



ABBHEY
MACHINERY

since 1947

AP-All Purpose
Multi-Spreader



**Maintenance,
Operating Instructions
and Spare Parts Lists**



ABBHEY
MACHINERY

since 1947

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Abbey AP Spreader P.D.I Chart

This Dealer pre-delivery inspection chart is to be completed and signed by the dealer or their representative before the machine is supplied to the customer.

Model _____ Date _____ Serial No _____

Tick box below after item is checked.

All Models

- ☐ Check all hydraulic connections.
- ☐ Check gearbox Oil Levels.
- ☐ Check tyre pressure (Refer to page 7 for correct value)
- ☐ Check opening and closing of the door
- ☐ Check wheel studs are torqued correctly, axle bolts and check function of hand brake.
- ☐ Check hydraulic brakes by connecting the standard female brake fitting to the tractor and ensure they operate properly.
- ☐ Check the rotor tips and securing bolts.
- ☐ Check chain tension on the rotor driveline.
- ☐ Check play on wheel bearings by rocking the wheels and check tyre pressures
- ☐ Check all lighting is working correctly.
- ☐ Check all safety guarding and devices are fitted, and in good working order.
- ☐ Check all lubrication points and grease.
- ☐ Check the machine overall visually and that a copy of the instruction manual is being supplied to the customer with the machine.

Sign below after working through the above check list, and log on to www.abbeymachinery.com dealer section to register this machine.

N.B. Machine must be registered for warranty purposes.

Signature: _____

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IMPORTANT NOTE

1. Drawings in this manual are not to scale.
2. While every care is taken to ensure that all information in this manual is correct, the manufacturer cannot be held responsible for any errors or omissions therein.
3. When ordering parts ensure you have the correct reference number and also the serial number of the AP Spreader.



The Range of Abbey AP Spreaders includes

AP700 And AP900

The Range of Abbey Machines also extends to:

Vacuum Tankers, Vertical Tub feeders, Paddle feeders, Sprayers, Fail Side Spreaders, Pasture Toppers and Fertilizer Spreaders.

1.0 THE FUNCTION OF THE AP SPREADER

The Abbey AP Spreader is a trailed machine which is used to transport farm yard manure from its storage area to the field where it is then spread. The AP Spreader was designed solely for agricultural slurries and farm yard manures. However in certain circumstances the Abbey spreader could be used to land spread other types of slurry. It must be noted that the standard Abbey Side Spreader has not been designed to travel at speeds of over 40km/h.

The principle of the Abbey AP Spreader is to move and land spread large quantities of farm yard manure. The Abbey AP Spreader does this with the use of a central auger in its hopper shaped tank. The central auger supplies manure to the rotor on the side of the machine which in turn shreds and spreads the manure. The machine can be filled with a front loader (i.e. tractor fitted loader or loading shovel) through the top of the hopper. It should be noted that the AP Spreader is designed to operate within the limits stated in the instruction manual. However it should be used within the legal limits of your country.

The above descriptions of the functions of each Tub Feeder, are provided to show how each AP Spreader can be used. Further detail on the AP Spreader and their variations can be found on the relevant leaflets.

*** IMPORTANT ***

READ INSTRUCTIONS CAREFULLY BEFORE

OPERATING THIS MACHINE

* The entire manual must be read and understood before operating
this machine, If there is confusion about the safe operation
of any part of the machine, contact your dealer
before operating it.

Abbey AP-Spreader

2.0 SAFETY WARNING

- 1) Stop the tractor engine, apply the parking brake and disengage the PTO before maintaining or adjusting the machine.



- 2) **WARNING:** The max speed to be applied at the PTO is 540 rpm and always dis-engage the PTO when turning.

- 3) Always adopt the procedure suggested in this manual for lifting the AP Spreader. Other lifting methods could create unforeseen risk.

- 4) Stand clear of the machine door when it is being operated and do not climb on the machine while it is working.

- 5) PTO guards/covers should be in place at all times and the guards are not to be used as a step. At no time is the cover to be left open while the tractor engine is running.

- 6) The PTO shaft is to be left on the stand provided, when the machine is not in use to prevent the shaft guard from being damaged.



- 7) **WARNING:** Do not stand in the spreading area or attempt to maintain the machine while the PTO shaft of the machine is connected to the tractor.

- 8) Take care to match tractor to AP Spreader on soft or sloping ground to prevent dangerous uncontrollable situations occurring.



- 9) **WARNING:** The operator must ensure that during operation of the machine, no person is standing in the spreading area. Flying debris could cause serious injury.

- 10) Damaged or worn hydraulic hoses should be replaced.

- 11) Inexperienced operators should not be allowed to work or maintain the machine without supervision.



- 12) **WARNING:** If entering the machine, disconnect the PTO shaft from the tractor and extreme care should be taken to prevent slipping in the machine. Always tell other operators when you are entering the machine.

- 13) If you have any doubts as to the safe operation of the AP Spreader advice should be sought from your local dealer or direct from the manufacturer.

- 14) Check maintenance instructions before operating the machine.

- 15) The PTO shaft must be used and maintained in line with its accompanying instructions.

- 16) Do not operate the AP Spreader with an excessively worn hitch eye – replace it. The hitch eye should be checked regularly, particularly on AP Spreaders used for long periods during season.

Abbey AP-Spreader

2.0 SAFETY WARNING (Con'd)

- 17) Do not approach the spreading rotor while the tractor engine is running. Remember the rotor continues to rotate for some time after the tractor PTO and engine are stopped. Always wait for the rotor to come to a complete stop before approaching it.



- 18) **CAUTION:** The Abbey AP Spreader has not been designed to travel at speeds over 40km/h and should be used in line with the road regulations regarding trailed machines in your particular country.

- 19) **The lifting lugs provided at either end of the machine hopper should be used if the machine is to be lifted off the ground.**

AP Spreader Noise Levels

Continuous A-weighted sound level at workstations noise levels exceeds 70 db (a).

Peak C-weighted instantaneous sound pressure exceeds 63 pa.

Caution



The necessary protective devices should be worn when operating the machine.

Abbey AP Spreader

3.0 SETTING UP FOR USE

1. Connect AP spreader to tractor on pick-up hitch or drawbar. Measure PTO shaft leaving minimum 6" of closure to allow turning circle and shaft closing. This may need to be increased depending on the contours of the land. If connected to the tractor drawbar the optional necessary hitch eye reducer bush must be used.
2. Ensure all guards and covers are in place before operating the machine.
3. Connect hydraulic hoses to the tractor. Check that both the hydraulic brakes and the spreader door are working correctly. Check spreader lights are working correctly.
4. Check that the wheel nuts are tight and hubs are greased.
 - a. Check tyre pressure: relevant tyre sizes for Spreader
 1. 18.4/15 x 26 – 32 PSI
 2. 1300 X 530/533 – 51 PSI
 3. 23.1 X 26 – 36 PSI
 4. 600/55 X 26.5 – 36 PSI
5. Check that the spreading rotor on the machine rotates freely, with the tractor engine stopped and the PTO shaft disconnected.
6. Run the machine for a short period at low revs. To ensure the machine functions correctly before filling.



Caution: Make sure all persons are standing clear before starting the machine.

1. The feeder should never be run at a higher speed than 540 r.p.m.

Abbey AP Spreader

4.0 OPERATING INSTRUCTIONS



1. Before filling the Abbey AP Spreader close the machine door to the locked vertical position by hydraulic or manual control.

Caution: Stand clear of the AP Spreader while the tractor engine is running.



2. When the AP Spreader is full, transport the manure to the field in a safe manner.
3. **WARNING:** Before starting the spreader ensure all persons are standing completely clear of the machine. No person should be standing in the spreading area when the machine is working.
4. With the door closed and the forward gear selected, engage PTO at low revs. To turn the spreading rotor. Increase the PTO revs to 540rpm and open the machine door to correct setting. Operate the machine at low ground speed gradually building up the speed as required.
5. The application rate is governed by the PTO speed, the door setting and forward ground speed. These can be varied depending on the conditions in which the machine works.
6. Always close the door of the machine before shutting off the tractor PTO which powers the spreading rotor. It will prevent premature shear bolt failure on the start of the next run.
7. When working with the very dry manure (i.e. un-rotted from a shed) it is advisable to fill the spreader level to edge of the hopper.
8. Care should be taken to ensure the rotor remains balanced and excessive vibration does not occur, always check the tips and their retaining bolts before working the machine.

Read and understand safety warnings before checking this.

9. The machine should only be filled to its maximum load level or hopper top edges.
10. The second 6 spline shaft on the gearbox is a reverser shaft. The reverser shaft on the gearbox allows the main auger of the machine be reversed and gain access to any foreign objects. Always engage the PTO at low speeds, when reversing machine.
11. The gearbox driven machine is fitted with shear bolt protection. If the M10x 40 8.8 shear bolt breaks during use, a M10x40 10.9 bolt can be used to unload the machine. The M10 x 40 8.8 bolt should be refitted before loading the machine again.
12. If the M10 x 40 10.9 bolt breaks the machine should be unloaded manually and the blockage cleared or the amount of material being loaded into the machine reduced.

Please note that all the above are bolts. A setscrew which is similar in length, but is threaded fully along its length, will not have the same torque capacity.

Abbey AP Spreader

5.0 CARE AND MAINTENANCE

1. The machine should be stationary and in a stable position with the PTO shaft disconnected to prevent the machine starting up while maintenance is carried out. Always replace and close the machine covers after maintenance or adjustment of the machine.
2. The rotor Tip and Auger springs should be inspected at regular intervals and replaced if excessively worn or missing, to prevent unnecessary vibration or damage occurring.
3. Daily check all wheel nuts are tight for the first week and once a week thereafter.



4. **CAUTION:** Special care should be taken to check hydraulic hoses for damage and replace if necessary.
5. Check PTO shaft guards and replace if necessary. The accompanying shaft instruction and maintenance manual must be consulted before maintaining or using the machine.
6. Maintain tyre pressure as recommended.



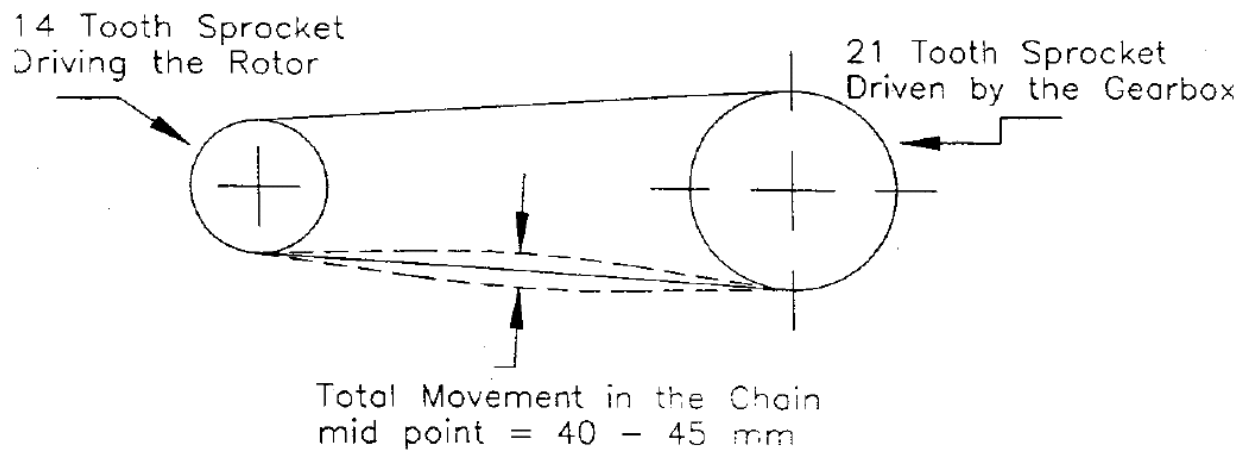
7. **CAUTION:** Part should be refitted to the AP Spreader in the correct manner so that they won't create any risk to the operator. If there is any confusion when refitting parts contact your local dealer before completing operation.
8. When rotor tips completely wear away their teeth replace them to prevent rotor wear occurring.
9. The machine may be cleaned by filling with water and then engaging the PTO while opening the machine door.
10. While greasing the chains on the spreader ensure to stand well clear of the PTO shaft.
11. Always disconnect the PTO shaft from the tractor before attempting to the reverse rotor tips.

Abbey AP Spreader

5.1 CARE AND MAINTENANCE (Contd)

Procedure for AP 900 Chain Tensioning

After ensuring the sprockets on the frame and the gearbox is in-line tighten the frame tightly into position. Loosen the bolts that link the corner of the gearbox to the frame. Pull the gearbox to the right front side of the machine (looking at the machine front) and tighten the link bolts tightly. A wedge may be required to hold the gearbox over, but remember to remove it before tensioning the drive chain.



Remove the wedge from under the box. Tighten the bearing housing adjuster plate so that the amount of play as shown above is left in the chain mid point. This procedure must be followed to tension the chain initially or re-tension the chain after a number of days use. Adjustment of the gearbox is also necessary particularly in high horsepower applications, to prevent the gearbox transferring excessive tension onto the chain. The excessive chain tension will cause chain failure very rapidly.

Abbey AP Spreader

5.2 CARE AND MAINTENANCE (Contd)

MAINTENANCE INTERVALS

DAILY

- a. Grease bearings on each end of auger tube and Rotor.
- b. Grease universal joints on each end of PTO shaft.

WEEKLY

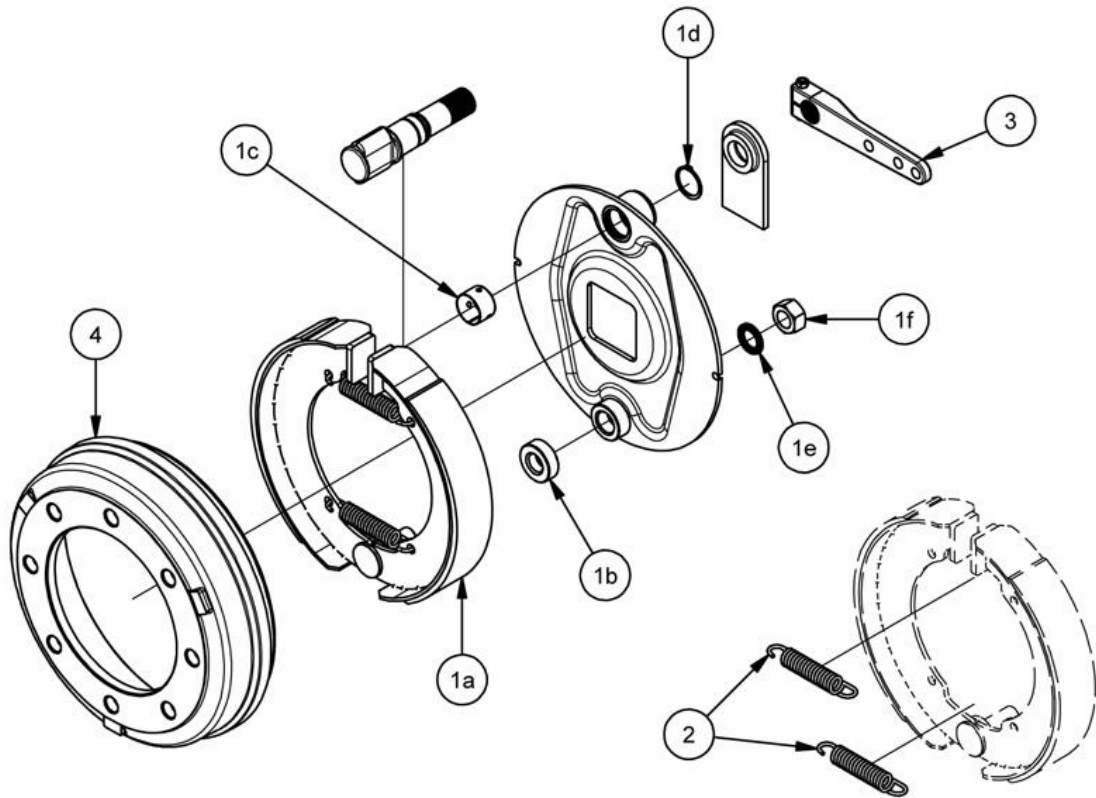
- a. Remove front cover, grease chains, drive shaft bearings and all sprockets.
- b. Check drive chain tension and adjust it by loosening the bearing bolts and tensioning the chain, by moving the shaft slider plates.
- c. **CAUTION:** Always replace and close the front cover after maintenance.
- d. Oil the hinges on the door and its operating mechanism.
- e. Check tyre pressure, tighten wheel nuts and grease wheel hubs.
- f. Examine the rotor for loose bolts or missing tips and tighten or replace if required.
- g. Check PTO shaft using guidelines laid out in its accompanying instruction manuals.



Abbey AP Spreader

6.0 REPLACEMENT PARTS

Axle 400X80 Braked - AF PARTS



Item No:	Description	Part No:
1a	Brake Assembly	ADR9RE0048
1b	Adapter	ADR9RE0048
1c	Camshaft	ADR9RE0048
1d	Retaining Ring	ADR9RE0048
1e	Washer	ADR9RE0048
1f	M24x1,5	ADR9RE0048
2	Spring	ADR9RK0005
3	Lever	ADR9RQ0001
4	Drum 8 Holes	ADR66LNF0801

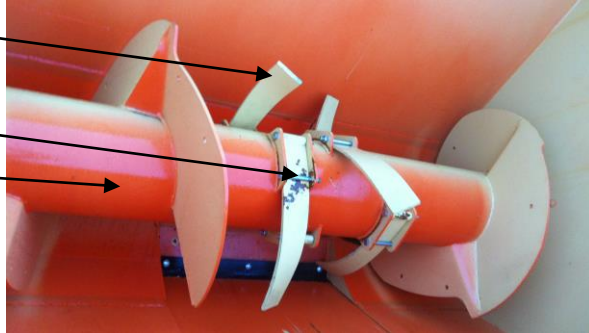
Abbey AP Spreader

6.0 REPLACEMENT PARTS

Feeding out Spring LH or RH (ABY6093L or R)

M16X150 + Lock Nut

Central Auger (ABY705)



Bolt on Back Door (ABY706)

Door Seal (ABY6094)

Auger Back Seal (ABY6906)

Auger Back Bearing (BRNUCFX 14E)

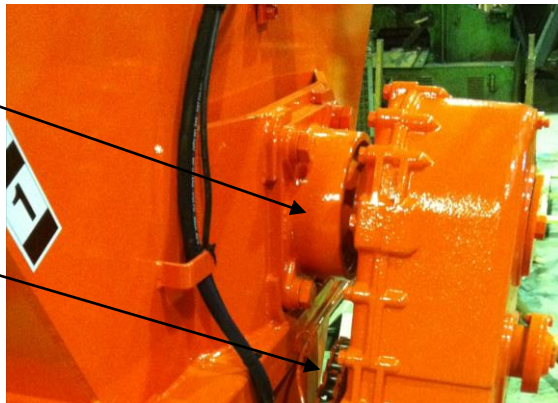
Bolt On Axle (ABY700)

23.1R26 Wheel (ABY4430)



Auger Front Bearing (BRNUCFX 20)

M25x90 + Lock Nut



Abbey AP Spreader

6.0 REPLACEMENT PARTS

Rotor Tips (ABY6907)

M16X40 + Lock Nut

Flinging Rotor (ABY710)

Slurry Tray (ABY711)

Safety Rail (ABY712)

M10x30 + Lock Nut

Rotor End Plate (ABY709)

Rotor Bearing (NUCFX 09)

Rotor PTO Shaft (ABY6908)



Door Ram Bolt on Brackets (ABY716)

Ram Pins (ABY9145)

Door Ram (ABY6909)

Door Splash plate Adjuster (ABY714)

Door Splash Plate (ABY715)

Door Indicator (ABY713)

Rotor PTO Shaft Cover (ABY717)

Main Cover (ABY740)

M12 Loop Nut

Shear Bolt Cover (ABY739)



Abbey AP Spreader

6.0 REPLACEMENT PARTS

Rotor Drive Sprocket (ABY6918 + ABY6918B)

Simplex Rotor Chain Drive (CHN 168-1)

Rotor Driven Sprocket (ABY6914)

RMS 11 Bearing Housing (ABY3039) Complete

M16X40 + Lock nut



Reduction Gearbox (ABY6930)

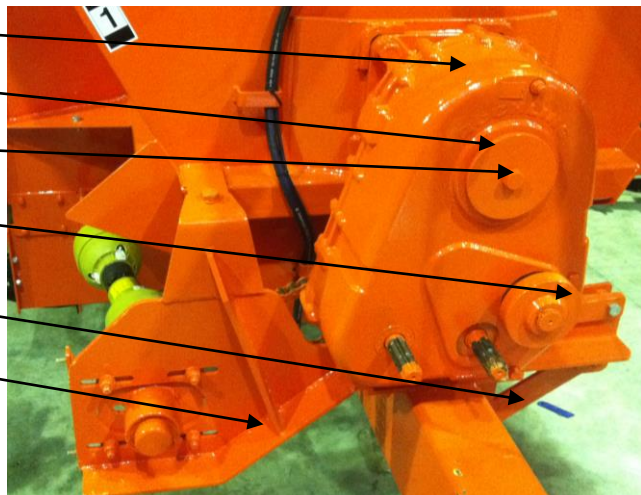
Gearbox mounting Disc (ABY741)

M20X40

Shear Bolt(DIN931-M10X40)

Torque Bar (ABY742)

Front Frame (ABY738)





Abbey AP Spreader

7.0 WARRANTY

The following warranty terms relate to parts only.

Abbey Machinery LTD will not accept claims for labour or mileage.

1. This AP Spreader is covered by the manufactures warranty for twelve months or one season.
2. AP Spreader used by agricultural contractors is covered by manufactures warranty for six months from the date of purchase.
3. AP Spreader hired out to and operated by third parties is not covered by manufacturer's warranty.
4. Manufactures warranty does not cover wearing parts, e.g. Rotor tips, shafts, etc.
5. Under no circumstances will warranty claims be accepted for any damage caused by failing to adhere to the operating instructions or maintenance requirements as outlined in this manual.
6. Warranty claims will only be assessed when all alleged faulty parts have been returned to the manufacturer. All parts dispatched to replace damaged parts under warranty consideration are chargeable, pending decision on claim.
7. For general warranty consideration please see terms and conditions of sale set out overleaf.

EC Declaration of Conformity
for machinery
according to Machinery Directive 2006/42/EC; Annex II A

Manufacturer: Abbey Machinery
Well road
Nenagh
Tipperary
Ireland

We declare that this delivery of the following machine is complete and conforms to the essential safety requirements of Machinery Directive 2006/42/EC.

Product Model No: _____
Type of machine: Muck Spreaders
Serial number: From 14000 onwards

All basic health and safety requirements according to Annex I of the above-mentioned directive are applied and observed.

Signature: 
Paul Callan
Operations Manager



Abbey AP Spreader

8.0 Terms and Conditions of Sale

General Consideration:

- ❖ Abbey Machinery Ltd, shall hereinafter be referred to as “the Company”.
- ❖ All products and/or components or whatever kind and all services sold by the company shall be sold subject to these Terms & Conditions of Sale and shall hereinafter be referred to as “the Goods”.
- ❖ The buyer of the goods shall hereinafter be referred to as “the Purchaser”.
- ❖ The Conditions of Sale shall be deemed to be incorporated in all tenders, quotations, delivery dockets, invoices, credit notes, and other documents of a similar nature submitted by the company for the supply of the goods.
- ❖ Any terms or conditions in the purchaser’s order which are inconsistent with these Terms & Conditions of sale shall not form part of any contract between the company and the purchaser unless accepted in writing.
- ❖ Unless previously withdrawn, offers by the company shall remain open for acceptance for a period of 30 (thirty) days or such longer period as the company may agree in writing.
- ❖ Each and every provision of these conditions of sale and reservation of title clause and every part of every such provision shall be deemed to be separate and severable, and enforceable accordingly.
- ❖ The law of the Republic of Ireland shall govern the operation and interpretation of these conditions of sale and reservation of title clause, but the company may sue for monies on foot of any sale in any jurisdiction.

Purchaser’s Rights

Nothing contained herein or in any other document in relation to any contracts is intended to affect or prejudice nor will affect or prejudice the contractual rights enjoyed by the purchaser by virtue of the Sale of Goods Act 1893 and 1980 and in particular, of sections 12,13,14 and 15 of the said Act of 1893 as amended or where goods are sold outside the jurisdiction of the Republic of Ireland, the statutory rights of a Purchaser who is a Consumer as hereinafter defined.

Conditions and Warranties

- ❖ Where the purchaser deals as a consumer within the meaning of the Sale of Goods and Supply of Services Act 1980, the goods are sold subject to any conditions and warranties implied by the Sale of Goods Acts, 1893 and 1980 or any amending statute.
- ❖ Save in the case where the purchaser deals with as a consumer as hereinbefore defined, all statements, representations and conditions or warranties as to the quality of the goods or their fitness for any particular purpose whether expressed or implied by law or otherwise are hereby expressly excluded.
- ❖ Whilst every care is taken that the goods are in accordance with specifications and of good material standard and workmanship, the Company shall not be liable for any loss or injury arising directly or indirectly from the use of the Goods or any component thereof whether manufactured or supplied by them or otherwise.
- ❖ In the case of products manufactured by the company, as our manufacturing policy is one continuous improvement, the company reserves the right to amend specifications, without notice.
- ❖ Except where the purchaser of the goods is a consumer as hereinbefore defined, all terms and conditions as implied by statute or common law in the case of contracts for the supply of goods and services are hereby expressly excluded.

Repairs and Alterations

Any products accepted for repair or alterations by the Company shall be held by the Company and repaired and altered by it entirely at Customer's own risk.

Force Majeure

If circumstances occur which could not have been foreseen at the time the contract was concluded and which are beyond the control of the company and directly or indirectly prevent, hinder or make more difficult the full or partial performance of the contract, such circumstances being, inter alia war, threat of war, civil war, natural disasters, riots, strikes, lockouts, fire, breakdowns in the Company's factory, delayed or incorrect deliveries by the Company's suppliers, government measures, blockages, the Company shall have the right without incurring further liability either to suspend performance of the contract wholly or in any part or to treat the contract as cancelled and thereupon all amounts due to the company by the purchaser by virtue of the contract become immediately payable but without prejudice to the right of the Company to claim full compensation including compensation for loss of profit. The company shall have similar rights in relation to the contract in the event of the purchaser committing an act of bankruptcy, suspending payment of its debts., entering into an agreement with its creditors, closing its business or in the case of a limited company having a Receiver or Liquidator appointed over it or its assets (Liquidation for the purpose of restructuring excepted).

Prices and Terms of Payment

- ❖ All prices are subject to alteration without notice and prices charged for goods and services are those ruling on the date of dispatch. This clause also applies to backorders. All prices are exclusive of V.A.T. and the same, together with carriage when charged, shall be borne by the Purchaser.
- ❖ The Company must be paid in full without deduction in respect of alleged or counterclaims in accordance with the terms specified by the company from time to time and if no date for payment has been specified, by the last day of the month following month of invoice.
- ❖ If part only of an order shall be supplied, the terms of payment shall apply to the goods actually delivered, notwithstanding the shortfall.

Damage in Transit and Shortages

On delivery, the goods must be checked against the delivery note which shall be signed by or on behalf of the purchaser. Such signature is an acknowledgement that the goods have been received in good condition and order. The Company will accept no responsibility for damage in transit or shortages unless same are noted on the Delivery Note, before signature. In any event all claims must be received by the Company within 7 (seven) days of the receipt of the Goods by the Purchaser.

Risks and Reservation Title

- ❖ No property in any of the goods the subject matter of this Contract shall pass the Purchaser until the invoice covering same has been paid in full.
- ❖ The goods shall be at the Purchaser's risk from the date of delivery until they are paid for in full and during this same time the purchaser shall store the Goods so as clearly to show them to be the property of the company.
- ❖ The personnel of the Company its servants or agents will be allowed free access to the Goods and place of storage at all reasonable times with the intention that such personnel may remove such Goods in exercise of any provisions in this clause. Any expense incurred in so doing shall be borne by the Purchaser.

Notes:

Notes: