

MAINTENANCE AND STORAGE

PERIODIC MAINTENANCE SCHEDULE TABLE

Service Records--Fill in dates as you complete regular service	Before Each Use	After Every 10 Hours of Use	After Every 25 Hours of Use	After Every 50 Hours of Use	After Every 100 Hours of Use	Before Each Season	Before Storage	See Note Below
Check air pressure in tires	√							
Check Engine Oil Level, Fill to Proper Level	√					√		
Clean Debris From Unit	√					√	√	
Lubricate All Pivot Points		√				√	√	
Check Fasteners for Tightness		√				√		1
Check Drive Belts Replace if Necessary		√				√		
Check Tines for Wear or Damage Replace if Necessary		√				√		
Check Fuel Line Replace if Necessary			√			√		
Lubricate Wheel Axles			√			√	√	
Check Spark Plug Replace if Necessary			√			√		
Change Engine Oil				√		√	√	2,3
Clean Air Filter Replace if Necessary			√			√		4
Replace Spark Plug					√			
Clean Combustion Deposits from Cylinder, Piston, and Valves					√			
Check Transmission Oil			√			√		

⚠ CAUTION

Important notes about maintenance schedule:

1. Re-check tightness of all fasteners after first 2 hours of initial use
2. Change engine oil after first 5–8 hours of initial use
3. Change oil every 25 hours if operating under heavy load or in high temperatures
4. Clean air filter every 10 hours if operating under dusty conditions.

⚠ WARNING !

Use only GENUINE replacement parts. Other parts may damage the unit or result in injury.

SERVICING THE TILLER

The following information will help you make the necessary checks and perform the procedures required to follow the normal care recommendations made for your tiller unit. If you prefer, your local authorized dealer can make these checks and perform the required procedures for you.

⚠ WARNING !

To prevent accidental starting:

Engine must be turned off and cool. The spark plug wire must be removed and secured from spark plug before checking and adjusting engine or equipment.

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CHANGING FORWARD/REVERSE BELTS (See Figure 13 and 14)

1. Turn off engine. Engine must cool completely before proceeding.
2. Remove spark plug wire and secure away from spark plug.
3. Reduce the belt tension by loosening the forward and reverse cable lower jam nut.
4. Remove the upper and lower belt guards.
5. To remove the reverse drive belt:
 - 5.1. Remove the reverse belt idler.
 - 5.2. Slide the belt free of the reverse belt guides and engine pulley.
 - 5.3. Pull belt down and away from the transmission pulley.
6. To remove the forward drive belt:
 - 6.1. Remove the two forward belt guide studs and forward belt idler assembly.
 - 6.2. Slide the belt free of the engine pulley. (Fig.14)
 - 6.3. Pull the belt down and away from the transmission pulley.
7. To install the forward drive belt:
 - 7.1. Insert the belt from underneath the unit and up around the rearward portion on the engine pulley.
 - 7.2. Place the lower loop of the belt around the rearward portion of the transmission pulley.
 - 7.3. Replace the two forward belt guide studs and forward belt idler assembly.
8. To install the reverse drive belt:
 - 8.1. Insert the belt from underneath the unit and up around the reverse belt idler.
 - 8.2. Place the lower loop of the belt around the forward portion of the transmission pulley.
 - 8.3. Replace the reverse belt idler into the reverse belt idler bracket. The belt should not go around the engine pulley. Be sure the belt is inside of the reverse belt guide studs.
9. Tighten the forward and reverse lower jam nut.
10. Check the belt tension. The belts should be loose with the drive levers disengaged.
11. Replace the upper and lower belt guards.
12. Re-attach the spark plug wire to the spark plug.
13. Follow Operating Instructions--start the engine and operate the forward drive lever to check for proper cable adjustment and belt tension.
14. Start the engine and operate the reverse drive lever to check for proper cable adjustment and belt tension

⚠ WARNING !

The tines or wheels should not rotate with the engine running, the depth regulator set at transport height (lowest height) and the drive lever not engaged.

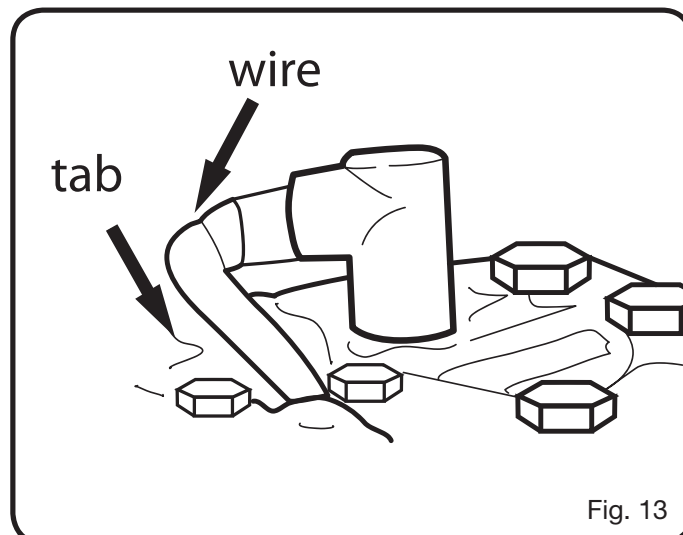
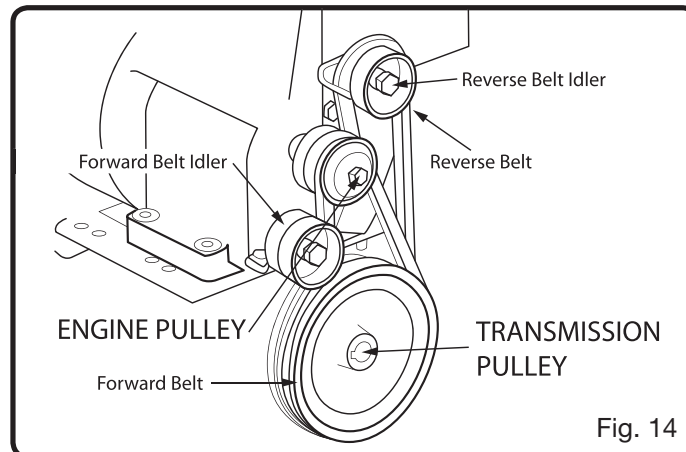


Fig. 13

MAINTENANCE AND STORAGE



ENGINE MAINTENANCE

Refer to the engine manual included in your parts packet for information on engine maintenance. Your engine manual provides detailed information and a maintenance schedule for performing the following tasks:

1. Check oil level before each use or after every 8 hours of operation.
2. Change oil after first 5-8 hours of operation. Change oil while engine is warm. Refill with new oil of recommended grade.
3. Check spark plug yearly or every 100 hours of operation.
4. Service air cleaner.
5. Keep engine and parts clean.
6. Check engine and equipment often for loose nuts and bolts, keep these items tightened.

CHECKING OR FILLING ENGINE CRANKCASE

IMPORTANT: Engine is shipped from factory without oil. You must add engine oil before starting engine.

1. Add oil according to engine manual. Do not overfill. Use a clean, high quality detergent oil. Do not mix oil with gasoline. Oil level must be full. Check the oil level by removing oil fill plug.
2. Always check oil level before starting engine. Refer to engine manual for capacity and type of oil to use.

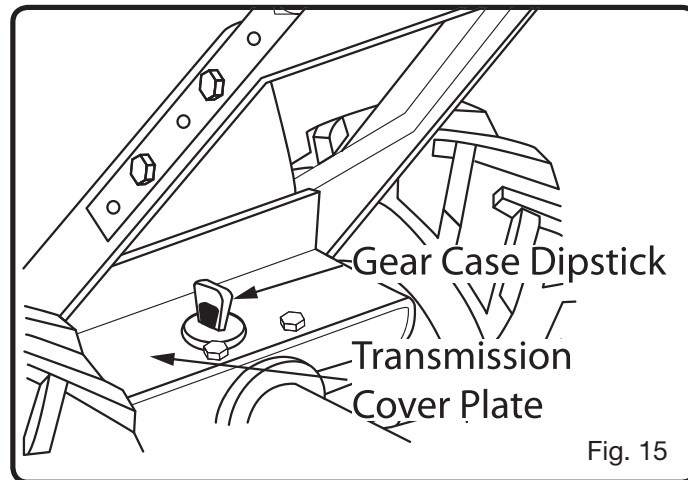
CHECKING TILLER TRANSMISSION OIL

IMPORTANT: Tiller transmission is shipped from factory with the proper amount of oil. When replacing oil, the tiller transmission holds 27–30 ounces. Do not overfill.

Check the oil level annually. To check the oil level:

1. Move tiller to level ground.
2. Remove oil level dipstick located between the handlebar mounts on the engine mount. If the oil level is near or below the lower limit, fill the oil to recommended level with SAE 85W–140 / 90W–140.
3. Replace oil level dipstick in the filler hole.
4. Note that the drive wheel transmission and rear tine transmission are one common reservoir. When you add to the front transmission, you must wait a short period of time for the oil to flow rearward and equalize in both front and rear. The dipstick will read correctly on level ground for both gear units.

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CHECKING TIRE PRESSURE

Recommended tire pressure is 25—30 PSI. If tires do not have equal pressure, tiller will pull to one side. Low tire pressure may result in damage to tire tube.

LUBRICATION

Proper lubrication of moving mechanical parts is critical for proper care and maintenance. Oil the moving parts shown at 10 hour intervals using a 30 weight oil.

CLEAN TINE AXLE SHAFT

1. Turn off engine. Engine must be cool.
2. Remove spark plug wire and secure from spark plug.
3. Tip the tiller forward. Block the tiller in position so that it rests on the engine mount and the tines are exposed.
4. Remove all vegetation, string, wire, and other material that may have accumulated on the axle between the inside set of tines and the seal cover on the transmission housing.
5. Tip the tiller back to a level position.
6. Replace spark plug wire.

STORING THE TILLER

⚠ WARNING !

Never store the tiller indoors with fuel in the fuel tank. Never store in an enclosed, poorly ventilated area where fumes could reach an open flame, a spark or a pilot light as on a furnace, water heater or clothes dryer. Allow the engine to cool before storing the unit.

⚠ WARNING !

Do not remove gasoline while inside a building, near a fire, or while you smoke. Gasoline fumes can cause an explosion or a fire.

NOTE: A yearly checkup or tune-up at an authorized service center will make sure that the tiller will provide maximum performance for the next season.

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When the tiller is put in storage for thirty days or more, the following steps should be followed to make sure the tiller is in good condition the next season. To prevent fuel gum deposits and corrosion in the unit's carburetor and fuel system, it is highly recommended using a fuel additive/stabilizer formulated for ethanol fuels. Follow the stabilizer manufacturer's instructions. Run the engine for at least 5 minutes after adding stabilizer.

1. Let the engine run until it is out of gasoline. Remove the carburetor screw from bowl and drain fuel. Tilt unit slightly to remove all fuel. Replace screw.
2. Change the oil.
3. Remove the spark plug from the cylinder. Pour one ounce of oil into the cylinder. Slowly pull the recoil—start handle so that the oil will protect the cylinder. Install a new spark plug in the cylinder. Pull the starter handle slowly a few times to distribute oil. Pull recoil slowly until resistance is felt. This will close the cylinder valves.

⚠ WARNING !

Do not attach spark plug wire to spark plug when storing the unit.

4. Clean tiller. Remove all dirt, leaves, debris, grease, etc. from the tiller — including cylinder cooling fans, recoil starter cover holes, under fuel tank, and under muffler.
5. Check the tiller for worn or damaged parts. Have damaged parts replaced if necessary.
6. Tighten any loose hardware.
7. Apply lubrication as directed in Maintenance section.
8. Put the unit in a building that has good ventilation.
9. Cover the tiller with a breathing material.

TRANSPORTING THE TILLER

Empty the gas tank. Always let the engine run until it has used up the remainder of gas in the tank. Empty the engine oil from the warm engine. Remove the spark plug cover from the spark plug. Clean the cooling fins of the cylinder and the housing. Use the original packaging to ship whenever possible.

TROUBLE SHOOTING

⚠ WARNING !

Before performing any maintenance or cleaning work, switch off the engine and wait until the blade has come to a stop.

⚠ CAUTION

Improper repairs can result in the product functioning unsafely. This endangers yourself and your environment.

Faults which cannot be rectified with the aid of the following table may require service by an authorized Yard Force repair center. Please be aware that any improper repairs will also invalidate the warranty and additional costs may be incurred.