INSTRUCTION MANUAL

FOR PREMIUM SCISSOR LIFT CARTS

MODELS COVERED: CART-300-S-FR, CART-300-D-FR, CART-600-S-FR, CART-600-D-FR, CART-1000-S-FR, CART-1000-D-FR



Note: Owner/Operator must read and understand this instruction manual before using the lift table.

This product is a hydraulically powered lifting device mounted on wheels. The lifting platform lifts by the action of the scissor arms. The product is designed to be manually positioned and operated, and to lift goods of no more than the rated capacity in total weight at any one time.

BEFORE USE OF THE TABLE:

- ~ This booklet should be read thoroughly;
- ~ This booklet should be passed to the safety officer to keep for future reference;
- ~ Any supplied test certificates should be passed to those responsible for your register of lifting equipment and be retained for scrutiny by a factory inspector, insurance company etc;
- ~ Familiarized yourself with the table.

SAFETY:

N.B. This table has been built to EN 1570 and is accompanied by a Test Certificate. It should be read and kept in a safe place as you may be asked to present it by your insurance company or factory inspector.

This table has been designed to give:

- ~ 30mm gap between the scissor arms to reduce risk of trapping;
- ~ 50mm gap between the scissor arms and the frame to reduce risk of trapping;
- ~ A safe descent speed governed by an oil flow control cartridge in the ram (even if the hydraulic hose is accidentally cut the table will still descend at a safe speed);
- ~ Automatic stop lowering even if the pedal is released.

Only authorized personnel should be allowed to operate this table. Please see section entitled *USAGE* for instructions for safe usage and warnings against possible misuse.

It is dangerous to work under the platform when raised. The table is designed for maintenance whilst in the fully lowered

position with the platform hinged open, therefore THERE IS NO MECHANICAL LOCKING DEVICE to stop the platform from lowering. Please see section entitled *MAINTENANCE* before attempting any kind of maintenance to the table.

If the table is damaged, deformed or performs incorrectly this should be reported and usage discontinued. After any major repair the table must be re-tested according to EN 1570 Annex C.

MAINTENANCE:

N.B. After any major repair the table must be re-tested according to EN 1570 Annex C.

N.B. The only maintenance that the table usually needs is topping up of oil and checking for damage.

Maintenance Instructions:

When the table is fully lowered the platform hinges open to allow access to the hydraulics for topping up the oil. All hinge points have nylon bearings and all the ball races are sealed, requiring little maintenance. When topping up the hydraulic oil only fill with enough oil to allow the table to lift to full height, as overfilling will cause leakage. The hydraulic oil used in the pump ISO VG22. The pump and ram can be removed together with the hose for replacement or service.

Maintenance Periods:

Daily: table should be checked for obvious damage and oil leaks. Faults should be reported.

Monthly: oil should be checked for serious leaks (oil may escape from cylinder or from the reservoir, particularly if table is tipped, tilted or overturned. If in doubt, check with engineer).

Annually: table should be re-tested (see EN 1570 Annex C).

Occasionally: it may be necessary to top up the hydraulic oil (e.g. after leakage).

SAFETY NOTICES:

The table is labeled with the following safety notices:

300 lbs Capacity

DO NOT WORK UNDER THIS PLATFORM

rated capacity of the table

no entry (inc. for maintenance) whilst platform raised



lifting of persons prohibited



access for maintenance by hinging platform open



do not touch the scissor arms

The table also has a serial plate, including:

- ~ The rated load and distribution
- ~ Manufacturer name and address
- ~ Type and serial number
- ~ Self weight of the table

ADDITIONAL SAFETY NOTICES:



The notice: "ONLY AUTHORISED PERSONS ARE ALLOWED TO OPERATE THE LIFTING TABLE" or similar must be permanently and visibly fixed at the control position.



The notice: "DO NOT OVERLOAD" must be provided in positions where overloading is possible.

USAGE:

Summary:

This product is a mobile scissor lift table, designed to lift goods of no more than the rated capacity in weight, and to be pushed only when fully lowered. This table is designed for use indoors and on a smooth level surface.

General Instructions:

N.B. Care must always be taken when handling heavy loads or moving a loaded table and especially if over a poor surface. When manually handling loads the appropriate manual handling procedures must be adhered to. Failure to do so can result in serious injury.

Loading the platform:

This table is designed to:

- ~ in one case lift half the rated load distributed over half the length of the platform;
- ~ in another case lift a third of the rated load distributed over half the width of the platform.

It is the responsibility of the user and operator to ensure that this loading is not exceeded and that the load being lifted by the scissor table is sufficiently secure as not to fall during operation of the table. The load should be secured to table if lifting above 2000mm.

Raising the platform:

Raise the platform by repeatedly operating of the foot pedal. N.B. The brake must be applied prior to raising the table.

Lowering the platform:

Lower the table by pressing and holding the lowering pedal. (The oil flow control cartridge ensures that the designed descent is not exceeded irrespective of the load.) The operator must ensure that nothing and no person is in the way of the platform or the scissor arms.

Moving the table:

When fully lowered, push and steer using the foldable handle.

The table is designed to be pushed only with the platform in the fully lowered position.

The table is designed to be pushed only along a level surface.

N.B. Safety shoes must be worn by persons moving the table (to avoid toes being crushed by the wheels).

Folding/Unfolding the handle (CART-300-S-FR):

To fold the handle down: push down on the horizontal bar at the handle end of the table (which retains the handle) far enough for the end of the tube to be freed and then fold the handle forward. To raise the handle: lift the handle and depress the retaining bar to allow the handle to click into position.

N.B. The handle must be fully locked into the vertical position prior to use.

NOT RECOMMENDED:

DO NOT USE on ramps, hills or slopes.

DO NOT USE in wet or damp conditions.

DO NOT USE foot pedal when platform is hinged open.

DO NOT USE to lift more than the rated capacity.

DO NOT USE to lift persons. This table is not designed to lift persons and it is the responsibility of the user and operator to ensure that such use is prohibited.

DO NOT USE IF DAMAGED, DEFORMED OR PERFORMING INCORRECTLY. If the table is damaged, deformed or performs incorrectly this should be reported immediately and use should be discontinued.

ASSEMBLY INSTRUCTIONS:

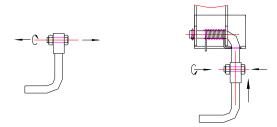


Figure 1

- 1. Attach the pedal bar (Part No.4-65) to the pump unit (see Figure 1);
- Loosen the bolt(4-64) and nut(4-39) on the pedal bar □;
 Hitch up the pedal bar assy. to the pedal bar □, then rotate it to make sure that the holes of them are in line;
- Insert the bolt across the holes, then fasten them by nut.

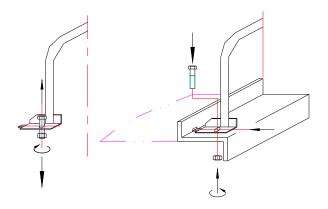


Figure 2

- 2. Assemble the handle (Part No.3-1) (see Figure 2);
- Loosen the bolt and nut;
- Insert the bolt into the holes of the handle and chassis, then fasten them by nut.

WARNINGS:

DO NOT work underneath the platform when raised.

DO NOT overload the table.

DO NOT exceed the load distribution limits (see USAGE section).

DO NOT adjust the overload valve.

DO NOT remove warning labels.

DO NOT invert the table or put it on its side.

DO NOT jack with the platform hinged open.

ALWAYS check for damage before use.

ALWAYS apply the brake when stationary.

ALWAYS ensure people are clear of the table before lowering.

ALWAYS beware that fingers could be trapped when raising or lowering.

ALWAYS ensure table is fully secure during maintenance as it may fall knocked or moved.

ALWAYS take care when handling heavy loads.

ONLY AUTHORISED PERSONS SHOULD BE ALLOWED TO OPERATE THIS TABLE.

TROUBLE SHOOTING:

FAULT	CAUSE	REMEDY
Foot pedal will not raise platform.	Air in hydraulics.	Press and hold lowering pedal and operate foot pedal twenty times. Release lowering pedal.
If fault remains.	Release plunger remains in (causing release ball to not seat properly).	Check that release plunger is not stuck, if so lightly lubricate and attempt to operate pedal.
		Check release plunger is not damaged or deformed and jammed. Attempt to straighten if necessary.
If fault remains.	Table overloaded	Check weight of load is within table capacity.
If fault remains.	Oil level low.	Check oil level and top up if necessary. DO NOT OVERFILL (see directly below).
If fault remains.	Insufficient air in reservoir (oil level too high).	Remove reservoir cap, remove excess so that oil level is no higher than 8mm below the bottom of the filler tube, operate pedal to raise platform to full height and replace cap.
If fault remains.	Seal blown.	Check by looking for leaking oil. Replace seal if necessary.
Platform will not lower.	Platform has been over-raised and load is insufficient to lower the platform.	Whilst holding release pedal apply additional load onto the platform to aid its descent.
If fault remains.	Flow control cartridge valve is jammed.	Unscrew hose connection, remove flow control cartridge and check that its plunger is still movable.

EXCLUSIONS FROM STANDARD EN 1570:

The standard EN 1570 does not apply to the following equipment:

- ~ Permanently installed lifting tables, serving specific levels of a building and fitted with a car.
- ~ Permanently installed lifting tables, serving specific levels of a building, not fitted with a car but with vertical travel of more than 2.0m
- ~ Power operated lifting platforms for persons with impaired mobility.
- ~ Lifting tables for Airport Ground Equipment.
- ~ Lifting tables for marine use.
- ~ Mobile elevating work platforms.
- ~ Vehicle lifts (for maintenance.)
- ~ Mobile lifting tables used for fire fighting.
- ~ Mobile lifting tables used as fork lift trucks, pallet trucks and order pickers.
- ~ Mobile lifting tables with a travelling speed of more than 1,6 m/s.
- ~ Rail dependent storage and retrieval equipment.
- ~ Theatre stage lifts.

The standard EN 1570 does not establish the additional requirements for:

- ~ Operation in severe conditions (e.g. extreme climates, freezer applications, strong magnetic fields.).
- ~ Operation subject to special rules (e.g. potentially explosive atmospheres, mines).
- ~ Handling of loads, the nature of which could lead to dangerous situations (e.g. molten metal, acids, radiating materials, especially brittle loads).
- ~ Hazards occurring during construction, transportation and disposal.
- ~ Equipment installed on the load platform or replacing it.
- \sim Integration into systems or other machines, control from more than two control stations etc.
- ~ Cable-less controls.
- ~ Lifting tables where the hydraulic pressure is derived directly from gas pressure.

TECHNICAL DETAILS:

Hydraulic Fluid: ISO VG22

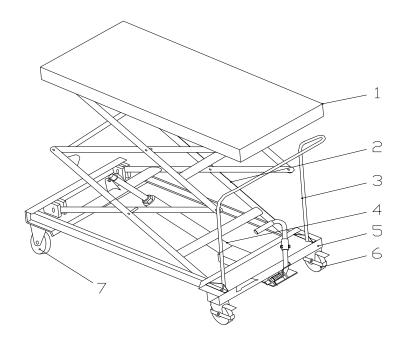
Hydraulic Hoses:

TRACTOR 1T EN 853 1SN

Insert: MF2000 – Multifit Type
Tube: Oil resistant synthetic rubber
Reinforcement: One high tensile steel braid
Cover: Environmental resistant synthetic rubber
Max. working pressure: 225 bar (3260 psi)

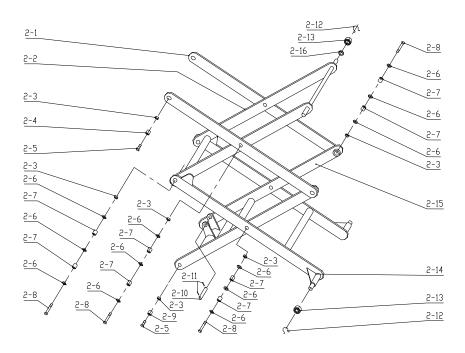
MODEL NO.	CART-300-S-FR	CART-300-D-FR	CART-600-S-FR	CART-600-D-FR	CART-1000-S-FR	CART-1000-D-FR
Built to:	EN1570	EN1570	EN1570	EN1570	EN1570	EN1570
Operation:	Manual	Manual	Manual	Manual	Manual	Manual
Max Capacity:	300 lbs	300 lbs.	600 lbs.	600 lbs.	1000 lbs.	1000 lbs.
Platform Size:	17¾" x 30"	19%" x 33"	20" x 311/8"	23¼" x 33"	24" x 40½"	24" x 40½"
Lowered Height:	10"	17"	13 3/16"	113/4"	13%"	115/8
Raised Height:	30 11/16"	551/8"	33"	53"	35 7/16"	61"
Handle Height:	37"	331/8"	331/8"	331/8"	36 7/16"	36 7/16"
Weight:	95	190	190	210	250	320
Scissor Arms:	Single	Double	Single	Double	Single	Double

Parts List



REF	PART	DESCRIPTION	QTY	REF	PART	DESCRIPTION	QTY
1	Table ass	sembly	1	5	Chassis assembly		1
2	Scissor a	assembly	1	6	Universal wheel assembly		2
3	Handle assembly		1	7	Fixed w	heel assembly	2
4	Pump Ur	nit	1				

Scissor Assembly:



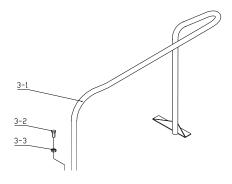
REF	PART	DESCRIPTION	QTY	REF	PART [DESCRIPTION	QTY
2-1	Outside (upper)	scissor assembling	2	2-9	Nylon busl	ı 🗆	2
	Inside : (upper)	scissor assembling	2	2-10	Piston rod		1
2-3	Self-loc	king nut M16	12	2-11	Tension pi	n 5×30	2
2-4	Nylon b	ush 🗆	2	2-12	Retainer ri	ng	4
2-5	Bolt		4	2-13	Ball bearin	g	4
2-6	Nylon w	rasher	24	2-14	Outside so (lower)	cissor assembly	2
2-7	Nylon b	ush 🗆	16	2-15	Inside sc (lower)	issor assembly	2
2-8	Hexago	n head bolt M16×75	8	2-16	Washer 2	20	2

Note: Items 2-1 to 2-16 available only as complete kit;

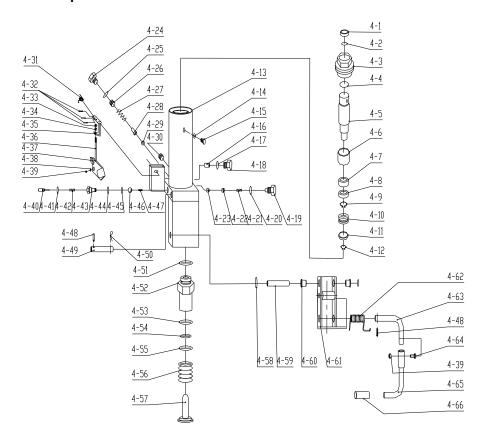
Handle assembly:

REF	PART	DESCRIPTION	QTY			
3-1	Handle a	Handle assy.				
3-2	Hexagon	2				
3-3	Self-locki	2				

Note: Items 3-1 to 3-3 available only as complete kit;



Pump Unit:

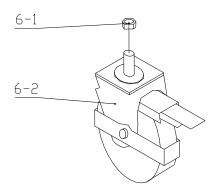


		1	1		
REF	PART DESCRIPTION	QTY	REF	PART DESCRIPTION	QTY
4-1	Dust cover φ30×φ38×5	1	4-16	Speed control valve	1
4-2	"O" ring φ30×2.65	1	4-17	Composite packing washer	1
4-3	Cylinder Cover	1	4-18	Bolt of speed control valve	1
4-4	"O" ring φ67×2.65	1	4-19	Bolt of single-way valve	1
4-5	Piston bar	1	4-20	Composite packing washer	1
4-6	Positioning bush	1	4-21	Spring for single-way valve	2
4-7	Nylon washer	1	4-22	Single-way valve	1
4-8	Oil-sealing for UN-hole	1	4-23	Steel ball φ8	1
4-9	Retainer ring	1	4-24	Bolt	1
4-10	Retainer for guiding ring	1	4-25	USS composite packing washer	1
4-11	Guiding ring	1	4-26	Inner Hexagon Bolt M10	1
4-12	Retainer ring	1	4-27	Spring for control valve	1
4-13	Cylinder welding	1	4-28	Spring base	1
4-14	"O" ring φ10.6×2.65	1	4-29	Steel ball φ5	1
4-15	Bolt for oil feeder	1	4-30	Bolt M6	2
4-31	Torsion spring	1	4-49	Pin for Hydraulic cylinder	1
4-32	Tension pin 4x32	1	4-50	Split pin	1
4-33	Self-locking nut M5	1	4-51	Composite packing washer	1
4-34	Guiding bush for bar	1	4-52	Pump	1
4-35	Lever	1	4-53	"Y" sealing φ24×φ16	1
4-36	Bar	1	4-54	"O" ring φ16×2.65	1
4-37	Dropping pedal	1	4-55	Dust cover φ24×φ16	1
4-38	Washer	1	4-56	Spring	1
4-39	Self-locking nut M8	1	4-57	Plunger assy.	1

4-40	Returning oil bar	1	4-58	Retainer ring	2
4-41	"O" ring φ7.1×1.8	1	4-59	Pin	1
4-42	Spring	3	4-60	Nylon bush	2
4-43	Guiding bush	1	4-61	Lifting-rod welding assembly	1
4-44	"O" ring φ10×1.8	1	4-62	Spring	1
4-45	Composite packing washer	1	4-63	Pedal bar □	1
4-46	Steel ball φ6.5	1	4-64	Hexagon head bolt M8×35	1
4-47	Tension pin 5×18	1	4-65	Pedal bar □	1
4-48	Tension pin 5×30	2	4-66	Protecting sleeve	1

Note: Items 4-1 to 4-66 available only as complete kit;

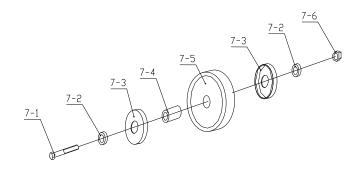
Universal wheel assembly:



F	REF	PART	DESCRIPTION	QTY	REF	PART	DESCRIPTION	QTY
	6-1	Self-lock	king nut M12	2	6-2	Castor	with brake	2

Note: Items 6-1 to 6-2 available only as complete kit;

Fixed wheel assembly:



REF	PART	DESCRIPTION	QTY	REF	PART	DESCRIPTION	QTY
7-1	Hexagon head bolt M10x70		2	7-4	Bearing bush		2
7-2	Outside positioning bush		4	7-5	Roller (F	PU)	2
7-3	Dust cover		4	7-6	Self-locking nut M10		2

Note: Items 7-1 to 7-6 available only as complete kit;

LIMITED WARRANTY

Vestil Manufacturing Corporation ("Vestil") warrants this product to be free of defects in material and workmanship during the warranty period. Our warranty obligation is to provide a replacement for a defective original part if the part is covered by the warranty, after we receive a proper request from the warrantee (you) for warranty service.

Who may request service?

Only a warrantee may request service. You are a warrantee if you purchased the product from Vestil or from an authorized distributor AND Vestil has been fully paid.

What is an "original part"?

An original part is a part <u>used to make the product as shipped</u> to the warrantee.

What is a "proper request"?

A request for warranty service is proper if Vestil receives: 1) a photocopy of the <u>Customer Invoice</u> that displays the shipping date; AND 2) a <u>written request</u> for warranty service including your name and phone number. Send requests by any of the following methods:

MailFaxEmailVestil Manufacturing Corporation(260) 665-1339sales@vestil.com2999 North Wayne Street, PO Box 507PhoneAngola, IN 46703(260) 665-7586

In the written request, list the parts believed to be defective and include the address where replacements should be delivered.

What is covered under the warranty?

After Vestil receives your request for warranty service, an authorized representative will contact you to determine whether your claim is covered by the warranty. Before providing warranty service, Vestil may require you to send the entire product, or just the defective part or parts, to its facility in Angola, IN. The warranty covers defects in the following *original* dynamic components: motors, hydraulic pumps, electronic controllers, switches and cylinders. It also covers defects in *original* parts that wear under normal usage conditions ("wearing parts"): bearings, hoses, wheels, seals, brushes, batteries, and the battery charger.

How long is the warranty period?

The warranty period for original components is <u>90 days</u>. The warranty period begins on the date when Vestil ships the product to the warrantee. If the product was purchased from an authorized distributor, the period begins when the distributor ships the product. Vestil may extend the warranty period for products shipped from authorized distributors by *up to* 30 days to account for shipping time.

If a defective part is covered by the warranty, what will Vestil do to correct the problem?

Vestil will provide an appropriate replacement for any *covered* part. An authorized representative of Vestil will contact you to discuss your claim.

What is not covered by the warranty?

- 1. Labor;
- Freight;
- 3. Occurrence of any of the following, which automatically voids the warranty:
 - Product misuse:
 - Negligent operation or repair;
 - Corrosion or use in corrosive environments;
 - Inadequate or improper maintenance;
 - Damage sustained during shipping;
 - Collisions or other incidental contacts causing damage to the product;
 - <u>Unauthorized modifications</u>: DO NOT modify the product IN ANY WAY without first receiving written authorization from Vestil. Modification(s) might make the product unsafe to use or might cause excessive and/or abnormal wear.

Do any other warranties apply to the product?

Vestil Manufacturing Corp. makes no other express warranties. All implied warranties are disclaimed to the extent allowed by law. Any implied warranty not disclaimed is limited in scope to the terms of this Limited Warranty.

