

Set 2

CHART

236 Apple

DOL7

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[.] Password

Enter Password: xxxxxxxxxxxx

OK Cancel

```

FILE SETUP
[.] Create/Save Desktop Init File
F
P Save as Default?      ( ) Yes ( ) No
  Choose Monitor Mode : ( ) Color ( ) Mono
  Select Serial Port  : ( ) 1 ( ) 2 ( ) 3 ( ) 4
R
P Select Stop Bits    : ( ) 1 ( ) 2
T
M Enter Gear Ratio Constant : 1
  Enter M.P.H. Constant   : 2
  Enter File Name        : DEFAULT.INI
  Save                    Exit
N
P

```

F1 Help Alt+X Quit

```

[.] Driver Interface
          Change To High & Low
Correl      : 0.350 ✓ P12VH      : 0.200
AnMinFlt    : 0.200 P12VL      : 4.848
AnMaxFlt    : 4.848 RgnDrv     : 0.503
AnMin       : 0.503 RgnTwo     : 2500.000
T from Pre-P12V: 2500.000ms RgnLow  : 65.000
BrkGain     : 65.000 DigMx     : 100.000
BrkMax      : 200.000 DigMin    : 30.000
T from Main  : 4500.000ms AmpScale : 61.999
SOC Reben Limit: 789.000 SOC High Limit : 4.160
VEL Out Scale : 0.350 SOC Low Limit  : 0.977
          Calc          Exit
          Calc          Exit

```

F1 Help Alt+X Quit

Do NOT modify T from pre-p12v 2500.000 ms
 T from main (Time for turn on voltages)

[.] CHARGING SETUP

CHARGING CONSTANT

Iref 110 VAC	:	12.95	3 AMP
Iref 220 VAC	:	14.97	15 AMP

Calc Exit

you can change for charging

Temperature Constants

1.CLDPMX	71.302	16.TVAL5	3.887	30.MXTMP5	65.778
2.CLDPMN	65.778	17.TVAL6	4.102	31.MNTMP5	62.717
3.MOTTMX	86.120	18.TVAL7	4.258	32.MXTMP6	71.302
4.MOTTMN	80.574	19.TVAL8	4.297	33.MNTMP6	68.001
5.CLDFNMX	51.064	20.MXTMP0	41.257	34.MXTMP7	75.431
6.CLDFNMN	46.016	21.MNTMP0	38.129	35.MNTMP7	73.385
7.MFANTMX	55.826	22.MXTMP1	46.016	36.MXTMP8	80.574
8.MFANTMN	51.064	23.MNTMP1	43.225	37.MNTMP8	77.443
9.CFANTMX	46.016	24.MXTMP2	51.064	38.MXTMP9	86.120
10.CFANTMN	41.257	25.MNTMP2	47.778	39.MNTMP9	83.370
11.TVAL0	0.996	26.MXTMP3	55.826	40.MN_V_DF	0.039
12.TVAL1	1.250	27.MNTMP3	52.895	41.VBAT_MN	0.000
13.TVAL2	1.504	28.MXTMP4	61.143	42.BRK_MIN	1.816
14.TVAL3	2.637	29.MNTMP4	58.069	43.SLIP_CNT	255.000
15.TVAL4	3.770				

Calc

Do not change

Exit

Normal Operation
Test Mode

F1 Help Alt+X Quit | Execute program in normal operation mode

[-] **MOTRING MODE**

BATTERY		DRIVER INFORMATION	
VBATT =	V	PRNDL	
IBATT =	A	MOTOR	
POWER =	Kw	STATUS	
MODE =		COMMAND	%
		P12V	V
		Temp.	°C
MOTOR		RELAYS	
RPM =		PRE	
MPH =		MAIN	
VALUES =	<i>Tn 7m in stop</i> <i>DSP</i> VARIABLES	CONSTANTS	
USER =	Select	Select	
e =			
CHANGE VALUES	<i>DSP</i> TEMPORARY	PERMANENT	
Value :	Change	Change	
e :			
		Clear Faults	
		No Save	Save Exit

F1 Help Alt+X Quit | Execute program in normal operation mode

MOTORING MODE

<p>BATTERY</p> <p>VBATT = V IBATT = <i>Current</i> A POWER = <i>1/2 A</i> Kw MODE = <i>01</i></p> <p>MOTOR</p> <p>RPM = MPH =</p> <p>VALUES</p> <p>USER = e =</p> <p>CHANGE VALUES</p> <p>Value : e :</p>	<p>[.] = USER e</p> <p>109. rgndrv Description 109. rgndrv 110. rgntwo 111. rgnlow 112. ampscale 113. SOC High Limit 114. SOC Low Limit 115. TBD 116. TBD 117. TBD 118. TBD 119. TBD</p> <p style="text-align: center;">Done</p>	<p>DRIVER INFORMATION</p> <p>PRNDL MOTOR <i>Running & hot</i> STATUS <i>at 100</i> COMMAND <i>Dig.</i> % P12V V Temp. <i>Cold plate</i> °C</p> <p>RELAYS</p> <p>PRE MAIN <i>close & not</i> <i>what it should be</i></p>
---	--	---

F1 Help Alt+X Quit

MOTORING MODE

<p>BATTERY</p> <p>VBATT = V IBATT = A POWER = Kw MODE =</p> <p>MOTOR</p> <p>RPM = MPH =</p> <p>VALUES</p> <p>USER = e =</p> <p>CHANGE VALUES</p> <p>Value : e :</p>	<p>[.] = Number Entry</p> <p style="text-align: center;">OK</p>	<p>DRIVER INFORMATION</p> <p>PRNDL MOTOR STATUS COMMAND % P12V V °C</p> <p>RELAYS</p> <p>N</p>
---	---	---

Enter indic DSP

Display Fault.

F1 Help Alt+X Quit

File Setup Real Memory Window Options Help

Download Constants ▶
Upload Constants

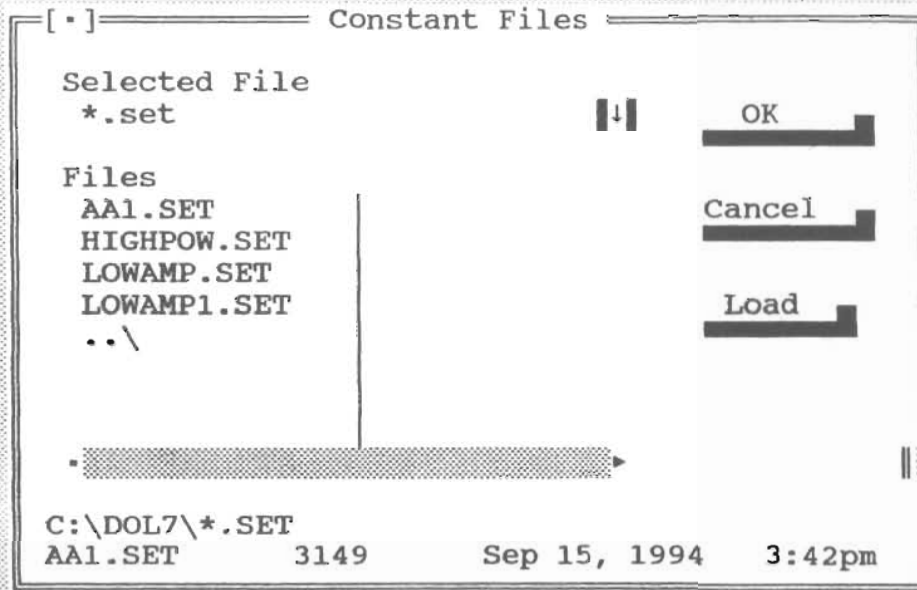
F1 Help Alt+X Quit | Download constants to unit

File Setup Real Memory Window Options Help

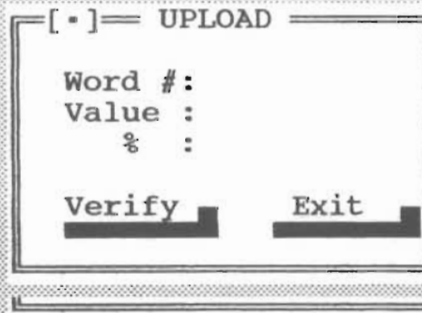
Download Constants ▶

Prism 25
S-10
Load New File

F1 Help Alt+X Quit | Load constants from a saved file



F1 Help Alt+X Quit



F1 Help Alt+X Quit | Upload constants from unit (MIN. ACCESS LEVEL: 4)

File Setup Real Memory Window Options Help

Tile
Cascade
Close all

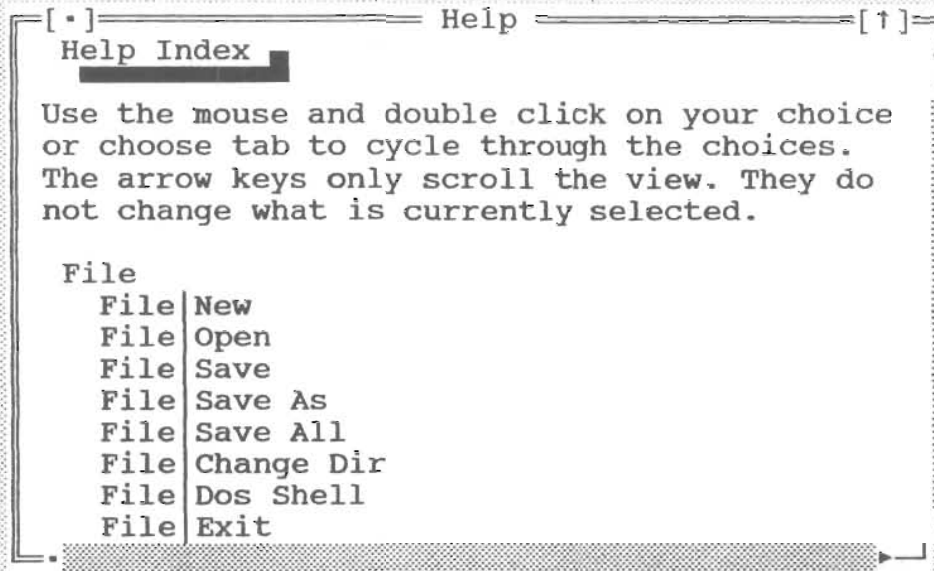
Size/Move	Ctrl+F5
Zoom	F5
Next	F6
Previous	Shift+F6
Close	Alt+F3

F1 Help Alt+X Quit | Tile all open windows

File Setup Real Memory Window Options Help

Color Monoitor
Monochrome Monitor
Change Passwords
Enter Password

F1 Help Alt+X Quit | Closes current window and changes to color mode



F1 Help Alt+X Quit

# FAULT	STATUS	INPUT
0: Accell	Enable	Key On
1: Brake	Stable	PRNDLA
2: Correl	Internal	PRNDLB
3: Key	Park	PRNDLC
4: CP	Drive	PRNDLP
5: Interlock	Forward	Brake Hi
6: Processor	Reverse	Brake Low
7: tbd	PreCharge	Prk Brake
8: Enable	Red Perf	TBD
9: PowerDown	Two	CP
A: P12V	Low	TBD
B: P12V	Low	TBD
C: IGBT	Main On	TBD
D: Batt Low	Charge	TBD
E: Batt High	Internal	TBD
F: Isolation	Test	TBD
F: Encoder	Internal	PROC FAULT

F1 Help Alt+X Quit | Displays fault code definitions (MIN. ACCESS LEVEL: 1)

**DOLPHIN COMMUNICATION
TEST MANUAL
DOL6
DOL7**

1.0 SCOPE

1.1 GENERAL

This Test Manual establishes the functions of the DOL6 Communication Program.

2.0 STARTING DOL6

With Test Box connected to UUT and computer.

Turn on computer.

Wait for the C prompt (C:\>).

Type CD\Dol then press ENTER.

Wait for the (C:Dol>)

Type DOL6 then press ENTER

The next screen will ask for a password.

Type 0 (zero), then press ENTER.

Next open the REAL menu and select NORMAL OPERATIONS.

Fig. 1 shows a typical motoring screen after the UUT is turned on.

2.1 SELECT AND CHANGE BOX

Turn on UUT.

The **SELECT** and **CHANGE** box on the left side of the computer screen is used to monitor (**SELECT**) and change (**CHANGE**) the variables and constants in address 0 to 318.

Any changes made on the left side is only temporary and will go back to its default values after power to the UUT is recycled.

The **SELECT** and **CHANGE** on the right side will change the constants permanently.

Only constants are held on the right side.

2.1.1 SELECTING AND CHANGING CONSTANTS

To monitor an Address, use the **TAB** key to highlight the **SELECT** symbol, then press **ENTER**.

A window showing the Addresses are shown.

Use the **TAB** key to highlight the address and the **UP ARROW** and **DOWN ARROW** to move the highlight to the Address of choice, then press **ENTER**.

A window showing the Addresses are shown.

Use the **TAB** key to highlight the address and the **UP ARROW** and **DOWN ARROW** to move the highlight to the Address of choice, then press **SPACEBAR**.

This will copy the chosen Address into the Choice Box and it's value can be seen next to **USER = _____**.

To change an Address highlight the **CHANGE** box then press **ENTER**.

Choose the Address, highlight it, then press the **SPACEBAR**.

After the chosen Address is copied to the **CHOICE** box, use the **TAB** key to highlight the **DONE** box then press **ENTER**.

A new window appears.

Enter the value, highlight the **DONE** box Then press **ENTER**.

The Default value is now changed to the value

2.1.2 DOWNLOAD AND UPLOAD CONSTANTS

To Download constants from Dol Com (Dol6)

Select the MEMORY window.

Download and Upload will be the choices.

Highlight DOWNLOAD then press ENTER.

The next window shown lets you choose between S10 or PRISM data files.

Highlight the file you want to Download then press ENTER.

To Upload constants form Dol Com (Dol6)

From the MEMORY window Highlight the UPLOAD then press ENTER.

When the Upload is done, a new window comparing the UPLOADED and DOWNLOAD checksum is shown.

Both checksums should be the same.

NOTE: It is faster to do Download and Upload while in charge mode.

Variable

0 FAULT

1 STA

2 BAT V

9 ISOLATE 1/2 OF BATTERY PACK
ISO in motor while drive

HC11 RAM/EEPROM DESCRIPTION

HC11 CONSTANTS

<i>Address</i>	<i>Name</i>	<i>Value (Comments)</i>
3488	CLDPMX	38 (Overheat Cold plate temperature condition; 70 C)
3489	CLDPMN	45 (Overheat clear temperature for Cold Plate temperature; 65 C)
3490	MOTTMX	25 (Overheat motor temperature condition; 85 C)
3491	MOTTMN	29 (Overheat clear temperature for motor temperature; 80 C)
3492	CLDFNMX	68 (Cold plate temperature to turn fan on, motoring mode; 50 C)
3493	CLDFNMN	79 (Cold plate temperature to turn fan off, motoring mode; 45 C)
3494	MFANTMX	60 (Motor temperature to turn fan on, motoring mode ; 55 C)
3495	MFANTMN	68 (Motor temperature to turn fan off, motoring mode; 50 C)
3496	CFANTMX	79 (Cold plate temperature to turn fan and pump on, charging mode; 45 C)
3497	CFANTMN	89 (Cold plate temperature to turn fan and pump off, charging mode; 40 C)
3498	TVAL0	51 (1V out to temperature gauge)
3499	TVAL1	64 (1.25V out to temperature gauge)
3500	TVAL2	77 (1.5V out to temperature gauge)
3501	TVAL3	135 (2.6V out to temperature gauge)
3502	TVAL4	193 (3.77V out to temperature gauge)
3503	TVAL5	199 (3.88V out to temperature gauge)
3504	TVAL6	210 (4.1V out to temperature gauge)
3505	TVAL7	218 (4.25V out to temperature gauge)
3506	TVAL8	220 (4.3V out to temperature gauge)
3507	MXTMP0	89 (Out TVAL0 at 40 C)
3508	MNTMP0	97 (Out 0V after cooling down from 40 C to 37 C)
3509	MXTMP1	79 (Out TVAL1 at 45 C)
3510	MNTMP1	85 (Out TVAL0 after cooling down from 45 C to 42 C)
3511	MXTMP2	68 (Out TVAL2 at 50 C)
3512	MNTMP2	75 (Out TVAL1 after cooling down from 50 C to 47 C)
3513	MXTMP3	60 (Out TVAL3 at 55 C)
3514	MNTMP3	65 (Out TVAL2 after cooling down from 55 C to 52 C)

HC11 RAM/EEPROM DESCRIPTION

3515	MXTMP4	51 (Out TVAL4 at 60 C)
3516	MNTMP4	56 (Out TVAL3 after cooling down from 60 C to 57 C)
3517	MXTMP5	45 (Out TVAL5 at 65 C)
3518	MNTMP5	49 (Out TVAL4 after cooling down from 65 C to 62 C)
3519	MXTMP6	38 (Out TVAL6 at 70 C)
3520	MNTMP6	42 (Out TVAL5 after cooling down from 70 C to 67 C)
3521	MXTMP7	34 (Out TVAL7 at 75 C)
3522	MNTMP7	36 (Out TVAL6 after cooling down from 75 C to 72 C)
3523	MXTMP8	29 (Out TVAL8 at 80 C)
3524	MNTMP8	32 (Out TVAL7 after cooling down from 80 C to 77 C)
3525	MXTMP9	25 (Out 5V at 85 C)
3526	MNTMP9	27 (Out TVAL8 after cooling down from 85 C to 82 C)
3527	MN_V_DF	210 (Minimum voltage difference before and after DC-DC on; 0.5 V) 0.1 ✓
3528	VBAT_MN	MSB; 0 (Minimum battery pack voltage; 100V)
3529		LSB; 93 (Minimum battery pack voltage; 100V)
3530	BRK_MIN	MSB; 255 (Regen Break Light to be turn on at -50 AMP)
3531		LSB; 154 (Regen break light to be turn on at -50 AMP)
3532	SLIP_CNT	5 (Constant value for motor temperature compensation in slip gain)

HC11 RAM/EEPROM DESCRIPTION

DSP CONSTANTS

<i>Address</i>	<i>Name</i>	<i>Value (Comments)</i>
3584	coef0	95 (MSB: Filter Coefficient value)
3585		255 (LSB: Filter Coefficient value)
3586	coef1	32 (MSB: Filter Coefficient value; 32767 - coef0)
3587		0 (LSB: Filter Coefficient value; 32767-coef0)
3588	acinc	1 (MSB: acinc)
3589		137 (LSB: acinc)
3590	acc0	192 (MSB: Accelerator * X ² factor)
3591		0 (LSB: Accelerator * X ² factor)
3592	acc1	127 (MSB: Accelerator * X)
3593		255 (LSB: Accelerator * X)
3594	correl	5 (MSB: Correlation)
3595		29 (LSB: Correlation)
3596	anminflt	0 (MSB: Min pot input volt)
3597		41 (LSB: Min pot input volt)
3598	anmaxflt	3 (MSB: Max pot input volt)
3599		224 (LSB: Max pot input volt)
3600	anmin	0 (MSB: Pot offset volt)
3601		103 (LSB: Pot offset volt)
3602	isov	0 (MSB: Isolation delta volt)
3603		64 (LSB: Isolation delta volt)
3602	isov	0 (MSB: Isolation delta volt)
3603		64 (LSB: Isolation delta volt)
3604	pc_tmr	5 (MSB: Precharge timer)
3605		220 (LSB: Precharge timer; approximately 1.5 sec)
3606	vmin	2 (MSB: B: Vmul)
3607		64 (LSB: B: Vmul)
3608	batoffmin	156 (MSB: B: Vmul)
3609		214 (LSB: B: Vmul)
3610	vminsl	2 (MSB: B: Vmul)

HC11 RAM/EEPROM DESCRIPTION

3611		250 (LSB: B: Vmul)
3612	vmax	3 (MSB: B: Vmul)
3613		21 (LSB: B: Vmul)
3614	batoff	77 (MSB: B: Vmul)
3615		101 (LSB: B: Vmul)
3616	vmaxsl	253 (MSB: B: Vmul)
3617		5 (LSB: B: Vmul)
3618	offseta	0 (MSB: ia reference offset)
3619		128 (LSB: ia reference offset)
3620	offsetb	0 (MSB: ib reference offset)
3621		128 (LSB: ib reference offset)
3622	ifwdlim	0 (MSB: Drive power limit in watts)
3623		112 (LSB: Drive power limit in watts)
3624	irevlim	0 (MSB: Reverse power limit in watts)
3625		112 (LSB: Reverse power limit in watts)
3626	batonmin	2 (MSB: Minimum turn on voltage)
3627		21 (LSB: Minimum turn on voltage)
3628	rgnscldq	0 (MSB: regen scale dq)
3629		30 (LSB: regen scale dq)
3630	idmax	13 (MSB: Max field current)
3631		172 (LSB: Max field current)
3632	spdlmt	34 (MSB: Max speed)
3633		243 (LSB: Max speed)
3634	slip1	0 (MSB: slip)
3633		243 (LSB: Max speed)
3634	slip1	0 (MSB: slip)
3635		22 (LSB: slip)
3636	slip2	0 (MSB: slip)
3637		171 (LSB: slip)
3638	slipoff2	0 (MSB: slip)
3639		6 (LSB: slip)
3640	slipcut	12 (MSB: slip)
3641		149 (LSB: slip)

HC11 RAM/EEPROM DESCRIPTION

3642	brkgain	0 (MSB: brake gain)
3643		35 (LSB: brake gain)
3644	brkmax	1 (MSB: Max brake regen from pedal)
3645		44 (LSB: Max brake regen from pedal)
3646	bus_tmr	13 (MSB: Bus voltage timer)
3647		172 (LSB: Bus voltage timer; approximately 3.5 sec)
3648	tslope	1 (MSB: CH: slope for temperature scale)
3649		100 (LSB: CH: slope for temperature scale)
3650	tbreak	0 (MSB: CH: when cold temp > value then tschsle = 1)
3651		92 (LSB: CH: when cold temp > value then tschsle = 1)
3652	vchrgsl	254 (MSB: CH: Vmul)
3653		0 (LSB: CH: Vmul)
3654	vchrgoff	53 (MSB: Vmul)
3655		79 (LSB: CH: Vmul)
3656	vchrgst	3 (MSB: CH: Vmul)
3657		21 (LSB: CH: Vmul)
3658	vmulmax	3 (MSB: CH: Vmul)
3659		232 (LSB: CH: Vmul)
3660	vchrgmx	3 (MSB: CH: When VBATT > vchrgmx, change constant voltage)
3661		49 (LSB: CH: When VBATT > vchrgmx, change constant voltage)
3662	chrgoff	0 (MSB: CH: Charging current reference offset)
3663		0 (LSB: CH: Charging current reference offset)
3664	vacmin	0 (MSB: CH: AC turn off)
3665		213 (LSB: CH: AC turn off)
3666	acbaton	0 (MSB: CH: Min VRAT)
3664	vacmin	0 (MSB: CH: AC turn off)
3665		213 (LSB: CH: AC turn off)
3666	acbaton	0 (MSB: CH: Min VBAT)
3667		213 (LSB: CH: Min VBAT)
3668	SOC_REGEN	78 (MSB)
3669		32 (LSB)
3670	acmin	0 (MSB: CH: When VBAT > acmin then latches to charge mode)
3671		181 (LSB: CH: When VBAT > acmin then latches to charge mode)
3672	acoff	3 (MSB: CH: When VBAT < acoff then latches to charge complete)

HC11 RAM/EEPROM DESCRIPTION

3673		85 (LSB: CH: When VBAT < acoff then latches to charge complete)
3674	iacmin	0 (MSB: CH: When (IAC < iacmin) and (VMODE), latches to charge complete)
3675		1 (LSB: CH: When (IAC < iacmin) and (VMODE), latches to charge complete)
3676	vac120	2 (MSB: CH: When VAC > vac120, 220V operation)
3677		21 (LSB: CH: When VAC > vac120, 220V operation)
3678	trkref	0 (MSB: CH: Reference current for trickle charge mode)
3679		79 (LSB: CH: Reference current for trickle charge mode)
3680	ich120	1 (MSB: CH: Max IAC for 120V AC)
3681		1 (LSB: CH: Max IAC for 120V AC)
3682	ich220	1 (MSB: CH: Max IAC for 220V AC)
3683		41 (LSB: CH: Max IAC for 220V AC)
3684	chrsclmx	127 (MSB: CH: Max output reference)
3685		240 (LSB: CH: Max output reference)
3686	vmodedel	0 (MSB: CH: Sets the number of 100 usec delays for a 1 bit change in chrscl in constant voltage mode)
3687		0 (LSB: CH: Sets the number of 100 usec delays for a 1 bit change in chrscl in constant voltage mode)
3688	imodedel	0 (MSB: CH: Sets the number of 100 usec delays for a 1 bit change in chrscl in constant voltage mode)
3689		6 (LSB: CH: Sets the number of 100 usec delays for a 1 bit change in chrscl in constant voltage mode)
3690	xx179	0 (MSB: NOT USED)
3691		0 (LSB: NOT USED)
3692	p12vh	3 (MSB: P12V high limit)
3692		235 (LSB: P12V high limit)
3691		0 (LSB: NOT USED)
3692	p12vh	3 (MSB: P12V high limit)
3693		235 (LSB: P12V high limit)
3694	p12vl	2 (MSB: P12V low limit)
3695		214 (LSB: P12V low limit)
3696	rgndrv	32 (MSB: Constant regen for DRIVE and REVERSE)
3697		0 (LSB: Constant regen for DRIVE and REVERSE)
3698	rgntwo	48 (MSB: Constant regen for TWO)
3699		0 (LSB: Constant regen for TWO)

HC11 RAM/EEPROM DESCRIPTION

3700	rgnlow	64 (MSB: Constant regen for LOW)
3701		0 (LSB: Constant regen for LOW)
3702	ampscale	108 (MSB: SOC, Converts the current amp hr per msec to units for display on external meter)
3703		27 (LSB: SOC, Converts the current amp hr per msec to units for display on external meter)
3704	socg	0 (MSB: Maximum SOC output voltage)
3705		180 (LSB: Maximum SOC output voltage)
3706	vela	0 (MSB)
3707		10 (LSB)
3708	velb	0 (MSB)
3709		5 (LSB)
3710	velc	0 (MSB)
3711		0 (LSB)
3712	acoffset	0 (MSB)
3713		80 (LSB)
3714	acaddr	0 (MSB)
3715		0 (LSB)
3716	diqthr	11 (MSB)
3717		184 (LSB)
3718	chksl	0 (MSB: Check sum LSW)
3719		0 (LSB: Check sum LSW)
3720	chksm	0 (MSB: Check sum MSB)
3721		0 (LSB: Check sum MSB)
3722	diqmx	0 (MSB: Max amount that the output torque command can change)
3720	chksm	0 (MSB: Check sum MSB)
3721		0 (LSB: Check sum MSB)
3722	diqmx	0 (MSB: Max amount that the output torque command can change)
3723		128 (LSB: Max amount that the output torque command can change)
3724	diqmn	0 (MSB: Min amount that the output torque command can change)
3725		53 (LSB: Minamount that the output torque command can change)
3726	xx197	0 (MSB: NOT USED)
3727		0 (LSB: NOT USED)
3728	sctime	0 (MSB: 100 usec intervals between motion program)

HC11 RAM/EEPROM DESCRIPTION

3729		10 (LSB: 100 usec intervals between motion program)
3730	chtmx	3 (MSB: Maximum on time when charging)
3731		215 (LSB: Maximum on time when charging)

U.S. Electricar

PZREV1.SET | Wednesday, 08/03/1994 | 21:08:32.78 | CheckSum=13172

CONFIDENTIAL

38	7. CLDPMX	41	59. anminfit	15000	111. rgnlow
45	8. CLDFMN	992	60. anmaxfit	27675	112. ampscale
25	9. MOTTMX	103	61. anmin	160	113. SOC High Limit
29	10. MOTTMN	213	62. isov	73	114. SOC Low Limit
68	11. CLDFNMX	2500	63. T from PRE-P12V	5	115. TBD
79	12. CLDFNMN	550	64. vmin	0	116. TBD
60	13. MFANTMX	41387	65. batoffmin	80	117. TBD
68	14. MFANTMN	762	66. vmins1	0	118. TBD
79	15. CFANTMX	764	67. vmax	3000	119. TBD
89	16. CFANTMN	19217	68. batoff	0	120. TBD
51	17. TVAL0	64773	69. vmaxs1	0	121. TBD
64	18. TVAL1	128	70. offseta	100	122. digmx
77	19. TVAL2	128	71. offsetb	30	123. digmin
135	20. TVAL3	112	72. TBD	0	124. TBD
193	21. TVAL4	112	73. TBD	10	125. TBD
199	22. TVAL5	507	74. batonmin	983	126. chtrmx
210	23. TVAL6	48	75. TBD	116	127. CheckSumL
218	24. TVAL7	3500	76. idmax	51	128. CheckSumH
220	25. TVAL8	8053	77. spdlimt		
89	26. MXTMP0	22	78. slips1		
97	27. MNTMP0	171	79. slips2		
79	28. MXTMP1	6	80. slipoff2		
85	29. MNTMP1	3221	81. slipcut		
68	30. MXTMP2	65	82. brkgain		
75	31. MNTMP2	200	83. brkmax		
60	32. MXTMP3	4000	84. T from MAIN		
65	33. MNTMP3	356	85. tslope		
51	34. MXTMP4	92	86. tbreak		
56	35. MNTMP4	65024	87. vchrgs1		
45	36. MXTMP5	13248	88. vchrgoff		
49	37. MNTMP5	764	89. vchrgst		
38	38. MXTMP6	1000	90. vmulmax		
42	39. MNTMP6	789	91. vchrgmax		
34	40. MXTMP7	0	92. TBD		
36	41. MNTMP7	213	93. vacmin		
29	42. MXTMP8	213	94. achaton		
32	43. MNTMP8	20000	95. SOC regen limit		
25	44. MNTMP9	181	96. acmim		
27	45. MXTMP9	828	97. acoff		
2	46. MN_V_DF	1	98. TBD		
32	43. MNTMP8	20000	95. SOC regen limit		
25	44. MNTMP9	181	96. acmim		
27	45. MXTMP9	828	97. acoff		
2	46. MN_V_DF	1	98. TBD		
0	47. VBAT_MN_MSB	533	99. vac120		
93	48. VBAT_MN_LSB	79	100. trikref		
255	49. BRK_MIN_MSB	257	101. ich120		
147	50. BRK_MIN_LSB	297	102. ich220		
5	51. SLJP_CNT	32752	103. chrsclmx		
0	52.	0	104. vmodel		
24575	53. coef0	6	105. imodel		
8192	54. coef1	0	106. VEL out scale		
0	55. TBD	1003	107. p12vh		
49152	56. acc0	726	108. p12vl		
32767	57. acc1	4000	109. rgndrv		
2293	58. correl	11000	110. rgntwo		

U.S. Electricar

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S10REV1.SET | Wednesday, 08/10/1994 | 08:07:04.53 | CheckSum=0

38	7. CLDPMX	41	59. anminflt	18748	112. ampsscale
45	8. CLDPMN	992	60. anmaxflt	183	113. SOC High Limit
25	9. MOTTMX	103	61. amin	36	114. SOC Low Limit
29	10. MOTTMN	213	62. isov	5	115. TBD
68	11. CLDFNMX	2500	63. T from PRE-P12V	0	116. TBD
79	12. CLDFNMN	576	64. vmin	80	117. TBD
60	13. MFANTMX	40150	65. batoffmin	0	118. TBD
68	14. MFANTMN	762	66. vmins1	3000	119. TBD
79	15. CFANTMX	789	67. vmax	0	120. TBD
89	16. CFANTMN	19813	68. batoff	0	121. TBD
51	17. TVAL0	64773	69. vmaxs1	100	122. digmx
64	18. TVAL1	128	70. offseta	30	123. digmin
77	19. TVAL2	128	71. offsetb	0	124. TBD
135	20. TVAL3	112	72. TBD	10	125. TBD
193	21. TVAL4	112	73. TBD	983	126. chtmx
199	22. TVAL5	533	74. batonmin	0	127. CheckSumL
210	23. TVAL6	48	75. TBD	0	128. CheckSumH
218	24. TVAL7	3500	76. ldmax		
220	25. TVAL8	8053	77. spdlimt		
89	26. MXTMP0	22	78. slips1		
97	27. MNTMP0	171	79. slips2		
79	28. MXTMP1	6	80. slipoff2		
85	29. MNTMP1	3221	81. slipcut		
68	30. MXTMP2	65	82. brkgain		
75	31. MNTMP2	200	83. brkmax		
60	32. MXTMP3	4500	84. T from MAIN		
65	33. MNTMP3	356	85. slope		
51	34. MXTMP4	92	86. tbreak		
56	35. MNTMP4	65024	87. vchrgs1		
45	36. MXTMP5	13647	88. vchrgoff		
49	37. MNTMP5	789	89. vchrgst		
38	38. MXTMP6	1000	90. vmulmax		
42	39. MNTMP6	817	91. vchrgmax		
34	40. MXTMP7	0	92. TBD		
36	41. MNTMP7	213	93. vacmin		
29	42. MXTMP8	213	94. acbaton		
32	43. MNTMP8	26000	95. SOC regen limit		
25	44. MNTMP9	181	96. acmin		
27	45. MXTMP9	853	97. acoff		
2	46. MN_V_DF	1	98. TBD		
32	43. MNTMP8	533	99. vac120		
25	44. MNTMP9	181	96. acmin		
27	45. MXTMP9	853	97. acoff		
2	46. MN_V_DF	1	98. TBD		
0	47. VBAT_MN MSB	533	99. vac120		
93	48. VBAT_MN LSB	79	100. trkref		
255	49. BRK_MIN MSB	257	101. ich120		
147	50. BRK_MIN LSB	297	102. ich220		
5	51. SLIP_CNT	32752	103. chrschmx		
0	52.	0	104. vmodel		
24575	53. coef0	6	105. imodel		
8192	54. coef1	0	106. VEL out scale		
393	55. TBD	1003	107. p12vh		
49152	56. acc0	726	108. p12vl		
32767	57. accl	4000	109. rgndrv		
2293	58. correl	11000	110. rgntwo		
		15000	111. rgnlow		

38	7.	CLDPMX
45	8.	CLDPMN
25	9.	MOTIMX
29	10.	MOTIMN
68	11.	CLDFNMX
79	12.	CLDFNMN
60	13.	MFANTMX
68	14.	MFANTMN
79	15.	CFANTMX
89	16.	CFANTMN
51	17.	TVAL0
64	18.	TVAL1
77	19.	TVAL2
135	20.	TVAL3
193	21.	TVAL4
199	22.	TVAL5
210	23.	TVAL6
218	24.	TVAL7
220	25.	TVAL8
39	26.	MXTMP0
37	27.	MNTMP0
79	28.	MXTMP1
35	29.	MNTMP1
58	30.	MXTMP2
75	31.	MNTMP2
50	32.	MXTMP3
55	33.	MNTMP3
51	34.	MXTMP4
56	35.	MNTMP4
45	36.	MXTMP5
49	37.	MNTMP5
48	38.	MXTMP6
42	39.	MNTMP6
44	40.	MXTMP7
46	41.	MNTMP7
49	42.	MXTMP8
42	43.	MNTMP8
45	44.	MNTMP9
47	45.	MXTMP9
	46.	MN_V_DF
	47.	VBAT_MN MSB
43	48.	VBAT_MN LSB
55	49.	BRK_MIN MSB
	46.	MN_V_DF
	47.	VBAT_MN MSB
43	48.	VBAT_MN LSB
55	49.	BRK_MIN MSB
47	50.	BRK_MIN LSB
	51.	SLIP_CNT
	52.	
4575	53.	coef0
192	54.	coef1
	55.	TBD
9152	56.	acc0
2767	57.	acc1
2	58.	correl
1	59.	anminflt
92	60.	anmaxflt
03	61.	anmin
13	62.	isov
500	63.	T from PRE-P12V
50	64.	vmin

41387	65. batoffmin
762	66. vminsl
764	67. vmax
192	68. batoff
64773	69. vmaxsl
128	70. offseta
128	71. offsetb
112	72. TBD
112	73. TBD
507	74. batonmin
48	75. TBD
3500	76. idmax
8053	77. spdlmt
22	78. slips1
171	79. slips2
6	80. slipoff2
3221	81. slipcut
65	82. brkgain
200	83. brkmax
4000	84. T from MAIN
356	85. tslope
92	86. tbreak
55024	87. vchrgsl
13248	88. vchrgoff
764	89. vchrgst
1000	90. vmulmax
789	91. vchrgmax
)	92. TBD
21	93. vacmin
213	94. acbaton
20000	95. SOC regen limit
181	96. acmim
328	97. acoff
1	98. TBD
533	99. vac120
79	100. trkref
257	101. ich120
297	102. ich220
12752	103. chrsclmx
)	104. vmoddel
)	105. imoddel
)	106. VEL out scale
.003	107. p12vh
.26	108. p12vl
1000	109. imoddel
)	106. VEL out scale
.003	107. p12vh
.26	108. p12vl
192	109. rgndrv
1000	110. rgntwo
5000	111. rgnlow
7675	112. amp scale
.60	113. SOC High Limit
10	114. SOC Low Limit
1	115. TBD
1	116. TBD
10	117. TBD
1	118. TBD
1000	119. TBD
1	120. TBD
1	121. TBD
00	122. digmx
0	123. digmin
	124. TBD

Enter 735 to change Vmode to 345vdc

10	125.	TBD
983	126.	chtmx
116	127.	ChecksumL
51	128.	ChecksumH

38	7.	CLDPMX
45	8.	CLDPMN
25	9.	MOTTMX
29	10.	MOTTMN
68	11.	CLDFNMX
79	12.	CLDFNMN
60	13.	MFANTMX
68	14.	MFANTMN
79	15.	CFANTMX
89	16.	CFANTMN
51	17.	TVAL0
64	18.	TVAL1
77	19.	TVAL2
135	20.	TVAL3
193	21.	TVAL4
199	22.	TVAL5
210	23.	TVAL6
218	24.	TVAL7
220	25.	TVAL8
89	26.	MXTMP0
97	27.	MNTMP0
79	28.	MXTMP1
85	29.	MNTMP1
68	30.	MXTMP2
75	31.	MNTMP2
60	32.	MXTMP3
61	33.	MNTMP3
51	34.	MXTMP4
56	35.	MNTMP4
45	36.	MXTMP5
49	37.	MNTMP5
38	38.	MXTMP6
42	39.	MNTMP6
34	40.	MXTMP7
36	41.	MNTMP7
29	42.	MXTMP8
32	43.	MNTMP8
25	44.	MNTMP9
27	45.	MXTMP9
2	46.	MN_V_DF
0	47.	VBAT_MN MSB
93	48.	VBAT_MN LSB
255	49.	BRK_MIN MSB
2	46.	MN_V_DF
0	47.	VBAT_MN MSB
93	48.	VBAT_MN LSB
255	49.	BRK_MIN MSB
147	50.	BRK_MIN LSB
5	51.	SLIP_CNT
0	52.	
24575	53.	coef0
8192	54.	coef1
0	55.	TBD
49152	56.	acc0
32767	57.	acc1
273	58.	correl
4	59.	anminflt
992	60.	anmaxflt
103	61.	anmin
213	62.	isov
2500	63.	T from PRE-P12V
576	64.	vmin

40150	65. batoffmin
762	66. vminsl
789	67. vmax
19 3	68. batoff
647,3	69. vmaxsl
128	70. offseta
128	71. offsetb
112	72. TBD
112	73. TBD
533	74. batonmin
48	75. TBD
3500	76. idmax
8053	77. spdlmt
22	78. slips1
171	79. slips2
6	80. slipoff2
3221	81. slipcut
65	82. brkgain
200	83. brkmax
4500	84. T from MAIN
356	85. tslope
92	86. tbreak
65024	87. vchrgsl
13647	88. vchrgoff
789	89. vchrgst
1000	90. vmulmax
817	91. vchrgmax
0	92. TBD
21	93. vacmin
213	94. acbaton
26000	95. SOC regen limit
181	96. acmim
853	97. acoff
1	98. TBD
533	99. vac120
79	100. trkref
257	101. ich120
297	102. ich220
32752	103. chrsclmx
0	104. vmoddel
5	105. imoddel
0	106. VEL out scale
1003	107. p12vh
726	108. p12vl
3100	109. rmoddel
0	106. VEL out scale
1003	107. p12vh
726	108. p12vl
3192	109. rgndrv
11000	110. rgntwo
15000	111. rgnlow
18748	112. amp scale
213	113. SOC High Limit
50	114. SOC Low Limit
5	115. TBD
0	116. TBD
10	117. TBD
5	118. TBD
1000	119. TBD
0	120. TBD
1	121. TBD
100	122. digmx
10	123. digmin
1	124. TBD

10	125.	TBD
983	126.	chtmx
177	127.	ChecksumL
49	128.	ChecksumH

--- MEMO ---

Memo: G2NEA
Date: 02/21/95
Time: 16:57

From: Frank Mc Henry

Subject: CONSTANTS TO BE CHANGE NEW/PCU

CHANGE WHEN CHARGING
DO NOT CHANGE WHEN IN WINDORS
CHANGE WHEN IN DOS
DO NOT PUT THE COMP. ON THE VACUUM PUMP OR PCU

S-10 TRUCK
109. REGEN DRIVE 4000
114 SOC OUT HIGH 183
SOC OUT LOW 56

PRIZM
109 REGEN DIRVE 4000
114 SOC LOW 73