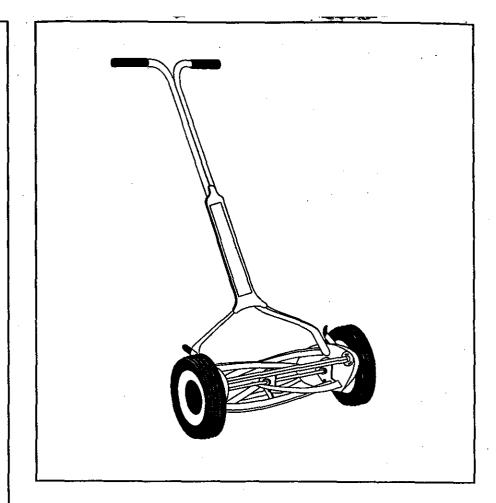
# SEARS OWNERS MANUAL

Model No. 486.37613



# **CRAFTSMAN®**

18" PUSH
REEL MOWER

# CAUTION:

Before using this product, read this manual and follow all Safety Rules and Operating Instructions.

- Safety
- Assembly
- Operation
- Maintenance
- Parts

# **TABLE OF CONTENTS**

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# **SAFETY**



Any power equipment can cause injury if operated improperly or if the user does not understand how to operate the equipment. Exercise caution at all times, when using power equipment.

- Read the reel mower owner's manual and know how to operate the reel mower before using it.
- Never allow children to operate the reel mower.
   Only persons well acquainted with these rules of safe operation should be allowed to use the mower.
- Keep the area of operation clear of all persons, particularly small children and pets. Small overlooked objects could be accidently thrown by the mower.
- Thoroughly inspect the area where the mower is to be used and remove all stones, sticks, wire, bones and other foreign objects which could be picked up and thrown by the mower.
- Do not operate the mower when barefoot or when wearing open sandals. Always wear substantial footwear.

- Mow only in daylight or in good artificial light.
- Never operate the mower in wet grass. Always be sure of your footing. Keep a firm hold on the handle and walk, never run.
- When cleaning, repairing or inspecting the mower, make sure the blade and all moving parts have stopped.
- Before attempting to unclog the mower, be sure the blades have stopped completely.
- Mow across the face of slopes, never up and down.
   Exercise extreme caution when changing direction on slopes. Do not mow excessively steep slopes.
- Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition.
- Follow all maintenance and lubrication instructions as outlined in the maintenance section of this manual.



Look for this symbol to point out important safety precautions. It means--Attention!! Become alert!! Your safety is involved.

## **WARRANTY**

# LIMITED ONE YEAR WARRANTY ON CRAFTSMAN 18" REEL MOWER

For one year from the date of purchase, when this 18" reel mower is maintained and lubricated according to the operating and maintenance instructions in the owner's manual, Sears will repair any defect in material or workmanship free of charge. If this 18" reel mower is used for commercial or rental purposes, this warranty applies for only 90 days from the date of purchase.

This warranty does not cover repairs necessary because of operator negligence or abuse, including the failure to maintain the equipment according to instructions contained in the owner's manual.

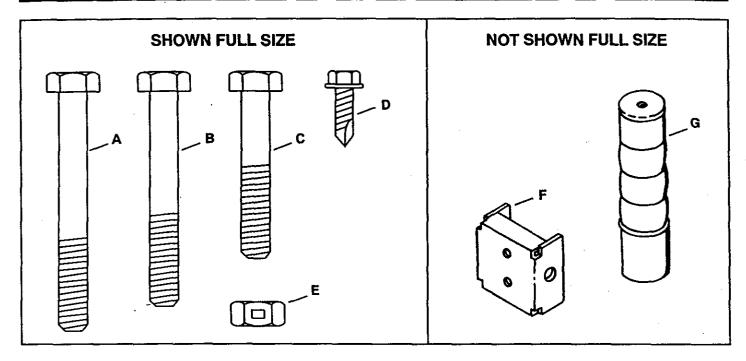
WARRANTY SERVICE IS AVAILABLE BY CONTACTING THE NEAREST SEARS SERVICE CENTER/DEPART-MENT IN THE UNITED STATES.

This warranty applies only while this product is in the United States.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Sears, Roebuck and Co. D/817 WA. Hoffman Estates, Chicago, IL 60179

The model and serial numbers will be found on a decal attached to the	MODEL NUMBER:	486.37613
You should record both the serial number and the date of	SERIAL NUMBER:	
purchase and keep in a safe place for future reference.	DATE OF PURCHASE:	

# HARDWARE PACKAGE CONTENTS

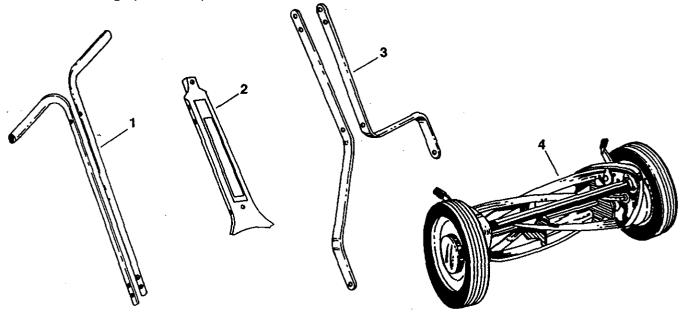


REF.	QTY.	DESCRIPTION	REF.	QTY.	DESCRIPTION .	
A B C D	1 2 1 2	Hex Bolt, 5/16" x 2-1/2" Long Hex Bolt, 5/16" x 2-1/4" Long Hex Bolt, 5/16" x 1-3/4" Long Screw, #10 x 5/8" Long	E F G	4 1 2	Hex Lock Nut, 5/16" Handle Brace Spacer Handle Grip	·

#### **CARTON CONTENTS**

## **Loose Parts in Carton**

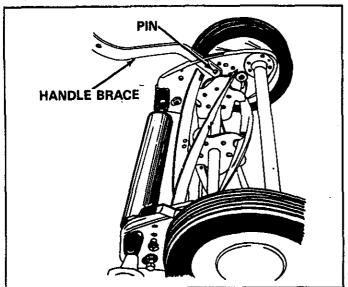
- 1. Upper Handle (2)
- 2. Handle Panel
- 3. Handle Brace (2)
- 4. Reel Assembly
- 5. Hardware Package (see above)



#### **ASSEMBLY**

#### TOOLS REQUIRED FOR ASSEMBLY

- (1) 1/2" Wrench
- (1) 5/16" Wrench
- (1) Pliers
- Remove the reel mower, the loose parts and the hardware package from the carton. Lay out the parts and hardware as shown on page 3.
- Insert the short ends of the two handle braces through the slots and over the two pins in the end plates. See figure 1.



#### FIGURE 1

 Assemble the spacer between the two braces using a 5/16" x 2-1/2" hex bolt and a 5/16" locknut. Tighten only finger tight at this time. See figure 2.

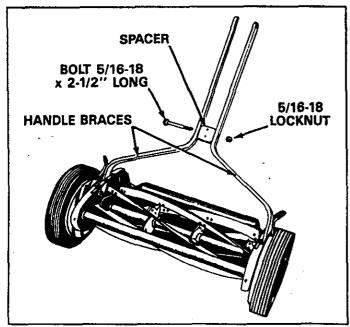


FIGURE 2

- Attach the two upper handles to the handle braces with two 5/16" x 2-1/4" hex bolts and 5/16" hex nuts.
   Tighten only finger tight at this time. See figure 3.
- Fasten the upper handles together at the top with a 5/16" x 1-3/4" hex bolt and a 5/16" locknut as shown in figure 3. Tighten all four bolts and nuts assembled in figures 2 and 3.

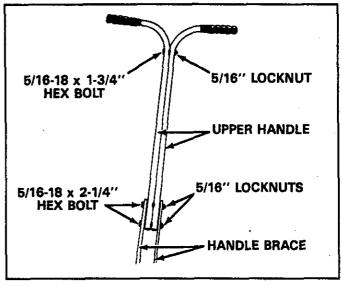


FIGURE 3

- Place the handle panel in position over the handles.
   Fasten the bottom of the panel to the spacer using a #10 x 5/8" hex head screw. Do not tighten yet. See figure 4.
- Secure the top of the panel to the upper handles using a #10 x 5/8\* hex head screw assembled down into the notch between the two upper handles.
   Tighten both screws at this time. See figure 4.

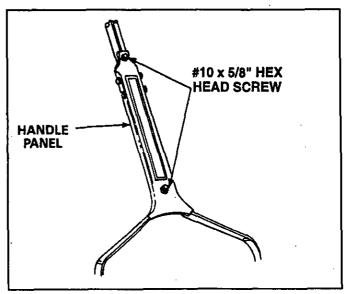


FIGURE 4

#### **OPERATION**



**CAUTION:** Mower blades are sharp. Keep hands and feet clear. Be sure blades are stopped before approaching near blades.

#### HOW TO USE YOUR REEL MOWER

Both the wheels and the roller are adjustable. By using combinations of the different wheel and roller settings, seven different cutting heights are available. The settings are listed in figure 6.

#### **ADJUSTING THE WHEELS**

 Each wheel has a height adjustment lever with five positions. To move the lever, tilt the mower back on the roller. Press the levers (one at a time) outward from the mower and move the lever to the desired position. Both levers must be in the same relative position. See figures 5 and 6.

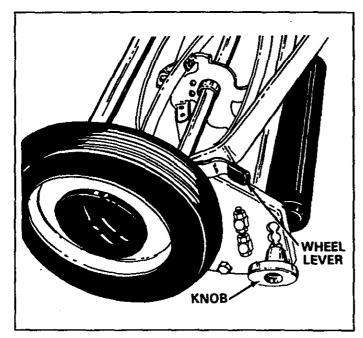


FIGURE 5

#### **ADJUSTING THE ROLLER**

 To adjust the roller, tilt the mower forward and loosen both the knobs on the roller at least two full turns.
 Move the roller to the desired position. Both roller knobs must be in the same relative position and tightened until firmly seated in the notches. See figures 5 and 6.

Cutting Height in Inches 2-1/4	Knob Lever	Wheel	
1-3/4 1-1/2	3	4	
1-1/4 1 3/4	2 2 2	3 3 1	,
		KNOB	

FIGURE 6

#### **USING YOUR REEL MOWER**

- Make sure grass is dry before starting to mow.
- Wear substantial footwear which will provide good traction.
- Remove all stones, sticks, wire, bones and other foreign objects from the area to be mowed. These objects can either jam the blades or be thrown by the mower.
- Adjust the wheels and the roller to the desired height.
- Do not attempt to make too deep a cut in tall grass.
   Reel mowers work best at a light to moderate depth of cut.
- Mow the lawn more frequently, taking a lighter cut to reduce pushing effort.
- Keep blades adjusted and sharpened to improve smoothness of cut and to reduce pushing effort.
- Mow across the face of slopes instead of up and down slopes for safer footing. Avoid mowing on excessively steep slopes.

## MAINTENANCE/STORAGE

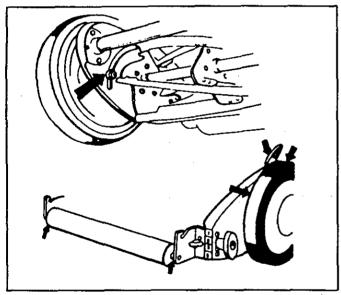
#### **CUSTOMER RESPONSIBILITIES**

 Read and follow the maintenance schedule and the procedures listed in the maintenance section.

MAINTENANCE SCHEDULE Fill in dates as you complete regular service.	<b>/</b> ◊	Store A	addr of	Wice F	yer e	81019 81019	ery two yes	Service Dates							
Check for loose fasteners	X	<u> </u>			•										
Check for worn or damaged parts	X				-,										
Clean mower		X			X										
Lubricate roller, adjustment points	Ĺ		Х		<u> </u>				<u> </u>						L.
Lubricate wheel bearings and gears	<del> </del>	_	_	Х		_		<del> </del>			-	-	<u> </u>	<b> </b> -	<u> </u>

#### SCHEDULED MAINTENANCE

 Lubricate the wheel adjustment mechanisms and the roller with a light oil as shown in figure 7. Periodic lubrication of these points will help ensure smooth mechanical operation.



#### FIGURE 7

- Clean and lubricate the wheel bearings and gears once every season or whenever the reel is sharpened, whichever is more often. Refer to figure 8.
  - A. Remove the hub cap
  - B. Remove the E-ring with a screwdriver.
  - C. Lift off the wheel.
  - D. If the axle is rusty, clean off with solvent and crocus cloth.
  - E. Coat the axle with light grease.
  - F. Clean the gear teeth on the inside of the wheel and then apply light grease.
  - G. Using snap ring pliers, remove the snap ring from the reel shaft and then remove the pinion gear. Avoid overstretching the snap ring, which causes a loss of holding power.
  - H. Clean gear and apply light grease inside gear.

- Pull the pawl from the reel shaft and clean.
- J. Reinstall parts in reverse order.

**IMPORTANT:** Note the position of the pawl in the shaft before removal. It must be installed facing the same way as when it was removed or the wheel will not drive. The flat surface of the pawl mates against the flat surfaces of the teeth inside the pinion gear.

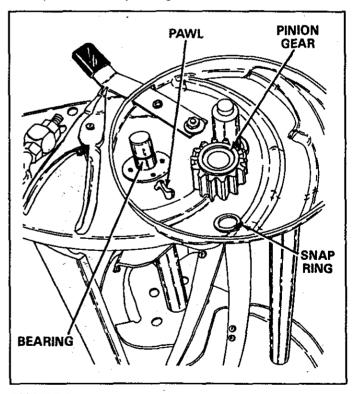


FIGURE 8

## STORAGE OF MOWER

- Clean the mower thoroughly using a broom or a brush to remove grass and dirt. DO NOT use water to clean the mower.
- Coat the mower's cutting blades with grease to prevent rusting.
- Store the mower inside a clean, dry area.

#### SERVICE AND ADJUSTMENTS

#### SHARPENING THE BLADES

 The blades should be sharpened when the mower will no longer cut satisfactorily without the cutter bar being adjusted to rub against the reel blades.

#### **CUTTER BAR ADJUSTMENT**

#### CHECKING THE CLEARANCE

- When the cutter bar is properly adjusted there should be .003" clearance between the cutter bar and the reel blades. The blades must not contact the cutter bar. Clearance may be checked in the following manner.
- Cut some quality .003" thick paper (writing paper or a magazine page) into strips approximately 2" wide and 6" long. Insert a strip of paper between the cutter bar and the blades as shown in figure 9. Turn the reel slowly backwards. The blades should pinch but not cut the paper. Check the clearance at each end and in the middle of the cutter bar. The paper should be held snugly by each blade.
- Determine whether the space between the cutter bar and the blades needs to be increased or decreased to obtain the recommended .003" clearance.
- If the clearance is determined to be correct but the mower will not cut grass, then the blades should be sharpened.

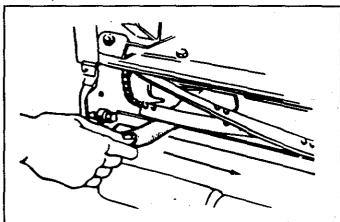


FIGURE 9

#### ADJUSTING THE CUTTER BAR CLEARANCE

**IMPORTANT:** Adjust only the nuts securing the upper trunnion; **DO NOT** adjust the nuts on the lower trunnion. Refer to figure 10.

- Before adjusting the cutter bar, check to make sure that all the nuts securing the cutter bar and the adjustment trunnions are still firmly tightened.
- To increase the clearance between the cutter bar and the blades, loosen the lower nut 1/4 turn and then tighten the upper nut 1/4 turn. Adjust each side of the mower equally until a .003" clearance is obtained. See figure 10.

 To decrease the clearance between the cutter bar and the blades, loosen the upper nut 1/4 turn and then tighten the lower nut 1/4 turn. Adjust each side of the mower equally until a .003" clearance is obtained. See figure 10.

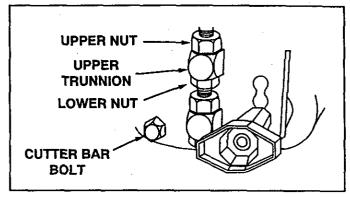


FIGURE 10

#### **CHECKING THE ADJUSTED CLEARANCE**

- Push the handle of the mower forward and let it rest on the ground. The roller should be off the ground.
- Insert a strip of quality .003" paper (writing paper or magazine page) between the cutter bar and blades.
- Turn the reel slowly forward as shown in figure 11.
   The paper should be cut cleanly, without the blades contacting the cutter bar.
- Perform this test at each end and in the middle of the cutter bar.

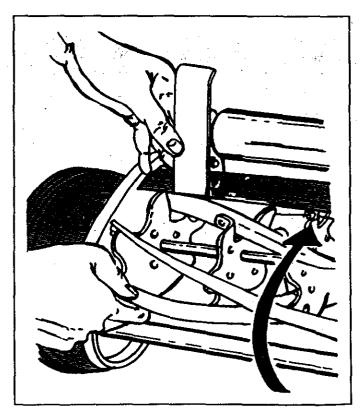


FIGURE 11

# **GEAR HOUSING REPLACEMENT**

IMPORTANT: The gear housing must be reassembled properly, according to the following instructions, or it will result in loose wheels and an early failure of the pinion and the wheel. Refer to figure 12.

- If the gear housing assembly is removed for service, it is very important for the gear housing assembly to fit UNDER the lip of the retainer when reassembled.
- The shoulder on the shoulder washer must fit into the curved slot in the end plate. Tighten the lock nut and then back it off one half turn so the height adjuster can move freely.

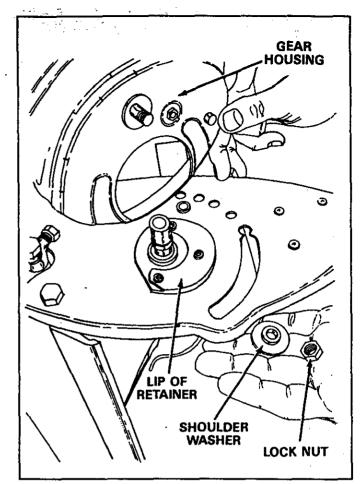
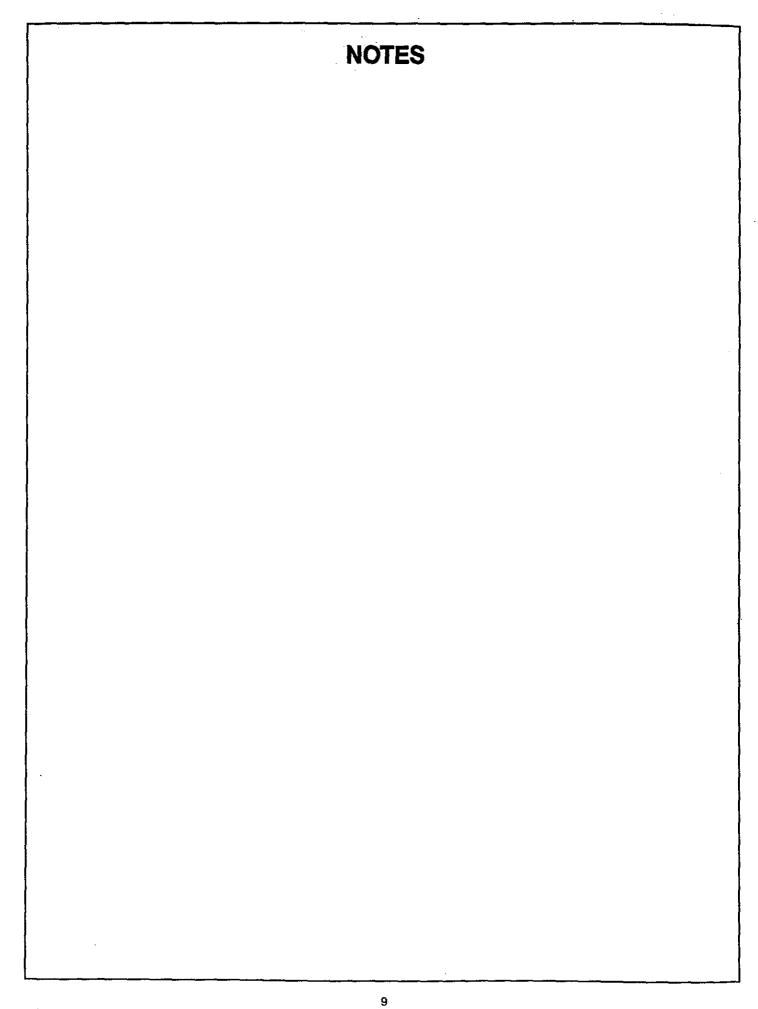
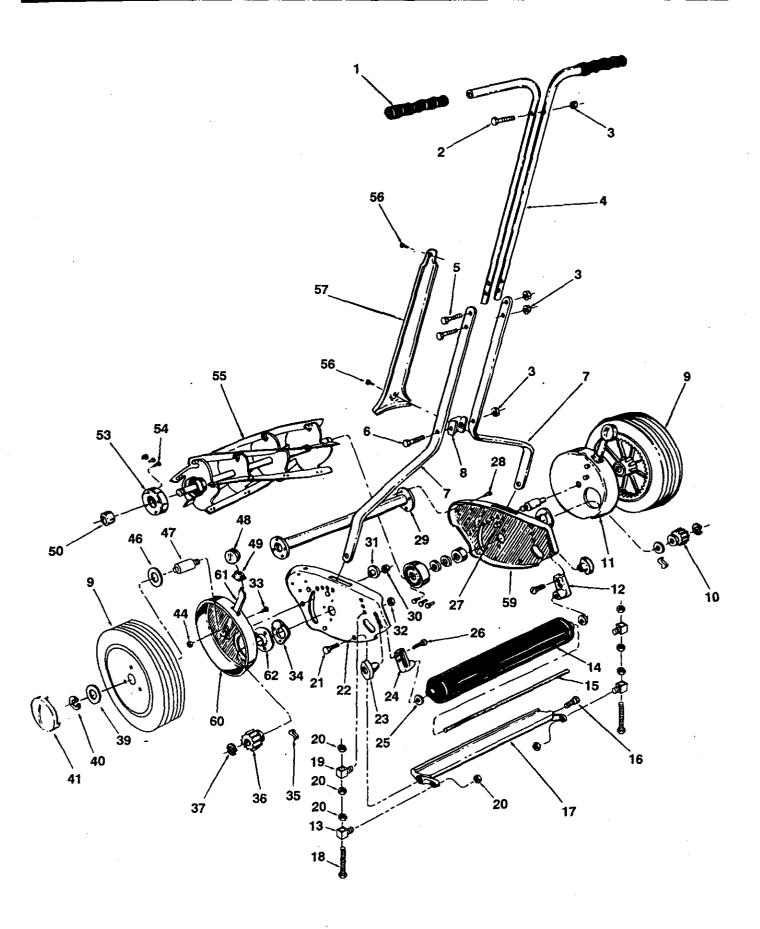


FIGURE 12

# **TROUBLESHOOTING**

PROBLEM	CAUSE	CORRECTION				
Mower won't cut grass satisfactorily	Blades are dull.     Too much cutter bar clearance.     Grass is too tall.	<ol> <li>Resharpen blades.</li> <li>Adjust the cutter bar. See page 7, Service and Adjustments section.</li> <li>Set mower to a higher cutting height. Mow grass more often.</li> </ol>				
Grass clogs up the reel blades.	1. Grass is too wet.	Allow grass to dry before mowing.				





# PARTS LIST FOR MODEL 486.37613 18" PUSH REEL MOWER

1 48471 2 43084 1 Bolt, Hex 5/16-18 x 1-3/4" Lg. * 31 1657-019 2 Bushing, Wheel Adjust Hex Lock 5/16-18 Thd. * 32 1038 2 Hex Lock S/16-24 Thd. Bushing, Wheel Adjust Hex Lock S/16-18 Thd. * 32 1038 2 Hex Lock Nut, 3/8-24 Thd. Hex Lock S/16-24 Thd. Bushing, Wheel Adjust Hex Lock S/16-18 x 2-1/4" Lg. * 34 1624-138 2 Bolt, Hex 5/16-18 x 2-1/2" Lg. * 35 0323-000 2 Pawl 1624-138 2 Hex Screw, #10-32 x 3/8" Lg. * 1624-138 2 Hex Lock Nut, 3/8-24 Thd. Hex Screw, #10-32 x 3/8" Lg. * 1624-138 2 Hex Lock Nut, 3/8-24 Thd. Hex Lock Nut, 3/8-24 Thd. Hex Lock Nut, 3/8-24 Thd. Hex Lock Nut, #10-32 x 3/8" Lg. * 1624-138 2 Hex Lock Nut, #10-32 x 3/8" Lg. * 1624-1	REF. NO.	PART NO.	QTY.	DESCRIPTION	REF. NO.	PART NO.	QTY.	DESCRIPTION
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	43084 43064 46434 43224 44292 3603-43 2624-018 1108-80 0425-000 2118-082 1609-708 46330 43716 1632-144 1509-086 2134-14 46331 46329 43512 0455-000 3111-131 1643-023 1609-707 43081 43682 0010-000 44060	14221212111211122811212228	Bolt, Hex 5/16-18 x 1-3/4" Lg. * Nut, Hex Lock 5/16-18 Thd. * Upper Handle Bolt, Hex 5/16-18 x 2-1/4" Lg. * Bolt, Hex 5/16-18 x 2-1/2" Lg. * Bolt, Hex 5/16-18 x 2-1/2" Lg. * Handle Brace Spacer Wheel Assembly Pinion Gear, R.H. Gear Housing Assembly R.H. Roller Bracket, R.H. Trunnion, Adj. Screw 18" Roller Roller Shaft Screw, Cutter Bar (L.H. Thd.) Cutter Bar Assembly Screw, Adjustment Trunnion, Adjustment Screw Nut, Hex 3/8-24 Thd. Screw, Cutter Bar (R.H. Thd.) End Plate Assembly L.H. Roller Adjustment Knob Roller Bracket, L.H. Flat Washer, 5/16" Std. * Carriage Bolt, 5/16-18 x 1-1/4" Trunnion Pop Rivet	30 31 32 33 34 35 36 37 39 40 41 44 46 47 48 49 50 53 54 55 56 57 59 60 61	1657-019 1038 1509-038 1624-138 0323-000 0428-000 1650-21 1540-118 1650-001 2674-032 1534-8 44008 1631-51 1643-060 1622-050 44232 1629-028 C-9M5732 2135-046 44818 3622-54 3111-130 2118-081 1155-047 1629-041	22222122 2222 222261211122	Bushing, Wheel Adjust Hex Lock Nut, 3/8-24 Thd. Hex Screw, #10-32 x 3/8" Lg. Retainer Pawl Pinion Gear, L.H. Retaining Ring Flat Washer, 3/8" I.D. x 1-1/4" O.D. Retaining Ring Hub Cap Hex Lock Nut, #10-32 Thd. Flat Washer, 1-1/8" O.D. x .78"I.D. x .025" Axle Knob, Wheel Adjustment Dust Cover Bearing Retainer, Bearing Rivet, Pop 18" Reel Assembly. Screw, Hex Hd. #10 x 5/8" Lg. Handle Panel End Plate Assembly R.H. Gear Housing Assembly L.H. Spring and Trunnion Assembly. Pinion Housing

<sup>\*</sup> Common hardware may be purchased locally.

For the repair or replacement parts you need delivered directly to your home

Call 7 am - 7 pm, 7 days a week

1-800-366-PART

(1-800-366-7278)

For in-home major brand repair service Call 24 hours a day, 7 days a week

1-800-4-REPAIR

(1-800-473-7247)

For the location of a Sears Parts and Repair Center in your area Call 24 hours a day, 7 days a week 1-800-488-1222

For information on purchasing a Sears Maintenance Agreement or to inquire about an existing Agreement

Call 9 am - 5 pm, Monday-Saturday

1-800-827-6655

When requesting service or ordering parts, always provide the following information:

- Product Name
- Part Name
- Model Number
- Part Number









