

Amoco/DataCard

Credit and Debit Card Networks

Version 001

for Site Controller II Versions 2.3 and above

part number: C35931

Gasboy CFN Series

Amoco/DataCard 001 Credit and Debit Card Networks

March 12, 2003

C35931

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C35931	March 21, 2001	Versions 2.3 and above
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Site Controller Related Publications

Site Controller II - version 2.3 and later

<i>Part No.</i>	<i>Title</i>
C09212	SC II Manager's Manual
C01918	SC II Installation Manual
C09213	SC II Configuration Manual
C09159	SC II Pocket Reference
C09204	Check Point Reference Manual
C35745	Profit Point Clerk's Manual
C35746	Profit Point Reference Manual
C35923	Point of Sale and Shift Change

Credit and Debit Card Networks

C35931	Amoco/DataCard	C35907	Gascard
C35901	Buypass	C35909	Generic Dial
C35914	ADS-Chicago (formerly SPS/Phillips)	C35908	PaymenTech (formerly Gensar)
C35902	ADS-CITGO	C35910	NaBANCO
C35906	ADS-FINA	C35911	NDC
C35919	ADS-ZION	C35913	Sinclair
C35904	EDS-CCIS	C35915	T-Chek
C35903	Comdata	C35916	UFDA
C35905	FDR	C35917	VDOT
C35930	Gasboy Dial	C35918	VisaNet

Forms, Quick Reference, Tutorials

C09134	SC II Configuration Order Form
call	SC II Sample Reports

Pump Interface

C09146	Pump Interface Manual
C01745	Gilbarco Interface Unit
C35849	SDI/Wayne CAT Interface
C35924	SDI/Unitec Interface
C35933	Insight Interface

Card Encoding and Miscellaneous

C09136	CFN Series Clubcard Format
C01687	CFN Series Card Encoding Manual

Remote Communications

C09137	Site Controller Host Communications
C09138	Site Controller Raw Mode Communications
C09140	Applications Guide for Host-SC Communications
C09141	PC/SiteControl User's Manual

Technical Publications

internal	SC II Technical Manual
C01759	CFN Diagnostic Manual

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001 Amoco/DataCard

If you are connecting your site to Amoco/DataCard for card verification, use this manual for reference.

The Amoco/DataCard software complies with the new VISA restriction on the credit card account printed on Island receipts. The number of digits defined in the ARSTA specification for the specific card type will be printed instead of the complete number.

Cards accepted

Amoco/DataCard currently accepts these credit cards:

- VISA
- MasterCard
- American Express
- Discover
- Diner's Club

The proprietary cards accepted are:

- Amoco
- Amoco Multicard
- Amoco Torch
- Amoco Co-Brand (VISA and MasterCard)
- TransiCard
- Universal (PHH)
- International Auto
- International Auto/VISA
- Voyager
- Wright Express (WEX)
- MasterCard Fleet

Amoco Network Required Changes

The Amoco/Gasboy network interface requires the following changes:

1. Products 1-14 must be the specific Amoco fuel products. If the site is selling merchandise through a Gasboy console, rearrange the merchandise products to free product numbers 1-14.
2. Price codes 1-14 levels 0 and 2 will also be occupied by price change information loaded into the DataCard terminal and sent to the Site Controller. Price changes for fuel products will now be done at the DataCard terminal. See the Amoco DataCard Manager manual for the proper procedure to change prices.

NOTE: The DataCard terminal will only load Price Levels 0 and 2. All other Levels (1, 3-9, etc.) for Cash and all CLUB levels will still be loaded at the Site Controller.

3. Amoco will also set/default all pump cutoff limits to \$35. Higher cutoffs can only be obtained through the Amoco Help Desk by request.

Note: Setting changes to the cutoffs in the Site Controller will only last until the next time it is rebooted or the DataCard is lost and communications are re-established with the Site Controller.

4. ICR messages are Amoco specific and will be loaded during the installation process.
5. Credit cards can only be approved at the ICR or DataCard terminal. Credit cards may not be run at a Gasboy console. Only Club cards can be run at a console.
6. Settlement of all CREDIT transactions will now be done at the DataCard terminal.
7. The DataCard Terminal will set the date and time of the Site Controller.

Failure to properly backup an existing Site Controller before these changes are made and booted may cause a complete loss of the Site Controller system data. A proper backup is required to restore any of the lost data.

Configuring the Site Controller

Your Gasboy authorized service representative will configure your Site Controller. Before the service representative begins, make sure you have collected all the information that will be used for configuration (such as tank, pump, fuel products, etc.).

Make sure you know the customer's PIN KEY. The Pin Key is listed on their Card encoding sheets or is available from the Gasboy Help Desk. Do not proceed until you have this information or club cards requiring PIN entry will not work.

For an existing site:

1. Perform the customer's typical End of Day procedures and make sure that the reports are properly printed. If the site was using a different network be sure that network's settlement procedure is properly completed. If they are accepting Club cards make sure those transactions are polled and reset/purged properly.
2. Run SYSBACK and TRANBACK commands and do a complete back up. Check command files that may have been modified by the customer using the command: DIR;L /BIN/*.CMD and note dates. These will be preserved with the backup procedure.
3. Check command files that may have been created by the customer. These may have to be manually placed on the backup diskette. Note: Do not copy any settle commands for the old network.
4. Make a printout of your current configuration using the CONFIG command. This can be used for future reference.
5. Printout all existing product codes, prices, crons, trfmt, pumps, tanks, etc. using the command PRNTSYS. This will print the current system information to the logger. A file will also be created called Prntsys.dta in the root directory of the hard drive. Use this for reference to note the required changes needed for the new Amoco fuel products. All existing products may change. Amoco product will occupy Products 1-14 and Price Codes 1-14 levels 0 and 2 as noted above. Check that the existing club card base matches with the new Amoco products and price codes.
6. Use a separate disk to copy your site specific files to use after the upgrade such as Framos.cfg, Sysback.dta, Tranback.dta, customer specific command files and modified

system command files. You may have Shift.fmt and Day.fmt from the BIN directory of the C drive, Offroad.DTA if used and the Prntsys.dta for reference.

If Offroad.dta is used by the site, you may need to modify the products used by that file due to the new Amoco fuel products or necessary movement of merchandise products.

You may also wish to copy the files that contain the customer's current shift reports for reference. For the original report package, these files are located in the root directory of the CL drive labeled as SHIFT.x. For the New Shift Report package, the reports are located in the REPORTS directory. These reports may be reprinted but not regenerated.

7. Insert the NEW Amoco Application Disk in the A: drive.
8. Type A:/BIN/Install
9. Respond with N if asked to copy SYSBACK.DTA and OFFROAD.DTA
10. At the "Do you want to install from an additional floppy disk (Y/N)" insert the new Amoco Release Disk, type Y and press enter.
11. Copy the Amoco.dta file to the C: drive.
12. Copy the Datacard.bin file into the C:/BIN directory.
13. Copy the backup files into their respective directories.
14. Type **REBOOT;A** at the C prompt. This will load the new operating system.
15. Go to number 6 in setting up a new site to load settings.

For a new site:

1. Run AMINSTAL.CMD to copy the files onto the hard disk.
2. From the command line, run FIX TR;I
3. Then REBOOT;A to load the new operating system and configuration.
4. Run AMRESTOR.CMD to restore the Amoco specific ICR messages and fuel products.
5. Run DATACARD.BIN to set up the router table.
6. Set up the tank table using the LOAD TANK command.
7. Set up the fuels using the LOAD FUEL command.
8. Set up pump configuration using the PUMP program.
9. Type SYSBACK and then REBOOT.
10. Set the Site Controller CPU board K2 jumper "to DTE" as shown in the diagram on page 7.

Once the Site Controller has been configured, run reboot to load the new configuration.

After the DataCard 780 unit has been set up and has dialed in and received its download from the Amoco host, connect the DataCard 780 unit (9 pin connector) to Port 3 (25 pin connector) on the Site Controller using interface cable C07162. When the DataCard unit establishes communication with the Site Controller the remainder of the configuration information will be downloaded from the DataCard unit to the Site Controller (receipt configuration, fuel prices, and system time). If the download does not occur automatically, execute the reboot command to force the DataCard 780 unit to send the configuration and price information.

Note: The Data Card system must use the same power source as the other Gasboy equipment.

System Parameters (SYS_PAR)

This information is provided for reference when installing at an existing site. The Amoco master configuration file and DataCard initialization program initializes and/or stores the appropriate values for you in the system parameters when installing a new site.

System parameters - page 1

Site ID: **Insert the last 6 digits of your SVB ID number.**
 Pin Key: **** (Cannot be seen)
 Lockout: **Limited**

Reader verification - page 4

Use remote verification: **credit**
 Use local verification: **none (optionally club)**
 Check PIN: **none (optionally club)**
 Check mod 10: **none**
 Check expiration date: **credit (optionally club)**

Console verification - page 5

Use remote verification: **none**
 Use local verification: **none (optionally club)**
 Check PIN (console): **none (optionally club) (and DEBIT - see console)**
 Check mod 10: **none**
 Check expiration date: **credit (optionally club)**

Serial port configuration - Page 8

Host handler channel: **3**
 Host handler baud rate: **2400**
 Send requests to host handler: **credit**
 Host handler data: **02 10 20 00 00 00 00 00 00 00 00 00 00 00 02 01**

The first two digits, the poll address, are always 02.

The second and third two-digit numbers, which set timeouts, are always 10 and 20.
 fourth through fourteenth two-digit numbers are always zeros (00).

The fifteenth two-digit number is 00 if debug output to disk, 01 if debug output to local port, or 02 if debug output to both disk and local port.

The sixteenth two-digit number is 01 if debug, else 00.

Receipt configuration - Page 12

Minutes until ICR receipt expires: **60**

Console (CONSOLE)

Allow Postpay on POS: **YES** (without console set to NO)
 Allow hand authorization of cards: **No** (optionally Yes if you will be using the DEBIT MOP to track DataCard Credit transactions paid inside for fuel and merchandise. Should be used only if the customer demands that the POS be able to track DataCard Credit sales under something other than cash.)
 Allow hand entry of card data: **No** (optionally YES with club cards)

Island card reader (READER)

The Island Card Reader (ICR) reader program (MENU 1) must be set-up as follows:

#	Ty	S/D	DISPLAY	WHILE ENTERING	OPTIONS
1	1	!		!	!
2	3	6	ENTER YOUR PIN	!YOUR PIN	! Optional Auto-enter Masked
3	7	7	ENTER ODOMETER	!ODOMETER	! Optional
4	6	8	ENTER VEHICLE NO.	!VEHICLE	! Optional
6	2	2	SELECT PUMP NUMBER	!PUMP	!
5	8	!	PLEASE WAIT	!	!
8	9	!		!	!
7	12	2	BEGIN FUELING	!	!
9			!-----END-----!	!	!

The last two lines may vary in your system and do not need to be altered to match.

The Island Card Reader (ICR) printer program (menu 2) must be set-up as follows:

#	Ty	S/D	DISPLAY	WHILE ENTERING	OPTIONS
1	10	!	PRINTING....	!	!
2	12	3	!PLEASE TAKE RECEIPT	!	!
3			!-----END-----!	!	!

TRFMT

Transaction format:

A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	2,0	2.4	19	3	4	6	7	8	9	16	11	17	13
Tran	CARD	ACCT	VEHICLE	Auth	Date	Time	P#	Pr	Quantity	PRICE	\$Total	ODOM	Error
0000	0000	00000000000000000000000000000000	xxxxxx	00/00	00:00	00	00	000000.000	0.000	0000.00	000000	xxxxxxxxxx	

The above is an example, your setup may vary. These requirements must be met:

- Do not change your account offsets, the change will affect Club cards to display improperly.
- Do insure that you modify the last account field to display a total of 19 digits for Credit cards. In the above example, C was modified to display 15 digits so the number of digits to display in the 2 account field (B & C) equals 19 digits.

Tables (TABLE)

The receipt table must have at least 500 entries.

The receipt header must have at least 15 entries.

The router table must have 7500 entries.

The price table must have 50 entries.

ICR Messages (LOAD MESSAGE)

The Island Card Reader (ICR) messages must be set-up as follows:

N.	Sec	Message
1	2.00	WELCOME TO AMOCO
2	2.00	SWIPE CARD

Amoco Fuel Products (LOAD PRODUCT)

The Amoco fuel products must be set-up as follows:

Pr	Cat	Name	Inventory	Reorder	Low price	High price	Price	Taxes	
1	1	Ultimate F	0.000	0	---	No override	---	0.00	None
2	1	Ultimate S	0.000	0	---	No override	---	0.00	None
3	1	Midgrade F	0.000	0	---	No override	---	0.00	None
4	1	Midgrade S	0.000	0	---	No override	---	0.00	None
5	1	Blue F	0.000	0	---	No override	---	0.00	None
6	1	Blue S	0.000	0	---	No override	---	0.00	None
7	1	Ethanol F	0.000	0	---	No override	---	0.00	None
8	1	Ethanol S	0.000	0	---	No override	---	0.00	None
9	1	Other F	0.000	0	---	No override	---	0.00	None
10	1	Other S	0.000	0	---	No override	---	0.00	None
11	1	Diesel-1 F	0.000	0	---	No override	---	0.00	None
12	1	Diesel-1 S	0.000	0	---	No override	---	0.00	None
13	1	Diesel-2 F	0.000	0	---	No override	---	0.00	None
14	1	Diesel-2 S	0.000	0	---	No override	---	0.00	None

Make sure that product codes match the existing club card base. If products 1-14 were used for merchandise these MUST be moved to another number.

Amoco Prices (Load Price)

Prices for level 0 and 2 must be loaded at the DataCard unit and level 1 for cash (if Console I-fuel only is allowed). All price levels of 4 and higher must be loaded on the Site Controller.

With a working DataCard system (loaded with prices) connected to the SCII, run the command:

```
LOad PRice;I
```

to remove all price codes and levels. All pumps will be disabled with no prices. Then execute the command:

```
DATACARD
```

to match the price codes of 1-14 with levels 0 and 2 on the SCII. This will also load Headings, Messages, and Cutoffs (normally \$35).

NOTE: Do not, under any circumstances, change pump cutoffs using the Load Cutoff command. The next download from Amoco will reset the cutoffs to the Amoco limit. Higher cutoffs MUST be obtained by calling Amoco Help Desk.

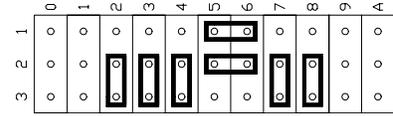
Use the command:

```
ENable PUmP;I
```

to bring the pumps back on-line if they do not enable automatically when the prices become non-zero.

Jumper settings

The Amoco/DataCard interface requires that the Site Controller be configured for “to DTE.” The “to DTE” jumper settings on K2 for port 3 are:



The DATACARD command

You must execute the command DATACARD to set up the router table.

If you see the message *Must run DATACARD.BIN to initialize* when the Site Controller boots, type DATACARD at the C* prompt.

Create a cron to run DATACARD that executes whenever the site crashes.

Settlement

Settlement is provided by Amoco/DataCard (Batch and End of Day). The site does not initiate the settlement process.

The transaction pointer

If you are not regularly polling and resetting the transaction pointer, then you should run the PURGE SITE command once a day so you do not fill up the Site Controller’s memory. This can be set up as a cron to run at a time that is normally non-interfering with the business at the site. An example load cron command is:

```
load cron 65 @*****0400 -purge site
```

This command would load a cron to run purge site at 4 A.M. every day.

If you are polling regularly, PURGE SITE must be run after polling to set the transaction pointers to avoid the memory full condition.

If you are having problems with the transaction file, contact Gasboy Technical Service.

PC Comm polling

If using a PC comm package, use the last 6 digits of the SVB ID number to communicate with the site controller.

Unattended Fueling - Troubleshooting Guide

The following should be used as a guide to determine whether a problem at a site is likely to be a DataCard 780 issue or a problem with the Gasboy Island Card Reader (ICR) or Site Controller.

- Unattended sites are those with Gasboy equipment operating in a site with no attendant or cashier on duty.
- Attended sites are those that have Gasboy equipment in a site with an attendant or cashier on duty for at least part of the day. Most of these will be C-Store locations, and may revert to an Unattended Mode of operation during evening hours.

- Any error messages or conditions that occur at the DataCard terminal should be investigated as a DataCard problem, using current DataCard troubleshooting procedures.
 - The following messages can appear to a customer at the ICR display, indicating a problem with either the DataCard Terminal or the Gasboy equipment.
1. **Club Cards Only - (AMOCO HELP DESK)** This message indicates that the connection between the Gasboy Site Controller and the DataCard terminal has been lost. This message can occur if the DataCard Terminal loses power, receives an *Internal Error*, or if the cable going from the Site Controller to the DataCard Terminal is loose or disconnected.
 2. **Down - Try Later - (GASBOY HELP DESK)** This message will display to a customer when the Gasboy ICR loses the connection to the Site Controller. Again, this could be a cable that is loose or disconnected, the result of a loss of power to the Site Controller, or a problem of unknown origin with the Site Controller.
 3. **Please See Cashier - (AMOCO HELP DESK) Attended Sites ONLY** - This message will display at the ICR when a credit card swiped at the ICR is rejected either by the DataCard Terminal (when not connected to the network) or by the Amoco network.
 4. **Transaction Denied - (AMOCO HELP DESK) Unattended Sites ONLY** - This message will display at the ICR when a credit card is rejected either by the DataCard Terminal (when not connected to the network) or by the Amoco network.
 5. **Receipt Not Available - (GASBOY HELP DESK)** After a customer finishes fueling their vehicle and hangs up the nozzle, they will return to the ICR and re-swipe their credit card. They should see a prompt “*Receipt? (Yes or No)*” If they press the **YES** key, their receipt should print. If they receive the above error message instead, possible reasons are:
 - Printer out of paper, or jammed.
 - Communication between the DataCard Terminal and the Gasboy Site Controller has been interrupted before the complete receipt information could be sent to the Site Controller.
 - Communication between the ICR and the Site Controller has been interrupted before complete receipt information could be sent to the ICR.
 6. **Card Read Error - (AMOCO HELP DESK/GASBOY HELP DESK)** Due to a problem with the customer's magnetic stripe on their credit card, or due to a problem with the magnetic stripe reader in the ICR, the credit card could not be read. This card could still be used via manual entry at Attended locations.
 7. **Pump Not Available - (AMOCO HELP DESK/GASBOY HELP DESK)** If a customer selects a pump number and sees this message displayed, possible reasons are:
 - Pump problem - power outage or other hardware failure at the pump.
 - Connection problem between the Site Controller and the dispenser.
 - Fuel prices not entered for all products available at the selected dispenser. If the site has Multi-Product Dispensers (MPDs), fuel prices must be entered at the DataCard Terminal for *all* of the products for an MPD to work.

Other items that may be reported at a site with the DataCard/Gasboy application:

1. After a customer finishes fueling their vehicle and hangs up the nozzle, they will return to the ICR and re-swipe their credit card to get their receipt. They should see a prompt “*Receipt? (Yes or No)*” **IF THEY DO NOT SEE THIS PROMPT** - but instead the display reads “*Please Wait*”, then “*Select Pump Number*”, the following may have occurred. **(GASBOY HELP DESK)**
 - The transaction is still in progress - try again after making sure the nozzle is hung up and the pump is in an IDLE state.

- The “retain receipt” timer is set incorrectly in the Site Controller table. This timer should be set at one hour.
 - The customer waited longer than an hour to try and get their receipt.
2. If a customer selects NO to the prompt “*Receipt? (Yes or No)*”, the prompts “*Processing Card*” and “*Select Pump Number*” will appear. The card swipe would then be treated just like another credit transaction at this point.
 3. “ICR” display flashes on DataCard Terminal display window. (**AMOCO HELP DESK/GASBOY HELP DESK**) This indicates that the connection between the Gasboy Site Controller and the DataCard Terminal is not operating normally. Some possible causes are:
 - Site Controller is down, due either to failure of application or loss of power.
 - Connecting cable is defective or unplugged from either the DataCard Terminal or Site Controller.
 4. Pump will not dispense fuel after customer swipes card and selects pump number. (**GASBOY HELP DESK**) Possible causes are:
 - Problem with Site Controller operation - not arming pump for fueling.
 - Customer selected wrong pump number.
 - Pump not functioning properly.
 - Pump availability timed out. The time-out value is configured at the site controller, and will usually be between 90 seconds and three minutes. If the customer does not lift the nozzle before the time-out is reached, the transaction will be canceled, and the customer will need to re-swipe their card to fuel.
 5. Pump stops before customer can fill tank. (**AMOCO HELP DESK/GASBOY HELP DESK**) Possible causes are:
 - Amoco limit on outside credit card sales is usually set at \$35.00 or \$50.00.
 - Station out of fuel.
 - Pump malfunction.
 6. If a customer uses their card for more than one transaction during a visit, only the last transaction to complete will have receipt information available at the ICR.
 7. Some functions of the DataCard will not be available when the ICR function is active. (i.e., CDL Request/Key Exchange etc.) To perform these functions, the site will need to:
 - Switch to *ATTENDED* mode (if not already there)
 - Turn ICR off
 - Perform the function
 - Turn ICR back on
 - Switch to *UNATTENDED* mode (if applicable)
 8. A site will not be able to do a Background Download from the old application (010009) to the new. There is a space limitation built into the old application, and the new application exceeds this limit. Once the new application is loaded via a Director Download, the VSAT download functionality will operate normally again.
 9. A DataCard Terminal may be shipped with the old application. If a site attempts to turn ICRs on, but ICR State is not displayed on the Set-up Mode 1 screen, the new application (020024) will need to be downloaded.