SQFT Pendular Spreader

Operator's Manual
Parts Breakdown

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TABLE OF CONTENTS

INTRODUCTION 2
SAFETY 2
SAFETY SIGNAL WORDS 3
GENERAL SAFETY GUIDELINES 3
SAFETY DECAL CARE 4
BEFORE OPERATION 4
DURING OPERATION 5
HIGHWAY AND TRANSPORT OPERATIONS 5
FOLLOWING OPERATION 6
PREFORMING MAINTENANCE 6
ASSEMBLY 7
OPERATION 8
SPREADING CHARTS 12
SERVICE 13
TROUBLESHOOTING 13
PARTS BREAKDOWN 14-19
LIMITED WARRANTY 20

INTRODUCTION

Thank you for purchasing your Tar River Equipment Pendular Spreader. Your spreader is design to be used on 540 rpm tractors. It is important to properly maintain and keep in place all safety guards and shields that came with your tiller.

SAFETY

Read and understand this manual and all safety signs before operating and maintaining. Review the safety instructions and precautions annually.

TAKE NOTE! THIS SAFETY ALERT SYMBOL FOUND THROUGHOUT THIS MANUAL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY AND THE SAFETY OF OTHERS. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN INJURY OR DEATH.

THIS SYMBOL MEANS

ATTENTION!
BECOME ALERT!
YOUR SAFETY IS INVOLVED!

SAFETY SIGNAL WORDS

Note the use of the signal words DANGER, WARNING and CAUTION with the safety messages. The appropriate signal word for each has been selected using the following guidelines:

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

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

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

GENERAL SAFETY GUIDELINES

Safety of the operator is one of the main concerns in designing and developing a new piece of equipment. Designers and manufacturers build in as many safety features as possible. However, every year numerous accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling equipment. You, the operator, can avoid accidents by observing the following precautions in this section.To avoid personal injury, study the following precautions and insist those working with you, or for you, follow them.

Replace any CAUTION, WARNING, DANGER, or instruction safety decal that is not readable or is missing. Location of such decals are shown in this booklet.

Do not attempt to operate this equipment under the influence of drugs or alcohol.

Review the safety instructions with all users annually.

This equipment is dangerous to children and persons unfamiliar with its operation. The operator should be a responsible adult familiar with farm machinery and trained in this equipment's operations. **Do not allow persons to operate or assemble this unit until they have read this manual and have developed a thorough understanding of the safety precautions and of how it works.**

To prevent injury or death, use a tractor equipped with a Roll Over Protective System (ROPS). Do not paint over, remove or deface any safety signs or warning decals on your equipment. Observe all safety signs and practice the instructions on them.

Never exceed the limits of a piece of machinery. If its ability to do a job, or to do so safely, is in question - **DON'T TRY IT.**

SAFETY DECAL CARE

- Keep safety signs clean and legible at all times.
- Replace safety signs that are missing or have become illegible.
- Replaced parts that displayed a safety sign should also display the current sign.
- Safety signs are available from your Distributor or Dealer Parts Department or the factory.

How to Install Safety Signs:

- Be sure that the installation area is clean and dry.
- Decide on the exact position before you remove the backing paper.
- Remove the smallest portion of the split backing paper.
- Align the decal over the specified area and carefully press the small portion with the exposed sticky backing in place.
- Slowly peel back the remaining paper and carefully smooth the remaining portion of the decal in place.
- Small air pockets can be pierced with a pin and smoothed out using the piece of decal backing paper.

BEFORE OPERATION

- Carefully study and understand this manual.
- Do not wear loose-fitting clothing, which may catch in moving parts.
- Always wear protective clothing and substantial shoes.
- Assure that all tires are inflated evenly.
- Give the unit a visual inspection for any loose bolts, worn parts or cracked welds, and make necessary repairs. Follow the maintenance safety instructions included in this manual.
- Be sure that there are no tools lying on or in the equipment.
- Do not use the unit until you are sure that the area is clear, especially children and animals.

- Do not hurry the learning process or take the unit for granted. Ease into it and become familiar with your newequipment.
- Practice operation of your equipment and its attachments. Completely familiarize yourself and other operators with its operation before using.
- Use a tractor equipped with a Roll Over Protective System (ROPS) and fasten your seat belt prior to starting the engine.
- The manufacturer does not recommend usage of tractor with ROPS removed.
- Move tractor wheels to the widest recommended settings to increase stability.
- Securely attach to towing unit. Use a high strength, appropriately sized hitch pin with a mechanical retainer and attach safety chain.
- Do not allow anyone to stand between the tongue or hitch and the towing vehicle when backing up to the equipment.

DURING OPERATION

- Children should not be allowed on the product.

- Clear the area of small children and bystanders before moving the feeder.

- If using a towing unit, securely attach feeder by using a hardened 3/4" pin, a metal retainer, and safety chains if required. Shift towing unit to a lower gear before going down steep downgrades, thus using the engine as a retarding force. Keep towing vehicle in gear at all times. Slow down for corners and rough terrain.
- Make sure you are following all local and state regulations regarding transporting equipment onpublic roads and highways. Lights and slow-moving signs must be clean and visible by overtaking or on-coming traffic when feeder is transported.
- Beware of bystanders, **particularly children**! Always look around to make sure that it is safe to start the engine of the towing vehicle or move the unit. This is particularly important with higher noise levels and quietcabs, as you may not hear people shouting.
- **NO PASSENGERS ALLOWED** - Do not carry passengers anywhere on, or in, the tractor or equipment, except as required for operation.
- Keep hands and clothing clear of moving parts.

- Do not clean, lubricate, or adjust your equipment while it is moving.

- When halting operation, even periodically, set the tractor or towing vehicle brakes, disengage the PTO, shut off the engine and **remove the ignition key**.
- Be especially observant of the operating area and terrain - watch for holes, rocks, or other hidden hazards.Always inspect the area prior to operation.

- **DO NOT** operate near the edge of drop-offs or banks.
- **DO NOT** operate on steep slopes as overturn may result.
- Operate up and down (not across) intermediate slopes. Avoid sudden starts and stops

HIGHWAY AND TRANSPORT OPERATIONS

- Adopt safe driving practices:
- Keep the brake pedals latched together at all times. **NEVER USE INDEPENDENT BRAKING WITH MACHINE IN TOW AS LOSS OF CONTROL AND/OR UPSET OF UNIT CAN RESULT.**
- Always drive at a safe speed relative to local conditions and ensure that your speed is low enough for an emergency stop to be safe and secure. Keep speed to a minimum.
- Reduce speed prior to turns to avoid the risk of overturning.
- Avoid sudden uphill turns on steep slopes.
- Always keep the tractor or towing vehicle in gear to provide engine braking when going downhill. Do not coast.
- Do not drink and drive!
- Comply with state and local laws governing highway safety and movement of farm machinery on public roads.
- Use approved accessory lighting flags and necessary warning devices to protect operators of other vehicles on the highway during daylight and nighttime transport. Various safety lights and devices are available from your dealer.
- The use of flashing amber lights is acceptable in most localities. However, some localities prohibit their use. Local laws should be checked for all highway lighting and marking requirements.

- When driving the tractor and equipment on the road or highway under forty kph (20 mph) at night or duringthe day, use flashing amber warning lights and a slow-moving vehicle (SMV) identification emblem.
- Plan your route to avoid heavy traffic.
- Be a safe and courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc..

- Be observant of bridge loading ratings. Do not cross bridges rated lower than the gross weight as which you are operating..
- Watch for obstructions overhead and to the side while transporting.
- Always operate equipment in a position to provide maximum visibility at all times. Make allowances for increased length and weight of the equipment when making turns, stopping the unit, etc..
- Pick the most level possible route when transporting across fields. Avoid the edges of ditches or gullies and steep hillsides.
- Be extra careful when working on inclines.
- Maneuver the tractor or towing vehicle at safe speeds.
- Avoid overhead wires or other obstacles. Contact with overhead lines could cause severe injury or death.
- Avoid loose fill, rocks, and holes; they can be dangerous for equipment operation or movement.
- Allow for unit length when making turns.
- Operate the towing vehicle from the operator's seat only.
- Never stand alongside of unit with engine running or attempt to start engine and/or operate machine while standing alongside of unit.
- Never leave running equipment attachments unattended.
- As a precaution, always recheck the hardware on equipment following every one hundred hours of operation. Correct all problems. Follow the maintenance safety procedures

- Following operation, or when unhitching, stop the tractor or towing vehicle, set the brakes, disengage the

FOLLOWING OPERATION

PTO and all power drives, shut off the engine and **remove the ignition keys**.

- Store the unit in an area away from human activity.
- Do not park equipment where it will be exposed to livestock for extended periods of time. Damage and livestockinjury could result.
- Do not permit children to play on or around the stored unit.
- Make sure all parked machines are on a hard, level surface and engage all safety devices.
- Use wheel chocks when needed to prevent unit from rolling.
- Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.

PERFORMING MAINTENANCE

- Make sure there is enough ventilation. Never operate the engine of the towing vehicle in a closed building. The exhaust fumes may cause asphyxiation.
- Be certain all moving parts on attachments have come to a complete stop before attempting to perform maintenance.
- Always use the proper tools or equipment for the job at hand.
- Use extreme caution when adjusting the spreader.
- Never replace hex bolts with less than grade five bolts unless otherwise specified.
- After servicing, be sure all tools, parts and service equipment are removed from the equipment.
- Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore your equipment to original specifications. The manufacturer will not claim responsibility for use of unapproved parts and/or accessories and other damages as a result of their use. If equipment has been altered in any way from original design, the manufacturer does not accept any liability.

Assembly

Note: All hardware needed for assembly will be found in the crate and the hardware bag of the spreader. The assembly will be easier if all parts are loosely assembled before tightening the hardware.

To assemble the SQTF spreader proceed as follows:

1. Place hopper over the frame and gearbox making sure the four holes line up with those of the frame.
2. Slip the M18 fender washer over the M12x50 carriage bolts and insert them through the hopper and frame. Make sure the rounded head of the bolt is facing the inside of the hopper. Secure the bolt with a M12 flat washer, a M12 lock washer and a M12 nut.
3. Slide the spout ring over the discharge chute, secure them to the gearbox making sure to use the M10x35 bolt on the top hole and the M10x40 bolts, M10 lock washers and M10 nuts on the remaining holes.
   Note: The M10x35 bolt does not require a nut on the other side as it screws directly into the gearbox housing.
4. Replace the gearbox plug with the dipstick.
5. Place opening lever over the rod support and secure it with the M8x25 bolt and M8 nut.
6. Insert gauge pin through the desired hole on the graded scale.
7. Install the shock joint side of the driveline to the spreader and secure it with the M10x60 and the M6x60 roll pins. Ensure that the driveline has at least 2" from bottoming out in its shortest working position and has the minimum 6" overlap in its longest working position.
8. Assemble the left and right attachment plates to the flywheel protection cover using the M6x20 bolts and Ø6 flat washers then secure them with the M6 fender washers and M6 elastic stop nuts.
9. Place the frame reinforcement tube over the welded brackets on the bottom of the spreader frame. Align the holes on the flywheel protection assembly over the holes on the frame reinforcement tube then secure both parts to the welded brackets on the spreader frame using the M8x55 bolts, the M8 fender washers on one side and the Ø8 fender washers and M8 elastic stop nuts on the other side.
10. On spreader models SQTF - 800 and SQTF - 1000, place the hopper extension with the decals facing to theback of the unit over the hopper.
11. Using a drill with a 7 mm. bit, drill holes on the edge of the hopper frame corresponding to the existing holes on the hopper extension.
12. Secure the hopper extension to the hopper by inserting the M6x35 bolts and the M6 fender washers through the top of the holes and securing them using the M6 washers and the M6 elastic stop nuts.
13. Tighten all hardware securely..

Before beginning work:

1. Apply a thick layer of grease to all exposed moving parts.
2. Apply a film of biodegradable oil in crevices and corners in order to keep corrosive material from rusting areas that are difficult to clean.
3. Every 8 hours check the gearbox oil level with dipstick (Use SAE 90W lubricant).

ATTACHING TO THE TRACTOR

To attach the implement to the tractor, do the following:

Back the tractor up to the implement in order to slip the tractor hitch arms over the hitch pins bolted to the frame. **Turn off the tractor engine and engage the park brake.** Secure the two tractor hitch arms to the implement with lynch pins. Tighten the tractor arms side movement with either the sway chains or blocks to limit side swing.

Connect the top link, locking it in place with the top hitch pin. Adjust it so the implement is as near parallel to the ground as possible with spout at a distance of 28 to 32 inches above the ground level .

Shortening a PTO Driveline if necessary

1. With the implement attached to the tractor's three-point hitch, and the PTO driveline not installed, separate the PTO driveline. Attach the implement end to the implement and the other end to the tractor PTO input shaft.
2. Raise the implement by using the tractor's hydraulic 3-point hitch to its maximum lift height.

3. Hold the half shafts next to each other and mark them so each end is approximately ½" from hitting the end of the telescopic profiles.
4. Shorten the inner and out guard tubes equally.
5. Shorten the inner and outer profiles by the same length as the guard tubes. Using a rattail file, round off all sharp edges and burrs. Grease the telescopic profile generously before reassembling.

Be sure each end of the driveline is connected securely with the locking pin on the tractor end and two roll pins on the implement end. Connect the driveline shielding chains to the tractor and to the implement to prevent the protective shielding from rotating during operation. If it was necessary to remove the PTO shielding to do any of the above operations, do not forget to replace it..

CAUTION: Load hopper with product only after the spreader has been correctly attached to the tractor.

WARNING: Chemicals may cause eye, skin or breathing problems. Always wear a face mask, gloves, and goggles when filling hopper. Refer to chemical manufacturer's label for specific safety information.

Operation

Before starting to use, never forget that the **operator is responsible** for the following:

1. Safe and correct driving of the tractor and spreader.
2. To learn precise, safe operating procedures for both the tractor and the spreader.
3. To ensure all maintenance and lubrication has been performed on the spreader.
4. To have read and understood all safety aspects for the spreader in the Operator's Manual.
5. To have read and understood all safety decals on the spreader.
6. Checking the tractor tires for the proper pressure in accordance with the tractor Operator's Manual.
7. **Checking that all shields are on the machine and securely in place.**
8. Making sure the proper attire is worn. Avoiding loose fitting clothing which can become entangled. Wearing sturdy, tough-soled work shoes and protective equipment for eyes, hands, ears, and head. Never operate tractor or implements in bare feet, sandals, or sneakers.
9. Ensuring proper lighting is available, sunlight or good artificial lighting.

Prior to start working do the following:

1. Make sure there are no obstructions.
2. Run machine under a no-load condition for a short while to assure that everything is functioning properly.
3. Adjust all settings for the desired quantity distribution and spread pattern.
4. Shift the transmission to a slow speed gear and start forward, increase the ground speed by shifting up- ward until the desired speed is obtained. Do not use in reverse unless absolutely necessary and only after careful observation of the area behind the spreader.

Operating Techniques

The material delivery is controlled by the lever that opens the orifices in the hopper bottom. The lever has up to twenty-seven positions that it can be locked into depending on the desired output. To ensure a constant output of product always keep the following factors into account.

The quantity of material distributed per acre depends on the following factors:

1. Tractor ground speed.
2. Unit weight and size of the material to be spread.
3. Spreading width.
4. Position of the lever connected to the hopper gates.

The working speed depends on ground conditions. Only a test run will enable you to gauge the optimal working speed for your conditions.

Optional Filter Grate

The filter grate is a simple bolt-on accessory available for pendular spreader models and is ideal for filtering clots and foreign objects from the material being spread.

Optional Agitator Extension

The agitator extension accessory available for all pendular spreader models is best suited when powdered or high humidity fertilizer is being spread. This type of material tends to bridge in the hopper. The agitator extension is assembled on the existing agitator using the supplied spring. Important: Heavy clods such as compacted salt must be broken up before being used in the spreader.

Optional Sand & Salt Spout

The sand & salt spout is available for all pendular spreader models and is used to cut the spread width in half. To assemble standard spout must be removed and sand & salt spout is bolted on in its place .

Optional Rubber Insert

The rubber insert is available for all pendular spreader models and is used when spreading high moisture product such as damp fertilizer or peat. The rubber insert provides a high viscosity surface that lets humid material flow through the spout better.

Optional Hydraulic Gate Control

The hydraulic gate control available for pendular spreader models allows operator to control the opening and closing of the gate using the tractors hydraulic system.

Optional Left/Right Directional Attachment

Although the standard spread deflector can be adjusted to spread only to the left or only to the right, the optional directional attachment improves accuracy when spreading in either direction. To assemble, unscrew the standard spread deflector and screw in the Left/Right directional attachment. It fits all models of pendular spreaders.

Spreading Charts

The graded scale comprises three lines of holes marked with letters R, S, T. Each line consists of nine holes, whichare out of line with the holes of the previous line by half a diameter. This system allows simple but effective adjustment with twenty-seven different fertilizer quantity settings. The spread tables in the following pages will help you determine what setting to use according to the type of product you are spreading. The figure below illustrates the hole selection for “4S

PTO 540 rpm	Spread Table in Lbs./Acre																													
Type of fertilizer	Spread width ft.	Work speed m.p.h.	LEVERPOSITION																											
			1R	1S	1T	2R	2S	2T	3R	3S	3T	4R	4S	4T	5R	5S	5T	6R	6S	6T	7R	7S	7T	8R	8S	8T	9R	9S	9T
Complex 12.12.12	39	3.7				32	52	73	93	130	166	203	259	316	371	435	500	564	623	682	741	842	942	1044	1077	1110	1144	1156	1178
		5				24	38	54	70	97	124	153	194	236	277	327	375	422	467	511	556	632	707	783	807	832	858	867	883
		6.2				20	31	44	55	79	100	122	155	189	222	261	300	338	374	409	444	505	566	626	646	666	686	694	698
		7.5				16	26	37	46	65	83	102	129	158	186	218	250	282	311	341	370	421	471	522	538	555	572	578	589
		8.7				13	22	31	41	56	71	87	111	136	160	186	214	241	267	292	318	361	403	447	461	476	490	495	505
Superphosphate	39	3.7				18	37	57	77	109	143	175	225	273	323	380	439	496	567	641	712	792	874	955	1014	1074	1133	1151	1169
		5				13	28	43	57	81	107	131	169	204	242	285	329	372	426	480	532	594	656	716	760	806	850	863	876
		6.2				11	22	34	46	65	86	105	135	164	194	228	263	298	341	385	426	476	525	573	608	644	680	691	701
		7.5				9	19	29	38	54	71	87	112	137	161	190	219	248	284	320	356	396	437	477	507	537	567	575	584
		8.7				8	16	24	32	46	62	75	96	117	138	163	188	212	244	275	305	339	375	410	435	460	485	493	501
Ammonium Nitrate	39	3.7				50	82	114	146	194	241	289	360	432	503	582	662	741	853	965	1078	1137	1196	1255	1292	1329	1367	1378	1388
		5				37	62	86	109	145	180	217	270	324	377	436	496	556	640	724	808	852	897	941	969	997	1024	1033	1041
		6.2				30	49	69	87	117	145	173	216	259	302	349	397	444	512	579	646	682	717	753	775	798	820	826	833
		7.5				25	41	57	73	97	120	145	180	216	252	291	331	370	426	483	539	568	598	628	646	665	683	689	694
		8.7				21	35	49	62	83	103	124	154	185	216	249	284	318	366	414	462	487	512	538	554	569	585	591	595
Calcium Nitrate	33	3.7							70	102	136	170	219	268	318	378	439	500	566	630	696	776	857	937	1030	1121	1213	1249	1280
		5							53	76	102	127	164	201	237	284	329	375	424	472	522	583	642	703	772	840	910	937	960
		6.2							42	61	81	101	132	161	190	227	263	300	339	378	418	466	514	562	617	673	724	749	768
		7.5							35	51	68	85	110	134	159	189	219	250	283	315	348	388	428	468	515	560	607	625	640
		8.7							29	44	58	72	94	115	136	162	188	214	243	270	298	333	367	401	442	480	520	535	549
Ammonium Sulfate	23	3.7				59	111	162	214	287	360	434	553	671	790	917	1046	1172	1329	1486	1643	1829	2013	2198	2222	2243	2266	2293	2306
		5				44	83	121	161	215	270	325	415	503	592	688	784	880	997	1114	1232	1371	1510	1648	1666	1682	1700	1719	1730
		6.2				36	66	97	128	172	216	260	332	402	474	550	627	703	798	891	986	1097	1208	1319	1333	1345	1361	1376	1384
		7.5				29	55	81	107	144	180	217	277	335	395	459	523	586	665	743	822	915	1006	1099	1111	1121	1133	1146	1153
		8.7				25	47	70	92	123	154	186	237	287	338	393	448	502	570	637	704	783	863	942	952	961	972	982	989
Magnesium Potassium Sulfate	36	3.7				25	50	77	102	145	189	232	291	348	407	464	519	576	657	739	819	923	1028	1131	1184	1237	1289	1326	1338
		5				19	37	57	77	108	142	173	218	261	304	348	389	432	492	554	615	691	771	848	888	927	967	995	1004
		6.2				15	30	46	61	87	113	138	175	209	244	278	311	345	394	443	492	553	617	679	710	742	774	796	803
		7.5				12	25	38	51	72	95	116	145	174	203	232	260	288	328	369	410	461	514	566	592	618	645	663	669
		8.7				11	21	33	44	62	81	99	125	149	174	199	222	246	281	317	351	395	440	484	508	530	552	568	574

PTO 540 rpm	Spread Table in Lbs./Acre																														
Type of fertilizer	Spread width ft.	Work speed m.p.h.	LEVERPOSITION																												
			1R	1S	1T	2R	2S	2T	3R	3S	3T	4R	4S	4T	5R	5S	5T	6R	6S	6T	7R	7S	7T	8R	8S	8T	9R	9S	9T		
Potassium Chloride Granular	33	3.7				23	55	89	121	171	223	273	339	407	473	559	646	732	832	931	1031	1105	1176	1249	1308	1369	1428	1481	1499		
		5				17	41	67	90	128	167	204	254	305	354	418	484	549	624	699	773	828	881	937	981	1026	1071	1111	1124		
		6.2				14	33	54	72	103	134	163	203	244	284	335	387	439	499	557	618	663	706	749	785	821	857	889	899		
		7.5				12	28	45	61	86	112	137	170	203	236	279	323	366	416	466	516	552	588	625	654	684	714	741	749		
		8.7				10	24	38	52	73	95	116	145	174	203	239	277	313	356	399	442	474	504	535	560	586	612	634	642		
Urea	33	3.7				34	57	80	103	152	198	248	300	353	407	473	541	607	685	766	844	919	996	1071	1101	1130	1160	1178	1191		
		5				25	43	60	78	113	148	184	225	265	304	354	405	455	514	574	633	689	747	803	825	847	870	883	893		
		6.2				21	34	48	62	91	119	147	178	212	244	284	325	364	411	459	506	551	598	642	660	677	696	707	715		
		7.5				17	29	40	52	76	99	123	150	175	203	236	270	303	343	383	422	459	498	535	550	565	580	589	595		
		8.7				14	24	35	45	65	85	105	128	152	174	203	232	260	294	328	361	393	426	459	472	484	497	505	510		
Calcium Cyanamide	30	3.7				61	111	159	209	282	353	426	532	637	742	862	980	1099	1201	1304	1406	1472	1540	1606	1636	1665	1695	1717	1731		
		5				46	83	119	156	211	265	319	399	477	557	646	733	824	900	978	1055	1104	1155	1204	1227	1248	1271	1288	1298		
		6.2				37	66	95	125	170	212	255	319	382	445	517	588	659	721	782	844	883	924	964	981	999	1017	1030	1039		
		7.5				30	55	79	104	141	177	213	266	319	371	431	490	550	600	652	703	736	770	803	818	832	848	858	865		
		8.7				26	47	68	89	120	152	182	228	272	319	369	420	471	515	559	602	631	660	688	701	714	726	736	741		
Granulated Thomas	46	3.7				29	57	84	112	162	212	262	323	385	446	534	621	708	787	865	944	1055	1163	1274	1340	1406	1472	1510	1529		
		5				21	43	62	84	121	159	196	242	289	335	400	466	532	590	649	708	790	873	956	1006	1055	1104	1132	1146		
		6.2				17	34	50	68	97	128	157	194	231	268	320	373	425	472	519	566	633	698	765	804	844	882	906	917		
		7.5				14	29	42	56	81	106	131	161	193	223	267	310	354	393	433	472	527	582	640	670	703	736	755	765		
		8.7				12	24	36	48	70	91	112	138	165	191	228	266	303	337	371	404	452	499	546	575	602	631	647	656		
Powdered Thomas	20	3.7				45	109	173	237	480	721	964	1363	1763	2163	2405	2646	2889	3199	3510	3820	4175	4532	4887	4977	5023					
		5				34	82	129	178	360	541	722	1022	1322	1621	1804	1984	2166	2399	2632	2865	3132	3399	3665	3732	3767					
		6.2				27	65	103	143	288	433	577	818	1058	1297	1444	1588	1733	1920	2106	2292	2505	2719	2933	2986	3014					
		7.5				22	54	87	119	240	360	482	682	881	1081	1203	1323	1444	1600	1755	1910	2088	2266	2444	2488	2512					
		8.7				19	46	74	102	206	309	412	584	756	926	1030	1134	1237	1371	1504	1637	1790	1942	2095	2133	2153					

PTO 540 rpm	Spread Table in Lbs./Acre																													
Type of seed	Spread width ft.	Work speed m.p.h.	LEVERPOSITION																											
			1R	1S	1T	2R	2S	2T	3R	3S	3T	4R	4S	4T	5R	5S	5T	6R	6S	6T	7R	7S	7T	8R	8S	8T	9R	9S	9T
Clover	26	3.7	7	23	39	55	89	125	159	218	275	334	393	451															
		5	5	17	29	41	67	94	119	163	206	250	294	338															
		6.2	4	14	23	33	54	75	95	130	165	200	236	271															
		7.5	4	12	20	28	45	62	79	109	137	167	196	226															
		8.7	3	10	17	23	38	54	68	94	118	143	168	194															
Grass	26	3.7	7	20	32	46	75	103	132	180	230	278	328	377															
		5	5	14	25	35	56	78	99	135	172	209	246	282															
		6.2	4	12	21	28	45	62	79	108	138	167	197	226															
		7.5	4	10	17	23	37	52	66	90	115	139	164	188															
		8.7	3	8	14	20	32	45	56	78	98	120	141	161															
Lucern	26	3.7	9	23	37	52	84	114	146	207	266	327	400	469															
		5	7	17	28	38	62	86	110	155	199	244	298	352															
		6.2	5	14	22	31	50	69	87	124	160	196	238	282															
		7.5	4	12	19	26	42	57	73	103	133	163	199	235															
		8.7	4	10	16	22	36	49	62	88	114	140	170	201															
Wheat	39	3.7				14	41	70	96	139	180	223	282	343	401	471	541	610	692	773									
		5				11	30	52	72	104	135	167	211	257	301	353	405	458	519	579									
		6.2				9	24	42	58	84	108	134	170	205	241	283	325	366	416	464									
		7.5				7	21	35	48	70	90	112	141	171	201	236	270	305	346	386									
		8.7				6	18	29	41	60	77	95	120	146	172	202	232	261	296	331									
Barley	39	3.7				11	27	43	59	84	111	136	175	214	253	309	364	419	478	535									
		5				8	20	32	44	62	83	102	131	161	190	231	273	314	359	401									
		6.2				6	16	26	36	50	66	81	105	128	152	185	219	252	286	321									
		7.5				5	13	21	29	42	55	68	87	107	127	154	182	210	239	268									
		8.7				4	12	18	25	36	47	58	75	91	109	132	156	179	204	229									
Oats	39	3.7				11	21	34	45	61	79	95	127	159	191	227	261	296	350	401									
		5				8	16	25	33	46	59	70	95	119	143	170	195	222	262	301									
		6.2				6	12	21	27	37	47	57	76	95	114	136	156	178	210	241									
		7.5				5	11	17	22	30	39	47	63	79	95	113	130	148	175	201									
		8.7				4	9	14	19	26	34	40	54	68	82	96	112	128	150	172									

Service

After each use:

1. Be sure to thoroughly wash the machine without using excessive pressure, especially on the moving parts. It is particularly important to wash the implement after using salt or fertilizer. This will help prevent the caustic chemicals in the salt and fertilizer from destroying the metal of the machine.
2. Carefully dry the machine.
3. Apply a thick layer of grease to all exposed moving parts.
4. Apply a film of biodegradable oil in crevices and corners.
5. Grease the driveline cross and bearing and shielding.
6. Grease the telescoping inner and outer tubes .

IMPORTANT: Periodically check the bronze slide inside the gearbox. This is the heart of the machine, and its condition will determine how the spreader runs. When the flywheel is turned by hand, there should be no jerking movement. The flywheel and the spout should move as one. If there are stops and starts, this may be an indication of wear on the bronze slide, and it should be replaced immediately. Failure to do so can create problems to other parts of the spreader

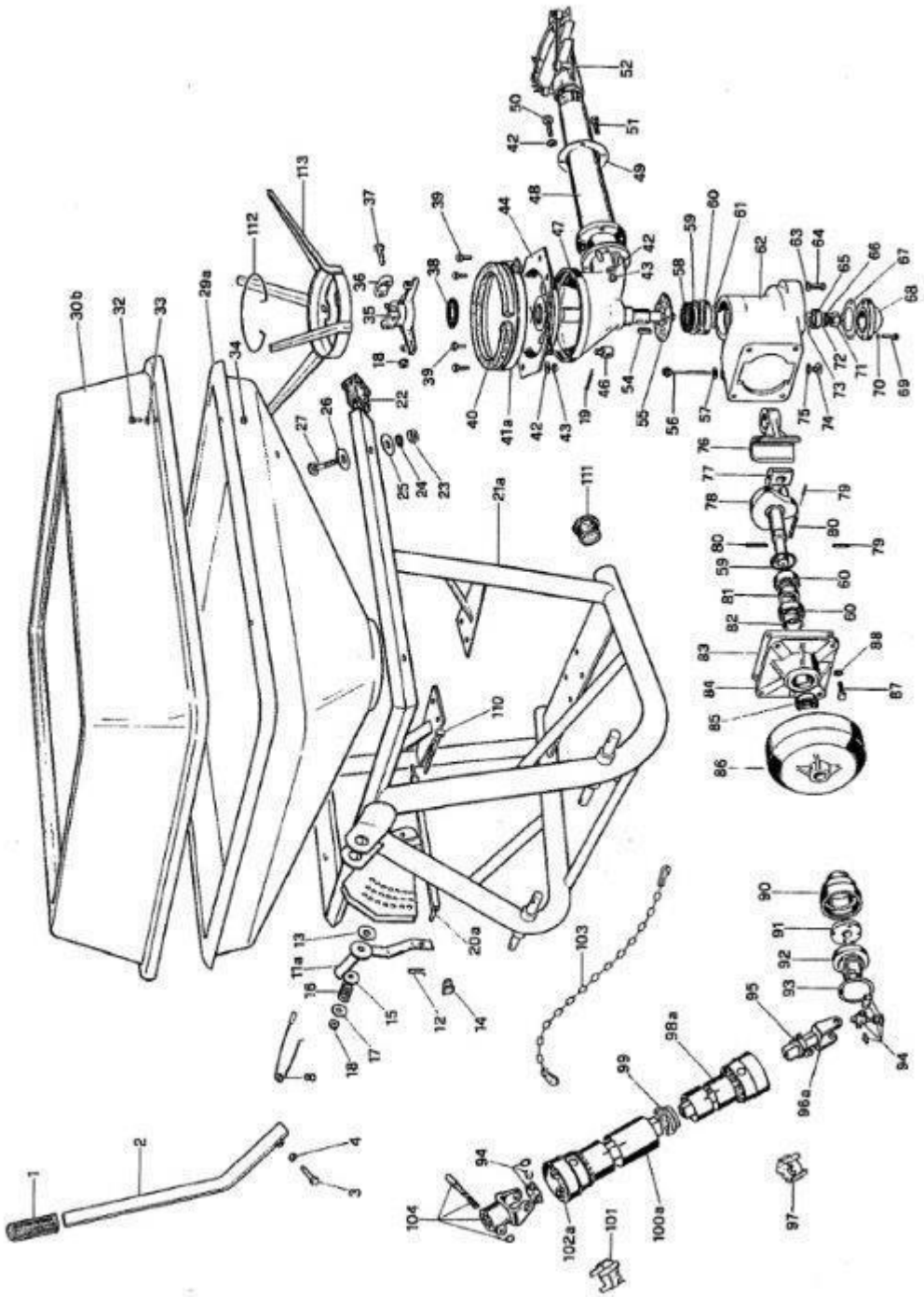
Troubleshooting

PROBLEM	POSSIBLE CAUSE	SOLUTION
Non uniform spread pattern.	Wrong gate opening. Spreader or pendular arm not positioned correctly.	Adjust gate opening. Adjust spreader parallel to the ground with spout 28-32 inches above the ground level.
Product not flowing to pendular arm.	Wet product. Powdered product.	Use dry product only or optional rubber insert. Use optional agitator.
PTO shaft turning but not the pendular arm.	Roll pin missing or sheared. Cam broken or worn.	Replace roll pin. Replace cam.
Narrow spread width.	Incorrect PTO speed. Pendular spout at wrong angle or wrong height.	Increase PTO speed to 540 PTO rpm. Adjust spreader parallel to the ground with spout 28-32 inches above the ground level.

Parts Breakdown

Tar River Equipment

SQFT-600 SQFT-800 SQFT-1000



Note: Gearbox complete Part # RP62-30-02

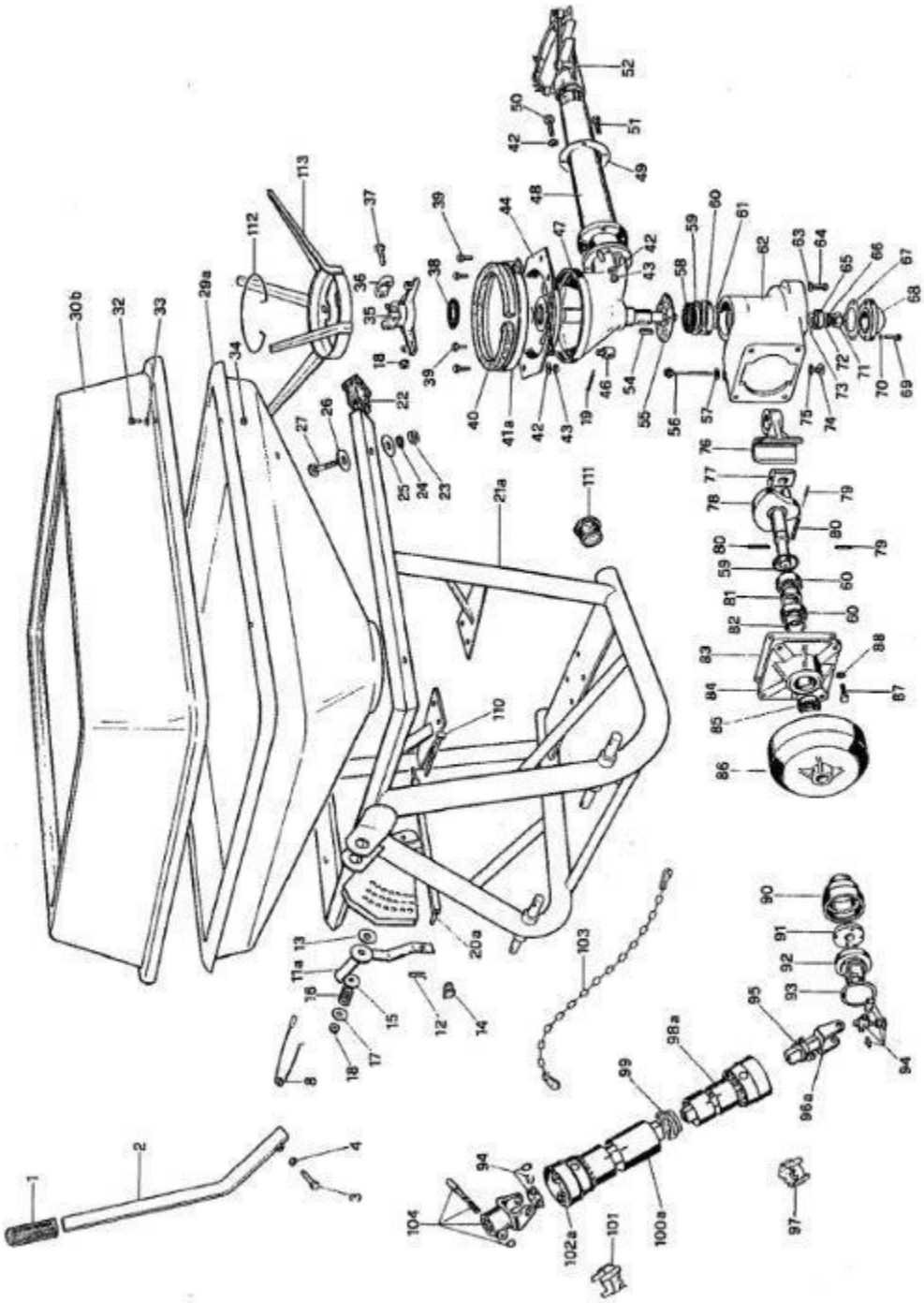
Tar River Equipment

SQFT-600 SQFT-800 SQFT-1000

POS.	Part #	Description	Qty
1	RP58-60-77	Handle	1
2	RP37-30-15	Lever	1
3	RP22-51-25	Screw	1
4	RP21-11-08	Nut	3
5	RP22-51-33	Screw	2
6	RP35-10-35	Spacer	2
7	RP20-23-08	Washer	2
8	RP61-17-05	Spring	1
9	RP22-15-84	Screw	1
10	RP21-30-06	Nut	1
11	RP37-32-07	Support- Model 600	1
11/A	RP37-32-05	Support- Model 404	-
12	RP25-00-60	Cotter Pin	1
13	RP58-38-22	Washer	1
14	RP58-30-53	Plug	1
15	RP20-19-16	Washer	1
16	RP61-01-43	Spring	1
17	RP20-10-13	Washer	1
18	RP21-30-12	Nut	3
19	RP25-00-60	Cotter Pin	1
20	RP37-34-07	Tie Rod 600	1
20/A	RP37-34-05	Tie Rod 404	-
21	RP37-02-15	Frame 600	1
21/A	RP37-02-11	Frame 404	-
22	RP58-30-57	Plug	4
23	RP21-10-12	Nut	4
24	RP20-24-12	Washer	4
25	RP20-19-22	Washer	4
26	RP20-11-16	Washer	4
27	RP22-93-37	Bolt	4
28	RP37-73-06	Half Ring	1
29	RP58-04-06	Hopper 600	1
29/A	RP58-04-29	Hopper 404	-
30	RP58-14-14	Extension- M400 x 600	1
30/A	RP58-14-12	Extension- M200 x 600	1
30/B	RP58-14-04	Extension- M100 x 404	-
32	RP22-51-29	Bolt	12
33	RP20-11-08	Washer	12
34	RP21-30-08	Nut	12
35	RP41-50-05	Agitator	1
36	RP41-52-05	Bracket	1

Tar River Equipment

SQFT-600 SQFT-800 SQFT-1000



Note: Gearbox complete Part # RP62-30-02

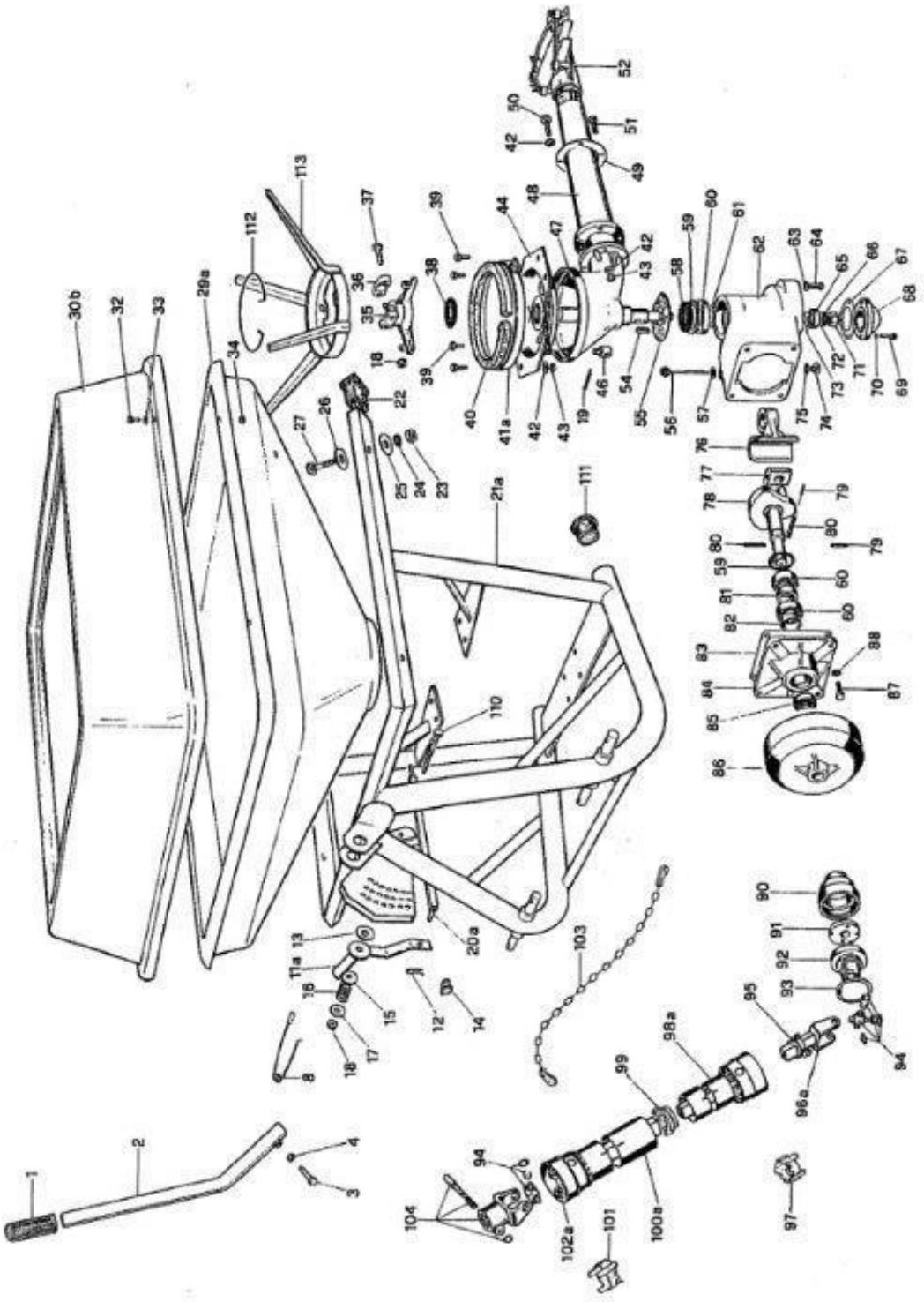
Tar River Equipment

SQFT-600 SQFT-800 SQFT-1000

POS.	Part #	Description	Qty
37	RP22-16-78	Screw	2
38	RP58-38-71	Washer	1
39	RP22-51-52	Screw	4
40	RP19-07-58	Gasket	1
41	RP39-40-05	Ring	1
42	RP20-23-10	Washer	4
43	RP21-11-10	Nut	7
44	RP62-70-25	Distr. Unit	1
44/A	RP62-70-30	Distr. Unit of stainless steal	1
46	RP35-40-27	Pawl	1
47	RP51-05-05	Tank	1
48	RP58-20-05	Tube	1
49	RP36-84-15	Ring	1
50	RP22-51-56	Screw	1
51	RP22-51-59	Screw	3
52	RP58-22-06	Deflector	1
52/A	RP58-22-25	Closed Deflector	1
54	RP25-81-03	Key	1
55	RP58-38-90	Washer	1
56+57	RP58-33-64	Plug	1
58	RP27-55-59	Ring	1
59	RP25-61-56	Ring	2
60	RP60-00-43	Bearing	3
61	RP35-10-07	Spacer	1
62	RP41-10-05	Box	1
63	RP20-21-12	Washer	4
64	RP22-46-83	Screw	4
65	RP60-00-31	Bearing	1
66	RP20-00-21	Washer	1
67	RP57-05-05	Gasket	1
68	RP41-13-30	Small Lid	1
69	RP22-80-62	Screw	3
70	RP20-23-06	Washer	3
71	RP21-31-21	Nut	1
72	RP20-30-21	Washer	1
73	RP35-10-05	Spacer	1
74+75	RP26-16-77	Plug	1
76	RP41-20-05	Fork	1
77	RP51-45-05	Slide	1
78	RP31-05-05	Shaft	1
79	RP25-11-92	Plug	2

Tar River Equipment

SQFT-600 SQFT-800 SQFT-1000



Note: Gearbox complete Part # RP62-30-02

POS.	Part #	Description	Qty
80	RP25-12-65	Plug	2
81	RP35-10-06	Spacer	1
82	RP25-60-35	Ring	1
83	RP57-05-10	Gasket	1
84	RP41-13-05	Lid	1
85	RP27-52-40	Ring	1
86	RP41-30-05	Flywheel	1
87	RP22-46-54	Screw	4
88	RP20-23-10	Washer	4
90	RP41-60-05	Joint	1
91	RP58-80-05	Spring Drive	1
92	RP35-20-05	Fork	1
93	RP25-61-59	Ring	1
94	RP63-80-02	Cross	2
95	RP63-80-20	Ring Nut	1
96	RP63-80-28	Fork	1
96/A	RP63-80-24	Fork	-
97	RP63-80-81	Ring Nut	1
98	RP63-80-65	Protection	1
98/A	RP63-80-69	Protection	-
99	RP63-80-19	Ring Nut	1
100	RP63-80-52	Protection	1
100/A	RP63-80-56	Protection	-
101	RP63-80-80	Ring Nut	1
102	RP63-80-12	Fork	1
102/A	RP63-80-08	Fork	-
103	RP63-80-84	Chain	1
104	RP63-80-01	Fork	1
110	RP22-11-79	Screw	-
111	RP58-30-37	Plug	-
112	RP61-17-15	Spring	1
113	RP39-38-15	Agitator for powder	1
210	RP90-80-18	PTO Shaft cm. 80 "CP" For SQTF 600-800-1000	1
-	RP62-30-02	Gearbox Complete	1

LIMITED WARRANTY

Tar River Equipment warrants to the original purchaser of any new piece of machinery from Tar River Equipment, purchased from an authorized Tar River Equipment dealer, that the equipment be free from defects in material and workmanship for a period of one (1) year for non-commercial, state, and municipalities' use, ninety (90) days for commercial use from date of retail sale. Warranty for rental purposes is thirty (30) days. The obligation of Tar River Equipment to the purchaser under this warranty is limited to the repair or replacement of defective parts.

This warranty is not provided for commercial or rental uses. The extended warranty provides for the replacement of parts only. Not covered are oil seals or any damages to the gearbox due to lack of lubrications.

Replacement or repair parts installed in the equipment covered by this limited warranty are covered for ninety (90) days from the date of purchase of such part or to the expiration of the applicable new equipment warranty period, whichever occurs later. Warranted parts shall be provided at no cost to the user at an authorized Tar River Equipment dealer during regular working hours. Tar River Equipment reserves the right to inspect any equipment or parts which are claimed to have been defective in material or workmanship.

This limited warranty does not apply to and excludes wear items such as shear pins, tires, tubes knives, blades, or other wear items. Oil or grease is not covered by this warranty.

All obligations of Tar River Equipment under this limited warranty shall be terminated if:

Proper service is not performed on the machine
The machine is modified or altered in any way.
The machine is being used or has been used for purposes other than those for which the machine was intended.

DISCLAIMER OF IMPLIED WARRANTIES & CONSEQUENTIAL DAMAGES

Tar River Equipment obligation under this limited warranty, to the ex- tent allowed by law, is in lieu of all warranties, implied or expressed, including implied warranties of merchantability and fitness for a particular purpose and any liability for incidental and consequential damages with respect to the sale or use of the items warranted. Such incidental and consequential damages shall include but not be limited to: transportation charges other than normal freight charges; cost of installation other than cost approved by Tar River Equipment; duty; taxes; charges for normal service or adjustment; loss