

LIMITED WARRANTY

AMMBUSHER, Inc. warrants each new product to be free from defects in material and workmanship.

For 90 days from the date of purchase, when the attachment has been maintained and lubricated in accordance with the operating and maintenance instructions in the Owners Manual, AMMBUSHER will replace free of charge, any defect in material or workmanship in this product.

This warranty does not cover:

This warranty excludes blades, which are expendable and become worn during normal use.

Repairs on the motor or spindle because of alteration, an accident, or operator abuse or negligence, including the failure to maintain and operate the equipment according to instructions contained in the Owners Manual, or if repairs have been made with parts other than those obtained through AMMBUSHER, Inc.

Disassembly of motor will void motor warranty.

Our obligation under this warranty shall be limited to repairing and replacing, free of charge to the original purchaser, any part that in our judgement shows evidence of a defect, provided the part is routed through the dealer and distributor from whom the purchase was made, transportation charges prepaid.

This warranty shall not be interpreted to render us liable for injury or damages of any kind. This warranty does not extend to any expense or loss incurred for labor, supplies, substitute machinery rental, or any other reason.

This warranty is subject to any existing condition of supply which may directly affect our ability to obtain materials or manufacture replacement parts.

AMMBUSHER, Inc. reserves the right to make improvements in design or changes in specifications at any time, without incurring any obligations to owners of units previously sold.

No one is authorized to alter, modify, or enlarge this warranty nor the exclusions, limitations and reservations.

Every AMMBUSHER product is the highest quality. If you wish to contact us regarding this product, please call toll free between 8:00 a.m. and 4:30 p.m. EST, Monday through Friday. 1-800-432-5955.

DL-66

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Thanks for selecting an AMMBUSHER ATTACHMENT

Your new Ammbusher DL-66 Brushcutter is designed and manufactured to cut nearly all types of brush, grasses, shrubs, and small trees over a wide variety of terrains. When attached to your skid loader, it is highly maneuverable for close cutting in tight areas.

Built to Ammbusher's rigid quality standards, it will give you years of trouble free service and dependability. Should you have any questions or experience any problems, please contact AMMBUSHER at 1-800-432-5955 or E-mail: information@ammbusher.com

As an owner or operator, it is your responsibility to learn the capabilities and limitations of the DL-66 Brushcutter. Please take the time to read this informative instruction manual and pay particular attention to the safety rules we've provided for your protection, as well as for the safety of others. Only with a complete understanding of your Ammbusher will you be able to get the most from it.

Don't forget to send in your owners registration form.

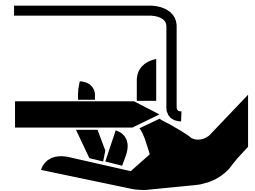
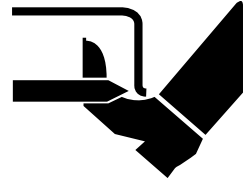
I. IMPORTANT SAFETY INSTRUCTIONS

Look for this symbol  to point out important safety precautions. Your safety or the safety of others is involved.

1. DISCHARGE DANGER LABEL

(3 labels - located on mower sides and front discharge plate) *figure 1 page 2*

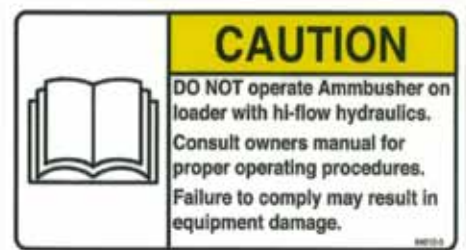
- The AMMBUSHER DL-66 discharges materials out the front. When cutting with the AMMBUSHER DL-66, never discharge material toward bystanders nor allow anyone near the machine while in operation.
- When cutting near bystanders is unavoidable, do not operate the cutter without Front Deflector Chains in place, and do not cut in the direction of bystanders. Bystanders must be at least 75 ft (23M) away when operating.
- Clear the work area of objects (fencing, rocks, bottles, wire, etc.) which might be picked up and thrown.
- Always use a shatterproof cab door or the 3/8" thick Safety Door supplied with your AMMBUSHER DL-66 when cutting. This is not only to protect you from thrown objects, but primarily to prevent overhanging or protruding objects such as tree limbs or other objects from entering the cab and causing operator injury.
- Disengage power to the AMMBUSHER DL-66 and shut the loader engine OFF before leaving the operators cab.
- Shut the AMMBUSHER DL-66 down and the loader engine OFF before performing any inspection or maintenance to the cutter.
- NEVER place hands or feet under the AMMBUSHER DL-66 deck when unit is running. Always keep clear of front discharge area when operating AMMBUSHER DL-66.



CAUTION LABEL

(Located on top cover) *figure 1 page 2*

If this label is on your machine, it means your machine was not equipped to operate with high-flow loaders. Use on high flow loaders will cause premature motor failure. AMMBUSHER is not responsible for damage incurred to the hydraulic motor due to unrecommended hi-flow usage. Please refer to the front cover of this owners manual for the maximum allowable hydraulic flow for your DL-66.



3. HYDRAULIC LEAK WARNING LABEL

(Located on motor) *figure 1 page 2*

AMMBUSHER DL-66 equipment has been designed to reduce the likelihood of hydraulic system leakage. Each AMMBUSHER DL-66 rotary cutter's hydraulic system is checked before shipment. However over time any hydraulic system may develop fluid leaks and very small leaks may produce high-pressure discharge flows capable of causing injury should skin come in contact with such discharge.



4. Do not raise the back of the DL-66 (nearest operator) over 18" off the ground. Never expose yourself or a bystander to the rotating blades.
5. When driving the loader to/from the worksite, carry the DL-66 as low as possible to the ground to avoid the possibility of tipping forward.
6. Do not carry passengers on the AMMBUSHER DL-66.
7. Never leave the AMMBUSHER DL-66 unattended in a raised position.
8. The loader and AMMBUSHER DL-66 should be stopped and inspected for damage after striking a foreign object and the damage should be repaired before restarting and continuing cutting.

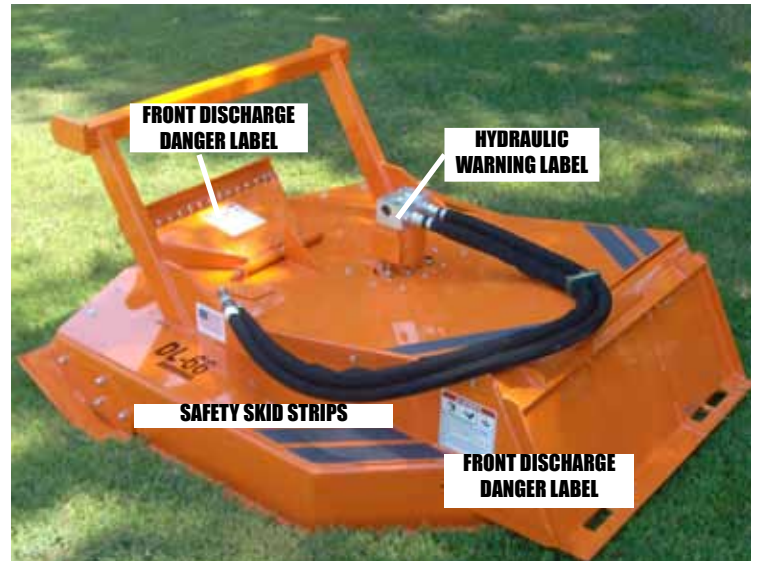


FIG. 1

9. Cut only in daylight or good artificial light.
10. Keep all nuts, bolts and screws tight and be sure the equipment is in safe working condition. Insure front deflector chains are in place and in good repair.
11. Check the blade mounting bolts for proper tightness at frequent intervals.
12. When working under the AMMBUSHER DL-66, always securely block it up. If attached to your loader, visually inspect your lock-on pins to make sure the Ammbusher is locked on your loader. Remember: The AMMBUSHER DL-66 weighs more than 1900 lbs.
13. Reduce speed on slopes and make turns gradually to prevent tipping or loss of control. Exercise caution when changing direction on slopes.
14. Stay alert for drop-offs or holes in the terrain.
15. Use caution when walking on AMMBUSHER DL-66 deck. The deck can be slick when wet.
16. Never drive your skid loader with your AMMBUSHER DL-66 raised more than 18 inches. Children are small, be aware of their presence and **ALWAYS** make sure you can see where you are driving and what you are cutting.

II. OPERATING INSTRUCTIONS

1. **HOOKUP** - The hookup procedure is the same as other powered attachments for your skid loader.
 - a. Install Safety Door on hinge pins. See separate instruction sheet " Safety Door Installation" supplied with your door for proper procedure for the initial installation.
 - b. Pull up and connect AMMBUSHER DL-66 to your loader.
 - c. Secure lock down levers. Note: Do not attempt to operate attachments with damaged or disengaged lock pins.
 - d. Connect (2) hydraulic hoses.

2. CUTTING OPERATION

The AMMBUSHER DL-66 is capable of, cutting trees and vegetation of varying height and up to 7" in diameter. Designed to make your loader more versatile the AMMBUSHER DL-66 is intended to perform these functions without the front of the mower deck being raised to a vertical height greater than 3 feet.

As an additional safety feature, your AMMBUSHER DL-66 is designed with a front-edge chain curtain. This is provided to reduce the likelihood of discharged objects. Always use a safety door on the front of your loader to provide the operator an additional level of protection from both overhanging objects (such as tree limbs) and the potential of discharged objects.

- a. Start the DL-66 Brush Cutter with loader running slightly above idle. Engage loader hydraulics and gradually throttle up to desired RPM. By maintaining a constant RPM along with a slower travel speed you will increase your cutting efficiency.
- b. Raise the back of the AMMBUSHER DL-66 (nearest the operator) only 4 or 5 inches off the ground. This is necessary for material to clear from under the cutting deck. Rotate or tilt the AMMBUSHER front up or down so that the skid rails are 1 - 2 inches off the ground. The AMMBUSHER deck will be sloping front down (away) from the operator. This is the optimum method for cutting close to the ground.



SAFETY NOTE:

1. Never drive your loader with the AMMBUSHER DL-66 raised more than 18 inches or tilted to the point your view is obstructed. Always make sure you can see what you are cutting.
2. Never operate the AMMBUSHER DL-66 in populated areas, or where thrown objects could injure persons or damage property. All front-edge safety chains MUST be installed.
3. Never raise the back of the AMMBUSHER DL-66 more than 18 inches off the ground. Never expose yourself or anyone else to the rotating blades. If you can see the rotating blades when operating the unit, the back of the AMMBUSHER DL-66 is raised too high.
- c. When cutting large brush, operate the AMMBUSHER DL-66 in the following manner: Slowly drive into the tree, and allow the front spring door to open up as you bend the tree with the push bar, the blades will cut the tree off. The tree can now be mulched by rotating the front up, driving forward several feet, roll the front down onto the tree and backdrag. When cutting larger trees keep in mind that although you can cut large trees, the operational life of the attachment may be shortened.
- d. Before shutting off the hydraulic motor, gradually throttle down to idle on your loader. This helps to prevent cavitation in the hydraulic motor, and helps to slow down the blade carrier.

III. REPAIR AND MAINTENANCE

1. BLADE CARRIER REMOVAL

This operation should be performed by an authorized dealer or qualified service technician. The blade carrier weighs approximately 250 pounds. Should it unexpectedly slide off the spindle shaft during removal it could result in personal injury.

- a. Disconnect DL-66 hydraulic hoses from loader and visually verify that the loader lock down pins are engaged through the AMMBUSHER DL-66 Quick Tach. Tilt the front of the AMMBUSHER DL-66 up and securely position a 4" x 4" post or equivalent strength strut under the front of the AMMBUSHER DL-66. The AMMBUSHER DL-66 must be blocked up to avoid injury should a hydraulic failure occur or should the tilt or lift pedal/lever be accidentally activated by someone in the operator cab.
- b. Turn off skid loader engine. Remove the cotter pin and loosen the castle nut on the spindle shaft but **DO NOT** remove the nut at this time.



SAFETY NOTE: The nut, while loosened, will hold the blade carrier on the shaft while you pop it loose.

- c. The spindle shaft and hub are on a tapered spline and may be stuck. If the blade carrier does not easily slide down the spindle shaft when loosening the castle nut, one or more wedges should be used to pop it loose. Once loose, the castle nut will keep the blade carrier from falling off.
- d. Once the blade carrier is loose on the spindle shaft, remove the supporting strut and set the entire machine on the floor. Lift open the front door and lay it back on the machine deck. Place wood 4x4 or other material to block up the blade carrier as shown in Fig. 2. Reach in the front door opening and remove the castle nut. As you remove the castle nut, the blade carrier should lower and rest on the support blocks. Once the castle nut is removed start your loader, lift the DL-66 cutter and back up a few feet to gain access to the blade carrier, which is sitting on the support blocks.

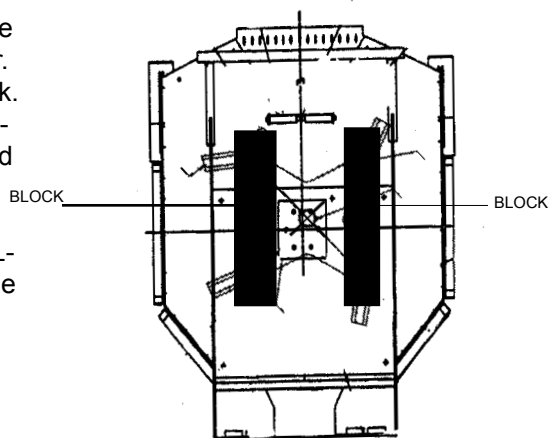


Figure 2



SAFETY NOTE: If you are not immediately replacing the blade carrier, lower the unit to the ground. **DO NOT** leave the AMMBUSHER DL-66 unattended in a raised position.

2. BLADE CARRIER INSTALLATION

- a. Set the DL-66 on 4 support stands, approx. 24 to 36" off the ground, however insure that the unit is steady and cannot fall if accidentally bumped. Keeping the DL-66 attached to the loader, turn off loader and disconnect the hydraulic hoses. Visually insure that the loader lock pins are engaged.
- b. Place blade carrier on the forks of a forklift or loader. Carefully drive forward under the DL-66 and align the splined shaft with the carrier. Slowly raise the blade carrier onto the shaft, **taking care to align the shaft splines**. When the blade carrier is raised sufficient so that the splines are aligned, install castle nut and snug by hand.
- c. Slowly lower forks and back out from under the DL-66. Check each brace to make sure the mower is still secure.
- d. Raise the front of the DL-66 and block with a 4x4 strut. Turn off loader engine.
- e. With a long handled torque wrench, torque castle nut to 1000 ft - lbs., then tighten further until the slots in the castle nut align with the hole in the gearbox shaft. Install cotter pin thru hole in spindle and bend the cotter pins ends to secure.
- f. Remove the AMMBUSHER DL-66 support struts and lower unit to the ground.

3. BLADE REMOVAL PROCEDURE

- a. Set the AMMBUSHER DL-66 flat on the ground. Turn the loader engine off and disconnect hydraulic hoses. Loosen the nut on the access cover plate on the top of deck. Rotate the access cover plate to expose the access hole in the deck. Push back front hood weldment and SLOWLY rotate the blade carrier until blade attaching nut is aligned in the access hole. From the top of the deck, insert a 1 11/16" socket thru the access hole onto the blade nut. Remove the nut and insure that the blade drops to the ground. Repeat this process for all 4 blades.

After the blade nuts have been removed and the blades have dropped down, retrieve the blades, nuts and bolts.



SAFETY NOTE: Use caution when working around sharp blades. If you must work under the deck to remove a blade from the blade carrier visually verify that the loader lock down pins are engaged thru the AMMBUSHER DL-66 Quick Tach. Turn loader engine off and insure that the unit is properly supported with a support strut.

NOTE: When sharpening or replacing the cutting blades, replace or sharpen blades opposite each other in pairs or sets at the same time to maintain proper balance.

4. BLADE INSTALLATION PROCEDURE



SAFETY NOTE: Visually verify that the loader lock down pins are engaged through the AMMBUSHER DL-66 Quick Tach and loader is not running. Disconnect hydraulic hoses from loader.

IMPORTANT: Use genuine AMMBUSHER DL-66 blades part #85225 and attaching bolt #84365 only, new #84363 blade nuts must replace used nuts each time the blades are removed. Substitute or inferior blades, bolts, nuts, and blade carrier may be dangerous.

- a. Set the AMMBUSHER DL-66 flat on the ground. Turn the loader engine off and disconnect hydraulic hoses. Loosen the nut on the access cover plate on the top of deck. Rotate the cover plate to expose the access hole in the deck. Push back front hood weldment and SLOWLY rotate the blade carrier so the bolt hole is aligned in the access hole. Install keyed bolt and nut. Nut may be tightened at this point, but it is easier to perform final torquing through the access hole in the deck with a 1 11/16 socket. Insure proper blade orientation. The sharpened edge of the blade should be lower than bolted end when the AMMBUSHER DL-66 is in a level position. Repeat this step for remaining blades.
- b. Finally torque the blade nuts to 450 ft.-lbs. through the access hole in the deck. Slowly rotate blades to align blade nut with deck access hole to tighten remaining nuts. Visually verify that the blade bolt is threaded completely through the nut. This is necessary for proper seating of the bolt and proper locking of the locknut.

5. SPINDLE REMOVAL



SAFETY NOTE: Visually verify that the loader lock down pins are engaged through the AMMBUSHER DL-66 Quick Tach. Turn off skid loader engine.

- a. Remove blade carrier. Follow instructions on REMOVING THE BLADE CARRIER in part 1 - page 3 of this manual.
- b. Remove motor. Follow instructions on MOTOR REMOVAL in part 6 - page 5 of this manual. **Note the orientation of the motor on the spindle for future re-assembly.*
- c. Remove 12 nuts from the spindle base. Lift spindle unit straight off of the 6 mounting studs using caution not to spill gear grease located inside the spindle.
- d. Reinstall the spindle in the reverse order. After bolting the 12 nuts onto the bolts add Mobilux EP023 grease. Approx 1 quart. Torque all nuts to 275 ft.-lbs.

NOTE: Insure the splined bushing is installed in the spindle input prior to reinstalling motor.

- e. Reinstall as described for the motor page 5 section 6 and blade carrier as described on page 4 section part 2.

6. MOTOR REMOVAL AND INSTALLATION

Note: Disassembly of motor will void warranty.

- a. Set the AMMBUSHER DL-66 flat on the ground. Turn your skid loader engine off before attempting to perform service or remove the motor cover.
- b. Remove the 2 small motor covers.
- c. Remove the two hydraulic hoses from the motor using recommended safety instructions on page 6.
- d. Remove the four 1/2" nuts and bolts from the motor.

- e. Lift motor out of spindle unit. **Note the orientation of the motor on the spindle for future re-assembly.*
- f. To reinstall new motor, perform the above steps in reverse order and apply permanent threadlocker (262 red locktite). Tighten the 4 nuts/bolts. Torque to 75 ft-lbs.

7. REMOVING HYDRAULIC HOSES

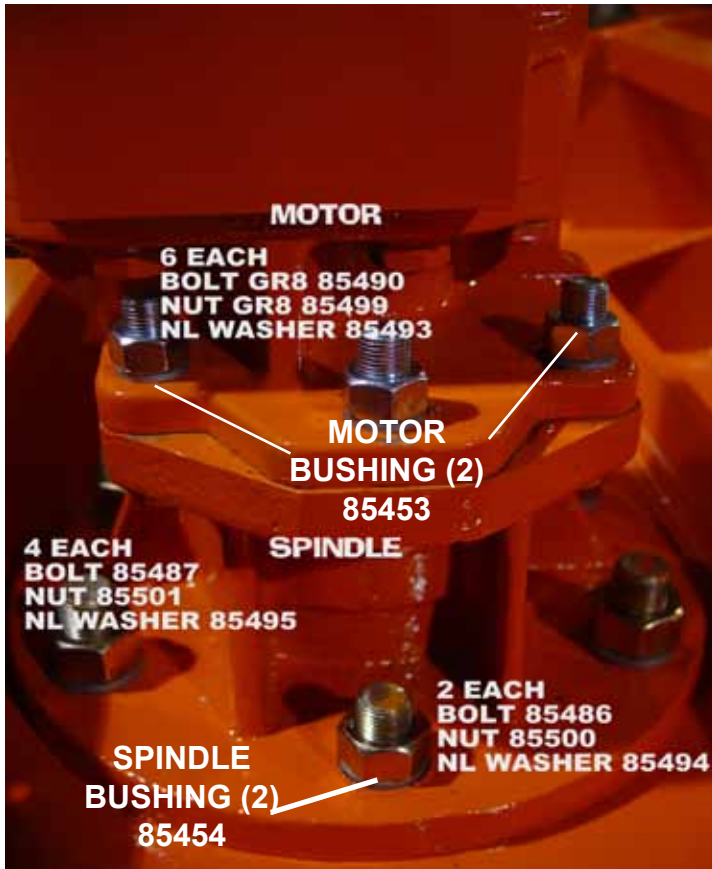
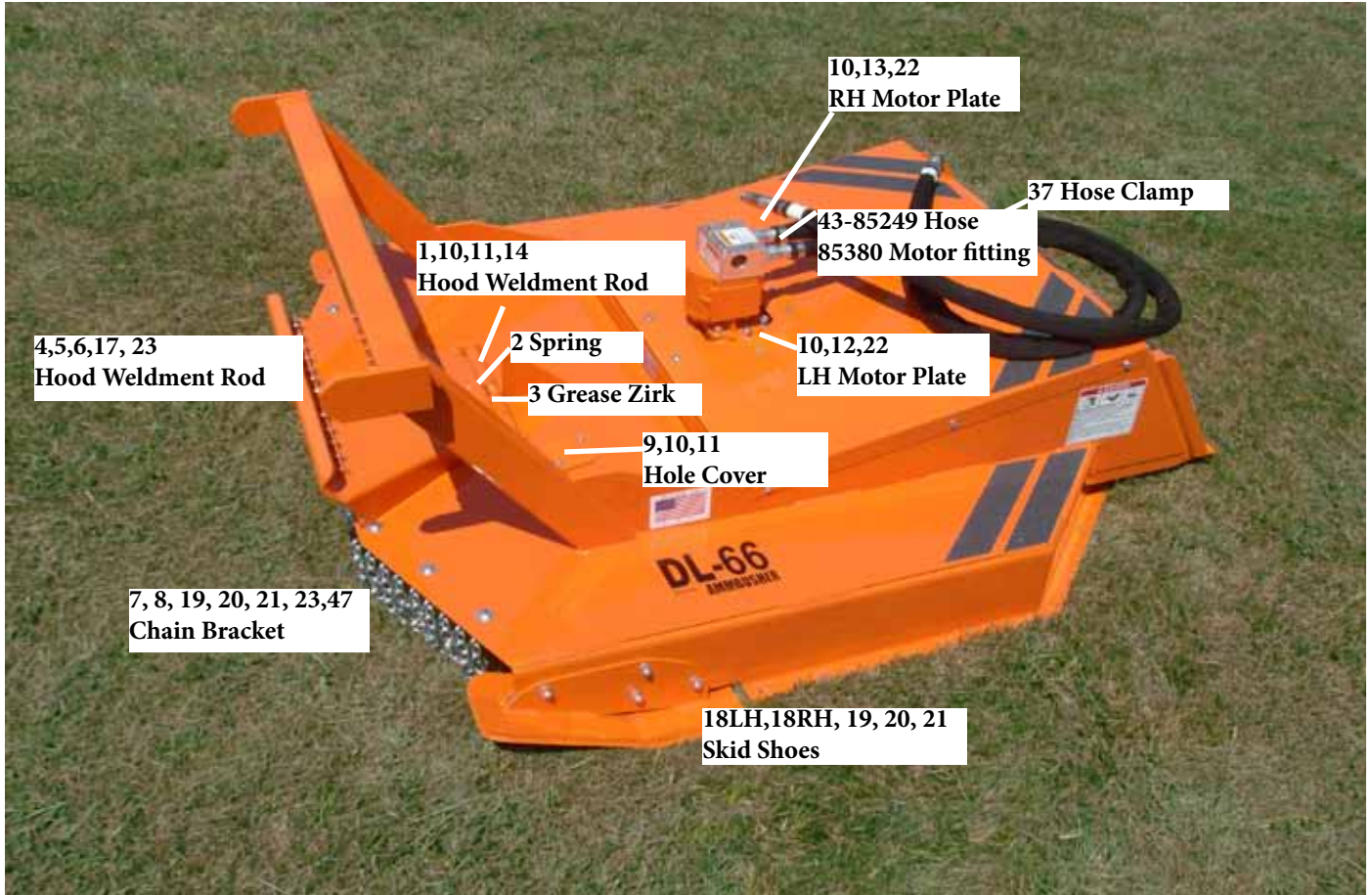


SAFETY NOTE: There may be pressure in the hydraulic lines. Wear safety glasses and gloves when performing this operation.

- a. Connect the (2) quick connect couplers together. Place quick coupler ends of hoses lower than the motor. This will reduce the amount of oil leakage during removal.
- b. Lay a rag over the hose fittings, then slowly unbolt/unscrew the hose end from the motor.
- c. Drain hoses into a receptacle for proper disposal of oil.

8. SAFETY SHIELDING

Always keep the front access door and front chain curtain in place and in a good state of repair.



4 BLADE CARRIER

Part #

- 85245 Blade Carrier Weldment
- 85225 Blades (sold in pairs)
- 84363 Blade Nuts (sold in pairs)
- 84365 Blade Bolt (sold in pairs)

DL-66 PARTS BREAKDOWN

F/N			Quantity	
			Each	
1	85237	Hood Weldment Hinge Pin	1	each
2	85267	Torsion Spring	1	each
3	84895	1/4-28 Grease Zirk	2	each
4	85257	Lift Door Hood Weldment	1	each
5	85263	Rod For Lift Door (welded to housing - not shown)	1	each
6	85265	Chain 8 link (Front Hood Weldment)	15	each
7	85261	Chain Bracket Weldment bolts on (rod, links, bracket)	2	each
8	85264	Chain 6 Link for front sides	8	each
9	84595	Blade Hole Cover	1	each
10	84516	Flat Washer 1/4" (Blade Hole Cover)	6	each
11	84515	Nylock Nut 1/4-20 (Blade Hole Cover)	4	each
12	85283	LH Motor Plate	1	each
13	85284	RH Motor Plate	1	each
14	84378	1/4-20NCx1" GR8 (Motor Pl. & Hinge Pin)	2	each
15	85211	Top Cover	1	each
16	85491	3/8"-16x5/8" Hex Bolt (Top Cover) GR8	8	each
17	84340	3/8 Flatwasher (Top Cover)	8	each
18	85246	Front Wear Shoe Weldment	2	each
19	85488	1/2"-13x1.75" Bolt GR8 (Front Shoe)	14	each
20	84333	Lockwasher 1/2" (Shoes, Motor, Chain Bracket)	14	each
21	85497	1/2-13 GR8 Hex Nut (Shoes)	14	each
22	85492	1/4-20x3/4" GR8 (Motor Plate)	6	each
23	84623	1/4-16 Nylock Nut	3	each
24	85250	Spindle - Load Adapter	1	each
25	85259K	Spindle Castle Nut (Includes Pin)	1	Kit
26	85001	3/4-16 Hex Nut GR8 (Spindle)	4	each
27	85495	3/4 Nordlock Washers (Spindle)	4	each
28	85493	1/2" Nordlock Washers (Motor to Spindle)	6	each
29	85225	Blade 12"x1/2"	4	pair
30	84365	Blade Bolt	4	pair
31	84363	Blade Nut	4	pair
32	85245	Blade Carrier Weldment	1	each
33	85490	1/2-13 x 2 1/4 " GR 8 (Motor Bolt)	4	each
34	XXX	Motor - 85233 / 234 / 235	1	each
35	84912K	Label Kit	1	Kit
36	85251	Owners Manual	1	
37	84542K	Hose Clamp - green	1	Kit
38	84417	1/2" Female Flat Face Coupler	1	each
39	84418	1/2" Male Coupler	1	each
40	85460	Adapter large hose to 1/2" coupler		each
41	84428	1" Male Coupler		each
42	84429	1" Female Flat Face Coupler		each
43	85249	Hydraulic Hose Assy	2	each
44	85499	1/2-20 GR8 Nut (Motor to Spindle)	6	each
45	85486	5/8"-18x2 1/2" GR 8 Bolt (Spindle)	2	each
46	85487	3/4-16x2 3/4" GR 8 Bolt (Spindle)	4	each
47	85494	5/8" Nordlock Washer (Spindle)	2	each
48	85500	5/8" GR8 Hex Nut (Spindle)	2	each