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BMI EJECTOR TRAILERS

OPERATING AND SAFETY INSTRUCTIONS

1.0 Introduction

Congratulations on your purchase of a BMI ejector trailer. These trailers have a proven record in the haulage industry for reliability, durability and strength of the product.

This manual intends to give you all the required information of how to operate and maintain your BMI ejector trailer. Before starting to operate your trailer you must read the manual.

If you require any assistance or replacement parts, the contact address and telephone numbers are listed below:

Address:	**The bmi group** **Unit 20 Granville Industrial Estate** **Dungannon Co** **Tyrone Northern** **Ireland BT70 1NJ**
Telephone:	**+44 (0)28 8775 3999**
E-Mail Address:	**spares@thebmigroup.com**
Web Address:	**www.bmigroup.com**

The use of genuine 'BMI' spare parts is essential for the long and trouble free life of your trailer; any variance from this will render ***warranties invalid.***

Due to our policy of continuous redevelopment and improvement, our company reserves the right to modify the design and specifications without any prior notice.

2.0 General Description

The BMI ejector trailer is a high quality bulk-carrying vehicle with uses for waste disposal, recycling, or any application where control of discharge is critical.

The ejector principal overcomes the hazards of tipping trailers and allows the operator to select the discharge point accurately.

BMI ejectors are available in a wide variety of body sizes, with a choice of running gear and ancillary equipment. The six-stage ejector ram is powered from a hydraulic pump that is driven either from a truck PTO or an auxiliary engine installation.

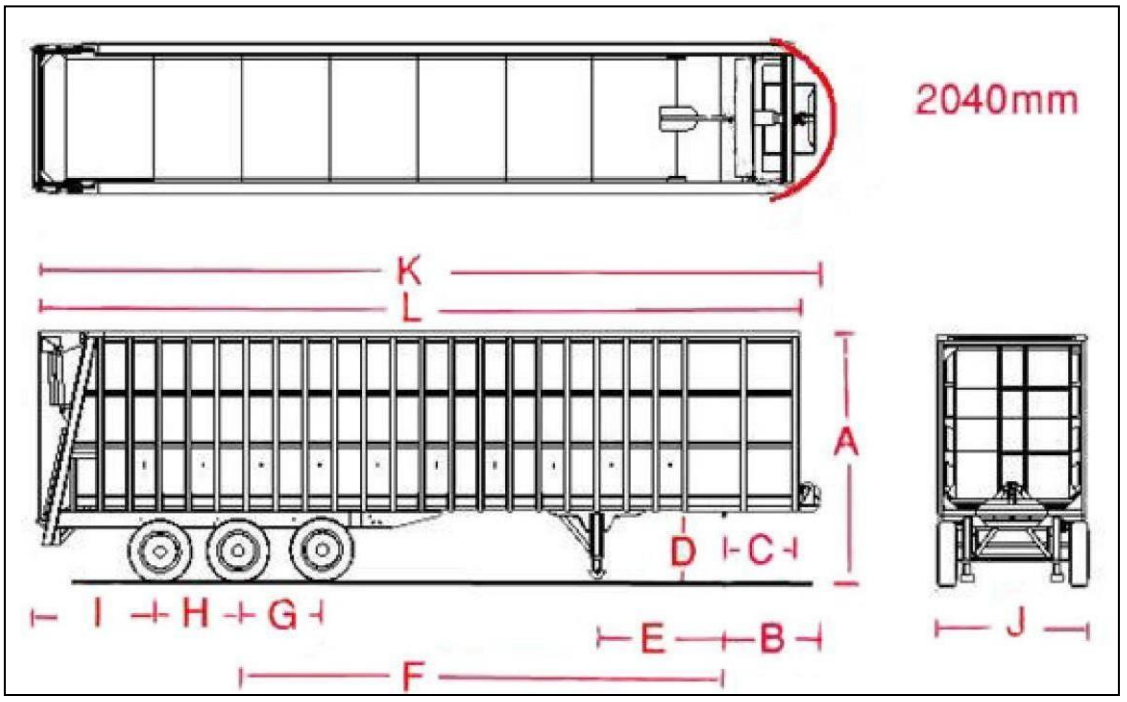
The frame and running gear for an ejector trailer follow standard approved practices but weight is minimised and hence, load capacity is maximised by the use of monocoque chassis construction. Floor supports are integrated with the trailer frame giving enhanced rigidity to the body.

Ejector bodies are fabricated from high-grade steel with a reinforcing shape design which makes it operate extremely well under all conditions of normal operation.

This manual covers the three main aspects of the ejector trailer; technical specification, operating safety and maintenance. To achieve maximum use from the trailer it should be studied in detail before the trailer is put into service.

The bmi Group operates a policy of continual product improvement and the details of any newtrailer will be included in the specific manual for that trailer.

3.0 Trailer Specification



Trailer Sizes (mm)				
Key	**100 yard**	**105 yard**	**110 yard**	**120 yard**
A (mm)	4110	4230	4380	4530
B (mm)	1600	1600	1660	1600
C (mm)	1300	1300	1300	1300
D (mm)	1300	1300	1300	1300
E (mm)	2400	2400	2400	2400
F (mm)	8120	8120	8120	8120
G (mm)	1310	1310	1310	1310
H (mm)	1310	1310	1310	1310
I (mm)	2365	2365	2365	2365
J (mm)	2540	2540	2540	2540
K (mm)	13680	13680	13680	13680
L (mm)	13450	13450	13450	13450

4.0 Operation Instructions

4.1 Health and Safety Legislation:

The information in this chapter is issued in compliance with the Health and Safety Act 1992. Purchasers of BMI TRAILERS are advised to ensure that all of their staff concerned with the operation of the ejector trailer are fully conversant with the operation systems and have been instructed on the safety aspects of the operation.

BMI ensure, as far as is reasonably practicable, that their products are safe to use when properly operated. No liability can be accepted for defects or accidents caused by operating the trailer outside its design limits. The following points should be brought to the operator's attention.

HSE PUBLICATIONS AND INFORMATION - The Road Haulage Association supplies a full list of publications. The following particular web-links may be of interest to ejector trailer users:

Reversing Vehicles
Managing Vehicle Safety at the Workplace
Danger – Vehicles at work

4.2 The Principle Operation guide

This principle operation guide is a simplified checklist for the highly experienced user. On the following page, a more comprehensive guide on how to operate a BMI ejector trailer is explained.

Before using the trailer you must ensure that:

The trailer is on stable ground and there are no persons at the rear or sides of the trailer.
The sheeter system is fully opened before opening the tailgate. These can be a number of different sheeter systems. If unsure, please relate to the more comprehensive guide on the following pages.
The tailgate is in the fully opened position before the blade is operated.
All safety checks have been completed before ejecting the blade.
Ensure the Suisse lead has been coupled up between the tractor unit and the trailer and the side lights are switched on.

Once the trailer has ejected its load, complete the following steps:

Retract the blade fully
Close the tailgate ensuring no persons at the rear of the trailer
Close the sheeter system.

4.3 The Comprehensive Operation Guide

Below is complete guide for the less experienced operator. The trailer is broken down to several key operation areas. Each must be completed before the next can be started. Please follow the steps to complete each operation.

If unsure, please contact BMI Trailers Ltd before starting any operation.

4.4 Sheeter Systems

The sheeter system is the only operation in the loading process. Please ensure that the nets are fully open before any material is inserted into the ejector trailer and then fully close the sheeter system before the ejector trailer begins transportation.

This process is repeated when off-loading the material. Please ensure the sheeter system is fully open before tailgate is open. If this is not done then it will cause damage to the sheeter at the rear of the trailer. If applicable, ensure the sheeter protection is engaged.

Once the material is fully ejected from the trailer, ensure the blade is retracted and the tailgate is fully closed before closing the sheeter system.

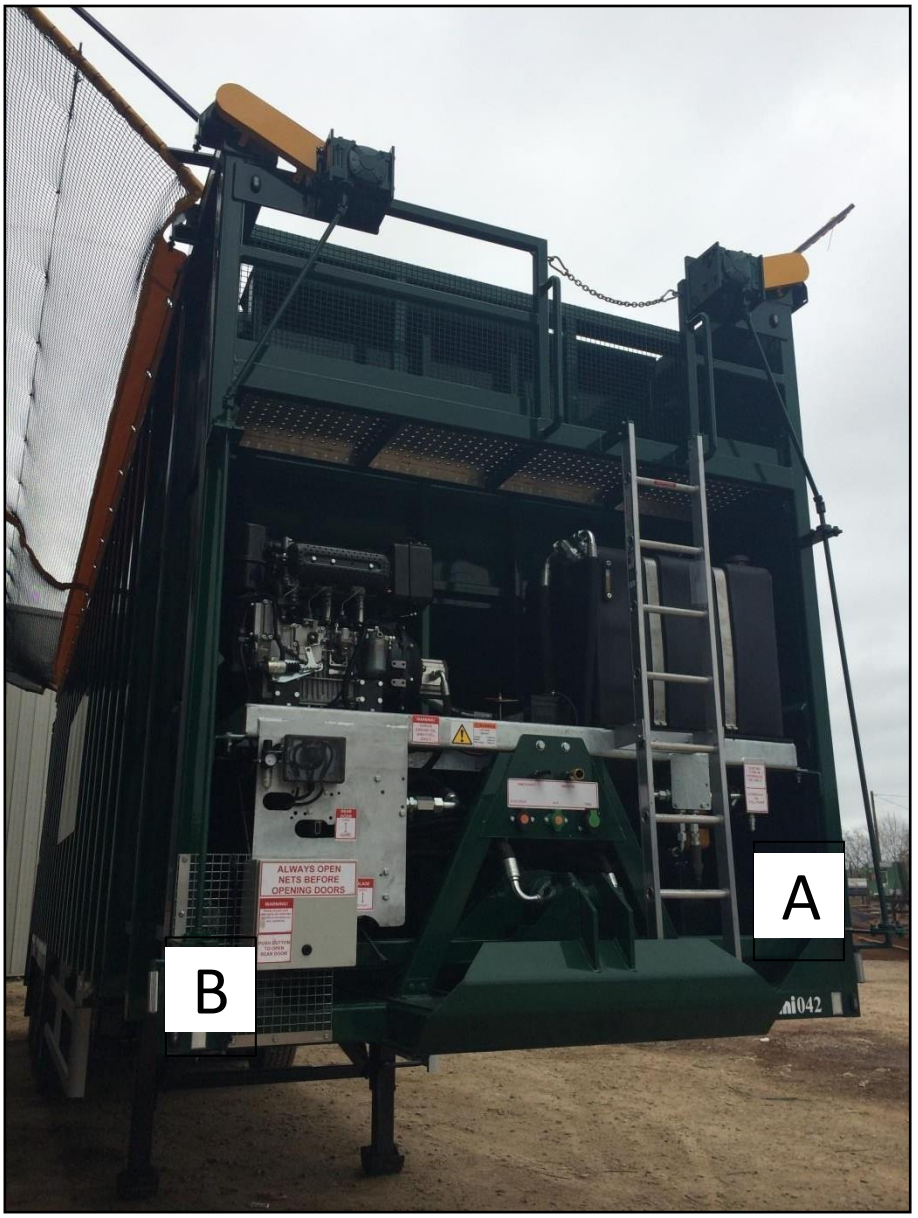
There are four different types of sheeter system available and the operation of each is listed below. Please refer to the system that applies to your trailer.

4.4.1 Manual Half-Net Sheeter System

This is the manually operated system which works by the sheeter being controlled by the driver. Please ensure to open the half nets in the correct order. Below is a guide how to operate.

Before operating ensure the tailgate is fully closed.

The half-nets are opened manually by turning a handle on both sides.
First turn handle at (A) on the passenger side to operate net
Then turn handle at (B) on the driver side to open second net.
Ensure sheeter protector switch (if applicable) is engaged.



4.4.2 Hydraulic Half-Net System

The hydraulic half-nets are an optional extra. The operator can open this sheeter system via two lever controls at the front of the trailer. Each lever arm controls the movement of one half of the nets. Below is a guide how to operate.

Before operating ensure the tailgate is fully closed.

The operator MUST open the passenger side net first in order to prevent damage to the sheeter system.

Open the driver side net second using the second control lever.

Below is an illustration showing how this operation is completed.

4.4.3 Hydraulic Full-Net System

The hydraulic full-net system is an optional extra. The operator can open this sheeter system via one lever control at the front of the trailer. The lever arm controls the movement of the full net. Below is a guide how to operate.

Before operating ensure the tailgate is fully closed.

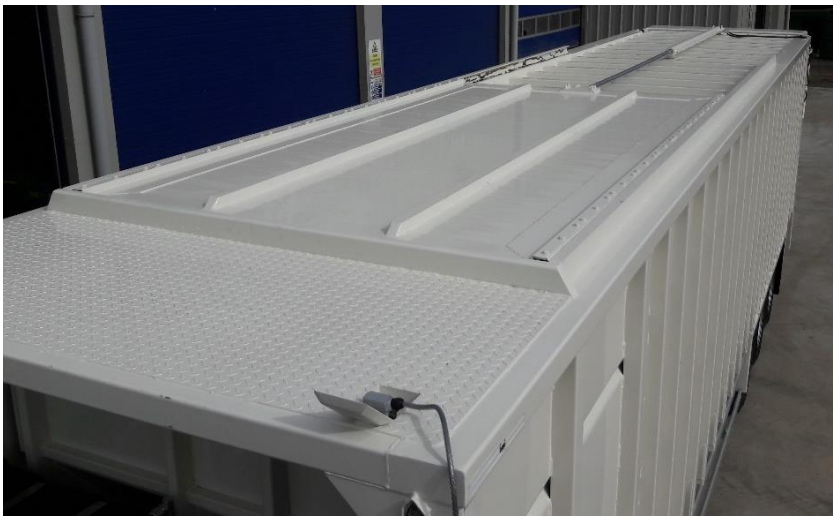
When operating this system, a distance of at least three metres must be maintained to prevent damage to other objects. Operator should take care for overhead hazards; power lines, bridge structures etc.

The operator can open the net from the front control panel via the sheeter lever.

To close the sheeter, please pull the sheeter lever down.

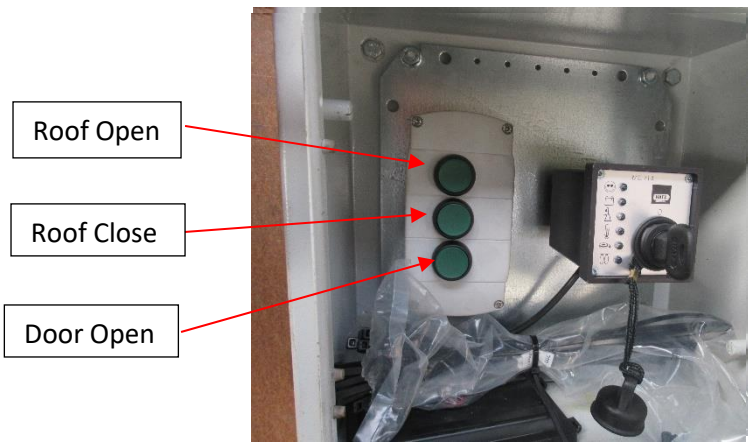
4.4.4 Hydraulic Sliding roof system

The 4m front opening hydraulically operated solid alloy roof is operated from within the control box at the front of the trailer or the auxiliary control box (if supplied)



To open the roof, start the engine and press the top button of the three button controller inside the control box at the front of the trailer. Or the button on the auxiliary control box if included.

The roof is closed via the second button on the 3 button controller or the close button on the auxiliary control box.



4.4.5 Hydraulic Sliding roof system 2023

The 4m front opening hydraulically operated solid alloy roof is operated from the remote system supplier with the trailer – please check your remote for the corresponding labels for roof open and closed.

To open the roof, start the engine and and press the roof open and closed functions on the remote.

Ensure the blade is fully retracted. IF the blade is out of position the strobes mounted on the side of the trailer will be flashing.

4.5 Tailgate

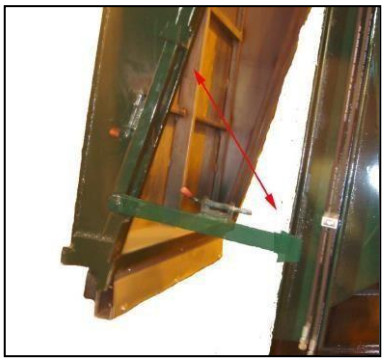
The tailgate can be controlled from the front or the back of the trailer depending on the controls on the trailer.

Ensure the sheeter system is fully opened out to prevent damage occurring.

The user can open the tailgate from the front via single push button control and close it from the rear position via dual push button controls

Unless the trailer is a ‘compaction’ trailer, at no time should the load be pushed against the closed rear door as this will result in severe damage.

4.5.1 Standard Tailgate Prop



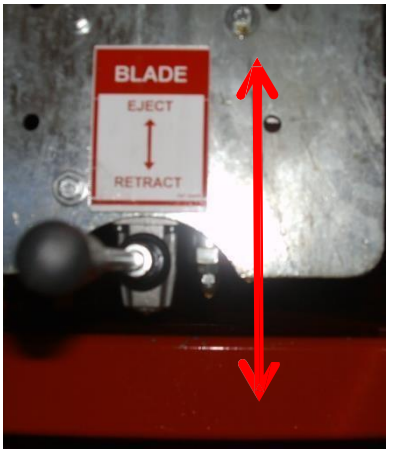
This extra safety feature ensures that the tailgate will not close until it is in the upright position. For normal operations, the safety prop can be kept in its secure position via a spring loaded latch.

4.6 Blade

The blade can be controlled from the front of the trailer at the main control panel. The purpose of the blade is to eject the material from inside the trailer out through the opened tailgate. Please follow operational instructions.

Firstly, confirm that both the sheeter system and the tailgate have both been fully opened to prevent damage to the trailer.
Before operating the blade, warn everyone in the vicinity of the trailer that they must stay clear of the rear of the trailer as it ejects the material.

To operate the blade:



Once the safety information above has been carried out, the operator can activate the blade by pushing the lever up to start the ejector ram pushing the blade out.
Once the material has been fully ejected, the lever can be pushed down to retract the blade back to the front of the trailer.

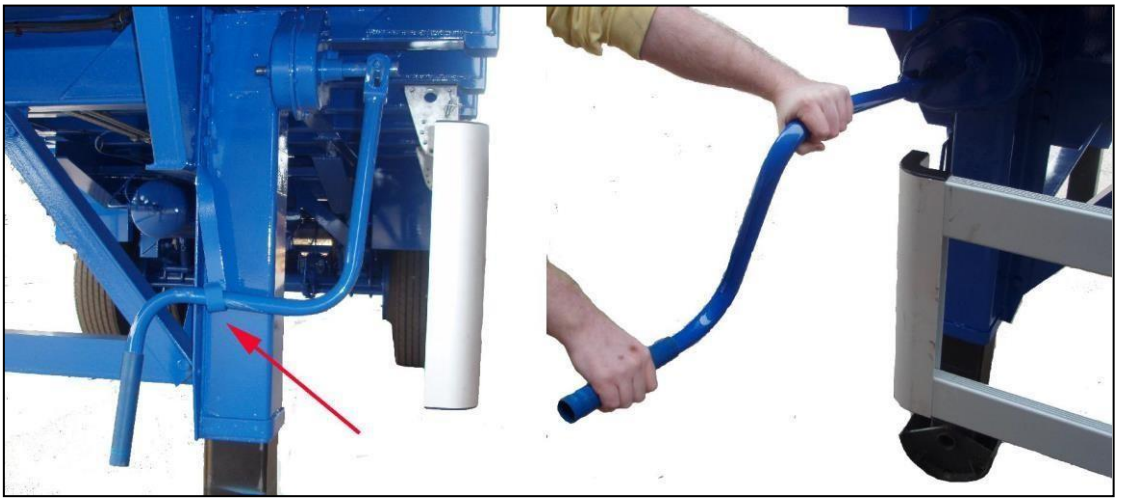
If the blade stops manoeuvring before the material inside the trailer is fully ejected, it is strongly advised that you retract the blade fully and start once more. If the operator does not fully retract the blade before starting the ejection process, it will damage the hydraulic ram. **This will void the warranty.**

Do not attempt to speed up the operation of the ejector ram by increasing the system pressure or engine revolutions beyond prescribed limits. **This will void the warranty.**

4.7 Landing Legs

The landing legs are used when the trailer is in stationary position when unhooked from the tractor unit. They are operated by the use of the manual handle which, when turned, retracts and extrudes out the landing legs to the desired height.

> Ensure the handle is securely placed back into its holder after use.
> If on soft ground, position a plank under the legs to prevent them from sinking.



4.8 Coupling Trailer to Tractor Unit

Ensure that the trailer mechanical parking brake is applied.

Check that the fifth wheel jaws are open and the rear end is tilted downwards.

Ensure that the support legs are adjusted to the correct coupling height. If necessary, adjust using the lower gear.

Align the tractor and trailer and slowly reverse the tractor into coupled position.

Check the security of the coupling by attempting to move forward with the trailer brakes applied. Visually check that the tractor and trailer are correctly coupled and securely locked.

Connect the electrical couplings and airlines to their respective couplings.

Raise the support legs to their fullest extent and secure in the running position.

Check that the trailer brakes have released and release the parking brake.

4.9 Uncoupling Trailer from Tractor Unit

Apply the trailer parking brake.
Lower the front support legs to take the weight of the trailer. If on soft ground, position a plank under the legs to prevent them from sinking.
Disconnect the electrical coupling and airlines and attach them to the dummy coupling to avoid contamination.
Unlock and release the fifth wheel coupling and slowly drive the tractor clear of the trailer.

4.10 Loading Trailer

Customers have various methods of loading their ejector trailers. To ensure the safety of the operator and to prevent damage to the Bmi ejector trailer, please consider these cautions.

When loading the trailer unit you must be careful not to damage the sides or the roof severely as this could result in the blade sticking, or to the sheeter system not being able to operate correctly. **This will void your warranty.**
Pay Load; the trailers are designed and constructed to carry the rated payload distributed evenly along the length of the trailer. Concentrated loads will reduce the capacity of the trailer and may impair safe handling. Operators must ensure that axle load regulations are not infringed by incorrect loading or positioning of such loads. **This will void your warranty if not followed.**
Operators must ensure that the axle loading limits and neck ratings for the vehicle are not exceeded. These limits are to be found on the plates attached to the main rail. Unless otherwise arranged, the trailers are designed for highway use only. **This will void your Warranty if not followed.**

4.11 Engine

There are four different engines which can be used on the Bmi ejector trailers, each having a different specification. All the engines are activated via a start box on the main control panel. The engines types are listed below and explained in more detail:

4.11.1 Lombardini Series 11LD

The Lombardini Series 11LD engine is one with little protective covering. When using this engine, be aware that the maximum torque is 32.8 Nm; and the minimum allowable oil pressure is 1.5 Bar. The complete list of specifications is listed below:

The engine is a four stroke air cooled diesel engine with direct injection

Axial blower air cooling
Mechanical fuel lift pump
Forced lubrication with gear pump
Full flow oil filtration with external cartridge filter
Torque regulator
Electric starting
Oil cooler

4.11.2 Lombardini Sileo

The Lombardini Sileo engines are the quietest engine in the Lombardini range. They have a power pack which is covered and protected. Every part of the engine is protected inside this covering which makes it very resilient. There is a control panel mounted on the shell where the hour counter is also positioned for handy maintenance programming. As a result of the sheet, there is protection to the atmosphere. The rest of the specifications are listed below:

It is a four stroke diesel engine with 3 - 4 vertical cylinders in a row
Cast iron mono block with re-bore-able integral barrels
Indirect injection
Liquid cooled with axial fan and air / liquid radiator
High capacity dry air filter
Exhaust silencer

4.11.3 Hatz Silent Pack

This Hatz engine is the quietest engine in the field, produced with an outer shell containing everything inside the shell to protect the operation of the working components. Specifications listed below:

The engine is a four stroke air cooled diesel engine
Direct fuel injection
The oil pressure is at minimum 0.6 Bar.

4.11.4 Standard 2-Cylinder Hatz

One of the most robust and durable in this market segment, the extremely compactly built two- cylinder engine is distinguished by its high reliability and, not least, flexible in application thanks to its dimensions. The light metal construction of the housing and die-cast aluminium cylinder heads keep the weight low, between 88 kg and 105 kg depending on the version.

4.11.5 3 Cylinder Yanmar

- EU Stage5 Ready
  Cleanest engine in its category
- No Scheduled Maintenance DPF* for 6,000 hours
  Seamless operation in the field
- Tough and Reliable Power
- Best in Class Fuel Consumption

4.11.6 Engine Safety

For each one of the engines, the following must be adhered to for personal safety:

Never start the engine when any persons are in the trailer.
Once the engine is started, allow it to reach the optimum pre-set RPM before operating the hydraulics.
The exhaust must **NEVER** be touched when the engine is in operation or shortly after operation as it will be extremely hot.
Do not use the engines in small enclosed spaces as the fumes of the engines are toxic.
Stop the engine before any maintenance work is carried out or before refueling.
Never wear baggy or loose fitting clothing when operating the engine.
If the engine has run dry, prime the fuel before attempting to start the engine.
Always make sure the batteries are kept away from hot parts of the engine as this could result in flames.
Never use contaminated diesel

4.12 Remote Control

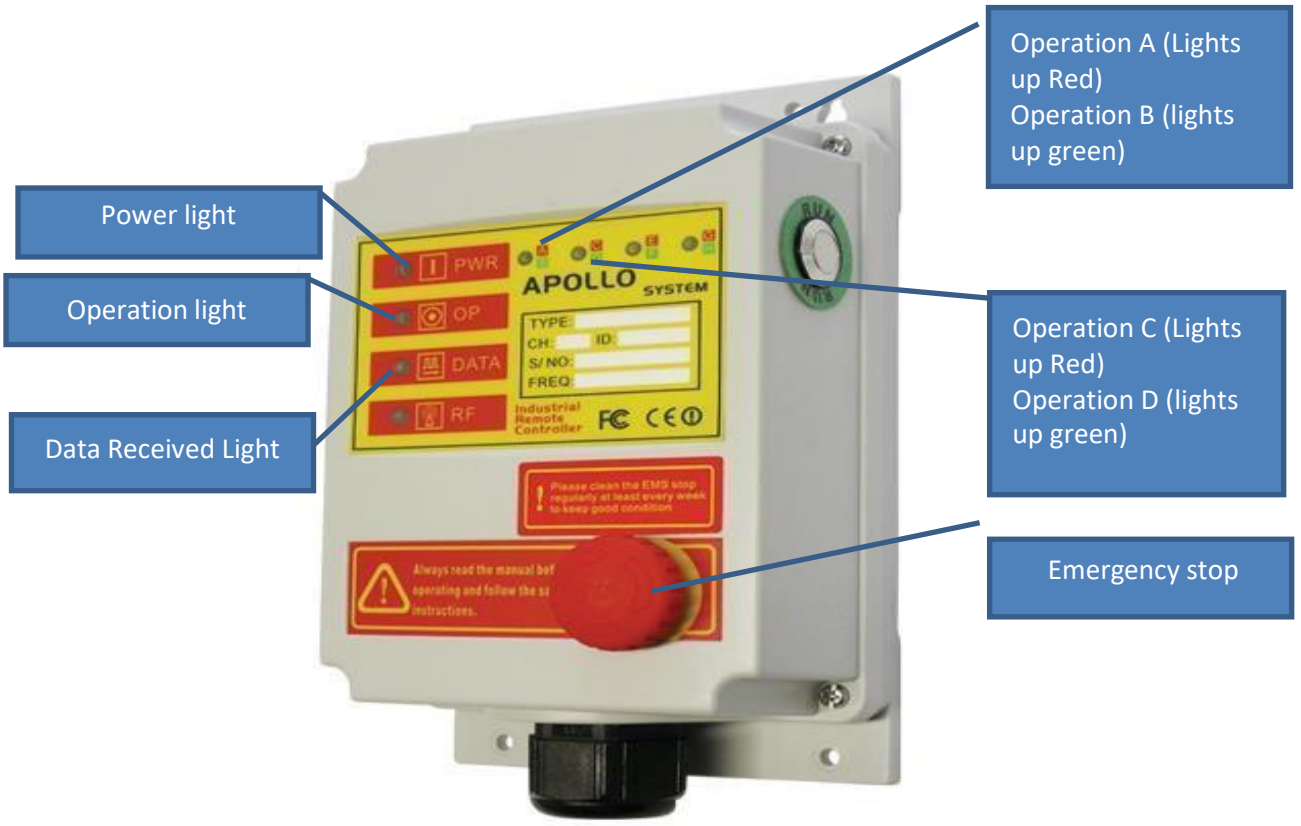
Ensure the following before you start to use the remote

That the Suisse lead has been coupled up between the tractor unit and the trailer and the side lights are switched on.
That the red airline has been coupled up between the tractor unit and the trailer
That the hydraulics have been coupled up and the PTO is engaged
That emergency stop buttons have been reset.
That the power button on the remote is on and green.
That the power button on the receiver is on and green.
When you select a function the correct colour on the receiver lights up.

Correct Operation

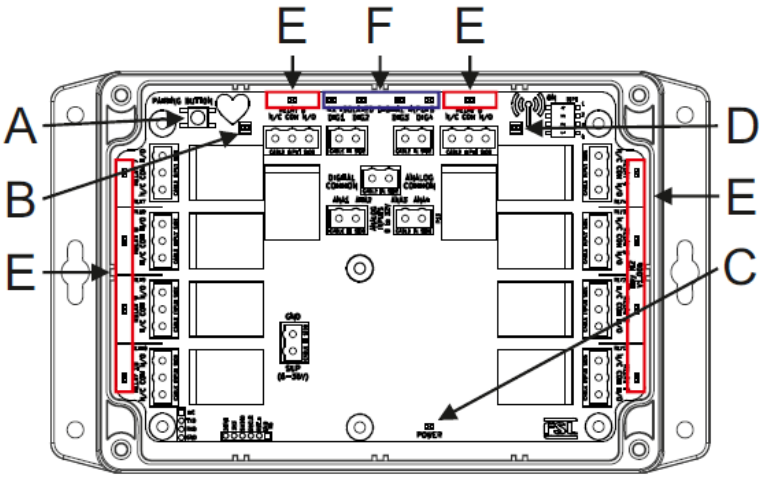
1. Insert safety catch and release emergency stop to turn on the remote.
2. Choose a function and press and hold the button
3. When finished remove the safety catch and/or press the emergency stop button.

4.12.1 The Apollo Receiver



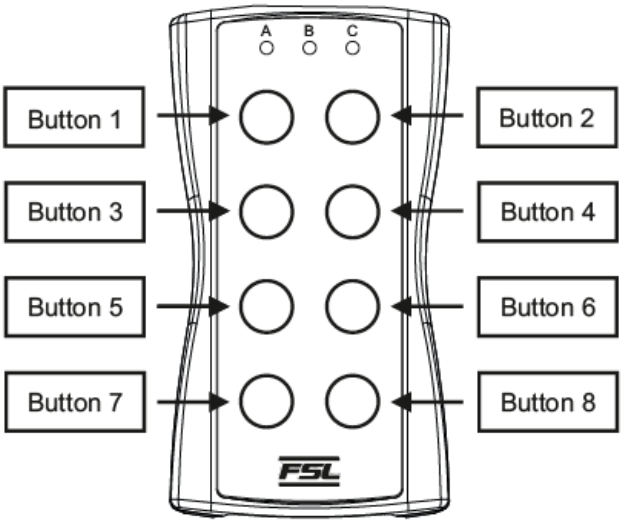
4.12.2 Your Remote control with functions

4.12.3 The FSL Reciever



A	Pair Button
B	Heartbeat LED
C	Power LED
D	Transmission LED
E	Relay LEDs
F	Digital Input LEDs

4.0.1 The FSL Remote



5.0 Compactor Tailgate Options

5.1 Option 1

Our most common option for the ejector tailgate arrangement is shown below. The off-loading of this compactor is hydraulically controlled and operates like our conventional ejector trailers withoptions of the controls being at the front or rear of the compactor.

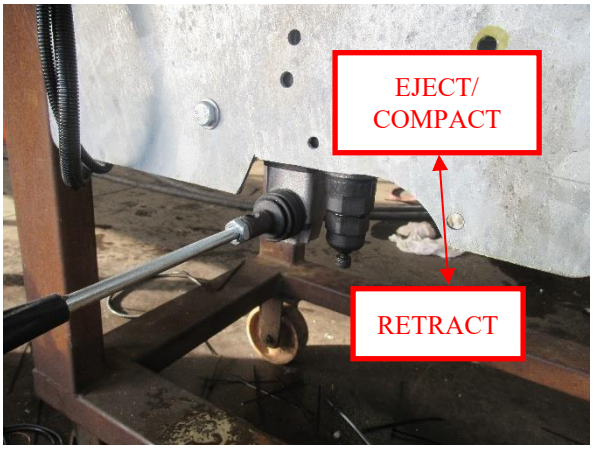
Should extra pressure be needed to fully eject the load, (Doors open) the green push button can be pressed along with operating the manual ejection lever.

<u>This button should never be used for compaction.</u>

5.1.1 Compaction with option 1 hydraulic door.

For compacting the load with this option of back door, the back door should be fully closed, the chains should be attached to the latching points and fully tightened.

Compaction can be controlled from the auxiliary control box or the ejection lever at the front of the trailer.



NOTE: Compaction should only occur at maximum 90 bar pressure. Both the manual lever and the auxiliary control box will operate the ram at maximum 90 bar pressure.

Check what remote system is installed on your trailer. As different trailers can have 2-10 functions the location on the remote for eject and compact may differ.

For these functions your remote will have bespoke labels stating eject and compact.

Before compacting, please follow the steps for tieing down the door and latching in place. After this you can use the control panel or remote styles below depending on your trailer specification.

5.2 Option Two

The loading of this compactor is achieved by manually opening the ‘barn doors’ via unlocking the door mechanisms. The off-loading of this compactor is hydraulic control and operates like our conventional ejector trailers with options of the controls being at the front or rear of the compactor.

5.3 Option Three

This final option is manually operated and requires no hydraulic assistance at any stage of the loading or unloading process. The doors are locked in place by four 30mm catches which are cam operated with damper assist. The top door can be opened separately from the bottom and it is centrally hinged to enable it to be folded over on itself for a smaller swing radius.

6.0 Ejector Trailer General Maintenance

Before attempting any maintenance, please isolate the ejector trailer. Please ensure you have qualified technicians to carry out checks and required maintenance to BMI ejector trailers.

Daily for the first 1000 Km

Torque load wheel nuts.
Torque load Kingpin bolts (190 Nm).
Connect the electrical plugs and check the operation of the lights.

Axles	Wheel Nuts	Shocks	Suspension
Mercedes	600 Nm	200Nm + ½ turn	800Nm + ½ turn
SAF	600 Nm	500Nm	400Nm + 120°
BPW	630 Nm	425Nm	660Nm

Daily after first 1000 Km

Connect the electrical plugs and check the operation of the lights.
Check brakes

Weekly for the first 6000Km

Torque load the wheel nuts
Torque load the suspension and 'U' bolts
Torque load Kingpin bolts. (190 Nm)
Check the level of hydraulic fluid in the tank

Monthly

Connect the air supply and charge the tanks.
Visually check the operation of the brakes.
Ensure that the trailer inflates to ride height.
Check the level of hydraulic oil.
Check the operation of the hydraulic tailgate and ejector ram.
Check the tyre pressure.
Check all bolts/fasteners, hinges, rams/arms on sheeter system
Check hydraulic system pressure.
Check the operation of the landing legs.
Grease blade guides using EP2 multi-purpose grease.

Yearly

Replace oil filter in hydraulic circuit.
Replace nylon side runners on blade (If applicable).
Replace nylon floor runners on blade (If applicable).
Replace rubber scrapers around blade.
Replace hydraulic oil in tank with recommend brands.
Replace air filters/oil filters/fuel filters.

Please note, the components list can be found on the following pages. The use of genuine BMI spare parts is essential for a long and trouble free life; any variance from this will render **warranties invalid**.

If a BMI ejector trailer is out of operation for more than two months, all the above checks must be carried out, including the point below:

Carry out a road test before returning to full duties.

6.1 Hydraulic Maintenance

Before attempting any maintenance, please isolate the ejector trailer. Please ensure you have qualified technicians to carry out checks and required maintenance to BMI ejector trailers. The hydraulic system is an important aspect of the trailer as it operates the blade, tailgate and sheeter system. Please follow these checks when you are completing a weekly, monthly and yearly maintenance check. These checks also apply if you are having trouble with any of the hydraulic operated features of the trailer.

Ensure gate valve is fully opened at tank exit port.
All contact levers are at the neutral position before staring the engine.
Check oil levels.
Ensure all connections are secure and there are no oil leaks.
Ensure the quick release couplings are fully engaged before operating the trailer. Note this only applies to PTO operated trailers.
Check the Suisse lead has been coupled up between the tractor unit and the trailer and the side lights are switched on.

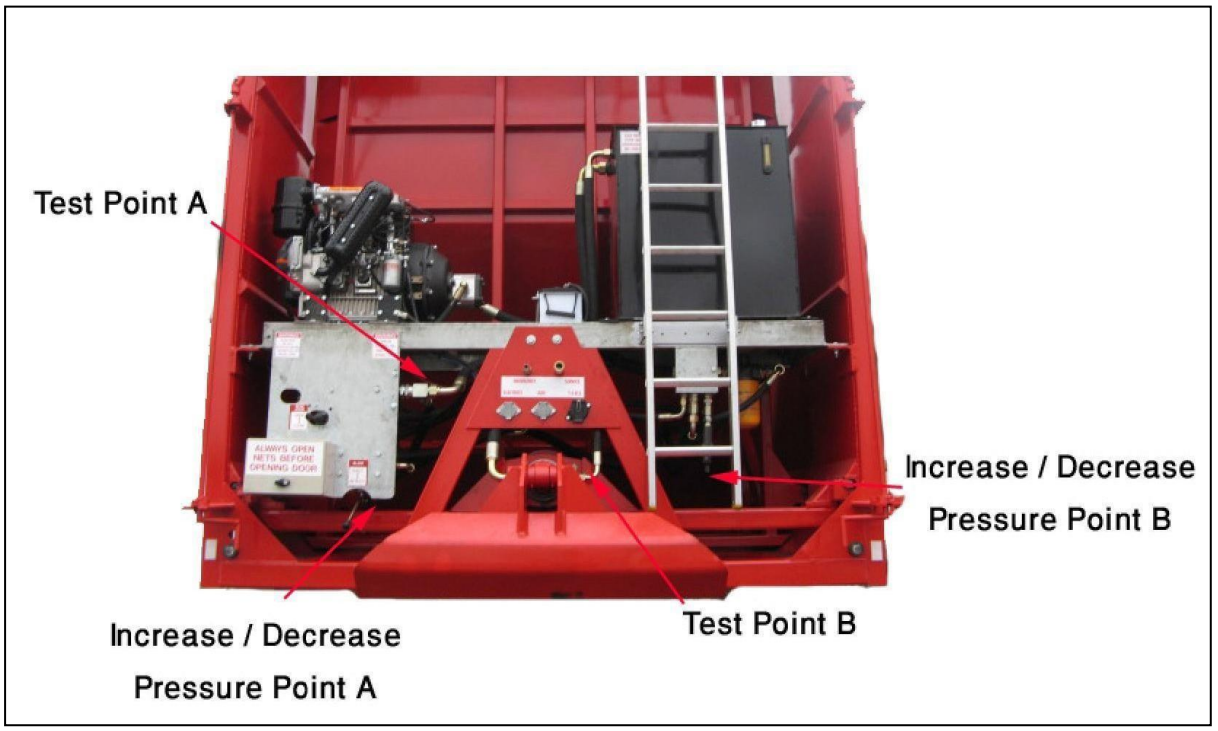
Complete a system pressure / flow check. Please follow the instructions below.

Ensure the trailer is empty.
First, attach gauge lead to test point A (see picture on next page).
Fully extend the blade.
Maximum system pressure should read 150Bar / 2175 PSI
The blade should fully extend within three to three and half minutes.

Complete a retract pressure / flow check. Please follow the instructions below:

Ensure the trailer is empty.
First, attach gauge lead to test point B (see picture on next page).
Fully retract the blade.
Maximum system pressure should read 140Bar / 2030 PSI
The blade should fully retract within one to one and half minutes.

If the BMI trailer that you are testing is not achieving the pressures or flow rates stated above please contact BMI Trailer Ltd immediately to receive advice to solve the issue. Under no circumstances should you adjust the pressure setting without receiving approval by BMI Trailers Ltd. **Failure to comply with this will result in voiding your warranty.**



6.2 Hydraulic Oil Refill Points

There are two locations where hydraulic oil can be inserted into the oil tank, at the top and bottom of the tank. The lower option allowsthe tank to be filled at ground level using a quick release coupling.

7.0 Engines General Maintenance

These are general guidelines, for more detailed engine maintenance the engine manufacturer's manual should be followed.

For each engine, the following should be carried out every ***8 – 15 hours*** of operation:

Check the oil levels by removing the dipstick
The air cleaner should be checked before starting the engine
Check the combustion air intake

For each engine the following should be carried out every ***250 hours*** of operation:

Engine oil change (use recommend brands)
Clean fan, cooling fins and oil cooler
Check the tightness of threaded connections
Clean mesh from exhaust pipe
Check for fuel contamination

For each engine the following should be carried out every ***500 hours*** of operation:

Maintain the air cleaner
Check and adjust the valve clearances
Change the engine oil
Change the oil filter

For each engine the following should be carried out every ***1000 hours*** of operation:

Renew the fuel filter

8.0 Spare Parts List

Below is a list of components that are required to be replaced in order to maintain the BMI trailers warranty. Please refer to the warranty & claims procedure on how to complete any claims.

Part number	EJ Part list and description
Hydraulic parts	
PN 0119	12VDC AIR SOLENOID VALVE KIT + AIR FITTINGS (per Pair)
PN 0120	24VDC AIR SOLENOID VALVE KIT + AIR FITTINGS (per Pair)
HY 1104	3/8" CONTROL VALVE SINGLE BANK
HY 1106	HOSE BURST V/V (RBXB-R3/8)
HY 1107	VARIABLE 3/8 FLOW RESTRICTOR (EG03RVR)
HY 1108	3/8" SINGLE PILOT OPERATED CHECK VALVE (FPS3/8)
HY 0002	3/8" DA SPRING MONO CONTROL VALVE TRIPLE BANK
HY 0003	3/8" CONTROL VALVE DOUBLE BANK
HY 0004	3/8" CONTROL VALVE DOUBLE BANK WITH ONE AIR SOLENOID
HY 0005	3/4 " MAIN CONTROL VALVE SOLENOID
HY 0008	FRONT MTD 3 BANK CONTROL VALVE(102N1PA12DDD)
HY 0010	3/8" CONTROL VALVE TRIPLE BANK WITH ONE AIR SOLENOID
HY 0014	3/8"CONTROL VALVE SINGLE BANK AIR SOLENOID
HY 0016	3/8" CONTROL VALVE DOUBLE BANK WITH TWO AIR SOLENOIDS
HY 0019	3/8" CONTROL VALVE TRIPLE BANK WITH THREE AIR SOLENOIDS
HY 1193	FLOW CONTROL (VUR-3V)
HY 1702	HIGH PRESSURE IN LINE FILTER (FMP0653A25AN)
HY 1704	IN LINE RELIEF VALVE (SGRA06/G12)
HY 4482	2" SUCTION FILTER (LSUSP102B32F2601)
HW 0455	102 valve handle housing
HY 0021	102 VALVE HANDLE
HY 0029	25 MICRON SPIN ON ELEMENT FOR ABOVE FILTER
HY 0030	3/8 MONOBLOCK DIRECTIONAL CONTROL VALVE 2 LEVER 45L - 2nd SPOOL PNEUMATIC
HY 0031	3/8 MONOBLOCK DIRECTIONAL CONTROL VALVE 3 LEVER 45L - 3rd SPOOL PNEUMATIC
HY 0032	3/4 MONOBLOCK DIRECTIONAL CONTROL VALVE 1 LEVER 90L - DETENT, HPCO
HY 0033	3/4 MONOBLOCK DIRECTIONAL CONTROL VALVE 1 LEVER 90L - PNEUMATIC, HPCO
HY 0034	3/8 MONOBLOCK DIRECTIONAL CONTROL VALVE 1 LEVER 45L - PNEUMATIC
HY 0035	3/4 SECTIONAL DIRECTIONAL CONTROL VALVE 1 LEVER - PNEUMATIC, HPCO
HY 0036	VARIABLE 3/8 FLOW RESTRICTOR - BARREL TYPE
HY 0037	3/4" IN LINE CHECK VALVE
HY 0038	3/8" BI-DIRECTIONAL FLOW CONTROL
HY 0039	210 BAR PRESSURE FILTER + 25 MICRON ELEMENT - no by-pass
HY 0040	REPLACEMENT 25 MICRON PRESSURE ELEMENT
HY 0041	100mm LEVEL/TEMPERATURE GAUGE
HY 0042	IN LINE RELIEF VALVE
HY 0043	1 1/4" BSP SUCTION STRAINER - FLOW RATE 170L/MIN
HY 0045	CHROME FILLER BREATHER CAP WITH 150mm WIRE BASKET
HY 0046	150 L/Min PRESSURE COMPENSATED FLOW REGULATOR COMBINED TYPE
HY 0047	3/8" BSP HOSE BURST VALVE - ML/FML BODY
HY 0048	3/8" BSP SINGLE ACTING PILOT CHECK VALVE
HY 0049	PLASTIC FILLER BREATHER CAP - NON SPILL
PN 0035	3/4" BSP PNEUMATIC DIVERTOR VALVE
EL 0060	LIMIT SWITCH BODY
EL 0061	LIMIT SWITCH HEAD
HY 4333	POLYETHYLENE HYD. TANK (straps only)
HY 4333	POLYETHYLENE HYD. TANK made up complete
HY 1482	Dump Valve (1VRHS10R1PA03)
HY 1700	RETURN LINE FILTER C/W BY PASS
HY 1701	25 Micron spin on filter (CH100A25A)

HY 0050	195mm HAND LEVER FOR GM08 SERIES VALVE
HY 0051	225mm HAND LEVER FOR GM16 SERIES VALVE
HY 0052	FRONT CAP ASSY FOR GM08 SERIES VALVE
VM Engine	
SP 3000	Stop start solenoid for Vm (1.197.206)
SP 0001	VM engine Key switch barrel (3.888.0258)
SP 0002	VM engine Air filter (41132017f)
SP 0003	VM engine fan belt (465105381)
SP 0005	VM engine Wiring loom
SP 0013	VM Engine Fuel filter (45310054A)
SP 0014	VM Engine Oil filter (41150031A)
SP 0015	VM Engine Fuel Cap
SP 0019	VM engine mounts
SP 3015	VM engine Air filter housing 31132013
SP 3030	VM engine oil filter housing 11150015A
SP 3035	VM oil filler cap (11770001)
SP 3037	Gasket set for VM engine
SP 3038	VM exhaust (Original) 11062030
SP 3039	VM Manifold gasket (22022066)
SP 3040	Vm exhaust gasket (22022061)
SP 3044	VM cap Sun 3105 (41120047A)
SP 3045	VM sun 3105 (V belt)
SP 3058	VM Flywheel (90590123F)
SP 3073	VM top gasket kit 12032135
SP 3130	VM lift pump (1 518 0017)
SP 3132	O ring for VM lift pump (4 632 0251)
HW 0095	44cc gear pump For VM engine
SP 3004	Ring gear for Sun 2105
Lombardini Engine	
SP 0004	Lombardini engine Fuel cap (9043097) Screw
SP 3005	Lombardini fuel cap (9043092) Twist
SP 0008	Lombardini sileo engine fuel filter (21 75 143)
SP 0009	Lombardini sileo engine oil filter (21 75 104)
SP 0010	Lombardini sileo engine Air filter (21 75 124)
SP 0011	Lombardini Engine 11LD626 Fuel Filter (2175046)
SP 0012	Lombardini Engine 11LD626 Oil filter (2175040)
HW 0022	SILEO 1600 ENGINE LDW1603SSILEO
HW 0023	LOMBARDINI ENGINE GSE25 11LD626-3
HW 0059	34cc Gear Pump HP1050
SP 3006	Lombardini fuel injector pump (659372)
SP 3014	Lombardini sileo key panel (7245 459)
SP 3015	VM engine Air filter housing 31132013
SP 3022	Lombardini exhaust Silencer (5460353)
SP 3017	Lombardini exhaust tail pipe (917018)
SP 3018	Lombardini exhaust stud (6780171)
SP 3019	Lombardini Exhaust nuts (3240163)
SP 3024	Lombardini exhaust gusset (4500079)
SP 3021	Lombadini key switch (7245417) 11LD626
SP 3023	Lombardini Regulator (7362228)
HW 0120	Lombardini fuel tank small (8103021)
HW 0452	Lombardini Alternator 1157518
HW 0454	Lombardini Fan belt(24403580)
SP 0034	Lombardini mechanical lift pump (6585139)
SP 0035	Lombardini Starter motor (5840261)
SP 3016	Lombardini exhaust Silencer (5460353)

SP 3020	Lombardini exhaust gusset (4500079)
SP 3024	Gasket to suit lombardini exhaust (450079)
SP 3041	Lombardini injector (6615104)
SP 3050	Lombardini stop-start solenoid(3586074)
SP 3087	Lombardini dip stick 1400519
SP 3107	LOMBARDINI SILEO EXHAUST SILINCER (5460624)
SP 3110	PUSH ROD LOMBARDINI (1410053)
SP 3123	HEAD GASKET (4730 621 LOMBARDINI)
SP 3150	LOMBARDINI SOLENOID (3587 105)
HATZ Engine	
HW 0020	ENGINE 4L41C (HATZ)
HW 0021	HATZ ENGINE 3L41C 12V
HW 0105	30cc Gear Pump FOR HATZ ENGINE
HW 0106	cast iron pump mounting plate FOR HATZ ENGINE
HW 0107	Pump Hub (13 tooth)FOR HATZ ENGINE
HW 0108	Engine flange FOR HATZ ENGINE
SP 3019	HATZ ENGINE MOUNTS (01060100)
SP 3007	Hatz oil filter (40065301)
SP 3008	Hatz Air filter 00952900
SP 3009	Hatz Fuel filter (50251500)
SP 3010	Hatz pre fuel (50317000)
SP 3011	Hatz Fan Belt (50141501)
SP 3012	Hatz 1000 hour kit 3I (00991506)
SP 3013	Hatz 1000 hour kit 4I (01203306)
SP 3027	Hatz fuel cap (50385801)
Hydraulic half net	
HW 0040	HYDRAULIC HALF NET (SHEETER SYSTEM)
HW 0433	Front lid assy Hydraulic double flip 764
HW 0056	Ladder assy (on special offer)
SP 0040	H section for hydraulic sheeter systems
HW 0436	Centre lid assy hydraulic double flip
HW 0437	Rear lid assy hydraulic double flip
HW 0044	Double hinge
HW0438	Single hinge
HW 0439	Actuator assy hydraulic double flip
HW 0233	1/2 NET (Bmi version 12500 long)
HW 0010	Half Net Hydraulic double flip (original net)
HW 0440	Hydraulic Cylinder For Double flip
HW 0052	ROLLER ASSEMBLY

Sidewinder	

HW 0041	SIDEWINDER kit
HW 0055	REAR LID ASSY hydraulic single flip
HW 0045	Centre lid assy hydraulic single flip
HW 0056	Ladder assy (on special offer)
SP 0040	H section for hydraulic sheeter systems
HW 0044	Double hinge
HW0438	Single hinge
HW 0058	Universal Lid Ext
HW 0441	Centre Lid Ext
HW 0054	Front Lid Assy
HW 0053	Actuator assy single flip
HW 0442	Wind deflector single flip
HW 0025	Full Nets black (Bmi version)

HW 0422	Full Net Donovan (T1906) (only if in stock)
HW 0052	ROLLER ASSEMBLY
New Manual Half Net	
AW 15133	Nylon block
EJ 25695	Passenger side rear arm
EJ 25705	Driver side rear arm
EJ 25710	Passenger side front arm
EJ 25715	Driver side front arm
EJ 27092	GEAR BOX SIDE PLATE
EJ 27094	GEAR BOX FRONT PLATE
EJ 27095	GEAR BOX ATTACHMENT PLATE
EJ 27096	GEAR BOX HOUSING GUSSET
EJ 27097	GEAR BOX CHAIN TIGHTENING PLATE
EJ 27100	40mm UCP208 BEARING MOUNT RHS
EJ 27102	TOP BEARING GUARD
EJ 27104	40mm UCP208 BEARING MOUNT LHS
EJ 27105	BEARING TOP REAR PLATE
EJ 27192	20mm BEARING HOLDER BOTTOM
EJ 27193	20mm BEARING HOLDER TOP
FA 3216	M10 x 140mm EYE BOLT FULLY THREADED
HW 0112	UNIVERSAL JOINT 20/20
HW 0113	UNIVERSAL JOINT 20/18
HW 0114	20mm FLANGE BEARING
HW 0125	GEAR BOX DRIVER SIDE (HUCO- MODEL FCW, TYPE 70, RATIO 1:40,
HW 0126	GEAR BOX PASSENGER SIDE (HUCO- MODEL FCW, TYPE 70, RATIO 1.40)
HW 0127	40mm bearing
HW 0129	GEAR BOX CHAIN 5/8 (5M Box)
HW 0133	GEAR BOX LARGE SPROCKET 20 TOOTH
HW 0134	GEAR BOX SMALL SPROCKET 14 TOOTH
HW 0233	1/2 NET (Bmi version 11300 long)
HW 0375	D ring
HW 0428	6mm Wire Rope per M
HW 0429	6mm Wire rope catches
	Chain guard
Old manual half net parts	
SP 0016	Renold gear box Blue (JPM22)
SP 6001	Half coupling
SP 6000	Rubber star
Sheeter protection	
EL 0060	Limit switch body (zkm1h29)
EL 0061	Limit switch head (zkd08)
EL 0062	12 vdc coil and din plug (CCS012D)
HY 0001	N/O BI-Direct 30L 210bar (GS021600N)
HY 4256	Line body 3/8 BSP (LB10506A)
Chassis PARTS	
HW 0002	KING PIN (Complete
HW 0001	King pin dome
HW 0006	BMI MUDFLAP WITH LOGO (CP18)
HW 0051	SOLID STATE FUEL PUMP (40165)
HW 0230	TLM/03 TANK LEVEL MONITOR
HW 0135	JOST LANDING LEG SET E0201 (C/W ROCKER FEET)

HW 0281	JOST LANDING LEG SET E0501 (C/W ELEPHANT FEET)
HW 0136/37	TTC LANDING LEG SET
HW 0156	TOOLBOX (only) 800mm 40086
HW 0187	TOOLBOX FITTINGS FOR JBX80 40090
HW 0153	AIR WEIGH SYSTEM TRAILER SCALE W/ EXTRA LONG CABLE
HW 0110	EBS KIT FOR TRAILER KB933G2
HW 0099	SAREL BOX ELSTEEL ENCLOSURE 300X200X150
HW 0164	DIGITAL HOUR METER
HW 0165	250 BAR PRESSURE GAUGE
BODY PARTS	
HW 0012	TOP SECTION LADDER CLA3OD
HW 0184	3 STEP LADDER 40275
HW 0030	EJECTOR RAM (222 6 Stage)
EJ 20110	DOOR RAM
SIDE RAIL KIT	
HW 0015	Hinged sideguard leg
HW 0016	Aluminium rail
HW 0019	End cap kit
Lift axle kit	
HW 0140	AUTO DROP (AR20-K)
HW 0142	LIFT AXLE VALVE K008546
EJ 25161	Airbag
Lights	
EL 0031	Rear combination lamp R/H
EL 0032	Rear combination lamp L/H
EL 0034	Junction Box
EL 0053	Rear Marker Lamp
EL 0052	Front Marker Lamp
EL 0054	LED Side Light w/ bracket
EL 0076	Front side LED Marker lamp
EL 0063	LED Number Plate Lamp
EL 0038	Socket Type 24N (Normal)
EL 0039	Socket Type 24S (Supplementary)
DC 0305	ECE70 Marker Board 565x195mm
HW 0185	Euro Number Plate Catches
EL 0043	Clear Adhesive Reflector
EL 0041	JUNCTION BOX
EL 0065	LED HELLA HAMBURGER LIGHT
EL 0138	HELLA BULB HAMBURGER LIGHT
EL 0139	HELLA BULB REVERSE LIGHT
EL 0222	HELLA BULB FOG LIGHT
EL 0080	REFLECTIVE TRIANGLE
SAF Axle Parts	
SP 0051	Saf Disc break 4079001302
SP 0052	Saf break Calliper (3080005100) LH
SP 0053	Saf break Calliper (3080005000) RH
SP 0054	Safbreak pads (3057008400)
SP 0073	Saf bush (RGA032178) copy
SO 0074	SHOCK SAF (2376007302)

SP 0075	SBS SAF BRAKE PAD SET (20.3.057.0096.00)
SP 0076	BEARING KIT FOR 33073045+3056 (20.3.434.3020.00)
SP 0077	BRAKE DISC B9 SERIES 430mm (20.4.079.0017.01)
SP 0078	4079001700 FIXING KIT (20.3.434.3663.00)
SP 0079	SBS SAF CALIPER R/H INC BOLTS (20.3.302.1157.00)
SP 0080	SBS SAF CALIPER L/H INC BOLTS(20.3.080.0081.00)
SP 0081	DUST SHIELD ASSY SNK 420 (20.3.005.0173.00)
SP 0082	BRAKE DRUM 420X180 INTRADRUM (20.1.064.0260.02)
SP 0083	BEARING KIT 3.307.3043.00 (20.3.434.3019.00)
SP 0084	o-ring-integral hub cap (20.4.315.0082.00)
SP 0085	S9 4218 BRAKE REPAIR SOLOUTION KIT (20.S9-4218-KT)
SP 0086	CAMSHAFT BEARING ASSY REPAIR KIT (20.3.434.3652.00)
SP 0096	saf shock absorber 450 r/h
SP 0102	SAF CHAMBER 16/24 DOUBLE DIAPHRAGM (20.4.454.1077.64)
SP 0105	SAF AIR BAG 20.3.229.0029.00
SP 0112	USED SAF AXLES 2090mm

9.0 Warranty and Claims Procedure

Every care and attention is taken in the production of your trailer/chassis, however, should you feel that a claim on warranty should be made, please contact BMI Trailers without delay quoting the serial number stamped on the manufacturer's plate.

We cannot act on your claim without this number.

Basic Guidelines to making a Claim

Customers are to report any issues they may be having to their regional sales managers, either by telephone or email message. This is to ensure the repair/replacement is processed in a timely manner. However, this **MUST** be followed up, **in writing** to the sales manager, with a detailed description of the fault/failure, including photographs (where applicable). Bmi cannot guarantee full or part payment of invoice(s) for labour or materials, without prior agreement and arrangement with our Warranty Department.

The Sales Manager must fill out a customer complaint form with these details, and forward this and any related emails from the customer to the Service Department. Sales Managers must ensure that correct contact details are included within this report.

Our Service department will then liaise with the customer and ascertain whether a repair or replacement parts are required. If a repair is necessary, the customer will be allocated a service agent or a booking appointment within the nearest bmi Service Depot will be organised to get the issue resolved.

Alternatively, if a replacement part is required, these will be dispatched directly.

All jobs must be signed off by either bmi Service or our approved service agents. They will carry out a full investigation, and if it is deemed valuable for future projects, a report may be compiled with details of the issue, and subsequent resolution. The report will also include details on any warranty claim if applicable. Please note, any claims on parts can only be granted if the defective part is returned to one of the bmi Depots.

At this point, an invoice will be raised for the claim. If the issue is deemed to be covered by warranty, the invoice will be forwarded on internally to bmi Account Dept. However, if it is found that the issue has arisen due to customer fault, the invoice will be forwarded onto the customer for payment. Please note that a customer making a claim on an assumed defective component may be liable for the full cost of testing the components (including carriage) if, on inspection it is found to be functioning correctly.

All reports will be discussed and evaluated during monthly review meetings, where preventative planning will be put in place where necessary.

Specific Warranty Notes

Braking Pre-Dominance

The braking system fitted to the trailer conforms to the current legislation and is based on braking calculations which are designed to produce the braking performance currently required by EE directive.

However, due to the numerous variations in tractor unit braking system designs and their effects on the braking performance of the vehicle combination as a whole, The bmi Group cannot be held responsible for any incompatibility between the two vehicles.

Any customer experiencing 'Over braking' or 'Under braking' on the trailer should include a pre-dominance check in their inspection of the system.

Axle Alignment

At the time of manufacture, the axle alignment is carried out in accordance with the procedures laid down by the suspension manufacturers. It must therefore be noted that before releasing the trailer we have set the axle alignment correctly and any subsequent adjustment is not covered under our warranty policy.

10. Customer Acceptance Form

I_____confirm that the 'operating and safety instructions manual' is fully understood and that all operatives of the trailer have been explained correctly on the operating requirements as detailed in this manual and health and safety aspects of the trailer before it went into operation.

Company:	
Telephone No:	
Date trailer went into service:	
Trailer Fleet Number:	
Trailer chassis number:	

11.0 Trouble Shooting

Please refer to the section which relates to the area with which you are having trouble.

Half Net manual system

If the half net system is not opening, please carry out the following checks:

Check chain tension
Check sprocket is not damaged
Check gearbox operation
Check if system is fully lubricated.

Hydraulic Half Net / Full Net System

If the hydraulic net system is not opening, please carry out the following checks:

Check hinge assemblies are lubricated or damaged
Check for oil leaks on the hydraulic pipes
Check for damage on the sheeter arms

Tailgate

If the tailgate is not opening, please complete the following checks:

Ensure the sheeter system is fully opened
Ensure there is nothing obstructing the door hinges
Check the adjustment of the flow control valve on the engine skid. (See picture).
The door should open/close in approximately 25 to 30 seconds.

Blade

If the blade is not extending, please complete the following checks:

Ensure there is nothing obstructing the blade movement on the floor or side channels
Refer to the hydraulic maintenance section. Complete the checks.
Refer to the operation of the blade in section 4.6.

If the problem still persists, please contact The bmi Group for further assistance. Please note that under no circumstances should you attempt to adjust the pressure setting without receiving approval by The bmi Group.

Failure to apply to this will result in voiding your warranty.

NOTES