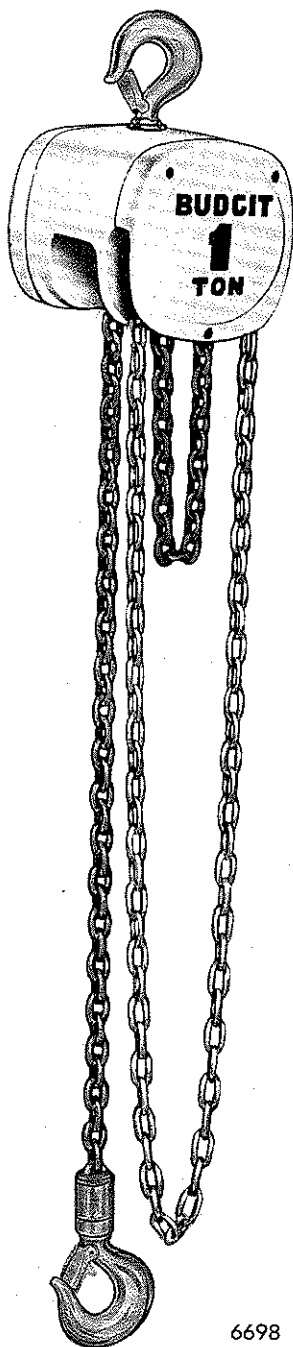


PARTS LIST AND INSTRUCTION MANUAL



BUDGIT[®]

ALUMINUM CHAIN HOISTS

1/4, 1/2, 1, 1 1/2, AND 2 TON
CAPACITIES

(Including parts for
spark and corrosion
resistant models)

LIFTTECH



LIFT-TECH INTERNATIONAL, INC.
CRANE AND HOIST OPERATIONS
MUSKEGON, MICHIGAN 49443

IMPORTANT INFORMATION

This manual contains information to help you install, operate and maintain your BUDGIT aluminum chain hoist.

Two parts illustrations are included. Fig. 1 shows all the parts for the 1/4- and 1/2-ton hoist, while Fig. 2 shows them for the 1-, 1½- and 2-ton hoist. Each part is indicated on the illustration by a reference number which also appears on the parts price list for easy identification. The corresponding CB-number is also given for each part in the list to facilitate ordering of spare and replacement parts. It may be a long time before you need to use this information, so it is suggested this book be carefully filed to make it readily available when required.

Specifications herein are subject to change without notice.

IMPORTANT: When ordering parts, always be sure to give the CB-numbers of the parts required AND capacity, lift and model number of chain hoist for which parts are being ordered.

NOTE: Complete inspection, overhaul and service is available for BUDGIT aluminum chain hoists at your nearest Authorized BUDGIT Repair Station. They have a staff of skilled service men, authorized testing equipment and a complete inventory of BUDGIT replacement parts.

EQUIPMENT ILLUSTRATED AND DESCRIBED IN THIS MANUAL IS NOT DESIGNED OR SUITABLE FOR LIFTING OR LOWERING PERSONS.

INSTALLATION AND OPERATING INSTRUCTIONS

When you hang chain block up, suspend it so it hangs from saddle of hook - NOT from tip of hook.

If hand chain is of improper length (chain should hang about 2'-6" above floor) modify its length following special instructions given in back of this book.

Be sure load chain is well lubricated. See LUBRICATION INSTRUCTIONS paragraph 5.

OPERATING PRECAUTIONS

Safe operation of an overhead hoist is the operator's responsibility. Listed below are some basic rules that can make an operator aware of dangerous practices to avoid and precautions to take for his own safety and the safety of others. Observance of these rules in addition to frequent examinations and periodic inspection of the equipment may save injury to personnel and damage to equipment.

WARNING

Do not load hoist beyond rated capacity.

Rated Capacity in Tons	Chain Pull in Pounds to Lift Full Load
1/4	25
1/2	50
1	60
1½	60
2	80

The user is also here warned that overloading of the hoist can take place by means other than applying a high hand chain force. Proper rigging and observance of the rules listed here can help avoid such external causes of overload. Use good common sense and judgment at all times.

Do not use hoist to lift or lower persons.

Never lift loads over people.

Do not use load chain as a sling or load binder.

Do not operate hoist with twisted, kinked, or damaged load chain.

Never operate hoist with hooks that have opened up.

Inspect hoist regularly and replace worn or damaged parts.

Do not operate a damaged or malfunctioning hoist.

Do not operate hoist unless load hook, load chain and hoist frame can be kept in a straight line.

BUDGIT hand chain hoists are intended to be used to lift or lower movable freight loads. Do not use hoist for attempting to free or dislodge stuck objects.

Do not remove or obscure warning labels.

Do read and understand this manual, including safety chart on inside of back cover, before operating this hoist.

REPAIR INSTRUCTIONS DISASSEMBLY

1. Set chain hoist on work bench with chain wheel side up.
2. Remove three screws (See Fig. 1 or Fig. 2) and lockwashers holding chain wheel guide cover. Remove chain wheel guide cover by placing hands in position shown in Fig. A and lifting straight upward. Cover will lift off. Slip hand chain off hand chain wheel.

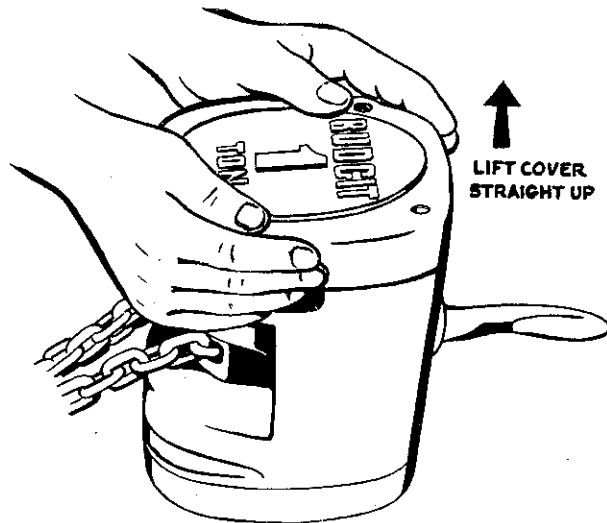


FIG. A. REMOVING CHAIN WHEEL GUIDE COVER

3. On 1/4 and 1/2 ton models, detach small Spirolox or Truarc retaining ring from end of pinion shaft. Remove Spirolox ring by locating tongued end and gently pulling tongue outward and upward from retaining groove while carefully unwinding ring. If ring is a Truarc, remove it with a standard snap ring removing tool or needle nosed pliers. On late 1 and 2 ton models, remove elastic stop nut and washer from pinion shaft. Early 1 and 2 ton models have a retaining ring in place of the elastic stop nut.
4. Lift brake stop lug off pinion shaft.
5. Slip hand chain wheel and load brake assembly off pinion shaft. Lift out brake pawl. Keep pawl shaft and spring for re-use.

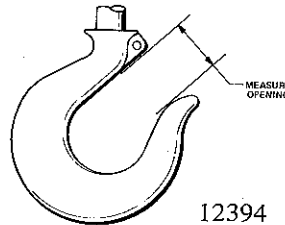
NOTE: If it is only desired to replace brake parts, disassembly may be stopped at this point. Reassembly may be carried out by following the directions in "ASSEMBLY" below, beginning with Step 7.

6. Detach hand chain wheel from brake unit by holding unit and turning wheel counterclockwise.
7. Unscrew and remove tail chain anchor pin and lockwasher to release end of tail chain. Now run load chain out of hoist.
8. Lower hook assembly will come apart after the retaining ring is removed and the lower block sleeve is slipped up over the load chain.
9. Remove two screws and lockwashers from chain stripper and lift chain stripper free of load chain guide.
10. Remove 4 screws and lockwashers from gear cover and lightly tap opposite exposed end of pinion shaft with a soft faced hammer while carefully pulling cover free of frame. Remove pinion shaft from between idler gears.

11. Lay hoist frame on work bench with gear side up and carefully unwind Spirolox retaining ring securing pocket wheel gear on pocket wheel. Lift out gear.
12. Remove large diameter Spirolox retaining ring lying behind pocket wheel gear and securing pocket wheel bearing.
13. Turn frame over so gear side is down and tap gently on bench. Pocket wheel and pocket wheel bearings will drop out of frame. The load chain guide will then drop out of the frame.

INSPECTION

1. Inspect all parts. Replace any found worn, corroded or damaged.
2. Replace lower hook if distorted, opened, elongated in shank, or otherwise damaged.



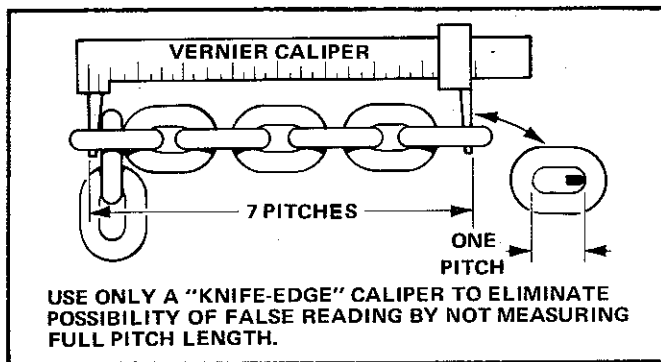
Hook Size	Hook Throat Opening	
	Normal Opening	Replace Hook If Opening Is Greater Than
No. 4	1-1/8"	1-5/16"
No. 5	1-1/4"	1-7/16"
No. 6	1-3/8"	1-9/16"

3. The upper hook is permanently attached to frame by welding nut to hook shank at assembly. If hook is distorted, opened, elongated in shank, or if hook or frame is otherwise damaged the complete frame and upper hook assembly must be replaced. DO NOT attempt to remove and replace only the hook. If desired, the original frame assembly may be returned to the factory, or Authorized "Budgit" Repair Station to have a new replacement hook installed.
4. Clean chain for inspection. Examine visually for gouges, nicks, weld splatter, corrosion or distorted links. Slacken chain and check bearing surfaces between links for wear. Case hardness of chain is about .010" deep. Chain must be replaced before the case is worn thru. Also check chain for elongation using a vernier caliper (See below). Select an unworn, unstretched section of chain (usually at slack or tail end) and measure and record the length over 7 pitches as illustrated. Measure and record the same length of a worn section in the load side of the chain. Obtain the amount of wear by subtracting the measurement of the unworn section from the measurement of the worn section. If the result (amount of wear) is greater than .125", the chain has elongated beyond the maximum allowable length and must be replaced. Chain with excessively pitted, corroded, nicked, gouged, twisted or worn links should be replaced using factory approved chain. Never weld or attempt to repair coil chain.

NOTE: On spark resistant models, coil load chains are stainless steel and must be inspected for wear and lubricated more frequently than the standard alloy steel heat treated load chain.

CAUTION

Do not assume that load chain is safe because it measures below replacement points given herein. Other factors, such as those mentioned in visual checks above, may render chain unsafe or ready for replacement long before elongation replacement is necessary.



WARNING

When replacing coil load chain, use only factory approved chain conforming to factory specifications for material, hardness, strength and link dimensions. Chain not conforming to BUDGIT hoist specifications may be dangerous as it will not fit in the load sprocket and chain guide correctly, causing damage to hoist, and it will wear prematurely, deform and eventually break.

LUBRICATION INSTRUCTIONS

1. Lubricate upper and lower load hooks with heavy-duty graphite grease.
2. Lubricate metal-to-metal surfaces of load brake, pawl shaft and hub with a very light film of N.L.G.I. EP-2 grease.

For lubrication of the load brake threads, apply a small amount of EP-2 grease on the leading internal threads of the hand chain wheel hub. When the hand chain wheel hub is assembled to the load brake flange shaft any excess grease will be brought to the end of the load brake flange shaft where it can be wiped off.

WARNING

It is extremely important that load brake friction surfaces be kept dry, as an oily film may cause slippage, thereby, permitting a load to drop.

3. Lubricate all needle bearings. All other bearings in this hoist are of the permanently lubricated type.
4. Lubricate all gear faces with N.L.G.I. EP-2 grease.

NOTE: IF chain hoist is used in cold temperatures, lubricate with suitable light grease. Where hoist is used in extremely high temperatures, consult factory for lubrication instructions.

5. Load chain should be lubricated with graphite suspension oil.

ASSEMBLY

(Refer to Fig. 1 & Fig. 2)

1. On one-ton hoists, the pinion shaft bearing **MUST** be inserted in the center bore of the hoist frame from the **INSIDE** of the frame as shown by the guide lines on Fig. 2. **DO NOT DROP THIS BEARING INTO ITS FRAME BORE FROM THE OUTSIDE, OR HOIST WILL NOT**

OPERATE PROPERLY. To keep bearing in its bore, lay hoist on its face. The above operation is not necessary on the 1/4-, 1/2- and 2-ton hoists, since the comparable bearing is seated in the pocket wheel. On 2-ton hoists, the bearing is held in the pocket wheel by a retaining ring.

2. For all capacity hoists, install pocket wheel bearing (52, Fig. 1 or 15 or 15-B, Fig. 2) on the inside of the frame as shown by guide lines on the Figures.

3. Insert load chain guide in frame cavity and insert pocket wheel from outside of frame. Install the other pocket wheel bearing (16, Fig. 1 or 15 or 15-A, Fig. 2) in outside of frame and use retaining ring to secure the bearing.

4. Install pocket wheel gear on pocket wheel spline and put Spirolox retaining ring on the spline.

5. To prepare gear cover and idler gear for assembly, insert pinion shaft between gears and then remove. This indexes idler gear teeth so they will mesh with pocket gear when the assembled gear cover, idler gears and pinion shaft are installed in the frame.

6. Set frame on its bottom and gently slide pinion shaft into frame assembly. Tap gear cover gently until idler gears mesh with pocket wheel gear. Secure cover with four screws and lockwashers.

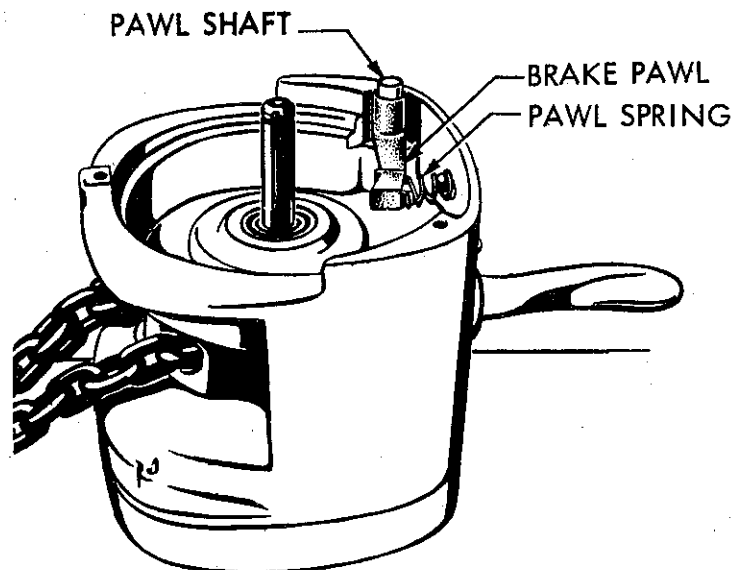


FIG. B. INSTALLING BRAKE PAWL & SPRING

7. Slip brake pawl on brake pawl shaft and install pawl spring as shown in Fig. B.

8. If hand chain wheel (Fig. D) has not previously been detached from the brake assembly, do so by holding brake assembly and turning wheel counterclockwise. Install brake assembly on pinion shaft as in Fig. C. With spring in place, pawl **MUST** engage ratchet wheel teeth as shown. Apply thin film of graphite grease on teeth of ratchet wheel.

9. With hoist laying on gear cover end, screw hand chain wheel on brake threads with clockwise motion until brake clicks. After clicking starts, continue to turn wheel clockwise until the boss on the plated bronze hub is closest to the upper hook as shown in Fig. D. Install brake stop lug on pinion shaft so gap between lug and boss on the hub is

1/4" to 3/8" wide as shown in Fig. E. (It may be necessary to remove brake stop lug from shaft and turn it over to achieve this gap.)

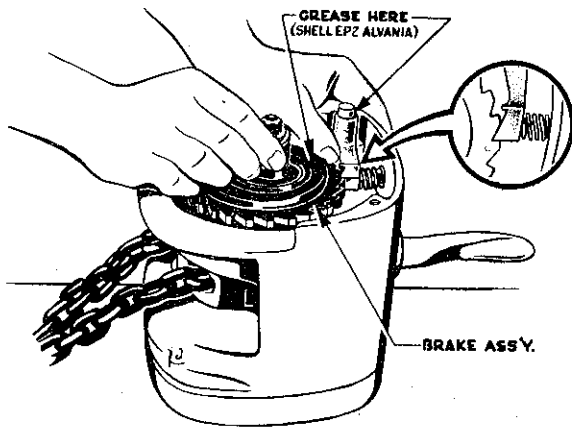


FIG. C. INSTALLING BRAKE ASSEMBLY

The lug must be to the left of the boss as shown in Fig. E. Install Truarc retaining ring or elastic stop nut with washer (depending on model) on end of pinion shaft.

10. Load chain is now installed in the load chain opening OPPOSITE the tail chain anchor. The first link must be installed in a VERTICAL (See Fig. D) position and the horizontal links must be positioned so their welds are AWAY from the pocket wheel pockets. If welds fall in the wheel pockets, action will be bumpy and chain will tend to gag. With first link inserted as described, turn hand chain wheel in raise direction until load chain catches. When first link appears in other chain opening, guide it out with a wire or other probe to prevent it jamming. Secure this end of the load chain with tail chain anchor pin (43, Fig. 1 or 19, Fig. 2).

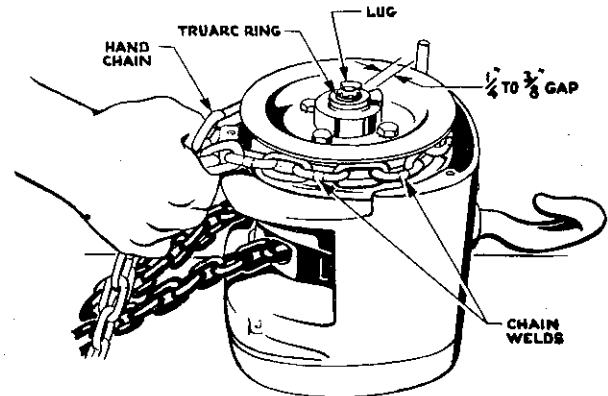


FIG. E. POSITIONING BRAKE STOP LUG

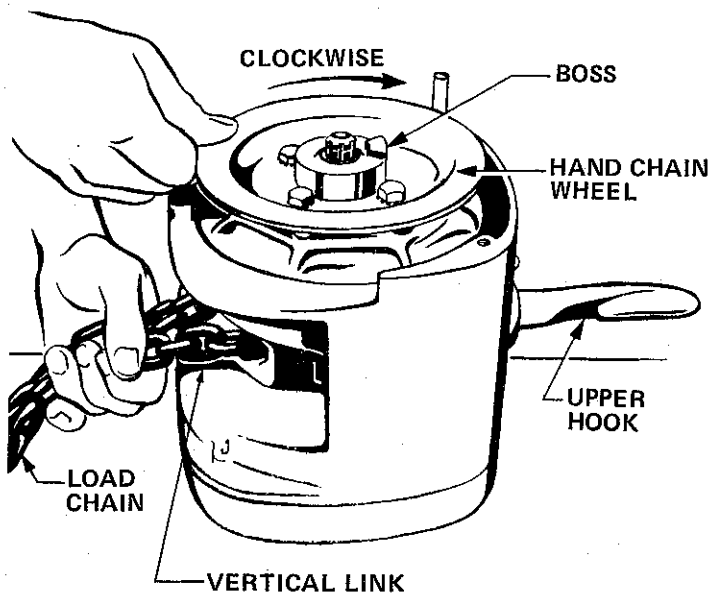


FIG. D. INSTALLING HAND CHAIN WHEEL

11. Install chain stripper with screws and lockwashers.

12. Replace hand chain on hand chain wheel so welds shown in Fig. E are away from the wheel as shown in the figure. (If chain is positioned so welds seat in wheel pockets, chain action will be bumpy.)

13. Hold hand chain as shown in Fig. E to keep chain wheel from moving and install cover. Secure cover with three screws and lockwashers. Draw screws down so that all are uniformly tightened.

IMPORTANT: After completion of reassembly and before being placed in service, the hoist should be tested under rated capacity load to insure proper operation.

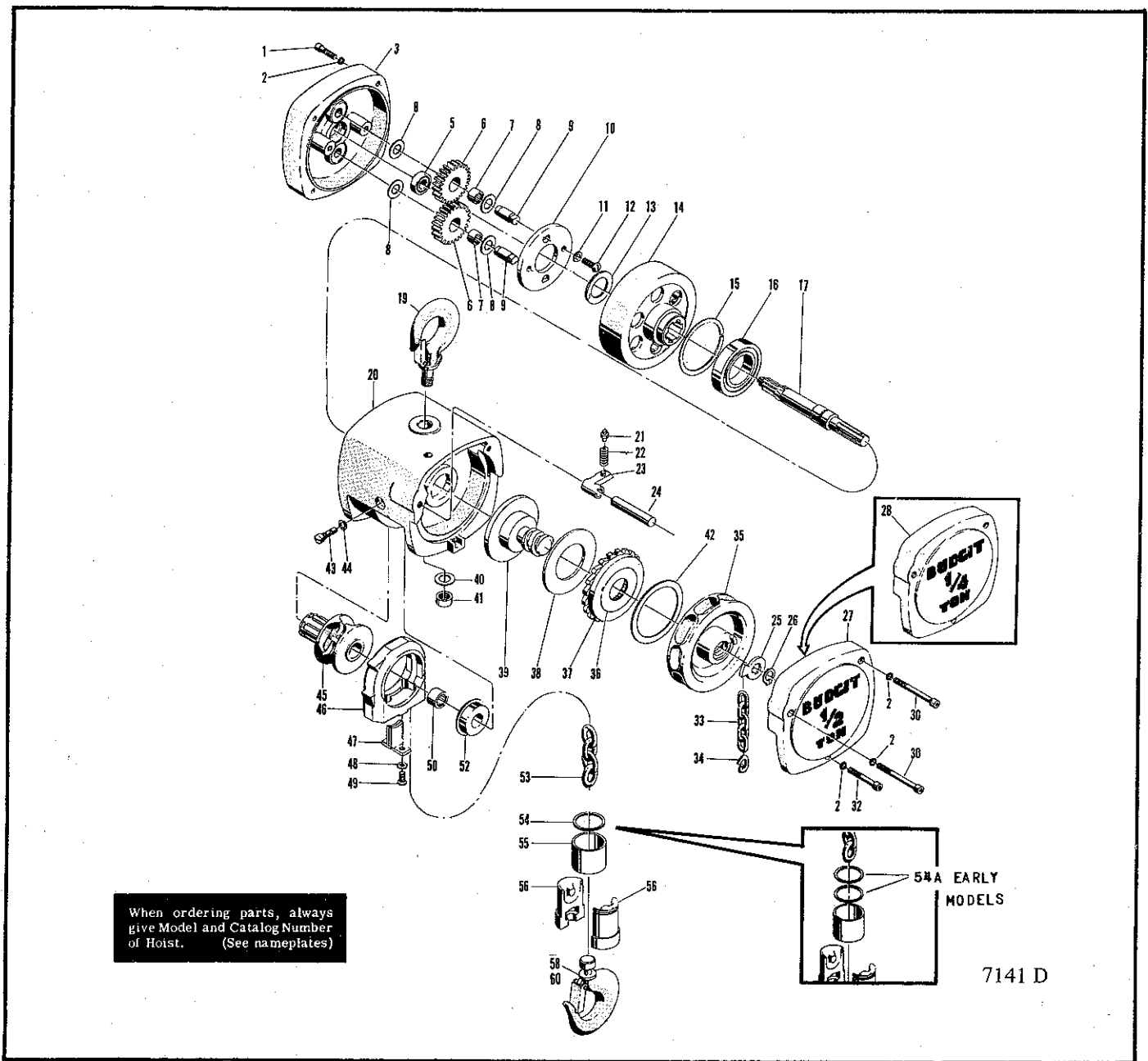


FIG. 1. EXPLODED VIEW OF 1/4 & 1/2 TON CAPACITY CHAIN HOISTS

Ref. No.	Part Number	Part Name	Quantity Required	
			1/4 Ton	1/2 Ton
1	CBA-101	Gear Cover Screw - 1/4-20 x 1" Socket Hd.	4	4
2	CBA-102	Lockwasher for Gear Cover Screw - 1/4" Std.	7	7
3	CBA-103	Gear Cover	1	1
5	CBA-105	Bearing for Pinion Shaft	1	1
6	CBA-106	Idler Gear	2	2
7	CBA-107	Needle Bearing for Idler Gear	2	2
8	CBA-108	Idler Shaft Spacer Washer	4	4
9	CBA-109	Idler Gear Shaft	2	2
10	CBA-110	Retaining Plate	1	1
11	CBA-111	Lockwasher - 1/4"	2	2
12	CBA-112	Screw for Retaining Plate - 1/4-20 x 3/4" Truss Hd.	2	2
13	CBA-113	Retaining Ring for Pinion Shaft	1	1
14	CBA-114	Pocket Wheel Gear	1	1
15	CBA-115	Retaining Ring	1	1
16	CBA-116	Pocket Wheel Bearing	1	1
17	CBA-117	Pinion Shaft	1	1

Ref. No.	Part Number	Part Name	Quantity Required	
			1/4 Ton	1/2 Ton
19	CBA-119	Upper Hook (Latch Type)	**1	**1
20	CBA-120A	Frame & Latch Type Upper Hook Assembly	1	1
	CBA-120A-SR	Frame & Latch Type Upper Hook Assembly	*1	*1
21	CBA-121	Pawl Stud	1	1
22	CBA-122	Pawl Spring	1	1
23	CBA-123	Load Brake Pawl	1	1
24	CBA-124	Brake Pawl Shaft	1	1
25	CBA-125	Brake Stop Lug	1	1
26	CBA-126	Retaining Ring	1	1
27	CBA-127	Chain Wheel Guide Cover (1/2 Ton)	-	1
28	CBA-128	Chain Wheel Guide Cover (1/4 Ton)	1	-
29		Reserved		
30	CBA-130	Screw for Chain Wheel Guide Cover 1/4-20 x 2-1/4" Socket Head	2	2
31		Reserved		
32	CBA-132	Short Screw for Chain Guide Cover - 1/4-20 x 1-1/2" Socket Head	1	1
33	CBA-133	Hand Chain	Per Ft.	Per Ft.
	CBA-133-SR	Hand Chain	Per Ft.	Per Ft.
		NOTE: Two extra feet of Hand Chain needed for each extra foot of Hand Chain Drop.		
34	CBA-134	Connecting Link for Hand Chain	1	1
35	CBA-135	Hand Chain Wheel	1	1
36	CBA-136	Bearing for Load Brake Ratchet	1	1
37	CBA-137	Load Brake Ratchet	1	1
38	CBA-138	Thermoid Brass Impregnated Brake Disc	1	1
39	CBA-139	Load Brake Flange Assembly	1	1
40	CBA-140	Washer for Hook Nut	**1	**1
41	CBA-141	Nut for Hook	**1	**1
42	CBA-142	Hard Fibre Brake Disc	1	1
43	CBA-143	Tail Chain Anchor Pin	1	1
44	CBA-144	Lockwasher for Tail Chain Anchor Pin - 5/16" Shakeproof	1	1
45	CBA-145	Pocket Wheel	1	1
46	CBA-146	Load Chain Guide (1 Piece)	1	1
47	CBA-147	Chain Stripper Assembly	1	1
48	CBA-148	Lockwasher for Chain Stripper Assembly	2	2
49	CBA-149	Screw for Chain Stripper Assembly - 1/4-20 x 1/2" Rd. Hd. Machine	2	2
50	CBA-150	Pocket Wheel Bearing	1	1
51		Reserved		
52	CBA-152	Pocket Wheel Bearing	1	1
53	CBA-153	Load Chain	Per Ft.	Per Ft.
	CBA-153-SR	Load Chain	Per Ft.	Per Ft.
54	CBA-154	Snap Ring for Lower Block Assembly	1	1
54A	CBA-154A	Retaining Ring for Lower Block (Early Models)	2	2
55	CBA-155	Lower Block Sleeve	1	1
	CBA-155-SR	Lower Block Sleeve	1	1
56	CBA-156	Lower Block Body	2 Halves	2 Halves
	CBA-156-SR	Lower Block Body	2 Halves	2 Halves
58	CBA-158	Load Hook (Latch Type)	1	1
	CBA-158-SR	Load Hook (Latch Type)	*1	*1
60	CBA-160	Complete Lower Block Assembly with Latch Type Hook (Not Illustrated)	1	1
	CBA-160-SR	Complete Lower Block Assembly with Latch Type Hook (Not Illustrated)	*1	*1

*Spark and Corrosion Resistant Models.

**Upper hook is not available separately. Order Frame and Hook Assembly (20) or return original frame assembly to factory or Authorized BUDGIT Repair Station to have hook replaced.

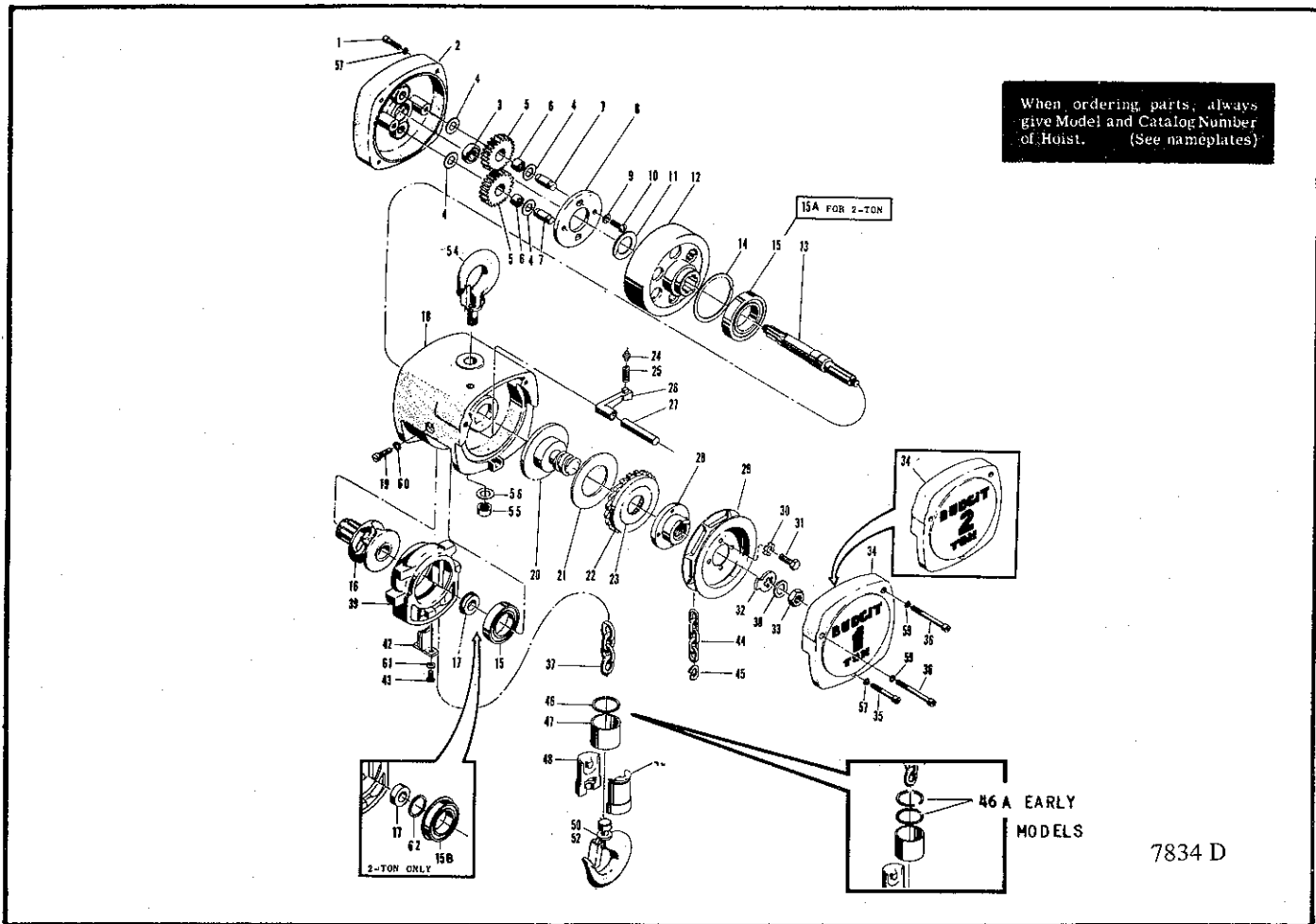


FIG. 2 EXPLODED VIEW OF 1 & 2 TON CAPACITY CHAIN HOISTS
(Part Numbers for 1½ ton are same as for 2 ton except for Ref. No. 34)

Ref. No.	Part Number	Part Name	Quantity Required	
			1 Ton	2 Ton
1	CBA-201	Gear Cover Screw 1/4-20 x 1-1/4" Socket Head (1 Ton)	4	-
		Gear Cover Screw 1/4-20 x 1-3/4" Socket Head (2 Ton)	-	4
2	CBA-202	Gear Cover (1 Ton)	1	-
		Gear Cover (2 Ton)	-	1
3	CBA-203	Bearing for Pinion Shaft	1	1
4	CBA-204	Idler Shaft Spacer Washer	4	4
5	CBA-205	Idler Gear	2	2
6	CBA-206	Needle Bearing for Idler Gear	2	4+
7	CBA-207	Idler Gear Shaft	2	2
8	CBA-208	Retaining Plate	1	1
9	CBA-209	Lockwasher 5/16"	2	2
10	CBA-210	Screw for Retaining Plate	2	2
11	CBA-211	Retaining Ring for Pinion Shaft	1	1
12	CBA-212	Pocket Wheel Gear	1	1
**13	CBA-213	Pinion Shaft	1	1
14	CBA-214	Retaining Ring	1	1
15	CBA-215	Pocket Wheel Bearing (1 Ton)	2	-
15A	CBA-215A	Pocket Wheel Bearing (2 Ton)	-	1
15B	CBA-215B	Pocket Wheel Bearing (2 Ton)	-	1
16	CBA-216	Pocket Wheel	1	1
17	CBA-217	Pinion Shaft Bearing	1	1
18	CBA-218A	Frame and Latch Type Upper Hook Assembly	1	1
	CBA-218ASR	Frame and Latch Type Upper Hook Assembly	*1	*1

Ref. No.	Part Number	Part Name	Quantity Required	
			1 Ton	2 Ton
19	CBA-219	Tail Chain Anchor Pin	1	1
20	CBA-220	Load Brake Flange Assembly	1	1
21	CBA-221	Brake Disc	1	1
22	CBA-222	Load Ratchet	1	1
23	CBA-223	Bearing for Load Brake Ratchet	1	1
24	CBA-224	Pawl Stud	1	1
25	CBA-225	Pawl Spring	1	1
26	CBA-226	Load Brake Pawl	1	1
27	CBA-227	Brake Pawl Shaft	1	1
28	CBA-228	Hand Chain Wheel Hub	1	1
29	CBA-229	Hand Chain Wheel	1	1
30	CBA-230	Lockwasher for Hand Chain Wheel Hub	4	4
31	CBA-231	Screw for Hand Chain Wheel Hub (5/16-18 x 1/2" Hex Hd.)	4	4
32	CBA-232	Brake Stop Lug	1	1
33	CBA-233	Elastic Stop Nut	1	1
34	CBA-234	Chain Wheel Guide Cover (1 Ton)	1	-
		Chain Wheel Guide Cover (1½ Ton -1 Required)		-
		Chain Wheel Guide Cover (2 Ton)	-	1
35	CBA-235	Short Screw for Chain Wheel Guide 1/4-20 x 1-1/2" Socket Head (1 Ton)	1	-
		Short Screw for Chain Wheel Guide 1/4-20 x 2-1/2" Socket Head (2 Ton)	-	1
36	CBA-236	Long Screw for Chain Wheel Guide 5/16-18 x 2-3/4" Socket Head	2	2
37	CBA-237	Load Chain	Per Ft.	Per Ft.
	CBA-237SR	Load Chain	Per Ft.	Per Ft.
38	CBA-238	Flat Washer	1	1
39	CBA-239	Load Chain Guide - 1 Piece Style	1	1
40		Reserved		
41		Reserved		
42	CBA-242	Chain Stripper Assembly	1	1
43	CBA-243	Screw for Chain Stripper Assembly	2	2
44	CBA-244	Hand Chain	Per Ft.	Per Ft.
	CBA-244SR	Hand Chain	Per Ft.	Per Ft.
		NOTE: Two extra feet of Hand Chain needed for each extra foot of hand chain drop.		
45	CBA-245	Connecting Link for Hand Chain	1	1
46	CBA-246	Snap Ring for Lower Block Assembly	1	1
46A	CBA-246A	Retaining Ring for Lower Block (Early Models)	2	2
47	CBA-247	Lower Block Sleeve	1	1
	CBA-247SR	Lower Block Sleeve	*1	*1
48	CBA-248	Lower Block Body	2 Halves	2 Halves
	CBA-248SR	Lower Block Body	2 Halves	2 Halves
50	CBA-250	Load Hook (Latch Type)	1	1
	CBA-250SR	Load Hook (Latch Type)	*1	*1
52	CBA-252	Complete Lower Block Assembly with Latch Type Hook (Not Illustrated)	1	1
	CBA-252SR	Complete Lower Block Assembly with Latch Type Hook (Not Illustrated)	*1	*1
54	CBA-254	Upper Hook - Latch Type	***1	***1
55	CBA-255	Nut for Hook	***1	***1
56	CBA-256	Washer for Hook Nut	***1	***1
57	CBA-257	Lockwasher for Gear Cover Screw 1/4"	5	5
59	CBA-259	Lockwasher for Chain Wheel Guide Screw 5/16"	2	2
60	CBA-260	Lockwasher for Tail Chain Anchor Pin 5/16"	1	1
61	CBA-261	Lockwasher for Chain Stripper Assembly Screw	2	2
62	CBA-262	Retaining Ring for Pinion Shaft Bearing	-	1

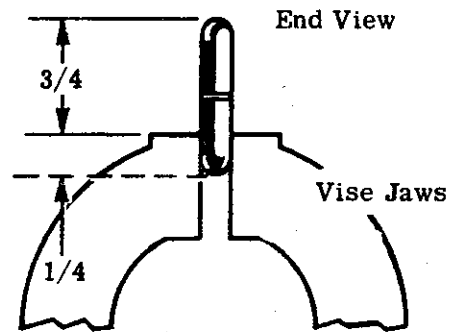
*Spark and Corrosion Models. **On early models, end of pinion shaft (13) was not threaded as illustrated, but was grooved and an external retaining ring was used in place of the elastic stop nut (33).

***Upper hook is not available separately. Order Frame and Hook Assembly (18) or return original frame assembly to factory or Authorized BUDGIT Repair Station to have hook replaced.

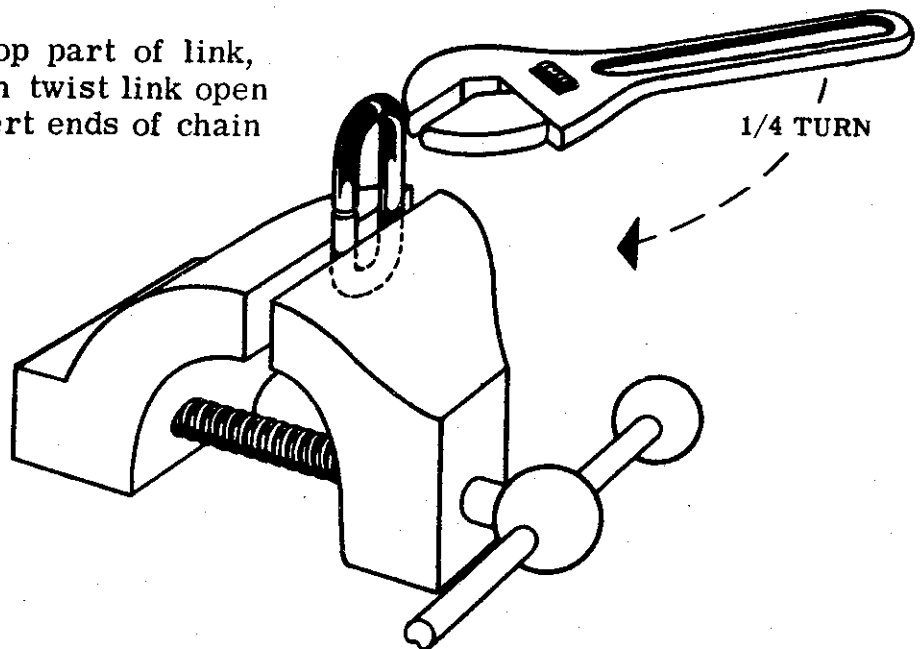
†On current production 2 ton models, two short needle bearings are used in each idler gear in place of 1 long needle bearing as illustrated.

INSTRUCTIONS FOR MODIFYING HAND CHAIN LENGTH

- 1 Insert split connecting link in a vise so that three-quarters of the link is above the top of the vise jaws as shown.

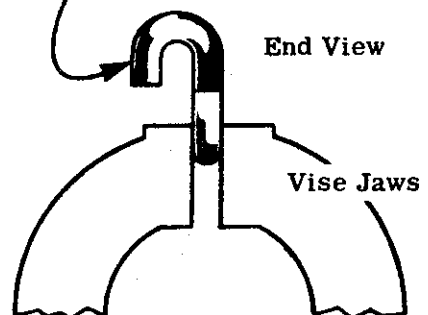


- 2 Place wrench on top part of link, tighten jaws. Then twist link open wide enough to insert ends of chain to be joined.



- 3 Insert ends of chain on open link, being sure there is no twist in the chain.
- 4 Place wrench on top part of link, tighten jaws and twist back until link is closed.

Place Ends To Be
Joined Over This End




CAUTION

These instructions cover hand chain modifications only. Never attempt to weld or repair load chain. Always replace load chain with factory approved chain.

SAFE IS... KNOWING YOUR HOIST!
 STUDY MANUFACTURER'S OPERATING INSTRUCTION MANUAL FOR CORRECT HOIST OPERATION. KNOW WHAT TO DO, -AND HOW TO DO IT! ... EVERYTIME!

WOW! I DIDN'T KNOW THAT!

HOIST OPERATING MANUAL

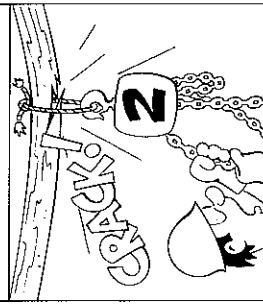


SAFE IS... NEVER OVERLOADING!
 ALWAYS BE SURE TO USE PROPER CAPACITY HOIST. ... IN DOUBTFUL WEIGHT SITUATIONS USE HOISTS WITH OVERLOAD PROTECTION DEVICES WHICH WILL REJECT DANGEROUS OVERLOADS.



SAFE IS... MAKING SURE UPPER SUSPENSION WILL HOLD THE LOAD!

BACK!



SAFE IS... RIGGING THE HOIST CORRECTLY!

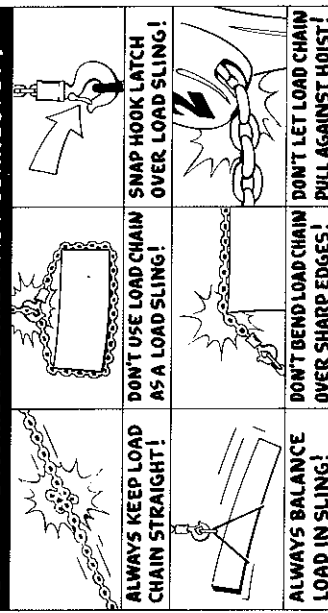
ALWAYS KEEP LOAD CHAIN STRAIGHT!

DON'T USE LOAD CHAIN AS A LOAD SLING!

SNAP HOOK LATCH OVER LOAD SLING!

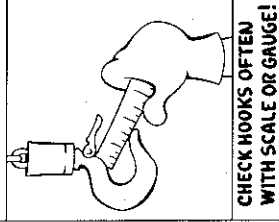
ALWAYS BALANCE LOAD IN SLING!

DON'T BEND LOAD CHAIN OVER SHARP EDGES! PULL AGAINST HOIST!



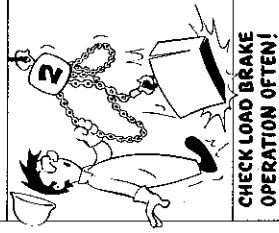
SAFE IS... NEVER USING A HOIST WITH "OPENED" HOOKS!

CHECK HOOKS OFTEN WITH SCALE OR GAUGE!



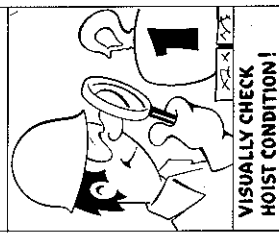
SAFE IS... NEVER USING A HOIST WITH SLIPPING BRAKE!

CHECK LOAD BRAKE OPERATION OFTEN!




SAFE IS... NEVER USING A DAMAGED HOIST!

VISUALLY CHECK HOIST CONDITION!

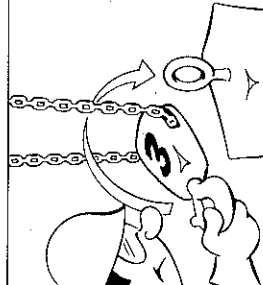


SAFE IS... USING GOOD JUDGMENT!

NEVER THROW OR DROP A HOIST!



SAFE IS... NEVER TWISTING CHAIN BY CAPSIZING LOWER BLOCK!



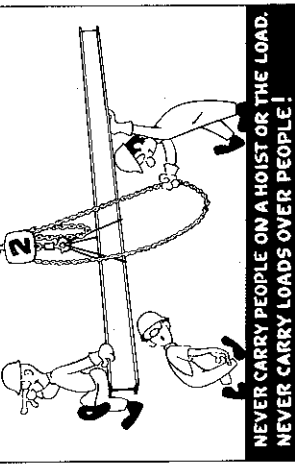
SAFE IS... ALWAYS MAKING SURE OF YOUR FOOTING!

ALWAYS LOOK WHERE YOU'RE GOING!



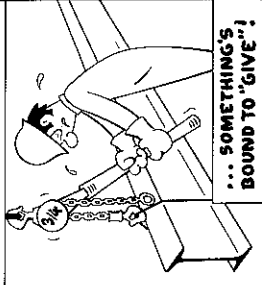
SAFE IS... ALWAYS STAYING OUT FROM UNDER A SUSPENDED LOAD!

NEVER CARRY PEOPLE ON A HOIST OR THE LOAD. NEVER CARRY LOADS OVER PEOPLE!

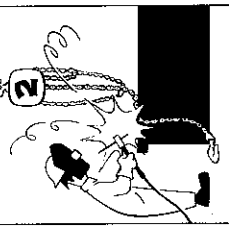


SAFE IS... NEVER USING A PIPE (CHEATER) ON LEVER HOIST HANDLE!

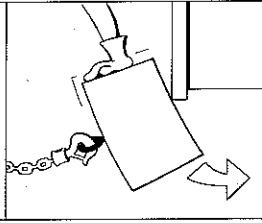
... SOMETHING'S BOUND TO "GIVE"!



SAFE IS... NEVER PERMITTING A WELDING TORCH TO HEAT LOAD CHAIN!



SAFE IS... NEVER APPLYING SHOCK LOAD TO CHAIN SUDDENLY!



SAFE IS... ALSO

- NEVER DRAGGING A LOAD CHAIN FROM UNDER THE LOAD!
- BEING A THOUGHTFUL, COURTEOUS WORKER!

Safe is Beautiful



**Recommended Spare Parts
for Your BUDGIT Hoist**

Certain parts of your hoist will, in time, require replacement under normal wear conditions. It is suggested that the following parts be purchased for your hoist as spares for future use.

Brake Discs
Hand Chain Wheel
Hand Chain
Load Chain
Lower Block
Chain Wheel Guide
Load Brake Pawl
Pinion Shaft
Elastic Stop Nut

NOTE: When ordering parts always furnish Model and Catalog Number of Hoist and lift of hoist on which the parts are to be used.

Parts for your hoist are available from your local authorized BUDGIT repair station. For the location of your nearest repair station, write:

Crane & Hoist Operations
Lift-Tech International, Inc.
Muskegon, Michigan 49443

or phone: 616/733-0821.

b. Attach load hook to a test load of the weight specified in chart for the capacity of the chain hoist being tested. Operate chain hoist in raising direction to take slack out of load chain.

c. Attach a spring scale to R.H. hand chain (as viewed facing hand chain wheel cover) and pull on scale. If regulator is operating properly it will release at the pounds-pull value listed in the "Hand Chain Pull at Static Release" column in the application and specification chart. A plus or minus 15% tolerance range of the regulator's pounds-pull value is permissible.

CAUTION: If regulator does not release at 15% over the pounds-pull value DO NOT continue to pull. The regulator assembly is not op-

erating and must be replaced. Pull beyond that listed for static release will greatly increase overload and may cause damage to chain hoist or other equipment.

REPLACEMENT PARTS

The regulator assembly is of a riveted construction and is not to be disassembled. If hand chain wheel is worn or damaged or if test shows that regulator is not functioning properly, the complete regulator assembly must be replaced. If a replacement is necessary order required Regulator Kit from "Application & Specification" chart shown below. Always include Catalog Number and Model Number of chain hoist or trolley hoist with order for replacement parts.

APPLICATION AND SPECIFICATION CHART FOR BUDGIT AUDIO LIFT REGULATORS*

CATALOG NO. OF REGULATOR KIT	HOIST RATED LOAD (TONS)	CATALOG NUMBERS OF HOISTS ON WHICH REGULATORS ARE TO BE USED				AVG. HAND CHAIN PULL HOISTING (POUNDS)	MODEL NO. OF REGULATOR	HAND CHAIN PULL AT STATIC RELEASE (POUNDS ± 15%)	RECOM. TEST LOAD (POUNDS)
		HOOK SUSPENSION CHAIN HOISTS	ARMY TYPE TROLLEY HOISTS						
902401	¼	260	3301	3331		27	506911-12	47	1000
902402	½	261	3302	3332		53	506911-1	93	2000
902403	1	262	3303	3333	3315 3351	60	506912-1	90	3000
902405	1-½	259				60	506912-3	90	4500
902404	2	263	3304	3334	3316 3352	80	506912-2	120	6000
902405	3	264	3305	3335	3317 3353	63	506912-3	95	9000
902406	4	265	3306	3336	3318 3354	84	506912-11	126	12000
902407	5	266	3307	3337	3319 3355	72	506912-4	108	15000
902408	6	267	3308	3338	3320 3356	86	506912-12	129	18000
902408	8	268	3309	3339	3321 3357	89	506912-12	134	24000
902408	10	269	3310	3340	3322 3358	92	506912-5	138	30000

The above chart lists catalog and model numbers of regulator kits by capacities and shows by catalog number which chain hoist or trolley hoist the kit is to be installed on. Chain hoist catalog numbers are located on name plates attached to hoist frames. These regulators can also be used on hoists of above catalog numbers having the suffix letters B, C, D, E, F, G and SR. In addition, the chart shows average hand chain pull values for rated capacities, hand chain pull values for testing at static release and recommended test loads.

*Covered under U.S. Patent No. 3,542,341 and Canadian Patent issued 1971 and other foreign patents.

BUDGIT**LIFTTECH**LIFT-TECH INTERNATIONAL, INC.
CRANE AND HOIST OPERATIONS
MUSKEGON, MICHIGAN 49443**BUDGIT®**
AUDIO LIFT REGULATOR
FACTORY INSTALLED**ADDENDUM TO BUDGIT CHAIN HOIST PARTS LISTS AND INSTRUCTIONS**
113534-1, 113534-12 & 113534-13**GENERAL**

This addendum sheet is issued to temporarily outline important operation, maintenance and replacement parts information on BUDGIT Audio Lift Regulators not covered in above noted manuals. Revised editions of these manuals containing complete instructions for regulators will be issued in the near future and will be available to owners of BUDGIT Chain Hoists and Trolley Hoists upon request to the factory. This sheet should be inserted in the manual packaged with your hoist and filed for future reference.

Chain hoists and trolley hoists equipped with factory installed regulators are identified two ways. 1) The catalog number stamped on hoist nameplate has a letter "R" prefix (example: R262). 2) Two triangular shaped red labels with wording "Equipped with BUDGIT Audio Lift Regulator" are affixed on each cover at both sides of hoist.

DESCRIPTION

The BUDGIT Audio Lift Regulator is a revolutionary chain hoist overload safety device, designed exclusively for BUDGIT Aluminum Chain Hoists, HI-CAP Chain Hoists, and Army Type Trolley Hoists. It replaces the conventional hand chain wheel and provides overload protection for hoist and operator. The regulator not only warns the operator when chain hoist begins to exceed its rated load, but also limits the hoist's lift capabilities whenever the overload becomes excessive.

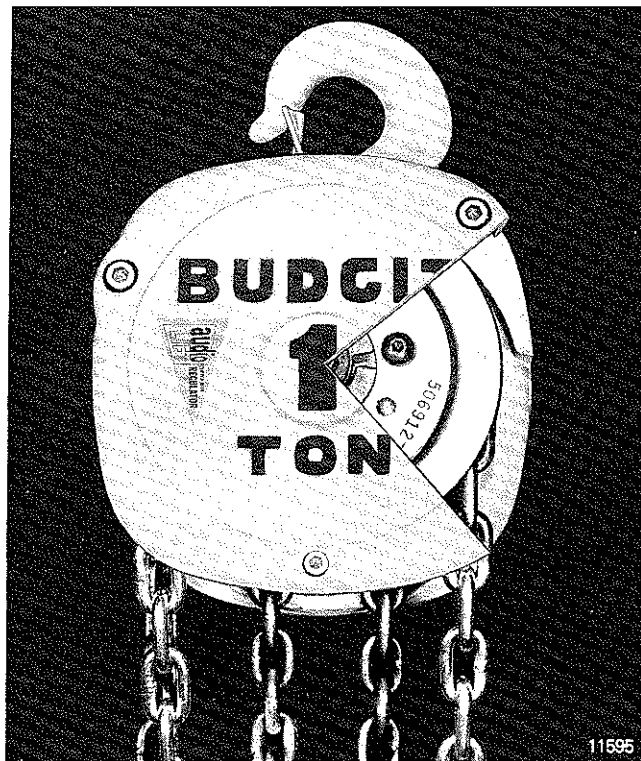
OPERATION

Chain hoists or trolley hoists equipped with regulators are operated in the normal manner, pulling on the right hand chain (facing chain wheel side of hoist) to raise load and left hand chain to lower load. The regulator will warn the operator (by audible clicking of roller detent) when load begins to exceed rated capacity of hoist. Continued pulling on right hand chain will cause the regulator to release and thereby limit the hoist's lift capabilities if overload is excessive. At release (slipping) of regulator, pull on hand chain lessens to about one third of the amount of pull present prior to release. The load will not drop since it is under complete control of the load brake.

WARNING

Equipment covered herein is not designed or suitable as a power source for lifting or lowering persons.

NOTICE: Information contained in this addendum is subject to change without notice.



Cutaway View Showing Regulator Installed in 1 Ton BUDGIT Aluminum Chain Hoist.

Read and follow the instructions in the Operations Manual and ANSI B30.16.

MAINTENANCE RECOMMENDATIONS

General. The Audio Lift Regulator is factory manufactured and preset for your particular hoist. There are no adjustments to be made and the regulator is lubricated with special long lasting high graphite content grease. Observance of the following suggested test procedure will assist you to operate your chain hoist properly so as to permit you to obtain full benefit from its overload protection. It is recommended that the test is performed at regular intervals based on type service to which chain hoist is subjected. For light service annual testing will be adequate. For medium service test every six months and for heavy service test every 90 days or oftener depending on severity of service.

TEST PROCEDURE

- a. Suspend chain hoist on an overhead structure capable of supporting weight of chain hoist and test load specified in "Application & Specification Chart" on back of page.