Sears

ow ner s manual

MODEL NO. 247.88110

123-550.

CAUTION:
Read SAFETY
RULES and
INSTRUCTIONS
carefully



CRAFTSMAN
HI WHEEL
SELF PROPELLED
ROTARY MOWER

- Assembly
- Operating
- Maintenance
- Repair Parts

Sold by SEARS, ROEBUCK AND CO., Chicago, Ill. 60607 U.S.A. and SIMPSONS-SEARS LIMITED, Toronto

PART NO. 770-4447 PRINTED IN U. S. A.

IMPORTANT

SAFE OPERATION PRACTICES FOR WALK-BEHIND MOWERS

TRAINING

- Read the Operating and Service Instruction Manual carefully. Be thoroughly familiar with the controls and the proper use of the equipment.
- 2. Never allow children to operate a power mower.
- Keep the area of operation clear of all persons, particularly small children, and pets.

PREPARATION

- Thoroughly inspect the area where the equipment is to be used and remove all stones, sticks, wire, bones and other foreign objects.
- Do not operate equipment when barefoot or wearing open sandals. Always wear substantial footwear.
- Check the fuel before starting the engine. Do not fill
 the gasoline tank indoors, when the engine is running,
 or while the engine is still hot. Wipe off any spilled
 gasoline before starting the engine.
- Disengage the self-propelled mechanism or drive clutch on units so equipped before starting the engine (motor).
- 5. Never attempt to make a wheel adjustment while the engine (motor) is running.
- 6. Mow only in daylight or in good artificial light.
- Never operate the equipment in wet grass. Always be sure of your footing; keep a firm hold on the handle and walk, never run.

OPERATION

- Do not change the engine governor settings or overspeed the engine.
- 2. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.
- Stop the blade(s) when crossing gravel drive, walks or roads.
- 4. After striking a foreign object, stop the engine (motor), remove the wire from spark plug, thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower.

- If the equipment should start to vibrate abnormally, stop the engine (motor) and check immediately for the cause. Vibration is generally a warning of trouble.
- Stop the engine (motor) whenever you leave the equipment, before cleaning the mower housing, and when making any repairs or inspections.
- 7. When cleaning, repairing or inspecting, make certain the blade and all moving parts have stopped. Disconnect the spark plug wire, and keep the wire away from the plug to prevent accidental starting.
- 8. Do not run the engine indoors.
- Shut the engine (motor) off and wait until the blade comes to a complete stop before removing the grass catcher or unclogging chute.
- Mow across the face of slopes, never up-and-down.
 Exercise extreme caution when changing direction on slopes. Do not mow excessively steep slopes.
- Always disconnect electric mowers (line operated) before cleaning, repairing or adjusting.
- 12. Never operate mower without proper guards, plates or other safety protective devices in place.
- 13. Keep washout ports and other mower-housing service openings closed when mowing.

MAINTENANCE AND STORAGE

- 1. Check the blade and the engine mounting bolts at frequent intervals for proper tightness.
- Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
- Never store the equipment with gasoline in the tank inside of a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.
- To reduce fire hazard, keep the engine free of grass, leaves, or excessive grease.
- Check the grass catcher bags frequently for wear or deterioration. Replace with new bags for safety protection.

CRAFTSMAN HI-WHEEL SELF-PROPELLED ROTARY MOWER

CRAFTSMAN 1-YEAR GUARANTEE

If during the first year this Craftsman product fails to give proper performance due to defects in material or workmanship, we will make all necessary repairs, free of charge.

This guarantee service is available through any of our stores or service centers throughout the United States or Canada.

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MAINTENANCE AGREEMENT

A MODERN, LOW-COST MAINTENANCE AGREEMENT IS AVAILABLE ON THIS PRODUCT TO EXTEND THE GUARANTEE. CONTACT YOUR NEAREST SEARS STORE.

CUSTOMERS RESPONSIBILITIES

ALWAYS USE CARE WHEN OPERATING THE HI WHEEL ROTARY MOWER. KEEP CLEAR OF MOVING PARTS. DO NOT WORK ON HI WHEEL ROTARY MOWER WITH ENGINE RUNNING. AVOID STRIKING OR RUNNING INTO SOLID OBJECTS OR DEBRIS IN THE AREA TO BE WORKED. READ AND OBSERVE THE RULES FOR SAFE OPERATION. KEEP THE HI WHEEL ROTARY MOWER CLEAN. FOLLOW A REGULAR MAINTENANCE AND CHECK SCHEDULE TO PROVIDE EFFICIENT AND SAFE OPERATION. A WELL-CARED FOR HI WHEEL ROTARY MOWER WILL LAST LONGER AND OPERATE MORE EFFICIENTLY. ALWAYS BE CAREFUL FOR YOURSELF AND FOR OTHERS

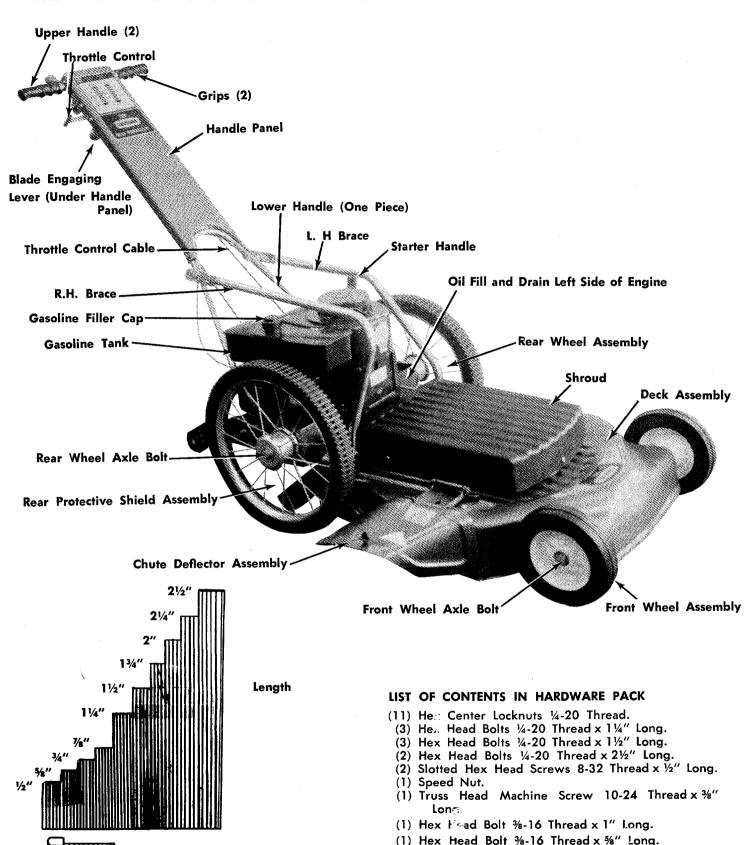
SET UP INSTRUCTIONS

IT IS SUGGESTED THAT THIS MANUAL BE READ IN ITS ENTIRETY BEFORE ATTEMPTING TO ASSEMBLE OR OPERATE THE HI WHEEL ROTARY MOWER.

THE SEARS HI WHEEL ROTARY MOWER HAS BEEN COMPLETELY ASSEMBLED AT THE FACTORY, EXCEPT FOR THE HANDLE AND OPERATING CONTROLS WHICH HAVE BEEN LEFT UNASSEMBLED FOR SHIPPING PURPOSES. ALL PARTS SUCH AS NUTS, WASHERS, BOLTS, ETC., NECESSARY TO COMPLETE ASSEMBLY OF THE HANDLE AND CONTROLS HAVE BEEN PRE-INSERTED IN THE PLACES THEY ARE TO BE USED OR PLACED IN A PLASTIC BAG.

ASSEMBLE THE UNIT AS OUTLINED. REFER TO ILLUSTRATIONS FOR ASSEMBLY ASSISTANCE.

REFERENCE PHOTO FOR ASSEMBLY AND INSTRUCTIONS



- - (2) Flat Washers %" I.D. x 11/4" O.D. x 5/32 Thick.

 - (1) Flat Washer 1/4" I.D. x 1/2" O.D. x 1/16" Thick
 - (1) Flat Washer 1/2" I.D. x 3/4" O.D. x 1/32" Thick. Refer to figure 4.

Measure Screws Here

FIGURE 2.

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ASSEMBLY INSTRUCTIONS

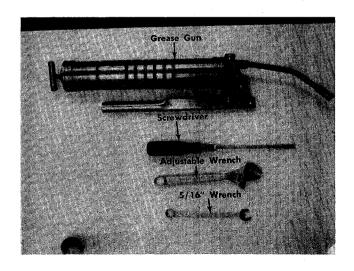


FIGURE 3. TOOLS REQUIRED

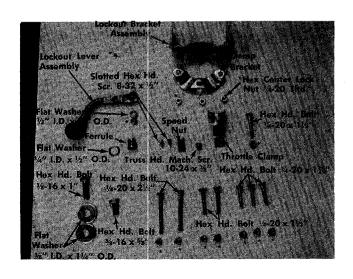


FIGURE 4. LOOSE HARDWARE

NOTE: Reference to right hand and left hand of your unit is from the operator's position.

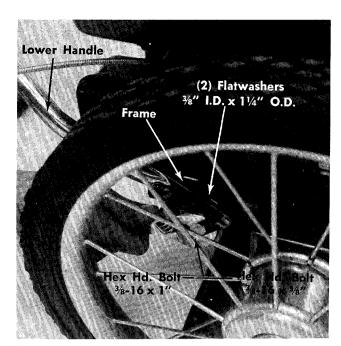


FIGURE 5 LOWER HANDLE ASSEMBLY

Step 1.

- a. Place the lower handle in position on the frame.
- b. Place two (2) flat washers %'' I.D. x $1\frac{1}{4}$ " O.D. between the handle and frame only on the right hand side. See figure 5.
- c. Secure the right hand side of lower handle with one (1) Hex Hd. Bolt %-16 x 1" Long. NOTE: Just run bolt in two or three threads. Do not tighten.
- d. Secure the left hand side of lower handle with one (1) Hex Hd. Bolt %-16 x %" Long.

NOTE: No washers are required for the left hand side. Again just run the bolt in two or three threads. Do not tighten.

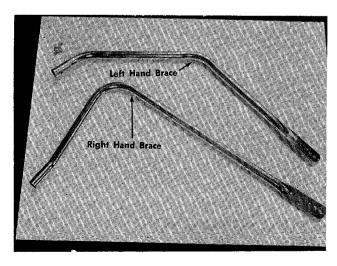


FIGURE 6. RIGHT AND LEFT HAND BRACE

Step 2.

a. Place the right hand brace in position on frame and secure with one (1) Hex Hd. Bolt ¼-20 x 2½". Refer to figures 6 and 7.

NOTE: Do not tighten.

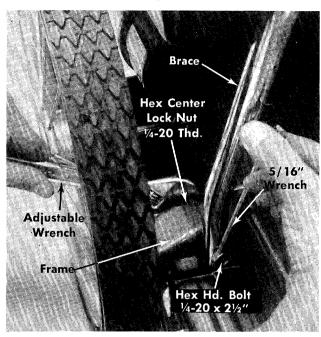


FIGURE 7. BRACE ASSEMBLY

b. Place the left hand brace in position on frame and secure with one (1) Hex Hd. Bolt $1/4-20 \times 2\frac{1}{2}$ ". Refer to figures 6 and 7.

NOTE: Do not tighten.

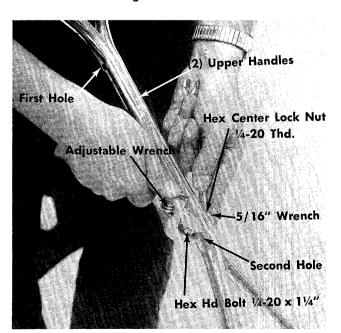


FIGURE 8. UPPER HANDLE ASSEMBLY

c. Place the two (2) upper handles together using the second hole. See figure 8.

d. Secure the two (2) upper handles together with one (1) Hex Hd. Bolt ¼-20 x 1¼" and one (1) Hex Center Lock Nut ¼-20 Thd.

NOTE: Do not tighten. See figure 8.

e. Place the two (2) upper handles assembled in position with the lower handle. See figure 9.

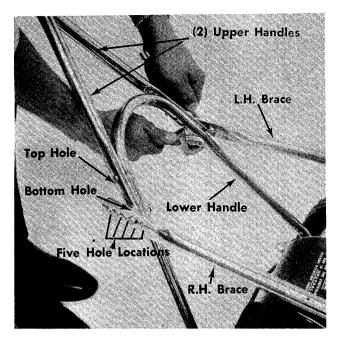


FIGURE 9. HANDLE AND BRACE ASSEMBLY

- f. Place a bolt, regardless of length, in the top hole of the lower handle to help hold handle in position when working.
- g. The right and left hand braces have five (5) hole locations for mounting the braces to the lower handle. The reason for having five (5) hole locations is so that you may adjust the handle height to suit you.
- h. Upon selecting the desired height of handle, secure with one (1) Hex Hd Bolt ¼-20 x 1½" and one Hex Center Lock Nut ¼-20 Thd.

NOTE: Use the bottom hole of lower handle only. See figure 9. Do not tighten.

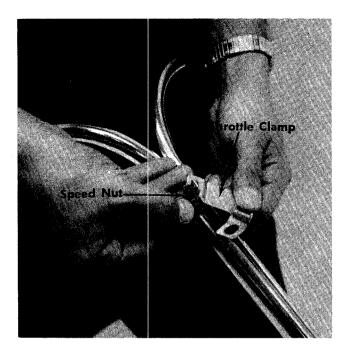


FIGURE 10. THROTTLE CLAMP ASSEMBLY Step 3.

a. Place the speednut on the throttle clamp. See figure 10.

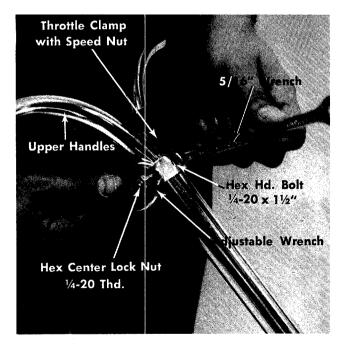


FIGURE 11. THROTTLE CLAMP ASSEMBLY

- b. Place the throttle clamp with speed nut in position on upper handle.
 - NOTE: Be sure the speed nut is towards the top of handle. See figure 11.
- c. Secure the throttle clamp with one (1) Hex Hd. Bolt ¼-20 x 1½" Long and one (1) Hex Center Lock Nut ¼-20 Thd.

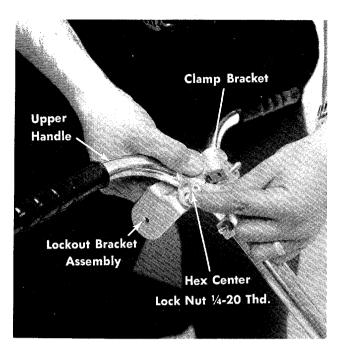


FIGURE 12. LOCKOUT BRACKET ASSEMBLY

- d. Place the lockout bracket assembly under the "T" portion of the upper handle with the bolt ends facing up. See figure 12.
- e. Place the clamp bracket over the bolt ends in the lockout bracket assembly and secure with three (3) Hex Center Lock Nuts ¼-20 Thd. See figure 12. Tighten nuts tight.

Step 4.

a. Start the two (2) self tapping screws 8-32 x ½" in by hand which hold the throttle control to the handle panel. See figure 13.

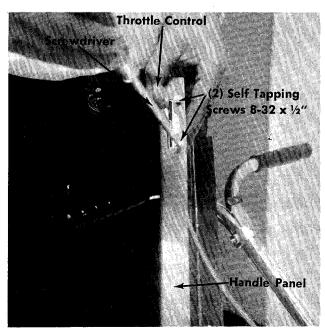


FIGURE 13. THROTTLE ASSEMBLY TO PANEL

b. Secure two (2) Self Tapping Screws $8-32 \times \frac{1}{2}$ " holding throttle control to handle with a screwdriver tightly. See figure 13.

Step 5.

a. Place the handle panel with throttle control attached in position on handle assembly. See figure 14.

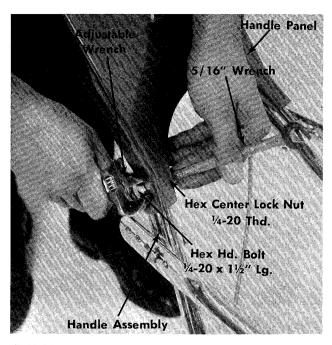


FIGURE 14. HANDLE PANEL ASSEMBLY TO HANDLE

- b. Secure bottom of handle panel to handle assembly with two (2) Hex Hd. Bolts ¼-20 x 1½" and two (2) Hex Center Lock Nuts ¼-20 Thd. See figure 14.
- c. Secure top of handle panel to speed nut with one (1) Truss Hd Machine Screw 10-24 x %" Long. See figure 15.

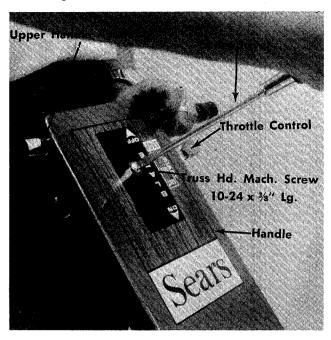


FIGURE 15. HANDLE PANEL ASSEMBLY TO HANDLE

Step 6.

- Tighten all nuts and bolts on handle assembly, braces and handle to frame, securely with wrenches.
- Step 7. Assemble one of the control rods and lockout levers to the self-propelling mechanism with the ferrule (G) and washer (H) at the bottom and washer (F) and nut (E) on the lockout lever as shown in figures 17 and 18.

NOTE

Both lockout levers and rods are the same. Be sure the control rod is on the Left Hand side of the lockout lever as shown in figure 17.

CAUTION

Check the distance between the drive pinions and the rear tires. When the lockout lever is disengaged, the pinion should be no more than 1/8" from the rear tire. Adjust the rod in the ferrule if necessary to obtain the 1/8" distance. See figure 16.

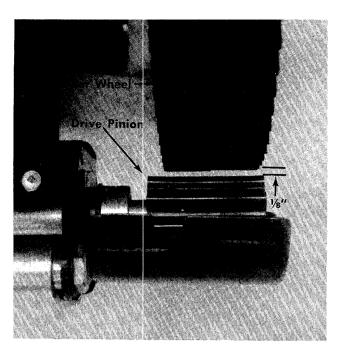


FIGURE 16 DRIVE PINION CLEARANCE

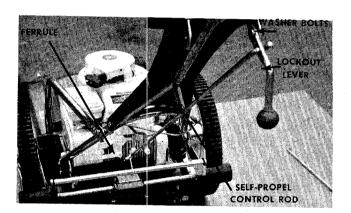
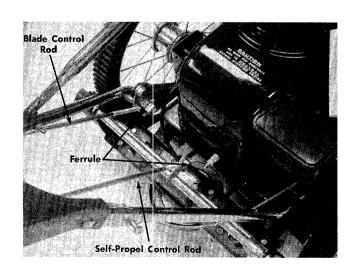


FIGURE 17.SELF-PROPEL CONTROL ASSEMBLY



Step 7. Assemble the other control rod and lockout lever to the pivot lever on the lower Left Hand side of the mower with ferrule and washer. Assemble the lockout lever to the upper handle with washer and nut as shown in figures 18 and 19.

NOTE

With the blade lockout lever in the disengaged position, adjust the rod in the ferrule so that there is just enough resistance to hold the blade lockout lever in place.

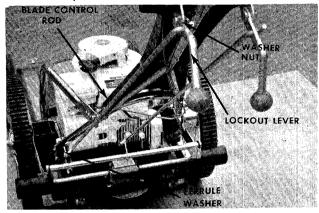


FIGURE 19. BLADE CONTROL ASSEMBLY

CONTROLS

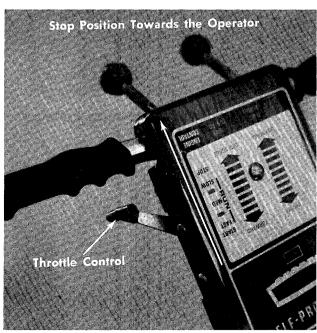


FIGURE 20. THROTTLE CONTROL STOP POSITION

Figure 20 shows throttle control in the STOP position. Throttle should remain in this position any time the unit is not in use or when any maintenance is being performed.

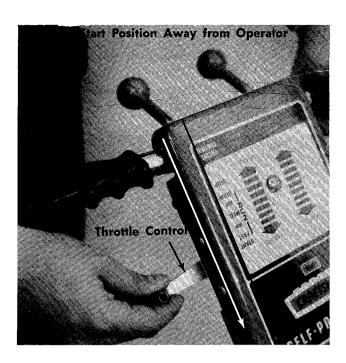


FIGURE 21. THROTTLE CONTROL START POSITION

2. Figure 21 shows throttle control in the START position.



FIGURE 22. LOCKOUT LEVERS DISENGAGED

3. Figure 22 shows lockout lever in the OFF position (Disengaged) lever all the way up. Lockout levers must remain in this position when starting.

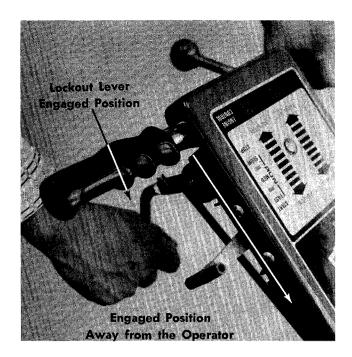


FIGURE 23. DRIVE MECHANISM ENGAGED

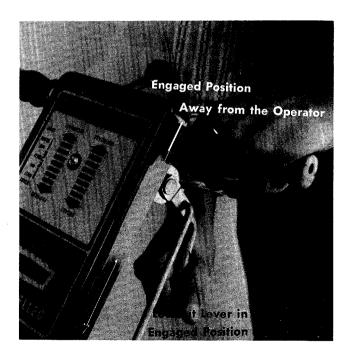


FIGURE 24 BLADE ENGAGED

4. Figures 23 and 24 show lockout levers engaged and locked over center.

OPERATION

CAUTION

Stop the engine and disconnect the spark plug wire from the spark plug before making any adjustments. See figure 25.

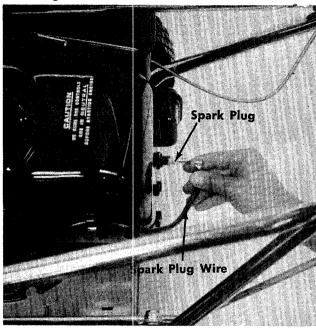


FIGURE 25. SPARK PLUG WIRE BEING REMOVED

Blade Spindle Assembly—The blade spindle assembly is equipped with a grease fitting. Use grass discharge chute for access to the fitting located under the deck. Use multi-purpose grease. Lubricate PRIOR to initial use and every 25 hours thereafter. See figure 26.

CAUTION: Be sure spark plug wire is disconnected and grounded. See figure 25.

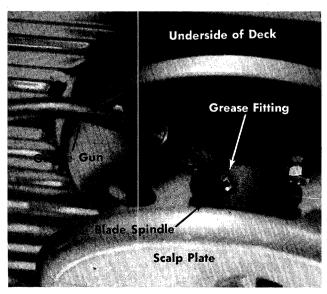


FIGURE 26. INITIAL LUBRICATION OF BLADE SPINDLE ASSEMBLY

- 2. Service engine with clean fresh regular gasoline.
- 3. Service engine with SAE 30 weight motor oil. Fill oil fill opening to overflow. See figure 27.

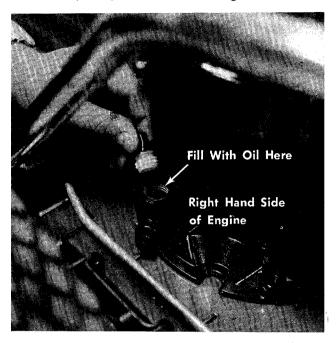


FIGURE 27. OIL FILL LOCATION

- 4. Move the lockout lever to the DISENGAGED position. (All the way towards the operator.)
- Move the throttle cotnrol lever to the START position. (All the way forward.)
- Put blade into motion by moving blade control handle to ON position.

To engage the blade with the engine running:

- a. Move the throttle control lever to FAST position.
- b. Engage the blade engagement handle SLOWLY.
- c. Adjust engine speed.
- 7. Appropriate clothing should be worn when cutting brush or heavy weeds. Safety shoes and safety glasses are highly recommended.



8. The operation of any powered outdoor equipment can result in foreign objects being thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields before commencing power tool operation. We recommend Wide Vision Safety Mask for over spectacles, or standard safety glasses...available at Sears retail or catalog stores.

TO START THE ENGINE

- 1. Be sure the engine has been serviced with the proper oil and fuel.
- Move the lockout lever to the DISENGAGED position.
- 3. Move the throttle control lever to the START position.
- Place one foot on the left side of the deck. See figure 28.
- 5. Grasp the starter handle and pull out sharply and hold it in the out position. (Do not let cord snap back.) The cord should not be pulled out more than about two feet. If the engine fails to start, allow the cord to wind back into the housing, then pull out sharply again. Refer to figure 28.



FIGURE 28. STARTING

EFFICIENT OPERATION

CAUTION

Stop the engine and disconnect the spark plug wire from the spark plug before making any adjustments.

 Deck—The underside of mower deck should be cleaned after each period of use as grass clippings, leaves, dirt and other matter accumulates. This accumulation of grass clippings, etc., is undesirable as it will invite rust and corrosion and may cause an uneven discharge of grass clippings at next cutting. The deck may be cleaned by tilting the mower backward or on its side and scraping clean with a suitable tool or by washing with a stream of water from a garden hose.

CAUTION

Do not direct the stream of water at a hot engine as damage to the engine may result.

 For best results do not cut wet grass because it tends to stick to the underside of the mower, thus preventing proper discharge of grass clippings. If wet grass must be cut, reduce walking speed to help distribute the clippings more effectively.

New grass should be treated as wet grass, otherwise a normal walking speed is about the right pace for efficient mowing.

The best mowing pattern is one that allows the clippings to discharge towards the uncut part of the lawn. This permits recutting of the clippings to further pulverize them. When cutting high weeds, discharge towards cut portion then recut at right angle to first direction.

Lawns should be cut in fall as long as there is growth.



- 1. The mower should not be operated without the entire grass catcher or chute deflector in place.
- The mower should not be operated without the protective shield on the rear of the deck in place.

IMPORTANT

After striking a foreign object, stop the engine (motor), remove wire from spark plug. Thoroughly inspect the mower for any damage and repair the damage before restarting and operating the mower.

ADJUSTMENT

CAUTION

Stop the engine and disconnect the spark plug wire from the spark plug before making any adjustments.

 Handles may be adjusted by changing the position of the lower support mounting holes. When this change is made, it may also be necessary to check the adjustment of the control rod. See figures 29 and 30.

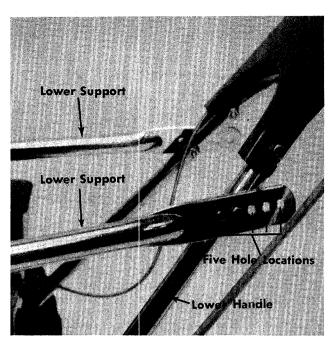


FIGURE 29. HANDLE ADJUSTMENT

- Remove hex lock nut holding the lockout lever in position.
- Remove the hex head bolts and nuts holding the lower supports to lower handle.
- 4. Position handle for desired height and reassemble lower supports to the lower handle. See figure 29.

CAUTION

Stop the engine and disconnect the spark plug wire from the spark plug before making any adjustments.

 Lockout rod adjustment is made as shown in figure 30.

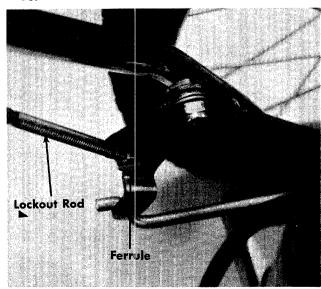


FIGURE 30. LOCKOUT ROD ADJUSTMENT

- 2. Remove the hex lock nut holding the lockout lever in position.
- Turn the lockout rod and lever in or out of the ferrule until the lockout lever lines up with the lockout bracket.
- 4. Secure lockout lever in position with hex lock nut.

CAUTION

Stop the engine and disconnect the spark plug wire from the spark plug before making any adjustments.

1. Cutting height adjustment is made by removing and moving axle bolts to the desired positions. All axle bolts must be mounted in the same relative position to the deck. When wheels are mounted to the deck, the crown shape washers must be assembled with the crown away from the deck. This is necessary to prevent the axle bolts from loosening. Refer to figures 31, 32 and 33.

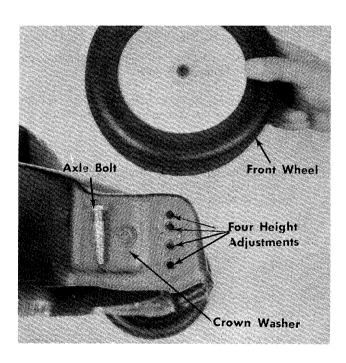


FIGURE 31. FRONT WHEEL HEIGHT ADJUSTMENT

2. Upon reassembling the rear wheel, be sure the crown washer is positioned in the inner frame bracket. See figure 32.

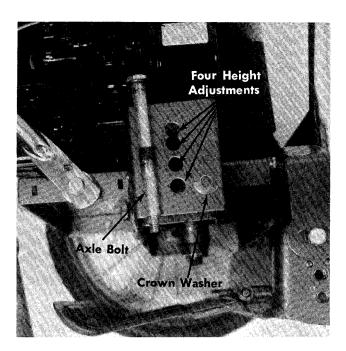


FIGURE 32. REAR WHEEL HEIGHT ADJUSTMENT

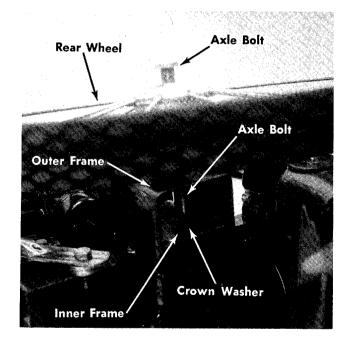


FIGURE 33. CROWN WASHER LOCATION FOR REAR WHEEL

CAUTION

Stop the engine and disconnect the spark plug wire from the spark plug before making any adjustments.

- Throttle Control—If throttle adjustment becomes necessary, the throttle control wire may be reset as follows:
 - a. Loosen, but do not remove, screw securing throttle control wire assembly at engine.
 - Move throttle control lever on handle to START position.
 - c. Move lever to which control wire is fastened to engine to full START position. Retighten screw to secure throttle control wire assembly. See figure 34.



FIGURE 34. THROTTLE ADJUSTMENT

MOWER LUBRICATION

CAUTION

Stop the engine and disconnect the spark plug wire from the spark plug before making any adjustments.

- Wheel bearings are ball bearings front and rear. Lubricate at least once a season with SAE 30 weight motor oil.
 - a. Front wheels to be oiled at the axle bolt.
 - b. Rear wheels to be oiled at oil caps in rear wheel. See figure 35.

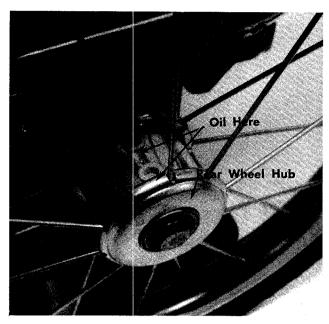


FIGURE 35. REAR WHEEL LUBRICATION CAUTION

Stop the engine and disconnect the spark plug wire from the spark plug before making any adjustments.

 Throttle—Periodically lubricate throttle control lever and entire length of throttle wire assembly with a few drops of SAE 30 engine oil for ease of operation.

CAUTION

Stop the engine and disconnect the spark plug wire from the spark plug before making any adjustments.

 Friction point between idler bracket assembly and deck should be greased once each season with a multi-purpose grease. See figure

CAUTION

Stop the engine and disconnect the spark plug wire from the spark plug before making any adjustments.

4. Protective Shield—The pivot points on the protective shield should be lubricated periodically with oil to prevent any rust or binding up.

CAUTION

Stop the engine and disconnect the spark plug wire from the spark plug before making any adjustments.

5. Blade Spindle Assembly

The blade spindle assembly, located on the underside of the mowing deck, is equipped with a grease fitting Use grass discharge chute for access to the fitting located under the deck. Use multi-purpose grease. Lubricate prior to initial use and every 25 hours thereafter. See figure 36.

CAUTION

Be sure spark plug wire is disconnected and grounded.

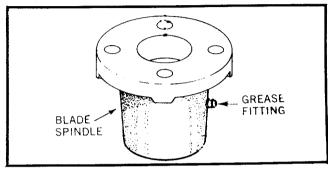


FIGURE 36. BLADE SPINDLE

6. Gear Box

Check lubricant in the self-propelled drive gear box. This must be maintained half full at all times and should be checked after each 25 hours of operation. The gear box is packed at the factory with Alduralube Heavy or Temprite No. 2. It is suggested that this or an equivalent type and quality fibrous high heat wheel bearing grease be used in maintaining this mechanism. Grease can be ordered by part number 727-111. Horizontal bronze bearings under the self-propelled drive mechanism should be lubricated with SAE 30 engine oil. Refer to figure 37.

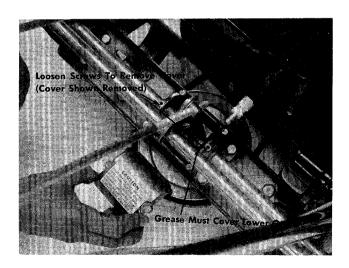


FIGURE 37. GEAR BOX LUBRICATION

 Chute Deflector—The torsion spring and pivot point should be lubricated periodically with oil to prevent any rust or binding up. Deflector must work freely.

ENGINE LUBRICATION

CAUTION

Stop the engine and disconnect the spark plug wire from the spark plug before making any adjustments.

1. Position equipment so that engine is setting level. Remove oil filler plug. See figure 38.

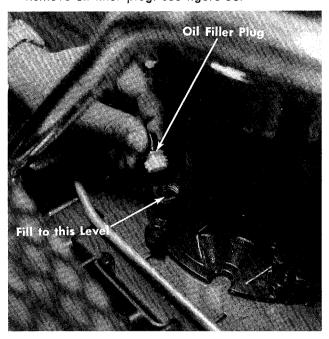


FIGURE 38. OIL FILL LOCATION

- Pour oil into opening which you removed the oil filler plug from.
- 3. During initial "Break-in" period oil level should be watched closely.

Oil . . . Use the following:

Summer-Above 32°F-SAE 30 (SAE 10W30 is an acceptable substitute).

Winter-Below 32°F-SAE 5W20 (SAE 10 or 5W30 are acceptable substitutes).

Winter-Below 0°F Only-SAE 10W with 10% kerosene.

- Change oil first two (2) hours of operation and check oil level every five (5) operating hours or each time equipment is used.
- Change oil every twenty-five (25) operating hours or sooner if equipment is operated in extremely dusty or dirty conditions.
- Oil can be changed by removing the oil drain plug located on the right hand side of the engine. See figure 39.

7. Tip mower on its right hand side and remove the oil drain plug.



FIGURE 39. OIL DRAIN LOCATION

ENGINE MAINTENANCE

CAUTION

Stop the engine and disconnect the spark plug wire from the spark plug before making any adjustments.

To obtain long life and trouble-free service from your engine, certain normal maintenance must be performed as outlined below:

- Check unit on which engine is mounted. Hard starting can result if blades are loose, belts or chains too tight, etc. Periodically check bowden wire controls. If the wire has loosened it may not put the carburetor on full choke when starting or open the throttle wide enough for the RUN or FAST position.
- Change oil in crankcase after first two (2) hours of operation. Then, follow instructions outlined under OIL, page 16.

CAUTION

Disconnect high tension wire at spark plug to prevent accidental starting of engine. Unscrew oil drain plug located on side of engine (figure 1).

NOTE

Always tip engine toward oil drain hole.

Be sure oil drains completely.

Replace oil drain plug and refill with oil as directed on page 1, or engine nameplate.

- 3. CHECK OIL every five (5) operating hours or each time equipment is used.
 - a. If engine has dip stick, keep oil level at mark indicated by adding if necessary.
- CLEANING ENGINE—This is an air-cooled engine which operates most efficiently when the cooling fins are clean.

Clean cylinder fins and underside of tank or housing thoroughly of all accumulated grass and debris.

5. AIR CLEANERS-

a. Polyurethane Type—Serviceable. Clean element every ten (10) hours or oftener if engine runs rich and emits black smoke from the exhaust. Service by removing air cleaner cover. Remove polyurethane element and wash in detergnt and water solution by squeezing similar to a sponge. Squeeze out cleaning solution. Re-oil element by applying generous quantity of oil to sides and open ends. Squeeze to distribute oil and to remove excess oil. Reinstall element and air cleaner cover as illustrated in figure 40.

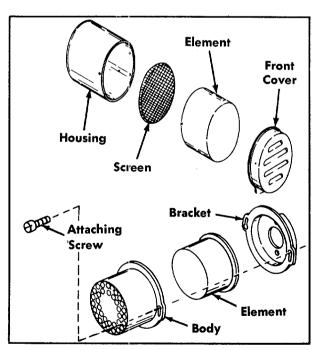
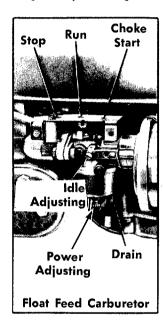


FIGURE 40.

CARBURETOR ADJUSTMENTS

Do not make unnecessary adjustments. Factory settings are correct for most applications. If adjustments are needed, proceed as follows:

- Close power adjusting needle (figure 41 or figure 42) by turning to right (clockwise). Close finger tight only. Forcing will cause damage.
- 2. Open one turn (counterclockwise).
- Close idle adjusting needle (figure 41 or figure 42), by turning to right (clockwise). Close finger tight only. Forcing will cause damage.



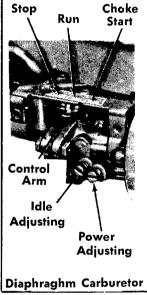


FIGURE 41.

FIGURE 42.

- 4. Open one and one-half turns (1½) counterclockwise (figure 41 or figure 42).
- 5. Start engine. Follow starting instructions.
- With throttle open (carburetor control at RUN or FAST position), adjust power adjusting needle oneeighth (1/2) turn at a time forward or backward until engine runs smoothly. If engine tends to stall under load, enrich slightly (counterclockwise).
- Hold throttle lever closed or move carburetor control to IDLE or SLOW position and adjust idle adjusting needle until engine runs smoothly, proceeding as in step 6 above.
- 8. Allow several seconds between each adjustment when performing either step six (6) or seven (7) to allow engine to react to new setting.
- Maximum engine speeds are preset at factory and should not be changed except by a qualified service station repairman who has the necessary equipment.

STORAGE INSTRUCTIONS

In event engine is to be stored for any length of time (30 days or more) or at the end of mowing season, prepare as follows:

1. Drain gas tank completely by removing fuel line at the carburetor or fuel tank, whichever is easier.

CAUTION

Drain into container outdoors away from fire or flame.

2. DRAIN CARBURETOR.

Drain by pressing upward on bowl drain (figure 7).

 Inside protection of engine for storage is performed by removing spark plug and pouring one ounce of SAE 30 oil through spark plug hole into cylinder. Crank engine without starting several times to spread oil over cylinder walls.

IMPORTANT: A yearly checkup or tuneup by the SEARS Service Department is a good way of ensuring that your rotary mower will provide maximum performance for the next season.

Store the rotary mower in a protected area and cover the unit for additional protection.

ENGINE SERVICE

Unless the operator is fully qualified to make engine adjustments and repairs, it is recommended that such work be done by technicians trained to work on rotary mower type gasoline engines.

The Repair Parts section of this manual contains a list of engine replacement parts and illustrations to assist the trained technician in making repairs and ordering proper replacement parts.

The following chart, **Trouble Shooting**, is provided as a guide for correcting minor problems when the trouble is known.

TROUBLE SHOOTING CHART

CAUTION: ALWAYS DISCONNECT SPARK PLUG BEFORE ATTEMPTING ANY REMEDY.

TDAI	IDIE
TRO	JDLL

LOOK FOR

REMEDY

Blocked	fuel	line	or
empty g	as ta	nk.	

Clean fuel line; check fuel supply.

Defective spark plug.

Spark plug lead wire disconnected.

Engine fails to start.

Faulty spark plug-spark should jump gap between control electrode and side electrode. If spark does not jump, replace spark plug.

NOTE: Use insulated pliers to hold the spark plug wire.

Throttle setting.

Throttle control lever not in the starting position.

Loose connections

Spark plug wire loose.

Hard starting or loss of power.

Dirty air cleaner.

Remove air cleaner and clean as outlined in paragraph Engine Maintenance.

Carburetor improperly adjusted.

Review paragraph Carburetor Adjustment.

Excessive vibration.

Bent or damaged blade spindle.

Stop engine immediately; tighten all bolts and make all necessary repairs. If vibration continues, have the unit serviced by a competent repairman.

Loose parts.

Stop engine immediately; tighten all bolts and make all necessary repairs.

Unit fails to propel itself.

Drive belt loose or defective.

Adjust drive belt; replace if defective.

Lockout rod adjustment.

Review paragraph on Adjustments, page 13.

Unit fails to discharge grass.

Discharge chute clogged.

Clean discharge chute and inside of deck.

Foreign object lodged in deck.

Remove object from deck. See CAUTION following step 1 in paragraph Operation.

Engine overheats.

Obstructions in air passages.

Remove any obstruction from air passages in shroud.

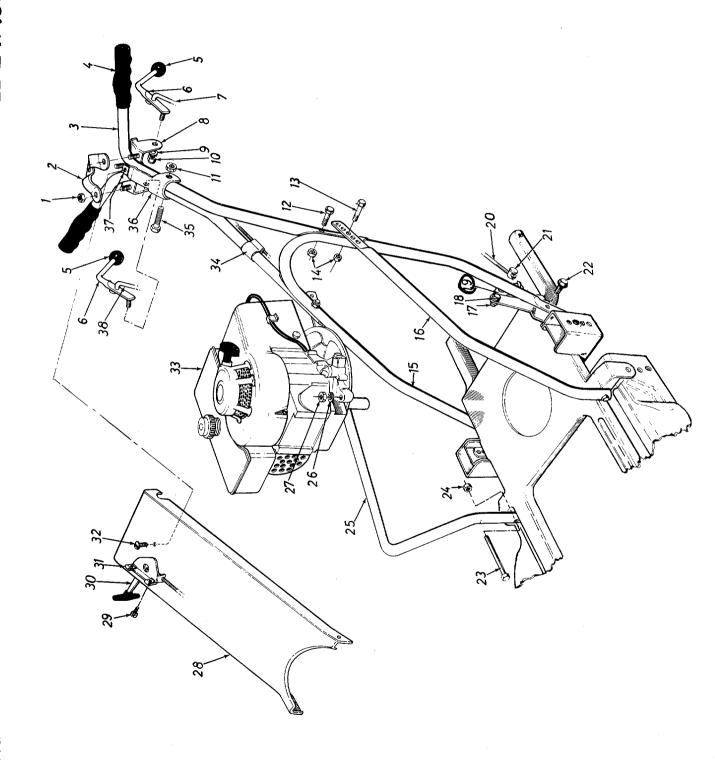
Grass and dirt in engine shroud.

Clean cooling fins.

Oil level.

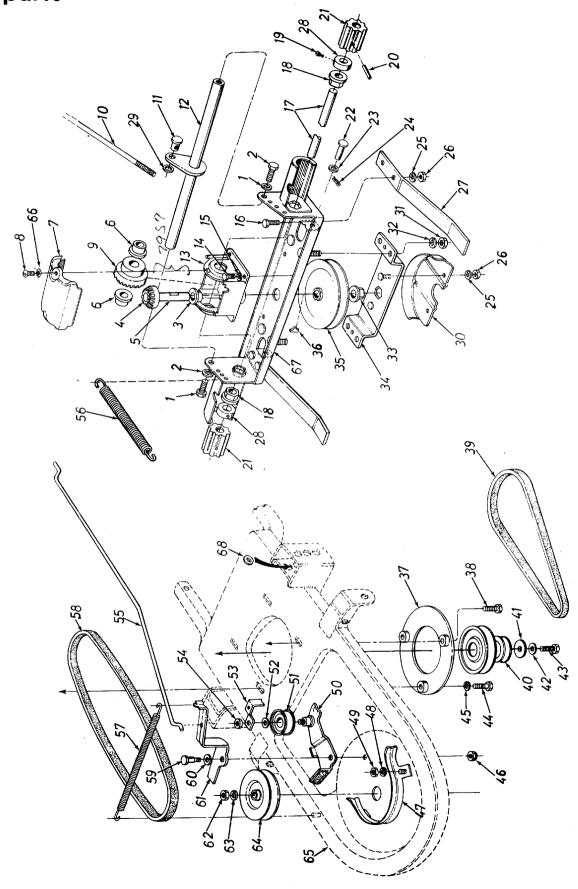
Fill crankcase to proper oil level.

repair parts



CRAFTSMAN HI WHEEL SELF-PROPELLED ROTARY MOWER MODEL 247.88110

S. G.	PART NO.	DESCRIPTION	RE S	PART NO.	DESCRIPTION
-	701 017	100 Coutes October 11, 00 That	000	711-180	Control Rod
_ ,	/01-71/	nex Cerrei Lockriol /4-20 illa:	7 7	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	
7	8378	Clamp Bracket	- 17	K/I-II/	Adjustment retrute
n	9354	Upper Handle (2-Reg'd.)	22	710-253	Hex Scr. %-16 x .62" Lg.*
4	720-157	Grib	23	710-102	Hex Scr. 1/4-20 x 2.50" Lg.*
5	7889	Plastic Ball	24	712-107	Hex Center Locknut 1/4-20 Thd.
9	8373	Lockout Lever Ass'v. with Plastic	25	11991	Lower Handle Support—R.H.
)		Ball	26	736-119	Spring Lockwasher 5/16" Scr.*
7	711-180	O	27	712-123	Hex Nut 5/16-24 Thd.*
∞	8376		28	11990-347	Handle Panel
6	736-108		29	710-473	Truss Mach. Scr. #10-24 x .50"
		O.D. x .033			
01	712-107	Hex Center Locknut 1/4-20 Thd.	30	746-171	Throttle Control Ass'y.—Comp.
_	712-107	Hex Center Locknut 1/4-20 Thd.	33	712-526	Speed Nut #10-24
12	710-106	Hex Scr. 1/4-20 × 1.25" Lg.*	32	710-473	Truss Mach. Scr. #10-24 x .50"
13	710-606	Hex Scr. 1/4-20 x 1.50" Lg.*			.* Lg.*
14	712-107	Hex Center Locknut 1/4-20 Thd.	33	752-404	Engine Model No. V60-70259H
15	9362	Lower Handle	34	746-128	Cable Clip for 78" Tubing
16	8327	Lower Handle Support—L.H.	35	710-606	Hex Scr. 1/4-20 × 1.50" Lg.*
17	712-130	Hex Inserted Lockout %-16 Thd.	36	7861	Clamp Bracket
18	738-234	Shoulder Scr500" Dia. x .295	37	712-526	Speed Nut #10-24
6	9372	Pivot Bracket	38	711-180	Control Rod
					The state of the s



CRAFTSMAN HI WHEEL SELF-PROPELLED ROTARY MOWER MODEL 247.88110

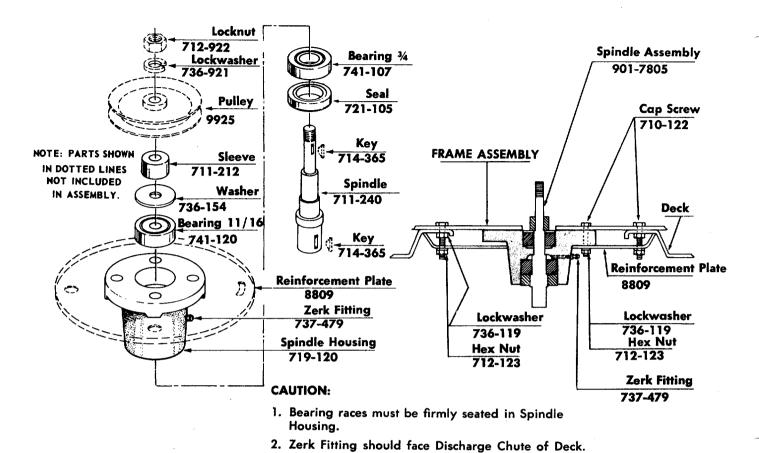
repair parts

CRAFTSMAN HI WHEEL SELF-PROPELLED ROTARY MOWER MODEL 247.88110 40 -35 /

CRAFTSMAN HI WHEEL SELF-PROPELLED ROTARY MOWER MODEL 247.88110

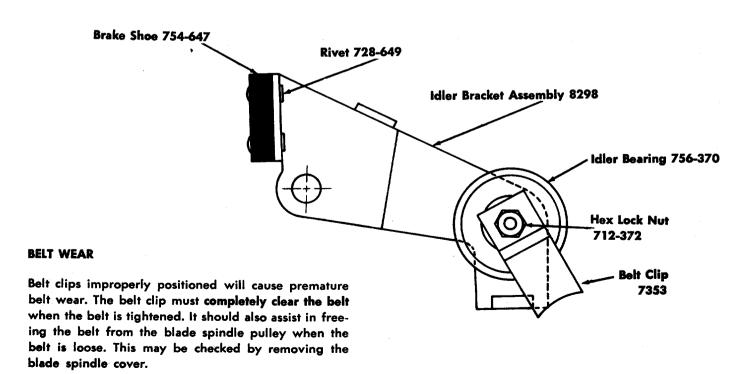
1 710-117 2 710-158 3 8279-347 4 710-209 5 736-329 7 11446-347 8 11197-347 9 713-132 10 741-113 11 738-114 12 11141-347 13 732-253	N 8 N 6 N 6	22	5	DESCRIP FICH
88 111 11	N 8 N 6 N 6	22		
8 11 1	8 / 6 / 6	1	9383-501	Front Wheel Ass'y. Comp.
8 77 7	8 / 6 / 6	23	736-105	Belleville Washer
8	V 9.V 9	24	712-123	Hex Nut 5/16-24 Thd.*
		25	736-129	Spring Lockwasher 5/16" Scr.*
L. t		26	742-125	22" Blade
	<u>~</u>	27	710-117	Hex Scr. 5/16-24 x 1.00" Lg.
	_			Heat Treated
= =	7 Deck Assembly	28	710-459	Hex Scr. %-24 x 1.50" La. Heat
	_			Treated
-	2 Oil Cap	29	736-217	Spring Lockwasher 36" Scr. Heavy
=	3 Ball Bearing .504" 1.D. × 1.38" Dia.			Duty
=		99	7919	Scalp Plate
=	Lg.	33	748-189	Blade Adapter
	_	32	712-123	Hex Nut 5/16-24 Thd.*
_	_	33	736-119	Spring Lockwasher 5/16" Scr.*
_	16 Push Nut 1/4" Rod	34	712-123	Hex Nut 5/16-24 Thd.*
<u>_</u>		35	736-119	Spring Lockwasher 5/16" Scr.*
_	5 Pivot Pin	36	8809	Reinforcement Plate
17 10769		37	7805	Blade Spindle Ass'y.—Comp.
18 734-438		38	710-473	Truss Mach. Scr. #10-24 x .50"
19 734-180			,	*.0]
734-39	1 Semi Pneumatic Tire 16 x 1.75	36	731-230	Blade Spindle Cover
	Gear Tread	40	11679-347	Chute Deflector Ass'y.—Comp.
20 741-11	4 Ball Bearing .504" I.D. x 1.12" Dia.	4	712-526	Speed Nut #10-24
21 738-213		42	770-4447	Owners Manual (Not Illustrated)
··	Lg.	43	775-1121	Model Plate (Not Illustrated)

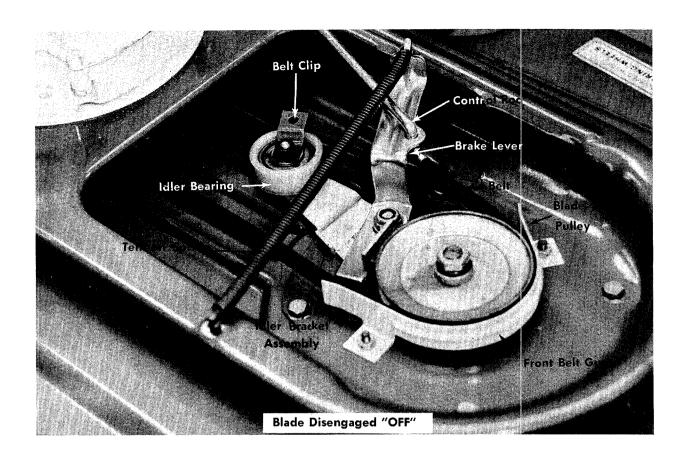
BLADE SPINDLE ASSEMBLY 901-7805

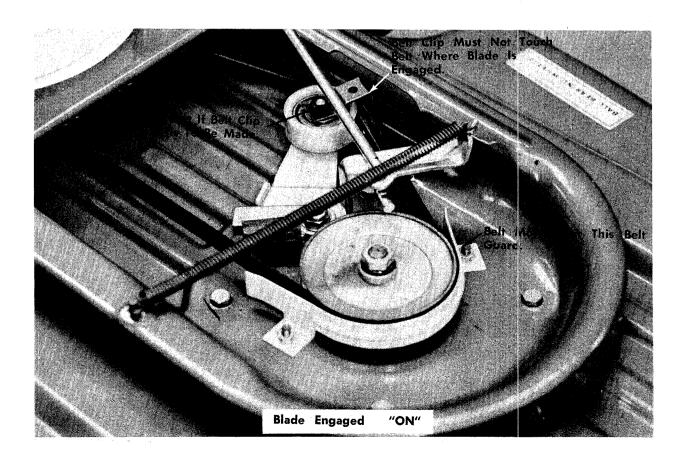


3. Lubricate every 8 to 10 hours with Shell General Purpose Grease or Equivalent.

BLADE IDLER BRACKET ASSEMBLY DETAIL

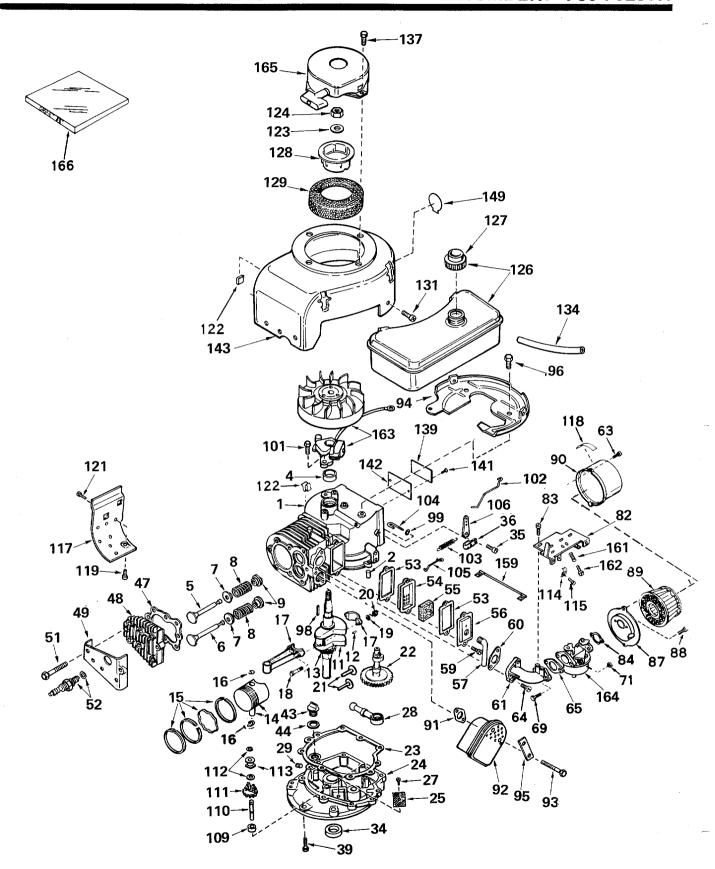






NOTES:

NOTES:



TECUMSEH 4-CYCLE ENGINE

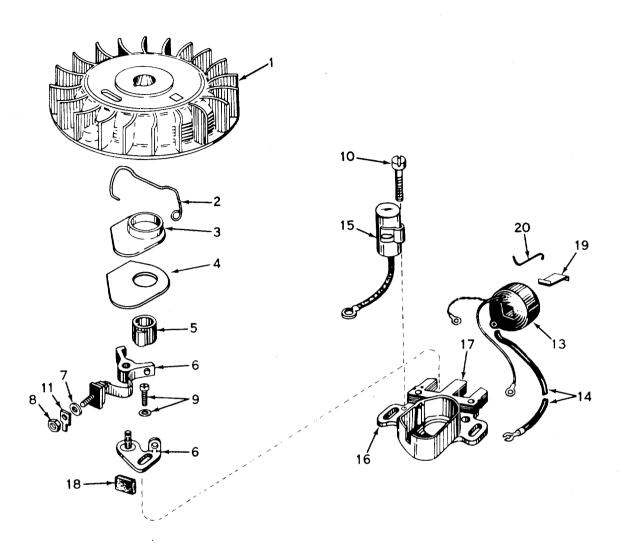
MODEL NUMBER: V60-70259H

	JINSEII	T CICE ENVINE		MODEL	NONDEN. V00-7023311
Ref. No.	Part No.	Part Name	Ref. No.	Part No.	Part Name
1	33361	Cylinder Assy. (Incl. Nos. 2 & 4)	51	650697	Screw, Hex hd. cap, 5/16-18 x 2-1/2
$\begin{bmatrix} 2 \\ 4 \end{bmatrix}$	27652 27876B	Pin, Dowel Seal, Oil	52	33636	Plug, Spark (Champion J-8 or equivalent)
5	27877A	Valve, Intake (Standard) (Incl.	5 3	*27896	Gasket, Valve chamber cover
		No. 9)	54	28423	Body Assembly, Breather
5	27880A	Valve, Intake (1/32" oversize)	55 56	28424	Element, Breather
6	27878A	(Incl. No. 9) Valve, Exhaust (Standard)	56 57	28425 27627	Cover, Valve chamber Tube, Breather
6	27880A	(Incl. No. 9) Valve, Exhaust (1/32" over-	59	650128	Screw, Fil. slotted hd. Sems, 10-24 x 1/2
"	21000A	size) (Incl. No. 9)	60	*27915	Gasket, Intake pipe
7	27882	Cap, Upper valve spring	61	31358	Pipe, Intake
8	27881	Spring, Valve	63	650152	Screw, Fil. slotted hd. Sems,
9 11	32581 33799	Cap, Lower valve spring Crankshaft Assy. (Incl. Nos. 12	64	650378	8-32 x 3/8 Screw, Fil. hd. Sems, 5/16-18 x
12	29783	& 13) Pin Crankshaft gaar	65	*26756	1-1/8 Gasket, Carburetor
13	27884	Pin, Crankshaft gear Gear, Crankshaft	69	6201	Screw, Hex hd. cap, 1/4-28 x
14	33312	Piston & Pin Assembly (Incl. 2	00	0201	7/8
		of No. 16) (Standard)	71	29752	Nut, Hex, 1/4-28
14	33313	Piston & Pin Assembly (Incl. 2 of No. 16) (.010 oversize)	82	32181	Control Assy., Speed (Incl. Nos. 161 & 162)
14	33314	Piston & Pin Assembly (Incl. 2 of No. 16) (.020 oversize)	83	30200	Screw, Slotted hex washer hd., $10-24 \times 1/2$
15	33315	Ring Set, Piston (Standard)	84	*27272	Gasket, Air cleaner bracket-to-
15	33316	Ring Set, Piston (.010 oversize)	07	01.001	carburetor
15 16	33317 27888	Ring Set, Piston (.020 oversize) Ring, Piston pin retaining	87 88	31691 28820	Bracket, Air cleaner Screw, Phil. fil. hd. mach.
17	31380B	Rod Assembly, Connecting	00	20020	Sems, 10-32 x 1/2
	O COOOD	(Incl. Nos. 18, 19 & 20)	89	30727	Element, Air cleaner
18	30682	Bolt, Connecting rod	90	31692	Body, Air cleaner
19	26073	Washer, Connecting rod bolt	91	*27930	Gasket, Muffler flange
20	28264	Nut, Hex, 5/16-24	92 93	28269 650696	Muffler Assembly Screw, Hex hd. cap, 5/16-18 x
21 22	27893 33157	Lifter, Valve Camshaft (Compression Re-	90	050090	2-3/4
44	00107	lease)	94	29536	Baffle, Blower housing
23	*30684	Gasket, Mounting flange	95	31588	Plate, Locking muffler
24	31471B	Flange Assembly, Mounting (Incl. Nos. 25, 27, 29, 34, 43,	96	650561	Screw, Phil. hex hd. Sems, $1/4-20 \times 5/8$
		44 & 110)	98	30884	Key, Flywheel
25	31355	Screen, Oil filter Screw, Slotted hex hd. self	99	28277	Washer, Flat Screw, Hex hd. Sems with flat-
27	29117	tap., 8-32 x 5/16	101	650489	washer, $1/4-20 \times 11/16$
28 29	31356 27642	Pump Assembly, Oil Plug, Pipe	102 103	31823 31361	Link, Governor Spring, Governor
34	27897	Seal, Oil	104	30669	Rod, Governor (Incl. No. 99)
35	650548	Screw, Hex slotted washer hd., 8-32 x 3/8	105 106	32582 31357	Link, Governor spring Lever, Governor
36	31335	Clamp, Governor lever	109	31707	Spacer
39	650488	Screw, Hex hd. Sems, 1/4-20 x	110	30668	Shaft, Mechanical governor
		1-1/4	111	30591	Gear Assembly, Governor
43	27625	Plug, Oil filler (Incl. No. 44)	112	29193	Ring, Retaining
44 47	*29673 *28938B	Gasket, Oil filler plug Gasket, Cylinder head			*Indiantes Douts Included in
47	30938A	Head, Cylinder Head, Cylinder			*Indicates Parts Included in Gasket Set, Ref. No. 166.
49	30939A	Cover, Cylinder head			Austre Det, Itel. 110. 100.
L	<u> </u>	l	L	<u> </u>	L

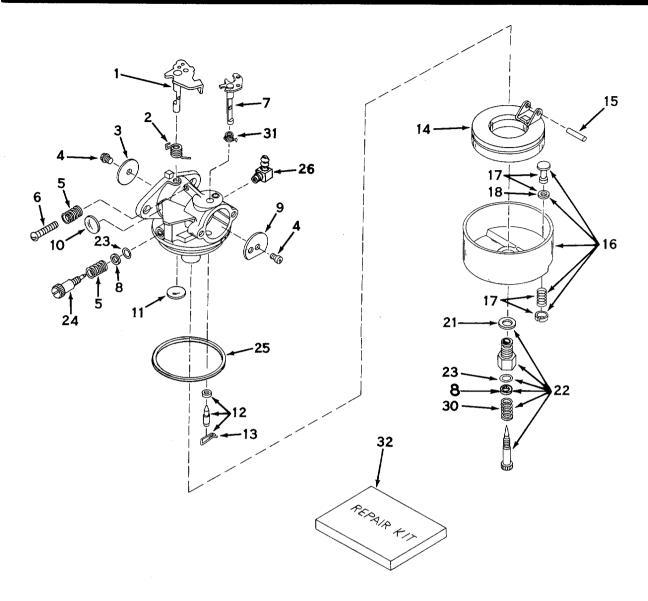
TECUMSEH 4-CYCLE ENGINE

MODEL NUMBER: V60-70259H

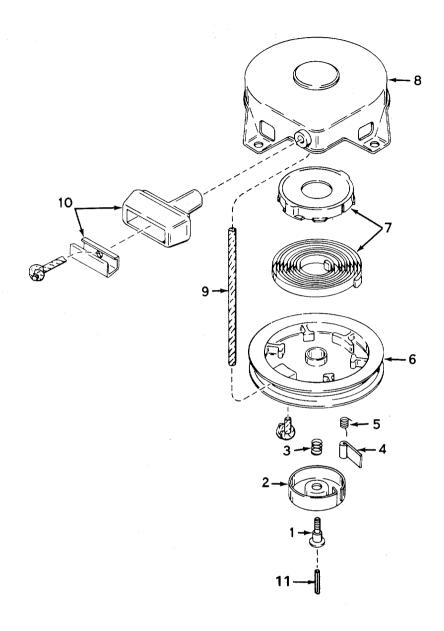
15/	OMSEI	4-CICLE ENGINE		MODEL	NUMBER: V60-70259H
Ref. No.	Part No.	Part Name	Ref. No.	Part No.	Part Name
113 114 115	30588A 27793 28942	Spool, Governor Clip, Conduit Screw & Lockwasher, Slotted hex.hd., 10-32 x 3/8	134 137 139	29774 29716 31398	Line, Fuel Screw, Pan hd. P.C.R. with lockwasher, 1/4-28 x 7/16 Decal, Instruction
117 118	30622 31752	Extension, Blower housing Decal, Air cleaner	$\begin{array}{c c} 141 \\ 142 \end{array}$	28670 31345	Stud, Drive Plate, Identification
119	650128 30688	Screw, Fil. slotted hd. Sems, 10-24 x 1/2 Screw, Hex hd. cap Sems,	143 149 159	32629A 31324 28468	Housing, Blower Decal, Name & H.P. Wire, Ground
122	27275	1/4-20 x 1/2 Clip, Hi tension wire retaining	161 162	31342 650549	Spring, Compression Screw, Speed adjustment, 5-40
123 124 126	650490 8116 32584	Washer, Belleville Nut, Hex, 1/2-20 Tank Assy., Fuel (Incl. No.	163 164	610689A 631444	x 7/16 fil. slotted hd. mach. Magneto Carburetor
127	32387A	127) Cap, Fuel	165 166	590420 33234	Starter, Rewind Gasket Set (Incl. items
128 129 131	32125 590417 29747A	Cup, Starter Screen, Starter cup Screw, Hex hd. Sems, cap,	1		marked*) *Indicates Parts Included in
	2011111	5/16-24 x 3/4			Gasket Set, Ref. No. 166.
		•			
				·	
1	1	1	I	1	



Ref. No.	Part No.	Part Name	Ref. No.	Part No.	Part Name
1 2 3 4 5 6 7 8 9	610689A 30555 30551 30550 33695 30992 30547A 610385 610408 29181	Flywheel Spring, Breaker box dust cover Cover, Breaker box dust Gasket, Dust cover Cam, Breaker	10 11 13 14 15 16 17 18 19 20	610593 30843 30560A 30554 30548A 30545 30561A 30549 29629 31311	14) Wire, Ignition lead Condenser Core and Plate Group



Ref. No.	Part No.	Part Name	Ref. No.	Part No.	Part Name
	631444	Carburetor	16	631025	Bowl & Drain Assy., Float
1	31834	Shaft & Lever Assy., Throttle			(Incl. No. 17)
2	631279	Spring, Throttle return	17	27136A	Plunger Assy., Drain (Incl. No.
3	631036	Shutter, Throttle			18)
4	650506	Screw, 4-40 x 3/16	18	*27554	Gasket, Drain plunger
5	630766	Spring, Idle regulating screw	21	27110	Gasket, Bowl-to-body
6	650417	Screw, Idle regulating	22	*631026	Adjustment Screw Assy., Main
7	630973	Shaft & Lever Assy., Choke			(Incl. Nos. 8, 21, 23 & 30)
8	630739	Washer, Flat	23	*630740	"O" Ring, Adjustment screw
9	631037	Shutter, Choke	24	*631078	Screw, Idle adjustment
10	*630748	Plug, Welch	25	*631028	Gasket, Bowl-to-body
11	*631027	Plug, Welch	26	631445	Fitting, Fuel inlet
12	*631021	Inlet Needle, Seat & Clip Assy.	30	630738	Spring, Main adjustment screw
		(Incl. No. 13)	31	630821	Spring, Choke return
13	631022	Clip, Inlet needle	32	631029	Repair Kit (Incl. items
14	631023	Float, Carburetor			marked*)
15	*631024	Shaft, Float			,



Ref. No.	Part No.	Part Name	Ref. No.	Part No.	Part Name
1 2 3 4 5 6	590420 590409 590410 590411 590148 590412 590413A	Starter, Rewind Screw, Retainer Retainer, R.H. Spring, Brake Dog, Starter Spring, R.H. dog Pulley	7 8 9 10 11	590414 590415 590386 590387 590459	Spring & Keeper Assy. Housing Assy., Starter Rope, Starter Handle Assy., Starter Pin, Centering

Sears

ow ner s manual

MODEL NO. 247.88110

Sears
SERVICE
is at
Your
SERVICE
wherever You
live or move
in the U.S.A.

How to ORDER Repair Parts

The Model Number will be found on a plate attached to your mower at the right-hand side of the frame. Always mention the Model Number when requesting service or repair parts for your 22 INCH HI WHEEL SELF PROPELLED ROTARY MOWER.

All parts listed herein may be ordered through SEARS, ROEBUCK AND CO. or SIMPSONS-SEARS LIMITED. When ordering parts by mail, selling prices will be furnished on request or parts will be shipped at prevailing prices and you will be billed accordingly.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION AS SHOWN IN THIS LIST.

- 1. The PART NUMBER
- 2. The PART DESCRIPTION
- 3. The MODEL NUMBER 247.88110
- 4. The NAME OF ITEM—
 22 INCH HI WHEEL SELF PROPELLED
 ROTARY MOWER
- 5. ENGINE MODEL NO. V60-70259H

Your Sears merchandise takes on added value when you discover that Sears has over 2,000 Service Units throughout the country. Each is staffed by Sears-trained, professional technicians using Sears approved parts and methods.

Sold by SEARS, ROEBUCK AND CO., Chicago, Ill. 60607 U.S.A. and SIMPSONS-SEARS LIMITED, Toronto