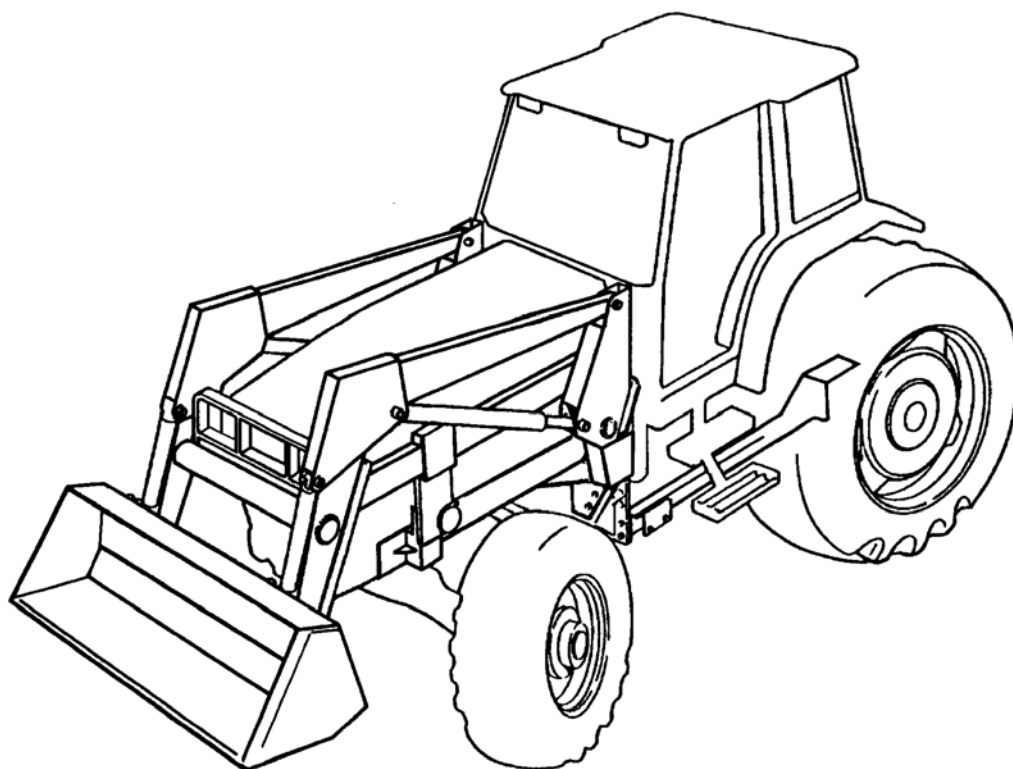




# OPERATOR AND PARTS MANUAL

## Loader

Models 995TSL & S995TSL





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## Introduction

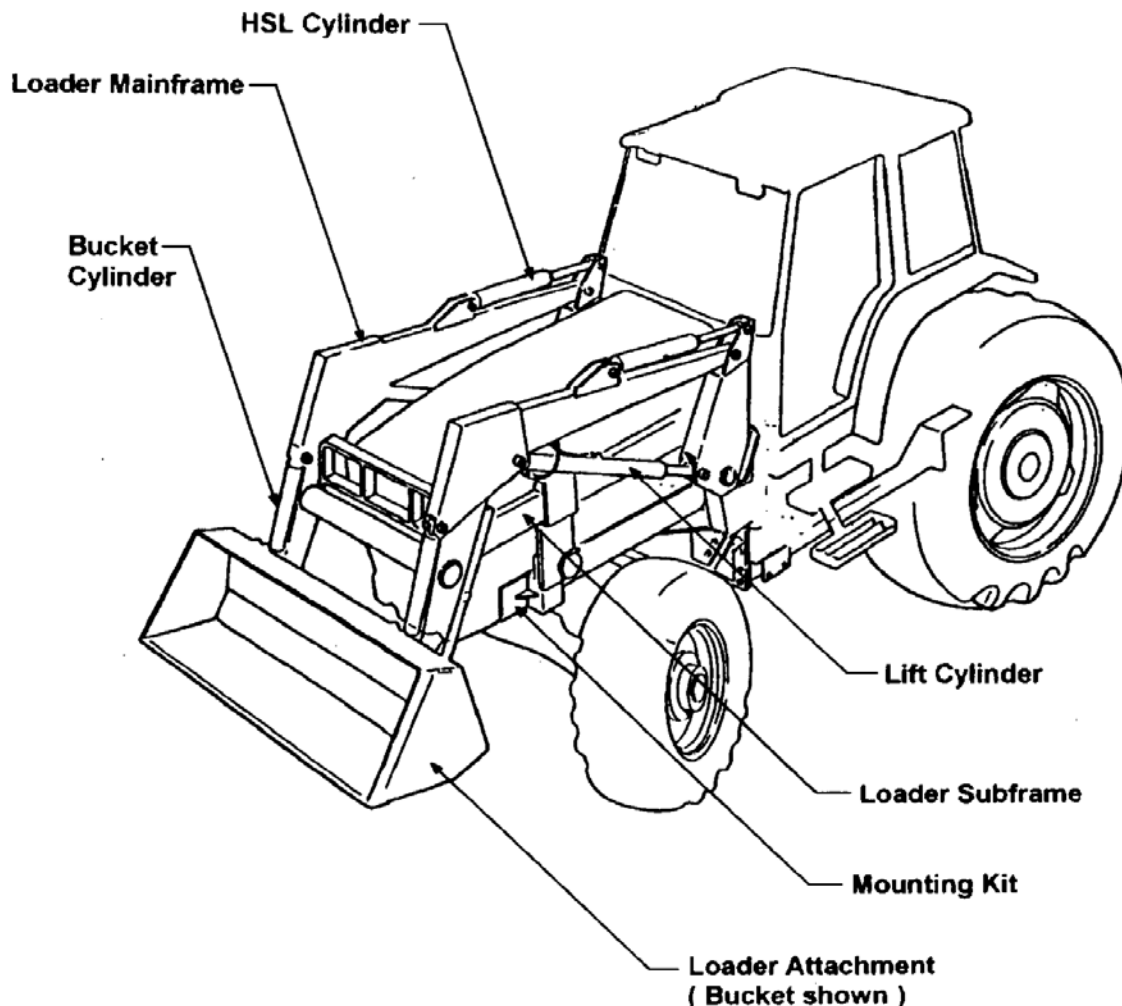
Allied by Farm King front-end loaders are backed by years of extensive research. Factory testing simulates specific operations to evaluate durability; days of continuous cycling in raising, twisting and dropping loads using a programmed hydraulic power unit represents years of extreme use. With one of the largest mounting kit application lists in the industry, there is an Allied front-end loader available for nearly every tractor, large or small, new or old. Custom colors are available to match all tractor brands which adds resale value and visual appeal.

Keep this manual handy for frequent reference. All new operators or owners must review the manual before using the equipment and at least annually thereafter. Contact your Allied by Farm King Dealer if you need assistance, information, or additional copies of the manual. Visit our website at [www.buhlerindustries.com](http://www.buhlerindustries.com) for a complete list of dealers in your area.

The directions left, right, front and rear, as mentioned throughout this manual, are as seen facing in the direction of travel of the implement.

## Terminology

Basic terminology used throughout this manual has been identified below. For part numbers and further details refer to the Parts section.

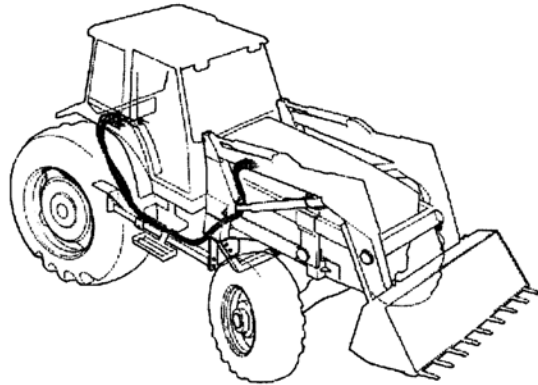


## Hydraulic (Hose Kit)

### Hose Kit "A"

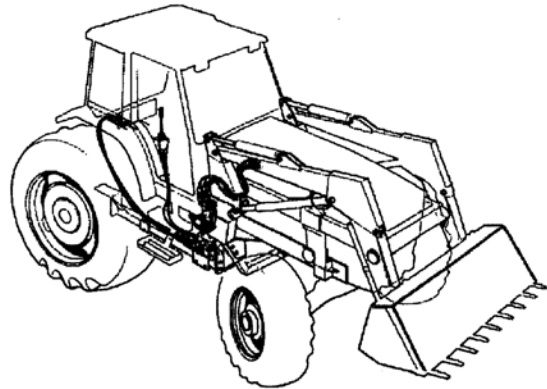
Loader powered by the tractor remotes.

Consists of four hoses leading from loader tubing to tractor remote couplers



### Hose Kit "B"

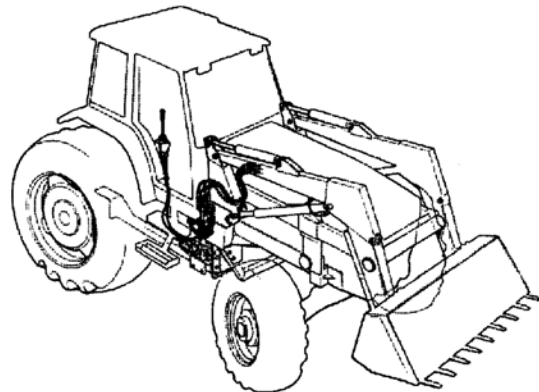
Loader operated by an external OC or CC valve that is powered from the tractor remotes.



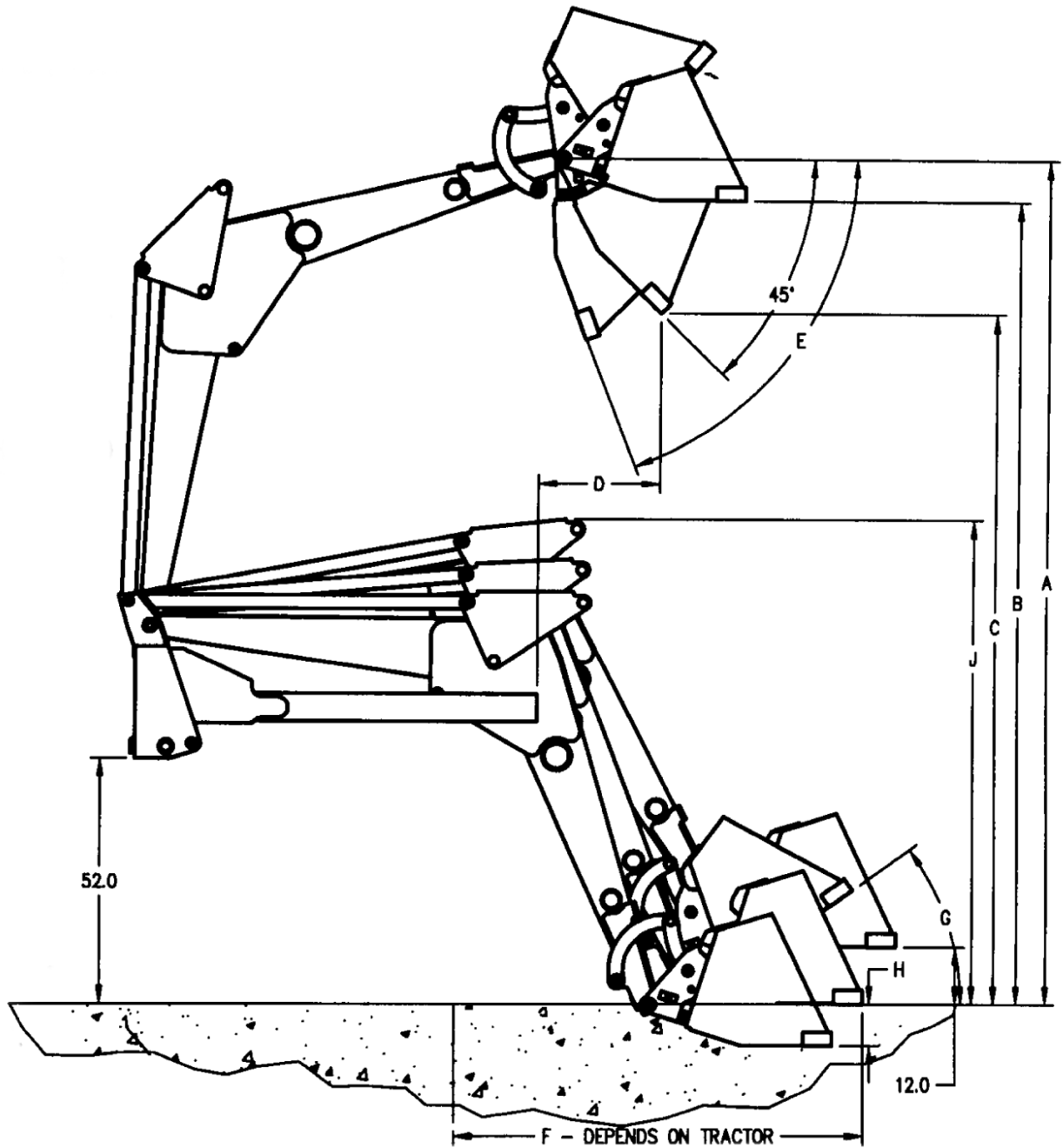
### Hose Kit "C"

Loader operated by an external valve that is plumbed into the tractor hydraulic system.

Consists of 4 hoses leading from loader tubing to external mounted valve plus the necessary fittings, hoses and adapter blocks (if necessary) to tap into tractor hydraulic system. Use valve type shown with hose kit "C"



## Specifications



Model number: 995TSL regular

Mounting height: 52.0 (nominal)

Typical range: 48.0 to 56.0

Description	Bucket Cylinders	Lift Cylinders
Bore	3.00	3.50
Rod	1.75	2.00
Stroke	24.75	32.50
Extended Length	86.50	85.00
Retracted Length	61.75	52.50

A - Maximum lift height to pivot point (full height): 181.0

B - Maximum lift height under level bucket: 172.0

C - Clearance with bucket dumped: 152.0

D - Reach at maximum lift height: 25.0

E - TSL max dump angle (full height): 70°

E1 - TSL max dump angle at ground: 90°

G - Bucket rollback angle at ground: 36°

G1 - TSL bucket rollback angle: 50°

H - Digging depth: 9.0

J - Overall height in carry position: 102.0

Estimated breakout force: 6600 lbs

Estimated lift capacity: 4075 lbs

**Notes:**

1 - Estimated values assume 2500 psi lift cylinder pressure

2 - Breakout force estimated as per ASAE S301.2 - 4.1.2 (net payload applied at cutting edge)

3 - Lift capacity estimated as per ASAE S301.2 - 4.1.1

4 - Main pivot pin: 1.50 All other pins: 1.25

# Safety

## Safety Instructions

Remember, YOU are the key to safety. Good safety practices not only protect you, but also the people around you. Make these practices a working part of your safety program. Be certain that everyone operating this equipment is familiar with the recommended operating and maintenance procedures and follows all the safety precautions. Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

The alert symbol is used throughout this manual. It indicates attention is required and identifies hazards. Follow the recommended precautions.



The safety alert symbol means...  
**ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**



### CAUTION

The caution symbol 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.



### WARNING

The Warning Symbol 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.



### DANGER

The Danger Symbol 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 that, for functional purposes, cannot be guarded.



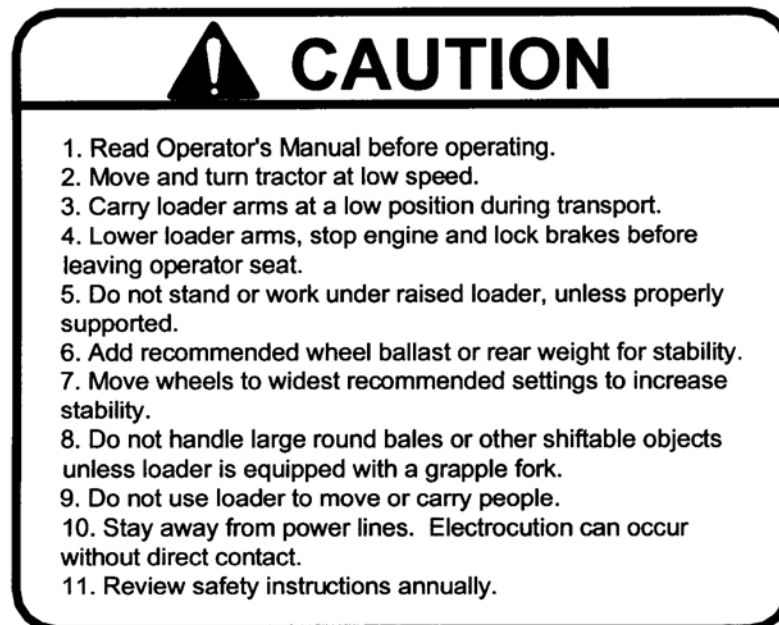
## General Safety Instructions

- Have a first-aid kit available for use and know how to use it.
- Have a fire extinguisher available, stored in a highly visible location, and know how to use it.
- Wear appropriate protective gear. This list may include but is not limited to:
  - hard hat
  - protective shoes with slip resistant soles
  - protective glasses or goggles
  - heavy gloves
  - wet weather gear
  - hearing protection
  - respirator or filter mask
- Read and understand the Operator's Manual and all safety signs before operating, servicing, adjusting, repairing, or unplugging the equipment.
- Never work beneath raised loader unless it is securely supported. The following are instructions for the lift lock supports.
- Do not pivot or turn tractor with bucket raised, except at a minimum speed. Always make allowance for length of loader when making turns.
- Never leave tractor unattended while the bucket is raised. Always lower bucket to the ground and shut off before leaving the tractor seat.
- Do not walk under raised bucket.
- Never operate loader while operator is not seated in the driver's seat on the tractor.
- Keep tractor on solid ground. Loose fill, rocks and holes can be dangerous for loader operation or movement.
- Never operate a loader with frayed or damaged hoses or leaking fittings.
- Add ballast as required to ensure 25% of gross vehicle weight is transferred to the rear axle.
- Space rear tires as recommended by tractor manufacturer. Maximize width for high lift applications.
- Do not raise bucket to extreme heights while tractor is on an incline. Carry loader low for safety. Load center when bucket is raised on a slope. Be alert for terrain changes and adjust bucket accordingly. Keep bucket low, no more than one foot high, as long as possible.
- Note: A pivoting front axle acts like a three-wheeled tractor until the stops hit the axle.
- If the cylinders are used to raise front wheels of tractor for service, place blocks under tractor before working around front end.

## Installation


- To install safety signs, ensure 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 and align over the specified area. Carefully press in place.
- Slowly peel back the remaining paper and smooth the remaining portion in place. Small air pockets can be pierced with a pin and smoothed out.

## Safety Decals



## Important Precautions

**⚠ DANGER**



**ELECTROCUTION HAZARD**  
To prevent serious injury or death:

Stay away from power lines and cables.  
Electrocution can occur with or without direct contact.

**⚠ WARNING**



**FALLING HAZARD**  
To prevent serious injury or death:

Do not lift, carry or allow anyone to ride on or work from any portion of loader.

**⚠ WARNING**



**CRUSHING HAZARD**  
To prevent serious injury or death:

Do not handle round bales or other shiftable objects unless loader is equipped with an attachment designed for this purpose.  
Do not handle loose loads that are not secured.  
Do not lift load higher than necessary.

**⚠ WARNING**



**HIGH PRESSURE FLUID**  
To prevent serious injury or death:

Relieve pressure on system before repairing or adjusting or disconnecting.  
Wear proper hand and eye protection when searching for leaks. Use wood or cardboard instead of hands.  
Keep all components in good repair.  
If hydraulic fluid penetrates skin, obtain medical treatment IMMEDIATELY.

**⚠ WARNING**



**ROLL-OVER HAZARD**  
To prevent serious injury or death:

Move and turn tractor at low speed.  
Carry load no higher than necessary to clear the ground when transporting.  
Add wheel ballast or rear weight for stability.  
Move wheels to widest possible settings to increase stability.  
It is recommended the tractor be equipped with a rollover protective structure (ROPS).

**⚠ WARNING**



**CRUSHING HAZARD**  
To prevent serious injury or death:

Do not allow bystanders in loader work area.  
Lower loader to the ground before leaving seat.  
Do not walk or work under raised loader. For servicing, refer to operator's manual.  
Read and understand operator's manual before operating loader.

## Operation

### Operation

#### General Operating Notes:

Refer to tractor Operator's Manual for Operating information on the tractor's hydraulic system.

Hydraulic systems using auxiliary valves should have them located for easy reach from the tractor seat. Hoses should be connected in such a manner that pushing forward on valve handles lowers the boom or dumps the bucket



#### **WARNING**

Always connect boom hoses to float section.

Weight added to rear of tractor provides better traction and an easier, more efficient loader operation. Extra weight along with the rear wheels, reduces the risk of roll-over.

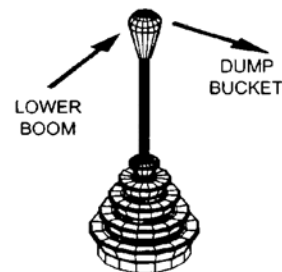
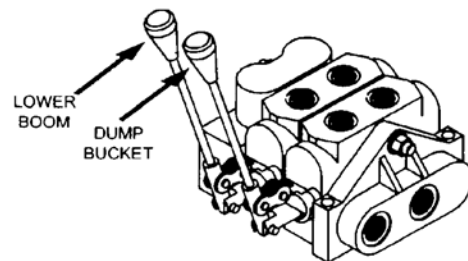
The smaller the tractor is, the easier it will roll. We recommend that weight be added to rear tires with liquid or by the installation of rear wheel weights. Where additional weight is required, a counterweight box can be fabricated for tractors with three-point hitches.

Extra weight can also be added by the use of a heavy implement mounted to the three-point hitch.

A roll-over protective structure is also recommended.

In cold weather, operate the tractor's engine at idle speed until the hydraulic fluid is warmed up. High engine speed when the hydraulic fluid is cold will cause the pump to wear prematurely.

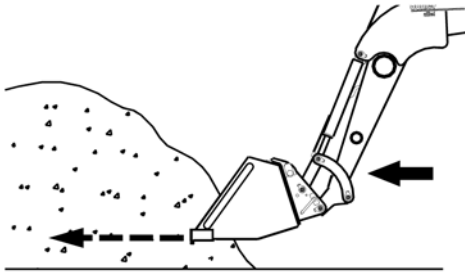
Under normal conditions, operate the tractor's engine at 1/2 throttle. Shift the tractor into a low gear before entering a pile of material to minimize strain on loader arms.



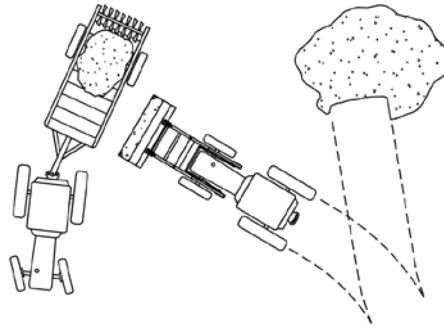
## Operating Suggestions for Loading

When handling heavy loads, be sure to lower lift arms slowly. This is known as feathering the hydraulic lever. If load is lowered too fast and stopped suddenly, excessive shock loads are created which can damage loader or tractor.

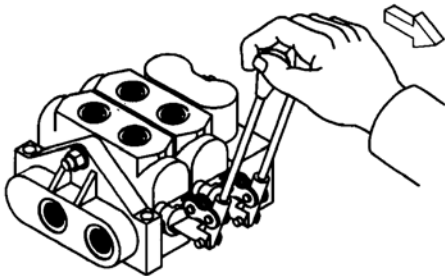
When loading bucket, drive straight into material. Attempting to turn tractor while loading bucket can cause damage to both the loader and tractor.



Note: Bottom surface of bucket is parallel to line on motion.

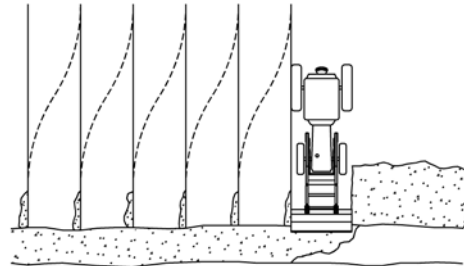


To increase loading efficiency. Minimize angle of turn and length to run between pile and spreader.

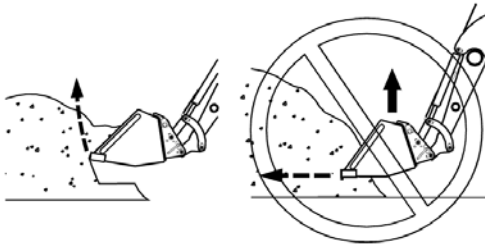


Work both levers back to direct pressure to both cylinders.

Combined action of lift and bucket cylinders increases loading efficiency.



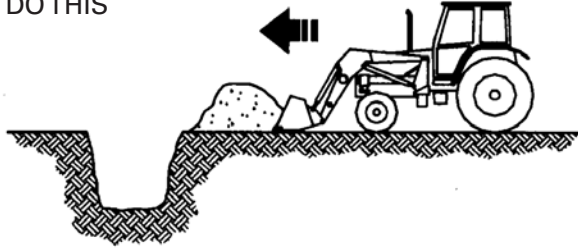
Leave material, which drifts over the bucket sides for final cleanup.



A straight bottom offers more resistance to lift.

## Operating Suggestions for Backfilling

DO THIS

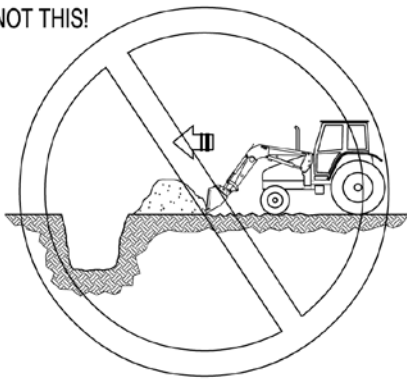


When backfilling approach pile with a flat bucket. Leave dirt in bucket. Dumping on each pass wastes time.



Backgrade work surface with a loaded bucket. Release all pressure on lift cylinders so full weight of bucket is scraping ground. Use heel of bucket

NOT THIS!



Do not use bucket in dumped position for bulldozing. This will only impose severe shock loading on the bucket cylinders and make it more difficult to maintain a level grade.



### **WARNING**

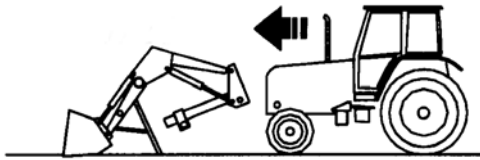
Do not use loader as battering ram!

## Attaching the Loader to Your Tractor

1. Position the tractor as centrally as possible and drive, using lowest gear possible, into the loader frame until hoses can be connected.
2. Couple up the hydraulic hose lines to the loader or tractor valve ensuring proper function (see operator and maintenance section)

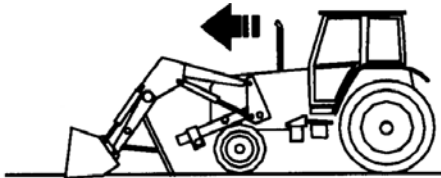
NOTE: When mounting the loader for the first time, slowly work the cylinders back and forth, so that most of the air is removed. Loosen the bolts on the hooks so that they can be moved. Also, check that the nuts in the rear of the subframe are in line with the holes.

3. On some tractors, the lift cylinders may have to be extended slightly, so that the subframes can clear the front axle. Do not extend the cylinders more than is required.



On self leveling loaders, the bucket will dump at the same time the loader is raised. Therefore, Operate both hydraulic levers together.

4. Drive the tractor ahead until the subframe is past the front axle and the front hook is close to mounting boss.



Check front grille clearance during installation to avoid tractor damage.

5. Retract or extend the lift cylinders to line up the front hook with the mounting boss.

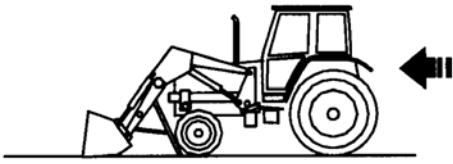


On self leveling loaders, the bucket will roll back at the same time the loader is lowered. Therefore, operate both hydraulic levers together.

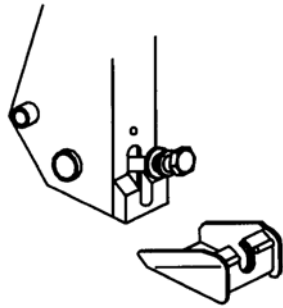
6. When the hook is lined up, dump or roll back the bucket to lower or raise the subframe upright to align with the mounting boot.



7. Continue to drive the tractor forward until the subframe uprights are seated in the boot.

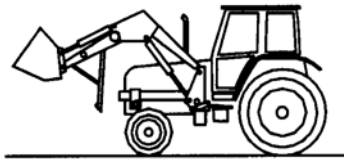


8. Secure the subframe uprights with the bolts and washers. Torque 500 ft-lb.



When mounting for the first time, the front hook bolts will have to be tightened after positioning the hook directly over the mounting boss (most rearward position)

9. Raise the loader and lock the support stand tubes in the up position.



When mounting for the first time, raise the loader slowly and check to make sure that the hoses do not bind or become pinched in all positions. Work the loader and bucket up and down to work out all the air in the hydraulics. Check and refill the tractor's hydraulic system.



## Removing the Loader from Your Tractor



### WARNING

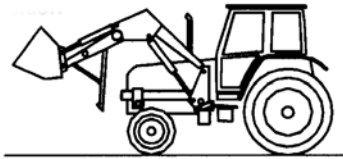
When removing the loader, it must be fitted with a bucket or other suitable attachment to give the frame stability after removal. If this is not done, the frame will not remain standing.



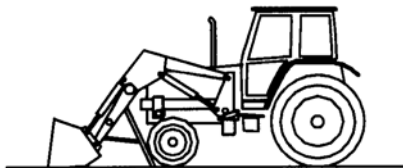
### WARNING

Always remove the loader on firm, level ground (away from children's play area and high traffic areas). This makes attaching and removing much faster and easier. It also makes the free standing loader more stable.

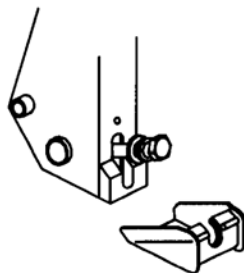
1. Raise the loader, lower support stand tubes and lock into position.



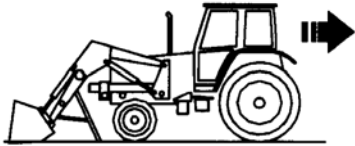
2. Lower the loader until the stand tubes are firmly on the ground and then dump the bucket so that it is also firmly on the ground. there should be slight downward pressure.



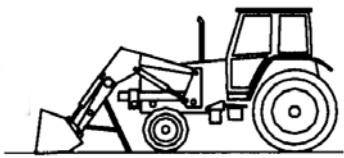
3. Loosen the bolts from the rear of the subframe boots and swing bolt up into lock position.



4. Roll back the bucket slightly and simultaneously extend or retract the lift cylinders to free hooks from spools. Then slowly back up the tractor.

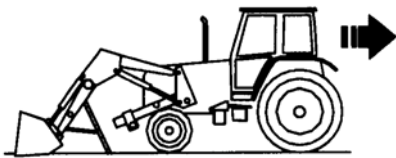


5. Once the subframe is clear of the boot and the hook is clear of the mounting boss, roll back the bucket all the way. This raises the rear uprights of the loader.



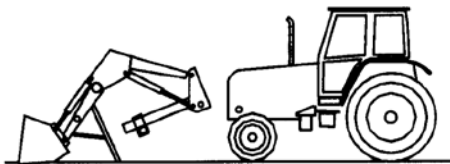
On some mountings, the lift cylinders must be extended more while the tractor is backing up, so that the subframes clear the front axle.

6. Continue backing up until the loader is clear.



Be sure the hoses do not get pinched or catch on any frame members while backing up.

7. After the loader is clear, retract the lift cylinders to protect the shafts and disconnect the hydraulic lines at quick couplers.



## General Instructions

---

As with any piece of equipment, the care with which your loader is operated and maintained will greatly affect its life and the safety of the people using it.

1. Keep all pivots well lubricated for longer bushing life. Inspect every 500 hours of operation for wear.
2. Periodically check all bolts for tightness. If any bolt is damaged, replace it with a bolt of equivalent grade or strength.
3. Follow the recommendations of the tractor manufacturer in regards to the quantity of oil used.
4. Check oil level frequently to ensure the system is full.
5. When making an oil check, be sure lift cylinders are retracted.
6. Before operating the loader, particularly if the loader is left standing for any length of time, check the hydraulic system and oil level.
7. When installing hydraulics, follow the circuit carefully. See hydraulic hook-up section and make sure the hoses do not contact any hot manifolds or sharp edges on tractor. After assembly, raise the loader slowly and check to make sure that the hoses do not bind in all positions.
8. The pressure of the relief and open center valves is set at the factory. Do not tamper with the setting, serious injury to the operator or damage to the loader or tractor hydraulics may occur. Warranty will be void if the loader is operated above recommended pressure.
9. When servicing any hydraulic components, care must be taken to prevent any foreign matter from entering the system.
10. Do not neglect oil leaks. Leaks affect loader operation, are dangerous and can result in personal injury or damage to the hydraulic system.
11. Never leave the cylinder shafts exposed when loader is not in use.
12. Worn or damaged components should be replaced as soon as possible with only the manufacturer's recommended component or equivalent.

## TSL General Note and Instructions

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1. The true self leveling system (TSL) utilizes mechanical linkages to maintain bucket level while raising and lowering. The pivot plate weldment, leveling tubes and linkages have been developed to ensure that the bucket remains at the same position throughout its range of motion. This feature is standard with 2.50" and 3.00" diameter bucket cylinders.
2. The TSL system incorporates a relief and anticavitation manifold to provide extra dump at ground and rollback at full lift height. This feature is available on 3.00" bucket cylinders only. If the loader is raised with the bucket fully dumped, oil from the bucket piston side will be bypassed at high pressure to the bucket shaft side and the lift shaft side as the quickattach contacts the dump stop. If the loader is lowered with the bucket fully rolled back, oil from the bucket shaft side will be bypassed at high pressure to the bucket piston side and the lift piston side will provide makeup as the quick attach contact the rollback stop. Note that these two conditions are likely to occur intermittently and although the pump will be forced to supply oil at a higher pressure, no damage to the loader components will occur. It is, however, recommended to avoid the above situations and keep the bucket somewhat level while raising or lowering the loader for smoother operation.
3. The extra bucket stroke length allows for the bucket to be dumped to approximately 90° at ground. This allows for bucket assist when traction is minimal. If the loader is raised from this position, the bucket will retract as the quick attach contacts the dump stop and the circuit goes through relief as described in note 2.
4. Extra bucket retraction allows for the bucket to be rolled back as the loader raises. The TSL feature maintains the bucket level, but as required the bucket can be manually rolled back approximately 20° to allow for increased bucket capacity. If the loader is lowered from this position, the bucket will extend as the quick attach contacts the rollback stop and the circuit goes through relief as described in note 2.
5. The relief valve is factory set at 3250 PSI cracking pressure and is capable of bypassing 10-15 GPM. If loader lock-up should occur due to a low tractor relief setting, higher inlet flows or return line restrictions, the relief valve may be backed off slightly until the lock-up condition is overcome (counterclockwise turn of set-screw). Contact the factory for further instructions.

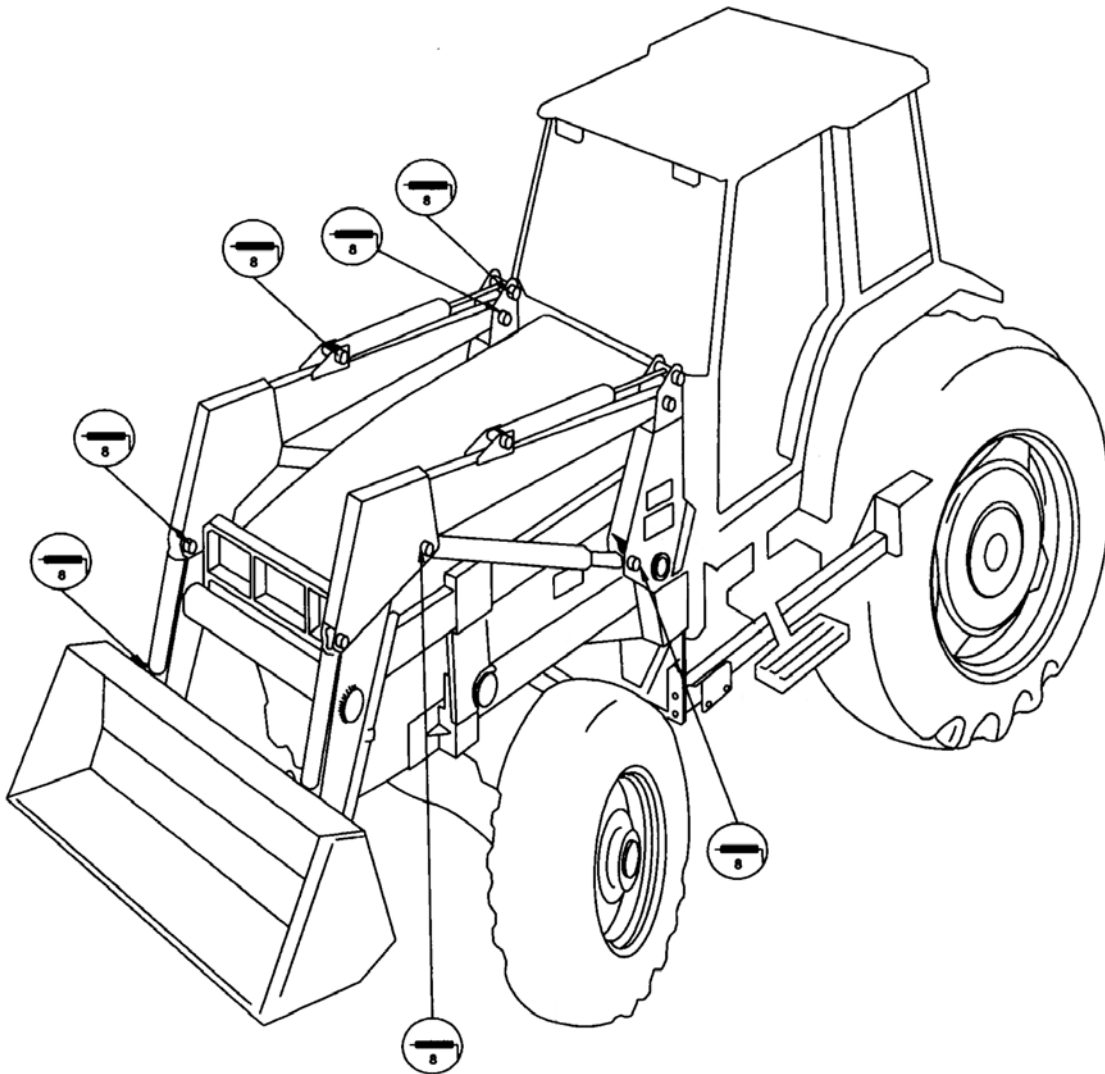
## Maintenance

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### Lubrication

Lubricate tractor hydraulic unit as indicated in tractor operator's manual. Keep bushings on lift arm pivots and cylinders well lubricated. Use high-grade lithium grease every 8 hours of operation.

NOTE: Frequent greasing will prevent contaminants from migrating between the pins and bushings



## Bolt Torque

### Checking Bolt Torque

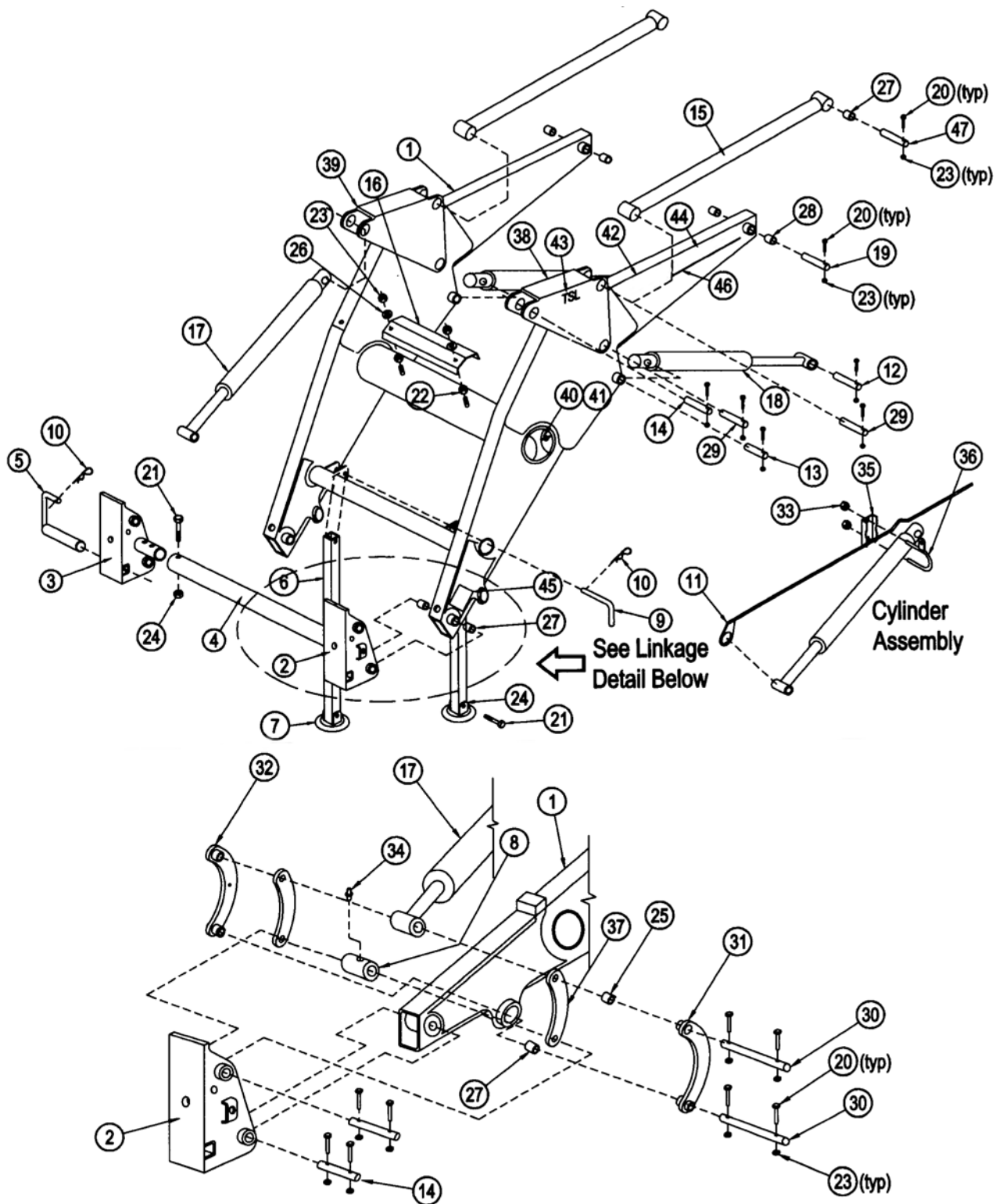
The tables shown below give correct torque values for various bolts and hex bolts. Tighten all bolts to the torques specified in chart unless otherwise noted. Check tightness of bolts periodically, using bolt torque chart as a guide. Replace hardware with the same strength bolt.

Standard Bolt Torque						
Bolt Size (in)	Grade 2		Grade 5		Grade 8	
	Torque		Torque		Torque	
	ft-lb	NM	ft-lb	NM	ft-lb	NM
0.25	6	7	8	11	12	16
0.313	11	15	17	23	25	33
0.375	20	27	31	41	44	60
0.438	32	43	49	66	70	95
0.5	49	66	76	103	106	144
0.563	70	95	109	148	153	207
0.625	97	131	150	203	212	287
0.75	144	195	266	360	376	509
0.875	166	225	430	583	606	821
1	250	339	644	873	909	1232
1.125	354	480	795	1077	1288	1745
1.25	500	678	1120	1518	1817	2462
1.375	655	887	1470	1992	2382	3228
1.5	870	1179	1950	2642	3161	4283

Metric Bolt Torque								
Bolt Size (mm)	Class 5.6		Grade 8.8		Grade 10.9		Grade 12.9	
	Torque		Torque		Torque		Torque	
	ft-lb	NM	ft-lb	NM	ft-lb	NM	ft-lb	NM
6	3.1	4.3	7.3	9.9	10.3	14	12.1	16.5
8	7.7	10.5	17.7	24	25	34	29	40
10	15	21	35	48	49	67	59	81
12	26	36	61	83	86.2	117	103	140
14	42	58	97	132	136	185	162	220
16	64	88	147	200	210	285	250	340
18	89	121	202	275	287	390	346	470
20	126	171	287	390	405	550	486	660
22	169	230	390	530	549	745	656	890
24	217	295	497	675	708	960	840	1140
27	320	435	733	995	1032	1400	1239	1680
30	435	590	995	1350	1401	1900	1681	2280
33	590	800	1349	1830	1902	2580	2278	3090
36	759	1030	1740	2360	2441	3310	2935	3980
39	988	1340	2249	3050	3163	4290	3798	5150



## Main Frame Assembly



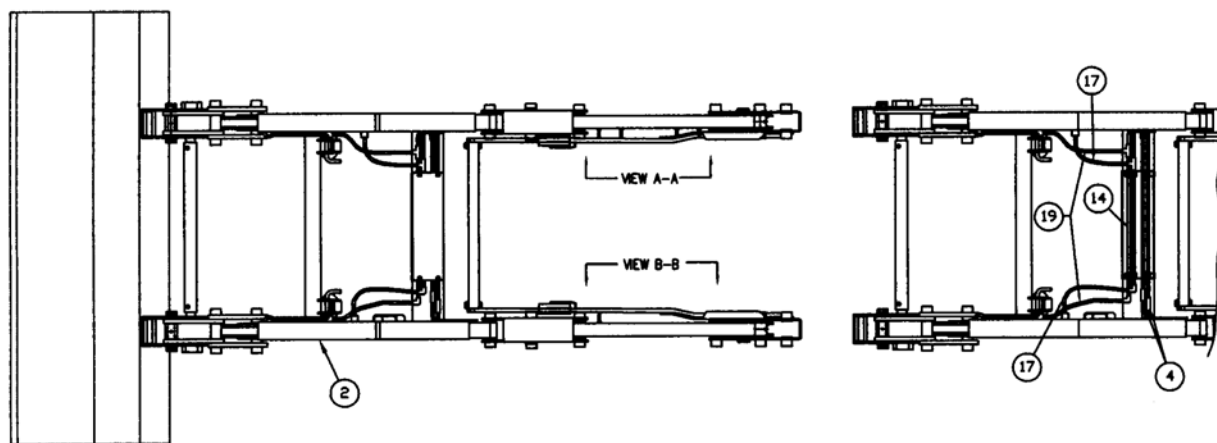
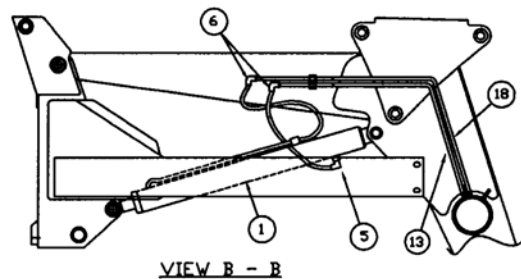
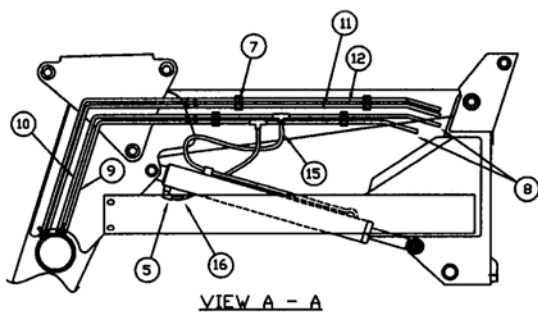


Item	Part #	Description	Qty 995 TSL	Qty S995 TSL
1	24701	995TSL Mainframe	1	
	24722	S995TSL Mainframe		1
2	24705	Quick Attach Left	1	1
3	24706	Quick Attach Right	1	1
4	113102	Cross Tube	1	1
5	108827	Pin Weldment	2	2
6	114304	Stand Tube	2	2
7	114303	Stand Foot	2	2
8	113690	Link Spacer	2	2
9	110907	Stand Pin 0.625 Diameter	2	2
10	12779	Hair Pin Clip	4	4
11	114173	Leveling Rod	1	1
12	113587	Pin 1.25 x 8.75 Lg	2	2
13	113660	Pin 1.25 Dia x 6.00 Lg	2	2
14	113696	Pin 1.25 Dia x 8.13 Lg	6	6
15	113924	Leveling Tube	2	2
16	24242	Cross Tube Cover	1	1
17	24707	Cylinder Bucket	2	2
18	24830	Cylinder Lift	2	2
19	114250	Pin 1.50 Dia x 8.75 Lg	2	2
20	81581	Hex Bolt 0.375 Dia x 2.5 Lg	32	32
21	81669	Hex Bolt 0.625 Dia x 3.5	4	4
22	81592	Hex Nut 0.375 Dia	4	4
23	81344	Locknut 0.375 Dia	41	41
24	81967	Locknut 0.625 Dia	18	18
25	113691	Bushing 1.25 I.D. x 1.63 O.D. x 0.75" Lg	8	8
26	81570	Flat Washer 0.375 Dia	4	4
27	113633	Bushing 1.25 I.D. x 1.63 O.D. x 1.88" Lg	16	16
28	113579	Bushing 1.50 I.D. x 1.88 O.D. x 1.88" Lg	4	4
29	114100	Pin 1.25 Dia x 8.39 Lg	4	4
30	114175	Pin 1.25 Dia x 9.13 Lg	4	4
31	114095	Link Weldment Left	2	2
32	114096	Link Weldment Right	2	2
33	81966	Locknut 0.50 Dia	2	2
34	84583	Grease Fitting 1/8 NPT Straight	2	2
35	FNH114039	Bolt Plate	1	1
36	FNH114040	Rod Guide	1	1
37	114097	Link Assembly 11.25	4	4
38	24704	Pivot Plate Left	1	1
39	24702	Pivot Plate Right	1	1

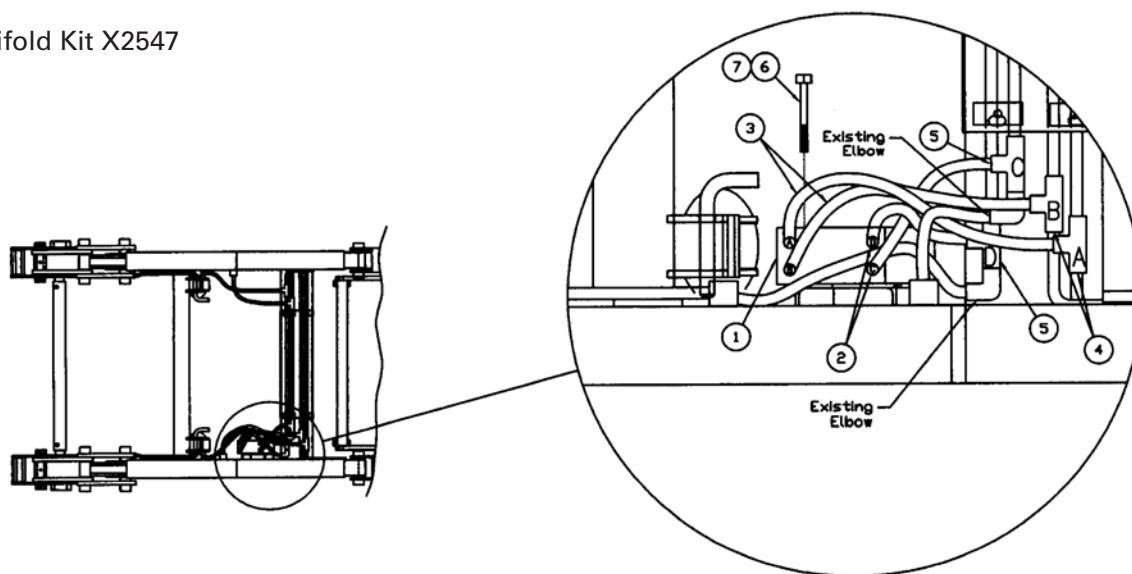
Item	Part #	Description	Qty 995 TSL	Qty S995 TSL
40	813228	1/2" Wing Nut (PI)	2	2
41	81637	1/2" Lock Washer (PI)	2	2
42	813356	Decal - Buhler Allied x 1.75	2	2
43	114132	Decal - TSL x 1.75	2	2
44	813358	Decal - True Self Leveling	2	2
45	113488	Decal - Quick Attach Instruction	2	2
46	52281-000	Bright Orange Scotchcal #72368	10 ft	10 ft
47	114251	Pin 1.25 Dia x 8.75 Lg	2	2



## Hydraulic Plumbing Assembly



## Manifold Kit X2547



Item	Part #	Description	Qty
1	24830	3.0 Dia x 32.50 Cylinder Assembly Lift	2
2	24707	3.0 Dia x 24.75 Cylinder Assembly Bucket	2
3	812069	Tee 3/4-16 Mjic x 3/4-16 Mjic	4
4	886704	Adaptor Str 3/4 Mjic x 3/4 Mjic	2
5	811414	Elbow 90° 3/4-16 Morb to 3/4 Mjic	2
6	813128	Elbow 90° 3/4 Mjic x 3/4 Mjic	4
7	11362	Pipe Clip	9
8	112937	Tubing Ext. Lift Cyl 31.0"	2
9	114107	Tubing Lift Cyl (Bottom, Raise)	1
10	114105	Tubing Lift Cyl Right (Top, Drop)	1
11	114109	Tubing Bucket	1
12	114108	Tubing Bucket Cylinder (Top, Rollback)	1
13	114916	Tubing Lift Cyl Left (Bottom, Raise)	1
14	114106	Tubing Cross Tube	2
15	114605	Hose 3/8 x 24 3/4-26 Morb x 3/4-16 Swfjic	2
16	812697	Hose 3/8 x 24 3/4-16 Swfjic x 3/4-16 Swfjic	2
17	811434	Hose 3/8 x 30 3/4-16 Morb x 3/4-16 Swfjic	2
18	114228	Tubing Lift Cylinder Left (Top, Drop)	1
19	811574	Hose 3/8 x 40 3/4-16 Morb x 3/4-16 Swfjic	2

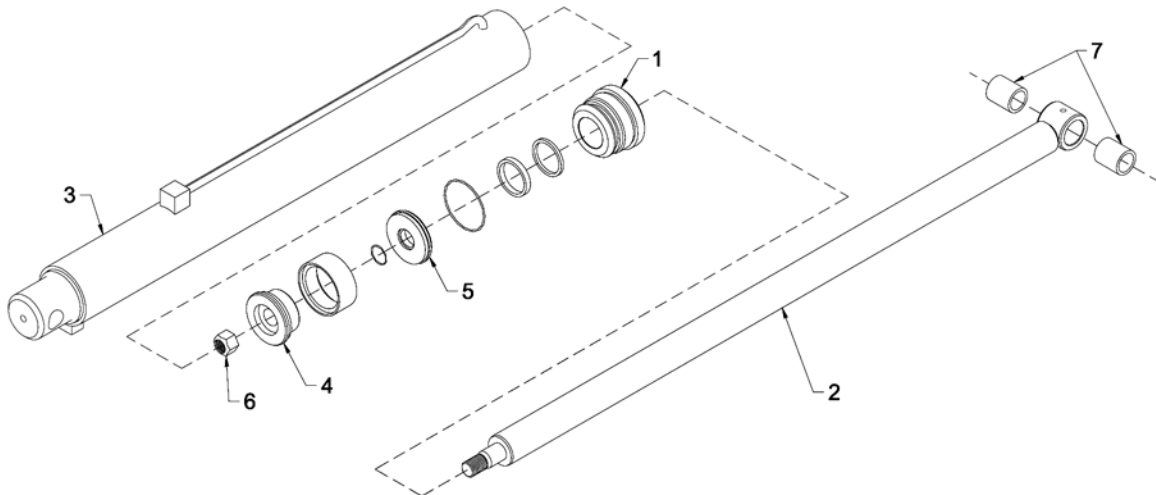
Parts List for X2547TSL Mainifold Kit			
1	24750	TSL Manifold	1
2	114605	Hose 3/8 x 24 3/4-16 Morb x 3/4-16 Swfjic	2
3	811434	Hose 3/8 x 30 3/4-16 Morb x 3/4-16 Swfjic	2
4	812069	Tee 3/4-16 Mjic x 3/4-16 Mjic	2
5	812786	Tee 3/4 Mjic x Run x 3/4 Swfjic	2
6	812052	Bolt Hex 0.250nc x 3.00 gr5 pl	2
7	81922	Nut Lock (Nylon) 0.25nc grbpl	2

# Assembly

## Hydraulic Cylinder Assembly

Item	Description	Bucket Cylinders	Lift Cylinders	
	Diameter	3.00"	3.00"	3.50"
	Length of Stroke	24.75"	32.50"	32.50"
	Retracted Length	61.75"	52.50"	52.50"
	Extended Length	86.50"	85.00"	85.00"
	Cylinder Assembly No.	24707	24830	24607
	Seal Kit No.	X1424	X1424	X1425
	Shaft Diameter	1.75"	1.75"	2.00"
1	Head Plate No.	24606	24606	24430
2	Shaft Weldment No.	114135	114930	113700
3	Cylinder Tube Weld't No.	24699	24786	24785
4	Piston Half (wide) No.	112862	112862	112940
5	Piston Half (narrow) No.	112863	112863	112941
6	Self-Locking Nut No.	810457	810457	810457
7	Shaft Bushing No.	113766	113766	113766

1. Bucket cylinder shown.
2. All cylinder seals are contained in corresponding seal kit.



### CAUTION

Maximum pressure - 2750 psi

## Pre-delivery Check List

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Before delivering this equipment please complete the following check list.

- ☐ 1. The loader has been installed using the appropriate mounting kit for the tractor and loader.
- ☐ 2. The hydraulic system installed is appropriate for the tractor and loader.
- ☐ 3. The loader is properly installed.
- ☐ 4. All bolts are tightened to the torque specifications shown in the torque chart.
- ☐ 5. All safety decals are readable.
- ☐ 6. The loader has been tested and operates properly.
- ☐ 7. The operator's manual has been delivered to the owner who has been instructed on the safe and proper use of the loader.

Dealer's Signature:

This check list is to remain in this owner's manual and is the responsibility of the dealer to complete it before delivery to the customer.

## Allied by Farm King Limited Warranty

This document limits your warranty rights.

### Base Limited Warranty

Buhler Industries Inc. provides this warranty only to original retail purchasers of its product. Buhler Industries Inc. warrants to such purchasers that all Buhler Industries Inc. manufactured parts and components used and serviced as provided for in the Operator's Manual shall be free from defects in materials and workmanship for a period following delivery to the original retail purchaser of 12 months (80 days for commercial applications). This limited warranty applies only to those parts and components manufactured by Buhler Industries Inc. Parts and components manufactured by others are subject to their manufacturer's warranties, if any.

Buhler Industries Inc. will fulfill this limited warranty by, at its option, repairing or replacing any covered part that is defective or is the result of improper workmanship, provided that the part is returned to Buhler Industries Inc. within thirty (30) days of the date that such defect or improper workmanship is, or should have been, discovered. Buhler Industries Inc. reserves the right to either inspect the product at the buyer's location or have it returned to the factory for inspection. Parts must be returned through the selling representative and the buyer must prepay transportation charges.

Buhler Industries Inc. will not be responsible for repairs or replacements that are necessitated, in whole or part, by the use of parts not manufactured by or obtained from Buhler Industries Inc. Under no circumstances are component parts warranted against normal wear and tear. There is no warranty on product pump seals, product pump bearings, rubber product hoses, pressure gauges, or other components that require replacement as part of normal maintenance. Also: Buckets and Bucket Tines carry no warranty, Bent Spears carry no warranty, Snowblower Fan Shafts carry no warranty, Mower Blades carry no warranty, Portable Auger Parts Have Two (2) Year Warranty, Loader Parts Have Two (2) Year Warranty. The purchaser is solely responsible for determining suitability of goods sold. This warranty is expressly in lieu of all other warranties expressed or implied. Buhler Industries Inc. will in no event be liable for any incidental or consequential damages whatsoever. Nor for any sum in excess of the price received for the goods for which liability is claimed.

### Repair Parts Limited Warranty

Buhler Industries Inc. warrants Allied by Farm King replacement parts purchased after the expiration of the Buhler Industries Inc. Limited Warranty, and used and serviced as provided for in the Operator's Manual, to be free from defects in materials or workmanship for a period of thirty (30) days from the invoice date for the parts. Buhler Industries Inc. will fulfill this limited warranty by, at its option, repairing or replacing any covered part that is defective or is the result of improper workmanship, provided that the part is returned to Buhler Industries Inc. within thirty (30) days of the date that such defect or improper workmanship is, or should have been, discovered. Such parts must be shipped to Buhler Industries Inc. at the purchaser's expense.

### What is Not Covered

Under no circumstances does this limited warranty cover any components or parts that have been subject to the following: negligence; alteration or modification not approved by Buhler Industries Inc.; misuse; improper storage; lack of reasonable and proper maintenance, service, or repair; normal wear; damage from failure to follow operating instructions; accident; and/or repairs that have been made with parts other than those manufactured, supplied, and or authorized by Buhler Industries Inc.



**Authorized Dealer and Labor Costs**

Repairs eligible for labor under this limited warranty must be made by Buhler Industries Inc. or an authorized Allied by Farm King dealer. Buhler Industries Inc. retains the exclusive discretion to determine whether it will pay labor costs for warranty repairs or replacements, and the amount of such costs that it will pay and the time in which the repairs will be made. If Buhler Industries Inc. determines that it will pay labor costs for warranty work, it will do so by issuing a credit to the dealer's or distributor's account. Buhler Industries Inc. will not approve or pay invoices sent for repairs that Buhler Industries Inc. has not previously approved. Warranty service does not extend the original term of this limited warranty.

**Warranty Requirements**

To be covered by warranty, each Allied by Farm King new product must be registered with Buhler Industries Inc. within thirty (30) days of delivery to original retail purchaser. If the customer decides to purchase replacement components before the warranty disposition of such components is determined, Buhler Industries Inc. will bill the customer for such components and then credit the replacement invoice for those components later determined to be covered by this limited warranty. Any such replacement components that are determined not to be covered by this limited warranty will be subject to the terms of the invoice and shall be paid for by the purchaser.

**Warranty Claims:**

Warranty requests must be prepared on Buhler Industries Inc. Warranty Claim Forms with all requested information properly completed. Warranty Claims must be submitted within a thirty (30) day period from date of failure repair.

**Warranty Labor:**

Any labor subject to warranty must be authorized by Buhler Industries Inc. The labor rate for replacing defective parts, where applicable, will be credited at 100% of the dealer's posted shop rate.

**Exclusive Effect of Warranty and Limitation of Liability**

TO THE EXTENT PERMITTED BY LAW, BUHLER INDUSTRIES INC. DISCLAIMS ANY WARRANTIES, REPRESENTATIONS, OR PROMISES, EXPRESS OR IMPLIED, AS TO THE QUALITY, PERFORMANCE, OR FREEDOM FROM DEFECT OF THE COMPONENTS AND PARTS COVERED BY THIS WARRANTY AND NOT SPECIFICALLY PROVIDED FOR HEREIN.

TO THE EXTENT PERMITTED BY LAW, BUHLER INDUSTRIES INC. DISCLAIMS ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ON ITS PRODUCTS COVERED HEREIN, AND DISCLAIMS ANY RELIANCE BY THE PURCHASER ON BUHLER INDUSTRIES INC.'S SKILL OR JUDGMENT TO SELECT OR FURNISH GOODS FOR ANY PARTICULAR PURPOSE. THE PURCHASER'S ONLY AND EXCLUSIVE REMEDIES IN CONNECTION WITH THE BREACH OR PERFORMANCE OF ANY WARRANTY ON PRODUCTS MANUFACTURED BY BUHLER INDUSTRIES INC. ARE THOSE SET FORTH HEREIN. IN NO EVENT SHALL BUHLER INDUSTRIES INC. BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING, BY WAY OF EXAMPLE ONLY AND NOT LIMITATION, LOSS OF CROPS, LOSS OF PROFITS OR REVENUE, OTHER COMMERCIAL LOSSES, INCONVENIENCE, OR COST OF REPLACEMENT OF RENTAL EQUIPMENT). IN NO EVENT SHALL Allied by Farm King'S CONTRACT OR WARRANTY LIABILITY EXCEED THE PURCHASE PRICE OF THE PRODUCT.

(Note that some provinces or states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations and exclusion may not apply to you.) This warranty gives you specific legal rights and you may also have other rights, which vary from province to province or state to state.

Buhler Industries Inc. neither assumes nor authorizes any person or entity, including its selling representatives, to assume any other obligations or liability in connections with the sale of covered equipment, or to make any other warranties, representations, or promises, express or implied, as to the quality, performance, or freedom from defect of the components and parts covered herein. No one is authorized to alter, modify, or enlarge this limited warranty, or its exclusions, limitations and reservations.

Corrections of defects and improper workmanship in the manner, and for the applicable time periods, provided for herein shall constitute fulfillment of all responsibilities of Buhler Industries Inc. to the purchaser, and Buhler Industries Inc. shall not be liable in negligence, contract, or on any other basis with respect to the subject equipment.

This limited warranty is subject to any existing conditions of supply which may directly affect Buhler Industries Inc.'s ability to obtain materials or manufacture replacement parts.

Buhler Industries Inc. reserves the right to make improvements in design or changes in specifications to its products at anytime, without incurring any obligation to owners of units previously sold.

**Government Legislation:**

Warranty terms and conditions are subject to provincial or state legislation.

**Important Note:** This warranty does not apply to rentals.



[www.farm-king.com](http://www.farm-king.com)



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