

TBRO Series *(TBRO-22, 30 and 36)* **Dough Rounder and Divider** **Operation Manual**



**Important Instructions! Please retain on file.*

- **CAUTION!** Please read this manual in it's entirety prior to operation

Congratulations on owning a
THUNDERBIRD
Dough Divider and Rounder!!!

Your new THUNDERBIRD TBRO-Series has been specially designed to produce a wide variety of dough ball sizes!

“We are glad to have the opportunity to design for you, our customer, a machine that will, once again, produce dependable, quality results, each and every time it is used.” Thanks again and enjoy!

PLEASE, feel free to call for future orders or information on Thunderbird’s many other machines and products by dialing:

(866) 7-MIXERS, (866) 875-6868, (214) 331-3000 (866) 451-1668 or (800) 7-MIXERS!

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This machine was designed to operate on 220V, single phase; however, 115V or 380V is also available.

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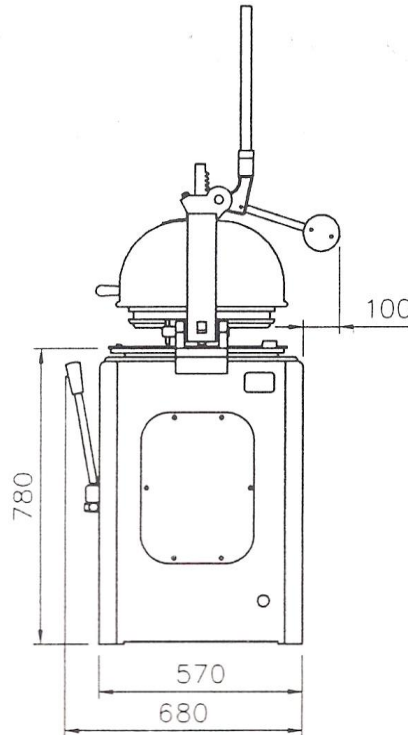
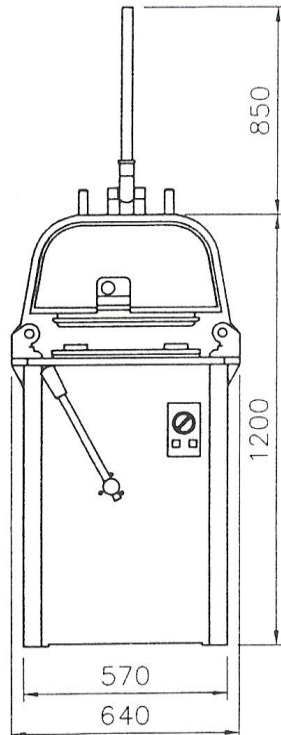
2.1 Introduction

Congratulations! You now own a Thunderbird dough rounder/divider, model TBRO-22 , TBRO-30 or TBRO-36! Your new machine will help you do the best job for your customers. Please read this booklet carefully and in it's entirety. Also, keep this booklet throughout the life of the machine, or delivered to its following users. This machine will last you for decades if properly operated and maintained!

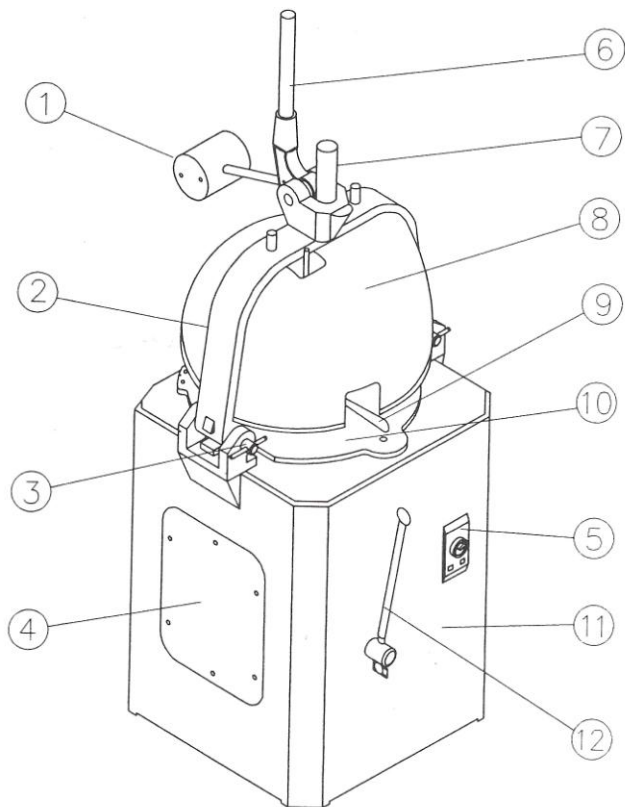
Thunderbird Semi-Automatic dough rounder/divider, model TBRO-22, TBRO-30 and TBRO-36 can divide and round the dough in 22 pieces, 30 pieces and 36 pieces equally. Each divided dough weigh from 30 grams to 150 grams (details as per chapter 2.2), The machine specifications are as follows:

2.2 SPECIFICATION

Model	TBRO-22	TBRO-30	TBRO-36
Dough weigh	50-150 grams	30-100 grams	25-85 grams
Quantity	22 pieces	30 pieces	36 pieces
Motor power	1 Hp	1 Hp	1 Hp
Weigh	720lbs	720lbs	720lbs
Dimensions	85cmx95cmx160cm	85cmx95cmx160cm	85cmx95cmx160cm



3.1 COMPONENT PARTS

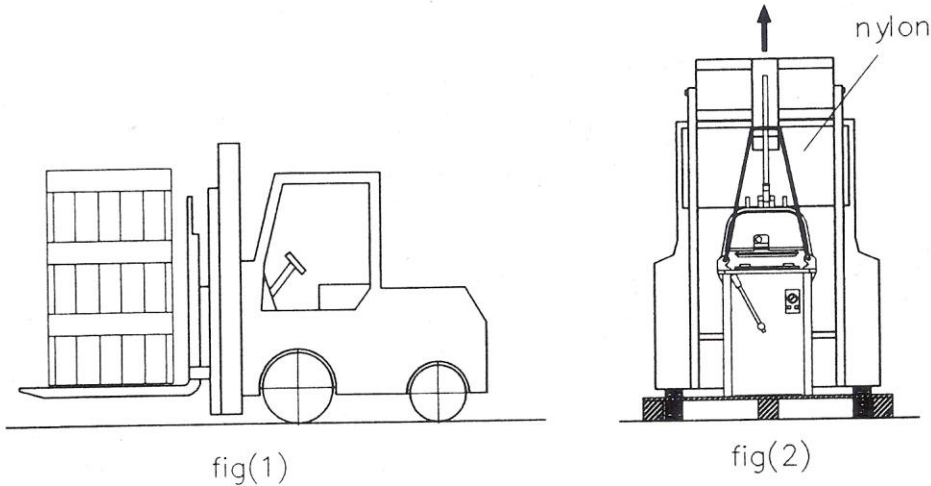


3.2 PARTS NAME LIST

Number	name	Number	name
1.	Weight balance	7.	Main shaft
2.	Upper support set	8.	Front plastic cover
3.	Pin	9.	Stopping handle
4.	Side cover sheet	10.	Plastic pan
5.	Main power switch	11.	Main body
6.	Operation handle	12.	Rounding operating handle

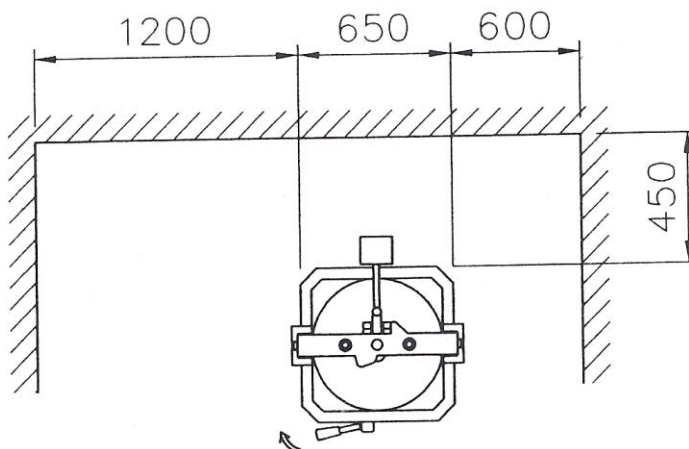
4.1 TRANSPORT HANDLING (PLEASE SEE FIGURE 1 AND FIGURE 2)

The machine was packed on the wooden pallet and fixed by four bolts (details as figure 1), it needs to use at least one ton capacity of forklift to transport or handle the machine before unpacking it. When installing this machine, it is your option to have the machine remain on the wooden skid or to remove the wooden skid from the machine (details as figure 2)



4.2 INSTALLATION

The surrounding area must be clear to allow for maintenance and the cleaning. When the machine is in placed and unpacked, insert part No.12 rounding operation handle into part No.28 gear set and tighten the fixing screw. You must hire a licensed electrician to hook up power to the machine.



4.3 Securing the machine:

Once you have identified where you will want to install machine place it and remove one of the side covers. Using a permanent marker, mark the four bolt holes location on the floor. Next move the machine and using cement drill. Drill out the four holes for the anchors, inserting them. Then carefully return machine to position and then put nuts on bolts and tighten down. Thus securing the machine to the floor.



Once machine is secure, you'll need to thoroughly clean the base and floor around the machine. Then apply a silicone caulking around the base sealing it completely.

5.1 OPERATIONS AND SAFETY

Please get a licensed expert to do perform installation operations. Check the sliding shaft set (details as the part No.60 on chapter 8.1) to see whether there is the oil for lubrication or not. If not, you may need to add some oil to maintain proper lubrication. Always keep the machine in a horizontal position; this may extend the life of the machine.

Please ensure that the plastic pan is running in a counter-clockwise direction when pushing the rounding operation handle.

Clean with protection oil before operating the machine. Recommended dough weight is about 2kgs (or 4 lbs). Repeat testing your machine until this part is fully clean for normal operation.

To get the correct weight of each divided dough, you must adjust the height of the rounding. To do this, simply adjust the adjusting screw (No.70 as shown on chapter 9.1), the number on the screw is the weigh of the divided dough (for example, at number 60 means 60 grams of each divided dough). To divide the dough, use your left hand to push No.9 (the stopping handle) (details as per chapter 3.1), and your right hand to push down the part No.6 (details as per chapter 3.1, it will divide the dough equally).

To round the dough, move your left hand on rounding operation handle No.12 (details shown on chapter 3.1), it takes about 3 to 5 seconds to get produce rounded dough. The rounding time is increased according to the amount of dough being rounded

After the dough has been rounded, release the operating handle No.6 (details on chapter 3.1) to get rounded and divided dough onto the plastic pan.

For safety reasons; when the machine is in operation, the operator is prohibited to let any body parts come into contact with the machine.

The maximum capacity of dough for the model TBRO-22 is under 3.3 kgs (6.5lbs) and for TBRO-30 and TBRO-36 is under 3.6kgs (or 7 lbs.) Make sure there are no hard ingredients in the dough; otherwise it will damage the dividing unit.

6.1 CLEANING

CLeaning Instructions for the Thunderbird TBRO-36, -30, -22 Rounder/divider.

Be sure to shut off power to machine, prefeably unplug , or at breaker, lock out.

Next turn yellow cutter guard to notched area ,(see pic 1) ,



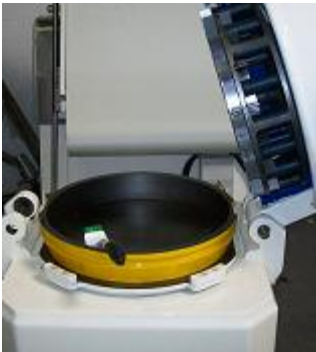
pic 1 , so that guard drops

down. (pic 2).



pic 2

Next raise the top portion of the machine, by pulling the pin on side. Guard should remain on table surface. pic 3.



pic 3. Then with handle at top pulled up, clean knife

guide surface thoroughly with brush and approved cleaning products. Pic 4.



pic 4

Next pull top handle down all the way, moving side handle to allow full knife drop.

Pic 5.



pic 5.

Thoroughly scrub knife with brush and approved cleaning products. Then using pressured air line with spray nozzle, blow out any particles that remain inside to out in the knife chamber. (See pic 6).



pic 6...

Once again clean knife and plate section with brush and water cleaner, and blow out with air gun. See pic 7 & 8.



pic 7.....



Pic 8

Repeat till clean and no particle free.

Dry and pull knives back into housing and slowly lower top back to position.

Then raise the knife guard back up and turn approx 2/3rds of the way around the lock secure it in place.

6.2. Cleaning the top of rounder.

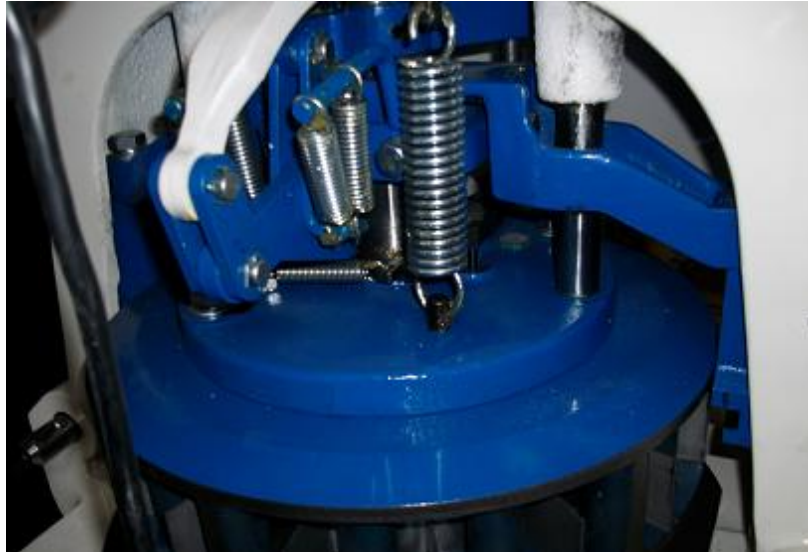
Remove top covers by unscrewing thumb screws;



Next pull covers off;



Using a brush and air blow nozzle remove and food particle or dirt . Inspect to make sure nothing is hiding in amongst the parts. Check lubricated parts add lub as needed. Replace cover once clean.

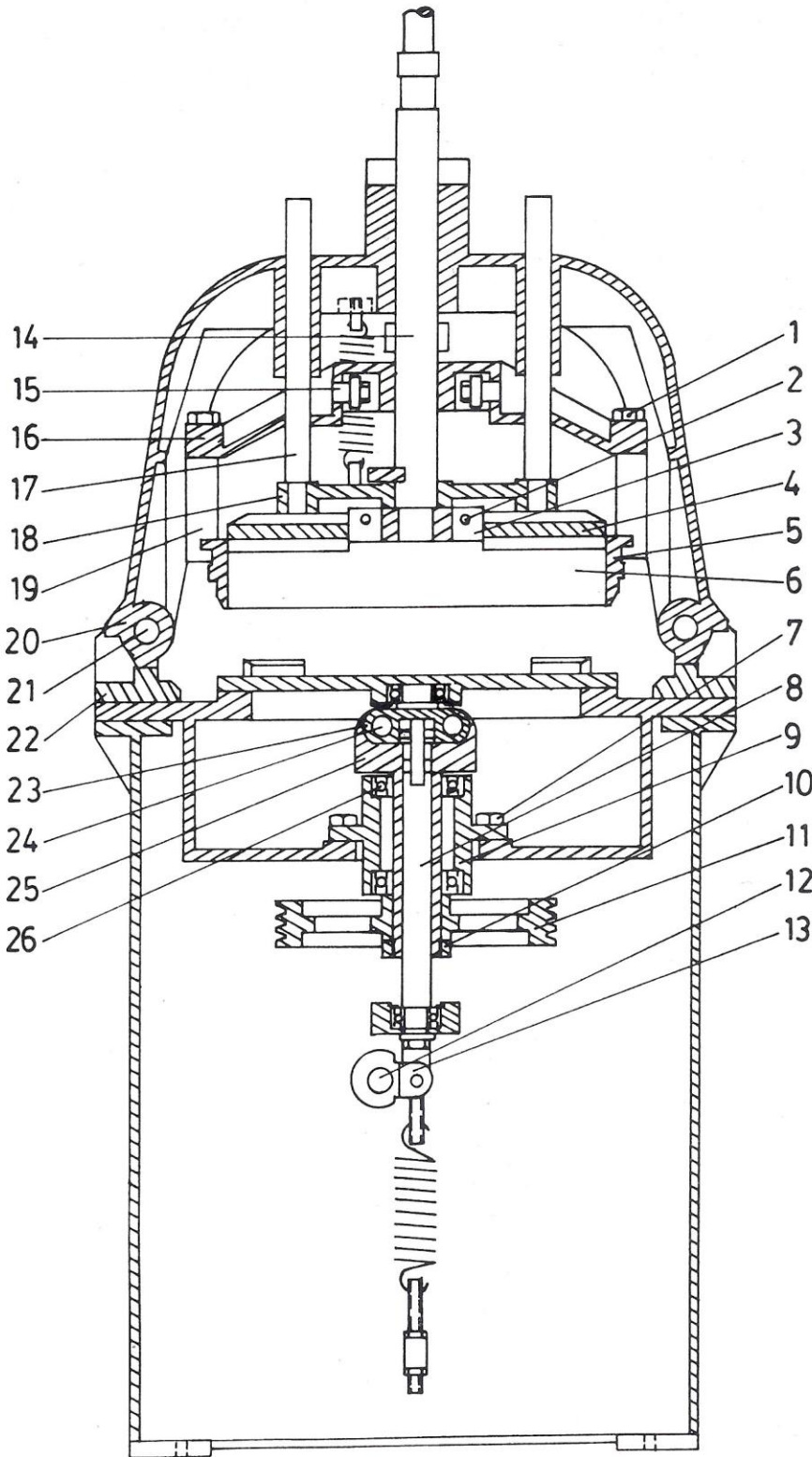


6.3 MAINTENANCE

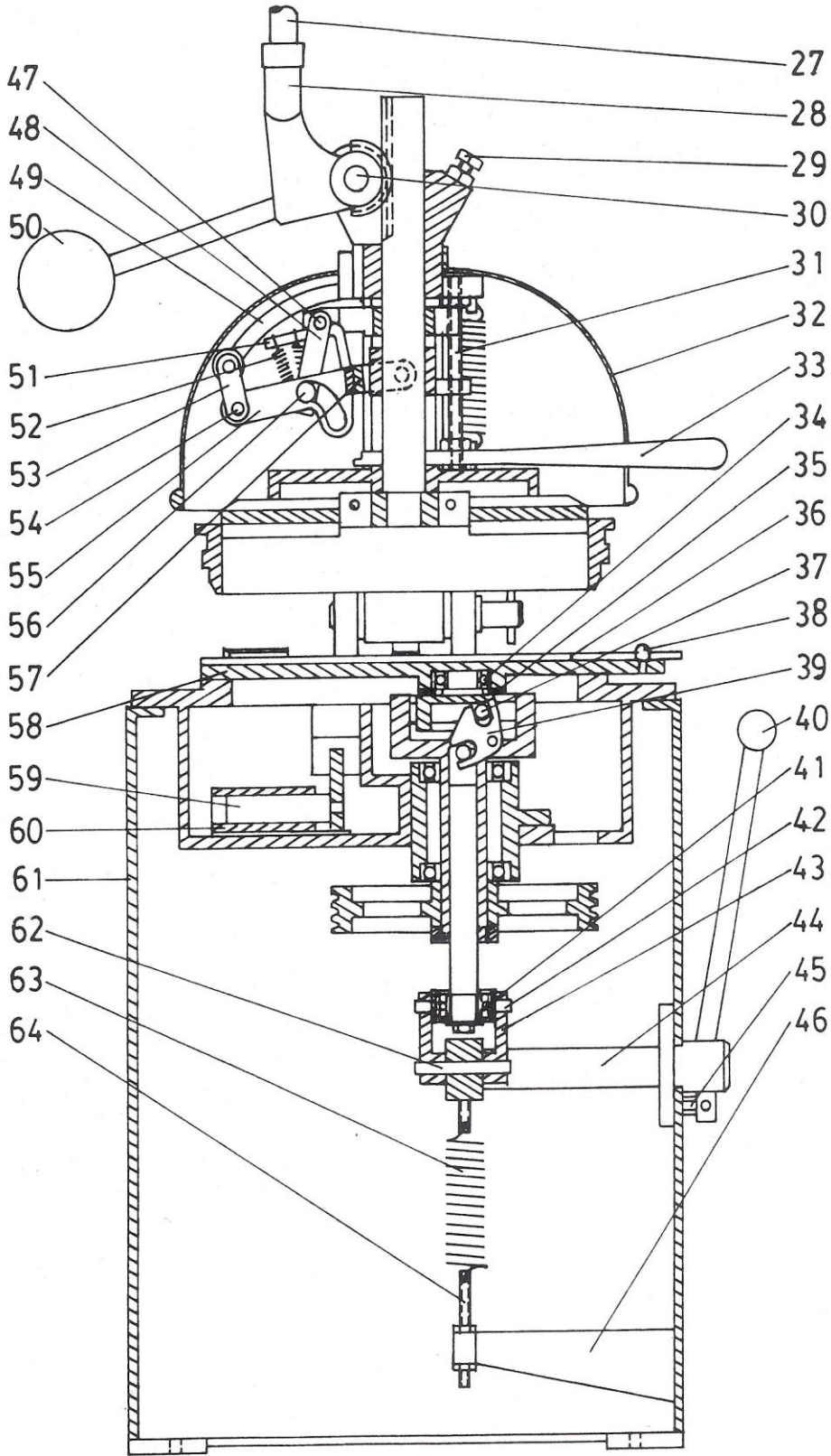
- a. To adjust the drive belt on the motor pulley, please find the adjusting screw which can make the belt tighter.
- b. Use food grade oil (A360B) as lubrication oil. The lubrication must be done every 3-6 months, depending on how often the machine is used.
- c. **Always keep enough oil inside the sliding shaft set (No.60 as shown on chapter 8.1)**



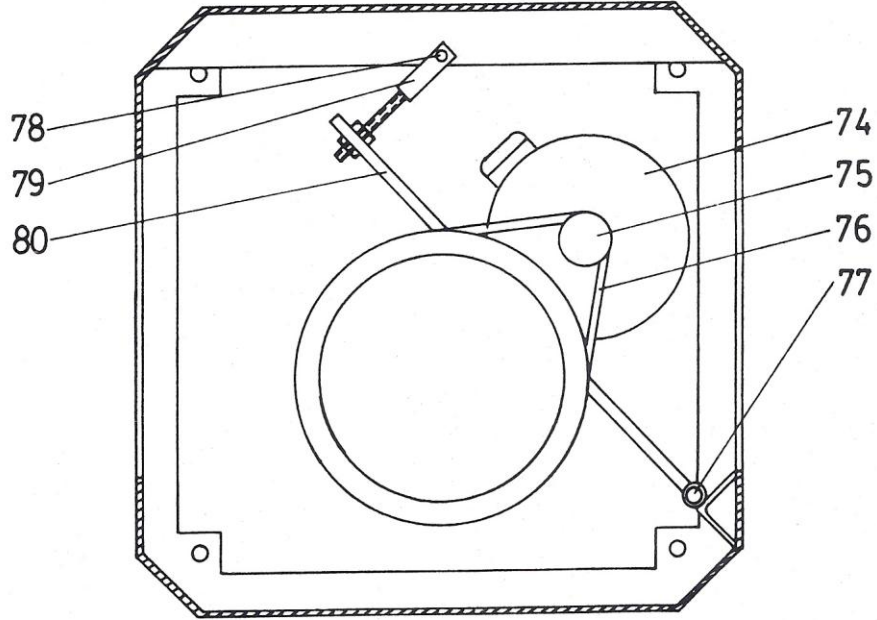
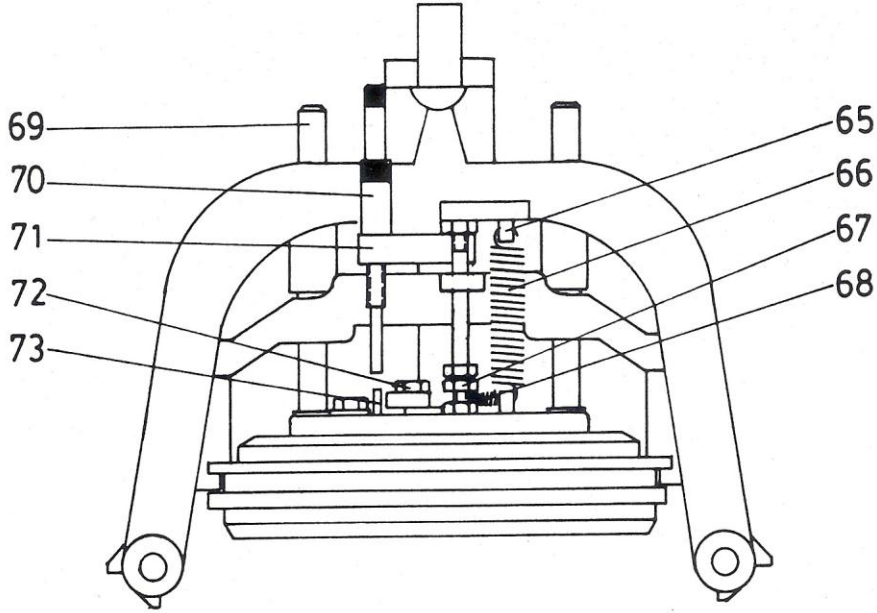
7.1 PARTS SHEET (TABLE 1)



8.1 PARTS SHEET (TABLE 2)



9.1 PARTS SHEET (TABLE 3)

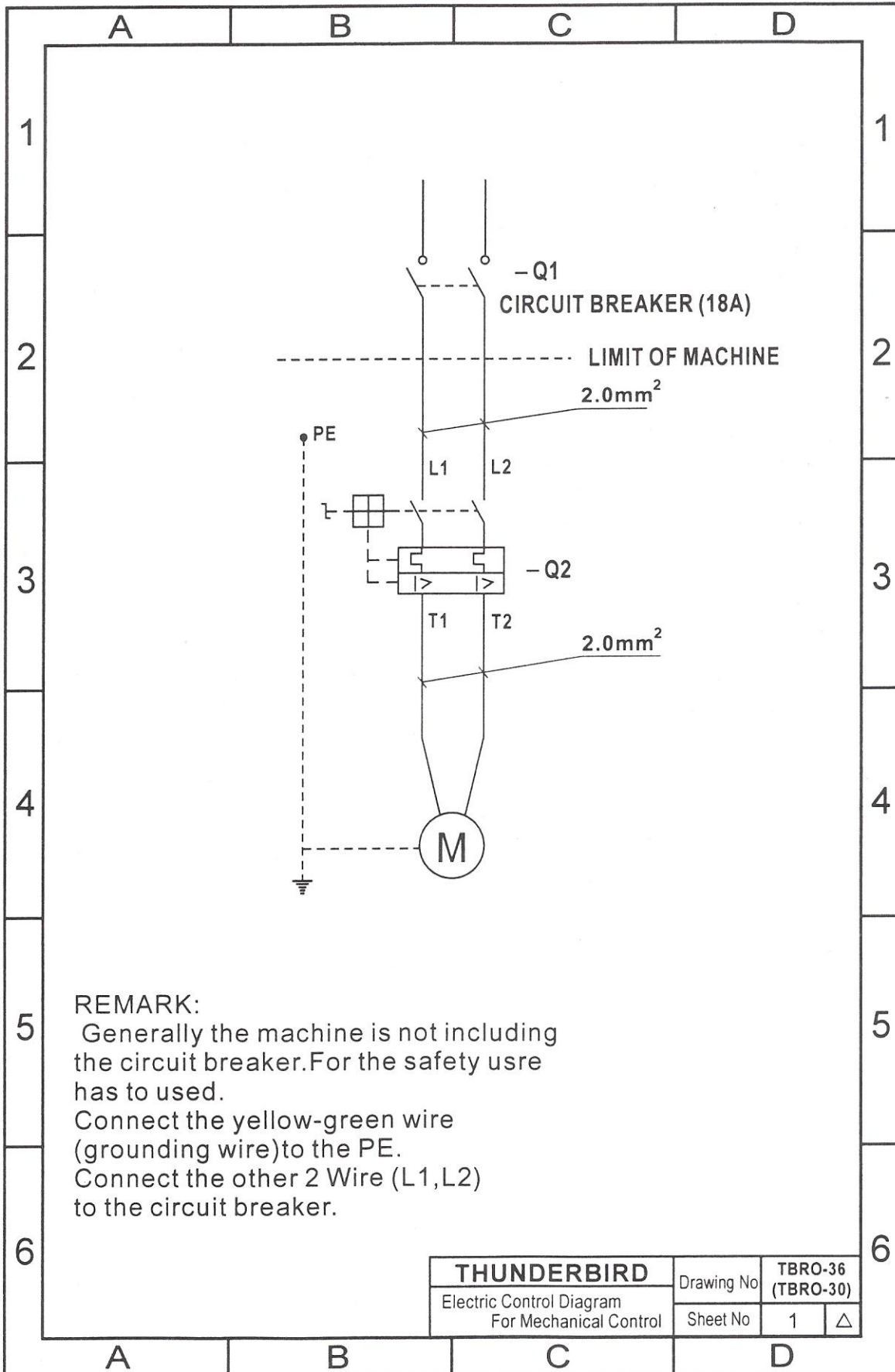


10.1 PARTS LIST

No. Description

1.	Hex screw	28.	Gear set	55.	Same group of No.51
2.	Hex screw	29.	Hex screw	56.	Stopping pin
3.	Cross type fixing set	30.	Shaft	57.	U type part
4.	Cutting blade holder	31.	Measured screw	58.	Rounding set
5.	Holder housing	32.	Plastic cover	59.	Sliding sheet
6.	Cutting blade	33.	Stopping handle	60.	Sliding shaft set
7.	Hex screw	34.	Bearing	61.	Body
8.	Rounding shaft	35.	Bearing unit	62.	Shaft
9.	Sliding bearing set	36.	Plastic pan	63.	Spring
10.	Nut	37.	Pin	64.	Spring adjusting nut
11.	Pulley	38.	Ball stopper	65.	Spring
12.	Control shaft	39.	Fish-type sliding part	66.	Spring
13.	Connecting set	40.	Handle	67.	Hex screw
14.	Main shaft	41.	Bearing	68.	Spring
15.	Screw	42.	Cam set cover	69.	Fixing shaft
16.	Fixing shaft	43.	Cam unit	70.	Fixing screw
17.	Blade holder cover	44.	Shaft unit	71.	Adjusting support set.
18.	Blade holder cover	45.	Fixing bolt	72.	Fixing screw
19.	Support unit	46.	Lower support set	73.	Spring pin
20.	Support arm	47.	Shaft	74.	Motor
21.	Pin	48.	Arm of spring	75.	Motor pulley
22.	Support arm set	49.	Arm	76.	Belt
23.	Internal turning unit	50.	Weigh balance	77.	Motor support sheet pin
24.	shaft	51.	Spring holder	78.	Hex screw
25.	External turning unit	52.	Spring	79.	Fixing arm
26.	Bearing	53.	Connecting part	80.	Motor support sheet
27.	Handle	54.	Arm pin		

11.1 WIRING DIAGRAM.



THUNDERBIRD®

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