30V (H.S.)
24V (SERVO)

0V TB 3,7,11

340 T15 REGULATOR → 15V

340 T12 REGULATOR → 12V (TB12)

340 T5 REGULATOR → TB8 5V

KEY LOGIC STATES

X = UNKNOWN FAULT CONDITIONS SHOWN : H.L.

I/P D to A CONVERTER

	D	E	F
S.S.	1	1	0
W/C	1	0	1
H.R.	1	0	0
H.L.	0	1	1
H.B.	0	1	0

I/P FROM [illegible]

	A	B	C
S.S.	1	1	1
W/C	1	1	0
H.R.	1	0	0
H.L.	0	1	0
H.B.	0	0	0

I/P FROM SERVO [illegible]

	G	H	K
S.S.	1	1	1
W/C	1	1	0
RAIL1	1	0	X
RAIL2	0	1	X
H.B.	0	0	X

SERVO O/P ARRANGEMENT

W/C — K702 (TB8 15) — K803 — TB1-12
RAIL1 — TB1-37 — K801 — K803 — TB1-10
RAIL2 — TB8-14 — K802 — K803 — TB8-11
I.M. FAIL — TB8-6 — K804 — 0V

H.S. MKB

18V
W/C — BD7
H.R. — BD14 — 14
H.L. — BD13 — 14
CURRENT SENSOR — BC1550 — A

H.S. MKA

12V
W/C — BD2
H.R. — BD6 — 14
H.L. — BD8 — 14
C.S. — POWER TR — A

340 T15 REGULATOR → 15V
340 T12 REGULATOR → 12V (TB12)
340 T5 REGULATOR → TB8 5V

LM324 — R2 = 1KΩ — GARDNER AM109 — TO L.I.N. — OUTPUT

LM566 (VCO): 33nF, 20K, 1nF, 12V
ZN425E D TO A CONVERTER: 0.22μF, 5V
74LS00: F, E, D → A
120Ω, 820Ω, 8.2V, 270Ω, 12V, 0V, 2.7V
R2 = 1KΩ

RS 237-310 — SW. SET FOR SERVO

74LS123: 16mS, 9mS, 400mS
C1

TB
10 — I.M. FAIL (SERVO ONLY)
9 — CURRENT SENSOR (H.S. ONLY)
4 — H.L. (RAIL 2)
5 — H.R (RAIL 1)
6 — W/C

BC107, 12V, 0V, C1 = 10nF, R2, 5V

1 CURRENT SN
2 IM TO 0V
3 H L
4 HR
5 WC

INPUTS

2 OUTER PINS

Revisions		British Railways Board - Scottish Region Chief Signal and Telecommunications Engineer	British Rail Chief S & T Engineer
		EDINBURGH HBD INTERFACE TRANSMITTER 2nd PROTOTYPE (DUNBAR)	No. TD 79/20

A2 BR 888/19

J1067