

# TECHNICALLY SPEAKING-INDEX

## Volumes 1 through 13

AA TRUCKS-see car/truck review section at back of index

### ACCESSORIES-

-Motor meters	Vol 9	pg 1
	10	pg 28,29
-Dial style gauges	9	pg 2
-The "Upstarter"	11	pg 59
-Winter accessories (for the windshield)	11	pg 60
-Clocks for the Model A	11	pg 66-67
-Promotional Ford pocket watches	11	pg 79
-Oil/temperature gauges	11	pg 99
-Model A lap robes	12	pg 27,63
-The Model A Sportlite	12	pg 98-105
-Disassembling the Sportlite	13	pg 6
-Re-assembling the Sportlite	13	pg 10
-Make you own Model a lap robe	13	pg 32
-The Milwaukee Oilmeter	13	pg 59
-Heat w/o cutting a hole in the firewall	13	pg 60

### ALIGNMENT-

-Setting front wheel toe-in	Vol 10	pg 13
-Proper front end alignment	10	pg 88,89
-A cheap and easy toe-in alignment fixture	11	pg 7
- A procedure for measuring camber	11	pg 81-82

### AMMETER-

-Function, repair, troubleshooting	Vol 3	pg 58
-Understanding ammeter readings	6	pg 31
-Early meter features	6	pg 64
-Use, testing, troubleshooting	6	pg 98
-Ford script meters	10	pg 102
-Disassembly, tips for good operation	11	pg 100-101
-Incorrect ammeter faces	11	pg 119

### ASSEMBLY-

-Detailed manufacturing assembly notes for the Model A Ford	Vol 10	pg 98-100
-The Cleveland, Ohio Ford plant	11	pg 48-50
-Production/introduction of the Model A	11	pg 90-95
-Assembly plants/opening dates	12	pg 24-25
-Passenger bodies-introduction, production dates	12	pg 66-69

### AXLES-

-Rear axle restoration	Vol 1	pg 101
-Rear axle spindle restoration	2	pg 37
-Front axle design	2	pg 40
-Front spindle restoration	2	pg 42
-Rear axle-design differences	2	pg 45
-Rear axle grease retainer	4	pg 46
-Front wheel shimmy	5	pg 28
-Spindle bolt locking pins	5	pg 27
	10	pg 9
-Rear axle wear on the AA	7	pg 77
-Step by step examination/repair of the entire front end assembly	9	pg 118
-Restoring the front wheel spindle	12	pg 52-53
-Installing King Pins	10	pg 9
-Ford script front axles	10	pg 95
-Rebuilding front and rear spring perches/shock link balls	11	pg 46-47
-A procedure for measuring camber of front axles	11	pg 81-82
-Production of the rear axle assembly components	11	pg 113-114
 AUTOMOBILIA-		
-Bumper and license plate attachments	Vol 8	pg 80
 BABBITT-		
-Burned main bearing	Vol 5	pg 30
-KR Wilson process	5	pg 60
-Composition, why used	5	pg 79
-The Babbitt "Dr."	6	pg 8
 BADGES/EMBLEMS-		
-Ford factory badges and service awards	Vol 9	pg 64, 67,78,
83		
-Ford trade school student badges	10	pg 91-92
-Historical emblems from the early Ford Co.	11	pg 16-17
 BATTERY-		
-Battery disconnect	Vol 2	pg 26
-Effects of overcharging/undercharging	3	pg 30
-Factors affecting battery life	3	pg 32
-Prolonging the life	5	pg 51
-Prolonging the life, part 2	7	pg 27
-Infrequently used batteries	5	pg 66
-Battery basics	5	pg 114
-Early battery ground straps	8	pg 24
- Battery covers in the floor board	9	pg 45

-The Model A Negative Battery Cable	13	pg 34
BELTS-		
-Correct colors	Vol 6	pg 2
BENDIX DRIVE-		
-Bendix drive	Vol 4	pg 5
-Retrieving broken bendix bolts, washers	12	pg 79
BODY-		
-Woodgraining	Vol 1	pg 19
-Interior colors	1	pg 85
-Frame and body bolts	2	pg 83
-Installing a lowering rear coupe window	3	pg 87
-Roof drip moldings	3	pg 119
-Installing roof drip molding	3	pg 119
-Painting the exterior body	3	pg 120
-Front seat alignment	4	pg 102
-Roadster top props and straps	4	pg 108
-Landau irons- correct color	6	pg 1
-Trunk/rumble lid handles	6	pg 51
-Door check straps	7	pg 12
-Door bumpers and grommets, open cars	7	pg 52
-Side curtain rods	8	pg 85
-Differences in rear hood hinge retainers	8	pg 108
-Cowl grommets and firewall lacing	8	pg 108
-Rear fender step plate, raised fender dimple	9	pg 73
-Rear fender step plates and pads	12	pg 28-29
-Rear spare wheel carrier assemblies	9	pg 81
-Inside and outside door handles for open cars, features and differences	9	pg 89
-Early rear fender design details	10	pg 5
-Rear fenders-different lengths	10	pg 63
-Floor board screws	10	pg 75
-Side curtain rods	10	pg 78,79
-Station Wagon- brackets for tail light, stop light and license	11	pg 4
-Hood latch restoration	11	pg 51-56
-Dust shield panel details- '30-31 trucks	11	pg 58
-Interior door and window handle restoration	11	pg 61-62
-Differences in front license clips, bolts	11	pg 63
-1930 running board construction, design and assembly	11	pg 110-112
-Door lock keys	12	pg 7-10
-Installing rear window rubber seals	12	pg 70
-A tool for locating the side mount carrier hole		

in the splash apron	12	pg 114
-Locating tool for the side mounts '29/'30	13	pg 1
-Flat black paint for '30 instrument panel	13	pg 39
-Determining curves and tapers (True Sweep) for Model A wooden parts/upholstery	13	pg 64
-Four types of floor board plates for the A	13	pg 73

#### BOLTS-

-Frame and body bolts	Vol 2	pg 83
-Grades, quality, concerns	5	pg 106
-Special Head carriage bolts for the Model A	13	pg 24
-Cleaning fasteners (bolts)	13	pg 73

#### BRAKES-

-Brakes-disassembly/reassembly	Vol 1	pg 26
-Rear brake restoration	2	pg 14
-Early Model A brakes	2	pg 66
-One-piece brake cross shaft	2	pg 73
-Brake rod adjustment	2	pg 89
	9	pg 3
-Brake cross-shaft lubrication	3	pg 65
-Brake rod repair	3	pg 108
-Brake lubrication	5	pg 72
-Brake backing plate differences	6	pg 42
-Brake lever arms	7	pg 87-102
-Removing the rear backing plate brake lever	12	pg 14-15
-Details of differences in brake rods	8	pg 83
-Overhauling the Model A brake system	8	pg 107
-Early, later rear service brake camshafts	9	pg 46
-Early, later emergency brake toggle levers	9	pg 48
-Restoring Model A brakes	9	pg 100
-Brake adjustment instructions, procedures	10	pg 7-8
	12	pg 54,55,70
-Left-hand emergency brakes	10	pg 10
-Tools to install/remove front backing plate bolts	11	pg 65
-Restoring the Model A brake cross shaft	11	pg 8-11
-Early rear brake camshaft lever arms	11	pg 64
-Brake shoe and lining production practices	12	pg 18-21
-Brake rod return springs	13	pg 9
-Judging Area 7 brakes	13	pg 14
-Make your own improved brake adjustment tool	13	pg 54

## BUMPERS-

-All bumpers were chrome	Vol 1	pg 12
-Bumper and arm styles	4	pg 119
-Model A bright work	5	pg 35
-Early bumper arm and bar styles	6	pg 94
-Late 1928 through 1929 bumperettes	7	pg 4
-Building a Model A flag holder (for the bumper)	7	pg 42
-Center bumper clamps	7	pg 81
-Bumper and license plate attachments	8	pg 80
-Restoring stainless clad bumper clamps	10	pg 34-35
-Center bumper clamp variations	11	pg 14-15
	12	pg 56,57,88,89
-Bumper bar end bolts, nuts and numerates	11	pg 63

## CARBURETOR-

-Zenith carburetors-function and repair	Vol 1	pg 34
-Double venturi early carburetors	1	pg 56
-Fixing carburetors	2	pg 9
-Types, changes	3	pg 49
-Notes, discussion	4	pg 1
-Tilloston carburetors	4	pg 38
-Repair tips	4	pg 47
-Venturis	4	pg 53
-Rough but restorable carburetors	5	pg 49
-Carburetor orifices testing	5	pg 87
-Zenith carburetors-history and production	5	pg 110
-Zenith-3 production dates	6	pg 1
-Zenith-3 -documentation story	10	pg 31,32
-Carburetor jets	6	pg 38
-Zenith jets	9	pg 19
-Early Zenith embossings	6	pg 42
-Carburetor accessories	6	pg 49
-Raised-letter carburetors	6	pg 85
-Gasoline leaks in Zenith carburetors- causes and cures	7	pg 36
-Linkage rods	7	pg 52
-Holley manufactured Zenith carburetors	8	pg 23
-Flow testing Zenith carburetor jets	8	pg 29
-Explanation of the Zenith jet numbering system	8	pg 106
-Adjusting the carburetor	8	pg 111
-Features of a side bowl carburetor	9	pg 12
-Model B Zenith venturi sizes	9	pg 55
-Zenith carburetors- the importance of using correct metric taps and threads when rebuilding	9	pg 93

-Details of the Zenith carburetor	9	pg 102
-Original carburetor castings	9	pg 111
-Zenith carburetor choke nut evolution	10	pg 26
-Adjusting rod locking sleeves- differences	10	pg 74
-Carburetor facts-		
-Throttle stop screws		
-Idle jets		
-Gas adjusting needles and housings		
-"Show Car" features	10	pg 94-95
-Carburetor lever details	11	pg 58
-Repair remedy- loose throttle shaft	13	pg 18
-"Fixing" carburetor needle and seat leaks	13	pg 35
CHASSIS- (also see FRAME)-		
-Frame and body bolts	Vol 2	pg 83
-Motor mounts	3	pg 16
-Evolution of front motor mounts	8	pg 45
-Motor mount pads and cushions	12	pg 1
-Side wheel carrier	4	pg 52
-1930-31 wheel carrier markings	10	pg 11
-Chassis repair and preparation	5	pg 37
-Examples of original motor mount rubber pads	8	pg 25
-Differences in late running board brackets	8	pg 53
-Front fender brackets, stamped	8	pg 75
-1930-31 emergency brake cross-shaft support brackets	Vol 9	pg 12
-Replacing the front radius rod ball joint assembly	11	pg 105-106
-Restoring front wheel spindles	12	pg 52-53
-The evolution of frame features	13	pg 56
CLUTCH-		
-The clutch and transmission	Vol 2	pg 106
-The clutch pedal shaft and washer	5	pg 10
-Installing a single plate clutch	5	pg 10
-Double-clutching	5	pg 90
-The multi-disc clutch rear disc	9	pg 65
-Double-clutching the Model A	11	pg 12
COIL-		
-Discussion of the ignition system	Vol 1	pg 61
-Troubleshooting the electrical system	1	pg 69
-Notes on the ignition system	2	pg 117
-Coil wiring changes to the ammeter	4	pg 46
-Coil polarity	5	pg 32
	9	pg 56

	10	pg 26
-Ford script coils	7	pg 97,102
-Securing coil wire brass tips	10	pg 28
-Date markings on early coils	11	pg 13-14
CONDENSER-See coil, distributor, electrical systems and ignition.		
CONVERSIONS-		
-Converting Sedan Deliveries into pickup trucks	Vol 6	pg 25
COTTER PINS-		
-Types, correct installation	Vol 7	pg 65
COWL-		
-Cowl band repair	Vol 3	pg 81
-Cowl lamps	4	pg 20
-Cowl cardboard and wiring retainer clips	7	pg 46
-A cowl light location tool	9	pg 35
DISTRIBUTOR -		
-Ignition system	Vol 1	pg 61
-Electrical system	1	pg 69
-Ignition cable wire	1	pg 81
-Rebuilding the distributor	2	pg 103
-Notes of the ignition system	2	pg 117
-Distributor breaker plates	4	pg 102
-Breakaway view of the distributor	4	pg 107
-Problem points	5	pg 86
-Distributor basics	6	pg 28
-Early distributor castings	6	pg 51
-Early features of the distributor	6	pg 56
-Spark plug/distributor connectors	7	pg 10
-Linkage rods	7	pg 52
-Distributor base oilers	7	pg 103
-Adjusting the timing lever (spark) when driving	8	pg 10
-Checking the points for spark	8	pg 34
-Date codes on upper distributor plates	8	pg 44
-Early distributor cap clamp rivets	10	pg 26
-Ford script distributor parts	10	pg 26
-On-going changes in the Model A distributor	11	pg 24
-Discussion of distributor and condenser parts	12	pg 71
-Installing quick change ignition points	12	pg 96-97

## DRIVABILITY-

-Preparing the Model A for driving and touring	Vol 6	pg 85
	9	pg 51
-Improving drivability of the "A"	7	pg 20
-Engine		
-Chassis		
-Clutch		
-Headlamp alignment		
-Drive your "A" as Henry made it	7	pg 67
-Adjusting the timing lever (spark) when driving	8	pg 10
-Advantages of a copper manifold gasket	8	pg 100
-How to start the Model A	9	pg 23
-Double-clutching the Model A	11	pg 12
-Starting an engine that has sat idle	11	pg 102
-New truck driving and maintenance instructions	12	pg 32
 EARLY MODEL A'S- Distinctive features	Vol 2	pgs 23,31,68
-Features of the original first 200 A's	8	pg 32
-Model A number A-189	8	pg 13
	10	pg 51-54
-Extra holes in some pillar assemblies	11	pg 32,33,43
-The evolution of frame features	13	pg 56

## EARLY PARTS AND FEATURES-

-Ammeters	Vol 6	pg 64
-Axle-front	6	pg 33
-Axle-locking pins	6	pg 41
	3	pg 43
-Backing plates	6	pg 43
	7	pg 87,102
-Bows-top bows	5	pg 53
-Early brakes	2	pg 66
-Brake lever arms	4	pg 30
	7	pg 87
	9	pg 48,106
-Brake rear cam shafts	9	pg 46
-Brake springs	9	pg 107
-Early service brake retracting mechanism	11	pg 64
-Early left-hand emergency brakes	10	pg 10
-Bulbs	7	pg 59
-Bumper arm styles	6	pg 94
-Bumperette bars	6	pg 33
-Bumper clamps, center	7	pg 80
	12	pg 88-89



-Carburetor-early Zenith castings	6	pg 42
-Early trucks	8	pg 20
-Clips	5	pg 46
	9	pg 54, 62
-Date markings on early coils	11	pg 13-14
-Connectors, cowl lights	5	pg 53
-Cranks, trucks	8	pg 20
-Crossmember, front	3	pg 42
-Distributors	5	pg 47
-Distributor castings	6	pg 51
-Distributor- cap and body	3	pg 41
-Distributor cap clamp rivets	10	pg 26
-Door handles- open cars	9	pg 89
-Drum tail lamps	5	pg 77
-Engine numbers	6	pg 56
	9	pg 106
	10	pg 12
-Registered early engine numbers	11	pg 45
-Raised bosses on early engines	11	pg 57-58
-Changes in the Model a cylinder block	13	pg 44
-Fenders, front	6	pg 35
-Early rear fender design	10	pg 5
-Flywheel housing	6	pg 34, 56
-Gas caps- '28-'29	11	pg 34,35,44,45
	12	pg 38,80
-Gas gauge face plates	6	pg 44
-Gas lines	5	pg 52
-Grease guns	6	pg 56
-Grommets	5	pg 46
	6	pg 64
-Ground straps, battery to starter	5	pg 68
battery to ground	8	pg 24
-Headlight lens	9	pg 52
-Hood hook handles	9	pg 106
-Horn covers and tags	11	pg 57
-Hub caps	7	pg 59
-truck hub caps	8	pg 20
-Innertube markings	7	pg 5
-Junction box covers	3	pg 41
	6	pg 42
	9	pg 105
-Evolution- terminal box and covers	13	pg 80
-Keys	6	pg 53
-License brackets	5	pg 99
-Lock nuts for wheel carrier	5	pg 76
-Lug nuts	5	pg 48

-Lug nuts for trucks	8	pg 20
-Manifold- clamps	3	pg 42
- early intake	6	pg 67
-Mirrors	5	pgs 68, 99
-Oil breather caps	7	pg 82
-Oil cans	5	pg 46
-Oil pans	5	pg 52
-Evolution of oil pumps	13	pg 74
-Radiator caps- '28-'29	11	pg 34,35,44,45
	12	pg 38
-Radiator crank hole covers	12	pg 112-113
-Rumble lid handles	6	pg 51
-Rumble seat panels	7	pg 110
-Shock absorber covers	6	pg 52
-The evolution of early shock links	9	pg 17
	12	pg 38-39
-Shock absorber needle valves	10	pg 4
-Spark plugs	5	pg 98
-Speedometers- cable clips	9	pg54
-gear cap screws	9	pg 74
-differences	9	pg 107
-drive cap screws	10	pg 101
-Springs- dummy leaf	6	pg 56
- clamps	6	pg 95
- shackles	7	pg 83
	12	pg 33
-Starter- switch cable terminals	5	pg 68
-switch cables	5	pg 98
-Able style starters	7	pg 81
-Starter switch covers	10	pg 101-102
-Features of the first generation starters, starter switches and rods	11	pg 64
-Steering-shaft lower bearing	3	pg 42
-Production of the red steering wheel	11	pg 64
-Step plates	7	pg 80
-Switches- Popout	5	pg 67
	6	pg 55
-Starter	6	pg 92
-Light	7	pg 80
-Stop light switch assembly	6	pg 43
-Tail lamps- Brackets	4	pg 39
	9	pg 80
-Drum tail lights	5	pg 77
	7	pg 81
-Terminal box cover screws	10	pg 26
-Timing pins	6	pg 44

	9	pg 105
-Tire pumps	5	pg 76
-Top- open car prop nut	5	pg 68
-Transmission- Reverse idler shaft, wide collar	6	pg 34
-Upholstery nails	5	pg 53
-Valve chamber cover	6	pg 57
-Valve stems	6	pg 33
	7	pg 83
	13	pg 40
-Valve stem comparisons- A and T	13	pg 16
	11	pg 45
-Water- outlets	7	pg 6
- return pipes	7	pg 86
-Wheels	7	pg 10
-Wiper blades	5	pg 99
-Wiring harness metal tags	12	pg 32-33
-September 1928 service bulletin changes for:		
-cowl side panels		
-axle housing plugs/tools		
-shocks		
-four door car ventilators		
-changes in roadster gear ratio	11	pg 5
 ELECTRICAL SYSTEM-		
-Trouble shooting	Vol 1	pg 69
-High resistance/generator failure	4	pg 3
-Tips for checking the electrical system-		
generator, lamps, starter, battery	4	pg 51
-Avoiding damage from high resistance	8	pg 23
-Maintenance	9	pg 25
-Cleaning contact parts for better performance	11	pg 98
-Installing a fuse and switch	12	pg 40
-Fuses- inexpensive safety improvements	13	pg 51
 EMERGENCY BRAKES-		
-1930-31 Emerg.brake cross shaft brackets	Vol 9	pg 12
-Early/later Emerg.brake toggle levers	9	pg 48
-Brake lever pawls, differences	10	pg 14
-Emergency brake rods- adjusting ends	10	pg 74
-Installing a grease fitting in the emergency brake toggle lever	11	pg 18
 ENGINE-		
-Reducing engine vibration	Vol 1	pg 8
-Head bolt tightening and torque pattern	1	pg 20
-Overheating	1	pg 55

-Overheating prevention	2	pg 119
-Engine color	1	pg 75
-Rear main oil drip	1	pg 81
-A fix for a rear main oil leak	12	pg 26
-Installing the flywheel	2	pg 20
-Oil pump tips	2	pg 34
-Oil filters	2	pg 56
-Camshaft	2	pg 59
-Understanding the A and B camshaft	10	pg 36-40
-Timing	2	pg 71
-Motor mounts	3	pg 16
	6	pg 46
-Leaking head gaskets	4	pg 41
-Engine numbers	4	pg 56
	10	pg 51-54
	10	pg 55-56
	10	pg 66,67
-Distorted manifold	4	pg 89
-Save the manifold	4	pg 111
-Burned main bearing	5	pg 30
-Replacing the head gasket	5	pg 41
-Rebuilding- the K.R. Wilson process	5	pg 60
-Babbitt- how to protect	5	pg 79
-Valve timing	5	pg 95
-Overheating- causes and corrections	6	pg 5
-Early engine number locations	6	pg 56
	9	pg 106
-Early valve chamber covers	6	pg 57
-Ignition timing	6	pg 67
-Pressurized main oil bearing system	6	pg 68
-Engine lubrication	7	pg 39
-Early water outlets	7	pg 6, 66
-The A-8250 water outlet (Gooseneck)	13	pg 2
-Rare engine inside oil return systems	7	pg 11
-Oil breather cap design	7	pg 82
-Engine overview- specifications, serial numbers, and major changes	7	pg 89
-PCV'ing a Model A	7	pg 113
-Adjusting the valves	8	pg 46
-Setting tappet clearance to minimize noise	8	pg 69
-Installing the Model B crankshaft in the A	9	pg 29
-Photo details of the Model A engine	9	pg 41
-Replacement engine blocks	10	pg 6
-Engine block repair bushings	10	pg 26
-Putting oil in a new engine	10	pg 32
-Evolution of the Model A cylinder block	10	pg 68-70

	11	pg 36-39
-Raised bosses on early engines	11	pg 57-58
-Choosing the right oil for the Model A	11	pg 70-73
	11	pg 83
-The Hal-Hed high performance engine	11	pg 107-109
-The Model A industrial engine	12	pg 59-62
- Head removal methods	13	pg 43
-Measuring the camshaft while in the engine	13	pg 52
-Removing the oil pan drip tray	13	pg 59
 FAN BLADE-		
-Balancing a fan blade	Vol 1	pg 77
	10	pg 59,60
	3	pg 44
-Water pump and fan blade	2	pg 60
	4	pg 10
	4	pg 33
-The late 1931 fan blade myth	7	pg 23
-The aluminum fan blade	9	pg 117
	12	pg 49
-Fan blade modification, repair	10	pg 24
-Evolution of the Model A fan blades	11	pg 80
 FENDERS-		
-Front fenders	Vol 6	pg 35
-Front fender stamped brackets	8	pg 75
-Rear fender step plate/dimple	9	pg 73
-Rear fender step plates, pads	12	pg 28-29
-Early rear fender design	10	pg 5
-Installing fender patch panels	10	pg 82,83
-Special carriage bolts-fenders to running board shields	13	pg 24
 FILTERS-		
-Air and oil filters for the Model A	Vol 6	pg 36
 FLYWHEEL-		
-Installing the flywheel	Vol 2	pg 83
-The flywheel housing hole	4	pg 19
-Replacing the flywheel pilot bearing (for worn transmission clutch shaft)	4	pg 48
 FRAME- (also see chassis)		
-Frame and body bolts	Vol 2	pg 83
-Motor mounts	3	pg 16
	8	pg 45

-Motor mount pads and cushions	12	pg 1
-Side wheel carrier	4	pg 52
-1930-31 wheel carrier markings	10	pg 11
-Frame numbers	4	pg 56
-Chassis repair and preparation	5	pg 37
-Differences in late running board brackets	8	pg 53
-Front fender brackets, stamped	8	pg 75
-1930-31 emergency br. Cross shaft brackets	9	pg 12
-The evolution of frame features	13	pg 56
 FUEL-		
-No-lead gasoline	Vol 3	pg 56
-Running the "A" on alcohol	4	pg 104
-The A-9155 cast iron sediment bowl	7	pg 24
-Testing fuel shutoff valves	10	pg 1
-Comparing shutoff valve designs	10	pg 5,6
-A positive gasoline shut-off valve	13	pg 26
 GASKETS-		
-Gaskets	Vol 3	pg 104
-Leaking head gaskets	4	pg 41
-Replacing the head gasket	5	pg 41
-Gasket tips- exhaust, rear main seal, water outlet, oil pump return pipe, oil pump	9	pg 101
-Make your own gaskets	9	pg 101
-Tips for installing gaskets	10	pg 23
 GASOLINE-		
-No-lead gas for the Model A	Vol 3	pg 56
-Gas mileage	7	pg 78
 GAS GAUGE-		
-Fuel tank gauge tips	Vol 1	pg 21
-Gas gauge- service bulletin-calibrating	3	pgs 44, 65
-Repairing fuel tank gauge leaks	5	pg 70
-Modifying the gas gauge oat	6	pg 21
-Early gas gauge face plates	6	pg 44
-Fabricating a new brass gas gauge float	10	pg 71-73
-Evolution of the gas gauge assembly	12	pg 44-48
 GAS TANK-		
-Gas tank shut-off	Vol 1	pg 38
-Improved gas tank shut-off valve	13	pg 26
-Restoring leaky gas shut-off valves	1	pg 94
-Glass sediment bowls	4	pg 3
-Gas tank removal and repair-'30-'31	4	pg 27

-Gas tank shut-off valve	4	pg 49
-Testing fuel shutoff valves	10	pg 1
-Gas tank caps (and radiator caps)	4	pg 50
	7	pg 31
-Repairing fuel tank guage leaks	5	pg 70
-The A-9155 cast iron sediment bowl	7	pg 24
-Gas tank filter screens	8	pg 41
-Evolution of gas tank filler screens, flanges	12	pg 30-31
-Gas cap liners	8	pg 52
-Features of different gas caps	8	pg 62
-Removing fuel shutoff valves	10	pg 70
-Cleaning the Model A gas tank	11	pg 26
- Features of the '28-'29 Model a gas caps	11	pg 34,35,44,45
	12	pg 38,80
-Gas tank production practices, features	12	pg 2-5, 84-87
-Stainless gas cap dent removal techniques	12	pg 17
-Evolution of the 1930-31 gas tank	12	pg 106-110

#### GENERATORS-

-Trouble-shooting the electrical system	Vol 1	pg 69
-The generator cutout	3	pg 25, 26
-Ammeter function, repair, trouble-shooting	3	pg 58
- Checks for electrical equipment	4	pg 51
-Generators and starters	4	pg 75
-Generator rebuilding hints	7	pg 72
-Early casting marks	8	pg 44
-Date codes on cover bands	8	pg 44
-6 volt generator and headlight output	9	pg 14
-The Powerhouse generator	10	pg 57,58
-Repairing frayed generator pigtail wires	10	pg 97
-Early powerhouse pulleys	11	pg 35-36
-How to make powerhouse generator brushes	12	pg 58
-The Model A cutout	13	pg 36

#### GREASE AND GREASE FITTINGS-

-Lubrication for your "A"	Vol 1	pg 31
-Lubrication tips	2	pg 21
-Driving in grease fittings	3	pg 65
-Fitting original style grease fittings into replacement shackles	3	pg 73
-Cleaning and repacking front wheel bearings	9	pg 23
-Adding a grease fitting to the emergency brake toggle lever	11	pg 18
-Tools for greasing leaf type springs	13	pg 72

## HARDWARE-

-Interior hardware	Vol 3	pg 62
-Satin and Butler finishes	4	pg 70
-Model A bright work	5	pg 34
-Valvestems and hardware	5	pg 82, 95

## HEADLIGHTS-

-Headlamp grounding	Vol 1	pg 100
-Headlamp reflectivity	2	pg 65
-Model A headlamps	3	pg 95
-Shells- replacing rusty rivets	3	pg 106
-Focusing and alignment	3	pg 107
-Lighting the way for your "A"	7	pg 69
-Bulbs	9	pg 37
-Checking the cause for dim, inoperative headlights	9	pg 47
-Prism types in the fluted lens	9	pg 58

## HEATERS-

-Manifold heaters for the Model A	Vol 6	pg 73
-Installing an in-car heater in the "A"	9	pg 43
-Heat w/o cutting holes in firewall	13	pg 60

## HORN-

-Horn connections	Vol 1	pg 109
-The voice of the Model A	3	pg 66
-Ames horns	3	pg 70
-E A horns	3	pg 80
-Sparton horns	3	pg 92
-Stewart-Warner horns	3	pg 97
-GMI horns	3	pg 103
-Early Model A horns	6	pg 10
-Markings on horn mounting brackets	7	pg 51
-Restoring the sound of the Model A horn	7	pg 84
-The THAD (temporary horn activating device)	7	pg 100
-Repairing the horn rod	8	pg 9
-Repairing the Stewart-Warner armature shaft end	9	pg 99
-"Tuning" the Model A horn	10	pg 81
-Replacing the field coils in the "A" horn	11	pg 1
-Repairing a damaged horn armature	11	pg 3
	11	pg 41-42
-Early horn covers and tags	11	pg 57
-Horn basics	13	pg 78



## HUBCAPS-

-1930 hubcap design	Vol 4	pg 3
-Wheels, tires, and hubcaps	4	pg 43
-Early hubcap (1928) design features	7	pg 59
-Differences in 1930-31 hubcaps	7	pg 114
	10	pg 80
-Early truck hubcaps	8	pg 20
-Restoring early 1930 hubcaps	12	pg 50-51
-Installing Model A hubcaps	13	pg 31

## IGNITION-

-The Model A ignition system	Vol 1	pg 61
-The electrolock ignition system	1	pg 67
-Troubleshooting the electrical system	1	pg 69
-Replacing ignition cable wire	1	pg 81
-Notes on the ignition	2	pg 117
-Coils	5	pg 32
-Ignition timing	6	pg 67
-Ignition locks	7	pg 53
-Ignition keys	12	pg 6-7
-Installing quick change ignition points	12	pg 96-97
-Restoration of the Electrolock pop out	13	pg 85

## INSTRUMENTS-

-The instrument panel and instruments	Vol 4	pg 66
-Differences in instrument panels	6	pg 113
-Instrument panel finishes	8	pg 25, 46
-Correct instrument panel screws	10	pg 4,5
-Black enamel finish- 30's instrument panel	13	pg 39

## INTERIOR-

-Mahogany wood graining	Vol 1	pg 19
-Body interior colors	1	pg 85
-Interior hardware	3	pg 62
-Satin and Butler finishes	3	pg 70
-Blue ribbon upholstery	5	pg 4
-Model A bright work	5	pg 34

## JACKS-

-Wheel jack markings	Vol 8	pg 25
-Early wheel jack features	10	pg 10
-The C-2 Jack	13	pg 50

## JUNCTION BOXES-

-Covers	Vol 3	pg 41
	6	pg 42
	9	pg 105
-Script boxes, differences	6	pg 42
-Evolution of the terminal box and covers	13	pg 80

## KEYS-

-Ignition, door handle and lock keys	Vol 12	pg 6-10
--------------------------------------	--------	---------

## LAMPS AND LIGHTS-

-Headlamp grounding	Vol 1	pg 100
-Turn signals	1	pg 110
	8	pg 102
-Headlamp reflectivity	2	pg 65
-Back curtain light assembly	2	pg 86
-Dome lights	3	pg 8
-Sport lights	3	pg 12
	7	pg 56
-Sportlite disassembly	13	pg 6
-Sportlite re-assembly	13	pg 10
	12	pg 98-105
-Model A headlamps	3	pg 95
-Headlight shells- replacing rivets	3	pg 106
-Focusing and aligning headlamps	3	pg 107
-Model A rear lamp	3	pg 111
-Rear lamp mounting brackets	4	pg 4
-Cowl lamps	4	pg 20
-Early tail lamp brackets	4	pg 39
	9	pg 80
-Drum tail lamps	5	pg 77
-Drum tail light lens	10	pg 79
	7	pg 81
-Early stop light switch assemblies	6	pg 43
-Original issue head and tail lamp features	7	pg 59
-Light switch assemblies	8	pg 59
-Steel tea cup tail lamp shells for trucks	8	pg 109
-A steel Ford script tail lamp	9	pg 95
-Differences in light/horn switch levers	10	pg 75
-Panel Delivery tail light bracket features	10	pg 75
-Station wagon tail, stop light and license bracket supports	11	pg 4

## LUBRICATION -(also see Grease and Grease fittings)

-Lubrication of Model A springs	Vol 1	pg 6
-30,000 mile lubrication	1	pg 31
-Lubrication tips	2	pg 21
-Filtered oil	2	pg 56
-Oil pump tip	5	pg 33
-Why clean oil	5	pg 36
-Oiling the Trico wiper motor	5	pg 40
-Brake lubrication	5	pg 72
-Lubricating the steering box	1	pg 38
	6	pg 46
-Model A engine lubrication	7	pg 39
-Cleaning and packing front wheel bearings	9	pg 23
-Adding a grease fitting to the emergency brake toggle lever	11	pg 18
-Choosing the right oil for your Model A	11	pg 70-73, 83
-Three important lube points	12	pg 43
- Grease tools for leaf type springs	13	pg 72

## MANIFOLD-

-Reworking distorted manifolds	Vol 4	pg 89
-Save that manifold	4	pg 111
-Manifold heaters for the Model A	6	pg 75
-Advantages of copper manifold gaskets	8	pg 100

## MAINTENANCE-

-Winter maintenance tips	Vol 12	pg 41
-Maintenance tips/repairs for:		
-the cooling system		
-water pump and fan assembly		
-losing idle upon deceleration		
-proper battery cable routing	12	pg 42-43

## MIRRORS-

-Rear view mirrors-passenger cars	Vol 4	pg 95
-commercial	4	pg 98
-station wagon	10	pg 76,77
-Features of rear mirror wing nuts	7	pg 47
-Early mirror brackets	8	pg 45
	10	pg 56

## MOTORS (also see Engine)-

-Reducing engine vibration	Vol 1	pg 8
-Engine coloration	1	pg 75
-Rear main oil drippings	1	pg 81
-Engine timing tips	1	pg 82

-Camshaft	2	pg 59
-Understanding the A and B camshafts	10	pg 36-40
-Engine timing	2	pg 71
-Engine overheating, prevention	2	pg 119
-Motor mounts	3	pg 16
-Cleaning carbon and grinding valves	4	pg 68
-Burned out center main	5	pg 30
-Replacing the head gasket	5	pg 41
-Engine rebuilding/ KR Wilson process	5	pg 60
-How to protect Babbitt	5	pg 79
-Valve timing	5	pg 95
-Pressurized main bearing oil system	6	pg 68
-Overview- specifications, serial no., major changes	7	pg 89
-Loosening stuck engines- a mixture	10	pg 22
-Putting oil in a new engine	10	pg 32
-Choosing the right oil for the Model A	11	pg 70-73, 83
-The Hal-Hed high performance engine	11	pg 107-109
-The Model A industrial engine	12	pg 59-62
-Head removal	13	pg 43
-Model A cylinder block update	13	pg 44
-Measuring the camshaft while in the engine	13	pg 52
-Removing the oil pan drip tray	13	pg 59
 MUFFLER-		
-Muffler clamps	Vol 7	pg 50
-The Model A tapered muffler	13	pg 38
 OIL/OIL FLITERS/OIL PUMPS-		
-Lubrication tips/ chart	Vol 2	pg 21
-Oil pump-holding while pan is down	2	pg 34
-Filtered oil for the Model A	2	pg 56
-Oiling the Trico vacuum motor	3	pg 99
-Why clean oil	5	pg 36
-Pressurized main bearing oil system	6	pg 68
-Putting oil in a new engine	10	pg 32
-Choosing the right oil fir the Model A	11	pg 70-73, 83
 ORIGINAL PARTS-		
-Reasons to search for original parts	Vol 6	pg 3
 OVERHEATING-		
-Preventing overheating	Vol 1	pg 55
-Improving water pump efficiency	1	pg 60
-Engine overheating, prevention	2	pg 119

-Causes and corrections	6	pg 5
-Flushing the radiator to prevent overheating	11	pg 30
PAINT AND PAINTING-		
-Mahogany wood graining-deluxe trim	Vol 1	pg 19
-Model A engine coloration	1	pg 75
PAINT AND PAINTING-Cont'd		
-Body interior colors	Vol 1	pg 85
-Painting the "A"	2	pg 99
-Painting the Model A body	3	pg 120
-Sandblasting vs. chemical stripping	4	pg 110
-landau irons- color	6	pg 1
-Trucks- interior colors	6	pg 1
-Painting the Model A Ford	9	pg 32-35
-Ford paint methods	11	pg 96-98
-Black enamel for the 30's instrument panel	13	pg 39
PARTS-		
-Outside suppliers and manufacturers	Vol 6	pg 45
-Interchangeable parts	9	pg 24
PATENTS-some patents issued by Ford		
-Protecting Model A patents	Vol 8	pg 65
	13	pg 28
PITMAN ARM-Shortening the Model a Pitman arm	Vol 12	pg 78
RADIATOR-		
-Preventing overheating	Vol 1	pg 55
-Variations in the radiator shell and Medallion	1	pg 92
-Preventing overheating	2	pg 119
-The radiator assembly	3	pg 45
-Radiator lacing	4	pg 103
-How to test your radiator	5	pg 75
-Radiator hose colors	1	pg 16
	6	pg 2
-Radiator shell emblems	6	pg 52
-Features of the 1928-29 radiators	6	pg 107
	7	pg 4
-Radiator caps	7	pg 31
-Stainless radiator cap dent removal techniques	12	pg 17
-Radiator drain cock A-8155	7	pg 44
-Original water return pipe features	7	pg 86
-The drain cock (petcock) assembly	7	pg 106
-Motor meters and Quail radiator caps	8	pg 21, 83

-Radiator drain cocks	8	pg 34
-Features of radiator caps	8	pg 62
-Features of '28,'29 radiator caps	11	pg 34-35,44-45
	12	pg 38,80
-Radiator shell crank hole covers- design and materials	8	pg 76
	12	pg 112-113
-Quail radiator caps	10	pg 47-50
-Boyce Moto-Meter features	10	pg 64,65
-Antifreeze- chart	10	pg 93
-Flushing the radiator to reduce overheating	11	pg 30
 RADIUS RODS- rear radius rod ends	 Vol 4	 pg 82
 RESTORATION/REPAIR TIPS-		
-Restoring interior door and window handles	Vol 11	pg 59, 61-62
-Repairing with silver solder	12	pg 92-95
-The dash belt rail repair	13	pg 20
-Restoring the Model A water pump	13	pg 58
-Cosmetically restoring the 3X sparkplug	13	pg 62
-Restoring 1930 running boards	13	pg 66
 ROOF (also top)-		
-Reproduction roof drip molding	Vol 3	pg 119
-Short-long grain roof material	4	pg 64
-Cabriolet top trim binding	4	pg 82
-Replacing top material	4	pg 91
-Soft top foundation	5	pg 56
-Sport coupe top materials	6	pg 1
 RUMBLE SEAT-		
-Rumble seat conversions	Vol 2	pg 47, 64
-Relocating the lid striker plate	4	pg 45
-Rumble seat deck lids (comparing '28-29 to '30-31)	5	pg 41
-Rumble lid/handles	6	pg 51
-Rumble seat panels	7	pg 110
 SEAT BELTS-		
-Installing seat belts in a slant window fordor	Vol 11	pg 77-78
 SECURITY SYSTEMS-		
-Installing an electric security system	Vol 6	pg 54
 SEDIMENT BOWL-		
-Glass sediment bowls	Vol 4	pg 3

-The A-9155 cast iron sediment bulb	7	pg 24
-Service Bulletin- list of changes	9	pg 75

#### SHACKLES-

-Fitting original style grease fittings into replacement shackles	Vol 3	pg 73
- Early Ford-script spring shackles	7	pg 83

#### SHOCKS-

-Model A shock absorbers	Vol 1	pg 42,48
-Are your shocks rebuildable?	4	pg 100
-Tubular shock links	5	pg 24
-Tips for a better ride	5	pg 26
-Shock absorber covers	6	pg 52
-Design features of Model A shocks	7	pg 28
-Differences in shock links	7	pg 45
-Shocks and shock arms	7	pg 45,111
	9	pg 11
-Features of the HECO rear shock arm & bolts	9	pg 13
-The evolution of early shock links	9	pg 17
	12	pg 38,39,57
-Early shock absorber needle valves	10	pg 4
-Testing shock absorbers	10	pg 87
-Explanation of changes in Model A shocks	11	pg 84-89
-Features/differences in shock absorber arms	11	pg 115-118
-The Hassler Canadian shock absorber	12	pg 72-73

#### SPARK CONTROL-

-reworking spark and throttle control	Vol 1	pg 117
-replacing spark and throttle rods	12	pg 64-65
-Adjusting the spark when driving	8	pg 10

#### SPARK PLUGS-

-Champion spark plugs-1927 to 1932	Vol 6	pg 58
-Champion 3X spark plugs	6	pg 70
-Champion spark plug features	6	pg 82
-Features of spark plug/distributor connectors	7	pg 10
-An early Champion spark plug cleaner	8	pg 39
-Restoration of 3X champion plugs	8	pg 94
-Setting spark plug gap	9	pg 38
-The Dur-A-Ball spark plug	12	pg 27
-Spark plug voltage polarity	12	pg 36-37
-Cosmetically restoring the 3X spark plug	13	pg 62

## SPEEDOMETER-

-Restoring the speedometer	Vol 1	pg 15
-It measures your miles	1	pg 104
-The instrument panel and instruments	4	pg 66
-Differences in speedometer face plates	7	pg 30
-Speedometer drives	7	pg 46
-Gear and cap assemblies	7	pg 75
-1930-31 instrument panel features	8	pg 25
-Speedometer cable clips	9	pg 54
-Speedometer gear cap screws	9	pg 74
-Features of early speedometer bezels	9	pg 107
-Speedometer drive cap screws	10	pg 101
-Engine RPM/road speed chart	11	pg 6
-Installing a digital speedometer	11	pg 15

## SPINDLES-

-Spindle balls	Vol 2	pg 37
-Front spindle restoration	2	pg 42
	12	pg 52-53
-Spindle bolt locking pins	3	pg 43
	5	pg 27
	6	pg 41
-Spindle arm nuts	7	pg 60

## SPRINGS/SPRING SPREADERS-

-Lubrication for a smoother ride	Vol 1	pg 6
-Rear spring spreader	1	pg 86
-Model A springs	2	pg 50
-Assembling spring leaves	3	pg 63
-Replacing rear spring perch balls	4	pg 45
	11	pg 47
-The dummy leaf spring	6	pg 55
-Spring clamps	6	pg 95
-Front spring perch details	7	pg 60
-Spring shackles	7	pg 83
	9	pg 18
	9	pg 96
	11	pg 76
	12	pg 33
-Rear spring clamps	8	pg 97
-Converting 10 leaf tudor rear springs to a 7 or 8 leaf spring	8	pg 112
- Rebuilding front spring perch balls	11	pg 46-47
- Tools for lubricating leaf type springs	13	pg 72



## STAINLESS STEEL IN THE MODEL A FORD-

-Ford first to use stainless	Vol 2	pg 91
------------------------------	-------	-------

## STARTER-

-Removing starter bolts	Vol 2	pg 26
-Removing the starter-tips	3	pg 65
-The bendix drive	4	pg 5
	9	pg 36
-Retrieving broken bendix bolts and washers	12	pg 79
-Generators and starters	4	pg 75
-Starter switch cable terminals	5	pg 68
-Starter switch cables	5	pg 98
-Early starter switches	6	pg 92
-Early starters, Abel style	7	pg 81
-Early starter casting marks	8	pg 44
-Date codes on starter cover bands	8	pg 44
-The history and design details of starters	8	pg 78
-Starter switch designs	9	pg 72
-Repairing frayed pigtail wires	10	pg 97
-Illustrations of first generation starters, rods, and switch bodies	11	pg 64

## STEERING-

-Steering gear lubrication	Vol 1	pg 38
	6	pg 46
	9	pg 60
-Two tooth steering gear	2	pg 76
-Seven tooth steering gear	2	pg 93
-The steering gear- chronological changes/ variations	2	pg 97
-Steering shaft lower bearing	3	pg 42
-Repairing a broken steering shaft	3	pg 118
-Steering column repair tips	4	pg 6
-Steering adjustment	4	pg 116
-Steering balls, plugs, and caps	5	pg 107
-Restoring the Model A steering column		
Part 1	6	pg 100
Part 2	6	pg 109
Part 3	6	pg 117
Part 4	7	pg 1
-Restoring spark and throttle rods	12	pg 64-65
-Rubber gaskets for the steering column	6	pg 106
-Repairing the horn rod	8	pg 9
-Examples of late steering column support brackets	8	pg 96

-Steps to improving steering	10	pg 10-16
-Evolution of the steering arm (Pittman arm)	10	pg 27,28
-Steering column floor plates-rubber, felt and metal	10	pg 61,62
-Rebuilding steering and pitman arms	11	pg 19-22
-A warning of rebuilt steering arm (ball) failure	12	pg 16-17
-Building a steering worm installation tool	11	pg 102
-Restoring front wheel spindles	12	pg 52-53
-Shortening the Model A pitman arm	12	pg 78
 STEP PLATES-		
-Step plates for the Model A	Vol 3	pg 122
	7	pg 81
-Rear fender and bumper step plates and pads	12	pg 28-29
 STORAGE-		
-Winterizing the Model A	Vol 3	pg 109
	12	pg 41
SQUEAKS- Tips about squeaks	Vol 4	pg 55
 THROTTLE CONTROL-		
-Reworking spark and throttle controls	Vol 1	pg 117
	12	pg 64-65
 TIMING-		
-Engine timing	Vol 2	pg 71
-Model A valve timing	5	pg 95
-Potential problems with timing gears	8	pg 61
 TIRES-		
-Tire size and gear ratios	Vol 7	pg 57
-Truing your tires	7	pg 117
-Tips for mounting tires w/o damaging wheel	8	pg 64
 TOOLS-		
-Rear spring spreader	Vol 1	pg 86
-Service equipment for the Model A garage	1	pg 118
-The Model A tool kit	3	pg 52
-Spring hanger tool	3	pg 63
-K.R.Wilson tools	5	pg 43
-Engine rebuilding-KR Wilson process	5	pg 60
-Early grease guns	6	pg 56
-Spark plug wrenches, hand cranks,and tire pumps	6	pg 91
-Open end wrenches (Model A vs. V-8)	6	pg 106
	9	pg 45
-The Model A tool bag	7	pg 33

	12	pg 34-35
-Pliers	7	pg 95
-Tire pumps	8	pg 42
	12	pg 11-12
-Comparing A and T tire pump handles	10	pg 103
-Adjustable wrenches	8	pg 42
-Wheel jack markings	8	pg 25
-Features of various wheel jacks	8	pg 55,76
	12	pg 82-83
-Early Model A jacks	10	pg 10
-A brake link regrind guage	8	pg 77
-Cowl lamp marking tool	9	pg 35
-Measuring blocks/gauges	9	pg 39
-Shift lever spring removal tool	9	pg 74
	12	pg 74-77
-Proper use of tools	10	pg 22-23
-A list of tools needed for touring emergencies	10	pg 25
- Fabrication of a rear wheel hub puller	11	pg 31
-Model A tools and instruction books	11	pg 40
-Tools for front backing plate bolts	11	pg 65
-A steering worm installation tool	11	pg 102
-Valve stem installation wrenches	12	pg 111
-A tool for locating the side mount	13	pg 1
-A gear shifter repair tool kit	13	pg 5
-A clevis-pin cotter-key tool	13	pg 19
-Naval jelly for glass cleaning	13	pg 23
-A light switch retainer clip tool	13	pg 42
-A differential assembly stand	13	pg 57
 TOPS AND TOP RESTS-		
-Replacing top material	Vol 4	pg 91
-Roadster top rests, straps, and window frame cushions	4	pg 108
-Soft top foundation panels	5	pg 56
-Tops and side curtain materials and design	8	pg 86
 TRANSMISSIONS-		
-The clutch and transmission	Vol 2	pg 106
-Replacement flywheel pilot bearing	4	pg 48
-The Model A transmission	5	pg 1,11,15,20
-The reverse idler shaft collar	6	pg 34
-Transmission lubricants and shifting	7	pg 108
-The Model A transmission- a comprehensive overview	9	pg 4
-Building a transmission stand	10	pg 90
-Repairing the worn transmission input shaft	12	pg 90

## TRANSMISSION SHIFT TOWER/LEVER-

-Replacing the shift lever	Vol 2	pg 58
-Method for installing the shift lever spring	5	pg 23
-Gear shift knobs	7	pg 29
-Shift lever spring removal tool	9	pg 74
-Rebuilding the Model A shift assembly	11	pg 27-29
-Restoring the gear shift lever ball	11	pg 68-69
-A fixture for rebuilding the shift assembly	12	pg 74-77
-A gear shifter rebuild tool kit	13	pg 5

TRUCKS -AA- see car/truck reviews at back of index

## TURN SIGNALS-

-Turn signal for safety	Vol 1	pg 110
-------------------------	-------	--------

## UNIVERSAL JOINT-

-Noisy universal joints	Vol 2	pg 13
-------------------------	-------	-------

## UPHOLSTERY-

-Do it yourself instructions	Vol 5	pg 4
-Window shades	6	pg 22
-Headliners	6	pg 47
-Upholstery construction details	7	pg 48
-Early rumble seat panels	7	pg 110

## UPHOLSTERY-Cont'd

-Fasteners	Vol 11	pg 94
-Dovetail cutout bezels	12	pg 80-81
-Determining correct curves for upholstery	13	pg 64

## VALVE STEMS-

-1928-29 valve stems and hardware	Vol 5	pg 82
-1930-31 valve stems and hardware	5	pg 91
-Valve stem details	5	pg 118
-Valve stem hardware	6	pg 41
	7	pg 5
-Valve stem dust covers	6	pg 66
	7	pg 83
-Valve stem features	6	pg 90
-Schrader valve stems	6	pg 93
	9	pg 18
-Installing metal valve stems	10	pg 41-43
-Comparing A and T valve stems	10	pg 102,103
-Truck valve stems	12	pg 56,112,113
-Valve stem installation wrenches	12	pg 111

-Valve stems- comparisons, features	13	pg 3,16,40
VALVE TIMING-		
-Valve timing	Vol 5	pg 95
-Valve adjustment	8	pg 46
-Setting tappet clearance to minimize noise	8	pg 69
VOLTAGE-		
-The Model A ignition	Vol 1	pg 61
-Troubleshooting the electrical system	1	pg 69
-The generator cut-out	3	pg 25,26
-Signs of excessive voltage	4	pg 3
WATER PUMP-		
-Improving water pumps efficiency	Vol 1	pg 60
-Water pumps and fan blade	2	pg 60
-Water pumps and fan blade (reprint)	4	pg 10
-Water pumps-comprehensive article	4	pg 33
-Teflon lubricant	4	pg 83
-Leakless water pump seal	5	pg 105
-Leakless water pumps	7	pg 98
-Brass packing nuts, original to '28-'29s	8	pg 22
-Restoring the Model a water pump	13	pg 58
WHEELS-		
-The Ford steel spoke wheel	Vol 4	pg 42
-Wheels, tires, and hubcaps	4	pg 43
-Side wheel carrier	4	pg 52
-Tool for locating the splash apron hole for the carrier	12	pg 114
-Front wheel shimmy	5	pg 28
-Restoring the Model A wheel	6	pg 75,79,87
-Wheel lug types	6	pg 114
	11	pg 74-75
-Early Firestone innertube markings	7	pg 5
-Early 1928 wheels	7	pg 10
-Cautions in interchanging early and late Model A front wheel hubs	7	pg 43
-Getting the correct wheels for AA trucks	7	pg 93
-Early truck lug nuts	8	pg 19
-Dating of wheels by manufacturers	8	pg 52
-Tips for mounting tires w/o damaging wheels	8	pg 64
-Cleaning and repacking front wheel bearings	9	pg 23
-Evolution and markings of wheels	9	pg 26
-Rear spare wheel carrier assemblies	9	pg 81
-Discussion of lug nut thread compatibility		

-and safety considerations	10	pg 18-23
-Locking lug nuts	10	pg 29
-Procedure for removing a spinning lug nut	12	pg 25
-Balancing 21 inch wheels prior to mounting	12	pg 41
-Building a test stand to check wheels for straightness and trueness	12	pg 58
-Truing up front and rear hubs	12	pg 91
<b>WINDSHIELD-</b>		
-Windshield seal on closed bodies	Vol 4	pg 82
-Windshield finger clips (pulls)	9	pg 72
	10	pg 30
<b>WIPER MOTORS-</b>		
-Oiling the Trico vacuum wiper motor	Vol 3	pg 99
-Vacuum wiper line clips	3	pg 105
-Oiling the wiper motor	5	pg 40
-Overhaul of the Trico vacuum motor		
A-17508 for closed cars	6	pg 96
-Preventive maintenance and repair for vacuum wiper motors	6	pg 116
-Repairing a broken wiper body	9	pg 98
-Trico- large logo markings	10	pg 56
-Repairing wiper armatures	11	pg 41-42
<b>WIRING-</b>		
-Wiring fixes with modern connectors	Vol 5	pg 81
-Light switch assemblies	7	pg 81
	8	pg 59
-A simplified wiring diagram for starting the Model A	7	pg 90
-Terminal box nuts	7	pg 103
-Wiring clips	8	pg 96
-Modern wiring connectors	9	pg 91
-Explanation of the Model A wiring system	9	pg 110
-Early metal wiring harness tags	12	pg 32-33
-Use fuses for safety	13	pg 51
<b>WOOD-</b>		
-Wood header repair	Vol 3	pg 7
- Determining correct curves and taper for wooden parts	13	pg 64

## CAR/TRUCK REVIEWS-

### 1928-29

-Sport Coupe	Vol 1	pg 19
-Phaeton	1	pg 23
-Pickup	1	pg 39
-Business Coupe	1	pg 52
-Two Window Fordor	1	pg 78
-Special Coupe	1	pg 83
-Panel Delivery/Deluxe Delivery	1	pg 95
-Roadster	1	pg 105
-Cabriolet	2	pg 111
-Tudor	3	pg 82
-Taxi Cab	3	pg 100
-Town Car	3	pg 75

### 1930-31

-1931 Slant Windshield Sedan	Vol 1	pg 29
-Sport Coupe	1	pg 32
-Victoria	1	pg 46
-Deluxe Phaeton	1	pg 58
	10	pg 44-46
-Pickup	1	pg 64
-1931 Wide bed Pickup	8	pg 11
-Convertible Sedan 400-A	1	pg 73
-Deluxe Fordor Sedan	1	pg 78
-Two Window Fordor	1	pg 78
-Tudor	1	pg 87
-Deluxe Delivery, Town Car Delivery, and Special delivery	1	pg 112
	4	pg 115
-Panel Delivery	2	pg 4
-Coupe	2	pg 17
-Coupe (letter to the Editor)	3	pg 24
-Cabriolet	2	pg 111
-Town Car	3	pg 75
-1931 Slant Windshield Deluxe Pickup	9	pg 92
-The 20 Millionth Ford	10	pg 2

## SNOWMOBILES-

Vol 2	pg 108
-------	--------

## TRACTORS-

Vol 3	pg 34
9	pg 85

## CANADIAN MODEL A's-engine nos. and prod. dates

-Hassler Canadian shock absorbers	Vol 5	pg 55
	12	pg 72

## AA TRUCKS-

-Stake trucks, 1928-29	Vol 4	pg 22
-Stake trucks, 1930-31	3	pg 111
-Standrive Delivery Trucks	8	pg 1
	9	pg 109
-Miscellaneous AA trucks-types and bodies	8	pgs 4,15
-Early truck lug nuts	8	pg 19
-Early truck hubcaps, mirrors, cranks, and lug wrenches	8	pg 20
-1931 AA Police paddy wagon	8	pg 27
-Performance specifications for AA trucks	8	pg 37
-A detailed overview of AA's	8	pg 70
-Steel tea cup tail lamp shells for trucks	8	pg 109
-New truck driving/maintenance instructions	12	pg 32
-Stems for truck wheel rims	12	pg 56,112,113
-Early Model A trucks- Great Britain	12	pg 97
-The Dual-Wheeled AA brake pedal	13	pg 9