

"no one  
protects you  
better."



**Model RCT-4**

# **Armored Riot Control Truck**

**ALPINE ARMORING INC.**  
[alpineco.com](http://alpineco.com)



## ALPINE ARMORING's RCT-4

- A** High intensity white search lights
- B** Amber signal lights
- C** Mesh screen protection
- D** Hydraulic ballistic barricade remover
- E** Ballistic Glass (all windows)
- F** Duel cannons up to 500GPM each
- G** 5 Gun ports
- H** Run-Flats
- I** Duel chemical/dye tanks

- J** Emergency LED Lights
- K** High intensity flood Lights & camera
- L** Top wash down system
- M** Under vehicle wash down system
- N** Radiator protection
- O** Hydrant or pond/creek fill capable
- P** Cabin armored to level A9/B6+
- Q** Water tank armored to level A5/B4





CHASSIS SPECIFICATIONS

**MAKE / MODEL:** Ford F750 (Alpine's RCT-4)

**ARMORING:** A9/B6+ Cabin / A4/B4 Water Tank

**ENGINE:** 6.7L L6 Cummins Diesel

**POWER:** 360 HP @ 2,300 RPM

**TRANSMISSION:** Automatic 6-Speed Allison

**SEATING:** 2 + 2 Operators

**FUEL TANK:** 45 Gallons

**TIRES:** Six (6) Runflats installed

**FINAL WEIGHT:** 22,000 lbs (empty tank)

**LENGTH:** 350 IN. (890 CM)

**WHEELBASE:** 230 IN. (584 CM)

**HEIGHT:** 122 IN. (308 CM)

**WIDTH:** 101 IN. (256 CM)

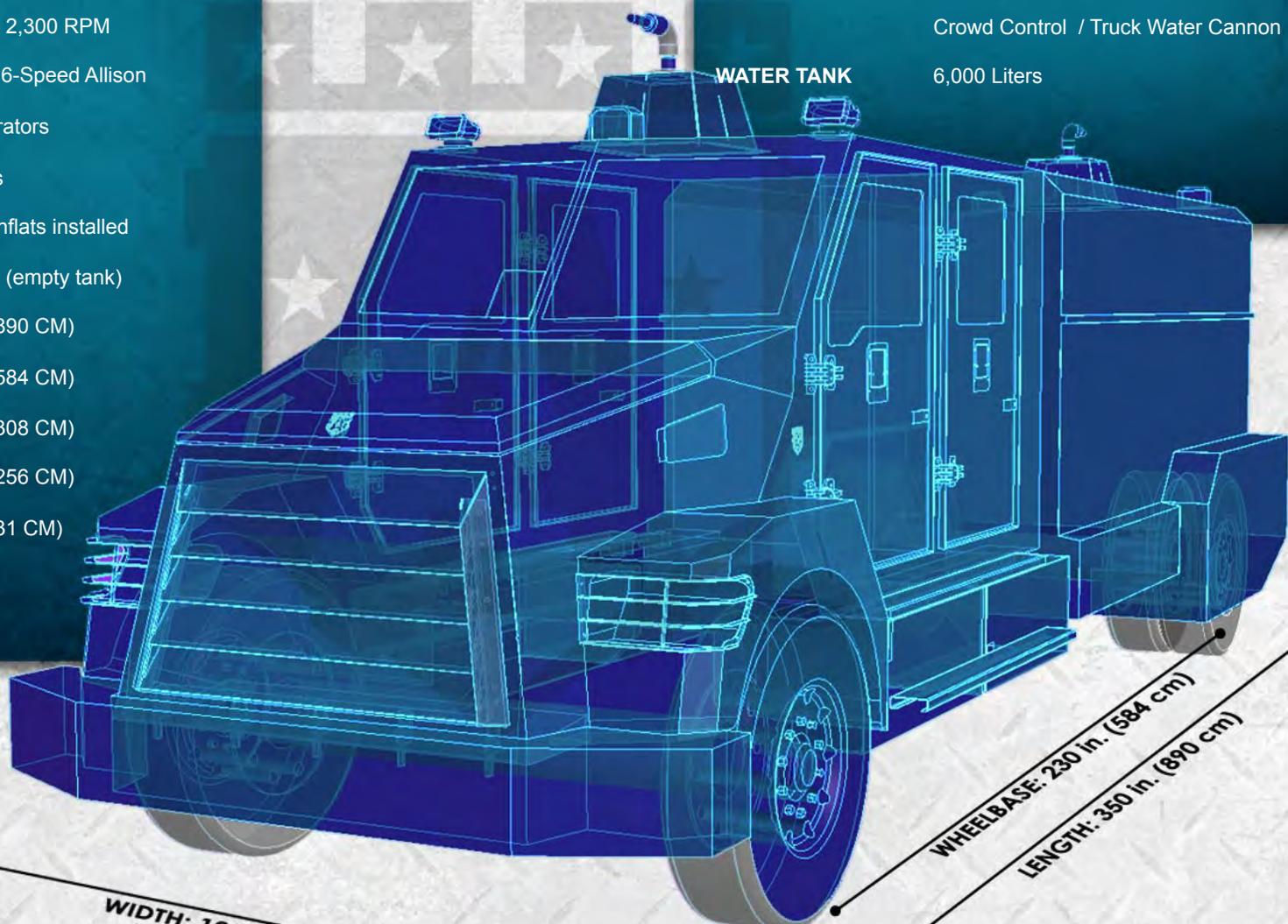
**CLEARANCE:** 12 IN. (31 CM)

MAJOR COMPONENT SPECIFICATIONS

**PUMP:** WS Darley HM 500 pump  
Max pressure 250 PSI @ 250 gpm

**WATER CANNONS (2) Two Model 3563**  
Crowd Control / Truck Water Cannon

**WATER TANK** 6,000 Liters



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## OPAQUE ARMOR DETAILS

**Firewall**

Ballistic steel firewall provides protection up front.

4-1

**Floor**

Entire floor is lined with certified NIJ rated ballistic steel.

4-2

**Window/Door Frames**

All window and door frames are designed for better ballistic and blast protection and ease of maintenance.

4-3

**Engine Protection**

The entire engine compartment is built from ballistic steel and also includes integrated radiator protection.

4-4

**Roof**

Roof is lined with certified ballistic steel at an angle.

4-5

**Doors**

All doors are lined with certified NIJ rated ballistic steel.

4-6

**Heavy-Duty Hinges**

Custom hinges construction from ballistic steel that will withstand the weight of the armored doors for the lifetime of the vehicle.

4-7

**Wheel Wells**

Front and rear wheel wells are lined with ballistic steel and provide optimal coverage against debris.

4-8



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# TRANSPARENT ARMOR DETAILS

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## Glass Thickness

Minimum 40 mm thick glass/  
polycarbonate composite  
transparent armor.

5-1



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## Anti-Spall Layer

Inner-most anti-spall layer  
prevents glass and bullet  
fragments from penetrating into  
passenger cabin area.

5-2



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## Mesh Screen

All windows are protected with  
mesh screening which  
prevents damage to glass from  
debris. Windshield mesh can  
be lowered when not in use.

5-3



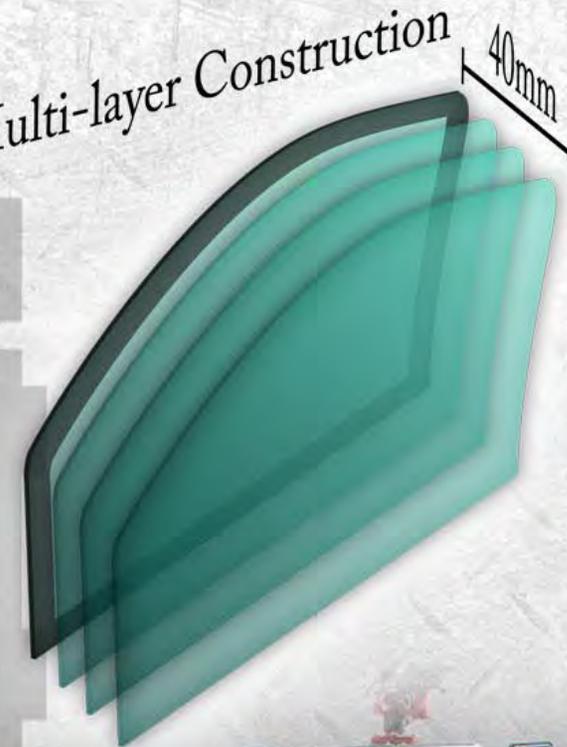
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## Anchored Windows

All windows are anchored for  
additional protection from  
explosions.

5-4

Multi-layer Construction



## VEHICLE CONSTRUCTION AND ARMORING DETAILS

**Frame Construction**

Along with the body panels, the frame is constructed out of ballistic steel.

6-1

**Water Tank Support Frame**

The water tank protection is specially designed to provide optimal coverage with A5/B4 ballistic steel with integrated access panels for maintenance.

6-5

**Gunports**

Gunports installed in each door as well as one forward facing gunport below the front passengers windshield.

6-2

**Rear Armoring Protection**

Rear armoring provides protection for water tanks and includes compartments with integrated camera and lights.

6-6

**Chemical Tank Protection**

Both chemical tanks are independently protected with large maintenance panels for ease of access.

6-3

**Roof Structure**

Entire roof on top of the cabin and water tank are protected. There are several maintenance hatches to access water tank.

6-7

**Water Tank Protection**

The water tank is protected using certified ballistic steel.

6-4

**Barricade Remover**

Constructed from 4mm ballistic steel this plow can travel up/down with hydraulic controls available to the driver

6-8



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6



## WASH DOWN SYSTEM TANKS



## Tire Wash Down

Provides fire suppression for all four wheel wells.

7-1



## Under Vehicle Wash Down

Provides fire suppression for front and rear axels as well as the center of the vehicle.

7-2



## Dual Chemical/Dye Tanks

Dual chemical tanks which can be filled with a variety of liquids or dye which mix into the water cannon spray.

7-3



## Hydrant or pond/creek fill

Water system is capable of being filled by either municipal fire hydrant or a small body of water (lake, pond, stream, creek)

7-4





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**Chemical/Dye Control**

Ability to add up to two different chemical/dye/foam liquids into the jet stream.

8-1



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**Dynamic Nozzle**

The water cannon nozzle features dynamic stream shape controls. It can go from narrow to wide in shape.

8-2



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**Pulse and Stream**

Can pulse between .5 second and 2.5 seconds of flow or can be used in continuous mode.

8-3

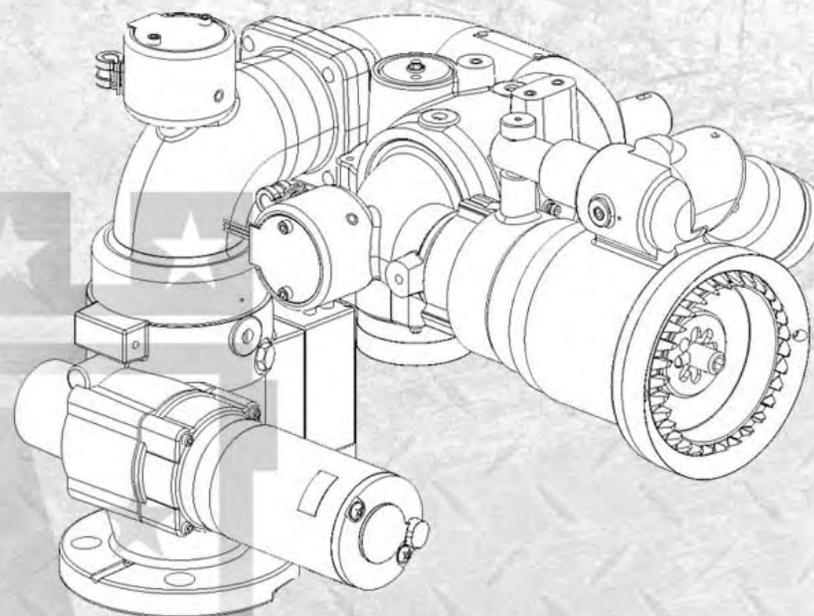


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**Joystick**

Operator can remotely control the nozzles up to 320 degrees in rotation and 135 degrees in elevation.

8-4



## CABIN FEATURES



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## Wide View

Inside cabin driver and crew can have a clear view of their surroundings, and are supported by large windows and multiple camera angles.

9-1



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## Control Console

Mounted between the rear passengers and includes joysticks on dynamic swing arm for optimal comfort.

9-2



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## Seating Configuration

Vehicle seats 4 operators, each seat designated with a specific function.

9-3



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## Operator Comfort

Seats have been designed for operator comfort as well as the A/C and heating system for long term deployment.

9-4



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9



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**Side Cameras**

This camera can withstand a bullet from a 12 gauge shot gun, or a 9mm handgun, and is installed on each side of the vehicle.

10-1



**Rearview Camera**

Integrated in the rear panel to provide optimal protection. Motorized up and down to adjust viewing angle.

10-2



**Nozzle Cameras**

Both nozzles include IR camera with the ability to record all water cannon activity.

10-3



**Multiple Monitors**

Multiple large monitors allow ease of navigating each input for all 5 cameras.

10-4

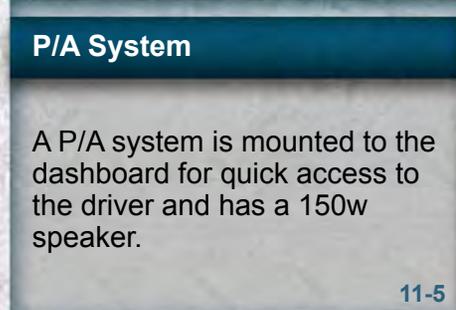




### Emergency LED Lights

Red/Blue LED lights installed and integrated into the vehicle to provide debris protection.

11-1



### P/A System

A P/A system is mounted to the dashboard for quick access to the driver and has a 150w speaker.

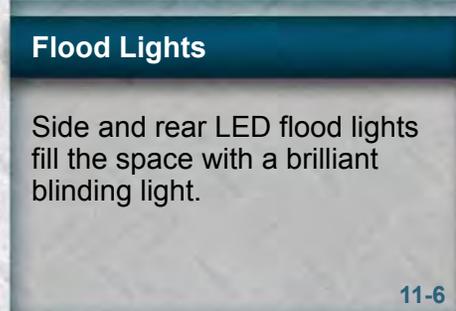
11-5



### Remote Search Lights

Two powerful remote controlled search lights are mounted to the roof and can be controlled from the front cabin.

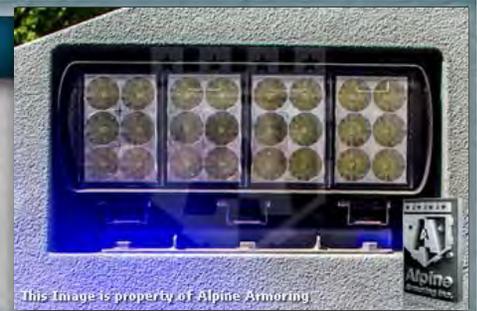
11-2



### Flood Lights

Side and rear LED flood lights fill the space with a brilliant blinding light.

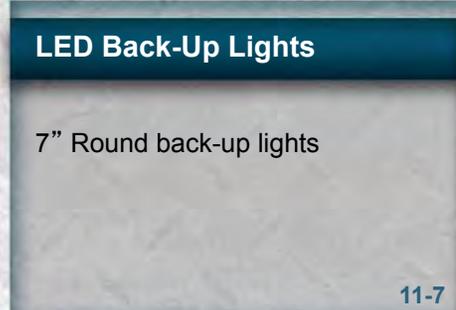
11-6



### Interior LED Dome Lights

Provides red/white light to the operators.

11-3



### LED Back-Up Lights

7" Round back-up lights

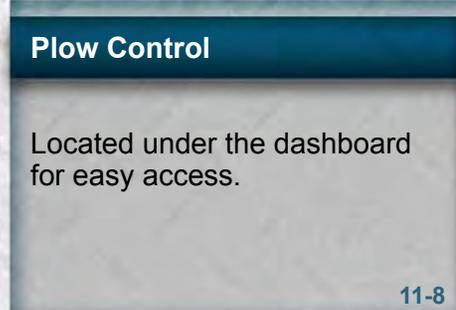
11-7



### Mesh Protected Lights

Mesh installed around key lighting systems for protection against thrown objects.

11-4



### Plow Control

Located under the dashboard for easy access.

11-8





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**COMPARTMENTS**

- One main compartment (6,000 liter capacity)

**TANK**

- Barrel design
- 3/16 Aluminum skin
- ¼ aluminum bottom
- 3/16 outriggers & cross members at all baffles
- Fully dished & flanged baffles
- No walk walkway
- One 3" tank overflow pipe welded in tank at center

**WATER LEVEL**

- MC 4 lamp water level indicator in cab panel

**WALKWAY**

- U.L.C. approved P.A.F. Tiona manhole cover
- No spill containment around manhole

**TANK MOUNTING**

- Oakwood sills, full length
- Flange type mounting
- Four point spring mounting at front

**MONITOR**

- Two Units installed one at front & one at rear of unit

**PUMP PRESSURE CONTROL**

- High strength bronze alloy
- Designed for pump relief
- Valve will automatically activate at preset pressure
- on and off selector valve
- Large hand wheel for pressure setting control
- Flush valve and strainer

**RELIEF VALVE POSITION LIGHTS**

- Mechanical override valve allows manual control

**SUCTION**

- One 4" suction line from tank
- One 3" suction ball valve to allow drafting
- One 4" removable strainer

**PRESSURE**

- Schedule 40 3" pressure line monitor

**CONTROLS**

- Small control panel mounted between cab seats

**PANEL**

- Two (2) monitor control joysticks
- Monitor valve controls
- Pump pressure control

**P.T.O. - HD "HOT SHIFT" AIR OPERATED**

- Control switch in cab
- Chassis is equipped with PTO outlet

**SHAFT**

- HD P.T.O. shaft

**PTO GUARD**

- One steel wire mesh cage surrounding PTO and shaft

**OUTLET**

- One (1) 2.5" outlet on front bumper c/w CSA adapter and cap

**MANUAL HOSE**

- Ultra-bright LED digital readout
- Injection percentage from 0.1% to 10.0%
- Display following information:
- Low concentrate/ No concentrate warning
- Water flow rate
- Total water used
- Injection percentage
- Total concentrate used
- Dual-tank capability and calibration
- Displays separate totals for each tank
- Calibrate for each concentrate





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**PUMP FEATURES**

- WS DARLEY HM pump c/w mounting brackets or equivalent
- Rated gpm max. pressure 250 PSI@250gpm
- One 3" drafting facility located at side of unit
- Storks connection c/w 2 10ft. suction hose

**PUMP PRESSURE CONTROL**

- High strength bronze alloy
- Designed for pump relief
- Valve will automatically activate at preset pressure
- On and off selector valve
- Large hand wheel for pressure setting control
- Flush valve and strainer
- Relief valve position lights
- Mechanical override valve allows manual control

**FIRE SUPPRESSION WASH DOWN**

- Spray system mounted under vehicle for axles, 3 nozzles
- Top side spay system, 2 nozzles
- At each tire location under wheel wells, 4 nozzles
- Utilizing pump water and series of 9 water jets
- Controlled from cab

**CONTROL AND GUAGUE DISPLAY**

- Ultra-bright LED digital readout
- Injection percentage from 0.1% to 10.0%
- Low concentrate/ No concentrate warning
- Water flow rate

- Total water used
- Injection percentage

**WATER CANNON FEATURES**

- 3563 Crowd Control Truck Water Cannon
- Programmable Pulse - Stream Jet
- Faster Target Acquisition
- Adjustable Control System
- 320° Rotation
- 135° Elevation (+45° to -90°)
- Programmable Pulse - Stream Jet Options
- Optional high speed valve provides pulses
  - between 1/2 second - 2 1/2 seconds
  - in length or can be used in continuous mode.
- STYLE 3563 Shown with STYLE 417 Tip
- On 1" shot bore nozzle c/w stream straightener
- Electric Control shut off valve and 2.5" piping

**TANK FILL**

- 2.5" tank fill line installed on right side
- Connected to main pressure line
- One 2.5 inline ball Valve

**HYDRANT**

- One 2.5" X 25 ft hydrant hose c/w C.S.A. female

**HOSE**

- Connection and one 2.5" camlock connection



# ALPINE ARMORING'S BALLISTIC CHART

WEAPONS	SPECS			LEVELS					BULLETS			NUMBER OF SHOTS	
	TYPE	CALIBER (mm)	CLASS	STANAG	UL	ALPINE	NIJ	CEN	MASS (g)	MATERIAL	VELOCITY		
	.38 Special	9 x 19	Handgun	—	1	A1	I,II,IIA	—	8.00	LCCJ	358 M/S	5	
	.357 Magnum	9 x 33	Handgun	—	2	A2	I,IIA	B1 & B3	10.20	JSP	430 M/S	5	
	.44 Magnum	11 x 33	Handgun	—	3	A3	IIIA	B4	15.60	LWC	440 M/S	5	
	MP5	9 x 19	SMG	—	6	A4	IIIA	B2	8.00	LCCJ	427 M/S	5	
	Shotgun	12 Gauge	Shotgun	—	3 & 4	A5	IIIA	SG2	28.30	SLUG	503 M/S	3	
	Tokarev	7.62 x 25	Handgun	—	—	A5	IIIA	—	5.50	LCSJ	488 M/S	5	
	Kalashnikov (AK-47)	7.62 x 39	Assault Rifle	—	—	A6	III	B5	9.70	SCCJ	732 M/S	5	
	Kalashnikov (AK-47 Military)	7.62 x 39 API BZ	Assault Rifle	II	—	A7	—	B5+	11.70	SCCJ	774 M/S	5	
	M16/AR-15	5.56 x 45 NATO SS109 5.56 x 45 NATO Ball	Assault Rifle	I	7	A8	IV	B5	4.00	SCCJ LCCJ	900 M/S 833 M/S	3	
	Winchester .308	7.62 x 51	Rifle	I	7	A9	III	B6	10.90	LCCJ	810 M/S	5	
	Remington 700 SPS	7.62 x 63 AP (.30-06) 7.62 x 51AP (WC core)	High-Power Rifle	III	5 & 8	A10	IV	B7-	10.80 8.40	AP	869 M/S 930 M/S	5	
	Dragunov	7.62 x 54R B32 API	Sniper Rifle	III	—	A11	IV+	B7+	10.04	SCCJ	854 M/S	1	
	.50 Cal	12.7 x 99	High-Power Rifle	IV	10	A12	—	—	45.00	CJ	908 M/S	1	

"no one protects you better"



**UL** ..... Underwriters Laboratory, 752  
**NIJ** ..... National Institute of Justice, 0108.01  
**CEN** ..... European Standard  
**STANAG** ... NATO's Standard (STANAG 4569)  
**ALPINE** .... Alpine Armoring's Certified Standard

**LCCJ** ..... Lead Core Copper Jacket  
**JSP** ..... Jacketed Soft Point  
**LWC** ..... Lead Wad Cutter  
**LCSJ** ..... Lead Core Steel Jacket  
**SCCJ** ..... Steel Core Copper Jacket  
**AP** ..... Armor Piercing  
**SG** ..... Shotgun

**Shots (5)** .... 11.4 cm Square Pattern (Corners & Center)  
**Shots (3)** .... 11.4 cm Triangular Pattern  
**Velocity** ..... Minimum Measured Velocity  
**NIJ Rating** .. Levels I, II, IIA, & IIIA (based on 1 of 2 required calibers of ballistic threat)



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# WARRANTY

## ARMORED RIOT CONTROL TRUCK - RCT4

This vehicle, as proposed to the client, would be under Alpine Armoring's premium warranty covering all its armored parts and labor as well as all added accessories for one full year, effective the day of sale. Additional warranty for longer period is available upon request.

Alpine Armoring Inc. hereby honors this warranty, in the United States and worldwide, against any and all related manufacturer's defects, including parts and labor.

MANAGEMENT AUTHORIZED  
ALPINE ARMORING INC.  
HERNDON, VIRGINIA, USA

DATE ISSUED

