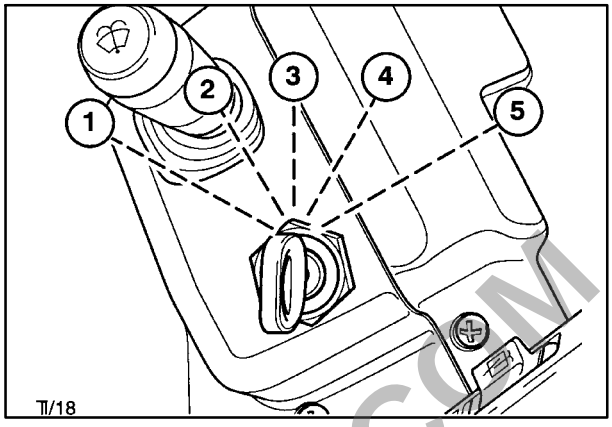
To Exit The Calibration Mode

1. Turn the key-start to the off position (2).

The tractor is now ready for normal operation.



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Error Codes

Code	Meaning
U2O	Correct start up sequence was not used. Depress and release the clutch pedal, then repeat the high range clutch calibration procedure.
U21	Engine speed too low (1200 ± 100 rev/min)
U22	Engine speed too high (1200 ± 100 rev/min)
U23	Shuttle lever not in forward position.
U24	Main gear lever not in 1st. gear.
U25	Range lever not in high range.
U26	Clutch pedal not fully released.
U27	High clutch calibration too low. Starting pressure sufficient to cause engine pull down.
U28	High clutch calibration too high. Max. test pressure reached without drop in engine speed.
U29	Low clutch calibration too low. Starting pressure sufficient to cause engine pull down.
U30	Low clutch calibration too high. Max. test pressure reached without drop in engine speed.
U31	Tractor wheel movement detected.
U37	Synchroniser shuttle mode calibration - Synchro potentiometer feedback outside limits.
U38	Synchroniser hi/lo mode calibration - Synchro potentiometer feedback outside limits.
U39	Synchroniser neutral mode calibration - Synchro potentiometer feedback outside limits.

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SYSTEM TROUBLE SHOOTING

The following information lists possible problems, their cause and corrective action. The systems are listed as follows:

Subject	Page	Subject	Page
Engine	5-2	3-Point Hitch	5-9
Transmission		Brakes	5-9
- Semi-Powershift or Full Powershift	5-5	Cab	5-10
- Two Speed Powershift	5-6		
- Synchro Shift	5-7	Electrical	5-11
Hydraulics	5-8		

ENGINE

PROBLEM	POSSIBLE CAUSE	CORRECTION
Engine will not start or is difficult to start	Incorrect starting procedure.	Review starting procedure.
	Low or no fuel.	Check fuel level.
	Air in fuel lines.	Bleed fuel system.
	Low ambient temperature.	Use cold starting aid.
	Contaminated fuel system.	Clean and bleed fuel system.
	Fuel pump inoperative.	Check fuse. If satisfactory, replace pump.
	Clogged fuel filter(s).	Replace filter element(s).
	Malfunctioning fuel injectors.	See your authorised dealer.
	Malfunctioning fuel solenoid or solenoid relay.	See your authorised dealer.
	Incorrect engine oil viscosity.	Use correct viscosity oil.
	Incorrect fuel for operating temperature.	Use correct type of fuel for temperature conditions.
	Slow starter speed.	See Electrical fault finding.
Engine runs roughly and/or stalls	Clogged fuel filter(s).	Replace fuel filter element(s).
	Contaminated fuel system.	Clean and bleed fuel system.
	Fuel solenoid incorrectly adjusted.	See your authorised dealer.
	Fuel cap vent blocked.	Wash cap in clean fuel oil.
Engine overheats	Low engine oil level.	Add oil, as required.
	Low engine coolant level.	Fill coolant recovery tank. Check cooling system for leaks.
	Defective thermostat(s).	Check thermostat(s).
	Dirty/blocked radiator core.	Clean.
	Excessive engine overload.	Shift to lower gear, reduce draft load or ballast carried.
	Faulty radiator pressure cap.	Replace cap.
	Cooling system blocked.	Flush cooling system.

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ENGINE		MXM120	MXM130	MXM140	MXM155	MXM175	MXM190
Rated Engine power	Kw	91	96	106	114	130	142
(ISO TR 14396 at rated speed)	Ps	122	129	142	153	174	190
With Power Boost	Kw	-	-	-	-	156	168
(ISO TR 14396 at rated speed)	Ps	-	-	-	-	209	225
Turbocharged		Yes	Yes	Yes	Yes	Yes	Yes
Intercooled		Yes	Yes	Yes	Yes	Yes	Yes
Rated speed	rev/min ± 25	2200	2200	2200	2200	2200	2200
Max no load speed	rev/min ± 25	2375	2375	2375	2375	2380	2380
Idle speed	rev/min	800	800	800	800	920	920
Number of cylinders		6	6	6	6	6	6
Bore	mm.	111.8	111.8	111.8	111.8	111.8	111.8
	in.	4.4	4.4	4.4	4.4	4.4	4.4
Stroke	mm.	127	127	127	127	127	127
	in.	5.0	5.0	5.0	5.0	5.0	5.0
Displacement	cm^3	7500	7500	7500	7500	7500	7500
	in^3	457	457	457	457	457	457
Compression ratio		17.5:1	17.5:1	17.5:1	17.5:1	17.5:1	17.5:1
Firing order				1.5.3.6.2.4			

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OPERATION 42
TRANSMISSION CLUTCH CALIBRATION
(Two-Speed Powershift Transmission Only)

NOTE: *The Two-Speed Powershift transmission has directional clutches that require periodic calibration to compensate for wear. This service should be performed at the first 50 hour service and thereafter only if a deterioration in gear shifting quality is noted. It is recommended that this operation be performed by an authorised dealer.*

IMPORTANT: *During the calibration procedure, the transmission control module detects precisely the point at which the clutches start to engage. This engagement is detected by a very small reduction in engine speed. During calibration, it is essential that no action is taken to cause the engine speed to vary. Ensure that the air conditioner and all electrical equipment is switched off. Do not operate the PTO or any hydraulic lever or move the hand or foot throttle.*

Preparing the Tractor for Calibration

NOTE: *The clutches should be adjusted when the transmission oil temperature is between 20°C (68° F) and 50°C (122°).*

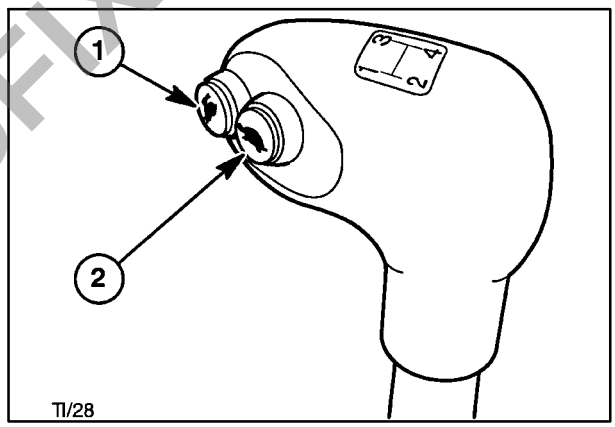
Prior to calibrating the directional clutches, carry out the following:

1. Park the tractor on level ground away from any obstacles in case of unexpected tractor movement).

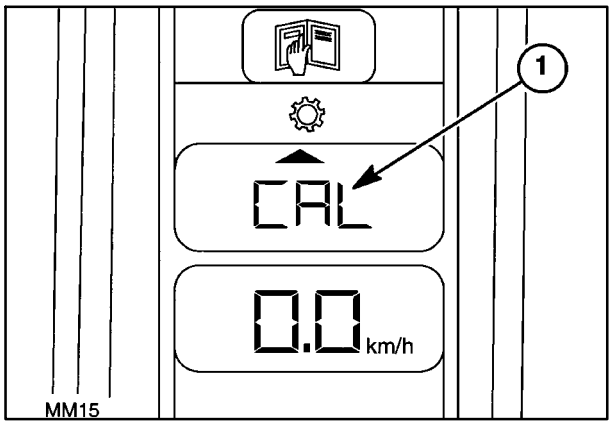
2. Turn off all electrical equipment, including the air conditioning (where fitted), stop the engine and place remote hydraulic controls in the neutral position. Lower hydraulic equipment to the ground.

3. Engage the parking brake, place all gear shift levers in neutral. block the wheels, front and rear.

4. Press and hold in both Powershift buttons (1) and (2), on the main gearshift lever. While holding in the buttons, start the engine.



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LUBRICATION AND MAINTENANCE CHART

Service Interval	Operation No	Maintenance Requirement	Check	Clean	Lube	Change	Adjust	Drain	Page No.
When warning lamp lights	1	Engine air cleaner outer element	X	X					4-9
	2	Engine coolant level	X				X		4-12
	3	Brake fluid reservoir level	X				X		4-13
	4	Clutch fluid reservoir level (where fitted)	X				X		4-14
	5	Fuel filter/water separator	X					X	4-14
Every 10 hours or daily	6	Engine oil level	X				X		4-15
	7	Windscreen washer reservoir fluid level (where fitted)	X				X		4-15
	8	Air reservoir(s) (air operated trailer brakes)						X	4-16
Every 50 hours	9	Radiator, oil cooler and air conditioner condenser	X	X					4-17
	10	Cab air filters		X					4-18
	11	All grease fittings			X				4-20
	12	Front and rear wheel nut torque	X				X		4-26
	13	Tyre pressures and condition	X				X		4-27
	14	Remote control valve drain bottle(s)	X						4-27
Every 300 hours	*15	Engine oil and filter				X			4-28
	16	Battery electrolyte level (tropical climates)	X	X			X		4-30
	17	Four wheel drive front axle and hubs oil level	X				X		4-31
	18	Front suspension cylinder upper bearing			X				4-32
	19	Transmission/rear axle/hydraulics oil level	X				X		4-32
	20	Poly V-belt	X						4-33
	21	Compressor drive belt (where fitted)	X				X		4-33
	22	Cab and safety frame mounting bolts torque	X				X		4-34
	23	Parking brake	X				X		4-35
Every 600 hours	24	Hydraulic and transmission oil filters				X			4-36
	25	Engine air cleaner outer element				X			4-37
	26	Engine air intake connections	X						4-37
	27	Secondary fuel filter element				X			4-38
	28	Engine crankcase breather filter element				X			4-39
	29	Calibrate electronic systems	X						4-39
Every 1200 hours or annually	30	**Primary fuel filter element**				X			4-40
	31	Cab air filters				X			4-41
	32	Transmission/rear axle/hydraulic oil and filter				X			4-42
	33	FWD axle differential oil				X			4-43
	34	FWD axle hub oil				X			4-44
	35	Battery electrolyte level (temperate climates)	X	X			X		4-45
Every 1200 hours or two years	36	Engine coolant				X			4-46
	37	Engine air cleaner inner element				X			4-50
Every 1800 hours	38	Fuel injectors	X	X			X		4-51
Every 3 years	39	Air conditioner system	X	X		X			4-53
General maintenance	40	Bleeding the fuel system	X				X		4-54
	41	Bleeding the tractor braking system	X				X		4-54
	42	Transmission calibration (Two-Speed Powershift transmission)	X				X		4-59
	43	Transmission calibration (Semi-Powershift transmission)	X				X		4-63
	44	Transmission calibration (Full Powershift transmission)	X				X		4-66
	45	Calibrating the EMU	X				X		4-68
	46	Calibrating the Electro-Hydraulic remote valves	X				X		4-70
	47	Footbrakes	X				X		4-71
	48	Engine idle speed	X				X		4-72
	49	Automatic pick-up hitch	X				X		4-72
	50	Cab suspension adjustment	X				X		4-73
	51	Headlight and worklamp adjustment	X				X		4-74
	52	Bulb replacement				X			4-75
	53	Fuse replacement				X			4-78

***** Oil change interval will be reduced if fuel has a high sulphur content or if the tractor is operated in extremely cold temperatures.
# Grease more frequently when operating in very wet, muddy or extremely dusty conditions.

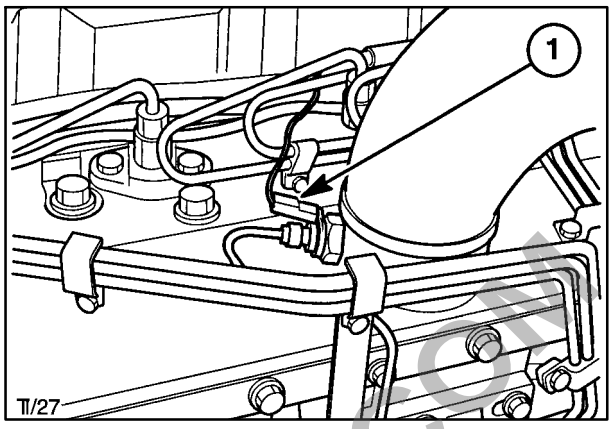
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STARTING THE ENGINE

⚠ WARNING ⚠

Your tractor is equipped with the Thermostart cold weather starting aid. Do **not** use ether with Thermostart installed. It will explode in the intake manifold. If, in an emergency, it is necessary to use ether, disconnect the Thermostart wire (1) from the heater terminal on the intake manifold.



1

The Thermostart, which is effective in ambient temperatures down to –18° C (0° F), consists of a heating element installed in the intake manifold. When operated by the key–start switch, the Thermo-start will ignite fuel in the manifold, heating indrawn air prior to it being drawn into the combustion chamber.

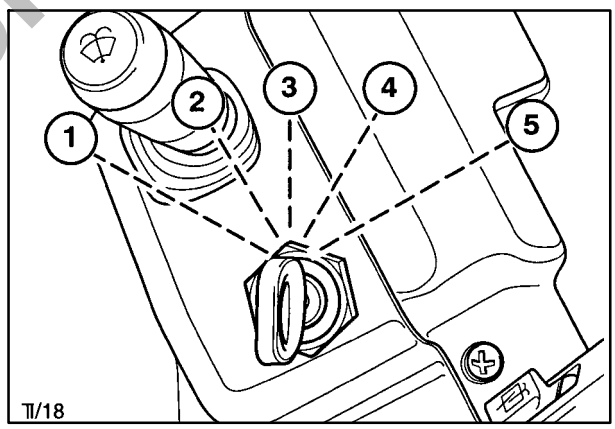
If temperatures below –18° C (0° F) are encountered, a coolant immersion heater is available as an accessory. The coolant immersion heater is effective in ambient temperatures down to –29° C (–20° F) when used in conjunction with the Thermostart.

A five-position key-start switch is installed. The key-start switch positions are as follows:

Position 1	Thermostart activated
Position 2	Off
Position 3	Accessories on
Position 4	Warning lights and instruments on
Position 5	Starter motor engaged

IMPORTANT: *Never push or tow the tractor to start the engine.*

NOTE: *Neutral start switches prevent operation of the starting motor unless the forward/reverse (shuttle) lever is in the neutral (N) position and the clutch pedal depressed).*

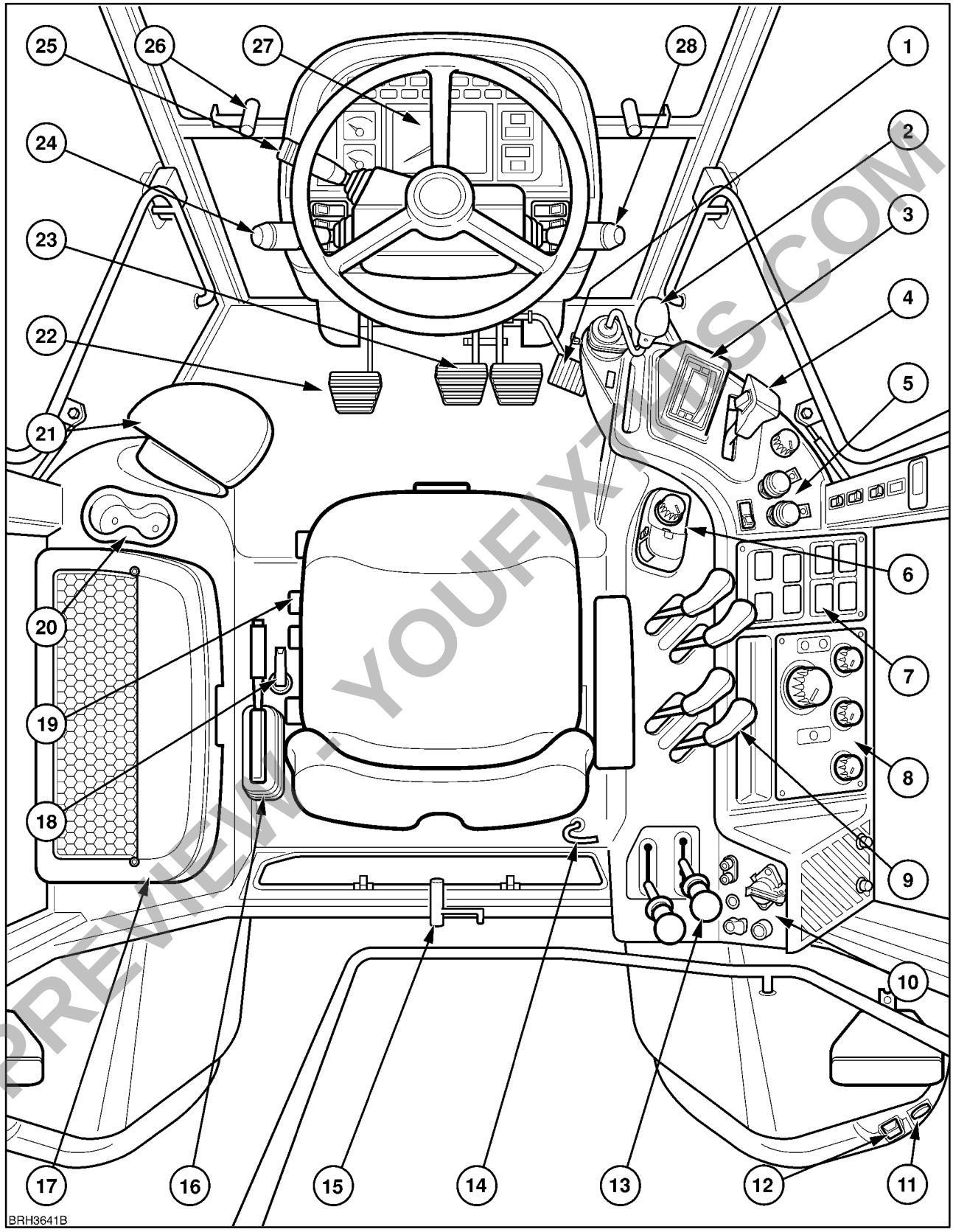


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CAB AND PLATFORM CONTROLS



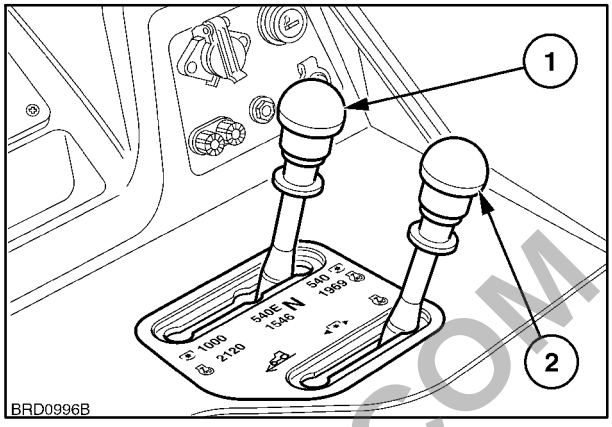
1

General View of Tractor Controls MXM120 to MXM155

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With shiftable P.T.O., a range lever is provided. The lever is used to select one of two or three P.T.O. speed ranges to provide power or economy. The range lever (1), is located at the rear of the right-hand console.



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Ground drive P.T.O. is available, in conjunction with 3-speed, shiftable P.T.O., on all models except MXM175 and MXM190. As suggested by the name, ground drive P.T.O. speed is directly related to rotation of the rear wheels rather than engine speed. When ground drive P.T.O. is installed, a second lever (2) is provided.

Three ground speed ranges are provided, selected by means of the P.T.O. range lever (1). The lever (2) is used to select ground drive.

ATTACHING P.T.O. DRIVEN EQUIPMENT

⚠ CAUTION ⚠

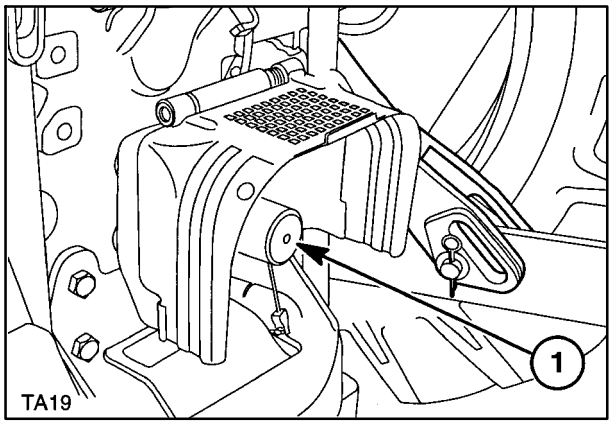
Before attaching or detaching equipment or changing the P.T.O. shaft:

- Firmly apply the parking brake.
- Ensure that **all** gearshift levers are in neutral.
- Disengage the P.T.O. (knob fully down) and wait until the P.T.O. and equipment stops. Switch off the engine before getting off the tractor.

With the engine stopped, the P.T.O. brake is released and the shaft may be turned by hand to aid implement shaft alignment.

Mount or hitch the equipment to the tractor as outlined in THREE-POINT HITCH on page 3-90.

Two types of P.T.O. guard are available. Both types of guard serve as a support for drive-line shields used with P.T.O.-driven equipment and provide for your safety. Do not modify the guard. A plastic P.T.O. cap (2) is also supplied and should always be installed over the shaft when the P.T.O. is not in use.



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TOWING THE TRACTOR

IMPORTANT: *The tractor should only be towed a short distance, such as out of a building. Do not tow on roadways or as a method of transport.*

IMPORTANT: *If it is necessary to tow the tractor, all* ***gear levers must*** *be moved to the* ***neutral position before*** *stopping the engine otherwise damage to transmission components may occur during towing. If creeper gears (reduction gear set) are fitted, then the selector control must be in the* ***off*** *position.*

Use a strong chain when towing the tractor. Tow the tractor from the rear using only the drawbar, rear tow hitch or the three-point hitch. Tow the tractor from the front using the tow pin in the front weights or front support. Have an operator steer and brake the tractor.

To avoid damaging the transmission or other components that turn but are not lubricated during towing, observe the following:

- Only tow a short distance
- Keep speed below 5 MPH (8 km/h)
- If possible, run the engine to provide lubrication and power steering.

IMPORTANT: *On MXM175 and MXM190 models the brakes are hydraulically power assisted. With the engine off, the brakes will still function but wth a higher pedal effort.*

⚠ CAUTION ⚠

Do not tow the tractor faster than 5 MPH (8 km/h). The steering is much slower and steering wheel effort is much greater without the engine running.

⚠ WARNING ⚠

Do not use cables or rope to tow the tractor. If the cable or rope breaks or slips, it may whip with sufficient force to cause serious injury. When using a chain, attach the chain with the hook open side facing up. If the hook slips, it will drop down instead of flying up.

NOTE: *Four wheel drive will be engaged if the engine is not running, regardless of the position of the 4WD activation switch.*

CARRYING THE TRACTOR ON A TRANSPORTER

Transport the tractor with all four wheels on a flat bed trailer or truck. Securely chain the tractor to the transporter.

IMPORTANT: *Do not chain around the four wheel drive shaft, steering cylinders, front wheel drive axle or other components that could be damaged by contacting the chain or by heavy loading.*

Use the drawbar or drawbar hanger for a rear tie down point.

IMPORTANT: *Cover the silencer outlet so that the wind does not spin the turbocharger and damage the bearings.*

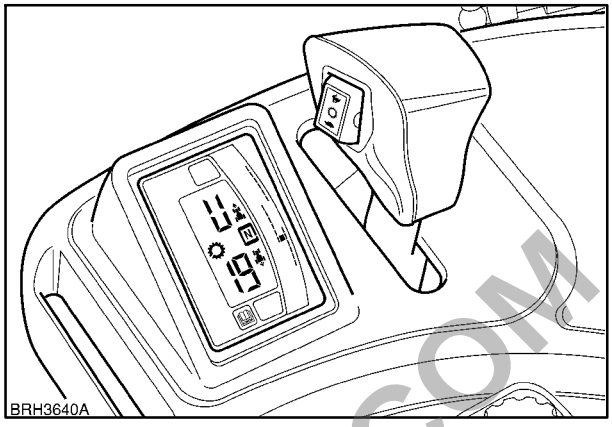
Turbocharger turbine freewheeling (turning without engine running) must be avoided since lubrication will not be provided to the turbocharger bearings.

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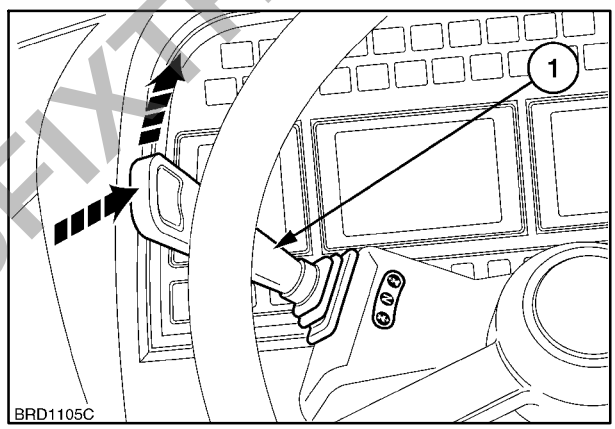
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Error Codes for Semi-Powershift Transmission

Code	Meaning
U19	Oil temperature too low.
U21	Engine speed too low (1200 ± 100 rev/min)
U22	Engine speed too high (1200 ± 100 rev/min)
U23	Shuttle lever not in forward drive position.
U26	Clutch pedal not fully released.
U31	Tractor wheel movement detected.
U36	Maximum allowed clutch calibration value exceeded.
U37	Engine speed dropped too soon during calibration.
U81	No mid-reverse synchro movement sensed.
U82	No low-high synchro movement sensed.
U83	Synchro potentiometer connectors swapped.
U84	Reverse and high synchro solenoid connectors swapped.
U85	Mid and low synchro solenoid connectors swapped.
U86	Mid-reverse synchro neutral error.
U87	Low-high synchro neutral error.
U88	Mid-reverse synchroniser calibration values out of tolerance.
U89	Low-high synchroniser calibration values out of tolerance.



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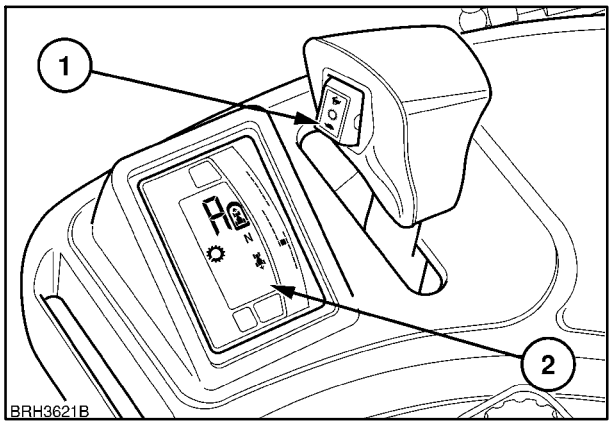
Clutch and Synchroniser Calibration

4. Move the shuttle lever (1) Figure 126, to the forward drive position.

5. Adjust engine speed, by means of the hand throttle, to 1200 ± 100 rev/min.

6. Press the top of the shift control to calibrate clutch pack 'A'. The display (2) will show 'A', indicating that clutch pack A is ready for calibration.

7. Press and hold in the downshift control (1) Figure 127, to calibrate clutch A. The display (2) will show a value for several seconds while engine speed stability is monitored and the synchronisers are shifted, then the value displayed will increase quite rapidly. Calibration is complete when the display alternates between the final value and the letter 'A'.



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ENGINE (continued)

PROBLEM	POSSIBLE CAUSE	CORRECTION
Engine lacks power	Engine overloaded.	Shift to lower gear, reduce draft load or ballast carried.
	Air cleaner restricted.	Service air cleaner.
	Low engine operating temperature.	Check thermostats.
	Engine overheats.	See Engine overheats.
	Clogged fuel filter(s).	Replace fuel filter element(s).
	Incorrect fuel.	Use correct type fuel.
	Malfunctioning fuel injectors.	See your authorised dealer.
	Malfunctioning fuel injection pump.	See your authorised dealer.
	Maximum 'no-load' speed set too low.	See your authorised dealer.
	Leaking air intake boost pipes or exhaust manifold.	Check and rectify or see your authorised dealer.
	Turbocharger malfunctioning.	See your authorised dealer.
	Implement incorrectly adjusted.	See implement Operator's Manual.
Engine knocks	Fuel injection pump timing.	See your authorised dealer.
	Low engine oil level.	Add oil, as required.
	Low engine oil pressure.	See your authorised dealer.
	Low engine operating temperature.	Check thermostats.
	Engine overheats.	See Engine overheats.
Engine overheats	Low engine oil level.	Add oil, as required.
	Low engine coolant level.	Fill coolant recovery tank. Check cooling system for leaks.
	Defective thermostat(s).	Check thermostat(s).
	Dirty/blocked radiator core.	Clean.
	Excessive engine overload.	Shift to lower gear, reduce draft load or ballast carried.

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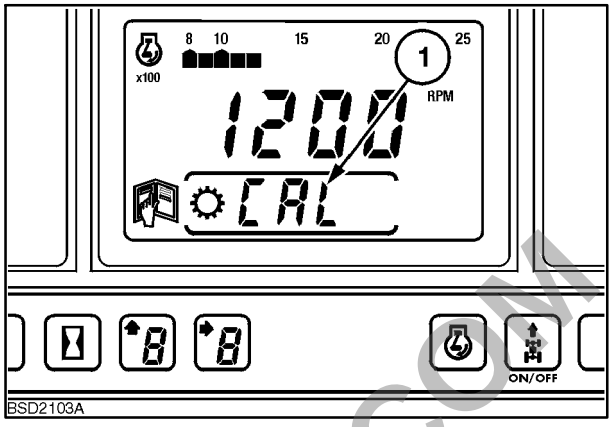
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FUEL SYSTEM		MXM120	MXM130	MXM140	MXM155	MXM175	MXM190
Injection pump type							
Bosch VE Rotary		Yes	Yes	Yes	Yes	-	-
Bosch VP 30 Rotary		-	-	-	-	Yes	Yes
Timing (+/- 0.5°)		2°	2°	2°	2°	2.5°	2.5°
Injector crack-off pressure	bar			270 - 278			
	lbf/in.^{2}			3915 - 4031			
COOLING SYSTEM							
Type				Pressurised with full flowby pass and recovery tank			
Thermostats		2	2	2	2	2	2
Begins to open at	° C	81	81	81	81	81	81
	° F	178	178	178	178	178	178
Fully open at	° C	95	95	95	95	95	95
	° F	203	203	203	203	203	203
Radiator pressure cap	bar	1.0	1.0	1.0	1.0	1.0	1.0
	lbf/in.^{2}	14.5	14.5	14.5	14.5	14.5	14.5
Vistronic fan							
Number of blades		7	7	7	7	7	7
Fan diameter	mm.	550	550	550	550	550	550
	in.	21.6	21.6	21.6	21.6	21.6	21.6

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5. 'CAL' will be displayed in the transmission display on the instrument panel. See Figures 118 or 119. Release the Powershift buttons.

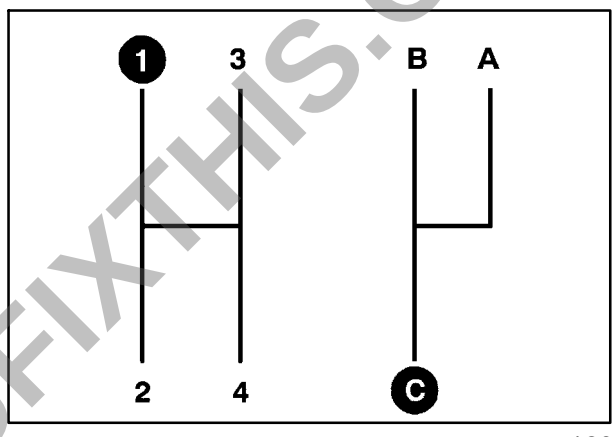


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6. Depress the clutch pedal and use the gear shift levers to select 1st. gear, high range (C), forward shuttle position –see Figure 120. Release the clutch pedal.

7. Adjust engine speed, by means of the hand throttle, to 1200 ± 100 rev/min.

The transmission is now ready for calibration.



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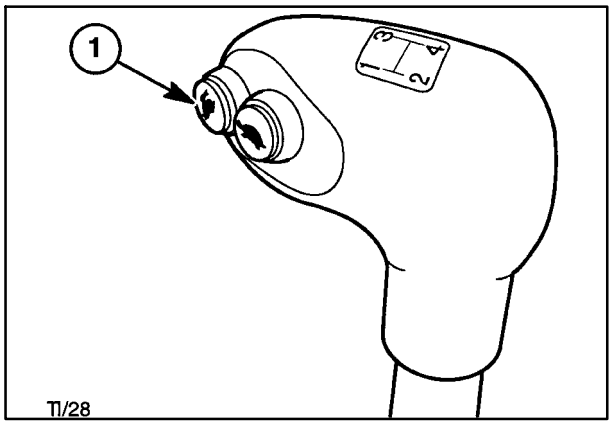
Upshift Drive Clutch Calibration

To calibrate the Upshift drive clutch:

1. Press and hold in the upshift button (1) on the main gearshift lever. If an error code ('U' followed by a two digit number) is displayed in the instrument panel, then the calibration conditions have not been met. See table on page 4–62 for explanation of error codes.

2. If calibration conditions are correct, 'Hi' will be briefly displayed followed by a numerical value. The number displayed will be a low value, gradually increasing until the reading is steady when a slight reduction in engine speed will be noted.

3. Release the upshift button.



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LUBRICANTS AND COOLANTS

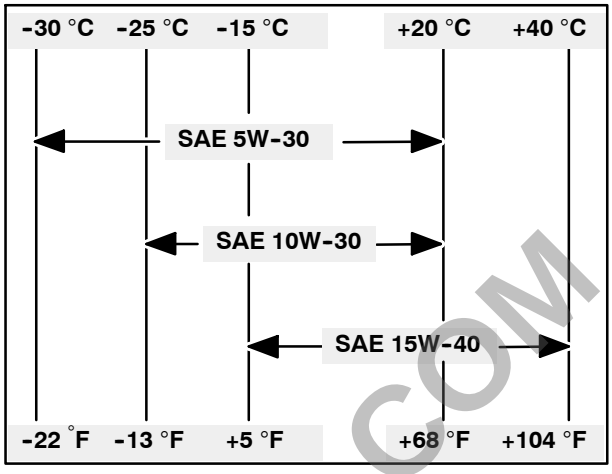
The correct engine oil viscosity grade is dependent upon ambient temperature. Refer to the chart on the right when selecting oil for your tractor engine.

NOTE: *In areas where prolonged periods of extreme temperatures are encountered, local lubricant practices are acceptable; such as the use of SAE 5W30 in extreme low temperatures or SAE 50 in extreme high temperatures.*

Sulphur in Fuel

The engine oil change period is shown in section 4. However, locally available fuel may have a high sulphur content, in which case the engine oil change period should be adjusted as follows:-

Sulphur Content %	***Oil Change Period***
Below 0.5	*Normal*
0.5 - 1.0	*Half the normal*
above 1.0	*One quarter normal.*



NOTE: *The use of fuel with a sulphur content above 1.3% is not recommended.*

RECOMMENDED FLUIDS AND APPLICATIONS	Akcela Specification	International Specification	Approximate Quantities
Engine Oil SAE (15W-40) SAE (10W-30)	No.1 Engine Oil MS1121	API CH-4, ACEA-E5	19 Litres (20 U.S. qts.)
Transmission, Rear Axle and Hydraulic System Oil -Synchro Shift -Two-Speed Powershift MXM120/130 -Semi and Full Powershift MXM140/155 -Semi and Full Powershift MXM175/190 -Full Powershift	Nexplore	MAT 3525	 65 Litres (17.2 U.S. gal) 73 Litres (19.3 U.S. gal) 80 Litres (21.1 U.S. gal) 90 Litres (23.8 U.S. gal) 100 Litres (26.4 U.S. gal)
Front Wheel Drive Oil Axle -MXM120-MXM140 -MXM155-MXM190 Hubs -MXM120-MXM140 - Per Hub -MXM155-MXM190 - Per Hub	Nexplore	MAT 3525	 9 Litres (9.5 U.S. qts.) 14 Litres (14.8 U.S. qts.) 1.7 Litres (1.8 U.S. qts.) 2.15 Litres (2.3 U.S. qts.)
Engine Radiator Coolant System Capacity *Water Coolant	Premium Antifreeze MS1710	Ethylene Glycol	26 Litres (6.9 U.S. gal.) 50% 50%
Air Conditioning Compressor Oil Low Viscosity Oil SP10	n/a	PAG-E13, ISO100 Viscosity	As Required
Brake/Clutch Oil	LHM Fluid		As required
Grease Fittings and Bearings	Multi-Purpose Grease 251 HEP	NLGI2-251 EP-M	As Required

***NOTE:** Use antifreeeze (50%) plus clean, soft water (50%). In order to reduce deposits and corrosion, water used in the cooling system should not exceed the following limits:*

Total Hardness:	**Chlorides**	**Sulphates**
300 parts per million	100 parts per million	100 parts per million

***IMPORTANT:** See Section 4 regarding use of coolant inhibitor where the above mentioned antifreeze is not available. In those hot countries where antifreeze is not available, use **clean** water only.*

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Before starting the engine, always carry out the following procedure:

- Sit in the driver's seat.
- Ensure that the parking brake is firmly applied.
- Ensure that **all** gearshift levers are in neutral. (Synchro Shift and Two-speed Powershift)
- Ensure the shuttle lever is in the neutral position.
- Ensure the P.T.O. is disengaged.
- Place the remote control valve levers in the neutral position.
- Move the hydraulic lift control lever fully forward. (Synchro Shift only)

⚠ CAUTION ⚠

Check the area beneath the equipment to ensure that no injury or damage will be caused when equipment is lowered.

- Depress the clutch pedal.

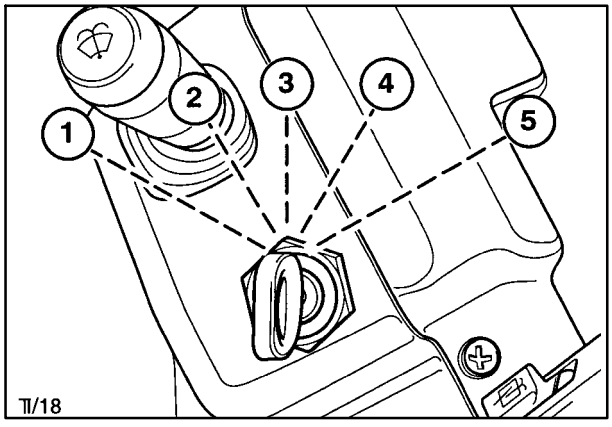
IMPORTANT: *The high operating speed of the turbo-charger makes it essential that adequate lubrication is assured when the engine is started. Therefore, idle the engine at 1000 rev/min for approximately one minute before driving the tractor.*

Starting in warm weather or when the engine is hot

- Open the hand throttle halfway, depress the clutch and turn the key-start switch fully clockwise to position (5) to operate the starting motor. Crank the engine until it starts but do not operate the starting motor for more than 60 seconds.

NOTE: *Once the starter motor has been operated, it is necessary to return the key-start switch back to the 'off' position before the starting motor can be re-activated.*

- Return the throttle to the idle position and check that all warning lights extinguish and gauge readings are normal.



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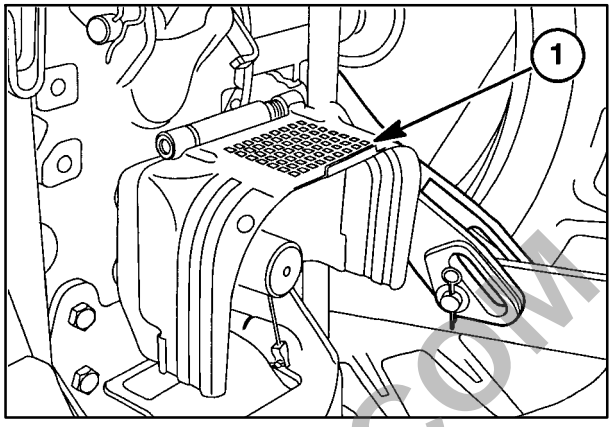
A flip-up P.T.O. guard is fitted as standard. The guard (1), has a special spring-loaded hinge that will retain the guard in any one of several points between the horizontal and fully raised positions.

To connect P.T.O.-driven equipment to the P.T.O. shaft, tilt the guard up for access. Pull the plastic cap from the shaft and store it in a convenient place.

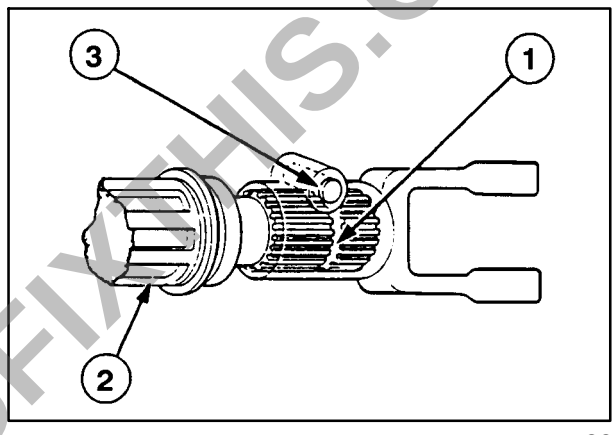
NOTE: *Tractors with slider type, vertically adjustable drawbars have a flip-up P.T.O. guard plate fixed to the slider frame. See 'Slider Frame Drawbars' on page 3-110.*

Attach the implement to the P.T.O. shaft, ensuring that the implement driveshaft coupler lock pin (3) or detent balls engage the groove in the P.T.O. shaft (2). If the coupler does not have a locking arrangement, pin the coupler to the shaft. Lower the flip-up guard.

IMPORTANT: *After attaching mounted equipment, carefully raise and lower using Position Control and check clearances and P.T.O. shaft slide range and articulation. When attaching trailed equipment, ensure that the drawbar is correctly set. See 'Swinging Drawbar' on page 3-104.*



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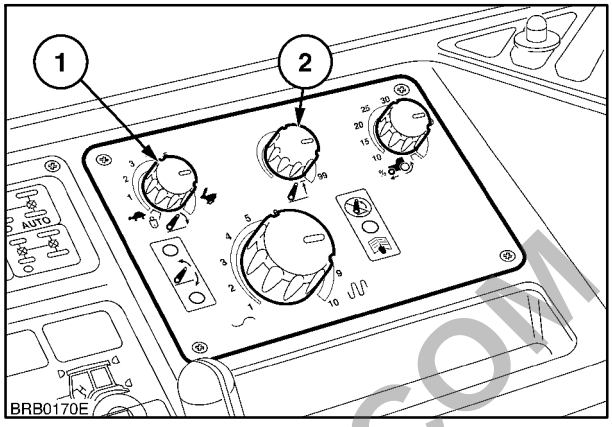
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TRANSPORT LOCK AND RIDE CONTROL

Transport Lock

When transporting equipment on the 3-point linkage, select positon control, raise the linkage to the transport position and turn the **drop rate control knob** (1), fully anti-clockwise to the lock position (padlock symbol). This will prevent the implement from accidentally lowering and damaging the road surface.

IMPORTANT: *With transport lock engaged the fast raise/lower switch can only be used to raise the 3-point linkage to the transport position and is then disabled. To re-enable switch operation, disengage transport lock and re-capture the hitch using the hitch position control or the fast raise/lower switch. See 'Hitch Disabled Warning Light', page 3-62.*



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Ride Control

When transporting equipment on the 3-point hitch, implement bounce can lead to lack of steering control at transport speeds. With Ride Control selected, when the front wheels hit a bump, causing the front of the tractor to rise, the hydraulic system will immediately react to counter the movement and minimise implement bounce to provide a smoother ride.

To engage Ride Control, turn the **drop rate control knob** (1) Figure 120 , fully anti-clockwise to the transport lock position. Press the top of the raise/lower switch to raise the implement to the height set by the **height limit control** (2).

Ride Control will only operate at speeds above 8 km/h (5 MPH). When tractor speed exceeds 8 km/h (5 MPH), the implement will drop by 4 – 5 points (as displayed on the instrument panel) as the hydraulic system makes corrections to counteract implement bounce. Corrections are denoted by the movement indicator lights flashing. When tractor speed falls below 8 km/h (5 MPH) the implement will raise again to the height set by the height limit control and Ride Control will become inoperative.

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