

# OPERATING, MAINTENANCE & PARTS MANUAL

MANUAL #: 33339401



Available in 1t, 2t & 3t capacities • Plain or Geared-Type



Follow all instructions and warnings for inspecting, maintaining and operating this trolley.

The use of any trolley presents some risk of personal injury or property damage. That risk is greatly increased if proper instructions and warnings are not followed. Before using this trolley, each operator should become thoroughly familiar with all warnings, instructions and recommendations in this manual. Retain this manual for future reference and use.

Forward this manual to the trolley operator. Failure to operate the equipment as directed in this manual may cause injury. Should you have any questions regarding this product, please call Columbus McKinnon.

The hoisting equipment described in this manual is intended for industrial use only and should not be used to lift, support or otherwise transport people.

### **GENERAL INFORMATION:**

ANSI B30.11 compliant. The UT series trolleys are designed to be used with several Columbus McKinnon hoists up to a capacity of 3 metric tons. Safety lugs, machined wheels and sealed bearings are included with each trolley. Rubber bumpers are available as an option.

#### **LOAD RATINGS:**

Before installing, make certain the capacity of the hoist does not exceed the capacity of the trolley and the supporting structure is capable of supporting the load, hoist and trolley.

#### **INSTALLATION:**

Adjustable flange width ranges are 2.3" to 8.6" and may be mounted on either American Standard Beams or Wide-Flange Beams. Proper adjustment is obtained by positioning the washers and spacers to achieve a beam to wheel flange spacing of approximately 1/16". See pages 4 and 5 of this manual for recommended guidelines.

#### **MAINTENANCE / INSPECTION:**

The trolley should be inspected periodically for evidence of excess wear or overload and its continued ability to support the load. The frequency of inspection will depend on the severity of use. It is recommended that the user begin with a monthly inspection and extend periods to quarterly, semi-annually or annually based on monthly experience. **Any worn parts should be replaced immediately.** The trolley should be visually inspected for the following conditions: loose hardware, sideplate damage or bending, cracks or distortion, wheel wear or cracks and worn bearings.



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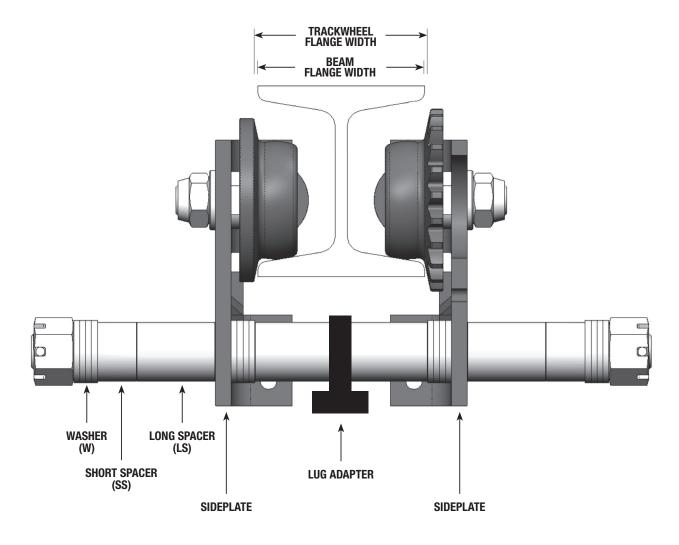
### **ELECTRIC/AIR HOIST SUSPENSION KITS**

The CM Universal Trolley is designed to suspend several electric and air chain hoist models that are part of the CMCO family of brands. Select the appropriate Suspension Kit for your specific hoist listed below.

HOIST	REEVING	MOUNTING POSITION	TROLLEY	SUSPENSION KIT
CM SHOPSTAR / CM SHOPAIR / COFFING SLC / COFFING SLA / LITTLE MULE SLM / BUDGIT SHOPHOIST / BUDGIT SERIES 600	1 & 2	CROSS	UT1	20655K
CM LODESTAR (CLASSIC) (V1) (Small Frame)	1	PARALLEL	UT1	2992UT
CM LODESTAR (CLASSIC) (V1) (Small Frame)	1	CROSS	UT1	2992UTC
CM LODESTAR (CLASSIC) (V1) (Small Frame)	2	CROSS OR PARALLEL	UT1	2993UT
CM LODESTAR (CLASSIC) (V2) (Large Frame)	1	CROSS OR PARALLEL	UT2	3677UT
CM LODESTAR (CLASSIC) (V2) (Large Frame)	2	CROSS OR PARALLEL	UT2	3668UT
CM LODESTAR (CLASSIC) (V2) (Large Frame)	3	CROSS OR PARALLEL	UT3	9561UT
CM LODESTAR (NH) (V1) (Small Frame)	1	PARALLEL	UT1	2992NHUT
CM LODESTAR (NH) (V1) (Small Frame)	1	CROSS	UT1	2992NHUTC
CM LODESTAR (NH) (V1) (Small Frame)	2	CROSS OR PARALLEL	UT1	2993NHUT
CM LODESTAR (NH) (V2) (Large Frame)	1	CROSS OR PARALLEL	UT2	3677NHUT
CM LODESTAR (NH) (V2) (Large Frame)	2	CROSS OR PARALLEL	UT2	3668NHUT
CM LODESTAR (NH) (V2) (Large Frame)	3	CROSS OR PARALLEL	UT3	9561NHUT
CM MAN GUARD / BUDGIT BEHC / YALE KELC	1	CROSS OR PARALLEL	UT2	23456925
CM MAN GUARD / BUDGIT BEHC / YALE KELC	2	CROSS	UT2	32560625
CM MAN GUARD / BUDGIT BEHC / YALE KELC	2	PARALLEL	UT2	32560626
CM MAN GUARD / BUDGIT BEHC / YALE KELC	3	CROSS OR PARALLEL	UT3	50796125
CM AIRSTAR 6 / BUDGIT 6000 / YALE KALC / COFFING CAH (Large Frame)	1	CROSS OR PARALLEL	UT2	23456925
CM AIRSTAR 6 / BUDGIT 6000 / YALE KALC / COFFING CAH (Large Frame)	2	CROSS	UT2	32560625
CM AIRSTAR 6 / BUDGIT 6000 / YALE KALC / COFFING CAH (Large Frame)	2	PARALLEL	UT2	32560626
CM AIRSTAR 6 / BUDGIT 6000 / YALE KALC / COFFING CAH (Large Frame)	3	CROSS OR PARALLEL	UT3	50796125
BUDGIT 2200 / COFFING CAH (Small Frame) / CM AIRSTAR / YALE YAL	1	CROSS	UT1	23561201
BUDGIT 2200 / COFFING CAH (Small Frame) / CM AIRSTAR / YALE YAL	1	PARALLEL	UT1	23561202
BUDGIT 2200 / COFFING CAH (Small Frame) / CM AIRSTAR / YALE YAL	2	CROSS	UT1	23561203
BUDGIT 2200 / COFFING CAH (Small Frame) / CM AIRSTAR / YALE YAL	2	PARALLEL	UT1	23561204
COFFING JLC / LITTLE MULE FLC / YALE YJL	1 & 2	PARALLEL	UT2	33337901
COFFING JLC / LITTLE MULE FLC / YALE YJL	1 & 2	CROSS	UT2	33337901C
COFFING EC1	1 & 2	CROSS OR PARALLEL	UT2	33337902
COFFING EC1	3	CROSS OR PARALLEL	UT3	33337903
COFFING EC3 (3t Max.) (Plain Only)	1 & 2	CROSS OR PARALLEL	UT3	33337904



### **UT WASHER & SPACER PLACEMENT**



Due to the variations in beam flange widths, it is suggested that the beam flange width be measured to determine the exact distribution of washers and spacers. The distance between trackwheel flanges should be 1/8 to 3/16 inch greater than the beam flange width for straight runway beams and 3/16 to 1/4 inch greater than the beam flange width if runway system includes sharp curves. Also, the use of other than CM supplied washers and spacers may result in trackwheel to beam flange variations and thus the recommendations in the following tables will not apply.





### **UT WASHER & SPACER PLACEMENT (CONTINUED)**

Each washer/spacer chart shows the available beam flange width setting from minimum to maximum. To center the hoist under the beam, use the same amount of washers and spacers between the lug adapter and sideplates. The amount of washers and spacers on the outside of the sideplates does not have to be the same.

Note: There will always be one long spacer on each side of the lug adapter.

#### **UT1 MODEL**

BEAM FLANGE	NUMBER OF WASHERS & SPACERS														
WIDTH (in.)	W	SS	LS		W	SS	LS		LS	SS	W		LS	SS	W
2.45	7	1	1		0	0	1		1	0	0		1	1	7
2.68	6	1	1		1	0	1		1	0	1		1	1	6
2.92	5	1	1		2	0	1		1	0	2		1	1	5
3.16	4	1	1		3	0	1		1	0	3		1	1	4
3.39	3	1	1		4	0	1		1	0	4		1	1	3
3.63	2	1	1		5	0	1		1	0	5		1	1	2
3.86	1	1	1		6	0	1		1	0	6		1	1	1
4.18	7	0	1		0	1	1	-	1	1	0		1	0	7
4.42	6	0	1		1	1	1	LUG ADAPTER	1	1	1		1	0	6
4.65	5	0	1	ATE	2	1	1	쁜	1	1	2	ATE	1	0	5
4.89	4	0	1	7	3	1	1	<u></u>	1	1	3	7	1	0	4
5.12	3	0	1		4	1	1	4	1	1	4	בו	1	0	3
5.36	2	0	1	ᆸ	5	1	1		1	1	5	ᆸ	1	0	2
5.60	7	1	0	Ш	0	0	2	┫	2	0	0	Ш	0	1	7
5.83	6	1	0	SID	1	0	2	45	2	0	1		0	1	6
6.07	5	1	0	<u>~</u>	2	0	2	2	2	0	2	S	0	1	5
6.31	4	1	0	٠,	3	0	2	긤	2	0	3	•	0	1	4
6.54	3	1	0		4	0	2		2	0	4		0	1	3
6.78	2	1	0		5	0	2		2	0	5		0	1	2
7.01	1	1	0		6	0	2		2	0	6		0	1	1
7.33	7	0	0		0	1	2		2	1	0		0	0	7
7.57	6	0	0		1	1	2		2	1	1		0	0	6
7.80	5	0	0		2	1	2		2	1	2		0	0	5
8.04	4	0	0		3	1	2		2	1	3		0	0	4
8.27	3	0	0		4	1	2		2	1	4		0	0	3
8.51	2	0	0		5	1	2		2	1	5		0	0	2
8.75	1	0	0		6	1	2		2	1	6		0	0	1

#### Example using a UT1 model:

Measure your beam flange width - **4.94**".

In the beam flange width column, the measured beam size is between 4.89" and 5.12". Always use the larger beam size setting – **5.12**".

The 5.12" setting requires **1-LS** (long spacer), **1-SS** (short spacer) and **4-W** (washers) between the lug adapter and sideplates.

The total clearance distance will be 5.12" - 4.94" = 0.18". If the application requires more clearance, move to the next larger beam size setting- 5.36".

**CAUTION:** The installer must confirm that the trolley will remain on straight sections of beam at increased clearance settings.

### **UT2 & UT3 MODELS**

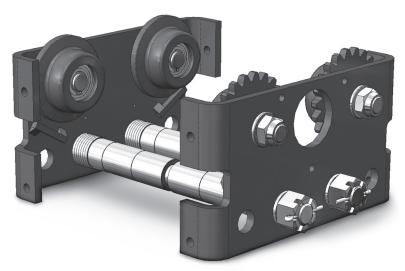
BEAM F	FLANGE H (in.)		NUMBER OF WASHERS & SPACERS													
UT2	UT3	W	SS	LS		W	SS	LS		LS	SS	W		LS	SS	W
2.45	2.46	6	1	1		0	0	1		1	0	0		1	1	6
2.76	2.78	5	1	1		1	0	1		1	0	1		1	1	5
3.08	3.09	4	1	1		2	0	1		1	0	2		1	1	4
3.39	3.41	3	1	1		3	0	1		1	0	3		1	1	3
3.71	3.72	2	1	1		4	0	1	~	1	0	4		1	1	2
4.02	4.04	6	0	1		0	1	1	띪	1	1	0		1	0	6
4.34	4.35	5	0	1	Ш	1	1	1	ш	1	1	1	ш	1	0	5
4.65	4.67	4	0	1	A	2	1	1	5	1	1	2	ATE	1	0	4
4.97	4.98	3	0	1	4	3	1	1	ADAP	1	1	3	1	1	0	3
5.28	5.30	2	0	1		4	1	1		1	1	4		1	0	2
5.60	5.61	6	1	0	Ш	0	0	2	7	2	0	0	Ш	0	1	6
5.91	5.93	5	1	0	$\overline{\Box}$	1	0	2		2	0	1	$\overline{\Box}$	0	1	5
6.23	6.24	4	1	0	<u>S</u>	2	0	2	D D	2	0	2	S	0	1	4
6.54	6.56	3	1	0	υ,	3	0	2	2	2	0	3	U,	0	1	3
6.86	6.87	2	1	0		4	0	2		2	0	4		0	1	2
7.17	7.19	6	0	0		0	1	2		2	1	0		0	0	6
7.49	7.50	5	0	0		1	1	2		2	1	1		0	0	5
7.80	7.82	4	0	0		2	1	2		2	1	2		0	0	4
8.12	8.13	3	0	0		3	1	2		2	1	3		0	0	3
8.43	8.45	2	0	0		4	1	2		2	1	4		0	0	2
8.75	8.76	1	0	0		5	1	2		2	1	5		0	0	1



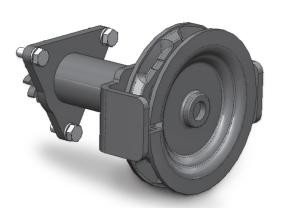


### **UTG GEARED HAND DRIVE INSTALLATION**

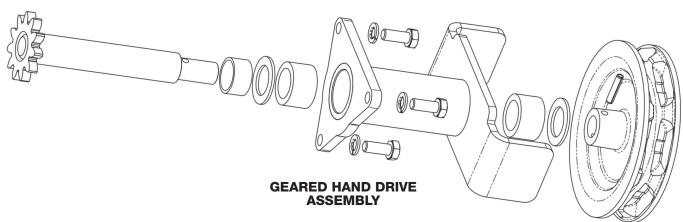
The CM Universal Trolley is available in both plain and geared trolley models. The CM UT is designed to be easily converted from plain to geared in the field. Simply attach the appropriate geared hand drive assembly to the geared sideplate as shown.



**UNIVERSAL TROLLEY** 



**GEARED HAND DRIVE ASSEMBLY** 



#### **GEARED HAND DRIVE ASSEMBLY KITS\***

KIT	PART NUM	BER	DESCRIPTION
UT1	UT2	UT3	DESUNIFIION
11843110	11843110	33336310	GEARED HAND DRIVE ASSEMBLY

<sup>\*</sup> Hand chain and connector link are included with this kit (not shown)

#### **INSTRUCTIONS:**

- 1) Position hand drive assembly onto trolley as shown
- 2) Install (3) lock washers and (3) hex bolts 3) Tighten each hex bolt to 19-24 Nm [14-18 ft./lb.]

For UT1G & UT2G, use Geared Hand Drive Assembly 11843110 For UT3G, use Geared Hand Drive Assembly 33336310 For Motorized Universal Trolley, contact factory

#### **CHAIN EXTENSION KITS\*\***

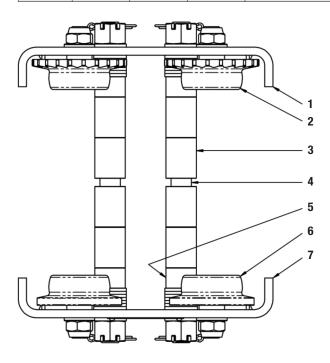
KIT PART NUMBER	DESCRIPTION
51703230	for 30 ft. lift hoist
51703240	for 40 ft. lift hoist
51703250	for 50 ft. lift hoist

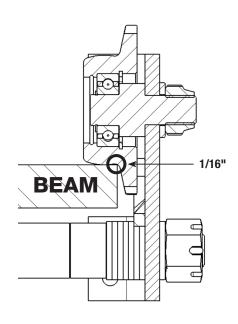
<sup>\*\*</sup> This kit extends the standard hand chain furnished with trolley, which is in proportion to a 20' lift hoist.

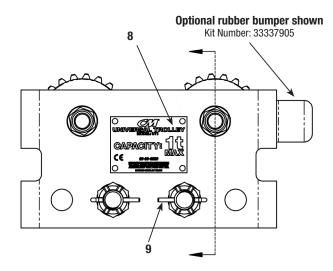


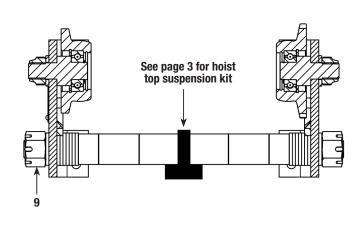
### **UT PARTS LIST**

ITEM	P/	ART NUMBE	:R	DECODIDATION	VIT CONTENTS
NUMBER	UT1	UT2	UT3	DESCRIPTION	KIT CONTENTS
1	11843108	23554608	33336308	SIDEPLATE KIT, GEARED	2 - geared wheels, 1 - geared sideplate, 2 (UT1 & UT2) or 4 (UT3) - bearings, 4 - retaining rings, 2 - axles, 2 - nuts and 2 - washers
2	0508211A	0508212A	0508213A	WHEEL ASSEMBLY, GEARED	1 - geared wheel, 2 - retaining rings, 1 (UT1 & UT2) or 2 (UT3) - bearings, 1 - axle, 1 - washer and 1 - nut
3	11842001	11842003	11842007	SPACER KIT, LONG	8 - long spacers
4	11843101	23554601	33336301	SUSPENSION PIN KIT	2 - suspension pins
5	11842002	11842004	11842008	SPACER KIT, SHORT	4 - short spacers
6	0508207A	0508208A	0508209A	WHEEL ASSEMBLY, PLAIN	1 - plain wheel, 2 - retaining rings, 1 (UT1 & UT2) or 2 (UT3) - bearings, 1 - axle, 1 - washer and 1 - nut
7	11843107	23554607	33336307	SIDEPLATE KIT, PLAIN	2 - plain wheels, 1 - plain sideplate, 2 (UT1 & UT2) or 4 (UT3) - bearings, 4 - retaining rings, 2 - axles, 2 - nuts and 2 - washers
8	11843102	23554602	33336302	NAMEPLATE KIT	1 - nameplate and 4 - drive screws
9	11843104	23554604	33336304	HARDWARE KIT	28 (UT1) or 24 (UT2 & UT3) - suspension pin washers, 4 - slotted nuts and 4 - cotter pins













#### **DECLARATION OF CONFORMITY**

In accordance with Machinery Directive 2006/42/EC (Appendix II A)

We hereby declare, that the design, construction and commercialized execution of the below mentioned machine complies with the essential health and safety requirements of the EC Machinery Directive. The validity of this declaration will cease in case of any modification or supplement not being agreed with us previously.

Furthermore, validity of this declaration will cease in case that the machine will not be operated correctly and in accordance with the operating instructions and/or not be inspected regularly.

**Description:** Trolley UT Capacity: 1000 - 3000 kg Machine Type: Hoisting equipment

**Relevant EC Directives:** EC Machinery Directive 2006/42/EC ISO 12100-1:2003/A1:2009 **Transposed harmonised** standards in particular: ISO 12100-2:2003/A1:2009

EN 349:2008

**Applied Standards:** ASME B30.11 (Monorail Systems and Underhung Cranes)

ISO 9001 **Quality Assurance:** 7.13.2012 Date:

**Identification of the Signee:** 

David K. Huber

Director – Product Engineering Systems & Standards

Hoist and Rigging Americas Columbus McKinnon Corporation

















SHAW-BOX

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