Self Financing Module
Version 2.11 February 2018

Introduction

This program is designed to help those dealers that self finance (Buy Here Pay Here) cars from their lot.

The goals of the program are to:
1)   generate a payment schedule
2)   print payment coupons for the client
3)   print receipts for payments made by the client
4)   keep track of payments
5)   Provide for customers who pay any time at any amount
6)   allow for entry of late payment fees
7)   warn you when a client is getting late with his payments
8)   generate a letter to the client when they are late
9)   let you know exactly what kind of a balloon payment would be needed if the client wants to pay off early.
10)   Provide a series of reports.

I have gone through several iterations of this program, and finally arrived at a version that I find satisfying and correct, and that my clients seem to like. It is based on the idea that all calculations will be made on a daily basis. That is, the interest calculations are updated every day, and the payment information is updated every day. If a client decides to make an early payment, that will reduce their interest requirements a bit. If they want to make two or three payments per month, we can deal with that. If they are late, not only do we charge them daily interest on the remaining principle for the duration of their late time, but we allow you to assess them a late payment charge.

If a client should want to pay off a loan early, can tell you what that payoff would be, that is, what the remaining principle on the loan is and any unpaid interest due on the loan at that point.

There is a Salesman version of this program. It differs only in that a) you cannot close an account, and b) you cannot run reports. The full version can be passworded.

The Master Screen

When this program first starts up, you have three options:

1) to add a new car to the self financing tracking
2) to print out a series of reports
3) to deal with the details of an individual customer.

This latter can be selected by either a customer's name, or the stock number of the car they bought. The customer name will also contain the stock number of the car, in case the customer bought two cars. The other functions are selected by clicking on their buttons.

The Create Screen

When this function is selected, you can either enter a stock number into the combo down box, or select from one of the cars in the drop down portion of that box. The little box at the upper right shows how many months back in time we will look for a sold car to populate this combo box. You can change that value to whatever you would like. It defaults to 1 month. It only searches for sold cars with an outstanding loan.

When a car is selected, it must be a sold car, with financing done. Otherwise you will get an error message. If, after a car was created, you found that something changed about the deal (the monthly payment, for instance, or the term of the loan) you can go back to the Deal program, enter in the correct information, save this information (click Update in the Complete tab of the Deal program) and then go back to this Create screen and enter the stock ID. The system will reread the car deal information and use the latest version of the data. Any existing payments will be retained.

Most of the information on the screen can also be changed on the screen itself. So if the Deal program calculates a monthly payment of X, but the bank insists that the payment should be Y, you can enter that payment on this screen, and the X value will be overridden. The default for Method of Calculation is Revised. See the section at the end of this chapter for more details.

If you want to enter this data into the system, then click the aqua Update or Create button. To skip it, click "Cancel". Clicking either of these buttons closes the screen and gets you back to the master screen.

You can Delete this vehicle from the self finance system altogether. A blue Delete button will appear with the other buttons to let you do this. If you need to make major changes to the terms of the loan, this would probably be the best way to deal with it: delete it from the self finance system, and then bring it back and start over.

If you need to modify the characteristic of a new loan, you can now do that. Enter the changes you need to make into the appropriate entry boxes, and then click the green Save button. This feature is provided mostly for the cases where a dealer is taking in payments created by somebody else, using some other method or program. The chances are good that my calculations and that other method's calculation, will not match up exactly. This will allow you to force the system to use the other method's results. This will work for an existing loan also, but remember it will affect all existing payments entered into the system.

There is one other function provided for on this screen. It is quite complicated, but I will try to explain it. I mentioned above that you can change the terms of the original deal by fiddling with the Deal program and then reloading that information into the Self Finance program. But what if you want to modify the terms of the loan in mid stream? What if after three or four months, you want to modify the monthly payment, or the number of months? This could happen if your customer needed some major repairs to the car, you agreed to do it, but to add the cost to the loan. You don't want to toss the existing loan details, but you do need to modify those detail from that point on.

That is what the pink Change button is for. If you click it, you will see the screen below, which

allows you to change the principle, loan rate, monthly payment, number of months and when these changes occur. You do not need to change all of these values. The principle change is an Additive function – that is, you do not create the value of the new principle, but you add or subtract this amount from the current value of the principle. You will see the results of this on the Loan Maintenance screen.

You can Add a new change, or Update an existing change. You can also delete all the changes already made on this vehicle.

Methods of Calculation.

With V2.11, there are now two ways to calculate what is going on. Both ways use a Daily Interest Compounding method, rather than a Monthly Compounding. There is very little difference between the two compounding methods for the amounts calculated. We have found that many BHPH customers do not pay on time, or the correct amount when they do pay. The only way I could figure out how to handle that was to calculate the interest daily until they did pay, subtract the accumulated interest from the payment, and subtract the residual from the balance.

The problem comes up when one of two things happen: the dealer applies a late fee because payments are late, or a payment made by the customer does not even amount to the accumulated interest from the last payment. In the Traditional method of calculations, I had no place in the database to put these values, so I added them to the Balance. This is technically wrong, because you cannot charge interest on a penalty or on interest itself. With V2.11, I now have a Revised method, because I was able to create the database space to hold these extra items. So in the Revised method, if there is interest not paid last time (Negative Owed) or if there is a Penalty recently applied, those values will appear in the new NegOwe and Fines columns. So the procedure now is, when a payment is made, the Negative Owed will be subtracted from it, then the Penalty will be subtracted from what is left, and then the Accumulated Interest will be subtracted. The residual goes against the Balance. If there is still not enough to deal with those first three items, then nothing subtracts from the Balance that month, and we keep a tab of the Fines and Negative Owed until those items are paid off. But we do NOT calculate any interest on those values.

Note that your loan contract needs to state that the interest is compounded Daily and not Monthly. The standard Carousel contract does do this in the Legal section.

The Maintenance Screen

The maintenance screen is where we show the details of a particular loan, and apply payments received.

The top part shows the customer and the car details.

The middle part shows the schedule of the loan, and the actual payments made on the loan.

We treat these loans like a regular mortgage. You start with the amount of the loan (the principle). For each day till the first payment is made, you calculate the accumulated interest since the last payment by the daily interest of the loan, which in our example is about a buck a day. When a payment is made, you first apply the payment to the accumulated interest, and then the rest to the principle. Then the principle goes up again till the next payment is made.

You apply the payments at the bottom of the screen.. Select a date, and in the right hand box enter the value of the payment. The screen will redraw itself with the updated information, and the payment will show up in the Actual Payment screen. The second column indicates that the

payment was in cash (0), check (1), or credit card (2). Note that you must click either the Submit or Reset button now, because of this added information that is being gathered.

At the extreme left, you see the Most Recent Balance Due, for a date taking into account the Grace Period. This date is the date of the last time a payment was expected, plus the grace period, and what that balance should have been. The grace period is a default value that can be changed in the Admin program.

Below that is a Red area if the payments are delinquent, and a Green area if the payments are up to date.

In the middle of the top area (the field with the yellow background), I show the current payoff value, that is, the amount it would take to pay off the loan today. This is the value of the principle and all the interest accumulated to today, less the value of the payments already made.

There is a button at the bottom of the screen that will print all this information out in a report for this individual.

If you wish to delete a payment, click a payment item. A Delete button will appear. Click this button and the payment goes away. If you enter a payment with the same date as an existing payment, the first payment is overwritten.

This screen allows you to print out a coupon book to give to the customer, that shows what the payment schedule should be. If the checkbox in the button is checked, then no running balance will be displayed on the coupon. This is so the client is not confused when their coupon book says they owe X, but because they did not make their payments on time or something, the actual value is Y.

You can also print a receipt for a payment. The receipt number will be the record number in the database that captures the payment. I was asked to disable the print receipt button until something was entered into the payment screen. Actually, all you have to do to enable the button is to move into the payment entry box. This is to prevent people taking money, printing a receipt, but not entering the payment information The checkbox, if checked, does not print the amount owing on the receipt.

The Exclamation Point is a button that allows you to enter comments about this loan, and contains any comments entered about this car in the Inventory and Deal comment entries. If the first three characters of this comment are !!!, then the comment will automatically pop up when you bring up this screen. This is for the people who need certain information, but never bother to look for it. The word ATTENTION anywhere in the comment will do the same thing.

When the loan is paid off, click on the Terminate Account button to put this loan into historical status. You can now indicate if it was a normal, early payoff, or a repo. A timestamp for when

this happens is logged

Payments made will be exported to Quickbooks, with a separation of the interest and the principle parts of the payment.

The Example Explained.

In the example, a loan amount of 3522.25 was made on a vehicle on 1/15/2016, with the first payment to be made on 2/13/2016. The interest rate was 15%. You can tell that this contract is using the Revised method of calculation because the rightmost two columns of the spreadsheet are filled in. The Traditional method does not fill in those columns.

The top spreadsheet shows the scheduled payments.

The bottom spreadsheet shows the actual payments.

A hidden line would show that the first payment was made on time.

The first visible line shows that the March payment was also made on time. The daily interest was $1.41, and the accumulated interest was $40.69, which was subtracted from the $170.93 payment, subtracting $130.24 from the balance. Which is now $3263.29.

In April, our customer had a problem, and only paid $100 on the proper date. Since this was more than the accumulated interest of $41.82, $58.18 was subtracted from the balance.

A week later, the customer came up with another $75. During this time there was accumulated interest of $9.24, leaving $65.76 to be subtracted from the balance.

On May 13th, a payment of only $25 was made on the 13th. This was less than the accumulated interest of $29.80, so nothing was subtracted from the balance, and $4.80 was added to the Negative Owed column.

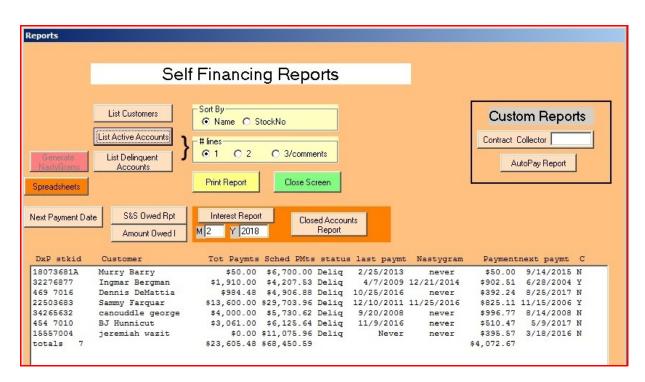On May 16th, a $25 penalty was imposed by the dealership, and this value transferred into the Fines column.

On May 20, a $160 payment was made. This resulted in three line items on the spreadsheet.
The first line item was paying off the $4.80 in interest owed from last time.
The second line item was paying off the $25 fine from last time.
The third line item was subtracting the accumulated interest of $9.03 from the payment, resulting in $121.17 being applied to the balance, now resulting in $3018.18.

Note that the last two columns of the Active screen are only available in v2.11 or later. In previous versions, the excess interest or penalties wee added to the balance.

The PayOff (in yellow) as of today (1/15/2017) is $3330.96, because nothing was paid since May.

The Reports Screen

I have created a series of reports for this function, and will probably generate some more in the future. What I have now is a list of customers with loans, a list of the active accounts, a list of only the delinquent accounts, a list of amounts owed (sort of) and a report of the amount of interest collected for a month. The above screen shot shows the active account list.

The reports can be sorted by customer name, or stock number. The default is customer name.

The active and delinquent account reports can be displayed as a one line report (shown) or a two line report, which contains address and phone number information for the customer.

When the delinquent account report is run, you can click on an account, and the Generate Nastygram button will become enabled. This will generate a short letter to the client, telling them that they are overdue, by how much, and please come in and get paid up. Or else.

The Y/N at the end of the line indicates that a comment exists for this vehicle (or not).
The DxP at the beginning of some reports is the number of days since the last payment.
Payday is the day of the month they are supposed to make a payment.

Three of the reports in the self finance report tool can now generate spreadsheets. After the report (customer, active accounts, delinquent accounts) is run, click on the spreadsheet button. When it

goes gray, the spreadsheet will be on \temp\spreadsheet.csv (and .txt).

Next Payment Date shows all the active accounts, and the date of their next payment. This is sorted by day of the month, so you can get an idea of who should be making payments in the next few days. Note that if somebody missed a (or several) payments, their next payment from the last one paid will be shown. This will only work for monthly payments currently, and not weekly.

Two reports are very similar, and will someday be combined. They are the S&S Owed report, and the Amount Owed report. Amount Owed has more information, but no totals. S&S has totals but less information.

Interest Report shows the interest payments made and the interest component of the payments for a selected month.

Closed Accounts report shows what accounts closed during a selected month.

There are a few Custom reports that specific clients have asked for. I am not going to describe them, because they are unique to those clients, and it is also true that I have long forgotten what they are supposed to do, who they were done for, and what data is needed to run them.