PARTS LIST AND INSTRUCTION MANUAL

8041

BUDGIT®

ALUMINUM ARMY TYPE TROLLEY 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, DIVISION OF COLUMBUS MCKINNON CORPORATION
MUSKEGON, MICHIGAN 49443-0769

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PART NO. 113534-12

FOR YOUR CONVENIENCE

This booklet is for your convenience. It contains suggestions to help you install, operate and maintain your BUDGIT army type trolley hoist. The army type trolley hoist is a precision built unit. With proper maintenance, it will provide many years of service.

Four parts illustrations are included. Fig. 1 shows all of the parts for the 1/4 and 1/2 ton hoist, Fig. 2 shows all of the parts for the 1, 1-1/2 and 2 ton hoist, Fig. 3 shows all of the parts for the 1/4 to 2 ton army type push trolley and Fig. 4 shows all of the parts for the 1, 1-1/2 and 2 ton army type hand geared trolley. Each part is indicated on the illustration by a reference number which also appears on the parts list for easy identification. The corresponding part 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, therefore, we suggest that this booklet be carefully filed to make it readily available when required.

Specifications herein are subject to change without notice.

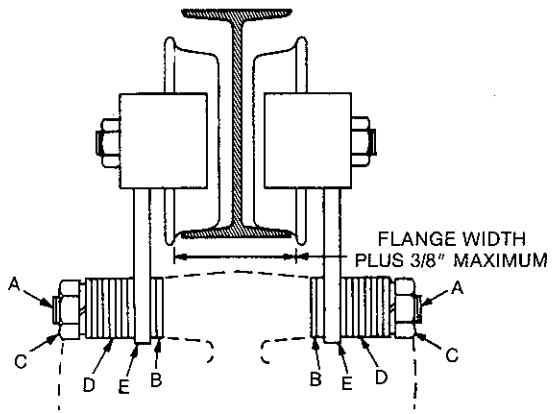
IMPORTANT: When ordering parts, always be sure to give the part numbers of the parts required AND capacity, lift and model number of the unit for which parts are being ordered.

NOTE: Complete inspection, overhaul and service are available for BUDGIT army type trolley 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.

INSTRUCTIONS FOR INSTALLATION, OPERATION, MAINTENANCE AND REPAIR OF THE 'BUDGIT' ALUMINUM ARMY TYPE TROLLEY HOIST

Your new BUDGIT army type trolley hoist can be installed with a minimum of effort by using the following directions:

The span between the inside of the trolley wheel flanges must equal the I-beam flange width plus 3/8". This distance is obtained by installing the correct number of spacer washers on hoist studs (A) at positions (B).



INSTALLATION OF TROLLEY ON I-BEAM

Due to manufacturing tolerances, I-beams having the same size designation may actually vary widely in the width of their flanges. This makes it impossible to prescribe the specific number of washers to use at (B) for any particular I-beam. Therefore, before installing the trolley on your I-beam, proceed as follows:

1. Measure the I-beam width and add 3/8" to this figure. With unit on the floor or a suitable table, remove hex nuts (C) lockwashers and spacer washers (D) from hoist studs. Remove side plates (E) and adjust number of washers (D) at the (B) positions to arrive at the required span determined above. The number of washers at the four (B) positions MUST NOT vary more than one washer.

2. Replace side plates (E) and extra spacer washers (D), lockwashers and nuts (C).

3. Making sure both side plates are firmly against spacer washers (B), measure the distance between the insides of the trolley wheel flanges to make sure it equals the width of the I-beam plus 3/8" maximum. If not, again adjust number of washers at (B) position.

4. When span is correct, the trolley hoist may be placed on the I-beam by one of two methods:

   a. If it can be slipped directly over the end of the beam, it need not be disassembled.

b. If it cannot be slipped over the end of the I-beam, remove the hex nuts, lockwashers, outer spacer washers and side plate from either side and reassemble trolley hoist on the beam.

⚠ CAUTION

In all cases, after trolley hoist has been installed on I-beam, make sure a suitable stop is secured to each end of the beam to prevent the unit rolling off.

After trolley hoist is suspended, check load chain for evidence of chain twist. If present, remove by looping lower block over and thru chain suspension.

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.

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.

Do not subject trolley to side loads. Always center trolley over load when hoisting.

Do not ram trolley into end stops, other trolleys, or any obstruction on beam. Improper and careless operation can result in a hazardous condition for operator and load.

Do not remove or obscure warning labels.

MAINTENANCE AND REPAIR

Your army type trolley hoist can be readily disassembled, inspected and reassembled with a minimum of effort because all connections are splines. No keys are used. Complete tear-down and reassembly can be accomplished with common tools.

In the event replacement parts are required, refer to the parts list on the following pages which is applicable to the capacity and type of unit needing parts.

DISASSEMBLY

Your trolley hoist can be completely dismantled and worn or damaged parts replaced as follows:

1. Remove trolley hoist from I-beam and hoist from trolley by reversing procedure given for trolley installation.

2. Lay trolley to one side and begin disassembling chain hoist. Remove three socket head screws and lockwashers from hand chain wheel guide cover and remove cover. (Follow directions per Fig. A. lifting straight upward.) Remove hand chain.

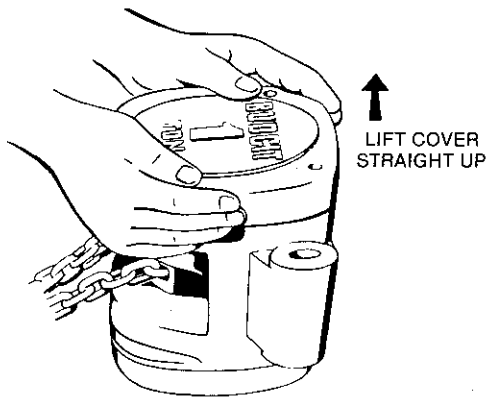


FIG. A, REMOVING CHAIN WHEEL GUIDE COVER

3. On 1/4 and 1/2 ton models, detach small Spirolox or Truarc retaining ring (26, Fig. 1) from end of pinion shaft (17, Fig. 1 or 13, Fig. 2). 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 (33, Fig. 2) and washer (38, Fig. 2) 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 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 under "ASSEMBLY" 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 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.

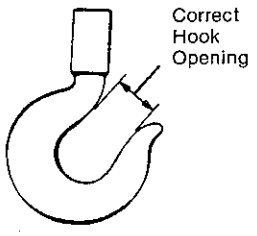
12. Remove large diameter Spriolox retaining ring lying behind pocket wheel gear and securing pocket wheel bearing.

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 all parts that are worn, corroded or damaged.

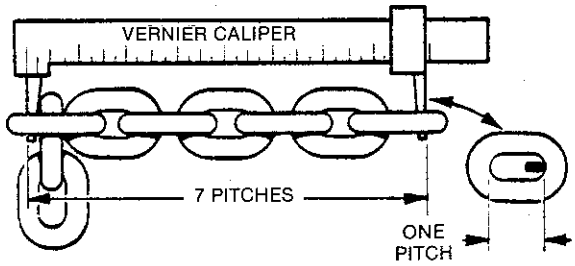
2. Replace lower hook if it is distorted, opened, elongated in shank, or otherwise damaged.



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. Inspect load chain. 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 heat treated load chain.



USE ONLY A "KNIFE-EDGE" CALIPER TO ELIMINATE POSSIBILITY OF FALSE READING BY NOT MEASURING FULL PITCH LENGTH.

⚠ 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 lower load hook with heavy-duty grease as required. A good grade of ball bearing grease is satisfactory for the lower block assembly.

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 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

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 (50, Fig. 1 or 17, Fig. 2) is seated in the pocket wheel (45, Fig. 1 or 16, Fig. 2). On the two ton hoist, the bearing is held in the pocket wheel by a retaining ring (62, Fig. 2).

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 secure the bearing with a retaining ring.

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

5. To prepare gear cover and idler gears for assembly, insert pinion shaft between idler 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.

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

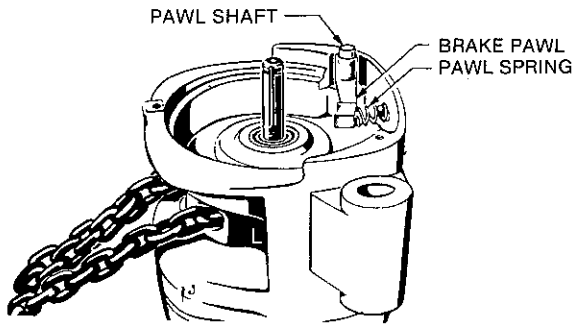


FIG. B, INSTALLING BRAKE PAWL & SPRING

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.

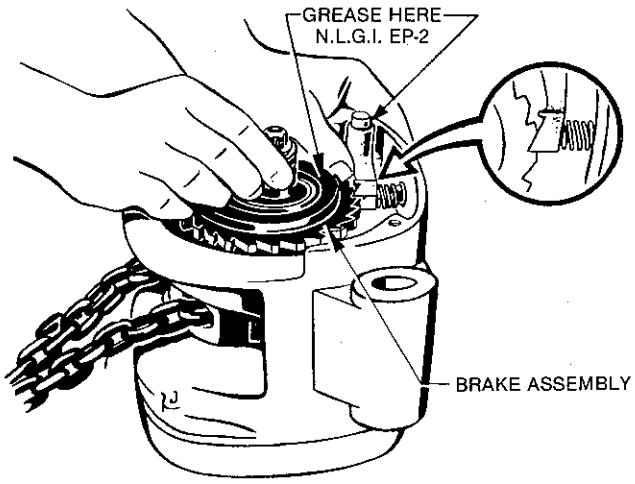


FIG. C, INSTALLING BRAKE ASSEMBLY

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 bronze hub is closest to the top center as shown in Fig. D. Install brake stop lug on pinion shaft so gap between lug and boss on the bronze 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.) The lug must be to the left of the boss as shown in Fig. E. Install retaining ring or elastic stop nut with washer (depending on model) on end of pinion shaft.

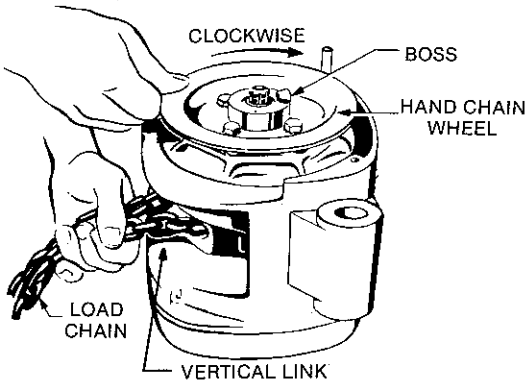


FIG. D, INSTALLING HAND CHAIN WHEEL

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 position (see Fig. D) 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.

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.) DO NOT REMOVE BRAKE PAWL SHAFT TO GET CHAIN ON WHEEL. To do so will allow brake pawl to fall and block will have to be disassembled again.

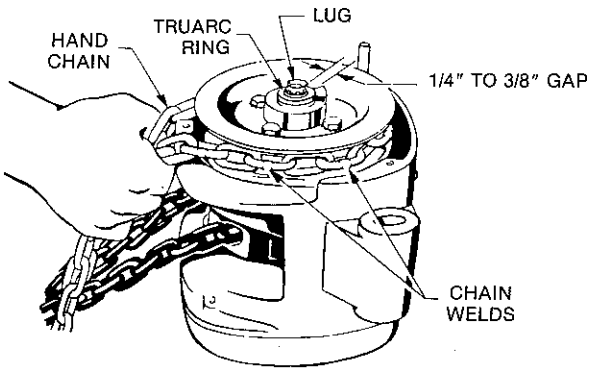


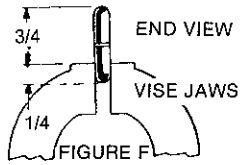
FIG. E, POSITIONING BRAKE STOP LUG

13. Hold hand chain as shown in Fig. E to keep chain wheel from moving. Carefully install cover. BE SURE A LOCKWASHER IS INSTALLED WITH EACH SCREW.

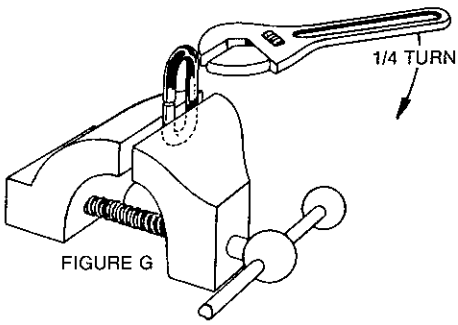
14. With the three screws finger tight, draw each of them partly down in turn, so that all are uniformly tightened.

THE CORRECT WAY TO MAKE HAND CHAINS ENDLESS BY USE OF SPLIT CONNECTING LINK

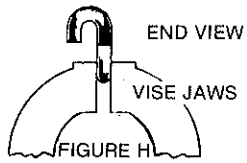
1. Insert split connecting link in a vise so that three-quarters of the link is above the top of the vise jaws as shown in Fig. F.



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



3. Insert ends of chain on open link, make 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.

NOTE: This equipment or similar equipment is not designed or suitable as a power source for lifting or lowering persons.

NOTES

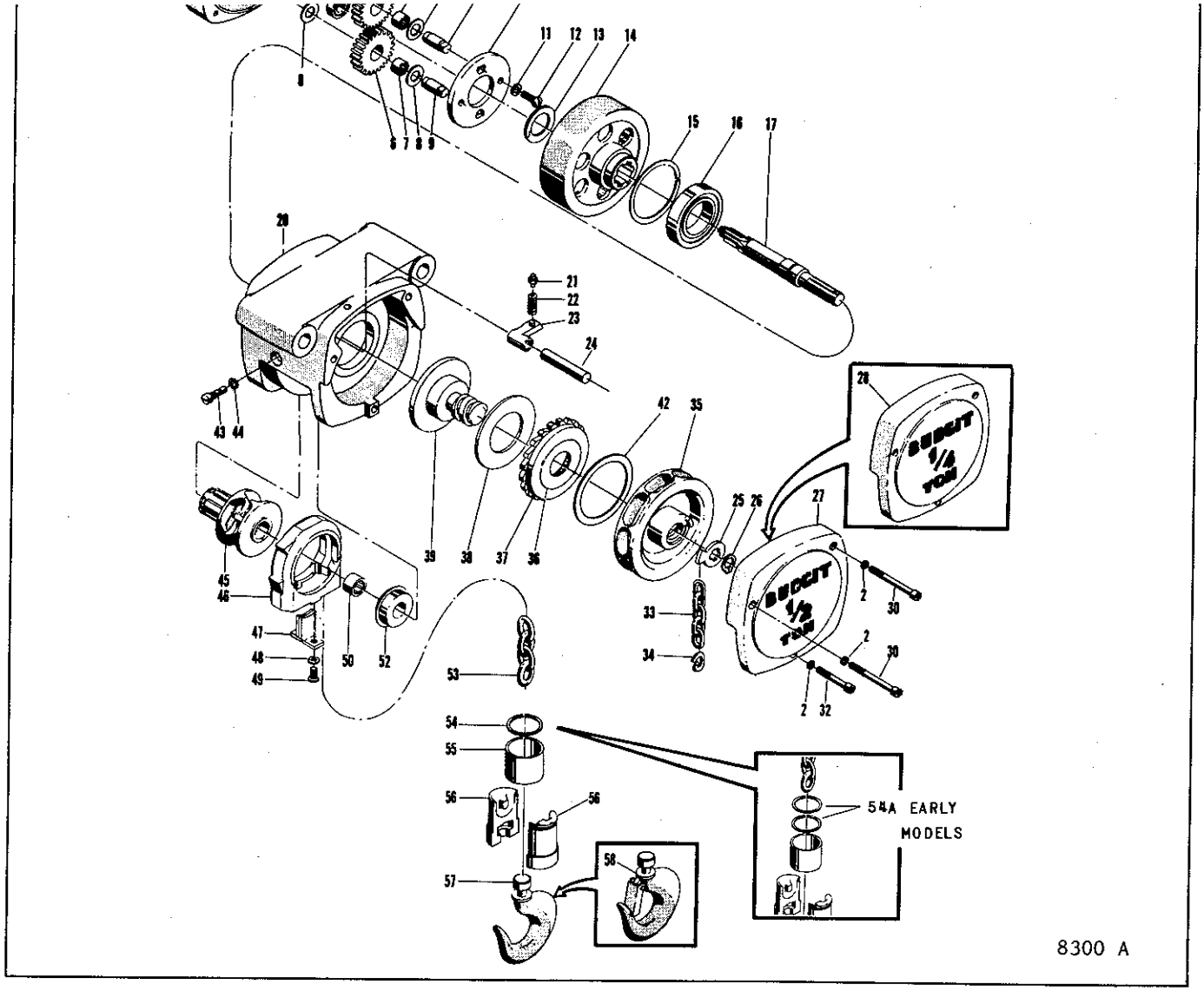


FIG. 1 EXPLODED VIEW OF 1/4 AND 1/2 TON CAPACITY ARMY TYPE CHAIN HOIST

Ref. No.	Part No.	Part Name	Quantity Required	
			1/4 Ton	1/2 Ton
1	ACB-101	Gear Cover Screw 1/4-20 x 1" Socket Head.	4	4
2	ACB-102	Lockwasher for Gear Cover Screw 1/4" Std.	7	7
3	ACB-103	Gear Cover (1/2 Ton)	-	1
4	ACB-104	Gear Cover (1/4 Ton)	1	-
5	ACB-105	Bearing for Pinion Shaft	1	1
6	ACB-106	Idler Gear	2	2
7	ACB-107	Needle Bearing for Idler Gear	2	2
8	ACB-108	Idler Shaft Spacer Washer	4	4
9	ACB-109	Idler Gear Shaft	2	2
10	ACB-110	Retaining Plate	1	1
11	ACB-111	Lockwasher 1/4" Shakeproof	2	2
12	ACB-112	Screw for Retaining Plate 1/4-20 x 3/4" Truss Head	2	2
13	ACB-113	Retaining Ring for Pinion Shaft	1	1
14	ACB-114	Pocket Wheel Gear	1	1

Ref. No.	Part No.	Part Name	Quantity Required	
			1/4 Ton	1/2 Ton
15	ACB-115	Retaining Ring	1	1
16	ACB-116	Pocket Wheel Bearing	1	1
17	ACB-117	Pinion Shaft	1	1
18		Reserved	-	-
19		Reserved	-	-
20	ACB-120	Frame	1	1
21	ACB-121	Pawl Stud	1	1
22	ACB-122	Pawl Spring	1	1
23	ACB-123	Load Brake Pawl	1	1
24	ACB-124	Brake Pawl Shaft	1	1
25	ACB-125	Brake Stop Lug	1	1
26	ACB-126	Retaining Ring	1	1
27	ACB-127	Chain Wheel Guide (1/2 Ton)	-	1
28	ACB-128	Chain Wheel Guide (1/4 Ton)	1	-
29		Reserved	-	-
30	ACB-130	Screw for Chain Wheel Guide 1/4-20 x 2-1/4" Socket Head	2	2
31		Reserved	-	-
32	ACB-132	Short Screw for Chain Guide 1/4-20 x 1-1/2" Socket Head	1	1
33	ACB-133	Hand Chain Cadmium Plated	Per Foot	Per Foot
	ACB-133SR	Hand Chain Everdur Bronze	Per Foot	Per Foot
		(Note: Two Extra Feet of Hand Chain Needed for Each Extra Foot of Hand Chain Drop)		
34	ACB-134	Connecting Link for Hand Chain	1	1
35	ACB-135	Hand Chain Wheel	1	1
36	ACB-136	Bearing for Load Brake Ratchet	1	1
37	ACB-137	Load Brake Ratchet	1	1
38	ACB-138	Thermoid Brass Impregnated Brake Disc	1	1
39	ACB-139	Load Brake Flange Assembly	1	1
40		Reserved	-	-
41		Reserved	-	-
42	ACB-142	Hard Fibre Brake Disc	1	1
43	ACB-143	Tail Chain Anchor Pin	1	1
44	ACB-144	Lockwasher for Tail Chain Anchor Pin 5/16" Shakeproof	1	1
45	ACB-145	Pocket Wheel	1	1
46	ACB-146	Load Chain Guide (1 Piece)	1	1
47	ACB-147	Chain Stripper Assembly	1	1
48	ACB-148	Lockwasher for Chain Stripper Assembly 5/16" External	2	2
49	ACB-149	Screw for Chain Stripper Assembly 1/4-20 x 1/2" Rd. Hd. Machine	2	2
50	ACB-150	Pocket Wheel Bearing	1	1
51		Reserved	-	-
52	ACB-152	Pocket Wheel Bearing	1	1
53	ACB-153	Load Chain	Per Foot	Per Foot
	ACB-153SR	Load Chain Stainless Steel	Per Foot	Per Foot
54	ACB-154	Snap Ring for Lower Block Assembly	1	1
54A	ACB-154A	Retaining Ring for Lower Block (Earlier Models)	2	2
# 55	ACB-155	Lower Block Sleeve	1	1
	ACB-155SR	Lower Block Sleeve	*1	*1
# 56	ACB-156	Lower Block Body	2 Halves	2 Halves
	ACB-156SR	Lower Block Body	2 Halves	2 Halves
57	***	Load Hook (Standard Type)	1	1
	***	Load Hook (Standard Type)	*1	*1
58	ACB-158	Load Hook (with Latch)	1	1
	ACB-158SR	Load Hook (with Latch)	*1	*1
59	***	Complete Lower Block Assembly with Standard Type Hook (Not Illustrated)	1	1
	***	Complete Lower Block Assembly with Standard Type Hook (Not Illustrated)	*1	*1
60	ACB-160	Complete Lower Block Assembly with Safety Type Hook (Not Illustrated)	1	1
	ACB-160SR	Complete Lower Block Assembly with Safety Type Hook (Not Illustrated)	*1	*1

#Above parts not available separately. Items 54, 55 & 56 will be furnished in kit form.

*Spark and Corrosion Resistant Models.

***Available with latch only, order Item 58 or 60 as required.

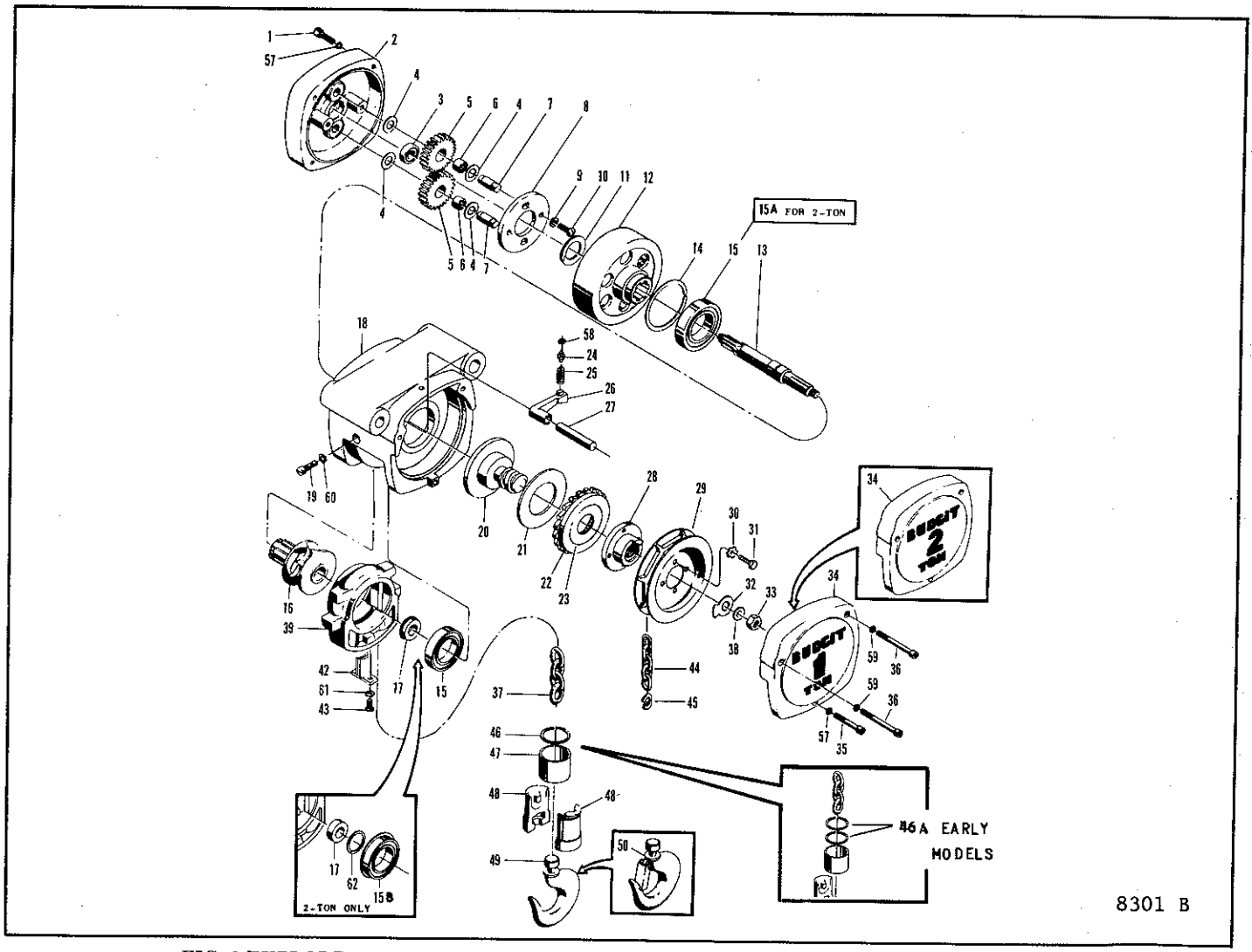


FIG. 2 EXPLODED VIEW OF 1, 1-1/2 AND 2 TON CAPACITY ARMY TYPE CHAIN HOIST
(Part numbers for 1-1/2 ton are same as for 2 ton except for Ref. No. 34)

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

**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).

Ref. No.	Part No.	Part Name	Quantity Required 1-Ton	Quantity Required 2-Ton
19	ACB-219	Tail Chain Anchor Pin	1	1
20	ACB-220	Load Brake Flange Assembly	1	1
21	ACB-221	Brake Disc	1	1
22	ACB-222	Load Brake Ratchet	1	1
23	ACB-223	Bearing for Load Brake Ratchet	1	1
24	ACB-224	Pawl Stud	1	1
25	ACB-225	Pawl Spring	1	1
26	ACB-226	Load Brake Pawl	1	1
27	ACB-227	Brake Pawl Shaft	1	1
28	ACB-228	Hand Chain Wheel Hub	1	1
29	ACB-229	Hand Chain Wheel	1	1
30	ACB-230	Lockwasher for Hand Chain Wheel Hub	4	4
31	ACB-231	Screw for Hand Chain Wheel Hub 5/16-18 x 1/2" Hex Hd.	4	4
32	ACB-232	Brake Stop Lug	1	1
33	ACB-233	Elastic Stop Nut	1	
34	ACB-234	Chain Wheel Guide (1 Ton)	1	-
		(2 Ton)	-	1
35	ACB-235	Short Screw for Chain Wheel Guide 1/4-20 x 1-1/2" Socket Hd.	1	-
		Short Screw for Chain Wheel Guide 1/4-20 x 2-1/2" Socket Hd.	-	1
36	ACB-236	Long Screw for Chain Wheel Guide	1	1
37	ACB-237	Load Chain	Per Foot	Per Foot
	ACB-237SR	Load Chain	Per Foot	Per Foot
38	ACB-238	Flat Washer	1	1
39	ACB-239	Load Chain Guide - New Style (1 Piece)	1	1
40		Reserved	-	-
41		Reserved	-	-
42	ACB-242	Chain Stripper Assembly	1	1
43	ACB-243	Screw for Chain Stripper Assembly	2	2
44	ACB-244	Hand Chain	Per Foot	Per Foot
	ACB-244SR	Hand Chain	Per Foot	Per Foot
		(Note: Two Extra Feet of Hand Chain Needed for Each Extra Foot of Hand Chain Drop)		
45	ACB-245	Connecting Link for Hand Chain	1	1
46	ACB-246	Snap Ring for Lower Block Assembly	1	1
46A	ACB-246A	Retaining Ring for Lower Block (Earlier Models)	2	2
#47	ACB-247	Lower Block Sleeve	1	1
	ACB-247SR	Lower Block Sleeve	*1	*1
#48	ACB-248	Lower Block Body	2 Halves	2 Halves
	ACB-248SR	Lower Block Body	***	***
49	##	Load Hook (Standard Type)	1	1
	##	Load Hook (Standard Type)	*1	*1
50	ACB-250	Load Hook (with Latch)	1	1
	ACB-250SR	Load Hook (with Latch)	*1	*1
51	##	Complete Lower Block Assembly with Standard Type Hook (Not Illustrated)	1	1
	##	Complete Lower Block Assembly with Standard Type Hook (Not Illustrated)	*1	*1
52	ACB-252	Complete Lower Block Assembly with Latch Type Hook (Not Illustrated)	1	1
	ACB-252SR	Complete Lower Block Assembly with Latch Type Hook (Not Illustrated)	*1	*1
53		Reserved	-	-
54		Reserved	-	-
55		Reserved	-	-
56		Reserved	-	-
57	ACB-257	Lockwasher for Gear Cover Screw - 1/4" Std.	5	5
58	ACB-258	Washer for Pawl Stud 1/4" External	1	1
59	ACB-259	Lockwasher for Chain Wheel Guide Screw 5/16" Std.	2	2
60	ACB-260	Lockwasher for Tail Chain Anchor Pin 5/16" Internal	1	1
61	ACB-261	Lockwasher for Chain Stripper Assy. Screw	2	2
62	ACB-262	Retaining Ring for Pinion Shaft Bearing	-	1

#Above parts not available separately. Items 46, 47 & 48 will be furnished in kit form.

##Available with latch only, order Item 50 or 52 as required.

*Spark and Corrosion Resistant Models.

***Use Standard CBA-248.

†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.

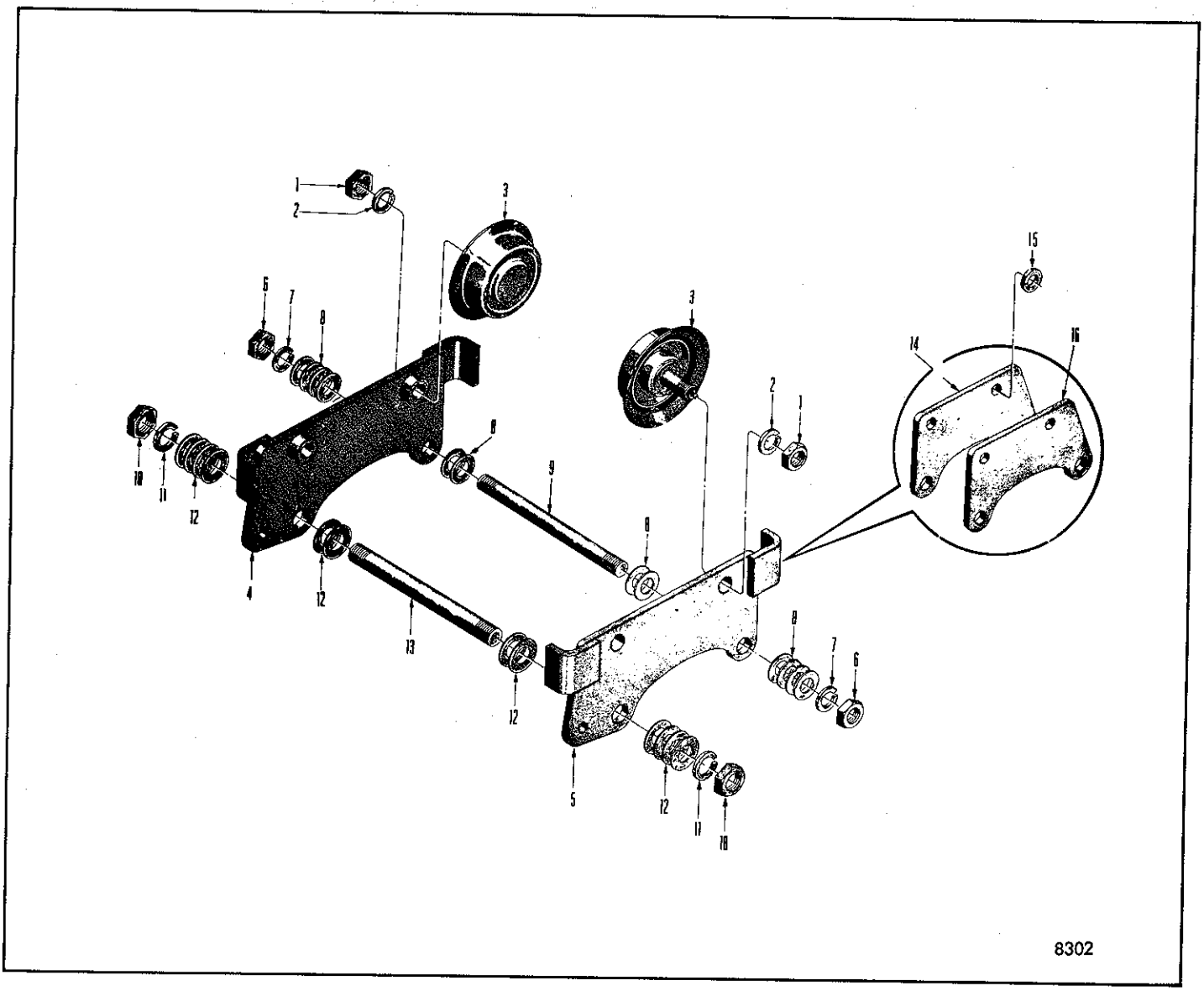


FIG. 3 EXPLODED VIEW OF 1/4, 1/2, 1, 1-1/2 AND 2 TON CAPACITY ARMY TYPE PUSH TROLLEY

Ref. No.	Part No.	Part Name	Quantity Required		
			1/4 & 1/2 Ton	1 Ton	1-1/2 & 2 Ton
1	ATP-101	Nut	4	4	4
2	ATP-102	Lockwasher	4	4	4
3	ATP-103	Wheel	4	4	4
4	ATP-104	Side Plate	-	1	1
5	ATP-105	Side Plate	-	1	1
6	ATP-106	Nut	2	2	2
7	ATP-107	Lockwasher	2	2	2
8	ATP-108	Spacer	20	-	-
	ATP-108	Spacer	-	22	-
	ATP-108	Spacer	-	-	26
9	ATP-109	Stud	1	1	1
10	ATP-110	Nut	2	2	2
11	ATP-111	Lockwasher	2	2	2
12	ATP-112	Spacer	20	-	-
	ATP-112	Spacer	-	22	-
	ATP-112	Spacer	-	-	26
13	ATP-113	Stud	1	1	1
14	ATP-114	Side Plate	1	-	-
15	ATP-115	Spacer	4	-	-
16	ATP-116	Side Plate	1	-	-

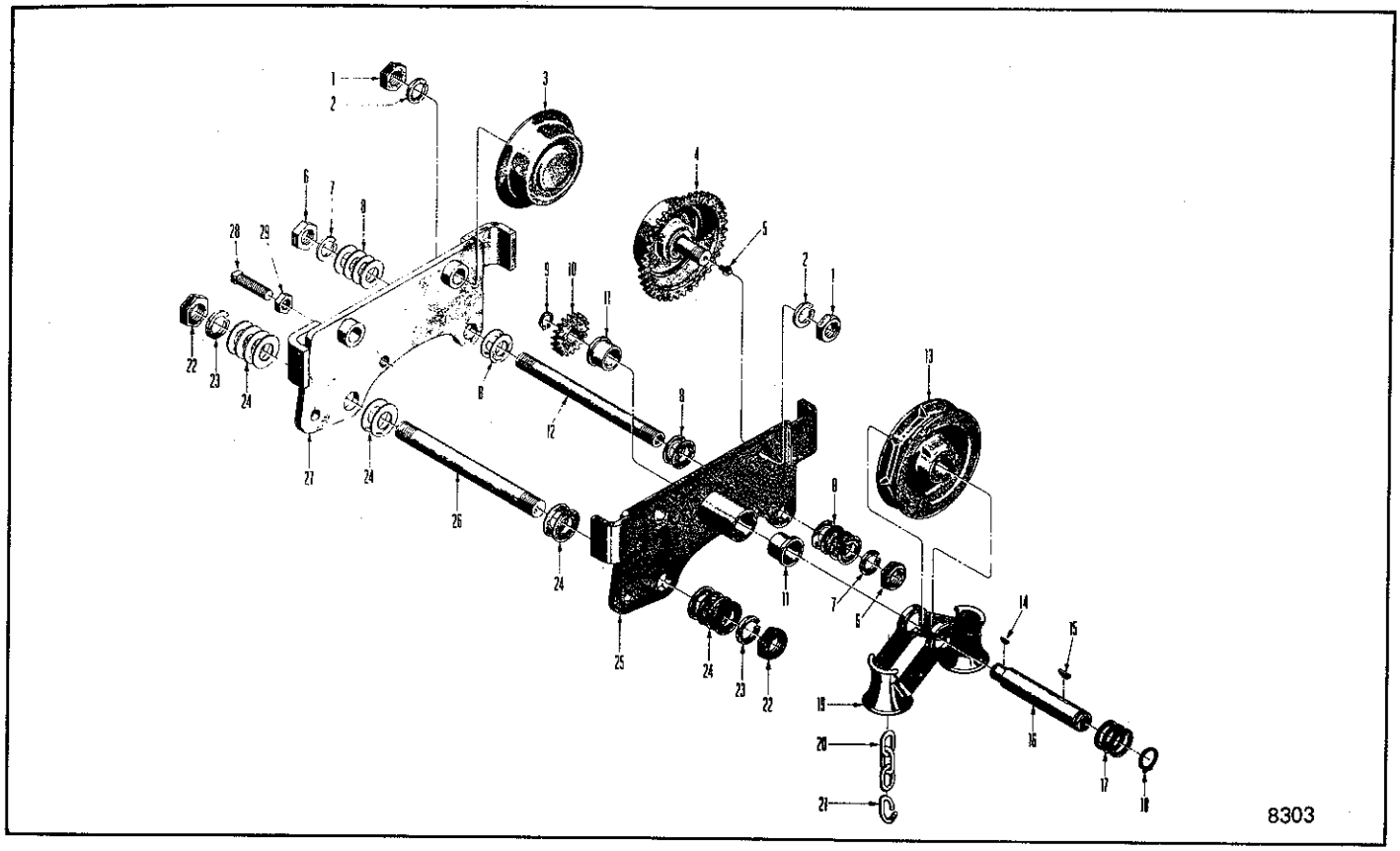
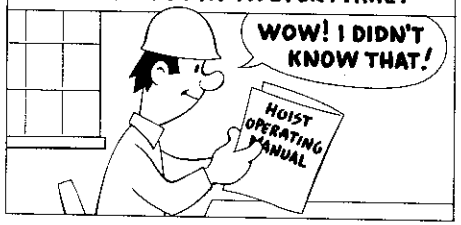


FIG. 4 EXPLODED VIEW OF 1, 1-1/2 AND 2 TON CAPACITY ARMY TYPE HAND GEARED TROLLEY

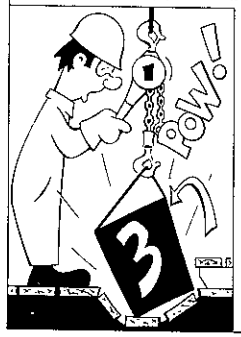
Ref. No.	Part No.	Part Name	Quantity Required	
			1-1/2 & 2 Ton	1 Ton
1	ATG-201	Nut	4	4
2	ATG-202	Lockwasher	4	4
3	ATG-203	Wheel, Plain	2	2
4	ATG-204	Wheel, Geared	2	2
5	ATG-205	Lubrication Fitting	2	-
6	ATG-206	Nut	2	2
7	ATG-207	Lockwasher	2	2
8	ATG-208	Spacer	22	-
	ATG-208	Spacer	-	24
9	ATG-209	Retaining Ring	1	1
10	ATG-210	Pinion	1	1
11	ATG-211	Flange Bearing	2	2
12	ATG-212	Stud	1	1
13	ATG-213	Chain Wheel	1	1
14	ATG-214	Key	1	1
15	ATG-215	Key	1	1
16	ATG-216	Shaft	1	1
17	ATG-217	Machinery Bushing	2	-
	ATG-217	Machinery Bushing	-	3
18	ATG-218	Retaining Ring	1	1
19	ATG-219	Chain Guide	1	1
20	ATG-220	Hand Chain (16'-0")	1	1
21	ATG-221	Open Link	1	1
22	ATG-222	Nut	2	2
23	ATG-223	Lockwasher	2	2
24	ATG-224	Spacer	22	-
	ATG-224	Spacer	-	24
25	ATG-225	Side Plate, Geared	1	1
26	ATG-226	Stud	1	1
27	ATG-227	Side Plate	1	1
28	ATG-228	Set Screw	1	1
29	ATG-229	Nut	1	1

NOTES

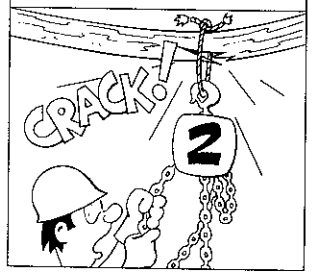
SAFE IS... KNOWING YOUR HOIST!
STUDY MANUFACTURER'S OPERATING INSTRUCTION MANUAL FOR CORRECT HOIST OPERATION. KNOW WHAT TO DO. -AND HOW TO DO IT! ... EVERYTIME!



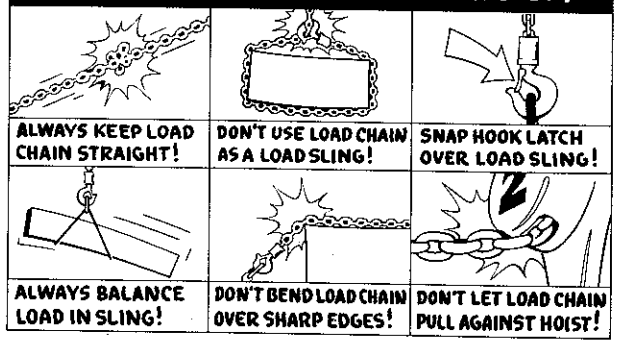
SAFE IS... NEVER OVERLOADING!
ALWAYS BE SURE TO USE PROPER CAPACITY HOIST. ...IN DOUBTFUL WEIGHT SITUATIONS USE HOISTS WITH *OVERLOAD PROTECTION DEVICES* WHICH WILL REJECT DANGEROUS OVERLOADS.



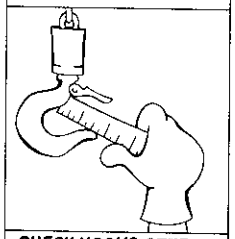
SAFE IS... MAKING SURE UPPER SUSPENSION WILL HOLD THE LOAD!



SAFE IS... RIGGING THE HOIST CORRECTLY!

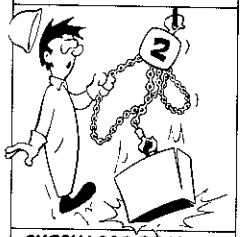


SAFE IS...
NEVER USING A HOIST WITH "OPENED" HOOKS!



CHECK HOOKS OFTEN WITH SCALE OR GAUGE!

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

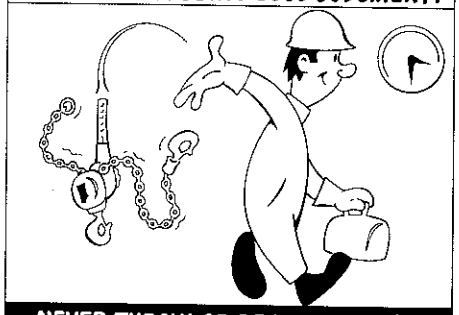


CHECK LOAD BRAKE OPERATION OFTEN!

SAFE IS...
NEVER USING A DAMAGED HOIST!

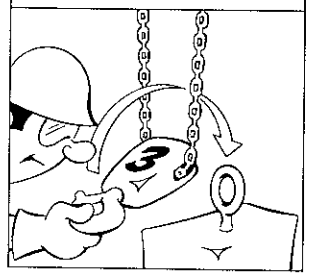
VISUALLY CHECK HOIST CONDITION!

SAFE IS... USING GOOD JUDGMENT!

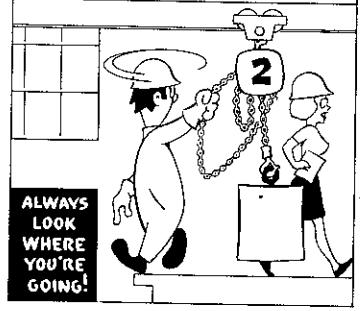


NEVER THROW OR DROP A HOIST!

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

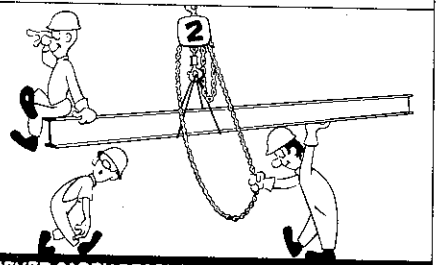


SAFE IS... ALWAYS MAKING SURE OF YOUR FOOTING!



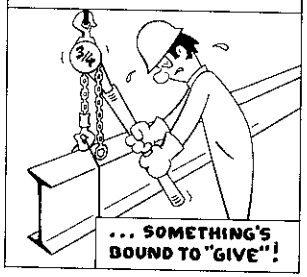
ALWAYS LOOK WHERE YOU'RE GOING!

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



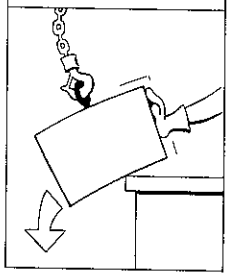
NEVER CARRY PEOPLE ON A HOIST OR THE LOAD. NEVER CARRY LOADS OVER PEOPLE!

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



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** Aluminum
Army Type Trolley Hoist

Certain parts of your trolley hoist will, in time, require replacement under normal wear conditions. It is suggested that the following parts be purchased for your trolley 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
- Pocket Wheel Bearings
- Pinion shaft Bearing
- Set of Wheels

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

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

	IN USA	**IN CANADA**
	LIFT-TECH INTERNATIONAL **PO BOX 769** **MUSKEGON MICHIGAN 49443-0769**	**LIFT-TECH INTERNATIONAL** **CRANES & HOISTS** **53-D COWANSVIEW ROAD** **CAMBRIDGE, ONTARIO, N1R 7L2**
or phone:	**616-733-0821**	**519-621-3201**
or fax:	**616-733-3223**	**519-621-3125**

WARRANTY

WARRANTY AND LIMITATION OF REMEDY AND LIABILITY

A. Seller warrants that its products and parts, when shipped, and its work (including installation, construction and start-up), when performed, will meet applicable specifications, will be of good quality and will be free from defects in material and work-manship. All claims for defective products or parts under this warranty must be made in writing immediately upon discovery and, in any event, within one (1) year from shipment of the applicable item unless Seller specifically assumes installation, construction or start-up responsibility. All claims for defective products or parts when Seller specifically assumes installation, construction or start-up responsibility, and all claims for defective work must be made in writing immediately upon discovery and, in any event, within one(1) year from completion of the applicable work by Seller, provided; however, all claims for defective products and parts must be made in writing no later than eighteen (18) months after shipment, Defective items must beheld for Seller's inspection and return to the original f.o.b. point upon request. THE FOREGOING IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES WHATSOEVER, EXPRESS, IMPLIED AND STATUTORY, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS.

B. Upon Buyer's submission of a claim as provided above and its substantiation, Seller shall at its option either (i) repair or replace its products, part or work at either the original f.o.b. point of delivery or at Seller's authorized service station nearest Buyer of (ii) refund an equitable portion of the purchase price.

C. This warranty is contingent upon Buyer's proper maintenance and care of Seller's products and does not extend to normal wear and tear. Seller reserves the right to void warranty in event of Buyer's use of inappropriate materials in the course of repair or maintenance, or if Seller's products have been dismantled prior to submission to Seller for warranty inspection.

D. The foregoing is Seller's only obligation and Buyers exclusive remedy for breach of warranty, and is Buyer's exclusive remedy hereunder by way of breach of contract, tort, strict liability or otherwise. In no event shall Buyer be entitled to or Seller liable for incidental or consequential damages. Any action for breach of this agreement must be commenced within one (1) year after the cause of action has accrued.