



HAMMER KNIFE FLAIL MOWER SHREDDER

**Operation, Service,
& Parts Manual
For Models:
GOL79 & GOL89**

October 2010

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Date of Purchase:_____

Model Number:_____

Serial Number:_____

INSTALLATION

BEFORE ATTACHING THE MOWER TO THE TRACTOR

1. Make sure that the mower is suitable for your tractor's horsepower.

<u>MODELS</u>	<u>YOUR TRACTOR's MAX. H.P.</u>
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All GOL Models	95
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CAUTION: Please note that if these limits are exceeded, it will invalidate your warranty.

2. Make sure the lower links and top link on the 3-point hitch arms of your tractor are Cat. 2 only so that they correspond to the size of the hitch on the mower you have purchased.

3. ***P.T.O. Installation:***

First, connect the P.T.O. shaft to the tractor. With the shaft in its shortest position, there should be about a 2" clearance between the end of the gearbox shaft and the end of the P.T.O. shaft. Should it be necessary to shorten the P.T.O. shaft, shorten both male and female shafts equally, keeping the protective tube covers 1" shorter than the steel tubes.

Particular attention should be given to carefully removing all burrs and to clean and lubricate the steel tubes and protective covers. There must be sufficient telescopic movement so that the two tubes do not touch the end of the P.T.O. shaft.

It is most important to carefully raise and lower the mower with the tractor hydraulic system, making sure that the P.T.O. shaft does not bottom or disengage the telescopic shaft tubes, otherwise damage may occur.

SAFETY INFORMATION



OPERATIONAL SAFETY:

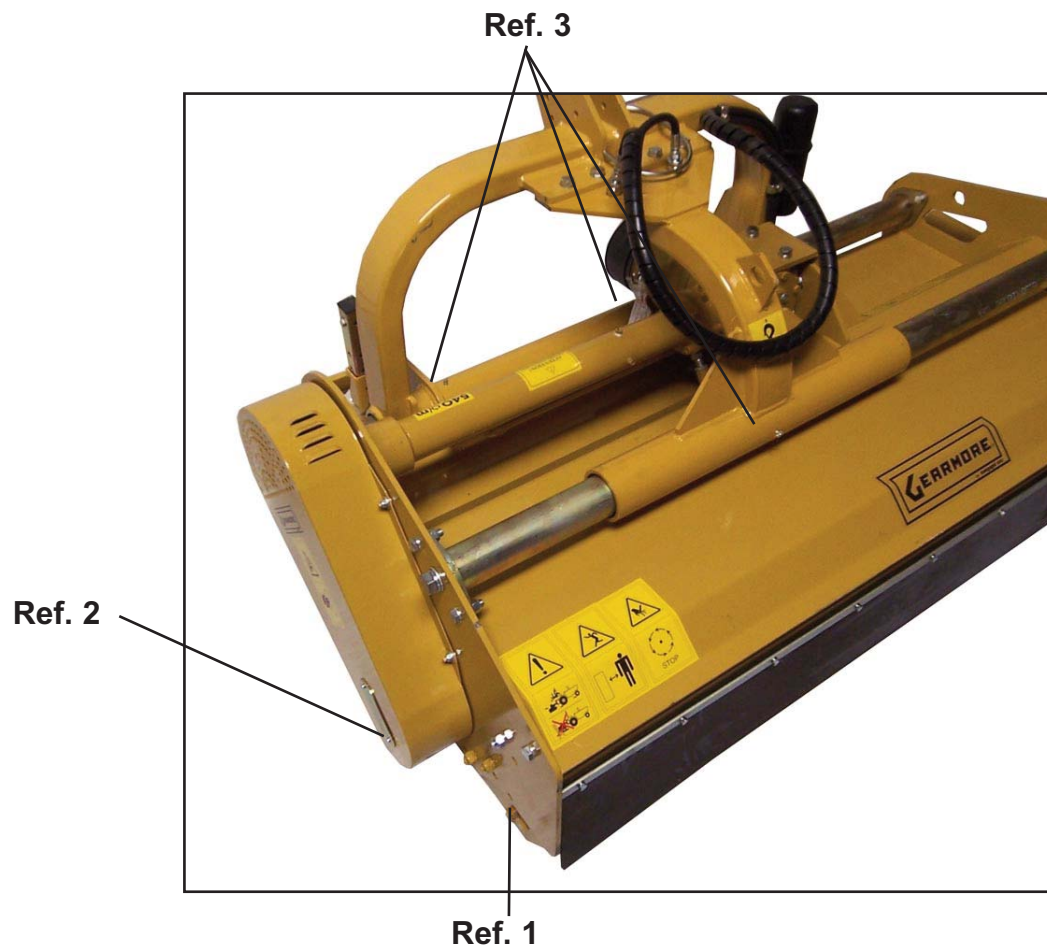
- ❑ Guards and safety shields are for your protection. **DO NOT** operate equipment unless they are in place.
- ❑ Always operate tractor PTO (power-take-off) at recommended RPM (revolutions per minute).
- ❑ Disengage tractor PTO and shift into neutral before attempting to start engine.
- ❑ Read and observe all safety decals on the tractor and mower.
- ❑ **NEVER** allow anyone within 25' of machine while it is in operation.
- ❑ **DO NOT** stop or start suddenly when going uphill or downhill. Avoid operation on steep slopes.
- ❑ Be alert for holes in terrain and other hidden hazards. Always drive slowly over rough ground.
- ❑ Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Be careful when changing direction on slopes.
- ❑ Stop mower and tractor immediately upon striking an obstruction. Turn off engine, inspect mower and repair any damage before resuming operation.
- ❑ Disengage power to mower and stop engine before dismounting from tractor, before making any repairs or adjustments, transporting or unclogging mower.
- ❑ Take all possible precautions when leaving tractor unattended: Disengage PTO, lower mower, shift into neutral, set parking brake, stop engine and remove key from ignition.
- ❑ Front tractor weights or front tire ballast should be used to enhance front end stability on small tractors.
- ❑ Check to make sure PTO is properly connected and that the driveline is correct to prevent bottoming out or pulling apart during the full lift range of the hitch.
- ❑ This implement is designed for a one-man operation. It is the responsibility of the tractor operator to see that no one is in the proximity of the implement when it is started. **DO NOT** operate the implement with another person within 25' of the implement.
- ❑ **NEVER** operate mower with hatch in the wrong working position.
- ❑ **NEVER** run mower with rotorshaft out of balance.

LUBRICATION



Grease all fittings according to the following schedule:

1. **ROLLER (Ref. 1):** Grease at both ends *after 4 hours* of operation, until grease is visible..
2. **CUTTING SHAFT (Ref. 2):** Grease at both ends lightly *after 8 hours* of operation.
3. **3-POINT HITCH FRAME (Ref. 3):** Grease extension shaft bearing *every 40 hours*.
4. **P.T.O. SHAFT:** The universal joints and overrunning clutch (option) need to be greased *every 8 hours*. The telescopic tubes should be greased *every 16 hours* and the shield retaining bearing should be greased *every 40 hours*.



PRE-OPERATION CHECK

- ✓ Check tightness of all bolts and nuts.
- ✓ Check gearbox and extension shaft oil level (Grade SAE80W-90 gear oil).
- ✓ Grease all points, on all GOL mowers.
- ✓ P.T.O. (power take-off) speed should not exceed 540 RPM (revolutions per minute).
- ✓ Check correct length of P.T.O. shaft. When fitted, there should be 3 3/4" free travel on male and female tubing (check in fully raised and fully lowered positions).
- ✓ The recommended cutting height, with the hammer or blade in its lowest position, is between 2" and 4" (*Ref. 1*). Basically, the fine height adjustment is achieved with the top link of the 3-point hitch. For a greater height adjustment, it is necessary to raise or lower the roller (*Ref. 2*).
- ✓ Drive belt should flex 3/8" (1 cm.) when pushed firmly with the finger.
- ✓ If your tractor does not have a double clutch, or has a hydraulic P.T.O., an overrunning P.T.O. shaft is required.
- ✓ Mower should be completely cleaned after use and before storage.

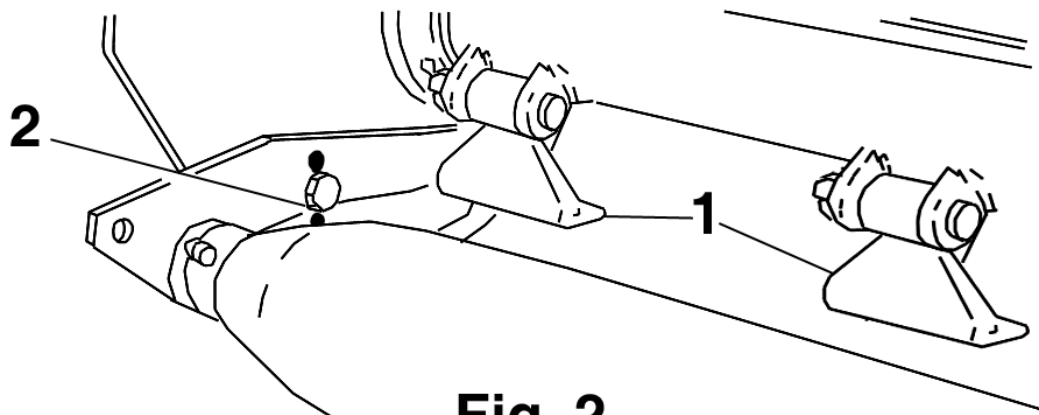


Fig. 2

MOWER ADJUSTMENTS

FOR VARIOUS TYPES OF MOWING

There is an adjustable rear hatch (*Fig. 3*) that can be set in one of seven positions to control the amount of power needed to do the work.

FOR BEST MOWING OPERATION, OPEN REAR HATCH FULLY TO ALLOW MATERIAL TO EXIT

1. Adjustment of the rear hatch can be made by removing the bolt at the side (*Fig. 13, ref. 1*). Loosen the bolt (*Fig. 13, ref. 2*) until the hatch can be moved. To fix the hatch in the desired position, align the hole in the side of the casing of the machine with the appropriate hole in the hatch. Insert the bolt (*Fig. 13, ref. 1*) and tighten the self-locking nut. Tighten the pivot bolt (*Fig. 13, ref. 2*).

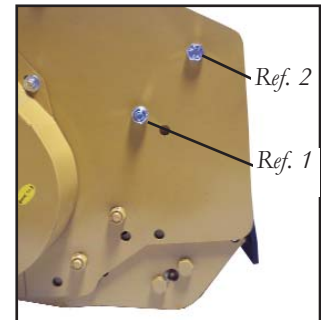


Fig. 13

2. The rear hatch should be in a completely closed position (*Fig. 4*) when used for mulching of prunings, or pulverizing debris.
3. The hatch is used in position (*Fig. 5*) to allow the grass clippings to escape above the roller.
4. The hatch should be in a completely open position when the mower is used for grass, cover crop, weed abatement, vegetables, corn stalk and cotton cutting operations (*Fig. 6*). An open hatch enables the clippings to be discharged quickly, thus allowing a faster mowing speed and lower H.P. requirements.



DANGER: When the hatch is in the fully open position, objects may be thrown out of the machine. Make sure that **NO ONE** is in the operation area.

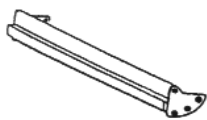


Fig. 3

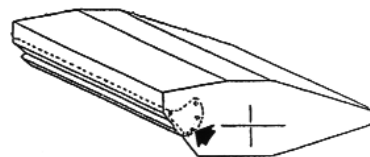


Fig. 4

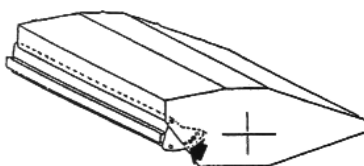


Fig. 5

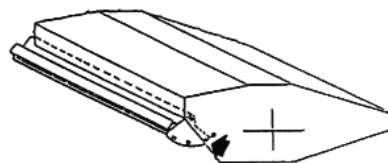
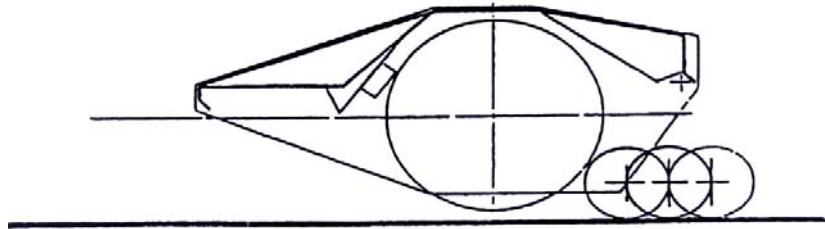


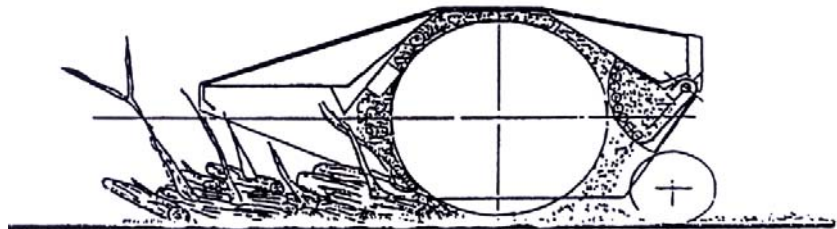
Fig. 6

MOWER ADJUSTMENTS

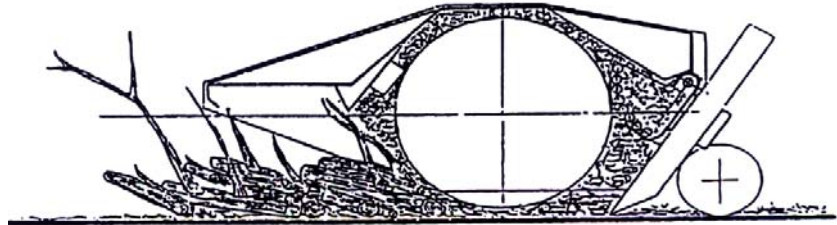
1. Various roller adjustments
3 positions



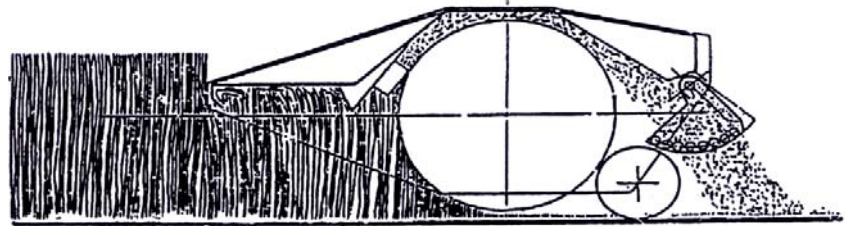
2. Used for mulching
of prunings



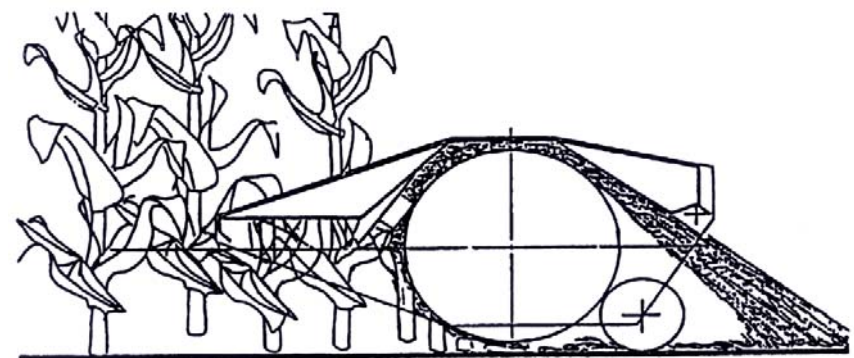
3. Used with rakes to
mulch prunings



4. Used for cutting
grass



5. Used to mulch
cornstalk



ROLLER HEIGHT CONTROL

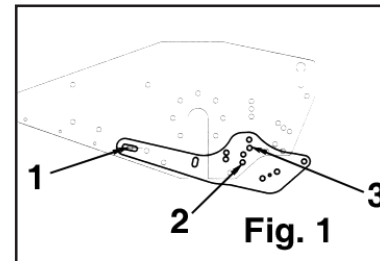
The roller can be adjusted for 2 or 3 cutting heights. By raising the roller, you get a shorter cut, by lowering it, a longer cut is achieved. You can also fine adjust the cutting height with the top link arm. By shortening the link arm, your cut is further from the ground.

A suggested cutting height is having the hammer tips about 2" from the ground.

You can control the power needed and the amount of wear on the hammers by this adjustment.

ADJUSTING REAR ROLLER:

To adjust roller, loosen (Fig. 1, ref. 1). Completely remove (Fig. 1, ref. 2 & 3). Align the appropriate hole in the support bracket with the hole in the deck to achieve roller position desired.



1. There is also an adjustment that can be made on the roller to control mulch size and power needed. By moving the roller toward the cutting shaft (Fig. 7), a finer mulch is produced, requiring less H.P. In this case, we suggest opening the hatch to cut grass, vegetables, cornstalk, cotton, etc.
2. By moving the roller away from the cutting shaft (Fig. 7), a coarser mulch is produced, requiring more H.P. In this case, we suggest closing the hatch to mulch prunings.
3. The third position, or furthest from the cutting shaft, is used only to allow room for rakes on the mower, if needed. Rakes are used when the prunings are laying close to the ground and have to be drawn out.
4. For more precise work and performance, we recommend spending 5 minutes adjusting your mower for the job, this can be done according to the previous recommendations.
5. The roller scraper can be removed when cutting grass, because close positioning of the roller to the cutting shaft permits the hammers to act as a roller cleaning device.

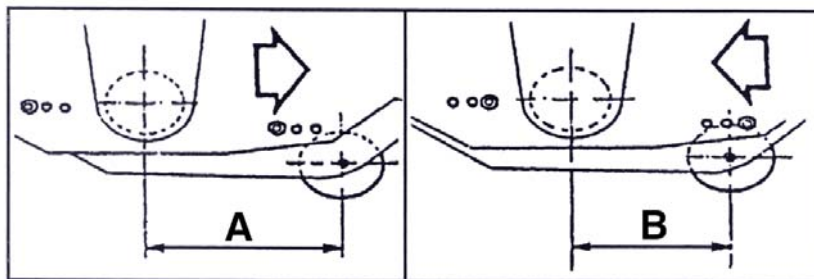


Fig. 7

DRIVE BELT TENSION ADJUSTMENT

1. Check belt tension before each use (*Fig. 8*). The tension is correct when you can depress one belt 1 cm ($3/8$ ") between the two pulleys. It is possible for you to insert a tool through the belt cover (*Fig. 9*), with mower stopped, to check the tension.
2. To adjust the belt tension, loosen bolts 1, 2, 3 & 4 and locknut 6 (*Fig. 9*). To adjust tension, move bolt 5. Do not forget to tighten all bolts after correct belt tension is achieved. If a belt requires replacement, replace all other belts as well.

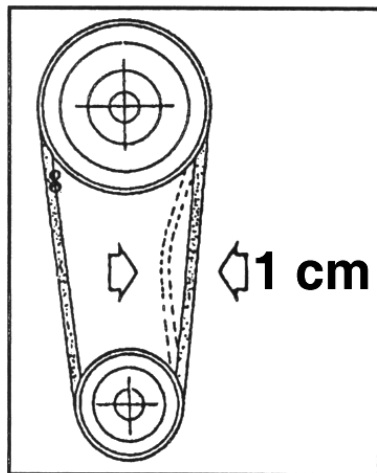


Fig. 8

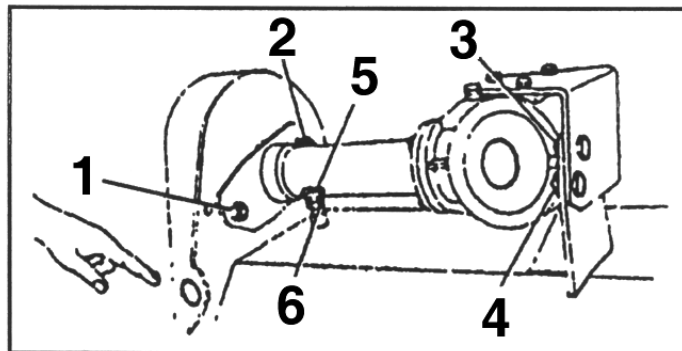


Fig. 9

TROUBLESHOOTING

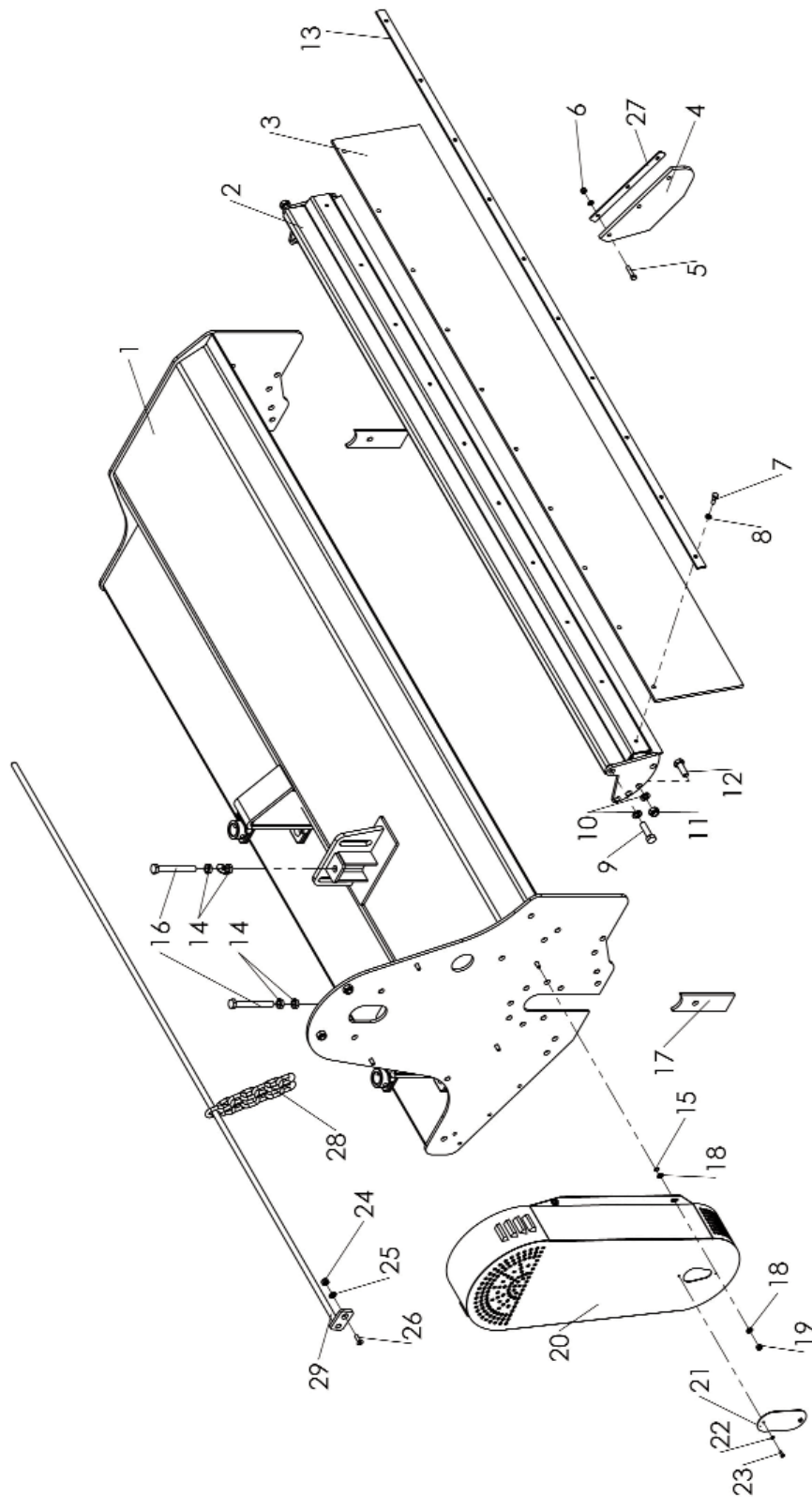
1. Cutting shaft does not rotate properly:
 - a. Tighten drive belts to correct tension (*see page 8*).
 - b. Replace belts if they no longer can be adjusted properly.
2. Mower vibrates:
 - a. Check for loose or missing hammers or bolts.
 - b. Check for hammers that are unevenly worn. If one or more hammers is badly worn, replace all the hammers the first time. Keep the hammers that are in good shape for future replacement in worn series of hammers. For example: when replacing a worn hammer, replace it with a hammer of similar shape and weight. This will insure a balanced and vibration free cutting.
3. If the cutting shaft becomes jammed, reverse the rotation of the shaft to loosen and release the obstruction.
4. If the hammer mounting ears break off, they must be welded back in their exact position, otherwise the cutting shaft will be unbalanced.
5. If you have any questions or problems, it is always best to contact your dealer immediately.
6. When ordering spare parts, you must contact your authorized Gearmore dealer for original replacement parts. When doing so, please include the following information:
 - a. Model Number
 - b. Serial Number

SAFETY PRECAUTIONS

1. All adjustments, inspections and repairs must be made with tractor and mower completely stopped.
 - a. When the mower is in operation, make sure that there is no one near the flying debris from the mower, to prevent the possibility of serious injuries.
 - b. **ALWAYS** keep hands and feet away from a mower that is in operation.
 - c. Check that all guards and safety features are in place and in good operating condition.
2. While mowing, take the necessary precautions to insure operator's and others safety.
3. **DO NOT** make height adjustment using only the top link. This will cause flying debris to come out the front of the mower and toward the operator. Use the roller adjustment.

We thank you again for your choice of mowers and we remind you that the safety points outlined in this manual will help you do your work in a safe and efficient manner.

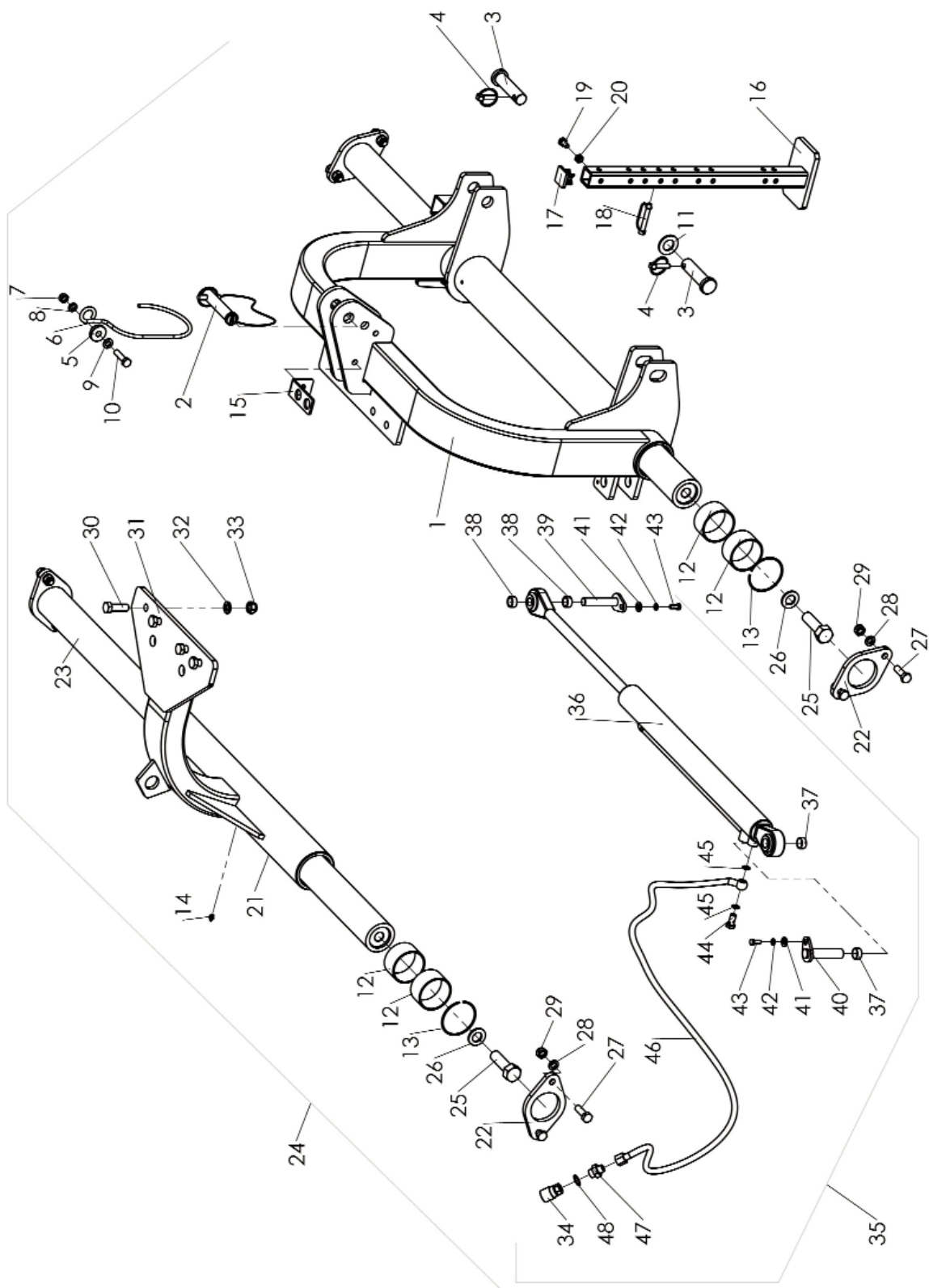
GOL DECK ASSEMBLY (01-0007)



GOL DECK ASSEMBLY (01-0007)

<u>REF#</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	15501046	Deck Frame GOL79
1	1	15501047	Deck Frame GOL89
2	1	13008020	Hatch GOL79
2	1	13008021	Hatch GOL89
3	1	11310024	Rubber Shield GOL79
3	1	14408008	Rubber Shield GOL89
4	2	13010033	Rubber Side Shield
5	6	96605821	Bolt M8 x 35
6	12	97971721	Lock Nut M8
7	10 / 11	96605621	Bolt M8 x 25
8	10 / 11	97494831	Washer
9	2	96612321	Bolt M14 x 35
10	7	97495131	Washer
11	2	97972321	Lock Nut M14
12	2	96612421	Bolt M14 x 40
13	1	14008024	Plate Rubber Support GOL79
13	1	14008025	Plate Rubber Support GOL89
14	4	97093311	Washer M14
15	4	97277980	Gasket
16	2	96621721	Bolt M14 x 120
17	2	15501025	Plate
18	8	97094921	Washer M8
19	4	97971721	Lock Nut M8
20	1	15510018	Belt Cover
21	1	13010039	Plate
22	2	97708871	Washer
23	2	96964401	Bolt
24	1	97971721	Lock Nut M8
25	1	97494831	Washer
26	1	97344422	Bolt M8 x 25
27	2	13010034	Plate, Support
28	As Req'd	14410002	Chain, 9 Links
29	1	19410010	Rod Deflector Chain GOL79
29	1	19410011	Rod Deflector Chain GOL89

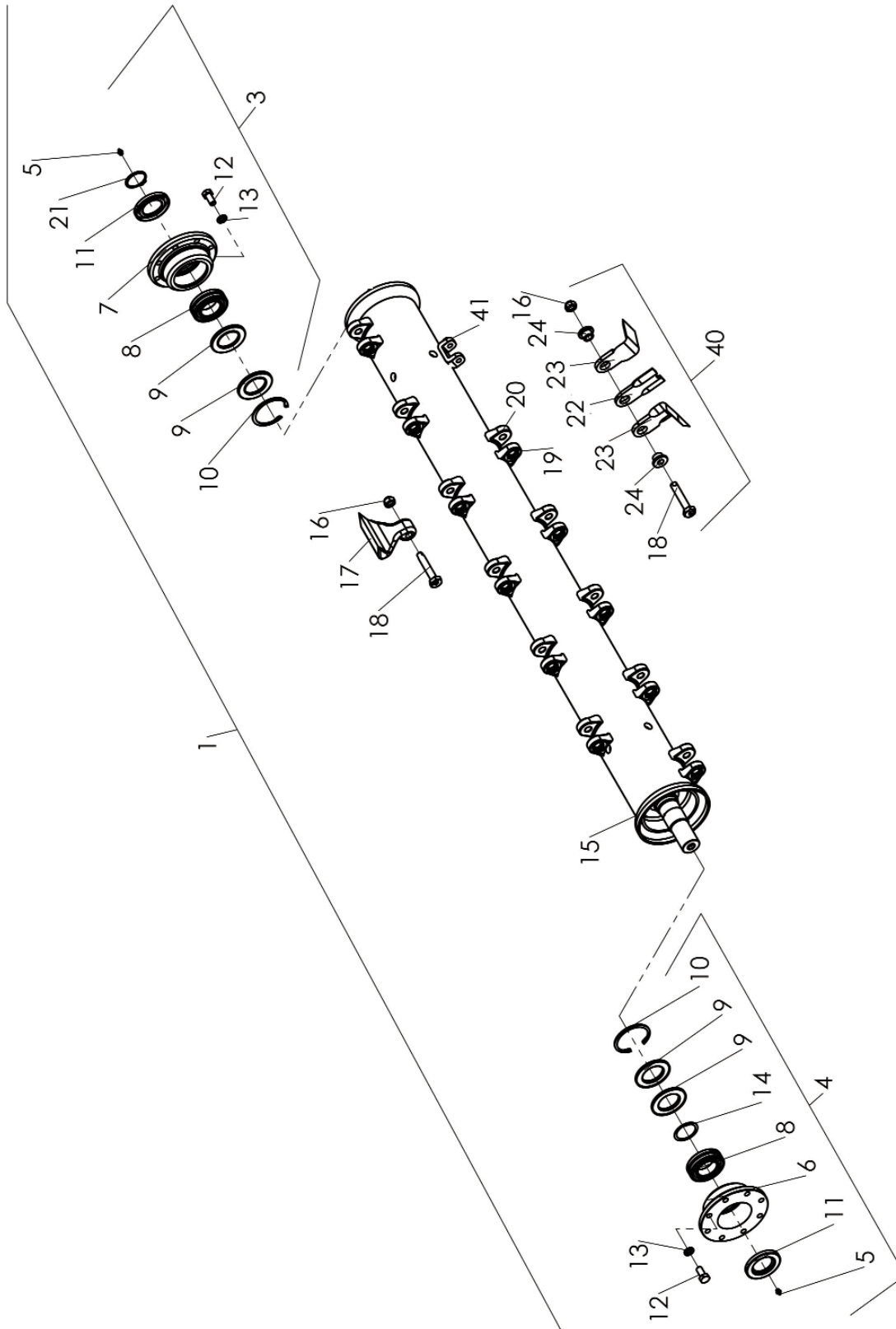
GOL A-FRAME ASSEMBLY (04-0034)



GOL A-FRAME ASSEMBLY (04-0034)

<u>REF#</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	15504005	A-Frame Side Shift
2	1	19404015	Top Link Pin Cat. 2
3	2	19704013	Lower Lift Pin Cat. 2
4	4	16004014	Lynch Pin
5	1	13004139	Bushing
6	1	14404021	Support, PTO
7	1	97972021	Lock Nut M12
8	1	97495031	Washer
9	1	97095311	Washer
10	1	96610321	Bolt M12 x 50
11	1	97096311	Washer D.28
12	4	14504011	Bushing
13	2	97084076	Lock Rink D.90
14	2	97036711	Grease Zerk M8 x 1.25
15	1	13004199	Bracket, Coupler
16	1	14311003	Stand
17	1	14311001	Cap
18	1	14311010	Pin
19	1	96607521	Bolt M10 x 20
20	1	97971821	Lock Nut M10
21	1	15504012	Post, Sliding
22	2	15504016	Flange
23	1	15504025	Tube
24	1	15504004	Sliding Post Assembly
25	2	96620723	Bolt M24 x80
26	2	97096211	Washer D.25 x 44 x 4
27	4	96614221	Bolt M14 x 45
28	4	97495131	Washer D.14.2 x 24.1 x 3
29	4	97972321	Lock Nut M14
30	4	96614821	Bolt M16 x 50
31	1	15504011	Post Bracket
32	4	97495231	Washer D.16.2 x 27.4 x 3.5
33	4	97972521	Lock Nut M16
34	2	19412004	Coupler, Male
35	1	15512001	Hydraulic Cylinder Assembly
36	1	13312001	Hydraulic Cylinder Only
37	2	15512003	Bushing 25 x 19 x 12
38	2	15512002	Bushing 25 x 22 x 12
39	1	14304075	Pin D.22 x 90
40	1	14412001	Pin D.25 x 85
41	2	97093210	Washer M10
42	2	97494831	Washer D.8.2 x 14.8 x 2
43	2	96605621	Bolt M8 x 25
44	2	19412007	Banjo Bolt
45	4	96508160	Copper Washer M14 x 18
46	2	19412002	Hose Assembly 1/4" x L=2200
47	2	19412009	Adapter
48	2	96508460	Copper Gasket D.21.5 x 27

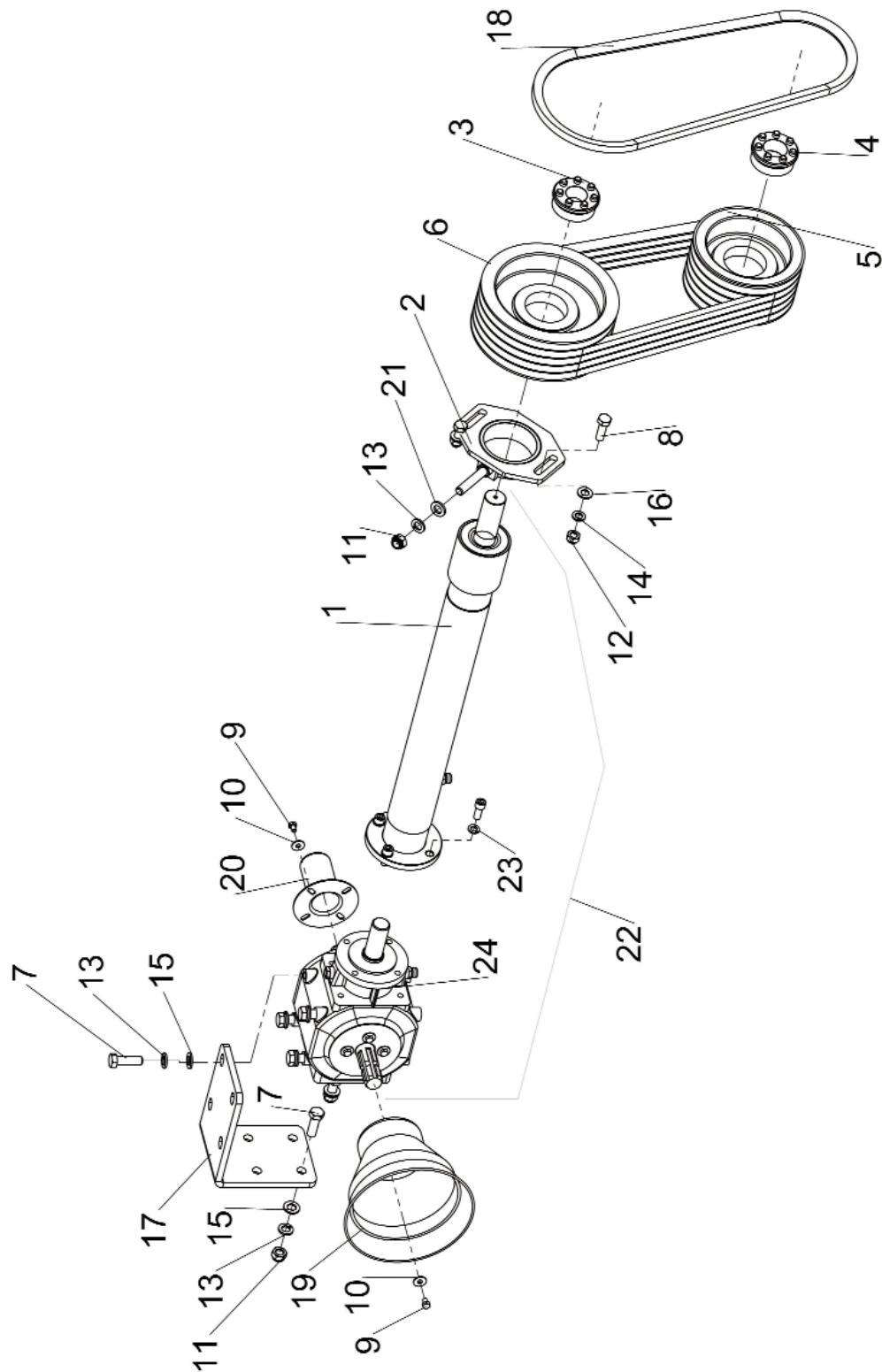
GOL ROTOR ASSEMBLY (02-0002)



GOL ROTOR ASSEMBLY (02-0002)

<u>REF#</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	14402025	Rotor Assembly Hammers GOL79
1	1	14402053	Rotor Assembly Y Knives GOL79
1	1	14402026	Rotor Assembly Hammers GOL89
1	1	14402054	Rotor Assembly Y Knives GOL89
3	1	13002065	Support Assembly R.H.
4	1	13002066	Support Assembly L.H.
5	2	97036711	Grease Nipple M8 x 1.25
6	1	13002012	Support Hub R.H.
7	1	13002048	Support Hub L.H.
8	2	22210	Bearing 22210
9	2	13002038	Flange Pair D.55 90 x 6
10	2	96875176	Lock Ring 90 x 3
11	2	50X90X10	Oil Seal
12	As Req'd	96612227	Bolt M14 x 30
13	As Req'd	97495134	Washer 14.2 x 24.1 x 3
14	1	96867876	Circlip E50
15	2	13002103	ProtectionCap GOL89
16	As Req'd	13002076	Nut M16 x 1.2 - 10.9
17	As Req'd	48020002	Hammer SMO GOL79
17	As Req'd	48020001	Hammer SMW GOL89
18	As Req'd	13002075	Bolt M16 x 1.5 x 90
19	As Req'd	15002039	Ear, Knife Hex
20	As Req'd	15002038	Ear, Knife
21	As Req'd	98046116	Spacer 50 x 62 x 0.5
22	As Req'd	13002005	Center Blade
23	As Req'd	13002008	Y Blade
24	As Req'd	13002044	Bushing, Special

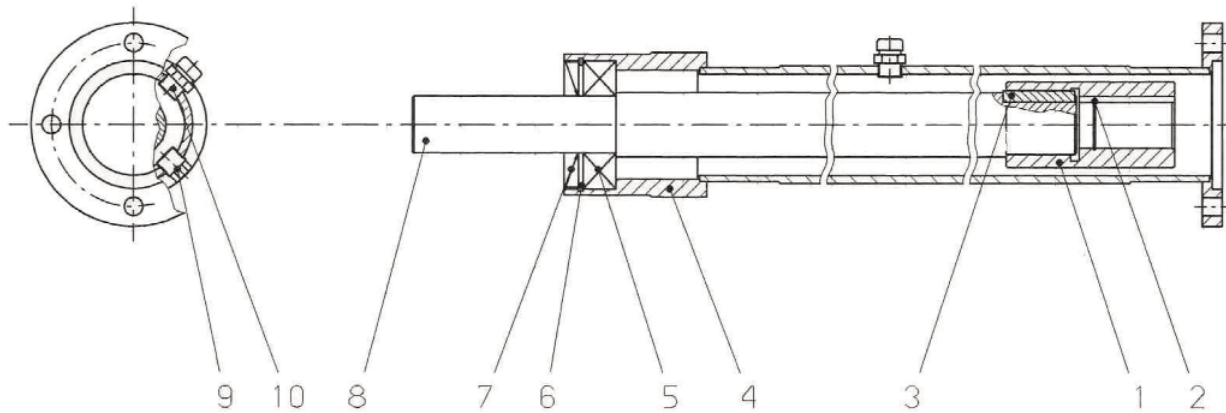
GOL DRIVE ASSEMBLY (03-0091)



GOL DRIVE ASSEMBLY (03-0091)

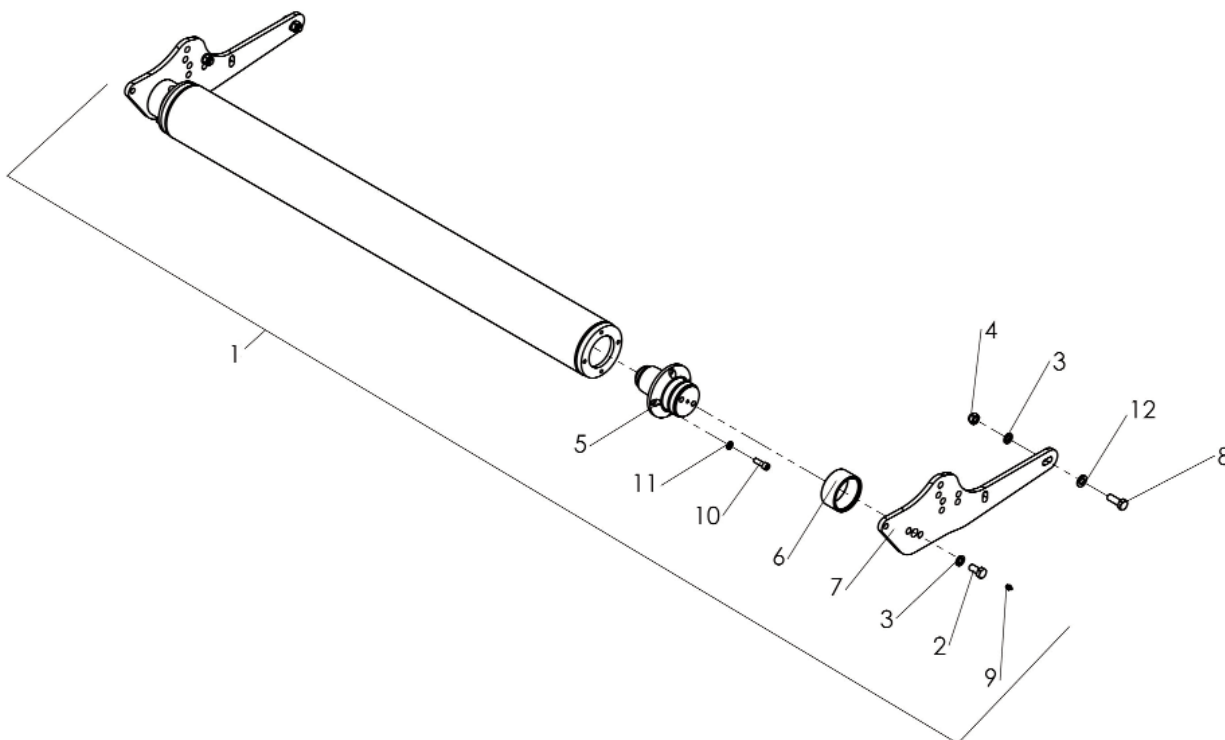
<u>REF#</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	48030656	Extension Shaft Assembly
2	1	15503007	Support Flange
3	1	15003054	Taper Lock 40 x 80
4	1	13003006	Taper Lock 45 x 80
5	1	19403088	Lower Pulley 5SPB200
6	1	13003015	Upper Pulley 5SPB250
7	4	96614821	Bolt M16 x 50
8	2	96612521	Bolt M14 x 45
9	4	96605321	Bolt M8 x 12
10	4	97094921	Washer M8
11	4	97972521	Lock Nut M16
12	2	97972321	Lock Nut M14
13	9	97495231	Washer 16.2 x 27.4 x 3.5
14	2	97495131	Washer 14.2 x 24.1 x 3
15	8	97095711	Washer 16 x 30 x 3
16	2	97095511	Washer 14 x 28 x 2.5
17	1	17603001	Bracket, Support
18	5	75000491	Bolt SPBX1550
19	1	14310012	Shield, PTO
20	1	19410040	Shield, Shaft
21	1	97093611	Washer M16
22	1	14403025	Gearbox Assembly w/Extension Shaft
23	4	97495031	Washer 12.2 x 21.2 x 2.5
24	1	48030707	Gearbox Assembly Only

GOL EXTENSION SHAFT ASSY (03-0047)



<u>REF#</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1		Coupler
2	1		Clip
3	1		Key
4	1	48403017	Extension Shaft L=795
5	1	21308	Bearing 21308
6	1	96875176	Lock Ring
7	1	40X90X8	Oil Seal
8	1	14403084	Transmission Shaft L=950
9	1	48030246	Plug
10	1	48030003	Breather Plug

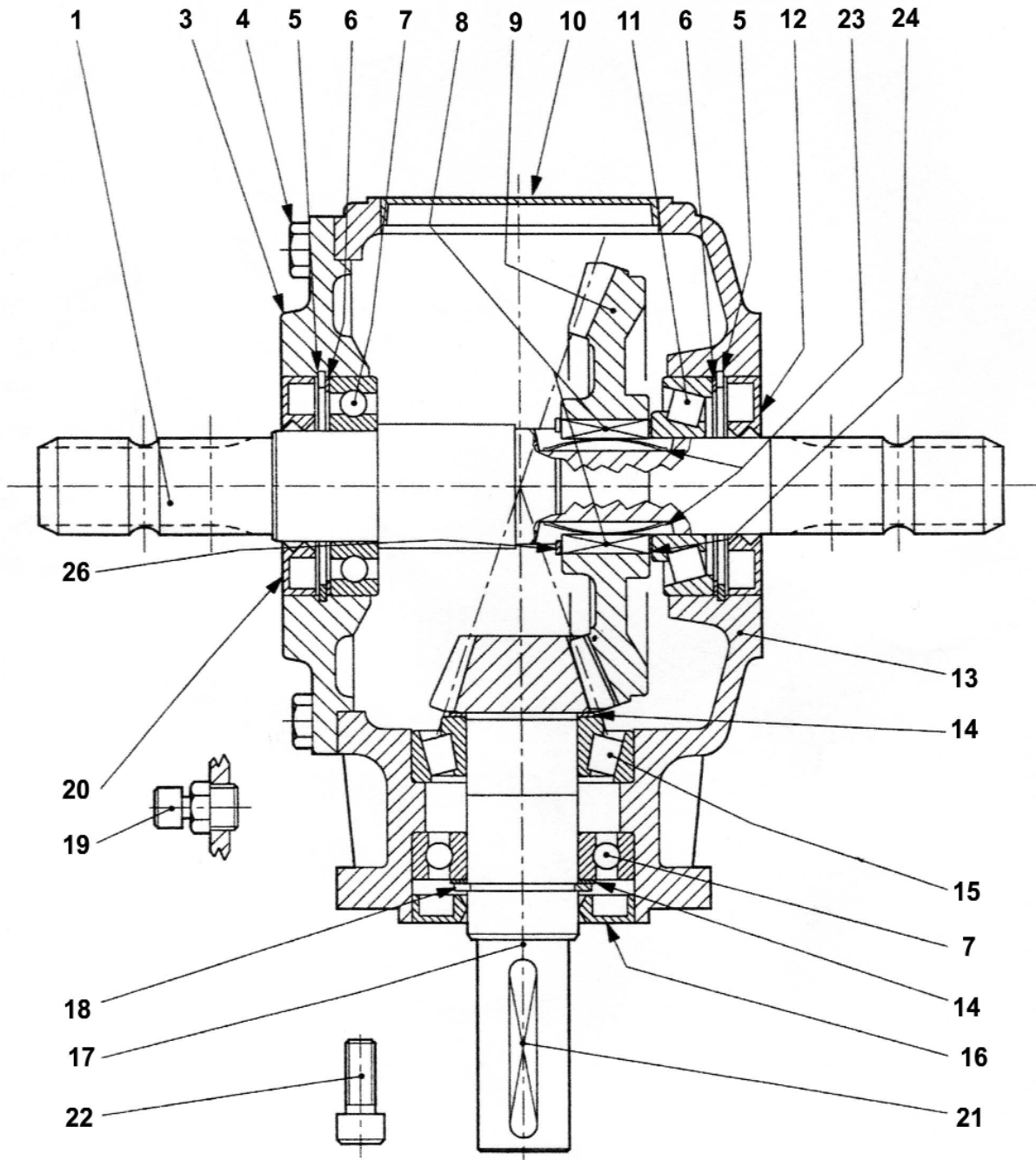
GOL ROLLER ASSEMBLY (05-0004)



<u>REF#</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	13005205	Roller Assembly GOL79
1	1	13005206	Roller Assembly GOL89
2	4	96612221	Bolt M14 x 30
3	6	97495131	Washer 14.2 x 24.1 x 3
4	2	97972321	Lock Nut M14
5	2	13005000	Roller Hub Assembly
6	2	13005165	Spacer
7	2	13005001	Bracket, Support
8	2	96612521	Bolt M14 x 45
9	2	97035711	Grease Zerk M8 x 1.25
10	8	96692223	Bolt M10 x 30
11	8	97494931	Washer 10.2 x 18.1 x 2.2
12	2	97495131	Washer 14.2 x 24.1 x 3

GOL GEARBOX ASSEMBLY (03-0016)

Part No. 48030707

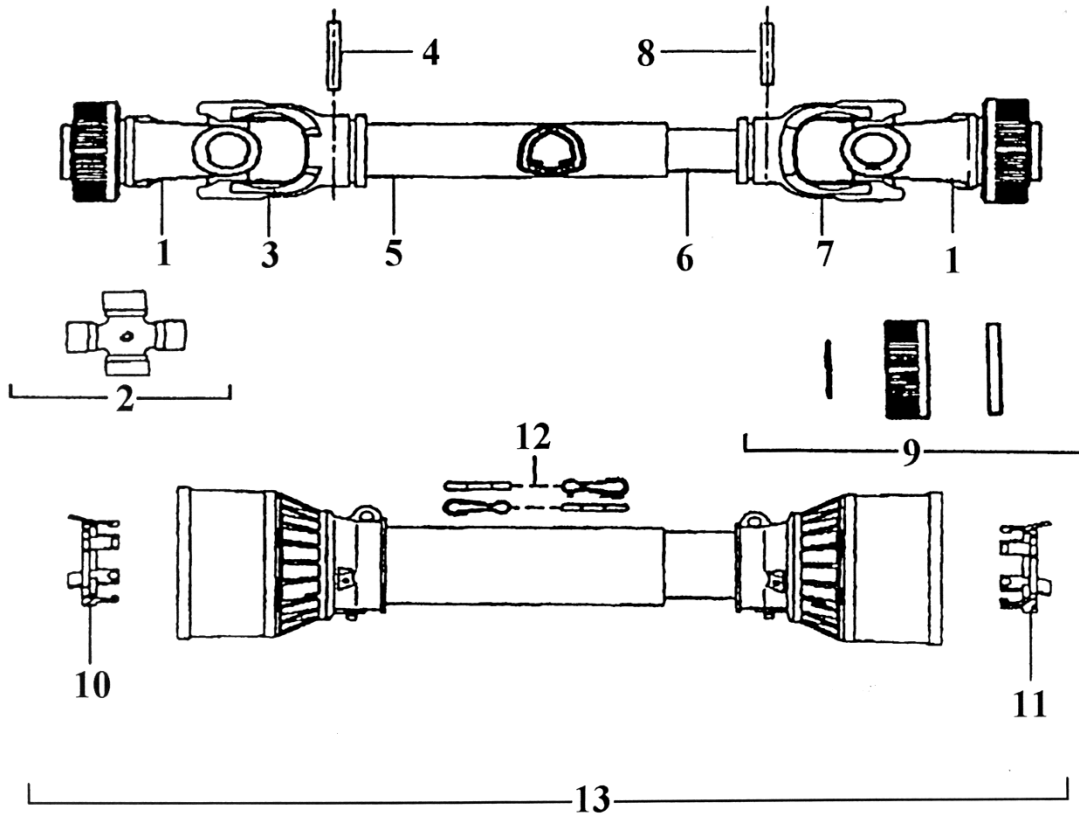


GOL GEARBOX ASSEMBLY (03-0016)

Part No. 48030707

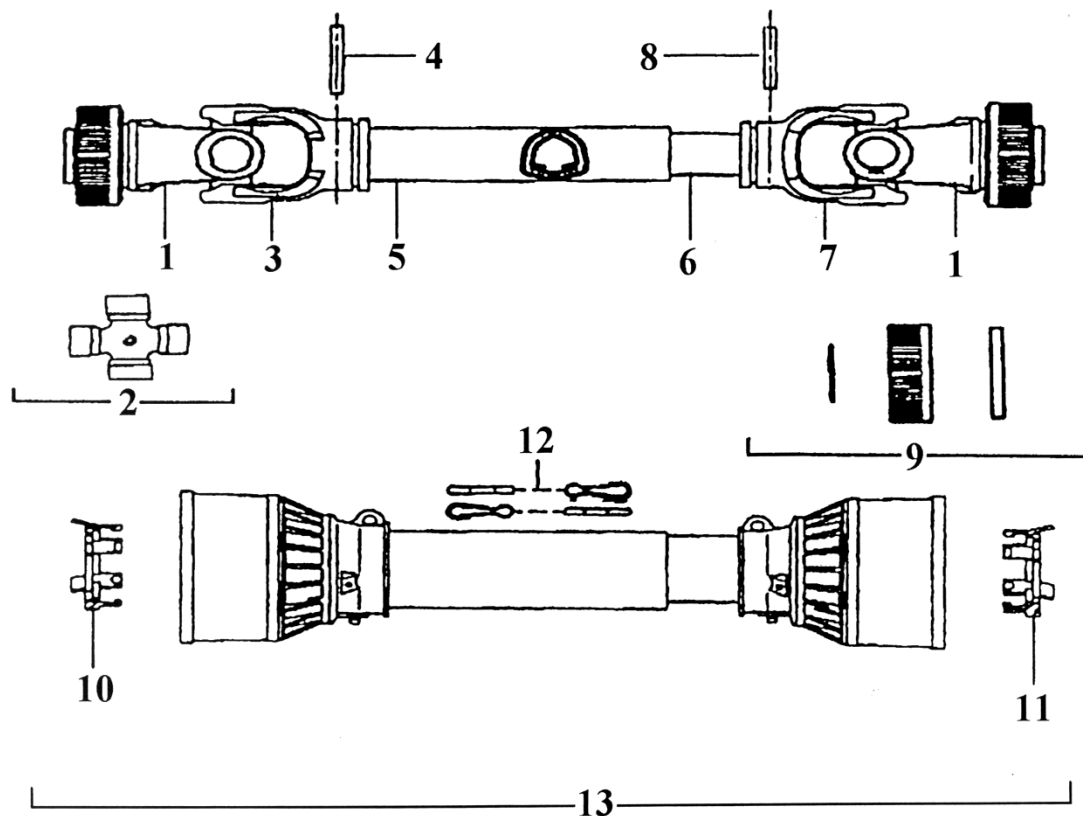
<u>REF#</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	48030951	Input Shaft
3	1	48030798	Cover
4	8	96607627	Bolt M10 x 25
5	2	96874776	Circlip I80
6	2	48030884	Spacer 69 x 79.9
7	2	6208	Bearing
8	2	48030799	Key
9	1	48030948	Ring Gear Z36
10	1	48030814	Cap 100 x 10
11	1	30307	Bearing
12	1	35X80X10	Oil Seal
13	1	48030765	Housing
14	As Req'd	48030367	Shim 51.5 x 40.3 x .3
14	As Req'd	48030368	Shim 51.5 x 40.3 x .4
14	As Req'd	48030369	Shim 51.5 x 40.3 x .5
15	1	32208	Bearing
16	1	40X80X10	Oil Seal
17	1	48030754	Pinion Z12
18	1	96867476	Circlip I40
19	1	48030003	Breather Plug
20	1	40X80X10	Oil Seal
21	1	48030753	Key 10 x 8 x 65
22	4	96693823	Allen Bolt M12 x 30
23	2	48030983	Spring
24	1	48030984	Spacer 35.3 x 48 x 1.0
26	1	48030982	Ring

GOL79 PTO SHAFT



<u>REF#</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2	572060351	RS Yoke 1-3/8 6 Spline
2	2	41206	#6 Cross Kit
3	1	204066851	Outer Tube Yoke
4	1	341042000	Roll Pin O.T.
5	1	225690860	Outer Drive Tube 860 mm
6	1	225110860	Inner Drive Tube 860 mm
7	1	204066852	Inner Tube Yoke
8	1	341043000	Roll Pin I.T.
9	2	240003051	RS Collar Kit
10	1	255060005	Shield Bearing Outer
11	1	255060006	Shield Bearing Inner
12	2	252000001	Safety Chain
13	1	AS30130	Complete Shield w/Bearings
	1	AB6105	Complete Driveline Assembly

GOL89 PTO SHAFT



<u>REF#</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2	572080351	RS Yoke 1-3/8 6 Spline
1	1	572083751	RS Yoke 1-3/8 21 Spline (Optional)
2	2	41208	#8 Cross Kit
3	1	204086860	Outer Tube Yoke
4	1	341054000	Roll Pin O.T.
5	1	225730860	Outer Drive Tube
6	1	225690860	Inner Drive Tube
7	1	204086861	Inner Tube Yoke
8	1	341055000	Roll Pin I.T.
9	2	240003551	RS Collar Kit
10	1	255080005	Shield Bearing Outer
11	1	255080006	Shield Bearing Inner
12	2	252000005	Safety Chain
13	1	AS30130	Complete Shield w/Bearings
	1	AB8105	Complete Driveline Assembly

LIMITED WARRANTY



GEARMORE, INC., warrants each new Gearmore product to be free from defects in material and workmanship for a period of twelve (12) months from date of purchase to the original purchaser. This warranty shall not apply to implements or parts that have been subject to misuse, negligence, accident, or that have been altered in any way.

Our obligation shall be limited to repairing or replacement of any part, provided that such part is returned within thirty (30) days from date of failure to Gearmore through the dealer from whom the purchase was made, transportation charges prepaid.

This warranty shall not be interpreted to render us liable for injury or damages of any kind or nature, direct, consequential or contingent, to person or property. This warranty does not extend to loss of crops, loss because of delay in harvesting or any other expenses, for any other reasons.

Gearmore in no way warrants engines, tires, or other trade accessories, since these items are warranted separately by these respective manufacturers.

Gearmore reserves the right to make improvements in design or changes in specification at any time, without incurring any obligations to owners or units previously sold.

GEARMORE, INC.
13477 Benson Ave.
Chino, CA 91710

Always refer to and heed machine operating warning decals on machine.

The serial number of this product is stored in our computer database, thus submitting a warranty registration card is not required.