

# BETTER HYDRAULIC SYSTEMS SERVICE

WHAT'S  
GOTTEN  
INTO  
YOU!?

*SORRY!* I THINK  
I'VE GOT SOME  
CONTAMINATION IN MY  
HYDRAULIC SYSTEM!

**M**echanics, hydraulic system contamination causes aircraft problems and can cause crashes. Servicing aircraft reservoirs has been a problem.

Take the Apache, for example. The old way of servicing its reservoirs required:

- open cans of hydraulic fluid
- the use of potentially dirty tubes (which can cause contamination)
- sucking air into the reservoir.

But now the Army has a new standard 2-gal reservoir servicing unit (RSU). It provides quick disconnects and an easy and quick way to refill aircraft reservoirs with clean, moisture- and air-free hydraulic fluid. The RSU is another tool to make servicing a little easier.



The RSU is coming to your unit... soon!

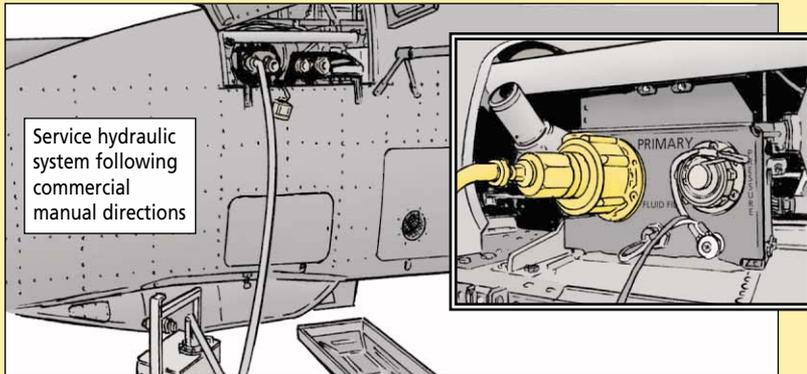
Initial issue to units will be configured with quick disconnect fittings based on the helicopter models in the unit.

For the AGPUs, you'll get a quick disconnect coupling used to fill AGPU reservoirs.

The basic RSU, NSN 4940-01-504-5279, is stocked without quick disconnects, but they are listed separately in the commercial manual as stocked items. NSNs are also available on the following: output hose, NSN 4720-00-484-5765, clear return tubing, NSN 4720-01-038-2651; and hose fitting, NSN 4730-00-472-4093.

THE RSU CAN BE USED ON **ALL AIRCRAFT**, BUT IT IS MOST USEFUL WHEN SERVICING THE APACHE.

BLACK HAWKS AND CHINOOKS HAVE BUILT-IN FILL PUMPS WITH OPEN RESERVOIRS THAT MECHANICS CAN EASILY FILL FROM QUART CANS.



- The steps on flushing the hose, filling the reservoir, and stowing the output quick disconnects are listed on the reservoir's decal.
- Fluid is dispensed from the RSU using a manual pump, with a 200 psi output pressure.
- The output hose is fitted with a 2-micron filter to control solid contamination.
- A bulkhead connector and a return tube are provided to allow the output hose to be flushed prior to connecting to a bird.
- The return tube is transparent so that hydraulic fluid can be checked for air bubbles.
- The aircraft reservoir is filled by pumping the fluid through the quick disconnect fitting on the ground support return port for the hydraulic system to be serviced.
- The RSU delivers 4 cubic inches of fluid per stroke or a quart per 17 strokes.

The only maintenance requirement for AVUM is to replace the filter element in the output hose. But always make sure the RSU uses MIL-PRF-83282 as it says on the factory-applied label, since this fluid is used in all helicopter flight control systems.

Keep in mind that brakes use a different type of fluid, MIL-PRF-5606. For now, stay with the filter and bleeder assembly, NSN 4910-00-245-1832, to service brake systems.



PS END