NASH

OWNER'S MANUAL

3540 *Series*

DERMIT only the installation of Genuine Nash Parts.

All Nash Parts are manufactured with the same care and precision exercised in the production of parts from which your car was constructed.

That means exact dimensions, uniform hardness and the best of materials.

Substitution may be dangerous.

INSIST UPON

GENUINE PARTS

No.

THE NASH MOTORS CO.

KENOSHA, WIS., U. S. A.

To the Owner of this NASH

WE ARE pleased that your judgment of motor car value led to the purchase of this Nash. You will find the car simply and substantially constructed. Your purchase will be justified by the many miles of economical service and pleasure you will receive.

In preparing this Manual for you we have made a conscientious effort to handle the subject in a manner that will enable you to understand thoroughly the construction of your car and the simple maintenance necessary to obtain the results you expect. We cannot urge you too strongly, in your own interests, to follow with exactness the directions given in this book on the care of the car.

Visit Authorized Nash Service Stations for all maintenance and repair service. Their mechanics are factory trained and understand well the construction, lubrication and adjustment of the car.

Authorized Nash Service Stations everywhere are prepared to render quick, courteous service to the Nash owner away from home. They will appreciate your call on them for any information or service you may need while you are touring.

We share your pride in the Nash and covet for you, as you become more familiar with the car and the service it will give, a continuance of this high regard both for the car and for its makers.

THE NASH MOTORS COMPANY
KENOSHA, WIS., U. S. A.

Warranty

"THE manufacturer warrants that each new motor vehicle (including original equipment placed thereon by the manufacturer, except tires), chassis or part manufactured by it is free from defects in material or workmanship under normal use or service, its obligations under the warranty being limited to making good at its factories any part or parts thereof which shall within ninety days after delivery of the vehicle to the original purchaser, or before such vehicle has been driven 4,000 miles, whichever event shall first occur, be returned to its factories with transportation charges prepaid, and which are determined by the manufacturer to have been defective in material or workmanship, or will put such parts in condition as good as new without charge.

"This warranty being expressly in lieu of all warranties, expressed or implied, and of all other obligations or liabilities on the part of the manufacturer, and the manufacturer neither assumes nor authorizes any person to assume for it any liability in connection with Nash motor vehicles, or the sale thereof, or any other matter.

"This warranty shall not apply to any Nash vehicle which shall have been altered or repaired outside of an authorized Nash service station in any way that in the judgment of the manufacturer would affect its stability or reliability or which has been subject to misuse, neglect, or accident."

The manufacturer reserves the right to make changes in design or add any improvements on motor vehicles and chasses at any time without incurring any obligation to install same on motor vehicles and chasses previously purchased.

THE NASH MOTORS COMPANY
KENOSHA, WIS.

Contents

License Data

Car Serial Number—On frame on right side under hood.

Engine Serial Number—On plate on engine at front below valve cover plate.

Car Serial and Engine Number also shown on caution plate on left front door corner post.

Body Number—On dash right side under hood.

Cylinder Bore—3⅜".

Piston Stroke—4⅜".

Number of Cylinders—6.

S.A.E. (N.A.C.C.) Horsepower Rating—27.34.

Piston Displacement—234 cubic inches.

Wheelbase—117".

Technical Information

Engine

Type—L-head—6 cylinders cast en bloc.

Developed Horsepower—90 at 3400 R. P. M.

Compression Ratio—5.58 to 1.

Firing Order—1-5-3-6-2-4.

Oil Pan Capacity—7 quarts.

Crankshaft—7 Main Bearings—Hollow Crank Pins—statically and dynamically balanced—4 counterweights integral with shaft.

Main Bearings—Steel backed babbitt lined shells. Replaceable without removing crankshaft. No reaming or scraping.

Main Bearing Clearance—.002".

Main Bearing End Play—Center Main—.004" to .007".

Vibration Dampener—Inertia type—Non-adjustable.

Flywheel—Cast iron—steel starter gear—balanced as a unit with crankshaft and vibration dampener.

Connecting Rods—Forged Steel.

Lower Bearings—Steel backed babbitt lined shells—Easily replaceable—No reaming or scraping.

Lower Bearing Clearance—.002" to .003". One shim on camshaft side only. Do not file caps.

Lower Bearing Side Clearance—.008" to .012".

Connecting Rod Upper Bushing—Bronze.

Piston Pin Fit in Connecting Rod Bushing—Light push fit—both parts cold.

Pistons—Aluminum with Invar Strut.

Clearance in Cylinder at Skirt of Piston—.002" measured with Steel Thickness Gauge.

Piston Pin Fit in Piston—Light push fit—piston heated.

Piston Rings—
2—1/8" Compression Rings.
1—1/8" Oil Control Ring.
1—3/16" Oil Control Ring.

Piston Ring End Gap—.010"-.025".

Camshaft—Forged Steel.

Camshaft Drive — Non-adjustable double strand chain—2 sprockets.

Camshaft Bearings—6.

Valves—
Exhaust—Silchrome No. 1 steel.
Intake—Chrome nickel steel.

Valve Head Diameter—
Exhaust—1-17/32".
Intake—1-21/32".

Valve Seat—45° angle—1/16" wide.

Valve Tappet Clearance—Intake and exhaust .015". Measure with engine hot or cold.

Engine Lubrication—Full pressure to main bearings, camshaft bearings, connecting rod bearings, piston pins, and full pressure spray to cylinder walls. Splash and gravity feed to all other parts.

Oil Pump—Gear—Shaft driven from camshaft.

Cooling System

Circulating Pump—V belt drive.

Radiator—Turbo-Tube.

Fan—4 Blades—Fan shaft bearing lubricated by inbuilt oil circulating pump.

Thermostat—Balanced type located in cylinder head water outlet connection.

Cooling System Capacity—
18 Quarts.

Cooling System Drain—At bottom of radiator. Also plug on rear left side of engine block.

Fuel System

Carburetor — Stromberg Down-Draft.

Air Cleaner—Flame arrester, Silencer Type.

Gasoline Tank Capacity—15+Gallons.

Fuel Feed—Fuel pump driven from camshaft.

Electrical Units

Igniter—Auto-Lite.

Spark Control—Full automatic.

Ignition Timing and Adjustment—
(See page 21).

Spark Plug Gap—.025".

Generator—Auto-Lite.

Charging Rate—Maximum—22 Amperes at generator—generator hot

Charging Rate Regulation — Third brush.

Field Fuse—7½ Amperes—Located under small cover ahead of brush cover band.

Starting Motor—Auto-Lite.

Starter Control—Operated by clutch pedal.

Drive—Bendix—Eclipse.

Lamp Bulb Specifications

		C.P.	Base	Voltage
Head		32-21	D.C.D.F.	6-8
	Pre-Focused Flange Base Type			
Parking		3	S.C.	6-8
Rear Stop	1 bulb	3-21	D.C.D.F.	6-8
Dash		3	S.C.	6-8
Dome		4	D.C.	6-8

Lighting Circuit Fuse—20Amperes. On fuse block on light switch back of instrument panel.

Battery

U.S.L.—K.W.—13-A 13 Plate.

Clutch

Type—9½" Single Plate. Cushioned.

Clutch Pedal—Free movement at toe board—½" minimum.

Universal Joints

Front and Rear—All metal—needle bearings. Lubricant sealed in.

Rear Axle

Hotchkiss Drive — Semi-Floating axle drive shafts. Timken Bearings at outer end of axle shaft. Adjusted with shims under brake support plates.

Axle Drive Shaft End Movement—.003" to .006".

Ring and Pinion Gears — Spiral Bevel.

Pinion Shaft and Differential Side Bearings—Timken.

Pinion Shaft End Play—Zero—Adjusted with shims between inner bearing cup and housing.

Front Axle

Type—One piece drop forged I beam. Reversed Elliott with 7° inclined knuckle pins.

Knuckle Pin Bearings—
Upper and Lower—Bronze.
Thrust—Ball Bearing.

Caster Angle—0° to 1°.

Cambre Angle—0° to 1½°.

Front Wheel Toe-In—⅛" maximum.

Brakes

Type—Two shoe—Hydraulic.

Steering Gear

Cross Shaft End Play—Zero when front wheels are straight ahead. Adjusting screw and lock-nut on back of steering gear housing cover.

Steering Column End Play—Zero—Adjust with shims under cover on bottom of gear housing.

Mesh of Roller in Worm—Adjust with shims.

Tires

Size	Tire Pressure
16x6.00	30 lbs.

Car Keys

Number of each lock stamped on keys for that lock. Note your key number on license or identification cards. Duplicate keys supplied only by number.

Anti-Freeze Solutions

For protection in cold weather, the following anti-freeze solutions and the proportions to use are suggested:

Radiator Capacity 18 Qts.	For protection down to 0° F. Add	For protection down to —10° F. Add	For protection down to —20° F. Add
Alcohol	8 Qts.	9 Qts.	10 Qts.
Glycerine (G.P.A.)	13 Qts.	15 Qts.	17 Qts.
50% Alcohol 50% Glycerine	8 Qts.	9 Qts.	10 Qts.
Ethylene Glycol (Prestone)	7 Qts.	8 Qts.	9 Qts.

Temperatures given are approximately the freezing point of the solution. Precautions should be taken in the use of alcohol solutions that they are not splashed on the car finish as they will damage it.

At the time anti-freeze solutions are added the cooling system should be thoroughly flushed out and all defective and leaking hose and connections repaired. The cooling system should also be flushed at the time anti-freeze solutions are drained out in the spring.

Note: Radiator Cap must be removed when drains are opened to insure complete draining as the overflow check valve may retard flow of water from radiator. Radiator cap is of the sealed cooling type and care must be taken in replacing cap to see that valves in cap are seated on their base. Misalignment of these valves will destroy the sealing function and cause loss of water.

Hood Service Door

For convenience in putting oil or water in the engine a hood service door is provided at the front of the hood. The oil filler pipe cap is marked "Oil" and care should be exercised when filling the radiator that water is not inadvertently put into the "Oil" filler cap.

License Information and Specifications for British Imperial and Metric Measurements

Description	British Imperial	Metric
Number of cylinders	6	6
Cylinder bore diameter	3⅜"	85. M.M.
Stroke of piston	4⅜"	111 M.M.
Piston Displacement	234 C. in.	3.8 L.
Horsepower rating (S.A.E.)	27.34	27.34
Wheelbase	117"	2.97 M
Gasoline tank capacity	13+gals.	60+L.
Radiator capacity	15 qts.	17 L.
Engine oil capacity	5¾ qts.	6 L.
Tire Size	16x6.00	406.4x152.4 M.M.
Transmission oil capacity	4 lbs.	1.8 Kg.
Rear axle oil capacity	3 lbs.	1.4 Kgs.
Tire pressure 16x6.00 Tire	30 lbs.	2.1 Kgs.

Driving Information

The operation of the clutch, transmission shift, brakes, and steering follows conventional practice. Should any difficulty be encountered in handling the car, consult with an authorized Nash Dealer.

THE STARTING MOTOR is placed in operation by fully depressing the clutch pedal. Care should be exercised in not fully depressing clutch after motor is running.

THE HAND BRAKE can be applied more securely and released more easily if the foot brake pedal is depressed at the same time.

THE LIGHT SWITCH is located on the instrument panel and the lights are controlled by moving the button in or out. The dimmer switch is located on the toe board to the left of the clutch pedal. It is operated by pressing it with the foot.

STARTING COLD MOTOR is best accomplished by pulling out the throttle button on instrument panel far enough to give good motor speed, pulling choke button out all the way for 2 to 5 seconds while starter is engaged and then returning the choke button about ½ inch. A little practice along this line will enable you to start the engine in the coldest weather without trouble.

Caution: *When starting cold motor, do not race it or attempt high car speeds with motor cold. Cold oil is thick and may not lubricate properly some parts of the motor. Allow sufficient time for the oil to warm up before racing engine.*

A CAUTION PLATE, on the left front corner post of the body and visible when the door is open is for your information and convenience. On it you may note in pencil the speedometer reading and date of the various services performed at definite intervals of either time or mileage.

HOOD SERVICE DOOR. For convenience in filling radiator or putting oil in engine a hood service door is provided—See page 9.

Recommendations During Running-In Period

Drive with care. Avoid unnecessary speed in low and second gears. Avoid racing the engine.

Nash motors are constructed with minimum friction at all points and special running-in oil is not needed or recommended.

First 250 miles: Do not exceed 30 M.P.H.

250 to 500 miles: Do not exceed 40 M.P.H.

500 to 1,000 miles: Do not exceed 50 M.P.H.

Do not run with wide-open throttle and top speed until at least 2,500 miles are on car.

Inspect water daily or, on long trips, at every filling of gasoline.

Inspect engine oil daily or, on long trips, at every filling of gasoline.

At end of first 500 miles have free inspection rendered by dealer.

At end of first 1,500 miles have second free inspection and adjustment rendered by dealer.

Within 5 days after purchase of car have the storage battery registered by your dealer with the authorized battery service station. This will make the storage battery guarantee effective.

Fill storage battery with distilled water every two weeks.

Recommendations After Running-In Period

All services should be performed by an Authorized Nash Service Station using preferred equipment and following factory procedures.

Lubricate car every 1,000 miles—Use Nash approved lubricants.

Change oil every 1,000 miles.

Have dealer make free inspection every 1,000 miles.

Inflate tires every week.

Fill battery with distilled water every two weeks.

Check water in radiator and oil in motor at every filling of gasoline.

Clean air cleaner every 3,000 to 5,000 miles.

Clean gasoline strainer on fuel pump every 3,000 to 5,000 miles.

Check fan belt adjustment every 3,000 miles.

Change transmission and rear axle oil every 5,000 miles.

Tune motor and inspect all chassis parts for looseness, such as wheel bearings, etc., every 5,000 miles. Tighten car.

Flush and clean entire cooling system at least once a year.

Renew spark plugs every 10,000 miles.

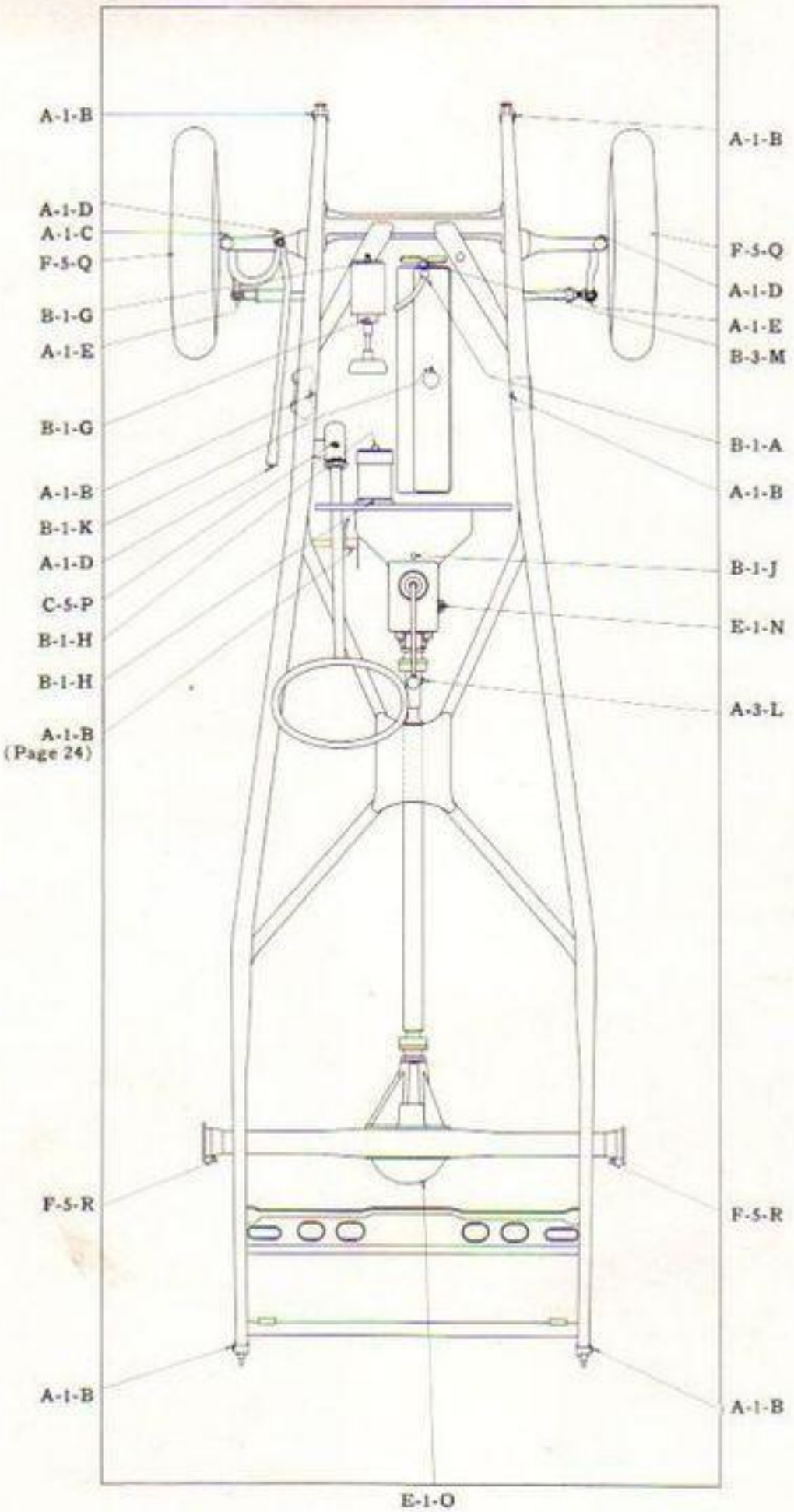
In addition, immediately call to the attention of an Authorized Nash Service Station any unusual or peculiar condition of operation that becomes evident to you.

The above several suggestions are made with your interests in mind. A systematic plan for caring for the car will afford the most economical and satisfactory service from it.

Caution — Draining Cooling System

If car is stored during winter months, and cooling system is drained, be sure and drain at bottom of radiator *and also at drain plug on left side of engine at rear.*

LUBRICATION CODE



Third Letter—
See such paragraph in following pages for complete information.

Numeral—
Intervals of Mileage
1—1000 Miles
3—3000 Miles
5—5000 Miles

First Letter
Type of Lubricant
E—Nash Approved Lubricant
F—Wheel Bearing Lubricant

A—Heavy Oil
B—Motor Oil
C—Steering Gear Oil

Motor Oil

—A—

Capacity 7 Qts. Use SAE-30 in warm and hot weather. Use SAE-20 low cold test in cold weather.

To put oil in engine, raise hood service door at front of hood and pour oil into long filler pipe. The oil filler pipe has a cap which is marked "Oil."

The engine oil level can be determined from the driver's seat by means of the combination oil level and fuel gauge (1). When the switch (2) is in normal (out) position the gas gauge is operating. To operate oil level gauge on dash, hold in switch with finger and read amount on gauge. When finger is removed from switch, gas gauge is again in operation. The gauge does not operate unless ignition switch is turned on. To check quantity of oil in quarts, a blade type gauge (3) is provided on left side of motor. To use this stop engine, withdraw gauge blade (3), wipe off oil, re-insert and again withdraw blade; note height of oil on blade. Each quarter-inch drop below "Full" indicates consumption of about one quart. Keep oil to "Full" mark.

Change oil every 1,000 miles. (500 miles in extremely cold weather if there is evidence of excessive gasoline in the old oil due to unusual use of the carburetor choke.)

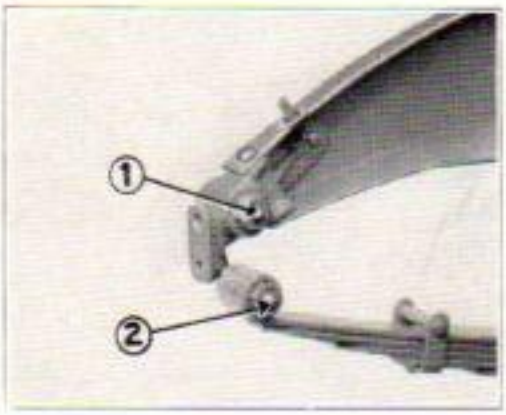
Remove oil pan and clean oil lines and pump screen every 10,000 miles.

Occasionally observe oil pressure gauge (4) on instrument panel while driving. Pressure must show when engine is running.

Spring Shackles and Bolts

—B—

11 Points. Right front spring front shackle shown. Rear end of right front spring, one place. Front end of left front spring, two places. Rear end of left front spring, two places. Rear end of rear springs, two places each. The front end of the rear springs are supported by rubber and no lubrication is needed.



Brake Pedal Shaft, one oiler.

Lubricate every 1,000 miles.

Use heavy oil in pressure gun.

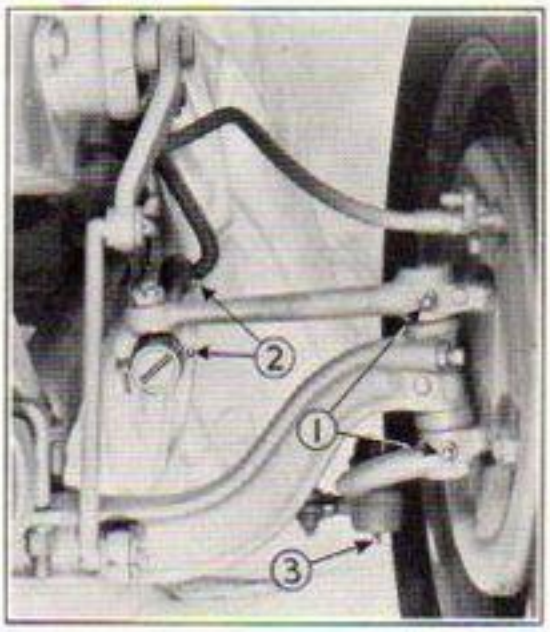
Steering Knuckles
—C—

4 Points. (No. 1 on picture.)

Use heavy oil in pressure gun.

Lubricate every 1,000 miles.

More rapid results will be obtained if the wheels are jacked up when lubricating the steering knuckles. The wheels should be turned from right to left to free up the bearings if the oil does not carry through both the upper and lower bearings.



Drag Link Ball Joints
—D—

2 Points. (No. 2 on picture.)

Use heavy oil in pressure gun.

Lubricate every 1,000 miles.

Tie-Rod Ends
—E—

2 Points (No. 3 on picture.) Use heavy oil in pressure gun.

Lubricate every 1,000 miles.

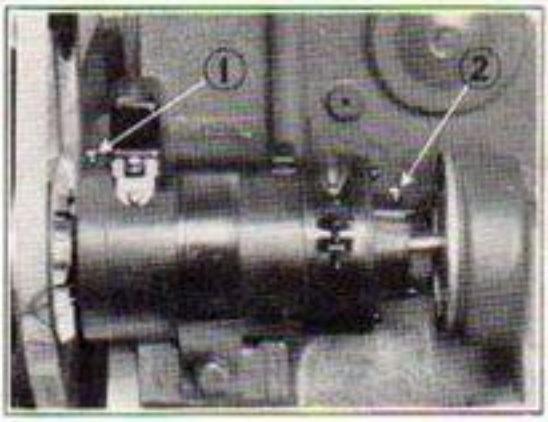
Generator
—G—

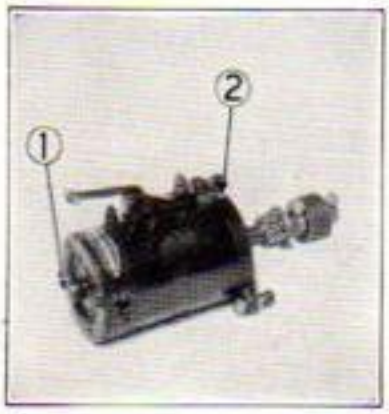
2 Points (No. 1 and 2 on picture.)

A few drops of light oil in oil cups.

Lubricate every 1,000 miles.

Do not over-lubricate as excess oil will get on commutator and destroy armature.





Starter

—H—

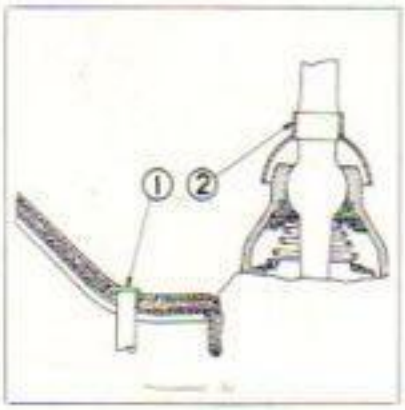
2 Points. (No. 1 and 2 on picture.)

A few drops of light oil in oil cups.

Lubricate every 1,000 miles.

Oil hole in end cap is covered with small plate which must be forced to one side with small screw driver. Do not over-oil.

The Bendix Starter mechanism, shown on the end of the starting motor, works better when not lubricated and when it is clean and dry. The use of oil may cause the Bendix gear to spin without engaging the starter gear on the flywheel.



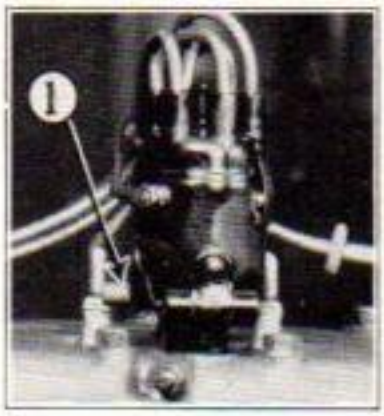
Clutch Bearing

—J—

A few drops of motor oil in oil cup (1).

Lubricate every 1,000 miles.

Oil cup is located just ahead of the gear-shift and is reached through a hole in the floor mat. Do not over-lubricate this bearing, as surplus oil may get on clutch facings and cause difficulty in operation.



Igniter

—K—

1 Point.

A few drops of light oil in oil cup (1).

Lubricate every 1,000 miles.

See also Page 21 for additional points requiring lubrication that are taken care of during ignition timing procedure. Provided the ignition points are adjusted and lubricated as often as recommended on Page 21 no attention is required, except the few drops of oil in the oil cup every 1,000 miles.

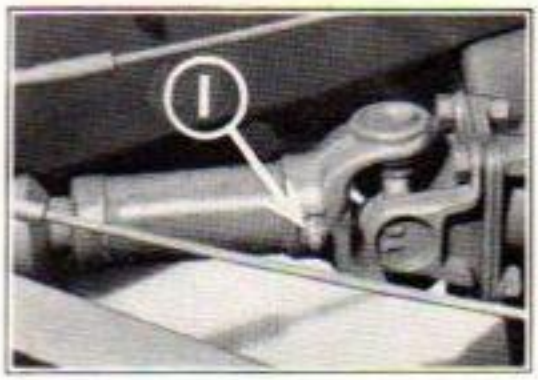
Universal Joints
—L—

1 Fitting (1) on front joint.

This lubricates splines on front joint. Use heavy oil.

Lubricate every 3,000 miles.

Universal Joint Bearings are self-lubricating.



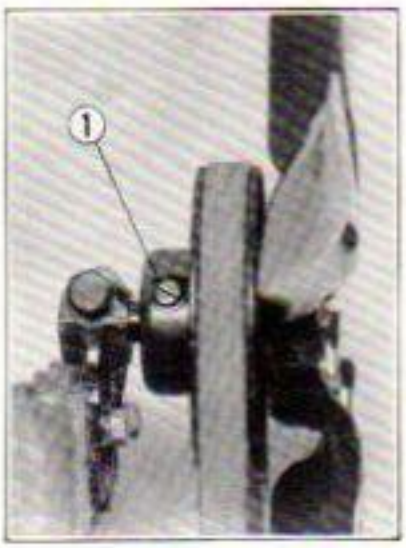
Fan Bearings
—M—

Use motor oil. Do not permit the use of non-fluid or thick viscous lubricants in the fan. The oil circulating pump which is built into the fan will not circulate an oil less fluid than motor oil.

Remove filler plug (1). Slowly inject oil until it drips from the bottom of the shaft at the rear of the fan housing. Use nothing but motor oil in fan.

Lubricate every 3,000 miles.

Occasionally tighten the bolt which clamps the fan shaft in the support bracket.



Transmission
—N—

Remove level plug (1) and examine quantity and condition of oil every 1,000 miles.

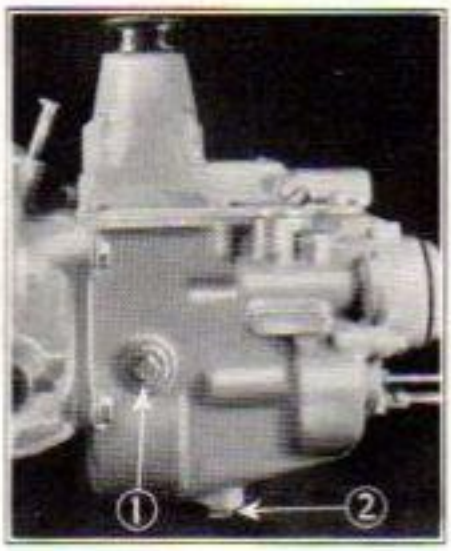
Change oil every 5,000 miles.

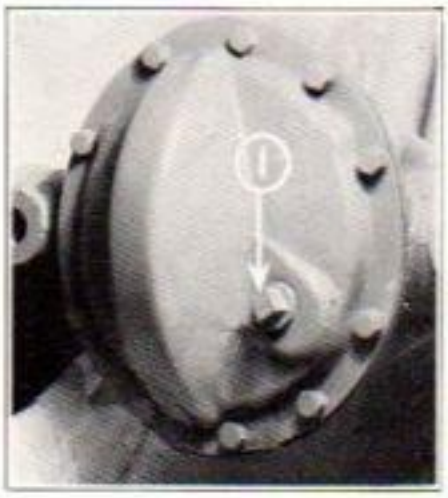
Drain at plug 2.

Fill to level of plug 1.

Use only Nash approved oil, S.A.E. No. 90 E.P. This is important. Consult your dealer.

Capacity of transmission—4 pounds.





Rear Axle

—o—

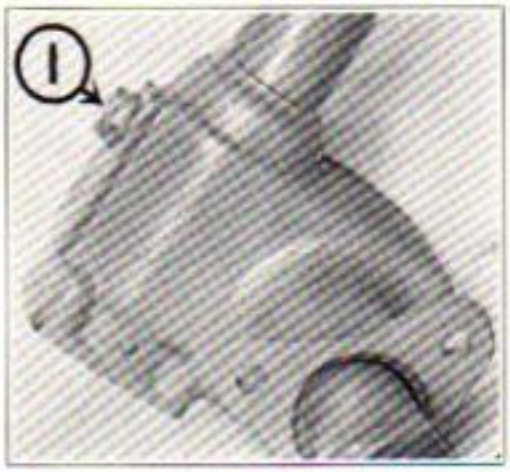
Remove level plug (1) and examine quantity and condition of oil every 1,000 miles.

Change oil every 5,000 miles. Remove drain plug, flush and renew oil.

Fill to level of plug (1).

Use only Nash approved oil, S.A.E. No. 90 E.P. This is important. Consult your dealer.

Capacity of real axle—3 pounds.



Steering Gear

—P—

Use steering gear oil.

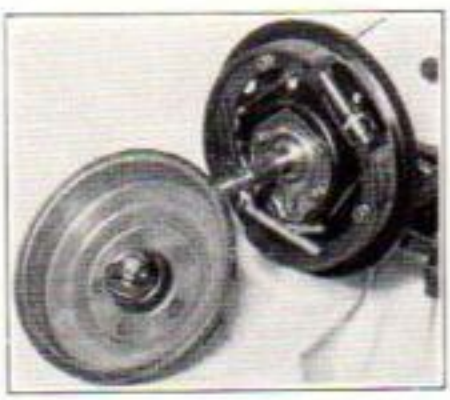
Fill through plug (1).

Lubricate every 5,000 miles.

If the oil in the steering gear gets too low a rattle may occur. Refilling to the level of the filler plug with correct lubricant will eliminate such noises. If the steering wheel turns excessively hard in extremely cold weather it will indicate the oil in the steering gear is too heavy, and it can be thinned out by adding a small quantity of very light motor oil or a similar diluent.

Front Wheel Bearings

—Q—



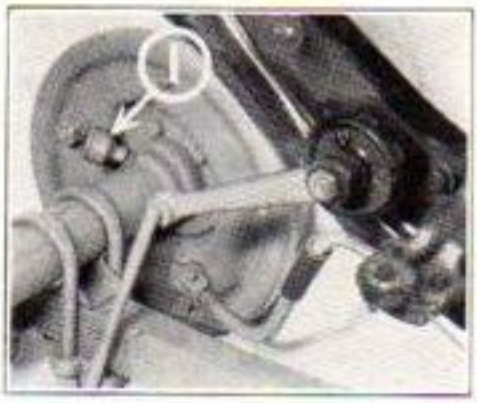
Use wheel bearing grease.

The inner bearing is retained by the steel grease retainer and the retainer and bearing must be driven out with a long punch extended through the hub. Both bearings should be removed and cleaned with gasoline and repacked with fresh grease. Do not place grease in hub caps as this does no good and may get onto the brake linings if there is too much of it.

Repack front wheel bearings every 5,000 miles.

Rear Wheel Bearings

—R—



Use wheel bearing grease.

Fill grease cup (1) at each end of rear axle housing and screw down. One or two grease cupfuls should be sufficient.

Lubricate every 5,000 miles.

Spring Covers

Front and rear springs have special inserts between the leaves and springs require no lubrication. Springs are rubber covered to exclude dirt and for this reason spraying of oil on springs is not necessary and should be avoided. Oil or grease allowed to remain on covers may cause deterioration of the rubber.

Miscellaneous

Occasionally lubricate the following parts:

Oil or grease hood lacing at dash.

Oil hood hinges.

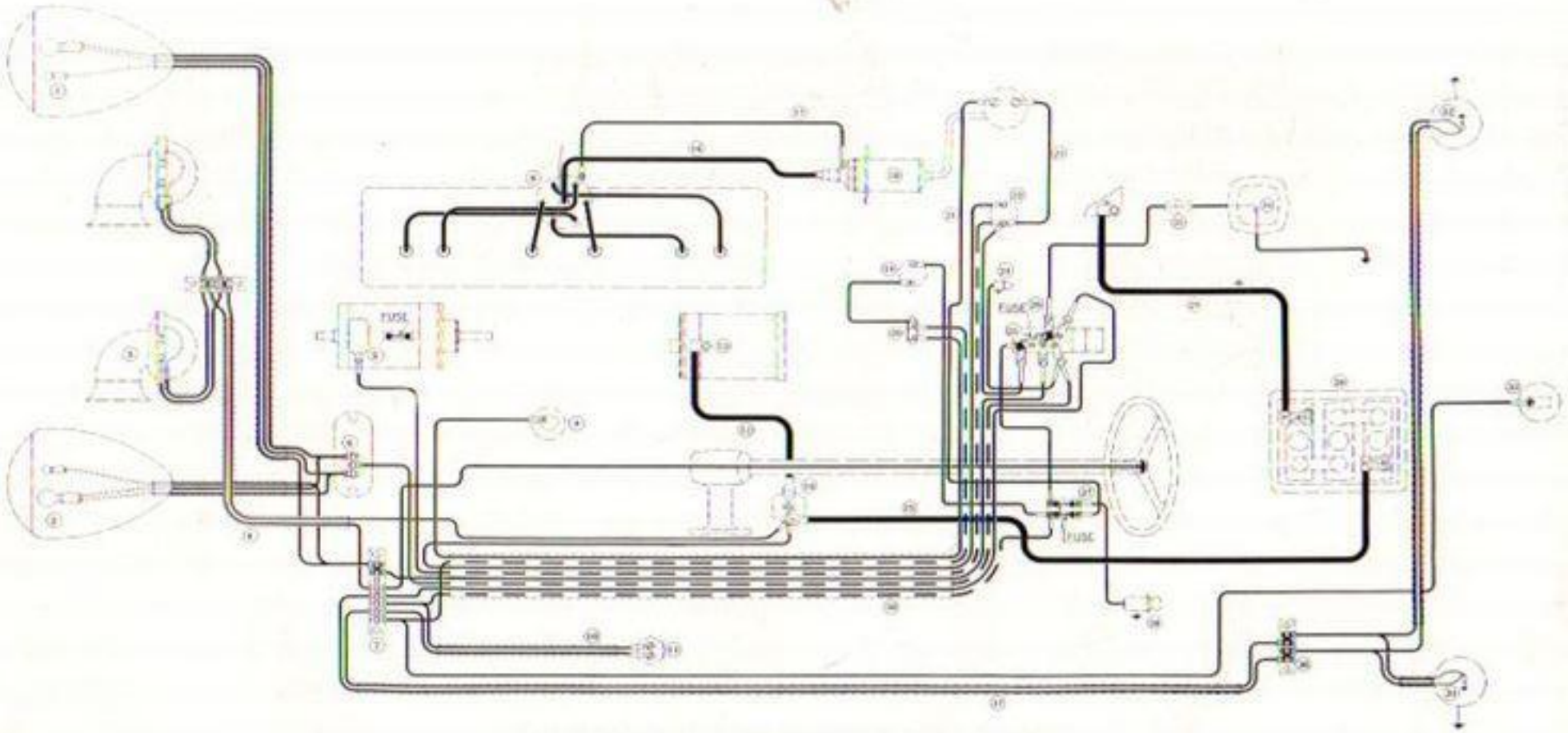
Oil door hinges. Use Nash-Seaman Body Lubricant.

Use vaseline or soap on door strikers.

Oil clutch and brake pedal bearings and levers.

Oil throttle pulley bearings.

Oil hood lock mechanism.



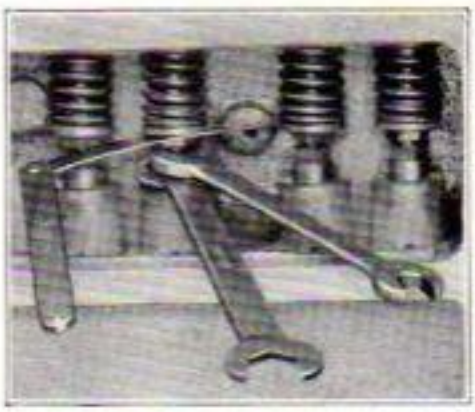
WIRING DIAGRAM AND WIRING CHART

1—Head Lamp R.H.
2—Head Lamp L.H.
3—Horn
4—Horn Wire Harness
5—Generator
6—Head Lamp Foot Switch
7—Junction Block
8—Distributor
9—Oil Pan Oil Gauge
10—Stop Light Switch Wire Harness
11—Stop Light Switch
12—Starting Switch to Start. Motor Cable
13—Starting Motor
14—Starter Switch
15—Neg. Bat. to Starting Motor Cable
16—Coil to Distributor—High Ten. Wire
17—Coil to Distributor—Low Ten. Wire
18—Ignition Coil
19—Gasoline Gauge
20—Gas. & Oil Gauge Selector Switch
21—Ignition Switch to Fuse Block Wire
22—Ammeter
23—Ammeter to Ignition Switch Wire
24—Instrument Panel Light
25—Light Switch
26—Fuse
27—Fuse Block
28—Battery
29—Battery to Ground Cable
30—Main Wiring Harness
31—Tail & Stop Light L.H.
32—Tail & Stop Light R.H.
33—Gasoline Gauge — Tank Unit
34—Dome Light
35—Dome Light Switch
36—Junction Block—Tail Light Wire
37—Tail & Stop Light Wire
38—Cigar Lighter — Special Equipment

Maintenance and Adjustments

Valve Adjustment

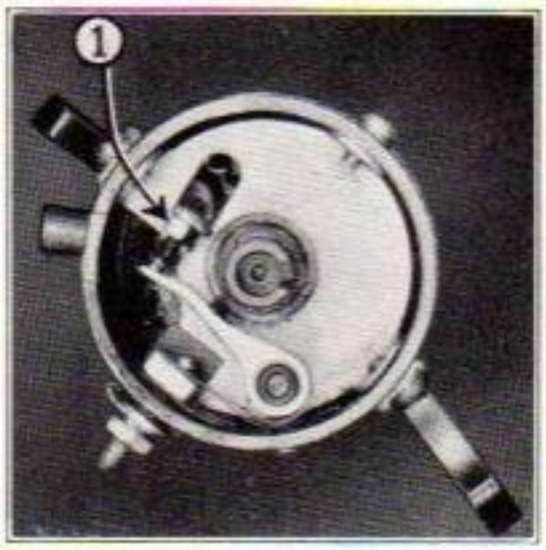
Clearance—Intake and exhaust valves .015".



Engine hot or cold.

If making compression test, do so after valves are adjusted. Use compression gauge. Make test with all spark plugs removed, throttle open and at starter speed. Compression should not vary more than 10 pounds between any two cylinders.

Ignition Points



Ignition points must be free from pits and burns.

Turn motor until points are opened to widest gap. Adjust gap with screw point (1) so gap is .020". Measure with thickness gauge. Place small piece of vaseline between contact arm fibre and cam. Place 1 drop of oil on contact arm pivot. Place 2 or 3 drops of oil on felt in top of distributor shaft.

Ignition Timing

Turn motor by hand crank until I.G.N. (or first) mark (1) on front vibration dampener is directly under pointer on chain cover.

Loosen set screw at Igniter base and shift distributor so points are just ready to open.

(Distributor shaft turns clockwise.)

Tighten set screw and lock nut.

Nash Ignition Timing Lights are recommended for this operation.

Spark Plugs

SPARK PLUG GAPS—.025"

Certain driving conditions may require use of hotter spark plugs and if car is radio equipped may also require spark plug gaps .030" wide. Consult your dealer.

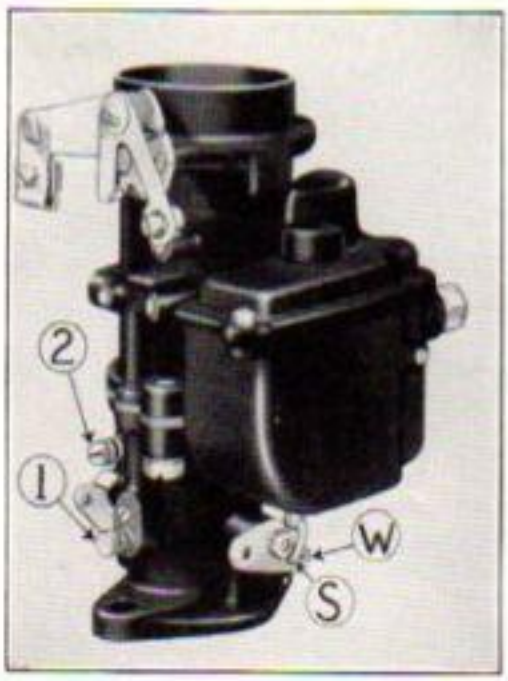
We also recommend that the spark plugs be cleaned, when necessary, with a quartz blast cleaner. Nash dealers make a very small charge for this service.

Space sparking points exactly .025" with thickness gauge. Bend electrode attached to steel shell. Never bend center wire.

Carburetor

Idle Adjustment:

One adjustment (No. 1) for idle engine speed. Adjust with engine at normal operating temperature. Screw in or out on idle screw (1) a little at a time until motor idles smoothly. Screwing in gives a "leaner" mixture; screwing out gives a "richer" mixture.



Motor Speed:

Motor speed with throttle closed controlled by stop screw (2). Do not set for slower than 5 miles per hour car speed in high gear.

Accelerating Pump:

Two adjustments—S and W on arm of throttle.

Set rod in "S" hole in warm weather and "W" hole in winter.

If carburetor pops back or engine hesitates on rapid acceleration set in "W" hole.

If engine seems sluggish and slow to get away set in "S" hole.

While the "S" and "W" holes are not marked on the throttle lever they are so designated for easy reference.

Fan Belt

The fan belt is in need of adjustment when the belt can be depressed more than one and one-half inches by pressing lightly on it midway between the generator and the fan.

Loosen capscrews (1) holding fan bracket to engine.

Move bracket upward until belt can be depressed about one inch by finger between fan pulley and generator pulley.

Fuel Pump

Remove screw (2) and remove strainer cover above body. Clean and replace. Tighten screw securely. Be sure the cork gasket is not damaged. If in doubt use a new gasket for a leaking gasket will seriously decrease the capacity of the pump.

Remove screw (3) and permit rust and water to drain off.

Air Cleaner

Remove from car. Disassemble cleaner as shown. Shake filter element in pan of gasoline until dust is washed off, dry, dip in pan of motor oil, drain and reassemble.

This operation should be performed at least every 3,000 miles. If neglected, the accumulation of dust will retard the flow of air to the carburetor, resulting in loss of speed and power and increased fuel consumption.

If car is driven constantly in extremely dusty territory we suggest you consult with your dealer regarding the installing of the oil type air cleaner.

Clutch Adjustment

Adjust pedal link (1) so not less than ½" or more than 1" free movement of pedal is evident. Never operate car with less than ½" free movement.

The adjustment can be easily made from left side of motor.

Lubricate pedal at (2).

Front Wheel Bearings

Jack up front wheels.

Grasp tire at top and bottom and shake to disclose any looseness of bearings.

Remove wheel cap by snapping off of wheel.

Remove inner hub cap by tapping on it with a hammer.

Remove cotter pin from spindle nut (1).

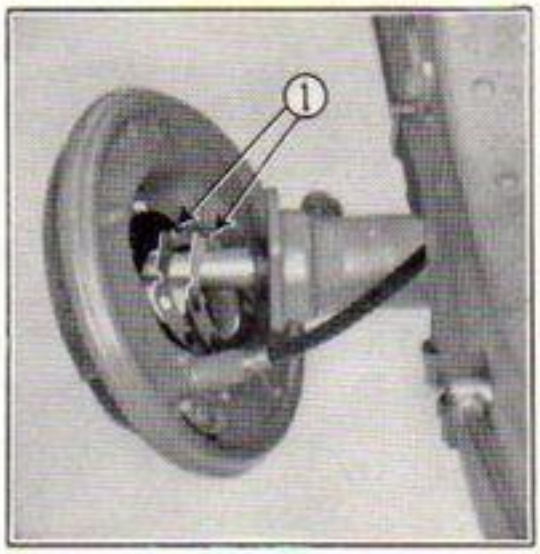
Tighten nut just enough to remove bearing looseness. Rotate wheel while tightening nut.

Front wheels must be absolutely free but with no looseness in bearings.

Rear Wheel Bearings

Jack up both rear wheels. Remove hub cap and axle shaft nut. Pull off rear wheel.

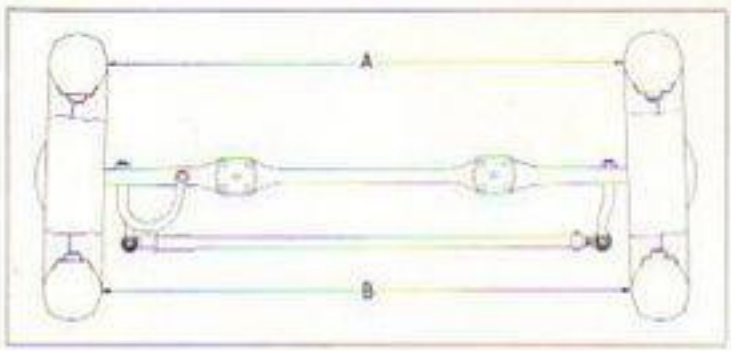
Remove screws holding brake support plate and end cap to axle tube. Adjusting shims (1) are back of brake support plate.



Remove shims so between .003" and .006" end play is evident in axle shaft when support plate and end cap are rebolted in place.

End play in both axle shafts removed from either side. A dial indicator should be used to measure the axle shaft end play so that the .003" to .006" may be determined accurately.

Front Wheel Toe-In



Wheels should toe-in at the front 0" to 1/8".

Measure with recommended toe-in gauge. If incorrect, adjust by loosening clamp at right end of tie-rod and screwing tie-rod in or out of end joint. In case of accident, or when from other causes axle misalignment is suspected, have an Authorized Nash Service Station make the necessary checks and tests, as they have full knowledge of the geometry of the front axle and the correct method of making these checks.

Spring Clips

Tighten front and rear spring clips securely.

Use extra long wrench.

Brakes

Series 3540 is equipped with Bendix two shoe type brakes actuated by hydraulic pressure. **It is extremely important that only genuine Lockheed fluid be used in the braking system.** This fluid can be obtained at any Nash service station.

Fluids containing mineral oil will swell and destroy the rubber, causing unnecessary expense, as in such cases all rubber connections must be replaced, the system thoroughly cleaned and refilled with genuine fluid, before proper brake action is restored.

The master cylinder, located under the floor board, must at all times be kept at least half full of fluid. **Caution**—Extreme care should be used in filling the master cylinder to prevent the entry of dirt. Insufficient fluid may result in air entering the system, in which case it will be necessary to "bleed" the lines.

Free movement of the pedal, of ½ inch before the pressure stroke starts, should be maintained at all times, as insufficient clearance at this point may cause the brakes to drag.

Lubricate pedal shaft to insure freedom of pedal on shaft. See Pg. 24.

Should the pedal go almost to the floor board, one of the following may be the cause:

(A) Air has entered the system.

(B) Adjustments are required to compensate for the natural wear of the brake linings.

(C) Leak in system.

(D) No fluid in master chamber.

We suggest that "bleeding" the lines or other adjustments be performed in Nash authorized service stations.

If after a long period of time brakes require new linings, only genuine Nash brake lining should be used.

Linings of different special characteristics are used on primary and secondary shoes on front and rear wheels. For your satisfaction and safety insist on genuine Nash lining.

Parking Brake

The brakes on the rear wheels are also operated by a parking brake located on the left side of the driver's compartment. Either the foot pedal or the hand brake can be operated independently of each other.

Combination Fuel and Oil Level Gauge

A combination electrically operated fuel and oil level gauge is provided on the instrument board. These gauges do not operate unless the ignition key is turned on. In the normal (out) position of the gauge switch (2) the fuel gauge is in operation. To operate oil level gauge, press switch (2) with finger. This converts the gauge into an oil level gauge and readings are taken with the switch pressed in. Removing the finger from the switch places the fuel gauge again in operation. In case the gauges fail to operate, be sure the wire is securely fastened to the gauge and that the wire is not broken.

Shock Absorbers

The car is equipped with Gabriel Thermostatically Controlled full automatic shock absorbers. Inspect connecting links and attaching bolts occasionally and keep them tight.

The fluid in the shock absorber is Gabriel Processed Hydraulic Fluid and no other should be used. Inspect quantity of oil every 5,000 miles by removing filler plug in upper part of shock absorber body. Maintain to level of filler plug. Consult with your dealer for this service.

Body Lubrication

There are many moving parts in the body and doors and all of them require occasional lubrication to enable them to perform smoothly and silently.

The door parts should be lubricated most frequently, at least every 1,000 miles. Oil all door hinge pins, door locks, door lock bolts and dovetails. Nash Seaman Body Lubricant, which will not stain, should be used on all parts with which passengers are likely to come in contact.

Also provide lubrication to the front seat slide mechanism. Use glycerine to lubricate the door key lock cylinder.

Changing Tires

REMOVING WHEEL: The nuts holding the wheel to the hub are exposed by inserting a screw driver between the hub cover and the wheel and forcing outward from the lock ring. To install simply press firmly into place with hands.

The removal of tires from the drop center type rims is very simple when the following methods are followed. Tires can be applied with the bare hands although ordinarily it is simpler to use short tire tools about 10" long.

TO REMOVE TOP BEAD: Deflate tire completely.

Loosen both beads from rim edges, using tool if necessary.

Stand on tire with both feet, about 15" apart, opposite valve, to force bead off bead seat.

Insert two tire tools about 8" apart between bead and rim flange near valve and pry short lengths of bead over flange as shown. Then leaving one tool in position, follow around rim with the other tool to remove remainder of bead. Remove tube.

TO REMOVE BOTTOM BEAD: Stand wheel in upright position with bead head in well or rim at bottom. If soft soap is available apply around both sides of soft rubber tip.

Insert tool between bead and rim flange at top of wheel and pry wheel out of tire as shown.

Tire changing is made extremely easy by coating the inside and outside of the tire bead with soft soap. Do not use oil or grease.

TO APPLY BOTTOM BEAD: Inflate tube until barely rounded out and insert in tire.

Place tire on rim, guiding valve through valve hole.

Push bottom bead down into well at valve and force remaining portion of bead over rim flange.

Tire tool may be needed to pry last portion of bead over flange.

TO APPLY TOP BEAD: At point opposite valve insert tool between top bead and rim flange, prying bead over rim flange.

Holding tool in position continue prying with other tool, working around rim until bead is in place.

Push valve back into casing to make certain that tube is not pinched under bead. Do not let go of valve stem while doing this.

Pull valve through rim, inflate tire slowly, and see that tire is centered on rim on both sides.

Body

The body on this car is finished with the best quality lacquer, applied under most modern conditions, and is given an original finish of very high lustre. The beauty of the finish can be maintained for indefinite periods if it is given the care necessary to its preservation.

Unless protected properly by waxing and polishing, repeated exposure of the lacquer to the elements will cause a lustreless chalk-like film to appear on the surface. This is easily removable and immediately the lacquer comes back to life, as beautiful as before.

Do not be alarmed if the water used in washing the car becomes tinted with the color of the lacquer. This is a natural condition and the original appearance of the car is easily restored by following the directions given below for maintaining a lacquer finish.

1. From time to time remove dust by rubbing vigorously with clean cheese cloth. This will, at the same time, have a polishing tendency.
2. Remove heavy mud by washing with clean cold water.
3. Remove road tar and oil with gasoline.
4. Polish the car every six weeks to two months with Nash Polish followed by Nash Wax. Your dealer can supply you.
5. If the finish has been neglected and traffic film and dirt have become imbedded in the lacquer, the finish can be restored by applying Nash Cleaner, followed by Nash Wax.

AC. 79

These and many other Nash approved supplies and accessories for your Nash can be obtained from your Nash Authorized Service Station.

AC. 81

AC. 82

CAUTION: Non-freezing solutions containing alcohol will injure the lacquer if spilled or splashed on it.

Use considerable care when filling radiator and caution others to do so.

BODY BOLTS: Tighten all body to frame bolts occasionally.

WINDSHIELD CLEANER should not be operated unless the windshield is wet as operation with the glass dry may result in scratches on the glass from the dust.

THE UPHOLSTERY should be vacuum cleaned at intervals.

In cleaning spots from upholstery whether Mohair or Broadcloth, we suggest that Nash Fabric Cleaner be used. This can be applied with a cloth and followed by brushing with a whiskbroom. Do not use soap and water on the upholstery. Nash Fabric Cleaner can be purchased from your dealer.

When filling the battery do not get any of the battery solution on the upholstery.

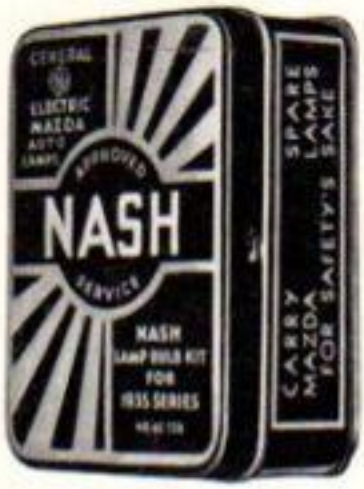
CHROMIUM PLATED parts should be wiped occasionally with a cloth dampened with kerosene. If badly tarnished and spotted, clean with a good chromium plate cleaner.

DOOR LOCKS are provided on all enclosed models. ALL DOORS must be locked from inside with the **door closed.** Closing the door after moving the inside handle to the locked position will again unlock it. Lock right front door from outside with key provided.

ACCESSORIES: Your Nash car has been exceptionally well equipped at the factory, yet due to personal preferences, there may be a desire on your part, to install additional accessories for extra adornment or to add to convenience and comfort. To assure quality and suitability of installation of such accessories, The Nash Motors Company have made available through Nash Dealers accessories designed and approved by Nash engineers.

Consideration has been given in the design so that accessories harmonize and are readily installed. The Nash-Philco Radio Control is designed to be placed in the false door location in the left of the instrument panel. All visible parts harmonize perfectly with the rest of the appointments.

Ask your Dealer to show you this remarkable radio.



Lamp Bulb Kit

Carry a spare set of light bulbs in your car.

Authorized Nash Dealers can furnish you with this Nash accessory.

Conveniently packed in a metal container, the bulbs are fully protected against damage, and are immediately available for emergency use when carried in your car.

The Fowle Printing Company
C-1001—10M—3140 Printed in U. S. A.

Lubrication

Regular and systematic lubrication of your car, using the proper material, in the right quantities, is the most vital part in the maintenance of your car.

In this book has been outlined the complete procedure for this important operation.

We cannot urge too strongly, the fact that your best interests are served and your investment protected, by starting the operation of your new car with a definite plan in mind for regular lubrication.

Make it a habit to record your lubrications on the plate provided on the left front door and have lubrication performed regularly as outlined in the Nash procedure, and have this important operation performed by Authorized Nash Dealers.