How to repair a leaking saw motor seal

Read completely through before starting, there are 2 ways to do this repair.

1. Replacing the seal without removing the saw motor

- Parts and tools required

  Circlip plyers
  Seal pick
  21mm deep socket or pipe the same outer diameter as the seal
  New RR2143 seal
  13mm & 18mm wrench
  Large locking jar plyers (waterpump plyers)

A. Power off the processor.
B. Engage the saw motor to relieve any hydraulic pressure.
C. Remove the saw bar, chain, sprocket and woodruff key, make sure to mark one side of the Sprocket (Fig.1). To loosen nut on sprocket after chain is removed –gently hold sprocket with adju stable pliers and loosen nut with 18mm wrench. (Fig.2)


Fig.1


Fig.2

D. Using circlip plyers pull the circlip and then using a seal pick and caution, pull the seal
E. Lubricate the pump shaft with light grease or oil. (Fig.3)


Fig.3

F. Replace the seal with the protruding part facing in towards the saw motor (Fig.4), use the 21mm socket to push the seal in evenly (Fig.5), push seal in only far enough to be able to put circlip in groove, do not push seal in too far.

Range Road Enterprises Ltd
Box 944
Eckville AB T0M 0X0
www.range-road.ca

Fig.4

Fig.5

G. Re-install circlip, rotate clip to make sure it is seated properly in groove.
H. Re-install woodruff key.
I. Slide sprocket on making sure that the side you marked is facing the right direction. (Fig.1)
   ****The sprocket is tapered and only fits one way – do not force it on****
J. Tighten the sprocket retaining bolt, 15 – 18 ft-lbs. Do not use an air ratchet, Do not over tighten.
K. Re-Install bar and chain, tension chain as per maintenance manual.

Repair is now complete.

2. Replacing the seal when removing saw motor

- Parts and tools required

Circlip plyers
Seal pick
7/8 deep socket or pipe the same diameter as the seal
Allen wrench set to pull the pump off
New 18mm x 30mm x 8mm double lip seal
1-1/16" wrench
12mm, 13mm, 14mm wrench

A. Power off the processor.
B. Engage the saw motor to relieve any hydraulic pressure.
C. Remove the saw bar, chain, sprocket and woodruff key, make sure to mark one side of the sprocket (Fig.1). To loosen nut on sprocket after chain is removed –gently hold sprocket with adjustable pliers and loosen nut with 18mm wrench. (Fig.2)
D. Mark the saw motor ports and the hoses (Fig.6) and pull the hoses o the saw motor off.

Fig.6

E. Remove 4 Allen head bolts holding the saw motor to the swivel bracket
F. Remove saw motor and place on bench
G. Do Not dissemble Saw Motor – this will automatically void all warranty
H. Using circlip plyers pull the circlip and then using a seal pick and caution, pull the seal
I. Lubricate the pump shaft with light grease or oil (Fig.3)
J. Replace the seal with the protruding part facing in towards the saw motor (Fig.4), use the 21mm socket to push the seal in evenly (Fig.5)
K. Re-install Circlip, rotate to make sur it is seated properly
L. Re-Install Saw motor with 4 Allen head bolts
M. Re-Install Hydraulic hoses, making sure the pressure and return lines are in the correct positions
N. Re-install woodruff key
O. Slide the sprocket on making sure that the side you marked is facing the right direction (Fig.1) ****The sprocket is tapered and only fits one way – do not force it on****
P. Tighten the sprocket retaining bolt, 15 – 18 ft-lbs. Do not use an air ratchet, Do not over Tighten.
Q. Re-Install bar and chain, tension chain as per maintenance manual.

Repair is now complete.