



**LEWIS
WINCH**

**OWNER'S
MANUAL**

Congratulations!

You are now the proud owner of a Lewis Winch 400MK2

Please take the time to read through our Lewis Winch Owner's Manual to learn how to properly operate your new Lewis Winch.

We welcome and very much appreciate any photos, movies and comments you care to send us in regards to the Lewis Winch performance. - and don't hesitate to contact us if you have any questions about your new Lewis Winch, its accessories and anchoring systems.

Choosing the right Chainsaw

The size of your chainsaw is important!

GENERAL PERFORMANCE CHART			
Expected Use	Engine Size (bhp)	Pulling Capacity (lbs)	
		Straight-Line	Using 1 Snatch Block
Light Duty	3 - 4	2,000 – 2,500	4,000 -5,000
General Duty	5 – 6	3,000 – 3,500	6,000 – 7,000
Heavy Duty	7*	Up to 4,000	Up to 8,000

*THE OPERATOR ACCEPTS ALL RISK WHEN USING AN ENGINE WITH MORE THAN 100 cc's OR 7 bhp

- Using a chainsaw with minimum 3 horsepower (48 cc's, 18"+ bar w/ 3/8" chain) is best, because it ensures a commercial – grade clutch that although it may sometimes slip under a heavy load, the clutch will not burn up.
- Electric chainsaws and smaller gas chainsaws will give satisfactory performance with lighter loads only.
- Using the **Lewis Winch Snatch Block(s)** with heavier loads will significantly improve the safety factors and decrease the load on the cable, winch and chainsaw.
- Chainsaws must be properly maintained and serviced (see your chainsaw owners' manual or check with your local chainsaw dealer).
- Please ensure that your chainsaw's throttle and clutch are in proper working order – because they directly affect the safe performance of your new Lewis Winch.

Servicing & maintenance for your Lewis Winch

Never let your Lewis Winch gear box run dry. Nearly all gear damage occurs in a DRY GEAR BOX. ANY oil or grease is better than none at all.

- Maintain 5 oz of oil in the gear box at all times. To check oil level in gear box, stand your winch vertically on its spool. Remove the oil fill-plug. Fill oil to the level of the fill-plug. Do not overfill.
- The gear box was filled at the factory with 5 oz. of 80/90 weight gear oil.
- Do not operate your Lewis Winch unless the chain-guard is in place.
- Keep all nuts, bolts and set screws tight.

Cable Management

- **Replace cable when it shows signs of wear** (frays, bends, etc.).
- Use 1/8" or 3/16" Lewis Winch Cables – **DO NOT USE LARGER CABLES!** For more pulling power, use more Lewis Winch Snatch Blocks.
- Included with your new Lewis Winch is 150 feet of 3/16" aircraft cable. This cable length allows you to use more Snatch Blocks to increase your pulling power. If you are pulling your loads directly without using a Snatch Block, you may want to **cut off 20–30 feet to make cable management easier.**
- For safety reasons, **keep at least 10-20 wraps on the drum** at all times.
- Make sure to **take the slack out of the cable** as well as the rest of your set-up, before throttling up your chainsaw to avoid a sudden jerk on the cable that could break the shear-pins of your Lewis Winch - causing the spool to free-wheel.

In case of a jam:

- Stop the engine, free the load from the obstacle and start pulling again.
- You could damage your Lewis Winch by pulling up against an unknown load. Winch damage is more likely to occur with larger chainsaw engines.

OPERATING TIPS

- Your Lewis Winch and Snatch Blocks must be **anchored to something heavier** and more solid than the object that you are trying to move.
- To anchor your Lewis Winch to a tree, use a **Lewis Winch Tree-Saver Belt** wrapped around the tree then connected directly to the winch or snatch block - or you can include chain or cable in your setup.
- To anchor your Lewis Winch to a tree stump, then use the **Lewis Winch Peavey Hook**.
- To anchor your Lewis Winch to a vehicle use a cable or chain attached securely to the vehicle's frame, or use your **Lewis Winch Trailer-Hitch Mount** if your vehicle is equipped with a 2" receiver hitch.
- When there is no other anchor in sight, use the **Lewis Winch Ground Anchor**.

If you have any difficulty releasing your Lewis Winch clutch because of tension remaining in the cable, try using a chain-binder in your anchor set-up. This will allow you to easily release the cable tension. **WARNING: Engage the Lewis Winch hand-brake when releasing the clutch under load.**

Use your **Lewis Winch Snatch Block** to double your pulling power or to pull loads at angles.

Use Bungy-Cord on Brake-Handle to keep tension on the brake when unspooling the cable to prevent "birdnesting".



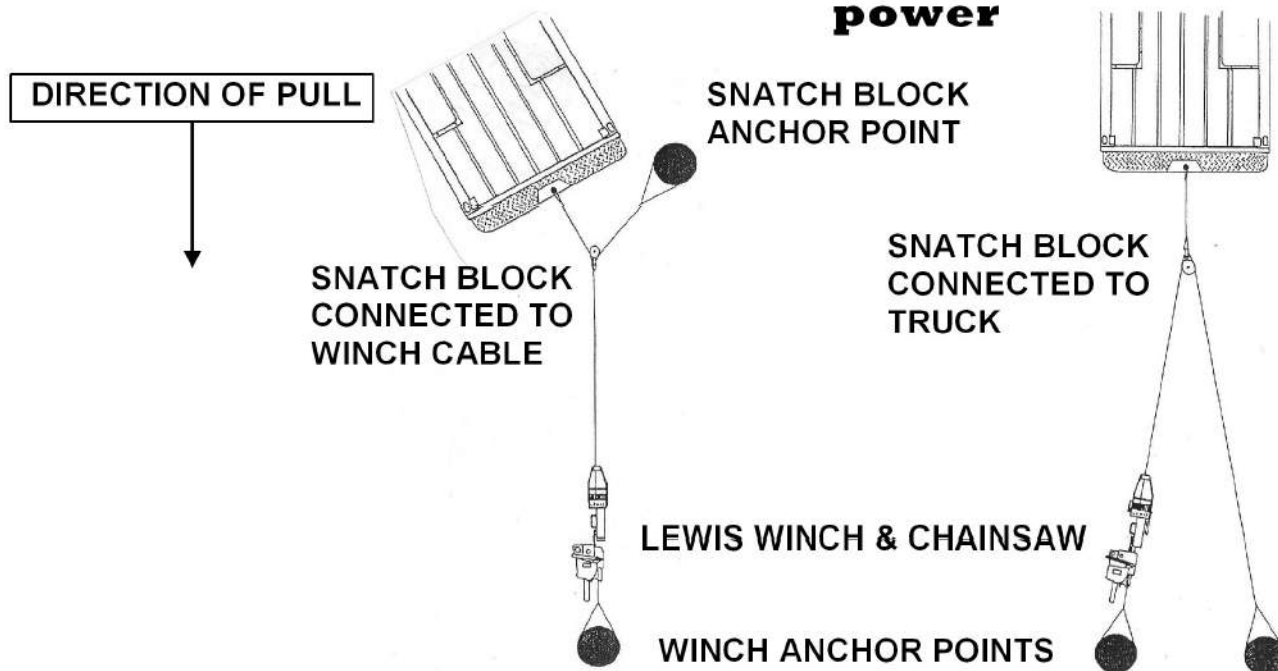
BE SAFE

This Lewis Winch owners' manual is general in nature. If you have any questions or concerns, check with your local Lewis Winch dealer or call the factory for more information.
Do not take chances with your safety!

NOISE LEVELS The sound level produced by a Lewis Winch is negligible. Nearly all noise and vibrations emanate from the drive engine. To determine relevant engine noise and vibration levels, see your chainsaw's owners manual. Note that in certain applications, the Lewis Winch may dampen the engine noise and/or vibration levels.

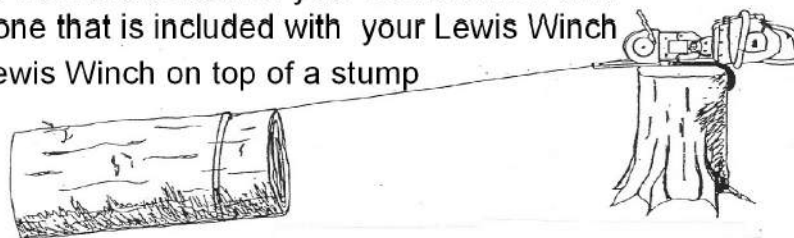
Increase speed by 50%

Double your pulling power

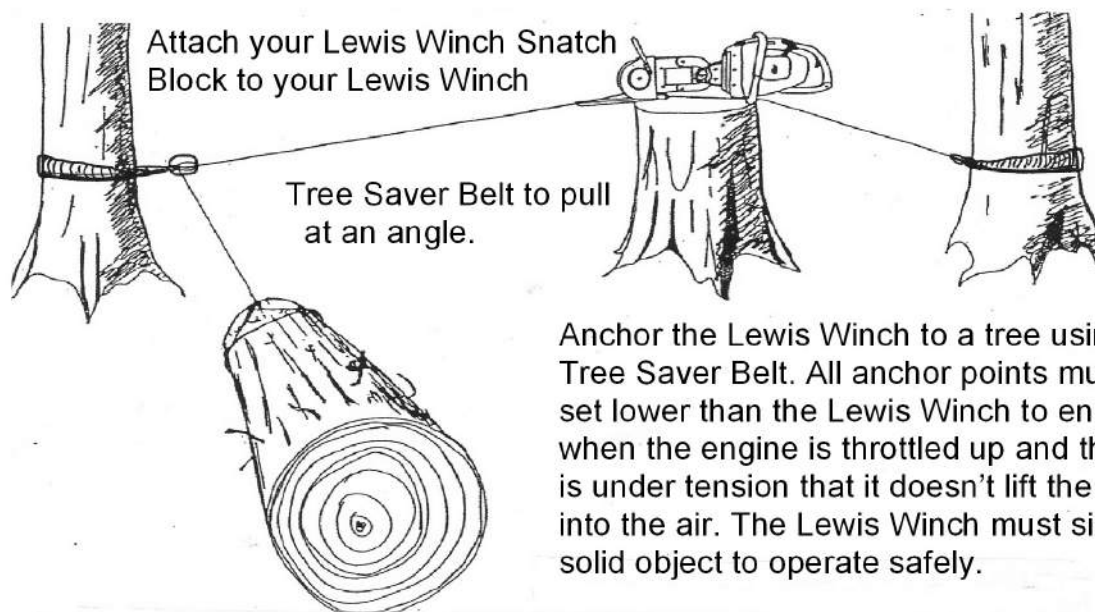


Anchoring your Lewis Winch with a Peavey Hook

Remove B409 Anchor Shackle from the bottom of your Lewis Winch and replace with the Shackle with one that is included with your Lewis Winch Peavey Hook. Position your Lewis Winch on top of a stump so the Peavey Hook has a solid penetration point. The tension on the cable will embed the Peavey Hook onto the stump creating a solid anchor point.



Anchoring your Lewis Winch with a Tree-Saver Belt



Anchor the Lewis Winch to a tree using a Tree Saver Belt. All anchor points must be set lower than the Lewis Winch to ensure that when the engine is throttled up and the cable is under tension that it doesn't lift the winch into the air. The Lewis Winch must sit on a solid object to operate safely.

Anchoring your Lewis Winch with your Trailer-Hitch Mount...

...to your vehicle

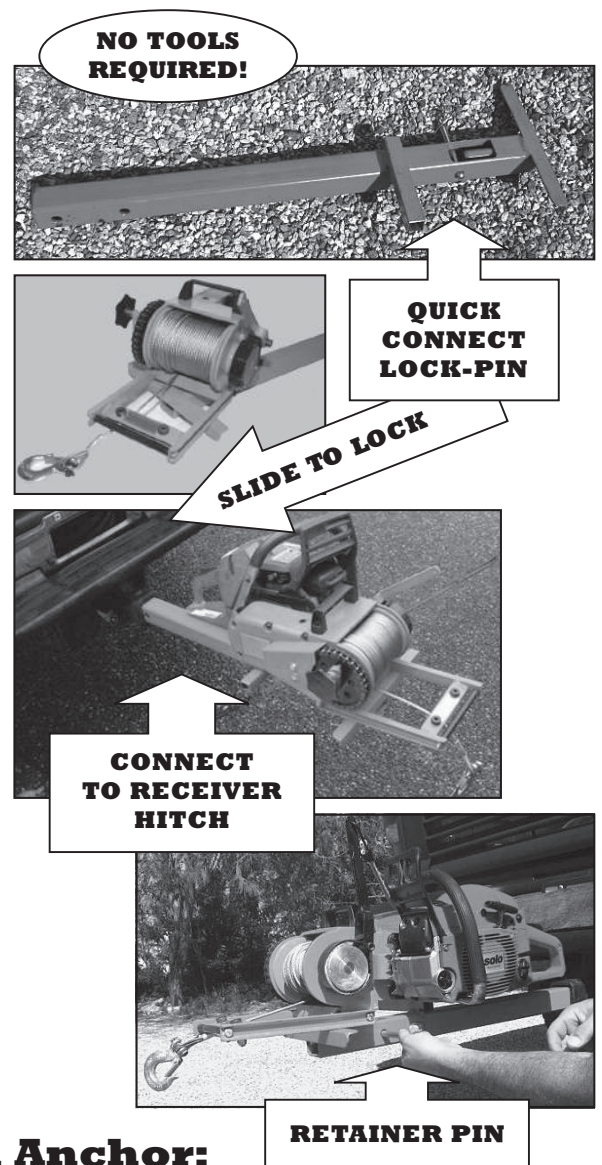
Your Lewis Winch Trailer-Hitch Mount has a unique quick-connect Lock-Pin to attach to your Lewis Winch...no tools required!

It also comes with a Retainer Pin to ensure that your Lewis Winch and chainsaw stay in place in case you need to move your vehicle.

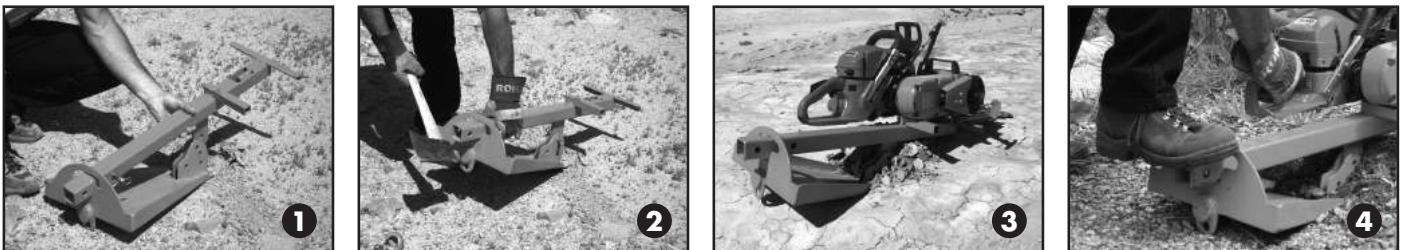
Insert Lewis Winch Trailer-Hitch Mount into any vehicle or trailer fitted with a 2" receiver-hitch and secure with 5/8" hitch pin (not included). Position your Lewis Winch over the lock-pin hole and drop into place.

Slide the winch forward until the B409 Anchor Shackle on the bottom of the Lewis Winch slides over lock-pin, securing your Lewis Winch to the Trailer Hitch Mount. Insert supplied Retainer Pin.

Since the winch can swivel on the Trailer Hitch Mount, it is the ideal way to easily wind your cable evenly on the spool.

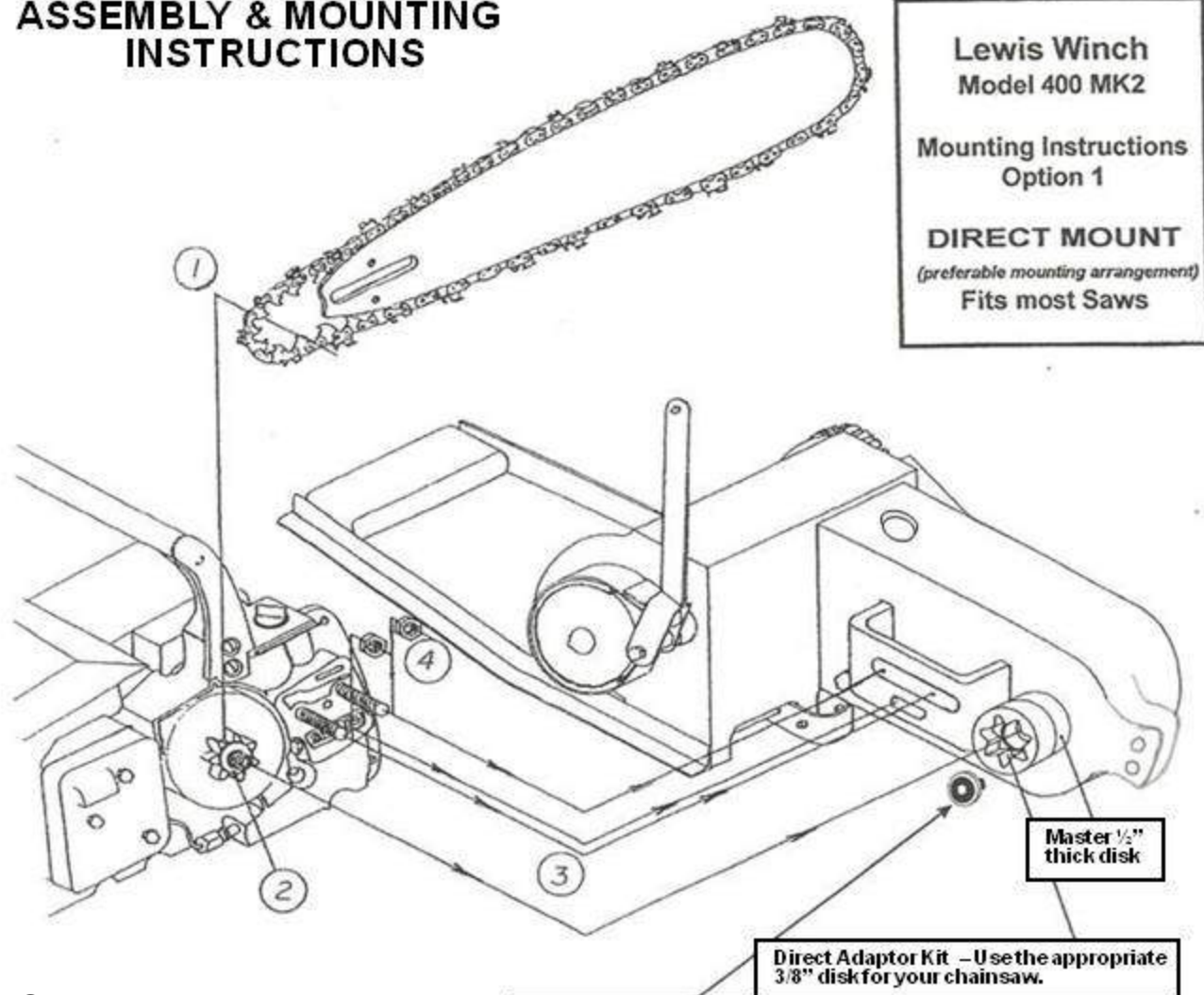


...or to your Lewis Winch Ground Anchor:



1. Insert your Lewis Winch Trailer-Hitch Mount into the back of the Ground Anchor and then secure with the Lock-Pin. Insert pin into appropriate hole depending on soil conditions. Higher holes work best for softer ground.
2. If the ground is soft, you can push the Anchor in by hand. In firmer soil use an axe or sledge hammer to pound on the pound-button on the back of the anchor until it is imbedded deep enough to sit solid.
3. Attach the winch and chainsaw assembly on the Trailer Hitch Mount as instructed above. Spool out cable and attach to load.
4. Start up motor and carefully bump throttle while pushing down with your foot on the back of the Trailer Hitch Mount. Once the Anchor is embedded enough that the load starts to move then you can open up the throttle and pull the load in.

ASSEMBLY & MOUNTING INSTRUCTIONS



Step 1

DIRECT MOUNT

1. Remove the bar and chain from your chain saw, **retain bar-mounting nuts.**
2. **Remove the spring-clip** from your chain saw's output shaft.
Remove the large washer from your chain saw's output shaft. If your chain saw is equipped with a rim-sprocket, you must also remove that. Re-install spring-clip, but not the large washer.
3. Remove the orange-cup washer from your Lewis Winch input shaft. **Failure to remove the orange-cup washer when using the "direct mount" method may result in gear damage.** Find the correct adaptor for your chain saw. Using the supplied 3 screws, bolt the 1/2" thick master-disk to the appropriate 3/8" disk for your chain saw. **TIP: Use "Loctite" to ensure screws stay tight.** Slide assembled adaptor onto your Lewis Winch input shaft. Then line-up the chainsaw's studs with the slot in the winch, ensuring that the adaptor is fully engaged in the chain saw's output shaft and is set straight. The Direct Drive Adaptor should have 3/8" – 1/2" of back and forth float, if it has more than 1/2" use L906A spacer. **TIP: Ensure the bar-adjustment stud on your chainsaw fits into your Lewis Winch's lower slot.** Turning your chainsaw's bar-adjustment screw, will aid with the alignment.
4. Replace bar-mounting nuts onto your chain saw's bar-studs. **Tighten the nuts** (use Loctite.)

TIP: Consider emptying your chainsaw's chain-oiler tank when using the Direct Mount Method.

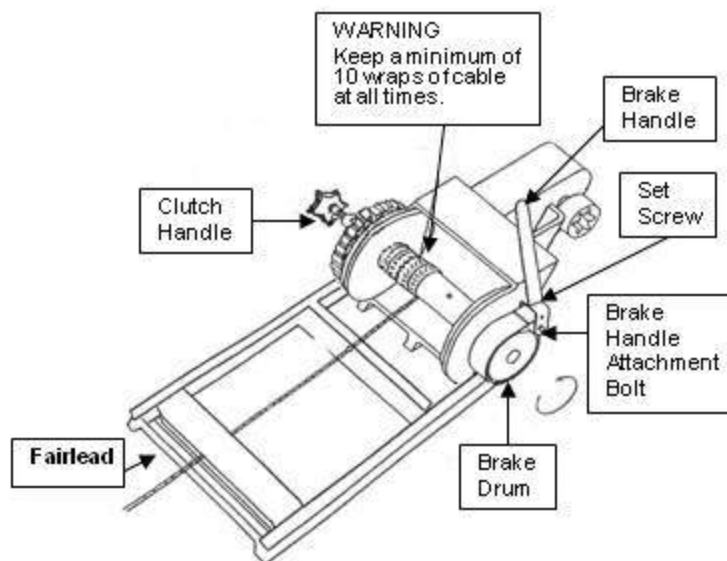
Step 1 - Alternate UNIVERSAL MOUNT



1. Remove the bar and chain from your chain saw, retain bar-mounting nuts.
2. Bolt L901 Adaptor onto your Lewis Winch with the 2 supplied 5/16" cap-screws and lock-washers.
Slide the supplied E504C Rim-sprocket on to your Lewis Winch output-shaft. Leave orange cup washer in place.
3. Bolt your Lewis Winch Adaptor onto your chain saw's bar-studs using the retained bar-mounting nuts.
4. Wrap the supplied cutter-less chain around your chain saw's sprocket and the one on your winch.
5. Connect chain with supplied connecting-link, install side-plate, use hammer to "peen" pins so side-plate is secure or install spring clip as supplied.
Adjust chain tension using the chain-adjustment screw on your chain saw.

Step 2 BRAKE-HANDLE INSTALLATION

- Use 5/16" Hex-Key to back off Brake-Handle attachment-bolt until it is flush with Brake-Handle.
- Slide Brake-Handle over Brake-Drum. Line up Attachment-Bolt with threaded hole in your Lewis Winch casting. Use Hex-Key to tighten bolt while holding Brake-Handle tight to the casting. **TIP:** If you over-tighten the Attachment-Bolt, the Brake-Handle will be stiff.
- Use 1/8" Hex-Key to tighten set-screw in your Lewis Winch casting so Brake-Handle Attachment-Bolt can not back off. Use Loctite.



Step 3 CABLE INSTALLATION

- With a gloved hand, press **Clutch-Handle** in firmly and rotate counter-clockwise to disengage clutch, allowing the spool to free-wheel.
- Fully unwind cable (**See CABLE CARE**). Push cable-end through fairlead and then through hole in spool. Manually wind the cable from below 10-20 turns evenly on the spool. See drawing. **TIP:** For your safety, use duct-tape to secure a minimum number of wraps around the spool.
- Rotate Clutch-Handle clockwise to re-engage clutch. **TIP:** Ensure Clutch-Shaft is fully engaged into a hole in the **Drive-Sprocket**.
- Start your chain saw and evenly wind up remainder of cable onto the spool. **TIP:** Attach a Heavy Enough Weight to the hook on your cable to insure that the cable winds tight on the spool.
- Keep a light constant pressure on the brake using a **Bungy Cord**, to ensure that the cable does not create a "bird's nest" when unspooling.
- Visit www.youtube.com/lewiswinch to watch cable installation videos and videos of the Lewis Winch in action.

CABLE CARE

WARNINGS, DEFINITIONS AND CAUTIONS

governing the purchase, sale and use of wire rope and aircraft cable

WARNING

Breaking strengths apply only to new unused wire rope and aircraft cable. When determining Maximum Working Load, see CAUTION below. These products must be properly applied to equipment which is properly designed, maintained, and operated under normally accepted conditions, and OSHA safety standards. Aircraft cables are not suitable for use in aircraft controls.

DEFINITION: BREAKING STRENGTH

Breaking Strength applies only to new, unused wire rope or aircraft cable and is the minimum at which the product will break when properly tested in a standard testing machine, pulled in direct tension at a uniform rate of speed, being in the same condition as when it left the factory.

CAUTION

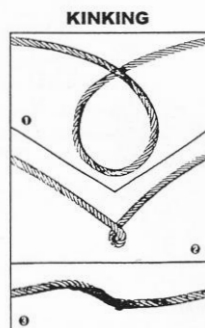
When determining maximum working load for each individual application, many factors should be considered. Included among but not limited to these factors are loads applied, speed of operation, acceleration, deceleration, length of rope or cable, shock loads, abrasion, corrosion, number, size, condition and location of drums and sheaves, facilities for inspection and the danger to life and property should a rope or cable break.

*Store and handle properly before and after use.
Inspect from time to time. Do not kink or knot.*

AIRCRAFT CABLE
SUPPLIED BY
LEWIS WINCH INC.
HAS A
BREAKING STRENGTH
OF
1/8" 2,145 LBS.
3/16" 4,927 LBS.

TIP:

When winding cable onto the spool insure that you do not lay a tight layer of cable over a loose layer. This will cause the top layer to force itself between the first layer and cause a jam. When unspooling cable use tension on the brake to insure spool speed does not exceed cable speed causing a "birds nest".



KINKING OF WIRE ROPE can be avoided if ropes are properly handled and installed.

CAUSE - Kinking is caused by the rope taking a spiral shape as a result of unnatural twist in the rope. One of the most common causes for this twist is improper unreeling and uncoiling.

Illustration #1 shows the start of a kink. At this stage no harm will be done if you discontinue the pull and untwist the wire rope to prevent further kinking.

EFFECT - **Illustration #2** shows the effect. The rope has been kinked and it is permanently injured.

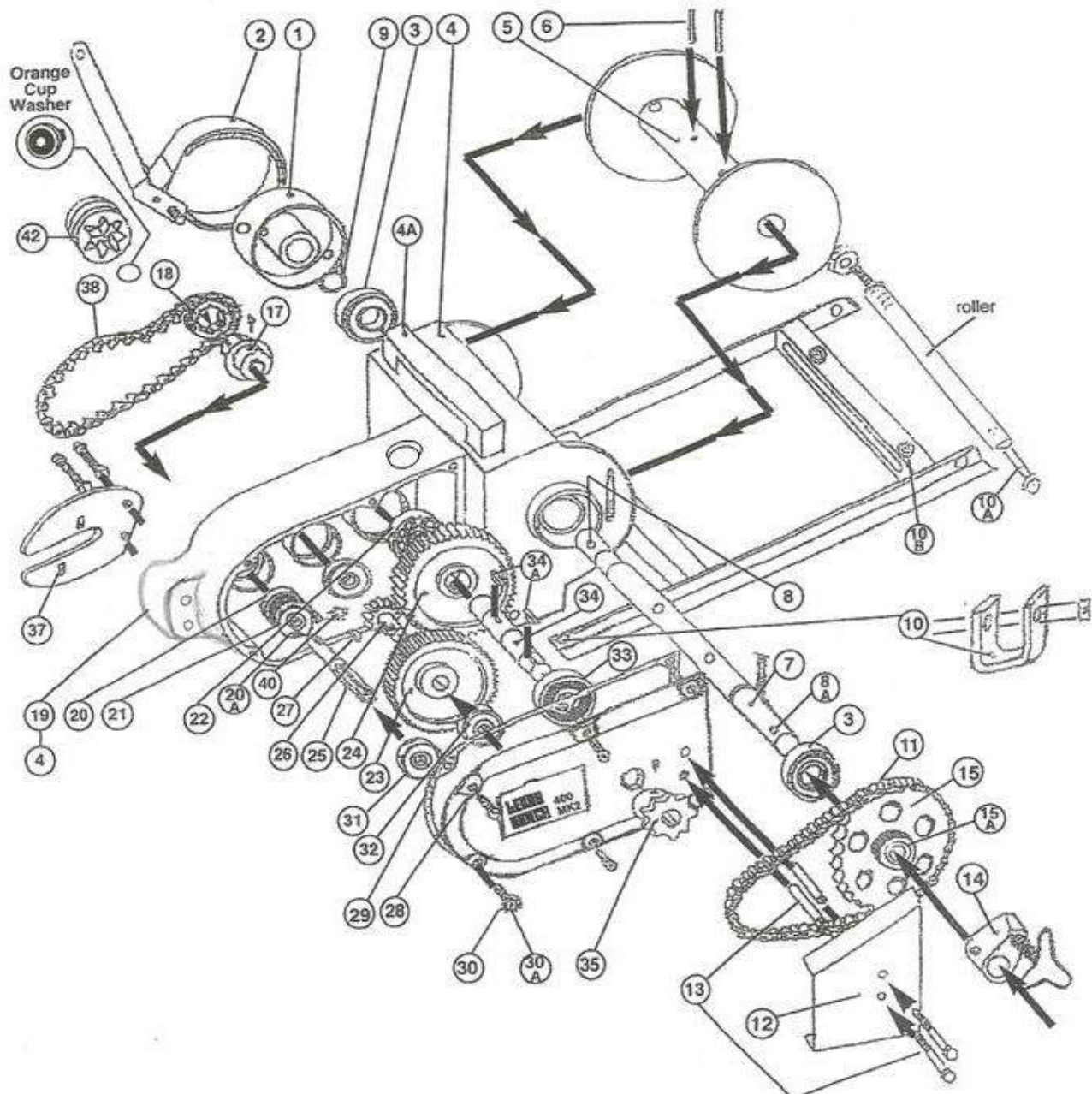
RESULT - Notice in **Illustration #3**, the result of a rope that has been kinked. Strands and wires are out of position, which creates unequal tension and brings excessive wear at this part of the rope.

Even though the kink may be straightened so that the damage appears to be slight, the relative adjustment between the strands has been disturbed so the rope can not give maximum service, and should be replaced.

LEWIS WINCH

400 MK2

See following pages
for your
Lewis Winch
Part Numbers List



Accessories & Anchoring Systems

N1002	3" Snatch Block 1.5 ton
N1003	5" Snatch Block 4.5 ton
N1008	3/16" Aircraft Cable 150ft with hook
N1009	1/8" Aircraft Cable 250ft with hook
N1010	Tree-saver Belt 6ft 8,000 lbs
N1011	Peavey Hook with Shackle
N1012	Trailer-Hitch Mount NEW STYLE c/w Lock
N1013	Ground Anchor

Parts

ITEM	PART	DESCRIPTION
1	A400	Brake Drum
2	A401	Brake Handle (complete)
3	B402	Bearing
4	B403	Drum Housing c/w Gearbox (1 casting)
4A	B403A	Main Handle
5	B404	Cable Drum
6	B404A	Retainer Pins (2)
7	B406	Drum Shaft (predrilled)
7 o/s	B406 o/s	Drum Shaft (old style)
8 o/s	B407 o/s	Key (for older type winch)
8	B407	Retainer Pin (1)
8A	B407A	Hardened Dowel Pin (for clutch)
9	B408	Snap Ring (1)
10	B409	Shackle & Bolt c/w Locknut
10A	B409A	Cable Roller & Bolt c/w Locknut
10B	B409B	Hardened Shoulder Bolt c/w Locknuts (2)
11	C409	40 Pitch Chain c/w Connector
12	C500	Chain Guard
13	C501	Bolt c/w Spacers (2)
14	D502	Clutch c/w Handle (for new sprocket #15)
15	D503	Sprocket with 6 Holes (for clutch units 2003 & later)
15A	D503A	Bronze Bushing
17	E504B	Adaptor
18	E504C	* Rim Sprocket 3/8" Pitch
19	OBSOLETE	See Item 4
20	E506	Bearing
20A	E506A	Oil Seal for input shaft (units 2004 & later)
21	E507	Bearing
22	E508	Bearing
23	E509	Gear 2nd shaft large
24	E600	Gear 3rd shaft large
25	E601	Gear 1st shaft small (input shaft)
25 o/s	E601 o/s	Gear 1st shaft small (input shaft)
26	E602	Gear 2nd shaft small
27	E603	Key (for older type winch)
28	E604	Gearbox cover
29	E605	Gasket

Parts (continued)

ITEM	PART	DESCRIPTION
30	E605A	Socket head cap screws 1/4" (6)
30A	E605B	1/4" Star Lock washer (6)
31	F606	Bearing
32	F607	Bearing
33	F608	Bearing
34	G700	Shaft gear box (output shaft)
34A	G609	Key (2)
35	H702	Sprocket 40 pitch
36	L900	Yoke c/w bolts OBSOLETE (2010 & earlier only)
37	L901	* Bar adaptor (mounting bar) c/w 2 bolts & lock washers
37A	L901A	Universal Adaptor Kit c/w Sprocket Bar, Chain & 2 bolts & lock washers
37B	L901B	Universal Bar Adaptor Stud Reducer
38	L902	* Cutterless chain 3/8" pitch c/w connector
39	L903	Fairlead
40	L904	Drain plug
* included in L901A Universal Adaptor Kit		

Direct Adaptors

ITEM	PART	DESCRIPTION
42	L906	Direct Drive Adaptor Kit 4 pcs c/w 3 screws
	L906A	3/16" Spacer for Adaptor Kit c/w 3 longer screws
	L906B	7 tooth Mini Spline Adaptor for small Stihl saw
	L906D	6 tooth Adaptor for electric saw & small Stihl
	L906E	* Master Adaptor for Lewis Winch 1/2" thick w 3 screws
	L906F	* 7 tooth Standard Spline Adaptor
	L906G	* 7 tooth spur adaptor 3/8" pitch
	L906H	* 7 tooth Small Spline Adaptor
	L906J	* 3 adaptor screws (std length)
	L906M	Special 1 pc Adaptor 1" long std spline to 8 tooth .325
* included in L906 Direct Adaptor Kit		



**LEWIS
MULTI
DRILL**

**PORTABLE
CHAINSAW
DRILL**

Another product
from the makers
of the
LEWIS WINCH

www.LewisMultiDrill.com



Earth, Ice and Wood
The little drill that could

DRILL FITS ALL CHAINSAWS

Anchor Your Lewis Winch...

...to a tree



TREE-SAVER BELT

...to a vehicle



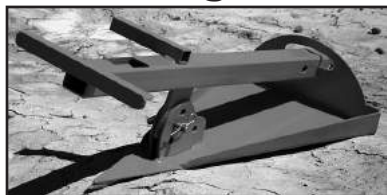
TRAILER-HITCH MOUNT

...to a stump



PEAVEY HOOK

...to the ground



GROUND ANCHOR

Watch Instructional Videos
on our website
www.LewisWinch.com



**8000 Pounds of
pulling power using
ONE Lewis Winch
Snatch Block!**

Working Load:
Large 4½ Ton
Small 1½ Ton

**For longer but lighter
pulls, use the Lewis
Winch 1/8" x 250 ft
Aircraft Cable & Hook.
2,000 Lb max load.**



European Union
Approved

WARRANTY

If your Lewis Winch fails to operate properly due to a manufacturing defect within one year of purchase, please return it freight pre-paid, with a clear copy of your sales receipt.

We will refurbish your Lewis Winch or supply you with a new one and ship it back to you, at no charge.

NO QUESTIONS ASKED!

SAFETY FIRST

- Wear gloves, eye and ear protection
- Do not operate this unit while under the influence of alcohol or drugs
- Use additional safety restraint when pulling rolling loads
- Maximum rated capacity 4,000 lbs or 8,000 lbs using a Snatch Block



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