



1-WAY TIPPER

Instruction Manual

Revision 6.0 February 2007

Models Covered: Transit 350M & 350L Double Cab

Body Types: UK84RP026 & UK84RP027
March 2007 - on



This manual to remain with
the vehicle at all times.



Read and understand this
manual before attempting
to operate the Tipper.



INDEX

Contents	Page
Preface	3
Safety First	4
Loading the Tipper	5
Load Retention and Sheeting	6
Controls	8
Tipping - General	27
Tipping	29
Driver Checks, Maintenance and Servicing	31
Fault Finding	34

Record of Repair and Servicing	36
Wiring Diagram	38
Spare Parts List	39
EC Declaration of Conformity	50

PREFACE

Preface

This Tipper Instruction Manual will familiarise you with the handling of the vehicle and provide details on safe every day operating procedures, advice and general care.

Regular inspection and servicing of the Tipper is mandatory to ensure its roadworthiness, safety and resale value. This manual is essential daily reference material and should be kept safe and with the vehicle at all times.

Warranty:

Full warranty for parts and workmanship for three years/100,000 miles from date of vehicle registration, on all parts associated with the Tipper body conversion. Warranty is only valid if the Tipper is operated in accordance with the Instruction Manual and current Road Traffic Act Legislation.



Pass on this instruction manual when you resell the vehicle. It is an integral part of the vehicle.

Safety First!**WARNING**

Tipping is a potentially hazardous operation. It is essential that all Operators fully understand this Manual and the Controls found on the vehicle before attempting to use this vehicle. All Health and Safety legislation must be strictly applied. UK Construction & Use Regulations must be observed when operating the vehicle on the public highway. The unladen dB level when operating the tipper is 90dB, vibration levels are lower than 2.5m/s^2

The basis for Health and Safety law in the UK is the Health and Safety at Work Act 1974 and its amendments. However certain EU Law is now applicable; all of which must be complied with before, during and after the use of this vehicle and the Tipper bodywork supplied with it. The Tipper bodywork supplied with this vehicle is recognised as a machine, therefore Health and Safety legislation applicable to machinery must be recognised in addition to general Health and Safety law.

It is the responsibility of the Driver, Owner and/or Operator to establish what Health and Safety legislation applies when using this vehicle and only persons trained and qualified in line with that legislation be allowed to use this machine.

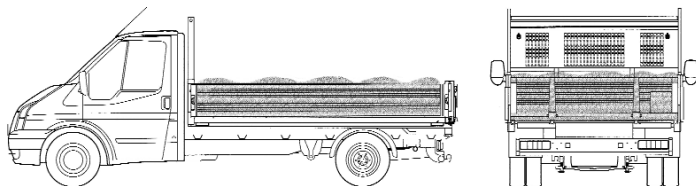
Depending on the circumstances and the territory that the vehicle is being used, other legislation may apply. Always check that existing legislation has not been updated or superseded, and whether new legislation has been introduced.

LOADING THE TIPPER

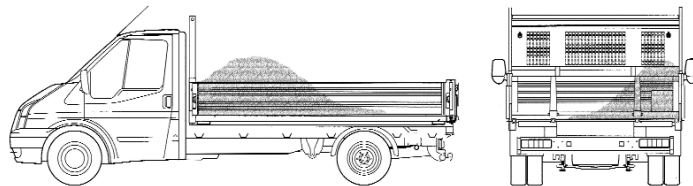
Loading the Tipper

- Prior to loading ensure that the Tipper is fully lowered.
- Ensure that the sideboards and tailboard are closed and securely latched.
- To prevent unnecessary damage always load bulk materials e.g. sand ballast etc. from the lowest practical height.
- Avoid dropping large items such as rocks, demolition debris etc. onto the Tipper bed.
- Ensure that the load is uniformly distributed across the Tipper bed.
- Do not overhang plank or sheet material forward of the headboard.

CORRECT LOAD DISTRIBUTION



INCORRECT LOAD DISTRIBUTION





ROAD SAFETY

All loads must be secured and restrained before operation on the public highway. Failure to adequately restrain the payload will present a hazard to other road users and is in contravention of the UK Construction and Use Regulations.

The Tipper is designed to carry bulk loads of which there are two distinct types:

- 'Fluid' Bulk loads are loads that act similar to a fluid once in motion, for example:
 - Sand
 - Gravel
 - Type 1
 - Hardcore
 - Topsoil
 - Wood chippings
- Non-Fluid Bulk loads, for example:
 - Palletised or wrapped building materials (bricks, tiles, thermal blocks)
 - Timber
 - Sheet material (plywood, plasterboard, roofing sheets etc.) – should only be placed on the load bed. Do not overhang plank or sheet material forward of headboard.
 - Scrap machinery, white goods and furniture.

LOAD RETENTION AND SHEETING

Load retention and sheeting continued

The method of load retention will depend on the type of load being carried: -

Fluid loads:

Sheeting the load with a high strength waterproof Tarpaulin is the best form of load protection especially for a dry powdery load. This will prevent the load being blown from the vehicle and prevent the load becoming waterlogged and thereby potentially overloading the vehicle.

The body is supplied with roping points at the end of each body cross-bearer under the floor, rear rave and forward facing lower corners of headboards. These should be used to tie off any Tarpaulins that envelope the body sides. Once fitted, the Tarpaulin should be restrained by high quality nylon rope, (minimum 8mm Diameter) specifically designed for Commercial Vehicle use.

Non-fluid loads:

All non-fluid loads must be suitably restrained using the load lashing points provided on the tipper floor. Loose loads must not be allowed to shift or roll around in the rear of the vehicle, presenting in some instances, extreme impact forces to the bodysides, tailboard and headboard, generated by cornering, braking and acceleration forces. If the load is to be tipped rather than removed mechanically or manually, the lashing must be removed immediately prior to the tipping operation.

Good quality ratchet straps or approved nylon rope should be used. For cylindrical loads or awkward shaped loads, it is imperative to chock the load with timber to enable the straps or rope to work effectively.

Tipper Isolation Switch

**Warning**

Do not drive the vehicle with the Tipper Isolation Switch in the 'ON' position

Description:

The Tipper Isolation Switch provides electrical isolation to both the electric and hydraulic systems found on the tipper, for maintenance purposes.

Location:

The switch is located adjacent to the drivers seat base.

Purpose:

To safely isolate the tipper electric and hydraulic systems from the vehicle when the tipper is not in use.

Use:

- The isolation switch must be set to 'OFF' when performing any maintenance tasks with the bed raised and propped.
- Only switch 'ON' immediately prior to tipping.
- Do not drive the vehicle with the switch in the 'ON' position.



CONTROLS - Emergency Stop Switch

Emergency Stop Switch

Description:

The Emergency Stop Switch ceases all Tipper operations and activates an audible alarm. The Tipper Control Panel displays “Emergency Stop Activated”.

Location:

The Emergency Stop Switch is located on the left hand side of the Tipper Control Panel (see photo).

Purpose:

In emergency situations when the switch is activated all Tipper functions cease, until the switch is reset.

To Activate:

Press in with finger or palm of hand.

To Release:

Rotate clockwise and allow button to spring out.



Tipper Control

Description:

A four button switch and display panel, which allows control of the raise/lower function of the body. When switched on it will automatically mute the radio cassette/CD player.

Location:

The Tipper Control Panel is housed centrally on the dashboard above the radio cassette/CD player.

Purpose:

The Tipper Control Panel enables the operator to raise and lower the tipper bed in a controlled and instructed sequence.

Use:

The Tipper Control Panel can be operated/read from either the driver or passenger seat. To perform tipping operations follow the instructions below:

1 *Action* Park the vehicle and apply handbrake.

Action Check isolation switch is set to 'ON' position.

Action Proceed to 2.



CONTROLS - Tipper Control

- 2** *Action* Switch on the Tipper Control Unit, message will display...

HAVE YOU READ AND UNDERSTOOD THE INSTRUCTION MANUAL	
YES	NO

Action If you have read and understood the manual, press YES and proceed to 4.

Action If you have not read and understood the manual, press NO.

- 3** *Action* If you pressed NO after question 2, message will display...

REFER TO MANUAL BEFORE PROCEEDING

Result After 10 seconds unit will turn off.


Tipper Control continued

4 *Action* If you answered YES to question 2 message will read...



RELEASE TAILBOARD
BEFORE TIPPING

5 *Action* If you release the handbrake after answering 'YES' to question 2 a warning will sound and message will read...



ENSURE VEHICLE IS
STATIONARY AND
APPLY HANDBRAKE

Action Re-apply handbrake.

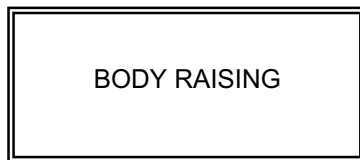
CONTROLS - Tipper Control

Tipper Control continued

6 To Raise Body...

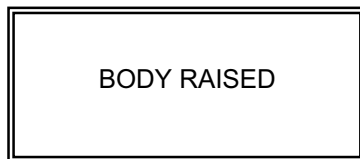
Action Release tailboard.

Action Press RAISE to raise body.



Result Body raises with both cab and external sounders operating and display will read as shown.

7 Action Release RAISE button at any time whilst body raising, message will read...



Result Body will cease rising awaiting next instruction.

Tipper Control continued

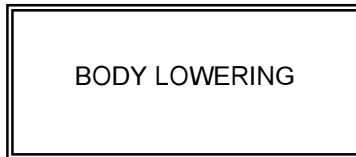
8 *Action* Continue pressing RAISE until body fully raised. Message will read...



Action Release RAISE button.

9 **To lower body...**

Action Press LOWER to lower body.



Result Body lowers with both cab and external sounders operating and display will read as shown.

CONTROLS - Tipper Control

Tipper Control continued

10 *Action* Release LOWER button at any time whilst body lowering, message will read...

BODY RAISED

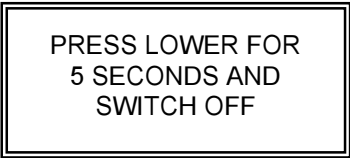
Action Body will cease lowering awaiting next instruction.

11 *Action* Continue pressing LOWER until body fully lowered. Message will read...

BODY FULLY LOWERED
..... PURGING

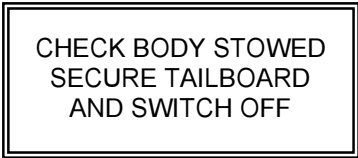
Tipper Control continued

12 *Action* If the LOWER button is released before a single long tone is heard, message will read...



PRESS LOWER FOR
5 SECONDS AND
SWITCH OFF

13 When body is completely lowered, message will read...



CHECK BODY STOWED
SECURE TAILBOARD
AND SWITCH OFF

Message displays for 60 seconds, auto shut down then takes place.

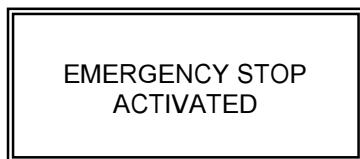
CONTROLS - Tipper Control

Tipper Control continued

14

Emergency Stop...

Action At any time, all Tipper functions can be ceased by pressing the Emergency Stop Button. Display will read...



Action Ensure it is safe to proceed and release the emergency stop button by twisting it clockwise.

Warning LED's and Buzzers

Description:

The warning LED's and buzzers indicate only when the Tipper is in use.

Location:

The three LED's are located in the Tipper Control Panel, left hand side; Red, Green and Yellow. The warning buzzers are located on the Tipper subframe and inside the Tipper Control Panel.

Purpose:

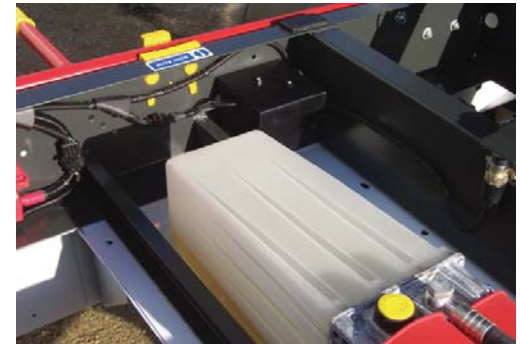
The green LED and buzzer, indicates when the tipping operation has commenced and the body is raising or lowering.

Yellow LED, indicates that the Tipper requires maintenance.

Red LED, indicates if the handbrake is not applied or the Emergency Stop is activated prior to commencing a tipping cycle.

Use:

The warning devices function automatically. If a warning device fails to operate, stop immediately and refer to the fault diagnosis section.



CONTROLS - Body Prop

Body Prop



Never Stand or Work underneath an un-propped body.

Description:

A body prop is a safety device that is provided to ensure the safety of personnel carrying out routine checks and maintenance of components and structures underneath the body. The weight of the body is held mechanically rather than relying on the hydraulic system.

Location:

The body prop is an integral part of the subframe and is stowed on the outside of the offside subframe.

Purpose:

To provide a safe means to maintain the body in a raised position.

Use:

When to deploy the body prop:

- Whenever there is a requirement to work or stand underneath the body.



Body prop continued

How to deploy the Body Prop:

- Park the vehicle on a firm level surface and apply the handbrake.
- Raise the Tipper bed.
- Raise the body prop by pulling up on the handle.
- Rotate the body prop past the vertical until it stops.
- Lower the body until it stops.
- Ensure the body prop locates in the socket, as illustrated below.
- Turn the tipper isolation switch to the 'OFF' position.
- Remove the keys from the vehicle ignition.

Do not leave the vehicle with the body raised and propped for any length of time. The protective oil film on the ram will evaporate, drain away or be washed away. Corrosive elements may erode the highly finished surface of the ram, which in turn could lead to damage of the ram seals, resulting in potential oil leaks.



CONTROLS - Tailboard



HAZARD

Tailboard in lowered position obscures vehicle rear lights.

Avoid lowering the tailboard when stationary on the Public Highway.

Temporary obscuration during loading/unloading is acceptable providing other road users are warned of an obstruction in the road.



A warning triangle or similar devices are permitted to be placed in the road to warn of a temporary obstruction.



SHUT TAILBOARD

Ensure Tailboard is closed and locked before driving the vehicle.

Never drive the vehicle with the Tailboard in the lowered position.

Vehicle side lights must remain on during loading/unloading through the hours of darkness or poor visibility.

It is acceptable to obscure the rear lights temporarily with the vehicle parked during loading/unloading. However, you must take steps to warn other road users of the vehicle obstruction by using at least one of the following: -

- Warning Triangle - supplied with vehicle.
- Minimum four cones or pyramids.
- Minimum four flat traffic delineators.
- Road vehicle sign (large yellow sheet with a red triangle).

Tailboard continued



CAUTION

Always ensure that there is sufficient clearance for the tailboard to hang without touching the ground and that there is a minimum of 8" (200mm) spare, this will allow for suspension compression as the load moves rearwards. If a tow bar has been fitted ensure that it had been installed with protective guides to prevent the tailboard from jamming on the tow bar/ball/clevis, if guides are not installed the tailboard may be crushed, possibly causing significant damage to the body.

Location:

The tailboard is mounted at the rear of the body.

Purpose:

- To safely discharge the payload from the rear aperture of the body.
- To provide primary restraint for fluid loads only. All loose loads should be restrained using the load lashing rings provided on the tipper bed. The tailboard is not designed to prevent un-restrained loose loads from penetrating or bursting the tailboard.



CONTROLS - Tailboard

Tailboard continued

To open tailboard:

To open:

- Hold the top of the tailboard with one hand, with the other hand use an index or forefinger to release the latch, by first pulling up to approximately 90 degrees from the vertical.
- Using the palm of your hand push up on the handle until it is almost vertical and the latch is released.
- Repeat the action for the other latch. Maintain pressure on the tailboard with both hands until it is safe to lower the tailboard gently.

To close:

- Brush away debris from the tailboard, specifically the edges and two upper latch pins. Clear the vertical edges of the body corners and horizontal rear edge of the tipper bed.
- Grab the lower edge of the tailboard with both hands and rotate upwards to its closed position.
- Return the latches to their closed position by pushing down on the handle with the palm of one hand and supporting the weight of your body with the other against the tailboard, rotate the handle until it is parallel with the vertical face of the rear corner pillar.



Sideboards

Description:

The sideboards are made from tough lightweight extruded aluminium held in place by two latches per side, locking the sideboard to the headboard and the rear corner pillars.

Location:

Near and offside of vehicle.

Purpose:

To provide primary restraint for fluid loads, secondary restraint for loose loads. All loose loads should be restrained using the load lashing rings provided in the floor. Sideboards are not designed to prevent un-restrained loose loads from penetrating or bursting the sideboards.

Use:

Sideboards can be lowered to aid the manual or mechanical loading of non-fluid material.

To release sideboard:

1. Remove sheeting if the load is sheeted, remove or tie-off tarpaulin safely.
2. Visually check that the load is not exerting a force on the sideboard.

CONTROLS - Sideboards

To release sideboards continued

3. Hold the top of the sideboard with one hand, with the other hand use an index or forefinger to release the latch, by first pulling up to approximately 90 degrees from the vertical, using the palm of your hand push up on the handle until it is almost vertical and the latch is released. Repeat the procedure for the latch located at the opposite end of the sideboard. Maintain pressure on the sideboard with both hands until it is safe to lower the sideboard gently.



To close sideboard:

- Brush away all debris between the sideboard and the edge of the tipper bed, including the vertical faces at the headboard and rear corner pillar. If any resistance to closing the board is felt, lower the board and remove the debris that is jamming the board – do not force it closed.

To close sideboard continued

- Lift the sideboard and rotate it until shut, holding the top of the board with one hand, grasp one latch in the palm of the hand and push the latch handle home. Repeat for other latch.



- Grasp sideboard by the top edge and pull to ensure the sideboard is secure.



TIPPING - General

Tipping - General



WARNING

Tipping is a potentially hazardous operation. Ensure all other sections of this manual are fully understood and full familiarisation of the Controls have been achieved before attempting to tip a load.

Common Procedures for Tipping:

The following procedures must be observed before, during and after the Tipping operation.

Before Tipping: -

- Apply handbrake.
- Switch on hazard warning lights.
- Establish that the ground bearing the weight of the vehicle is level and is firm enough to support the weight of the vehicle. (Maximum gradient 5%). Avoid wet or waterlogged clay, soil or sandy terrains. If available, have someone direct you to the required position taking the precautions identified above.
- Check that the area surrounding the vehicle is free from personnel, equipment and livestock, except for an assistant specifically tasked to guide you to the area where the load is to be tipped. Health and Safety (Safety Signs & Signals Regulations 1996) guidelines on verbal or hand communication must be observed.
- Ensure the area surrounding the vehicle is suitably illuminated. (night operation)
- Check overhead clearance for overhead cables and power lines, abort tip or reposition vehicle if there are any overhead cables within the vicinity.

Before Tipping continued

- If the load is sheeted, loosen the sheeting; roll back to the headboard and tie-off.
- Remove load restraints if fitted.
- Now continue with the tipping operation.

During the Tipping operation: -

- Be vigilant and observe the operation closely.
- Never try and shake a stuck load free, lower body fully to manually remove all or part of the load.
Do not restart tipping until all personnel are clear from the vehicle.

After the load has been Tipped: -

- Clean the tipper bed with a broom to clear the floor of debris maintaining the smooth surface, essential in allowing the load to slip when tipping.
- Brush off the body edges and generally clean around the bodyside and / or tailboard apertures to ensure the side and tailboard can be closed without jamming.
- If used on muddy/dirty sites, always wash down wheels, rear tail-lights, license plate and lamps before joining the public highway. A potential traffic offence will be created if the vehicle is driven with obscured lights or license plate.
- Perform a visual check for damage.
- Re-apply sheeting (if fitted) or fold, roll and store until required.
- Switch off hazard warning lights.

TIPPING

Tipping

Method:

- Reverse vehicle to the position where you want to tip the load.
- Refer to the Controls section of this handbook, ensure there is no load pressing against the tailboard.
- Hold the tailboard firmly with one hand and release the tailboard latches by raising the handle to the fully raised position and lowering the tailboard gently to the hung position.



WARNING

At any time, all functions can be ceased by pressing the EMERGENCY STOP BUTTON

- Switch the Isolation Switch to the 'ON' position.
- Control the tip using the Tipper Control Panel as described in the controls section of this manual.
- Use the cab rear window and exterior mirrors for maximum vision. Ideally a visible assistant should be made available to indicate progress of the load being tipped.
- Raise the body to the required height to either tip part or all of the load. The body will automatically stop tipping when the ram is fully extended. The tipping can be stopped at any time by releasing the RAISE button. A buzzer will sound when the RAISE button is pressed.
- Lower the body until the warning sounder ceases and the Tipper Control Display reads, 'CHECK BODY STOWED SECURE TAILBOARD AND SWITCH OFF'.
- Close the tailboard observing the precautions outlined in the 'Controls' section, ensuring that it is securely locked. Use a combination of a visual check and a physical tug on the tailboard to check that they are fully home and locked.

Tipping continued

Before driving the vehicle, ensure: -

- Isolation Switch is 'OFF'.
- Body is fully lowered.
- Check Tailboard is securely latched.
- Ensure rear wheels are clear of any tipped material.
- Ensure rear cross-member, tail-lights, and registration plate are cleared of any tipped material.
- Ensure that all precautions detailed in 'Controls' are observed.

**LOW VOLTAGE WARNING**

If the vehicle battery voltage is below 11.5V for 60 seconds or 10V for 5 seconds when the Tipper Control unit is switched 'ON', an audible alarm will sound and the Tipper Control Display will read 'WARNING LOW VOLTAGE START ENGINE'. The vehicle engine should be started to maintain battery charge throughout the tipping operation.

DRIVER CHECKS, MAINTENANCE & SERVICING

Driver Checks and Maintenance Items:



It is imperative that the recommended Driver Checks and Maintenance be carried out to ensure the safe and efficient operation of the Tipper.



WARNING

Any maintenance carried out under the load bed must only be performed when the body is securely propped, refer to page 19. The body may lower without warning in an uncontrolled manner, if hydraulic pressure is lost i.e. the hydraulic hose splits or a union is loosened/disconnected.

The driver, regardless of ownership of the vehicle must perform the following checks and vehicle maintenance. If the driver does not own the vehicle, the owner of the vehicle must satisfy themselves that the driver to whom the vehicle has been allocated will carry out these essential checks.

The driver must be made aware of their responsibilities to read and understand the INSTRUCTION MANUAL including the Daily, Weekly and Monthly Maintenance.

Daily checks - before use:

- Check Instruction Manual is complete and located in a safe position within the cab.
- Check tipper load deck for damage, clean and remove any material that has stuck to it, ensure the surface is smooth and free from debris that may snag loads.
- Check hydraulic lines for signs of fluid leaks.
- Check security of all side and tailboard latches.
- Check all safety signs are present, and ensure they are legible and not damaged
- Check rear lights and license plate to ensure any site debris or mud thrown up from the rear wheels has not obscured them.

Weekly checks:

- Check electrical cable fixings and ensure that no chaffing has occurred.
- Check operation of warning buzzers and LEDs.

Monthly maintenance checks:

- Check hydraulic reservoir oil level and top up if required with hydraulic oil ISO 32.
- Inspect and grease ram upper ball & socket bearing with general-purpose grease.
- Inspect and grease lower ram and gimble bearings with general-purpose grease.
- Inspect and grease tailboard latches with general-purpose grease.
- Inspect and grease rear body pivot bearings with general-purpose grease.
- Inspect and grease sideboard latches with general-purpose grease.
- Check security of rear corner pillars.



WARNING

Ensure body prop is correctly deployed before attempting to check hydraulic reservoir oil level.

To check oil level:

- Raise body, deploy body prop, lower body onto body prop, unscrew oil filler cap and check oil level on the integral dipstick. If required refill oil to appropriate level.

DRIVER CHECKS, MAINTENANCE & SERVICING

Specified torque figures

Description	Torque Value (Nm)
Tipper sub-frame to vehicle chassis fixings.	45
Rear corner pillar mounting fixings.	100
Headboard securing fixings.	80
Rear bolster fixings (optional part).	25
Fender mounting bracket fixings.	25
Side marker lamp mounting bracket fixings (double cab only).	25

Fault Finding

	Problem	Possible Causes	Corrective Action
1.	The Tipper fails to operate.	<ul style="list-style-type: none"> a) Chassis mounted isolation switch, switched OFF. b) No electrical power (1). c) No electrical power (2). d) No electrical power (3). e) Stroke end switch defective. f) Insufficient hydraulic oil in the reservoir. g) Electric drive motor defective. 	<p>Switch ON isolation switch.</p> <p>Check fuse under driver's seat (150A). Check the Tipper Controller fuse 10.0A and 15.0A fuse next to isolation switch. Check all electrical connections and cables.</p> <p>Replace stroke end switch. Fill the reservoir to the correct level.</p> <p>Replace the drive motor/pump unit.</p>
2.	The electric drive motor runs but the Tipper fails to rise.	<ul style="list-style-type: none"> a) Tipper overloaded. b) Hydraulic pump defective. 	<p>Reduce load.</p> <p>Replace the drive motor/pump unit.</p>

FAULT FINDING

3.	Hydraulic oil sprays from the reservoir when the Tipper is lowered.	a) Reservoir over filled. b) Reservoir punctured.	Fill reservoir to the correct level. Replace reservoir.
4.	Chassis mounted buzzer fails to operate.	a) Buzzer defective. b) No electrical power.	Replace buzzer. See items a - d in 1 above.
5.	The Tipper lowers when the hydraulic pump stops.	a) Defective non-return valve. b) Defective pressure release valve. c) Hydraulic oil leak.	Replace non-return valve. Replace pressure release valve. Inspect hydraulic system, replace parts as required.
6.	Tipper only rises partially.	a) Vehicle not on level ground. b) Tipper loaded unevenly. c) Insufficient oil in the reservoir. d) Pressure relief valve defective.	Tip when the Tipper is on level ground. Redistribute the load. Fill reservoir to the correct level. Replace pressure relief valve.
7.	Tipper fails to lower.	a) Solenoid defective. b) Solenoid valve defective. c) Body fully lowered switch defective.	Replace solenoid. Replace solenoid valve. Replace switch.
8.	Tipper Control Module displays 'ELECTRICAL FAULT'.	See 1.b)-d) and 1.g).	Contact VFS.

RECORD OF REPAIR AND SERVICING

Record of Repair and Servicing

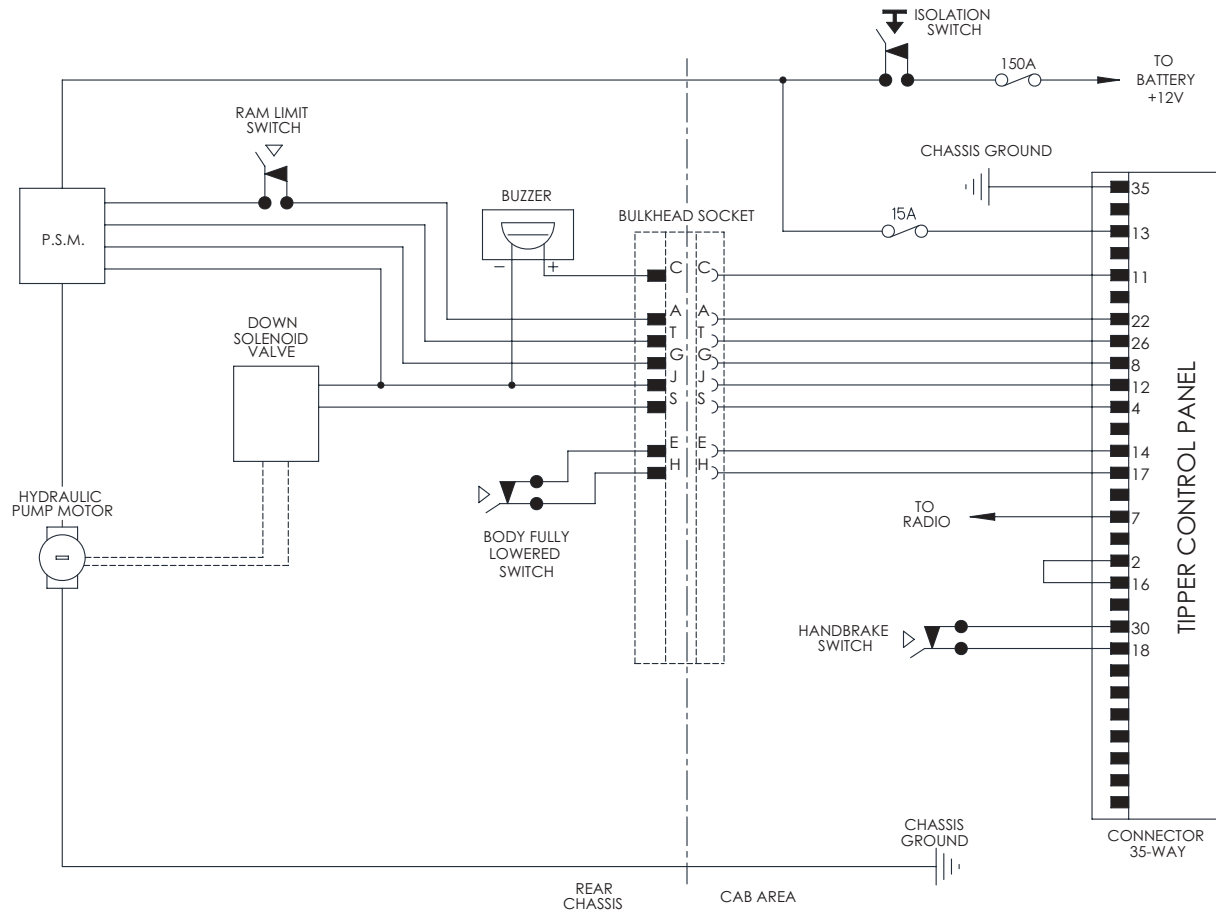
Date	Nature of Repair	Carried Out By

RECORD OF REPAIR AND SERVICING

Record of Repair and Servicing

Date	Nature of Repair	Carried Out By

WIRING DIAGRAM



SPARE PARTS LIST

Spare Parts List

Tipper spare parts are available from:

VFS (Southampton) Ltd.


Unit 8

Barton Park Industrial Estate

Chickenhall Lane

Eastleigh

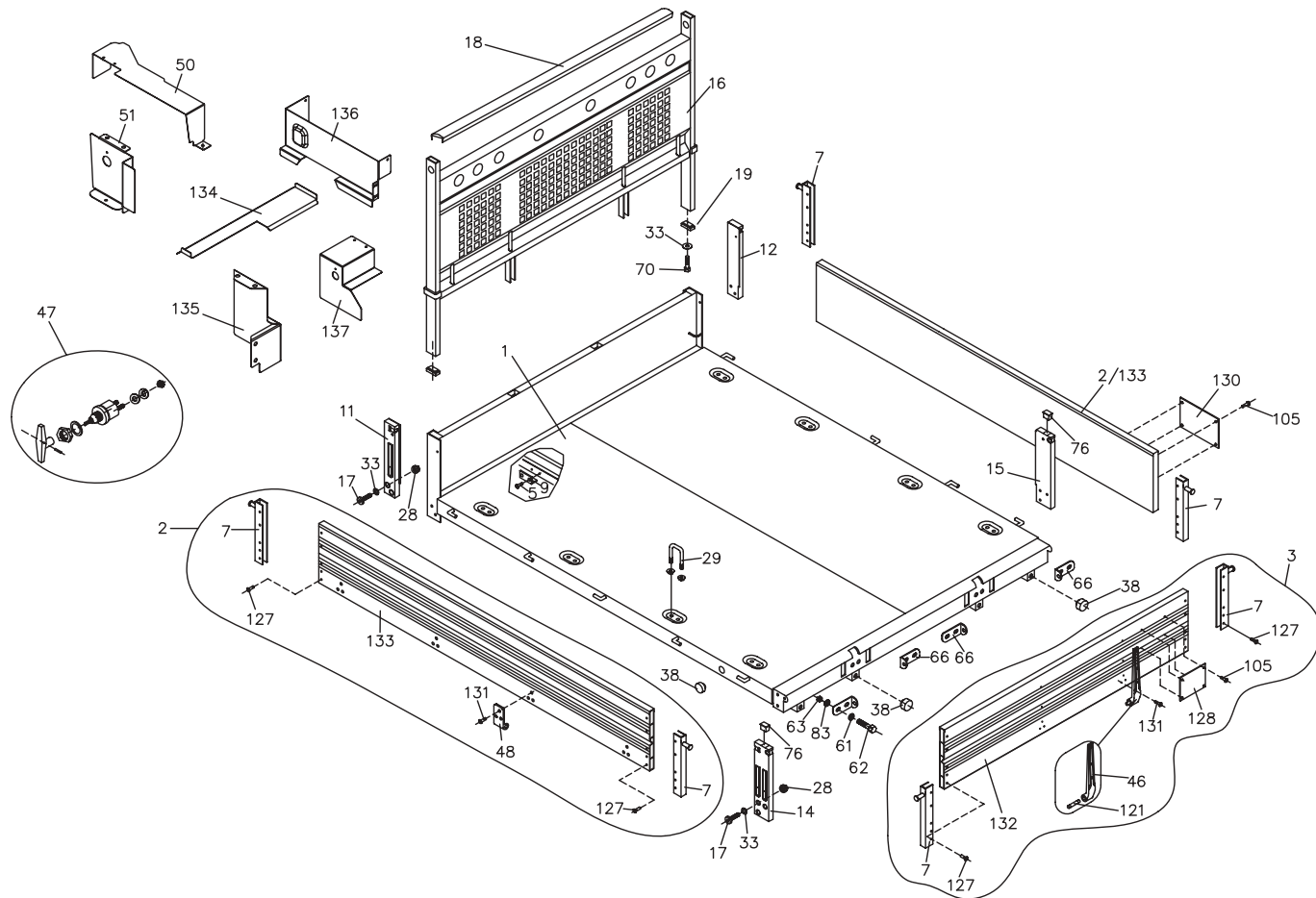
SO50 6RR

 Phone 023 8065 1704

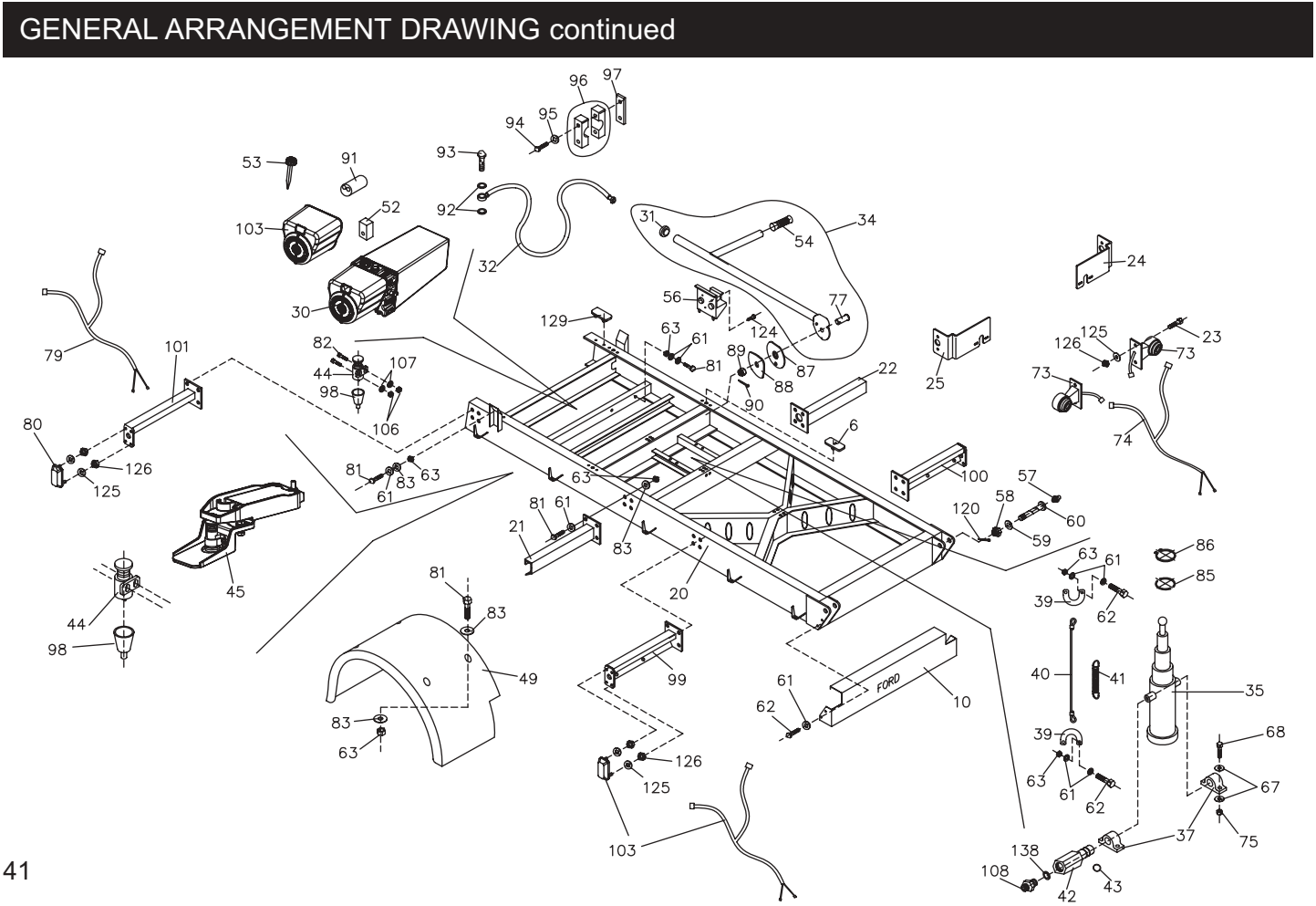
 Fax 023 8062 0999

Email: parts@vfs.co.uk

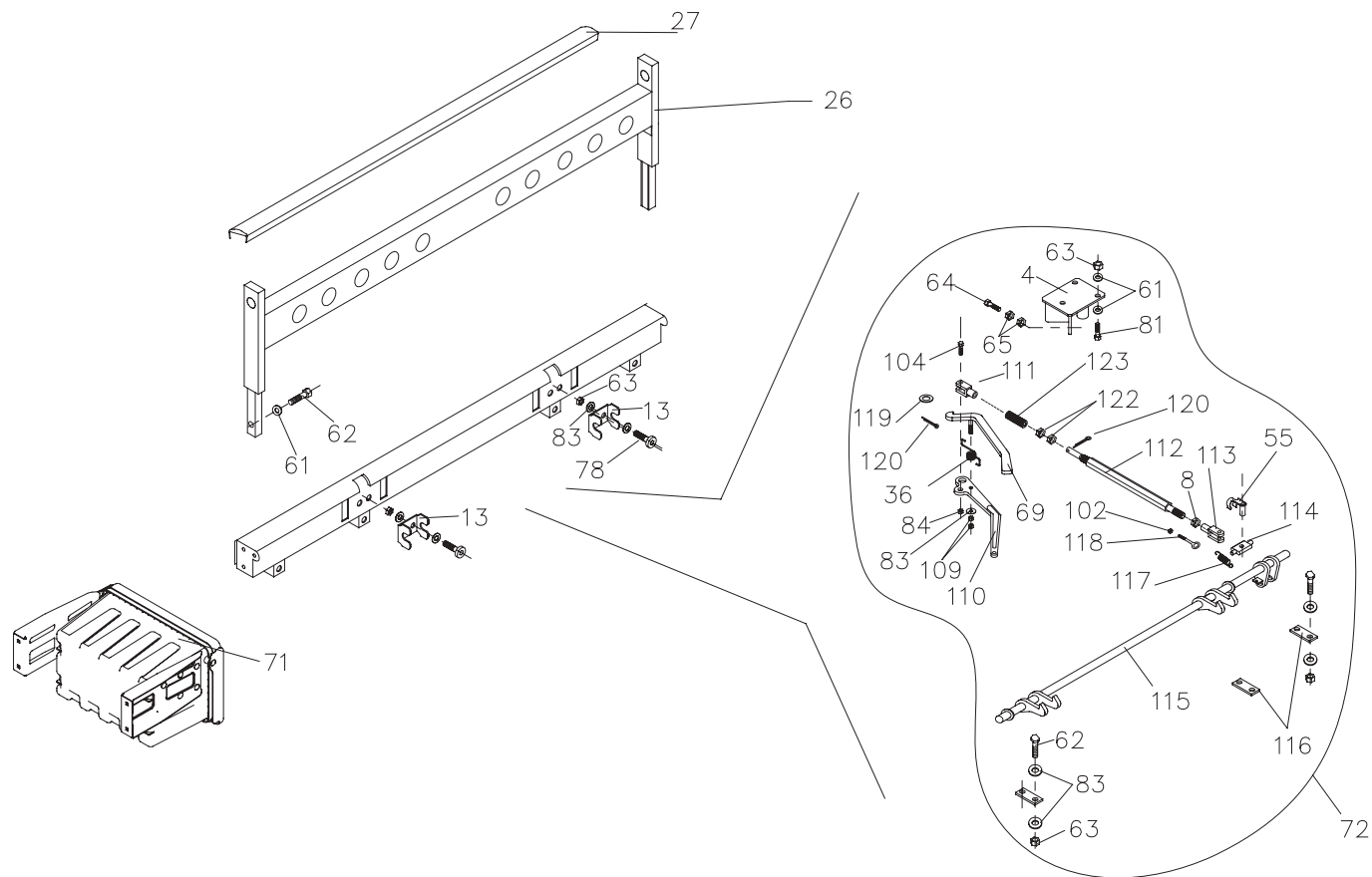
GENERAL ARRANGEMENT DRAWING



GENERAL ARRANGEMENT DRAWING continued



OPTIONAL ACCESSORIES



SPARE PARTS LIST

ITEM NUMBER	DESCRIPTION	PART NUMBER	
		SINGLE CAB	DOUBLE CAB
1	Frame Assy	UK84VR32L6	UK84VR31L6
2	Sideboard including Latches	UK84SL045	UK84SL044
3	Tailboard including Latches	UK84SP013	UK84SP013
4	Tailboard Release Lever Mtg Bracket	UK84ASSU00L6	UK84ASSU00L6
5	Rivet Ø6 x 12	107980	107980
6	Rubber Bumper Plate	151196	151196
7	Board End Cap	SCGESLTS00L6	SCGESLTS00L6
8	M12 High Nut	103580	103580
9	Teflon Bumper Plate	151153	151153
10	Rear Protection Plate	UK84CRPR04L6	UK84CRPR04L6
11	LHS Front Sideboard Latch Assy	110509	110509
12	RHS Front Sideboard Latch Assy	110508	110508
13	Tail Board Hook	701684	701684
14	LHS Rear Corner Pillar Latch Assy	110599	110599
15	RHS Rear Corner Pillar Latch Assy	110598	110598
16	Headboard Cab Protection	UK84PR003	UK84PR003
17	M12 x 30 x 1,25 Screw	101051	101051
18	Cab Protection Rubber	151199	151199
19	Cab Protection Fixing Plate	UK84PRAC02L6	UK84PRAC02L6
20	Subframe	UK84CR18L6	UK84CR17L6
21	Bracket Fender LH Front	UK84PGSU01L6	UK84PGSU01L6

22	Bracket Fender RH Front	UK84PGSU00L6	UK84PGSU00L6
23	Slotted Head Screw	102568	102568
24	Marker Lamp Bracket RH	UK84BPSU00L6	UK84BPSU00L6
25	Marker Lamp Bracket LH	UK84BPSU01L6	UK84BPSU01L6
26	Rear Bolster	UK84PP000	UK84PP000
27	Rear Bolster Beam Rubber	151147	151147
28	Flanged Nut M12 x 1,25	101045	101045
29	U-Bolt With Flanged Nuts	732020	732020
30	12V Hydraulic Power Pack	135842	135842
31	Body Prop Rubber Bung	151117	151117
32	Hydraulic Hose	130509	130509
33	Ø12 Washer	103843	103843
34	Body Prop	UK84CRPS04L7	UK84CRPS04L7
35	Hydraulic Cylinder	135949	135949
36	Tailboard Release Spring	150719	150719
37	Ram Support Bracket	110400	110400
38	Rubber Bump Stop	150269	150269
39	Safety Cable Mtg Bracket	BIGEVAC00L6	BIGEVAC00L6
40	Safety Cable	150096	150096
41	Safety Cable Spring	150702	150702
42	Hydraulic Safety Valve	SCGEVAPR00L7	SCGEVAPR00L7
43	'O' Ring - Hydraulic Safety Valve	151617	151617
44	Stroke End Switch	120754	120754
45	Stroke End Switch Mounting Bracket	FD84VASU01L7	FD84VASU01L7

46	Rear Board Hinge	110199	110199
47	Isolation Switch	120755	120755
48	Sideboard Hinge	110117	110117
49	Fender	111060	111060
50	Cable Protection Plate - Upper	UK84VAPR04L6	-
51	Cable Protection Plate - Switch Mtg	UK84VAPR05L6	-
52	Solenoid	135737	135737
53	Oil Reservoir Filler Cap	135840	135840
54	PVC Handle	151190	151190
55	Spring Clip Ø12	150053	150053
56	Body Prop Bracket	151126	151126
57	Grease Nipple M10	151302	151302
58	Nut Self Locking M24	103736	103736
59	Washer Ø24	103797	103797
60	Rear Pivot Hinge Pin	110195	110195
61	Washer Ø8	103835	103835
62	Screw TE M8 x 25	100721	100721
63	Self-Locking Nut M8	100973	100973
64	HH Screw M10 x 40	100747	100747
65	Nut M10	103576	103576
66	Rear Board Hinge Mtg Bracket	UK84SPAT00L6	UK84SPAT00L6
67	Washer Ø14	103848	103848
68	Screw TE M14 x 40	100749	100749
69	Tailboard Release Lever	701441	701441
70	HH Screw M12 x 100	100930	100930

71	Tool Box with Mounting Brackets	SCGECA006	SCGECA006
72	Tip-Through Tailboard Release Mechanism	UK84KT000	UK84KT000
73	End Outline Marker Lamp	120434	120434
74	End Outline Marker Light Loom	120433	120433
75	Self-Locking Nut M14	101023	101023
76	Rear Corner Pillar Cap	151148	151148
77	Body Prop Pivot Pin	SCGECRPS04L2	SCGECRPS04L2
78	Button Head Set Screw M8 x 20	101031	101031
79	Side-marker Lamp Loom	-	120493
80	Side-marker Lamp	-	120494
81	Screw TE M8 x 20	100714	100714
82	Screw TE M4 x 16	100706	100706
83	Washer Ø8 x 24	103837	103837
84	Self-Locking Nut M12	100993	100993
85	Hydraulic Cylinder Collets	135946	135946
86	Circlip	135947	135947
87	Body Prop Teflon Plate	SCGECRPS02L4	SCGECRPS02L4
88	Spring Washer for Body Prop	SCGECRPS03L4	SCGECRPS03L4
89	Body Prop Nut M16	103729	103729
90	Split Pin 4 x 40	109610	109610
91	Solenoid	120770	120770
92	Sealing Copper Washer	103968	103968
93	Banjo Bolt	130137	130137
94	Screw M6 x 45	100754	100754

95	Washer Ø6	103832	103832
96	Plastic Hose Clamp Assy	130285	130285
97	Hose Clamp Retaining Plate	130286	130286
98	Rubber Protection Boot	120756	120756
99	Bracket Fender LH Rear	UK84PGSU00L6	UK84PGSU03L6
100	Bracket Fender RH Rear	UK84PGSU01L6	UK84PGSU02L6
101	Side Marker Lamp Bracket	-	UK84CRSU11L6
102	Nut M6	103569	103569
103	Power Pack Motor Cover	135839	135839
104	Screw TE M12 x 40	100748	100748
105	Stainless Steel Rivet Ø4.8	108027	108027
106	Nut M4	103565	103565
107	Washer Ø4	104060	104060
108	Hydraulic Connector 1/2"M – 1/2"M	131461	131461
109	Nut M8	103572	103572
110	Tailboard Release Handle	110904	110904
111	Coupling	160711	160711
112	Adjustable Linkage	701306	701306
113	Coupling	150052	150052
114	Linkage End Fitting	700949	700949
115	Tailboard Locking Bar	SCGEAS002	SCGEAS002
116	Tailboard Locking Bar Fixing Plate	SCGEVRSG01L6	SCGEVRSG01L6
117	Spring Ø3 x 16.5 x 64.5	150700	150700
118	Eye Bolt M6	151714	151714
119	Washer Ø22/40	103863	103863

120	Split Pin Ø4x50	109612	109612
121	Hinge Pin Ø12	700997	700997
122	Nut M14	103586	103586
123	Bellville Washer Ø25 x Ø12.5 x 1.5	104451	104451
124	Aluminium Rivet Ø4.8 x 11.2	107922	107922
125	Washer Ø5	104062	104062
126	Nut M5	103567	103567
127	Stainless Steel Rivet Ø4.8 x 14.2	108030	108030
128	Tailboard Decal Mounting Plate	UK84SPAC02L6	UK84SPAC02L6
129	Rubber Pad	160662	160662
130	Rear Sideboard Decal Mounting Plate	UK84SLAC06L6	UK84SLAC06L6
131	Rivet Ø6.4 x 14.6	107988	107988
132	Drilled Tailboard	UK84SPBA13L1	UK84SPBA13L1
133	Drilled Sideboard	UK84SLBA45L1	UK84SLBA44L1
134	Cable Protection Plate - Floor	-	UK84VAPR06L6
135	Cable Protection Plate - Rear	-	UK84VAPR07L6
136	Cable Protection Plate - Front	-	UK84VAPR08L6
137	Cable Protection Plate - Switch Mtg	-	UK84VAPR09L6
138	Main Fuse - 150 Amp	0-376-15	0-376-15
139	Power Cable - Battery to Fuse	VFS01-11-246A	VFS01-11-246A
140	Power Cable - Fuse to Switch	VFS01-11-282B	VFS01-11-282B
141	Power Cable - Switch to PSM	VFS01-11-349A	VFS01-11-353A
142	Power Cable - PSM to Motor	VFS01-11-350A	VFS01-11-350A
143	Earth Cable - Motor to Battery	VFS01-11-283A	VFS01-11-286A
144	Control Loom Assy - Front	VFS01-11-347A	VFS01-11-351A

145	Control Loom Assy - Rear	VFS01-11-348A	VFS01-11-352A
146	Rear Chassis Box - Alarm Assy	VFS01-11-052	VFS01-11-052
147	Power System Module	VFS01-11-326A	VFS01-11-326A
148	Tipper Control Module	VFS01-11-324A	VFS01-11-324A
149	Identification Plate	VFS01-11-250A	VFS01-11-250A
150	Badge - "Tipper"	VFS01-11-013	VFS01-11-013
151	Handbrake Switch	VFS01-11-058	VFS01-11-058
152	Warning Triangle	1221082	1221082
153	Decal - Headboard 400Kg	VFS01-11-290A	VFS01-11-290A
154	Decal - Do Not Overhang Material	VFS01-11-297A	VFS01-11-297A
155	Decal - Do Not Work Under... unless Mechanical Support	VFS01-11-291A	VFS01-11-291A
156	Decal - Do Not Work Under... Isolator Switch	VFS01-11-292A	VFS01-11-292A
157	Decal - Body Prop	VFS01-11-296A	VFS01-11-296A
158	Decal - Headboard Slippery Load Bed	VFS01-11-293A	VFS01-11-293A
159	Decal - Isolation Switch	VFS01-11-254A	VFS01-11-254A
160	Decal - Tipper Main Fuse	VFS01-11-040J	VFS01-11-040J
161	Decal - QTR Window (Before Tipping)	VFS01-11-072L	VFS01-11-072L
162	Decal - Beware of Live Wires	VFS01-11-294A	VFS01-11-294A
163	Decal - Tailboard (Lamp Obscuration)	VFS01-11-295A	VFS01-11-295A
164	Decal - Headboard (TUV)	VFS01-11-253A	VFS01-11-253A
165	Decal - Subframe (dB Warning)	VFS01-11-132A	VFS01-11-132A
166	Decal - Warning Keep Hands Clear	VFS01-11-267A	VFS01-11-267A



Your Total 'One Stop' Solution Provider For Vehicle Conversions

EC Declaration of Conformity

In accordance with BS EN ISO 17050-1:2004.

We
of
VFS (Southampton) Ltd.
Unit 8 Barton Park Industrial Estate, Chickenhall Lane, Eastleigh,
Hampshire, SO50 6RR, UK

declare that:

Equipment Ford Transit Chassis Cab installed with a Tipping Body
Serial Number
Model Number
Chassis Number

is in accordance with the following Directive(s):

98/37/EC Machinery Directive
89/336/EEC Electromagnetic Compatibility Directive and its amending directives

and has been designed and manufactured to the following specifications:

UNI 10692 (May 1998); Road Vehicles. Tipping equipment. Design criteria for safety prop, maintenance operations.
UNI 10693 (May 1998); Road Vehicles. Tipping equipment. Design criteria for manufacture and design of tipping equipment. (Annex TUV CV006/04 applies)
UNI 10694 (May 1998); Road Vehicles. Tipping equipment. Design criteria for multi-stage cylinder limit stop.

UNI 10695 (May 1998); Road Vehicles. Tipping equipment. Design criteria for the correct and safe operation of a multi-functional tipping body. (Annex TUV CV006/04 applies)

I hereby declare that the equipment named above has been designed to comply with the relevant sections of the above referenced specifications. The equipment complies with all applicable essential requirements of the Directives.

Signed by: *Barry Whittaker*

Name: Barry Whittaker

Position: Quality Director

Installed at: Eastleigh, Southampton

On: 14/02/2007

CE07