

# INSTALLATION INSTRUCTIONS

SPRING ASSIST KIT  
MFG. NO. 1685336

## GENERAL

The Spring Assist Kit is used to retrofit the hitch used to install the 42" and 46" Snow Plow/Dozer Blade on several different models (series) of tractors. For easier understanding of this instruction sheet, **first** identify the size of blade (42" **or** 46") and group of tractor on which you are working. Follow these specifications throughout the ten steps.

### Tractors:

Group 1: **600, 4000, 5000**

Group 2: **800, 6000**

Group 3: **700, 7000**

Group 4: **900, 7100**

### Snow Plow/Dozer Blade:

42" - Mfg. No. 1690085 (Group 1, 2 tractors)

42" - Mfg. No. 1691520 (Group 3, 4 tractors)

46" - Mfg. No. 1~690088 (Group 3, 4 tractors)

## KIT PARTS

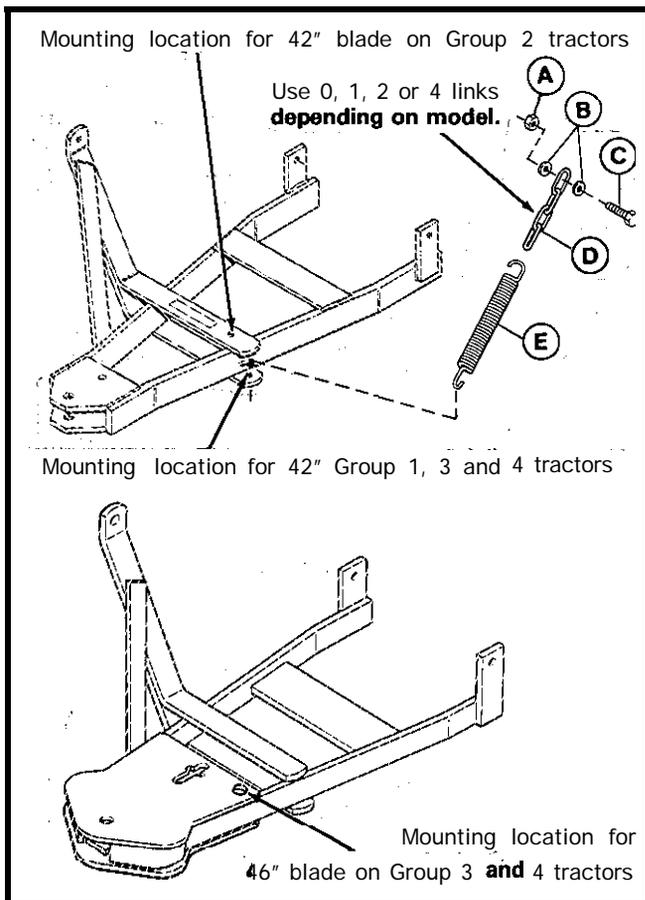


Figure 1. Kit Parts

Ref.	Description	Qty.	Part Number
A.	NUT, Hex Lock, <b>5/16-18</b>	1	1923362
B.	WASHER, Plain, <b>5/16</b>	2	1919381
C.	<b>CAPSCREW, 5/16-18 x 1-1/4</b>	1	1921977
D.	CHAIN, <b>4-Links</b>	1	1669241
E.	SPRING	1	1675232

## INSTALLATION

1. Park tractor on a flat, level surface. Shut off engine, remove key and apply parking brake.
2. Release lift handle so that dozer blade rests on the ground.
3. Remove spring clip from king pin (A, figure 2). Remove king pin and pivot pin (B) from push bar. Slide dozer blade forward and **remove** from push bar.
4. Remove cotter pin (C) from rod guide(D). Remove rod guide from hitch bracket (E). Push bar should now be free to **move** up and down.

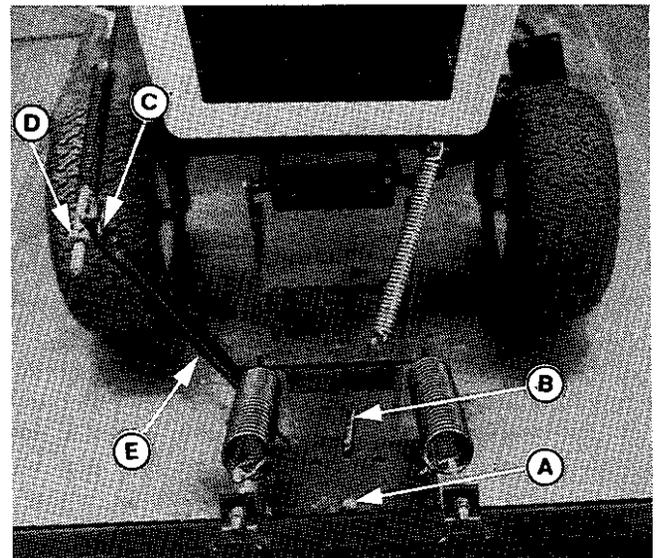


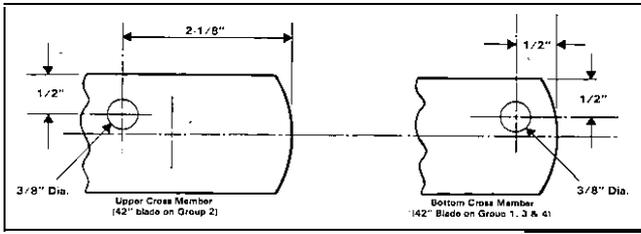
Figure 2. Dozer Blade Removal

- A. King Pin
- B. Pivot
- C. Cotter Pin
- D. Rod Guide
- E. Hitch Bracket

5. Drill a hole in the bottom cross member (42" blade on Group 1, 3 and 4 Series tractors) or upper cross member (42" blade on Group 2 tractors) according to the diagrams of the templates in **figure 3**. Actual templates are on a separate insert included with these instructions.

For 46" blades on Group 3 and 4 tractors, drill a **.406"** hole in the (top) front plate. Hole should be located **2-3/4"** left of centerline and **1/2"** forward of the plate rear edge. (Refer to figures 7E and 7F.)

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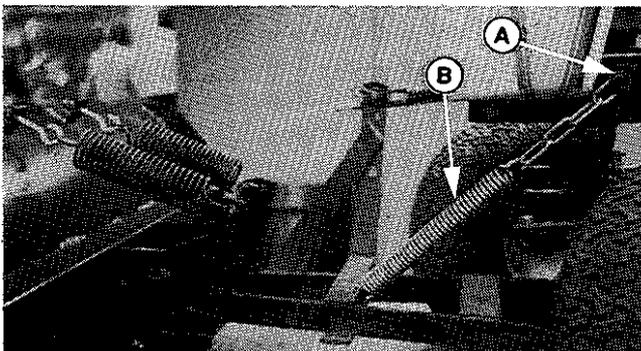


**Figure 3. Diagrams of Hitch Templates**

6. Assemble the chain (D, figure 1) to the tractor as follows:

**42" Blade on Group 1 and 2**

- On left-hand side, remove and discard the upper self-tapping screws that holds bumper to frame. This is the hole used for installing chain in the following steps, using **5/16-18 x 1-1/4 capscrew** (C), two **5/16** washers (B) and one **5/16** locknut (A).
- Place one **5/16** washer onto the **capscrew**. Then place the chain on the **capscrew**, and then the other **5/16** washer:
- Insert the **capscrew** (A, figure 4) through tractor frame. From inside the frame, install **5/16** locknut onto capscrew. Tighten snug only at this time. (Spring (B) will be installed in step 7.)



**Figure 4. Chain Installation (Group 2 Tractor Shown)**

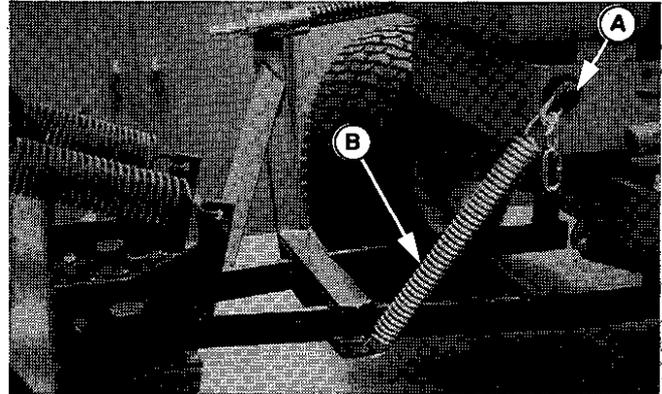
**A. Capscrew B. Spring**

**42" Blade on Group 3 and 4; 46" Blade on Group 4**

- On the left hand side, remove the front hood pivot bolt.
- Chain must be installed with the following hardware (not included in this kit):

Blade	Tractor	Qty	Hardware	Part Number
42"	Group 3	1	<b>Capscrew, 3/8-16 x 2-1/4</b>	1922130
		3	<b>Washer, 3/8</b>	1622766
42"	Group 4	1	<b>Capscrew, 3/8-16 x 1-1/2</b>	1921969
46"		3	<b>Washer</b>	1922755

- Place one washer onto capscrew. Place **first** link of chain (42" blade on Group 3 tractor) or second link of chain (42"/46" blade on Group 4 tractor) on **capscrew**. Install final two washers on **capscrew**.
- Insert **capscrew** (A, figure 5) through tractor frame. Tighten snug only **at** this time. (Spring,(B) will be installed in step 7.) **From inside** the frame, install locknut.

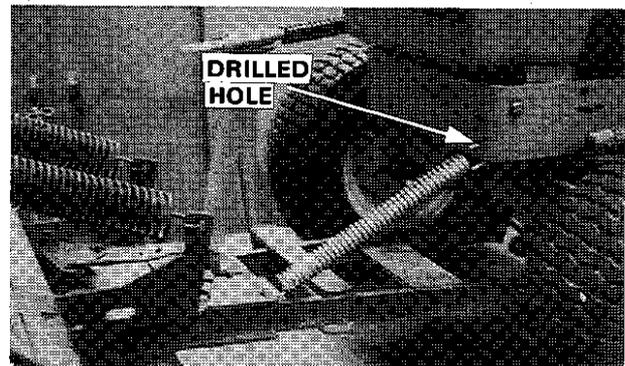


**Figure 5. Chain Installation (Group 3 Tractor Shown)**

**A. Capscrew B. Spring**

**46" Blade on Group 3**

- The chain is not used to secure spring to tractor frame. Spring is installed directly to **hole** in tractor frame.
- Drill a **.406** hole in the front of frame **1-1/4"** in from the front left side and **1/2"** up from the bottom of the frame. Refer to **figure 6**.



**Figure 6. Spring Installation (Group 4 Tractor Shown)**

- Raise the push bar and hook up one end of spring to chain or frame as shown in figures 7A through 7F. Hook other end of spring to hole drilled in hitch cross member (figure 7A-7D) or top front plate (figure 7E-7F).

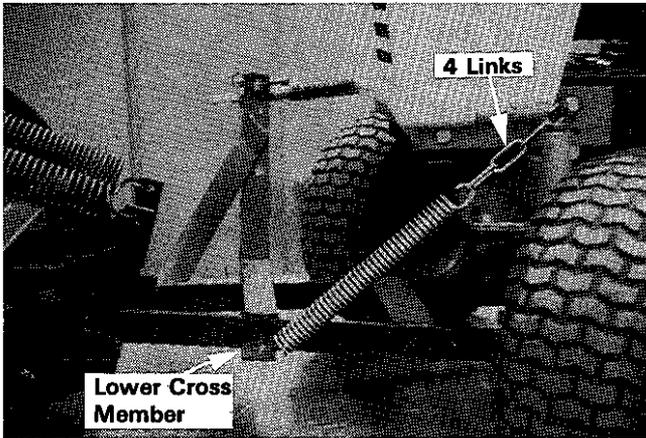


Figure 7A. 42" Blade - Group 1

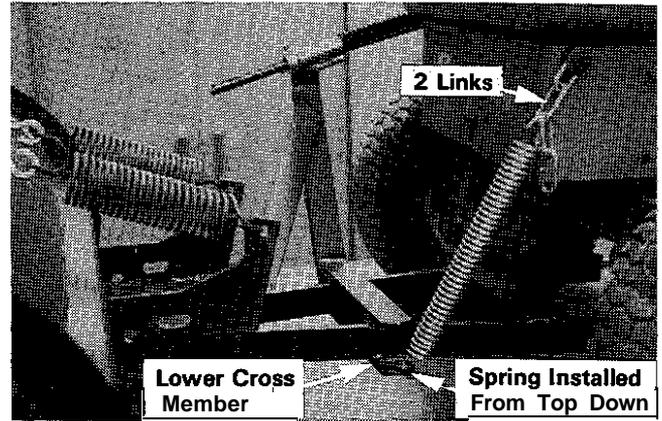


Figure 7D. 42" Blade - Group 4

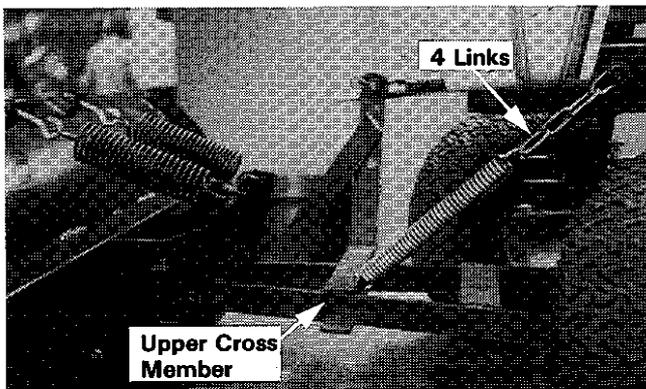


Figure 76. 42" Blade - Group 2

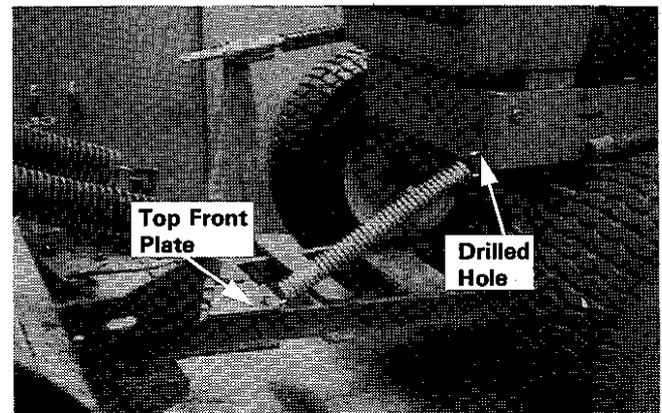


Figure 7E. 46" Blade - Group 3

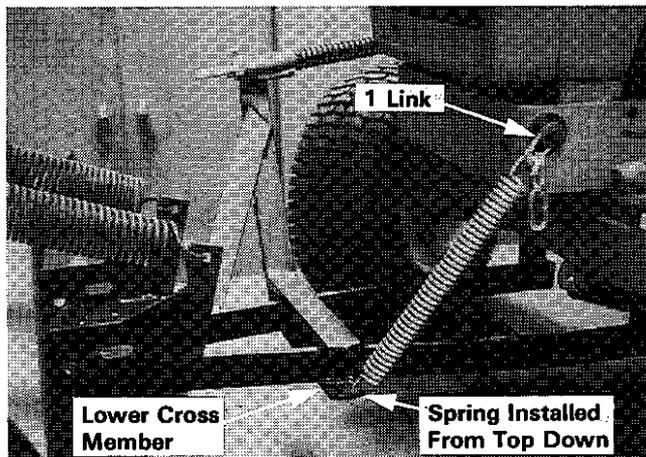


Figure 7C. 42" Blade - Group 3

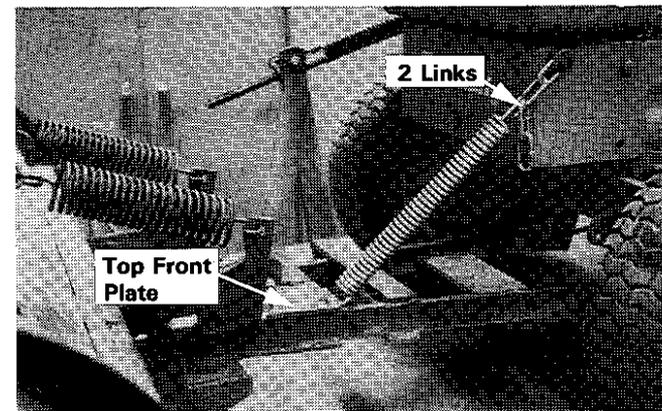
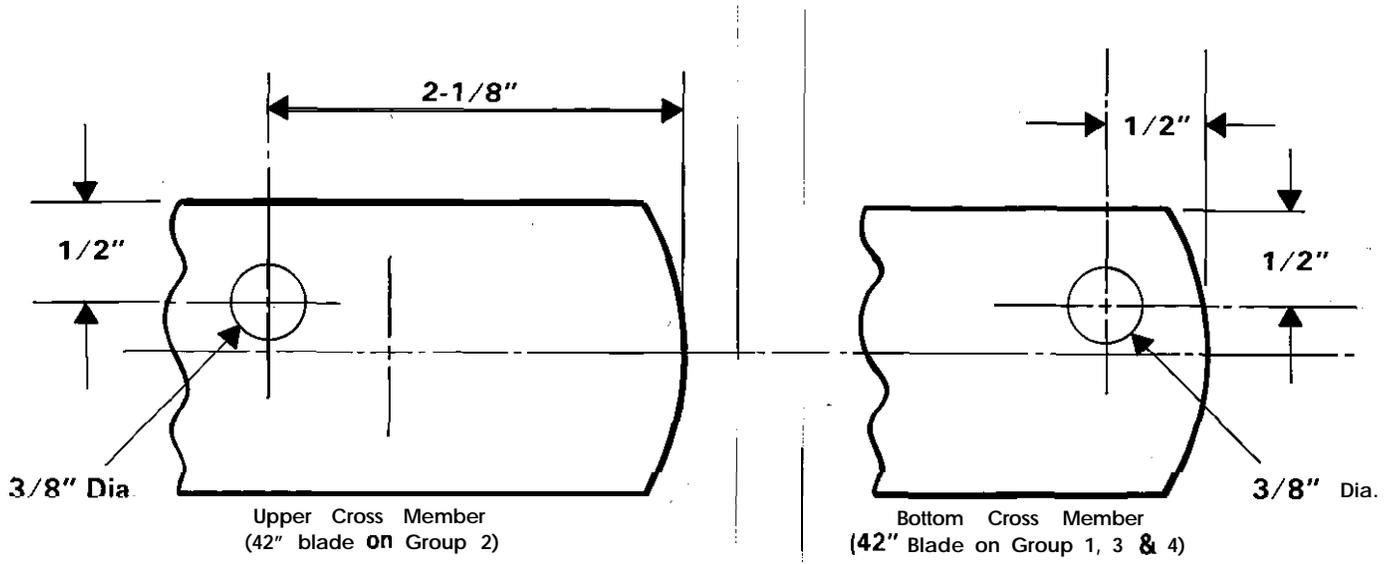


Figure 7F. 46" blade - Group 4

### Figures 7A thru 7F. Spring Installation

8. Lower push bar and install dozer blade with kingpin (A, **figure 2**), spring clip, and pivot pin(B). Reattach rod guide (D) and secure with cotter pin (C).
9. Tighten **capscrew** (A, **figure 4** or 5) and nut which hold chain to tractor frame.
10. Perform Lift Rod Adjustment as instructed in Operator's Manual for your Snow Plow/Dozer Blade.



Actual Templates of Figure 3.

INSERT - 1701016

