

Insert this Section in the
Case 130-180 Garden Tractor Service Manual
Rac. Form 9-76391

SERVICING THE
ROTARY MOWER AND DOZER BLADE
USED ON
CASE 130 AND 180 GARDEN TRACTOR

TABLE OF CONTENTS

INTRODUCTION	3
ROTARY MOWER	
Removal and Installation	4
ROTARY MOWER (Upper Components)	
Disassembly, Inspection and Assembly	6
ROTARY MOWER (Lower Components)	
Disassembly, Inspection and Assembly	8
MOWER ADJUSTMENTS	10
DOZER BLADE	
Removal and Installation	11
Servicing The Dozer Blade	12

NOTE

The terms "Right Hand" and "Left Hand" whenever used in this manual apply to the tractor and mower when facing in the direction the tractor and mower will move in forward operation.

NOTE: The J. I. Case Company reserves the right to make improvements in design or changes in specifications at any time without incurring any obligation to install them on units previously sold.

INTRODUCTION

This manual covers the servicing of the Case Rotary Mower and Dozer Blade as used on the Case 130-180 Garden Tractor. Unless indicated otherwise the information in this manual pertains to both the Case 130 and 180 Tractor. Pertinent differences will be indicated when they effect the service operation.

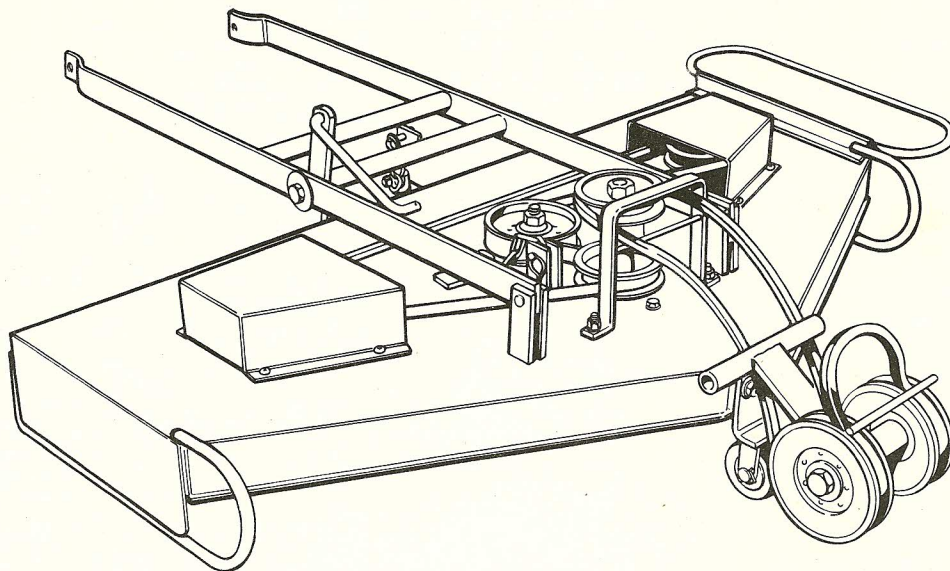


Figure 1. Rotary Mower

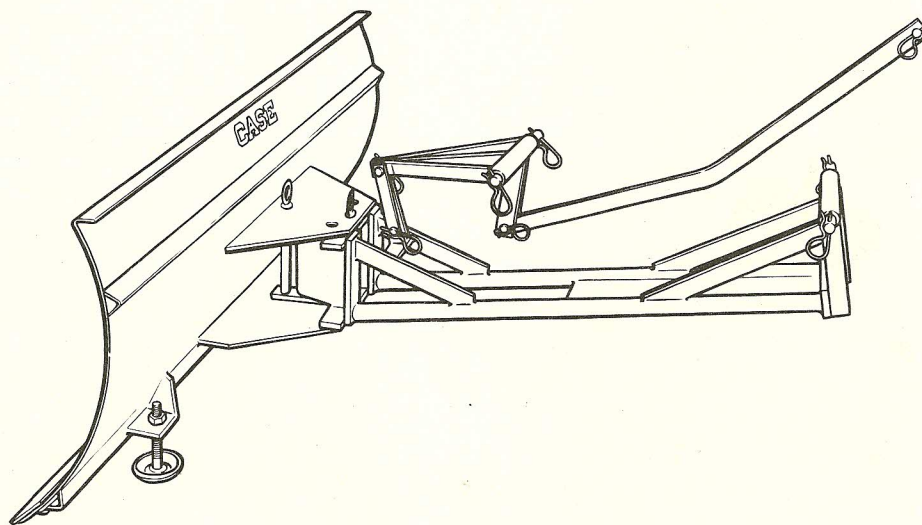


Figure 2. Dozer Blade

ROTARY MOWER (Refer to Figure 3)

Removal



NEVER ATTEMPT TO REMOVE OR INSTALL THE MOWER WITH THE ENGINE RUNNING.

1. Remove the left and right hand pivot arms at points (A) & (B). **NOTE** (On the 180 Tractor mower also disconnect pivot arm

at point (1) and chain (2), see inset B.

2. Disconnect the three chains at points (C) & (D). **NOTE** (See inset B for 180 Tractor mower).

3. Slide mower forward under tractor to relieve drive belt tension - then disconnect belt guard (E) at points (F) & (G), see inset A - remove belt guard and slip belt over cooling fan.

4. Remove retainer pins at (H) and the right end of (K) - then pull clutch lever (K) out of tractor frame and clutch idler bracket (J).

Mower can now be slid out from under tractor.

Installation

1. Slide the mower under and to the rear of the tractor in position to install the clutch idler assembly (J).

2. Line up the tube end of (J) with the holes in the tractor frame below the engine. Slide the clutch lever (K) through the tractor frame and clutch idler assembly (J). Install and lock a retainer pin at the right end of (K).

3. Slide the mower to the front of the tractor in position to install the drive belt. Install the drive belt (L) over the engine fan. Install the engine pulley guard (E) at points (F) & (G), see inset A.

4. Push the clutch lever far enough forward to enable installation of the clutch lever spring and spring bracket between (K) and (H). Install and lock a retainer pin at (H).

5. Connect the three chains at points (C) and (D).

6. Connect the pivot arms at points (A) and (B). **NOTE** (On the 180 Tractor and mower, Inset B, connect points 1 and 2 also)

NOTE On the 180 tractor mower installation differences can be observed in Inset B.

Removal and Installation

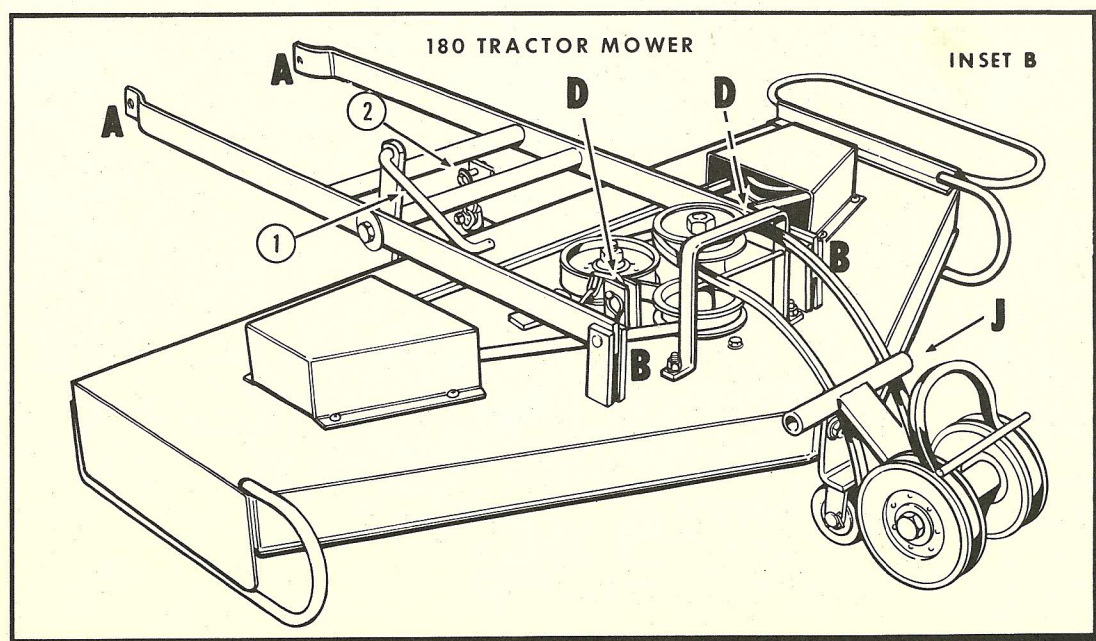
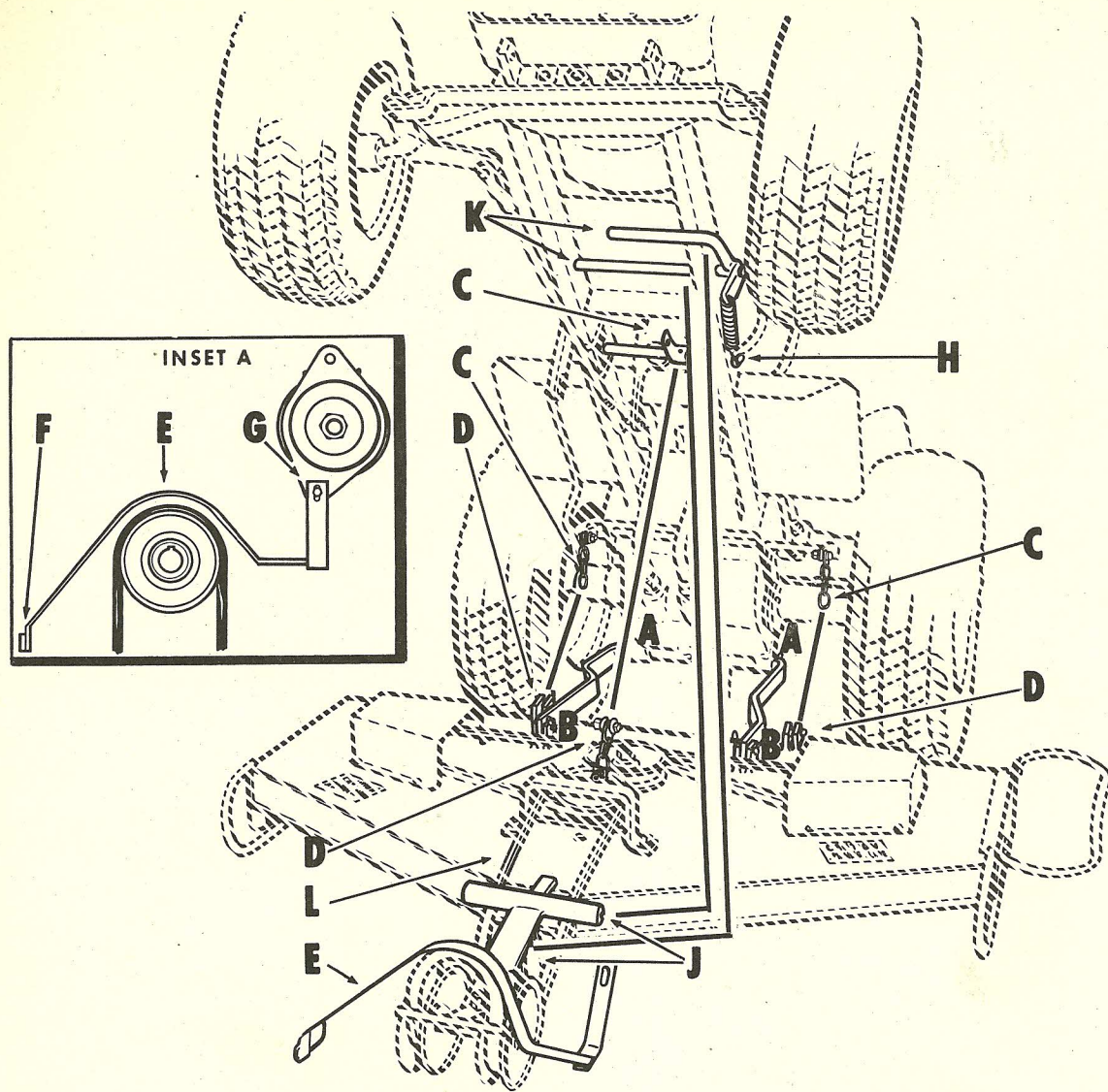


Figure 3

ROTARY MOWER(Upper Components)

(Refer to Figure 4)

Disassembly

1. To remove driven belt (42) and drive belt (10) remove nuts (6) lockwashers (7) bolts (8) and belt guard and lift bracket (5).
2. Remove capscrews (14) lockwashers (15) and outboard pulley guards, L.H. (16).R.H. (37).
3. Loosen nut (34) and slide idler pulley bracket (30) to the left to loosen belt tension.
4. To remove idler pulley (31), remove nut (33) and lockwasher (32).
5. To remove outboard spindle pulleys (17), remove the self locking nuts (9).
6. Remove pulleys (17) using a suitable puller if necessary. Remove short square keys (18) and spindle bearing washer (13).

IMPORTANT

ALWAYS PULL ON THE INNER HUB OF THE PULLEY.

7. To remove center spindle two groove pulley (11), remove self locking nut (9) and using a suitable puller if necessary, remove pulley (11). Remove long square key (12) and spindle bearing washer (13). On the 180 tractor mower, inset A, remove self locking nut (43). Using a suitable puller, if necessary, remove pulley (44). Remove key (45) and spacer (46). Remove pulley (47) key (48) and spindle bearing washer (49).

IMPORTANT

ALWAYS PULL ON THE INNER HUB OF THE PULLEYS.

Inspection

With the upper components completely disassembled, the parts can easily be cleaned and inspected for wear, cracks, score marks and burrs. All worn or damaged parts must be replaced. Check belts for fraying or cracking. Check bearing surfaces for wear, pitting or score marks. Check pulleys for bent or chipped side walls.

Assembly

1. To replace center spindle two groove pulley (11), install spindle bearing washer (13) and long square key (12). Install pulley (11) and tighten self locking nut (9). On the 180 tractor mower, inset A, install spindle bearing washer (49) key (48), pulley (47), spacer (46), key (45) and pulley (44). Install self locking nut (43) and tighten securely.
2. To replace outboard spindle pulleys (17), install spindle bearing washers (13) short square keys (18). Install pulleys (17) and tighten self-locking nuts (9).
3. To replace idler pulley (31), install pulley (31). Install lockwasher (32) and nut (33).
4. Install driven belt (42) on pulleys (11), (17) (31). When installing belt on pulley (11), install belt in lower pulley groove. See inset B for correct belt travel. Tighten belt in place. Refer to Page 10 for correct adjustment.
5. To replace drive belt (10), insert belt in top groove of center spindle two groove pulley (11). On the 180 tractor, inset A. Insert the drive belt in center spindle top pulley (44).
6. Install belt guard & lift bracket (5) using bolts (8), lockwashers (7) and nuts (6).
7. Install outboard pulley guards (16,37) over pulleys (17) and tighten using capscrews (14) and lockwashers (15).

DISASSEMBLY — INSPECTION — ASSEMBLY

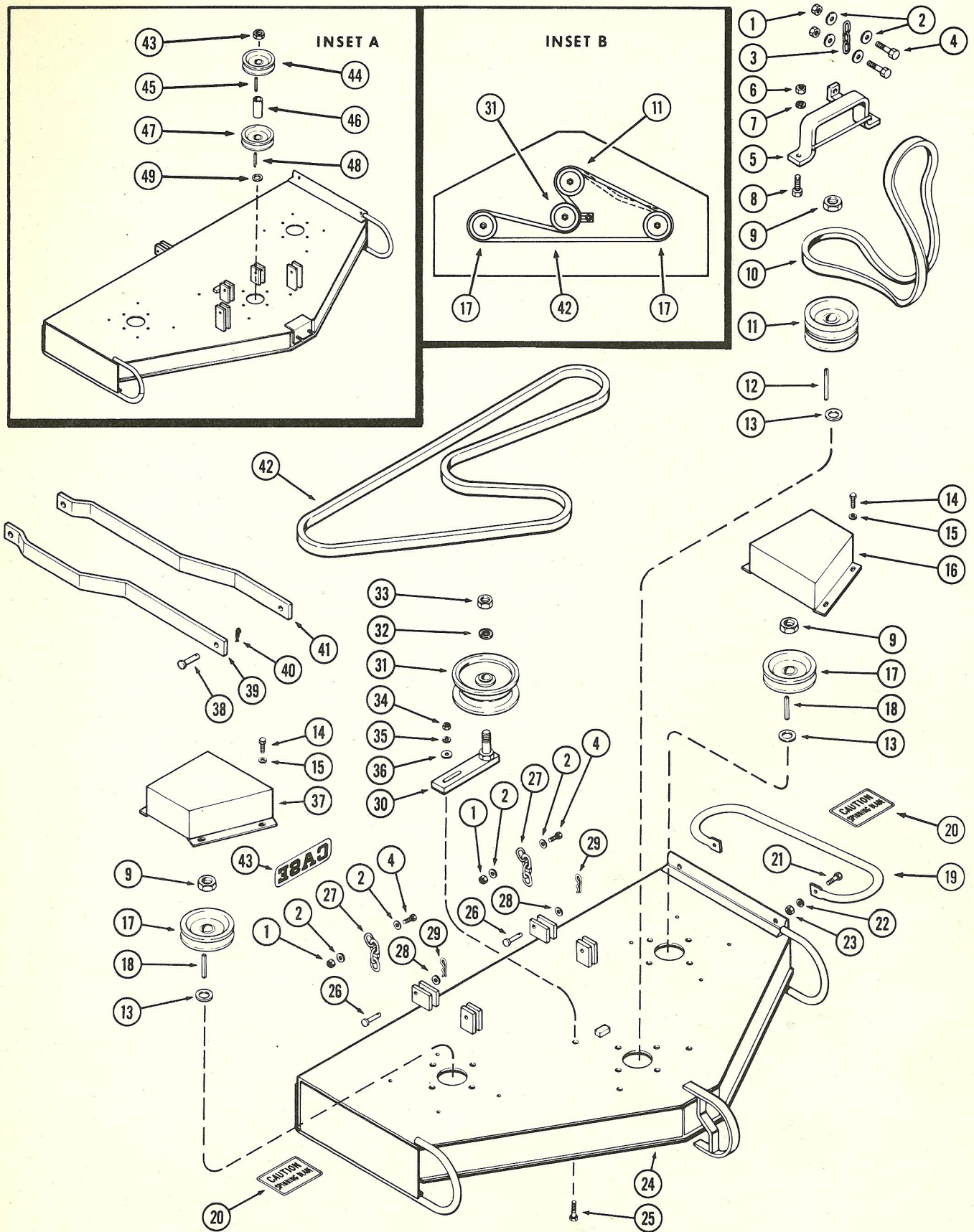


Figure 4

ROTARY MOWER(Lower Components)

(Refer to Figure 5)

Disassembly

NOTE

Disassembly of the lower components can be done only after the upper components have been disassembled with the exception of the blades which can be removed without removing the upper components. Refer to Page 6.

1. Remove nuts (22), washers (21) and bolts (19).
2. Remove cotter pins (23), roller spacers (1) and bracket (20). Rollers (2) can now be slid off of mounting bracket and rod assembly (3).

NOTE

After the upper components have been re-

moved, see Page 6, remove capscrews (4) and washer (5) then items 10 thru 18 can be removed as a group.

3. To remove blades (16), remove capscrews (18) and lockwashers (17).
4. To remove blade guard baffle (8) remove nuts (6) lockwashers (7) and bolts (9).
5. To remove spindle bearings (10) and spacers (11) from spindle housings (12) use a suitable puller or press the bearings from the housings.
6. On 180 tractor mower only, inset A to remove front roller (27), remove cotter pin (25) and shaft (26).

Inspection

With the lower components completely disassembled, the parts can easily be cleaned and inspected for wear, cracks, score marks and burrs. All parts that are worn or damaged must be replaced with the exception of the blades which can be sharpened. After the blades are sharpened they must balance horizontally before installing. See Note and Inset C. Page 9. Check the bearings for pitting and looseness.

Assembly

1. On 180 Tractor mowers only, inset A, line up the front roller (27) in the bracket (24) and install shaft (26) and cotter pins (25).
2. If bearings (10) were removed, press lower bearing (10) into spindle housing (12). Install spacer (11). Press upper bearing (10) into spindle housing. See Inset B.

NOTE

Press bearings (10) in with the numbered side of the bearing in. See inset B.

3. Install blade guard baffle (8), bolts (9), lockwashers (7) and nuts (6).
4. Install spindle housings (12) with capscrews (4) and lockwashers (5).
5. Install blades (16) on spindles (15 and 14) with capscrews (18) and lockwashers (17).

NOTE

When installing blades (16). Always re-

place lockwashers (17) with new lockwashers.

6. Install items 13 thru 18 up thru spindle housings (12).

NOTE

Install upper components refer to Page 6.

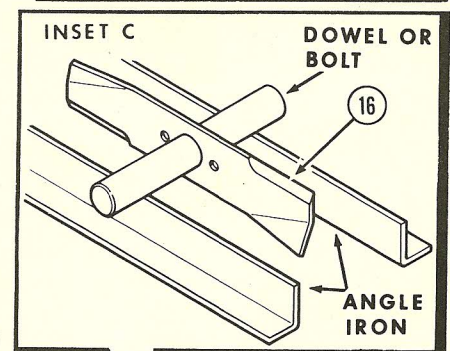
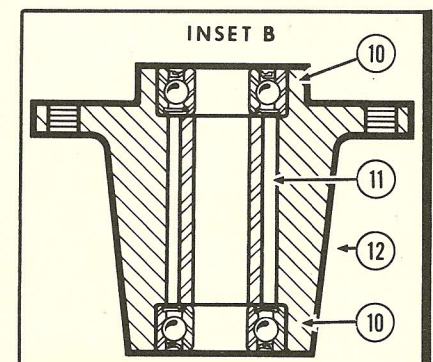
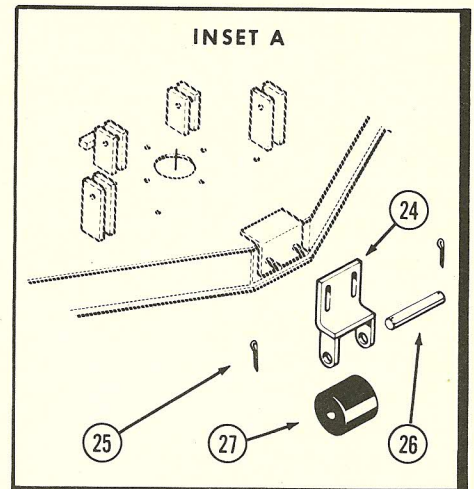
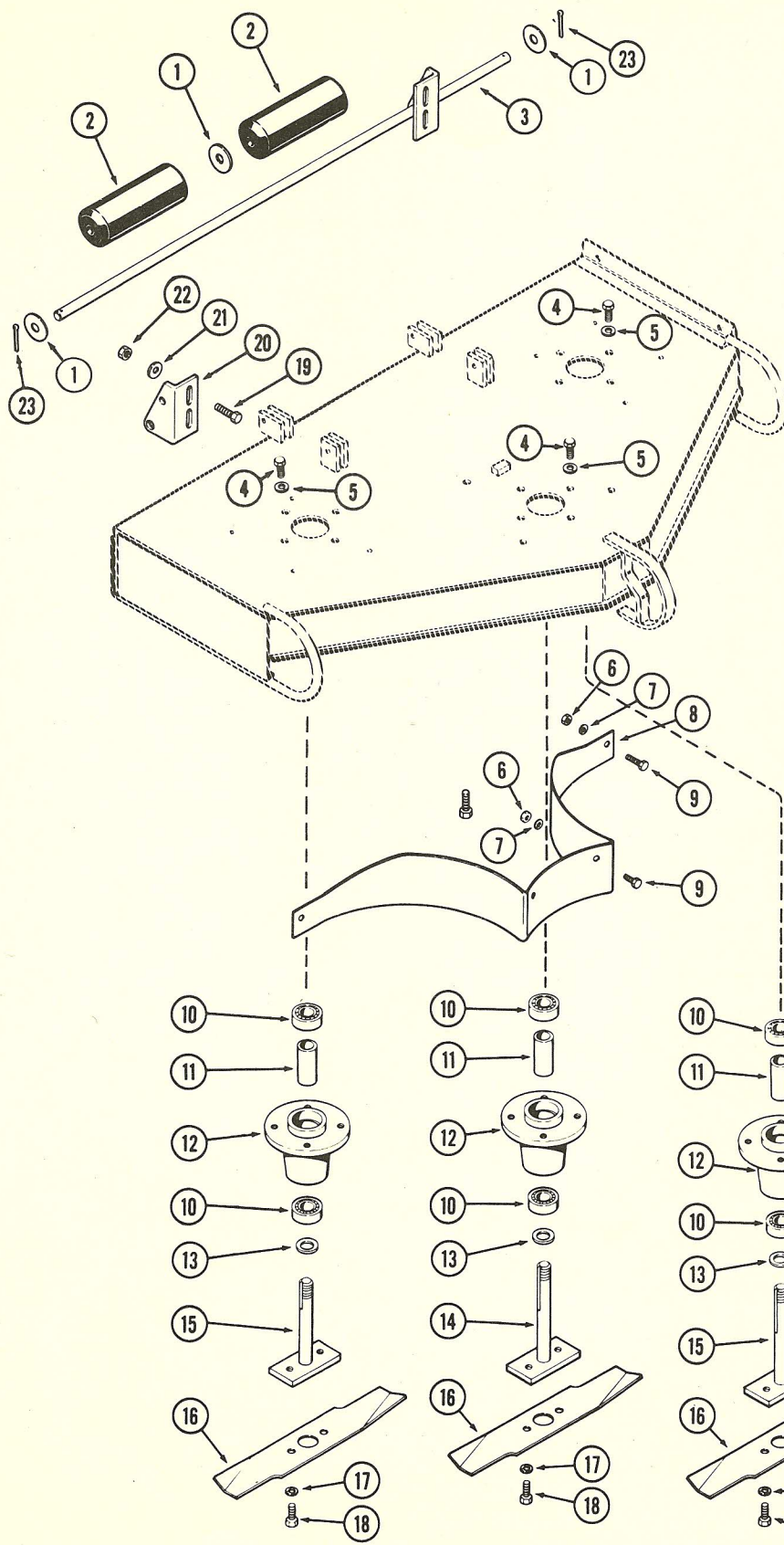
7. Install rollers (2) with one roller spacer (1) on each end of every roller.
8. Before installing the last 7" roller, install bolts (19) through the rear deck and roller mounting bracket (20). Tighten using washers (21) and nuts (22).

NOTE

A 7" roller must always be at each end of the rod assembly (3).

9. Install cotter pins (23).

DISASSEMBLY — INSPECTION — ASSEMBLY



NOTE

After sharpening blades - check balance by inserting dowel or bolt in blade - place between two level angle irons - balanced blade will center itself so cutting edges are parallel with angle iron.

If not, resharpen until balanced or replace with new blade.

CAUTION-unbalanced blades are a hazard and will cause premature wear or failure of bearings (10) and shafts (14).

Figure 5

MOWER ADJUSTMENTS (Refer to Figures 6, 7 and 8)

1. The rear rollers should be adjusted leaving 1 inch between the top of the mower deck (3) and the top of the roller bracket (4), Figure 6.

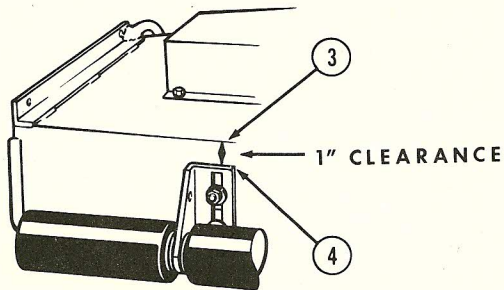


Figure 6

2. To adjust the front roller on the 180 tractor mower, lower the mower on a flat hard surface, concrete or blacktop, and measure from the top of the mower deck to the ground. The front of the deck should be $\frac{3}{8}$ of an inch lower than the rear of the deck.

3. The driven belt must be installed as indicated in Figure 7.

2-3/4 POUNDS AT 1/4\" DEFLECTION

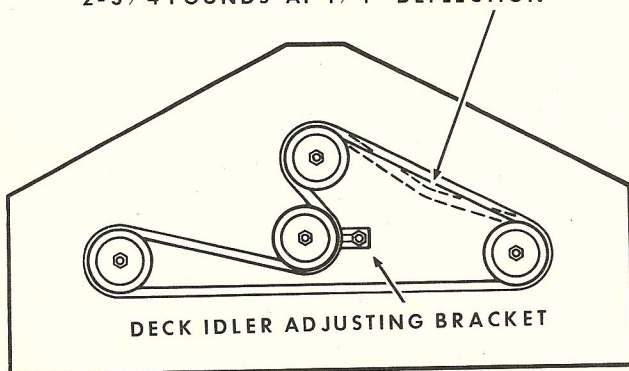


Figure 7

4. To adjust the deck belt, loosen the deck idler adjustment bracket and slide it to the right to tighten. See Figure 7 for proper belt deflection.

5. Adjust the clutch idler belt guide (1) leaving $\frac{1}{8}$ \" between the clutch idler pulleys (2) and the belt guide (1), Figure 8.

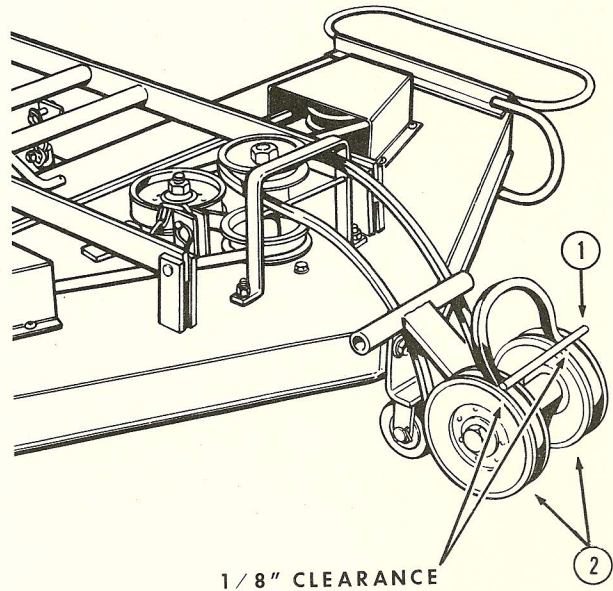


Figure 8

DOZER BLADE

(Refer to Figure 9)

Removal

1. Lower the blade (1) to the ground and pull the two blade pivot pins (2). Remove the blade (1) from the blade carriage (9).
2. Remove push rod (7). It is connected to the lift bracket (4) on the blade and the bottom of the implement lift lever on the tractor.
3. Remove the two lift arms (3); held in place by two clevis pins and two retainer pins.
4. Remove the lift bracket (4) held in place by two retainer pins and a pivot pin (5). On the 130 tractor, it will be necessary to turn the front wheels in order to remove the pivot pin (5).
5. Remove the blade carriage (9) held in place by two retainer pins and a pivot pin (8).

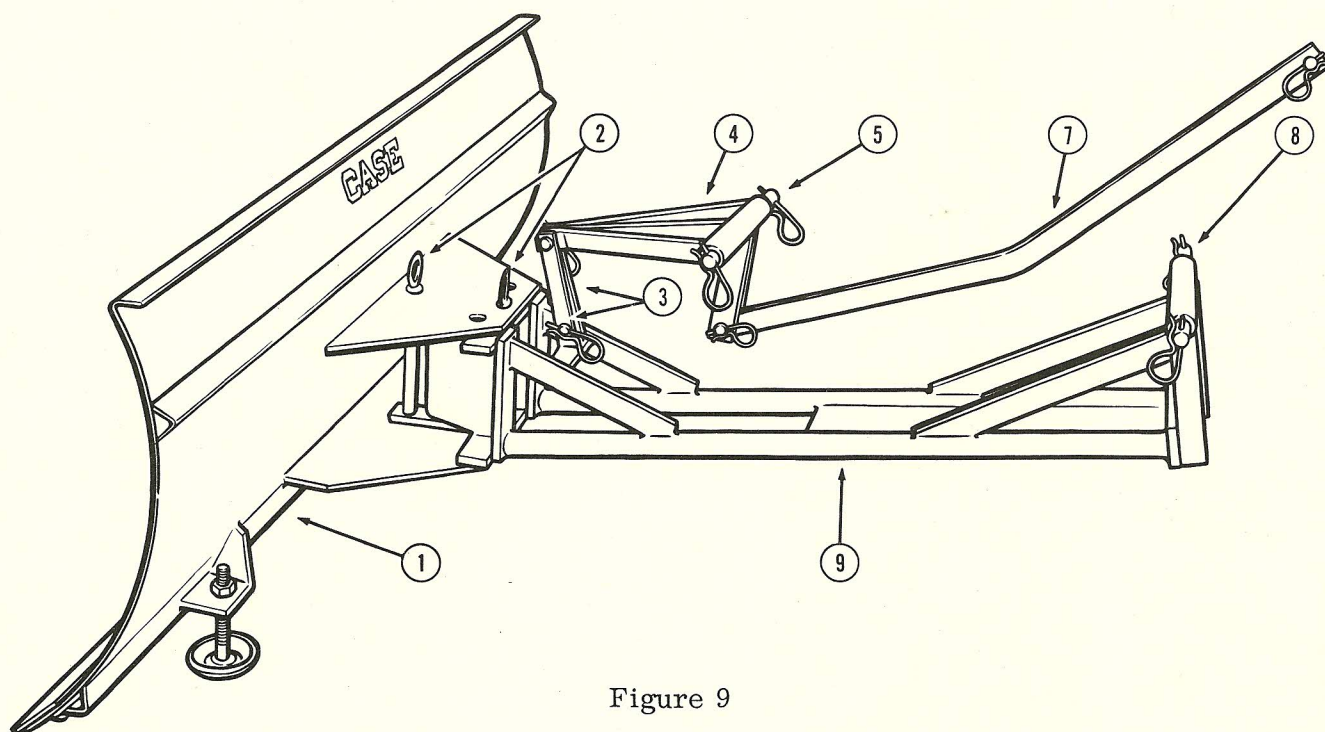


Figure 9

Installation

1. Place the blade carriage (9) under the tractor and line up the holes in the tractor frame beneath the engine with the hole in the carriage. Insert the 5/8" x 10-1/4" pin (8) and install a retainer pin at each end of pin.
2. Connect the lift bracket (4) to the mounting lugs in front of the tractor frame. Use the 5/8" x 8-1/2" pin (5) and two retainer pins.
3. Connect the lift bracket (4) to the blade carriage assembly (9) using the two lift arms (3), two small clevis pins and two retainer pins.
4. Connect the push rod (7) between the bottom of the implement lift lever (offset end connects to the inside of the lift lever) and the mounting lug on the lift bracket (4). Use two large clevis pins and two retainer pins.
5. Mount the blade (1) on the blade carriage (9) and insert the blade pivot pins (2).

SERVICING THE DOZER BLADE

(Refer to Figure 10)

1. The blade cutting edge (18) can be reversed when one side wears down. Do not permit wear to extend to the blade shell (12).
2. Grease all pivot points frequently to prevent rust and wear. If the dozer is used constantly a weekly greasing is recommended.
3. The blade skids (16) control the cutting height of the blade. Adjust the blade skids on a flat hard surface with the cutting edge (18) on the ground. For snow removal a cutting height of 1/4 to 1/8 inch is recommended. For other dozing operations adjust the skids as desired.
4. The blade skids (16) should be rotated periodically so that they wear evenly.

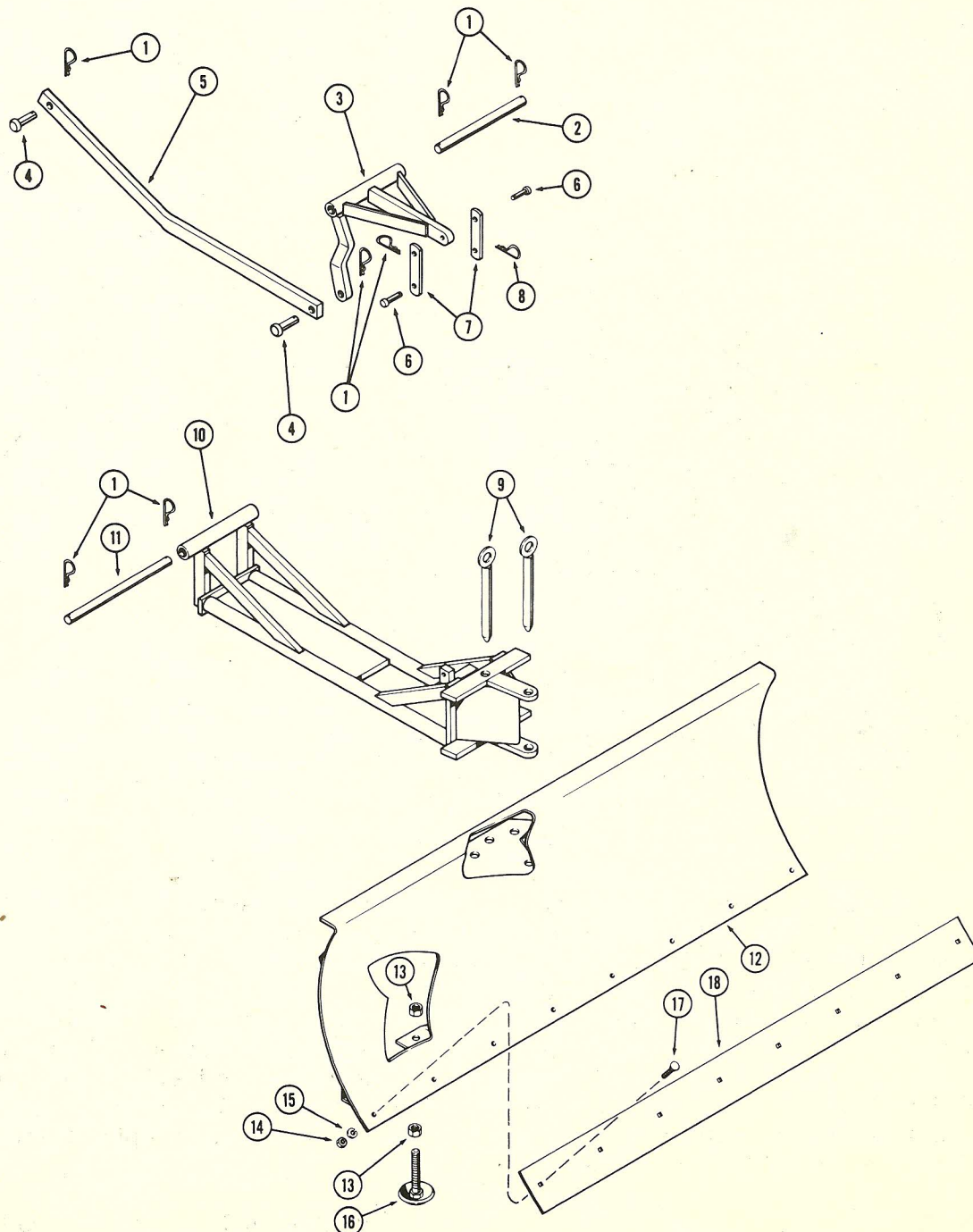


Figure 10