## 4450 4x4 AMPHIBIOUS UTILITY VEHICLE





Vehicle pictured may feature optional equipment.





Rolligon's model 4450 vehicle is designed for light duty application requiring carrying capacities up to 4,000 lbs. (1814 kg). The unit can be ordered with a small three point hitch and live P.T.O. Box at the rear frame for light implement use. The Rolligon 40 x 50 - 12 tire comes standard on the unit with an optional 54 x 68 - 18 Rolligon Tire for extremely low ground pressure applications. Higher ground pressure applications allow the use of small "Terra Tires".

The 4450 is full time four wheel drive (4x4) and is amphibious with Rolligon tires. The vehicle is easy to operate and maintain and can be ordered with full hydrostatic drive for low speed operations. This versatile, small vehicle is ideal for pipeline construction support, dredging and dragline support, a full hauler, personnel carrier, general utility vehicle and general equipment support unit.

#### **ENGINE OPTIONS (All Diesel)**

 Std: Cummins 4B3.9
 65 BHP (49 kw) @ 2500 RPM

 Opt: Cummins 4BT3.9
 97 BHP (73 kw) @ 2500 RPM

 Opt: Deere 3164 NA
 52 BHP (39 kw) @ 2500 RPM

Heavy duty cooling system is standard. Air cooled diesel engines also available.

#### TRANSMISSION

Std: Manual, four (4) speed forward, one (1) speed reverse.

Heavy duty clutch. Rolligon transfer case. Ratio - 1:1

Opt: Full Hydrostatic drive.

#### AXLES

Std: Dana 70 series bolted to frame member.

Opt: Dana 70 HD series bolted to frame member.

(70 HD required with Rolligon 54 x 68 - 18 tires.

#### STEERING

Full hydraulic power steering, single cylinder. Steering wheel on center line of vehicle, frames articulate at pivot section. Opt: Joy stick steering on operator's chair.

#### BRAKES

Foot pedal operated drum brake on transmission input. Dynamic braking on hydrostatic drive units.

#### TIRES AND WHEELS

Std: Rolligon 40 x 50 - 12 V2 cleated rubber tires. 20 ply strength grade with integral cleats. (Minimum tire for amphibious operations.)

Opt: Rolligon 54 x 68 - 18 - Highly amphibious.

Opt: Goodyear 44 x 41.00 - 20 - Not amphibious.

All Rolligon tires available in 20, 40 or 60 ply strength grades, and features integral cleats molded into tire at curing, not added after cure.

Std: Wheels: All aluminum assembly.

Opt: Wheels: All steel wheel, alum. keeper rings.

#### **OPERATOR'S STATION**

Located centerline of vehicle, single seat with fold down arm rests. Full set engine gauges, keyed ignition switch and headlight switches. Designed for operator comfort and safety. Seat mounted on aluminum platform.

#### FRAME

Six inch (15 cm) T-1 channel with articulation steering section integral to frame. Roll-pivot section allows independent front/rear frame roll to 28 degrees left or right. Stops prevent excessive roll.

All frame attachments bolt in place.

#### REAR CARGO DECK - Standard

All aluminum construction with stake pockets.

Dimensions: Length: 5 ft. 0 in. (1.52 m)

Width: 6 ft. 0 on. (1.82 m)

Assembly bolted to rear frame, houses fuel tank.

Fuel capacity: 20 U.S. Gallons (75 L)

#### FRONT WINCH

P.T.O. driven from transmission.

Capacity: 8,000 lbs.(3628 kg).

Complete with 100 ft. (30 m) steel line, hook and tail chain.

Operated from driver seat.

#### ACCESSORIES - Standard

Dual headlights

Tire inflation kit Tire puncture kit

Front grill guard

Wheel lug wrench

Operation and Maintenance Manual

#### **OPERATION CHARACTERISTICS-Standard Vehicle**

Empty Vehicle Weight	4,500 lbs.	(20	041 kg)
Payload, Land		(18	814 kg)
Payload Amphibious	1,500 lbs.	( (	680 kg)
Ground Clearance, 40x50-12_	20 in	(	51 om)
Ground Clearance 54x68-18_	27 in	(	68 om)
Forward Gradeability	60 %		
Side Gradeability	40%		
Maximum Forward Speed	24 mph	(38	8 kmph)
Turning Radius	20 ft.	(	6 m)
Dimensions:			
Length	14 ft.	(	4.2 m)
Width, 40x50-12	10 ft.	(	3.0 m)
54x68-18	13 ft.	(	3.9 m)
Height, 40x50-12	7 ft.	(	2.1 m)
54x68-18	8 ft.	(	2.4 m)
Fuel Capacity	20 gal.	(	75 1)

For additional please contact:

#### ROLLIGON CORPORATION

10635 BRIGHTON LANE

STAFFORD, TEXAS 77477 U.S.A.

TELEPHONE: (713) 495-1140

FAX: (713) 495-1145, TELEX: 79-0515

# 4x4 HYDRODRIVE ROUGHNECK TRACTOR



Vehicle shown with optional climatized cab and rolligon 72 x 96-28 V6 tires.





Rolligon's 4x4 Hydrodrive Roughneck Tractor is a full hydrostatic, four wheel drive (4x4) vehicle designed for low and extremely low ground pressure applications. The unit features full flow hydraulic power take off outlets at the rear frame which support a three point hitch and hydraulic lift/tilt system available in SAE category two or three class. The hydrostatic drive system is comprised of high pressure, high flow pumps and motors capable of delivering up to 120 gallons (454 I) of fluid per minute at up to 5,000 psi for heavy duty implement use. The unit is capable of travel speeds ranging between 5 feet (1.5 m) per minute and 24 miles per hour (38 km/h).

Operator comfort and safety are paramount in the design of this unit, resulting in more efficient and profitable operations. The operator seat swivels 320 degrees as do all major vehicle controls: steering, three point hitch lift/tilt, and forward and reverse direction and speed control. These features allow the operator to drive the unit forward or reverse in maximum comfort. Steering is accomplished through joy stick control, a much more desirable system over the conventional steering wheel. A full range of hydraulic implements are available: brush cutters, mowers, rotary ditchers, etc.

#### **ENGINE OPTIONS (All Diesel)**

Std: Caterpillar 3208 NA, Opt: Caterpillar 3208 T, Opt: Cummins 6CT8.3, Opt: Cummins 6CTA8.3, Caterpillar 3208 T, Opt: Cummins 6CTA8.3, Caterpillar 3208 T, Opt: Cummins 6CTA8.3, Caterpillar 3208 NA, Opt: Caterpillar 3208 NA, Opt: Caterpillar 3208 NA, Opt: Caterpillar 3208 NA, Opt: Caterpillar 3208 T, Opt: Caterpilla

#### **TRANSMISSION**

Full hydrostatic four speed transmission driven by hydraulic pump powered from engine mounted triple pump drive. One pump drive powers traction drive, second pump drive powers P.T.O. implement drive, third powers ancillary systems.

#### **AXLES**

Std: Heavy duty 22,000 lb (9,979 kg) planetaries. Opt: For Rolligon 96 inch wide tire installation, 36,000 lb (16,329 kg) planetaries required.

#### STEERING

Full hydraulic power steering, dual cylinders. Steering joy stick control mounted on operator's chair arm rest, seat and control swivel.

Unit easily steers forward and reverse direction.

#### BRAKES

Hydraulic dynamic brakes provided by vehicle hydraulic traction drive system.

System identical for forward and reverse.

#### TIRES AND WHEELS

Std: Rolligon 72 x 68 - 28 V2 cleated rubber tires. 20 ply strength grade with integral cleats.

Opt: Rolligon 72 x 82 - 28 (Standard axle)

Opt: Rolligon 72 x 96 - 28 (Requires Heavy axle)

All Rolligon tires available in 20, 40 or 60 ply strength grades, and features integral cleats molded into tire at curing, not added after cure.

All steel wheel and steel keeper ring assemblies standard equipment for all tire sizes.

#### **OPERATOR'S STATION**

Located centerline of vehicle, single seat with fold down arm rests. Full set engine gauges, keyed ignition switch and headlight switches. Station protectedd by R.O.P.S. with slide in/out lexan glasses on front, rear and right side. Operator seat and controls swivel 320 deg.

#### **FRAME**

Tubular front and rear frame,  $3" \times 8" \times 0.25"$  wall  $(7.6 \times 20.3 \times .63 \text{ cm})$  alloy steel. Front and Rear frame joined through articulation joint. Front axles oscillates under front frame. Frame designed for bolt on mounting of major components.

Steering section heavy reinforcement.

#### REAR THREE POINT HITCH - Standard

At rear of rear frame vehicle features an S.A.E. category two (2) three point hitch and hydraulic lift/tilt system. Activated by dual hydraulic cylinders system capable of lifting 5,000 lb (2,268 kg) implements. All components T-1 steel.

#### POWER TAKE OFF

Std: Full hydraulic flow and pressure at vehicle three point hitch, quick disconnects attach.

Opt: Rolligon heavy duty live P.T.O. box mounted at rear of frame, provides 540 RPM, 170 hp.

Opt: 1000 RPM P.T.O. Box.

#### ACCESSORIES - Standard

Dual headlights

Tire inflation kit

Tire puncture kit

Front grill guard

Remote Mounted Oil Cooler

90 Gallon (340 I) Hyd. Tank

Removable Intake Screens

Precleaner Air Intake Sys.

Wheel lug wrench

Operation and Maintenance Manual

#### **OPERATION CHARACTERISTICS-Standard Vehicle**

Empty Vehicle Weight (Std)	17,500 lbs.	(7938 kg)
Ground Pressure w/72x68-28	1.5 psi	(0.1 kg/cm)
Ground Pressure w/72x82-28	1.1 psi	(0.07 kg/cm)
Ground Pressure w/72x96-28	0.9 psi	(0.06 kg/cm)
Ground Clearance	30 in	( 76 cm)
Forward Gradeability	60 %	10 (200)
Side Gradeability	40%	
Maximum Forward Speed	24 mph	(38 kmph)
Turning Radius	16 ft.	( 4.8 m)
Dimensions:		15 45
Length	21 ft.	( 6.4 m)
Width, 72x68-28	15 ft.	( 4.5 m)
72x82-18	17 ft.	( 5.2 m)
72x96-28	19 ft.	( 5.8 m)
Height	12 ft.	( 3.6 m)
Fuel Capacity	120 gal.	( 454 I)

For additional information please contact:

## ROLLIGON CORPORATION

10635 BRIGHTON LANE STAFFORD, TEXAS 77477 U.S.A. TELEPHONE: (281) 495-1140

FAX: (281) 495-1145

INTERNET: www.rolligon.com

## Model RA-15 (4x4) All Terrain-Four Wheel Drive





Vehicle shown with 28L x 26 tires.

The 4x4 RA-15 vehicle is designed to be a versatile and long life unit. Capable of mounting many different types of off-road tires, the unit finds great application in the geophysical industry as well as in general utility work.

More Rolligon RA-15 vehicles are at work on the North Slope of Alaska than any other type of Rolligon. The rugged frame design and smooth ride of the unit make it ideal for sustained, harsh environment applications. Arctic cabs and winterization packages are available.

The vehicle comes standard equipped with a 152 h.p. diesel engine, powershift transmission with Power Take-Off, comfortable operator

station, and heavy duty axles with enclosed hydraulic wet disc brakes. The wide rear frame will accept a utility bed, flat cargo deck, geophysical drill rig, geophone cage, water tank, fuel tank, seismic cabin or other frame mounted equipment. The RA-15 vehicle is used extensively as a seismic drill rig carrier, water tank support unit, or derrick/digger carrier, for the utility industry.

When equipped with the Rolligon 72 X 68-28 tire the unit is completely amphibious. This and the other time proven features make the Rolligon RA-15 model the choice for safe, comfortable, and profitable off-highway transportation.





Rolligon standard 4 x 4 RA-15 vehicle with Rolligon 72 x 68 - 28 high flotation tires.

#### **ENGINE OPTIONS (All Diesel)**

Std: Cummins 6BT5.9 152 BHP (114 kw) @2500 RPM Opt: John Deere 6068T 170 BHP (127 kw) @2500 RPM Opt: Cummins 6B5.9 119 BHP (89 kw) @2600 RPM Opt: Cummins 6BTA5.9 174 BHP (130 kw) @2500 RPM Heavy duty air intake system, high capacity cooling with various intake configurations.

Other engines available on request.

#### TRANSMISSION

Std: Six speed powershift. Drives steering pump and hydraulic system for accessories. Transmission

equipped with oil cooler.

Opt Full Hydrostatic drive system.

Mechanical Transmission

hi/lo range

#### **AXLES**

Std: Heavy duty 22,000 lb (9,979 kg) planetaries.

Opt: For Rolligon 96 inch wide tire installation 36,000 lb.

(16,329 kg) planetaries required.

Rear Axle: Fixed Mount-Front Axle: Oscillation

#### **STEERING**

Full hydraulic power steering, dual cylinders. Steering wheel located on centerline of vehicle for ease of driving judgment. Opt: Joy stick steering control available.

Steering is articulated.

#### **BRAKES**

Hydraulic enclosed wet disc brakes housed in each end of planetary axle. Engaged by foot pedal. All four (4) wheels brake.

All brakes completely sealed and water proof. Parking Brake: Standard

#### TIRES AND WHEELS

Buyers Choice:

Firestone 28L x 26

Goodyear Rice and Cane Tractor Tire

Goodyear 67 x 34-25 Flo Grip Tire

Goodyear 66 x 43-25 Terra Tire

Rolligon 72 x 68-28 tire-Extremely low ground

pressure plus amphibious capabilities

All Rolligon tires available in 20, 40, or 60 ply strength grades, and features integral cleats molded into tire at curing.

#### **OPERATOR'S STATION - Forward Mount**

Located centerline of vehicle, single seat with fold down arm rests. Full set gauges, keyed ignition switch and headlight switches. Equipped with fold down and telescoping steering column.

Optional R.O.P.S. available.

Optional canopy top/sun shield available.

Optional enclosed cabins available.

#### FRAME

Tubular front and rear frame, 3" x 8" x 0.5" heavy wall (7.6~ 20.3 cm) alloy steel. Front and Rear frame joined through articulation joint. Front axles oscillates under front frame. Frame designed for bolt on mounting of major components.

Steering section reinforced.

#### **VEHICLE OPTIONS**

- Category II three point hitch (5000 #) with hydraulic lift/tilt system
- · Front stabilizer blade
- Arctic winterization packages
- · Roll-over protection system
- · Fully enclosed cabin with air conditioning and heat
- · Murphy safety engine shut-down system

#### ACCESSORIES - Standard

Dual headlights Tire puncture kit Front grill guard

Wheel lug wrench

Telescoping steering column Seat belts

Operation and maintenance manual

#### **OPERATION CHARACTERISTICS-Standard Vehicle**

Empty Vehi	cle Weight Std.	12,500	(5670 kg)
Ground Pre	ssure w/172x68-28	1.5 psi	(0.1 kg/cm)
Ground Pre	ssure w/66x43-25	5.1 psi	(0.36 kg/cm)
Ground Pre	ssure Rice & Cane	7.9 psi	(0.55 kg/cm)
Ground Cle	arance	30 in	(76 cm)
Forward Gr	adeability	60%	35, 31
Side Grade	ability	40%	
Maximum F	orward Speed	24 mph	(38 kmph)
Turning Rad	dius	16 ft.	(4.8 m)
Dimensions			(8)
Length		24 ft.	(7.3 m)
Width	72x68-28	15 ft.	(4.5 m)
	66x43-25	11 ft.	(3.3 m)
	Rice & Cane	8 ft.	(2.4 m)
Height	72x68-28	9.6 ft.	(2.9 m)
Fuel Capac		40-80 gal.	(265 I)

For additional information, please contact:

#### ROLLIGON CORPORATION

10635 BRIGHTON LANE

STAFFORD, TEXAS 77477 U.S.A.

TELEPHONE: (281) 495-1140

FAX: (281) 495-1145

Internet: www.rolligon.com

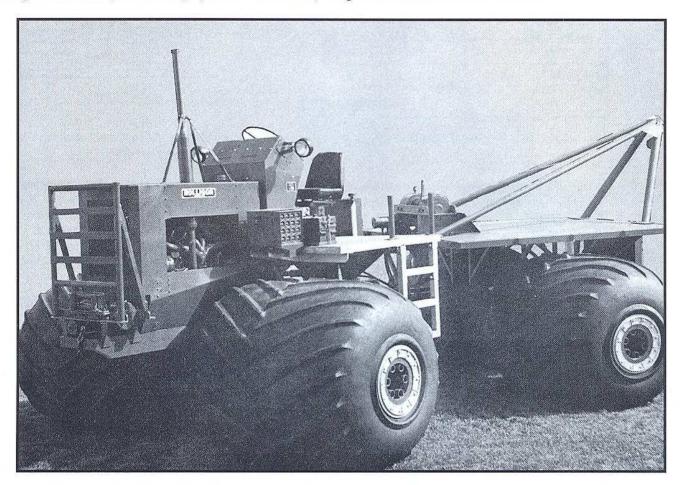
## **MODEL 4460**

Vehicle pictured may feature optional equipment.





The Model 4460 is a rugged and versatile 4-wheel drive all-terrain work vehicle. The Rolligon 4460 is designed to transport 5 ton payloads in remote, rough and difficult terrain areas.



#### **Features**

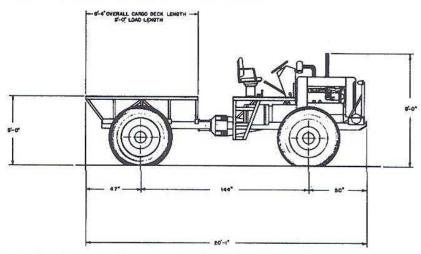
- Four 54x68-18 Rolligon Tires
- · Center-Frame Articulation Steering
- Amphibious Calculated Load
- Low Center of Gravity
- · Ease of Operation & Maintenance
- Standard Heavy-Duty Components

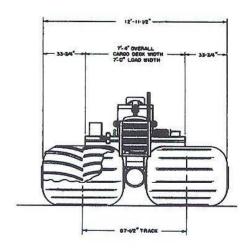
For additional information please contact:

### **ROLLIGON CORPORATION**

10635 BRIGHTON LANE STAFFORD, TEXAS 77477 U.S.A. TELEPHONE: (281) 495-1140 FAX: (281) 495-1145 INTERNET: www.rolligon.com

## **SPECIFICATIONS**





Note: This drawing is diagrammatic only and is subject to change.

Due to continual upgrading of our equipment, specifications may be altered at any time without notice.

#### **Engine**

Cummins 6-Cylinder Diesel producing 116 hp @ 2500 rpm, Geared by a 4-speed Manual Transmission with 12" Dry Clutch. Forward gear ratio's (6.32/3.09/1.69/1:1) 1-Speed Reverse gear ratio (7.44:1). Dry Type Air Cleaner, Oil and Fuel Filters, 12-volt starter, battery and 12-volt 61 amp alternator. Radiator and Guard. Exhaust Muffler and Stack Foot Throttle, Hand Throttle, 35 Gallon Fuel Tank.

#### **Drive Line**

All wheels powered. Spicer 1350 Universal Joints from power plant. Rolligon Transfer Case, 2.64:1 ratio, self oiling quadruple roller chain. Two Rockwell type L-155 Axles, 18,500 lb. Rating, 6.17 ratio, with "no-spin" differentials, & 10 stud hubs with 11-1/4" B.C. Steel Wheels with welded bolting flange.

#### Frame

Front frame on one axle, rear frame on one axle, coupled by articulated joint. Welded alloy steel construction with dual 6" channels. Integral welded mounts for assembly of components.

#### **Articulated Joint**

Welded alloy steel construction. Upper and lower 1-1/2" thick gudgeons welded to pivot section. Upper and lower trunnion pairs welded to heavy front frame end plate. Pair 2" dia. tool steel pivot pins mounted in self-aligning ball bushings.

#### Steering

32° maximum steering angle left or right from center. Full hydraulic power steering. Hydraulic pump driven by power plant. Two heavy duty steering cylinders.

#### Wheels

Welded and machined steel wheels. Each wheel with 54" diameter by 68" wide lugged Rolligon Tire mounted onto wheel end flanges with aluminum Tire Keeper Rings. Tire inflatable to 6 psi. from engine exhaust by inflation hose.

#### Cargo Deck

All welded steel structure bolted to rear frame.

#### **Brakes**

Disc brake on front axle drive shaft hydraulically operated by foot pedal. Drum brake on transmission output shaft mechanically operated by hand lever with ratchet.

#### Front Winch

10,000 lb. capacity, Mechanically driven.

#### **Operator Platform**

Operator platform with aluminum floor plate and welded steel structure. One operator seat.

#### Instruments

Dial Instruments with lights: Ammeter, Oil Pressure, Water Temperature, Fuel Quantity. Hourmeter & Ignition Key Switch.

#### Standard Accessories

Front headlights with single filament sealed beam bulbs. All surfaces painted Rolligon orange except aluminum and tires. Operation & Maintenance Manual (1-copy). Wheel Lug Wrench. Tire Inflation Assy. Tire Pressure Gauge. Tire Puncture Kit. Rear Pintle Hitch.

#### **Optional Equipment**

10,000 lb. hydraulic driven Rear Cargo Deck Winch. Front A-Frame. Rear A-Frame. Cargo Deck Cable Roll. Trailer Fifth Wheel. Arctic and Standard Enclosed Cabs. Brush Guard. Canopy Top. Front Tow Hook

Maximum Payload on Land	10,000 lbs.
Tire Displacement (4 tires @	
5000# each)	20,000 lbs
Vehicle Weight, no payload,	
no operator, no fuel	8,000 lbs.
Minimum Ground Clearance	
at Pivot	25 inches
Maximum Forward Gradeability	60%
Maximum Side Gradeability	45%
Maximum Angle of Approach	60 degrees
Maximum Angle of Departure	80 degrees
Minimum Turning Radius	22 feet
Maximum Forward Speed	<b>24 MPH</b>
N	on land