

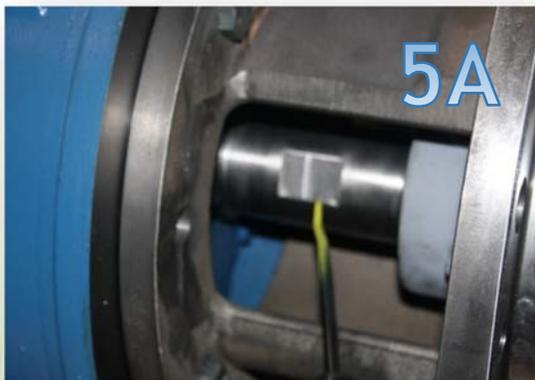
1. Lock out and tag prior to working on pump.



2. Use a 1 1/8" box wrench to remove nuts from pump housing.

3. Slide back housing from pump, exposing pump impeller (Refer to label **A** on page 8 Figure 1) and stuffing box (Refer to label **B** on page 8 Figure 1). Ensure there is enough electrical cable available to slide unit back.

4. Remove packing gland bolts with a 9/16" exposing mill slot (Picture 5A) on shaft.



5. Secure main shaft on electric motor (Picture 5B) with 2 1/4" open end wrench.



6. Using 1 1/8" deep socket, remove LEFT HAND threaded impeller bolt.



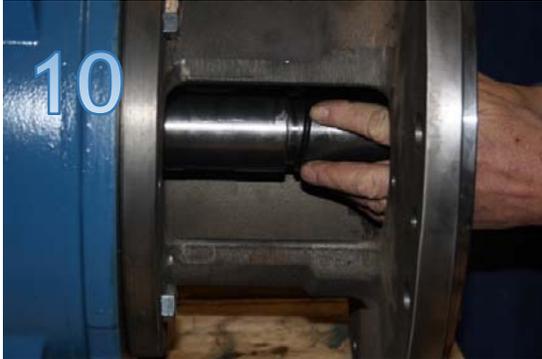
**7.** Using Topco Impeller Wrench (Part #79500) (Picture 7A), remove impeller in a counter clockwise direction. (Note: Mechanical seal spring (Refer to label **C** on page 8 Figure 1) will come off with impeller) (Picture 7B).

**8.** Remove stuffing box (Picture 8B) from C flange using a 3/4" open end wrench on bolt (Picture 8A).

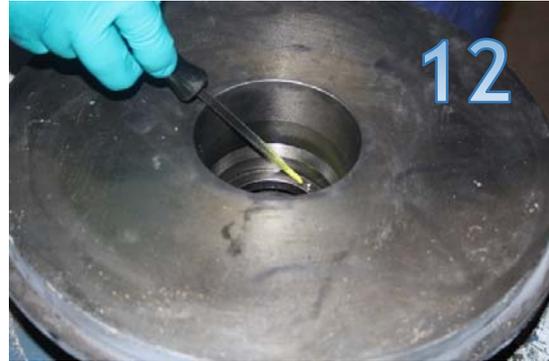
Note: Removing stuffing box will always expose mechanical seal assembly, and also may remove shaft sleeve (Picture 8C).



**9.** Remove shaft sleeve off motor shaft if still on, if problems occur with removal of the sleeve call Topco for assistance.



**10.** Remove O-ring (329) from shaft (Picture 10).

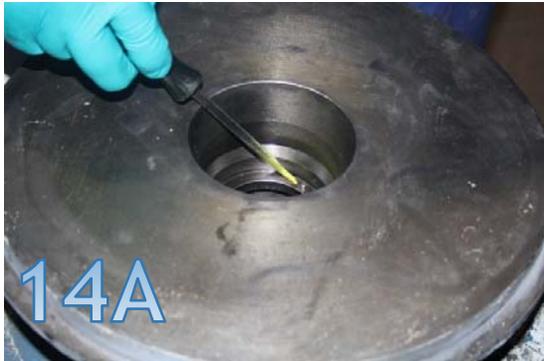


**12.** Clean and inspect stuffing box bore ensure no excessive wear or damage to bore and drive pin (Picture 12). Replace stuffing box if required.



**11.** Remove rope packing and stationary seal assembly from stuffing box . (Picture 11).

**13.** Inspect housing wear plate and Impeller for excessive wear and damage. Replace if required.



**14.** Check drive pin (picture 14A) to insure that it is not bent or missing, replace if required, Lube O-ring (Picture 14B) on stationary seal, line up notch to drive pin (Picture 14C) and install in stuffing box.



**15.** Install rope packing (Picture 15) in stuffing box.



**16.** Install #329 O-ring (Picture 16) on motor shaft up to shoulder.



**17.** Install #329 O-ring on motor shaft (Picture 17) up to shoulder.



**18.** Install stuffing box onto C flange (Picture 18A) to the face (Picture 18B).



**19.** Apply a thin coat of oil on surface of sleeve and in the bellows of the mechanical seal (picture 19B).



**20.** Slide mechanical seal onto sleeve (picture 20A), ensuring seal is at the back of the sleeve (picture 20B & C).



**21.** Install sleeve with mechanical seal face touching (Picture 21A) and push sleeve onto motor shaft (Picture 21B) until sleeve contacts O-ring. Ensure mechanical seal faces are seated (Picture 21C).

## ENDUREL® PUMP - REASSEMBLY



22. Place spring on back of impeller (Picture 22A), install impeller (Picture 22B).



23. Rotate impeller to insure there is no contact with stuffing box (Picture 23).



24. Using Topco Impeller Wrench (Part #79500) (Picture 24). Thread on (install) impeller in the clockwise direction.

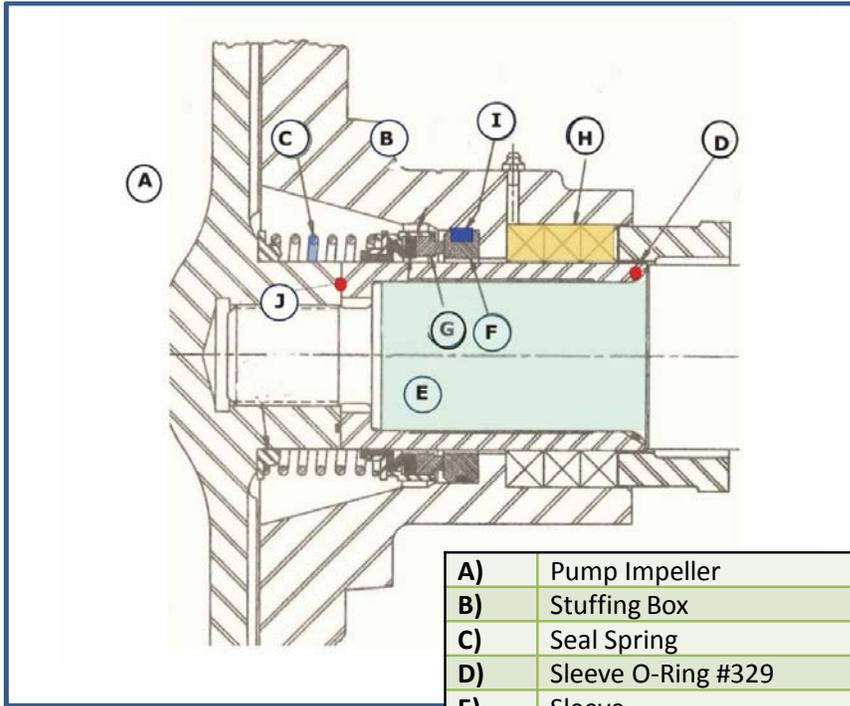


25. Install impeller bolt.  
Note: The bolt is LEFT HAND THREAD.



26. Install new pump case gasket, and install case and tighten up nuts.

**Figure 1**  
**Mechanical Endurel® Pump Assembly**



A)	Pump Impeller
B)	Stuffing Box
C)	Seal Spring
D)	Sleeve O-Ring #329
E)	Sleeve
F)	Stationary Seal
G)	Rotating Element
H)	Rope Packing
I)	Seal O-Ring
J)	Impeller O-Ring

**ISOMETRIC Of Endurel® Pump Assembly**

