

REF # 752596M

# Masport®

**Maintenance Manual 552596M**

**Crossjet & S-Series**

Last updated May 2012



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### Belt Replacement

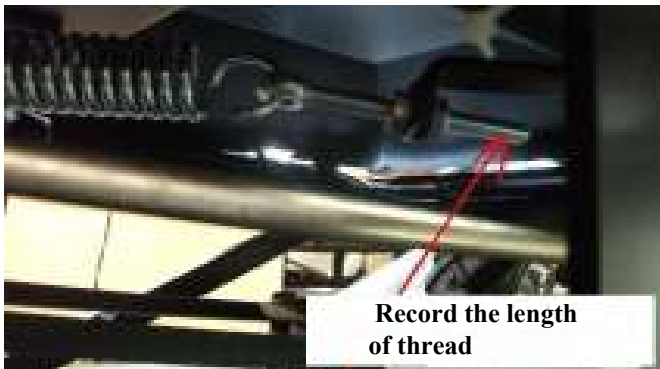
Raise the deck and place a length of supporting timber roughly 50 x 100 (Photo 1)

Photo 1



Measure the length of the protruding thread on the rod, record this information for future reference.(photo 2)

Photo 2



Loosen the outer nut to allow the spring to lessen its tension on the Idler Roller (photo 3 & 4)

Photo 3

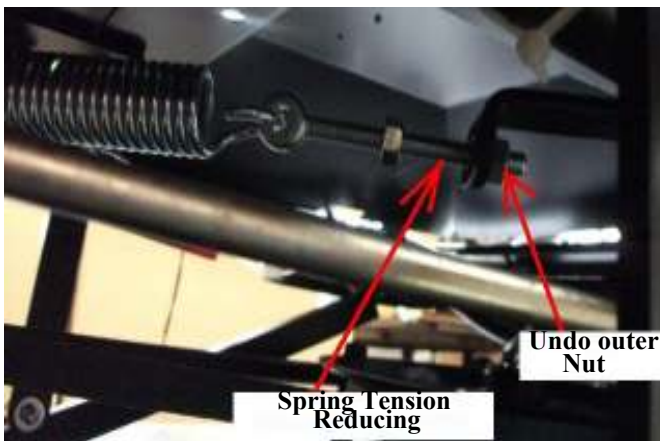
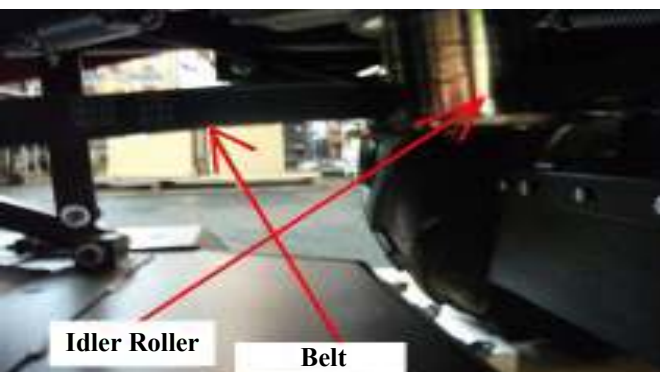


Photo 4



There are also three Brackets that require to be loosened, these are placed around the Pulley, swing each one away to allow for the Belt to be removed. (Photos 5 & 6)

Photo 5

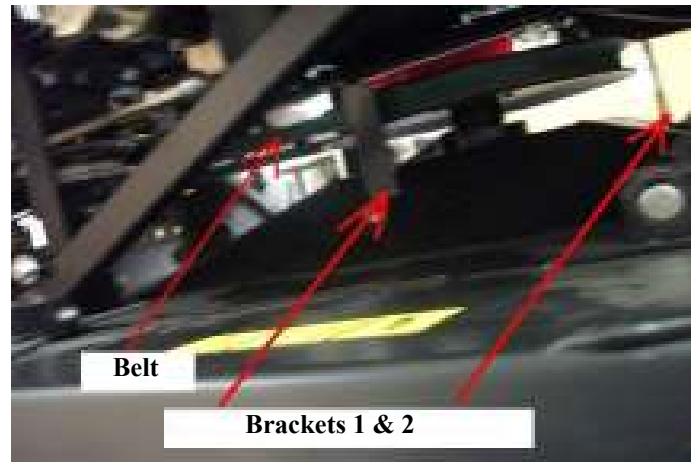
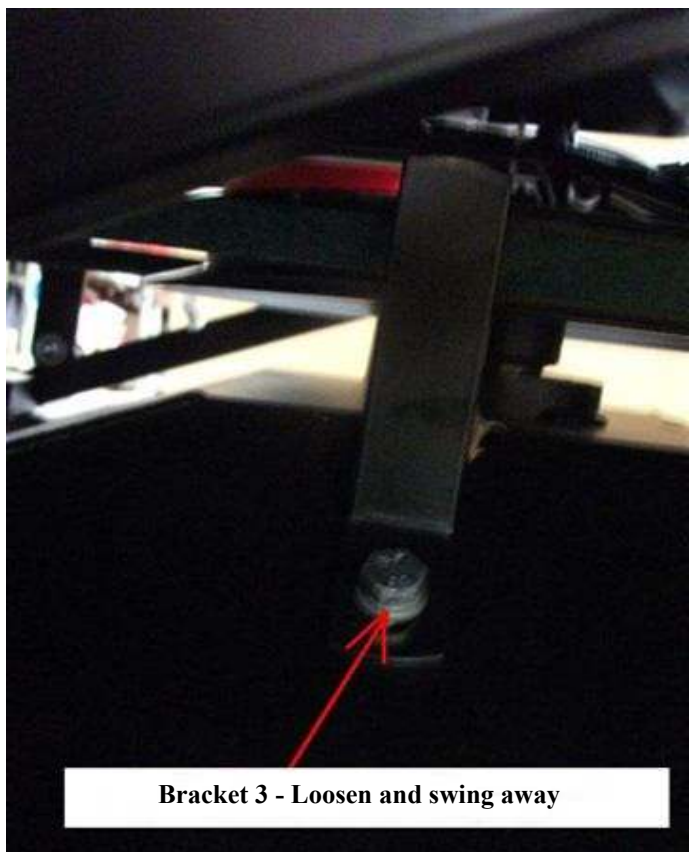


Photo 6



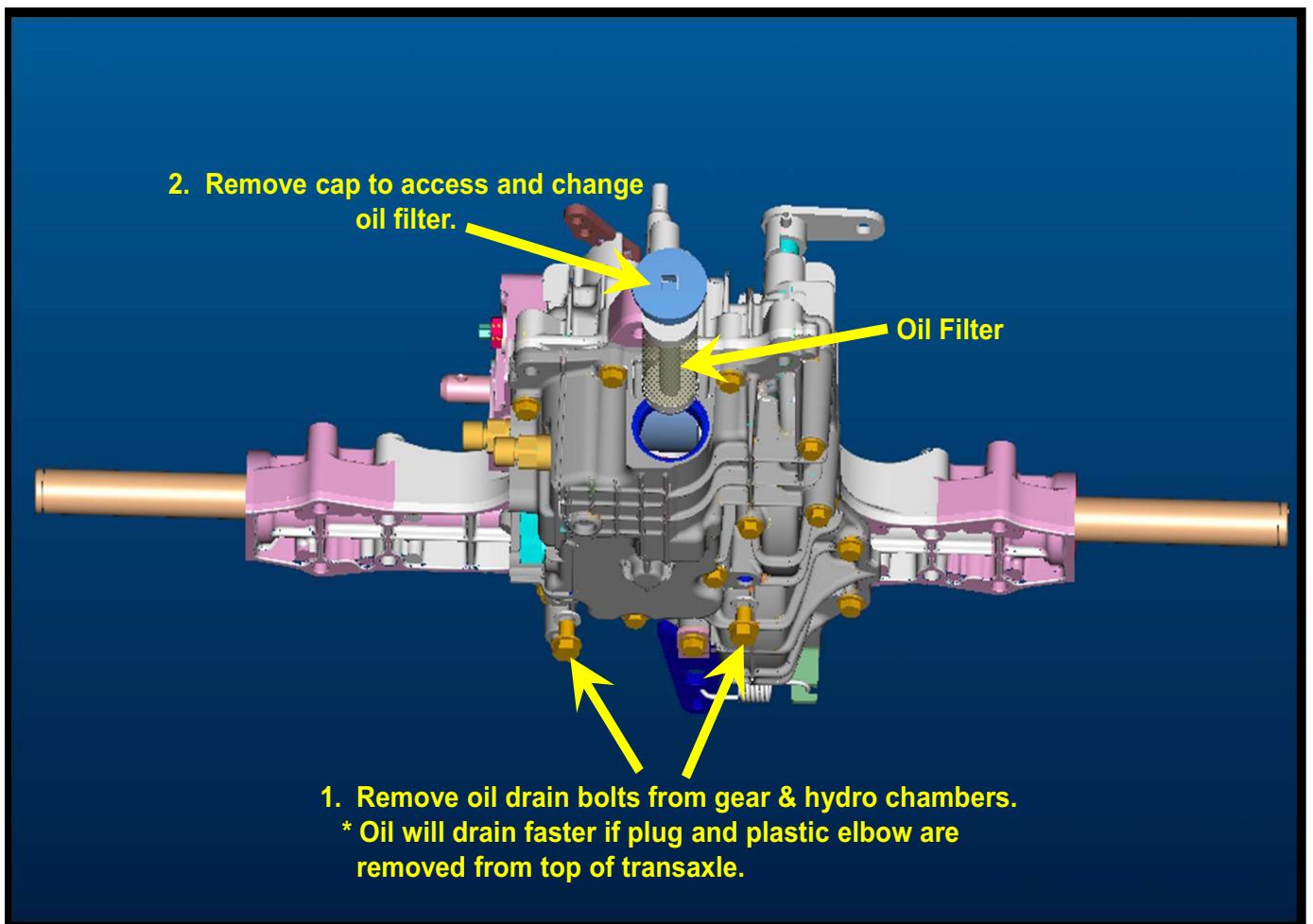
The Belt is now ready to be removed, placing one hand on the Idler Roller, pull the Idler Roller away from the Belt to allow for more clearance, remove the Belt. Replacement is the reverse. Should the new Belt require more or less tension, this is achieved by adjusting the position of the nuts in photo2

## CROSSJET 4WD Transmission Maintenance

### Oil Type

SAE 5w50 fully synthetic oil is recommended to withstand the high demand (loading) on the 4WD system. Oil viscosity is very important for cushioning hydrostatic surfaces.

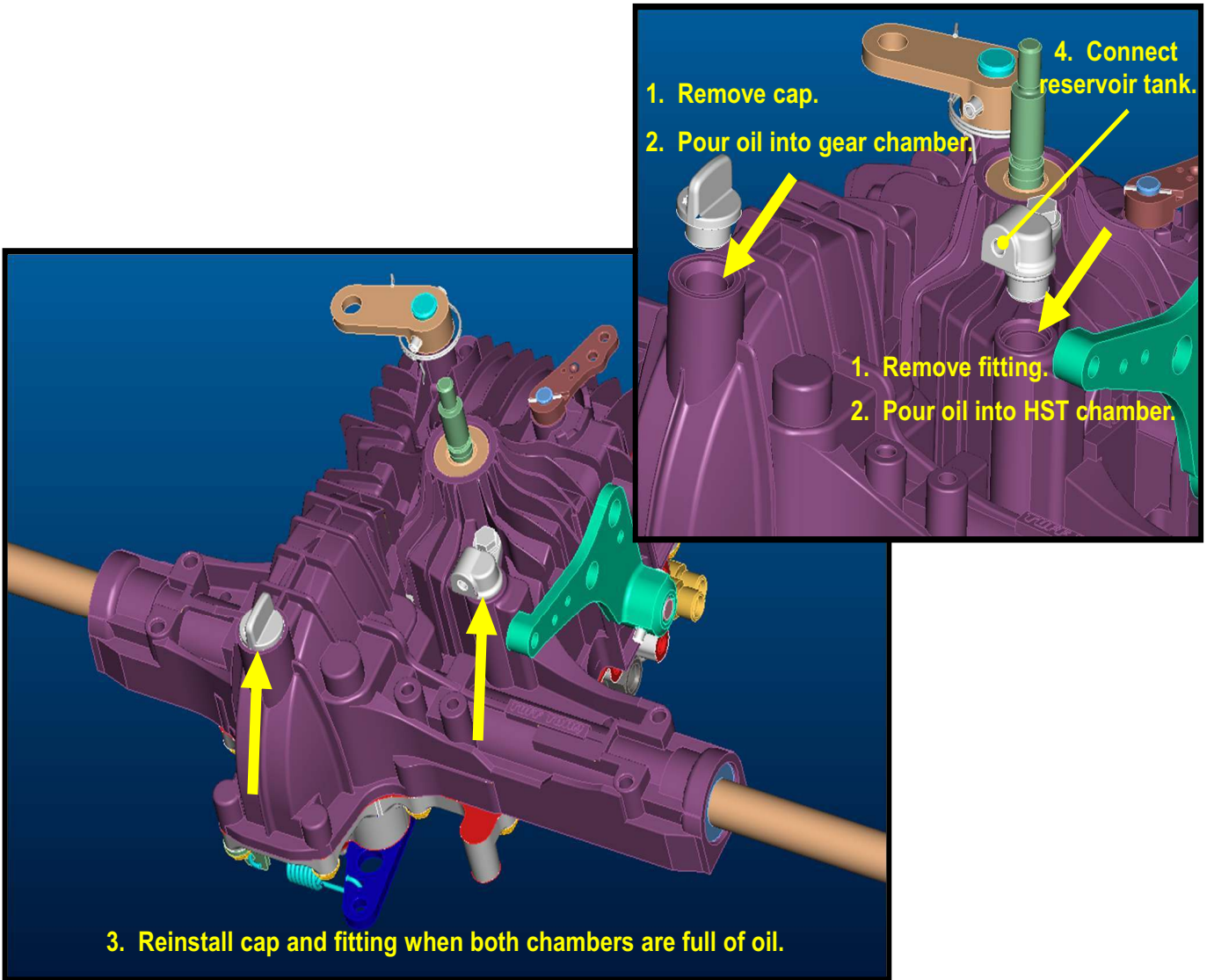
## Procedure for Changing Filter and Draining Oil from the K664 Transaxle



**Oil & Filter Change: Refer to the Owner's Manual for the recommended frequency.  
Refer to TB 94.A-Speed Ratio Adjustment. Frequency = Concurrent with the above service.**

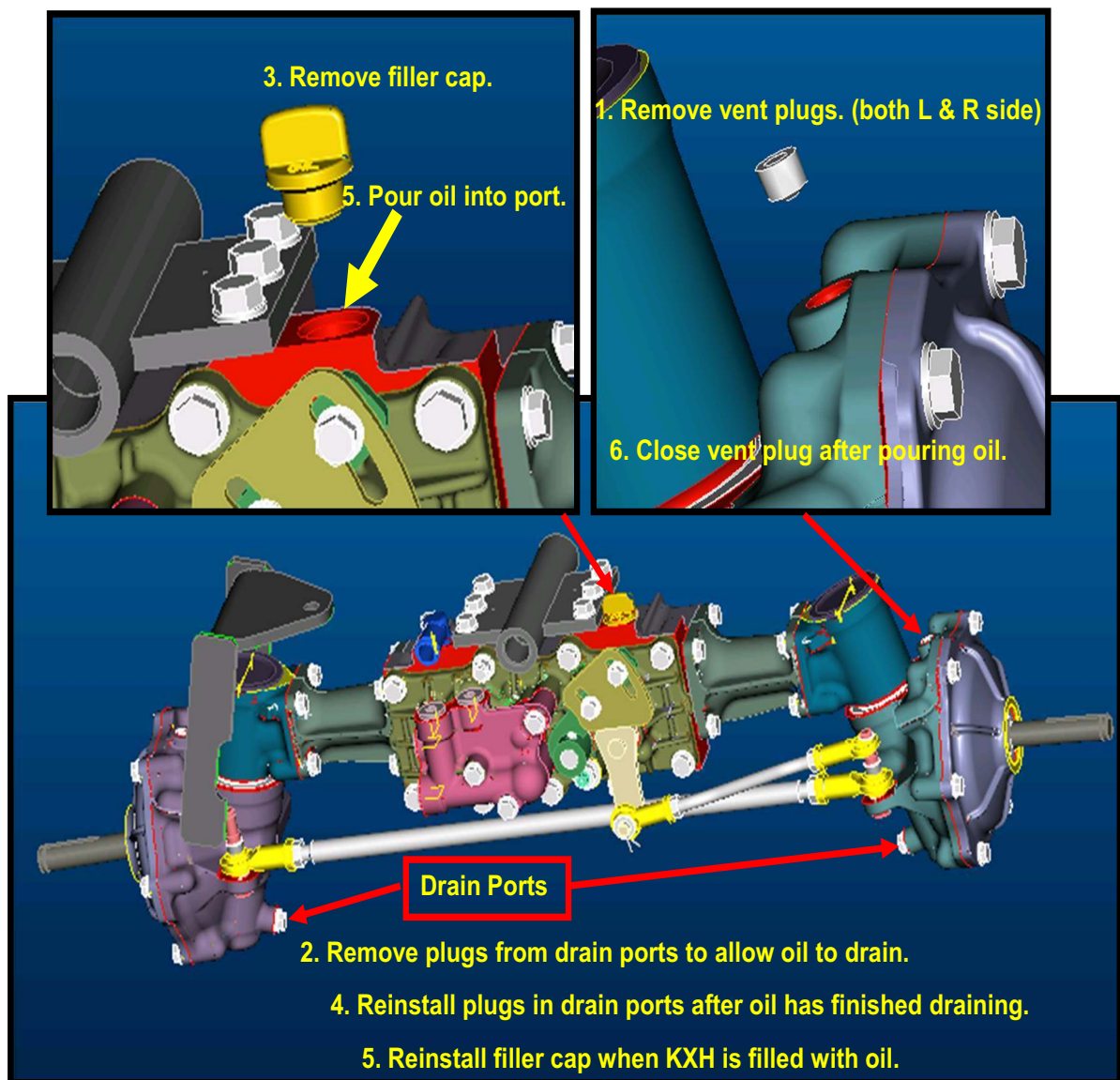
### CROSSJET 4WD Transmission Maintenance

#### Procedure for Adding Oil to K664 Transaxle



### CROSSJET 4WD Transmission Maintenance

## Procedure for Draining & Filling KXH Steering Axle with Oil



### CROSSJET 4WD Transmission Maintenance

#### Procedure for Oil Filling & Air Purging K664E + KXH10N 4WD System

No.	Procedure	K664E		ENGINE	Note
		Bypass	Transaxle Control Lever		
1	Prefill the K664E and KXH10N units with oil. ● Close Bypass Valve on K664 to prevent oil leakage from hydraulic ports. ● Prefill each unit with oil to at least 80% of their total volume.	Close	Neutral	STOP	Total Oil Volume K664E: 3.0±0.5 L KXH10N: 2.4±0.15 L
2	Assemble the K664 and KXH10N components into the vehicle and connect the hydraulic hoses, pipes and reservoir.	Close	Neutral	STOP	
3	Prefill the Reservoir with oil.	Close	Neutral	STOP	
4	Place Tractor's Front and Rear Axles on jack stands with wheels off floor.	Close	Neutral	STOP	
5	Start Engine and adjust throttle for low idle.	Close	Neutral	START	
	● Maintaining K664 input speed to no more than 1500 rpm is desirable.			Low idle	
6	Open the Bypass Valve and move and hold the K664 Speed/Direction Control Lever rearward at half stroke.	Open	Neutral to Reverse	Low idle	Operating time ~10 sec; repeat 5 times.
	● Oil flows from K664 pump to KXH10N, filling the hydraulic pipes and returns to reservoir. ● KXH10N axle shafts will rotate.		Half Swash Angle		
7	Open the Bypass Valve and move and hold the K664 Speed/Direction Control Lever forward at half stroke.	Open	Neutral to Forward	Low idle	Operating time ~10 sec; repeat 5 times.
	● KXH10N axle shafts will rotate.		Half Swash Angle		
8	Return Speed/Direction Control Lever to the neutral position and close the K664 Bypass Valve.	Close	Neutral	Low idle	
9	If oil is below level mark on Reservoir, add oil.	Close	Neutral	Low idle	
10	Alternately operate the Control Lever between full Forward & full Reverse position while monitoring hydraulic noise. Repeat procedure 2 times while holding each in full stroke.	Close	Forward ↔ Reverse	Low idle	Operating time ~5 sec; repeat 2 times.
	● Axle shafts of both K664 and KXH10N will rotate.		Full Swash Angle		
11	If oil level in Reservoir is again low, add oil to bring level up to mark.	Close	Neutral	Low idle	

1. Oil temperature should be maintained between 20° ~ 40°C.

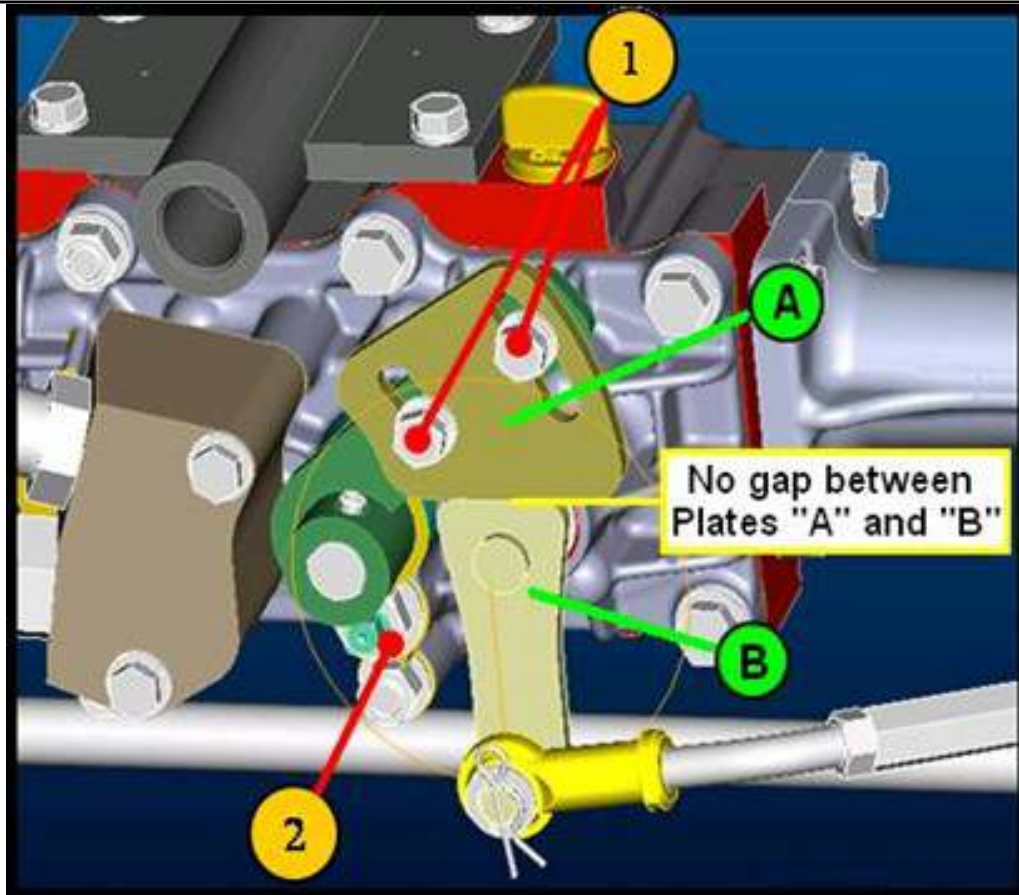
2. No.6 & 7 - Holding Speed/Direction Control Lever at half stroke (50% Swash Angle) will prevent air circulation in the hydraulic pipes.

3. No.6 & 7 - Holding time of 10 sec. and frequency of repeating 5 times are not strict, just suggested. Customer may determine the holding time by experience.

4. After this oil filling procedure is completed, vehicle should be operated to check hydraulic noise.

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## Speed Ratio Adjustment for KXH10N



### Procedure

- 1 Place the tractor's Front and Rear Axles onto jack stands with the wheels off the floor.
- 2 Adjust the steering wheel to point the wheels straight ahead
- 3 Loosen 2 bolts (1) and make a gap between **Plate A** and **Plate B**
- 4 Start the engine and fix the speed control lever. (Max' position is best)
- 5 Lock the Front Right Wheel, and measure the Front Left Wheel speed (rpm)
- 6 Calculate the Front Right wheel speed by multiplying the Front Left wheel speed by 0.89
- 7 Lock Left Front wheel, and measure the Front Right wheel speed (rpm)
- 8 Adjust the Front Right wheel speed to calculated value by adjusting the fulcrum (2)
- 9 When the measured value equals the calculated value, lock the fulcrum
- 10 Fit **Plate A** against **Plate B** and tighten the 2 bolts (1)

*This TB 94.A is for the Ride-On's: S23/92HD C/Jet 4WD 552597 & M24/110 HD 4WD 552710*

*This TB 94.A should be used concurrently with TB 93.A*