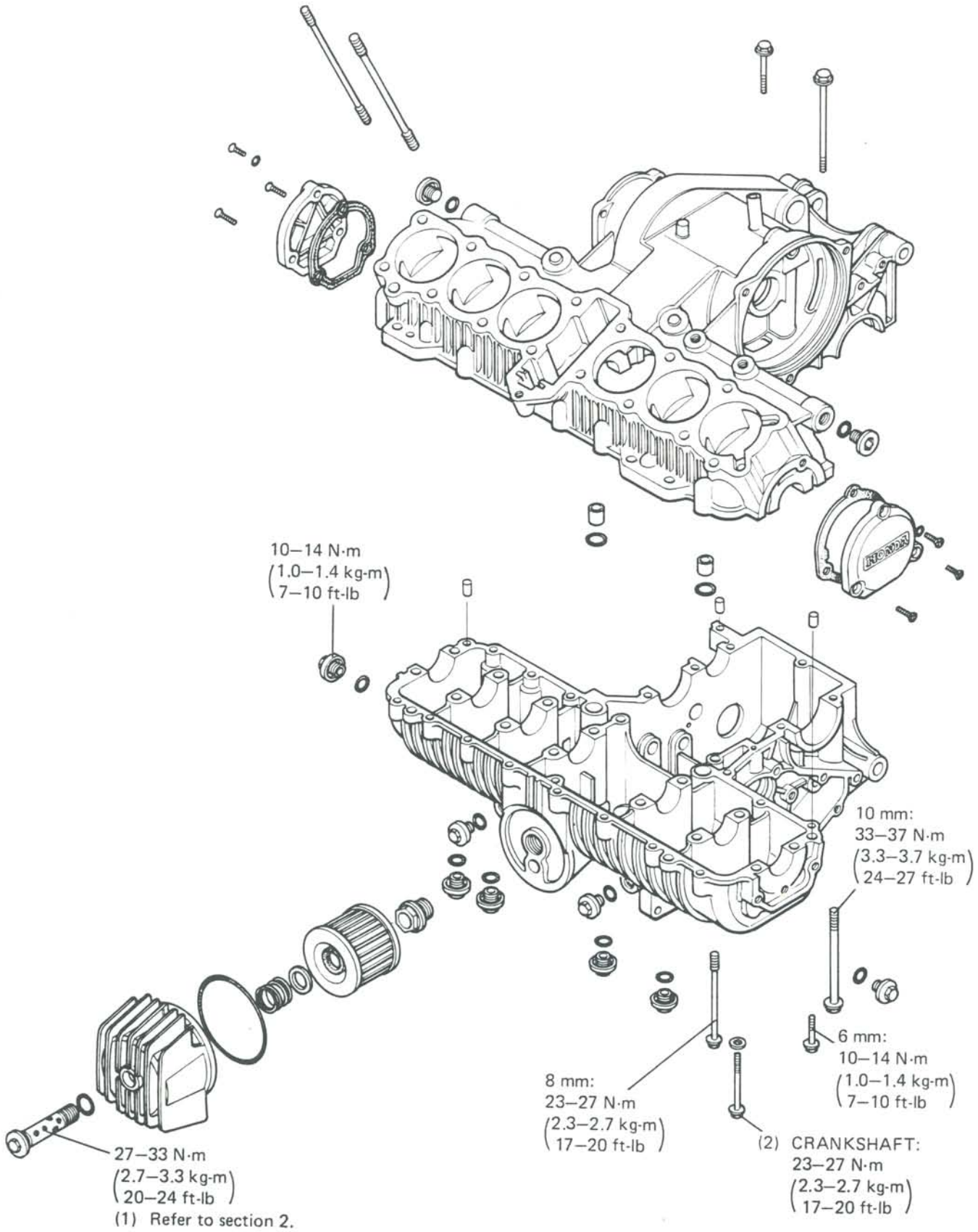
CRANKCASE

CARTER MOTEUR

KURBELGEHÄUSE

CARTER DEL CIGÜEÑAL

(1) Se reporter á la section 2. (2) VILEBREQUIN:	(1) Siehe Abschnitt 2. (2) KURBELWELLE	(1) Remítase a la sección 2 (2) Soporte del ciguëñal


10–14 N·m
(1.0–1.4 kg-m)
7–10 ft-lb
10 mm:
33–37 N·m
(3.3–3.7 kg-m)
24–27 ft-lb
6 mm:
10–14 N·m
(1.0–1.4 kg-m)
7–10 ft-lb
8 mm:
23–27 N·m
(2.3–2.7 kg-m)
17–20 ft-lb
(2) CRANKSHAFT:
23–27 N·m
(2.3–2.7 kg-m)
17–20 ft-lb
27–33 N·m
(2.7–3.3 kg-m)
20–24 ft-lb
(1) Refer to section 2.

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SERVICE INFORMATION

WORKING PRACTICE

To repair the crankshaft, connecting rod, primary shaft and the transmission including the shift fork and drum, it is necessary to separate the crankcase halves.
The following parts must be removed before disassembling the crankcase.

Item to be serviced	Items to be removed
Crankshaft and connecting rod	Cylinder head, cylinder, pistons and primary shaft assembly
Primary shaft	A.C. generator and lock nut (inside the clutch)
Transmission	Clutch, oil pump drive chain and gear shift linkage

TORQUE VALUES

8mm bolt (Crankshaft)	23–27 N·m (2.3–2.7 kg-m, 17–20 ft-lb)
8mm bolt (Crankcase)	23–27 N·m (2.3–2.7 kg-m, 17–20 ft-lb)
6mm bolt	10–14 N·m (1.0–1.4 kg-m, 7–10 ft-lb)
10mm bolt	33–37 N·m (3.3–3.7 kg-m, 24–27 ft-lb)
Oil path cap	10–14 N·m (1.0–1.4 kg-m, 7–10 ft-lb)

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INFORMATIONS D'ENTRETIEN

PRATIQUE DE TRAVAIL

Pour la réparation du vilebrequin, des bielles, de l'arbre primaire et de la transmission y compris les fourchettes et le tambour de sélection, il est nécessaire d'ouvrir le carter moteur en deux.
Avant de démonter le carter moteur, les pièces et organes suivants doivent être déposés.

Organes à entretenir	Organes à déposer
Vilebrequin et bielles	Culasse, cylindres, pistons et arbre primaire
Arbre primaire	Génératrice de courant alternatif et contre-écrou (à l'intérieur de l'embrayage)
Boîte de vitesses	Embrayage, chaîne d'entraînement de pompe à huile et mécanisme de sélection des vitesses

COUPLES DE SERRAGE

Boulon de 8 mm (vilebrequin)	23 à 27 N·m (2,3 à 2,7 kg-m)
Boulon de 8 mm (carter moteur)	23 à 27 N·m (2,3 à 2,7 kg-m)
Boulon de 6 mm	10 à 14 N·m (1,0 à 1,4 kg-m)
Boulon de 10 mm	33 à 37 N·m (3,3 à 3,7 kg-m)
Couvercle de passage d'huile	10 à 14 N·m (1,0 à 1,4 kg-m)

CRANKCASE DISASSEMBLY

Remove the cylinder head, cylinder, pistons and oil filter (Sections 6 and 7).

Remove the clutch, clutch related parts, A. C. generator, gear shift linkage and starting motor (Sections 8, 9, 16 and 18).

NOTE

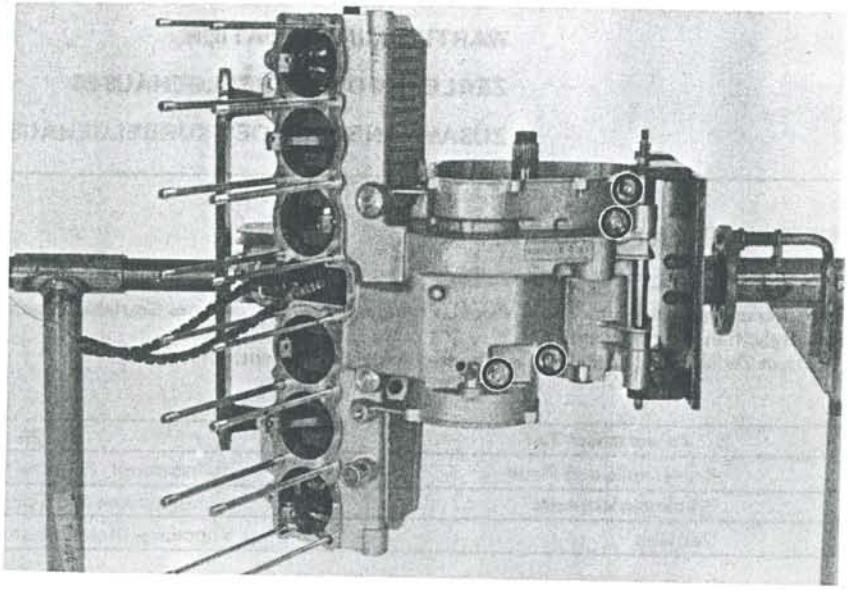
The crankcase can be separated without removing the clutch, clutch related parts, A. C. generator, gearshift mechanism and starting motor. However, we recommend removal of these parts, because the transmission gears may be dropped when separating the crankcase.

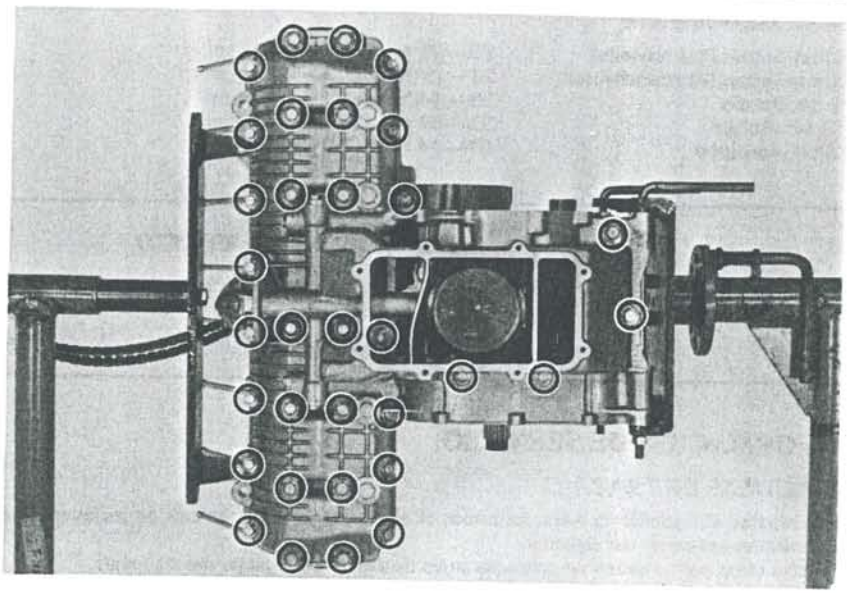
Remove the upper crankcase bolts.

Turn the engine upside down.
Remove the oil pan.
Remove the lower crankcase bolts.

NOTE

Remove the bolts in two or more steps and in a crisscross pattern to prevent warpage.

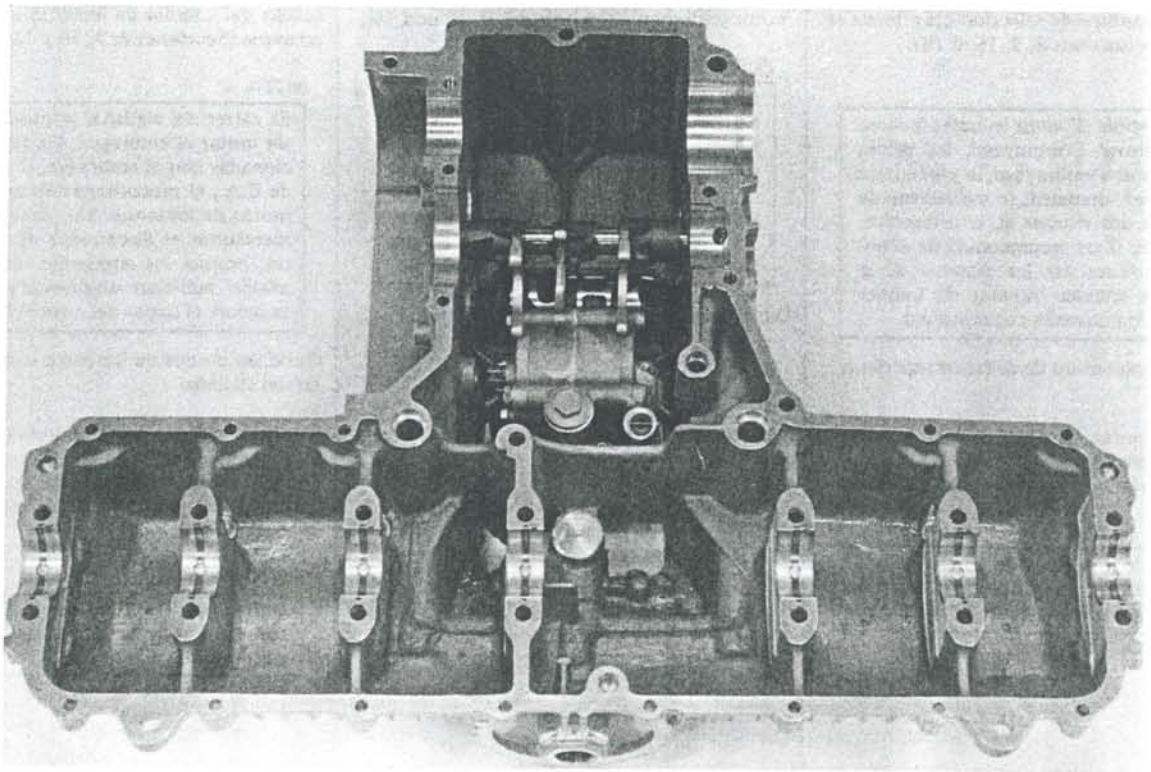


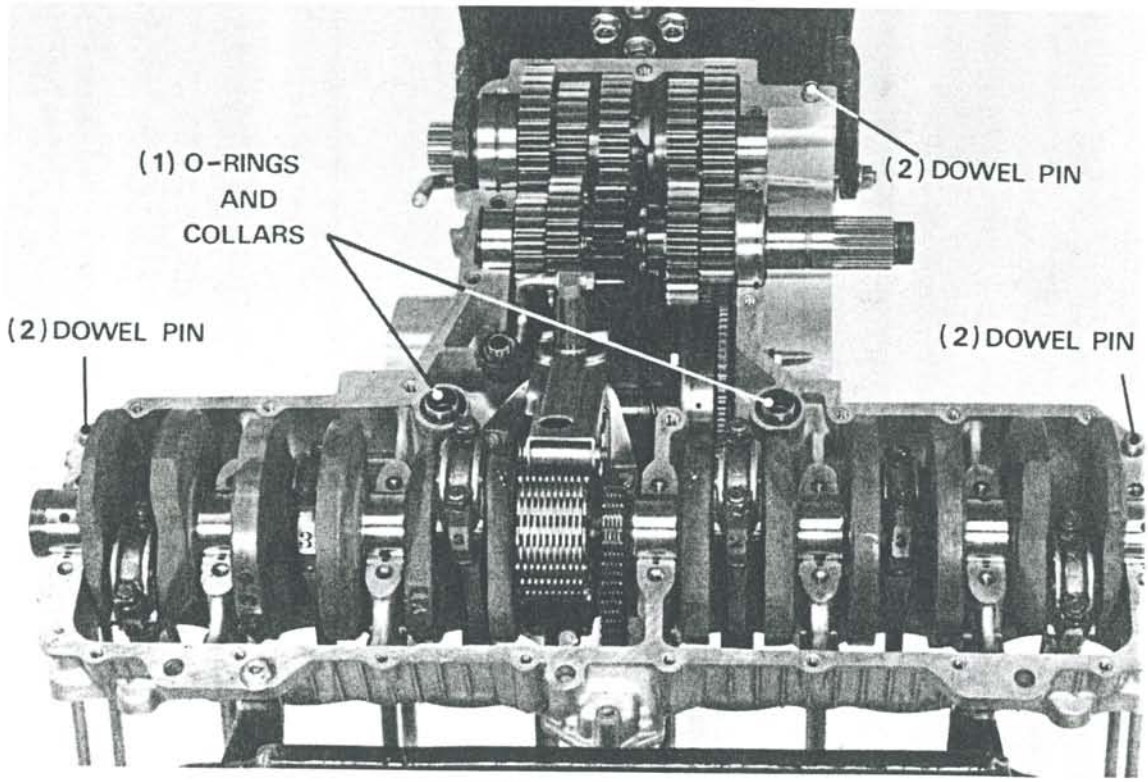


Separate the lower case half.

CAUTION

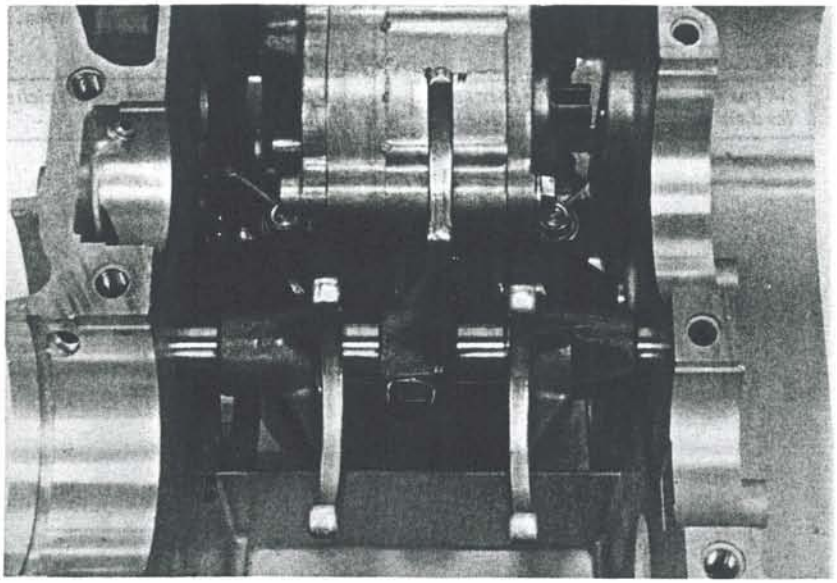
Do not pry between the upper and lower cases.





CRANKCASE ASSEMBLY

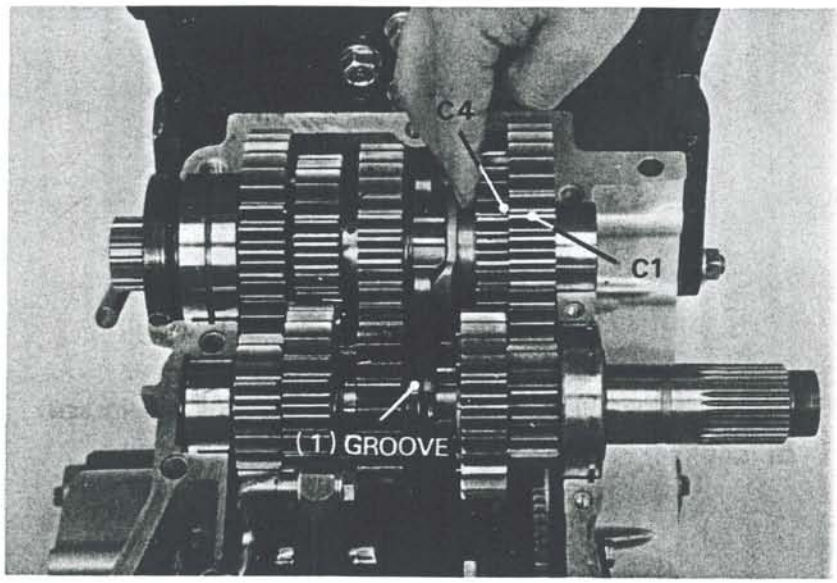
If the gearshift linkage, shift fork and shift drum are installed in the lower crankcase, shift the gearshift linkage into 1st gear for easier assembly.



Slide the C4 gear into the C1 gear.
Make sure that the other gears are not engaged.

Apply molybdenum disulfide grease to the groove of the M3 gear.

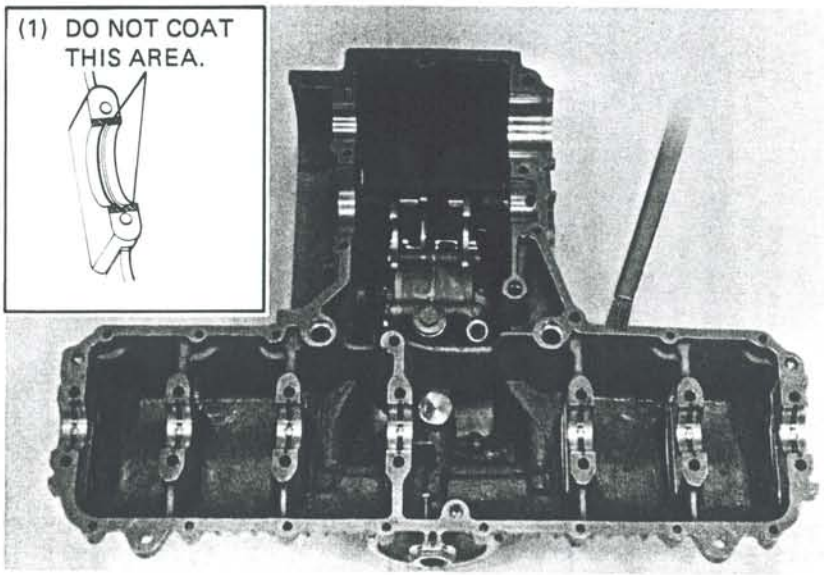
Apply molybdenum disulfide grease to the crankshaft main bearings.



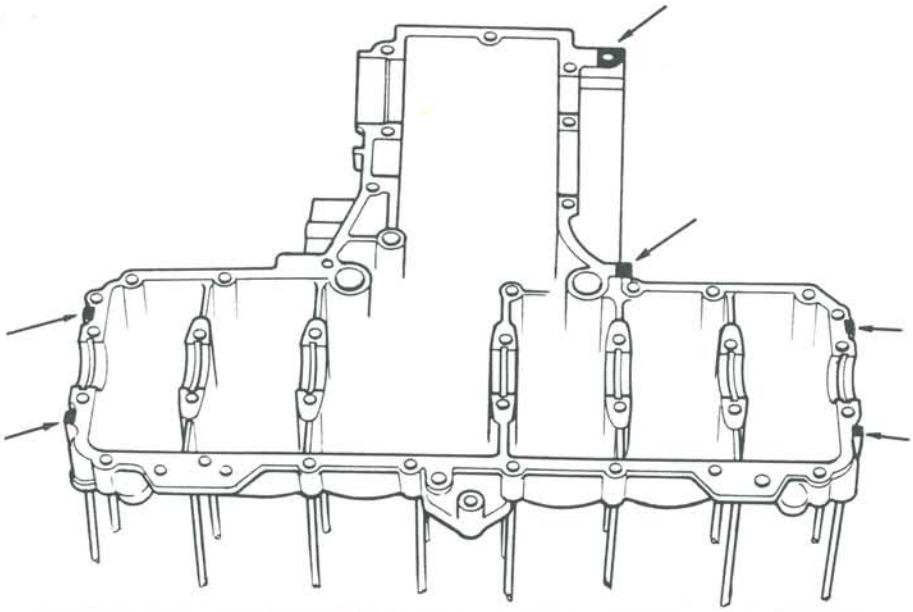
Clean the crankcase mating surfaces.
Apply liquid sealant to the mating surface of the lower crankcase.

CAUTION

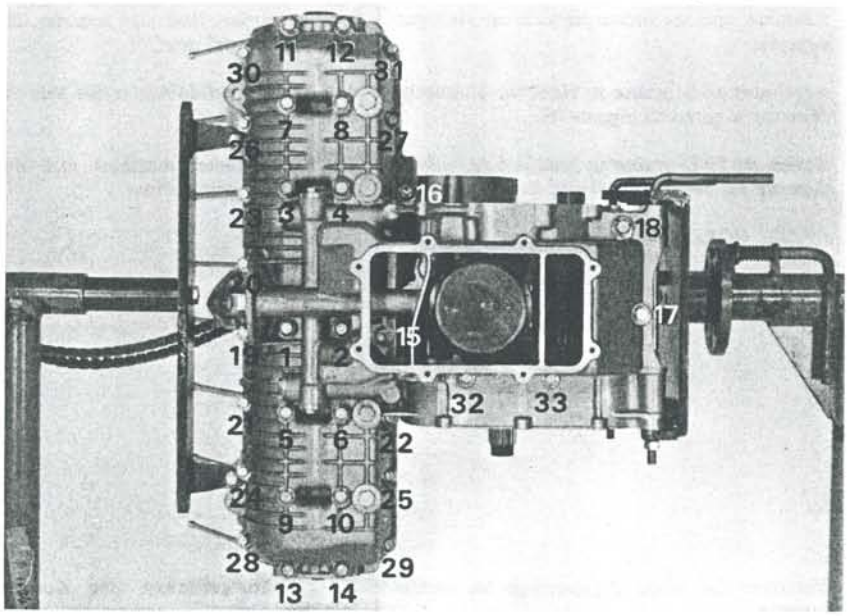
Do not apply sealant to the portion near the main bearing.



For the upper crankcase, apply sealant only where shown.



Assemble the crankcase halves, aligning the shift fork claws with the gears.
Tighten the bolts to the specified torques in the sequence shown.



TORQUE SPECIFICATIONS:

8 mm bolt (Crankshaft)	23–27 N·m (2.3–2.7 kg-m / 17–20 ft-lb)
8 mm bolt (Crankcase)	23–27 N·m (2.3–2.7 kg-m / 17–20 ft-lb)
6 mm bolt	10–14 N·m (1.0–1.4 kg-m / 7–10 ft-lb)
10 mm bolt	33–37 N·m (3.3–3.7 kg-m / 24–27 ft-lb)

NOTE

- Make sure that the plain washers are under the crankshaft bearing bolts.
- Apply molybdenum disulfide grease to the threads and head of the fourteen crankshaft holding bolts.

Tighten the upper crankcase bolts to the specified torque, proceeding front to rear.

NOTE

If the oil path cap is removed, apply molybdenum disulfide grease to the threads when reinstalling.