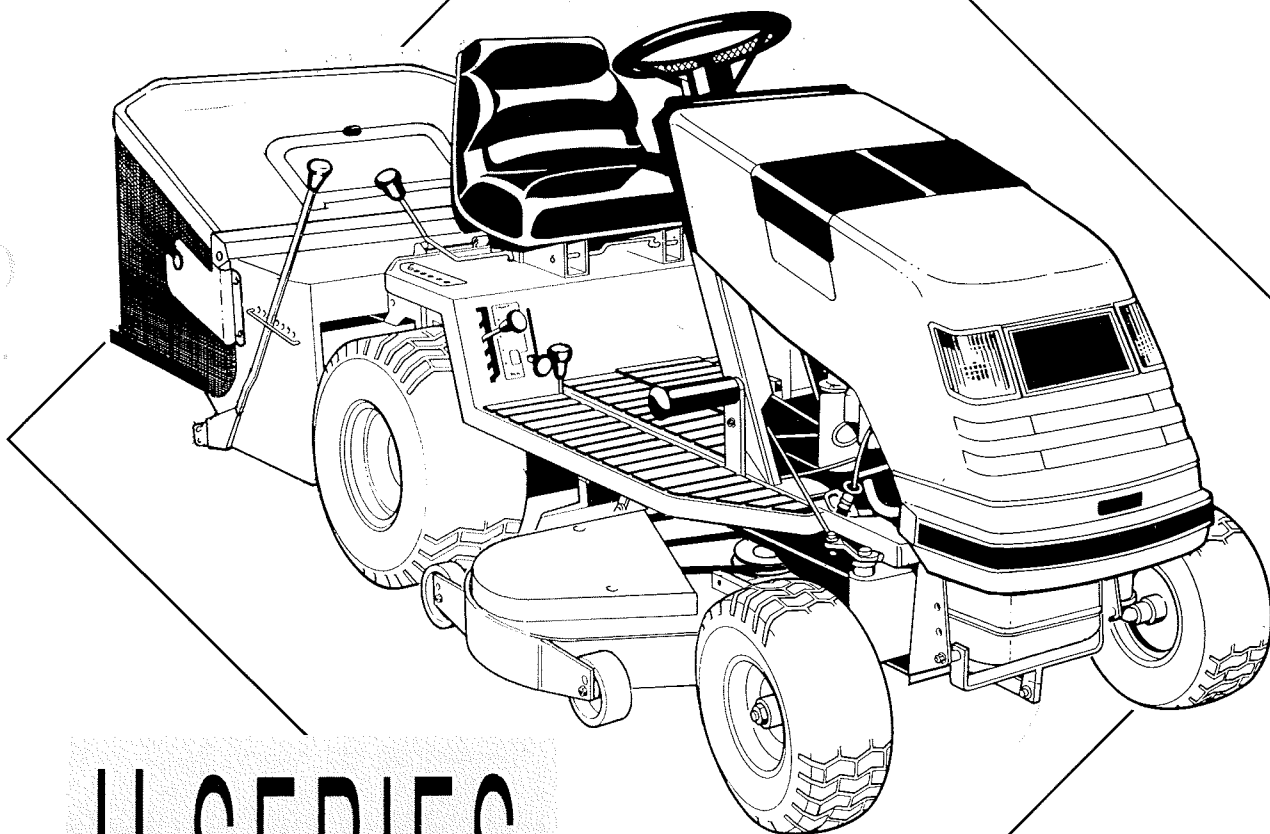


HAYTER



H-SERIES

GARDEN
TRACTOR

INSTRUCTION MANUAL

CONTENTS

DASHBOARD

Indicator Lights: Brake, Cutter Off, Cutter On.
WARNING, Ignition, Headlights, Battery, Charging.

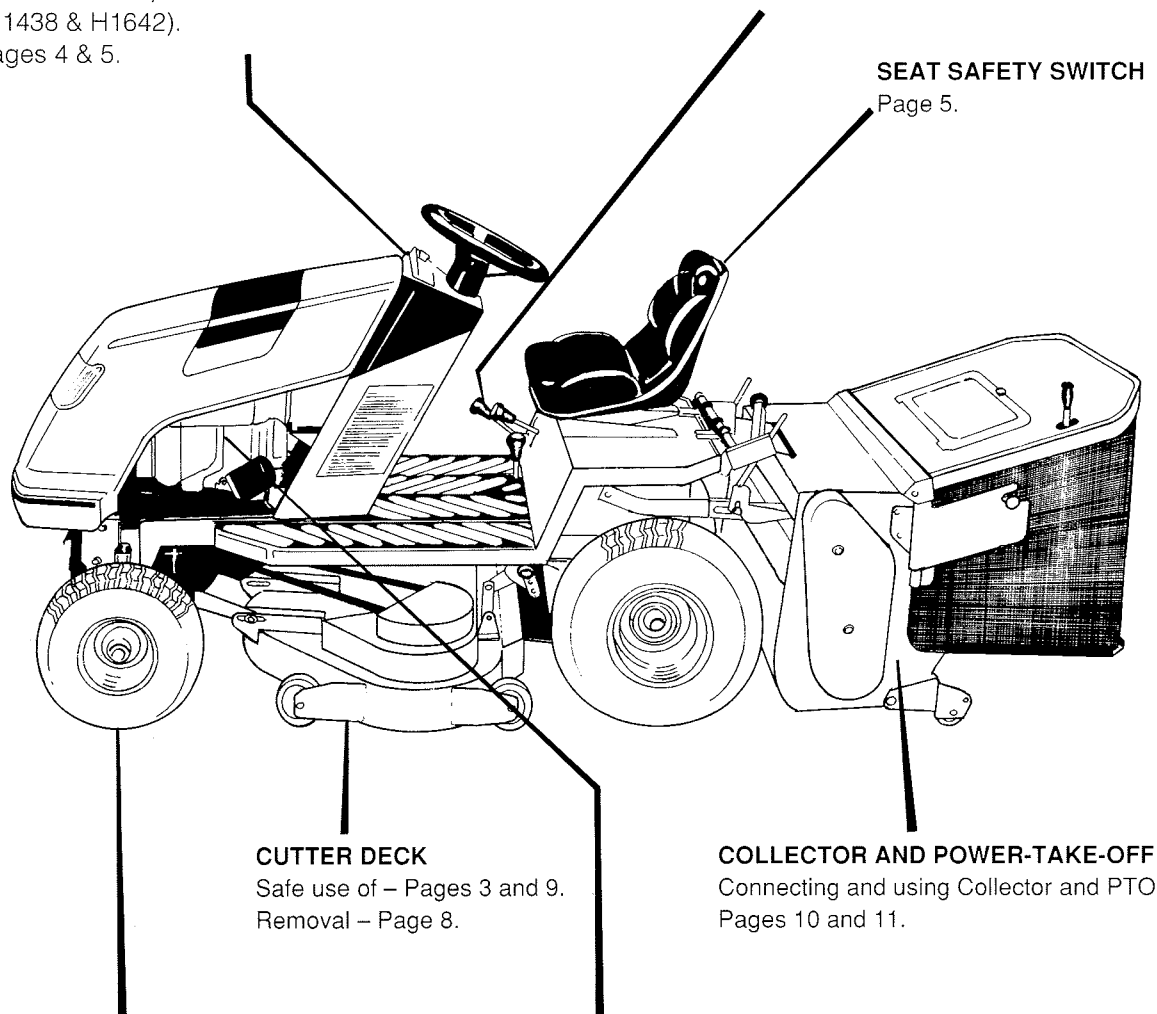
Switches and Controls: Key Ignition, Cutter ON/OFF,
Throttle Control, Choke.
(H1438 & H1642).
Pages 4 & 5.

CONTROL LEVERS

Gear Lever (Five forward and Reverse), Cutter
Height Adjustment Lever, Power-Take-Off Lever
(Collector ON/OFF), Handbrake and seat adjustment.
See Pages 6 & 7.

SEAT SAFETY SWITCH

Page 5.



CUTTER DECK

Safe use of – Pages 3 and 9.
Removal – Page 8.

COLLECTOR AND POWER-TAKE-OFF

Connecting and using Collector and PTO.
Pages 10 and 11.

TYRES AND BATTERY

Tyres – Back Cover.
Battery – Page 7.

ENGINE AND FUEL

Engine – Pages 3, 8 and Back Cover.
Fuel and Safe Filling – Page 3.
Oil – Page 3 and Back Cover.

CONTROL AND SAFE USE OF YOUR TRACTOR

Read Pages 3 and 9 carefully and follow the advice given.

Any alterations to specifications since this was published in February 1993 will be included on
Supplementary Sheets at the back of this Handbook.

THE SAFE OPERATION OF YOUR H-SERIES GARDEN TRACTOR

BEFORE STARTING THIS TRACTOR

Any operator should:

Read this Handbook thoroughly and familiarize yourself with the controls. Be certain you know how to stop the engine in an emergency and that you understand and observe the safety instructions on this summary page AND the pages that follow.

Check that the engine is filled to the correct level with an oil approved by the engine manufacturer.

DO NOT CHANGE GEAR ON THE MOVE
– see page 6

Ensure the fuel tank is filled with preferably lead-free petrol **BEFORE** starting the engine. Mop up spillages or wait until they have evaporated. Never refill with the engine running. Never smoke or expose a naked flame when handling or near petrol.

Check the area to be mowed for stones, sticks and any loose object that could be struck and thrown by the blades.

Note the position of any stumps, manhole covers, roots, depressions etc and avoid them to prevent damaging the cutting blades.

Wear substantial footwear and avoid loose clothing that could become entangled in the mechanisms.

Use good sense at all times to ensure this tractor is in safe and serviceable condition – fit only manufacturer's original spares.

Do not run the engine in a confined space such as a garage or shed.

ALWAYS DISCONNECT BOTH BATTERY TERMINALS before attempting any work or adjustment under the bonnet. Work carried out by unauthorised personnel may invalidate your warranties.

FUEL AND FILLING We recommend that you use standard UNLEADED fuel at all times although the engine will run on 4 star. **TAKE CARE WHEN FILLING** – do not fill when the engine is hot or running. Wipe up spills **BEFORE** starting.

**OBSERVE THESE OPERATING RULES:
DO NOT CARRY PASSENGERS.**

The cutter deck on this mower is very quiet and almost vibration free. Whilst the engine is

running **NEVER ASSUME THAT THE BLADES ARE STATIONARY.**

ALWAYS KEEP HANDS AND FEET AWAY FROM THE MOVING BLADES.

Only switch cutter blades ON when you have arrived at the area to be cut. Never drive to and from the area to be cut with cutter blades engaged.

Do not allow children, pets or even adults **to approach the tractor** when the blades are rotating. There is a red flashing reminder light on the dashboard that operates when the cutter deck is engaged; check each time that it is functioning – if not replace the LED unit – but never rely solely on the indication of this light.

Always Switch OFF the Blades and Power-Take-Off BEFORE dismounting.

SWITCH OFF THE ENGINE, remove the ignition key and remove sparking plug leads:-

BEFORE attempting to clear a blockage or checking the condition of cutter blades or belts,

BEFORE checking, cleaning or working on any other part of the tractor.

AFTER STRIKING A FOREIGN OBJECT or if the TRACTOR STARTS TO VIBRATE ABNORMALLY – inspect the tractor for damage and consult your dealer to make necessary repairs.

STABILITY

The H-Series is a remarkably stable TRACTOR – it is not however a Go-Kart or an All-Terrain Vehicle. Do not let the light and positive steering and small turning circle encourage you to attempt tight turns at speed.

MOW UP AND DOWN SLOPES OF MORE THAN 10 degrees – NOT ACROSS.

Always select a suitably low gear before tackling any slope; avoid abrupt stops and starts. Take particular care on steep or wet slopes – exercise caution and use common sense at all times.

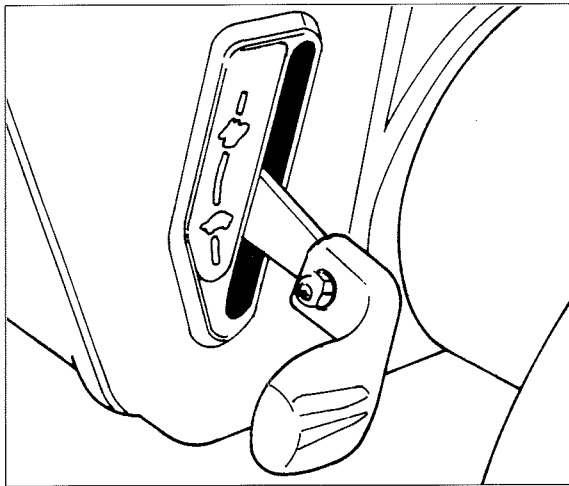
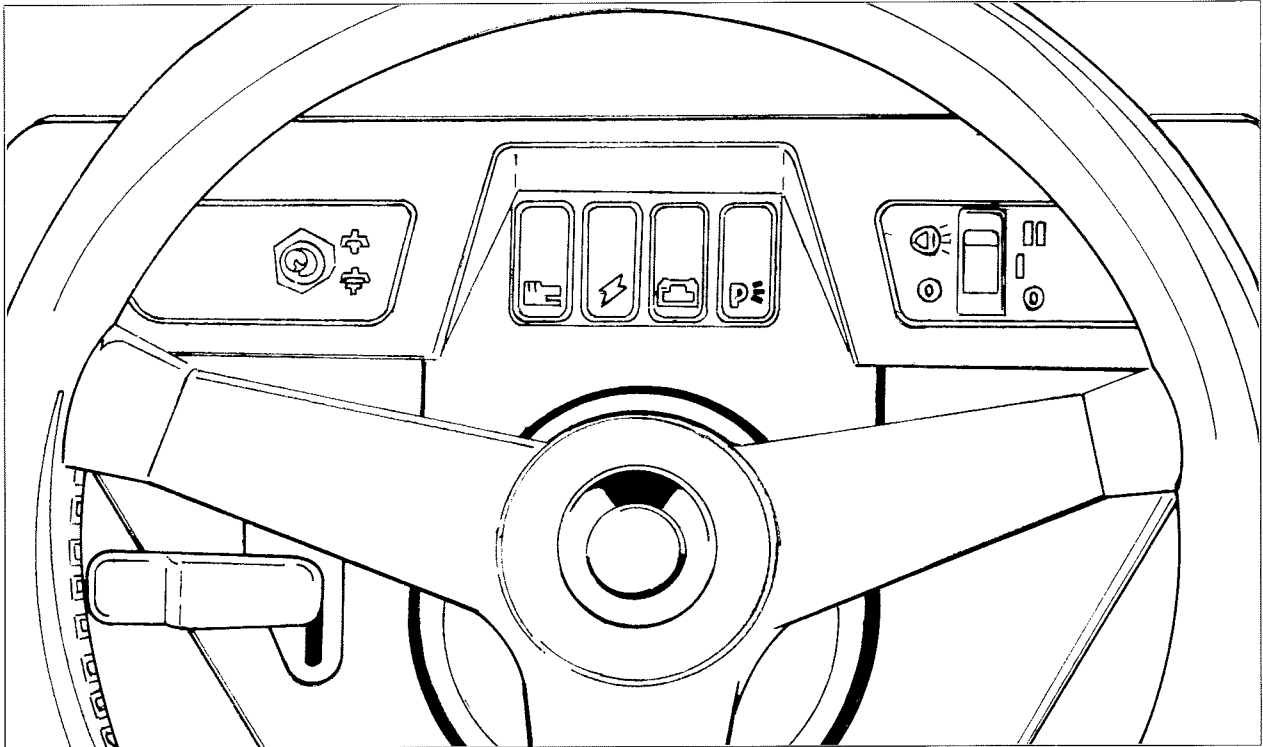
Do not alter factory-set engine governors.

Do not leave the tractor unattended and running.

Remove Ignition Key to prevent use or joy-riding by children.

Do not put hands near Moving Belts or the Power-Take-Off pulley.

CONTROLS – DASHBOARD

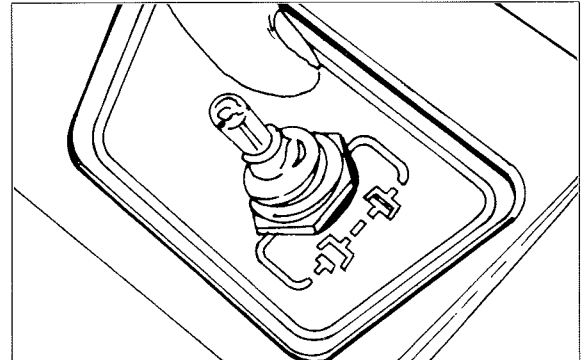


THROTTLE

The lever is pushed forward and up for Fast and back and down for Slow. For mowing the tractor should be operated on the fast setting at all times.

CHOKE

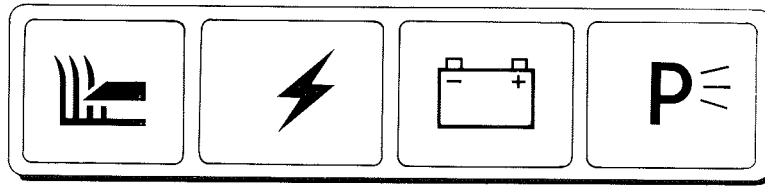
An independent choke is fitted to the H1438 and the H1642 models. This choke should be used in combination with a fast throttle setting to start a cold engine. It should be cancelled as soon as possible. Do not use choke on a warm engine as it will tend to flood.



CUTTER ON/OFF SWITCH

The cutter switch controls the electro-magnetic blade clutch. It works like a light switch (but in reverse) – UP for ON and DOWN for OFF. Although it always returns to the central position and the cutter deck will automatically be turned off when the engine is switched off, however it is not good practice to rely on this. The cutter deck should always be switched OFF as soon as you have finished cutting and certainly BEFORE stopping the engine or getting off the tractor.

DASHLIGHTS



A. Is the 'Cutter On' indicator and flashes continuously when the cutter is running.

B. Is the 'Ignition On' indicator which goes out when the cutter is running.

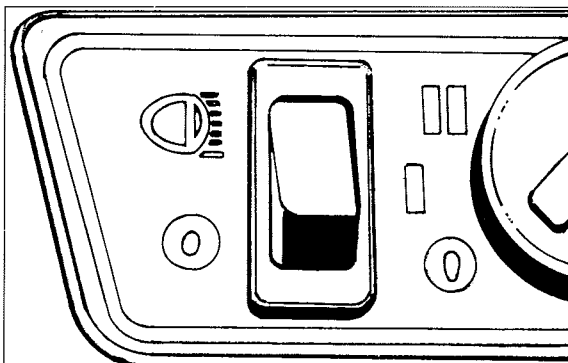
C. Is the 'Charge' indicator which comes on only when the battery is charged. (If this indicator is not lit by the end of a mowing session you should remove the battery for charging)

D. Is the 'Brake On' indicator.

IGNITION

This Key Start controls both ignition and the starter motor. Insert the key and turn to the first position and the dashlights will come on (check that all is ready to start) then turn further to activate the starter motor. Release immediately the engine starts.

To stop, turn the key to the left (having first switched off both cutter and PTO) **IT IS ALWAYS GOOD PRACTICE TO REMOVE THE KEY AND KEEP IT SAFELY.** As with a car, it is important to prevent unauthorised use by children, who could injure themselves.



HEADLIGHTS SWITCH

The headlights are turned ON by switching the rocker switch down. The headlights will not operate when the ignition is off. It is good practice to turn the lights OFF before starting or stopping.

SAFETY SWITCHES

SEAT SAFETY SWITCH

Your Hayter H-Series Tractor is fitted with a switch that will turn OFF the engine and the cutter deck should you dismount. This is a safety back-up and should not be used voluntarily.

If you want to dismount from the tractor, and want the engine to continue running, first switch OFF the cutter deck, then apply the Parking Brake. You can now dismount, but **DO NOT LEAVE THE TRACTOR STANDING WITH ENGINE IDLING FOR ANY LENGTH OF TIME.** Should you try and dismount with the parking brake ON and the cutter deck ON, the cutter deck will cut out after a delay of a couple of seconds. **DO NOT RELY ON THIS BACK-UP CUT-OUT, THAT DELAY OF A FEW SECONDS COULD STILL ALLOW AN ACCIDENT.**

BRAKE PEDAL SAFETY SWITCH

Your Hayter H-Series Tractor is fitted with a safety switch under the brake/clutch pedal. This switch 'earths' the ignition when the brake is not applied. The engine will only start while the brake/clutch is depressed. Two red lights on the dash (Ignition – second Right and Brake – far Right) indicate that the engine is ready to start.

CONTROLS – LEVERS

THE GEARS

Your Hayter H-Series Tractor has a heavy duty transaxle with five forward speeds and reverse. These gears are selected with the lever to the right of the driver. The tractor can be driven off in any of the forward gears, their purpose is to govern the speed of the tractor. *Never change gear on the move as this will cause damage to the gears.* Always stop the tractor and depress the clutch/brake.

Select NEUTRAL (hollow circle symbol) before starting the tractor. Select the gear you require and then slowly release the brake/clutch (see Page 9). Get used to this by practising in LOW gears first. Take great care when starting in fourth or fifth.

FIRST AND SECOND gear are for slow manoeuvring and for very heavy load conditions such as cutting long, dense, wet grass.

SECOND AND THIRD gear are for normal cutting or towing. FIFTH is a fast TRANSPORT gear and should not normally be used whilst cutting.

REVERSE is a low ratio gear for manoeuvring and is selected only when the tractor has stopped, by pulling the lever up, towards the seat, and back. Being HEAVY DUTY there are four locating lugs on this gear and it may not engage first attempt if so slightly lift the clutch pedal while engaging.

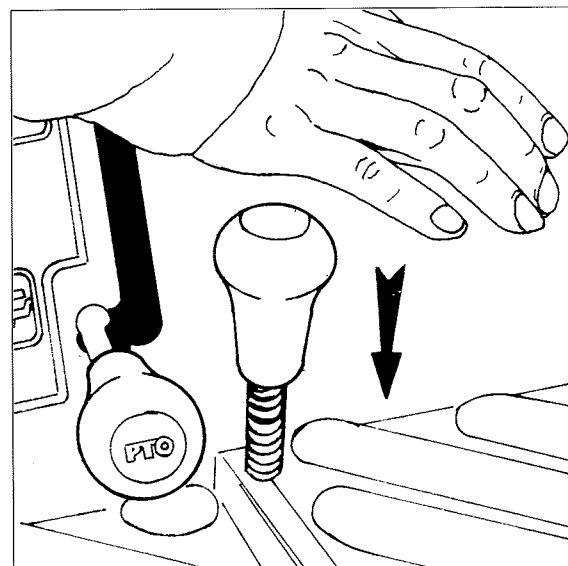
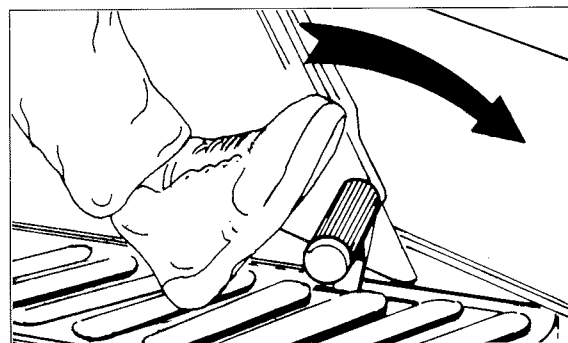
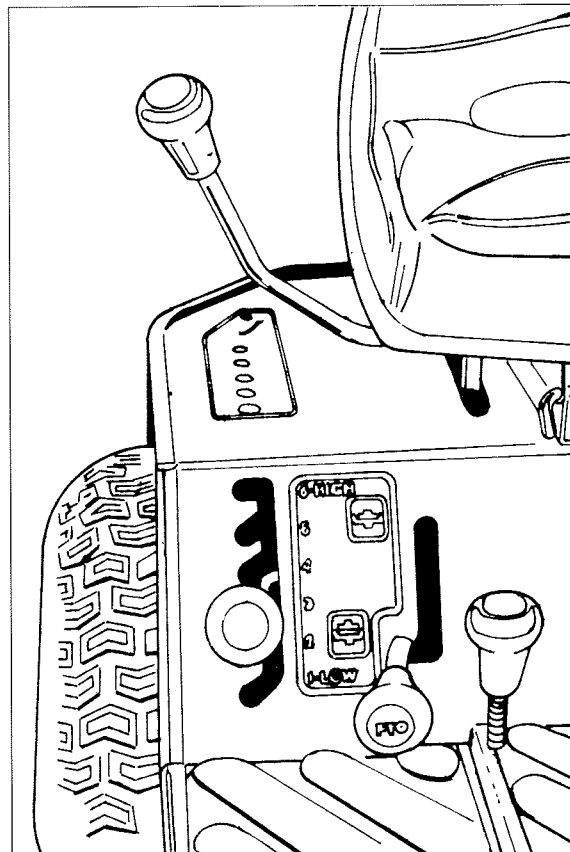
BRAKE/CLUTCH PEDAL

This pedal controls both the clutch and the brake and operates in two stages; the first and upper part of the travel is the clutch, the second and lower part is the brake. A safety switch (see Page 5) under the brake will not permit the engine to start UNLESS THE BRAKE IS APPLIED.

PARKING BRAKE

To apply the Parking Brake, this knob should be pressed down and held while the Brake/Clutch pedal is fully depressed and then released. The Parking Brake will lock the foot pedal in the ON (down) position.

The Parking Brake is released by depressing the brake/clutch pedal.



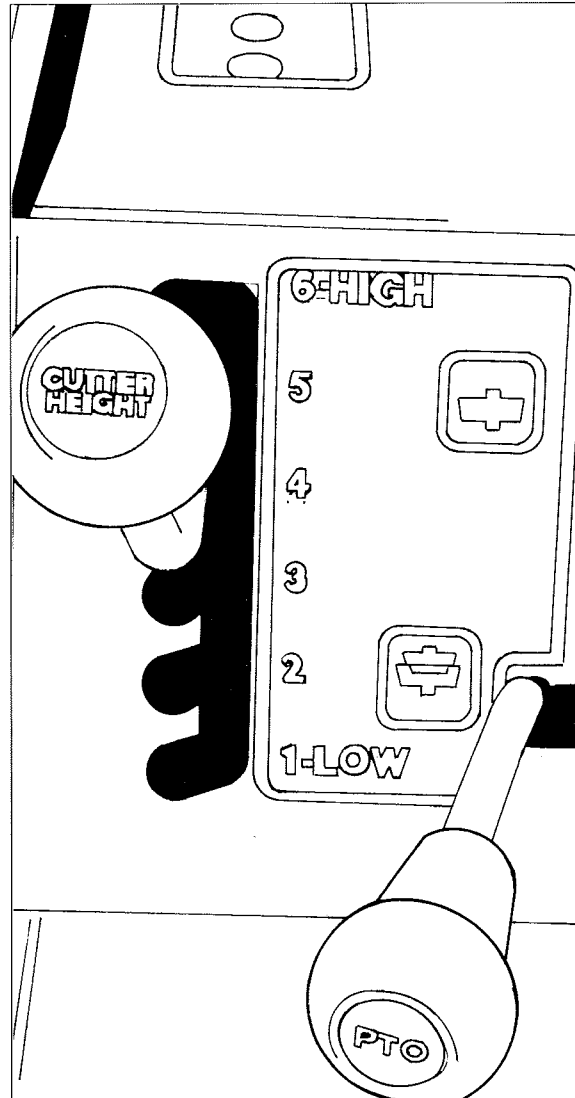
CUTTER HEIGHT LEVER

This lever is used to select the cutting height – down for LOW, up for HIGH (from about $\frac{1}{2}$ " to about $3\frac{3}{4}$ "). A HIGH position (5 or 6) should be selected before turning on the 'Cutter Engage' Switch. Make sure that no one is standing near (see Instructions on Page 3). The six cutting heights are numbered. We suggest you select position 2 or 3 for mowing lawns and position 4 or 5 for long grass and paddocks. In practice you will discover the height you need for each area. In wet or heavy conditions it is advisable to select a higher position than you would in light or dry conditions.

It is always a good idea to switch the cutter deck OFF and raise the Cutting Height Lever to the highest position before driving the tractor from one part of your grounds to another – this will limit the possibility of damage to the deck that could result from hitting an obstacle at speed.

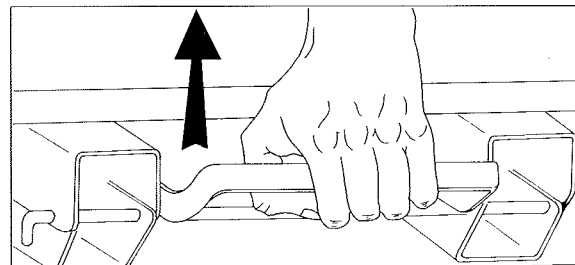
POWER-TAKE-OFF (P.T.O.)

Pull the lever UP to engage the PTO and DOWN and to the right to disengage. This is an ON/OFF lever for the powered collector. Always have this lever in the DISENGAGED POSITION when you are not collecting. Do not put hands near moving pulleys and belts (see Instructions on Page 3).



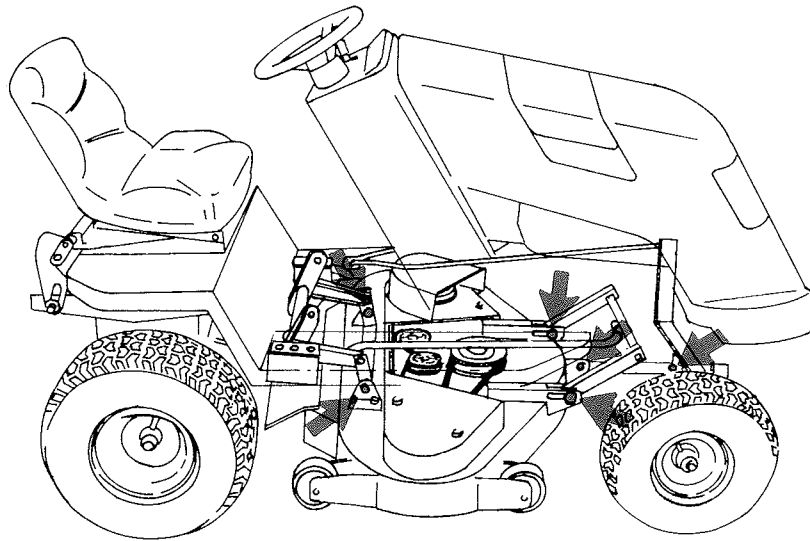
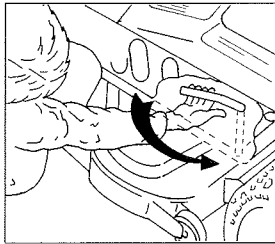
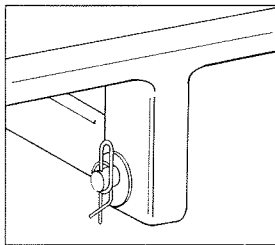
SEAT ADJUSTMENT

The seat can be adjusted forward to suit your driving position. Simply pull the lever up and slide backwards or forwards until the desired position is achieved.



BATTERY

Your Hayter H-Series Tractor is fitted with a heavy duty 12 volt automotive battery which is charged from the engine. It has quick release toggle levers – BLUE for NEUTRAL and RED for POSITIVE – so the battery can quickly be removed for charging should it be necessary after a long winter's lay-off. Always take the negative (BLUE) terminal off first when removing the battery, and put it on last.



REMOVAL OF THE CUTTER DECK

The Cutter Deck should be removed to replace blades or to give greater clearance when driving or towing over uneven ground.

Follow this sequence:

Put cutter height adjustment lever to lowest position.

De-tension the cutter drive belt with the lever under the left (nearside) running board. Pull the lever forwards until it points towards the front.

Remove the **three securing pins (arrowed)** from the front of the cutter deck by pulling out the clips and sliding the pins out.

Remove the **two pins (arrowed)** from the back of the deck.

Slip the cutter drive belt off the engine pulley. Slide out the deck.

If you are going to use the tractor with the deck removed:

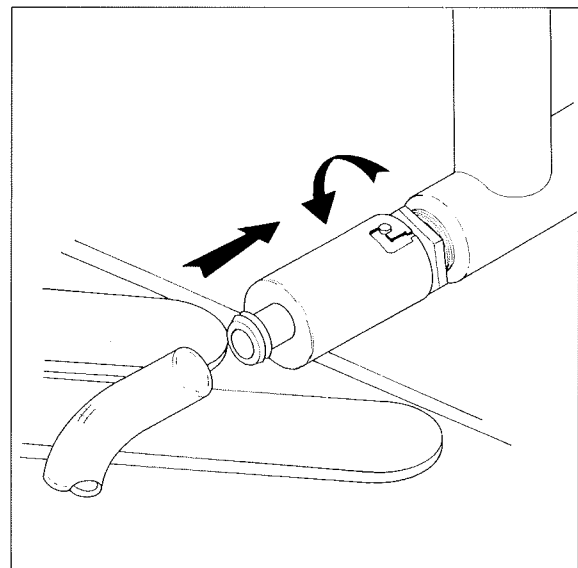
- Remove the securing bar from the front of the tractor and refit to the cutter deck.
- Replace all the pins on the brackets on the cutter deck and secure with the clips.
- Store the deck on planks of timber to keep it off the ground.

When replacing the cutter deck, remember to re-tension the belt with the lever under the running board. **DO NOT ADJUST TENSION ON THE CUTTER BELT OR CHANGE THE BELT FOR A NON H-SERIES REPLACEMENT.** Your dealer has an instrument for measuring belt tension – it is a job for the professional.

OIL DRAINING.

Your H Series tractor comes complete with an oil drain adaptor/cover which operates by hand. To drain:

- Fit short length of 1/2" hose (supplied in the tool kit) over the nozzle of the drain cover and direct the other end to a can or bowl big enough to take the contents of the sump.
- Press the drain cover in, turn to the left and release – the oil will now flow.
- When the sump is drained, press in and turn the cover to the right. Remove and store the hose for the next use.
- Refill with oil to engine manufacturer's instructions.



ALWAYS READ AND FOLLOW THE ENGINE MANUFACTURER'S INSTRUCTIONS ON ALL MATTERS RELATING TO USE AND SERVICING.

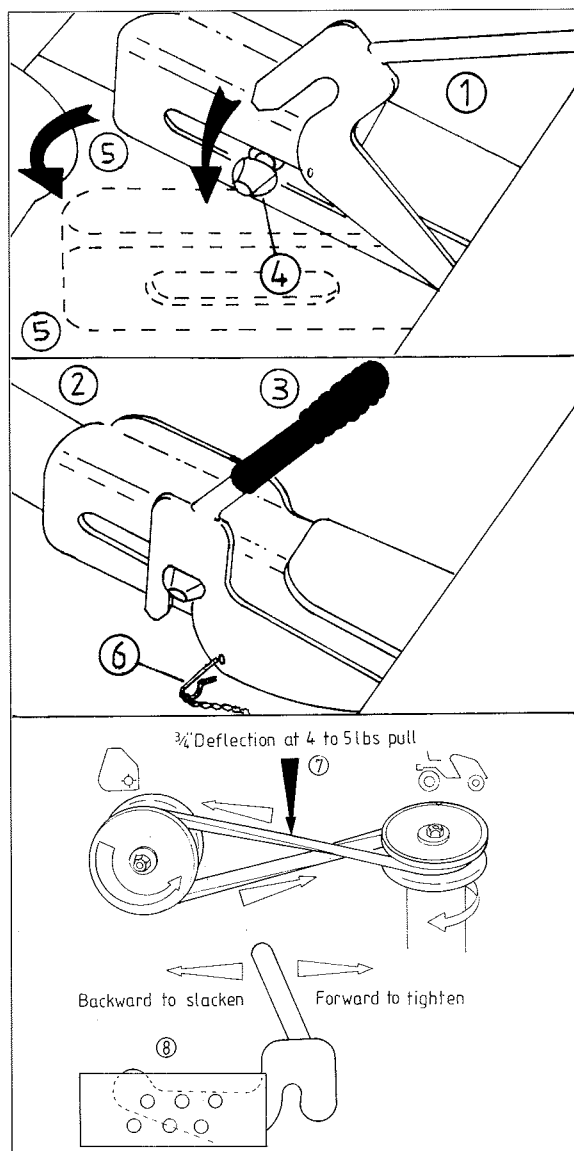
STARTING AND USING YOUR H-SERIES TRACTOR. INSTRUCTIONS FOR USE FROM START TO STOP

BEFORE EMBARKING ON THIS, READ ALL THE FOREGOING PAGES – FAMILIARISE YOURSELF WITH THE CONTROLS AND PAY PARTICULAR ATTENTION TO PAGE 3.

KNOW HOW TO STOP BEFORE YOU START!

1. Get on your tractor and make sure you are comfortable and can reach all the controls. Ensure that the P.T.O. is disengaged and that the parking brake is engaged. SELECT NEUTRAL.
 2. ADJUST THROTTLE CONTROL TO THE FAST POSITION. With a cold engine also select Choke. A warm engine will start on the Fast throttle setting only.
 3. Insert key and TURN IGNITION TO THE RIGHT (first position). The Ignition and Brake indicator lights on the dash will illuminate showing the tractor is ready to start – if the lights do not illuminate ensure that the brake is applied (there is a safety cut-out on the brake).
 4. TURN IGNITION FURTHER to operate the starter motor. If the engine does not start first time, REPEAT.
 5. DEPRESS CLUTCH/BRAKE TO CANCEL HANDBRAKE.
 6. CANCEL 'CHOKE' AND SELECT FAST SETTING when the engine is running well.
 7. SELECT THE GEAR (low if you are using the tractor for the first time).
 8. BEFORE you move off RAISE THE CUTTER TO THE HIGHEST POSITION – this will minimise the chances of damage whilst moving to the area to be cut.
 9. To move off – RAISE THE CLUTCH/BRAKE PEDAL SLOWLY (taking particular care if you have selected a high gear) and move off.
 10. When you have reached the area to be cut, make sure the cutter is in the raised position and nobody is near the tractor, then TURN THE CUTTER SWITCH UP briefly – you will hear the cutters engaging.
 11. SELECT CUTTING HEIGHT – second or third lowest for dry lawns, higher for wet or longer grass.
- IF USING THE POWERED COLLECTOR READ AND FOLLOW THE INSTRUCTIONS ON PAGES 10 AND 11)**
12. TO STOP CUTTING, RAISE CUTTER DECK TO A HIGH POSITION and TURN THE CUTTER SWITCH OFF (DOWN).
 13. Drive to where you intend to leave your tractor, stop and APPLY PARKING BRAKE.
 14. Select NEUTRAL, put THROTTLE TO LOW and ensure that the cutters and Power-Take-Off are switched off.
 15. TURN OFF IGNITION. Your tractor will stop.
 16. REMOVE KEY FROM IGNITION and keep in a safe place to prevent dangerous and unauthorised use by children.

POWERED COLLECTOR



CONNECTION

To connect the Powered Collector to the H-Series tractor, ensure that both are on an even surface with the Locking Levers (1) on the collector facing the Trailing Arms (2) on the tractor. Move the collector manually to the tractor. Lower the Trailing Arms using the telescopically adjustable lever to the left of the seat.

At the end of each Trailing Arm you will find a Locating Peg (4). Fit the Hinged Channels (5) on either side of the Powered Collector over these pegs and position so the Locking Levers match the Locating Pegs.

TO INSTALL THE COLLECTOR DRIVE BELT (see diagram below left) Place the Drive Belt over the PTO pulley and standing behind and facing the tractor, lean over the tractor and extend the belt with both hands parallel to the ground. Now twist the belt to form a figure '8' –

the right-hand up and the left-hand down. In this position place the other end of the belt over the Powered Collector Pulley. *Be sure that this is installed the right way round otherwise the brush will work in reverse and collection will be poor!*

Engage the Locating Levers over the Locating Pegs (an Extension Lever (3) is supplied to give you leverage) and finally insert the Securing Pins (6)

To disconnect, reverse this procedure.

PTO DRIVE BELT TENSION

Engaging the Locating Levers tensions the belt which should not be run too tight – to check the tension there should be 3/4" deflection with light finger pressure (4-5lbs) at a midway point between PTO pulley and Sweeper pulley (7).

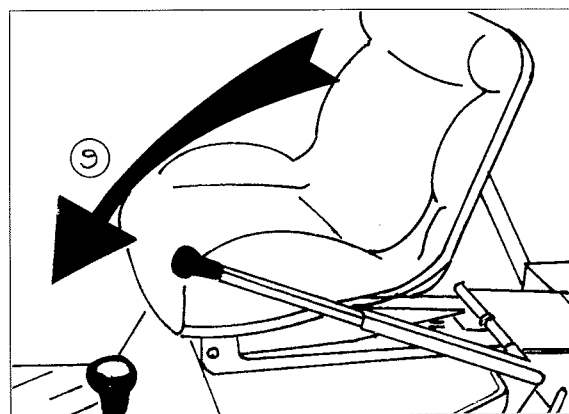
If tension needs adjustment, disconnect the collector and the adjustment holes (8) will be found on the inside of the Locating Channels. Adjust by movement of one lever at a time by one hole at a time, alternate sides. There should never be more than one hole difference from left to right.

If in doubt, please contact your dealer.

TO USE: RAISE SWEEPER TO THE TRANSPORT POSITION

A Lever (9) to the driver's left-hand raises the Powered Collector to the transport position. This lever telescopically extends for greater leverage. We recommend that you drive to and from the area to be swept with the Powered Collector in this transport position and with the P.T.O. disengaged.

When you reach the area to be swept, lower the collector and then engage the brushes by pushing the sprung PTO lever to the left to release and engage.



ALWAYS DISENGAGE THE PTO BEFORE RAISING THE COLLECTOR.

LOWER THE COLLECTOR

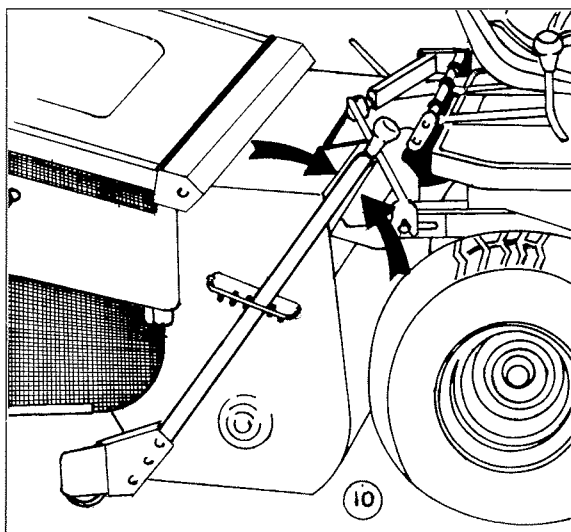
Using the telescopically extending handle, lower the collector.

ADJUST THE SWEEPING HEIGHT (10)

Select a sweeping height appropriate to the conditions and the height of cut. TO GET THE BEST SWEEPING PERFORMANCE AND PRESERVE THE BRUSHES, ALWAYS SELECT THE HIGHEST SETTING that works – START HIGH and adjust down until the brushes start to collect.

TIP (11)

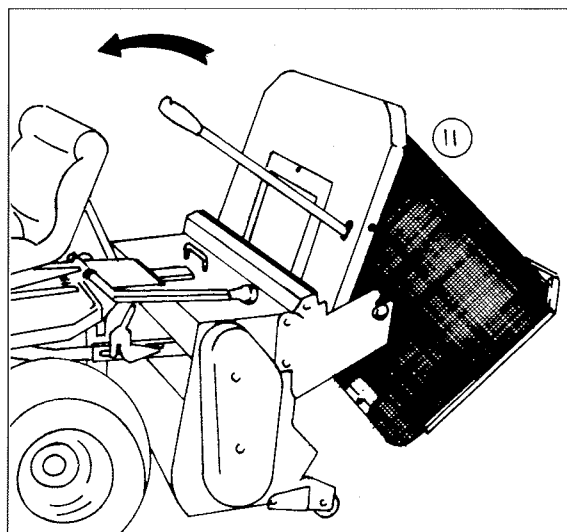
You can check the contents of the grassbox through the clear cover. When it is full, DISENGAGE THE PTO and raise the collector to the transport position.



Drive to your tipping area, reverse to the pile, select neutral, then extend and pull the tipping handle towards you. The cuttings will discharge. If some cuttings are reluctant to come out of the grassbox, tip the grass box as you drive forward from the heap.

THE POWERED COLLECTOR IS ALSO A MOST EFFICIENT LEAF SWEEPER. We recommend that you 'mow' the fallen leaves while you collect. This will reduce the volume in the collector and aid breakdown and composting.

ROUTINELY remove debris that may have collected in the brushes - this will maintain sweeping efficiency and extend the life of the brushes. When worn, brush units are easily replaced.



LAYING UP YOUR TRACTOR FOR THE WINTER

Your tractor should be serviced annually by your dealer – ideally in the winter – book it in early to beat the last minute, rush.

1. Having first disconnected the battery and made sure that the terminal leads are removed – DRAIN THE FUEL TANK.
2. Reconnect the battery and START AND RUN THE ENGINE UNTIL IT STOPS.
3. WASH YOUR TRACTOR, taking particular care to clean all cuttings from the underside of the deck and keeping water away from electrical components..
4. REMOVE THE BATTERY and charge before use in the new season.
5. KEEP YOUR TRACTOR IN A DRY PLACE.

SPECIFICATION SUMMARY

Engine

Model	Engine	Disp.	HP	Torque	Bore	Stroke
H1438 Twin	Briggs & Stratton Vanguard V Twin OHV	480cc	14hp min @ 3600rpm	24ft/lb @ 2400rpm	68.0mm	66.0mm
H1642 Twin	Briggs & Stratton Vanguard V Twin OHV	480cc	16hp @ 3600rpm	26ft/lb @ 2400rpm	68.0mm	66.0mm

Engine Lubrication

Crankcase capacity
H1438 & H1642 1.6 litres (2.19 pints)*

Weight

H1438 38" 537lbs (244 kilos)
H1642 550lbs (249.5 kilos)
Powered Collector 127lbs (58 kilos)

Forward Speeds

At 3600rpm	
1st gear	1.27mph
2nd gear	1.68mph
3rd gear	2.54mph
4th gear	4.00mph
5th gear	6.40mph

* Read and follow the instructions in your
Briggs & Stratton Handbook.

Recommended: SAE30 or 10W-30
high quality detergent oil classified
for service; SG, SF, SE, SD, SC.

Where load and engine output allow

Transmission

Peerless Model 801 Heavy duty
Transaxle giving five forward gears
and one reverse. Disc Brake.
Sealed for life lubrication.

RECOMMENDED TYRE PRESSURES

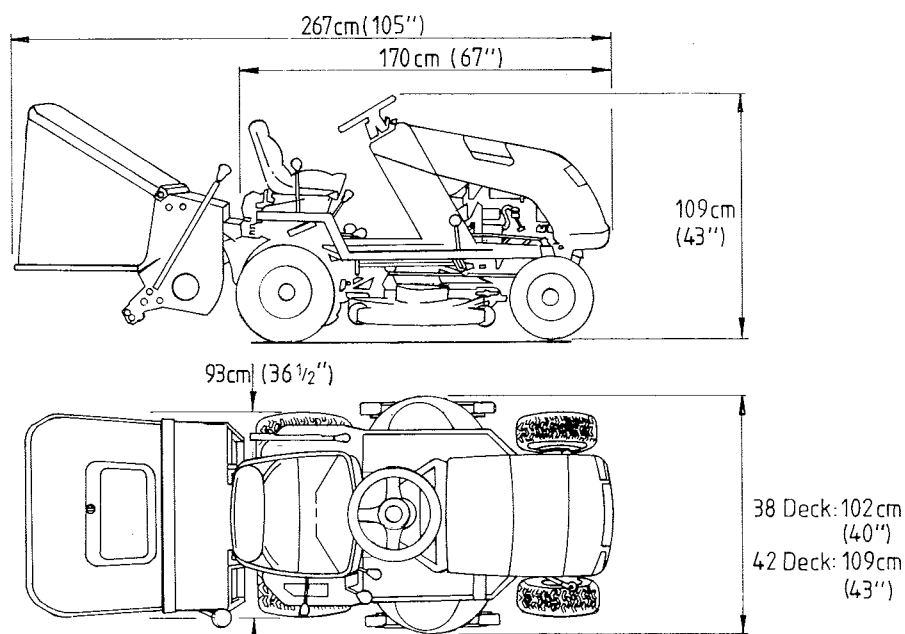
12lb PSI TO 16lb PSI - Front Wheels
10lb* PSI TO 12lb PSI - Rear Wheels
* Pressure recommended for maximum grip.

NEVER INFLATE ABOVE THE MAXIMUM
PRESSURE SHOWN ON THE TYRE

Turning Circle

6ft internal diameter or less.

We reserve the right to change
Specifications and Prices without
notice.



Hayters PLC

Bishop's Stortford, Hertfordshire CM23 4BU

Telephone: 0279 723444 Fax: 0279 723821