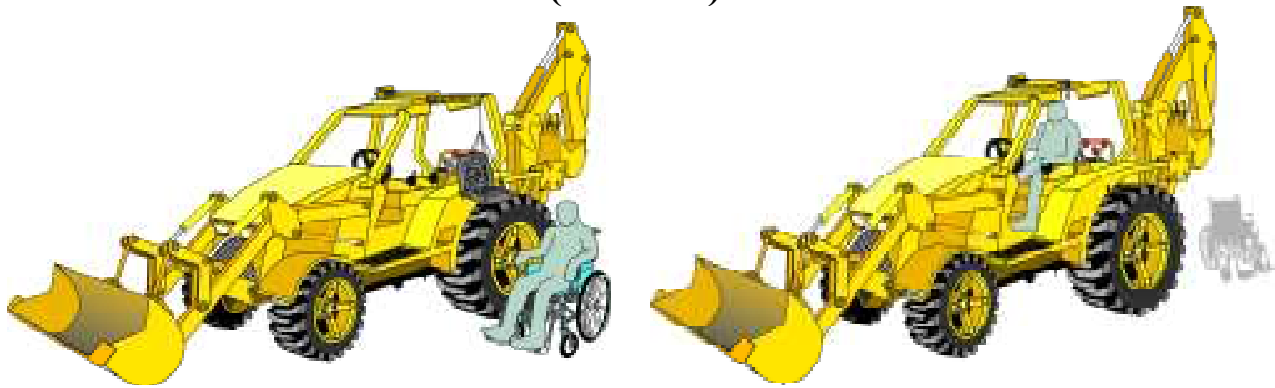


Amputee Support System-Integrating Solution Technologies (ASSIST)



Current Problem: According to the US Army Office of the Surgeon General, between September 2001 and January 12, 2009, there were 1,286 amputations in Operation Iraqi Freedom (OIF), Operation Enduring Freedom (OEF), and unaffiliated conflicts. The total includes 935 major limb amputations and 351 minor amputations. Over 50% of these amputees were wounded by improvised explosive devices (IEDs). In addition, The Department of Health and Human Services (2010) reports an average of 185,000 new amputations occur yearly in the general population. With the implied value of statistical injury of an amputee at \$1,300,000, the cost of the prosthetic limb between \$12,000 and \$100,000, and annual medical costs between \$45,000 to \$60,000, a means to provide quality-of-life that also returns cost needs to be addressed. Also, approximately 8,000 people become paraplegic annually in the general population.

Current Solution: Add to an existing commercial backhoe/loader a lift and control system so that an amputee/paraplegic can control the vehicle's function from either his wheelchair or from the operator's seat within the vehicle. By adding a series of cameras the user can operate the vehicle from a distance, or be lifted into the operators seat and travel with the vehicle to the construction site.

Benefit: With both manual and robotic controls the backhoe/loader can be used as a construction tool that will help users regain community re-integration and quality-of-life. In addition, the vehicle can be used and operated with in-place controls as a standard backhoe/loader vehicle. Such operators will become private contractors and offer their services to support general construction and earthwork. By doing so they will pay local, State, and Federal taxes.

Group	Use	Availability	Cross Reference	Technical Reference	Price
Military	Secondary	120 days	A1, A2, A3, A3a, A4, A5, A6, A7, A8	B1, B2, B3	\$60,000
Construction	Primary				
Industrial Mining	Secondary				
Homeland Security	Secondary				

U.S. Patents Pending.

www.argusrobotics.com
 P.O. Box 335 – Hurricane, WV 25526
john@argusrobotics.com-- 304-767-4576