

Game Trailer (Hunter, Fieldsman, Huntsman) Operator and User Manual



Photo used for illustration purposes only Actual Model may vary from that shown



SAFETY INSTRUCTIONS

Before connecting this machine to any power source or switching it on, the user must read these operating instructions carefully.

Clay target launchers can be dangerous and must be treated with great care at all times to avoid accidents. You must treat a clay target launcher with the same respect that you would treat a loaded gun.

Never place any bodily part into the path of any mechanical piece whilst any machine is in motion or likely to be so.

SAFETY FENCING AND GUARDS SHOULD ALWAYS BE ERECTED AROUND THE MACHINE WHEN IN USE

Assume at all times that a clay target launcher is cocked or loaded and treat it accordingly.

Never approach any machine from the front or sides. Approach only from behind.

ALWAYS disarm ALL machines before carrying out reloading or adjustment.

Reloading with clays should be carried out from the rear of the machines.

Re-arm/cock machines only when all personnel are either behind or at a safe distance away.

Ensure that all machines are stable and cannot fall over.

Ensure that the machine is sited in a way that will prevent people from being struck by either the clay in flight, or broken bits of clay being ejected **sideways** from the machine.

Never allow members of the public or untrained personnel to approach or touch the machine.

Be aware of the fall zone of both broken and unbroken clays and that changes in wind direction will affect this. This is particularly important with teal and driven birds.

Never move a cocked/loaded machine. Remove the main throwing spring before transport.

Never place yourself or any bodily part into the path of the casting arm or the clay when the machine is operating.

Special Hazardous Conditions

In the rare event that the release of the casting arm is blocked or jammed by a piece of clay, or, in the event of immovable blockage, release the spring by winding the adjusting nut off, whilst keeping all bodily parts back and away from the spring as it jumps towards the front of the machine upon release.

Think very carefully about the result that your actions will produce before proceeding.



INSTALLATION INSTRUCTIONS

In most instances, these machines will not be used in a permanent situation, but whether the installation is permanent or temporary, the following advice is still applicable.

1. Site the machine in a way, which allows free and un-cramped access all around, paying particular attention to the ease of disarming/arming and reloading.

2. Ensure that there are no obstructions to the path of the arm and that the machine cannot change its position due to vibration or reaction.

3. Ensure that the power supply can be easily disconnected.

4. Ensure that cables are laid in such a way that they cannot become entangled in the mechanism.

5. Ensure that access is only available to the machine by qualified, trained personnel.

6. Although the spring tension can be wound on to the maximum amount possible, it is advisable to leave at least a couple of mm clearance between the end of the spring and the locking nut. This will allow the spring to move freely when the machine is fired.

7, Remove transit bolt (if fitted) on Centre trap before use and replace before transporting.



Trap Use and Maintenance

OPERATING INSTRUCTIONS

GAME TRAILER/SUPER SPORTER (All Models)

BEFORE MAKING ANY ADJUSTMENTS OR WORKING ON THE TRAPS ENSURE THAT THE TRAPS ARE UNCOCKED AND SWITCHED OFF

Check visually from the rear of the machine(s) that the motion of the casting arm(s) is not restricted or blocked in any way.

Always operate only from the **REAR** and **NEVER** from the front or sides. From this stage on, do not lean on the machine(s) OR touch whilst in motion.

Check the trip/isolator(s) on the side of the control box are in the "OFF" position, so that the red telltale(s) are visible.



Check that ALL switches on the operators panel are in the centre OFF position.



Make the battery connections ensuring that the red and black cables of each pair are connected to the same battery. With the fitted quick release battery connections it is essential **NOT** to hammer the connections on or to over tighten them.



Switch the trip/isolator(s) on the side of the control box to the "ON" position, so that the red telltale(s) are not visible.

Selecting each machine in turn and from the back of the machine(s) push the arm/off/disarm toggle switch into the "DISARM" position for about half a second only and release it. The switch is spring-loaded and will return automatically to the "OFF" position.

The casting arm(s) should now be static and visible to the left side of the machine(s) and the machine(s) will be in a safe condition. If the casting arm(s) are not visible, repeat the previous step until the arm(s) are visible. and the machine(s) are in a safe condition.

Switch the trip/isolator(s) on the side of the control box to the "OFF" position, so that the red telltale(s) show.

If your machine has been supplied ready for operation, then proceed to the next instruction. If your machine is supplied without its carousels fitted, they will need to be fitted using the centre pin, nut and washers provided on the top plate. Tighten the 19mm nylock nut down on to the blue plastic damping spacer. The nut should be tight enough for the carousel(s) to turn but not spin freely. It is best to keep turning the nylock until the blue damping spacer starts to squash up slightly.



If your trap was delivered without its mainspring fitted, now is the time to fit it. The Arm(s) can now be moved by hand until they stick directly out of the front of the trap away from the operator. The mainspring would now normally be at its shortest length and can therefore be fitted to the machine. See following photo.



DO NOT LOAD CLAYS YET.



Ensure that nothing will restrict the further motion of the arm(s).

Switch the trip/isolator(s) on the side of the control box to the "ON" position, so that the red telltale(s) are not visible.

Switch the arm/off/disarm toggle switch(s) down to the "ARM" position.

The machine(s) will cycle and stop in the armed position and **MUST BE TREATED WITH EXTREME CAUTION**.

It is now necessary to fire the trap but **NOT** allow it to re-cock so that clays can be loaded. This is done by pushing the arm/off/disarm toggle to the "DISARM" position for about half a second and release it so that it returns to the "OFF" position as before.

The trap will immediately fire but not re-arm. The throwing arm will be visible and stationary on the left hand side of the machine.

The machine is now in the disarmed or **SAFE** state.

To further remove the risk of accidental re-cocking, it is advisable to switch the trip/isolator(s) on the side of the control box to the "OFF" position, so that the red telltale(s) are visible.

(Remember to switch back on after loading clays! This is often forgotten in the rush to re-load during shoots.)

The magazine can now be filled and it is advisable to place only a small quantity of clays in each column initially.

Ensure that the clays about to be thrown are going into a safe area.

Switch the arm/off/disarm toggle switch(s) down to the "ARM" position. The machines will load a clay and come to the cocked position and are now ready to fire.

To check for clay flight and direction, fire the traps using the arm/off/disarm toggle switch exactly as before so that the machine fires **ONCE** but **does not re-arm** until the switch is returned to the "ARM" position.

With the trap(s) in the **DIS-ARMED/SAFE** position, switch the trip/isolator(s) on the side of the control box to the "OFF" position, so that the red telltale(s) are visible. Move to the rear of the machine to adjust the direction of the clay flight to suit and elevation if required as follows.

ANGLE ADJUSTMENT

DTL (Front) trap(s) as fitted to the Fieldsman Range have additional control motors to allow the trap(s) to oscillate from side to side and on ABT (Rear) trap up and down as well. The amount of angle can be adjusted as follows.

Loosening the clamping nut(s) on the elevation slot bolts on the Front 2 machines will allow you to adjust the height and angle of elevation, once correctly set, tighten the nut on the height-adjusting slot lightly. See photo below.



Trap shown for illustration purposes only

Using a 10mm Allen key undo the crank bolt, situated on the oscillating disc on the small gearbox, bolted to the trailer frame between the front traps and remove from the hole in the disc. See photo below. The disc has several 12mm threaded holes in it spiralling out from the centre of the disc. The further out the hole the greater the angle of oscillation. Put the crank bolt back in to the required hole and tighten.





The front 2 traps are tied together with a tie rod (seen at the bottom of the picture above) which has been factory set but can be adjusted to allow a greater spread of clays. Caution should be exercised to ensure that the tie rod is not over adjusted to enable the mounting bolts to hit the trailer frame.

On the rear ABT trap (Hunter/Huntsmant variants only) here is an extra control motor fitted for up and down movement. See photo below.



By placing the crank bolt in a different hole on the disc the angle of elevation can be adjusted. The further out the hole from the centre on the disc, the more up and down movement is achieved.





The rear trap also has a separate control motor bolted to the trailer frame below the rear trap for oscillation, again adjustment is made using a 10mm Allen key to undo the crank bolt, situated on the oscillating disc on the small gearbox, and remove from the hole in the disc. See photo above. The disc has several 12mm threaded holes in it spiralling out from the centre of the disc. The further out the hole the greater the angle of oscillation. Put the crank bolt back in to the required hole and tighten.

The oscillating control switches on the Front and Rear traps have three positions. The centre position is the "off" position. The forward momentary position is for inching the machine a few degrees at a time (enabling static targets) and the rear "on" position holds the motor on so allowing the oscillating motor to oscillate continuously while the machine is in use. Note that when in the "on" position the oscillating motors will run and then stop momentarily before restarting. This feature is fitted to all machines with oscillating motors as it carries out two functions. The first is to randomly stop and start the oscillating motors so making it impossible for the shooter to "read the target" or guess which direction the next target is going in if the trap is hidden from view. The second function is to stop the oscillating motors after a short period of time if the machine is not being used so saving battery power. This means that the user does not have to walk up to the machine and turn it off when shooting has finished, the timer will do this automatically. When the next target is called for and the trap fired, the timer starts the oscillating motors again. Even if the oscillating motors have shut down, users must be aware that the machine(s) are still armed and must only be approached from behind to disarm the machine(s) before reloading or adjusting. Inch control automatically bypasses the timer unit which means that the oscillating motors will continue to oscillate until they are switched off at the operators control box.

The elevation control switch on the Rear traps also has three positions. The centre position is the "off" position. The forward momentary position is for inching the machine a few degrees at a time (enabling static targets) and the rear "on" position holds the motor on so allowing the elevating motor to run continuously while the machine is in use. Note that when in the "on" position and like the oscillating motors above, the elevation motor will run and then stop momentarily before restarting. Even if the motor has shut down, users must be aware that the machine(s) are still armed and must only be approached from behind to disarm the machine(s) before reloading or adjusting. Inch control automatically bypasses the timer unit which means that the elevation motor will continue to run until switched off at operators control box.

Once the above adjustments have been finalised, you are now ready to fill the magazine if required. Should the clay have a tendency to peel off, either left or right of stable flat flight, this can be adjusted by raising the trailer on one side to compensate and bring the flight level. This method may be necessary for machines situated on uneven ground.

All Super Sporter traps have an adjustable rear clay guide rail on the casting plate. By slackening and moving this rail either forward or backwards by **small** increments, and then re-tightening, it is possible to adjust the direction of throw of the clay by up to 30° **without** moving the complete machine. It is not recommended that this facility be used in temporary sporting settings.

ADJUSTMENT FOR DISTANCE AND SPEED

Increasing or decreasing the distance that the clay is thrown is achieved by winding tension on or off the spring(s). This MUST be done with the trap(s) in the disarmed/safe condition. After adjustment of the main spring to set the correct throwing distance, the nuts on the spring stud must be tightened against each other. The trap(s) can now be switched on for normal use by pressing the arm/off/disarm toggles down to "ARM" to cock the machine. The trap(s) will fire and re-cock each time that the fire button on either the operators control box or radio remote is pressed. No loading or adjustment to the machine should be carried out unless the machine is disarmed/safe. After use, the machine must be left in the disarmed/safe condition and the power supply removed. It is **not** necessary to relieve the remaining spring tension.



Radio Control/Flush Control (*Type and function depends on trailer model*) About the Game trailer radio

The radio control handset provided enables you to run pre-programmed flushes, fire each trap individually or fire all three simultaneously.

Sporting Mode

Pressing the Mode button will toggle between Simulated Game / Sporting mode. In Sporting mode, the three traps can be fired directly from the numbered buttons or the button below this group can be used to throw all three traps simultaneously.

Simulated Game Mode

The controller has as standard 20, 40, 60, 80 & 100 bird flushes (Buttons 1-3). To use these flushes first select simulated game mode using the Mode button and then press the corresponding numbered button to select the flush you wish to shoot. A double push on button 1 will select the 40 bird flush, a double push on button 2 will select the 80 bird flush.

The screen will display the name of the flush you have selected along with "select sequence" press the OK button to confirm selection.

The screen will then display the last used flush speed and the message "select speed" select the desired speed (see below) and then press the OK/Start button to confirm selection. The screen will then display "ON = Start/Pause". Upon pressing the OK/Start button the controller will emit 3 beeps then begin throwing the flush. The first line of the display will give a count down showing the birds remaining, whilst the second line will show which traps are currently throwing.

Pausing / Escaping from a flush

Push the OK/Start button to pause a flush, and push it again to re-commence. To abort a flush once commenced, pause it using the OK/Start button and then press the Mode button. The controller will return to the flush selection menu.

Speed control

Speed Control Up/Down Can be used to increase or decrease the speed of the a flush whilst it is in progress as well as during its selection.

Solo Delay

In Sporting mode this button toggles the delay on or off, when ON the controller will pause for 3 seconds before throwing the selected target, emitting 3 beeps as it does so, allowing the shooter time to put down the radio and mount his gun.



Switching off

The radio can only be turned off when in Sporting mode. Toggle into Sporting using the mode button then press and hold the OK/Start button for about 2 seconds to turn off the handset. If left unused for approximately 10 minutes the handset will automatically turn off. (when powered up again the controller will have been reset and any paused flush will have been lost)

Batteries

The handset is powered by 4 x AA size batteries (Alkaline batteries recommended), which can be changed by removing the rear cover to allow access.





Battery Charge Bar System (Huntsman XP Only)

The Huntsman XP is supplied with 5 x 105Ah 12volt DC Lead Acid batteries and an Automatic Charging system fitted, the system consists of a number of intelligent chargers which enable the user to plug into a mains AC supply using the removable mains lead supplied and leave the trailer to recharge overnight. The intelligent chargers monitor the battery conditions and adjust the charge rate to suit, with an automatic cut out when the batteries are fully charged.

FAULT FINDING

It is Promatic's policy to upgrade or modify any of its products if they are ever proved suspect. Problems, which do occur, usually revolve around the clay pigeons themselves or the variation in their sizes between the different manufacturers. Poor maintenance and cleaning or physical damage caused during transportation of the machine are the other normal causes. Items that should be treated with great care are the throwing arm, casting plate and electrical box.

WARNING: At no time should you put yourself at risk by placing any bodily part within the area of operation of moving mechanical parts.



FAULT FINDING (ELECTRICAL) Super Sporter as fitted to Game Trailer Range

Electrical Schematic (Huntsman 3 trap variant shown)



1. Machine does not cock (i.e. come to the loaded position.) Check:

(a) Battery is charged and that connections are tight.

(b) Magnetic trip switch is in the "ON" position.

(c) Toggle switch is in the down "ARM" position.

(d) Arm is clear of roller limit switch under casting plate. If not, then press toggle up to "DISARM" until the arm is clear, then back down to the "ARM" position.

2. Machine still does not cock.

(a) Check all connections are tight including those inside the electrical box. Check for broken wires and damaged connections.

(b) If there are no broken connections (battery connected, all switches on) press toggle up to "DISARM", listen and watch for the 12v relay operation in the control box.

(c) If the **relay operates** but the motor does **not** turn - short across the 2 large contacts on the relay with a screw driver or piece of wire.

If the motor does not turn - then the motor is suspect. If the motor does turn - then the relay is faulty. Contacts may be dirty or worn out.

(d) If the relay does not operate - short across contacts on back of trip switch on Super Sporter models.Try toggle switch in "DISARM" and "ARM" positions.

If the motor turns - then the trip switch is faulty.



(e) If the motor does not turn - then short the brown wire to the yellow/green wire on the back of the toggle switch with the switch in the "DISARM" position. If the relay operates and the motor turns - then the toggle switch is faulty.

If the relay still does not operate then it is faulty.

3. Machine runs in "DISARM" position, but not in "ARM" position.

(a) If the arm is clear of the roller limit switch then the roller limit switch is faulty. Check that the roller arm is not seized. If so, strip, clean and re-assemble. Otherwise replace the switch.

4. Machine cocks, but will not fire on Radio Handset.

(a) Either the connections, Receiver or Handset are faulty. Replace the battery in the Handset if the trap still does not fire, remove the lid from the receiver and check that the power on LED is illuminated, if not remove the lid of the main control box and check the radio supply fuse. If the fuse has blown replace, if the fuse continues to blow or the fuse is not blown the radio is faulty and should be returned to Promatic for repair.

5. Trap fires by itself!

(a) Disconnect the radio receiver and switch the trap back on.

If the trap cocks normally - then the radio is damaged or shorted out.

Alternatively, the push button switch is stuck in or faulty.

(b) If the trap **continues to fire** - then check the arm to crank timing relationship as described further on in this manual. If the above relationship is correct then, **after having put the trap into the disarmed/safe position**, move the roller limit switch **away** from main frame along the slotted bracket to its maximum. If the machine now

cocks normally - then move the limit switch back to within 5mm of its original position. If the trap now fires by itself again then move the switch to 10mm of its original position and so on until the trap cocks normally under all conditions.

(c) If the machine still fires by itself - check if the relay contacts have

stuck together, and if so replace. If the relay operates correctly, but the trap still fires by itself, then the roller limit switch is faulty and should be replaced.



FAULT FINDING (MECHANICAL) Super Sporter

1. Carousel does not rotate.

Check:

(a) The Carousel pusher arm is not jammed with broken clays or dirt.

(b) The pusher return spring is broken or missing.

(c) With the pusher arm withdrawn, the carousel should be free to rotate with a small amount of friction. This is adjusted by tensioning the locking nut holding the carousel on against the plastic sleeve underneath it.

(d) Carousel pusher **timing** is correct, i.e. when the gearbox crank and connecting rod are **in line at maximum extension**, (see photo below) the rollers on the bottom of the carousel pusher arm should be 1 mm clear of the carousel plate at maximum travel. If this is not the case then the clamp on the rear pusher shaft should be adjusted accordingly. It must be **tightened** before operation of the machine.



2. Machine will not throw clays.

It is usually obvious what is wrong with a machine which does not throw clays at all. It is more likely that the following situation arises:

Machine throws clays but:

(a) The clay flicks up in the air.

The arm is probably bent down or the casting plate bent up, squeezing the clay between them. The arm or plate should be replaced or straightened.

(b) **The clay goes no distance** (even though the main spring is wound up tight). The arm is probably bent upwards causing clay to go under it at its tip. This will also cause clays to break. The solution is to straighten the arm.

(c) The clays are inconsistent in direction.





The clay is being jammed under the arm towards the end. This is usually caused either by the arm being bent down, then the tip bent up or more likely clays varying in thickness. The solution if the arm is bent is to straighten it. If it is the clay thickness, then lower the casting plate to accommodate the thickest one you can find. Adjust each nut **exactly** the same amount, until 1 to 1.5 mm clearance is achieved between the bottom of the friction strip and the clay. See photo above.

3. The Machine breaks clays!

A point to consider here is that if you have other traps, which have suddenly started to break clays, then it is probably the clays, which are at fault. Particularly soft clays can be accommodated, by fitting a "soft fall" plate to the machine (all machines manufactured after January 98 are fitted with a soft fall plate), but sometimes the clay will be unable to absorb the actual throwing forces consistently. The maximum acceptable level of no birds is 5%, but should in practice be less.

A simple process should be followed which differentiates between the **loading** of the clay prior to **throwing** and the throwing of that same clay.

Check loading cycle first:

(a) Check that clays in the magazine are intact, not chipped or cracked. If in doubt, remove suspect clays and refill with ones known to be intact.

(b) With the machine switched "OFF", rotate the magazine by hand, removing each clay as it drops onto the casting plate. Check for cracks and chips. If the clays arrive on the plate intact, then move

on to the throwing section below.

(c) If they arrive chipped or cracked then remove the magazine and check that the thickest clay you can find slides easily under both inner and outer knife edges, i.e. just free enough not to be squeezed onto the carousel plate. Check of course that the knifeedges are not excessively high, although this would tend to shave the bottom off the next clay, not break it. Adjust both knife-edges accordingly.

(d) If damaging contact occurs on all columns then the knife-edge is damaged and must be realigned by refitting or possibly filing or grinding to give minimal clearance. The knife-edges are adjustable with a 10 mm spanner. Each knife-edge has three slotted holes for ease of adjustment.

(e) Check each clay and if all are unchipped or uncracked, remove the cloth and repeat the process. This time if any of the clays break or crack as they land on the casting plate, then the clay is unsuitable or too soft.

(f) Check that there are no tight spots in any of the carousel pockets. Occasionally machines can suffer slight damage in shipping to the carousel. This can be easily adjusted with a suitable piece of wood or the handle of a hammer. See photo below. Ensure that a handful of clays move up and down each of the pockets once adjusted. If the clays arrive on the plate intact, then the fault lies in the throwing cycle.





Check throwing cycle next:

(a) Check arm for straightness, for chunks missing from the rubber/plastic friction strip or any other physical damage to the arm. If the arm cannot be straightened then it should be replaced. A new friction strip can be fitted to an old arm if necessary.

(b) Check for damage to the casting plate especially the front edge of the plate in case it has been dented, bent or burred. Check for flatness; ensure that no screw heads protrude and that there are no other obstructions to the clay's path.

(c) Check the height of the arm over the plate across its whole surface to ensure that the clay fits under the friction strip with about 1 mm clearance. Any more than 3 mm clearance will cause the arm to break the clay by riding over it.

(d) Check that the bolt holding the arm to its clamp block is tight.

(e) Check the **arm-crank timing relationship**. If this relationship is incorrect the trap will definitely break clays when throwing. **The timing can be adjusted to the diagram found in this manual**.

As each of the above elements is checked, something incorrect should be discovered. If the machine still breaks clays, then there is one final check.

Slacken the main spring to its minimum extension, i.e. with the throwing arm in the forward position the coils are just open. Operate the trap a few times in this mode, which puts hardly any stress into the clay because of the slack mainspring. If the clays still break then it is very likely that the actual clays are sub standard and a new batch should be obtained.

ARM TIMING DIAGRAM





Instructions for Fitting a Midi Carousel

1. With the trap disarmed and the carousel empty of clays, remove the standard carousel from the machine. This is done by unscrewing the 19mm nylock nut in the centre of the carousel.

2. With the carousel removed take a 10mm spanner and unscrew the outer knife-edge assembly from the top plate. Look at the underside of the top plate to establish which two bolts hold the assembly to the top plate.

3. Refit the complete knife-edge assembly over the inner fixing holes on the top plate.

4. Drop the midi carousel on to the top plate shaft but do not fit the 19mm nylock nut and spacer.

5. Put a midi clay into one of the carousel pockets (it does not matter which one) and rotate the carousel so that the clay passes through the knife-edges. The clay must pass through the inner and outer knife-edges without the drive-band of the clay catching on the side of either knife blade. If the clay does catch on either blade, the blade will need to be adjusted. It is possible to move the blades away from the clay as all blades have slotted holes machined in them. Slacken off the bolts that hold the knife blade to the block and then slide the blade in the direction required. Retighten the fixing bolts when the blade is in the correct position.

6. With the clay passing cleanly through the knife-edge blades, stop the clay under the leading edges of the knife blade and check that the blades are at the correct height. Adjust as necessary with a 10mm spanner.

7. Fit the carousel blue spacer and 19mm nylock nut and retighten, so that the carousel does not spin freely when it turns. There needs to be a small amount of friction when the carousel rotates. The carousel does not need to be set in any particular position, it will automatically time itself.

8. The carousel is now ready to be filled with clays.



INSTRUCTIONS FOR SPRING REMOVAL The instructions below apply to the Super/Sporter models.

 Ensure the machine is sited in a way, which allows free and un-cramped access all around, paying particular attention to the ease of disarming/arming and reloading.
Ensure that there are no obstructions to the path of the throwing arm and that the machine cannot change its position due to vibration or reaction.

3. Disarm the machine using the arm/disarm toggle switch and make safe before removing any clays from the carousel.

4. From behind the machine, press the arm/disarm toggle switch down to arm the machine. The throwing arm will rotate to the armed position. In this condition the machine must be treated with **extreme** caution.

5. The next step is to disarm the machine, but only hold the toggle switch in the disarm position just long enough for the trap to fire. Release the toggle switch immediatley so that the rectangular block (the rectangular block has a long crank bar connected to it with a 10mm cap head bolt) on the gearbox output shaft stops in the 11.00 o'clock position. The 11.00 o'clock position is when viewed from behind the machine looking down on the gearbox itself.

6. If the rectangular block is pointing to 12.00 o'clock flick the arm/disarm toggle switch momentarily just enough to allow the block to point to the 11.00 o'clock position.7. If the rectangular block is pointing to 10.00 o'clock, rearm the machine and then disarm again.

8. Disconnect the battery from the machine once the block is in the correct position. 9. With the rectangular block now pointing to the 11.00 o'clock position, the throwing arm can be pushed slowly around anti clockwise by hand. It is important to push only on the end of the throwing arm. With the machine disarmed the throwing arm will have stopped at somewhere between 8.00 and 7.00 o'clock. When pushing the arm by hand the spring will take over when the arm gets to about 6.00 o'clock, at this point it is advisable to hold on to the arm so that it gently stops at the 5.00 o'clock position. It is the 10mm cap head bolt on the rectangular block that stops the arm at 5.00 o'clock, which in turn stops the arm from firing. This is why it is important to only carry out step 9 when the rectangular block is pointing to the 11.00 o'clock position.

10. Reconnect the battery to the machine and hold the arm/disarm toggle switch to the disarm position long enough until the throwing arm has moved and is pointing to the 12.00 o'clock position directly in front of the machine.

11. With the throwing arm sticking out in front of the machine, the spring can now be removed by undoing the locking nuts with two 19mm spanners.

12. When refitting the spring, wind tension on until, with the arm fully forward, the coils have at least 0.5mm gap between them. Tighten the two 19mm locking nuts to the mainframe so that the spring can't vibrate loose.



SPORTER 400TT & SUPER SPORTER SPARE PARTS

Number	New Part No	Description
1	HR/2010	Arm Complete (L/Cut)
2	HR/2100	Arm (L/Cut)
3	RN6/2100	Arm (Cast)
4	HR/3350	Soft Fall Plate
5	RN6/2200	Friction Strip
6	RN6/3500	Teal Finger
7	RN8/1140	Rear Pusher Shaft (400TT)
7	SP8/1140	Rear Pusher Shaft (Sporter 8)
7	SSP10/1140	Rear Pusher Shaft (Sporter 10)
8	RN6/2500	Arm Clamp Block
9	RN8/3400	Let Down Ramp
10	RN8/4200	Rear Pusher Clamp Block (400TT)
10	SP8/4200	Rear Pusher Clamp Block (Sporter 8)
10	SPIDA/4200	Rear Pusher Clamp Block (Sporter 10)
11	RN6/2630	Spring Roller
12	RN6/2600	Main Shaft
13	RN8/3150	Outer Knife Edge
14	RN6/3200	Outer Knife Edge Block
15	SP8/4375	Bearing Sleeve (Sporter)
16	B00V/SET1	Bearing Set 1 (400TT)
17	D04N/RN38	Main Shaft Spacer
18	S02Z/037D6	Rear Pusher Spring
19	B06V/BF202620	Phos. Bronze Bushes
20	D04N/RN25	Rear Pusher Rollers
21	RN6/3250	Inner Knife Edge
22	RN6/3300	Inner Knife Edge Block
23	RN6/3030	Rear Top Plate Supports (400TT)
24	E11V/83850	Roller Switch
25	RN6/3440	Backrail
26	RN6/7210	Roller Switch Bracket
27	SP8/4050	Gearbox Shaft
28	M02V/BR113	12v Motor
29	M03V/MV50R50 NMRV50	50:1 Gearbox
30	E00V/SP8	Electric Box (Sporter)
31	E00V/SSP8	Electric Box (Super Sporter)
32	E00V/RN8US	Electric Box (400TT)

For more information please see Main User Manual or call Promatic



DTL/ATA & ABT/WOBBLE SPARE PARTS

Number	New Part No	Description
1	SP1A/2010	Arm Complete (Laser Cut)
2	SP1DA/1180	Rear Pusher Top Half
3	SP1DA/1140	Rear Pusher Shaft
4	OT8/4608	Solenoid Trigger
5	OT8/4618	Solenoid Bracket (OT)
6	SPIDA/4620	Solenoid Cradle
7	S02Z/031D7	Solenoid Return Spring
8	SPIDA/4604	Solenoid Bracket (Sporter)
9	S03Z/14 X 10 X096	Solenoid Spring
10	SPIDA/4607	Pivot Bar
11	RN6CA/4100	Rotation Disc (Club & Pro ATA/DTL)
	RNPW/4100	Rotation Disc(Pro ABT/Wobble)
	SPIDA/4100	Rotation Disc (Int Sporter ABT/Wobble)
12	E12V/BEN12	Solenoid
13	SPIDA/4606	Fail Safe Bar
14	RN6CW/4125	Elevation Disc (Club ABT/Wobble)
	RNPW/4125	Elevation Disc (Pro ABT/Wobble)
15	M02V/MP080	12 v Oscillating/Elevating Motor
	SPIW/4125	Elevation Disc (Inter Sporter ABT/Wobble)
16	M03V/MV40R80	Gearbox 80:1(Club & Pro ATA/DTL)
	M03V/MV40R60	Gearbox 60:1 (Club ABT/WOBBLE)
17	M02/MP102	12 v Oscillating/Elevating Motor
18	M03V/MV50R80	Gearbox 80:1 (Pro ABT/Wobble)
	M03V/MV50R60	Gearbox 60:1 (Pro ABT/Wobble)
	M03V/MV50R100	Gearbox 100:1 (Inter Sporter ATA/DTL)

For more information please see Main User Manual or call Promatic



INSTRUCTIONS FOR INSTALLING ONE-WAY BEARING IN

SPORTER/SUPER SPORTER

- Release main spring tension and unhook.
- Remove top plate and carousel.
- Remove throwing arm and clamp block.
- Undo 4 bolts holding gearbox and swing clear,
- to enable main shaft removal.

• Knock out old bearings.

Install new bearings and seals in the order as shown below.

Install in sequence shown.



Note: — Install the seals and bearings with markings on the upper face. — Ensure bearings are well lubricated with 3-in-1 oil on assembly



ELECTRICAL SPARE PARTS

Number	New Part No	Description
1	E09V/5PIN	4 Pin Relay (Replaced With 5 Pin & Terminals)
2	E06V/DURP	Duraplug
3	E09V/5PIN	5 Pin Relay
4	E0PV/SW618	12v Relay (Solenoid)
5	E10V/VB4A	Rocker Switch - Double Pole
6	E11V/7410	Fire Button
7	E01P/CB	Remote Disarm Box
7	E03V/CCBA	Command Button Box
8	E03V/RDFL	Remote Disarm - Complete
9	E06V/45100	Red Battery Terminal
10	E06V/45110	Blue Battery Terminal
11	E11V/7420	Toggle Switch - Spade Terminal
12	E11V/7430	Toggle Switch - Screw Terminals
13	E03V/CCBA	Command Button Box Complete
14	E09V/625668	Large Mains Relay
15	E09V/351926	Large Mains Relay Base
16	E09V/G2R2	Small Relay (Old Mains Trap)
17	E09V/P2RF	Small Mains Relay Base
18	E10V/FH30A	Orange Fuse Holder
19	E10V/FH20A	Black Fuse Holder
20	E10V/F10A	5a Blade Fuse
20	E10V/F05A	0a Blade Fuse
20	E10V/F15A	15a Blade Fuse
20	E10V/F20A	20a Blade Fuse
20	E10V/F30A	30a Blade Fuse
21	E10V/TT03A	Mains Trip 3a
21	E10V/TT04A	Mains Trip 4a
21	E10V/TT05A	Mains Trip 5a
21	E10V/TT06A	Mains Trip 6a
21	E10V/TT10A	Mains Trip 10a
22	E11V/FH59	Fire Button (Colt / Junior)
23	E04N/250PG9	20mm Gland
24	E04N/250PG9	P69 Gland
25	E10V/MB50A	12v Trip Switch (50a)
26	E23V/BLNST	Rotation / Elevation Timer











