

TITLE: SUSPENSION ROPE INSTALLATION, DUAL, 3 GROOVE SHEAVES, 10mm ROPE		PART NO.	QTY	S/P	SHIPPED
1	10mm 8x19 + WRC STEEL CORE ROPE x FT LONG	11322	6	P	
2	EM-100 WEDGE SOCKET ASSY W/1/2\" ROD EM-101 (3/8\" WEDGE INSERT (1 ea)	11322	12	S	
3	SLACK ROPE SPRING x 4\" LG #0CS-1109-6	11329	6	S	
4	ROPE TAG MARKED AS SHOWN BELOW	15934	1	P	
5	1/2\" SCHD 40 PIPE x 2\" LONG	15934	6	S	
6					

Shipping Note: Item #2 pt 11324 consists of a socket and rod assembly, a wedge insert, and two retainer clip assemblies each

OTHER DIAMETER	NOMINAL STRENGTH (LBS)	TRACTION	WRC
.394"	12900		

SHOP MARK ROPE TAG:  
8 x 19

INSTALLATION NOTES

1. MAIN AND AUX. RAIL, JACK UNITS, FOLLOWER GUIDES, CAR FRAME, OIL LINE, AND POWER UNIT SHOULD BE INSTALLED BEFORE ROPEING.
2. TENSION EQUALIZATION INSTRUCTIONS.
3. CAR FRAME IS TO BE RESTING ON BUFFER SPRINGS. JACK UNIT IS TO BE FULLY COLLAPSED.
4. SHACKLE ONE END OF EACH ROPE PER DRAWING P1.501. INSTALL ROPED SHACKLES THRU PIT BASE, ROPE HITCH PLATE HOLES. INSTALL ROPED ROPE SPRING STOP PIPE, 4\" LONG SPRING, FLAT WASHER, AND TWO HEX NUTS ON SHACKLE ROD END AS SHOWN. TIGHTEN HEX NUTS AGAINST EACH TO DIMENSION SHOWN TO FLAT WASHER. TIGHTEN NUTS AGAINST EACH OTHER AT 4 1/2\" DIMENSION. ALL SIX PIT SHACKLE ROD ENDS MUST BE EQUAL AS DIMENSIONED. NOTE THAT SHACKLE SPRINGS MAY NOT COMPRESS FULLY TO THE 2\" DIMENSION SHOWN UNTIL PLATFORM AND CAR ARE INSTALLED. DO NOT CHANGE PIT SHACKLE ROD NUT LOCATIONS TO EQUALIZE ROPES BECAUSE DIMENSIONS SHOWN ARE REQUIRED FOR PROPER OPERATION OF SAFETY STACK ROPE DEVICES. INSTALL COTTER PINS IN SHACKLE ROD END HOLES.
5. INSTALL EACH ROPE IN ITS PROPER GROOVE ON JACK SHEAVE PER DIAGRAM ON THIS SHEET. ADJUST TOP ROPE GUARDS ON SHEAVE FRAME AND SHROUD DOWN TO CLOSE RUNNING CLEARANCE TO ROPES SEATED IN GROOVES. TIGHTEN ROPE GUARD ASSEMBLIES IN PLACE. ROPE GUARDS MUST PREVENT A SLACK ROPE FROM LEAVING ITS SHEAVE GROOVE.
6. INSTALL SHACKLES ON CAR HITCH ENDS OF ROPES PER DRAWING P1.501. SET ALL 6 ROPE LENGTHS EQUAL WHEN INSTALLING SHACKLES. INSTALL CAR SHACKLES THRU CAR SLING ROPE HITCH BEAM. INSTALL EACH OF THE 6 SHACKLES IN ITS WATCHING HOLE PER THE DIAGRAM ON THIS SHEET. ADJUST HEX NUTS AS REQUIRED TO INITIALLY EQUALIZE ROPE TENSIONS. INSTALL COTTER PINS IN SHACKLE ROD END HOLES.
7. RESTRAIN "DEAD ENDS" OF ROPE USING RETAINING CLIPS PER DRAWING P1.501.
8. "JOG" JACK UNIT RAMS UPWARD SO THAT WEIGHT OF SLING IS SUSPENDED BY ROPES. THIS WEIGHT WILL BEGIN TO "SET" THE SHACKLE WEDGES IN THE SHACKLE BODIES (SEE DRAWING P1.501). AFTER WEDGES ARE "SET" RECHECK ROPE TENSIONS AND, IF REQUIRED, EQUALIZE ROPE TENSIONS BY ADJUSTING CAR SHACKLE ROD NUTS - DO NOT ADJUST PIT SHACKLE ROD NUTS. EQUAL ROPE TENSION IS REQUIRED FOR PROPER JACK OPERATION.
9. THE OFF SHACKLE BODIES TO EACH OTHER TO PREVENT SHACKLE ROTATION.
10. AFTER INITIAL RUN IN PERIOD WITH FULL LOAD ON ROPES AND BEFORE TURNING CAR OVER FOR NORMAL USE, ADJUST ROPE LENGTH AT CAR HITCH END IF REQUIRED TO CORRECT ANY ROPE "STRETCH" AND EQUALIZE TENSION.

REVISIONS

REV	DATE	BY	CHK	SCALE	JOB #
ORIG	5-28-02	BY DMB			???
REV1	2-2-04	BY DMB			???
REV2	8/11/05	BY JPS		1.0	???
REV3	1-11-07	BY LSK		1-JOB	P1.500
REV4		BY		NONE	???

CANTON ELEVATOR

ALL 6 PIT (3 EACH SIDE) SHACKLE ENDS MUST BE EVEN AT DIMENSION SHOWN FOR STACK ROPE DEVICE OPERATION - INSTALL NUTS AT DIM SHOWN

PIT ROPE HITCH DO NOT ADJUST

ALL ROPE TENSION ADJUSTMENTS ARE TO BE MADE ON CAR HITCH END OF ROPES ONLY - DO NOT ADJUST PIT SHACKLE ENDS FROM DIMENSIONS SHOWN

ADJUST ROPE TENSION AT CAR HITCH ONLY

NO SPRINGS ON CAR HITCH

CAR ROPE HITCH

INSTALL COTTER PINS

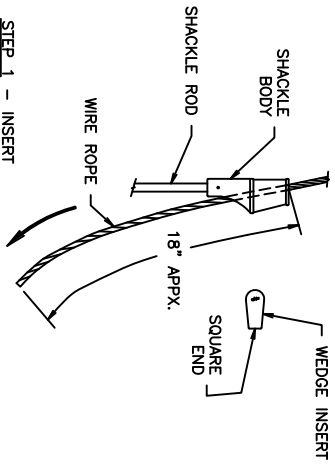
CAR SLING ROPE BEAM

CAR HITCH ONLY - MAY VARY - AS REQUIRED FOR EQUAL ROPE TENSIONS

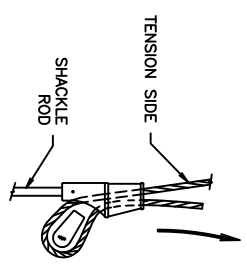
INSTALL COTTER PINS

SHACKLE ENDS FROM DIMENSIONS SHOWN

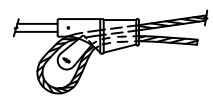
ADJUST ROPE TENSION AT CAR HITCH ONLY



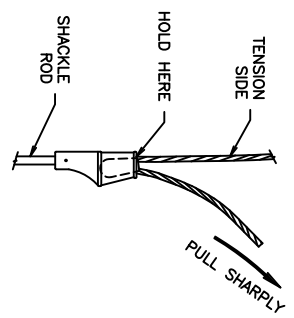
STEP 1 - INSERT THE END OF THE WIRE ROPE THROUGH THE TOP OF THE SHACKLE BODY AS SHOWN. TENSION SIDE OF WIRE ROPE IS ALWAYS TO BE IN LINE WITH THE SHACKLE ROD SIDE OF THE SHACKLE.



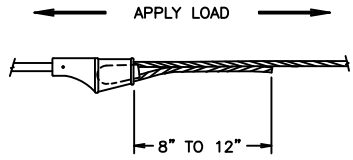
STEP 2 - FORM A LOOP WITH THE END OF THE WIRE ROPE AND INSERT THE END BACK UP THROUGH THE SHACKLE BODY AS SHOWN. LEAVE ENOUGH ROOM IN LOOP FOR WEDGE INSERT.



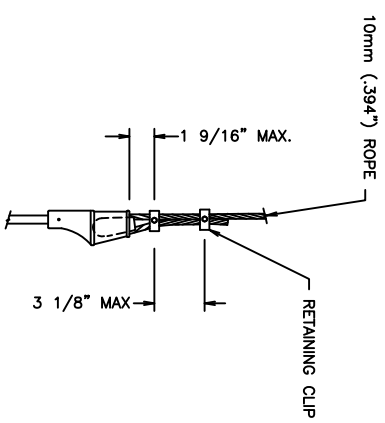
STEP 3 - PLACE THE WEDGE INSERT IN THE LOOP. WEDGE INSERTS ARE MARKED FOR THE ROPE SIZE THEY ARE INTENDED FOR. 10mm ROPE USES THE 3/8\"/>



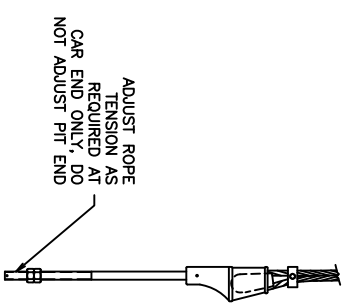
STEP 4 - WHILE HOLDING DOWN ON THE TENSION SIDE OF THE ROPE AND SHACKLE BODY, PULL UP ON THE LOOSE END WITH A QUICK PULL UNTIL THE ROPE LOOP AND INSERT ARE SEATED IN THE SOCKET BODY.



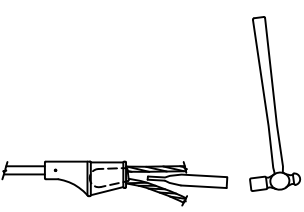
STEP 5 - AFTER ALL ROPES ARE INSTALLED, LET THE WEIGHT OF THE SLING ETC. BE SUSPENDED BY THE ROPES. THE ROPE AND WEDGE INSERT WILL RISE AS MUCH AS 1 INCH TO THE FINAL \"SET\" UNDER LOAD. AFTER BINDING, CUT ANY SURPLUS ROPE OFF. \"DEAD END\" BUT LEAVE AT LEAST 8 INCHES.



STEP 6 - INSTALL FIRST RETAINER CLIP NO MORE THAN 1 9/16\"/>



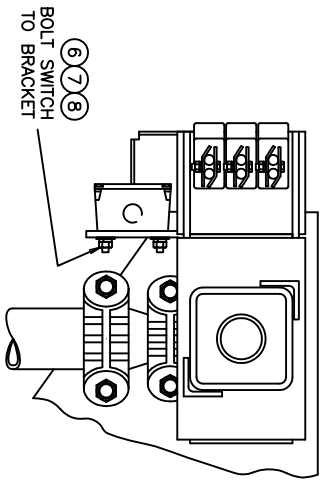
STEP 7 - TENSION IN ROPES MUST BE EQUAL FOR PROPER OPERATION. CHECK TENSION OF ROPES BY \"FEEL\". ANY ROPE THAT FEELS LOOSER THAN OTHER ROPES SHOULD BE TIGHTENED BY ADJUSTING NUTS ON THREADED ROD OF SHACKLE ASSEMBLES ON CAR HITCH ONLY - DO NOT ADJUST PIT HITCH SHACKLES. HOLD SHACKLE BODIES WHILE ADJUSTING NUTS TO PREVENT ROTATION. SHACKLES TO PREVENT ROTATION DURING NORMAL OPERATION.



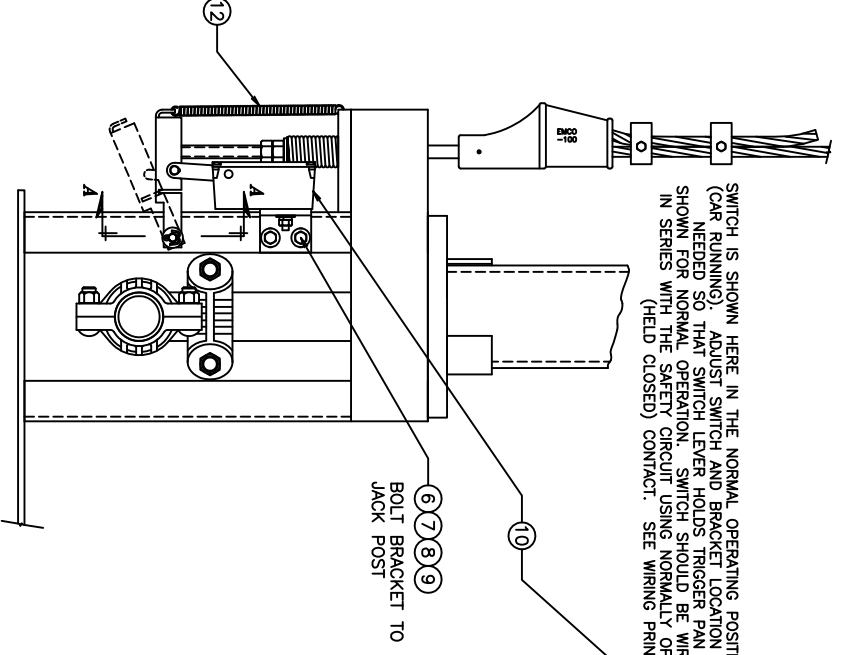
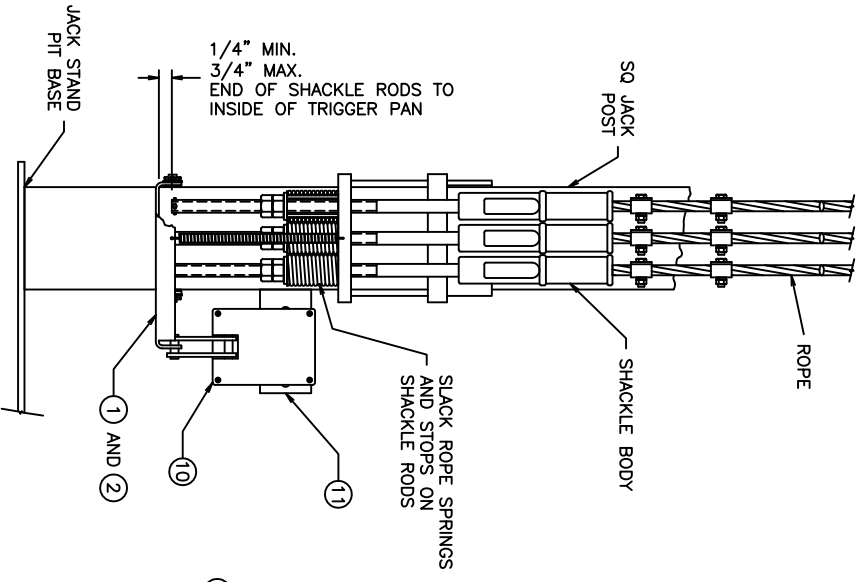
SHORTEN ROPES WHEN REQUIRED BY TAPPING ON TOP OF WEDGE INSERT WITH A DRIFT PIN UNTIL WEDGE IS LOOSE IN SHACKLE BODY AND \"DEAD END\" OF ROPE CAN BE PULLED. NEVER LENGTHEN A ROPE INSTALLATION.

IMPORTANT - RETAINER CLIPS ARE TO BE INSTALLED SO AS NOT TO DAMAGE OR DEFORM ROPE IN ANY WAY.

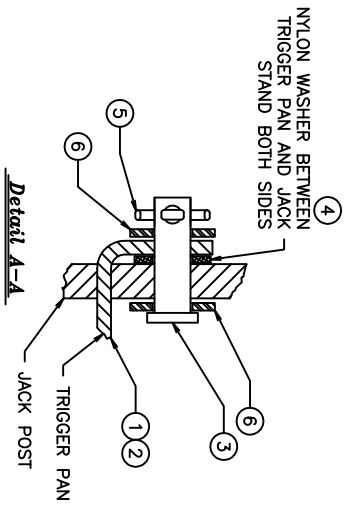
REVISIONS		CANTON ELEVATOR	
ORIG. DATE	BY	WEIGHT	DATE
1-10-02	DMB	NA	??
1-11-07	LSK	STUDY	??
	BR	NA	??
	BR	QTY	DMC # P11.501
	BR	NA	
	BR	SCALE	NONE
	BR		JOB # ??



SWITCH IS SHOWN HERE IN THE NORMAL OPERATING POSITION (CAR RUNNING). ADJUST SWITCH AND BRACKET LOCATION AS NEEDED SO THAT SWITCH LEVER HOLDS TRIGGER PAN AS SHOWN FOR NORMAL OPERATION. SWITCH SHOULD BE WIRED IN SERIES WITH THE SAFETY CIRCUIT USING NORMALLY OPEN (HELD CLOSED) CONTACT. SEE WIRING PRINTS.



NO.	TITLE	PART NO.	QTY	S/P	SHIPPED
1	R/H TRIGGER PAN CY6.101 (PAINT)	12398	1	S	
2	L/H TRIGGER PAN CY6.100 (PAINT)	12399	1	S	
3	5/16" x 1" SST CLEVIS PIN	23395	4	S	
4	5/16" NYLON WASHER	23400	4	S	
5	1/8" x 1 1/2" LG SST COTTER PIN	23390	4	S	
6	1/4" FLAT WASHER	50325	22	S	
7	1/4" LOCK WASHER	50375	8	S	
8	1/4" HEX NUT	50445	8	S	
9	1 1/4" HHMB x 1 1/4" LONG	50025	4	S	
10	SLACK ROPE SWITCH (MOD. PER NOTE b)	13312	2	S	
11	SLACK ROPE SWITCH BRACKET (CY5.519)	12397	2	S	
12	TRIGGER RETENTION SPRING #0ES-148B-14	11356	2	S	
13					
14					
15					



**FIELD INSTALLATION NOTES**

- BEFORE INSTALLING SLACK ROPE DEVICE, ENTIRE EMPTY CAR WEIGHT INCLUDING CAB AND DOOR EQUIPMENT MUST BE INSTALLED TO ENSURE COMPRESSION OF SLACK ROPE SPRINGS TO STOPS.
- MAKE TWO INSTALLATIONS, ONE AS SHOWN AND ONE OPPOSITE AS SHOWN. TRIGGER PANS ARE HANDED - CORRECT TRIGGER PAN INSTALLATION WILL HAVE ANGLED NOTCH IN TRIGGER PAN UNDER INSTALLED SWITCH LEVER AS SHOWN. ALL OTHER COMPONENTS ARE INTERCHANGEABLE FROM LEFT TO RIGHT.
- INSTALL AND ADJUST SWITCHES WITH LEVER DOWN AS SHOWN. THE ANGLED NOTCH IN THE TRIGGER PAN IS TO ENGAGE THE PIN AT THE END OF THE SWITCH LEVER HOLDING THE LEVER "IN" AS SHOWN.

**CANTON SHOP NOTES**

- PAINT RIGHT AND LEFT HAND TRIGGER PANS BEFORE SHIPPING.
- MODIFY STANDARD LS-1B ROLLER SWITCHES BY REMOVING THE ROLLER AND REINSTALLING THE PIN AND CLIP.

**REVISIONS**

DATE	BY	SCALE	QTY.	DATE	BY	SCALE	QTY.
1-11-02	BR DMB	NA	25				
1-11-07	BR LSK	NA	25				



DATE	BY	SCALE	QTY.	DATE	BY	SCALE	QTY.
1-11-02	BR DMB	NA	25				
1-11-07	BR LSK	NA	25				