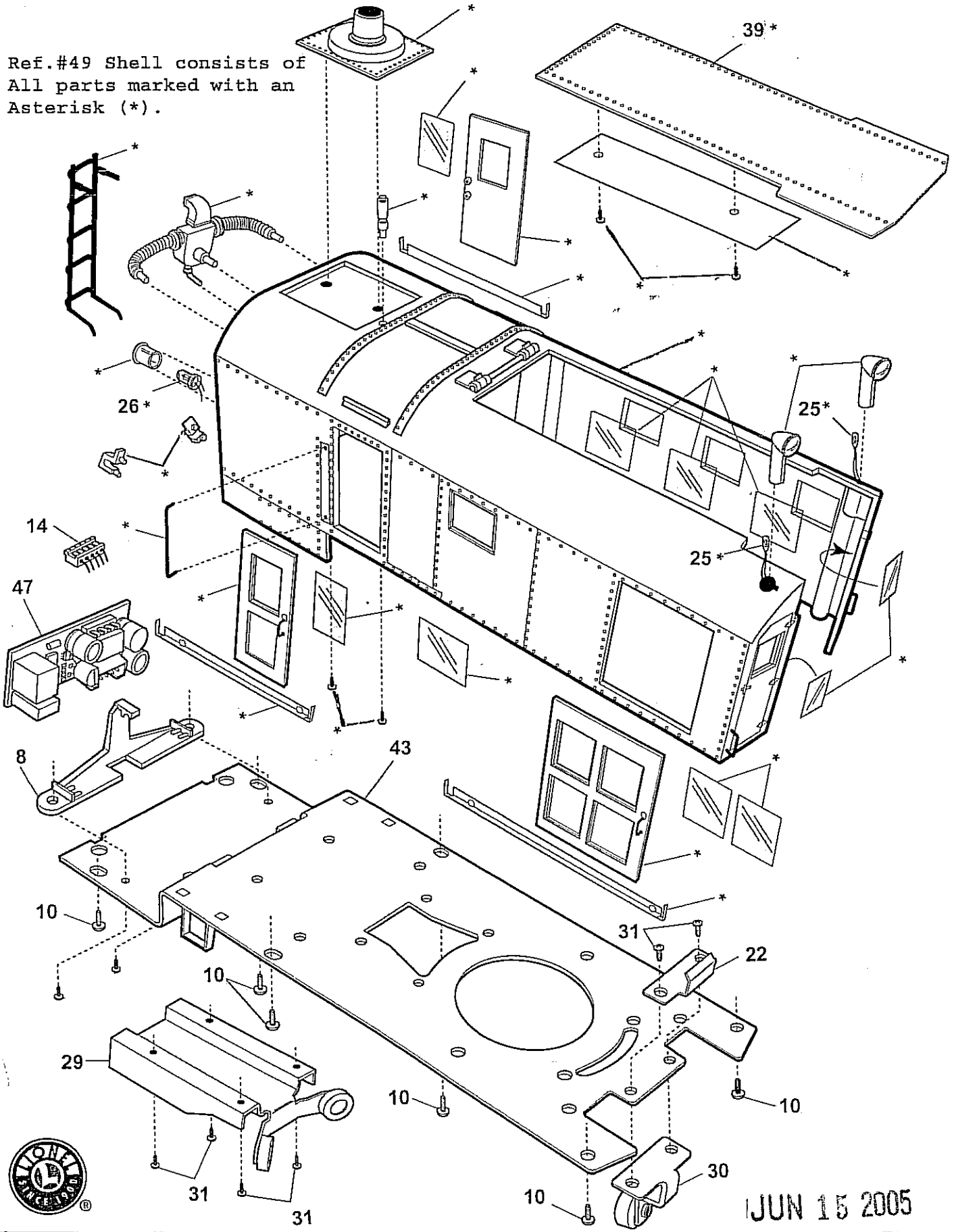


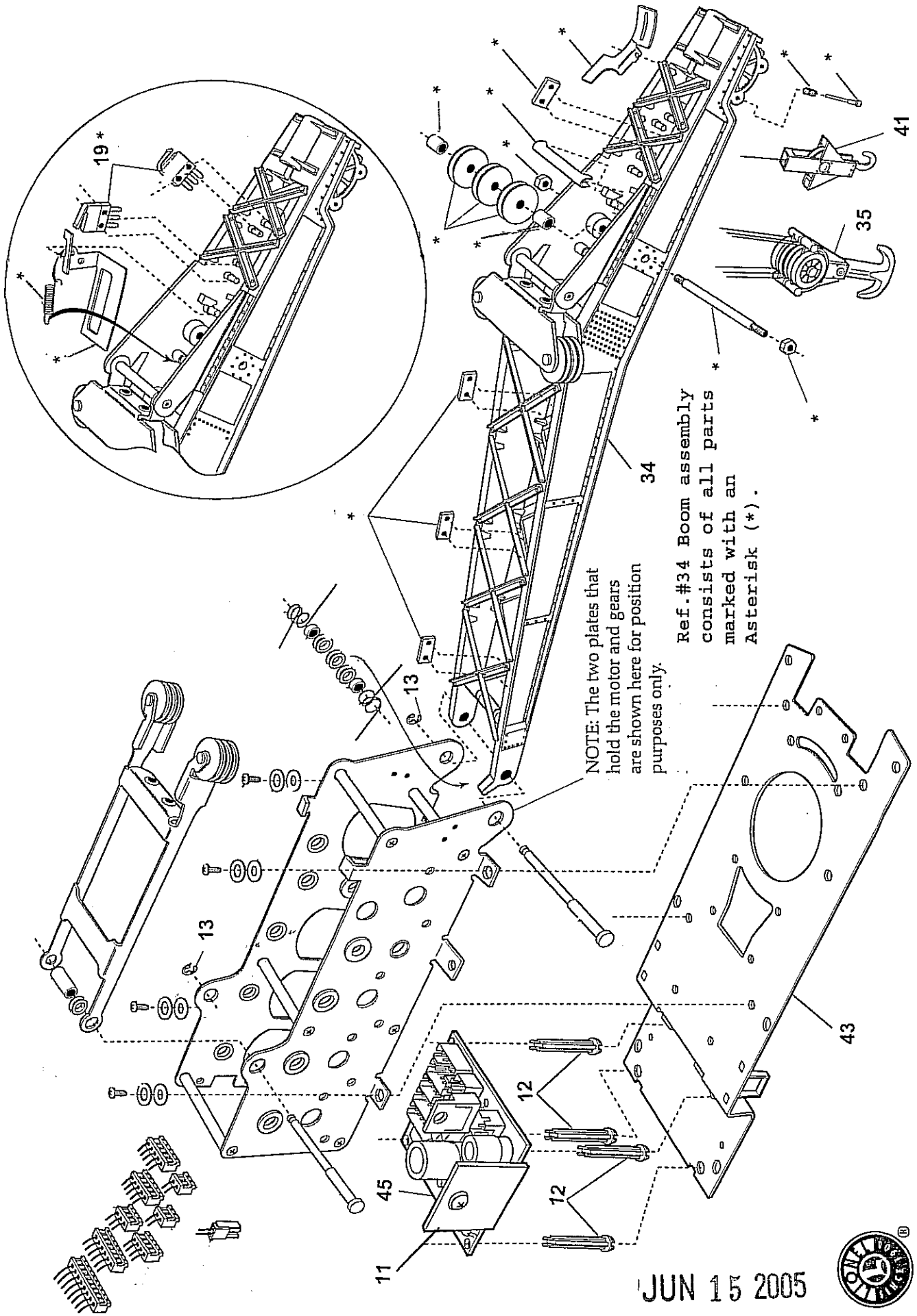
# TMCC CRANE CAR CAB LAYOUT

Ref.#49 Shell consists of  
All parts marked with an  
Asterisk (\*).



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# TMCC CRANE CAR BOOM LAYOUT



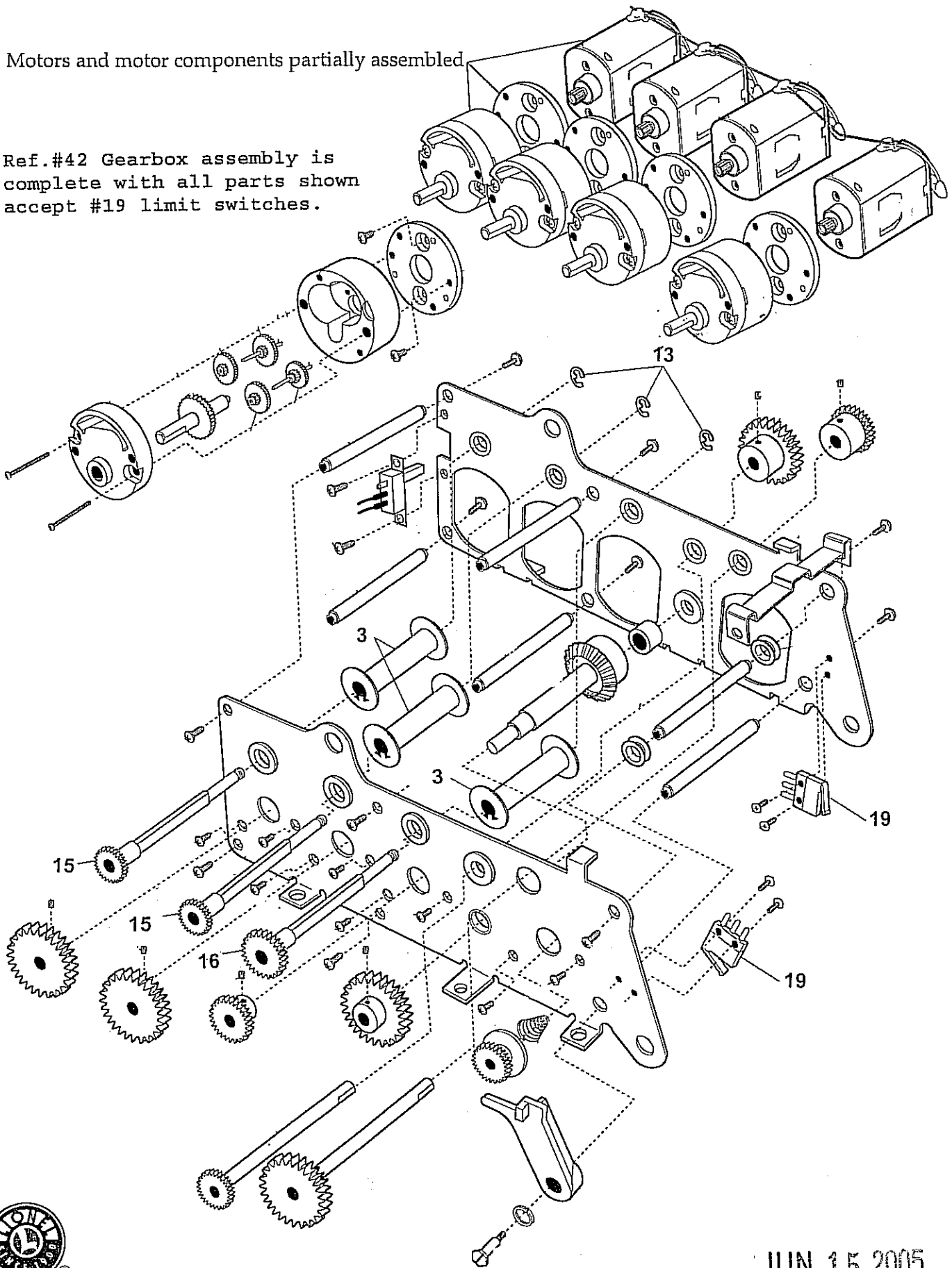
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# TMCC CAR MOTOR AND GEAR LAYOUT

Motors and motor components partially assembled

Ref.#42 Gearbox assembly is complete with all parts shown except #19 limit switches.



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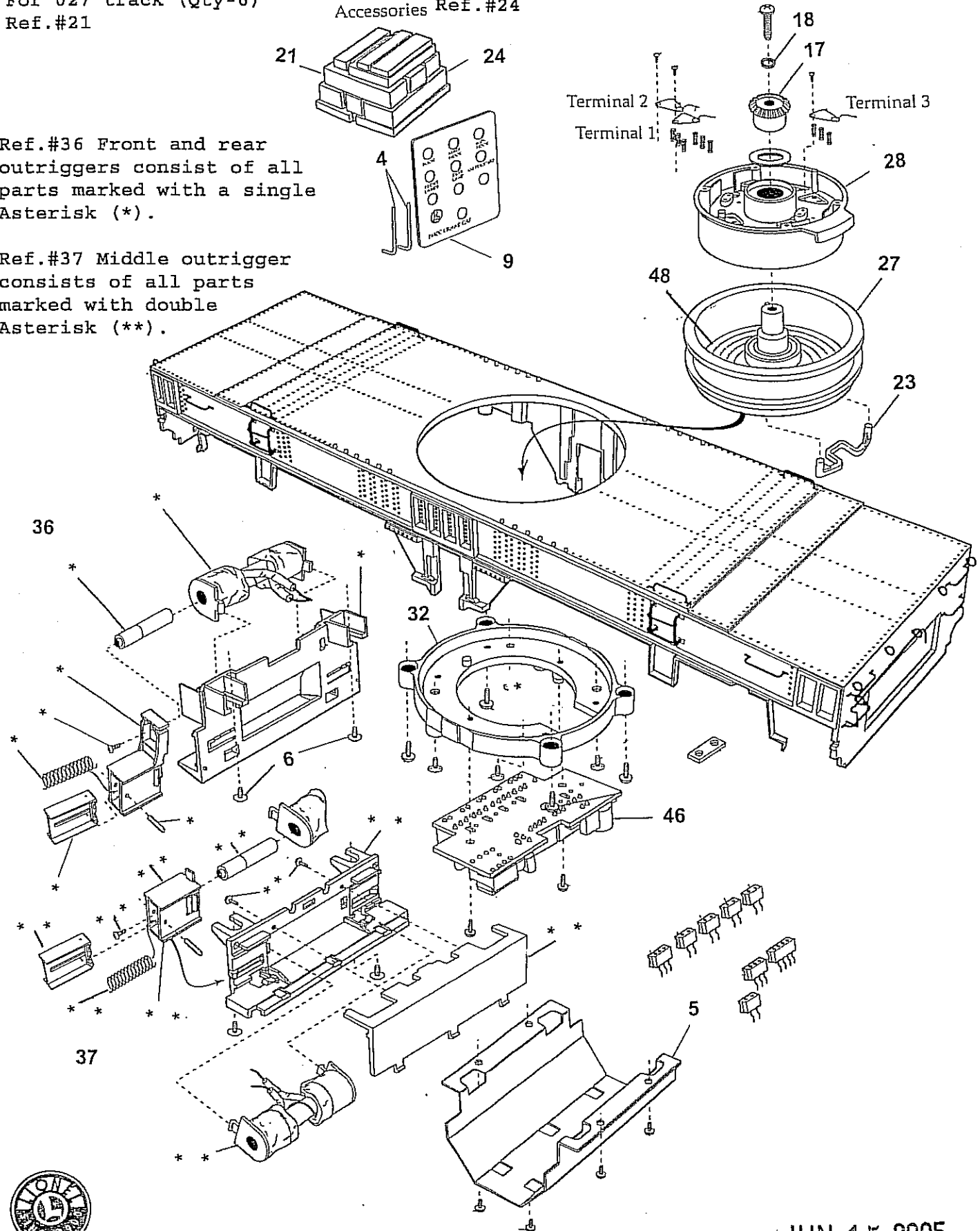
# TMCC CRANE CAR LOWER FRAME LAYOUT

For 027 track (Qty-6)  
Ref.#21

Accessories Ref.#24  
For 0 and FasTrack (Qty-6)

Ref.#36 Front and rear outriggers consist of all parts marked with a single Asterisk (\*).

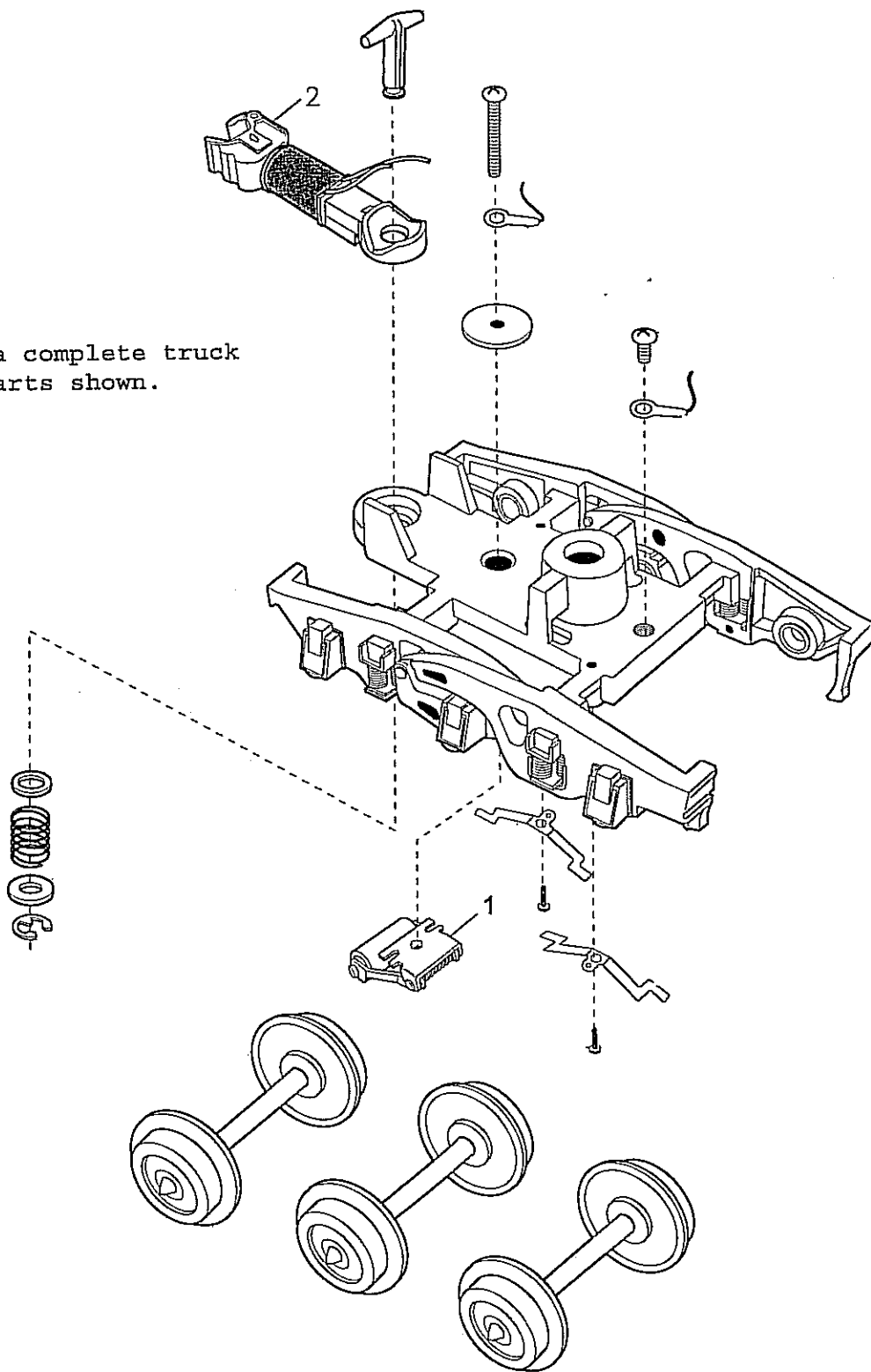
Ref.#37 Middle outrigger consists of all parts marked with double Asterisk (\*\*).



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# TMCC CRANE CAR FRONT AND REAR TRUCK LAYOUT

Ref.#7 is a complete truck  
with all parts shown.



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# Parts List

6/03/05

CRANE CAR

MLR CMD CNTRL CRANE CAR SF

<u>NO.</u>	<u>Item</u>	<u>Description</u>	<u>Qty Reqd</u>	<u>U/M</u>
1	6108274173	COLLECTOR ASSY	2.0000	EA
2	6108274550	COIL COUPLER ASSY	2.0000	EA
3	6109899014	CABLE SPOOL/TMCC CRANE CAR	3.0000	EA
4	6109899022	CAB LOCKING PIN/CRANE CAR	2.0000	EA
5	6109899031	COVER/MIDDLE OUTRIGGER	1.0000	EA
6	6109899032	SCR 2.5X4MM/MTG OUTRIGGERS	6.0000	EA
7	6109899050	TRK COMP W/SLV SPRING/CRANE CR	2.0000	EA
8	6109899055	BRKT/RECEIVER BRD MOUNT	1.0000	EA
9	6109899060	OVERLAY, CRANE CAR	1.0000	EA
10	6109899072	SCR 2.5X5MM PH/MTG SHELL	6.0000	EA
11	6109899120	HEAT SINK/MTR DRIVER BRD	1.0000	EA
12	6109899123	STAND-OFF/MTR DRIVER BRD MOUNT	3.0000	EA
13	6109899133	C CLIP/SHAFT RETAINER	4.0000	EA
14	6109899135	5 PIN HARNESS/RECEIVER BRD	1.0000	EA
15	6109899151	SPOOL SHAFT ASSY/BOOM&AUX HOOK	2.0000	EA
16	6109899152	SPOOL SHAFT ASSY/MAIN HOOK	1.0000	EA
17	6109899153	BEVEL GEAR/BEARING CONTACT BAS	1.0000	EA
18	6109899154	LOCK WASHER/BEVEL GEAR MOUNT	1.0000	EA
19	6109899162	LIMIT SWITCH/TMCC CRANE CAR	2.0000	EA
20	6109899172	SCR/3X5MM/TRUCK MOUNT	2.0000	EA
21	6109899175	OUTRIGGER SUPPORT/027/CRANE CR	6.0000	EA
22	6109899180	CABLE GUIDE PLATE/TMCC CRANE	1.0000	EA
23	6109899181	WIRE RETAINER/CONTACT BASE ASY	1.0000	EA
24	6109899185	OUTRIGGER SUPPORT/O/CRANE CAR	6.0000	EA
25	6109899300	LED/CAB FRONT/CRANE CAR	2.0000	EA

\* - PART NOT AVAILABLE

# Parts List

6/03/05

CRANE CAR

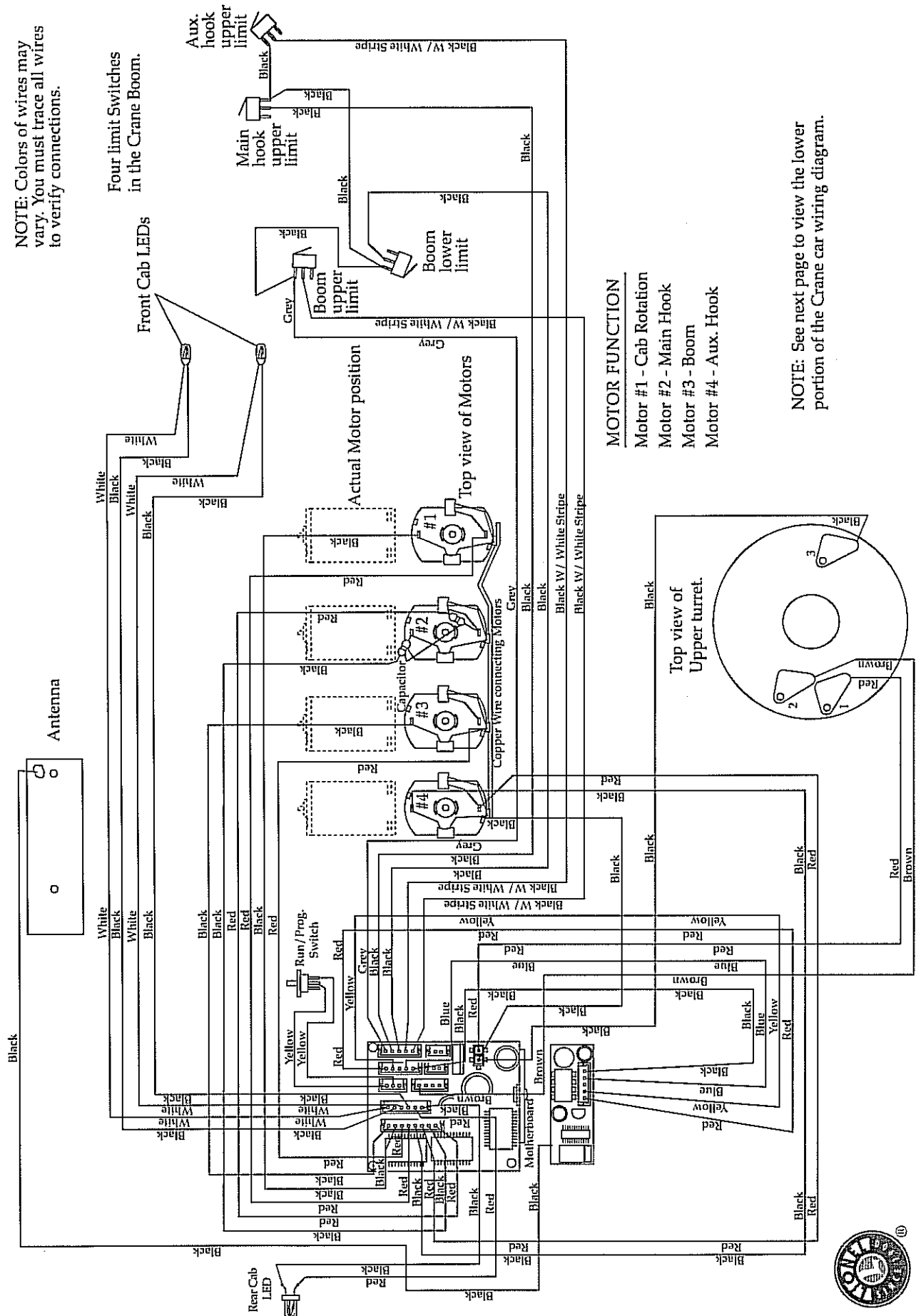
MLR CMD CNTRL CRANE CAR SF

<u>NO.</u>	<u>Item</u>	<u>Description</u>	<u>Qty Reqd</u>	<u>U/M</u>
26	6109899301	LED/CAB REAR/CRANE CAR	1.0000	EA
27	6109899325	BEARING CONTACT BASE ASSY/FRM	1.0000	EA
28	6109899326	CONTACT BASE ASSY/CAB/CRANE CR	1.0000	EA
29	6109899327	SUPPORT FRM RR/W/DOUBLE ROLLER	1.0000	EA
30	6109899328	SUPPORT FRM FRT W/SINGLE RLLER	1.0000	EA
31	6109899329	SCR 2.3MM/FRM SUPPORT/CVR MTG	10.0000	EA
32	6109899421	CAB FLOOR BASE/TMCC CRANE CAR	1.0000	EA
33	6109899800	SCR PACK/TMCC CRANE CAR	1.0000	EA
34	6206769009	BOOM ASSY W/LMT SW/SLV/CRN CAR	1.0000	EA
35	6206769013	MAIN HOOK ASSY/SLV & BLK/SF	1.0000	EA
36	6206769020	OUTRIGGER ASSY/FRT&RR/SLV/SF	2.0000	EA
37	6206769030	OUTRIGGER ASSY/MIDDLE/SLV/SF	1.0000	EA
38	6206769050	12LB TEST CST LINE (BLK) TIGHT	22.0000	FT
39	6206769075	COVER DOOR/SLV/SF CRANE CAR	1.0000	EA
40	6206769076	MTG PIN/COVER DOOR/SF CRANE	1.0000	EA
41	6206769113	AUX HOOK ASSY/SLV & BLK/SF	1.0000	EA
42	6206769145	GEAR BOX ASSY/SF/SLV/CRANE CAR	1.0000	EA
43	6206769500	FRAME ASSY W/SWIVEL PLATE/SF	1.0000	EA
44	691CECQV1H	CAP .1UF 50V 5% (ECQ-V1H104JL)	8.0000	EA
45	691CRANC01	CRANE CAR MOTOR DRIVER BOARD	1.0000	EA
46	691OUT1C01	OUTRIGGER BOARD REV C CRANE	1.0000	EA
47	691RCV1B01	RECEIVER COMMUNICATION BOARD	1.0000	EA
48	691RND1A00	CRANE CAR ROUND CONTACT BOARD	1.0000	EA
49	6206769002	SHELL W/LED/SF CRANE CAR	1.0000	EA

\* - PART NOT AVAILABLE

# TMCC CRANE CAR UPPER PORTION PICTORIAL WIRING DIAGRAM

NOTE: Colors of wires may vary. You must trace all wires to verify connections.



**MOTOR FUNCTION**  
 Motor #1 - Cab Rotation  
 Motor #2 - Main Hook  
 Motor #3 - Boom  
 Motor #4 - Aux. Hook

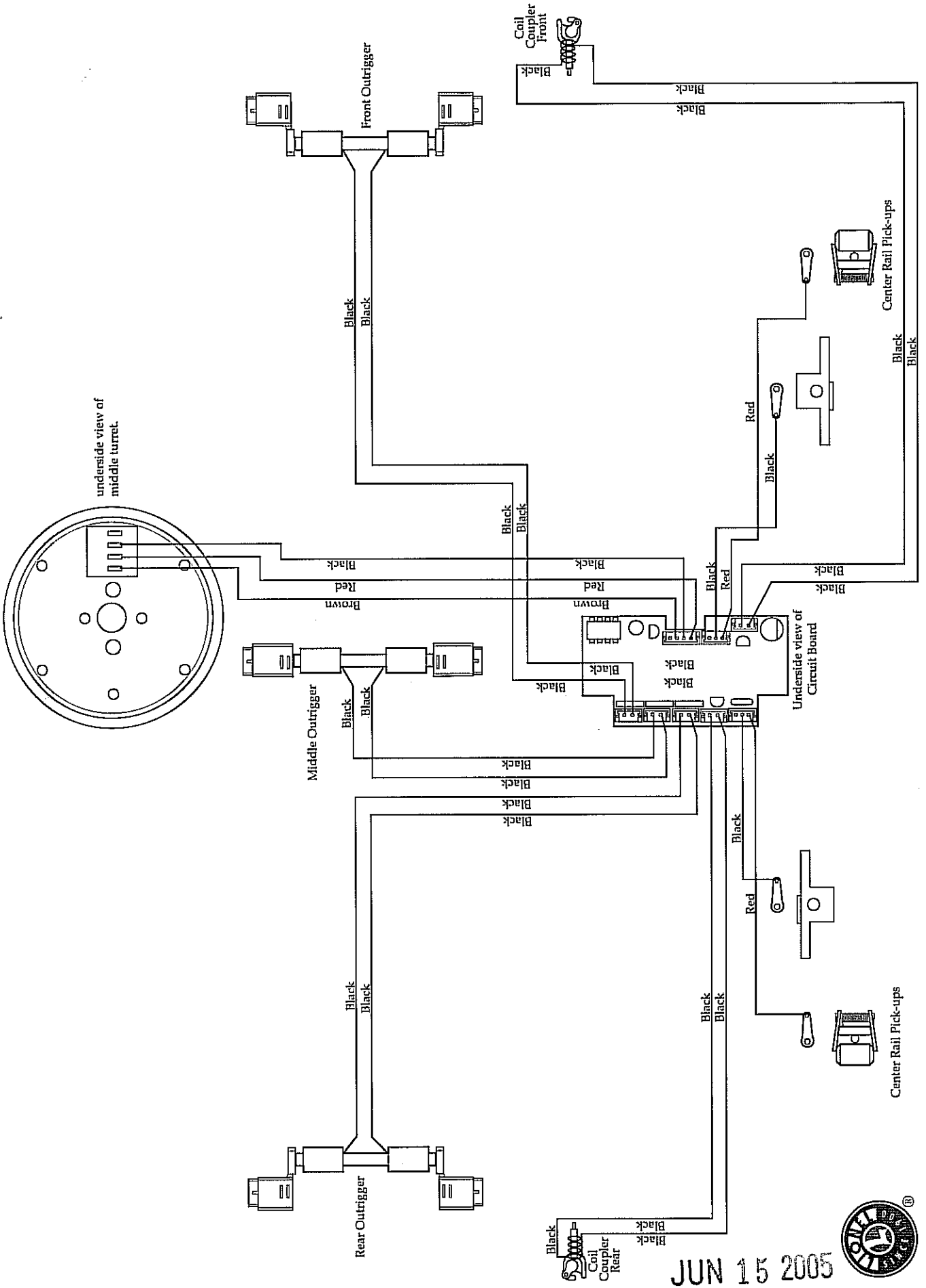
NOTE: See next page to view the lower portion of the Crane car wiring diagram.



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# TMCC CRANE CAR LOWER PORTION PICTORIAL WIRING DIAGRAM

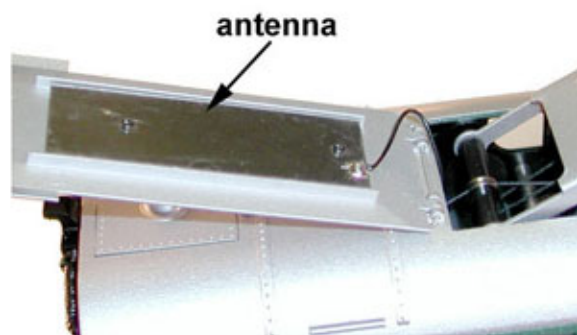
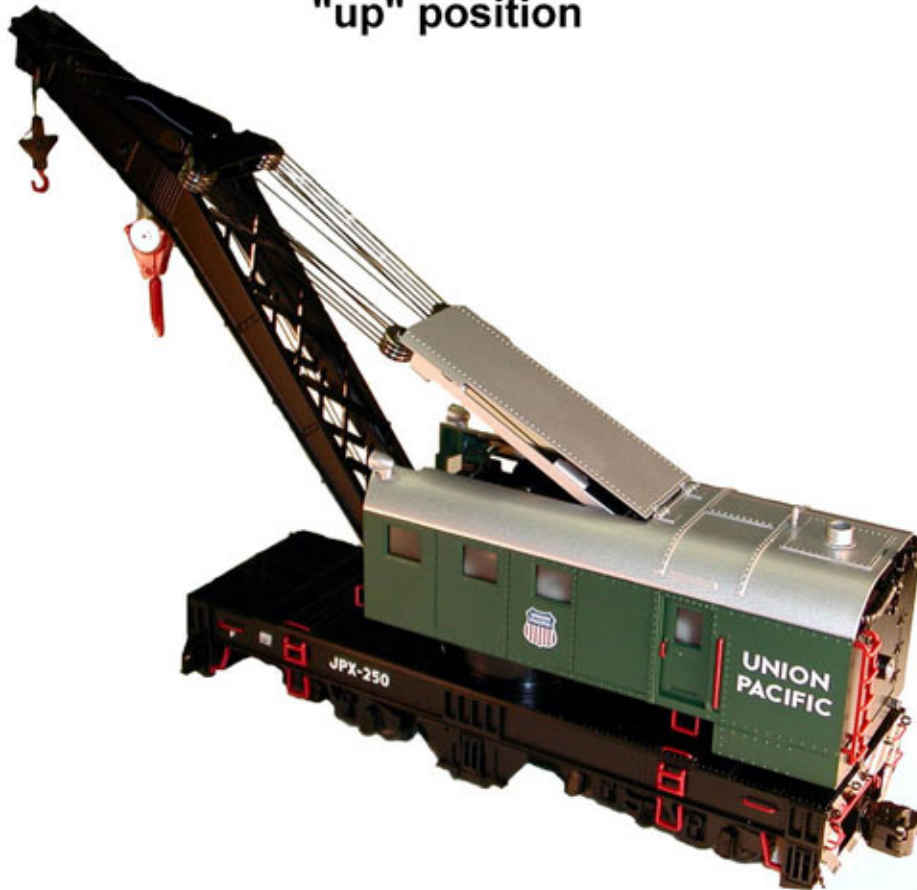


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# TMCC Crane Car Customer Service Note

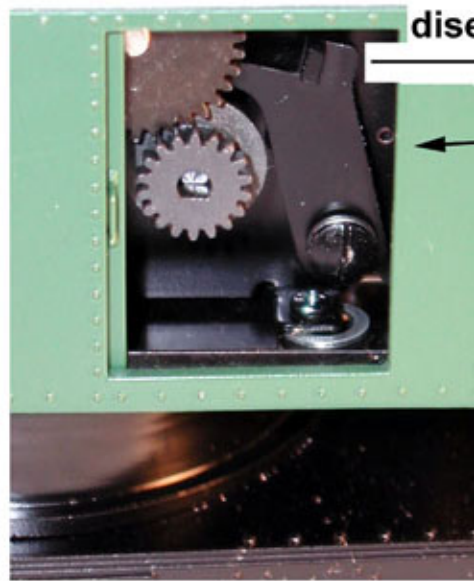
How to manually lower a boom stuck in the  
"up" position



**Step 1. Unsolder antenna wire OR remove the antenna from  
the boom cover door.**

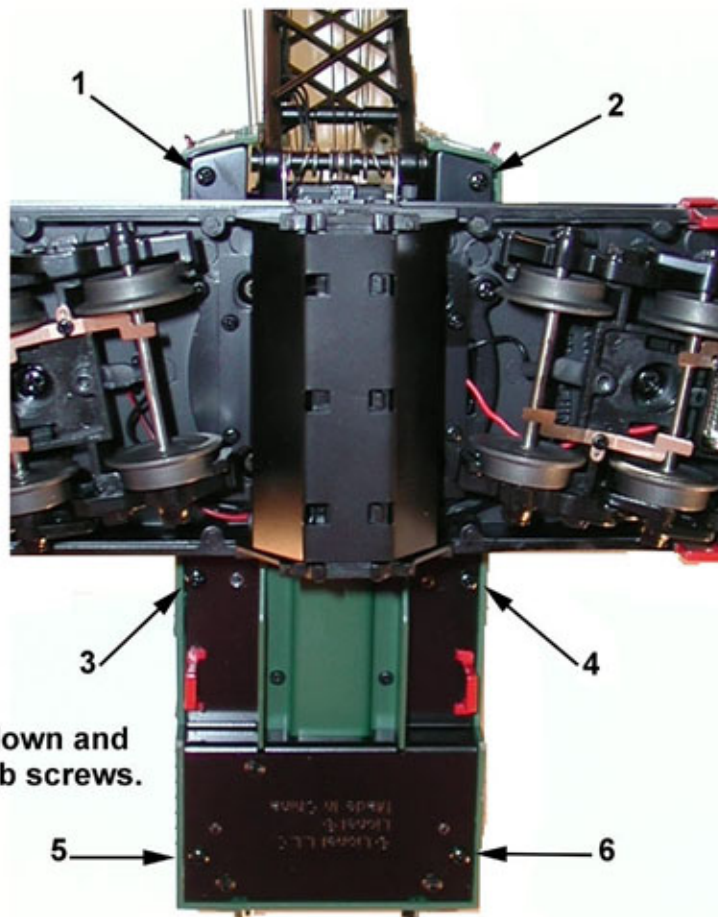
# TMCC Crane Car Customer Service Note

**NOTE!** Make sure you keep constant pressure on the boom to keep the boom string taut. If the boom moves when turning the car upside-down, the string will come off of the pulley and will tangle.



**Step 2.** Move lever to disengage cab rotation gears. The cab can now spin freely.

crane front →

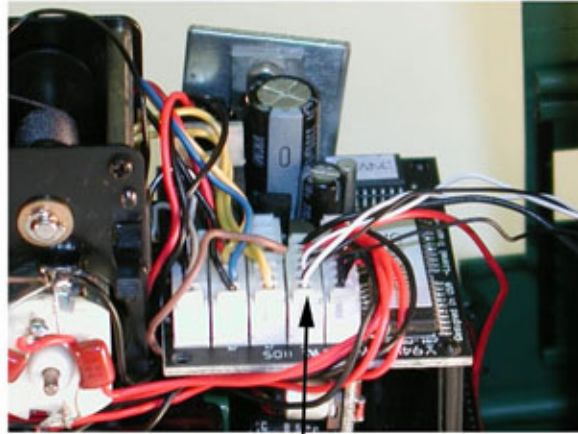


**Step 3.**

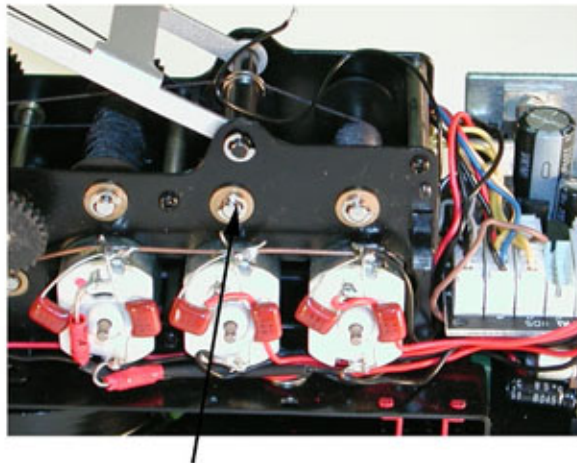
Turn car upside-down and remove the six cab screws.



# TMCC Crane Car Customer Service Note



**Step 4.**  
Unplug the L.E.D. harness to free the cab from the chassis.



**Step 5.**  
The boom motor and pulley are located in the middle position.  
Carefully remove the C-clip\* from the boom pulley shaft.

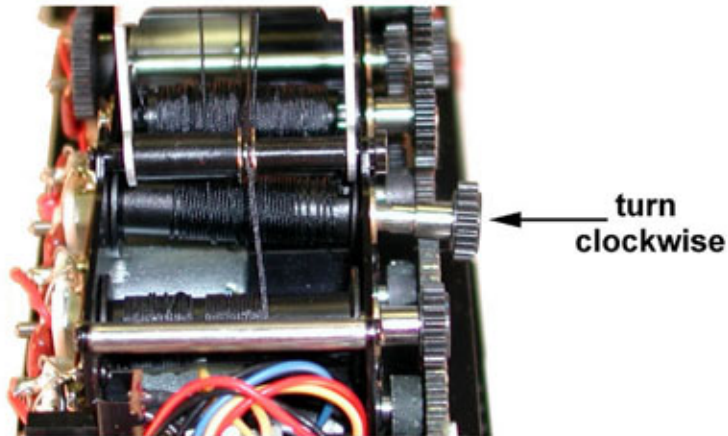
**\*610-9899-133 C-clip/shaft retainer**



# TMCC Crane Car Customer Service Note

## **CAUTION!**

Support the boom assembly so that it does not fall when the gears disengage.



## **Step 6.**

Pull the pulley shaft assembly out slowly until the shaft gear clears the lower drive gear. Now rotate the shaft gear clockwise to lower the boom. Once lowered, carefully re-install the pulley shaft assembly and install the C-clip.

## **Step 7.**

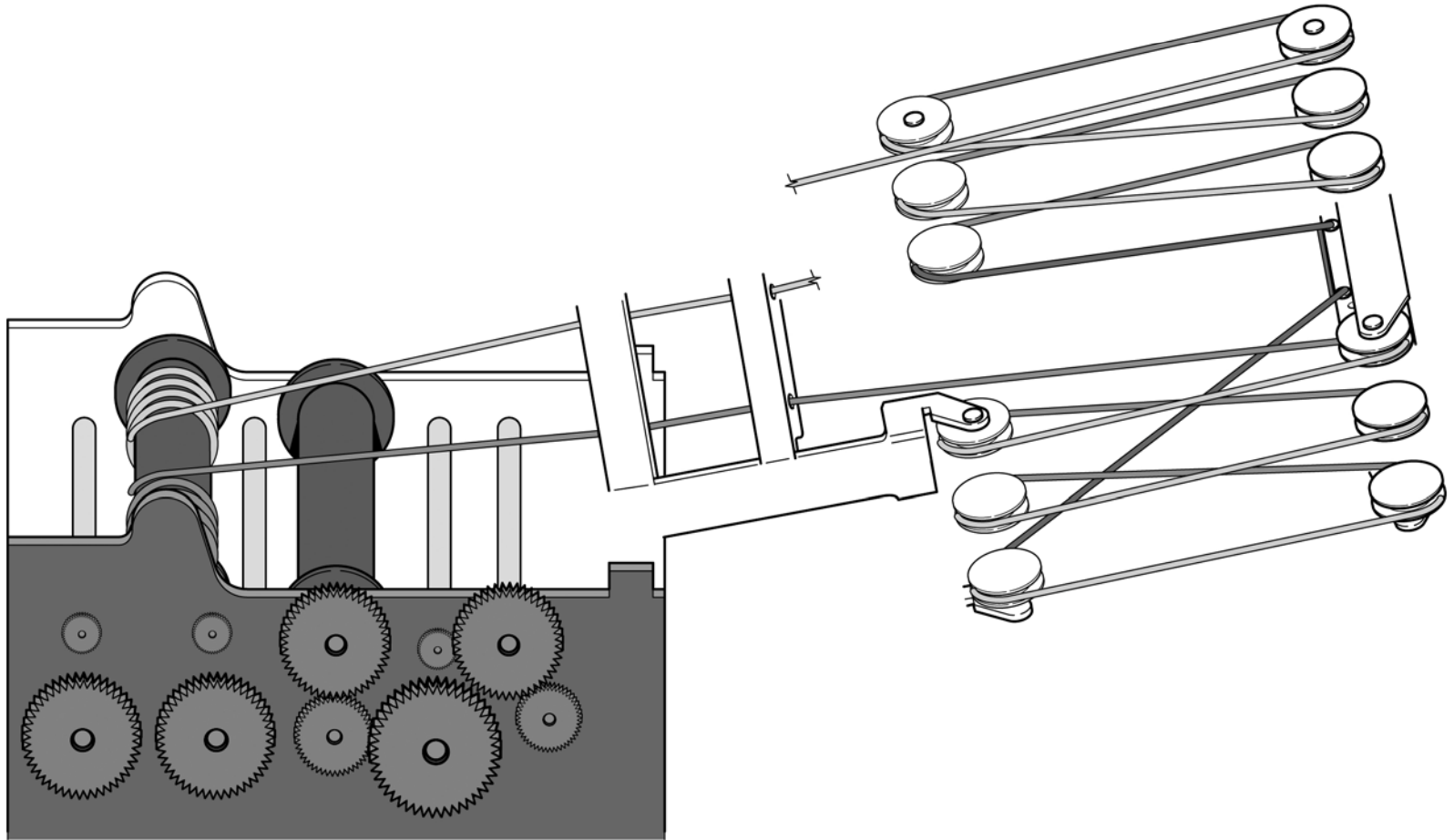
Reinstall the cab.

## **Step 8.**

Engage the cab rotation gears (optional) and re-solder the antenna wire if removed. The crane car can now be placed into its original packaging.

notes:

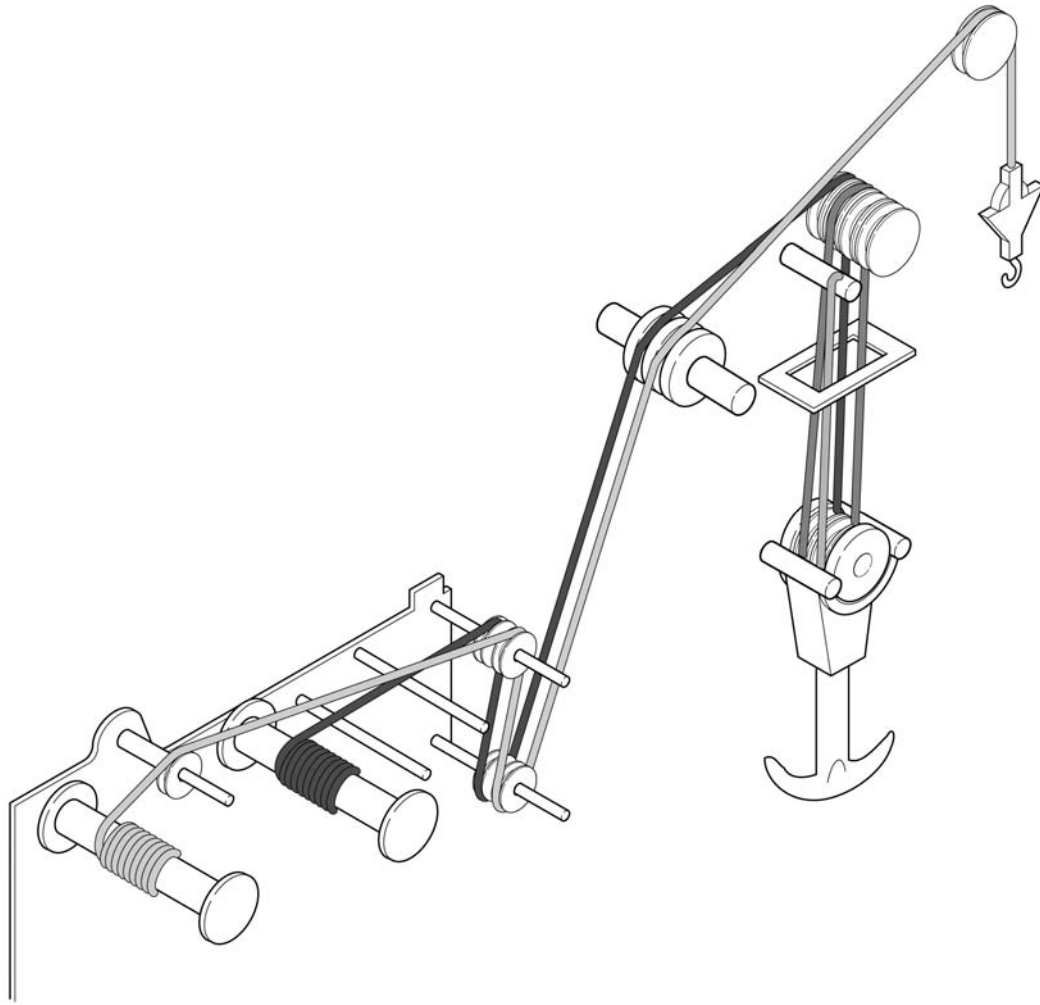
# T.M.C.C. CRANE CAR BOOM RE-STRINGING DIAGRAM



**String Part # 620-6769-050 (order by the foot) – length 8 ft. plus 3 in. for string tie offs. (qty-1)**

**Complete car restringing (hooks and boom) requires 20 ft.-9 in. of string.**

# T.M.C.C. CRANE CAR HOOK RE-STRINGING DIAGRAM



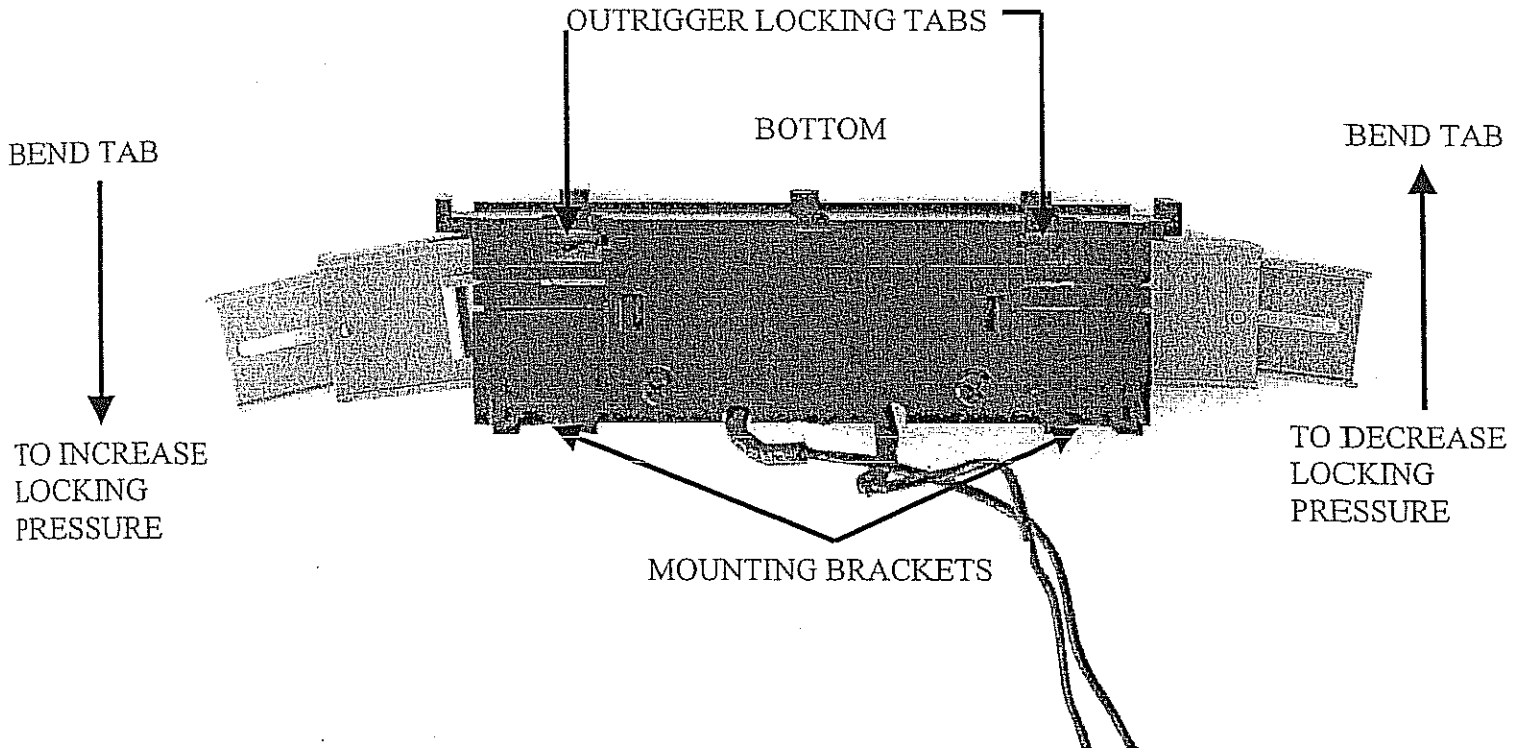
**String Part # 620-6769-050 (order by the foot)**

**Main Hook length 8 ft. plus 3 in. for tie offs.(qty-1)**

**Auxiliary Hook length 4 ft. plus 3 in. for tie offs. (qty-1)**

**Complete car restringing (hooks and boom) requires 20 ft.-9 in. of string.**

## TMCC CRANE CAR OUTRIGGER ADJUSTMENTS



**CAUTION!** ADJUSTMENTS REQUIRE THE CAR TO BE TURNED UPSIDE DOWN. SECURE THE BOOM SO THAT IT DOES NOT FALL AWAY WHEN TURNED OVER, OTHERWISE THE BOOM RIGGING CAN BECOME TANGLED

1. OUTRIGGER DEPLOYS BY ITSELF
  - BEND TAB IN DIRECTION SHOWN TO INCREASE LOCKING PRESSURE
2. OUTRIGGER "BUZZES" BUT DOES NOT DEPLOY
  - 6-19899 PENNSY, 6-26769 SANTA FE CARS ONLY. IF END OUTRIGGERS DO NOT DEPLOY TRY THIS FIRST. THE LOWER HANDRAILS ON THE CAR ENDS MAY BE PUSHED INTO FRAME TOO DEEPLY JAMMING THE OUTRIGGER BEHIND IT. CAREFULLY PULLING THE HANDRAIL OUT SLIGHTLY WILL ALLOW OUTRIGGERS TO DEPLOY. IF NOT MOVE ON TO TAB ADJUSTMENT.
  - BEND TAB IN DIRECTION SHOWN TO DECREASE LOCKING PRESSURE

### NOTE!

- MAKE ADJUSTMENTS IN SMALL INCREMENTS AND TEST CAR BEFORE MAKING ANOTHER ADJUSTMENT
- MIDDLE OUTRIGGER REQUIRES REMOVAL OF METAL COVER TO ACCESS THE TABS
- OUTRIGGERS DO NOT HAVE TO BE REMOVED FROM CAR
- OUTRIGGERS MUST BE DEPLOYED TO ACCESS THE TABS