INTERNATIONAL®

INTERNATIONAL® SPRING TRIP BLADE (42 and 54-inch) (1067 and 1372 mm) for INTERNATIONAL 482, 582, 682 and 782 CUB CADET® TRACTORS

SETTING UP INSTRUCTIONS

OPERATOR'S MANUAL

To The Owner

Your new International Harvester blade 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 efficient operation and maximum trouble-free service. Remember, an implement which is properly lubricated and adjusted saves time, labor, and fuel.

After the operating season, thoroughly clean your blade 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.

METRIC (SI) MEASUREMENTS

A standard of measurement known as International System of Units (SI) has been adopted for world-wide use. English Units followed by Metric Equivalents are used throughout this manual. (Metric Equivalents are given in parentheses)

DELIVERY SERVICE FOR INTERNATIONAL® HARVESTER EQUIPMENT

This form must be filled out by the dealer and signed by both the dealer and the customer at the time of delivery.

Equipment and Model No. _____

Serial No. _____ Engine Serial No. _____

Owner _____ Dealer _____

Address _____ Address _____

Town _____ Town _____

State _____ Zip _____ State _____ Zip _____

DEALER'S COPY

I have thoroughly instructed the buyer on the above described equipment which review included the Operator's Manual content, equipment care, adjustments, and safe operation. The warranty policy provisions were also explained and reviewed.

_____
DEALER'S SIGNATURE

Above equipment and Operator's Manual have been received by me and I have been thoroughly instructed as to care, adjustments, safe operation and applicable warranty policy.

_____ _____
DATE *AUTHORIZED SIGNATURE*

INTERNATIONAL HARVESTER COMPANY
401 NORTH MICHIGAN AVE. / CHICAGO, ILLINOIS 60611 / U.S.A.

1 096 278 R1.
PRINTED IN UNITED STATES OF AMERICA

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.

Service Manual Not 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

TOTAL _____

Please Print

Name _____

Street Address _____

City _____

State _____

Zip Code

_____ _____

Date **Signed**

Do not send cash or stamps

Prices subject to change without notice.

R1

CONTENTS

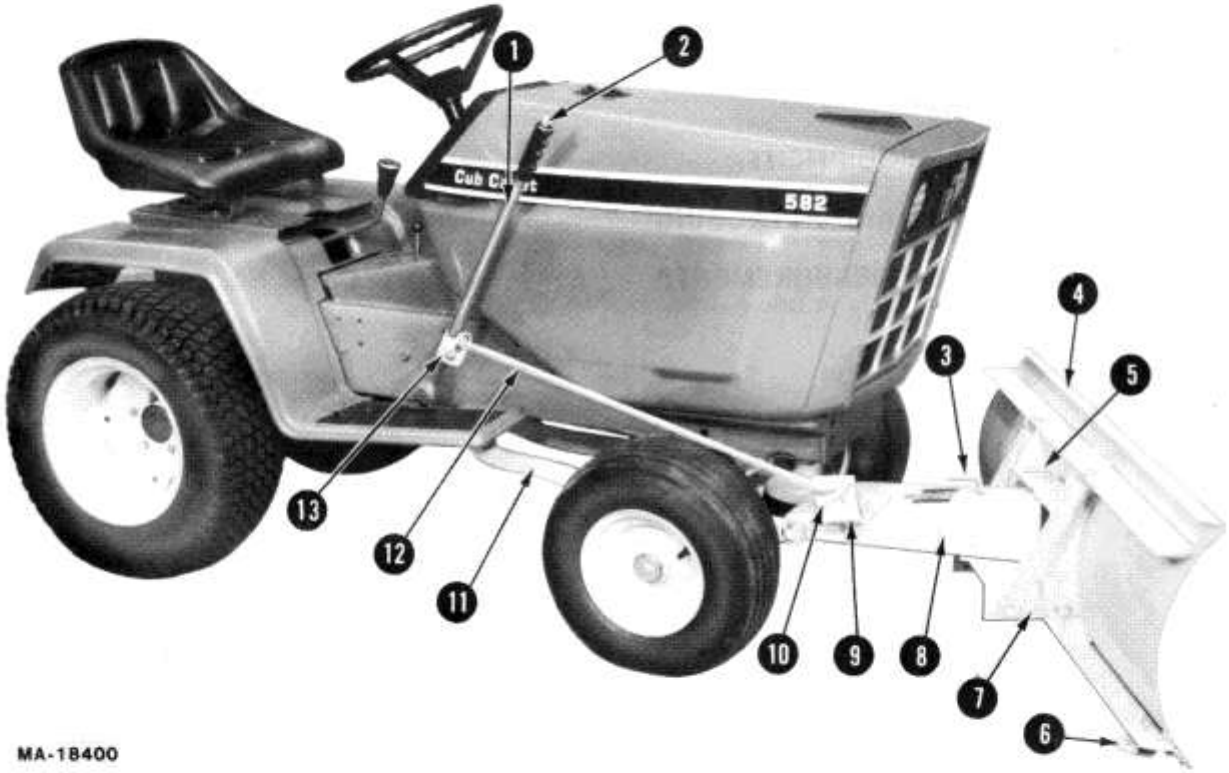
INTRODUCTION

The International 42 or 54-inch (1067 or 1372 mm) blade can be installed on all International Cub Cadet Tractors.

When the proper sub frame has been installed on the tractor, then the installation of either of the two sized blades and their main frames are basically the same.

Use sub frame adapting package (144 582 C91) for use with International Cub Cadet models 482, 582, 682 and 782 Tractors with serial numbers 665,001 and above.

Whenever the terms "left" and "right" are used, it should be understood to mean from a position behind and facing the machine.



MA-18400

1 - Lift handle
2 - Release button
3 - Angling pin
4 - Blade
5 - Spring trip lock pin
6 - Shoe (both sides)
7 - Pivot frame
8 - Main frame
9 - Lift arm
10 - Lockout bar
11 - Subframe
12 - Lift rod
13 - Handle bracket

Manually operated blade.

Blade mounted on 582 tractor.

MA-18401

1 - Hydraulic control lever
2 - Angling pin
3 - Blade
4 - Spring trip lock pin
5 - Shoe (both sides)
6 - Pivot frame
7 - Main frame
8 - Lift arm
9 - Lockout bar
10 - Subframe
11 - Lift rod
12 - Lift bracket
13 - Cam stop
14 - Locking knob

Hydraulically operated blade.

Blade mounted on 782 tractor.

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 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.

Make adjustments only when the blade is attached to the tractor.

After servicing, be sure all tools, parts or servicing equipment are removed from the machine.

Thoroughly inspect the area where the blade is to be used and remove all objects which might 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.

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 blade unless properly supervised, and are physically and mentally capable of safe operation.

Never permit the blade 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.

When operating the blade be sure you are in the operator's area, sitting on the seat until the operation is complete.

Hydraulic fluid escaping under pressure can have enough force to penetrate the skin. Hydraulic fluid may also infect a minor cut or opening in the skin. **If injured by escaping fluid, see a doctor a once.** Serious infection or reaction can result if medical treatment is not given immediately. Make sure all connections are tight and that hoses and lines are in good condition before applying pressure to the system. Relieve all pressure before disconnecting the lines or performing other work on the hydraulic system. To find a leak under pressure, use a small piece of cardboard or wood. Never use hands.

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 a tractor at high transport speeds on slippery surfaces. Operate the tractor smoothly — avoid erratic operation and excessive speed. Always maintain control.

Keep the blade in the lowest possible position when changing the angle, reversing, or removing the blade. Be sure that your feet are not under the blade when the adjustments are made.

No person should be allowed near the working area when the blade 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.

Reduce speed when traveling on rough roads, sharp turns, and down steep hills.

Do not stop or start suddenly when going uphill or downhill to prevent loss of control.

Never operate the tractor at high speeds with the blade locked in the stationary position. A collision with a hidden obstacle may damage the blade cutting edge and unseat the driver.

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, shut off engine and inspect for damage after striking an object. Repair any damage before restarting and operating the machine.

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

Never operate the blade 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.

Be careful to avoid catching the blade on stumps or other immovable objects.

Never tow another object with the blade or use the blade as a battering ram.

To ensure maximum side and ground clearance, do not transport the blade in the angled or tilted position.

Use extreme care when operating close to ditches, fences, or on hillsides.

TRANSPORTING

Be sure that the blade is fully raised and is in the straight forward position when in transport.

When turning close to buildings or passing through narrow areas, be sure to allow sufficient clearance for the blade.

Avoid heavily-traveled roads when moving equipment, if at all possible.

AFTER OPERATING

Always wait for the tractor to come to a complete stop, lower blade to the ground and shut off the engine before leaving tractor.

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

ADJUSTING AND OPERATING

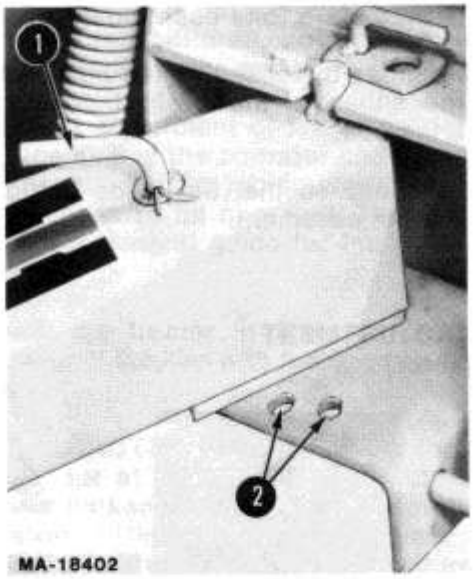
GENERAL

The blade is designed for use on International® Cub Cadet 482, 582, 682 and 782 Tractors for clearing snow, leveling soft dirt or sand, and other lightweight dozer jobs. The spring trip release protects the blade, tractor, and operator from severe shock loads when the blade comes in contact with curbs and other obstacles, regardless of speed. The blade has a reversible and replaceable cutting edge.

782 Tractor with Front Hydraulic Outlet

A Hydraulic Angling Attachment is available at your International Dealer for Cub Cadet Hydrostatic Drive tractors equipped with Front Hydraulic Outlets. **Refer to "Optional Equipment".**

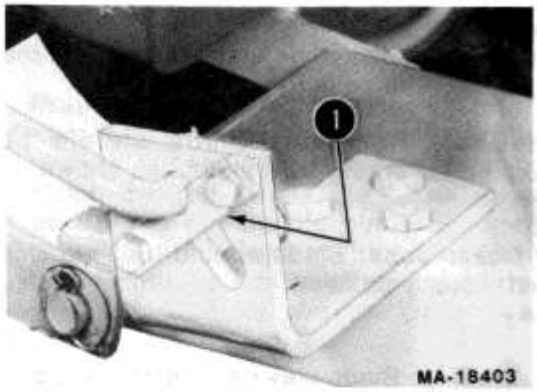
BLADE ANGLING



1 - Angling pin
2 - Two angular positions (three positions not seen)

The manually operated blade has five angular positions. The angle is controlled by the angling pin. Raise the pin and angle the blade as desired, then lock in place by lowering the pin.

BLADE DOWN PRESSURE ADJUSTMENT



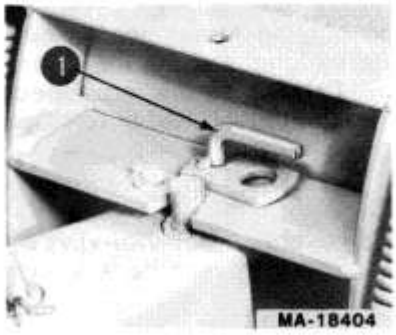
1 - Lockout bar

Lockout bar in locked position.

The lockout bar is used for blade down pressure. When the lockout bar is in the locked position as shown, the blade has the ability to push down for increased digging.

NOTE: For normal blade operation, remove lockout bar so blade can float.

SPRING TRIP LOCK



1 - Spring trip lock

Blade shown in unlocked position for spring trip release.

Blade should always be unlocked so that the spring trip release is in operation.

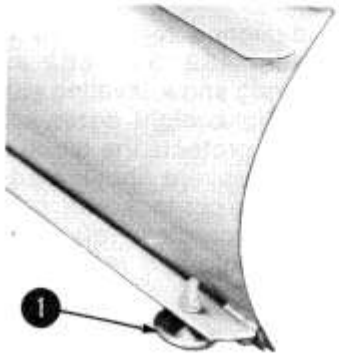
For Snow Removal: Blade should be unlocked for spring trip release as shown.

For Dozer Jobs: Blade should be locked in the stationary position.

For Grading: Blade may be locked in the stationary position or unlocked for spring trip release as shown.

CAUTION! Never operate the tractor at high speeds with the blade locked in the stationary position. A collision with a hidden obstacle may damage the blade cutting edge and unseat the driver.

BLADE SHOE ADJUSTMENT



1 - Skid shoe (one each side)

Adjust the shoes by loosening the bolts and moving the shoes to the desired position. Retighten the bolts.

Adjust the shoes so that the blade cutting edge clears the pavement.

HEIGHT ADJUSTMENT (782 Tractor)

1 - Hydraulic lift control lever

The hydraulic lift control lever is spring loaded. To raise the blade, move the lever back toward the tractor seat. To lower the blade, move the lever forward. **Refer to tractor Operator's Manual for preset height adjustment.**

(482, 582, 682 Tractors)

The lift handle is used to lift or lower equipment used with the tractor. The blade can be set in multiple positions by depressing the button on the top of the handle and releasing it when the desired position is reached. **Refer to illustration in "Introduction".**

OPERATION

CAUTION! To prevent injury, do not carry passengers or give rides. Keep children, pets and by-standers a safe distance away.

The exact adjustment of the blade depends upon the skill of the operator and the type of conditions and other factors under which the equipment is to be operated. The following will give a general guide for the use of the blade:

Operate the tractor in first gear and part throttle until familiar with the operation of the blade.

CAUTION! Never operate the tractor at high speeds with the blade locked in the stationary position. A collision with a hidden obstacle may damage the blade cutting edge and unseat the driver.

Pushing Snow

Adjust the shoes so the blade cutting edge just clears the pavement.

Adjust for least amount of down pressure by removing lockout bar.

In large open flat areas, the tractor can be operated in second gear (482 and 582 tractors).

Light Grading

For light grading and spreading soil, sand, gravel, etc., adjust the shoes so they are even with the cutting edge. Be sure lockout bar is in the locked position for down pressure on blade. Control blade position with the tractor implement lift. Operate the tractor in first or second gear.

Heavy Grading

For heavy grading of soil, sand, gravel, etc., adjust the shoes so they are slightly above the cutting edge. Be sure lockout bar is in the locked position for down pressure on the blade. Control blade position with tractor implement lift. Operate the tractor in first gear.

Terracing

For terracing, adjust the shoes so they are approximately 1/4-inch or more above the cutting edge, depending on the rate of blade penetration desired. Angle the blade away from the trench cut by the blade. Be sure lockout bar is in locked position for down pressure. Control blade depth with tractor implement lift. Operate the tractor in first gear.

Once the desired angle of the terrace is achieved, level the blade and continue grading until the desired terrace depth or width is obtained.

CAUTION! To avoid an accident or injury, do not allow children or adults to operate the blade without proper instructions.

LUBRICATION

Periodically, lubricate the pivot points with a good grade of engine oil.

SETTING UP

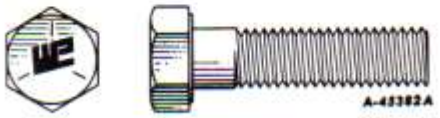
Remove all wires or other packaging material. Sort out all hardware by sizes and types in a convenient and orderly manner.

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

Lubricate all working parts as you proceed, and see that they work freely.

Whenever the terms "left" and "right" are used, it should be understood to mean from a position behind and facing the machine.

Bolts furnished with the blade are identified by three radial lines on the head. Bolts without radial lines are type 1.

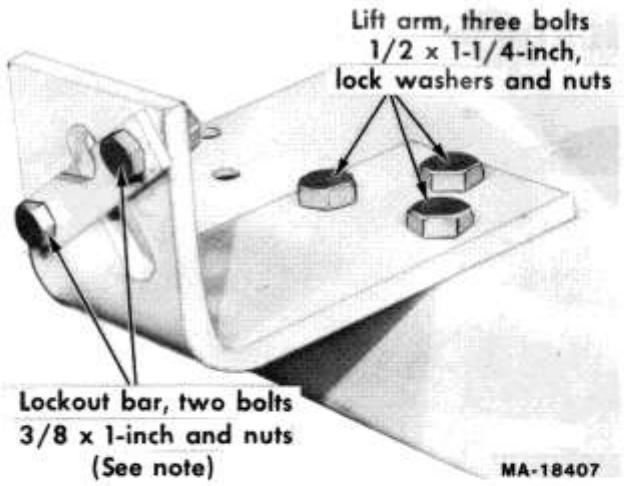


BOLT TORQUE IN FOOT POUNDS AND NEWTON METERS

Bolt Dia. Inches	Type 1		Type 5		Type 8	
	Ft. lbs.	(N·m)	Ft. lbs.	(N·m)	Ft. lbs.	(N·m)
1/4	6	(8)	10	(14)	13	(18)
5/16	13	(18)	20	(27)	29	(39)
3/8	23	(31)	35	(47)	48	(65)
7/16	37	(50)	57	(77)	80	(108)
1/2	55	(75)	85	(115)	123	(167)
5/8	104	(141)	170	(230)	235	(319)
3/4	185	(251)	305	(414)	425	(567)
7/8	315	(427)	445	(603)	690	(936)
1	445	(603)	670	(908)	1050	(1424)

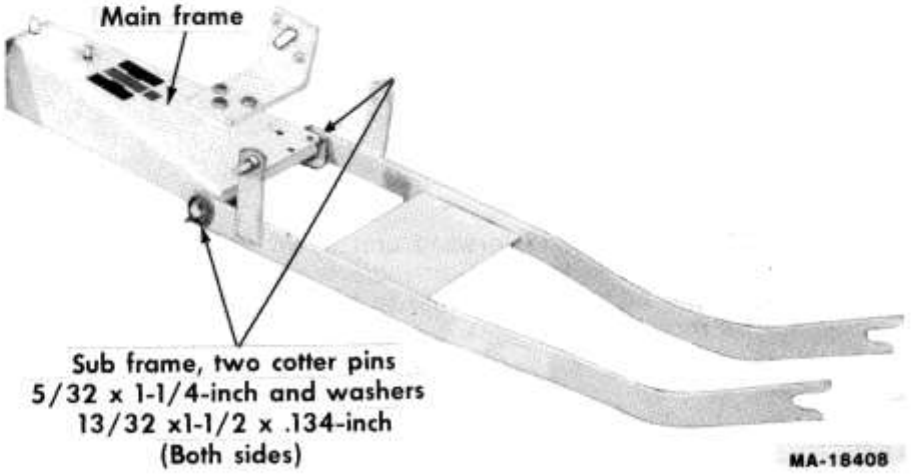
NOTE: For plated bolts use 85% of chart figures.

STEP 1. ATTACH LOCKOUT BAR TO LIFT ARM ATTACH LIFT ARM TO MAIN FRAME

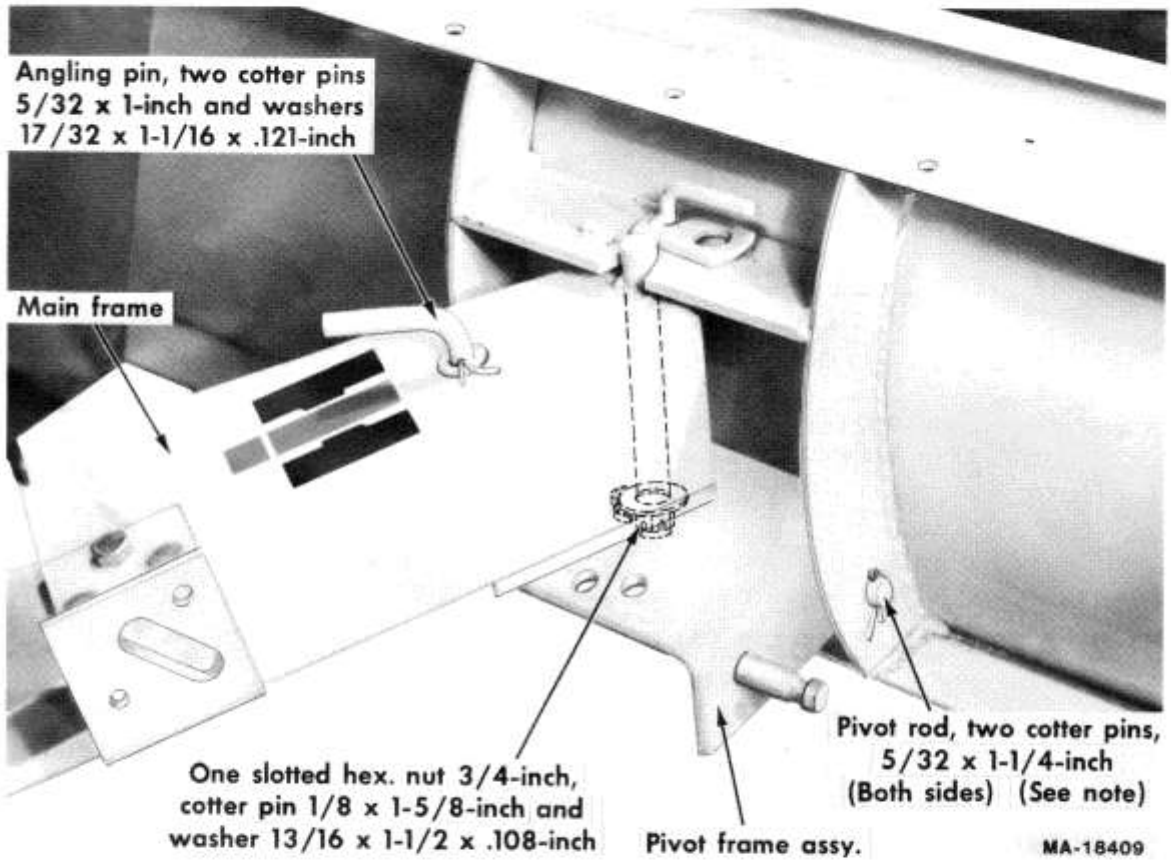


NOTE: For normal blade operation, the lockout bar should not be attached.

STEP 2. ATTACH SUBFRAME TO MAIN FRAME

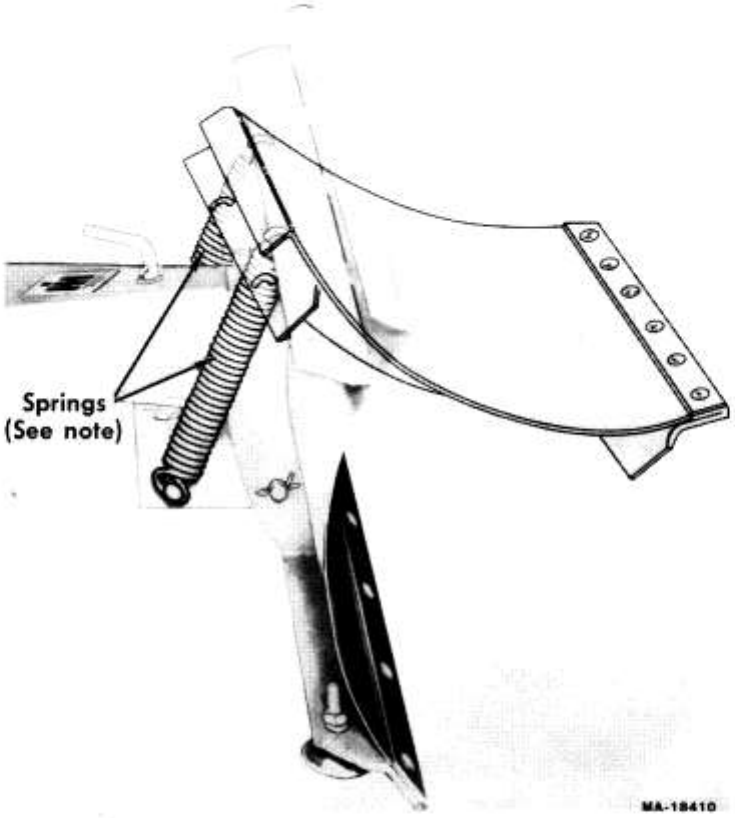


STEP 3. ATTACH ANGLING PIN TO MAIN FRAME
ATTACH MAIN FRAME TO PIVOT FRAME ASSEMBLY
ATTACH PIVOT ROD TO PIVOT FRAME ASSEMBLY AND BLADE



NOTE: Pitch blade forward and down (see illustration in Step 4 for example of pitching blade) to attach pivot frame to blade, using pivot rod and cotter pins.

STEP 4. ATTACH SPRINGS

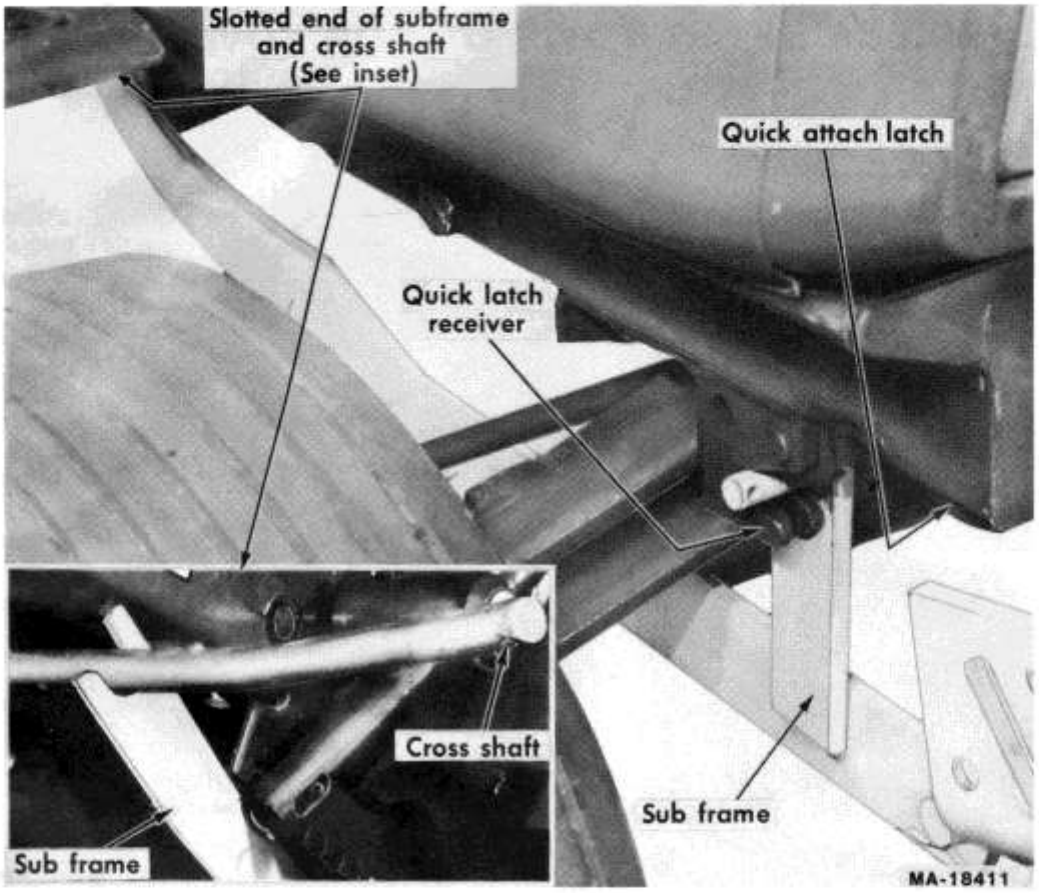


NOTE: Pitch blade rearward and connect the springs.

CAUTION! Read Operator's Manual before disassembly of a loaded spring.

MA-16850

STEP 5. ATTACH SUBFRAME TO TRACTOR



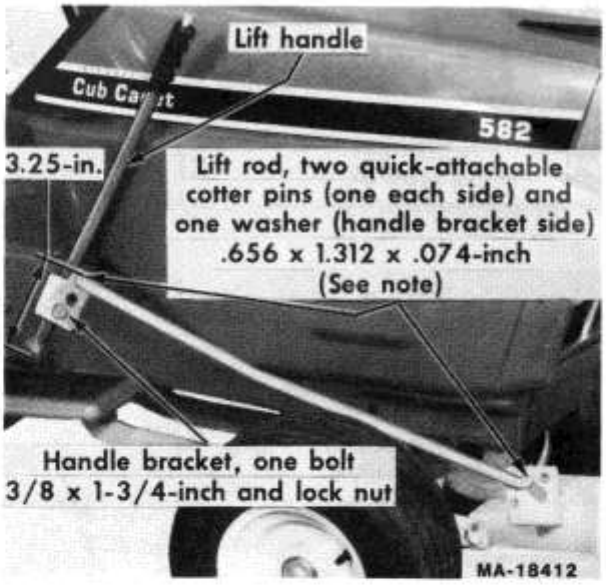
Right side

582 Tractor shown.

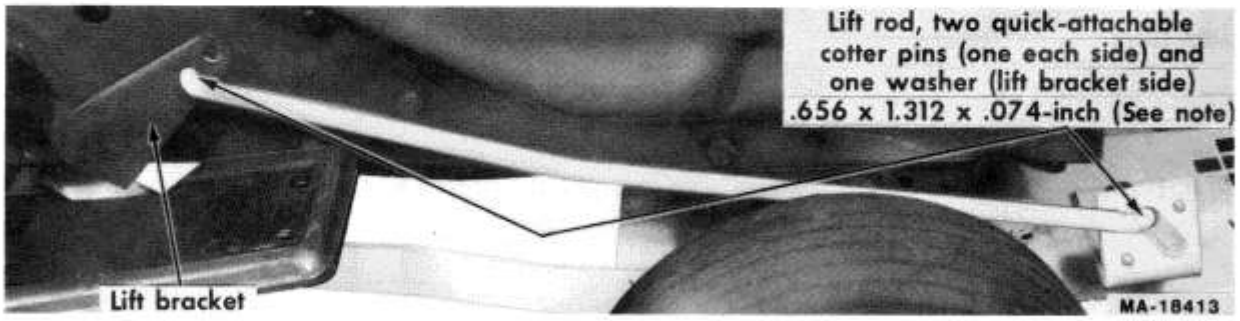
Place slotted ends of subframe on cross shaft under tractor. Raise subframe into quick latch receiver, push in to lock.

NOTE: When mounting slotted ends of subframe on cross shaft under 782 tractor, loosen cam stop (turn counterclockwise) so there will be no interference with rockshaft arms. After cam stop is loosened, move rockshaft until rockshaft arms do not interfere with subframe. Rockshaft arms should be in raised position.

STEP 6. ATTACH LIFT ROD AND HANDLE BRACKET



582 Tractor shown.



782 Tractor shown.

Attach the lift rod to the lift arm on the main frame and in the upper hole of handle bracket or lower hole of the lift bracket, depending on the type of lift the tractor is equipped with.

NOTE: After lift rod is attached, operate lift handle or lift bracket to be sure there is enough clearance between tractor frame and lift rod.

NOTE: Refer to the Operator's Manual for correct operating instructions for Manual Lift or Hydraulic Lift.

MEASUREMENT UNITS

English Unit	Metric Equivalent (SI)
Area	
1 square inch (in^2)	6.45 square centimetre (cm^2)
1 acre	0.405 hectare(ha)
Force	
1 pound-force (lbf)	4.45 newton (N)
Length	
1 foot (ft)	304.8 millimetre (mm), 30.5 centimetre (cm), 0.305 metre (m)
1 inch (in)	25.4 millimetre (mm), 2.54 centimetre (cm)
1 mile	1609 metre (m), 1.61 kilometre (km)
Mass	
1 pound (lb)	0.454 kilogram (kg)
Power	
1 horsepower (hp)	0.746 kilowatt (kW)
Pressure	
1 pound-force per square inch, psi (lbf/in^2)	6.89 kilopascal (kPa), 0.00689 megapascal (MPa)
Temperature	
t degree Fahrenheit (°F)	$\frac{(t - 32)}{1.8}$ degree Celsius (°C)
Torque	
1 pound-force foot (lbf·ft)	1.356 newton metre (N·m)
Velocity	
1 mile per hour (mph)	1.61 kilometre per hour (km/h)
Volume	
1 US bushel	0.035 cubic metre (m^3)
1 US gallon (US gal)	3.79 litre (L)
1 US quart (US qt)	0.946 litre (L)

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