

1:72

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D-110

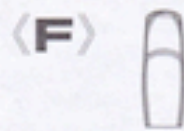
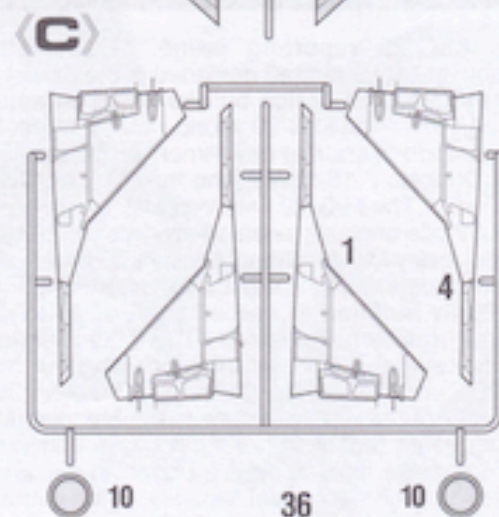
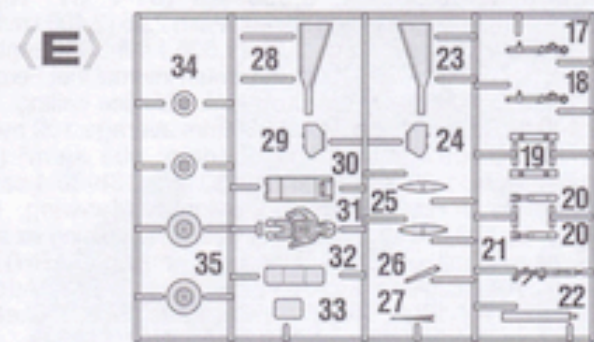
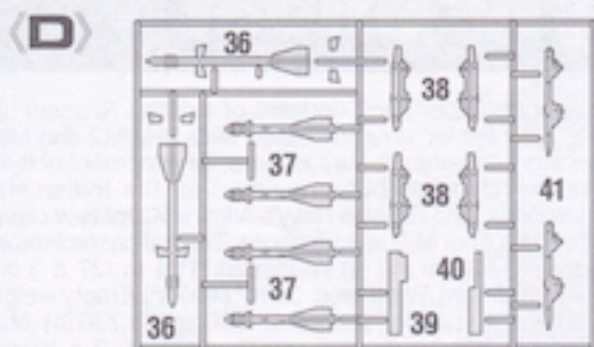
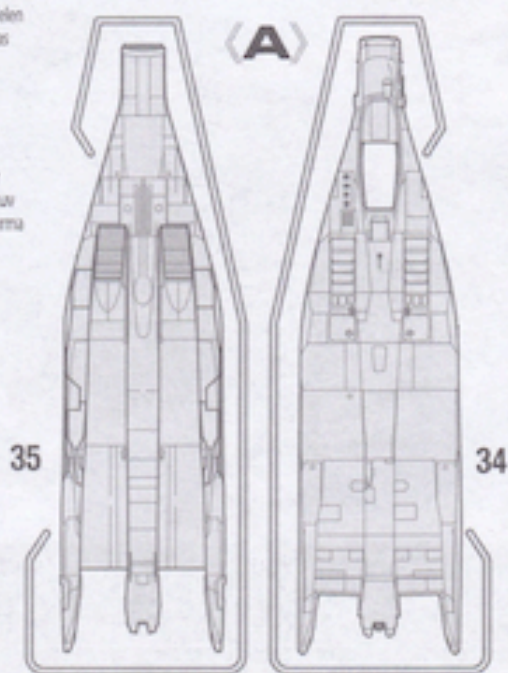
MiG-29 'Kyiv Ghost'

The Mikoyan MiG-29 reporting name: "Fulcrum") is a fourth-generation jet fighter aircraft designed in the Soviet Union. Developed by the Mikoyan design bureau as an air superiority fighter during the 1970s, the MiG-29, along with the larger Sukhoi Su-27, was developed to counter new American fighters such as the McDonnell Douglas F-15 Eagle, and the General Dynamics F-16 Fighting Falcon. The MiG-29 entered service with the Soviet Air Force in 1983. While originally oriented towards combat against any enemy aircraft, many MiG-29s have been furnished as multirole fighters capable of performing a number of different operations, and are commonly outfitted to use a range of air-to-surface armaments and precision munitions. The MiG-29 has been manufactured in several major variants, including the multirole Mikoyan MiG-29M and the navalised Mikoyan MiG-29K; the most advanced member of the family to date is the Mikoyan MiG-35. Later models frequently feature improved engines, glass cockpits with HOTAS-compatible flight controls, modern radar andIRST sensors, considerably increased fuel capacity; some aircraft have also been equipped for aerial refuelling. Following the dissolution of the Soviet Union, a number of successor states have continued to operate the MiG-29; the largest of which is the Russian Air Force. The Russian Air Force wanted to upgrade its existing fleet to the modernised MiG-29SMT configuration, but financial difficulties have limited deliveries. The MiG-29 has also been a popular export aircraft; more than 30 nations either operate or have operated the aircraft to date, India being one of the largest export operators of the type. As of 2013, the MiG-29 is in production by Mikoyan, a subsidiary of United Aircraft Corporation since 2006. The MiG-29B was widely exported in downgraded versions, known as MiG-29B 9-12A and MiG-29B 9-12B for Warsaw Pact and non-Warsaw Pact nations respectively, with less capable avionics and no capability for delivering nuclear weapons. Total production was about 840 aircraft. In the 1980s, Mikoyan developed the improved MiG-29S to use longer range R-27E and R-77 air-to-air missiles. It added a dorsal 'hump' to the upper fuselage to house a jamming system and some additional fuel capacity. The weapons load was increased to 4,000 kg (8,800 lb) with airframe strengthening. These features were included in new-built fighters and upgrades to older MiG-29s. MiG-29UB is two seat combat trainer. Refined versions of the MiG-29 with improved avionics were fielded by the Soviet Union, but Mikoyan's multirole variants, including a carrier-based version designated MiG-29K, were never produced in large numbers. In the post-Soviet era, MiG-29 development was influenced by the Mikoyan bureau's apparent lesser political clout than rival Sukhoi. Some more advanced versions are still being

pursued for export, and updates of existing Russian aircraft are likely. New fighter versions called MiG-29M/M2 and MiG-29SMT have been developed. Furthermore, development of the MiG-29K carrier version has been resumed for the Indian Navy's INS Vikramaditya, and Russian Navy's Admiral Kuznetsov class aircraft carrier. Data from MiG specifications: General characteristics: Crew: 1 Length: 17.37 m (57 ft), Wingspan: 11.4 m (37 ft 3 in), Height: 4.73 m (15 ft 6 in), Wing area: 38 m² (409 ft²), Empty weight: 11,000 kg (24,250 lb), Loaded weight: 15,300 kg (33,730 lb), Max. takeoff weight: 20,000 kg (44,100 lb), Powerplant: 2 x Klimov RD-33 afterburning turbofans, 8,300 kgf (81.4 kN, 18,300 lbf) each, Performance: Maximum speed: Mach 2.25 (2,400 km/h, 1,490 mph) At low altitude: Mach 1.25 (1,500 km/h, 930 mph), Range: 1,430 km (772 nmi, 888 mi) with maximum internal fuel, Ferry range: 2,100 km (1,300 mi) with 1 drop tank, Service ceiling: 18,013 m (59,100 ft), Rate of climb: initial 330 m/s average 109 m/s 0-6000 m [170] (65,000 ft/min), Wing loading: 403 kg/m² (82 lb/ft²) Thrust/weight: 1.09, Armament: 1 x 30 mm GSh-30-1 cannon with 150 rounds, 7 Hard points: 6 x pylons under-wing, 1 x under fuselage: Up to 3,500 kg (7,720 lb) of weapons including six air-to-air missiles — a mix of semi-active radar homing (SARH) and AA-8 "Aphid", AA-10 "Alamo", AA-11 "Archer", AA-12 "Adder", FAB 500-M62, FAB-1000, TN-100, ECM Pods, S-24 rockets, Kh-25, Kh-29 Avionics: Phazotron N019 Radar, N010 radars. D. Die Mikojan-Gurewitsch MiG-29, NATO-Codename: Fulcrum) ist ein zweistrahliger Kampfflugzeug, das in der Sowjetunion entwickelt wurde. Historische Entwicklung. Zur Zeit des Kalten Krieges wurden 1972 in der sowjetischen Militärführung erste Überlegungen über eigene Flugzeugmodelle angestellt, die den US-amerikanischen Neuentwicklungen F-15 und F-16 ebenbürtig sein sollten. Im Laufe dieses Prozesses wurden die Entwürfe von Suchoi und MiG für die Prototypenphase ausgewählt. Die MiG-29 wurde dabei als Flugzeug für die Frontfliegerkräfte geplant, das unter Feldbedingungen auf unbefestigten Startplätzen einsatzfähig sein sollte. Es hatte die Aufgabe, die Streitkräfte direkt zu unterstützen. Das schloss auch die direkte Verteidigung von Flugplätzen oder Städten ein. Ferner wurde die Bekämpfung von Marschflugkörpern zumindest vorgesehen. Varianten: MiG-29B-12 (Produkt 9.12A bzw. 9.12B) „Fulcrum-A“ Vereinfachte Exportversionen für Staaten des Warschauer Pakt (9.12A) oder andere Staaten (9.12B). Ohne System zum Abwerfen von Kernwaffen und mit vereinfachtem Radar, ECM und IFF. NATO-Codename „Fulcrum-A“. MiG-29UB-12 (Produkt 9.51) „Fulcrum-B“ Zweisitziges Trainingsflugzeug. Nur mit Infrarot-Sensor und ohne Radar. Erstflug am 29. April 1981. [2] NATO-Codename

GB. Numbering of parts • D. Nummerierung von Teilen • PL. Numeracja części
 • F. la Numérotation des pièces • CZ. Číslování dílů • RUS. Нумерация частей

NL. Nummering van onderdelen
 ESP. Numeración de las piezas
 POR. Numeração das peças
 I. Numerazione delle parti
 S. Nummering av delar
 FIN. Numeroit osien
 DEN. Nummering af dele
 NOR. Nummering av deler
 GR. Επισημάνση των τμημάτων
 TUR. Parçaların Numaralandırma
 H. Számozás alkatrészek
 SK. Číslování dílů
 Rum. Numerotarea pieselor
 BUL. Номерация на часте
 UA. Нумерація частей



Parts not used
 Nicht benötigte Teile
 Elementy niepotrzebne
 Pieses non utiliseses
 Niet benodigde onderdelen
 Piezas no necesarias
 Peças não utilizadas
 Parti non usate
 Inte använda delar
 Tappeittomat osat
 Ikke nødvendige dele
 Dele som ikke er nødvendige
 Неиспользуемые детали
 μη χρησιμοποιούμενα μέρη
 Gerekli olmayan parçalar
 Nepotřebné díly
 Nel nem használt
 Nesi obsojno
 Piese de schimb care nu sunt folosite
 Части, които не се използват
 Частей не використовуються

MISTERCRAFT Michał Meleszka,
 Nowica 1E, 56-460 Dobroszyce, POLAND
 e-mail: customerservices@mistercraft.eu

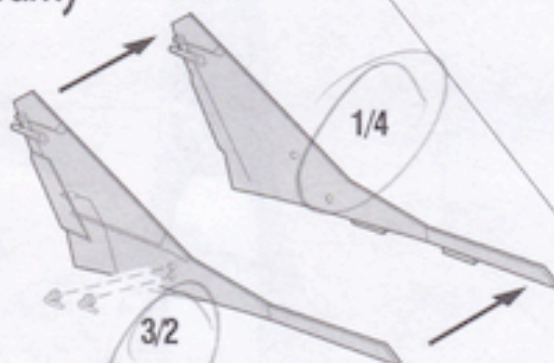
UK: Please note the enclosed safety advice and keep safe for later reference.
 D: Beiliegenden Sicherheitstext beachten und nachschlagebereit halten.
 PL: Stosować się do załączonej karty bezpieczeństwa i mieć ją stale do wglądu.
 F: Respecter les consignes de sécurité ci-jointes et les conserver à portée de main.
 NL: Houdt u aan de bijgaande veiligheidsinstructies en hou deze steeds bij de hand.
 E: Observar y siempre tener a disposición este texto de seguridad adjunto.
 I: Seguire le avvertenze di sicurezza allegate e tenerle a portata di mano.
 P: Ter em atenção o texto de segurança anexo e guardá-lo para consulta.
 S: Beakta bifogad säkerhetstext och håll den i beredskap.
 FIN: Huomioi ja säilytä ohjeet varoitukset.
 DK: Overhold vedlagte sikkerhedsanvisninger og hav dem liggende i nærheden.
 N: Ha alltid vedlagt sikkerhetstext klar til bruk.
 RUS: Сохранить прилагаемый текст по технике безопасности, хранить это в легко доступном месте.
 GR: Προσοχή τι περιεχόμενα υποδείξεις ασφαλείας και φυλάξτε τις τσι δίπλα να τις έχετε πάντα σε όψοθήκη σας.
 TR: Ekteki güvenliik talimatlarını dikkate alıp, bakabileceğiniz bir şekilde muafaza ediniz.
 CZ: Dbejte na příložený bezpečnostní text a mějte jej připravený na dosah.
 H: A mellékelt biztonságási szöveget vegye figyelembe és tartsa fellepözésre készen!
 SLO: Priložena varnostna navodila izvajajte in jih hranite na vsem dostopnem mestu.
 Rum: Vă rugăm să rețineți staturi de siguranță încluse și păstrați în condiții de siguranță pentru referință ulterioară.
 BUL: Моля, обърнете внимание на приложената съвети за безопасност и се пази за по-късна справка.
 UA: Зверніть увагу, що додана рекомендація з безпеки та дотримувалися безпекою для подальшого використання.

GB.Assembly instruction

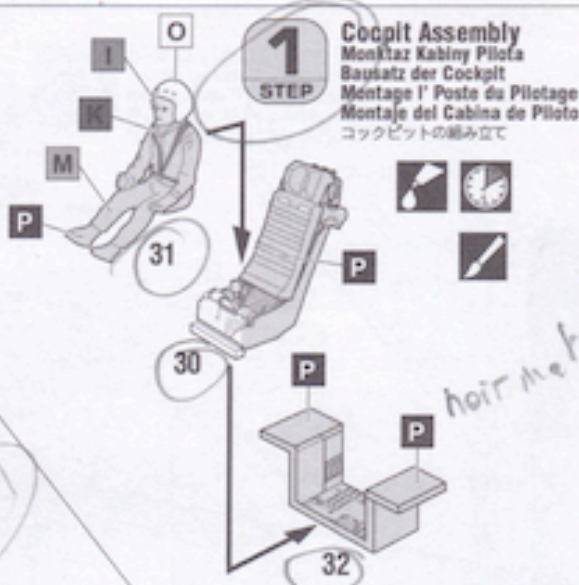
- D.Montageanleitung
- PL.Instrukcja montażu
- F.Notice de montages
- Montážní návod
- Инструкция по монтажу

NL.Montagehandleiding
 ESP.Instrucciones de montaje
 POR.Instruções de montagem
 I.Istruzioni di montaggio
 S.monteringsanvisning
 FIN.Asennusohje
 DEN.Samlevejledning
 NOR.monteringsanvisning
 GR.Οδηγίες συναρμολόγησης
 TUR.Montaj talimat
 H.Szerelési utasítás
 SK.Montážny návod
 Rum.Adunarea de instructiuni
 BUL.Събрание инструкция
 Инструкция по монтажу

Left Tail Fin Parts (2+4)



Right Tail Fin Assembly Montaż prawego statecznika pionowego Zusammensetzung der Rechts Seitenleitwerks Montage des Empennage vertical (droite) Montaje del Cola vertical (derecho)

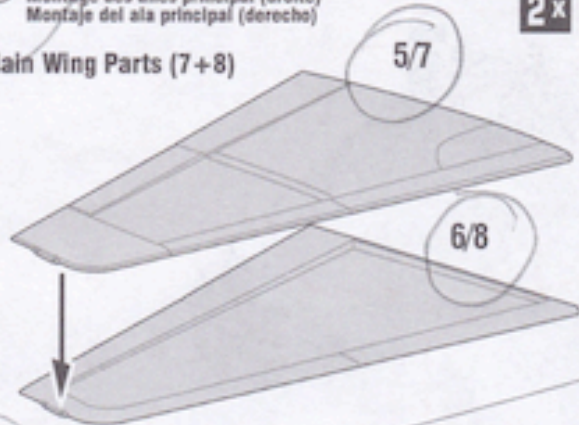


1 STEP Cockpit Assembly Montaż Kabiny Pilota Baupatz der Cockpit Montage l' Poste du Pilotage Montaje del Cabina de Piloto コックピットの組み立て

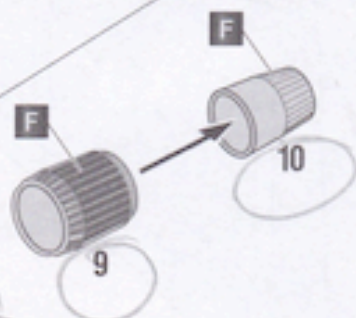
3 STEP Right Main Wing Assembly (5+6) Montaż Prawego Skrzydła Zusammensetzung der Rechts Tragflächen Montage des ailes principal (droite) Montaje del ala principal (derecho)



Left Main Wing Parts (7+8)



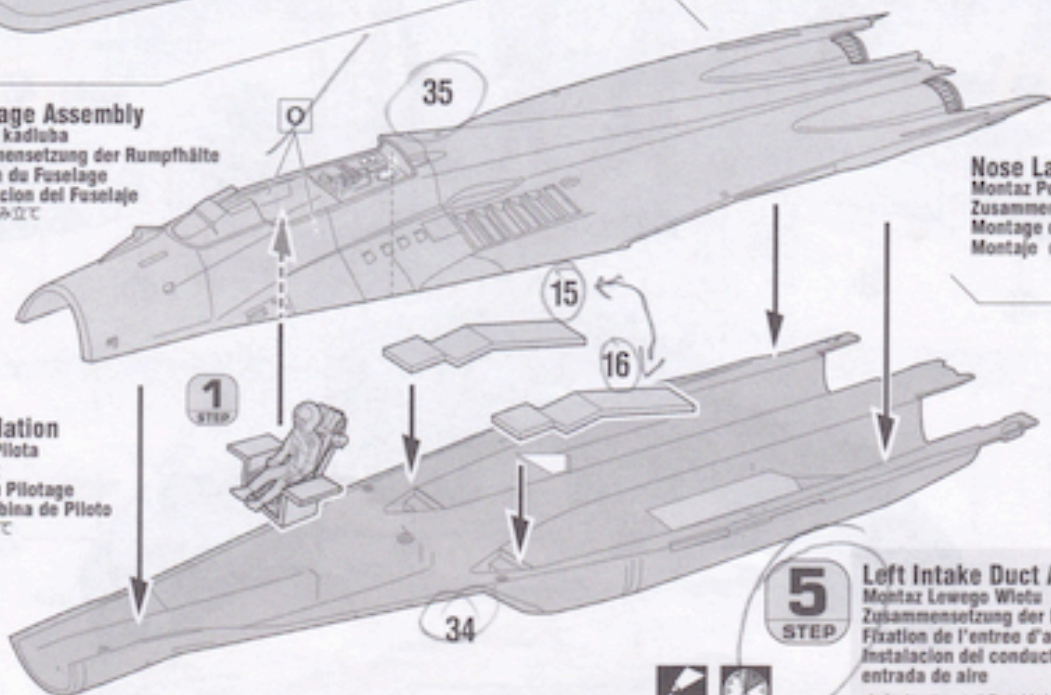
4 STEP Exhaust Nozzles Assembly Montaż Dysz Wylotowych Silnika Zusammensetzung der Düse Abgas Montage de la de la buse d'échappement Montaje de la boquilla de escape



7 STEP Fuselage Assembly Montaż kadłuba Zusammensetzung der Rumpfhälte Fixation du Fuselage Instalación del Fuselaje コックピットの組み立て

6 STEP Cockpit Installation Instalacja Kabiny Pilota Einbau der Cockpit Fixation l' Poste du Pilotage Instalación del Cabina de Piloto コックピットの組み立て

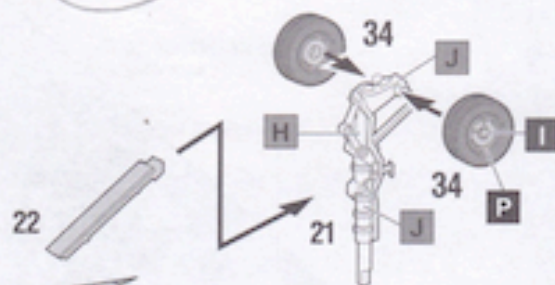
1 STEP



5 STEP Left Intake Duct Assembly Montaż Lewego Wlotu Zusammensetzung der Links Lufteinlass Fixation de l'entree d'air gauche Instalación del conducto izquierdo de la entrada de aire 左右インテークの取り付け



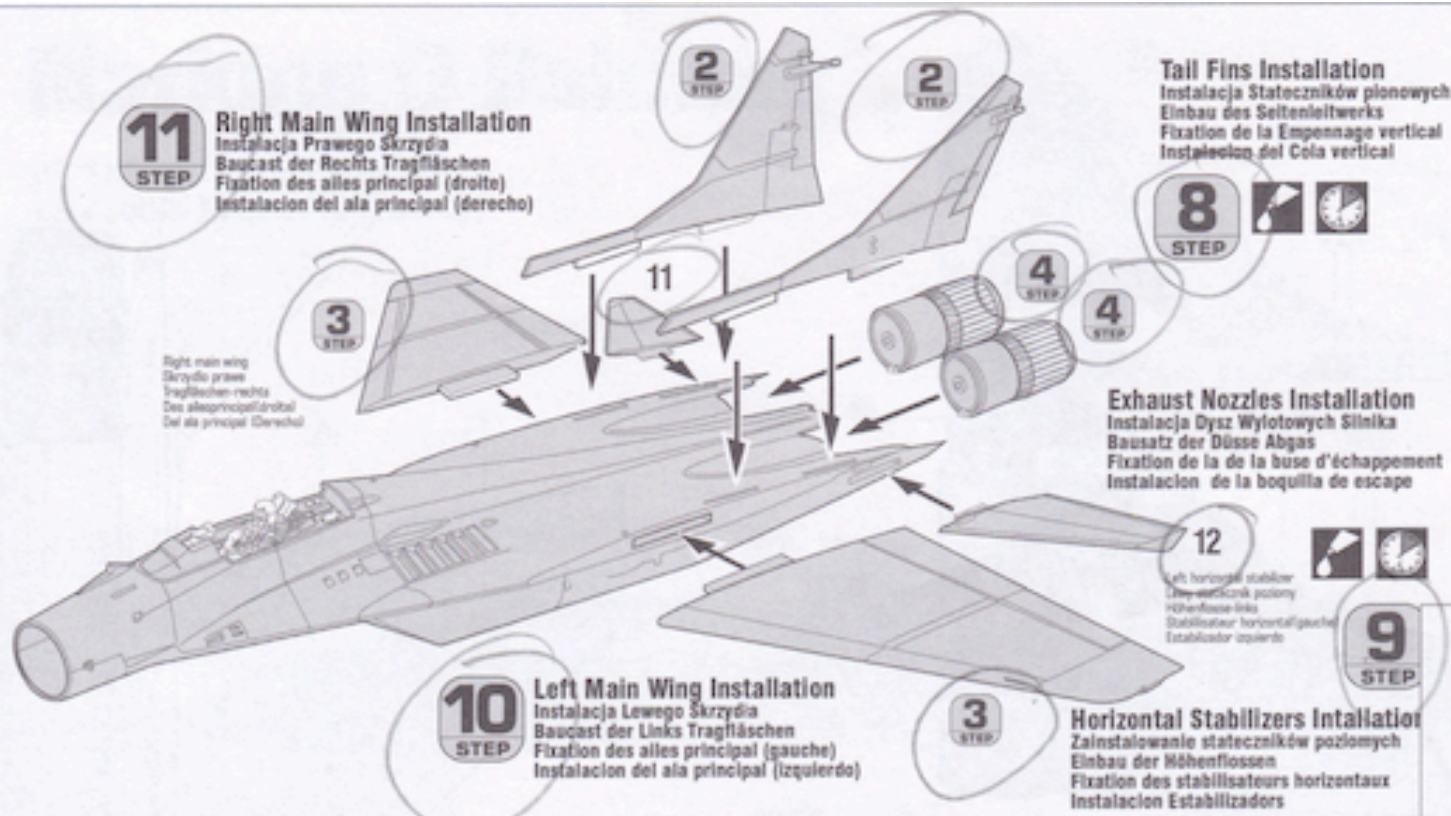
4 STEP Nose Landing Gear Assembly Montaż Podwozia Przedniego Zusammensetzung des Bugfahrwerk Montage du train Avant Montaje del engranaje



11
STEP**Right Main Wing Installation**

Instalacja Prawego Skrzydła
Bausatz der Rechts Tragflächen
Fixation des ailes principal (droite)
Instalacion del ala principal (derecho)

Right main wing
Skrzydło prawe
Tragflächen-rechts
Des ala principal (derecho)

**10**
STEP**Left Main Wing Installation**

Instalacja Lewego Skrzydła
Bausatz der Links Tragflächen
Fixation des ailes principal (gauche)
Instalacion del ala principal (izquierdo)

8
STEP

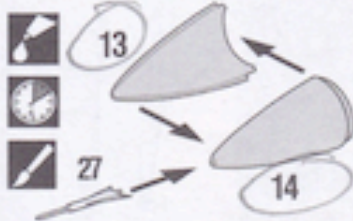
Tail Fins Installation
Instalacja Stateczników pionowych
Einbau des Seitenleitwerks
Fixation de la Empennage vertical
Instalacion del Cola vertical

Exhaust Nozzles Installation
Instalacja Dysz Wylotowych Silnika
Bausatz der Düse Abgas
Fixation de la de la buse d'échappement
Instalacion de la boquilla de escape

Horizontal Stabilizers Installation
Zainstalowanie stateczników poziomych
Einbau der Höhenflößen
Fixation des stabilisateurs horizontaux
Instalacion Estabilizadores

13
STEP**Radar Cone Assembly**

Zainstalowanie osłony radaru
Bughaube-Einbau
Fixation de la radôme

**14**
STEP**Radar Cone Installation**

Montaż osłony radaru
Bughaube-Zusammensetzung
Montage de la radôme

15
STEP**Canopy Installation**

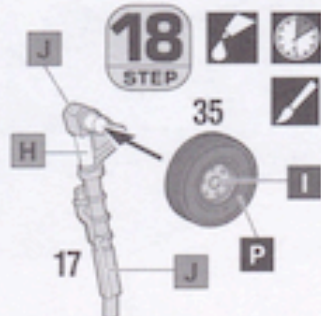
Zainstalowanie Osłony Kabiny
Einbau der Kabinendach
Fixation de la Verriere
Instalacion de la Dose

**16**
STEP**Others Details Installation**

Instalacja pozostałych elementów
Andero Einzelheiten Installation
Autres détails d'installation
Otros detalles de la instalación

Right Main Landing Gear Assembly

Montaż Prawego podwozia głównego
Bausatz der Hauptfahrwerk (Rechts)
Fixation du train principal (droite)
Instalacion del engranaje principal (derecho)

**18**
STEP**23**
STEP**Nose Landing Gear Cover Installation**

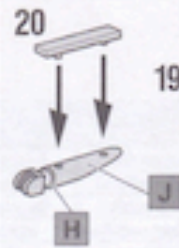
Instalacja Osłony Podwozia Przedniego
Einbau des Bugfahrwerk-Klappen(Nose)
Fixation des plaques du train Avant
Instalacion Puerta frontal de la parte delantera

22
STEP**Nose Gear Strut Installation**

Instalacja Lamp Kolowania
Einbau der Bugfahrwerk Strebe
Fixation Centrefiche d'engrenage de train avant
Instalacion Punta del tren delantero

17
STEP**4**
STEP**20**
STEP**Right Main Landing Gear Installation**

Instalacja Prawego podwozia głównego
Einbau der Hauptfahrwerk
Fixation du train principal
Instalacion del engranaje principal

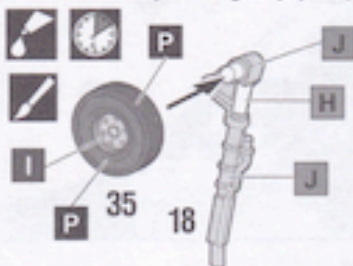
**20****19****24**
STEP**Rt. Main Gear Outer Door Installation**

Instalacja Osłony Bocznych prawego podwozia
Bausatz der Hauptfahrwerk-Klappen (Rechts)
Fixation de la Porte extérieure du train principal droit
Puerta del engranaje principal externo derecho

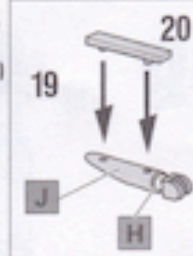
Right main wing
Skrzydło prawe
Tragflächen-rechts
Des ala principal (derecho)

19
STEP**Left Main Landing Gear Assembly**

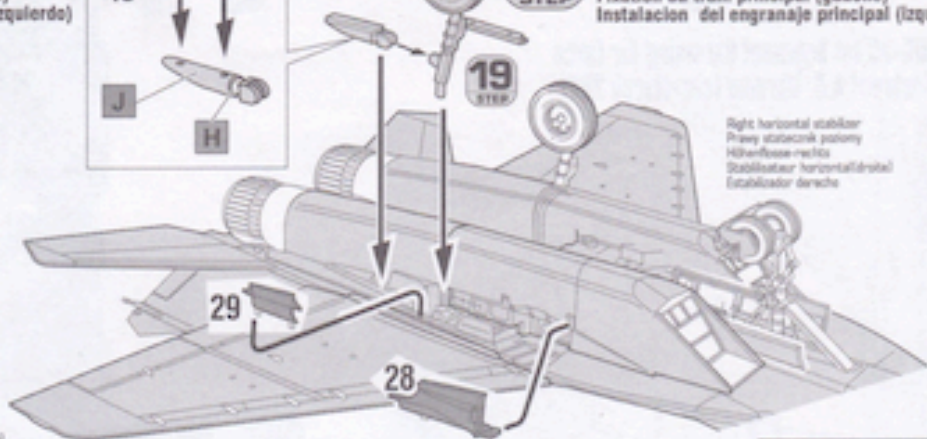
Montaż Lewego podwozia głównego
Zusammensetzung der Hauptfahrwerk (Links)
Montage du train principal (gauche)
Montaje del engranaje principal (Izquierdo)



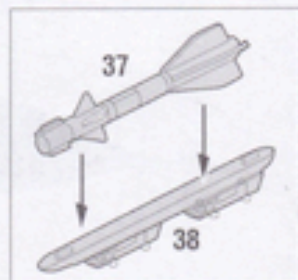
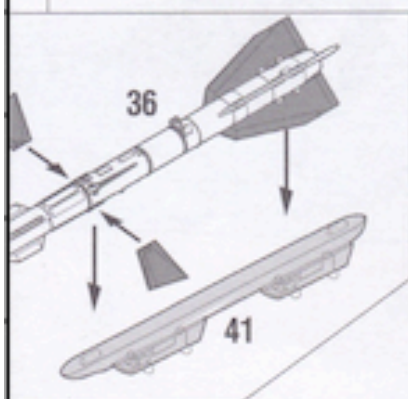
Left main wing
Skrydło Lewe
Tragflächen-Links
Das ala principal (Gauche)
Del ala principal (Izquierdo)

**20**
STEP**Left Main Landing Gear Insta.**

Instalacja Lewego podwozia głównego
Baucastra der Hauptfahrwerk (Links)
Fixation du train principal (gauche)
Instalacion del engranaje principal (Izqui



Right horizontal stabilizer
Prawy statecznik poziomy
Höhenflosse-rechts
Stabilisateur horizontal/droite
Estabilizador derecho

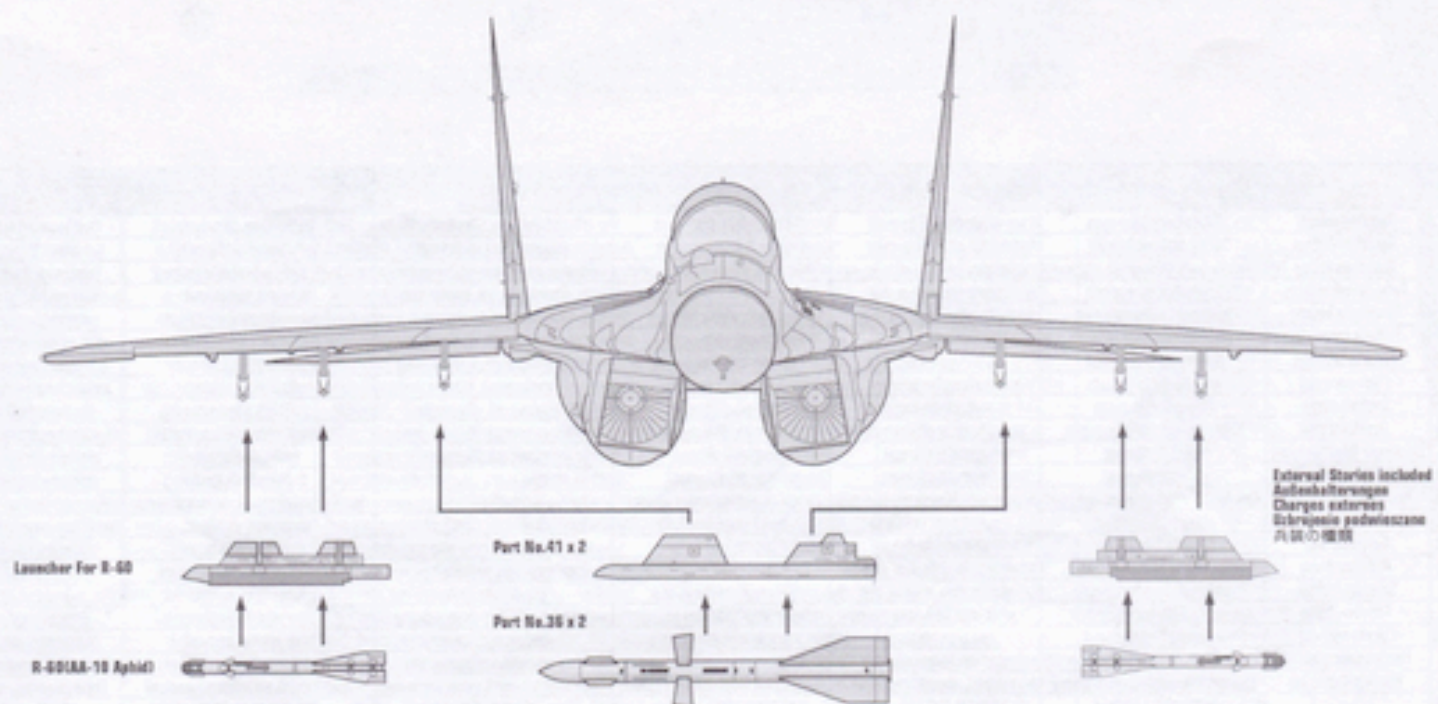


Left horizontal stabilizer
Lewy statecznik poziomy
Höhenflosse-links
Stabilisateur horizontal/gauche
Estabilizador izquierdo

25
STEP**Left Main Landing Gear Installation**

Instalacja Lewego podwozia głównego
Einbau der Hauptfahrwerk (Links)
Fixation du train principal (gauche)
Instalacion del engranaje principal (Izquierdo)

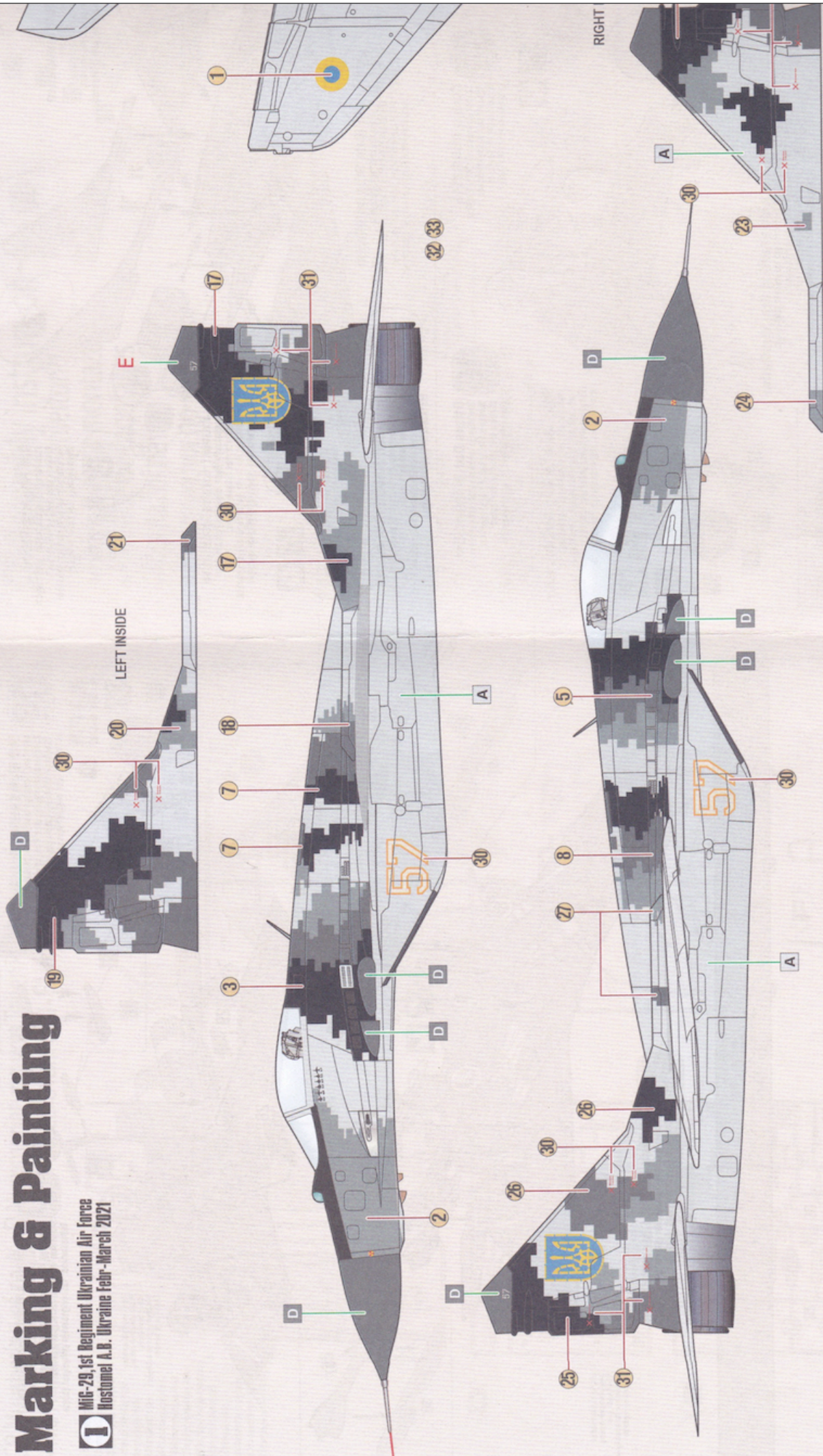
MIG-29 Fulcrum Load configuration
Konfiguracja podwozowa
Zaladungs-konfiguration
Configuration des charges externes
外荷配置

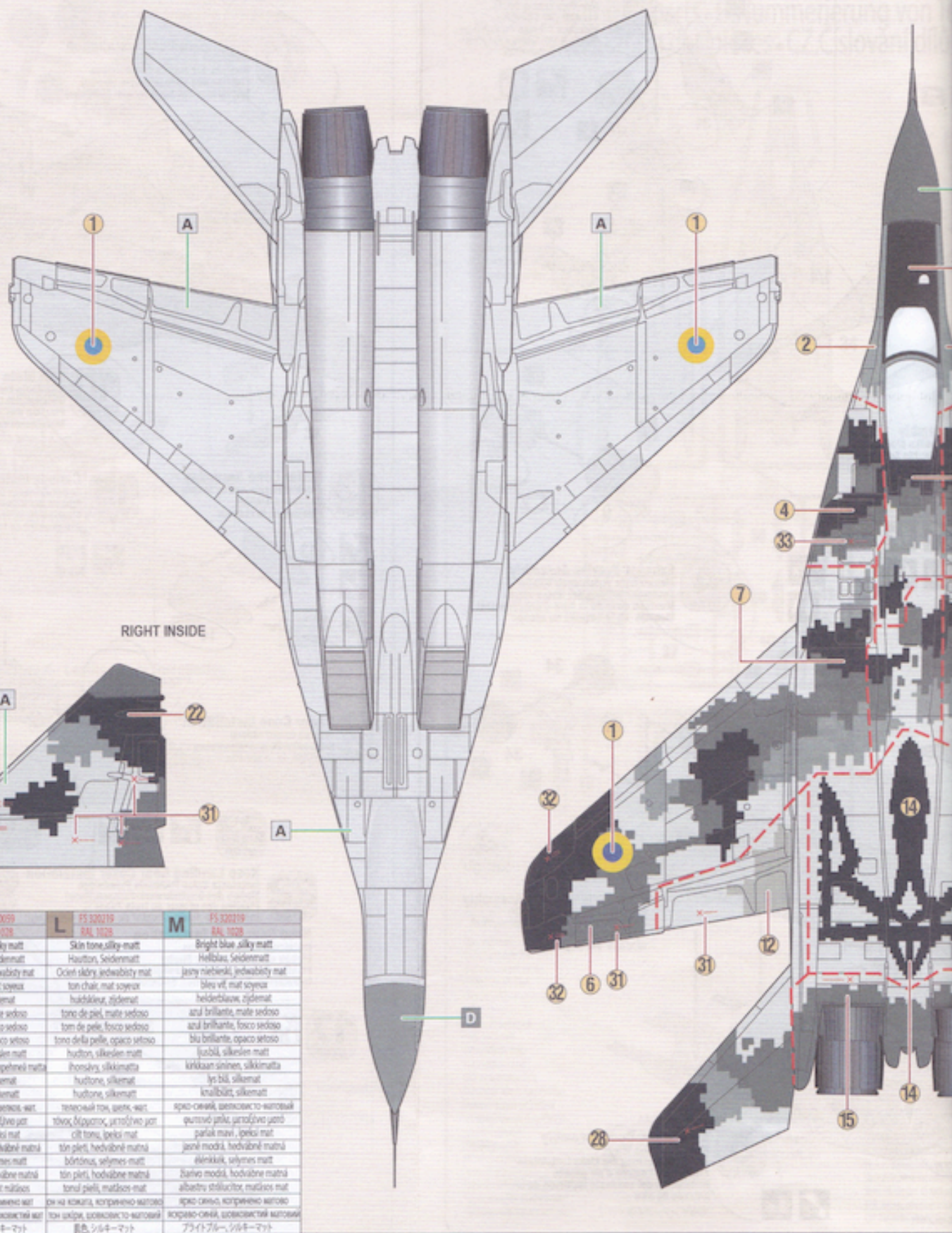


External Stores included
Außenbehälterungen
Charges externes
Strojnice podwozowa
外荷配置

Marking & Painting

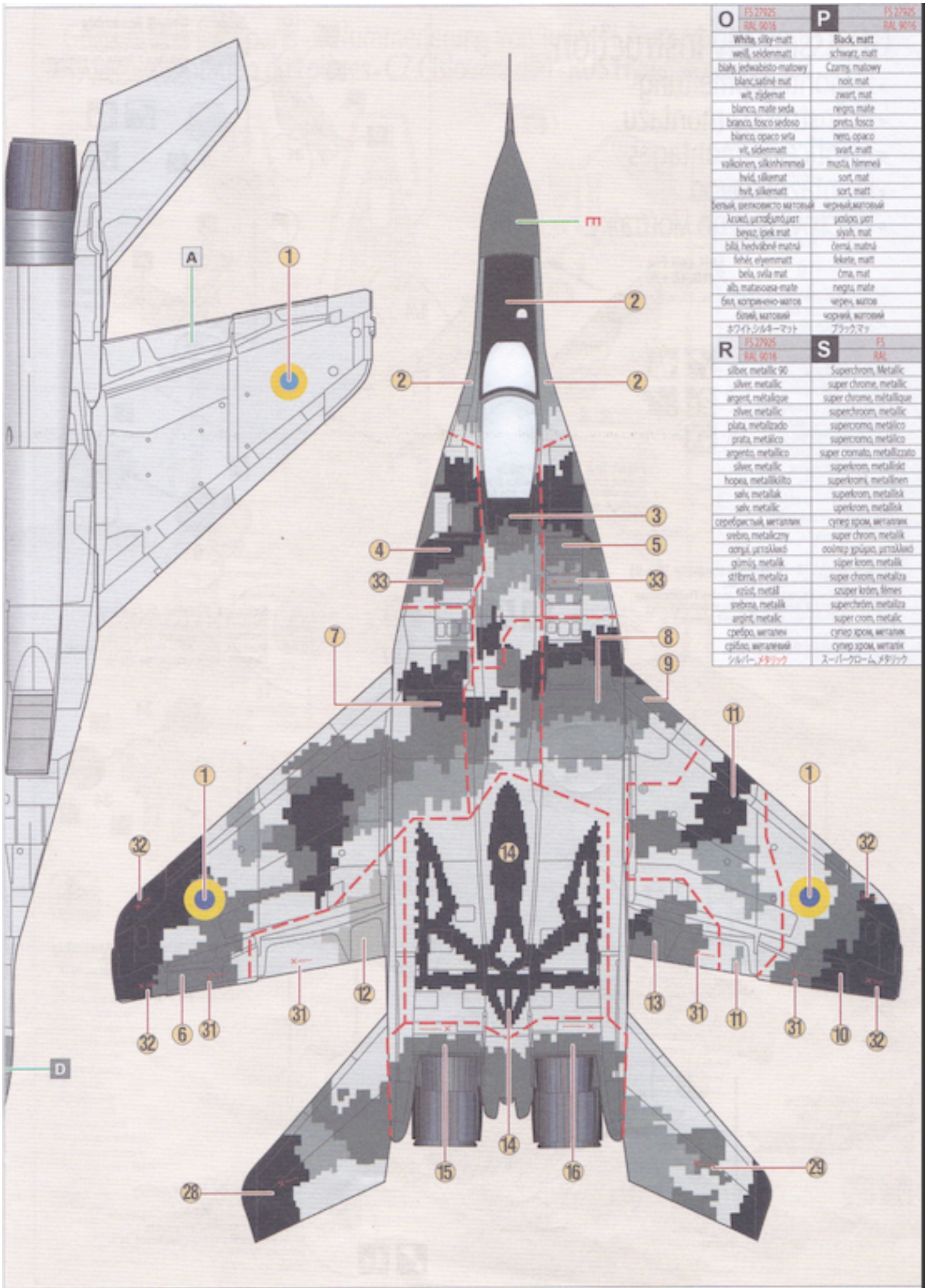
1 MiG-29, 1st Regiment Ukrainian Air Force
Hostomel A.B. Ukraine Febr.-March 2021





RIGHT INSIDE

	K	L	M
07	FS 500070	FS 500219	FS 500219
07	RAL 1028	RAL 1028	RAL 1028
ky matt	French khaki, silkymatt	Skin tone, silkymatt	Bright blue, silkymatt
vedennatt	French khaki, Seidematt	Hautton, Seidematt	Hellblau, Seidematt
écaie matowa	Francois khaki, jedwabisty mat	Ocnié skóry, jedwabisty mat	jasny niebieski, jedwabisty mat
mat soeua	kaki francois, mat soeua	ton chair, mat soeua	bleu vif, mat soeua
zijdenat	frans koki, zijdenat	huddkóeur, zijdenat	helderblauw, zijdenat
ste sedosa	cagui francois, mate sedosa	tono de pieli, mate sedosa	azul brillante, mate sedosa
edosa male	cagui francois, fosco sedosa	ton de pelle, fosco sedosa	azul brillante, fosco sedosa
u, satinato	cach francois, opaco setoso	tono della pelle, opaco setoso	blu brillante, opaco setoso
enatt	frans khaki, silkesen matt	hudtone, silkesen matt	luubli, silkesen matt
pitmei matta	fransalinen khaki, silkkimatta	ihonsiis, silkkimatta	kirkkaan sininen, silkkimatta
silemat	frans koki, silemat	hudtone, silemat	lys blii, silemat
ikematt	frans khaki, silemat	hudtone, silemat	knallblau, silemat
spaco-avotsoai	spaco-avotsoai koki, avotsoai-wei	teno-avotsoai toi, avotsoai-wei	spaco-avotsoai, avotsoai-to-avotsoai
écaie-jet	setkaki jasi, jasi/ivo-jet	toivoi, écaie-jet, jasi/ivo-jet	quiroi jasi, jasi/ivo-jet
ylki mat	frans koki, peili mat	oil toni, peili mat	parlak mavii, peili mat
écaie matna	fransooskii khaki, hedvábni matna	ton pieli, hedvábni matna	jasni modii, hedvábni matna
semy mat	frans khaki, selymen matt	bórtónus, selymen matt	ékinikii, selymen matt
écaie matna	fransooskii khaki, hodvábne matna	ton pieli, hodvábne matna	zariivo modii, hodvábne matna
mat matónus	kaki frantsouz, mat matónus	tonii pieli, matónus mat	albatruu striktofor, matónus mat
avotsoai-wei	spaco-avotsoai koki, korpeineo avotsoai	oi-ka avotsoai, korpeineo avotsoai	spaco-avotsoai, korpeineo avotsoai
spaco-avotsoai	spaco-avotsoai koki, avotsoai-to-avotsoai	toi avotsoai, avotsoai-to-avotsoai	avotsoai-avotsoai, avotsoai-to-avotsoai
カラーマツ	フレンチーカラーマツ	肌色、シルキーマツ	ブルーカラーマツ



O	FS 27925 RAL 9016	P	FS 27925 RAL 9016
	White, silky-matt		Black, matt
	weiß, seidemat		schwarz, matt
	biały, jedwabisto-matowy		Czarny, matowy
	blanc, satiné mat		noir, mat
	wit, zijdemat		zwart, mat
	bianco, mate seda		negro, mate
	bianco, fosco sedoso		prfita, fosco
	bianco, opaco seta		nero, opaco
	vit, sidemat		svart, matt
	valkoinen, silkkihimmeä		musta, himmeä
	hvít, silkenat		sort, mat
	hvít, silkenatt		sort, matt
	белый, шелковисто-матовый		черный, матовый
	Ауақ, жүзді жұмырт		қара, мат
	beisz, ipak mat		siyah, mat
	білі, жедібінді матна		қара, матна
	lohés, éjyematt		fekete, matt
	bela, svila mat		črna, mat
	alı, matosaosa-mate		negro, mate
	бел, шелковисто-матово		чегер, матос
	белый, матовый		қарапай, матовый
	белый, шелковисто-матовый		қара, мат
R	FS 27925 RAL 9016	S	FS RAL
	silver, metallic 90		Superchrom, Metallic
	silver, metallic		super chrome, metallic
	argent, métallique		super chrome, métallique
	silver, metallic		superchrom, metallic
	plata, metalizado		superchrom, metálico
	grata, metalico		superchrom, metalico
	argento, metalico		super cromato, metallizzato
	silver, metallic		superchrom, metalliskt
	hopea, metallikalito		superchromi, metallinen
	saks, metallak		superchrom, metallisk
	saks, metallic		uperchrom, metallisk
	серебряный, металлик		чегер chrom, metallik
	среб, металiczny		super chrom, metallik
	ооруй, жаралканд		оолимп chrom, metallik
	gimüş, metalik		siyer krom, metallik
	stříbrná, metaliza		super chrom, metaliza
	ezüst, metall		super krom, limes
	сребна, metalik		superchrom, metaliza
	argint, metalic		super crom, metalic
	сребно, металлик		чегер chrom, metallik
	срібло, металік		чегер chrom, metallik
	срібло, металік		чегер chrom, metallik
	27925-49117		2-71-70-4, 27925

WHITE



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