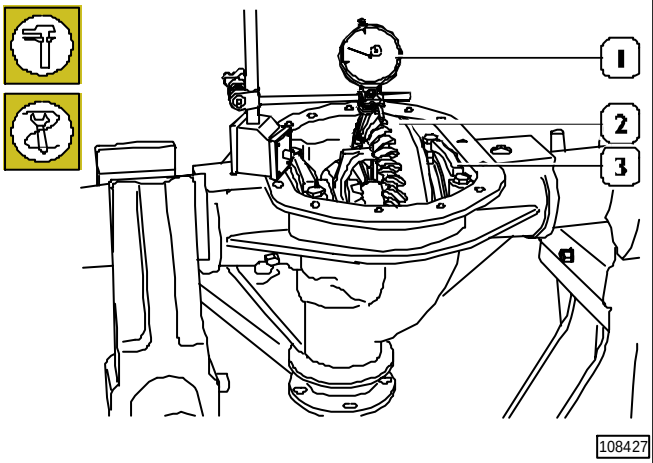
Figure 53



Position the dial gauge 99395728 (1) with a magnetic base and measure the clearance between the pinion and crown wheel on four opposite teeth of the crown wheel (2).

The average of the measurements must equal the required value.

If a different clearance is found, remove the caps (3) again and swap over the assembly position of the adjustment shims (1 and 3, Figure 50).

Should this not be sufficient, replace adjusting shims by other shims having different thickness, on condition that total thickness must be equal to the total thickness of the adjusting rings that were dismounted.

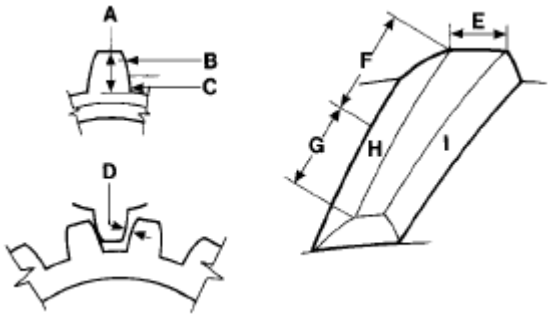
This is so as not to change the total rolling torque.

Using a brush, apply a thin layer of Prussian blue on crown teeth.

Turn the pinion and measure the impression of the contact of the pinion toothing on the crown wheel toothing.

Here we illustrate the possible contacts with the corrections to obtain precise coupling of the crown wheel and pinion.

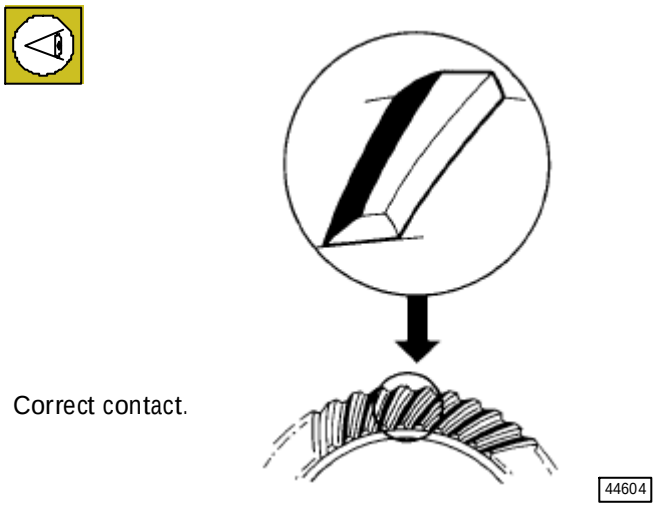
Figure 54



A = Coupling depth
B = Crest
C = Side
D = Play

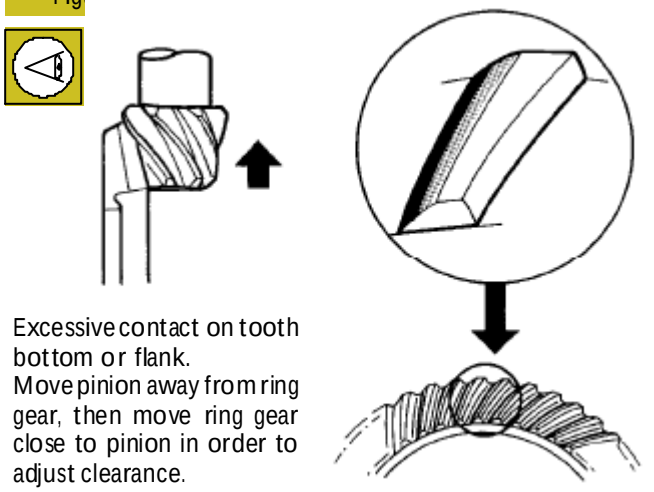
E = Greater base
F = Heel
G = Top land
H = Contact surface
I = Lateral surface

Figure 55



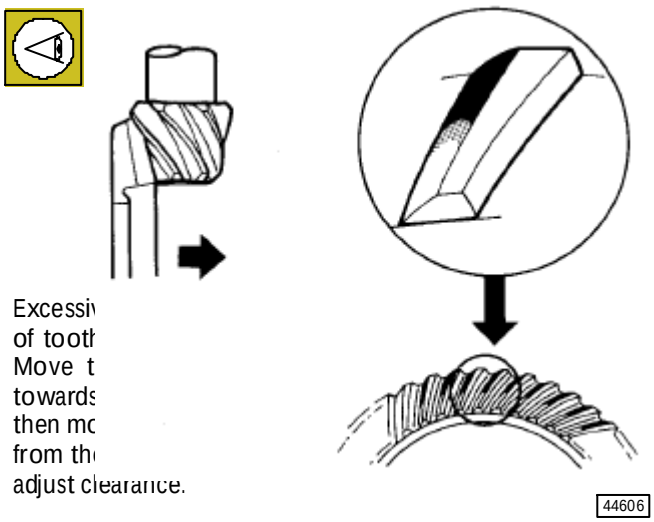
Correct contact.

Figure 56



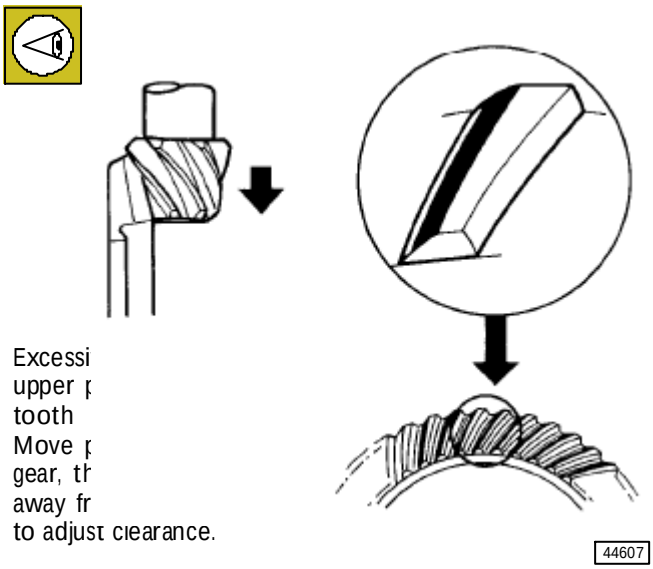
Excessive contact on tooth bottom or flank.
Move pinion away from ring gear, then move ring gear close to pinion in order to adjust clearance.

Figure 57



Excessi
of tooth
Move t
towards
then mo
from th
adjust clearance.

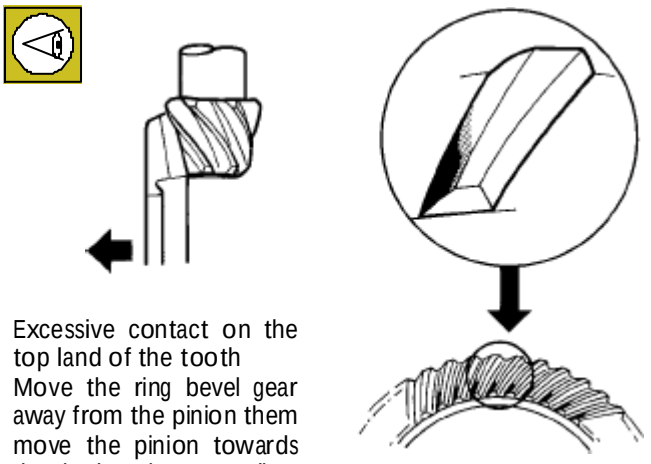
Figure 58



Excessi
upper p
tooth
Move p
gear, th
away fr
to adjust clearance.

44607

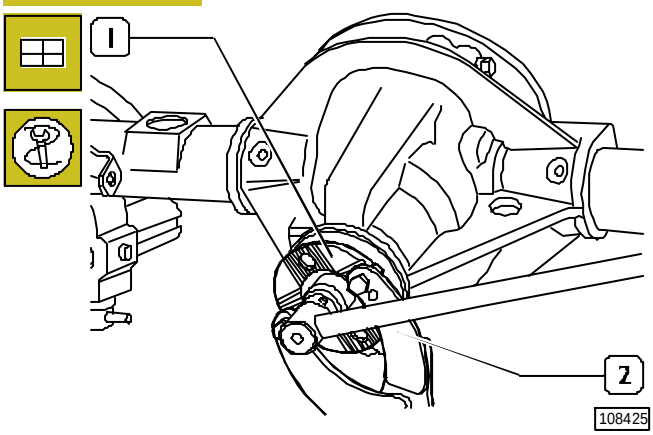
Figure 59



Excessive contact on the top land of the tooth
Move the ring bevel gear away from the pinion them move the pinion towards the ring bevel gear to adjust clearance.

44608

Figure 60

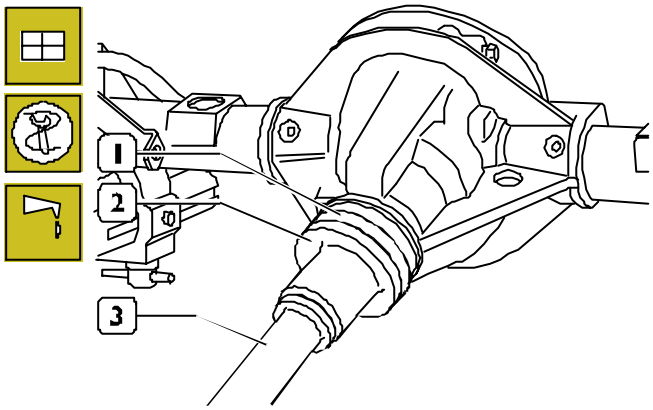


108425

After prescribed coupling clearance has been completed, stop the rotation of flange (1) using tool 99370317 (2).

Unscrew the retaining nut and extract the flange (1) from the bevel pinion.

Figure 61

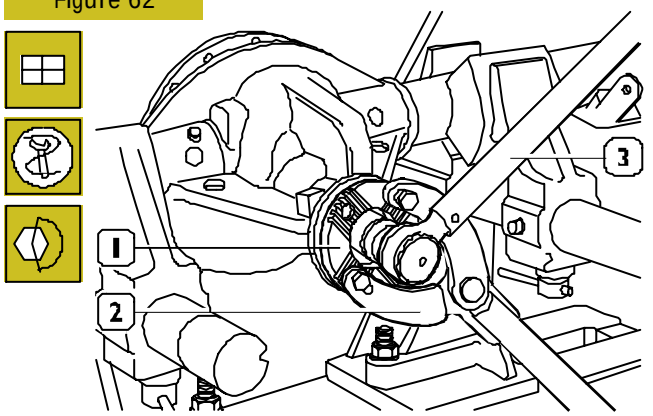


108426

Lubricate the internal lip of the seal (1).

With the key 99374022 (2) and grip 99370007 (3), mount the seal in the axle housing.

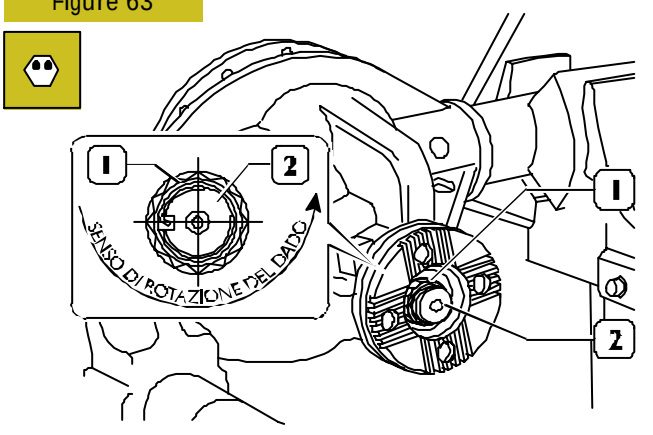
Figure 62



108421

Mount flange (1). Stop the rotation of flange (1) using tool 99370317 (2).
Using torque wrench (3), tighten nut checking bevel pinion at prescribed torque.

Figure 63



108428

Deform the collar of the nut (1) as shown in the figure at the milling of the bevel pinion (2).