

9800 series of dispensers and refuellers:

The 9800 series uses a Gasboy model 3000 electronic register.

A toggle switch is installed on the "B" side of the 9800 series and is used to view the gross volume, flowrate and temperature (inspection mode) in one position and to view the net volume (normal operation) in the opposite position. The ATC informaton is shown on the 9800 series main display. The Kraus auxillary display board is not used in this application. Figure 7 shows the location of the switch when facing the "A" side of the dispenser/refueller. The switch is installed on the "B" side of the unit. As an option, a magnetic activated switch can be used in place of the toggle switch. This switch is activated by placing the Tokheim magnet over the Gasboy insignia on side "B" of the dispenser/refueller. (see Figure 8).

The gross volume, temperature of the product dispensed, product type, ATC status, flowrate and software version are displayed alternatively in the net volume display. A "0" displayed in front of the temperature indicates a negative temperature and a "1" indicates a positive temperature.

ERROR CODES ARE DISPLAYED IN NUMBERS

8 = open probe

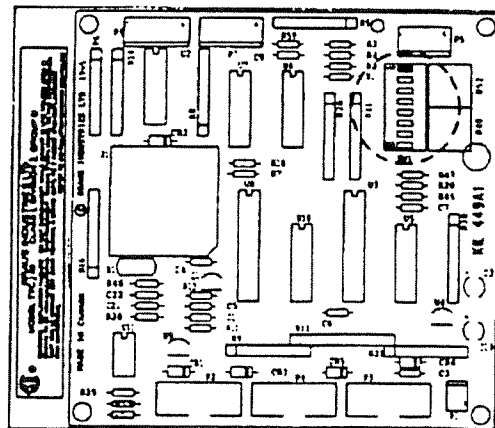
4 = Pulsar

2 = Exceptional Reset detected

- A CPU reset that was not expected.
ie. not caused by the handle switch
reset circuit.

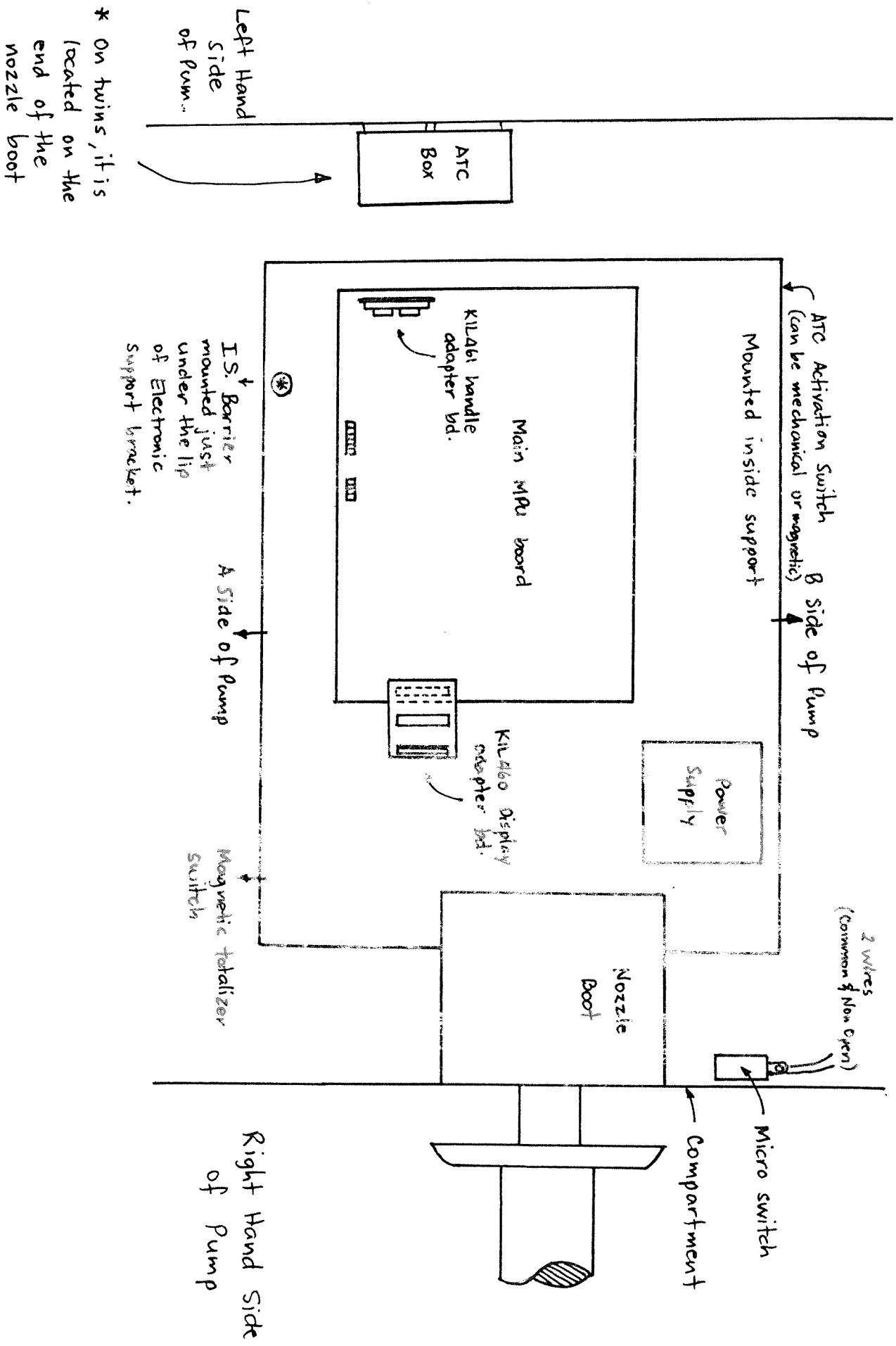
New TTC 200 Dip Switch Setting for both the Tokheim 9840 and other 9800 series
Nouveau Réglage des commutateurs DIP du TTC 200 pour la série 9840 et autre série 9800 de Tokheim

Switch/Commutateur	On/En Circuit	Off/Hors Circuit
1	Product 1 or A diesel Produit 1 ou diesel A	Product 1 or A gas Produit 1 ou essence A
2	Product 2 or B diesel Produit 2 ou diesel B	Product 2 or B gas Produit 2 ou essence B
3	Not used Non-utilisé	Not used Non-utilisé
4	Not used Non-utilisé	Not used Non-utilisé
5	Not used Non-utilisé	Not used Non-utilisé
6	2 probes 2 capteurs de température	1 probe 1 capteur de température
7	9840 series Série 9840	other 9800 series autre série de 9800
8	ATC on CTA en circuit	ATC off CTA hors circuit



SW1 - eight DIP switches / huit commutateurs DIP

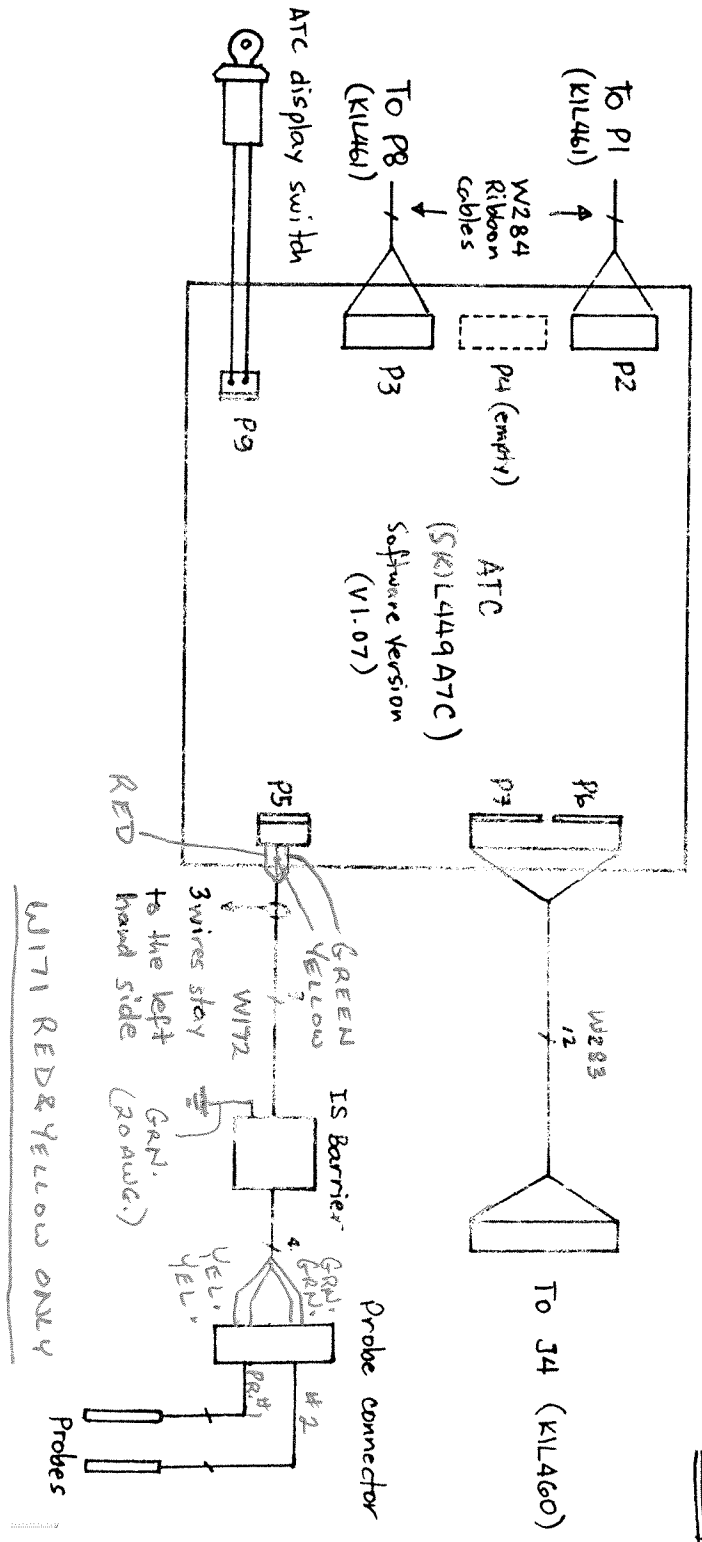
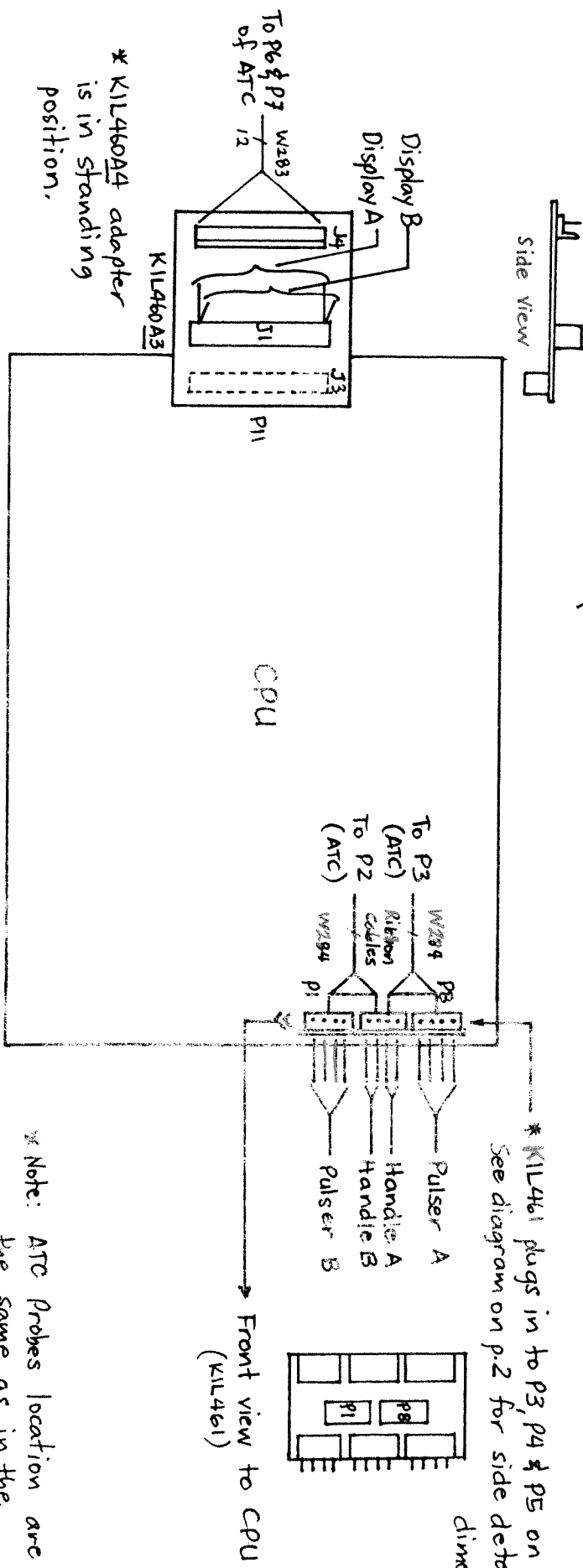
Figure 2



TTC 200 - G
Typical component location for
9800 series

* On twins, it is located on the end of the nozzle boot

TTC 200 - G (9800 Series)



* Note: ATC Probes location are the same as in the 8700 series mainfold.

Author: Dwight Kjartanson <Dkjartanson@krausgroup.com> at INTERNET
Date: 11/27/1998 9:54 AM
Priority: Normal
TO: John Mehaffey at Tokheim_Canada
Subject: RE: 9800 DIP Switches *ATC Bd.*

John

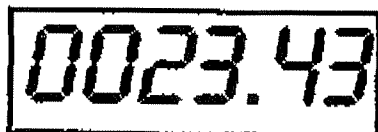
The DIP switch settings are as follows:

- 1) Product 1 ON = Diesel, OFF = Gas
- 2) Product 2 ON = Diesel, OFF = Gas
- 3) Not used
- 4) ~~Not used~~ *ON = 9850 = 66 2/3 PPU - Version 1.08 +*
OFF = 250 PPU
- 5) Pulser Multiplier ON = High Speed *off = 9852A*
9853A
- 6) # of Probes ON = 2 Probes, OFF = 1 Probe
- 7) Pulser Adder ON = 9840
- 8) ATC ON = ATC ON, OFF = ATC OFF

Dwight

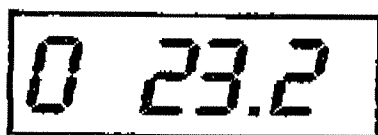
5 895
204 663 7112
Attk
Gord

Uncompensated Volume

A digital display showing the number 0023.43 in a seven-segment font, enclosed in a rectangular border.

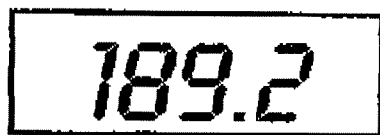
If the handle is off, this is the uncompensated volume (in litres) of the most recent delivery.
If the handle is on, this is the current uncompensated volume (in litres).

Probe Temperature

A digital display showing the number 0 23.2 in a seven-segment font, enclosed in a rectangular border.

Because the display cannot handle a minus sign, the leftmost digit indicates the sign of the temperature. When the leftmost digit is 0, the temperature is negative. When the leftmost digit is 1, the temperature is positive. A temperature probe fault is indicated when the displayed temperature is +50°C or -50°C. +50°C indicates a shorted temperature probe. -50°C indicates a disconnected temperature probe. Temperature is measured in degrees Celsius.

Flow Rate

A digital display showing the number 189.2 in a seven-segment font, enclosed in a rectangular border.

The flow rate is measured in litres per minute.

Software Version Number

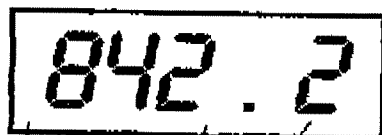
A digital display showing the number 1.30 in a seven-segment font, enclosed in a rectangular border.

This is the version number of the TTC 200 ATC software.

ATC Mode Display Operation

- ATC display mode is active when the display is flashing.
- By repeatedly switching the remote toggle switch off and on again, various display items and styles can be selected. As the switch is toggled, the following display modes are selected in the following order:
 1. Automatic rotating display - All status items are displayed in turn.
 - Each item is flashed three times before the next item is displayed.
 2. Status display - Displays ATC status only.
 3. Volume display - Displays uncompensated volume only.
 4. Probe Temperature display - Displays probe temperature (in °C) only.
 5. Flow rate display - Displays flow rate (in LPM) only.
 6. Version display - Displays software version number only.
 7. the mode selection goes back to item 1 above.
- The displayed items each have a unique "look" which allows the user to determine the meaning of each item. The "look" and description of each display is detailed below.

ATC Status



The rightmost digit indicates whether or not temperature compensation is enabled and, if so, what product is being dispensed. Meanings of this digit are:

- 0 if temperature compensation is disabled.
- 1 if product is gasoline and compensation is enabled.
- 2 if product is diesel and compensation is enabled.

The leftmost digits are error indicators which are blank when the corresponding error condition is not active. When any of these digits are displayed, their meanings are:

- 8 if temperature probe fault is detected.
- 4 if pulsar error occurred.
- 2 if an exceptional reset was detected.

Preliminary Installation Manual for Evaluation of TTC200 for Gasboy 9800

written by Dwayne Surdu-Miller, P.Eng., June 6, 1996

The Kraus TTC200 ATC for the Gasboy 9800 is connected to a Gasboy 9800 as follows:

1. Connect the SKIL461A1 adapter to the Gasboy 9800 CPU board as follows:
 - i) Connect the W284 10-pin ribbon cable from TTC200 ATC P2 to connector P1 of the SKIL461A2 adapter.
 - ii) If the GASBOY 9800 is configured for two handles connect the other W284 10-pin ribbon cable from TTC 200 ATC P3 to connector P8 of the SKIL461A2 adapter.
 - iii) Disconnect the pulser 1 cable from P3 of the GASBOY 9800 CPU board.
 - iv) Disconnect the handle cable from P4 of the GASBOY 9800 CPU board.
 - v) Disconnect the pulser 2 cable (if present) from P5 of the GASBOY 9800 CPU board.
 - vi) Connect the pulser 1 cable to P2 of the SKIL461A2 adapter.
 - vii) Connect the handle cable to P3 of the SKIL461A2 adapter.
 - viii) Connect the pulser 2 cable (if present) to P6 of the SKIL461A2 adapter.
 - ix) Connect P3 and P4 (and, if present, P5) of the CPU board with P4 and P5 (and P7), respectively, of the SKIL461A2 adapter. The component side of SKIL461A2 should be facing away from the edge of the GASBOY 9800 CPU board.
2. Connect the SKIL460A2 adapter board to the Gasboy 9800 CPU board as follows:
 - i) Connect the 13-pin connector from TTC200 ATC P6 and P7 to connector J4 of the SKIL460A3 adapter.
 - ii) Disconnect the Gasboy 9800's display cable from connector P11 of the GASBOY 9800 CPU board.
 - iii) Connect the display cable to connector J1 of the SKIL460A3 adapter.
 - iv) Connect J2 of the SKIL460A3 adapter to connector P11 of the GASBOY 9800 CPU board.
3. Connect the two flying leads from the TTC200 ATC to a temperature probe. Note that the red lead is a ground lead and the yellow lead is the probe input.

The settings of the TTC200 ATC's DIP switch, SW1, are as follows:

- | | |
|----------|--|
| Switch 1 | Select Product 1: OFF for gasoline product, ON for diesel product |
| Switch 2 | Select Product 2: OFF for gasoline product, ON for diesel product |
| Switch 3 | no effect for Gasboy operation |
| Switch 4 | no effect |
| Switch 5 | MUST BE ON for Gasboy operation |
| Switch 6 | OFF for single product, ON for dual product |
| Switch 7 | MUST BE OFF for Gasboy operation |
| Switch 8 | OFF for no temperature compensation, ON for temperature compensation |

A remote toggle switch is attached to the TTC200 ATC:

- When this switch is OFF, the Gasboy display operates normally, showing dispensed (possibly corrected) volume.
- When this switch is ON, the Gasboy display enters ATC mode. In this mode, the display flashes regularly to indicate special display operation.

9840 need
Ver 1.06
or
higher

Switch 4 OFF = 260 PPL ON for 9850 - 66 1/3 PPL
Switch 5 MUST BE ON for Gasboy operation
Switch 7 MUST BE OFF for Gasboy operation ON for 9840

ver 1.08 +
Needs Rev
449 - A-7
or
higher

ITEM	QTY	PART NO.	DESCRIPTION
1.	1	229AY02	TTC 200 ATC board (For Gasboy 9800) & box ass'y
2.	1	SKIL-460	TTC200/Gasboy9800 Display Adapter Board Ass'y
3.	1	SKIL-461	TTC200/Gasboy9800 Pulsar/Handle Adapter Board Ass'y
4.	1	W283	TTC200/Gasboy9800 Display Harness
5.	2	W284	TTC200/Gasboy9800 Pulsar/Handle Harness
10.	1	218AY00	Dual Intrinsic Safety Barrier
12.	1	212AY04	Single Probe Connector Assembly
14.	1	W171	3-wire harness for LS. Barrier
15.	1	W199	probe assembly
16.	1	BC407	thermowell
17.	1	BC546	120-B 1/8" NPT adapter drilled to 17/64" LD.
18.	1	235-C	THERMOWELL PLUG
19.	1	122-B	1/8" NPT x 1" hex nipple
20.	1	103-B	1/8" NPT coupling
25.	4	BC256B	Black "VOLUME CORRECTED TO 15° C" label
27.	10		18-22 AWG crimp splice
31.	1	BC1380	serialized AV-2322 nameplate DRWG# 5232
32.	1		5/16" hex nut
33.	1		5/16" flat washer
35.	0.25		TTC 200 Gasboy 9800 Installation Manual
36.	3		clear plastic parts bag