

**DESIGNED FOR MILITARY AND CIVILIAN USE  
WHERE A HIGH STANDARD OF PERFORMANCE IS  
REQUIRED BOTH ON AND OFF THE ROAD**



# ESARCO 8 x 8 ALL TERRAIN VEHICLE TECHNICAL SPECIFICATIONS

The vehicle is designed to meet the following requirements:

- \* Very low ground pressure for sand or soft ground.
- \* Trench crossing capability to a maximum width of one metre.
- \* Ascend and descend 60% slope.
- \* Scree crossing i.e. loose rocks.
- \* Wading to at least 31.5 inches/800mm.
- \* Road speeds up to 60 mph/96 kph (6 X 6) and 65 mph/105 kph (8 X 8).
- \* Small turning circle for excellent maneuverability in confined areas.
- \* The vehicles have an all steel box section ladder chassis with modular welded body. Cross members support the Ford Rover One-Ten drivetrain, suspension and axles.
- \* Tow a three-ton trailer.
- \* Air portable underslung from Puma or Chinook, or inside Chinook and both Hercules variants; can be airdropped on a standard NATO pallet.
- \* No driver training required.
- \* Carry 12 men (8 X 8) including driver.
- \* Carry crew of two plus two and one half ton payload (8 X 8); tow a three-ton trailer or powered trailer equipment.
- \* The whole assembly is treated with a corrosion resistant finish.
- \* Power assisted steering is standard and acts on the front and front and rear axles (8 X 8).
- \* Chassis 90% stronger than other all wheel drive vehicles.
- \* Ease of maintenance, full engine and transmission change can be done in one hour.

## **Engines:**

Water cooled 4.9 litre in-line 6, 120 hp petrol engine.

Ford Model CSG-649.

Light weight cast iron construction.

Bore: 101.6mm Stroke: 101.9mm

Compression ratio: 8.0:1

Max Power: 92.504kW (124bhp) at 3600 rpm.

Max Torque: 326.97Nm (241 lb/ft) at 2000 rpm.

**Transmission** — Ford C-6, Automatic, 3 speed forward and reverse.

**Transfer cases** — one transfer case on transmission driving No. 1 & 2 axle and a second transfer case driving axles No. 2 & 4. High and low ration, and front and rear axle disconnect may be selected by driver.

**Brakes** — hydraulic disc brakes, power assisted. Park brake hand operated drum brake on transfer case.

**Suspension** — long travel coil springs, controlled by double acting shock absorbers. Axles located by radius arms and panhard rods.

**Axles** — 4 beam type axles incorporating fully floating axle shafts, spiral bevel limited-slip differentials at 3.54:1 ratio. Front and rear coordinated steering; the two center axles are not steered.

**Steering** — front and rear axle steering, power assisted, providing an 18 ft. (5.486m) turning circle.

**Cab** — sheet steel construction, cab-over design for easy access to engine compartment.

**Bed** — flat load bed is 109 inch (2775mm) long and 88 inch (2234mm) wide. Sheet steel construction.

## **OPTION**

**Engine:** 7.3L VERSION

7.3 litre, OHV V8 Diesel engine

Navistar Model

Bore: 4.11 in. Stroke: 4.18 in.

Compression ratio: 21.5:1

Max Power: 185 hp at @3300 rpm.

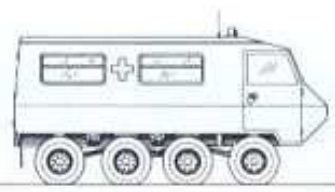
Peak Torque: 338 lb-ft @1600

**Transmission** — Allison 542, Automatic, 3 speed forward and reverse

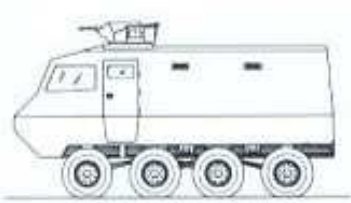




Four Man Cab Extended Flatbed



Ambulance



Armoured Carrier



Amphibious



Firefighter



Helicopter Field Service



Missile Launcher



105mm Gun Tug



20mm Cannon



Barrier Layer



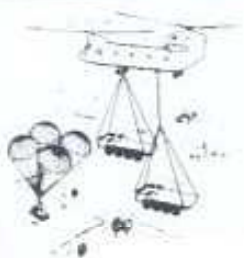
Ranger Mine Layer



Digger



Fuel/Water Tanker plus Trailer



Two in Chinook



Eight in Hercules





# ESARCO 8 x 8 ALL TERRAIN VEHICLE

## SPECIFICATIONS:

Height.....	96"
Length (without pintle hook) .....	199"
Width.....	88"
Height-Top of Dash.....	62"
Curb Weight.....	7000#
Payload-Offroad.....	5000#
Track.....	74"
Bed Length.....	120"
Bed Width.....	88"
Bed Height.....	42"
Ground Clearance.....	11"
Wading Depth.....	34"
Max Gradability.....	45 Degrees
Ramp Brake Over Angle.....	90 Degrees
Approach Angle.....	45 Degrees
Departure Angle.....	60 Degrees
Turning Circle-Inside.....	120"
Average Ground Pressure-Empty.....	11 psi
Average Ground Pressure-Loaded.....	19 psi
Highway Speed.....	60 MPH

## Power Components: STANDARD PACKAGE

ENGINE: Ford 4.9L Gas-120 HP

TRANSMISSION: Ford C6 (Automatic)-3 Speed

AXLES: Four DANA 60 Axles (2 steer, 2 rigid)

BRAKES: Ford F Series Disc Brakes-Power Assisted

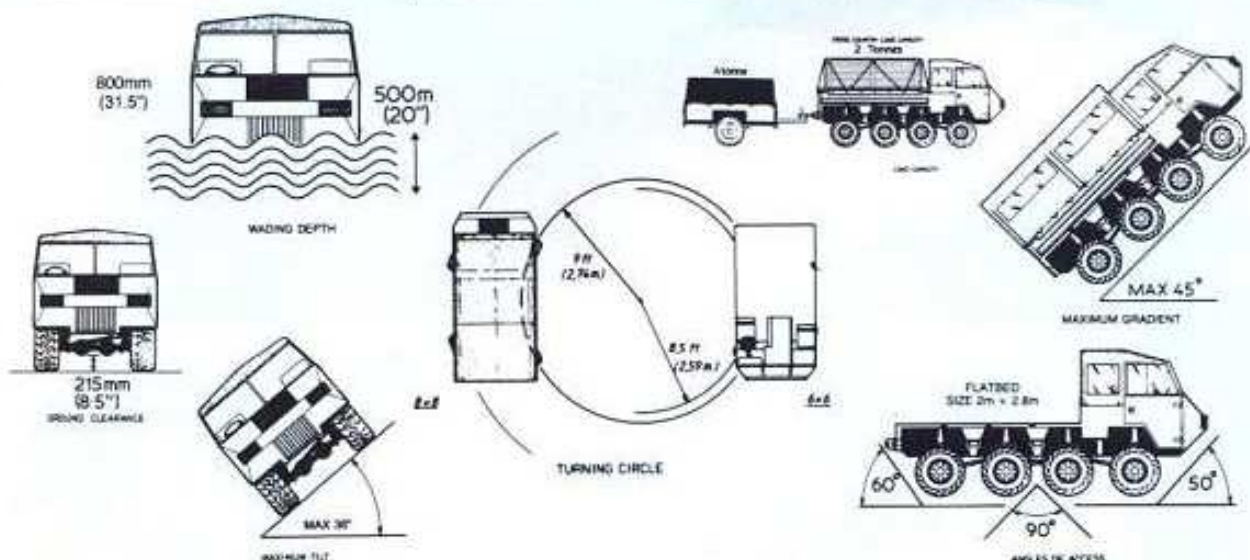
TIRES: Offroad Type

POWER STEERING: Standard

SUSPENSION: Coil Spring with Off Road Shock Observers for Maximum Mobility

FUEL CAPACITY: 22 Gallons

TRANSFER CASES: 2 Speed with Front and Rear Axle Disconnect



NOTE 1: A new Cab has been designed and will be fitted to the SS-300 in July 1988. The new Cab tilts open for ease of maintenance and features a human engineered interior for maximum comfort.

NOTE 2: Most of the components on the SS-300 are off-the-shelf automotive parts from FORD.

### Optional Extras for Esarco Vehicles

Winch (mechanical/electrical), Towhook (NATO/Pintle/50mm ball), Wiring kit for towing, Weather protection, Run-flat tyre system, Seating for 8 men (6 x 6 only), Flotation tanks on hull (6 x 6 only), Tracks for rear axles (6 x 6 only), Seat for 10 men (8 x 8 only), Tracks for two centre axles if required (8 x 8 only).

Specialist fits to customer's requirements.