

TGMi

IMPACTOR IP400, IP500 and IP600

WASTE COMPACTORS

INSTALLATION, OPERATING AND MAINTENANCE MANUAL

PLEASE LEAVE WITH OPERATOR



IP400 – SERIES 5, IP500 – SERIES 3, IP600 – SERIES 2

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February 2024

EC DECLARATION OF CONFORMITY

(Guarantee of Production Quality)

We, The Greenmachine Industrial of:
P.O. Box 108, 3600 AC Maarssen, The Netherlands
Declare under our sole responsibility that the machine

TGMi
CE**IP400 – SERIES 5****IP500 – SERIES 3****IP600 – SERIES 2**

As described in the attached technical documentation is in conformity with the Machine Safety Directive 89/392/EEC as amended by 91/368/EEC and 93/44/EEC and is manufactured under a quality system EN 29001. It is also in conformity with the protection requirements of the Electro Magnetic Compatibility Directive 89/336/EEC and is manufactured in accordance with harmonised standards EN 50-081-2 Generic Emission and EN 50-082-2 Generic Immunity (plus product specific standards).

It also satisfies the essential requirements of the Low Voltage Directive 73/23/EEC amended by 93/68/EEC.

Approved by S Witt, Product Support Manager



Signed at Wrexham, Date

February 2007

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INTRODUCTION

TGMi Compactors are designed to reduce the bulk of waste by compression into a plastic bag within a purpose-designed trolley. The recommended type of waste is cardboard boxes, plastic containers, bottles, cans and dry food waste. It is important that these recommendations are adhered to. Any other use is against the manufacturer's advice and is beyond the design limitations of the unit. No legal liability can be deemed to attach to the manufacturer in respect of such misuse or wrongful application.

GUARANTEE

Each Impactor is guaranteed by TGMi for 1 Year from the date of its purchase from TGMi, or from one of its stockists, dealers or distributors. The guarantee is limited to the replacement of faulty parts or products and excludes any consequential loss or expense incurred by purchasers. Defects which arise from faulty installation, inadequate maintenance, incorrect use or fair wear and tear are not covered by the guarantee.

Please observe these instructions carefully.

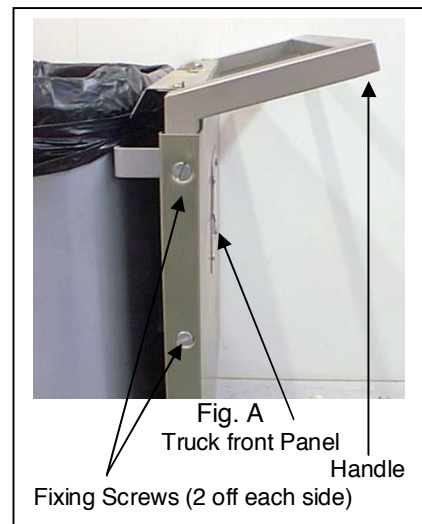
The guarantee applies in this form to installations within the EU. Contact your Impactor supplier first.

RECEIVING THE UNIT / UNPACKING INSTRUCTIONS

- Prior to unpacking check that there is no transit damage.
- Stand the carton or crate on the end marked 'bottom'.
- Remove the outer carton or crate panels.
- Knock away the wooden blocks around the machine.
- Lift latch handle on the truck and pull the truck out.
- Remove all the packaging materials from inside the truck and remove the following items:

Set of keys
 User manual
 Pair of truck liners
 100 bags with 100 wire ties(1 box)and tie twisting tool
 Truck handle - not fitted

IP500 and IP600 machines are delivered with the truck part-assembled. To assemble the truck handle remove the four fixing screws in the truck front. Slide the handle in place and refit the four fixing screws.
 (See fig. A)



- IP400 machines are delivered assembled with the following loose items inside the truck:
 Set of keys
 User manual
 Pair of truck liners
 100 bags with 100 wire ties (1 box) and tie twisting tool

To manoeuvre the IP400 truck: lift truck latch handle, raise the truck handle to the high position, lift the latch handle and lower the truck handle to fit truck into machine.

- Wheel the machine off its packing base.
- Inspect the machine carefully before disposing of the packing materials, and check that the machine and any accessories have been delivered undamaged.

If anything is missing or damaged please notify both the carrier and the supplier within three days of receipt.



Warning: This machine has a high centre of gravity, take care when manhandling it

Shipping specifications

Model	Weight/kg		Dimensions cm	Cube m ³
	Gross	Net		
IP400	223	193	176x60x73	0.770
IP500	373	298	187x77x90	1.296
IP600	474	377	210x96x110	2.218

PREPARATION

Strip off the protective vinyl covering from the stainless steel sheeting. If appearance is not an important factor it does no harm to leave this protection in place.

SITING AND INSTALLATION

For the installer:

These instructions contain important information designed to help the user obtain the maximum benefit from the investment in an TGMi Waste Compactor.

Please read them carefully before starting work, and consult with the supplier in the event of any queries.

Please leave this Instruction Manual with the user after installation.

Procedure:

The Compactor is designed to reduce the volume of rubbish. The maximum advantage is gained if compaction is carried out at the point at which the waste arises. This results in minimum movement, reduced handling, and maximum cost savings. Alternatively, it is possible to order extra trucks for larger establishments or waste segregation.

Ensure that the Compactor is located on a flat and level floor. Ensure that sufficient additional space is available to allow the truck to be withdrawn. The front pair of castors are fitted with brakes, which can be locked into position by depressing the pedal. Push truck into machine, and ensure it is latched in.

ELECTRICAL CONNECTION

Standard machines are supplied as single phase units. 3 phase machines are supplied as variation to specification.

Before making the electrical connection check that the voltage of the supply is suitable for the machine. The details of the machine are on a rating label located on the rear panel.

All machines should be connected to a switched outlet.

Machine Type	Machine termination	Supply termination
Single phase machines 230-1-50 220/240-1-60 110-1-60	Mains lead terminated with a moulded plug, fitted with 10 Amp fuse	13 Amp switched socket
3 phase, 4 wire 220-3-60 440-3-60	Mains lead free end, wires marked: L1 (black) L2 (black) L3 (black) E (green / yellow)	Fused isolator switch rated at 10 Amps per phase.
3 phase, 5 wire 415-3-50 220-3-50 360/440-3-50 380/415-3-50	Mains lead free end, wires marked: L1 (black) L2 (black) L3 (black) N (blue) E (green / yellow)	Fused isolator rated at 10 Amps per phase

Note: On 3 phase machines to ensure that the Power Pack Motor rotates in the correct direction, connect the leads of the mains cable to the corresponding wires of the mains supply fused isolator switch. After connection to the isolator switch, switch on the isolator and press the green start button on the machine. If the hydraulic power pack runs but the ram does not operate the machine must be stopped immediately. Switch off at the isolator and exchange any two incoming phase wires.



WARNING - THIS MACHINE MUST BE EARTHED

OPERATING:

Preparing for Use

- Remove the truck by lifting the truck latch and pulling on the truck handle.
- Place an TGMi bag into the truck and arrange for the bottom of the bag to cover the base of the truck. Then fold the top edges of the bag over and around the rim of the truck.
- Position the truck liners inside the bag.
- Push the truck back into the machine.

It is recommended that only TGMi Impac tor bags are used to achieve best results. Additional bags are available from TGMi or its distributors.

Operation

- Turn the keyswitch to select the ON position.
- Select NORMAL or CONSTANT operation.

If NORMAL is selected the unit will cycle once only: the ram will move to the down position, pause for four seconds and return to the fully up position where it will stop.

CONSTANT leaves the ram in the down position until released by turning the switch from constant to normal. Use this mode for resilient material which has resistance to compaction.

- Open the flap and place waste material into the truck. Waste may also be placed into the truck before is pushed into the machine.
(A useful tip is to commence with some cardboard which then forms a solid base in the bag. There is no need to sort waste, but it is not recommended to compact large amounts of glass).
- Close the flap fully and press the START button, the run indicator will light while the ram is moving or in the down position.
- The machine will not operate unless the truck is properly locked into position and the safety flap is closed.
- To stop the machine at any point in its cycle press the STOP button.
To restart press the START button - the machine will continue its cycle.
- Continue compacting until the bag full light comes on. Bag full levels are dependent on the type of waste being processed. Do not overfill the truck as this makes it difficult to withdraw.

- When the truck is full, lift the truck latch handle and pull the truck out of the machine by its handle.
- Unlock the toggle clips at the front of the truck.
- Withdraw the truck liners by lifting vertically.
- Unfold the rolled over edges of the plastic bag and pull together.
- Twist the neck of the bag and fold a wire tie round the neck of the bag so that the two loops on the tie come together. Then insert the hook of the tying tool into both loops. Pull the handle and the tool will twist the wire tight, sealing the bag.
- Fasten the toggle clips on the truck.
- Wheel the truck to the garbage storage area. Unfasten the toggle clips, open the two truck doors and slide the bag out.
- Take care to re-engage the two doors correctly into the slots, close the toggle clips and return the truck to the machine.
- It is recommended that if the machine is not in use for long periods it is switched off at the keyswitch.

OVERLOAD PROTECTION

Under extreme load circumstances the Compactor might overheat. The switchgear contains an overload to prevent any damage to the motor. This device will automatically reset itself when cool, and it will only be necessary to wait a few minutes before the machine can be restarted.

Press the START button to reset and start the machine.

If any difficulty is encountered please contact the supplier or the manufacturer.

MAINTENANCE

Keep the Compactor and the area around it clean at all times.

Remove the truck and then, by releasing the castor brakes, the unit may easily be moved to clean the floor beneath and behind it. (NB. Switch off the electricity supply at the isolator or unplug the unit before moving or cleaning).

It is advisable to clean the exterior stainless steel finish periodically with a stainless steel cleaning agent or a soapy cloth.

Once a year the hydraulic oil level must be checked by a Service Technician. This is done by removing the top and back panel, and checking the hydraulic oil level in the Power Pack reservoir. The Power Pack reservoir has a label showing maximum and minimum oil levels. These should be adhered to when checking levels. Replace with Derwent 68 oil, or equivalent.

A Service Contract for regular maintenance is recommended. Please contact TGMi Service Desk (01978 667743) for information.

FAULT FINDING

1 Pressing the green START button has no effect:

- Check that the key switch is switched on.
- Check the NORMAL/CONSTANT switch is set on normal.
- Check flap is fully closed.
- Check the truck is in the machine and fully latched in.
- Check electricity supply is on.
- Check the fuse in the plug.
- Check the electrical socket is functional.

2 The machine stops with the ram in the down position and RUN indicator light on.

- Check that the machine NORMAL/CONSTANT switch is set on normal.

3 The machine stops during its cycle and RUN indicator light is not lit:

- Check flap is fully closed.
- Check that the truck is fully home and latched in.
- Under extreme load condition the compactor might overheat. The switchgear contains an overload to prevent damage to the motor, this device will automatically reset when cool. Wait a few minutes then press the START button to reset and start the machine.
- Check electricity supply is on.
- Check the fuse in the plug.
- Check the electrical socket is functional.

- Check that the flap interlock switch is functioning by metering to check that with the flap closed, the switch contacts are made.
- Check that the truck switch is functioning by metering to check that with the truck latched in, the contacts are made.

If difficulty persists contact the supplier or TGMi +31 (0) 6 53 192 745

ORDERING SPARE PARTS

In the event that spare parts or accessories need to be ordered, please always quote the SERIES AND SERIAL NUMBER of the machine. This is to be found on the rating plate located near the supply cable.

For installations outside the EU please contact your supplier.

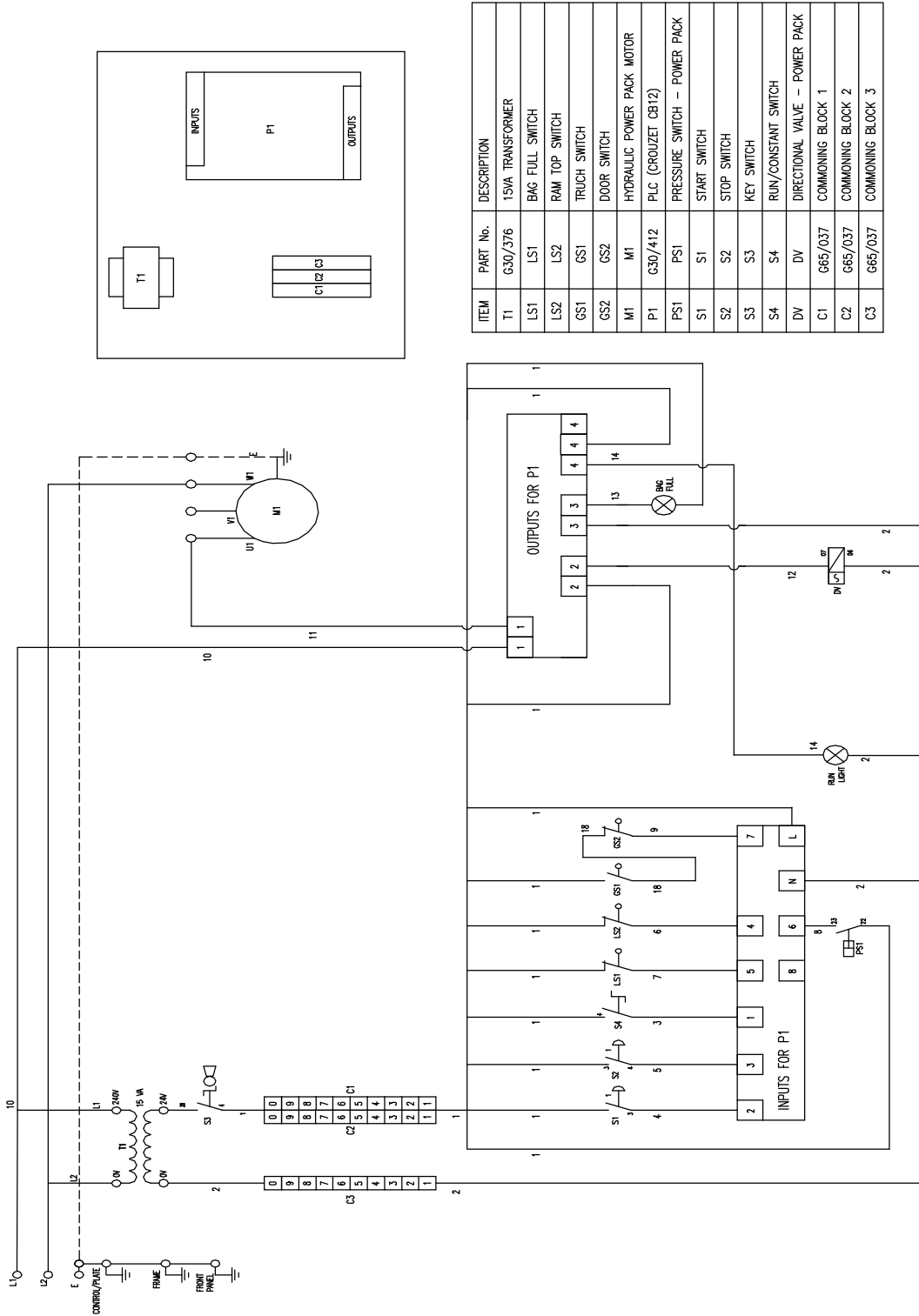
For information on TGMi spares and service support (if applicable), please call TGMi:

Tel.: +31(0) 6 53 192 745
E-mail: info@thegreenmachine.nl

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**Wiring Diagram –
400, IP500 & IP600
110 - 240V – 1 phase, 50/60Hz
Fig. 1**



ITEM	PART No.	DESCRIPTION
T1	G30/376	15VA TRANSFORMER
LS1	LS1	BAG FULL SWITCH
LS2	LS2	RAM TOP SWITCH
GS1	GS1	TRUCH SWITCH
GS2	GS2	DOOR SWITCH
M1	M1	HYDRAULIC POWER PACK MOTOR
P1	G30/412	PLC (CROUZET CB12)
PS1	PS1	PRESSURE SWITCH – POWER PACK
S1	S1	START SWITCH
S2	S2	STOP SWITCH
S3	S3	KEY SWITCH
S4	S4	RUN/CONSTANT SWITCH
DV	DV	DIRECTIONAL VALVE – POWER PACK
C1	G65/037	COMMONING BLOCK 1
C2	G65/037	COMMONING BLOCK 2
C3	G65/037	COMMONING BLOCK 3

Parts Illustration – IP400
Fig.2



PARTS LIST IMPACTOR IP400, JANUARY 2002To be read in conjunction with Figs 1-4. **NB Before ordering please read the note on page 9**

Item	Part No.	Description	Item	Part No.	Description		
1	E56/030	Frame Welded Assy	7	E56/164	Latch Arm		
	A19/007	Fixed Castors		K08/186	Carton wire ties, bags		
	E56/002	Bracket (Stop)		K03/005B	Bag tying tool		
	L56/007	Stop		E56/136	Lever arm, RH		
	E56/110	Bracket		8	E56/051	Front panel top	
	E56/067	Bracket C/B			E56/093	Hinge bracket upper	
	A19/008	Swivel Castors			E56/096	Hinge bracket lower	
	E56/069	Plate locking			A10/224	M20 Gland Locknut	
	K11/015	Patio slab				G80/029	M20 Cable Gland
	E56/114	Strut (ballast)				E56/174	Enclosure backing plate
	E56/158	Switch Bracket/guide				G227A	Key Switch (head only)
	L56/027	Plunger, male				G30/376	Transformer 15VA 24VAC
	L56/028	Plunger, female				G30/412 M1	CD12 PLC 24VAC
	L56/029	Guide				G65/037	Terminal block
	A18/012	Spring, compression				G76/030 M1	Control box enclosure
2	A16/025	Hydraulic Ram	G45/015			Pushbutton green flush	
	A16/026	Hydraulic Power Pack	G45/033			Pushbutton red	
	C56/001M	Ram Plate Machining	G45/056			Lever roller limit switch	
	L56/009	Ram Guide Bearing	G45/057			Push roller limit switch	
	L56/011	Guide Rod	G45/059	Selector switch 2-position			
	E56/044	Bracket L/S	G50/044	Bulb holder			
	E56/165	Bracket	G50/046	Bulb 28V A16-24			
	E56/045	Bracket L/S	G50/051	Green Lens			
	J06/055	Hydraulic Hose Assy	G60/101 M14	Mains Cable assy			
	J08/010	Sealing Washer	G30/376	Wiring Diagram reference			
	J08/022	3/8" BSP Male/Male Fitting			G45/056	T1	
	K08/057	Lts Derwent 68 Oil			G45/057	LS1 and LS2	
	3	E56/049			Inner side L/H	G45/056	GS1
		E56/039			Inner side R/H	G45/056	GS2
		E56/050			Inner back	A16/026	M1 and PS1
E56/151		Inner top front			G30/412	P1	
E56/058		Inner back Upper			G45/015 and	S1	
A21/012		Catch			G45/016	S2	
4	E56/043	Access flap			G45/016 and	S2	
	L56/018	Spacer			G45/033	S3	
	L56/017	Spacer shouldered Nylon			G227A	S4	
5	L56/016	Modified screw			G45/016 and	S4	
	E56/047	Side Panel R/H			G45/059	C1, C2 and C3	
	E56/048	Back Panel			G65/037		
	E56/038	Side Panel L/H					
	E56/041	Top Cap					
A27/189	Sound barrier mat						
6	S56/049	Truck Assy					
	E56/034	Front panel					
	E56/036	Handle					
	A21/022	End latch					
	S56/069	Truck Castor Assembly					
	A21/023	Paddle latch – 2 way					
	E56/084	Latch arm, LH					
	E56/057	Truck liner					
	D12/074	3/32"x 1/2" Split Pin					

Parts Illustration – IP500
Fig.3



PARTS LIST IMPACTOR IP500, JANUARY 2002To be read in conjunction with Figs 1-4. **NB Before ordering please read the note on page 9**

Item	Part No.	Description	Item	Part No.	Description	
1	E56/119	Frame Welded Assy	7	S56/055	Carton wire ties, bags	
	A19/007	Fixed Castors		K03/005B	Bag tying tool	
	E56/002	Bracket (Stop)		E56/127	E56/094	E56/095
	L56/007	Stop				
	E56/009	Bracket				
	E56/067	Bracket C/B		8	A10/224	M20 Gland Locknut
	A19/008	Swivel Castors			G80/029	M20 Cable Gland
	E56/069	Plate locking			E56/174	Enclosure backing plate
	E56/158	Bracket, switch/guide			G227A	Key Switch (head only)
	L56/027	Plunger, male			G30/376	Transformer 15VA 24VAC
	L56/028	Plunger, female			G30/412 M1	CD12 PLC 24VAC
	L56/029	Guide			G65/037	Terminal block
	A18/012	Spring, compression			G76/030 M1	Control box enclosure
2	A16/027	Hydraulic Ram	G45/015	Pushbutton green flush		
	A16/026	Hydraulic Power Pack	G45/033	Pushbutton red		
	C56/003M	Ram Plate Machining	G45/056	Lever roller limit switch		
	L56/009	Ram Guide Bearing	G45/057	Push roller limit switch		
	L56/011	Guide Rod	G45/059	Selector switch 2-position		
	E56/044	Bracket L/S	G50/044	Bulb holder		
	E56/165	Bracket	G50/046	Bulb 28V A16-24		
	E56/045	Bracket L/S	G50/051	Green Lens		
	J06/055	Hydraulic Hose Assy	G60/101 M14	Mains Cable assy		
	J08/010	Sealing Washer				
	J08/022	3/8" BSP Male/Male Fitting				
K08/057	Lts Derwent 68 Oil					
3	E56/120	Inner side L/H	G30/376	G45/056	G45/057	
	E56/121	Inner side R/H				
	E56/122	Inner back				
	E56/156	Inner top front				
	E56/124	Inner back Upper				
	A21/012	Catch				
4	E56/128	Access flap	G45/056	GS1		
	L56/018	Spacer	A16/026	GS2		
	L56/017	Spacer shouldered Nylon	G30/412	M1 and PS1		
	L56/016	Modified screw	G45/015 and	P1		
			G45/016	S1		
5	E56/126	Side Panel R/H	G45/016 and	S2		
	E56/132	Back Panel	G45/033			
	E56/125	Side Panel L/H	G227A	S3		
	E56/133	Top Cap	G45/016 and	S4		
	A27/189	Sound barrier mat	G45/059			
			G65/037	C1, C2 and C3		
6	S56/054	Truck Assy				
	E56/130	Front panel				
	E56/135	Handle				
	A21/022	End latch				
	S56/069	Truck Castor Assembly				
	A21/023	Paddle latch – 2 way				
	E56/164	Latch arm				
	E56/145	Truck liner				
	E56/148	Cover plate				

**Wiring Diagram
reference**

T1
LS1 and LS2
GS1
GS2
M1 and PS1
P1
S1
S2
S3
S4
C1, C2 and C3

Parts Illustration – IP600
Fig. 4



PARTS LIST IMPACTOR IP600, JANUARY 2002To be read in conjunction with Figs 1-4. **NB Before ordering please read the note on page 9**

Item	Part No.	Description	Item	Part No.	Description			
1	E56/070	Frame Welded Assy	7	S56/052	Carton wire ties, bags			
	A19/007	Fixed Castors		K03/005B	Bag tying tool			
	E56/002	Bracket (Stop)		E56/090	E56/094	E56/095		
	L56/007	Stop						
	E56/110	Bracket						
	E56/067	Bracket C/B						
	A19/008	Swivel Castors						
	E56/112	Latch Plate						
E56/100	Switch Bracket	8	A10/224	M20 Gland Locknut				
E56/069	Plate Locking		G80/029	M20 Cable Gland				
2	A16/027		Hydraulic Ram	E56/174	Enclosure backing plate			
	A16/026		Hydraulic Power Pack	G227A	Key Switch (head only)			
	C56/002M		Ram Plate Machining	G30/376	Transformer 15VA 24VAC			
	L56/009		Ram Guide Bearing	G30/412 M1	CD12 PLC 24VAC			
	L56/011		Guide Rod	G65/037	Terminal block			
	E56/044		Bracket L/S	G76/030 M1	Control box enclosure			
	E56/165	Bracket	G45/015	Pushbutton green flush				
	E56/045	Bracket L/S	G45/033	Pushbutton red				
	J06/055	Hydraulic Hose Assy	G45/056	Lever roller limit switch				
	J08/010	Sealing Washer	G45/057	Push roller limit switch				
	J08/022	3/8" BSP Male/Male Fitting	G45/059	Selector switch 2-position				
	K07/057	Lts Derwent 68 Oil	G50/044	Bulb holder				
	3	E56/079	Inner side L/H	G50/046	Bulb 28V A16-24			
		E56/080	Inner side R/H	G50/051	Green Lens			
E56/081		Inner back	G60/101 M14	Mains Cable assy				
E56/077		Inner top front	G30/376	G45/056	G45/057			
E56/082		Inner back Upper						
A21/012		Catch						
4		E56/075				Access flap	G45/056	G45/057
	L56/018	Spacer				G45/056	A16/026	A16/026
	L56/017	Spacer shouldered Nylon				G45/057	G30/412	G30/412
	L56/016	Modified screw				G45/056	G45/015 and	G45/016
5	E56/071	Side Panel R/H	G45/016 and	G45/016 and	G45/033			
	E56/074	Back Panel	G45/016	G45/033	G227A			
	E56/072	Side Panel L/H	G45/016 and	G45/016 and	G45/059			
	E56/073	Top Cap	G45/016	G45/059	G65/037			
	A27/189	Sound barrier mat	G45/016 and	G45/059	G65/037			
6	S56/051	Truck Assy	G45/016 and	G45/059	G65/037			
	E56/086	Front panel	G45/016 and	G45/059	G65/037			
	E56/109	Handle	G45/016 and	G45/059	G65/037			
	A21/022	End latch	G45/016 and	G45/059	G65/037			
	S56/069	Truck Castor Assembly	G45/016 and	G45/059	G65/037			
	A21/023	Paddle latch – 2 way	G45/016 and	G45/059	G65/037			
	E56/164	Latch arm	G45/016 and	G45/059	G65/037			
	E56/099	Truck liner	G45/016 and	G45/059	G65/037			
	E56/137	Switch bracket	G45/016 and	G45/059	G65/037			

Wiring Diagram reference

T1
LS1 and LS2
GS1
GS2
M1 and PS1
P1
S1
S2
S3
S4
C1, C2 and C3