GASBOY

™

CFN ISLANDER II

WITH KEY OPTION

CONVERSION MANUAL

C36053

REV. 04/15/03

GASBOY INTERNATIONAL LLC   LANSDALE, PA

ISLANDER II WITH KEY OPTION CONVERSION

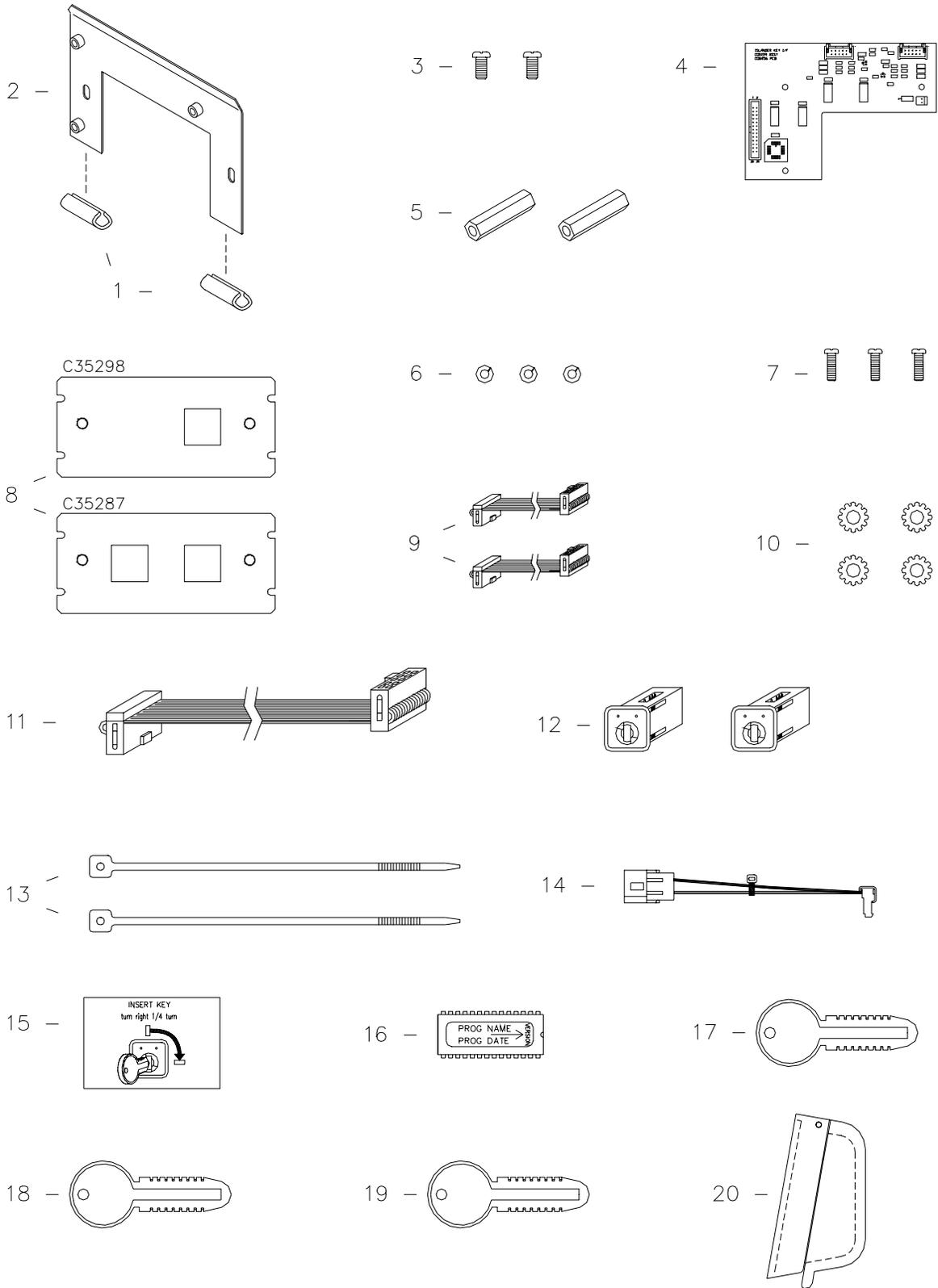## USING THIS MANUAL

These instructions are provided to assist the system operator in the conversion of a GASBOY CFN Islander II (mag or optical) system, or satellite islander (mag or optical) reader to a key version. The instructions contain:

- an illustrated parts breakdown
- steps for converting the system from mag or optical to key
- system checks and diagnostics to verify proper operation

CONTENTS OF THE CONVERSION KIT

2 —

3 —

4 —

5 —

1 —

C35298

7 —

6 —

8 —

C35287

9 —

10 —

11 —

12 —

13 —

14 —

15 — INSERT KEY
turn right 1/4 turn

16 — PROG NAME
PROG DATE

17 —

18 —

19 —

20 —

CONTENTS OF THE CONVERSION KIT (C05898)

Item	Part No.	Description
1	C04371	Trim edge material (2")
2	C36030	PCB I/F mounting brkt.
3	C04037	2 Screws, #8-32 x 3/8
4	C05159	Key I/F PCB assembly
5	C04125	2 F/Fstandoffs, #8-32 x 1
6	C01166	3 Split lock washers, #6
7	C04039	3 Screws, #6-32 x ½
8	C35287	Key adapter bracket-Dual
	C35298	Key adapter bracket-Single
9	C05881	2 Ribbon cable assy, 26-position
10	068842	4 Star lock washers, #8
11	C06043	Ribbon cable assy, 26-position
12	C02848	2 Key receptacle devices
13	C08126	2 Tie wraps, 8" long
14	C05880	DC power cable assy, I/F PCB
15	C09499	Key insertion instructions decal
16	C06426	Prog'd. EPROM chip (V6.0 or >)
17	C01625	Key, serial memory - black
18	C01624	Key, serial memory - gray
19	C01623	Key, serial memory - green
20	C34843	Cover assy.
21	C36053	Instructions (This document)

CONVERSION INSTRUCTIONS

Use the following instructions to convert your system. The first two subsections detail removal of your old Mag or Optical card reader unit. The next section details installation of the new key unit(s). Assembly drawings appear at the end of these instructions for your reference.

IMPORTANT
Before proceeding with conversion please note that the Site Controller operating system software that you are running on must be V2.2B or above; if not, an updated version must be obtained before the conversion can continue.

REMOVE MAG READER

1. Unlock and open the rear door on the head of the Islander.

2. Turn off the AC power switch located on the bottom right.

3. Remove the hood of the unit.

IMPORTANT
Once again, before going any further with the conversion, check that the CPU PCB, mounted to the inside of the right vertical panel when facing front of unit, is C05857 ICR2 CPU PCB assembly. If not, obtain this board assembly before proceeding.

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4. Working inside the head of the unit, remove the four screws that secure the external cover assembly (shields the mag card reader) to the face of unit. Save these screws; they will be reinstalled later with the new cover assembly. Discard old cover assembly.

5. Locate the P1 and P1A connector(s) in the bottom left corner of the ICR2 CPU PCB and disconnect the cable attached at one of these positions.

    Still inside the head, remove the two screws that secure the mag card reader to the face of the unit; remove mag card reader with cable and rubber gasket from the unit.

6. Proceed with the **Installation of Key System** instructions.
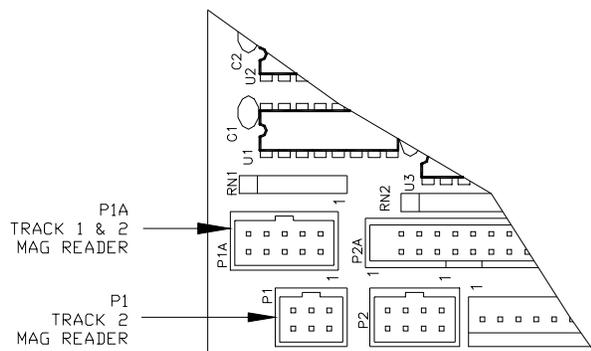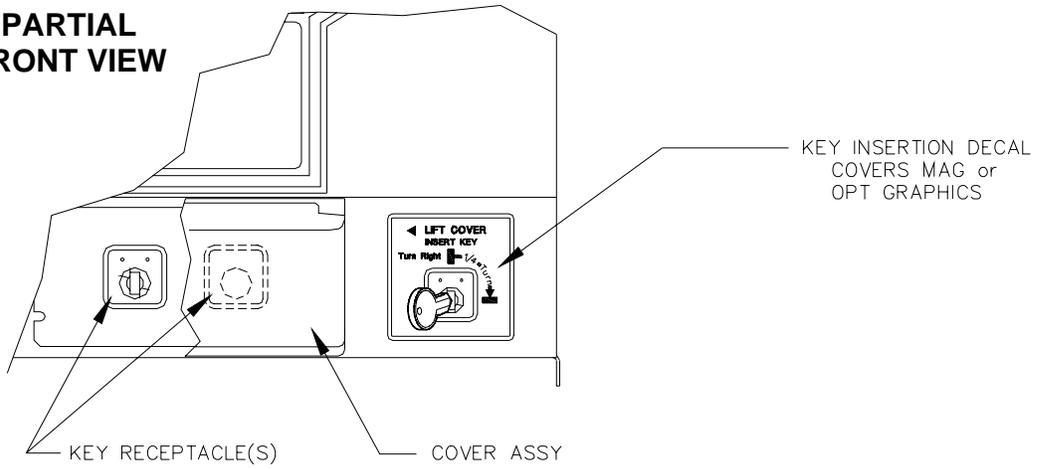
REMOVE OPTICAL READER

1. Follow Steps 1 through 3 under **Remove Mag Reader** including **IMPORTANT** statement.

2. Locate the P5 connector on the right side of the ICR2 CPU PCB and disconnect the attached ribbon cable.

3. Disconnect the +5VDC power cable (black and orange) that supplies the optical reader.

4. Still inside the head, remove the two screws which secure the optical reader bracket to the inside face of the unit (the same two screws help secure the bottom of the external card reader cover assembly). Remove the entire optical reader assembly from the head.

5. Still inside the head, remove the remaining two screws which secure the external reader cover assembly. *NOTE: Be careful when removing this external cover assembly from the face of the unit because the optical reader adapter plate will come off with it. The four screws and the reader cover assembly will be reused later; however, the Optical reader adapter plate will not.*

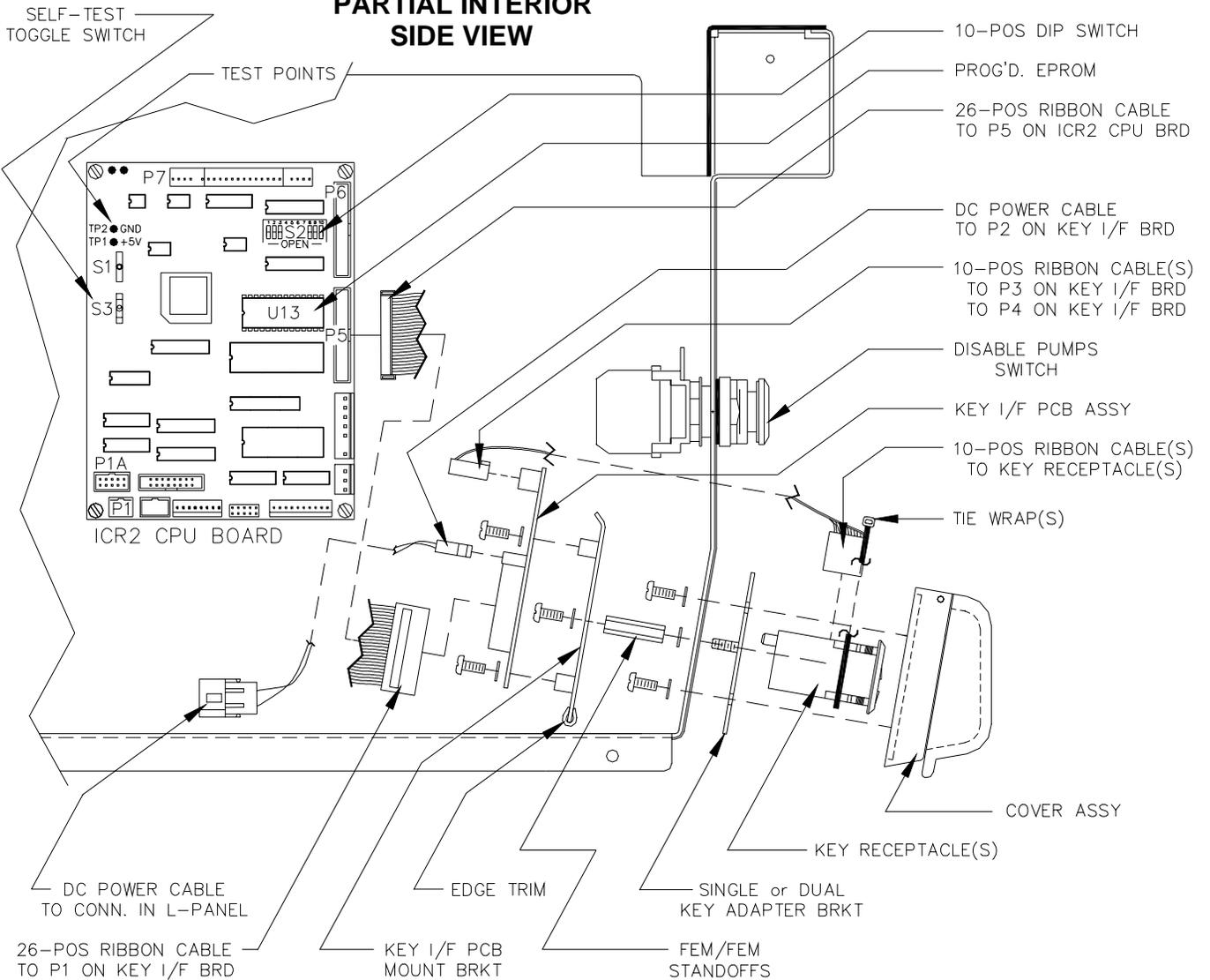6. Proceed with the **Installation of Key System** instructions.

INSTALLATION OF KEY SYSTEM

1. From the outside of the unit, insert the two threaded studs of the conversion kit single or dual key adapter bracket into the two mounting holes in the face of the unit where the mag or optical card reader was mounted. The four slotted holes in the adapter bracket must line up with the four holes in the face of the unit. If not, rotate the adapter bracket.

2. With the proper orientation of the key adapter bracket now known, install the conversion kit key receptacle(s) by snapping them into the large square key adapter bracket holes. Before snapping in, be sure that the PCB connector of each key receptacle is facing up.

3. Install the conversion kit 10-position ribbon cable(s) by inserting one end into the keyed opening in the top of each key receptacle and letting the other end hang free for now. Secure the ribbon cable(s) to the key receptacle(s) with the conversion kit tie wrap(s).

4. Working inside the head, with the key adapter bracket assembly in position against the front face, slip a conversion kit star lock washer over each stud of the key adapter bracket and then secure the two conversion kit F/F standoffs to these studs.

5. Install the new cover assembly using the four screws previously removed. Make sure cover hinges upward before tightening screws.

6. From the conversion kit, press the trim edge material (two 1" long pieces) onto the bottom two edges of the PCB I/F mounting bracket.

7. Align the two slotted holes of the PCB I/F mounting bracket with the two standoffs just installed and using conversion kit star lock washers and # 8 screws, secure PCB I/F bracket to inside face of unit. *NOTE: The components of the I/F PCB assembly will be facing the rear of unit.*

8. Using the # 6 screws and split lock washers from the conversion kit, secure the Key I/F PCB assembly to the I/F bracket. *NOTE: The components of the I/F PCB assembly will be facing the rear of unit.*

9. Route the unconnected 10-position ribbon cable(s), from Step 3 above, over the top of the I/F bracket and insert into the keyed connectors on the I/F PCB assembly.

10. Install the conversion kit 26-position ribbon cable by inserting one end into the keyed P1 connector of the Key I/F PCB and the other end into the keyed P5 connector (aux/optical reader) of the ICR2 CPU PCB assembly.

11. Install the conversion kit DC power cable by inserting the end with the smaller connector into the P2 connector of the Key I/F PCB. The cable end with the larger connector plugs into the unused connector that is snapped into the inside left vertical panel (near the bottom when facing front of unit).

12. If the EPROM chip (U13 in your C05857 ICR2 CPU PCB assembly is version 6.0 or higher, skip to Step 13; otherwise, remove this chip from the U13 socket and install the conversion kit programmed EPROM, which contains the software revision for the Key system.

13. The above ICR2 CPU PCB assembly also contains a S2 bank of 10 DIP switches, some of which are set according to what type of reader is being used. For what is now a Key system the required settings are: S2, position 4 = closed and S2, position 6 = closed. For a complete description of all switch settings see *Islander II Start-up Manual, C01665.*

14. On the front face of the unit in the lower righthand corner is either a mag or an optical reader pictured. Clean off any dirt and dry this area before using the self-adhesive Key insertion decal supplied in the conversion kit. Peel backing off decal and apply it over this existing diagram.

15. Proceed with **Power On and Test** instructions.

**PARTIAL
FRONT VIEW**

KEY INSERTION DECAL
COVERS MAG or
OPT GRAPHICS

◄ LIFT COVER
INSERT KEY
Turn Right ▌ 1/4 Turn ▼

KEY RECEPTACLE(S)

COVER ASSY

**PARTIAL INTERIOR
SIDE VIEW**

SELF−TEST
TOGGLE SWITCH

TEST POINTS

10−POS DIP SWITCH

PROG'D. EPROM

26−POS RIBBON CABLE
TO P5 ON ICR2 CPU BRD

DC POWER CABLE
TO P2 ON KEY I/F BRD

10−POS RIBBON CABLE(S)
TO P3 ON KEY I/F BRD
TO P4 ON KEY I/F BRD

DISABLE PUMPS
SWITCH

KEY I/F PCB ASSY

10−POS RIBBON CABLE(S)
TO KEY RECEPTACLE(S)

TIE WRAP(S)

P7

P6

TP2 ● GND
TP1 ● +5V

S2
OPEN

S1

S3

U13

P5

P1A

P1

ICR2 CPU BOARD

COVER ASSY

KEY RECEPTACLE(S)

DC POWER CABLE
TO CONN. IN L−PANEL

26−POS RIBBON CABLE
TO P1 ON KEY I/F BRD

EDGE TRIM

KEY I/F PCB
MOUNT BRKT

SINGLE or DUAL
KEY ADAPTER BRKT

FEM/FEM
STANDOFFS

POWER ON AND TEST

1. When you have finished installing the conversion kit, turn on the power for the Islander unit.

   If the unit does not power up, turn the power off and verify all cables are on and in the correct locations. Turn on the power for the Islander unit again.

   If the unit still will not power up, contact Gasboy Technical Service at (800)444-5529.

2. Using a calibrated multimeter, measure the +5 VDC between TPI (+) and TP2 (-). The voltage should be +5.05 ± .1 VDC. Adjust if necessary. Measure the + 12 VDC between the red (+) and black (-) wires on the DC OUTPUT connector of the power supply. The voltage should be between +11.0 VDC and +14.0 VDC.

3. Move the toggle switch S3 to the self-test or down position.

4. Press the Start Over button and **Self Test Mode** will appear on the display.

5. Press "**.**" on the keypad and the display will show **Insert Key**. Insert a programmed test key and turn it to the left. The display will show **CRC1 OK, CRC2 OK** followed by the key data. Continue to press the Start Over button until all key data is shown and you return to the **Self Test Mode** prompt. Remove your test key from the receptacle. *NOTE: If you have dual key receptacles, repeat self test to test both receptacles.*

6. Remove the test key and move the toggle switch S3 to the on-line or up position and press the S1 reset button.

CONFIGURING THE SITE CONTROLLER

A Key option is available for Islander II sites. The following configuration adjustments must be made to the Site Controller configuration for this option.

SYSTEM PARAMETERS (SYS PAR)

The following setting must be used to configure the Site Controller to accept keys.

- **Page 2: Club card format - field widths**

    Digits in limitation code = 1
    Digits in authorization code = 1
    Digits in price level = 1
    Digits in restriction code = 1
    Digits in expiration date = 4

- **Page 3: Club card format - offsets**

    Limitation code offset = 0
    Authorization code offset = 1
    Price level offset = 2
    Restriction code offset = 3

- **Reader verification - page 4**

    The key option on the CFN allows the PIN number to be stored on the key. If you are using this option, when the user enters the PIN at the reader, it is verified against the PIN stored on the key. These PIN numbers do not use the standard CFN algorithm and are verified at the reader. In order to use this option, you must set the following reader verification parameters:

    Require PIN (reader) = none
    Check PIN (reader) = none

    NOTE: The check digit on the key must be set to require PIN in order to verify the key PIN number. Refer to the KE200 Key Encoder/Maintenance Terminal Operation Manual, C08380 for more information.

    If you are using key and card combinations (verifying the PIN for the card), code keys (using the Lookup tables), or verifying the PIN based on an Account field number and not the number stored on the key, you must set the following reader verification parameters:

    Check PIN (reader) = club

    NOTE: The check digit on the key must be set to NOT require PIN. Refer to the KE200 Key Encoder/Maintenance Terminal Operation Manual, C08380 for more information. If you are verifying the PIN based on an Account field number from the key, set the following parameter:

    Require PIN (reader) = club

- **Miles-per-gallon package - page 13**

  The Key option on the CFN allows the odometer to be stored on the key for reasonableness check. If you are using this option, when the user enters the odometer, it is verified at the reader against the odometer stored on the key. If you are using this option, you must set the following system parameters

  MPG package used for club cards = no

  If you are using the MPG package feature of the CFN system, set the following system parameters:

  MPG package used for club cards = yes
  Maximum miles between fuelings = (4 digit #, Max. 9999)
  Club odometer tries allowed = 0

ISLAND CARD READER (READER)

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

- **Step 3 - PIN**
  Enter PIN message must be preceded by a space, must be in all capital letters and must say ENTER YOUR PIN.
  Number of digits = Must be at least 4
  Optional = yes

- **Step 7 - Odometer**
  Use default Enter Odometer message
  Number of digits = 6
  Optional = yes

- **Step 11 - Remove Card**
  This step must be used with systems that have the key option. The message can be changed to read: **Remove Key** or **Remove Card/Key**.

  An example is shown below:

```
#    Ty   S/D        DISPLAY     WHILE ENTERING       OPTIONS
1    1         !     INSERT CARD   !                !
2    3    6    !    ENTER YOUR PIN !YOUR PIN        !OPTIONAL
3    7    7    !   ENTER ODOMETER  !ODOMETER        !OPTIONAL
4    8         !     PLEASE WAIT   !                !
5    2    2    ! SELECT PUMP NUMBER!PUMP            !
6    9         !                   !                !
7    11   2    !    REMOVE KEY(S)   !                !

8    12   2    !    BEGIN FUELING   !                !
9              !   ------END------  !                !
```

PIN KEY

The Key option requires a 4-digit PIN key to be loaded at the Site Controller. Use the command **LOad KEY** to enter this PIN. The **LOad KEY** command requires 18 digits to be entered at the prompt. Key systems will use only the last 4 digits. Place 0's (zeros) in the first 14 digits with the final 4 digits the required PIN key. Use the example as a guide.

If PINs are being calculated from a mag card in a card/key combination, the PIN key is still loaded in SYS_PAR.

Example: PIN is 1234. *(In actual use, data is masked; it is shown here for example only.)*

```
LO KE↵
Key? 000000000000001234↵
```

Upon completion of this **Configuration** section, your converted Islander with Key option system should be working and fully operational. If you have any questions, please call Gasboy Technical Services at 1-800-444-5529.