


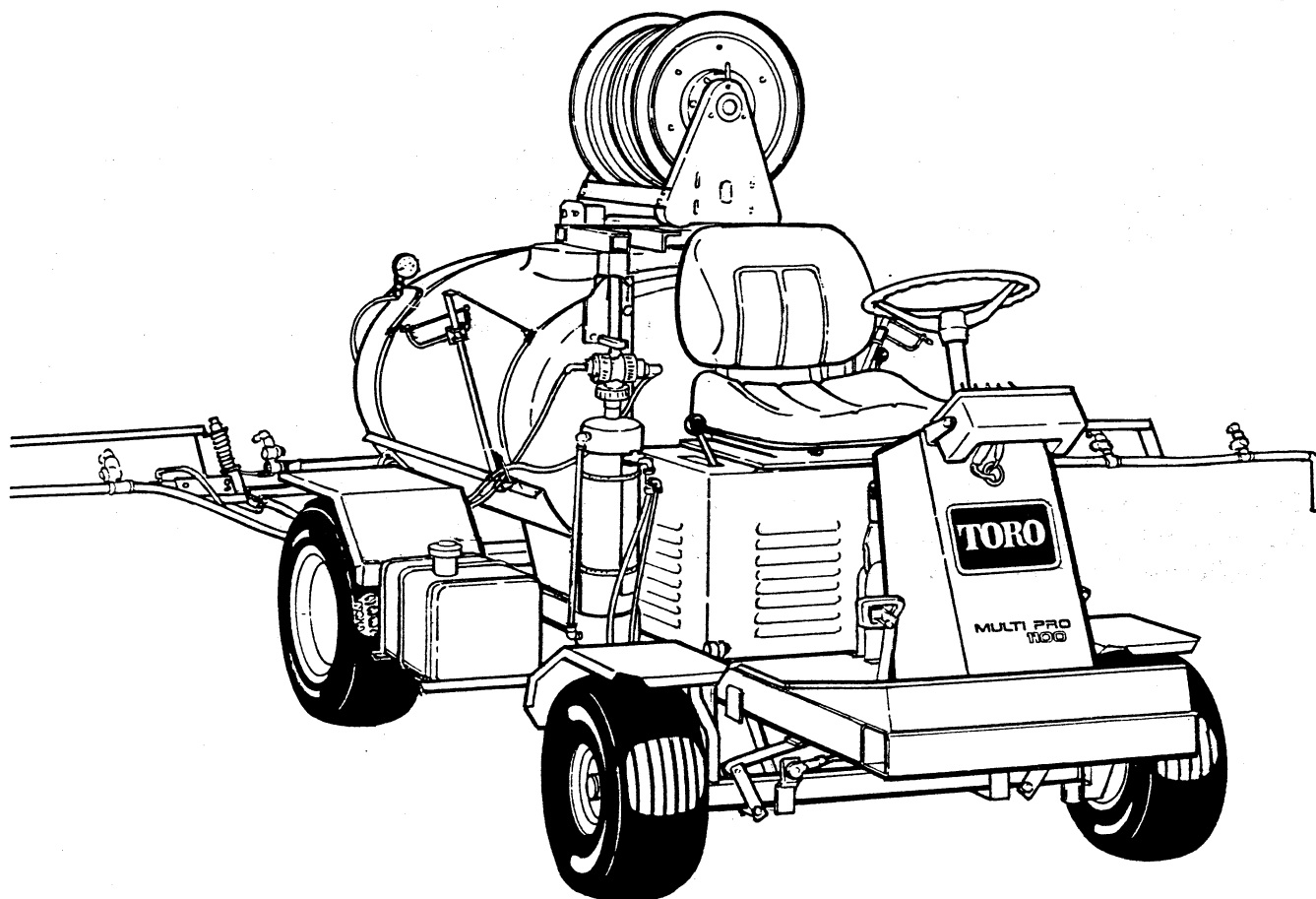


MODEL NO. 41105-30101 & UP

OPERATOR'S
MANUAL**MULTI-PRO 1100
VEHICLE**

To assure maximum safety, optimum performance, and to gain knowledge of the product, it is essential that you or any other operator of this Vehicle read and understand the contents of this manual before the engine is ever started. Pay particular attention to the **SAFETY INSTRUCTIONS** highlighted by this symbol —

 The safety alert symbol means **CAUTION, WARNING or DANGER** — personal safety instruction. Failure to comply with the instruction may result in personal injury.



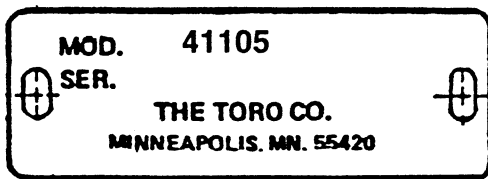
IDENTIFICATION NUMBERS

VEHICLE
SERIAL NUMBER _____

Located on floor board in front of
Seat Support.

ENGINE MODEL: CH185 PS-62517
SERIAL NUMBER _____

Located on right hand side of Engine
shrouding.



Record these numbers in the space above as soon as possible as it is necessary to include this information when ordering service parts or requesting information. Fill out the individual warranty cards and mail immediately.

Date Purchased.....

This vehicle is not a motor vehicle as defined by the National Traffic Motor Vehicle Safety Act. It is not designed or manufactured for use on roads, streets or highways and is not to be licensed as a motor vehicle.

safety

RECOGNIZE SAFETY INFORMATION



This safety-alert symbol is used to call attention to a dangerous situation, which could result in serious injury or death to the operator, a passenger or a bystander.

Follow recommended precautions and safe operating practices.

It is important to always replace any lost or damaged safety-alert and informational decals on the vehicle and accessories immediately.

UNDERSTAND SIGNAL WORDS

Be aware of the symbols and signal words used throughout this manual.

A signal word—DANGER, WARNING, or CAUTION—is used with the safety-alert symbol. DANGER identifies the most serious hazards.

Safety signs with signal word DANGER or WARNING are typically near specific hazards.

General precautions are listed on CAUTION safety signs. CAUTION also calls attention to safety messages in this manual.

Instructions beginning with the signal words “IMPORTANT” or “NOTE”, provide essential information regarding the operation and maintenance of this machine.

FOLLOW SAFETY INSTRUCTIONS

Read this manual and the engine manual BEFORE attempting to operate the vehicle. It is important that ALL operators of this vehicle have easy access to these instructions and safety information at all times. Keep this manual, the engine manual and any accessory manuals, in the plastic tube behind the operator seat when not in use.

Carefully read all safety messages in this manual and on your machine safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs.

Learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction.

Keep your machine in proper working condition. Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.

Read the engine manufacturer's operating instructions. Make note of the safety-alert messages and follow them.



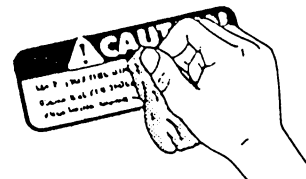
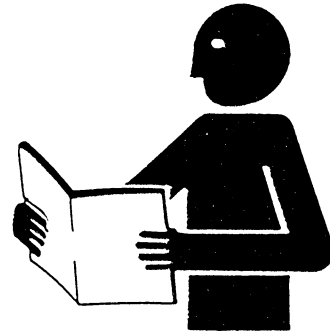
⚠ DANGER

⚠ WARNING

⚠ CAUTION

IMPORTANT!

NOTE:



OPERATE SAFELY

This manual is provided as a guide in the safe operation and proper maintenance of this vehicle. However, the operator's personal safety, as well as those persons in the work area, will depend on the careful actions and good judgement of the operator.

DO NOT operate the vehicle in or near any area where there are explosive fumes or dust. This vehicle's electrical and exhaust systems will make sparks . . . which can ignite explosive fumes or dust!

KEEP RIDERS OFF MACHINE

Only allow the operator on the machine. Keep riders off.

Riders on machine are subject to injury such as being struck by foreign objects and being thrown off of the machine. Riders also obstruct the operator's view resulting in the machine being operated in an unsafe manner.



DRIVE SAFELY

Always SLOW the vehicle when approaching, and while making, a turn.

Always SLOW the vehicle when driving in unfamiliar areas or over rough terrain.

Always SLOW the vehicle when changing the direction of travel or preparing to stop.

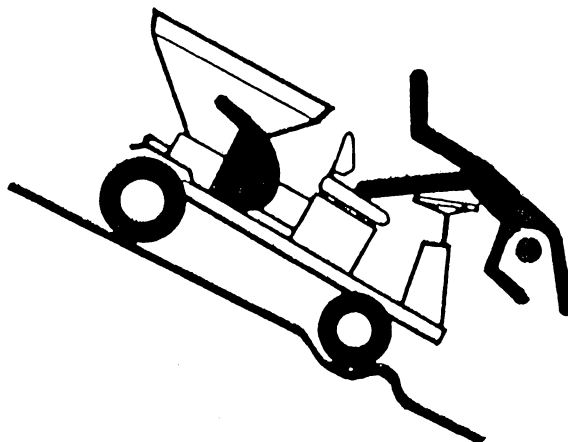
DO NOT make sudden or sharp turns or change direction of travel, on an incline, ramp, grade, slope or similar surface.

Adjust the vehicle speed to allow for existing conditions such as wet, slick surfaces, low visibility, etc.

Drive the vehicle UP and DOWN the face of the slopes, inclines or grades whenever possible. DO NOT drive ACROSS the face if at all possible. There is a risk of upsetting the vehicle, which can result in serious injury or death.

Be especially careful when driving a heavily loaded vehicle down an incline or slope. SLOW the vehicle !

Keep both hands on the steering wheel whenever possible. Keep all body parts within the vehicle while it is moving. Arms and legs sticking out past the vehicle sides could be seriously injured by nearby objects being passed.



PREVENT MACHINE RUNAWAY

Avoid possible injury or death from machinery runaway.

Do not start engine by shorting across starter terminals. Machine will start in gear if normal circuitry is bypassed.

NEVER start engine while standing on ground. Start engine only from operator's seat, with transmission in neutral or park.



AVOID TIPPING

Do not drive where machine could slip or tip.

Stay alert for holes, rocks, and roots in the terrain, and other hidden hazards. Keep away from drop-offs.

Slow down before you make a sharp turn.

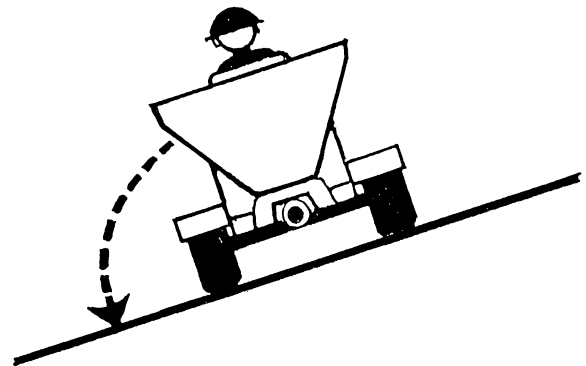
The center of gravity is higher when sprayer tank or hopper is full, and vehicle can tip at any speed.



PROTECT BYSTANDERS

DO NOT operate near bystanders, ramp edges, platforms or other equipment. Watch for overhead obstacles, low hanging tree limbs, door jambs, etc.

Be aware of your surroundings, bystanders and other equipment. Always back the vehicle carefully and only at a reasonable speed. ALWAYS look to be sure there is no one behind you!

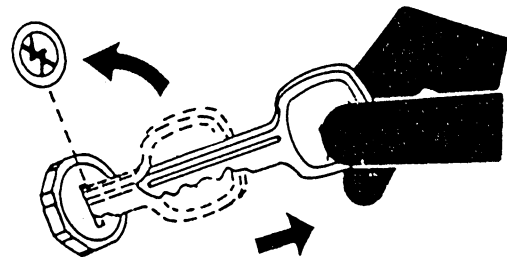


PARK SAFELY

Disengage all power, shut off engine, and be sure all moving parts have stopped before servicing, lubricating, or unclogging machine.

Always stop engine and remove key before leaving operator's seat. Do not leave engine running unattended.

Park vehicle with park brake engaged.



HANDLE FUEL SAFELY—AVOID FIRES

Handle fuel with care: it is highly flammable. Do not refuel the machine while smoking or when near open flame or sparks.

Always stop engine before refueling machine. Fill fuel tank outdoors.

Prevent fires by keeping machine clean of accumulated trash, grease, and debris. Always clean up spilled fuel.



AVOID INJURY FROM MOVING PARTS

Keep hands, feet, and clothing away from power-driven parts.

Never clean, lubricate or adjust machine while it is running.



STAY CLEAR OF ROTATING DRIVELINES

Entanglement in rotating driveline can cause serious injury or death.

Keep tractor master shield and driveline shields in place at all times. Make sure rotating shields turn freely.

Wear close fitting clothing. Stop the engine and be sure PTO driveline is stopped before making adjustments, connections, or cleaning out PTO driven equipment.



AVOID HIGH-PRESSURE FLUIDS

Escaping fluid under pressure can penetrate the skin causing serious injury. Relieve pressure before unhooking hydraulic or other lines. Tighten all connections before applying pressure. Keep hands and body away from pinholes and nozzles which eject fluids under high pressure. Use a piece of cardboard to search for leaks.

If ANY fluid is injected into the skin, it must be surgically removed within a few hours by a doctor familiar with this type injury or gangrene may result.

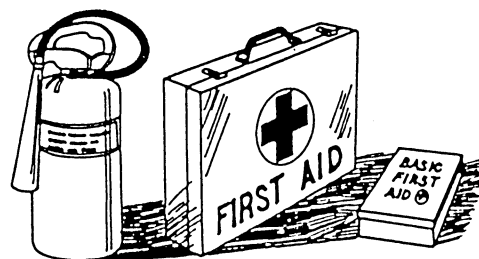


PREPARE FOR EMERGENCIES

Be prepared if a fire starts.

Keep a first aid kit and fire extinguishers handy.

Keep emergency numbers for doctors, ambulance service, hospital, and fire department near your telephone.



PRACTICE SAFE MAINTENANCE

Understand service procedure before doing work. Keep area clean and dry.

Never lubricate or service machine while it is moving. Keep hands, feet, and clothing from power-driven parts. Disengage all power and operate controls to relieve pressure. Lower equipment to the ground. Stop the engine. Remove the key. Allow machine to cool.

Securely support any machine elements that must be raised for service work.

Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Remove any buildup of grease, oil, or debris.

Disconnect battery ground cable (—) before making adjustments on electrical systems or welding on machine.

Remove all traces of fertilizer from cavities and tubes before any type welding takes place.

Always use the hydraulic lock when servicing vehicle with utility bed raised.



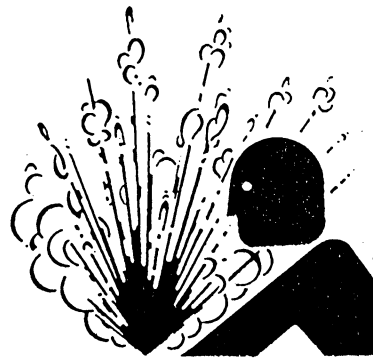
INSPECT MACHINE SAFELY

Always check all parts of the vehicle and any attachments before actual use. If there is a problem, make sure it is corrected BEFORE the unit is put in operation.

Foam marker tank is under pressure. Shut off compressor and put control handles in the open position while servicing the foam marker tank.

Shields and guards must be in place and in good condition before starting.

Keep nuts, bolts, and all connections tight. Replace worn parts.



SERVICE TIRES SAFELY

Failure to follow proper procedures when mounting a tire or a wheel or rim can produce an explosion which may result in serious injury or death. Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job. Have it done by your distributor or a qualified tire repair service.

When sealing tire beads on rims, never exceed 32 psi (241 kPa) (2.4 bar) or maximum inflation pressures specified by tire manufacturers for mounting tires. Inflation beyond this maximum pressure may break the bead, or even the rim, with dangerous explosive force. If both beads are not seated when the maximum recommended pressure is reached, deflate, reposition tire, relubricate bead, and reinflate.

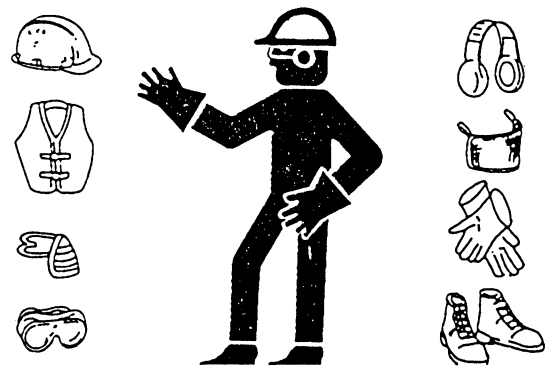


WEAR PROTECTIVE CLOTHING

Wear close fitting clothing and safety equipment appropriate to the job.

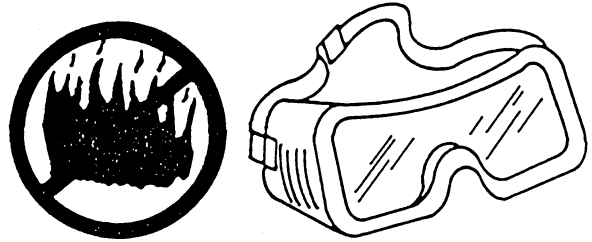
Prolonged exposure to loud noise can cause impairment or loss of hearing.

Wear a suitable hearing protective device such as earmuffs or earplugs to protect against objectionable or uncomfortable loud noises.



BATTERY PRECAUTIONS

Batteries generate explosive gases. Keep sparks, flames, burning cigarettes, or other ignition sources away at all times. Always wear safety goggles when working near batteries.



PREVENT BATTERY EXPLOSIONS

Battery gas can explode. Keep sparks and flames away from batteries. Use a flashlight to check battery electrolyte level.

Never check battery charge by placing a metal object across the posts. Use a voltmeter or hydrometer.

Always remove grounded (-) battery clamp first and replace it last.



AVOID ACID BURNS

Sulfuric acid in battery electrolyte is poisonous. It is strong enough to burn skin, eat holes in clothing, and cause blindness if splashed into eyes.

Avoid the hazard by:

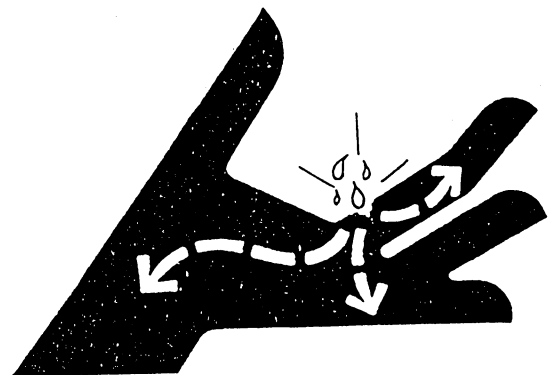
1. Filling batteries in a well-ventilated area.
2. Wearing eye protection and rubber gloves.
3. Avoiding breathing fumes when electrolyte is added.
4. Avoiding spilling or dripping electrolyte.

If you spill acid on yourself:

1. Flush your skin with water.
2. Apply baking soda or lime to help neutralize the acid.
3. Flush your eyes with water for 10-15 minutes. Get medical attention immediately.

If acid is swallowed:

1. Drink large amounts of water or milk.
2. Then drink milk of magnesia, beaten eggs, or vegetable oil.
3. Get medical attention immediately.



AVOID TOXIC FUMES

Some chemicals are toxic and, in sufficient quantities, may be fatal. Ill effects or death does not have to be from direct contact.

Wear a filtered respirator. Wear goggles to protect your eyes.

Keep dust away from skin and hair.

Keep containers low when pouring.

Let the wind blow fumes away from you when mixing or filling.

Use chemicals only in applications for which they are recommended.

Clean equipment in a recommended manner.



HANDLE CHEMICALS SAFELY

Chemicals can be dangerous. Improper selection or use can injure persons, animals, plants, soils or other property.

Select the right chemical for the job.

Handle and apply chemicals with care.

Follow instructions issued by chemical manufacturer.

Study all labels carefully. DO NOT remove labels.

Wear goggles to protect your eyes.

Wash exposed skin areas frequently—do not leave chemicals on your skin.

Do not smoke while handling chemicals.

Properly dispose of chemical containers, unused chemicals and left-over treated seed and fertilizer.

Read and observe manufacturer's recommendations.

Remove clothing and bathe skin immediately if chemicals contact skin. Launder contaminated clothing.

Wash hands before eating.

Apply chemicals at recommended time, rate, and manner. Do not allow chemicals to drift to neighboring areas.

See a physician immediately if symptoms of illness occur during or shortly after the use of any chemicals.



Store chemicals in a separate, plainly marked, LOCKED building.

Store chemicals in original containers with labels intact.

Federal and state laws govern the use of chemicals. Before using any chemical, consult state agricultural agent or chemical supplier for proper uses.

See a physician or druggist for first aid kits and learn how to use them.



INSTALLING AND USING ATTACHMENTS:

Always read the operating instructions that are included with the accessories BEFORE actually operating the unit. Carefully read and follow any "set-up" instructions that are given.

The installation of accessories on the TORO vehicle other than those designed and sold for that express purpose by TORO may adversely affect the performance and safety characteristics of this vehicle.

The addition of accessories, with their added weight and bulk will make the vehicle somewhat less stable. When turning or driving on slopes, always SLOW the vehicle before making a turn, and then SLOWLY turn the vehicle to prevent loss of control and possibly upset the vehicle.

DO NOT OVERLOAD THE VEHICLE. Maximum load limits are shown on decals used on all accessories . . . do not exceed these limits.

Failure to position loads carefully can result in their shifting or tipping over suddenly, causing the vehicle to upset.

Distribute loads evenly, keeping them low so as to prevent the vehicle from becoming top-heavy. When loading the cargo bed, have heavy loads to the front of the rear axle. Heavy loads in back of the rear axle can raise the front wheels clear of the ground, causing a loss of steering control and making the vehicle unstable.



Keep all Decals in good condition. Replace missing or damaged Decals as soon as possible.



#65-3090 Located center of Dash Panel, below Steering Column.

! WARNING

FAILURE TO OBEY THE SAFETY WARNINGS MAY RESULT IN INJURY TO YOU OR OTHERS.

THIS VEHICLE IS OF SUFFICIENT SIZE AND WEIGHT TO CAUSE SERIOUS INJURY IN CASE OF UPSET OR COLLISION.

WHILE OPERATING VEHICLE:

- READ AND UNDERSTAND OPERATOR'S MANUAL LOCATED BEHIND SEAT.
- DO NOT EXCEED PAYLOAD CAPACITY OF VEHICLE AND/OR TORO ACCESSORIES OR PERMIT PASSENGER ANY PLACE ON VEHICLE EXCEPT SEAT.
- USE HAND HOLDS WHERE APPLICABLE.
- PLACE HEAVY LOADS FORWARD OF REAR AXLE. UNBALANCED OR TOP HEAVY LOADS CAN CAUSE UPSET.

WHILE OPERATING VEHICLE:

- REMAIN SEATED AND USE BOTH HANDS FOR STEERING.
- KEEP ARMS AND LEGS WITHIN VEHICLE BODY.
- AVOID SUDDEN STARTS AND STOPS.
- SUDDEN SHARP TURNS CAN CAUSE UPSET.
- REGULATE SPEED TO MEET ROAD AND WEATHER CONDITIONS.
- DO NOT OPERATE IN OR NEAR AN EXPLOSIVE ENVIRONMENT.
- IF A MALFUNCTION OCCURS, CEASE OPERATION. DO NOT OPERATE VEHICLE UNTIL CONDITION IS CORRECTED.

BEFORE LEAVING VEHICLE:

- TURN IGNITION TO "OFF" POSITION. REMOVE KEY.
- APPLY PARKING BRAKE. PARKING BRAKE IS NOT AUTOMATICALLY APPLIED.

67-0580

#67-0580 Located on floor board, behind Console.

! CAUTION

TO AVOID PERSONAL INJURY KEEP ALL SHIELDS IN PLACE.

- DISENGAGE AND SHUT OFF ENGINE BEFORE SERVICING OR UNCLOGGING MACHINE.
- KEEP HANDS, FEET AND CLOTHING AWAY FROM POWER-DRIVEN PARTS.

67-0450

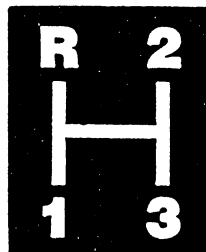
#67-0450 Located on Engine

! CAUTION

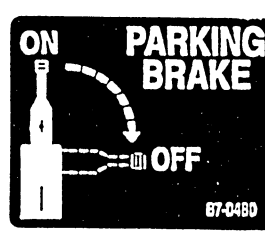
HYDRAULIC FLUID ONLY

Use 10W40 motor oil, which meets API Services SG, SF/CD specifications

#67-0500 Located on Steering Pump Reservoir



#41173 Located on right hand side of Seat Support.



#67-0480 Located on floor board, at right of Emergency Brake.



#41176 Located on Dash Panel, next to Key Switch.

! WARNING

AVOID POSSIBLE INJURY OR DEATH FROM A MACHINE RUNAWAY.

- DO NOT START ENGINE BY SHORTING ACROSS STARTER TERMINALS. MACHINE WILL START IN GEAR AND MOVE IF NORMAL STARTING CIRCUITRY IS BYPASSED.
- START ENGINE ONLY FROM OPERATOR'S SEAT WITH TRANSMISSION IN NEUTRAL OR PARK.
- NEVER START ENGINE WHILE STANDING NEXT TO MACHINE

67-0430

#67-0430 Located at bottom rear side of Seat Support.



#41175 Located on Seat Support next to Throttle.



#41174 Located at left rear of Seat Support, near Spray Pump Clutch Handle.

pre-use service

IMPORTANT: THE BATTERY ON THIS VEHICLE MUST BE BROUGHT TO A FULL CHARGE PRIOR TO CONNECTING THE BATTERY CABLES AND OPERATION OF THE VEHICLE



CAUTION: Batteries contain sulfuric acid . . . avoid contact with skin, eyes, or clothing. Batteries produce explosive gas when being charged. Ventilate area when charging battery. Keep cigarettes, open flame and sparks away from battery at all times. Keep batteries and acid out of reach of children. Remove all jewelry when working on battery.



When removing battery from equipment, always disconnect the negative (–) (ground) cable first.

When replacing battery, connect the negative (–) (ground) cable last.

Disconnect battery before any welding by removing negative (–) (ground) cable first.

After bringing the battery to a full charge:

- Connect the positive (+) cable first, and cover the terminal with the rubber protective cap.
- ALWAYS connect the negative (–) cable last.

ELECTRICAL SYSTEM:

DO NOT connect the battery cables until all wiring harness connections have been made and properly tightened.

If accidentally grounded, the lead to the battery terminal will burn the wiring harness.

IMPORTANT!

Spark arrestors are required by California Public Resources Code, Sections 4428-4422, when operating any internal combustion engine on hydrocarbon fuels, on forest, brush or grass-covered lands.

vehicle controls

Familiarize yourself with the controls and recommended operating procedures before operating the MULTI-PRO. These procedures will help to maintain the efficient performance this machine was designed to deliver.

Most of the Vehicle controls are familiar automotive-type. Those which are unique to this Vehicle are explained as follows.

THROTTLE CONTROL: Controls the speed of the engine. Pushing the Lever forward increases the engine speed. Pulling the Lever back toward the operator decreases the engine speed.

EMERGENCY BRAKE: Pull up toward operator to lock the Brake. ALWAYS USE EMERGENCY BRAKE WHEN PARKING.

GEAR SHIFT LEVER: Is located to the right side of the operator's seat. The "H" shift pattern for the standard 3-speed transmission is diagrammed on the decal.

"Right" and "Left" as used in this manual refer to the operators' right or left, when seated in the normal operating position. Likewise "Front" and "Rear" as seen from the operators' position.

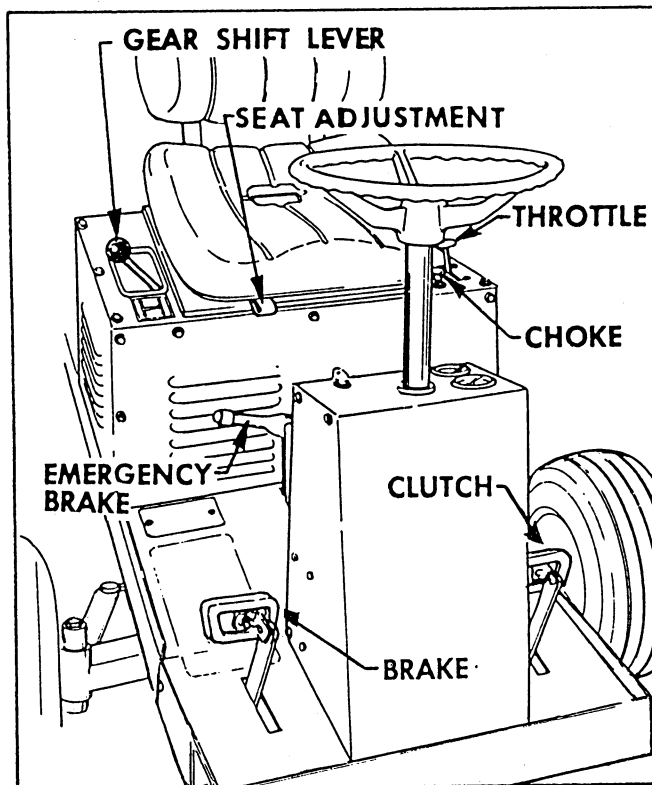


FIG. 1

VEHICLE SPEEDS

Speed in M.P.H. (Miles per Hour)	Time Required in SECONDS to Travel a Distance of:		
	100 feet	200 feet	300 feet
3.0	23	45	68
3.5	20	39	58
4.0	17	34	51
4.5	15	30	45
5.0	14	27	41
6.0	11	23	34
7.0	9.7	19	29
7.5	9	18	27
8.0	8.5	17	26
9.0	7.6	15	23
10	6.8	14	20

INSTALLING ATTACHMENTS:

Assembly Instructions and an illustrated Parts List are included with all attachments and accessories to be used with the MULTI-PRO. Carefully read these instructions before actual operation

vehicle operation

ALWAYS CHECK THE OIL LEVEL BEFORE STARTING THE ENGINE. Make sure the engine is stopped and the Vehicle is parked on a level surface. Allow time for the engine to cool and oil to drain into the sump.

CAUTION: Start engine **ONLY** outdoors or in a well ventilated area. Exhaust fumes are dangerous.

STARTING THE ENGINE:

- Fully depress the Clutch Pedal to disengage the transmission.
- Hold the Clutch Pedal to the floor plate and position the Gear Shift Lever in NEUTRAL.

NOTE: As a safety feature, the MULTI-PRO is designed so that the engine cannot be started until the Clutch Pedal is fully depressed and the Gear Shift Lever is in NEUTRAL.

- Move the Throttle Lever to midway between "SLOW" and "FAST" positions.
- Pull the Choke up to full choke position, (if engine is cold)
- Turn the Ignition Key to the full right (Start). Release the Key as soon as the engine starts.

CAUTION: Do not hold Key in starting position longer than 10 seconds at one time. If the engine does not start, wait at least 60 seconds before attempting to start again. Continuous cranking will burn out the starter motor. If the engine develops sufficient speed to disengage the starter, but fails to continue running, the engine must come to a complete stop before attempting to restart the engine. If starter is engaged while flywheel is still rotating, the starter pinion and flywheel ring gear may clash, resulting in damage to the starter.

If the starter does not turn engine over, shut off ignition immediately and do not attempt to start engine until condition has been corrected. Do not "Jump-start" using another larger, battery. **NOTE** Starter motors are prelubricated. Brushes normally require servicing only after extended use.

- Gradually push the Choke Control down to the "OFF" position as the engine starts and warms up.
- Position the Throttle Lever at the desired engine speed.

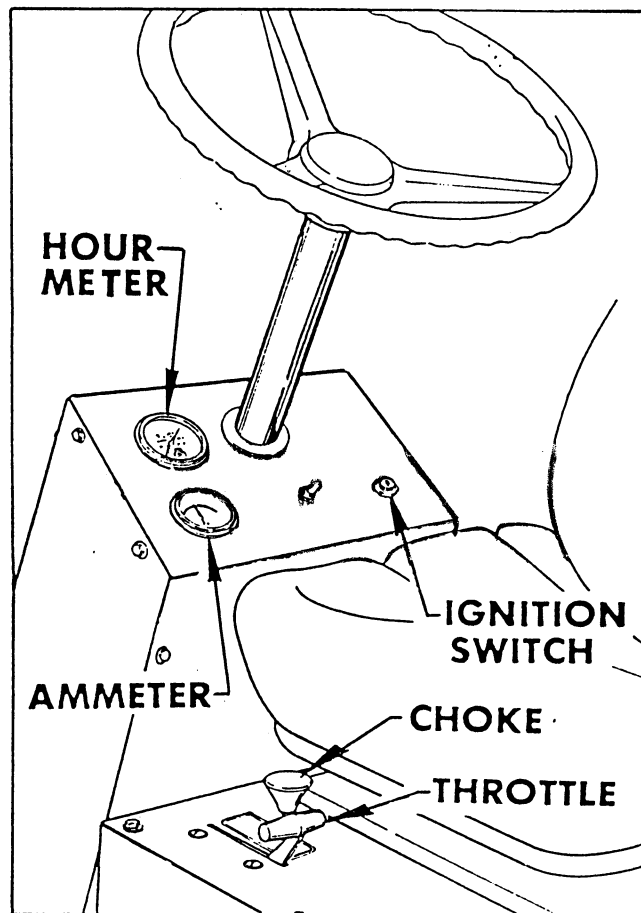


FIG. 2

STOPPING THE ENGINE:

- Move the Throttle Lever to "SLOW" and turn Ignition Key to "OFF."
- Remove the Ignition Key and engage the Emergency / Parking Brake.

CAUTION: DEVELOP THE HABIT OF REMOVING THE KEY EVERY TIME YOU LEAVE THE VEHICLE AND ENGAGE THE EMERGENCY / PARKING BRAKE.

CAUTION: Do not operate the engine continuously at angles exceeding 30° in any direction. Engine damage may result from lack of lubrication.

Stop the engine immediately if debris builds up on the air intake screen and remove debris.

CAUTION: The engine and exhaust system can be extremely hot. Do not operate with shrouds, covers or guards removed. Do not let engine run unattended.

maintenance & lubrication schedule

Refer to Page	Service at intervals indicated (X)	Hours of Operation					
		daily	25	50	100	200	500
13	Check engine crankcase oil	X					
13	Service air cleaner	X					
14	Clean engine cooling fins	X					
14	Check steering pump oil level.	X					
13	Change engine crankcase oil		X				
15	Check transmission oil level			X			
15	Check differential oil level			X			
15	Check master cylinder oil level			X			
15	Check tire pressures			X			
16	Lubricate at all grease fittings			X			
17	Service spark plug				X		
13	Change air cleaner element				X		
17	Check tension of all belts					X	
	Clean Battery terminals					X	
15	Check all hoses, pipes and clips						X
	Drain and refill transmission and differential						X

maintenance


The Maintenance Schedule in this Manual specifies maintenance and lubrication periods based on normal operating conditions. Check and service the MULTI-PRO and attachments more frequently when operating in extremely cold, hot or dusty conditions. For additional engine maintenance information see the Engine Manual.

FUEL:

Use clean fresh regular or unleaded grade gasoline with an octane rating of 87 or higher. Unleaded is recommended because it leaves less combustion chamber deposits.

Do not overfill Fuel Tank, leave room for fuel to expand.

Proper fuel storage is very important. Dirty fuel and fuel that has been stored for a long period of time can cause many engine problems. Store the fuel in a convenient place outside of buildings.

 **CAUTION:** Never smoke or leave engine running while filling fuel tank. Allow the engine to cool before re-fueling.

Preventive maintenance will pay off many times over in peak performance and efficient operation.



CAUTION: Before servicing or adjusting this machine...

- ✓ Disengage all power
- ✓ Shut-off the engine
- ✓ Wait until all moving parts have stopped moving.

WHEEL TORQUE SPECIFICATIONS:

After the "initial run-in" (approximately one to two hours) check all the fasteners for tightness. Particularly the Front and Rear Wheels. Check periodically thereafter and maintain the wheel nuts at:

FRONT WHEELS: 55-65 ft. lbs. (75-88 N-m) max.

REAR WHEELS: 65-75 ft. lbs. (88-102 N-m) max.

ENGINE CRANKCASE OIL & FILTER:

Check the oil level daily, before engine start-up, while engine is cool. Have the machine on a level surface with the engine OFF. Add oil if necessary, to bring level up to, but not over the "F" mark on the dipstick.

CAUTION: Do not operate engine with oil level below the "L" mark or over the "F" mark. Keep the area around the fill tube clean to prevent dirt from falling into the engine.

(OIL CAPACITY: 2 U.S. quarts (1.9 litres))

WINTER: (below 32°) use S.A.E. 5W-30

SUMMER: (above 32°) use S.A.E. 30

IMPORTANT: Use high quality detergent oil of API (American Petroleum Institute) service class SF.

The engine Oil Filter is important in preserving the internal condition of the engine and should be changed every 25 hours or whenever the engine oil is changed.

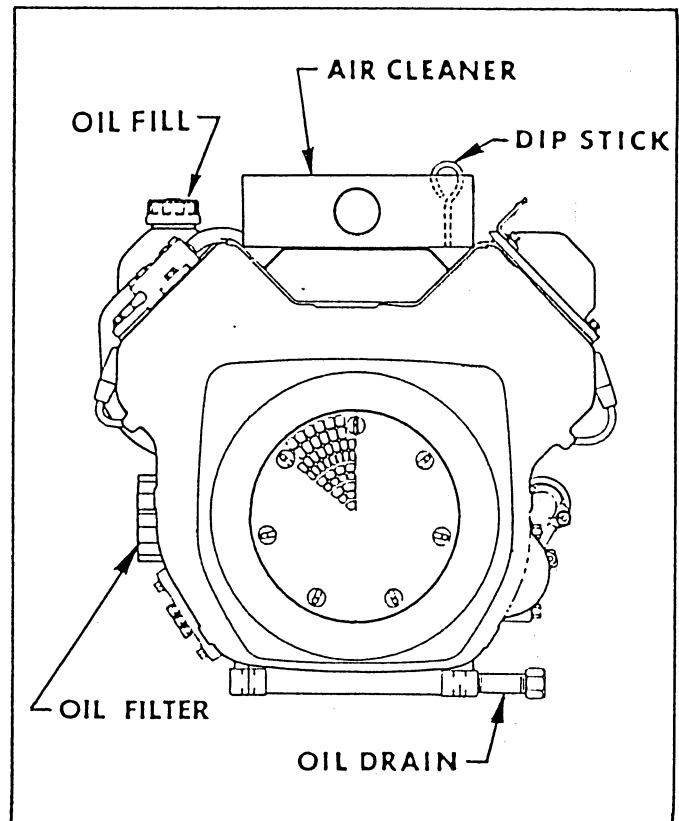


FIG. 3

IN A NEW OR REBUILT ENGINE . . . CHANGE THE CRANKCASE OIL AFTER THE FIRST FIVE HOURS OF OPERATION, AND EVERY 25 HOURS THEREAFTER.

While engine is warm, drain the crankcase by removing the cap on the oil drain (see FIG. 3). Clean the cap and replace. Refill , using a screened funnel.

AIR CLEANER:

Service daily if engine is operating in very dusty and dry conditions. Extensive damage can result from operating with a dirty air cleaner.

- Remove wing nut and air cleaner cover.
- Remove precleaner from paper element and wash precleaner in warm water with detergent. Rinse thoroughly to remove all traces of detergent.
- Squeeze away excess water. Do not "wring" precleaner.
- Saturate in fresh, clean engine oil and squeeze out excess.
- Reinstall precleaner over paper element.

After every 100 hours, more often under extremely dusty or dirty conditions, clean the paper element.

- Remove the precleaner, the element cover and the paper element.
- Gently tap the flat side of the element to dislodge dirt. Do not wash or use pressurized air to clean the paper element. If element is damaged, replace it.

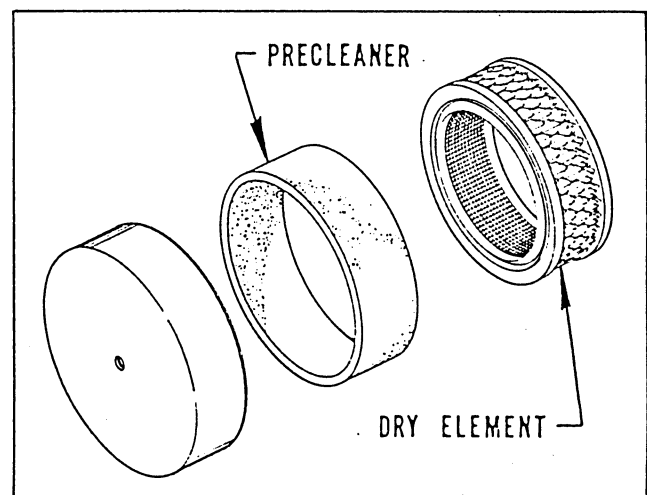


FIG. 4

While Air Cleaner is disassembled, check the base plate, cover and seals for damage. Damaged components allow unfiltered air into engine, causing premature wear and failure.

maintenance cont.



CAUTION: Disengage all power, shut off engine and be sure all moving parts have stopped before servicing, lubricating or unclogging machine.

ENGINE COOLING SYSTEM:

Remove the cooling shrouds and clean the cooling fins daily. Also clean dust, dirt and oil from external surfaces of engine and the air intake screen. Do not operate with cooling shrouds removed!

STEERING PUMP:

Check the oil level in the Steering Pump's reservoir daily. Remove the cap and check to see that the oil level is above the top of the filter within the reservoir. Replenish as required with 10W40 Motor Oil.

To check the power steering:

- Fill the reservoir
- Start the engine
- Turn the Steering Wheel full left, then full right.
- Turn off the engine and recheck the oil level. Replenish as required.



CAUTION! The engine and exhaust system can be extremely hot. Do not operate with any shrouds, covers or guards removed.

FUEL FILTER:

An in-line filter is incorporated into the fuel line. Should it become necessary to replace the Filter, proceed as follows:

- Clamp fuel lines on each side of the Filter so gasoline cannot drain when lines are removed.
- Loosen the hose clamps at both ends of the Filter and pull fuel lines off Filter.
- Push fuel lines onto a replacement Filter and tighten the hose clamps to secure them to the Filter. Be sure arrow on side of Filter points toward the fuel pump.

ENGINE TROUBLESHOOTING:

	Problem	No Fuel	Improper Fuel	Dirt In Fuel Line	Dirty Air Screen	Incorrect Oil Level	Engine Over-Loaded	Dirty Filter Element	Faulty Spark Plug
When a problem occurs, do not overlook the simple causes. For example, starting problems could be caused by an empty fuel tank. The table lists some common causes of troubles.	Will not start	X		X			X	X	X
	Hard Starting	X	X	X			X	X	X
	Stops suddenly	X		X	X	X	X	X	
	Lacks power		X	X	X	X	X	X	X
Do not attempt to service or replace major items or any items that call for special timing or adjustment procedures (governor, valves, etc.). Have this work done by your Kohler Engine Service Dealer.	Operates erratically		X	X	X		X	X	X
	Knocks or pings		X		X		X		X
	Skips or misfires		X	X	X			X	X
	Backfires			X			X	X	X
	Overheats			X	X	X	X	X	
	High fuel consumption							X	X

DIFFERENTIAL

The Differential has a capacity of 3 U.S. pints (1.4 l). Check the oil level after every 50 hours of operation.

To check the oil level remove the pipe plug from the rear of the Differential housing. If oil does not run out, replenish with a high quality SAE 85-140 gear oil at temperatures above 32°F. Add oil until it begins to drip from hole where plug was removed.

TRANSMISSION:

The Transmission has a capacity of 1½ U.S. Pts. (.71 l). Check the oil level after every 50 hours of operation.

To check the oil level remove the pipe plug from the side of the Transmission housing. If oil does not run out, replenish with a high quality SAE 85-140 gear oil at temperatures above 32°F. Add oil until it begins to drip from hole where plug was removed.

AFTER EVERY 500 HOURS OF OPERATION DRAIN AND REPLACE THE OIL IN BOTH THE TRANSMISSION AND THE DIFFERENTIAL

MASTER CYLINDER:

Check every 50 hours to see that fluid is within one half inch of top of the cylinder. Replenish if necessary with any high quality automotive brake fluid.

TIRE PRESSURE:

Check frequently and maintain tire pressure as follows:

FRONT TIRES: 15 p.s.i. (max.)

REAR TIRES: 15 p.s.i. (max.)

Tire pressure is a matter of individual preference and Vehicle load. Once the desired pressure has been ascertained it should be used as a factor in the computer programming and maintained, to insure the accuracy of the spraying system.

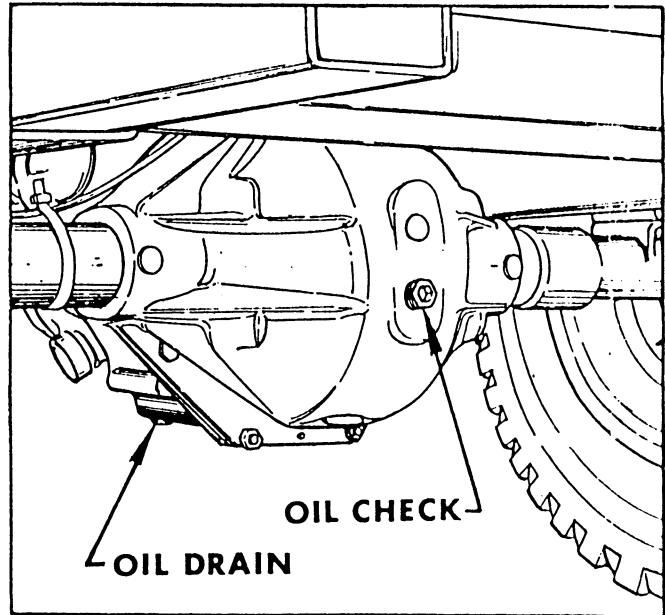


FIG. 5

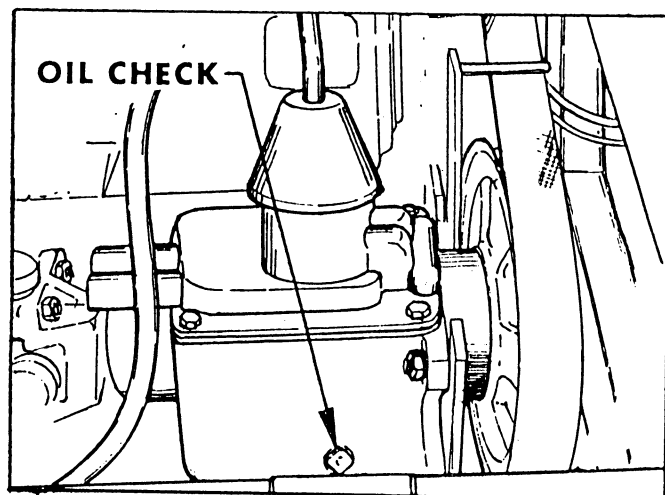


FIG. 6

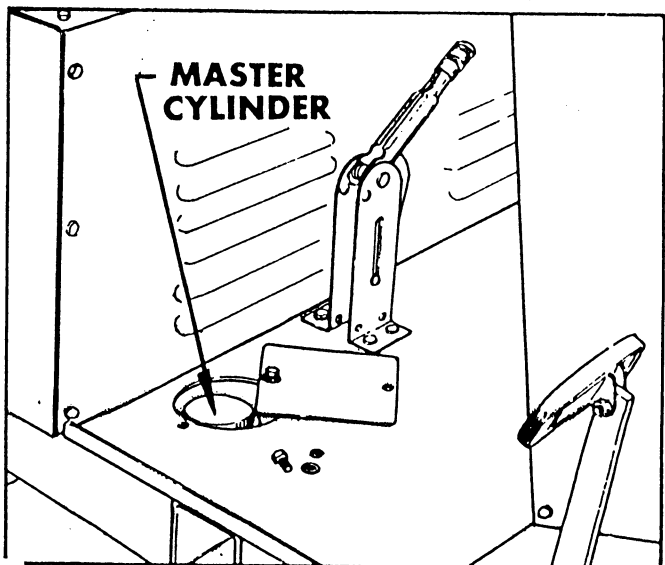
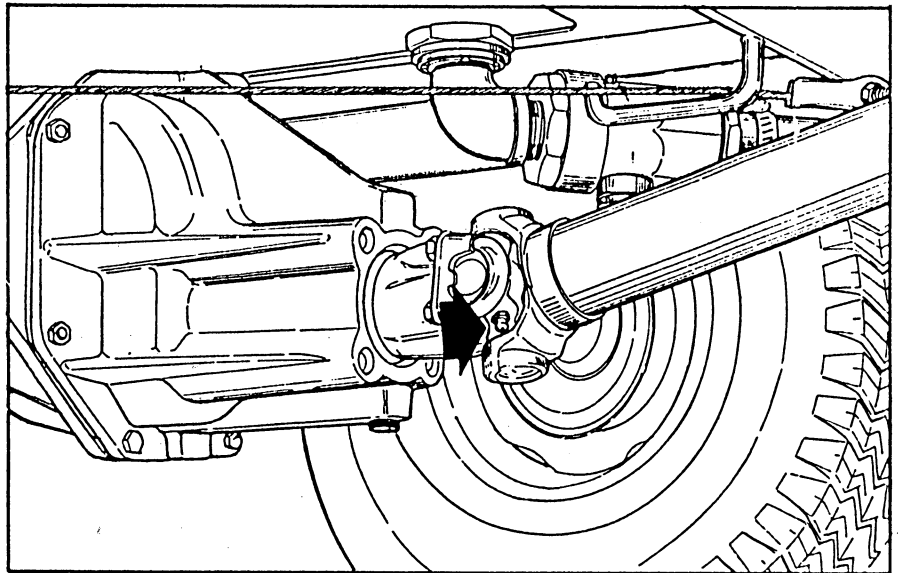
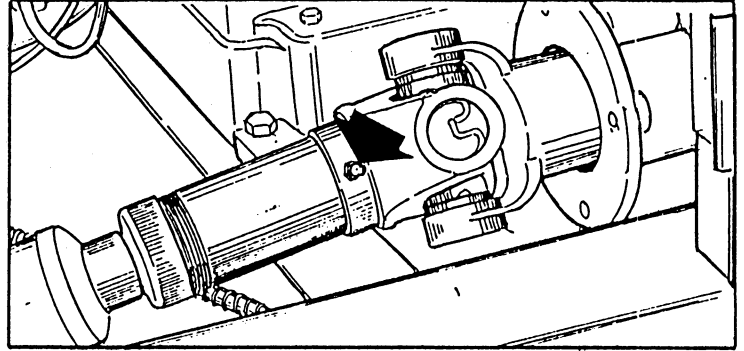
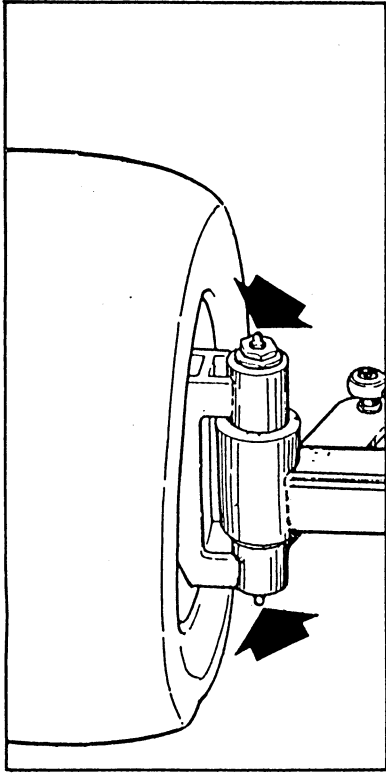


FIG. 7

AFTER EVERY 50 HOURS:

Use a hand grease gun with a good grade of general purpose grease to lubricate through grease fittings at the following points:



SPARK PLUG :

Every 100 hours remove plug and check condition. Good operating conditions are indicated if plug has light coating of gray or tan deposit. A dead white, blistered coating could indicate over-heating. A black (carbon) coating may indicate an "over-rich" fuel mixture caused by clogged air cleaner or improper carburetor adjustment. Do not sandblast, wire brush, scrape or otherwise service plug in poor condition . . . best results are obtained with new plug. Set spark gap to .025"

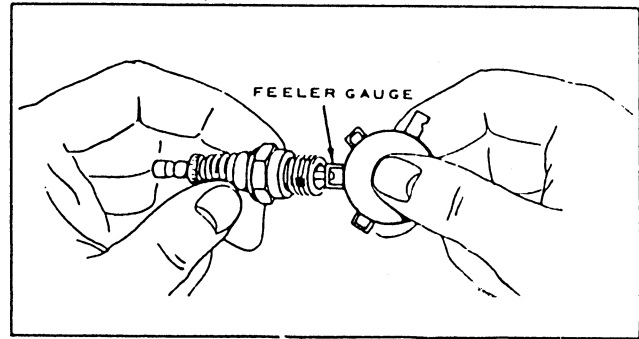


FIG. 8

IMPORTANT!

Equipment to be operated in Canada must use a resistor type spark plug in compliance with Canadian Government regulations.

BELT TENSION:

CAUTION: Do not attempt to check or adjust the tension of the belts while the engine is running.

After every 200 hours of operation, check the tension of all belts and clearance of belt guides.

The best tension for a V-belt drive is the lowest tension at which the belts will not slip under the highest load condition.

Check the tension on a new drive frequently during the first day of operation.

Check the drive tension periodically, thereafter.

Too much tension shortens belt and bearing life.

Keep belts and sheaves free from any foreign material which may cause slip.

If a V-belt slips, tighten it.

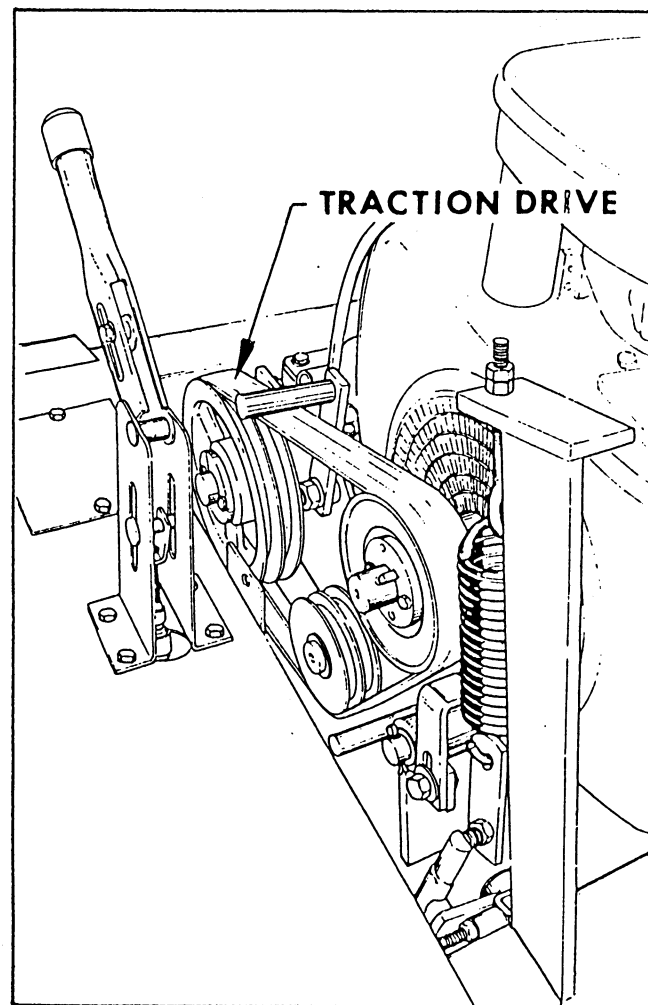


FIG. 9

adjustments

CLUTCH PEDAL "FREE PLAY":

The Clutch Pedal is set at the factory so that when the Pedal is "at rest", it is pressed against the Stop Plates; and when the Clutch Pedal is depressed, it will travel approximately $\frac{1}{8}$ to $\frac{3}{8}$ inch before actuating the Clutch linkage. That is, "free play". See FIG. 10.

It is necessary to maintain this "free play" in order to insure the safe and efficient operation of the Vehicle's drive mechanism. Adjust as follows:

- Loosen the nut on top of the Stop Plates.
- Depress and hold the Clutch Arm at the point of resistance.
- Slide the two Plates back until there is $\frac{1}{8}$ to $\frac{3}{8}$ inch between the Plates and the Clutch Arm. Tighten the nut on top of the Plates.

When it is no longer possible to achieve Clutch Pedal "free play" by this method, proceed as follows:

- Remove the Return Spring and the Adjustable Clevis from the Clutch Arm and loosen the Jam Nut on the Push Rod.
- Turn the Adjustable Clevis on the Push Rod to lengthen the linkage, until the "free play" is achieved.
- Reassemble the Adjustable Clevis to the Clutch Arm, replace the Return Spring and tighten the Jam Nut.

TRACTION DRIVE BELT

It is necessary to make sure that there is sufficient "free play" prior to any adjustment of the Traction Drive Belt. See "CLUTCH PEDAL FREE PLAY" above.

To adjust the Drive Belt tension, tighten or loosen the Stop Nut (see FIG. 11) to increase or decrease the Idler Pivot Spring tension. Tension is correct when a .010 feeler gage will slide between the coils.

Recheck Clutch Pedal "free play".

Further adjustment can be obtained by sliding the engine in the slotted mounting holes in the frame.

BELT GUIDES: Check and maintain the clearances between the Belt Guides and the outside surface of the Traction Belt at $\frac{1}{8}$ inch

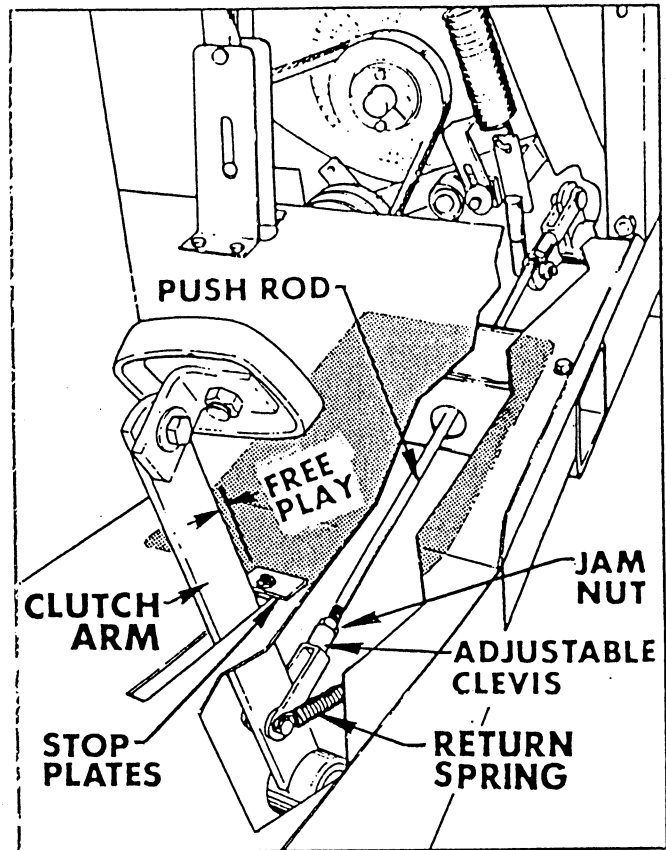


FIG. 10

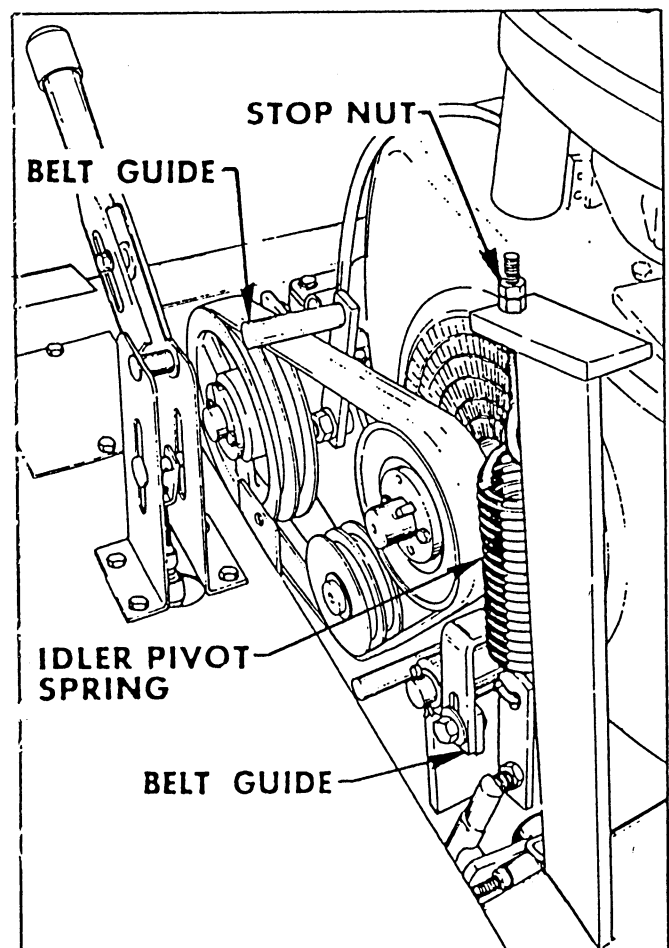


FIG 11

BRAKE ADJUSTMENT:

This unit is equipped with automotive type self-adjusting Brakes, however, they can be manually adjusted as follows:

CAUTION: Over-adjustment will cause excessive wear on the Brake Bands.

Any slack in the Brake Line can be adjusted by tightening the nut on the Brake Equalizer.

To adjust the Emergency Brake, turn the hand screw on the Handle counter-clockwise for more cable tension or clockwise for less tension.

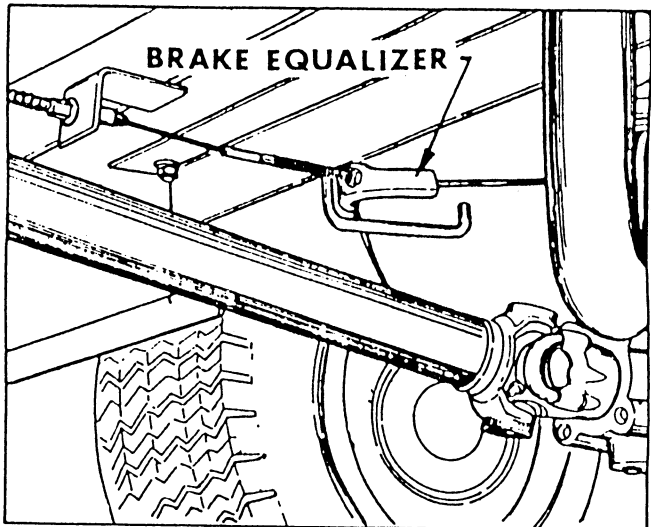


FIG. 12

BRAKE PEDAL "FREE PLAY":

The Brake Pedal is set at the factory so that when the Brake Pedal is depressed, it will travel approximately $\frac{1}{8}$ to $\frac{3}{16}$ inch before actuating the Brake linkage.

Maintain this "free play" in the Brake Pedal to avoid dangerously abrupt stops and undue wear on the Vehicle's brake linings. Adjust as follows:

- Remove the Adjustable Clevis from the Brake Arm and loosen the Jam Nut on the Push Rod.
- Turn the Adjustable Clevis on the Push Rod until there is approximately $\frac{1}{8}$ to $\frac{3}{16}$ inch travel in the Push Rod before the Master Cylinder Piston is engaged. Tighten the Jam Nut.
- If additional adjustment is required, it may be necessary to replace the brake linings.

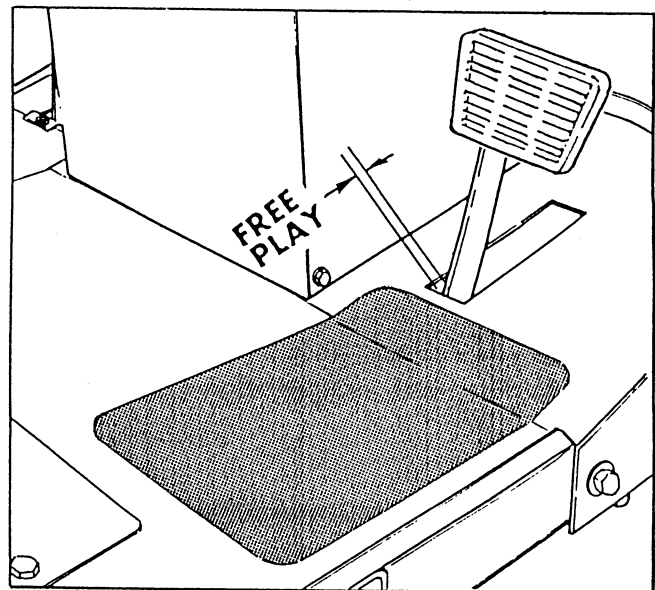


FIG. 13

CAUTION: Asbestos brake linings contain asbestos fibers.

Breathing asbestos dust may be hazardous to your health and may cause respiratory or other bodily harm.

1. Avoid creating dust.
2. Do not remove brake drum without proper protective equipment.
3. Do not work on brake linings without proper protective equipment.
4. Do not replace brake linings without proper protective equipment.
5. Do not attempt to sand, grind, chisel, file, hammer or alter brake linings in any manner without protective equipment.
6. Follow OSHA standards for proper protective devices to be used when working with asbestos materials.

adjustments cont.

SAFETY START SWITCH:

Check and maintain the Safety Switch in a position that prevents the engine from starting unless the Clutch Pedal is fully depressed.

With the Clutch Pedal fully depressed, the button should be pushed approximately half-way inside the Safety Switch...engaging the Switch, completing the circuit and allowing the engine to start.

If the Clutch Pedal is completely depressed and the Safety Switch is not engaged:

- Loosen the screw holding the Safety Switch Plate to the Idler Pivot.
- Depress and hold the Clutch Pedal to the floor plate.
- Slide the Safety Switch Plate toward the contact point on the Idler Arm until the button is depressed approximately half-way inside of the Safety Switch.
- Tighten fasteners securely.

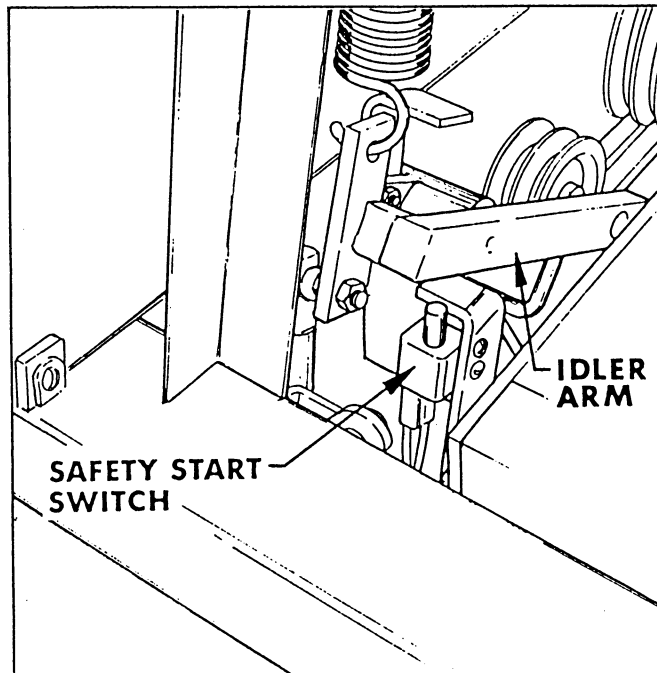


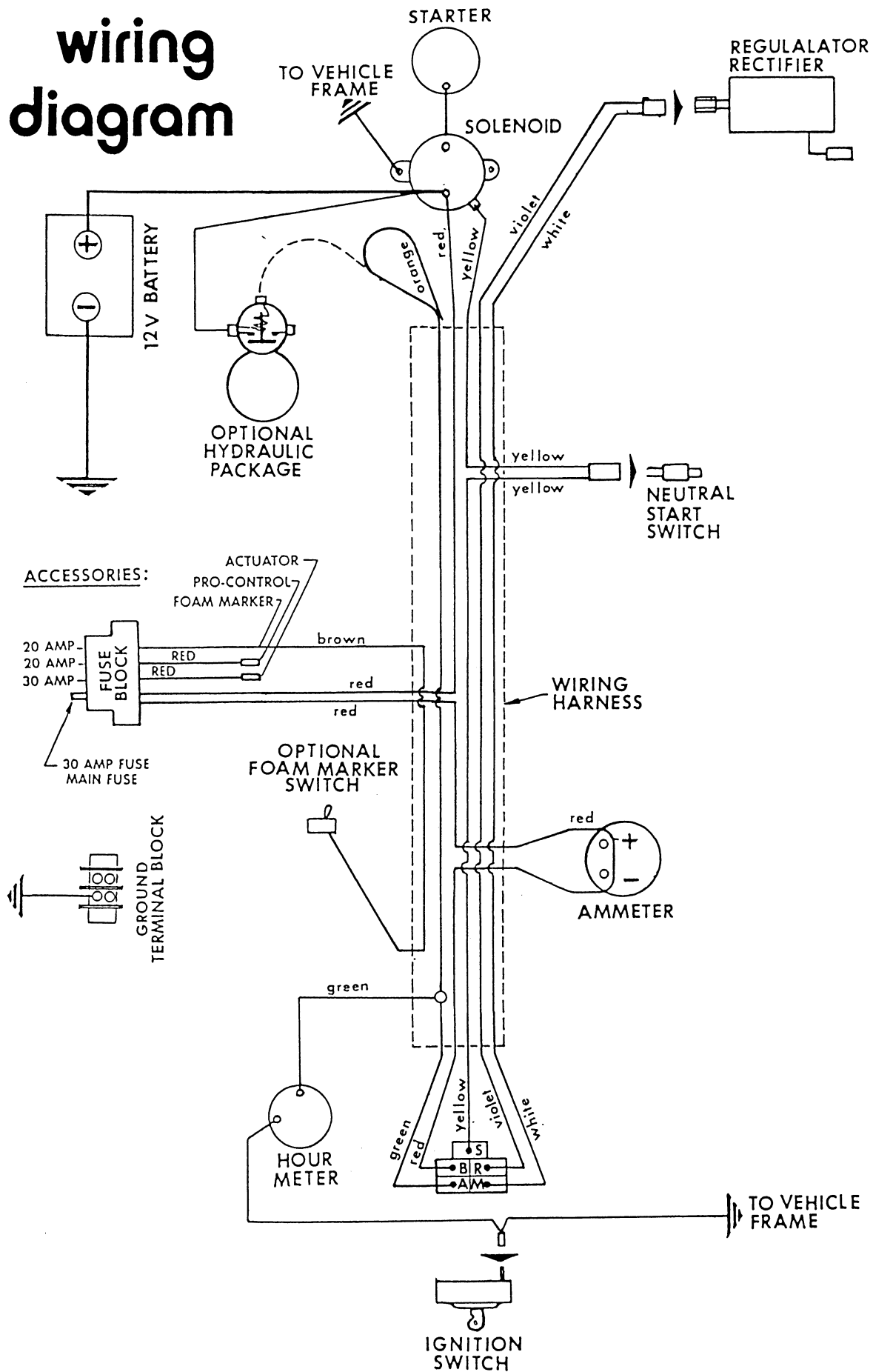
FIG. 14

GOVERNOR:

⚠ CAUTION: DO NOT TAMPER WITH THE GOVERNOR SETTING-OVERSPEED IS HAZARDOUS AND COULD VOID THE ENGINE WARRANTY.

The governor functions to maintain engine speed under changing load conditions and also acts as a speed limiting device. Governors are set in the factory and further adjustment should not be required unless linkage works loose or becomes disconnected. Readjustment should be made if engine surges with changing load or if speed drops considerably when normal load is applied. See the engine manual for adjustment instructions.

wiring diagram



maintenance record

[illegible]

storage

Check the machine thoroughly for any replacement parts required. In the event parts are needed, place your order with your dealer in the fall or winter to avoid the delays caused by the usual spring rush. When ordering parts please specify the MODEL NUMBER and the SERIAL NUMBER of the MULTI-PRO (not the engine).

ENGINE:

Close shut-off valve and remove the fuel filter. Open shut-off valve and drain fuel tank. Clean fuel line and filter and reassemble to tank. Operate engine until gasoline in the carburetor is completely consumed.

While engine is still warm, drain oil from crankcase. Refill with fresh oil.

Remove spark plug, pour one ounce of S.A.E. 30 oil into cylinder and crank slowly to distribute oil. Clean and replace spark plug.

Clean any dirt and chaff from cylinder head fins and blower housing.

NEVER STORE A MACHINE WITH GASOLINE IN THE TANK OR INSIDE A BUILDING WHERE FUMES MAY REACH AN OPEN FLAME OR SPARK. ALLOW THE ENGINE TO COOL BEFORE STORING IN ANY ENCLOSURE.

VEHICLE

Check all visible moving parts for damage or wear. Wipe belts clean with a dry cloth.

Check oil level in the transmission and the differential. Lubricate as directed in MAINTENANCE

Remove the battery, clean terminals and coat lightly with grease. Check liquid level and add distilled water if necessary. Bring battery to full charge. Store in a cool, dry area where battery will not freeze. Do not allow battery to sit directly on floor.

The Toro Promise

A ONE YEAR LIMITED WARRANTY

The Toro Company promises to repair your TORO Product if defective in materials or workmanship. The following time periods from the date of purchase apply:

Commercial Products 1 Year

The costs of parts and labor are included, but the customer pays the transportation costs on walk rotary mowers with cutting unit widths of less than 25".

If you feel your TORO product is defective and wish to rely on The Toro Promise, the following procedure is recommended:

1. Contact your Authorized TORO Distributor or Commercial Dealer (the Yellow Pages of your telephone directory is a good reference source).
2. The TORO Distributor or Commercial Dealer will advise you on the arrangements that can be made to inspect and repair your product.
3. The TORO Distributor or Commercial Dealer will inspect the product and advise you whether the product is defective and, if so, make all repairs necessary to correct the defect without an extra charge to you.

If for any reason you are dissatisfied with the distributor's analysis of the defect or the service performed, you may contact us.

Write:

TORO Commercial Products Service Department
8111 Lyndale Avenue South
Minneapolis, Minnesota 55420

The above remedy of product defects through repair by an Authorized TORO Distributor or Commercial Dealer is the purchaser's sole remedy for any defect.

THERE IS NO OTHER EXPRESS WARRANTY. ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE ARE LIMITED TO THE DURATION OF THE EXPRESS WARRANTY.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

This Warranty applies only to parts or components which are defective and does not cover repairs necessary due to normal wear, misuse, accidents, or lack of proper maintenance. Regular, routine maintenance of the unit to keep it in proper condition is the responsibility of the owner.

All warranty repairs reimbursable under the Toro Promise must be performed by an Authorized TORO Commercial Dealer or Distributor using Toro approved replacement parts.

Repairs or attempted repairs by anyone other than an Authorized TORO Distributor or Commercial Dealer are not reimbursable under the Toro Promise. In addition, these unauthorized repair attempts may result in additional malfunctions, the correction of which is not covered by warranty.

THE TORO COMPANY IS NOT LIABLE FOR INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH THE USE OF THE PRODUCT INCLUDING ANY COST OR EXPENSE OF PROVIDING SUBSTITUTE EQUIPMENT OR SERVICE DURING PERIODS OF MALFUNCTION OR NON-USE.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

COUNTRIES OTHER THAN THE UNITED STATES OR CANADA

Customers who have purchased TORO products exported from the United States or Canada should contact their TORO Distributor (Dealer) to obtain guarantee policies for your country, province or state. If for any reason

you are dissatisfied with your Distributor's service or have difficulty obtaining guarantee information, contact the TORO importer. If all other remedies fail, you may contact us at The Toro Company.