## S0114418 1/144 R-73 (AA-11 Archer)



Assembly scheme



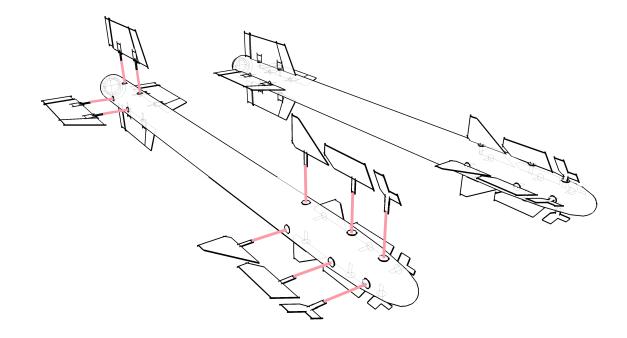
This is a set for an experienced modeller. We provide you with really small parts, so try not to swallow it, this is carpet crawlers' business after all.

The construction of the missile is pretty basic - have your end result looking as on photo above and you're there. We trust you can handle it. Just remember to keep fin attachment pins on the proper side of the blade while cutting out photoetched parts. Those pins are only 0.2mm long, but should make your job fitting fins to body much easier.

Of course, this is R-73, and it is in 1/144 scale. This means installing front AOA vanes is just as easy as evading R-73 that was fired upon you in a dogfight. Good luck.

Missile body has two additional slots for attaching to pylon/launcher, a template to get those slots aligned on launcher is provided on the edge of photoetched fret.

As for painting and markings - use your reference photos for desired scheme and exact colors. Actually, always use your reference photos!



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# Shelf Oddity

### Brief history and description of missile

R-73 (NATO AA-11 Archer) is short range air-to-air infrared homing missile. Along with R-27 it was designed in 1970s for latest Soviet fighters (Su-27 and MiG-29) to complement their high maneuverability with its extreme agility. At the beginning it was thought of as a development of R-60, but soon it became apparent to engineers at "Molnia" design bureau that range and maneuverability require larger airframe and new approach. One of preliminary design dispensed with front control surfaces altogether, and the missile was left with six hexagonaly placed fins at the back end. This however put additional emphasis on thrust vectoring and had adverse effect on range and operation. Finally aerodynamic scheme, somewhat resembling R-60 - with vortex generators in front of control surfaces - was accepted.

First test firing took place in 1978, first air launches - in 1980, along with state trials. It was officially accepted and put in service in 1984.

Wide aspect infrared seeker head, coupled with helmet mounted cueing system, 0.3km minimal range, effective aerodynamics and thrust vectoring make this missile extremely effective in close visual combat.

Further variants:

R-73E - export variant

R-73M1/M2 - progressively improved overall performance

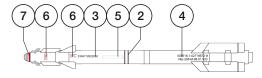
K-74ME - range extended from 30 to 40km

R-73 - with laser fuse

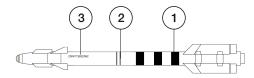
Operational missiles are white with some black and red stenciling.

Training missiles, as with other russian air-to-air guided weapons, are marked with three black stripes at the back of fuselage, and lack front AOA vanes.

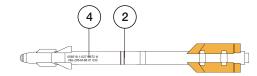
There are some photos showing test articles in various shades of red and orange - with all features of operational missiles. It seems as though reds and oranges proved to be better visible upon overcast sky - opposite to US experience with Douglas D-558-I Skystreak and Bell X-1 experimental aircraft which switched from orange/red to white livery for better visibility against clear Mojave sky.



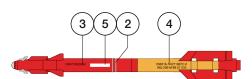
Default R-73: overall white, red band around nose (live warhead), aluminium AOA fins.



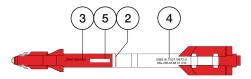
Training R-73: overall white, black stripes, no AOA fins.



Training R-73: overall white, orange (FS12246) wings, no AOA fins.

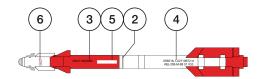


Hi-viz test R-73 scheme: Red (FS11302) and orange (FS12246).



Hi-viz test R-73 scheme: Red (FS11302) and white.

Colors and markings



Hi-viz test R-73 scheme: as above, but with white front.

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## **SO114418** 1/144 R-73 (AA-11 Archer)



#### Note

Missile bodies are produced using CNC lathe. Lathe blade has a certain, finite edge radius. Working toward tip of the missile, where radius of body decreases, we arrive at a point when the blade is unable to reach the very tip of round-nosed missile. This leaves a tiny mark.

We guessit is not a big deal for an advanced modeller to sand this scar smooth with few swipes of 1000-grit sandpaper. Worse things happen on daily basis on our workbenches. In return for this slight inconvenience we are able to machine a recessed exhaust nozzle, which we believe will be more appreciated.