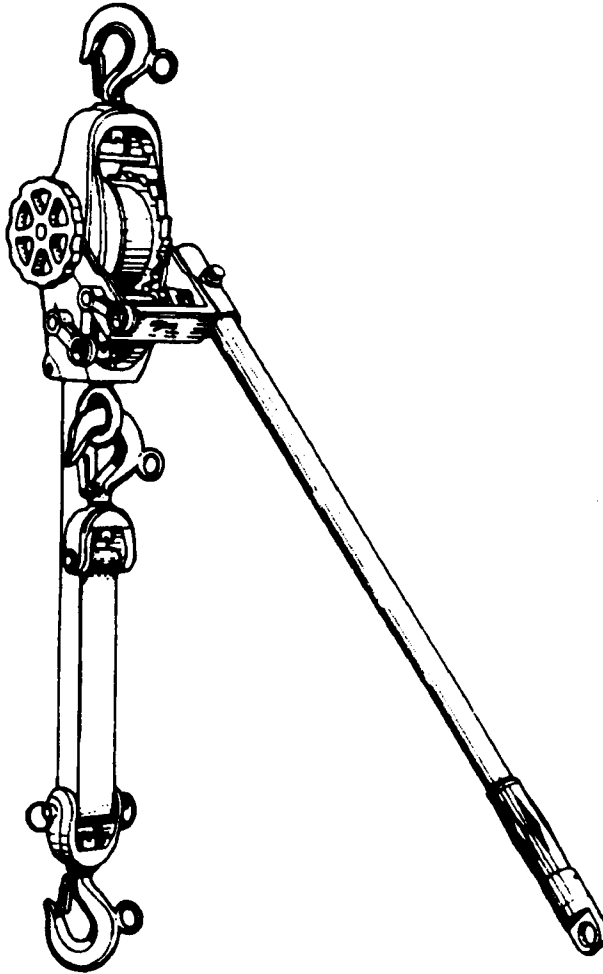




Lineman's Hoists



Models
300A
344A
300DA
344DA

Operation and Maintenance Manual

PUBLICATION PART NO. 931LM

IMPORTANT — **CAUTION**

This manual contains important information for the correct installation, operation and maintenance of the equipment described herein. All persons involved in such installation, operation, and maintenance should be thoroughly familiar with the contents. To safeguard against the possibility of personal injury or property damage, follow the recommendations and instructions of this manual and keep it for further reference.

WARNING

The equipment shown in this manual is intended for industrial use only and should not be used to lift, support, or otherwise transport people, or to suspend unattended loads over people.

⚠ WARNING — To Avoid Injury

Do not operate damaged or malfunctioning hoist.
 Do not lift more than rated load.
 Do not lift people or loads over people.
 Do not operate with twisted, fouled or damaged web strap.
 Do not operate hoist unless hoist body, web strap and load block or hook are in a straight line.
 Do not operate hoist until load is properly seated in hook.

Do not operate hoist with a handle extension.
 Do not attempt to free wheel web strap with a load on hoist.
 Do not use hoist web strap for a sling or drag strap under load.
 Do not operate except with hand power.
 Do not remove or obscure the warning decal.
 Do not allow web strap and hoist to be dirty — clean and dry thoroughly. Relubricate hoist.

⚠ DANGER — To Avoid Electrical Shock Resulting in Serious Injury or Death

The web strap on this hoist is NOT a rated insulating member. When clean and dry, the strap may have dielectric properties typical of nylon or polyester fibers. The non-metallic handle and webbing provide an extra measure of safety for use around energized power lines.

Use an appropriate insulating member in series

with hoist and web strap to achieve proper working distances per OSHA Regulation Subpart V, 1926.950 or your company work practices. When handle swings closer to energized conductors than OSHA safe working distances or company practices permit, use appropriate clothing and rubber gloves for rated voltages.

**OSHA REGULATION SUBPART V, 1926.950 TABLE V-1
 Alternating Current — Minimum Distances**

Voltage Range (Phase to Phase) Kilovolt	Minimum Working Distance	Voltage Range (Phase to Phase) Kilovolt	Minimum Working Distance
2.1 to 15	2 ft. 0 in.	161 to 169	3 ft. 8 in.
15.1 to 35	2 ft. 4 in.	230 to 242	5 ft. 0 in.
35.1 to 46	2 ft. 6 in.	345 to 362	7 ft. 0 in.
46.1 to 72.5	3 ft. 0 in.	500 to 552	11 ft. 0 in.
72.6 to 121	3 ft. 4 in.	700 to 765	15 ft. 0 in.
138 to 145	3 ft. 6 in.		

INTRODUCTION

This operation and maintenance manual covers RLF and RLG Series Little Mule Lineman's Hoists manufactured by Duff-Norton Company. This manual has been

prepared to assist the user or repair person in operating, maintaining and repairing the web strap hoists.

DESCRIPTION

All web strap hoist models are designed for lifting and pulling loads up to the rated capacities listed on the hoist nameplate. Features include a winding wheel for taking up slack or free stripping of the strap and a handle designed to fail before any mechanical part of the hoist is subjected to damaging overload. The handle may be

inserted into the U-Frame socket from either direction to facilitate use in confined areas or to allow the operator to pull against the load under unusual conditions. A double, interlocking pawl system provides positive load control at all times. Hot-stick rings on levers and hooks increase safety and utility on models with "D" suffix.

OPERATION

Americrane & Hoist Corp. 1-800-652-1932

CAUTION

Hoist should be checked prior to use. Inspect hooks, all mechanisms, frame and handle for wear, cracks or deformation. Inspect strap for wear, cuts and frays. If defective parts are found, discontinue use of hoist until parts are replaced or repaired. Use only genuine Little Mule parts for replacement.

WARNING

The web strap on this hoist is NOT a rated insulating member. When clean and dry, the strap may have dielectric properties typical of nylon or polyester fibers. Use an appropriate insulating member and exercise safe hoist practices as outlined on page 2 of this manual.

Lifting or Pulling

Place control lever in position shown at right, engaging the loading pawl against the ratchet teeth. Work handle as required to get desired operation. Handle may be inserted into either end of the U-frame socket to enable user to work in restricted areas. Never use a "cheater" bar or handle other than the one supplied with the hoist.

CAUTION

Rig hoist properly so that the hoist is free to align with the direction of pull. Avoid side loading.

Lowering

Place control lever in position shown at right and operate handle to its extreme down position until load is removed from holding pawl. As the handle is slowly released, the load will be lowered one notch. To continue lowering repeat this operation. The lowering of heavy loads is easier if quick (sharp) downward handle motion is used.

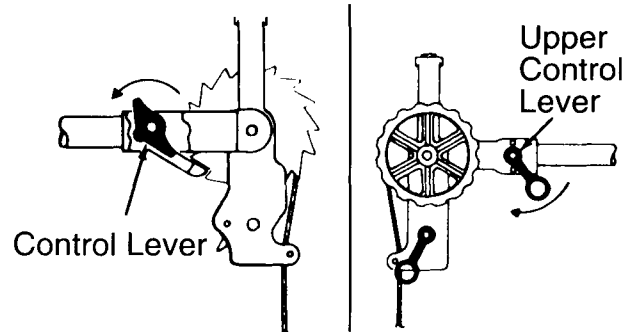
Free Wheeling

To release strap for free wheeling, place control lever as shown at right and hold spring loaded holding pawl as shown. The strap may now be stripped from the drum to facilitate more rapid positioning while attaching to the object to be pulled or lifted. Similarly, with the control lever as shown, excess slack may be quickly and easily rewound on the drum using the winding wheel.

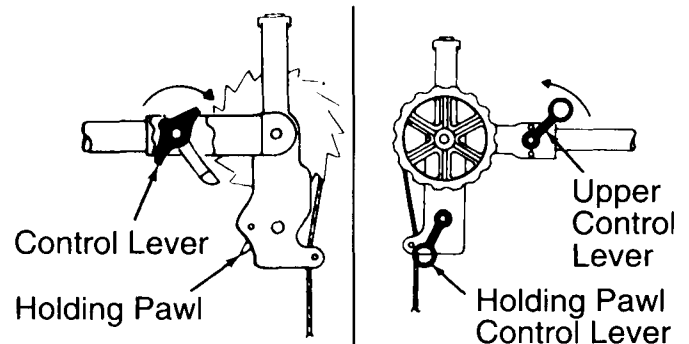
STANDARD MODELS

HOT-STICK MODELS

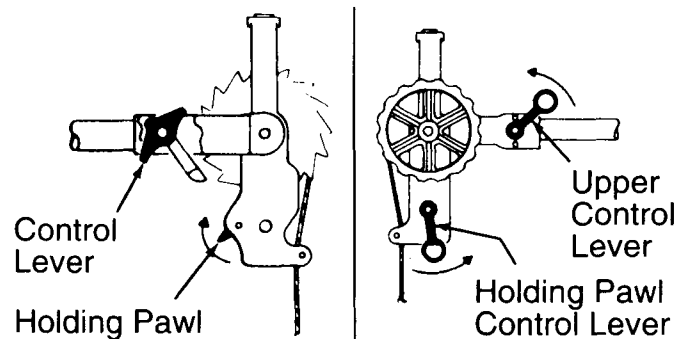
Lifting or Pulling



Lowering



Free Wheeling



MAINTENANCE

General

Maintenance of the hoist is normally limited to cleaning and lubrication. The hoist should always be lubricated following each cleaning operation to replace any lubricants that were washed away.

Cleaning

Under normal use, minimum cleaning is required. Clean metal parts and web strap with soap or detergent and

water. Allow web strap to dry thoroughly before using hoist.

Lubrication

Lubricate pawls and ratchet wheel sparingly with a light grease. Apply a drop of clean motor oil to points where shafts rotate. Caution must be exercised to avoid getting lubricants on web strap.

REMOVAL AND REPLACEMENT OF MAJOR PARTS

General

Replacement instructions are limited to replacing parts that are most likely to wear during normal use. To replace other parts, use common practice procedures while referring to Figures 1 and 2.

Strap Replacement

1. To remove strap, remove all of strap from the drum to expose drive pin (AA). Using a 1/8" pin punch, drive pin from drum. Remove snap ring (E) and shaft (CC). Remove strap from drum. Remove strap from shackle assembly (K) by removing snap ring and shaft.
2. Place new strap into position in shackle assembly (K). Replace shaft and snap ring. Place other end of strap under strap guide roller (RR), so that the cut end of the strap will be against the drum. Place end of strap into slot in drum (KK). Reinstall shaft (CC) and with hole in shaft aligned with drum hole, drive pin (AA) through drum, piercing strap. Replace snap ring (E).

Reversing Spring or

Loading Pawl Replacement

1. On models with hot stick levers, drive pin (B) from spring lever (W) using a 1/8" punch. Dislodge two snap

rings (E) and while holding loading pawl (T) and reversing control lever (X or W) in place, slide shaft (S) out of U-frame.

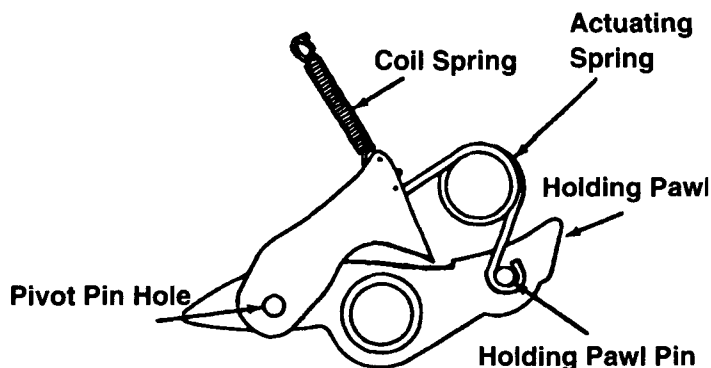
2. Replace reversing spring or loading pawl as required and reinstall shaft (S) and snap rings (E).

Holding Pawl or Pawl Control

Assembly Replacement

1. On models with hot stick levers, drive pin (B) from holding pawl (MM) using a 1/8" punch. Dislodge two snap rings (E) and slide shaft (LL) out of main frame.
2. Remove holding pawl and pawl control assembly for replacement of parts as required.
3. Place pawl control assembly spring onto holding pawl pin in correct position as shown below. Install free end of coil spring over hook end of shock spring (PP). Move pawl control assembly, with holding pawl attached, into position and place pivot hole in pawl control assembly over the pivot pin in the main frame. Make sure that pawl control assembly and holding pawl remain in relative position as shown. Reinstall shaft (LL) and two snap rings (E).

PAWL CONTROL ASSEMBLY



PARTS LIST

To order a part for your hoist, specify the complete model number, the name of the part and the complete part number.

Item	Description	300A	344A	300DA	344DA
A	Idler Roller Assembly (Complete)	399	3599	3499	3599D
B	Rollpin, 7/8"	H5250	H5250	H5250	H5250
C	Nut, Hook	16	H3986P	16	H3986P
D	Hook with Latch	24	L3-IS	324D	L3-IDS
E	Ring, Retaining	322RR	322RR	322RR	322RR
F	Shaft, Roller	396R	396R	—	—
G	Shaft, Quick Disconnect	3496	3496	3496	3496
H	Roller	3495	3495	3495	3495
J	Yoke	391	392	391	392
K	Swivel Shackle Assembly (Complete)	335	335	3435	3435
L	Latch Kit	10	10	10	10
N	Handle	350	3050	350	3050
	Handle, 36" (opt.)	3650	3650	3650	3650
P	Handle with Hot Stick Ring	350SPL	3450	350SPL	3450
	Handle, 36" with Ring (opt.)	3650SPL	3650SPL	3650SPL	3650SPL
Q	Eye Bolt	25	25	25	25
R	Nut, Eye Bolt	16	16	16	16
S	Shaft, Loading Pawl	2459R	445R	245R	3445R
T	Pawl, Loading	241	441	41	3441
U	Spring, Reversing	42	42	42	42
V	Lever, Hot Stick	—	—	348D	348D
W	Lever, Spring	—	—	43	43
X	Lever, Reversing	47	47	—	—
Z	Rollpin, 1 1/4"	73-1	73-1	73-1	73-1
AA	Rollpin, 1 1/2"	H5245	H5245	H5245	H5245
B B	Wheel	32R	32R	32R	32R
CC	Shaft, Drum	272	472	272	472
DD	Strap	371/10	372/12	371/10	372/12
EE	U-Frame Assembly (Complete)	246	446	346D	3446
GG	U-Frame	240	440	240	440
JJ	Handle Lock Screw	51	51	51	51
K K	Drum	370	3470	370	3470
LL	Shaft, Holding Pawl	219R	219R	319DR	319DR
MM	Pawl, Holding	21Z	21Z	321D	321D
NN	Control Pawl Assembly	20G	20G	20G	20G
PP	Spring	31	31	31	31
QQ	Rollpin, 2 1/4"	H5257	H5257	H5257	H5257
RR	Roller, Guide	326	326	326	326
SS	Mainframe, with Bearings	311	3411	311	3411
TT	Latch Kit	10	H7540	10	H7540

Order Parts from your Little Mule Distributor

Models 300A and 344A

Americrane & Hoist Corp. 1-800-652-1932

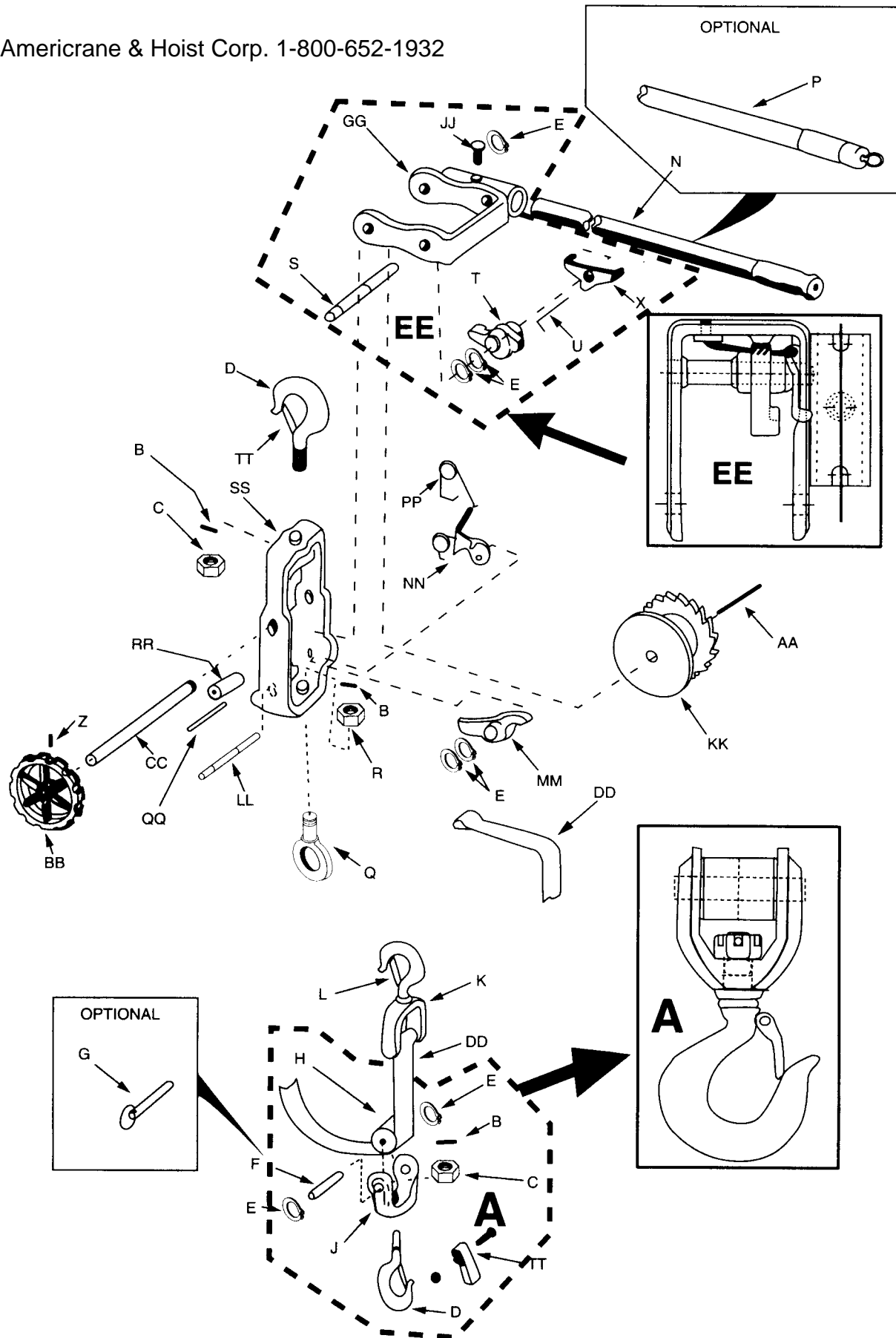


Figure 1

LITTLE MULE® PRODUCTS WARRANTY

LITTLE MULE products warrants to the original using purchaser thereof that hoisting equipment and parts thereof will, when properly assembled (if such is required), and installed by such purchaser, be and remain free under normal conditions of use and operation from all malfunctions arising out of defects in material or workmanship for a period of **one year** from the date of delivery to such original using purchaser (except for the LMES electric chain hoist, which is warranted for **90 days** from the date of delivery to the original purchaser). This warranty is further subject to the conditions noted herein.

Such warranty shall not apply to hoists, hoisting equipment or parts thereof subjected to operation in excesses of design limitations, negligent maintenance, or abuse, or damage by casualty, or unauthorized alteration.

All warranty claims shall be made to LITTLE MULE Products, P.O. Box 779, Wadesboro, NC 28170, and shall be supported by satisfactory evidence in respect of conditions herein noted. As a condition precedent to the allowance of such claim, the hoist, hoisting equipment or part involved shall, if requested by us be returned by freight prepaid for examination. We reserve the right in our sole discretion to repair or replace f.o.b. Wadesboro, any hoist, hoisting equipment, or parts found to be defective upon examination by its authorized personnel, and with respect to parts not of its own manufacture, such division limits its obligation hereunder to the adjustment, if any.

We undertake no responsibility for work done or expense incurred in connection with repair or replacement except on specific authority. We accept no liability hereunder, whatsoever, for consequential damages or for the negligence of others.

The foregoing warranties are exclusive and there are no warranties which extend beyond the description on the face hereof. These express warranties are in lieu of all other warranties whether written, oral or implied and LITTLE MULE hereby expressly excludes the implied warranties of merchantability and fitness for a particular purpose.

Except as stated herein, subject to the conditions noted, we neither make nor authorize to be made any other warranty expressed or implied, oral or written.

Improvements:

LITTLE MULE is constantly striving to improve its products. Changes in design and improvements will be made whenever the manufacturer believes the efficiency of the product will be improved without incurring any obligation to incorporate such improvements in any products which have been shipped or are in service.

Important Notice:

Use of chain, wire rope, or replacement parts other than as supplied as original equipment on LITTLE MULE hoists may lead to dangerous operation. Accordingly, we cannot be responsible in such cases and our warranty would be voided.

For more information write LITTLE MULE Products, P.O. Box 779 Wadesboro, NC 28170.

WARNING: The hoist equipment shown in this bulletin is intended for industrial use only and should not be used to lift, support or otherwise transport people.

Americrane & Hoist Corp. 1-800-652-1932



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