



OPERATIONS MANUAL KUBOTA B3000 HST WITH NEILO BROOM COMBO

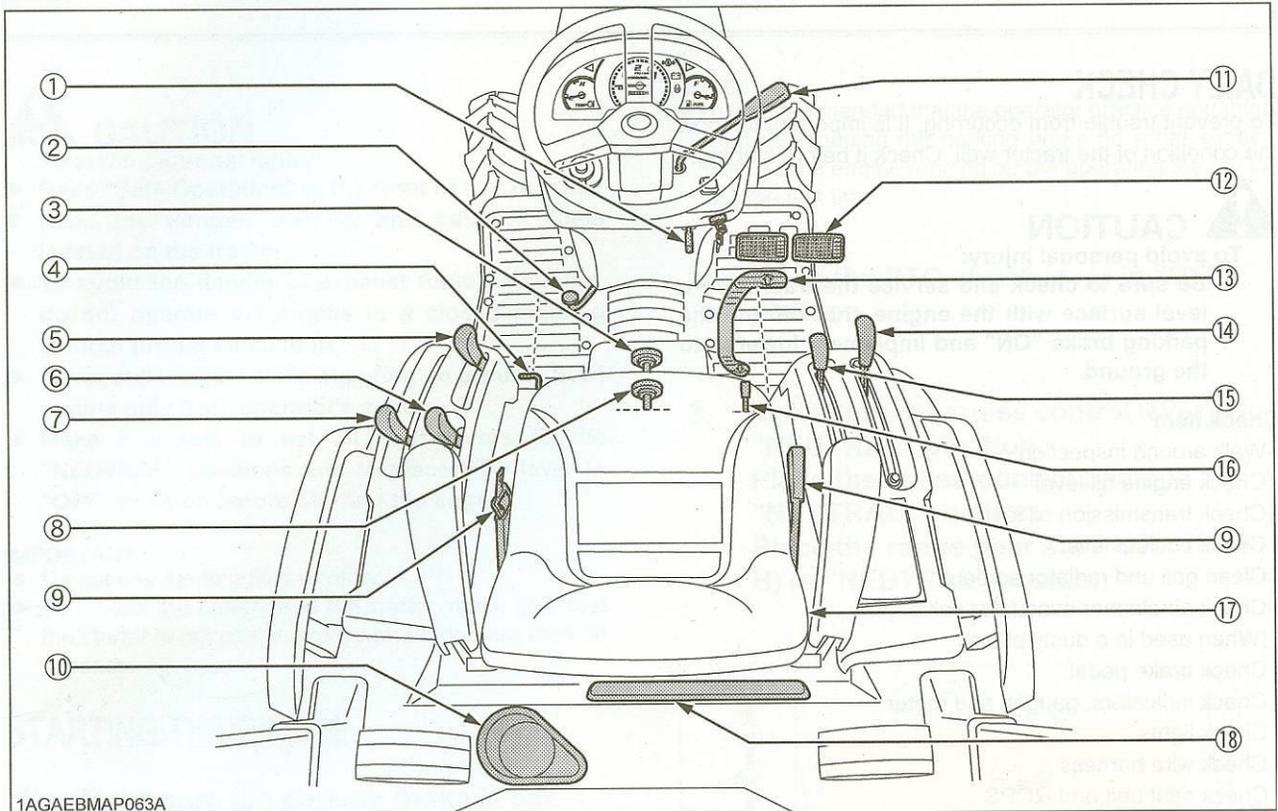


**This manual is to be used in conjunction with the
Kubota B3000 operator manuals**



BASIC OPERATING PROCEDURE OF KUBOTA B3000HST TRACTOR WITH NEILO BROOM

For detailed operating and servicing procedures please see Kubota B3030 HST operator manual supplied



- | | |
|----------------------------------|---|
| 1. Parking brake lever | 11. Hand throttle lever |
| 2. Steering wheel tilt pedal | 12. Brake pedal |
| 3. 3 PL speed knob (disengaged) | 13. HST speed control pedal |
| 4. Differential lock Pedal | 14. 3PL position control lever (disengaged) |
| 5. PTO clutch (Broom Drive) | 15. Cruise control lever |
| 6. PTO select Lever (disengaged) | 16. 4WD lever |
| 7. Range gear shift lever | 17. Operators seat |
| 8. Seat suspension adjustment | 18. Tool box |
| 9. Seat belt | |
| 10. Cup Holder | |

To start tractor

- Disengage the PTO (Broom drive)
- Ensure cruise control lever # 15 is in rear position
- Ensure HST pedal # 13 is in neutral position
- Set throttle at approx $\frac{1}{2}$ speed
- Start
- To stop tractor Turn key

Engine operating RPM

When driving the tractor always operate at 75 to 100% of available RPM (throttle) to ensure efficient operation of HST Transmission

ALWAYS WEAR A SEAT BELT!

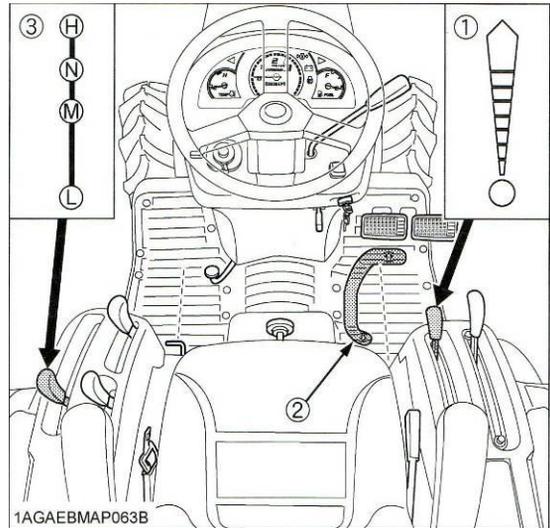
HST Hydrostatic Transmission

HST is a fluid or hydraulic drive transmission.

HST allows infinite speed adjustment and instant forward to reverse travel via the foot pedal.

Components of the HST Transmission are:

1. Cruise control lever
2. HST speed control pedal
3. Range change lever L-M-H



Range change lever 3

Select a suitable gear range depending on the type of work load. Ensure tractor is stationary before selecting gear.

L (low) **M** (medium) **H** (high)

L is the lowest and most powerful gear and will operate between 0 - 5.2 km/H.

Use for very heavy operations.

M is the medium range and will operate between 0 - 9.6 km/H.

We recommend Medium as the most suitable gear for brooming operations

H is the highest and least powerful gear and will operate between 0 - 20 km/H.

Use for light work and highway operations.

HST continued.

HST speed control pedal 2

- To move forward, slowly depress the front of the HST pedal
- The further you depress the HST pedal the higher the gear and the faster the tractor travels.
- To decrease speed or when the pulling requirement increases simply decrease pedal pressure.

Forward to reverse:

- To shuttle between forward to reverse simply step on front or rear of HST pedal

Cruise control lever 1

- This will manually override the HST pedal.
- Push the cruise control lever forward for a higher gear and the faster the tractor travels

Safety feature of cruise control:

- By stepping hard on the brake pedal or hard on the rear of the HST pedal and the cruise control lever will return to the neutral position.

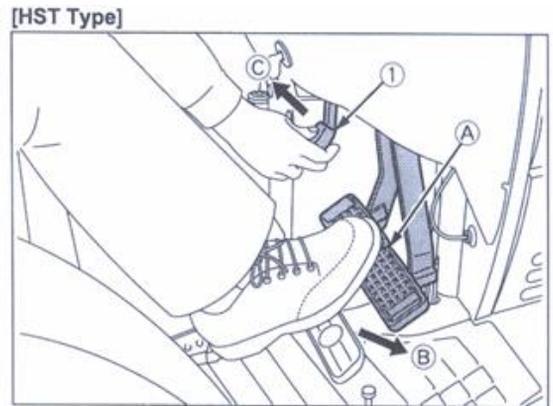
Engine braking and the HST transmission:

- Tractors with HST transmissions enjoy very effective engine braking.

Caution: when operating the cruise control we recommend leaving the right hand on the cruise control lever at all times

Parking brake

- **To set the parking brakes:**
Depress the brake pedal (a)
- Latch the brake pedal with the parking brake latch lever (1)
- To release parking brake step firmly on brake pedal.

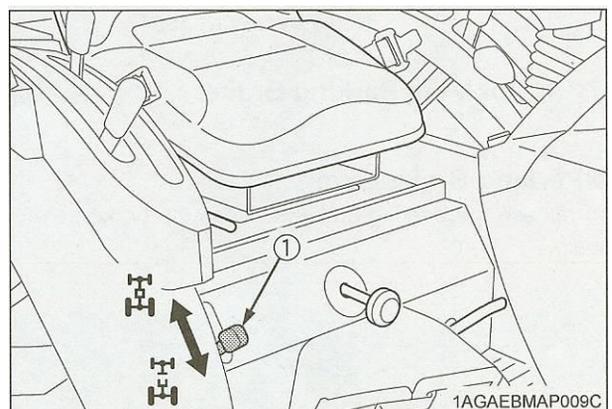


4WD Four wheel drive

- 4WD should only be engaged when greater pulling force is required on wet or loose surfaces.
- **Caution!** To avoid excess front tire wear and torque build up in the tractors drive line do not operate 4WD when operating on hard dry surfaces or traveling at highway speed.

To engage/disengage 4wd:

- Stop tractor
- 4WD lever in up position
- 2WD lever in down position



Operating broom

Joystick control to lift lower and angle

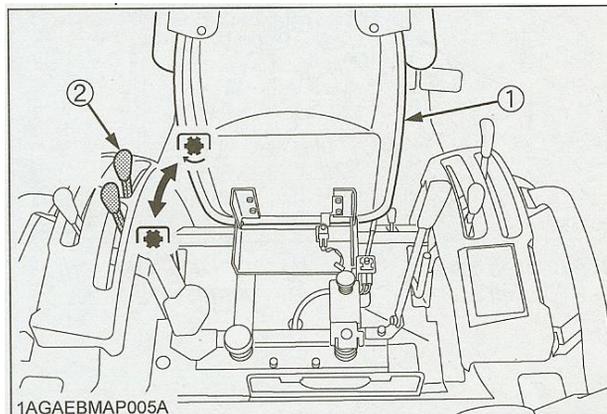
- Push directly forward to lower
- Pull directly back to lift
- Push to right to angle right
- Push to left to angle left
- Safety locking mechanism



To engage & stop broom drive

- To engage broom push the PTO lever (2) forward
- To stop broom pull lever back

Caution never $\frac{1}{2}$ engage lever, slippage & excess wear may occur

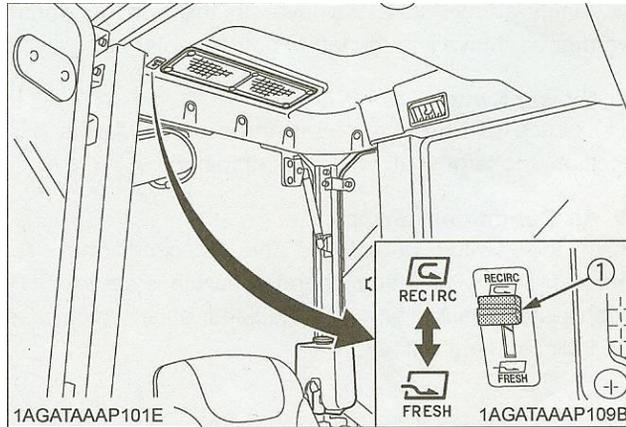


If the operator leaves the seat with the PTO broom drive engaged the safety switch will stop the engine, to override and operate PTO broom drive while out of the cabin roll seat (1) forward against steering wheel then engage PTO

Operating broom continued.

Keeping dust out of the cabin

- Keep all windows and doors shut
- Turn on blower with or without air conditioning
- Ensure lever in cab roof is set to FRESH to keep positive air pressure in cab



REPLACING BRUSH SECTIONS

- Stop engine and lower close to ground
- Remove 24mm Lock nut LH end of broom
- Remove large nut on LH end of broom
- Remove LH end plate and worn brush section
- Fit new brush sections and reverse procedure



If brushes are to be recycled 25mm of bristle must be retained

CAUTION ONLY FIT NZ BRUSH CO. BRUSH SECTIONS!

FITTING OTHER BRANDS MAY CAUSE DAMAGE TO BROOM

Daily & weekly service checks

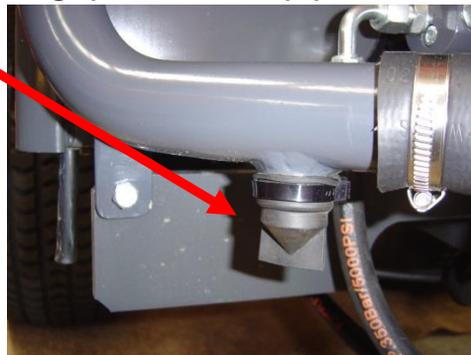
- Check engine oil level and cooling water daily
- Greasing-There are nine grease nipples requiring one shot of grease daily



- Clean pre cleaner by removing bowl and emptying dust

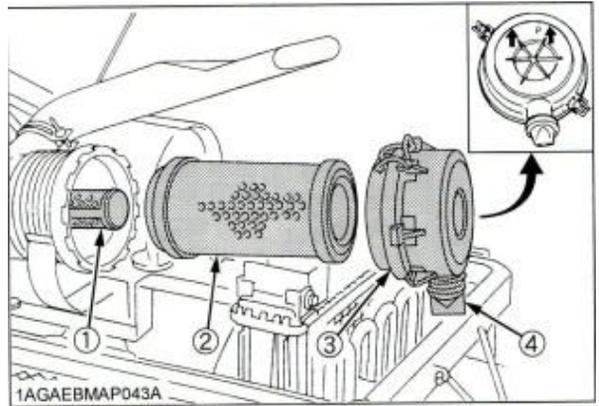


- Squeeze vacuator on bottom Of long pre cleaner pipe to release potentially trapped water

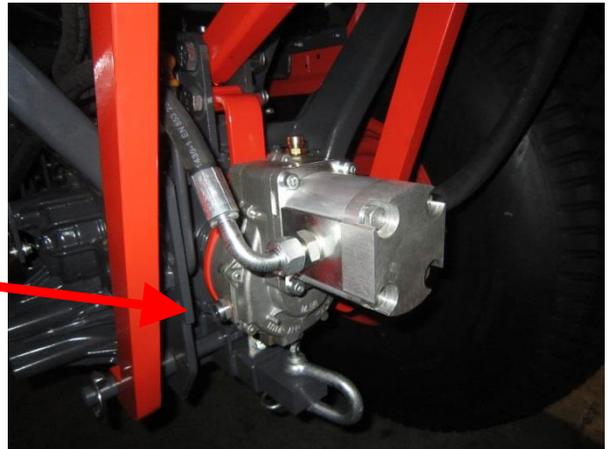


Daily & weekly service checks Continued..

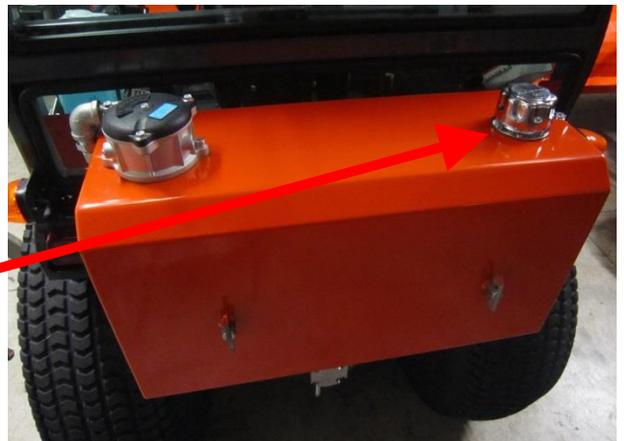
- Check primary air filter weekly



- Check site glass on PTO step up box weekly



- Check oil level of hydraulic reservoir, oil should be visible above gauze strainer



- Check tyre pressures weekly Front 23 PSI Rear 16 PSI (see options)

If Titan HD 2000 Front tyres fitted inflate to 40psi

Note rear tyres are 50% filled with water ballast

CHECK DAILY FOR OIL LEAKS AND REPORT IMMEDIATELY TO YOUR SUPERVISOR OR SERVICE PROVIDER

MAINTENANCE

SERVICE INTERVALS

| No. | Items | | Indication on hour meter | | | | | | | | | | | | | Since then | Ref page | | | | | |
|-----|---|---------|--------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------------|----------|---|--------------|-----|----|---|
| | | | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | | | | | 700 | | |
| 1 | Engine oil | Change | ☉ | ○ | | ○ | | ○ | | ○ | | ○ | | ○ | | ○ | | ○ | every 100 Hr | 51 | | |
| 2 | Engine oil filter | Replace | ☉ | | | ○ | | | | ○ | | | | | | ○ | | | every 200 Hr | 56 | | |
| 3 | Transmission oil filters | Replace | ☉ | | | | | ○ | | | | | | | | ○ | | | every 300 Hr | 58 | | |
| 4 | Transmission fluid | Change | ☉ | | | | | ○ | | | | | | | | ○ | | | every 300 Hr | 58 | | |
| 5 | Front axle case oil | Change | | | | | | ○ | | | | | | | | ○ | | | every 300 Hr | 59 | | |
| 6 | Front axle pivot | Adjust | | | | | | | | ○ | | | | | | | | | every 400 Hr | 60 | | |
| 7 | Engine start system | Check | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | every 50 Hr | 50 | | |
| 8 | Greasing | - | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | every 50 Hr | 49 | | |
| 9 | Wheel bolt torque | Check | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | every 50 Hr | 51 | | |
| 10 | Battery condition | Check | | ○ | | ○ | | ○ | | ○ | | ○ | | ○ | | ○ | | ○ | every 100 Hr | 52 | *5 | |
| 11 | Air cleaner element [Double element type] Primary element | Clean | | ○ | | ○ | | ○ | | ○ | | ○ | | ○ | | ○ | | ○ | every 100 Hr | 53 | *1 | @ |
| | | Replace | | | | | | | | | | | | | | | | | every 1 year | 60 | *2 | |
| | Air cleaner element [Double element type] Secondary element | Replace | | | | | | | | | | | | | | | | | every 1 year | 60 | | |
| 12 | Fuel filter element | Clean | | ○ | | ○ | | ○ | | ○ | | ○ | | ○ | | ○ | | ○ | every 100 Hr | 54 | | @ |
| | | Replace | | | | | | | | ○ | | | | | | | | | every 400 Hr | 60 | | |
| 13 | Fan belt | Adjust | | ○ | | ○ | | ○ | | ○ | | ○ | | ○ | | ○ | | ○ | every 100 Hr | 54 | | |
| 14 | Brake | Adjust | | ○ | | ○ | | ○ | | ○ | | ○ | | ○ | | ○ | | ○ | every 100 Hr | 55 | | |
| 15 | Radiator hose and clamp | Check | | | | ○ | | | | ○ | | | | | | ○ | | | every 200 Hr | 56 | | |
| | | Replace | | | | | | | | | | | | | | | | | every 2 year | 62 | | |
| 16 | Fuel line | Check | | ○ | | ○ | | ○ | | ○ | | ○ | | ○ | | ○ | | ○ | every 100 Hr | 55 | | @ |
| | | Replace | | | | | | | | | | | | | | | | | every 2 year | 62 | *3 | |

Part numbers and oils

- Engine oil Filter part # HH160-32093
- Fuel filter part # 6A320-59930
- Hydraulic filter part # HH670-37710
- HST filter part # HH660-36060
- Air Filter (outer) part # 6C060-99410
- Air Filter (Inner) part # 32721-58242
- Air Conditioning Filter part # T1855-71600
- Cab key part # 15248-63700
- Ignition key part # T0270-81840
- Broom Filter MF1002P10NB
- Broom Bearing UC207 self aligning bearing & F207 bearing block

Oils

- **Engine oil:** Kubota Engine oil API CH4 15W40 / BP C6 Global
- **Transmission oil:** 15L (TTF) Tractor Transmission Fluid
Kubota UDT-GL4 or Super UDT-GL4 / BP Traction TF10 classification API-GL4
- **Front axle case:** 4.7 L same as tractor transmission
or SAE80-SAE90 gear oil
- **Broom Hydraulics:** 60 L HD46
- **Step up box:** same as tractor transmission, fill to site glass only (do not overfill)

GREASE

- General purpose grease

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