INSTALLATION MANUAL

DOC. NO. 438.9200-35/5 EDITION 42.2008

W/E/SU620, 630, 640, 655 and 675c/s Emerald, Selecta, Clarus & Classic Control

Valid up to machine No. -xxx/99999

Installation manual

W/E/SU620, 630, 640, 655 and 675c/s

Emerald, Selecta, Clarus & Classic Control

WARNING: ALL OPERATING AND MAINTENANCE PROCEDURES SHOWN ON THE NEXT PAGE OF THIS MANUAL MUST BE FOLLOWED DAILY FOR PROPER OPERATION OF YOUR WASCOMAT MACHINE.

PLEASE ENTER THE FOLLOWING INFORMATION AS IT APPEARS ON THE MACHINE(S) DATA PLATE(S).

MACHINE TYPE OR MODEL				
MACHINE SERIAL NUMBER(S)				
ELECTRICAL CHARACTERISTIC	S:	_ VOLTS,	PHASE,	_ HZ.

MAKE CERTAIN TO KEEP THIS MANUAL IN A SECURE PLACE FOR FUTURE REFERENCE.



Intentionally blank



Replace If Missing Or Illegible

One or more of these signs must be affixed on each machine as indicated, when not included as part of the front instruction panel.

LOCATED ON THE OPERATING INSTRUCTION SIGN OF THE MACHINE:

CAUTION

- 1. Do not attempt to open door unitl "Door unlocked" indicator is lit.
- 2. Machine must not be used by children.
- 3. Do not use flammable liquids in this machine.

MACHINE MUST NOT BE USED BY CHILDREN

PRECAUCION

- 1. No intente abrir la puerta hasta que la luz indicadora este encendida.
- 2. La maquina no debe ser operado por ninos.
- 3. No use liquidos inflamable en la lavadora.

LAS MÁQUINAS NO DEBEN SER USADAS POR NIÑOS

IMPORTANT SAFETY INSTRUCTIONS IMPORTANTES MESURES DE SECURITE WARNING -

To reduce the risk of fire, electric chock, or injury to persons when using your appliance: **AVERTISSEMENT -**

Pour réduire les risques d'incendie, de choc électrique ou de blessure quand, l'appareil est utilisé:

- 1. Read all instructions before using the appliance. *Lire toutes les instructions avant d'utiliser l'appareil.*
- 2. This machine must be securely bolted to the floor according to the installation instructions. *Ce machine doit être visseé sur le plancher selon les instructions d'installation.*
- This machine MUST be serviced and operated in compliance with manufacturers instructions. CHECK DOOR LOCKS EVERY DAY FOR PROPER OPERATION TO PREVENT INJURY OR DAMAGE. IF THE DOOR LOCK FAILS TO OPERATE PROPERLY, PLACE THE MACHINE OUT OF ORDER UNTIL THE PROBLEM IS CORRECTED.

IL FAUT QUE cette appareil soit entretenue et actionnée conformement aux instructions du fabriquant. CONTROLEZ LA SERRURE DE PORTE TOUS LES JOURS AFIN DE EVITER DES DOMMAGES OU DES RISQUES PERSONNELLES. SI LA SERRURE DE PORTE NE FONCTIONNE PAS, IL FAUT METTRE LA MACHINE HORS SERVICE JUSQU'À LE PROBLEME SOIT CORRIGÉ.

4. Do not wash articles that have been previously cleaned in, washed in, soaked in, or spotted with gasoline, drycleaning solvents, or other flammable or explosive substances, as they give off vapors that could ignite or explode.

Ne pas laver des articles qui ont été nettoyés ou lavés avec de l'essence, des solvants pour nettoyage à sec ou d'autres substances inflammables ou explosives, ou que l'on a fait tremper dans ces produits. Ces substances dégagent des vapeurs qui peuvent s'enflammer ou exploser.

- 5. Do not add gasoline, dry-cleaning solvents, or other flammable or explosive substances to the wash water. These substances give off vapours that could ignite or explode. Ne pas ajouter d'essence, de solvants pour nettoyage à sec ou d'autres substances inflammables ou explosives à l'eau de lavage. Ces substances dégagent des vapeurs qui peuvent s'enflammer ou exploser.
- 6. Under certain conditions, hydrogen gas may be produced in a hot-water system that has not been used for 2 weeks or more. HYDROGEN GAS IS EXPLOSIVE. If the hot-water system has not been used for such a period, before using a washing machine, turn on all hot-water faucets and let the water flow from each for several minutes. This will release any accumulated hydrogen gas. As the gas is flammable, do not smoke or use an open flame during this time.

De l'hydrogène peut être produit dans un système à eau chaude qui n'a pas été utilisé depuis deux semaines ou plus. L'HYDROGÈNE EST EXPLOSIF. Si le système à eau chaude n'a pas été utilisé depuis un certain temps, ouvrir tous les robinets d'eau chaude et laisser l'eau couler pendant plusieurs minutes avant d'utiliser une laveuse, l'hydrogène accumulé, le cas échéant, s'échappera. L'hydrogène étant inflammable, ne pas fumer ou utiliser un appareil à flamme nue pendant que l'eau coule.

7. Do not allow children to play on or in the appliance. Close supervision of children is necessary when the appliance is used near children.

Ne pas permettre aux enfants de jouer sur ou dans l'appareil. Surveiller ètriotement les enfants lorsqu'ils se trou vent près de l'appareil qui fonctionne.

- 8. Before the appliance is removed from service or discarded, remove the door. *Avant de mettre l'appareil hors service ou de jeter, retirer la porte.*
- 9. Do not reach into the appliance if the tube is moving. *Ne pas mettre la main dans l'appareil lorsque la cuve bougent.*
- 10. Do not install or store this appliance where it will be exposed to the weather. *Ne pas installer ou placer cet appareil dans un endroit où il sera exposé aux intempéries.*
- 11. Do not tamper with controls. *Ne pas trafiquer les commandes.*
- 12. Do not repair or replace any part of the appleance or attempt any servicing unless specifically recommanded in the user-maintenance instructions or in published user-repair instructions that you understand and have the skills to carry out.

Ne pas réparer ou remplacer les pièces de l'appareil ou procéder à l'entretien de celui-ci sauf si les instructions visant l'entretien et les réparations qui doivent être effectués par l'utilisateur le spécifient, si vous comprenez bien ces instructions et si vous possédez les

connaissances nécessaires.



NOTICE TO: OWNERS, OPERATORS AND DEALERS OF WASCOMAT MACHINES

IMPROPER INSTALLATION AND INADEQUATE MAINTENANCE, POOR HOUSEKEEPING AND WILLFUL NEGLECT OR BYPASSING OF SAFETY DEVICES MAY RESULT IN SERIOUS ACCIDENTS OR INJURY. TO ASSURE THE SAFETY OF CUSTOMERS AND/OR OPERATORS OF YOUR MACHINE, THE FOLLO-WING MAINTENANCE CHECKS <u>MUST</u> BE PERFORMED ON A <u>DAILY</u> BASIS.

NOTICE À L'ATTENTION DES PROPRIÉTAIRES, UTILISATEURS ET REVENDEURS DE MACHINES WASCOMAT

UNE INSTALLATION INCORRECTE ET UN ENTRETIEN INADÉQUAT, DE MÊME QUE LA NÉGLIGENCE OU LA NEUTRALISATION DÉLIBÉRÉES DES DISPOSITIFS DE SÉCURITÉ, PEUVENT ÊTRE CAUSES DE BLESSURES OU D'ACCIDENTS SÉRIEUX. POUR ASSURER LA SÉCURITÉ DES CLIENTS ET/OU DES UTILISATEURS DE VOTRE MACHINE, IL EST <u>INDISPENSABLE</u> DE PROCÉDER <u>CHAQUE JOUR</u> AUX CONTRÔLES DE ROUTINE CI-APRÈS.

- 1. <u>Prior to operation of the machine</u>, check to make certain that all operating instructions and warning signs are affixed to the machine and legible. (See the following page of this manual for description and location of the signs.) Missing or illegible ones <u>must be replaced imme-</u><u>diately</u>. Be sure you have spare signs and labels available at all times. These can be obtained from your dealer or Wascomat.
- 2. Check the door safety interlock, as follows:
 - (a) OPEN THE DOOR of the machine and attempt to start in the normal manner:

For coin-operated models, insert the proper coins to start the machine.

For manually operated models, place the ON-OFF switch in the ON position and press the Start switch.

THE MACHINE(S) MUST NOT START !

(b) CLOSE THE DOOR to start machine operation and, while it is operating, attempt to open the door without exerting extreme force on the door handle. The door should remain locked!

If the machine can start with the door open, or can continue to operate with the door unlocked, the door interlock is no longer operating properly. The machine <u>must</u> be placed <u>out of order</u> and the interlock immediately replaced. (See the door interlock section of the manual.)

- 3. DO NOT UNDER ANY CIRCUMSTANCES ATTEMPT TO BYPASS OR REWIRE ANY OF THE MACHINE SAFETY DEVICES AS THIS CAN RESULT IN SERIOUS ACCIDENTS.
- 4. **Be sure to keep the machine(s) in proper working order**: Follow <u>all</u> maintenance and safety procedures. Further information regarding machine safety, service and parts can be obtained from your dealer or from Wascomat through its Teletech Service Hotline 516/371-0700.

All requests for assistance must include the model, serial number and electrical characteristics as they appear on the machine identification plate. Insert this information in the space provided on the previous page of this manual.

5. **WARNING:** DO NOT OPERATE MACHINE(S) WITH SAFETY DEVICES BYPASSED, REWIRED OR INOPERATIVE! DO NOT OPEN MACHINE DOOR UNTIL DRUM HAS STOPPED ROTATING!

AVERTISSEMENT: NE PAS FAIRE FONCTIONNER LA (LES) MACHINE(S) AVEC UN DISPOSITIF DE SÉCURITÉ NEUTRALISÉ, RECÂBLÉ OU NON OPÉRATIONNEL! NE PAS OUVRIR LA MACHINE TANT QUE LE TAMBOUR NE S'EST PAS IMMOBILISÉ!

NOTICE TO INSTALLER

Improper installation of this machine:

- May cause serious damage to the machine.
- May result in other property damage.
- · May cause personal injury.
- Will void the manufacturer's warranty.

Improper fastening of this machine to its foundation, inferior foundation materials, an undersized foundation, the use of fabricated steel bases not provided by Wascomat or its approved supplier(s), the use of an improper type, number, or size of mounting bolts, or failure to use proper hardware on mounting bolts may result in damage to the machine that will not be covered by the manufacturer's warranty.

Use of a steel base beneath this machine DRAMATICALLY INCREASES the mechanical stress placed on the underlying concrete floor or foundation. This must be taken into consideration when employing a steel base to raise the height of the machine.

Increase the manufacturer's recommended floor or foundation thickness requirements by <u>at least</u> three inches (see installation manual) when using six-inch-high Wascomat steel bases to raise the machine's height.

The use of steel bases more than six inches in height is NOT recommended. If installation requires a base higher than six inches, contact Wascomat Technical Support at 516-371-0700 for advice.

Connection to line Voltage or over-current protection devices other than those specified on the data plate may result in severe damage to machine components, and will void the manufacturer's warranty.

Refer to complete installation instructions provided in manuals accompanying the machine.

Contact Wascomat Technical Support at 516-371-0700 with any questions BEFORE installing this machine. Damage resulting from inadequate installation materials or improper installation techniques will void the manufacturer's warranty.

Contents

Technical data	1:1
Installation	2:1
Installation ships, ships, oil-rigs, etc	3:1
Water connections	4:1
Drain connection	5:1
Steam connection	6:1
Connection of external liquid supplies	7:1
Electrical installation	8:1
Function checks, Emerald, Selecta & Classic Control	9:1
Preventive maintenance	10:1

The manufacturer reserves the right to make changes to design, material and/or specifications without notice.

Safety instructions

- The machine is designed for water washing only.
- The machine must not be used by children.
- All installation operations are to be carried out by qualified personnel. Licensed personnel are necessary for all electric power wiring and plumbing.
- The door interlock must be checked daily for proper operation and must not be bypased.
- All seepage in the system, due to faulty gaskets etc., must be repaired immediately.
- All service personnel must be fully familiar with the operating manual before attempting any repair or maintenance of the machine.
- The machine must not be sprayed with water.
- Do not add flammable or explosive substances to the wash water. There may give off vapors that could ignite or explode.

Consignes de sécurité

- La machine est conçue pour le lavage à l'eau exclusivement.
- La machine ne peut être utilisée par des enfants.
- Tous les travaux d'installation doivent être effectués par une personne qualifiée. Tous les câblages électriques doivent être réalisés par un électricien diplômé.
- Le verrouillage du hublot doit être vérifié chaque jour et ne peut être neutralisé.
- Toute fuite du système, due à des joints défectueux etc., doit être réparée sans délai.
- Tous les membres du personnel d'entretien doivent être parfaitement familiarisés avec le manuel d'entretien avant d'entreprendre une réparation ou un entretien de la machine.
- Ne jamais asperger d'eau la machine sous peine de risquer un court-circuit.
- Ne pas utiliser dans la machine des adoucissants textiles contenant des liquides volatils ou inflammables.

Intentionally blank

Technical data

		W/E/SU620	W/E/SU630	W/E/SU640	W/E/SU655	W/E/SU675
Innerdrum volume diameter	litres/ft³ mm/inch	85/3.0 520/20 1/2	130/4.6 595/23 7/16	180/6.4 650/25 9/16	250/8.8 725/28 9/16	330/11.7 795/31 5/16
Drum speed wash extraction	rpm rpm	52 528/694*	49 494/649*	44 471/619*	44 446/587*	42 427/561*
Heating electricity steam hot water	kW	5.4/7.5 x x	7.5/10 x x	13 x x	18 x x	23 x x
G-factor Weight, net	kg/lbs	81/140* 136/300	81/140* 175/386	81/140* 228/503	81/140* 287/633	81/140* 330/727

* SU-model

Connections

		W/E/SU620	W/E/SU630	W/E/SU640	W/E/SU655	W/E/SU675
Water valves connection		DN20 3/4"	DN20 3/4"	DN20 3/4"	DN20 3/4"	DN20 3/4"
Rec. water pres	-	30-90 200-600			30-90 200-600	30-90 200-600
Functioning lim	its psi	8-145	8-145	8-145	8-145	8-145
for water valve	kPa	50-1000	50-1000	50-1000	50-1000	50-1000
Capacity at 45 (300 kPa)	psi gallon/min l/min	5 20	5 20	5 20	15 60	15 60
Drain valve	inch	3	3	3	3	3
	outer Ø mm	75	75	75	75	75
Draining	gallon/min	45	45	45	45	45
capacity	I/min	170	170	170	170	170
Steam valve connection		DN15 1/2"	DN15 1/2"	DN15 1/2"	DN15 1/2"	DN15 1/2"
Rec. steam pressure ps		45-90	45-90	45-90	45-90	45-90
kPa		300-600	300-600	300-600	300-600	300-600
Functioning lim steam valve	its for psi	8-115	8-115	8-115	8-115	8-115
	kPa	50-800	50-800	50-800	50-800	50-800

1:1

1	Electrical	connection
---	------------	------------

- 2 Cold water
- 3 Hot water
- Steam connection 4
- 5 Drain
- 6 Liquid detergent supply
- 7 Control panel
- 8 Soap box
- 9 Water reuse
- Door opening, W/E/SU: ø310 mm/12 3/16", SU630: ø365 mm/14 3/8", W/E630, SU640: ø395 mm/15 9/16", W/E640, W/E/SU655, W/E/SU675: ø435 mm/17 1/8" 10

in mm	Α	В	С	D	E	F	G	н	I	к	L	м	Ν	0	Р	R
W/E/SU620	660	730	1115	355	765	825	45	1030	215	1010	130	830	385	-	100	210
W/E/SU630	720	790	1200	365	825	910	45	1115	215	1095	130	910	420	-	100	235
W/E640	750	880	1325	435	915	1035	45	1245	130	1225	210	1040	325	295	100	225
SU640	750	880	1325	435	915	1035	45	1245	130	1225	210	1040	325	295	100	225
W/E655	830	955	1410	470	990	1120	45	1330	160	1290	245	1125	325	325	100	265
SU655	830	955	1410	470	990	1120	45	1330	160	1290	245	1125	325	325	100	265
W/E675	910	1040	1445	500	1075	1155	45	1365	160	1325	245	1155	280	325	100	210



Front









in inch	Α	В	С	D	E	F	G	н	I	к
W/E/SU620	26	28 3/4	43 7/8	14	30 1/8	32 1/2	1 3/4	40 9/16	8 7/16	39 3/4
W/E/SU630	28 3/8	31 1/8	47 1/4	14 3/8	32 1/2	35 13/16	1 3/4	40 7/8	8 7/16	43 1/8
W/E640	29 1/2	34 5/8	52 3/16	17 1/8	36	40 3/4	1 3/4	49	5 1/8	48 1/4
SU640	29 1/2	32 11/16	52 3/16	14 3/8	36	40 3/4	1 3/4	49	5 1/8	48 1/4
W/E655	32 11/16	37 5/8	55 1/2	19 1/2	39	44 1/8	1 3/4	52 3/8	6 5/16	50 13/16
SU655	32 11/16	37 5/8	55 1/2	17 1/8	39	44 1/8	1 3/4	52 3/8	6 5/16	50 13/16
W/E675	35 13/16	40 15/16	56 7/8	19 11/16	42 5/16	45 1/2	1 3/4	53 3/4	6 5/16	52 3/16

in inch	L	м	N	0	Р	R
W/E/SU620	5 1/8	32 11/16	15 3/16	_	3 15/16	8 1/4
W/E/SU630	5 1/8	35 13/16	16 9/16	-	3 15/16	9 1/4
W/E640	8 1/4	40 15/16	12 13/16	11 5/8	3 15/16	8 7/8
SU640	8 1/4	40 15/16	12 13/16	11 5/8	3 15/16	8 7/8
W/E655	9 5/8	44 5/16	12 13/16	12 13/16	3 15/16	10 7/16
SU655	9 5/8	44 5/16	12 13/16	12 13/16	3 15/16	10 7/16
W/E675	9 5/8	45 1/2	11	12 13/16	3 15/16	8 1/4



Front







438 9159-45/09

		620	630	640	655	675
Frequency of the dynamic force	e Hz	9.3/11.6*	8.7/10.8*	7.9/10.3*	8.3/9.8*	7.5/9.4*
Max floor load at extraction	lbs force	269±697/ 269±585*			629±1191/ 629±1304*	
	kN	1.2±3.1/ 1.2±2.6*	1.7±4.1/ 1.7±3.7*	2.2±4.7/ 2.2±4.7*	2.8±5.3/ 2.8±5.8*	3.8±6.0/ 3.8±6.9*

* SU-model

Installation

Leave the machine on the transport pallet until it can be placed in the final, prepared position.

Siting

Install the machine close to a floor drain or open drain. In order to make installation and servicing the machine easier the following clearances are recommended:

Fig.

• At least 20 inches (500 mm) between the machine and the wall behind.

 Minimum 1 inch (25 mm) to next machine if more than one machine is installed on a foundation.

Floor

In this type of machine, the drum is attached directly to the frame. As a result the floor under the machine must be stable enough to absorb the dynamic forces generated during spin cycles. For that reason, the mounting bolts must be cast into the floor material itself.

The machine must be securely fastened to a suitable foundation using M16 (5/8 inch) threaded rod, flat washers and lock nuts or lock washers. Failure to properly secure the machine to its foundation, or securing the machine to an inadequate foundation, will result in severe vibration, damage to the machine, and will void the manufacturer's warranty.

When fixing the machine to an existing cement floor, it must be at least 8 inches (200 mm) thick.

The floor must be able to withstand the loads indicated in the table.

If it isn't possible to cast the bolts into the floor, an alternative might be to use so-called chemical anchors. Your local dealer can provide the information you need.

IMPORTANT NOTE:

The use of chemical anchors and/or the use of a fabricated steel mounting base DOES NOT reduse the thickness requirement for the underlying concrete floor. The floor MUST BE AT LEAST 8 INCHES (200 MM) THICK, or a new concrete foundation MUST be poured.



Model SU and W/E675

For these machines two expander bolts shall be mounted at the front part of the machine.

- Fig. Drill two holes (1) ø10 mm/ 3/8" and 40 mm/ (2) 1 9/16" deep.
 - After the machine has been placed over the other four bolts, place the two spacer washers over the two holes. They shall be placed between the machine and foundation.
 - Mount the expenderbolts in the drilled holes and fasten the machine. Don't forget the washers.



in mm	А	В	С	D	Е	F	G	Н	I
W/E620	725	660	495	445	115	665	_	I	
W/E630	785	720	575	495	120	760	_	Ι	-
W/E640	875	750	635	570	120	855	_	-	_
W/E655	950	830	715	635	125	955	_	Ι	_
W/E675	1035	910	790	695	135	1050	810	10	95
SU620	725	660	495	445	115	665	495	0	75
SU630	785	720	575	495	120	760	595	10	80
SU640	875	750	635	570	120	855	655	10	85
SU655	950	830	715	635	125	955	735	10	85
SU675	1035	910	790	695	135	1050	810	10	95

in inch	А	В	С	D	E	F	G	Н	I
W/E620	28 9/16	26	19 1/2	17 1/2	4 1/2	26 3/16	_	_	_
W/E630	30 7/8	28 3/8	22 5/8	19 1/2	4 3/4	29 15/16	_	_	_
W/E640	34 7/16	29 1/2	25	22 7/16	4 3/4	33 11/16	_	_	_
W/E655	37 3/8	32 11/16	28 1/8	25	4 15/16	37 5/8	—	_	—
W/E675	40 3/4	35 13/16	31 1/8	27 3/8	5 5/16	41 5/16	31 7/8	13/32	3 3/4
SU620	28 9/16	26	19 1/2	17 1/2	4 1/2	26 3/16	19 1/2	0	2 15/16
SU630	30 7/8	28 3/8	22 5/8	19 1/2	4 3/4	29 15/16	23 7/16	13/32	3 1/8
SU640	34 7/16	29 1/2	25	22 7/16	4 3/4	33 11/16	25 13/16	13/32	3 3/8
SU655	37 3/8	32 11/16	28 1/8	25	4 15/16	37 5/8	28 15/16	13/32	3 3/8
SU675	40 3/4	35 13/16	31 1/8	27 3/8	5 5/16	41 5/16	31 7/8	13/32	3 3/4

2:2

Installation on an excisting floor or foundation

Instead of braking up the excisting floor or foundation, chemical bolts M16 can be used. A set of four HILTI HVU bolts can be ordered from our Spares Dept, part No. 471 6699-64.

Mounting instruction

- Fig. Drill ø18 mm (11/16") to a depth of 125 mm (5"). Do not make the hole too deep.
 Fig. Clean the drilled holes.
 4
 Fig. Put down the chemical ampule in the hole.
- 5
- Fig. Rotate the bolt into the hole, so that the glass ampule is broken and its contents mixed.
- Fig. Rotate the bolt to correct depth.
- (7) **NOTE!** Do not rotate the bolt against the concrete bottom. Check that the chemicals have filled the hole completely.
- Fig. Remove the drilling machine with the
- mounting tool. Hold the bolt with one hand.
 Let the bolt harden before the machine is mounted.

Time for hardening, due to different concrete temperatures.

- -10°C 6 hours
- 5°C 2.5 hours
- ± 0°C 1 hour
 - 5°C 30 minutes
- 10°C 20 minutes
- 15°C 15 minutes
- 20°C 10 minutes



5922

Casting a plinth

- Fig. A foundation should be used where the existing
- (9) floor is less than 8 inches (200 mm) thick or in order to ensure that the machine is securely anchored and will not vibrate excessively.

The foundation must be at least 8 inches (200 mm) thick.

Proceed as follows:

- Fig. Break up the existing floor to a depth of approx. 5 inches (125 mm) and check that the sides of the hole are tapered outward so that the longest side at the bottom measures 5 inches (125 mm) more than at the top.
 - · Make the forms for the foundation.
 - Moisten the hole well and apply cement to the sides and bottom.
 - A number of mounting bolts must be set into the concrete of the foundation. The bolts need to project 1-1 1/2 inches (40 mm) out of the base. Pour the concrete into the prepared base mold and make sure that the surface is level.
 - The concrete should be left to set for at least two days before mounting the machine on the foundation.
 - Mounting bolt locations are shown with respect to the outer surface of the machin's front panel. If the front panel is to be set back from the front of the foundation, add the setback distance to dimension "E".





Installation, ships, oil-rigs, etc

Leave the machine on the transport pallet until it can be placed in the final, prepared position.

Siting

Install the machine close to a deck drain or open drain. In order to make installation and servicing the machine easier the following clearances are recommended:

Floor

In this type of machine, the drum is attached directly to the frame. As a result the deck under the machine must be stable enough to absorb the dynamic forces generated during spin cycles.

The combination deck and foundation must be able to withstand the loads indicated in the table.

Some marine installations have very thin decks. Special attention to be taken. Reinforcing deck plus increased size of foundation may be necessary.

Welding a foundation

A welded foundation shall be made where concrete foundation can not be made.

In order to make installation and servicing the machine easier the following clearances are recommended:

• At least 40" (1000 mm) between the machine and the wall behind.



in mm	Α	В	С	D	E	F	G	Н	I	к	L	М	N
W/E/SU620	660	725	495	80	445	115	495*	80*	0	75*	30	505	85
W/E/SU630	720	785	575	75	495	120	595*	65*	10	80*	30	555	85
W/E/SU640	750	875	635	55	570	120	655*	45*	10	85*	30	630	90
W/E/SU655	830	950	715	55	635	125	740*	45*	10	85*	30	695	95
W/E/SU675	910	1035	790	60	695	135	810*	50*	10	95*	30	755	105

in inch	А	В	С	D	Е	F	G	н	I	к	L	М	Ν
W/E/SU620	26	28 9/16	19 1/2	3 1/8	17 1/2	4 1/2	19 1/2*	3 1/8*	0	2 15/16*	1 3/16	19 7/8	3 3/8
W/E/SU630	28 3/8	30 7/8	22 5/8	2 15/16	19 1/2	4 3/4	23 7/16*	2 9/16*	3/8	3 1/8*	1 3/16	21 7/8	3 3/8
W/E/SU640	29 1/2	34 7/16	25	2 3/16	22 7/16	4 3/4	25 13/16*	1 3/4*	3/8	3 3/8*	1 3/16	24 13/16	3 9/16
W/E/SU655	32 11/16	37 3/8	28 1/8	2 3/16	25	4 15/16	29 1/8*	1 3/4*	3/8	3 3/8*	1 3/16	27 3/8	3 3/4
W/E/SU675	35 13/16	40 3/4	31 1/8	2 3/8	27 3/8	5 5/16	31 7/8*	1 15/16*	3/8	3 3/4*	1 3/16	29 3/4	4 1/8

* Not for the W- and E-models.

Installing the machine

To install the machine:

- Remove the transport packaging
- Remove the front panel.
- Remove the machine from the transport pallet and locate it on the bolts.
 Always lift the machine by the chassis, never by the door or door handle.
- Fig. Check that the machine is level and steady at all four corner mounting points. Adjust the level by using stainless or galvanized steel washers or shims between the machine and the floor. The washers must be of a size to cover the support surface.

Fig. Fit the washers and self-locking nuts supplied
 with the machine and tighten securely.

• To tighten the nuts we recommend to use a rachet wrench, especially in the right rear corner.

During the first several weeks of use, check and tighten the nuts (as necessary) frequently. Continue to check them periodically, thereafter.

IMPORTANT NOTE:

Fig.

(4)

Failure to closely follow the instructions provided in this manual may result in severe damage to the machine, and the risk of personal injury. The manufacturer is not responsible for damage or injury resulting from improper installation.







Intentionally blank

Water connections

All inlet connections to the machine are to be fitted with manual shut-off valves and filters, to facilitate installation and servicing.

Water pipes and hoses should be flushed clean before installation. After installation, hoses should hang in gentle arcs.

Hoses are to be of an approved type and grade, to comply with national regulations.

The machine may have between one and four DN 20 (R 3/4") water connectors. All connectors present on the machine must be connected to the water supply, or the machine may not function properly. The table shows the possible connection options, which will depend on the model of the machine.

All water connectors must be connected up, otherwise the wash program will not function correctly.

The water pressure data is as follows:

- min: 15 PSI (100 kPa)
- max: 90 PSI (600 kPa)
- recommended: 30-90 PSI (200-600 kPa)

	Water type	Water connection				
		1	2	3	4	
Fig.	cold and hot	cold	hot		**	
Fig. 2	cold and hot	cold	hot	cold*/ hot	**	

* For detergent container.

** Only machine with Clarus Control.

Extra water valve which can be used for hard water if soft water is connected to 1.

This valve can also be used for water reuse from tank.

If pump is used, it is only a water connection without valve.





Drain connection

Connect a 3 inch O.D. (75 mm) pipe or rubber hose to the machine's drain pipe, ensuring a downward flow from the machine. Avoid sharp bends which may prevent proper draining.

Fig. The drainage pipe should be located over a floor (1) drain, drainage channel or the like so that the gap

 drain, drainage channel or the like so that the gap between the outlet hose and the drain is at least 1 inch (25 mm).



Intentionally blank

Steam connection

The water supply to the machine should be fitted with manual shut-off valves and filters to facilitate installation and servicing.

The connection hose must be of type ISO/1307-1983 or equivalent. Connection size at filter: 1/2" (DN 15).

Steam pressure required:

- minimum: 8 psi (50 kPa)
- maximum: 115 psi (800 kPa)
- Fig. Remove the cover (A). (1)

Fig.

- Fig. Mount the articulated nipple to the steam valve.
- Fig. (3) Mount the steam value on the machine.
- Fig. Mount nipple, strainer and elbow. Note the direction of the strainer. Mount steam hose to the elbow.
 Check that there are no sharp angles or bends

on the connected steam hose.Mount the hose with wires between steam

valve and machine.
 Connect wires in the steam valve.
 Connect ground cable to the terminal ground connection.
 Mount the cable connector on X46 on distribution card.











Intentionally blank

Intentionally blank

Connection of external liquid supplies





All optional equipment connected must be EMC-approved to EN 50081-1 or EN 50082-2.

- Distribution card A can be used to control Fig.
- (1)machine functions, output and input signals.
- Outputs (110-240V AC): Fig.

Only Clarus Control (2)

- X71:1,2 Signal "Door locked, program on"
- X72:1 0 V (common)
- X72:2 Liquid supply 1
- X72:3 Liquid supply 2
- X72:4 Liquid supply 3
- X72:5 Liquid supply 4
- X73:1 Detergent box 1 (Y11)
- X73:2 Detergent box 2 (Y12)
- X73:3 Detergent box 3 (Y13)
- X73:4 Detergent box 4 (Y14)
- X73:5 Detergent box 2 (Y22)

Inputs:

- X70:1,2 Paus/PC5
- X70:3,4 Start/Stop



7:1

Installation

Fig. 3	Outputs (110-240V AC): Only Emerald and Selecta Control				
	X70	See Payment system			
	X72:1	0 V (common) (Door locked)			
	X72:2	L1 (Door locked)			
	X72:3	Liquid supply 1 (Prewash, Emerald), (Detergent, Selecta)			
	X72:4	Liquid supply 2 (Main wash, Emerald), (Sour, Selecta)			
	X72:5	Liquid supply 3			
	X72:6	Liquid supply 4 (Bleach, Selecta)			
	X72:7	Liquid supply 5 (Bleach, Emerald), (Starch, Selecta)			
	X73:1	Heating			
	X73:2	Detergent box 2 (Y12)			
	X73:3	Cold water (Y15)			
	X73:4	Detergent box (Y22)			
	X73:5	Hot water (Y25)			
	X73:6	Inverted drain			
	X73:7	Drain			

Fig. Outputs (110-240V AC): Only Classic Control

Up to the following machine No.'s:

W620 W630 W640 W655 W675	-520/65403 -595/20756 -650/20444 -725/12139 -795/6075
X70	See Payment System
X71:1	0 V (common), program signal
X71:2	L1, program signal
X72:1	0 V (common)
X72:2	Liquid supply, prewash
X72:3	Liquid supply, mainwash
X72:4	Conditioner, last rinse
X72:5	Bleaching agent, main wash





Fig.Outputs (110-240V AC):5Only Classic Control

From the following machine No.'s:

	0
W620	520/65404-
W630	595/20757-
W640	650/20445-
W655	725/12140-
W675	795/6076-
X71:1	L1, program signal
X71:2	0 V (common), program signal
X72:1	0 V (common)
X72:2	Liquid supply, prewash
X72:3	Liquid supply, mainwash
X72:4	Conditioner, last rinse
X72:5	Bleaching agent, main wash



Installation

	Payment system						
	Price reduction						
Fig.	X70:1	Timer, opto- input (120-230V)					
(6)	X70:2	Timer, opto- input					
	External coin-meter						
	X70:1	0 V (common), output					
Fig.	X70:2	Coin 2					
	X70:3	Coin 1					
	X70:4	Price programming					



5610

- [8] If more signals are required the machine can be
 - equipped with a second distribution card B (only Clarus Control).

Outputs (200-240V AC):

- X75:1 0 V (common)
- X75:2 Liquid supply 5
- X75:3 Liquid supply 6
- X75:4 Liquid supply 7
- X75:5 Liquid supply 8
- X76:1 0 V (common)
- X76:2 Drain lock
- X76:3 Drain A
- X76:4 Drain B
- X76:5 Drain C
- X76:6 Inlet A
- X76:7 Inlet B
- X76:8 Inlet C
- X77:1 Buzzer (N)
- X77:2 Buzzer (L1)

Inputs:

- X74:1,2 Switch between heating 1/heating 2
- X74:3,4 No function



Installation

Fig. Option card

9 Only Classic Control

Up to the following machine No.'s:

W620	-520/65403
W630	-595/20756
W640	-650/20444
W655	-725/12139
W675	-795/6075

There are some possibilities to alter the standard parameters in the wash programs by moving or adding jumpers on the option card.

Fig. • When adding a jumper on N or M gives warm rinses instead of cold. N shall be used on W620, 630 and M on W640, 655 and 675.



2 Rinses

Ρ

5601, 5602

- Fig. When adding a jumper on O there will be no prewash in the programs. The timer rapid advances the prewash automatically. Remember that "Delicate" is always without prewash.
- Fig. When adding a jumper on P there will be two rinses instead of three. The timer rapid advances the first rinse.
- Fig. If the jumper on Q is removed the main wash will be extended by three minutes to nine minutes instead of six.



-12-			
	No Pre W.		
	2 Rinses		
	No Time Ext.		
	High/Low Lev. High Level	R S S	
			5604


Fig. In standard position on R, low level is used in prewash, main wash and high level in rinses. If jumper is moved to S it will be high level also in prewash and mainwash.



Option card Only Classic Control

From the following machine No.'s:

W620	520/65404-
W630	595/20757-
W640	650/20445-
W655	725/12140-
W675	795/6076-

There are some possibilities to alter the standard parameters in the wash programs by moving or adding jumpers on the option part of the rotary switch.

Fig. • When adding a jumper on N gives warm (15) rinses instead of cold.



- Fig. When adding a jumper on O there will be no prewash in the programs. The timer rapid advances the prewash automatically. Remember that "Delicate" is always without prewash.
- Fig. When adding a jumper on P there will be two rinses instead of three. The timer rapid advances the first rinse.
- Fig. If the jumper on Q is removed the main wash will be extended by three minutes to nine minutes instead of six.



- Fig. In standard position on R, low level is used in prewash, main wash and high level in rinses. If jumper is moved to S it will be high level also in prewash and main wash.
- Fig. Three spare jumpers are mounted on the plate.





Intentionally blank

Electrical installation



An individual electrical disconnect must be provided in proximity to each machine.

The connecting cable should hang in a gentle curve.

For proper circuit breaker sizes, see table on the next page.

Single-phase connection:

Fig. (1)

Connect the earth and other two wires as shown in example "1AC" in the figure.

For the W640 and W655, special circuit breaker considerations must be made. The following guidelines will assist you in selecting an appropriate circuit breaker.

W640:

Select a 25 Amp circuit breaker capable of maintaining at 60 Amperes for 8 seconds.

W655:

Select a 30 Amp circuit breaker capable of maintaining at 70 Amperes for 7 seconds.

Three-phase connection:

- Fig. Connect the earth and the three phases as
- (2) shown in example "3AC" in the figure.

When the installation is completed, check:

- that the drum is empty.
- that the machine operates by turning on the mains switch, starting the machine and using RAPID ADVANCE to reach the spin cycle (see operations manual).



IMPORTANT

When making power supply connections to machines rated 208-240V AC, <u>do not</u> connect any phase measuring in excess of 125 V AC (with respect to earth ground) to the L1 or L2 terminals on the connection block. So-called "stinger legs" must be connected to the "L3" terminal, which does not feed power to the control circuits of the machine.

On three-phase models (except SU675), check that the drum rotates in the direction indicated on the machine while in extraction. If the direction is incorrect, reverse two of the power line phases to correct the rotation direction, while observing the note above.







W/E620

Heating	Voltage	Total	Circuit
alternative	alternative	kW	breaker A
No heating	120 V 1 AC	1.3	15
or Steam heating	208-240 V 1 AC	1.1	15
El heating	208-240 V 1 AC	6.9	35
	208-240 V 3 AC	6.9	25

W/E630

Heating	Voltage	Total	Circuit
alternative	alternative	kW	breaker A
No heating	208-240 V 1 AC	1.2	15
or Steam heating	208-240 V 3AC	1.7	15
El heating	208-240 V 3 AC	9.1	30

W/E640

Heating alternative	Voltage alternative	Total kW	Circuit breaker A
No heating	208-240 V 1 AC	2.3	25
or Steam heating	208-240 V 3 AC	2.1	15
	415-480 V 3 AC	2.1	15
El heating	208-240 V 3 AC	11.8	40
	440/480 V 3 AC	13.5	20
	400 V 3/3N AC	12.5	25

W/E655

Heating	Voltage	Total	Circuit
alternative	alternative	kW	breaker A
No heating	208-240 V 1 AC	2.8	30
or Steam heating	208-240V 3 AC	2.8	15
	380-415 V 3/3N AC	2.8	15
	415-480 V 3 AC	2.8	15
El heating	208-240 V 3 AC	16.4	50

W/E675

Heating	Voltage	Total	Circuit
alternative	alternative	kW	breaker A
No heating	208-240 V 3 AC	1.9	15
or Steam heating	415-480 V 3 AC	1.9	15
g			

SU620

Heating	Voltage	Total	Circuit
alternative	alternative	kW	breaker A
No heating or Steam heating	208-240 V 1 AC	0.6	15

SU630

Heating	Voltage	Total	Circuit
alternative	alternative	kW	breaker A
No heating or Steam heating	208-240 V 1 AC	0.8	15
El heating	208-240 V 1 AC	9.2	50
	208-240 V 3 AC	9.3	30

SU640

Heating alternative	Voltage alternative	Total kW	Circuit breaker A
No heating or Steam heating	208-240 V 1 AC	0.9	15
El heating	208-240 V 1 AC	12.1	60

SU655

Heating	Voltage	Total	Circuit
alternative	alternative	kW	breaker A
No heating or Steam heating	208-240 V 1 AC	1.2	15

SU675

Heating	Voltage	Total	Circuit
alternative	alternative	kW	breaker A
No heating or Steam heating	208-240 V 1 AC	1.5	15

Function checks, Emerald/Selecta

Perform the following checks once the machine is installed:

- Open the manual water valves.
- Turn on the power at the external switch.
- Check that the drum is empty, and close the loading door.
- Put detergent into compartment 2.
- Choose a high-temperature program.
- Insert requested amount of coin(-s) then press the **START** button. If the machine is coinoperated insert the amount of coins or tokens shown on the display.

Check:

Fig. (1)

Fig.

(2)

- that the drum rotates normally and that there are no unusual noises.
- that there are no leaks in water supply/drain connections.
- that water passes through the detergent compartment and fabric conditioner compartments.
- that the door cannot be opened during a program.
- that the machine is heating (if the machine is equipped with heating)

E- and W-models

• Check that the drum rotates clock-wise during extraction, seen from the front. If not, change two of the phases on the incoming connection.



Function checks, Clarus Control

Manual operation

- Switch on the machine's main switch.
- Open the manual valves for water and for steam if the machine has steam heating.

In the operating manual, chapter "Manual operation", one can find how to operate the machine manually.

- Check that the drum is empty and close the door.
- Close the drain valve.
- Operate the machine manually to fill with cold water, then hot water. Check that these water supplies are connected as they should be.
- Start the motor on wash action, and check that the motor is revolving clockwise and anticlockwise alternately, as normal for wash action.
- Start heating by entering a final temperature and then pressing **START**. Check that the steam valve opens or the heating element relay reacts, as appropriate.
- Check that all sources of detergent supply are working as they should, including the built-in detergent supply compartments, where present.
- Check the water and steam connections and the drain valve for signs of any leakages.
- Empty the water from the machine and open its door.

E- and W-models

• Check that the drum rotates clock-wise during extraction, seen from the front. If not, change two of the phases on the incoming connection.

Function checks, Classic

Perform the following checks once the machine is installed:

- Open the manual water valves.
- Turn on the power at the external switch.
- Choose a high-temperature program.
- Press the **START** button or if equipped with coin-meter, insert coin(-s). Check:
- that the drum rotates normally and that there are no unusual noises.
- that there are no leaks in water supply/drain connections.
- that water passes through the detergent compartment and fabric conditioner compartments.
- that the door cannot be opened during a program.
- that the machine is heating (if the machine is equipped with heating)

E- and W-models

Fig.

• Check that the drum rotates clock-wise during extraction, seen from the front. If not, change two of the phases on the incoming connection.



Intentionally blank

To keep your machine in proper working order, follow the preventive maintenance recommendations provided below.

The maintenance interval should be adjusted according to machine usage. The suggested schedule assumes an 8 hour work day, and a 5 day work week.

Daily

- Check the door and door lock:
 - Open the door and try starting the machine. The machine MUST NOT START.
 - Close the door, start the machine and try opening the door. It MUST NOT BE POSSIBLE TO OPEN THE DOOR WHILE THE MACHINE IS OPERATING!
 - Check that the door does not leak.
 - Clean the door seal, removing any detergent and fluff.
- · Check that the drain valve does not leak during the wash cycle.
- Clean out any detergent remaining in the detergent compartment. Rapid advance through a program and let the water rinse the compartment.
- · Inspect liquid chemical tubing and connections for leaks. Repair as necessary.

Every third month (refer this service to qualified personnel)



- Check that the door does not leak.
- · Check the drain valve and remove any lint.
- Inspect the interior of the machine (during an actual wash cycle to ensure that no leaks are noticed) by:
 - Turning of the main power switch of the machine.
 - Remove the top cover and the protective front and rear plates.
 - Cover the detergent dispenser to prevent water from splashing inside the machine.
 - Start a wash program.
 - KEEP CLEAR OF MOVING PARTS WHILE MACHINE IS OPERATING!!

- Inspect all internal hoses, seals and gaskets for signs of leakage. Repair as necessary.
- Check that water inlet screens are clean of debris. Dirty screens result in longer fill times, which reduce productivity.
- Inspect the drive belt. Adjust the tension or replace if necessary (see section 30. Motor).
- Check that there are no signs of leakage on the floor beneath the machine. Locate and repair any leak.
- On heated machines, if the heating time is unusually long, check the heating elements (see section 40. Heating). If the water is very hard, check whether there are lime deposits on the heating elements. Decalcify the elements if necessary. Adapt the amount of deliming agent to the manufacturer's guidelines.
- Never switch on the heating elements when there is no water in the machine. This will cause the slow-blow fuse to trigger.
- Inspect the shock absorbers and coil springs. (Only EX- and H-model).