

AHV-IV™ RENEGADE

FEATURES

- Up to 80,000 lbs of peak force and frequency limit of <1 Hz to 250 Hz*
- Fully integrated with INOVA's Vib Pro™ and VibPro HD™ source controllers for greater control, timing, and QC
- Durable, rectangular baseplate reinforced to support long term field use in comparison with I-Beam structured baseplates.
- The AHV-IV Renegade is produced using an advanced reaction mass assembly which makes it easier to detect and repair failures in the field.
- INOVA's Patented Pre-Loaded Stilt Structure prolongs the life of parts
- Certified Roll-Over Protection
- Simplified Hydraulics
- Articulated, Oscillated Steering
- High Capacity Hydraulic Cooling

TECHNICAL SPECIFICATIONS - PLS-380 ACTUATOR

Shaker Model:	P-Wave Vibrator; PLS-380
Peak Force:	356 kN (80,000 lb)
Piston Area:	167.2 sq cm (25.92 sq in)
Mass Weight:	5,910 kg (13,029 lb)
Driven Weight:	1,985 kg (4,377 lb)
Useable Stroke:	10.16 cm (4.0 in p-p)
Frequency Limit:	1 Hz to 250 Hz*
Mass Accumulators:	2 x 1 L (0.26 gal.); in-line
Lift Stroke:	114.3 cm (45 in)
Balance Method:	Airbags
Isolation Method:	Airbags
Hydraulic System:	Closed-loop
Hydraulic System Pumps:	2 x 119 cc (7.25 in ³); Denison P-7
Servo Valve:	Atlas 240H (with DR modification)
Pilot Valve:	MOOG

* Max peak force from 5.5 Hz



Hydraulic Fluid Filtration:	3-micron absolute servo filter; 3.5-micron absolute, high and low pressure, triple element
Accumulators:	2 x 19 L (5 gal); bladder-type
Heat Exchanger:	Steel core; multi-wing fan; hydraulically-driven
Reservoir:	170 L (45 gal)
Baseplate Type:	Reinforced rectangular
Baseplate Area:	2.5 m ² (3,864 in ²)
Baseplate Clearance:	46 cm (18 in) - Tires 58 cm (23 in) - Tracks

TECHNICAL SPECIFICATIONS - CHASSIS

Engine:	Detroit Diesel – Series 60, 14 L (425 BHP @ 1,900 RPM)
Air Cleaner:	Dry-type, 3-stage with pre-cleaner
Cooling:	Water-cooled radiator to +50 °C (+122 °F) for hot climate and -50 °C (-58 °F) for cold climate
Air Compressor:	13 CFM
System Warning Device:	Engine shutdown system for low oil pressure, high engine water temperature, and low coolant level

AHV-IV™ RENEGADE

TECHNICAL SPECIFICATIONS - CHASSIS (CON'T)

Fuel Capacity:	757.08 L (200 gal)
Drive Pumps:	100 cc (6.1 in ³) with electric displacement control
Drive Motors:	250 cc (15.25 in ³) variable volume with electronic control for 6 forward and 2 reverse speeds
Frame:	Solid-steel frame for maximum strength and reliability; 35 articulated; hydraulic power steering; 16.5 oscillation center joint
Axles:	Inboard planetary axle with enclosed wet disc brakes and differential lock
Gearboxes:	1.7 to 1 ratio reduction
Cab:	Fabricated-steel construction; high visibility with adjustable driver and passenger seat; two, 3-point shoulder belts; air-conditioning; heater; defroster; wiper; dome light; and side-mounted mirrors
Electrical:	+24 V start; +12 V run with 110-amp alternator and two, heavy-duty, +12 V, 8D batteries; battery - disconnect switch
Tire Options:	Sand Tire: 167 cm x 112 cm x 64 cm (66 in x 44 in x 25 in) ; 20 ply minimum Tracks: 91.44 cm (36 in) wide rubber track

PHYSICAL SPECIFICATIONS

Buggy Length:	10.01 m (400 in)
Buggy Width:	3.4 m (134 in) for 66 x 44 tires on standard axle** 4.0 m (157 in) for 66 x 44 tires on heavy axle** 3.0 m (118 in) for tracks on standard axle 3.58 m (141 in) for tracks on heavy axle
Height (maximum):	3.50 m (138 in) for tires 3.68 m (145 in) for tracks
Wheelbase:	4.77 m (188 in) N/A for tracks
Turning radius – inside:	6.93 m (273 in) N/A for tracks
Speed:	20.4 km/hr (12.7 mph) tires, heavy axle 20.9 km/hr (13 mph) tracks, standard axle
Gradeability:	Tires: 60%; (31 degrees) heavy axle Tracks: 51%; (27 degrees) standard axle
Gross Vehicle Weight:	Tires: 37,300 kg (82,300 lb) Tracks: 41,855 kg (92,080 lb)
Hold-down Weight:	Tires: 36,287 kg (80,000 lb) at 2,850 psi Tracks: 36,287 kg (80,000 lb) at 2,850 psi
Front axle Weight:	Tires: 18,750 kg (41,350 lb) Tracks: 20,245 kg (44,540 lb)
Rear axle Weight:	Tires: 18,585 kg (40,950 lb) Tracks: 21,609 kg (47,540 lb)

**Buggy width will vary depending on tires selected

AHV-IV™ RENEGADE

COMMON VEHICLE OPTIONS***

- Winch with capacity of 13,608 kg (30,000 lb)
- Engine upgrade to 500 BHP
- Various Tire and Wheel Options On Request
- Tracks
 - Suitable for Artic or Desert Operations
- 295 L (78 gal) Hydraulic reservoir
- 1135 L (300 gal) fuel tank
- 160-amp alternator
- Accumulator charging manifold kit
- Automatic greasing system
- Central tire inflation system
- Wiggins fuel system
- Safety Kits
 - Emergency stop, fire extinguisher, backup camera