



C20" & C24"

OPERATOR & PARTS MANUAL

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English version

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READ THIS MANUAL BEFORE USING AN ALLETT C20 OR C24 CYLINDER MOWER.

YOUR SAFETY IS INVOLVED

IT IS ESSENTIAL THAT OPERATORS STUDY THIS DOCUMENT FOR THEIR OWN SAFETY.

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1.0 Introduction

The C20 & C24 are designed predominantly as a lawn mower. However, the base unit has the ability to accept a range of interchangeable cartridges to cover a number of professional turf management tasks.

The base unit is powered by a petrol engine, it is self propelled via a belt and chain drive to the land roll. The land roll has an internal geared differential. Power is transferred to the cartridge by a toothed coupling and belt drive.

The C20 & C24 mower is designed for the management of high quality turf. Use in any way other than that stated is considered contrary to the intended use. Compliance and strict adherence to the conditions of operation, service and repair as specified in this manual also constitute essential elements of the intended use.

The way in which the mower is operated and maintained will have a profound effect on its performance and reliability.

A C20 & C24 mower should be operated, serviced and repaired only by persons who are familiar with its particular characteristics and who are familiar with the relevant safety procedures.

The safety precautions outlined in this manual and all other generally recognised regulations on safety must be observed at all times.

Any modifications carried out to a C20 or C24 mower will relieve Allett Ltd of liability for any resulting damage or injury.

This manual is based on information available at the time of publication.

Allett Ltd reserves the right to amend product specifications without prior notification.

1.1 Model type and serial number

The model can be found in two places:

1. On the top cover of the mower.
2. On the serial number plate located on the right side of the mower chassis.

The serial number can be found on the serial plate.

Please enter your information below

Model:

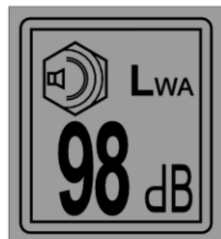
Serial Number:

ALLET LTD Regal House, Airfield Industrial Estate, Hixon, Staffordshire, U.K. ST18 0PF Tel: 01889 271503 www.allett.co.uk			
MODEL			
SERIAL No.			
YEAR OF MANF.		UNLADEN WEIGHT kg	
MADE IN THE UK			

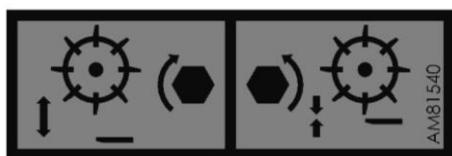
2.0 Pictograms and Decals



Refer to manual before carrying out maintenance,
Engine On/Off switch, Read manual before starting



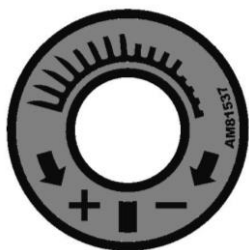
Guaranteed Sound power level
emitted by the mower



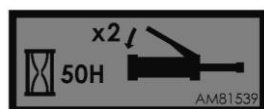
Bottom blade to cylinder adjustment



Flying debris, keep bystanders away. Warning, sharp blades, blades continue to rotate after the mower is switched off



Cut height, Turning anticlockwise increases cut height (+), turning clockwise decreases cut height (-).
1 audible click moves the front roller by 0.3mm (1/80"), this alters the bottom blade height by 0.175mm (7 thousandths of an inch).



Apply two pumps of
grease from a grease gun
every fifty hours.

3.0 Safety notes

Read these instructions carefully, be familiar with the controls and the proper use of the lawnmower.
Learn how to stop the lawnmower quickly in an emergency.

Never allow children or people unfamiliar with these instructions to use the lawnmower. Local regulations may restrict the age of the operator.

Never mow while people, especially children or pets are nearby

Never pick up or carry the lawnmower while the motor is running.

Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people or their property.

Whilst mowing, always wear substantial footwear and long trousers. Do not operate the equipment when barefoot or wearing open sandals.

Wear appropriate protective clothing and equipment when you are operating the lawnmower, such as safety glasses, long trousers, substantial footwear and ear protection. Long hair, loose clothing or jewellery can get tangled in moving parts.

Thoroughly inspect the area where the lawn mower is to be used and remove all objects that may be thrown by the machine.

WARNING - petrol is highly flammable.

- Store fuel in containers especially designed for this purpose
- Refuel outdoors only and do not smoke while refuelling
- Add fuel before starting the engine. Never remove the cap of the fuel tank or add petrol whilst the engine is running or the engine is hot.
- If petrol is spilt, do not attempt to start the engine, but move the machine away from the area of spillage and avoid creating any source of ignition until petrol vapours have dissipated.
- Replace the fuel tank and container caps securely
- Replace faulty silencers
- Do not operate the engine in a confined space where dangerous carbon monoxide fumes can collect.
- Before using, always visually inspect to see that the cartridge is not worn or damaged.

Mow only in daylight or in good artificial light.

Avoid operating the lawnmower in wet grass, where feasible.

Always be sure of your footing on slopes.

Walk, never run.

Mowing on banks can be dangerous:

- Mow across the face of slopes – never up and down.
- Be particularly careful of your footing on slopes or wet grass.

Exercise extreme caution when changing direction on slopes.

Do not mow excessively steep slopes.

- Use extreme caution when stepping back or pulling the lawnmower towards you.

Stop the blades if the lawnmower has to be tilted for transportation when crossing surfaces other than grass and when transporting the lawnmower to and from the area to be mowed.

Do not tilt the lawnmower when starting, except if the lawnmower has to be tilted for starting in long grass or when using a cartridge set to work below the surface. In this case, do not tilt it more than absolutely necessary and lift only the part which is away from the operator. Always ensure that both hands are in the operating position when returning the mower to the ground.

Never operate the lawnmower with defective guards or without the safety devices, for example deflectors and grass catchers in place.

Do not change the engine governor settings or overspeed the engine. Operating an engine at excessive speed may increase the hazard of personal injury.

Disengage all blade drive clutches before starting the engine

Start the engine carefully according to instructions and with feet well away from the blades. Do not tilt the mower when starting. Keep clear of the discharge opening at all times. Never pick up or carry a lawnmower while the engine is running.

Do not put hands or feet near or under rotating parts while the lawnmower is being operated.

Stop the engine and disconnect the spark plug lead:

- Before checking, cleaning or working on the lawnmower
- After striking a foreign object, inspect the lawnmower for damage and make repairs before restarting and operating the lawnmower.

Stop the engine:

- If the lawn mower starts to vibrate abnormally
- Before making height of cut adjustment

- Whenever you leave the machine
- Before refuelling
- Before checking blockages

Reduce the throttle setting during engine shut-down and turn the fuel off at the conclusion of mowing.

Keep all nuts, bolts and screws tight to be sure that the lawnmower is in safe working condition.

Never store the lawnmower with petrol in the tank inside a building where fumes may reach an open flame or spark.

Allow the engine to cool before storing in any enclosure.

To reduce the fire hazard, keep the engine, silencer and fuel storage area free of grass, leaves or excessive grease.

Check the grassbox frequently for wear or deterioration.

Replace worn or damaged parts for safety.

Go slow when using a trailing seat, especially when cornering.

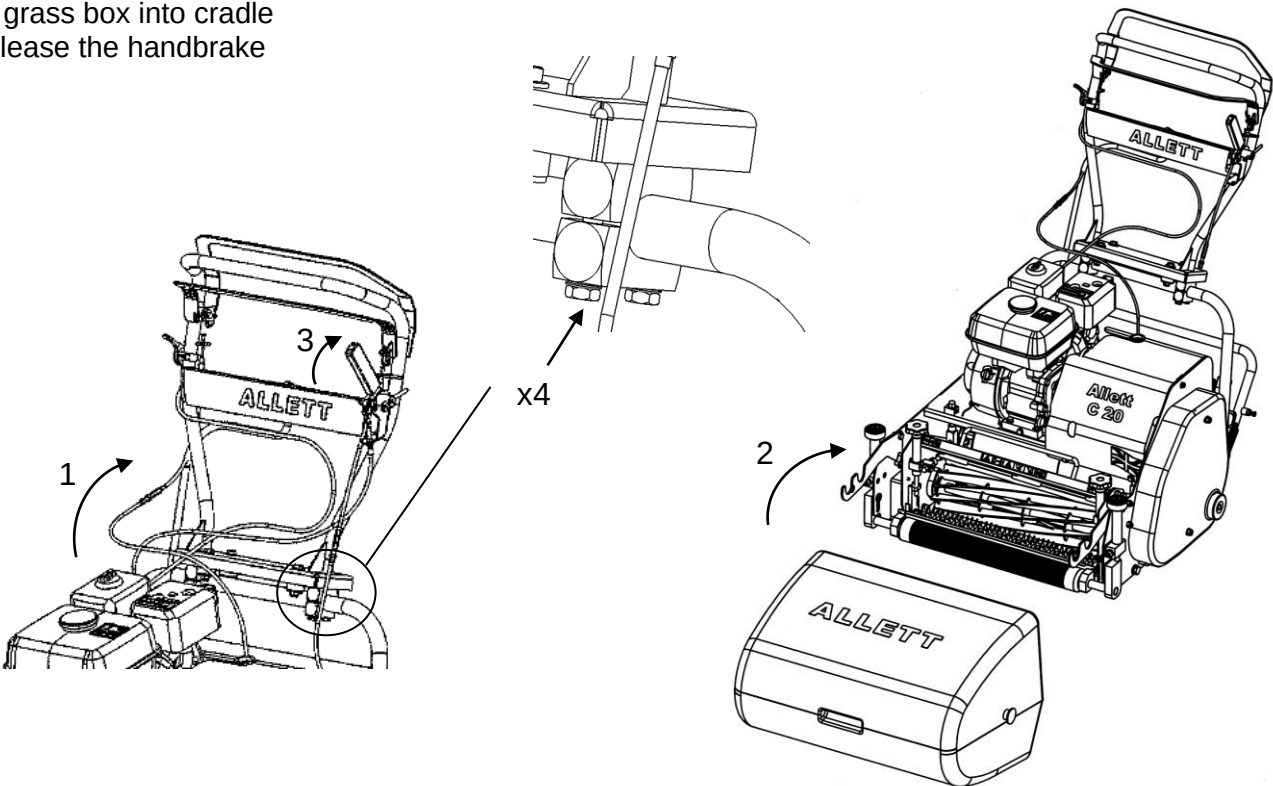
If the fuel tank has to be drained, this should be done outdoors.

Be careful during the adjustment of the lawnmower to prevent entrapment of the feet and hands between moving blades and fixed parts of the lawnmower.

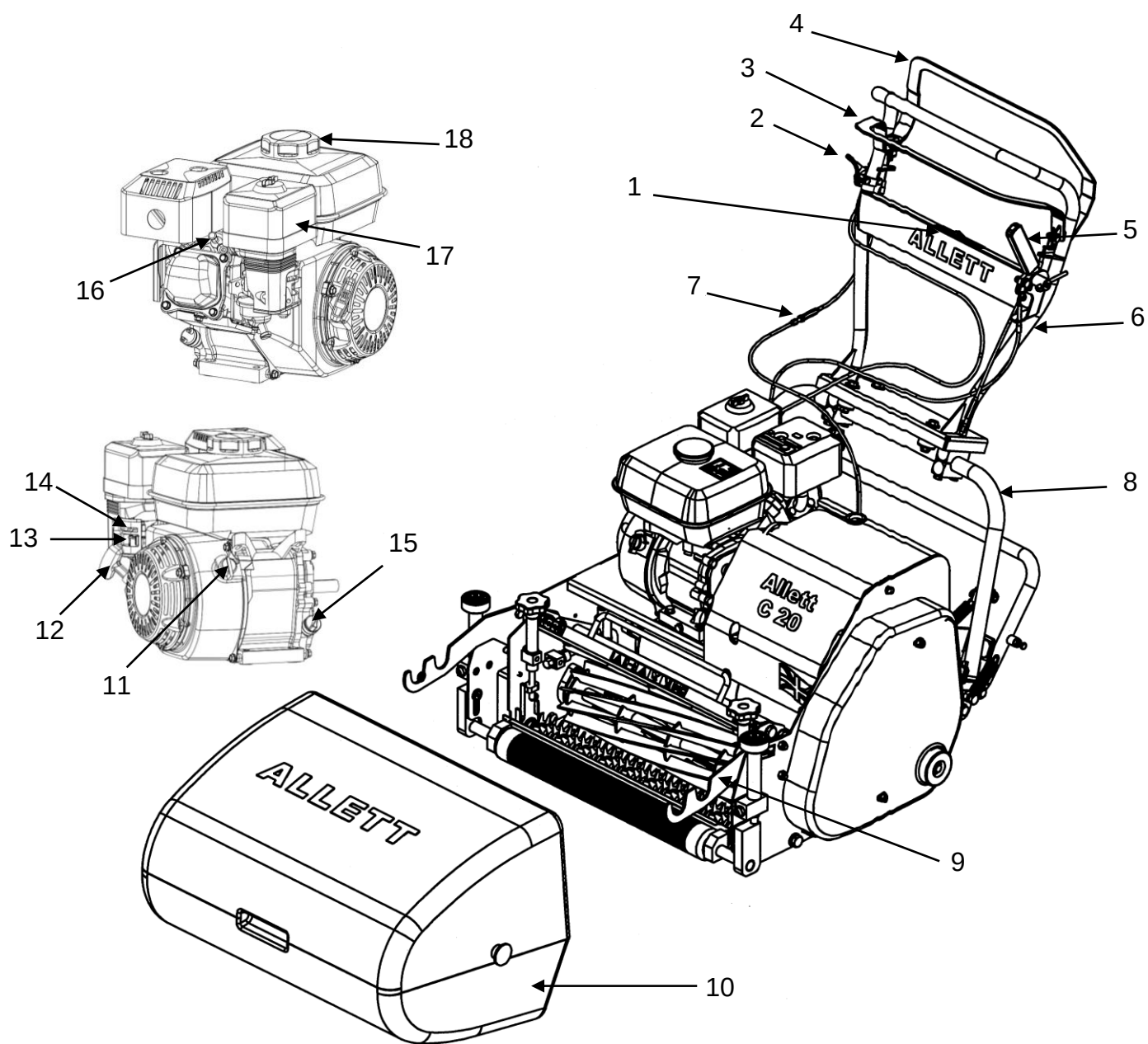
Ensure replacement parts fitted are manufacturer's original or approved by the manufacturer.

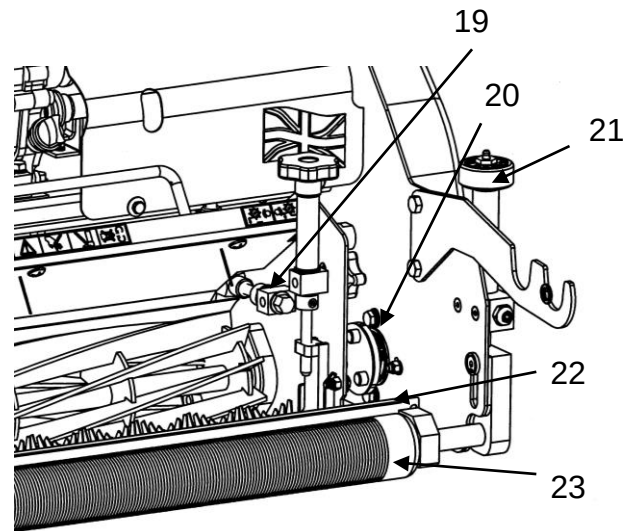
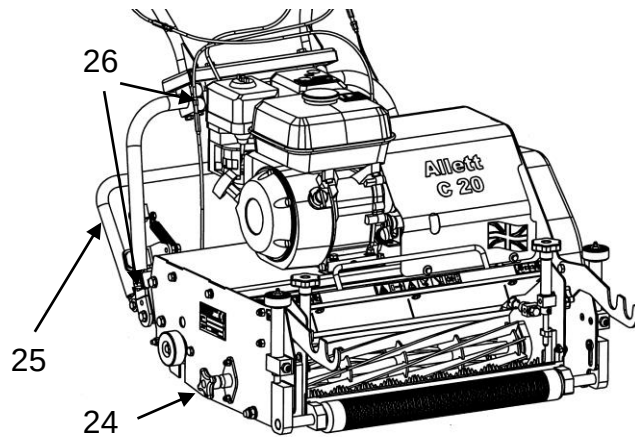
4.0 Assembly

- 1) Fold handles back to a comfortable operator height and tighten 4 bolts
- 2) Fit grass box into cradle
- 3) Release the handbrake



5.0 Operating controls

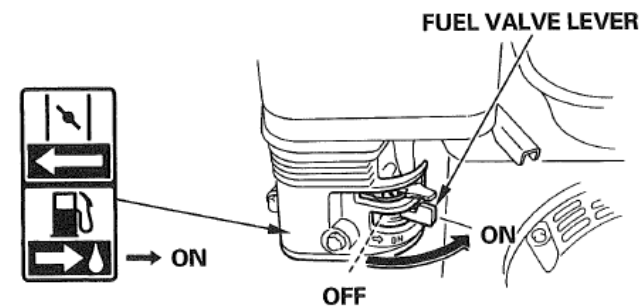




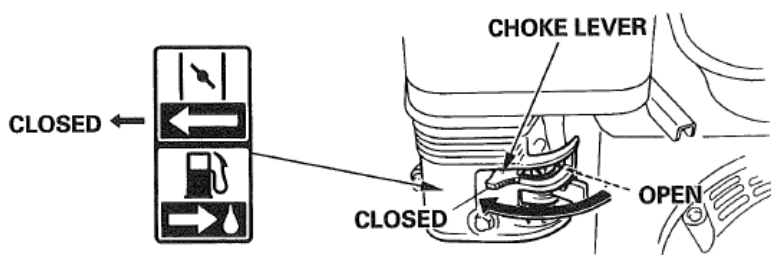
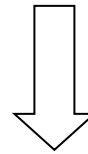
- | | |
|--------------------------------|------------------------------|
| 1) Handle bar ON/OFF switch | 14) Choke lever |
| 2) Throttle | 15) Oil dipstick |
| 3) Cutting cylinder engagement | 16) Spark plug |
| 4) Land roll engagement | 17) Air filter |
| 5) Park brake | 18) Fuel tank |
| 6) Top handle bar | 19) Bottom blade adjuster |
| 7) Cable adjuster | 20) Cartridge drive coupling |
| 8) Bottom handle bar | 21) Quick height adjuster |
| 9) Grass box cradle | 22) Front roller scraper |
| 10) Grass box | 23) Front Roller |
| 11) Engine ON/OFF switch | 24) Cartridge securing screw |
| 12) Starter grip | 25) Kick stand |
| 13) Fuel valve lever | 26) Vibration mounts |

6.0 Using your mower

6.1 Starting

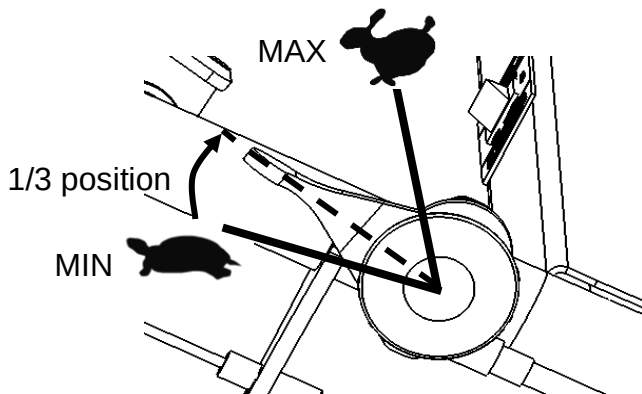
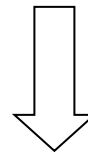


- 1) Move the fuel valve lever to the ON position

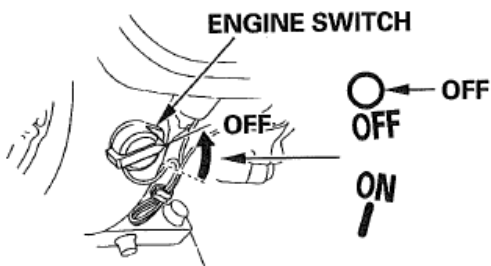
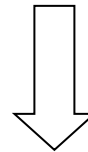


- 2) For a cold ❄ start move the choke lever to the CLOSED position **||**

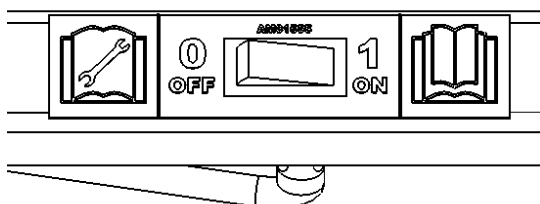
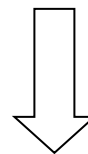
To restart a warm ☀ engine leave the choke lever in the OPEN position



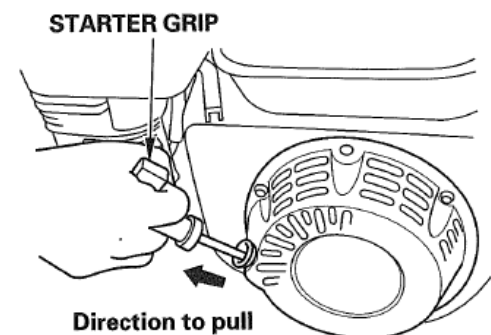
- 3) Set the throttle to 1/3 position between MIN and MAX



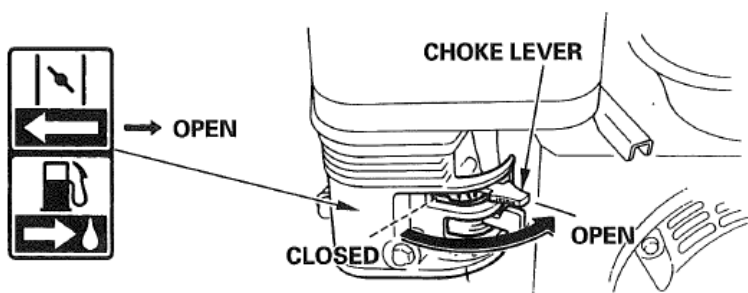
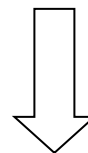
- 4) Turn the engine switch to the ON position



- 5) Move the handle bar mounted engine switch to the ON position



- 6) Pull the starter grip lightly until you feel resistance, then pull briskly. Return the starter grip gently



- 7) If the choke lever was moved to the CLOSED position **||** to start the engine, gradually move it to the OPEN position **|||** as the engine warms up

6.2 Stopping

- 1) Move the throttle lever to MIN position
- 2) Move the handle bar mounted stop switch to OFF
- 3) Turn the petrol tap OFF

To stop in an emergency move the handle bar mounted stop switch to OFF

6.3 Adjusting the bottom blade - setting "on cut"

For grass cutting cylinder cartridges only.

The bottom blade is correctly adjusted when the cutting cylinder lightly brushes the bottom blade as the cylinder is turned. Contact should be made across the full width of the bottom blade.

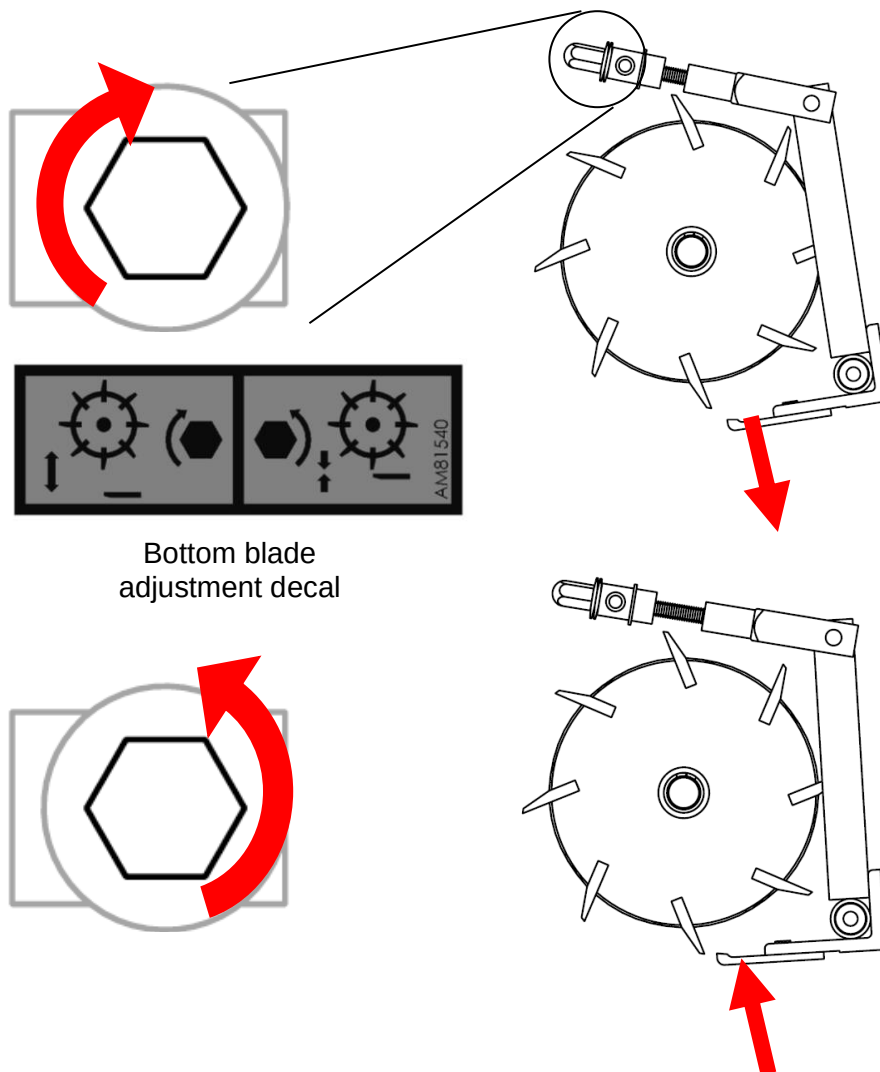
The blades act like a pair of scissors, as a test correctly adjusted blades will cleanly cut a piece of good quality writing paper across the width of the blade. The bottom blade should be adjusted if the grass is not cut cleanly and evenly.

WARNING – Blades are sharp always wear gloves

WARNING – Stop the engine and remove the spark plug cap

To set the cutting cylinder cartridge on cut:

- 1) Tilt the mower back and wedge securely
- 2) Turn the adjuster screws anti clockwise to move the bottom blade closer to the cylinder
Turn the adjuster screws clockwise to move the bottom blade further from the cylinder
- 3) When making adjustments to the bottom blade frequently check progress by cutting a piece of paper.

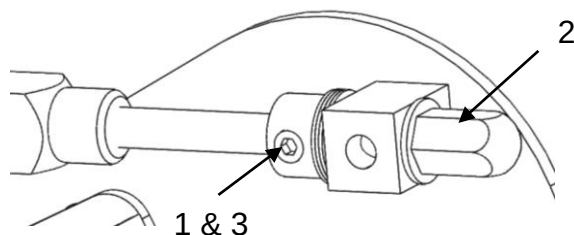


Do not over tighten the bottom blade – the cylinder should be able to spin freely

If you are still unable to cleanly cut paper, inspect the bottom blade and cylinder. If they appear, rounded, damaged or excessively worn they may need to be reground or replaced. New bottom blades should always be reground attached to the bottom blade carrier. For bottom blade grinding angles see the section 7.6

The bottom blade adjusters can sometimes become very tight and may be hard to turn. If this is the case:

- 1) Slacken off the grub screw on the collar
- 2) Rotate the adjuster anti-clockwise 1/8th of a turn
- 3) Tighten the grub screw



6.4 Height of cut adjustment

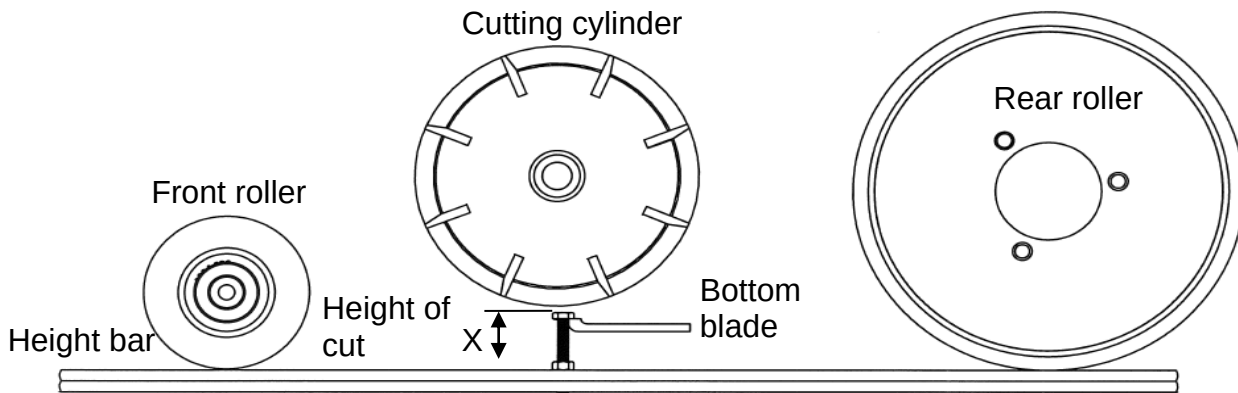
The height of cut is set by altering the position of the front roller.

WARNING - blades are sharp, always wear gloves

WARNING – Stop the engine and remove the spark plug cap

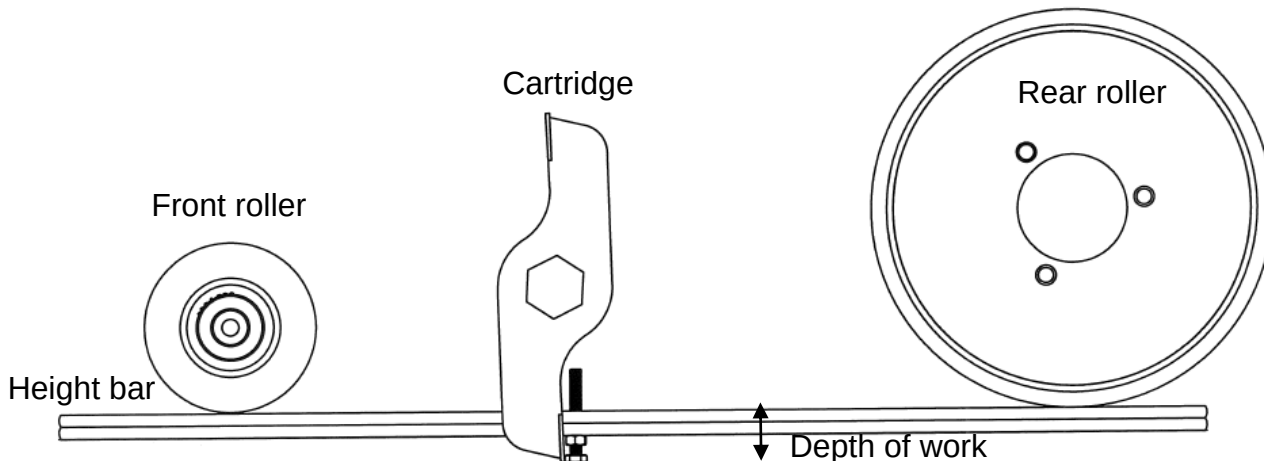
For a cutting cylinder cartridge:

- 1) Set “on cut” first, refer to section 6.3
- 2) Adjust and lock the bolt on the height setting bar to your desired height of cut (X)
- 3) Slacken the four front roller fasteners
- 4) Tilt the mower back and wedge securely
- 5) With the height setting bar near one end of the bottom blade, locate the bolt head on top of the bottom blade and under the rear roller
- 6) Adjust the front roller so it makes contact with the height setting bar
- 7) Tighten the front roller fasteners on the side you have adjusted
- 8) Move the height setting bar to the other end of the bottom blade and repeat steps 5-8



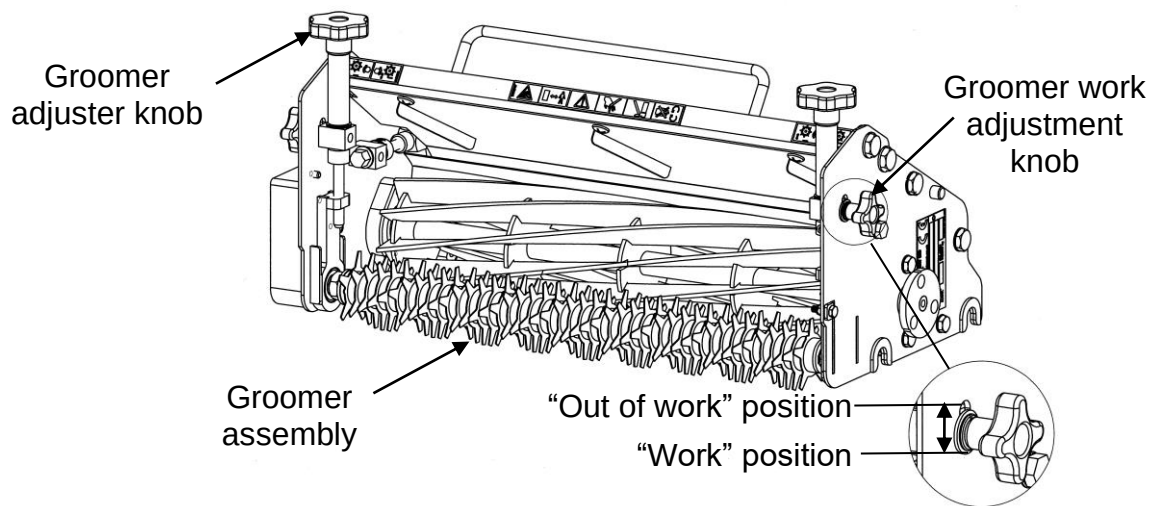
For all other turf maintenance cartridges:

- 2) Adjust and lock the bolt on the height setting bar to your desired working height or depth
- 3) Slacken the four front roller fasteners
- 4) Tilt the mower back and wedge securely
- 5) With the height setting bar near one edge of the cartridge, position one end against the rear roller
- 6) Adjust the front roller so it makes contact with the height setting bar and the bolt head lines up with the blade/tine/bristle
- 7) Tighten the front roller fasteners on the side you have adjusted
- 8) Move the height setting bar to the other end of the cartridge and repeat steps 5-8



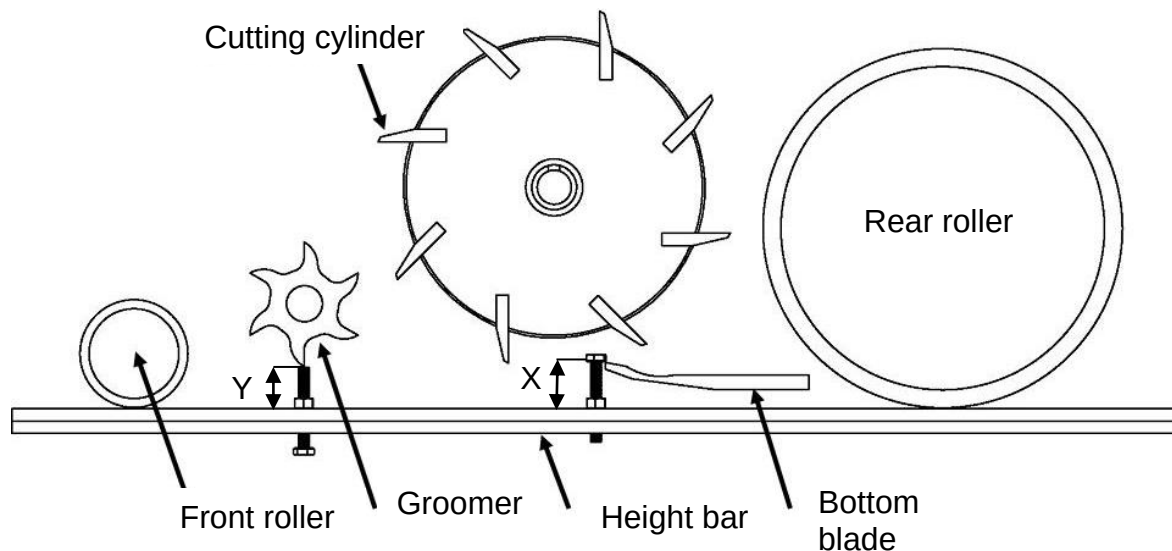
6.5 Groomer height adjustment

The groomer work adjustment knob can be used to raise the groomer out of work if it is not needed



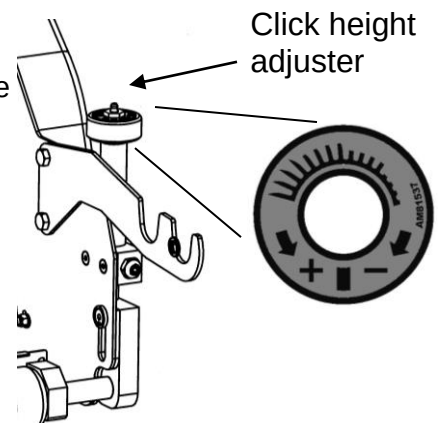
For a cutting cylinder cartridge with optional groomer, set the groomer depth as follows:

- 1) Adjust and lock the screw on the height setting bar to your desired grooming height (Y), this is normally 2-3mm less than the height of cut.
- 2) Ensure that the groomer is in the work position, the work adjustment knobs should be fully in the bottom of the slot.
- 3) Tighten both work adjustment knobs.
- 3) Adjust the groomer height using the adjuster hand wheels.



6.6 Click height adjusters

To alter the position of the front roller, rotate the quick height adjuster clockwise to reduce the height of cut and anti-clockwise to increase the height of cut. One click moves the front roller by an increment of 0.3mm (1/80 of an inch), this alters the height of the blade by 0.175mm (7 thousandths of an inch). 1 click = 0.175mm, 3 clicks = 0.525mm (1/50"), 6 clicks = 1.05mm (1/25") etc.



6.7 Engaging drive to the cylinder/cartridge

- 1) Gradually squeeze the cylinder/cartridge bail bar towards the top handle – see section 5.0
- 2) Release the bail bar to stop the cylinder/cartridge

6.8 Engaging drive to the land roll

- 1) Gradually squeeze the drive bail bar towards the top handle – see section 5.0
- 2) Release the bail bar to stop forward movement

6.9 Park brake

To engage the park brake:

- 1) Pull and hold the red lever on the top handle bar
- 2) Tighten the lock handle

6.10 Mowing

- 1) Before mowing check the engine oil level and fill the petrol tank (see maintenance section)
- 2) Start the engine – see section 6.1
- 3) Engage drive to the cylinder/cartridge
- 4) Release the park brake
- 5) Engage drive to the land roll

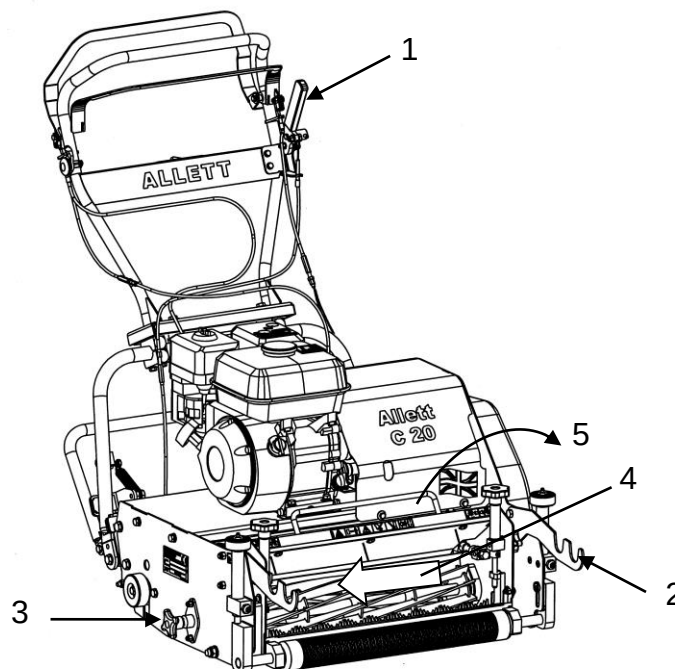
6.11 Removing and replacing a cartridge

WARNING - blades are sharp, always wear gloves

WARNING – Stop the engine and remove the spark plug cap

To remove a cartridge:

- 1) Stop the engine and apply the park brake
- 2) Remove the grass box
- 3) Loosen the cartridge securing hand wheel
- 4) Slide the cartridge across to separate the drive coupling
- 5) Lift the cartridge out using the handle. Obtain assistance if required.



To replace a cartridge:

- 1) Stop the engine and apply the park brake
- 2) Remove the grass box
- 3) Lift the cartridge into the frame using the handle. Obtain assistance if required.
- 4) Align the teeth on the drive coupling, use the indicator marks to help
- 5) Slide the cartridge across to engage the drive coupling
- 6) Tighten the hand wheel to secure the cartridge in place

7.0 Maintenance

WARNING – Stop the engine and remove the spark plug cap

To ensure long and reliable service, carry out the following maintenance regularly:

Regularly check for obvious defects such as a loose, dislodged or damaged blades, loose fixings and worn or damaged components.

Check that covers and guards are undamaged and correctly fitted. Carry out necessary maintenance or repairs before using.

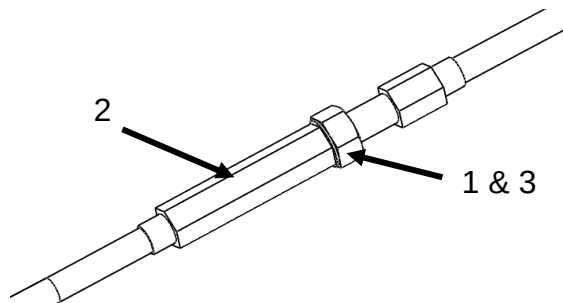
Clean the exterior of the machine thoroughly using a soft brush and cloth. Remove all debris, especially from the air filter and engine fins.

If the mower should happen to fail despite the care taken in manufacture and testing, repairs should be carried out by an authorised Allett dealer.

7.1 Adjusting land drive and cylinder cables

If the mower or cylinder doesn't drive adequately it may be necessary to adjust the drive cable as follows:

- 1) Slacken lock nut
- 2) Turn the adjuster a few times clockwise
- 3) Retighten the adjuster with the lock nut

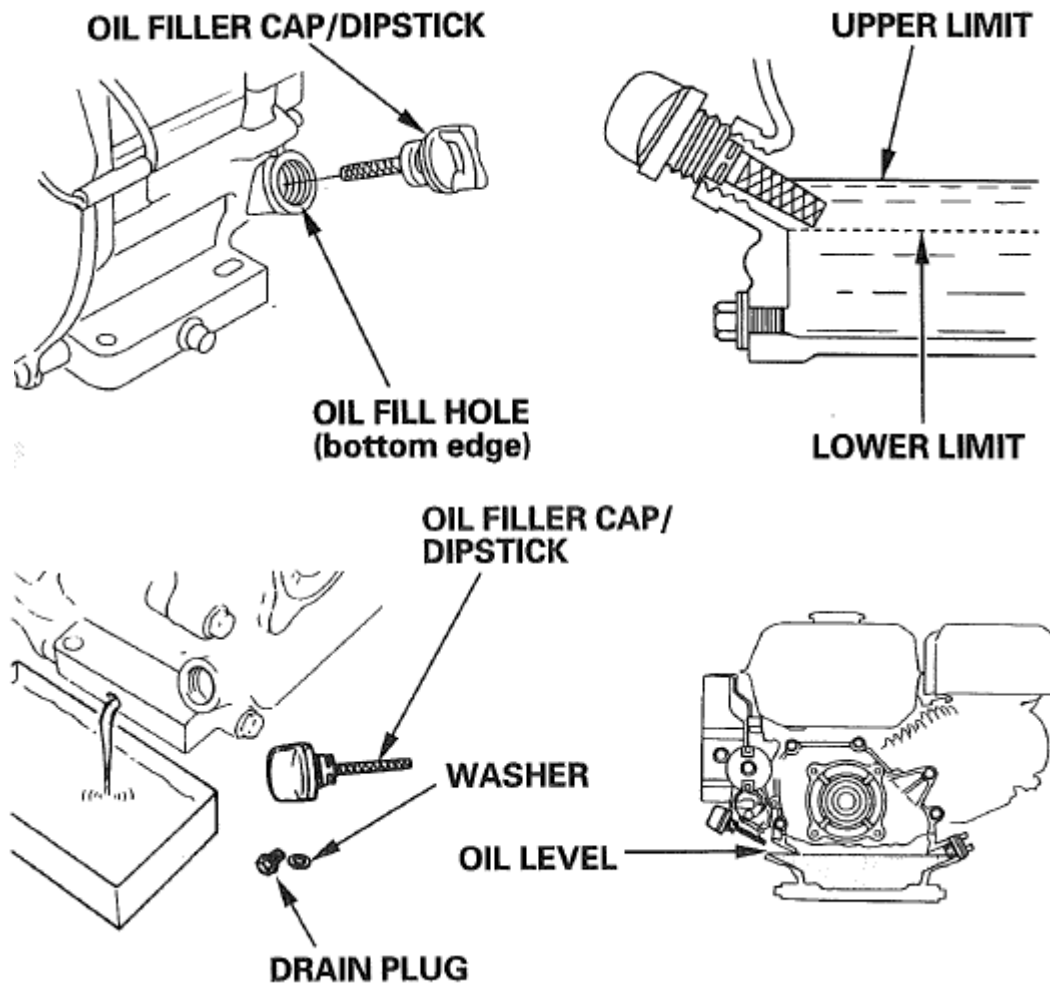


When correctly adjusted, drive to the land roll or cylinder is engaged when the bail bar is squeezed against the top handle. When released drive should disengage. When released the drive **MUST** disengage.

7.2 Checking the engine oil

Change the engine oil after the first 8 hours of use. The oil should then be changed every 50 hours or at the end of each season before storage, whichever is sooner.

- 1) With the mower standing on level ground, unscrew and remove the engine oil filler dipstick (15)
- 2) Wipe the oil filler dipstick clean: insert the oil dipstick, then remove it again. Do not screw it in.
- 3) Check the oil level
- 4) Add a good quality SAE 10W-30 oil in small quantities at a time, allowing it to settle. Repeatedly add oil and check the level until it reaches the upper limit.



SAE 10W-30 oil is recommended for general use. It is important to use the recommended oil to avoid damage to your engine. Engine oil capacity is 0.6L

7.3 General engine maintenance

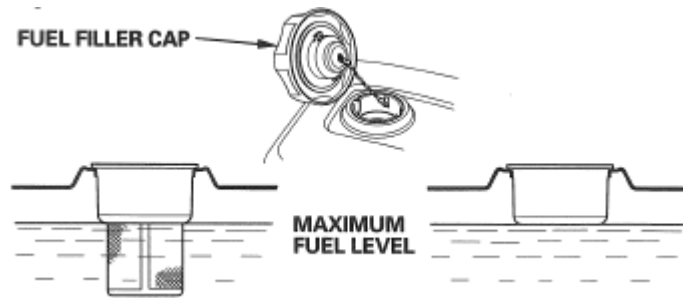
Check and clean the air filter (17), replace if necessary. See engine manual for details.
Check and clean the fuel sediment bowl and spark plug. See engine manual for details.
For all other engine adjustments and maintenance refer to the engine manual.

7.4 Fuel

Petrol deteriorates over time. Engine starting may be difficult if you use petrol kept for more than 30 days. Always run the fuel tank dry when storing over 30 days.

- 1) Remove the petrol filler cap (18), slowly add unleaded petrol to the tank, fill to approximately the top of the strainer gauze.

- 2) Replace petrol filler cap
- 3) Wipe up any spilt petrol from the engine before starting the mower



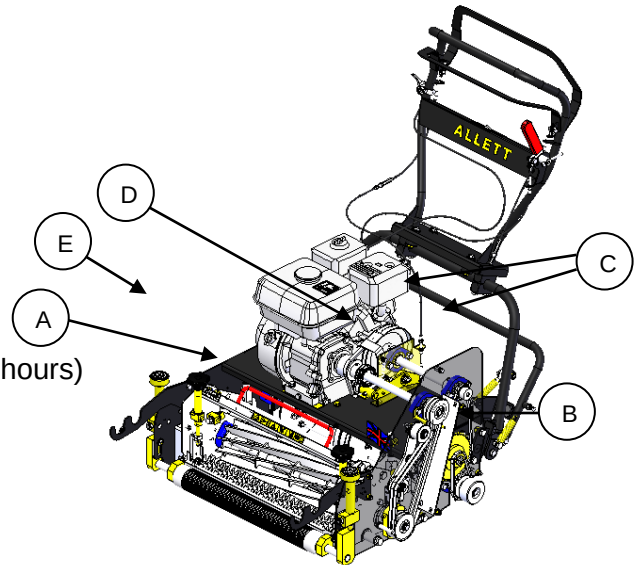
7.5 Grease points



8 Grease points in total
(Remove covers to access grease points)

- A) 2 cartridge bearings (1 pump every 1-2 weeks)
- B) 2 rear roller bearings (1 pump every month)
- C) 3 drive shaft bearings (1 pump every 1-2 weeks)
- D) 1 idler pulley bearing (1 pump every 1-2 weeks)
- E) 2 quick height adjusters (2 pumps every month or 50 hours)

Recommended best practice is to grease little and often

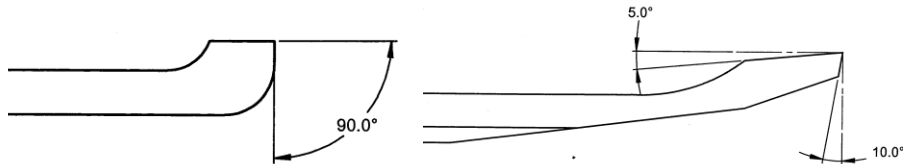


7.6 Bottom blade grinding angles

For cylinder cutting cartridges only. The cutting performance of the C20 and C24 is highly dependent on the condition of both the cylinder and bottom blade. Poorly maintained parts will lead to a poor quality of cut.

Newly fitted bottom blades will need to be ground when bolted to the blade carrier to ensure a perfectly flat cutting edge.

It is advisable that grinding/reconditioning is carried out by an authorised Allett dealer to the angles shown below.



7.7 Inspection of safety critical components

The below parts are critical to the safe operation of your lawnmower, before each use check that:

When the park brake is engaged the mower cannot move.

The guards, deflectors and the grass box are in good condition and secured in place

The On/off engine switch stops the mower in case of an emergency

When the bail bars are released the cylinder/cartridge and land roll drive stop immediately

7.8 Maintenance schedule

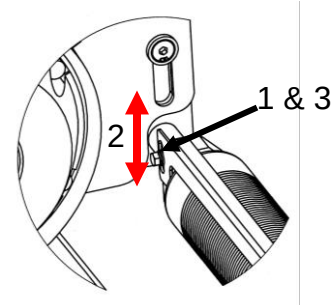
Activity	Task	Daily	Weekly	Monthly	Yearly
Check					
	Engine oil level	●			
	Fuel level	●			
	Air cleaner condition	●			
	Guards in place	●			
	Cutting cylinder/cartridge	●			
	Fasteners		●		
	Chain and belt tension			●	
	Spark plug			●	
Clean					
	Debris/grass from mower	●			
	Engine cooling fins	●			
	Fuel sediment bowl				●
	Air filter elements		●		
	Inside guards		●		
Test					
	Parking brake	●			
	On/off switches	●			
	Drive engagement/disengagement	●			
Replace					
	Engine oil				●
	Spark plugs				●
	Air filter elements				●

8.0 Making adjustments to your mower

8.1 Front roller scraper

To keep the front roller clean it is fitted with an adjustable scraper. To adjust the scraper:

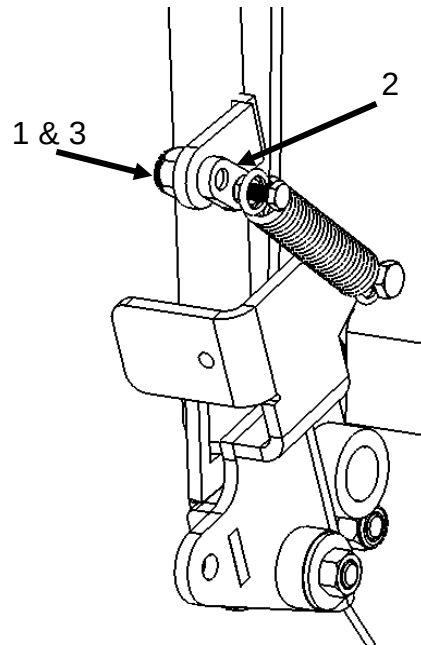
- 1) Slacken the two locking screws
- 2) Move the scraper bar so there is minimal clearance between the bar and the roller
- 3) Tighten the two locking screws



8.2 Floating handle bars

The upper and lower handle bars are isolated with rubber vibration mounts. The lower handle bar is also suspended via springs. The sprung lower handle bar is designed to “float” off the rubber stops when in use. The spring tension can be adjusted by rotating the spring anchor.

- 1) Slacken the locking nut
- 2) Rotate the spring anchor to adjust spring tension
- 3) Tighten the locking nut



8.3 Chain tensioner

Tension the top 3/8" chain using the plastic chain tensioner. The chain tensioner moves in a slot in the chassis. Tension the bottom 1/2" chain using the compound sprocket. The compound (or double sprocket) can move in a slot in the chassis. When correctly tensioned both chains should have 10mm (3/8") movement in both directions on the slack side of the chain.

9.0 Vibration reduction

Best practices for reducing vibration emission:

The mower is designed to operate at low engine speeds. Adequate performance can be achieved at little over idle speed.

Inspect the rubber vibration mounts for signs of wear and deterioration, replace if necessary. Properly adjust the sprung floating handle bars to improve operator comfort and further limit vibration transmission (See section 8.2).

A well maintained mower with an accurately ground and balanced cylinder are recommended to limit vibration emission. Forcing the mower to cut longer grass than intended or setting cartridges to work at great depths or on unsuitable surfaces will result in higher levels of vibration and wear.

10.0 Noise reduction

Best practices for reducing noise emission:

This mower is designed to operate at low engine speeds. Adequate performance can be achieved at little over idle speed. Setting minimal contact between the cylinder and bottom blade will also help reduce noise emissions. Forcing the mower to cut longer grass than intended or setting it to work at great depths may cause higher levels of noise emission.

Damaged exhausts or loose guards can increase noise emissions. Therefore, before use inspect the exhaust system for signs of wear and ensure the guards are securely attached and in good condition.

11.0 EU Declaration of conformity

We: **Allett Ltd**

of: Regal House, Airfield Industrial House, Hixon, Staffordshire, ST18 0PF, UK
declare that:

Equipment: Lawn mower

Model name/number: C20 & 24 (Cutting width 0.51 & 0.61m)

in accordance with the following directives:

2014/53/EU	Conforms with the essential protection requirements of the Electromagnetic Compatibility Directive and its amending Directives.
2006/42/EC	Conforms with the essential requirements of the Machinery Directive and its amending Directives.
2000/14/EC	Conforms with the essential requirements of the Noise Directive and its amending Directives. The conformity assessment procedure followed was in accordance with Annex VI of the Directive

Has been designed and manufactured to the following standards:

EN ISO 12100-1:2003+A1:2009

Safety of machinery. Basic concepts, general principles for design. Basic terminology, methodology.

EN ISO 12100-2:2003+A1:2009

Safety of machinery. Basic concepts, general principles for design. Technical principles.

BS EN ISO 5395-1/-2:2013

Garden equipment – Powered lawnmowers – Safety

Measured Sound Power Level (2000/14/EC, BS EN ISO 5395-1 Annex I): 94dB L_{WA}

Guaranteed Sound Power Level (2000/14/EC): 98dB L_{WA}

Uncertainty K: 2.5dB

Sound Pressure Level (BS EN ISO 5395-1 Annex F): 83dB L_{PA}

Wear hearing protection!

Vibration test code BS EN ISO 5395-1 Annex G, 2.95 m/s/s 1.5 m/s/s uncertainty

Notified body: AVT Reliability, Warrington, Cheshire

Technical construction file is kept by: Allett Ltd, Regal House, Airfield Industrial Estate, Hixon, Staffordshire, ST18 0PF

I hereby declare that the equipment named above has been tested and found to comply with the relevant sections of the above referenced specifications. The unit complies with all essential requirements of the Directives

Signed by:



Name: Austin Jarrett

Position: Managing Director

Done at: Allett Ltd

On: 1st March 2018

12.0 Fault finding when mowing

Problem	Possible cause	Remedy
Occasional blades of uncut grass.	Ground speed too fast. Height of cut too high Poorly adjusted bottom blade. Blunt cutting cylinder/bottom blade. Drive belt slipping.	Reduce forward travel speed. Reduce height of cut. Re-adjust bottom blade. Grind/recondition as necessary. Adjust belt tension.
Strips of uncut grass between adjacent runs.	Overlap between runs too small.	Increase overlap between runs.
Uneven cut on uneven ground.	Uneven ground conditions.	Reduce forward travel speed, change direction of cut.
Scalping of grass.	Height of cut too low for conditions. Uneven ground conditions.	Increase height of cut. Increase height of cut, change direction of cut.
Ribbing of grass perpendicular to direction of travel.	Forward travel speed too fast.	Reduce forward travel speed.
Tram lining of grass in the direction of forward travel.	Bottom blade in ground contact. Poor cylinder to bottom blade adjustment. Worn cylinder bearings.	Increase height of cut. Re-adjust bottom blade. Replace worn parts.
Excessive bottom blade wear.	Bottom blade in heavy ground contact. Blunt cutting edge. Cylinder in heavy contact with bottom blade. Excessively abrasive ground conditions.	Increase height of cut. Grind/recondition. Re-adjust the bottom blade to cylinder clearance. Increase height of cut.
Cylinder knocks while rotating.	High spots on the cutting edges. Worn cylinder bearings.	Grind/recondition cylinder and bottom blade. Replace worn parts.

13.0 Specification

13.1 Base machine specification

Model name	C20	C24
Cutting width	508mm (20")	610mm (24")
Engine	Honda GX160	Honda GX160
Weight	88.5kg	94kg
Dimensions (W x L x H)	750mm x 1500mm x 1010mm	920mm x 1500 x 1010
Engine fuel/oil capacity	3.1L Unleaded fuel, 0.6L oil SAE 10W-30	
Power output (Net)	3.61kW (4.8hp) @ 3,600rpm	
Handlebar	Adjustable with anti-vibration mountings	
Drive engagement	Handle mounted lever engaging V belt via cable	
Cartridge engagement	Handle mounted lever engaging V belt via cable	
Rear roller	Rubber covered, 2 piece steel roller with steel bevel gear differential	
Front roller	Grooved aluminium on sealed bearings	
Groomer Adjustment	1mm per turn of adjuster	
Height Adjustment on Front roller	1mm per turn of adjuster	
Grassbox	Rotational moulded plastic	

13.2 Cartridge specification

Cartridge name	Weight (kg)
20" 6 blade cylinder	18.5
20" 10 blade cylinder	20.0
20" 10 blade c/w groomer	24.0
20" Scarifier	14.0
20" Scarifier tungsten tip	14.0
20" Verticut	15.5
20" Brush	8.5
20" Sorrel roller	18.7
20" Slitter	13.6
24" 6 blade cylinder	21.5
24" 10 blade cylinder	22.0
24" 10 blade c/w groomer	29.0
24" Scarifier	16.5
24" Scarifier tungsten tip	16.5
24" Verticut	18.0
24" Brush	10.0
24" Sorrel roller	21.5
24" Slitter	15.5

14.0 Guarantee

Allett guarantees this product against manufacturing defects. We will repair (or replace at our option) if a manufacturing defect occurs within the guarantee period as long as it has not been subjected to rental/hire use. The engine fitted to this mower is covered by the engine manufacturer. See engine manuals for details.

The guarantee period is 2 years for parts and labour costs from the date of purchase. A 3rd year extended guarantee is available only if the lawnmower has been registered within 90 days of purchase and is serviced annually by an authorised Allett service agent.

To obtain a repair under this guarantee:

- Take your lawnmower to an Allett approved service agent
- Show your dated proof of purchase
- Show the guarantee page

This guarantee does not apply if:

- The product has been resold by the original purchaser (this does not apply in the Republic of Ireland) or has been used under hire.
- The product has been modified to change the manufacturers specification, or if non-genuine spares have been fitted
- If any previous repair has been undertaken by anyone other than an Allett approved service agent
- The fault is due to maladjustment, abuse, neglect or accidental damage
- The fault is due to lack of lubrication or maintenance
- The failure is due to normal wear

The following parts are considered as wearing parts. Their life is dependent on regular servicing and they are not therefore normally considered by the guarantee:

Blades, drive chains, bearings, belts, rubber on the rear roller and cables.

The cost of routine maintenance of the product is not covered by the guarantee.

It is in your best interest to follow the operating instructions for your lawnmower as a properly cared for product should give many years of excellent service cutting grass.

Always insist on genuine Allett spares or parts. Any damage caused to the product through the fitting of parts not made or approved by Allett is not covered by the guarantee.

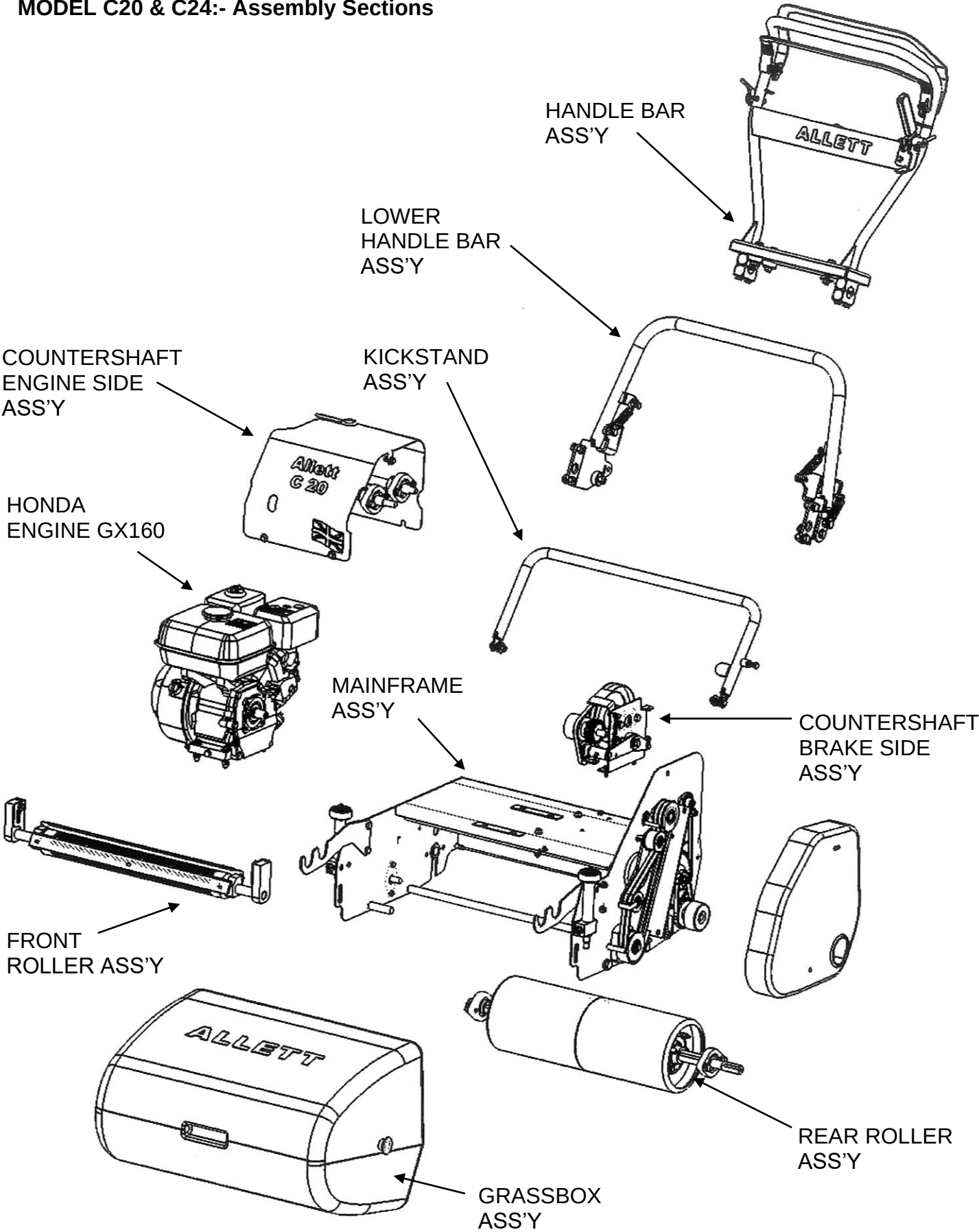
Your statutory rights are not affected by this guarantee.

When the time comes to dispose of this product please consider the environment and take it to a recognised recycling facility.

15.0 PARTS SECTION

**C20/5 and C24/5
PARTS SECTION
For C20/5-09-001 ONWARDS
For C24/5-09-001 ONWARDS**

MODEL C20 & C24:- Assembly Sections



MODEL C20 & C24:- Main Frame Assembly (FIG 1)

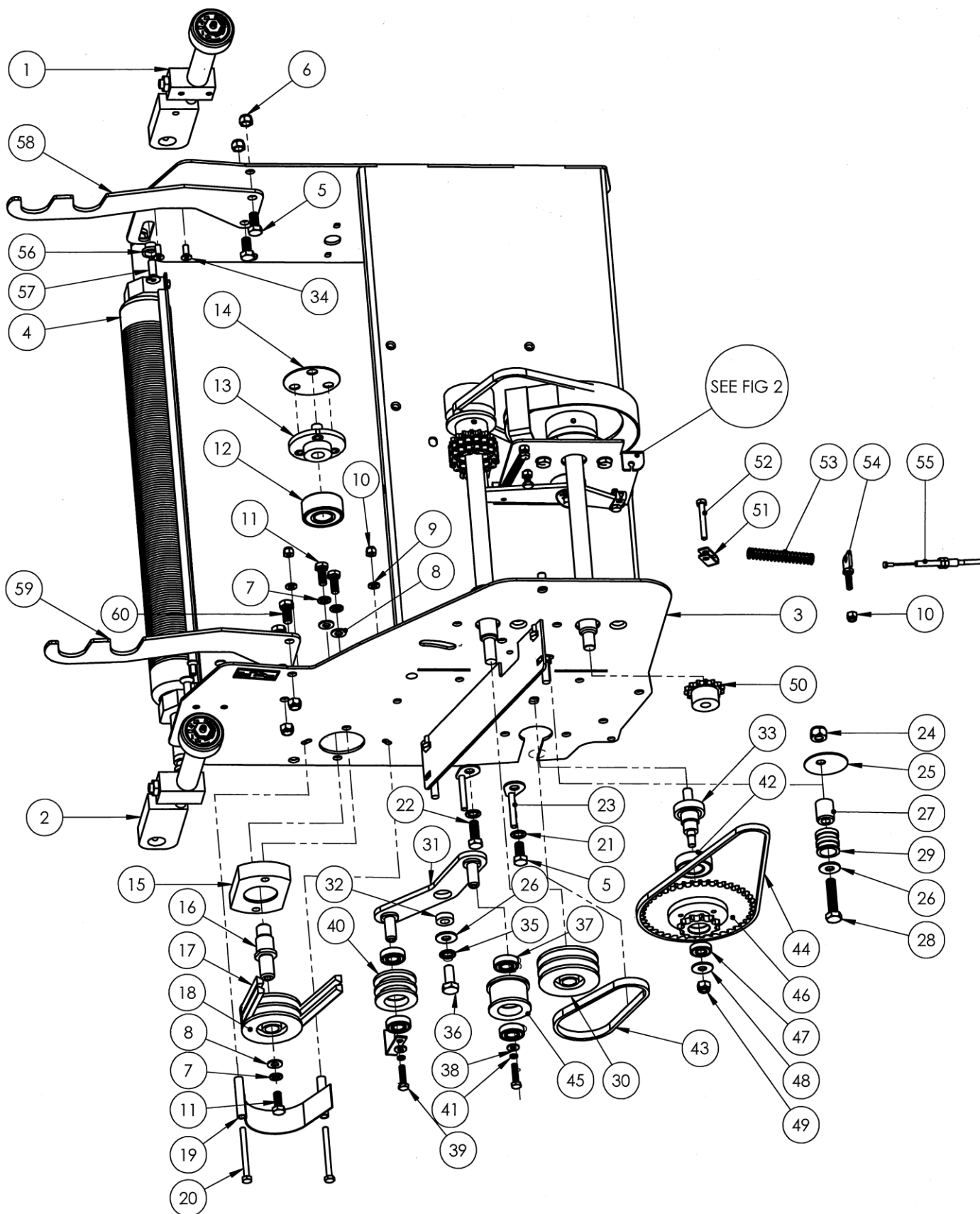


FIG 1

MODEL C20 & C24:- Main Frame Assembly BOM (FIG 1)

ITEM NO.	DESCRIPTION	PARTS 20"	PARTS 24"	USED
1	RH QUICK HEIGHT ADJUSTER	C030		1
2	LH QUICK HEIGHT ADJUSTER	C029		1
3	C20 CHASSIS FAB	C241	C242	1
4	MACHINED 3/8 x 3/4 SCREW	C1091		2
5	NUT 3/8 NYLOC			4
6	SPRING WASHER M8	SWM8		3
7	WASHER M8	WM8		3
8	WASHER M6	WM6		2
9	NUT M6 NYLOC	NNM6		2
10	SET SCREW M8 x 20	SM820		3
11	20mm BEARING	AM81436		1
12	DRIVE PLATE FAB	C210		1
13	GASKET DRIVE PLATE	C1065		1
14	BEARING HOUSING	C1045		1
15	CYL DRIVE SPINDLE	C1046		1
16	BELT CUTTER SHAVER	AM89451		2
17	PULLEY DOUBLE	AM89406		1
18	BOTTOM BELT GUIDE FAB]	C229		1
19	SET SCREW M6 x 65	SM665		2
20	3/8 SPRING WASHER			2
21	3/8 x 1 SCREW	S11014		1
22	TOP BELT GUIDE FAB	AB029		2
23	NUT M10 NYLOC	NNM10		1
24	ECCENTRIC SHIM	BSG1276		1
25	WASHER M10 FORM C	WM10C		2
26	CHAIN TENSIONER	BSG1330		1
27	SET SCREW M10 x 45	SM1045		1
28	CHAIN TENSIONER SLEEVE	BSG1038		1
29	PULLEY DOUBLE	AM89406		1
30	CUTTER CLUTCH ARM FAB	BSG002		1
31	CUTTER CLUTCH PIVOT	BSG1041		1
32	COMPOUND CENTRE	BSG1288		1
33	SET SCREW M6 x 16 CSK	M616		4
34	SPRING WASHER M10	SWM10		1
35	SET SCREW M10 x 25	SM1025		1
36	BEARING 12mm	AM82104		4
37	WASHER M6 FORM C	WM6C		2
38	SET SCREW M6 x 25	SM625		2
39	PULLEY CUT CLUTCH	BSG1034		1
40	SPRING WASHER M6	SWM6		2
41	BEARING 20mm 6004	AM81007		1
42	CHAIN 1/2 B27 LINKS	AM81022		1
43	CHAIN 3/8 68 LINKS	AM81054		1
44	CUT CLUTCH JOCKEY TWIN	BSG1033		1
45	SMALL COMPOUND SPROCKET	BSG025		1
46	BEARING 9mm 609	AM90513		1
47	WASHER M8 FORM C	WM8C		1
48	NUT M8 NYLOC	NNM8		1
49	TOP SPROCKET	C1113		1
50	YOKE ANCHOR POINT	BSG1024		1
51	SET SCREW M6 x 45	SM645		1
52	SPRING	AM90519		1
53	CABLE ANCHOR PLATE	BSG012		1
54	CABLE CUTTER CLUTCH	BSG1077		1

55	CSK TOP HAT SPACER	C1143		2
56	SET SCREW M8 x 20	SM820		2
57	GRASSBOX ARM	C1173	C1088	1
58	GRASSBOX ARM	C1174	C1088	1
59	3/8 x 3/4 SCREW	S11011		2
CPL	GROOVED ROLLER ASSY	C031	C032	1

MODEL C20 & C24:- Rear Roller Assembly (FIG 1A)

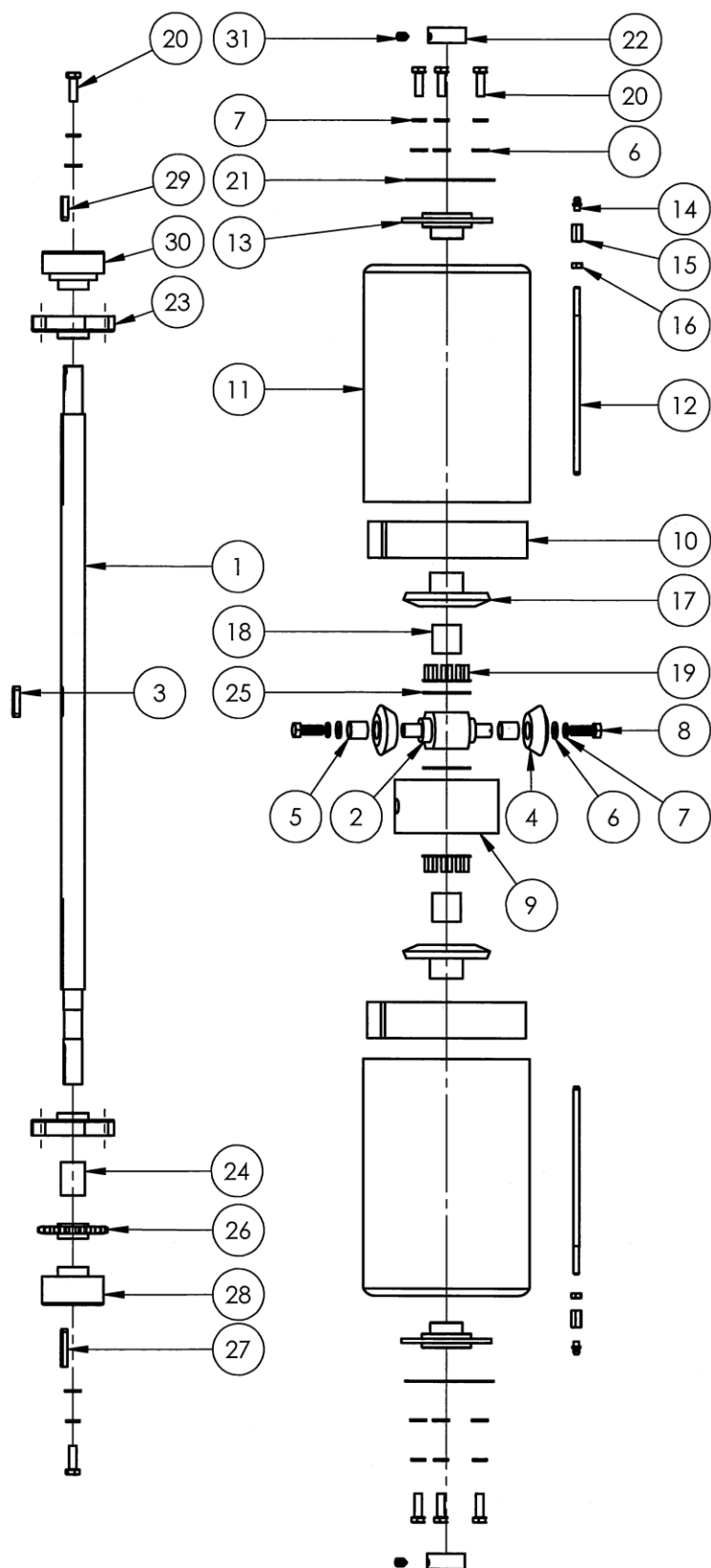


FIG 1A

MODEL C20 & C24:- Rear Roller Assembly BOM (FIG 1A)

ITEM NO.	DESCRIPTION	PART 20"	PART 24"	USED
1	REAR ROLLER SHAFT	C1024	C1025	1
2	DIFFERENTIAL CARRIER	BSG024		1
3	KEY 1/4" x 1.1/4" Form A	AM92888		1
4	PINION GEAR STEEL	BSG049		2
5	OILITE BUSH	BSG1102		2
6	M8 PLAIN WASHER	WM8		10
7	SPRING WASHER	SWM8		10
8	SET SCREW 3-8 UNF x 1 ZC			2
9	PVC TUBE - REAR ROLLER DIFF SHROUD	BSG1083		1
10	SEALING BAND	AS1062		2
11	SHAVER REAR ROLLER FAB	AS070	AS071	2
12	GREASE TUBE	BSG1284	BSG1285	2
13	BEARING - 25mm	AM81049		2
14	GREASE NIPPLE M6	GNM6		2
15	M6 STUDDING CONNECTOR	BSG1287		2
16	M6 PLAIN NUT	NM6		2
17	BEVEL GEAR STEEL	BSG048		2
18	BRONZE BUSH	AM81143		2
19	POP RIVET 4.8 DIA x 16mm STEEL	PR4820		20
20	SET SCREW M8 x 25	SM825		8
21	REAR ROLLER TAB WASHER	BSG1320		2
22	BAR- REAR ROLLER LOCKING COLLAR	BSG016		2
23	BEARING 20MM FLANGED LFTCB11010	AM81008		2
24	DISTANCE PIECE REAR ROLLER	C1069		1
25	SPACER	BSG1046		2
26	ROLLER DRIVE SPROCKET	BSG1161		1
27	KEY TYPE AB	AM81463		1
28	SPACER REAR ROLLER	C1064		1
29	6 x 6 x 25 KEY	AM81465		1
30	SPACER REAR ROLLER NON-DRIVE SIDE	C1095		1
31	GRUB SCREW M8 x 8	ACGM8		2
CPL	COMPLETE REAR ROLLER ASSY	C001	C002	1

ODEL C20 & C24:- Front Roller Assembly (FIG 1B)

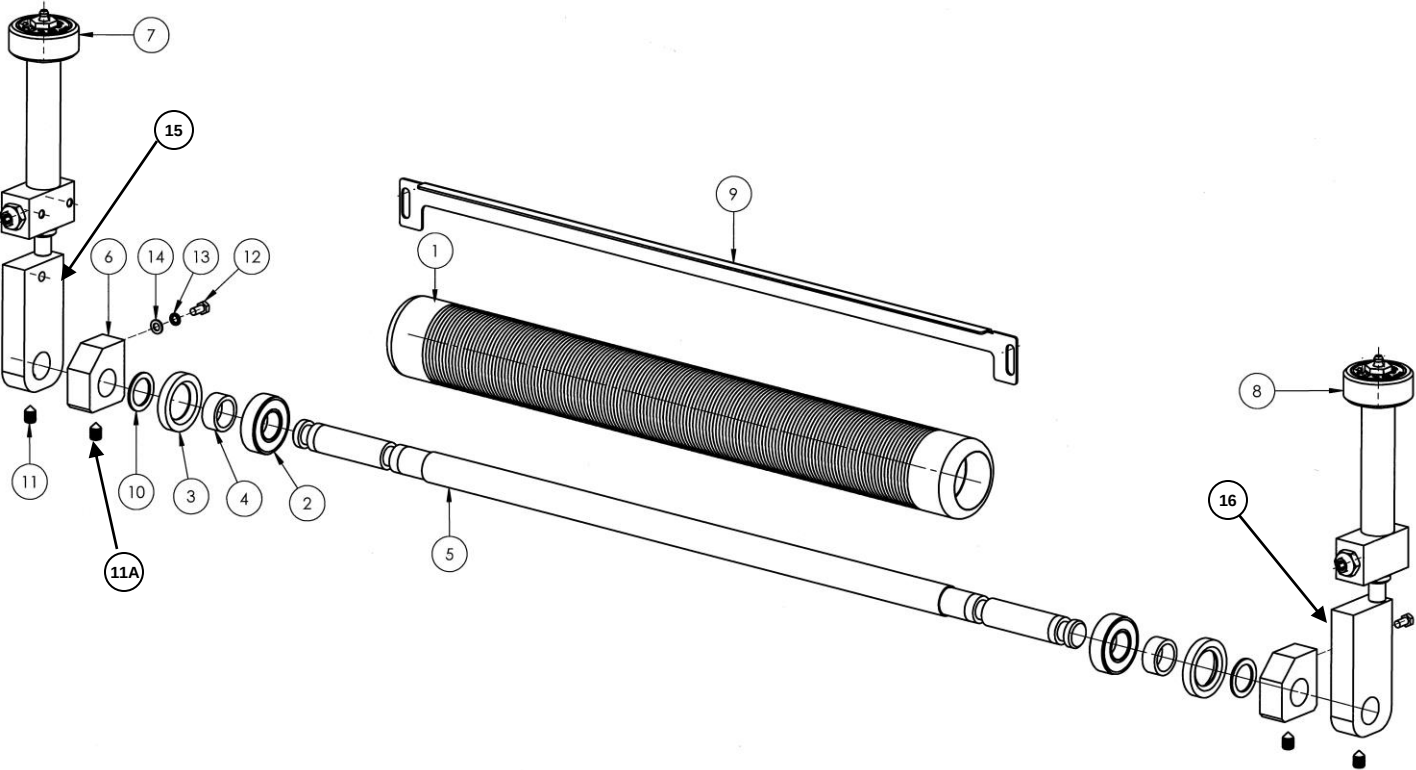


FIG 1B

MODEL C20 & C24:- Front Roller Assembly BOM (FIG 1B)

ITEM NO.	DESCRIPTION	PART 20"	PART 24"	USED
1	GROOVED FRONT ROLLER TUBE	BSG1262	BSG1263	1
2	BEARING 20mm 6004 2RS	AM81007		2
3	OIL SEAL 42 OD,26 ID, 7 THK	AM81524		2
4	SEAL SLEEVE	AM81523		2
5	FRONT ROLLER SHAFT	C1145	C1146	1
6	LOCATOR BLOCK - C FRONT ROLLER	C1054		2
7	RH QUICK HEIGHT ADJUSTER	C030		1
8	LH QUICK HEIGHT ADJUSTER	C029		1
9	SCRAPER BAR	BSG1140	BSG1142	1
10	SHIM WASHER 20 ID, 28 OD, 1.5 THK	AM81533		2
11	GRUB SCREW M6 x 12	ACGM612		2
11A	GRUB SCREW M8 x 8	ACGM8		2
12	M5 SET SCREW x 10	SM510		2
13	SPRING WASHER M5	SWM5		2
14	WASHER M5 FORM A	WM5		2
15	LEFT HAND ANCHOR	C1141		1
16	RIGHT HAND ANCHOR	C1142		1
CPL ASSY	GROOVED FRONT ROLLER ASSY C/W HOC ADJUSTERS, BEARING & SEALS	C031	C032	1

FRONT ROLLER ASSEMBLY WITH JUST
SEALS AND BEARING UNAVAILABLE, PLEASE
ORDER SEPARATE ITEMS

MODEL C20 & C24:- Countershaft Assembly BOM (FIG 2)

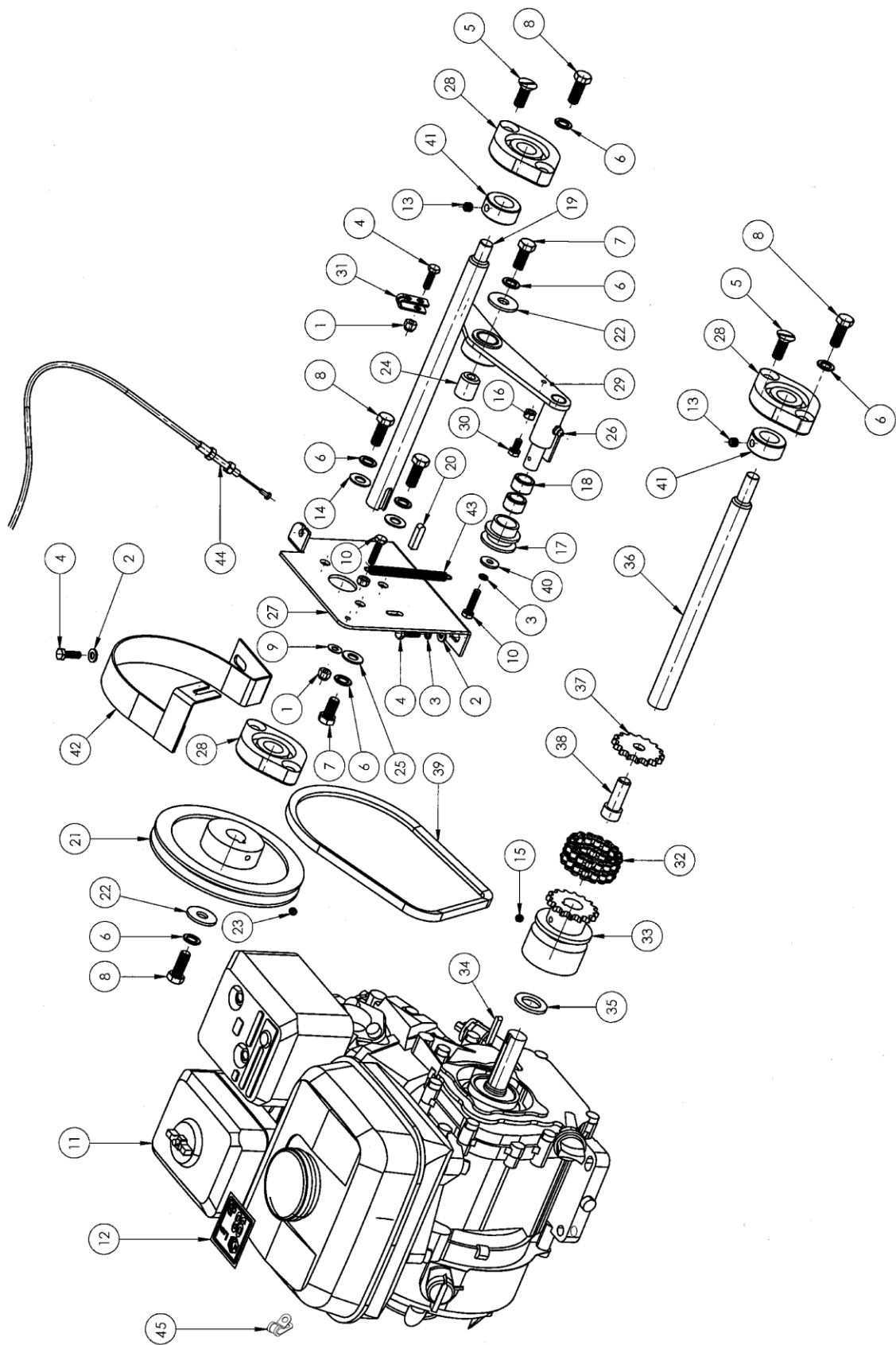
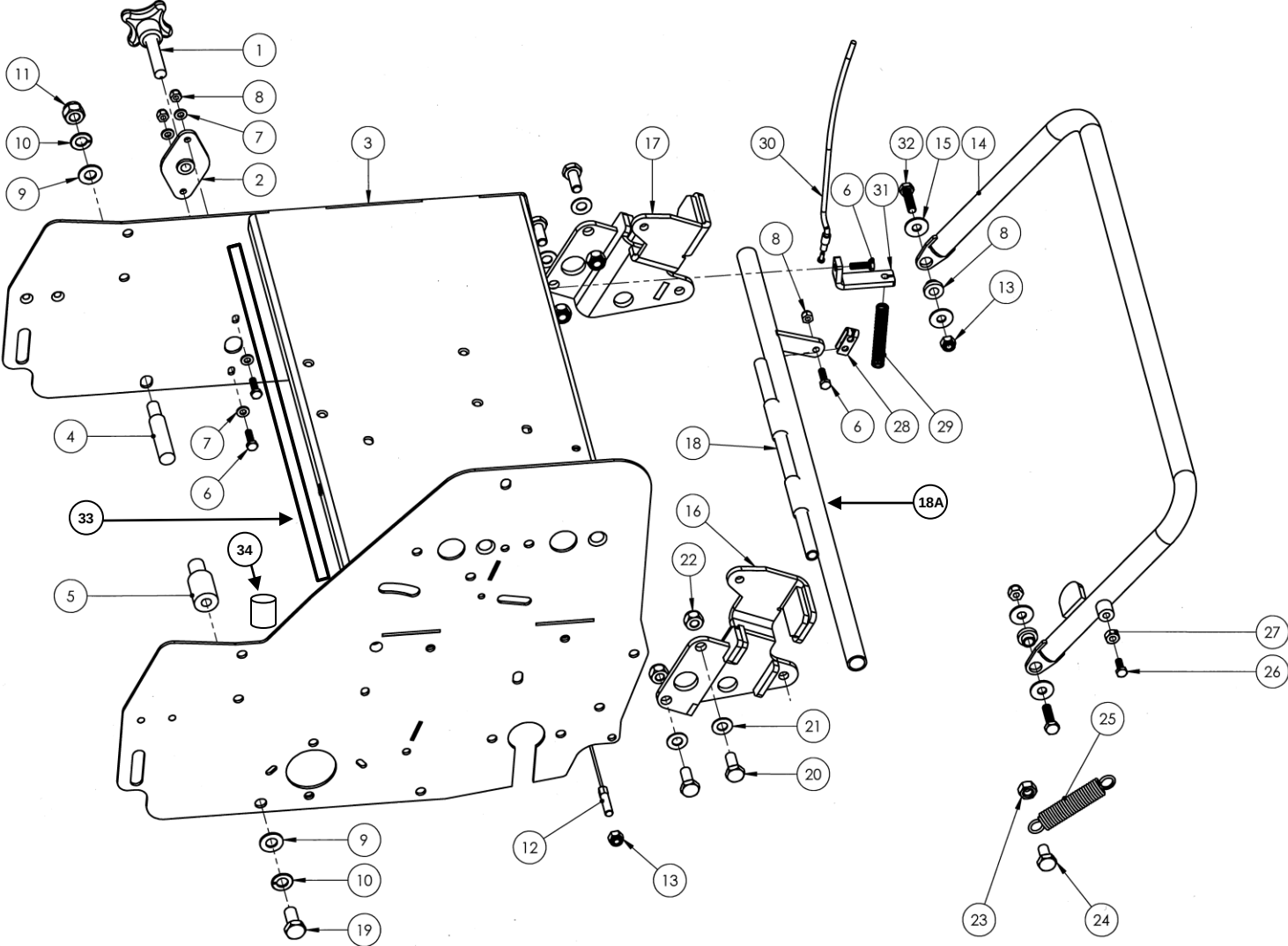


FIG 2

MODEL C20 & C24:- Countershaft Assembly BOM (FIG 2)

ITEM NO.	DESCRIPTION	PART 20"	PART 24"	USED
1	NUT M6 NYLOC	NNM6		2
2	WASHER M6	WM6		3
3	SPRING WASHER M6	SWM6		3
4	M6 x 20 SET SCREW	SM620		4
5	3/8 X 1 UNF CSK SLOTTED	S11010		2
6	3/8 SPRING WASHER			7
7	3/8 x 1/2 UNF			1
8	3/8 X 1 UNF SET SCREW	S11014		6
9	WASHER M6 FORM D	WM6D		1
10	SET SCREW M6 x 25 ZC	SM625		2
11	HONDA ENGINE	GX160		1
12	DECAL 98dB	AM81433		1
13	GRUB SCREW M8 x 8	ACGM8		2
14	WASHER M10 FORM Z/C	WM10		2
15	M6 X 6 GRUBSCREW	ACGM6		2
16	NUT M6 PLAIN	NM6		2
17	DRIVE CLUTCH JOCKEY PULLEY	BSG018		1
18	NEEDLE ROLLER HK1412	AM81002		2
19	BAR - ROLLER DRIVE SHAFT	BSG1035	BSG1036	1
20	KEY 1/4 X 26 LG FORM C	AM81055		1
21	PULLEY DRIVE ALUMINIUM	AM89495		1
22	WASHER M10 FORM G	WM10G		2
23	GRUB SCREW M6 x 6	ACGM6		1
24	CLUTCH ARM SWIVEL	BSG017		1
25	3-8 WASHER			1
26	GREASE NIPPLE M6	GNM6		1
27	SHAFT RETAINING PLATE	BSG003		1
28	BEARING 20MM FLANGED LFTCB11010	AM81008		3
29	DRIVE CLUTCH ARM ASSY	BSG064		1
30	M6 x 12 SET SCREW	SM612		1
31	YOKE ANCHOR POINT	BSG1024		1
32	CHAIN3/8 DUPLEX 16 LINKS	AM89475		1
33	BAR - SMALL FLYWHEEL PULLEY	AM89478		1
34	KEY 3/16 x 1.1/4 FORM C	AM83273		1
35	DISTANCE PIECE ENGINE SHAFT	SG1001		1
36	CYLINDER DRIVE SHAFT	C1062	C1063	1
37	PLATEWHEEL 16T 3/8 MODIFIED	BSG1052		1
38	SCREW CAP HEAD 1/2 UNF x 1 1/4 ZC	S11022		1
39	BELT ENGINE DRIVE	AM89482		1
40	FLAT WASHER M6 FORM G	WM6G		1
41	LOCKING COLLAR 20-20-EC	AM81000		2
42	PRIMARY BELT GAURD ASSEMBLY	BSG004		1
43	SPRING	AM85343		1
44	CABLE ROLLER DRIVE	BSG1078		1
45	6mm P-CLIP	AM81642		1

MODEL C20 & C24:- Kickstand Assembly (FIG 3)



MODEL C20 & C24:- Kickstand Assembly BOM (FIG 3)

ITEM NO.	DESCRIPTION	PART 20"	PART 24"	USED
1	HANDWHEEL FAB	C217		1
2	LOCATING BOSS	C238		1
3	CHASSIS FAB	C241	C242	1
4	SUPPORT PIN	C1015		1
5	SUPPORT PIN	C1018		1
6	SET SCREW M6 x 20	SM620		1
7	WASHER M6 FORM A	WM6A		1
8	NUT M6 NYLOC	NNM6		1
9	WASHER M12 FORM A	WM12		2
10	SPRING WASHER M12	SWM12		2
11	NUT M12 NYLOC	NNM12		1
12	SCRAPER WIRE	BSG1166	C1070	1
13	NUT M8 NYLOC	NNM8		3
14	KICKSTAND FAB	C223	C224	1
15	WASHER M8 FORM C	WM8C		4
16	LH PIVOT BRACKET FAB	BSG110		1
17	RH PIVOT BRACKET FAB	BSG111		1
18	BRAKE SWIVEL FAB	C221	C222	1
18A	RUBBER STOPS FOR ABOVE FAB	BSG1116		2
19	SET SCREW M12 x 25	SM1225		1
20	SET SCREW M10 x 25	SM1025		4
21	WASHER M10	WM10		4
22	NUT M10 NYLOC	NNM10		4
23	NUT M10 PLAIN	NM10		1
24	SET SCREW M10 x 20	SM1020		1
25	SPRING	RT-00003098		1
26	SET SCREW M6 x 16	SM616		1
27	NUT M6 PLAIN	NM6		1
28	YOKE ANCHOR POINT	BSG1024		1
29	SPRING	AM90519		1
30	CABLE CUTTER CLUTCH	BSG1077		1
31	BRAKE CABLE RETAINER	BSG1193		1
32	SET SCREW M8 x 30	SM830		2
33	TIE BAR	C1019	C1020	1
34	LOCATING STOP BOSS	C1154		1

MODEL C20 & C24:- Handle Bar Assembly (FIG 4)

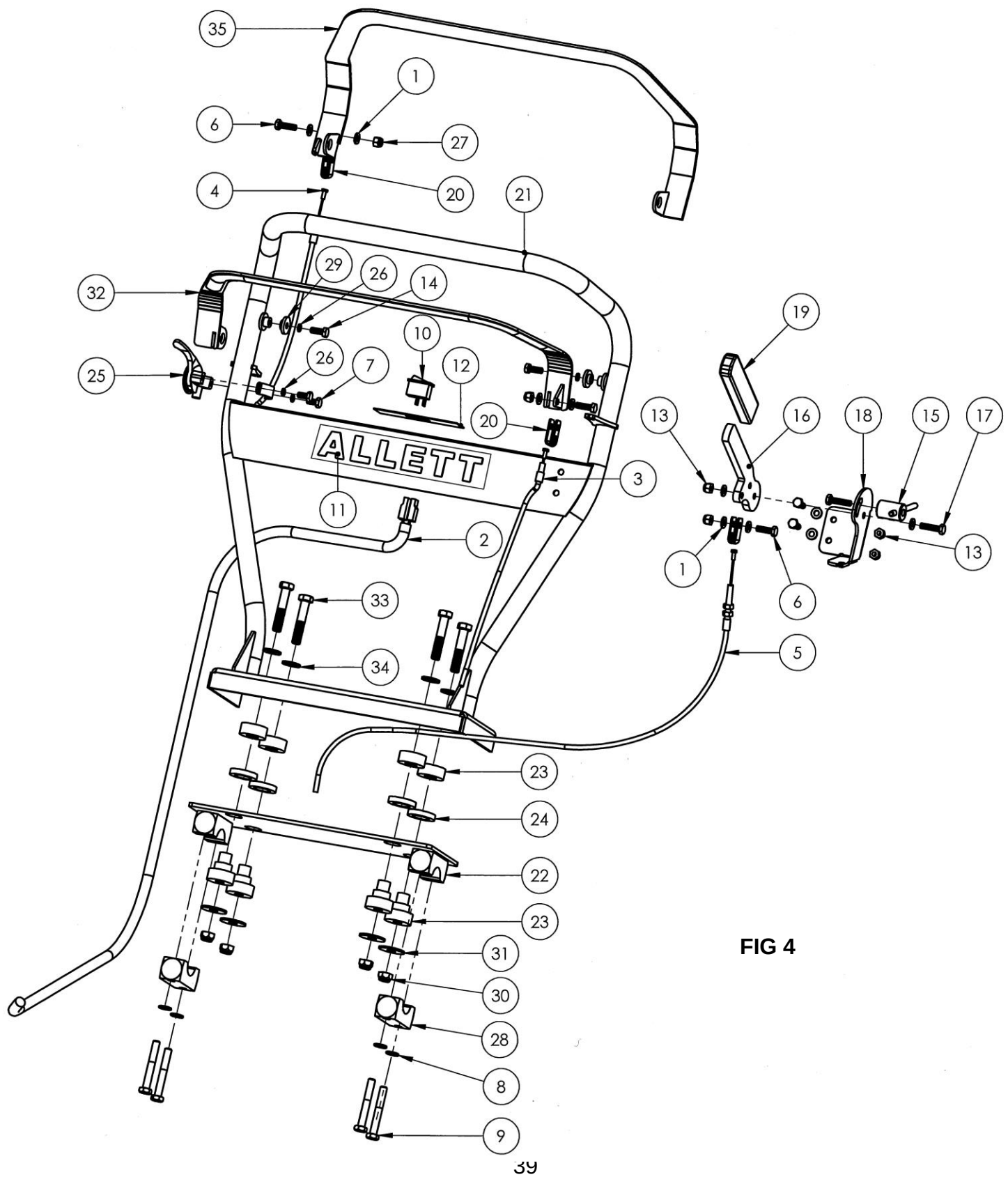


FIG 4

MODEL C20 & C24:- Handle Bar Assembly BOM (FIG 4)

ITEM NO.	PART NUMBER	DESCRIPTION	USED
1	WM6	WASHER M6	6
2	BSG035	ON-OFF SWITCH HARNESS ASSEM	1
3	BSG1077	CABLE CUTTER CLUTCH	1
4	BSG1078	CABLE ROLLER DRIVE	1
5	BSG1077	BRAKE CABLE	1
6	SM620	HEX SET SCREW	3
7	SM612	M6 x 12 SET SCREW	2
8	AM81640	SHAKEPROOF WSH 8.4x15x0.8	4
9	B11001	5/16 UNF x 2 1/4"	4
10	AM85043	SWITCH ON-OFF ROCKER	1
11	AM81622	ALLET SMALL DECAL	1
12	AM81555	ON OFF SWITCH DECAL	1
13	NNM6	NUT M6 NYLOC	4
14	SM616	SET SCREW M6 x 16 Z/C	2
15	BSG046	SCREWLOCK BODY FAB	1
16	BSG1090	BRAKE LEVER	1
17	SM625	SET SCREW M6 x 25 ZC	1
18	BSG1089	BRAKE LEVER BASS PLATE	1
19	AM81140	FLAT CAP	1
20	BSG1024	YOKE ANCHOR POINT	1
21	BSG093	TOP HANDLE FAB	1
22	BSG094	LOWER AV PLATE FAB	1
23	AM81320	UNIVERSAL MOUNT	4
24	BSG1207	SPACER FOR A/V MOUNTING	4
25	AM82177	THROTTLE LEVER RH	1
26	SWM6	SPRING WASHER M6	4
27	NNM6	NUT NYLOC M6	2
28	BSG1020	HANDLE BAR CLAMP	2
29	BSG1081	BAR - LEVER MOUNT	2
30	N11002	NUT NYLOCK 3-8 UNF BZP	4
31	WM10G	FLAT WASHER M10 FORM G	4
32	BSG038	CUTTER LEVER	1
33	B11009	BOLT 3/8 UNF x 2 ZC	4
34	WM10	M10 FLAT WASHER	4
35	BSG039	ROLLER DRIVE LEVER FAB	1

This diagram shows an exploded view of a mechanical assembly. The main components are a long, curved tube (21) and a central housing (9). The assembly includes various fasteners, springs, and internal components. The numbered callouts are as follows:

- 1: Small pins or spacers.
- 2: Small pins or spacers.
- 3: Small pins or spacers.
- 4: A small bracket or clip.
- 5: Small pins or spacers.
- 6: A small pin or spacer.
- 7: A small pin or spacer.
- 8: A small component, possibly a seal or gasket.
- 9: The central housing or main body.
- 10: A coiled spring.
- 11: A small component, possibly a seal or gasket.
- 12: A small pin or spacer.
- 13: A small pin or spacer.
- 14: A small component, possibly a seal or gasket.
- 15: A small bracket or clip.
- 16: A small pin or spacer.
- 17: A small pin or spacer.
- 18: A small pin or spacer.
- 19: A small pin or spacer.
- 20: A small component, possibly a seal or gasket.
- 21: The long, curved tube.

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MODEL C20 & C24:- Lower Handle Bar Assembly BOM (FIG 5)

ITEM NO.	DESCRIPTION	PART 20"	PART 24"	USED
1	WASHER M10 FORM Z/C	WM10		6
2	SET SCREW M10 x 20	SM1025		4
3	M10 NYLOC NUT	NNM10		8
4	SET SCREW M8 x 20 ZC	SM820		2
5	FLAT WASHER M10 FORM G	WM10G		2
6	NUT M10 PLAIN	NM10		3
7	SET SCREW M10 x 20	SM1020		3
8	LOWER RUBBER BUFFER	BSG1236		2
9	TOP BUFFER	BSG1235		2
10	SPRING	RT-00003098		3
11	LH PIVOT BRACKET	BSG110		1
12	M8 NUT PLAIN	NM8		4
13	SET SCREWM 6 x 16	SM616		1
14	RH PIVOT BRACKET	BSG111		1
15	SPRING ANCHOR FAB	BSG109		2
16	WHEEL CLAMP WASHER	AC4246		2
17	UNIVERSAL MOUNT	AM81320		2
18	SPACER HYDRO BOSS 32x20x3mm	AFK1132		2
19	BOLT M10 x 55	BM1055		2
20	BUMP STOP	AM81187		1
21	BOTTOM HANDLE FAB	BSG102	C235	1

MODEL C20 & C24:- Final Assembly BOM (FIG 6)

ITEM NO.	DESCRIPTION	PART 20"	PART 24"	USED
1	TUNNEL GUARD 20	BSG1125	BSG1126	1
2	CHAINCASE COVER	AS045		1
3	GRASSBOX ASSEMBLY	SG007	SG009	1
4	GROMMET PVC	AM81264		1
5	ALLETT C** DECAL	AM81624	AM81625	1
6	DECAL - UNION FLAG	AM81525		1
7	SET SCREW M6 x 20	SM620		5
8	SPRING WASHER M6	SWM6		5
9	WASHER M6 FORM G	WM6G		4
10	WASHER M6 FORM A	WM6A		1
11	NUT M8 NYLOC	NNM8		2
12	WASHER M8 FORM A	WM8A		2
CPL	TUNNEL GUARD ASSEMBLY	C1175	C1176	1

MODEL C20 & C24:- Final Assembly (FIG 6)

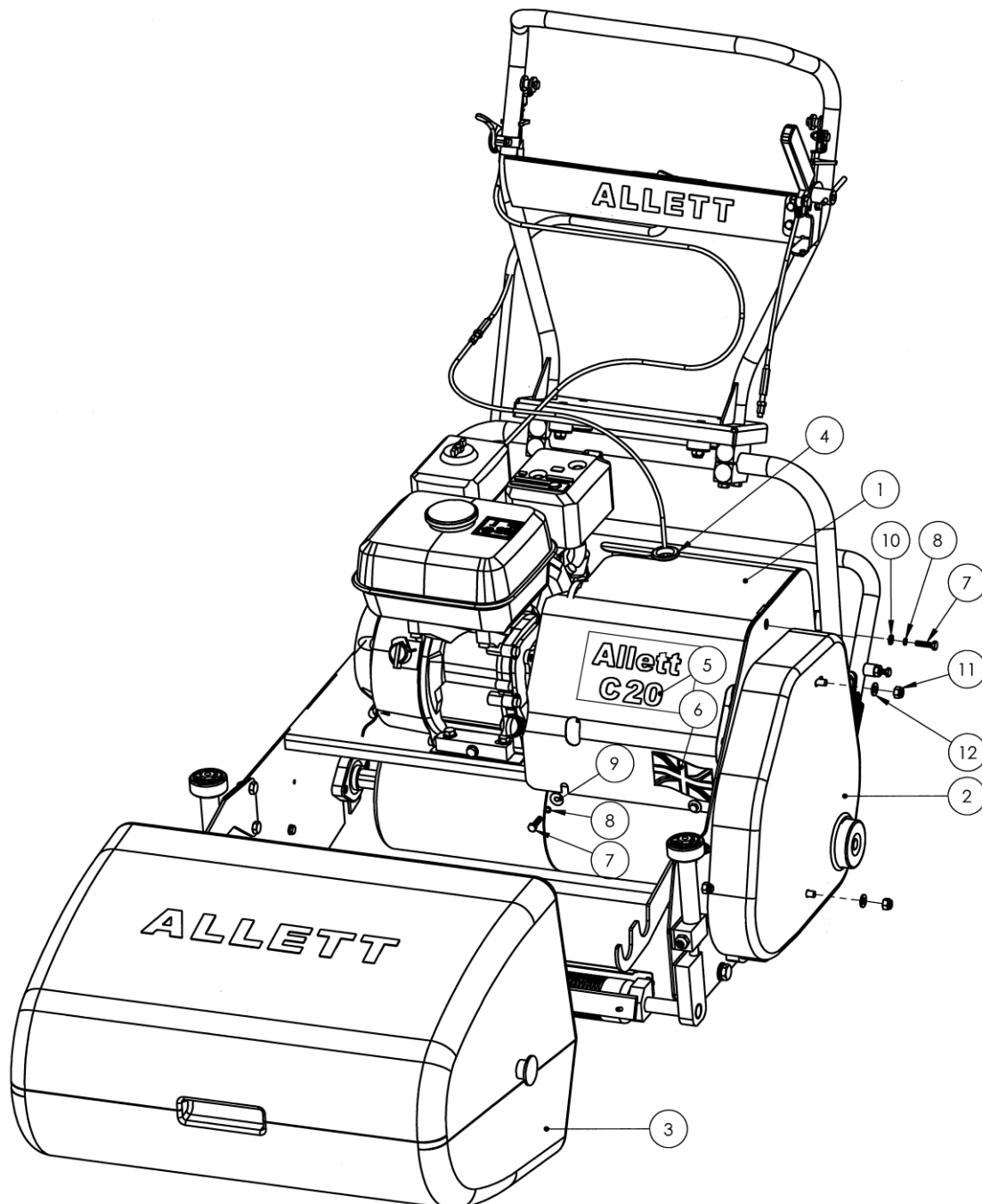
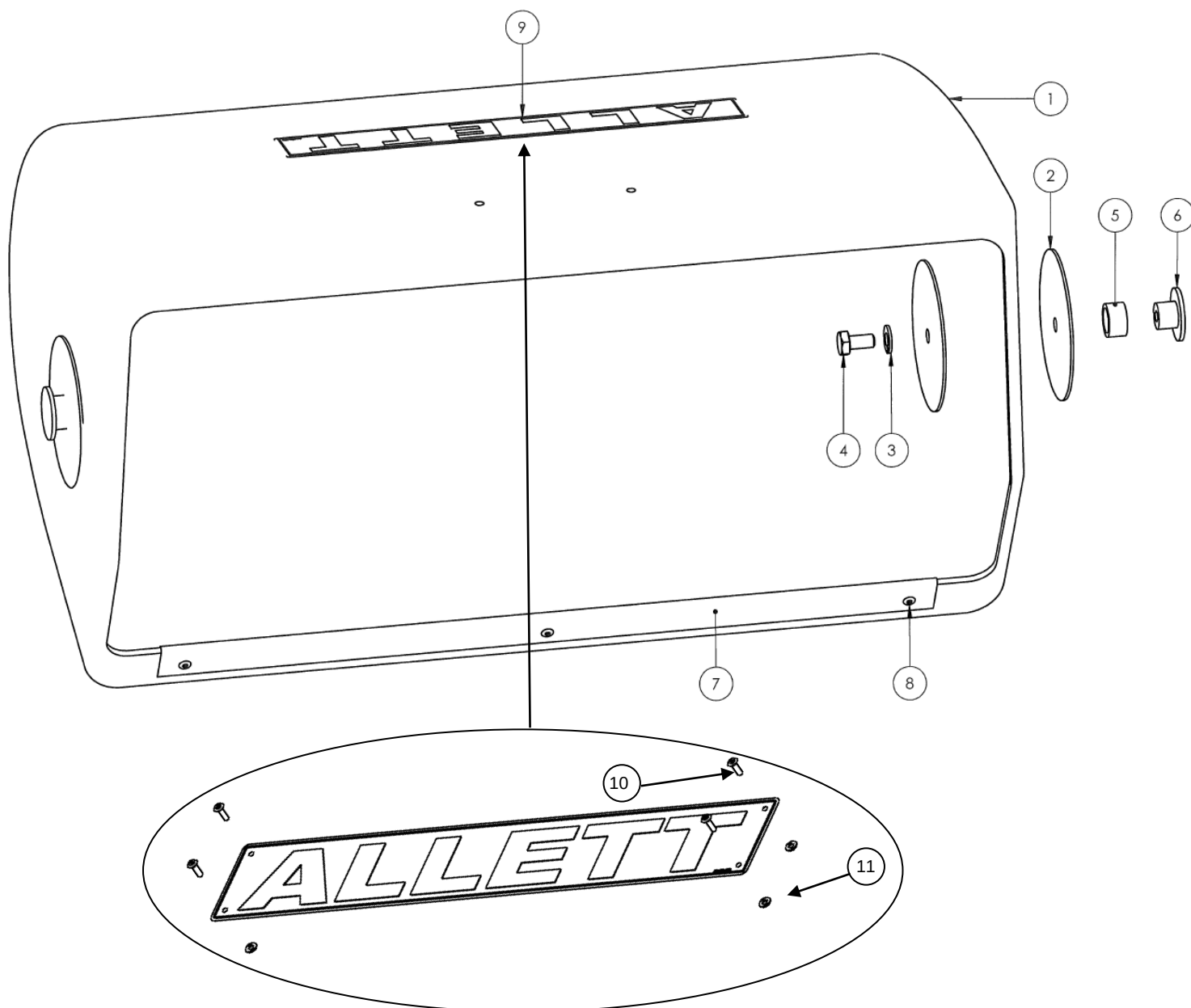


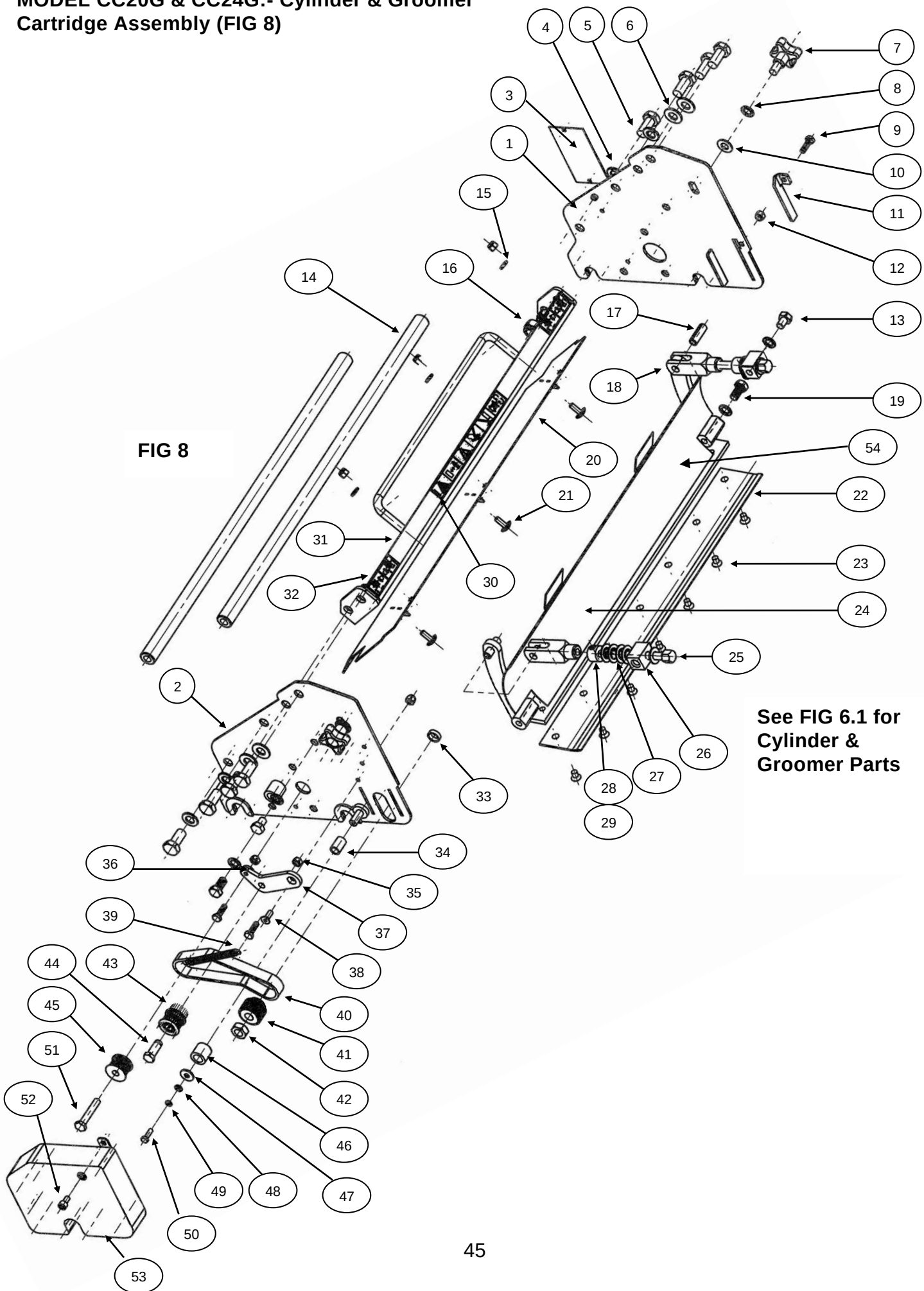
FIG 6

MODEL C20 & C24:- Grassbox Assembly BOM (FIG 7)

ITEM NO.	DESCRIPTION	PART 20"	PART 24"	USED
1	GRASSBOX	AM89511	AM92510	
2	GRASSBOX PLATE	BSG1029		4
3	WASHER SPRING M10	SWM10		2
4	SET SCREW M10 x 20	M1020		2
5	GRASSBOX SWIVEL BUSH	BSG1050		2
6	GRASSBOX SWIVEL	BSG013		2
7	GRASSBOX STIFFENER	BSG006	BSG1022	1
8	POP RIVET 4.8DIA x16mm	PR4816		3
9	ALLETT LARGE DECAL	AM81620		1
10	POP RIVET 4DIA X 12mm BLACK	PR412		4
11	4M WASHER FORM G	WM4A		4
CPL	GRASSBOX ASSEMBLY	SG007	SG009	1
CPL	GRASSBOX ASSEMBLY PRIOR TO SERIAL No – 14-231 (C20 ONLY)	SG008		1



MODEL CC20G & CC24G:- Cylinder & Groomer Cartridge Assembly (FIG 8)



**See FIG 6.1 for
Cylinder &
Groomer Parts**

MODEL CC20G & CC24G: Cylinder & Groomer Cartridge
BOM (FIG 8)

ITEM	DESCRIPTION	PART 20"	PART 24"	USED
1	DRIVE SIDE PLATE	C213		1
2	NON DRIVE SIDE PLATE	C214		1
3	CE PLATE	T000333		1
4	SPRING WASHER M12	SWM12		4
5	M12 x 25 SET SCREW	SM1225		8
6	WASHER M12	WM12		4
7	START KNOB 3/8" UNF X 1/2	AM81260		2
8	SPRING WASHER 3/8			5
9	M6 x 20 SET SCREW	SM620		3
10	WASHER 3/8			1
11	BRUSH GUIDE BRACKET	BSG1205		1
12	M6 NUT NYLOC	NNM6		5
13	SET SCREW 3/8" UNC X 1/2" Z/C	S11073		2
14	TIE BAR	C1022	C1023	2
15	WASHER M6 PLAIN			3
16	M12 NUT NYLOC	NNM12		4
17	ROLL PIN M10 x MBK x 30	AM89341		2
18	ADJUSTER FORK	AB1004		2
19	3/8 x 3/4 BOLT			2
20	DELIVERY PLATE FAB	C225	C226	1
21	M6 x 16 ROOFING BOLT ZC	S11060		3
22	BOTTOM BLADE	AM89115	AM89116	1
23	BOTTOM BLADE SCREW 5/16 BSF	S11050		7
24	BOTTOM BLADE FAB	AZ079	AZ080	1
CPL	BTM BLADE FAB ASSY W/ BLADE	AZ081	AZ082	1
25	BAR – ADJUSTER SCREW	AS1038		2
26	BAR – ADJUSTER ANCHOR	AB1002		2
27	3/8" BELLEVILLE WASHER	95-006		8
28	ADJUSTER LOCKING COLLAR	AB1003		2
29	M8 x 6 GRUBSCREW			2
30	CYLINDER BLADE CAUTION DECAL	AM81541		1
31	LIFT BAR FAB	C204	C205	1
32	BOTTOM BLADE DECAL	AM81540		2
33	DRIVEN PULLEY SPACER	C1059		1
34	BRONZE BUSH 1/2 X 3/8 X 3/4 LG	AM81266		1
35	M6 NUT PLAIN			2
36	DRIVE PULLEY SPACER	C1058		1
37	TENSIONER BRACKET	C1061		1
38	M6 x 16 CSK HEX SCREW			1
39	SPRING	AM85343		1
40	TIMING BELT C GROOMER	AM81508		1
41	GROOMER - DRIVEN PULLEY	C1117		1
42	1/2" UNF HALF NUT	N11020		1
43	JOCKEY PULLEY GROOMER	C028		1
44	JOCKEY SPINDLE BOLT	C1137		1
45	DRIVER PULLEY – GROOMER	C1116		1
46	DRIVE BELT ROLLER	C1056		1
47	WASHER M6 FORM G	WM6G		1
48	WASHER M5	WM5		1
49	SPRING WASHER M5	SWM5		1
50	M5 x 16 SET SCREW	SM516		1
51	GROOMER PULLEY SCREW	C1119		1
52	M6 x 12 CAP HD SCREW	AM85343		1
53	DRIVE GUARD BODY	C218		1
54	DEFLECTOR PLATE	AZ1023	AZ1140	1

MODEL CC20G & CC24G: Cylinder & Groomer Cartridge

BOM (FIG 8.1)

ITEM	DESCRIPTION	PART 20"	PART 24"	USED
1	3/8 x 3/4 BOLT	S1101		4
2	SPRING WASHER 3/8	SW3-8		4
3	BEARING 20MM FLANGED	AM81008		2
4	10 BLADED CYLINDER	C206	C207	1
5	DRIVEN PLATE	C1040		1
6	ROLLER ADJUSTER KNOB	AM81261		2
7	STAR KNOB 3/8" UNF X 1/2	AM81260		2
8	VERTICAL GROOMER ADJUSTER	BSG082		2
9	GROOMER ADJUSTOR FAB	BSG051		2
10	BEARING 1/2 INCH	AM82960		2
11	CIRCLIP EXTERNAL DOMED	AM81245		2
12	SPACER HYDRO BOSS 32x20x3mm	AFK1132		2
13	GROOMER SPACER	BSG1148		46/55
14	GROOMER BLADE	BSG1149		46/55
15	GROOMER SHAFT	BSG1146	BSG1147	1
16	WASHER M10	WM10		2
17	SPRING WASHER M10	SWM10		2

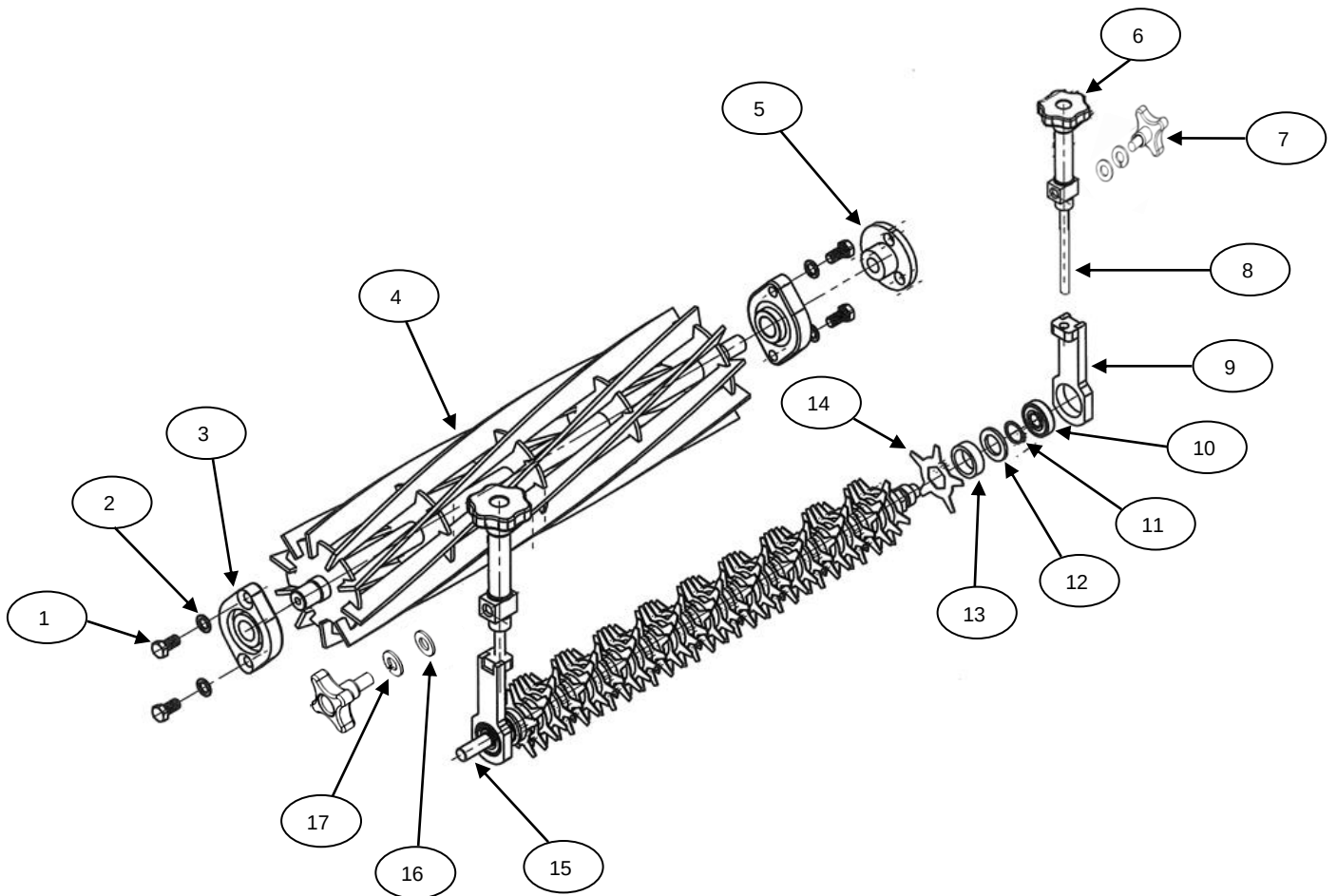


FIG 8.1

MODEL CC206:- Cartridge Unit & 6 Blade Cylinder (Fig 9)

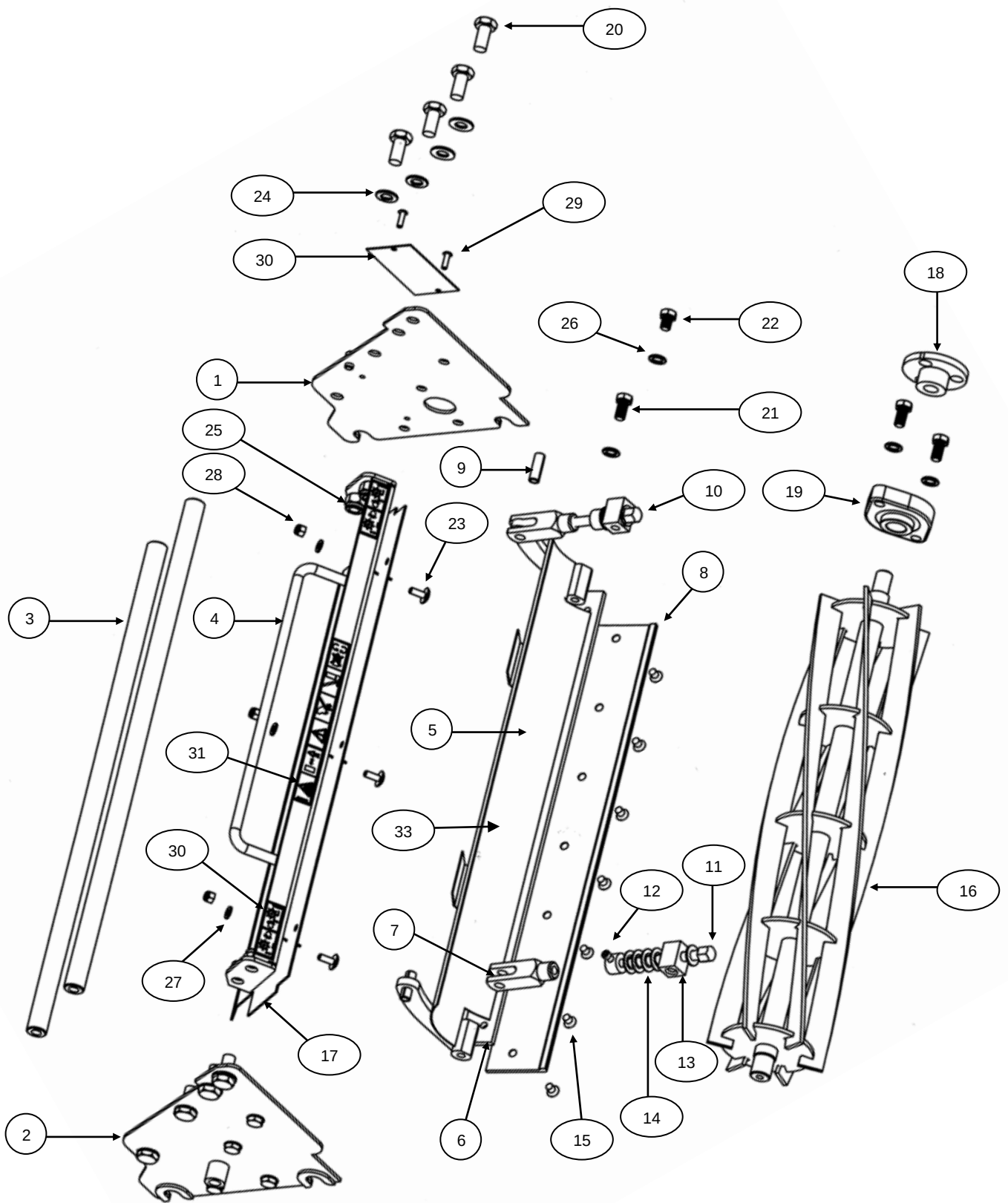


FIG 9

MODEL CC206 & CC246: Cartridge Unit & 6 Blade Cylinder
BOM (FIG 9)

ITEM	DESCRIPTION	PART 20"	PART 24"	USED
1	CYLINDER DRIVE SIDE PLATE	C211		1
2	CYLINDER NON DRIVE SIDE PLATE	C212		1
3	TIE BAR	C1022	C1023	2
4	LIFT BAR FAB	C204	C205	1
5	BOTTOM BLADE CARRIER	AZ071	AZ072	1
6	BOTTOM BLADE CARRIER FAB	AZ079	AZ080	1
7	ADJUSTER FORK	AB1004		2
8	BOTTOM BLADE	AM89115	AM89116	1
9	ROLL PIN M10 x 30	AM89341		2
10	ADJUSTER SCREW ASSEMBLY	BSG053		2
11	ADJUSTER SCREW	AS1038		2
12	LOCKING COLLAR	AB1003		2
13	ADJUSTER ANCHOR	AB1002		2
14	BELLEVILLE WASHER	W11030		4
15	BOTTOM BLADE SCREW	S11050		7/8
16	CYLINDER 6 BLADE	C208	C209	1
17	DELIVERY PLATE FAB	C225	C226	1
18	DRIVEN PLATE	C1040		1
19	BEARING 20mm FLANGED	AM81008		2
20	SET SCREW M12 x 30	SM1230		8
21	SET SCREW 3-8 x 3-4 UNF	S11011		6
22	SET SCREW 3-8 x 1-2 UNF	S11073		2
23	ROOFING SCREW M6	S11060		3
24	SPRING WASHER M12	SWM12		4
25	NYLOC NUT M12	NNM12		4
26	SPRING WASHER M10	SWM10		8
27	WASHER M6 FORM C	WM6C		3
28	NYLOC NUT M6	NNM6		3
29	RIVET 4.8 x 20	PR4820		2
30	BOTTOM BLADE ADJUSTER DECAL	AM81540		2
31	CYLINDER BLADE CAUTION DECAL	AM81541		1
32	CE PLATE	T000333		1
33	DEFLECTOR PLATE	AZ1023	AZ1140	1

MODEL CC2010:- Cartridge Unit & 10 Blade Cylinder (Fig 10)

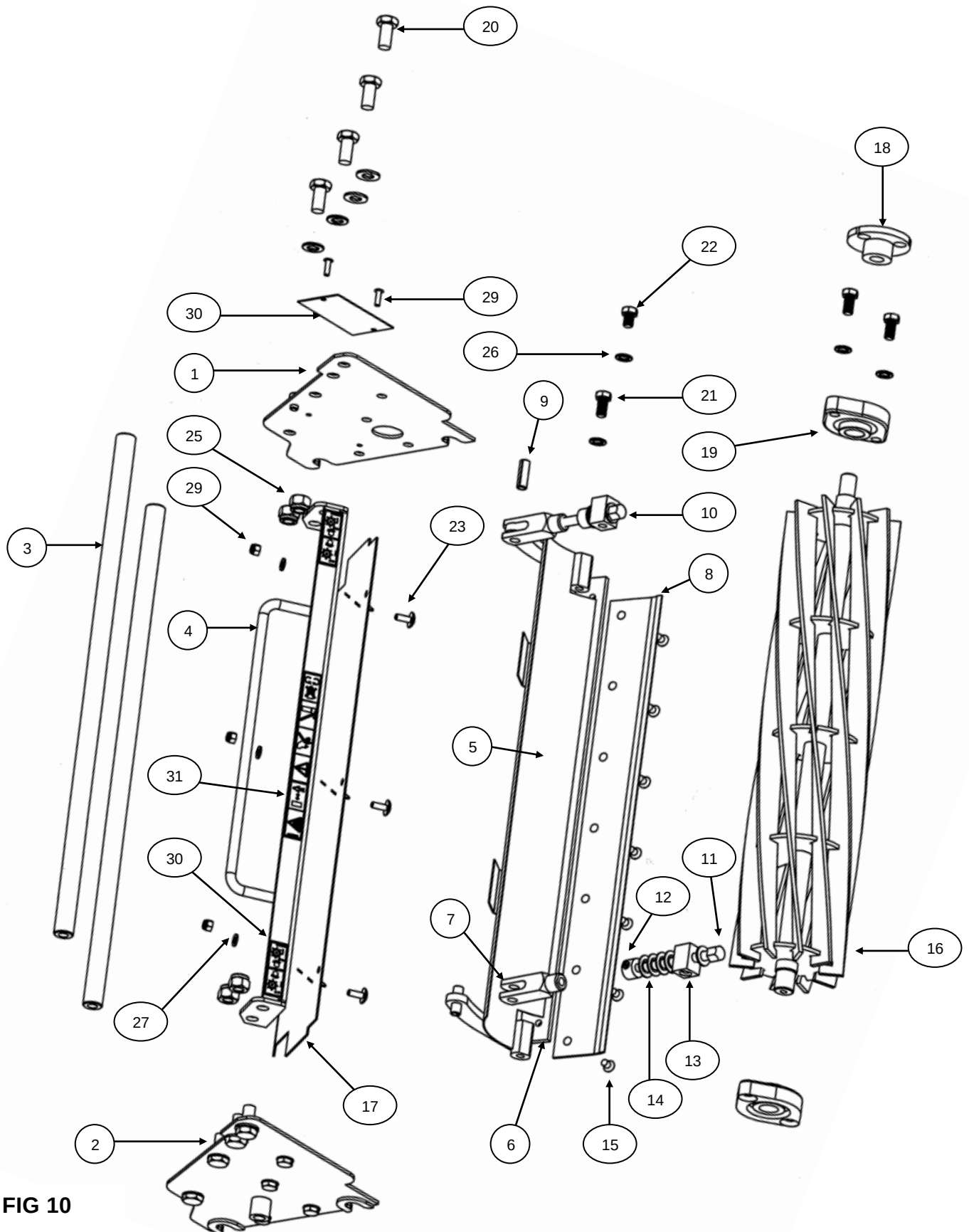


FIG 10

MODEL CC2010 & CC2410: Cartridge Unit & 10 Blade Cylinder
BOM (FIG 10)

ITEM	DESCRIPTION	PART 20"	PART 24"	USED
1	CYLINDER DRIVE SIDE PLATE	C211		1
2	CYLINDER NON DRIVE SIDE PLATE	C212		1
3	TIE BAR	C1022	C1023	2
4	LIFT BAR FAB	C204	C205	1
5	BOTTOM BLADE CARRIER	AZ071	AZ072	1
6	BOTTOM BLADE CARRIER FAB	AZ079	AZ080	1
7	ADJUSTER FORK	AB1004		2
8	BOTTOM BLADE	AM89115	AM89116	1
9	ROLL PIN M10 x 30	AM89341		2
10	ADJUSTER SCREW ASSEMBLY	BSG053		2
11	ADJUSTER SCREW	AS1038		2
12	LOCKING COLLAR	AB1003		2
13	ADJUSTER ANCHOR	AB1002		2
14	BELLEVILLE WASHER	W11030		4
15	BOTTOM BLADE SCREW	S11050		7/8
16	CYLINDER 6 BLADE	C206	C207	1
17	DELIVERY PLATE FAB	C225	C226	1
18	DRIVEN PLATE	C1040		1
19	BEARING 20mm FLANGED	AM81008		2
20	SET SCREW M12 x 30	SM1230		8
21	SET SCREW 3-8 x 3-4 UNF	S11011		6
22	SET SCREW 3-8 x 1-2 UNF	S11073		2
23	ROOFING SCREW M6	S11060		3
24	SPRING WASHER M12	SWM12		4
25	NYLOC NUT M12	NNM12		4
26	SPRING WASHER M10	SWM10		8
27	WASHER M6 FORM C	WM6C		3
28	NYLOC NUT M6	NNM6		3
29	RIVET 4.8 x 20	PR4820		2
30	BOTTOM BLADE ADJUSTER DECAL	AM81540		2
31	CYLINDER BLADE CAUTION DECAL	AM81541		1
32	CE PLATE	T000333		1

MODEL C20B:- Brush Cartridge Assembly (Fig 11)

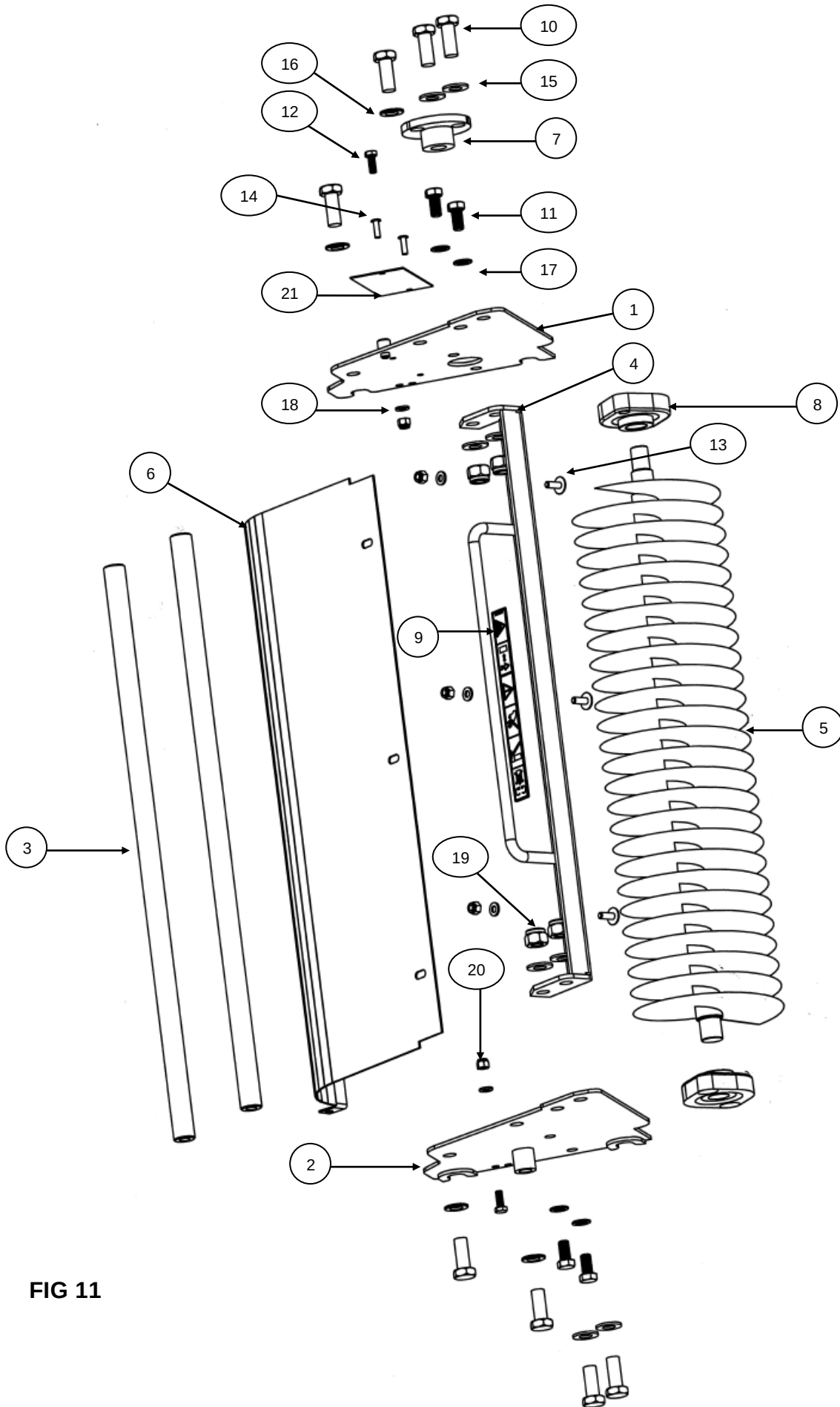


FIG 11

MODEL C20: Brush Cartridge BOM (FIG 11)

ITEM	DESCRIPTION	PART 20"	PART 24"	USED
1	DRIVE SIDE PLATE	C215		1
2	NON DRIVE SIDE PLATE	C216		1
3	TIE BAR	C1022	C1023	2
4	LIFT BAR FAB	C204	C205	1
5	BRUSH ASSEMBLY	C230		1
6	SCARIFIER DEFLECTOR	C1030	C1031	1
7	DRIVEN PLATE	C1040		1
8	BEARING 20mm FLANGED	AM81008		2
9	CYLINDER CAUTION DECAL	AM81541		1
10	SET SCREW M12 x 30	SM1230		8
11	SET SCREW 3-8 x 3-4 UNF	S11011		4
12	SET SCREW 6 x 16	SM616		2
13	ROOFING BOLT M6 x 16	S11060		3
14	RIVET 4.8 x 16	PR4820		2
15	WASHER PLAIN M12	WM12		8
16	WASHER SPRING M12	SWM12		4
17	WASHER SPRING 3-8	SW3-8		4
18	WASHER PLAIN M6	SWM6		5
19	NUT NYLOC M12	NNM12		4
20	NUT NYLOC M6	NNM6		5
21	CE PLATE	T000333		1

MODEL C20B:- Verticutter Cartridge Assembly (Fig 12)

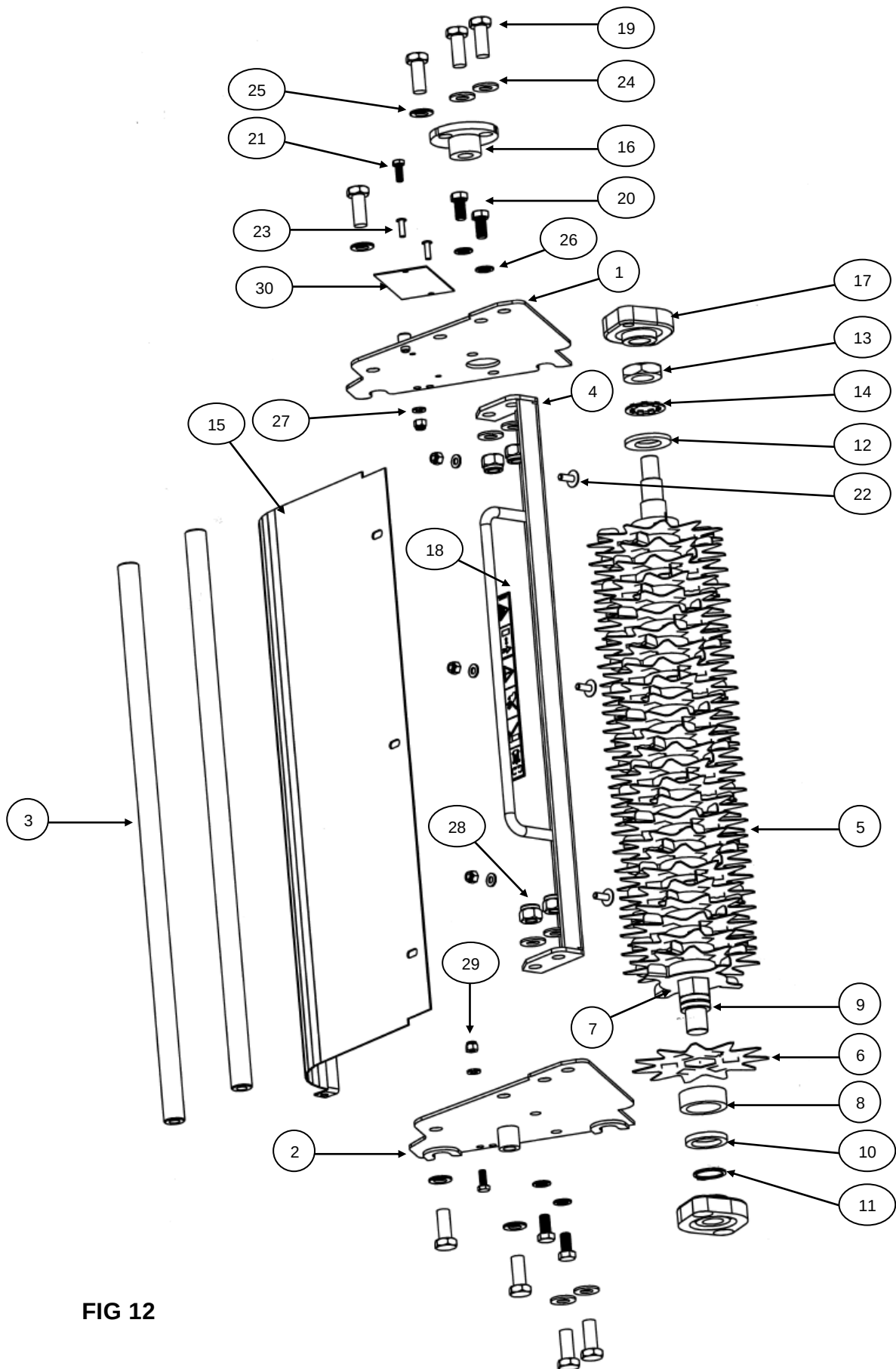


FIG 12

MODEL C20: VERTI-CUTTER CARTRIDGE BOM (FIG 12)

ITEM	DESCRIPTION	PART 20"	PART 24"	USED
1	DRIVE SIDE PLATE	C215		1
2	NON DRIVE SIDE PLATE	C216		1
3	TIE BAR	C1022	C1023	2
4	TIE BAR FAB	C204	C205	1
5	VERTI-CUTTER ASSEMBLY	C013	C014	1
6	VERTI-CUTTER BLADE (Replaces C1026)	C1182		28/36
7	VERTI-CUTTER FAN BLADE (Replaces C1126)	C1181		27/35
8	VERTI-CUTTER SPACER FAB	C1131		28/36
9	SHAFT SCAR/VERT	C1048	C1049	1
10	WASHER THRUST	AZ1095		1
11	CIRCLIP EXTERNAL	AM81229		1
12	WASHER M24	WM24C		1
13	NUT HALF M24	NHM24		1
14	WASHER 24 INTERNAL TEETH	WM24TI		1
15	VERTICUTTER DEFLECTOR	C1028		1
16	DRIVEN PLATE	C1040		1
17	BEARING 20MM FLANGED	AM81008		2
18	CYLINDER CAUTION DECAL	AM81541		1
19	SET SCREW M12 x 30	SM1230		8
20	SET SCREW 3-8 x 3-4 UNF			4
21	SET SCREW M6 x 16	SM616		2
22	ROOFING BOLT M6 x 16	S11060		3
23	RIVET 4.8 x 16	PR4820		2
24	WASHER PLAIN M12	WM12		4
25	WASHER SPRING M12	SWM12		4
26	WASHER SPRING M10	SWM10		4
27	WASHER PLAIN M6	WM6		5
28	NUT NYLOC M12	NNM12		4
29	NUT NYLOC M6	NNM6		5
30	CE PLATE	T000333		1

MODEL C20SC:- Scarifier Cartridge Assembly (Fig 13)

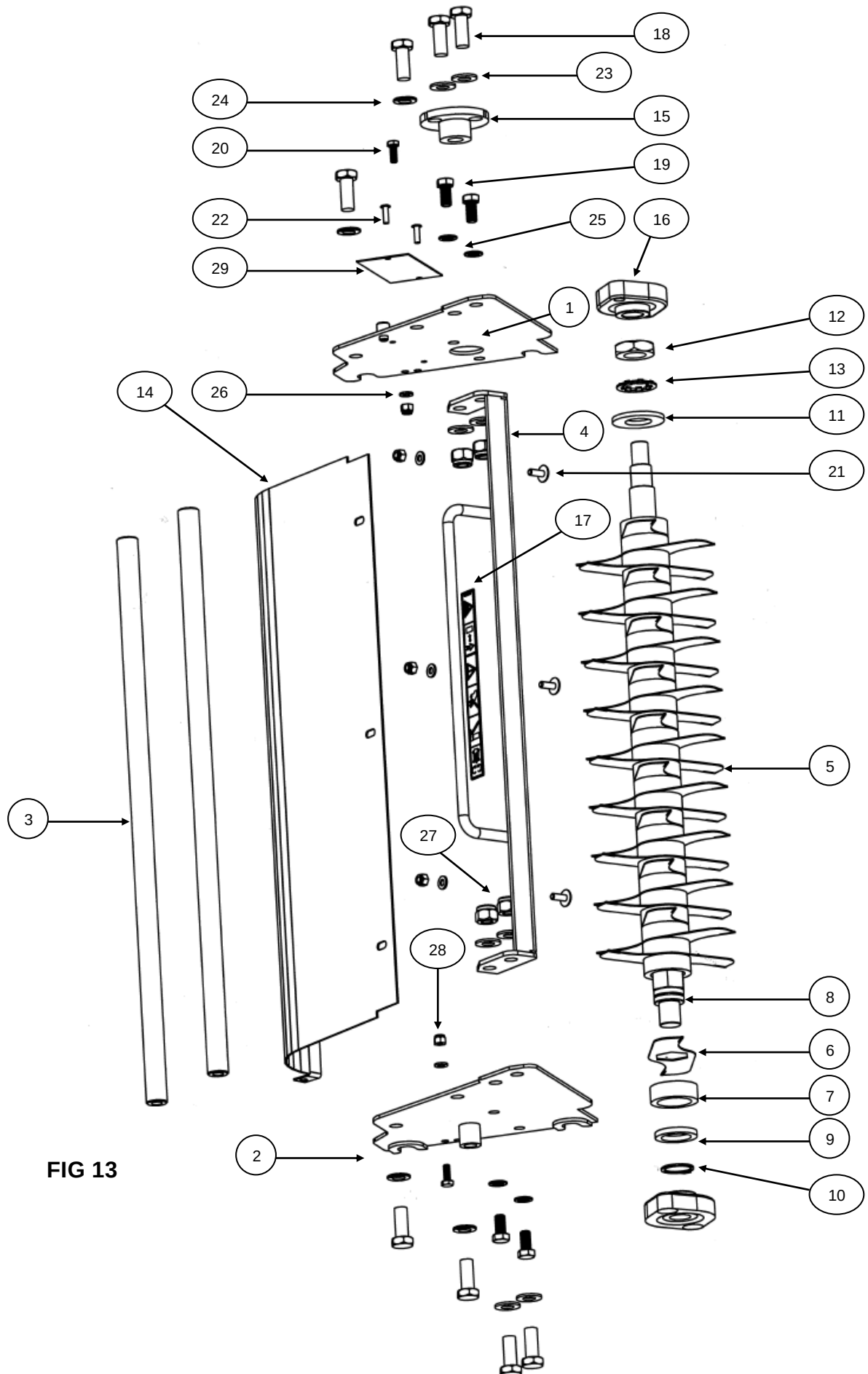


FIG 13

MODEL C20: SCARIFIER CARTRIDGE BOM (FIG 13)

ITEM	DESCRIPTION	PART 20"	PART 24"	USED
1	DRIVE SIDE PLATE	C215		1
2	NON DRIVE SIDE PLATE	C216		1
3	TIE BAR	C1022	C1023	2
4	TIE BAR FAB	C204	C205	1
5	SCARIFIER ASSEMBLY	C013	C012	1
6	SCARIFIER BLADE	C1027		27
7	CARTRIDGE SPACER FAB	C1131		28
8	SHAFT SCAR/VERT	C1048	C1049	1
9	WASHER THRUST	AZ1095		1
10	CIRCLIP EXTERNAL	AM81229		1
11	WASHER M24	WM24C		1
12	NUT HALF M24	NHM24		1
13	WASHER 24 INTERNAL TEETH	WM24TI		1
14	VERTICUTTER DEFLECTOR	C1028		1
15	DRIVEN PLATE	C1040		1
16	BEARING 20MM FLANGED	AM81008		2
17	CYLINDER CAUTION DECAL	AM81541		1
18	SET SCREW M12 x 30	SM1230		8
19	SET SCREW 3-8 x 3-4 UNF			4
20	SET SCREW M6 x 16	SM616		2
21	ROOFING BOLT M6 x 16	S11060		3
22	RIVET 4.8 x 16	PR4820		2
23	WASHER PLAIN M12	WM12		4
24	WASHER SPRING M12	SWM12		4
25	WASHER SPRING M10	SWM10		4
26	WASHER PLAIN M6	WM6		5
27	NUT NYLOC M12	NNM12		4
28	NUT NYLOC M6	NNM6		5
29	CE PLATE	T000333		1

MODEL C20: Sorrel Cartridge Assembly (Fig 14)

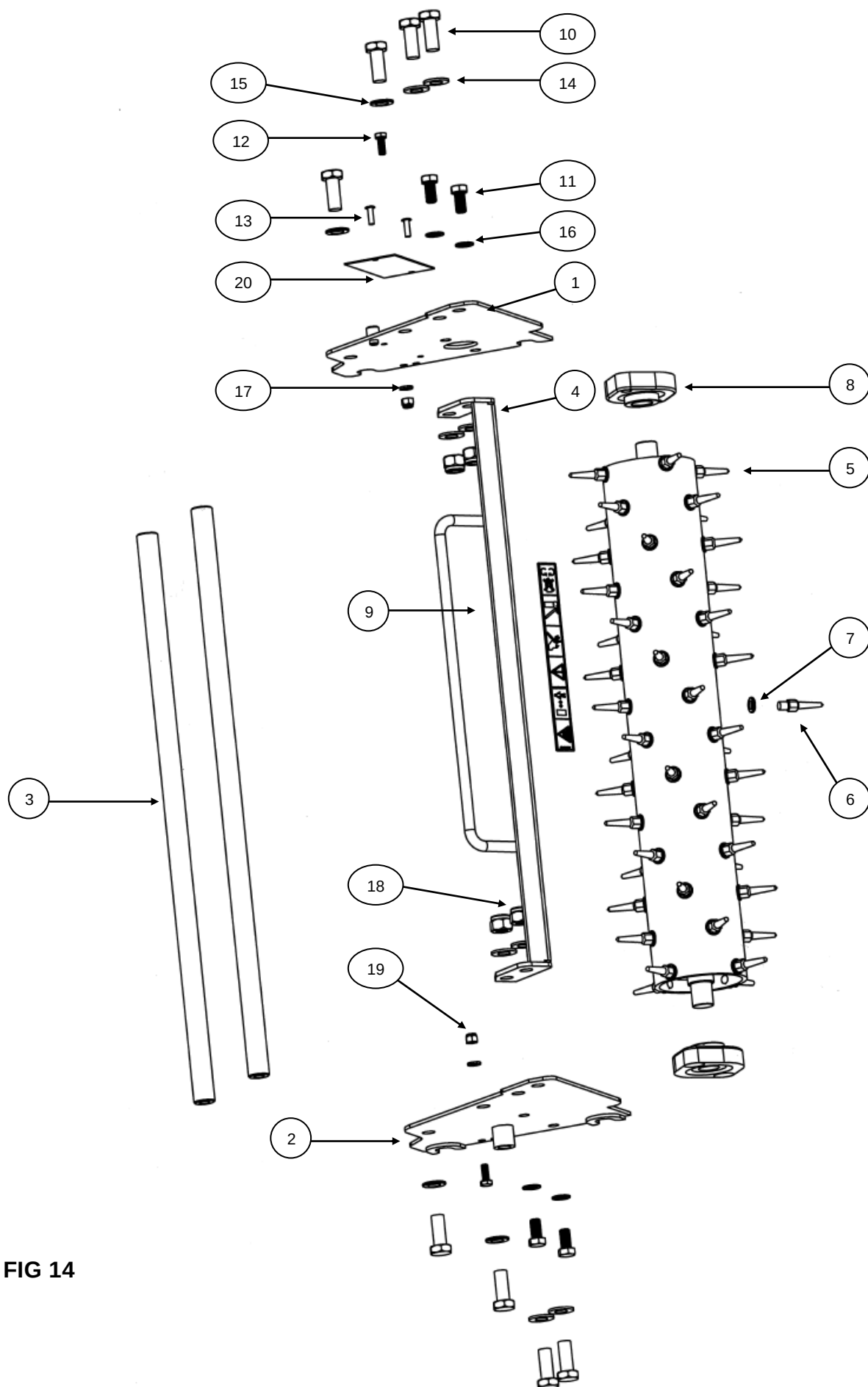


FIG 14

MODEL C20: SORREL CARTRIDGE BOM (FIG 14)

ITEM	DESCRIPTION	PART 20"	PART 24"	USED
1	DRIVE SIDE PLATE	C215		1
2	NON DRIVE SIDE PLATE	C216		1
3	TIE BAR	C1022	C1023	2
4	TIE BAR FAB	C204	C205	1
5	SORREL ASSEMBLY	C017	C018	1
6	SOLID TINE	C1125		56
7	WASHER SPRING M6	SWM6		56
8	BEARING 20MM FLANGED	AM81008		2
9	CYLINDER CAUTION DECAL	AM81541		1
10	SET SCREW M12 x 30	SM1230		8
11	SET SCREW 3-8 x 3-4 UNF			4
12	SET SCREW M6 x 16	SM616		2
13	RIVET 4.8 x 16	PR4820		2
14	WASHER PLAIN M12	WM12		4
15	WASHER SPRING M12	SWM12		4
16	WASHER SPRING M10	SWM10		4
17	WASHER PLAIN M6	WM6		2
18	NUT NYLOC M12	NNM12		4
19	NUT NYLOC M6	NNM6		2
20	CE PLATE	T000333		1

MODEL C20/24: Turf Rake Cartridge Assembly (Fig 15)

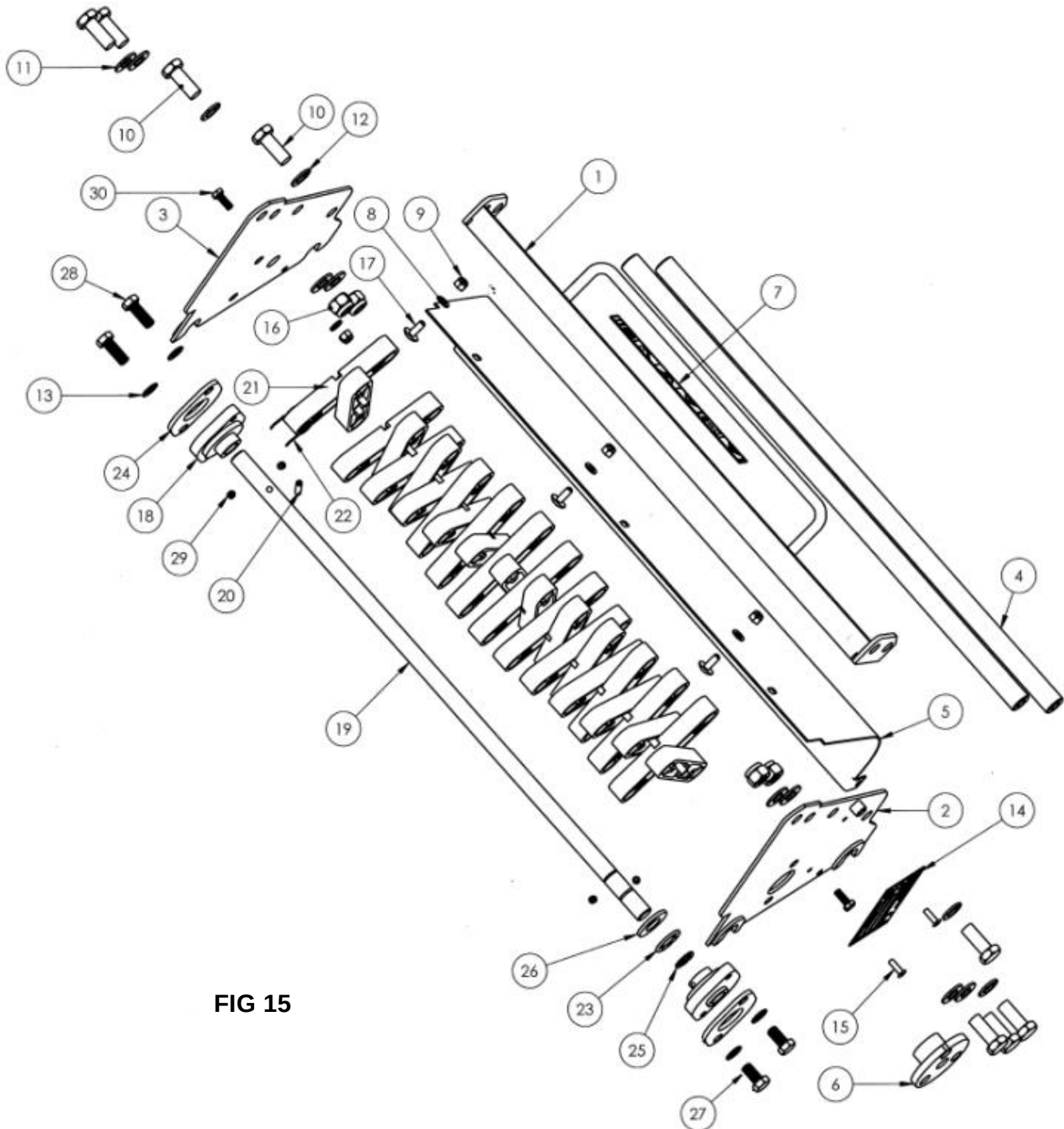


FIG 15

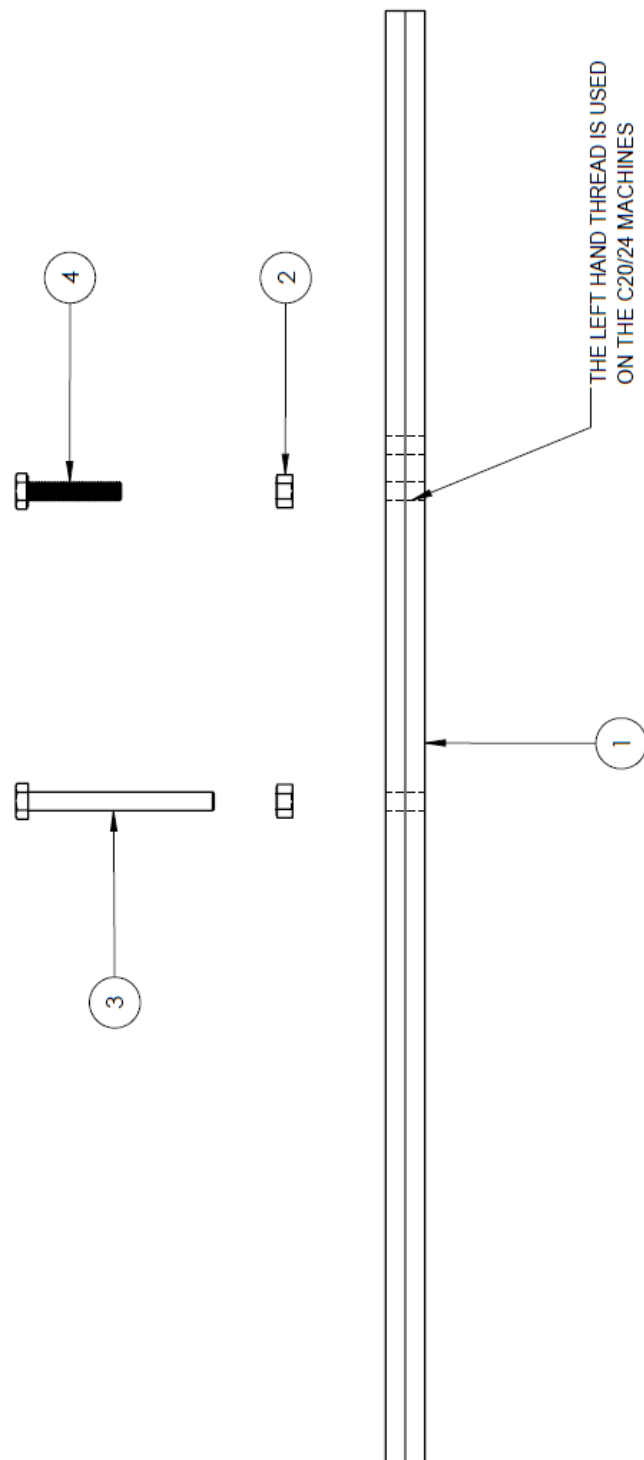
MODEL C20/24: TURF RAKE CARTRIDGE BOM (FIG 15)

ITEM NO.	DESCRIPTION	C20TR PART No	USED	C24TR PART No	USED
1	LIFT BAR FAB - 20"	C204	1	C205	1
2	ACCESSORY DRIVE SIDE PLATE FAB	C346	1	C346	1
3	NON DRIVE SIDE PLATE FAB	C345	1	C345	1
4	TIE BAR 20"	C1022	2	C1023	2
5	DEFLECTOR 20" SCARIFIER & BRUSH	C1030	1	C1031	1
6	DRIVEN PLATE	C1040	1	C1040	1
7	CYLINDER BLADE CAUTION DECAL	AM81541	1	AM81541	1
8	WASHER M6	WM6	5	WM6	5
9	NUT M6 NYLOC	NNM6	5	NNM6	5
10	M12 x 30 BOLT/SET SCREW	SM1230	8	SM1230	8
11	WASHER M12	WM12	8	WM12	8
12	SPRING WASHER M12 Z/C	SWM12	4	SWM12	4
13	WASHER M10	WM10	4	WM10	4
14	CE PLATE	T000333	1	T000333	1
15	POP RIVET 4.8 DIA X16mm STEEL	PR4820	2	PR4820	2
16	NUT M12 NYLOC	NNM12	4	NNM12	4
17	SCREW M6 x 16 ROOFING BOLT	S11060	3	S11060	3
18	16mm FLANGE BEARING	AM81597	2	AM81597	2
19	SPRING TINE SHAFT 20"	C1160	1	C1161	1
20	ROLL PIN 5mm x 30	F016L36483	1	F016L36483	1
21	TINE CARRIER	F016A57926	13	F016A57926	16
22	TURF RAKE TINE	F016T43818	52	F016T43818	64
23	RATCHET PLATE 16mm	F016A58860	1	F016A58860	1
24	TURFRAKE BEARING SPACER	C1163	2	C1163	2
25	16mm HEAVY DUTY EXTERNAL CIRCLIP	AM81598	1	AM81598	1
26	WASHER M16 FORM C	WM16C	1	WM16C	1
27	3/8 X 1- 1/2" UNF	S11011	2	S11011	2
28	3/8 X 1 UNF SET SCREW	S11014	2	S11014	2
29	M6 GRUBSCREW	ACGM6	4	ACGM6	4
30	SET SCREW M6 x 16	SM616	2	SM616	2

HEIGHT OF CUT BAR BOM (FIG 16)

ITEM NUMBER	DESCRIPTION	PART N0 C20	PART N0 C24	USED
1	SETTING BAR	BSG1108	BSG1108	1
2	M6 FULL NUT	NM6	NM6	2
3	SET PIN M6 X 60	SM630	SM630	1
4	SET PIN M6 X 30	SM660	SM660	1

MODEL C20: HEIGHT OF CUT BAR (Fig 16)



Notes