



AM 331 ARMORED 25mm WEAPON STATION



AM General Corporation 

VEHICLE ENGINEERING DATA

DIMENSIONS

| | ENGLISH | METRIC |
|---------------------------------------|--------------------------------|---------------------------------|
| Wheelbase | 110 in. | 2794 mm |
| Overall Length | 220 in. | 5588 mm |
| Overall Width, Maximum | 96 in. | 2438 mm |
| Overall Height, No Load | 121 in. | 3073 mm |
| Inside Length of Body | 219 in. | 5563 mm |
| Inside Width of Body | 95.3 in. | 2421 mm |
| Inside Height of Body | 56 in. | 1422 mm |
| Body Floor to Ground, No Load | 27.25 in. | 692 mm |
| Frame Height to Ground, No Load | 21 in. | 533 mm |
| Spring Deflection, Normal Load: | | |
| At Front Axle | .5 in. normal, 1.0 in. max. | 12.7 mm normal, 25.4 mm max. |
| At Rear Axle | .5 in. normal, 1.0 in. max. | 12.7 mm normal, 25.4 mm max. |
| Ground Clearances: | | |
| Under Front Axle | 15 in. | 381 mm |
| Under Rear Axle | 15 in. | 381 mm |
| Under Chassis | 27 in. | 686 mm |
| Turning Radius: | | |
| On Land | 28.8 ft. | 8778 mm |
| In Water | 29.0 ft. | 8839 mm |
| Tires: | | |
| Front Track | 78 in. | 1981 mm |
| Rear Track | 78 in. | 1981 mm |
| Angle of Approach | 60 degrees | |
| Angle of Departure | 45 degrees | |
| Shipping Dimensions: | | |
| Shipping Cube | 1,479 ft. ³ | 41.89 m ³ |

WEIGHTS

| | | |
|--|--------------------|-------------|
| Curb Weight, Vehicle Fully Equipped | | |
| Less Payload And Personnel | 21,112 lbs. | 9,574.6 kg. |
| Gross Weight, Fully Equipped, Loaded | 25,000 lbs. | 11,338 kg. |
| Weight Allowance for Operating Personnel | 600 lbs. | 272.1 kg. |
| Payload Allowance | 3,288 lbs. | 1491.2 kg. |
| Towed Load Allowance | 10,000/25,000 lbs. | 11,338 kg. |
| Weight of Fuel, Lubricants, and Water | 1,450 lbs. | 657.6 kg. |

PERFORMANCE AT GROSS WEIGHT

| | | |
|--------------------------|-------------|-------------|
| On Land: | | |
| Maximum Speed | 72 MPH | 116 kph |
| Maximum Grade | 60% | 60% |
| Maximum Side Slope | 35% | 35% |
| Cruising Range | 450-650 mi. | 724-1045 km |
| In Water: | | |
| Maximum Speed | 3.4 MPH | 5.5 kph |
| Freeboard in Water | 18 in. | 457 mm |

MAXIMUM SPEED BY GEAR

| Gear | Time To Max. Speed in Gear | | | Distance to Max. Speed in Gear | | Max. Gradeability in Gear |
|------|-------------------------------|----------|-----------|-----------------------------------|----------|------------------------------|
| | | | | | | |
| 1 | 7 mph | 0.91 sec | 11.3 kph | 5.0 ft. | 1.5 m | 60% |
| 2 | 14 mph | 2.5 sec | 22.5 kph | 29.0 ft. | 8.8 m | 48% |
| 3 | 23 mph | 6.0 sec | 37.0 kph | 120.0 ft. | 36.6 m | 16% |
| 4 | 52 mph | 27.0 sec | 83.7 kph | 1328.0 ft. | 404.8 m | 10% |
| 5 | 72 mph | 73.0 sec | 115.9 kph | 5606.0 ft. | 1708.7 m | 3.5% |

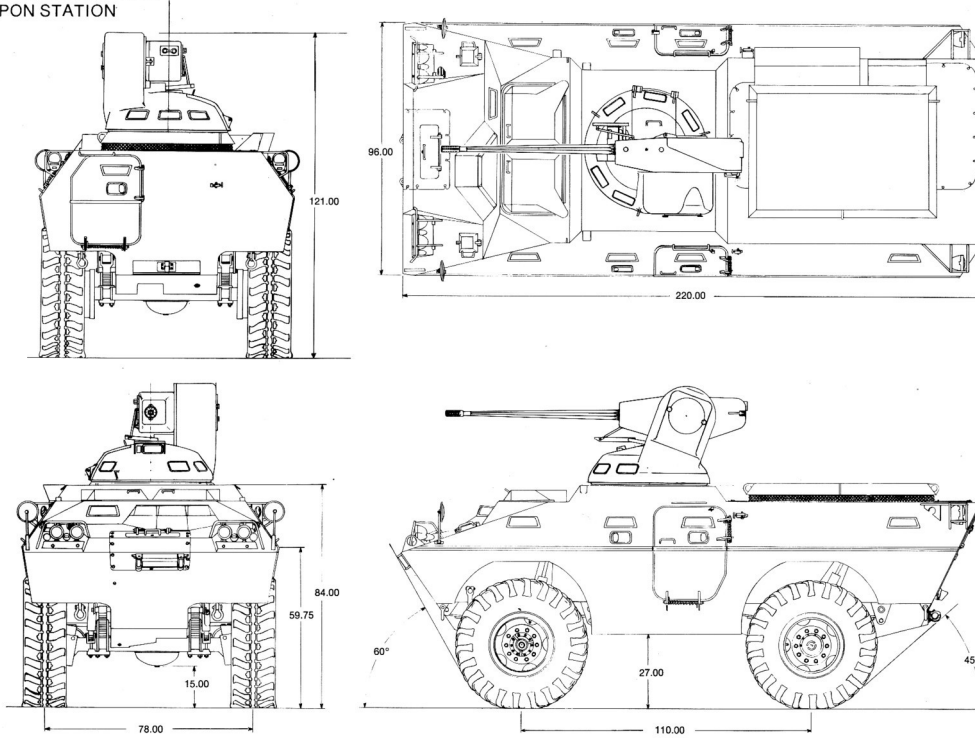
ENGINE

| | | |
|-------------------------------|--|------------------|
| Model | D.D.A. 6-V-53T, Turbocharged (224 kw) @ 2800 RPM | |
| Type | Two-Cycle, V6 | |
| Displacement | 318 in. ³ | 5.22 litres |
| Bore & Stroke | 3.875 x 4.5 in. | 9.8 mm x 11.4 mm |
| Compression Ratio | 17:1 | |
| Fuel | Diesel | |
| Fuel Capacity | 90 gals. | 340.7 litres |
| Governor: | | |
| Speed | 2800 RPM | |
| Type | Limiting Speed | |
| Horsepower: | | |
| Maximum Gross | 300 | |
| Maximum Net | 270 | |
| Crankcase Capacity | 22 qts. | 20.8 litres |
| Cooling System Capacity | 52 qts. | 49.2 litres |
| Fuel System | Injection | |

VEHICLE ENGINEERING DATA

| TRANSMISSION | ENGLISH | METRIC |
|-----------------------------------|--|--------------------------|
| Model | Allison MT 653 DR | |
| No. of Speeds: | | |
| Forward | 5 | |
| Reverse | 1 | |
| Input Torque Rating | 480 lb-ft. | 66.4 kg-m |
| Ratios: 1st | 8.04 | |
| 2nd | 3.58 | |
| 3rd | 2.09 | |
| 4th | 1.39 | |
| 5th | 1.00 | |
| Reverse | 5.67 | |
| Lubricant Capacity | 15 qts. | 14.2 litres |
| CHAIN CASE | | |
| Type | Single Speed | |
| Ratio | 1.17:1 | |
| Control of Front Axle | Manual | |
| Lubricant Capacity | 24 qts. | 22.7 litres |
| AXLES | | |
| Front: | | |
| Type | Hypoid, Single Speed, Double Reduction, Full Locking | |
| Ratio | 6.44:1 | |
| Torque Rating | 3,000 lb-ft. | 414.8 kg-m |
| Lubricant Capacity | 12 qts. | 11.4 litres |
| Rear: | | |
| Type | Hypoid, Single Speed, Double Reduction, Full Locking | |
| Ratio | 6.44:1 | |
| Torque Rating | 3,000 lb-ft. | 414.8 kg-m |
| Lubricant Capacity | 12 qts. | 11.4 litres |
| ARMOR | | |
| Type | 250 Gauge XAR 30 Single Hardness Alloy Plate | |
| Construction | Monocoque | |
| ELECTRICAL | | |
| Waterproofed | Yes | |
| Radio Suppressed | Yes | |
| Potential | 24 volts | |
| Rating | 100 amp | |
| No. of Batteries | 2 | |
| STEERING | | |
| Type | Hydraulic Power Assist | |
| Ratio | Variable Ratio of 19 = 24 = 19:1 | |
| Lubricant Capacity | 1.25 qt. | 1.2 litres |
| BRAKES | | |
| Type | Internal Expanding | |
| Size: Front (Dia. x Width) | 16.5 dia. x 5.5 wide (in) | 419 dia. x 140 wide (mm) |
| Size: Rear (Dia. x Width) | 16.5 dia. x 5.5 wide (in) | 419 dia. x 140 wide (mm) |
| Total Effective Area: Front | 339 in. ² | 2,187 cm ² |
| Total Effective Area: Rear | 339 in. ² | 2,187 cm ² |
| Actuation | Hydraulic Power Boosted | |
| Parking Type | Dual Grip Mounted on Chain Case | |
| SPRINGS | | |
| Front (2 Required): | | |
| Size (Wide x Long) | 3 wide x 56 long (in) | 76 wide x 1422 long (mm) |
| No. Leaves | 11 | |
| Type | Elliptical Leaf | |
| Rear (2 Required): | | |
| Size (Wide x Long) | 3 wide x 56 long (in) | 76 wide x 1422 long (mm) |
| No. Leaves | 11 | |
| Type | Elliptical Leaf | |

AM331 ARMORED 25mm
WEAPON STATION



ON VEHICLE EQUIPMENT (O.V.E.)

1. Special Equipment — Three Bilge Pumps, 50 GPM (190 LPM)

2. Boxed in Vehicle

TOOLS

QUANTITY

| | |
|------------------------------|---|
| Wrench Drain Plug | 1 |
| Wrench, Open End | 1 |
| Pliers, Slip Joint — 10" | 1 |
| Screwdriver, Flat Tip, 4" | 1 |
| Screwdriver, Flat Tip, 5" | 1 |
| Screwdriver, Phillips, 4" | 1 |
| Screwdriver, Phillips, 6" | 1 |
| Bag, Tool, Canvas, 10" x 20" | 1 |
| Bag, Pamphlet, Cotton Duck | 1 |

PUBLICATIONS

Operator's Manual
Lubrication Order

AM General Corporation