

LOGIC

EBC-TFL Range

**LOGIC
ELECTRO-BROADCASTER**



OPERATORS MANUAL

WM1-EBCTFL Range

Quick Start Up Guide

QUICK START UP GUIDE FOR YOUR EVANS AND PEARCE ELECTROBROADCASTER

GUIDE TO FLOW RATE NUMBER (Numbers shown in bold are flow rate settings)							
PRODUCT	RATE KG/HA	SPEED KPH					BIAS SETTING
		10	15	20	25	30	
METAREX	4	N/A	4	4.5	5	5.5	6
<i>SPREAD 12M</i>	8	4	5	6	6.5	7.5	
MINI PELLET	9	6	7	7.5	8.5	9	6
<i>SPREAD 12M</i>	18	7.5	8	11	12	N/A	
*GRASS SEED	25	9	10	12	N/A	N/A	12
<i>SPREAD 6M</i>	30	9.5	12	N/A	N/A	N/A	
*OSR	4	2.5	3	3.5	4.5	5	6
<i>SPREAD 12M</i>	6	3	4	5	6	6.5	

* Seeds should always be sown using a two pass system to ensure even coverage
Remember to check distribution, spread width and flow rate after a short operating time.

THE ABOVE TABLE SHOULD BE VIEWED AS A GUIDE ONLY. FOR CORRECT CALIBRATION ALWAYS REFER TO THE CALIBRATION CHART ON PAGE 13 OF THIS MANUAL.

REMOVE ALL PACKAGING FROM THE MACHINE AND ENSURE THAT THE HOPPER IS CLEAR OF ANY POTENTIAL OBSTRUCTIONS

WARRANTY VOID

DO NOT WIRE THE MACHINE UP THROUGH AN AUXILLERY 12 V SUPPLY.

WIRE DIRECTLY TO THE BATTERY ONLY

(MOTOR BURNOUT WILL RESULT IF WIRED INCORRECTLY)

ENSURE THAT THE MACHINE IS WIRED UP CORRECTLY AND THE MOTOR IS ROTATING IN THE CORRECT ANTI CLOCK WISE DIRECTION.

BROWN WIRE TO THE BATTERY POSITIVE

BLUE WIRE TO THE BATTERY NEGATIVE

ENSURE THAT YOU ARE FAMILIAR WITH THE APPLICATION RATE OF THE PRODUCT OR SEED THAT YOU ARE SPREADING

BEFORE FILLING MAKE SURE THAT THE SHUT OFF PLATE IS WORKING FREELY AND THEN RETURN TO THE CLOSED POSITION

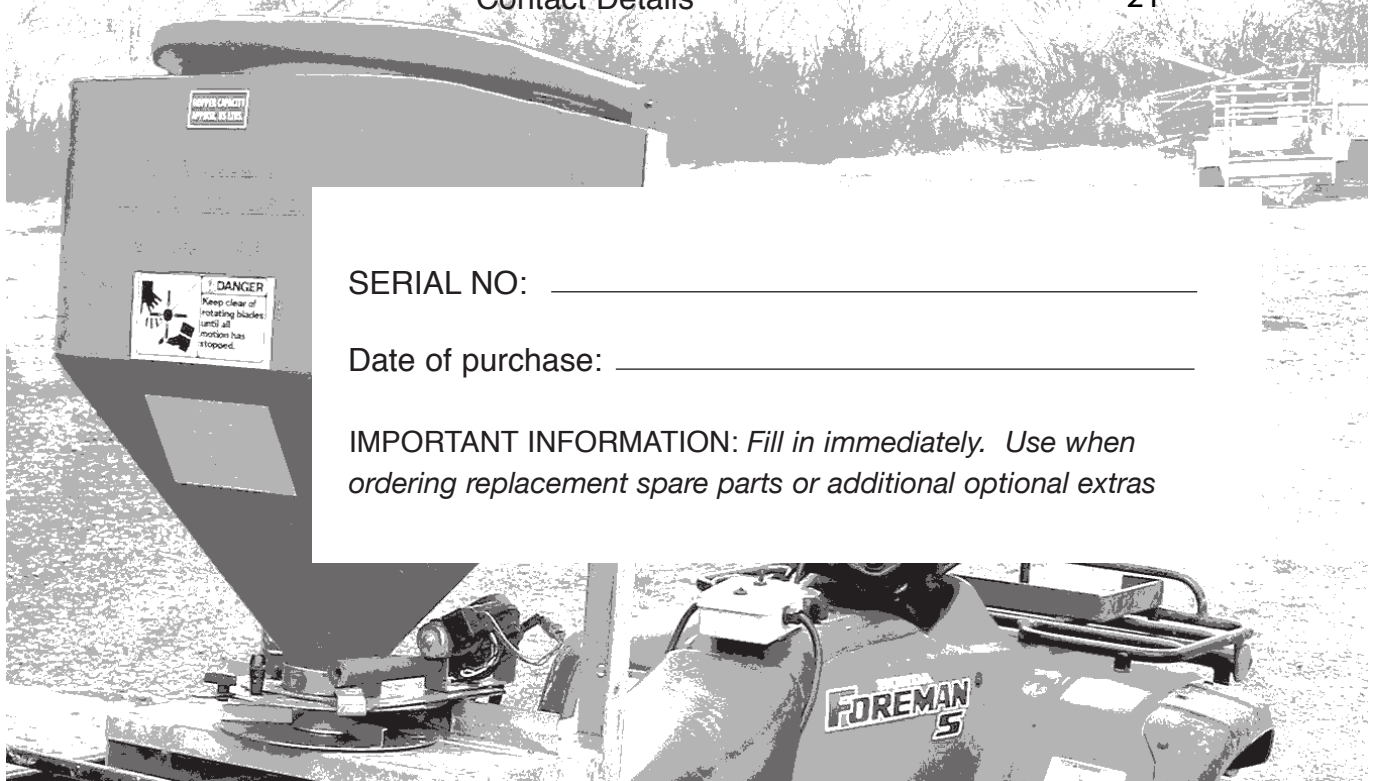
BEFORE ATTEMPTING TO COVER WHOLE FIELD DRIVE A SHORT DISTANCE AND THEN STOP TO MAKE SURE SPREAD WIDTH IS CORRECT AND EVEN.

ELECTROBROADCASTER

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SERIAL NO: _____

Date of purchase: _____

IMPORTANT INFORMATION: *Fill in immediately. Use when ordering replacement spare parts or additional optional extras*

Safe use of all-terrain vehicles (ATVs) in agriculture and forestry

HSE information sheet

Agriculture Information Sheet No 33 (Revision 1)

Introduction

This information sheet gives advice on the safe use of ATVs. It covers the two main types used in off-road working in agriculture, forestry and the land-based industries, namely:

- **Sit-astride ATVs:** Any motorised vehicle designed to travel on four low-pressure tyres on unpaved surfaces, with a seat designed to be straddled by the operator and with handlebars for steering control (see Figure 1). These vehicles are intended to be used by a single operator without a passenger. They may also be referred to as quad bikes.
- **Side-by-side ATVs:** Small utility vehicles in which the driver and passenger sit alongside each other in conventional (ie sit-in) seats (see Figure 2). Most side-by-side vehicles are capable of carrying two occupants in this way; however, some vehicles are equipped with a second row of seating (and can therefore carry four occupants), while others have bench-style seats allowing up to three people to be seated in a row. The majority of side-by-side vehicles have four wheels, although six-wheel and full and partially tracked versions are also available. There is usually a cargo bed behind the seating area. Side-by-side ATVs are sometimes referred to as utility vehicles (UTVs) or rough terrain utility vehicles (RTVs).

ATVs are usually fitted with a tow hitch and are capable of towing a load such as a trailer, a trailed appliance or other equipment.

Hazards

Both types of ATV are designed to cope with a wide variety of terrain types, including steep slopes, but if used outside their safe operating parameters they can very rapidly become unstable. The main causes of serious or fatal injury associated with ATVs are from:

- being thrown off during vehicle overturns or after loss of control;

- collisions with structures, trees, other vehicles etc;
- being trapped/asphyxiated under an overturned machine;
- pedestrians being struck or run over by ATVs.

Contributory factors/underlying causes of accidents and injury with ATVs can include:

- lack of formal operator training and/or experience;
- incorrect/lack of appropriate head protection;
- excessive speed;
- age of the operator;
- carrying a passenger on a sit-astride ATV;
- unbalanced loads or overloading;
- tipping on a bank, ditch, rut or bump;
- loss of control on a steep slope combined with other factors, eg ground or load conditions;
- towing excessive loads with unbraked equipment;
- poor maintenance, eg faulty brakes, incorrect tyre pressures etc.

Control measures for sit-astride ATVs

Training

It is a legal requirement for employers to provide adequate training for employees who use work equipment such as ATVs, and to make sure that only employees who have received appropriate training in their safe use, including the use of any towed equipment or attachments, are permitted to ride them. The same requirements apply to the self-employed.

You can get details of suitable training courses from franchised ATV dealers, manufacturers' websites, EASI (European ATV Safety Institute), the British Off Road Driving Association (BORDA) and through colleges and training providers.

When purchasing a new or used machine from a franchised dealer an industry-led scheme offers customers free training – see 'Useful contacts'.

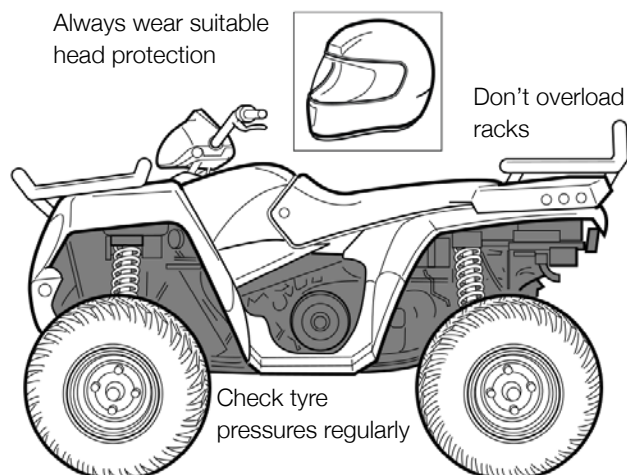


Figure 1 Example of a sit-astride ATV

Personal protective equipment – the importance of head protection

Sit-astride ATVs are not fitted with either a cab or roll bar, so your only protection is what you wear. Head protection is vital. Many ATV fatalities in the UK have been caused by head injuries. Helmets would certainly have prevented most of, if not all, these deaths. You should always wear a helmet when riding an ATV.

Helmet types suitable for ATV operations, depending on the circumstances, are motorcycle helmets, equestrian helmets, specialist ATV helmets, cycle helmets and mountaineering helmets. All helmets should be manufactured and tested in accordance with the current relevant EN/BS standard, have a chinstrap and be capable of being used with suitable eye protection. The type of helmet chosen should be based on an assessment of the circumstances in which the ATV will be used, eg the types of surface travelled over and anticipated speeds. The harder the surface and higher the speed the greater the degree of protection needed. NB: Forestry helmets and industrial hard hats are not acceptable for any ATV operations.

Wear clothing that is strong and covers your arms and legs. Gloves are useful for protection and handlebar muffs can help to keep hands warm in cold weather for good control of the ATV. Wear sturdy, ankle-covering footwear, eg boots or wellingtons that are strong, supportive and have good wet grip.

Protect your eyes from insects and branches with either a visor or goggles.

Passengers

The long seat on a conventional sit-astride ATV is to allow operators to shift their body weight backwards and forwards for different slope conditions,

a technique known as 'active' riding. It is **not** for carrying passengers. Manufacturers often display a sign on machines prohibiting passengers and this message is also repeated in operator manuals.

Do not carry a passenger in a trailer behind an ATV as any movement can make the machine unstable, particularly with independent rear suspension and trailers with axles wider than the ATV.

Some machines have received European Community Whole Vehicle Type Approval, allowing them to be ridden on the public highway. Some of these machines are designed to carry passengers. Such machines may not be suitable for carrying a passenger when used in off-road situations, eg on sloping ground, as the operator may not be able to use active riding techniques to maintain machine stability. Such machines may not have a locking differential and may not provide an acceptable level of traction to ensure safety in certain off-road conditions.

Before using an ATV you should assess the suitability of the machine for the intended tasks and working environment.

Route planning and stability

Accidents can occur where ATVs are driven on new routes over steep ground for the first time, or are carrying or dragging destabilising loads. When travelling over rough terrain, get to know your own ground and stick to planned routes where possible. Walk new routes if necessary to check for hidden obstructions, hollows or other hazards. Allow for changes in ground conditions and for the destabilising effect of loads or attachments.

Safety checks and maintenance

Off-road use is especially harsh on equipment so it is essential to carry out safety checks and maintenance in accordance with the manufacturer's recommendations. In particular, pre-ride safety checks should always include:

- tyre pressures. These are low, eg typically around 2–7 psi, so even a 1 psi (0.07 kg/cm²) difference in pressure can cause vehicle control problems. Use a gauge that is designed for measuring and displaying low pressures – usually supplied with the ATV;
- brakes and throttle. Check that the brakes give a safe straight stop and that the throttle operates smoothly in all steering positions. Brakes can have a relatively short life in farming or forestry environments and need frequent cleaning, regular adjustment and proper maintenance.

Safe riding methods

On sit-astride ATVs rider positioning is vital to operate them correctly. The position of the rider on the machine needs to be changed depending on the terrain and motion. Riders must have the ability to move and balance the momentum of the ATV with their own body weight. Plan routes (and review the plan if a route is used regularly) to assess risks.

The following advice is no substitute for formal training.

- Most ATVs have no differential and so do not handle in the same way as other machines. This means that when you turn, the ATV tries to keep going in a straight line.
- When cornering on an ATV with no differential, or with the differential lock engaged, where your body weight needs to be positioned depends on how sharp the corner is and on how fast you are going. Correct body position allows you to transfer weight to the outside of the turn through the footrests while maintaining balance with the torso. This lets the inside wheels skid slightly allowing the ATV to make the turn properly.
- You must understand how the transmission system of your machine will affect engine braking for both riding on slopes and recovery of stalled ATVs.
- When riding across a slope, keep your weight on the uphill side of the ATV.
- When going downhill, slide your weight backwards, select a low gear and use engine braking, reducing the need to use the brakes.
- When going uphill, it is important to review the route before starting the climb. Move your weight forwards and maintain a steady speed. It is important to shift your body weight forwards as much as possible. If necessary, stand up and lean forward, keeping both feet on the footrests at all times and always maintain momentum.
- Avoid sudden increases in speed. This is a common cause of rearward overturning accidents, even from a standing start on flat ground where there is good grip.
- Never put your foot onto the ground to stabilise an ATV when riding, but shift your weight across the ATV away from the imbalance.
- Always read the owner's manual.

Trailed equipment and loads

Ensure all riders know the manufacturer's recommended towing capacity and drawbar loading limit. Always operate within these requirements. Remember that your ability to control the ATV by your body movements will be considerably reduced when carrying a load or towing a trailer.

- When selecting trailed equipment look for:
 - over-run brakes;
 - a swivel hitch drawbar;
 - bead lock rims on wheels;
 - a low centre of gravity and a wide wheel track;
 - a long drawbar;
 - attachment points for securing a load.
- Check the weight ratio between your ATV and its trailed load. This needs to be assessed for each operation. As a general guide, on level ground braked trailed equipment can be a maximum of four times the unladen weight of the ATV. For unbraked trailed equipment the maximum should be twice the unladen weight. These loads should be reduced when working on slopes, uneven ground or poor surface conditions. Follow the manufacturer's advice for your particular machine.
- Weight transfer is also important. Stability and resistance to jackknifing is improved if some load is transferred onto the ATV's drawbar. Approximately 10% of the gross weight of the loaded trailer is recommended, but this should not exceed the manufacturer's drawbar loading limit. Remember that weight transfer can change dramatically when you start going up or down hill.
- When selecting mounted equipment, make sure it is within the manufacturer's approved weight limit, with a low centre of gravity and controls which are easy to operate but do not create a hazard. Where equipment is added to one end of the machine, add ballast at the other end to maintain stability.
- Loads carried on racks must be well secured, eg with ratchet straps, and be evenly balanced between the front and rear, except where they are deliberately altered to aid stability when going up or down a slope. Maximum weights that can be carried should be specified in the operator's manual and may be marked on the machine. These should not be exceeded.
- Only tow a load from the hitch point. Loads towed from other points, such as the rear rack, have caused sudden rear overturning even on slight slopes or with slight acceleration. Do not use ropes or chains to drag a load; they can become caught on a wheel. This may lead to entanglement with the brake cable, causing unexpected braking.

Using sprayers

- Sprayers should be fitted with an induction hopper unless the filling point is less than 1.5 m from the ground and within 0.3 m from the edge of the sprayer. A separate clean water tank for washing must be provided containing at least 15 litres of clean water and a tap that allows the water to run without being continuously pressed.
- When buying a sprayer look for a low centre of gravity and internal baffles to reduce liquid surge and improve stability when turning on slopes.

- ATVs should only be used with rear-mounted spray booms or other equipment that reduces the risk of pesticide exposure to the operator.
- Do not hold a spraying lance while riding your ATV as you need two hands for safe control.

Accessories

Beware of the potential dangers of accessories which are not approved by manufacturers, eg home-made gun racks and boxes. Either use accessories supplied/approved by manufacturers or seek their advice as to the suitability of those sourced elsewhere.

Any weight added above the centre of gravity will decrease the ATV's stability, eg feed hoppers/dispensers fixed above the rear rack.

Children

- Never carry a child as a passenger. It is illegal and will reduce your ability to control the ATV.
- Children under 13 years old are prohibited from using an ATV for work. Over-13s should only ride ATVs of an appropriate size and power after formal training on a low-power ATV.
- Children under 16 years old are prohibited from using most adult-sized machines. Check and adhere to the manufacturer's minimum age recommendations for your ATV; this information may be displayed on the machine and in operator manuals. Similar restrictions apply to side-by-side machines.
- The ratio of a child's weight to that of the ATV is significant, as weight transfer is the key to safe handling.
- In the event of an overturn, a child may be crushed by the weight of an adult-sized ATV. They may be unable to lift it off unaided.

Roll-over protective structures (ROPS)

- HSE's current advice is that roll-over protective structures (ROPS or crush protection devices) are not recommended for sit- astride ATVs. Research has shown that they may lead to an increased risk of injury in the event of an overturn by either preventing the operator from separating from the machine or striking the operator as the machine overturns.
- Lap straps/seat restraints should not be fitted. They prevent active riding and would be potentially lethal without a full cab or roll cage.
- Weather cabs on sit- astride ATVs restrict a rider's ability to jump clear in an overturn. The rider is likely to be crushed within the cab unless it is strong enough to withstand the forces involved. Carefully assess the risks for your particular

conditions of use before fitting any such structure and consult the manufacturer for information.

Side-by-side ATVs

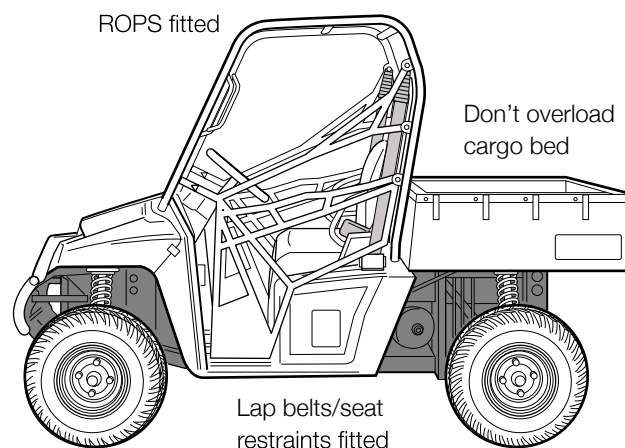


Figure 2 Example of a side-by-side ATV

Utility side-by-side ATVs are used for many of the same purposes as tractors and designed for similar work activities, ie off-road use on difficult terrain. They have conventional sit-in seats, and the main controls comprise a steering wheel and pedals. The driver does not need to use weight transfer to steer or to control stability. Nevertheless, the correct distribution of weight on-board the vehicle is important, particularly when carrying a load or on uneven surfaces. Loads carried on the cargo bed should not exceed the recommended weight and should be secured against movement.

Training

The legal requirements for training are the same as for the sit- astride ATVs.

ROPS and seat belts

The requirements for these machines are quite different to those of sit- astride ATVs:

- To reduce the risk of injury in the event of a roll-over or other incident, side-by-side vehicles require lap belts/seat restraints as well as ROPS that essentially form a protective structure around the seating area. The compartment is usually open, although some vehicles are fitted with a windscreen and/or side doors. The driver and all passengers should be protected by ROPS and wear lap belts.
- Where a machine is amphibious and used on deep water as opposed to marshland, then the seat restraints (and possibly ROPS) could increase the

overall risk rather than reduce it. In this case, do not use seat restraints while on the water. Assess the risk from the roll frame according to its design and the likelihood of trapping the occupants if the machine should sink.

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Parking

If you have to park on a slope, always park across it unless it is too steep. Accidents have occurred when machines have run down slopes because of poor brake maintenance or application, particularly while they are being loaded and movement or the increase in weight has set the machine in motion.

Useful contacts

EASI®, the European All-Terrain Vehicle Safety Institute, is a not-for-profit organisation which provides safety training courses for ATV riders.

EASI's UK operation is sponsored by a number of ATV manufacturers and delivers a programme of specialist ATV training courses which are designed to improve rider skills, safety levels and awareness of the capabilities of ATV machines.

Buyers who purchase a new or used ATV from one of these manufacturers via an authorised UK dealer are eligible for **free** or highly subsidised training, subject to qualifying terms, conditions and availability. See www.quadsafety.org/ for details.

Training is also available from other organisations, such as the British Off Road Driving Association (BORDA). See www.borda.org.uk for details.

Further information

For information about health and safety, or to report inconsistencies or inaccuracies in this guidance, visit www.hse.gov.uk/. You can view HSE guidance online and order priced publications from the website. HSE priced publications are also available from bookshops.

This guidance is issued by the Health and Safety Executive. Following the guidance is not compulsory, unless specifically stated, and you are free to take other action. But if you do follow the guidance you will normally be doing enough to comply with the law. Health and safety inspectors seek to secure compliance with the law and may refer to this guidance.

This leaflet is available at:
www.hse.gov.uk/pubns/ais33.htm.



THE ELECTROBROADCASTER.

The TFL Range is designed to broadcast a wide range of products at rates of 1 - 50 kg per Hectare and at widths of 4 to 30 metres.

TFL 80 Manual and Power Shut Off

The TFL 80 is capable of spreading a good quality slug pellet to 24 metres, but it is a fact that all broadcasters have a '*tail off*' factor in their spreading performance. A lapped pattern or system will give much better distribution than if one is attempting to "match" work. If spreading conventional slug pellets, the TFL 80 can give excellent cover up to 20 metres.

BD 12 Game Bird Feeder

This model uses the same motor as the TFL80, but it is geared down to give a slower disc speed. This results in a high output with a narrow spread of game food.

TFL 120

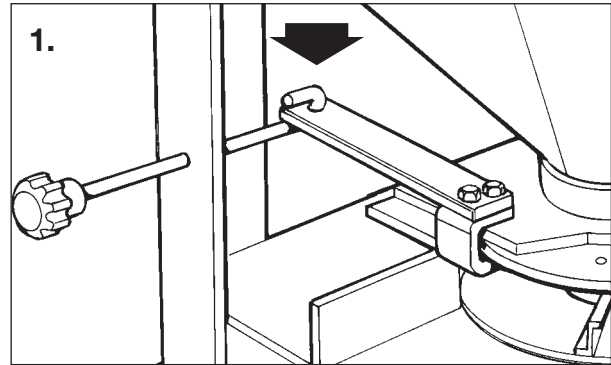
This machine is capable of casting slug pellets to distances much greater than 24 metres, but this is not achievable if the machine is mounted on an ATV. Mount the machine higher (on a tractor or sprayer, for example) to achieve wider spread widths.

This machine has a substantially uprated motor. It must be realised that this only works if the battery and alternator are capable of meeting the demand.

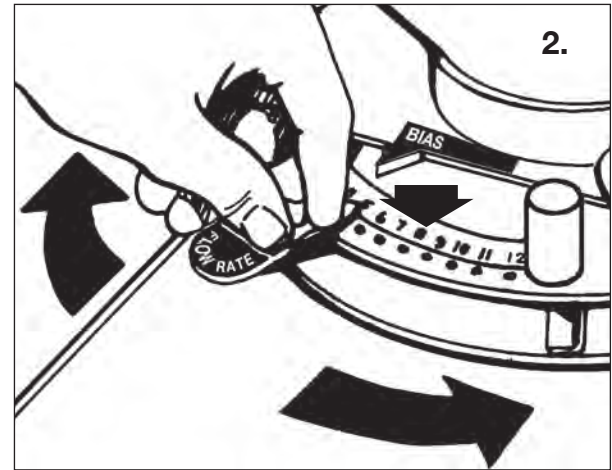
**Operating with an inadequate battery will damage the motor.
Damage caused in this way is excluded in the warranty.**

OPERATING INSTRUCTIONS

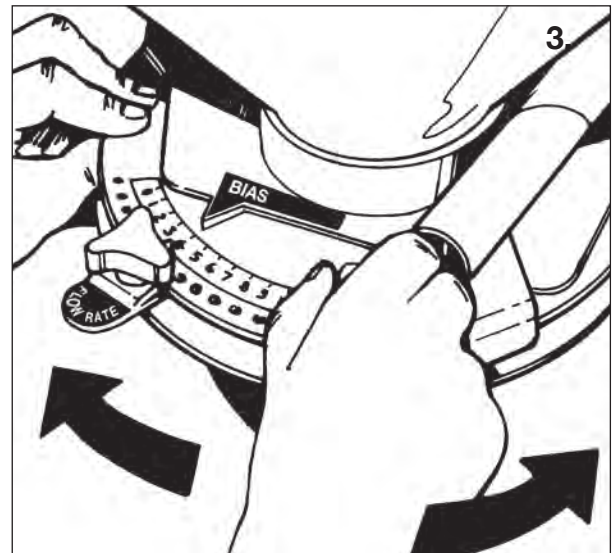
The **TFL 80** Manual comes with the Hand Lever separate to facilitate packing. The Manual Control round link arm needs to be inserted into the flat link arm via the hole in the frame and the two bolts and nuts tightened up. (See *fig one*)



On all machines, product flows from the two apertures in the adjustable feed disc onto the distribution cone. The rate of flow is determined by the metal pointer against the numbered scale. The higher the number the greater the flow. Adjust by undoing finger nut and moving pointer to desired number and tighten. (See *fig two*)



In order to compensate for the different characteristics of various products, it is possible to move the position of the two holes. This will correct any bias to one side or the other. The illustration in fig three shows how by moving the bias plate left or right this may be achieved, and the same scale is used to indicate the position, using the arrow which is pointing towards you.



It is a good idea to try this before putting any products in the machine, and watch the effect by looking into the hopper at the same time. The machine comes with the bias set at No. 6, which is usually right for slug pellets.

Grass seeds will normally require a bias setting of 12. The chart on page 13 gives you the bias settings for various products.

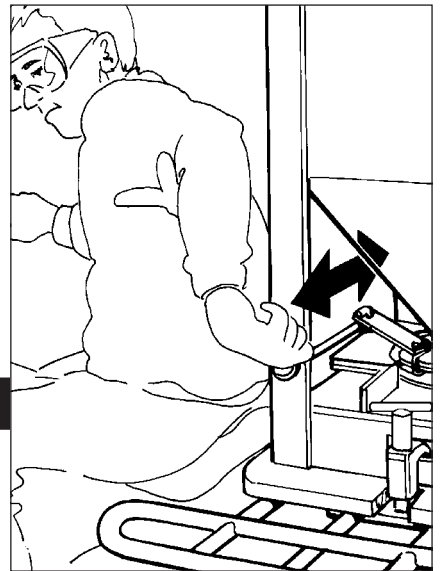
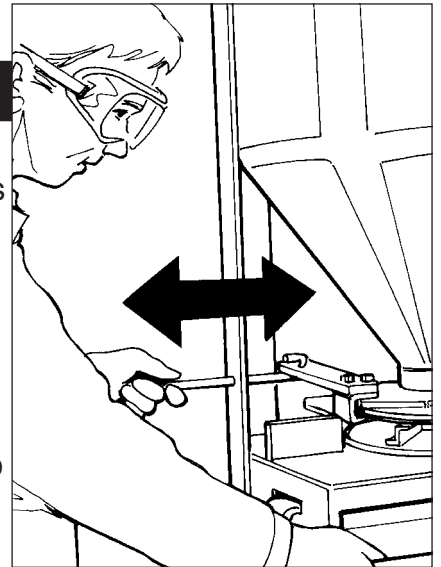
OPERATING INSTRUCTIONS

All machines are designed that in work, the motor runs constantly. When turning, operation of the cut off plate effectively cuts the flow of product instantly. This may be by means of the manual or power control.

IT IS EXTREMELY DANGEROUS to attempt adjustment with the motor running.. The isolator switch has been provided specifically to allow the operator to stop the disc at all times when making adjustments.

MAKE SURE THE DISC HAS STOPPED.

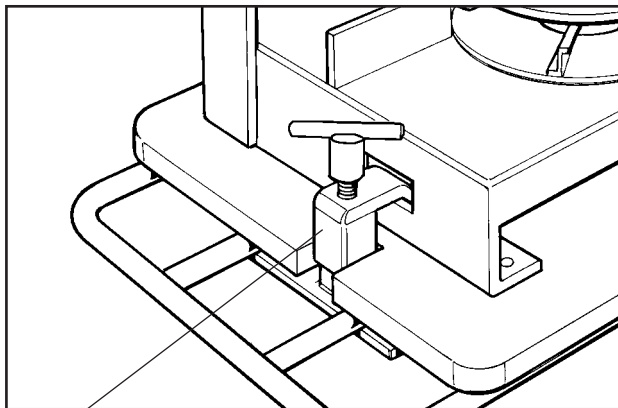
Equally when checking spread pattern or width, take particular care as to the risk of eye damage. Also, recognise this risk if you are approached by any person when working in the field.



ATV MOUNT KIT

The most common vehicle to carry the Electro broadcaster is an ATV. The simple mounting board and adjustable grip plates will provide a quick positive attachment, which is durable and low cost.

Self propelled sprayers and tractors are a matter for individual appraisal and choice. Wherever you finally decide to fix your machine, make sure the operator is suitably protected from dust that may occur at the disc when in use and at the hopper when filling.



BD030 - Mounting Clamp x2

BD029 - Complete Mounting Kit

ELECTROBROADCASTER

WIRING INSTRUCTIONS FOR TFL 80 M/P MODELS

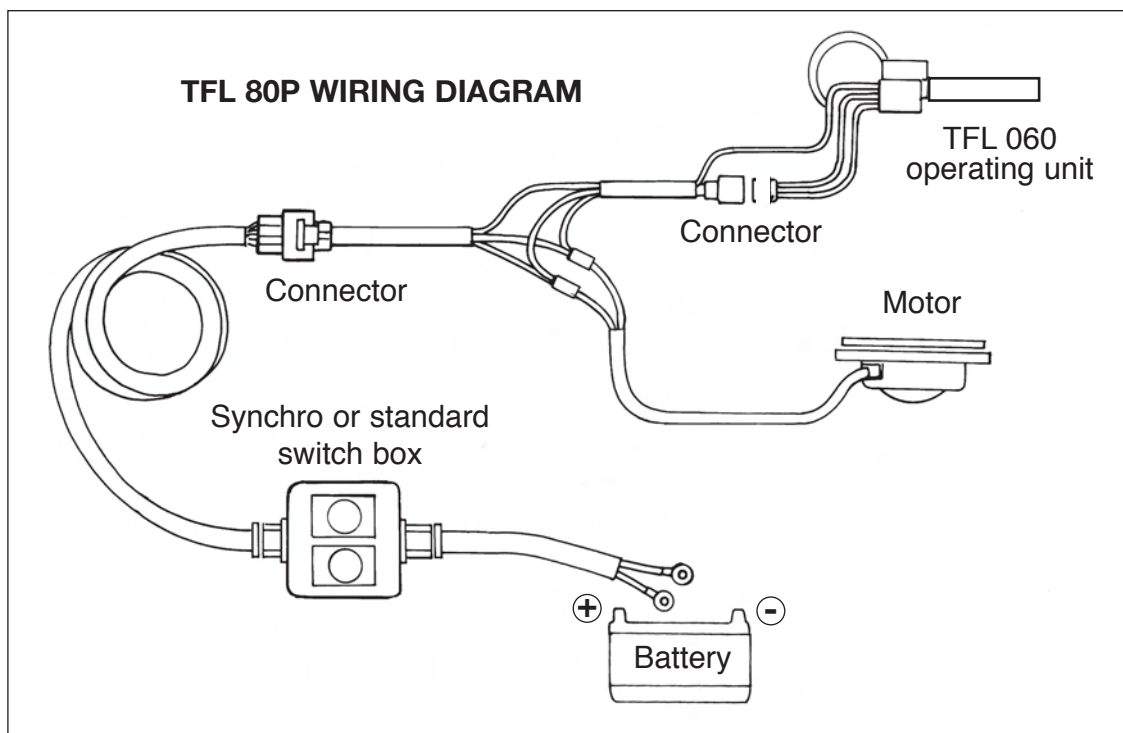
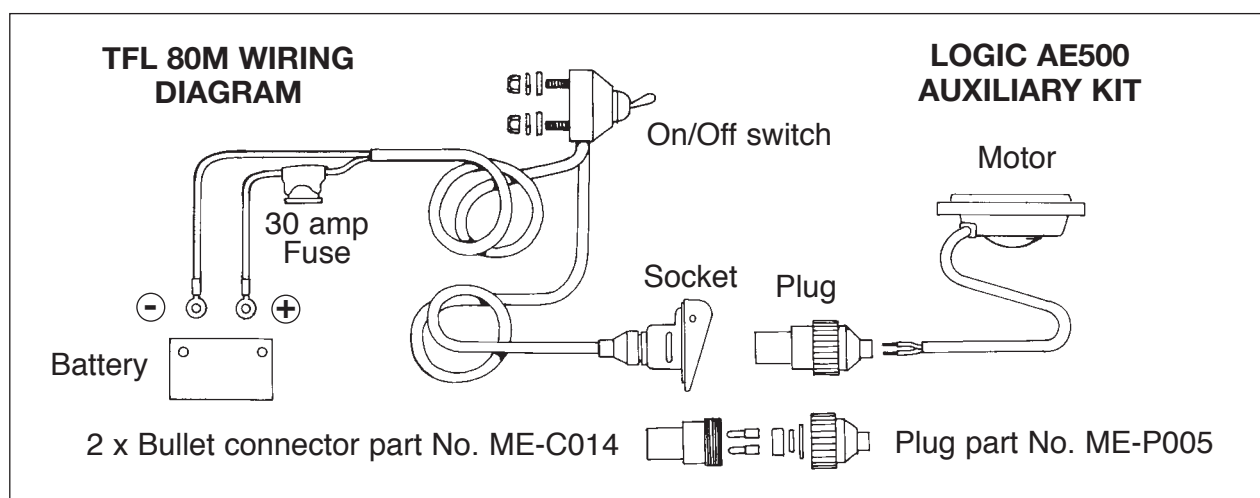
As already stated, the **TFL 80** will demand 12 amps to start and 8 amps to run under NORMAL LOAD.

Machine performance will be adversely affected if the voltage to the motor is not maximised.

Connect the cable from the switchbox directly to the battery. **Do not use auxiliary sockets.**

We do approve the **LOGIC AE500** wiring kit.

- Make sure any extra cable is no less than 2.5 mm².
- Make sure any extra cable is multi stranded.
- The vehicle alternator must be connected to the battery being used.
- The Battery must be in a good state of charge and should supply 13 Volts or more at the output terminal.
- Some vehicles, particularly ATV's, may need a battery of greater capacity than fitted.

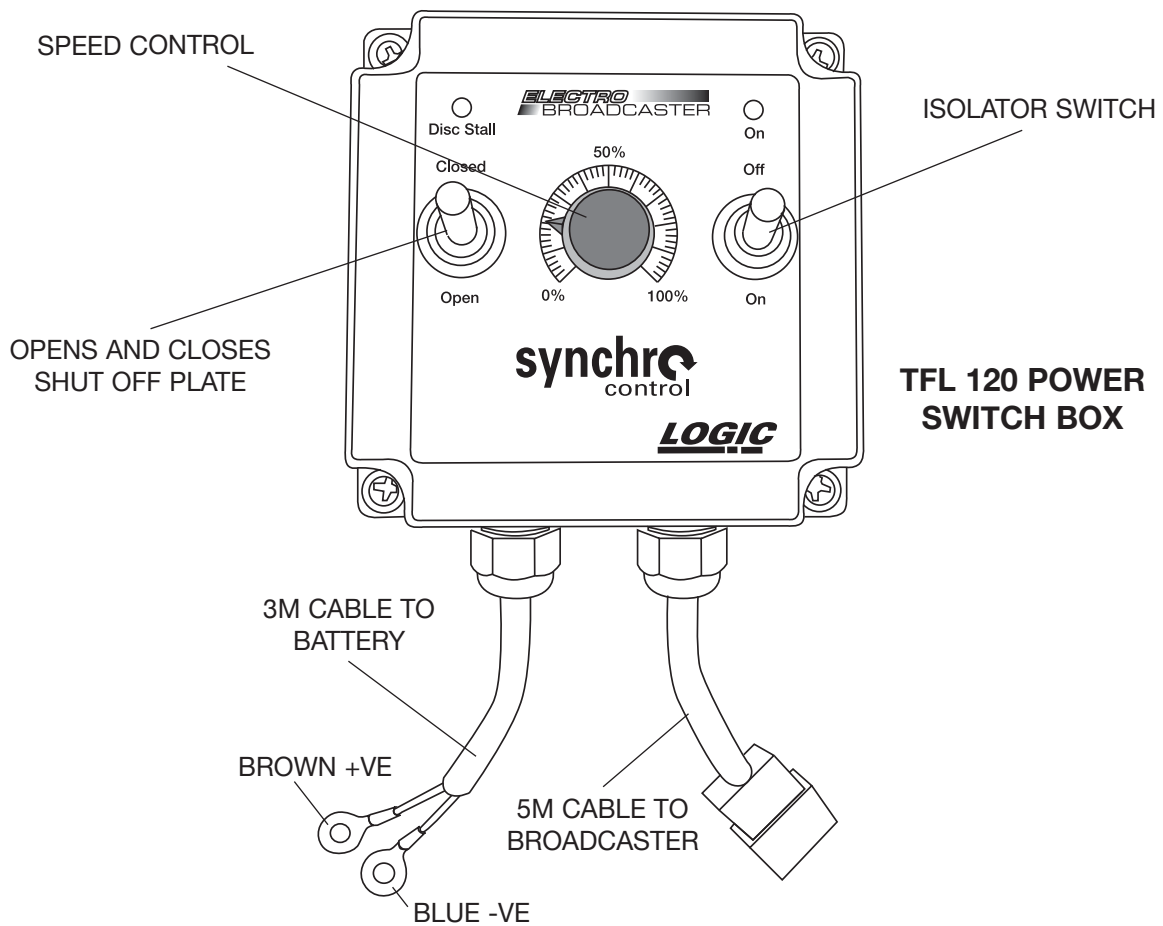


TFL 80 SYNCHRO CONTROL BOX

The Synchro Spread control box allows you to match the spread width of your Electro broadcaster to either the implement width that you are using it in conjunction with or to spread in narrow bands where the situation demands.

When the Electro broadcaster is shut off, but with the disc still running, the disc speed will return to its full rpm. When product is allowed to flow by opening the shut off slide the disc will once again return to its preset speed. This has been done to ensure that the disc always receives full power upon start up and helps reduce the incidence of disc stall; which can happen when current is reduced to the disc.

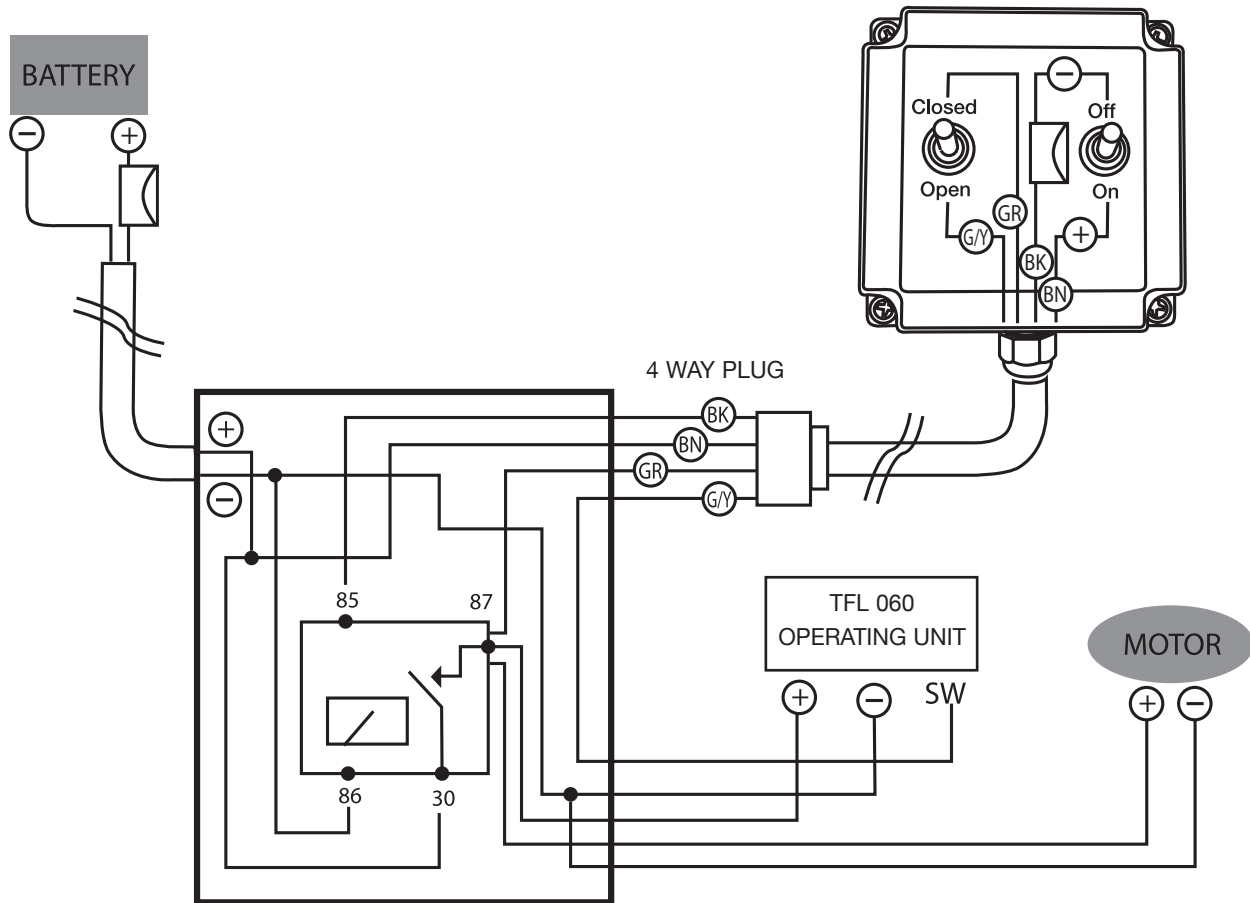
The stall light will illuminate when the disc motor fails to rotate on start up. It will not illuminate in the unlikely event of the disc ceasing to rotate during operation.



SWITCH BOX MUST BE WIRED DIRECTLY TO BATTERY - NO 12v AUXILLARY SOCKETS

TFL 120 POWER WIRING DIAGRAM

The wiring diagram for the TFL120P model is shown below. Please note that the battery connection is made directly to the spreader unit and not the switch box.



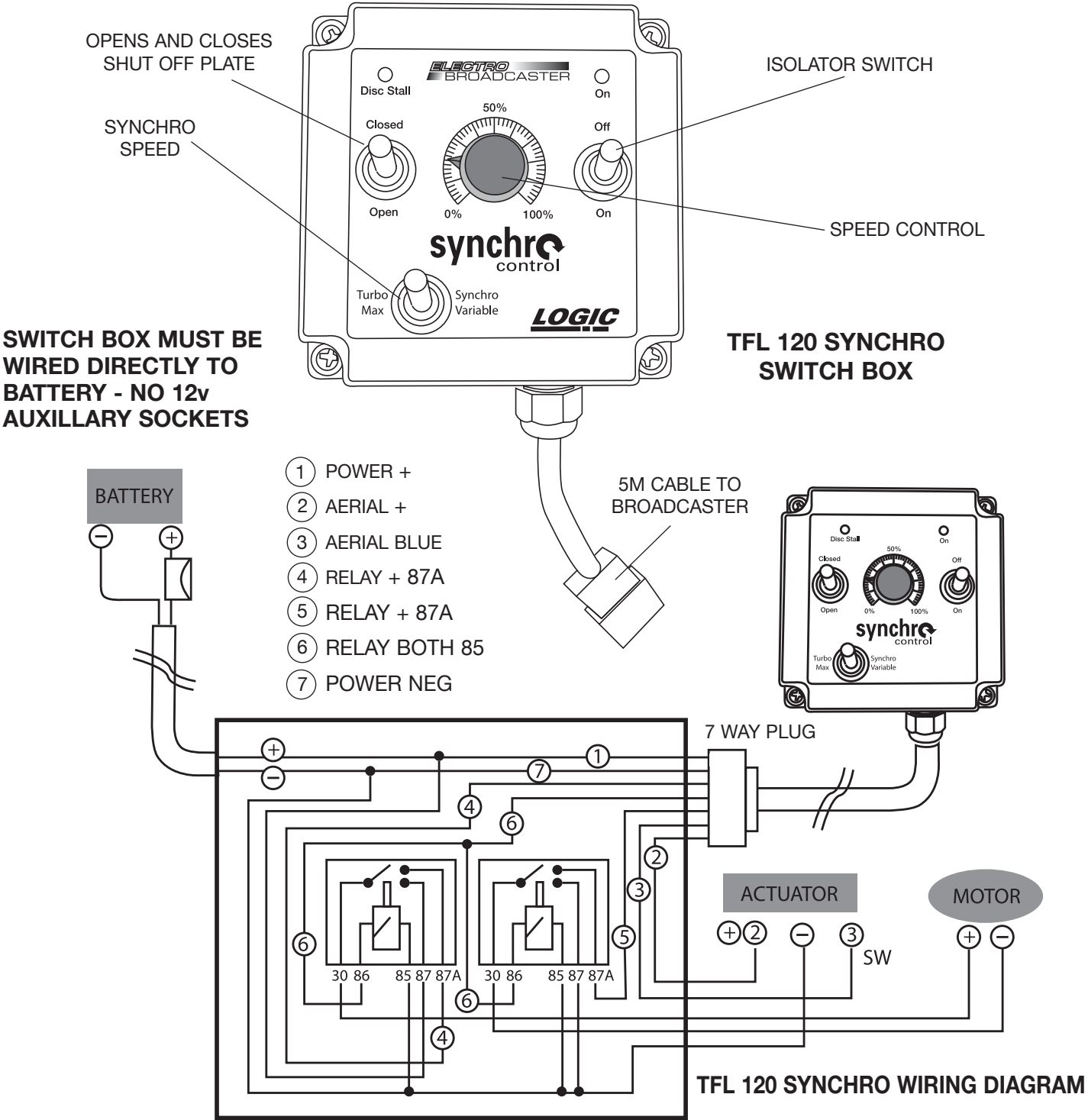
- (BN) BROWN = POWER +
- (BK) BLACK = RELAY 85
- (GR) GREY = RELAY 87
- (G/Y) GREEN/YELLOW = TFL 060 UNIT: BLUE

TFL 120 POWER WIRING DIAGRAM

Machine performance can be compromised if connections to battery and subsequent cabling is not good and free from breaks and resistance. Please do not alter factory supplied cabling without first consulting the company you purchased the machine from.

TFL 120P AND SYNCHRO MODELS

The TFL120 Synchro Control features a Turbo switch which allows additional current to flow to the motor when you are looking for maximum spread width. Use the SYNCHRO VARIABLE position for variable width spreading using the 0-100% scale on the speed control adjuster. Use the TURBO MAX position to give up to an extra 10% to the disc rpm. This is a useful extra when looking to achieve maximum spread width.

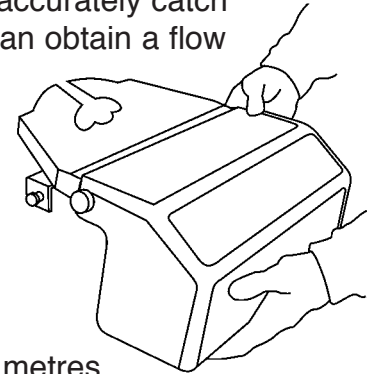


PLEASE ENSURE POWER LEAD TO BATTERY IS AS SHORT AS POSSIBLE FOR TFL 120 MODELS

CALIBRATION

The chart provided gives the rate of flow in KG per minute for a range of products. These flow rates are a guide only.

In order to obtain an accurate flow rate setting for your machine we can supply you with our purpose built calibration chute. This allows you to accurately catch and collect the material output from your machine so that you can obtain a flow rate in kg/min. Please contact your dealer for more details



When sowing seed go over the field twice at half the rate each time to ensure good even cover. Stop and check regularly until you are satisfied that you have the right setting.

Forward speed is, in itself, a method of fine tuning.

So for your initial setting use the formula :-

$$\frac{\text{Dosage rate in Kg / Ha} \times \text{Speed in KPH} \times \text{Driving width in metres}}{600}$$

This will give the amount of product in Kg / min

For example:- **Metarex @ 4 Kg / Ha**

$$\frac{4 \text{ Kg per Hect} \times 25 \text{ KPH} \times 12 \text{ metres}}{600} = 2 \text{ Kg / minute}$$

The nearest setting on the chart to 2 Kg / min is Flow Setting 5 (2.2kg / min) You can either put the Flow rate setting slightly below 5 or drive a little faster in order to compensate. It is wiser to start with a slight under dose and check after a short distance. Check again before you over or under dose any appreciable area.

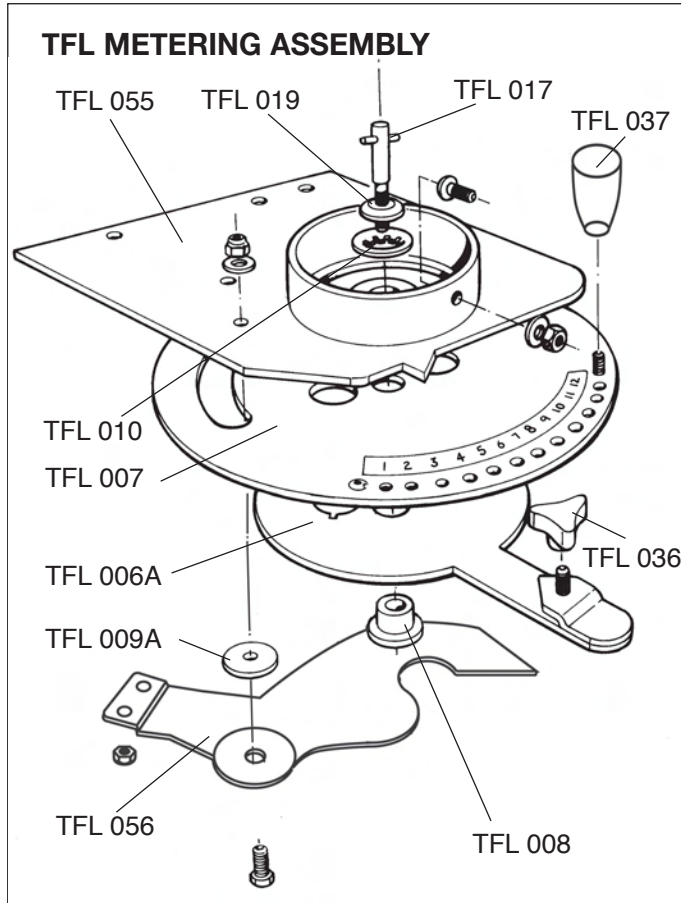
REMEMBER - the wider the spread the greater the load.

Is your battery condition adequate ?

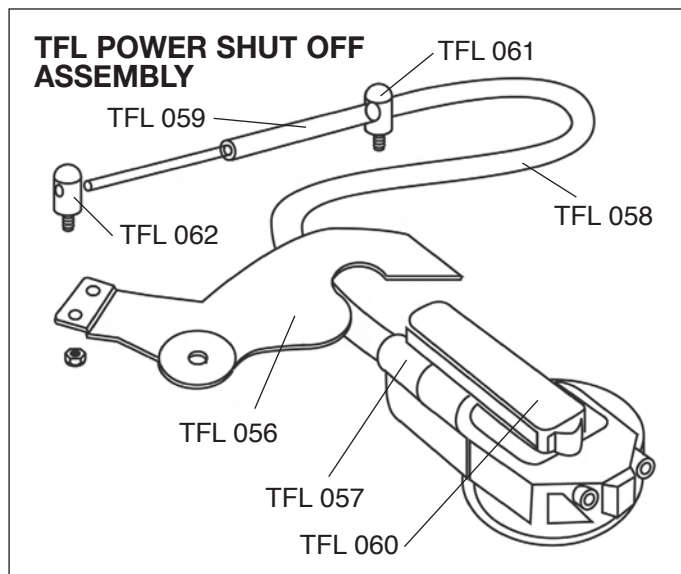
CHECK -Nothing in the hopper before filling ? Do Not over fill, especially when starting. Make sure the spread is even. Make sure disc rotational direction is correct. Avoid driving long distances with the hopper full as this can cause compaction and makes start up difficult.

Product flow rates KG /min													
WETEX PELLETS					MINI PELLETS		SEEDS				FERTILISER		HERBICIDE GRANULES
FLOW	METAREX	HURON	DRAZA FORTE	SLUGGO	LYNX	PESTA	GRASS LEY	CLOVER	OSR/TURNIP	MUSTARD	20-10-10	GRASSTRAC	AVADEX
1								0.2					0.12
2								0.6	0.4				0.7
3								1.4	1.2				1.65
4	1.2	1.3	1.4	1.2					1.8	0.9			2.7
5	2.2	2.1	2.2	2.3	0.8	1.0			2.5	1.9			4.1
6	3.1	3.2	3.4	3.2	1.8	2.1			3.0	2.5	2.9		
7	4.3	4.6	4.6	4.4	2.8	3.0			4.5	3.9	4.7		
8	5.6	6.0	6.1	5.6	3.9	4.3	1.4				6.7	5.3	
9	6.7	7.5	7.5	6.9	5.7	6.1	2.4				9.0	6.4	
10	7.6	8.6	8.7	7.7	6.5	6.7	3.5				10.1	8.9	
11	8.7	10.0	10.1	8.8	7.1	7.5	3.9				11.5	10.7	
12	9.3	11.0	11.2	9.5	8.6	9.3	4.6				13.3	11.5	
Bias	6	6	6	6	6	6	12	6	6	6	12	6	6

TFL AND BD RANGE PARTS LIST



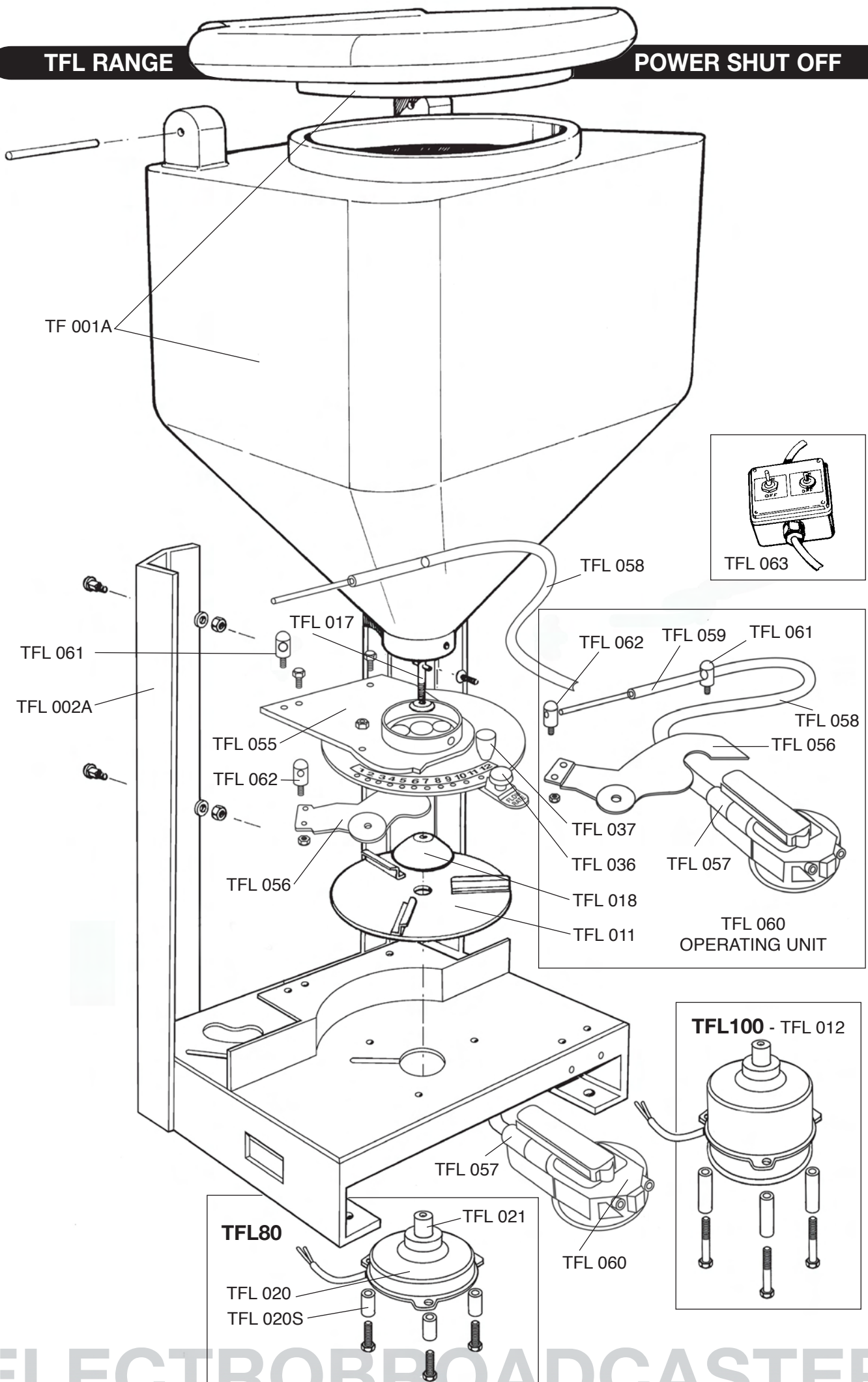
- TFL 001A Hopper complete with lid
- TFL 002A Base unit and legs
- TFL 036 Finger Nut
- TFL 037 Knob
- TFL 006A Adjustable feed disc
- TFL 007 Bias Disc
- TFL 008 Nylon bush
- TFL 009A Plastic washer
- TFL 010 Starlock
- TFL 011 Spreader disc
- TFL 012 TFL 100 motor and hub, spacers and mounting bolts
- TFL 017 Agitator
- TFL 018 Distribution cone
- TFL 019 Shaft seal
- TFL 020 Motor
- TFL 020S Motor mounting spacers
- TFL 021 Motor hub
- TFL 024 Round link arm (manual)
- TFL 025 Handwheel (manual)
- TFL 033 Fuse blade 40 amp
- TFL 034 Fuse carrier



- TFL 055 Meter fixing plate
- TFL 056 Cut off plate
- TFL 057 Black slide tube
- TFL 058 Red slide tube
- TFL 059 Stainless slide tube
- TFL 060 Operating unit c/w slide tubes
- TFL 061 Cut off pillar (PT)
- TFL 062 Cut off pillar (ST)
- TFL 063 Remote control switchbox complete with cable
- TFL 064 Flat link arm (manual)

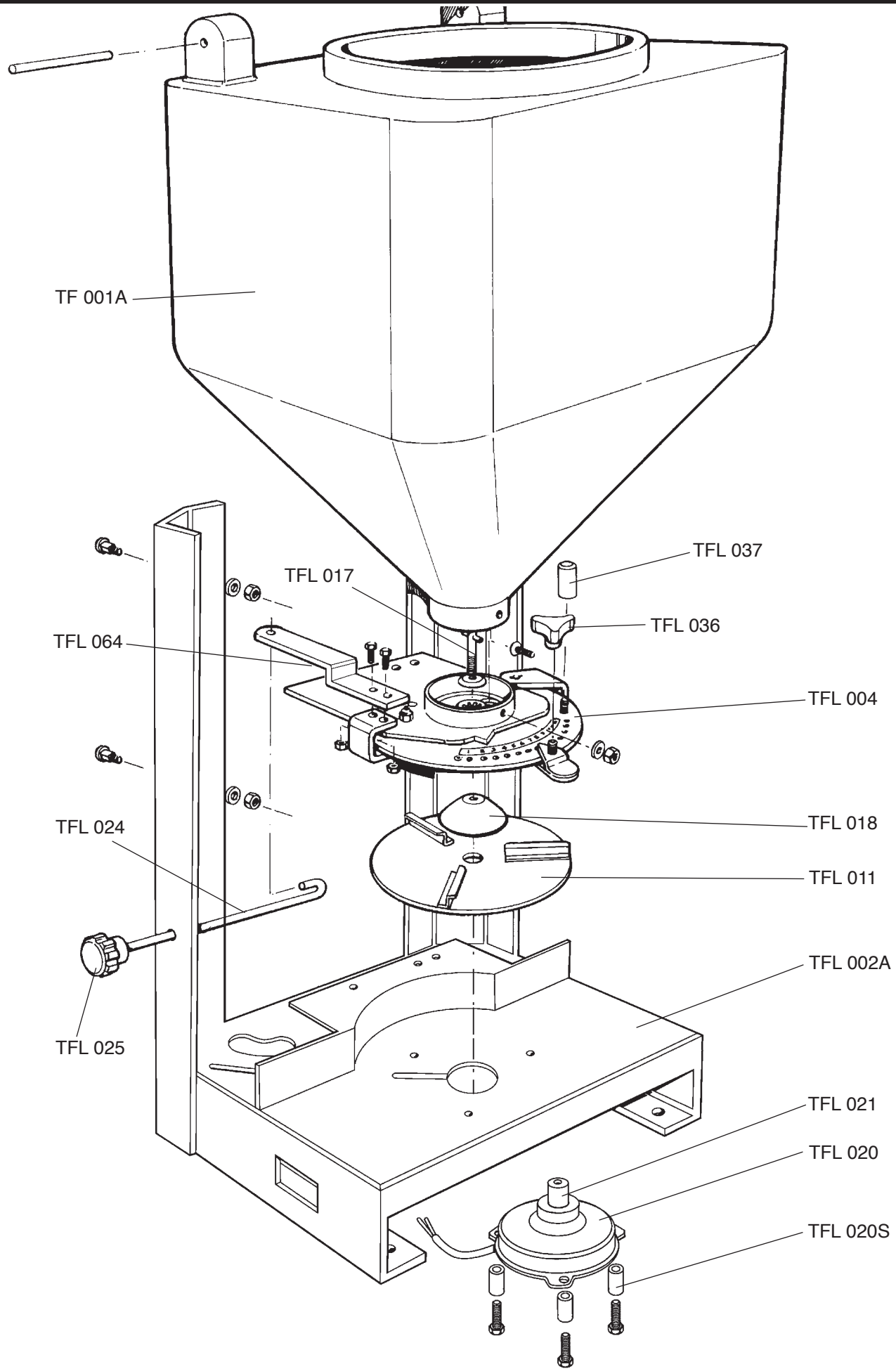
TFL RANGE

POWER SHUT OFF



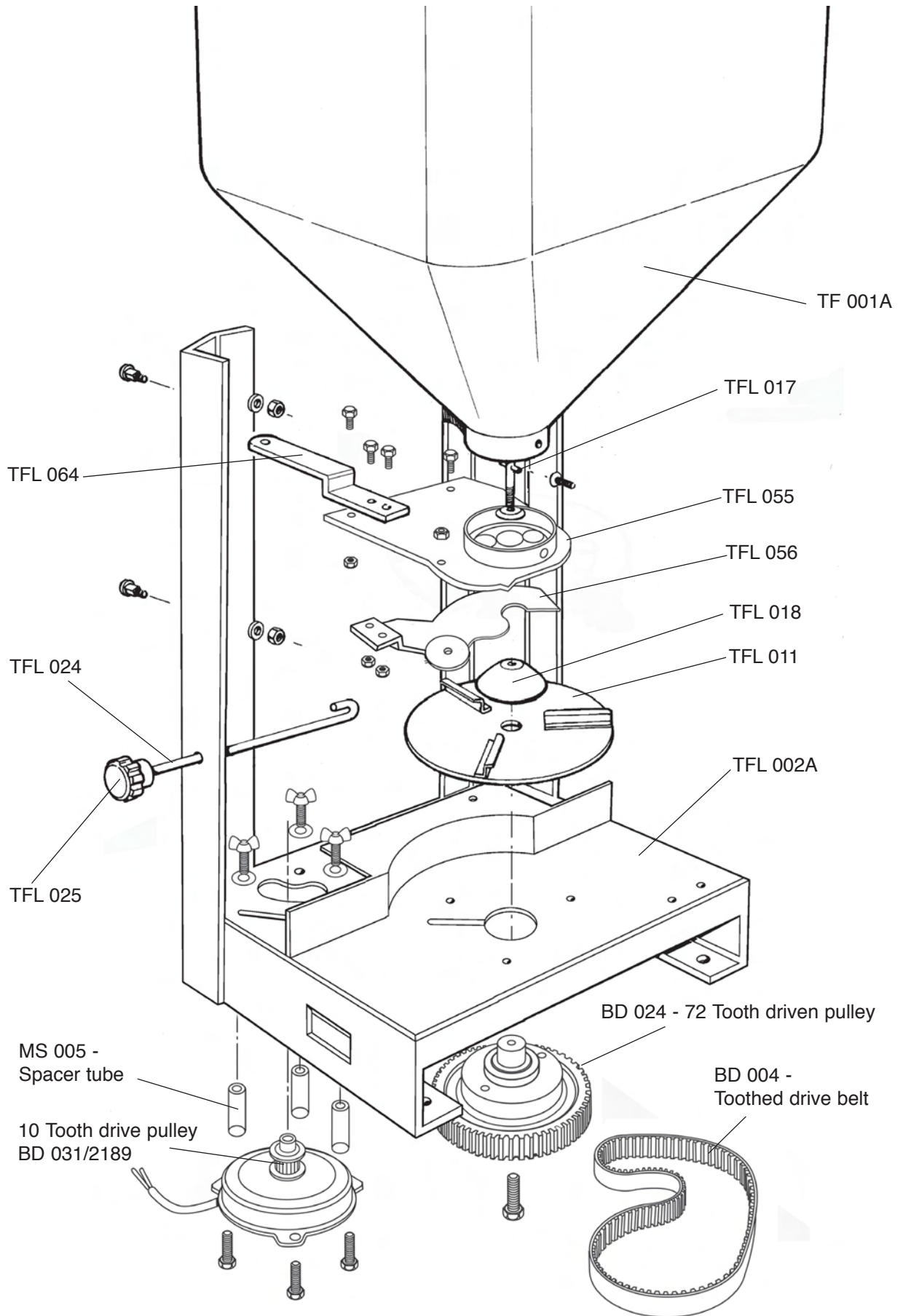
ELECTROBROADCASTER

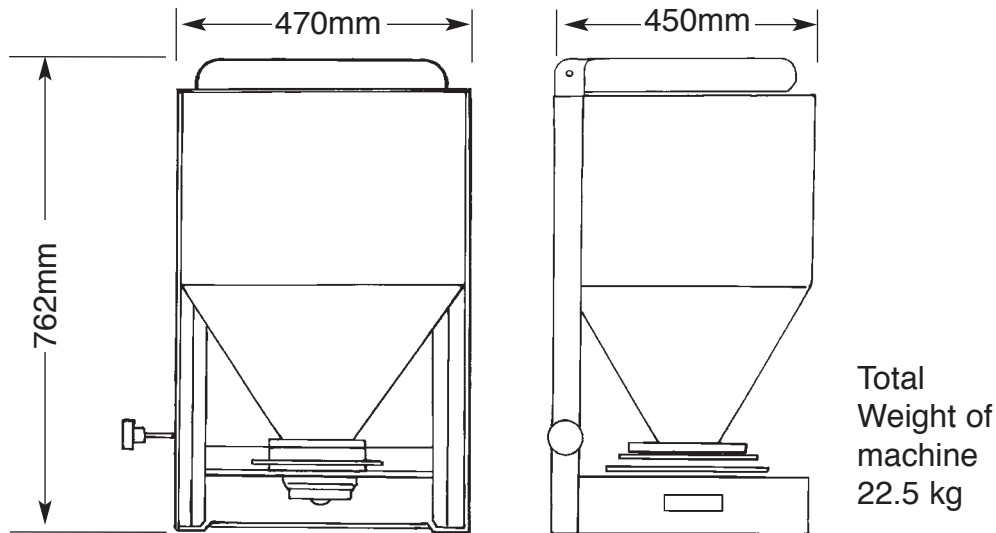
TFL80 MANUAL SHUT OFF



ELECTROBROADCASTER

BD 12 GAMEFEEDER





SAFETY WARNING

- **Keep fingers away from moving disc & agitator**
- **Switch Off when making adjustments**
- **Always wear correct protective gear**
- **Check hopper has no harmful objects or alien product inside before filling**
- **Do not travel long distances with hopper full, otherwise product will compact and prevent start up.**
- **Motor shafts are invariably broken by reason of articles put in the hopper and forgotten. Switching on can cause an impact shock which leads to shaft failure. The shaft is adequate for normal usage. No warranty is given on motor shafts except in exceptional circumstances.**
- **No warranty claim will be considered without a return to manufacturer inspection**

Warranty

12 Months from date of purchase on parts and faulty workmanship.
Every effort has been made to make this machine simple and reliable but should a breakdown occur please use only Evans & Pearce parts as any other components will invalidate the warranty.

Excessive wear brought about by the application of abrasive material is NOT covered by the warranty

Manufactured by
Evans & Pearce Ltd
Trent, Sherborne, Dorset England DT9 4SH

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Whilst every care has been taken in the production of this document, no liability can be accepted by the authors or manufacturers for loss, damage or injury caused by any errors in, or omissions from, the information given.

The Manufacturers and Distributors of the ElectroBroadcaster accept no responsibility for any loss, injury or damage arising from any misuse or otherwise of the product which is not in accordance with our instructions

DECLARATION OF CONFORMITY

93/44/EU

EVANS & PEARCE LTD
Trent, Sherborne, Dorset
England DT9 4SH

Product Type: **Electrobroadcaster**

Covered by Technical File No.: TF Range. EPB/TF/96/12/01

Product Serial Number: Types TFL 80, BD12 and TFL100

Standards and Regulations Used: The Supply of Machinery (Safety) Regulations 1992 Schedule 3 HSE Guide lines on ATV Equipment

Place of Issue: Trent, Sherborne, Dorset. UK. DT9 4SH

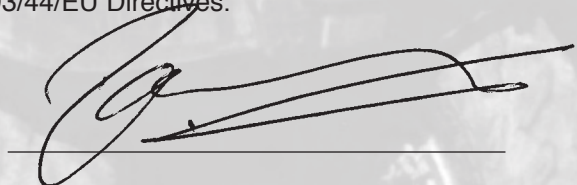
Name of Authorised Representative: Robert White

Position of Authorised Representative: Director

Declaration

I declare that as the authorised representative, the above information in relation to the supply/manufacture of this product, is in conformity with the stated standards and other related documents following the provisions of 93/44/EU Directives.

Signature of authorised representative.



R.J. White

Date: March 2012

