



SERVICE BULLETIN

10-T2-27

MODELS CONCERNED: All Hydrostatic Tractors

CONCERN: Hydrostatic Transaxle Oils & Bleeding Information

Tuff Torq

A good quality engine oil: SAE 30, 10w40, 20w50 CD or CE. It is recommended that the oil be changed at every service or once a year.

Hydrogear

A good quality engine oil: Mobil 1 5w50, 15w50, Shell Gemini, 10w40, 15w50, Helix Ultra.

Peerless

A special synthetic oil, which has a peerless par number of 730228.

VOLUME OF OIL IN THE TRANSAXLE

Tuff Torq

K55	-	2.0 Litres
K46	-	2.5 Litres
K61	-	3.0 Litres
K62	-	3.2 Litres
K66	-	3.2 Litres
K66 (Power Steering)		3.7 Litres
K71 (Power Steering)		4.0 Litres

Hydrogear

332-705	-	3.2 Litres
---------	---	------------

Peerless

VST 205 (008-014B)		2.0 Litres
--------------------	--	------------

ALL THE ABOVE VOLUMES ARE APPROXIMATE

TRANSAXLE OIL FILL LEVELS

Tuff Torq K55

5mm from the top of casting

Tuff Torq K46

1. When the bottle is positioned on top of the Transaxle you need to have 5mm in the bottle
2. When the bottle is positioned in the seat box you need to have 8-10mm in the bottle

Tuff Torq K57 / K574 / KTM10 / KXH7N . See Service training notes

Tuff Torq K61

The bottle is positioned in the rear of the seat box you need 25mm in the bottle

Tuff Torq K62

The bottle is positioned on the back of the transaxle, when re-filling with oil you will need to remove the draw bar plate, then remove the bottle from the transaxle and fill this side off the case full to the top, then replace the bottle. Fill the rest of the transaxle through the orange filler case. You will need to have 20mm of oil in the bottle

Tuff Torq K66

The bottle is positioned in the rear of the seat box. When filling the transaxle you will need to remove the draw bar plate. Fill through the orange cap also the bottle. The bottle will need 25mm of oil in it.

Tuff Torq

Tuff Torq K66 (Power Steering) D18/50 & D20/50

When the transaxle is filled with oil, you need to turn the steering from lock to lock 5 times to purge the oil through the Power Steering system.

Tuff Torq K71

The above procedure should be applied.

Hydrogear

The oil should be between 1.75+& 2.0+from the top of the housing. To top up remove the breather tube. (For full instructions refer to manufacturer)

Peerless

Refer to manufacturer

NOTE: - after re-filling the transaxle with oil & bleeding the air from transaxle, run the machine for 5 minutes and re-check oil levels.

BLEEDING AIR FROM OIL CIRCUIT (HST)

1. Place tractor's rear axle on jack stand with wheels off the floor
2. Start engine and operate at low idle
3. Repeat opening and closing by pass valve while alternately shifting between forward and reverse with Hydrostatic lever.
4. After axle shafts start rotating, lower rear wheels to floor.
5. While stroking Hydrostatic lever forward push vehicle backwards and when stroking hydrostatic lever for reverse, push forward.
6. When vehicle starts to move, increase engine speed to high idle.
7. Repeat quick start and panic start until transaxle gives full response.
8. Re-check and top up oil level.

Note: -

1. For faster air bleeding, fill transaxle with new oil through connector hole of transaxle while rotating pump and motor shafts by hand via the brake disk.
2. Item 5 procedure must be conducted by 2 people (1 operating and 1 pushing)

When there is on 1 person available, the procedure should be repeated stroking of the hydrostatic lever in an alternating forward and reverse manner.

COUNTAX C600H

- Oil filling procedure -

STEP	PROCEDURE
1	Pre-fill the HFWD with oil.
2	Assemble the HFWD and K574 to the vehicle and connect the hydraulic hoses, pipes and Reservoir.
3	Fill the Reservoir, K574 and Drain hoses with oil.
4	Fill the Hydraulic Circuit with oil.

KANZAKI
KANTYUKOKI MFG. CO. LTD.

STEP 1: Pre-fill the HFWD with oil.

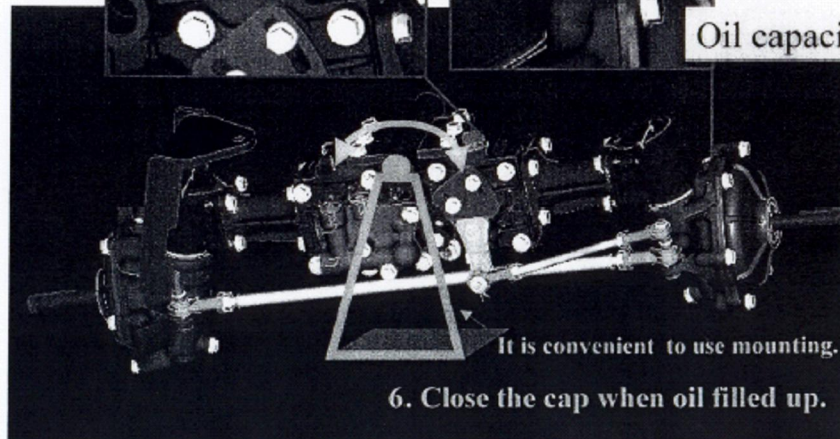
2. Open the cap.

3. Pour oil.

1. Open the plug.(both LR side)

5. Close the plug
after oil overflow.

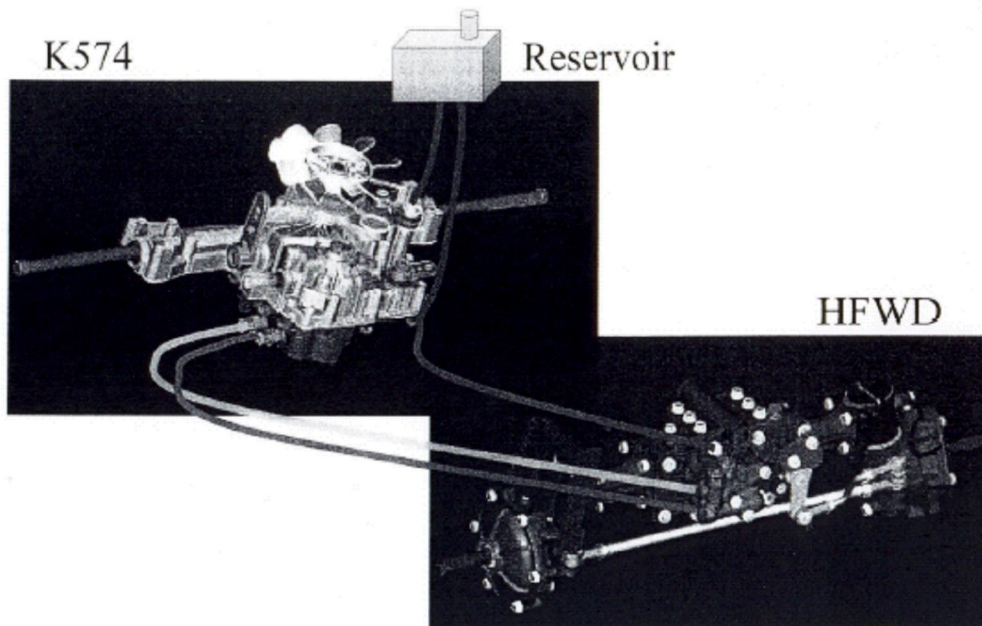
Oil capacity :2.3L



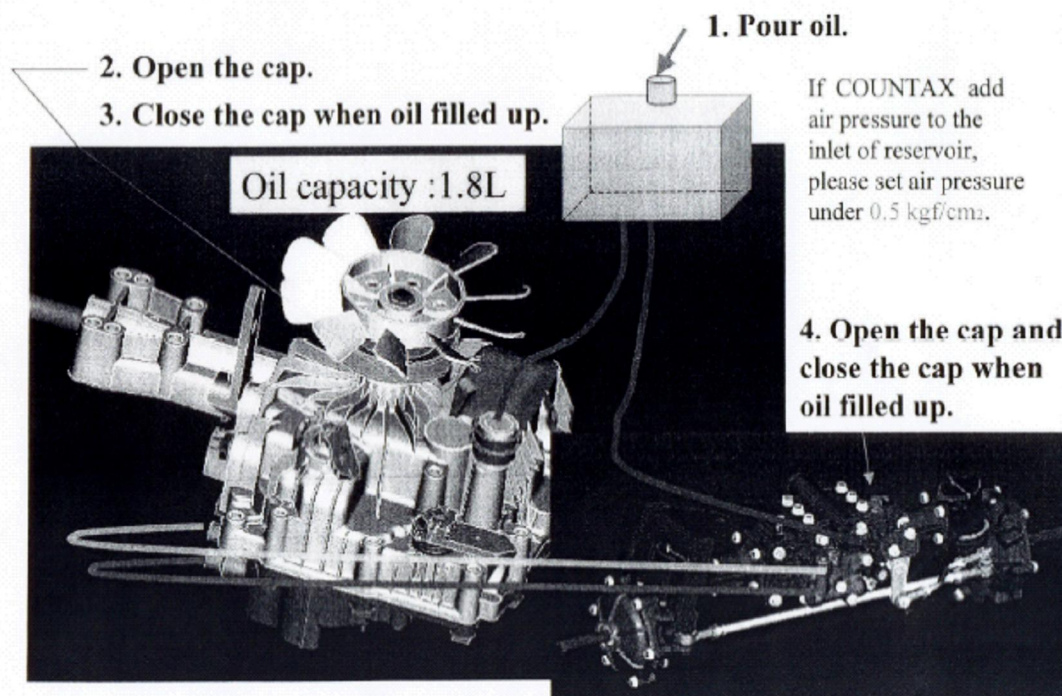
6. Close the cap when oil filled up.

4. Swing the HFWD right and left.

STEP 2: Assemble the HFWD and K574 to the vehicle and connect the hydraulic hoses, pipes and Reservoir.



STEP 3: Fill the Reservoir , K574 and Drain hoses with oil.



STEP 4: Fill the Hydraulic Circuit with oil.

No.	PROCEDURE	BYPASS	PUMP	ENGINE
1	Set the Vehicle on the roller and start the engine and keep low idling.	Close	Neutral	Low idle (1500rpm)
2	Open the bypass valve and operate the K574 pump pedal for reward with holding 1/3 position 30sec. *) Oil flow from K574 pump to HFWD, fill the hydraulic pipes and return to reservoir. *) HFWD axle shaft will rotate.	Open	Reward 1/3position	Low idle
3	Operate the K574 pump pedal for forward with holding 1/3 position 30sec. *) HFWD axle shaft will rotate.	Open	Forward 1/3position	Low idle
4	Return pump pedal to neutral position and close the bypass valve.	Close	Neutral	Low idle
5	If oil level of reservoir is lower, add oil into the reservoir.	Close	Neutral	Low idle
6	Operate the pump pedal for forward and reward. Repeat 2 times each with holding 10 sec of each full position. *) HFWD axle shaft and K574 axle shaft will rotate.	Close	Forward & Reward Full position	Low idle
7	If oil level of reservoir is lower, add oil into the reservoir, again.	Close	Neutral	Low idle