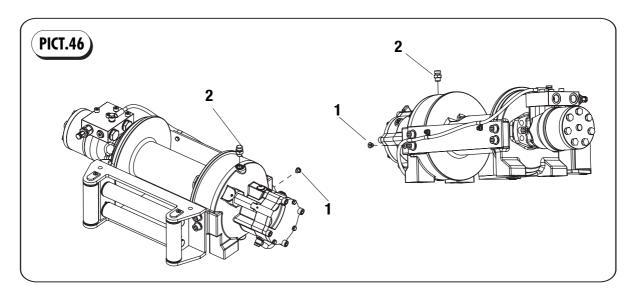
SECTION 5 MAINTENANCE



5.1 MAINTENANCE

Winches mod. EPH FN are designed to reduce maintenance to wire rope and gear housing oil

level only.



5.1.1 MONTHLY MAINTENANCE



Technical staff required:

Technician or user

Procedure:

1. Inspect the cable for damage and lubricate frequently with viscous oils or light grease with additives adhesive with graphite or bisulfure molybdenum. If cable becomes frayed with broken strands, replace immediately by following procedure indicated on chapter 2.11.



2. Planetary gears are bathed in oil. Keep oil to level hole.



3. To check oil level: remove oil level plug (1) and check oil level. Oil level should be kept up to oil level hole. If oil level is below level hole, remove breather plug (2) and add oil 15/W40 MULTIGRADE Tightening plugs.

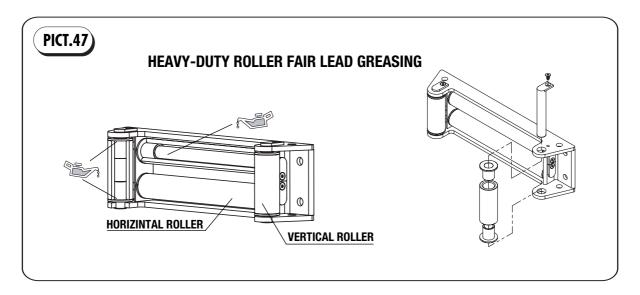




WARNING

Periodically inspect rope mounting setscrews and tighten if necessary.

EPH FN winches can be equipped with zinc plated Heavy-duty roller fairlead and zinc plated Cable tensioner.



4. The Roller fairlead rollers must roll free to let wire rope slide perfectly. ments such as: salt, water, oxidation and a bad maintenance can cause the rollers locking, and excessive wire rope wear. The Roller fairlead rollers bad operation, can cause their own rapid wear. We recommend to keep rollers lubricated, with medium dense oil, between axe and roller as shown on pict.47.



Fairlead rollers are zinc plated. Treatment with time will be removed by rope sliding.



IMPORTANT

Fairlead rollers sliding on wire rope, when show an excessive wear must be replaced.



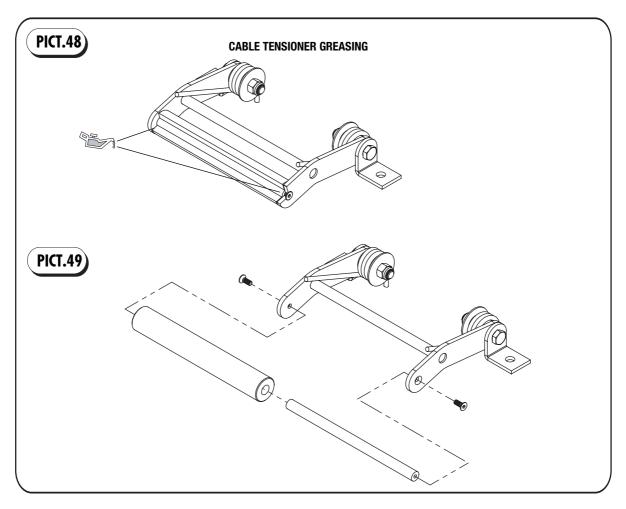
WARNING

A roller excessively worn, particularly if it has deep stripes, could damage the wire rope.



5. Cable tensioner roller is made in copolymer acetate. This material reduces maintenance. In very dirty environments, we recommend to keep maintenance and roller lubricated, with medium dense oil as shown in (pict.48).

In case of excessive locking, cable tensioner roller (2) can be disassembled as shown on pict.41.



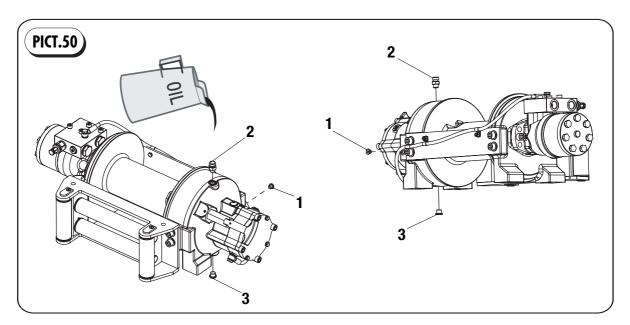
IMPORTANT

Cable tensioner roller sliding on wire rope, when shows an excessive wear must be replaced.

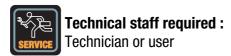
WARNING

A roller excessively worn, particularly if it has deep stripes, could damage the wire rope.





5.1.2 ANNUAL MAINTENANCE



Procedure:

At least once a year, it is necessary inspect oil level. To inspect oil level follow instruction as indicated in chapter 5.1.1 step 3. To fully replace the oil do as follow:

- 1. Remove breather plug (2) and oil level plug (1).
- 2. Drain oil from winch by removing drain plug (3) taking care to put the oil drained in a container (approx. 1,5 Lt. capacity).
- 3. Tighten drain plug (3) and fill up planetary gear housing with new oil through oil hole (2) till reach oil level hole (1) (see table below for oil quantity).

Model	Q.ty
EPH 3600 FN	800 Gr.
EPH/L 3600 FN	900 Gr.
EPH 4500 FN	900 Gr.
EPH 5200 FN	900 Gr.
EPH 6200 FN	900 Gr.
EPH 6700 FN	900 Gr.

4. Tighten oil level plug (1) and breather plug (2)

IMPORTANT

To avoid pollution, the oil drained from the winch, must be carried off in compliance with regulation.



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WARNING

Inspect mounting capscrews and tighten if necessary.