

MINI V-BLADE

Operation and Maintenance Manual



122305-48"

122310-60"



*Register your
WARRANTY
within 30 days
of purchase*



BD-092

888-376-7027 | BlueDiamondAttachments.com

Owner Information

Thank you for your decision to purchase a Blue Diamond Mini V Blade. To ensure maximum performance of your equipment, it is mandatory that you thoroughly study the Operator's Manual and follow the recommendations. Proper operation and maintenance are essential to maximize equipment life and prevent personal injury.

Operate and maintain this equipment in a safe manner and in accordance with all applicable local, state, and federal codes, regulations and /or laws. Follow all on-product labeling and instructions.

Make sure that all personnel have read this Operator's Manual and thoroughly understand safe and correct operating, installation and maintenance procedures.

Blue Diamond is continually working to improve its products. Blue Diamond reserves the right to make any improvements or changes as deemed practical and possible without incurring any responsibility or obligation to make any changes or additions to equipment sold previously.

Although great care has been taken to ensure the accuracy of this publication, Blue Diamond makes no warranty or guarantee of any kind, written or expressed, implied or otherwise with regard to the information contained within this manual. Blue Diamond assumes no responsibility for any errors that may appear in this manual and shall not be liable under any circumstances for incidental, consequential or punitive damages in connection with, or arising from the use of this manual.

Keep this manual available for frequent reference. All new operators or owners must review the manual before using the equipment and annually thereafter. Contact your Blue Diamond Attachments Dealer for assistance, information, or additional copies of the manual. Contact www.bluediamondattachments.com or call 888-376-7027 for a complete list of dealers in your area.

Serial Number Location

Please record attachment information in the space provided for future reference.

Model Number: _____

Serial Number: _____

Dealer Name: _____

Dealer Number: _____

Date of Purchase: _____

The serial number plate (is located on right side, just forward of the attachment mounting plate.

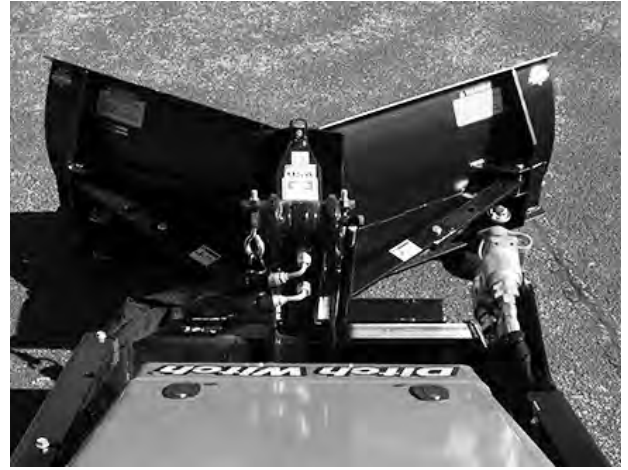
Always use your serial number when requesting information or when ordering parts.

NOTE: The directions left, right, front and rear, as mentioned throughout this manual, are as viewed from the operator's position.

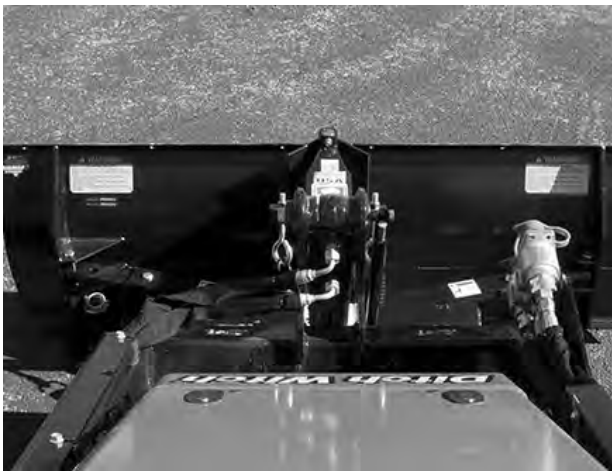
Specifications



30° Angle Cut Width
4' - 42 1/2" | 5' - 53 3/8"



Scooped Cut Width
4' - 42 1/4" | 5' - 52 3/4"



Straight Cut Width
4' - 50" | 5' - 62"



V Cut Width
4' - 43" | 5' - 54"

SAFETY PRECAUTIONS

Most equipment accidents can be avoided by following simple safety precautions. These precautions, if followed at all times, will help you operate your dozer safely.

1. Do not attempt to start the loader engine while standing beside the loader. Always start the engine while in the loader operator's location.
2. Always stop engine when leaving the loader.
3. Do not allow anyone but the operator to ride on the loader-dozer.
4. Do not make mechanical adjustments while the unit is in motion, the blade is raised, or the engine is running.
5. Do not dismount from the loader and leave the dozer blade raised.
6. Do not get under the blade when dozer blade is raised.
7. When parking, make sure the parking brakes are set and the dozer blade is fully lowered.
8. Exercise extreme caution when operating the loader with the dozer blade on the sides of a hill.
9. Do not over speed the loader with dozer blade. Damage to the loader and dozer blade will result, and personal injury may occur.
10. When in transport move both blades to the rearmost position.
11. Wear eye protection when operating the loader with dozer blade. Small stones etc. may be thrown towards the operator when trip springs return blade to the operating position.

Whenever you see this symbol



it means:
ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

GENERAL INFORMATION

The mini v blade is designed for quick, easy installation on the skid steer. Trip springs, blade trip lock out, and skid shoes are standard equipment with each blade.

CONTROLS

The lift is operated by the control located on the skid steer.

OPERATION

Operation of the blade will depend greatly on the type of work it is used to do, the location and numerous operational factors. There are several basic points, however, which will aid to better blade operation:

1. Blades are designed for moving snow and loose dirt. Do not abuse blade by prying rocks or stumps with high impact loads.
2. Skid shoes when used for snow removal, should be set properly to avoid gouging of the surface material.
3. Use the unit wisely. Do not overload the loader dozer blade capacity.
4. Use the float position to remove material without moving the actual surface material of the area.
5. For back blading, always use the float position on the control valve.
6. Always use the float position when moving snow.
7. Check torque on all bolts and check entire unit over thoroughly after first hour of operation and periodically thereafter.
8. Check all mounting and assembly bolts periodically and tighten if necessary.
9. Check all parts and pins in the blade. Repair or replace any damaged or worn parts.
10. Do not operate with blade locked when moving snow. Remove 1/2 x 5 clevis pin (lock pin). Blade must be allowed to trip.

BLADE MOUNTING INSTRUCTIONS

ATTACH THE BLADE TO THE LOADER

IMPORTANT: Before connecting the blade to the loader, ensure that the mount plates are free of any dirt or debris and that the pins rotate freely.

1. Start the engine.
2. Tilt the attachment mount plate forward.
3. Drive forward, position the mount plate into the upper lip of the receiver plate. (FIG.1)

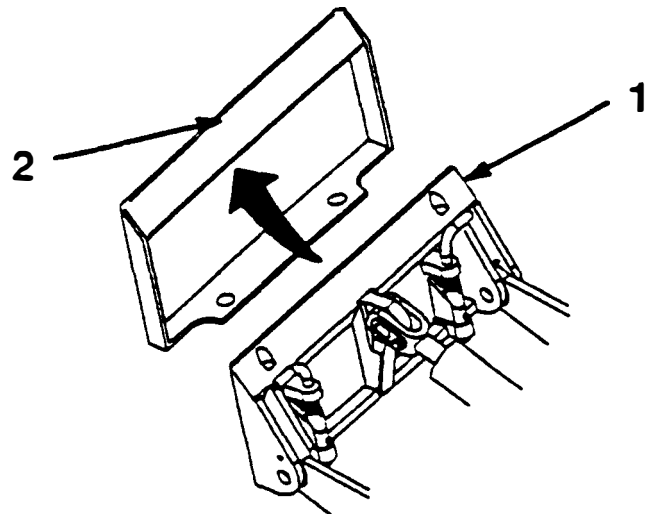


FIG. 1

1. Mount plate
2. Receiver plate
4. Tilt the mount plate back until the receiver plate contacts the mount plate.
5. Engage the quick attach pins, ensuring that they are fully seated in the mount plate.

BLADE OPERATION

1. Adjust the spring tension according to the type of material to be moved. (Note: Moving snow requires less tension than moving loose dirt.) If the blade trips too easy, loosen lower nut and tighten top nut to desired tension. If the blade trips too hard, loosen top nut to desired tension, and tighten lower nut. Nuts must be tightened to prevent movement during operation. (FIG. 2)

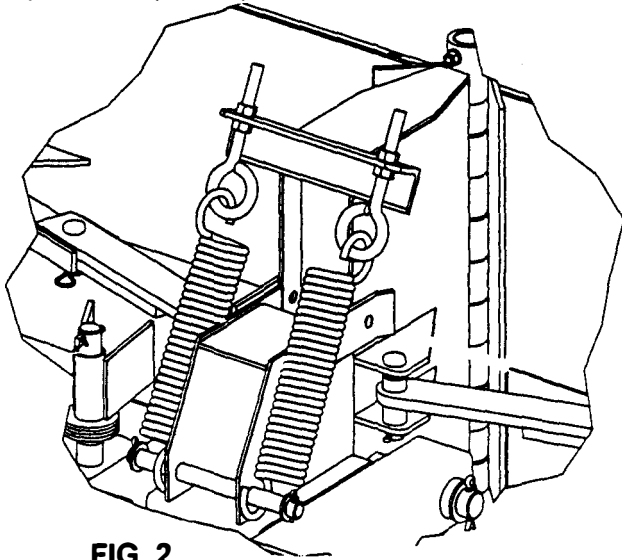


FIG. 2

2. Adjust the skid shoe height. Lift the blade up and place blocks under the cutting edge and lower the blade to the blocks. To lower the cutting edge, remove the pin and install washers on the top of the skid shoe shaft until desired cutting edge height is obtained. Reinstall the pin. To raise the cutting edge, remove pin and install washers on the bottom of the skid shoe shaft between the skid shoe and the mount until the desired cutting edge height is obtained. Reinstall the pin. (FIG. 3)

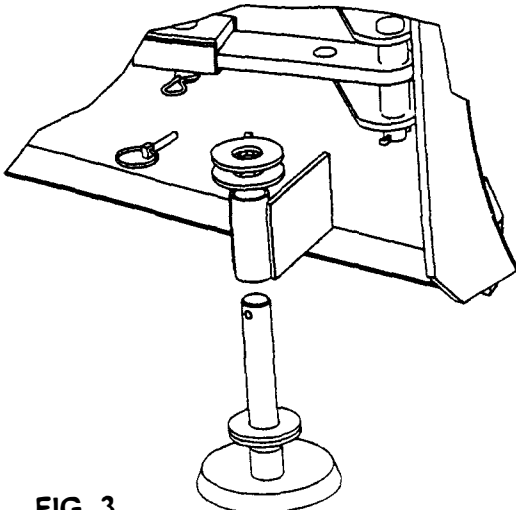


FIG. 3

Blue Diamond® Attachments

3. For moving loose dirt and material other than snow the blade trip can be locked. Use the 1/2 x 5 clevis pin and #3 clip pin. (FIG. 4)

Do not operate with the blade locked when moving snow. Remove the #3 clip pin and 1/2 x 5 clevis pin. Blade must be allowed to trip.

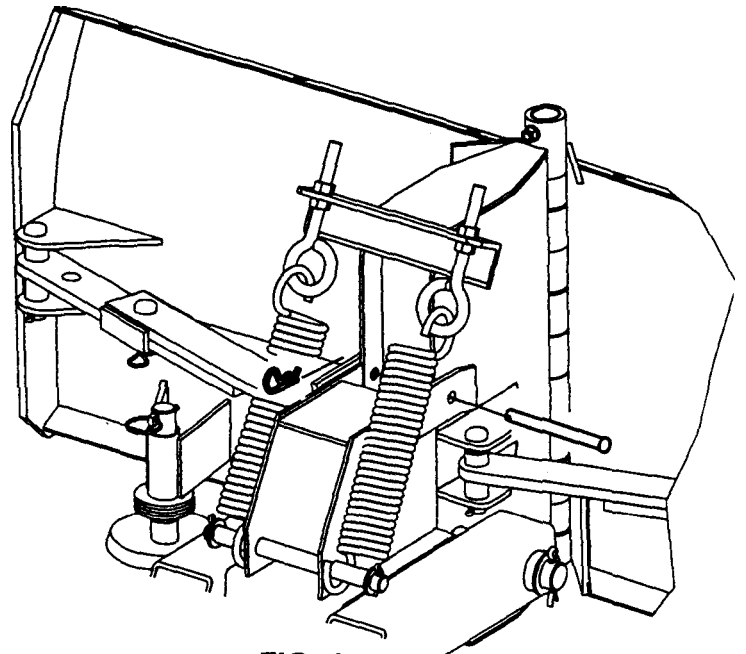


FIG. 4

4. Adjust the position of the R.H. and L.H. blade using the adjustment strap weldments on both sides. Remove the #11 clip pin and 3/4 x 2 clevis pin, move the blade to the desired position and reinstall the clevis pin and clip pin. (FIG. 5)

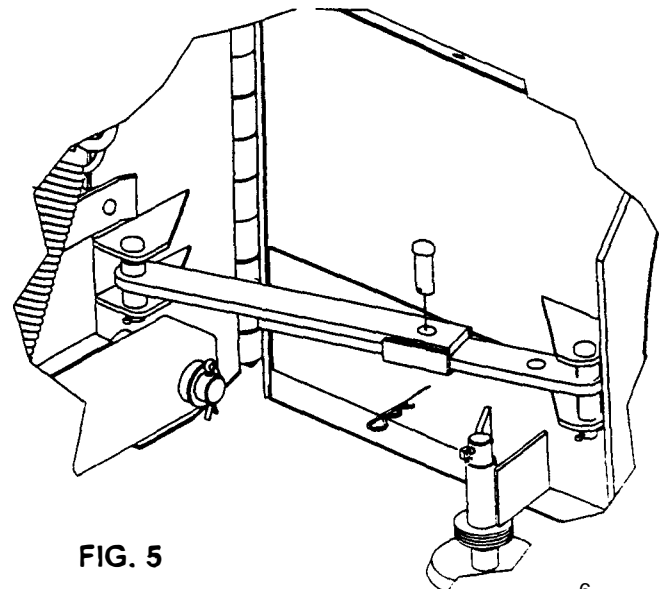
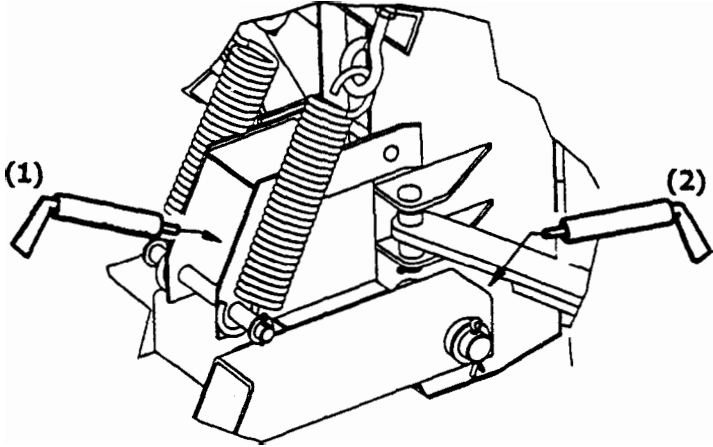


FIG. 5

LUBRICATION AND MAINTENANCE

The blade is designed for a minimum amount of maintenance. Listed below are items that must be checked and serviced.

1. Check that all bolts are tight and check entire blade over thoroughly after first hour of operation and periodically thereafter.
2. Use a good quality lithium base grease and grease the 2 fittings in the subframe bushings and the fitting in the pivot bushing. Grease these fittings before using the blade and periodically during operation. (FIG. 6)



(FIG. 6)

3. Check all bolts periodically and tighten if required.
4. Check all parts and pins in the blade. Repair or replace any damaged or worn parts.

BLADE REMOVAL FROM THE LOADER

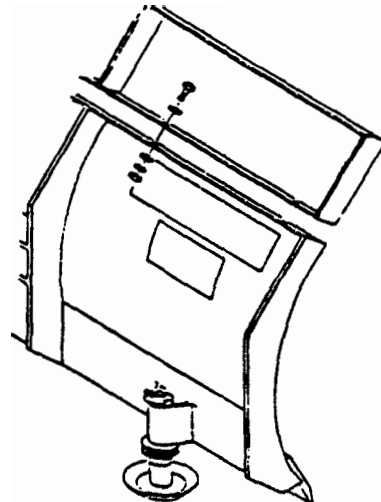
1. Move the blade to a level storage area.
2. Lower the blade to the floor or ground.
3. Unlock the attachment lock pins in the mount.
4. Tilt the mount plate forward and back the loader away from the blade.

STORAGE

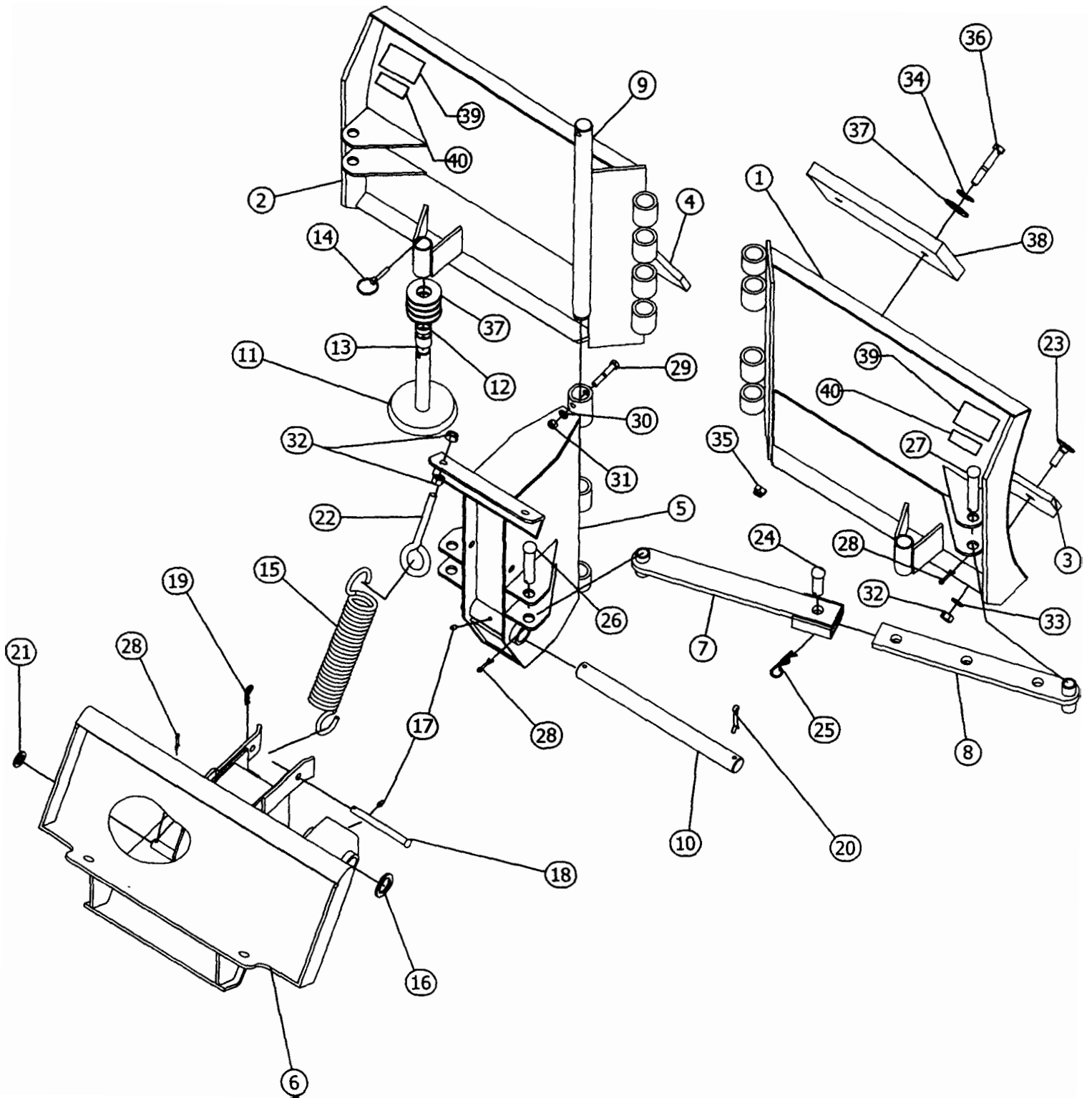
1. Store in dry, clean storage area.
2. Check the entire blade for wear or damage, and replace parts or repair if necessary.
3. Check the cutting edge for wear. Reverse or replace if required.

ATTACH (OPTIONAL) BLADE EXTENSIONS

- (1) Attach the R.H. extension to the R.H. blade and the L.H. extension to the L.H. blade. Secure the extensions to the blades with a 1/2-13 x 1-1/4 hex hd capscrew, nut, lockwasher, and (2) flatwashers in each hole and tighten securely.



BLADE ASS'Y AND REPAIR PARTS



REPAIR PARTS

4' BLADE

REFERENCE NUMBER	DESCRIPTION	PART NUMBER	NUMBER REQUIRED
1	4' SHORT BLADE - R.H. (W/CUTTING EDGE)	20306	1
2	4' SHORT BLADE - L.H. (W/CUTTING EDGE)	20307	1
3	CUTTING EDGE-R.H.	20167	1
4	CUTTING EDGE-L.H.	20172	1
5	PIVOT WELDM'T	20173	1
6	SUBFRAME AND MOUNT WELDM'T	20183	1
7	STRAP WELDMENT - UPPER	222340	2
8	STRAP WELDMENT - LOWER	222341	2
9	HINGE PIN	18448	1
10	PIVOT PIN	18449	1
11	SKID SHOE WELDM'T	10229	2
12	BUSHING	10272-1	2
13	BUSHING	10272-3	2
14	1/4 X 1 3/4 LYNCH PIN	101307	2
15	TRIP SPRING	100246	2
16	1 1/4 I.D. X 1 7/8 O.D. X 10 GA. MACHINERY BUSH	101572	2
17	GREASE ZERK	101704	3
18	1/2 X 5 CLEVIS PIN	102457	1
19	#3 CLIP PIN	100171	1
20	1/4 x 2 COTTER PIN	101224	2
21	3/4 I.D. X 1 1/4 O.D. X 10 GA. MACHINERY BUSHIN	102033	2
22	1/2 X 6 EYE BOLT	100249	2
23	1/2-13 X 1 3/4 PLOW BOLT	101439	4
24	3/4 X 2 CLEVIS PIN	222342	2
25	#11 CLIP PIN	222343	2
26	3/4 X 3 1/2 CLEVIS PIN	101060	2
27	3/4 X 4 CLEVIS PIN	222344	2
28	5/32 x 1 COTTER PIN	222345	6
29	3/8-16 X 2 1/4 HEX HD. CAPSCREW	100336	1
30	3/8 LOCKWASHER	100074	1
31	3/8 - 16 HEX NUT	100085	1
32	1/2-13 HEX NUT	100087	8
33	1/2 LOCKWASHER	100076	4
34	1/2 FLAT WASHER	100081	2
35	1/2-13 LOCKNUT	100715	2
36	1/2-13 X 3 HEX HD. CAPSCREW	100060	2
37	1" FLATWASHER	100237	10
38	CENTER RUBBER CUTTING EDGE	103213	1
39	DECAL-WARNING		2
40	DECAL-BDA		2

REPAIR PARTS

5' BLADE

REFERENCE NUMBER	DESCRIPTION	PART NUMBER	NUMBER REQUIRED
1	5' SHORT BLADE - R.H. (W/CUTTING EDGE)	20310	1
2	5' SHORT BLADE - L.H. (W/CUTTING EDGE)	20311	1
3	CUTTING EDGE-R.H.	18853	1
4	CUTTING EDGE-L.H.	19006	1
5	PIVOT WELDM'T	20173	1
6	SUBFRAME AND MOUNT WELDM'T	20183	1
7	STRAP WELDMENT -UPPER	222340	2
8	STRAP WELDMENT-LOWER	222341	2
9	HINGE PIN	18448	1
10	PIVOT PIN	18449	1
11	SKID SHOE WELDM'T	10229	2
12	BUSHING	10272-1	2
13	BUSHING	10272-3	2
14	1/4 X 1 3/4 LYNCH PIN	101307	2
15	TRIP SPRING	100246	2
16	1 1/4 I.D. X 1 7/8 O.D. X 10 GA. MACHINERY BUSHING	101572	2
17	GREASE ZERK	101704	3
18	1/2 X 5 CLEVIS PIN	102457	1
19	#3 CLIP PIN	100171	1
20	1/4 x 2 COTTER PIN	101224	2
21	3/4 I.D. X 1 1/4 O.D. X 10 GA. MACHINERY BUSHING	102033	2
22	1/2 X 6 EYE BOLT	100249	2
23	1/2-13 X 1 3/4 PLOW BOLT	101439	4
24	3/4 X 2 CLEVIS PIN	222343	2
25	#11 CLIP PIN	100172	2
26	3/4 X 3 1/2 CLEVIS PIN	101060	2
27	3/4 X 4 CLEVIS PIN	222344	2
28	5/32 x 1 COTTER PIN	222345	6
29	3/8-16 X 2 1/4 HEX HD. CAPSCREW	100336	1
30	3/8 LOCKWASHER	100074	1
31	3/8 - 16 HEX NUT	100085	1
32	1/2-13 HEX NUT	100087	8
33	1/2 LOCKWASHER	100076	4
34	1/2 FLAT WASHER	100081	2
35	1/2-13 LOCKNUT	100715	2
36	1/2-13 X 3 HEX HD. CAPSCREW	100060	2
37	1" FLATWASHER	100237	10
38	CENTER RUBBER CUTTING EDGE	103213	1
39	DECAL-WARNING	101211	2
40	DECAL-BDA		2



MANUFACTURER'S LIMITED WARRANTY

BLUE DIAMOND ATTACHMENTS, a manufacturer of quality attachments, warrants new BLUE DIAMOND ATTACHMENTS products and/or attachments at the time of delivery to the original purchaser, to be free from defects in material and workmanship when properly set up and operated in accordance with the recommendations set forth by BLUE DIAMOND ATTACHMENTS, LLC.

BLUE DIAMOND ATTACHMENTS liability for any defect with respect to accepted goods shall be limited to repairing the goods at a BLUE DIAMOND ATTACHMENTS designated location or at an authorized dealer location, or replacing them, as BLUE DIAMOND ATTACHMENTS shall elect. The above shall be in accordance with BLUE DIAMOND ATTACHMENTS warranty adjustment policies. BLUE DIAMOND ATTACHMENTS obligation shall terminate twelve (12) months for the Mini V Blade after the delivery of the goods to original purchaser.

This warranty shall not apply to any machine or attachment which shall have been repaired or altered outside the BLUE DIAMOND ATTACHMENTS factory or authorized BLUE DIAMOND ATTACHMENTS dealership or in any way so as in BLUE DIAMOND ATTACHMENTS judgment, to affect its stability or reliability, nor which has been subject to misuse, negligence or accident beyond the Company recommended machine rated capacity.

WARRANTY CLAIM

To submit a warranty claim, a return authorization from BLUE DIAMOND ATTACHMENTS must be obtained. The failed part may then be returned. Tampering with the failed part may void the warranty. This warranty does not include freight or delivery charges incurred when returning machinery for servicing. Dealer mileage, service calls, and pickup/delivery charges are the customers' responsibility.

EXCLUSIONS OF WARRANTY

Except as otherwise expressly stated herein, BLUE DIAMOND ATTACHMENTS makes no representation or warranty of any kind, expressed or implied, AND MAKES NO WARRANTY OF MERCHANTABILITY IN RESPECT TO ITS MACHINERY AND/OR ATTACHMENTS ARE FIT FOR ANY PARTICULAR PURPOSE. BLUE DIAMOND ATTACHMENTS shall not be liable for incidental or consequential damages for any breach or warranty, including but not limited to inconvenience, rental of replacement equipment, loss of profits or other commercial loss. Upon purchase, the buyer assumes all liability for all personal injury and property resulting from the handling, possession, or use of the goods by the buyer.

No agent, employee, or representative of BLUE DIAMOND ATTACHMENTS has any authority to bind BLUE DIAMOND ATTACHMENTS to any affirmation, representation, or warranty concerning its machinery and/or attachments except as specifically set forth herein.

This warranty policy supersedes any previous documents.

NOTE: Blue Diamond Attachments is a trademark of BLUE DIAMOND ATTACHMENTS, LLC.



QUALITY | DEPENDABILITY | INTEGRITY

Blue Diamond® Attachments
4512 Anderson Road, Knoxville, TN 37918
88-376-7027