

Studebaker SERVICE BULLETIN

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MAILING NO. 2
1949 SERIES



CLEAN-UP
TUNE-UP
SHINE-UP
TIME!

It was a tough winter -- in many sections of the country.

Even in the milder climates driving in relatively long periods of cool weather and shortened hours of daylight makes a careful, thorough seasonal conditioning of cars an important service to be rendered owners by automobile dealers.

So this spring there is a real need for all automobile service men to recondition cars, to clean them up all over - clean sludge out of oiling systems, get the road chemicals off the paint and underbody, to clean cooling systems, and tune up engines and give them relief after this hard winter's work.

Heaters and lights came in for extra duty all winter, so check batteries very carefully and thoroughly inspect electrical systems, with

particular attention to generators, starter motors, voltage regulators, and lights.

Over one and a half million service customers and prospects of Studebaker dealers in the United States will be reminded of the need for spring reconditioning as the mailing piece illustrated above spreads across the nation during March and April. This effective mail campaign should be strongly supported by reference to spring conditioning in all your advertising during the next two months -- and in your telephone solicitation, too.

Clean up -- tune up -- shine up your service department. Clean up -- tune up -- shine up your customers cars! Even a winter as bad as the last need not keep our motorists from full enjoyment of spring and summer driving if spring service is widely available and well performed.

LOOK FOR SLUDGE DEPOSITS!

Most cars have been driven slower during the winter months, for shorter distances, and at lower engine temperatures than during the rest of the year.

This means that sludge deposits have probably accumulated in the crankcase and possibly throughout the engine oiling system.

After talking with the owner about his winter driving habits it can be determined whether sludge accumulation may be present. It probably is.

Explain the importance of sludge removal and secure the owner's permission to drain the crankcase. By running a finger around the

vicinity of the oil drain hole in the crankcase, sludge, if present, can be proven and visibly demonstrated.

The owner should then be advised and when his consent is given, clean the internal parts of the engine thoroughly with a power engine flusher and strong solvent such as Kelite, Stanapurge, or Clisco *without running the engine*. If power flushing equipment is not available, it will be necessary to remove the oil pan, clean it carefully and thoroughly, and at the same time clean the Floto and all other accessible internal parts of the engine.

For a more comprehensive article regarding the formation, effects, and removal of sludge deposits, see Service Bulletin No. 197, p. 1.

PARTS AND MATERIALS NEEDED

Certain supplies, parts, and equipment are essential for satisfactory spring conditioning of passenger cars and trucks.

The items which are usually most in demand are listed below. If you are short any of these items, order them at once so you will not run out when the demand for seasonal service occurs.

I--Cooling System

Radiator and Climatizer Hose and Clamps
 Studebaker Cooling System Cleaner -- AC-1335, AC-1479, or AC-1465
 Studebaker Rust Inhibitor -- AC-1334 or AC-1480
 Studebaker Radiator Seal -- AC-1336 or AC-1475
 Thermostats and Housing Gaskets
 Fan Belts
 Water Manifolds
 Water Jacket Cover Gaskets
 Water Pump Repair Kits
 Gasket Cement -- AC-1476

II--Engine

Automatic Choke Repair Parts
 Carburetor Repair Kits and Gaskets
 Fram Filters and Cartridges
 Head, Manifold, and Valve Cover Gaskets
 Fuel Pump Repair Kits
 Oil Pan Gaskets
 Oil Strainers
 Muffler, Tail Pipe
 Gasket Paste -- S-266, S-267, or S-435

III--Electrical

Battery and Ignition Cables
 Distributor Caps and Rotors
 Distributor Condensers
 Distributor Point Sets
 Fuses and Circuit Breakers
 "Pib" Liquid Insulation -- AC-1337 and AC-1338
 Spark Plugs
 Lamp Bulbs
 Generator and Starter Brushes
 Starter and Lighting Switches
 Bendix Drives

IV--Brakes

Brake Hose and Fittings
 Brake Fluid -- AC-1381, AC-1496, AC-1497, or AC-1498
 Brake Lining Kits and Rivets
 Brake Oil Seals
 Brake Lining, Filler Compound -- S-139
 Brake Cable Lubricant -- AC-145
 "Lubri-plate" Lubricant -- S-50

Supplies

Dripless Penetrating Oil -- AC-1477, AC-416, AC-418, or AC-419
 Tar and Road Oil Remover
 Kasson's Waterproof Grease - AC-107
 Shock Absorber Fluid -- AC-1435, AC-1436, AC-1437, AC-1438 -- Houde
 Shock Absorber Fluid -- AC-483, AC-485 -- Delco
 Spring Packing Grease -- S-312, S-325
 Summer Lubricant
 Wheel Bearing Lubricant
 Powdered Graphite
 Stick Lubricant -- Door Ease -- AC-173 or AC-375
 Windshield Wiper Blades
 Windshield Wiper Tubing (rubber)
 Bendix Cleaner -- AC-1328
 Black Rubber Dressing -- AC-1484

Polish and Cleaners -- AC-1468, AC-1470-2-4-
etc.

General Purpose Rubber Cement -- AC-1567
Hypoid Rear Axle Lubricant -- S-297 or S-154
Fabric Cleaner -- AC-1481 or AC-1482
Chrome Cleaner -- AC-1464, AC-1466, or
AC-1485

EQUIPMENT REQUIREMENTS

Your spring service campaign should be backed up by equipment designed to perform certain functions accurately and quickly. Here is a list of some equipment which will be in constant use during the spring conditioning program. Keep it in top-notch working order, painted, and cleaned up to let customers see that it is ready for action.

Radiator Flushing Equipment
Steering Alignment Equipment
Brake Service Equipment
Engine Tune-up Equipment
Electrical Service Equipment
Headlight Service Equipment
Valve Reconditioning Equipment
Gear Flushing Equipment

RECOMMENDED SERVICES

These are the minimum of services which we consider necessary to prepare a car for warm weather driving. They should be given all cars.

Drain and reverse flush cooling system.
Check thermostat and heat indicator operation.
Check condition of radiator hose and fan belt.
Refill cooling system and install Rust Inhibitor.

NOTE.-Preserve anti-freeze. See Service Bulletin No. 154, Page 6, for detailed storage recommendations.

Clean oil pan and inside of engine crankcase using approved flushing method.
Refill crankcase with spring weight engine oil.
Install new engine oil filter cartridge if not recently changed.
Check service and parking brakes for need of adjustment or other service.
Check wheel alignment (camber, caster, toe-in, king pin inclination) and visually inspect condition of all steering connections.
Tighten cylinder head and manifold bolts to correct tension.
Chassis and body lubrication, unless performed within the last 1000 miles, including any seasonal or mileage lubrication requirements.

MAJOR SPRING SEASON CONDITIONING

General body and chassis tightening, safety inspection, lubrication, and other miscellaneous adjustments are listed under the heading of major spring conditioning. These services fulfill a semi-annual need and are most often required when the car has been continuously used under the strain of severe winter driving. We should warn, however, against selling any of these suggested operations or combinations which appear under the various headings, unless it is first determined that need for the work actually exists. These needs are determined by inquiry of owner, examination of car, or road testing.

Safety Inspection

Inspect and adjust service and parking brakes.
Check condition of exhaust, muffler, and tail pipe.
Check master cylinder fluid level.
Check wheel alignment (camber, caster, toe-in, king pin inclination) and visually inspect condition of all steering connections.
Adjust steering gear.
Check condition of all lamps and aim (align) headlamps.
Test horn and all lights.
Examine all tires, check tread depth and rotate tire and wheel assemblies according to tire wear. Inflate to proper pressure. Report condition of tires to owner.
Test windshield wiper and washer operation and report. Note condition of wiper blades.
Check climatizer, hose, blower, and valve setting.

Engine Performance

Clean spark plugs and adjust gap.
Check cylinder compression.
Clean and adjust ignition points.
Check operation of spark modifier and ignition timing. Set octane selector for type of fuel used.
Adjust valve tappets.
Remove, disassemble, clean, and adjust carburetor.
Service air filter.
Clean gasoline lines and screens.
Tighten manifold bolts and nuts to proper tension.
Tighten cylinder head bolts to proper tension.
Free up manifold heater valve or report if it is necessary to remove and clean shaft.

NOTE.-If an excessive spark knock is evident after spring conditioning the engine, remove cylinder head and examine for carbon.

Lubrication

Clean oil pan and inside of crankcase using approved flushing method.
 Remove valve cover plates and clean valve chambers.
 If car is equipped with oil filter, change filter cartridge if not recently changed.
 Flush transmission and change lubricant.
 Flush rear axle and change lubricant.
 Disassemble and repack universal joint bearings (when not equipped with lubrication fittings).
 Lubricate chassis and body completely.
 Clean, repack, and adjust front wheel bearings.
 Clean and repack rear axle shaft bearings.
 Lubricate springs.

Cooling System

Drain, reverse flush, and refill cooling system.

NOTE.- See Service Bulletin No. 154, page 6, for detailed anti-freeze storage recommendations.

Check thermostat and heat indicator operation and report.
 Adjust fan belt. Report on condition.
 Check alignment and condition of pulleys.
 Inspect all hose connections. Report on condition.
 Tighten all hose clamps.
 Remove, clean, and oil Climatizer filter.

Electrical Service

Examine, clean, and tighten all electrical connections.
 Test and fill battery. Adjust hold-down bolts.
 Clean generator commutator.
 Check generator charging rate with instruments. Report results to owner.
 Clean starter motor commutator.
 Check starter motor operation. Report results to owner.

General Tightening

Tighten all chassis bolts and nuts.
 Tighten wheel bolts.
 Tighten bumper bolts.
 Tighten door hinges.
 Examine and lubricate all door locks and hinges.
 Examine window regulators and report necessary repairs.
 Tighten shock absorbers.

Miscellaneous Inspection and Adjustments

When performing a spring check-up, don't overlook the following inspections and adjustments. They are all important and attention now is insurance against future trouble.

Check gearshift rod adjustment.
 Check overdrive control adjustment.
 Check and adjust clutch pedal travel.
 Check and adjust hood lock and control.
 Fill and adjust shock absorbers.

APPEARANCE CONDITIONING

Your customers may stroll down the avenue in the Easter parade, but they'll drive their cars to and from the church.

Remind them that not only is pride of ownership increased in a properly washed and Plas-Tel treated car, but that the need for future paint reconditioning is actually lessened.

Studebaker's exclusive Plas-Tel "Sparkle Spray" treatment contains high, brilliant, non-smear plastics mixed with basic coloring to match all Studebaker models and hundreds of other cars, too. The final Plas-Tel coat, after color mixing, is sprayed on to the car to give it a lasting beauty and worthwhile protective coat.

When your customers ask to have their cars *cleaned up* and *tuned up* this spring, be sure to advise them about Plas-Tel's excellent *shine up* qualities.