



# First-Mover proudly presents the new

R-3500 Car mover



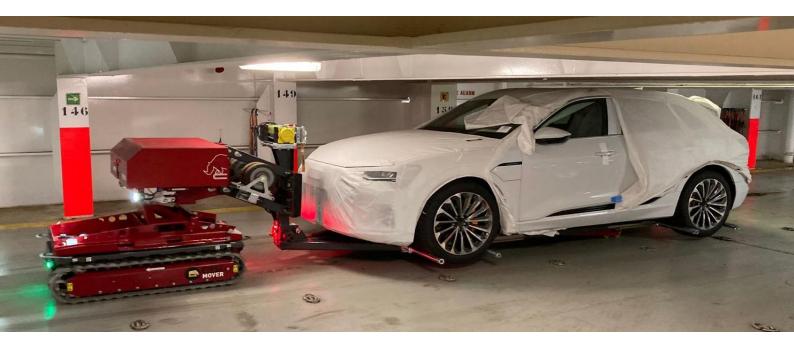






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#### R-3500 are specially developed for safe salvage of vehicles

**Patented Remote Controlled Car Mover** 

The R-3500 makes it possible to safely handle tasks that will normally pose a high security risk to the staff who performs the tasks.

- Lifts 3,500 kg without any manual operation is necessary
- Easily handles vehicles in buildings where height and space conditions are limited
- Moves vehicles that are on fire or generate dangerous fumes
- Moves vehicle that is parked inappropriately i.e., in a fire lane
- Handle damaged vehicles on freeways with the operator safely placed behind the guard rail
- Easily lifts / salvages vehicles that are not completely damaged

Wherever a safe distance is necessary, or the space is tight - the R-3500 is an invaluable help. The operator can remote control the R-3500 and still be in full control of the operation up to 100 meters away.







#### R-3500 specification. (Emergency)

Function: R-3500 is fully remote controlled. All functions can be operated by a person up to 100 meters away from the unit.

The Mover-unit and Flatbed are galvanically separated, thus eliminating the risk of electric shock and ensuring the R-3500 can safely recover EVs. The Pickup platform can be inserted under the damaged vehicle at any angle from the R-3500 main unit, in other words it does not have to be in a straight line in front of or behind the damaged vehicle.

The pickup platform's hydraulic system can lift the damaged vehicle up to 600 mm off the surface. The R-3500 can then maneuver the damaged vehicle freely - without using of additional personnel or equipment!

If the damaged vehicle is too low to allow the platform to driven under it (i.e., where the car has lost one or more tires) a 2495kg winch is fitted to the R-3500, which can pull the crashed vehicle up onto the pick-up platform. The winch can also be used as lashing during transport.

#### **During maneuvering:**

The R-3500's remote control constantly shows the slope of the mover. An acoustic warning sounds if the maximum permissible slope is exceeded.

The lifting height can be adjusted individually front and rear, allowing an easy salvage from e.g., a multi-level parking garage; on ferry-ramps etc. that would otherwise make the salvage impossible.

#### **Construction:**

The frame is powder-coated and high-strength steel, All hydraulic functions are secured against hose breakage. The pick-up platform is made of 5 mm stainless steel, which is ideal for many years of extensive use. The top plate can be easily replaced. The sloping ramp make it easy loading of the vehicles.

First Mover R-3500 - Pictures from live fire tests at Shell in Arnhem 2023.



**Delivery of First-Mover R-3500 to Shell Amsterdam** 







#### R-3500 specification. (Recovery)

R-3500 lifts the vehicle via the wheels instead of on the bottom of the vehicle as (Emergency).

When dismantling lifting shafts, The R-3500 (Recovery) can be used for the same functions as (Emergency)

Maximum wheelbase length approximately 3,600 mm (i.e., Tesla Model X / Mercedes S-Class)

Minimum length of wheelbase 1,600 mm

Maximum weight 3.500 kg

The Mover-unit and Flatbed are galvanically separated, thus eliminating the risk of electric shock and ensuring the R-3500 can safely recover EVs.

#### **Functional description**

**R-3500 Recovery** is inserted under the crashed vehicle without lifting the axles \* mounted.

When is located under the vehicle, the lifting shafts is mounted - They can be individually adjusted i.e., to compensate for a damaged or missing wheel. After mounting the lifting shafts, a lashing can be mounted between the two lifting shafts.

The wrecked vehicle can then be lifted from its position and moved without the use of additional personnel or equipment!

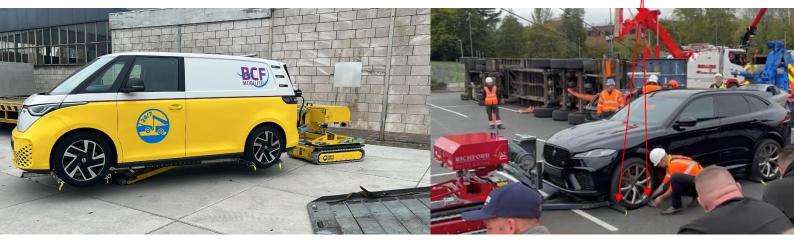
#### Image description of features:

Lifting shafts system:



Storage system for lifting shafts-

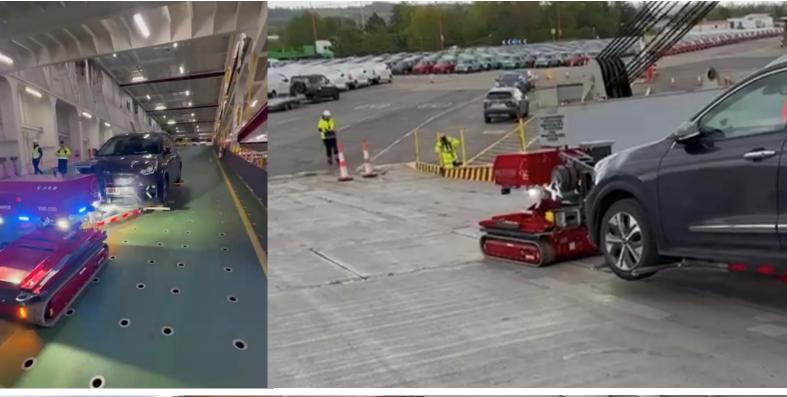
Lifting points-







Pictures from First-Mover on assignments











## **Driving on ramps increase:**

R-3500 can drive at up to 12°/15° slope and the vehicle can be hoisted 600 mm from the surface - depending on surface conditions



# Functional testing of R-3500 maximum lift 3500 kg with test bench







#### First Mover R-3500 Technical specifications:

 Speed
 4 Km/h

 Power (max)
 3,4 kW

 Load capacity (only mover)
 2200kg

 Net weight
 500kg

Net weight 500kg
Operating time. can be modulated 4-5 hours
Charging time 8-9 hours
Charge voltage 230v/10Amp.

Charge voltage 230V/10Amp.

Maximum slope 45°

Remote control for all functions. 100 meters

Power bank Battery 24v 260 Amp.

Flatbed:

Mover:

Load capacity Flatbed 3.500 kg 1.880 kg Net weight (with mover) FME Total weight - (maximum load) 5.380 kg Lifting system Electro-hydraulic 12°/15° Maximum slope - Forward / Backward (mover) Width 1.080mm Height of lifting platform 115 mm Length (total module) can be modulated\* 6.100 mm Length (Flatbed-Without) can be modulated\* 5.700 mm 4.100 mm

Length (Flatbed pickup platform) (from winch and back)4.100 mmLength Mover-unit1.260 mmLifting height (Flatbed)600 mm

Remote control for all functions.

Operating time. can be modulated (F17)

4-5 hours

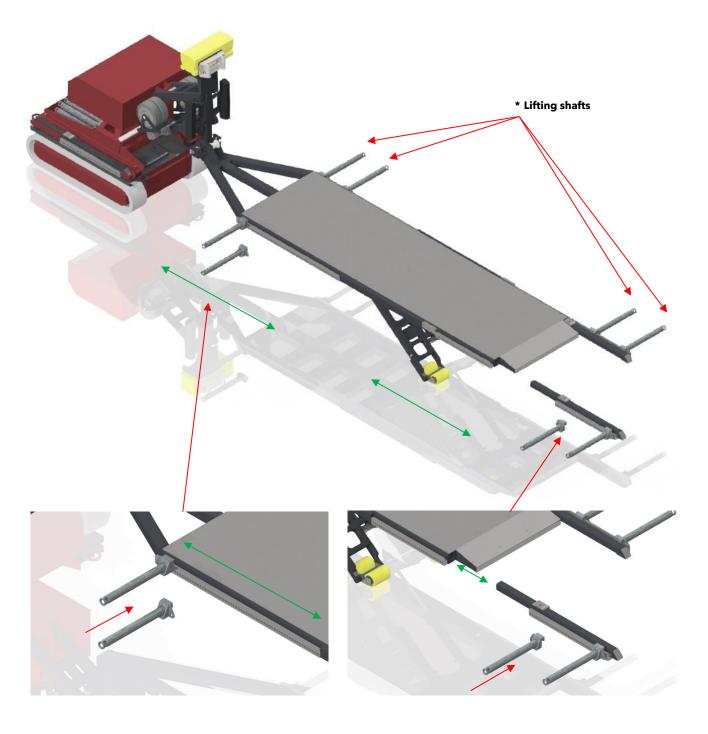
Charging time 8 hours
Charge voltage 230v/10Amp.

Power bank Battery 24v 100Amp.



Construction drawing First Mover R-3500 (F13-F18 Accessories/equipment)

## **Construction drawings of lifting principle (Recovery):**



Front- Lifting shafts

Rear - Lifting shafts /Extends lifting spear

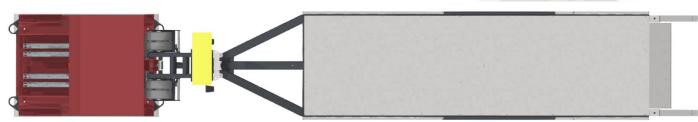




**Extraction spears Recovery/Emergency:** 

**Extraction spears (burning cars) Recovery/Emergency:** 





#### Lift axles location - not in use

#### **Pull Eyes**

Four fixed eye are fitted - two at each end.

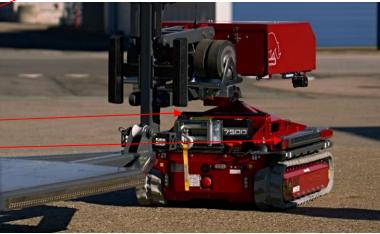


Extend spear location - storages when not in use

Safety beam at slope over 12°

Extend spear location - storages when not in use





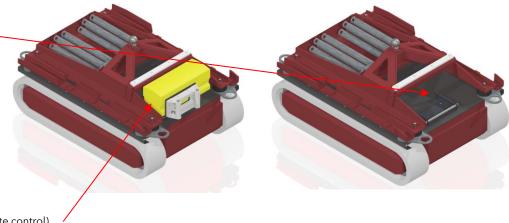




## F13 - Winch



**Bracket for Winch** 

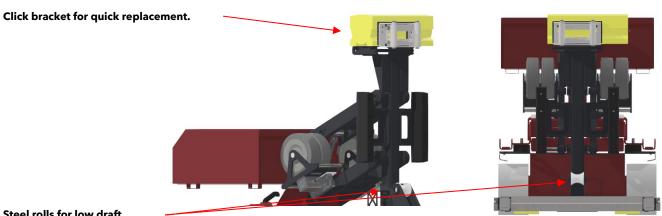


## Winch location (on Mover)

Controlled by mover. (In and out by remote control)

#### Winch on Flatbed:



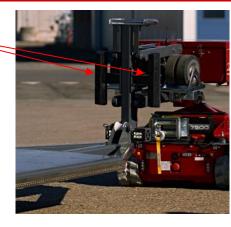


Steel rolls for low draft



#### **Rubber blocks (standard)**

Rubber fender for protection of the vehicle is placed on the front of the flatbed



#### Control box (standard)

Top shield - which can tilt open for maintenance and service.

2x12v 100Ah battery package

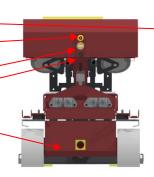
Prepared for compressor

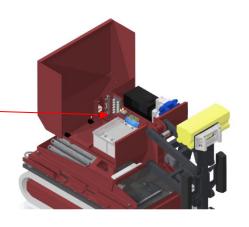
Charger for remote control battery

Emergency stop

Voltmeter (indication battery capacity)

Charging point for 230V

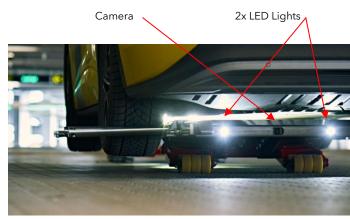




### F14 - Remote control with LCD screen and camera on flatbed

**F14 Option:** Remote control with LCD screen







#### F15 - Road wheels Maximum Payload 3500kg (Recovery)

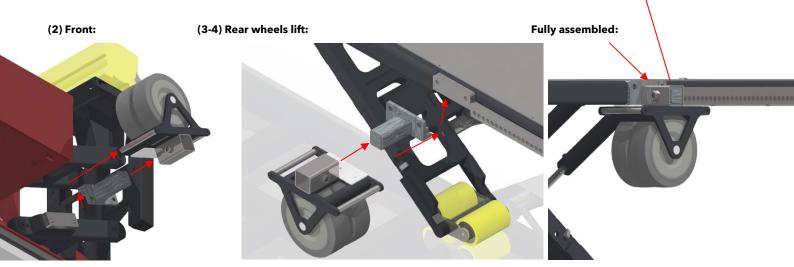
#### Position before the road wheels are mounted:



#### **Position with mounted Road wheels:**



- 1. lift the flatbed approx. 300mm from surface with the hydraulic system (vehicle on the flatbed)
- 2. Road wheels are removed from the bracket in the front (Road wheels + lifting bracket) (No tools)
- 3. The lifting bracket is mounted on the flatbed. (No tools)
- 4. Then the road wheel is moved over the axle and locked with a spring lock (No tools)
- 4. Lower flatbed down to O-position Ready for transport



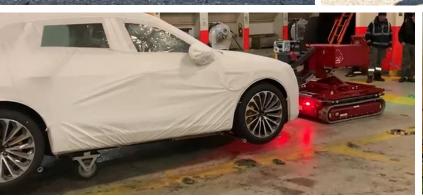


## F15 - Road wheels Maximum Payload 3500kg

Pictures from Road wheels in different situations

















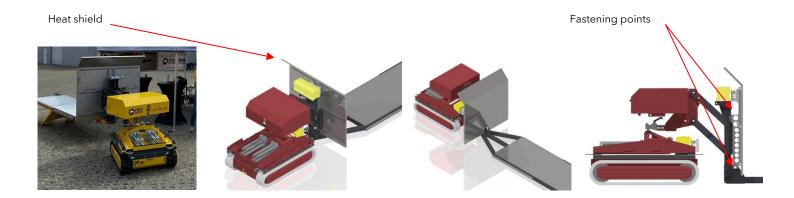




#### F16 - Heat shield

The protective heat shield is made of stainless steel plates Total weight is 25 kg.

Low pull snatch block for the winch can still be used with an attached heat shield. Light on the front cannot be used with a heat shield fitted.



## F18 - Compressor

Performance:

24v Max. 10bar







#### F19 - Trailer T1

**Description of trailer:** 3 axle galvanized trailer. 2 pcs. Loading ramps. - Bottom waterproof plywood.

Sheet length: approx. 5950mm

Total length trailer: approx. 7840mm

Width: 1920mm

Weight:

Trailer weight. 680kg

Trailer total weight (Can be weighed down to (R-3500+trailer) = 1880kg \* 2560kg







#### First Mover R-3500 (Emergency) - Standard Types

- 1- Mover Pro 2200
- 1- R-3500 (Emergency)
  - Pickup platform
  - Maximum lift on flatbed 3,500 kg.
  - Storage system on the mover
- 2- Extraction spears (Emergency)
- 1- Color: (red RAL 3003) (grey RAL 7024) (Option to purchase your own color)
- 1- Remote control:
  - All functions can be operated by a person up to 100 meters away

Continuously shows the slope of the platform. An acoustic warning sounds if the maximum permissible slope is exceeded.

The lifting height can be adjusted individually front and rear.

Visible operating functions in the dark

2 batteries incl. battery charger which is mounted on the flatbed. (Charge together with flatbed 220/230v)

- 1- LED light package (2 front light 2 work lamps 2 work lamps rear flatbed 3 Blue or yellow flash) Activated on remote control
- 1- 100Ah 24v battery
- 1- Winch 2495kg 12 Meter steel wire
- 1- Warning horn standard installation (controlled via remote control)
- 1- Green light forward and redlight Standard mounting
- 2- Charging cables 5m 220/230v (mover and flatbed have a built-in maintenance battery charger)
- 1- F12- Road wheel set ø250mm bracket on lifting frame (prepared for upgrade)
- 1- Operating manual/wiring diagram English
- 1- Training program (2 hours) for super users in Aarhus, Denmark







#### First Mover R-3500 (Recovery) - Standard Types

- 1- Mover Pro 2200
- 1- R-3500 (Recovery) lifts the vehicle on the wheels instead of on the bottom of the vehicle as (Emergency). When dismantling lifting shafts, R-3500 (Recovery) can be used for the same functions as described above in section (Emergency). Maximum wheelbase length 3,600 mm. Minimum length of wheelbase 1,600 mm The R-3500 can maneuver the vehicle easy without using of additional personnel or equipment!
  - Maximum lift on flatbed and lifting shafts 3,500 kg
  - Storage system on the mover for extending spears / lifting spears
- 2- Extended lifting spear
- 2- Extraction spears
- 1- Color: (red RAL 3003) (grey RAL 7024) (Option to purchase your own color)
- 1- Remote control:
  - All functions can be operated by a person up to 100 meters away
  - Continuously shows the slope of the platform. An acoustic warning sounds if the maximum permissible slope is exceeded.
  - The lifting height can be adjusted individually front and rear.
  - Visible operating functions in the dark
  - 2 batteries incl. battery charger which is mounted on the flatbed. (Charges together with flatbed 220/230v)
- 1- LED light package (2 front light 2 work lamps 2 work lamps rear flatbed 3 Blue or yellow flash) Activated on remote control
- 1- 100Ah 24v Battery
- 1- Winch 2495kg 12 Meter steel wire
- 1- Warning horn standard installation (controlled via remote control)
- 1- Green light forward and redlight (Standard mounting)
- 2- Charging cables 5m 220/230v (mover and flatbed have a built-in maintenance battery charger)
- 1- F12- Road wheel set ø250mm bracket on lifting frame (prepared for upgrade)
- 1- Operating manual/wiring diagram English
- 1- Training of 2 hours for super users in Aarhus









## Accessories/equipment

#### F13 - Winch 2495kg 12 Meter steel wire

Warn 2495kg 24v winch with 12meter steel wire

Mounted with brackets for two possible locations (can be operated on mover and flatbed)

Detachable wire guide Pom-c eye

Controlled with FME / FMR units' remote control

#### F14 - Remote control with LCD screen and camera on flatbed

#### F15 - Road wheels (only R-3500 Recovery)

Two sets of auxiliary wheels with two wheels on each axle -

Makes it possible to drive on stones or poor surfaces

Price 2 Pcs including storage bracket

#### F16 - Heat shield

The protective heat shield is made of stainless steel plates - Weight 25kg.

Snatch block for low pull on the winch can be used with an attached heat shield

Light on the front cannot be used with a heat shield fitted.

#### F18 - Compressor

Performance: 24v 10,bar

The air outlet is placed under the front module. Start/stop is placed in front of the module.



## Warranty:

24-month warranty. Wearing parts are excluded.

Annual inspection is a requirement for a 24-month warranty.

## **Annual statutory inspection**

Service includes:

Thorough testing of the unit - transport and lubrication.

Interval of 12 months depending on use. The annual Inspection must be completed to maintain 24 months warranty.

#### **Technical info:**

First-Mover R-3500 is CE-Certified in accordance with the Machinery Directive.

First-Mover R-3500 is a patented system.





#### **Contact information**

Manufacturing industries

## BS Engineering ApS

Samsøvej 2

8382 Hinnerup

Denmark

Cvr. Nr. 41 33 07 59

Phone + 45 42 13 48 99

E-Mail <u>info@bssupport.dk</u>

Web. www.first-mover.dk

# Your local dealer



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