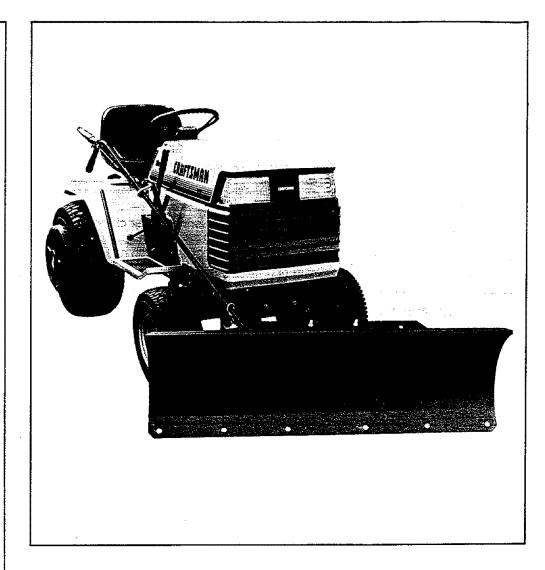
# SEARS owners manual

Model No.

486.244021 48" DOZER BLADE



48" DOZER BLADE

CAUTION: Read Rules for Safe Operation and Instructions Carefully

- Assembly
- Operation
- Maintenance
- Repair Parts

Sears, Roebuck and Co., Chicago, Ill. 60684 U.S.A.

## **RULES FOR SAFE OPERATIONS**

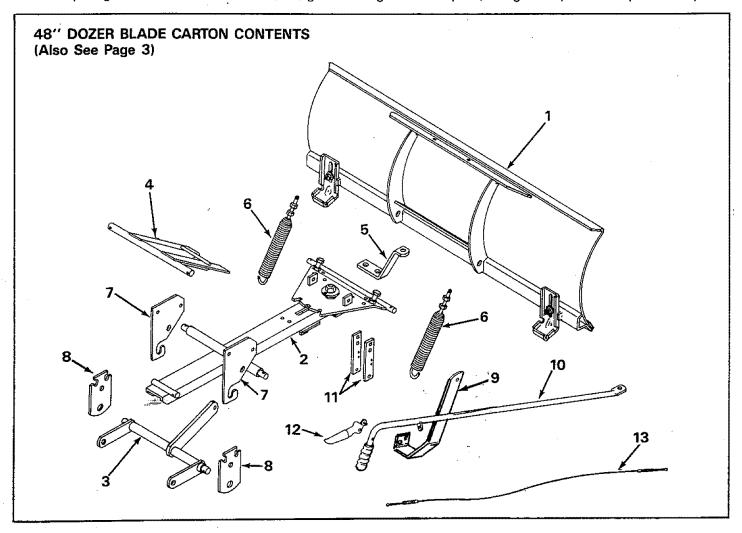
Remember, any power equipment can cause injury if operated improperly or if the user does not understand how to operate the equipment.



LOOK FOR THIS SYMBOL TO POINT OUT IMPORTANT SAFETY PRECAUTIONS. IT MEANS--- ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED.

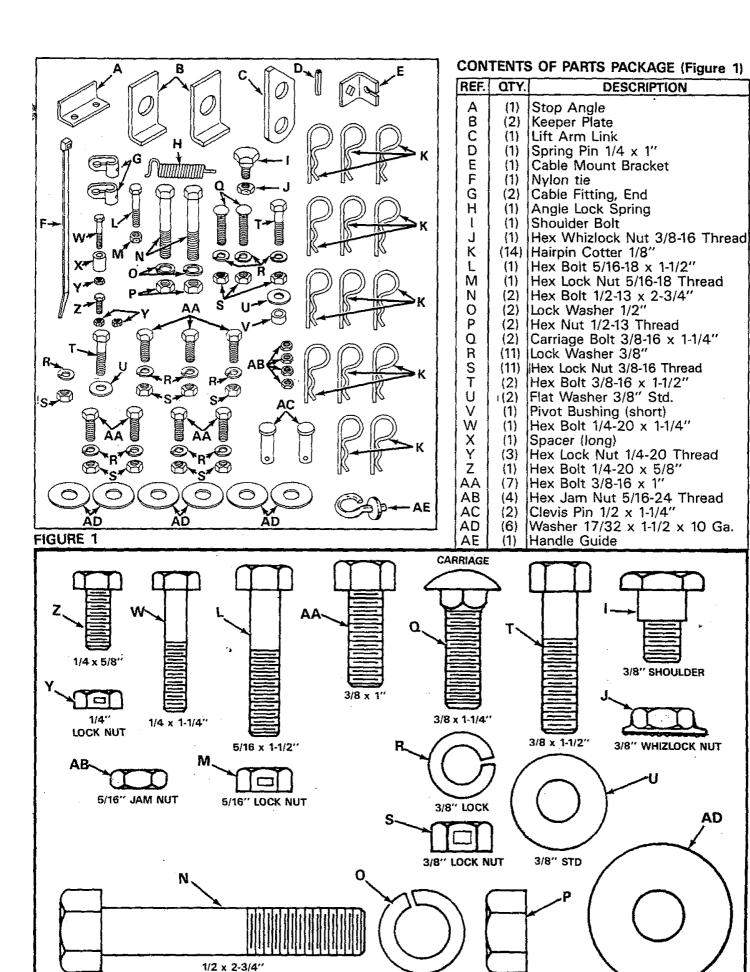
Exercise caution at all times, when using power equipment.

- Read the tractor and dozer blade owners manuals and know how to operate your tractor, before using tractor with the dozer blade attachment.
- Never operate tractor and dozer blade without wearing proper clothing suited to weather conditions and operation of controls.
- 3. Never allow children to operate tractor and dozer blade, and do not allow adults to operate without proper instructions.
- 4. Always begin with transmission in first (low) gear and engine at low speed, and gradually increase speed as required.



## **CARTON CONTENTS**

REF. NO.	QTY.	DESCRIPTION	REF. NO.	QTY.	DESCRIPTION
1 2 3 4 5 6 7	(1) (2) (1) (1) (1) (2) (2)	Blade Asssembly Channel/Pivot Plate Assembly Lift Assembly Guide Bracket Assembly Blade Pivot Bracket Spring Assembly Hitch Plate	8 9 10 11 12 13	(1) (1)	Lift Pivot Plate Support Bracket Handle Assembly w/grip Angle Lock Bars Grip Assembly Control Cable Assembly Parts Package (Not Shown)



**FULL SIZE HARDWARE REFERENCE CHART** 

1/2" LOCK

1/2" NUT

17/32 x 1-1/2"

## ASSEMBLY INSTRUCTIONS

### TOOLS REQUIRED FOR ASSEMBLY

- (1) 7/16" Open End or Box Wrench
- (1) 1/2" Open End or Box Wrench
- (1) 9/16" Open End or Box Wrench
- (1) 3/4" Open End or Box Wrench
- (1) Adjustable Wrench
- (1) Hammer

Refer to carton contents figure on page 2 and figure 1 on page 3 for parts and hardware needed to assemble dozer blade.



RIGHT HAND (R.H.) AND LEFT HAND (L.H.) ARE DETERMINED FROM OPERATOR'S POSITION WHILE SEATED ON TRACTOR.

1. Assemble curved end of angle lock spring into small hole in washer as shown in figure 2.

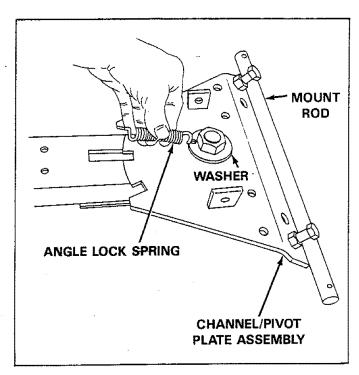
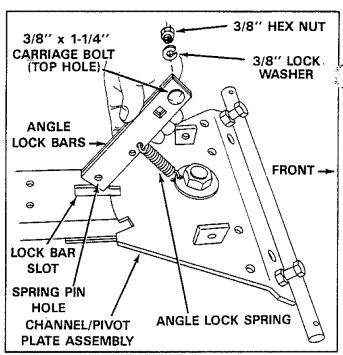


FIGURE 2

2. Assemble the two-angle lock bars together as shown in figure 3, using one 3/8" x 1-1/4" carriage bolt down through the top holes with a 3/8" lock washer and a 3/8" hex nut underneath. **Do not tighten at this time.** 



### FIGURE 3

3. Assemble the offset end of angle lock spring into small holes in angle lock bars as shown in figure 3. Slide lock bars through lock bar slot until spring pin hole is aligned with bracket on back side. See figure 4. Using a hammer drive 1/4" x 1" spring pin into lock bars until flush with bracket. See figure 4. Tighten nut in angle lock bars which was left loose in step 2."

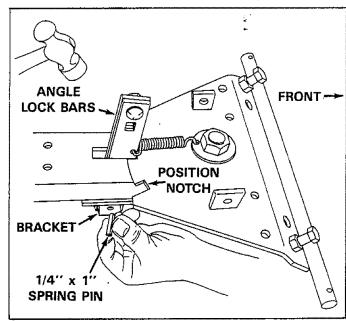


FIGURE 4



Lock bars should pivot freely and when pulled all the way back the channel/pivot plate assembly should be unlocked and free to pivot to right or left position notches. 4. Assemble angle stop to top of channel using one 1/4" x 5/8" hex bolt down through left hand hole, and one 1/4" hex lock nut under channel. See figure 5. **Do not tighten at this time**.

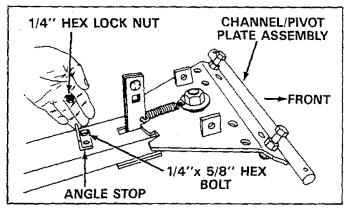


FIGURE 5

5. Assemble 3/8" x 1-1/4" carriage bolt through square hole in cable mount bracket and through square hole in lock bars. See figures 6 and 7. Hold cable mount bracket in position as shown in figure 7 and secure with 3/8" lock washer and 3/8" hex nut.

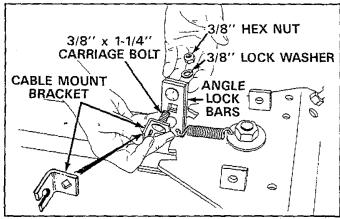


FIGURE 6

 Assemble one 5/16-24" hex nut onto threaded end of control cable approximately 3/4" from end. Assemble threaded cable end through round hole in cable mount bracket and secure with another 5/16-24" hex nut. See figure 7.

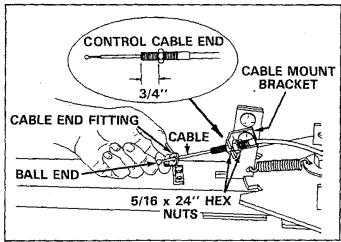


FIGURE 7

7. Assemble ball end of cable through round hole in cable end fitting and into slot of fitting. See figures 7 and 8.

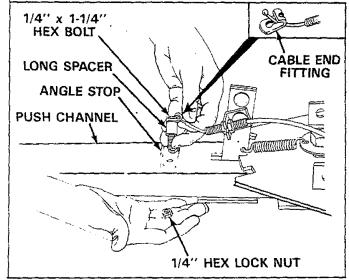


FIGURE 8

8. Assemble 1/4" x 1-1/4" hex bolt down through cable end fitting, through long spacer, angle stop, (right hand hole) and through channel. See figure 8. Secure with 1/4" hex lock nut and tighten the other 1/4" hex lock nut, which was left loose in step 4. NOTE: Keep cable and fitting in alignment when tightening nuts.

# ASSEMBLY OF DOZER BLADE TO TRACTOR

Remove mower or any other attachment you may have mounted to your tractor. Mark all loose parts and save for re-assembly. Refer to tractor owners manual for removal of mower/attachment.

 Assemble hitch plates to outside of tractor frame and secure with two 3/8" x 1" hex bolts, two 3/8" lock washers, and two 3/8" hex nuts on each side. See figure 9.

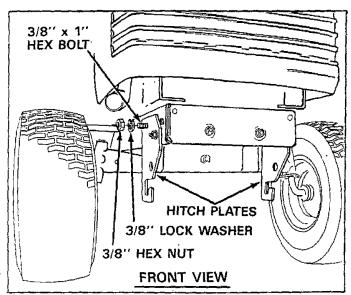
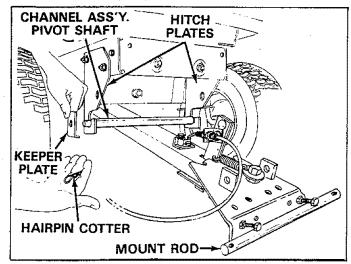


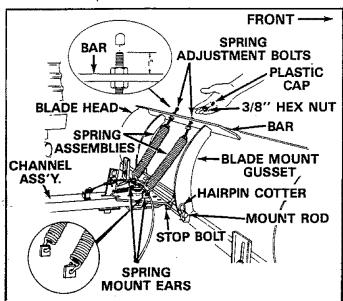
FIGURE 9

 Assemble channel assembly pivot shaft under front of tractor and into hitch plates as shown in figure 10. Assemble keeper plates over ends of shaft (with lip under hitch plates) and secure by placing hairpin cotters through small holes outside keeper plates near each end of shaft.



## FIGURE 10

 Hold blade head upright and guide one end of mount rod into hole near bottom of blade mount gusset. See figures 10 & 11. Secure with a hairpin cotter. Slide other end of mount rod into other blade mount gusset hole and secure with hairpin cotter.



### FIGURE 11

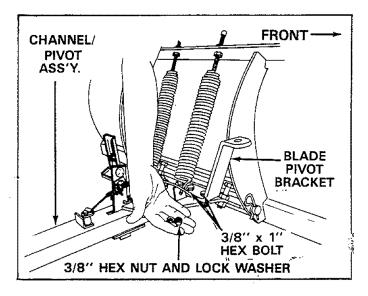
4. Connect curved end of spring assemblies into spring mount ears. See figure 11. Remove plastic cap and one 3/8" hex nut from end of each spring assembly. Hold blade back against stop bolts and assemble spring adjustment bolts up through bar. Re-assemble two 3/8" hex nuts, removed earlier, onto adjustment bolts on top side of bar. Tighten both spring adjustment nuts approximately 1" down from end of bolt threads, see figure 11, to provide tension of blade against stop bolts.

5. Re-assemble plastic caps on top ends of spring adjustment bolts.



## SEE ADJUSTMENT SECTION ON PAGE 10 FOR SPRING TENSION.

6. Assemble blade pivot bracket on to top right hand side of channel/pivot assembly. See figure 12. Assemble two 3/8" x 1" hex bolts down through bracket and plate and secure with two 3/8" lock washers and 3/8" hex nuts underneath.



### FIGURE 12

7. Assemble the lift pivot plate under the left hand foot rest of the tractor and over the suspension bracket mount pin. See figure 13. Secure with one 17/32" x 1-1/2" flat washer and one hairpin cotter. See figure 14. Do not assemble the lift pivot plate under the right hand foot rest at this time.

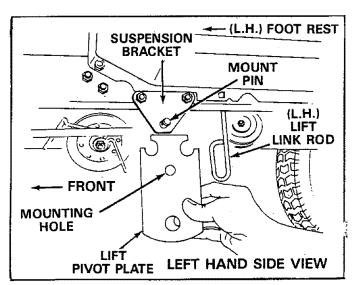


FIGURE 13

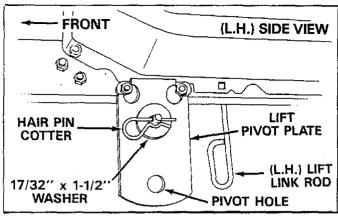
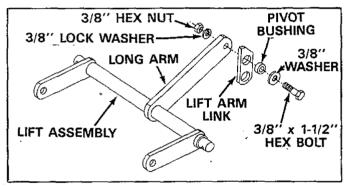


FIGURE 14

8. Pre-assemble front lift arm link to long arm on lift assembly as shown in figure 15. Assemble one 3/8" x 1-1/2" hex bolt through one 3/8" flat washer, through pivot bushing and through large hole in lift arm link near angle end. Secure with one 3/8" lock washer and one 3/8" hex nut. See figure 15. NOTE: Lift arm link must pivot freely.



### FIGURE 15

 Relieve spring tension on lift lever (see figure 16 and note below) loosening hex jam nut and unscrewing adjustment bolt counterclockwise.

Tractor lift lever must be positioned all the way back and locked in position.

NOTE

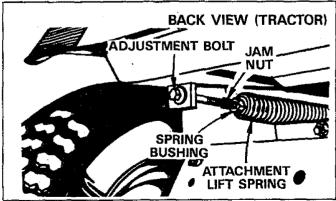


FIGURE 16

 Assemble lift arm link over channel rod and insert pivot shaft end (from R.H. side of tractor) into hole in L.H. lift pivot plate. See figure 17.

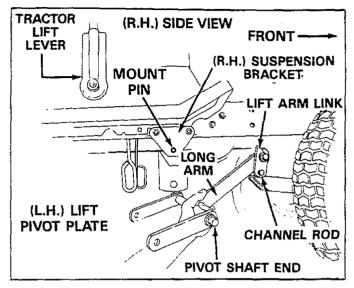


FIGURE 17

11. Assemble right hand lift pivot plate over right hand end of lift assembly pivot shaft and secure to right hand suspension bracket mount pin with one 17/32" x 1-1/2" washer and one hair pin cotter. See figures 17 and 18.

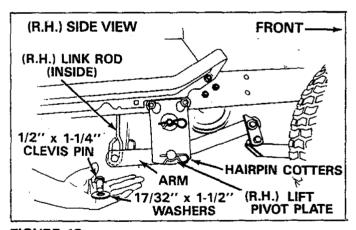


FIGURE 18

12. Move tractor lift lever to forward position. Assemble one 1/2" x 1-1/4" clevis pin from inside through one 17/32" x 1-1/2" washer, through right hand link rod, and through lift assembly arm. See figure 18. NOTE: Link rods must be positioned inside of lift assembly arms. Assemble 17/32" x 1-1/2" washer over clevis pin on outside and secure with a hairpin cotter. Secure lift assembly to right hand lift pivot plate with a hairpin cotter through hole in lift assembly pivot shaft on outside. See figures 18 and 19. Repeat this step on left hand side.

13. Secure lift arm link to channel rod with one hairpin cotter. See figure 19.

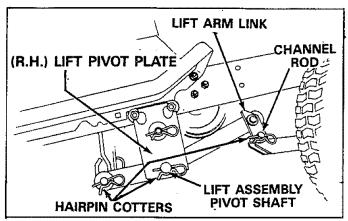
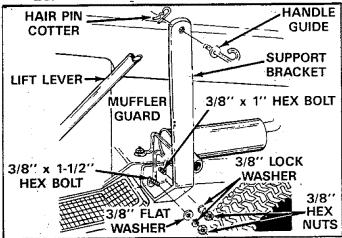


FIGURE 19
14. Assemble support bracket onto right hand side of tractor (between muffler guard and tractor frame if so equipped) using one 3/8" x 1" and one 3/8" x 1-1/2" hex bolt inside and secure with one flat washer, two 3/8" lock washers, and two 3/8" hex nuts on outside. See figure 20.



#### FIGURE 20

15. Assemble handle guide (with loop outside) at top of support bracket and secure with one hairpin cotter inside. See figures 20 and 21.

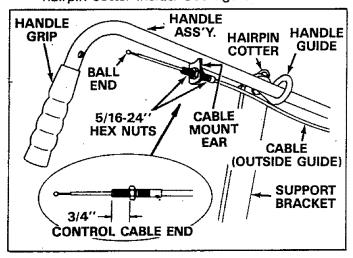
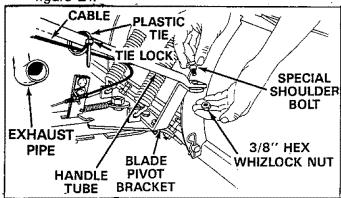


FIGURE 21

- 16. Assemble handle assembly down through handle guide as shown in figure 21. Secure lower end of handle to top side of blade pivot bracket with special shoulder bolt (on top) and 3/8" hex whizlock nut underneath. See figure 22.
- 17. Assemble one 5/16-24" hex nut onto threaded end of control cable approximately 3/4" from end. Assemble threaded end of cable up through cable mount ear and secure with second 5/16-24" hex nut. See figure 21.

 Assemble handle grip on upper end of handle assembly if not already pre-assembled. See figure 21.



#### FIGURE 22

- 19. Wrap plastic tie around handle tube and cable, (see figure 22), assembling end of tie through lock. Pull plastic tie tight to retain cable to handle tube just above exhaust pipe. Cut off extra plastic end.
- 20. Assemble grip assembly to handle assembly using one 5/16" x 1-1/2" hex bolt and one 5/16" hex lock nut. See figure 23. NOTE: Do not over tighten lock nut, grip assembly must pivot freely.

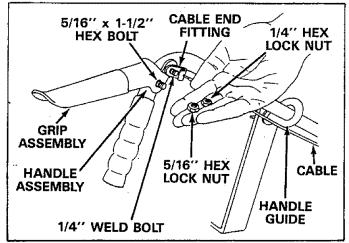


FIGURE 23

21. Assemble ball end of cable (see figure 21), through round hole in cable end fitting and into slot of fitting. See figure 23. Assemble cable end fitting over 1/4" weld bolt on grip assembly and secure with one 1/4" hex lock nut. NOTE: Do not over tighten lock nut, cable fitting must pivot freely.

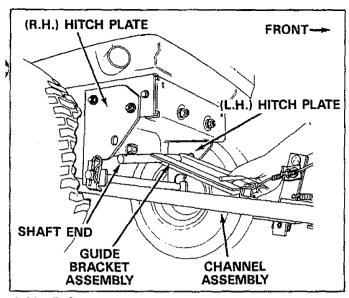


FIGURE 24

22. Assemble guide bracket assembly shaft end into the left hand hitch plate. See figure 24. Slide guide assembly back to the right and into the hole in the right hand hitch plate, and secure with a hairpin cotter on each end. See figure 25. Lower front end of guide bracket assembly to straddle channel assembly. See figure 25.

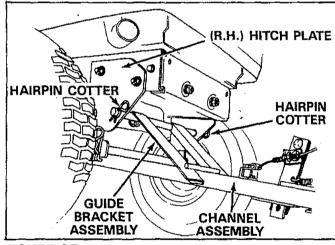


FIGURE 25

# OPERATION INSTRUCTIONS AND ADJUSTMENTS



HIDDEN OBJECTS CAN CAUSE SUDDEN STOPS OR CHANGE IN DIRECTION.

## **CONTROLS**

Become familiar with all of the controls and adjustments on the tractor and dozer blade before operating. Refer to tractor owners manual for tractor controls. Controls for operating dozer blade are as follows:

### A. Lift control lever:

Located on right hand side of tractor. See figure 26. Move lever forward to lower dozer blade. Pull lever back to raise dozer blade. Pulling lever all the way back locks dozer blade in up position.

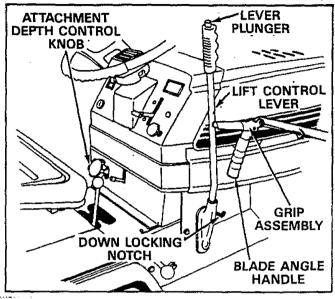


FIGURE 26

## B. Lift lever plunger:

Located on top of lift control lever. See figure 26. Pull back on lift control lever and depress plunger to release.



WITH THE DOZER BLADE IN THE "UP" POSITION DO NOT DEPRESS THE PLUNGER WITHOUT HOLDING BACK ON THE LIFT CONTROL LEVEL OR DOZER BLADE MAY SUDDENLY DROP.

#### C. Attachment depth control knob:

Adjust lift control lever movement with attachment **DEPTH CONTROL KNOB** (see figure 26) for **maximum movement** between locking notches and to prevent lever from locking in the down lock notch. See figure 26.

## D. Blade angle handle and grip assembly:

Located on right hand side of tractor. See figure 26. NOTE: Always raise dozer blade and lock in "up" position before moving angle control handle. Depress grip assembly to release blade angle lock and push/pull angle control handle forward to move dozer blade angle to left, center, right and release grip to lock.

## **ADJUSTMENTS**

### A. Blade angle lock bars:

If angle lock bars **Do Not** completely disengage from slots in pivot plate assembly, adjustment of cable is required. See figure 27.

## B. Adjust blade springs:

To change spring tension (stand in front of blade assembly), adjust the nuts at the upper end of the springs (see figure 27) turning counter clockwise () to relieve tension and clockwise () to increase tension.

Adjust spring adjustment nuts approximately 1" from end when moving snow or other light material, (keep spring tension light for safety). This frees the blade to spring trip and return if a hidden obstacle is encountered.

When heavier material is to be moved, adjust spring adjustment nuts accordingly.

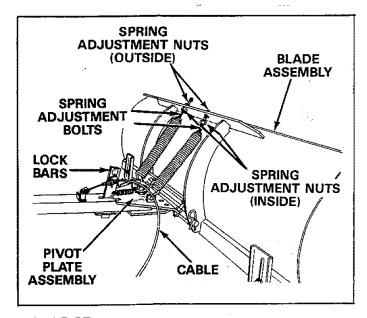
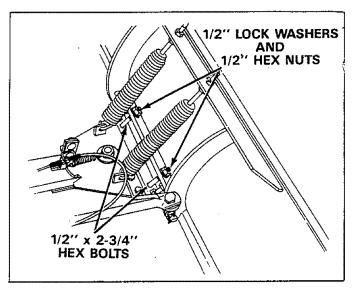


FIGURE 27



KNOW THE TERRAIN. AVOID EXCEPTIONALLY SHARP SLOPES OR DROPOFFS WHICH MAY BE HIDDEN BY THE SNOW.

NEVER RUN THE DOZER BLADE INTO HEAVY MATERIAL AT HIGH SPEED.



## FIGURE 28

## C. Dozer spring lockout:

To lock dozer blade spring trip action for heavy dozer work, install two 1/2" x 2-3/4" hex bolts (included in hardware package) as shown in figure 28. Secure with two 1/2" lock washers, and two 1/2" hex nuts



DO NOT OPERATE TRACTOR AND DOZER BLADE AT HIGH SPEEDS WITH SPRING TRIP ACTION IN LOCKED OUT POSITION.

## D. Blade shoe adjustment:

Blade shoes on ends of blade, (see figure 29), maybe raised for clean dozing on smooth surfaces or lowered to raise the blade to work on rough or uneven areas. Make sure both shoes are set evenly and nuts are tightened securely.

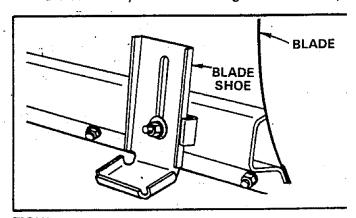


FIGURE 29



Wheel weights and tire chains should be used with your dozer to improve traction. For additional traction, install wheel weights on rear of drawbar using weight bracket kit 71-26235 and one or two wheel weights from wheel weight kit 71-26234.

These accessories are available at your nearest Sears retail or catalog store.

## **OPERATION**



INSPECT THE AREA TO BE WORKED CAREFULLY BEFORE OPERATING THE DOZER BLADE. AVOID PIPES, ROOTS, CURBS OR OTHER HEAVY OBSTRUCTIONS.

- Prepare the tractor engine for cold weather use following instructions furnished with tractor.
- Always begin with transmission in first (low) gear and engine at slow speed and gradually increase speed as required.
- If blade is stored in heated area, allow tractor and blade to adjust to outdoor temperature before operating to reduce icing on the metal surfaces.



ALWAYS LOWER BLADE TO GROUND BEFORE LEAVING TRACTOR.

# TO REMOVE DOZER BLADE FROM TRACTOR

- Lower blade to ground with blade in the center (straight) position.
- 2. Refer to figure 30 below and;
  - A. Remove hairpin cotters and 17/32" x 1-1/2" flat washers from right hand and left hand lift pivot plates.
  - B. Remove hairpin cotters, clevis pins and washers from right hand and left hand link rods
  - C. Pull right hand and left hand lift pivot plates off of mounting pins and lower the lift assembly to the ground.

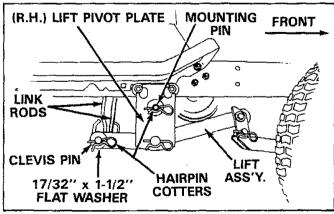


FIGURE 30

 Refer to figure 31 below and remove hairpin cotters from ends of guide bracket assembly and remove guide bracket assembly.

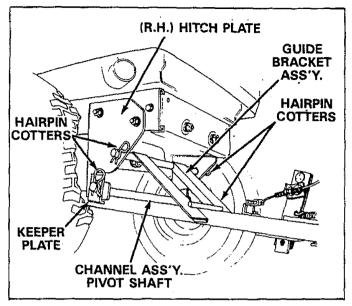


FIGURE 31

4. Refer to figure 31 above and remove hairpin cotters from ends of channel assembly pivot shaft and remove keeper plates. Lift the channel assembly pivot shaft out of the hitch plates and lower channel assembly to the ground.



Hitch plates do not require removal for re-assembly of mower deck. See figure 31.

 Refer to figure 32 below and remove hairpin cotter from end of handle guide to release handle assembly from tractor.

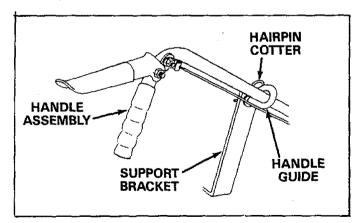


FIGURE 32

6. Save all loose parts and hardware for re-assembly of blade to tractor.

## **MAINTENANCE**

During the operating season, check all bolts, nuts and hairpin cotters to be sure they are secure. For improved snow removal performance, coat the blade with automotive type paste wax.

### **LUBRICATION**

Oil all pivot points so that they will work freely.

### SCRAPER BAR

After extensive use, and wear the scraper bar may be reversed to utilize the unused top edge. See figure 33.

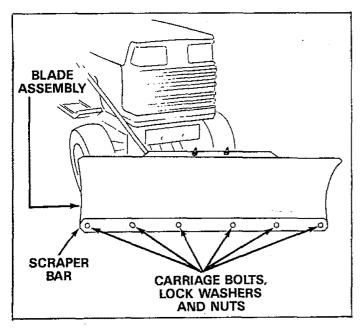


FIGURE 33

## **STORAGE**

When the dozer is not being used, remove all dirt and rust and touch up with paint.

Apply a light coat of grease or rust preventative to the blade and oil pivot points.

Store in an area where it is protected from weather.

# Attachments That Add to the Usefulness of Your Craftsman Tractor

Sears offers a wide variety of attachments that fit your tractor. Many of these are listed below with brief explanations of how they can help you. This list was current at the time of publication; however, it may change in future years — more attachments may be added, changes (including changes in the stock number) may be made in these attachments, or some may be available.

Most of these attachments do not require additional hitches or conversion kits (those that do are indicated) and are designed for easy attaching and detaching. You may order these attachments at most Sears retail stores, catalog sales offices, and through the catalog.

Tire Chains are heavy duty, closely-spaced with extra-large cross links that give smooth ride and outstanding traction.

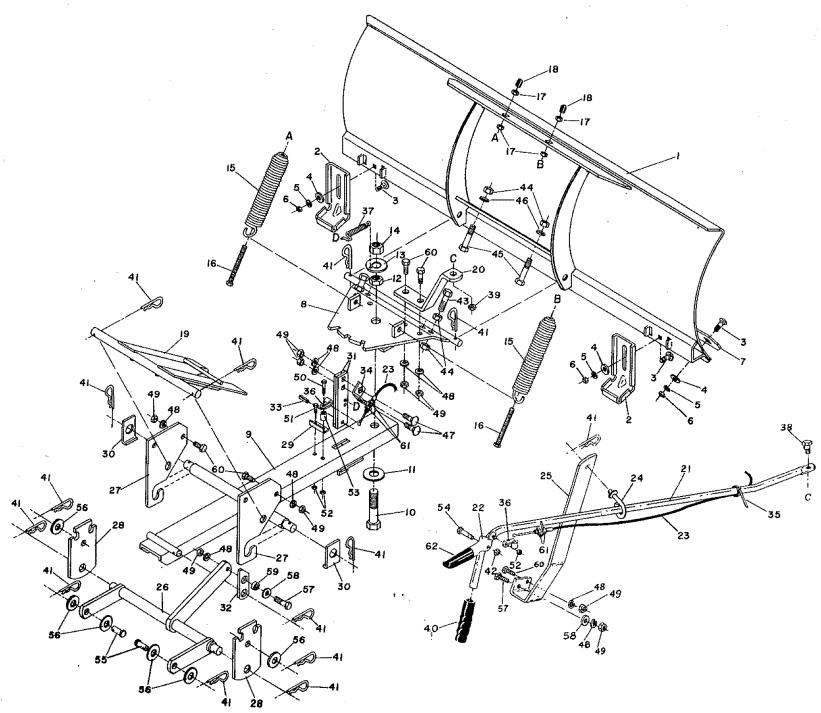
Stock No. (Pr.)	Fits Tractors With This Rear Tire S
71-24953 (Pr.)	18 x 9.5 - 8 in. rim (Turf Saver)
71-24953 (Pr.)	18 x 9.5 - 8 in. rim (Turf Tractor)
71-24950 (Pr.)	20 x 10.0 - 10 in. rim
71-24951 (Pr.)	19 x 9.5 - 8 in. rim
· 71-26946 (Pr.)	$23 \times 10.5 \times 12$ in. rim

Wheel weights for rear wheels provide needed traction for snow removal or dozing heavy materials.

Stock No.	Weight (each)	Fits
71-24434 (Pr.)	30 lb.	Lawn Tractor with 8 in. rims
71-24435 (Pr.)	33 lb.	Lawn or Yard Tractors with 10-in. rims
71-26234	55 lb.	Garden Tractor with 12-in, rims

Use mounting bracket (#71-244360) to mount one 55 pound weight (#71-26234) on the rear of your tractor frame for added tracton.

## REPAIR PARTS FOR MODEL 486.244021-48" DOZER BLADE



## REPAIR PARTS LIST FOR MODEL 486.244021—48" DOZER BLADE

RE NO	F. ).	PART NO.	QTY.	DECRIPTION	REF. NO.	PART NO.	QTY.	DESCRIPTION
1		62554	1	48" Blade Ass'y.	32	23631	1 1	Lift Arm Link
2		R3132J	2	Shoe	33	43349	1	Spring Pin 1/4 x 1"*
3		43079	8	Carriage Bolt 5/16-18 x 1"*	34	05762	1	Cable Mount Bracket
4		43081	8	Washer 5/16 Std. Wrt.*	35	726-0178	1	Nylon Tie (Cable)
5		43086	8	Lock Washer, Spring 5/16*	36	746-0260	2	Cable Fitting, End
6		43083	8	Hex Nut 5/16-18*	37	43348	1	Angle Lock Spring
7		23639	1	Wear Plate 48"	38	738-0234	1	Shoulder Bolt (Special)
8		62556	1	Pivot Plate Ass'y.	39	44072	1	Hex Whizlock Nut 3/8-16
9		62557	1	Channel Ass'y.	40	7071	1	Handle Grip 3/4"
10	o	710-0741	1	Hex Bolt 3/4-10 x 3-1/2"	41	43343	14	Hairpin Cotter 1/8"*
) 1·	1	1540-162	1	Washer 3/4"	42	43064	1	Hex Lock Nut 5/16-18*
1:	2	40436	1	Hex Jam Nut 3/4-10*	43	41596	2	Hex Bolt 1/2-13 x 2"*
1:	3	736-0306	1	Washer 3/4 (Special)	44	712-0206	6	Hex Nut 1/2-13*
1.	4	40598	1	Hex Lock Nut 3/4-10	45	43510	2	Hex Bolt 1/2-13 x 2-3/4"*
1	5	9466R	2	Blade Adjustment Spring	46	43353	2	Lock Washer, Spring 1/2"*
10	6	44071	2	Hex Bolt 3/8-16 x 3-1/2"	47	710-0305	2	Carriage Bolt 3/8-16 x 1-1/4*
1		43015	4	Hex Nut 3/8-16*	48	43003	11	Lock Washer, Spring 3/8*
1		44074	2	Plastic Cap, 3/8"	49	43082	11	Hex Lock Nut 3/8-16*
1		62559	1	Guide Bracket Ass'y	50	1509-90	1	Hex Bolt 1/4-20 x 1-1/4"*
2		23646	1	Blade Pivot Bracket	51	43866	1	Hex Bolt 1/4-20 x 5/8"*
2		62560	1	Tube Handle Ass'y.	52	43013	3	Hex Lock Nut 1/4-20*
2		62561	1.	Release Grip Ass'y.	53	23658	1	Spacer
2		746-0366	1	Control Cable Ass'y.	54	43085	1	Hex Bolt 5/16-18 x 1-1/2"*
2		62562	1	Handle Guide	55	44049	2	Clevis Pin 1/2 x 1-1/4
2		23728	1	Support Bracket	56	R19172410	6	Washer 17/32 x 1-1/2 x 10 Ga.
	6	62563	1	Lift Ass'y.	57	43062	2	Hex Bolt 3/8-16 x 1-1/2"*
	7	23652	2	Hitch Plate	58	43070	2	Washer 3/8 Std. Wrt.*
	•	23435	2	Lift Pivot Plate	59	23625	1	Pivot Bushing
	9	23655	1	Stop Angle	60	43001	7	Hex Bolt 3/8-16 x 1"*
	0	23624	2	Keeper Plate	61	712-0256	4	Hex Jam Nut 5/16-24*
	1	23151	2	Angle Lock Bar	62	731-0869	1	Plastic Grip
1				j ,		44749	1	Owners Manual

<sup>\*</sup>Purchase common hardware locally.

Sears, Roebuck and Co. reserves the right to make any changes in design or improvements without imposing any obligation to install the same upon its items heretofore manufactured.

## SEARS owners manual

Model No. 486.244021 48" DOZER BLADE

How to Order Repair Parts

## 48" DOZER BLADE

Always mention the Model Number when requesting service or repair parts for your dozer blade.

All parts listed herein may be ordered from any Sears Service Center and most Sears stores.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

- THE PART NUMBER
- THE PART DESCRIPTION
- THE MODEL NUMBER
- THE NAME OF MERCHANDISE

If the parts you need are not stocked locally, your order will be electronically transmitted to a Sears Repair Parts Distribution Center for handling.

## LIMITED ONE YEAR WARRANTY ON 48" DOZER BLADE

For one year from date of purchase, when this dozer blade is maintained and lubricated according to the operating and maintenance instructions in the owner's manual, Sears will repair free of charge any defect in material or workmanship.

If this dozer blade 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 abuse or negligence, 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/DEPARTMENT IN THE UNITED STATES.

This warranty applies only while this product is in use 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/731CR-W, Sears Tower, Chicago, IL 60684

Sears; Roebuck and Co., Chicago, Ill. 60684 U.S.A.