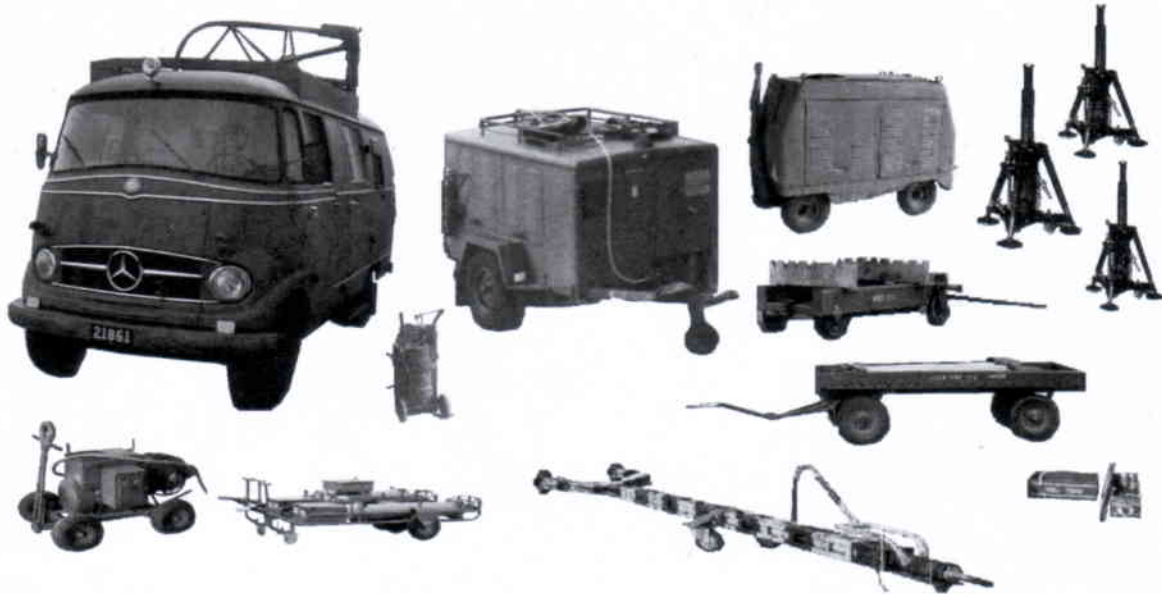


GECKO HEAVY INDUSTRIES

J35 DRAKEN GROUND SUPPORT SET SCALE 1/72

GEC72025

SCALE 1/72

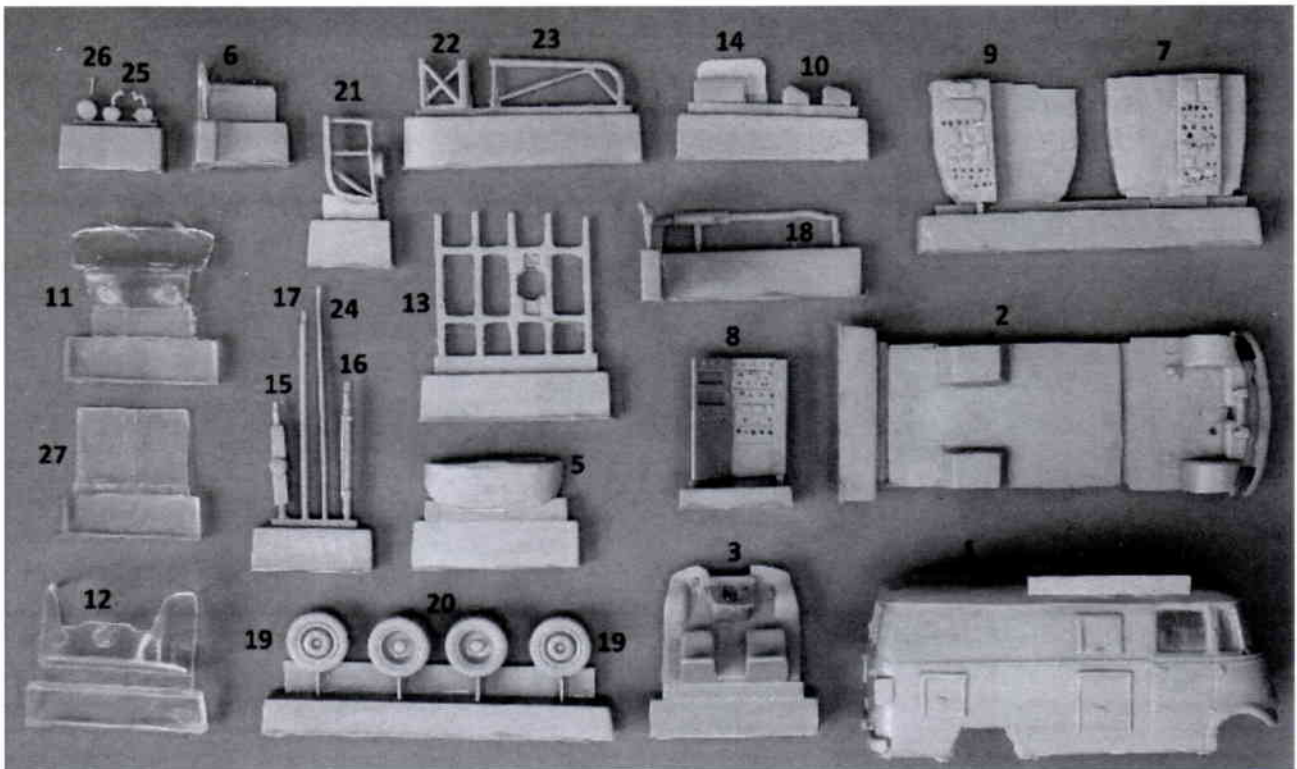


General Background

Sophisticated military aircraft require complex preparation for mission readiness and thorough maintenance after every flight. This set of ground support equipment aims to provide modelers with enough ancillary equipment in order to build an attractive diorama around a 1/72 Saab J35 Draken model. It was painstakingly researched over half a decade by examining all available literature, documentary videos, internet sites and measuring remaining originals in museums. This set compliments GE72024 Volvo Amlastbil 806 for the J32 and GE72022 Volvo Bogserbil 959 with towbar and Kraftvagn 745G for the AJ37, the Maestro MMS7201 Rull Tank and MMS7203 Volvo Startbil 953. Remove all casting blocks and clean up the parts leaving them on separate piles for each equipment so as not to get them confused. Most of the equipment, with few exceptions, was painted in standardized Flygvapnet light Olive. Tamiya AS14 USAF Olive comes closest.

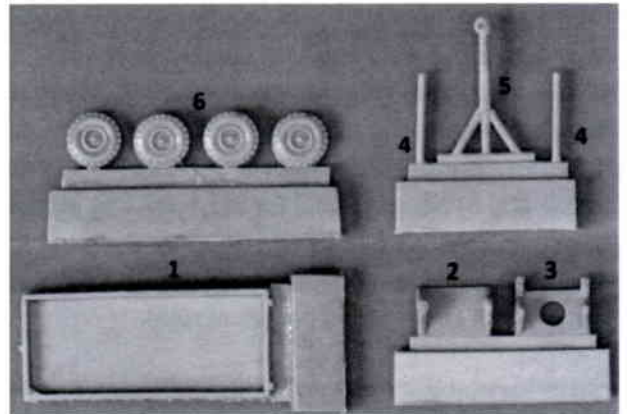
MB319 Servicebil 405

Clean up all casting gates inside and underneath vehicle body (1). Cement seat module (3) to chassis (2) using locating pin and then glue instrument panel (5) to seat module. Attach side electronics panel (8) to front electronics panel (7). Prime van interior, interior components, including rear electronics panel (9) and then spray paint light gloss grey. Highlight grey panels with black, red, silver, green and yellow buttons etc. Steering wheel (6) rim is black. Attach to locating hole in chassis and beneath instrument panel (5). Glue rear extensions (10) to prepared positions on rear of van body besides the doors. Sand joints smooth. Then attach gantry frame (13) to rooftop bases with short end facing rear. Mask inside of vehicle with tissue paper and or masking tape and then prime. Prime and spray paint van body and chassis underside light olive drab. Insert first windshield (11) and then side windows (12) in front cabin without using glue. The insert first combined front and middle electronic panel (7-8) in middle of cab followed by rear electronic panel (9), again without using glue as tension will keep them in place. After verifying fit, glue chassis assembly (2) to van body (1) with all interior components inside. Attach running board (14), axles (15-16), exhaust (18) and drive shaft (17) to chassis. Paint suspension, exhaust, axles and drive shaft gun metal. Wheel rims are olive and tires dark grey. Attach pre painted wheels (19-20) to axles after checking fit. Assemble gantry (21, 22, 23). Extra resin rod (24) is provided to add supports on front of gantry (21). Prime and spray paint gantry Olive. Use 1 x 20 cm 1mm rubber tube glued to tip of gantry. Mask window of side door (27) inside and outside. Paint outside Olive and inside light gloss grey. Attach side door open to rear or closed. There was a black roll down curtain inside the window. Attach pre-painted side mirrors (25) in pre-prepared and slightly enlarged hole in "A" pillar and attach searchlight (26) to deepened hole at front of cab roof. Paint grill gun metal and then carefully paint lights and trim silver. Make license plates on your printer with yellow letters and black background in font 5. Known license numbers are: 21861, 25366, 26312, 24220, 20009. One vehicle is displayed in a museum with an old style metal office chair for a shop manikin in the correct uniform in the electronics section, while the other is not. Crew and chair not provided. Exact historical configuration is not known, so feel free to use your creativity. **See image page 2.**

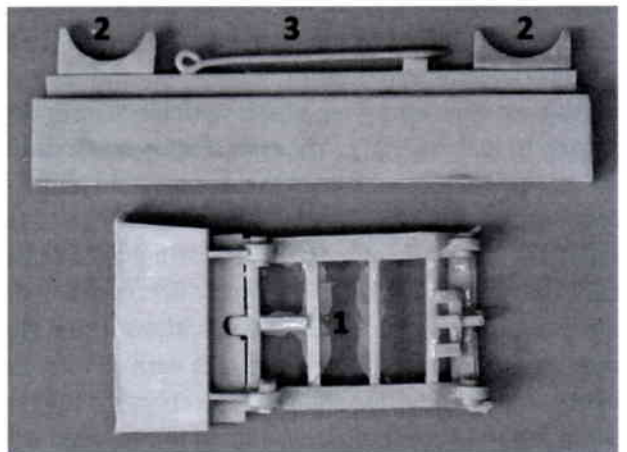


Ammunitionsläpkärä 1 / Ammunition Cart 1 (exact designation unknown)

For 30 mm Aden Cannon ammunition and Stowage etc. (See below). Already used by J29 Tunnan for RB24 Sidewinders and other equipment since 1950s. Remove triangular film inside axle supports (2-3) with sharp blade and attach to bottom of trailer bed (1). Attach axles (4) to supports. Attach tow arm (5) to protrusions on front of steerable axle support (3). Prime and spray paint Olive. In some cases, the cart did not have the side walls, so sand them off if interested in depicting them this way. In that case paint cars light grey with worn dark grey boards. Attach pre-painted wheels (6).

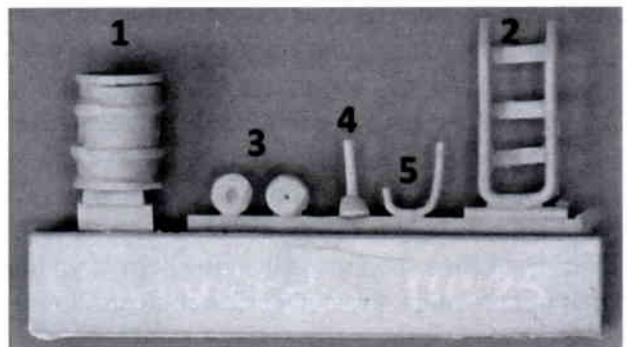


Ammunitionsläpkärä 2 / Ammunition Cart 2 (exact designation unknown) For RB24 Sidewinders and/or J35 Drop Tank, also used by J32 Lansén for bombs and rockets. One unit is preserved in the F11 museum in Nyköping. Cement drop tank supports (2) to top of 2nd from inside frames of main body (1). Attach tow arm (3) to front protrusion. Prime and paint Olive or medium blue. White reflectors at front, red in back corners.

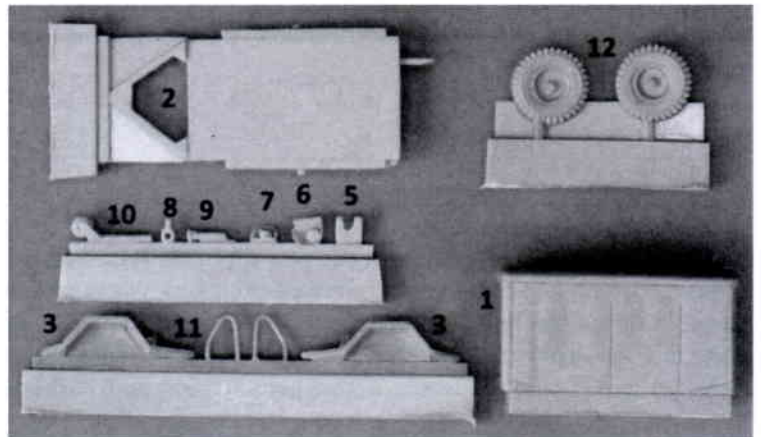


Startvätska MC 25 / Drum Cart

In use since mid-1950s for various replenishment liquids until now with only small modifications. It was also used for AJ37 and J32. Take Barrel (1) and attach frame (2) with handle bars pointed out and so that the cart points slightly down with the wheels on. Attach pointed rod (3) in middle of barrel and hook like tube (4) cemented between rod and right frame. Prime and spray paint Olive with yellow stencils. Black handlebars. Use 1 x 5 cm long 0.6 mm rubber tube.

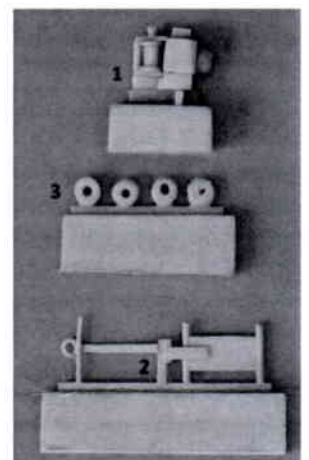
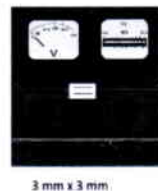


Kraftvagn 745B (Beredskapaggregat) The Kraftvagn 745B was produced by ASEA and had an industrial Porsche engine. It was used for starting/ground power/warming up from at least 1970s until around the mid-1990s. Attach body (1) to chassis (2) with orifice from hot air tube at front where tow arm is. Attach socket (5) for warm air tube to main body. Position mudguards (3) above axle so that wheels fit comfortably and that triangular light point to the rear. Attach rear lights (6-7) and tow hook (8) to rear chassis. Larger light goes to right side. Drill holes in both sides of rear chassis for support struts (11). Attach towing arm (9) to front of chassis frame together with front support dolly (10) positioned at correct height. Due to the complexity of casting process, the roof rack is not provided. Use thin copper wire (not included) using provided locator holes. Unused cables were stored on there. Paint entire assembly Olive with some gun metal highlights on grills and tow hook as well dark grey tires. Yellow and white stencils. Attach pre painted wheels (12). Rear lights/reflectors were red/orange. Use 2 x 20 cm long 1 mm rubber tube + 1 x 20 cm long 2 mm rubber tube. The thicker tube was used for warming up critical aircraft components.



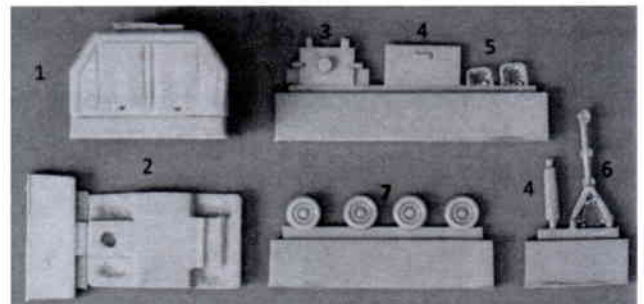
Omfornarvagn 802 "Humlan"

The Humlan (bumblebee) provided electric power for instruments during maintenance only inside of hangars, not on flight line, often in conjunction with the MB319L Servicebil 405. It sought to have been in use since around the early 1960s until the 1990s. At least one unit is in the Flygvapenmuseum. Attach body (1) to chassis (2) with cable drum at rear and wheels (3) to axles. Prime and spray paint entire unit Olive with dark grey tires and gun metal cables. Use 1 x 10 cm long 0.6 mm rubber tube. Part of cable stowed on top of unit. Decals provided with dials on right sized and coloured buttons on left side. Some yellow stencils best done with decals from spares box or carefully hand painted. Red handlebars and to hook.



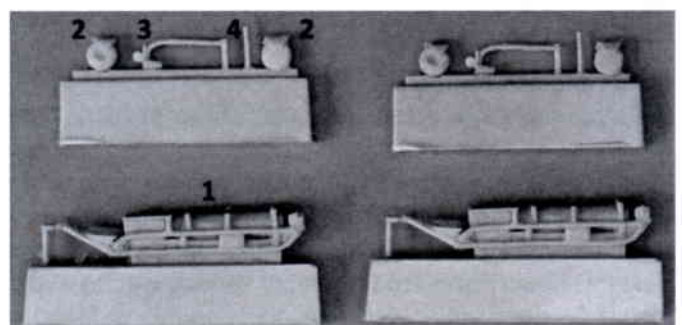
Hydraulprovingsaggregat 402 MT

Hydraulic testing unit from unknown manufacturer, used from around early 1960s until 1990s. At least 1 unit is preserved in Flygvapenmuseum. After cleaning and sanding away all casting blocks, attach body (1) to chassis (2) with indentation for instrument panel at rear. Drill out holes for 4 lift loops on top and for both rear bumpers. Attach axle (4) and turning dolly (3) to chassis in the desired position. Make 4 small lifting loops from thin copper electrical wire and attach at each top corner. Attach instrument panel cover (4) open or closed. Attach tow bar (6) to locators on turning dolly. Prime and spray paint entire unit Olive. Highlight grills etc. with gun metal. Attach pre painted wheels (7) to axles. White and yellow stencils. A decal for the instrument panel is provided. Use 1 x 20 cm long 1 mm rubber tube in top orifice.



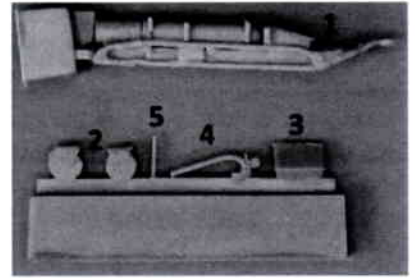
Syrgaskärta 873/Kvävgaskärta 875: Oxygen and Nitrogen carts

(Identical except for paint on tanks). In use since at least 1970s and still in use with some in museums. Can also be used for AJ37 and J32. Attach wheels (2) on locator tabs on sides of main frame (1). Drill out tow hole. Attach front wheel support (3) in gap between tow hook and main part of frame with handle bars (4) at top. Prime and spray paint Olive. The oxygen tank was black while the nitrogen tank was grey. Both had yellow stencils. Use 2 x 5 cm long 0.6 mm rubber tube (1 for each).



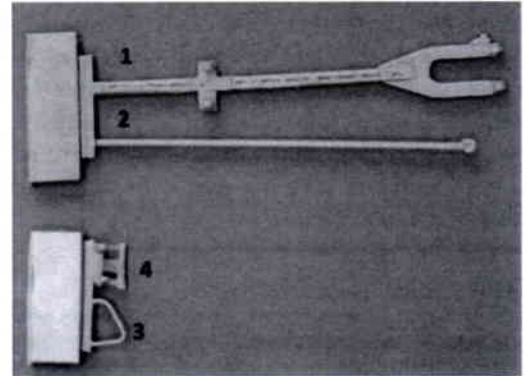
Tryckluftkärra 8051: Compressed air cart

In use since around 1970s and still in use. Some in museums. Can also be used for AJ37 and J32. Attach wheels (2) on locator tabs on sides of main body (1). Cement stowage box (3) to top of tank near front. Drill out tow hole. Attach front wheel support (4) in gap between tow hook and main part of frame with handle bars (5) at top. Prime and spray paint green. Tank is grey with yellow and white stencils. Use 1 x 5 cm long 0.6 mm rubber tube.



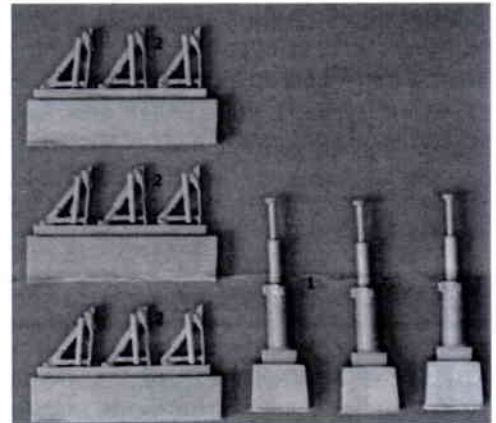
Bogsergaffel Combination / Tow Bar

Multi aircraft tow bar in use from late 1960s to mid-1990s. Also useable for J32, J29 and SK60. Drill small hole in end of main frame (1). Insert extension (2) at desired length into hole in main frame ensuring tow hole is parallel to ground. Drill out tow hole. Attach handle (3) near front of main frame. Prime in white then spray paint yellow. Then paint black stripes. 2 different support wheel (4) configurations possible. Accent gaps in frame with dark grey paint.



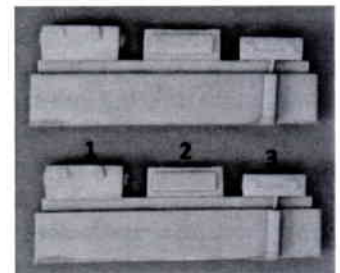
Domkraft / Support Jacks x 3

In use from early 1960s and most likely still in use. Can be adjusted to desired height by reducing height of rod. Can also be used for AJ37 Viggen. Carefully sand supports (2) so that they attach smoothly just under the three locator tabs on central hydraulic unit (1). If the unit is not completely vertically straight, add a thin layer of triangular plasticard under short support to even out. Prime and paint Olive. Bottom of support above pad and top of Jack metal colour with yellow stencils. When not used to support an aircraft, Jacks often stood in corner of Hangar, sometimes folded up.



Munitions Boxes

For Aden 30 mm cannon ammunition and stowage (3). In use until mid-1990s. Lids (2) sometimes folded to the side of the box (1) or were loose. (We challenge our customers to design and print 3D some 30 mm ammo belts as below). Paint Olive with yellow stencils, place on Amsläpvagn 2 or on ground next to aircraft.



Heartfelt thanks for technical support and research assistance from Hans Fernström and Per Björqvist at the Flygvapenmuseum.

Useful Web Sites:

For detailed photos, refer to the IPMS Swedish and Finnish SIG Facebook site internet search engines or under <https://www.facebook.com/groups/1599052557035228> or for help with paint schemes and details.

General instructions

We try to make our details as easy to fit as possible. However, we expect our customers to have some experience in modelling and be familiar with the new materials like resin, brass and photo etched. It is easy when you have learned the basics. First, we urge you to clean up the parts with soap and water, to remove possible remains of release agents. This goes for common plastic injected parts as well. Usual plastic cement does not work on resins and metals. Cyanoacrylate glue or epoxy does the job. If longer parts are bent, soak in hot water and gently bend until they are straight. Resin Parts are preferably sanded wet, to avoid inhaling the dust. The use of Cyanoacrylate and epoxies is also to be done under well ventilated conditions. Read the instructions of your adhesive products.

NOT RECOMMENDED TO CHILDREN UNDER THE AGE OF 14.

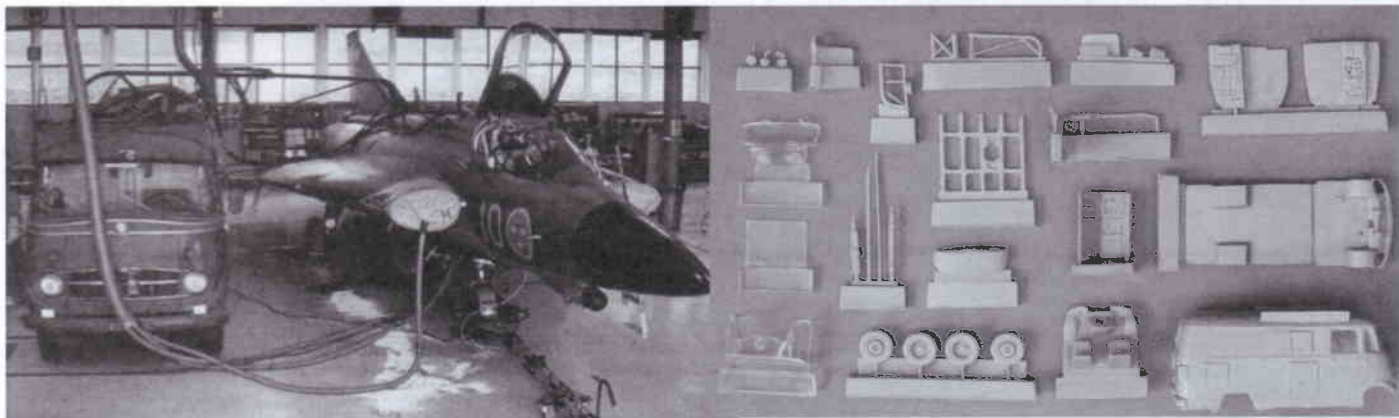
GECKO HEAVY INDUSTRIES

J35 DRAKEN GROUND SUPPORT SET

GE72025

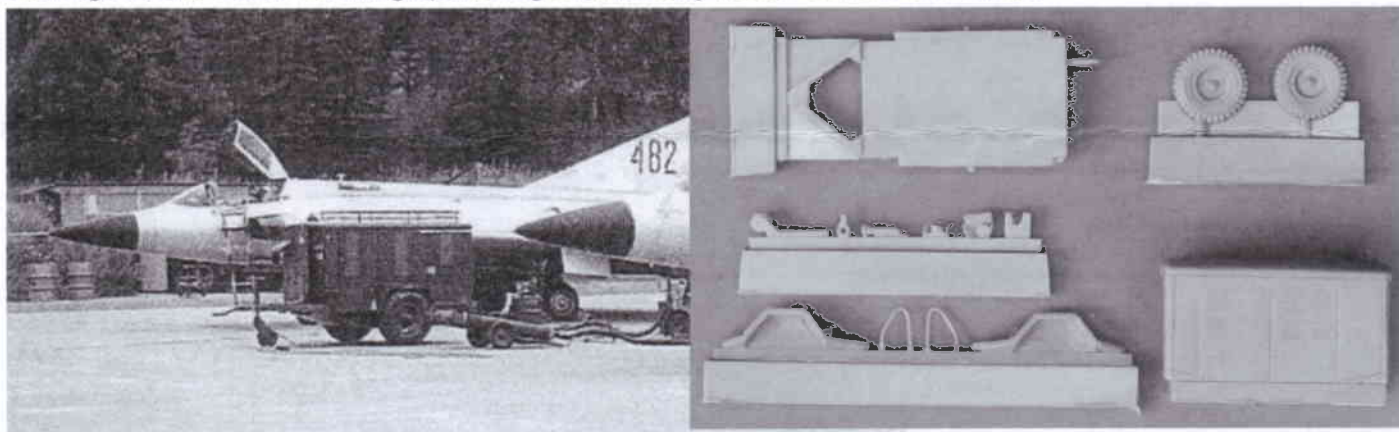
MB319 Servicebil 405

Vehicle is introduced in 1955 and is customized for testing electronics on J35 starting ca 1960. 2 vehicles remaining in Swedish museums. Also used by Finnish Air Force



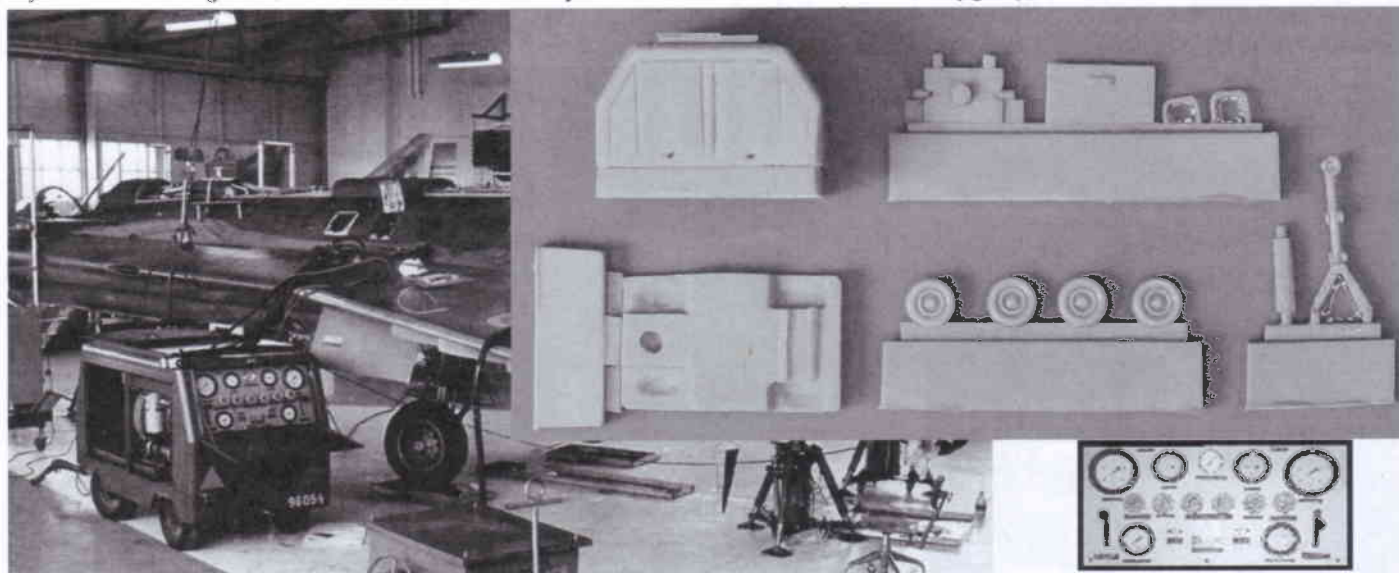
Kraftvagn 745B

Starting/Ground Power/warming up starting around early 1960s until around 1990s.



Hydraulprovingsagregat 402 MT

Hydraulic Testing unit, used from around early 1960s until 1990s. 1 Unit in Flygvapnet Museum.

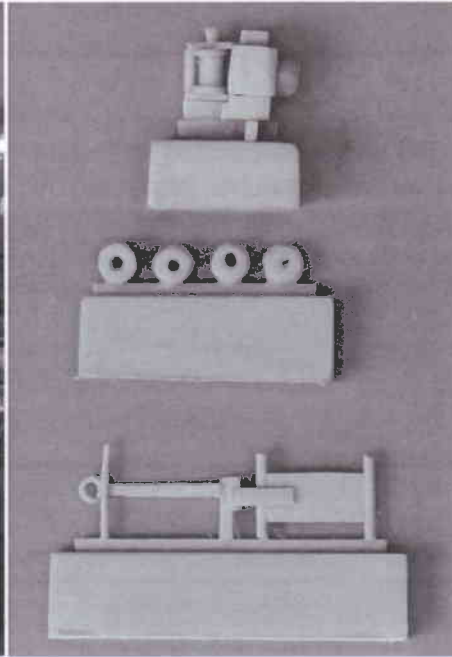
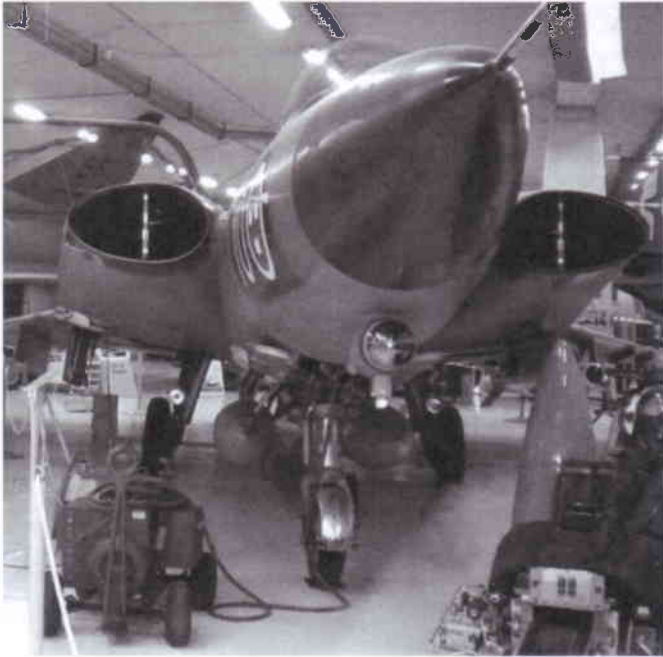


Omformarvagn 802 "Humlan"

Electric Power during maintenance

Used only in hangars, not flight line, in conjunction with MB319L Servicebil 405.

In use since around early 1960s until 1990s. At least one unit in Flygvapnet Museum.

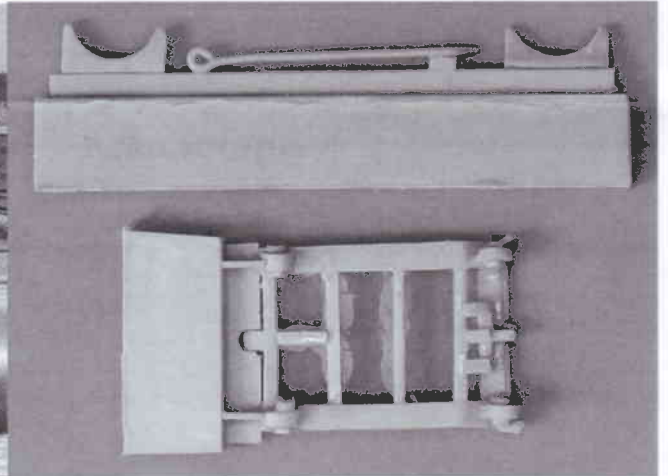


Optional due to size

Ammunitionsläpkärra 1 (exact designation unknown)

For RB24 Sidewinders and/or J35 Drop Tank, also used by J32 Lansen

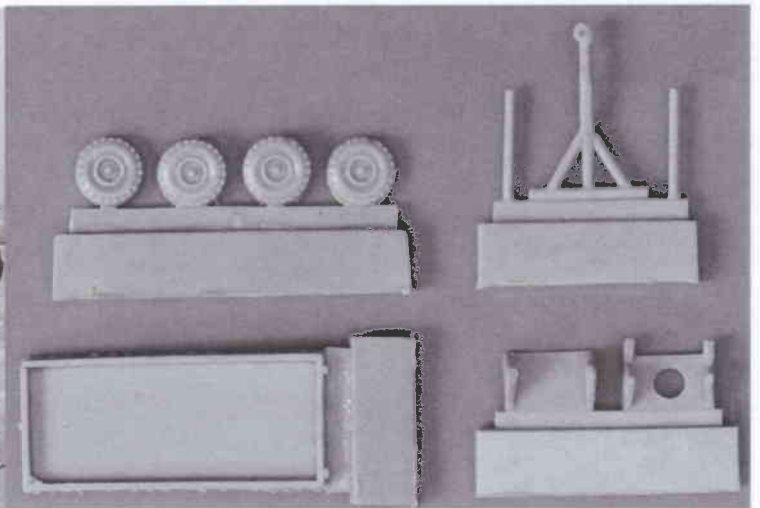
One unit in the F11 museum in Nyköping.



Ammunitionsläpkärra 2 (exact designation unknown)

For Cannon ammunition and Stowage etc (See below).

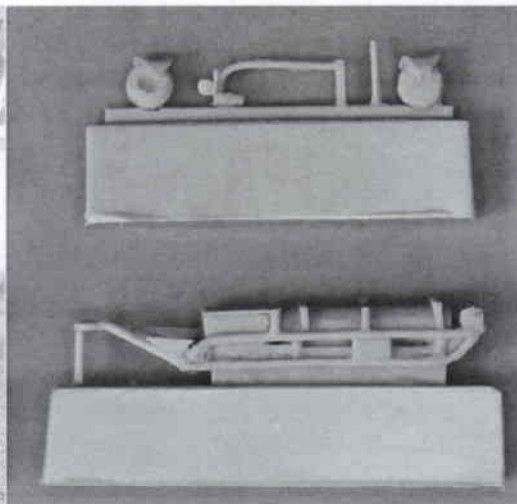
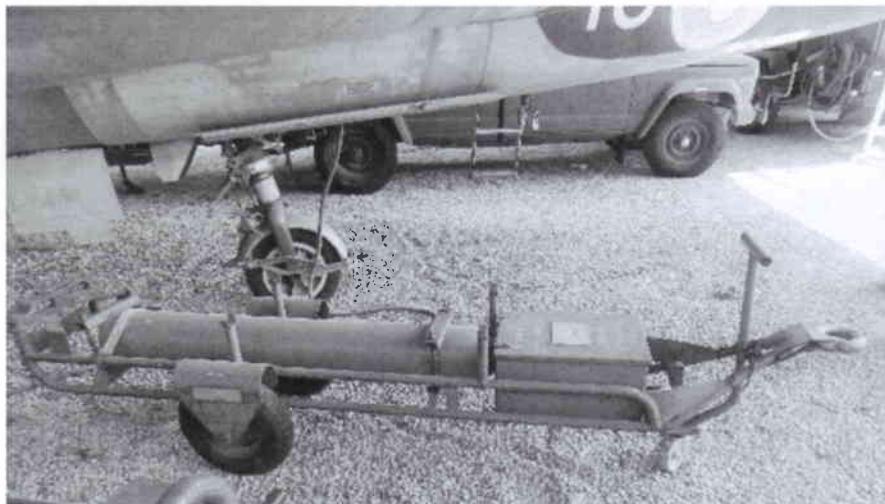
Already used by J29 for RB24 Sidewinders since 1950s



Syrgaskärra 873 / Kvävgaskärra 875

Oxygen cart / Nitrogen cart

In use since around 1970s and still in use. Some in museums.

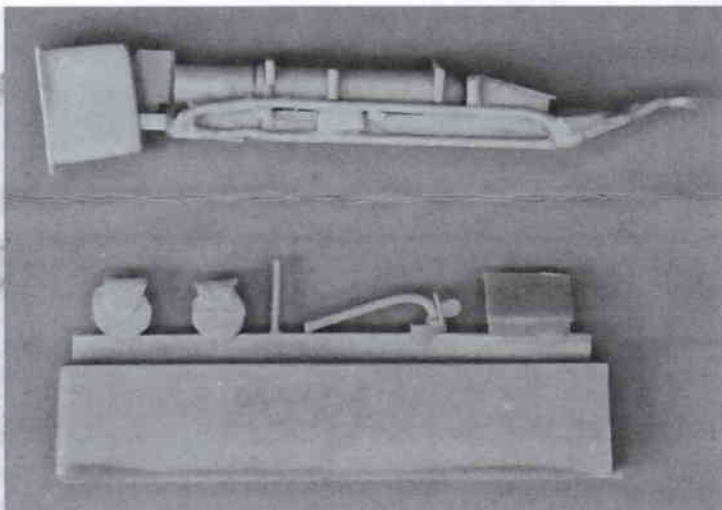
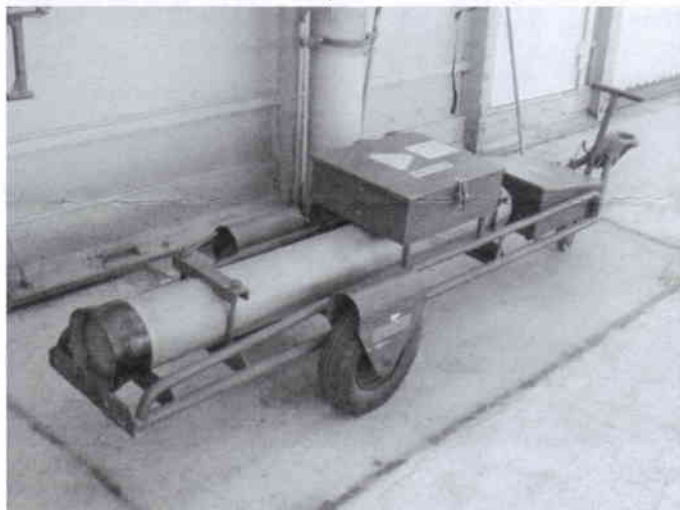


Tryckluftkärra 8051

Compressed air cart

In use since around 1970s and still in use.

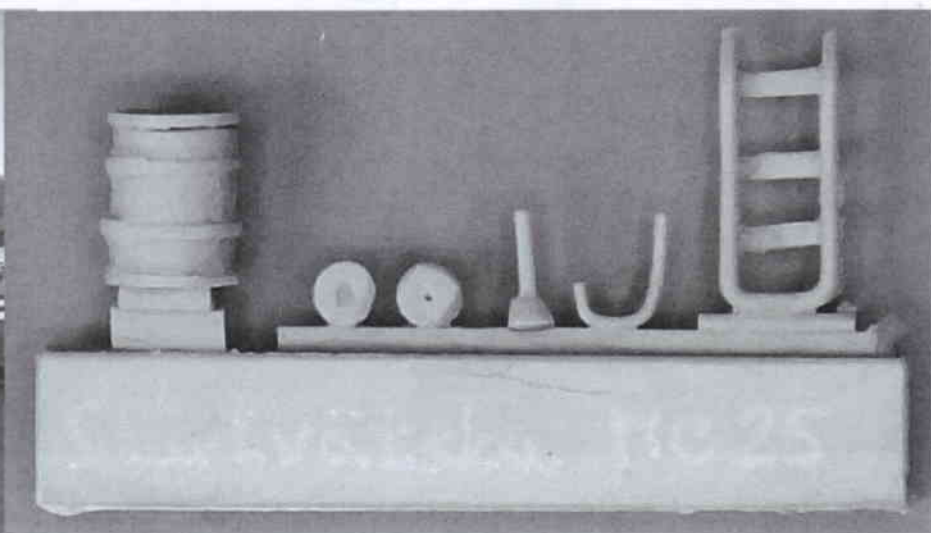
Various units in museums.



Startvätska MC 25

Lubrication cart

In use since mid 1950s until with small modifications.



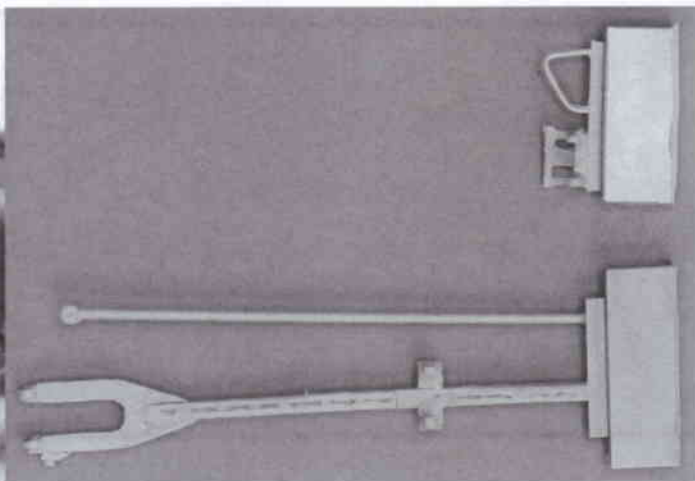
Bogsergaffel Combination

Tow Bar

Useable for J32, J29 and SK60.

In use from late 1960s to mid 1990s.

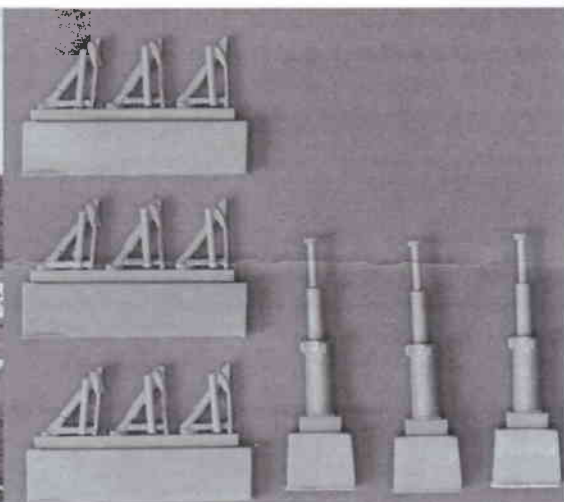
2 wheel configurations possible and extendable



Domkraft

Jacks, Also usable for J37 etc (sized for J37, can be cut to J35 Size)

In use from early 1960s and most likely still in use.



Ammunitionslåda

Munitions box for 30 mm Aden Cannon and stowage.

In use until mid 1990s.

