TAKING A MODEL T OUT OF MOTH BALLS
GETTING IT READY FOR DURABLE TOURING

By Milt Webb

Yep, it takes more than a can of gas and a new battery to get a mothball 'T' [10-50 years storage] ready to go on the road! You always hear, "It ran OK 10 years ago!" In my experience, it takes all the checks, cleaning, repairs, and adjustments outlined below to get through the first mile!

Here's how!

STARTING SYSTEM

Install a new 6-volt battery, negative to ground. Remove and clean ground strap bolt on the frame. Install a ground strap from the bolt at the emergency brake cross shaft bracket to the bottom U-joint cover bolt on the crankcase. Use a heavy woven-style cable or a #1 gauge cable with flat ends. Loosen one bolt on the starter and re-tighten. This breaks corrosion, if any.
Remove and disassemble the starter switch. Sand the contacts to shiny clean. Remove starter cable nut at starter. Tighten bottom nut to just snug. These are pinned and soldered on the inside. Sometimes the solder joint breaks loose and the pin pulls out easily if over-tightened. Install new #1 gauge cables, from the battery to the switch and from the switch to the starter. Old cables are usually corroded even when you cannot see the green.
Caution: Do not use 12 volt cables [number 4 or 6 gauge]. 12-volt cables will get warm or hot during crank, plus the cranking may be very slow.
It is best to test the starting system with a digital voltmeter. For best results, acceptable voltage drop during cranking readings are:

Cable, batt. to starter switch 0.2 volt max
Starter switch, post-post 0.2 volt max
Cable, starter switch to starter0.2 volt max
Cable, batt. neg.[-] to engine0.2 volt max
Batt. pos. [+] to neg. [-] 4.5 min [cold]
Battery, positive to negative5.0 min [hot]
Starter draw 400 amps max
See Figure 1 on "How to Make Voltage Drop Measurements".

For better starter switch durability, install a '48 Ford 6-volt starter solenoid. Use the 'T' starter switch for the solenoid 'control' switch to ground.

If the starter is 'sluggish' at this point, try spraying some electronic or motor cleaner on the starter commutator during crank. If the current draw is over 400 amps, have the starter re-built. During re-build, install a seal in the end of the starter mount housing. See Figure 3 for how to. This will prevent massive oil leaks out of the starter.
Test starter after re-build by hooking the starter post to a 6-volt battery plus (+) terminal with heavy jumper cables. Hold the starter on the floor. Connect the negative (-) terminal to the starter at the mounting bolt flange. Run starter motor [no load]. Grasp the starter shaft and hold to slow down the shaft. If you can slow it down some, but can't stop it, the starter is good. If you can stop it [shaft], it won't crank engine. During this test, the amps will go up to 75 at around 4.3 volts.

IGNITION

The commutator [timer], coils, and coil box are usually in need of cleaning, adjusting, and tightening. Corrosion takes its toll from sitting. Clean the timer and roller [or brush] with solvent and sand the grounding bars to shiny clean. Sand the roller or brush tip. Sand the brush-type commutator bars and clean with solvent.

Check the wiring from the commutator to the coil primary for shorts and opens by disconnecting both ends. for testing. Re-install wires to commutator, routing them so they will not touch metal or kink when advancing or retarding the spark.

On roller-type commutators, oil rotor and commutator bars liberally with motor oil upon re-assembly. On brush-type commutators. I recommend leaving the brush and commutator strips dry.

Disassemble the coil box connectors. Clean all the hardware in muriatic swimming pool acid [goggles and gloves]. It is best to solder the contacts to the small carriage bolts . Install new wood [kit from 'T' suppliers]. Treat the wood with water sealer, but do not paint the wood, especially with black paint. Painting may cause shorts. Black paint has charcoal, a conductor!
I strongly recommend you let a professional restore the coils, installing new points and modern condensers, and adjusting to the correct current draw. You will more than likely have reasonable trouble-free operation. Adjusting the gap to a 'strong buzz' does not guarantee good spark.

Clean or replace the spark plugs and adjust the gap to 0.025 inches.

You may want to compare the cost of a distributor to 'T' coil repair. If you're showing your 'T', stay with the original coils and timer to maintain authenticity. If you want a driver [durability and smoother acceleration] purchase a distributor, 6-volt coil, and plug wires.

If using a distributor, disconnect the 'T' coil box primary wire and connect it to the new 6-volt coil + terminal. Connect the coil °© terminal to the distributor. Use number 14-gauge wire for all primary wire hook up. If your 'T' is a 12-volt system, install a 'dropping' resistor to cut the voltage from 12 to nine. Adjust the point gap to 0.017-.020 inches if no specification is provided.
The distributor turns clockwise. Remove number one plug and turn crank to TDC on the compression stroke. Retard the spark lever, turn the distributor body in the counter-clockwise direction until the points just start to open. This is the retarded firing position on number one cylinder [TDC].

Install the advance linkage and adjust the rod length with the spark control lever in the retard position to match the retard position of the distributor. Tighten distributor housing clamp bolt.

Check advance linkage for binding. If your new distributor has advance weights, retard to start, then advance the spark by moving the lever down 1⁄2 inch from the retard position. The automatic advance will take care of additional distributor advance at higher RPM.

ENGINE CHECKS

Remove all four plugs and measure the compression. Continually crank the engine until the compression pressure has built up four times. Record the compression pressure of each cylinder. A good 'T' engine [cold] will crank 50 psi on each cylinder. 45 psi is OK. 25 psi is a worn engine or bad valves and there may not be enough power to propel the car. If the compression pressure varies over 5 psi from cylinder to cylinder, grind the valves and set the tappet clearance to around 0.012 inches.

If there's no starter, remove all four plugs. Crank each cylinder through compression with your thumb covering the plug hole. If the pressure is about equal in all cylinders, the valves are probably OK. Also, visually look down each plug hole at top of valves. If they are the same color, the odds are they're good enough to start the engine.

Drain the oil. If the old oil is 'jelly' or 'syrup' let it drain overnight. .Install pan plug using a small amount of RTV gasket maker on washer. Install four quarts of 20-50 weight oil. Check for dripping out of the top oil level petcock If equipped with an external oiler, disassemble and verify it's not plugged up.

After start up, let engine warm up for one minute at around 1000 RPM. Increase the RPM to 1500 and hold it steady. Then, short each cylinder, one at a time, to detect rod bearing knock. If the rod knock(s) goes away with a warm engine, the rods are slightly loose. If the rod knock(s) continues with a warm engine, adjust the rods to 0.002 inches clearance and install Chevrolet-style oil dippers ["T" supply houses stock the dippers].

Refer to the 'Engine Manual' published by MTFCA for detailed procedures.

Drain water and re-fill. Add a cup of StaLube 'soluble oil'.
If the tubes are rusted on the top end, remove radiator and have it professionally checked and flushed at a radiator shop.

FUEL SYSTEM

In the fuel system, checks include the fuel tank, fuel lines, filter, carburetor, and intake manifold leaks. Start at the fuel tank. If it's full of flakey rust inside, or there is 'algae' and\or it has rust holes in the bottom, have it restored professionally or replace it. Disassemble the fuel sediment bowl, clean in muriatic acid and replace the filter screen. Set up sediment bowl in vice. Loosen front fitting. Use a propane torch to heat bowl casting.

Reassemble and install the sediment bowl into the tank. Use aviation, gas-resistant sealant on the threads. Do not get sealant inside gas passages. Do not use 'Teflon' tape. Gasoline will dissolve the tape, and it may get inside, causing flooding problems.

Pour in one gallon of gas and test for leaks and flow out the sediment bowl. Install the gas line over the frame rail. Route the fuel line under the splash shield parallel to the frame rail. Route fuel line between firewall and frame rail adjacent to firewall to frame bracket. This routing will minimize heat transfer into fuel line. Other routings may cause fuel foaming ['vapor lock'].

Disassemble carburetor and clean in carburetor cleaner. If float needle valve seat is 'frozen' in the carburetor top, leave it alone. Use old needle valve. If the needle valve seat can be removed, replace it with a new 'Viton' tip needle and seat or a double check ball-style valve [Grose Jet].

Test the float [brass] in hot water. If small bubbles escape while immersed, the float is defective. Replace it! The older carburetors use a cork float. If intact, sand lightly with 320 grit sand paper. Coat with gas-resistant epoxy [Hobby Poxy #1]. Wipe off excess before the epoxy cures. Coat a second time. Wipe again. Check weight before and after each coating. Less than 0.1 ounce increase in weight is OK. If more, start again with a new cork float [available from 'T' parts suppliers].

A new cork float must be coated with very light coats of gas-resistant epoxy. The same technique discussed above applies to new cork floats. Gas-resistant- Try it out; soak a small amount of cured epoxy in gas. It if softens, try another brand. If the float gets too heavy, it will sink, causing flooding!

Adjust the float to specification. Turn carburetor upside-down. Usually, if the float is 'level' with the top surface of carburetor, the float level is OK.

Re-assemble and install carburetor. Adjust needle valve to one turn open from seat. Most 'Ts' run at around 1⁄2 to 3⁄4 turn. If adjustment is a lot different than this on NH carburetors, something may be wrong with the carburetor or float. Review the Ford 'T' Service Manual or the Carburetor Manual published by the MTFCA.

TRANSMISSION

By now, you know if 'neutral' has a slight drag which is normal. In some cases, long storage and some oils will allow the clutch disks to 'seize up', caused by 'congealing' of the old oil. If this occurs, jack up one rear wheel so a 'neutral' will be available for easy start up.

To test for neutral [before start up] pull the emergency brake lever all the way back [neutral and rear wheel brake]. If it cranks with the starter, neutral is OK. If not, pull the engine through with the hand crank. If no neutral, then try and free up after start up [see 'Run Start up' later in this text].
If neutral is OK, check the pedal adjustments next. Low gear pedal should tighten the band just before hitting the floor board. The high gear lever should begin to engage the clutch shaft lever for neutral about midway between all the way down and the vertical position. The rear wheel brakes should not drag at this point. Pull the brake lever to vertical position; both rear wheels should have an equal heavy drag [see Rear Axle Drive Shaft and Brake Adjustment].

The transmission brake pedal should engage about one inch above the floor board.

The reverse band should engage about halfway between full up and the floor board.

If band adjustment cannot be obtained, review the Ford 'T' Service Manual or the Transmission Manual [MTFCA] for relining and adjustment procedures.

STEERING AND FRONT AXLE

Start with the steering gear. Remove the steering wheel and steering gear cover. Pack with moly chassis lube or wheel bearing grease. Lube steering collar [lower part] with grease cup.

Check the pitman arm on the shaft. Many times this nut and arm are loose on the steering shaft. Check woodruff key for slop. Oil threads and tighten to around 75 pound feet torque and re-install the cotter pin.
Test the drag link ball caps for looseness by turning the steering wheel free play [wheels on ground]. Put your finger between the cap and the steering arm. If there is 'slop' [more than 1\32 inch], remove cap and grind flat face. Re-install cap and re-check for clearance [less than 1\32 inch]. If OK, disassemble, grease with moly lube, tighten bolts and jamb nuts, insert cotter pins. Test for binding (lock to lock) with wheels off the ground. If drag link binds, loosen bolts slightly, tighten jamb nuts, and insert new cotter pins. Check for binding again. Repeat drag link cap check on the right end steering link.

Check and oil the tie rod ends. If more than 1\32 inch clearance, replace pins and bushings [See Ford 'T' Service Manual for procedures]. Rebuild kits are available from the 'T' parts supply houses.

Check the radius rod 'wishbone' ball and cap. If less than 1\64 inch play side-to-side when turning the steering wheel [front wheels on ground], grease wishbone ball cap, tighten and \or replace studs, spring, and nuts. The wishbone ball must be tight in the socket with no side-to-side play. Safety wire both studs to each other. Do not use cotter pins. Ball joint studs may work loose and unscrew.

Remove and inspect the front wheel bearings and grease seals. Clean bearings in solvent ['paint thinner', not lacquer thinner]. Blow dry with air and then wash in solvent, again. If rollers are pitted, replace bearings and cups [races]. Grease bearings using moly wheel bearing grease. Install inner wheel bearing and seal. Install wheel on spindle shaft and screw on outer wheel bearing. The right spindle axle nut and bearing should be a left-hand [counterclockwise] thread. The left side is a right-hand thread. Tighten until snug and back off until light bearing play exists. Install washer and jamb nut. Tighten jamb nut to line up cotter pin slots. Bearing play should be just snug with out binding. Turn wheel [off ground]. If it stops abruptly, loosen jamb nut, loosen bearing nut _ turn, re-tighten jamb nut. If the wheel turns freely, adjustment is OK.

Lastly, test the spindle and bushings [king pins] for end [up and down] play and for vertical plane play.

In the vertical plane check [wheels off ground], grab the top and bottom of the tire and wiggle in and out. If the outer rim moves in and out more than one inch, look at spindle bushings and wood spokes [spoke looseness checks in 'wheels' section]. If in and out movement at spindle [king pin] bushing is more than 1\64 inch [0.015"] the spindle pin bushings are very loose and should be replaced.

Next, test the bushing end play [up and down movement in the vertical plane]. The end play clearance should be zero. Test by placing a tire iron under the tire [wheels off the ground]. If end play clearance is greater than 0 [like 0.005" or 0.010", 0.015" is 1\64 inch], remove cotter pin, loosen jamb nut, tighten spindle bolt 1⁄4 turn, re-tighten jamb nut, and re-test for end play.

The bottom portion of the axle has a thread for the spindle bolt. If it's stripped, tighten jamb nut to take up end play. The Ford 'T' Service Manual specifies tightening the spindle bolt until 'resistance' to turning exists.

To avoid wheel wobble at low speed, tighten spindle bolt to just zero end play, as outlined above. If left tight [resistance] steering will be hard and the car will steer you and you will be constantly correcting as you travel down the road.

Oil the oil caps at top of spindle bolt with motor oil. If oil drips to ground out of bottom bushing, oil holes are open. If not, disassemble spindle bushing bolt, clean oil holes and re-assemble. Test for end play, align spindle jamb nut, and install cotter pin.

Test for camber, caster, and toe-in ['gather']. Make a 'plumb bob' with a string and a nut tied to one end. Measure camber by holding the string at the top outer surface of tire. Move forward until string clears the hub cap. The horizontal measurement to tire surface at bottom is three inches [specified in Ford 'T' Service Manual].

Test the caster [pitch] by holding a carpenter square perpendicular to the floor and touching the front surface of bottom spindle\axle area. Measure the distance from the square to upper edge of spindle\axle area. This measurement should be the specified 1⁄4 inch on both spindles.

Measure the 'gather' [toe-in] by holding a tape measure the inside front rim edge about halfway up from the ground. Measure distance to same spot on other rim. Move the tape measure to the inside rear rim edge. The 'toe-in' should be around 3\16 - 1⁄4 inch. For example, if the front measures 53 1⁄2 inches and the back is 53 3⁄4 inches, the toe-in is 1⁄4 inch.

Many times, the toe-in measurement will be 1⁄2 inch toe-in or up to 1⁄2 inch toe-out! Needles to say, the car will wander all over if the above measurements are incorrect.

Review the Ford 'T' Service Manual for detailed procedures to measure camber, caster, and toe [gather]. Toe is adjustable.

WHEELS

In 1998, the wheels with metal outer rims may be up to 78 years old! Wood felloe and wood outer rim wheels may be 88 years old! That's old! If the spokes are loose in any way, consider having them re-spoked by a professional wheelwright advertised in the hobby magazines. The wheel(s) may be slightly out of true in the vertical plane. An inch out of true wobble is OK; but if greater, consider re-spoking the wheel. You have read about wheels folding up on curves and causing accidents. It's worth the price to your family, friends, and relates, in-laws and outlaws to make safety a top issue! Do not try shimming, epoxy, or resin to 'tighten' up the spokes. The heat from the rear brakes may melt the glue to honey, run out all over the brake, and then collapse!
'NUFF' SAID!

REAR AXLE, DRIVE SHAFT AND BRAKE CHECKS

Test the drive shaft front bushing by removing the drive shaft housing plugs. Insert a small screwdriver and push up. If it pushes up 1\64 inch [0.015 inches] the clearance is barely acceptable the clearance spec for this bushing is 0.002 - 0.006 inches. If the clearance is over 1\64 inches, it's very loose! This measurement excess may indicate other rear axle wear and excess end play.
With a screwdriver, move the pin fore and aft to check drive shaft end play. If over 1\64 inches [0.015"], it's too loose. Although loose, one can drive the car. Consider re-building the drive shaft assembly. Check the Ford 'T' Service Manual for overhaul procedures.

If the drive shaft\U-joint pin is loose, support the bottom of pin with a _ punch and blocks [hardwood on cement] to the floor. Peen the top of pin with a 1⁄4 inch punch and a two-pound hammer. Turn drive shaft 180, and peen the other end. The pin is quite soft. Grease the drive shaft bushing cup with moly grease, and turn it in 1⁄2 turn for every trip. The front drive shaft bushing without grease is a 'high wear' item on a 'T'!

Test the rear axle up and down play with wheels off the ground. Any play up and down up to 0.005 inches is OK, Test the wheels with a tire iron on the bottom side of the tire using the iron as a lever. Lift it up and down. If it's over 0.005 inches, it's loose! The wear is usually in the bearing axle sleeve upper outside edge [Part #2509].

To remove wheel hubs, jack up one side. Install a 'knock-out' on opposite axle shaft. Tighten knock-out. Srike heavy blows on end of knock-out with a 'sledge' hammer. If really tight, re-check knock-out. If, after five hard blows, it is not loose, install a 'wheel puller' to remove hub. Most wheel hubs fall off or come loose with a couple of firm blows.

Remove the bearing [two small screwdrivers] and feel the ridge wear in the axle sleeve. Remove the

race [with puller from 'T' supply houses]. Install inner axle seals and new 'heat-treated' sleeves. ['T' supply houses have these parts].
Measure the rear axle bearing diameter with a micrometer. The standard diameter size of the roller bearing is 0.500 inches. If it measures 0.495 or more its OK. If it less than 0.495 inches, replace the bearing. I personally prefer a bearing 0.002 to 0.003 inches under 0.500 inches. The looser, the faster the car will go up to an acceptable limit!

While the bearing is out, check the axle end play. If over 1\32 inch [0.031"], it's excessive. If left this way, the axle may shift in and out causing the drum to rub the brake lining edges. It may squeal!
Check the Ford 'T' Service Manual for correct set up when re-building the rear axle assembly.
Install inner grease seals [Part #2511] and the bearing sleeves [there is a left and right sleeve; grease holes must line up!].
Grease the rear axle bearing with heavy duty wheel bearing grease or moly grease. Install bearings. Tap bearings in lightly and turn cage back and forth. With old bearings, they will slip in easily. With new, reproduction bearings, a moderate tap is OK.

When all the way in, the bearings will rotate easily, because the axle is usually worn from 0.003 to 0.005 inches on the bearing surface area. If in doubt about the above, review the Ford 'T' Service Manual for procedures.

Check the brake shoe lining. The small 9-inch brakes with lining is inadequate for hill country, but may be OK for flat country [a personal opinion]. You may want to consider 'rocky mountain' brakes.

The 11-inch brakes ['26°©'27 'T'] is much better and adequate for mountain driving. 'Fade' may still be a problem.

Recently [1997], I had my 11-inch brakes relined with a 'molded Kevlar' lining used in industrial brake applications. The brand name is Redco Heavy Duty Woven Lining. This Kevlar lining will withstand higher temperatures before fade than Model T brake lining. If it fades, the brakes will recover faster upon cooling.

After 100 miles, the brakes seated and stopping power is superb with minimum fade.

In either case, have the lining professionally drilled and riveted with brake machinery. Don't skimp and do it 'by hand'! It will work loose! There goes your safety factor!

Oil brake arm cam lever bushings. Put a thin film of moly grease on the cam surface [top and bottom]. Install lining. Disconnect brake rods.

Prepare rear axles. Remove axle burrs and shine taper surfaces with 80 grit-type sand paper. Peen the outer end of the axle keyway. Insert the axle key by tapping into the burr. You don't want this to move when installing the wheel hub. Clean axle threads with a _ x 13 [National Fine] die. Tap nut to clean thread.

Oil axle surface, axle thread, and nut for a better torque.

Slip on hub drum. Rotate wheel. If you hear a metal scraping, it may be the brake lining edge rubbing the drum. Remove hub and install an axle shim [Part #2505 SH] coated with oil. Recheck for scraping sound.

The oiled axle shaft surfaces will provide a better seating of the hub on the axle. Install the nut, and snug lightly [for now]. Re-install brake rods, oil clevis pins, and install cotter pins.

Adjust the brakes for equal drag. Pull the emergency brake handle to the vertical position. Test for equal drag on both wheels.

Move brake lever to neutral with no brake. Test for free-wheeling at rear wheels. The trick is to have the wheels free in neutral with no brake drag, then pull lever to vertical. The wheels should have a heavy equal drag to almost locked up with brake lever in vertical position.

Make sure emergency brake lever and locking pawl doesn't slip. If it does, replace it [pawl].

In my experience, the rear brakes are, quite often, adjusted too tight. If tight, the brake applies the instant you pull the lever into neutral.

As new brake lining high spots wear in, re-adjust rear brakes for equal drag as outlined above.

If all the above adjusts out as discussed above, tighten brake rod clevis jam nuts and install cotter pins in clevis pins.

Torque the axle nuts to 75 foot pounds, align the cotter pin slots, and insert the cotter pin.

Fill the differential case to bottom edge of fill plug hole with 140 weight gear oil.

START UP

Now, for the big test! If all the above has been performed with good repair practice and adjusted to specification, your car should start in 5-10 seconds and almost be ready to drive on tour! The order of start up and drive events are as follows:

Adjust mixture, engine off
Crank and start
Adjust mixture and spark advance
Test for rod knocks
Test transmission band adjustment
Drive car, test shifting
Drive car, test brakes
Drive car, test for 'wabble'
Test for overheating
Drive car on tour!

Turn on gas and adjust mixture rod to one turn open from seated position. Hook up battery.

With gas at half throttle and spark in full-retarded position, crank engine for five seconds. During crank, choke for up to two seconds.

On hand crank models, use the same throttle and retarded spark settings as previously discussed. With ignition off, pull crank through three times with full choke. Release choke.

Turn on ignition, leave spark retarded, and crank to start.

Upon start up, be prepared to choke slightly as the engine begins to rev up. If it's 'sputtering', open choke [no choke] to let it rev up more. Advance spark to half way on 'Ts' equipped with four coils and timer. To lean the mixture, turn mixture knob clockwise until the engine 'smooths out'.

Return to idle slowly. Adjust idle throttle screw and mixture rod to maintain good idle smoothness.

NOTE: In my experience, the mixture rod will be open around 3⁄4 turns from seated position at 1⁄2 throttle. Idle mixture setting for a long idle usually requires about 1⁄4 turn more rich [counter-clockwise] than at 1⁄2 throttle in neutral.

During warm up, rev engine to around 1200 RPM. Leave it at a steady RPM. Listen for knock(s).

Short [with a screwdriver], one spark plug at a time. That cylinder will drop in RPM. Simultaneously, listen for knock while plug is shorted. If the knock goes away while shorting out the cylinder, the rod is loose.

Perform the same test on remaining cylinders.
After a long warm up, perform the same rod knock test, again. If it still knocks, the rod(s) is\(are) very loose.

In addition, test for center main bearing knock by holding at _ throttle and spark advanced halfway. Short number two and three spark plug simultaneously. If the knock goes away, adjust the center main after you adjust the rods. If you have any doubt about knocks, review the MTFCA Engine Manual for procedures.

To test the transmission bands, set emergency brake and start engine. Warm up. With emergency brake set, push in low pedal gently. Listen for a changing transmission 'whine'. This is the beginning of low band engagement. This point should be around one °© two inches up from the floorboard surface.

Next, push in reverse pedal with emergency brake set. The pedal should travel about half-way (1⁄2) to the floorboard surface.

With new, or old transmission bands, start with the above suggested adjustments. The real test is on the road. The adjustments may seem on the 'loose' side to you. However, the loose adjustments will minimize premature failure due to excessive drag.

If the bands are too tight, they will already be partially engaged. They may work against each other, and the transmission may sound like it's binding up. Further the bands may burn and fail prematurely due to lack of oil [cooling].

Sometimes the clutch disks will not allow a neutral. To test for neutral while running with one wheel jacked up, pull brake lever back slowly to neutral. Note RPM change, if any. Then continue to pull increasing brake drag. Engine RPM should not change and transmission neutral is OK.

If engine slows down during this maneuver, clutch disks are hung up and\or oil is congealed on disks' surfaces. Try this brake on\off procedure for 10 minutes.

If it [neutral] still does not work, change oil again. Repeat above steps. If it still hangs up, remove, disassemble engine and transmission to repair clutch.

READY FOR ROAD TEST

Now the big plunge! You're ready for the road!

If you are not experienced, ask an experienced friend who regularly drives 'Ts' on tours to drive your car the first time.

Slowly, slowly, engage reverse pedal gently and back out of the driveway. Leave emergency brake in neutral position to hold clutch pedal in place, while backing up.

Push in low pedal to move forward. Leave emergency brake lever in neutral. Accelerate to 10 MPH in low, then let up on the throttle and low pedal.

Let the car coast. Then apply foot brakes, gently. No chatter during stop- Next accelerate to 10 MPH in low. With your foot still on low pedal let the brake lever into high gear position [all the way down]. At 10 MPH, let throttle off slightly and simultaneously let clutch [high gear] engage by slowly letting up low pedal.

Note how smooth the shift is! If it chatters, the clutch disks may be 'hanging up' on the inside of the transmission brake drum guides.

After 50 miles or so, change the crankcase oil, again. When bringing your car out of mothballs, the syrupy oil could cause the hangup and rough shift. New oil may minimize the rough shift.

You have been applying the emergency brake gently, noting pull. At 30 MPH in high gear, let up on throttle and pull emergency brake to lock the rear wheels [panic stop]. Be prepared for a pull to right or left.

If it pulls to right, adjust the left clevis pin one turn tighter and re-install cotter pin. Try panic stop again. If you cannot get equal pull, re-line emergency brakes as discussed in brake section.

Test for 'Wabble':

Proceed over chuck holes slowly [5 MPH]. If shimmy develops, re-check front end looseness and alignment checks, as outlined in the 'Front Axle' section.

Test the radiator. If it boils on a cool day during these pre-tour tests, consider a 'flat tube' radiator re-core or a new radiator. In a good radiator system, water pumps are unnecessary, even on hot days.

READY FOR TOUR

If all the above works as outlined above, you're now ready for a durable tour.
Before every tour:

_Fill radiator to 1⁄2 inch from full up
_ Check oil drip out of top petcock
_ Clean timer
_Fill tank with gas
_Turn front drive shaft bushing grease cup one turn.
_Start, warm up, and go on tour!