INNOVATION+VERSATILITY

Canterbury Trap International Ltd

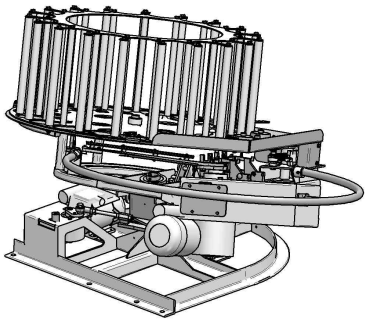
TRAPMASTER

Owners Manual

CT25 DTL – CT45 Continental

New Zealand and Australia.

www.canterburytrap.co.nz



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SYMBOLS USED IN THIS MANUAL.

The following symbols are used in this manual to explain procedures, restrictions, handling precautions, and instructions that should be observed for safety.

Indicates a warning concerning operations that may lead to death or injury to persons if not preformed correctly. To use the machine safely, always pay attention to these warnings.

Indicates a warning concerning operation that may lead to injury to persons, or damage to this equipment if not performed correctly. To use the machine safely, always pay attention to these warnings.

Indicates a Caution concerning operation that may lead to injury to persons, or damage to equipment if not performed correctly. To use the machine safely, always pay attention to these warnings.

Indicates a warning concerning operation that may lead to injury to persons. Ensure you never enter any areas displaying these warnings as death may result.

Be careful. Do not lift heavy loads without assistance.
It is recommends that correct lifting apparatus and methods be employed at all times times to prevent injury.

Indicates a warning concerning flying objects that may lead to injury to persons. Eye protection must be warn at all times.

Indicates a warning concerning electrical hazards that may lead to injury to persons or equipment, read instructions carefully.

Failure to comply with the safety precautions and instructions and/or tampering with the machine will relieve Canterbury Trap International LTD of any liability for damages and accidents to property and/or injury to people. The user must read and fully understand the whole manual before operating the machine.

The user is also responsible for complying with the prevailing accident prevention standards in the countries in which the machine is installed as well as all the guidelines contained in this instruction manual.

IMPORTANT SAFETY INSTRUCTIONS

Never approach the bunker without first turning off the **Voice release**.
Then for additional safety turn off the '**pwr**' button on the speaker stand pod.

Never walk in front of or enter the bunker without first using the **Remote safety release** to switch off the cocking motor and then release the blade using the **Green** button.

Whenever any person wishes to enter the bunker to load, service or maintain the Trapmaster or for any reason whatsoever, he must use the **Remote safety** to switch off the cocking motor and then release the blade using the **Green** button.
The remote safety must then remain inside the bunker under that person's control.

If, for any reason, a person is inside the bunker and the blade is in the cocked position, it can be manually released by pulling the rod (TM48) at the rear of the machine. However, before releasing the blade using this manual release, ensure that the **Remote safety** is turned **off** and that the control box is **off** also. Ensure that all persons are clear from the front of the bunker before release.

Please be aware when releasing targets that if cracked or broken targets are released while you are in the bunker they may shatter into many pieces. Safety glasses must be worn by all persons whenever targets are being released.

The Arm guide rail, is NOT a safety device. It purely indicates the outside radius of the throwing arm. At ALL TIMES, any person, part of a person or their clothing, or any object whatsoever, MUST be kept outside of this guide rail.

Whenever the Trapmaster is being serviced or having routine maintenance, the trap must be isolated on the main control box by having the POWER switch turned '**off**' and the Arm must be in the fully released position.

The Trapmaster has many moving parts and pinch points, use extreme caution at all times. Any person, part of a person or their clothing, or any object whatsoever, MUST be kept clear at all time.

If there is a problem in releasing the trap via the remote release, e.g. an electrical fault, then turn the remote safety switch to '**off**'. Carefully enter the bunker (we recommend one person only enter the bunker and not to walk in front of the bunker) and switch the Trapmaster off at the control box.
Then manually release the blade by pulling the manual release rod (TM 48) at the rear of the trap.

This equipment is not intended for use by young children or infirm persons unless they have been adequately supervised by a responsible person to ensure that they can use it safely. Young children should be supervised to ensure that they do not play with the equipment.

Dear Customer

Thank you for purchasing the Canterbury Trapmaster.

We are confident that you and your fellow shooters will get many years of trouble free enjoyment with your Trapmaster trap. The Trapmaster has been designed and engineered to be almost maintenance free and very reliable under even the most extreme conditions. Please read through this manual as it contains important safety, performance and maintenance information. It's important for you to understand this new trap so that you get maximum performance from it and so increase your enjoyment of trap shooting. By reading this manual fully before throwing your first targets you'll get the most from this trap. If you have any questions feel free to call your nearest Canterbury Distributor for assistance.

Warranty:
Canterbury Trap International Ltd warrants the trap machines you have purchased to be free of material defects and workmanship for Two years from the date of shipment from the factory. All electronic components are only warranted for One year from the date of shipment from the factory.
This warranty is exclusive of improper use, failure to provide proper care and maintenance, accidents, abuse or misuse, unauthorized adjustments, repairs or modifications or damage caused by any "Act of God", Flood, Fire, or damage caused by Storms, Water and Lightning to the electrical and electronic components and equipment and normal wear and tear.
Canterbury Trap International Ltd or its authorized agents shall be the sole judge of warranty claims. The responsibility rests on the purchaser to advise the Company in writing within the warranty period, of any faults or defects covered within the scope of the warranty.
If you have a warranty claim, contact your nearest Canterbury Distributor for instructions.

What is excluded from this warranty?

Canterbury Trap does not guarantee parts subject to wear, such as but not limited to Driving rails and Mainsprings, any parts considered consumables are excluded from this warranty.
Canterbury Trap excludes and will not pay incidental or consequential damages under this warranty. By this we mean any loss, expense or damages other than to repair the defects in the Trap or replace the Trap. No implied warranties extend beyond the term of this written warranty.

Please spend the time to fill in and register your warranty card on page 41.
Registering your new Trapmaster on our data base ensures that you receive
the full manufactures warranty for the first twenty four months from date of purchase.

Register on line www.canterburytrap.co.nz

Trap Assembly from Crate:

Unscrew the sides of the crate from the base and remove the bolts holding the machine onto the pallet.

Remove all tape and packing material from the machine and carefully inspect the Trap making sure nothing was damaged in shipment.

Don't cut the plastic cable tie securing the arm to the hopper plate at this time.

Remove the control box. Place this to one side, as this is mounted in the trap house after the trap is installed.
The hopper tubes consist of 19 large diameter plastic tubes and 19 small diameter plastic tubes.
The 19 small diameter tubes are screwed hand tight only onto the inner ring of studs.
The 19 large diameter tubes are screwed hand tight only onto the outer ring of studs.
Install the 38 x 6mm bolts and flat washers and snug them up firmly.

Care should be taken not to over tighten these bolts as it may distort the red hopper top plate (TM 7).

Engage the Torsion Spring (TM18) into the locating notches on the Target Clamp Wheel Brackets (TM19).

If the main spring has not already been installed into your trap, then screw the main spring all the way onto the threaded end of the connecting rod inside the chassis. Tighten the lock nut firmly back against the spring. Fit the spring adjuster (TM132) through the chassis end plate and screw it into the main spring. Cut the wire-tie securing the arm to the hopper plate. Now tighten the spring adjuster (TM132) lightly, which will move the arm to it's fully released position as the spring is tensioned. Visually check that the elevator is in the down position.

IF YOU ROTATE THE THROWING ARM TOO FAR, DO NOT ATTEMPT TO REVERSE IT. (ONE WAY BEARING WILL PREVENT REVERSAL). CONTINUE ROTATING COUNTER CLOCKWISE UNTIL YOU ARE IN THE FULLY RELEASED POSITION!

Trap House Preparation

Before installation check that the height of the pedestal
that you plan to mount the trap onto is
Between 50mm and 150mm below centre lane height.

If the machine pedestal/platform is on old greasy board, please change it. Your new trap will not leak oil or grease so a clean platform to start with will help to keep your new trap clean.

Make sure that the electric wiring (single phase 230v/240v) in the trap house/s is correct and safe and conforms to all local electrical requirements.

Mount the holder for the safety remote (TM142) onto the wall of the trap house out of shotgun range, but in a position that can be easily reached when entering or leaving the house. We suggest that you mount it on the same side of the trap house that you enter from and accessible without entering the target throwing zone.

Tools & Supplies

Make sure that you have adequate personnel on hand when you need to move the trap. Our traps are heavy, **please refer to safety instructions**. The trap weighs approx 140kg.

A good electric drill and an assortment of bits. If you have a block or concrete trap house then a 5mm concrete bit is necessary to mount wire clamps and the main control box to the wall.

A metric socket set and some crescent wrenches, flat and Phillips screwdrivers, hammer and pliers would all be handy.

Buy a can of outdoor silicone spray lubricant. This is a non-sticky lube for things like the oscillation arm threads and the mainspring crank. Don't use to much grease or oil and do follow the maintenance instructions in this manual.

If you are using a wooden base to mount the trap on, then a selection of lag bolts or carriage bolts to fasten down the machine will come in handy.

Installation of Trap

By now, you should have the base prepared ready for the trap.

Before installation re-check that the height of the pedestal
that you plan to mount the trap onto is
Between 50mm and 150mm below centre lane height.

If you are not utilizing an existing pedestal, but building a brand new pedestal for the trap to sit upon, then use the bolt holes in the base frame as the footprint to locate your securing bolts. Use 3 bolts of at least 12mm diameter.

Please refer to Traphouse layout on pages 37 & 38 for more details.

Check the trap for wobble. You may need to reconfigure your pedestal to ensure that the trap is as vibration free as possible. A stable trap throws a stable target. If the trap moves around or shakes, the target flight may be erratic

Fit the arm guide rail (TM41) securely into the locating holes and tighten the grub screws. This rail must be fitted at all times.

Find a suitable mounting place on the side of the trap house for the control box. Use the template provided to drill the attaching point holes into the wall and attach the control box with the screws provided. Keep the loom cable away from the arm of the machine and plug it into the control box.

Don't force the plug, there are locating keyways inside the plug and care should be taken to ensure the correct orientation. Care must be taken not to touch the pins in the plug on the end of the loom, as this may damage the memory chip in the loom.

Attach the wiring loom to the wall and/or floor with clips to keep it out of the area where damage could result to it, or people getting into/out of the trap house. Remember that there is lots of movement in the trap house with people and cartons, so be careful where you route the wiring.

We recommend some form of protection for the cable loom where it may be in contact with people or equipment.

Control box features.

Target counter: Records both single or double targets thrown. It will only record targets released via the VOICE RELEASE. Targets released via the remote safety (ie set up targets) won't be counted.
Records the total number of cycles.

Oscillation motor:Unreadable interrupt and sleep mode after two minutes of inactivity
Sleep mode canceled by voice release or remote safety release button.

Continental motor: Sleep mode after two minutes of inactivity.
Sleep mode canceled by voice release or remote safety release button.

Connecting the control leads.

WARNING: This is a self powered 12V DC control system.
Under no circumstances should external voltage be connected to these sockets.
" OPEN/CLOSED SWITCHED CONNECTIONS ONLY."

"NEVER" connect any remote release leads (voice or push button) to the control box until you have totally finished setting up the trap. With this lead connected and the remote safety switched **"on"** it could be possible for the trap to be released unexpectedly via the remote release by somebody outside the trap house.

The main cable from a Canterbury Voice Release system will plug directly into the control box socket marked (**VOICE RELEASE**.)

Follow the directions in the Voice Release Manual for setting-up the CVR system.

For manual release utilizing the standard pull cord (TM157), plug the pull cord into the socket on the control box marked (**VOICE RELEASE** .)

" OPEN/CLOSED SWITCHED CONNECTIONS ONLY."

Warning : The sockets on the front of the control box marked (**Voice release**) and (**Target manager**) are self powered at **12V DC**.
"Under no circumstances should external voltage be connected to these sockets"
OPEN/CLOSED SWITCHED CONNECTIONS ONLY.

Preparing your trap for operation.

Now that you have your Trapmaster solidly mounted in your trap house,
DOUBLE CHECK YOUR WORK.

It's easier to rectify any problems now than after you have started to throw targets.
Use the method "measure twice, cut once".

Don't turn the main POWER switch on yet.

Now push the arm counter clockwise so that it is positioned directly above the chassis, (9 O'clock) this activates the micro switch, located inside the chassis. The arm is now in a position that when the power is turned on it will be driven into battery by the cocking motor.

IF THE MACHINE IS NOW SWITCHED ON AT THE MAIN CONTROL AND SAFETY REMOTE, IT WILL OPERATE – ENSURE YOU HAVE READ AND UNDERSTOOD THE SAFETY INSTRUCTIONS IN THIS MANUAL BEFORE PROCEEDING FURTHER.

Don't operate the trap with the main spring TM128 Disconnected.
Don't manually push the ARM TM80 past the 9 O'clock position when the MAIN SPRING TM128 is connected.

Turning your trap on.

Ensure that the remote safety lead is turned "**OFF**".

At the control box, turn the **POWER** switch to "ON".
The LCD will now display the trap serial number and software version,followed by the number of cycles and targets thrown.

At the control box, turn the **BLADE** switch to "ON".
This will allow the cocking motor to run.

At the control box, set the **ANGLES** switch as required. CONT-OFF-INT
This will allow the oscillation motor to run either continuously or intermittently

This next action will allow the control box to receive a signal from the remote safety release and allow the above functions to be actioned.

Standing at the rear of the trap, turn the remote safety to "**ON**". The trap will now cycle and the throwing arm will be cocked.

YOUR NEW TRAP IS NOW OPERATIONAL.

Beware of moving parts and keep clear of the target exit zone.

Start Up

Although your trap was throughly tested in our workshop before dispatch we recommend that before you load the hopper for the first time that you cycle the trap 20 to 30 times to check that everything is working as it should. This can be carried out by positioning yourself at the rear of the machine and releasing the trap by pressing the release button on the remote safety lead. Check that the elevator is moving up and down freely, the hopper is indexing and that the arm is coming into battery and releasing correctly. These small checks may save you the trouble of unloading the hopper if some damage has occurred in transit.

General Operation

Loading the Turret

NEVER LOAD THE HOPPER WITH THE ARM IN THE COCKED POSITION.

For ease of loading, the singles/doubles gate (TM15) can be fully closed by lifting the locking pin and pushing the gate (TM15) fully clockwise towards the front of the machine until the locking pin engages. The turret can now be rotated in a counter clockwise direction to any suitable position to facilitate loading.

Before reopening the singles/doubles gate after reloading the turret, ensure that the hopper is rotated so that the green target clamp wheels (TM16) are in line with the hopper support tubes (TM11), this prevents targets falling from the hopper when gate is reopened for the first time after reloading.

Selecting Singles or Doubles

Singles

Open the singles/doubles gate (TM15) to its first position, ensure the locking pin is fully engaged. One target only will now be delivered to the arm per cycle and only one target will be counted on the target counter on the control box display.

Doubles

Remove the bolt securing the ball joint (TM75) to the oscillation cam (TM1) and reposition it into the doubles support boss (TM145A).This will give maximum stability to the trap, and the best target presentation.

Then open the singles/doubles gate (TM15) counter clockwise to its second position, ensure the locking pin fully engages. Two targets will now be delivered to the arm per cycle, and two targets will be counted on the control box display.

Initial and daily Field Centering

On initial installation of your new Trapmaster the following procedure is recommended.

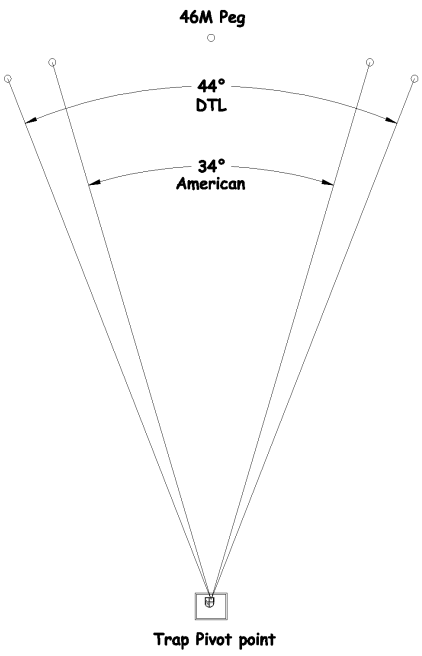
Spending time now setting up the angles adjustments correctly will save you time later when changing between DTL and Double rise. If this is done correctly you will be able to throw even pairs of doubles down lanes One and Five and when you change back to DTL you will still have your target oscillate 22° either side of the center line, lane Three.

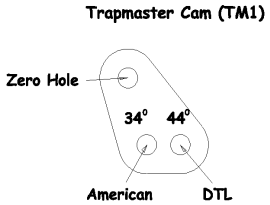
Remove the bolt securing the balljoint (TM75) to the oscillation cam (TM1) and reposition it into the Zero (center hole) of cam – i.e. straightaway target position. Throw a few targets and see where they land. If required release the M12 wing nut and M12 plain nut on the linkage and adjust (TM75) until a straightaway target is found. Re-tighten both M12 wing nut and nut when you are happy with the straightaway target.

Now move the oscillation arm across to the doubles support boss (TM145A) and bolt it on, don't forget the spacer underneath the balljoint. This is where the arm should be when throwing Double Rise.
What you need to do now is throw a few pair's of Doubles and see if they are going down lanes One and Five. If not loosen the M12 bolt under the support boss (TM145A) and move the support boss either left or right until the pair of targets are flying equally either side of the center line, lane Three. The angle between the pair of targets in Double rise on the Trapmaster is not adjustable, but what you are trying to achieve is to have them balanced and equal either side of the center line, lane Three.

Now for DTL just reposition the oscillation arm and spacer (TM77) back into either hole,
34° (American angles) or 44° (DTL New Zealand and Australia) in the oscillation shaft cam (TM1) to select the desired target angle.
Future Minor adjustments can be made on the day for cross winds to center the field by simply releasing the M12 wing nut and M12 plain nut on the oscillation arm.
Once the doubles boss position is determined it should not need to be moved again.

Trapmaster Angles.





Setting Targets

⚠WARNING BEFORE MAKING ANY ADJUSTMENTS,

ENSURE: THE REMOTE SAFETY IS 'OFF'
ENSURE: THE ARM IS RELEASED, EITHER MANUALLY OR FROM THE REMOTE

Height Adjustment standard option CT25.

Target height is easily adjusted from the rear of the machine by turning the handle (TM67).Clockwise to decrease height. Counter clockwise to increase height.
If the Continental option is fitted use the HEIGHT switch on the control box to adjust the target height as required.

Height Adjustment for Continental Option CT45.

The cam (TM147A) is preset to give you a 3M height difference between the upper and lower targets 10M from the trap house when set in hole number 3.
If you are having trouble getting the lower target up high enough above the trap house try using holes 2 & 1. Hole 1 will give you the highest low target, but will close the gap between the two targets to 2.6 M.
If your trap is not installed at the correct height, so that the pivot point of the arm is 250mm to 350mm above the center lane you may be unable to get the targets to the correct height. If this is the case you may have to pack up the front of the trap base frame TM4 by 20 or 30mm.
Using the HEIGHT switch on the control box, rotate the continental gearbox shaft (TM147A) until it's cam is pointing to the 6 o'clock position.
This is the low target position. You can now adjust the height of the lower target now by rotating the turnbuckle (TM153). Clockwise = target up. Counter clockwise = target down, until you are happy with the target height. Re tighten the M12 locknut's when the setting is correct.

Distance Adjustment

Increasing or decreasing tension of the main spring (TM128) by means of turning the spring tensioner (TM132) adjusts target-throwing distance. Clockwise increases distance, counter clockwise decreases distance.

Windage Adjustment

Adjusting the windage turnbuckle (TM70) will set the windage or level of targets (especially doubles). Once adjusted, the nut (TM69) can be used to lock the setting by tightening against the turnbuckle.

FAQ

Q 1/ THE TRAP WILL NOT OPERATE

A 1/ i Check that the mains lead is plugged in and the power is turned on. Test it by plugging in another appliance (eg. electric drill)

ii Check that the LCD on the control box is showing a reading . If not, check the fuse inside the control box and replace it with a 800ma fuse only. Unplug the control box from the mains power before removing the cover.

iii Check that the remote safety lead TM137 is connected to the control box and switched on. The red LED in the hand-piece must be illuminated .
If not the hand-piece is faulty.

iv If the on/off switch on the control box is turning itself off. Be aware this is a circuit breaker and will trip if there is an electrical fault. It has mains voltage going in (ie 240v) and 240V and 12 Volt coming out ,to operate the voice and manual release systems.

v If the trap is an oscillating model, turn on the ANGLES switch to CONT. Check that the oscillation motor will operate. With the switch set to INT the trap goes to sleep after 2 minutes of inactivity. It has to be reactivated by operating the solenoid either by voice release or pressing a manual button.

vi If the trap is a continental model the same applies with the motor going to sleep as per the oscillation model.

vii If the blade motor does not operate check the position of the throwing arm . It must be between the 7 o'clock and 10 o'clock position as viewed from the rear of the trap. This will activate the microswitch that starts up the motor.
If it still does not operate , check the thermal overload button on top of the terminal box of the blade motor. Push down the plunger to reset it .

viii If you are using voice release , check the red LED at the referees hand-piece. If you call for a target through the speakers on the voice release and the light blinks , it indicates the voice release is working and the fault is at the trap. If it doesn't blink the fault is in the voice release system.

Q2/ TARGETS DO NOT FEED PROPERLY

A2/ i Hopper rotation is insufficient to deliver targets thru the opening in hopper platform. Adjust the length of the index rod TM38 to increase travel.

ii Targets not delivered onto elevator platform due to mis-alignment of hopper platform. Also caused by incorrect adjustment of elevator platform TM89A.

iii The 6 target fingers TM134-TM130-TM78-TM103-TM101 x 2 need to be free from target dust and return fully to the upright position. The front ones are numbered 1, 11, 111, 1111 in order from the pivot point of the throwing arm.

iv When the targets are placed on the fingers by the elevator there should be external and internal clearance around the target. There should be left to right movement available. They should be sitting flat in the bottom of the four front fingers .

v When the throwing arm TM80 comes into the park or battery position. There should be visible daylight between the upper leading edge of the arm and the bottom edge of the targets. If not the target will jump or bounce as the arm stops on the trigger.

vi The throwing arm roller TM162 and stud head TM163 should line up squarely with the two fingers on the release trigger TM52. This will have an effect on the explanation above v.

Q3/ TARGETS DO NOT FLY PROPERLY

A3/ i Check the condition of the Target driving rail TM79. Replace it if it is rough , cracked, chipped or split.. A temporary fix is to turn the rail around end for end.

ii Check that your particular brand of target does not have a thicker outer ring. This may cause the target to pinch under the target driving rail TM79 and flip up. You may need to space up the rail with small flat washers (5mm) to give it clearance.

iii When shooting doubles the targets should be level in the sky. Adjust the turnbuckle TM70 clockwise to raise the right-hand target. The right-hand target is also effected by the condition of the target brush TM26 , which is bolted underneath the hopper platform TM29.

iv It is important that the field is centered properly when shooting doubles. The right-hand target should be a straight-away down lane 1. The left-hand target should be a straight-away down lane 5. Adjust the angles turn-buckle TM75 to achieve the correct setting.

v When shooting doubles, the angles adjusting turnbuckleTM75 needs to be disconnected from the oscillation shaft TM1 and installed onto the solid mounting post on the trap base. This will improve target flight consistency when shooting doubles. Once this has been done you will need to re center the field.

Maintenance

Your new Trapmaster has been designed to provide you and your club with years of trouble free service. However, like all machinery your Trapmaster needs some minimal maintenance to perform its best, year after year.

Keep the pedestal area of the trap clean and free of grease, oil and target dust.

A touch of high quality grease on the cocking lever face (TM109) is recommended monthly or every 10,000 targets.

The windage turnbuckle (TM70), angle adjustment turnbuckle (TM75) and height adjustment screw (TM67) may need to be sprayed with silicone twice a year to assure ease of movement. If you live in a high humidity area, Bi-monthly application of silicone may be in order to prevent corrosion. The spring tension adjustment thread (TM132) and trigger shaft (TM52) need bi-annual shots of silicone lube as well.

The cocking motor and oscillation motor need no lubrication, as they are sealed units.

The hopper needs a shot of grease underneath periodically where (TM33) runs on it. And check for any undue wear or damage.

There is a 800mA fuse fitted inside the control box. There are no other owner serviceable parts inside. Call your dealer if problems arise. Keeping connectors clean and coated with light conductive grease will ensure many years of service.

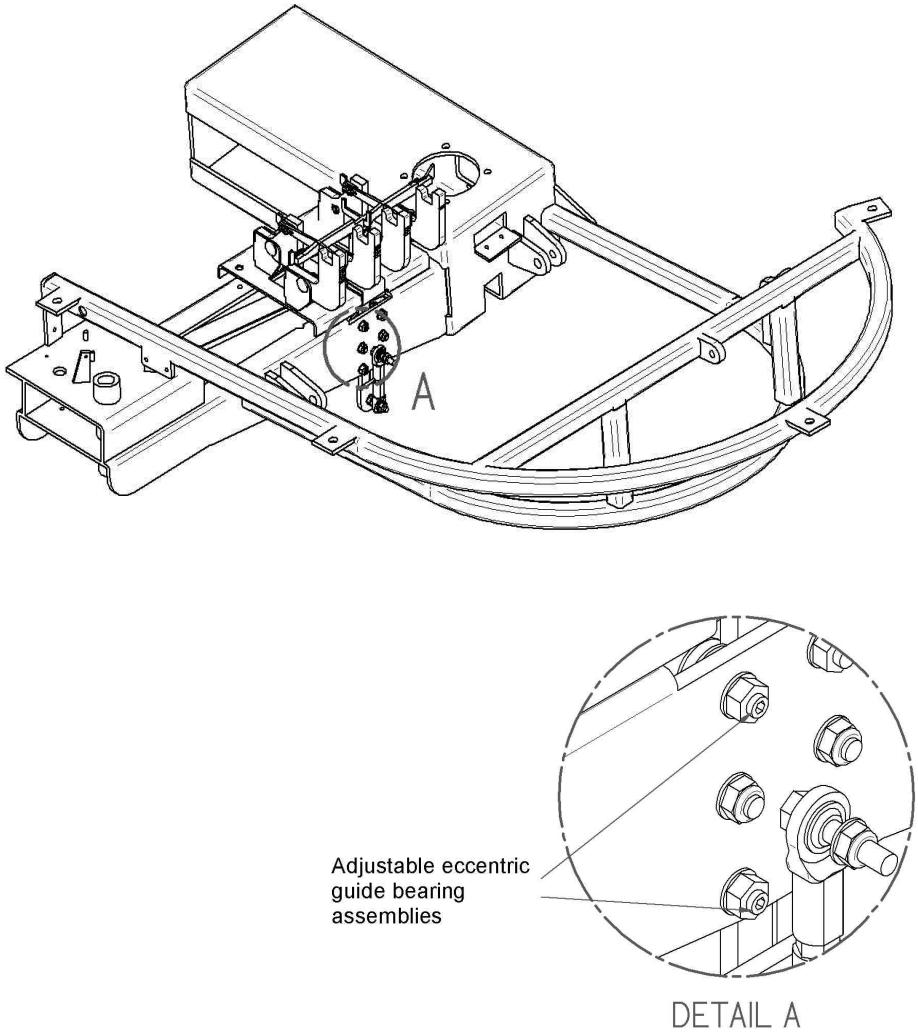
Main pivot bearing housing (TM85) (x 2) have grease nipples. We recommend yearly greasing of these bearings.

Target friction wheel (TM 16) and elevator shaft (TM94), which passes through (TM99), requires a shot of good lubricant or CRC556 monthly to ensure free running.

Clean any broken target fragments and dust from all moving parts on a regular basis.

Trapmaster's fitted with the Continental option have grease nipples in the ends of the pivot shaft (TM158). We recommend that these be greased every month if you are throwing a lot of continental targets.

Elevator platform linear bearing adjustment.



Elevator shaft adjustment.

The linear elevator shaft (TM94H) is supported by four slimline bearings.
The two bearings (TM87E) closest to the Trigger are adjustable, the other two (TM87C) are fixed.
This assembly is factory set, but if required may be adjusted to reduce any play in the assembly.
The adjustable bearings lock nuts are silver in colour and you will need a 10mm spanner to loosen them. You will also need a 2.5mm allen key to make the adjustment.
Once you have released the lock nut half a turn counter clockwise, you will be able to rotate the bearings axle using the 2.5mm allen key to remove any excess play between the bearings and the elevator rail. The axle can be rotated in either direction to reduce the clearance.
This adjustment is best carried out with the finger plate removed, this will remove any friction between the elevator shaft and the felt dust seal (TM99). Don't use excessive force when making this adjustment. Applying too much pressure will cause the elevator rail to stick and reduce the life of both the shaft and bearings. **Only apply light pressure**.
Once you have made the adjustment remove the top ball joint (TM90) and check that the shaft slides smoothly up and down.
If set correctly there should be no play between the bearings and the rail but the rail should slide down freely under it's own weight.

Elevator platform adjustment.

The elevator platform (TM 89A) is adjustable so that it can be altered to suit your target diameter.The platform will accept targets between 107mm and 110mm in diameter. This adjustment need only be carried out once unless you change your make/brand of target.**The factory preset is for 110mm diameter targets.**

This adjustment ensures correct and consistent feeding from the hopper for both singles,doubles and continental settings.

It is best carried out by removing the platform and adjusting it on the bench, but can be done in place later if required.

BEFORE MAKING ANY ADJUSTMENTS, ENSURE:
THE TRAP IS SWITCHED OFF AT THE WALL.
THE ARM IS RELEASED, EITHER MANUALLY OR FROM THE REMOTE.

Refering to the diagram on the next page (17) adjust as follows.

There are 4 adjustable points A E F H

And there are 4 fixed points B C D G

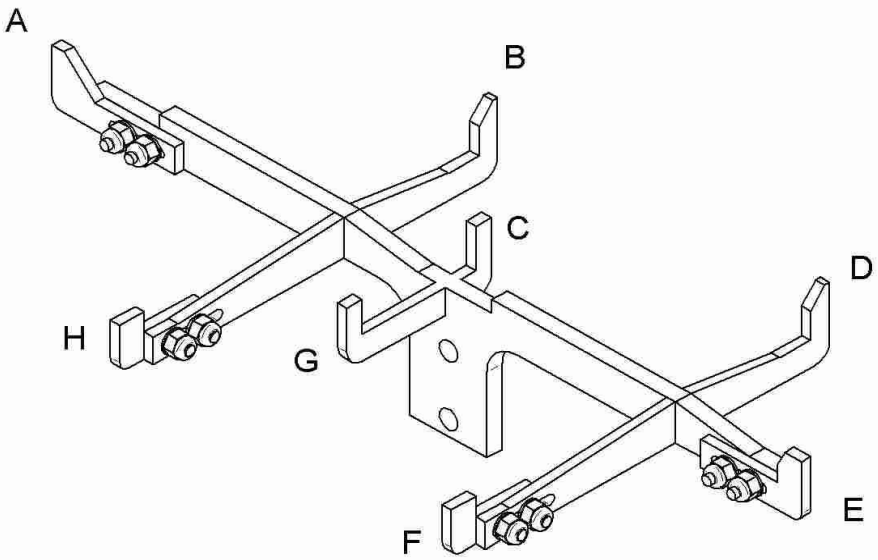
Use a drill 1.0mm in Diameter to check clearance.

Install the LH or upper target (closest to the pivot point) onto the elevator platform and adjust point "A" to give 1 mm clearance between the target and points "C" & "G". With the target held forward to point "A" adjust point "H" to give 1 mm side clearance.

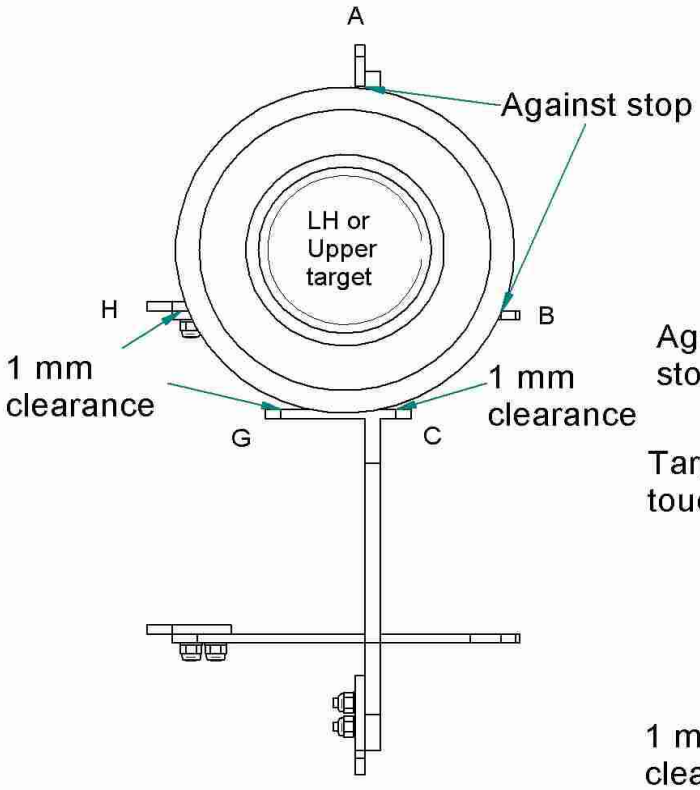
Install the RH or lower target onto the elevator platform and adjust point "E" to give 2.0mm clearance between point "E" and the LH or upper target. With the RH target held forward to the LH target adjust point "F" to give 1.0mm clearance.

NEVER ADJUST THE RH OR LOWER TARGET WITHOUT THE LH OR UPPER TARGET INSTALLED

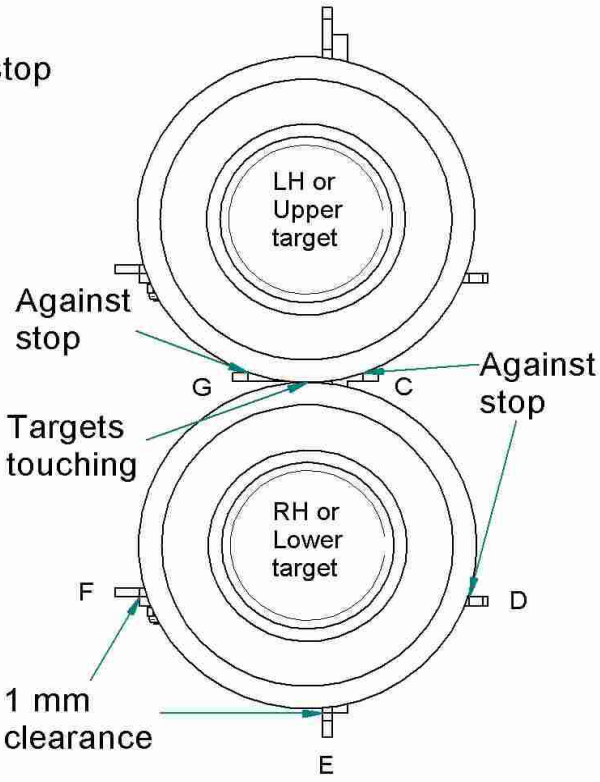
Elevator platform adjustment



Adjusting left hand or upper target



Adjusting right hand or lower target



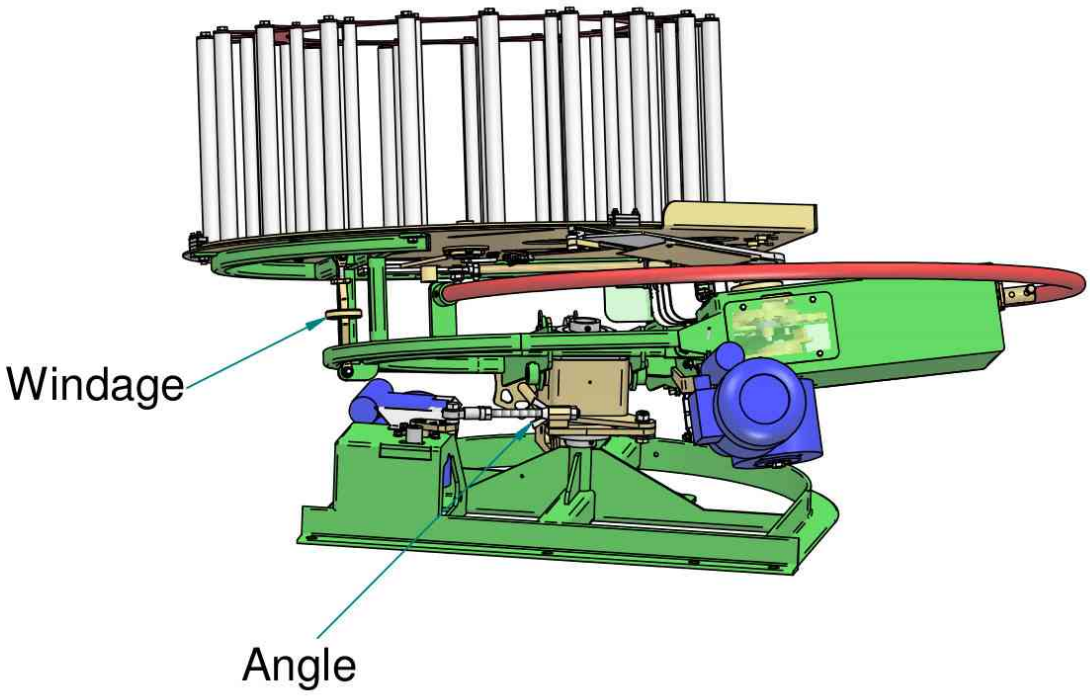
PART#	PART DESCRIPTION	
TM 1	Oscillation shaft	
TM 2	Shaft key 6mm	X3
TM 3	Oscillation shaft spacer	
TM 3A	Continental shaft spacer	
TM 4	Base frame assembly	
TM 5		
TM 6	Oscillation shaft washer	
TM 7	Hopper upper plate	
TM 8		
TM 9		
TM 10		
TM 11	Hopper outer tube	x19
TM 12	Hopper inner tube	x19
TM 13	Hopper lower plate	
TM 14	Bush 25mm	x3
TM 15	Singles/Doubles gate	
TM 16	Target friction wheel	x2
TM 17	Spring retaining washer	x2
TM 18	Target wheel torsion spring	x2
TM 19	Target friction wheel arm	x2
TM 20	Bush 12mm	x3
TM 21	Target wheel arm thrust washer	x2
TM 22	Wiring loom P clip small	x3
TM 23	Wiring loom P clip medium	
TM 24	Ratchet arm support guide	x2
TM 24S	Ratchet arm shim	X1
TM 25	Ratchet arm spacer guide	
TM 26	Blade brush	
TM 27	Hopper lower plate support guide	x8
TM 28	Hopper lower plate spacer guide	x4
TM 29	Hopper platform	
TM 30	Hopper centre spigot	
TM 31	Hopper indexing stop lever	
TM 32	Short bush 25mm	
TM 33	Hopper index plunger	
TM 34	Hopper index arm	
TM 35	Hopper index arm washer	x2
TM 36	Hopper index plunger spring	
TM 37	Ball joint 10mm	X3
TM 38	Hopper indexing rod	
TM 39	Chassis	
TM 40	Windage frame	
TM 41	Arm Guide Rail	
TM 42	Chassis frame plug	
TM 43	Hopper crank arm	
TM 44	Hopper crank arm bush	x2
TM 45	Wiring loom P clip large	x3
TM 46	Hopper crank shaft	
TM 47	Trigger return spring	
TM 48	Trigger manual release rod	
TM 49	Trigger linkage	
TM 50	Solenoid 240 volt	
TM 51		
TM 52	Trigger	

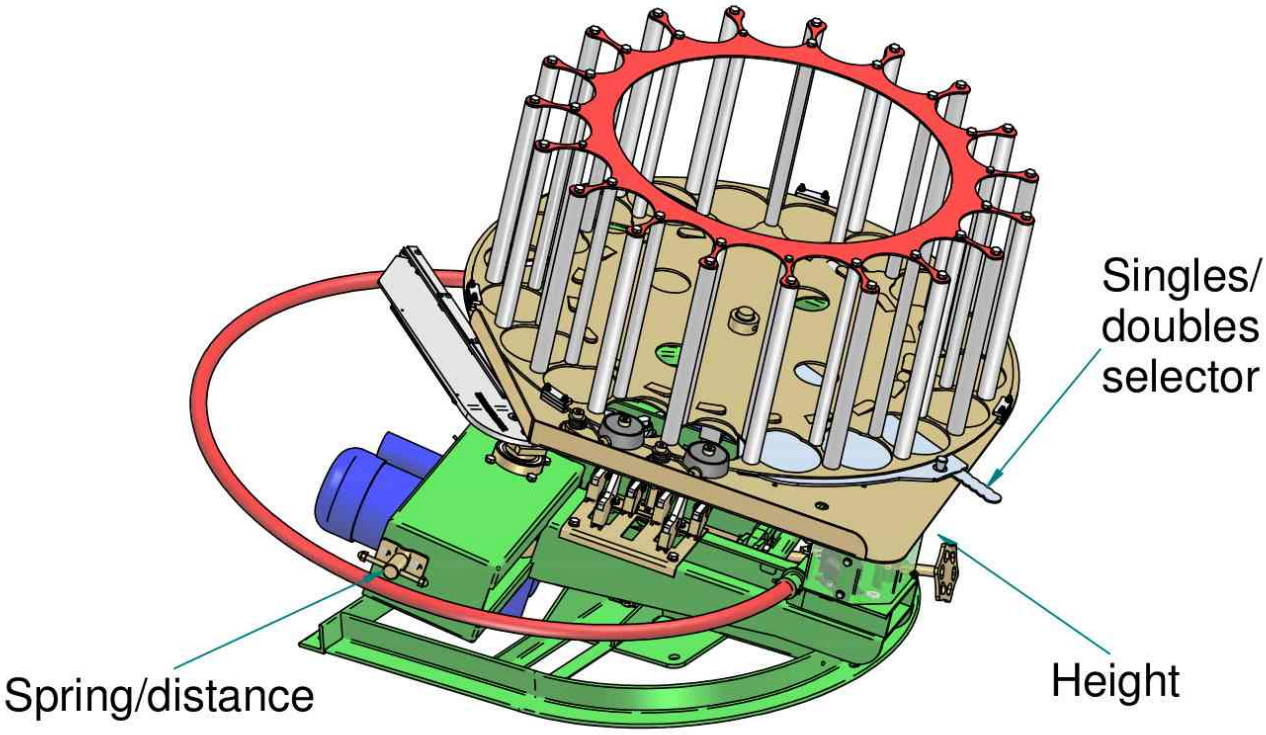
PART#	PART DESCRIPTION	
TM 53	Trigger safety cover	
TM 54		
TM 55	Mechanism inspection window	
TM 56	Main pivot bearing	x2
TM 57	Pivot shaft	
TM 58	Pivot shaft bush	x2
TM 59	Oscillation arm pivot washer	
TM 60	Height adjuster thrust plate	
TM 61	Main pivot/oscillation housing CT25	
TM 61A	Main pivot/oscillation housing CT45	
TM 62	Height linkage pivot pin	
TM 63	Height linkage	
TM 64	Height adjuster trunion	
TM 65	Height adjuster thrust collar	
TM 66	Bush 16mm	
TM 67	Height adjuster shaft	
TM 68	Windage adjuster shaft RH	
TM 69	Windage adjuster locknut	
TM 70	Windage adjuster turnbuckle	
TM 71	Windage adjuster shaft LH	
TM 72	Oscillation arm	
TM 73	Oscillation arm bearing	
TM 74	Mainshaft motor/gearbox 240 volt	
TM 75	Angles Adjuster rod.	
TM 76	M12 Rod End Male R/H	
TM 77	Oscillation arm spacer	
TM 78	Target support finger front #3	
TM 79	Target driving rail (QRP)	
TM 80	Arm	
TM 81	Arm finger guide plate	
TM 82		
TM 83	Trigger roller extension	
TM 84		x2
TM 85	Main pivot bearing housing	
TM 86	Elevator arm torsion spring	x2
TM 87E	Elevator shaft bearings	x2
TM 87C	Elevator shaft bearings	
TM 88	Elevator arm	
TM 89A	Elevator platform	x2
TM 89B	Elevator platform	
TM 89C	Elevator platform	
TM 89D	Elevator platform	x2
TM 90	Elevator ball joint	
TM 91	Threaded rod 6 x 35mm	
TM 93	Elevator shaft stop plate	
TM 94H	Elevator shaft	
TM 96	Wiring loom	
TM 97H	Elevator bearing housing	
TM 98	Elevator shaft upper shield	
TM 99H	Elevator shaft felt seal	
TM 100	Elevator shaft lower shield	x2
TM 101	Target support finger rear	x6
TM 102	Finger return spring	
TM 103	Target support finger front #4	
TM 104	Finger support plate	

PART#	PART DESCRIPTION	
TM 105		
TM 106	Finger pivot pin	x6
TM 107		
TM 108	Lockwasher	
TM 109	Cocking lever	
TM 110	Locating dowels 6mm	x2
TM 111	Cocking lever hub	
TM 112	Indexing crank arm	
TM 113	Indexing crank arm bearing	
TM 114	Elevator cam plate	
TM 115	Mainshaft spacer	
TM 116	Mainshaft	
TM 117	Mainshaft securing washer	
TM 118	Mainshaft key 8mm	
TM 119	Indexing shaft bearing	
TM 120	Indexing shaft	
TM 121	Support hub	
TM 122	Sprag clutch assembly	
TM 123	Oscillating motor/gearbox 240 volt	
TM 124	Doubles counter switch	
TM 125	Mainspring crankrod bearing	
TM 126	Cocking roller	
TM 127	Mainspring crankrod	
TM 128	Mainspring	
TM 129	Spring adjuster thrust plate	
TM 130	Target support finger front #2	
TM 131	Arm motor micro-switch	
TM 132	Spring adjuster handle	
TM 133	Locating dowel pins 8mm	x2
TM 134	Target support finger front #1	
TM 135		
TM 136	Electronic control box 240 volt	
TM 137	Remote safety lead	
TM 138	Wiring loom insulator	x2
TM 139	Trigger spacer	
TM 140		
TM 141	Mainshaft Washer	
TM 142	Remote safety wall mounting bracket	
TM 143	Trigger shaft	
TM 144	Blade brush deflector	
TM 145A	Doubles support boss.	
TM 146		
TM 147A	Continental gearbox shaft.	
TM 148	Hopper platform retaining washers	x4
TM 149	Continental motor/gearbox 240v.	
TM 150		
TM 151	Continental control box 240v.	
TM 152	Continental wiring loom.	
TM 153	Turnbuckle 65mm.	
TM 154	M12 Rod End Male L/H	
TM 155A	Continental windage frame.	
TM 156		

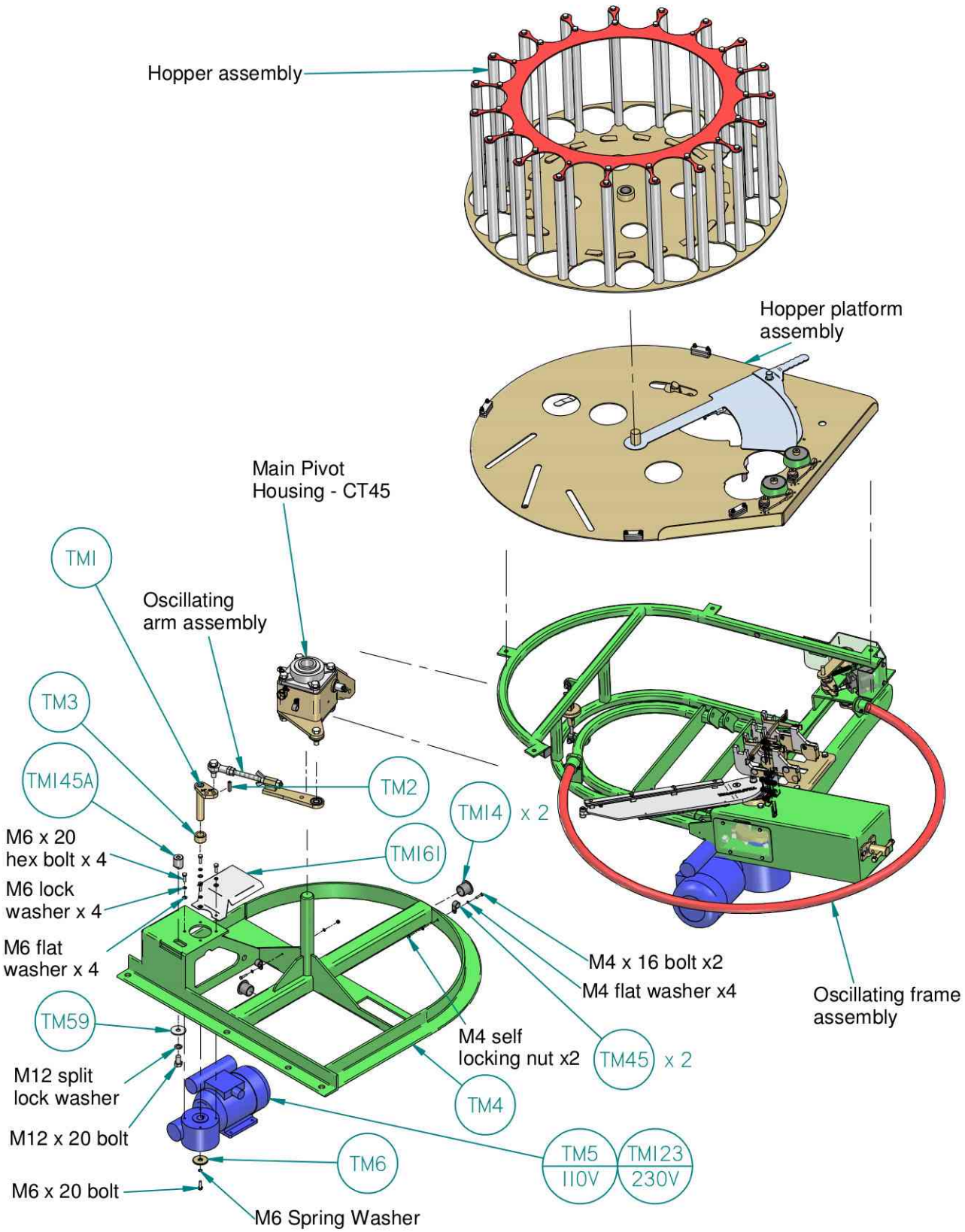
PART#	PART DESCRIPTION	
TM 157	Manual pull cord 33m.	
TM 158	Continental pivot shaft.	
TM 159	Continental pivot shaft bushes.	x2
TM 160	Elevator bearing.	
TM 161	Motor Shield.	
TM 162	Trigger roller	
TM 163	Trigger roller pin.	
TM 164	Solenoid linkage spacer	x2
TM 165	Hopper lower plate support kit	
TM 166	Shouldered sleeve 13.5mm	
TM 167	Shouldered sleeve 10mm	
TM 168	Ratchet arm reinforcing bracket	
TM 169	Target splitter	
TM 170	M12 Rod End Female R/H	

TRAP MASTER
ADJUSTMENTS

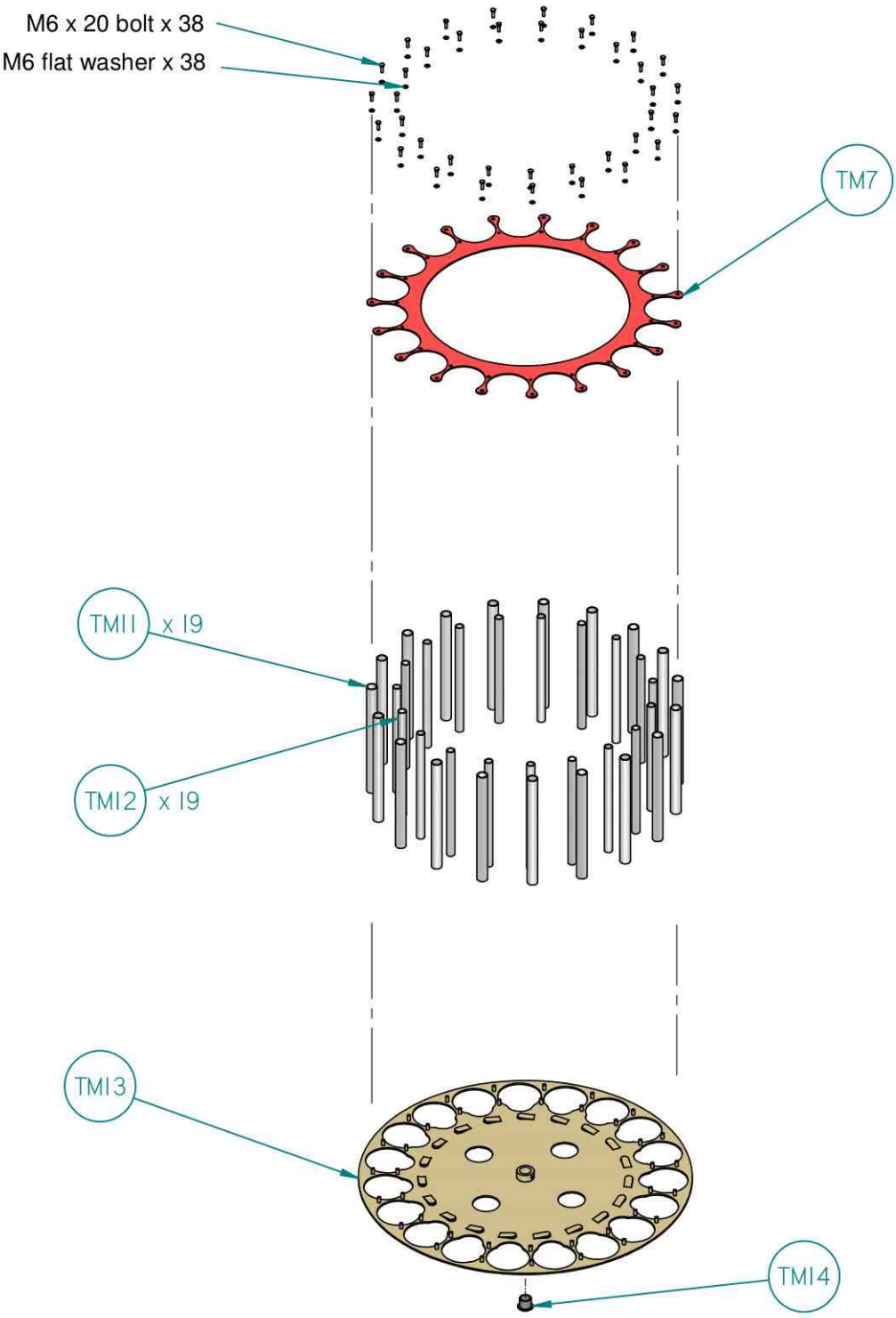




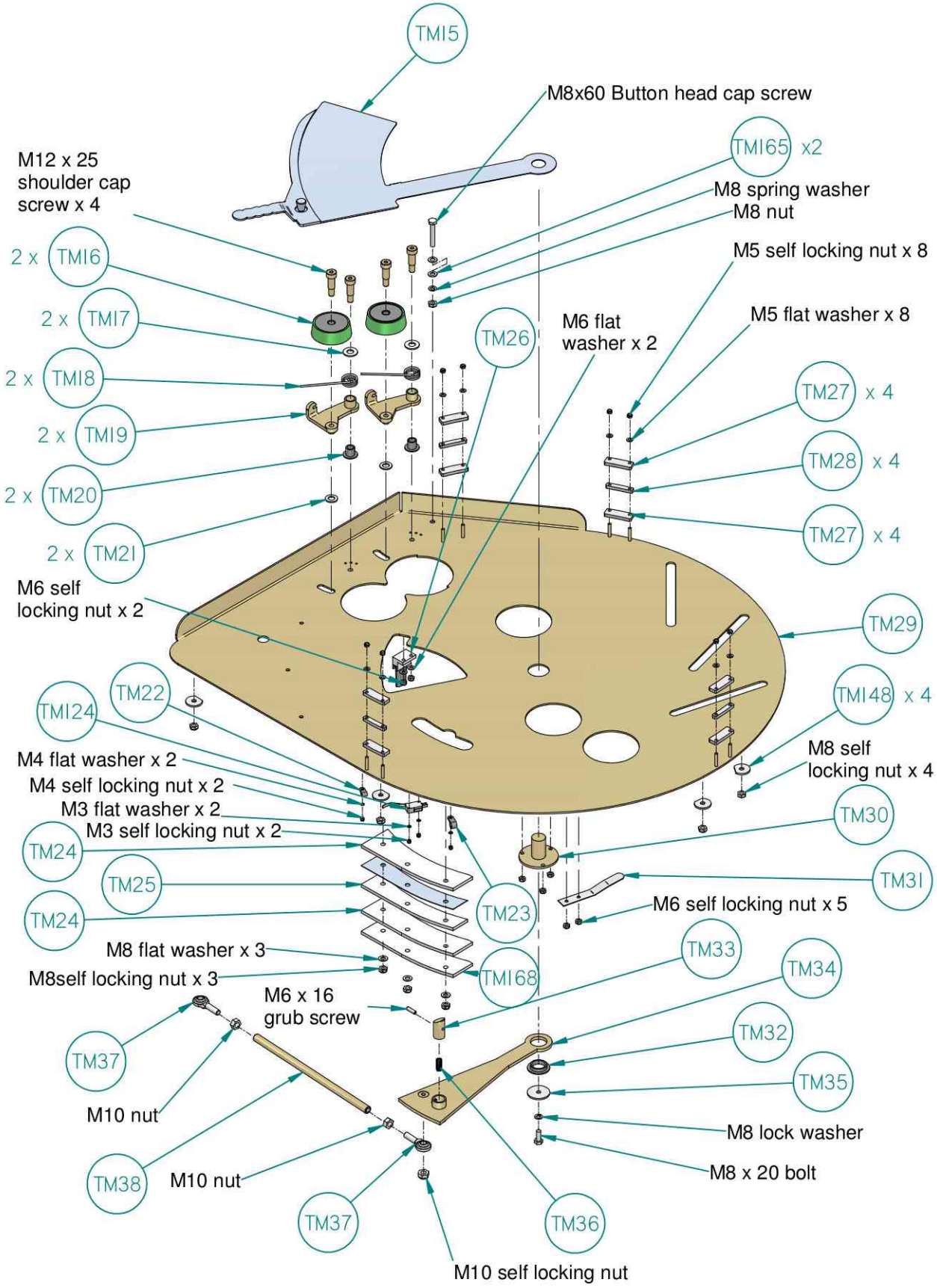
Trap Master Assembly - CT-45



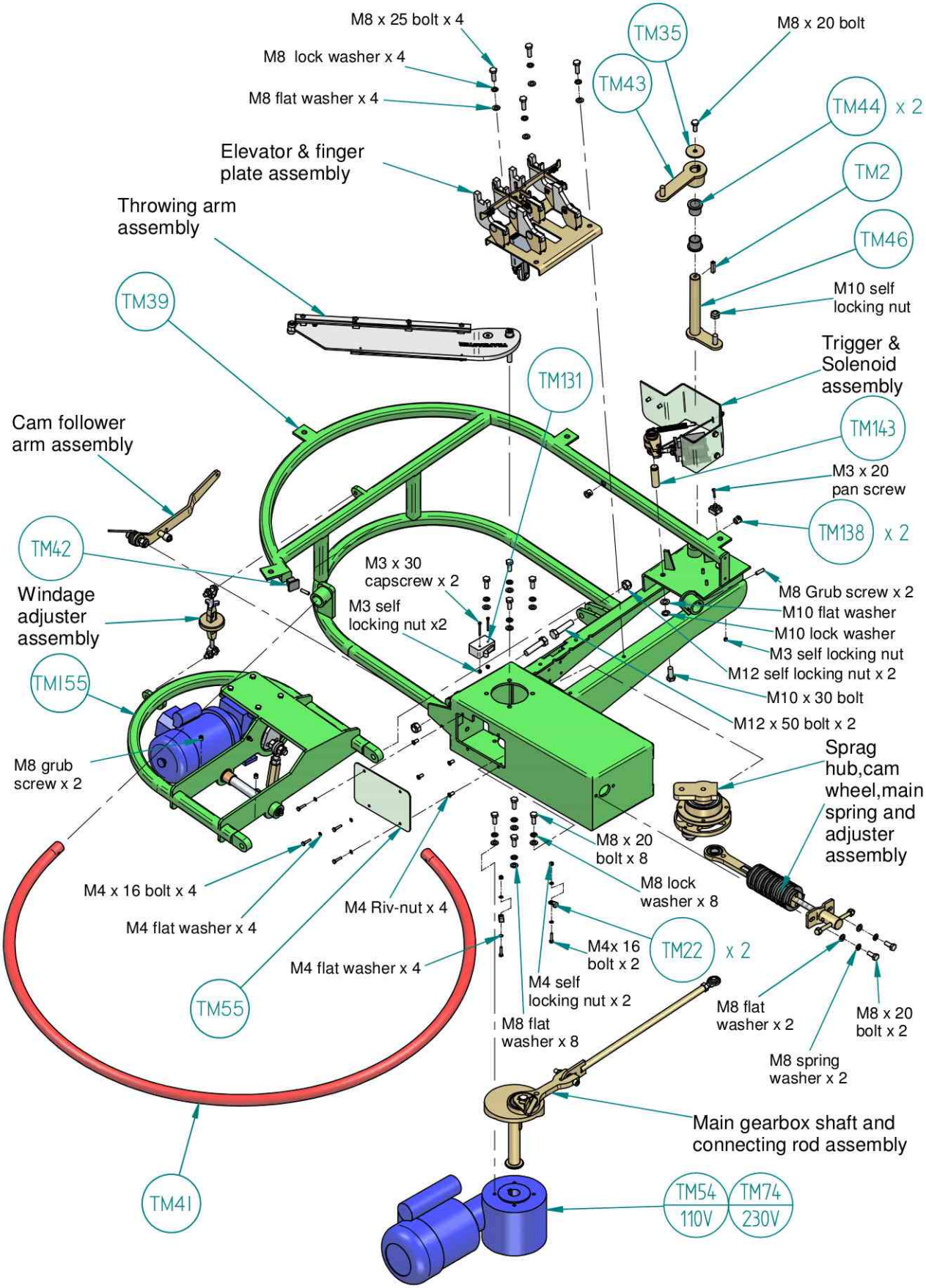
Hopper Assembly



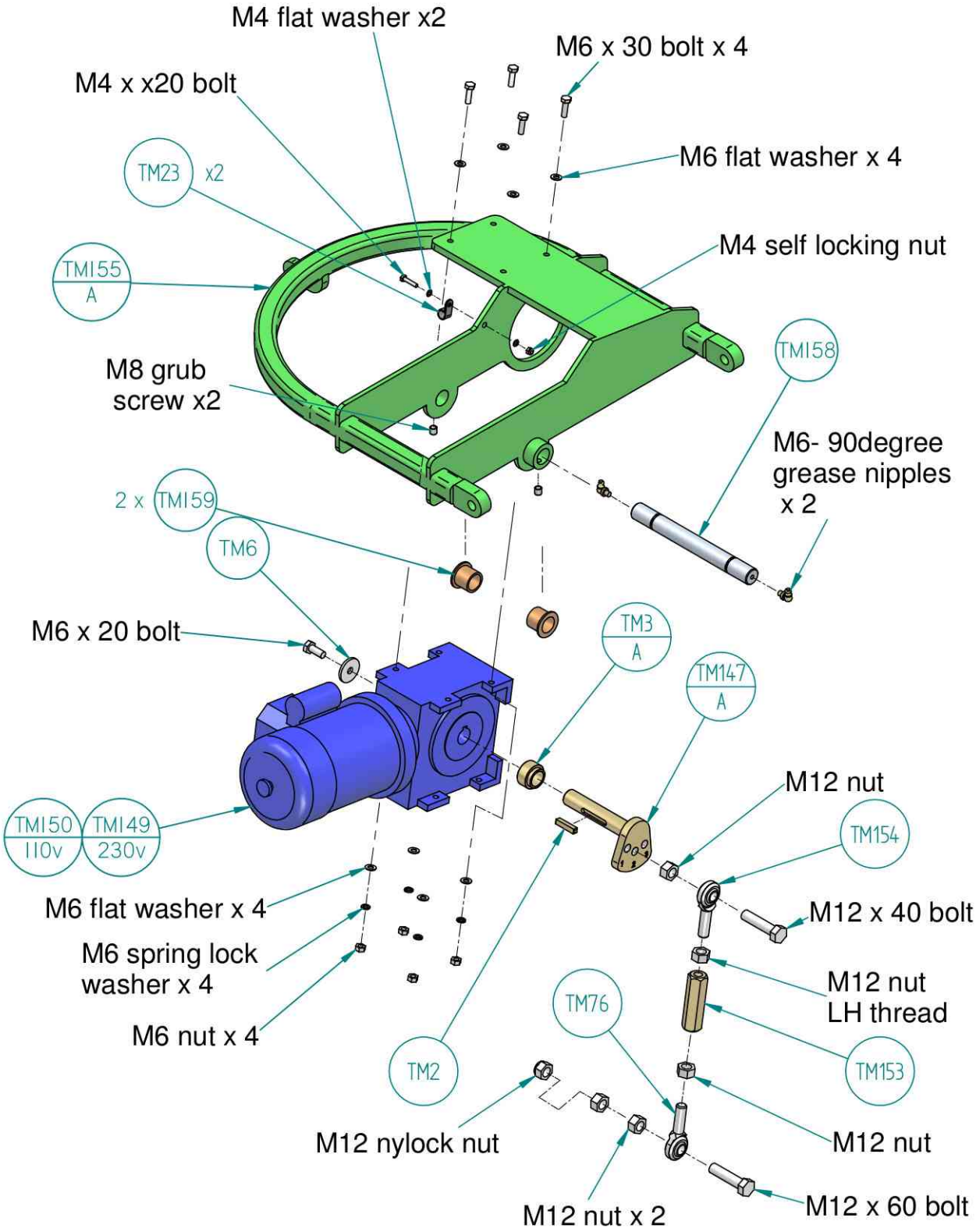
Hopper Platform Assembly



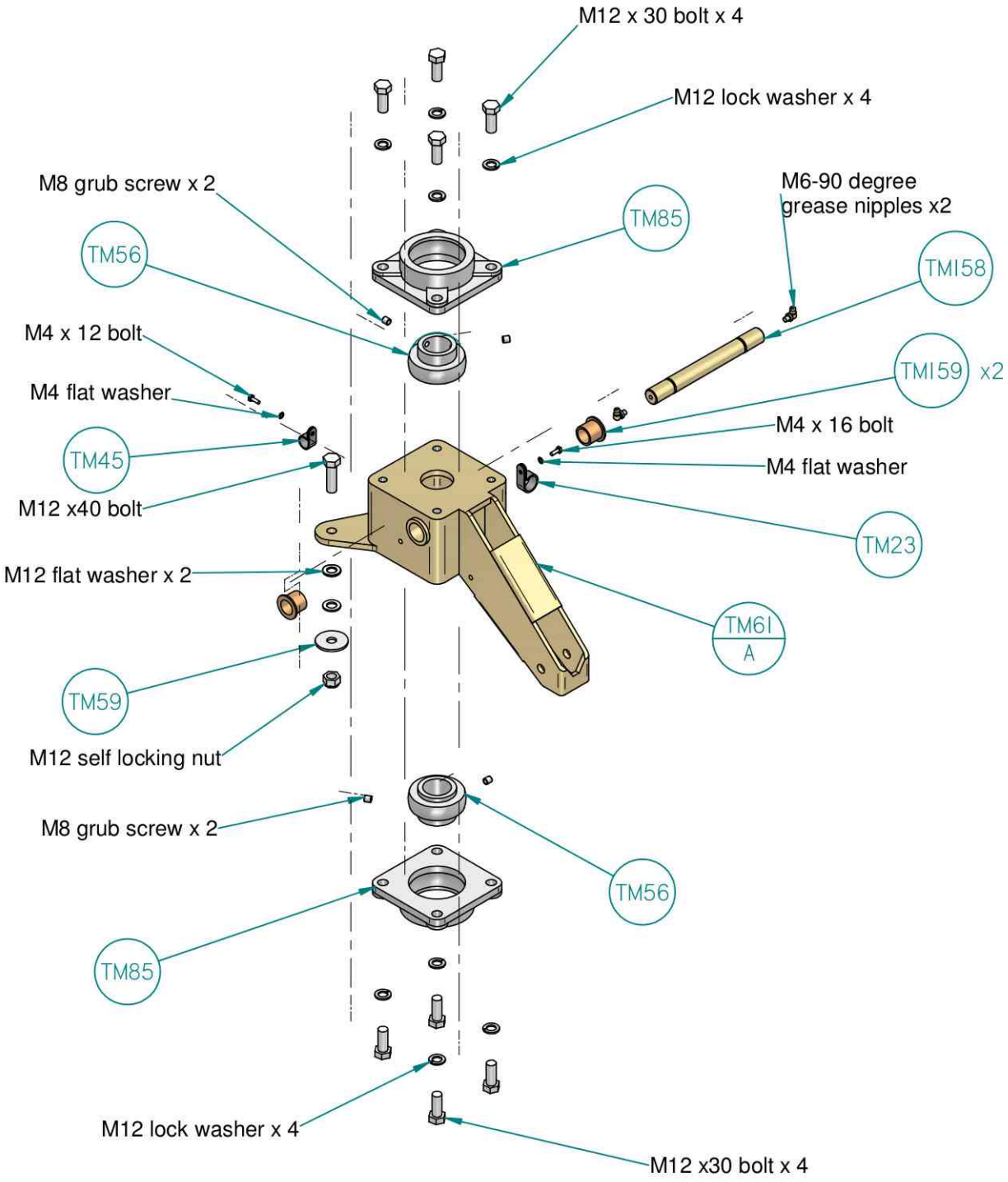
Oscillating Frame Assembly - CT45



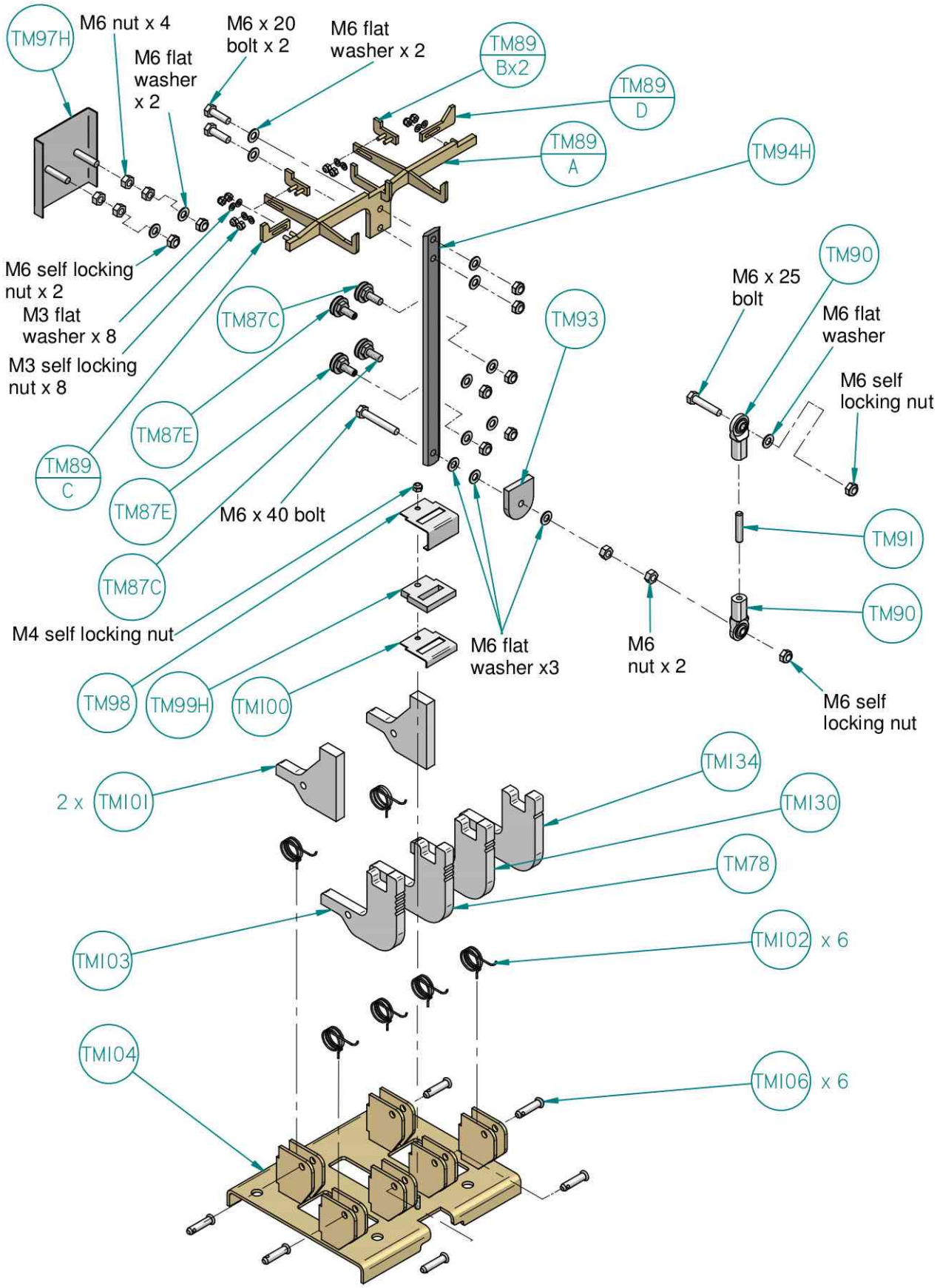
Continental Windage Frame Assembly



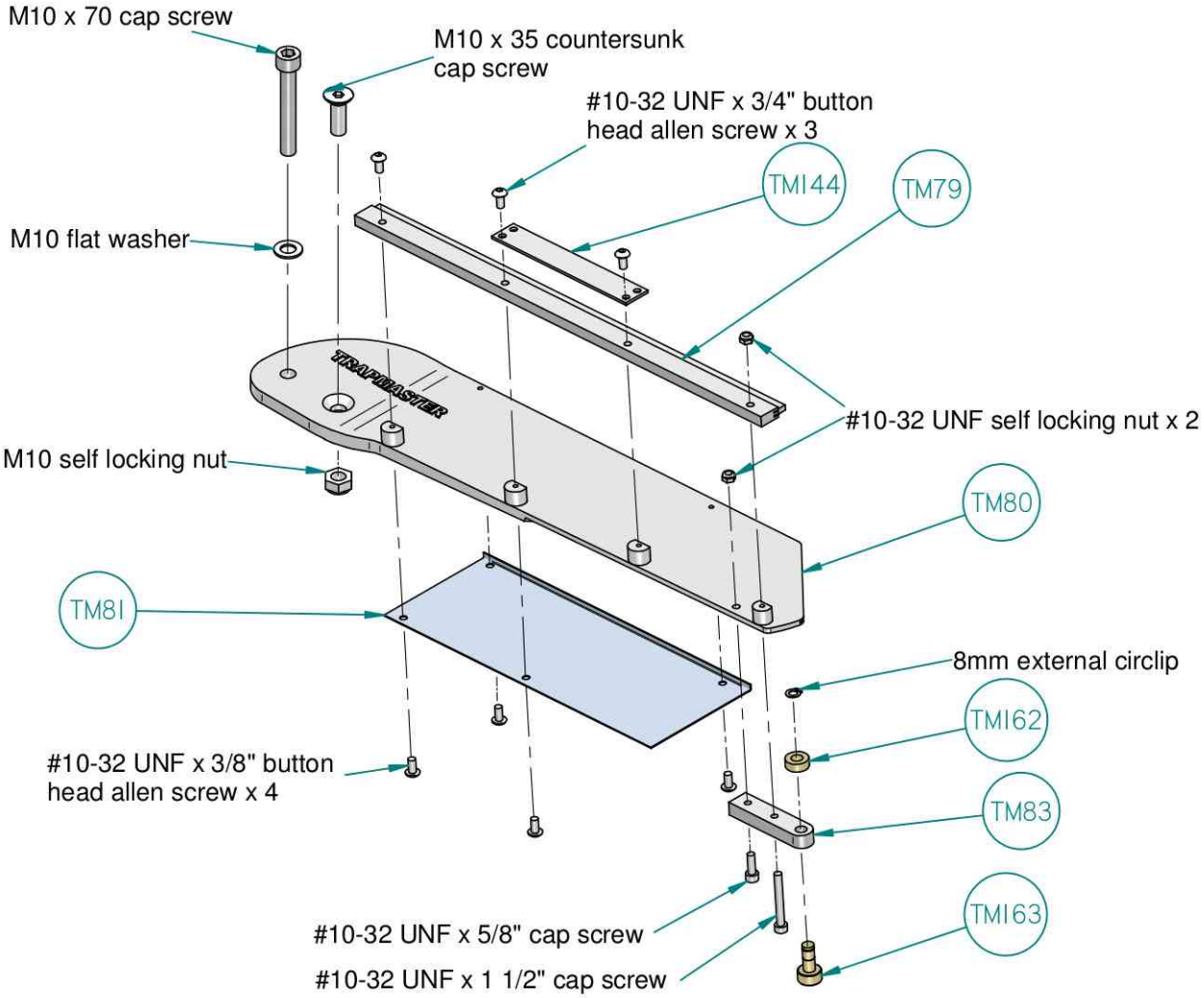
Main Pivot Housing - CT-45



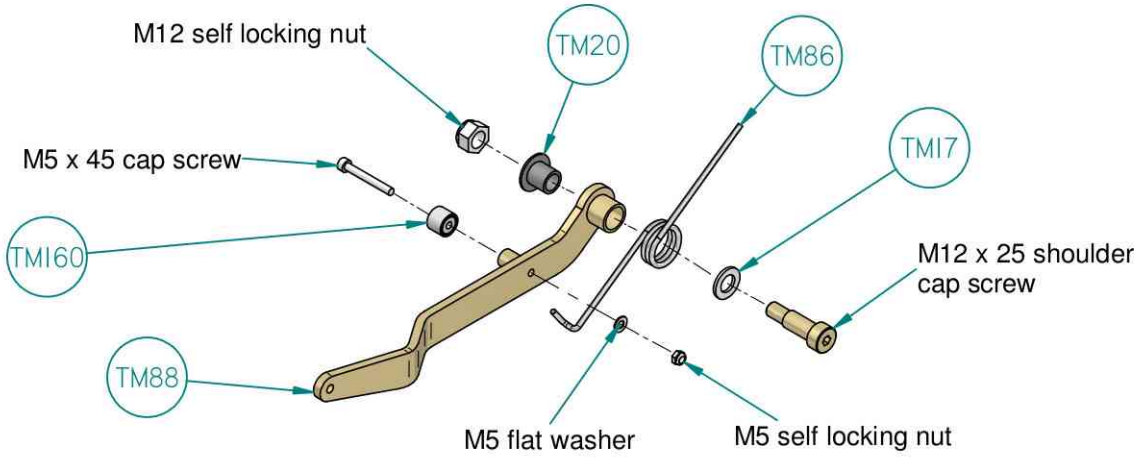
Elevator & Finger Plate Assembly



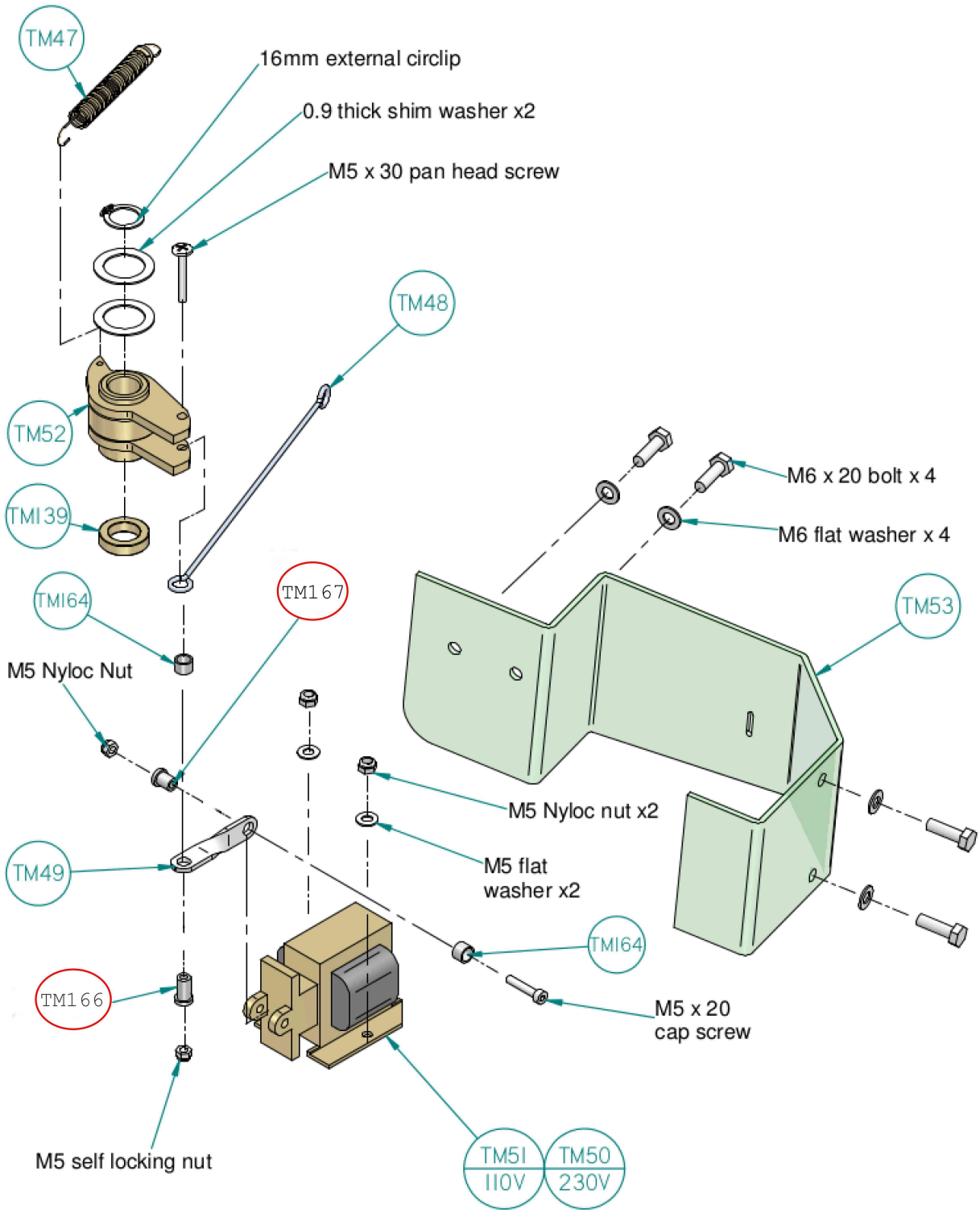
Throwing Arm Assembly



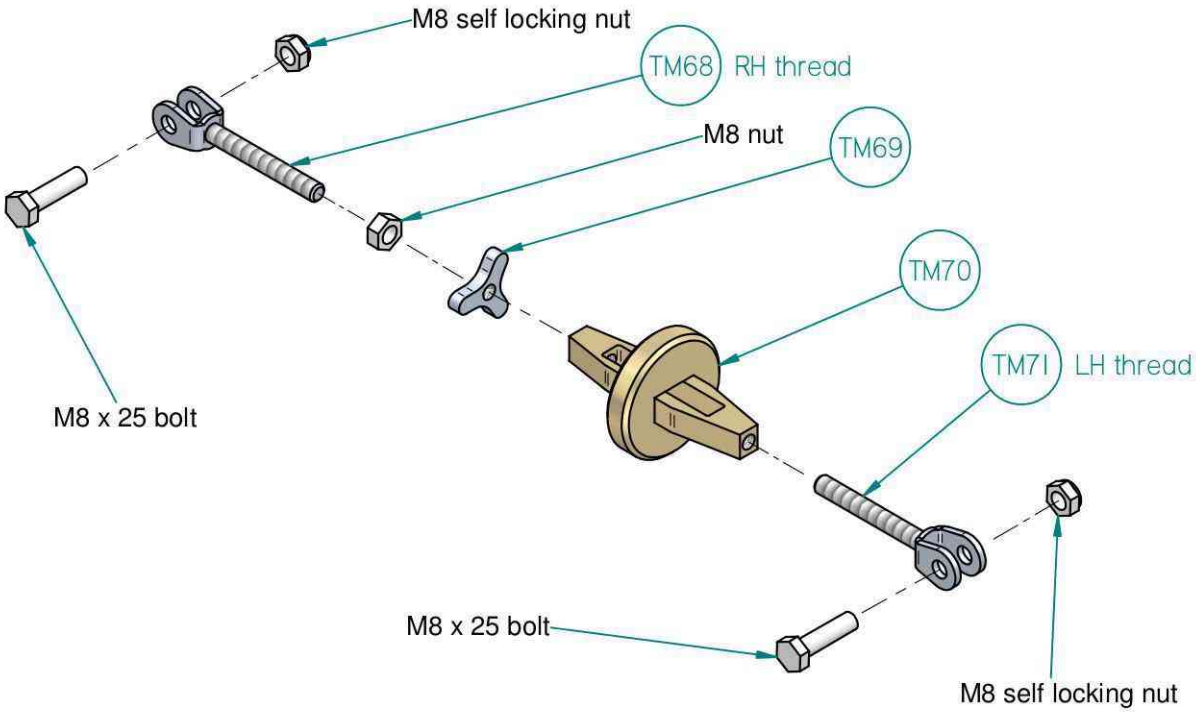
Elevator Arm Assembly



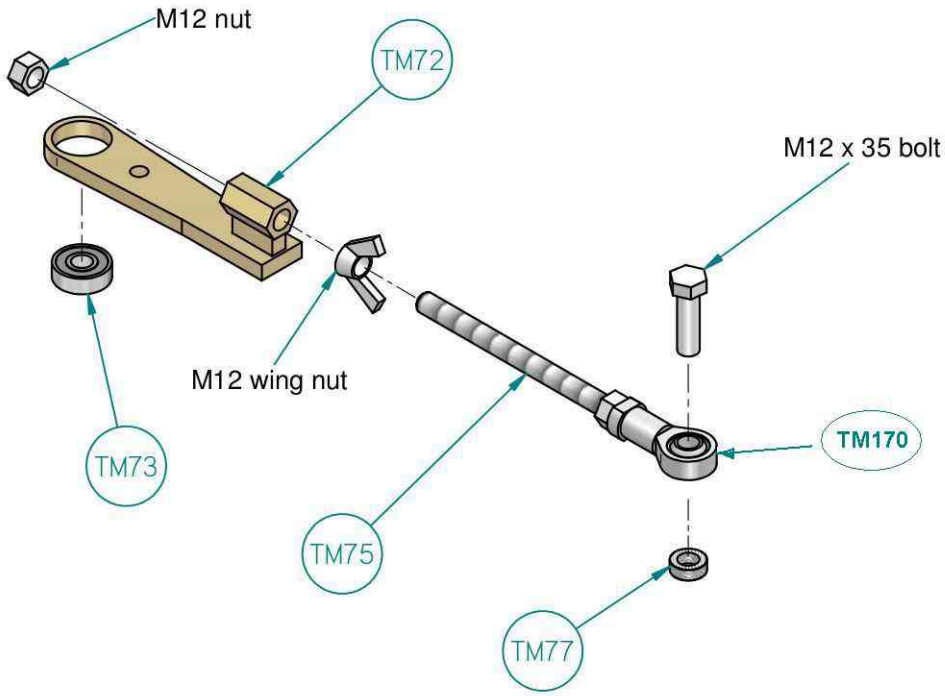
Trigger & Solenoid Assembly



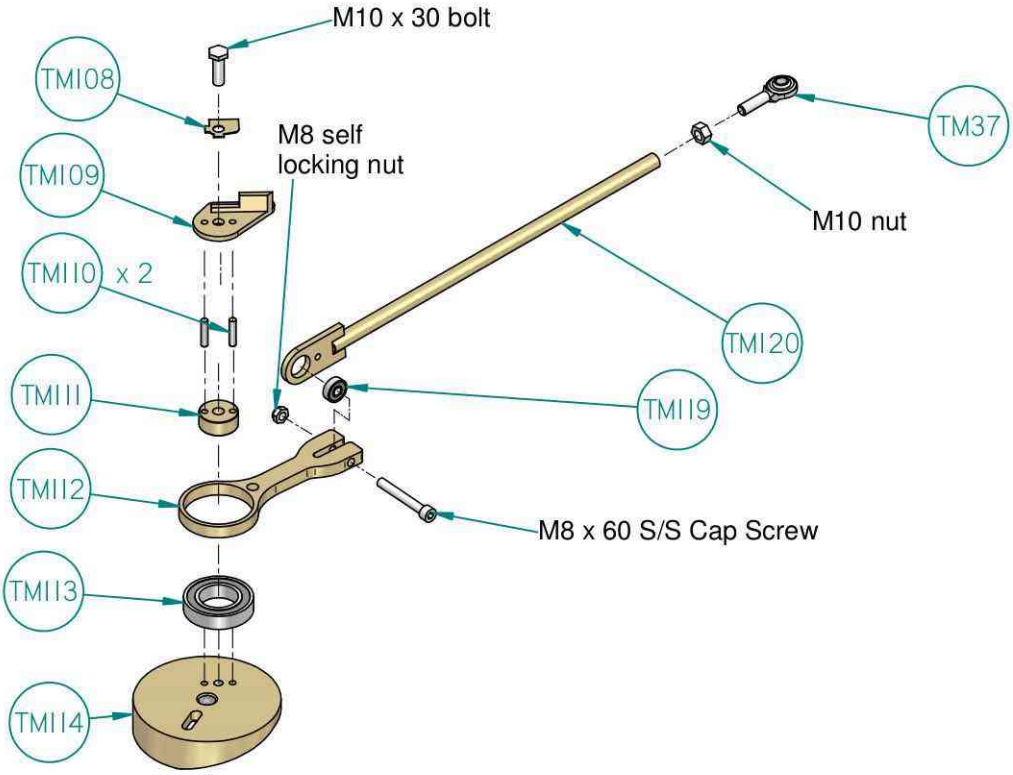
Windage Adjuster Assembly



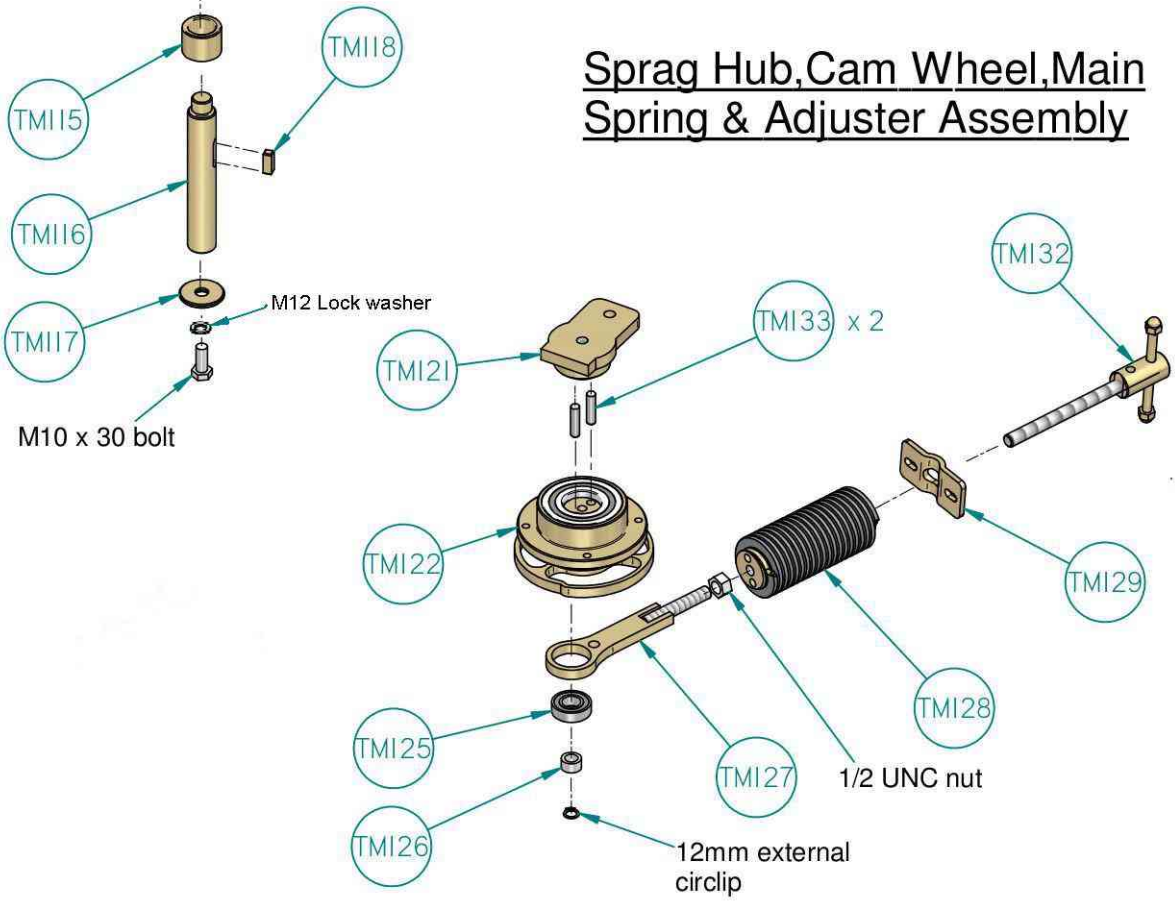
Oscillating Arm Assembly



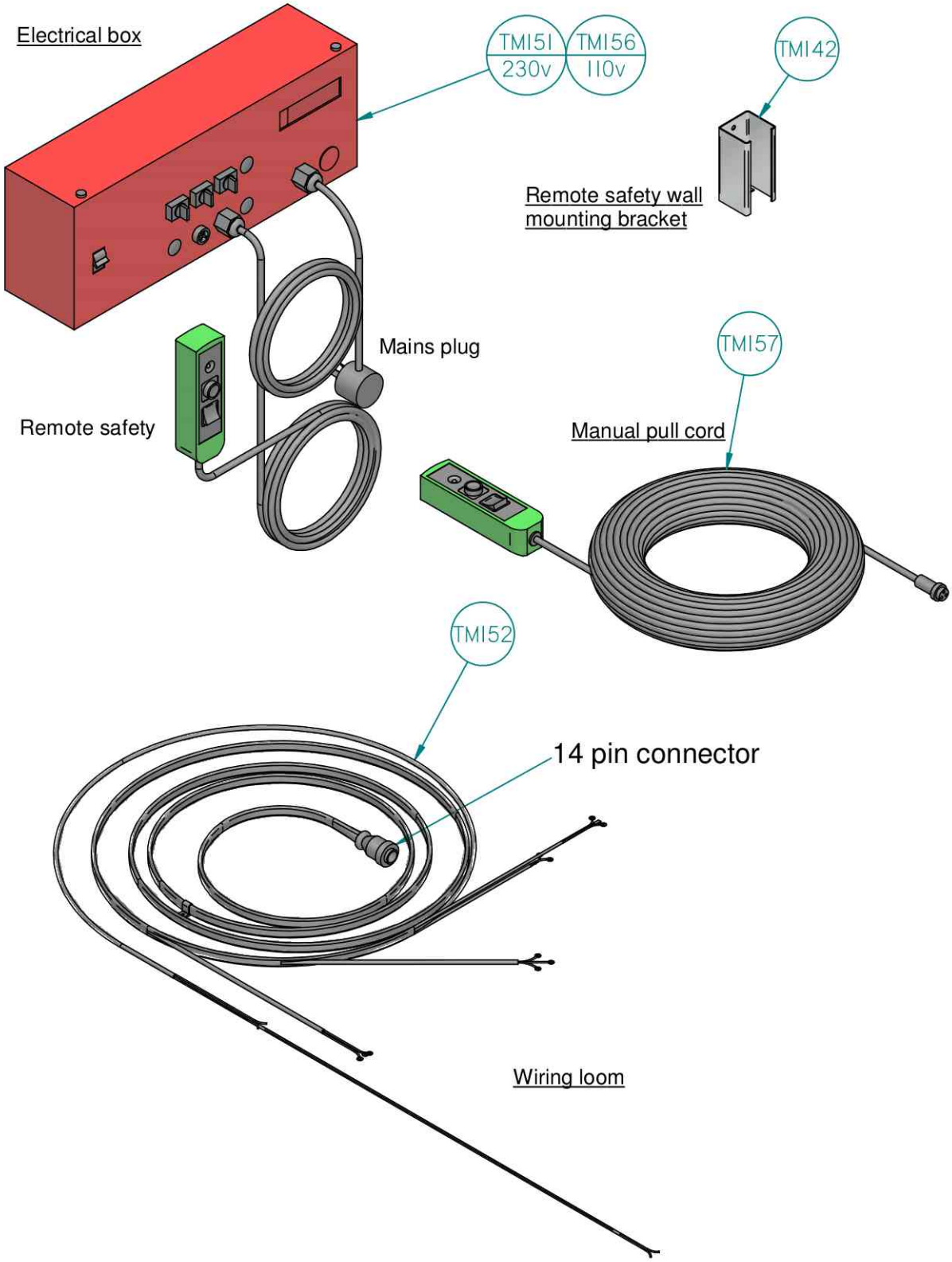
Main Gearbox Shaft & Connecting Rod Assembly



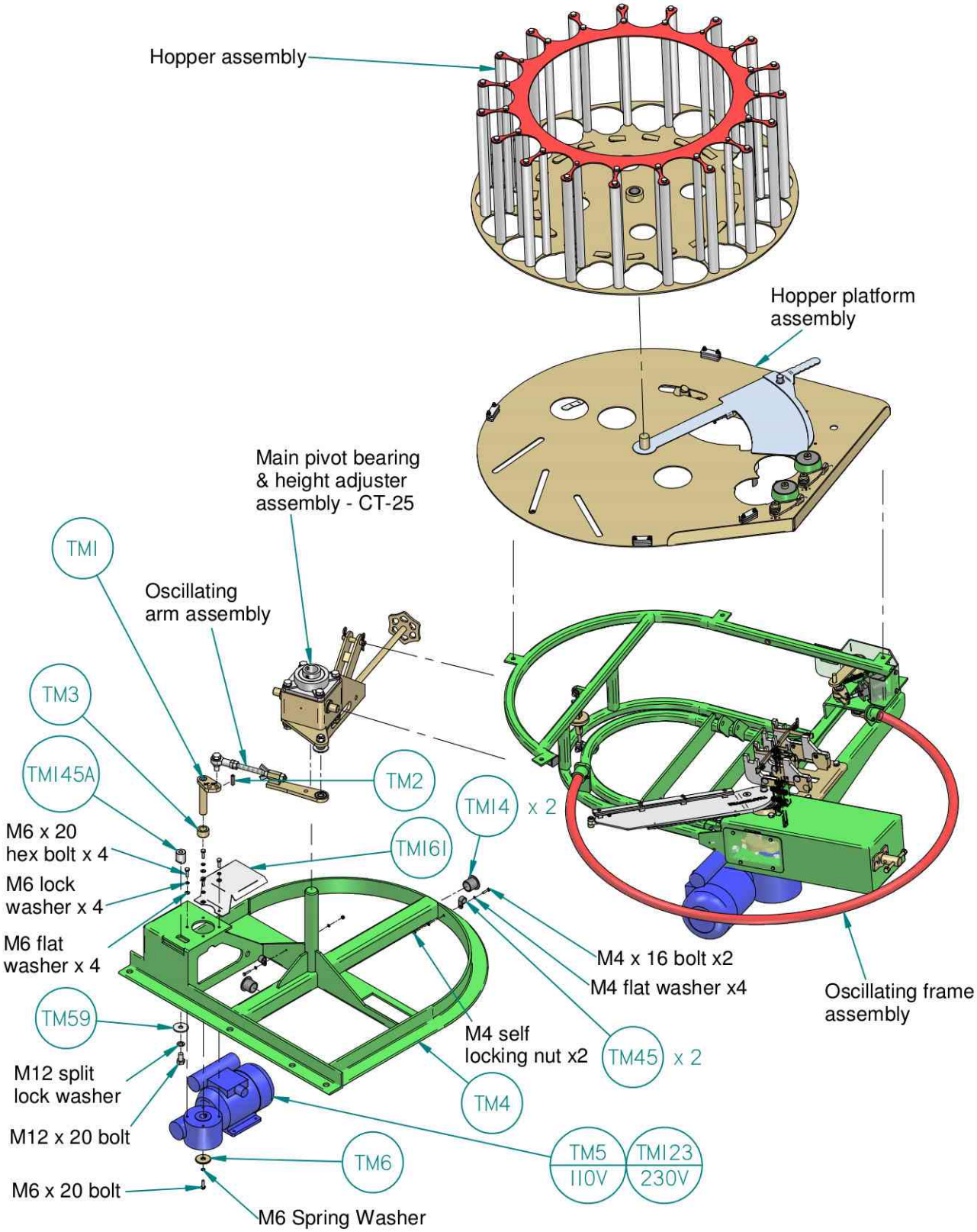
Sprag Hub,Cam Wheel,Main Spring & Adjuster Assembly



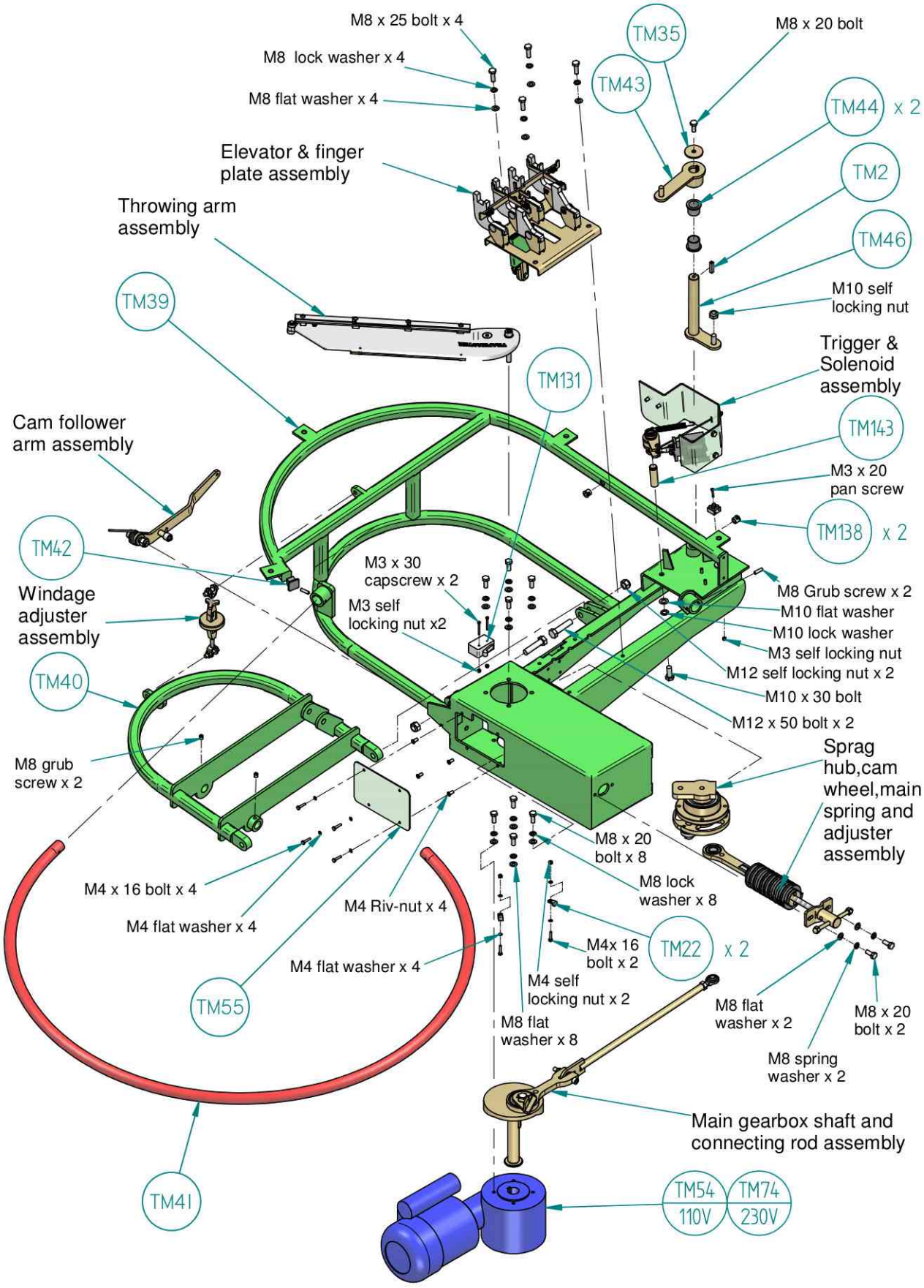
Control Box, Loom & Manual Pull Cord



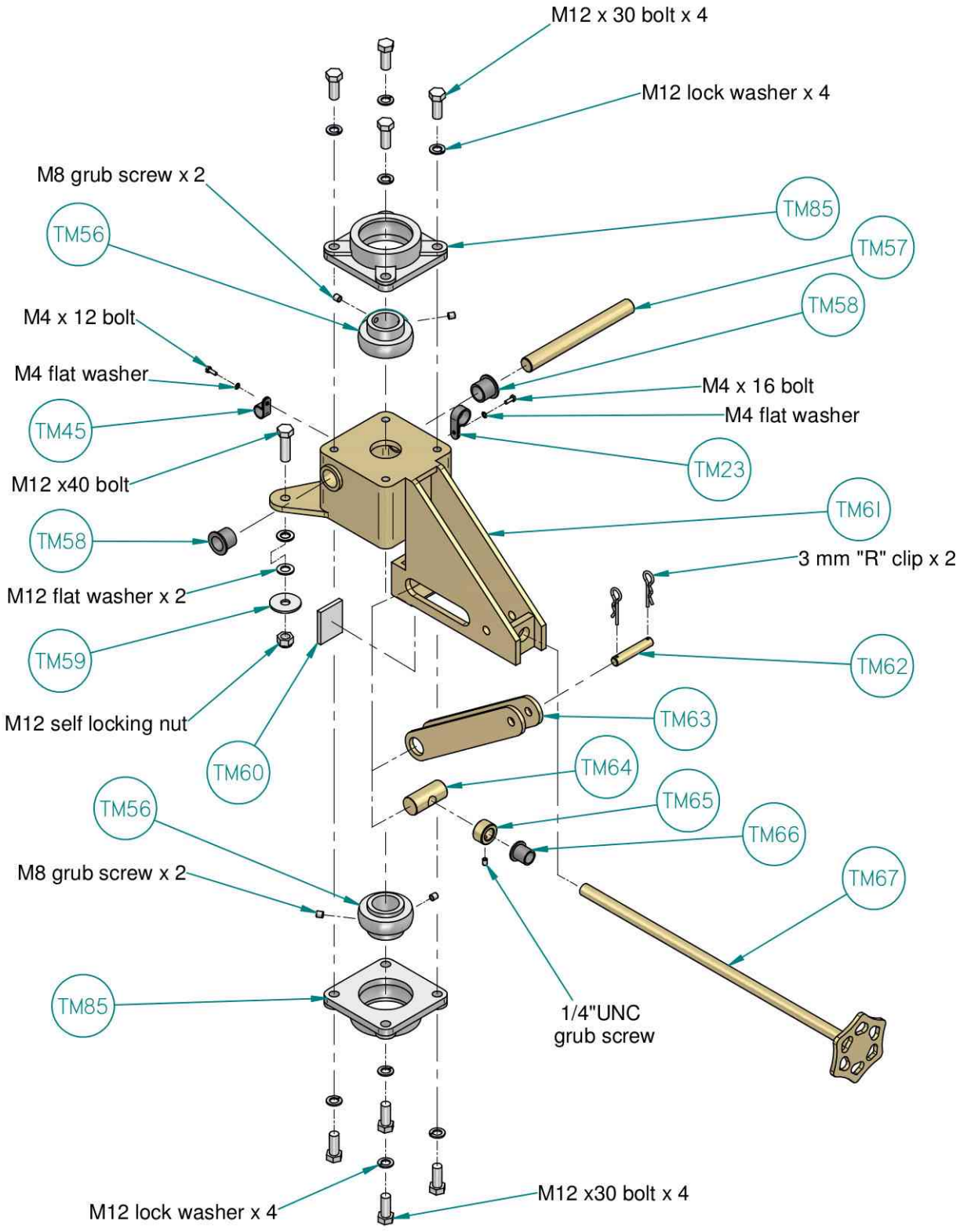
Trap Master Assembly - CT-25



Oscillating Frame Assembly - CT25



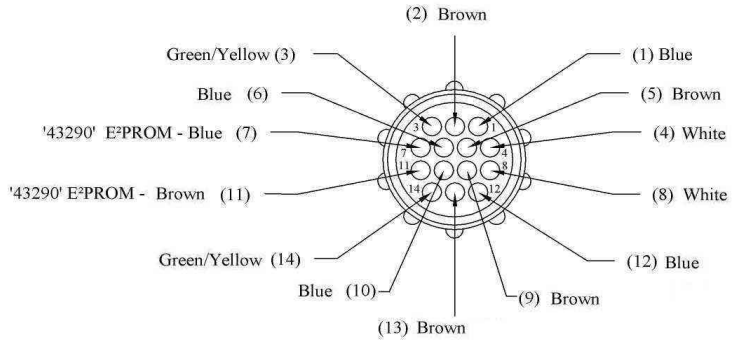
Main Pivot Housing & Height Adjuster Assembly For CT25



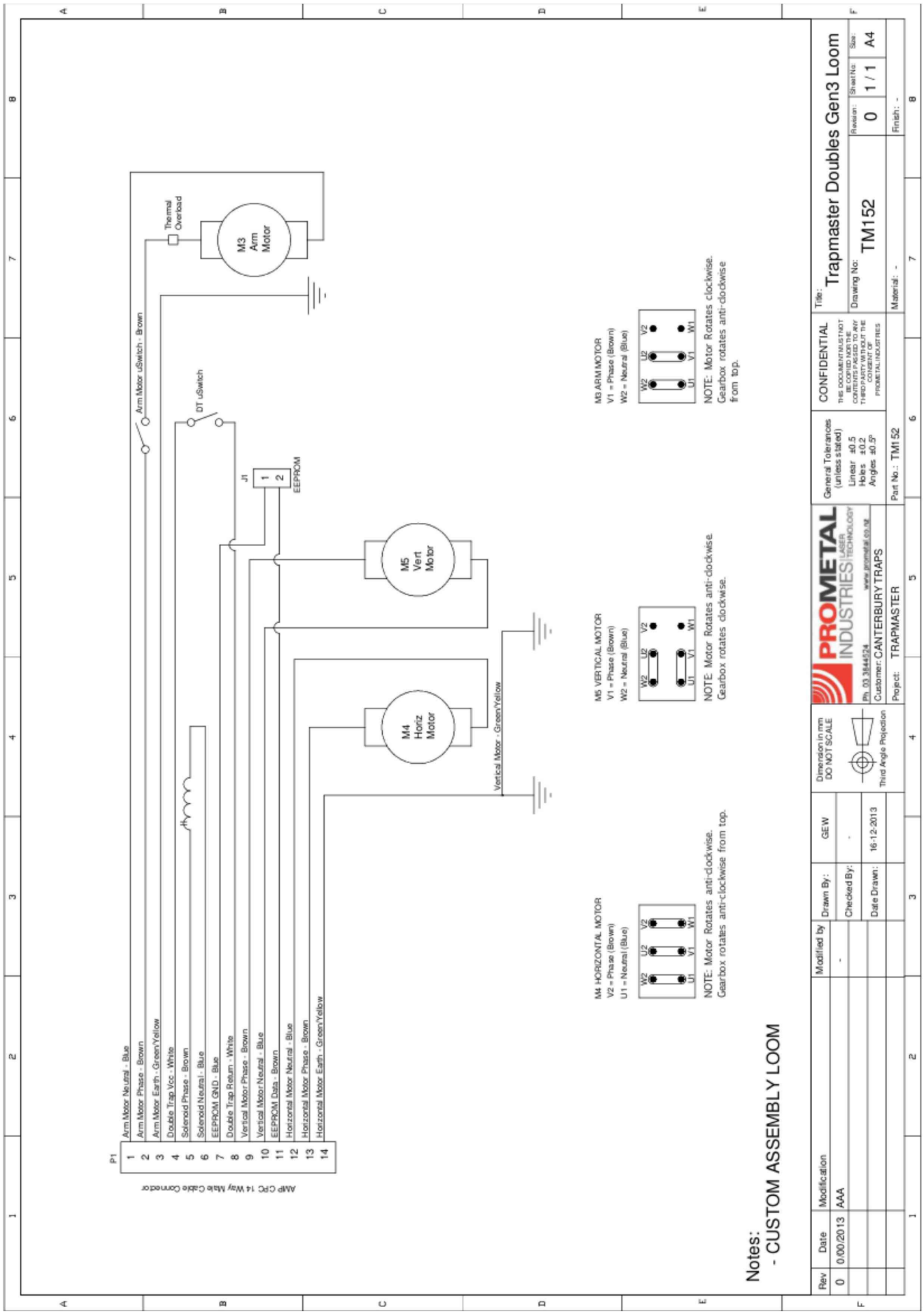
Trapmaster Wiring Loom May 2014				
Pin #	Electrical	Description	Control box loom	TM 152 main loom
1	N	Arm Motor	Blue	Blue
2	Ph	Arm Motor	Brown	Brown
3	E	Arm Motor	Green with yellow stripe	Green with yellow stripe
4	Vcc	Doubles Trap	White	White
5	Ph	Solenoid	Brown	Brown
6	N	Solenoid	Blue	Blue
7	E2 Gnd	E2 Prom	Blue (EEPROM)	Blue (EEPROM)
8	Return	Double Trap	White	White
9	Ph	Vert Motor	Brown	Brown
10	N	Vert Motor	Blue	Blue
11	E2 Vcc	E2 Prom	Brown (EEPROM)	Brown (EEPROM)
12	N	Horz Motor	Blue	Blue
13	Ph	Horz Motor	Brown	Brown
14	E	Horz Motor	Green with yellow stripe	Green with yellow stripe

Applicable to Trapmasters with serial no: 8465 – 8469.

TM152 Trapmaster Loom JPED 86

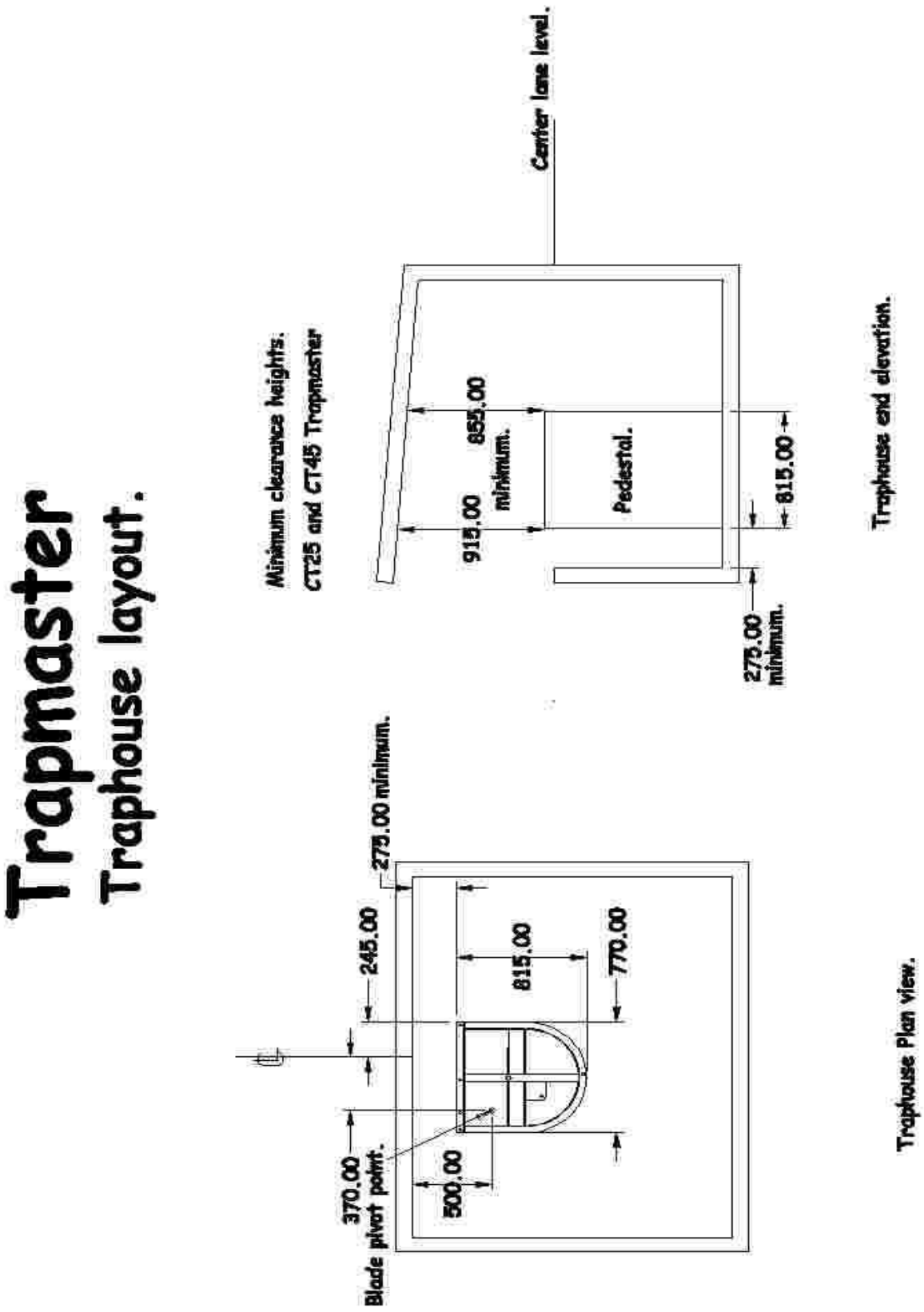


14 way CPC connector - Rear Plugging View



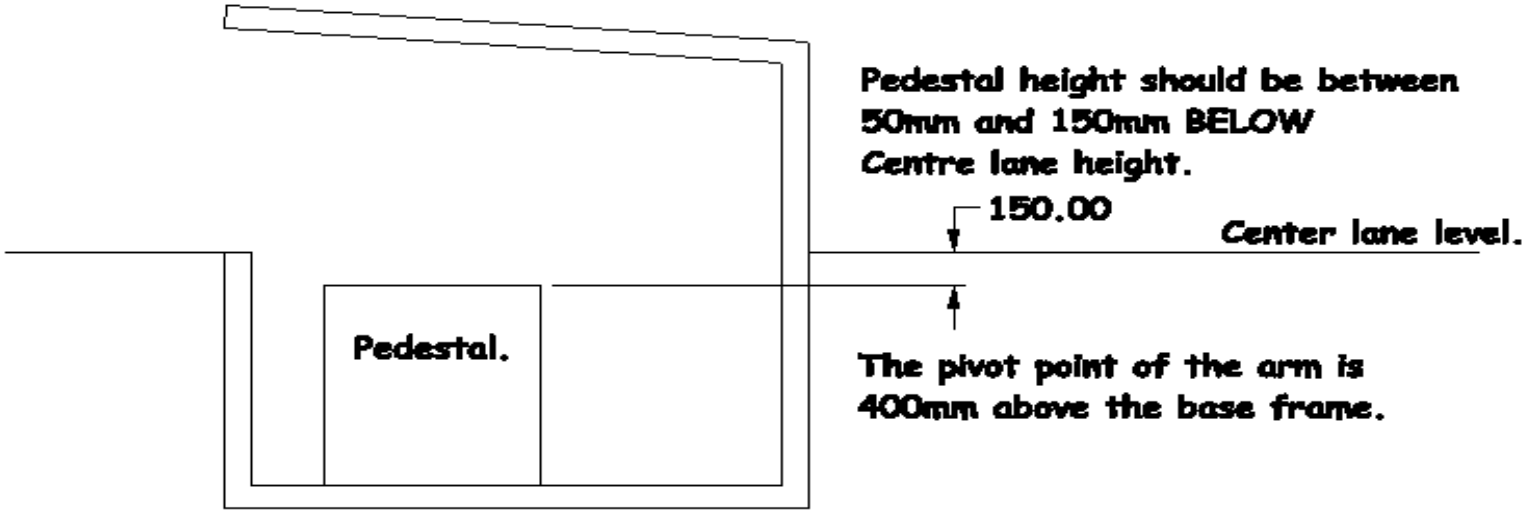
New Zealand Range manuals:

If you require information on the setting out and building of trap houses please visit the NZCTA website for more details. www.nzclaytarget.org.nz/nzcta2012/rrs.php



Trapmaster

Traphouse layout.



Traphouse end elevation.

INNOVATION+VERSATILITY
Canterbury Trap International Ltd

Trapmaster

Warranty Registration

Name:
Address:
City:
State:
Country:
e-mail:
Date of purchase: / /
Product Name: Trapmaster
Model:
Trap serial No:
Control box serial No:

Canterbury Trap International reserves the right to alter or amend any specification on it's products at any time without notice.

Register on line : www.canterburytrap.co.nz

Please fax to +64 3 3484285
or
Canterbury Trap International.
PO box 14-035,
Christchurch.

New Zealand

NB! This form must be returned within thirty days of purchase.

