J80 30632

# Operators Manual
# H80 and H84
# Snow Blowers



Win. Form No. 9-35302

## INTRODUCTION

The Model H80, 38" Snow Blower is designed for use on Case Model 220 and 222 Compact Tractors above serial number 9646800. The Model H84, 48" Snow Blower is furnished complete to mount on all Model 220, 222, 442 and 444 Compact Tractors above serial number 9646800.

This manual covers recommended operating procedures, safety suggestions, maintenance information, adjustments and installation instructions. Read this manual carefully before operating your snow blower. Your J I Case Compact Tractor Dealer is well qualified to answer any further questions you might have concerning your snow blower. Also, if the need should arise, his Service Department with factory trained technicians, genuine Case replacement parts and the required facilities is in a position to provide proper repairs in the shortest time possible.

The definitions "Right, Left, Front and Rear" as used throughout this manual relate to the tractor and snow blower when the operator is seated facing forward in the normal operating position on the tractor.

LOOK FOR THIS SYMBOL TO POINT OUT IMPORTANT SAFETY PRECAUTIONS.

**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.



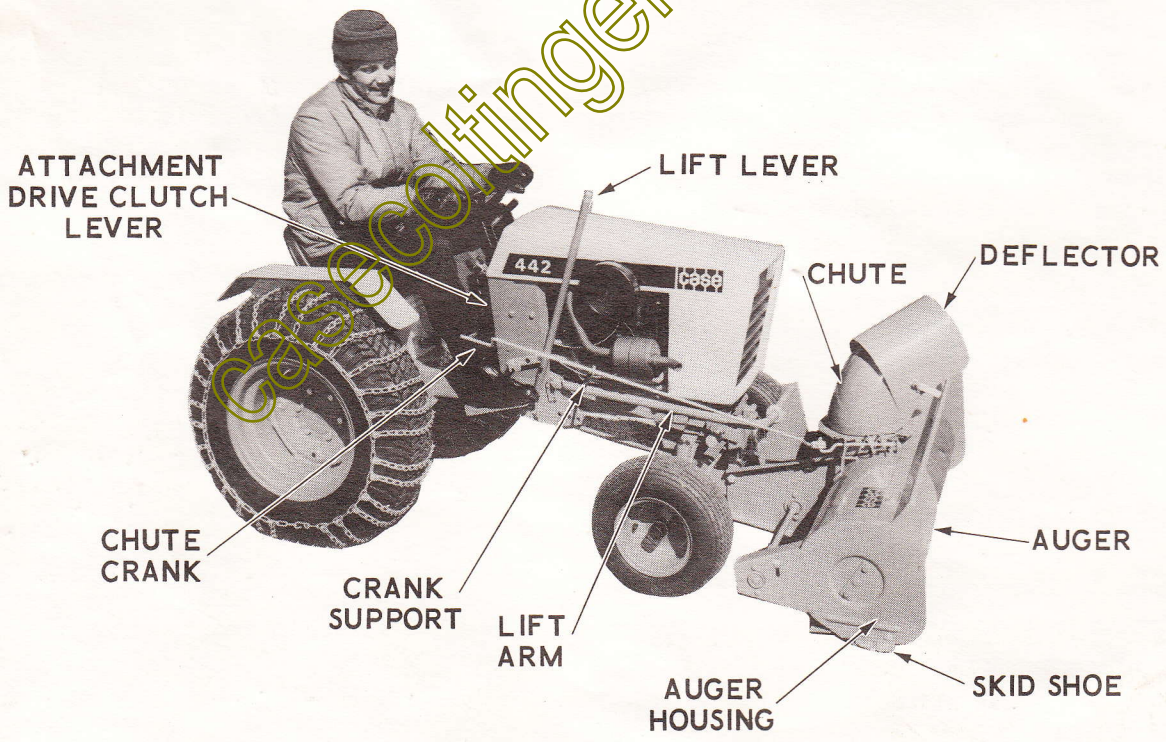


Figure 1.

## OPERATING CONTROLS

The principle components and controls of the tractor and snow blower are identified in Figure 1 with the same description used throughout this manual. Refer to the tractor Operator's Manual for identification of all tractor controls.

The chute crank, attachment drive clutch and lift lever controls are all conveniently located near the operator's position on the tractor. The auger is placed in motion by pulling outward on the tractor attachment drive clutch lever. The chute crank adjusts the direction of snow discharge and the deflector angle controls the distance the snow is blown.

## OPERATING SAFETY SUGGESTIONS

Read Safety Precautions Carefully.



1. Regard your snow blower as a piece of power equipment and be sure this is understood by all who operate it.
2. Never allow children or young teenagers to operate the tractor and snow blower.
3. Be sure you know how to stop the tractor and auger at a moment's notice.
4. Instruct children to keep away from the area of operation at all times.
5. Check the tractor and blower to make certain both are in good operating condition.
6. Fill gas tank out of doors and avoid spilling gasoline. Do not fill tank with gasoline while smoking or while engine is running.
7. Give complete and undivided attention to the job at hand.
8. Keep the area clear of all persons, particularly small children.
9. Stop engine and disengage attachment drive clutch when tractor is unattended.
10. Disengage attachment drive clutch when someone approaches.
11. Do not allow anyone other than the operator to ride on the tractor or to be towed behind.
12. Extreme caution should be exercised under slippery conditions. Reduce forward speed. Install tire chains and wheel weights to traction wheels for added safety.
13. DO NOT ATTEMPT TO CLEAR AUGER OR DISCHARGE CHUTE WHILE ENGINE IS RUNNING.
14. When changing position of the deflector, disengage the attachment drive clutch and stop engine.
15. Never direct snow discharge at people or buildings.
16. Disengage attachment drive clutch when transporting.

## OPERATING TIPS

1. Whenever possible, discharge snow down wind.

2. Do not attempt to remove ice or hard packed frozen snow.

3. Always overlap each pass slightly to assure complete snow removal.

4. Use extreme care when freeing a frozen or stuck auger or chute. Always turn off the tractor first.

5. If tractor is equipped with Hydraulic Lift, operate with the lift lever in the "float" (full forward) position. Never apply down pressure to the snow blower. With the hydraulic lift lever in the "float" position, the skid shoes will remain on the surface even though operating on uneven terrain.

## METHODS OF SNOW REMOVAL

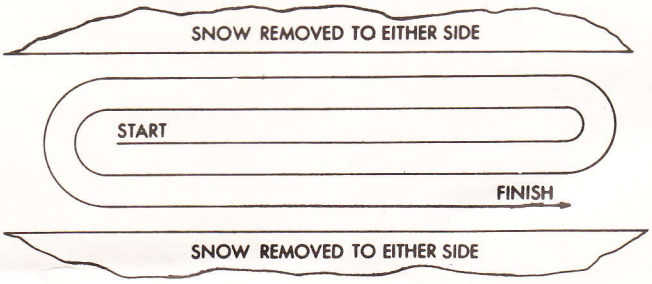


Figure 2

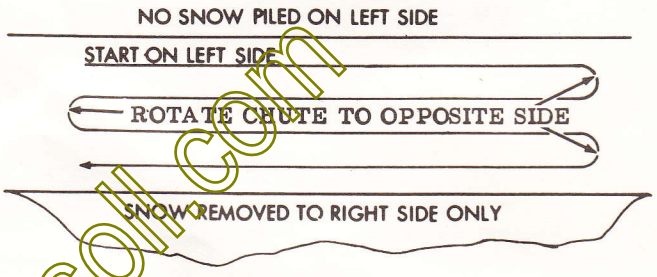


Figure 3

A definite pattern of operation is required to thoroughly clean the snow area. This pattern will avoid a second removal of snow and avoid blowing snow in unwanted places. Where it is possible to blow snow to right and left, as on a long driveway, it is advantageous to start in the middle. See Figure 2. Work from one end to the opposite end blowing snow to both sides without changing direction of discharge chute. If snow can only be blown to one side of the driveway, start on the opposite side. See Figure 3. At the end of each pass, rotate chute to opposite side for the return pass. At the end of each succeeding pass, rotate chute to opposite side to maintain direction of throw into the same area.



## TIRE CHAINS AND WHEEL WEIGHTS

The use of tire chains and wheel weights, Figure 4, is recommended for snow removal operation. The extra traction resulting gives the tractor operator maneuverability in handling heavy snow removal jobs. These accessories are sold by your dealer and are not included with the snow blower.

The same wheel weights can also be attached to the front of the tractor when garden plowing or tilling by adding the Model H18 Front Weight Bracket Kit.

For added traction on soft ground, snow or ice.

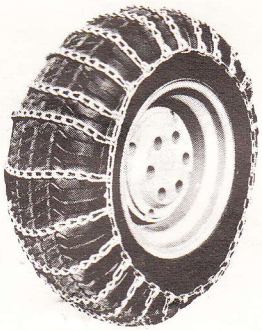

Figure 4

## PREPARING FOR SNOW REMOVAL

Disengage the attachment drive clutch when starting engine and when transporting the snow blower. Before the first snowfall, the area in which snow removal is to take place should be cleared of all stones, sticks, etc., which might be picked up by the snow blower. OBSTACLES SUCH AS DRIVEWAY MARKERS, WATER OR GAS SHUT OFFS, ETC. SHOULD BE MARKED SO THEIR LOCATIONS UNDER THE SNOW ARE VERY OBVIOUS.

To become familiar with the controls, operate the tractor and snow blower in a clear area before removing snow. The more familiar you become with the snow blower, the better results you will have in its use.

A light coat of wax applied to the inside surfaces of the discharge chute and deflector will help to prevent snow and slush from sticking. The inside of chute and deflector should be waxed several times during the snow removal season. Use any good commercial grade of paste wax or spray silicone which is available from your dealer or from your local hardware store.

Allow ample engine warm up time before starting snow removal.

Best results are obtained when snow is removed as soon as possible after it falls.

Check each item covered in the "ADJUSTMENTS" and "MAINTENANCE" sections of this manual before operating the snow blower.

## SNOW CONDITIONS

Snow removal conditions vary so greatly from the first light fluffy snowfall to wet or heavy snow that operating instructions must be flexible. The operator must operate according to depth of snow, wind direction, temperature, and surface conditions.

The auger speed and blowing distance are directly related to the engine speed. For maximum removal volume and distance, maintain high engine RPM (three-quarters to full governed throttle). Operating at lower throttle settings will reduce the blowing distance and increase fuel economy. Always operate the tractor in low range for safe and efficient snow removal. The speed control lever should be operated to provide a ground speed most compatible with the snow removal conditions.

In extremely deep snow, raise snow blower into transport and remove top layer first. Lower the snow blower to the ground and repeat process to remove the balance of snow. Working with repeated passes into and out of drifts will eventually move even the deepest of snow piles.

## ADJUSTMENTS

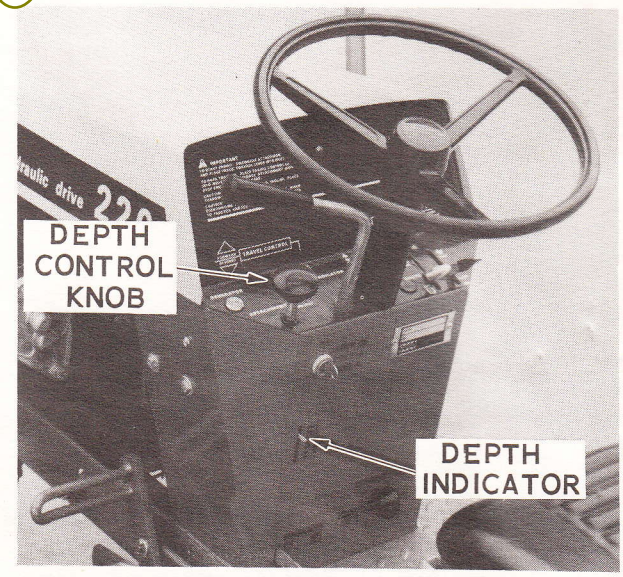


Figure 5.

1. Depth Control Knob - See Figure 5. Turn the Depth Control Knob to position the Depth Indicator at the top of its notch when operating the snow blower. This position will permit the skid shoes to remain in contact with the surface being cleared even though it may not be level.

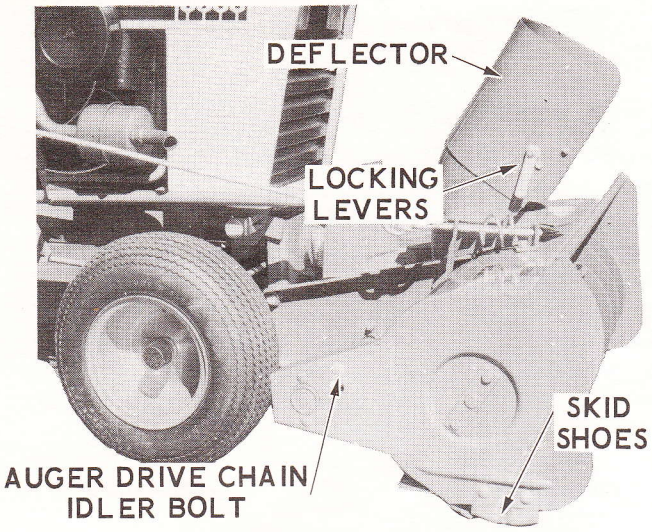


Figure 6.

2. Deflector - See Figure 6. The deflector has a slotted hole on each side for adjustment. To change the angle of the deflector, loosen the two locking levers. By angling the deflector upward, the snow will be cast higher and further from the tractor. When angled downward, the deflector will direct the snow closer to the ground and it will be cast a shorter distance. Tighten the locking levers when the deflector is adjusted to the desired angle.

3. Skid Shoes - See Figure 6. Slotted mounting holes are provided to obtain the desired clearance between the base of the auger housing and the surface of the area to be cleared. When operating on a smooth surface such as cement or asphalt, the skid shoes can be set at the lower end of the slots. If operating on a rough surface such as gravel or earth, the skid shoes should be set at the upper end of the slots to prevent foreign material from entering and possibly damaging the snow blower.

4. Auger Drive Chain - The chain slack at the lower section should be held to between 3/8" and 1/2" under normal finger pressure midway between the drive sprockets. Adjust the idler block bolt on the upper chain section, up or down, as necessary to maintain proper slack. Should the available adjustment for the idler block be used up, the overall chain length can be decreased by removing one link and adding the offset link furnished with snow blower. The idler block can also be rotated or turned around if the chain wears in excessively.



## MAINTENANCE

Never attempt to service or make adjustments while the snow blower or tractor is running.

Grease the discharge chute control crank, chute guides and the chute base ring. Figure 7, daily to keep the crank turning freely.

Once a month during season or every 25 operating hours, lubricate the auger drive chain with Case Heavy Duty Chain and Cable Lubricant available through your Case Compact Tractor Dealer.

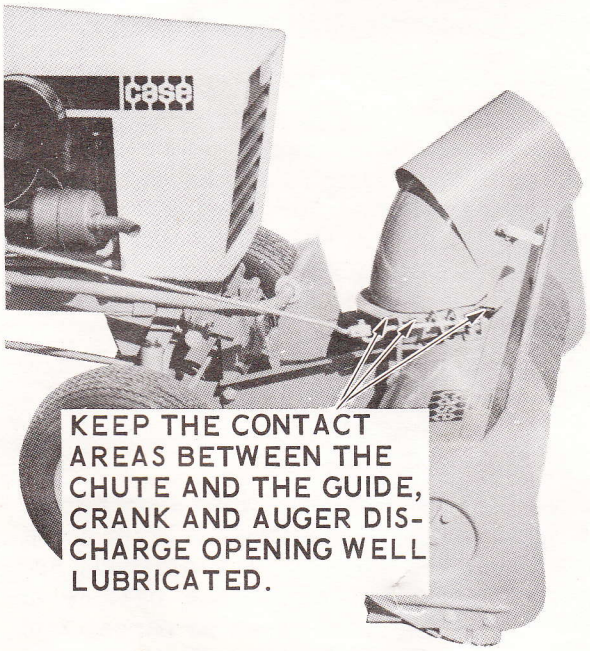


Figure 7.

*A LITTLE DIRT CAN CRIPPLE*

## CHAINS and CABLES

Check these high quality features:

- Provides constant lubrication, permitting a smooth running chain or cable.
- Allows maximum load carrying capacities on high or low speed chains.
- Reduces friction drags on sudden overloads.
- Prevents dripping on slow speed or idle chains.
- Penetrates inward—flows freely into the links and strands.
- Serves the purpose of a high quality rust preventive to exposed or idle chains and cables.
- Helps prevent cable and chain breakage and premature failure.


Figure 8.

At the end of the snow season, the following steps are recommended:

1. Remove the snow blower from tractor following the procedure outlined at the end of this manual.

2. Wash off any salt deposit which may have dried on the auger and chute. Paint or cover exposed metal with a light coat of oil. Case Touch-up Enamel is available through your Case Compact Tractor Dealer.

3. Service the snow blower following lubrication instructions above. Oil the auger drive chain thoroughly using Case Chain and cable Lubricant to prevent rust from forming.

4. Store snow blower in a dry place.

- Glossier Than Most
- Gloss Lives on While Other Chalk
- Matches Original Paint
- Exceptional Hiding Power
- Same Formula As Original Equipment Paint
- Outstanding Package Stability

CASE PAINT is Tough

Stays Glossy — Is Stable
Hides Better — Matches the Original

Case Paint goes to Florida to look better longer. After a paint sample passes the Case weather-ometer cycle, it must endure a more severe test in sunny Florida. In the subtropical region, West of Miami, the deteriorating action of high temperature, relative humidity, annual rainfall, salt atmosphere and solar radiation combine to attack Case paint. Only the best paints survive to earn the "Genuine" Case Label.

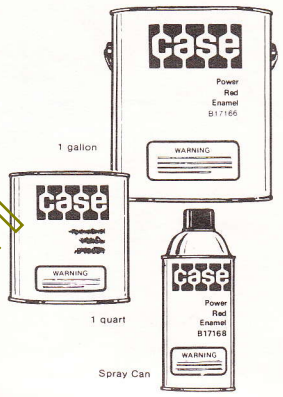


Figure 9.



## INSTALLATION

A. Locate the tractor on a smooth and level surface. Check tires for equal and recommended pressures.

**NOTE** The front tires should be inflated to 20 psi when the snow blower is installed.

B. Before attaching the snow blower, lay out the individual parts as illustrated in Figure 10. To simplify the original installation, all components are preassembled as far as practical and the attaching hardware is installed in its proper location. Two drive belts are included with the 48" Model H84 snow blower so it can be mounted on either high or low clearance tractors.

C. The following installation sequence is the same whether the tractor is equipped with hydraulic or mechanical lift.

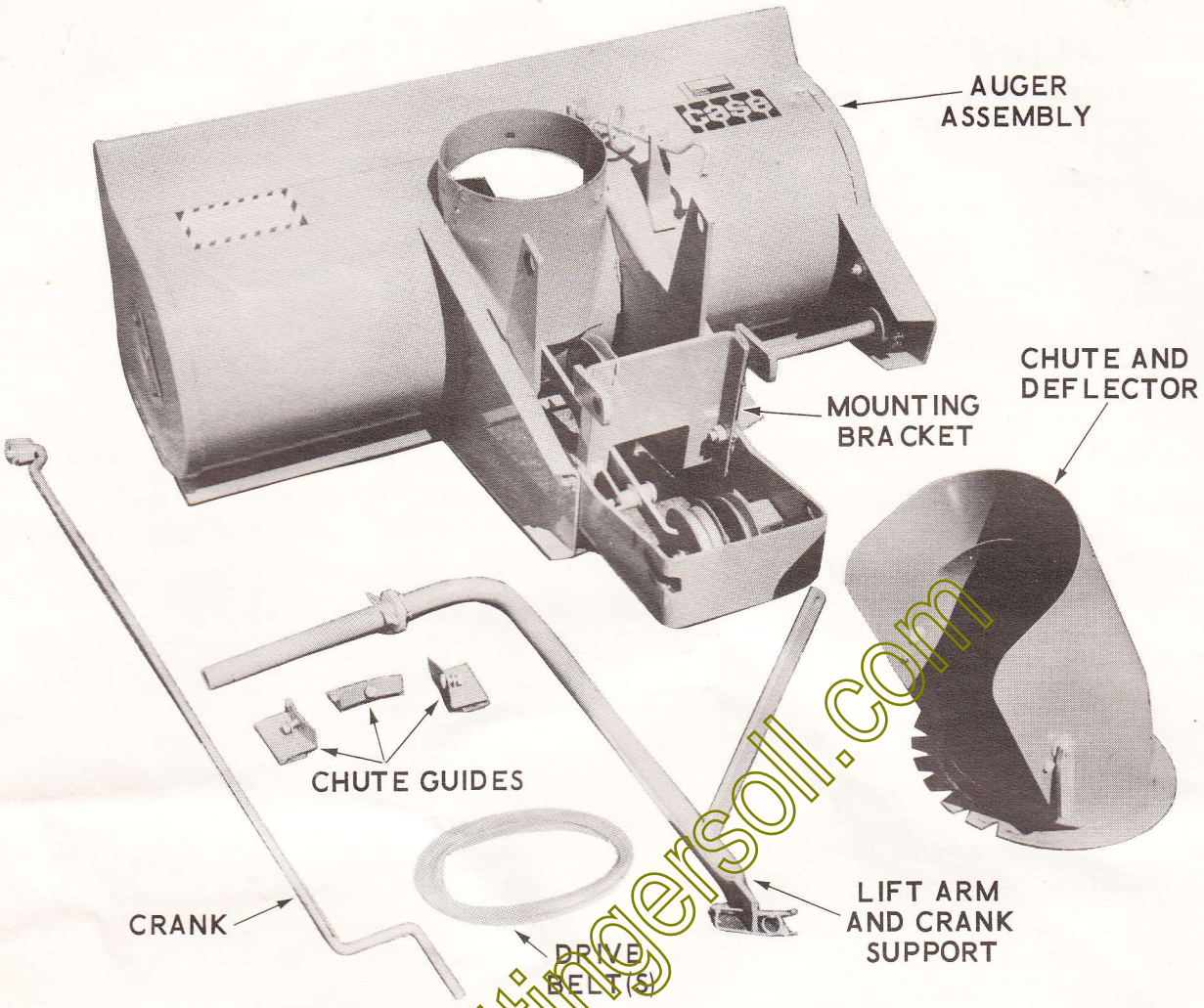


Figure 10.

1. See Figure 11. Position the auger assembly so the tractor can be lined up with the mounting brackets.

2. Roll the tractor up to the auger assembly and align the anchor pins and snap pin receptacles with the mounting brackets. Engage and lock the brake to hold the tractor while attaching the snow blower.

3. Slide the auger to engage the mounting bracket notches with the anchor pins on the tractor.

4. Lock the tractor snap pins in the "open" position. Pivot the mounting bracket upward and into the tractor snap pin receptacles. Release the snap pins and pivot the bracket until they are locked as shown in Figure 12.

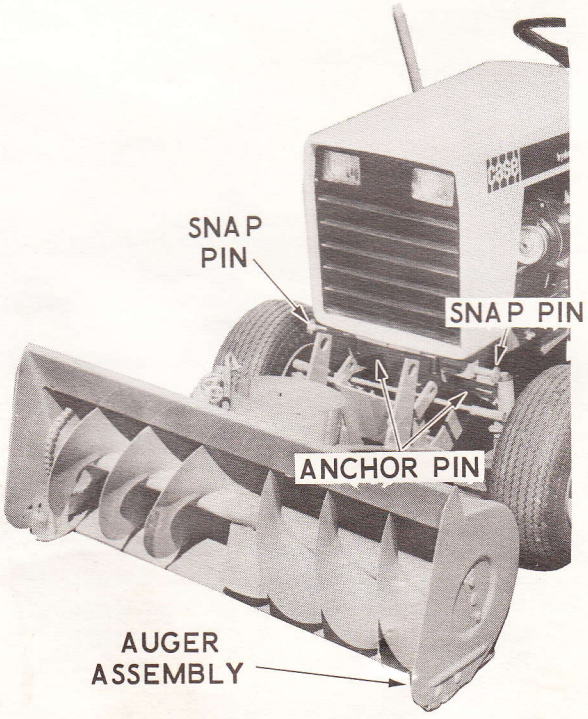


Figure 11.

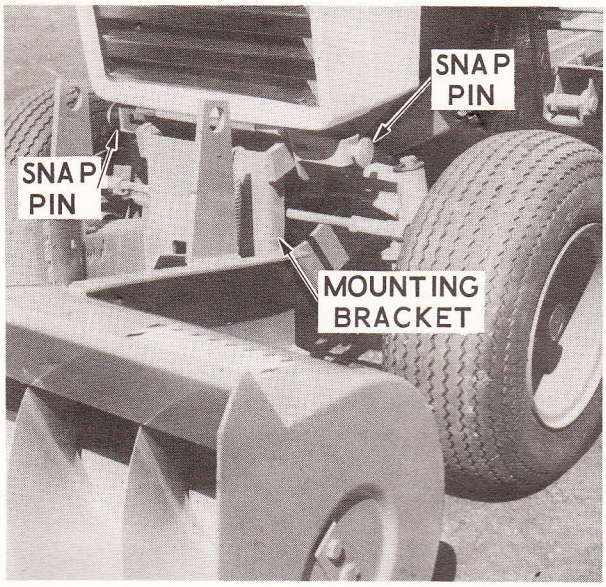


Figure 12.

5. Remove the safety pins from the lift arm. With the plain washer located next to the cotter pin as shown in Figure 13, place the lift arm through the auger lift brackets.

6. Lower the lift lever to align the lift arm. Connect the lift arm to the lift lever pin with the plain washer and safety pin. Install the other safety pin through the lift arm at the inside of the right lift bracket.

7. Apply a coat of grease around the outside of the discharge spout as shown in Figure 13.

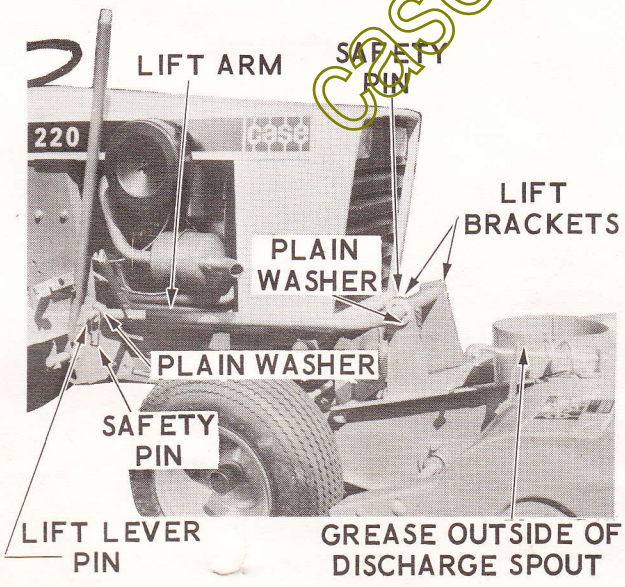


Figure 13.

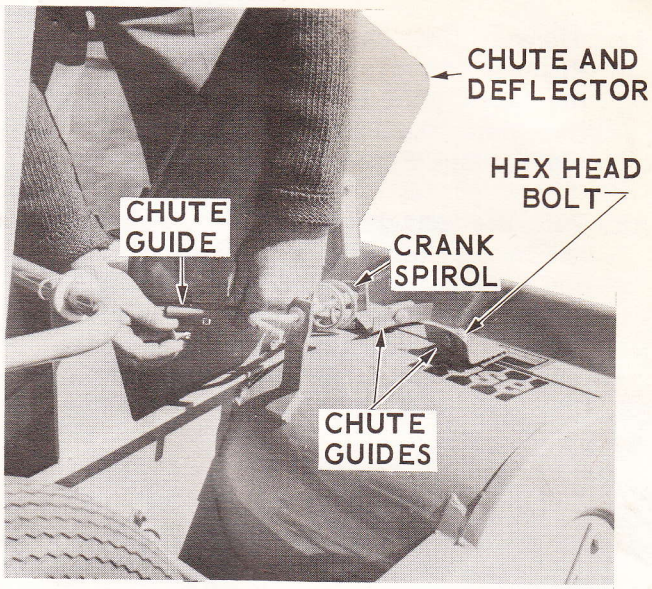


Figure 14.

8. Apply a coat of grease to both sides of the notched chute base ring. Place the chute over discharge spout and engage the base ring notches with the crank spirol.

9. See Figure 14. Individually align the two side chute guides with the square holes in the discharge spout and secure with round head bolts. Install the bolts with the round head at the inside of the discharge spout.

10. Install the front chute guide using the hex head bolt. This bolt should be installed from the outside with the nut and lockwasher to the inside.

**NOTE** Check to make certain the three guides are square with the chute base ring to prevent the chute from binding when turning the crank.

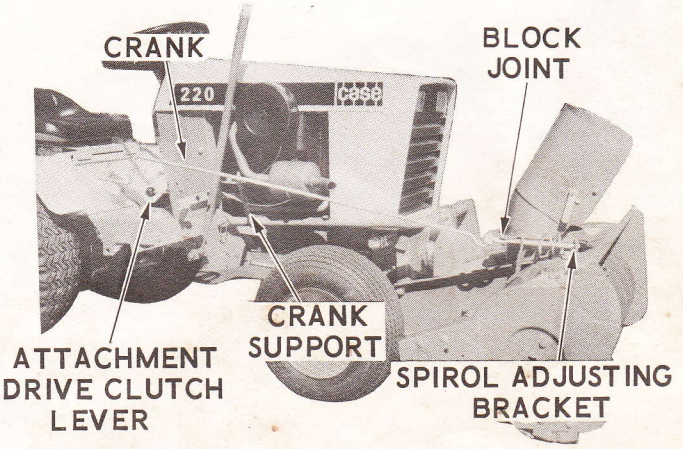


Figure 15.

11. Thread the handle end of the crank through the crank support and connect the block joint to the crank spirol using the plain washer and cotter pin provided. (See Figure 15.)

12. Pull the attachment drive clutch lever out to the "on" position. Raise the hood and remove the spark plug wire as a safety precaution. Insert the drive belt between the fan and heat exchanger and onto the attachment drive clutch pulley.

**NOTE** Two belts are included with the 48" Model H84 Snow Blower to permit mounting on both high and low clearance tractors. If mounting this snow blower on a Model 442 or 444 tractor, use the longer of the two belts. Use the shorter of the two belts when mounting this snow blower on a Model 220 or 222 tractor.

13. See Figure 16. Place the belt under the "fixed" idler pulley and around the "auger shaft" pulley. Push down on the "spring idler" pulley lever and locate the belt on the underside. Check the belt to make certain it is correctly installed with the "vee" side in the vee groove pulleys and the "flat" side in the flat groove idler pulley.

14. Push the attachment drive clutch lever into the "off" position and manually turn the auger to check the belt for proper operation. Reconnect the spark plug wire.

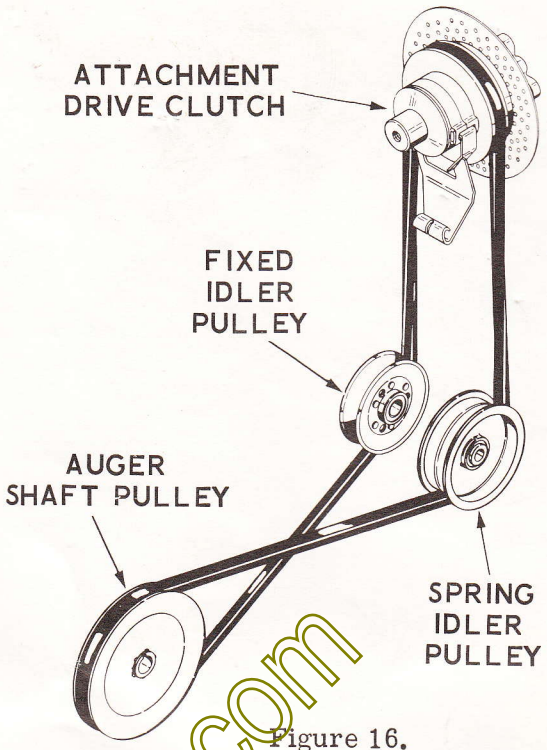

Figure 16.

15. See Figure 15. Check the operation of chute crank. If the chute should turn hard, check to see if the crank spirol is binding in the chute notches. If necessary, loosen the spirol adjusting bracket bolt and shift the bracket to relieve the bind. Tighten the bolt following adjustment.

**IMPORTANT** Before operating the snow blower, review and follow the recommendations outlined in the Adjustments and Maintenance sections of this manual.

## REMOVING THE SNOW BLOWER

1. Disconnect spark plug wire as a safety precaution, pull the attachment drive clutch lever out to the "on" position.

2. Push the "spring idler" pulley down to loosen and remove the belt. Push the clutch lever back into the "off" position and reconnect the spark plug wire.

3. Disconnect the lift arm from the tractor lift lever. Remove the safety pin from the front of the lift arm. Slide the lift arm part way out of the auger lift brackets to clear the tractor. Swing the lift arm with crank attached over the auger assembly.

4. Pull the snap pins out to release the mounting bracket and back the tractor away.

## REMOUNTING THE SNOW BLOWER

1. With brakes locked, slide auger assembly to position mounting bracket slots onto the anchor pins. Pivot the mounting bracket upward and engage the snap pins.

2. Connect lift arm to tractor lift lever and secure with plain washers and safety pins at both front and rear ends.

3. Disconnect spark plug wire as a safety precaution. Pull the clutch lever out and install the belt as explained in paragraph 13 of the Installation Section.

**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.



All of the information and instructions contained in the updated Operators Manual for H80 and H84 snow blowers 9-35302 R-1 dated 10/22/71 are applicable to the J series snow blowers.

The significant change in the J series are longer drive belts to accommodate installation on 1973 model tractors. Following is the drive belt cross reference chart for interchange installation between H series and J series snow blowers.

| | | |
|---|---|---|
| H80-C16498 | J80-C18706 | Low clearance tractor belt |
| H84-C16499 | J84-C18707 | High clearance tractor belt |

Printed in U.S.A. 40¢ FJNBO

# INSTALLATION INSTRUCTION SUPPLEMENT

## MODEL H80 SNOW BLOWERS, S/N F20182 AND ABOVE

## H84 SNOW BLOWERS, S/N G20205 AND ABOVE

1. In order to reduce the size of the shipping carton and hold transportation costs to a minimum the Mounting Bracket is detached from the Auger Assembly.

   Position the Mounting Bracket between the Auger Adapter Plates as shown in Figure 10. Insert a spacer in each of the Adapter Plates. Bolt the Mounting Bracket to the Adapter Plates with the plain washers to the outside and lock nuts at the inside.

2. Three round head bolts are furnished to attach the chute guides to the discharge spout instead of two as shown in Figure 14. Install the bolts at the two side guides with the round heads to the inside. For ease of assembly, install the front guide bolt with the nut and lockwasher to the inside.

3. The heavy duty skid shoes can be rotated from one side of the blower to the other for increased life when the leading edges wear down.
   The shoes can be installed with the skids facing either inward or outward. If the skids are installed inward they will protect the cutting edge by keeping it 3/16" higher than the skids when they are adjusted to the "minimum" clearance position. If the skids are installed inward the nuts and lockwashers must be to the inside to provide a "smooth" outside surface.

   If the shoes are installed with the skids to the outside they can be adjusted further upward if desired to place the cutting edge in direct contact with a hard level surface such as a concrete or asphalt driveway. If installed in this manner the nuts and lockwashers can be to the outside. This installation is not recommended when operating on dirt, gravel or uneven surfaces.

4. The replaceable cutting edge can also be reversed for increased life when the leading side wears down.

5. Auger Drive Chain Adjustment -- The idler block described on page 6, paragraph 4, has been eliminated. The two auger mounting hubs have four holes in an eccentric circle around the auger mounting shaft. The hubs also have an orientation hole near the shaft. Chain slack at the lower section should be held to between 3/8" and 1/2" under normal finger pressure midway between the drive sprockets.

   When adjustment is necessary, remove the two bolts from the right hand mounting hub and rotate the hub in either direction until correct chain tension is obtained and reinstall the two bolts. Important - To keep the chain in line with the auger sprocket, rotate the left hand mounting hub to locate the orientation hole in the same position as the right hand hub.

   Turn the auger to make certain there is no interference with the housing. If interference is encountered, remove the two bolts from the right hand mounting hub and rotate the hub in the opposite direction until correct tension is obtained. Reset the left hand hub to place the orientation hole in the same location as the right hand hub.

   Should the available adjustment on the auger mounting hubs be used up, the overall chain length can be decreased by removing the offset (half) link from the chain.