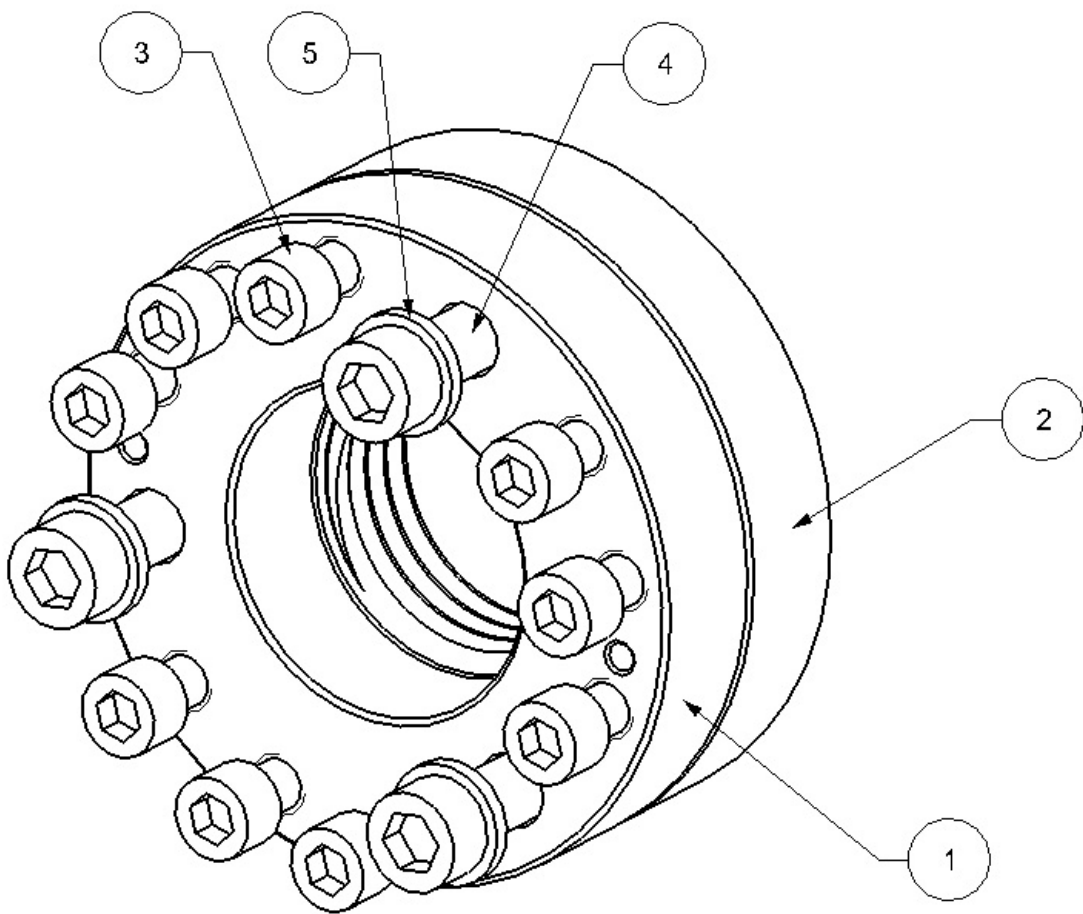




# **PROPELLER PULLER**

Instruction Manual



ITEM NO	NAME	QTY
1	PLATE (PLAIN)	1
2	PLATE (THREADED)	1
3	SOCKET HEAD SCREW (JACKING)	6 OR 9
4	SOCKET HEAD SCREW (PULLER)	3
5	WASHER, HEAVY	3

## **Installation of Propeller**

- 1 Carry out all preliminary installation tasks such as cleaning, blueing, key clearance checks, etc. then place the propeller onto the shaft with key in place and push home firmly.
- 2 Ensure the 6 or 9 (depending on model) hex socket jacking screws (**Item 3**) are lubricated and installed in the side of the puller with the threaded bore (**Item 2**). Place the puller onto the shaft thread with the flat face against the aft end of the propeller (non-threaded side – **Item 1**).
- 3 Align the 3 puller bolt holes and the threads in the aft end of the propeller and install at least 1 of the larger puller bolts (**Item 4**). Leave this bolt loose and with at least 0.30" (or ~8.00mm) clearance. This is only a guide to limit rotation of the plates when torque is applied during subsequent steps.
- 4 Commence tightening the 6 or 9 (depending on model) hex socket screws (**Item 3**) in a diagonal pattern, evenly and with increasing torque at the completion of each sequence until the maximum torque (*Table 1*) is reached on all screws.
- 5 Release the torque on the socket screws and remove the puller plates from the shaft.
- 6 Fit and lock the propeller nut.
- 7 Cover the puller plates and bolts with a suitable preservative oil and return to the bags and case.

## Removal of Propeller

- 1 Remove the propeller nut.
- 2 Ensure the 6 or 9 (depending on model) hex socket jacking screws (**Item 3**) are lubricated and installed in the side of the puller with the non-threaded bore (**Item 1**). Place the puller onto the shaft thread with the flat face towards the aft end of the propeller (threaded bore side – **Item 2**).
- 3 Align the 3 puller bolt holes and threads in the aft end of the propeller but leave approximately 0.25" (or ~6.00mm) clearance between the aft end of the propeller hub and the face of the puller plate (**Item 2**). Install the 3 large puller bolts and washers (**Item 3 and 4**) just to touch the face of the plate. They do not need to be tight but just nipped up evenly.
- 4 Commence tightening the 6 or 9 (depending on model) hex socket screws (**Item 3**) in a diagonal pattern, evenly and with increasing torque at the completion of each sequence. The propeller should be released from the taper. Do not exceed maximum specified torque (*Table 1*).
- 5 If the propeller does not release from the taper once the maximum torque is applied it may be necessary, while maintaining the puller force at the maximum, to use an aluminium drift and hammer to strike the forward end of the propeller hub. An alternate is to carefully use a gas torch flame to warm along the hub between the blades until the propeller releases.
- 6 Once the propeller is released, remove the bolts and puller plates.
- 7 Cover the puller plates and bolts with a suitable preservative and return to the bags and case.

Part No.	Shaft Dia.	Max. Torque lbf.ft (or ft.lbs)
SAE 150	1.50"	13
SAE 175	1.75"	16
SAE 200	2.00"	16
SAE 225	2.25"	23
SAE 250	2.50"	32
SAE 275	2.75"	38
SAE 300	3.00"	38
SAE 350	3.50"	60
SAE 375	3.75"	76
SAE 400	4.00"	76
SAE 450	4.50"	133
SAE 500	5.00"	133
SAE 550	5.50"	133
SAE 600	6.00"	133

*Table 1. Maximum Torque*