A member of the Turfmech group

Regal 36” & 42”

OPERATOR & PARTS MANUAL

(AM81591 Issue D October 2016)

English version

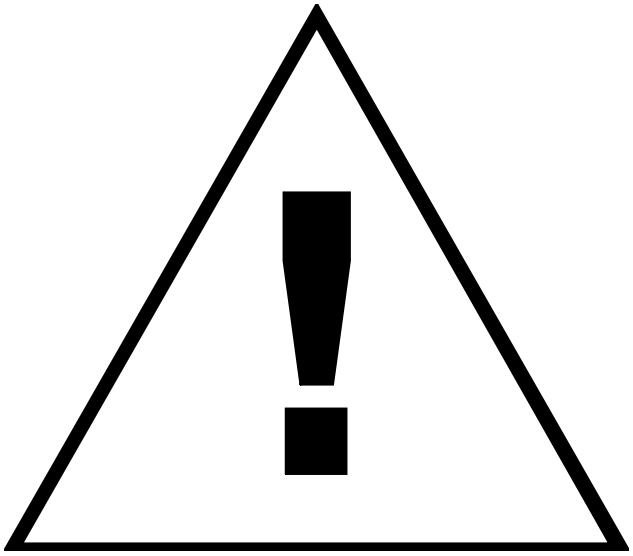
Turfmech Machinery Limited
Hangar 5, New Road, Hixon, Stafford, ST18 0PJ, United Kingdom
Tel: +44 (0) 1889 271503
Fax: +44 (0) 1889 271321

Sales@turfmech.co.uk
www.turfmech.co.uk

For Allett spare parts
Tel: +44 (0) 1889 272095
Fax: +44 (0) 1889 271321

Sales@allett.co.uk
www.allett.co.uk

ATTENTION



THIS SYMBOL MEANS
BE ALERT!

YOUR SAFETY IS INVOLVED

READ THIS MANUAL BEFORE USING AN ALLETT REGAL CYLINDER MOWER.

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

Introduction

The Regal mower is a petrol engine powered self-propelled machine with a belt and chain driven differential rear roller and a belt driven cutting cylinder.

The Regal mower is a product of exceptional quality and is designed solely for cutting high quality turf. Use in any way other than that stated is considered contrary to the intended use. Compliance with 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 Regal mower is operated and maintained will have a profound effect on its performance and reliability.

A Regal mower should be operated, serviced and repaired only by persons who are familiar with its particular characteristics and who are acquainted 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 arbitrary modifications carried out to a Regal mower may relieve Turfmech Machinery Limited of liability for any resulting damage or injury.

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

Turfmech Machinery Limited reserves the right to amend product specifications without prior notification.

Model type and serial number

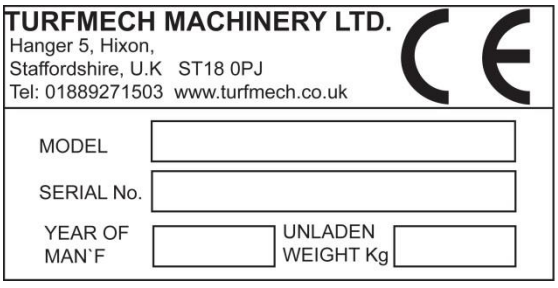
The model type can be found in two places

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

ENTER YOUR INFORMATION BELOW

Model:

Serial Number:



EC Declaration of conformity

We: **Turfmech Machinery Limited**
of: Hangar 5, New Road, Hixon, Staffordshire, ST18 0PJ, UK
declare that:

Equipment: Lawn mower
Model name/number: Regal 36 & 42 (Cutting width 0.91 & 1.07m)

in accordance with the following directives:

2004/108/EC	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 836:1997
Garden equipment – Powered lawnmowers – Safety

Measured Sound Power Level (2000/14/EC): 98dB L_{WA}
Guaranteed Sound Power Level (2000/14/EC): 100dB L_{WA}
Uncertainty K: 2.5dB
Sound Pressure Level (BS EN 836): 86dB L_{PA}
Wear hearing protection!

Notified body: AV Technology, Handforth, Cheshire
Technical construction file is kept by: Turfmech Machinery Ltd, Hangar 5, New Road, Hixon, Staffordshire, ST18 0PJ, UK

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: Turfmech Machinery Ltd
On: 30th January 2013

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.

Safety Precautions

Training

READ THIS MANUAL BEFORE USING A REGAL MOWER. IT IS ESSENTIAL THAT OPERATORS STUDY IT FOR THEIR OWN SAFETY.

THE FOLLOWING PRECAUTIONS MUST BE TAKEN TO HELP PREVENT ACCIDENTS. A CAREFUL OPERATOR WHO USES COMMON SENSE IS THE SAFEST OPERATOR.

Read the instructions carefully. Be familiar with the controls and the proper use of the equipment. Learn how to stop the mower quickly in an emergency.

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

Be alert while people, especially children, or animals are nearby.

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

Do not attempt to ride on the mower or carry passengers.

All operators should seek and obtain professional and practical instruction. Such instruction should emphasise:

- The need for care and concentration while working with the Regal mower.

- The need to slow down when making tight turning manoeuvres, particularly on slopes. Failure to take adequate care can affect stability leading to loss of control of the mower.

- Control of a machine sliding on a slope will not be regained by the application of the brake. The main reasons for loss of control on a slope are:

    - Insufficient traction between roller and ground.
    - Being driven too fast.
    - Lack of awareness of ground conditions.

Preparation

While operating the equipment always wear substantial footwear and long trousers. Do not operate the equipment when barefoot or wearing open sandals.

Ear protection should be worn when the engine is running.

Eye protection should also be worn whilst mowing.

Thoroughly inspect the area that is to be cut and remove all objects which are likely to cause damage to the machine.

Never operate the mower unless all belt and chain guards are correctly in place and securely fastened.

Before use check the bottom blade and cylinder. Replace or sharpen if necessary

Petrol is highly flammable, therefore:

- Store fuel in containers specially designed for the purpose.
- Refuel outdoors only and do not smoke while refuelling.
- Add fuel before starting the engine. Never remove the cap from the fuel tank or add petrol while the engine is running or while the engine is hot. Allow the engine to cool for at least two minutes before refuelling. Be aware that the engine exhaust silencer will remain hot for some time after the engine is switched off.
- Do not attempt to start the engine if petrol is spilled or a smell of petrol is present. Move the machine away from the area of spillage and avoid creating any source of ignition until the petrol vapours have dissipated.
- Always use fresh fuel. Stale fuel can block the carburettor and cause leakage.
- Replace the fuel tank cap securely.

Operation


Do not operate the engine in a confined space where dangerous carbon monoxide fumes can collect.


Mow only in daylight or in good artificial light.


Before starting the engine, disengage drive to the cutting cylinder and the rear drive roller and engage the parking brake.


Watch out for traffic when crossing or near roadways.


Always disengage the drive to the cylinder before travelling over any surface other than grass.


When using the mower, never direct the discharged material towards bystanders or allow anyone near the machine whilst it is in operation.


Never operate a mower with defective guards.


Do not attempt to increase the factory set maximum speed of the engine. Operating an engine at excessive speed will lead to increased wear and tear and increases the risk of injury.


Before leaving the operator position:

- Disengage drive to the rollers
- Disengage drive to the cutting cylinder
- Engage the parking brake.
- Switch the on/off switch on the handlebars to the **OFF** position.


Engage the parking brake, disengage drive to the cutting cylinder, switch off the engine and ensure the cylinder is completely stationary:

- Before releasing blockages.
- Before checking, cleaning or working on the machine.
- After striking a foreign object inspect the mower for damage and rectify any problems before continuing.
- Before refuelling.
- Before making cylinder adjustments.


If the machine starts to vibrate abnormally **STOP** immediately and check the machine over.


Never park the machine on a slope.


Reduce the throttle setting during run out.


ALWAYS KEEP HANDS AND FEET WELL AWAY FROM A ROTATING CUTTING CYLINDER.

Maintenance and storage


Always wear thick gloves when manually rotating a cutting cylinder.


Check that all nuts, bolts and screws are sufficiently tight so as to ensure that the equipment is in safe working condition.


To reduce the risk of fire, keep the engine and exhaust area free of grass, leaves and other debris. Wipe off excess grease.


Frequently check fuel lines and fittings for cracks or leaks and replace if necessary.


Replace worn or damaged parts.


Ensure that all safety decals are properly secured and in good condition.


Never work on the equipment while the engine is running.


Take care to prevent entrapment of the fingers between moving blades and fixed parts during maintenance activities.


Allow the engine and exhaust to cool before storing in any enclosure.


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


Always chock the roller when the mower is being left in storage

Health and Safety at Work Act

In accordance with section 6 of the Health and Safety at Work Act 1974 the Regal mower has been designed and constructed so that, in so far as is reasonably practical, it will not endanger the safety and health of those working with it. This is, however, subject to the equipment being properly used and maintained according to the conditions stated in this manual and elsewhere, which have been found necessary as a result of the research and testing of Turfmech Machinery Limited and Allett.

Maintenance Schedule

Activity	Task	Daily	Weekly	Bi-weekly	Yearly 500 hours
Check					
	Engine oil level	●			
	Air cleaner condition	●			
	Fuel level	●			
	Guards in place	●			
	Tyre pressures (if fitted)	●			
	Cutting cylinder	●			
	Fasteners		●		
	Chain and belt tension			●	
	Spark plugs			●	
Clean					
	Debris/grass from mower	●			
	Engine cooling baffles	●			
	Fuel sediment bowl		●		
	Air filter elements		●		
	Inside guards		●		
Test					
	Parking brake	●			
	On/off switches	●			
	Drive engagement	●			
Replace					
	Engine oil				●
	Spark plugs				●
	Air filter elements				●
	Fuel hose				●

Maintenance

Regular maintenance is essential for the continued safe operation of the Regal mower. Correct servicing will prolong the working life of the machine and safeguard the warranty.

Always fit genuine Allett parts, fitting spurious parts will invalidate the warranty.

The following information is given on the understanding that Turfmech Machinery Limited accepts no responsibility for work carried out by a customer or for any damage thus caused, whether or not the service instructions have been misunderstood.

To ensure that the warranty terms are not breached service work should be carried out by Turfmech Machinery Limited or an authorised Allett dealer.

SAFETY NOTICE

WARNING - PREVENT ACCIDENTS

When carrying out maintenance procedures it is essential that:

- The engine is not running.
- The parking brake is engaged.
- The cutting cylinder drive is disengaged.
- The rear roller drive is disengaged.
- The safety precautions in this manual have been read and understood.

WARNING - PREVENT ACCIDENTS

Engine oil will be hot after machine use. Allow it to cool before working on the machine, particularly when changing oil or filters.

WARNING - PREVENT ACCIDENTS

Use hazardous substances carefully. The following fluids are identified as being hazardous:

Substance	Risk
Oil	Low
Grease	Low
Petrol	High

It is recommended that eye protection and gloves are worn when handling the above fluids and that care is taken to avoid spillages.

Avoid contact with skin – wash spillages off with soap and water.

Avoid contact with eyes – wash with running water and seek medical attention if symptoms persist.

Avoid ingestion – if swallowed seek medical attention.

IMPORTANT – PREVENT ENVIRONMENTAL DAMAGE

When disposing of hazardous waste products, take them to an authorised disposal site. Waste products must not be allowed to contaminate surface water, drains or sewerage systems.

Cylinder and bottom blade grinding/reconditioning

The cutting performance of the Regal mower is highly dependent on the condition of both the cylinder and bottom blade. Poorly maintained parts will lead to poor quality of cut.

It is advised that the grinding/reconditioning of the cylinder and bottom blade be carried out by either Turfmech Machinery Limited or a registered Allett dealer.

The bottom blade of the Regal mower should be ground with a 3-5^{O} top face angle as shown below.

Daily Checks/maintenance

Checking engine oil level

- The level of the engine oil should be checked when the engine is at rest and cool.
- Locate the engine oil dipstick at the front of the engine.
- Remove it and wipe clean.
- Insert the dipstick into the engine and remove to see the oil level.
- The minimum level is at the end of the dip stick.
- Add/remove oil as necessary.

Checking the air cleaner

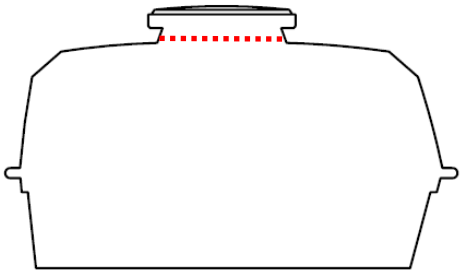
- Locate the air cleaner on top of the engine.
- Remove the wing nut on the top of the air cleaner and remove the outer cover.
- Undo the wing nut which retains the filter elements.

  Check for rips and tears in the foam element, replace if damaged. If necessary clean the element as described in the weekly maintenance section.

  Check the condition of the main paper element, replace if damaged. If necessary clean the element as described in the weekly maintenance section.
- Refit by reversing the procedure outlined above.

Checking fuel level

- Locate the fuel tank on top of the engine.
- Remove the fuel cap and visually check the fuel level. Fill the tank before storing overnight in order to reduce internal condensation.
- The maximum fuel level is as shown.
- Never over fill the fuel tank.



Checking belt/chain guards

- There are two guards to check:

    1. Main cover (Top of the mower).

    2. Plastic belt guard (LH side of mower).

Checking the cutting cylinder

- Visually inspect the cutting cylinder and the bottom blade for any damage, misalignment or distortion.

- The cutting performance of the Regal mower is highly dependent on the condition of both the cylinder and bottom blade. Poorly maintained parts will lead to a poor quality of cut.

- It is advised that the grinding/reconditioning of the cylinder and bottom blade be carried out by either Turfmech Machinery Limited or a registered Allett dealer.

Testing the parking brake

WARNING - PREVENT ACCIDENTS

- Carry out this check in a well ventilated area clear of obstacles and bystanders.

- Ensure that the parking brake is engaged and start the engine.

- Set the engine throttle control lever to slow speed.

- Slowly engage the rear roller drive clutch.

- The engine should stall without any movement of the mower.

- If the mower moves forward against the parking brake then re-adjustment is required (refer - Adjusting cables).

Testing the ignition on/off switches

- Start the engine.
- Once the engine is running turn the on/off switch on the handlebars to the **OFF** position, the engine should stop immediately.

WARNING - PREVENT ACCIDENTS

If the engine does not stop – **DO NOT USE THE MACHINE** – contact your Turfmech/Allett dealer.

- Carry out the same procedure for the on/off switch on the engine.

Weekly Maintenance

Checking fastener torques

- Ensure that the engine is switched off and the cutting cylinder is stationary.
- Check and where necessary tighten the bearing retaining fasteners.
- Check and where necessary tighten the belt and chain tensioner fasteners.
- Check and where necessary tighten the engine and drive belt mounting fasteners.

Bolt size	Torque (Nm)
M6	10
M8	25
M10	50
5/16" UNF	20
3/8" UNF	45

Cleaning the fuel sediment bowl

- Locate the fuel sediment bowl. Move the fuel cut-off switch to the **OFF** position.
- Place a container underneath the sediment bowl to catch any fuel and then unscrew the retaining screw at the bottom.
- Remove the screw and sediment bowl, together with the rubber gasket, and retain in a safe place.
- Wash the sediment bowl using fresh petrol.
- Replace the sediment bowl by reversing the procedure outlined above; ensure that the rubber gasket is put back in place.
- Move the fuel cut-off switch to the **ON** position.

Cleaning the air filter element

- Remove the air filter element from its housing (refer – Checking the air cleaner).
- To clean the inner paper element, use a compressed air supply to blow out the dust. Take care not to damage the element whilst cleaning it.
- To clean the outer foam element, wash it in warm soapy water. Rinse thoroughly using clean water, allow it to dry completely and then refit (refer – Checking the air cleaner).

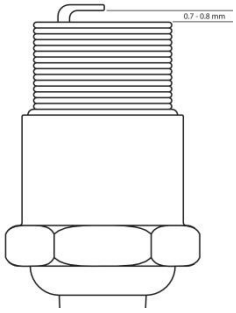
Bi-weekly Maintenance

Checking the spark plug condition and gap

WARNING - PREVENT ACCIDENTS

Allow the engine to cool before attempting to remove the spark plug.

- Locate the spark plug.
- Pull off the high tension lead and remove the spark plug using a spark plug socket.
- Check that the spark plug is in good condition, replace if necessary. Check that the gap is between 0.7 - 0.8mm using a feeler gauge.
- Replace the spark plug and refit the high tension lead.



Checking the chains and belts

- To check whether the cutting cylinder drive belt is correctly tensioned you must first ensure that the engine is **OFF** and the parking brake is engaged.
- Pull the cutting cylinder drive handle towards the handlebar. At approximately 30mm from the handlebar resistance should be felt and the drive to the cylinder should begin to engage.
- If there is no resistance and the drive does not engage then the belt needs to be tightened.
- If resistance is felt when the drive handle is further than 30mm away from the handlebar then the belt is too tight and needs to be adjusted accordingly.
- To check chain tension, firstly remove the chain guard on the side of the machine.
- The chains are correctly tensioned when there is no more than 10mm movement at the midpoint of the slack side of each chain. If necessary adjust.

Yearly maintenance

Replacing the engine oil

- Drain the old engine oil. This is best carried out when the oil is warm, but not hot.
- Locate the engine drain plug at the bottom of the engine. There are two drain plugs, the drain plug at the rear of the machine is more accessible.
- Remove the dipstick.
- Place a container of suitable capacity underneath the drain plug, remove the plug and allow the old engine oil to empty out.
- Once the engine has been drained of oil replace the drain plug and refill the engine with clean oil through the dipstick hole. The correct level is reached when oil overflows the dipstick hole.

Replacing the spark plug

- Remove the spark plug as described in the bi-weekly maintenance section.
- Fit the new spark plug.
- Start the engine and ensure that it runs smoothly before carrying out any further maintenance.

Replacing air filter elements

- Remove the air filter elements – foam and paper - from their housing (refer – Checking the air cleaner).
- Fit new air filter elements and secure in place.
- Replace the outer cover and secure in place.

Storage

Carry out the following procedure before storing the Regal mower between mowing seasons.

WARNING - PREVENT ACCIDENTS

Never drain fuel in an enclosed environment – always undertake this procedure out doors or in a very well ventilated workshop environment.

WARNING - PREVENT ACCIDENTS

Always send unwanted fuel to an authorised disposal agent – never dispose of fuel down the drain or by any other means.

Preparing the machine

- Clean the machine so that it is clear of grass and any other debris.
- Repair any worn or damaged parts – replace with genuine Turfmech/Allett parts if new parts are required.
- Check all bolts and tighten as necessary.
- Repair any damaged paint work.
- Apply a wax coat to all panels (standard automotive wax can be used).
- Allow all belts to dry before storing.
- Lubricate all grease points and apply a thin coat of chain lubricant to the chains.

Preparing the engine

- Drain the fuel.

  For a small amount of fuel start the engine and allow it to run until all the fuel is consumed.

  For a larger amount of fuel loosen the drain plug on the sediment bowl and collect the fuel in a suitable container.

- Close the fuel shut- off tap.
- The engine should be left in compression. Gently pull the recoil starter handle until you feel resistance. When you feel resistance allow the handle to return to its stowed position.

Removing from storage

- Carry out the daily inspection list.
- Open fuel shut-off tap.

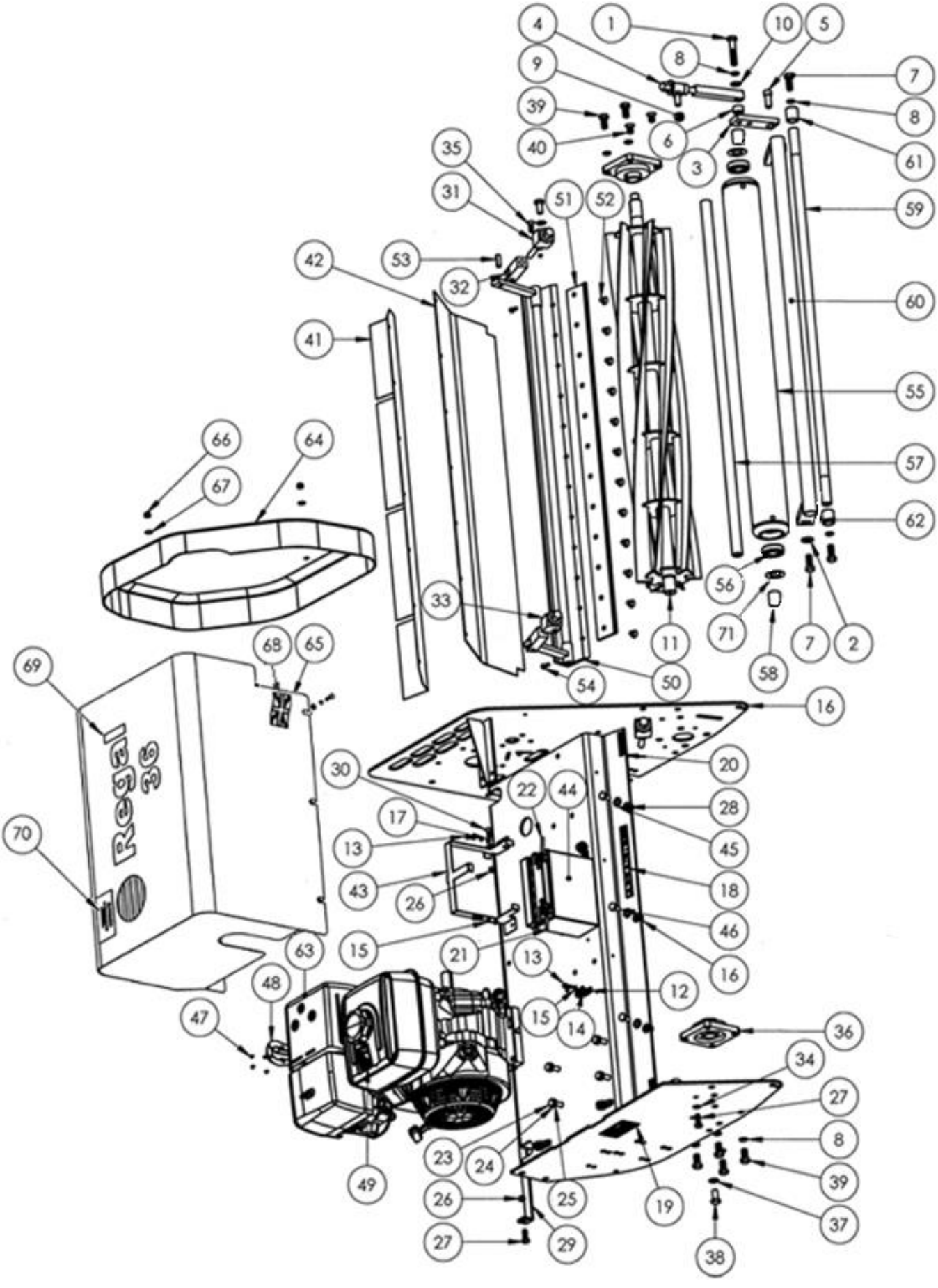
Specification

	36” Regal	42” Regal
Cutting Width	914mm (36”)	1067mm (42”)
Overall Width	1118mm (44”)	1270mm (50”)
Weight	352kg (774lb)	376kg (827lb)
Engine	Honda GX340 9.5hp	Honda GX340 9.5hp
Overall Height	1016mm (40”)	
Overall Length	2083mm (82”)	
Rate of Cut	Variable	
Height of Cut	6.5mm to 44.5mm (0.25” to 1.75”)	
Drive Clutch	Handle mounted lever operating tight and loose V belt via rods	
Cutter Clutch	Handle mounted lever operating tight and loose triple V belts via rods	
Rear Roller	Three piece steel, rubber covered with full differential running in an oil bath	
Front Roller	All steel on sealed bearings	
Cylinder	6 bladed, all welded, high carbon spring steel, hardened and tempered to 45HRC Mounted on greaseable bearings	
Bottom Blade	Manufactured from EN8 hardened and tempered to 45HRC	
Handle Bar		
Grassbox	Rotationally moulded plastic with deflector hood and steel lifting bar	
Optional Extras	Trailing seat	
Power Steering	Rod operated brakes, fitted as standard	

Regal 36” & 42”

PARTS SECTION

MODEL REGAL 36” & 42”:- Mainframe Assembly (FIG 1)

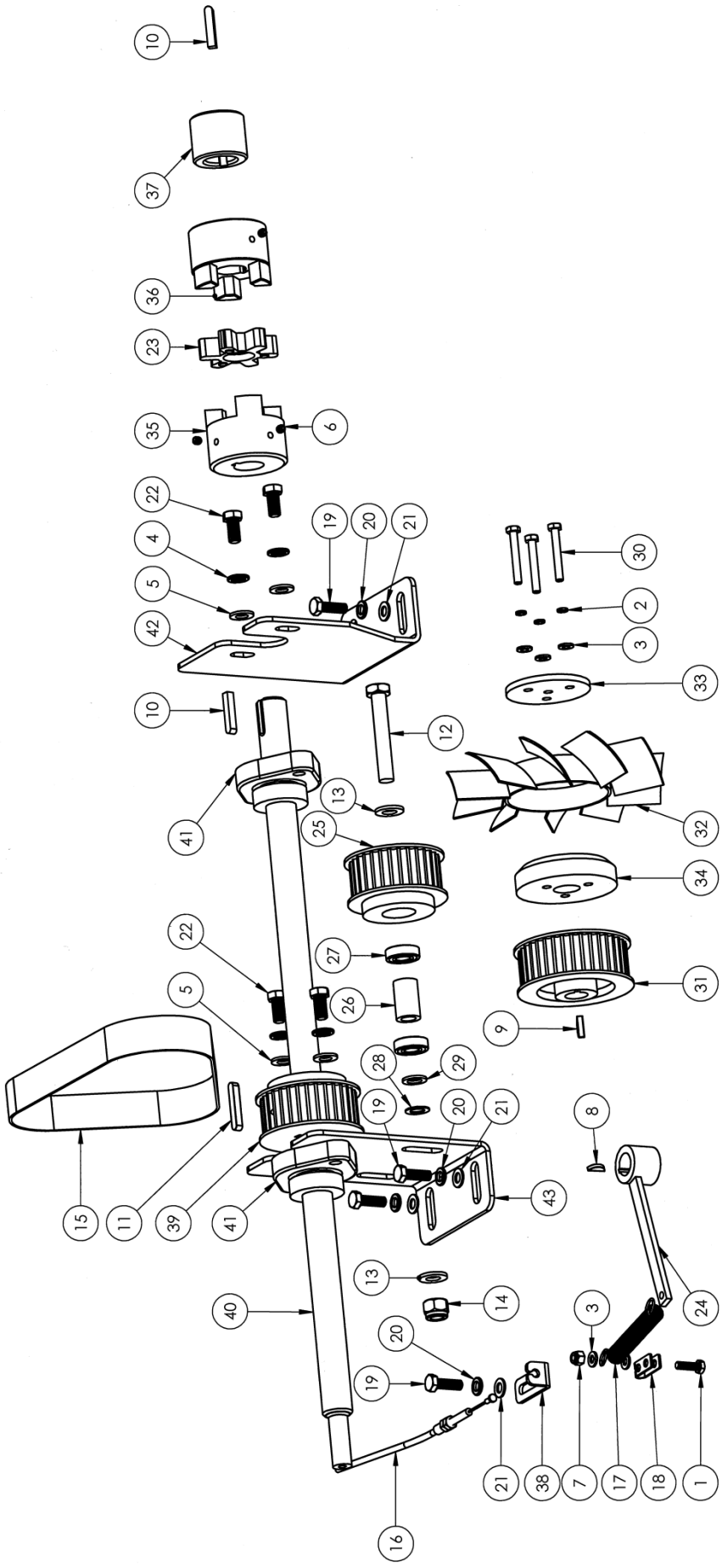


MODEL REGAL 36” & 42”:- Mainframe Assembly BOM (FIG 1)

ITEM NO.	DESCRIPTION	PART 36"	PART 42"	USED
1	1/2" x 2 1/2" UNF SET SCREW	B11006		1
2	1/2" UNF WASHER	W11014		1
3	HEIGHT ADJUSTER PLATE	AFK058		1
4	FRONT ROLLER ADJUSTER ASSY	AFK027		1
5	SCREW CAP HEAD 1/2 UNF x 1 1/4 ZC	S11022		1
6	HEIGHT ADJUSTER BOSS	AFK1067		1
7	1-2" X 1 & 1-4" SET SCREW	S11013		3
8	1-2" SPRING WASHER			9
9	1/2" UNF NYLOC NUT			1
10	WASHER M12	WM12		1
11	CYLINDER	AM81457	AM81497	1
12	CABLE CLIP	AM81048		4
13	M6 x 20 SET SCREW	SM620		11
14	WASHER M6	WM6		8
15	SPRING WASHER M6	SWM6		11
16	REGAL CHASSIS	AFK201	AFK202	1
17	WASHER M6 FORM A	WM6A		3
18	CYLINDER BLADE CAUTION DECAL SMALL	AM81541		1
19	CE PLATE	T000333		1
20	BOTTOM BLADE ADJUSTMENT DECAL	AM81540		2
21	NEGATIVE BATTERY LEAD	AFK1430		1
22	POSITIVE BATTERY LEAD	AFK1431		1
23	M10 x 40 SET SCREW	SM1040		4
24	M10 SPRING WASHER	SWM10		4
25	M10 FLAT WASHER	WM10		4
26	NUT M8 NYLOC	NNM8		2
27	SET SCREW 3-8 UNF x 1 ZC	S11014		2
28	WASHER M10 FORM Z/C	WM10		3
29	SCRAPER BAR REAR ROLL	AFK1223		1
30	3/8 UNF x 3/4 CSK SLOTTED	S11052		1
31	BOTTOM BLADE ADJUSTER LH	AFK004		1
32	ADJUSTER FORK	AFK1036		2
33	BOTTOM BLADE ADJUSTER RH	AFK105		1
34	3/8 WASHER			1
35	SCREW 3-8 UNF x 1 CSK	S11010		1
36	BEARING FLANGED 12SF 1 1/8"	AM81010		2
37	SPRING WASHER M12 Z/C	SWM12		2
38	M12 x 25 SET SCREW	SM1225		2
39	1/2" x 1" UNF SET SCREW	S11018		6
40	1/2" UNF X 3/4" CSK	S11033		2
41	DELIVERY BRACKET	AFK1029	AFK1031	1
42	DELIVERY PLATE 36	AFK1030	AFK1032	1
43	BATTERY STRAP	AFK1414		1
44	BATTERY	AM81475		1
45	M10 SPRING WASHER	SWM10		3
46	SET SCREW M10 x 20	SM1020		3
47	4 x 6 TAPPING SCREW			4
48	EXHAUST DEFLECTOR	AM81495		1
49	DECAL 100dB	AM81434		1
50	BOTTOM BLADE CARRIER FAB	AFK022	AFK110	1
51	BOTTOM BLADE	AM82109	AM92084	1
52	BOTTOM BLADE SCREW 3/8"	S11051		12
53	ROLL PIN M10 x MBK x 30	AM89341		2
54	SET SCREW M6 x 16	SM616		2
55	FRONT ROLLER TUBE ASSY 36"	AFK279	AFK278	1
56	BEARING 25mm	AM85314		2

57	FRONT ROLLER SHAFT	AFK1526	AFK1527	1
58	FRONT ROLLER SPACER	AFK1525		2
59	FRONT ROLLER CARRIER SHAFT	AFK1196	AFK1197	1
60	FRONT ROLLER HEIGHT ADJUSTER	AFK010	AFK027	1
61	OILITE BUSH 7/8 X 1 1/8 x 1 1/4LG	AM82118		2
62	SET SCREW M6 x 25 ZC	SM625		2
63	HONDA GX340 ENGINE	GX340		1
64	REGAL CHAINCASE	AFK002		1
65	TUNNEL COVER	AFK204	AFK205	1
66	NUT M8 NYLOC	NNM8		2
67	M8 PLAIN WASHER	WM8		2
68	UNION FLAG DECAL	AM81525		1
69	REGAL DECAL	AM81614	AM81615	1
70	LABEL CAUTION	AM81219		1
71	OIL SEAL 52x30x7	AM81608		2

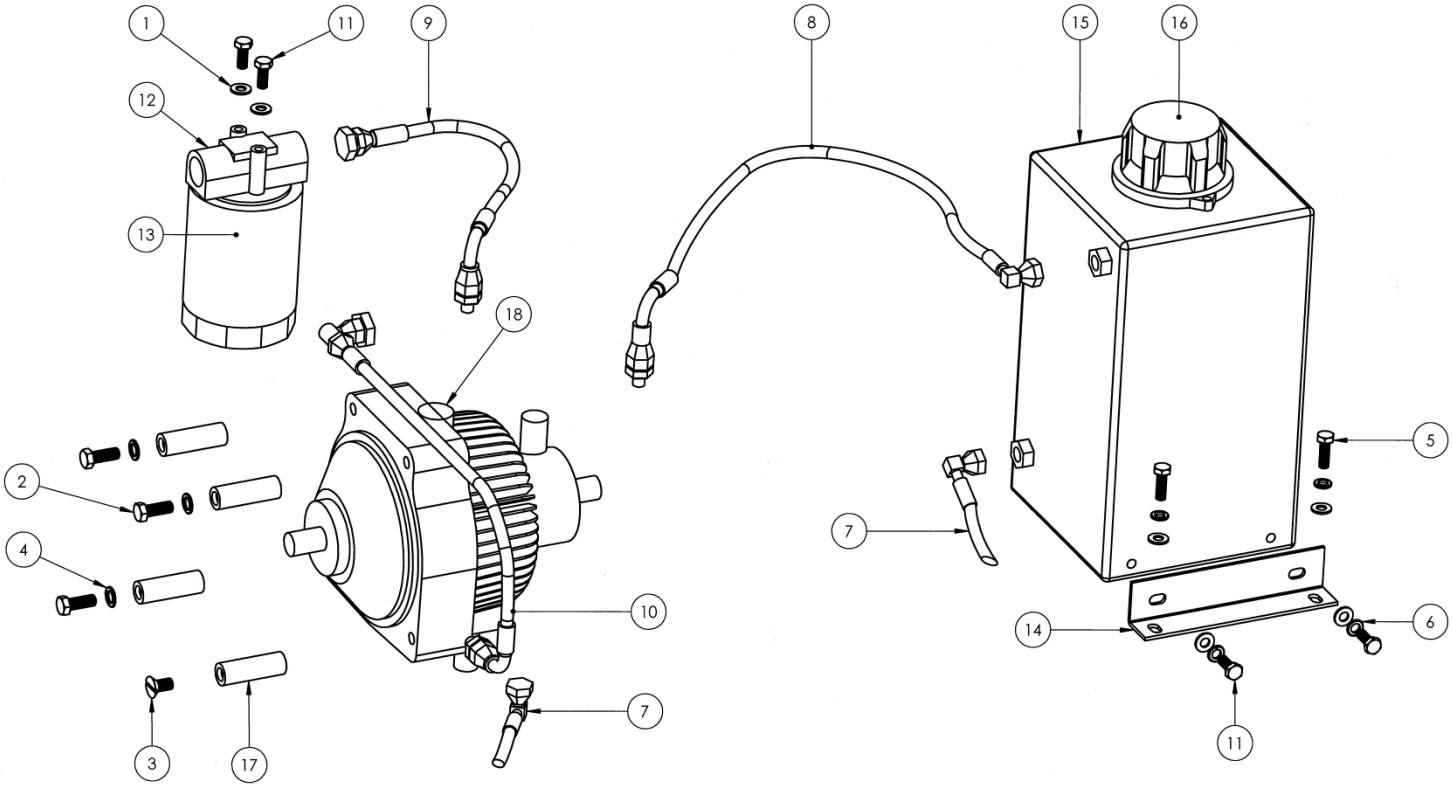
MODEL REGAL 36” & 42”:- Drive Shaft Assembly (FIG 2)



MODEL REGAL 36” & 42”:- Drive Shaft Assembly BOM (FIG 2)

ITEM NO.	DESCRIPTION	PART 36"	PART 42"	USED
1	M6 x 20 SET SCREW	SM620		1
2	SPRING WASHER M6	SWM6		3
3	WASHER M6 FORM A	WM6A		5
4	M10 SPRING WASHER	SWM10		4
5	M10 FLAT WASHER	WM10		4
6	M6 x 6 GRUBSCREW	ACGM6		4
7	NUT M6 NYLOC	NNM6		1
8	KEY 5/8 x 1/8 WOODRUFF	K5-5		1
9	KEY 3/4 x 3/15 WOODRUFF	AM81113		1
10	KEY 1/4 Sq x 32 LONG	AM81012		2
11	KEY 1/4 x 1 1/2	AM81112		1
12	M12 BOLT/SET SCREW	SM1275		1
13	M12 WASHER FORM A	WM12A		2
14	NUT M12 NYLOC	NNM12		1
15	TIMING BELT REGAL	AM81105		1
16	CABLE CUTTER CLUTCH	AFK1367		1
17	SPRING	ACS007		1
18	YOKE ANCHOR POINT	BSG1024		1
19	M8 x 25 SET SCREW	SM825		5
20	SPRING WASHER	SWM8		5
21	M8 FLAT WASHER	WM8		5
22	3/8 x 3/4 UNF	S11011		4
23	L100 BHUNA INSERT	AM81490		1
24	HYDROSTAT LINKAGE FAB	AFK235		1
25	IDLER PULLEY	AFK1333		1
26	IDLER PULLEY BEARING SPACER	AFK1332		1
27	BEARING 12mm 6001 2RS	AM82104		2
28	SPACER	AFK1354		1
29	SPACER	AFK1355		1
30	SET SCREW M6 x 45 ZC	SM645		3
31	HYDROSTAT PULLEY	AFK1330		1
32	HYDROSTAT FAN	AM87456		1
33	HYDRO FAN SUPPORT PLATE	AFK1338		1
34	FAN SPACER	AFK1324		1
35	JAW COUPLING LAYSHAFT	AFK1418		1
36	JAW COUPLING ENGINE	AFK1417		1
37	ENGINE SPACER	AFK1416		1
38	BABLE BRACKET	AFK1378		1
39	DRIVE SHAFT PULLEY	AFK1329		1
40	LAYSHAFT	AFK1415	AFK1419	1
41	BEARING	AM81009		2
42	SHAFT SUPPORT PLATE	AFK1428		1
43	SHAFT RETAINING PLATE	AFK1311		1

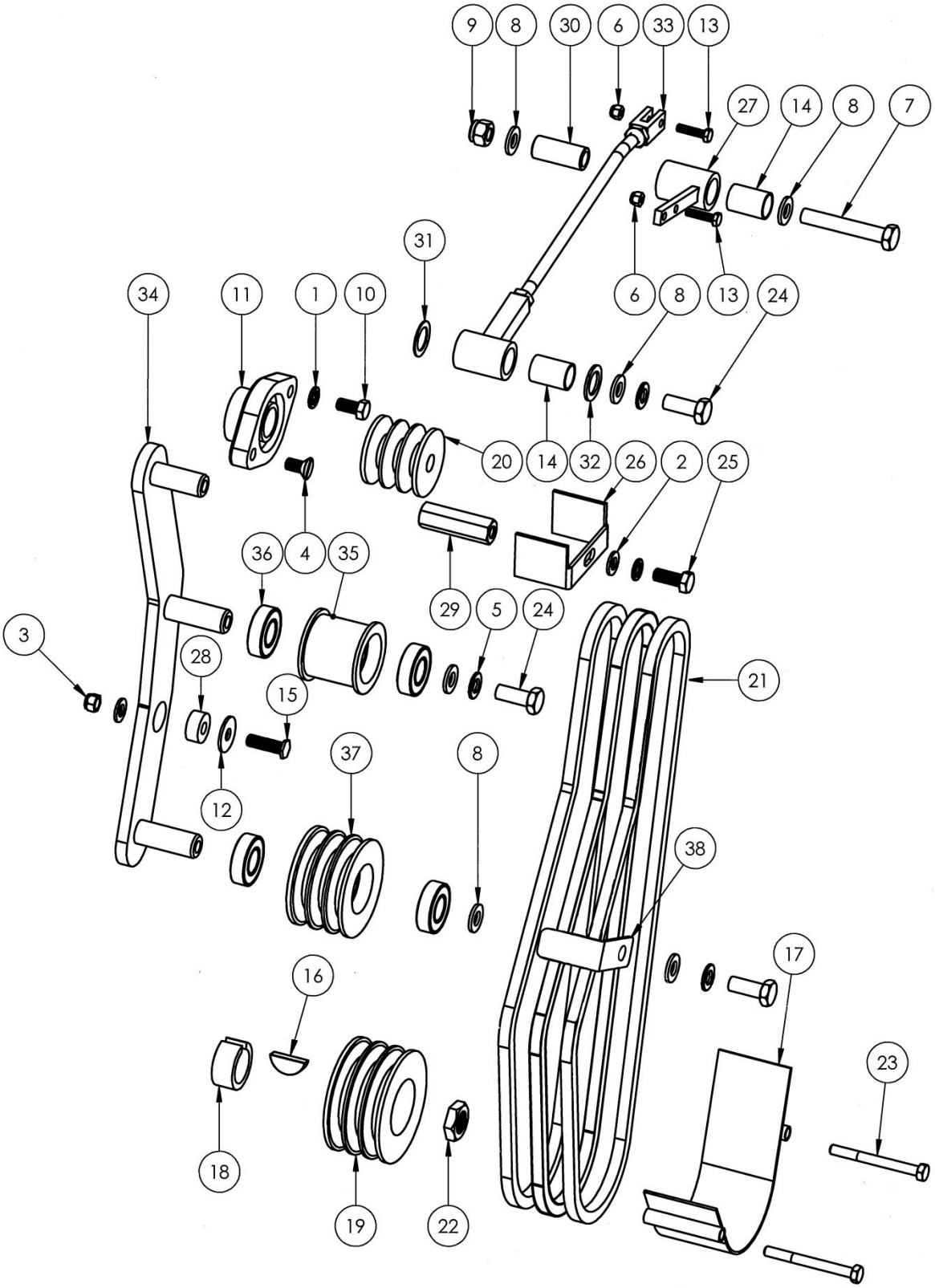
MODEL REGAL 36” & 42”:- Hydraulic Assembly (FIG 3)



MODEL REGAL 36” & 42”:- Hydraulic Assembly BOM (FIG 3)

ITEM NO.	DESCRIPTION	PART 36"	PART 42"	USED
1	M8 PLAIN WASHER	WM8		6
2	SET SCREW 3-8 UNF x 1 ZC	S11014		3
3	3/8 UNF x 3/4 CSK SLOTTED	S11052		1
4	3/8 WASHER			3
5	M8 x 25 SET SCREW	SM825		2
6	SPRING WASHER	SWM8		4
7	HOSE ASSY RETURN	AFK222		2
8	HOSE ASSY FILTER TO PUMP	AFK256		1
9	HOSE ASSY FILTER TO PUMP	AFK220		1
10	HOSE ASSY FILTER TO HYDRO	AFK223		1
11	SET SCREW M8 x 20 ZC	SM820		4
12	OIL FILTER HOUSING	AM81100		1
13	OIL FILTER ELEMENT	AM81100E		1
14	FOOT	AFK1426		1
15	OIL TANK	AFK1427		1
16	REGAL BREATHER/FILLER	AM81099		1
17	HYDROSTAT MOUNTING BOSS	AFK1334		4
18	HYDRO STAT	AM81097		1

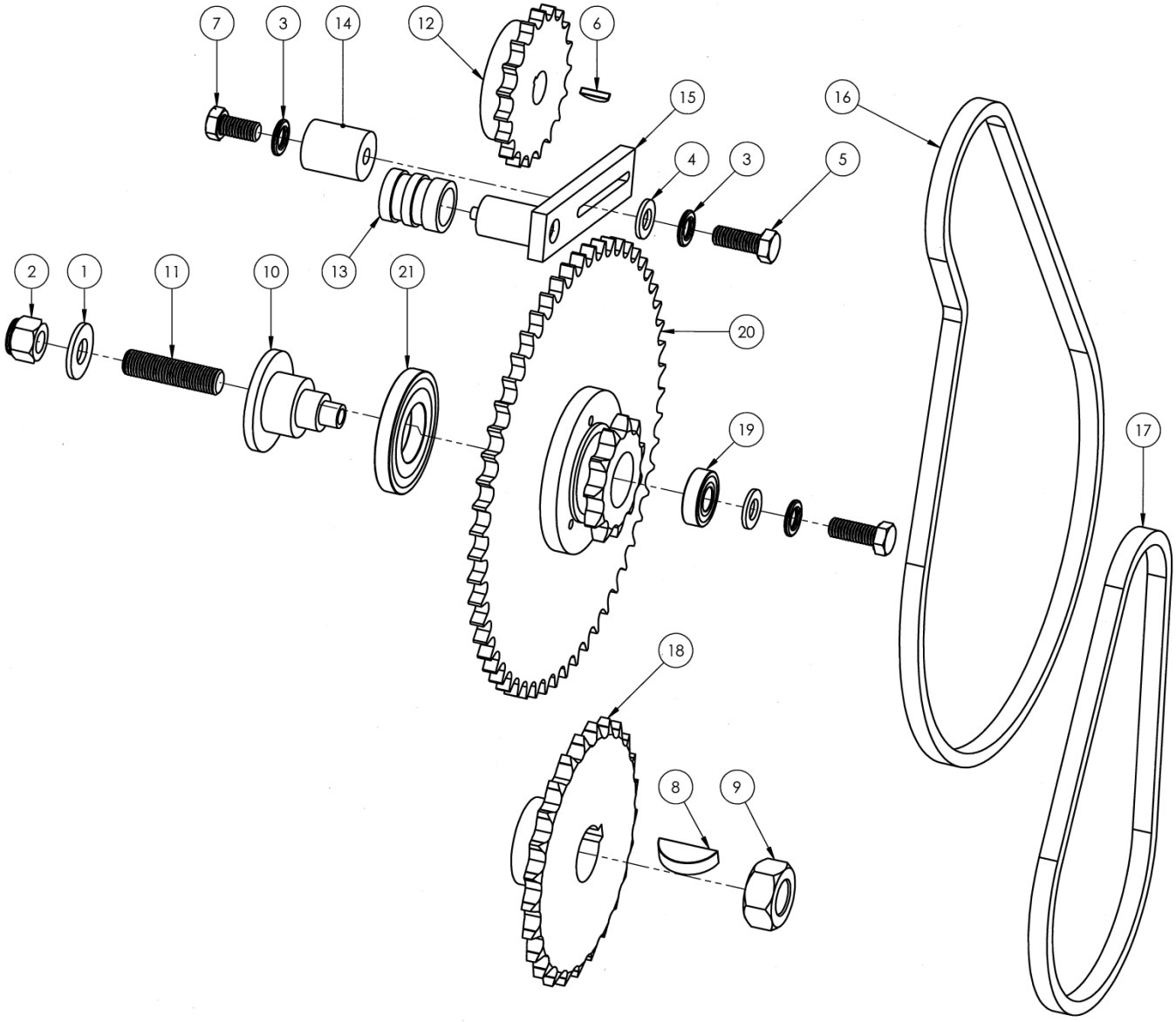
MODEL REGAL 36” & 42”:- Cylinder Drive Assembly (FIG 4)



MODEL REGAL 36” & 42”:- Cylinder Drive Assembly BOM (FIG 4)

ITEM NO.	DESCRIPTION	PART 36"	PART 42"	USED
1	M10 SPRING WASHER	SWM10		2
2	M10 FLAT WASHER	WM10		2
3	NUT M8 NYLOC	NNM8		1
4	3/8 UNF x 3/4 CSK SLOTTED	S11052		1
5	SPRING WASHER M12 Z/C	SWM12		1
6	NUT M6 NYLOC	NNM6		2
7	M12 BOLT/SET SCREW	SM1275		1
8	M12 WASHER FORM A	WM12A		3
9	NUT M12 NYLOC	NNM12		1
10	3/8 x 3/4 UNF	S11011		1
11	BEARING	AM81009		1
12	FLAT WASHER M10 FORM G	WM10G		1
13	SET SCREW M6 x 25	SM625		2
14	3/4" BRONZE BUSH	AM81084		2
15	3-8 UNF x 1 1/2 ZC	AFK1145		1
16	1 & 1/2" X 5/16" WOODRUFF KEY	AM82165		1
17	LOWER BELT GUIDE	AFK042		1
18	CYLINDER/PULLEY DISTANCE PIECE	AFK1209		1
19	CYLINDER V-BELT PULLEY	AM90180		1
20	TOP V-BELT PULLEY	AM90184		1
21	CUTTER CLUTCH BELT	AM90140		3
22	M20 HALFNUT	NHM20		1
23	BOLT M8x80	BM880		2
24	M12 X 30 BOLT/SET SCREW	SM1230		1
25	M10 X 25 SET SCREW	SM1025		1
26	BELT GUIDE	AFK006		1
27	CUTTER CLUTCH ROD SWIVEL	AFK044		1
28	CUTTER/CLUTCH PIVOT BOSS	AFK1210		1
29	BELT GUIDE COLUMN	AFK1208		1
30	CLUTCH/HYDRO SWIVEL BOSS	AFK1207		1
31	C/CLUTCH SPACER	AFK1215		1
32	SPACER C/CLUTCH 30X20x2	AFK1216		1
33	LOWER CUTTER CLUTCH ROD	AFK124		1
34	CUTTER CLUTCH ARM FABRICATION	AFK012		1
35	CUTTER CLUTCH JOCKEY	AFK003		1
36	BEARING 20mm 6004 2RS	AM81007		4
37	CUTTER CLUTCH JOCKEY V-BELT PULLEY	AM90182		1
38	BELT GUIDE L SHAPE	AFK1131		1

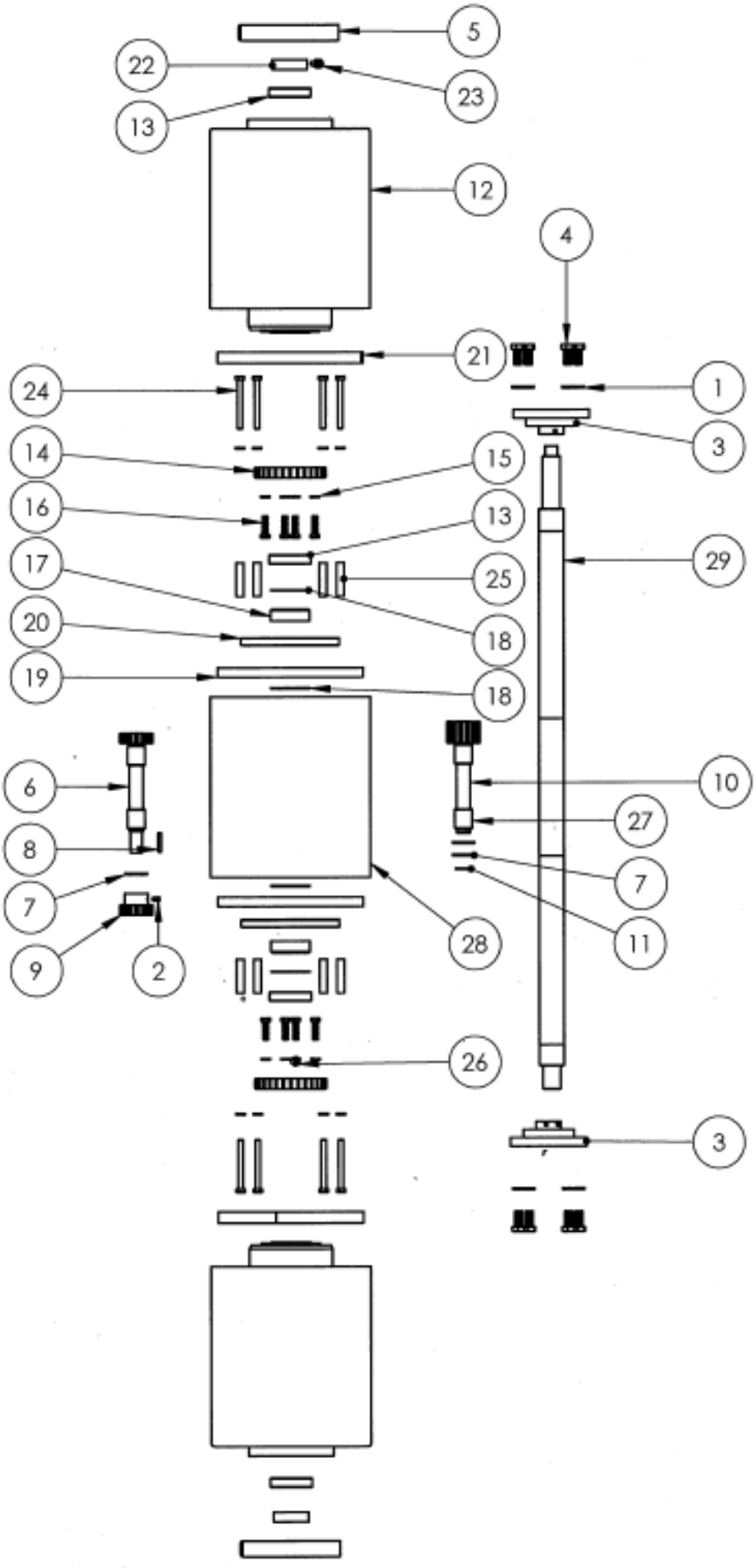
MODEL REGAL 36” & 42”:- Rear Roller Drive Assembly (FIG 5)



MODEL REGAL 36” & 42”:- Rear Roller Drive Assembly BOM (FIG 5)

ITEM NO.	DESCRIPTION	PART 36"	PART 42"	USED
1	1/2" UNF WASHER	W11014		1
2	1/2" UNF NYLOC NUT			1
3	M10 SPRING WASHER	SWM10		3
4	M10 FLAT WASHER	WM10		2
5	SET SCREW 3-8 UNF x 1 ZC	S11014		2
6	KEY 5/8 X 1/8 WOODRUFF	K5-5		1
7	3/8 x 3/4 UNF	S11011		1
8	1 & 1/2" X 5/16" WOODRUFF KEY	AM82165		1
9	NUT M20 PLAIN	NM20		1
10	LARGE COMPOUND CENTRE	AFK056		1
11	1/2" X 2 1/2" UNF BOLT	AFK1110		1
12	PRIMARY DRIVE SPROCKET	AFK1335		1
13	CHAINTENSIONER SLEEVE LONG	AFK1116		1
14	ADJ BOSS	AFK1127		1
15	CHAIN TENSIONER FAB	AFK029		1
16	CHAIN 1/2 PITCH X 75 LINKS	AM81515		1
17	CHAIN 5/8 37 LINKS	AM90214		1
18	REAR ROLLER SPROCKET	AFK062		1
19	BEARING 12mm 6001 2RS	AM82104		1
20	LARGE COMPOUND SPROCKET HUB	AFK057		1
21	BEARING 12mm 6001 2RS	AM82323		1

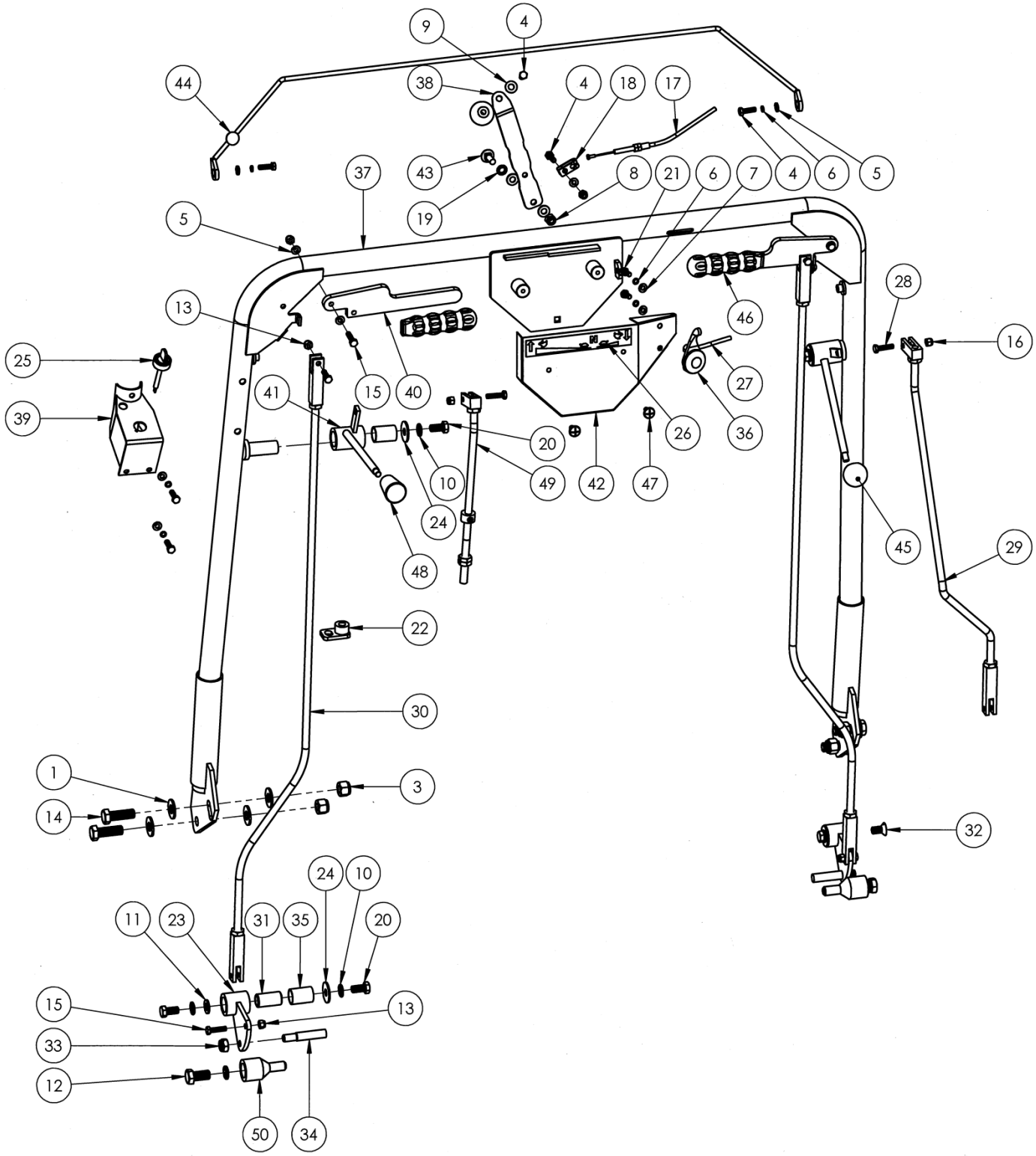
MODEL REGAL 36” & 42”:- Rear Roller Assembly (FIG 6)



MODEL REGAL 36” & 42”:- Rear Roller Assembly BOM (FIG 6)

ITEM NO.	DESCRIPTION	PART 36"	PART 42"	USED
1	1-2" SPRING WASHER			8
2	M6 X 6 GRUBSCREW	ACGM6		4
3	BEARING FLANGED 12SF 1 1/8"	AM81010		2
4	1/2" X 1" UNF SET SCREW	S11018		8
5	BRAKE BAND	AFK021		2
6	13T SINGLE DIFF ASSY	AFK142		1
7	REAR ROLLER GEAR WASHER	AFK1199		3
8	KEY 3/16 x 1.1/4 FORM C	AM83273		1
9	13T PLANET PINION	AFK1154		1
10	13T DOUBLE DIFF GEAR ASSY	AFK141		1
11	CIRCLIP 7/8 EXTERNAL	AM82176		1
12	REAR ROLLER OUTER FAB	AFK113	AFK114	2
13	BEARING 40mm 6008 2RS	AM82105		4
14	REAR ROLLER RING GEAR	AFK040		2
15	M8 SPRING WASHER	SWM8		16
16	SET SCREW M8 x 25	SM825		8
17	INNER ROLLER COLLAR	AFK013		2
18	ROLLER SHIM	AFK1429		6
19	OIL SEAL HOUSING	AFK1149		2
20	OIL SEAL 135 ID x 160 OD R21 SINGLE LIP	AM81053		2
21	REAR ROLLER SEALING BAND	AFK1228		2
22	OUTER ROLLER COLLAR	AFK055		2
23	SET SCREW M8 x 20 ZC	SM820		2
24	BOLT M8x80	BM880		8
25	REGAL ROLLER SEAL PLATE SPACER	AFK1521		8
26	SET SCREW M8 x 20	SM820		1
27	OILITE BUSH 7/8 X 1 1/8 X 1 1/4LG	AM82118		5
28	REAR ROLLER CENTRE FAB	AFK127		1
29	REAR ROLLER SHAFT 36	AFK1124	AFK1123	1

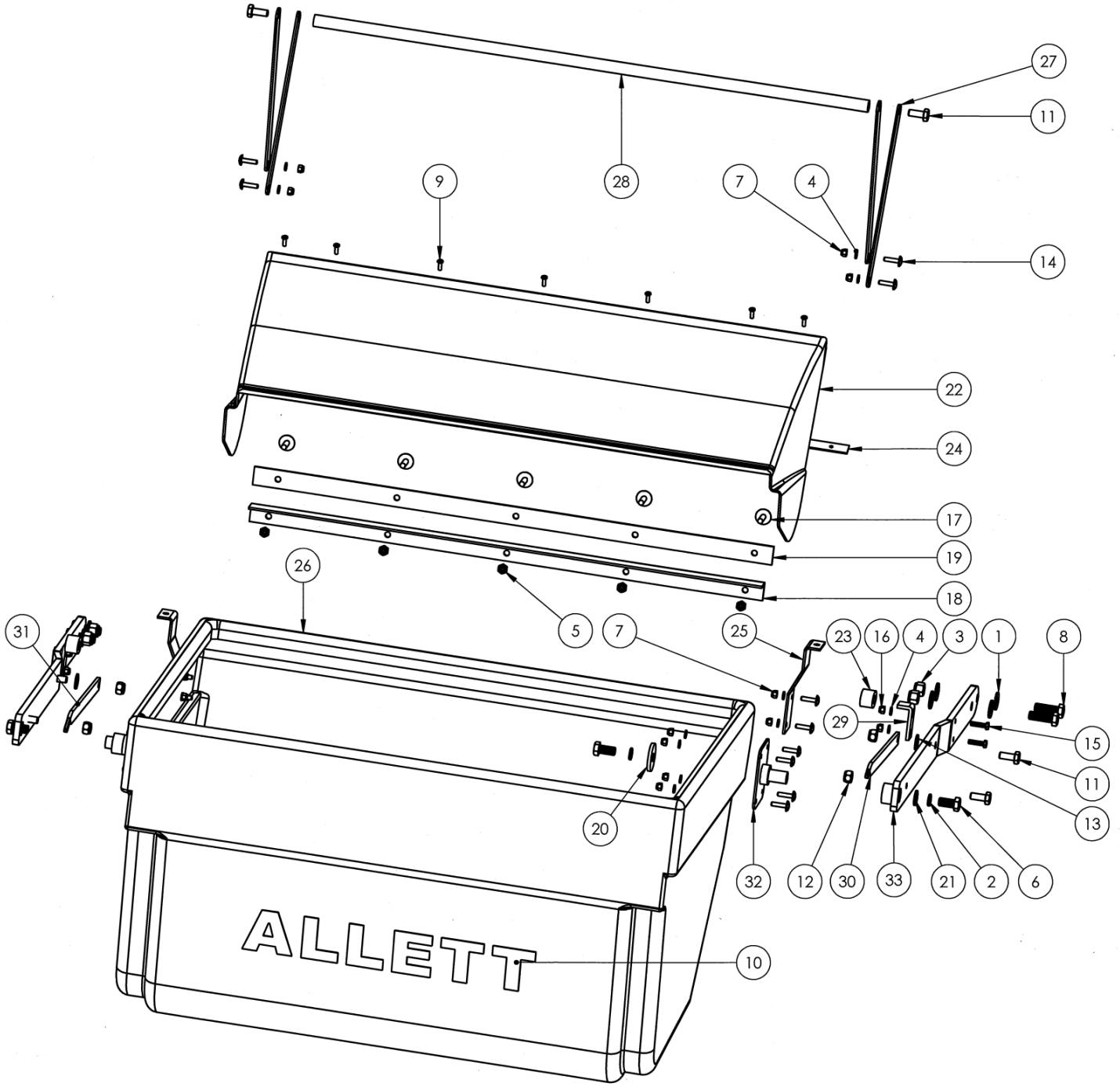
MODEL REGAL 36” & 42”:- Handlebar Assembly (FIG 7)



MODEL REGAL 36” & 42”:- Handlebar Assembly BOM (FIG 7)

ITEM NO.	DESCRIPTION	PART 36"	PART 42"	USED
1	1/2" UNF WASHER	W11014		6
2	1-2" SPRING WASHER			2
3	1/2" UNF NYLOC NUT			4
4	M6 x 20 SET SCREW	SM620		1
5	WASHER M6	WM6		8
6	SPRING WASHER M6	SWM6		2
7	WASHER M6 FORM A	WM6A		3
8	NUT M8 NYLOC	NNM8		1
9	M8 PLAIN WASHER	WM8		3
10	M10 SPRING WASHER	SWM10		3
11	M10 FLAT WASHER	WM10		1
12	1/2" X 1" UNF SET SCREW	S11018		2
13	NUT M6 NYLOC	NNM6		3
14	1/2" X 1" UNF SET SCREW	S11019		4
15	SET SCREW M6 x 25 ZC	SM625		2
16	NUT M6 NYLOC	NNM6		2
17	CABLE CUTTER CLUTCH	AFK1367		1
18	YOKE ANCHOR POINT	BSG1024		1
19	SPRING WASHER M8	SWM8		1
20	3/8 x 3/4 UNF	S11011		3
21	M6 X 12 SET SCREW	SM612		2
22	HAND BRAKE PLATE FAB	AFK211		1
23	BRAKE SWIVEL L/H DRVE SIDE	AFK016		2
24	FLAT WASHER M10 FORM G	WM10G		2
25	WIRING HARNESS - IGNITION BARREL	AFK274		1
26	REGAL HYDROSTAT DECAL	AM81559		1
27	THROTTLE CABLE	AFK1420		1
28	SET SCREW M6 x 25	SM625		2
29	UPPER CUTTER CLUTCH ROD	AFK126		1
30	POWER STEERING ROD	AFK122		2
31	POWER STEERING SWIVEL BOSS	AFK1202		2
32	3-8 x 3-4 CSK	S11052		1
33	M10 x 1.25 NYLOC	NNM10		2
34	BRAKE SWIVEL	AFK1046		2
35	3/4" BRONZE BUSH	AM81084		2
36	THROTTLE LEVER BODY	AM82177		1
37	REGAL HANDLE BAR FAB	AFK232	AFK236	1
38	HYDROSTAT CONTROL LEVER	AFK1371		1
39	ON/OFF SWITCH BOX	AFK251		1
40	STEERING LEVER	AFK1020		2
41	CUTTER CLUTCH LEVER	AFK210		2
42	HYDROSTAT CONTROL COVER	AFK1368		1
43	COACH BOLT M8 x 25 ZY	BCM825		1
44	SAFETY SWITCH BAR FAB	AFK217	AFK218	1
45	BALL KNOB	AM87264		2
46	HANDLE GRIP POST	AM81059		2
47	SCREW M6 x 16 ROOFING BOLT ZC	S11060		2
48	TAPERED KNOB	AM81516		1
49	HAND BRAKE ROD	AFK207		1
50	30/36 BRAKE ANCHOR	AFK026		2

MODEL REGAL 36” & 42”:- Grassbox Assembly (FIG 8)



MODEL REGAL 36” & 42”:- Grassbox Assembly BOM (FIG 8)

ITEM NO.	DESCRIPTION	PART 36"	PART 42"	USED
1	1/2" UNF WASHER	W11014		8
2	1/2" SPRING WASHER			4
3	1/2" UNF NYLOC NUT			4
4	WASHER M6	WM6		20
5	NUT M8 NYLOC	NNM8		5
6	1/2" X 1" UNF SET SCREW	S11018		4
7	NUT M6 NYLOC	NNM6		16
8	1/2" X 1" UNF SET SCREW	S11019		4
9	POP RIVET4.8 DIA X16mm STEEL	PR4816		7
10	ALLETT DECAL LARGE	AM81620		1
11	SET SCREW M10x20	SM1025		6
12	M10 NYLOC NUT	NNM10		4
13	WASHER M10 FORM C Z/C	WM10C		2
14	SCREW M6 x 16 ROOFING BOLT ZC	S11061		16
15	SET SCREW M6 x 25 ZC	SM625		4
16	NUT M6 NYLOC	NNM6		4
17	M8 x 25 CUP SQ BOLT	BM830		5
18	SUPPORT ANGLE	AFK1424	T003024	1
19	BACKPLATE FOR SUPPOPRT ANGLE	AFK1425	T003025	1
20	CLAMPING WASHER	AC139		2
21	1/2 WASHER			2
22	GRASSBOX HOOD	M337	AM81058	1
23	REGAL GRASS BOX RUBBER BUFFER	AFK1494		2
24	GRASSBOX DEFLECTOR STRIP	AFK1229		1
25	GRASSBOX BRACKET	AFK034-B		2
26	GRASSBOX	AM82142	AM81057	1
27	GRASSBOX HOOD MOUNTING ARM	AFK1128		4
28	GRASSBOX HOOD SHAFT	AFK1117	AFK1115	1
29	GRASSBOX ARM BRACKET	AFK1050		2
30	BRASS BOX ARM SHORT	AFK1051		1
31	GRASS BOX ARM SHORT	AFK1052		1
32	30/36 GRASS BOX PIVOT ASSEMBLY	AFK025		2
33	GRASSBOX ARM FAB	AFK017		2

Notes