

**Cross kart motor
KTM-GasGas-Husqvarna SXF 2017-
2021**

HOMOLOGERINGS DOKUMENT

Homologeringen er gyldig fra 01.01.2025 -

1. Generell info/ General

101. PRODUSENT/MANUFACTURER

KTM / GASGAS / HUSQVARNA

Deksler på motorsider vil være avvikende mellom KTM/GASGAS og HUSQVARNA, disse variantene til GAS GAS og HUSQVARNA kan benyttes,

3. Motor Engine

307. SYLINDER KAPASITET/ MAXIMUM CYLINDER CAPACITY

a) Unitaire Unitary	249,91	cm3
b) Total	249,91	cm3

309 MINIMUM VEKT PÅ MOTOR/ MINIMUM WEIGHT

a) Vekt som beskrevet i homologeringsdokumentet som på bildene	24.14	kg
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314. BORRING/BORE

78	+0 - 0.1 mm
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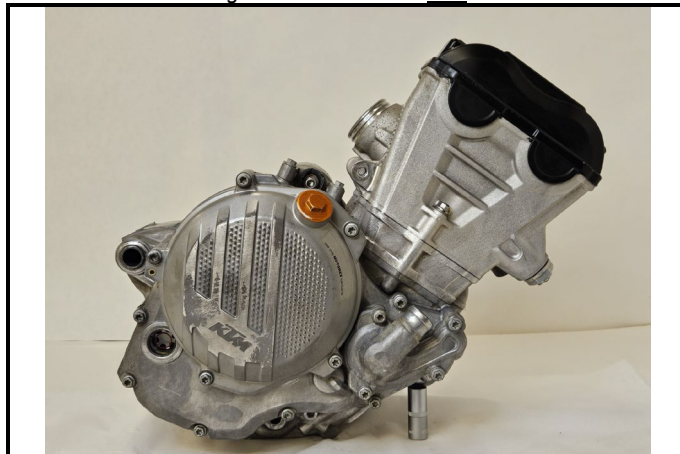
316. SLAGLENGDE/STROKE

52.3	+0 - 0.1 mm
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C1-1) Demontert motor -sett fra siden
Dismounted engine – seen from the side



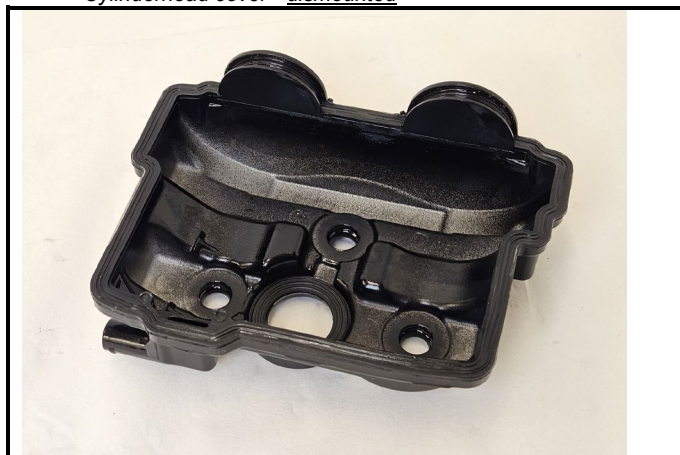
C1-2) Demontert motor – sett fra siden
Dismounted engine – seen from the side



C1-3) Toppdeksel - demontert
Cylinderhead cover - dismounted



C1-4) Toppdeksel- demontert
Cylinderhead cover - dismounted

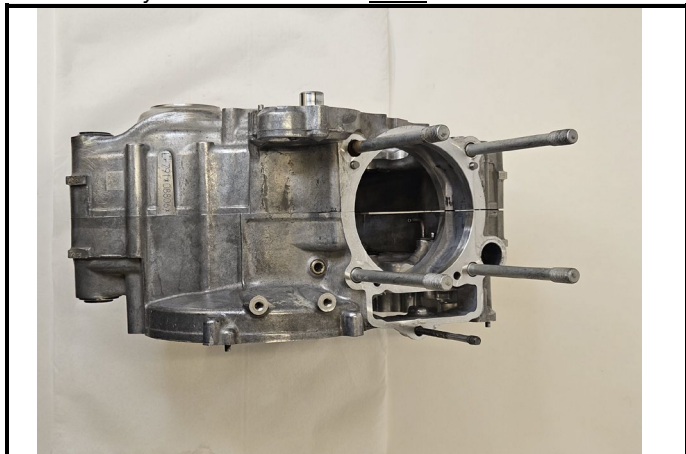


311. SYLINDERBLOKK

a) Materiale Aluminium

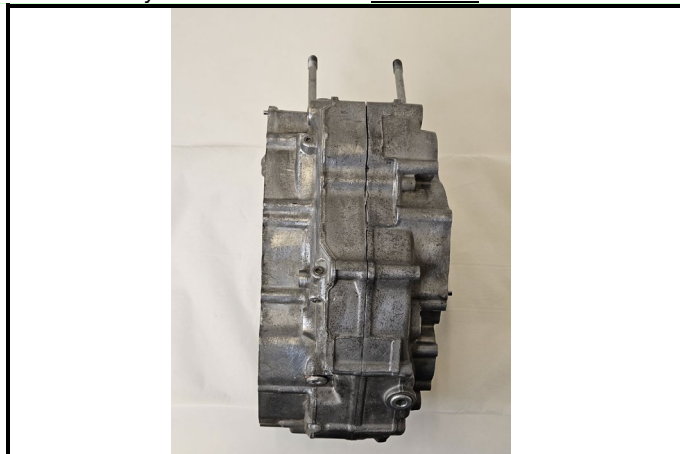
C3-1) Sylindereblokk sett ovenfra

Bare cylinder block seen from above



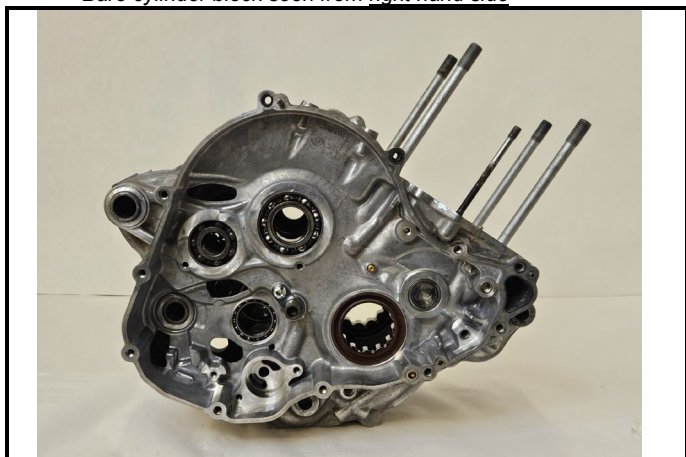
C3-2) Sylindereblokk sett unnenfra

Bare cylinder block seen from underneath



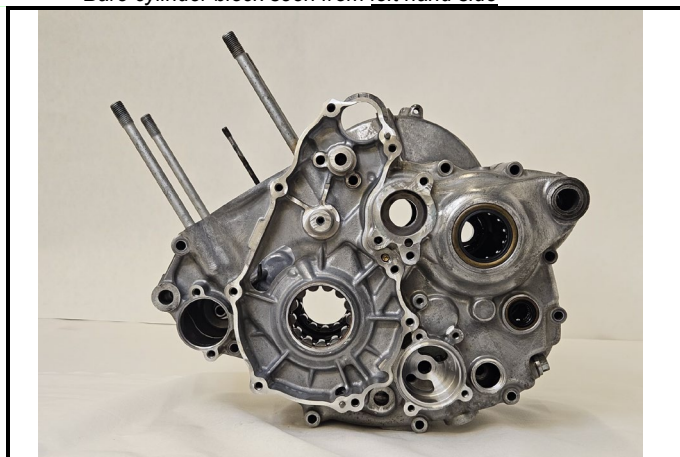
C3-3) Sylindereblokk sett fra høyre side

Bare cylinder block seen from right hand side



C3-4) Sylindereblokk sett fra venstre side

Bare cylinder block seen from left hand side



C3-5) Sylindereblokk sett fra eksosiden

Bare cylinder block seen from exhaust side

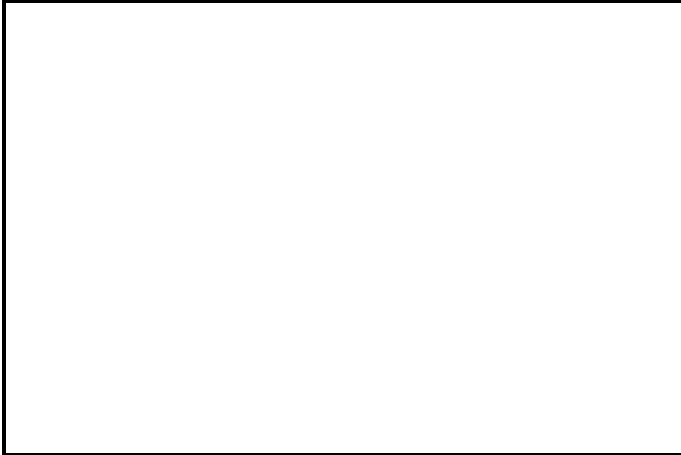


C3-6) Sylindereblokk sett fra innsugsiden

Bare cylinder block seen from intake side



C3-7) Veivaksellager holder
Crankshaft bearing caps



C3-8) Serienummer på motorblokk
Serial number on engine block



307. BALLANSEAKSEL SYSTEM

a) Balanseakselens materiale
Balancing shafts material

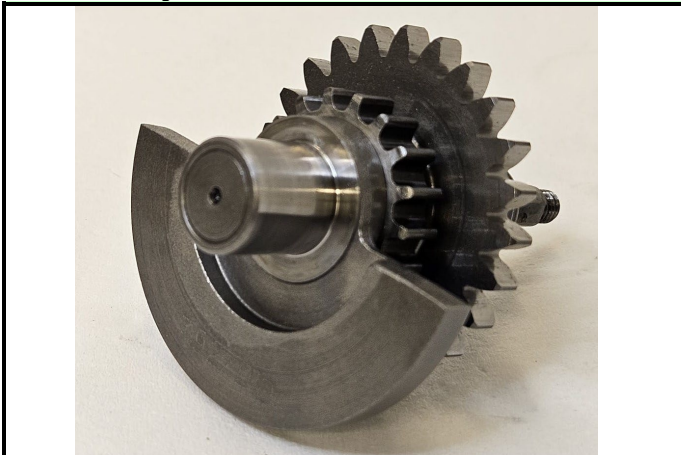
**Stål
Steel**

b) Balanseakselens vekt
Balancing shafts weight

238

+/- 5 g

C3-9) Balanseaksel demontert
Balancing shafts - dismounted



C3-10) Balanseaksel demontert
Balancing shafts - dismounted



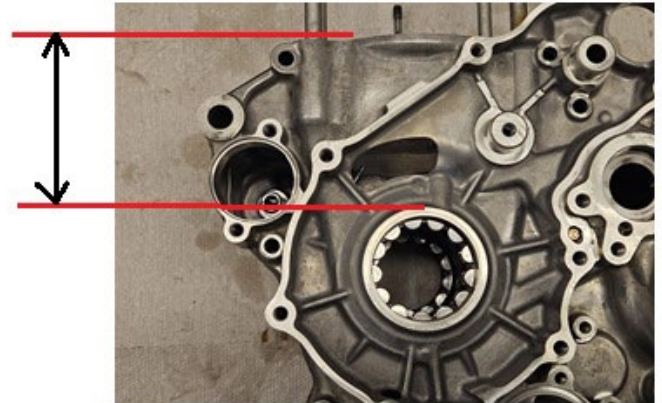
312. MINIMUM HØYDE PÅ SYLINDERBLOKK / MIN. HEIGHT OF THE CYLINDER BLOCK

a) Mellom bunnpakningsflate og
lager toppunkt
*Between botum gasket plane
and main bearing top point*

82,23mm
± 0.2 mm

b) Mellom veivakselens seterlinje
og toppakningsflate
*Between crankshaft centreline
and head gasket plane*

N/A

III-C1) Høyde / Height measurement

313. CHEMISES / SLEEVES

a) Sylinder
Sleeved cylinder block

Ja / Yes

☐

Nei / No

☒

C3-8) Sylinder demontert (Original)
Sleeve dismounted (Original)

b) Material
Material

c) Type
Type

**Bløtt
Wet**

☐

**Tørt
Dry**

☒

C3-9) Sylinder demontert (Réparation)
Sleeve dismounted (Repair)

C3-13 Sylindrblokk sett fra siden
Bare cylindre seen from side view



C3-14 Sylindrblokk sett fra siden
Bare cylindre seen from side view



C3-15 Sylindrblokk sett fra eksossiden
Bare cylinder block seen from exhaust side



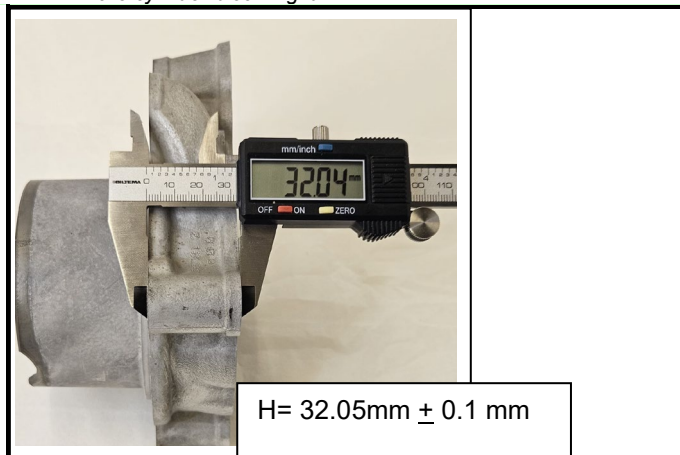
C3-16 Sylindrblokk sett fra innsugsiden
Bare cylinder block seen from intake side



C3-15 Sylindrblokk sett fra bunn
Bare cylinder block seen from bottom



C3-16 Sylindrblokk høyde
Bare cylinder block hight



311 SYLINDER BUNNPAKNING

a) Bunnpakning sylinder materiale
Crankcase cylinder gasket material

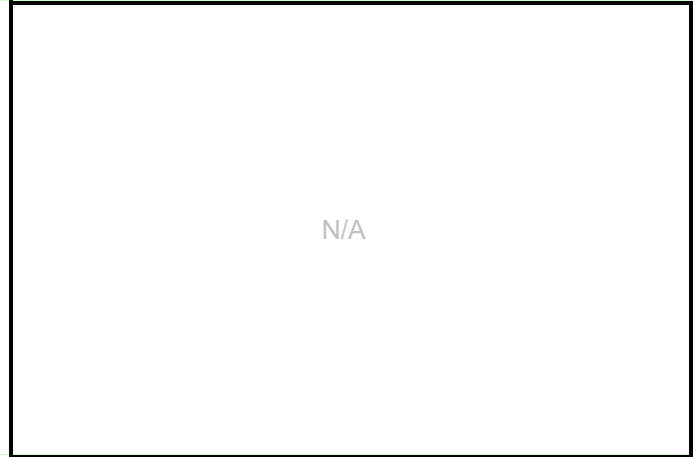
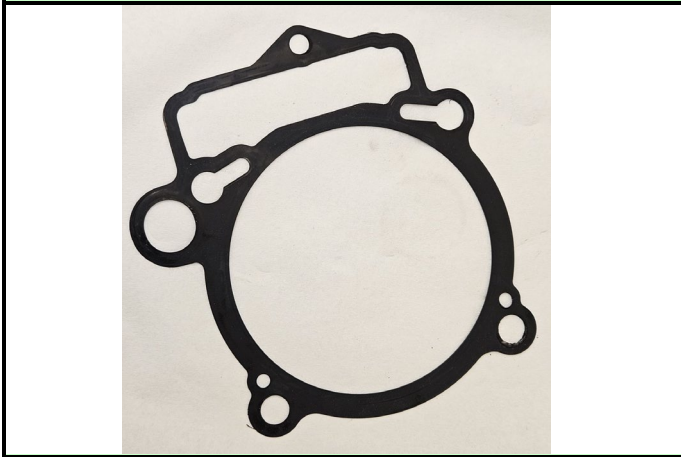
b) Bunnpakning tykkelse
Balancing shafts weight

0,40

±0.05 mm

C3-17 Bunnpakning sylinder- demontert
Crankcase cylinder gasket - dismantled

C3-18 N/A



317. STEMPEL / PISTON

- | | | | |
|--|--------------------|---|--|
| a) Materiale
Material | Aluminium | | |
| b) Antall stempelringer
Number of rings | 2 | b1) Tykkelse på stempelringer
Thickness of rings | 0.8 – 1.5 + 0.1
-0.05 mm |
| c) Minimum vekt
Minimum weight | 192 | g | <u>Med stempelbolt, lager, klips og stempelringer</u>
<u>With pin, bearing, clips and rings</u> |
| d1) Maximum høyde stempel
Maximum compression height | 19.75-24.30 | mm | |

C4-1) Stempel fra ¾ av toppen
Piston from ¾ top



C4-2) Stempel fra ¾ av bunn
Piston from ¾ bottom



C4-3) Sempel ringe
Piston rings



III-D1) Stempelbolt
Piston pin

± 0.1 mm tolerance

III-D2) Minimum høyde kompresjon
Minimum compression height

318. RÅDE / CONNECTING ROD

- | | | | |
|--|-----------------------------|-----------------------------------|-------------------|
| a) Materiale
Material | Stål
Steel | b) Type arm
Big end type | Sammensatt |
| c) Innerdiameter store enden (uten lagerskåler)
Interior diameter of the big end (without shell bearings) | | N/A | +0.1
- 0 mm |
| d) Lengde mellom aksene
Length between axes | N/A | e) Minimum vekt
Minimum weight | N/A g |
| | ± 0.1 mm | | |

C5-1) Råde sett ¾ fra store enden
Connecting rod from ¾ on big end side



C5-2) Råde sett ¾ fra den lille enden
Connecting rod from ¾ rear on small end side

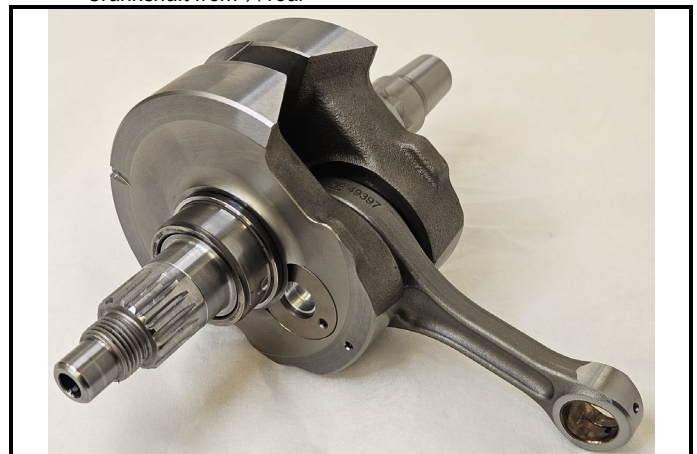

319. VEIVAKSEL / CRANKSHAFT

- | | | | |
|---|-----------------------------|-------------------------------------|---|
| a) Type veivaksel/produksjonstype
Type of manufacture | | b) Material
Material | |
| c) Type veivaksel produksjon
Manufacturing process | Støpt
Cast | Smid
Forged | Maskinert fra heldel
Machined from raw |
| f) Diameter på hovedakselstapp
Diameter of main journals | ☐ | ☒ | ☐ |
| g) Lager bukk materiale
Bearing caps material | | N/A +0
- 0.1 mm | |
| h) Minimumsvekt på veivaksel
Minimum weight of bare crankshaft | | 3120 g ± 3% | |
| i) Diameter på veivtapp
Diameter of crank pins | | N/A +0
- 0.1 mm | |

C6-1) Veivaksel sett ¾ forfra
Crankshaft from ¾ front



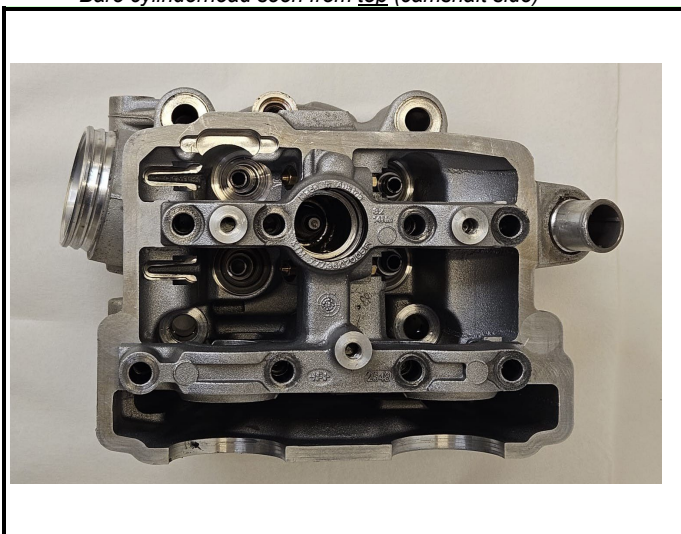
C6-2) Veivaksel sett ¾ bakfra
Crankshaft from ¾ rear



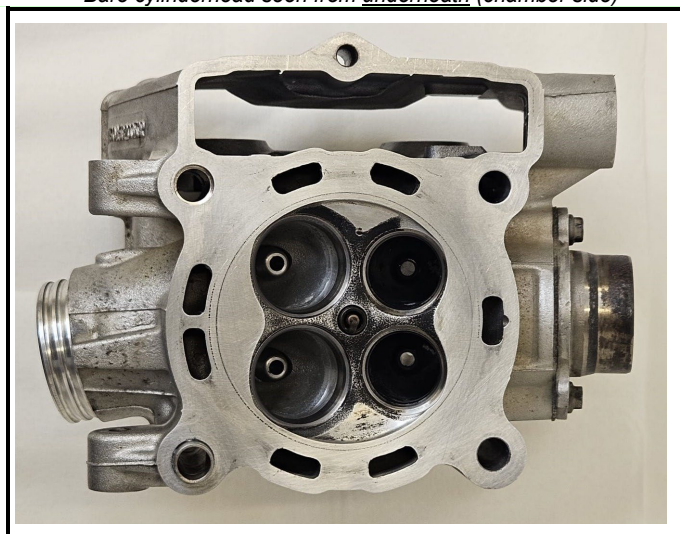
321. TOPPLOKK / CYLINDERHEAD

- | | | | |
|---|------------------|-----------------|---|
| b) Materiale
<i>Material</i> | Aluminium | | |
| c) Minimum høyde
<i>Minimum height</i> | 119.15 | mm | |
| d) Målt fra hvor
<i>Where measured</i> | | | |
| g) Minimum volum på forbrenningskammer
<i>Minimum volume of a combustion chamber</i> | 19.0 | cm ³ | (Ifra. Stempel og toppakning)
<i>Incl. Piston and Cyl. Head Gasket</i> |

C8-1) Topplukk sett ovenfra (kamakselside)
Bare cylinderhead seen from top (camshaft side)



C8-2) Topplukk sett underfra (forbrenningskammer side)
Bare cylinderhead seen from underneath (chamber side)



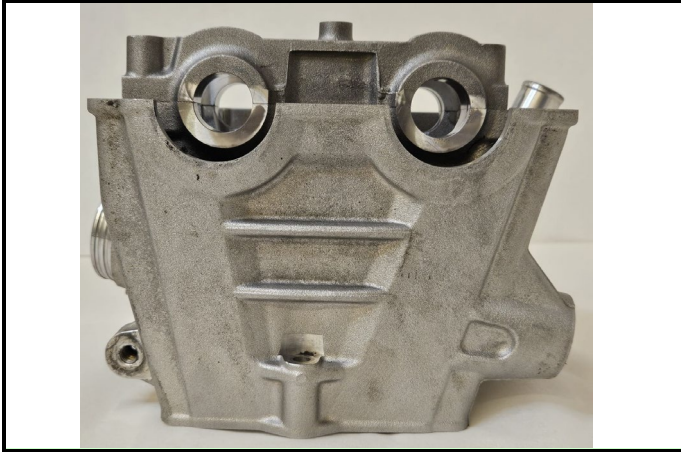
C8-3) Topplukk sett fra insugssiden
Bare cylinderhead seen from intake side



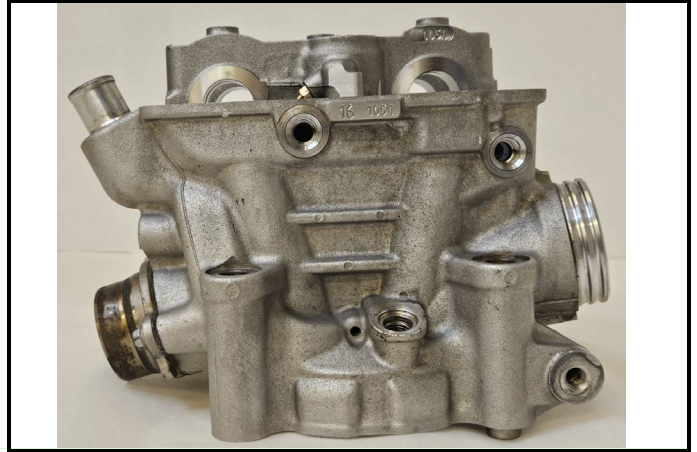
C8-4) Topplukk sett fra eksossiden
Bare cylinderhead seen from exhaust side



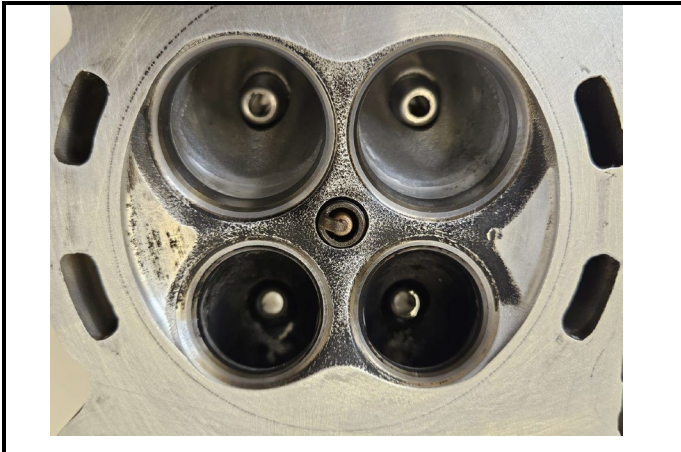
C8-5) Topplukk sett fra venstre side
Bare cylinderhead seen from left hand side



C8-6) Topplukk sett fra høyre
Bare cylinderhead seen from right hand side



C8-7) Kompresjonskammer
Combustion chamber



III-E1) Maksimum diameter på insugsventilens sete
Maximum intake seat diameter



III-E2) Maksimum diameter på eksosventilens sete
Maximum exhaust seat diameter



INNSUG / INTAKE

Tegninger av topplokets innsugsporter – toleranser på dimensjoner : -2/+4 %
Drawings of cylinder head ports - tolerances on dimensions : -2/+4 %

III-K1) Topplukk manifoild side / *Cylinderhead, manifold side*

N/A

EKSOS / EXHAUST

Tegning av topplokets eksosporter – toleranse på dimensjoner : -2/+4 %
Drawings of cylinder head ports - tolerances on dimensions : -2/+4 %

III-L1) Topplukk eksos side / *Cylinderhead, manifold side*

N/A

322. TOPPAKNING / CYLINDERHEAD GASKET

- a) Tykkelse på en tiltrukket toppakning
Thickness of tightened cylinderhead gasket **0.9** ± 0.1 mm
- b) Målested
Location of measurement **På siden av motor uten demontering**

C8-14) Toppakning – demontert
Cylinderhead gasket – dismantled



324. DRIVSTOFFTILFØRSEL / FUEL FEED BY INJECTION – ELECTRONICS

- a) Lavfart injektor referanse
Low Injectors référence **KTM NR**
- b) Høy fart injektor referanse
High Injectors référence **N/A**

C9-1) Lavfart dyser
Low Injectors low



C9-2) Høyfart dyser
Low Injectors Nozzle



C9-1) Insugsdyse
High *Injectors*



C9-2) Insugsdyse
High *Injectors Nozzle*



324. MOTORSTYRING SYSTEM / ENGINE CONTROL SYSTEM

- a) Merke og type
Make and type **Keihin 44**
- c) Bensinsystem
Fuel measurement **Mekanisk / Mechanical**
- e) Antall drivstoffuttak i bruk
Number of effective fuel outlets **1**
- f) Dyser
Injectors **f1) Posisjon
Position**
- g) Liste av sensorer for motorstyringen
List of engine control system sensors

Direkte - Direct

Indirekte - Indirect

Elektronikk / *Electronic*

Hydraulisk / *Hydraulic*

Manifoild / *Manifold*

Topplukk / *Cylinder head*

Kamber
Chamber

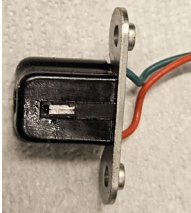
Forkamber
Pre Chamber

N°	Number	Function	Merke og referanse- Make & Reference
C1		GIRPOSISJON/ GEARBOX POSITION	Fee
C2	1	GASSPJELDPOSISJON/ THROTTLE POSITION	KTM 79041077044
C3	1	MAPFØLER/ BAROMETRIC PRESSURE	KTM 77741085044
C4	1	TURTALL/ENGINE SPEED	KTM 79230040000
C5		VANNTMP/ WATER TEMP	KTM 79435047000
C6		LUFTTEMP/ AIR TEMP	KTM 61041080000

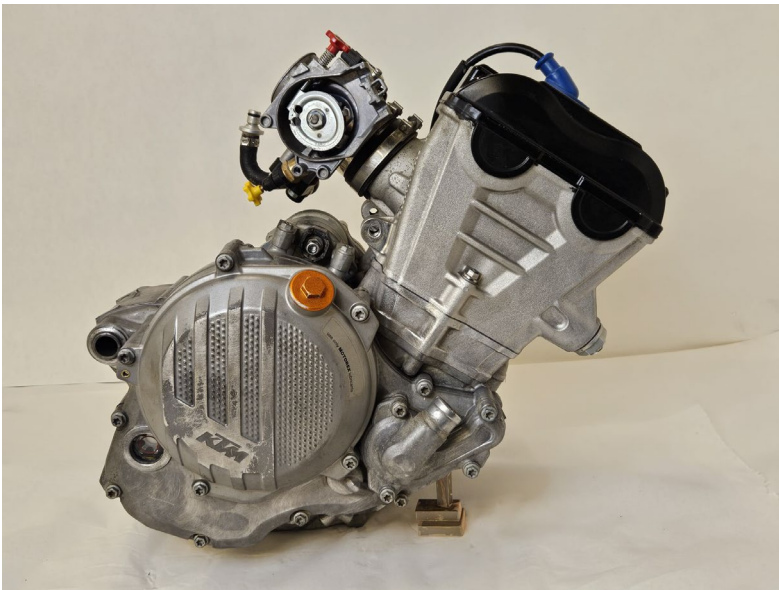
- h) Liste av aktuatorer for motorstyringen
List of engine control system actuators

N°	Number	Function	Merke og referanse- Make & Reference
A1		ECU	KTM 79641031000
A2		COILS	KTM type IG 5128
A3		FUEL INJECTORS LOW	KTM 79041023044
A4		MAPPING SWITCH	KTM 79039074000

C9-1) Motorstyringssystem
Engine control system

III-II) POSISJON PÅ SENSORER OG AKTUATORER / LOCATION OF SENSORS AND ACTUATORS



Sensors not located on Engine

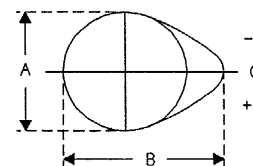
C6	Luft temp føler i luftfilterslange

325. KAMAKSEL / CAMSHAFT

- c) Drivsystem **Kjede**
Drive system **Chain**
- e) dimatere av akseltappen **20/22** ± 0.1 mm
Diameter of journals

- g) Kamdimensjon
Cam dimensions

	Admission Intake	Echappement Exhaust
A =	28 ± 0.1 mm	28.0 ± 0.1 mm
B =	36.25 ± 0.1 mm	35.55 ± 0.1 mm



Les tolérances s'appliquent avec le même signe pour A et B
The tolerances must be used with the same sign for A and B

- h) Minimumsvekt
Minimum weight

0.226 kg	0.219 kg
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326. DISTRIBUTION / TIMING

- a) Teroretisk klaring **Innsug Intake 0.12** mm **Eksos Exhaust 0.15** mm
Theoretical clearance
- b) Kamaksel timing mot TDC **Innsug Intake 113.5** $\pm 2^\circ$ **Eksos Exhaust 103.5** $\pm 2^\circ$
- c) Kamakseløft (demontert aksel) **Målt med 3mm ball diameter**
Cam lift in mm (dismounted camshaft) **Measured with a 3mm diameter ball**

INNSUG / INTAKE				EKSOS / EXHAUST			
Rotasjons vinkel Rotation angle in degrees	Løft i mm Lift in mm (± 0.05 mm)	Rotasjons vinkel Rotation angle in degrees	Løft i mm Lift in mm (± 0.05 mm)	Rotasjons vinkel Rotation angle in degrees	Løft i mm Lift in mm (± 0.05 mm)	Rotasjons vinkel Rotation angle in degrees	Løft i mm Lift in mm (± 0.05 mm)
0	8.31			0	7.59		
- 5	8.23	+ 5	8.25	- 5	7.50	+ 5	7.55
- 10	7.99	+ 10	8.07	- 10	7.24	+ 10	7.37
- 15	7.53	+ 15	7.79	- 15	6.75	+ 15	7.10
- 20	6.76	+ 20	7.39	- 20	5.93	+ 20	6.70
- 25	5.55	+ 25	6.89	- 25	4.70	+ 25	6.20
- 30	3.98	+ 30	6.32	- 30	3.22	+ 30	5.59
- 35	2.65	+ 35	5.61	- 35	2.10	+ 35	4.90
- 40	1.70	+ 40	4.80	- 40	1.35	+ 40	4.12
- 45	1.05	+ 45	3.91	- 45	0.83	+ 45	3.20
- 50	0.64	+ 50	2.99	- 50	0.50	+ 50	2.37
- 55	0.40	+ 55	2.11	- 55	0.34	+ 55	1.66
- 60	0.30	+ 60	1.41	- 60	0.26	+ 60	1.05
- 65	0.24	+ 65	0.91	- 65	0.20	+ 65	0.63
- 70	0.17	+ 70	0.56	- 70	0.15	+ 70	0.39
- 75	0.10	+ 75	0.36	- 75	0.08	+ 75	0.26
- 80	0.04	+ 80	0.27	- 80	0.03	+ 80	0.20
- 85	0.01	+ 85	0.20	- 85	0.02	+ 85	0.12
- 90	0.00	+ 90	0.13	- 90	0.00	+ 90	0.05

En differanse på +/- 2 grader på alle målinger er akseptert / + = Samme rotasjonsretning som motoren
A shift of +/- 2 degrees of the whole measurement is accepted / + = Same rotation direction as engine

- c) Maksimum ventilløft
Maximum valve lift

Innsug Intake	Eksos Exhaust
10.6	9.6

Målt med klaring iht produsenten

C10-1) Kamaksel- demontert
Camshaft - dismounted



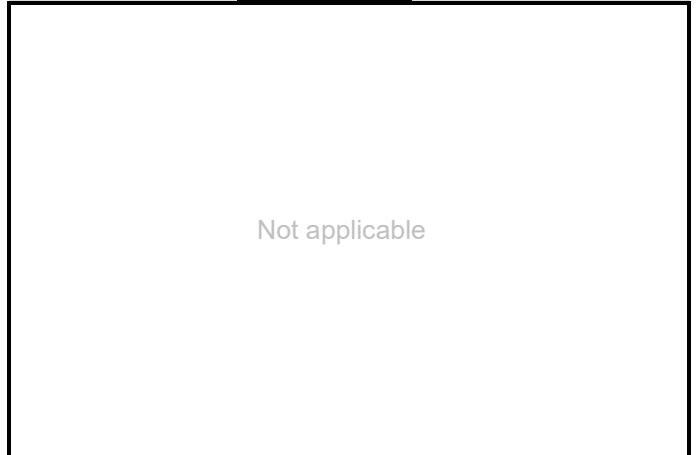
C10-2) Kamaksel- demontert
Camshaft - dismounted



C10-5) Kammakselhjul - demontert
Camshafts gears - dismounted



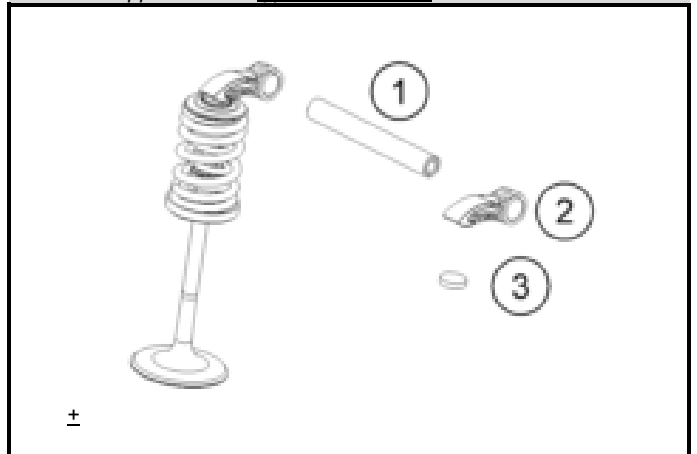
III-J2) Vippearmer - dimensjoner
Rocker arm - typical dimensions



C10-6) Ventilløfter eller trykker innsug - demontert
Tappet Intake - dismounted



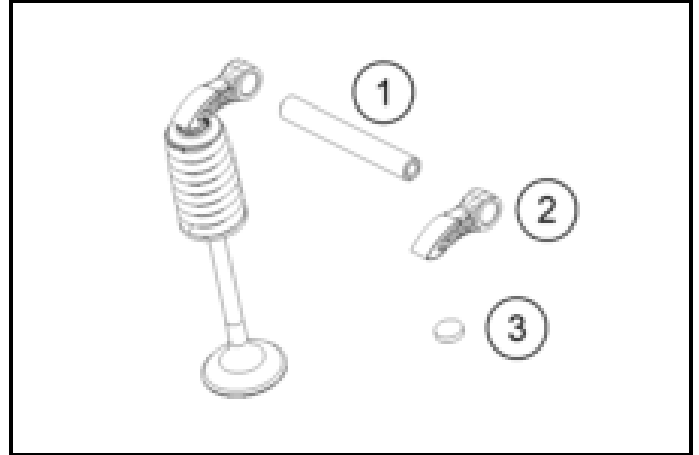
III-J3) Ventilløfter eller trykker innsug - dimensjoner
Tappet Intake - typical dimensions



C10-7) Ventiløfter eller trykker eksos – demontert
Tappet Exhaust – dismounted



III-J4) Ventiløfter eller trykker eksos – dimensjon
Tappet Exhaust – typical dimensions



C10-8) Ventilfjær innsug
Intake valve spring



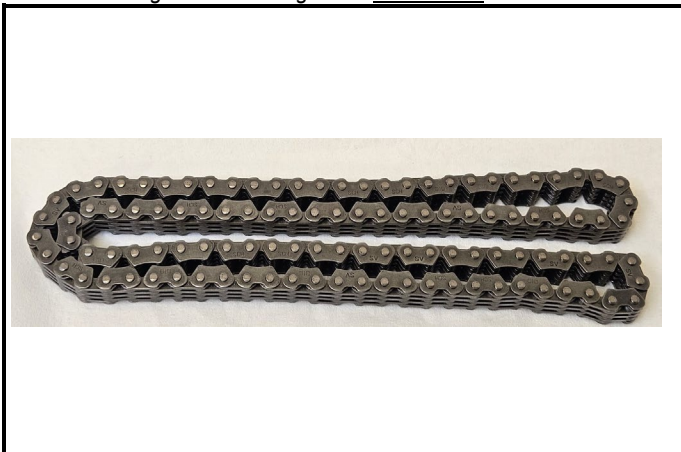
C10-9) Ventilfjær eksos
Exhaust valve spring



- d) Ventilfjær innsug lengde ubelastet
Intake valve spring free length **42.4/
39.4** ± 1 mm
- e) Ventilfjær innsug lengde belastet 200 Nm
Intake valve spring length under 200 Nm **27.50/
32.15** ± 1 mm
- g) Ventilfjær innsug diameter.
Intake valve spring wire diameter **2.85-
2.25** ± 0.1 mm

- d) Ventilfjær eksos lengde ubelastet
Exhaust valve spring free length **41.2** ± 1 mm
- f) Ventilfjær eksos lengde belastet 200 Nm
Exhaust valve spring length under 200 Nm **34.0** ± 1 mm
- h) Ventilfjær eksos diameter.
Exhaust valve spring wire diameter **3.35-
2.65** ± 0.1 mm

C10-10) Register reim, kjede eller tannhjul- demontert
Timing belt, chain or gears – dismounted



Type / Type : **Lavstøys kjede**

Pitch / Pitch : **6.35** ±0.1 mm

Ant. Tenner / Nb of teeth : **55**

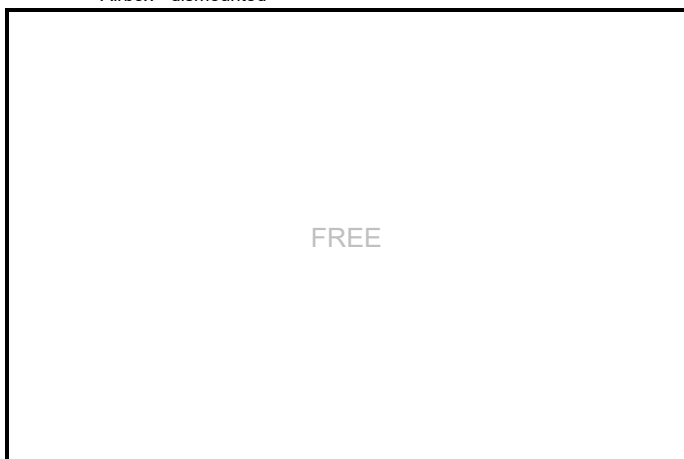
Lengde / Length : **697** ±2 mm (exterieur/outside)

Bredde / Width : **9.34** ±0.1 mm

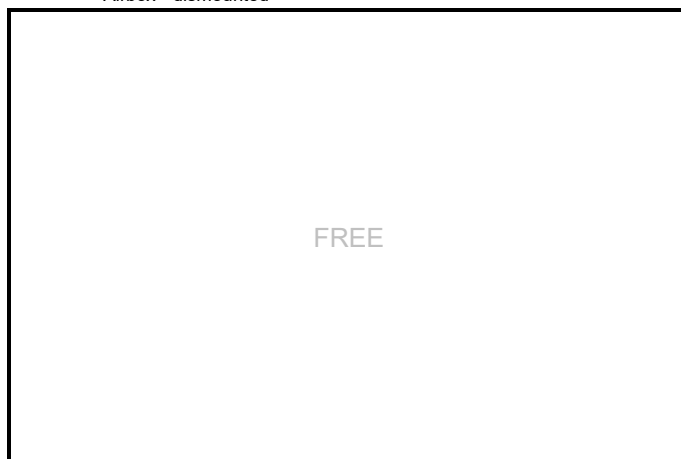
327. INNSUG / INTAKE

a) Materialet av traktene <i>Material of trumpets</i>	N/A				
b) Dimensjon av innsugsrøret ved gassspjeldet <i>Dimensions of the intake pipe at the throttle valve</i>		42		+0.1 / -0.2 mm	
c) Avstand mellom gassspjeld og topplokk <i>Distance between throttle valve and head</i>		40		± 2 mm	
d) Maximum diameter på ventiltoppen <i>Maximum diameter of the valve head</i>	32.5	± 0.1 mm	d1)Vinkel på ventiltoppen <i>Angle of valve head</i>	45	deg ± 30 min
e) Diameter på ventilstammen <i>Diameter of valve stem</i>	5	+0 -0.2 mm	f) Lengde på ventilen <i>Valve length</i>	95.9	± 1.5 mm
g) Materialet på ventilen <i>Valve material</i>	Titan		h) Min vekt ventil <i>Min valve weight</i>	18.4	g
i) Fjærplate materiale <i>Spring plate material</i>	Alu		j) Minimum vekt på fjærplate <i>Min spring plate weight</i>	5.8	g

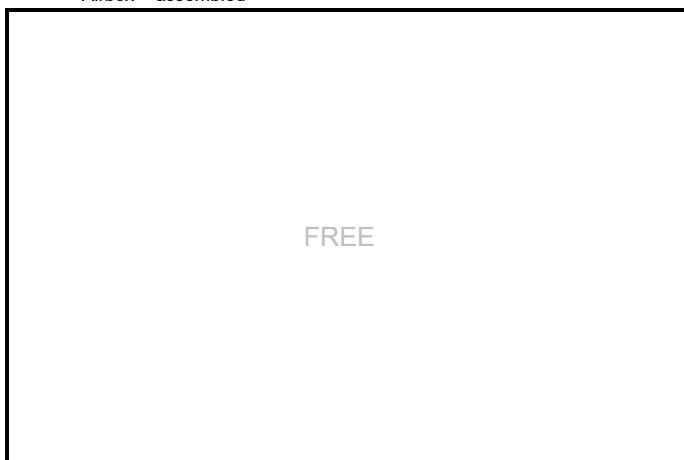
C11-1) Luftfilterboks- demontert
Airbox - dismantled



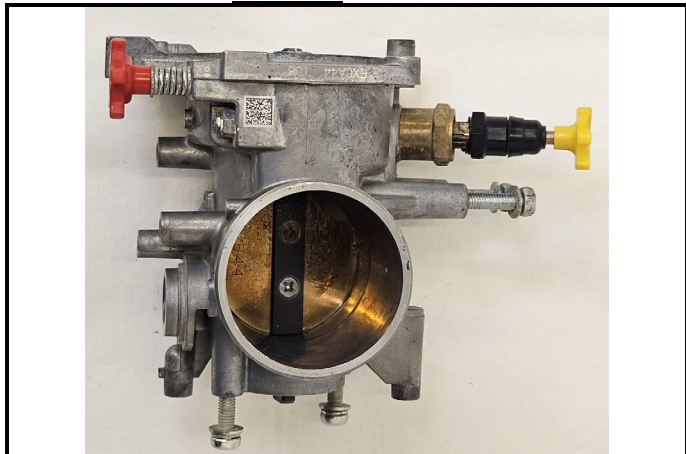
C11-2) Luftfilterboks- demontert
Airbox - dismantled



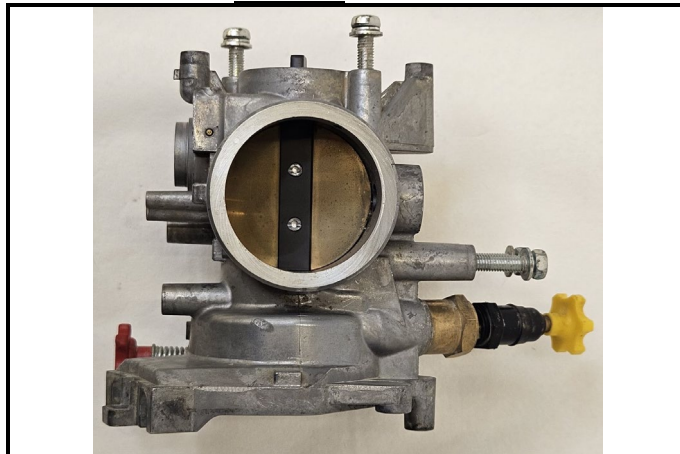
C11-3) Luftfilterboks- montert
Airbox – assembled



C11-3) Gasspjeld enhet- demontert
Throttle unit - dismounted



C11-4) Gasspjeld enhet- demontert
Throttle unit - dismounted



C11-5) Innsugs ventil
Intake valve - dismounted



C11-6) Innsug ventilfjærplate
Intake spring plate - dismounted



Tykkelse 1,5mm $\pm$ 0.1 mm

328. ECHAPPEMENT / EXHAUST

a) Materiale eksos Material of exhaust	N/A				
c) Minimum tykkelse på rør Minimum thickness of tubes	N/A	mm			
d) Maximum ventildiameter Maximum diameter of the valve	26.5	± 0.1 mm	d1) Ventil hode vinkel Angle of valve head	45	deg ± 30 min
e) Ventilstamme diameter Diameter of valve stem	5	+0 -0.2 mm	f) Ventil lengde Valve length	98.3	± 1.5 mm
g) Ventil materiale Valve material	Titan		h) Masse soupape mini Min valve weight	17.5	g
i) Ventil fjærplate materiale Spring plate material	Alu		j) Vintelfjærplate vekt Min spring plate weight	4.85	g

C12-1) Eksosventil
Exhaust valve - dismounted



C12-2) Eksos ventilfjærplate
Exhaust spring plate - dismounted



Tykkelse 1,5mm ± 0.1 mm

C12-3) Fjærplate oversikt



EKSOS / EXHAUST

Tegning av komplett eksosanlegg
Drawing of the complete exhaust

III-L1) Eksos / Exhaust

All dimensions in mm
diameters

FREE

All diameters are internal

LYDDEMPER / SILENCER

Tegning av komplett lyddemper
Drawing of the complete silencer

III-L3) Lyddemper / Silencer

All dimensions in mm

All diameters are internal diameters

SECTION OF SILENCER

331. SYSTEME DE REFROIDISSEMENT / COOLING SYSTEM

- c) Tupe vannpumpe
Origin of the water pump

Mekanisk

- C13-3) Vannpumpe -demontert
Water pump - dismounted



- C13-4) Vannpumpe monterert på motor
Water pump mounted on engine



- C13-5) Turbin hjul vannpumpe
Turbine wheel of water pump



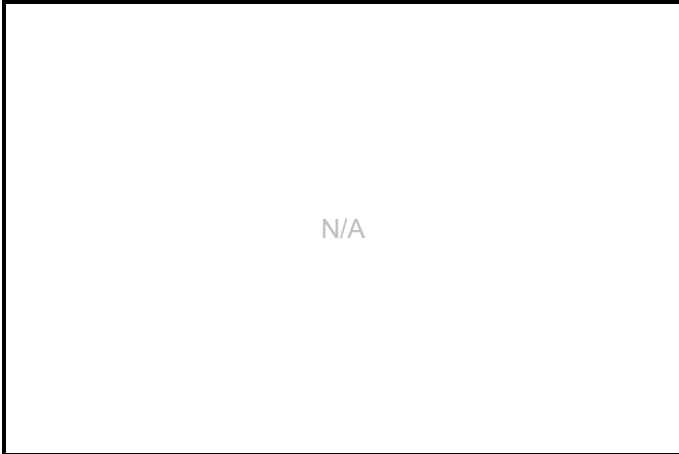
- III-M2) Roue de turbine de pompe à eau
Turbine wheel of water pump

± 1.0 mm tolerance

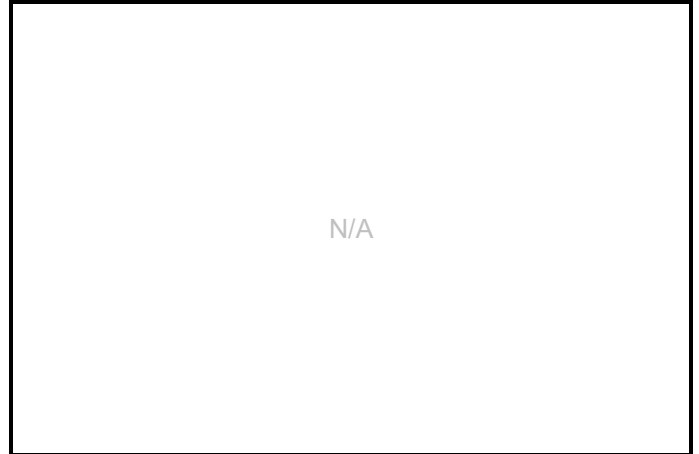
333. SYSTEME DE LUBRIFICATION / LUBRICATION SYSTEM

- a) Materiele for oljesump
Material of oil sump

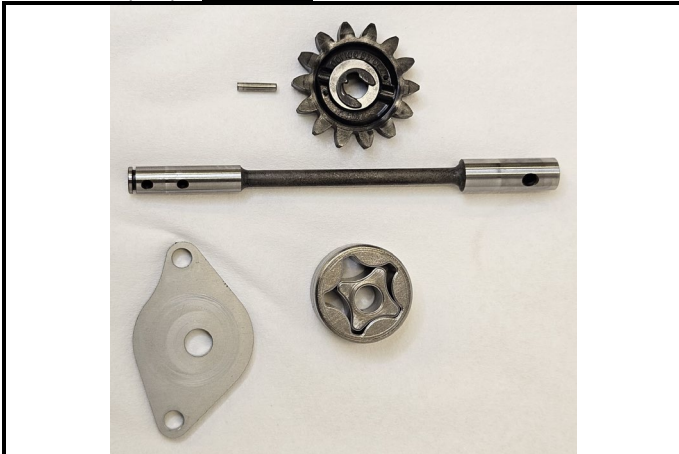
C14-1) Oljesump demontert
Oil sump - dismounted



C14-2) Oljesump demontert
Oil sump - dismounted



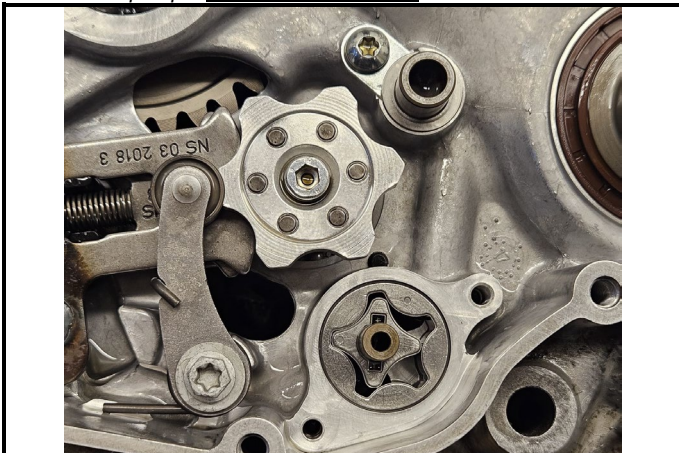
C14-3) Oljepumpe - demontert
Oil pump - dismounted



C14-3) Oljepumpe - demontert
Oil pump - dismounted



C14-4) Oljepumpe – monteret i sin riktige posisjon
Oil pump – mounted in its location



4. / FUEL

402. BENSIN PUMPE / FUEL PUMP

a) Maximum trykk
Maximum pressure

4,0

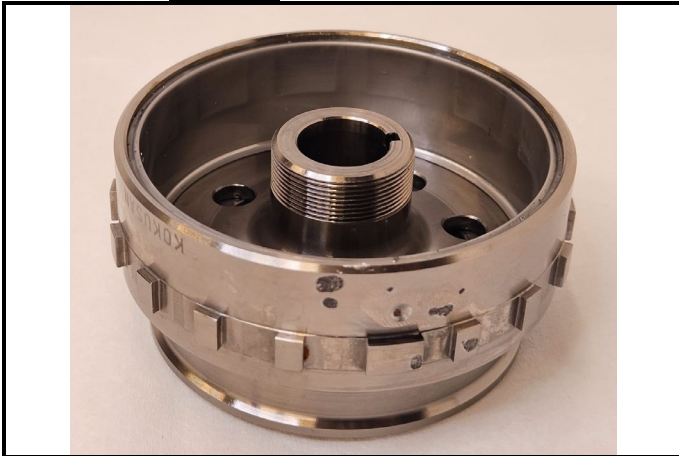
barA

5. EQUIPEMENT ELECTRIQUE / ELECTRICAL EQUIPMENT

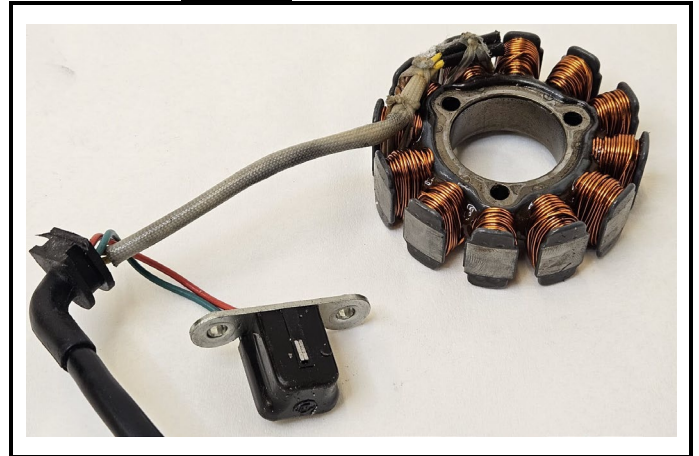
502. ALTERNATEUR / GENERATEUR / DEMARREUR / ALTERNATOR / GENERATOR / STARTER

a) Svinghjul ytre diameter <i>Rotor External diameter</i>	88	+/- 0.5 mm
b) Svinghjul indre diameter <i>Rotor Internal diameter</i>	77.8	+/- 0.5 mm
c) Antall statorpøler <i>Number of Stator pôles</i>	12	
d) Bredde statorpøler <i>Width of Stator pôles</i>	14.3	+/- 0.5 mm
e) Ytre diameter stator <i>Stator external diameter</i>	76.3	+/- 0.5 mm
f) Indre diameter stator <i>Stator internal diameter</i>	32	+/- 0.5 mm

C15-1) Svinghjul - demontert
Rotor - dismounted



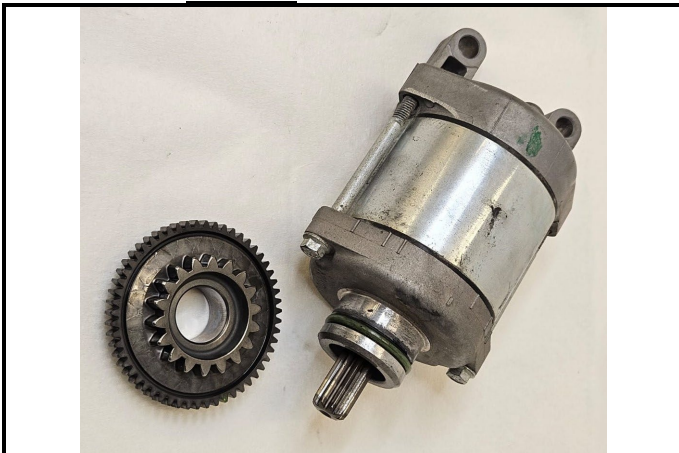
C15-2) Stator - demontert
Stator - dismounted



504. DÉMARREUR / STARTER

a) Referanse starter <i>Starter reference:</i>	KTM	
b) Frihjul antall tenner <i>Free wheel : Teeth nb :</i>	55	
c) Frihjul bredde : <i>Free wheel width :</i>	5.4	+/- 0.5 mm

C16-1) Starter- demontert
Starter - dismounted



C16-2) Frihjul - demontert
Free Wheel - dismounted

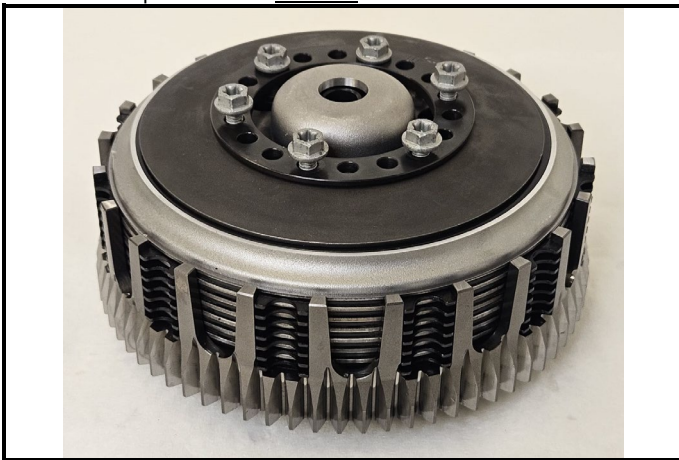


6. TRANSMISSION / POWER TRAIN

602. CLUTCH / CLUTCH

a) Clutch vekt Assembly weight	2199	g	+/- 50 g	Avec écrou de fixation With fixing nut
b) Friksjonsplate disk Driving disks	b1) Nombre Number	7	17-8) Tykkelse Thickness	1.9 +/- 0.5mm
c) Trykkplate disk Driven disks	c1) Nombre Number	7	17-7) Tykkelse Thickness	6x1.4/ 1x1 +/- 0.5mm

C17-1) Embrayage complet - monté
Complete Clutch - mounted



C17-2) Ressort
Spring



C17-7) Came d'embrayage – vue de face
Clutch cam – face view



C17-8) Came d'embrayage - vue de dos
Clutch cam – rear view



603. BOITE DE VITESSES / GEARBOX

- a) Plassering
Location: **Motorblokk**
- b) Tannhjul veivaksel
Primary ratio on crankshaft **24**
- c) Tannhjul clutch
Primary ratio on clutch **73**

- d) Rapports
Gear ratios

	Primaire: Layshaft:	Secondaire: Pinionshaft:	d) Materiau: Material:	f) Epaisseurs (mm): Thicknesses (mm): ± 0.5mm	g) Masse (g): Weight (g): ± 15 g
1	13	32	<i>Stål / Steel</i>	11.3/ 11.0	432/ 192
2	16	32	<i>Stål / Steel</i>	13/ 11	88/ 209
3	17	28	<i>Stål / Steel</i>	12.7/ 12.6	12.5/ 183
4	19	25	<i>Stål / Steel</i>	12.8/ 9.9	140/ 232
5	21	26	<i>Stål / Steel</i>	12.35/ 11.9	121/ 263
6					

F12-1) Tannhjul Veivaksel
Gear Crankshaft



F12-2) Tannhjul clutch
Gear Clutch



F12-3) Tannjul #1 Sett forfra
Gears #1 – Front view



F12-4) Tannhjul #1 – Sett bakfra
Gears #1 – Rear view



F12-5) Tannhjul #2 – Sett forfra
Gears #2 – Front view



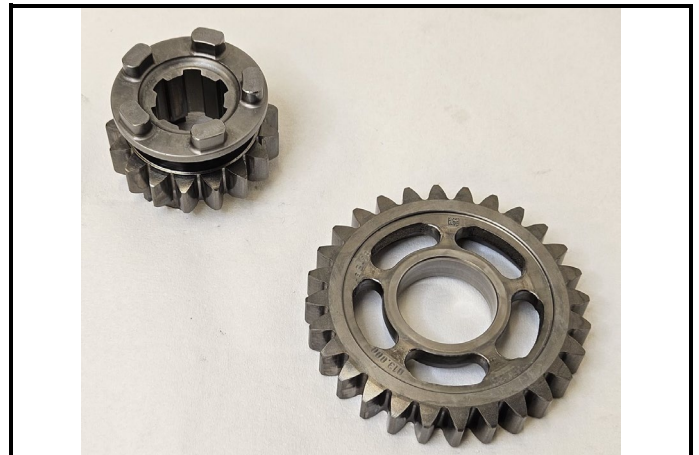
F12-6) Tannhjul #2 – Sett bakfra
Gears #2 – Rear view



F12-7) Tannhjul #3 – Sett forfra
Gears #3 – Front view



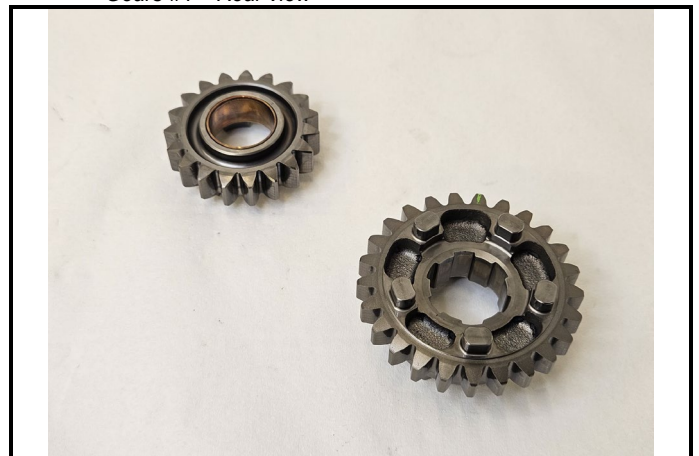
F12-8) Tannhjul #3 – Sett bakfra
Gears #3 – Rear view



F12-9) Tannhjul #4 – Sett forfra
Gears #4 – Front view



F12-10) Tannhjul #4 – Sett bakfra
Gears #4 – Rear view



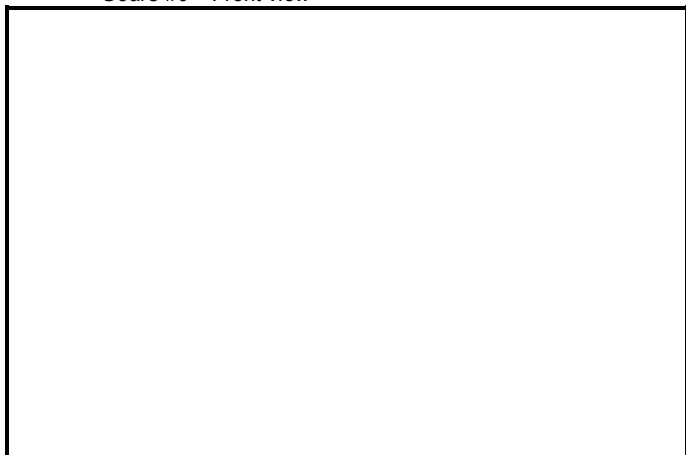
F12-11) Tannhjul #5 – Sett forfra
Gears #5 – Front view



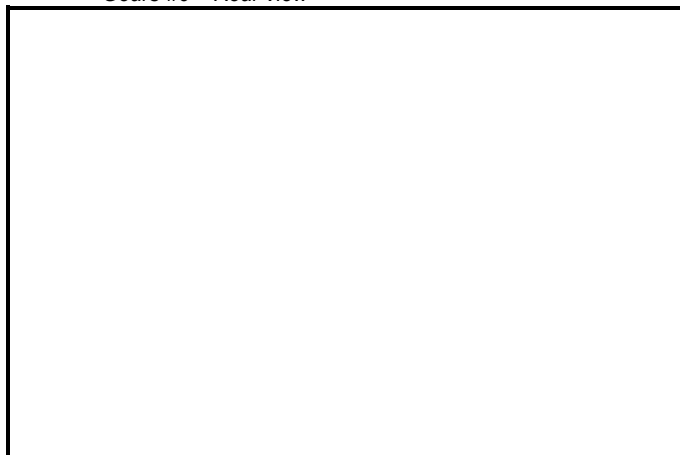
F12-12) Tannhjul #5 – Sett bakfra
Gears #5 – Rear view



F12-13) Tannhjul #6 – Sett forfra
Gears #6 – Front view



F12-14) Tannhjul #6 – Sett bakfra
Gears #6 – Rear view



604. GIRAKSEL / LAYSHAFT ASSEMBLY

a) Lager referanse <i>Reference of bearing</i>	KTM	
b) Vekt lager <i>Weight of bearing</i>	N/A	± 10 g
c) Bredde, ytre og indre diameter av lager <i>Width / External and internal diameters of bearing</i>	N/A	± 0.1 mm
d) Vekt på giraksel <i>Weight of layshaft</i>	432	± 10 g
e) Materiale på giraksel <i>Material of layshaft</i>	Stål Steel	

F7-1) Lager
Bearing



F7-2) Giraksel
Layshaft



605. GIRAKSEL OG LAGRING HOVEDAKSEL / PINIONSHAFT / MAINSHAFT ASSEMBLY

a) Materiale giraksel/ hovedaksel <i>Material of pinionshaft/mainshaft</i>	Stål / Steel	
b) Vekt giraksel/ hovedaksel <i>Weight of pinionshaft/mainshaft</i>	393	± 10 g
c) Hovedlager referanse <i>Reference of left mainshaft bearing</i>	KTM	
d) Bredde/ ytre og indre diameter lager <i>Width / External and internal diameters of mainshaft bearing</i>	N/A	± 0.1 mm
e) Vekt på venstre hovedaksel <i>Weight of left mainshaft bearing</i>	N/A	± 10 g
f) Referanse høyre hovedlager <i>Reference of right mainshaft bearing</i>	KTM	
g) Bredde/ ytre og indre diameter hovedaksel lager <i>Width / External and internal diameters of right mainshaft bearing</i>	N/A	± 0.1 mm
h) Vekt på høyre hovedaksel lager (med holder og klips) <i>Weight of right mainshaft bearing (With support and clips)</i>	N/A	± 10 g
i) Bredde/ ytre og indre diameter nålelager <i>Width / External and internal diameters of ratio needle bearings</i>		± 0.1 mm
j) Vekt nålelager <i>Weight of ratio needle bearings</i>	N/A	± 5 g
k) Materiale på holder <i>Material of the hub</i>		
l) Antall dog klør på hvert tannhjul <i>Number of dog on each gear</i>	1 :5 / 2 :5 / 3 :5/ 4 :5 / 5 :5	
m) Materiale på ingrepsring <i>Material of clutch rings</i>	Stål integrert i tannhjul	
n) Vekt på ingrepsring <i>Weight of clutch rings</i>	Integrert i tannhjul	

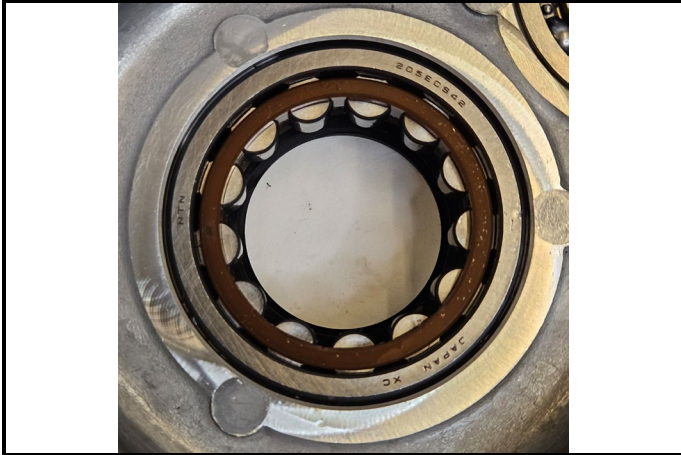
F8-1) Giraksel / hovedaksel
Pinionshaft / Mainshaft



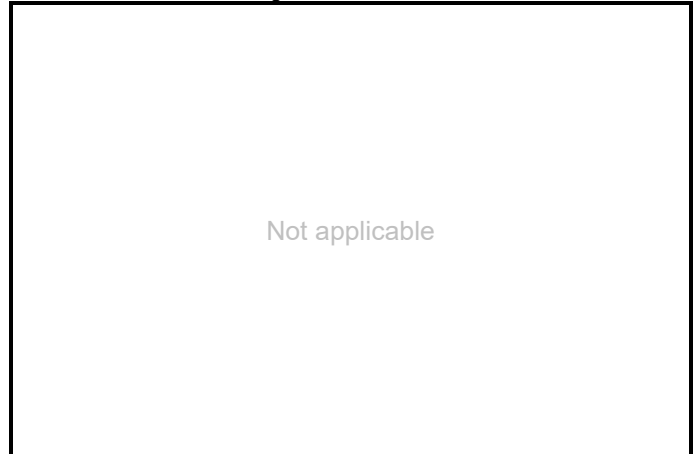
F8-2) Venstre hovedlager
Left mainshaft bearing



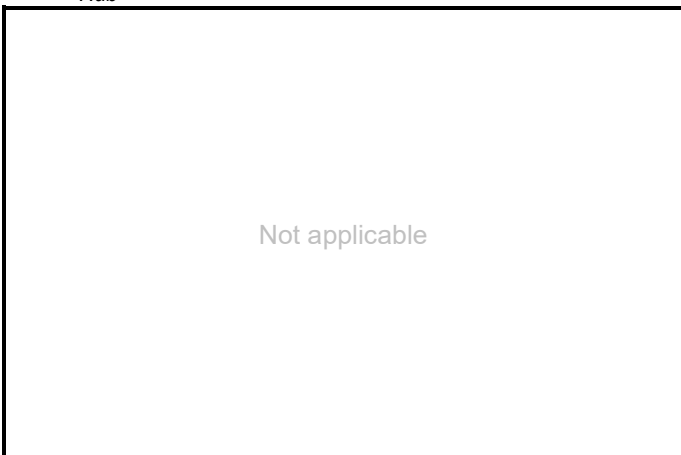
F8-3) Høyre hovedlager
Right mainshaft bearing



F8-4) Nålelager
Ratio needle bearings



F8-5) Holder
Hub



606. GIR SKIFTER MEKANISME / GEAR SELECTION MECHANISM

- a) Materiale på skiftegafler og aksel
Material of selector forks incl. axle

Stål, med kompositt belegg

	#1-4	#2-4	#3	
b) Vekt skiftegafler Weight of forks	61	61	61	± 5 g
c) Vekt aksel for skiftegafler Weight of shaft gear shift fork	46		31	± 5 g

- d) Diameter aksel skiftegafler
Forks axle diameter

11.75 ± 0.1 mm

- e1) Tykkelse skiftegafler
Forks finger thickness

4.9 ± 0.1 mm

- e2) Gaffel aksel diameter
Forks locating pin diameter

5.96 ± 0.1 mm

- f1) Materiale på skifterulle
Material of selector barrel assembly

Alu

- f2) Vekt skifterulle
Weight of selector barrel assembly

140 ± 5 g

F9-1) Skiftegafler #1-4
Selector forks gear #1-4



F9-2) Skiftegafler #2-5
Selector forks #2-5



F9-3) Skiftegafler #3
Selector forks #3



F9-4) Skiftegaffel aksel #1-4 / # 2-5
Fork's axle #1-4 / # 2-5



F9-5) Skiftegaffel aksel #3-4
Fork's axle #3-4



F9-10) Skifterulle
Selector barrel assembly



F9-11) Skifterulle
Selector barrel assembly

