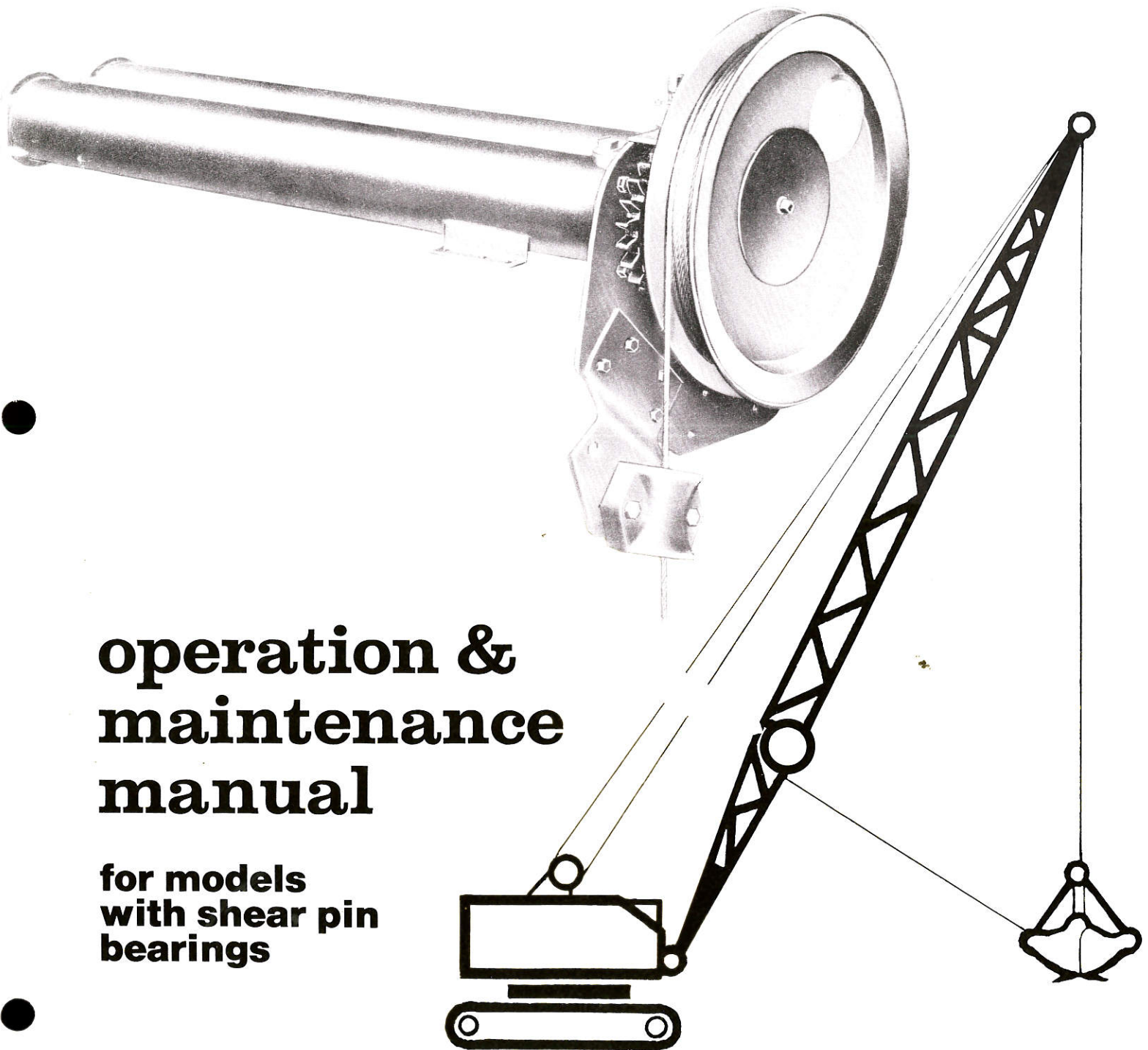


RUD·O·MATIC®

Double Barrel Tagline



**operation &
maintenance
manual**

**for models
with shear pin
bearings**

RUDOMATIC® Inc.

12770 E. Florence Ave., Santa Fe Springs, CA 90670

RUD-O-MATIC® Double Barrel Tagline Operations & Maintenance Manual

For models with shear pin bearings

TABLE OF CONTENTS

	Page
BASIC FUNCTION	3
GENERAL DESCRIPTION	3
SAFETY PRECAUTIONS	3
ASSEMBLY	3
LUBRICATION	3
INSTALLATION	4
Mounting Double Barrel Tagline: Cable Reel Outside Boom	4
Cable Reel Inside Boom	5
PRE-OPERATION TEST	6
TO ADD TENSION	6
OPERATION INSTRUCTIONS	6
SAFETY AND MAINTENANCE UNDER OPERATIONAL CONDITIONS ..	6
PREPARATION FOR DISASSEMBLY TO REPLACE WORN PARTS	7
Release Of Spring Tension: With Cable Remaining On Wheel	7
With Cable Removed From Wheel	7
When Reel is "Frozen" Immobile	7
TAGLINE DISASSEMBLY	8
Disassembly Steps	8
Re-assembly Procedure	8
ENGINEERING DRAWINGS – EXPLODED VIEW	8, 9
PARTS LIST	9
PARTS LIST – For Models With Needle Bearings	10
SPECIFICATIONS AND MANUFACTURER'S RECOMMENDATIONS ..	10
Shear Pin Breaking Point	10
MOUNTING DIMENSIONS	11
WARRANTY	11

Rudomatic® Products are sold and serviced by authorized dealers throughout the world. Contact Rudomatic® factory, 12770 E. Florence Ave., Santa Fe Springs, Ca 90670, for information on nearest authorized dealer in your area.
Phone: (562) 944-2844 Fax: (562) 944-8853

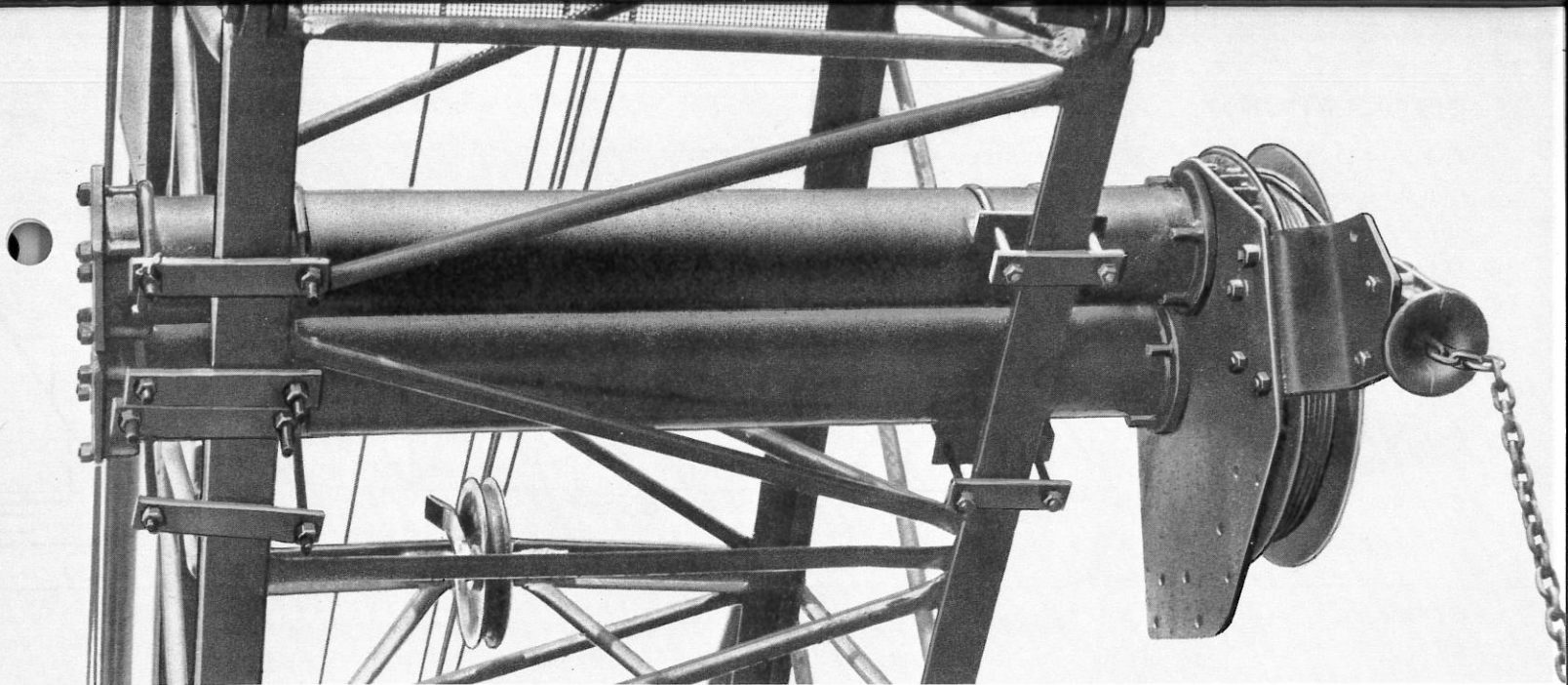


Figure A.

RUD-O-MATIC® Double Barrel Tagline

BASIC FUNCTION

The Rud-O-Matic® Double Barrel Tagline holds a clamshell bucket steady regardless of boom angle while the bucket and its load are suspended in air. Tagline operation is completely automatic after installation.

GENERAL DESCRIPTION

The Rud-O-Matic® Tagline operates on a coil spring system that maintains constant, positive tension on a clamshell bucket or other types of crane loads. Unit mounts on a crane boom and consists of a cable reel, cable wire, two spring-loaded cylinders, and bell guide fairlead. Fairlead requires no sheaves, pins, or lubrication.

SAFETY PRECAUTIONS

Where applicable, safety precautions are included in paragraphs containing instructions on installation and disassembly procedures. Safety and maintenance data under normal operational conditions is contained in a separate section on page 6.

ASSEMBLY

Except for fairlead bracket, Model 1248 Rud-O-Matic® Double Barrel Tagline with 20-inch cable reel is completely assembled before shipping.

Model 1248 Rud-O-Matic® Double Barrel Tagline with 30-inch cable reel and Model 1266 Rud-O-Matic® Double Barrel Tagline with 30-inch or 40-inch reel are each shipped in two sections, with cable reel separate from tagline housing.

To assemble, secure cable reel to main gear of tagline housing with 6 cap screws enclosed with tagline housing (Fig. K, page 8, Items 3 & 7 — 20" reel; Items 3 & 4 — 30" & 40" reel). Secure safety plate with cap screw as indicated (Fig. K, Items 5 & 6 — 20" reel; Items 1 & 2 — 30" & 40" reel).

Assembly information for fairlead bracket (all models) is included under "Mounting Cable Reel..." paragraphs in Installation Section, pages 4 and 5.

LUBRICATION

Use S.A.E. 90 heavy oil. A large decal, plainly visible on each Rud-O-Matic® Tagline Barrel, contains precise data for correct amount of oil required. Lubricate one barrel at a time. To lubricate (Fig. B), remove 3-inch oil plug on barrel housing near cable reel and ½-inch black pipe plug on end plate. Add oil per decal guide until oil level lines up with plug hole on end plate. Do not fill past plug hole. Replace plugs.

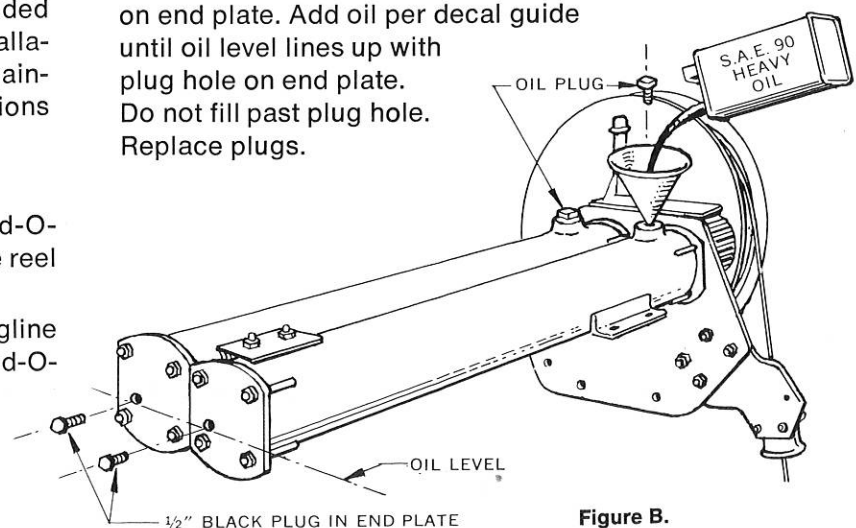


Figure B.

INSTALLATION

The Rud-O-Matic® Double Barrel Tagline is designed to mount with cable reel on either side of boom, or entire unit may be mounted within boom structure, depending on size of tagline model and inside diameter of boom. Installation data for each type of mount is given below.

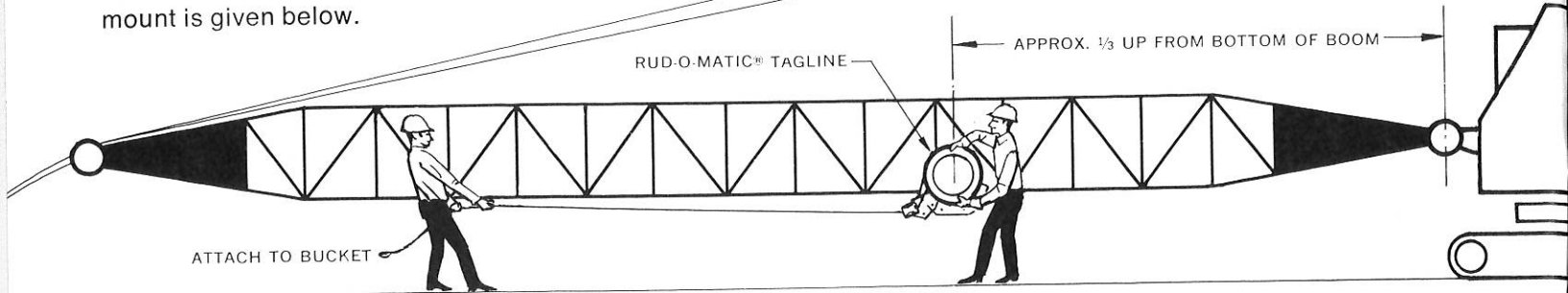


Figure C.

A. Mounting Double Barrel Tagline With Cable Reel Outside Boom

Lower crane boom and bucket to ground level. Materials for securing tagline to boom — U bolts with plates, nuts, and lock washers — are located on tagline housing. Remove and use materials as shown in Fig. K, Items 57 & 58, page 8.

Tagline unit should be located approximately 1/3

up from bottom of boom (Fig. C, above) and set in position between upper and lower angles (Fig. A photo, page 3). Tagline mounts with cable reel on either side of boom, per instructions below. **SAFETY PRECAUTION: ALWAYS MOUNT TAGLINE ON OPPOSITE SIDE OF CRANE OPERATOR CAB.**

1. Mounting Cable Reel On Left Side Of Boom (Fig. D)

Secure unit so that center edge of main end plate protruding from perimeter of cable reel is on ground side and parallel to horizontal running edge of lowered boom structure. Fairlead bracket bolts to main end plate and points in direction of bucket (upper boom end). Secure with four cap screws (Fig. K, Item 46, page 8). Three bolt holes at opposite end of fairlead bracket provide choice of two positions for attaching bell cable guide. Use position that permits cable to travel smoothly back and forth through bell guide.

2. Mounting Cable Reel On Right Side Of Boom (Fig. E)

Cable will have to be directed around reel and back out underside towards bucket. Secure unit to boom so that center edge of main end plate protruding from perimeter of cable reel is on ground side and parallel to horizontal running edge of lowered boom structure. Bolt fairlead bracket to main end plate with four cap screws provided in position that points towards upper boom end and bucket. Three bolt holes at opposite end of fairlead bracket provide choice of two positions for attaching bell cable guide. Use position that assures best working alignment of cable through bell guide to bucket.

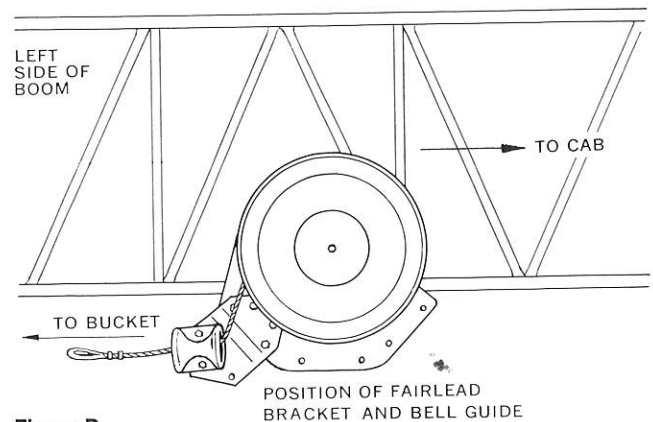


Figure D.

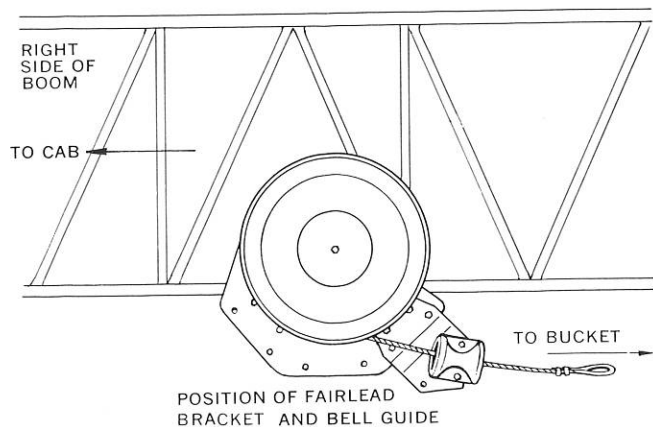


Figure E.

3. Securing Cable To Bucket – Model 1248 & Model 1266

SAFETY PRECAUTION: IF MORE INITIAL TENSION THAN THREE REVOLUTIONS IS REQUIRED, USE TWO-MAN TEAM. MAKE CERTAIN DOG RATCHET IS ENGAGED IN GEAR.

With tagline unit mounted on boom, either side, cable remains hooked in original position on reel. Engage dog ratchet by turning reel enough to drop ratchet in place in gear mechanism. For Model 1248, rotate reel counterclockwise a minimum of three complete revolutions from neutral position (no tension). For Model 1266, rotate reel counterclockwise a minimum of six complete revolutions from neutral position. Unhook cable from reel and pass it through bell guide. Pull cable out along lowered boom and attach cable end to bucket. Disengage dog ratchet by turning reel counterclockwise enough to release from gear mechanism. Unit is now functional and ready for pre-operation testing.

NOTE: UNDER CERTAIN OPERATING CONDITIONS MORE THAN SIX REVOLUTIONS OF INITIAL TENSION MAY BE NECESSARY. WITH GREATER INITIAL TENSION ON REEL, TWO MEN SHOULD BE USED TO PULL OUT CABLE AND ATTACH TO BUCKET.

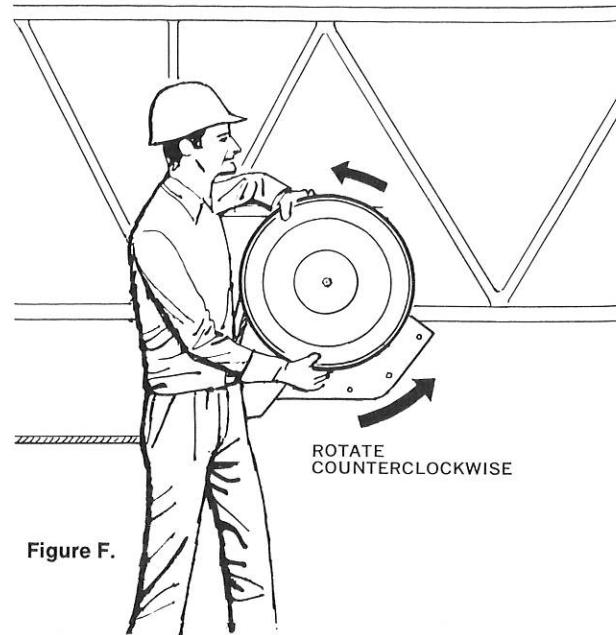


Figure F.

B. Mounting Double Barrel Tagline With Cable Reel Inside Boom

Model 1248 Rud-O-Matic® Double Barrel Tagline with 20-inch reel requires minimum inside boom diameter of 30 inches to mount complete tagline inside boom structure.

Model 1266 Rud-O-Matic® Double Barrel Tagline with 30-inch reel requires minimum inside boom diameter of 40 inches to mount complete tagline inside boom structure.

1. Methods

There is no single preferred method for securing tagline unit to boom. Several workable methods may be improvised depending on type of boom in operation. In majority of installations, supports are installed across boom, with tagline housing bolted or welded to these supports (Fig. G).

Locate unit within lower third portion of boom, with small end plate pointing towards cab, and tagline housing parallel to angle of boom height (Fig. G). Exterior flat side of cable reel faces upper boom end. Center edge of main end plate protruding from perimeter of cable reel is on ground side and parallel to horizontal

strut across boom. Fairlead bracket bolts to main end plate with four cap screws provided. There is a choice of three positions. At opposite end of fairlead bracket, three bolt holes provide choice of two positions for attaching bell guide to bracket, or bell guide may be attached to side of boom.

Line up unit, fairlead bracket, and bell guide in positions that provide smoothest working arrangement of cable through bell guide to bucket.

2. Securing Cable To Bucket – Models 1248 & 1266

Use two-man team. With tagline unit mounted inside boom, cable remains hooked in original position on reel. Engage dog ratchet by turning reel enough to drop ratchet in place in gear. For Model 1248, rotate reel counterclockwise a minimum of three complete revolutions from neutral position (no tension). For Model 1266, rotate reel counterclockwise a minimum of six complete revolutions from neutral position. Unhook cable from reel and pass it through bell guide. Pull cable out along lowered boom and attach cable end to bucket. Release dog ratchet by turning reel counterclockwise enough to release from gear mechanism. Unit is now functional and ready for pre-operation testing.

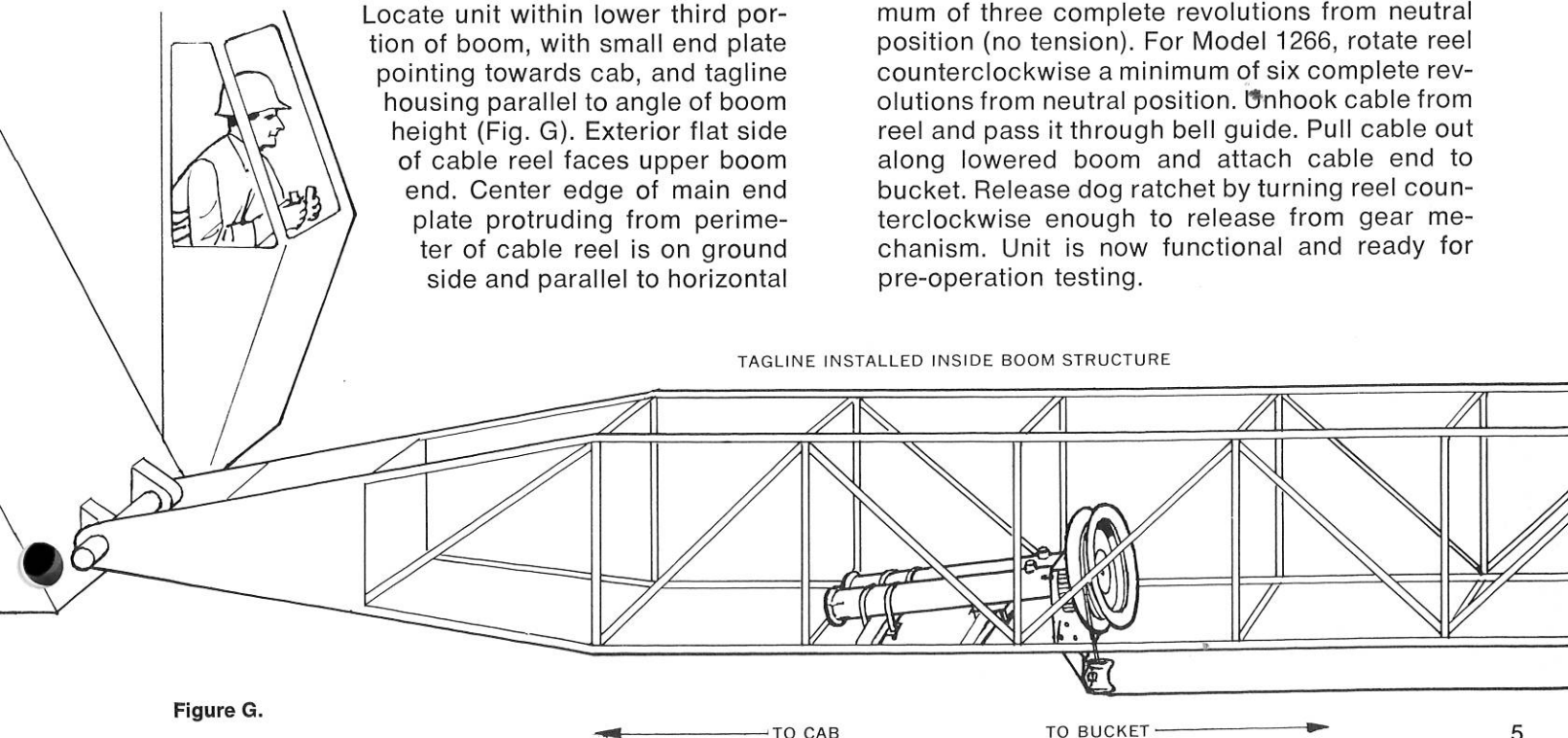


Figure G.

PRE-OPERATION TEST

Position crane boom over dirt surface at approximate 35° angle. Raise clamshell bucket to maximum height. Drop bucket to ground in fully opened position. Load and close bucket. Raise to height of not less than 15 feet while swinging bucket through 45° arc. Drop load and return to original position. During test observe tagline operation to make certain crane hoisting and closing lines do not twist enough to cross over and foul operations. If tagline and bucket function smoothly without hindrance, unit is ready to work. Should twisting occur, additional tension will be required.

To Add Tension. Lower boom to ground level. Engage dog ratchet by turning reel enough to drop ratchet in place in gear. Using two-man team, (Figs. H & I), turn cable reel counterclockwise and release enough slack cable to allow one additional turn of cable around reel. **IMPORTANT: REEL MUST BE HELD IN STATIONARY POSITION WHILE CABLE IS WOUND AROUND IT.** Dog ratchet in gear accomplishes this, but reel may also be held in stationary position by hand. After completion of additional turn around reel, disengage gear mechanism by turning reel counterclockwise enough to release dog ratchet. Repeat pre-operation test.

OPERATION INSTRUCTIONS

Tagline operation is completely automatic after unit is installed and cable end attached to bucket. Tagline functions in conjunction with boom operation.

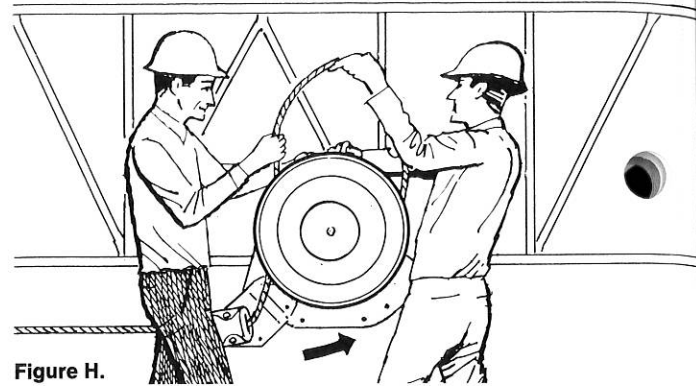


Figure H.

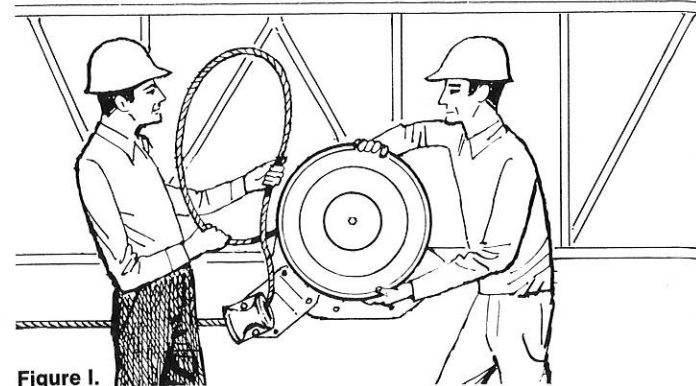


Figure I.

SAFETY AND MAINTENANCE UNDER OPERATIONAL CONDITIONS

A. SAFETY

1. Disengaging Cable From Bucket & Other Loads

Employ following procedure: USE TWO-MAN TEAM. Lower bucket to ground level. Engage dog ratchet. Wearing protective gloves, one man unhooks cable end and grasps cable firmly with both hands. Second man disengages dog ratchet and stands by reel ready to re-engage dog ratchet should first man lose grip on cable as it is slowly walked in and wound around reel. Re-engage dog ratchet after cable is wound up around reel.

IMPORTANT: If tension remaining on spring inside housing is more than six revolutions of cable reel — OR IF IN DOUBT ABOUT HOW MUCH TENSION REMAINS ON SPRING — USE THREE-MAN TEAM. One man disengages dog ratchet and stands by at reel, as two men wearing gloves slowly walk in cable. Re-engage dog ratchet after cable is wound up on reel.

B. MAINTENANCE

1. Preventive Maintenance To Avert Coil Spring Overwinding

Coil spring overwinding can only occur in taglines manufactured prior to November, 1980 that do not contain shear pin bearings. To prevent coil spring overwinding during operations, cable reel should not exceed number of turns recommended for tagline model. See complete Specification Chart on page 10, bottom, for maximum number of cable reel turns recommended to prevent coil spring overwinding.

Taglines manufactured after November, 1980 are equipped with bearings containing shear pins designed to break and release spring tension if cable reel exceeds maximum recommended number of turns.

2. Lubrication (See Fig. B, Page 3)

Lubrication service should be carried out on a quarterly basis and at the start of each new job. Lubricate one barrel at a time. Use S.A.E. 90 heavy oil. Remove 3-inch oil plug near reel on tagline housing and 1/2-inch black pipe plug on end plate. Add oil per decal guide located on tagline housing until oil level lines up with plug hole on end plate. Do not fill past plug hole. Replace plugs.

3. Inspection For Wear Or Damage

Inspect bell cable guide and cable for routine wear. If signs of frayed ends or wear are visible, replace cable. Replace bell guide if pronounced groove is apparent.

4. Storage Between Use

For brief periods of inactivity it is not necessary to drain oil from housing, BUT ALWAYS STORE UNIT WITH HOUSING IN HORIZONTAL POSITION.

For long periods of inactivity, lubrication oil should be drained from housing. Loosen four nuts on end plate. Tilt unit to remove final oil residue. Tighten four nuts.

CAUTION: Do not store tagline in vertical up-ended position with oil in housing. In time, oil may leak through oil seal.

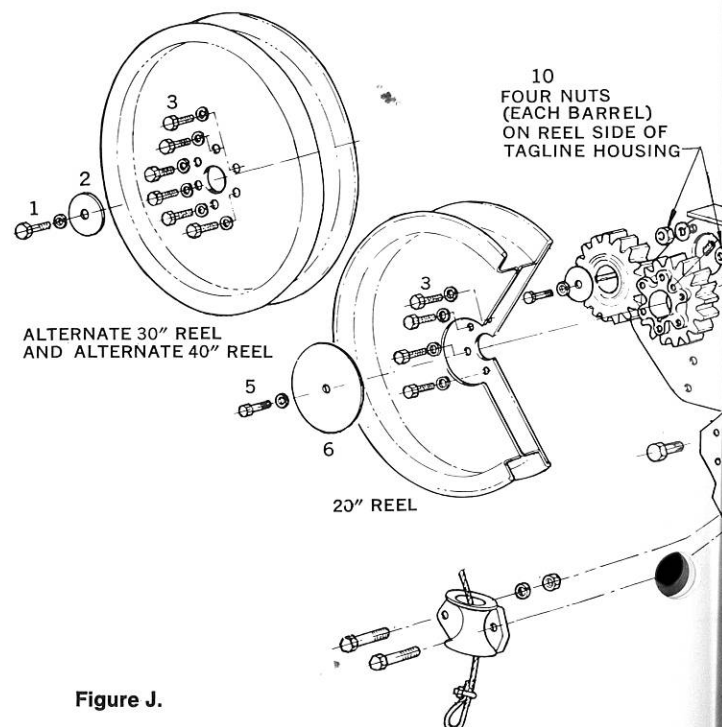


Figure J.

PREPARATION FOR DISASSEMBLY TO REPLACE WORN PARTS

SAFETY PRECAUTION: ALL TENSION MUST BE RELEASED FROM COIL SPRINGS INSIDE BOTH BARRELS BEFORE TAGLINE CAN BE DISASSEMBLED. USE TWO-MAN TEAM. Alternate procedures for releasing spring tension in tagline housing are given below. Use method that best suits type of mount and condition of unit.

A. Release Of Spring Tension With Cable Remaining On Reel

Note: This procedure not recommended when tagline is mounted inside boom.

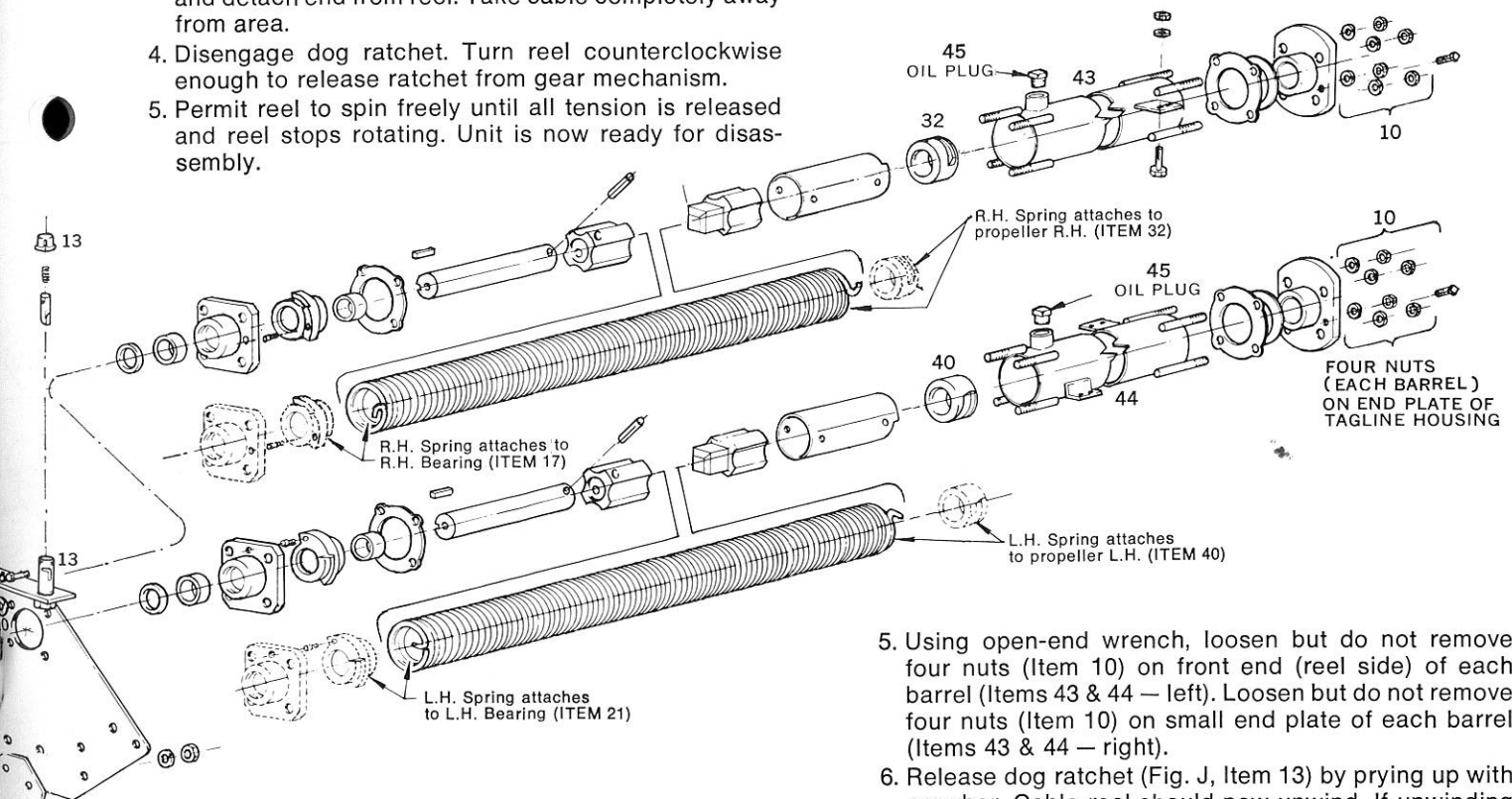
1. Lower boom to ground level. This is reverse of procedure used to add tension. Tagline cable remains hooked to bucket.
2. One man holds reel in place while second man removes one loop of cable from reel. First man then turns reel **clockwise** one turn to take up cable slack, thus reducing tension on spring by one turn. Repeat procedure until all tension on springs in both barrels is released. Unit is now ready for disassembly.

B. Release Of Spring Tension With Cable Removed From Reel

1. Lower boom to ground level. Cable reel must be in working condition.
2. **IMPORTANT:** BEFORE ATTEMPTING TO REMOVE CABLE, REEL MUST BE SECURED IN STATIONARY POSITION. To accomplish this, engage dog ratchet. Turn reel enough to drop ratchet in place in gear mechanism.
3. With ratchet holding reel in place, unwind all cable and detach end from reel. Take cable completely away from area.
4. Disengage dog ratchet. Turn reel counterclockwise enough to release ratchet from gear mechanism.
5. Permit reel to spin freely until all tension is released and reel stops rotating. Unit is now ready for disassembly.

SAFETY PRECAUTION: DO NOT ATTEMPT TO UNHOOK "FROZEN" OVERWOUND COIL SPRING FROM PROPELLER (ITEM 32 OR 40) BY INSERTING CROWBAR, HAMMER, SCREWDRIVER, OR SIMILAR INSTRUMENT. SUDDEN UNWINDING OF "FROZEN" COIL SPRING CAN CAUSE BODILY HARM. CAREFULLY FOLLOW STEP BY STEP PROCEDURE OUTLINED BELOW TO RELEASE SPRING TENSION.

1. Lower boom to ground level.
2. **SAFETY PRECAUTION:** DOG RATCHET MUST BE IN GEAR BEFORE ATTEMPTING TO REMOVE CABLE FROM REEL. To engage dog ratchet, turn reel enough to drop ratchet in place in gear mechanism.
3. Remove all cable and disengage from reel. **SAFETY PRECAUTION:** TAKE CABLE COMPLETELY AWAY FROM AREA. ALWAYS WORK FROM SIDE OF TAGLINE HOUSINGS UNTIL COIL SPRINGS IN BOTH BARRELS ARE COMPLETELY UNWOUND. DO NOT STAND IN FRONT OF END PLATES OR CABLE REEL WHEN LOOSENING NUTS TO RELEASE TENSION.
4. Remove cable reel as follows: unscrew safety plate and six cap screws from back side of reel (Fig. J, Items 5, 6, & 3 on 20" reel; Items 1, 2, & 3 on 30" & 40" reel). Disengage cable reel from main gear and remove from tagline housing. **SAFETY PRECAUTION:** DO NOT REMOVE GEARS FROM HOUSING. GEARS ARE NEVER REMOVED UNTIL ALL TENSION HAS BEEN RELEASED.



C. Release Of Spring Tension When Reel Is "Frozen" Immobile. Refer To Fig. J

NOTE: This situation occurs only in taglines that do not contain shear pin bearings (those manufactured prior to November, 1980). **IMPORTANT:** To prevent re-occurrence of spring overwinding to "frozen" immobile position, it is necessary to order a new set of Bearings With Shear Pins (Items 17, Part No. 551 for Right Hand Spring, and Item 21, Part No. 550 for Left Hand Spring) with replacement order for "frozen" spring.

5. Using open-end wrench, loosen but do not remove four nuts (Item 10) on front end (reel side) of each barrel (Items 43 & 44 — left). Loosen but do not remove four nuts (Item 10) on small end plate of each barrel (Items 43 & 44 — right).
6. Release dog ratchet (Fig. J, Item 13) by prying up with crowbar. Cable reel should now unwind. If unwinding is not smooth and reel tends to stick or stop, it will be necessary to burn through coil springs in tagline barrels in order to release tension.
7. To burn springs, remove 3-inch oil plug near reel on each barrel. Coil springs can now be seen inside each plug hole. Burn through coil spring in one barrel with acetylene torch. If springs do not unwind, burn through coil spring in second barrel until all tension releases and coil springs in both barrels are completely unwound. Unit is now ready for disassembly.

TAGLINE DISASSEMBLY

With all tension released from coil springs (see previous section on preparation for disassembly), tagline disassembly can begin. Entire procedure may be carried out with tagline secured to boom. For greater working convenience, however, complete unit can be dismantled from boom prior to disassembly and removed to table or bench. Dismantling may require burning off U bolts that secure tagline to boom. When tagline is re-mounted it will be necessary to replace U bolts.

SAFETY PRECAUTION: BEFORE STARTING DISASSEMBLY ON BENCH, UNIT SHOULD BE SECURELY TIED DOWN WITH C-CLAMPS OR EQUIVALENT MEANS.

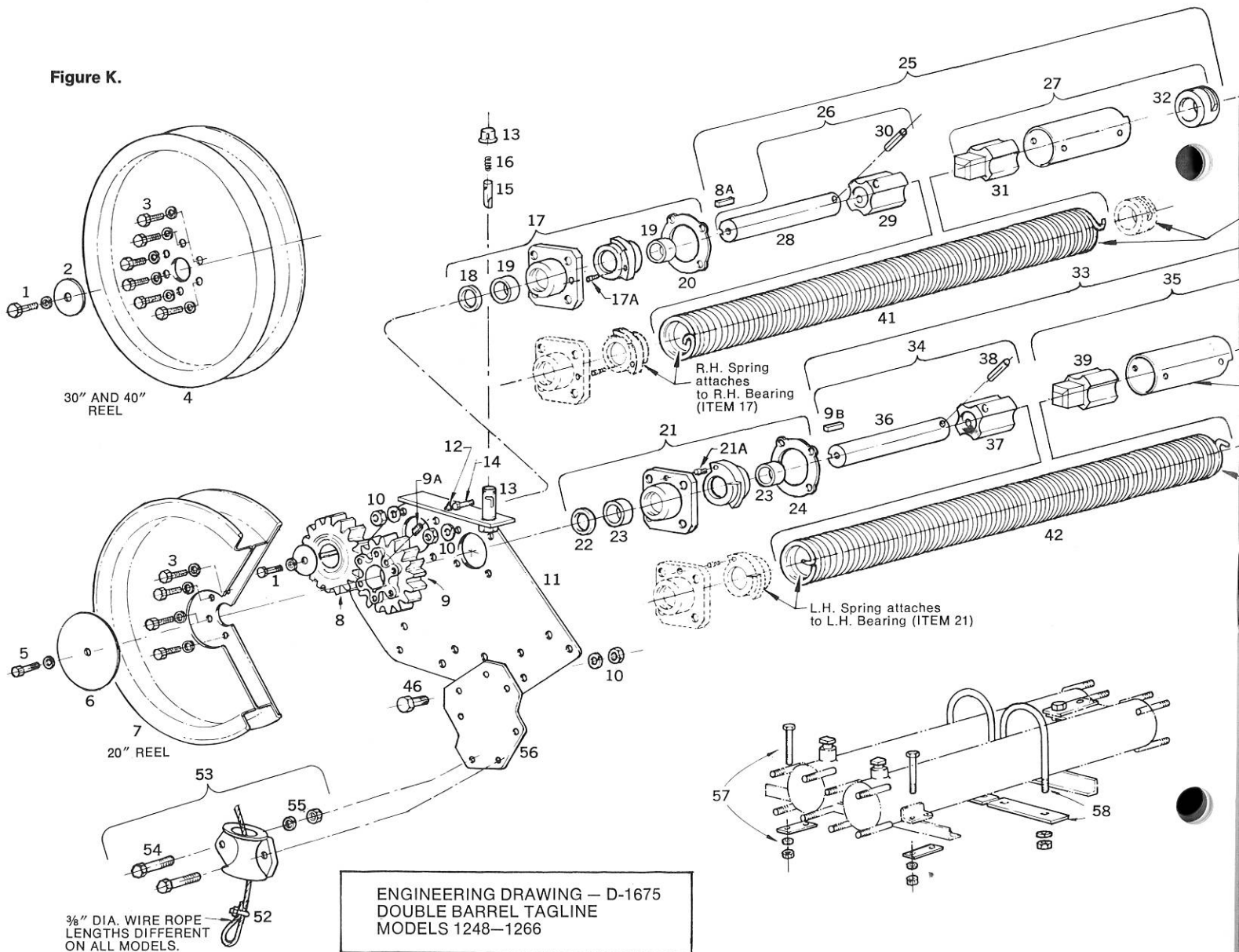
DISASSEMBLY STEPS. Refer to Fig. K.

NOTE: If cable reel has been removed from tagline in preparing for disassembly, as in case when reel is "frozen" immobile (page 7, Section C), begin disassembly with Step 4, below.

1. Remove cap screw and safety plate (Items 5 & 6 on 20" reel; Items 1 & 2 on 30" & 40" reel).
2. Remove 6 cap screws (Item 3) securing cable reel to main gear.
3. Remove cable reel (Item 7 on 20" reel; Item 4 on 30" & 40" reel).
4. Remove socket set screw from main gear (Item 9A).

5. Remove main gear (Item 9) and square key (Item 9B).
6. Remove cap screw and safety plate on secondary gear (Items 1 & 2).
7. Remove secondary gear (Item 8) and square key (Item 8A).
8. Remove 8 hex nuts (Item 10), 4 each barrel, holding main end plate (Item 11) to tagline housing.
9. Remove main end plate (Item 11).
10. If necessary, dismantle fairlead bracket (Item 56) from main end plate.
11. Remove right-hand and left-hand bearings (Items 17 & 21). Each bearing contains tagline oil seal, oilite bushing, shear pin and gasket. If bearing sticks, clean shaft with emery stick or file.
12. Remove shaft with coupling from each barrel (Items 26 & 34).
13. Remove end plate, thrust washer, and gasket from each barrel (Items 48, 49, & 50).
14. Remove tube with male coupling and propeller from each barrel (Items 27 & 35).
15. Remove coil springs from either end of tagline housing.

RE-ASSEMBLY PROCEDURE. Reverse disassembly steps listed above.



PARTS LIST — RUD-O-MATIC® DOUBLE BARREL TAGLINE
DO NOT USE ITEM NUMBER IN ORDERING PARTS — USE PART NUMBER

ITEM NO.	PART NO.	WEIGHT EACH	DESCRIPTION
1	57	2 oz.	1/2" x 1 1/4" Cap Screw & Lock Washer
2	71	8 oz.	Safety Plate, 2 3/4"
3	63	3 oz.	5/8" Cap Screw & Lock Washer for #62 Gear
4	47	105 lbs.	Cable Reel, 30" Dia. for Double Barrel Tagline
	47A	125 lbs.	Cable Reel, 40" Dia. for Double Barrel Tagline
5	467	3 oz.	Cap Screw w/Lock Washer 1/2" x 2 1/4"
6	67	3 lbs.	Safety Plate 10" for 1248 Tagline w/20" Cable Reel
7	125	60 lbs.	Cable Reel, 20" Dia. for 1248 (5/8" holed Gear)
8	64	14 lbs.	Gear, Right Hand
8A	472	1 oz.	1/2" x 1" Square Key
9	62	20 lbs.	Gear 5/8" hole, Left Hand
9A	470	1/2 oz.	3/8" x 1" Socket Set Screws
9B	473	2 oz.	1/2" x 1 3/4" Square Key
10	104	3 oz.	Nut w/Lock Washer

MAIN END PLATE

11	79	43 lbs.	Main End Plate for Double Barrel Tagline Consists of:
12	168	1/4 oz.	Alemite Grease Fitting
13	43	12 oz.	Ratchet Dog Tube and Cap
14	468	1 oz.	Cap Screw 5/16" x 1 1/4"
15	40	10 oz.	Ratchet Dog 5" for Double Barrel Tagline
16	44	1 oz.	Ratchet Dog Spring

ITEM NO.	PART NO.	WEIGHT EACH	DESCRIPTION
21	550	15 lbs.	BEARINGS * (continued) Bearing, Left Hand Includes Shear Pin, Tagline Oil Seal, Oilite Bushings, & Gasket (Items 21A, 22, 23, & 24)
21A	560	1/2 oz.	Shear Pin.
22	72	3 oz.	Tagline Oil Seal
23	556	2 oz.	Oilite Bushing (2 required)
24	73	1 oz.	Gasket

NOTE: Order extra Shear Pins to have on hand for future convenience.

SHAFT ASSEMBLY

25	249	49 lbs.	Shaft Assembly, Right Hand for 1248 Tagline
	250	57 lbs.	Shaft Assembly, Right Hand for 1266 Tagline Consists of:
26	461	15 lbs.	Shaft w/Pin & Coupling (#50 & 129) Welded
27	462	35 lbs.	Tube w/Male Coupling & Right Hand Propeller for 1248
	463	44 lbs.	Tube w/Male Coupling & Right Hand Propeller for 1266
28	50	7 lbs.	Shaft, Right Hand
29	129	7 lbs.	Female Core Coupling
30	169	8 oz.	Shaft Pin, 3/4" x 3 3/4"
31	128	6 lbs.	Male Core Coupling
32	39	4 lbs.	Propeller, Right Hand
33	247	50 lbs.	Shaft Assembly, Left Hand for 1248 Tagline
	248	58 lbs.	Shaft Assembly, Left Hand for 1266 Tagline Consists of:
34	464	16 lbs.	Shaft w/Coupling for 1248, 1266 (#49 & 129) Welded
35	465	35 lbs.	Tube w/Male Coupling, Left Hand Propeller for 1248
	466	44 lbs.	Tube w/Male Coupling, Left Hand Propeller for 1266
36	49	9 lbs.	Shaft Left Hand (5/8" holed Gear)
37	129	7 lbs.	Female Core Coupling
38	169	8 oz.	Shaft Pin, 3/4" x 3 3/4"
39	128	6 lbs.	Male Core Coupling
40	29	4 lbs.	Propeller, Left Hand

SPRINGS

41	98	75 lbs.	Spring, Right Hand for Model 1248
	99	100 lbs.	Spring, Right Hand for Model 1266
	99A	100 lbs.	Spring, Right Hand for Model 1266 w/437 Spring (Special)
42	90	75 lbs.	Spring, Left Hand for Model 1248
	91	100 lbs.	Spring, Left Hand for Model 1266
	91A	100 lbs.	Spring, Left Hand for Model 1266 w/437 Spring (Special)

HOUSING

43	253	73 lbs.	Housing, Right Hand for 1248 Tagline
	254	90 lbs.	Housing, Right Hand for 1266 Tagline
44	251	73 lbs.	Housing, Left Hand for 1248 Tagline
	252	90 lbs.	Housing, Left Hand for 1266 Tagline

MISCELLANEOUS

45	460	1 lb.	Oil Plug
46	471	3 oz.	Cap Screws 5/8" x 1 1/2"
47	469	4 lbs.	Brackets 2 ea. w/2 Cap Screws, Nuts
48	176	9 lbs.	End Plate w/Gasket
49	292	4 oz.	Steel Thrust Washer for End Plate, 2 1/2" I.D.
50	73	1 oz.	Gasket
51	401	2 oz.	Black Pipe Plug, 1/2"
52	198	2 1/2 oz.	3/8" Wire Rope Clamp

BELL CABLE GUIDE COMPLETE

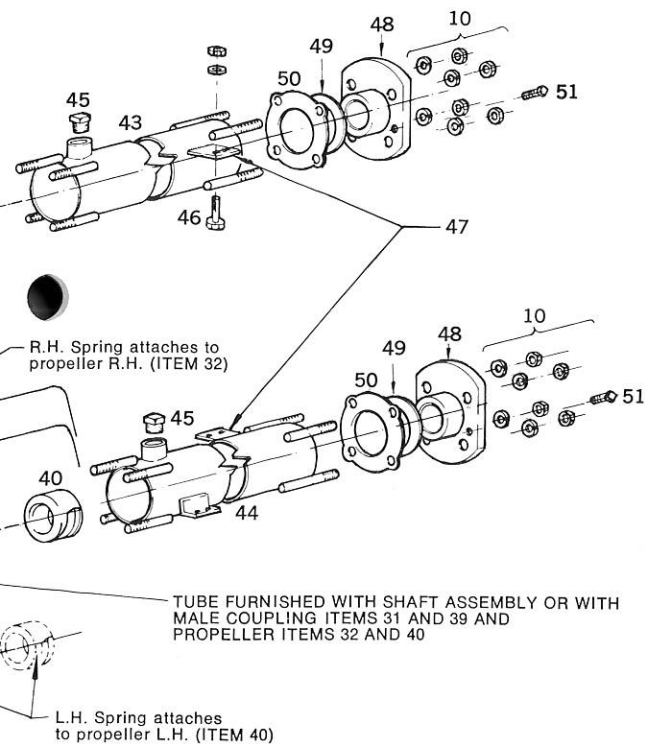
53	245	14 lbs.	Consists of:
54	246	15 oz.	Bolt w/Nut & Lock Washer for Bell Cable Guide
55	104	3 oz.	Nut w/Lock Washer

FAIRLEAD

56	101	9 lbs.	Fairlead Bracket for Double Barrel Tagline
	101A	17 lbs.	Fairlead Bracket for Double Barrel Tagline for 40" wheel

MISCELLANEOUS

57	42	4 lbs.	Clamping Plate w/Bolts, Nuts, Lock Washers (2 ea. req.)
58	41	6 lbs.	U Bolt w/Plate, Nuts, Lock Washers (2 ea. req.)



ITEM NO.	PART NO.	WEIGHT EACH	DESCRIPTION
17	551	15 lbs.	BEARINGS * Bearing, Right Hand Includes Shear Pin, Tagline Oil Seal, Oilite Bushings, & Gasket (Items 17A, 18, 19, & 20)
17A	560	1/2 oz.	Shear Pin.
18	72	3 oz.	Tagline Oil Seal
19	556	2 oz.	Oilite Bushing (2 required)
20	73	1 oz.	Gasket

NOTE: Order extra Shear Pins to have on hand for future convenience.

* Bearing replacement parts manufactured after November, 1980 contain Shear Pins.

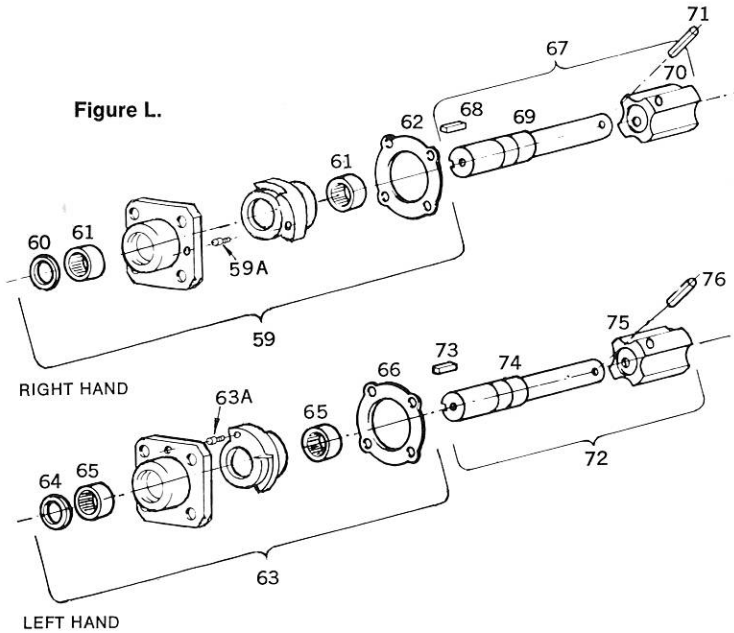
† If Tagline Model is not known, supply length measurement of Tagline Housing (Item 43 or 44).

PARTS LIST — FOR MODELS WITH NEEDLE BEARINGS

NOTE: Parts listed below pertain to bearings and shafts only.
To order all other parts for these models, consult Parts List on page 9.

ITEM NO.	PART NO.	WEIGHT EACH	DESCRIPTION	ITEM NO.	PART NO.	WEIGHT EACH	DESCRIPTION
59	554	15 lbs.	BEARINGS * Bearing, Right Hand Includes Shear Pin, Tagline Oil Seal, Needle Bearings, & Gasket (Items 59A, 60, 61, & 62)	63	553	15 lbs.	Bearing, Left Hand Includes Shear Pin, Tagline Oil Seal, Needle Bearings, & Gasket (Items 63A, 64, 65, & 66)
59A	560	½ oz.	Shear Pin.	63A	560	½ oz.	Shear Pin.
60	72	3 oz.	Tagline Oil Seal	64	72	3 oz.	Tagline Oil Seal
61	178	1½ lbs.	Needle Bearing (2 required)	65	178	1½ lbs.	Needle Bearing (2 required)
62	73	1 oz.	Gasket	66	73	1 oz.	Oil Gasket
				67	498	15 lbs.	Shaft w/Coupling (#495 & 501) Welded Right Hand (Inner Race)
				68	472	1 oz.	½" x 1" Square Key
				69	495	8 lbs.	Shaft w/Inner-Race w/Pin, Right Hand for Double Barrel Tagline
				70	501	8 lbs.	Female Core Coupling, 1 7/8" I.D. Hole
				71	169	8 oz.	Shaft Pin, ¾" x 3 3/4"
				72	499	16 lbs.	Shaft w/Coupling (#496 & 501) Welded Left Hand (Inner Race)
				73	473	2 oz.	½" x 1 3/4" Square Key
				74	496	9 lbs.	Shaft w/Inner Races w/Pin, Left Hand for Double Barrel Tagline
				75	501	8 lbs.	Female Core Coupling, 1 7/8" I.D. Hole
				76	169	8 oz.	Shaft Pin, ¾" x 3 3/4"

Figure L.



* Bearing replacement parts manufactured after November, 1980 contain Shear Pins.
‡ If Tagline Model is not known, supply length measurement of Tagline Housing (Item 43 or 44), Page 9.

SPECIFICATIONS AND MANUFACTURER'S RECOMMENDATIONS

Rud-O-Matic® Standard Double Barrel Taglines are manufactured in four models to accommodate various size buckets and booms. Each model is engineered to have sufficient cable pullout with the required positive tension to provide full control of bucket in operation. Tagline model specifications and manufacturer's recommendations for different size buckets and booms are given below.

Shear Pin Breaking Point. To prevent coil spring overwinding, shear pin in bearing is designed to break and release spring tension if cable reel exceeds maximum recommended number of turns. Consult proper columns in chart to determine maximum number of cable reel turns for tagline model before shear pin will break. (To order correct shear pin to match tagline model, see Item 17A or 21A, page 9.)

Model	Weights	Housing Length (each barrel)	Bucket Size	Cable Pullout From Neutral	Maximum Turns Of Cable Reel	Spring Dimension (.393 wire)
1248 with 20" reel	650 lbs.	60"	1½ yd. to 4 yd., 80 ft. boom	90 ft.	18	6" dia., 48" closed, 65" free, 121 coils
1248 with 30" reel	700 lbs.	60"	1½ yd. to 2 yd., 100 ft. boom	125 ft.	18	6" dia., 48" closed, 65" free, 121 coils
1266 with 30" reel	790 lbs.	78"	1½ yd. to 2 yd., deep digging	200 ft.	25	6" dia., 66" closed, 87" free, 156 coils
1266 ◊ with 40" reel	810 lbs.	78"	1½ yd. to 2 yd., deep digging	250 ft.	25	6" dia., 66" closed, 87" free, 156 coils

◊ Available with .437 coil spring wire for jobs requiring greater tension. Bucket size: 2 yd. to 5 yd.; deep digging. Cable Pullout from neutral: 180 feet. Maximum turns of cable reel: 18. 140 coils.

MOUNTING DIMENSIONS DOUBLE BARREL RUD-O-MATIC® TAGLINE

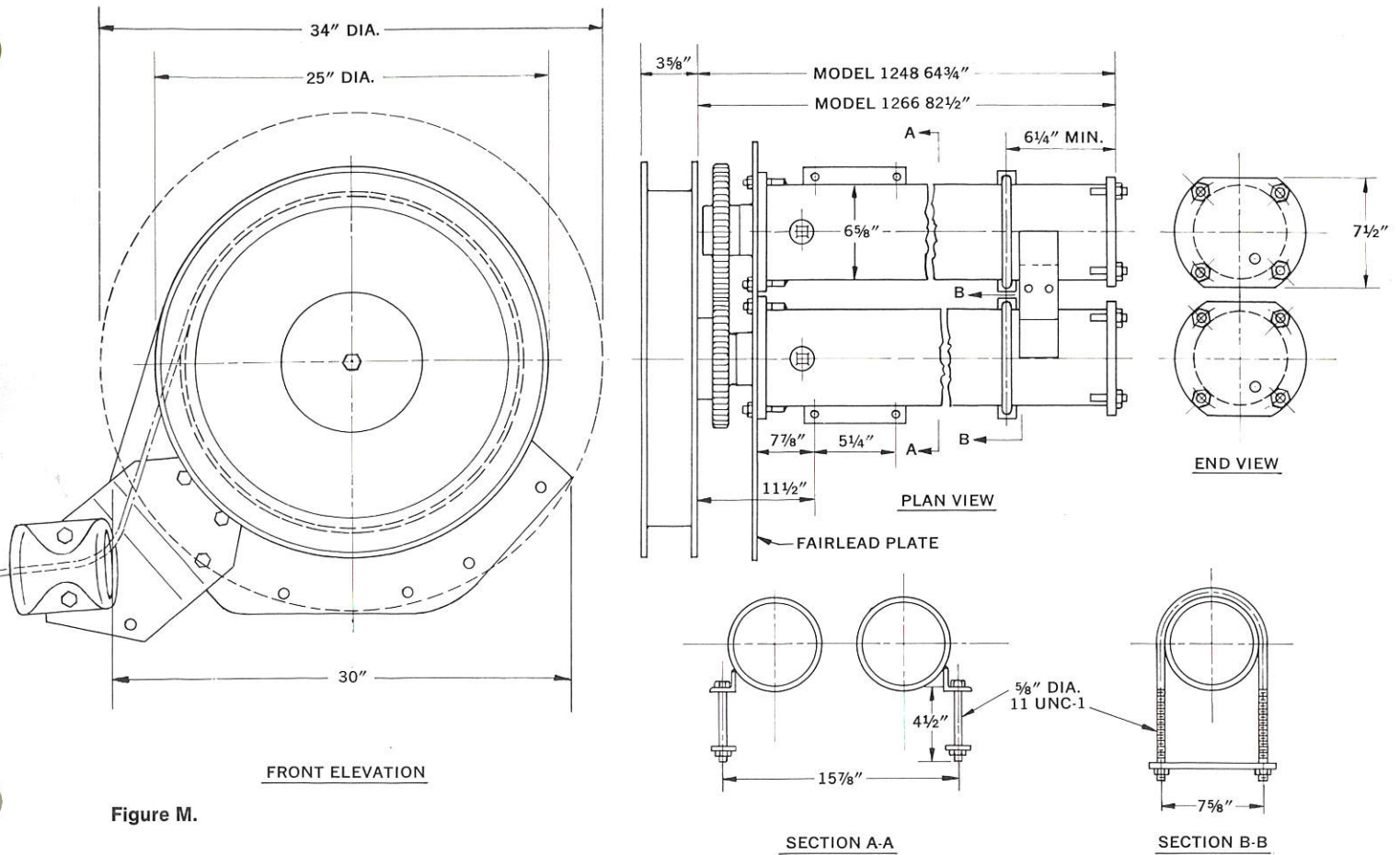


Figure M.

Warranty

RUDOMATIC® Inc. warrants each new RUD-O-MATIC® unit to be free from defects in material and workmanship. If any parts prove defective, new parts will be furnished at no cost. RUD-O-MATIC® TAGLINES, RUD-O-MATIC® COMBINATION MAGNET REELS AND TAGLINES, and spare parts for these units are warranted for a period of one year from the date of the original sale. All warranty claims must be

handled directly with RUDOMATIC® Inc., Los Angeles, California.

No warranty is extended on any RUD-O-MATIC® unit which has had its serial number altered, effaced, or removed.

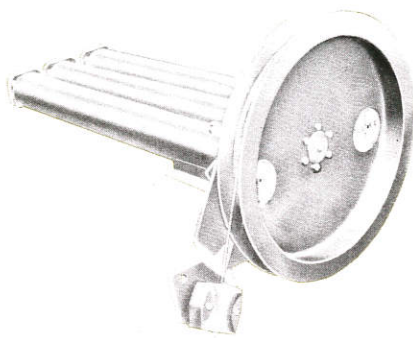
This warranty is in lieu of all other warranties, expressed or implied; and no person is authorized to assume for RUDOMATIC® Inc. any other liabilities in connection with the sale of RUD-O-MATIC® products.

other RUD-O-MATIC® coil-spring products



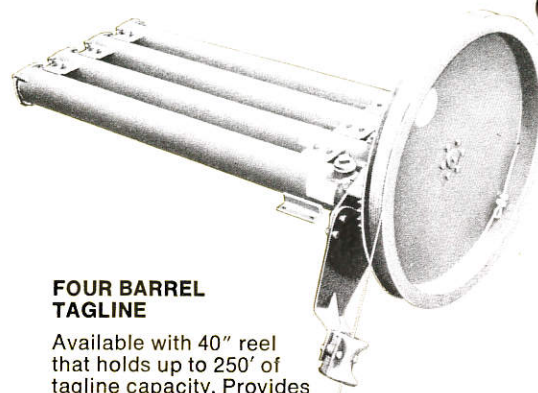
SINGLE BARREL TAGLINE

All RUD-O-MATIC® Taglines come with fairlead and cable attached. Bell Guide fairlead requires no sheaves, pins, or lubrication.



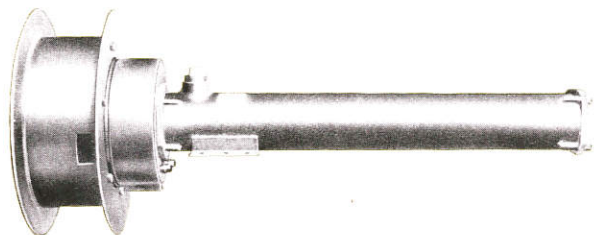
TRIPLE BARREL TAGLINE

In four models designed to answer specific demands for smooth handling of heavier material.



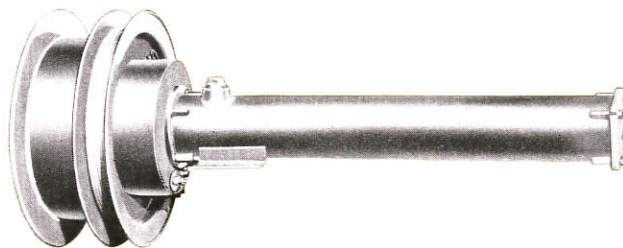
FOUR BARREL TAGLINE

Available with 40" reel that holds up to 250' of tagline capacity. Provides positive tension to control full payout of heaviest loads.



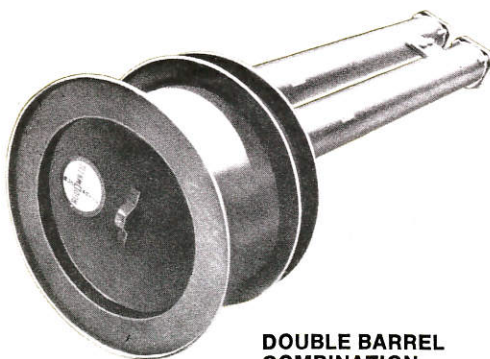
STANDARD SINGLE BARREL MAGNET REEL

Electric cable drum only. No tagline. Works in conjunction with separately mounted tagline or without tagline on overhead cranes, and where no tension is required.



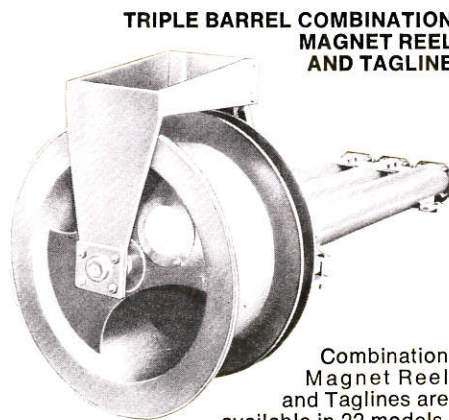
SINGLE BARREL COMBINATION MAGNET REEL AND TAGLINE

Steel tagline maintains margin of slack to protect expensive electric cable at all times. Needle bearings now standard equipment on all magnet reels.



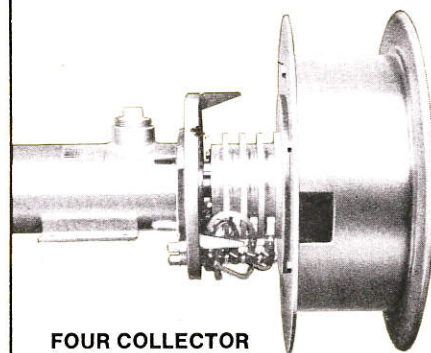
DOUBLE BARREL COMBINATION MAGNET REEL AND TAGLINE

Steel tagline maintains margin of slack to protect expensive electric cable while keeping magnet and load steady at all times.



TRIPLE BARREL COMBINATION MAGNET REEL AND TAGLINE

Combination Magnet Reel and Taglines are available in 22 models. Needle bearings are standard equipment on all magnet reels.



FOUR COLLECTOR RING MAGNET REEL (high volt - low amp only)

Magnet Reels can also be assembled with three collector rings. Contact factory for information.

COIL SPRING RUD-O-MATIC PRODUCTS ARE IN WORLD-WIDE USE.

RUDOMATIC® inc.

12770 E. Florence Ave., Santa Fe Springs, CA 90670

Phone: (562) 944-2844 Fax: (562) 944-8853

