

EFFECTIVE: NOVEMBER 24, 2008

ALL PRICES IN U.S. DOLLARS



EXTRA PRICES

XTRA-1108

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EXTRA PRICESEFFECTIVE: November 24, 2008
800-888-0985**ELECTRIC HOISTS AND TROLLEYS**

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CM TROLLEYS

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1) **CHAIN CONTAINER - LONG LIFT**

LODESTAR - Apply for lifts other than those listed. 10 inch diameter bucket for close headroom and long lift applications. Brackets included.

***See also User Price Book HFLU-55**

<u>LENGTH</u>	<u>MODEL</u>	<u>MAX.LIFT</u>	<u>TOTAL PRICE</u>
10 Inch *Code# 2461	A-AA-B-C-F	44'	\$ 415.00
	E - H	22'	
	J-JJ-L-LL	28'	
	R - RR	14'	
	RT - RRT	9'	
15 Inch *Code# 2463	A-AA-B-C-F	104'	\$ 430.00
	E - H	52'	
	J-JJ-L-LL	66'	
	R-RR	33'	
	RT - RRT	22'	
20 Inch *Code# 2464	A-AA-B-C-F	166'	\$ 443.00
	E - H	83'	
	J-JJ-L-LL	106'	
	R-RR	53'	
	RT - RRT	35'	
25 Inch *Code# 2465	A-AA-B-C-F	230'	\$ 457.00
	E - H	115'	
	J-JJ-L-LL	144'	
	R-RR	72'	
	RT - RRT	48'	
30 Inch *Code# 2466	A-AA-B-C-F	290'	\$ 469.00
	E - H	145'	
	J-JJ-L-LL	180'	
	R-RR	90'	
	RT - RRT	60'	

Note: May require counter balancing

POWERSTAR - See HFLU-0808

2) **COILED CORD** - (Power or Control Cord)

LODESTAR/POWERSTAR/XL

4 ft. retracted, 25 ft. extended

Add to user list price of hoist

AWG #16-4 Code 89383	\$	333.39
AWG #14-4 Code 89384	\$	400.56

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3a) **CONTACTOR - MAINLINE (UP TO 4 H.P. - HOIST DUTY)**

LODESTAR

Add to user list price of motor driven trolley. \$ 711.50

Extra charge includes mainline contactor, control transformer, larger control box, mounting brackets and wiring.

NOTE: Price does not include additional buttons in control station.
Mainline Contactor Only (4 H.P.) \$ 261.60

3b) **CONTACTOR - MAINLINE**

POWERSTAR/XL

Add to user list price of hoist

- A. Hoist Duty (Nema 0) \$ 1,394.95
Up to 3 H.P. @ 230 Volts
Up to 5 H.P. @ 460 volts
- B. Size 1 (Nema 1) \$ 1,540.60
Up to 7.5 H.P. @ 230 volts
Up to 10 H.P. @ 460 volts
- C. Size 2 (Nema 2) \$ 3,949.40
Up to 15 H.P. @ 230 volts
Up to 25 H.P. @ 460 volts

4) **CONTACTOR - REVERSING TROLLEY (CARRIER) OR BRIDGE** - Single or two speed carrier or bridge

LODESTAR/POWERSTAR/XL

- A. Thru 2 H.P. (Max) \$ 596.80
- B. Over 2 H.P. thru 4 H.P. \$ 891.35

5) **CONTROL CIRCUIT, 24 or 48 VOLT - EXTRA CHARGES AS FOLLOWS**

LODESTAR

HOIST ONLY

	<u>115-1-60</u>	<u>230/460-3-60</u>
A thru H (single speed)	\$82.45	\$82.45
J, L, R & RT (single speed)	\$82.45	\$82.45
JJ, LL, RR, RRT (single speed)	Not Available	\$82.45
Two speed (All Models)	Not Available	\$82.45

ELECTRIC HOIST/TROLLEY EXTRA PRICES

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5) **CONTROL CIRCUIT, 24 or 48 VOLT - EXTRA CHARGES AS FOLLOWS** - Cont.

<u>LODESTAR</u>	<u>115-1-60</u>	<u>230/460-3-60</u>
M.D.T. ONLY	\$ 45.00	\$ 45.00

Extra charge for modified control circuit includes special contactor, transformer, speed selecting relay (for two speed hoists), miscellaneous wiring and hardware.

<u>POWERSTAR/XL</u>		
HOIST ONLY	(1 or 2 speed standard voltages)	\$ 128.00
M.D.T. ONLY	(1 or 2 speed standard voltages)	\$ 46.95

Extra charge for modified control circuit includes special contactor, transformer, speed selecting relay (for two speed units), miscellaneous wiring and hardware.

6) **ADDITIONAL CONTROL CABLE** - Extra charges beyond standard 6 ft. drop

LODESTAR/POWERSTAR/XL

<u>CONTROL CORD</u>	<u>EXTRA PER FT.</u>
AWG #16-8	\$ 13.40
AWG #16-10	\$ 15.35
AWG #16-12	\$ 16.95
AWG #16-14	\$ 18.90

7a) **ADDITIONAL BUTTONS IN CONTROL STATION (NEMA 3R)**

LODESTAR/POWERSTAR/XL

Add to user list price of motor driven trolley

A.	Two extra single speed buttons	\$ 196.90
B.	Two extra two speed buttons	\$ 240.80
C.	On/Off (for mainline disconnect)	\$ 199.65
D.	Mushroom	\$ 195.50
E.	Key Selector	APPLY
F.	3-Position Selector	APPLY

Extra charge includes larger cables, chain strain relief and mounting hardware (mainline or bridge contactor(s) not included)

ELECTRIC HOIST/TROLLEY EXTRA PRICES

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7b) **ADDITIONAL BUTTONS FOR MULTI-FUNCTION CONTROL STATIONS,
PENDANT FROM HOIST - HOIST LESS MDT**

LODESTAR

Add to User List Price of hoist.

ALL MODELS

A.	2 additional single speed buttons	\$	161.00
B.	2 additional 2 speed buttons	\$	367.95
C.	On/Off momentary (for mainline contactor)	\$	367.95

Extra charge includes special wiring diagram, reworked end cover, 3 ft. tag lead out of hoist and chain strain relief (relays and reversing contactors and larger transformers [25 VA standard] not included).

8) **SURFACE MOUNTED CONTROL STATION - CAST STEEL OR STAINLESS STEEL**

LODESTAR/POWERSTAR/XL

Push buttons marked up and down, or forward and reverse, or both.

	<u>2 Button</u>	<u>4 Button</u>
All single speed, standard lift models	APPLY	APPLY
For two speed - APPLY		

9) **CONTROL TRANSFORMER** - For additional control functions

LODESTAR/POWERSTAR/XL

Add to user list price of hoist.

A.	100 VA	\$	931.55
B.	250 VA	\$	1,184.15

10) **CRATING AND PACKAGING**

LODESTAR/POWERSTAR/XL

Other than standard factory packaging, apply for pricing. APPLY

ELECTRIC HOIST/TROLLEY EXTRA PRICES

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11) **DUAL HOIST/TROLLEY CONTROL**

LODESTAR/POWERSTAR/XL

A. TWO HOISTS CONTROLLED FROM ONE PENDANT CONTROL STATION

Push buttons marked Hoist Up and Hoist Down, selector switch marked Hoist #1, Hoist #2 and both.

Add to user list price of each hoist.

All single speed models with contactor	\$ 724.00
All two speed models	\$ 1,448.00

Price includes hoist isolating contactor, transformer (mounted in box), hoist speed selecting relay (for 2 speed units), weatherproof electrical enclosure, #16-8 control station cable (for single speed hoists) or #16-10 control station cable (for two speed units) chain strain relief and hardware.

Control station is pendant from electrical enclosure and control cord length is based on 10 ft. hoist lift. For longer control cord add:

<u>CONTROL CORD</u>	<u>EXTRA PER FT.</u>
AWG #16-10	\$ 15.35

Standard distance between hoists is 10 ft. for each additional foot of distance add:

<u>CONTROL & POWER CORDS</u>	<u>EXTRA PER FT.</u>
Single or two speed models	\$ 24.80

B. TWO HOISTS AND TWO MOTOR DRIVEN TROLLEYS CONTROLLED FROM ONE PENDANT CONTROL STATION

- Push buttons marked Hoist Up and Hoist Down, Trolley Forward and Trolley Reverse, selector switch marked Hoist #1, Hoist #2, and both, Trolley #1, Trolley #2 and both

Add to user list price of each hoist and trolley.

All single speed models with contactor	\$ 1,075.90
All two speed models	\$ 2,154.60

Price includes weatherproof electrical enclosure, transformer, hoist isolating contractor, trolley isolating contactor, hoist speed selecting relay (for 2 speed units), larger control cables for additional control functions, chain strain relief & hardware.

Control station is pendant from electrical enclosure and control cord length is based on 10 ft. hoist lift. For longer control cord add:

<u>CONTROL CORD</u>	<u>EXTRA PER FT.</u>
AWG #16-14	\$ 18.90

ELECTRIC HOIST/TROLLEY EXTRA PRICES

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11) **DUAL HOIST/TROLLEY CONTROL** - Cont.

Standard distance between hoists is 10 ft. for each additional foot of distance add:

<u>CONTROL & POWER CORDS</u>	<u>EXTRA PER FT.</u>
Single or two speed models	\$ 43.60

12) **ELECTRICAL INTERLOCK**

LODESTAR/POWERSTAR/XL - Additional normally closed contacts installed in the hoist or trolley to prevent both hoisting and lowering or trolley forward and reverse circuits to become energized simultaneously.

Add to each contactor \$ 125.50

13) **EXTENDED ARM FOR CONTROL STATION** (Outrigger)

1 4 ft. or 5 ft. extension.

LODESTAR/POWERSTAR/XL

Add to user list price of hoist or motor driven trolley. \$ 1,159.55

Price includes counterweights and anti-tipping rollers (if required). Add for extra control cord as required.

Can also offer 180° pivot - need to specify length required from center web of beam. APPLY

14) **EYEBOLT TYPE SUSPENSION (TO REPLACE UPPER HOIST HOOK)**

Add to user list price of hoist with standard rigid hook suspension

LODESTAR

Maximum 2 ton Capacity \$ 995.70

15) **FUNGUS PROTECTION** - To protect hoist or trolley components from humid atmospheres (special varnish spray for various electric components).

LODESTAR/POWERSTAR/XL

A. Hoist only - Add to user list price of hoist \$ 213.90

B. Trolley only - Add to user list price of trolley \$ 167.25

NOTE: Also add weatherproofing extra from sales literature if not standard

ELECTRIC HOIST/TROLLEY EXTRA PRICES

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16) **HOIST OR TROLLEY HIGH TEMPERATURE SERVICE** - (Special motor insulation)

A. **LODESTAR**

Add to user list price of hoist or trolley

Hoist

Class F - Standard (rated at 135°C)	STANDARD
Class H (rated at 155°C)	\$ 637.05

Trolley

Class F - Standard (rated at 135°C)	STANDARD
Class H (rated at 155°C)	\$ 637.05

B. **POWERSTAR**

Add to user list price of hoist or trolley

Hoist

Class F - Standard (rated at 135°C)	STANDARD
Class H (rated at 155°C)	\$ 2,101.85

Trolley

Class F (rated at 135°C)	STANDARD
Class H (rated at 155°C)	\$ 749.85

C. **LODESTAR XL**

Add to user list price of hoist or trolley

Hoist

Class F - Standard (rated at 135°C)	STANDARD
Class H (rated at 155°C)	\$ 1,137.85

Trolley

Class F (rated at 135°C)	STANDARD
Class H (rated at 155°C)	\$ 865.25

ELECTRIC HOIST/TROLLEY EXTRA PRICES

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17) **LONG LIFT LIMIT SWITCHES**

LODESTAR - Apply for lifts longer than those listed.

<u>HOIST MODEL (1 & 2 SPEED)</u>	<u>LIFT RANGE FT.</u>	<u>EXTRA CHARGE</u>
A & C	0 to 204	N/C STANDARD
A & C	205 to 260	\$ 96.00
AA	0 to 385	N/C STANDARD
AA	386 to 490	\$ 96.00
B	0 to 102	N/C STANDARD
B	103 to 130	\$ 96.00
E & H	0 to 47	N/C STANDARD
E & H	48 to 60	\$ 96.00
F	0 to 102	N/C STANDARD
F	103 to 130	\$ 96.00
J	0 to 125	N/C STANDARD
J	126 to 160	\$ 96.00
JJ	0 to 254	N/C STANDARD
JJ	255 to 324	\$ 96.00
L	0 to 125	N/C STANDARD
L	126 to 160	\$ 96.00
LL	0 to 254	N/C STANDARD
LL	255 to 324	\$ 96.00
R	0 to 66	N/C STANDARD
R	67 to 84	\$ 96.00
RR	0 to 125	N/C STANDARD
RR	126 to 160	\$ 96.00
RT	0 to 44	N/C STANDARD
RT	45 to 56	\$ 96.00
RRT	0 to 83	N/C STANDARD
RRT	84 to 106	\$ 96.00

NOTE: Above extra charge is for finer thread limit switch shaft and traveling nuts. Hoist duty cycle must be considered if repetitive lifting is required

Also, coarser 28 thread limit switch shaft and traveling nuts are available to provide finer adjustment for close headroom applications. These 28 thread limits reduce lift range to one half the long lift ranges shown above.

EXTRA CHARGE
\$ 96.00

ELECTRIC HOIST/TROLLEY EXTRA PRICES

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17) **LONG LIFT LIMIT SWITCHES** Cont.

POWERSTAR

2 & 3 Ton - up to 199 ft. lift.

4, 5, & 6 Ton - up to 99 ft. lift

EXTRA CHARGE

N/C STANDARD

N/C STANDARD

2 & 3 Ton - over 199 ft. but less than 254 ft.

4, 5 & 6 Ton - over 99 ft. but less than 127 ft.

7 1/2 - 10 Ton - over 66 ft. but less than 84 ft.

12 Ton - over 40 ft. but less than 63 ft.

15 Ton - over 39 ft. up to 50 ft.

\$ 96.00

Extra charge is for specially machined limit
switch shaft and traveling nuts (56 threads per inch)

Longer Lifts

APPLY

LODESTAR XL

Capacity	Reeving	Speed	Lift Range Ft.
2 ton	Single	18 fpm	121 - 152
2 ton	Single	24 fpm	131 - 165
2 ton	Single	30 fpm	213 - 269
3 ton	2-part	9 fpm	61 - 76
3 ton	2-part	12 fpm	66 - 82
3 ton	2-part	15 fpm	107 - 134
4 ton	2-part	9 fpm	61 - 76
4 ton	2-part	12 fpm	66 - 82
4 ton	2-part	15 fpm	107 - 134
5 ton	2-part	9 fpm	61 - 76
5 ton	2-part	12 fpm	66 - 82
5 ton	2-part	15 fpm	107 - 134
5 ton	3-part	6 fpm	41 - 50
5 ton	3-part	8 fpm	44 - 55
6 ton	3-part	6 fpm	41 - 50
6 ton	3-part	8 fpm	44 - 55
6 ton	3-part	10 fpm	72 - 89
7.5 ton	3-part	6 fpm	41 - 50
7.5 ton	3-part	10 fpm	72 - 89

\$ 96.00

Extra charge is for specially machined limit
switch shaft and traveling nuts (56 threads per inch)

Longer Lifts

APPLY

18) **LUG SUSPENSION FOR PATENTED CARRIERS**

LODESTAR

LUG SUSPENSION FOR AMERICAN MONORAIL CARRIERS - Add to
"Hoist Only" Column in HFLU price sheet.

LIST PRICE EA.

Models A-AA-B-C-F on A-167 Load Bar	Code 2780	APPLY
Models E-H on A-212 Load Bar	Code 2781	\$ 337.00
Models A-AA-B-C-F on A-212 Load Bar	Code 2791	APPLY
Models J-L-JJ-LL on A-212 Load Bar	Code 3618	\$ 326.00
Models R-RR on A-215 Load Bar	-	APPLY

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18) **LUG SUSPENSION FOR PATENTED CARRIERS** Cont.

LODESTAR

LUG SUSPENSION FOR CLEVELAND TRAMRAIL CARRIERS - Add to
"Hoist Only" Column in HFLU price sheet.

LIST PRICE EA.

Models A-AA-B-C-F on 2K-8780 Load Bar	Code 2794	APPLY
Models E-H on 2K-8780 Load Bar	Code 2795	APPLY
Models J-JJ on 2K-8780 Load Bar	Code 3620	APPLY
Models A-AA-B-C-F on 3K-7143 Load Bar	Code 2786	\$ 258.00
Models J-L-JJ-LL on 3K-7143 Load Bar	Code 3621	\$ 300.00
Models E-H on 3K7143 Load Bar	Code 2787	APPLY
Models R-RR on 3K-7143 Load Bar	Code 3637	\$ 359.00

LUG SUSPENSION FOR PATENTED CARRIERS

EXTRA CHARGE

Models RT-RRT APPLY

Manufacturer, Carrier Model Number and Load Bar

NOTE: Number, and/or Load Bar Details must be submitted.
(Special)

19) **MAINTAINED CONTROL (AUTOMATIC HOOK TRAVEL IN TWO DIRECTIONS)**

LODESTAR

The hoist must have a contactor which is equipped with auxiliary contacts (electrical interlock - n.o. contacts), used in conjunction with a three button control station (or stations if more than one control point is desired). For **dumbwaiter** applications, the protector gear must be replaced by a solid intermediate gear and hoist be equipped with rigid type suspension.

Push buttons are normally marked "Stop, Up and Down"

Add to user list price of hoist \$ 1,094.40

The above price includes a single 3 button station, surface mounted type.

20) **OVERCURRENT PROTECTION - HOIST OR TROLLEY**

LODESTAR

A. **THERMAL PROTECTION** - thermal overload device
(Klixon) in motor winding

Add to user list price of hoist or trolley \$ 49.00

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20) **OVERCURRENT PROTECTION - HOIST OR TROLLEY** Cont.

**B. MOTOR THERMAL OVERLOAD RELAYS (T.O.R.)
(AUTOMATIC RESET) FOR OVERCURRENT PROTECTION**

To protect motors against excessive voltage drop and current draw
(1 relay required for single speed motor, 2 relays for 2 speed motor)

- 1. For hook, lug or low headroom trolley suspension - Add to User List Price of hoist:

All 3 phase single speed models (1 relay)	\$ 872.10
All 2 speed models (2 relays)	\$ 1,141.00

Price includes box, straps, brackets for mounting outside hoist and wiring.

- 2. For M.D.T. suspensions - Add to User List Price of trolley:

3 phase - M.D.T. only (1 relay)	\$ 250.55
3 phase single speed hoist with M.D.T. (2 relays)	\$ 501.00
Two speed hoist with M.D.T. (3 relays)	\$ 751.50

Price includes larger control box, mounting brackets and wiring.

**C. MOTOR OVERCURRENT PROTECTION (REPLACEABLE FUSES)
SINGLE OR 3 PHASE**

Set of fuses to protect each motor against voltage drop and excessive current draw.

- 1. For hook, lug or low headroom trolley suspension - Add to User List Price of hoist:

Models A thru H - Single phase (2 fuses)	\$ 689.25
Three phase - Single speed (3 fuses)	\$ 705.20
Three phase - Two speed (6 fuses)	\$ 751.50

Price includes box, straps, brackets for mounting outside hoist and wiring.

Trolley Mounted Only

Models J, L, R & RT - Single phase (2 fuses)	\$ 501.00
Models J thru RRT - Three phase -	
Single speed (3 fuses)	\$ 525.60
Two speed (6 fuses)	\$ 576.30

Note: External box is required - fuses are mounted inside box.

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21a **OVERSIZED BEAMS**

LODESTAR

A. **LOW HEADROOM TROLLEY**

Add to list price of trolley for larger than standard flange widths.

<u>CAPACITY</u>	<u>LARGER "S" BEAMS</u>	<u>WF SHAPES</u>	<u>EXTRA CHARGE</u>
Up to 1 Ton	Over 5 5/8" thru 7 1/4"	Over 5 13/16" thru 6 13/16"	\$ 67.00

SPECIFY STANDARD CODE #3588

Above are maximum obtainable flange widths. Extra charge is for larger load bracket and longer suspension bolts.

2 Ton	Over 6" thru 8"	Over 5 13/16" thru 8 1/16"	\$ 86.00
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Extra charge is for larger load bracket and longer suspension bolts. SPECIFY STANDARD CODE #3570

2 Ton	-	Over 8 1/16" thru 10 9/16"	\$ 195.85
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10 9/16" maximum obtainable flange width. Extra Charge is for larger load bracket, longer suspension bolts and modified side frames (addition of spacer block for support).

3 Ton	Over 5 5/8" thru 7 1/4"	Over 5 7/16" thru 7 5/16"	\$ 145.30
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Extra charge is for longer suspension bolts and larger load bracket.

3 Ton	Over 7 1/4" thru 8"	Over 7 5/16" thru 8 15/16"	\$ 327.05
	-	Over 9 1/16" thru 10 1/2"	\$ 722.60

10 1/2" is maximum obtainable flange width. Extra charge is for longer suspension bolts and modified side frames (addition of spacer block for support and machined steel load bracket) - Special.

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21a **OVERSIZED BEAMS** Cont.

LODESTAR

B. SERIES 635 MOTOR DRIVEN TROLLEY

Add to list price of Motor Driven Trolley for larger than standard flange widths.

<u>CAPACITY</u>	<u>LARGER "S" BEAMS</u>	<u>WF SHAPES</u>	<u>EXTRA CHARGE</u>
Up to 2 Tons	Over 5 5/8" thru 8"	Over 5 7/16" thru 8 3/16"	\$ 86.80

Extra charge is for larger load bracket and longer suspensions bolts.

Up to 2 Tons	-	Over 8 3/16" thru 10 1/4"	\$ 425.95
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10 1/4" is maximum obtainable flange width. Extra charge is for larger load bracket, longer suspension bolts and modified side frames (addition of spacer block for support).

3 Ton	Over 5 5/8" thru 7 1/4"	Over 5 7/16" thru 7 1/16"	\$ 154.10
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Extra charge is for longer suspension bolts and larger load bracket.

3 Ton	Over 7 1/4" thru 8"	Over 7 5/16" thru 9 1/8"	\$ 336.50
	-	Over 9 1/8" thru 10 1/2"	\$ 722.60

10 1/2" maximum obtainable flange width. Extra Charge is for longer suspension bolts, modified side frames (addition of spacer block for support and machined steel load bracket) - Special.

ELECTRIC HOIST/TROLLEY EXTRA PRICES

EFFECTIVE: November 24, 2008
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21b **OVERSIZED BEAMS**

POWERSTAR/XL

Add to list price of trolley or hoist with trolley.

CAPACITY

<u>TONS</u>	<u>LARGER "S" BEAMS</u>	<u>WF SHAPES</u>	<u>EXTRA CHARGE</u>
2 Ton	Over 5 1/2"	Over 5 5/16"	\$ 136.70
Powerstar and XL	thru 7 5/8"	thru 7 7/16"	

Extra charge is for longer suspension bolts and modified frames.
(Addition of spacer block for support).

2 Ton			
Powerstar and XL	Over 7 5/8"	Over 7 7/16"	\$ 289.70
	thru 8"	thru 9 9/16"	
	–	Over 9 9/16"	\$ 1,041.90
		thru 13 5/8"	

13 5/8" is maximum obtainable flange width. Extra Charge is for longer suspension bolts and modified side frames, (Addition of spacer block for support) - Special.

3 to 6			
Powerstar Only	Over 6 1/4"	Over 6 1/16"	\$ 136.70
	thru 7 5/8"	thru 7 7/16"	

Extra Charge is for longer suspension bolts and modified side frames
(Larger spacer block for support).

3 to 6			
Powerstar Only	Over 7 5/8"	Over 7 7/16"	\$ 351.60
	thru 8"	thru 8 13/16"	
	–	Over 8 13/16"	\$ 722.60
		thru 10 3/4"	

Extra charge is for longer suspension bolts and modified side frames.
(Larger spacer block for support) - Special. Apply for larger than 10 3/4"

7 1/2 Ton			
Powerstar Only	Over 7 1/2"	Over 7 5/16"	\$ 501.90
	thru 8"	thru 8 13/16"	
	–	Over 8 13/16"	\$ 722.60
		thru 10 1/2"	

9 - 10			
Powerstar Only	–	Over 7 13/16"	\$ 565.40
		thru 8 13/16"	
	–	Over 8 13/16"	\$ 722.60
		thru 10 1/2"	

Extra charge is for longer suspension bolts and modified side frames.
(Larger spacer block for support) - Special.

12 - 15			
Powerstar Only	-	Over 8 13/16"	\$ 1,041.90
		thru 10 1/2"	

Extra charge is for longer suspension bolts and modified side frame.
(Larger spacer block for support) - Special.

ELECTRIC HOIST/TROLLEY EXTRA PRICES

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22) **SPECIAL PAINT OR FINISH**

LODESTAR/POWERSTAR/XL

Other than standard factory finish, apply for pricing.

APPLY

23a **PATENTED TRACK**

LODESTAR

A. **LOW HEADROOM TROLLEY**

Standard trolleys up to 2 ton capacity will operate on patented track with 3.33" or 3 1/4" flange widths, but may not negotiate smaller radius curves, switches, interlocks or splice plates.

NOTE:

A rigid lug for a MDT must be used to join hoist to special low headroom trolley.

For operation on 2", 3.33" or 3 1/4" patented track using flat tread wheels (if desired). Add to user list price of low headroom trolley:

CAPACITY

<u>(TONS)</u>	<u>2" FLANGE</u>
*1	\$1,062.70
2	\$635.45
3	N/A
	<u>3.33" OR 3 1/4" FLANGE</u>
1	\$751.14
2	\$323.15
3	\$163.30

Extra charge is for plain type Motor Driven Trolley (1/8 - 2 Ton) with modified side frames and flat tread trackwheels (customer responsible for counterweighting if required) - Special.

* Requires 2 ton load bracket and MDT lug. Lug must be ordered separately.

B. **SERIES 635 MOTOR DRIVEN TROLLEY**

Standard trolleys up to 2 ton capacity will operate on patented track with 3.33" or 3 1/4" flange widths, but may not negotiate smaller radius curves, switches, interlocks or splice plates. Also this trolley is not suitable for operation on Cleveland Tramrail "2100" Rail.

For operation on 2", 3.33" or 3 1/4" patented track using flat tread wheels. Add to user list price of motor driven trolley.

CAP

<u>(TONS)</u>	<u>2" FLANGE</u>
Up to 2	\$530.80
3	N/A
	<u>3.33" OR 3 1/4" FLANGE</u>
Up to 2	\$155.70
3	\$155.70

Extra charge is for modified side frames and flat tread trackwheels (customer responsible for counterweighting if required) - Special

ELECTRIC HOIST/TROLLEY EXTRA PRICES

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23b **PATENTED TRACK** - with 3.33" or 3 1/4" flange widths

POWERSTAR/XL

Standard trolleys up to 2 ton will operate on patented track with 3.33" or 3 1/4" flange widths but are not suitable for operation on Cleveland Tramrail "2100" Rail. The 3 thru 5 ton must be modified in order to operate on patented track with 3.33" or 3 1/4" flange widths, and are not suitable for operation on Cleveland Tramrail "2100" Rail or Louden "Supertrack."

23b **PATENTED TRACK** - with 3.33" or 3 1/4" flange widths - Cont.

POWERSTAR/XL

NOTE: Trolley may not negotiate smaller radius curves, switches, interlocks or splice plates.

Add to list price of trolley or hoist with trolley

1.	Up to 2 ton	Powerstar and XL		N/C
2.	3 thru 6 ton	Powerstar Only	\$	310.45

Extra charge is for 3 thru 6 ton, includes shorter suspension bolts, modified side frames and flat tread wheels.

24) **POWER CORD STRAIN RELIEF**

LODESTAR/POWERSTAR/XL

Add \$ 56.77

NOTE: Specify Code 68695 on order.

25a **SPECIAL POWER SUPPLIES**

LODESTAR

A. HOIST ONLY

Add to user list price of standard 115-1-60 hoist (single speed units only)

Models A thru H, J, L, R & RT

<u>115-1-50</u>	<u>208-1-60</u>	<u>230-1-60</u>	<u>230-1-50</u>
\$ 42.55	\$ 42.55	\$ 42.55	\$ 42.55

Add to user list price of standard 230/460-3-60 hoist
All models single or two speed

<u>575-3-60</u>	<u>208-3-60</u>	<u>380-3-50</u>	<u>230-3-50</u>	<u>380-3-60</u>
\$ 42.55	Standard Hoist *	Standard Hoist *	Standard Hoist *	\$ 243.95

* No extra charge for special power supply when noted as "Standard Hoist"
Please note, however, that hoist motor provided will be 230V or 460V nominal

ELECTRIC HOIST/TROLLEY EXTRA PRICES

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25a **SPECIAL POWER SUPPLIES** - Cont.

LODESTAR

B. M.D.T. ONLY

Add to user list price of standard motor driven trolley.

<u>115-1-50</u>	<u>208-1-60</u>	<u>230-1-60</u>	<u>230-1-50</u>	<u>380-3-60</u>
\$ 45.00	\$45.00	\$ 45.00	\$45.00	\$ 243.95

<u>208-3-60</u>	<u>380-3-50</u>	<u>575-3-60</u>	<u>230-3-50</u>
Standard Trolley *	Standard Trolley *	\$ 43.80	Standard Trolley *

* No extra charge for special power supply when noted as "Standard Trolley"
Please note, however, that hoist motor provided will be 230V or 460V nominal

25b **POWERSTAR**

A. HOIST ONLY

Add to user list price of hoist

<u>208-3-60</u>	<u>380-3-50</u>	<u>575-3-60</u>
Standard Hoist *	Standard Hoist *	\$ 162.35

Extra charge is for additional motor, transformer and brake coil if applicable.

B. M.D.T. ONLY

Add to user list price of standard motor driven trolley.

<u>208-3-60</u>	<u>380-3-50</u>	<u>575-3-60</u>
Standard Trolley *	Standard Trolley *	\$ 162.35

* No extra charge for special power supply when noted as "Standard Hoist" or "Standard Trolley"
Please note, however, that hoist or trolley motor provided will be 230V or 460V nominal

26) **SPACE HEATERS**

LODESTAR/POWERSTAR/XL

Add to user list price of hoist \$ 1,088.90

ELECTRIC HOIST/TROLLEY EXTRA PRICES

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27) **TROLLEY ACCELERATION CONTROL DEVICE - (SOFT START) (3 PHASE ONLY)**

LODESTAR/POWERSTAR/XL

Add to user list price of M.D.T. \$ 467.70

Price includes larger control box for mounting acceleration control device and miscellaneous wiring.

28) **TROLLEY BALLAST RESISTORS** - Set of 3 in a ventilated enclosure for cushioned start of Motor Driven Trolley (3 phase).

LODESTAR/POWERSTAR/XL

Add to list price of trolley. \$ 750.10

29) **TROLLEY GUARDS**

LODESTAR

LOW HEADROOM & SERIES 635 MDT

Trolley guards are sections of steel welded to the four ends of the trolley side frames forming bumpers. Side frames must be modified prior to assembly.

Add to list price of Low Headroom or M.D.T. \$ 41.85

30) **TROLLEY TRAVEL LIMIT SWITCHES**

LODESTAR/POWERSTAR/XL

Add to list price of trolley \$ 1,989.90

Extra charge is for mounting and wiring two roller type limit switches (one forward, one reverse) to trolley side frame. Customer to fabricate and install actuator on beam or track to trip switches. CM will provide details for fabricating and installing actuators.

ELECTRIC HOIST/TROLLEY EXTRA PRICES

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31) **ADDITIONAL AVAILABLE MOTOR DRIVEN TROLLEY SPEEDS**

LODESTAR SERIES 635

CAPACITY (TONS)	SPEED (FPM)	ADD TO USER LIST PRICE
1/8 - 3	15	\$ 145.30
	25	\$ 145.30
	50	\$ 145.30

POWERSTAR/XL

Powerstar and XL	CAPACITY (TONS)	SPEED (FPM)	ADD TO USER LIST PRICE
	1/2 - 2	17 1/2	\$ 1,214.20
		35	\$ 146.70
		35/17 1/2	\$ 1,327.80
		50	\$ 146.70
		50/25	\$ 1,432.45
		65/32	\$ 1,237.20
		100/50	\$ 1,010.60
		150	\$ 458.95
		150/75	\$ 1,237.20
Powerstar Only	3 - 6	17 1/2	\$ 2,053.40
		25	\$ 146.70
		35	\$ 146.70
		50/25	\$ 1,237.20
		65	\$ 146.70
		65/32	\$ 1,237.20
		75	\$ 458.95
		75/37	\$ 1,237.20
Powerstar Only	3 Ton (Only)	100	\$ 458.95
		100/50	\$ 1,237.20
		150	\$ 734.65
Powerstar Only	7 1/2	17 1/2	\$ 186.70
		25	\$ 186.70
		35	\$ 186.70
		35/17 1/2	\$ 1,237.20
		50	\$ 458.95
		50/25	\$ 1,521.70
Powerstar Only	9	17 1/2	\$ 188.80
		35/17 1/2	\$ 1,237.20
		50	\$ 458.95
		50/25	\$ 1,237.20

ELECTRIC HOIST/TROLLEY EXTRA PRICES

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31) **ADDITIONAL AVAILABLE MOTOR DRIVEN TROLLEY SPEEDS** Cont.
POWERSTAR/XL Cont.

	CAPACITY (TONS)	SPEED (FPM)	ADD TO USER LIST PRICE
Powerstar Only	10 & 12	17 1/2	\$ 179.90
		35/17 1/2	\$ 1,237.20
		50	\$ 458.95
		50/25	\$ 1,237.20
Powerstar Only	15	17 1/2	\$ 179.90
		35/17 1/2	\$ 1,237.20

32) **TOW BAR**

LODESTAR/POWERSTAR/XL

A tow bar or spacer bar for tandem arrangement of two trolleys on same beam.
(Up to 10 ft. - specify distance between hooks)

Add to list price of low headroom or motor driven trolley \$ 1,311.80

33) **3M PHASE SENSING RELAY**

LODESTAR (3 Phase Only)

NOTE: Same price for factory installed when ordering Lodestar hoist for
3M Company or for field retrofit kits:

#2890 for Lodestar V1 (Small Frame)	\$ 224.00
#3690 for Lodestar V2 (Large Frame)	\$ 216.00

34) **UNDERSIZED BEAMS**

POWERSTAR

**TROLLEY OPERATION ON S8 X 18.4 (4" FLANGE) THRU S10 X 35
(5" FLANGE) BEAMS**

Add to list price of trolley or hoist with trolley

3 thru 6 Ton \$ 85.50

Extra charge includes shorter suspension bolts and modified side frames.

CM HAND POWER EXTRA PRICES

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1) **CYCLONE ARMY & LOW HEADROOM TROLLEY HOIST W/TROLLEY GUARDS (SPECIAL)**

<u>CAPACITY</u>	<u>EXTRA CHARGE</u>
1/4, 1/2 & 1 Ton	\$ 60.65
1 1/2 & 2 Ton	\$ 122.90
3 & 4 Ton	\$ 148.00
5 & 6 Ton	\$ 193.55
8, 10 & 12 Ton (Army Only)	\$ 265.75

2) **CYCLONE ARMY TYPE TROLLEY HOIST - BEYOND STANDARD ADJUSTMENT RANGE (SPECIAL)**

<u>CAP.(TONS)</u>	<u>LARGER "S" BEAMS</u>	<u>WF SHAPES</u>	<u>EXTRA CHARGE</u>
1/4, 1/2 & 1	Over 5 1/2" thru 7 5/8"	Over 5 5/16" thru 7 7/16"	\$ 464.25
		Over 7 5/8" thru 8"	\$ 1,584.10
		Over 10" thru 13 5/8"	APPLY
1-1/2 & 2	Over 5 5/8" thru 8"	Over 5 7/16" thru 7 13/16"	\$ 464.25
		Over 7 13/16" thru 10 1/2"	\$ 1,023.70
		Over 10 1/2" thru 13 5/8"	APPLY
3 & 4	Over 5 5/8" thru 8"	Over 5 7/16" thru 7 13/16"	\$ 2,450.90
		Over 7 13/16" thru 10 1/2"	\$ 2,450.90
		Over 10 1/2" thru 13 5/8"	APPLY
5 & 6	Over 6 3/8" thru 8"	Over 6 3/8" thru 8 5/8"	\$ 622.45
		Over 8 5/8" thru 10 1/2"	\$ 2,450.90
		Over 10 1/2" thru 13 5/8"	APPLY
8, 10 & 12	-	Over 7 13/16" thru 13 5/8"	\$ 2,741.95

CM HAND POWER EXTRA PRICES

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3) **LOW HEADROOM TROLLEY HOIST**

TROLLEY HOISTS - BEYOND STANDARD ADJUSTMENT RANGE (SPECIAL)

<u>CAP.(TONS)</u>	<u>LARGER "S" BEAMS</u>	<u>WF SHAPES</u>	<u>EXTRA CHARGE</u>	
1/2 & 1	Over 5" thru 5 1/2"	Over 4 13/16" thru 5 5/16"	\$	450.95
1 1/2, 2 & 3	Over 5 1/2" thru 6"	Over 5 5/16" thru 5 13/16"	\$	718.30
4, 5 & 6	Over 7" thru 7 7/8"	Over 6 13/16" thru 7 11/16"	\$	1,109.65

NOTE: Flange widths are maximum obtainable due to trolley side frames hitting handwheel cover.

4) **FLANGE ARMY TYPE TROLLEY HOIST & LOW HEADROOM TROLLEY HOIST - FOR OPERATION ON 3 1/4" OR 3.33" PATENTED TRACK (SPECIAL)**

<u>CAPACITY</u>	<u>EXTRA CHARGE</u>
1/4 & 1/2 & 1 Ton	N/C
1 1/2 & 2 Ton (Army) (Low Headroom Trolley)	N/C Uses Standard N/C Wheels
3, 4, 5 & 6 Ton	APPLY (Uses flat tread wheels)
8, 10 & 12 Ton	APPLY

5) **CYCLONE & TROLLEY HOIST - STAINLESS STEEL LOAD CHAIN**

<u>CAPACITY</u>	<u>EXTRA CHARGE</u>
1/4 & 1/2 Ton	\$31.65 /Ft. Lift
1 Ton	\$41.35 /Ft. Lift
1 1/2 thru 12 Ton	N/A

NOTE: When 1 ton Cyclone is furnished with Stainless Steel Load Chain, the design factor is 4:1 which conforms with specifications of ASME B30.16, but does not conform with the normal Columbus McKinnon imposed 5:1 design factor for these products when furnished with our standard Disc Grade Load Chain.

CM HAND POWER EXTRA PRICES

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6) **CYCLONE & TROLLEY HOIST - UNWELDED ALUMINUM HAND CHAIN**

	<u>EXTRA CHARGE</u>
All Capacities (Hoist & Trolley)	\$ 5.00 /Ft. HC Drop

7) **CYCLONE & TROLLEY HOIST - UPPER OR LOWER BRONZE HOOK**

<u>CAPACITY</u>	<u>EXTRA CHARGE</u>
1/4 & 1/2 Ton	\$ 342.90
1 Ton	\$ 1,335.70
1 1/2 & 2 ton	\$ 2,738.75
3 ton	APPLY
4 & 5 Ton	APPLY
6 thru 12 Ton	APPLY

8) **CYCLONE & TROLLEY HOIST - ZINC PLATED LOAD CHAIN & HAND CHAIN**

<u>CAPACITY</u>	<u>EXTRA CHARGE</u>
1/4 & 1/2 ton	\$1.85 /Ft. Lift
1 Ton	\$1.05 /Ft. Lift
1 1/2 & 2 Ton	\$1.20 /Ft. Lift
3 & 4 Ton	\$2.40 /Ft. Lift
5 & 6 Ton	\$3.60 /Ft. Lift
8 ton	\$4.80 /Ft. Lift
10 ton	\$6.00 /Ft. Lift
Hand Chain	\$0.60 /Ft. HC Drop

9) **CYCLONE - EYE TYPE SUSPENSION**

<u>CAPACITY</u>	<u>EXTRA CHARGE</u>
1/4, 1/2 & 1 Ton	\$ 598.15
1 1/2 & 2 Ton	\$ 721.00
3 & 4 Ton	\$ 740.85
5 Ton	\$ 780.80
6 thru 10 Ton	APPLY

CM HAND POWER EXTRA PRICES

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10) **CYCLONE & TROLLEY HOIST - SPECIAL PAINT OR FINISH OTHER THAN STANDARD FACTORY FINISH (SPECIAL)**

All Capacities APPLY

11) **CYCLONE & TROLLEY HOIST - SPECIAL CRATING OR PACKAGING**

All Capacities APPLY

12) **CYCLONE & TROLLEY HOIST - SPECIAL TAGS OR I.D. PLATES**

All Capacities APPLY

13) **PULLER/SHORT HANDLE PULLER - ZINC PLATED LOAD CHAIN**

<u>CAPACITY</u>	<u>EXTRA CHARGE</u>
3/4 Ton	\$1.85 /Ft. Lift
1 1/2 Ton	\$1.20 /Ft. Lift
3 Ton	\$2.40 /Ft. Lift
6 Ton	\$4.80 /Ft. Lift

14) **PULLER/SHORT HANDLE PULLER - STAINLESS STEEL LOAD CHAIN**

<u>CAPACITY</u>	<u>EXTRA CHARGE</u>
3/4 Ton	\$31.65 /Ft. Lift
1 1/2 Ton	N/A
3 Ton	N/A
6 Ton	N/A

NOTE: When 3/4 ton Puller/Short Handle Puller is furnished with Stainless Steel Load Chain, the design factor is 4:1 which conforms with specifications of ASME B30.21, but does not conform with the normal Columbus McKinnon imposed 5:1 design factor for these products when furnished with our standard Disc Grade Load Chain.

CM HAND POWER EXTRA PRICES

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15) **PULLER/SHORT HANDLE PULLER - SPECIAL PACKAGING OR HANDLING**

All Capacities APPLY

16) **PULLER/SHORT HANDLE PULLER - SPECIAL TAGS OR I.D. PLATES**

All Capacities APPLY

17) **PULLER/SHORT HANDLE PULLER - SPECIAL PAINT OR FINISH OTHER THAN STANDARD FACTORY FINISH (SPECIAL)**

All Capacities APPLY

18) **PULLER/SHORT HANDLE PULLER - UPPER OR LOWER BRONZE HOOK**

<u>CAPACITY</u>	<u>EXTRA CHARGE</u>
3/4 Ton	\$ 1,335.70
1 1/2 Ton	APPLY
3 Ton	APPLY
6 Ton	APPLY

CM TROLLEY EXTRA PRICES

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ADD TO USER LIST PRICE OF TROLLEY

1) **SERIES 632 TROLLEY BEYOND STANDARD ADJUSTMENT RANGE**

<u>CAP. (TONS)</u>	<u>LARGER "S" BEAMS & WF SHAPES</u>	<u>EXTRA CHARGE</u>
1/2 & 1	Over 5 1/6" thru 7 1/2"	\$ 38.55

NOTE: 7 1/2" maximum obtainable flange width - extra charge is for longer load bar.

2	Over 5 5/8" thru 8"	\$ 46.45
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NOTE: Extra charge is for a longer load bar reinforced by a support section above the hook seat.

NOTE: Flange widths greater than listed above are not available. Refer to Series 633, Series 80 or Series 84 Trolley for those applications.

2) **SERIES 632 TROLLEY OPTIONAL ACCESSORIES**
TROLLEY GUARDS

Trolley guards are heavy formed lug sections which provide added suspension security.

<u>CODE NO.</u>	<u>CAPACITY</u>	<u>EXTRA CHARGE</u>
3227	1/4 & 1/2 ton	\$ 30.90
3228	1 ton	\$ 31.95
3229	2 ton	\$ 40.15

BUMPERS

Bumpers can be provided where two or more trolleys travel on the same runway or runways with tight radius curves.

	<u>EXTRA CHARGE</u>
1/4 thru 1-ton	\$ 51.35
1-1/2 ton thru 3-ton	APPLY