



## Texas T Parts

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Note our  
**New Address**  
Everything else  
remains the same.



## Guidelines for Commissioning a Rebuilt Model T Engine

### Getting Ready to start the engine

1. Once the engine is installed, sit in the driving position and check the travel on all of the transmission pedals to make sure that the proper travel occurs and that the pedals are not restricted by interference with the floorboards. **Do NOT overtighten the transmission bands. There should be at least two inches of free play in all foot pedals before the bands tighten.**
2. Check to make sure that the engine is full of both engine oil and coolant. We recommend either 30W or 10W-40 detergent oil. We recommend a 50/50 mixture of water and antifreeze in the cooling system.
3. Check the firing order and timing of the engine to make sure No. 1 spark occurs on No. 1 compression stroke and that the firing order is 1-2-4-3. Insure that the spark occurs slightly after the piston reaches top dead center with the spark lever in the fully retarded position.
4. Make sure that there is adequate fuel in the fuel tank and that fuel flows freely through your fuel system to the carburetor.
5. Assure that the fuel mixture is set correctly. General factory settings are 1-1/4 turns open. Insure that the gas lever operates the carburetor properly and moves it the full range from the full throttle position to the idle position. Once the engine starts, turn the carburetor adjusting knob clockwise until the engine runs without surging. You will probably need to turn the mixture clockwise approximately one quarter of a turn.

### Starting Guidelines - to be carried out in a well ventilated area

1. Check to make sure that the parking brake is applied and place a chock in front of a wheel.
2. Do NOT turn on the key. Choke the carburetor and turn the engine over 4 to 6 compressions (2 to 3 revolutions) to get a gasoline/fuel mixture into the cylinders.
3. Make sure that the spark lever is fully retarded and that the gas lever is advanced 5 to 6 notches (approximately 15°)
4. Turn on the ignition key.
5. Crank the engine. As soon as the engine fires, advance the ignition and adjust the gas lever to maintain a fast idle. Do Not race the engine. Do not back off on the throttle so far that the engine idles at the minimum speed.
6. Pull the advance lever down approximately 70% or to achieve a smooth running position. (For distributor systems, you will only need to advance the spark approximately 20%.) If the engine does not continue to run or if any later attempt is made to start the engine, assure that the spark lever is returned back to the fully retarded position.
7. Observe the engine running for 5 minutes watching for any fuel leaks, coolant leaks, or severe oil leaks. If leaks are observed, turn the engine off and correct the source of the problem.

1. After the engine has been run for 5 minutes, turn the engine off. While the engine is hot;
  - Re-tighten the 4 manifold studs,
  - Tighten the water inlet casting bolts,
  - Tighten the water outlet casting bolts,
  - Tighten the radiator hose clamps
  - Retighten the exhaust pipe manifold nut.
  - If your engine has a cast iron head, retorque the head bolts to 55 ft. lbs. while it is hot. If your engine has an aluminum head, you should re-torque the head bolts to 55 ft. lbs. after the engine has fully cooled.
  
2. Before driving the car, check all bolts that were removed or replaced during the installation of the engine. It has been found through bad experiences that the steering drop arm and all other connections within your steering linkage should be checked when replacing your engine. Make sure all connections have cotter pins and that the wishbone cap studs are wired together. Do not use cotter pins in the wishbone cap nuts.
  
3. Ideally, the car should be driven 25 to 30 miles per hour in high gear for the first 20 miles. Steep hills should be avoided. Avoid allowing the engine to boil. Some heating in a new engine is to be expected, but if the engine does start to boil pull over and allow it to cool down. Make sure you are using proper driving techniques. Always advance the spark to where the engine runs best and adjust the mixture on your carburetor to where the engine runs best. Both of those variables are common causes of over heating engines for new Model T drivers.
  
4. After driving about 20 miles or one hour of running the engine:
  - repeat Follow-up step #1 plus,Check the tightness of the:
  - Engine to oil pan bolts
  - Hogs-head to pan bolts
  - Oil pan inspection cover bolts
  - Timing case cover bolts
  - Valve chest cover bolts (do not overtighten or distort the valve chest cover)
  - Generator/Alternator bolts
  - Starter motor bolts
  - Bendix drive cover screws
  - Universal joint cover bolts
  - Magnetio post screws
  - Transmission door screws
  - Engine mounting bolts
  - Install cotter pins in all appropriate engine bolts
  
5. After 100 miles:
  - Change engine oil
  - Remove the ignition key and then remove transmission door, clean the oil screen, and replace the transmission door.
  - Refill with oil
  - Check the drain plug and if necessary refill with oil again.
  - Check and adjust transmission bands.
  - If it were my car I would repeat follow-up guideline #1, but since it's your car you can do what you want. If you do repeat the checks, keep in mind that your objective is to check the tightness and not necessarily tighten everything. Don't over tighten and stretch the bolts.