The Soviet IS Series Heavy Tanks & How to Model Them

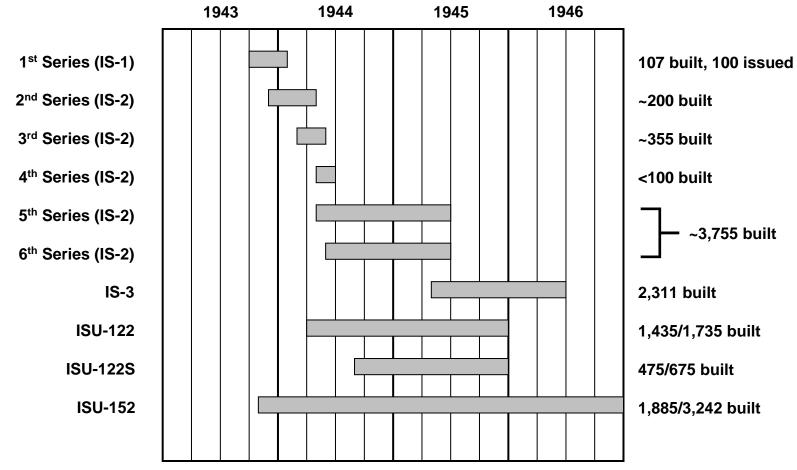
IS Series Gun Tanks

- IS-1 (IS-85 prior to March 1944)
 - 85mm D-5T gun
- IS-2 (IS-122 prior to March 1944)
 - 122mm D-25T gun
 - Updated hull and turret
 - Modernized in late 1950s to IS-2M
- IS-3
 - 122mm D-25T gun
 - Redesigned hull and turret
 - Modernized in late 1950s to IS-3M

IS Series Self-Propelled Artillery

- ISU-122
 - 122mm A-19S gun
 - No muzzle brake
- ISU-122S
 - 122mm D-25S gun
 - TsAKB muzzle brake
- ISU-152
 - 152.4mm ML-20S gun-howitzer
 - Fluted muzzle brake

IS Series Production Timeline



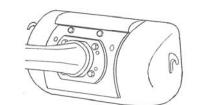
Production numbers – Until May 1945/Total

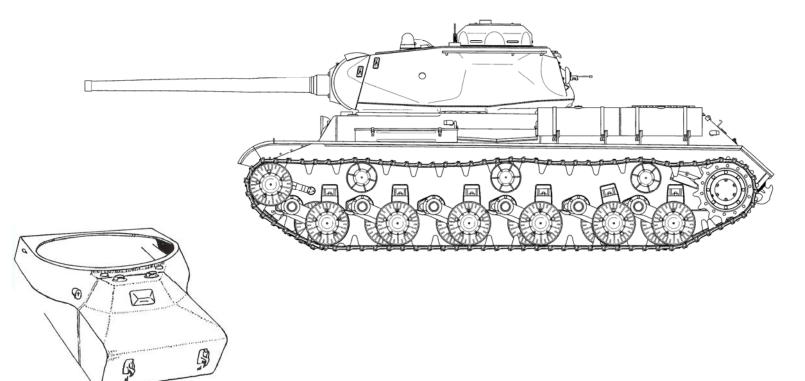
Gun Tanks

IS-85/IS-1 (1st Series)

- Oct 1943 to Jan 1944
- "Broken nose" hull
 - 72° glacis plate
- 85mm D-5T gun
 - Narrow mantlet (10T-15 gun sight)
 - PT-4-17 periscopic sight
 - No muzzle brake
- 107 built by ChKZ (100 issued to field units)
 - 76 survived until the end of the war
 - (37 written off in April 1945, 37 mothballed)
 - A small number (~10) were upgraded to IS-2 standard in 1944

IS-85/IS-1 (1st Series)





Cross-kit DML JS-1 kit 6052 with Eastern Express KV-85 kit 35102

- Use DML hull and running gear
 - Increase height of lower hull by 1.5mm
 - Raise return roller mounts by 1.5mm
 - Replace road wheels with MiniArm B35004
 - Fill holes in return rollers
 - Omit gun travel lock from rear hull
 - Replace tracks with Friul ATL-54
- Use turret from Eastern Express KV-85 kit
 - Replace barrel with Model Point MB35007
 - Detail with DML parts

Cross-kit DML "JS-1/JS-2 2 in 1" kit 9108 with Eastern Express KV-85 kit 35102

- Use DML hull and running gear
 - Raise return roller mounts by 1.5mm
 - Replace road wheels with MiniArm B35004
 - Fill holes in return rollers
 - Omit gun travel lock from rear hull
 - Replace tracks with Friul ATL-54
- Use turret from Eastern Express KV-85 kit
 - Replace barrel with Model Point MB35007
 - Detail with DML parts

Cross-kit DML JS-1 Kit 6052 with Zvezda JS-2 Kit 3524 and Eastern Express KV-85 kit 35102

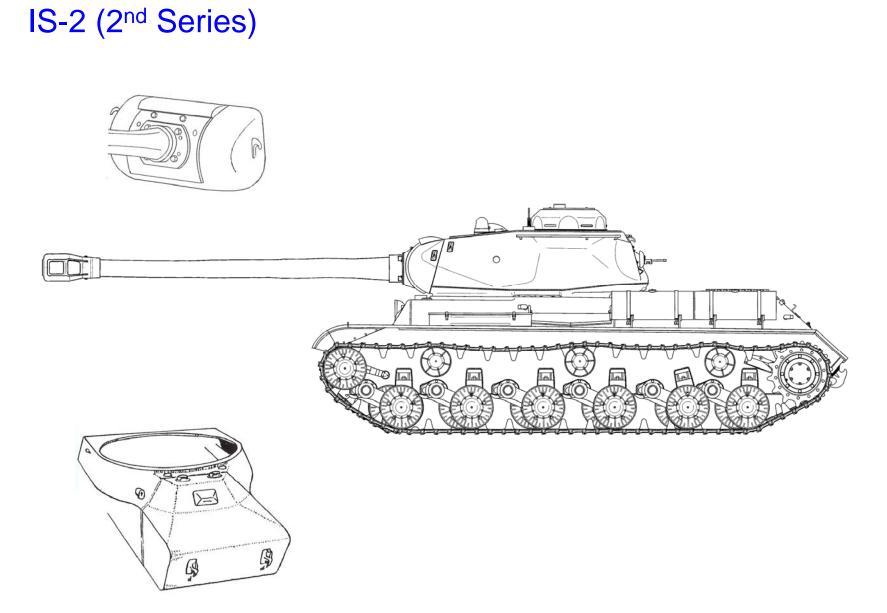
- Lower hull and running gear from Zvezda
 - Replace tracks with Friul ATL-54
 - Fill holes in return rollers
- Upper hull from DML
 - Omit gun travel lock from rear hull
- Turret from Eastern Express
 - Detail with DML parts
 - Replace barrel with Model Point MB35007

Cross-kit DML JS-1 Kit 6052 with Tamiya JS-2 Kit 35289 and Eastern Express KV-85 kit 35102

- Lower hull and running gear from Tamiya
 - Replace tracks with Friul ATL-54
 - Fill holes in return rollers
 - Omit spare tracks from lower front hull
 - Remove ammo loading hatch from left-hand side
- Upper hull from DML
 - Omit gun travel lock from rear hull
- Turret from Eastern Express
 - Detail with Tamiya and DML parts
 - Replace barrel with Model Point MB35007

IS-2 (2nd Series)

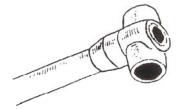
- Dec 1943 to April 1944
- "Broken nose" hull
 - 72°/75° glacis plate
- 122mm D-25T gun
 - Narrow mantlet (10T-17 telescopic gun sight)
 - PT-4-17 periscopic sight
 - Bulged turret left-hand side (asymmetrical roof)
 - Screw/piston breech
 - Muzzle brake
 - Some early vehicles had a "German" style muzzle brake
- 147 built by ChKZ



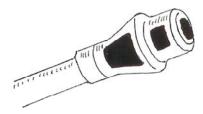
IS-2 Modified Turret



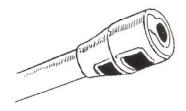
122mm D-25T Muzzle Brakes



T-shaped muzzle brake IS-122 prototype and trials vehicles – fall 1943



"German-style" muzzle brake Initial production examples – winter 1943/44



TsAKB muzzle brake Subsequent production examples – March 1944 onward

Modeling the IS-2 2nd Series – Option 1

DML JS-2 Kit 6012

- Increase height of lower hull by 1.5mm
- Raise return roller mounts by 1.5mm
- Replace road wheels with MiniArm 35004
- Fill holes in return rollers
- Omit the spare track links from the front hull (pre-July 1944)
- Replace tracks with Friul ATL-54 (optional)
- Replace barrel with
 - CMK HB039 (German-style muzzle brake)
 - Jordi Rubio TG-20 or Aber 35L69 (TsAKB muzzle brake)

Modeling the IS-2 2nd Series – Option 2

DML "JS-1/JS-2 2 in 1" Kit 9108

- Raise return roller mounts by 1.5mm
- Replace road wheels with MiniArm 35004
- Fill holes in return rollers
- Omit the spare track links from the front hull (pre-July 1944)
- Replace tracks with Friul ATL-54 (optional)
- Replace barrel with
 - CMK HB039 (German-style muzzle brake)
 - Jordi Rubio TG-20 or Aber 35L69 (TsAKB muzzle brake)

Modeling the IS-2 2nd Series – Option 2

Cross-kit Zvezda JS-2 Kit 3524 with DML JS-2 Kit 6012

- Lower hull and running gear from Zvezda
 - Replace tracks with Friul ATL-54 (optional)
 - Fill holes in return rollers
- Upper hull, turret and details from DML
- Replace barrel with
 - CMK HB039 (German-style muzzle brake)
 - Jordi Rubio TG-20 or Aber 35L69 (TsAKB muzzle brake)

IS-2 (3rd Series)

- March to May 1944
- "Broken nose" hull
 - 75° glacis plate
- 122mm D-25T gun
 - Narrow mantlet (10T-17 telescopic gun sight)
 - PT-4-17 or MK-IV periscopic sight
 - Bulged turret left-hand side
 - Falling wedge breech (faster operation)
 - TsAKB muzzle brake
- ~355 built by ChKZ
- Externally identical to 2nd Series

IS-2 (4th Series)

- May/June 1944
- "Broken nose" hull
 - 75° glacis plate
- 122mm D-25T gun
 - Wider mantlet (Tsh-17 gun sight)
 - Some vehicles had two sight apertures in the mantlet
 - MK-IV periscopic sight
 - Bulged turret left-hand side
 - Falling wedge breech
 - TsAKB muzzle brake
 - Gun travel lock on rear hull
- Unknown number (<100) built by ChKZ

IS-2 (4th Series) Ø ß 0 Ð Ð DE

© Neil Stokes 2009-2010

9

G

Modeling the IS-2 4th Series – Option 1

Cross-kit DML JS-2 Kit 6012 with Tamiya JS-2 Kit 35289 "JS-2 Model 1944 ChKZ"

- Hull and running gear from DML
 - Increase height of lower hull by 1.5mm
 - Raise return roller mounts by 1.5mm
 - Replace road wheels with MiniArm B35004
 - Fill holes in return rollers
 - Replace tracks with Friul ATL-54
 - Omit gun travel lock from rear hull
- Turret from Tamiya
 - Replace barrel with Jordi Rubio TG-20 or Aber 35L69

Modeling the IS-2 4th Series – Option 2

Cross-kit DML "JS-1/JS-2 2 in 1" Kit 9108 with Tamiya JS-2 Kit 35289 "JS-2 Model 1944 ChKZ"

- Hull and running gear from DML
 - Raise return roller mounts by 1.5mm
 - Replace road wheels with MiniArm B35004
 - Fill holes in return rollers
 - Replace tracks with Friul ATL-54
 - Omit gun travel lock from rear hull
- Turret from Tamiya
 - Replace barrel with Jordi Rubio TG-20 or Aber 35L69

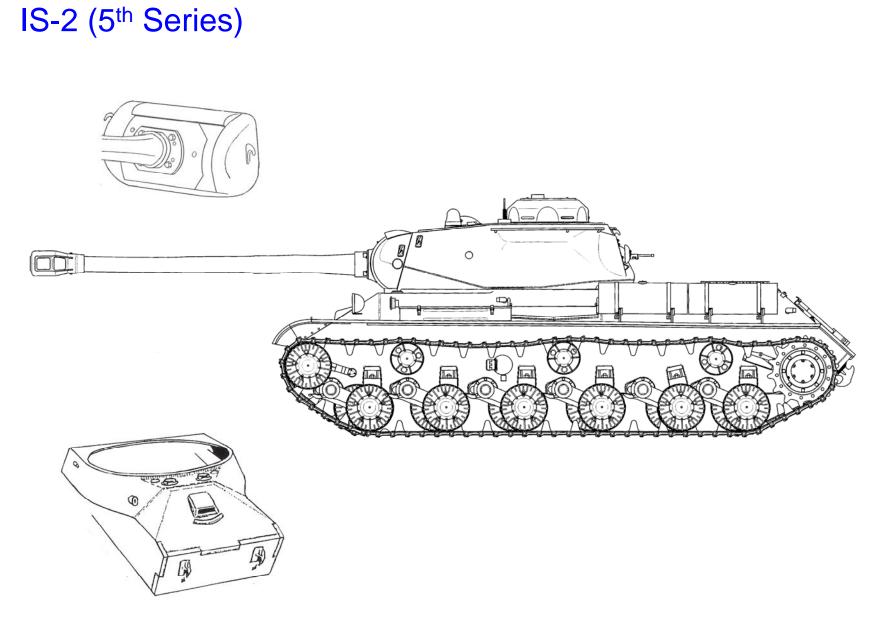
Modeling the IS-2 4th Series – Option 3

Cross-kit DML JS-2 Kit 6012 or "JS-1/JS2 2 in 1" Kit 9108 with Tamiya JS-2 Kit 35289 "JS-2 Model 1944 ChKZ"

- Lower hull and running gear from Tamiya
 - Replace tracks with Friul ATL-54
 - Fill holes in return rollers
 - Omit spare tracks from lower front hull
 - Remove ammo loading hatch from left-hand side
- Upper front hull from DML
- Upper rear hull from Tamiya
 - Omit gun travel lock from rear hull
- Turret from Tamiya
 - Replace barrel with Jordi Rubio TG-20 or Aber 35L69

IS-2 (5th Series)

- May 1944 to June 1945
- "Straight nose" hull with welded nose
 - 60° glacis plate
 - Ammunition loading hatch in left-hand side of the lower hull
 - Cast return rollers with three lightening holes
- 122mm D-25T gun
 - Wider mantlet (Tsh-17 gun sight)
 - MK-IV periscopic sight
 - Bulged turret left-hand side
 - Falling wedge breech
 - Muzzle brake
 - Gun travel lock on rear hull
- Part of ~3,755 built by ChKZ and LKZ
 - Hulls & turrets cast by UZTM



Modeling the IS-2 5th Series – Option 1

Tamiya Kit 35289 "JS-2 Model 1944 ChKZ"

- Modify nose to represent UZTM "sharp-nosed" version
- Modify tow shackle mounts on right front fender (or use parts from Aber 35219)
- Omit track links from lower front hull (pre-July 1944)

- Replace tracks with Friulmodel ATL-54
- Replace barrel with Jordi Rubio TG-20 or Aber 35L69
- Replace fenders with Aber 35220
- Detail with Aber 35219

Modeling the IS-2 5th Series – Option 2

DML "JS-2m UZTM Production Type, Chinese Volunteer" Kit 6804

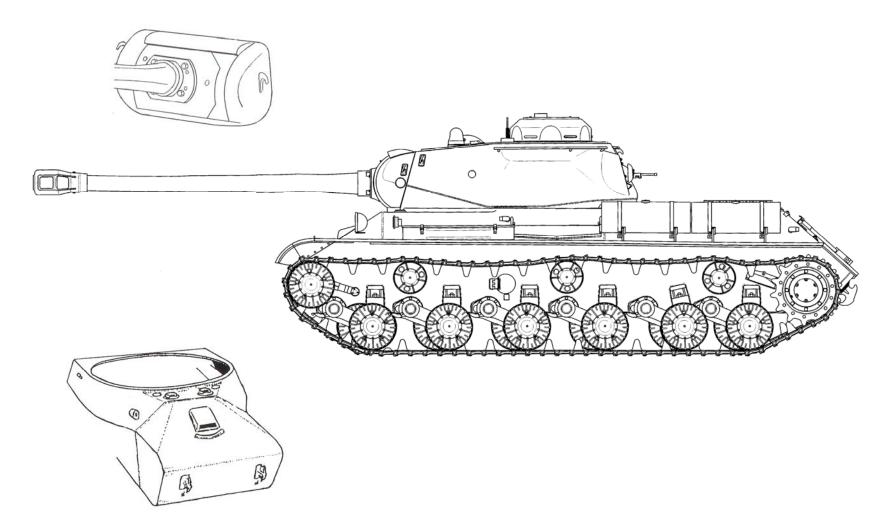
- Increase height of lower hull by 1.5mm
- Raise return roller mounts by 1.5mm
- Replace road wheels with MiniArm 35004
- Omit the spare track links from the front hull (pre-July 1944)

- Replace tracks with Friulmodel ATL-54
- Replace barrel with Jordi Rubio TG-20 or Aber 35L69
- Replace fenders with Aber 35220
- Detail with Aber 35219

IS-2 (6th Series)

- June 1944 to June 1945
- "Straight nose" hull with cast nose
 - Ammunition loading hatch in left-hand side of the lower hull
 - Cast return rollers with three lightening holes
- 122mm D-25T gun
 - Wider mantlet (Tsh-17 gun sight)
 - MK-IV periscopic sight
 - Bulged turret left-hand side
 - Falling wedge breech
 - Muzzle brake
 - Gun travel lock on rear hull
- Part of ~3,755 built by ChKZ and LKZ
 - Hulls & turrets cast by Factory No.200

IS-2 (6th Series)



Modeling the IS-2 6th Series

Tamiya Kit 35289 "JS-2 Model 1944 ChKZ"

- Build out of the box
- Modify tow shackle mounts on right front fender (or use parts from Aber 35219)
- Omit track links from lower front hull (pre-July 1944)

- Replace tracks with Friulmodel ATL-54
- Replace barrel with Jordi Rubio TG-20 or Aber 35L69
- Replace fenders with Aber 35220
- Detail with Aber 35219

IS-3

- April 1945 to mid-1946
- Essentially a new vehicle
 - Originally designated *Pobeda* ("victory")
- Lower, wider hull
 - Pointed "shchuka" ("pike") nose
 - Cast return rollers with three lightening holes
- "Soup bowl" turret
- 122mm D-25T gun
 - Tsh-17 gun sight
 - MK-IV periscopic sight
 - Falling wedge breech
 - Muzzle brake
 - Gun travel lock on rear hull
- 2,311 built by ChKZ and LKZ

Modeling the IS-3

Tamiya Kit 35211 "JS-3 Stalin Russian Heavy Tank"

- Fill open sponsons
- Modify tow shackle mounts on right front fender (or use parts from Aber 35035)

- Replace tracks with Friulmodel ATL-34
- Replace barrel with Jordi Rubio TG-20 or Aber 35L69
- Detail with Aber 35035

Self-Propelled Guns

ISU-122

- April 1944 Dec 1945
- Ammunition loading hatch in left-hand side of the lower hull
- Original return rollers lacked lightening holes
 - New return rollers with three lightening holes added in June 1944
- 122mm A-19S gun
 - ST-18 telescopic sight
 - No muzzle brake
- 12.7mm DShK anti-aircraft machine gun fitted from the end of 1944
 - Retro-fitted to some older vehicles after repairs
- 1,735 built (1,435 until May 1945)

Modeling the ISU-122 – Option 1

Tamiya Kit 35303 JSU-152

- Replace gun barrel/mantlet with CMK HB061
- Add grab handle to left-hand side of mantlet

- Replace tracks with Friul ATL-54 (pre-July 1944)
- Fill holes in return rollers (pre-June 1944)
- Omit track links from lower front hull (pre-July 1944)
- Add third hand rail to forward superstructure sides (post-war)
- Add DShK machine gun (January 1945 onwards)

Modeling the ISU-122 – Option 2

DML Kit 9112 JSU-152 3 in 1

- Raise return roller mounts by 1.5mm
- Replace road wheels with MiniArm 35004
- Omit the spare track links from the front hull (pre-July 1944)
- Fill holes in return rollers (pre-June 1944)
- Omit third hand rail to forward superstructure sides (WW2)
- Add grab handle to left-hand side of mantlet
- Add DShK machine gun (January 1945 onwards)

- Replace tracks with Friulmodel ATL-54
- Replace engine intake screens with Aber 35 G40

ISU-122S

- September 1944 Dec 1945
- Ammunition loading hatch in left-hand side of the lower hull
- Return rollers with three lightening holes
- 122mm D-25S gun
 - Tsh-17 telescopic sight
 - TsAKB muzzle brake
- 12.7mm DShK anti-aircraft machine gun fitted from the end of 1944
 - Retro-fitted to some older vehicles after repairs
- 675 built (475 until May 1945)

Modeling the ISU-122S – Option 1

Tamiya Kit 35303 JSU-152

- Replace gun barrel/mantlet with CMK HB024
- Add grab handle to left-hand side of mantlet

- Add third hand rail to forward superstructure sides (post-war)
- Add DShK machine gun (January 1945 onwards)

Modeling the ISU-122S – Option 2

DML Kit 9112 JSU-152 3 in 1

- Raise return roller mounts by 1.5mm
- Replace road wheels with MiniArm 35004
- Omit third hand rail to forward superstructure sides (WW2)
- Add grab handle to left-hand side of mantlet
- Add DShK machine gun (January 1945 onwards)

- Replace tracks with Friulmodel ATL-54
- Replace engine intake screens with Aber 35 G40

ISU-152

- November 1943 1947
- Ammunition loading hatch in left-hand side of the lower hull
- Original return rollers lacked lightening holes
 - New return rollers with three lightening holes added in June 1944
- 152.4mm ML-20S gun-howitzer
 - ST-10 telescopic sight
 - Fluted muzzle brake
- 12.7mm DShK anti-aircraft machine gun fitted from the end of 1944
 - Retro-fitted to some older vehicles after repairs
- 3,242 built (1,885 until May 1945)

Modeling the ISU-152 – Option 1

Tamiya Kit 35303 JSU-152

- Replace gun barrel/mantlet with:
 - Aber 35 L40
 - CMK HB026 (includes mantlet)
- Add grab handle to left-hand side of mantlet

- Replace tracks with Friul ATL-54 (pre-July 1944)
- Fill holes in return rollers (pre-June 1944)
- Omit track links from lower front hull (pre-July 1944)
- Add third hand rail to forward superstructure sides (post-war)
- Add DShK machine gun (January 1945 onwards)

Modeling the ISU-152 – Option 2

DML Kit 9112 JSU-152 3 in 1

- Raise return roller mounts by 1.5mm
- Replace road wheels with MiniArm 35004
- Omit the spare track links from the front hull (pre-July 1944)
- Fill holes in return rollers (pre-June 1944)
- Omit third hand rail to forward superstructure sides (WW2)
- Add grab handle to left-hand side of mantlet
- Add DShK machine gun (January 1945 onwards)

- Replace tracks with Friulmodel ATL-54
- Replace engine intake screens with Aber 35 G40