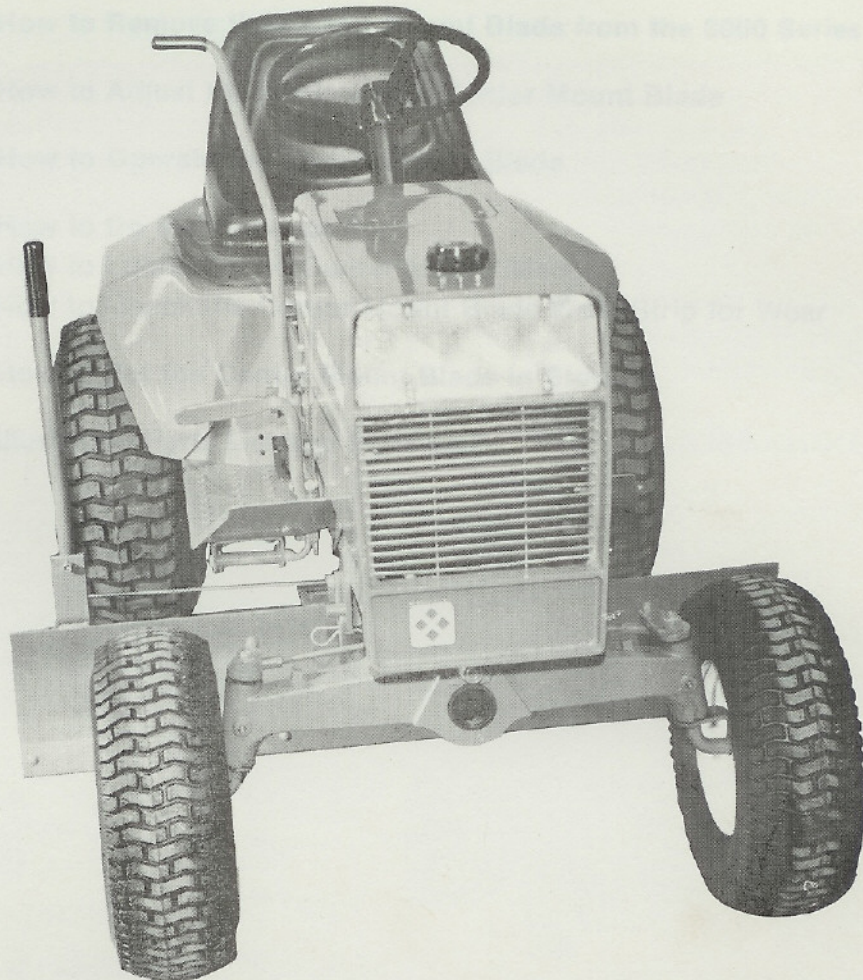


GRAVELLY OPERATOR'S MANUAL

NAME: CENTER MOUNT BLADE

PART NUMBER(S): 21308



The Center Mount Blade is for use with the Gravely 8000 Series tractor.

The Front Weight Rack (part number 20443), the Weight Kit (part number 11924), and the Tire Chains are for use with the Center Mount Blade.

All reference to left side, right side, front and rear are given from the operator's position.

To continue its program of quality and design improvement, the manufacturer reserves the right to change specifications, designs and prices without notice and incurring obligation.

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1.0 WARNINGS - FOR YOUR SAFETY

NOTE: This warning symbol indicates that there is danger to persons or equipment. Read these warnings carefully and follow them.

This section gives warnings for you about operating and doing maintenance on this equipment.

Using this equipment the wrong way can cause injury to persons and damage to the equipment. Persons operating or doing maintenance on this equipment must read this Operator's Manual and follow the instructions.

It is important to understand that this Operator's Manual and other Gravely instruction books do not list every possible danger. It is not possible for Gravely to know and tell all the dangers in operating and doing maintenance on the equipment.

The purchaser must give these instructions to the person operating and doing maintenance on this equipment. The purchaser must get the operator and person doing maintenance on this equipment to use eye and foot protection.

1.1 INSTRUCTIONS BEFORE OPERATION

1. Read the Operator's Manual for the tractor and this Operator's Manual carefully before operating or doing maintenance.
2. Learn the location and the function of all the controls for the tractor and the center mount blade.
3. Know how to use the controls to stop the tractor and the center mount blade quickly.
4. Never permit children to operate or ride on the tractor or the center mount blade.
5. Use caution with gasoline. Gasoline is very flammable. Keep gasoline in a clean and tight container. Keep gasoline away from fire or hot items. Never put gasoline in the fuel tank while the engine is running or hot. Clean any leakage of gasoline from the tractor before starting the engine.
3. Wear strong shoes. Wear clothing that is not loose. Wear eye protection.
4. Before starting the engine, put the direction control lever in the "NEUTRAL" position and the power take off (PTO) control in the "OUT" position.
5. Keep the tractor and the center mount blade in good operating condition. Do the maintenance as shown in the Operator's Manual.
6. Do not operate the tractor and the center mount blade where the area of operation is too dark for the operator to see.
7. Never operate the tractor and the center mount blade when there is damage to any part or when any part is not in the correct position.

1.2 PREPARATION FOR OPERATION

1. Check the area of operation and remove all material that will damage the tractor or the attachment.
2. Make sure all shields and guards are in the correct position before operating.

1.3 OPERATION

1. Keep away from moving parts.
2. Keep all persons and animals away from the area of operation.
3. Do not let persons ride on the tractor or the

center mount blade.

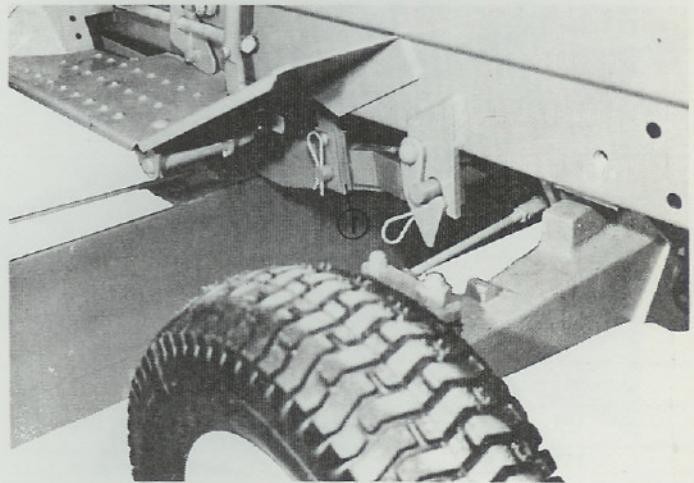
4. When operating on slopes, use a slow speed and engage the direction control lever slowly.
5. When operating on slopes go up and down the slopes.
6. Always look for and keep away from holes and other hazards.
7. Use caution when moving backwards. Look for persons and hazards in the way.
8. After hitting an object stop the tractor and the engine and check for damage.
9. Operate the equipment only when in the operator's position.
10. Before leaving the tractor, put the PTO control in the "OUT" position. Turn the ignition switch to the "OFF" position and remove the ignition key.
11. If there is a sudden change in the sound or vibration of the tractor or the center mount blade, stop the tractor and check for damage. Make repairs before operating.
12. Never start and run the engine inside a building except to move the equipment outside. Exhaust fumes are dangerous.
13. Always follow traffic laws while going on or near a road.
14. Go slow on surfaces where the tractor can slide.
15. Before leaving the operator's position to make adjustments or to do maintenance, put the PTO control lever in the "OUT" position. Turn the ignition switch to the "OFF" position. Wait until the engine and moving parts have stopped.

2.0 HOW TO ATTACH THE CENTER MOUNT BLADE TO THE 8000 SERIES TRACTOR

WARNING: Stop the engine before attaching the center mount blade to the tractor.

NOTE: Fasten the shear link in the second hole from the bottom, on the 8000 series commercial tractor, with the long frame.

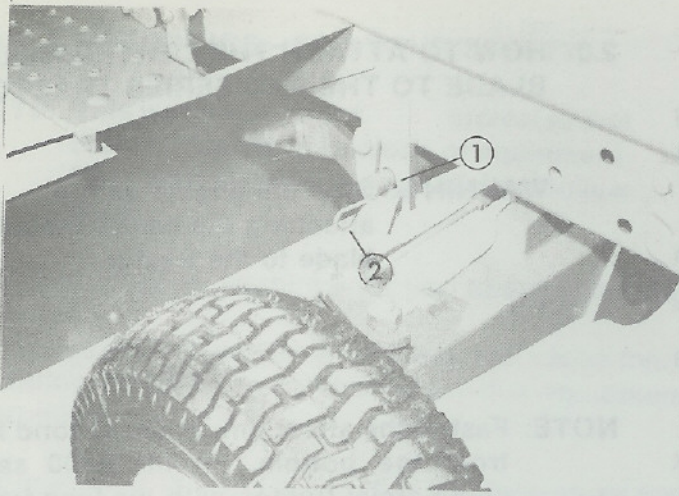
1. Move the lift lever of the tractor to the highest position. Put the shear link in the center hole of the lift lever on the tractor. See figure 2.0-1.



1 - Shear Link

Figure 2.0-1

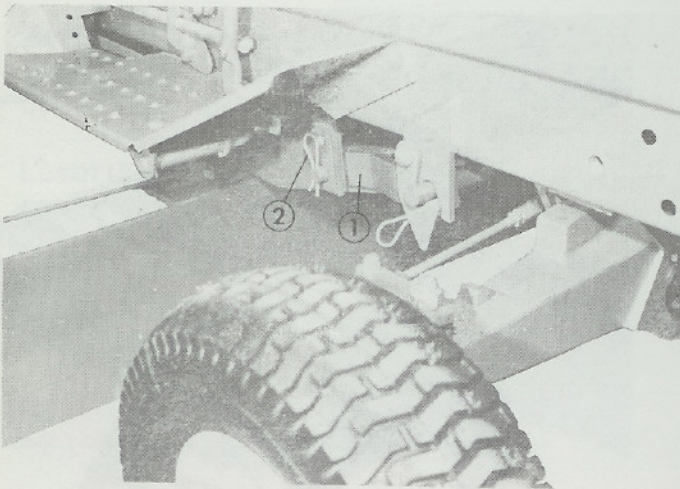
2. Slide the frame under the tractor from the right side.
3. Put the frame pivot in the attachment bracket on the tractor. Close the equipment latches and install the hair pin cotters. See figure 2.0-2.



- 1 - Attachment Bracket
- 2 - Hair Pin Cotter

Figure 2.0-2

4. Put the shear link on the lift pivot on the frame. Install the hair pin cotter. See figure 2.0-3.



- 1 - Frame
- 2 - Hair Pin Cotter

Figure 2.0-3

3.0 HOW TO REMOVE THE CENTER MOUNT BLADE FROM THE 8000 SERIES TRACTOR

WARNING: Stop the engine before removing the center mount blade.

1. Remove the hair pin cotter from the lift pivot. See figure 2.0-1.
2. Remove the hair pin cotters from the attachment brackets. Open the equipment latches and remove the frame from the attachment brackets.

4.0 HOW TO ADJUST THE ANGLE OF THE CENTER MOUNT BLADE

1. Use the attachment lift to raise the blade from the ground.

NOTE: There are three notches for adjusting the angle of the blade. The latch block must be in one of the notches.

2. To angle the blade to the right, pull the handle to the left to unlock the latch. Pull the handle toward the rear of the tractor. Then push the handle to the right to lock the latch. See figure 4.0-1.

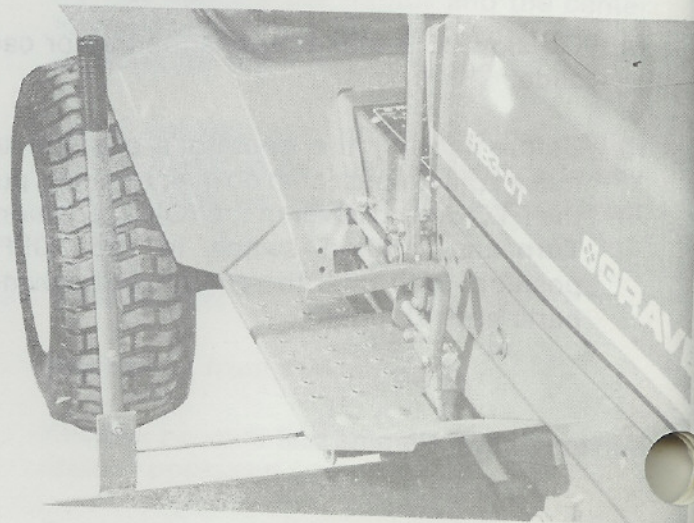


Figure 4.0-1

3. To angle the blade to the left, pull the handle to the left to unlock the latch. Push the handle toward the front of the tractor. Then push the handle to the right to lock the latch.
4. To angle the blade to the center, pull the handle to the left to unlock the latch. Move the handle until the blade is in the center. Push the handle to the right to lock the latch.
5. The depth of the blade is controlled by adjusting the attachment lift lever on the tractor.

5.0 HOW TO OPERATE THE CENTER MOUNT BLADE

Read this Operator's Manual and the Operator's Manual for the tractor before operating the equipment.

WARNING: Use a slow speed the first time you operate the tractor and the center mount blade.

NOTE: If a solid object is hit, the bolt in the shear plate assembly can break. This is to protect the lift system. Replace the 5/16" x 1-1/4" round head bolt. Tighten to a torque of 25 ft. lbs. (34 N.m).

1. Adjust the angle of the blade as shown in section 4.0.
2. Start the engine. Wait until the engine is running smoothly before operating.
3. Put the range selector in the "LOW" position.
4. Put the gear selector in the 1 or the 2 position.
5. Move the throttle lever to the "FAST" position.
6. Lower the blade to the ground. Put the direction control lever in the "FORWARD" position and move the tractor forward. Adjust the height of the blade as needed

6.0 HOW TO DO MAINTENANCE

WARNING: Stop the engine before doing maintenance on the center mount blade.

6.1 HOW TO LUBRICATE THE CENTER MOUNT BLADE

After every use, put engine lubricant on the following:

- A. The pivot tube.
- B. The bushing in the latch block.
- C. The bushing in the handle.
- D. Both ends of the latch rod.

6.2 HOW TO TIGHTEN THE BOLTS

Inspect all nuts, bolts, and other fasteners to make sure they are tight. Replace any fasteners that are missing. Tighten the bolts to the torque given in figure 6.0-2, unless shown differently.

BOLT TORQUE SPECIFICATIONS		
BOLT SIZE	FOOT POUNDS (ft. lbs.)	NEWTON METERS (N.m)
1/4"	7	9.5
5/16"	14	19
3/8"	25	34
7/16"	40	54
1/2"	60	82
9/16"	83	113
5/8"	120	163
3/4"	200	271

Figure 6.0-2

6.3 HOW TO CHECK THE CENTER MOUNT BLADE WEAR STRIP FOR WEAR

NOTE: Do not let the wear strip become worn to the point that the blade comes in contact with the surface.

1. Check the wear strip for wear after every use. The wear strip must be turned over 180°, top to bottom, before it becomes even with the edge of the blade.

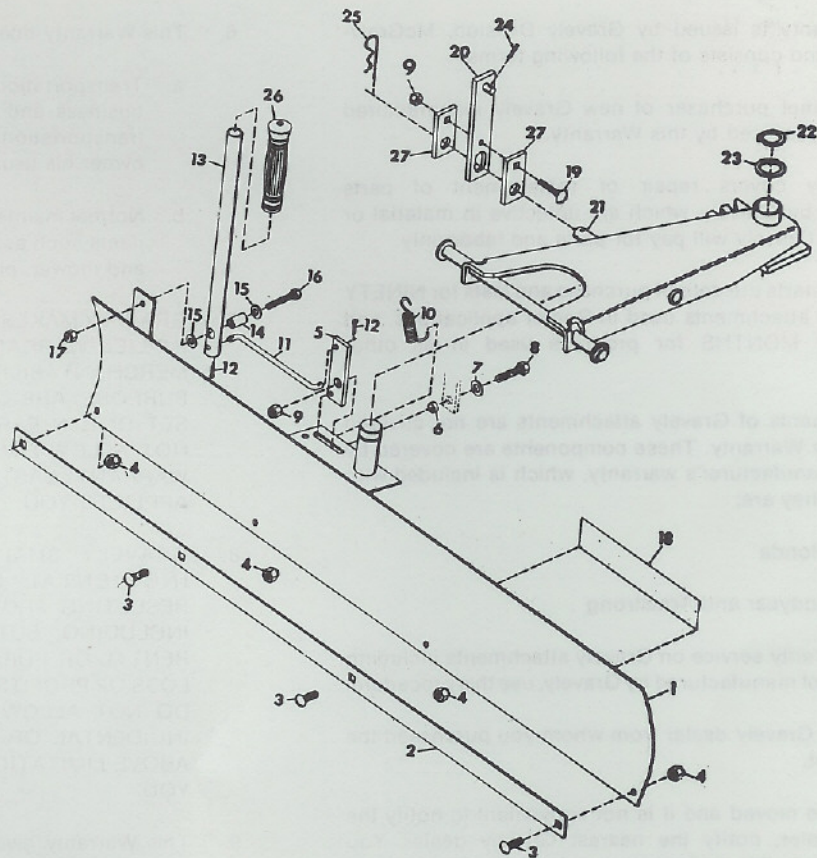
2. Remove the 1/4" x 5/8" bolts and the 1/4" hex nuts from the wear strip and the blade.
3. Turn the wear strip 180°, top to bottom.
4. Fasten the wear strip to the blade with the 1/4" x 5/8" nuts and the 1/4" hex nuts.

7.0 HOW TO PUT THE CENTER MOUNT BLADE IN STORAGE

If the center mount blade will not be used for three months or more do the following:

1. Clean all the debris and dirt from the center mount blade.
2. To prevent rust, apply paint or lubricant to any area where the paint has been removed.
3. Do the maintenance shown in section 6.0.

8.0 ILLUSTRATED PARTS AND PARTS LIST



Item No.	Part No.	Qty.	Description
1	19632	1	Blade, Weldment
2	19633	1	Strip, Wear
3	126203	4	Bolt; 1/4" x 5/8"
4	120375	5	Nut, Hex; 1/4"
5	19634	1	Block, Latch
6	19635	1	Bushing, Latch
7	120386	1	Washer, Flat; .312
8	180082	1	Bolt, Hex; 5/16" x 1-3/8"
9	419455	1	Nut, Lock; 5/16"
10	19636	1	Spring, Ext Type
11	19637	1	Rod, Latch
12	121222	1	Pin, Cotter
13	19638	1	Handle
14	19639	1	Bushing, Handle
15	120394	2	Washer, Flat; .406
16	180126	1	Bolt, Hex; 3/8" x 1-1/2"
17	456004	1	Nut, Lock; 3/8"
18	19365	1	Decal, Gravely
19	120230	1	Bolt; 5/16" x 1-1/4"
20	19650	1	Link, Weldment
21	20115	1	Frame Weldment
22	19652	1	Ring, Retaining
23	172760	1	Washer, Flat; 1-7/8"
24	443017	1	Pin, Groove Type
25	10405	1	Pin, Hair Cotter
26	10671	1	Grip, Hand
27	20120	2	Plate, Shear

GRAVELY ATTACHMENT LIMITED WARRANTY

This Limited Warranty is issued by Gravelly Division, McGraw-Edison Company, and consists of the following terms:

1. Only the original purchaser of new Gravelly manufactured attachments is covered by this Warranty.
2. This Warranty covers repair or replacement of parts manufactured by Gravelly which are defective in material or workmanship. Gravelly will pay for parts and labor only.
3. The Warranty starts the date of purchase and lasts for NINETY (90) DAYS for attachments used in Roofer applications, and TWELVE (12) MONTHS for products used in all other applications.
4. Some components of Gravelly attachments are not covered by the Gravelly Warranty. These components are covered by the original manufacturer's warranty, which is included with the product. They are:
 - a. Engine - Honda
 - b. Tires - Goodyear and Armstrong
5. To obtain warranty service on Gravelly attachments including components not manufactured by Gravelly, use this procedure:
 - a. Notify the Gravelly dealer from whom you purchased the attachment.
 - b. If you have moved and it is not convenient to notify the selling dealer, notify the nearest Gravelly dealer. You should supply this dealer with a copy of the bill of sale as proof of the date of purchase.
 - c. Make arrangements to have the attachment delivered to the dealer (refer to paragraph 6(a) below).
 - d. If you have any questions concerning the Gravelly Limited Warranty, they should be referred to:

Gravelly Division
McGraw-Edison Company
One Gravelly Lane
Clemmons, NC 27012

Attn: Manager of Customer Services
 - e. Warranty service on Gravelly attachments must be performed by an authorized Gravelly dealer or Gravelly factory branch.
6. This Warranty does not cover the following:
 - a. Transportation between owner's home or place of business and the dealership. If the dealer provides the transportation of the attachment, he will charge the owner his usual rate for such service.
 - b. Normal maintenance services and normal replacement of items such as spark plugs, belts, oil, oil filters, air filters, and mower, plow or cultivator blades.
7. GRAVELLY MAKES NO OTHER EXPRESS WARRANTIES. ANY IMPLIED WARRANTIES, INCLUDING WARRANTIES AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE PERIOD SET OUT IN PARAGRAPH 3 ABOVE. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE STATEMENT MAY NOT APPLY TO YOU.
8. GRAVELLY SHALL HAVE NO RESPONSIBILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE BREACH OF ANY WARRANTY, INCLUDING, BUT NOT LIMITED TO, INCONVENIENCE, RENTAL OR PURCHASE OF REPLACEMENT PRODUCTS, LOSS OF PROFITS OR COMMERCIAL LOSS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.
9. This Warranty gives you specific legal rights, and you may have other rights which vary from state to state.
10. A Gravelly product registration card is supplied with each Gravelly product. Please complete the card and return it to Gravelly at the address listed on the card. The registration card will be used by Gravelly for:
 - a. Recording date of purchase.
 - b. Notification of owners in compliance with the Consumer Product Safety Act, should any notification be necessary.The return of registration card is not required in order to take advantages of this Warranty.
11. This Warranty is not subject to change or modification by anyone, including Gravelly dealers and no Gravelly dealer is authorized to make any representations or promises on Gravelly's behalf.



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