



High Capacity Wall Freezer



Equipment Manual (H&K Model Number HCWF1C-01P)

This manual is for the exclusive use
of licensees and employees of
McDonald's Systems Inc.

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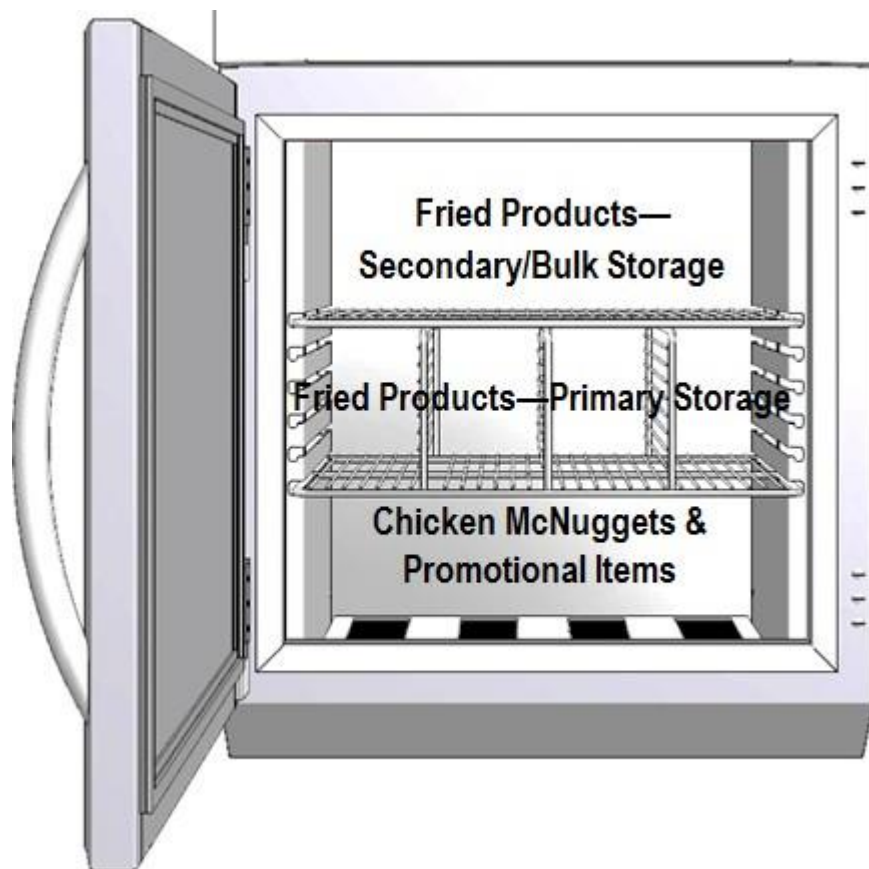


This unit contains a flammable refrigerant. Exercise caution when installing and servicing this item. See page 11 of this manual for details.

Introduction

Note: This Installation & Operating Manual contains important instructions and safety information on the High Capacity Wall Freezers (HCWF). Read and understand the contents of this manual **before** attempting to install, operate, or service the unit.

The HCWF is a wall mounted freezer design to hold all chicken and fish products at the desired temperature during normal and peak sales periods. Access to the product and replenishment is through the front mounted hinged-door. The door swing can be reversed if desired. Suggest product loading is:



Note: Overloading the wall freezer with product could affect performance. Inside air vents at top of cabinet must be clear of product to provide proper cooling. Failure to do so could potentially void the warranty.

Installation Instructions

Installation of this equipment must be completed by qualified personnel in compliance with all manufacturer's instructions and local building, food safety and electric codes.

Inspection

Upon receipt, examine the equipment carefully for any damage. If damage has occurred, notify the freight carrier and H&K immediately.

Uncrate the Unit

This unit will arrive crated in a skid-mounted carton.

Caution! The shipping container may have staples, nails, banding under tension and possible wood splinters, which can cause injuries. Wear gloves and eye protection to reduce the risk of injury when uncrating.

- Cut the banding holding the cardboard carton to the shipping pallet, using heavy scissors or tin snips. Use caution to avoid contact with cut banding.
- Lift the cardboard carton straight up and off the unit.
- Cut the banding that holds the refrigerator to the shipping pallet or skid. Use caution to avoid contact with the cut banding.

****Note: Leave unit on skid until ready to install***

- Peel the protective adhesive film from all exposed areas (front, sides, and interior).

Caution! This unit is very heavy; do not attempt to remove this unit from its packaging without assistance.

Remove Packing & Loose Components

Remove any tape and foam blocking used to secure the loose components.

Installation – Wall Mounted

Follow installation instructions on Installation Manual attached to the top back of the unit. This unit is extremely heavy and failure to follow instructions may result in injury and/or damage to the unit.

Wash and Sanitize Unit Interior & Shelving Components

Note! Use only McDonald's approved cleaning and sanitizing agents according to instructions.

- Wipe down, sanitize and dry the freezer interior. Refer to the Planned Maintenance cards on how to clean this unit.

Operating Instructions

Connect to Power Source

Insert the plug of the HCWF into a standard 120V AC 60 Hz. 15A outlet. The HCWF contains a compressor and should not be used on the same circuit with other motors or heavy demand appliances.

Start-up

The power switch is located on the front of the unit by the control display. ***Allow the HCWF to run for one hour prior to loading with product to pull down to operating temperature***

Temperature Setting

The HCWF has been tested and preset at the factory to maintain a temperature between -10°F (-23°C) and 0°F (-18°C). The temperature controller located on the front panel displays the internal temperature of the refrigerator. (Figure 1.)



Red light indicates compressor is running

Red light indicates evaporator fans are running

Red light indicates unit is in defrost mode

Standby button turns off unit but power is still supplied to controller. Press and hold to turn off. Press to turn on.

To view current set point or if the temperature is not reading within the range specified above, the thermostat can be adjusted using the following procedure:



Figure 1

Press “ i ” button on lower left corner of controller to view the setpoint. Press the up or down arrow keys to the right to reach the desired setpoint. Factory limits are set to prevent unit from being set too cold or too warm.

Caution! Do not adjust the set point below -13°F or -25°C. Doing so may result in excessive ice buildup on the cooling coils, the unit not holding a safe temperature, and potential damage to the compressor.

Loading and Restocking

- **DO NOT** over-load the HCWF case. All refrigeration requires good air circulation to maintain uniform temperatures.
- **DO NOT** let plastic bags, packaging or containers block or obstruct the Evaporator air intake openings at the top of the case.
- **DO NOT** leave the door open, except to remove product or to restock.

Store Closing Procedure

The HCWF is designed for continuous operation and manual defrost is not required. *Consult your store manager or operations director for guidance on product storage.*

Cleaning

Caution! Do not use a pressurized spray to clean the HCWF.

Caution! Do not use abrasives or strong chemicals to clean any surfaces of the HCWF.

Warning! Do not spray liquids directly onto the power switch, into the compressor compartment at the top of the cabinet, or into the evaporator. Doing so will void the warranty and risk serious personal injury.

Exterior Cleaning

The exterior of the unit should be cleaned with a clean sanitized towel. Do not use abrasive cleaners to clean the exterior of the cabinet as this might damage the stainless-steel finish. Do not use steel wool or any strong chemicals.

Interior Cleaning

The interior of the refrigerator can be cleaned using a clean sanitized towel. Do not allow liquid to puddle in the unit. Wipe the inner liner dry after cleaning.

Preventative Maintenance

Warning! Failure to properly perform scheduled preventative maintenance may void manufacturer's warranty.

WARNING! Verify freezer is disconnected from the power source before attempting any preventative maintenance. Failure to disconnect the electric power could result in electric shock, burns, injuries or death.

CAUTION! The fins on a condenser coil are very sharp, and some refrigeration components can be very hot, resulting in possible cuts and/or burns. Avoid physical contact with the fins on the condenser coil or any related refrigeration lines. Gloves are recommended when accessing the internal components of any refrigerated equipment.

Empty and Clean the HCWF (Weekly)

Once a week the unit should be shut down, emptied and given a thorough cleaning, as follows:

High Capacity Wall Freezer

- Turn OFF power at switch.
- Open doors, and remove all product and put into frozen storage elsewhere.

Note! Use a clean towel with sanitizer solution to clean the equipment inside and out.

- Clean, sanitize and dry the interior and exterior compartment, to include: back, sides, top, and floor.
- Turn ON power switch.

Allow case to run for at least one hour to return to target operating temperature of -10°F (-23°C) to 0° F (-18°C) before reloading or stocking product.

Clean the Condenser Coils (Quarterly)

Turn off the power switch. Lift panel up to clear hooks on both sides. Once all hooks are clear, remove grill as show in Figure 2.



Figure 2

Use a soft-bristled cleaning brush to remove dust and debris in and around the coil face. Make sure to brush only in the direction of the coil fins as shown in Figure 3.



Figure 3

Install access panel in reverse order of removal. Turn power back on at power switch on front of the unit.

Product Warranty

H&K Dallas, Inc. makes the following limited warranties to the original purchaser only for this equipment and replacement parts:

H&K warrants all components to be free of defects in material and workmanship, if properly installed, operated and maintained, for a period of (2) years from the date of the delivery.

The company's obligation under this warranty is limited to repairing or replacing any part or parts of the refrigerator determined to be defective by an authorized representative of H&K.

The company reserves the privilege of determining if such repairs are to be made in the field or at the H&K factory.

The company assumes no liability for expenses or repairs made by other parties except by written consent.

Corrections of such defects by repair or replacement shall constitute fulfillment of all company obligations to the purchaser.

H&K shall not be liable for loss, damages or expenses arising from misuse, abuse, alteration, accident or improper installation of the freezer such as:

- Improper or unauthorized repair;
- Failure to follow proper installation instruction;
- Improper maintenance;
- Damage in shipment;
- Abnormal use;
- Improper power supply;
- Natural disaster;

Special Conditions

This warranty also does not cover:

- Overtime or holiday charges;
- Consequential damages (the cost of repairing or replacing other property which is damaged), loss of time, profits, use of any other incidental damages of any kind.

Expected life of this equipment is 7 to 10 years provided that it is maintained properly through H&K approved suppliers using only approved component parts and that the unit is cleaned regularly and not abused.

Troubleshooting

<i>PROBLEM</i>	<i>POSSIBLE CAUSE</i>	<i>WHAT TO DO</i>
Unit won't run when unit is plugged into a grounded (120-volt) electric power outlet.	Unit is not "fully" plugged in.	Verify unit is plugged into outlet.
	Wall outlet isn't working.	Plug HCWF into another nearby outlet. If individual outlet is not working, use alternate and contact licensed electrician to repair or replace outlet.
	Circuit breaker has been tripped.	Check circuit breaker to see if it has tripped. Reset if necessary. If these steps do not fix problem, Call H&K at 800-788-2445.
Freezer is running but it won't reach target operating temperature of -10°F (-23°C) to 0° F (-18°C).	Condenser Coil is dirty or clogged with debris.	Use a soft brush to clean coils, per Preventative Maintenance instructions. If these steps do not fix problem, Call H&K at 800-788-2445 for service
	Door is left opened for extended periods.	Review product loading and general use instructions with crew to ensure door is open for restocking and order filling only.
	Room temperature and/or humidity exceed recommended maximums. 100°F (38°C) 50% RH max	Adjust store air conditioning. If these steps do not fix problem, Call H&K at 800-788-2445.
	Gasket is torn or worn allowing cold air to escape.	Call H&K at 800-788-2445 to order new gasket.
Controller reads "E1" and is beeping	The sensor probe has failed and must be replaced	Call H&K at 800-788-2445 for service
Controller reads "E2" and is beeping	The evaporator probe has failed and must be replaced	Call H&K at 800-788-2445 for service
Controller reads "rec" or "def"	Unit is currently in defrost mode or is recovering from defrost and is running normally.	If unit does not go back to normal operation after 1 hour, Call H&K at 800-788-2445 for service

Refrigeration

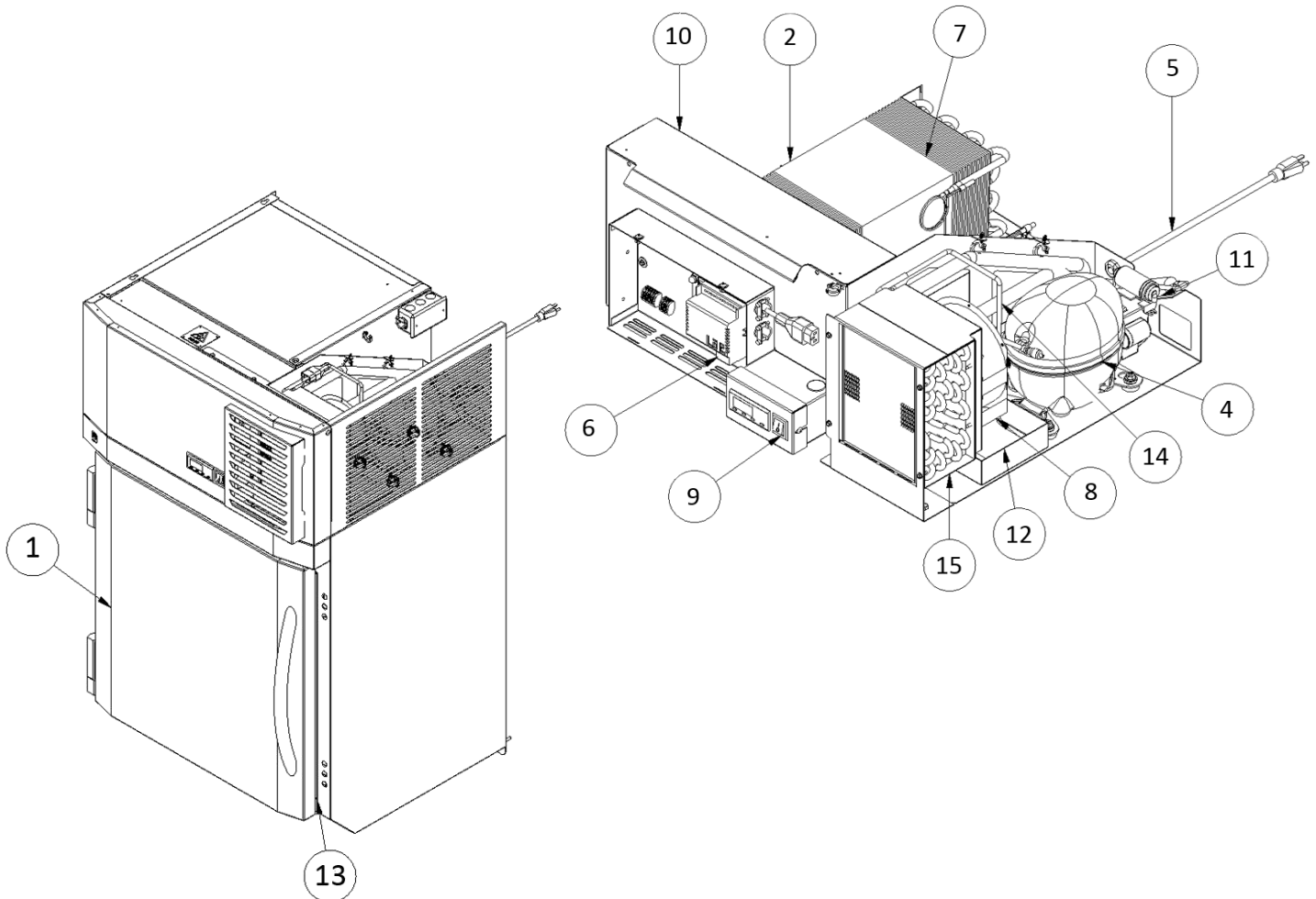
CAUTION: This unit contains a flammable refrigerant



- Under no circumstances can a mechanical device be used to defrost evaporator.
- Do not puncture refrigeration tubing.
- The unit is to be repaired by only a trained technician with experience with flammable refrigerants.
- Consult this manual before attempting to install or service a product with a flammable refrigerant.
- Unit must be disposed of in accordance with Federal or local regulations.

Parts List

Item	Description	H&K Part Numbers
		HCWF1C-01P
1	Door	HCWF1.83A
2	Defrost heater-600W	G-2-059
3	Temperature Probes	E-4-3-157
4	Compressor	P-1-353
5	Cord with Plug	E-10-12-8
6	Electronic Temperature Control	G-R02043
7	Evaporator	E-6-11-22
8	Condenser Fan Motor	E-6-023
9	Power Switch	E-1-19-11
10	Defrost Terminator	E-4-3-155
11	Dryer	P-1-12-25
12	Tray, Refrigeration System	HCWF1C-01P.01A.011
13	Door Gasket	H-4-39-185
14	Heat Exchanger	P-1-29-1
15	Condenser	E-6-11-28



Parts Ordering and Service

Returns

Contact: H&K Dallas, Inc.
2200 Skyline Drive
Mesquite, TX 75149
(214) 818-3500

Damages and Shortages

Upon receipt, examine the equipment carefully for any damage. If damage has occurred, notify the carrier and H&K Dallas, Inc. immediately.

Service and Parts

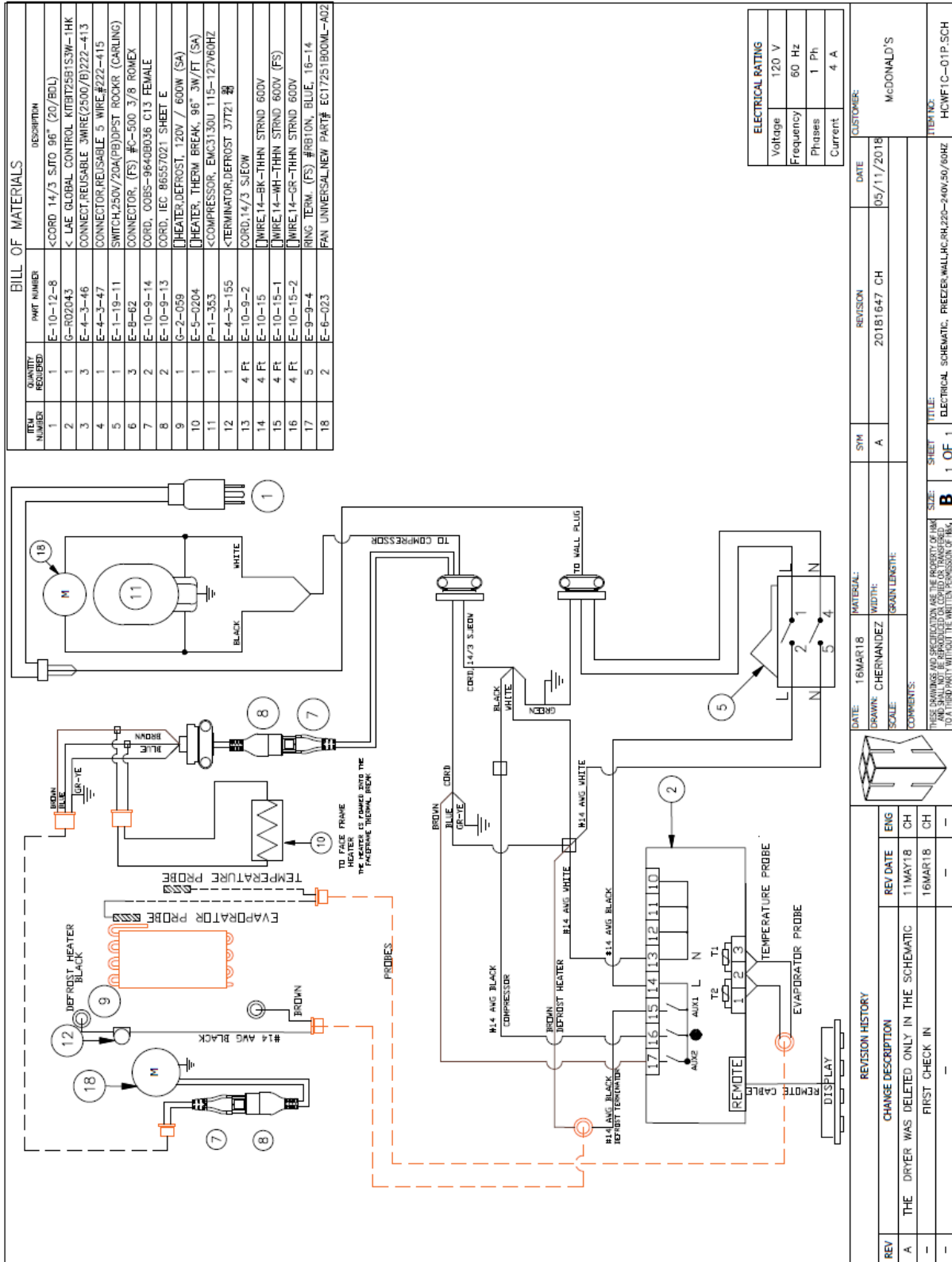
Contact: H&K Dallas, Inc.
2200 Skyline Drive
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(214) 818-3500



Disconnect all power sources before attempting any service or repair work.

Caution! A qualified licensed technician should perform all service and repair.

Wiring Diagram



Parameters List

Parameter	Value	Parameter	Value	Parameter	Value
SPL	-10	FDD	0	LSM	NON
SPH	5	FTO	4	OA1	DEF
SP	-10	FCM	TIM	OA2	FAN
C-H	REF	FDT	0	OS1	0
HYS	8	FDH	1	T2	YES
CRT	1	FT1	0	OS2	0
CT1	10	FT2	3	TLD	30
CT2	15	FT3	0	SCL	°F
CSD	0	ATM	ABS	SIM	1
DFM	TIM	ALA	-30	ADR	1
DFT	8	AHA	32	RES	NO
DFB	NON	AT1	T1		
DLI	54	ATD	120		
DTO	45	ADO	0		
DTY	ELE	AHM	NON		
DPD	0	ACC	0		
DRN	3	IISM	NON		
DDM	DEF	SB	YES		
DDY	30	DI1	NON		
FID	NO	DI2	NON		

Notes