

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Reports No: 50-456/84-20; 50-457/84-19

Docket Nos: 50-456, 50-457

Licenses No: CPPR-132; CPPR-133

Licensee: Commonwealth Edison Company  
Post Office Box 767  
Chicago, IL 60690

Facility Name: Braidwood Station, Units 1 and 2

Inspection At: Braidwood Site, Braidwood, IL

Inspection Conducted: July 23-25, and October 16-18, 1984

*W. J. Key*  
Inspector: W. J. Key

10/30/84  
Date

*D. H. Danielson*  
Approved By: D. H. Danielson, Chief  
Materials and Processes Section

10/30/84  
Date

Inspection Summary

Inspection on July 23-25, and October 16-18, 1984 (Report No. 50-456/84-20; 50-457-84-19)

Areas Inspected: Special, unannounced inspection to address allegations regarding defective block wall column welds. The investigation involved a total of 62 inspector-hours by one NRC inspector.

Results: No item of noncompliance or deviations were identified.

## DETAILS

### 1. Persons Contacted

#### Commonwealth Edison Company (CECo)

- \*G. E. Groth, Assistant Construction Superintendent
- \*C. W. Schroeder, Licensing and Compliance Superintendent
- \*T. E. Quaka, Site QA Superintendent
- \*C. Gray, Project Structural Supervisor
- \*L. M. Kline, Licensing and Compliance Engineer
- \*P. L. Barnes, Licensing Engineer
- B. Tanouye, Structural Engineer

#### Gust K. Newberg (GKN)

- D. Craven, Project Manager
- R. Voss, Supervisor

#### Pittsburgh Testing Laboratory (PTL)

- T. Fraizzer, Supervisor

\*Denotes those attending either the entrance or exit meeting, or both.

### 2. Allegations (ATS No. RIII-84-A-0096)

#### a. Background

On July 3, 1984, while touring the plant, the NRC Construction Senior Resident Inspector received an allegation from a craftsman that block wall columns installed by American Bridge four years ago had defective welds at the top and bottom of the columns.

The allegor stated that there were about 800 block wall columns with defective welds. The allegor further stated that G. K. Newberg had removed some of the concrete to inspect some of the welds and found unacceptable welding, but was told to cover it up due to the cost factor. The allegor stated, that, he felt the reason for the defects was the production push CECo had on American Bridge to complete the welding. He further stated that many block wall columns were put up in a short period of time; therefore, the quality of work suffered.

From the allegors statement, it appears that there are two allegations being made.

- . That there are defective welds at the top and bottom of the block wall columns.
- . That Newberg was told to cover up unacceptable welds that were found.

The alleger was recontacted by the NRC and questioned concerning his original statement "that Newberg was told to cover up unacceptable welding due to the cost factor." The alleger stated, that, he never meant to imply that a cover up was taking place, rather he had been told by a Newberg inspector that Newberg was "trying to sell" it to Commonwealth Edison Company on a sampling basis so that repairs would not have to be made.

b. NRC Review

The records show that American Bridge (ABD) supplied columns and miscellaneous auxiliary structural steel for the block column walls on P.O. No. 186236, dated, May 29, 1974. They performed no field installation activities. Mid-City supplied and installed the gallery columns on P.O. No. 205999, dated, November 23, 1976. Ramco also supplied about 1.6% of the columns on P.O. No. 236168, dated April 29, 1980.

On September 20, 1982, the licensee performed an audit of site contractors work procedures (Audit Report No. 20-82-52). The possibility of inadequate provisions for bolt torque and weld inspections of installed structural steel was revealed. The deficiency was that, inspections of columns and welded tees (WT) had not been performed since there were no provisions in Newbergs QCP Section 31 for inspection of installed structural steel.

Inspections that had been performed were performed by Newberg QC personnel. Many of these were not properly documented or were not documented at all.

In June 1977 the licensee instructed their inspection agency, Pittsburgh Testing Laboratory (PTL), to start performing shop inspections of auxiliary structural steel including block wall columns at the ADB fabrication shop. They were not instructed to inspect field installation.

Following the licensees audit of site work procedures Newberg was instructed to perform a documentation review of all block wall columns. This was completed on November 5, 1982. This review identified 1252 welded connections of 2028 total, and 484 bolted connections of 825 total that did not have inspection reports. Newberg issued nonconformance report No. 213-498 identifying installed columns and WT's in the locations listed below that had not been inspected and were now inaccessible.

- . Internal block wall columns
- . Block wall tees
- . Pipe tunnel at elevation 355'4"
- . Pipe tunnel at elevation 414', Diesel Room 1
- . Pipe tunnel at elevation 414', Diesel Room 2
- . Platform at elevation 410'6"
- . Roof at elevation 414', Unit 1
- . Roof at elevation 414', Unit 2
- . Framing at elevation 376', Area 5
- . Framing at elevation 376', Area 7

On November 8, 1982, the licensee wrote Nonconformance Report No. 434 identifying inadequate inspection procedures and PTL interface as the cause of the deficiency. Newberg QC Procedure, Section 31, "Erection and Inspection of Structural Steel" was revised to include weld inspection and bolt torque checks by PTL. The appropriate PTL procedures were also revised. On November 19, 1982, the licensee notified the Region III office of a deficiency reportable pursuant to 10 CFR 50.55(e) regarding structural steel installation inspection records. This reportable deficiency was identified as No. 82-10.

The licensee instructed Newberg to develop an inspection program to reinspect all accessible bolted and welded connections in accordance with Newbergs revised and approved QCP, Section 31.

For the inaccessible connections, inspections would be performed on selected columns and WT after exposure in accordance with a statistical sampling plan established by Sargent and Lundy (S&L) and developed in accordance with Military Standard 105D for a multiple sampling method. Inspection results are to be evaluated by S&L.

The acceptance criteria is based on yielding a 95% confidence/95% reliability level. Installation will be verified using the same procedure/requirements applied during initial installation.

From a list of members embedded in masonry walls or slabs without inspection records, S & L established a sampling plan made up of two groups; (1) columns/beams, and (2) welded tees (WT). The list of columns/beams identified which end of the column (top or bottom) or which beam connection would be inspected. The sampling plan calls for 50 column/beam connections to be inspected. If any sample is rejected an additional 50 connections would be inspected and evaluated. The plan further calls for 64 WT connections to be inspected. If any sample is rejected an additional 64 connections would be inspected.

From the list of inaccessible connections supplied to S & L, the following connections were selected for the first sample:

Column/Beam Connections

<u>Item</u>	<u>Random Number</u>	<u>Column Number</u>	<u>Connection</u>	<u>Drawing Number</u>
1	7	2AWC14	Bottom	S-673
2	13	3AWC15	Bottom	S-680
3	26	3.6AWC2	Top	S-707
4	34	4AWC2	Top	S-690
5	44	4WC13	Top	S-690
6	45	4AWC17	Bottom	S-690
7	58	4AWC26	Top	S-691
8	59	4AWC29	Bottom	S-691
9	60	4AWC31	Top	S-691
10	63	4AWC31	Bottom	S-691
11	67	4AWC39	Bottom	S-690
12	68	4AWC39	Top	S-690

<u>Item</u>	<u>Random Number</u>	<u>Column Number</u>	<u>Connection</u>	<u>Drawing Number</u>
13	89	4AWC88	Bottom	S-691
14	94	4.5AWC2	Top	S-705
15	98	4.5AWC5	Top	S-705
16	117	5AWC12	Bottom	S-696
17	125	5AWC27	Bottom	S-697
18	126	5AWC27	Top	S-697
19	127	5AWC31	Bottom	S-697
20	129	5AWC51	Bottom	S-700
21	155	5AWC205	Bottom	S-1287
22	177	6AWC90	Bottom	S-1601
23	208	6AWC14	Top	S-1601
24	211	6AWC16	Bottom	S-1601
25	219	6AWC20	Bottom	S-1601
26	247	7AWC39	Bottom	S-1303
27	251	7AWC41	Bottom	S-1303
28	253	7AWC42	Bottom	S-1302
29	279	8AWC6	Bottom	S-1315
30	281	8AWC7	Bottom	S-1315
31	287	8AWC40	Bottom	S-609
32	288	8AWC40	Top	S-609
33	296	8AWC44	Top	S-1610
34	320	8AWC69	Top	S-1313
35	334	8.5AWC37	Top	S-1335
36	335	8.5AWC38	Bottom	S-1335
37	336	8.5AWC38	Top	S-1335
38	346	8.5AWC43	Top	S-1335
39	348	8.5AWC69	Top	S-1612
40	370	9AWC3	Top	S-1618
41	375		1	S-707
42	381		6	S-707
43	386		12	S-707
44	393		3	S-708
45	405		10	S-704
46	413		18	S-704
47	427		32	S-704
48	429		34	S-704
49	430		35	S-704
50	439		44	S-704

WT Connections

<u>Item</u>	<u>Random Number</u>	<u>WT No.</u>	<u>A-DWG</u>	<u>Location</u>	<u>Elevation</u>
1	9	2AT92	A-226	M-23	359'0"
2	12	2AT92	A-226	M-23	360'0"
3	17	2AT94	A-226	M-24	357'0"
4	18	2AT94	A-226	M-24	360'0"
5	36	2AT93	A-226	M-25	358'0"
6	40	2AT99	A-226	Q-25	358'0"
7	62	2.6AT10	A-213	U.6-21	359'0"



<u>Item</u>	<u>Random Number</u>	<u>WT No.</u>	<u>A-DWG</u>	<u>Location</u>	<u>Elevation</u>
8	82	3AT36	A-220	P-23	369'0"
			A-256	P-24	369'0"
9	111	3AT44	A-220	Q-25/26	372'6"
10	121	3AT47	A-220	A-24	368'6"
			A-226		
11	131	3AT49	A-220	Q-23	372'0"
12	155	3AT61	A-223	Q.8-19.6	375'6"
13	160	3AT62	A-223	Q.8-19.6	376'6"
14	163	3AT63	A-223	Q.8-21	372'6"
15	168	3AT66	A-223	Q-21	375'0"
16	204	3AT75	A-223	V-15	380'0"
17	213	3AT78	A-223	UV-15	365'6"
18	225	3AT83	A-223	S-17	365'½"
19	319	3AT120	A-234	Q-15	378'0"
20	329	3AT127	A-234	Q-21	376'½"
21	332	3AT127	A-234	Q-21	378'½"
22	334	3AT128	A-234	Q.8-21	378'0"
23	342	3AT130	A-234	Q.8-19.6	379'½"
24	369	3AT149	A-228	P.8/10	375'0"
25	373	4AT2	A-229	L-14/15	384'½"
26	402	4AT13	A-229	L/M-12/13	387'0"
27	411	4AT28	A-229	N-11	392'0"
28	413	4AT37	A-229	P-11	384'½"
29	417	4AT49	A-229	P-18	384'½"
30	420	4AT49	A-229	P-18	398'0"
31	435	4AT64	A-229	Q-12/13	388'0"
32	447	4AT75	A-301	A-25/26	396'½"
33	465	4AT86	A-230	N-26	384'½"
34	509	4AT104	A-231	N-21	385'½"
35	570	4AT135	A-232	S/4-15	390'0"
36	588	4AT143	A-233	Q-10/11	396'0"
37	603	4AT150	A-230	Q-23	395'½"
38	626	4AT157	A-233	Q-11	387'0"
39	633	4AT159	A-233	P-11	393'0"
40	664	4AT185	A-234	U-21	397'0"
41	671	4AT202	A-234	Q.8-21	396'0"
42	695	5AT1	A-237	Q7.7	412'½"
			A-247		
43	736	5AT82	A-246	V.9-17/18	417'0"
44	738	5AT83	A-246	V.9-18	407'0"
45	744	5AT84	A-246	V.9-18/19	417'0"
46	769	7AT3	A-261	P/Q-7/7.7	441'0"
47	827	8AT5	A-266	P/Q-7/7.7	462'½"
48	833	8AT8	A-266	M-10	452'½"
49	835	8AT8	A-266	M-10	462'½"
50	903	8AT42	A-269	M-26	467'½"
51	61	2.5AT10	A-213	U.6-21	356'0"
52	156	3AT61	A-233	Q.8-19.6	380'0"
53	158	3AT62	A-223	Q.8-19.6	371'0"
54	234	3AT85	A-223	Q.8-15.4	376'0"
55	464	4AT84	A-230	N-25	398'0"

<u>Item</u>	<u>Random Number</u>	<u>WT No.</u>	<u>A-DWG</u>	<u>Location</u>	<u>Elevation</u>
56	510	4AT104	A-231	N-21	395' <sup>1</sup> / <sub>2</sub> "
57	578	4AT137	A-232	Q/5-15/17	390'0"
58	752	5AT88	A-239	N/P-24	417' <sup>1</sup> / <sub>2</sub> "
59	778	8AT5	A-266	P/Q-7/7.7	457'0"
60	856	8AT24	A-269	P/Q28.3/29	464'0"
61	861	8AT26	A-269	P/Q-30	452' <sup>1</sup> / <sub>2</sub> "
62	26	2AT96	A-226	N-25	359'0"
63	456	4AT82	A-230	N-24	388'0"
64	825	8AT5	A-266	P/Q-7/7.7	452' <sup>1</sup> / <sub>2</sub> "

Extras

65	134	3AT52	A-300	P-23	389' <sup>1</sup> / <sub>2</sub> "
66	251	3AT59	A-300	U-19	394' <sup>1</sup> / <sub>2</sub> "
67	559	4AT129	A-232	U/V-15/17	390'0"
68	562	4AT130	A-232	V-15	389' <sup>1</sup> / <sub>2</sub> "
69	596	4AT146	A-230	N-20	389'0"

An additional list of block wall columns/beams and WT connections without inspection reports was submitted to S & L on February 29, 1984. This increased the sample size and a new sampling plan was developed which took into consideration both lists.

The new sampling plan calls for 80 column/beam connections to be inspected; 40 of the inspections to be taken from the original list and 40 from the second list. All deficiencies are to be forwarded to S & L for review and disposition. If any deficiency cannot be dispositioned favorably an additional 80 connections are to be inspected.

The new plan also calls for 100 WT connections to be inspected. Sixty of the inspections are to be taken from the original list and 40 from the second list. Any deficiency that cannot be dispositioned favorably by S & L will be cause for inspecting an additional 100 connections. Newberg is tracking the status of connections inspected on their Wang system. A copy of the latest report is attached.

c. Observation of Activities

The inspector selected the connections listed below from the list being supplied to S&L for evaluation and visually examined the connection. Some deficiencies were noted, such as undercut, undersize welds, and overlap. In general the field welds appear to meet design requirements more than the shop welds.

For bolted connections deficiencies include slots too wide and bolts not centered in slots. All discrepancies noted are being documented on PTL reinspection reports and evaluated by S&L under their sampling program. All connections not meeting design requirements are being dispositioned by S&L and reworked or repaired.

<u>Connection Number</u>	<u>Drawing Number</u>	<u>Rev.</u>
8AWC69	S-1313	AL
7AWC40	S-1302	CD
6AWC20	S-1601	BS
6AWC6	S-1601	BS
6AWC14	S-1601	BS
5AWC51	S-700	AT
4AWC31	S-691	CM
4AT37	A-229	BN
2AT94	A-226	Y
3AT66	A-223	AZ
3AT36	A-220	AT
3AT33	A-220	AT

d. Material Traceability

The inspector reviewed the material test reports listed below for traceability of column connections. Documentation for the structural shapes reviewed indicate they meet the requirements for ASTM-A-36 materials.

<u>Column or Item No.</u>	<u>Material Heat No.</u>
2AT94 (WT)	2R8827
2AT92 (WT)	J53982
5AWC43	1R9982
8.5AWC57	1R8892
3AT13 (WT)	J52921
3AT49 (WT)	1R7593
3AT47 (WT)	K58443
4AT28 (WT)	H47292
2AT13 (WT)	82122
5AT82 (WT)	23694
6AWC72	1S131
8AWC27	1S133
6AWC31	J53832
8AWC34	10009
7AWC39	1R9106
5.7AWC2	10010

e. Reinspection Documentation

The inspector reviewed PTL reinspection reports of the ABD shop welds listed below. Many of the welds were reported as rejectable by PTL inspectors.

<u>Report No.</u>	<u>Column No.</u>	<u>Drawing No.</u>	<u>Weld No.</u>
6121VW-R1	2AWC14	S673	2128
7915VW-R1	2AWC30	S672	3484
7499VW-R1	4AWC29		2784
7379VW-R1	4.5AWC5	S1560	3039
6885VW-R1	5AWC51	S700	2742



<u>Report No.</u>	<u>Column No.</u>	<u>Drawing No.</u>	<u>Weld No.</u>
7592VW-R1	7AWC19	S1302	3032
7776VW-R1	7AWC39	S1561	2749
7775VW-R1	7AWC51	S1561	2752
7563VW-R1	7AWC42	S1561	2753
7423VW-R1	8AWC69	S1313	2761
7702VW-R1	8.5AWC38	S1335	2766

f. Reinspection Program

Based on information from the S&L evaluation of the statistical sampling program for block wall columns the licensee has decided to develop a program for repairing or reworking all connections both accessible and inaccessible to assure they meet design requirements. In a letter (No. BR/PCD 84-323) dated October 4, 1984 the licensee has instructed Newberg to develop and implement an inspection and rework program for inaccessible connections without documentation, and review accessible connections with documentation. Based on the actual Byron block wall loading criteria used in the statistical sampling evaluations the licensee has also decided to make modifications to increase the design margin since the Braidwood block wall loads may be greater than those at Byron.

There are also approximately 70 miscellaneous structural members embedded in concrete being evaluated to determine if they should be included in the program.

The licensee has also instructed Newberg to develop an inspection program for shop welds on both accessible and inaccessible American Bridge, Mid-City, and Ramco supplied members.

Removal of blocks and engineering inspections are in progress, however, no rework shall be started until the procedure for the new program has been developed, reviewed, and approved.

Inspections of the reworked columns will be performed by Newberg QC personnel with PTL performing an overview inspection. To verify proper installation of concrete expansion anchors S&L has recommended that Newberg torque the anchors to the original installation torque value and that a torque inspection as specified in form BY/BR/CEA be performed by PTL. Since the block wall columns are being reworked to meet the original design requirements no change to the FSAR is required.

g. Conclusion

Although the allegation that defective welding was performed on block wall columns during original installation has been substantiated, the licensee did identify the problem during their September 20, 1982 audit (Audit Report No. 20-82-52) and report it to the NRC in 50.55(e) report No. 82-10 on November 19, 1982.

The licensee developed a reinspection program and S&L established a sampling plan in accordance with Military Standard 105D and they have been taking corrective actions for the past two years.

Based on information gained from the sampling plan the licensee is developing a new reinspection/rework program to expose all column connections and rework/repair them to meet design requirements. Based on information from Newberg and PTL management personnel and the corrective actions taken by the licensee to date, the allegation that Newberg was told to "cover up" unacceptable welds or that Newberg was "trying to sell" the licensee the sampling program so that repairs would not have to be made has not been substantiated.

This allegation is closed and the licensee's actions regarding the 50.55(e) report will be examined further during future inspections.

3. Exit Meeting

The inspector met with licensee representatives denoted in Paragraph 1 at the close of the investigation on July 25, and October 18, 1984. The scope and findings of the investigation were discussed.

STATISTICAL SAMPLING  
NCR 213-498  
COLUMN/BEAM CONNECTIONS ATTACHMENT A

WEEK OF 4-27-84

Item	Random No.	Member No.	Released to Wallgren	Removal by Wallgren	SSIT	Sent to PTL	PTL Insp. No.	Sent to S&L	Returned From S&L	Wallgren Re-Install	COMMENTS
1	7	2AWC14	83-08-15	Complete	2128	Released	6121 VW	84-01-27	84-03-05 *		
							84-03-17 6121 VW R1	84-04-24			
2	13	3AWC15	83-08-15	Complete	2138	Released	6276 VW	83-11-14	Resubmitted		
							6276 VW	84-04-24			
3	26	3.6AWC2	83-08-15	Complete	2139	Released	6430 VW	83-11-14	84-03-05 *		
							Released SB-1373	84-11-14	84-03-05 *		
							84-03-17 6430 VW R1	84-04-17			
							SB-1373	84-04-17			
4	34	4AWC2	Released	Complete	1297	Released	4581 VW	83-12-06	84-03-05 *		
							Released SB-1365	83-12-06	84-03-05 *		
							84-03-17 4581 VW R1				
							SB-1365				
5	44	4AWC13	Released	Complete	1298	Released	4582 VW	83-12-06	84-03-05 *		
							Released SB-1366	83-12-06	84-03-05 *		
							84-03-17 4582 VW R1	84-04-17			
							SB-1366	84-04-17			
6	45	4AWC17	83-10-26	83-11-03	2733	83-11-03	6923 VW	83-11-17	Resubmitted		
							6923 VW	84-04-17			
7	58	4AWC26	Released	Complete	1299	Released	4585 VW	83-12-06	84-03-05 *		
							Released SB-1367	83-12-06	84-03-05 *		
							84-03-17 4585 VW R1				
							SB-1367				
8	59	4AWC29	83-09-19	Complete	2734	83-11-30	7499 VW	83-12-14	Resubmitted		
							Released SB-1421	83-12-14	Resubmitted		
							7499 VW				
							SB-1421				
9	60	4AWC29	83-09-19	Complete	2734	83-11-30	7499 VW	83-12-20	84-03-05 *		
							84-03-17 7499 VW R1				
10	63	4AWC31	Released	Complete	1300	83-07-22	4584 VW	83-07-22	84-03-05 *		
							84-03-17 4584 VW R1	84-04-17			
11	67	4AWC39	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Col.In Conc, See Item 51
12	68	4AWC39	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Col.In Conc, See Item 53
13	89	4AWC88	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	External?, See Item 54
14	94	4.5AWC2	83-10-23	83-11-03	2737	83-11-03	6923 VW	83-11-22	84-03-05 *		
							84-03-17 6923 VW R1				
							SB-				
15	98	4.5AWC5	83-10-23	83-11-03	2738	83-11-03	6925 VW	83-11-22	84-03-05 *		
							84-03-17 6925 VW R1				
							SB-				
16	117	5AWC12	83-10-23	83-11-15	2740	83-11-17	7100 VW	83-11-30	84-03-05 *		
							84-03-21 7100 VW R1				

\* Returned by S&amp;L for more information (Incomplete Survey)

STATISTICAL SAMPLING  
NCR 213-498

WEEK OF 4-20-84

Item	Random No.	Member No.	Released to Wallgren	Removal by Wallgren	COLUMN/BEAM CONNECTIONS ATTACHMENT A				Returned From S&L	Wallgren Re-Install	COMMENTS
					SSIT	Sent to PTL	PTL Insp. No.	Sent to S&L			
17	125	5AWC27	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Col.In conc, See Item 55
18	126	5AWC27	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Col.In conc, See Item 56
19	127	5AWC31	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Col.In conc, See Item 57
20	129	5AWC51	83-09-30	83-11-03	2742	83-11-03	6884 VW	83-11-17	84-03-05 *		
						84-03-17	6884 VW R1	84-04-17			
21	155	5AWC205	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Col.Not Instd-See Item 61
22	177	6AWC90	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Finished Lab Area-Item 63
23	208	6AWC14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Finished Lab Area-Item 65
24	211	6AWC16	83-10-23	83-11-17	2747	83-11-30	7351 VW	83-12-14	Resubmitted		
							7351 VW	84-04-17			
25	219	6AWC20	83-10-23	83-11-15	2748	83-11-17	7097 VW	83-11-30	84-03-05 *		
							84-03-21	7097 VW R1	84-04-17		
26	247	7AWC39	83-10-23	83-11-17	2749	83-11-30	7776 VW	84-01-09	84-03-05 *		
							84-03-17	7776 VW R1	84-04-20		
								13946-CEA	84-04-20		
								13806-CEA	84-04-20		
27	251	7AWC41	83-10-23	83-11-17	2752	83-11-30	7775 VW	84-01-09	84-03-05 *		
							84-03-17	7775 VW R1	84-04-20		
								13805-CEA	84-04-20		
28	253	7AWC42	83-10-23	83-11-17	2753	83-11-30	7563 VW	83-12-23	84-03-05 *		
							84-03-17	7563 VW R1	84-04-19		
29	279	8AWC6	83-10-23	83-12-05	2755	83-12-05	7429 VW	83-12-20	84-03-05 *		
							84-03-17	7429 VW R1			
								CEA			
30	281	8AWC7	83-10-23	83-12-05	2758	83-12-05	7532 VW	83-12-23	84-03-05 *		
							84-03-17	7532 VW R1	84-04-20		
								13804-CEA	84-04-20		
31	287	8AWC40(B)	83-10-23	83-11-17	2759	83-11-30	7349 VW	83-12-14	Resubmitted		
								7349 VW	84-04-20		
								13803-CEA	84-04-20		
32	288	8AWC40(T)	83-10-23	83-11-17	2759	83-11-30	7349 VW	83-12-14	84-03-05 *		
						Released	SB-1449	83-12-14	Resubmitted		
						84-03-17	7349 VW	84-04-20			
							SB-1449	84-04-20			
33	296	8AWC44	83-10-23	83-11-23	2760	83-11-30	7774 VW	84-01-09	84-03-05 *		
							84-03-17	7774 VW R1	84-04-19		
								SB-1546	84-04-19		
34	320	8AWC69	83-10-23	83-12-05	2761	83-12-05	7423 VW	83-12-20	84-03-05 *		
							84-03-17	7423 VW R1	84-04-19		
								SB-1519	84-04-19		

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STATISTICAL SAMPLING

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COLUMN/BEAM CONNECTIONS ATTACHMENT A

Item	Random No.	Member No.	Released to Wallgren	Rmoval by Wallgren	SSIT	Sent to PTL	PTL Insp. No.	Sent to S&L	Returned From S&L	Wallgren Re-Install	COMMENTS
35	334	8.5AWC37	83-10-23	83-12-05	2764	83-12-05	7425 VW	83-12-20	84-03-05 *		
						84-03-17	7425 VW R1	84-04-19			
36	335	8.5AWC38	83-10-23	83-11-28	2766	83-11-30	7702 VW	84-01-09	Resubmitted		
							7702 VW R1	84-04-19			
37	336	8.5AWC38	83-10-23	83-11-28	2766	83-11-30	7702 VW	84-01-09	84-03-05 *		
						84-03-17	7702 VW R1	84-04-19			
							SB-1545	84-04-19			
38	346	8.5AWC43	83-10-23	83-11-28	N/A	N/A	N/A	N/A	N/A	N/A	Col. Not Instd-Item 66
39	348	8.5AWC67	83-10-23	83-12-05	2769	83-12-05	7422 VW	83-12-19	84-03-05 *		
						84-03-17	7422 VW R1	84-04-19			
							SB-1520	84-04-19			
40	370	9AWC3	83-10-23	83-12-05	2769	83-12-05	7771 VW	84-01-09	84-03-05 *		
						83-03-17	7771 VW R1				
							SB-1574				
41	375	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Beam Conn. in Conc.
42	380	6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Beam Conn. in Conc.
43	386	12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Beam Conn. in Conc.
44	393	3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Beam Conn. in Conc.
45	405	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Beam Conn. in Conc.
46	413	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Beam Conn. in Conc.
47	427	32	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Beam Conn. in Conc.
48	429	34	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Beam Conn. in Conc.
49	430	35	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Beam Conn. in Conc.
50	439	44	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Beam Conn. in Conc.
51	327	8.5AWC31	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Col. in Conc.-See Item 52
52	188	7AWC4	83-11-01	Complete	3031	83-11-30	7591 VW	83-12-23	84-03-05 *		
						Released	SB-1448	83-12-14	84-03-05 *		
						84-03-17	7591 VW R1	84-04-17			
							SB-1448	84-04-17			
53	97	4.5AWC5	83-11-08	83-11-28	3039	83-11-30	7379 VW	83-12-19	84-03-05 *		
						84-03-17	7397 VW R1	84-04-17			
54	123	5AWC26	83-11-01	83-11-15	3030	83-11-17	7098 VW	83-11-30	Resubmitted		
							7098 VW	84-04-17			
55	128	5AWC31	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Col. In conc, See Item 58
56	153	5AWC204	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Col. Not Instd-See Item 59
57	156	5AWC205	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Col. Not Instd-See Item 60
58	332	8.5AWC36	83-11-08	83-12-05	3041	83-12-05	7426 VW	83-12-19	84-03-05 *		
						84-03-17	7425 VW R1	84-04-19			
							SB-1550	84-04-19			
59	9	2AWC30	83-12-05	83-12-19	3484	83-12-19	7915 VW	84-01-19	84-03-05 *		
						84-03-17	7915 VW R1	84-04-17			

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STATISTICAL SAMPLING  
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COLUMN/BEAM CONNECTIONS ATTACHMENT A

Item	Random No.	Member No.	Released to Wallgren	Removal by Wallgren	SSIT	Sent to PTL	PTL Insp. No.	Sent to S&L	Returned From S&L	Wallgren Re-Install	COMMENTS
60	217	7AWC19	83-11-01	Complete	3032	83-11-30	7592 VW	83-12-23	84-03-05 *		
61	96	4.5AWC4	83-12-13	83-12-19	3563	84-03-17	7592 VW R1	84-04-17			
						83-12-19	7912 VW	84-01-19	84-03-05 *		
						84-03-17	7912 VW R1	84-04-19			
							SB-1540	84-04-19			
62	15	3AWC30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	"NOT USED"
63	356	8.5AWC125	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Col. In conc, See Item 64
64	303	8AWC57	83-11-08	83-12-05	3040	83-12-05	7496 VW	83-12-20	Resubmitted		
							7496 VW	84-04-17			
65	101	4.5AWC7	83-11-01	83-11-15	3027	83-11-17	7099 VW	83-11-30	Resubmitted		
							7099 VW	84-04-17			
66	108	4.5AWC10	83-11-02	83-11-03	3028	83-11-07	6955 VW	83-11-22	84-03-05 *		
						84-03-17	6955 VW R1	84-04-19			
							SB-1863	84-04-19			
67	276	8AWC4	83-12-13	83-12-19	3564	83-12-19	7773 VW	84-01-09	84-03-05 *		
						84-03-17	7773 VW R1	84-04-19	***		
							SB-1518	84-04-19	***		
68	424	29	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Beam Conn. in concrete
69	443	46	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Beam Conn. in concrete
70	404	9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Beam Conn. in concrete

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\*\*\* Not to be used in S&L review only 40 samples needed for review

STATISTICAL SAMPLING  
NCR 213-498  
WT/CONNECTIONS ATTACHMENT A

Item	Random No.	Member No.	Released to Wallgren	Removal by Wallgren	SSIT	Sent to PTL	PTL Insp. No.	Sent to S&L	Returned From S&L	Wallgren Re-Install	COMMENTS
1	9	2AT92	Released	83-08-05	1822	Released	5223 VW	83-08-30	84-03-27 *		
2	N/A	N/A	N/A	N/A	N/A	84-04-06	5223 VW **	84-04-20			
3	17	2AT94	Released	83-08-05	1823	Released	5226 VW	83-08-30	84-03-05 *	N/A	Void Per S&L-Sec Item 65
4	18	2AT94	Released	83-08-05	1823	84-03-17	5226 VW R1	84-04-23			
5	36	2AT98	Released	83-08-05	1824	Released	5226 VW	83-08-30	84-03-05 *		
6	40	2AT99	Released	83-08-05	1825	84-03-17	5226 VW R1	84-04-23			
7	62	2.6AT10	Released	83-08-05	1826	Released	5224 VW	83-08-30	84-03-27 *		
8	82	3AT36	83-08-15	Complete	2113	84-04-06	5224 VW **	84-04-20			
9	111	3AT44	83-08-15	Complete	2114	Released	5225 VW	83-08-30	84-03-27 *		
10	121	3AT47	83-08-15	Complete	2115	84-04-06	5225 VW **	84-04-20			
11	131	3AT49	83-08-15	Complete	2116	Released	5222 VW	83-08-30	84-03-27 *		
12	155	3AT61	83-09-30	83-11-03	2773	84-04-06	5860 VW **	84-04-20			
13	160	3AT62	83-09-30	83-11-03	2774	Released	5862 VW	83-09-23	84-03-27 *		
14	163	3AT63	83-08-15	Complete	2117	84-04-06	5862 VW R1				
15	168	3AT66	83-08-15	N/A	2775	Released	5861 VW **	83-09-23	84-03-27 *		
16	204	3AT75	83-08-15	Complete	2118	84-04-06	5861 VW **	84-04-20			
17	213	3AT78	83-08-15	Complete	2119	Released	6275 VW	83-11-14	Resubmitted		
18	225	3AT83	83-08-15	Complete	2120	84-04-06	6275 VW	84-04-23			
19	319	3AT120	83-08-15	Complete	2121	Released	6956 VW	83-11-23	Resubmitted		
20	329	3AT127	83-08-15	Complete	2122	84-04-06	6956 VW	84-04-23			
						Released	6957 VW	83-11-23	Resubmitted		
						84-04-06	5881 VW	83-10-25	84-03-27 *		
						84-04-06	5881 VW **	84-04-20			
						Released	N/A	N/A	N/A	N/A	Unaccessible-See Item 66
						84-04-06	5883 VW **	83-10-23	84-03-27 *		
						Released	5859 VW	84-04-20			
						84-04-06	5859 VW **	83-10-25	84-03-27 *		
						Released	6277 VW	84-04-20			
						84-04-06	6277 VW **	83-11-14	84-03-27 *		
						Released	5882 VW	84-04-20			
						84-04-06	5882 VW **	83-10-25	84-03-27 *		
						Released	5863 VW	84-04-20			
						84-04-06	5863 VW **	83-09-23	84-03-27 *		
						Released	5863 VW **	84-04-20			

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\*\* Information on Weld Fit Up Gap added to original PTL Inspection Report No.

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Item	Random No.	Member No.	Released to Wallgren	Removal by Wallgren	SSIT	Sent to PTL	PTL Insp. No.	Sent to S&L	Returned From S&L	Wallgren Re-Install	COMMENTS
21	332	3AT127	83-08-15	Complete	2122	Released	5863 VW	83-09-23	84-03-27 *		
						84-04-06	5863 VW **	84-04-20			
22	334	3AT128	83-08-15	Complete	2776	83-11-30	8104 VW	84-01-19	84-03-05 *		
						84-03-17	8104 VW R1	84-04-23			
23	342	3AT130	83-08-15	Complete	2777	83-11-30	8105 VW	84-01-19	84-03-05 *		
						84-03-17	8105 VW R1	84-04-23			
24	369	3AT149	83-09-19	Complete	3011	83-11-30	7378 VW	83-12-19	84-03-05 *		
						84-03-17	7378 VW R1	84-04-23			
25	373	4AT2	83-09-14	83-10-18	2595	83-10-20	6743 VW	83-11-04	Resubmitted		
							6743 VW	84-04-23			
26	402	4AT13	83-09-14	83-10-18	2596	83-10-20	6748 VW	83-11-04	84-02-06		
							6748 VW	84-04-23			
27	411	4AT28	83-09-14	83-10-18	2597	83-10-20	6750 VW	83-11-04	84-02-06		
							6750 VW	84-04-23			
28	413	4AT37	84-09-14	83-10-18	2598	83-10-20	6752 VW	83-11-04	84-02-06		
							6752 VW	84-04-23			
29	417	4AT49	83-09-14	83-10-18	2600	83-10-20	6749 VW	83-11-03			
							6749 VW				
30	420	4AT49	83-09-14	83-10-18	2600	83-10-20	6749 VW	83-11-04	84-03-05 *		
							84-03-21	6749 VW R1			
31	435	4AT64	83-09-14	83-10-18	2601	83-10-20	6746 VW	83-11-04	84-02-06		
							6746 VW	84-04-23			
32	447	4AT75	83-09-19	N/A	3012	N/A	N/A	N/A	N/A	N/A	Unaccessible-See Item 67
33	465	4AT86	83-09-14	83-10-18	2602	83-10-20	6792 VW	83-11-10	84-03-27 *		
							84-04-06	6792 VW **	84-04-20		
34	509	4AT104	83-09-14	83-10-18	2606	83-10-20	6745 VW	83-11-03	84-03-27 *		
							84-04-06	6745 VW R1	84-04-20		
35	570	4AT135	83-09-14	Complete	2609	Released	6744 VW	83-11-04	84-03-27 *		
							84-04-06	6744 VW **	84-04-20		
36	588	4AT140	83-09-14	83-10-18	2610	83-10-20	6754 VW	83-11-04	84-02-06		
							6754 VW	84-04-23			
37	603	4AT150	83-09-14	83-10-18	2605	83-10-20	6747 VW	83-11-04	Resubmitted		
							6747 VW	84-04-23			
38	626	4AT157	83-09-14	Complete	2611	Released	6751 VW	83-11-04	84-03-27 *		
							6751 VW **	84-04-20			
39	633	4AT159	83-09-14	83-10-18	2613	83-10-20	6794 VW	83-11-10	84-02-05		
							6794 VW	84-04-23			
40	664	4AT185	83-09-14	83-10-18	2614	83-10-20	6795 VW	83-11-10	84-03-05 *		
							84-03-17	6795 VW R1	84-04-23		

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STATISTICAL SAMPLING  
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Item	Random No.	Member No.	Released to Wallgren	Removal by Wallgren	SSIT	Sent to PTL	PTL Insp. No.	Sent to S&L	Returned From S&L	Wallgren Re-Install	COMMENTS
41	671	4AT202	83-09-14	83-10-18	2615	83-10-20	6793 VW 6793 VW	83-11-10 84-04-23	Resubmitted		
42	695	5AT1	83-09-30	83-10-27	2770	83-10-28	6824 VW 84-03-17 6824 VW R1	83-11-14	84-03-05 *		
43	736	5AT82	83-09-30	83-11-15	3017	83-11-22	7377 VW 84-03-17 7377 VW R1	83-12-19 84-04-23	84-03-05 *		
44	738	5AT83	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Unaccessible, See Item 68
45	744	5AT84	83-09-30	83-11-03	3002	83-11-07	6907 VW 84-03-17 6907 VW R1	83-11-22 84-04-23	84-03-05 *		
46	769	7AT3	83-10-10	83-11-15	3018	83-11-30	7562 VW 84-03-17 7562 VW R1	83-12-23 84-04-23	84-03-05 *		
47	827	8AT5	83-10-10	83-12-05	3019	83-12-05	7500 VW	83-12-20	Resubmitted		
48	833	8AT8	83-10-10	83-12-05	3020	83-12-05	7497 VW 84-04-06 4797 VW **	83-12-20 84-04-20	84-03-27 *		
49	835	8AT8	83-10-10	83-12-05	3020	83-12-05	7497 VW 84-04-06 7497 VW **	83-12-20 84-04-20	84-03-27 *		
50	903	8AT42	83-10-10	83-11-15	3023	83-11-30	7501 VW 84-03-17 7501 VW R1	83-12-20 84-04-23	84-03-05 *		
51	61	2.6AT10	83-10-10	83-11-15	3485	83-12-05	7350 VW 7340 VW	83-12-14 84-04-23	Resubmitted		
52	156	3AT61	83-09-30	N/A	3005	N/A	N/A	N/A	N/A	N/A	No embed P/L@ 378'-Item 69
53	158	3AT62	83-09-30	Complete	3007	83-11-30	8106 VW 84-03-17 8106 VW R1	84-01-19 84-04-23	84-03-05 *		
54	234	3AT85	83-09-30	83-11-03	3000	83-11-22	7193 VW 7193 VW	83-12-06 84-04-23	Resubmitted		
55	464	4AT84	83-09-14	83-10-18	2604	83-10-20	6753 VW 84-03-17 6753 VW R1	83-11-03 84-04-23	84-03-05 *		
56	510	4AT104	83-09-14	Complete	2606	Released	6745 VW 84-03-17 6745 VW R1	83-11-03 84-04-20	84-03-05 *		
57	578	4AT137	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	VOID, See Item 71
58	752	5AT88	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	(VOID)Per S&L, See Item 73
59	778	8AT5	83-10-10	83-12-05	3019	83-12-05	7500 VW 7500 VW	83-12-20 84-04-23	Resubmitted		

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60	856	8AT24	83-10-10	83-11-15	3021	83-11-30	7347 VW	83-12-14	Resubmitted		
							7347 VW	84-04-23			
61	861	8AT26	83-10-10	83-11-15	3022	83-11-30	7348 VW	83-12-14	Resubmitted		
							7348 VW	84-04-23			
62	26	2AT95	83-10-10	83-11-03	2979	83-11-22	7206 VW	83-12-06	84-03-05 *		
						84-03-17	7206 VW R1	84-04-23			
63	456	4AT82	83-09-14	83-10-15	2603	83-10-20	6741 VW	83-11-04	84-02-03		
							6741 VW	84-04-23			
64	825	8AT5	83-10-10	83-12-05	3019	83-12-05	7500 VW	83-12-20	Resubmitted		
							7500 VW	84-04-23			
65	134	3AT52	83-10-10	83-11-15	3009	83-11-22	7192 VW	83-12-06	84-03-27 *		
						84-04-06	7192 VW R1				
66	251	3AT89	83-10-10	83-11-15	3010	83-11-22	7131 VW	84-01-27	84-03-05 *		
						84-03-17	7131 VW R1	84-04-24			
67	559	4AT129	83-09-19	Complete	3015	83-11-30	7380 VW	83-12-19	84-03-05 *		
						84-03-17	7380 VW R1	84-04-23			
68	562	4AT130	Released	83-10-18	2608	83-10-20	6742 VW	83-11-04	84-02-06		
							6742 VW	84-04-23	***		
69	596	4AT146	83-09-19	Complete	3016	83-11-30	7381 VW	83-12-19	84-03-05 *		
						84-03-17	7381 VW R1	84-04-23	***		
70	877	8AT30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	EXTRA
71	474	4AT87	83-12-13	83-12-19	3565	83-12-19	7725 VW	84-01-09	84-03-05 *		
							7725 VW R1	***	***		
72	838	8AT18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	EXTRA
73	394	4AT10	83-12-13	83-12-19	3566	83-12-19	7729 VW	84-01-09	84-03-05 *		
						84-03-17	7729 VW R1	***	***		
74	54	2.6AT6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	EXTRA

\* Returned by S&L for more information (Incomplete Survey)

\*\*\* Not to be used in S&L review

Total no. of samples reduced from 64 to 60 per S&L letter dated March 16, 1984



STATISTICAL / POLING

NCR 213-A

COLUMN/BEAM CONNECTIONS ATTACHMENT B

Item	Random No.	Member No.	Released to Wallgren	Removal by Wallgren	SSIT	Sent to PTL	PIL Insp. No.	Sent to S&L	Returned From S&L	Wallgren Re-Install	COMMENTS
1	321	6AWC72	84-03-12	84-03-14	5578	84-03-23	12155 VW				***
2	324	6AWC73	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Room Finished See Item 42
3	443	8.5AWC57	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Col. in Conc., See Item 48
4	376	8AWC15	84-03-12	84-03-19	5580	84-04-06					
5	177	5AWC217	84-03-12	84-03-22	5788	84-04-06					
6	382	8AWC18	84-03-12	84-03-19	5581	84-04-06					
7	279	6AWC45	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Room Finished, See Item 43
8	198	5.7AWC2	84-03-12	84-03-14	5652	84-04-06					
9	172	5AWC142	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Col. Not Inst., See Item 49
10	308	6AWC63	84-03-12	84-03-14	5582	84-03-23	12156 VW	84-04-17			
11	156	5AWC62	84-03-12	84-04-02	5875	84-04-20					FPR 1014
12	30	2AWC23	84-03-12	84-03-14	5585	84-03-23	12214 VW				
13	397	8AWC27	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Col. Reinstalled Item 59
14	389	8AWC21	84-03-12	84-03-16	5855	84-04-06					
15	388	8AWC21	84-03-12	84-03-16	5856	84-04-06					
16	230	6AWC16	84-03-12	84-03-14	5584	84-03-23	12168 VW				
17	259	6AWC31	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Col. in Conc., See Item 46
18	311	6AWC65	84-03-12	84-03-16	5792	84-04-06	12465 VW	84-04-19			
19	241	6AWC21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Col. in Conc., See Item 41
20	120	3AWC41	84-03-12	84-03-14	5586	84-03-23	12211 VW				
21	33	2AWC26	84-03-12	84-03-28	5873	84-04-06	12463 VW	84-04-19			
22	20	2AWC15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Col. in Conc., See Item 55
23	180	5AWC218	84-03-12	84-03-22	5789	84-04-06	12449 VW				
24	79	3AWC1	84-03-12	84-03-14	5587	84-03-23	12160 VW	84-04-17			
25	89	3AWC7	84-03-12	84-03-14	5588	84-03-23	12162 VW				
26	435	8.5AWC53	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Col. in Conc., See Item 44
27	434	8.5AWC52	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Col. in Conc., See Item 45
28	302	6AWC60	84-03-12	84-03-14	5654	84-03-23	12157 VW	84-04-17			
29	268	6AWC37	84-03-12	84-03-14	5653	84-03-23	12165 VW	84-04-17			
30	408	8AWC32	84-03-12	84-03-19	5688	84-04-06					
31	70	2AWC50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Bot Col. in Conc-See Item 53
32	322	6AWC72	84-03-12	84-03-14	5578	84-03-23	12155 VW				
33	350	6AWC94	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Room Finished, See Item 60
34	92	3AWC10	84-03-12	84-03-19	5689	84-03-23	12164 VW	84-04-17			
35	16	2AWC7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Bot. Col. in conc See Item 52

STATISTICAL SAMPLING

NCR 213-498

COLUMN/BEAM CONNECTIONS ATTACHMENT B

Item	Random No.	Member No.	Released to Wallgren	Removal by Wallgren	SSIT	Sent to PTL	PTL Insp. No.	Sent to S&L	Returned From S&L	Wallgren Re-Install	COMMENTS
36	292	6AWC54	84-03-12	84-03-14	5648	84-03-23	12159 VW CEA				
37	55	2AWC40	84-03-12	84-03-29	5874	84-04-06	12460 VW	84-04-19			
38	223	6AWC12	84-03-12	84-03-14	5649	84-04-06	12466 VW	84-04-19			
39	410	8AWC34	84-03-12	84-03-20	5690	84-04-06					
40	282	6AWC46	84-03-12	84-03-14	5650	84-03-23	12154 VW CEA				
41	115	3AWC39	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Col. Not Insc. See Item 56
42	390	8AWC22	84-03-13	84-03-19	5691	84-04-06					
43	363	6AWC103	84-03-13	84-03-14	5651	84-03-23	12158 VW SB-				
44	096	3AWC13	84-03-13	84-03-14	5590	84-03-23	12163 VW	84-04-17			
45	402	8AWC29	84-03-13	84-03-19	5692	84-04-06					
46	351	6AWC95	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Room Finished, See Item 47
47	185	5.6AWC8	84-03-13	84-04-06	5891	84-04-27					
48	109	3AWC36	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Col. Not Inst., See Item 50
49	339	6AWC88	84-03-13	84-03-13	5857	84-04-06	12464 VW SB-1849	84-04-19 84-04-19			
50	352	6AWC95	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Room Finished, See Item 51
51	101	3AWC23	84-03-14	84-03-19	5693	84-03-23	12161 VW	84-04-17			
52	141	5AWC23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Col. in conc.- See Item 54
53	129	5AWC7	84-03-22	84-04-02	5876	84-04-06	12448 VW SB-1851	84-04-19 84-04-19			
54	059	2AWC43	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Col. in conc.-See Item 62
55	440	8.5AWC55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Col. in Conc., See Item 58
56	272	6AWC40	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Room Finished, See Item 57
57	015	2AWC6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Col. in conc.-See Item 63
58	300	6AWC58	84-03-27	84-04-05	5892	84-04-06	12447 VW	84-04-19			
59	140	5AWC23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Col. in Conc., See Item 61
60	094	3AWC12	84-03-27	84-03-30	5877	84-04-06	12452 VW SB-1846				
61	019	2AWC15	84-03-28	84-02-29	5872	84-04-05	12459 VW SB-1850	84-04-19 84-04-19			
62	013	2AWC5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Col. in Conc.-See Item 64
63	087	3AWC6	84-04-03	84-04-05	5893	84-04-06	12454 VW	84-04-19			
64	371	8AWC11	84-04-03	84-04-05	5894	84-04-20					
65	236	6AWC19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	EXTRA
66	144	5AWC39	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	EXTRA
67	174	5AWC143	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	EXTRA
68	346	6AWC92	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	EXTRA
69	068	2AWC49	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	EXTRA
70	138	5AWC20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	EXTRA

STATISTICAL SAMPLING  
NCR 213-498  
WT/CONNECTIONS ATTACHMENT B

Item	Random No.	Member No.	Released to Wallgren	Removal by Wallgren	SSIT	Sent to PTL	PTL Insp. No.	Sent to S&L	Returned From S&L	Wallgren Re-Install	COMMENTS
1	77	2AT24	84-03-12	84-03-14	5655	84-03-23	12213 VW	84-04-18			***
2	554	6AT40	84-03-12	84-03-14	5657	84-04-06					
3	237	2AT80	84-03-12	84-03-26	5793	84-04-06	12458 VW	84-04-19			
4	519	6AT31	84-03-12	84-03-16	5694	84-04-06					
5	399	3AT33	84-03-12	84-03-16	5794	84-04-06	CEA 12453 VW	84-04-19			
6	40	2AT6	84-03-12	84-03-27	5849	84-04-06	12476 VW	84-04-20			
7	294	3AT1	84-03-12	84-03-21	5702	84-03-23	12172 VW	84-04-18			
8	504	6AT27	84-03-12	84-03-16	5852	84-04-06	12477 VW	84-04-20			
9	14	1AT12	84-03-12	84-04-03	5896	84-04-06	12471 VW	84-04-20			
10	532	6AT34	84-03-12	Removed	4094	84-02-16	8848 VW				
11	166	2AT50	84-03-12	84-03-29	5878	84-04-06	12473 VW	84-04-20			
12	104	2AT30	84-03-12	84-03-23	5795	84-04-06	12472 VW				
13	96	2AT28	84-03-12	84-03-30	5881	84-04-06	12446 VW	84-04-19			
14	457	6AT12	84-03-12	84-03-14	5658	84-04-06					
15	168	2AT50	84-03-12	84-03-29	5879	84-04-06	12456 VW	84-04-19			
16	333	3AT13	84-03-12	84-03-19	5695	84-03-23	12169 VW	84-04-17			
17	432	6AT4	84-03-12	84-03-14	5659	84-03-23	12167 VW	84-04-17			
18	120	2AT34	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Tee on ceiling-See Item 46
19	273	2AT104	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Tee on floor-See item 42
20	600	8AT20	84-03-12	84-03-19	5703	84-04-06					
21	123	2AT35	84-03-12	84-03-19	5696	84-03-23					
22	387	3AT30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Tee on floor-See Item 41
23	391	3AT31	84-03-12	84-03-14	5660	84-03-23	12171 VW	84-04-18			
24	449	6AT9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Room finished-See Item 44
25	53	2AT13	84-03-12	84-03-22	5850	84-04-06	12470 VW	84-04-20			
26	16	1AT12	84-03-12	84-04-05	5897	84-04-06	12478 VW	84-04-20			
27	594	8AT19	84-03-12	84-03-26	5796	84-04-06					
28	92	2AT27	84-03-12	84-03-27	5853	84-04-06	12462 VW	84-04-19			
29	459	6AT12	84-03-12	84-03-16	5697	84-04-06	12467 VW	84-04-19			
30	324	3AT9	84-03-12	84-03-21	5704	84-03-23	12173 VW	84-04-18			
31	183	2AT59	84-03-12	84-03-27	5854	84-04-06	12455 VW	84-04-19			
32	277	2AT107	84-03-12	84-03-14	5661	84-03-23	12212 VW	84-04-18			
33	251	2AT83	84-03-12	84-03-19	5698	84-03-23	12209 VW	84-04-18			
34	445	6AT8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Room finished-See Item 43
35	202	2AT66	84-03-12	84-04-03	5898	84-04-06	12474 VW	84-04-20			
36	510	6AT29	84-03-12	84-03-16	5699	84-03-23	12166 VW	84-04-17			
37	197	2AT65	84-03-12	84-03-28	5880	84-04-06	12475 VW	84-04-20			
38	448	6AT8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Room finished-See Item 45
39	109	2AT32	84-03-12	84-03-22	5851	84-04-06	12461 VW	84-04-19			
40	414	3AT123	84-03-12	84-03-26	5797	84-04-06	12450 VW	84-04-19			
41	346	3AT16	84-03-14	84-03-14	5662	84-03-23	12170 VW	84-04-18			
42	540	6AT36	84-03-14	84-03-14	5663	84-04-06	12468 VW	84-04-19			
43	105	2AT31	84-03-14	84-03-21	5705	84-03-23	12210 VW	84-04-18			
44	308	3AT5	84-03-14	84-03-27	5798	84-04-06	12451 VW	84-04-19			
45	135	2AT39	84-03-14	84-04-02	5882	84-04-06	12457 VW	84-04-29			
46	013	1AT12	84-03-14	84-04-05	5895	(NO WELD)	N/A	84-04-24			
47	070	2AT22	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	EXTRA
48	204	2AT66	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	EXTRA
49	289	2AT112	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	EXTRA
50	530	6AT34	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	EXTRA