

Basic features of the various IFVs of the Russian Ground Forces

BMP-1

Small turret,
in the middle

73mm gun



BMP's have a 6
wheel system
(BMD's have 5)



4 roof-hatches
behind turret



Both BMP-1 and 2 has a
two-door system and are
identical from behind.

BMP-2

Larger "frying pan"
turret, more behind

30mm
autocannon



2 roof-hatches
behind turret



BMP-3

Larger and more flat
turret, in the middle

100mm gun and
30mm autocannon

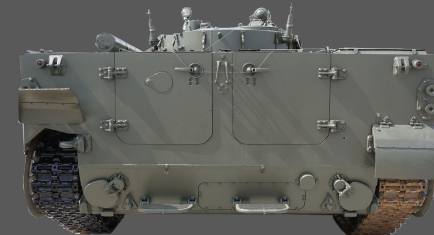


Concave wheels



3 hatches in front
of turret

2 large rectangular
doors also with a hatch



The BMP-3's rear doors
accompany the roof doors, the
rear of the vehicle is more cubic

Commonly
mistakable

**Standard Model
BMP-1(P)**



Konkurs ATGM



Photo: Vitaly Kuzmin



Photo: dokaspez

Malyutka ATGM

73mm Grom



Malyutka hatch

Photo: Alexander Miller

Later models called **BMP-1P** receive the 9K111 "Fagot" or 9K113 "Konkurs" ATGM on the roof (not essential) and 6x Smoke Discharge Tubes behind the turret.

2A28 "Grom" 73mm Gun and 9M14 Malyutka ATGM (The Malyutka rail is not essential)

Gunner's station in the turret with a 1PN22M1 sight with **four periscopes** around the hatch. Also an IR-lamp aside and the hatch for the Malyutka. (Hatch may be welded in later models)

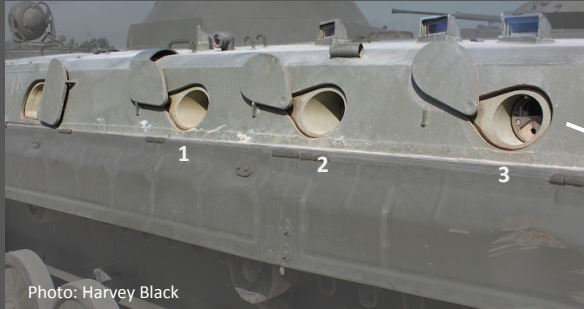
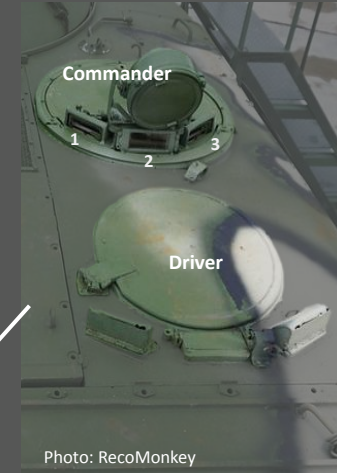


Photo: Harvey Black

Three main embrasure for the infantry on board (both sides) and an additional **square embrasure**.



Photo: Mark Voorendt



Commander

Driver

Photo: RecoMonkey



Dismount door has a lever handle - some shared by the BMP-2 (however there are variations to the BMP-2 door, see page)



Photo: Lutz Bruno



Photo: Lutz Bruno



Photo: aviakurs

The hatches for the driver and commander is **circular** and **semicircular** respectively, with the commander hatch with an **IR-lamp**.

Additionally, the commander hatch has **3 periscopes** (on the BMP-2 it is two).

Sub-Variant
BMP-1D

The BMP-1D is a unique survival-kit made for the BMP-1 which provide a reinforcement of armored plates around the hull. (It is almost non-existent, replaced by newer kits)



Sub-Variant
BMP-1(P)K

The BMP-1K or 1PK is a command vehicle for company or battalion sized elements, and internally house different radios. Externally, it is identical to the BMP-1(P) except the **removal of the firing ports** on the sides.



Photo: Yury Popov



BMP-1PK
Photo: aviakurs

Right-side have all ports removed



Left-side have only two firing holes



Mounting points for the two antennae for the radio.

The antenna on the left rear (1) is universal in BMP-1 vehicles, while the second antenna (2) is shared among the commanding vehicles with specific radios.

Sub-Variant
BMP-1AM

The BMP-1AM is a modernisation of the existing BMP-1, by replacing the Grom-turret with a remotely operated **BPPU-1** turret akin to the turret of the **BTR-82A** with a **30mm 2A72 autocannon**.



Photo: Vitaly Kuzmin

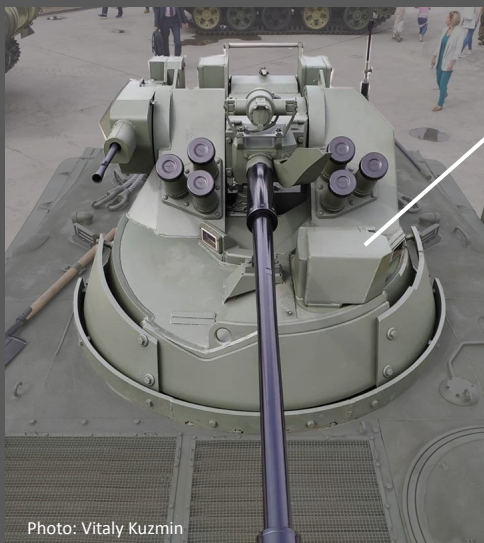


Photo: Vitaly Kuzmin

TKN-4GA combined day-night sight, universally used in all BPPU-1 turrets in various modernisation variants.

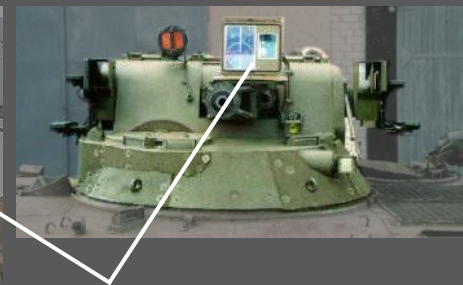
Foreign Variant
BMP-1U

Known as “Shkval”, the BMP-1U is a Ukrainian modernisation of the BMP-1 by replacing the turret with a remote **KBA-105** weapons station with a **30mm 2A72**, **7.62mm PKT** coaxial gun, an **automatic grenade launcher** and a firing module for two **9M113 Konkurs ATGM**.



Photo: Zinnsoldat

The ATGM module can also host Ukrainian domestic “Barrier” ATGM as well as an Iгла MANPADS



The optics present on the module is the **OTP-20** optical-television sight, shared in other turret modules.

Despite Ukrainian, the BMP-1U is in hands of the Russian Armed Forces as they were captured from the Georgian Army (~15) during the Russo-Georgian War. With high marks after testing in Russia, these have been spotted and destroyed in Ukraine

Official minor modifications on BMP-1 chassis



BMP-1PG – a minor modernisation product, the BMP-1P with an **AGS-17** automatic grenade launcher.



BMP-1-30 or BMP-1 w/ B-30 – is an one-off modification of the BMP-1 utilising the **B-30** turret on the **BMD-2** (see **BMD-2**)



BMP-2 with 675-sb3KDZ kit

BMP w/ 675-sb3KDZ – is an armor kit of slat “bar-armor” and polymer armor panels to provide protection against large calibre projectiles and against RPG warheads.



Some versions of the turret only has the grenade launcher, while others include a secondary observation device for the armament on the left of the turret.



Officially, the name **BMP-1-30** is very specific, and this vehicle has never entered service. However, due to the state of conflicts crude field-modifications do exist (see above) and it is more appropriate to label them **BMP-1 w/ B-30** turret



BMP-1P with 675-sb3KDZ kit

The armor kit originally was intended for the **BMP-2** (and another kit for the **BMP-3**), however it is cross compatible on chassis and can be seen in use for the **BMP-1** (see above) as well as **BMP-1AM**.

There is no official designation for the variant, so it is best to denote by kit.

Standard Model

BMP-2

Part 1



Launch rail and sight for the **9M113 Konkurs** ATGM on the turret.



2A42 30mm

902V
"Tucha"

2A42 30mm autocannon is employed on a newer and wider turret to accompany two crew. Alongside, a pair of three **902V "Tucha"** smoke launching tubes are on both sides of the turret.



Left side

Photos: RecoMonkey



Right side

Two main embrasures for the infantry on board (both sides) and an additional **square firing-hole** (two on the left side)



Photo: Russian MoD

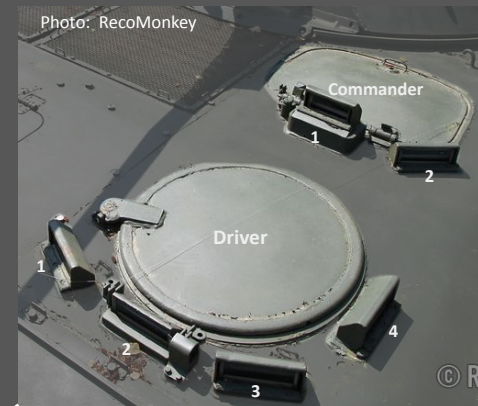


Photo: RecoMonkey

Commander

Driver

The hatches for the driver and commander is **circular** and **rectangular** respectively.

The driver has **four periscopes**. Additionally, the commander hatch has **3 periscopes** (on the BMP-2 it is two).



The rear dismant doors have two forms, one is shared with the BMP-1 (left) with the **lever type**, while on the modernised BMP-2's (right) with the **shielded-lever type**.



Photo: RecoMonkey

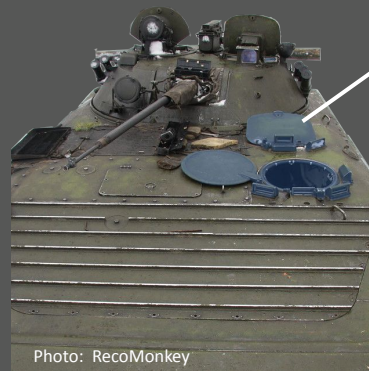
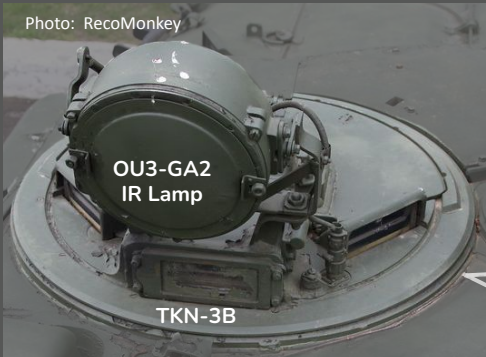


Photo: RecoMonkey

Photo: RecoMonkey



On the commander's hatch and on the right-side of the barrel there is the OU3-GA2 IR lamp for the TKN-3B sight



PL-1-01 IR Illuminator

In modernised variations (non-specific name) the BMP-2 replaces the old IR lamps with the PL-1-01 IR laser illuminator

Often this accompanies the TKN-AI commander sight. The other illuminator in front of the turret is for the gunner's SOZh sight. (see right page)

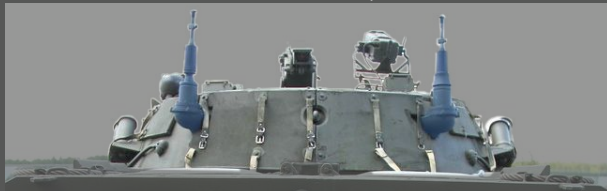


PL-1-01 opened

In some cases, the commander has the newer sight, but keeps the older lamp. (see right)



Photo: RecoMonkey



The antennae for the radio on the BMP-2's turret is located in the rear (highlighted in blue). On older production models the antennae is on the right (top) while later models post-obr 1986 have two antennae (bottom).

On later production models (post-obr 1986) internal lining and external cladding for NBC protection can be seen around the turret. (highlighted blue)



Photo: RecoMonkey



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OU3-GA2 IR Lamp

TKN-AI



Rear periscope

BPK-1(2)-42

2

3

Photo: Egor Kalmykov



SOZh

The gunner's hatch has three fixed periscopes (1 not visible in photo), one rear facing periscope as well as the BPK-1-42 or BPK-2-42 (BMP-2 obr 1986) sight which is not visually distinguishable. More recent modifications receive the SOZh.

Sub-Variant
BMP-2D

Photo: Zvezda



The BMP-2D alike to the BMP-1D is an Afghan-war byproduct with reinforced armor plates around the hull and behind the turret is increase survivability. There are distinct features to allow identification even without the plating.

Photo: Ivan Ponomarenko



Armor plate (6 mm) reinforcing the rear of the turret in an arc shape.

Photo: Танки АМ



On the underside, rarely seen is a layer of protection under the vehicle for mine protection.

Photo: Yuri Pasholok

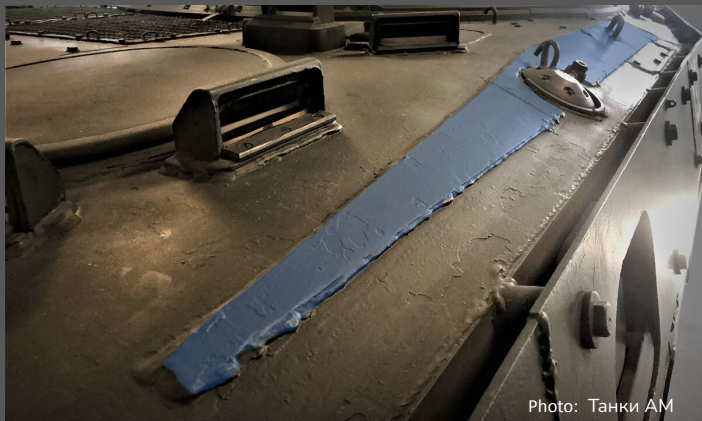


Armor plate (6 mm) reinforcing the side of the hull as well as the sideskirts with a gap, as well as openings for the embrasures.

Photo: Ivan Ponomarenko



Photo: Танки АМ



Very slightly on the sides of the hull, there is a very **thin sheet of metal** welded onto the wall. (Highlighted blue) On both sides of the vehicle this is present, and is one of the minor ways to identify the BMP-2D without the armor kit (see right).

Photo: Танки АМ



Thin streak from the welds can be noticed on the vehicle.

Sub-Variant
BMP-2K

The BMP-2K is a command vehicle for company or battalion sized elements, and internally house different radios. The vehicle has unique antenna posts and closed embrasures.



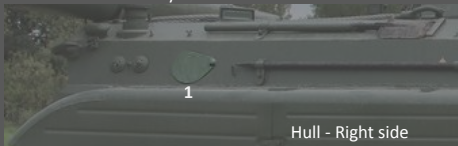
Photo: RecoMonkey



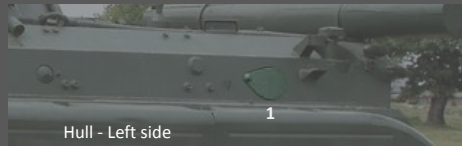
Two radio antennas located on the rear of the vehicle (not the turret).

One centerline behind the turret, and another on the rear-right side of the vehicle.

Photos: RecoMonkey



Hull - Right side



Hull - Left side

The embrasures on the side of the vehicle are all closed except of **one** on both sides of the vehicle.

Foreign Variant
BMP-2(M)
w/ 675sb3KDZ

The **675sb3KDZ** is an armor kit of slat "bar-armor" and polymer armor panels to provide protection against large calibre projectiles and against RPG warheads.

Different to the BMP-1, the kit for the **BMP-2** also comes with slat armor around the turret. (**Not for the BMP-2M!**)



BMP-2M with 675-sb3KDZ kit



BMP-2 with 675-sb3KDZ kit (Slat armor only on turret)

In cases, the slat armor is not always present on the vehicle, and only the armor kit may be present (see above).

Sub-Variant
BMP-2M
"Berezhok"



Photo: RecoMonkey

The BMP-2M has varying names due to the ambiguity of its development and forms, however the service model is called "Berezhok" for its turret module **Berezhok** (B05YA01).

The vehicle also can receive the add-on armor kit **675-sb3KDZ**, however unlike on the BMP-2, the slat armor around the turret is removed due to the ATGM launchers.



Dual 9M133 Kornet launchers on both sides of the turret,

902V Tucha smoke canisters are moved to the front of the turret.



Photo: RecoMonkey

BMP-2M with 675-sb3KDZ armor kit



AGS-17 automatic grenade launcher situated on the rear of the turret.

Standard Model

BMP-3

Part 1



Photo: Sergei Bobylev

A set of three 902V "Tucha" smoke dispensers are paired on each side of the turret.

Easily mistakable to the BMD-4.

Specific details on the commander/gunner section is in Part 2

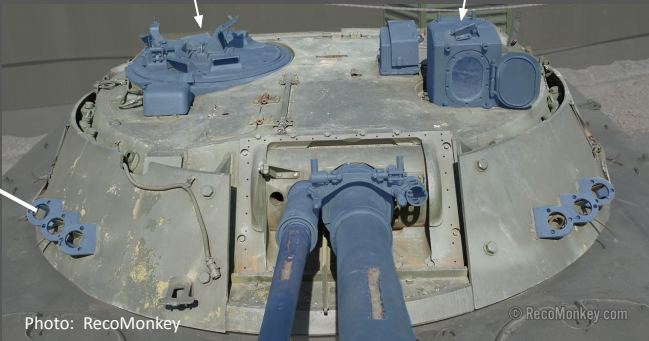


Photo: RecoMonkey



30mm 2A72 autocannon

100mm 2A70

Photo: Dmytro Teslenko

The main armament is the 100mm 2A70 gun and a 30mm 2A72 autocannon fixed to each other.

(Exact same to BMD-4 and easily mistakable)



Photo: Mike1979

The BMP-3's distinct features on its hull is the large rectangular exhaust which distinguishes itself to the other BMP's.

However it is the same exhaust as on the BMD-4 (see page). To identify, the BMP-3 has a 6-wheel system, while the BMD-4 has a 5-wheel system.



Photo: MoD Russia



Photo: RecoMonkey

The BMP-3 has an extendable wave-breaker and dozer blade that is folded into the front of the hull.

Both extended can be seen (below).

Unlike the BMP-1/2 the hatches for the BMP-3 are different.

Three separate hatches in front of the turret for the driver, and two infantry.

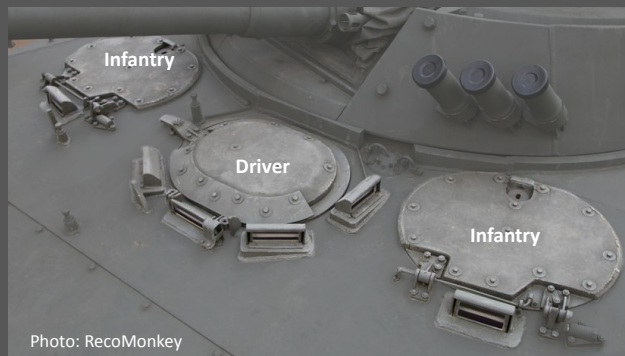
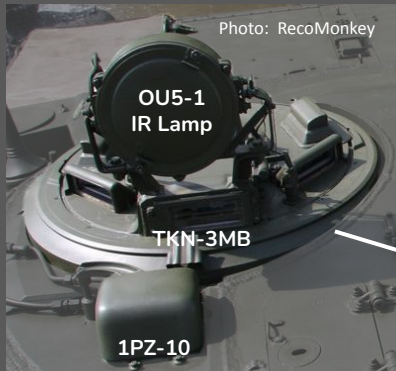
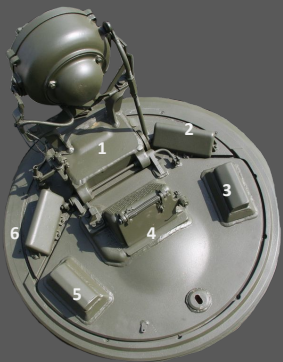


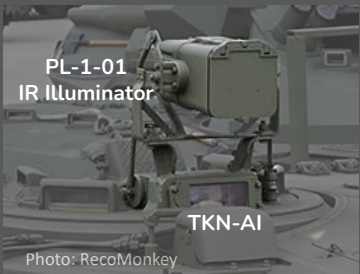
Photo: RecoMonkey



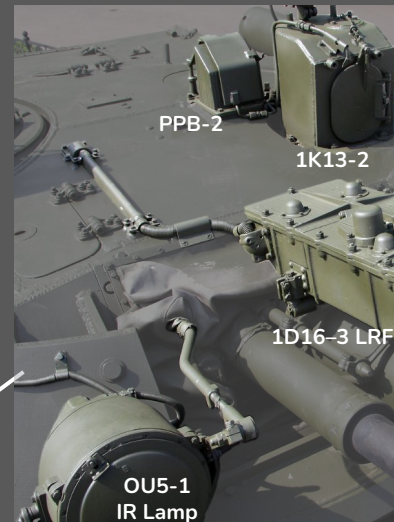


The commanders hatch has a **six periscopes** in a hexagonal arrangement. (left image) The main one being the **TKN-3MB** day-night sight requiring the **OU5-1** IR lamp.

Alike to the BMP-2, the commander also has a multi-purpose combat sight **1PZ-10**.



On newer BMP-3 models, the commander receives a newer **TKN-AI** sight which also receives are **PL-1-01** laser illuminator instead.



The gunner sight is a **1K13-2 day-night sight** and housed on its right is a **PPB-2 combat sight** (similar to the commander)

The gunner sight comes along with the **1D16-3 LRF** and a **OU5-1** IR lamp.

These features are in older BMP-3 models.



The **1D16-3** laser rangefinder is posted on top of the main gun.



On most modern BMP-3s, the standard gunner sight is the **SOZh** which is accompanied by the **PL-1-01** laser illuminator. (left)

The housing is exactly the same, so the only identifier is the lamp or illuminator.



The newest models, often considered "**obr.2017**" comes with the newer **Sodema** (B03S03) thermal sight which has a two-door housing, with no lamp.

Sub-Variant
BMP-3F

A variant developed for the naval forces/marines, the BMP-3F is a seaworthy variant of the BMP-3 provided with an **extendable ventilation tube**, **wave-deflecting visor** on the turret and the plow removed.



Extendable ventilation tube is visible (comparison to normal BMP-3 on the right), also in variations, the smoke dispensers on the turret are moved to the rear of the turret.



Sub-Variant
BMP-3
w/ 688A-sb6-2KP

The **688A-sb6-2KP** is an armor kit of slat "bar-armor" a thin sheet metal panel to provide protection against large calibre projectiles and against RPG warheads.



Sub-Variant
BMP-3
obr. 2020

A production derivative, the obr. 2020 is a standard modern BMP-3 with attachment points for ERA protection kit (see right page) on the turret.



Photo: Vitaly Kuzmin



Photo: Kurganmashzavod

902V "Tucha"
Smoke dispenser

Similar to some BMP-3F, the smoke dispensers are moved to the rear right of the turret (near the commanders hatch).

Sub-Variant
BMP-3
w/ 4S24 ERA Kit

An idea similar to the applique armor kit, this armor kit has varying designations and appearances however its primary objective was a more capable protection by utilising ERA blocks.



Kit comes with "block" like ERA cases around the side and front of the hull. Slat-armor situated in the rear of vehicle and behind the turret. Additionally, ERA-wedges around the turret with rubber flaps.

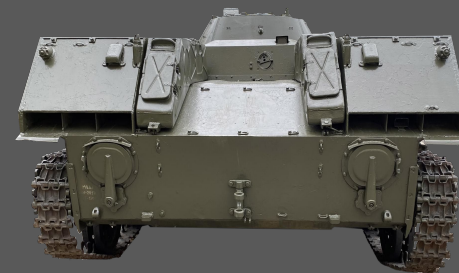
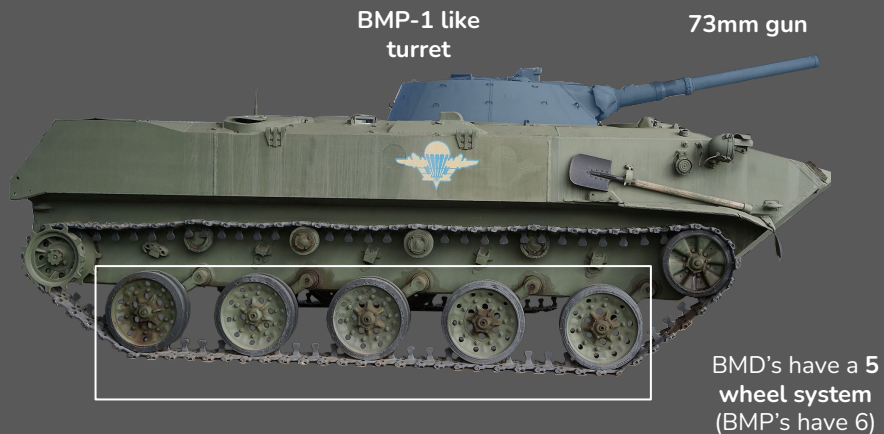


(Left) Appearance of the vehicle with the kit removed.

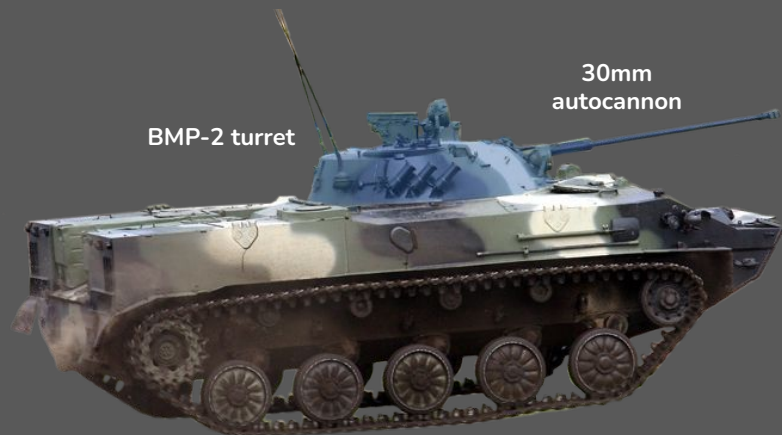
(Right) The vehicle is service particularly differ from the original with the rubber flaps switched to a more solid sheet metal.



Basic appearance of the various IFVs of the Russian Airborne Forces (1)



Basic appearance of the various IFVs of the Russian Airborne Forces (2)



Unofficial field-modifications



ZU-23-2



UB-type Rocket Pods