


Procedure: 	Document Number: MNP-DOC-2	Section: 1	Rev: 3.00
	Title: Manipulator Cleaning and Lubrication Procedure Copyright © 2012, VideoRay LLC	Page 1 of 3	Effective Date: 08/9/12
	Approved by: Brett Kolb		

1.0 Purpose

This procedure defines the methods used lubricate the manipulator screw drive.

2.0 Scope

Lubricating VideoRay Manipulators.

3.0 Responsibilities

Production, Repair, & QC Technicians.

4.0 Time for Assembly

5 minutes

5.0 Tools required


2.5mm Allen key or Driver

6.0 References

7.0 Procedure

The items used in this assembly are shown here:



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1. Remove the three M3 x 0.5mm x 8mm Socket screws and pull the manipulator head assembly off of the main housing assembly



There are 2 plastic spacers inside the main housing tube that may fall out.




2. Remove the drive nut and spacer. Thoroughly clean the threads, drive nut, & spacer. Also, clean the inside of the housing. There are no O-rings or sealing surfaces to worry about.



3. Apply a light layer of Dri Slide (Shake Well) to the areas shown below with a brush. Do not reassemble until the parts dry.



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4. Install the manipulator head assembly on the housing and insert the 3 socket head screws with medium strength Loctite gel.



To avoid adhesive on the screw drive, do not use any kind of Loctite liquid on the socket screws. Only use a thread locker gel. Do not over tighten the socket head screws.



Avoid storing the manipulator in the complete open or closed position. This will help prevent the manipulator jaws from getting stuck in the open or closed position.
