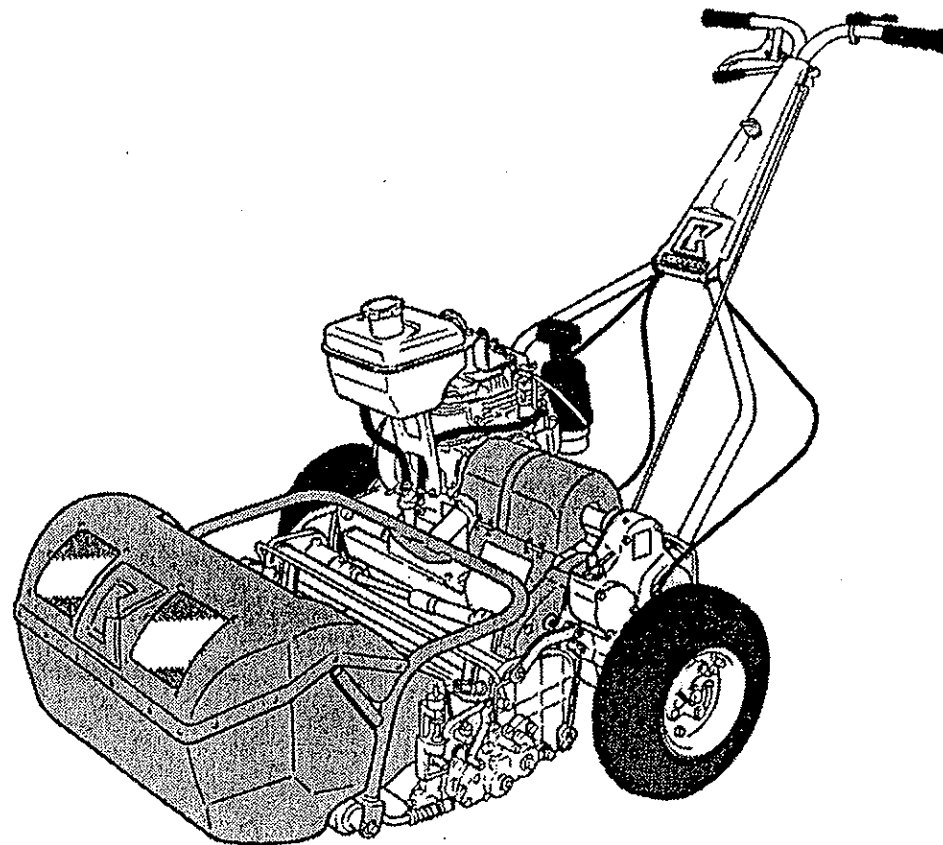


**LM54GA-R·LM54GAS-R** swing mowers

**Baroness  
lawn mowers**

**Operating and instruction manual and parts catalogue '96**



**“Required reading”** Before using the machine please ensure that you have read this manual and the operating and instruction manual for the engine.

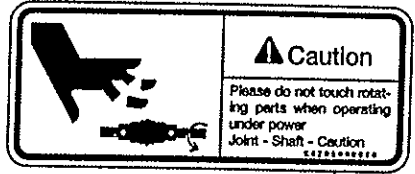
**BARONESS**

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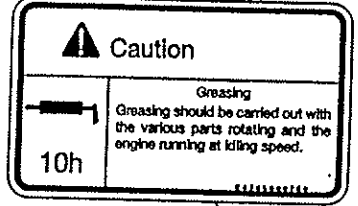
# Names of the various sections and locations of the warning labels

**K4205000810**  
Joint and rotating parts caution label

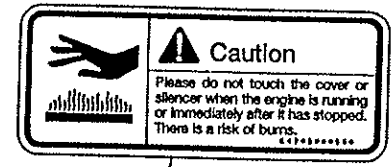


handle section

**K4205000760**  
Greasing caution label

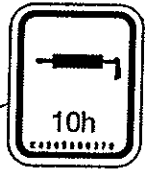


**K4205000560**  
Silencer caution label



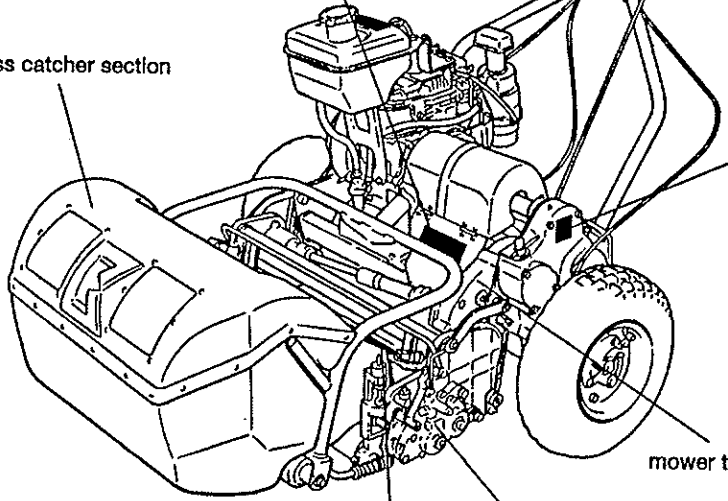
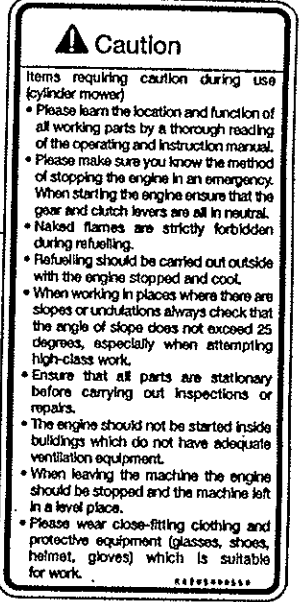
clutch section

**K4205000370**  
10 hour greasing label

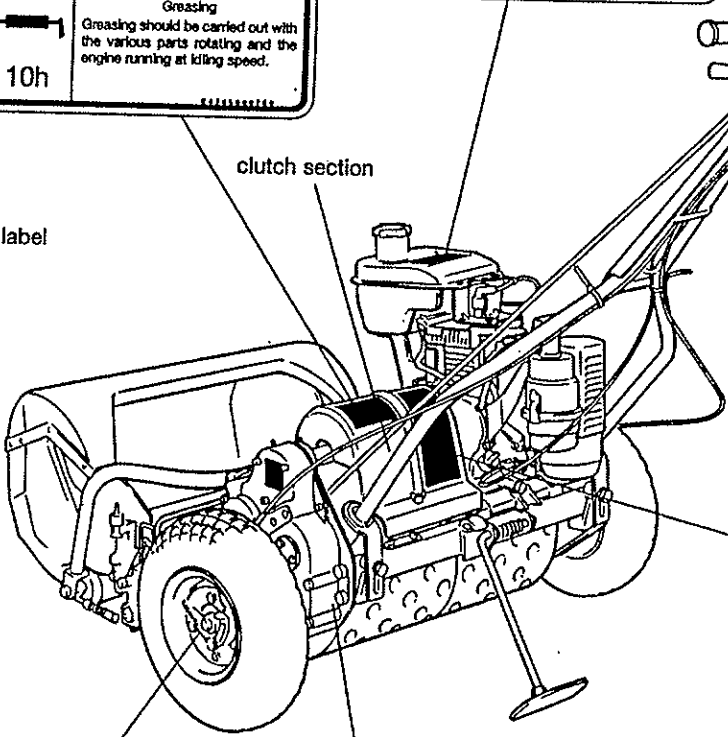


grass catcher section

**K4205000550**  
Cylinder mower caution label



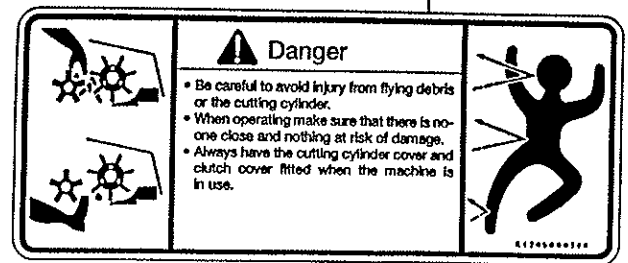
mower transmission section



drum wheel section

frame-related section

**K4205000340**  
cylinder mower danger label



mower section

## Safety warning

Warning labels and ▲ signs have been attached to this machine to ensure that you can operate it safely.

The warning labels indicate items which are particularly important from the safety point of view, so please work safely and always obey the warnings.

### Warning labels



**Danger:** Indicates that non-compliance with this warning will result in serious injury or death.



**Warning:** Indicates that non-compliance with the warning entails the risk of serious injury or death.



**Caution:** Indicates that non-compliance with this warning entails the risk of sustaining an injury.



... danger label  
(cylinder mower)



... danger label  
(cylinder mower)



... caution label  
(joint + rotating parts)



... caution label  
(hot parts)



... caution label  
(greasing)



... danger label  
(danger - flammables)



... fuel



... warning label  
(caution - exhaust fumes)



... refer to engine  
operating and  
instruction manual

## Introduction

Thank you for buying a Baroness lawn mower, the LM54GA-R or LM54GAS swing mower.

This operating and instruction manual describes the correct methods of handling, adjustment and inspection. It is essential that this manual is read, and its contents thoroughly understood, before the machine is brought into use.

After completion and before shipment the machine underwent a thorough test run and inspection at the factory, but the method of operation and the usual daily procedures of inspection, adjustment and lubrication before and after work will have a great influence on whether the machine achieves the expected performance. Please operate safely and we expect the machine to produce an excellent performance for a very long time.

### Please note

- Gradual changes may be made to the machines. When making enquiries about the machine please always specify both the model type and the manufacturer's number.
- The items mentioned in this manual may also be altered without prior warning.

### ▲ Caution ... when operating

The labels which are stuck to the machinery and referred to in this operating and instruction manual have written safety explanations.

Please read and take note of the handling procedures and safety precautions and only operate the machine after you have understood them completely.

The labels and accompanying explanations should be preserved in their entirety; if they become lost or damaged please replace them immediately with new ones.

**Please do not under any circumstances peel off the labels which have been stuck to the machine.**

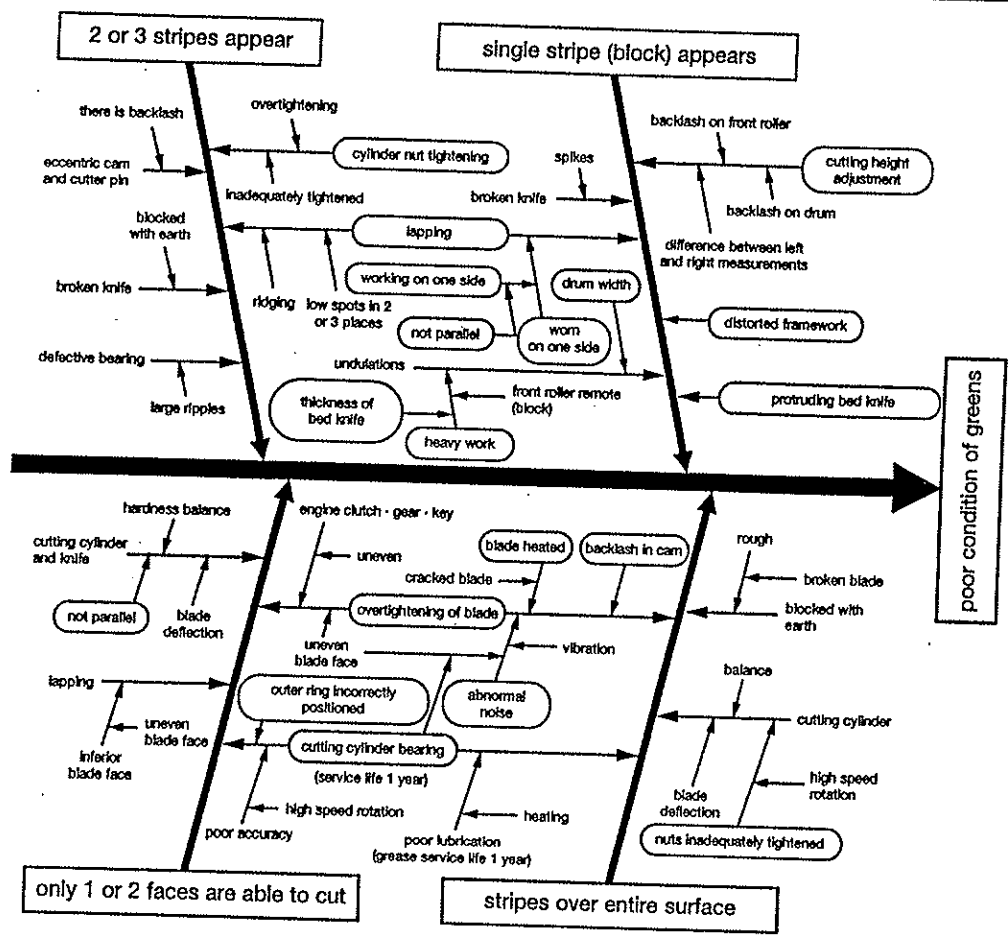
## Distinctive features of the LM54GA-R and LM54GAS-R

- The travel motion section and cutting unit can tilt independently, and sloping ground and undulations can be cut smoothly, even on hard and difficult greens.
- Because the cutting unit and grass collecting section are separate the greens can be cut uniformly.
- The transmission mechanism is of the all-gear type. There is an excellent direct system with a differential transmission device.
- The driving drum is made of rust-proof corrosion-resistant aluminium.
- Engine brake for safe working.
- The blades are outstandingly sharp due to the full heat treatment, and provide highly effective cutting.
- The GAS-R model is fitted with a thatching reel or rotating brush.

## Specifications (in operating state)

	LM54GA-R	LM54GAS-R
■ dimension		
• overall length	1520 mm	1520 mm
• overall width	930 mm	930 mm
• overall height	1000 mm	1000 mm
■ weight	93.5 kg	97.5 kg
■ speed	4.7 km/h (3000 rpm)	4.7 km/h (3000 rpm)
■ engine	Robin EY15D 3.5 PS / 4000 rpm	Robin EY15D 3.5 PS / 4000 rpm
■ cutting cylinder	102 mm x 9 blades	102 mm x 9 blades
■ width of cut	557	557
■ height of cut	3.5 ~ 10 mm (bottom blade 2.5)	3.5 ~ 10 mm (bottom blade 2.5)
■ frame (mower unit)	aluminium casting	aluminium casting
■ grooved front roller	50 x 577 grooved steel tube roller	50 x 577 grooved steel tube roller
■ drum wheel	175 x 535, corrosion- resistant aluminium	175 x 535, corrosion- resistant aluminium
■ mower unit weight	26 kg	30 kg
■ grass catcher weight	3.5 kg	3.5 kg

# Diagram showing the individual factors which cause poor results when cutting greens

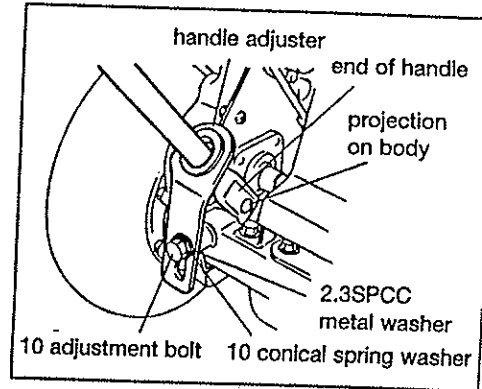


# Handling instructions

## 1. Assembly and adjustment of the body

### 1) Attaching the handle to the body.

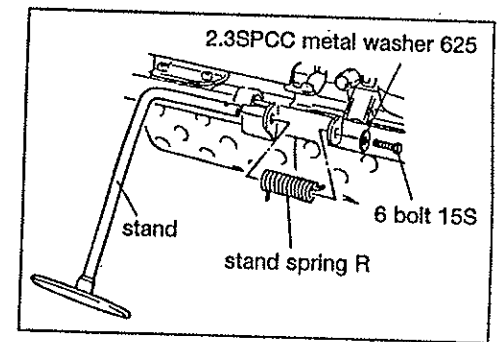
① Insert the ends of the handle from above through the holes in the left- and right-hand handle adjusters (6-22 and 6-23) respectively and position on projections on the body.



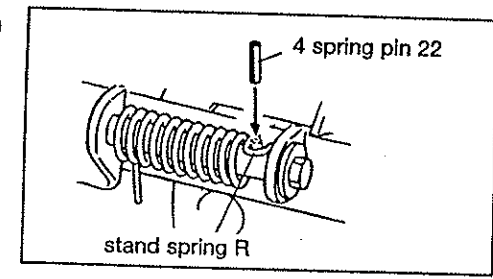
② Secure the respective left- and right-hand handle adjusters to the rear of the body with 10 adjustment bolts 25 (6-24), 10 conical spring washers 1H (6-25) and 2.3SPCC metal washers 1025 (6-33).

### 2) Attaching the stand.

① Secure the stand (3-46) from the left in the stand attachment fitting on the rear of the body, pass it to the right through the stand spring (3-47), and secure with 6 bolt 15S (3-51) and 2.3SPCC metal washer 625 (3-50).



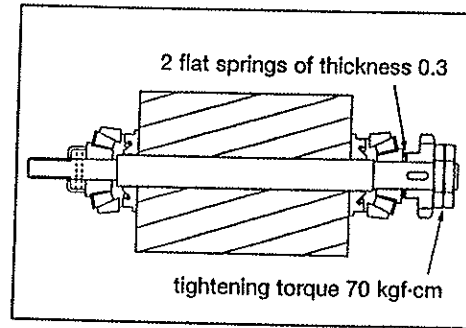
② Then insert the 4 spring pin 22 (3-49) into the hole in the stand after a tool has been used to hook the stand spring R securely onto the pin.



## 2. Method of installing the cutting cylinder

When installing the cutting cylinder turn the blades gently by hand and carry out the adjustment so that the bearing has no backlash. Once the nut has been tightened the adjustment is carried out by gradually loosening the nut until the cutting cylinder turns easily.

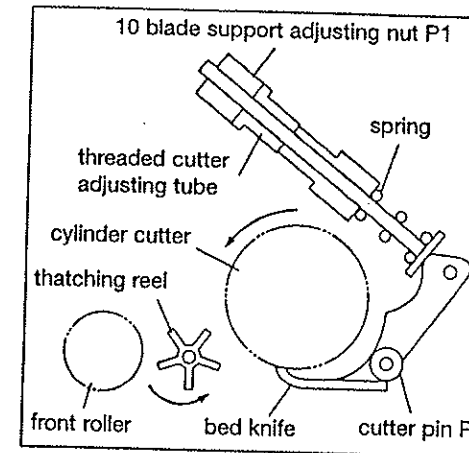
For the bearings in the cylinder cutter section please use the 30204JRP6 which has a small error level. Sufficient grease (Excellite EP no. 1) should be put into the bearing before installing it. Sufficient grease should also be put into the seal part (while turning the roller). **Bearings and seals should always be replaced every season.**



4) Screw in the threaded cutter adjusting tubes (1-49). Turn the 10 blade support adjusting nuts P1 (1-53) until fully slack and set to give left and right symmetry. Screw in cutter pin R (1-55), set the cam bush to the correct position and lock the lock nut (1-56).

5) Adjust the bed knife with the 10 blade support adjusting nuts P1 (1-53) so that it makes light contact with the cutting cylinder and can cut newspaper cleanly.

Lapping and grinding should be carried out if there are any places where the sharpness is poor (ragged edges to the incision).



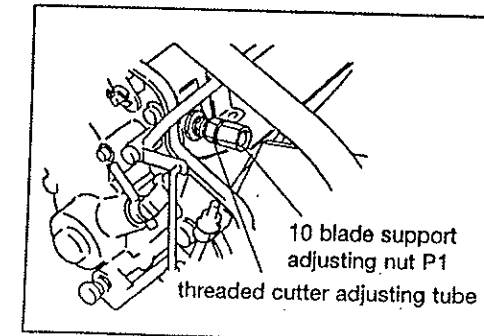
## 4. Method of blade adjustment

- ⚠ Caution ...**
- Adjustment of the blades should always be carried out on a level place with the engine stopped.
  - Hands should always be protected with gloves when making test cuts on newspaper. When turning the cutting cylinder take good care that the gloves do not get caught up in the cutting cylinder.

During adjustment, if the 10 blade support adjusting nut P1 (1-53) is turned to the right the contact with the edge of the blade becomes lighter and if it is turned the other way the contact becomes heavier.

It should be adjusted so that there is light contact on both left and right and newspaper can be cut easily.

If the cutting cylinder becomes worn and the spring pressure is inadequate the spring pressure should be increased by slackening the lock nut (1-50) and turning the threaded cutter adjusting tube (1-49) to the right.

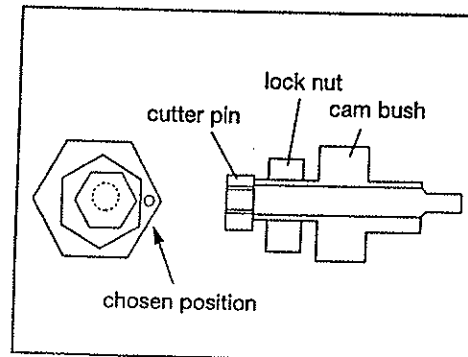


## 3. Adjusting the blade contact

1) Undo the threaded cutter adjusting tube (1-49), install cutter pin R (1-55) with zero spring pressure and set the bed knife COMP (1-42).

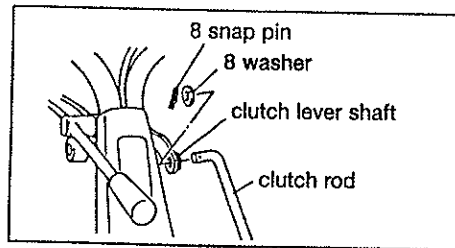
2) Adjust the cam bush (1-54), and mark the position of the cam bush when the bed knife just makes contact and there is no gap at the edge of the blade on the left or right.

3) Remove the cutter pin (1-55).

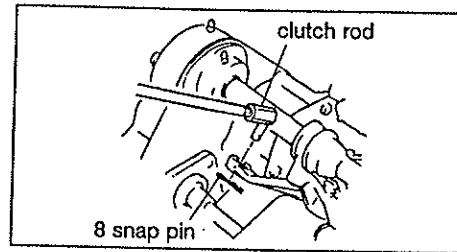


### 3) Attaching the clutch rod.

① Insert the clutch rod (6-6) into the clutch lever shaft (6-5) on the upper left side of the handle, and secure with 8 washer (6-21) and 8 snap pin (6-10).

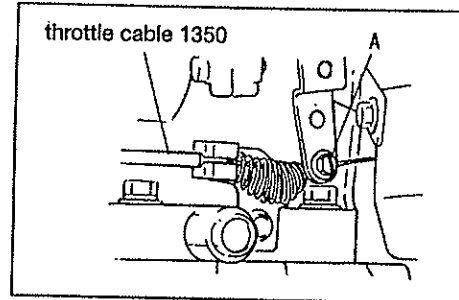


② Then insert the lower part of the clutch rod into the body and secure with 8 snap pin (6-10).



### 4) Attaching throttle cable.

Push the throttle cable 1350 (6-17) into the lower part of the rear of the engine body and tighten screw A securely.



### • Greasing the various components

The following components should be greased regularly.

Greasing should be carried out with the various parts rotating and the engine running at idling speed.

#### Greasing every 10 hours

- |                                |   |
|--------------------------------|---|
| • left-hand frame no. 2 shaft  | • transmission gear case intermediate shaft           |
| • left-hand frame no. 4 shaft  | • mower no. 1 shaft                                   |
| • right-hand frame no. 2 shaft | • mower intermediate shaft                            |
| • differential gear section    | • both sides of vertical gear case (GAS-R model only) |

Because bearings are involved particular attention should be paid to the greasing times for components on the 10 hour greasing schedule.

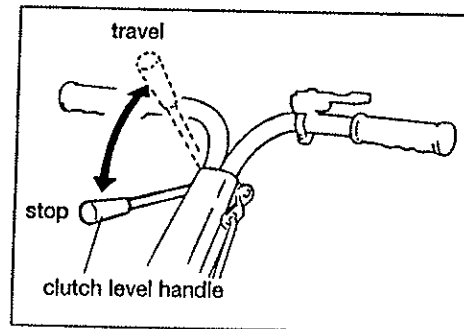
#### Greasing every 50 hours

- |                                |  |
|--------------------------------|--|
| • drum bearing                 | • lower part of left-hand frame cover  |
| • mower front and rear rollers | • left-hand frame clutch shaft bearing |

### • Adjustment of clutch lever handle

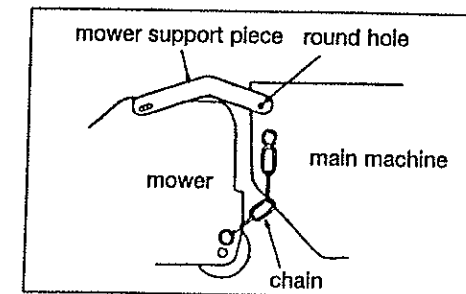
The machine travels when the clutch lever handle is pulled towards you and stops when it is returned.

If it does not move forward when the clutch lever is pulled slacken the 6 adjusting bolt 25 (3-15), rotate the lever mount (3-7) to the right, and tighten the bolt.



### • Adjusting the mower unit position

With the travelling wheels disconnected lower the body onto a flat place and adjust it so that the bolt 45 (1-65) comes to the centre of the long hole in the mower support piece (4-83).





## 5. Method of lapping and grinding

**⚠ Caution ...** hands should always be protected with gloves when making test cuts on newspaper. When turning the cutting cylinder take good care that the gloves do not get caught up in the cutting cylinder.

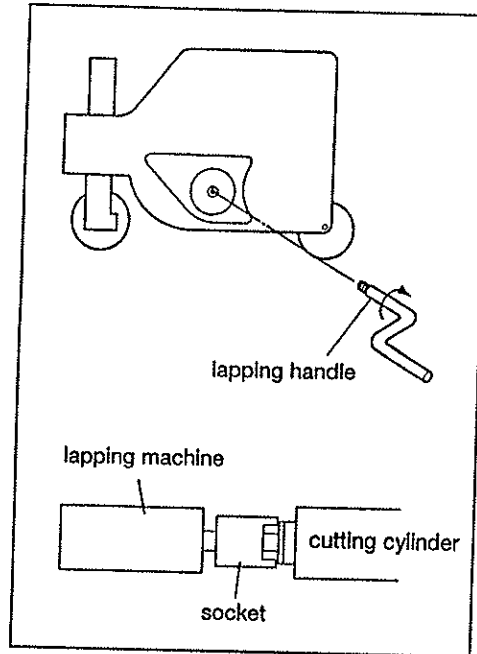
When the grass cutting work is finished and before any adjustments are made a check should be made for places which cut newspaper well and places which do not to see if lapping and grinding is required. (If no cutting occurs over the entire surface then a special check should be made for places which do not cut with the newspaper folded double).

A mixture of 3 ~ 4 parts oil with 1 part lapping powder (#200 ~ #400) should be applied to the cutting cylinder just on places which cut well, and the cylinder is then rotated in the reverse direction. (The powder must definitely not be applied to places with inadequate sharpness where the edge of the cut is ragged).

Rotate the cutting cylinder for a time and when the contact noise has died down test the cutting cylinder again over the full width for places which cut newspaper and places which do not cut.

If this work is carried out repeatedly the cutting cylinder and bed knife will engage evenly.

Finally, finish off by applying lapping powder to the entire surface.



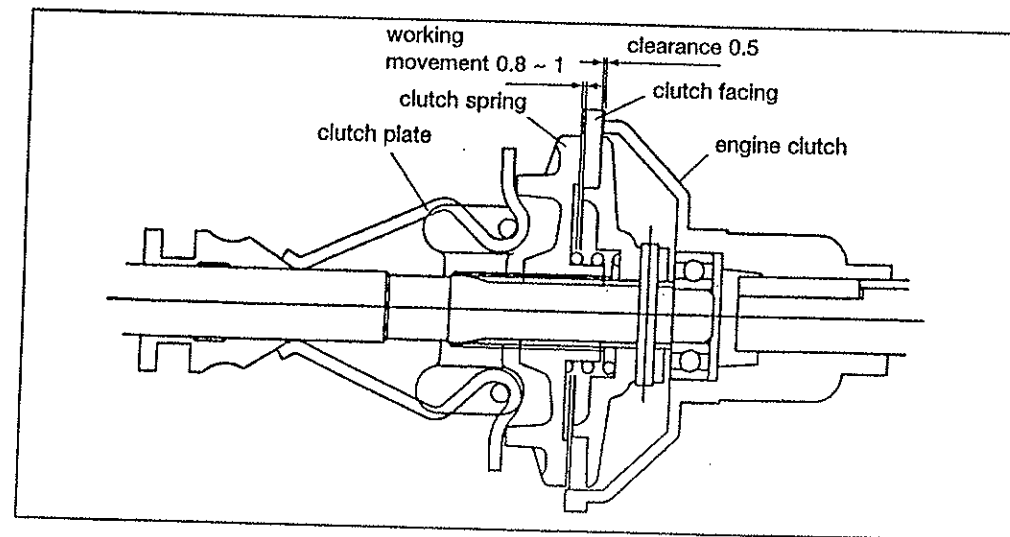
## 6. Adjusting the clutch components

### • Adjusting the engine clutch components

- If the engine is replaced the clearance between the engine clutch (3-1) and clutch facing (3-3) when the travelling clutch is engaged should be adjusted approximately 0.5 mm with a special purpose gauge.
- When a new machine has been in use for 10 hours or when the clutch spring (3-8) is replaced the working movement of the clutch plate (3-6) between when the travelling clutch is engaged and when it is disengaged should be adjusted to 0.8 ~ 1 mm with the engine stopped.

### • Clutch lever

- The travelling clutch lever is located on the right-hand side of the handle; if the lever is pulled the machine advances and if it is released forward the machine stops.
  - The various parts of the clutch lever are located towards the rear of the right hand frame cover (4-85) for the drum, towards the front of the left-hand frame cover (4-45) for the cylinder, and on the right-hand gear cover (1-89) of the mower for lapping.
- When the lever is moved forward the clutch is engaged, and when it is moved back the clutch is in neutral.

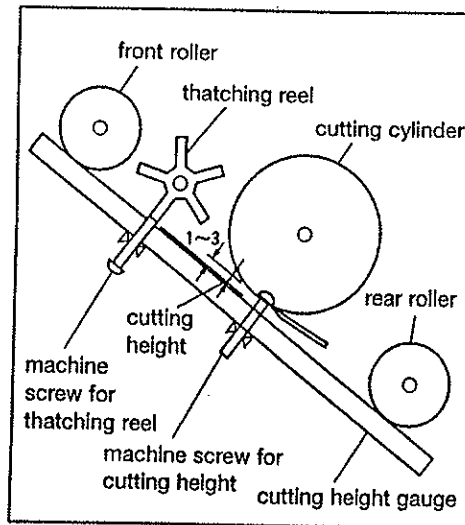


## 7. Adjusting the cutting height

1) By raising or lowering the front roller the cutting height can be adjusted between 3.5 mm and 10 mm. By using the 55G bed knife no. 2 it is possible to cut down to a minimum height of 3 mm.

2) When using the thatching reel the machine should be set to a lower cutting height of 1 ~ 3 mm. (LM54GAS-R: should be adjusted to suit the condition of the grass).

3) When the rotary brush is used it should be set to the same height as the cutting height. If it is set too low the brush will rapidly become damaged. (LM54GAS-R)



## 8. Types of bed knife

	blade thickness (mm)	minimum cutting height (mm)
standard blade	2.5	3.5
55G bed knife no. 2 (optional)	1.8	3.0

## 9. Engine inspection schedule

Maintenance inspections should always be carried out in accordance with the following inspection schedule to ensure that the engine is operated under optimum conditions at all times.

	running time	every 8 hours	every 15 hours	every 50 hours
check and replenish engine oil		○		
replace engine oil		first time		2nd time onwards
clean air cleaner			○	



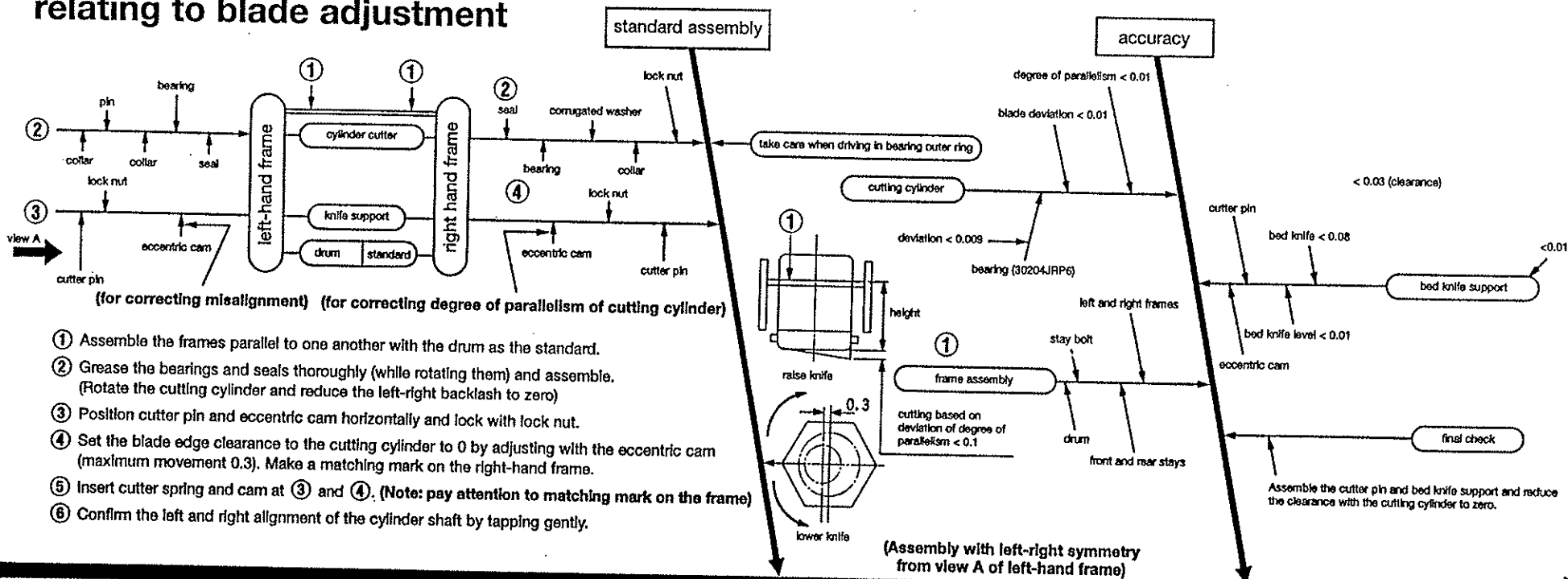
... for details please refer to the engine operating and instruction manual.

## 10. Advice on maintenance

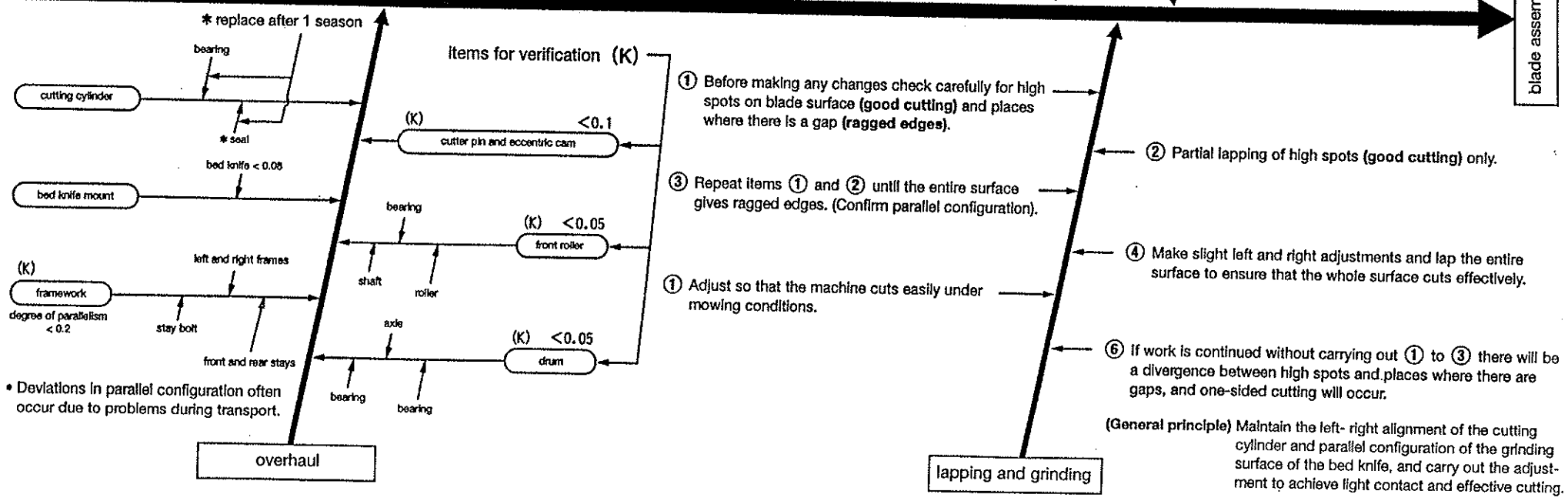
### ⚠ Caution Advice on maintenance

- Maintenance should be carried out after thorough familiarization.
- Maintenance should be carried out in a clean dry place on level ground.
- Maintenance or refuelling should not be carried out while the machine is running.
- Keep hands and feet away from driving and running parts. Great care should be taken that hands and feet do not get dragged in during the maintenance of driving and running parts.
- The cutting cylinder and bed knife both have sharp edges. Please take great care when handling them.
- When test cuts are made on newspaper the cutting cylinder should be turned very carefully with the finger tips.
- All parts should be installed correctly in good condition.
- Damaged parts should be repaired or replaced immediately.
- Parts which are worn and damaged must be replaced.
- Any adhering dirt, grease or oil should be removed.

# 11. Diagram showing the individual factors relating to blade adjustment



- ① Assemble the frames parallel to one another with the drum as the standard.
- ② Grease the bearings and seals thoroughly (while rotating them) and assemble. (Rotate the cutting cylinder and reduce the left-right backlash to zero)
- ③ Position cutter pin and eccentric cam horizontally and lock with lock nut.
- ④ Set the blade edge clearance to the cutting cylinder to 0 by adjusting with the eccentric cam (maximum movement 0.3). Make a matching mark on the right-hand frame.
- ⑤ Insert cutter spring and cam at ③ and ④. (Note: pay attention to matching mark on the frame)
- ⑥ Confirm the left and right alignment of the cylinder shaft by tapping gently.



## 12. Items requiring caution during use

### Danger cylinder mower



- Take great care that there are no injuries caused by blades or flying debris.



- During operation, work should be carried out after confirming that there is no-one in the vicinity and that there is no risk of damage.



- The cutting cylinder cover should always be fitted before working.

### Caution beware of hot parts.



- Please do not touch the cover or silencer when running or immediately after stopping. There is a risk of burns.

### Caution when working with machine running



- Do not touch any rotating parts when machine is running.

### Caution when carrying out greasing



- Greasing should be carried out with the various parts rotating and the engine running at idling speed.

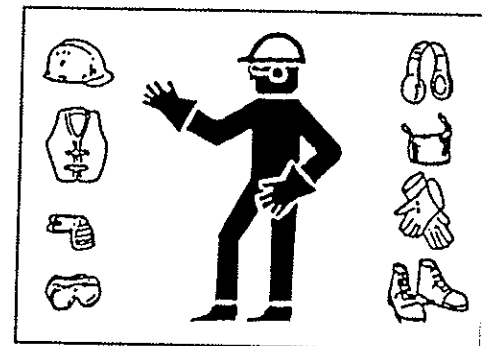
### Caution Caution during use

- Please learn the location and function of all working parts by a thorough reading of the operating and instruction manual.
- Please make sure you know the method of stopping the engine in an emergency. When starting the engine ensure that the gear and clutch levers are all in neutral.
- Naked flames are strictly forbidden during refuelling.
- When working in places where there are slopes or undulations always check that the angle of slope does not exceed 25 degrees, especially when attempting high-class work.
- Ensure that all parts are stationary before carrying out inspections or repairs.
- The engine should not be started inside buildings which do not have adequate ventilation equipment.
- When leaving the machine the engine should be stopped and the machine left in a level place.
- Please wear close-fitting clothing and protective equipment (glasses, shoes, helmet, gloves) which is suitable for work.

## 13. Safe working

### Caution Safety garments

- For safety please wear close-fitting clothes, which cannot get caught up in the machinery, and protective equipment (such as glasses, shoes, helmet and gloves) which is suitable for work.



### Caution Safe working

- As the manufacturers we ask you to ensure that the inspection and servicing of the machinery is thorough, and that the machine is operated correctly with safety as the prime objective not only to ensure the safety of the operator but also to prevent injury to others. To ensure safety we ask you to use genuine replacement parts for the components needed for servicing.

**Baroness lawn mower**  
**LM54GA-R and LM54GAS-R** swing mowers

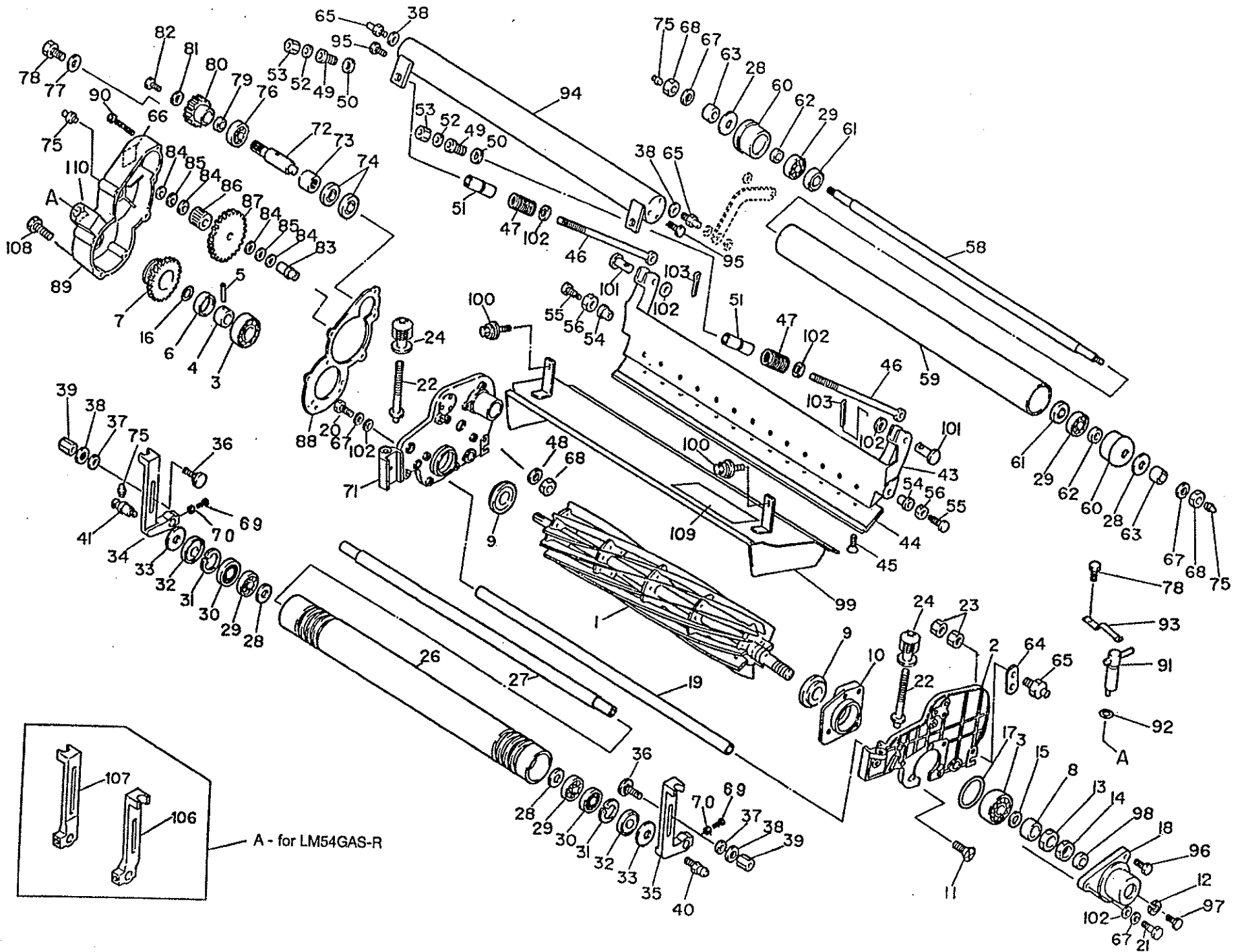
**Parts Catalogue**

☆ For ordering parts

The parts in these parts lists are managed by computer, so to avoid mistakes in deliveries please always specify catalogue number, code number and name of part when ordering parts.

(Example)	Catalogue number	Code number	Part name	Quantity
	1-2	LM5 4GA-0103AR	left-hand frame	1

1. Mower parts



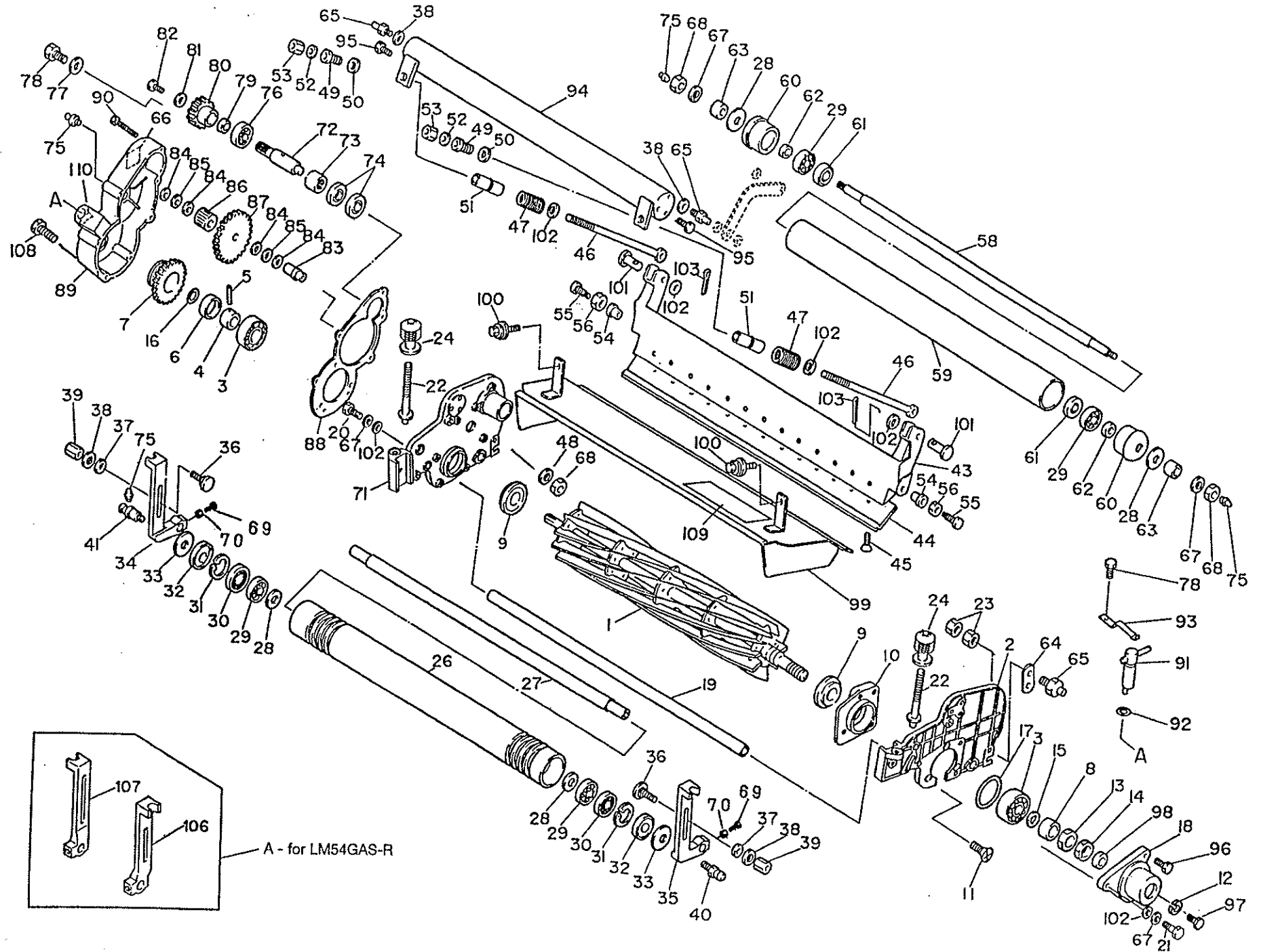
Shared parts ○ = LM55GD

Cat. No.	Code No.	Part name	No. off	Shared part	Notes
1-1	K280540090R	cutting cylinder - 557	1		
1-2	LM5 4GA-0103AR	left-hand frame	1		
1-3	K0631302040	tapered roller - 30204JRP6	2	○	
1-4	K6213000040	bearing collar - left	1	○	
1-5	K6051045280	4.5 hardened pin 28	1		
1-6	K5300000282	pin retaining collar	1		
1-7	LM5 4G--0108Z0	32 tooth gear	1		
1-8	K6212000250	20.2STKM collar 25.417	1		
1-9	K0830000020	oil seal 254210FA	2	○	
1-10	LM5 4GA-0110Z0	left-hand cylinder housing	1		
1-11	K0041080202	8 cross-head countersunk screw 20	3	○	
1-12	K0200080002	8 S washer	1		
1-13	K0170000132	20 small nut 10P1.5	1		
1-14	K0170000082	20 small nut 8P1.5	1		
1-15	K0220200001	20 corrugated metal washer	2		
1-16	K0880018000	O-ring P18	1		
1-17	K0880050000	O-ring P50	1		
1-18	LM5 4G--0111ZR	cylinder shaft cover	1		
1-19	LM5 4GA-0114A3	mower front stay 603.4	1		
1-20	LM5 4GA-0115Z3	knock bolt 25	1		
1-21	K0071000593	10 knock bolt 40	1	○	
1-22	LM5 4G--0134A0	adjusting screw	2		
1-23	K0102080002	8 nut 3	4		
1-24	K6084000063	roller adjuster	2	○	
1-25	LM5 4GA-0129Z0	front roller assembly (1-26~32 set)	1		
1-26	LM5 4GA-0131Z3	grooved roller	1		
1-27	K6131000010	front roller shaft	1	○	
1-28	K5051015280	1C5191P metal washer 1528	4	○	
1-29	K0613062020	bearing 62022RDC3	4	○	
1-30	K0861000030	oil seal 6202	2	○	
1-31	K0402042001	stop ring R42	2	○	
1-32	K0861000020	oil seal TA1542.38	2	○	
1-33	K5051015470	1C5191P metal washer 1547	2	○	
1-34	LM5 4GA-0106Z0	right-hand roller bracket	1		
1-35	LM5 4GA-0105Z0	left-hand roller bracket	1		

Shared parts ○ = LM55GD □ = LM315GA × = LM3C

Cat. No.	Code No.	Part name	No. off	Shared part	Notes
1-36	K0025080303	8 round head square neck bolt 30	2		
1-37	K5000080003	8 washer	2	○	
1-38	K0213080001	8 conical spring metal washer 1H	4	○	
1-39	K0149083203	8 long nut 20	2	○	
1-40	LM5 4G--0132Z0	left-hand mower attachment bolt	1		
1-41	LM5 4G--0133Z0	right-hand mower attachment bolt	1		
1-42	LM5 4GA-0119A0	bed knife COMP (1-43 ~ 45 set)	1		
1-43	LM5 4GA-0120AR	bed knife mount	1		
1-44	K2511000050	55G bed knife no. 1	1	○	
1-45	K0071000122	6 heat-treated countersunk screw 12	13	○	
1-46	K6511000050	cutter adjusting bolt 185	2		
1-47	K1000000072	3.5 compression spring 17.560	2		
1-48	K0210100001	10 conical disc spring L	1		
1-49	K6081000032	threaded cutter adjusting tube	2	○	
1-50	K0160000122	lock nut	2	○	
1-51	LM5 4GA-0117Z2	collar 53.5	2		
1-52	K5011010162	1SPCC metal washer 1016	2	○	
1-53	K0160000032	10 blade support adjusting nut P1	2	×	
1-54	K6010000010	cam bush	2	○	
1-55	K6082000010	cutter pin R	2	○	
1-56	K0160000112	lock nut	2	○	
1-57	LM5 4GA-0136Z0	rear roller assembly (1-29, 58~62 set)	1		
1-58	LM5 4GA-0137Z0	rear roller shaft	1		
1-59	LM5 4G--0138Z0	rear roller	1		
1-60	LM5 4G--0139Z0	rear roller housing	2		
1-61	K0811635090	oil seal MHS16359	2	□	
1-62	K0801525040	oil seal MH15254	2	□	
1-63	LM5 4GA-0140Z0	collar	2		
1-64	LM5 4G--0148Z3	stop	2		
1-65	LM5 4GA-0149Z3	bolt 45	4		
1-66	K4209000370	10 hour greasing label	1		
1-67	K0211100001	10 conical disc spring H	4	○	
1-68	K0160000282	10 nut 3P10H1	3	○	
1-69	K0000060202	6 bolt 20	2		
1-70	K0100060002	6 nut	2		

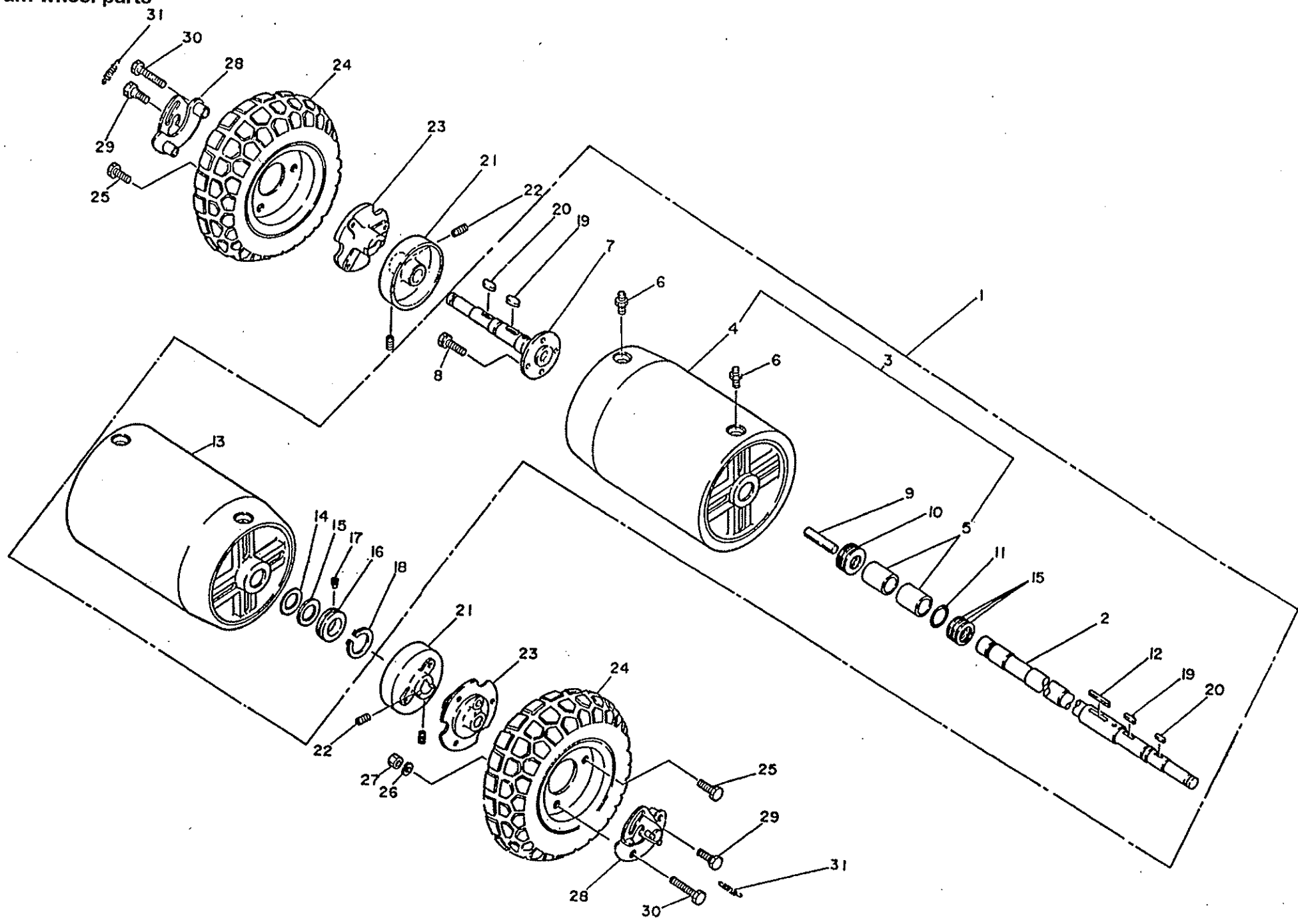
# 1. Mower parts





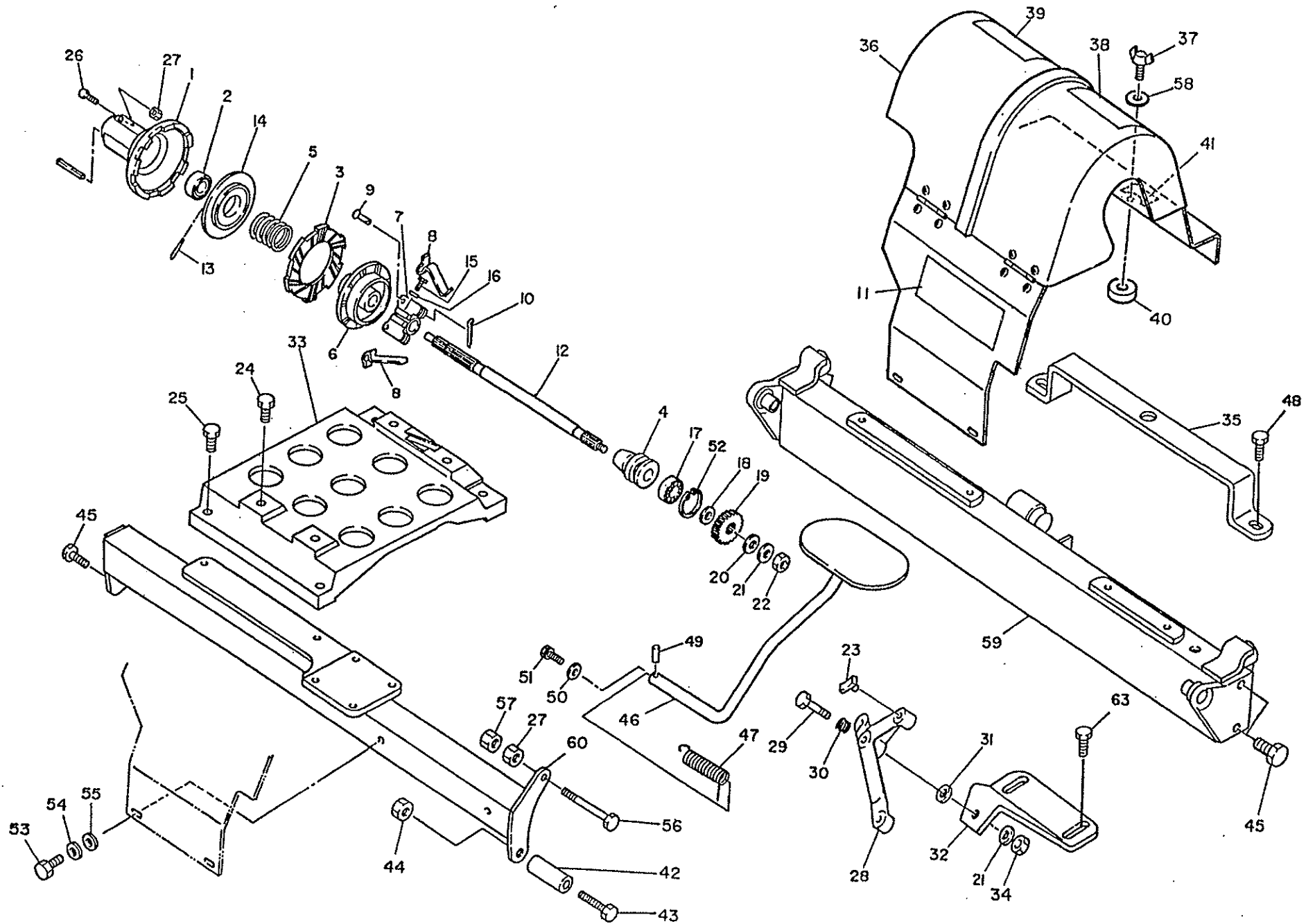


### 2. Drum wheel parts





### 3. Clutch parts



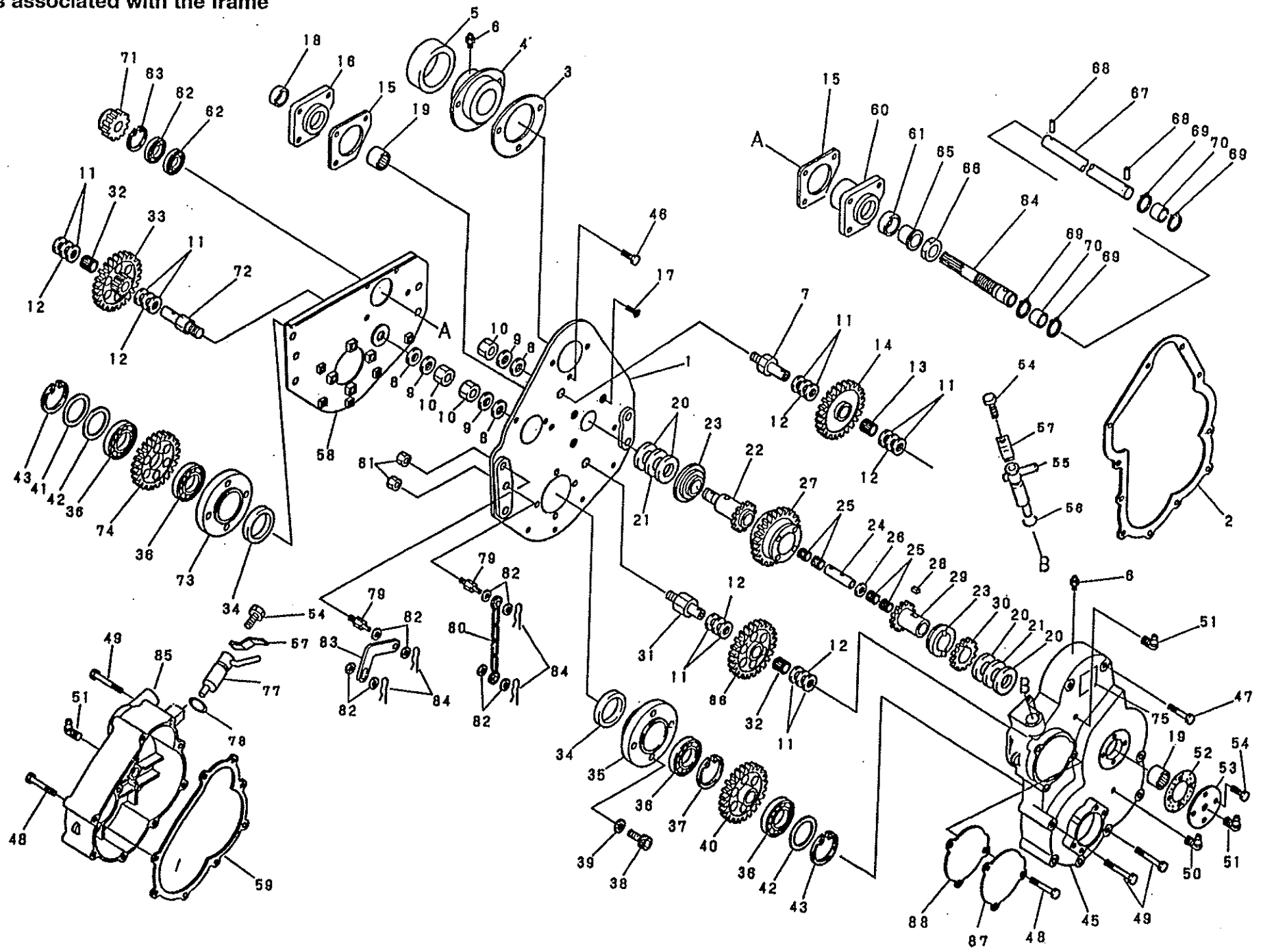
Shared parts ○ = LM55GD

Cat. No.	Code No.	Part name	No. off	Shared part	Notes
3-1	K6911000050	engine clutch	1	○	
3-2	K0616062020	bearing 62022NSEC3	1	○	
3-3	K1810000030	clutch facing	1	○	
3-4	K6311000012	clutch	1	○	
3-5	K1000000162	3.5 compression spring 3415	1	○	
3-6	K6911000022	clutch plate	1	○	
3-7	K6310000012	lever mount	1	○	
3-8	K1090000010	clutch spring	2	○	
3-9	K6040060282	6 round head pin 28	2	○	
3-10	K0300020202	2 split pin 20	2	○	
3-11	K4205000810	joint + revolving parts warning label	1	○	
3-12	K6100000023	engine clutch shaft 303	1	○	
3-13	K0310050402	5 tapered pin 40	1	○	
3-14	K6911000043	metal backing for facing 15	1	○	
3-15	K0013060251	6 adjusting bolt 25	1	○	
3-16	K5000060002	6 washer	4	○	
3-17	K0616062030	bearing 62032NSEC3	1	○	
3-18	K6212001060	17.1STKM collar 2214	1	○	
3-19	K6186000020	16 tooth gear	1	○	
3-20	K5002100002	10 washer 22	1	○	
3-21	K0213100001	10 conical spring washer 1H	2	○	
3-22	K0160000282	10 nut 3P10H1	1	○	
3-23	K6310000022	clutch trunnion	1	○	
3-24	K0007080402	8 bolt 40SW	4	○	
3-25	K0007080352	8 bolt 35SW	4	○	
3-26	K0000060302	6 bolt 30	1	○	
3-27	K0143060002	6 nut with conical disc spring	2	○	
3-28	K6911000032	L-shaped clutch lever	1	○	
3-29	K0003100502	10 bolt 50	1	○	
3-30	K1000000203	2 compression spring 1514	1	○	
3-31	K5011010202	1SPCC metal washer 1020	1	○	
3-32	LM5 4G--0711AR	L-shaped lever mount (M10P1→M10P1.5)	1		
3-33	LM5 4GA-0718ZR	engine base	1		
3-34	K0101100002	10 nut 2	1	○	
3-35	LM5 4G--0721AR	rear cover mount	1		

Shared parts ○ = LM55G

Cat. No.	Code No.	Part name	No. off	Shared part	Notes
3-36	LM5 4GA-0726Z0	clutch cover assembly	1		
3-37	K0022080202	8 wing bolt 20	1		
3-38	K4205000760	greasing warning label	1		
3-39	K4205000550	cylinder mower warning label	1		
3-40	K4031000070	5 anti-vibration rubber 825	1		
3-41	K4209000400	cover installation label	1		
3-42	LM5 4G--0615Z3	10.2 collar 59.8	1		
3-43	K0000100803	10 bolt 80	1		
3-44	K0143100002	10 nut with conical disc spring	1		
3-45	K0080100203	10 bolt 20 HW	5		
3-46	K7899000410	stand	1	○	
3-47	K1090000022	stand spring R	1	○	
3-48	K0007080152	8 bolt 15SW	3		
3-49	K0320040221	4 spring pin 22	1	○	
3-50	K5012306252	2.3SPCC metal washer 625	1	○	
3-51	K0006060152	6 bolt 15S	1	○	
3-52	K0402040001	stop ring R40	2		
3-53	K0000050103	5 bolt 10	2		
3-54	K0200050003	5S washer	2		
3-55	K5000050003	5 washer 1	0		
3-56	K0000061302	6 bolt 130	1		
3-57	K0100060002	6 nut	1		
3-58	K5000080002	8 washer	1		
3-59	LM5 4G--0714BR	frame rear stay	1		
3-60	LM5 4G--0713ZR	frame front stay	1		

### 4. Parts associated with the frame



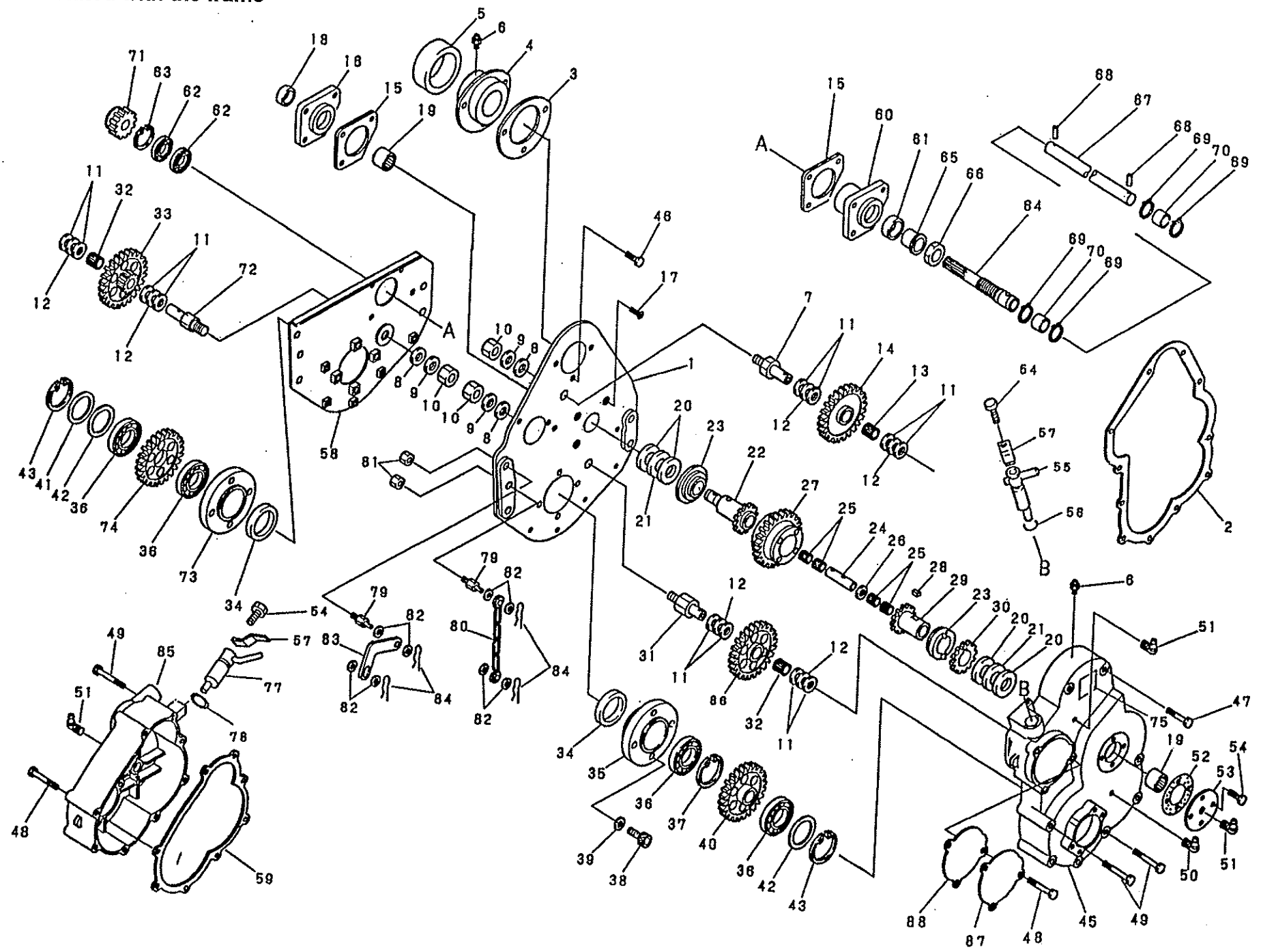
Shared parts ○ = LM55GD

Cat. No.	Code No.	Part name	No. off	Shared part	Notes
4-1	LM5 4G--0601A3	left-hand frame	1		
4-2	LM5 4G--0603A0	large gasket	1		
4-3	LM5 4G--0607Z0	no. 1 shaft gasket	1		
4-4	LM5 4G--0608Z3	no. 1 shaft housing	1		
4-5	K0811930070	oil seal MHS19307	1	○	
4-6	K1440000012	grease nipple	2	○	
4-7	LM5 4G--0201Z0	no. 2 shaft	1		
4-8	K5000100002	10 washer	3		
4-9	K0211100001	10 conical disc spring H	3		
4-10	K0160000283	10 nut 3P10H1	3	○	
4-11	K5051013220	1C5191P metal washer 1322	12	○	
4-12	K5020813220	0.8NBS55 metal washer 1322	6	○	
4-13	K0701317120	needle bearing KT 131712	1	○	
4-14	LM5 4G--0202Z0	38 tooth gear	1		
4-15	LM5 4G--0609Z0	differential housing gasket	2		
4-16	LM5 4G--0610ZD	left-hand differential housing	1		
4-17	K0041060122	6 cross-head countersunk screw 12	3		
4-18	K0871182640	seal DS18264 for needle bearing	1	○	
4-19	K0722210000	needle bearing TA2210Z	2	○	
4-20	K5051022300	1C5191P metal washer 2230	4	○	
4-21	K5020822300	0.8NBS55 metal washer 2230	2	○	
4-22	LM5 5GB-0210A3	right-hand 16 tooth differential gear	1	○	
4-23	K6202000140	differential gear bearing	2	○	
4-24	K6150000150	10 differential pin 55	1	○	
4-25	K0701013100	needle bearing KT 101310	4	○	
4-26	K5051010220	1C5191P metal washer 1022	1	○	
4-27	LM5 4G--0203Z0	50 tooth differential gear assembly	1		
4-28	K0520504060	5 single key 46.3	1	○	
4-29	LM5 5GB-0209C0	left-hand 16 tooth differential gear	1	○	
4-30	LM5 5GB-0214A0	left-hand 18 tooth gear	1	○	
4-31	LM5 4G--0218Z0	left-hand frame no. 4 shaft	1		
4-32	K0711317200	needle bearing KTW131720	2	○	
4-33	LM5 4GA-0219A0	46 tooth 17 tooth right-hand gear	1		
4-34	K0822542080	oil seal MHSA25428	2		
4-35	LM5 4G--0222A0	left-hand shaft housing	1		

Shared parts ○ = LM55GD

Cat. No.	Code No.	Part name	No. off	Shared part	Notes
4-36	K0601062040	bearing 6204C3	4	○	
4-37	K0402047001	stop ring R47	1	○	
4-38	K0024080201	8 hexagon bolt with holes 20	8		
4-39	K0215080001	8 conical spring washer 2H	8		
4-40	LM5 4GA-0223A0	left-hand 45 tooth shaft gear	1		
4-41	K5011020282	1SPCC metal washer 2028	2	○	
4-42	K5010320282	0.3SPCC metal washer 2028 (for adjustment)	4	○	
4-43	K0401020001	stop ring S20	2	○	
4-44	K2929000000	Dynamax no. 1 grease	500g	○	
4-45	LM5 4GA-0621Z0	left-hand frame cover with label	1		
4-46	K0007060203	6 bolt 20SW	2		
4-47	K0007060503	6 bolt 50SW	2		
4-48	K0007060653	6 bolt 65SW	9		
4-49	K0007060703	6 bolt 70SW	7		
4-50	K1440000032	B grease nipple	2	○	
4-51	K1440000022	C grease nipple	2	○	
4-52	LM5 5GB-0208Z0	gasket	1~2	○	
4-53	LM5 5GB-0217Z0	bearing pressure plate	1	○	
4-54	K0007060152	6 bolt 15SW	6	○	
4-55	K7321000092	clutch handle	1	○	
4-56	K0880015000	O-ring P15	1	○	
4-57	K1090000052	clutch pressure spring	2	○	
4-58	LM5 4G--0602Z3	right-hand frame	1		
4-59	LM5 4G--0606Z0	right-hand gasket	1		
4-60	LM5 4G--0612ZD	right-hand differential housing	1		
4-61	K0822030070	oil seal MHSA20703	1		
4-62	K0616062020	6202-2NSGC3SRL	2	○	
4-63	K0402035001	stop ring R35	1	○	
4-64	K6100000043	right-hand transmission shaft	1		
4-65	K0160000510	17 special nut P1-22	1		
4-66	K0160000333	17 special nut P1-7	1		
4-67	LM5 4G--0225Z3	transmission shaft	1		
4-68	K0311040170	4 needle roller 17.8	2	○	
4-69	K0401018001	stop ring S18	4	○	
4-70	LM5 5GB-0224Z2	differential coupling shaft collar	2	○	

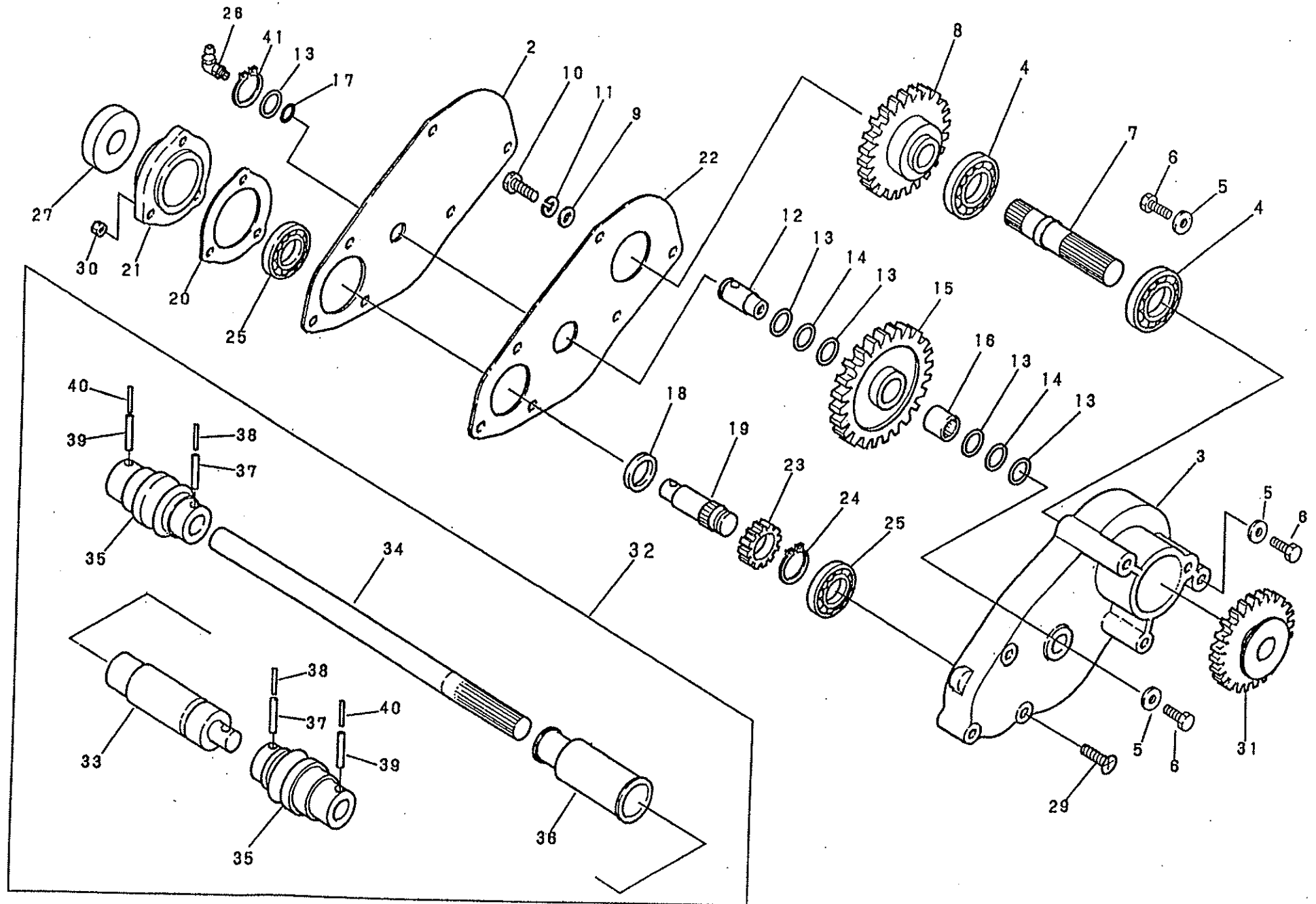
### 4. Parts associated with the frame





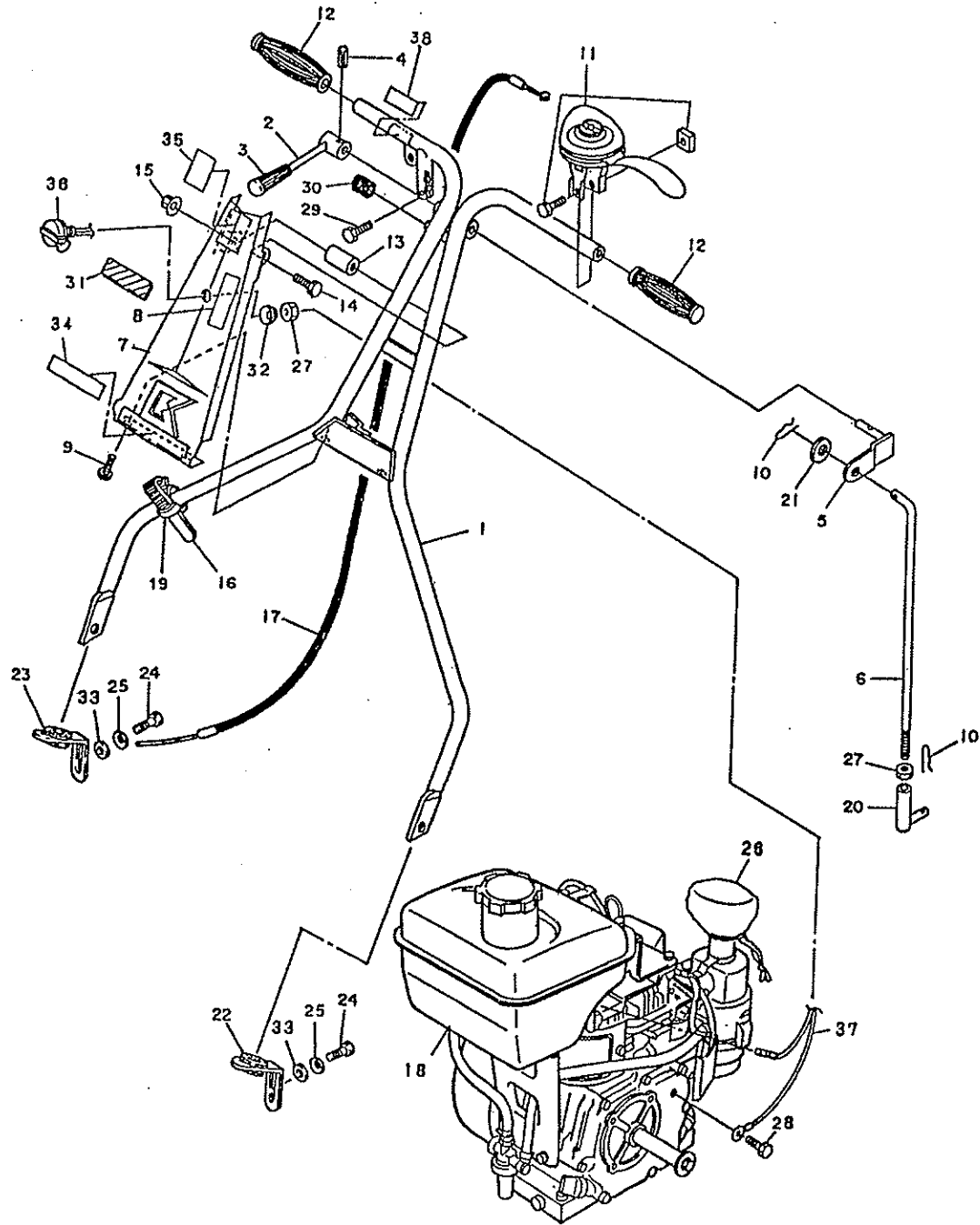


### 5. Mower transmission parts

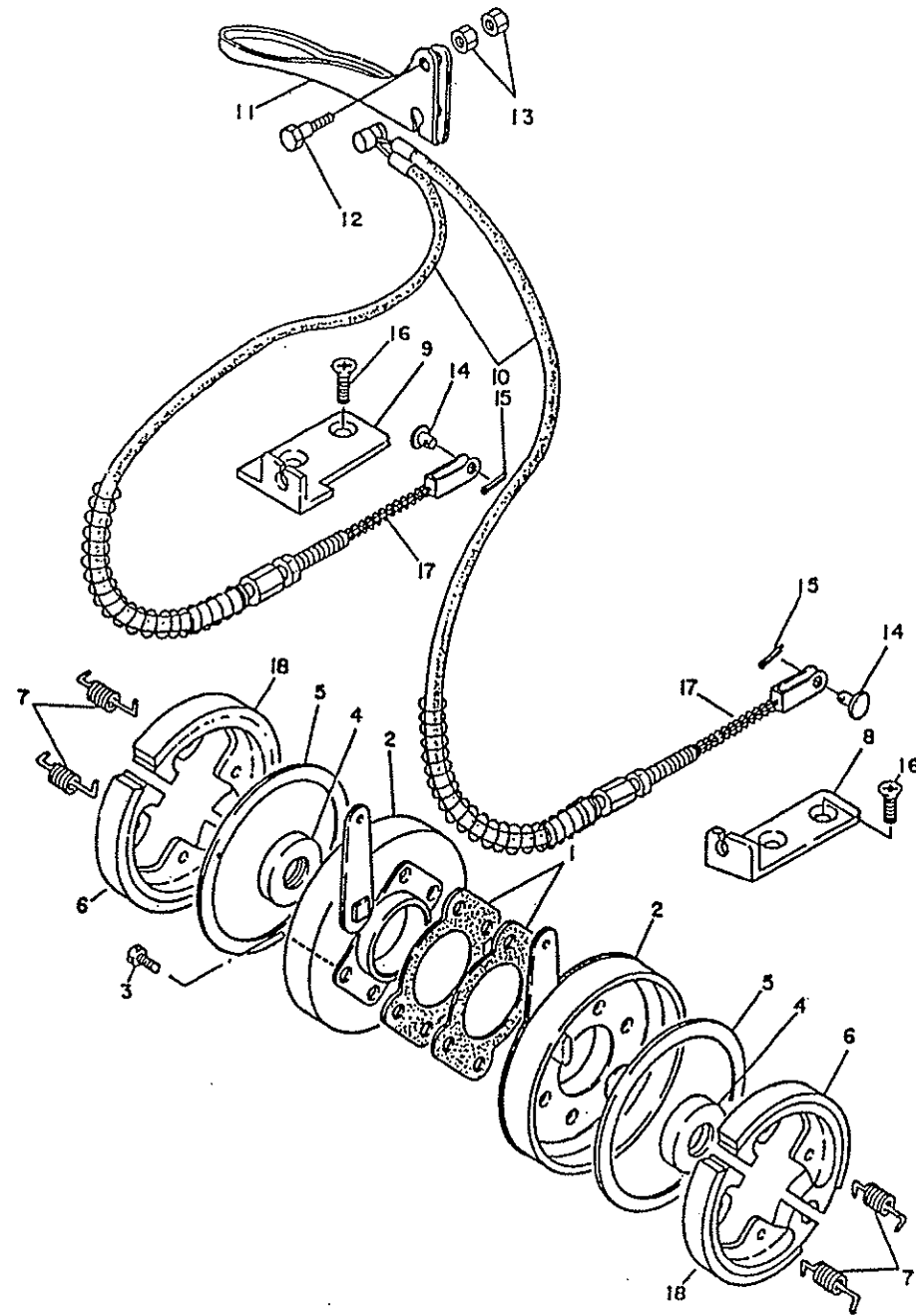




### 6. Handle parts



### 7. Brake parts



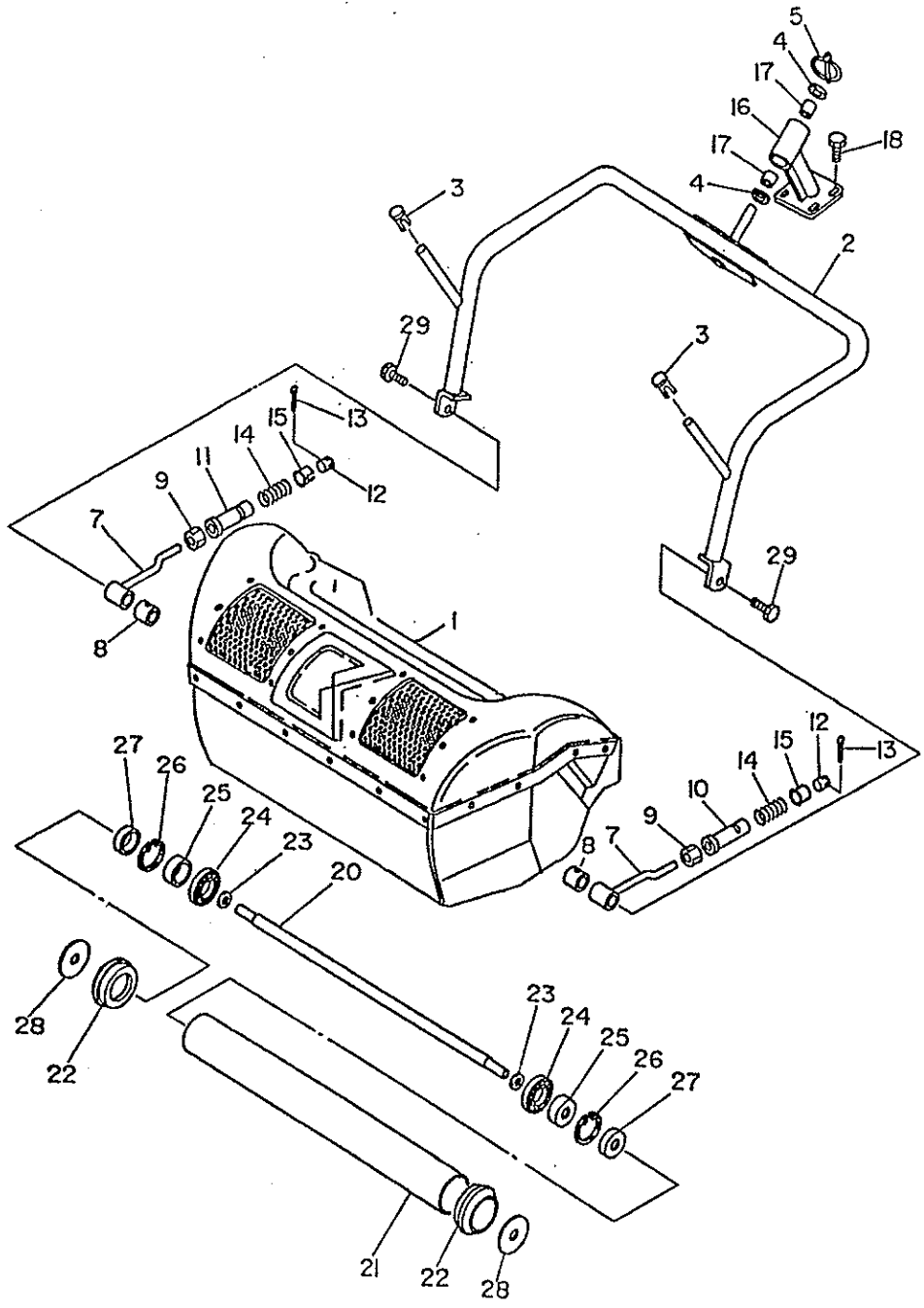
Shared parts ○ = LM55GD △ = LM22GF

Cat. No.	Code No.	Part name	No. off	Shared part	Notes
6-1	K9200000040	handle 54 with label	1	○△	
6-2	K8060000010	travelling clutch lever with grip	1	○△	
6-3	K1300000070	9 black grip 22	1	○△	
6-4	K0320050201	5 spring pin 20	1	○△	
6-5	K7321000033	clutch lever shaft	1	○△	
6-6	LM5 4G--0705Z3	clutch rod	1		
6-7	K9200000030	handle cover with label	1	○△	
6-8	K4203000680	engine switch label	1	○△	
6-9	K0048040102	4 cross-head countersunk screw 10S	2	○△	
6-10	K0340800002	8 snap pin	2	○△	
6-11	K1203552100	throttle lever E352100	1	○△	
6-12	K1300000140	black hand grip 21	2	○△	
6-13	K6211000033	6.5SGP collar 10.516	1	○△	
6-14	K0042050252	5 round-head screw 25	1	○△	
6-15	K0143050002	5 nut with conical disc spring	1	○△	
6-16	K4141000010	nylon band 140	3	○△	
6-17	K1110135000	throttle cable 1350	1	○△	
6-18	K2620000230	Robin EY150DDM190	1	△	
6-19	K4241000070	urethane tube 7	1	○△	
6-20	K7309000013	rod adjuster	1	○△	
6-21	K5000080003	8 washer	1		
6-22	LM5 5GB-0715E0	left-hand handle adjuster	1	○	
6-23	LM5 5GB-0716E0	right-hand handle adjuster	1	○	
6-24	K0010100251	10 adjustment bolt 25	2	○△	
6-25	K0213100001	10 conical spring washer 1H	2	○△	
6-26	K4110000060	cleaner cover A	1	○△	
6-27	K0102080003	8 nut 3	2	○△	
6-28	K0000080152	8 bolt 15S	1	△	
6-29	K0006050203	5 bolt 20S	1	○△	
6-30	K4031000100	rubber stopper	1	○△	
6-31	K4033000070	handle cover anti-vibration rubber	1	○△	
6-32	K0210080002	8 conical disc spring L	1	○△	
6-33	K5012310253	2.3SPCC metal washer 1025	2	○△	
6-34	K4201000120	Baroness label 121	1	○△	
6-35	K4209000430	clutch indication label	1	○△	
6-36	K3662000050	engine switch FR56361-A	1	○△	
6-37	K3620000410	engine switch cable 8	1	○△	
6-38	K4203000440	brake lever label	1	○△	

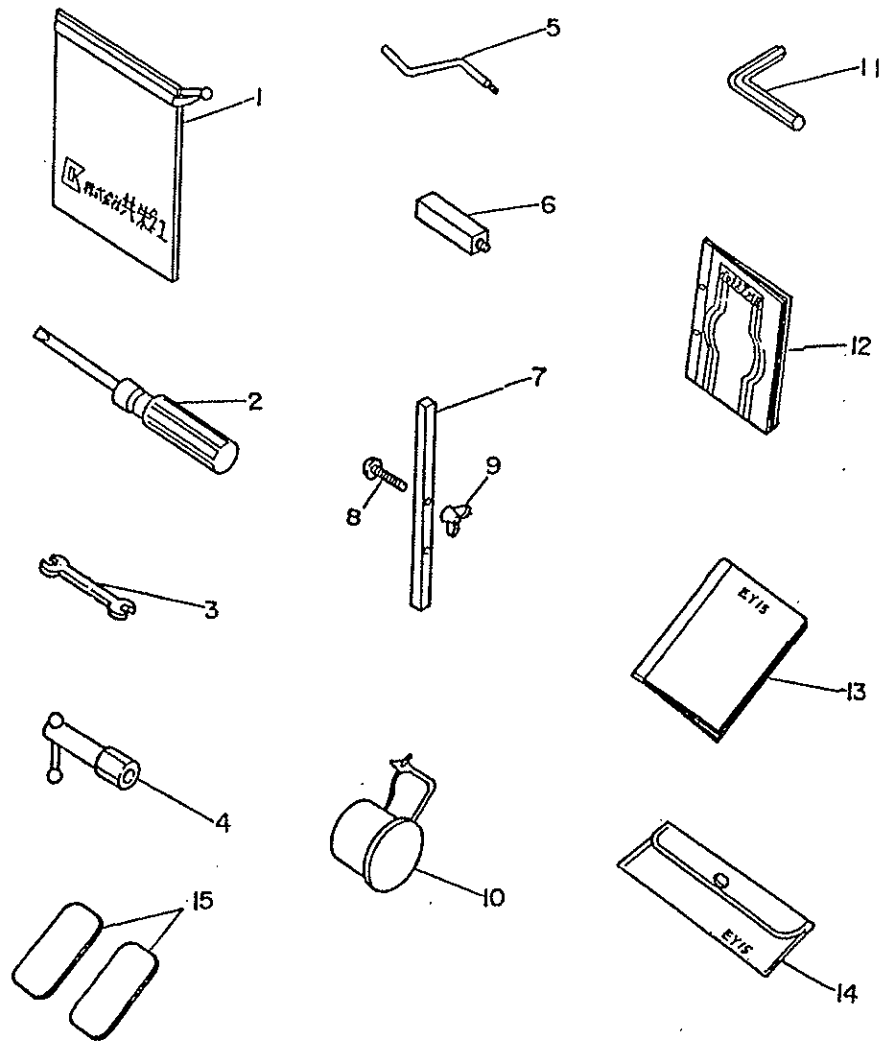
Shared parts ○ = LM55G

Cat. No.	Code No.	Part name	No. off	Shared part	Notes
7-1	LM5 5GB-1101Z0	gasket	2	○	
7-2	LM5 5GB-1102Z3	brake mounting plate	2	○	
7-3	K0006060202	6 bolt 20S	8	○	
7-4	K0852042080	oil seal PJN20428	2	○	
7-5	K4009000010	1 felt 96110	2	○	
7-6	K1725000010	right-hand brake shoe 100	2	○	
7-7	K1040000010	1.6 hooked spring 845	4	○	
7-8	LM5 5GB-1113A3	left-hand brake cable mount	1	○	
7-9	LM5 4G-1112Z3	right-hand brake cable mount	1		
7-10	K1120143400	brake cable 1434	1		
7-11	K1241132014	brake lever E113201	1	○	
7-12	K0071000213	brake bolt	1	○	
7-13	K0100060002	6 nut	2	○	
7-14	K6030050122	5 flat-head pin 12	2	○	
7-15	K0300020162	2 split pin 16	2	○	
7-16	K0040060152	6 cross-head countersunk screw 15	4	○	
7-17	K1000000272	0.8 compression spring 76.5	2	○	
7-18	K1725000020	left-hand brake shoe 100	2	○	
		Note: When replacing brake shoes please replace 7-6 and 7-18 as a set.			

### 8. Grass catcher parts

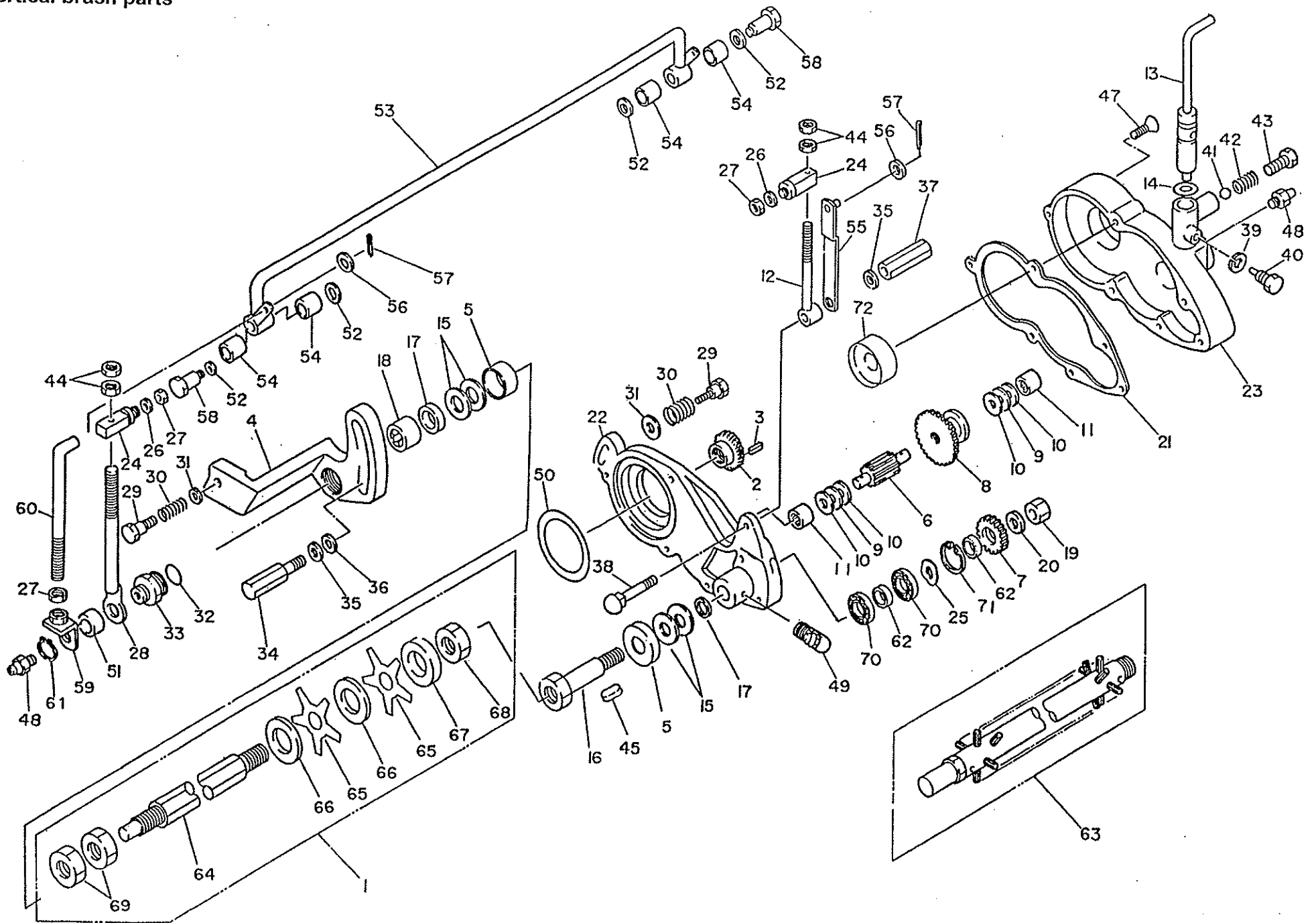


### 9. Tools





### 10. Vertical brush parts





Shared parts ○ = LM55GDF

Cat. No.	Code No.	Part name	No. off	Shared part	Notes
10-1	LM5 4GAS1209C0	G groomer reel (10-64~69 set)	1		
10-2	LM5 4GS-1206Z0	23 tooth reel gear	1		
10-3	K0520404140	4 single key 414	1	○	
10-4	LM3 4GS-1207AR	right-hand vertical housing	1		
10-5	K5300000293	dustproof cover	2		
10-6	LM5 4GS-1215Z0	intermediate shaft	1		
10-7	LM5 4GS-1216Z0	17 tooth gear	1		
10-8	LM5 4GS-1217Z0	37 tooth gear	1		
10-9	K5020808180	0.8NBS55 metal washer 818	2	○	
10-10	K5051008180	1C5191P metal washer 818	4	○	
10-11	K0720810000	needle bearing TA810Z	2	○	
10-12	LM5 4GS-1220Z3	left-hand stopper	1		
10-13	LM5 4GS-1221A3	clutch lever	1		
10-14	K0880011000	O-ring P11	1	○	
10-15	K5051015280	1C5191P metal washer 1528	4	○	
10-16	LM5 4GAS1223Z3	small vertical shaft	1		
10-17	K0821522070	oil seal MHSA 15227	2	○	
10-18	K0721520000	needle bearing TA1520Z	1	○	
10-19	K0108100002	10 nut 3P1	1	○	
10-20	K0210100001	10 conical disc spring L	1	○	
10-21	LM5 4GS-1224Z0	gasket	1		
10-22	LM5 4GAS1225ZR	left-hand reel housing	1		
10-23	LM5 4GAS1247Z0	cover with label	1		
10-24	LM5 4GAS1227Z3	adjuster	2		
10-25	K0220160110	16011 corrugated washer	1		
10-26	K5012306202	2.3SPCC metal washer 620	2	○	
10-27	K0143060002	6 nut with conical disc spring	3		
10-28	LM5 4GS-1229Z3	mounting screw	1		
10-29	LM5 5GBS1230C2	right-hand case retaining bolt	2	○	
10-30	K1000000302	1.6 compressing spring 13.720	2	○	
10-31	K5090000250	2C5191P metal washer 8.522	2	○	
10-32	K0880018000	O-ring P18	1	○	
10-33	LM5 4GS-1231A0	screw	1		
10-34	K6081000053	bolt with perforated handle 45	1	○	
10-35	K0213080001	8 conical spring washer 1H	2	○	

Shared parts ○ = LM55GD □ = LM315GA ● = LM55T1

Cat. No.	Code No.	Part name	No. off	Shared part	Note:
10-36	K5000080002	8 washer	1	○	
10-37	K0149083203	8 long nut 20	1	○	
10-38	K0025080553	8 round head square neck bolt 55	1	○	
10-39	K0200080002	8S washer	1	○	
10-40	LM5 5GBS1236Z2	stop bolt	1	○	
10-41	K1500635000	6.35 steel ball	1	○	
10-42	K1000000090	1 compression spring 618	1	○	
10-43	K0007080152	8 bolt 15SW	1	○	
10-44	K0102008003	8 nut 3	4	○	
10-45	K0520404050	4 single key 45.8	1		
10-46	K2931000000	Exellte EP no. 2	50g	○	
10-47	K0040060352	6 cross-head countersunk screw 35	6	○	
10-48	K1440000012	grease nipple	2	○	
10-49	K1440000032	B grease nipple	1	○	
10-50	K0880050000	O-ring P50	1		
10-51	LM5 4GS-1237Z3	17.3 collar 8	1		
10-52	K5051010180	1C5191P metal washer 1018	4	○	
10-53	LM5 4GS-1238Z3	lever	1		
10-54	K6000000170	10 bush 1210	4	□	
10-55	LM5 4GS-1239Z3	connecting piece	1		
10-56	K5000060003	6 washer	2		
10-57	K0302020160	2 stainless split pin 16	2		
10-58	LM5 4GS-1240Z3	pivot shaft	2		
10-59	LM5 4GS-1241Z3	right-hand mount	1		
10-60	LM5 4GS-1242Z3	6L rod 115	1		
10-61	K0401013001	stop ring S13	1		
10-62	LM5 4GS-1246Z0	12SS41B collar 175.6	2		
10-63	K4150000010	brush shaft assembly	1	●	
10-64	LM5 5TBS1201F3	vertical shaft	1	●	
10-65	K2570000013	thatching blade 63	77	○	
10-66	LM5 5GBS1203B0	collar	77	○	
10-67	LM5 5GBS1204Z0	collar	1	●	
10-68	K0183160002	16 left-hand-thread nut P1.5	1	●	
10-69	K0160000302	17 special nut P1	2	○	
10-70	K0611069010	ball bearing 6901RDC3	2	○	
10-71	K0402024001	stop ring R24	1	○	
10-72	K0821628070	oil seal MH16287	1		

