



Winton Agri-Machinery

OPERATOR'S MANUAL

WINTON HYDRAULIC OFFSET FLAIL MOWER

PART NO(S): WHF145, WHF175 & WHF200



IMPORTANT

Read these instructions before installing and using this implement

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Safety at all times

Thoroughly read and understand the instructions given in this manual before operation. Refer to the "Safety Decal", read all instructions noted on them.

Do not allow anyone to operate this equipment who has not fully read and comprehended this manual and who has not been properly trained in the safe operation of the equipment.

Operator should be familiar with all functions of the unit.

Operate implement from the driver's seat only.

Make sure all guards and shields are in place and secured before operating the implement.

Do not leave tractor or implement unattended with engine running.

Dismounting from a moving tractor could cause serious injury or death.

Do not stand between tractor and implement during hitching.

Keep hands, feet, and clothing away from power-driven parts.

Wear snug fitting clothing to avoid entanglement with moving parts.

Watch out for wires, trees, etc., when raising implement. Make sure all persons are clear of working area.

Turning tractor too tight may cause implement to ride up on wheels. This could result in injury or equipment damage.

Look For the Safety Alert Symbol

The SAFETY ALERT SYMBOL indicates there is a potential hazard to personal safety involved and extra safety precaution must be taken. When you see this symbol, be alert and carefully read the message that follows it. In addition to design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.

Be aware of signal words

A signal word designates a degree or level of hazard seriousness. The signal words are:

DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations, typically for machine components that, for functional purpose, cannot be guarded.

WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

For your protection

Thoroughly read and understand the "safety label" section, read all instructions noted on them.

Shutdown and storage

Lower machine to ground, put tractor in park, turn off engine, and remove the ignition key.

Detach and store implements in an area where children normally do not play. Secure implement by using blocks and supports.

Use safety lights and devices

Maximum transport speed for implement is 20 mph. Do not exceed. Never travel at a speed which does not allow adequate control of steering and stopping. Some rough terrain requires a slower speed.

Sudden braking can cause a towed load to swerve and upset. Reduce speed if towed load is not equipped with brakes.

Use the following maximum speed - tow load weight ratios as a guideline:

20 mph when weight is less than or equal to the weight of tractor.

10 mph when weight is double the weight of tractor.

IMPORTANT: Do not tow a load that is more than double the weight of tractor.

Keep riders off machinery

Riders obstruct of operator's view, they could be struck by foreign objects or thrown from the machine

Never allow children to operate equipment.

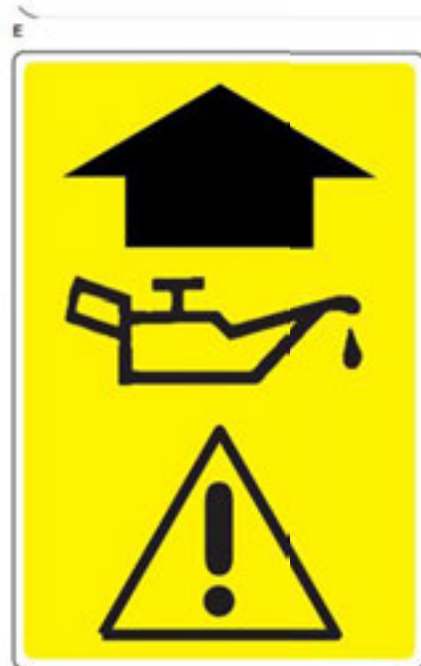
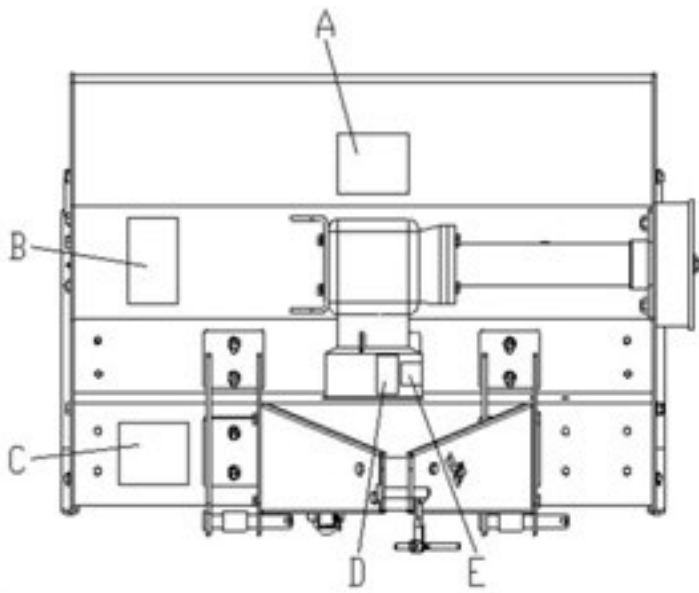
Practice safe maintenance

Understand procedure before doing work. Use proper tools and equipment. refer to Operator's Manual for additional information.

Work in a clean dry area.

Lower the implement to the ground, put tractor in park, turn off engine, and remove key before performing maintenance.

Allow implement to cool completely.



Operating Instructions

Transporting

NOTE: Always disengage PTO before raising mower to transport position.

When raising the mower to transport position, be sure that driveline does not contact tractor or mower. Adjust and set the tractor's 3-point hitch lift height so that the driveline does not contact mower deck in the fully raised position.

Be sure to reduce tractor ground speed when turning, leaving enough clearance so that the mower does not contact obstacles such as buildings, trees or fences.

Select a safe ground travel speed when transporting from one area to another. When travelling on roadways, transport in such a way that faster moving vehicles may pass safely.

When travelling over rough or hilly terrain, shift tractor to a lower gear.

CAUTION: When travelling on public roads, whether at night or during the day, use accessory lights and devices for adequate warning to operators of other vehicles. Comply with all Federal, State, and local laws.

Mowing Instructions

Clear area to be mowed of objects and debris that might be picked up and thrown by the mower blades.

Grass is best cut when it is dry. Mowing wet grass can cause plugging resulting in grass clumps behind the mower.

Grass should be mowed frequently as shorter clippings deteriorate faster.

If mowing extremely tall grass, it is best to raise cutting height and mow the area, then lower cutting height and mow a second time at the desired height.

Operating Instructions

Proper servicing is important for increasing longevity of any machine, with careful and systematic inspection of the mower, costly maintenance, time and repair can be avoided.

Before beginning to mow, the following inspection should be performed:

Check oil level in gearbox.

Check that all plugs in gearbox have been replaced and tightened properly.

Be sure all mower knives, bolts and nuts are tight.

Be certain all guards and shields are in place and secure.

Grease driveline shaft and all other grease fittings.

Clear area to be mowed of rocks, branches and other foreign objects.

Lower mower to ground. Set tractor throttle at approximately 1/4 open. Engage PTO to start blades rotating.

Operate with 540 rpm PTO tractor.

At first begin mowing at a slow forward speed and shift up until the desired speed is achieved - maintaining 540 PTO rpm.

Mower knives will cut better at a faster blade speed than at reduced throttle.

After mowing the first 50 feet, stop and check to see that the mower is adjusted properly.

Do not make sharp turns or attempt to back up while mower is on the ground.

Do not engage PTO with mower in the fully raised position. Do not engage PTO at full throttle.

Assembly and Set-up

Tractor Requirements: This mower is designed with a 3-Point category I hitch. Tractor horse power rating should not exceed 80 PTO horse power.

Assembly: Refer to the parts illustration.

Tractor Hook-Up:

Be certain that tractor draw bar will not interfere. Move draw bar ahead or remove if required. Draw bar should also be checked for clearance when unit is being raised for the first time.

Align lower link arms of tractor to hitch clevises on mower. Insert lower hitch pins into lower ball swivels and attach linch pins.

Attach tractor top link to upper floating hitch on mower with pin supplied. Secure with lock pin.

Adjust tractor top link in or out to place upper hitch pin vertically above or slightly behind lower hitch pins to allow mower flotation. The mower should be run with the back 15 degrees lower than the front.

Driveline Installation:

Slide driveline end with extended safety cone over spine shaft of the gearbox and secure with attaching device.

Slide driveline over tractor's spine PTO shaft and secure with locking device of driveline.

Driveline should now be moved back and forth to insure that it is secure on the PTO shaft of the tractor and mower gearbox.

Attach chain from the driveline shield to one of the upper hitch braces to ensure that the shield does not rotate.

Should driveline require shortening:

Hold the half-shafts next to each other in the shortest working position and mark them.

Shorten inner and outer guard tubes equally.

Shorten inner and outer sliding profiles by the same length as the guard tubes.

Proper overlap is a minimum of one-half the length of each tube, with both tubes being of equal length.

Round off all sharp edges and remove burrs. Grease sliding profiles.

CAUTION: Tractor PTO shields and all mower guards must be in place at all times during operation

Maintenance and Lubrication

Maintenance

Proper servicing and adjustment is the key to the long life of any farm implement. With careful and systematic inspection, you can avoid costly maintenance, time and repair.

CAUTION: For safety reasons, each maintenance operation must be performed with tractor PTO disengaged, mower lowered completely to ground and tractor engine shut off with ignition key removed.

After using the mower for several hours, check all bolts to be sure they are tight and check drive belt tension.

Replace any worn, damaged or illegible safety decals by obtaining new decals from dealer.

Knife Replacement

IMPORTANT: Make sure that the knife is the same length as the others on the mower. This will keep the rotor rotation balanced.

Remove bolt and nut. Remove old knife. Install new knife and existing bolt. Secure with nut.

V-Belt Installation

CAUTION: Belt drive system under spring tension; use care to avoid bodily harm.

Remove belt guard fender and belt cover.

Disengage belt tension by loosening belt tension bolt until belt can be removed.

With tension relieved from belt remove old belt from pulleys.

Tighten belt tension bolt.

Reinstall belt guard and belt guard fender.

Storage

At the end of the working season or when the mower will not be used for a long period, it is good practice to clean off any dirt or grease that may have accumulated on the mower and any of moving parts.

Clean as necessary.

Check knives for wear and replace if necessary.

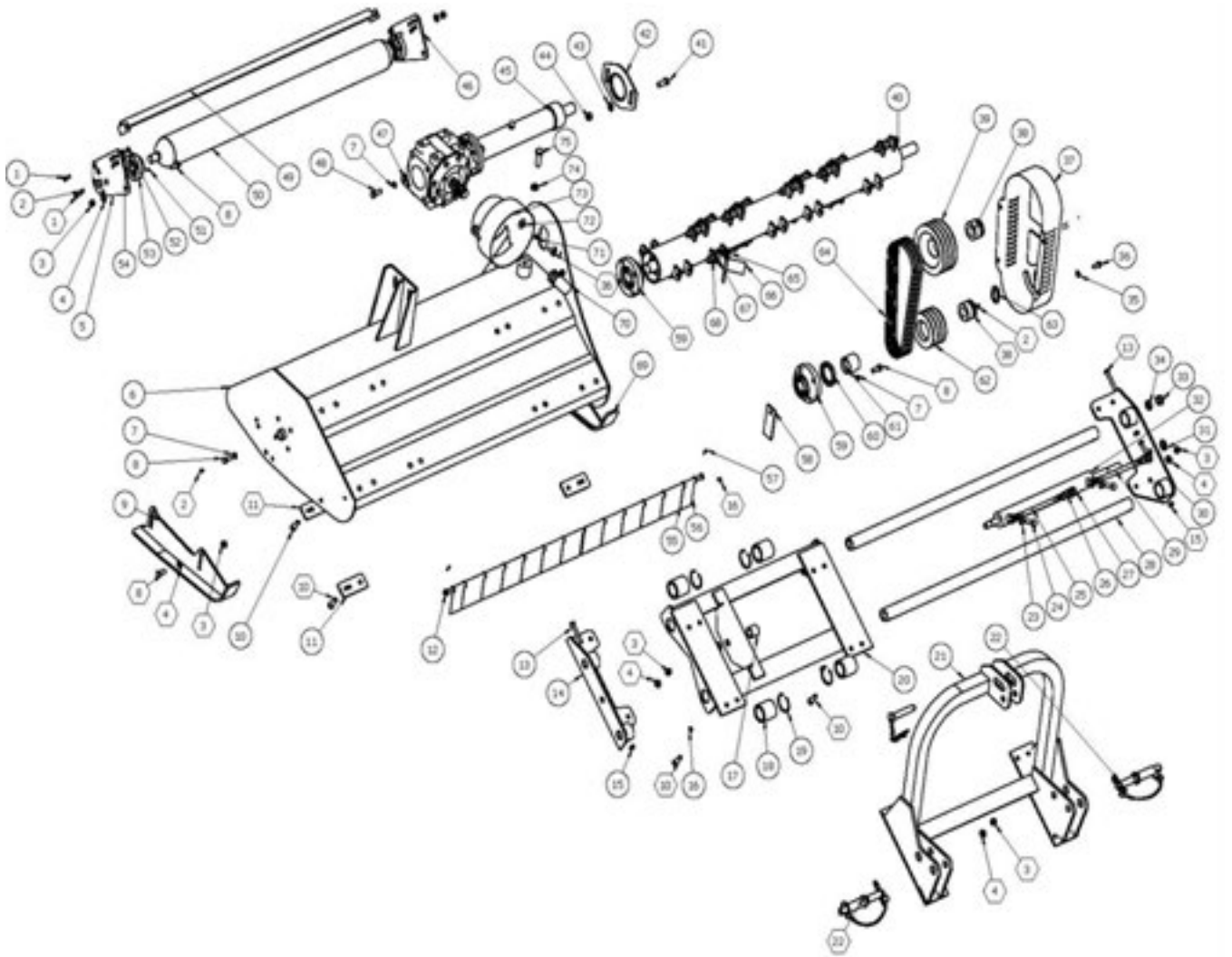
Inspect mower for loose, damaged or worn parts and adjust or replace as needed.

Store unit inside if possible for longer life.

Repaint parts where paint is worn or scratched to prevent rust.

Replace all damaged or missing decals.

<u>Problem</u>	<u>Solution</u>
<p>CAUTION: Do not try to clean rear discharge area when mower is running. Bodily harm may occur!</p>	
<p>Belt slipping</p>	<p>Unplug and clean mower deck.</p>
	<p>Remove belt guard shields and clean sheaves.</p>
	<p>Replace belt.</p>
<p>Patches of uncut grass</p>	<p>Mow at full throttle (540 PTO rpm), check PTO speed and tractor engine.</p>
	<p>Shift transmission to a lower gear.</p>
	<p>Tighten belts.</p>
	<p>Replace missing knives.</p>
<p>Excessive vibration</p>	<p>Replace knives.</p>
	<p>Replace drive belt.</p>
	<p>Replace pulleys or align.</p>
	<p>Remove belt guard shields & clean debris from belt area & sheaves.</p>
<p>Gearbox noisy</p>	<p>Check lubricant level.</p>
<p>Knives scalping grass</p>	<p>Raise cutting height by adjusting roller.</p>
	<p>Change mowing pattern.</p>
	<p>Reduce speed turns.</p>
<p>Uneven cut</p>	<p>Shift to a lower gear.</p>
	<p>Level mower.</p>
	<p>Replace missing knives.</p>
<p>Tractor loaded down by mower</p>	<p>Mow at full throttle (540 PTO rpm).</p>
	<p>Shift to a lower gear.</p>
	<p>Clean mower.</p>



Flail Mower Assembly

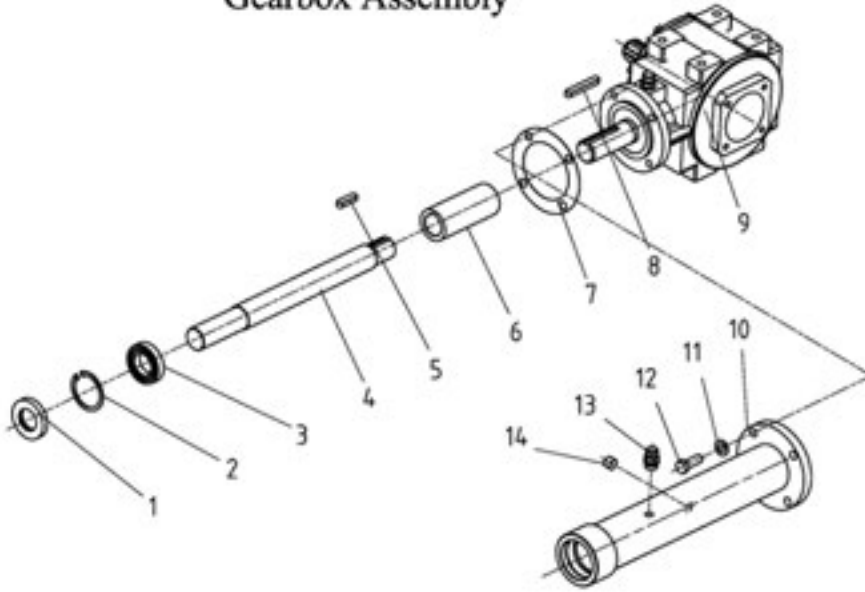
No.	SYS CODE.	DRAWING NO.	DESCRIPTION	QTY
1	501030185	bolt	GB70.3-M8X25	10
2	509010008	oil cup	GB1152-M8X1	4
3	503010763	nut	DIN985-M12	24
4	506010057	washer	GB97.1-12	32
5	801160001	roller supporting	EFG120.017	1
6-1	801680030	(105Model) hood	EFGCHM100.011B	1
6-2	801680031	(115Model) hood	EFGCHM110.011B	1
6-3	801680024	(125Model) hood	EFGCHM120.011B	1
6-4	801690024	(135Model) hood	EFGCHM130.011B	1
6-5	801700024	(145Model) hood	EFGCHM140.011B	1
6-6	801710024	(155Model) hood	EFGCHM150.011B	1
6-7	801720024	(165Model) hood	EFGCHM160.011B	1
6-8	801730024	(175Model) hood	EFGCHM170.011B	1
6-9	801740001	(200Model) hood	EFGCHM200.011A	1
6-10	801750001	(220Model) hood	EFGCHM220.011A	1
7	506030037	spring washer	GB93-12	12
8	501011126	bolt	GB5783-M12X30	16
9	801240019	left base	EFGC120.013	1
10	501011128	bolt	GB5783-M12X40	16
11	701680001	plate	EFGCHM120.101	4
12-1	700940005	(105Model) fender shaft	EF100.00.123	1
12-2	700950005	(115Model) fender shaft	EF110.00.123	1
12-3	700960009	(125Model) fender shaft	EF120.00.123	1
12-4	700970005	(135Model) fender shaft	EF130.00.123	1
12-5	700980005	(145Model) fender shaft	EF140.00.123	1
12-6	700990019	(155Model)fender shaft	EF150.00.123	1
12-7	701000005	(165Model)fender shaft	EF160.00.123	1
12-8	701010005	(175Model) fender shaft	EF170.00.123	1
12-9	701010006	(200Model) fender shaft	EF200.00.123	1
12-10	701010007	(220Model) fender shaft	EF220.00.123	1
13	501011121	bolt	GB5783-M10X70	4
14	801680021	plate	EFGCHM120.015	1
15	503010762	nut	DIN985-M10	6
16	509010017	oil cup	GB1153-M6X45°	4
17	701600026	sleeve	EFGCH120.101	1
18	701600028	sleeve	EFGCH120.103	4
19	506060182	cir clip	GB893.1-60	4
20-1	801680009	side shift rack	EFGCHM120.013	1
20-2	801740004	side shift rack	EFGCHM200.013	1

21-1	801680014	suspension bracket	EFGCHM120.014B	1
21-2	801740006	suspension bracket	EFGCHM200.014	1
22	802480066	(140-180Model) pin	EFAG140.014	2
23	516010004	bronze washer	TDQ-12	4
24	501014706	bolt	GB3541-M12X1.25	2
25	701600001	(1500) oil pipe	EFGCH120.011	1
26	705380114	connector	RK120.401	2
27	703820055	G1/2 quick coupling	QUICK-COUPLING-G1/2-G	2
28-1	701580029	(1000/1100)(L=1018) guide rail	EFGCH100.104	2
28-2	701600030	(1200-1700)(L=1218) guide rail	EFGCH120.104	2
28-3	701600031	(L=1342) guide rail	EFGCH120.104A	2
29	701600005	(1900) oil pipe	EFGCH120.011A	1
30	801680007	plate	EFGCHM120.012	1
31	506010060	washer	GB97.1-18	2
32-1	701600003	(105Model) cylinder	EFGCH120.012A	1
32-2	701600002	(200Model) cylinder	EFGCH120.012	1
32-3	701600004	(200/200Model) cylinder EFGCM200 220	EFGCH120.012B	1
33	503010741	nut	DIN985-M18X1.5	2
34	503010148	nut	GB6173-M18X1.5	1
35	506010056	washer	GB97.1-10	22
36	501011112	bolt	GB5783-M10X25	8
37-1	701250006	(H=100) belt cover	EFGC120.111	1
37-2	706160004	(H=120) belt cover	EFGC200.111	1
38-1	515010001	sleeve	REACH04-35X60	2
38-2	515010007	sleeve	REACH04-40X65	2
39-1	701160007	big pulley	EFG120.106A	1
39-2	701160040	(EFGCM200) big pulley	EFG120.106B	1
40-1	801140010	(105Model)blade axle	EFG100.013A	1
40-2	801150010	(115Model) blade axle	EFG110.013A	1
40-3	801160038	(125Model)blade axle	EFG120.013A	1
40-4	801170010	(135Model) blade axle	EFG130.013A	1
40-5	801180010	(145Model) blade axle	EFG140.013A	1
40-6	801190010	(155Model) blade axle	EFG150.013A	1
40-7	801200010	(165Model) blade axle	EFG160.013A	1
40-8	801210010	(175Model)blade axle	EFG170.013A	1

40-9	802080080	(200Model) blade axle	EFG200.013A-G2	1
40-10	802080085	(220Model) blade axle	EFG220.013A-G2	1
41-1	501011141	bolt	GB5783-M14X35	2
41-2	501011142	bolt	GB5783-M14X40	2
42-1	701240007	lath	EFGC120.102A	1
42-2	706160003	lath	EFGC200.102	1
43	506010058	washer	GB97.1-14	2
44	503010764	nut	DIN985-M14	2
45-1	801240026	(105Model) gearbox with shaft	EFGC100.015	1
45-2	801240023	(125Model) gearbox with shaft	EFGC120.015	1
45-3	801240027	(135Model) gearbox with shaft	EFGC130.015	1
45-4	802520119	(200/220/250Model) gearbox with shaft	EFGCH200.021A	1
46	801160004	roller supporting(L)	EFG120.018	1
47	506010037	washer	GB96.1-12	4
48	501011127	bolt	GB5783-M12X35	4
49-1	801140008	(105Model) mud shield	EFG100.024	1
49-2	801150008	(115Model) mud shield	EFG110.024	1
49-3	801160030	(125Model) mud shield	EFG120.024	1
49-4	801170008	(135Model) mud shield	EFG130.024	1
49-5	801180008	(145Model) mud shield	EFG140.024	1
49-6	801190008	(155Model)mud shield	EFG150.024	1
49-7	801200008	(165Model)mud shield	EFG160.024	1
49-8	801210008	(175Model) mud shield	EFG170.024	1
49-9	801130012	(200Model) mud shield	EFG200.024	1
49-10	801130013	(220Model) mud shield	EFG220.024	1
50-1	801140004	(105Model)(L=1027) roller	EFG100.012	1
50-2	801150004	(115Model)(L=1127) roller	EFG110.012	1
50-3	801160017	(125Model)(L=1227) roller	EFG120.012	1
50-4	801170004	(135Model)(L=1327) roller	EFG130.012	1
50-5	801180004	(145Model)(L=1427) roller	EFG140.012	1
50-6	801190004	(155Model)(L=1527) roller	EFG150.012	1
50-7	801200004	(165Model)(L=1627) roller	EFG160.012	1
50-8	801210004	(175Model)(L=1727) roller	EFG170.012	1
50-9	801160036	(200Model) (L=1977) roller	EFG200.012	1
50-10	801160041	(220Model) (L=2177) roller	EFG220.012	1
51	509010007	oil cup	GB1152-M6	2
52	503010761	nut	DIN985-M8	2
53	511040007	UC205 bearing seat	EF100.00.012	2
54	506010055	washer	GB97.1-8	2
55	700920108	fender	EF100.00.122	13
56	700920107	fender	EF100.00.121	1
57	508011473	pin	GB879.1-4X25	2

58	701160033	plate	EFG120.103	1
59-1	511040032	bearing	UC207	2
59-2	511040009	bearing	UC208	2
60-1	510020417	oil seal	GB13871-FB-55X80X8	1
60-2	510020397	oil seal	CFW-60X85X8	1
61-1	705380014	(EFG135-175)(L=48) sleeve	RK120.109A	1
61-2	702080005	sleeve	G2-150.105	1
62-1	701160006	small pulley	EFG120.105A	1
62-2	701160034	(EFGCM200) small pulley	EFG120.105B	1
63	701240046	U cover	EFGC120.138	1
64	514010001	belt	17X991	3
65	501014730	bolt	ZDLS-M16X1.5X85	20
66	701240009	blade	EFGC120.104	40
67	701240008	sleeve	EFGC120.103	40
68	503010740	nut	DIN985-M16X1.5	20
69	801240022	right base	EFGC120.014	1
70	702420030	shaft cover	EF100.00.177	1
71	506030036	spring washer	GB93-10	4
72	506010036	washer	GB96.1-10	4
73	703400008	PTO cover	FM120.00.199	1
74	503010137	nut	GB6173-M16X1.5	1
75	501011905	bolt	GB5786-M16X1.5X50	1

Gearbox Assembly



No.	SYS CODE.	DRAWING NO.	DESCRIPTION	QTY
1-1	510020640	GB13871-FB-35X72X12	oil seal FB35X72X12	1
1-2	510020405	GB13871-FB-40X80X10	oil seal FB40X80X10	1
2-1	506060188	GB893.1-72	cir clip 72	1
2-2	506060191	GB893.1-80	cir clip 80	1
3-1	511021666	GB276-6207-2Z	bearing 6207	1
3-2	511021529	GB276-6208-2Z	bearing 6208	1
4-1	701220003	EFGC100.133A	shaft (EFGC105-115)	1
4-2	701240003	EFGC120.133A	shaft (EFGC125)	1
4-3	701250003	EFGC130.133A	shaft (EFGC135-175)	1
4-4	701600034	EFGCH200.166B	shaft (EFGCHZ/M/H-200)(L=638)	1
5	507010086	GB1096-A-10X8X40	key A10X40	1
6	701240025	EFGC120.132	sleeve	1
7	701240024	EFGC120.131	gasket	1
8	507010091	GB1096-A-10X8X70	key A10X70	1
9-1	801240040	XH50.300Z.02	gearbox	1
9-2	801380003	XH50.300Z.02-200	gearbox EFGCM200 220	1
10-1	801220004	EFGC100.018A	shaft cover (EFGC100-110)	1
10-2	801240004	EFGC120.018A	shaft cover (EFGC120-170)	1
10-3	801600032	EFGCH200.026A	shaft cover (EFGCHZ/M/H-200) (L=640)	1
11	506030037	GB93-12	washer 12	4
12	505011445	GB70.1-M12X35	boltM12X35	4
13	705290211	CBW-00-011B	breath plug	1
14	516010003	ZBT32001.3-ZG3/8-19	tapered plugZG3/8"-19	1

