



HYJD-DC-25 & HYJD-DC-25E HYDRAULIC VERTICAL PIVOT GATE

**Operator's & Parts
Manual**

**TILT-A-WAY
TILT-A-WAY
TILT-A-WAY®**

**NOTE: WHEN ORDERING PARTS, PLEASE HAVE YOUR SERIAL NUMBER
TO ENSURE THE CORRECT PARTS ARE SENT TO YOU.**

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TILT-A-WAY LIMITED WARRANTY

Ideal Manufacturing warrants that its Tilt-A-Way vertical pivot gate Model HYJD-DC-25 and HYJD-DC-25E products will be free from defects in materials and workmanship for a period of 3 years from the date of purchase. If the product fails to function because of defects in materials or workmanship within the 3 year period of time being used for the purpose for which it was designed, Ideal Manufacturing will repair or replace the defective part at its option. This warranty excludes electrical components and damage due to Acts of God, unauthorized modifications, misuse, abuse or negligence to this product.

In order to proceed with a warranty claim, Ideal Manufacturing must be notified of the problem. A new part will be shipped out prepaid (Ground UPS). If the customer requests that the part be expedited that shipping charge will be charged to the owner.

The part that is being warranted must be returned to Ideal Manufacturing, postage prepaid. When the new part is shipped out, it will go out with an invoice and a warranty part return number. The defective part must be returned to Ideal Manufacturing, freight prepaid, with the warranty part return number. At that time the invoice will be considered paid in full.

This warranty is exclusive and in lieu of all other obligation, liabilities or warranties. In no event shall Ideal Manufacturing be liable or responsible for incidental or consequential damage or for any other direct or indirect damage loss, cost, expense or fee.

This warranty shall not apply to any products or parts that have been altered or repaired without written consent of Ideal Manufacturing.

Labor to remove and reinstall defective product or parts will be paid from a labor rate and schedule only. Consult Ideal Manufacturing for that rate and schedule.

For further information on returning your product or questions concerning Ideal Manufacturing warranty, please contact Ideal Manufacturing.

IMPORTANT SAFETY INFORMATION

Before installing the installer should read and understand the owners manual and safety instructions. The owner should keep this owners manual.

WARNING-TO REDUCE THE RISK OF INJURY TO PERSONS

1. Do not operate gate unless all safety devices are connected and working properly.
2. Do not permit children to play on or around a gate. Keep all controls out of reach from children.
3. Automatic gates are not intended for pedestrian use. Pedestrians must be supplied a separate entrance separate from the automatic gate.
4. Never operate an automatic gate system without visual contact so it can be shut down if necessary.
5. Access controls, are required, to be mounted at least 6 feet away from the gate and operator.
6. Disconnect all power before performing any maintenance on your gate or operator.
7. Keep your gate properly maintained-have a qualified service person make all repairs.
8. Test your gate monthly; make sure all safety devices are in working order. If you have a reversing edge use a rigid object to actuate the edge photo eyes-use an object to break the beam to insure it is in working order.
9. The gate and operator must have the appropriate primary and secondary safety devices to match the gate class installation.
10. Operator and barrier must display warning signs on both sides, in view of operator.
11. Do not install added weight to the gate barrier, your barrier has been balanced at the factory, if you add weight to the gate barrier it will make your gate out of balance, which could cause it to malfunction.
12. Only qualified personnel should install this equipment. Failure to meet this requirement could cause severe injury and or death, for which the manufacturer cannot be held responsible.
13. Safety devices, such as photo eyes and reversing edges should be installed to provide protection for personal Property and pedestrians.
14. Before turning the power on be sure that the correct voltage has been supplied to the electric motor and the equipment has been properly grounded

CLASS OF VEHICULAR GATES

Glossary

CLASS I-RESIDENTIAL VEHICULAR GATE OPERATOR (3.15)

A vehicular gate operator (or system) intended for use in a home of one to four single family dwelling, or a garage or parking area associated therewith.

CLASS II-COMMERCIAL/GENERAL ACCESS VEHICULAR GATE OPERATOR (3.16)

A vehicular gate operator (or system) intended for use in a commercial location or building such as multi-family housing unit (five or more single family unit), hotel, garages, retail store, or other building servicing the general public.

CLASS III-INDUSTRIAL/LIMITED ACCESS VEHICULAR GATE OPERATOR (3.17)

A vehicular gate operator (or system) intended for use in an industrial location or building such as a factory or loading dock area or other locations not intended to service the general public.

CLASS IV-RESTRICTED ACCESS VEHICULAR GATE OPERATOR (3.18)

A vehicular gate operator (or system) intended for use in a guarded industrial location or building such as an airport security area or other restricted access locations not servicing the general public, in which unauthorized access is prevented via *supervision by security personnel*.

INSTRUCTIONS FOR MANUAL OPERATION HYJD-DC-25 & HYJD-DC-25E

1. Locate two Brass colored knurled knobs on the top of the pump housing
(If equipped with a cold weather package, lift flap on the black cover to access knobs.)
2. Turn both knobs counter clockwise one full turn to open.
3. Gate barrier can now be lifted manually from out at the end of gate.
4. Turn knobs clockwise to close, then operate gate normally.

PROTECTION AGAINST ENTRAPMENT

Usage class	Gate operator category		Swing and vertical barrier (arm)	
	Horizontal slide, vertical lift, and vertical pivot		Swing and vertical barrier (arm)	
	Primary type (a)	Secondary type (a)	Primary type (a)	Secondary type (a)
Vehicular I and II	A	B1, B2, or D	A, or C	A, B1, B2, C, OR D A, B1, B2, C,
Vehicular III	A, B1, or B2	A, B1, B2, D, or E	A, B1, B2, or C	D, or E
Vehicular IV	A, B1, B2, or D	A, B1, B2, D, or E	A, B1, B2, C, OR D	A, B1, B2, C, D, or E

Note-The same type of device shall not be utilized for both the primary and the secondary entrapment protection means. Use of a single device to cover both the opening and closing directions is in accordance with the requirement; however, a single device is not required to cover both directions. A combination of one Type B1 for one direction and one Type B2 for the other direction is the equivalent of one device for the purpose of complying with the requirements of either the primary or secondary entrapment protection means.

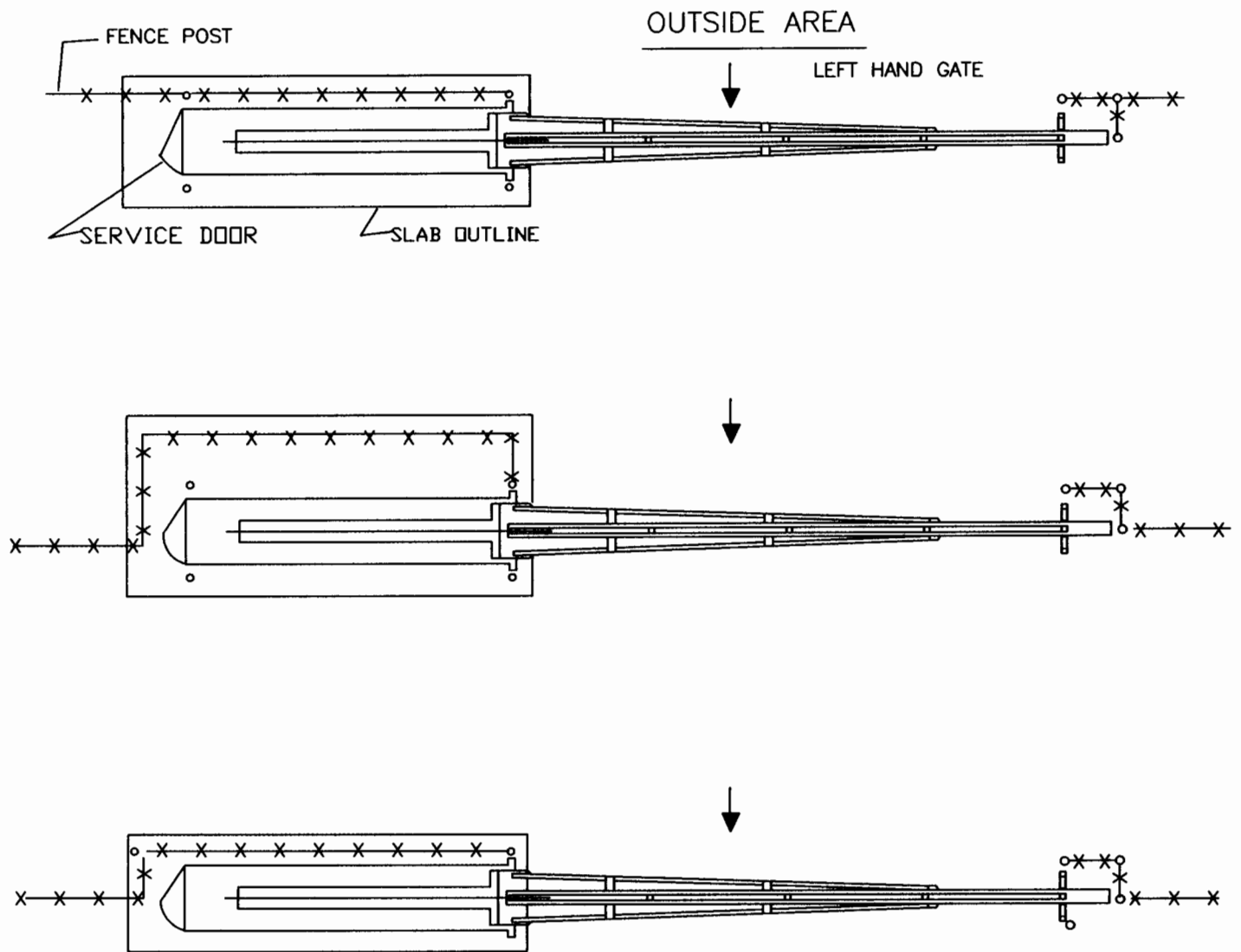
(a) Entrapment protection types:
 Type A - Inherent entrapment protection system. See 31.1.5
 Type B1 - Provision for connection of, or supplied with, a non-contact sensor (photoelectric sensor or the equivalent). See 31.1.6 - 31.1.9.
 Type B2 - Provision for connection of, or supplied with, a contact sensor (edge device or the equivalent). See 31.1.7 and 31.1.10 - 31.1.12.
 Type C - Inherent adjustable clutch of pressure relief device. See 31.1.13.
 Type D - Provision for connection of, or supplied with, an actuating device requiring continuous pressure to maintain opening or closing motion of the gate. See 31.1.14 and 31.1.15.
 Type E - An inherent audio alarm. See 31.1.16, 31.1.17, and 31.1.18

Specifications

Model#	HYJD-DC-25			
Operator Size	28" W x 50" T x 120"L			
Operator Weight	1,800 lbs.			
Maximum Barrier Size	96" T x 300"L-375 lbs			
Model#	HYJD-DC-25E			
Operator Size	28"W x 50"T x 132"L			
Operator Weight	1,830 lbs			
Maximum Barrier Size	108" T x 300"L-375 lbs			
Voltage	Phase	Hz	Cir. Reg. Amps.	Act. Draw
120 VAC	1	60	20	14
Operator Speed to 90°	16-20 Seconds			
Hydraulic Fluid	Aeroshell 4			

**Note: Minimum Circuit Requirements: 20 amp service at 120 VAC Single Phase .
For wire sizes consult the NEC (National Electric Code).**

MADE IN U.S.A.



INDICATED ARE THREE MOST COMMON WAYS TO SET A TILT-A-WAY GATE
 INDIVIDUAL CONDITIONS MAY REQUIRE A SPECIAL ARRANGEMENT

**ALTERNATE FENCE SCHEMES
 HYJD-DC-25 & HYJD-DC-25E**

GENERAL INFORMATION

The PEO202P Ideal logic timer board allows numerous programmable functions in various combinations (See Universal Commercial Logic Function Chart). This logic board contains an adjustable time for automatic closing which is adjustable from 1 second to 4 minutes.

When the time function is selected (Switch #3 ON), the timing sequence starts when the gate activates the open limit switch. (At this time the TIMER ACTIVE LIGHT comes ON.) The gate will automatically close after a predetermined time. The timing range is adjustable from 1 second to 4 minutes. The timer is reset by activating any input, which is selected to set the timer. Any combination of inputs will allow you to have more switches ON than are shown for any one input. For example: Input #2 SAFETY (Stop and Reverse) plus input #8 TIMER (Open and Always Set Timer). Switch #3 and switch #5 will both be ON.

GENERAL CIRCUIT BOARD CONNECTIONS

The numbers below refer to the terminal strip (#1 - #15) in the gate operator. All inputs are normally open.

SAFETY

Terminals 2 and 3 In the open position, this input will prevent the gate from closing, or if the timer is used, hold the timer until the input is cleared. In the closing cycle, activation of this input will reverse the gate to full open position, and if the timer is used, set and hold the timer until the input is cleared.

AUX TIMER

Terminals 2 and 4 this input is active only when timer circuit is used. In the open position, activation of this input will hold the timer until the input is cleared. In the closing cycle, activation of this input will reverse the gate to full open position, set the timer and hold the time until the input is cleared.

TIMER

Terminal 2 and 5 This input is active only when the timer circuit is used. When the gate is in the closed position activation of this input will open the gate and set the time. In the open position, this input will hold the timer until the input is cleared. In the closing cycle, activation of this input will reverse the gate to full open position, set the timer and hold the timer until the input is cleared.

ELECTRICAL LOGIC TIMER BOARD GENERAL CAPABILITY

TIMER BOARD

Terminal 2 and 6 This input is active only when the timer circuit is used. Then the operator is in the full open position, activation of this input will hold the timer until the input is cleared. This input will NOT reverse the gate when the operator is in the closing cycle.

SINGLE BUTTON

Terminal 2 and 11 When in the closed position, activation of this input will open gate. When in the opening cycle, activation of this input will stop the gate. If gate is stopped in mid travel, this input will open the gate when activated. In the full open position, activation of this input will close the gate. In the closing cycle, this input will reverse the gate to the full open position.

CLOSE

Terminal 2 and 12 When the gate is in the full open position or stopped in mid travel, activation of this input will close the gate.

OPEN

Terminal 2 and 13 When the gate is in the full closed position or stopped in mid travel, activation of this input will open the gate.

STOP

Terminal 7 and 8 This is a NORMALLY CLOSED circuit. Anytime the stop circuit is opened, all functions of the logic board will cease. Then the circuit is once again closed, the desired input will have to be reactivated to start the function once again.

INPUT:	FUNCTION:	SWITCH POSITION							
		1.	2.	3.	4.	5.	6.	7.	8.
1. SAFETY	WHEN DOOR IS OFF DOWN LIMIT STOPPING SAFETY ONLY	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
2. SAFETY	WHEN DOOR IS OFF DOWN LIMIT STOP AND REVERSE	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
3. SAFETY	WHEN DOOR IS OFF DOWN LIMIT INSTANT REVERSE	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
4. SAFETY	WHEN DOOR IS OFF DOWN LIMIT STOP AND REVERSE AND SET TIMER	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
5. SAFETY	WHEN DOOR IS OFF DOWN LIMIT INSTANT REVERSE AND SET TIMER	OFF	ON	ON	OFF	ON	ON	OFF	OFF
6. AUX. TIMER	WHEN DOOR IS OFF DOWN LIMIT OPEN AND SET TIMER STOP AND REVERSE AND SET TIMER	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
7. AUX. TIMER	WHEN DOOR IS OFF DOWN LIMIT OPEN AND SET TIMER INSTANT REVERSE AND SET TIMER	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
8. TIMER	OPEN AND ALWAYS SET TIMER STOP AND REVERSE AND SET TIMER	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
9. TIMER	OPEN AND ALWAYS SET TIMER INSTANT REVERSE AND SET TIMER	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
10. HOLD	HOLD TIMER RESET TIMER ONLY DURING TIMING PERIOD	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
11. STOP	STOP DOOR / GATE TRAVEL ONLY	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
12. STOP	STOP DOOR / GATE TRAVEL AND TIMER	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
13. SINGLE BUTTON	OPEN CYCLE OPEN - PARK - OPEN CLOSE CYCLE CLOSE - PARK - OPEN	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
14. SINGLE BUTTON	OPEN CYCLE OPEN - PARK - OPEN CLOSE CYCLE CLOSE - STOP - REVERSE	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
15. SINGLE BUTTON	OPEN CYCLE OPEN - PARK - OPEN CLOSE CYCLE CLOSE - INSTANT REVERSE	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
16. SINGLE BUTTON	OPEN CYCLE SET TIMER WHEN ACTIVATED ON OPEN LIMIT CLOSE CYCLE PARK - OPEN	ON	OFF	ON	ON	OFF	OFF	OFF	ON
17. SINGLE BUTTON	OPEN CYCLE OPEN - PARK - OPEN SET TIMER WHEN ACTIVATED ON OPEN LIMIT CLOSE CYCLE STOP AND REVERSE	ON	OFF	ON	ON	OFF	OFF	OFF	ON
18. SINGLE BUTTON	OPEN CYCLE OPEN - PARK - OPEN SET TIMER WHEN ACTIVATED ON OPEN LIMIT CLOSE CYCLE INSTANT REVERSE	ON	OFF	ON	ON	OFF	OFF	ON	ON
19. CLOSE	CLOSE DOOR / GATE EVEN WHILE TIMER IS TIMING	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
20. CLOSE	CLOSE DOOR / GATE EXCEPT WHEN TIMER IS TIMING	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
21. OPEN	OPEN DOOR / GATE ONLY	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
		NOT DEPENDENT ON ANY SWITCH POSITION							

ELECTRICAL LOGIC TIMER BOARD - GENERAL CAPABILITY

**TILT-A-WAY
HYDRAULIC OPERATOR
BASIC ELECTRICAL HARDWARE
DRAWING RGHYJD-E200**

	PART NO.	DESCRIPTION	QTY
1	PEO600	ENCLOSURE	1
2	FGO600	PANEL MOUNTING	1
3	PEO670	CIRCUIT BREAKER (15 AMP)	1
4	PEO642	C/B BRACKET	1
5	PEO671	CIRCUIT BEARKER (40 AMP)	1
6	PEO674	POWER SOLENOID	1
7	PEO679	RELAY 5 PIN	2
7A	PEO678	RELAY 8 PIN	2
8	PEO605A	SOCKET 5 PIN	2
8A	PEO606A	SOCKET 8 PIN	2
9	PEO672	RELAY 14 PIN	2
10	PEO673	SOCKET 14 PIN	2
11	PEO608	P/B CARTRIDGE	1
12	PEO608A	P/B OPERATOR	1
13	PEO202P	TIMER BOARD	1
14	PEO611	SAFETY SWITCH	2
15	PEO620	END BARRIER – TERMINAL BLOCK	2
16	PEO621	GRE/YEL BLOCK- TERMINAL BLOCK	1
17	PEO622	BLACK BLOCK-TERMINAL BLOCK	3
18	PEO624	GREY BLOCK- TERMINAL BLOCK	2
19	PEO627	DOUBLE BLOCK- TERMINAL BLOCK	18
20	PEO638	BARRIER- TERMINAL BLOCK	1
21	PEO629	BARRIER- TERMINAL BLOCK	1
22	PEO630	JUMPER- TERMINAL BLOCK	1
23	PEO631	JUMPER- TERMINAL BLOCK	1
24	PEO632	JUMPER- TERMINAL BLOCK	2
25	PEO678	MARKER- +1 THRU 13	1
26	PEO634	MARKER- N,L1,G,LL1,	1
27	PEO635	T DUCT PVC 48"- WIRE TRACK	1
28	PEO636	COVER PVC 48"- WIRE TRACK	1
29	PEO637	DIN TRACK 34"	1
30	PEO231	ELBOW CONNECTION 90 DEGREES	1
31	PEO235	CONNECTION STRAIGHT	3
32	PEO223	½" ROMEX	2
33	PEO275	¾" ROMEX	2
34	N/A	8 X ½" SELF DRILLING PHILLIPS SCREW	19
35	PEO214	SOCKET LOOP DETECTOR (OPTIONAL)	3
36	PEO675	BATTERY CHARGER	1

