

8. Remove impeller key from the shaft.
9. If unit has mechanical seal, remove gland stud nuts. The gland is a solid ring and cannot be removed after unbolting. Carefully slide the gland off the gland studs and move back on shaft and shaft sleeve. Avoid contact with exposed lapped seal faces and keep them clean.

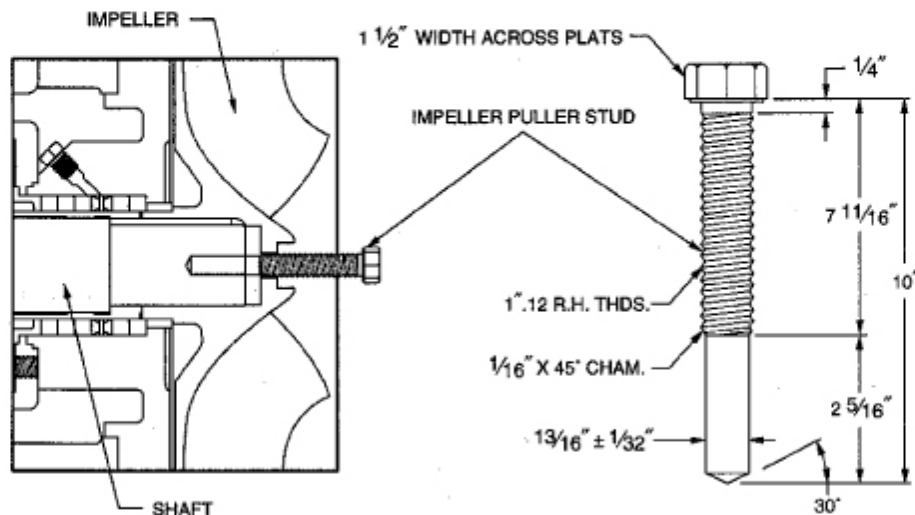


FIGURE 4 – Impeller Removal

10. Remove the adapter to stuffing box bolts. Pull the stuffing box cover from the frame adapter. (On some units, specifically the 18 and 22 inch units, tapped holes are provided in the frame adapter for the use of jacking bolts to assist disassembly of the stuffing box cover.) Do not allow the stuffing box cover to strike the shaft, shaft sleeve, or any mechanical seal part.
11. (a) If the pump has a PACKED STUFFING BOX, remove packing and lantern ring from the stuffing box cover.  
(b) If the pump has a MECHANICAL SEAL, the rotary portion of seal will slide off with the sleeve. Do not damage seal faces.
12. Scribe shaft at coupling hub (for proper positioning of hub engagement during reassembly) and remove hub.

To disassemble remainder of the liquid end; casing and suction sideplate, proceed as follows:

13. Disconnect suction and discharge flanges.
14. Remove casing hold-down bolts and move casing toward driver. If preferred, casing can be removed from bedplate for further disassembly.
15. Remove suction sideplate nuts.
16. Remove the suction sideplate by tightening the jacking screws evenly. Remove the sideplate-to-casing gasket.

To complete disassembly of the power end, proceed as follow:

17. Remove the bolts which hold the frame adapter to the bearing frame. Remove the frame adapter.
18. Remove the deflector from the shaft.
19. Remove the bolts which hold the inboard bearing end cover. The oil seal must be replaced at reassembly.
20. Tap the oil seal from the inboard bearing end cover.
21. Remove bearing housing bolts (21A). Impeller adjustment bolts with jam nuts (21B) can be used to assist in the removal of the shaft and bearing assembly from the bearing frame.
22. Slide the complete shaft assembly from back end of bearing frame. This includes the shaft, both bearings (radial and thrust), and bearing housing. O-rings must be replaced at reassembly.
23. Remove the inboard bearing using a bearing puller. The inboard bearing must be replaced at reassembly.
24. Remove the bolts which hold the bearing end cover to the bearing housing. Remove the bearing end cover. Be sure shaft is free of burrs so the oil seal will not be damaged, at reassembly.
25. Tap the oil seal from the coupling end bearing end cover. Replace the oil seal at reassembly.
26. Slide the bearing housing off shaft.
27. Straighten "tang" in lock washer and remove bearing lock nut and washer.
28. Remove coupling end bearing using a bearing puller. The thrust bearings must be replaced at reassembly.













































