

OWNER'S MANUAL

GARAGE DOOR OPENER

HERCULIFT SDO V8

for Tilting and Sectional doors

& HERCULIFT SDO V8E

◆ INTELLIGENT TRAVEL
LEARNING

◆ AUTOMATIC SAFETY
REVERSE SYSTEM

◆ SOFT START AND
SOFT STOP

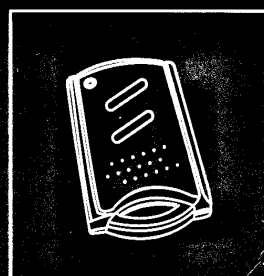
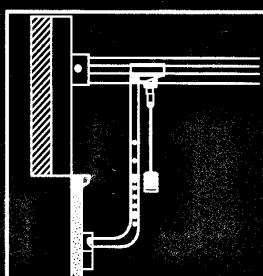
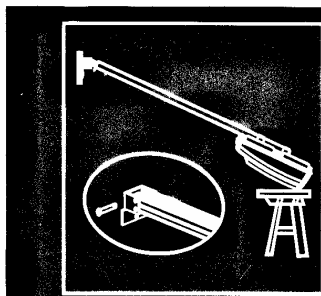
◆ SAFETY BEAMS

◆ INTELLIGENT FORCE
LEARNING

◆ ROLLING CODE

◆ MOTOR OUTPUT TORQUE
DISPLAY

◆ AUTOMATIC CLOSING
DISPLAY



IMPORTANT USER SAFETY INFORMATION

⚠ We strongly recommend the safety beams for more protection.

⚠ DO NOT operate the Garage Door Opener unless the Garage Door is in full view and free from objects such as cars and children or adults.

⚠ DO NOT operate the Garage Door Opener when children/persons are near the door. Children must be supervised at all times when near the garage door and when the Door Opener is in use.

⚠ Keep the remote control away from children.

⚠ Ensure that the SAFETY REVERSE SYSTEM (FORCE) is working correctly and is TESTED and set strictly according to the Installation Instruction Manual. This test must be carried out every month and made adjustment if necessary.

⚠ DO NOT disengage the Door Opener to manual operation with children/persons or and other objects including motor vehicles under the doorway.

⚠ Install the wall switch or wall mounted transmitter in a LOCATION/POSITION where the garage door is visible and out of reach of children.

⚠ Connect the opener power cord ONLY to properly earthed mains. Installation and wiring must be in compliance with relevant local requirements.

⚠ DISCONNECT electrical power connected to the door opener before undertaking any repair on/or removal work of the cover. Only experienced professional service personnel can remove the cover.

⚠ Keep hands or other parts of the body and loose clothing CLEAR of the door and door opener AT ALL TIMES while operating and servicing.

⚠ When using auto close mode, a SAFETY PHOTO BEAM device must be fitted and tested for correct operation at regular intervals. EXTREME CAUTION is recommended when using auto close mode. ALL safety rules must be observed.

⚠ The SAFETY REVERSE SYSTEM is only activated when a certain level of FORCE is exerted onto both the object / person and the door. As a result, the object / person / door may suffer DAMAGE OR INJURY. The SAFETY BEAM device is strongly recommended for more protection.

⚠ Ensure that the door is fully opened before passing into or out of the garage. Ensure that the door is fully closed before leaving the driveway.



MAIN FEATURES

OPERATION

To operate the door, simply press the programmed transmitter button for two seconds. The door can be stopped during opening or closing by pressing this button again. The next activation will move the door into the opposite direction of where it originally was. Wall mount transmitter or wall switch (optional) could also activate the operation.

EXTRA SECURED ROLLING CODE

This opener employs the most up-to-date rolling code technology. Every time a transmission signal is sent from the transmitter, a new secure code will be generated. This feature is designed to prevent possible "copy" of the code and make your garage safer. There are over 4.29 billion possible code combinations so that the code would never be repeated.

INTELLIGENT TRAVEL LIMIT LEARN FUNCTION

The open / close limit can be set and adjusted electrically through an easily operated LIMIT button on the opener panel. See Installation Instruction for details.

SAFETY REVERSE SYSTEM

If the door encounters an obstruction during the Closing Cycle it will stop. The safety obstruction force test should be tested once a month (Refer to Installation Instruction on how to test).

LOW VOLTAGE ALARM

When input voltage falls under 175V AC, opener panel light and courtesy light will flash 10 times and the opener will stop operate.

CONCODE MALFUNCTION AUTO INSPECTION

When open \close door, the opener automatically inspect the concode working condition. If malfunction appears, the opener will stop and flash to make security.

MAIN FEATURES

MANUAL RELEASE DEVICE

The opener is equipped with a Manual Release Device. The door can be released from automatic operation into manual by simply pulling down the release cord handle. This will enable you to manually open or close the door. To switch back to automatic operation, simply pull the cord handle again and re-set the lined release arm back into Engaged position.

SAFETY BEAM DEVICE (Optional)

The opener has an input terminal for provision of SAFETY BEAM device to be connected for additional safety protection. This device can be used in conjunction with the Auto Close Mode in the opener.

QUIET OPERATION

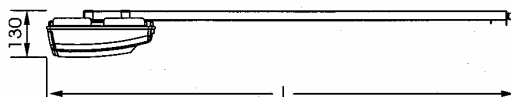
The opener is powered by a low voltage DC 24V motor and has an in-built Soft Start and Soft Stop program. The chain drive system travels inside a strong single pieced aluminum case, it will further minimise operating vibration and lower noise to ensure a smooth and seamless QUIET operation.

PRODUCT PROFILE

GENERAL PRODUCT INFORMATION

HERCULIFT SDO V8 GARAGE DOOR OPENER

The maximum door size that this opener operating on should not exceed 6.5 meters in width and 3.3 meters in height and the pulling force of the door should be less than 30 KG which is factory pre-set PULL force limit.



The factory pre-assembled chain rail requires minimum back room clearance in either of 2.4, 2.7, 3.2 or 3.6 meters depending on the height of the door.

I.P. AND WORKING ENVIRONMENT

Temperature: -25 to 55 Celsius Degree

Humidity: the humid month has a top humidity of 90% and the average temperature is 40 degree Celsius.

The average humidity should not exceed 50%.

This opener is designed for general residential car garage door purposes only. It should not be used in corrosion and other dangerous working conditions.

ATTENTION BEFORE INSTALLATION

The opener should not be installed in a damp or wet area.

The header bracket and support brackets must be securely fastened to structure supports.

An External Key Opening Device is required to be installed with the garage door, if there is no other access door.

Disengage all existing garage door locks to avoid possible damage to the door and opener.

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INSTALLATION INSTRUCTION

TYPE OF DOOR SUITABLE FOR OPERATING

This door opener is designed for installing in residential unit and for the purposes of domestic or residential applications.

This door opener maybe used for properly spring balanced (one-piece) TILTING type or sliding sectional type car garage door (See Fig 1), subject to capacity limitation.

1. ASSEMBLY SECTION (1.1 to 1.9)

1.1 ATTACH THE RAIL TO THE OPENER HEAD

Position rail onto opener chassis by lining up rail sprocket opening with motor head shaft. Make sure shaft engages teeth inside rail sprocket. (See Fig 2)

Press rail down firmly onto shaft and opener chassis.

Position two "U" brackets over rail and onto chassis. Flanges on "U" bracket holes and into chassis holes and tighten screws firmly to hold rail to head.

CAUTION: Always place packing or other soft materials under the opener head to prevent any scratches to the plastic cover.

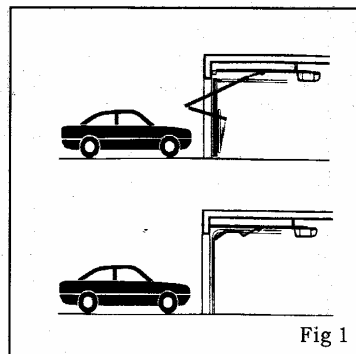


Fig 1

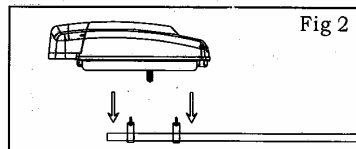


Fig 2

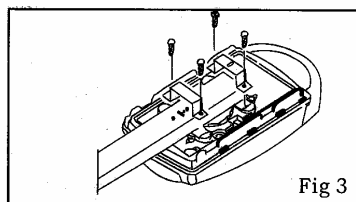
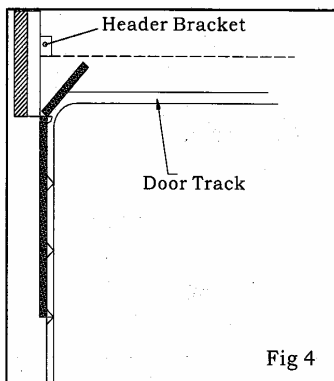


Fig 3

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INSTALLATION INSTRUCTION



1.2 POSITION THE HEADER BRACKET

Mark a vertical centreline (See Fig 5) of the door onto the header wall above the door.

Open the door and observe its highest travel point, measure the distance of this point to the garage floor. (See Fig 4)

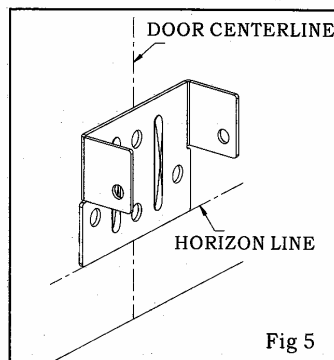
Add 50-150 mm to this measured distance and draw an intersecting horizontal line crossing the centreline. (See Fig 5)

1.3 INSTALL THE HEADER BRACKET TO THE WALL

Centre the header bracket on the door centreline with the bottom edge on the horizontal line (See Fig 5).

Drill holes and fasten the bracket with supplied screws in the parts bag.

CAUTION: The header bracket MUST be securely fastened to the structure supports of the wall. The wall should be reinforced if necessary.



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INSTALLATION INSTRUCTION

1.4 ATTACH RAIL TO HEADER BRACKET

Use the clevis pin to attach and secure the rail to header bracket. (See Fig 6)

CAUTION: Always making sure that the opener head is placed on top of packing or a soft material to protect the plastic cover.

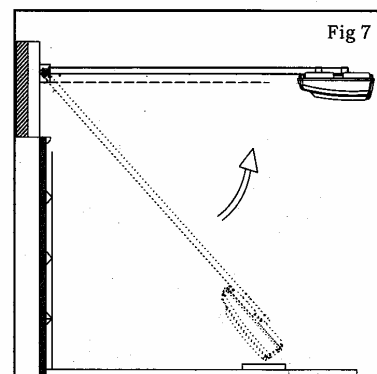
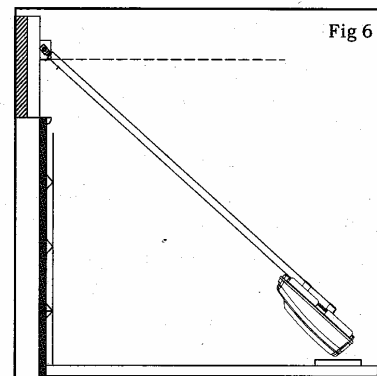
1.5 LOCATE OPENER INSTALLATION POSITION

Raise the rail towards the ceiling (See Fig 7).

Open the garage door and find the highest travelling point of the door.

Rest opener rail onto a multiple layer of packaging or soft material (or other) on top of the door and use it to bring the rail to a horizontal level. We suggest that the multiple layers should be at least 25 mm thick and the gap between the rail and the highest travelling point is not less than 25mm.

Find and mark the correct location for the support brackets.



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INSTALLATION INSTRUCTION

1.6 PREPARATION FOR HANGING OPENER

Fasten hanger bracket onto the opener with "U" sharp bracket (See Fig 8).

Bend the hanger bracket carefully to form a right angle. Do not bend at the point that has hole on the hanger bracket.

1.7 HANGING THE OPENER

Position the rail and make sure the highest door travelling point is at least 20mm lower than the rail and the opener and rail is in the centre of the door.

Secure the hanger brackets firmly to either structure support ceiling or a perforated support angle that is secured to the structure support.

1.8 INSTALL DOOR BRACKETS

Install the door brackets at the vertical centreline of the top panel of the door top (See Fig 10). Make reinforcement support to the panel if necessary.

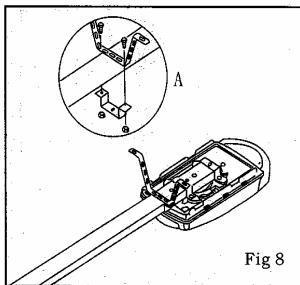


Fig 8

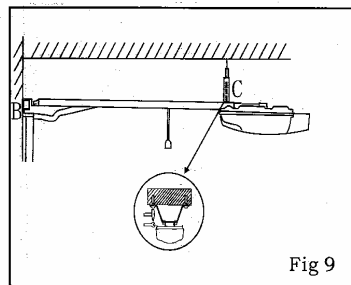


Fig 9

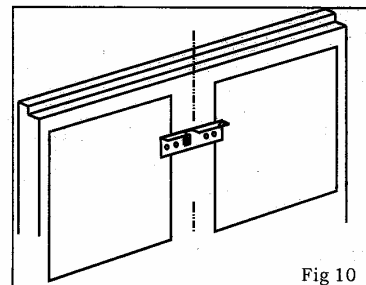


Fig 10

<8>

INSTALLATION INSTRUCTION

1.9 FASTEN THE DOOR ARMS

Fasten the straight and curved door arm with supplied bolts, nuts, plain and spring washers (See Fig 11).

Make door in fully closed position, pull the release hand cord to disengage the opener to manual operation mode and move the trolley close to the door.

Connect the curved arm to the door bracket and the straight arm, and to the trolley (See Fig 12)

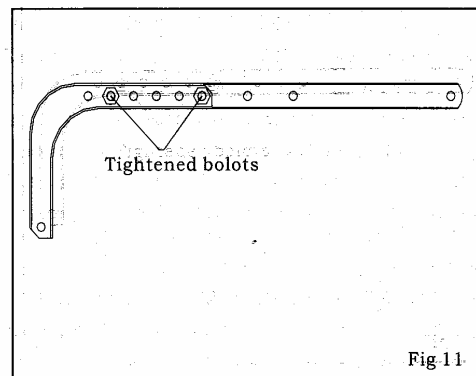


Fig 11

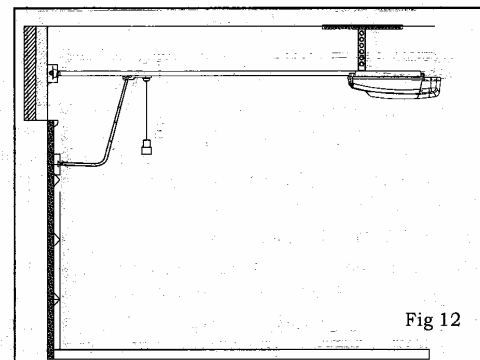


Fig 12

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INSTALLATION INSTRUCTION

2. ADJUSTMENT SECTION (2.1.1 to 2.4)

THE PROGRAM AND FUNCTION BUTTON / LAMP (as shown in Fig 13) IS ON THE FACE PANEL OF THE OPENER

2.1 PROGRAM REMOTE CONTROL TRANSMITTER

2.1.1 Erase all existing transmitter codes stored in the opener receiver

Press and hold the LEARN button for about 8 seconds until the LEARN LAMP is switched off.

2.1.2 Setting transmitter into opener receiver

Press LEARN button, the LEARN LAMP will switch on in RED.

Press the corresponding button on the transmitter TWICE, the LEARN LAMP will flash several seconds before it is OFF. This indicates that the transmitter code is programmed successfully.

Repeat procedure 2.1.2 to reprogram or add on more remote control transmitters.

2.2 PROGRAM DOOR OPEN / CLOSE LIMIT AND AUTO SET OPEN / CLOSE FORCE

Move the door in about half open position, switch on the power and the LIMIT LAMP is in RED.

Press and hold LIMIT button for 2 seconds, the LIMIT LAMP will switch on to Green, it indicates that the system is in setting open limit mode. Press UP (+) or DOWN (-) button to move the door to a desired open limit position, then press the LIMIT button to confirm. The system will automatically enter to close limit setting mode.

The LIMIT LAMP will switch off from Green into Red, it indicates that the system is in setting close limit mode.

Press UP (+) or DOWN (-) button to move the door to the desired close limit, press LIMIT button to confirm.

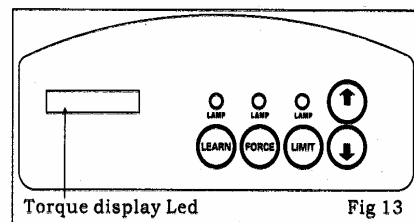
The Red LIMIT LAMP will switch to Green and it indicates the completion of limit setting program.

You do not need to do anything, as the opener is designed to set the open / close FORCE automatically after LIMIT setting. The door will automatically run a full circle while the FORCE LAMP will be on. The LAMP in Red will be off after completion of FORCE setting and the LIMIT LAMP will be in Red..

2.3 SAFETY REVERSE TEST

Open the door with transmitter and place a 50mm x 100mm wood block on the floor and in the centre of the door.

Close door onto and in contact with the wood block, the door should stop and reverse to the pre-set open limit position. The FORCE LAMP should be in RED and flash 5 times.



Torque display Led

Fig 13

<10>

INSTALLATION INSTRUCTION

2.4 OPEN / CLOSE FORCE ADJUSTMENT

If the door fails to reach the open or close limit position, or no satisfaction of the open / close FORCE, then increase or reduce this FORCE by following procedures below.

Press and hold FORCE button 2 seconds, the FORCE LAMP flashes in GREEN indicating that the system is in opening FORCE adjustment mode. Press UP (+) to increase or DOWN (-) to reduce the FORCE.

Press FORCE button again to confirm the setting and the LAMP will then switch to RED indicating that it is entering the close FORCE adjustment mode. Repeat procedures above to further adjust if necessary.

Press FORCE button when completed and the LAMP should switch off and the FORCE adjustments are completed.

There are TEN (10) FORCE levels that could be adjusted by each time pressing the Up or DOWN button during adjustment and the TORQUE DISPLAY LED(Fig.13)will indicate the level of the Force set..

3. UNDERSTANDING OF YOUR OPENER

3.1 CONTROL: The opener / door could be operated by pressing the pre-programmed button in the transmitter. The moving (opening / closing) direction of the door could be interrupted by each time pressing the transmitter.

When door is opening, press the transmitter, door will stop and LIMIT LAMP will be in GREEN. The next move will be closing.

When door is closing, press the transmitter, door will stop and LIMIT LAMP will be in RED. The next move will be opening.

When the door is in the process of opening, if there is a given level amount of force holding back the door from opening, it will cause the door to stop and the FORCE LAMP will flash in RED for 5 times. Once reactivated again, the door will reopen.

Also see SAFETY REVERSE TEST in section 2.3.

3.2 SAFETY (INFRA RED) BEAM DEVICE

The optional safety infra red beam device can be added to the opener for additional protection (See Fig 14). If an object breaks into the beam while door is closing, the opener / door will stop and then reverse to the full opening position. The FORCE LAMP will flash in RED for 3 times.

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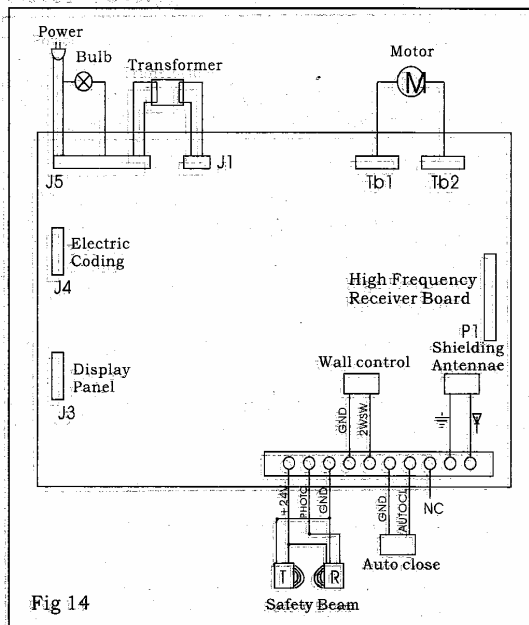
INSTALLATION INSTRUCTION

3.3 MANUAL OPERATION OF THE DOOR

The opener is equipped with a Manual Release Device. The door can be released from automatic operation into manual operation by pulling down the release cord handle (See Fig 12). This will allow manual opening or closing of the door. Pulling the handle again to set the release arm in the trolley back to Engaged position to switch the door back to automatic operation.

CAUTION: Do not hold and use the release handle to manually operate the door. Use the Manual Release Device only when the door is closed.

Circuit Theory:



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TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATLONS

INPUT VOLTAGE: 220V±15%, 50 Hz		MAX.PULL (MOTOR) FORCE: 50kg
INPUT POWER: 375W±10%		OPERATING NOISE: <65kB{opener only}
OUTPUT POWER: 180W±10%		
LIFTING HEIGHT: 1.2—3.3 METERS		FORCE ADJUSTMENT TOLERANCE: 5Kg
MOTOR	DC PERMANENT LUBRICATION	DC 24V
RECEIVER	BRAND WIDTH	UHF 433.92 MHz.AM
	CODE STARAGE CAPAITY	6~15 FOUR BUTTON TRANSMITTER CODE
TRANSMITTER	FREQUENCY	433.92MHz
	CODE TYPE	HOPPING CODE
	CODE COMBINATIONS	OVER 4.29 BILLION
	BATTERY VOLTAGE	12V

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INSTALLATION INSTRUCTION

THE FOLLOW IS FOR RDO V8E ONLY

4. MAIN COMPONENTS FOR EXTENAL CONNECTIONS

4.1 THE EXTENAL CONNECTION TERMINAL

Terminal 1: 24V DC power supply (max 50mA)

Terminal 2 & 3: Connection for 2-wire Infra Red Beam Safety Device

Terminal 4 & 5: Connection for the Wall Button Switch or External Radio Receiver (Terminal 4 also serves as GND,the Earth)

Terminal 6 & 7: Connection for External Aerial Antenna (T6 also serves as GND,the Earth)

4.2 THE DI-SWITCH

Switch No 1: ON position - Infra Red Beam device is not allowed; OFF - allowed.

Switch No 2: ON position - Auto Close Feature is not allowed; OFF - allowed.

Switch No 3: ON position - No use the Backup Battery; OFF - When use the Backup Battery.

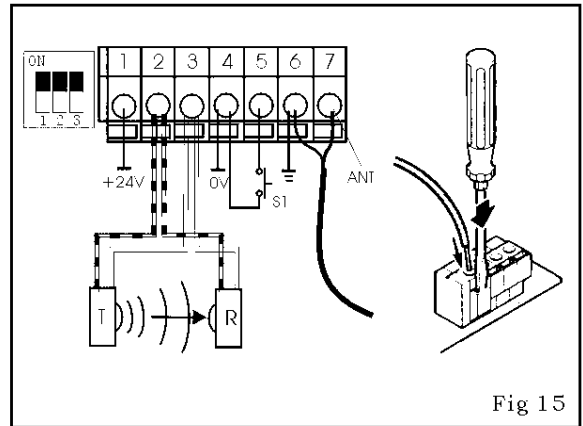
4.3 OPTIONAL BACKUP BATTERY DEVICE (Herculift Backup Battery device ONLY)

Connect the 3-pin connection cord from the Herculift Backup Battery device into the 3-pin terminal on the openers Circuit Board.

Move the Di-Switch No.3 from ON position to OFF position and connecting power to the opener.

Press the Green button on the face panel of the Backup Battery Box down to on and the Green light is on.

Circuit Theory (SDO v8E only):



PROBLEM SHOOTING

SYMPTOMS	POSSIBLE CAUSE	SOLUTION
Opener does not operate with any control devices	<ul style="list-style-type: none"> • No power supply to the opener • The thermal overload protector shut down the motor due to overheating 	<ul style="list-style-type: none"> • Check and make sure power is properly connected and switched on • Re-activate the opener after about 20 minutes
Door does not open fully	<ul style="list-style-type: none"> • Open LIMIT set incorrectly 	<ul style="list-style-type: none"> • Re-set the limit (see 2.2 in the manual)
Opener only operates from door control but not from transmitter	<ul style="list-style-type: none"> • Flat battery • Transmitter is not programmed correctly 	<ul style="list-style-type: none"> • Try a new battery • Re-program the transmitter (see 2.1 in the manual)
Door reverses before reaching the floor or stop before reaching fully closed position	<ul style="list-style-type: none"> • The door is too "heavy" to the pre-set close FORCE • Incorrectly installing the door arm 	<ul style="list-style-type: none"> • Review the FORCE adjustment in section 2.4 of the manual and increase FORCE accordingly • Disengage the door to manual operation and check the travelling point, adjust the length of the door arm if necessary
Transmitter only works within short distance to the door	<ul style="list-style-type: none"> • Battery is weak • Metal obstacles in the path of signal or , radio (including citizen band transmissions) or other electronic interference 	<ul style="list-style-type: none"> • Try a new battery • Re-position the opener antenna aerial toward the direction of the transmission signal • Extension of an antenna aerial (optional) to the door
Door opens but will not close	<ul style="list-style-type: none"> • Safety beam protection device is activated • Close FORCE is set incorrectly 	<ul style="list-style-type: none"> • Review Safety Beam Operation at 3.2, re-adjust the safety beam if necessary • See FORCE adjustment at 2.4 and increase the FORCE if necessary
Door close automatically while not in Auto Close Mode	<ul style="list-style-type: none"> • Transmitter button is stuck and in all time on position 	<ul style="list-style-type: none"> • Check transmitter and use another push button

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PACKAGE CONTENTS AND MAINTENANCE

	CONTENTS	QTY	
1	HERCULIFT SDO-V8 OPENER POWER HEAD	1	
2	TRANSMITTER	2	ONE WITH WALL MOUNT BRACKET
3	STRAIGHT & CURVED DOOR ARM	2	ONE EACH
4	HEADER BRACKET	1	
5	SMALL PARTS BAG	1	CLEVIS PINS, DOOR BRACKET, BOLTS, NUTS ETC.
6	OWNER' S MANUAL	1	INSTALLATION, OPERATING, MAINTENANCE, WARRANTY ETC.
7	OPENER RAIL TRACK & CHAINS	1	IN SEPEARTE, PACKING WITH THE OPENER
8	SAFETY BEAM DEVICE KIT	1	WRIED (OPTIONAL)

IMPORTANT INFORMATION IN GENERAL MAINTENANCE

The following should be conducted MONTHLY

Safety Reverse Test. Repeat the test as per Installation Instruction (See 2.3), make adjustment if necessary.

Door manual operation test. Manually open and close door, check to ensure door is not too heavy (should be less than 25 KG operating force in general), unbalanced or binding, due to loss tension of the spring/s or other reasons. Call for professional garage door service if necessary.

Check open and close LIMIT. Check and make sure door is fully opened and closed at the desired open / close position. Adjust LIMITS as per Installation Instruction (See 2.2) if necessary.

We recommend the following service to be carried out **ONCE A YEAR**

Professional services to the door such as adjusting door spring tensions to make sure the door in good working condition.

Lubricate door roller bearings and arms, door hinges. Caution: Do not lubricate the opener and its rail track. Do not lubricate the door tracks.

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WARRANTY

The manufacturer, **HERCULIFT** Access Technology Australia (□**HERCULIFT**□) provides the original purchaser of the **HERCULIFT** opener (□**Product**□) warranty that the product is free of defective in workmanship or materials for a period of TWO years from the date of purchase from **HERCULIFT** or one of its retail distributors, subject to the warranty conditions set out below.

The benefits conferred by this warranty are in addition all implied warranties, other rights and remedies in respect of the product that the purchaser has under the Trade Practices Act and similar State and Territory Laws at the time of product purchased.

Warranty Conditions

1. The warranty would only be given where proof of original purchase receipt is provided and returns of the Product that it is claimed to be defective to the **HERCULIFT**'s retailer or **HERCULIFT**.
2. This warranty is only valid for Product installed by **HERCULIFT** or its authorised reseller and used strictly according to the instructions in the owner's manual. The decision for repair or replacement of any part shall be of the view of the manufacturer. The instructions in the owner's manual covers installation, operation and maintenance of the Product. In the event that the Product is not installed by **HERCULIFT** or its authorised reseller, the warranty covers only replacement of parts, all other associated and related expenses shall be borne by the buyer. The Product must not be modified or changed in any way.
3. The warranty shall not apply and the manufacturer, reseller/distributor expressly exclude all or any liability for direct or consequential damage, loss, physical injury, claim or expense as a result of negligent handling, misuse, incorrect installation or installation not in accordance with the installation instructions, incorrect service and operation, not in accordance with owner's manual.
4. Not designed or warranted for application of the Product that is not under the conditions or according to the specifications in the Owner's Manual. Warranty does not cover consumable items such as globes and batteries.
5. The manufacturer does not accept any responsibilities and liabilities for defects that are in **HERCULIFT**'s view, a result of accidents or incidents that are not within the control of the manufacturer, such as, but not limited to floods, lightning, faulty wiring that the Product is affixed to, radio (including citizen band transmissions) or any electronic interference, etc.
6. The manufacturer reserves the right to modify designs and alter specifications of existing products without the obligation of making the same modifications or alterations to products previously sold.

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WARRANTY

Not designed or warranted for application of the Product that is not under the conditions or according to the specifications in the Owner's Manual. Warranty does not cover consumable items such as globes and batteries. Only One Year warranty for all transmitters.

Whilst every effort is made to ensure that descriptions, specifications and other information in this publication is correct, no warranty is given in respect thereof and the company shall not be liable for any errors therein.

RETAIN AND FILE WITH YOUR PURCHASE RECEIPT

Your purchase Receipt/invoice is proof of date of purchase. You must be able to present it to the **HERCULIFT** retailer where the product was purchased from OR to **HERCULIFT** to obtain a replacement or service under warranty.

Purchaser Name:

Address:

Installation Address (if different):

Purchased From:

Date of Purchase:

Installed By:

Date of Installation:

HERCULIFT Access Technology Australia, a member of the HERD Australia Group of companies, of 78 Shellharbour Road, Kemblawarra NSW 2505, Australia.

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