

OPERATING & SERVICE INSTRUCTION MANUAL

FOR

THETFORD INTERNATIONAL

ULTIMATE 5P COMPACTORS

AND ASSOCIATED EQUIPMENT

Printed in England by Thetford International Compactors Ltd

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GENERAL NOTES FOR SAFETY, INFORMATION AND GUIDANCE

C.E. ESSENTIAL HEALTH & SAFETY REGULATIONS (E.H.S.R.'S) and Health and Safety at Work etc, Act 1974 Sections 7 and 8

- (1) There is a statutory duty on everyone to take reasonable care for the health and safety of himself and of other persons who may be affected by his acts or omissions at work; and

As regards any duty or requirement imposed on his employer or any other person by or under any of the relevant statutory provisions, to co-operate with him so far as is necessary to enable that duty or requirement to be performed or complied with.

No person shall intentionally or recklessly interfere with or misuse anything provided in the interests of health, safety or welfare in pursuance of any of the relevant statutory provisions.

- (2) No unauthorized persons to operate Thetford International Compactor.

No unqualified persons to attempt the removal of any part of the Compactor or to undertake any repair, alteration, maintenance or servicing.

When cleaning procedures are necessary the Compactor must be switched off at the mains isolator switch, also at the Compactor control panel and keys removed and locked off.

Do not interfere with the safety switches or other parts of the Compactor other than required operating it in the correct way.

The Hopper lids, doors, safety bars etc are all fitted with safety switches and are there for your safety. The compactor will not operate unless all doors/lids etc are securely closed and the safety bar is in the reset position.

ROUTINE CARE OF THE COMPACTION EQUIPMENT

1. **Safety**

Compactor side and top panels should only be removed for maintenance and testing and it is essential that the machine is switched off and the isolator locked off before any work commences.

2. **Daily Maintenance**

Check oil level in hydraulic reservoir and top up if needed with good.

Quality 32 Hydraulic oil.

Examine hose joints etc, for leaks and repair where needed.

Check control panel for any condensation or water leaks and report.

ALL COVERS MUST BE REPLACED AND FIRMLY SECURED AFTER WORK IS CARRIED OUT.

ULTIMATE 5P COMPACTOR

OPERATING INSTRUCTIONS

1. Check that the discharge door is closed and the locking mechanism is securely fastened.
2. Insert mains supply lead socket. This is located on the Ultimate 5P compactor main control panel. Then insert the mains supply lead plug into the remote mains Supply Socket and switch on the main supply isolator.

NOTE: **The Ultimate 5P 3-phase has an automatic phase check and will always run the correct way.**

3. On models with double doors - Open the loading doors and load in the compactable material until the compactor compacting chamber is full.
4. Close both doors and fasten them. The compactor power unit will not work if the doors are not fully closed and fastened as electrical limit switches are then activated.
5. If the compactor is fitted with safety push bars on an open top hopper - electrical safety switches on the safety push bar will also stop the power unit from working. Safety push bars must be in the correct position for the power unit to start.
6. If an Over The Hook Loader is fitted to the compactor, the five stroke start switch must always be used, as one stroke selection switch may stop the Loader working midway of a lifting cycle.
7. Check that the emergency stop buttons are reset and that all access doors are closed and fastened, then insert correct key in the compactor main control panel switch also the main power supply isolator switch is to ON (O/off) (I/on).
8. Switch the compactor main control panel Isolator switch to (I/on) then select the one stroke or five stroke selector switch as required. Press start the compactor power unit motor will start and the compactor will commence its packing cycle.

NOTE: **If the compactor does not start it may indicate that an emergency stop has been pressed and not reset, or an access door has not been closed correctly. Re-close all doors and resent all emergency stops, then press the start button again.**

9. When the compactor ram has completed one or five strokes as selected the compacting ram will park at the charge box rear position and the compactor will automatically stop and switch itself off, ready for the charge box to be re-loaded with material.
10. If it is required to stop the compactor during its cycle time or in an emergency press any emergency stop button; the compactor will switch off and stop immediately.
11. When the Ultimate 5P compaction body is 75% full the 75% full lamp will illuminate. This indicates that it is almost full and it is to time to have the Ultimate 5P emptied.
12. When the Ultimate 5P compaction body is full the compactor power unit will automatically stop and the container full lamp will illuminate. To reset the compactor, switch the key switch to (O/off) then back to (I/on).
13. If the compactor is fitted with a malfunction system, the compactor will stop automatically, if a fault occurs the malfunction light will illuminate.

NOTE: If fitted with an Over The Hook Loader, see Operation of Loader Equipment before following instruction in next paragraph number 14.

14. When the Ultimate 5P compactor handling vehicle arrives to take the full compactor away for emptying, switch off the mains isolator and remove plug, switch the control panel isolator switch to (O/off) then remove the power cable socket (if fitted) from the compactor main control panel.
15. The Ultimate 5P compactor can now be picked up by the handling vehicle in the same way as a standard container.
16. When the Ultimate 5P compactor returns from being emptied and has been re-positioned on to the site area, repeat instructions from item number 1 onwards as the Ultimate 5P is now ready to be refilled again.

OPERATION OF OVER THE HOOK LOADER EQUIPMENT (if applicable)

1. An Over the Hook Loader enables mobile waste carts to be raised and inverted so that the content is discharged into the loading chamber of the compactor.

WARNING: NEVER WALK UNDER THE LOADING EQUIPMENT WHEN IT IS IN THE RAISED POSITION, EVEN IF THE MOTOR IS SWITCHED OFF.

2. The hydraulic control valve lever for the Over the Hook Loader equipment is located on the left or right hand side of the compactor side panels. The equipment will only operate when the compactor motor is running and the dead man type lever is held in the operating position.

NOTE: In the following paragraphs it is assumed that safety gates complete with electrically interlocked switches are fitted to the compactor.

3. Remove the transport holding lock pins, open the safety gates and locate them in the correct position, secure them with locking pins then place the full waste cart onto the compactor lifting equipment arms.
4. Start the compactor motor as detailed in the Operating Instructions.
5. Move to a position adjacent to the operating control lever so that you can also see the equipment operating.
6. Move the equipment control valve operating lever UPWARDS and hold it in this position whilst the cart is raised and inverted.
7. When the cart contents have emptied into the hopper of the compactor, move the control valve lever DOWNWARDS and hold it in this position until the equipment has returned to the fully down position. Remove the empty cart re-position another full cart and repeat the lifting cycle.

NOTE: The operation of the loader can be stopped at any stage by allowing the operating lever to spring back to the MID position. If the safety gate is opened whilst the equipment is in operation, the compactor power unit will switch off and the equipment will stop immediately. To recommence operation again you must re-start following the operation instructions.

WARNING: WHEN THE ULTIMATE 5P IS TO BE TRANSPORTED, THE SAFETY GATES MUST BE POSITIONED BACK IN THE TRANSPORTABLE POSITION AND THE LOCK PINS INSERTED TO HOLD THE SAFETY GATES IN THE TRAVELLING POSITION. ALSO, THE LOADER FRAME MUST BE IN THE UPPERMOST POSITION FOR TRANSPORTING.

OPERATION OF MOBILE LOADER (if applicable)

1. When the Ultimate 5P compactor has been sited in the correct position, move the Mobile Loader to the correct position for attaching the turn clamps to the Anchor Points on the compactor
2. Attach the turn clamps to the Anchor Points and securely tighten them.

NOTE: **The mobile loader has its own power unit.**

3. To operate the Mobile Loader, insert the mobile loaders mains electricity power mains supply lead socket into its supply, (this is located on the control panel of the compactor) then insert the Ultimate 5P supply lead socket, (if applicable some mobile compactors may have their own combustion engine power supply) then turn the main isolator to (I/on). At the Loader Control Panel, check that the emergency STOP button is reset; then switch the Loader Control Panel isolator switch to (I/on). The power supply is now ready for the Loader and the Ultimate 5 compactor unit if applicable.
4. Place the full waste cart onto the compactor lifting equipment arms or frame.
5. Start the Ultimate 5P compactor as detailed in the Ultimate 5P operating instructions.
6. Press the start button on the Mobile Loaders Control Panel; this will start the Power Unit.
7. If it is required to stop the Mobile Loader Power Unit during its operation, press the red stop button; to restart the Mobile Loader Power Unit pull out to reset the STOP button and then repress the start button.
8. Take up a position adjacent to the Mobile Loader operating control lever so that you can also see the Mobile Loader equipment operating.
9. Move the Mobile Loader control valve operating lever UPWARDS and hold it in the up position whilst the cart is raised and inverted.
10. When the cart contents have emptied into the hopper of the Ultimate 5P Compactor move the control valve lever DOWNWARDS and hold it in the downwards position until the cart has returned to the fully down position. Press the STOP button this will switch OFF the Loaders Power Unit, remove the empty cart reposition another full cart and repeat the lifting cycle.

NOTE: **The operation of the Loader can be stopped at any stage by allowing the Loader operating lever to spring back to MID position.**

11. When the Ultimate 5P compactor handling vehicle arrives to take the Ultimate 5P compactor away for emptying, switch the remote mains electricity isolator to the off (O/off) position, then switch the Loader and the Ultimate 5 compactor isolator to the off (O/off) then remove the power leads and sockets.

12. Release the two Anchor Turnclamps that secure the Mobile Loader to the Ultimate 5P compactor then move the Mobile Loader safely away from the Ultimate 5P compaction unit.

13. When the Ultimate 5P compactor has been emptied and re-positioned onto the site area, repeat operating instructions.

FAULT FINDING BY QUALIFIED PERSONS ONLY

NO UNQUALIFIED PERSONS TO ATTEMPT TO SERVICE OR REPAIR IN ANY WAY

<u>FAULT</u>	<u>POSSIBLE CAUSE</u>	<u>REMEDY</u>
MOTOR DOES NOT START WHEN 'START' IS DEPRESSED.	MAIN ISOLATOR SWITCH NO SWITCHED ON.	CHECK AT MAIN FUSE BOX.
	MAIN ISOLATOR ON CONTROL PANEL NOT SWITCHED ON.	CHECK THAT LEVER IS IN '1' POSITION
	FUSE BLOWN.	CHECK MAIN FUSES AND REPLACE IF NECESSARY.
	THERMAL OVERLOAD TRIPPED OUT.	OPEN CONTROL PANEL COVER AND CHECK IF CIRCUIT BREAKER HAS TRIPPED OUT; CHECK ALL WIRING AND FOR POSSIBLE CONDESATION.
	FAULTY MOTOR.	CHECK WIRING TO MOTOR. TEST MOTOR.
	FAULTY SAFETY SWITCHES.	CHECK ALL SAFETY SWITCHES AND DOORS/SAFETY GATES AND PUSH BARS ARE IN CORRECT POSITION.
MOTOR STARTS BUT PUMP FAILS TO RUN.	DRIVE GEAR SHEARED.	CHECK DRIVE GEAR AND REPLACE IF NECESSARY.
NOISY PUMP.	SUCTION LINE BLOCKED.	CHECK INTAKE PIPE FOR OBSTRUCTION.
	CAVITATION (OIL SHORTAGE).	CHECK OIL RESERVOIR AND TOP UP IF NEEDED.
	WORN PUMP OR BROKEN PUMP SHAFT.	EXAMINE PUMP AND REPLACE WORN PARTS.
	OVER PRESSURING.	CHECK RELIEF VALVE SETTING AND LINE RESTRICTIONS.
MOTOR AND PUMP START BUT RAM WILL NOT MOVE.	SHORTAGE OF OIL.	CHECK LEVEL AND REFILL IF NECESSARY.

	DIRECTIONAL SOLENOID VALVE FAULTY.	CHECK VALVE FOR CORRECT OPERATION, CLEAN OUT IF REQUIRED OR REPLACE.
RAM STAYS AT REAR	RETURN STROKE VALVE DEFECTIVE.	CHECK DIRECTIONAL VALVE FOR CORRECT OPERATION.
	LOW OIL PRESSURE.	CHECK PUMP FLOW WITH PRESSURE GAUGE. CHECK RELIEF VALVE FOR CORRECT SETTING.
RAM STOPS BEFORE END OF STROKE.	CONTAINER IS FULL.	RESTART MACHINE AND ASCERTAIN THAT MACHINE FUNCTIONS CORRECTLY. CHECK CONTAINER FULL LIGHT, REPLACE BULB IF NECESSARY.
	PRESSURE LOW.	CHECK PRESSURE SWICTH ADJUSTAED TO CORRECT SETTING.
RAM STOPS BEFORE END OF STROKE BUT MOTOR AND PUMP STILL RUN.	PRESSURE LOW.	AS ABOVE.
RAM STOPS BEFORE END OF STROKE BUT MOTOR AND PUMP STILL RUN.	VALVE SPOOL STICKING.	CALL SERVICE ENGINEER TO CLEAN AND ADJUST.

RECOMMENDED SPARE PARTS FOR ULTIMATE 5P COMPACTOR

When ordering spare parts please state Serial Number of the Compactor.

1	Isolator complete with Key Switch
1	Control Relay
1	Main Contactor
1	Start Power on Light complete
1	Container Pre Full Warning Light complete
1	Container Full Light complete
1	Transformer 150 va
1	Mobile Socket
1	Appliance Inlet
1	Start Switch complete
1	Stop Switch complete
1	'E Stop Switch complete
1	Thermal Overload Relay
1	Limit Switch
1	Safety Switch
2	Fuses for Transformer
1 set	Main Fuses
1 set	Hydraulic Ram Seals
1 set	Hydraulic Hoses
1	Pump
1	Hydraulic Valve Block complete
1	Pressure Switch
4	Platen Guide Blocks
2	Oil Filters

SERVICE SCHEDULE

Name

Address

.....

.....

.....

INTERMEDIATE

ANNUAL

DATE

JOB No.

SERIAL No.

CONTRACT No.

INTERMEDIATE SERVICE	
<i>CHECK / ADJUST / GREASE AS NECESSARY</i>	
MECHANICAL ✓	
1	Check guide blocks and pins
2	Check doors and safety devices for alignment
3	Check cover plates and guards secure
4	Check rigging screws and holding down bolts
5	Check platen, scraper blade and pin flaps
6	Check discharge door (where applicable)
HYDRAULICS	
7	Check hydraulic cylinders for oil leaks
8	Check hydraulic hoses and fittings
9	Check condition and level of hydraulic oil
ELECTRICS	
10	Check operation and setting of all safety switches
11	Check operation of control panel and remotes
12	Check operation and setting of all control switches
13	Check motor, coils and pressure switches
14	Check all lamp filaments
LOADER (where applicable)	
15	Check hydraulic cylinders for oil leaks
16	Check hydraulic hoses and fittings
17	Check directional valve for correct function
18	Check cylinder and frame bushes and pins for wear
19	Check condition of frame and cart locating arms
20	Check fences, gate safety switches and lock
TRAVERSING (where applicable)	
21	Check drive chain and tie bars
22	Check wheel bearings
23	Check electrical controls for correct operation
24	Check electrical motor
DOCKING (where applicable)	
25	Check correct function of directional valve
26	Check hydraulic cylinders for oil leaks
27	Check hydraulic hoses and fittings
28	Check slide blocks for wear

ANNUAL SERVICE : INTERMEDIATE PLUS	
<i>CHECK / ADJUST / GREASE AS NECESSARY</i>	
MECHANICAL ✓	
29	Check pins and bushes for excessive wear
30	Check condition of charge area
31	
32	
33	
34	
HYDRAULICS	
35	Check oil strainers and filters
36	Check hydraulic pressures
37	
ELECTRICS	
38	Check control switch barrels for wear
39	Check contacts of contactors for wear
40	Check panel wiring
41	Remove motor cover plate and check connectors
42	
LOADER (where applicable)	
43	Check pressures on relief valve
44	Check hydraulic cylinder relief valve operation
45	Check pins and bushes for excessive wear
46	
47	
48	
TRAVERSING (where applicable)	
49	Check gear box drive gears and locks
50	Check gear box oil level
51	
52	
DOCKING (where applicable)	
53	Check pressures on relief valve
54	Check hydraulic cylinder relief valve operation
55	Check pins and bushes for excessive wear
56	

Customer Sig.

Print Name

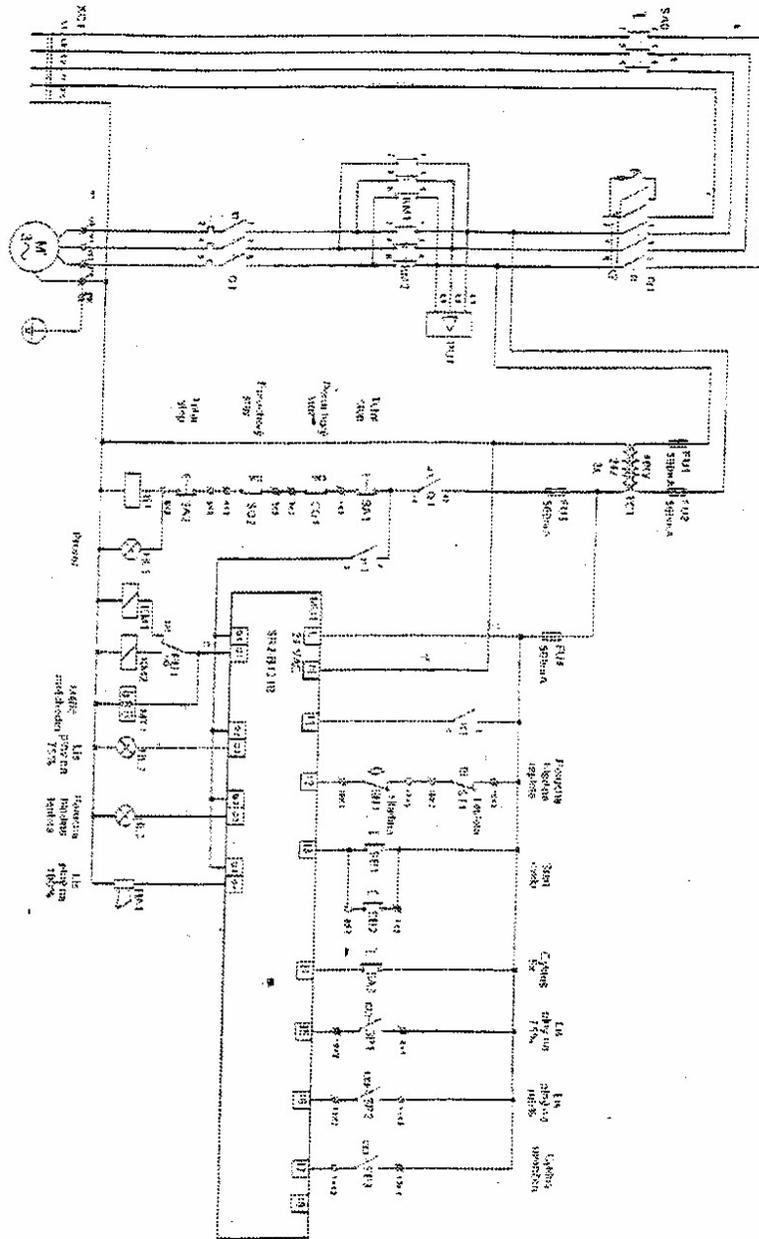
Position

Engineer Sig.

Print Name

Chargeable hours on site extra to contract

TICS 003 A6873 GREEN - To Office PINK - With Invoice WHITE - To Site, Customer



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