405	Velie	1917	28	Remy
4406 4619	Velle	1918-1919 1913	38 & 39 "4-40"	Remy
4620	Westcott	1914	"0-30"	Jesco Jesco
4601	Velle Velle Westcott Westcott Westcott	1915	"4-40" "0-30" "U 50" "O 35" 17 & 18	Delco
4602 4603	White Ventilaton Control	1917-18-19 1914	17 & 18	Delco
1604	Westcott White-Ventilator Control White-Steering column con-	1014	*******************	Entz
	trol	1914		Entz
1605 1606	White	1915		Entz
4607	White	1916 1917-1918	• • • • • • • • • • • • • • • • • • • •	Entz Leece-Neville
4608	Willys-Knight	1915		U. S. L.
4609	Wiliys-Knight	1916		Autolite
4610 4611	White Willys-Knight Willys-Knight Willys-Knight Willys-Knight Winton, Early part of 20 Season	1916		Autolite
4612	Season Winton, Latter part of 20	•••••	29	Gray & Davis
4613	Winton, with grounded start-	•••••	20	Gray & Davis
4614	Winton, with insulated start-		21	Gray & Davis
4815	er switch		21	Gray & Davis
4615 4616	Winton	1015	21	Bijur
4617	Winton	1915	21 ''21A''	Gray & Davis Bijur
4618	Winton	1916-17-18-19	22	Bijur
4621 4622	Winton	1916-17-18-19	22A	Bijur Bijur
1022	Winton Winton-Body Wirlng for limousine	1916-17-18-19	22 & 22A	Bijur
1000			22 0. 22M	23,01



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