

**User Guide for
Washmatic Card Terminal
connected to
Westmatic Rollover
Westmatic Heavy Duty
Westmatic Slimline**

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Washing equipment:
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1 WASH

General

Washing options

Washes can be done in different ways:

Self Service Mode

- * Used by the customer
- * Charged by cards
- * Controlled by the green buttons on the Washmatic
- * Shows "Welcome, insert card"

Attendance Mode (single or double)

- * Used by own washing staff
- * Charged by cards
- * Controlled by the buttons on the Control panel
- * Shows "Attendance mode, insert customers card"
- * Single for one Washer and double for two Washers

Spare Mode

- * Only to be used by own staff
- * Not charged (but recorded)
- * Controlled by the buttons on the Control panel
- * Shows "Card terminal disconnected"

Pay Options

No matter which mode the Washmatic is in, there are different ways to pay:

One time cards

Not valid in Truck Washes

Multi Cards

Not valid in Truck Washes

Money Cards

Optional. A card that is charged with a specific amount of money (for example 100 dollars). The value on the card decreases with each use. When the value is used up, the card will be recharged and retained by the Washmatic. You can then take it from the Card Terminal and sell it to a new customer. Be aware of two things: The customer is allowed to finish the ongoing wash even though the card is used up. If the card value is less than approximately 6 dollars, the Card Terminal will retain the card.

Not recommended for Truck Washes

Invoice Cards

Invoice cards come ready to use with the Card Terminal. They have a four digit PIN code which has to be used with the card. The Card Terminal remembers all the washes made and then it's up to you to charge the customers. All Invoice cards are activated as default, so if you want to block a card you need an extra memory circuit board (optional) .

Gas Station Cards

For example Shell cards and Texaco cards, with on-line connection to a card center.

Credit Cards

Dial-up modem connection with eg VISA or Master Card. Not available yet.

Alien Cards

Optional. Works approximately like Invoice Cards, but you can use whichever card you like, for instance a Gas Station Card or similar. No cards are activated as default. You have to approve every single card to be able to use it. Sometimes with a PIN code. The Washmatic won't accept a card that isn't approved. You can also block the cards and then the Washmatic will retain them.

Coins

Optional. Coin counters or token counters can be connected to the Washmatic, but it's not recommended for Truck washes.

Other

With a Manager card you'll be able to give your customers a free wash. It'll be recorded as "other" in the Statistics.

Short/Long Hall

Usually a 24 meter Truck should be able to stand in the Hall with the Washing machine in front of it. Between the Washing machine and the front of the Truck Photo cell 2 is located. The Washing machine will go along the Truck to the end of the Trailer and then back again to its home position. When the wash is finished the machine will go six meters towards the middle of the Hall to give the Truck more manoeuvring space to exit. *The machine will afterwards go back to its home position.* If the Hall is too short for the procedure above, equipment for a short Hall version can be installed. The Truck drives then almost all the way to the exit door where Photo cell 2 is located approximately one meter before Photo cell 3. The Washing machine stands in a resting position approximately six meter in to the middle of the Hall. When the first washing program starts, the machine will first go back to its home position and from there along the Truck to the end of the Trailer and back again to the home position. The next program will be run as usual from the home position; out and back to the home position.

When the wash is finished the machine will go in six meters to its resting position. This will make it easier to enter the Tractor and exit. The Washing machine will remain in the resting position till the next customer starts washing.

Bus Program

Optional. The Bus Program is a special program in the Washmatic *and* in the Washing machine.

When you have a Bus Program the Invoice card will come in three different versions:

- * Those which always activate the Bus program
- * Those which always activate the Truck Program
- * Those which ask what program you want to use

You can't see any difference in the cards by looking at them, but it'll be written on the PIN-code list which comes with the cards.

If you use a card which has the code "Always Bus" and the Washing machine doesn't have a Bus program, the Washmatic will show

"No bus wash program here. Choose: 1=Truck Program 0=Abort".

If you use a card which has the code "Ask if Truck or Bus" and the machine doesn't have a Bus program, the Truck program will be chosen automatically.

Alien Cards and extra Memory PCB

With the option "Alien cards" you get a special program and an extra Memory PCB. With this option you're able to approve different cards, for example Access Control Cards and Gas Station Cards. You

can store from 50 to 50 000 different cards in the memory, depending on the version. If you want to have a PIN code verification when a card is used, you have to store the correct PIN code when the card is approved. To approve a card you need a Manager card and then either insert the Alien card or type the card number with the digit buttons. See chapter about Manager card. You can also **stop** a card and then the Washmatic will write "Card is stopped" and reject it if someone tries to use it. You can block a card and the Washmatic will write "Card is revoked, retained" and retain it. If the card has an expiry date which has expired, the Washmatic will always retain the card. If you try to use a card that isn't **approved, stopped** or **blocked** the Washmatic will write "**Unknown card**" and return it. All types of Washmatic cards (Invoice cards, Manager cards and Attendance cards) can be blocked or stopped the same way as the Alien cards. With just extra memory PCB you can only stop or block Washmatic cards and nothing else. If the Washmatic is connected to the emMet account system, all blockings and approvals will be downloaded automatically by the computer.

Self Service

The Self Service wash is intended for the customers who want to wash their own Trucks. "Hall time" is the time the customer spends washing his Truck. In that time no working time charge is included (in contrary to the Attendance mode). The Control panel is disconnected and all functions are selected with the green buttons on the Washmatic. When you choose a function, the machine will do a wash cycle on its own. Where the machine can't reach, the customer has to use the manual high pressure Hand guns in the Hall. Both the entering door, exiting door and the light are controlled by the Washmatic.

Enter the Hall

If the outdoor Card reader indicates occupied, the Hall is used by someone else and the customer can not swipe his card.

The customer should swipe the card with a steady speed through the card reader. The door opens and the light turns on. *If there was an error on the card the red light will flash, see below.* The green traffic light turns on and that means **enter**. Photo cell 1 is located at the entering door. When he has blocked the photo cell for more than two seconds the Chassis wash will start. One can walk through the photo cell quickly and it won't start. The pump takes approximately ten seconds to reach maximum pressure. When the pressure is up, he drives slowly towards the traffic light. Photo cell 2 is located at the traffic light. When he blocks it, the traffic light switches to red ("stop"), then stop immediately. After two seconds the entering door is closed and the Chassis wash will stop if it's still running. One can quickly walk through Photo cell 2 without anything happens other than the traffic light will flash. Now it's time to fold in the rear view mirrors, check for loose straps and go to the Card terminal and insert the card. The straps should be stretched and slope slightly backwards.

No Chassis wash

If the customer doesn't want Chassis wash, he first swipes his card and then presses the "No Chassis wash"-button on the outdoor Card reader before he enters. At some sites the function is reversed for Bus cards so that a push *activates* the Chassis wash.

Chassis wash of Trailer

When the customer has blocked photo cell 1 for more than two seconds the Chassis wash starts. When the Truck has passed and the photo cell has been free for twelve seconds the pump stops. Then when the Trailer comes forward the pump starts immediately, but takes approximately ten seconds to reach maximum pressure again. In other words, it is wise to keep a speed just below twelve seconds

between Truck and Trailer so the pumps won't stop. When the vehicle comes to Photo cell 2 the pumps stop irrespective of if the Trailer has gotten in completely or not.

Outdoor Card Reader Signals

Card Reader version 1.0 with one red indication lamp:

—————	Hall occupied	Continuous
-	Card error	One flash
----	Closed for the night	Four flashes
-----	Invalid card	Six flashes
- - - - -	Blocked photo cell	Slow flashes continuous
-----	Machine out of order	Slow disrupts continuous

Card Reader version 2.0 and 3.0 with eight LEDs:

* Ok	Flashes when an approved card is swiped
* Card error	Card is broken or not properly swiped
* Wash hall occupied	Washing hall is used by someone else
* Wash hall closed	Washing hall closed for the night or out of service
* Invalid card	Card is not usable here, or is revoked
* Photo cell blocked	Something's blocking a photo cell in the Hall (ie a bucket)
* Water system malfunction	Reception tank for water purifying is overfull
* ---	Is normally not in use
* ---	Is normally not in use

Traffic Light signals

Black	No activity
Continuous red	Stop
Continuous green	Enter/Exit
Flashing green	Back out
Flashing red	Warning for closing doors (on some installations)
Slow flashing red	Washing machine malfunction, but the Hand guns are still working

Radio Control

Some versions have a radio control with two functions connected to the Chassis wash. One button is equal to swiping a card through the outdoor card reader (the Chassis wash is activated, the door opens, the light turns on). The other button is equal to pushing the "No chassis wash" - button. At some sites the function is reversed so one push on the button activates the Chassis wash.

Fault-detecting

If everything seems dead when you swipe a card:

Try to swipe the card *backwards*, then you should have a red flash (card error). If there *isn't* any flash, the Washmatic isn't ready to read any card. It is only when it says **"Welcome, insert card"** or **"Attendance mode. Insert customers card"** on the display that the Washmatic accepts cards in the card reader.

The red lamp flashes "Invalid card" for all cards:

All cards have a "last valid date" that might have expired, or the Washmatic has lost the time and thinks that all cards are old. Set the time in the Washmatic with the Manager card.

In that case it may think that even the Manager card is too old. You can solve that by shutting down the Washmatic with the power switch, wait ten seconds and turn the power on again. When it says "Welcome, insert card" you have one minute to insert the Manager card without Washmatic caring about if the Manager card is too old or not.

If the door opens, the light turns on, but the Chassis wash doesn't start (and the traffic light remains black):

Wash can be done with a washing card (ie an Invoice card). Manager cards and Attendance cards *only* open the entrance door.

If the door opens, the light turns on, but the Chassis wash won't start (and the traffic light is green):
The Chassis wash might be out of service for example due to risk of freezing during winter.

If the water comes out from the High pressure frame in the Washing machine instead of the Chassis wash:

The High pressure air which is needed for switching the water is probably missing.

It pours just a little bit of water (eject 50 cm) from the Chassis wash :

The switch of water is working, but the pumps are not. The working switches in the pump room are switched off, the Circuit breaker is open or the fuses are blown.

The Chassis wash starts, but stops after half the Truck:

Someone is blocking Photo cell 2, or the Truck has an unusual open frame so that Photo cell 1 sees through the Truck.

The Chassis wash stops before it has washed the whole Trailer because the Tractor is at Photo cell 2:

The vehicle combination is too long for the hall, so use a shorter Tractor to wash long Trailers.

The traffic light changes to red when you drive in but the entrance door doesn't close:

Something is blocking Photo cell 1 or has blocked it shortly before, it could be a Trailer that is too long or a person. Then the entrance door refuses to close due to security reasons. Remove the obstacle and close the door manually with the door buttons.

The Wash

When the customer has inserted his card and maybe typed a PIN code, the following questions may be displayed:

"Choose: 1=Truck program 2=Bus program"

Only if the Bus program option exists. Press '1' for the Truck program or '2' the Bus program. You don't have to press 'ENTER'. Some Invoice cards and Alien cards are preprogrammed for Truck or Bus programs, then the question doesn't come up.

"Give vehicle number. Press ENTER"

Optional. Type in the Trucks domestic number. Press 'ENTER' afterwards. If the customer has typed digits and then pressed 'CLEAR' he removes what he has typed. If the customer presses 'CLEAR' without typing anything, it means that he has changed his mind and doesn't want to wash.

The typed number will appear on the Invoice print out, so that a Trucking Company will be able to split the costs between their Trucks in case they don't have one card per Truck. For example if every driver has his own card, but washes different Trucks every time.

If the option Alpha numerical keyboard is present on the Washmatic both digits and letters can be used.

"Vehicle length (meters), press ENTER:"

Here the customer should type in the total length of the Truck and Trailer rounded up to nearest meter. Minimum length is 5 meters and the maximum length is 24 meters. Press 'ENTER' afterwards. The Washing machine will go as far as the customer has stated before it returns. If he types digits and presses 'CLEAR' he deletes what he has written. If he presses 'CLEAR' without typed anything, means that he has changed his mind and doesn't want to wash.

"Check mirrors and straps. Press ENTER"

Check that mirrors are folded in and check for loose straps.

When all the questions are done, **"Choose function with green button below"** shows (and the yellow button lights up on some versions). Now the customer is in the washing phase and can activate the different washing functions. At some sites rinsing water (low pressure), warm water and windshield washing fluid are available in the washing phase.

The Hand guns

On bars in the Washing hall hangs the Hand guns for Shampoo, Degreaser and Manual high pressure. To be able to use them the respective pump has to be started.

The button 'Manual Shampoo' starts the Shampoo pump. To turn it off you press one more time. If the pump has been on for 15 minutes it turns itself off; to start it again you just press the button once more. The green indication lamp in the button is lit while the pump is on. Turn it off when it's not in use to save the pumps life span. There are two cases when the pump is on even though you haven't pressed the button and the lamp isn't lit. It is when the Washing machine needs Shampoo for "Shampoo with machine" or shampoo in the brushes at the Brush wash. When the pump is on, you can use the Hand guns even though the lamp is not lit. Washmatic measures the used Shampoo volume anyway.

It is the diluted Shampoo (5% - 20%) that is used and measured, not the concentrate you buy.

The button 'Manual Degreaser' starts the Degreaser pump. To turn it off you press one more time. If the pump has been on for 10 minutes it turns itself off; to start it again you just press the button once more. The green indication lamp in the button is lit while the pump is on. Turn it off when it's not in use to save the pumps life span.

The button 'Manual high pressure' starts the Manual high pressure pump. To turn it off you press one more time. If the pump has been on for 30 minutes it turns itself off; to start it again you just press

the button once more. The green indication lamp in the button is lit while the pump is on. Turn it off when it's not in use to save the pump's life span.

Washing machine programs

You can choose two programs with the green buttons:

1. "Shampoo with machine"
 2. "Brush wash with machine" or "High pressure wash with machine" depending on version.
- Brush wash/High pressure wash can be found in different variations.

The button "Shampoo with machine" first moves the machine to its home position if it's not already there. Then the Shampoo pump starts. The Washing machine goes forward with high speed the number of meters the customer earlier stated and applies Shampoo with the Shampoo frame. Then the machine moves back again so that the Shampoo has time to work before you rinse it off. The Shampoo needs approximately 5 minutes. When the Washing machine returns to its home position the green indication lamp in the button turns off. Then you can choose the next Washing machine program (or the same again).

If the machine is a Heavy Duty it can in some cases do a prereading of the Truck's shape at the same time as it applies the Shampoo, in that case low speed is used instead of high speed.

The button "Brush wash with machine" first moves the machine to its home position if it's not already there. Then...

...if the Truck program is chosen:

The High pressure pumps start. The machine goes forward and washes with the high pressure frame. If the knob "Side brushes" is in position "off" it is *only* High pressure. If the knob is in position "on" it is High pressure *and* Side brushes.

If the knob is switched to position "Together" the Side brushes are pressed together more for narrow Vehicles or if you want to brush harder somewhere. This applies to the old Rollover.

The knob "Side brushes" can be changed while the machine is moving for example to press the Side brushes together when they pass the Tractor if it is narrow, and turn off the Side brushes with "off" when they pass aerials, or have the button in position "on" when the Trailer is being brushed.

Some machines have "Apart" instead of "Together", the normal is then that the machine follows the contour of the Truck even if it is narrow. With "Apart" the brushes will leave the Truck. For example around rear mirrors. The Roof brush is normally not in use during a Truck program at Self service.

...if the Bus program is chosen:

Rollover:

- * The Roof brush brushes the front and the roof one time (at some installations)
- * The Roof brush brushes the back of the Truck one or two times
- * The Side brushes don't start until they pass the rear mirrors
- * The High pressure doesn't start until the frame passes the driver's window.
- * The position "Side brushes off" disconnects *both* Side brushes and the Roof brush

Heavy Duty and Slimline:

- * The Side brushes start to wash the front overlapping
- * Then they stop and pass the rear view mirrors

- * After passing the rear view mirrors the brushes start again
- * The high pressure doesn't start until the frame has passed the drivers window
- * The Side brushes wash the back of the Truck two times
- * The position "Side brushes off" disconnects the Side brushes and maybe the Roof brush

If you type too short a Vehicle length on the Bus, the machine will turn before the back has been brushed.

With the knob "Side brushes" you can turn off both Side brushes and the Roof brush by switching it to the "off"-position. The position "Together" has no function because with the bus program the Side brushes always are in the inner position.

When the brushes are working a small quantity of Shampoo is applied into them to keep them clean.

In some machines there is a special roof brush program installed. It starts by holding the Side brush knob in the right position for 4 seconds when the machine stands still for turning. You can turn off the Roof brush at any time by turning the knob momentarily to the "off" position.

Recommended order

For a medium dirty Truck it will be suitable to press the "Shampoo with machine" and "Manual Shampoo". Then the customer can walk around and apply the Shampoo where the machine can't reach at the same time as the machine applies the rest. When he is finished he turns off the "Manual shampoo".

When the machine comes back to the home position he sets "Side brushes" to "on" and then starts "High pressure with machine". When the machine has turned at the far end position and rinsing on the way back he takes the opportunity to start "Manual high pressure" and washes the places where the machine couldn't reach. When he is finished he turns off "Manual Shampoo".

He can now check that the Truck is clean everywhere and if necessary applies some Degreaser and manual wash where it's needed.

When the machine returns to the home position and the customer is satisfied he presses "Wash finished". Then the machine moves 6 meter forward so he can fold out the rear mirrors and drive out.

If it is a short Hall, remember to apply the Shampoo and wash the Tractor *before* you start "Shampoo with machine", because later you can't reach the Tractor inside the machine.

Emergency stop

There are 4 emergency stop buttons on the Washing machine, one on the Control panel and one on the Washmatic. If the customer presses any of them the machine will stop and the pumps turn off. It will show "**Emergency stop. Pull the knob**", on the display. When you pull out the knob it will show "**Emergency stop, press yellow to resume**" on the display. When you press the yellow FINISH-button the pumps start again and a few seconds later the Washing machine will resume its program.

On some older installations you press the usual 'ENTER' instead of the yellow FINISH.

Receipt

When you have finished a wash and press "Wash finished" and chosen a receipt with '1' the receipt will be printed.

Cascade Truck Wash System Inc.
 1444 Plank Road
 Sarnia, Ontario N7W1A7
 +1-519-344-9274, VAT SE725000002801

18/04/95 07.14
 Account 03000234005942

Self service		0.00
Chassis wash	40 sek	10.00
Hall time	12 min	12.00
Machine shampoo	14 meter	14.00
Shampoo	15 liter	60.00
Degreaser	2 liter	30.00
Machine hi press	14 meter	42.00
Manual high press	2 min	8.00
Rinse water	0 min	0.00
Warm water	0 min	0.00
Windshield fl	7 liter	70.00

=====

Sum:		246.00
Add GST:		44.00

- "Self service" A start fee that can be included
- "Chassis wash" The number of seconds the Chassis wash is used
- "Hall time" The time from when the customer swipes a card in the card reader till he pressed "Wash finished"
- "Machine shampoo" The number of meters the machine has gone and applied Shampoo.
The *volume* of Shampoo is reported under "Shampoo"
- "Shampoo" The number of liters of diluted Shampoo used in both the Hand guns, the Shampoo frame and the Brushes
- "Degreaser" The number of liters of Degreaser the customer has used in the Hand guns
- "Machine hi press" The number of meters the machine has gone with High pressure, whether the brushes have been used or not. If the customer has a 10 meter Truck and runs the machine two times it will show 20 meters
- "Manual high press" The number of minutes the customer has *used* the Manual high pressure, not the time the pump has been running
- "Rinse water" The time the customer has used cold water or rinse water rounded up to minute.

"Warm water"	The time the customer has used the warm water rounded up to minutes
"Windshield fl"	The number of liters of diluted Windshield washing fluid used in the Pistol grip (optional)

Exiting the Hall

When the customer has finished a wash and pressed "Wash finished", the machine will first return to the home position if it wasn't there already.

Then the receipt will be printed and the machine will move forward 6 meters. During that time the customer folds out the rear view mirrors and starts the Truck. When the Washing machine stops, the exit door opens and when the door is wide open the red traffic light switch to green and he can exit.

When he has exited and left Photo cell 3, free for 15 seconds the roof light turns off and the exit door closes. Then the Washing machine returns to its home position (the machine stays if it is a short Hall). Then the traffic light turns off and the Washmatic is ready for the next customer.

If someone blocks Photo cell 3 while the door is closing the door will open again. Within 4 minutes the Washmatic will make a new attempt to close.

If the customer washes a low car he might exit beneath Photo cell 3, then he has to block the photo cell himself to close the door. Make sure that Photo cell 2 is free, block photo cell 3 for 4 seconds until the green traffic light turns off. Finally let Photo cell 3 be free for 15 seconds to close the door.

If the customer doesn't make any attempt to drive out the vehicle, the Washmatic will get tired after approximately 8 minutes and turn off the light, and after a few more minutes the Washing machine will return and the door will close. To get out he has to open the door manually with the door's open button on the door's control box.

On some sites you have to press "1" to get a receipt. You can also press several times to get more copies. If you fail to press when the display request **"Press '1' if you want receipt"** it is okay to press '1' later.

Attendance Mode

Attendance Mode is used when you have your own washing staff who washes the customers Trucks. The time the Truck is in the Hall is counted as "Working time", then *both* Hall rent and Working cost are included (in contrary to Self service). The Control panel is used, to manoeuver the washing machine and the Washmatic only makes the measuring and Invoicing.

The Washer has to open and close the entrance and exiting doors himself with the manual buttons on the door's control box. The light turns on and is lit the whole time the Washmatic is in Attendance mode.

In Attendance mode the Washer first opens the Attendance mode shift, then washes several Trucks with the customers own cards (or Trucks that don't have any cards at all), and finally he closes the Attendance mode.

Example: A site which has a Washer in the mornings and Self service the rest of the time. The Washmatic stands in the Self service mode (**"Welcome, insert card"**) during the night.

Begin the shift

At 7 am the Washer starts his shift by inserting his Attendance card and choose "1=Attendance mode". The text on the display will then change to "**Attendance mode. Insert customers card**". The roof light turns on and it will stay lit and the traffic light turns on and shows green light, but still can't start the Washing machine or any pumps. The only button that is working is the "Chassis wash"-button on the Control panel. The Washer switch it to the "Auto" position.

Entering the hall

A customer's Truck comes. The Washer opens the door manually and drives the Truck in. When the Truck is blocking Photo cell 1 the Chassis wash starts in the same way as in Self service. 12 seconds after the photo cell has been free the Chassis wash stops.

When the Truck comes to Photo cell 2 the traffic light switches to red. The Washer folds in the rear mirrors and checks for loose straps and after that he inserts *his or the Truck's* card into the Washmatic.

If the washer swipes his Attendance card in the outside card reader, the only effect is that the door will open and close alternately. This doesn't affect the Chassis wash at all.

If the Washer has a radio control (optional) and presses button 1 it has the same function as a card swipe, which means that the door will open and close alternately, but has no affect on the Chassis wash. Button 2 has no affect at all in the Attendance mode.

The Washing phase

The question "**Vehicle length (meters), press Enter**" will show on the display. Type the total length of the Truck and Trailer rounded up to the nearest meter. Minimum length is 5 meters and maximum length is 24 meters. The length is used only for the Invoicing and doesn't control how far the Washing machine goes. The Washer has to do the machine control himself when he is in Attendance mode.

Now the white (red) light ("Control") lits on the Control panel, which shows that all buttons are useable.

In the Attendance mode the Washer is also able to test the printer and feed paper when he changes the roll of paper as in **8 1 Printer**.

Buttons and indication lamps on the Control panel

The buttons on the Control panel differs between different versions of Washing machines and what equipment is installed; see separate manual of the Control panel.

Receipt

- - - - -

Cascade Truck Wash Inc.
1444 Plank Road
Sarnia, Ontario N7W1A7
+1-519-344-9274, VAT SE725000002801

18/04/95 07.14

Account 03000234005942

Attendance		5.00
Chassis wash	40 sek	5.00
Work time	12 min	36.00
Shampoo	15 liter	30.00
Degreaser	2 liter	15.00
Vehicle length	14 meter	35.00
Manual high press	2 min	4.00
Rinse water	0 min	0.00
Warm water	0 min	0.00
Windshield fl	7 liter	35.00
=====		
Total (CAD):		130.00
Add GST:		32.50

"Attendance"	A start up fee which can be added
"Chassis wash"	The number of seconds the Chassis wash is on.
"Work time"	The time from when a card is inserted in the Motor reader till someone presses "finished", including the time for the Chassis wash and one minute for exiting. The price should include Hall rent <i>plus</i> the Working cost
"Shampoo"	The number of liters of Shampoo used in both Hand guns, Shampoo frame and in the Brushes
"Degreaser"	The number of liters of Degreaser used in the Hand guns
"Vehicle length"	The number of meters the Truck is, not how far the machine has gone because that can not be measured in the Attendance mode. The price can be set so it covers an average Shampoo consumption and Brush wash.
"Manual high press"	The number of minutes he has <i>used</i> the Manual high pressure, not the time the pumps have been running
"Rinse water"	The time he has used cold water or rinse water rounded up to minutes
"Warm water"	The time he has used warm water rounded up to minutes
"Windshield fl"	The number of liters of diluted windshield washing fluid used in the Pistol grip (optional)

Exiting the Hall

The on going wash can be ended by pressing "Wash finished", or by driving out the Truck. Then the white (red) "control"-indication lamp is turned off and the receipt is written.

Driving out the Truck means more exactly that you block Photo cell 3 for more then 2 seconds at the same time as Photo cell 2 is free and the exiting door is open. You have to look out when you park the Truck before Photo cell 2 and block Photo cell 3 with yourself when you are washing the front of the Truck or Washmatic will think the Truck is driving out.

The Washer has to open and close the exiting door by himself.

As an option you can also choose to have an automatic exiting of the same type as for the Self service wash, it means that the Washing machine moves away and the door closes itself after drive out.

End the shift

When the Washer is finished with all his Trucks and has ended the last wash ("**Attendance Mode. Insert customers card**"), he inserts his own Attendance card and choose "3=Self service". Then an Attendance report is printed and the Washmatic returns to the Self service position and shows "**Welcome, insert card**".

Attendance report

- - - - -

ATTENDANCE REPORT

Number of washes	3 pcs
Hall time	48 min
Shampoo	42 liter
Degreaser	7 liter
Windshield fluid	0 liter

Last printout:	17/04/95 16.49.52
Todays date:	18/04/95 15.20.11

- - - - -

"Shampoo"	Total amount of Shampoo used during the shift.
"Degreaser"	Total amount of Degreaser used during the shift.
"Windshield fluid"	Total amount of Windshield washing fluid used during the shift.
"Last printout"	Time of previous Attendance report. You can check that no reports has been lost.
"Todays date"	Date and time of <i>this</i> report.

Spare mode

If the Washmatic stops working you can switch the equipment to Spare mode. Then the display will show "Card terminal disconnected". But more important, the white (red) "Control"-indication lamp on the Control panel will turn on and all buttons on the Control panel will be connected.

But "The Chassis wash" button's "Auto" position is not working because it is controlled by the Washmatic, and without it you have to start the Chassis wash with the "Manual"- position instead.

The mode switching between Spare and Normal mode is recorded and will show up on the log printout.

The Doors

Automatic closing

If any door is left open for more than 4 minutes when no one is washing, the Washmatic sends a closing pulse. The reason is that no door should be left wide open in winter time which could cause freezing damage to the Hall. If the door's indication signal for some reason shouldn't work, the Washmatic has to guess if the door is open or closed. In that case the door may close at any time within 4 minutes after someone has opened it with the buttons on the door's control box, *without any notice*. So if any door is to be opened manually for entering, turn off the door's Circuit breaker after opening.

This is not the case when you are in the Attendance mode and not when Washmatic has opened the door.

Open with other cards

If you swipe cards other than washing cards (for example Manager cards or Attendance cards) they will alternately open the door and turn on the light or close the door and turn off the light. This only works when no wash is in progress. The light is turned off after one minute delay. If a wash has occurred after this type of opening, the door will be closed and the light will be turned off. When you then swipe a card the light will turn on for one minute and the door will remain closed. Swipe your card one more time and the door will open.

Fault-detecting

When you think that the doors don't open and close as they should there are particularly two common reasons:

Door control

Test by turning off the power to the Washmatic (so it can't interfere with the test) and try to open and close both doors repeatedly. Test also that the squeeze protector reverses the doors. If it doesn't work as it should the door control is defective. Then test to have the door wide open and press Close.

The Photo cells

New type:

The photo cell amplifier for Photo cell 2 and 3 is in box (KLFC2-3), located near the roof in the washing Hall. The amplifier for Photo cell 1 is in its own box (KLFC1) also located near the roof in the washing Hall. There are indication lamps on the photo cell amplifiers to check the function and buttons to adjust the sensitivity.

Old type:

Test them by opening the lid on the Control panel; inside there are 3 grey boxes (3 x 8 cm) with a red indication lamp on each of them. Have someone block each photo cell in the Hall. When the photo cells are blocked the respective indication lamp should show red and when the photo cell is free the indication lamp should turn off.

Test using card terminal:

If you insert a Manager card and choose **8 4 PC**, it will show "**PC1=0 PC2=0 PC3=0 ...**". 0 means that the photo cell is free and 1 means that the photo cell is blocked.

If there is moisture in any of the photo cells, the error may not show up until after a long day of washing, but will work okay again when they have dried. Another common problem is that someone has touched and moved a photo cell out of position so that they don't aim at each other. The photo cells have to be cleaned at least once a week to work well.

Hall lights

During self service the Washmatic turns on the hall light when you swipe a card in the outdoor card reader and if you don't do anything more the hall light will be turned off after 10 minutes. From the time you insert the card in the Washmatic the light will be on for one minute. When you have typed your code you are a confirmed customer and the hall lights will stay on forever. The reason that there is a limited light time before you are a confirmed customer is so that no one can use the Hall as free parking space or workshop. When they are confirmed they can gladly do that --- because then they pay a Hall fee for the time. After you have pressed 'Wash finished' the light will be on for about 4 minutes if you don't exit. If you exit the light will turn off when the door closes.

As long as the Attendance mode is on ("**Attendance mode. Insert customers card**" or "**Attendance mode in progress**") the roof light is on continuously. After you have closed the Attendance mode the roof light turns off after one minute. If you use another card instead of a washing card to open the door the hall lights will be on continuously. If you use the same card to close with, the light will turn off after one minute.

All the cards that are recognized by the Washmatic will light the hall lights for one minute when they are inserted in the Motor reader.

Somewhere (for example at the fuse box) there is a switch to manual turn on the hall lights, to do some maintenance work with the Hall or if the Washmatic stops working. In spare mode you have to use that switch.

Automatic return to home position

As long as it shows "**Welcome, insert card**" on the display, the Washmatic controls every fourth minute that the Washing machine is in its home position (or resting position if it is a short Hall). If that is not the case the machine goes to the home position with high speed.

If it is a short Hall the machine will be reversed to its resting position. If the machine was on the wrong side of the resting position it will first be reversed to the home position, and then to the resting position.

If the machine is moved away of some reasons, for example when some maintenance work has to be done in the Hall. *Remember to press the hi lite emergency stop* so the machine doesn't run over something or turn over a ladder!

If the Washing machine has forgotten what it did last (for example due to a combination of spare mode and disconnected power to the Washing machine), it can go with low speed instead and maybe also with rinsing water. This will only happen the first time, then it will be normal again.

Wash without a Truck

If you want to wash without driving in any Truck in the Hall (maybe to test the wash) the photo cells

need to be blocked in suitable order:

1. Swipe the card through the outdoor card reader
2. Block Photo cell 1 for 2 seconds until the Chassis wash starts
3. Block Photo cell 2 for 2 seconds until the Traffic light stays on red
4. Insert the card in the Washmatic
5. Block Photo cell 2 for 2 seconds one more time when the display shows **"Drive up to the red light"**
6. Maybe make a wash
7. Press "Wash finished"
8. When the traffic light has switched to green block photo cell 3 for 4 seconds until the green traffic light turns off
9. Remove the blockings. After 15 seconds the exit door will close.
Photo cell 2 has to be free during step 8 and 9

Start at step 4 if you don't want the Chassis wash.

Abort a Wash ("Aborted, drive vehicle out")

After you have inserted the card in the Washmatic before the washing phase and you press 'CLEAR' any time during the questions the commenced wash will be aborted

If you press 'CLEAR' any time during the questions after that you have inserted the card in the Washmatic but before the washing phase, the commenced wash will be aborted. It will then show **"Aborted, drive vehicle out"** on the display and the exit door will open. Exit and the door will close automatically afterwards.

If you aborted by mistake you must drive around and start over again.

In questions, where you have to type in digits (for example Vehicle length), the 'CLEAR' button will abort if you haven't typed anything, but if you have typed any digits it will only clear those. The second press on the 'CLEAR' button will abort.

Opening hours

The washing Hall's opening hours can be set in the Washmatic. As default they are set so that the Hall is open 24 hours.

The times are set with the Manager card's **5 2 Door time**, see that chapter. The times can only be whole hours and the same times every day.

If you try to enter when the Hall is closed you get four flashes/"Wash closed" on the outdoor card reader of the old version 1.0.

The Manager card and the Attendance card can always be used as keys to get in.

If you just can get in, you can always insert your washing card directly in the Washmatic and the entrance door will open no matter what time it is. You get no Chassis wash.

Alarm/Circuit breaker

In the Washing machine there are a number of Circuit breakers that may trip open. If any of them opens it will show **"Machine out of order"** or **"Wash out of order"** on the Washmatics

display. On the new versions a yellow emergency stop indication lamp flashes on the Control panel. There are also alarms other than the Circuit breakers, see separate alarm list.

2 WASHING INSTRUCTIONS

1. Swipe the card through the Card reader
2. If you don't wish to have the Chassis wash, press the button "No Chassis wash"
3. The door opens
4. Drive in slowly, make sure you park straight
5. Drive to the traffic light and stop when it turns to red
6. Fold in rear mirrors. Check for loose straps
7. Insert the card into the card terminal and answer the questions
8. Type your four digit code and press ENTER
9. State the total Vehicle length rounded up to whole meters, press ENTER
10. Ready for wash when it shows **"Choose function with green button below"**
11. Press "Shampoo with machine" and the Shampoo will be applied
12. Wait for the machine to return to its home position.
13. Press "Manual Shampoo" and apply Shampoo with the Hand guns where the machine can't reach
14. When the machine has returned to its home position you can press "High pressure with machine" for machine wash, the brushes can be turned off or on with the knob "Side brushes"
15. The machine will rinse on the way back
16. Wait for the machine to return to its home position.
17. Press "Manual high pressure" and wash with the Hand guns where the machine can't reach
18. Press "Wash finished" when you are finished, and the machine will move forward so it's easier for you to exit
19. Press '1' and take the receipt
20. Fold out the mirrors
21. Exit when the traffic light switches to green
22. The door will close automatically

3 MENUS

When you insert an Attendance card or a Manager card a menu will show on the display, for example:

```
MGR: 1=LISTS 2=CARD REG 3=PRICE 4=CLOCK  
5=SETUP 6=DEMO 7=ATTENDANCE 8=FUNC
```

- "MGR:" Means that you are in the Manager mode
"1=LISTS" If you press number 1 you will enter the list menu
"4=CLOCK" If you press number 4 you are able to set the date and time

If you now press 'CLEAR' you will go back to where you started, probably to:

```
Welcome, Insert card
```

Power failure

The Washmatic has built in batteries which will keep the memory at shorter power failures (< 2 days), but at longer power failures the memory can be lost. When the power returns the Washmatic shows "**Error in NVRAM**" or "**Error in PARAM**". Then you have to type a three digit code to clear the memory. Be aware that all prices will be set to default, and that the statistics will be set to zero and all Invoices will be lost.

4 PAY OPTIONS

Money cards

A money card can for example be a 200-dollar card. The customer buys it from the cashier. When he inserts the card into the Washmatic, the display shows "**120 dollars left on the card**". If he presses the 'CLEAR' button quickly he gets the card back without commencing a wash.

You can then start a wash and when the amount is deducted from the card he gets it back.

When the card is inserted the balance is checked and if it's less than 6 dollars it will show "**Card is used up, retained**", and the Washmatic recharges the card with 200 new dollars and retains it. Then the wash starts. The 6 dollar limit is changeable.

When you have emptied the card basket you should print out a **1 2 Retained**, and then you can place the cards at the cashier for resale.

Money cards are not recommended for Truck washes.

Invoice card

When you insert the card the display will show "**Type PIN code, then Enter:**", you then type your four digit code and press 'ENTER' (the digits are shown as '*'). If you type the wrong code three times the Washmatic will retain the card.

If you typed the right code you are allowed to wash.

Information about the wash will be stored in memory for later retrieval with **1 3 Invoice**.

Alien cards

Alien cards (Access control cards, Gas station cards etc) are used in the same way as the Invoice cards. (But they have to be approved first, in contrary to the Invoice cards)

Gas station cards

For example Shell cards or Texaco cards with on-line connection to a card center.

5 MANAGER CARD

A Manager card is possessed by the person who is responsible for the wash.

1 1 Statistics

Asks first if the statistics will be reset *after* the printout has been printed. Prints out statistics about sold washes and how they have been paid.

STATISTICS

Product	Volume	A-price	Amount
Self Service	2 pcs	2.00	4.00
Attendance	11 pcs	2.00	22.00
Chassis wash	225 s	.12	27.00
Hall time	10 min	.30	3.00
Work time	210 min	.50	105.00
Mach Shampoo	40 m	.15	6.00
Shampoo	118 l	1.00	118.00
Degreaser	101 l	2.00	202.00
Mach hi press	30 m	.80	24.00
Vehicle length	70 m	1.00	70.00
Man hi press	56 min	.50	28.00
Rinse water	12 min	.20	2.40
Warm water	5 min	.30	1.50
Windshield fl	15 l	.75	11.25
Sum:			624.15

Payment method	Quantity	Aumont
One-time-cards	0	0.00
Multi-cards	3	108.00
Money cards	0	0.00
Invoice cards	11	373.00
Gas co cards	0	0.00
Credit cards	2	98.15
Coin	0	0.00
Cash register	1	45.00
Alien cards	0	0.00
Other	0	0.00
Sum:		624.15

Last reset: 18/10/99

Today's date: 19/10/99

One-time-cards, Credit cards, Coins and sometimes Money cards are not used together with the Truck washes.

The sum of the washing products and the sum on the payment methods shall be equal, otherwise the Washmatic has lost some statistics when the memory got full --- print out statistics more often. But due to rounding a minor discrepancy may occur.

1 2 Retained cards

Open the Washmatic and remove the magnetic cards from the card basket.

Press 1 and 2 and a list will be printed of the cards that are removed from the Washmatic.

RETAINED CARDS

Date	Card Number	Reason
19/09/00	0262360819016	Forgott
13/10/99	03000134006871	Cntfeit

Number of retained cards: 2

Last printout: 04/09/99
 Todays date: 19/10/99

If the card is a Washmatic card it has a 6 digit station number plus 8 digit serial number which is printed on the card (in this case 030001 and 34006871). The card number can also belong to a Shell card, Texaco card or similar cards, which has been retained by the Washmatic, then the card number is the card number printed on the card.

Blocked	The card has been retained due to a blocked account. The customer <i>never</i> gets it back.
Too old	The card has expired.
Forgot	The customer has forgotten the card in the Washmatic. The customer gets it back.
Bad PIN	The customer has typed the wrong PIN-code three times.
Onetime	The card was a One-time-card. Can now be resold
Multi	The card was a Multi-card and the last wash was done. The card is now recharged and can be resold.
Stuck	Check if it is a card stuck in the Washmatics Motor reader.
Trash	The card was not a magnetic card or it was already there when the Washmatic was started.
Cntfeit	The card is a fake. Send it to Kanard AB or Westmatic AB for further investigation.
Moneyca	The card was a Money card and the last amount of money has been used up. The card has now been recharged and can be resold.
Stopped	The card was temporarily stopped.
Other	Some other reason that the card was retained.

1 3 Invoice print out

With this list you Invoice completed washes. It is here the Invoice cards, Alien cards and Gas station cards end up. If a Gas station card or a Credit card were used, where the transfer of the transaction to the card center failed, it will also go to the Invoice print out list.

INVOICE PRINT OUT

Date	Time	Card number Car number	Price
24/05/93	12.30.10	61205634008712	55.00
24/05/93	15.15.20	61205634008511	110.00
Sum:			165.00

Last reset: 18/09/99
 Todays date: 19/09/99

After the print out it shows **"0=Erase debits, Clear=Keep debits"**

Press '0' if the print out was good and the memory will be erased.

Press '1' if the print out wasn't readable and print it out again

Press 'CLEAR' if you don't want to have another print out but want to keep the memory contents.

This question won't show if the card terminal is connected to emMet account, then the transactions are fetched automatically by the computer.

Approximately 400 debits can be stored in the memory.

"Car number" is the Truck fleets internal number if it was typed in during the wash.

1 4 Log

Here are the latest 64 most important events stored. The log is erased after the print out, and lost at power failures.

LOG

Date	Time	Event
93-05-05	13.46.58	Boot
93-05-05	14.10.15	Slits reader 795661205601334005051=95120000000000
93-05-05	14.11.55	Motor reader 795661205601334005051=95120000000000

Motor reader	A card has been inserted into the Motor reader
Slits reader	A card has been swiped through the outdoor card reader
PIN	A PIN code has been typed
Spare mode	The key switch has been turned to the Spare mode
Normal mode	The key switch has turned back again
Boot	The Washmatic has been turned on
Connection error	The connection with a card center or similar has been lost
Debit XX	Debit of XX dollars has been sent to the central
Pump error	Internal error in fuel pump

1 5 Time statistics

Here is the statistics for the last twelve months stored.

TIME STATISTICS

Cascade Truck Wash System Inc

Month	Amount	Shampoo	Degreaser
===== 99-01	29724.00	3275	2963
99-02	28724.20	3252	2710
99-03	27702.40	3194	2304
99-04	25496.40	3174	1283
99-05	23946.20	2962	996
---06	-----	-----	-----
---07	-----	-----	-----
---08	-----	-----	-----
---09	-----	-----	-----
---10	-----	-----	-----
---11	-----	-----	-----
98-12	29463.40	3475	2845
===== Sum:	165056.60	19647	13703

Today's date: 28/05/99

In the example above the card terminal was installed in December 1998 (the bottom line), and the example was printed out in May 1999 (the fifth line). As the time goes, the statistics grows downwards to December 1999, the old digits for December 1998 will be *replaced* with the digits for December 1999. You can't reset this type of statistics.

1 6 Summary

In the Invoice print out, all washes are printed in chronological order, but in the summary they are printed sorted and accumulated per card instead.

This program module is optional.

 SUMMARY

Cascade Truck Wash System Inc

Card Number	Customer
Date Time	
Car Number	Amount
=====	
Cards are missing in card registry:	
03002534011234	
25/05/99 22.30.56	
235	326.00
03002534011246	
26/05/99 14.37.12	
120	293.00
=====	
03002534011214	---
24/05/99 17.45.56	
198	492.00
25/05/99 22.30.34	
198	382.00
26/05/99 09.12.33	
185	428.00
Sum:	1532.00
03002534011195	---
12/01/99 20.45.42	
425	239.00
14/01/99 07.14.19	
425	239.00
22/01/99 09.56.22	
137	239.00
Sum:	1532.00
=====	
Latest reset:	05/05/99
Today's date:	28/05/99

The cards which are to be summed up have to be in the card registry, even if they are common Invoice cards. First comes the washes made by cards which are not in the card registry. They are printed in chronological order. Then comes all washes, in chronological order, which are made with the first card, then comes the next card and so on. On the right side of the card number there are three dashes ("---") in this example above. That is the position of the card's customer number, if it is recorded in the card registry.

2 Card registry

The Card registry doesn't exist in all versions of the Washmatic. If it doesn't exist the Washmatic will beep if you press 2.

In the card registry you can block any card you like of all types, both Gas station cards (eg Shell), Invoice cards or Attendance cards. The card registry can store between 50 and 50 000 cards depending on memory version.

You can also approve Alien cards, for example Access control cards or Gas station cards. When the customer later uses the card, he has to type his PIN code, and the wash ends up on the Invoice print out. You have to invoice the customer yourself.

When you approve a card you have to type the customer's PIN code and it will be stored in the Washmatic's memory. If it is a type of card that normally doesn't use a PIN code, the customer has to make one up.

The difference between a stopped card and a blocked card is that a stopped card will be returned to the customer but he can't wash with it, whereas a blocked card will be retained by the Washmatic (if it has a Motor reader).

If the card terminal is connected to emMet account, the card registry will be updated by the computer automatically.

2 1 Approve card

State the card number as it is described in Stop/Block below. Then a number of questions may show depending on how the card terminal is configured.

"Type PIN code, then Enter:" Type in the PIN code the customer has chosen.

2 2 Stop card

2 3 Block card

"State Card number, Row number or Insert card"

Type in the card number of those cards which shall be stopped/blocked, or the row number from a recent list if the card is on the list, or insert the card if it's available. Alien cards and Gas station cards have their numbers printed on the cards, use those numbers. If you'd like to block Invoice cards (or other Washmatic cards), the number has to be written in the long version, it means company number, station number and the printed card number. If your company number is 03, the station number is 0025 and the printed number on the card is "3403 1234", then you type in "03002534031234" (14 digits). Notice that the company number and the station number is for the site who *issued* the card, not necessarily your site. Make it a habit to always print out a list after you have changed anything, to see that it was correctly made.

2 4 Remove card

Choose a card number in the same way as in stop/block above. The card will be erased from the registry. Invoice cards from *this* site can then still be used, but not Invoice cards from other sites and Alien cards.

2 5 List cards

Print out a list of all cards in the card registry. To the left is the row number printed, which is mentioned above.

2 6 Card statistics

Optional. Prints out sale statistics for the used cards and also set limits, as maximum numbers of liters per occasion or maximum amount of dollars per day or months.

3 Change prices

The Washmatic will first ask which product you want to change the price for. The product number is the products row number in the Statistics.

Press for example 3 and ENTER

Select product (row no): _

Give new price: <55>: _

55, which is shown above is the current price. Type 60 now and press 'ENTER' and the new price will be stored. The price is stated in cents per meter/liter/minute/pcs. See which unit it is in the Statistics.

To see all prices, print out a Statistics, see **1 1 Statistics**.

On installation the prices are set to a default value, which you can change later. Your chosen prices will remain in the machine even after shorter power failures, but during longer power failures there is a chance that the Washmatic loses its memory and then you'll have to reset the memory and then the prices will be back to the original default values, and you have to set your own prices again.

4 Date and Time

Press 4 and the following will show:

Set clock: 93-06-01 12.35.22 3

The cursor is now under 9 in the number 93 (even if it is difficult to see sometimes). If you now type 9306021209003 it will be stored and you will return to the menu. You can also move the cursor right with B and left with A and only change the digits that are wrong. Then when you are finished you press 'ENTER'. If you change your mind, press 'CLEAR' instead and nothing has been changed. The last digit to the right is the day of the week and counts from Monday as day 1.

5 1 Own texts

You are able to put in one or two rows of text which are printed out in the end of the receipts, like "Merry Christmas" or "Welcome back".

Choose first which of the text rows you would like to change (1 or 2).

If you have a two-row display the old text row now shows on the top display row and some instructions on the bottom display row and you can start to make text at once.

If you on the other hand have a one row display some instructions will be showed first. When you have read them you press 'ENTER' and then the old text row will be shown and you can start changing.

The cursor always places itself under the first character position (can be difficult to see sometimes). You can move it right with B and left with A.

Now choose character

'0'	Shows space	" !"#&'()*+,-./"
'1'	Shows a "0"	"0123456789:;<=>?@"
'2'	Shows a capital "A"	"ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_"
'3'	Shows a lower-case "a"	"abcdefghijklmnopqrstuvwxyz{ }"
'C'	Changes to the next character in the "alphabet"	
'D'	Changes to the previous character in the "alphabet"	

When you are finished press 'ENTER' and it will be stored, or press 'CLEAR' if you have changed your mind.

Note that some displays show lower-case letters as capital, but on the paper they will be printed as lower-case anyway.

5 2 Opening Hours settings

Here you can decide when the customer should be able to swipe his card in the outdoor card reader and the door shall open. If you just can get into the washing hall, you can always insert the card into the Washmatic and wash. In this case you can give a key to those who can be trusted to wash during the night.

Door time: 1=Locked 2=Unlocked 3=Times

Alternative 1 closes the outdoor card reader completely, alternative 2 opens the outdoor card reader, for service around the clock.

When you press 3 you get questions about the first and the last hour which the door shall open. So if you for example answer 5 and 22, the opening hours will be 05.00 to 22.59.

6 Demo wash

Here you can start a free wash. When the wash is finished you return to the Manager menu. The wash will be recorded as payment method "Other". It is not to be used for normal washes.

7 Attendance mode

Here you can go directly into the Attendance menu without having an Attendance card. Press 'CLEAR' and you will return to the Manager menu.

8 1 Printer

1=Feed	Feeds the paper approximatly 5 centimeter (useful when you change the paper roll)
2=Print	Prints a test receipt
3=Status	Shows the printers condition. Return by pressing 'CLEAR'
4=Cut	Cuts the paper
5=Feed log	Feeds the paper on an extra log printer (optional)

8 2 Calibration

This menu is not used in Truck washes.

8 3 Light

1=On	Turns on the light
2=Off	Turns off the light
3=On one minute	Turns on the light, but turns it off after one minute.

8 4 Photo Cells

Here you can control the function of the photo cells and the sensors.

Example:

```
"PC1=0 PC2=1 PC3=0 SCH=0 DEG=1 HP=1 PR3=0 "
           "12   144           0"
```

The top row is the sensors condition right now, the bottom row is the number of pulses.

PC1 Photo cell 1, at the entrance door, 1 = blocked

PC2 Photo cell 2, at the traffic light, 1 = blocked

PC3 Photo cell 3, at the exiting door, 1 = blocked

SCH Shampoo counter

DEG Degreaser counter

HP Manual high pressure, 1 = in use

PR3 Counter for product 3, usually Windshield washing fluid

The example above means that a Truck is in the Hall and blocks Photo cell 2, the shampoo counter has counted 12 pulses, the degreaser counter has counted 144 pulses and stands on the 144th at the moment and someone is using the manual high pressure. To start the pumps you have to set Attendance mode or Spare mode and use the control panel.

HINTS

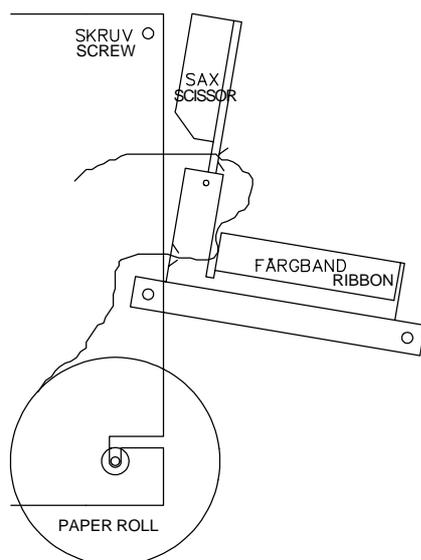
Change of paper in the Matrix printer (used in the blue box)

1. Remove old paper by turning the roll of paper backwards
2. Loosen the upper black screw
3. Fold down the printer to the stop
4. Fold up the scissor
5. Insert the Manager Card and choose **8 1 Printer**.
6. Place the roll of paper on the spindle
7. Put in the paper in the printer at the same time as you press **1 Feed**
8. Press several times on **1 Feed**, to get more paper
9. Insert the paper through the scissors
10. Fold down the scissors
11. Feed more paper with **1 Feed**
12. Insert the paper out through the hole in the front
13. Pull the paper from the front at the same time as you fold up the printer
14. Reset the screw again, don't tighten too hard, just use your fingers.
15. Press **4 Cut**
16. Press **2 Print** for a test print out
17. Press **4 Cut**
18. Press three times on 'CLEAR' to return to "Welcome"-position

Paper rolls and ribbons can be ordered from Westmatic AB, +46-570-10343:

Paper rolls article number 160

Ribbon, violet, article number 159



Matrix printer

Change of Paper in the Thermo printer (used in the stainless steel box)

All steps are important, don't skip any of them.

1. Turn off the power with the main switch in the Card terminal.
2. Fold up the grey arm on the left side of the printer and remove old paper.
3. Turn on the power again.
4. Make sure that the new paper is straight and not wrinkled
5. Fold up the black scissor
6. Insert the paper under the rubber roll from underneath, when the paper has extended a centimeter under the roll the printer will start and pull it in. The arm has to be folded up.
7. Place the paper roll in its holder
8. Fold down the paper's edge to the roll and see that the paper is sitting straight
9. Fold down the arm so it points straight down.
10. Insert the paper through the scissor hole and fold it down so it locks on both sides, check that the paper didn't get wrinkled or got stuck between the scissor and the printer.
11. Rip off the paper towards the scissor's edge
12. Close the printer
13. Insert the Manager card, choose '8' and '1', then press '2' and '4' for a print out.
14. If the print out was good, press 'CLEAR' three times to return to the "Welcome"-position

Paper rolls can be ordered from Westmatic AB, +46-570-10343, with the article number 165.

Statistics and Invoice Print Outs

The Invoice print out needs to be printed approximately once a week depending on the number of completed washes. It's wise to print out a statistics at the same time so you can check that the amounts are correct.