

UP ARMORED-HHV robotic transporter installation and operations guide

For vehicles with 2"x8" bumper

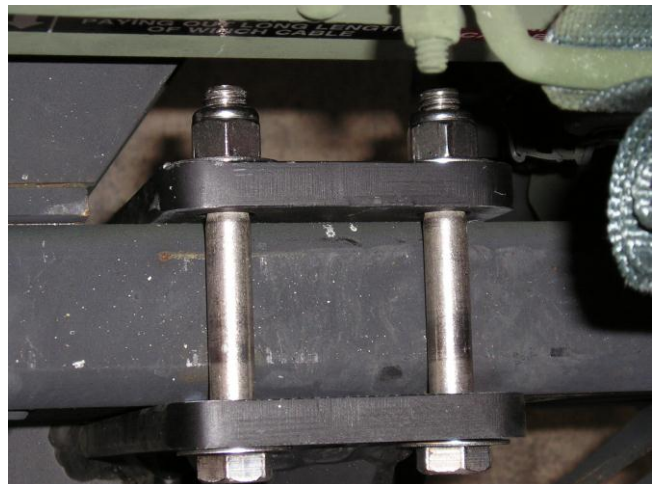


Tools required for first assembly and installation: Two 3/4" wrenches, One 9/16" wrench

Tools required for reinstallation: Two 3/4" wrenches

Note: Two 3/4" and One 9/16" wrenches are supplied with each transporter.

The operations guide is for an ANDROS MARK VI with Wheels, however the transporter can be used (if it fits) for any robot under 500LB.



Bolt platform tube to bumper, make sure winch umbilical connector is usable (two 3/4" wrenches needed).



Remove safety retainer pins (3 places).



Slide the first platform all the way on the tube (make sure ramp is on the passenger side).

Insert safety retainer pin in hole nearest bumper.

Slide platform back so it just hits the safety retainer pin.

Tighten the 4 bolts under the platform that secure the platform to the tube (9/16" wrench needed).

Note: the safety retainer pin is used for both location and keeping the ramp from sliding off of the tube if the bolts should become loose.



Slide the second platform all the way to the first platform.

If you are transporting an ANDROS MARK VI with wheels insert a safety retainer pin in the second hole from the bumper and slide the platform back so it just hits the safety retainer pin.

If not, adjust the spacing between the platforms for the specific vehicle.

Tighten the 4 bolts under the platform that secure the platform to the tube (9/16" wrench needed).



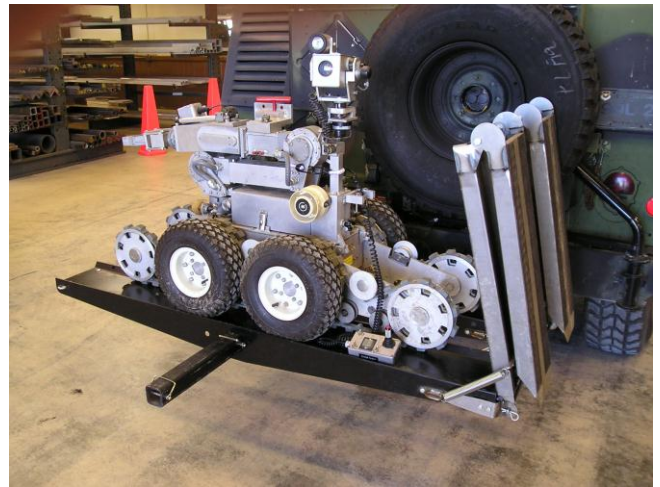
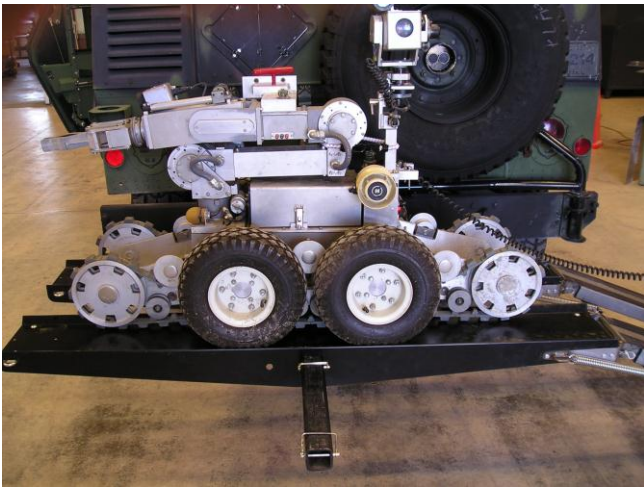
Insert safety retainer pin in hole at the end of the tube (This will keep the platforms from sliding off if the bolts should become loose).



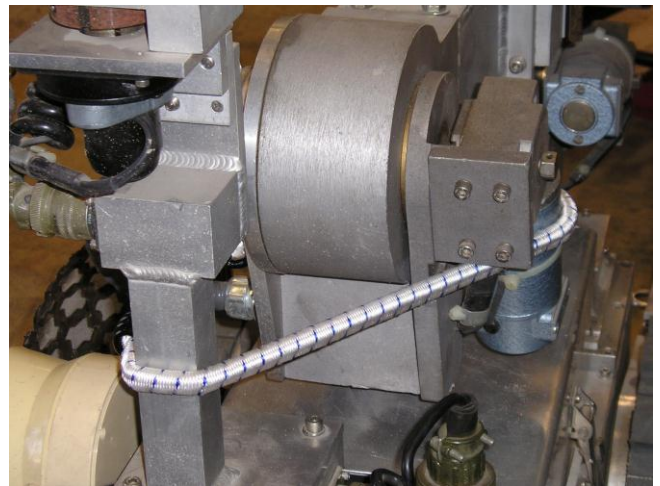
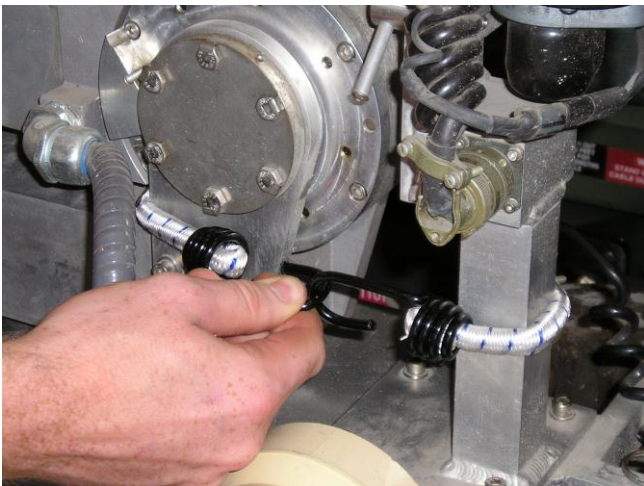
Remove hinge pin from platform and insert hinge pin between platform and ramp and secure with retainer clip.



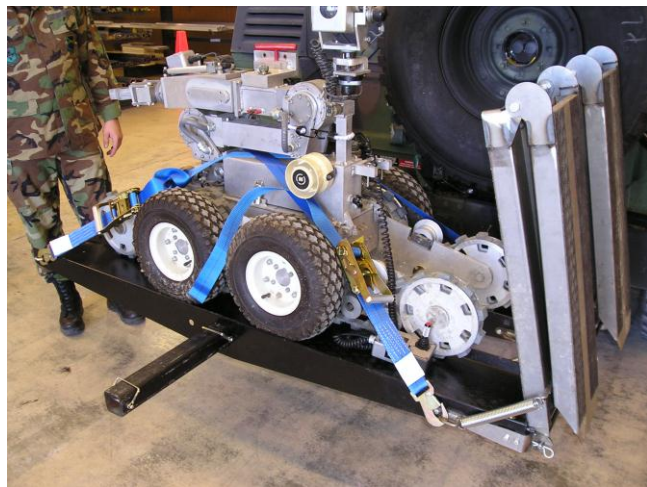
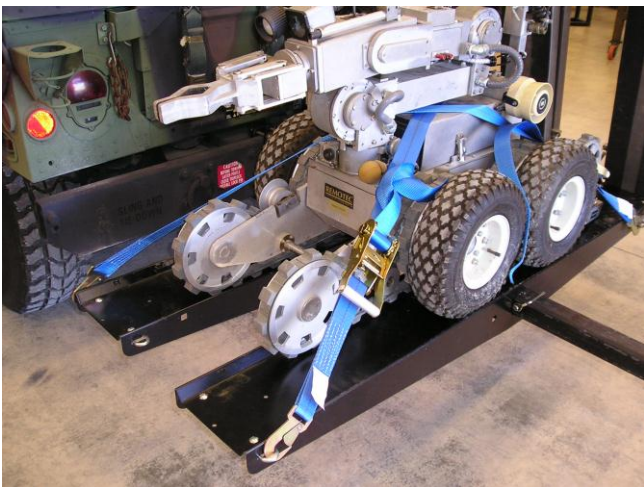
Lower ramps and load vehicle.



Center MARK VI on tube and fold ramps to travel position.

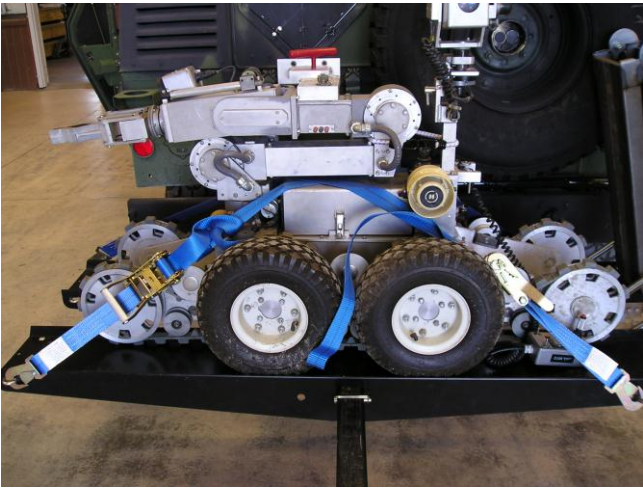


Secure arm with bungee cord (helps reduce damage to arm when transporting).



Strap robot to platform as shown.

Please follow this method explicitly as testing indicated this is the most secure and least damaging method.



Make sure straps do not go over arm as arm may be damaged by excessive loads.



Place cover over robot and secure with bungee cords.



Remove transporter by removing tube bolts and sliding off of bumper.



Reinstall tube bolts so they don't get lost.