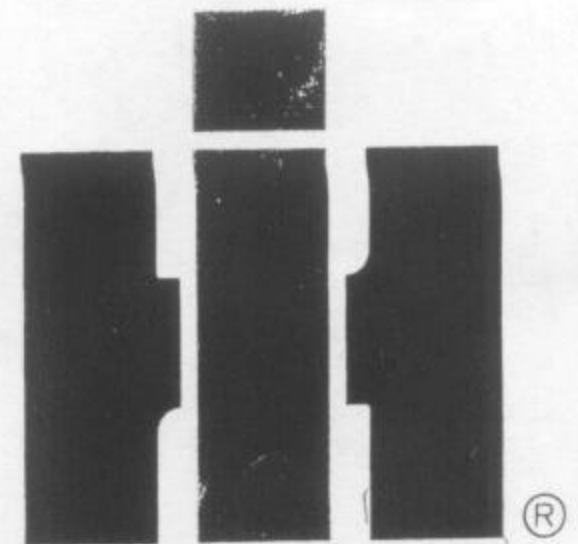


INTERNATIONAL[®]
H-42 and H-48
SNOW THROWERS

SETTING UP INSTRUCTIONS

INTERNATIONAL[®]

OPERATOR'S MANUAL



TECHNICAL PUBLICATIONS AVAILABLE

Your International Harvester Dealer and his factory trained servicemen are best qualified to service your equipment. Up-to-date instructions and adequate special tools are also a part of your Dealer's service facilities.

This Operator's Manual was prepared to instruct you in proper operation and maintenance of your equipment. If you desire additional information you may purchase Service Manuals and/or Parts Catalogs. Additional copies of the Operator's Manual are also available.

Fill out the order blank and forward together with your check or money order in the appropriate amount (U.S. Funds) to:

International Harvester Company

PRINTING AND
DISTRIBUTION SERVICES

807 Blackhawk Drive
Westmont, Illinois 60559

Attention: Cashier

-----Cut Along This Line-----

Title	Number	Qty.	Price Each
Operator's Manual			
International H-42 and H-48 Snow Throwers	1 096 550 R		2.50
Parts Catalog			
International H-42 and H-48 Snow Throwers	CPE-2		8.90

TOTAL _____

Cut Along This Line

Please Print

Name _____

Street Address _____

City _____

State _____

Zip Code _____

Date _____

Signed _____

Do not send cash or stamps

Prices subject to change without notice.

TO THE OWNER

Your new International Harvester snow-thrower is designed to meet today's exacting operating requirements. The ease of operation, and ability to adjust to various conditions lighten your work and shorten your hours on the job.

You are urged to consult your International Harvester Dealer concerning unusual conditions or special applications. Let the experience of your dealer and the organization associated with him serve you.

Be sure to read the instructions for Adjusting and Operating in this manual. Check each item referred to and acquaint yourself with the adjustments required to obtain safe, efficient operation and maximum trouble-free service. Remember, a machine which is properly lubricated and adjusted saves time, labor and fuel.

After the operating season, thoroughly clean your snow-thrower and inspect it. Preventive maintenance pays dividends. Your dealer has original-equipment parts which assure proper fit and best performance. He is able to recondition your equipment to a like new condition.

When in need of parts, always specify the model number and serial number of the snow-thrower.

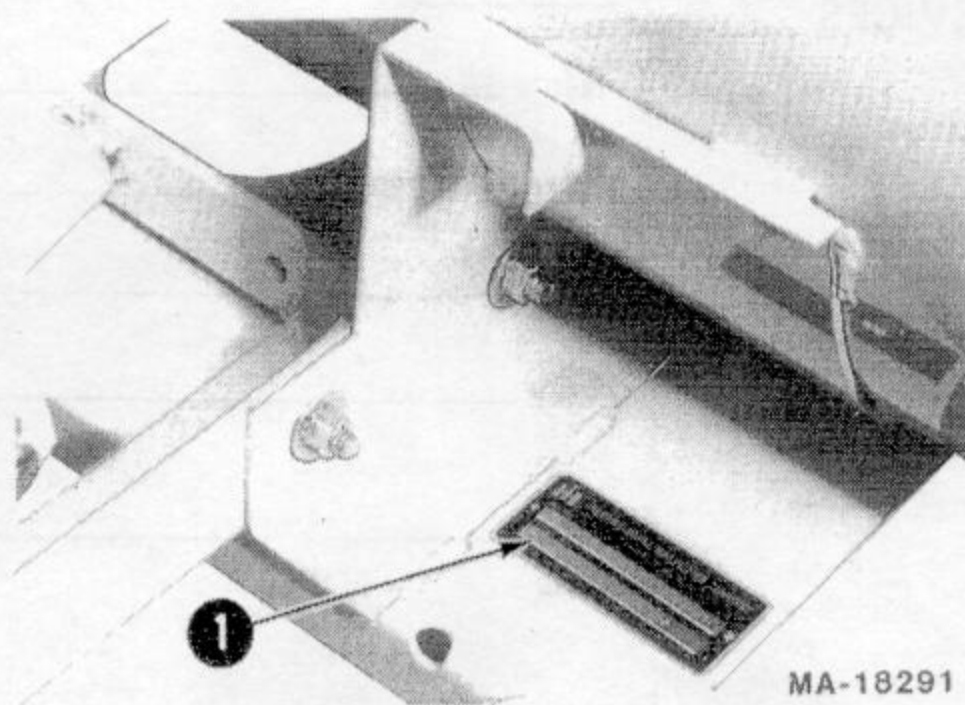
The model and serial number plate is located on the right rear of the snow-thrower housing.

Additional copies of this manual may be ordered from your International Harvester dealer at a nominal price.

This manual is for Snow Throwers with Serial Numbers:

H-42 — 3110043U008001 and above

H-48 — 3110048U008001 and above



1 - Snow thrower serial number _____

CONTENTS

TO THE OWNER	Inside Front Cover
WORK SAFELY – FOLLOW THESE RULES	2, 3
ENERGY CONSERVATION	4
INTRODUCTION	5 to 8
ADJUSTING AND OPERATING	9 to 18
General	9
Snow Conditions	9
Operating Speed	9
Deep Drifted Snow	9
Operating Tips	9
Method of Operating	9
Tire Chains	10
Lift Assist Spring	11
Runners	12, 13
Discharge Chute, Deflector Cap and Drive Tube	14
Starting and Stopping the Snow Thrower	15
Rotor/Collector Drive Chain	16, 17
Drive Belt Tension	17
Belt Removal and Replacement	18
Shear Pin	18
Support Stand	18
Lift Height	19
DETACHING AND ATTACHING	20 to 26
SETTING UP	27 to 29
LUBRICATION	27
General	27
Lubrication Fitting Grease	29
Lubrication Guide	30
STORING THE SNOW THROWER	30

WORK SAFELY — FOLLOW THESE RULES



Instructions given with this symbol are for personal safety. Be sure you and your workers follow them.

A CAREFUL OPERATOR IS THE BEST INSURANCE AGAINST AN ACCIDENT

BEFORE STARTING



CAUTION! Before handling ANY equipment, READ THE OPERATOR'S MANUAL.

MA-16875

Misuse or modification of this machine can cause:

- mechanical breakdown,
- property damage,
- injury or death.

Know how to use the controls and how to stop the tractor and snow thrower quickly. Read the tractor and implement operator's manuals thoroughly.

Do not operate the equipment while wearing loose clothing such as a scarf, which may be caught in the rotating parts of the machine. Wear sturdy footwear of the type which will improve footing on slippery surfaces.

Thoroughly inspect the area where the snow thrower is to be used and remove all stones, branches or any objects which might be thrown and cause personal injury or damage.

Carefully supervise inexperienced operators.

Handle gasoline with care, it is highly flammable:

- A. Use U.L. approved safety gasoline can.
- B. Do not remove the cap or fill the tank if the engine is running, hot, near flame, sparks, or while smoking.
- C. Wipe up spilled gasoline.
- D. Tighten cap securely.

Be sure the snow thrower is properly mounted on the tractor and all guards and other safety shields are in place and properly secured before starting to operate the equipment.

Before starting the engine, sit in the seat, disengage all clutches, and shift into neutral.

DURING OPERATION

Children should not be allowed to operate the snow thrower unless properly supervised, and are physically and mentally capable of safe operation.

Never permit the snow thrower to be operated by persons not acquainted with its use and the rules for safe operation.

NO RIDERS! To prevent injury, do not carry passengers or give rides. Only the operator should ride on the tractor and only in the seat.

WORK SAFELY — FOLLOW THESE RULES

Care should be exercised to provide the proper chute direction and deflector cap adjustment to avoid throwing snow and possible foreign material at people, pets, autos, windows, etc. to avoid injury or damage.

Keep hands and feet away from front of machine or discharge chute while tractor engine is running. Before dismounting tractor to make any repairs or adjustments or to clear the rotor/impeller, or discharge chute, shift transmission to neutral, set park brake, turn off power take-off and stop engine. Wait for all moving parts to stop.

Look behind tractor before backing. Children may run up unnoticed behind a tractor.

Avoid overturns — Do not clear snow across the face of slopes. Exercise extreme caution when changing direction on slopes. Do not attempt to clear steep slopes.

Never operate tractor at high transport speeds on slippery surfaces. Operate the tractor smoothly — avoid erratic operation and excessive speed. Always maintain control.

Adjust the snow thrower runner height so that the thrower housing will clear gravel or crushed rock surfaces, to prevent the discharge of stones from the snow chute.

No person should be allowed near the working area when the snow thrower is being operated.

Check overhead clearance carefully before driving under low hanging tree branches, or other situations where the operator may be struck or pulled from the tractor.

Watch out for traffic when near or crossing roadways.

Keep machine in good operating condition and keep safety devices in place.

Use guards or shields as instructed.

Stop snow thrower, shut off engine and inspect for damage after striking an object. Repair any damage before restarting and operating machine because broken pieces could be thrown causing injury.

If the machine starts to vibrate shut off the tractor engine at once and check for loose mounting bolts, damaged parts or other cause. Repair if necessary before restarting and operating.

Do not overload the machine capacity by attempting to clear the snow at too fast a rate. Take the time to do the job in a safe manner.

Never operate the snow thrower without good light or visibility.

Do not run the engine in confined areas such as storage buildings any longer than is necessary. Move the tractor outside into the air. EXHAUST GASES ARE TOXIC. Opening doors and windows may not provide adequate ventilation.

No one should operate the machine while intoxicated or while taking medication that impairs the senses or reactions.

AFTER OPERATING

Disengage power to rotor/collector when transporting or not in use.

Lower equipment to ground before leaving tractor to avoid the possibility of the equipment dropping and causing injury.

To reduce the possibility of unattended movement of the tractor or its use by unauthorized operators which could result in an accident and injury, always turn off the power take-off, shift transmission into neutral, set the parking brake, stop the engine, and remove ignition key when leaving the machine unattended.

ENERGY CONSERVATION FOLLOW THESE RECOMMENDATIONS



An Energy Conservation Plan is your best insurance against waste. Energy is Money. Don't Waste It!!

An Energy Conservation Plan consists of:

1. Being sure the equipment is properly adjusted to the task being performed. Review Operators Manual thoroughly.
2. Being sure the operator is thoroughly trained in the operation of the equipment. Review Operators Manual thoroughly.
3. Being sure that proper lubrication and maintenance procedures are followed. Review Operators Manual thoroughly.
4. Matching as closely as possible the tractor size (horsepower) to the implement size and soil conditions.

INTRODUCTION

The International H-42 Snow-Thrower is designed for front mounting on International® Cub Cadet 482, 582, 682 and 782 Tractors.

The International H-48 Snow Thrower is designed for front mounting on International® Cub Cadet 982 Tractor or on Cadet 782 Tractor with the use of an adapting package.

This manual provides mounting, adjusting, operating and setting up instructions for the snow-thrower.

Power to the snow-thrower is provided through a V-belt drive from the tractor engine and is controlled by the P.T.O. clutch lever located at the left side of the instrument panel.

The H-42 Snow Thrower will clear a path of snow 42-inches wide.

The H-48 Snow Thrower will clear a path of snow 48-inches wide.

The snow discharge chute can be rotated a full 270 degrees and can be directed by turning the chute control rod from the tractor operator's seat.

The snow thrower is equipped with two adjustable runners to hold the rotor/collector housing above the ground surface, as desired.

The snow thrower is raised and lowered by the tractor lift system.

NOTE: For easier raising and lowering of the snow thrower on tractors equipped with a manual lift, a lift handle helper spring package is available from your local International Harvester dealer.



CAUTION

Read the Operator's Manual.

Learn to operate this machine SAFELY.

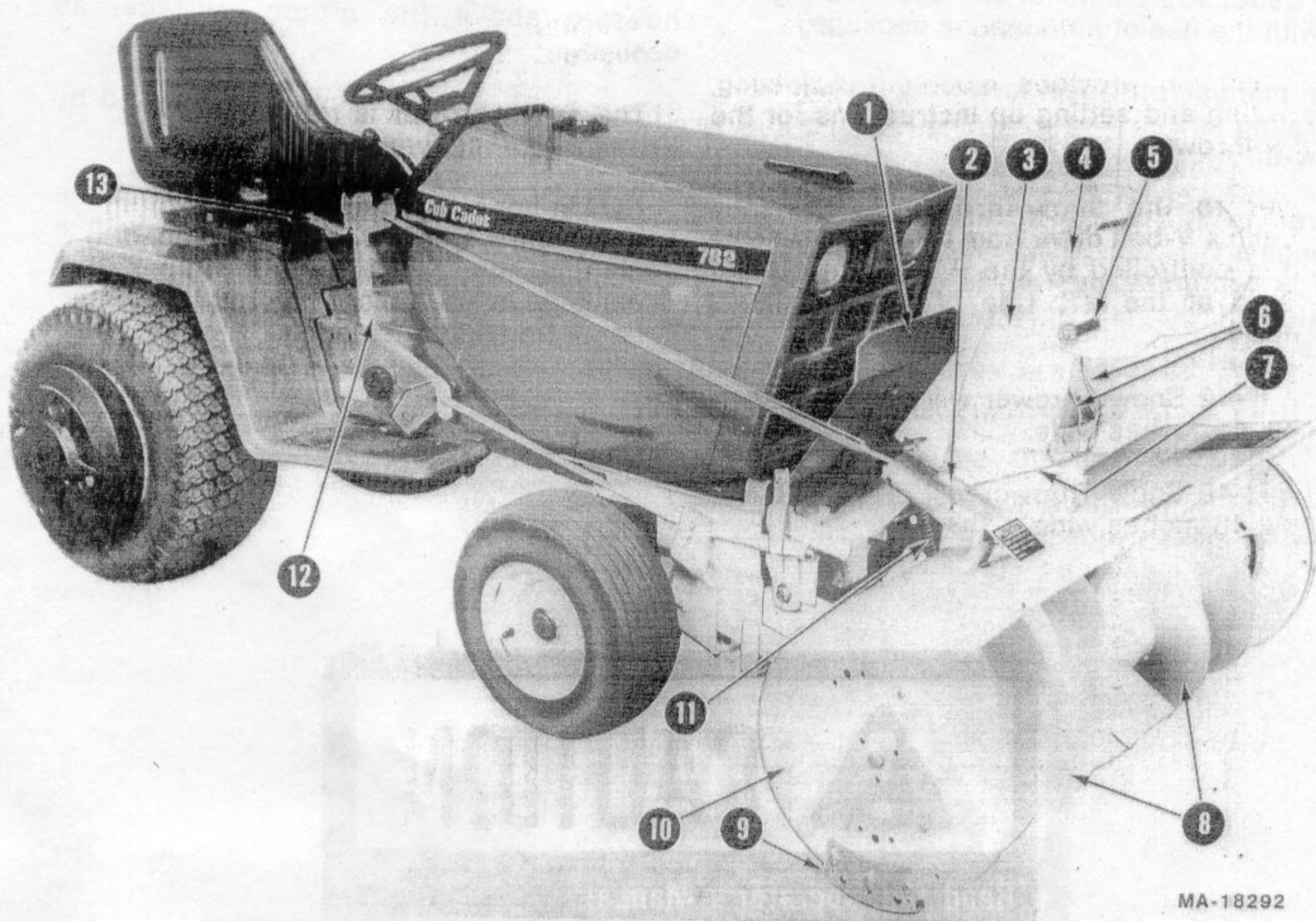
Be alert. Observe ALL Safety Practices.

Machines can be hazardous in the hands of an UNFAMILIAR, UNTRAINED or COMPLACENT operator.

Don't risk INJURY or DEATH.

MA-10034

INTRODUCTION

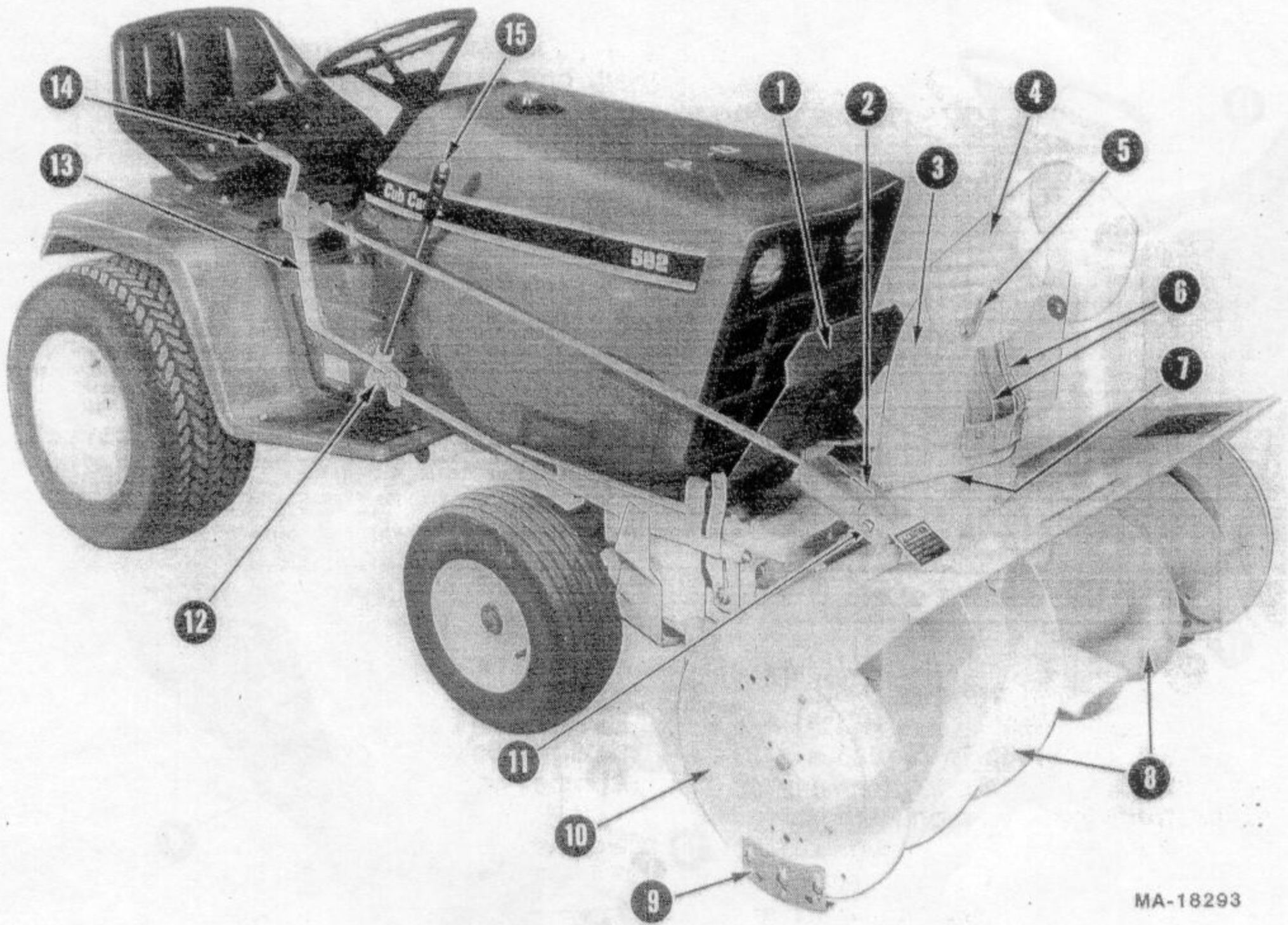


MA-18292

International H-42 Snow Thrower with Hydraulic Lift Control Lever.

- | | |
|--------------------------------|--|
| 1 - Heat shield | 8 - Rotor/collector |
| 2 - Discharge chute drive tube | 9 - Runner |
| 3 - Discharge chute | 10 - Housing |
| 4 - Deflector cap | 11 - Lift assist spring |
| 5 - Deflector lock | 12 - Chute control rod support bracket |
| 6 - Chute deflector guard | 13 - Discharge chute control rod |
| 7 - Discharge chute cable | |

INTRODUCTION

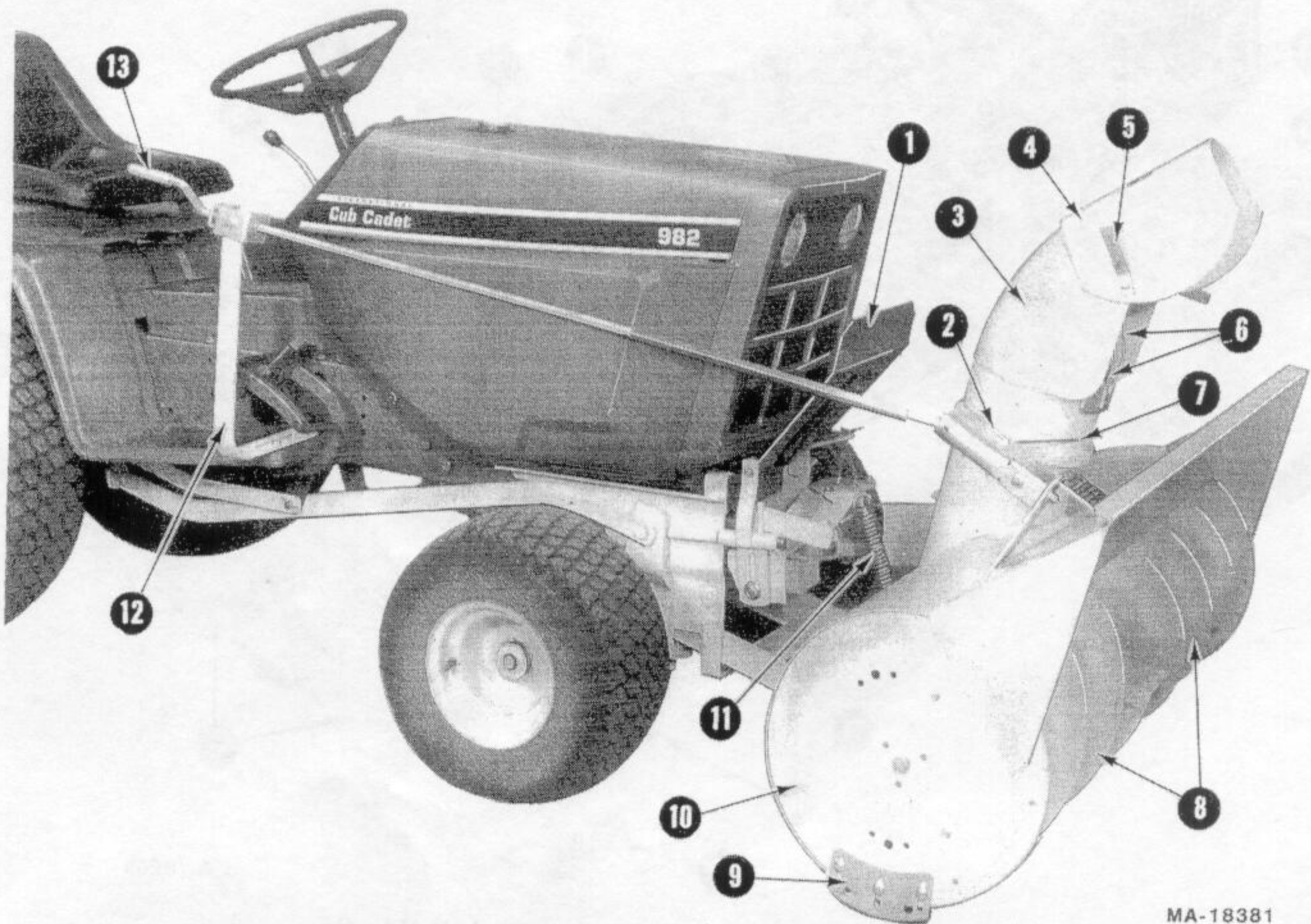


MA-18293

International H-48 Snow Thrower with Lift Handle.

- | | |
|--------------------------------|--|
| 1 - Heat shield | 9 - Runner |
| 2 - Discharge chute drive tube | 10 - Housing |
| 3 - Discharge chute | 11 - Lift assist spring |
| 4 - Deflector cap | 12 - Lift handle bracket |
| 5 - Deflector lock | 13 - Chute control rod support bracket |
| 6 - Chute deflector guard | 14 - Discharge chute control rod |
| 7 - Discharge chute cable | 15 - Lift handle |
| 8 - Rotary/collector | |

INTRODUCTION



MA-18381

International H-48 Snow Thrower with Hydraulic Lift Control Lever.

- | | |
|--------------------------------|--|
| 1 - Heat shield | 8 - Rotary/collector |
| 2 - Discharge chute drive tube | 9 - Runner |
| 3 - Discharge chute | 10 - Housing |
| 4 - Deflector cap | 11 - Lift assist spring |
| 5 - Deflector lock | 12 - Chute control rod support bracket |
| 6 - Chute deflector guard | 13 - Discharge chute control rod |
| 7 - Discharge chute cable | |

ADJUSTING AND OPERATING

GENERAL

The snow thrower controls are conveniently located at the operator's position. By engaging the P.T.O. clutch, snow is thrown through the discharge chute by the motion of the rotor/collector. Turning the discharge chute control rod directs snow discharge and the angle of the deflector cap controls the distance snow is thrown.

To become familiar with the snow thrower controls, operate the tractor and snow thrower in a clear area before attempting to remove snow.

Snow Conditions

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

Operating Speed

The rotor/collector speed is directly related to engine speed. For maximum snow removal and discharge maintain high engine R.P.M. (full throttle). Operate the tractor at a slow ground speed for safe and efficient snow removal (Usually 1st gear at full throttle).

Deeper Drifted Snow

In deep, drifted or banked snow, it will be necessary to drive the rotor/collector into the snow, disengage tractor clutch and allow to clear the snow.

Repeat this method until a path is cleared. On the second pass overlap the first enough to allow the rotor/collector to handle the snow without repeated clutching and declutching of the tractor.

In extremely deep snow, raise thrower from ground and drive ahead into snow to remove top layers first, keeping tractor out of snow bank where snow has not been removed to ground level.

Disengage tractor clutch and allow thrower to clear the snow. Reverse tractor and lower thrower to the ground. Drive tractor ahead and repeat process to remove balance of snow.

Working with repeated passes into and out of drifts will move even the deepest of snow piles.

Operating Tips

Whenever possible discharge snow down wind.

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

Always overlap each pass slightly to assure complete snow removal.

Never attempt to clear snow thrower at any time with tractor engine running.

Methods of Operating

A definite pattern of operating is required to thoroughly clean the snow area. This pattern will avoid a second removal of snow and avoid throwing snow in unwanted places.

Where it is possible to throw snow to right and left, as on a long driveway, it is advantageous to start in the middle. Work from one end to the opposite end throwing snow to either side without changing the direction of discharge chute.

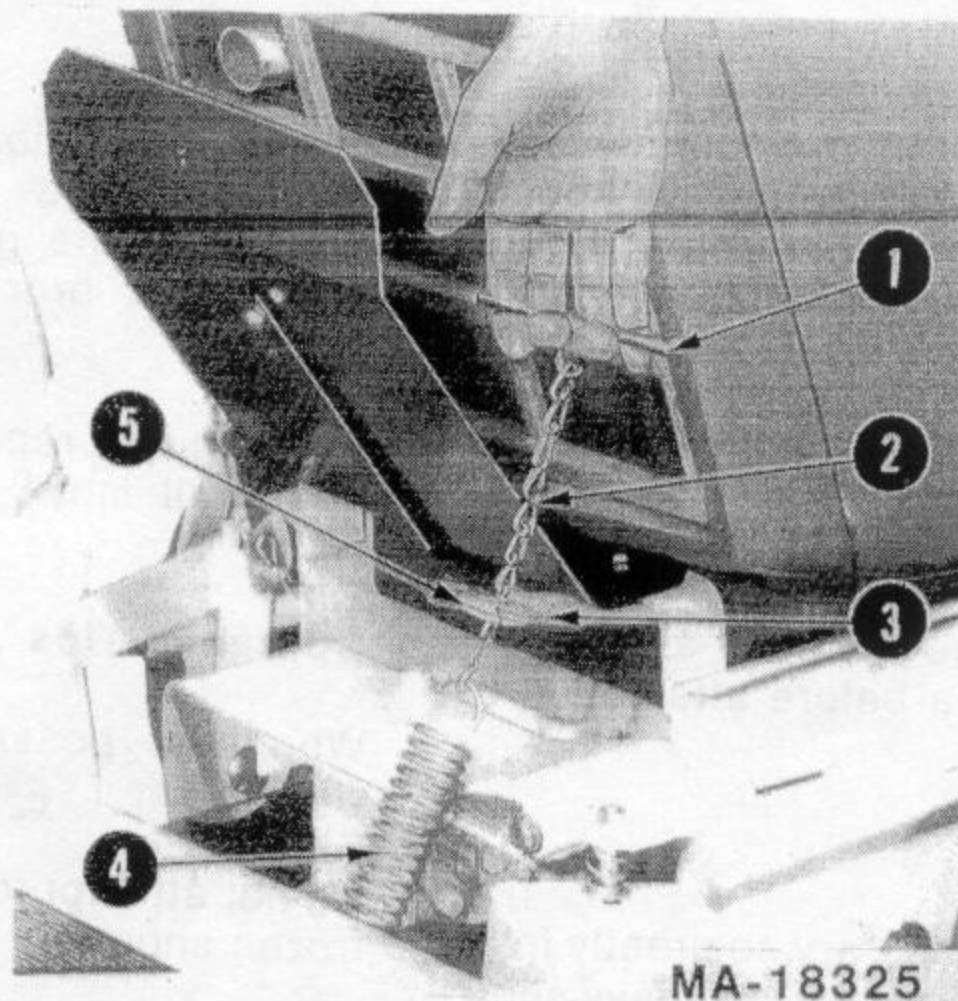
If snow can only be thrown to one side of the driveway or sidewalk, start on the opposite side. At the end of each succeeding pass, rotate the chute 180° to continue to throw snow into the same area.

Tire Chains

The use of tire chains is recommended for extra tractions.

ADJUSTING AND OPERATING

LIFT ASSIST SPRING



- 1 - Anchor chain handle
- 2 - Anchor chain
- 3 - Quick-attachable cotter pin
- 4 - Lift spring
- 5 - Hanger bracket

The lift assist spring is hooked to the snow thrower at the rear of the housing.

The lift spring helps to carry the weight to the snow thrower and makes raising the machine into transport position easier.

The amount of tension in the lift assist spring will cause the scraping action of the thrower and/or the effort required to raise the snow thrower to vary.

When the snow thrower is used on rough or uneven surfaces, less scraping is desired and more lift spring tension is necessary.

When the snow thrower is used on packed or hard snow, more scraping is desired and less lift spring tension is necessary.

To Adjust Spring Tension

Raise the snow thrower to transport position.

Grasp the anchor chain handle and pull up on the chain to raise the quick-attachable cotter pin up and off the spring hanger bracket.

Remove the quick-attachable cotter pin from the anchor chain while still holding on to the chain handle.

Allow several chain links to pass downward through the hole in the spring hanger bracket to reduce spring tension.

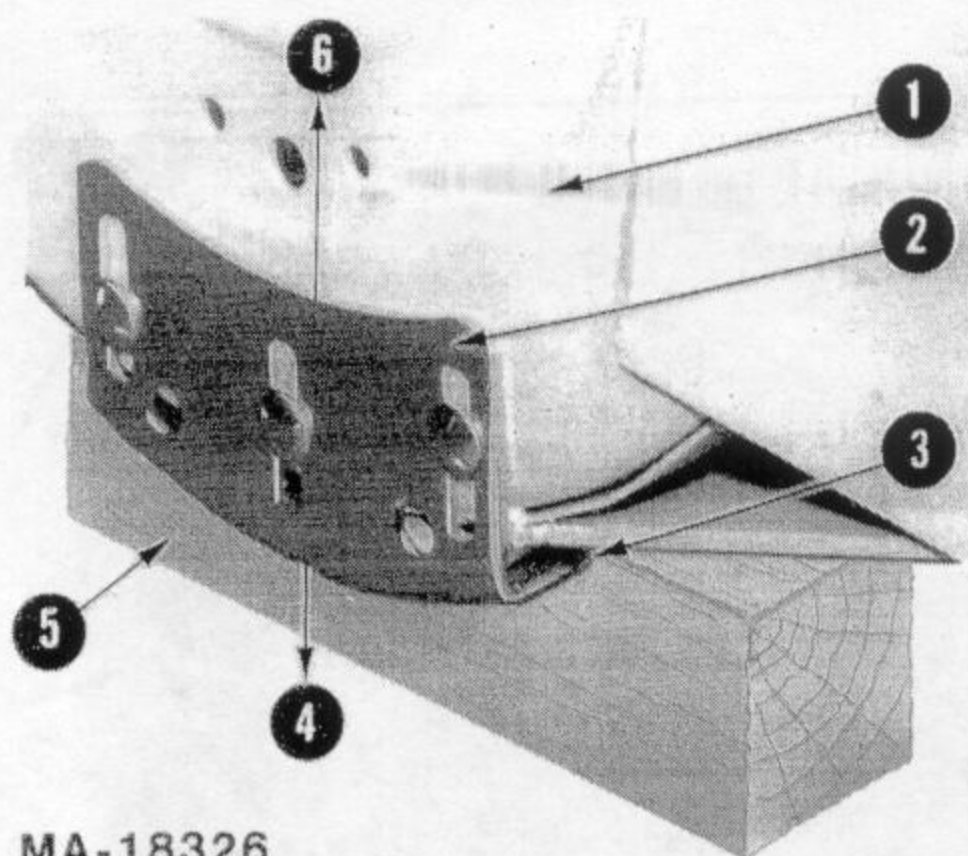
To increase spring tension, pull several chain links upward through the hole in the spring hanger bracket.

Reinstall the quick-attachable cotter pin through one of the chain links just above the spring hanger bracket surface and release the chain handle.

Lower the snow thrower to the ground. Check to see that the lift handle effort to raise the snow thrower is as desired and/or the down pressure of the snow thrower is adequate for required scraping. If not, repeat above adjustment.

ADJUSTING AND OPERATING

RUNNERS



MA-18326

- 1 - Rotor/collector housing
- 2 - Runner
- 3 - Runner flange
- 4 - Direction of movement to raise housing
- 5 - Wooden block
- 6 - Direction of movement to lower housing

The snow thrower is shipped with its runners mounted with the flanges to the inside at the right and left sides of the rotor/collector housing.

The runners may be removed and reinstalled with the runner flanges towards the outside to allow the rotor/collector to operate closer to the ground surface, if necessary.

The runners maintain the desired distance above the ground for the rotor/collector housing when the snow thrower is being operated.

When removing snow from an uneven surface or a gravel path or driveway, the runners should be adjusted to hold the rotor/collector housing high above the ground surface.

This will prevent possible damage to the rotor/collector and keep stones or other material from being thrown with the snow, which could result in damage to property or personal injury. Such adjustment will also reduce excessive wear on the snow thrower parts.

On a smooth and even surface, such as concrete or blacktop, the runners may be adjusted to allow the rotor/collector to work close to the ground.

To adjust the runners, raise the snow thrower and place a wooden block or other sturdy object under each side of the rotor/collector housing.

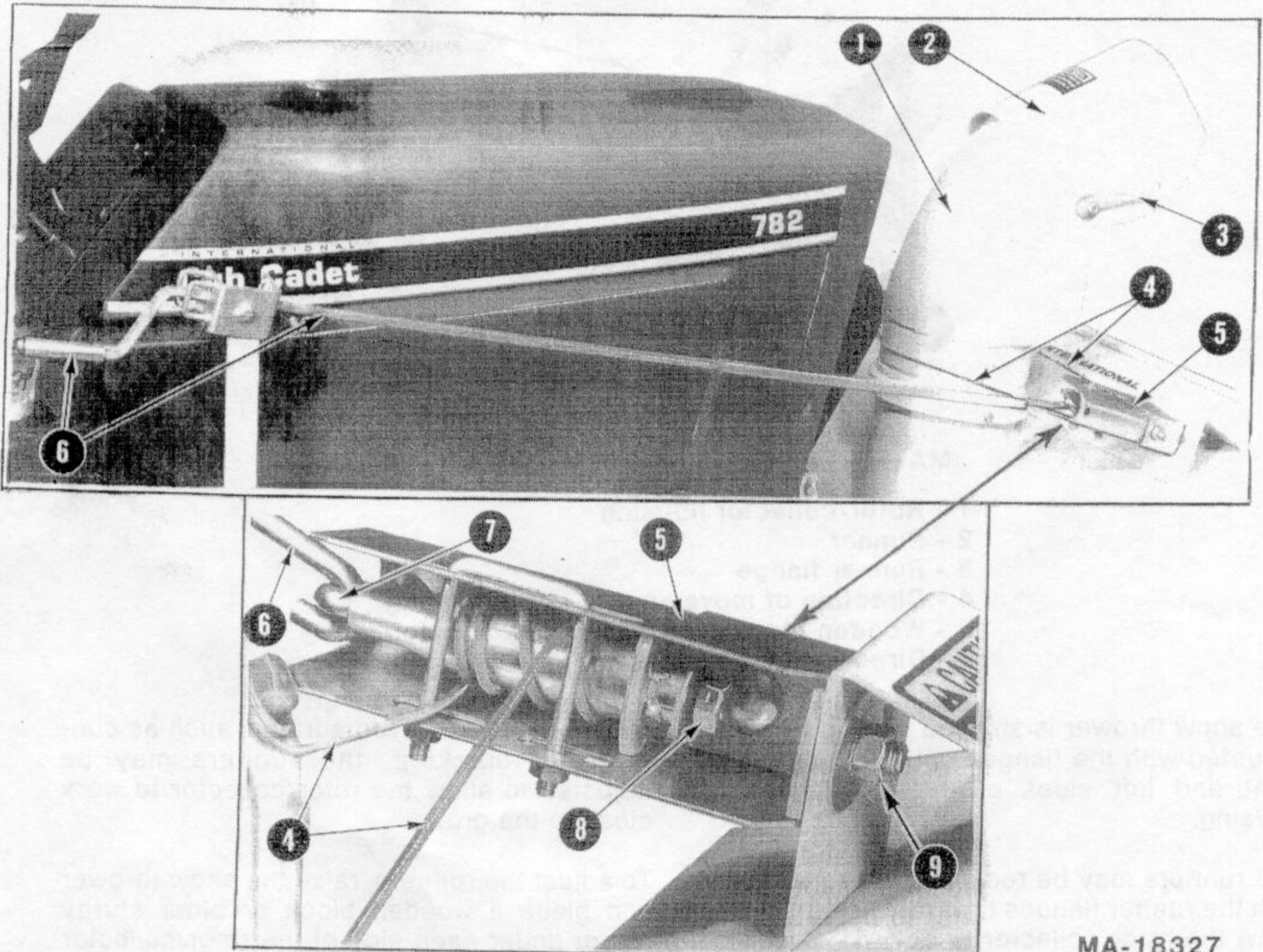
Loosen the nuts securing the runners to the rotor/collector housing and move the runners to the position required for adequate ground clearance and retighten the nuts.

Both runners should be adjusted to the same height to keep the rotor/collector housing level.

Runners are subject to wear due to constant use and are designed for easy replacement. Replace before wear is excessive to prevent possible damage to the rotor/collector housing.

ADJUSTING AND OPERATING

DISCHARGE CHUTE, DEFLECTOR CAP AND CHUTE DRIVE TUBE



MA-18327

- 1 - Discharge chute
- 2 - Deflector cap
- 3 - Deflector lock
- 4 - Discharge chute cable
- 5 - Chute drive tube assembly

- 6 - Discharge chute control rod
- 7 - Drive tube eyebolt
- 8 - Eyebolt lock nut
- 9 - Carriage bolt with nut

To direct snow from the discharge chute to the right, turn the discharge chute control rod to the right (clockwise). To direct the snow discharge to the left, turn the discharge chute control rod to the left (counterclockwise).

The discharge chute can rotate within its limits, a full 270 degrees.

If the discharge chute tends to rotate when throwing snow, and fails to hold the desired position, make the following adjustment.

Tighten the lock nut on the drive tube eyebolt 1/8 turn and check rotation of the drive tube by turning the discharge control rod.

ADJUSTING AND OPERATING

DISCHARGE CHUTE, DEFLECTOR CAP AND DRIVE TUBE - Continued

A slight resistance should be noticed. If no resistance is felt, it may be necessary to tighten the eyebolt lock nut an additional 1/8 turn.

Tighten the eyebolt lock nut only until the discharge chute holds its position. Do not over-tighten.


The position of the deflector cap on top of the discharge chute determines the distance that snow can be thrown.

To vary the distance that snow is thrown, loosen the deflector lock on both sides of the deflector cap. Move the cap upward to increase the distance snow is thrown.

To decrease the distance, move the deflector cap downward.

After making the adjustment, retighten the deflector locks on both sides.

Adjustment on the deflector cap cannot be made from the tractor operator's seat.

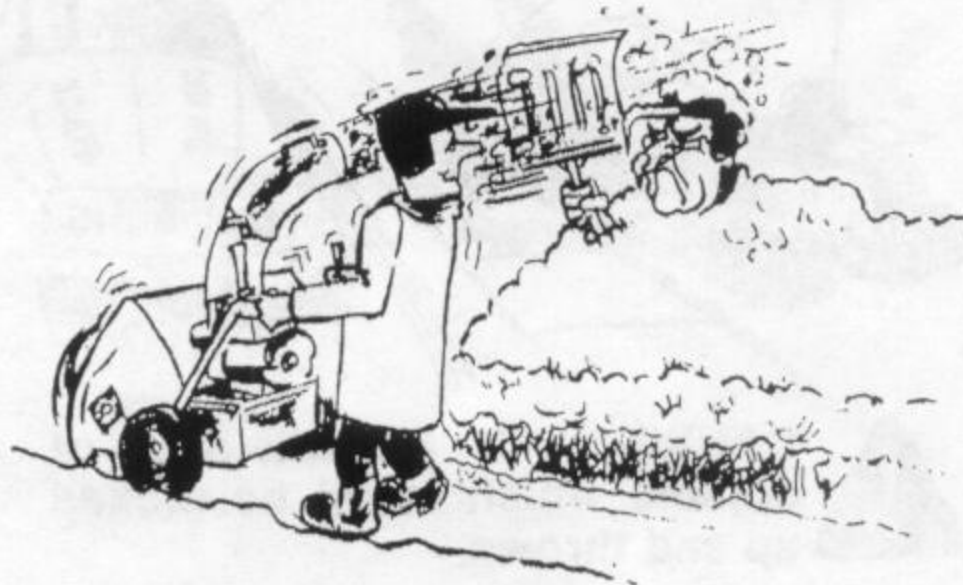
 **CAUTION! Shut off (disengage) the P.T.O. (power take-off) clutch and shut off the tractor engine before making any adjustment.**


If the discharge chute cable tension should become loose make the following adjustment:

Loosen the nut on the carriage bolt securing the drive tube assembly to the rotor/collector housing.

Move the drive tube assembly in the direction away from the chute to increase the cable tension.

Retighten the nut on the carriage bolt to secure the drive tube assembly to the rotor/collector housing.



 **CAUTION! Never direct discharge of material toward bystanders nor allow anyone near the machine while in operation.**


MA-16852

ADJUSTING AND OPERATING

STARTING AND STOPPING THE SNOW THROWER

Refer to your **Tractor Operator's Manual** for proper operating instructions for your tractor.

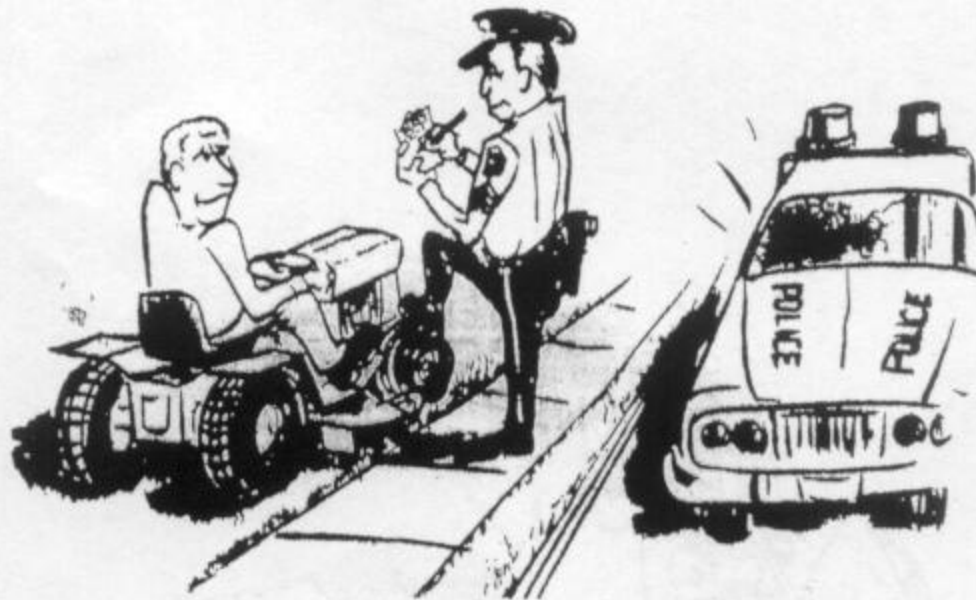
To start the snow thrower, engage (turn on) the power take-off clutch. To stop the snow thrower, disengage (turn off) the power take-off clutch. Refer to your **Tractor Operator's Manual** for "Front Power Take-Off" operating instructions.


 **CAUTION!** If the rotor/collector becomes plugged, shut off the power take-off clutch and shut off the tractor engine before attempting to unplug it.

Throttling down before disengaging the power take-off allows the rotor/collector to stop rotating more quickly.

Run the machine a few minutes after the snow throwing job is completed to prevent freeze up of rotor/collector.

Throttle down the tractor engine speed before engaging the power take-off. This will reduce the wear and strain on the snow-thrower drive belts as well as the tractor clutch.



 **CAUTION!** Clear work area of objects which might be picked up and thrown.

MA-16864

ADJUSTING AND OPERATING

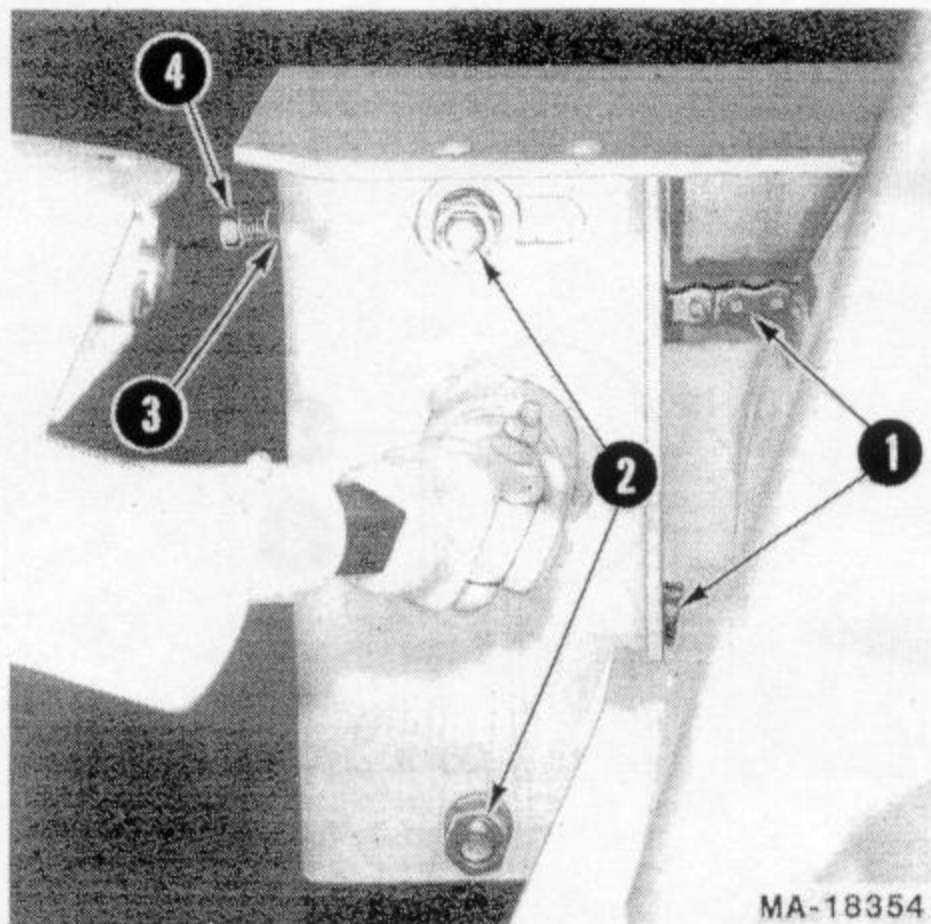
ROTOR/COLLECTOR DRIVE CHAIN

It is important to maintain proper drive chain tension for maximum chain life. After the first 2 hours of operation and each time the snow thrower is used thereafter, check drive chain for proper chain tension.

Too much tension causes wear on the chain and the bearings. Too little tension may cause the chain to whip excessively and to jump off of the sprocket.

Slack in the drive chain, due to normal chain stretch can be removed by adjustment if it becomes excessive.

To adjust the chain tension, proceed as follows:



- 1 - Rotor/collector drive chain
- 2 - Lock nuts
- 3 - Jam nut
- 4 - Adjusting bolt

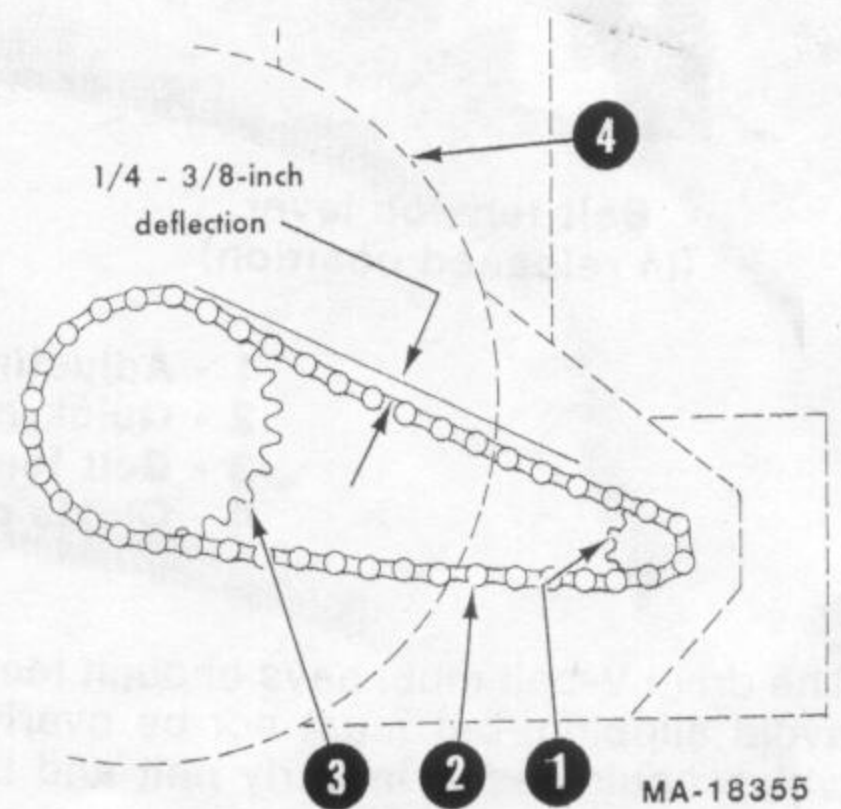
Shut off the tractor PTO (power take-off) and shut off the tractor engine.

Remove the tractor PTO shield located at the left rear of the snow thrower housing in order to gain access to the two lock nuts.

Loosen the two lock nuts and the jam nut on the adjusting bolt.

To increase the tension on the drive chain, turn the adjusting bolt in a clockwise direction.

To decrease the tension on the drive chain, turn the adjusting bolt in a counterclockwise direction.



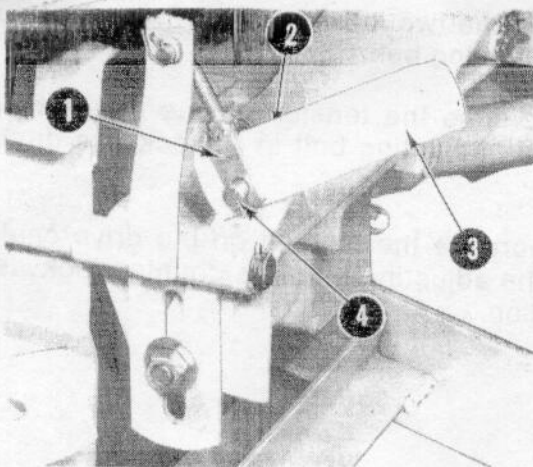
- 1 - Drive sprocket
- 2 - Rotor/collector drive chain
- 3 - Rotor/collector sprocket
- 4 - Housing

A deflection of 1/4 to 3/8-inch when firm hand pressure is applied to the drive chain indicates the tension is correct.

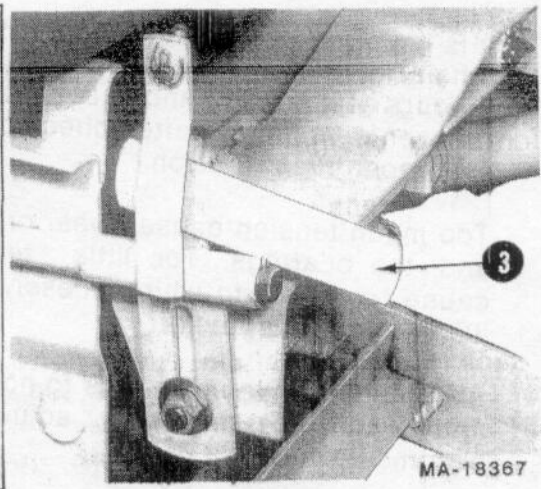
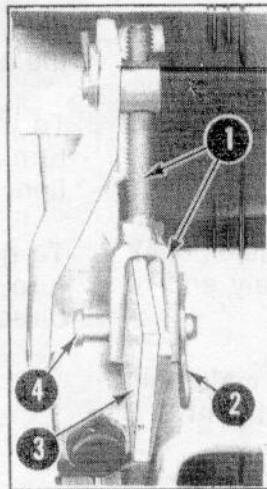
After adjusting the drive chain tension, retighten the two lock nuts and the jam nut. Reinstall the PTO shield.

ADJUSTING AND OPERATING

DRIVE BELT TENSION



**Belt tension lever
(in released position)**



**Belt tension lever
(in locked position)**

- 1 - Adjusting clevis (with threaded stud)
- 2 - Quick-attachable cotter pin
- 3 - Belt tension lever
- 4 - Clevis pin

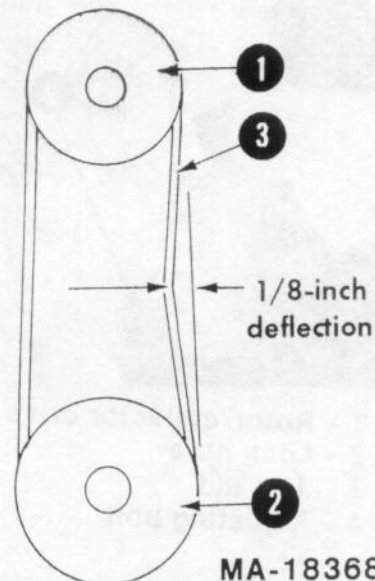
The drive V-belt must have enough tension to avoid slipping, but must not be overly tight, which could result in early belt and bearing failure.

Most drive belts stretch during the first few hours of operation.

Check the drive belt tension after the first 1/2 hour of operation, then every hour thereafter during the first five hours of operation. Thereafter, belt tension should be checked occasionally through the operating season and at the start of each new season.

If the belt deflection is not as indicated (see illustration), a belt tension adjustment will be necessary.

A deflection of approximately 1/8-inch when firm hand pressure is applied to the drive belt midway between the pulleys indicates correct belt tension.



Belt tension adjustment

- 1 - Tractor engine PTO pulley
- 2 - Gear box pulley
- 3 - Drive belt

DRIVE BELT TENSION — Continued

To adjust for the correct belt tension, proceed as follows:

Move the belt tension lever upward to release tension on the drive belt.

Remove the quick-attachable cotter pin and clevis pin from the belt tension lever.

Raise adjusting clevis at the clevis away from the belt tension lever and rotate the clevis (with threaded stud) counterclockwise to increase the drive belt tension.

To decrease the drive belt tension, rotate the clevis (with threaded stud) in a clockwise direction.

Reassemble the clevis to the belt tension lever using the clevis pin and quick-attachable cotter pin removed previously.

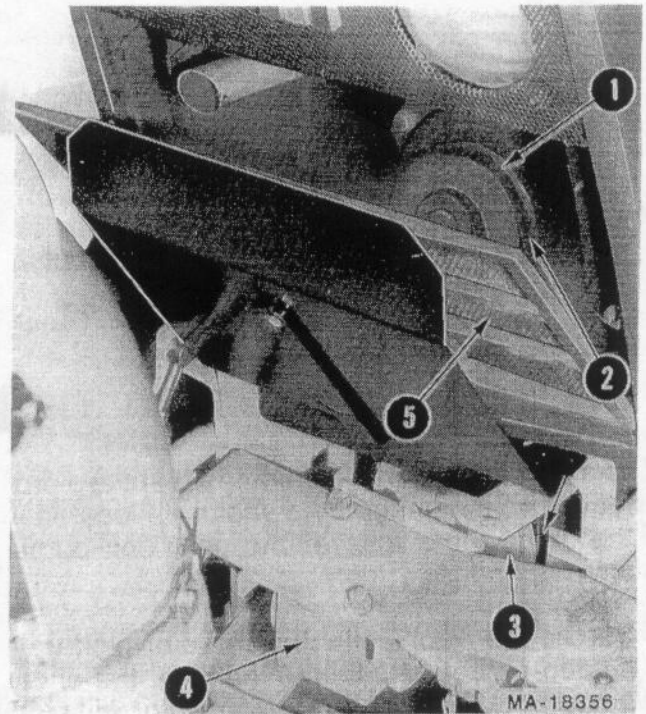
Move the belt tension lever downward to lock it in operating position. Check for proper belt deflection. If not correct, repeat adjustment procedure.

BELT REMOVAL AND REPLACEMENT

All belts stretch during the first few hours of operation.

The belt should have enough tension to keep it from slipping, but not too much tension which can result in belt and bearing failure.

If it should be necessary to remove or replace the drive belt, move the belt tension lever in the raised position. This will allow enough slack to permit slipping the V-belt off of both pulleys. Then proceed as follows:



- 1 - Tractor engine pulley
- 2 - Drive belt
- 3 - Gear box pulley
- 4 - Gear box
- 5 - Tractor grille

Grasp the grille at the front of the tractor, at the top and pull it outward. Grille is held in by spring tension. Holding the grille open, remove the belt from the engine PTO pulley. Take the belt off of the gear box pulley to complete belt removal.

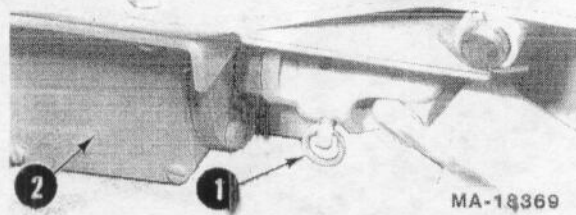
Check the condition of the gear box pulley and the tractor engine pulley before installing a new V-belt.

When new belt has been installed on both pulleys move the belt tension lever downward putting tension on the V-belt.

Check for proper belt tension and adjust as necessary according to instructions under "DRIVE BELT TENSION" heading.

ADJUSTING AND OPERATING

SHEAR PIN



- 1 - Shear pin with spiral lock ring
- 2 - Gear box

The snow thrower drive components are protected from damage by a shear pin located in the drive shaft yoke at the gear box output shaft.

Should the rotor/collector strike or pick up a hidden object or become jammed, the shear pin will break and the rotor/collector will stop, releasing the strain on the drive line parts.

CAUTION! Shut off (disengage) the P.T.O. (power take-off) clutch and shut off the tractor engine before making any adjustment.

Should it be necessary to replace a broken shear pin, proceed as follows:

Shut off the PTO and the tractor engine before making repairs.

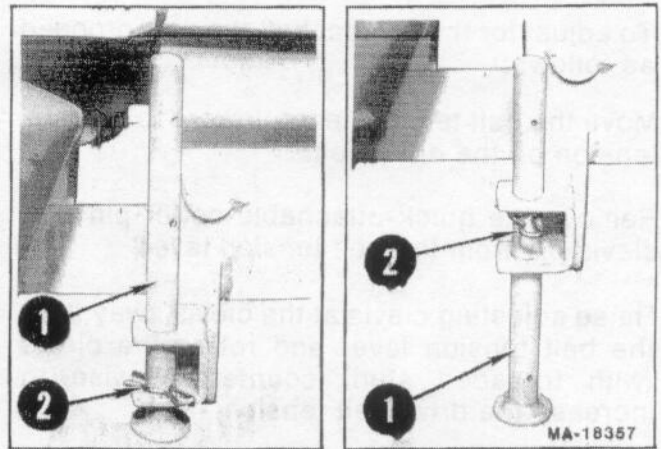
Check to determine the reason for the shear pin breakage and correct the problem. If necessary, recover portion of shear pin with lock ring attached.

Remove any remaining broken pieces of shear pin from yoke.

Install new shear pin and retain with spiral lock ring.

A number of extra shear pins have been included with the snow thrower. Additional shear pin can be obtained from your International Harvester dealer when required.

SUPPORT STAND



Support position

Storage position

- 1 - Support stand
- 2 - Quick-attachable cotter pin

A mounting frame support stand is provided to aid in attaching and detaching the snow throwers from the tractor.

Before detaching the snow thrower from the tractor, remove the quick-attachable cotter pin from the hole in the stand and lower the stand to the ground.

Reinstall the quick-attachable cotter pin to lock the stand in position.

After attaching the snow thrower to the tractor, remove the quick-attachable cotter pin from the stand.

Move the stand upward and secure it in the storage position by reinstalling the quick-attachable cotter pin.

LIFT HEIGHT

After the snow thrower has been mounted on the tractor, at the beginning of each season, check the lift height of the snow thrower when raised to the transport position.

Examine the lift frame clearance with the up stops to see if it is correct or needs adjustment. Refer to "LIFT HEIGHT" in Setting Up section.

DETACHING AND ATTACHING

DETACHING

Lower the snow thrower to the ground. Lock the tractor brakes.

Shut off the PTO clutch and the tractor engine.

Remove the chute control rod, rod support bracket and lift bars or rod.

Remove the drive belt from the tractor engine pulley.

Lower the support stand to the ground.

Then move the tractor away from the snow thrower.

ATTACHING

Move the tractor into position and align it with the snow thrower mounting frame. Lock the tractor brakes.

Shut off the engine and the PTO clutch.

To attach the snow thrower to the tractor, reverse the "DETACHING" instructions.

Raise the mounting frame support stand.

A Careful Operator

**IS THE BEST INSURANCE
AGAINST AN ACCIDENT**

SETTING UP

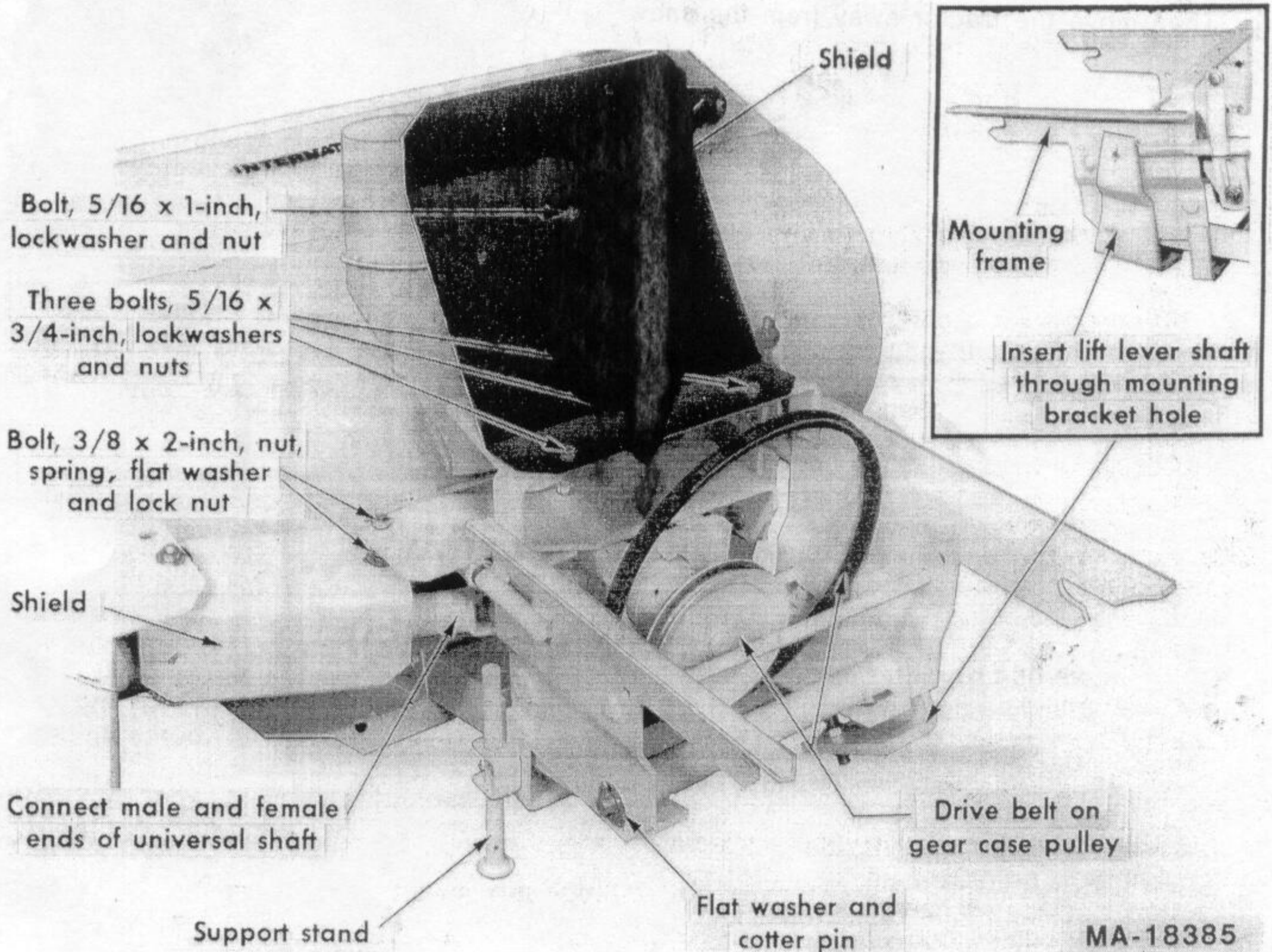
Remove all parts from the shipping carton and arrange the parts conveniently.

Bolts must be used in the holes in which they are found, or in the parts to which they are attached, unless otherwise shown.

Whenever the terms "left" and "right" are used, it should be understood to mean from the position of the tractor operator's seat when the snow thrower is mounted to the tractor.

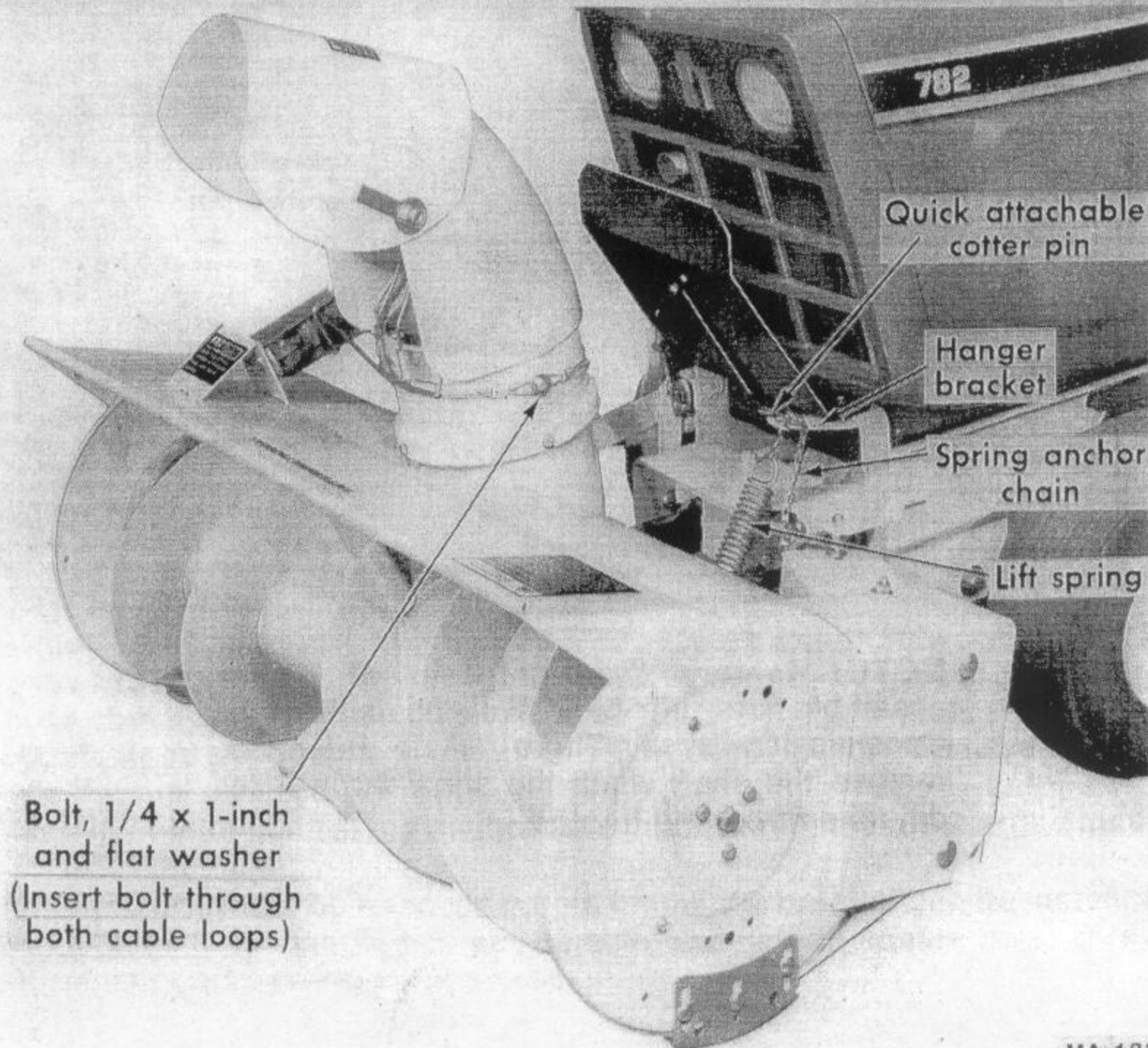
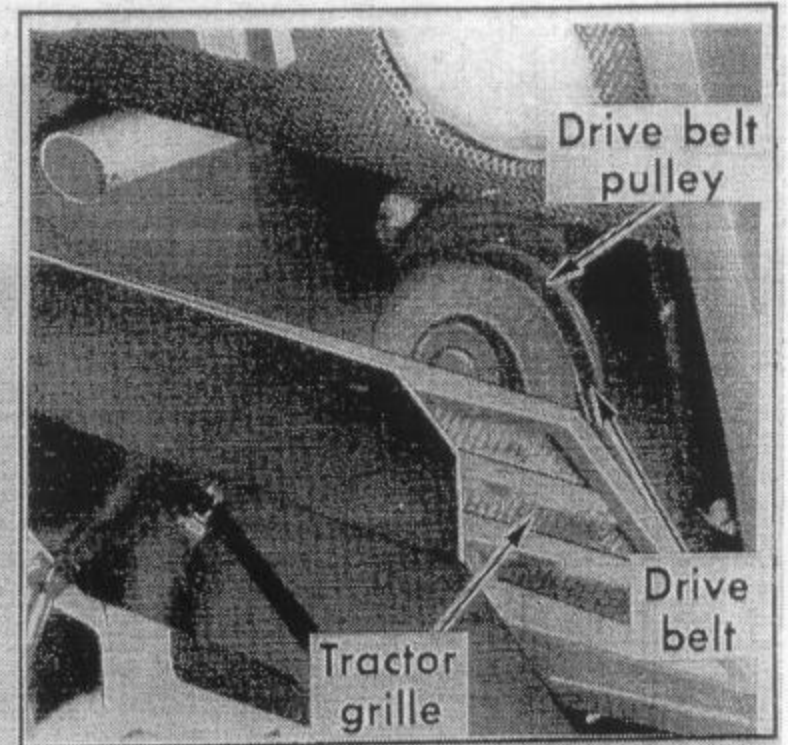
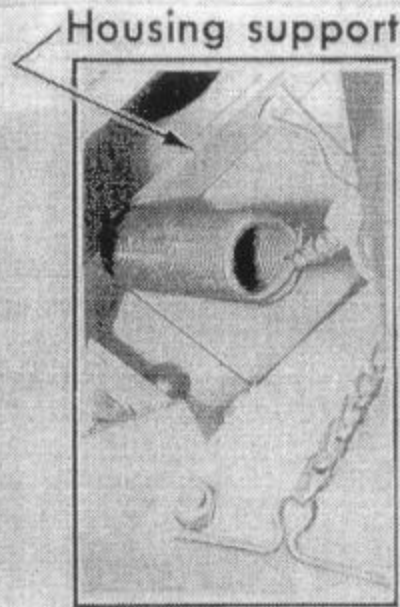
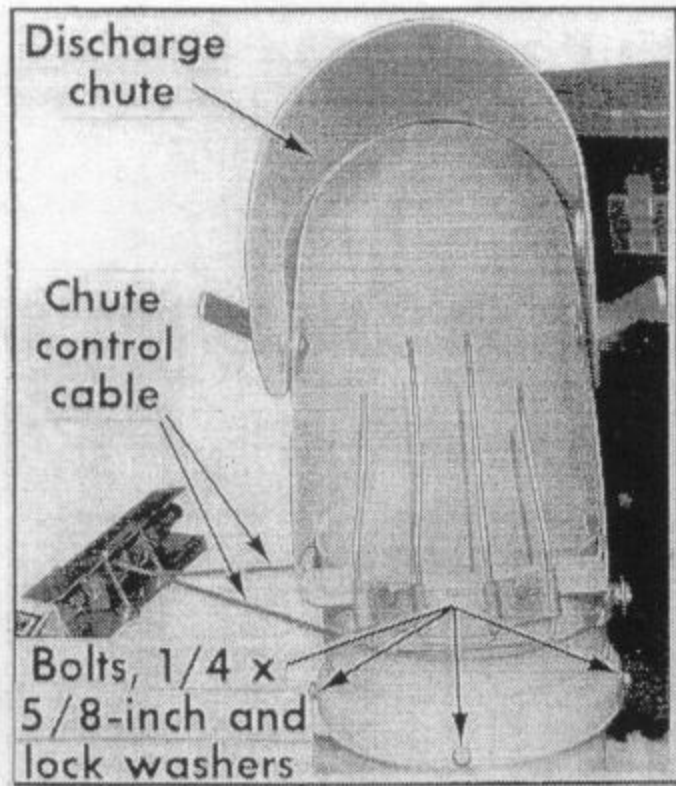
Before starting to assemble snow thrower to the tractor, shut off tractor engine, remove ignition key and lock tractor brakes.

STEP 1. MOUNTING FRAME, HEAT SHIELD, LIFT LEVER UNIVERSAL SHAFT, AND SHIELD



SETTING UP

STEP 2. ATTACHING TO TRACTOR, LIFT SPRING, DRIVE BELT, DISCHARGE CHUTE AND CONTROL CABLE.



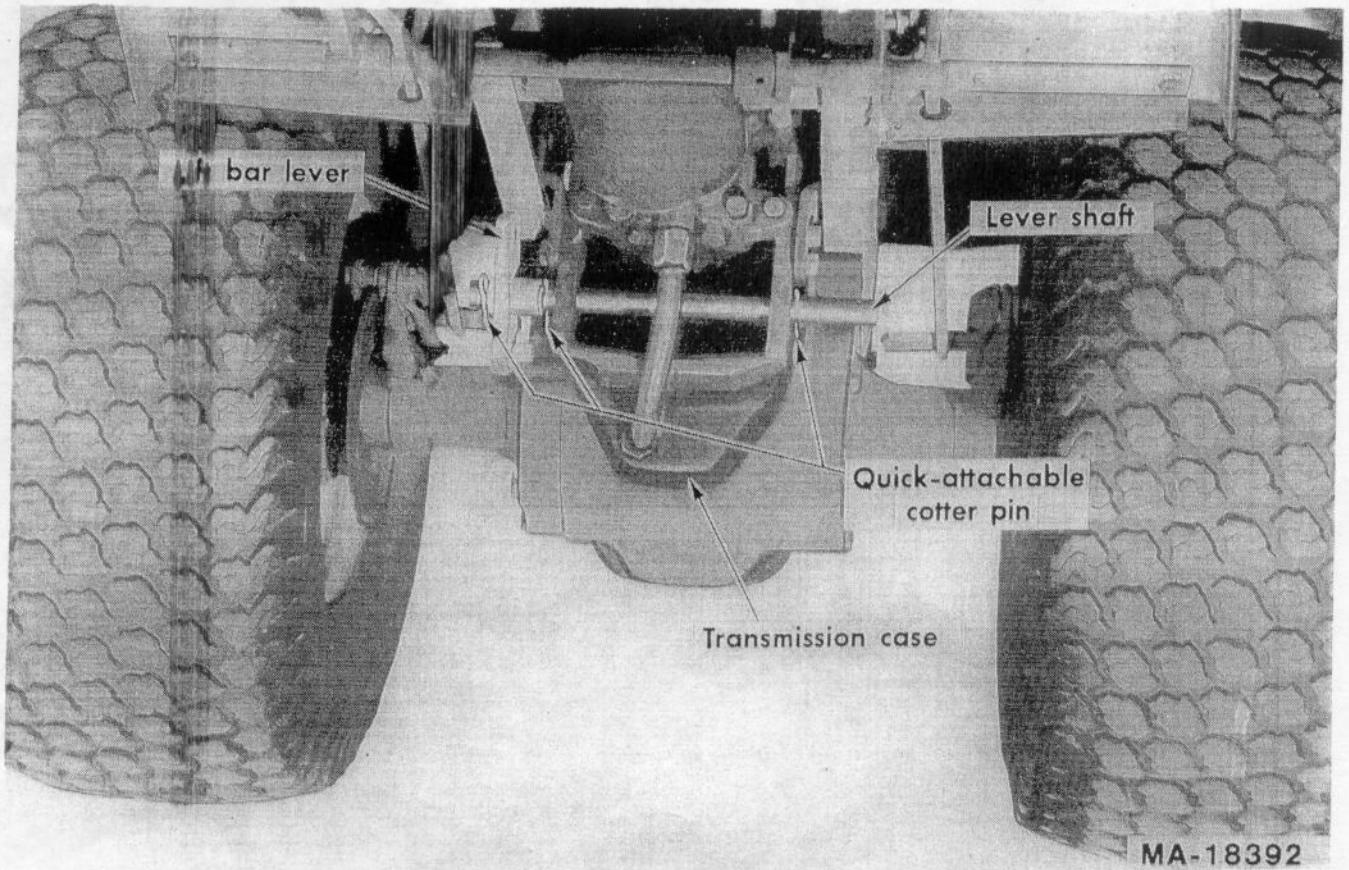
MA-18386

When attaching the snow thrower to the tractor, the mounting frame must be lifted slightly to engage the tractor quick latch.

NOTE: To adjust the lift spring tension, refer to instructions under heading of "LIFT ASSIST SPRING" in "ADJUSTING AND OPERATING".

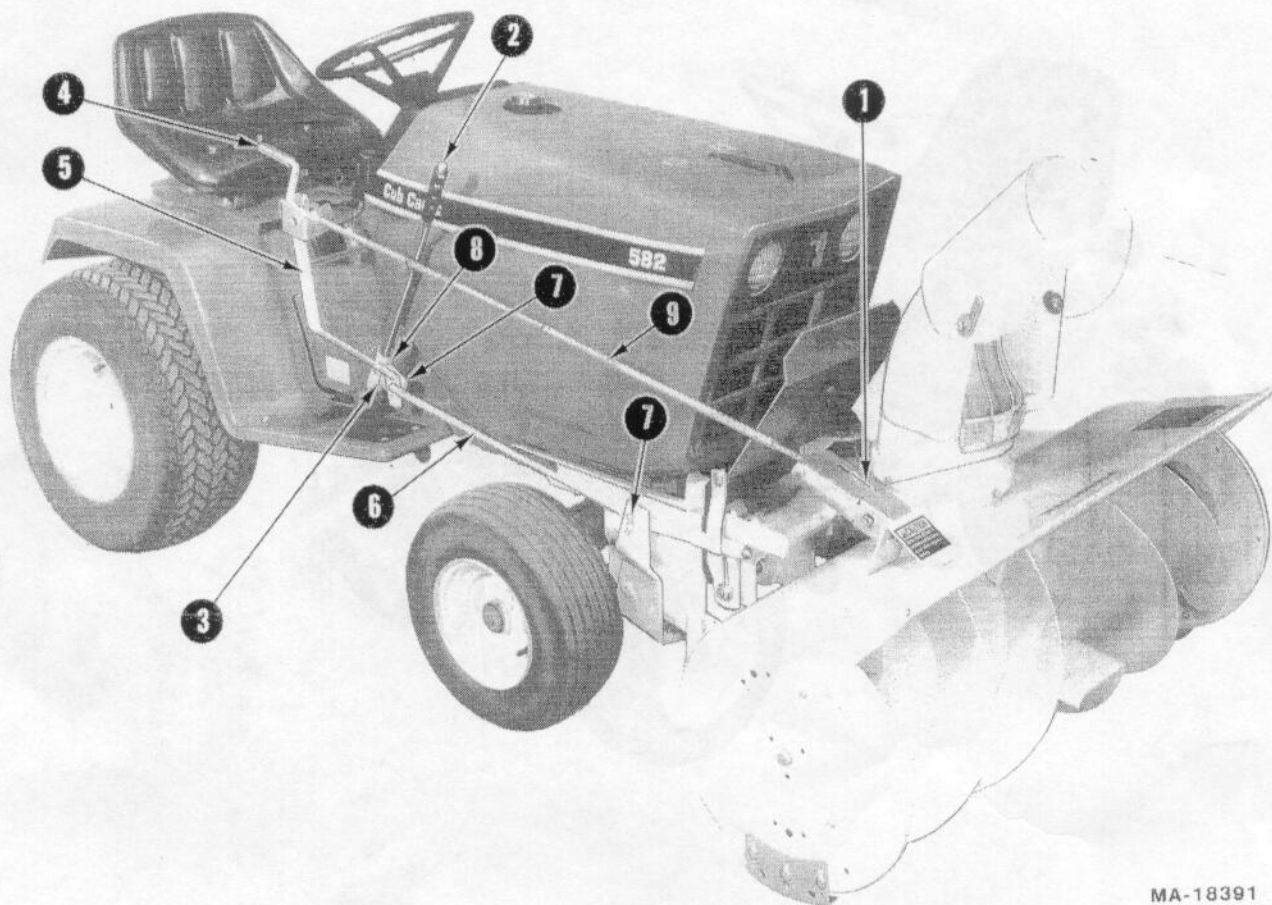
SETTING UP

STEP 3. LIFT BAR LEVER AND SHAFT (H-48 SNOW THROWER
ON 982 CUB CADET TRACTOR)



NOTE: Remove the right rear wheel to assemble the lift bar level shaft to the transmission case. There is no need to remove the shaft when the snow thrower is detached from the tractor.

**STEP 4. LIFT HANDLE, DISCHARGE CHUTE CONTROL ROD, ROD SUPPORT, AND LIFT ROD.
(H-42 SNOW THROWER ON CADET TRACTORS WITH MANUAL LIFT)**



MA-18391

- 1 - Discharge chute drive
- 2 - Lift handle
- 3 - Lift handle bracket
- 4 - Discharge chute control rod
- 5 - Chute control rod support

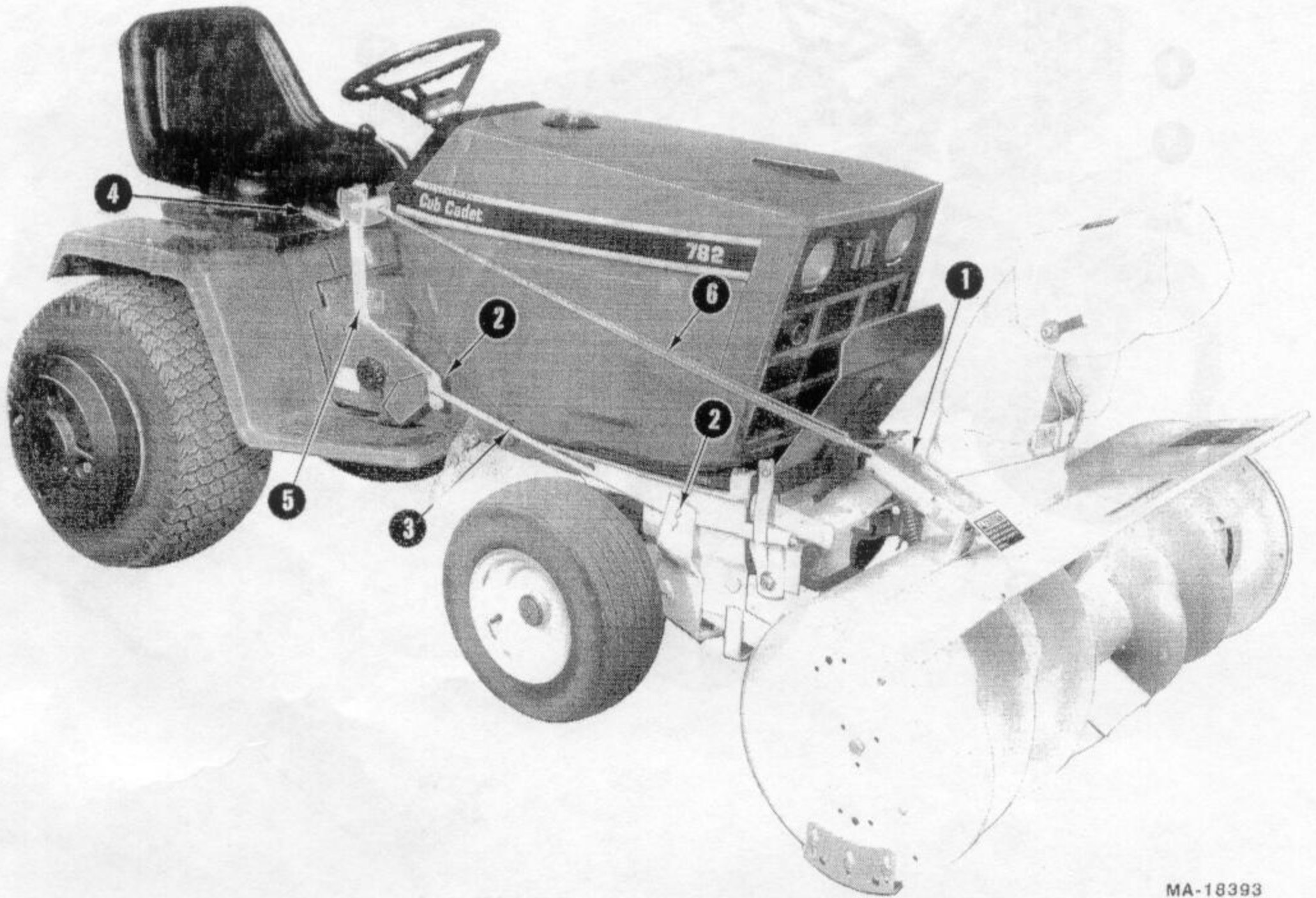
- 6 - Lift rod
- 7 - Quick attachable cotter pin -2-
- 8 - Square head screw
3/8-16 x 3/4-inch
- 9 - Chute control rod tube

NOTE: Attach the chute control rod square tube hook end to the discharge chute drive eyebolt.

NOTE: Lift handle grip must be removed before lift handle bracket can be installed. Locate handle bracket as close to lift handle hub as possible, and tighten square head screw, after lift rod and control rod support have been attached.

SETTING UP

STEP 4. DISCHARGE CHUTE CONTROL ROD, ROD SUPPORT, AND LIFT ROD. (H-42 SNOW THROWER ON CADET 782 TRACTOR WITH HYDRAULIC LIFT)



MA-18393

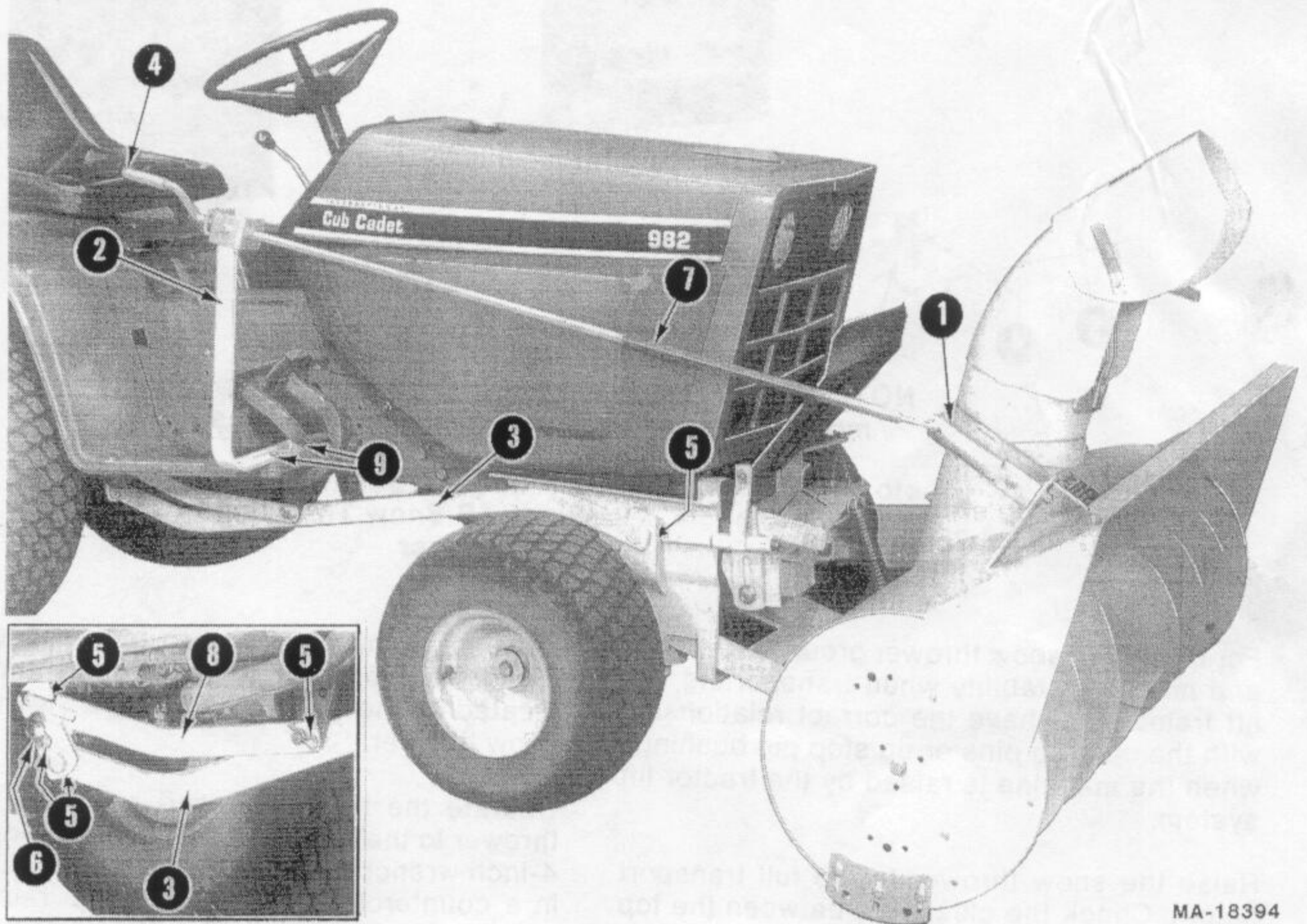
- 1 - Discharge chute drive
- 2 - Quick attachable cotter pin -2-
- 3 - Lift rod

- 4 - Discharge chute control rod
- 5 - Chute control rod support
- 6 - Chute control rod tube

NOTE: Attach the chute control rod square tube hook end to the discharge chute drive eyebolt.

SETTING UP

STEP 4. DISCHARGE CHUTE CONTROL ROD, ROD SUPPORT, AND LIFT ROD. (H-48 SNOW THROWER ON CADET 982 TRACTOR)



MA-18394

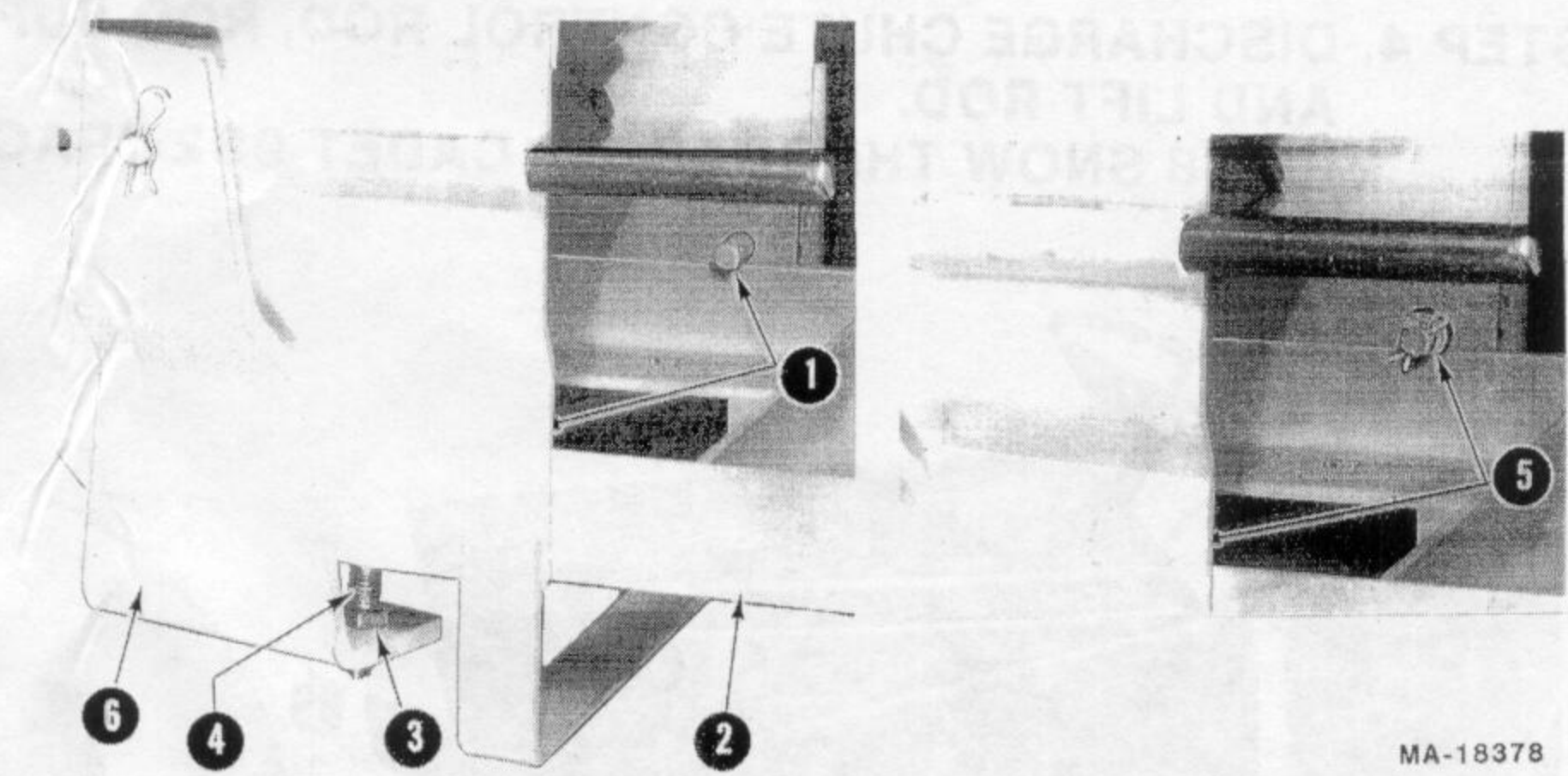
- 1 - Discharge chute drive
- 2 - Chute control rod support
- 3 - Long lift bar
- 4 - Discharge chute control rod
- 5 - Quick attachable cotter pin -5-

- 6 - Flat washer
- 7 - Chute control rod tube
- 8 - Short lift bar
- 9 - Screw w/lock nut -2-

NOTE: Attach the chute control rod square tube hook end to the discharge chute drive eyebolt.

NOTE: Loosen two screws at front of right foot platform, slide chute control rod support slotted holes under the heads of screws and retighten screws.

STEP 5. LIFT HEIGHT



NOTE: The gear box assembly is removed from the mounting frame to illustrate the up stop pins.

- 1 - Up stop pins
- 2 - Lift frame angle
- 3 - Jam nut
- 4 - Adjustment bolt

- 5 - Up stop pins with bushings (On H-48 Snow Thrower)
- 6 - Lift lever

For maximum snow thrower ground clearance and machine stability when transporting, the lift frame must have the correct relationship with the up stop pins or up stop pin bushings when the machine is raised by the tractor lift system.

Raise the snow thrower to the full transport height. Check the clearance between the top edge of the lift frame angle and the underside of the up stop pins or pin bushings at the left and right sides of the mounting frame.

The top edge of the lift frame angle should just touch the undersider of the up stop pins or pin bushings.

If the lift frame angle does not touch the up stop pins or pin bushings, or is forced tight against the up stop pins or pin bushings, a lift height adjustment is necessary. Proceed as follows:

Lower the snow thrower to the ground and loosen the jam nut on the adjustment bolt located on the lift arm at the right side of the snow thrower.

Operate the tractor lift and raise the snow thrower to the full transport height. Using a 3/4-inch wrench, turn the adjustment bolt head in a counterclockwise direction to raise the lift frame or clockwise direction to lower the lift frame.

Adjust the lift height so that the top edge of the mounting frame angle just touches the underside of the up stop pins or pin bushings.

Hold the adjustment bolt head from turning and retighten the jam nut firmly, to lock the bolt head in position.

Lower the snow thrower to the ground and raise to transport position once more. Check to see that the adjustment is correct.

LUBRICATION

The life of any snow thrower depends upon the care it is given. Proper lubrication is a very important part of that care.

GENERAL

Regular and sufficient lubrication increases the life of your machine and saves you time and money in terms of operating efficiency and service parts.

Completely lubricate the snow thrower according to this Lubrication Guide before operating for the first time. Thereafter, lubricate at the specified intervals.



CAUTION! Disengage (OFF) the power take-off and shut off the tractor engine before lubricating the snow thrower.

LUBRICATION FITTING GREASE


Use IH 251H EP grease or equivalent No. 2 multi-purpose lithium grease, for lubrication fittings on which the hand lubricator is applied.

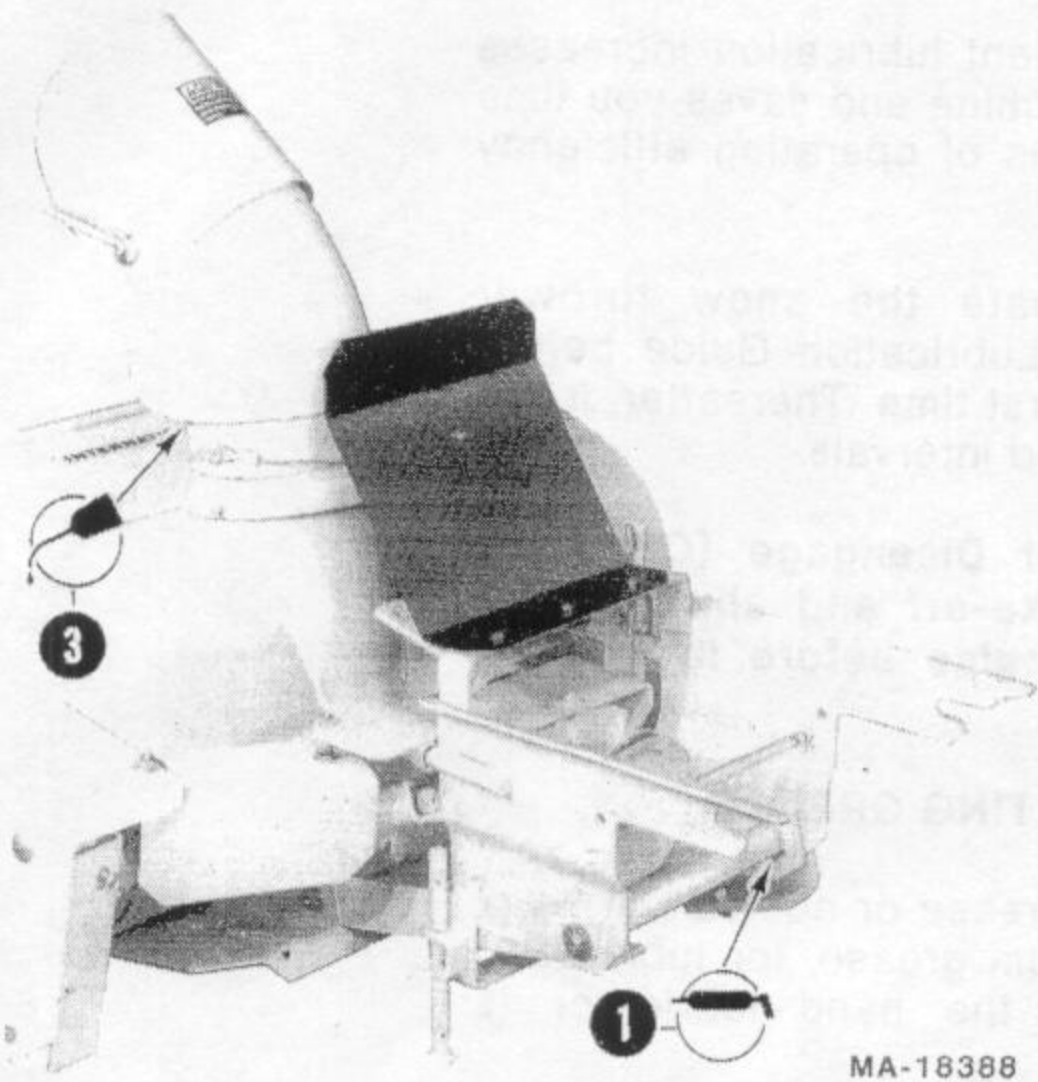


CAUTION! Exhaust fumes can kill. Never run engine inside buildings.

MA-16870 A

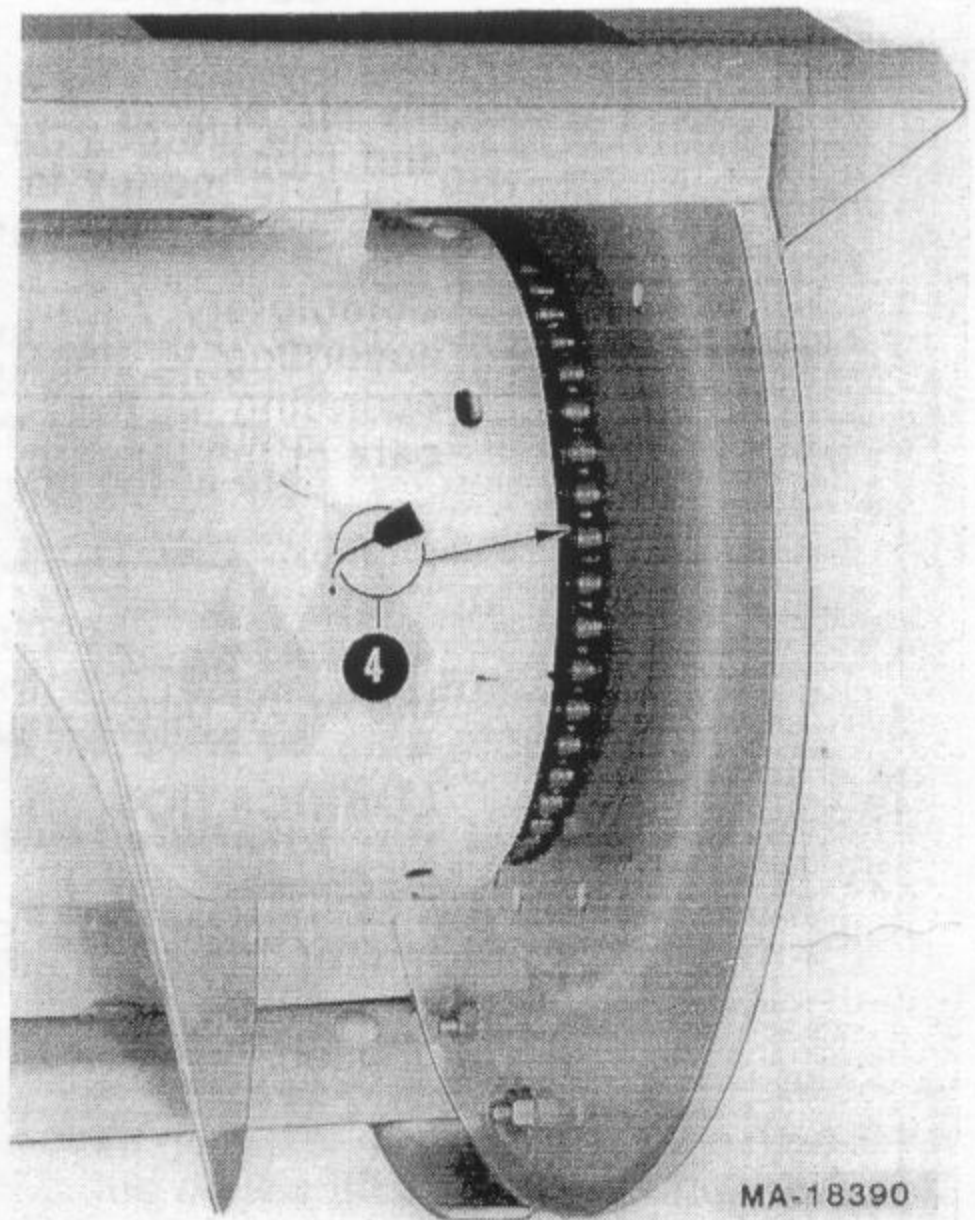
LUBRICATION

 **CAUTION!** To avoid an accident or possible injury, always stop the engine, disengage (OFF) the power take-off clutch and lock the brake on the tractor before servicing the snow thrower.



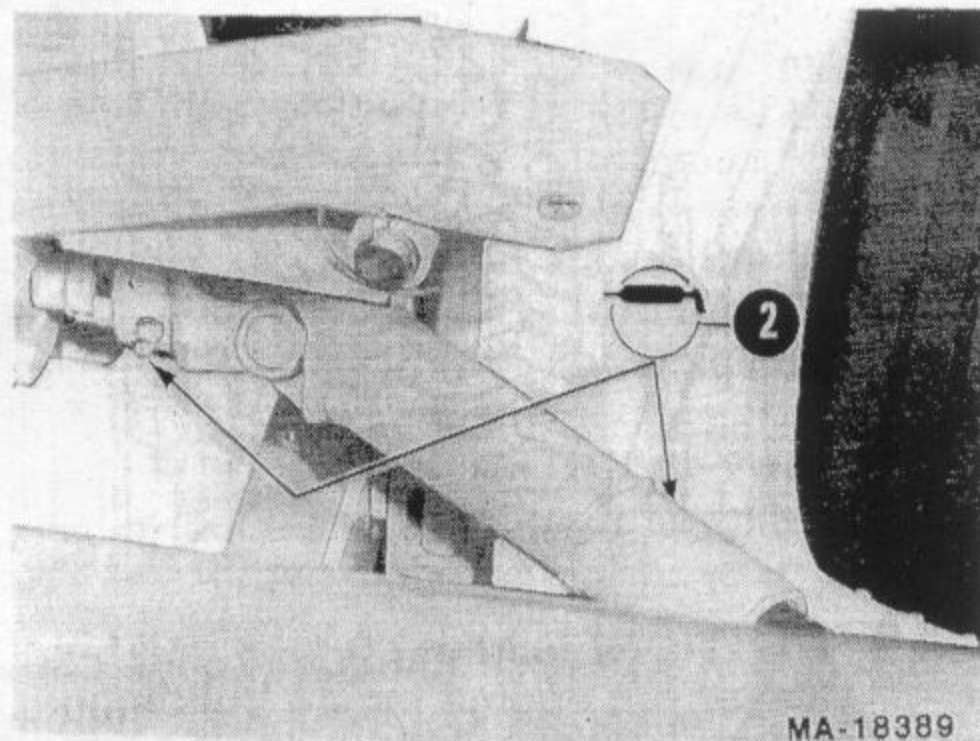
MA-18388

Discharge chute and lift frame tube



MA-18390

Rotor/collector drive chain



MA-18389

Universal shaft yoke

LUBRICATION

LUBRICATION GUIDE

The snow thrower is designed to require a minimum amount of lubrication; however, the points that are to be lubricated should be serviced regularly at the intervals listed.

Care should be taken to keep lubricant from coming in contact with V-belts or pulleys.

Keep the lubricating gun nozzle clean and wipe dirt from grease fittings before lubricating.

To maintain smooth and free operation, apply a few drops of oil as required to all pivot points before operation.

At Start of Snow Season and Before Storing

- 1 - Lift frame tube
 - 2 - Universal shaft and yoke (2)
- { Use IH 251H EP grease or equivalent No. 2 multi-purpose lithium grease and apply two or three strokes of lubricator, or sufficient grease to flush out the old grease and dirt.

Before Each Use of the Snow Thrower and After Every 5 Hours of Continuous Operation

- 3 - Discharge chute
 - 4 - Rotor/Collector drive chain
- { Apply a few drops of oil around the neck of the discharge chute.
- { Thoroughly lubricate chain with IH spray chain lubricant or IH No. 1 SAE-30W engine oil.

Miscellaneous

{ The gear box is a sealed unit type which was lubricated at the factory, no additional lubrication is required.

{ If the gear box should require service and lubricant must be replaced, or if lubricant must be added, use one pound of IH 251H EP grease or equivalent No. 2 multi-purpose lithium grease.

{ The rotor/collector drive bearings are sealed and do not require any lubrication.

{ Occasionally lubricate all linkage pivot points with a few drops of light engine oil.

STORING THE SNOW THROWER

At the end of the snow season, the following steps should be taken before storing the snow thrower.

Remove the snow thrower from the tractor.

Wash off any salt deposit or other foreign matter which may have gathered and dried on the snow thrower housing.

"Touch up" all rusted or chipped painted surfaces, by sanding and cleaning up the affected areas before painting.

Check for any damaged or bent parts. Make sure all idler pulleys and associated parts turn and move freely.

Should any service parts need replacement, they should be ordered early prior to storing the snow thrower.

This will give your International Harvester dealer enough time to provide the needed parts for installation before the next snow season.

Lubricate the snow thrower as outlined in the "LUBRICATION" instructions.

Store the snow thrower in a dry and protected area when not in use. Leaving it outdoors exposed to the weather elements will result in materially shortening its life.

BEFORE STARTING THE SNOW THROWER AFTER STORAGE

Make sure all bolts, nuts and fasteners are properly tightened.

Make sure all pulleys and associated parts turn freely.