CMHC Tractor Operating Guide

Refer to pictures as needed

- **Preflight** – Visual inspection. Add fuel (figure 1) as needed. Check radiator coolant level – COLD ENGINE ONLY! Check dipstick (right side of engine) and add oil (figure 2) as needed. Some consumption is normal – check each time the tractor is used. Fuel and oil are *currently* in the lockbox (This may change if/when we get a container or similar).

- **Throttle** – The tractor has two throttle controls. The foot throttle (figure 6) is used for transport (just moving the tractor) while the hand throttle (figure 3) is used for mowing or other steady speed work. The hand throttle is moved Counter Clockwise for lower engine speed, and Clockwise for higher speed. The lever will stay in position, so move as needed to adjust RPM. The engine has a governor to keep it at the set RPM when mowing.

- **Starting** – Choke (figure 3) as needed (cold engine only). Set hand throttle to idle. Set transmission range lever (figure 4) to "S". Start with key. Choke off as engine warms. Check for oil pressure – shut off if no pressure in 30 seconds. Warm engine if needed before mowing.

- **Brakes** – The Brakes (figure 6) are on the right side as seen in the picture. The tractor has independent right and left brakes, but they are locked together for mowing use.

- **Pre-Transport** – Set the RPM to 1000-1200 (figure 7) and raise the deck (figure 5) for transport to the mowing area. NOTE: The hydraulic system that raises the mower deck is driven through the clutch. To raise the deck while stopped, put the transmission in neutral and let the clutch out before moving the position lever. Put the clutch in, select transmission range and gear, release the clutch to drive. Clutch has a long travel and is somewhat 'grabby'. Use caution.

- **Transport** – Drive to the mowing area and lower the deck all the way, so the mower is resting on its wheels.

- **Mowing** – The suggested mowing setup is Low Range and 1st or 2nd gear. This is to get a good cut. The mower will mulch the grass, but if the travel speed is too fast a poor cut will result. Too fast can also possibly overload the mower and cause a broken belt or damaged gearbox. With the clutch in, set RPM to 1000-1200. Next, engage the PTO (Power Take Off) lever (under the seat by your left leg) by pulling it back. If it does not engage, 'feather' the clutch gently to allow the transmission shafts to rotate and allow engagement. With RPM still at 1200, gently engage the clutch. The clutch is a two stage – the first half of its travel will engage the PTO (mower) and the second half will engage the drive wheels. Do NOT shift the transmission while the tractor is rolling – simply pick the gear you will be using – the tractor will move from a standstill in any gear.

- **Mowing II** – Once the mower is engaged and the tractor is rolling, set the RPM to 1700 by adjusting the hand throttle. You will need to move past 1700 and let it spring back. This is to allow you to add throttle if needed in a high load situation without disturbing the governor setting. Mowing is always done at 1700 RPM to set the correct mower blade speed. More or less RPM and damage to the mower can result. Plan to mow with about 10-12 "of overlap. A good way to do this is to put the front wheel on the edge of the last mowed swath. During mowing it might be necessary to lift the mowing deck to shake loose the grass that has accumulated. Also remove grass that may collect on top of the deck to avoid it touching the hot tailpipe.

- **Done!** – When finished mowing, push in the clutch and disengage the PTO (mower) by moving the lever forward. Raise the deck and return to the parking area. Shut down by turning the key off and clean the mower deck and tractor of grass buildup as needed with a broom, etc.

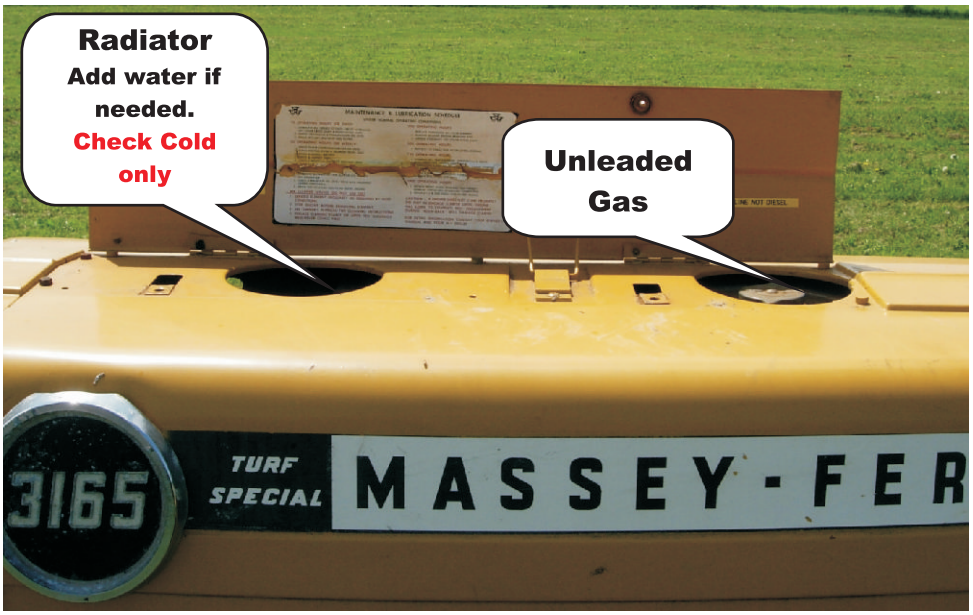

Figure 1
Oil and Water

Figure 2
Oil Filler

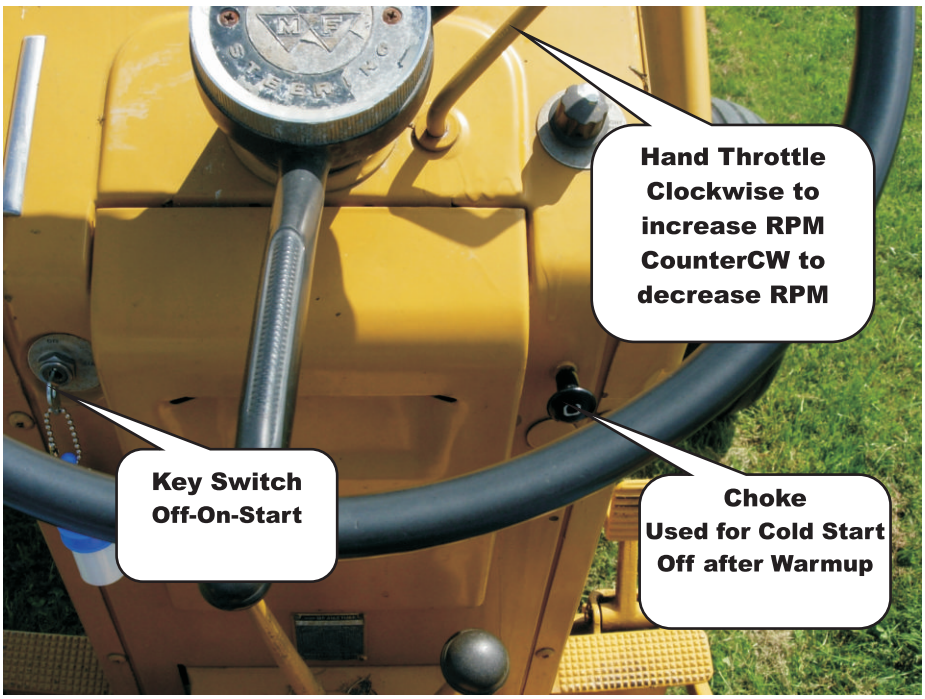

Figure 3
Controls

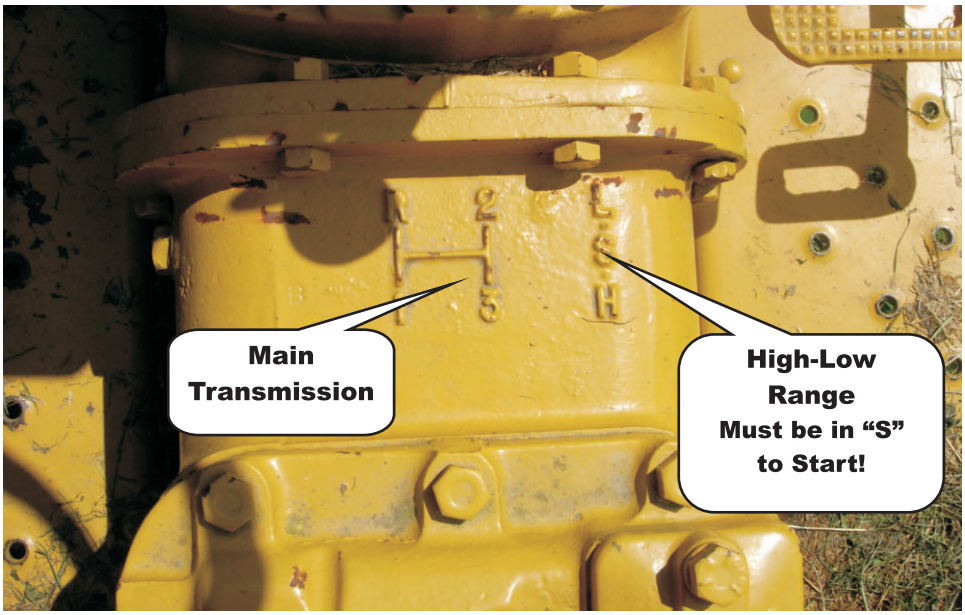

Figure 4
Transmission Pattens

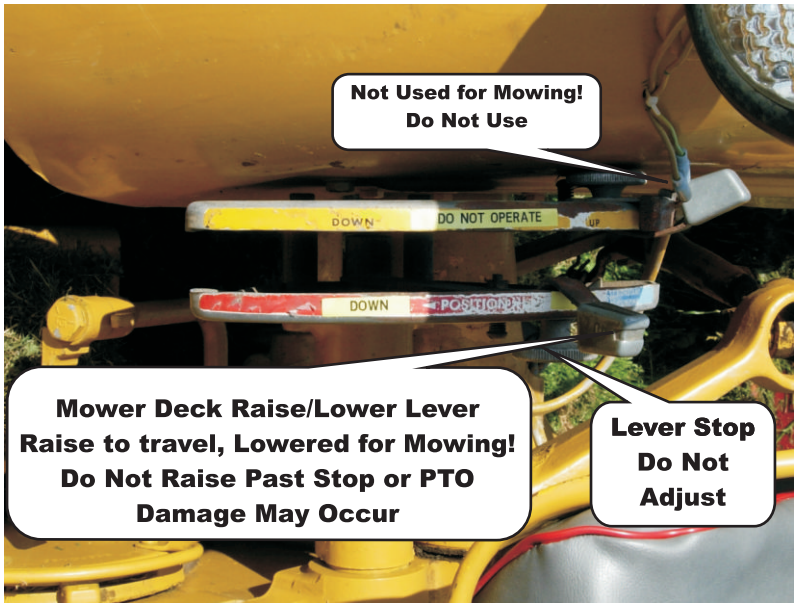

Figure 5
Deck Levers

Figure 6
Brake and Foot Throttle Pedals

Figure 7
Tachometer