PROCEDURE FOR CHECKING FLUIDS (MILLS)

FLUIDS PLAY AN INTEGRAL ROLL IN THE OPERATION OF ANY MACHINE. WHETHER IT IS HYDRAULIC FLUID, ENGINE OIL OR GEAR LUBE, THEY SHOULD ALL BE KEPT AT AN OPTIMAL PERFORMANCE LEVEL AND CHANGED OUT WHEN APPROPRIATELY SCHEDULED. NOT DOING SO WILL RESULT IN MAJOR MACHINE FAILURE. THEREFORE IT IS CRUCIAL THAT THEY ARE MONITORED AND MAINTAINED REGULARLY.

THE FOLLOWING PROCEDURE WILL INSTRUCT IN THE PROCESS OF MONITORING FLUID LEVELS. BEFORE CHECKING ANY FLUIDS, PARK MACHINE IN A LEVEL PLACE AND BE SURE THE ENGINE IS COMPLETELY SHUT DOWN AND COOL. ALSO, TURN THE BATTERY QUICK DISCONNECT OFF.

1. ENGINE OIL

THE ENGINE OIL IS THE FLUID USED TO LUBRICATE THE INTERNAL MECHANISMS OF THE ENGINE. FOR A SPECIFIC MACHINE WITH A SPECIFIC ENGINE THEN THE MANUFACTURERS SUGGESTED OIL TYPE AND WEIGHT SHOULD BE USED (BE SURE TO REFERENCE YOUR MACHINE’S ENGINE SERVICE MANUAL).

TO CHECK THE ENGINE OIL, FIRST LOCATE THE ENGINE OIL DIP STICK ON THE SIDE OF THE ENGINE (FIGURE NO 1). THE OIL LEVEL SHOULD REGISTER BETWEEN THE FULL AND LOW MARKS ON THE DIP STICK (FIGURE NO 2). IF LEVEL IS BELOW THE BOTTOM MARK THEN OIL WILL NEED TO BE ADDED.

FIGURE NO 1

ENGINE OIL DIP STICK

FIGURE NO 2

LOW & FULL INDICATION MARKS
2. HYDRAULIC OIL

The hydraulic oil is used in the hydrostatic propulsion system on the machine. This system provides forward and reverse motion, as well as driving the conveyors and all other hydraulic actions.

The hydraulic oil can be checked through a viewing glass located on the rear of the RX-60C (Figure No 3). There are two viewing ports, an upper and a lower. Hydraulic fluid should always register on the lower and never the upper. The upper viewing port is an overfill indicator. If the fluid does not register on the lower view port then some fluid will have to be added. **Note: Hydraulic fluid will expand up to six inches when it is heated.**

![Figure No 3](image)

3. GEARBOX OIL OR “GEAR LUBE” (CAT ENGINE ONLY)

If your machine is equipped with a CAT engine then it also is equipped with a hydraulic pump gearbox. This gearbox drives the hydraulic pumps and requires gear lube to function properly.

In order to check the gearlube level first access the gearbox via the RH side panel door (Figure No 4).

![Figure No 4](image)
CHECK THE FLUID LEVEL, FIRST WITH THE DIP STICK FLUID CHECK AND SECOND WITH THE FLUID LEVEL CHECK PLUG (FIGURE NO 5). IF THE LEVEL IS ABOVE THE FILL LINE ON THE DIP STICK, THEN IT IS FINE. LOCATE THE CHECK PLUG IN THE 3 O’CLOCK POSITION WHEN CHECKING FLUID. UNSCREW THE PLUG SLIGHTLY AS TO LET A LITTLE FLUID LEAK OUT. IF FLUID DOES NOT LEAK OUT, THEN SOME WILL NEED TO BE ADDED (USUALLY 80W90 HIGH PERFORMANCE GEARLUBE, BUT BE SURE TO REFERENCE YOUR MACHINE’S LUBRICATION CHART).

4. CUTTER DRUM OIL

IN ORDER FOR THE CUTTER DRUM TO MAINTAIN ITS PROPER FUNCTION, THEN THE OIL IN THE PLANETARY DRIVE WILL NEED TO BE CHECKED.

TO CHECK THE OIL IN THE PLANETARY DRIVE, THE ACCESS COVER, ON THE LEFT HAND SIDE OF THE CUTTER HOUSING, WILL NEED TO BE REMOVED。(FIGURE NO 6)
ONCE THE COVER HAS BEEN REMOVED, THE CUTTER DRUM WILL NEED TO BE TURNED UNTIL THE FLUID CHECK PLUG IS VISIBLE. USE THE SUPPLIED TURNING TOOL (FIGURE NO 7). THE FLUID CAN THEN BE CHECKED. WITH A 9/16 ALLEN WRENCH, SLOWLY REMOVE THE CHECK PLUG (FIGURE NO 8) AS TO LET A LITTLE FLUID LEAK OUT. IF NO FLUID LEAKS OUT, THEN FLUID WILL NEED TO BE ADDED (REFER TO YOUR MACHINE’S LUBE CHART FOR TYPE OF FLUID TO USE AND WHEN IT SHOULD BE CHECKED).
5. TRACK DRIVE OIL

THE THREE TRACK DRIVES ON ANY MILL GET A LOT OF WEAR AND TEAR. SO IT IS IMPORTANT TO KEEP THEM WELL LUBRICATED.

THERE ARE TWO LUBRICANT CHECK PLUGS ON EACH TRACK DRIVE ASSEMBLY. IN ORDER TO CHECK HOW MUCH GEAR OIL IS IN A TRACK ASSEMBLY, THEN ONE OF THE PLUGS WILL NEED TO BE POSITIONED AT EITHER THE 3 O’CLOCK OR 9 O’CLOCK POSITION (FIGURE 9). SLOWLY REMOVE THE PROPERLY POSITIONED CHECK PLUG AS TO ALLOW A LITTLE OIL TO DRAIN OUT. IF NO OIL COMES OUT, THEN SOME WILL NEED TO BE ADDED (REFER TO YOUR MACHINE’S LUBE CHART FOR OIL TYPE CHECKING INTERVAL).

FIGURE NO 9