

Contact Us

FREEDOM VEHICLE LIFTS, LLC. GENERAL INFORMATION

Address:	Freedom Vehicle Lifts, LLC. 31355 Co. 5 Blvd, Lake City, MN 55041
Website:	www.freedomracelifts.com



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Important Safety Information

For your safety, read, understand, and follow the information provided with this product. The owner and operator of this Full Car Lift shall have an understanding of this equipment and safe operating procedures before attempting to use. The owner and operator shall be aware that use and repair of this Full Car Lift may require special tools and knowledge. Instructions and safety information shall be conveyed in the operators native language before use of this lift is authorized. If any doubt exists as to the safe and proper use of this lift, remove from service immediately.

Inspect Lift Before Each Use

Do not use the Full Car Lift if broken, cracked, or damaged parts (including labels) are noted. If the lift appears to be damaged in any way, operates abnormally, or is missing parts discontinue use and tag the lift as "OUT OF SERVICE" remove from service immediately and notify the manufacturer. If you suspect the lift was subjected to a shock load (a load dropped suddenly and unexpectedly on it), immediately discontinue use and tag the lift as "OUT OF SERVICE" until the lift has been checked by a Factory Authorized Service Center (contact distributor or manufacturer for a list of Authorized Service Centers). It is recommended that an annual inspection be done by qualified personnel. Replace worn or damaged parts with Freedom Vehicle Lifts Authorized Replacement Parts only. Labels and Owners Manuals are available from manufacturer.



Safety Symbols

The words DANGER, WARNING, CAUTION are used throughout the safety messages and decals in the manual or on the equipment. Statements with one of these words indicates a safety risk is involved. Be sure to observe the precautions indicated whenever a Safety Alert Symbol is present.



This symbol is used to call attention to instructions concerning personal safety. Be sure to observe and follow these instructions. Take time to be careful!



The signal word DANGER on the equipment and in the manual identifies a hazardous situation which, if not avoided, <u>WILL</u> result in death or serious injury.



The signal word WARNING on the equipment and in the manual indicates a potentially hazardous situation which, if not avoided, <u>COULD</u> result in death or serious injury.



The signal word CAUTION on the equipment and in the manual indicates a potentially hazardous situation which, if not avoided, <u>MAY</u> result in minor or moderate injury. It may also be used to alert against unsafe practices.

IMPORTANT

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This notice identifies procedures which must be followed to avoid damage to the equipment.



Safety Label Description

Decals are placed on the equipment to protect anyone working on or around this equipment, as well as the components of the equipment. All personnel operating or maintaining this equipment must familiarize themselves with the safety labels.

The safety labels are color coded to warn the operator of the various levels of machine hazards. The graphic below defines a standard industry label.

Make sure all safety labels are in place and clearly readable. Replace any damaged or missing safety labels with a factory replacement label.



Hazard, Consequence, and/or How to Avoid Symbol



Make sure to study, understand and follow all Safety Instructions before operating this lift.

Safety Instructions

- · Read Operator's Manual and follow all safety precautions.
- · Study, understand and follow all instructions before operating this lift.
- · Keep the operational area clear of people and animals while the lift is in use.
- · Do Not exceed the rated capacity of the lift.
- · Use only on solid, stable, level surface to prevent vehicle from tipping off of lift.
- · Add additional jack stands to support the lifted vehicle.
- Lift only on areas of the vehicle that are structurally able to withstand the load.
- No alterations shall be made to this product.
- Do Not use an Impact Driver on this equipment as it could cause damage to the lift drive components.
- Do Not perform any type of maintenance on the lift while under load.
- Failure to heed these instructions may result in personal injury and/or property damage.



Safety Labels

FIGURE 1. Warning - Pinch Point Decal And Placement





FIGURE 2. Warning - Crushing Hazard Decal And Placement







FIGURE 3. Warning - To Avoid The Risk Of Accidents, Injury Or Death Decal And Placement

\land WARNING

TO AVOID THE RISK OF ACCIDENTS, INJURY, OR DEATH:

- Read Operator's Manual and follow all safety precautions.
- Study, understand and follow all instructions before operating this lift.
- Keep the operational area clear of people and animals while the lift is in use.
- Do not exceed the rated capacity of the lift.
- Make sure all shields and guards are properly installed.
- Use only on solid, stable, level surface to prevent vehicle from tipping off of lift.
- Add additional jackstands to support the lifted vehicle.
- Lift only on areas of the vehicle that are structurally able to withstand the load.
- No alterations shall be made to this product.
- Failure to heed these instructions may result in personal injury/death and/or property damage.









Before Use

- 1. Read the Operating, Safety, and Maintenance Manual completely and familiarize yourself thoroughly with the product, its components, and recognize the potential hazards with its use.
- 2. Remove the Freedom Full Car Lift from its packaging and account for all parts per assembly diagram.

Product Information

Freedom Full Car Lifts are designed to lift and support rated capacity loads. However, the load should be additionally supported by four appropriately rated jack stands.



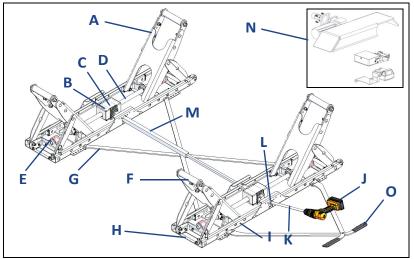
For maximum safety, place auxiliary jack stands under vehicle to provide additional support and stability.



Specifications

Model	Capacity	Min. Height	Max Height	Lift Size
FC32	3200 lbs.	3.1"	20"	3.1"H x 12.5"W x 49"L
FC40	4000 lbs.	3.9"	22"	3.9"H x 12.5"W x 50.25"D

FIGURE 1. Freedom Full Car Lift Components



LOCATION	DESCRIPTION
A	Lift Arm
В	Right Angle Gear Box
С	Anti-Reversing Mechanism (under gear box cover)
D	Ball Screw
E	Ball Screw Nut
F	Support Bar
G	Cross Brace
н	Lift Base
I	Lift Locking Pin
J	Customer Supplied Cordless Drill
к	Input Drive Shaft Extension
L	Universal Joint
м	Telescoping Drive Shaft
N	Optional Power Unit
0	Handle



Storage

- 1. For ease of transport and storage, disengage the Lift Locking Pins and rotate the Support Arms to their maximum down position. Insert the Lift Locking Pins in the Locking Pin Storage position brackets. Grab the lift by the openings in the Lift Arms to transport to a desired storage location. For maximum service life always store the Freedom Race lift under cover or indoors.
- 2. When loading the Freedom Race Lift in a vehicle or trailer, it is strongly recommended that 2 people be used to lift the Lift sections to avoid back strain or other injury.



It is strongly recommended to use two people to load the Lift sections into a vehicle or trailer to avoid injury.



Serial Number Plate

Please record your Freedom Vehicle Lift information in the spaces below for future reference. The Serial Number decal and QR Code are located on the top of the lift arm.

Remember to use the model number and serial number when requesting machine information or to order replacement parts.

	Freedom Vehicle Lifts, LLC. 31355 Co. 5 Blvd, Lake City, MN 55041 www.freedomracelifts.com
Model No.	
Mfg. Date	
Serial No.	
Lift Cap.	



QR Code Location

You can use your mobile device to scan the QR Code. The mobile device will then navigate to the Freedom Race Lift website.





Lift Setup/Operation

1. Insert Cross Brace onto lift sections and secure with detent pins.

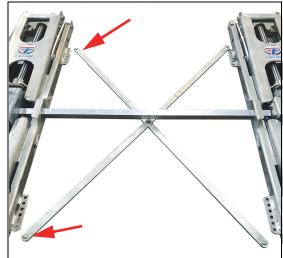
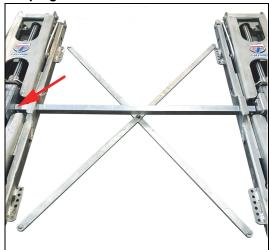


FIGURE 2. Center Cross Brace Pin Locations

2. Install Telescoping Drive shaft onto 1st lift section and secure with detent pins.

FIGURE 3. Telescoping Drive Shaft Installed





3. Install the Lift Handle to the Lift section and secure with detent pins.



FIGURE 4. Full Car Lift Handle Installed

4. Position lift sections under vehicle lift points.

IMPORTANT

Lift sections are connected prior to locating under vehicle.

IMPORTANT

Cross Brace may need to be adjusted based on distance the 2 lift sections are apart from one another, to align with vehicle lift points.

- 5. Insert socket, universal joint, and extension onto drive gear box input shaft.
- 6. Use a 18-40 volt cordless drill in good working condition, a 1/4" drive to 3/8" drive adapter, a 7/16" 6 pt. deep well socket and 12" extension with universal joint. Lock drill chuck onto hex 1/4"" to 3/8" input drive shaft adapter and connect extension and socket.

IMPORTANT

Confirm direction of rotation for raising and lowering. Depending on what section is being used, rotation may be opposite.

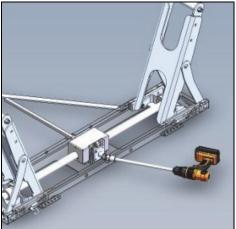


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Do Not use an Impact Driver on this equipment as it could cause damage to the lift drive components.



FIGURE 5. Drill Connection Location



7. Set the drill to slow speed and slowly depress the trigger watching to ensure the Lift Bars make solid contact with the vehicle lift points. A lift riser adjustment may be needed if lift points are not at same level. Once equal contact is made at all four points, continue to depress drill trigger to lift the vehicle to the desired working height.

IMPORTANT

As the lift raises, an internal anti-reverse rotation mechanism on each lift section prevents lift from lowering once the drill trigger is released.



Once the Vehicle has reached full lift height install Lift Locking pins. For maximum safety, place auxiliary jack stands under vehicle to provide additional support.



Lower Lift to the down position being careful not to drive the lift lower than its maximum down position.

NOTE: Trying to drive the Lift higher or lower than its maximum up and down position will put undue stress on the operators hand, drill, and Lift.



8. Make sure to check under the vehicle to be sure it's clear of any people or animals before lowering the lift.



Always be sure to check under the vehicle to be sure it's clear of any people or animals before lowering the lift.

9. To lower the Lift, set the drill to run in the opposite direction.



Remove Lift Locking Pin. Slowly press drill trigger to lower vehicle.

NOTE Failure to remove lift locking pin will prevent the Lift from lowering and put undue stress on the operators hand, drill, and Lift.



Lower Lift to the down position being careful not to drive the lift lower than its maximum down position.

NOTE: Trying to drive the Lift higher or lower than its maximum up and down position will put undue stress on the operators hand, drill, and Lift.



Periodical Maintenance

- 1. Keep the Freedom Race Lift free of dirt, water, or other debris.
- 2. Periodically inspect bevel gears under the covers. Clean and coat miter gears with a Molly Additive Based Grease.
- 3. Periodically inspect Anti-Reverse Rotation mechanism located under covers. The "Star" component of the mechanism should turn freely when Lift is raising, but should be stopped from rotating by the "Rocker" when lowering the lift. (See Figure 4 page 20)



Never operate the Freedom Race Lift if the Anti-Reverse Rotation mechanism is not operating properly. Contact an Authorized Service Center for further information.

- 4. Periodically inspect the lead screws. Blow off dirt, debris, and other build up on lead screw with high pressure air and lightly coat with a spray cleaner/lubricant such as WD-40. Lubricate lead screw nut via grease fitting with a Moly Additive Based Grease yearly.
- 5. Periodically inspect the Lift Carriage and Support Rollers. Use high pressure air to blow out any debris in Lift Base Channels.



Do Not perform any type of maintenance on the lift while under load.



General Maintenance Guide

Some of the Freedom Race Lift components are minimum maintenance and do not require much service. Follow the chart for the components that require set service intervals. Refer to Lift Component and Replacement Part Diagrams for Component locations.

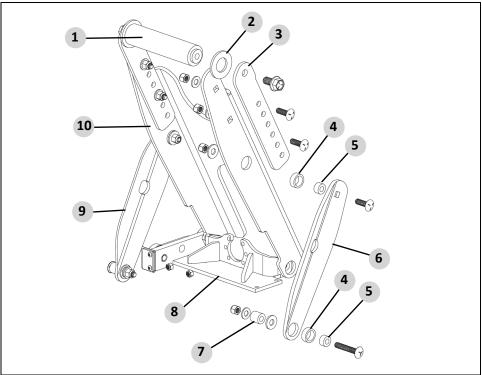
Component(s)	Maintenance Task	Service Type	Interval
Lead Screw	Clean with compressed air and light coating of cleaner	WD-40	Weekly
Miter Gears	Clean and coat Miter Gears with a Moly additive grease.	Moly Additive Based Grease	Yearly
Lead Screw Nut	Clean and coat Miter Gears with a Moly additive grease.	Moly Additive Based Grease	Yearly
Locking Pins	Keep Locking pins free from dirt and debris	Compressed Air / WD-40	Weekly
Lift Support Rollers	Keep base/track free of any debris with compressed air, wipe down.	Wipe Down	Weekly
Anti-Reverse Rotation Mechanism	Clean the Star to turn freely when raising the Lift. Stops rotating by the Rocker when Lift lowers.	Compressed Air, SAE 30 Lubricant	Monthly
Freedom Race Lift	Keep the Lift free of dirt, water, other debris	Wash and wipe down with compressed air to dry	As Required



REPLACEMENT PARTS

Full Car Lift - Side Assembly

FIGURE 1. Full Car Lift - Side Assembly

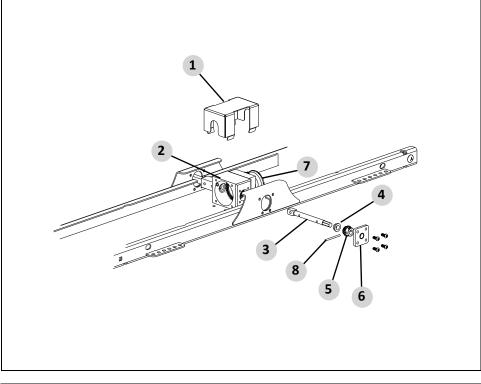


ITEM NO.	PART NO. FC32	PART NO. FC40	DESCRIPTION	QTY.
	FC32-000	FC40-000	FULL CAR LIFT, SIDE ASSEMBLY	2
	FC32-010	FC40-010	SLIDER ASSEMBLY	2
1	FC32-006	FC40-006	SUPPORT BAR	4
2	90126A038	90126A038	WASHER, STEEL SAE, ZINC PLATED	8
3	FC32-005	FC40-005	EXTENSION PLATE	8
4	2868T178	2868T178	SLEEVE BEARING, HIGH LD OIL EMBEDDED 863	20
5	FC32-046	FC40-046	PIVOT BUSHING 3/8"	16
6	FC32-030	FC40-030	LINK ARM	4
7	92510A805	92510A805	MODIFIED SPACER	8
8	FC32-011	FC40-011	SLIDE WELDMENT	4
9	FC32-031	FC40-031	LINK ARM	4
10	FC32-004	FC40-004	LIFTARM	4



Gear Box Assembly

FIGURE 2. Gear Box Assembly

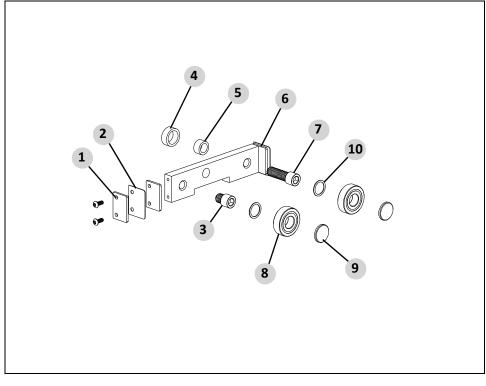


ITEM NO.	PART NO. FC32	PART NO. FC40	DESCRIPTION	QTY.
1	FC32-025	FC40-025	GEARBOX COVER	2
		FC40-020	GEARBOX ASSEMBLY	1
2	FC32-021	FC40-021	GEARBOX MAIN HOUSING	2
3	FC32-024	FC40-024	DRIVE SHAFT	4
4	6338K417	6338K417	OIL EMBEDDED FLANGED SLEEVE BEARING	4
5	SB1_5-1845	SB2_1845	KHK SB1.5 1845 MOD GEAR	2
6	FC32-023	FC40-023	GEARBOX FRONT PLATE	2
7	SB1_5-4518	SB2_4518	K14K 4518 MOD GEAR	4
8	90692A725	90692A727	GEAR PIN	1



Side Plate Slider Assembly

FIGURE 3. Side Plate Slider Assembly

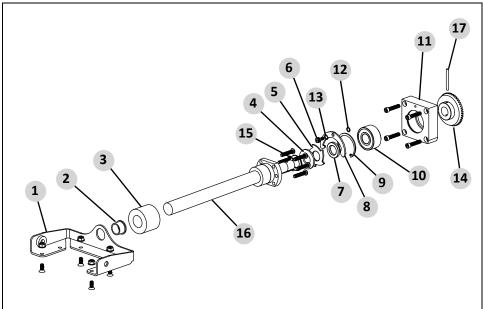


ITEM NO.	PART NO. FC32	PART NO. FC40	DESCRIPTION	QTY.
1	FC32-056	FC40-056	WIPER STIFFENER	32
2	FC32-055	FC40-055	TRACK WIPER	16
3	FC32-048	FC40-048	BEARING AXLE SHORT	8
4	2868T178	2868T178	HIGH LD OIL EMBEDDED SLEEVE BEARING 863	20
5	FC32-047	FC40-047	PIVOT BUSHING 1/2"	8
6	FC32-015	FC40-015	SIDE PLATE SLIDER	8
7	FC32-049	FC40-049	BEARING AXLE LONG	8
8	5972K44	5972K44	BALL BEARING	16
9	FC32-057	FC40-057	SLIDER GUIDE	16
10	95606A250	95606A250	NYLON PLASTIC WASHER	16



Lead Screw Assembly

FIGURE 4. Lead Screw Assembly

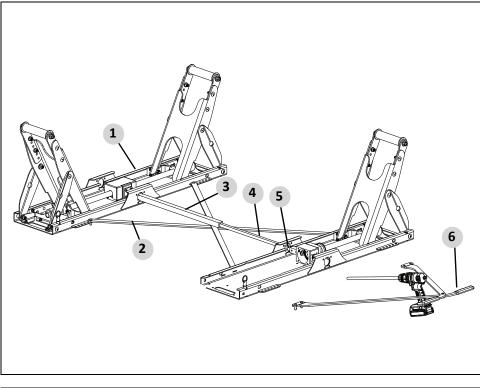


ITEM NO.	PART NO. FC32	PART NO. FC40	DESCRIPTION	QTY.
1	FC32-002	FC40-002	END BEARING SUPPORT	4
2	6659K41	6659K41	OIL EMBEDDED FLANGED SLEEVE BEARING	4
3	FC32-059	FC40-059	BUMPER, 25MM ID	4
4	2011N126	2011N129	OIL EMBEDDED THRUST BRONZE BEARING	4
5	FC32-032	FC40-032	RATCHET PLATE	4
6	91259A422	91259A422	SHOULDER SCREW, ALLOY STEEL	4
7	FC32-028	FC40-028	BEARING SPACER	4
8	FC32-033	FC40-033	RATCHET CATCH	4
9	98455A727	98455A362	INTERNAL RETAINING RING	4
10	52042RS	52052RS	BALL BEARING, 20MM ID	4
11	FC32-022	FC40-022	GEARBOX BEARING HOUSING	4
12	90482A414	90482A414	SPRING STEEL RING SHIM, 1074-1095	4
13	90134A029	90134A029	STEEL TRIPLE WAVE WASHER	4
14	SB1_5-4518	SB2_4518	KHK 4518 MOD GEAR	4
15	FC32-027	FC40-027	THRUST SPACER	4
16	SFU2505	SFU3205	BALL SCREW ASSEMBLY	4
17	90655A728	90655A749	GEAR PIN	1



Connecting Components

FIGURE 5. Connecting Components

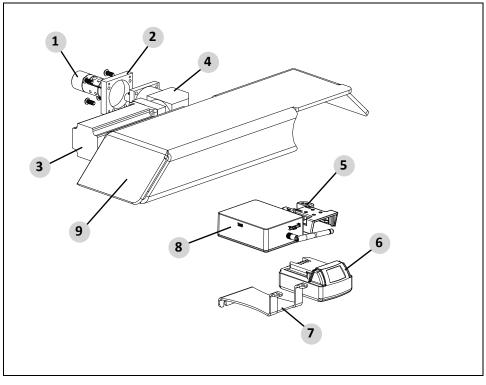


ITEM NO.	PART NO. FC32	PART NO. FC40	DESCRIPTION	QTY.
1	FC32-009	FC40-009	BASE WELDMENT	2
2	FC32-026	FC40-026	X-BRACE LINKAGE	2
3	FC32-018	FC40-018	TELESCOPING SHAFT, OUTER	1
4	FC32-017	FC40-017	TELESCOPING SHAFT, INNER	1
5	FC32-019	FC40-019	TELESCOPING SHAFT CONNECTOR	1
6	FC32-040	FC40-040	HANDLE ASSEMBLY	1



Wireless Power Unit

FIGURE 6. Wireless Power Unit

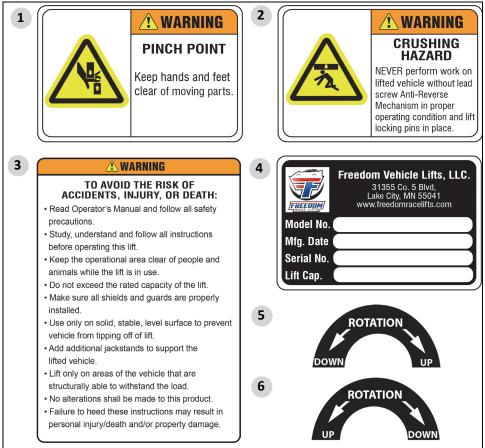


ITEM NO.	PART NO. FC32	PART NO. FC40	DESCRIPTION	QTY.
1	FC-EMB-004	FC-EMB-004	MACHINED COUPLER	1
2	FC-EMB-003	FC-EMB-003	MOTOR ADAPTER	1
3			POWER DRIVE MOTOR	1
4			90 DEGREE PLANETARY GEARBOX	1
5			M18 BATTERY MOUNT	1
6			MILWAUKEE M18 LITHIUM BATTERY	1
7	FC-EMB-002	FC-EMB-002	ELECTRONICS MOUNT STRAP	1
8	1590BB	1590BB	BOARD AND ENCLOSURE	1
9	FC-EMB-001	FC-EMB-001	FC ELECTRONICS COVER	1



Decals-1

FIGURE 7. Decals



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	FLD-005	PINCH POINT DECAL	1
2	FLD-004	CRUSHING HAZARD DECAL	1
3	FLD-010	TO AVOID RISK DECAL	1
4	FLD-001	SERIAL NUMBER PLATE DECAL	
5	FLD-003	ROTATION CLOCKWISE DECAL	
6	FLD-011	ROTATION COUNTERCLOCKWISE DECAL	



Decals-2

FIGURE 8. Decals



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	FLD-002	QR CODE DECAL	1
2	FLD-00	HIGH LOW MIN MAX MARKER DECAL	





Instructions are necessary before operating or servicing this equipment. Read and understand the Operation & Maintenance Manual and the decals. Follow warnings and instructions in the manual when making repairs, adjustments or servicing. Check for correct function after adjustments, repairs or service. Untrained operators and failure to follow instructions can cause injury or death.

Use the following chart to assist troubleshooting the Freedom Race Lift. The chart shows a list of symptoms, possible causes, and corrective actions to return the Lift to normal operation.

Symptom	Possible Causes	Corrective Action
Lift will not lift vehicle	Drill or Power Unit Bat- tery needs charging. Load exceeds lift capability. Debris caught in Lift base channel and carriages.	Charge battery. Do not exceed Lift load capability. Clean Lift of all debris that may be caught in Lift base channel and carriage path.
Lift reverses under load	Anti-Reverse Rotation mechanism not engaging	Inspect and perform maintenance
Lift will not lower	Drill or Power Unit Battery needs charging. Lift Locking Pin in place.	Charge battery. Remove lift locking pin, insure pin is not under load prior to removing.





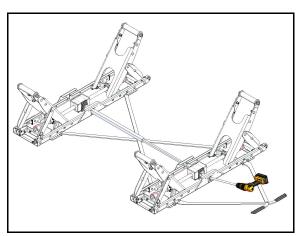
ONE YEAR LIMITED WARRANTY

For a period of one (1) year from date of purchase, Freedom Vehicle Lifts, LLC will repair or replace, at its option, without charge, any of its products which fail due to a defect in material or workmanship under normal usage. This limited warranty is a consumer's exclusive remedy

Performance of any obligation under this warranty may be obtained by returning the warranted product, freight prepaid, to Freedom Vehicle Lifts, LLC Warranty Service Department, 31355 Co. 5 Blvd, Lake City, MN 55041, except where such limitations and exclusions are specifically prohibited by applicable law.

- 1. THE CONSUMER'S SOLE AND EXCLUSIVE REMEDY SHALL BE THE REPAIR OR REPLACEMENT OF DEFECTIVE PRODUCTS AS DESCRIBED ABOVE.
- 2. FREEDOM VEHICLE LIFTS, LLC SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGE OR LOSS WHATSOEVER.
- 3. ANY IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED TO ONE YEAR, OTHERWISE THE REPAIR, REPLACEMENT, OR REFUND AS PROVIDED UNDER EXPRESS LIMITED WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER, AND IS PROVIDED IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED.
- 4. ANY MODIFICATION, ALTERATION, ABUSE, UNAUTHORIZED SERVICE, OR ORNAMENTAL DESIGN VOIDS THIS WARRANTY AND IS NOT COVERED BY THIS WARRANTY.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you, the consumer. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you, the consumer. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.









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