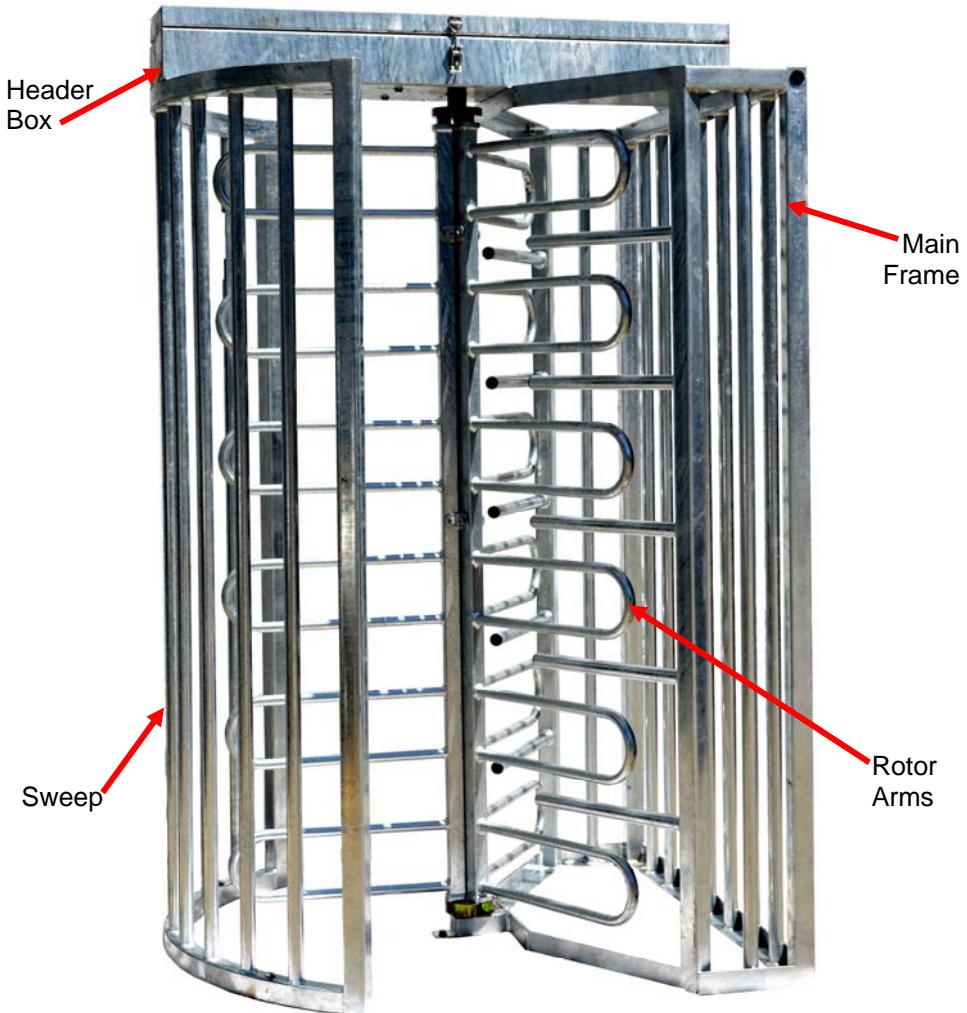


# TriStar FH TURNSTILE

3 ARM FULL HEIGHT  
(V4 1014)



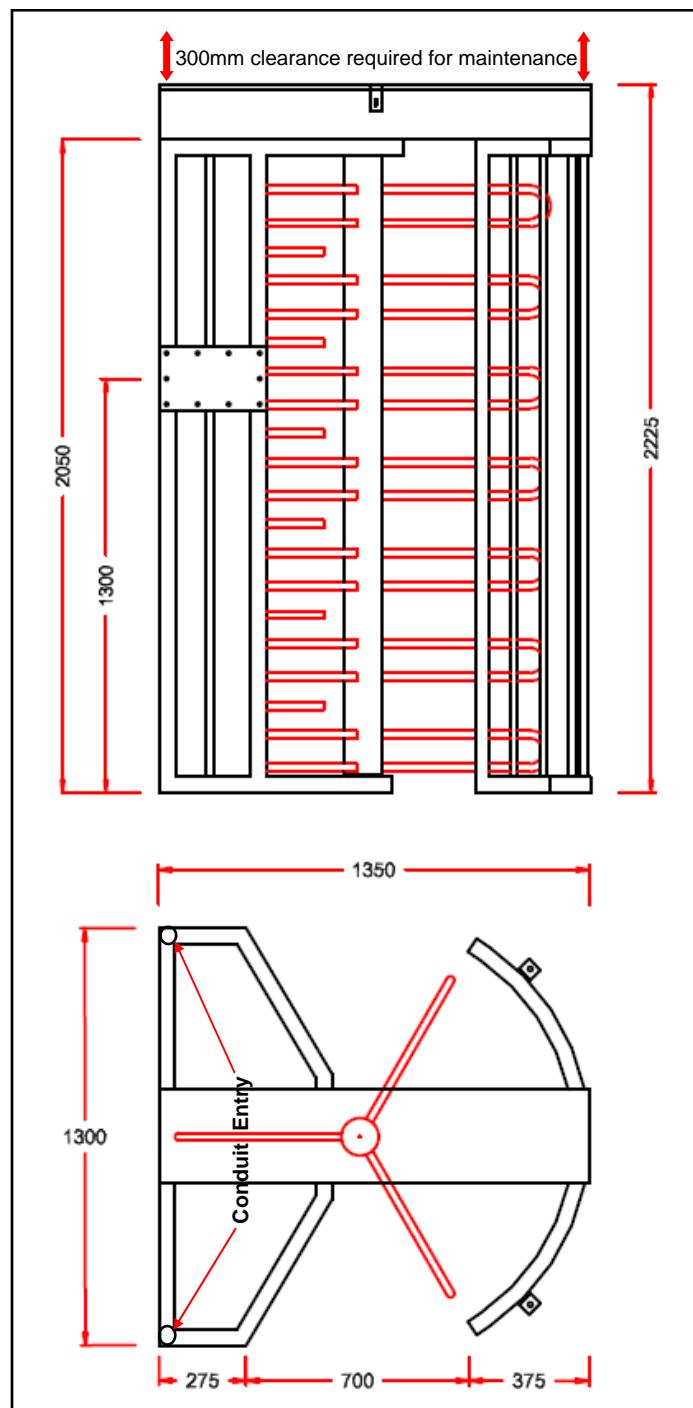
## TriStar FH Main Components



The turnstile consists of six main components:  
main frame, sweep, header box, 3 rotor arms .

The rotors only fit one way and the top of the rotor is marked.

It is supplied in knock down form on a pallet 1400 x 800 x 2200 and weighs 200kgs. One person can assemble the turnstile but it is advisable to use two people for safety reasons.



**STANDARD TURNSTILE**

## **INSTALLATION INSTRUCTIONS**

- Remove packaging, cable ties and disassemble.
- Open the header box and remove top and bottom flanges
- Place the main frame into final position and bolt down, make sure it is square and level. This is **very** important
- Place the sweep in the correct position and bolt down
- Lift header box into position and insert the 4 lengths 170 x 10 threaded rod into both ends of the header box and through the frame .Fix 1 nut top and bottom of the stud. This is to prevent the header box falling while you jack it up.
- Jack up the header box using the 4 lengths 8 x 250 threaded rod in the nutserts until it is 65 mm clear of the frame
- Position lower rotor flange (3 equal size blocks) onto spigot
- Assemble rotor arms on the lower flange and tie together with cable ties. The rotors can only fit one way and the top is marked.
- Slowly lower the header box and engage the longest pin into the rotor arm, continue lowering and engage the other rotor arms.
- Tighten all bolts in the header box and rotate the arms. The arms should only require 2 kgs force to rotate freely and return to the default position. If the rotor is not free something is out of alignment ,release the bolts and re try. If the problem persists you may need to use packers to level the sweep and/or the frame.
- Fit the two sets of "L" shape brackets onto the rotor arms and fasten securely, it is **important** that these are secure.
- **All electrical connections must be completed by a licensed electrician in accordance with Australian wiring regulations.**
- The cables can be fed to the header box via the holes provided in the frame .

- The power and control cables to the turnstile may be fed overhead, directly into the header box, or alternatively from below in conduits from the slab and entering through the hollow members of the frame
- Holes are provided to assist the installing of cables
- Plugs are provided to seal these holes

## **SPECIFICATIONS**

<b>Solenoid</b>	12vdc.
<b>Controller</b>	TL 100B
<b>Consumed Power</b>	4 amps 12vdc.
<b>Power Supply</b>	240 vac
<b>Self locking time out</b>	Dip switch adjustable 3 –10 secs
<b>Trigger Pulse</b>	N/O pulse 0.25 sec –1sec

**WARNING : DO NOT LEAVE KEY LOCK ENGAGED FOR  
EXTENDED PERIODS WHEN SOLENOID IS POWERED.  
(THIS WILL CAUSE THE SOLENOID TO BURN OUT)  
ISOLATE MAINS POWER BEFORE RELEASING THE LOCK**

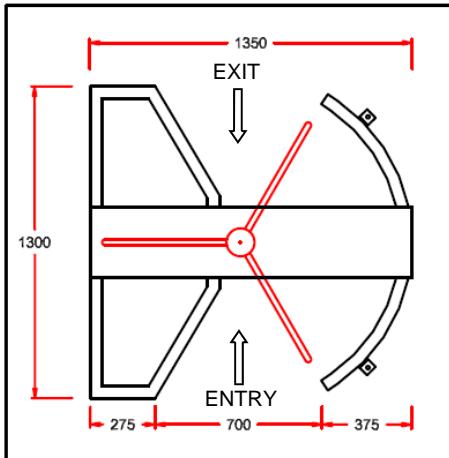
## **OPERATION**

The controller is triggered by a momentarily closed contact of + / - for 0.5 seconds. The solenoid unlocks the pawl to allow the rotor to rotate through 120°.

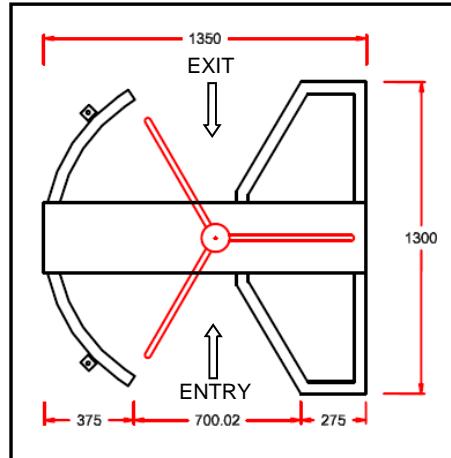
Once past the 60° position the rotor can not be reversed to allow the person to back out.

When the rotor has passed the 60° position the limit switch cam cancels the timer controlling the locking pawl and the turnstile locks itself.

If a person does not proceed through the turnstile the timer will time out and lock the turnstile after a pre-set time.



**STANDARD  
TURNSTILE**

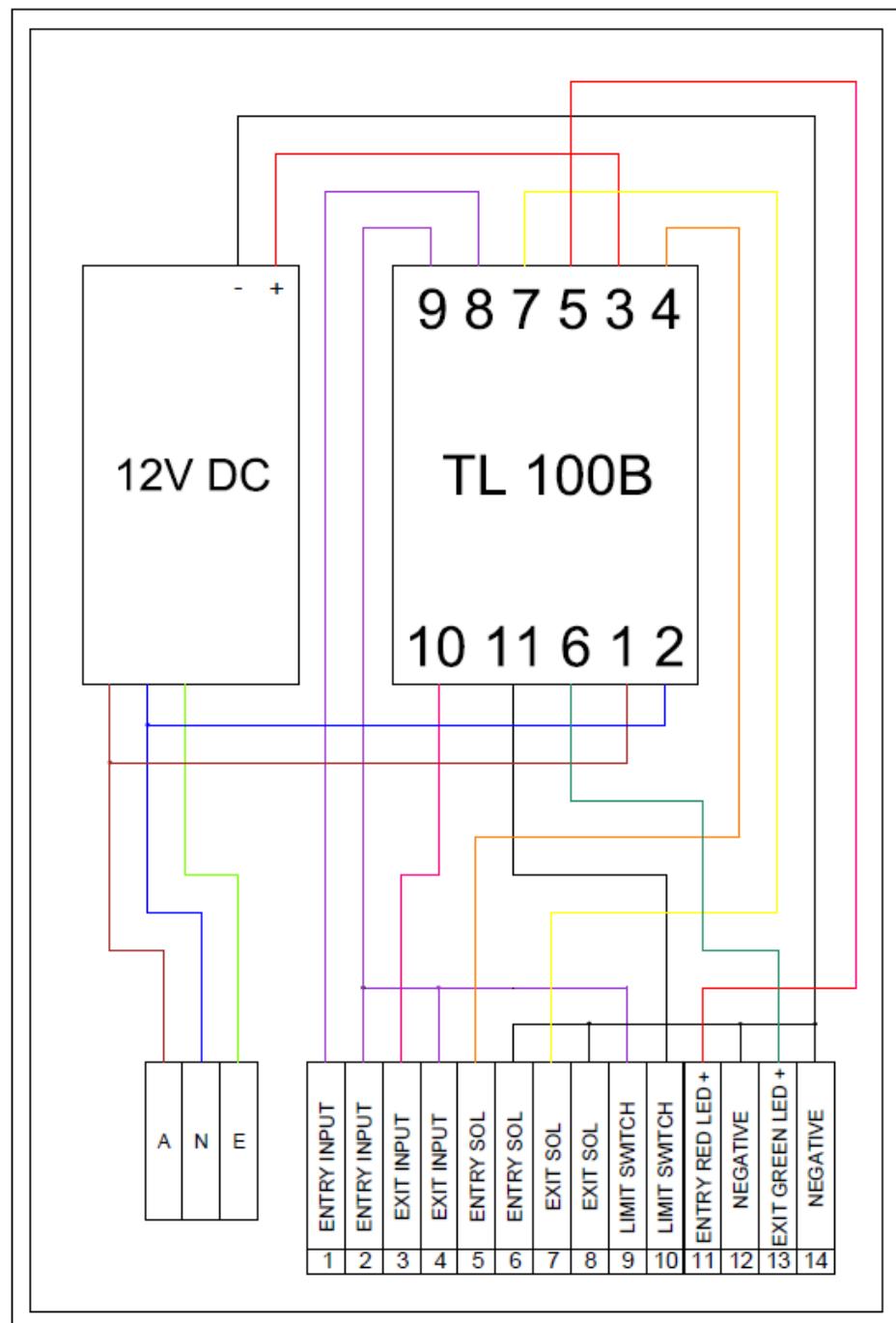


**NON - STANDARD  
TURNSTILE**

**TO CHANGE THE TURNSTILE FROM STANDARD TO  
NON-STANDARD**

- The solenoids have different springs and fittings, swap the complete solenoid, from one side to the other.
- The lock and the blanking plate will have to be swapped
- This will only change the entry and exit positions of the turnstile but the operation will be the same.

**NOTE :** The concrete pad should be 20Mpa (min) 150 mm thick ) cured for 7 days on a suitably compacted foundation. Hold down anchors (6) to be **10mm dia** x 75mm into the concrete.



## **SERVICE INSTRUCTIONS**

TriStar turnstiles are designed for a minimum of maintenance during their service life. The header box lids are fitted with rubber seals to ensure a dust free interior.

**NOTE: THESE LIDS MUST BE SECURED AT ALL TIMES AND NOT LEFT OPEN**

**1. SOLENOIDS:**

These have hard chromed armatures running in PTFE bushes and are designed to operate dry. **DO NOT GREASE OR OIL** as this could accumulate dust and damage the surface on the armature.

The master links between the solenoids and the pawl require a light grease on the shafts when doing the locking roller servicing every 2 years.

**2. LOCKING PAWLS AND LOCKING ROLLERS:**

These need to be cleaned and greased approximately every 2 years, depending on the traffic flow through the turnstile.

**3. HEAD:**

The locking drum is supported by two sealed ball bearings that do not need any servicing.

**4. CLEANING:**

- Remove the limit cam fitted on the top of the main shaft protruding through the top plate
- Remove the 3 nuts holding the top plate down
- Lift the top plate off, lift the roller pins out with the rollers, wash and Inspect for wear Re-lubricate with grease and refit.
- Clean the pivot bushes on the pawls, re-grease and refit.
- When re placing the top plate, ensure the spindle is in the default position.
- Re-fit and tighten 3 hold-down bolts.
- Re-fit limit cam to main shaft.

