1. **Suggested Materials**
   - **Mechanics Tools**
   - **Escalator Barricades**
   - **Vacuum Cleaner**
2. **Material Required: Supplied through Local Otis Office**

Item	Description & Part #	Part No.	Notes	Quantity
1	Relay 24VAC, 4-pole	COMMMY4ZN-AC24S	1	2
2	Socket, Relay, Ice cube, 4-pole	618AE2	1	2
3	18AWG numbered wire	AAA174AME4	1	30 INCH
4	18AWG Hook Up wire	AAA175ACD2	1	30 INCH
5	Wire ties	AAA652AA1	2	20
6	DIN rail 6-in	401B60	2	1
7	Lever operated connector 2-pos	AAA303EP227	2	5
8	Lever operated connector 3-pos	AAA303EP206	2	2
9	Updated wiring diagram markup	PUI2318003-2		2 Pages

Note 1: Prewired items 1-4 per "From – To" table Appendix-C

Note 2: Bag in a plastic bag

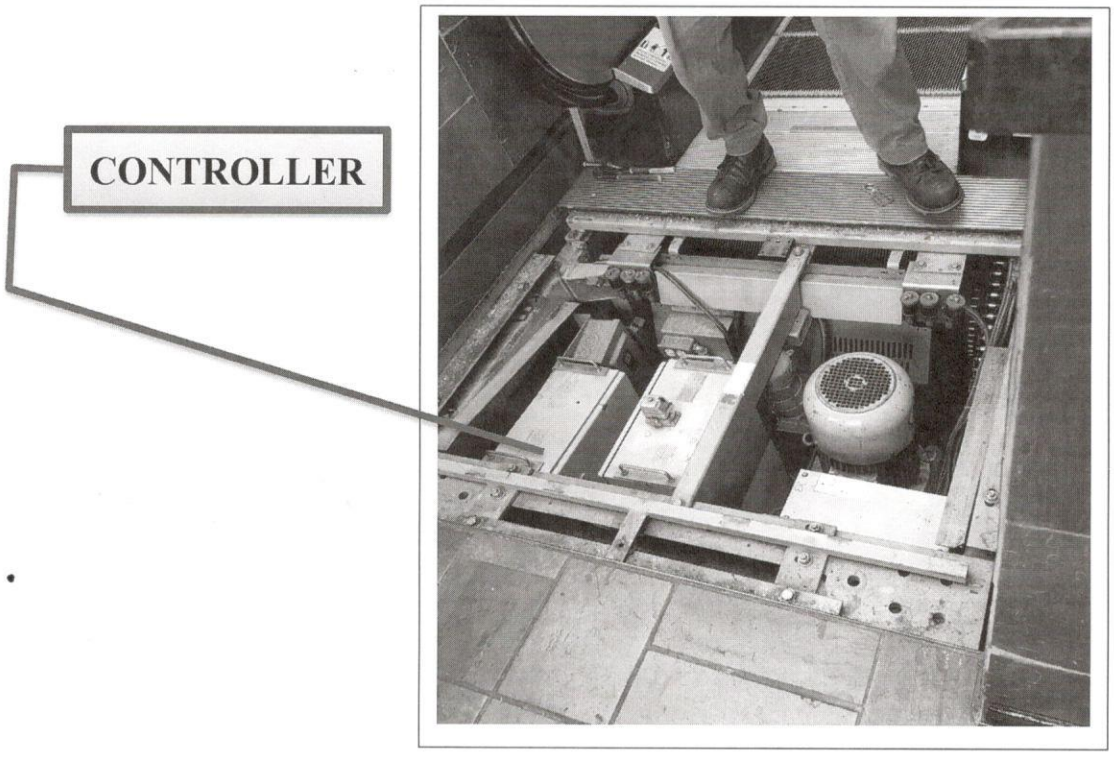
3. **Objective:**

The objective of this work is to positively isolate U/UX and D/DX relays from MOBO, (Escalator Mother Board), via a pair of pilot relays called hereinafter SRU, (Start Up Relay) and SRD, (Start Down Relay) respectively, see Area 201-212 and 193-196. It is possible for the AC power transients penetrate far into an idle escalator, with the disconnect closed,

and a compromised MOBO PCB to activate the UP or DOWN signal and in turn cause an unintended motion.

The coils of the SRU and SRD relays will be activated by the key-switch starting circuitry. A set of the SRU and SRD contacts added to the U & D relay circuitry respectively, will prevent the escalator from unintended starting during power-switching transition.

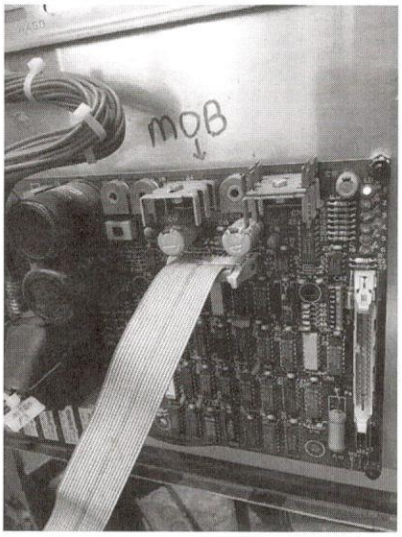
- NOTE: This work is intended for escalator controllers with an A9703C MOBO (Escalator Mother Board) PCB. See sheet 5 of this PUI for a photo of MOBO. If this machine is not equipped with MOBO it is not affected.

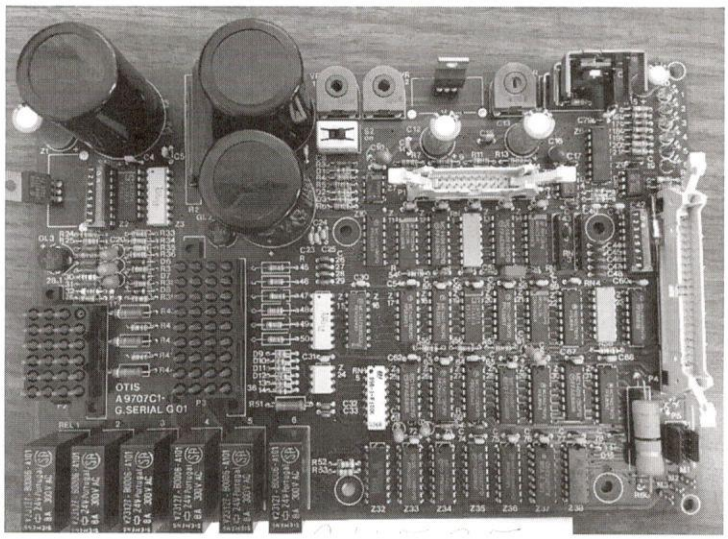


4. Work Instructions:

4.1. Open controller cabinet

4.2. Verify the escalator controller is equipped with an A9703C MOBO (Escalator Mother Board) PCB; it not the unit is not affected.





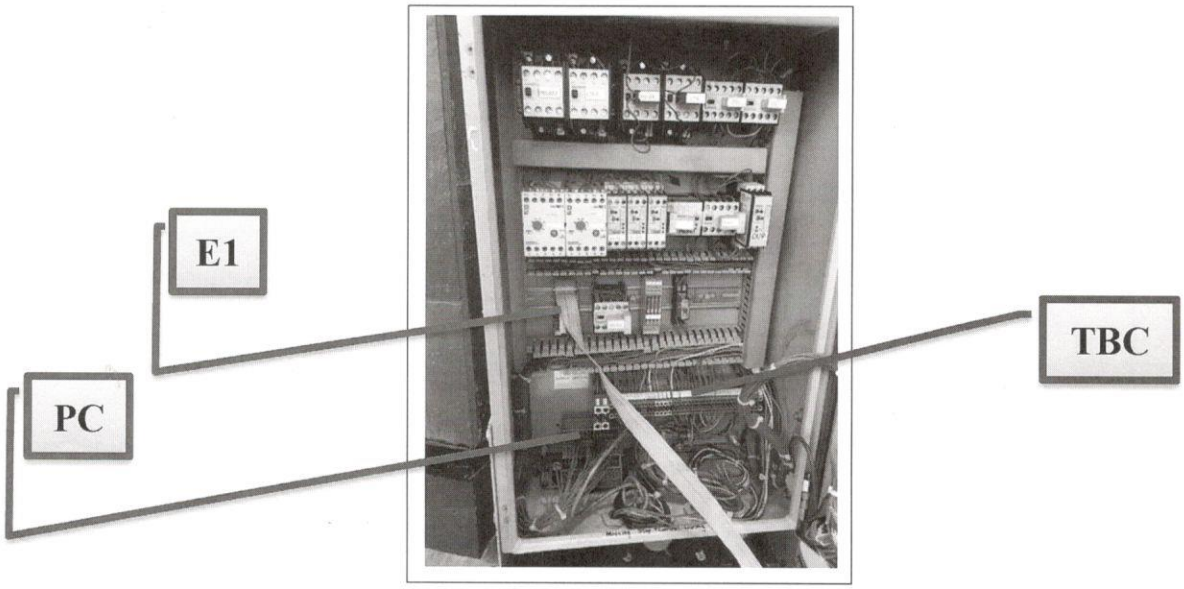
4.3. Clean and Vacuum the controller as necessary.

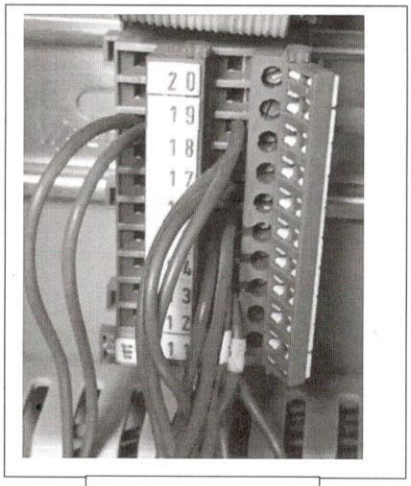
4.4. Identify terminal blocks E1, PC, and TBC, specifically identify following signal:

4.4.1. E1/3, E1/4, E1/5

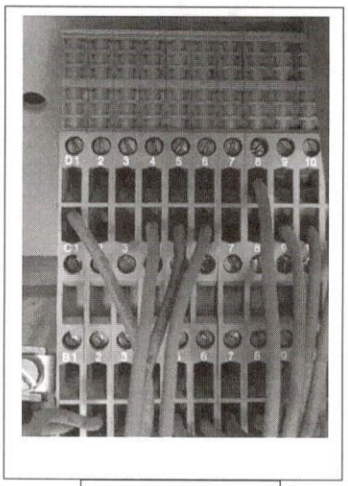
4.4.2. PC/4, PC/5, PC/

4.4.3. TBC/53, TBC/54, TBC/N2, TBC/V2

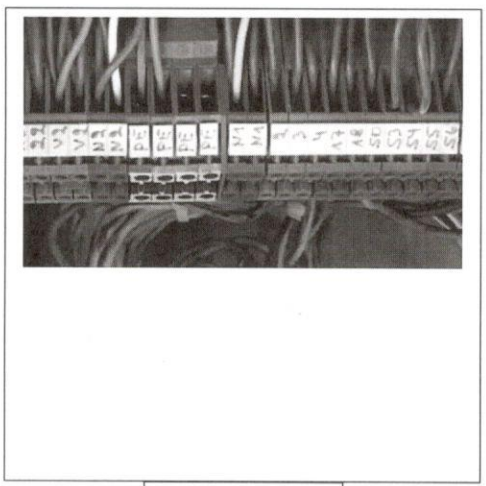




E1

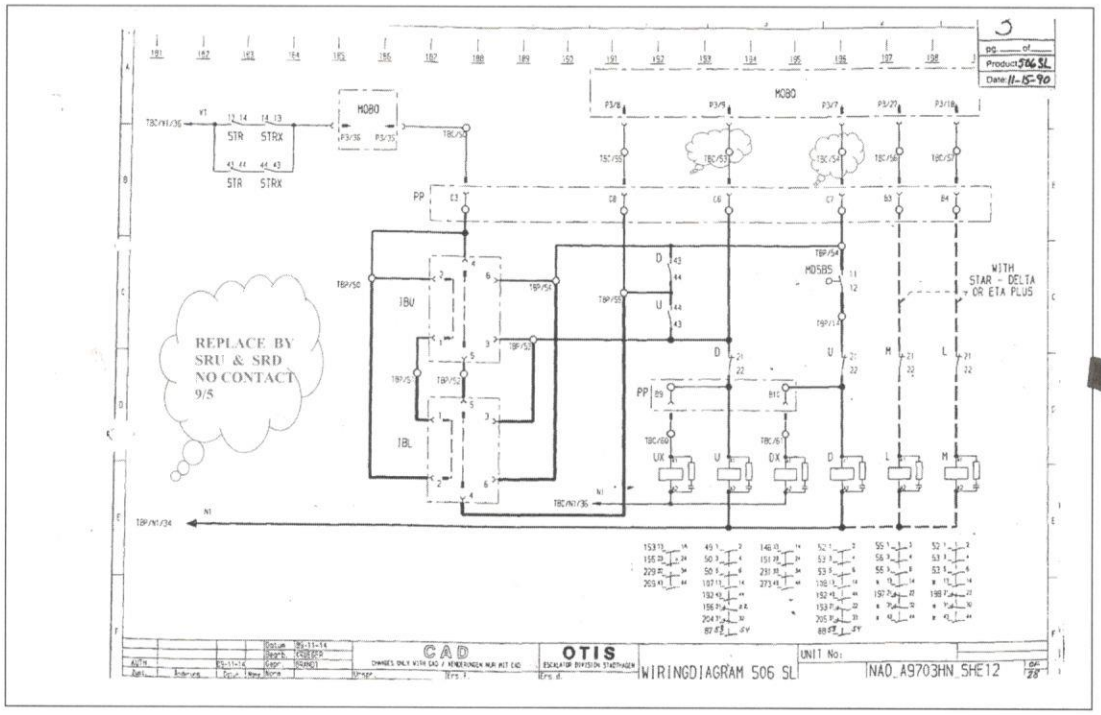


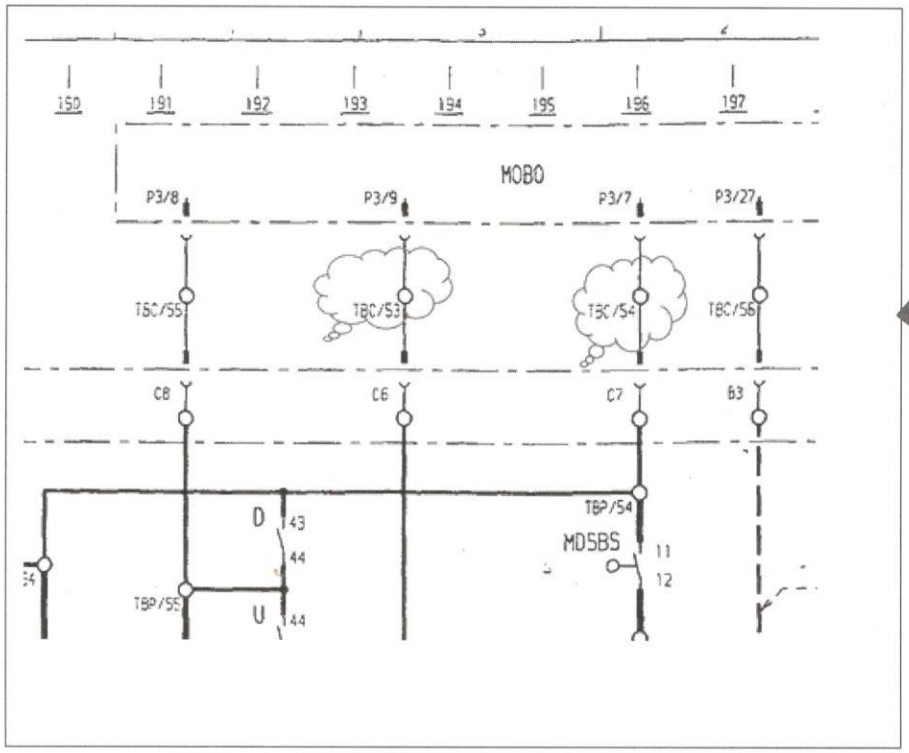
PC



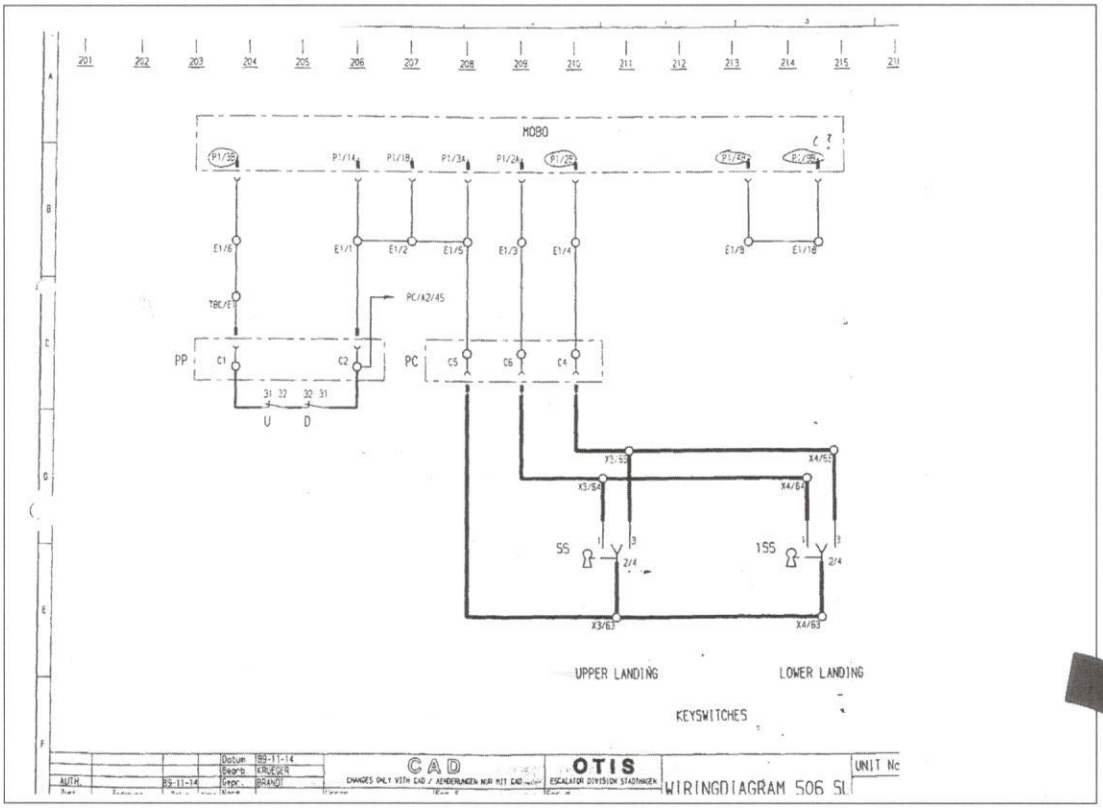
TBC

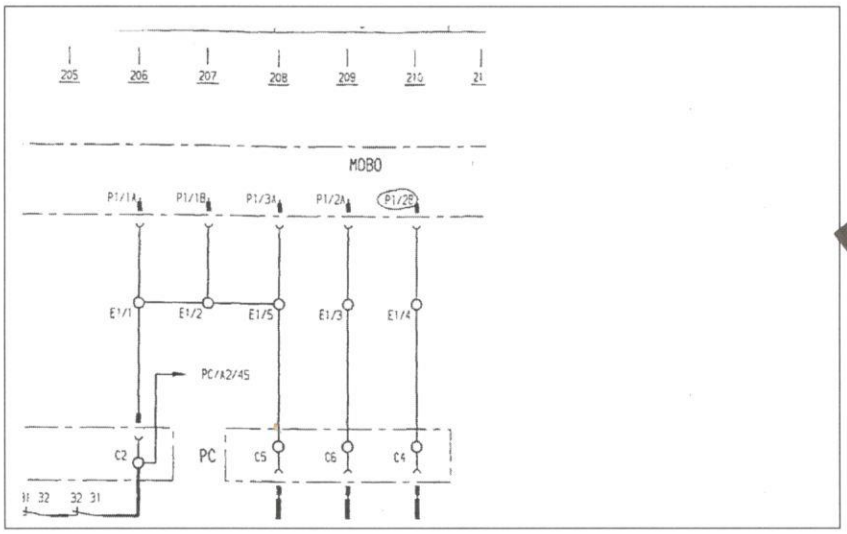
4.5. Review Area 192 – 196; the UX/U and DX/D circuit, identify wires terminated to TBC/53 and TBC/54





4.6. Review Area 205 – 211; identify wires terminating to terminal blocks E1/3, E1/4 and E1/5. Identify wires terminating to PC terminal Block PC C4, C5 and C6



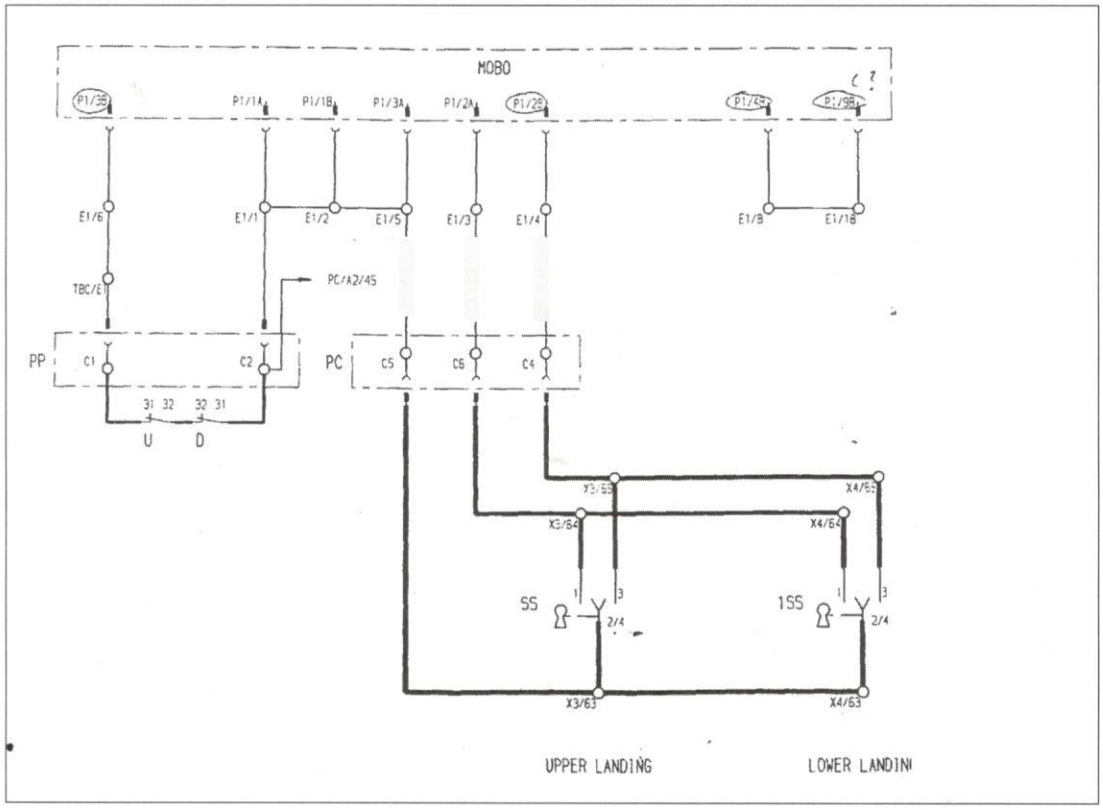


4.7. OMITs

4.7.1. Remove wire from E1/3 to PC/C6, discard the wire

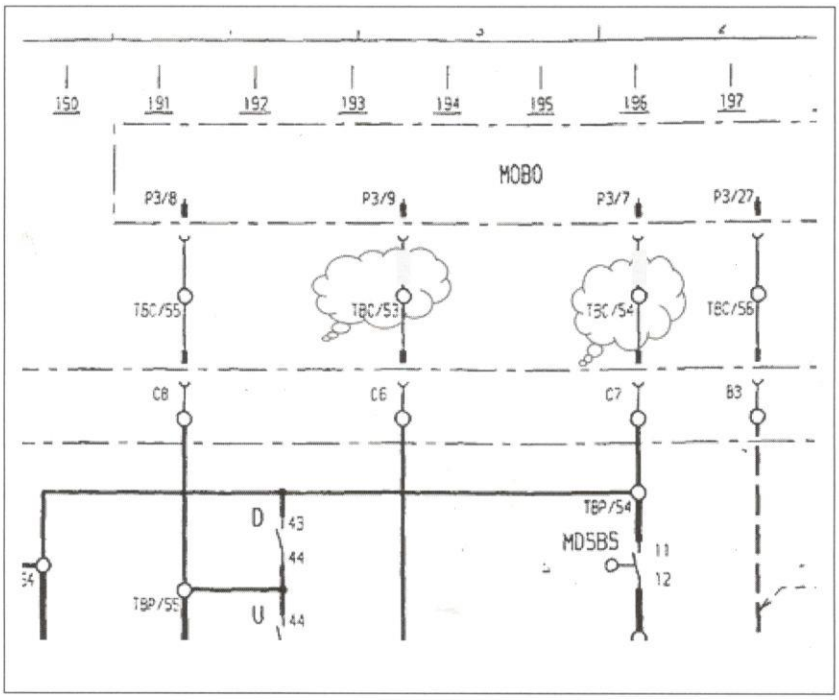
4.7.2. Remove wire from E1/4 to PC/C4, discard the wire

4.7.3. Remove wire from E1/5 to PC/C5, discard the wire, (!! IMPORTANT!! , after removing E1/5 from PC/C5, ensure E1/1, E1/2 and E1/5 are still connected together and measure zero OHM.

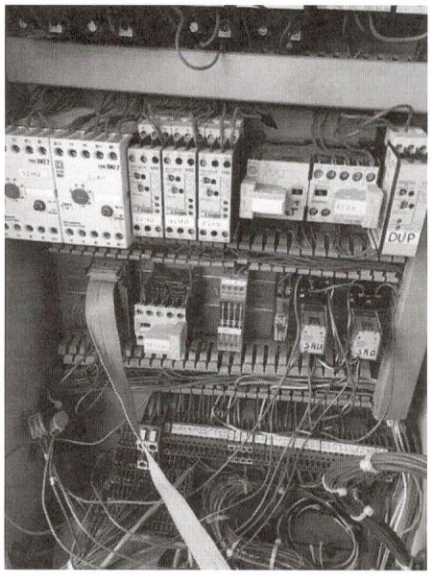


4.7.4. Remove wire from top of Terminal block TBC/53, mark this wire as P3/9

4.7.5. Remove wire from top of Terminal block TBC/54, mark this wire as P3/7



4.8. Install the pre wired SRD and SRU relays and sockets into the din rail inside the controller. If no din rail space is available you may use the provided din rail with this kit.



4.9. ADDs

4.9.1. Wire #1 to E1/5, (from SRD-7 /SRU-7)

4.9.2. Wire #10 to E1/3, (from SRU-11)

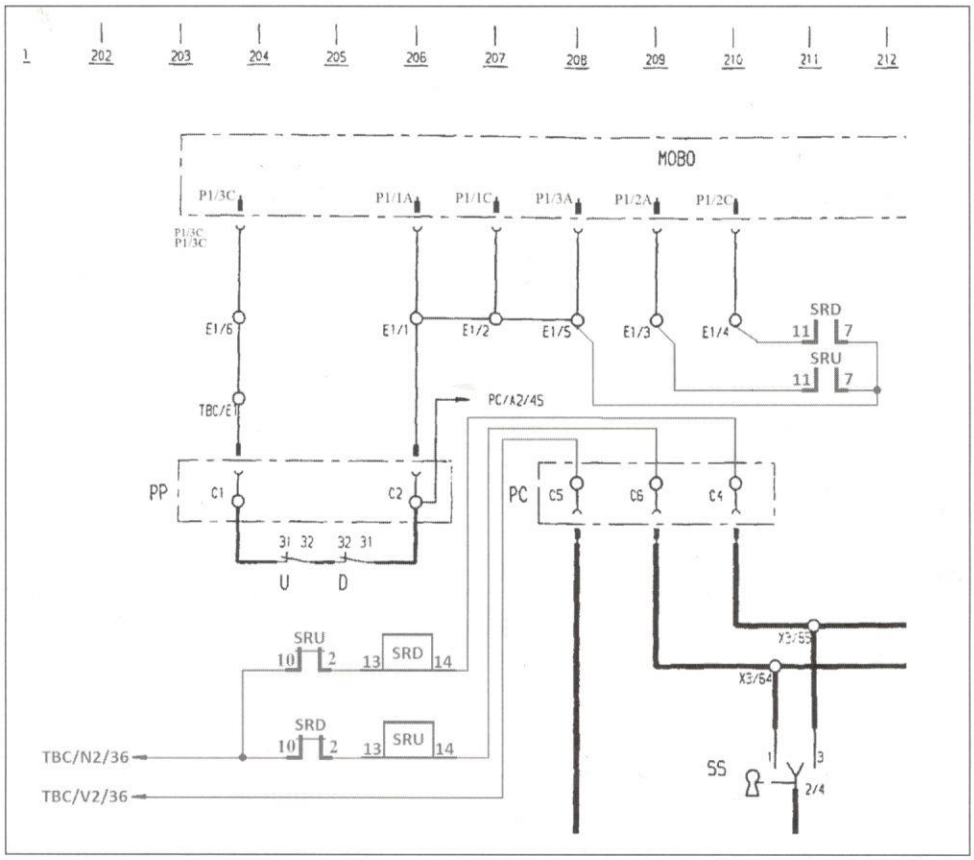
4.9.3. Wire #11 to E1/4, (from SRD-11)

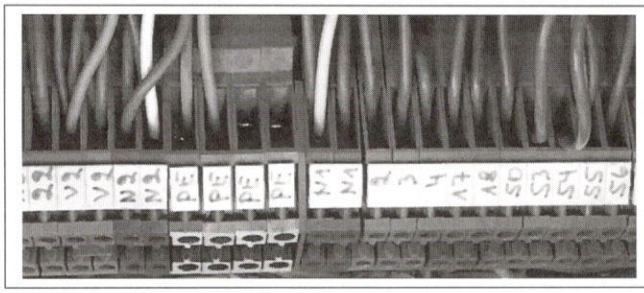
4.9.4. Wire #2 to PC/C4, (from SRD-14)

4.9.5. Wire #3 to PC/C6, (from SRU-14)

4.9.6. Wire #4 to PC/C5, (from TBC/V2)

4.9.7. Wire #5 to TBC/N2, (from SRD-10)



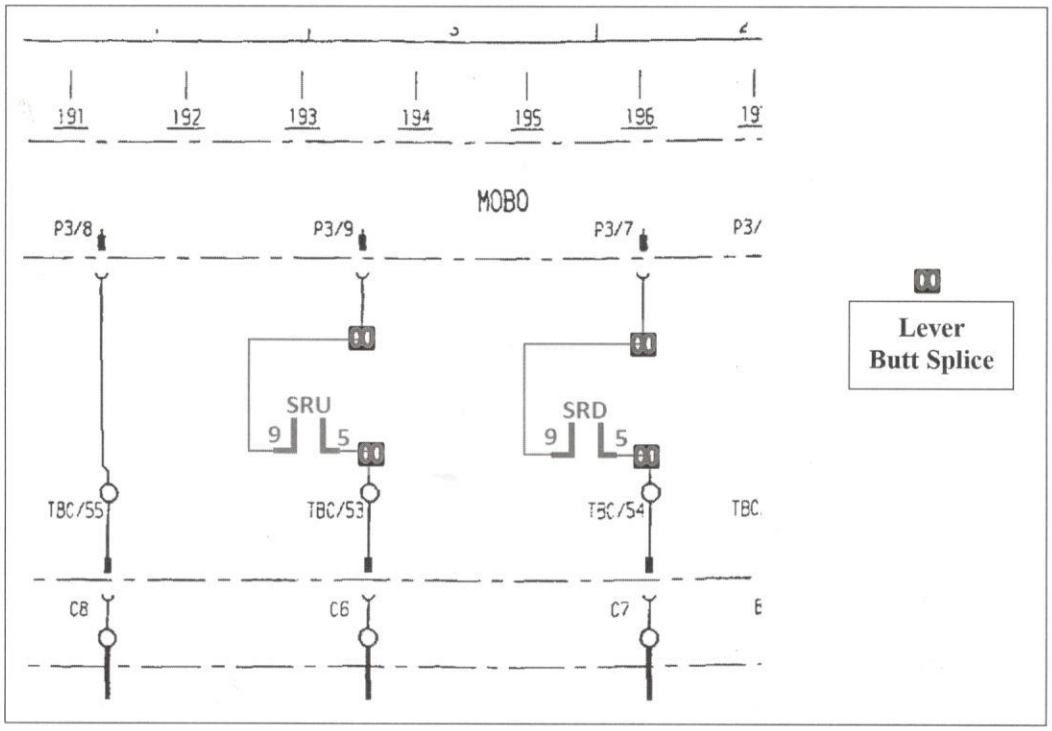


4.9.8. Wire #6 to P3/9 (from SRU-9). NOTE: use 2 position LBS, Lever Butt Splice

4.9.9. Wire #7 to TBC/53

4.9.10. Wire #8 to P3/7 (from SRD-9). NOTE: use 2 position LBS, Lever Butt Splice

4.9.11. Wire #9 to TBC/54



4.10. Review Omit and Add implementation. Ensure work is complete, tug wires and ensure terminations are secure and reliable.

4.11. Dress up wiring using provided tie-wraps in this PUI.

4.12. Clean up and account for all your tools and supplies. Prepare for preliminary system test.

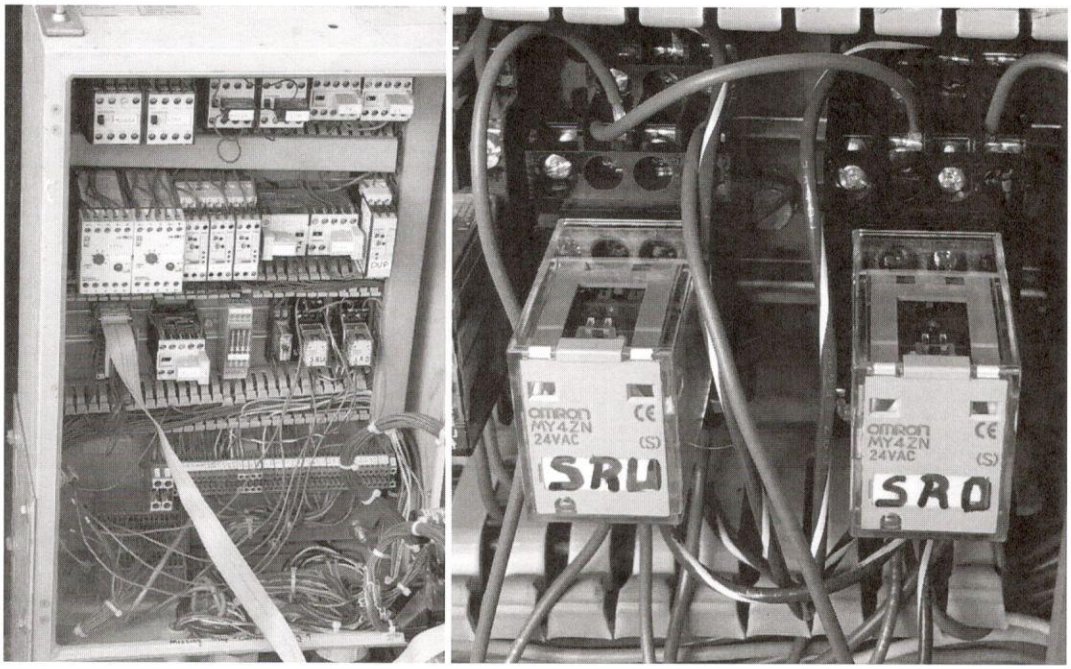
4.13. Close the controller door.

4.14. Take control of escalator.

4.15. Test START and STOP function, both in UP and DOWN direction from the upper and lower landing. Make note of any anomaly and remedy the problem.

4.16. Ride the escalator and note any anomaly.

4.17. Completed work



4.18. Final work:

4.18.1. Replace affected wiring diagrams with the updated markup wiring diagrams included with this PUI

4.18.2. W/D GCA26202D Sheets 11 & 12

4.18.3. W/D A9703HN Sheets 12 & 13

4.18.4. Return to service and notify customer.

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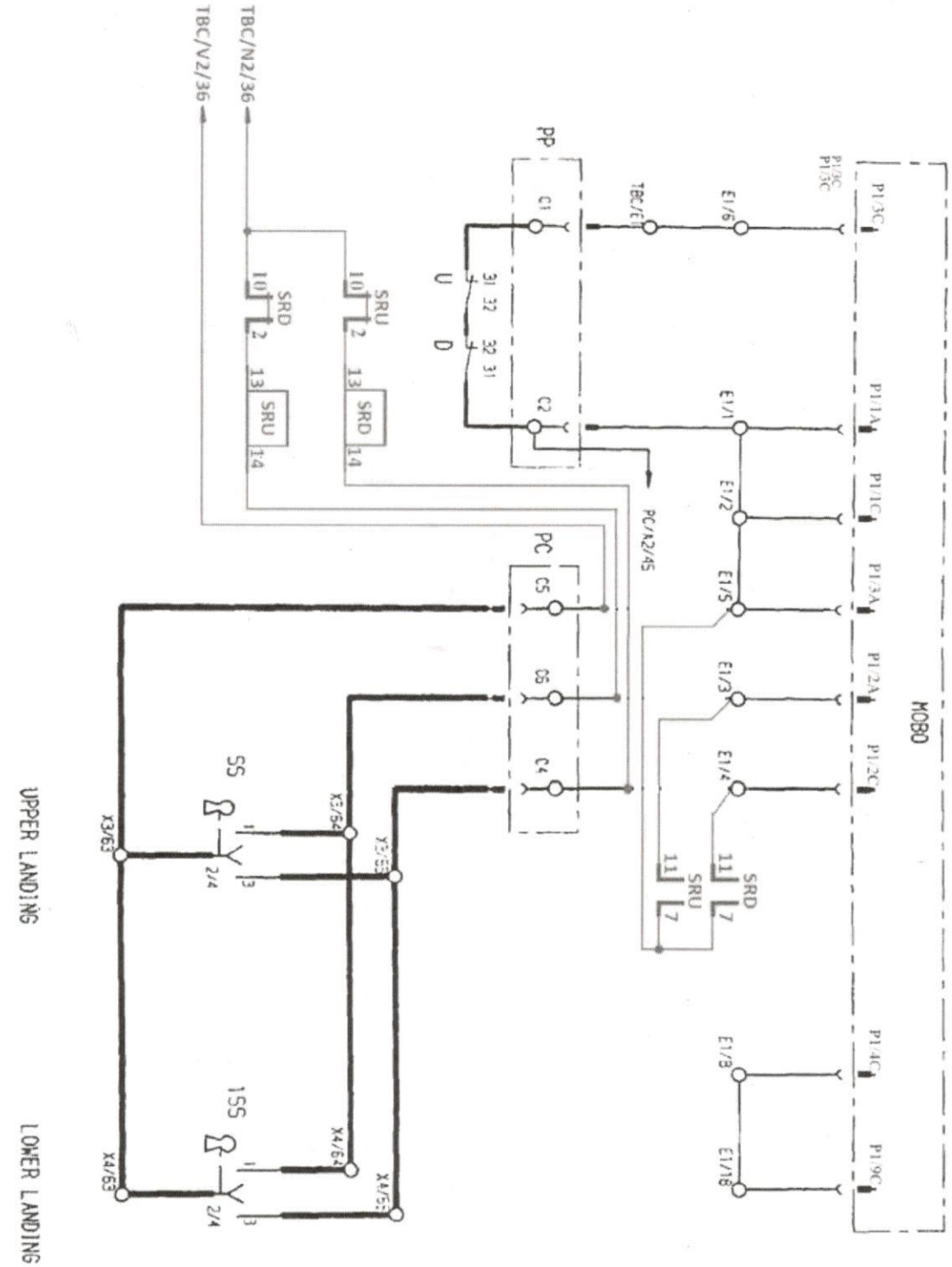
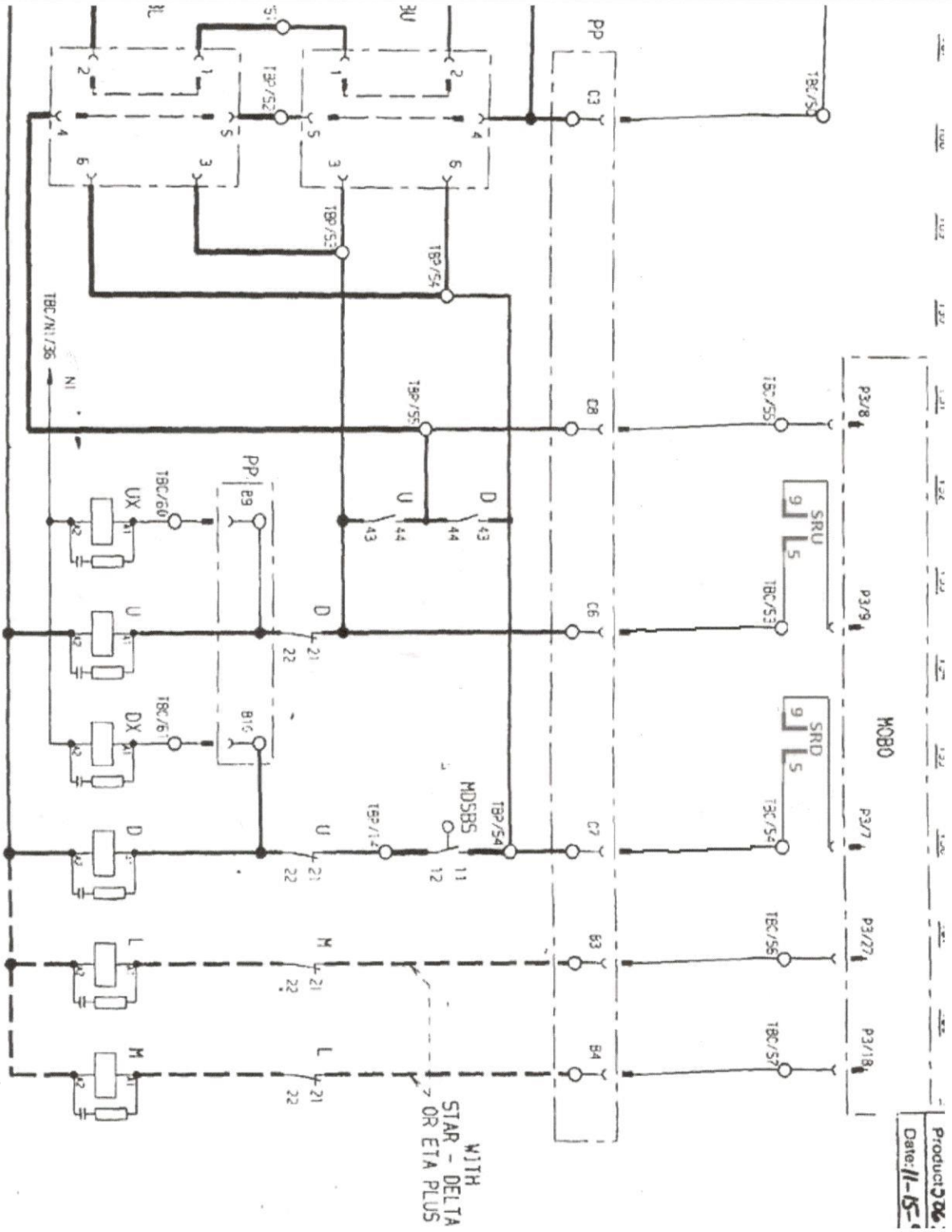
Appendix A



Appendix B



Appendix C

WIRE NO.	FROM	TO	DESCRIPTION
	SRD-7	SRU-7	6 INCH HOOK UP WIRE 18AWG BROWN
1	SRU-7	E1/5	18 INCH PIGTALE MARK AS: **E1/5**
2	SRD-14	PC/C4	18 INCH PIGTALE MARK AS: **PC/C4**
3	SRU-14	PC/C6	18 INCH PIGTALE MARKED AS: **PC/C6**
4	TBC/V2	PC/C5	18 INCH MARK AS: **FROM-V2 TO-PC/C5**
	SRD-13	SRU-2	6 INCH HOOK UP WIRE 18AWG BROWN
	SRU-13	SRD-2	6 INCH HOOK UP WIRE 18AWG BROWN
	SRU10	SRD-10	6 INCH HOOK UP WIRE 18AWG BROWN
5	SRD-10	TBC/N2	18 INCH PIGTAILE MARK AS: **TBC/N2**
6	SRU-9	LBS-P3/9	18 INCH PIGTAIL MARK AS: **P3/9**
7	SRU-5	TBC/53	18 INCH PIGTAIL MARK AS: **TBC /53**
8	SRD-9	LBS-P3/7	18 INCH PIGTAIL MARK AS: **P3/7**
9	SRD-5	TBC/54	18 INCH PIGTAIL MARK AS: **TBC/54**
10	SRU-11	E1/3	18 INCH PIGTALE MARK AS: **E1/3**
11	SRD-11	E1/4	18 INCH PIGTALE MARK AS: **E1/4**

Appendix D