SQTF Pendular Spreader

SQTF-600 & SQFT-1000

Operator's Manual

Rev. 01/22

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TO THE DEALER:

Assembly and proper installation of this product is the responsibility of the Tar River dealer. Read manual instructions and safety rules. Make sure all items on the Dealer's Pre-Delivery and Delivery Check Lists in the Owner's/Operator's Manual are completed before releasing equipment to the owner.

TO THE OWNER:

Read this manual before operating your Tar River equipment. The information presented will prepare you to do a better and safer job. Keep this manual handy for ready reference. Require all operators to read this manual carefully and become acquainted with all the adjustment and operating procedures before attempting to operate. Replacement manuals can be obtained from your selling dealer. The equipment you have purchased has been carefully engineered and manufactured to provide dependable and satisfactory use. Like all mechanical products, it will require cleaning and upkeep. Lubricate the unit as specified. Observe all safety information in this manual and safety decals on the equipment. For service, your authorized Tar River dealer has trained mechanics, genuine Tar River service parts, and the necessary tools and equipment to handle all your needs. Use only genuine Tar River service parts. Substitute parts will void the warranty and may not meet standards required for safe and satisfactory operation.

Record your implement model and serial number in the space provide below. Your dealer will need this information to give you prompt, efficient service.

Model Number: _____

Serial Number: _____

Date Purchased: _____

Table of Contents

Introduction

Thank you for purchasing your Tar River Fertilizer Spreader. The SQTF series spreader is designed to provide excellent precision and is versatile enough to spread materials with different weights, textures and sizes as well as high-moisture materials (up to 30% moisture content) such as powered fertilizer.

Technical Specifications

- Powder coated frame and Poly hopper
- 3 Spread patterns
- Easily change the discharge rate

	SQTF-600	SQTF-1000
Weight	322 lbs.	344 lbs.
Capacity	1402 lbs.	2645 lbs.
Spread swath - granulated	39” - 46”’	39” - 46”
Spread swath - powdered	16” - 19”	16” - 19”
Hopper	Poly	Poly
Unit dimensions	38”x59”x59”	47”x59”x59”

Important Safety Information

Safety

It is important that you read the entire manual and to become familiar with this product before you begin using it. This product is designed for certain applications only. The manufacturer cannot be responsible for issues arising from modification. We strongly recommend this product not be modified and /or used for any application other than that for which it is designed. If you have any questions relative to a particular application, DO NOT use the product until you have first contacted us to determine if it can or should be performed on the product.

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

Safety Signal Words

TAKE NOTE! This safety alert symbol found though out this manual is used to call you attention to instructions involving you 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!

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 serious 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 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 that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

Important Safety Information

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 many 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 many 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 DANGER, WARNING, CAUTION or instruction safety decal that is not readable or is missing. Location of such decals are indicated in this manual. 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 of death, use a tractor equipped with a Roll Over Protection System (ROPS). Do not paint over, remove or deface any 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 safety sign
- Safety signs are available from your Distributor or Dealer Parts Department or the factory.

Important Safety Information

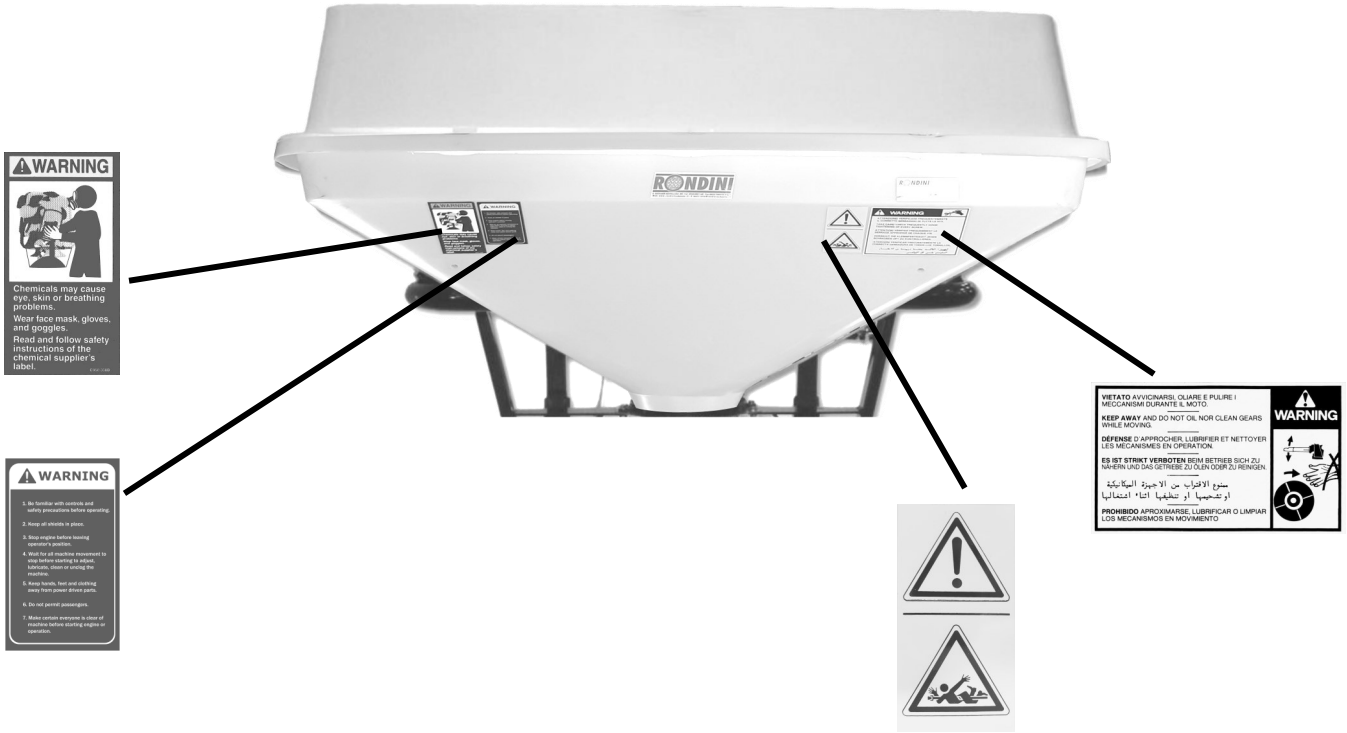
How to install Safety Signs:

- 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.

Important Safety Information

Safety Decals

If "Safety" Decals are damaged or unreadable, replace immediately.



Important Safety Information

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 with 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 of children and animals.
- Don’t hurry the learning process or take the unit for granted. Ease into it and become familiar with your new equipment.
- 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 Protection System (ROPS) and fasten your seat belt prior to starting 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.

Important Safety Information

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 in compliance with all local and state regulations regarding transporting equipment on public roads and highways. Lights and slow moving signs must be clean and visible by overtaking or oncoming traffic when feeder in 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 quiet cabs, 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 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 overturns may result.
- Operate up and down (not across) intermediate slopes. Avoid sudden starts and stops.

Important Safety Information

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 at 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 and marking requirements.
- When driving the tractor and equipment on the road or highway under 40 kph (20 mph) at night or during the day, use the 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 at lower than the gross weight at which you are operating.
- Watch for obstructions overhead and to the side while transporting.
- Always operate 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 route when transporting across fields. Avoid the edges of ditches or gullies and steep hillsides.
- Be extra careful when working in inclines.

Important Safety Information

Highway and Transport Operations

- Maneuver the tractor or towing vehicle at safe speeds.
- Avoid overhead wires or other obstacles. Contact with overhead lines could cause serious 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 and attachments unattended.
- As a precaution, always recheck the hardware on equipment following every 100 hours of operation. Correct all problems. Follow the maintenance safety procedures.

Operating Instructions

Operation

It is important that each operator of the Tar River Fertilizer Spreader read and understand the operational procedures and all related safety precautions outlined in this section. The following checklist is provided for the operator. It is important for both the personal safety and maintaining good mechanical condition that this check list is followed.

Prior to operating the Fertilizer Spreader:

1. Make sure that the spreader is properly lubricated.
2. Check for damaged or missing parts.
3. Check that all hardware is tightened according to specifications (See Torque Chart page 25).
4. Remove any foreign objects from hopper.
5. Never allow anyone inside the hopper. Serious injury or death could occur.
6. Do not place hands or feet inside hopper with tractor running. Moving parts inside the hopper can cause serious injury or death.
7. Make sure all guards are in place before operating spreader.
8. Clear the area of obstacles that can damage the spreader or cause uneven distribution of material.
9. Clear the area of bystanders, especially small children and animals.

Caution: Never load hopper with material without first securing the spreader to the tractor. Adding material to the hopper without first attaching it to the tractor can cause the spreader to flip over causing serious injury or death.

Warning: Take necessary precautions when handling any chemical. Chemicals can cause eye/skin irritation and or respiratory complications. Always wear PPE (Personal Protection Equipment) gloves, eye protection, face mask, respirator when filling the hopper. Refer to the chemical manufacturer's label for all safety recommendations.

Warning: If a tractor with a cab is used it must be equipped with proper filtration system or operator must wear a respirator cable of filtering toxic particles to prevent inhalation. Chemical particals can be harmful and possibly deadly.

Operating Instructions

Attaching to the tractor

1. Back the tractor to the spreader carefully. Turn off the tractor and set the park brake. Be sure there is nothing between the tractor and the spreader including people or animals. There is a possibility of serious injury or death.
2. Slide the tractor lower arms over the welded pins on the spreader. Secure with lynch pins. Next, connect the top link to the spreader and secure with the top hitch pin.
3. The spreader disc must be horizontal to spread material uniformly. Adjust the tilt by twisting the Top Link Arm in or out.
4. Adjust the height of the spreader to approximately 28”-32” from the bottom of the spreader disc to ground level, (Fig. 1).
5. Install the PTO on the spreader and then the tractor. Be sure to secure both ends with proper pins or bolts. Serious injury or death can occur from improperly secured PTO shaft. It may be necessary to shorten the PTO. See instructions on “Shortening a PTO Driveline”.

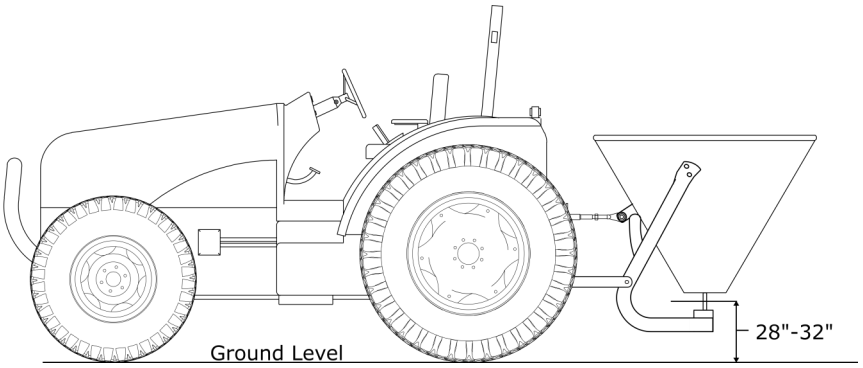


Fig. 1

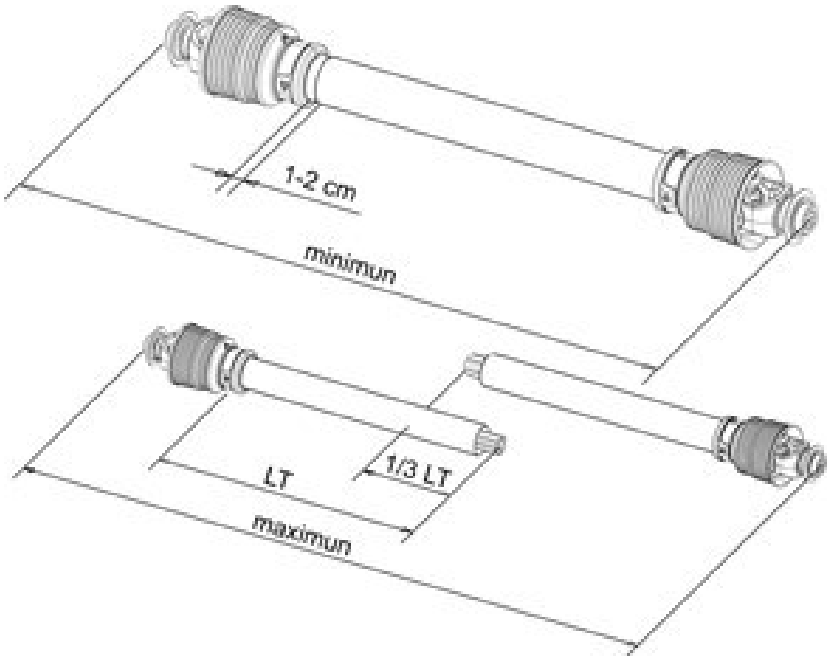
Attaching PTO Shaft

Attaching the PTO shaft:
Before installing the PTO shaft make sure that the RPM rating and the direction of rotation match those of the tractor. Carefully read the PTO shaft and tractor instructions. Before operation, make sure that the guards are installed on the power take off of the tractor and PTO shaft. Make sure that they cover the PTO shaft throughout its length. Note: The PTO shaft may be too long and require shortening. See **"Shortening a PTO driveline"** below.

Press the locking pin on the PTO yoke and slide yoke on to the PTO of the tractor until the pin seats. Pull on PTO shaft to make certain it is locked in place. Repeat the procedure for the machine end. Attach the PTO cover's safety chains to a stationary part of the tractor. Leave some slack in the chain to accommodate movement.

Shortening a PTO driveline:

1. With the machine attached to the tractor's 3-point hitch, and the PTO shaft not installed, separate the PTO shaft. Attach the machine end to the machine and the other end to the tractor PTO input shaft.
2. Raise the machine 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 1/2" from hitting the end of the telescopic profiles.
4. Shorten the inner and outer 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.



When fully extended, the tubes must overlap by at least 1/3 of the length of the pipes (LT). When retracted, the min. acceptable clearance is 1-2 cm (3/8"-3/4")

Scan the QR code below for more detailed information on PTO installation.

Operating Instructions

Spreading Operation

Consider the following factors when determining material quantity distributed per acre:

1. Operating speed is determined by ground conditions. Faster speeds can be obtained on dry, even, cleared land. Slower speeds are required for uneven ground. Making a practice run will help determine the correct setting for spreading as conditions vary.
2. Type or material distributed, density, moisture content, etc.
3. Width of spreading area.
4. Spreader lever position.

Spreading Adjustment

The Graded Scale is located on the side of the spreader near the handle, (See Fig. 2). This allows for setting a predetermined opening of the Distribution Ports to adjust the amount of material spread. The adjustment settings consist of three lines of holes identified with the letters, “T, S, R”. Each line contains 9 holes allowing for 27 positions of the Distribution Ports.

Setting the Spreading Adjustment is easily accomplished by moving the Adjustment Spring Pin to the desired position on the Graded Scale. Each type of material spread requires a unique setting. Refer to the “Spreading Charts” on the following pages of this manual for the correct position. These positions are a starting point and may require further adjustment. Make a test run to determine the actual spreading width.

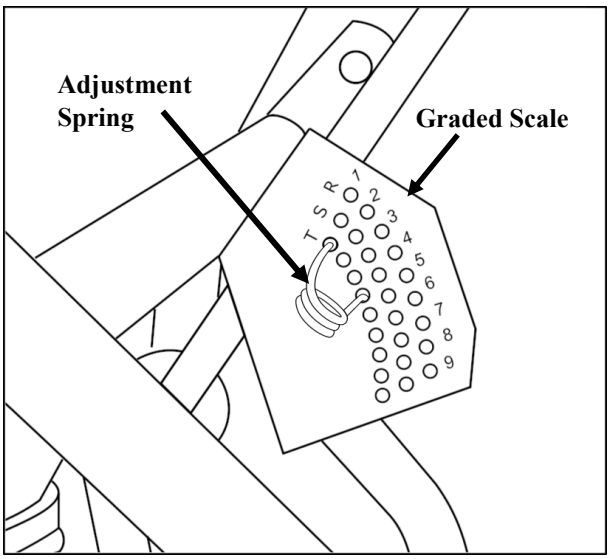
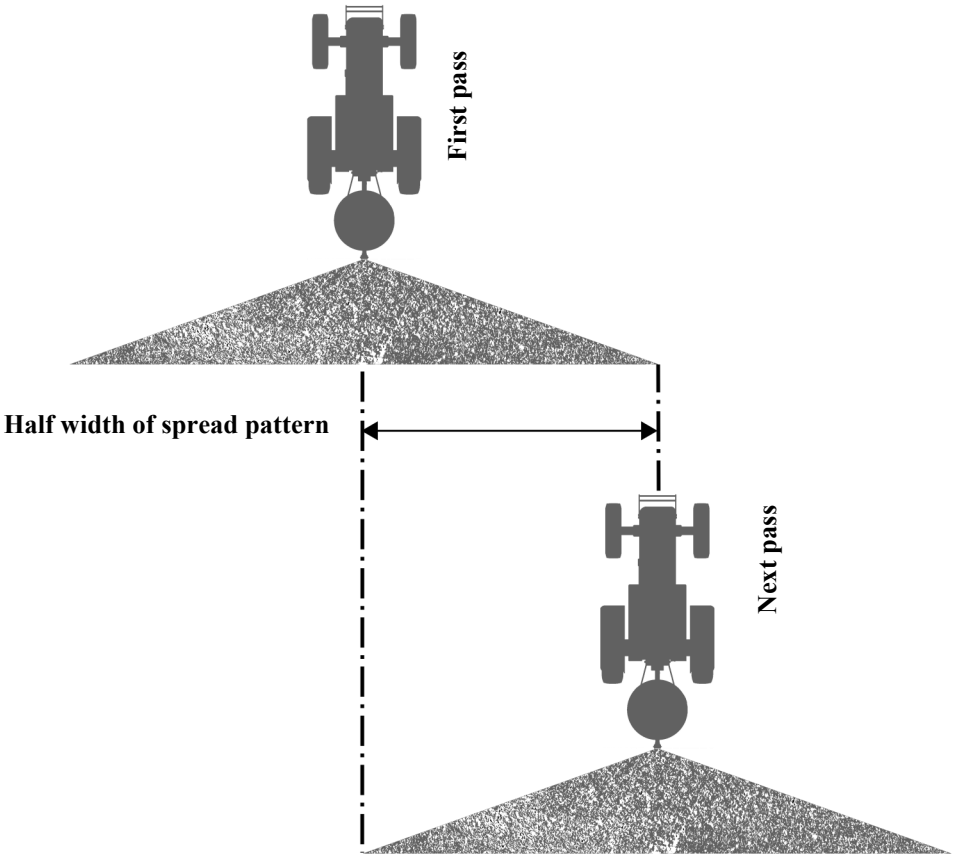


Fig. 2

Operating Instructions

Spread Width

The greatest amount of material spread will always be directly behind the spreader and decreases the further away from the spreader. The machine operator must maintain a parallel pattern during spreading to ensure consistent coverage of material spread, maintaining an overlap of no less than half the ***"Full Width of Spread Pattern",*** (See Fig. 3.) from the previous pass. This will ensure adequate coverage of material. Repeat the process for each pass until the area is completely covered.



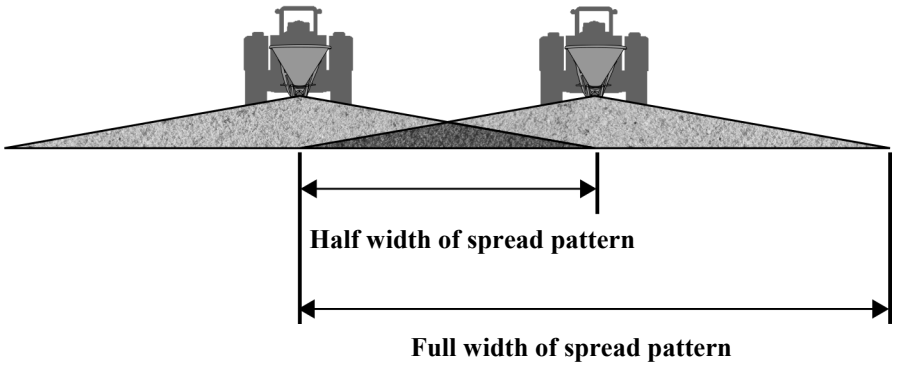


Fig. 3

Operating Instructions

Spread Pattern

The operator should establish a pattern of spreading by first setting the tractor at half the “Full Spread Distance” from the edge of the field. Begin by spreading around the perimeter of the field and then in parallel rows after each pass. Each pass should be equal to half the “Full Spread Distance” for proper coverage of material, (See Fig. 4).

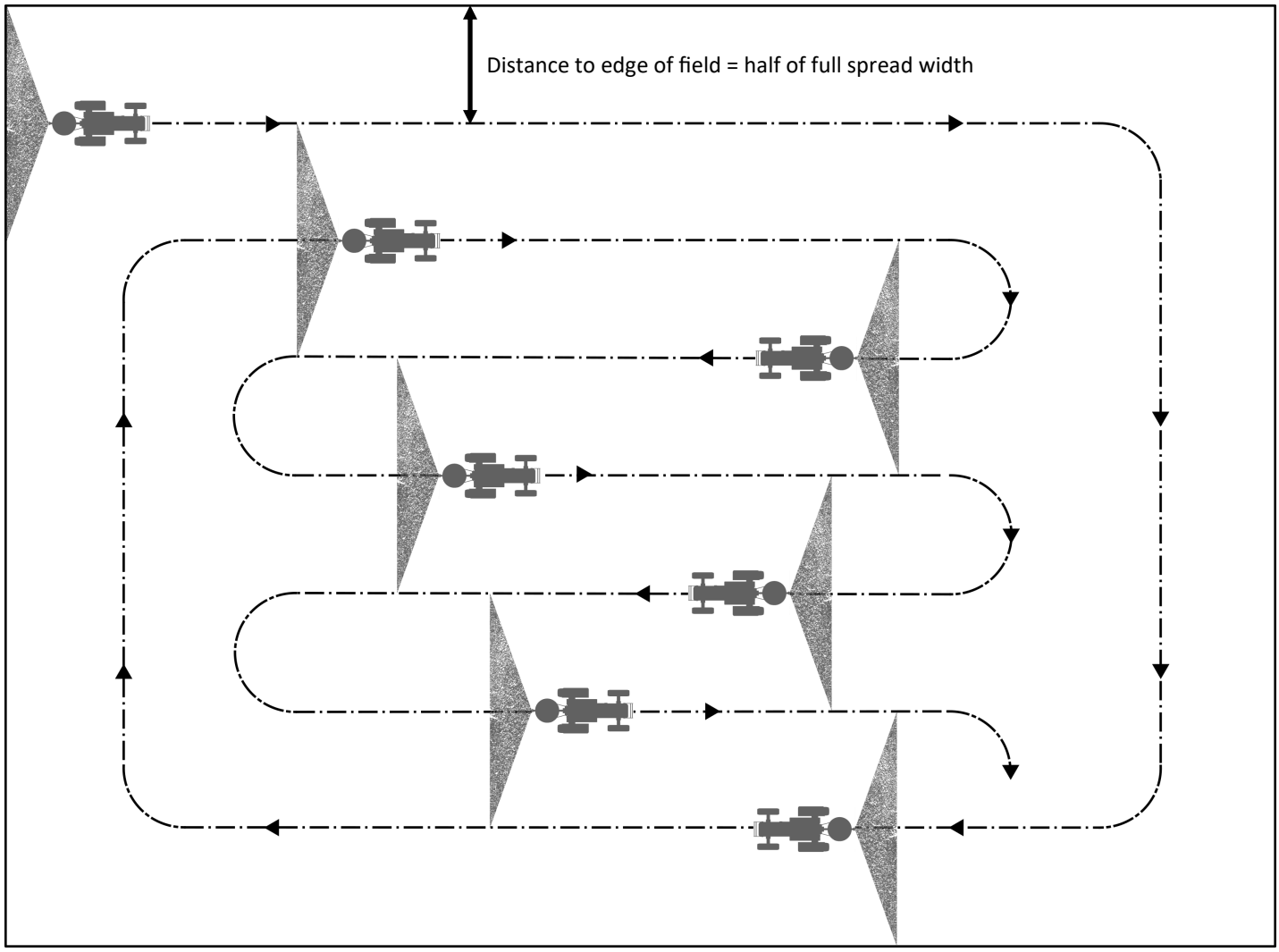
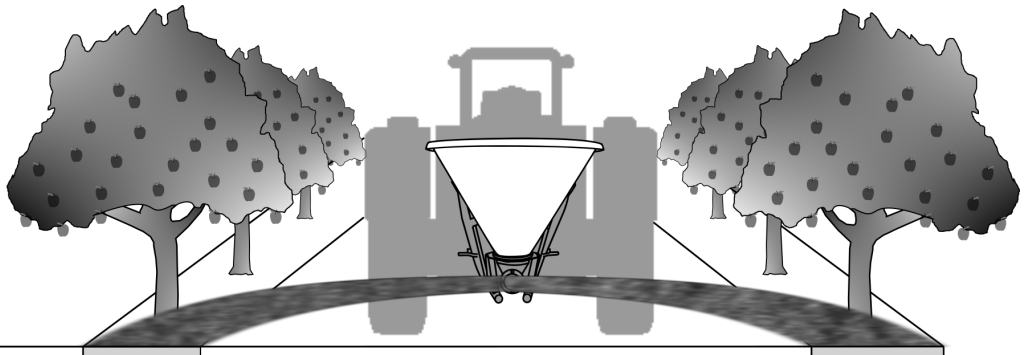


Fig. 4

Operating Instructions

Band Spreading

Band spreading is the technique of spreading material to the sides and not to the center of the spreader. This is accomplished by removing the deflector from the end of the spout and cutting off a portion of the spout if necessary. Determine the "Banding Width" (See Fig. 5) desired and remove a portion of the spout according to the chart below. Note: The chart below gives approximate distances and may vary according to conditions, moisture content of material, speed of tractor, etc. Making a practice run will determine the exact amount of material/distance spread.



Cut Dimensions	Row width in feet	Banding width in feet	Row width in feet
1/4 Length - 4.00"	3'	6'	3'
1/2 Length - 7-3/4"	3'	10'	3'
3/4 Length - 11-1/2"	3'	16'	3'
Full Length - 15-1/2"	3'	23'	3'

Fig. 5

Spreading Charts

Spread Table in Lbs./per Acre

PTO 540 RPM			Lever Position																											
Type of fertilizer	Spread width ft.	Work speed mph	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	1392	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	39	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 Sufate	39	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	39	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

Spreading Charts

Spread Table in Lbs./per Acre

PTO 540 RPM			Lever Position																											
Type of fertilizer	Spread width ft.	Work speed mph	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			

Spreading Charts

PTO 540 RPM	Spread Table in Lbs./per Acre																											
Type of seed	Spread width ft.	Work speed mph	Lever Position																									
			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								

Maintenance

Danger: Never attempt to perform maintenance on the machine without first stopping the towing vehicle's engine, setting the parking brake and removing the key from the ignition. Always wear the proper protection (PPE) when performing service. Refer to the chemical manufacturer for proper safety recommendations.

- Proper maintenance is the responsibility of the owner/operator. Poor maintenance is an invitation to trouble.
- Operate the spreader in an area with adequate ventilation. Never operate the engine of the towing vehicle in a closed building. Exhaust fumes may cause asphyxiation (suffocation) leading to serious injury or death.
- 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. Maintenance area should be clean and dry. Electrical outlets and tools are to be properly grounded.
- Use extreme caution when making adjustments. Securely block equipment before servicing.
- After servicing, be sure all tools, parts and service equipment are removed.
- Use personal protection equipment (PPE) such as eye, hand, hearing and proper mask to filter any chemicals used.
- Check tightness of all hardware periodically, including; bolts, nuts, screws, pins. See page "Torque Specification" Chart (Page 25) for proper torque specifications.
- Inspect tires for damage, wear and tear, and pressure. Add the proper amount of air according to the tire manufacturers specifications. Pressure specifications can be found on the tire.
- Use caution when inflating or servicing tires. Tires can be extremely dangerous if mishandled. Call on trained professions to service the tires if necessary.
- 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 for injury or warranty.

Service

Before operating spreader:

- Grease all exposed moving parts.
- Check air pressure in tires.
- Check all hardware for tightness.
- Replace worn or damaged parts.

Maintenance

After operating spreader:

- Wash the spreader thoroughly. This is extremely important especially after spreading corrosive materials such as fertilizer or salt. These materials are highly corrosive and will eat away at metal parts.
- Dry the machine after washing to remove any remaining water. Moisture will cause rust to form and corrode metal parts.
- Exposed parts should be coated with a thick layer of grease for lubrication and protection.

End of season or prolonged storage:

- Spreader should be washed and dried thoroughly.
- Examine the spreader for any damaged or worn parts. Replace with OEM parts to prevent voiding warranty.
- Check for corrosion on painted parts. It is advisable to remove any loose rust, prime and paint these parts to avoid further corrosion.
- All exposed moving parts should be coated with grease.
- Store the spreader in a clean and dry location. If shelter is not possible, the spreader should be covered from the elements.

Torque Specifications

Torque Specifications for Common Bolt Sizes

Inches		Bolt Head Identification						Metric		Bolt Head Identification					
		Grade 2		Grade 5		Grade 8				Class 5.8		Class 8.8		Class 10.9	
Bolt size (inches)	Thread pitch	N.m	ft-lb	N.m	ft-lb	N.m	ft-lb	Bolt size (metric)	Thread pitch	N.m	ft-lb	N.m	ft-lb	N.m	ft-lb
1/4"	20	7	5	11	8	16	12	M5	0.08	4	3	6	4	9	7
1/4"	28	8	6	13	10	19	14	M6	1	6	4	10	7	15	11
5/16"	18	15	11	24	17	33	25	M8	1.25	16	12	25	18	36	27
5/16"	24	17	13	26	19	37	27	M8	1	17	13	26	19	38	28
3/8"	16	27	20	42	31	59	44	M10	1.5	31	23	48	35	71	52
3/8"	24	31	23	47	35	67	49	M10	1.25	33	24	51	38	75	55
7/16"	14	43	32	67	49	95	70	M10	1	35	26	53	39	78	58
7/16"	20	48	36	75	55	106	78	M12	1.75	54	40	84	62	123	91
1/2"	13	66	48	102	75	144	106	M12	1.5	56	41	87	64	128	94
1/2"	20	75	55	115	85	163	120	M12	1.25	59	44	90	66	133	98
9/16"	12	95	70	147	109	208	154	M14	2	84	62	133	98	195	144
9/16"	18	106	79	164	121	232	171	M14	1.5	94	69	142	105	209	154
5/8"	11	132	97	203	150	287	212	M16	2	131	97	206	152	302	223
5/8"	18	149	110	230	170	325	240	M16	1.5	141	104	218	161	320	236
3/4"	10	233	172	361	266	509	376	M18	2.5	181	133	295	218	421	310
3/4"	16	261	192	403	297	569	420	M18	2	196	145	311	229	443	327
7/8"	9	226	167	582	430	822	606	M18	1.5	203	150	327	241	465	343
7/8"	14	249	184	642	473	906	668	M20	2.5	256	189	415	306	592	437
1"	8	339	250	873	644	1232	909	M20	1.5	288	212	454	335	646	476
1"	12	371	273	955	704	1348	995	M22	2.5	344	254	567	418	807	595
1-1/8"	7	480	354	1077	794	1746	1288	M22	1.5	381	281	613	452	873	644
1-1/8"	12	539	397	1208	891	1958	1445	M24	3	444	327	714	526	1017	750
1-1/4"	7	677	500	1519	1120	2463	1817	M24	2	488	360	769	567	1095	808
1-1/4"	12	750	553	1682	1241	2728	2012	M27	3	656	484	1050	774	1496	1103
1-3/8"	6	888	655	1992	1469	3230	2382	M27	2	719	530	1119	825	1594	1176
1-3/8"	12	1011	746	2268	1673	3677	2712	M30	3.5	906	668	1420	1047	2033	1499
1-1/2"	6	1179	869	2643	1949	4286	3161	M30	2	1000	738	1600	1180	2250	1659
1-1/2"	12	1326	978	2974	2194	4823	3557	M36	4	1534	1131	2482	1830	3535	2607

Notes:

This chart is an approximate estimate of torque values.

Always tighten hardware to these values unless a different torque value or tightening procedure is listed for a specific application.

Fasteners must always be replaced with the same grade as specified in the manual.

Always use the proper tool for tightening hardware: SAE for SAE hardware and Metric for Metric hardware.

Make sure that fastener threads are clean and that you properly start thread engagement.

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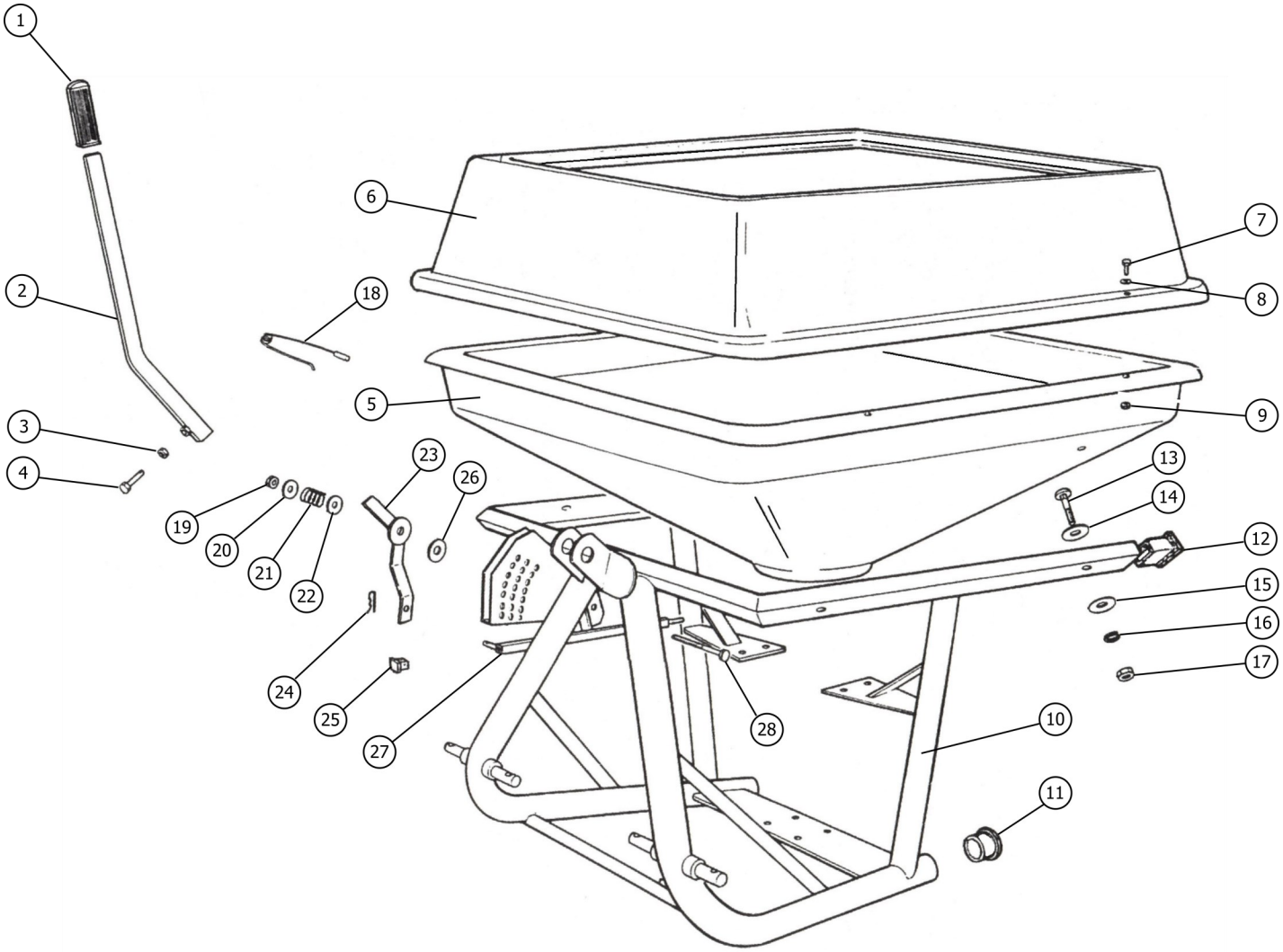
SQTF Pendular Spreader

SQTF-600 & SQFT-1000

Parts Manual

Rev. 01/22

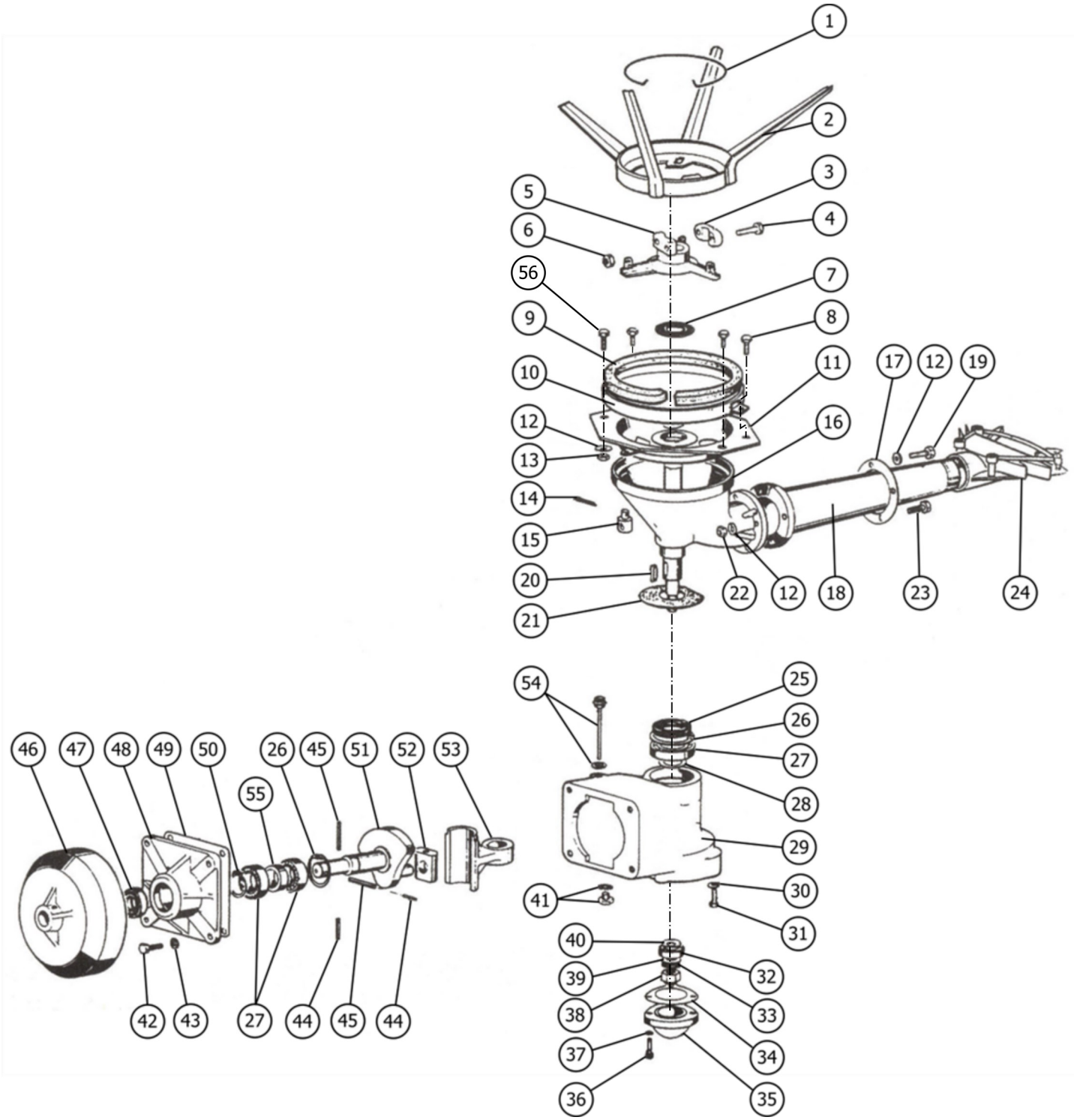
Hopper Assembly SQTF-600, 1000



Hopper Assembly SQTF-600, 1000

Item	Part #	Description	Qty.
1	RP58-60-77	Handle	1
2	RP37-30-15	Lever	1
3	RP21-11-08	Nut	1
4	RP22-51-25	Screw	1
5	RP58-04-29	Hopper 404	1
6	RP58-14-04	Extension M100 x 404	1
7	RP22-11-08	Bolt	12
8	RP20-11-08	Washer	12
9	RP21-30-08	Nut	12
10	RP37-02-11	Frame 404	1
11	RP58-30-37	Plug, lower frame	2
12	RP58-30-57	Plug, upper frame	2
13	RP22-93-37	Bolt	4
14	RP20-11-16	Washer	4
15	RP20-19-22	Washer	4
16	RP20-24-12	Washer	4
17	RP21-10-12	Nut	4
18	RP61-17-05	Spring	1
19	RP21-30-12	Nut	1
20	RP20-10-13	Washer	1
21	RP61-04-43	Spring	1
22	RP20-19-16	Washer	1
23	RP37-32-05	Support 404	1
24	RP25-00-60	Cotter pin	1
25	RP58-30-53	Plug, tie rod	1
26	RP58-38-22	Washer	1
27	RP37-34-05	Tie rod 404	1
28	RP22-11-79	Screw	1

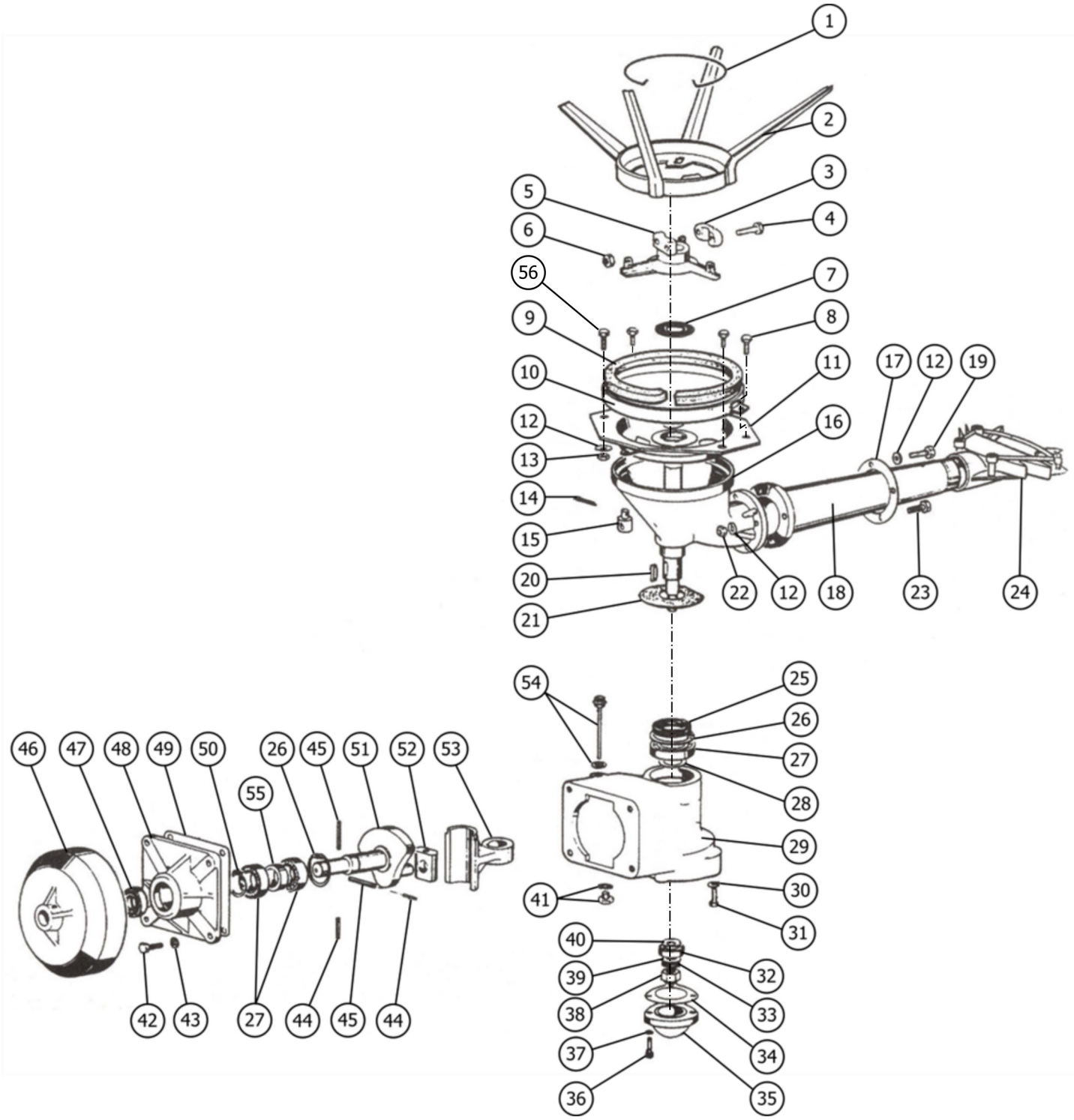
Gearbox Assembly SQTF-600, 1000



Gearbox Assembly SQTF-600, 1000

Item	Part #	Description	Qty.
1	RP61-17-15	Spring	1
2	RP39-38-15	Agitator for powder	1
3	RP41-52-05	Bracket	1
4	RP22-16-78	Screw	2
5	RP41-50-05	Agitator	1
6	RP21-30-12	Nut	2
7	RP58-38-71	Washer	1
8	BM101530	Bolt HH M10-1.5x30	2
9	RP19-07-58	Gasket	1
10	RP39-40-05	Ring	1
11	RP62-70-25	Distribution unit	1
12	RP20-23-10	Washer	7
13	RP21-11-10	Nut	4
14	RP25-00-60	Cotter pin	1
15	RP35-40-27	Pawl	1
16	RP51-05-05	Tank	1
17	RP-36-84-15	Ring	1
18	RP58-20-05	Tube	1
19	RP21-51-56	Screw	1
20	RP25-81-03	Key	1
21	RP58-38-90	Washer	1
22	RP21-11-10	Nut	4
23	RP22-51-59	Screw	3
24	RP58-22-06	Deflector	1
25	RP27-55-59	Ring	1
26	RP25-61-56	Ring	2
27	RP60-00-43	Bearing	3
28	RP35-10-07	Spacer	1
29	RP41-10-05	Box	1
30	RP20-21-12	Washer	4
31	RP22-46-83	Screw	4
32	RP60-00-31	Bearing	1
33	RP20-00-21	Washer	1
34	RP57-05-05	Gasket	1
35	RP41-13-30	Small lid	1

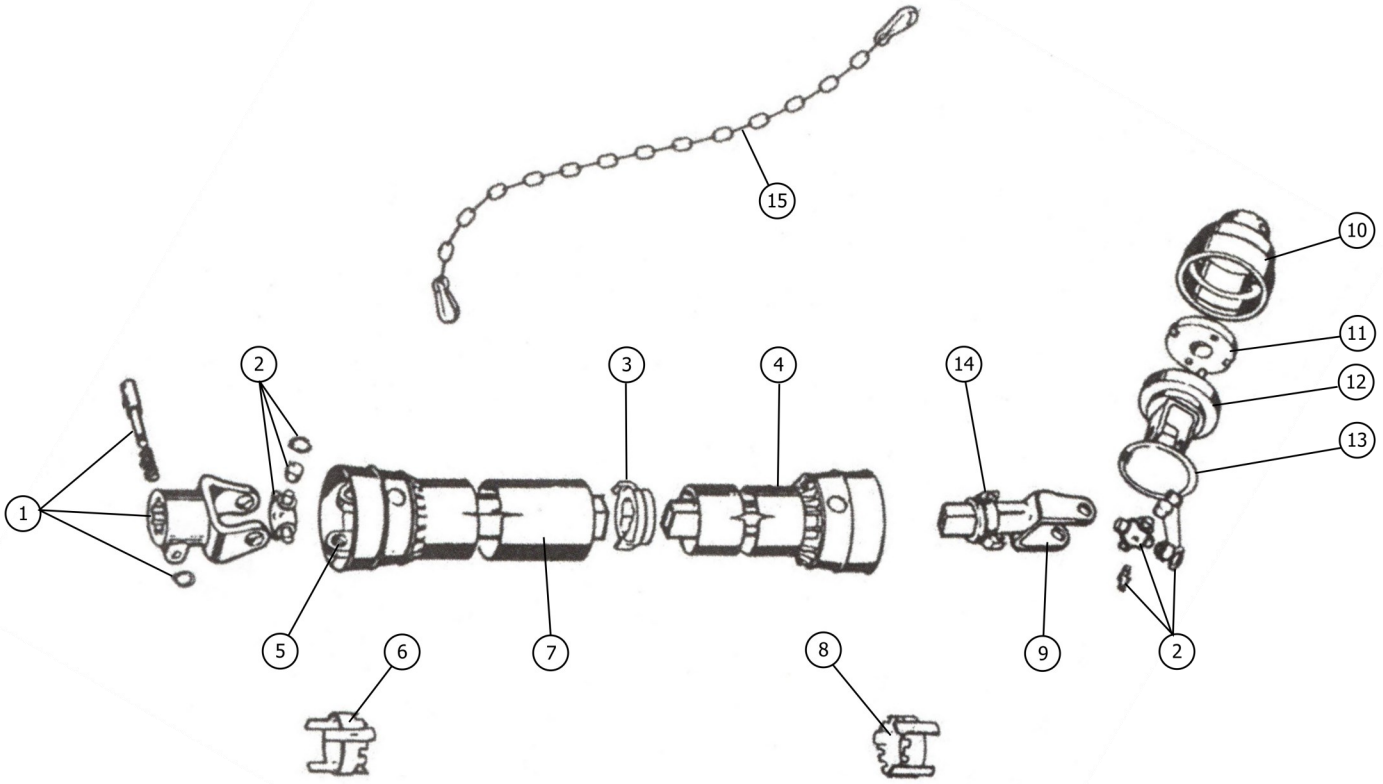
Gearbox Assembly SQTF-600, 1000



Gearbox Assembly SQTF-600, 1000

Item	Part #	Description	Qty.
36	RP22-80-62	Screw	3
37	RP20-23-06	Washer	3
38	RP21-31-21	Nut	1
39	RP20-30-21	Washer	1
40	RP35-10-05	Spacer	1
41	RP26-16-77	Plug with washer	1
42	RP22-46-54	Screw	4
43	RP20-23-10	Washer	4
44	RP25-11-92	Plug	2
45	RP25-12-65	Plug	2
46	RP41-30-05	Flywheel	1
47	RP27-52-40	Ring	1
48	RP41-13-05	Lid	1
49	RP57-05-10	Gasket	1
50	RP25-60-35	Ring	1
51	RP31-05-92	Shaft	1
52	RP51-45-05	Slide	1
53	RP41-20-05	Fork	1
54	RP58-33-64	Plug	1
55	RP35-10-06	Spacer	1
56	BM101525	Bolt HH M10-1.5x25	2

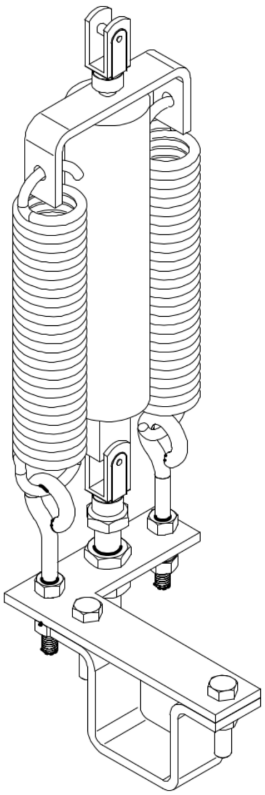
PTO Shaft SQTF-600, 1000

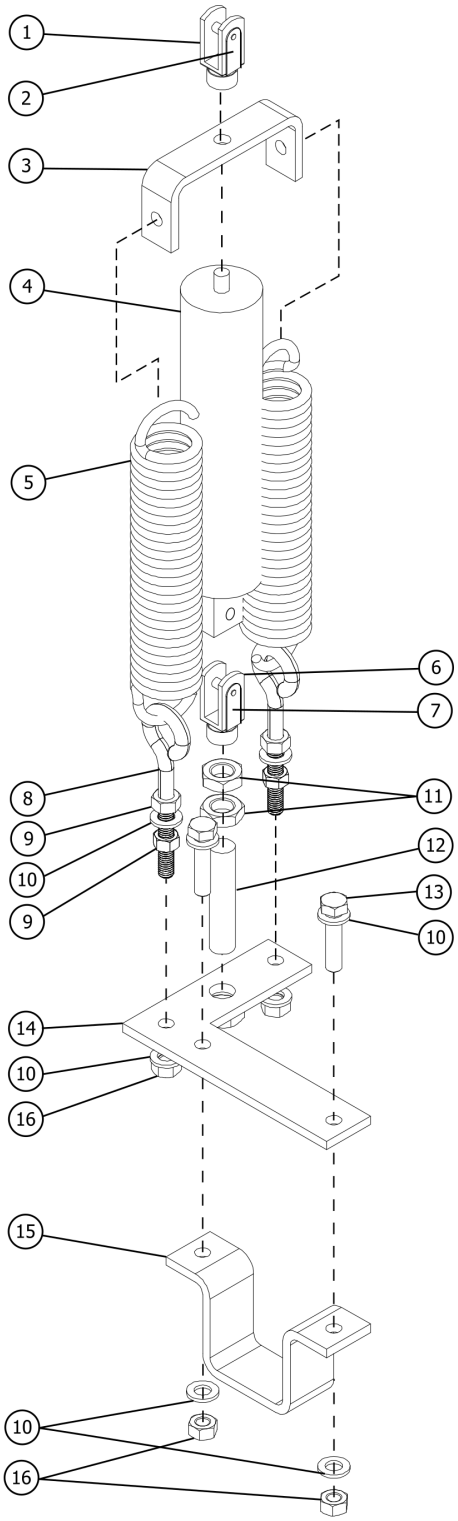


PTO Shaft SQTF-600, 1000

Item	Part #	Description	Qty.
1	RP63-80-01	Fork	1
2	RP63-80-02	Cross	2
3	RP63-80-19	Ring nut	1
4	RP63-80-69	Protection	-
5	RP63-80-08	Fork	-
6	RP63-80-80	Ring nut	1
7	RP63-80-56	Protection	-
8	RP63-80-81	Ring nut	1
9	RP63-80-24	Fork	-
10	RP41-60-05	Joint	1
11	RP58-80-05	Spring drive	1
12	RP35-20-05	Fork	1
13	RP25-61-59	Ring	1
14	RP63-80-20	Ring nut	1
15	RP63-80-84	Chain	1

Optional Hydraulic Kit SQTF-600, 1000

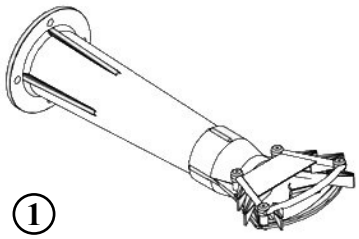




Optional Hydraulic Kit SQTF-600, 1000

Item	Part #	Description	Qty.
1	RP26-40-57	Fork M12	1
2	RP26-45-46	Clip fork M12	1
3	RP36-60-42	Upper piston fixing bracket	1
4	RP65-34-05	Cylinder	1
5	RP61-04-44	Return spring	2
6	RP26-40-89	Fork M16	1
7	RP26-45-59	Clip fork M16	1
8	RP26-37-09	Eye bolt M10 x 1.50 x 45	2
9	NM1015	Nut M10-1.50	2
10	FW10	Washer flat M10	8
11	NM1620	Nut M16-2.0	3
12	RP26-50-32	Threaded pin M16	1
13	BM101545	Bolt M10-1.50x45	2
14	RP36-62-07	Piston/frame fixing bracket	1
15	RP36-60-44	Lower piston fixing bracket	1
16	LNM1015	Nut self-locking M10-1.5	2
-	RP65-20-55	Hydraulic hose (not shown)	1
-	RP65-05-09	Gas nipple 1/4” (not shown)	1
-	RP27-11-14	Copper washer 1/4” (not shown)	1
	SQTF-003	Hydraulic lever control kit	1

Options SQTF-600, 1000



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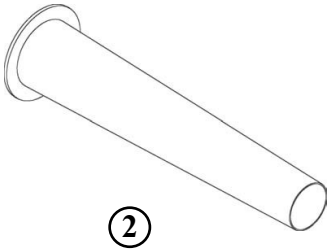

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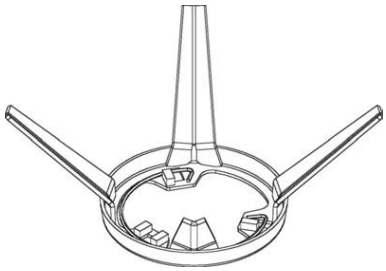

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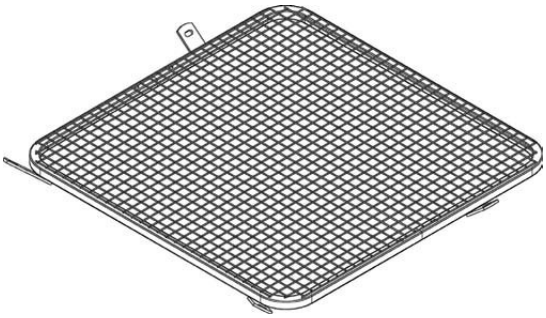

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Item	Part #	Description	Qty.
1	SQTF-001	Salt & sand chute	1
2	SQTF-002	Rubber chute insert	1
3	SQTF-004	Agitator extension	1
4	SQTF-005	Grate filter	1

Warranty

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.

Replacement or repair parts installed in the equipment covered by this limited warranty are warranted 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 extent 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 of crops or any other loss of income; rental of substitute equipment, expenses due to loss, damage, detention or delay in the delivery.

REGISTRATION

The online Warranty Registration must be completed in order to qualify for coverage on this Limited Warranty. Visit br-equipment.com, click on "Warranty Registration" and completely fill out the form to register the new piece of equipment.


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