Orain Serie Institut

GARDEN TRACTOR

WITH 32" ROTARY MOWER

IMPORTANT

Model Nos. 142-669 (Electric Starter) 192-651 (32" Mowing Unit)

SAFE OPERATION PRACTICES - RIDING MOWERS

- Know the controls and how to stop quickly— READ THE OWNER'S MANUAL.
- Do not allow children to operate vehicle. Do not allow adults to operate it without proper instruction.
- 3. Do not carry passengers. Keep children and pets a safe distance away.
- 4. Clear work area of objects which might be picked up and thrown.
- Disengage all attachment clutches and shift into neutral before attempting to start engine (motor).
- 6. Disengage power to attachments and stop engine (motor) before leaving operator position.
- Disengage power to attachment(s) and stop engine (motor) before making any repairs or adjustments.
- 8. Disengage power to attachments when transporting or not in use.
- 9. Take all possible precautions when leaving vehicle unattended; such as disengaging power-take-off, lowering attachments, shifting into neutral, setting parking brake, stopping engine and removing key.
- Do not stop or start suddenly when going uphill or downhill. Mow up and down the face of steep slopes; never across the face.
- 11. Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes.
- 12. Stay alert for holes in terrain and other hidden hazards.
- Use care when pulling loads or using heavy equipment.
 - A. Use only approved drawbar hitch points.
 - B. Limit loads to those you can safely control.
 - C. Do not turn sharply. Use care when backing.
 - D. Use counterweight(s) or wheel weights when suggested in owner's manual.
- 14. Watch out for traffic when crossing or near roadways.

- 15. When using any attachments never direct discharge of material toward bystanders nor allow anyone near vehicle while in operation.
- 16. Handle gasoline with care—it is highly flammable
 - A. Use approved gasoline container.
 - B. Never remove cap or add gasoline to a running or hot engine or fill fuel tank indoors. Wipe up spilled gasoline.
 - C. Open doors if engine is run in garage exhaust fumes are dangerous. Do not run engine (motor) indoors.
- Keep vehicle and attachments in good operating condition and keep safety devices in place. Use guards as instructed in owner's manual.
- 18. Keep all nuts, bolts, and screws tight to be sure equipment is in safe working condition.
- Never store equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark.
- Allow engine to cool before storing in any enclosure.
- 21. To reduce fire hazard keep engine free of grass, leaves or excessive grease.
- 22. Vehicle and attachments should be stopped and inspected for damage after striking a foreign object and the damage should be repaired before restarting and operating the equipment.
- 23. Do not change engine governor settings or overspeed engine.
- 24. When using vehicle with mower:
 - (1) Mow only in daylight or in good artificial light.
 - (2) Never make a cutting height adjustment while engine (motor) is running if operator must dismount to do so.
 - (3) Shut engine (motor) off when removing grass catcher and/or unclogging chute.
 - (4) Check blade mounting bolts for proper tightness at frequent intervals.
- Check grass catcher bags frequently for wear or deterioration. Replace with new bags for safety protection.

WARNING

The mower shall not be operated without the entire grass catcher or chute deflector in place.

NOTE

Under normal usage bag material is subject to wear, and should be checked periodically. Be sure any replacement bag complies with the mower manufacturer's recommendations.

Use factory replacement bag Number 764-122.

ASSEMBLY

The steering wheel, seat and deck wheels, with the necessary hardware, are easily assembled to the machine. The battery must be activiated and installed as outlined in this section and the cutting deck must be attached.

TOOLS NEEDED

Hammer ¾" open end wrench or adjustable wrench 7/16" open end wrench Pliers

HARDWARE SUPPLIED

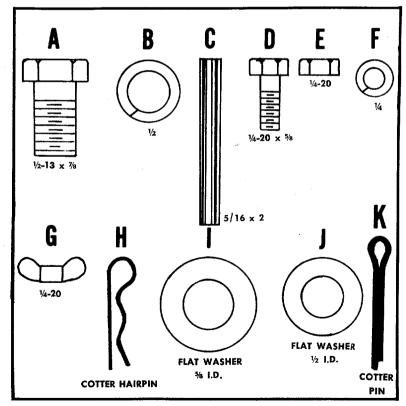


FIGURE 5. FRONT LINK ASSEMBLY

Step 1. Assemble the seat to the seat spring with the $\frac{1}{2} \times \frac{7}{8}$ " hex head bolt (A) and $\frac{1}{2}$ " lockwasher (B).

NOTE

The seat is adjustable by using one of the four different mounting holes. See figure 1.

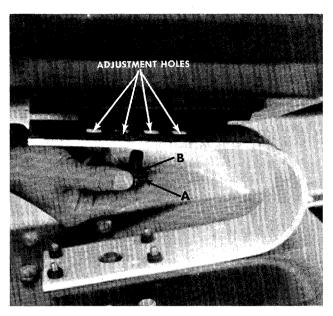


FIGURE 1. SEAT ASSEMBLY

Step 2. Assemble the steering wheel to the steering column, line up the hole and drive the roll pin (C) with a hammer. See figure 2.

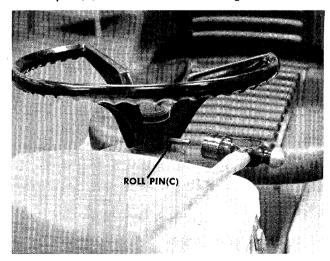


FIGURE 2. STEERING WHEEL ASSEMBLY

Step 3. Activate the battery.

CAUTION

Always add electrolyte to battery before battery is installed in vehicle.

- 1. Remove vent plugs.
- When using 6 quart or 2 quart container—place package upright; pull tab back to edge of carton, pull out hose; snip off end of hose. Fill each cell until electrolyte level rises to split ring at bottom of vent well.

DO NOT OVER FILL

- 3. After filling cells, wait five to ten minutes and add additional electrolyte if necessary to bring electrolyte to proper level.
- 4. Replace vent caps.
- 5. Charge battery for 10 to 15 minutes at 25-30 amps. or for 30 minutes at 4-6 amps.

WARNING

Electrolyte is a mixture of sulphuric acid and water. Avoid contact with skin, eyes, and clothing. If electrolyte is spilled flush area with clear water and neutralize with solution of water and baking soda or water and ammonia.

- Step 4. Installing the battery in the mower.
 - a. Open the hood of the mower.
 - b. Place the battery, with the terminals to the rear in the battery case. See figure 3.

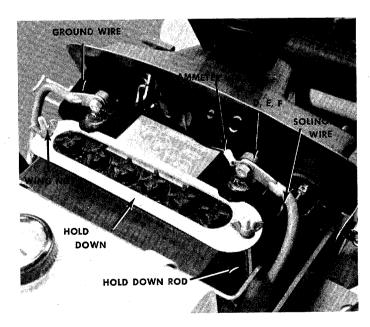


FIGURE 3. INSTALLING THE BATTERY

 Hook both hold down rods under the battery case and place the hold down over the battery caps and secure with wing nuts (G).

CAUTION

Be sure the flared edge of the hold down is facing up to avoid damage to the battery.

- d. Attach the free end of the positive cable and the small wire from the ammeter to the positive battery terminal with bolt (D), washer (F) and nut (E).
- e. Attach the free end of the negative cable to the negative terminal of the battery. Use bolt (D), washer (F), and nut (E).

Step 5. Deck Wheel Assembly.

Place the deck wheel over the deck axle and secure it with washer (I) and cotter pin (K).

See figure 4.

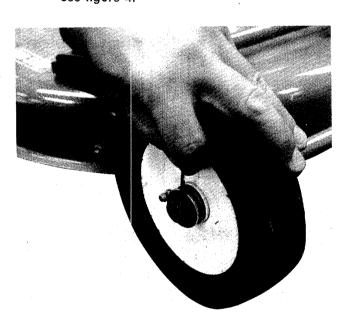


FIGURE 4. DECK WHEEL ASSEMBLY

Step 7. Attach the Cutting Deck.

- a. Move the blade engagement lever forward. See page
- b. Slide the cutting deck under the tractor so it is centered and is back as far as it can go against the rear rider wheels.
- c. From the front of the rider, grasp both front links and hook them in the pins in the frame and secure with cotter pins (H). See figure 5.



FIGURE 5. FRONT LINK ASSEMBLY

d. Place the two center links through the hole in the foot rest and attach the short slotted link to the pin in the lift arm and attach the long link to the pin in the frame. See figure 6.

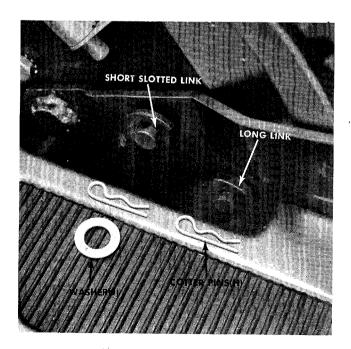


FIGURE 6. CENTER LINK ASSEMBLY

- e. Place washer (J) over the short slotted link and secure both links with cotter pins (H). See figure 6.
- f. Remove the bolt holding the front of the belt guard in place on the engine and swing the belt guard out of the way. See figure 7.

NOTE

The belt trap will be loose but will align itself when the bolt is replaced.

WARNING

Be sure the ignition key is off and the spark plug wire is removed and grounded when the belt is being replaced.

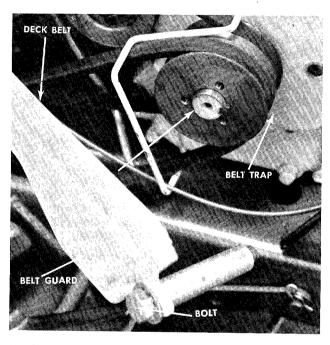


FIGURE 7. ATTACHING THE BELT

- g. Attach the belt to the engine pulley.
- h. Assemble the belt guard back on the rider.

The controls may be considered as the following.

a. Throttle Control. The throttle control is used to regulate the engine speed and choke the engine. The engine should be oprated from ¾ to full throttle when operating the cutting deck or snow thrower.

b. Gear Shift Lever.

1st Gear:
Heavy grass cutting
Snow Blade
Snow Thrower
Pulling heavy loads

2nd Gear:

Normal grass cutting Light snow throwing

3rd Gear:
Light grass cutting
Road Gear

Reverse: Used to back up

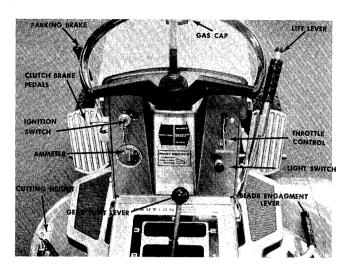


FIGURE 8. CONTROLS

c. Parking Brake. To set the parking brake, pull the lever back and hold it in the locked position by moving the lock to the left. See figure 9.



FIGURE 9. PARKING BRAKE

d. Clutch-Brake Pedal. Depress it all the way down to stop or shift gears. Release pedal showly to engage. The pedal must be depressed in order to start the engine.

CAUTION

Do not shift while in motion.

e. Blade Engagement Lever. Move the blade engagement lever forward to stop the blades from turning on the cutting deck. To engage the blades, slowly move the lever back.

NOTE

The blades must be disengaged before the cutting deck can be raised high enough to trip the interlock so the engine can be started.

f. Lift Lever. To raise the cutting deck or other equipment, depress the thumb button and pull the lever towards you. The lift lever must be all the way up in order to start the engine.

NOTE

The deck will not raise up high enough to start the engine unless the blades are disengaged.

g. Ignition Switch. Turn the switch all the way to the right to engage the starter. As soon as the engine starts, release the ignition key so that the starter is switched off. Turn the key to the left to shut off the engine.

NOTE

The clutch-brake pedal must be depressed and the lift lever must be raised all the way before the starter will operate

- h. Light Switch. Pull the light switch out to turn on the lights.
- i. Ammeter. The ammeter registers the rate of battery charge or discharge. The ammeter should register on the plus (+) side when the engine is running in the fast position until the battery is completely charged. With a fully charged battery or with the engine idling the ammeter will not show a charge.
- j. Cutting Height. Turn the cutting height arm, located on the L.H. side of the cutting deck, clockwise to lower the cutting height. The height of cut can be adjusted from %" to 2%". See figure 10. To prevent the cutting height arm from unscrewing, lock it as shown in figure 11.

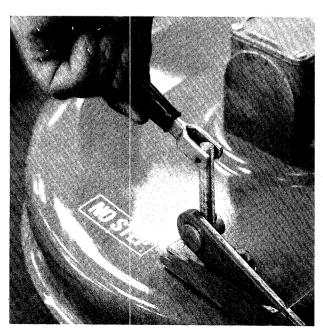


FIGURE 10. ADJUSTING CUTTING HEIGHT

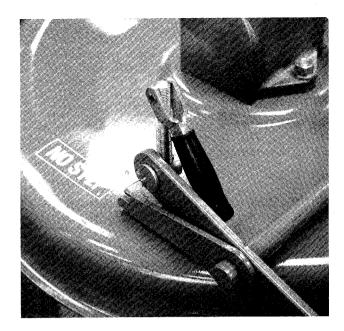


FIGURE 11. ADJUSTMENT LOCKED CHECKING OIL AND GASOLINE

NOTE

When packaged for shipment, the machine contains no oil or gasoline. Before starting the engine, oil must be added to the engine crankcase and gasoline to the tank. DO NOT mix oil with gasoline.

Oil

Remove the oil dip stick (See figure 12) and pour 21/4 pints of good quality type MS engine oil into the crank case.

Summer Use SAE 30

Winter (Below 40° F)
Use SAE 5W-20 or SAE 10W

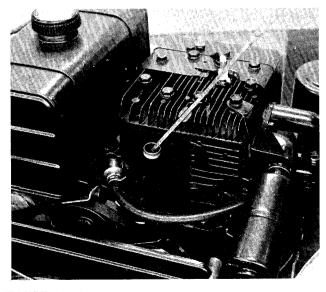


FIGURE 12. OIL DIP STICK

Gasoline

Remove the gas cap and fill the tank with FRESH REG-ULAR GASOLINE. Do not use gasoline that has been stored for any length of time.

STARTING THE ENGINE

Refer to the engine manual for information regarding oil and gasoline requirements, check that spark plug wire is connected, then proceed as follows:

- Step 1. With the machine set on level ground place gear shift lever in neutral (N). See figure 13.
- Step 2. Place the lift lever in the DISENGAGE position. See figure 13.

NOTE

The blade engagement lever must be disengaged before the lift lever can be raised.

Step 3. Supress the clutch brake pedals.

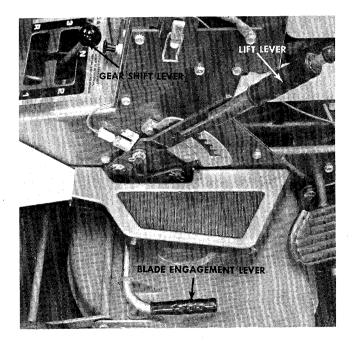


FIGURE 13. CONTROLS

- Step 4. Set the throttle control in the CHOKE position.
- Step 5. Turn the ignition key to the right to start the engine. Allow the key to return to the ON position. See figure 14.

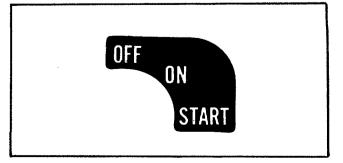


FIGURE 14. IGNITION SWITCH LABEL

NOTE

A brief break-in period is essential to ensure maximum engine and mower life. This consists of running the engine at half speed for a period of time required to use one tank of gasoline. It is also recommended to change crankcase oil after the first 2 hours of operation.

- Step 6. Set the desired cutting height. See figures 10 and 11.
- Step 7. Lower the cutting deck with the lift lever. See figure 13.
- Step 8. Slowly engage the blade engagement lever. See figure 13.

7. STOPPING THE ENGINE

To stop the engine, turn the ignition key to the left to the OFF position. Do not leave the key in the ignition switch.

WARNING

Whenever the mower is left unattended, disconnect the spark plug lead and remove the ignition key.

8. STOPPING THE BLADES

Move the blade engagement lever forward to stop the blades from turning. See figure 13.

9. STOPPING THE RIDER

To stop the rider from moving forward or backward, depress the clutch-brake pedal. See figure 8.

CAUTION

- 1. Keep all shields and guards in place.
- 2. Before leaving operator's position:

Shift transmission to neutral Set parking brake Disengage attachment clutch Shut off engine Remove ignition key

- Wait for all movement to stop before servicing machine.
- Keep people and pets a safe distance away from machine.

MAINTENANCE

10. CRANKCASE OIL

To ensure maximum engine performance, perform the following periodic maintenance:

a. Oil Check

Check the oil level in the crankcase before each use of the machine and after every two hours of operation. Keep the oil level between ADD and FULL. See figure 12.

b. Oil Change

After the first two hours of operating a new engine, drain the oil (See figure 15.) from the crankcase while engine is still hot and refill crankcase with new oil; thereafter change the oil after every 25 hours of operation. This procedure ensures for minimum wear of engine parts and provides for virtually trouble-free operation. To change the oil, proceed as follows:

- Step 1. Remove oil filler plug.
- Step 2. Drain the ail through the hole in the frame.
- Step 3. Fill crankcase with 2½ pints of good quality oil marked "For Service MS."

WINTER
(Below 40° F.)
Use SAE 5W - 20

(Above 40° F.) Use SAE 30

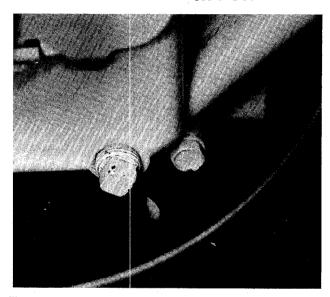


FIGURE 15. OIL DRAIN PLUG

11. TRANSAXLE LUBRICATION

The transaxle is lubricated at the factory with three pints of SAE 90 E.P. oil. When replacing or adding oil, remove the left rear mounting bolt (See figures 16 and 17.) and the overflow plug (figure 16.) and add oil until it overflows. The transaxle oil should be changed once a year.

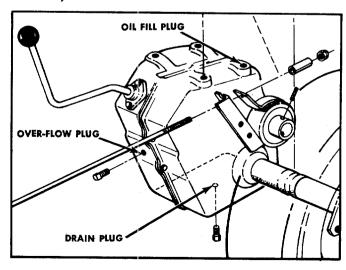


FIGURE 16. TRANSAXLE LUBRICATION

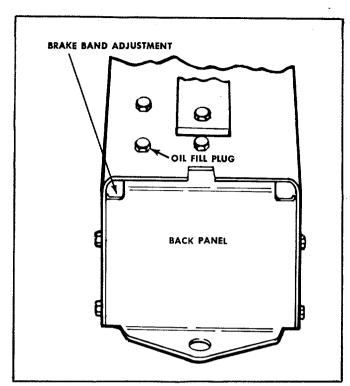


FIGURE 17. BACK PANEL

12. STEERING GEAR LUBRICATION

Lubricate the teeth on the steering segment, pinion gear and slide with automotive multi-purpose grease after every 24 hours of operation. See figure 18.

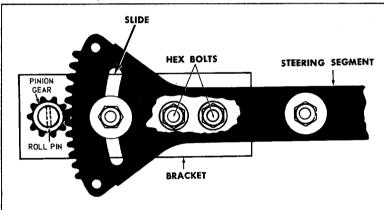


FIGURE 18. STEERING ASSEMBLY

13. WHEEL BEARING LUBRICATION

Front: Lubricate the front wheel bearings with SAE 30 non-detergent oil after every 24 hours of operation.

Rear: Lubricated by transaxle. Requires no further lubrication.

14. KING PIN LUBRICATION

Grease the front king pins with a grease gun using automotive multi-purpose grease after every 24 hours of operation. See figure 5.

15. DECK WHEEL LUBRICATION

The deck wheels require no lubrication.

steering adjustment

16. RIGHT ANGLE DRIVE LUBRICATION

Check the lubricant level after every 24 hours of operation. Lubricate with 4 ounces of E.P.G. Lithium grease. The grease level should cover the input shaft. See figure 19.

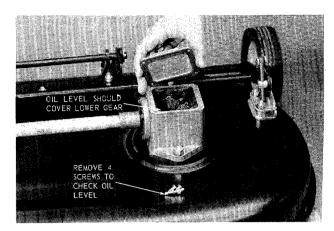


FIGURE 19. GEAR BOX LUBRICATION

17. AIR FILTER

Under normal operating conditions, the air cleaner, located on top of the carburetor, must be serviced after every ten hours of use. Under extremely dusty operating conditions, the air cleaner must be serviced after every hour of operation. See figure 20.

- Step 1. Remove the wing nut and cover.
- Step 2. Remove the paper element from the support hase.
- Step 3. To clean, tap the paper element (either top or bottom) on a flat surface or wash in a non-sudsing detergent and flush from the inside until the water is clear. After washing, air dry thoroughly before using.



FIGURE 20. AIR FILTER

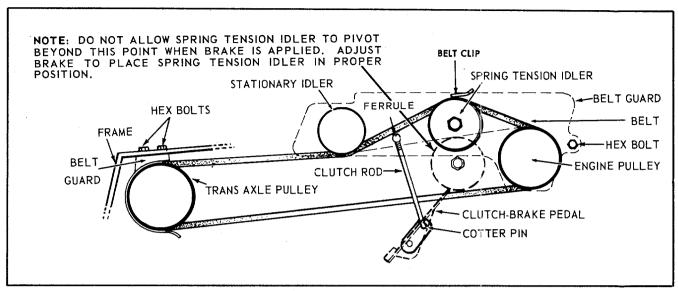


FIGURE 21. CLUTCH-BRAKE PEDAL ADJUSTMENT

18. CLUTCH-BRAKE PEDAL ADJUSTMENT

To adjust the angle of the clutch-brake pedal, remove the cotter pin on the clutch rod and turn the clutch rod in or out of the ferrule to obtain the most comfortable angle of the pedal when the pedal is released. See figure 21.

The brake adjustment is made by using a deep well socket and turning the adjusting nut clockwise through the opening in the back panel. See figure 17.

CAUTION

If the spring tension idler goes below the height of the engine pulley when the clutch-brake pedal is depressed it will cause excessive belt wear and the brake should be adjusted. See figure 21.

19. TRANSMISSION DRIVE BELT REPLACEMENT

Step 1. Remove the hex bolt holding the front of the belt guard and pivot it out of the way. See figure 21.

NOTE

If the cutting deck is attached, remove the cutting deck belt from the engine pulley first.

- Step 2. Mark the outside of the spring tension idler so it is assembled the same way.
- Step 3. Remove the hex bolt and locknut holding the pivot idler in place after noting the position of the belt clip.
- Step 4. Remove the belt from the engine pulley.
- Step 5. Remove the two hex bolts on the top of the rear frame holding the transmission pulley belt guard in place.
- Step 6. Remove the belt and replace it with a new helt.

20. CUTTING DECK BELT REPLACEMENT

- Step1. Engage the blade engagement lever as shown in figure 22.
- Step 2. Loosen the pivot idler bolt and nut and remove the belt.
- Step 3. Remove the E-ring from the shaft and slide the collar towards the center of the deck.

NOTE

A small felt pad is between the shaft and the L.H. gear box.

- Step 4. Remove the bolts, washers and nuts holding the L.H. gear box and turn it to the side.
- Step 5. Remove and replace the belt.
- Step 6. Reassemble in reverse order.

CAUTION

Check the blade timing in pargraph 21.

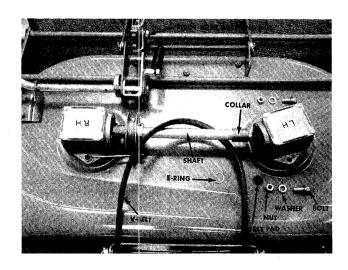


FIGURE 22. DECK BELT REPLACEMENT

21. BLADE TIMING

Timing of the blades consists of setting the blades at 90° to each other so they do not hit when they rotate. To time the blades, follow these steps.

- Step 1. Remove the cutting deck from the rider.
- Step 2. Remove the E-ring from the shaft, See figure
- Step 3. Slide the collar towards the center of the deck.
- Step 4. Tip the deck up and rotate the blades until they match figure 23.
- Step 5. Slide the collar back and install E-ring.

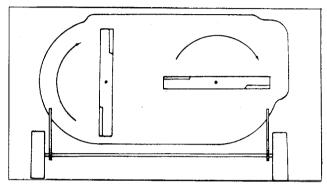


FIGURE 23. BLADE TIMING

22. BLADE REMOVAL

To remove the blades from the cutting deck, remove the deck from the rider, wrap a rag around the blade and remove the center locknut with a wrench. See figure 24.



FIGURE 24. BLADE REMOVAL

23. WHEEL ADJUSTMENT

The caster (forward slant of the king pin) and the camber (tilt of the wheels out at the top) requires no adjustment. Automotive steering principals have been used to determine the caster and camber on the tractor. The front wheels should toe-in 1/8 inch. To adjust the toe-in follow these steps.

- Step 1. Loosen the hex jam nut. See figure 25.
- Step 2. Remove the locknut and drop the tie rod end out of the wheel bracket. See figure 25.

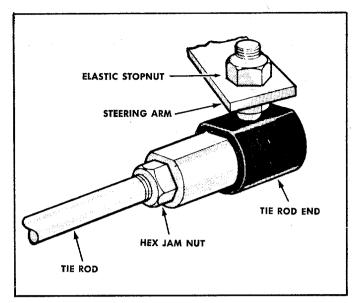


FIGURE 25. TIE ROD ADJUSTMENT

Step 3. Adjust the tie rod end in or out to obtain the proper toe-in adjustment as shown in figure 26.

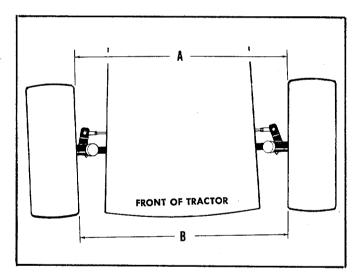


FIGURE 26. TOE-IN DIAGRAM

24. TIRE PRESSURE

Over-inflation may cause slippage of the rear wheels and under-inflation may cause excessive wear. Use 15 psi pressure on both front and rear tires.

24. TERRA TIRE ADJUSTMENT

When your tractor was first set-up the sleeve on the rear axle was on the outside of the wheel.

If you use tire chains to operate the snow blade or snow blower, you must remove the snap ring on the rear axle, remove the sleeve and place it on the inside of the wheel in order to get clearance between the chains and the fender. The cutting deck wheels will hit if you try to attach the deck with the wheels extended. See figure 27.

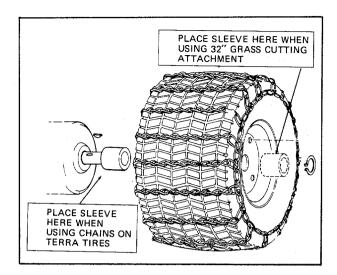


FIGURE 27. TERRA TIRE ADJUSTMENT

25. STEERING ADJUSTMENT

The "play" or looseness of the steering can be adjusted by loosening the two hex bolts on the bracket and lightly tapping the bracket towards the front of he tractor. If the pinion gear becomes worn it can be rotated one half turn by removing the roll pin. See figure 18.

26. FUEL SHUT-OFF VALVE AND FILTER

The fuel shut-off valve is located under the gasoline tank and is opened by turning it counter-clockwise. See figure 28.

The filter should be replaced once a year to insure operating your engine with clean fuel. To replace the filter, sult off the fuel valve and compress the legs of the clamps on both sides of the filter and slide them back. Replace the filter and replace the clamps. See figure 28.

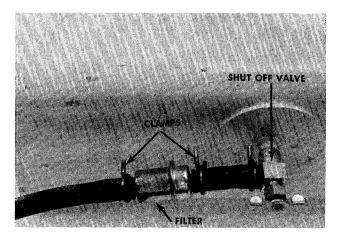


FIGURE 28. FUEL SHUT-OFF VALVE AND FILTER

27. PARKING BRAKE ADJUSTMENT

Step 1. To adjust the parking brake, set the parking brake in the lock position as shown in figure 29.

- Step 2. Using a 7/16" open end or box wrench, tighten the adjusting nut one turn.
- Step 3. Try pushing the tractor by hand. If the tractor is not locked in the park position, repeat steps 2 and 3 until you cannot move the tractor.



FIGURE 29. PARKING BRAKE ADJUSTMENT

28. OFF-SEASON STORAGE

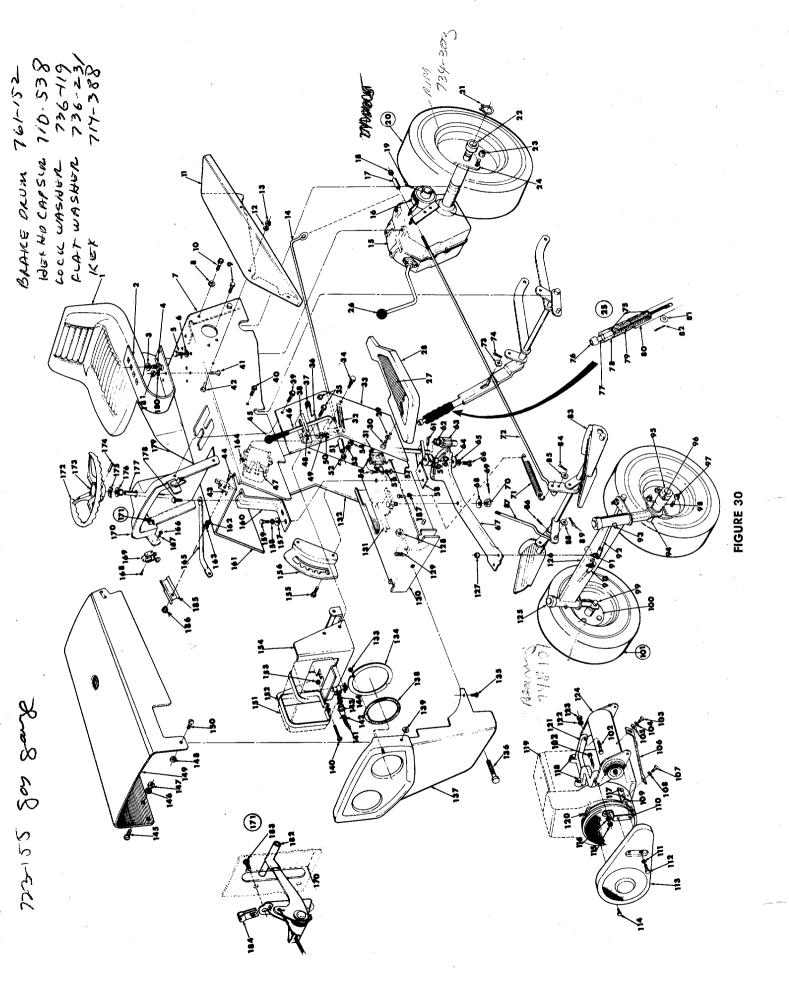
If the machine is to be inoperative for a period longer than 30 days, the following precautions are recommended:

Step 1. Working outdoors, drain all fuel from the fuel tank. Use a clean dry cloth to absorb the small amount of fuel remaining in the tank, then run the engine until all fuel in carburetor is exhausted.

WARNING

Do not drain fuel while smoking, or if near an open fire.

- Step 2. Drain all the oil from the crankcase (this should be done after the engine has been operated and is still warm) and refill the crankcase with clean new oil.
- Step 3. Disconnect the spark plug wire and remove the spark plug from the cylinder. Pour about six drops of engine oil into the cylinder, and then pull the recoil starter several times to spread the oil on the cylinder wall. Replace the spark plug, but DO NOT connect the wire.
- Step 4. Clean the engine and the entire mower thoroughly.
- Step 5. Lubricate all lubrication points indicated in figure 4-2, then wipe the entire machine with an oiled rag in order to protect the surfaces.



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	2					Š	DESCRIPTION	2	2	DESCRIPTION
	_	757-222	Seat		_	736-169	Spring Lockwasher 3/8" Scr.*	132	438-8588	Frame Side Plate
	~	732-266	Seat Spring		٦,,	710.344	Hex Hd. Cap Scr. 3/8-16 x 1.50" Lg.*	133	712-121	Hex Not 10-24 Thd.*
	m	736-921	Spring Lockwasher 1/2" Scr.*		_	438-8599	Steering Segment Assembly	134	438-9960	Head Light Retainer
	4	710-365	Hex Hd, Cap Scr. ½-13 x .88 Lg.		_	736-112	Belleville Washer .535 I.D. x 1.51 O.D. x .052 Thk.	135	710-198	Hex Sems Scr, 5/16-18 .75" Lg.*
	9	710-216			_	714-115	Cotter Pin 1/6" Dia. x 1.00" Lg.*	136	710-298	Hex Hd. Cap Scr. 18-18 x 3.50", Lg.*
	•	736-169	Spring Lockwasher 3/8" Scr.*			712-114	Castle Nut ½-20 Thd.	137	438-9958	Grille Assembly
	_	438-8589	Rear Frame Sub Assembly			732-180	Extension Spring	138	721-112	Head Lamp Gasket
	6 0	736-169	Spring Lockwasher 3/8" Scr."			711-203	Brake Rod	139	736-142	Flat Washer .28 I.D. x .500 O.D. x .063 Thk
	0	710-198	Sems Hex. Hd. Cap Scr. 5/16-18 x .75" Lg.*			736-234	Flat Washer .390 I.D. x 1.50 O.D. x .075 Thk.	5	710-279	Fillister Mach. Scr. 14-20 x 1.75" Lg.
	2	710-216	Hex Hd. Cap Scr. 3/8-16 x .75" Lg.*			714-474	Cotter Pin 1/8" Dia, x ,75" Lg.*	-	723-153	Gas Hose 14" 1.D. x 12" O.D. x 1011" La.
	=	312-8695	Fender-Left Hand		22	736-300	Flat Washer .385 i.D. × .870 O.D. × .060 Thk	142	723-157	Hose Clamp 1/2" O.D.
	2	736-329	Spring Lockwasher 1/4" Scr.*			726-110	Push Cap	143	723-154	Gas Filter
	13	712-287	Hex Nut 1/4-20 Thd.*		1	750-124	Spacer	1	723.152	Gas Hose 12" 1 D 16" O D 11" 1.
	7	747.100	Brake RodHand		78	305-8818	Grib	145	710-286	Truss Hd Marh Ser 16.20 × 50" 12 *
	4				_	732.156	Time Carina	1,46	736 330	Carried Ladiment, Ser. 74-20 X .30 Lg.
	2	2673,100	nhly Complete	1507				2	710.057	Spring LockWasher 12: Scr."
•		10501				900	Lift nandle Assembly	} ;	/97-71/	Hex Not 14-20 Thd.*
シンシン		750.107	Secretary Tribo			730-734	Flat Washer .370 I.D. × I.30 O.D. × .075 Thk.		/12-324	Hex Inserted Lock Not 1/4-20 Thd.*
		20.00	Spaces rose		_	14-4/4	Correr Pin /s. Dia. x ./ 3. 1g."	÷:	10101	Hood
•	2 5	107 012	Dex Inserted Lock (30) 5/ 10*10 file.		_	438-8033	Foot Pedal Assembly	2 :	CC7-01/	Iruss Hd. Mach. Scr. 1/4-20 x .75" Lg.*
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	2 2	73.0.4%	5q. rid. set scr. 3/ to-10 x .30 kg.		\$ 6	/14-4/4	Cotter Ptn %" Dia. x .75" Lg.	2 :	/23-149	Gas Tank
	3	1	Kear Wheel Ass y Complete		_	730-204	Flat Washer .344 I.D. x .625 O.D. x .063 Thk.	22	723-151	Gas Tank—Strap
	7	710-107	Shap King I.OV. Dia.	-	_	710-938	Set Scr. 14-28 x ,25" Lg.*	23	712-287	
	2 2	/21-06/	Spacer 1.053 1.D. x 1.630 O.D. x .975 tg.		_	711-218	Clutch Rod	154	438-8638	Battery Box Assembly
	23	712.173	Cone Nut 3/8-24 thd.	.;	_	736-264	Flat Washer .344 I.D. x .625 O.D. x .063 Thk.	155	710-253	Hex Hd. Cap Scr. 3/8-16 1.00" Lg.
	74	213	Kear Hub Assembly		_	714-474	Cotter Pin 1/8" Dia, x .75" Lg.*	126	11515	Index Bracket
	52	11521	Lift Handle Assembly Complete		_	723-156	Tie Rod End 3/8-24 Thd.	157	736-300	Flat Washer .385 I.D. × .87 O.D. × .060 Thk.
	9	722-110	1		_	712-116	Hex Inserted Lock Not 3/8-24 Thd.	- 28	736-169	Spring Lockwasher 3/8" Scr.*
	27	735-147	Foot Mat-Left Hand		_	711-209	1.	159	710-253	Hex Hd. Cap Scr.,3/8-16 x 1.00", La. *
		735-148	Foot Mat—Right Hand		_	737-107	Grease Fitting	160	438-8618	Reinforcement Bracket Assembly
	38	11517	Running Board Assembly—Left Hand		_	348-8609	Axle Assembly—Left Hand	191	438-8698	Frome Assembly Complete
	•	11518	Running Board Assembly—Right Hand.		25	711-518	Collar 3/" 1.D.	162	736-329	Spring Lockwasher 12" Ser *
	53	736-169	Spring Lockwasher 3/8" Scr.*			710-494	Sa. Hd. Set Scr. 5/16-18 x 38" La *	163	712-287	. Hex Nut 1/2-20 Thd *
	8	710-253	Hex Hd. Cap Scr. 3/8-16 x 1.00" Lg."		26	712-181	Hex Top-Locknut 3/8-16 Thd	164	712.324	Hex Inserted Lockers 17, 20 Th.
	3	725.270	Solenoid		_	7484171	Florate Secring 757 (Pront Wheel Hust)	165	438.0315	Poinforcement Box (Govern Barner)
	33	732-264	Extension Spring	`	·	348-8608	Asle Assembly—Right Hond	at.	712 412 17	"He Not #4 35*
	33	438-8588	Frame Side Plate			11526	Front Wheel-Hub Assembly	167	736-207	External lockworks #4 car *
	34	711-220	Step Screw—Special			502-10108	Front Wheel Assembly Complete	168	710-117	Truce Hol Mach Co. 44 20 50: 1 - *
	35	710-198	Sems Hex Hd. Cap Scr. 5/16-18 x .75" Lg.*			710-380	0 01 %	_	723.200	Hood Later
	38	11504	'Lockout Lever (Parking Brake)	2		-	Bridge and Stratton Part		10094	Dash Banal Assembly
	37	11249	Knob (For Lockout Lever)	3	2	 	Bridge and Stratton Port	121	746.161	Throttle Control Cashinat
	38	11500	Hand Brake Bracket Assembly			776 767	Elle Monte, 244 10 205 O. C. 240 TEL	2	733 305	Carlo Complete
	8	710-198	Sems Hex Hd. Cap Scr. 5/16:18 x 75" La.*	,		107-00	Britan and Structure Britan	12.	703 204	Steering Wheel
	\$	710.108		1	3 5	!		2.2	707-57/	Sreering Wheel Cap
	? =	710 222			<u> </u>	1		: :	171-017	spirol Pin 14" Dia. x 2.00" Lg.*
	?	710.250			2	F	briggs and Stratton Part	12	777-717	Push Nut % 1.D.
	1 5	725.740			<u>S</u>]		2 !	/48 22/	Hex Hange Bearing .630 I.D.
	? :	007-07/			9	1	Briggs and Stratton Part	∑.	711-403	Steering Shaft
	4	710-200	Hex Hd. Cap Scr. 14-20 x .88" Lg.		11	736-329	Spring Lockwasher 14" Scr.*	178	710-253	Hex Hd. Cap Scr. 3/8-16 x 1.00", Lg.*
	5	720-143	Grip-Hand Brake			710-258	Hex Hd Can Ser 1/2-20 x .62" to.*	129	312-8694	Fender-Right Hand
	\$	1913	Hand Brake Lever			312.9284	Belt Cover Assembly	180	736-119	Spring Lockwasher 5/16" Scr.*
	4	725-120	Voltage Regulator			710.148	Self Tonning Scr. #8.32 × 38" la	181	712-267	Hex Not 5/16-18 Thd.*
	#	i	Part of Ref. No. 38			770 014	TO . N. + A. T. T A. C	182	722-111	Centrol Knob
	4	736-142	Flat Washer .28" 1.D. x .500 O.D. x .063 Thk			727.110	THE MAIL OF 10 TO 110.	183	710.192	Truce He Mark Co. #10.04 00
	S	712-324	Hex Inserted Locknut 14-20 Thd.		-	×11-02	Spring LockWasner J/ 10 Ser.	187	712.147	Speed Not #10 34 /1/2 T
	2	711-318	Sleave .385 l.D. x .510 O.D. x 1.57" lg.		- :	l	Briggs and Stratton Fart	185	11525	Switch Court
	25	712-324	Hex Inserted Locknut 1/4-20 Thd.				Fraiss and strained right	186	712-324	Hex Inserted Lock Not 12, 30 Thu
	S	736-148	External Lockwasher 3/8" Scr.*			757.737	Engine 6 A E 300 //// Balt 32// E	187	726.106	Push-on Flance Defend
	25	712-798				101-101	Britan and Streets Bart	188	723-159	Gos Volve-For Ger Trail (New Forts
18.330	- 55	710-258	***	1,38v L	_	734.110	Saring Lockworks 5/15" Sr. *			Illus.)
100 01	4	736 320	3		123	712-267	Hex Not 5/16-18 Thd.*	189	723-155	Gas Gage (Not Shown)
	22	712-287	Hex Nut 1/4-20 Thd.			725-143	Starter Generator	8	714-314	Hi Pro Key 3/16 x 3/10 (Located Under R.
	8, 5	10043	Lower Mount Bracket Assembly		125	711-518	Collar 34" 1.D.			Disc) (Not Shown)
	î.	310-/380	Flat Washer	:		438-8614	Pivot Bar Assembly	161	714-113	Hi Pro Key .25 x %" Dia. (One Under Each Regr
	8	750-141	Spacer .420 I.D. x .505 O.D. x .317" Lg.			712-216	Hex Inserted Lock Nut 3/8-24 Thd.			Wheel Hub) (Not Shown)
	ē :	715-247	Spirol Pin 3/16" Dia. x 1.00" Lg.*	•		712-923	Hex Center Lock Nut %-18 Thd.	192	712-711	Hex Nut 3/8-24 Thd.* (For Tie Rods) (Not
	62	748-227	Nex Flange Bearing .630 I.D.			710-380	Hex Hd. Cap Scr. 5/16-18 x 1.75" Lg.			Numbered on Illus.)
	3	/1/-12/	Sper Gear		_	438-8591	Front Frame Assembly			
	2	310./386	Flat Washer				Part of Ref. No. 130			
	_	_		_	-	-		-	_	

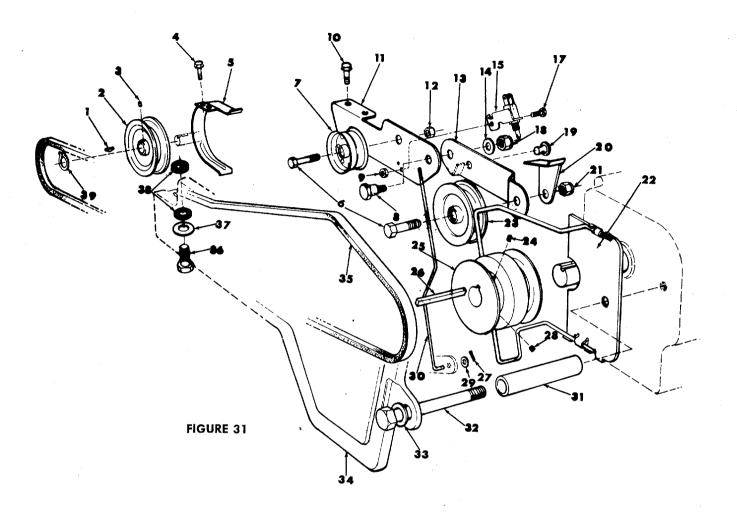
*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally order by part number and size as shown on parts list,

437 — Flag Red) When ordering parts if color or finish is important, use the appropriate color code shown at left. (e.g. 312 — White) Polar Blue Finish—10094 (438).
488 — Polar Blue)

The engine is not under warranty by the mower manufacturer. If repairs or service is not linguistic is not only please contact your nearest authorized engine service outlet.

Vellow Pages' of your telephone book under "Engines—Gasoline."

PULLEY ASSEMBLY FOR MODEL 142-669

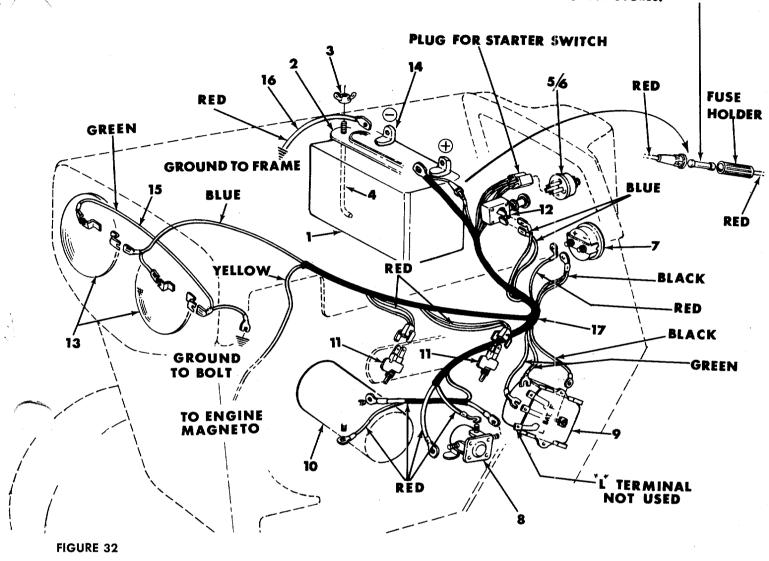


PARTS LIST FOR THE PULLEY ASSEMBLY MODEL NO. 142-669

REF. NO.	PART NO.	DESCRIPTION	REF.	PART NO.	DESCRIPTION
1	714-314	Hi Pro Key 3/16 x ¾" Dia.*	21	712-116	Hex Inserted Locknut 3/8-24 Thd.
2	756-118	Pulley 4.75 O.D., .75 I.D.	22	438-8689	Belt Trapout Bracket Assembly
3	710-494	Sq. Hd. Set Scr. 5/16-18 x .38" Lg.*	23	756-116	"V" Idler
4	710-198	Sems Hex Hd. Cap Scr. 5/16-18 x .75" Lg.	24	710-421	Set Scr. 5/16-18 x 25" Lg.*
5	438-8616	Belt Guard Assembly	25	756-140	Engine Pulley
6	710-459	Hex Hd. Cap Scr. 3/8-24 x 1.50" Lg.*	26	714-114	Sq. Key ¼" x ¼" x 2.00" Lg.*
7	756-117	Flat Idler	27	714-474	Cotter Pin 1/8" Dia, x .75" Lg.*
8	738-143	Shoulder Bolt	28	710-421	Set Scr. 5/16-18 x .25" Lg.*
9	712-287	Hex Nut ¼-20 Thd.*	29	736-264	Flat Washer 344 I.D. x .625 O.D. x .063 Thk.
10	710-198	Sems Hex Hd. Cap Scr. 5/16-18 x .75" Lg.	30	711-218	Clutch Rod
11	438-8620	Clutch Mounting Bracket Assembly	31	750-125	Spacer .525 I.D. x .755 O.D. x 3.01" Lg.
12	712-116	Hex Inserted Locknut 3/8-24 Thd.	32	710-285	Hex Hd, Cap Scr. 1/2-20 x 3.75" Lg.*
13	438-9200	Clutch Bracket	33	736-114	Internal Lockwasher .50 I.D.
14	736-300	Flat Washer .385 I.D. x .87 O.D. x .060 Thk.	34	312-8838	Belt Guard
15	725-268	Safety Switch	35	754-112	5L "V" Belt 21/32 x 80" Lg.
17	710-258	Hex Hd. Cap Scr. ¼-20 x .62" Lg.*	36	710-117	Hex Hd. Cap Scr. 5/16-24 x 1.00" Lg.*
18	712-130	Hex Inserted Locknut 3/8-16 Thd	37	736-264	Flat Washer .344 I.D. x .625 O.D. x .063 Thk.
19	711-179	Ferrule	38	735-126	Rubber Washer .33 I.D. x .87 O.D. x .32 Thk.
20	438-8664	Belt Keeper	39	716-102	Snap Ring 1.00" Dia.

^{*}For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally order by part number and size as shown on parts list.

FUSE-STANDARD 3AG TYPE 7 1/2 AMPS. 32
VOLTS 1 1/4 LONG X 1/4 DIA. AVAILABLE AT
MOST RADIO-TV SHOPS, SERVICE STATIONS
AND AUTOMOTIVE STORES.

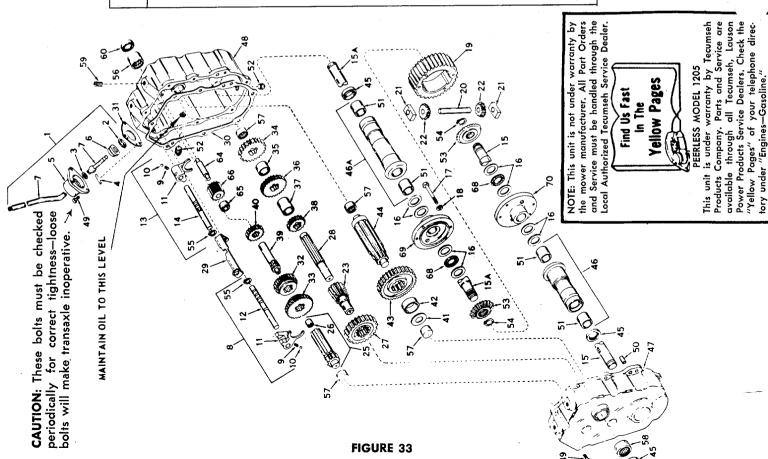


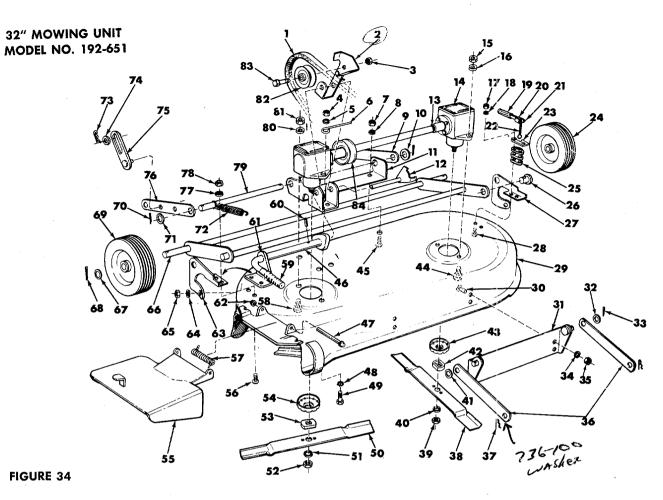
PARTS LIST FOR MODEL 142-669 ELECTRICAL SYSTEM

REF.	PART NO.	DESCRIPTION
1	725-117	Battery 12 Volt 32 Amp.
2	348-8821	Battery Hold-down
2 3	712-113	Wing Nut (2 Reg'd)
4 5	711-222	Battery Hold Down Rod (2 Reg'd.)
5	725-267	Ignition Switch
6	725-	Ignition Key
7	725-119	Ammeter
8	725-270	Solonoid
9	725-120	Voltage Regulator
10	725-143	Starter Generator
11	725-268	Safety Switch
12	725-202	Light Switch
13	725-222	Headlamp
14	710-2 5 8	Hex Hd. Cap Scw. ¼-20 x %" Lg.* (2 Req'd.)
	712-287	Hex Nut 1/4-20 Thd.* (2 Reg'd)
	736-329	Spring Lockwasher ¼" Scw.* (2 Reg'd)
15	725-204	Electric Wire (Green)
16	725-122	Electric Wire (Red)
17	725-271	Wiring Harness Complete
18	725-298	Fuse 7½ Amp.
19	712-123	Hex Nut 5/16-24 Thd.* (2 Req'd.)
		(For Solonoid Terminals) (Not Shown)

^{*}For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally order by part number and size as shown on parts list.

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DESCRIPTION	Spacer	Sparer	Geor. Sour (16 Teeth)	Shaft, Input	Spur Gear, Input Shaft	Washer	Spacer	Gear, Output	Pinion, Output	Seal, Oil	Hea & Buching Acc's 1 H	Axle (Includes No. 51)	Hsg. & Bushing Ass'v. P.H.	Axle (Includes No. 51)	Cover Assembly, Transaxle	(Includes Nos. 57 & 58)	Case Assembly, Transaxle	(Includes Nos. 36 & 37)	35 30 5 37	74.70 X 74	Pin, Dowel	Bushing	Plug, Pipe	Gear, Bevel	Ring, Snap	Ring, Snap	Bearing	Bearing	Screw Socket Head Set		Seal, Oil	Shaft, Reverse Idler	Spacer, Reverse Idler	Idler, Reverse	Bearing, Thrust	Carrier, Differential	Carrier, Differential
PART NO.	786014	786015	778023	776015	778024	780001	786017	778036	778041	788008	782022		782023		772045		770033	700007	122001		786026	780054	792010	778039	792018	792017	780013	780055	792012		788009	776008	786008	778016	780039	774029	//4028
REF.	35	3 %	8	36	9	4.	42	43	44	45	44	?	46A	:	47		48	Ş	}		20	51	25	53	24	çç i	3 12	28	26		99	64	65	99	89	66	₹
DESCRIPTION	Lever & Housing Ass'y	Ding Sage	Ping, Olida	Pin Roll	Housing, Shift Lever	Kepper, Shift Lever	Lever Shift	Rod Ass'v. Shift (Includes	Nos. 9 thru 12)	Spring	Ball, Steel	Fork, Shifter	Rod, Shifter	Rod Assembly, Shift	(Includes Nos. 9, 10, 11,	Pod Shifter	Axle w/2 Key Seats—L.H.	Axle w/2 Key Seats—R.H.	Washer, Thrust	Screw, Hex Hd. Cap 14-20 x	21/4	Lockwasher, 14"	Gear, Ring	Pin, Drive	Block Drive	Pinion, bevel	Shaft & Bearing Ass'v. Shifter	(Includes No. 26)	Bearing	Gear, Idler	Shaft, Idler	Stop, Shifter	Gasket, Case to Cover	Gasket, Shift Lever Housing	Gear, Shifting	Gear, Shitting	Gear, Spur (20 Teeth)
PART NO.	784095	702016	702001	792002	784088	784094	784096	784056		792003	792004	784004	784057	784054		784055	774067	774068	780042	792020		792006	778033	786019	/8002/	774022	776014		780018	778037	776032	784074	788026	788003	778019	778020	1700//
REF.	-	·	4 (*	o 4	. 10	9 9	· ^	. «)	6	2	=	2	23		7.	2	15A	16	17		18	6	50	7 5	7 5	25		56	27	28	53	ဓ္က		32	8 6	Ş





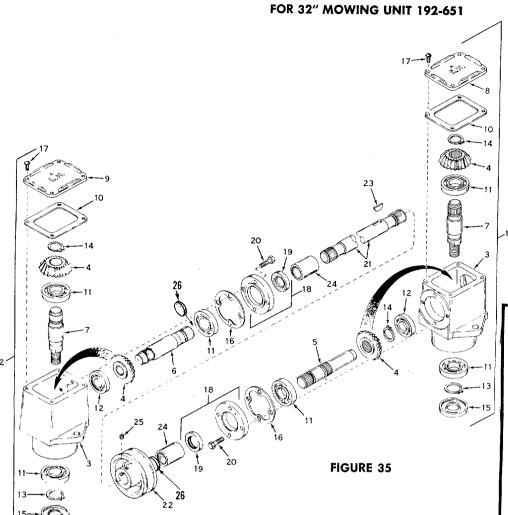
PARTS LIST FOR MOWING UNIT 192-651

REF NO	PART NO.	DESCRIPTION	REF.	PART NO.	DESCRIPTION
1	754-113	5L "V"-Belt 21/32 x 48" Lg.	44	710-253	Hex Hd. Cap Scr. 3/8-16 x 1.00" Lg.*
2	310-8627	Idler Bracket Assembly	45	710-260	Carriage Bolt 5/16-18 x .62" Lg.*
3	712-116	Hex Inserted Locknut 3/8-24 Thd.	46	11502	Lockout Handle Assembly
4	712-711	Hex Jam Nut 3/8-24 Thd.	47	711-571	Pivot Pin
5	736-169	Spring Lockwasher 3/8" Scr.*	48	736-148	External Lockwasher 3/8" Scr.*
6	723-148	Beit Guard	49	710-191	Hex Hd. Cap Scr. 3/8-24 x 1.25" Lg.*
7	712-267	Hex Nut 5/16-18 Thd.*	50	742-119	Blade 16 inch
8	736-119	Spring Lockwasher 5/16" Scr.*	51	736-158	Spring Lockwasher 1/8" Scr.*
9	11506	Deck Link	52	712-923	Hex Center Locknut %-18 Thd.*
10	736-116	Flat Washer .635 I.D. x .930 O.D. x .060 Thk.	53	748-140	Drive Collar
11	438-8652	Rear Deck Bracket	54	310-8855	Drive Cup
12	11514	Lockout Bracket Assembly	55	1163323	
13	716-107	"E"-Ring	56	710-240	Carriage Bolt 5/16-18 x .62" Lg.*
14		Right Angle Drive Assembly	57	732-261	Torsion Spring
15	712-798	Hex Nut 3/8-16 Thd.*	58	710-253	Hex Hd. Cap Scr. 3/8-16 x 1.00" Lg.*
16	736-169	Spring Lockwasher 3/8" Scr.*	59	720-152	Grip
17	712-267	Hex Nut 5/16-18 Thd.*	60	715-247	Spirol Pin 3/16" Dia. x 1.00" Lg.*
18	736-119	Lockwasher 5/16" Scr.*	61	11505	Support Bracket
19	305-2186	Handle Grip	62	726-106	Push-on Flange Palnut
20	310-8696	Adjustment Handle Assembly	63	438-8636	Mounting Bracket—Right Hand
21	715-103	Spirol Pin 1/8" Dia, x .75" Lg.	64	736-119	Spring Lock Washer 5/16" Scr.*
22	711-204	Adjustment Screw	65	712-267	Hex Nut 5/16-18 Thd.*
23	310-8634	Keeper Plate	66	438-8684	Wheel Bracket Assembly
24	734-225	Wheel Assembly Complete 6.0" Dia.	67	736-116	Flat Washer ,635 I.D. x ,930 O.D. x ,060 Thk.
25	310-8633	Spacer Plate	68	714-115	Cotter Pin 1/8" Dict. x 1.00" Lg*
26	711-202	Adjustment Ferrule	69	734-225	Wheel Assembly Complete 6.0" Dia.
27	438-8637	Mounting Bracket—Left Hand	70	714-115	Cotter Pin 1/6" Dict. x 1.00" La.*
28	710-161	Carriage Bolt 5/16-18 x 1.25" Lg.*	71	736-116	Flat Washer .635 I.D. x .930 O.D. x .060 Thk
29	11523	Deck Assembly	72	732-178	Extension Spring
30	710-260	Carriage Bolt 5/16-18 x .62" Lg.*	73	714-101	Hairpin Cotter ½" Dia.
31	438-8666	Front Bracket Assembly	74	736-160	Flat Washer .531 I.D. x .93 O.D. x .050 Thk.
32	736-160	Flat Washer .531 I.D. x .93 O.D. x .050 Thk.	75	11516	Lockout Link Assembly
33	714-115	Cotter Pin 1/a" Dia. x 1.00" Lg.*	76	11506	Deck Link
34	736-119	Spring Lockwasher 5/16" Scr.*	77	736-119	Spring Lock Washer 5/16" Scr.*
35	712-267	Hex Nut 5/16-18 Thd.*	78	712-267	Hex Nut 5/16-18 Thd.*
36	11506	Deck Link	79	438-8668	Shaft
37	714-101	Hair Pin Cotter 1/2" Dia.	80	736-169	Spring Lock Washer 3/8" Scr.*
38	742-119	Blade 16 inch	81	712-798	Hex Nut 3/8-16 Thd.*
39	712-923	Hex Center Locknut %-18 Thd.	82	756-116	"V"-Idler
40	736-158	Spring Lockwasher %" Scr.*	83	710-459	Hex Hd. Cap Scr. 3/8-24 x 1.50" Lg.
41	736-160	Flat Washer .531 I.D. x .93 O.D. x .050 Thk.	84	756-184	Pulley 3.25 O.D. x % 1.D.
42	748-140	Drive Collar	85	710-765	Set Scr. 5/16-24 a; .25" Lg.* (2-Reg'd.) (Not Show
43	310-8855	Drive Cup	ı		of the state of th

*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally order by part number and size as shown on parts list.

KE11714-12

RIGHT ANGLE DRIVE MODEL NO. (PEERLESS MODEL RA 15752)



NOTE: This unit is not under warranty by the mower manufacturer. All Part Orders and Service must be handled through the Local Authorized Tecumseh Service Dealer.



PEERLESS MODEL

This unit is under warranty by Tecumseh Products Company. Parts and Service are available through all Tecumseh, Lauson Power Products Service Dealers. Check the "Yellow Pages" of your telephone directory under "Engines—Gasoline."

PARTS LIST FOR RIGHT ANGLE DRIVE MODEL NO. (PEERLESS MODEL RA 15752)

	Ref. No.	Part Number	PART NAME
	1	794001	Head Assy., Right Hand (Incl. Nos. 3, 4, 5, 7, 8 and 10 thru 18
	2	794002	Head Assy., Left Hand (Incl. Nos. 3, 4, 6, 7, and 9 thru 18)
	3	770026	Housing, Right Angle Drive
	3 4	778046	Gear, Miter
	5	776040	Shaft, Input Pinion
i	5 6 7	776041	Shaft, Input Pinion
	. 7	776042	Shaft, Output
1	8 9	772034	Cover, Right Hand
	9	772035	Cover, Left Hand
	10	788028	Gasket, Cover
	11	780034	Bearing, Ball
	12	780024	Bearing, Ball
	13	788019	Ring, Snap
ĺ	14	788018	Ring, Snap
	15	788029	Seal, Oil
l	16	788030	Gasket, Cap
	17	792025	Screw, Rd. Hd. Self Tap, 10-24 x 1/2
	18	786029	Cap & Seal Assy., Retainer (Incl. Nos. 19 & 20)
ļ	19	788031	Seal, Oil
1	20	792026	Screw, Hex Hd., 1/4-20 x 7/8
- 1	21	776043	Shaft, Input Connector
	22	786037	Sheave
4-126		-756-184	Key, Woodruff, 3/16 x 3/4
	24	786031	Coupling, Input Shaft
	25	792027	Set Screw, Knurled Hd. Cup Pt., 5/16-24 x 1/4
	26		Felt Disc

788039

BATTERY WARRANTY CERTIFICATE

The following general warranty policy applies to all batteries sold by IBMA members using this warranty. The nationwide warranty applies only to batteries bearing the IBMA seal of approval.

All new batteries sold by IBMA members carry a warranty against faulty material or workmanship for 90 days from date of purchase. A faulty battery is to be adjusted, repaired or replaced with a new battery by an IBMA member, jobber or dealer only, or the warranty becomes void. An IBMA type battery that is faulty within the 90 day period is to be repaired or replaced with a new battery F.O.B. any IBMA factory supplier or any IBMA author ized dealer, without charge.

Your battery carries a further warranty on a pro-rata adjustment basis covering the number of months determined by the class of service and type of battery. In determining the exchange cost of a new battery, charges will be made for months of service used and the warranty is valid to the original purchaser only.

IBMA approved factory suppliers, as well as all IBMA authorized dealers, are to honor this Warranty. If your IBMA approved battery carries the IBMA seal of approval, this Warranty is to be honored by dealers handling IBMA approved batteries everywhere. (Independent Battery Manufacturers Association, Inc.)

Failures in service that are caused by fire, collision, freezing, abuse, faulty electrical equipment or the use of a battery of a group size smaller or specifications lower than the original battery are not covered by this policy.

BATTERY MANUFACTURER MEMBERSHIP LIST

ALABAMA Birmingham Southern Bty. Yocam Batteries Mobile Yocam Batteries Montgomery **Ebco Battery** ALASKA Anchorage Alaska Husky Bty, Miami **ARKANSAS** Hot Springs Red Diamond Bty. CALIFORNIA Los Angeles Estee Battery Laher Bty, Prod. Oakland Laher Bty Prod. Sacramento Laher Bty, Prod. San Francisco Amp King Btv. Laher Bty, Prod. Pico Bty. Mfg. Stackton Stockton Battery COLORADO Denver

Moore Battery

Washington

D. C.

Express Bty. Div. Leeth Brothers FLORIDA Fort Lauderdale Florida Bty. Higleah East Penn Mfg. Jacksonville Tropex Batteries Yocam Batteries Tropex Batteries Yocam Batteries Orlando Yocam Batteries Pensacola Yocam Batteries St. Petersburg Electro Battery Co. Tampa Bilt-Rite Bty. Mfg. Contract Bty. Mfg. DeSoto Bty. & Elec. Tropex Batteries Yocam Batteries GEORGIA Albany **Ebco Battery** Atlanta **Ebco Battery** Southern Bty.

Yocam Batteries

Columbus

Ebco Battery

Contract Bty. Mfg. Yocam Batteries ILLINOIS Belleville Bell City Bty. Mfg. Chicago Illinois Bty. Mfg. Universal Bty. Volta Bty. Corp. Pearin Red Diamond Bty. INDIANA Muncie Stout Storage Bty. IOWA Corydon Voltmaster Council Bluffs Reliance Bty, Prod. **Des Moines** Valtmaster **KANSAS** Kansas City American Batteries Contract Bty. Mfg. KENTUCKY Whitesburg Electro-Lite Bty.

LOUISIANA

New Orleans

Central Btv.

Reliable Bty.

Shreveport Central Bty. MARYLAND **Baltimore** East Penn Mfg. MASSACHUSETTS Watertown Atlantic Bty. MICHIGAN Detroit Batteries Mfa. Flint **ABC** Batteries Holly **Detroit Battery** Madison Heights C & W Lektra Warren G & M Battery MINNESOTA St Paul Standard Storage Bty. MISSISSIPPI Florence Contract Bty. Mfg. Jackson Central Btv. **New Albany** Laher Bty. Prod. MISSOURI Joplin Lead Products

Maryland Heights Electro Bty, Mfa. Sikeston Electro Bty. **NEW JERSEY Atlantic City** Landis Battery **NEW MEXICO** Alburquerque Sandia Bty. Mfg. **NEW YORK** Buffalo East Penn Mfg. Lockport **Great Lakes Battery** NORTH CAROLINA Charlotte Yocam Batteries Thomasville East Penn Mfg. OHIO Akron Crown Battery Cincinnati Moore Battery Cleveland Crown Battery New Castle Btv. Columbus Crown Battery Fremont Crown Battery

OREGON Beaverton Western Bty., Inc. **Portland** Laher Bty, Prod. PENNSYLVANIA Altoona East Penn Mfg. Erie New Castle Bty. Lancaster Lancaster Bty. Lyon Station East Penn Mfg. **New Castle** New Castle Bty. Philadelphia East Penn Mfg. Pittsburgh Simon Bty. & Res. Geidel Bty. Div. RHODE ISLAND **Providence** Pilof Mfg., Inc. SOUTH CAROLINA Columbia Yocam Batteries TENNESSEE Chattanooga Electro-Lite Bty. Knoxville Southern Bty.

Memphis Central Battery Laher Bty. Prod. Southern Bty. Nashville Electro-Lite Bty. Southern Bty. TEXAS Dailas Continental Bty. Reliable Battery El Paso El Paso Btv. Houston Texford Bty, Co. Reliable Battery San Antonio Reliable Battery UTAH Salt Lake City Laher Bty. Prod. VIRGINIA Arlington Express Bty, Div. Leeth Bros. Lynchburg Hydrate Battery WASHINGTON Seattle Laher Bty. Prod. Spokane Laher Bty. Prod. CANADA Vancouver, B. C. Industrial Bty. & Supply

WARRANTY

For one year from date of purchase, MTD Products Inc will replace for the original purchaser, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. All transportation charges on parts submitted for replacement under this warranty must be paid by the purchaser. This warranty does not include replacement of parts which become inoperative through misuse, excessive use, accident, neglect, improper maintenance or alterations by unauthorized persons. This warranty does not include the engine, motor, battery, battery charger or any component parts thereof. For service on these units refer to the applicable manufacturer's warranty.

The above warranty will apply only to the original owner and will be effective only if the warranty card has been properly processed. It will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. UNDER NO CIRCUM-STANCES WILL THE RETURN OF A COMPLETE UNIT BE ACCEPTED BY THE FACTORY UNLESS PRIOR WRITTEN PERMISSION HAS BEEN EXTENDED.

PARTS INFORMATION

MOWER, TILLER, SNOW THROWER AND TRACTOR PARTS

Mower, tiller, snow thrower and tractor parts are available through the authorized service firms listed below. All orders should specify the model number of your unit, parts numbers, description of parts and the quantity of each part required.

ENGINE PARTS AND SERVICE

Engine parts and service should be handled by your nearest authorized engine service firm. Check the yellow pages of your telephone directory under the listing *Engines – Gasoline*, Briggs and Stratton or Tecumseh Lauson — Power Products.

A 1 Engine & Mower Co. 327 East 9th Street Salt Lake City, Utah 84102

American Electric Ignition Co. 124 N. W. 8th Street Oklahoma City, Oklahoma 73102

Auto Electric & Carburetor Co. 2625 4th Avenue, S. P. O. Box 1948 Birmingham, Alabama 35233

Automotive Equipment Service Co. 3117 Holmes Street Kansas City, Missouri 64109

Bailey's Rebuild Inc. 1325 E. Madison Street Seattle, Washington 98102

Brown Equipment Distributor Inc. 110 Beech Street Corydon, Indiana 47112

Bullard Supply 2409 Commerce Street Houston, Texas 77003

Center Supply Company 6867 New Hampshire Avenue Takoma Park, Maryland 20012

R. T. Clapp Co. 2016 Magnolia Ave., N. E. Knoxville, Tennessee 37917

W. B. Clements 400 Salem Avenue Roanoke, Virginia 24016

Morton B. Collins Co. 300 Birnie Avenue Springfield, Massachusetts 01107

Dixie Sales Company
P. O. Box 1408
327 Battleground Avenue
Greensboro, North Carolina 27402

East Point Cycle & Key Shop 1617 Whiteway East Point, Georgia 30044

Gamble Distributors
West End Avenue
Carthage, New York 13619

Garden Equipment Co., Inc. 6600 Cherry Avenue Long Beach, California 90805

Henzler, Inc. 2015 Lemay Ferry Road St. Louis, Missouri 63125

Frank E. Ives & Son 1101 Lincoln Avenue Prospect Park, Pennsylvania 19076

J. W. Jewett Co. 981 Folsom Street San Francisco, California 94107

Kenton Supply 8216 North Denver Avenue Portland, Oregon 97217

615 W. Genesee Street Syracuse, New York 13204

Marr Brothers 423 E. Jefferson Dallas, Texas 75203

Mathews Auto Electric Co. 420 East 2nd Street Tulsa, Oklahoma 74120

McClure Lawn & Garden Supply 1114 Lexington Avenue Mansfield, Ohio 44907

Memphis Cycle & Supply Co. 421 Monroe Avenue Memphis, Tennessee 38103 Moz-All of Florida, Inc. 365 Greco Avenue Ceral Gables, Florida 33146

National Central, Div. of Joe Sterling, Inc. Drawer "D" 687 Seville Rd. Wadsworth, Ohio 44281

Power Equipment Distributor 36463 So. Gratiot Avenue Mt. Clemens, Michigan 48043

Parts & Sales Inc. 335 West St. Charles Road Villa Park, Illinois 60181

Power Lawn & Garden Equip. Co. 2551-2571 J. F. Kennedy Road Dubuque, Iowa 52001

Raub Supply Company
James & Mulberry Sts.
Lancaster, Pennsylvania 17604

Radco Distributors 2403 Market Street P. O. Box 3216 Jacksonville, Florida 32206

Richmond Battery & Ignition
P. O. Box 25369 — 957 Myers St.
Richmond, Virginia 23260

Smith Hardware Company 515 N. George Street Goldsboro, North Carolina 27530

South Denver Lawn Equip. Co. 527 West Evans Denver, Colorado 80223

Suhren Engine 8330 Earhart Blvd. New Orleans, Louisiana 701.18

Sutton's Lawn Mower Shop Route 4, Box 343 North Little Rock, Arkansas 72117

Warner Equipment 7520 Lyndale Avenue, So. Minneapolis, Minnesota 55423