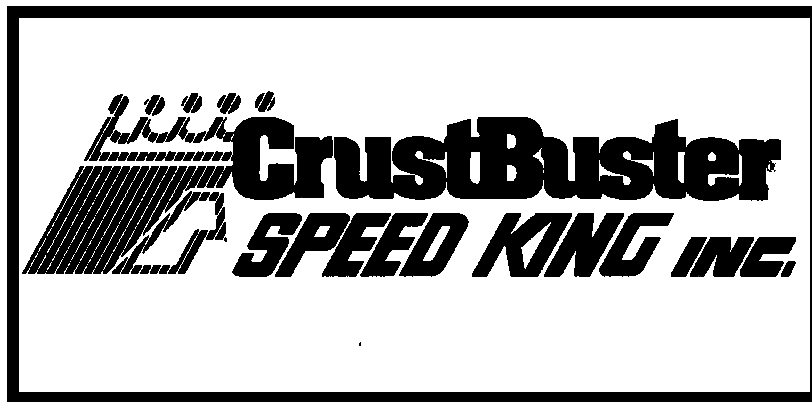




Super 20LS
BOLL BUGGY
REPAIR PARTS

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Identification

Your Boll Buggy is identified by a Serial Number and Model Number. Record these numbers in the spaces provided in this manual and refer to them when ordering parts or requesting service.

Serial Number	Model Number
---------------	--------------

Warranty

WARRANTY: In addition to the implied warranties of fitness and of merchantability, CrustBuster/Speed King warrants new products sold by it to be free from defects in workmanship and material for a period of 12 months, from the date of delivery to the first user customer. Warranty on purchased parts (cylinder and motors) will be the same as that offered by the appropriate manufacturer of these parts.

EXCLUSIONS: No warranty of any kind is made by CrustBuster/Speed King with regard to new products which have been subject to operation in excess of recommended capacities, misuse, abuse, negligence, or accident, or have been altered or repaired in any manner not authorized by CrustBuster/Speed King. CrustBuster/Speed King is constantly striving to improve its products. Changes in design and improvement will be made whenever CrustBuster/Speed King believes the efficiency of its products will be improved thereby, but without incurring any obligation to incorporate such improvements in any products which have been shipped or are in service. No obligation exists for compensation of unauthorized repairs or modifications without prior approval. And in no event will CrustBuster/Speed King be liable for consequential damages, such as but not limited to: downtime, delays, etc.

WARRANTY REGISTRATION: This warranty is not valid unless registered with CrustBuster/Speed King within 10 days from the date of purchase. It is the sole responsibility of the selling retail dealer to fill out the registration forms and see that they are properly filed with CrustBuster/Speed King.

WARRANTY PROCEDURE: Should any part fail to conform with this warranty, CrustBuster/Speed King will repair or replace the part or parts which do not conform. If a part is defective, take it to your authorized CrustBuster Farm Equipment Dealer immediately, along with your warranty registration, and complete the proper forms requesting a warranty adjustment. Our representative will pick up the part to be returned to the factory for examination. If the customer (first user) requests that a new part be substituted for the old part, a new part will be charged to the dealer who will in turn charge the customer. If the part is found by us to be defective, a credit for the part will be given to the dealer to be passed on to the customer. If the dealer or customer wishes to repair the part, this will be done only if authorized by CrustBuster/Speed King. This warranty procedure is in addition to all remedies authorized by law.

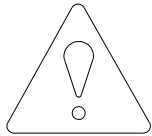
CRUSTBUSTER/SPEED KING, INC.
Box 1438
Dodge City, KS 67801

Safety



Read and follow these instructions for your safety and the safety of anyone around the machine. Keep safety signs clean and legible at all times. Replace safety signs that are missing or have become illegible.

#603217

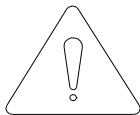


CAUTION

1. ALWAYS DISMOUNT FROM THE SIDE OF THE TRACTOR, NEVER AT THE REAR.
2. DO NOT ALLOW PEOPLE TO RIDE ON THIS MACHINE.
3. NEVER CARRY ANYONE ON THE TRACTOR.
4. BE SURE EVERYONE IS CLEAR OF THE MACHINE BEFORE STARTING ENGINE OR OPERATION.
5. USE S M V EMBLEM WHEN OPERATING ON HIGHWAYS, EXCEPT WHEN PROHIBITED BY LAW.
6. WHEN TRANSPORTING UNIT ON ROADS OR HIGHWAYS ALWAYS WATCH FOR WIDTH AND OVERHEAD OBSTRUCTIONS.
7. NEVER DUMP WHEN STRONG WIND BLOWS FROM RIGHT.
8. ALWAYS DUMP WITH MACHINE LEVEL, OR RIGHT SIDE LOWER.
9. WHEN DUMPING BASKET, ALWAYS WATCH FOR OVERHEAD OBSTRUCTIONS.
10. NEVER LUBRICATE OR MAKE ADJUSTMENTS WHILE ENGINE IS RUNNING OR BASKET IS IN RAISED POSITION.
11. KNOW YOUR MACHINE, STUDY OPERATORS MANUAL, ASK YOUR DEALER IF YOU HAVE ANY QUESTIONS ON THE OPERATION OF THIS MACHINE.
12. USE CAUTION WHEN TURNING OR CROSSING ROUGH TERRAIN.
13. USE CAUTION WHEN OPERATING AROUND ELECTRIC POWER LINES.

603217

#603894



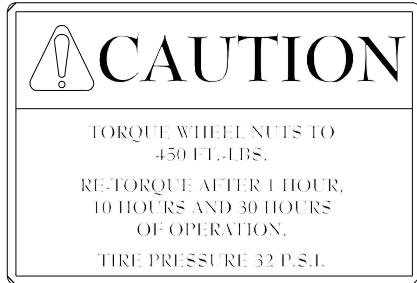
WARNING

**DO NOT DUMP AROUND
ELECTRICAL POWER LINES**

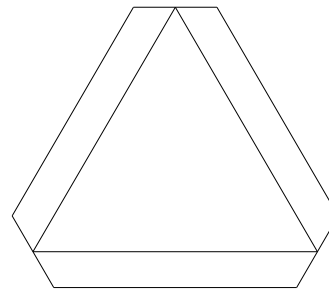
ELECTROCUTION CAN RESULT

Safety

#607291



#604512



#607549



May we suggest that you take a few additional minutes to read over more than once the areas of this manual where **SAFETY SYMBOLS** and **CAUTION** notes appear. These are areas where the operator should use particular care.

Play it "**SAFE.**"

**KNOW THE DANGER AREA
AND AVOID THEM.**

Look for this symbol to point out important safety precautions. It means---



**ATTENTION!
BECOME ALERT!
YOUR SAFETY
IS INVOLVED.**

Specifications

Volume	2030 cu ft struck
Basket	
Length	19' - 11"
Length at top with extensions	21' - 2"
Width at top	13' - 6"
Width at bottom	7' - 8"
Height	
Ground to basket pivot point	10' - 3"
Ground to top panel -dump in side	11' - 1"
Ground to bottom of main frame	27"
Ground to top panel	13' - 10"
Length	28'
Tongue jack stand	Standard
Single Axles	120" - 160" Adjustable
Tires	18.4-26 12 ply
Basket lift hydraulic cylinder	5" x 43½"
	2½" rod diameter
Packer panel hydraulic cylinder	2½" x 32"
	1½" rod diameter

Dealer Check List

Pre-Delivery Check List

After the Boll Buggy has been completely assembled and lubricated, inspect it thoroughly to be certain it is in good running order before delivering it to the customer. The following check list is a reminder of points to inspect. Check off each item as it is found satisfactory, or after proper adjustment is made.

Boll Buggy Inspection

- _____ Check all bolts and nuts to be sure they are on tight.
- _____ Check hydraulic system to make sure it has been purged to remove air as instructed in owner's manual.
- _____ Hitch adjusted to level Boll Buggy as instructed in owner's manual.
- _____ Check and, if necessary, lubricate all lubrication points.
- _____ Check to see if the safety decals are in place. (Refer to pages 1-2 for decal information.)
- _____ Check wheel hubs for bearing preload and remove end play if necessary.

Boll Buggy Functional Test

- _____ Attach Boll Buggy to tractor drawbar securely. Raise basket gradually, paying particular attention to the last 8 to 10 inches of cylinder stroke not to unbalance the unit with a sudden surge of hydraulic pressure. **Models equipped with regulator, fold-out door and/or chain dump side must be weighted to provide stability.**

NOTE: Observe safety precautions on the decal and in the manual while dumping basket. WATCH FOR OVERHEAD OBSTRUCTION.

Delivery Check List

- _____ Explain the adjustments for implement operation.
- _____ Review safety precautions with the owner and operator as stated on the safety decal and in the manual.
- _____ Give the customer the owner's manual and explain the importance of reading this manual.

IMPORTANT: The Warranty Registration form must be completed, signed by both dealer and customer and returned to CrustBuster/Speed King, Inc., Box 1438, Dodge City, KS 67801, to validate the warranty. If warranty registration is not completed and returned, the product concerned will not be covered by warranty policy.

Operation

Familiarize yourself with the various features of the Boll Buggy before operating. Read this section of your manual carefully.

Attaching to Tractor

1. Adjust tongue ball hitch (standard) or clevis hitch (optional) to the appropriate holes on the tongue to level main frame when attached to tractor drawbar.
2. Attach Boll Buggy to tractor (for the standard ball hitch) using a 2 5/16" ball (minimum capacity 12,500#) with enough shank and thread length to secure it with a full depth nut and lock washer. Make sure the ball shank threads go all the way through the nut.

To Couple:

1. Block buggy wheels.
2. Align hitch ball beneath coupler.
3. Set the locking pin in the open position.
4. Slide the locking plate into the open position and lower the buggy onto the hitch ball.
5. Visually check that the hitch ball is fully seated in the coupler.
6. Slide the locking plate into the closed position.
7. Set the locking pin in the closed position to close the coupler.

To Uncouple:

1. Block buggy wheels.
2. Set the locking pin in the open position.
3. Slide the locking plate into the open position and raise buggy from the hitch ball.

Adjusting Wheel Spacing

Wheel Spacings are from 120" to 160".

From the minimum wheel spacing of 120", each wheel can be adjusted out 20". This makes it possible to provide more stability to the dump out side.

Example: Set wheels on dump in side out 10"

Set wheels on dump out side out 20"

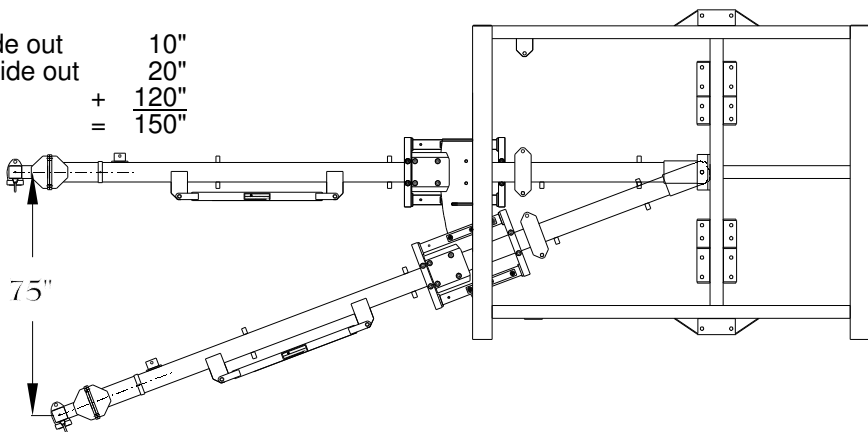
Wheel spacing = $\frac{120}{150}$ "

This will fit 5- 30" rows, but put the tractor ½ row off. This can be remedied by using a hydraulic swing hitch.



CAUTION

Secure hitch with transport bar for highway use. Remove and store bar before operating swing hitch.



Hydraulic System Purging Procedure

Hydraulic cylinders and hoses must be run without load to remove all air from system.

1. Attach hoses to a pair of quick coupler hydraulic fluid outlets on the tractor. Check the tractor hydraulic fluid and add fluid if system is not completely full.
2. Start tractor engine and activate valve lever to extend hydraulic cylinders approximately one-third of stroke or 20 inches. Stop at this point and check hydraulic fluid level in tractor. Add required amount to bring level to full. Again extend hydraulic cylinder an additional 20 inches of stroke. Repeat procedure above in checking fluid level in tractor. Extend cylinders to maximum extended position and repeat procedure used to check fluid level.
3. With the tractor fluid at a safe operational level, fully retract and extend the cylinders several times to insure removal of all air from system.
4. Retract cylinders to fully closed position.
5. Repeat above procedure for packer panel, swing tongue and chain dump unload panel cylinders.
7. After cycling all cylinders and purging lines and cylinders of any air locks, check to be certain all cylinder pins are securely held in place and will not work out under load.
8. You are now ready to dry run the unit. Complete the lubrication of the unit as described on page 8. Read the operating section of this manual before dry running of unit.

Operation



CAUTION:

While cycling the basket for the first time it is best to have an observer on the ground at a safe distance to give instructions to the operator. The observer will be looking for any hydraulic hose pinch points, loose connections, any binding of basket or packer panel, or anything else that would prohibit the safe and successful operation of the unit. Be sure to observe the hoses at the main pivot point for sufficient slack.

Operating Information

Before operating this unit, *refer to the Lubrication section in this manual on page 8* and make sure machine is properly lubricated.

The Boll Buggy is designed with a unique packer panel allowing the basket to hold two dumps from most cotton pickers and strippers as well as the ability to dump the two dumps separately. This means the Boll Buggy can dump without overfilling the module builder.

To receive load from harvesting unit, retract packer panel cylinders so top end of packer panel is against the right side or dump-in side of basket. Position Boll Buggy along the side of harvester, close enough to allow transfer of cotton from harvester to Boll Buggy.

After the harvester has dumped into the Boll Buggy, the packer panel cylinders may be extended as far as possible, thus compacting and moving the cotton to the left side of the basket.

At this time, the Boll Buggy is ready to receive the second dump from the harvesting unit. After receiving the second dump, the Boll Buggy packer cylinders should again be retracted enough to release compaction force on first dump and at the same time compact and hold second dump.

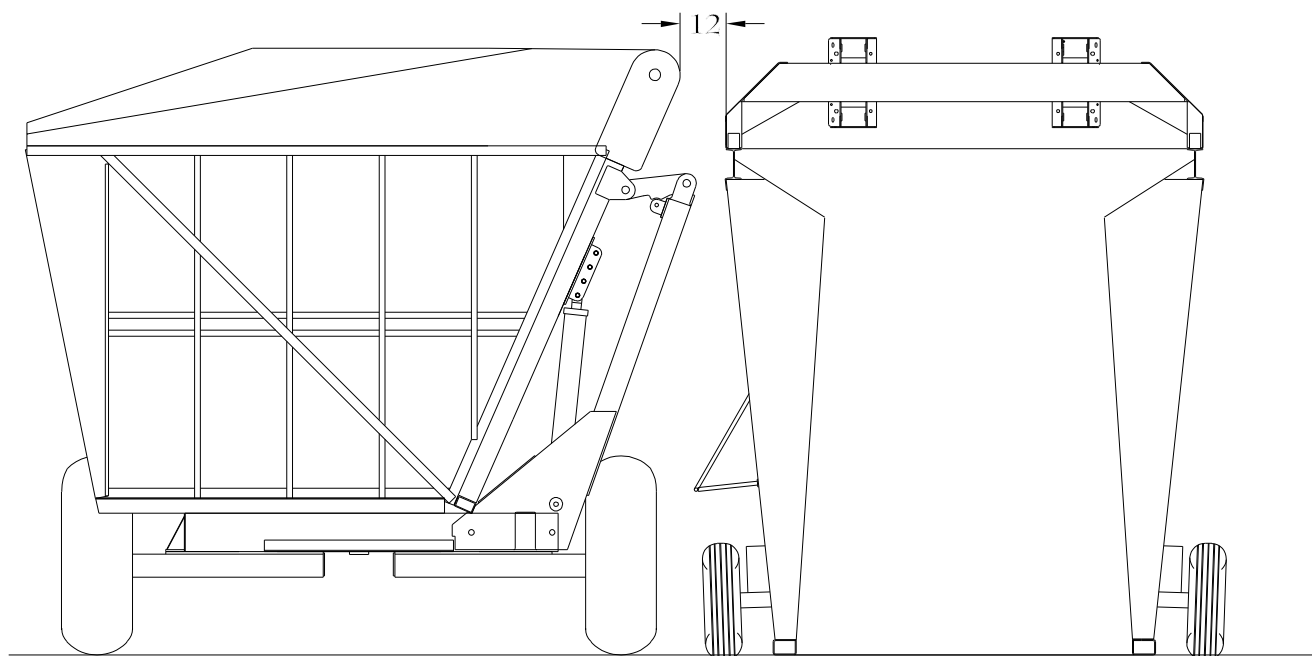


CAUTION: When turning or crossing rough terrain, slow tractor speed down.



CAUTION: Be sure everyone is clear of the machine before starting engine or operation.

To dump the Boll Buggy, simply drive along side of trailer or module and stop at the required position. The basket moves toward the builder when it raises, so it is not necessary to stop extremely close. *(See illustration below.)* Set tractor engine RPM at approximately 1/2 to 3/4 maximum engine RPM. Actuate tractor valve lever to raise basket.



Operation



CAUTION: Use the following cautions when dumping the Boll Buggy basket:

1. Use caution when operating around power lines.
2. Watch for overload obstructions which might interfere with the basket.
3. Always select level area for dumping. If the area is uneven, position units so when the Boll Buggy is dumping, the dump-in side of the unit is lower than the dump-out side. This will minimize the possibility of unit overturning during dump cycle.
4. Do not move unit with basket partially up or basket lift cylinders partially extended. Damage could result to cylinders and/or basket frame.
5. When dumping, always note direction strong winds are blowing from. Position units so Boll Buggy basket is dumping into wind current, or that wind current is blowing into either the front or rear of the Boll Buggy.

6. Do not move Boll Buggy with the basket in the dump position.

NOTE: Units with chain door are operated in the same load and dump sequence, but the chain door is used to regulate the amount of cotton metered into the module builder.

Adjust tractor hydraulic flow so chain door moves cotton at a controllable rate.

Chain door may be equipped with a front and rear motor to provide dual unload (See *pages 22-23.*)

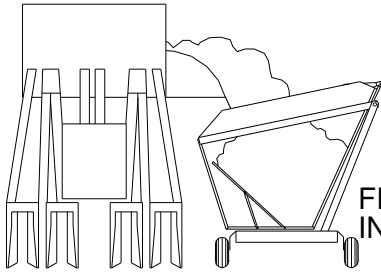
Once the first dump has left basket, the remaining dump can be released by retracting packer panel cylinders. This will place the top end of packer panel against dump-out side allowing cotton to move out of basket.

The complete fill and dump cycle has now been completed and can be started again in the same sequence.

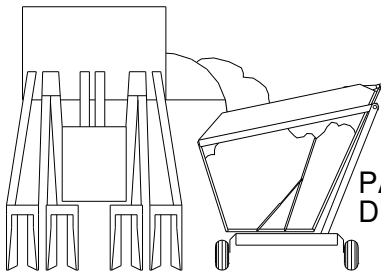
Operation



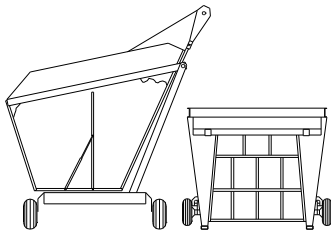
LOADING / UNLOADING PROCEDURE TYPICAL ALL BOLL BUGGY MODELS WITH PACKER / DIVIDER PANEL



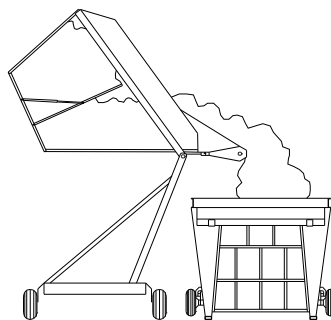
FILL BOLL BUGGY WITH PACKER / DIVIDER AGAINST INLOAD SIDE.



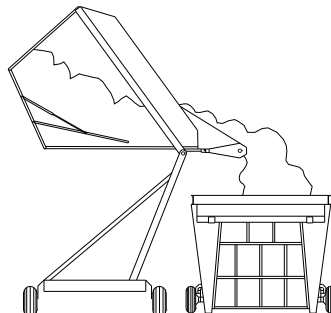
PACK COTTON TO OUTLOAD SIDE OF BOLL BUGGY AND DUMP SECOND LOAD.



MOVE PACKER / DIVIDER BACK TO INLOAD SIDE TO START UNLOAD.



RAISE BASKET AND START CHAIN DUMP AT THIS TIME. CONTINUE UNTIL FIRST LOAD HAS BEEN EMPTIED.



MOVE PACKER / DIVIDER BACK TO UNLOAD SIDE UNTIL COTTON SLIDES ONTO CHAIN AND EMPTY SECOND LOAD.



CAUTION: DO NOT LET THE PACKER / DIVIDER COME INTO CONTACT WITH CHAIN & SLAT.

Lubrication and Maintenance

IMPORTANT: Before operating your Boll Buggy, make sure it is properly lubricated and thoroughly inspected. Only a minimum of time and effort is required to regularly lubricate and maintain this machine to insure long life and trouble-free operation.

Lubrication

- ◇ Keep all lubricants and lubrication points free from dirt and grit.
- ◇ Use a general purpose lithium base grease to lubricate the pressure grease fittings.
- ◇ The following lubrication schedule is recommended:

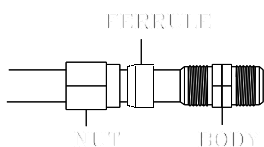
Basket and Pivot Pins
(10-Fittings) Weekly
Wheel Bearings Repack Yearly
Bearings on chain door
(4-Fittings) Yearly

Maintenance

- ◇ Inspect your machine regularly to prevent accidents and breakdowns.
- ◇ Check hitch pin periodically for wear and replace if worn excessively.
- ◇ Check hitch mounting bolts occasionally to make sure they are tight.
- ◇ Check wheel spindle bearing preload after twenty(20) hours operation.
- ◇ Torque wheel nuts to 450 ft-lbs. Re-torque after 1 hour, 10 hours, and 30 hours of operation.
- ◇ Check tire pressure and inflate to 32 PSI.
- ◇ Swing hitch - Remove shims from swing hitch clamps as required to prevent excessive vertical movement of hitch to frame.

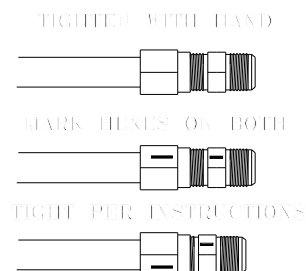
Tube Fitting Assembly

1. Clean all dirt and grit from the I.D. and O.D.
2. Slide the nut and then the ferrule onto the tube. Make sure the tapered end of ferrule points toward the nut.



3. Lubricate all mating surfaces of nut, ferrule and body with a heavy lubricant such as Aeroquip Lube Oil.
4. Place end of tube against standard S.A.E. 37° flare body.

5. Slide the ferrule and nut against body and tighten the nut onto the body "hand tight." Mark the nut in relation to the body for location.



6. Hold tube against body and tighten nut as follows:
 - a. 1 1/4 turns on tube size 3/16" (dash size -3) through tube size 5/8" (dash size -10).
 - b. 1 1/2 turns on tube size 3/4" (dash size -12) through tube size 2" (dash size -32).

Storage

The Boll Buggy should be stored in an enclosed building to prevent hoses, cylinders, and metal surfaces from deteriorating due to weather exposure.

Recommended storage procedure follows:

1. Elevate frame so tires will clear ground.

NOTE: Support frame securely so there is no danger of it falling.

2. Remove clamps from hydraulic hoses going to the tractor and elevate them above the front hydraulic cylinder to prevent oil from seeping out of quick couplers while not in use.

NOTE: When preparing to use machine after storage, check for any oil leaking. If there is any indication of oil leaking from fittings, hoses, or cylinders the hydraulic system should be purged prior to raising the basket. (Follow instructions in manual for hydraulic system purging -page 4.)

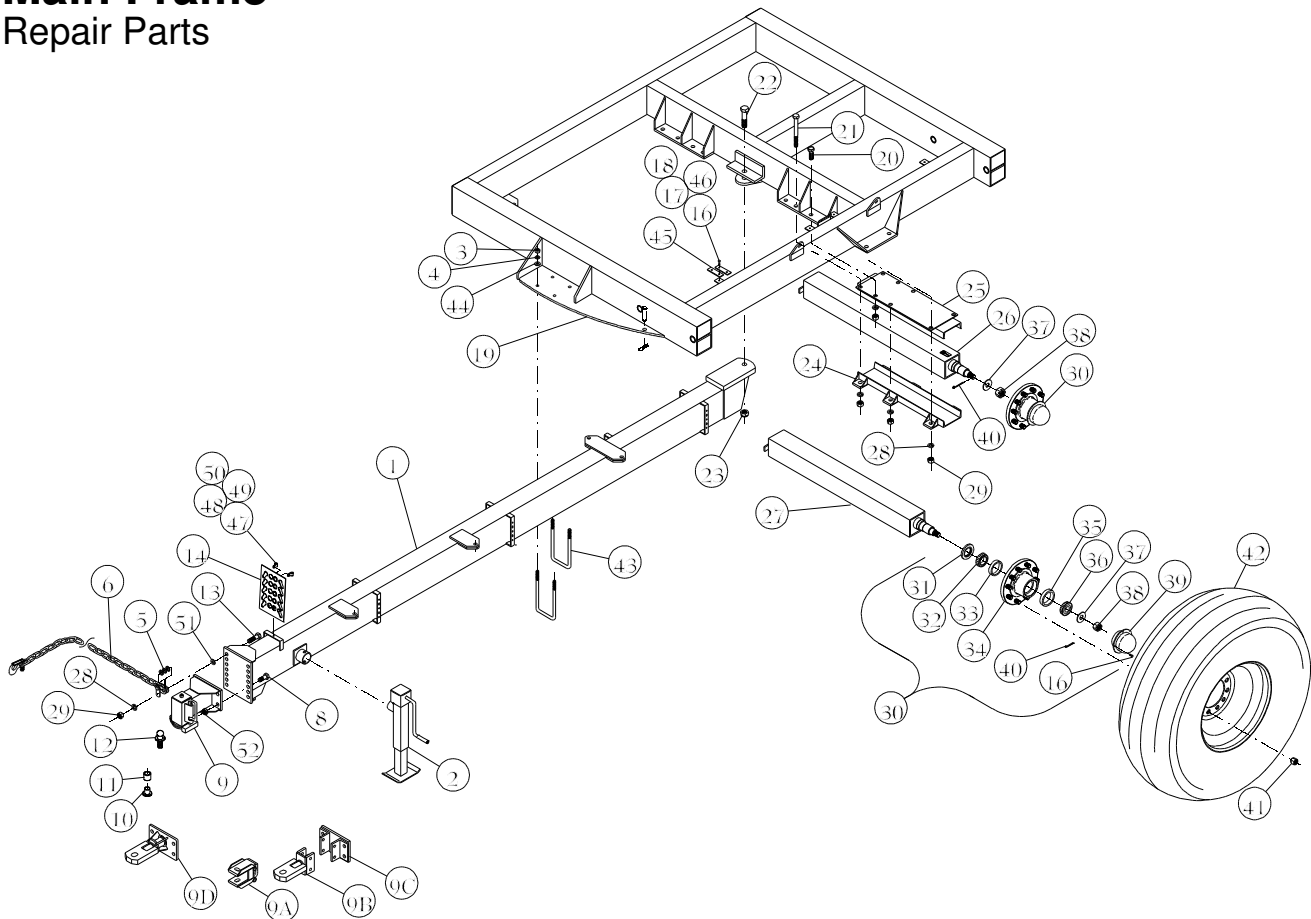
Trouble Shooting

NOTE: Step Number 1 in all cases is to familiarize yourself with the information in the owner's manual pertaining to assembly, operation, lubrication, and maintenance.

Trouble	Possible Cause	Possible Remedy
Basket fails to raise.	◇ Hoses not correctly coupled to tractor. ◇ Tractor system pressure not sufficient. ◇ Tractor hydraulic oil level is low.	Connect or insert quick coupler correctly. Check tractor system pressure. Fill per purging instructions - <i>page 4</i>.
Basket fails to raise evenly.	◇ System not purged of all air. ◇ Hose is pinched or has a restriction. ◇ Defective cylinder due to worn or bad piston seals.	Purge system as described in operation section. Replace hose and re-route so that it is clear of pinch point. Repair cylinders inspecting all parts for wear. Replace seal kit.
Cotton will not dump out when basket is raised.	◇ Dumping area sloping severely to right.	Move to level area for dumping.
Chain and slats fail to move.	◇ Hose not correctly coupled to tractor. ◇ Check valve improperly installed.	Connect quick coupler correctly. Install check valve in proper hydraulic line.

Main Frame

Repair Parts

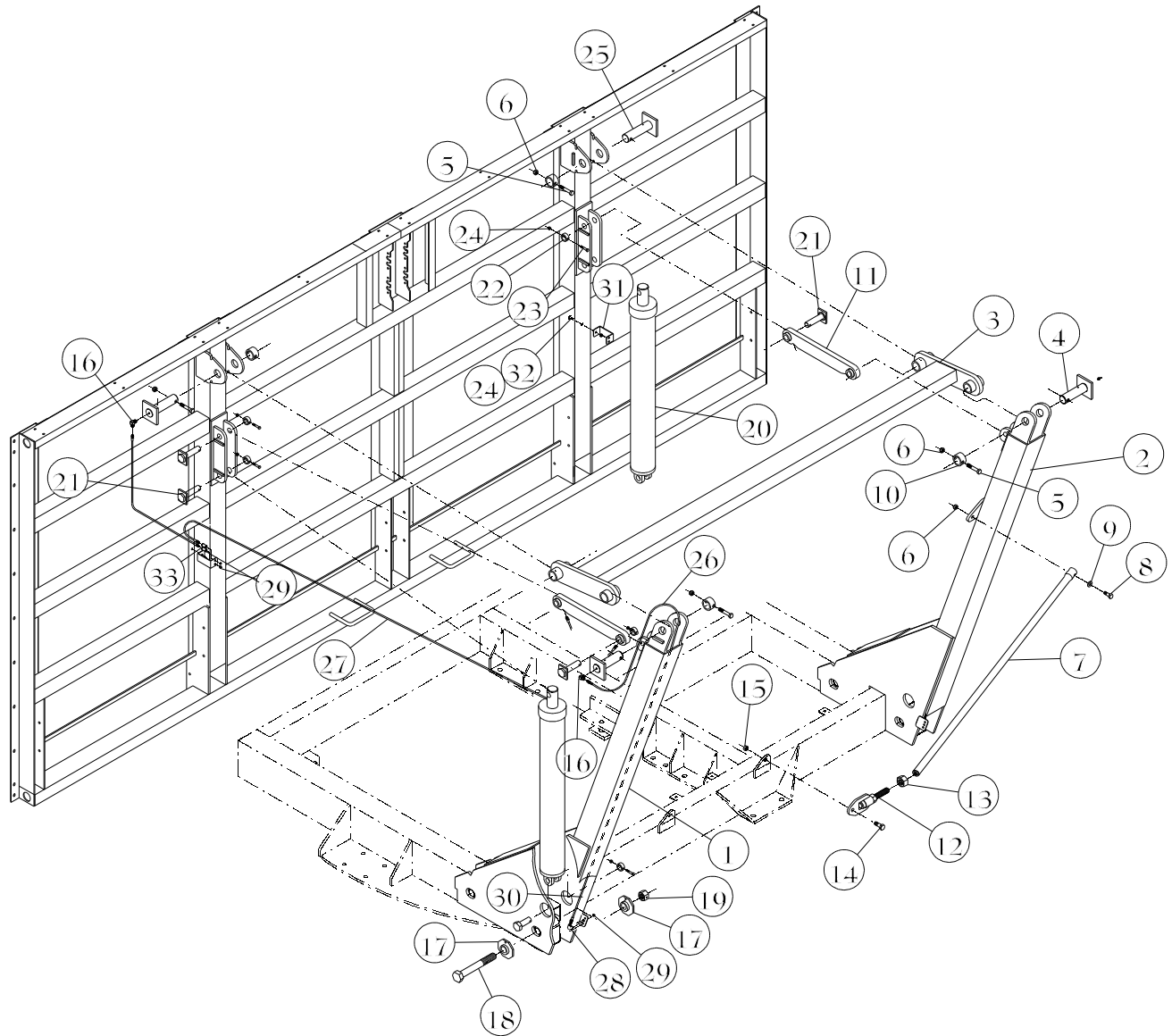


Item	Qty	Part No.	Description
1	1	967752	Tongue
2	1	530998	Jack
3	4	330290	Hex Nut 3/4"
4	4	330332	Lock Washer 3/4"
5	3	335166	Mach Bush 1" x 10 ga
6	1	433946	Safety Chain 21,000#
7			
8	4	01172600	HHCS 1" x 2 1/2"
9	1	873836	Coupler
9A		942813	Hitch
9B		964601	Swivel Mono Hitch
9C		967869	Hitch Converter
9D		967976	Swivel Mono Hitch
10	1	152892	Hitch Ball Spacer 2"
11	1	148957	Hitch Ball Spacer 1 1/2"
12	1	606343	Ball Hitch 2 5/16"
13	1	334789	HHCS 1" x 3 1/2"
14	1	965236	Hose Rack
15	10	00613000	Hose Clamp 5/8"
16	3	01261700	Carriage Bolt 5/16" x 1 1/2"
17	3	330845	Lock Washer 5/16"
18	3	330811	Hex Nut 5/16"
19	1	967778	Main Frame
20	4	332957	HHCS 1" x 2"
21	12	338020	HHCS 1" x 10"
22	1	338319	HHCS 1 1/4" x 5"
23	1	338228	Nylock Nut 1 1/4"
24	2	965632	Bottom Clamp
25	2	965624	Top Clamp
26	2	872945	Adjustable Axle Assembly Includes #27,30,37,38 & #40
27	2	966564	Axle -3 3/8" Spindle

Item	Qty	Part No.	Description
28	17	330399	Lock Washer 1"
29	17	330381	Hex Nut 1"
30	2	551358	Hub 10 Bolt Complete (873) (Includes #31-41)
31	2	403428	Grease Seal
32	2	403410	Inner Bearing
33	2	403402	Inner Cup
34	2	551366	Hub (873) w/cups only
35	2	402784	Outer Cup
36	2	402800	Outer Bearing
37	2	402842	Spindle Washer
38	2	402859	Spindle Nut 1 1/4" Castle
39	2	402818	Dust Cap
40	2	330530	Cotter Pin 1/4" x 2 1/4"
41	20	403352	Wheel Nut .750-16 Flange
		337899	Replacement Bolt 3/4-16 x 2 13/16"
42	2	862888	Tire & Rim 18.4-26 12 Ply 10 Bolt Rim
		530972	Tire Only 18.4-26 12P
		530709	Rim 10 Bolt 16-26 11.25BC
43	2	338137	U-bolt 3/4" x 6" x 13 1/4"
44	4	330340	Flat Washer 3/4"
45	6	212571	Hose Clamp Plate
46	3	330852	Flat Washer 5/16"
47	5	01017300	HHCS 3/8" x 1"
48	5	330894	Flat Washer 3/8"
49	5	330043	Lock Washer 3/8"
50	5	330035	Hex Nut 3/8"
51	1	330407	Flat Washer 1"
52	4	330597	Nylock Nut 1"

L-Frame

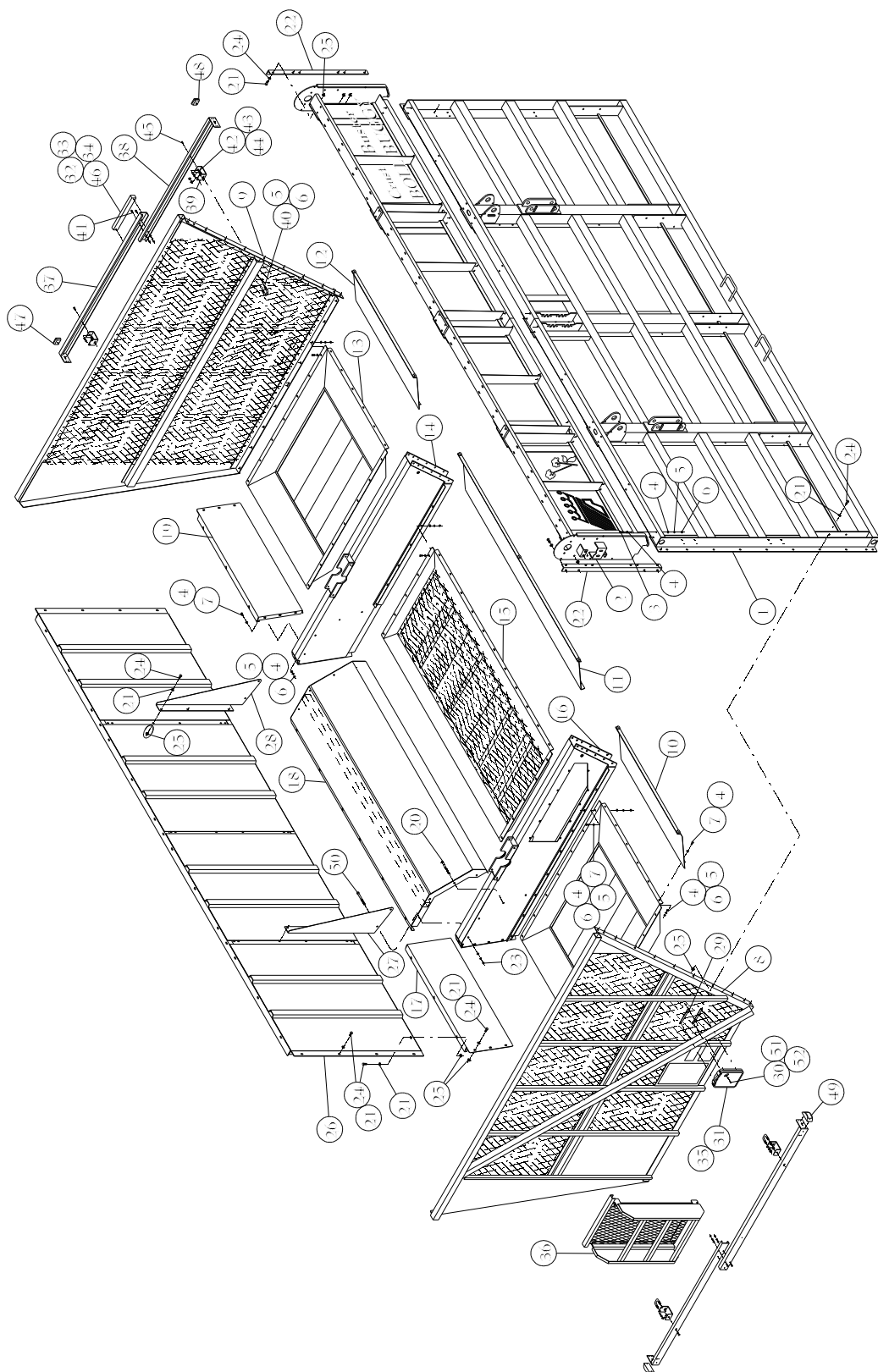
Repair Parts



Item	Qty	Part No.	Description	Item	Qty	Part No.	Description
1	1	967679	L-Frame Front	18	4	338095	HHCS 1½" x 11"
2	1	967687	L-Frame Rear	19	4	333575	Hex Nut 1½"
3	1	966028	Upper Linkage				w/ 5/16" Set Screw
4	2	965731	Pin 2" x 7 3/4"	20	2	472613	Cylinder 5" x 43½"
5	4	01116300	HHCS 5/8" x 3½"	21	6	968990	Pin 1 1/4" x 4 15/16"
6	6	01572700	Nylock Nut 5/8"	22	6	153056	Cylinder Pin Collar
7	2	966002	Brace Tube 63"	23	6	331884	HHCS 3/8" x 2½"
8	2	01146000	HHCS 5/8" x 1 3/4"	24	8	330837	Nylock Nut 3/8"
9	2	330183	Flat Washer 5/8"	25	2	965749	Pin 2" x 8½"
10	4	152967	Collar	26	2	472647	Grease Line 41"
11	2	969584	Lower Linkage	27	4	472654	Grease Line 30"
12	2	965129	End Adjustment	28	6	472001	Pipe Elbow 1/8"
13	2	01486000	Hex Nut 1 1/8"	29	10	02738300	Zerk 1/8" NPT Straight
14	2	335125	HHCS 3/4" x 2"	30	6	469494	Grease Line 112"
15	2	330316	Hex Nylock Nut 3/4"	31	2	266379	Hose Bracket
16	6	03392800	Adapter 90° 1/8MP x 1/8FP	32	2	330654	Carriage Bolt 3/8" x 1"
17	8	966606	Cam Bracket	33	6	331066	Pipe Coupling 1/8"

Basket

Repair Parts



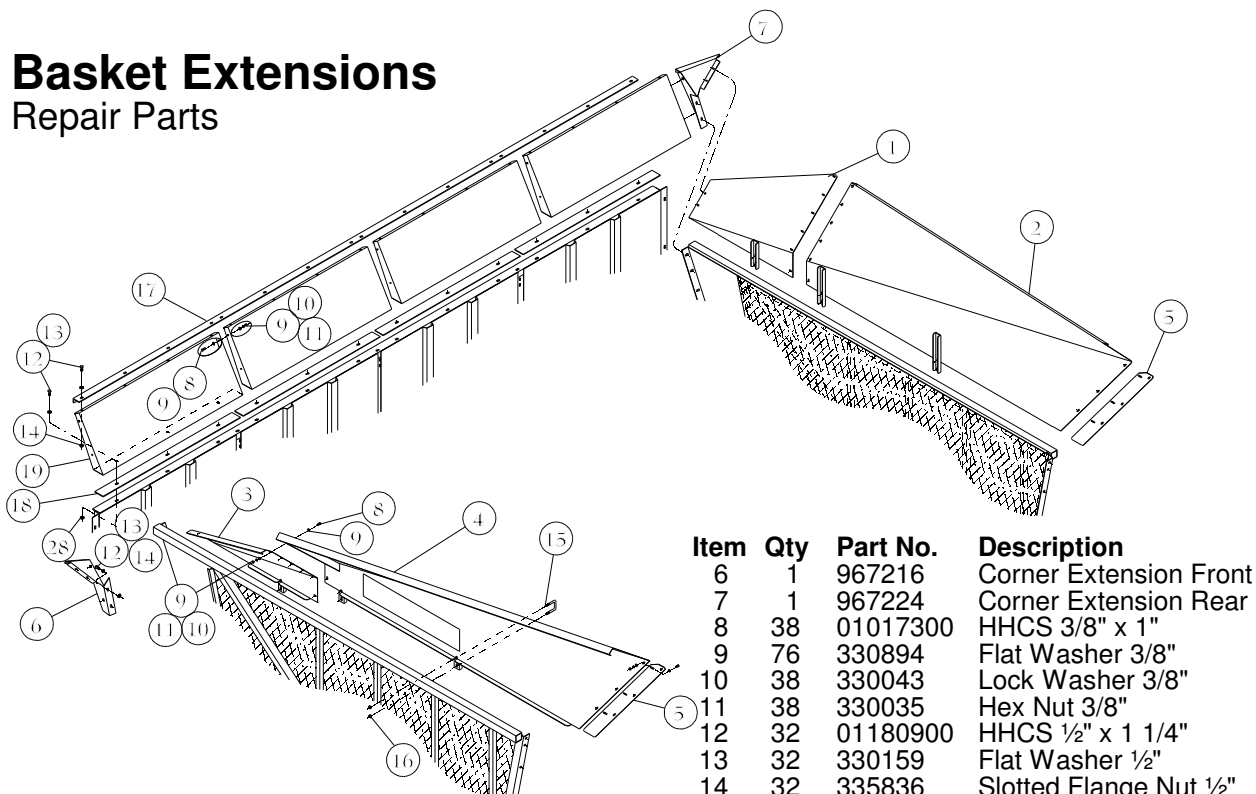
Basket

Repair Parts

Item	Qty	Part No.	Description	Item	Qty	Part No.	Description
1	1	873786	Lower Chain Side Panel	28	1	264440	Inload Panel Support Rear
2	1	872119	Upper Chain Side Panel	29	2	231647	Cannister Mounting Plate
3	24	01158500	HHCS 3/8" x 1 1/4"	30	4	01057900	HHCS 1/4" x 3/4"
4	138	330894	Flat Washer 3/8"	31	1	607416	Manual Pak
5	122	330043	Lock Washer 3/8"	32	4	02919900	Screw #10-24 x 1" Hex
6	122	330035	Hex Nut 3/8"	33	8	02692200	Flat Washer #10
7	90	330654	Carriage Bolt 3/8" x 1"	34	4	333393	Lock Nut #10-24
8	1	965509	End Panel Front	35	1	607374	Owners Manual
9	1	965491	End Panel Rear	36	1	967091	Door
10	1	967802	Unload Side Panel Front	37	2	265520	Light Bar Plate
11	1	967810	Unload Side Panel Center	38	2	265538	Light Bar Plate Inner
12	1	967794	Unload Side Panel Rear	39	4	265587	Light Bar Bracket
13	2	965442	End Floor	40	4	226936	Light Bar Bracket Back up
14	1	965467	Mid Section Rear	41	4	01010800	HHCS 5/16" x 1"
15	1	965459	Center Floor	42	14	330852	Flat Washer 5/16"
16	1	965475	Mid Section Front	43	8	330845	Lock Washer 5/16"
17	1	967323	Inload Side Plate Front	44	8	330811	Hex Nut 5/16"
18	1	965590	Inload Side Plate Center	45	4	01047000	Carriage Bolt 5/16" x 1"
19	1	967315	Inload Side Plate Rear	46	1	606111	Light Bar
20	4	334458	HHCS 1/2" x 6"	47	1	606954	Tail Light Right
21	72	330159	Flat Washer 1/2"	48	1	606962	Tail Light Left
22	2	284521	Unload Panel Brace	49	2	606970	Clearance Light
23	8	331363	Hex Nylock Nut 1/2"		1	607374	Wiring Harness
24	72	01180900	HHCS 1/2" x 1 1/4"	50	4	331942	HHCS 1/2" x 6 1/2"
25	72	335836	Slotted Flange Nut 1/2"	51	4	02016400	Flat Washer 1/4"
26	1	965483	Lower Inload Panel	52	4	330522	Nylock 1/4"
27	1	264432	Inload Panel Support Front				

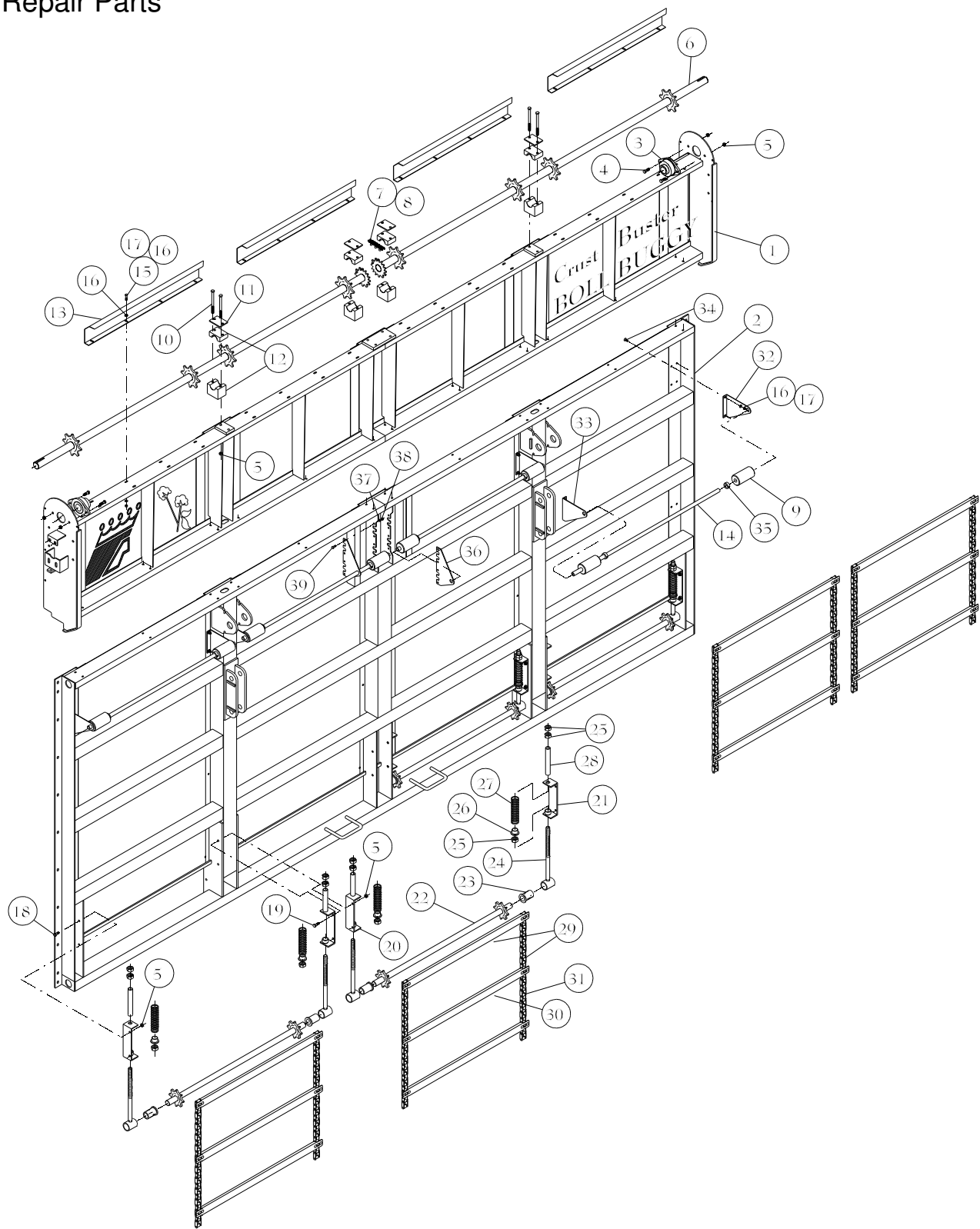
Basket Extensions

Repair Parts



Item	Qty	Part No.	Description	Item	Qty	Part No.	Description
1	1	967141	Load Side Extension Rear	6	1	967216	Corner Extension Front
2	1	965517	Unload Side Extension Rear	7	1	967224	Corner Extension Rear
3	1	967133	Load Side Extension Front	8	38	01017300	HHCS 3/8" x 1"
4	1	965525	Unload Side Extension Front	9	76	330894	Flat Washer 3/8"
5	2	265512	Side Extension	10	38	330043	Lock Washer 3/8"
				11	38	330035	Hex Nut 3/8"
				12	32	01180900	HHCS 1/2" x 1 1/4"
				13	32	330159	Flat Washer 1/2"
				14	32	335836	Slotted Flange Nut 1/2"
				15	6	331587	U-Bolt 1/2" x 2 1/2" x 3 1/2"
				16	12	331363	Hex Nylock Nut 1/2"
				17	1	284356	Top Angle
				18	4	225516	Back Up Strap
				19	4	967067	Top Inload Panel

Unload Side Repair Parts



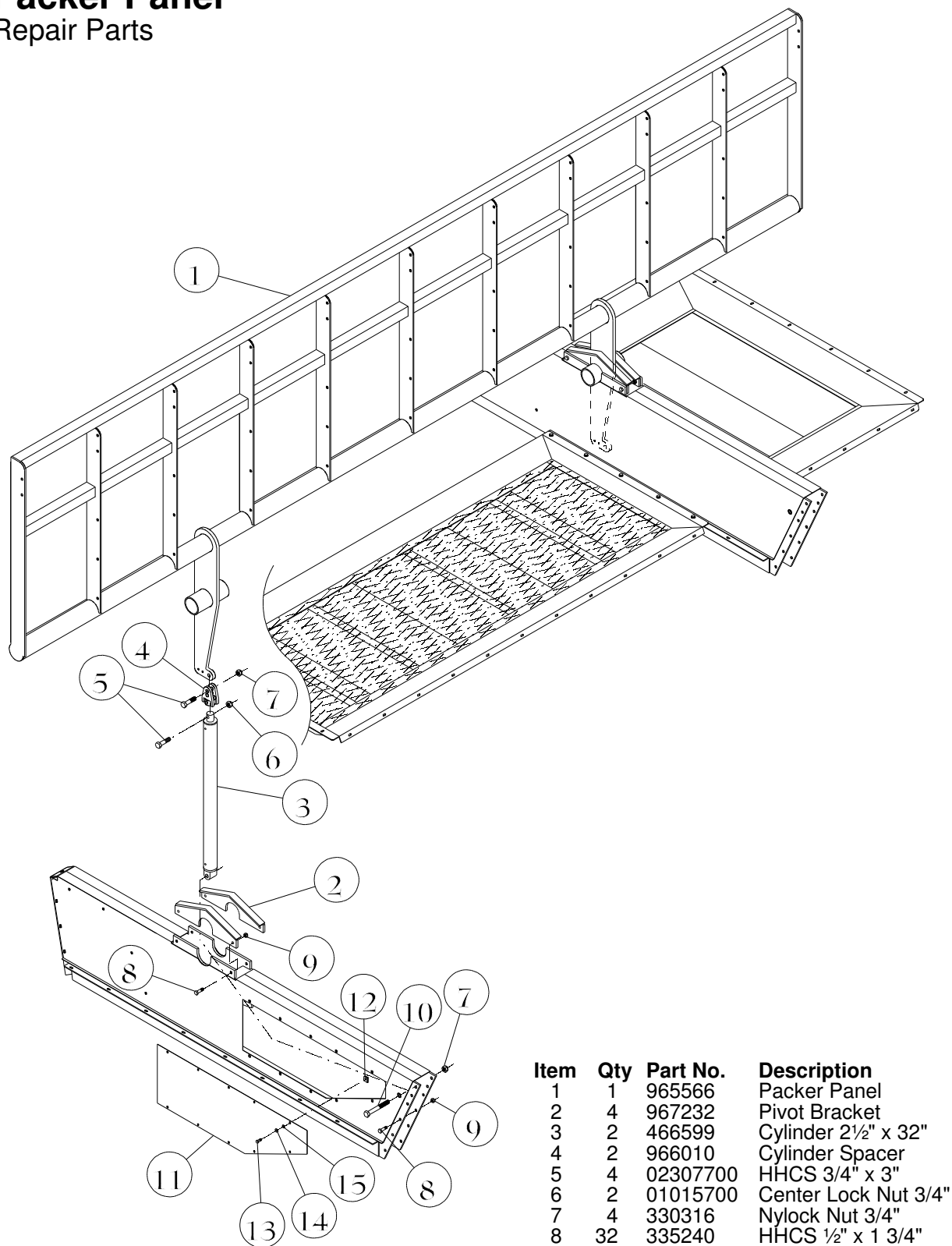
Unload Panel

Repair Parts

Item	Qty	Part No.	Description	Item	Qty	Part No.	Description
1	1	965756	Top Unload Panel	21	4	963249	Rear Spring Tension Bracket
2	1	967653	Bottom Unload Panel	22	4	964957	Bottom Shaft
3	2	402685	Bearing 2 Bolt Flange	23	8	402677	Take-Up Bushing
4	4	01147800	HHCS 1/2" x 1 1/2"	24	8	635920	Take-Up
5	24	331363	Nylock Nut 1/2"	25	16	332288	Hex Jam Nut 1"
6	2	965772	Top Shaft	26	8	963223	Spring Retainer Washer
7	1	433391	Chain #80 x 15 Pitches	27	8	502278	Spring 8"
8	1	00232900	Connector Chain #80	28	8	152157	Spring Tube
9	8	00190900	Plastic Roller 3"	29	4	873794	Chain & Slat Assembly Includes #32 & #33
10	8	335505	HHCS 1/2" x 7"	30	64	266262	Chain Slat Only
11	4	210906	Bearing Plate	31	8	433805	Chain Only CA550 x 166P
12	4	402669	Bearing UHMW	32	3	264374	Chain Guide Rear
13	4	263863	Top Shaft Guard	33	3	264416	Chain Guide Front
14	4	152926	Roller Tube	34	12	330654	Carriage Bolt 3/8" x 1"
15	16	335703	HHCS 3/8" x 1 1/2"	35	8	06409700	Set Collar 1"
16	44	330894	Flat Washer 3/8"	36	2	224931	Center Roller Bracket
17	28	330837	Nylock Nut 3/8"	37	8	330043	Lock Washer 3/8"
18	8	01180900	HHCS 1/2" x 1 1/4"	38	8	330035	Hex Nut 3/8"
19	8	335703	HHCS 1/2" x 7"	39	8	01017300	HHCS 3/8" x 1"
20	4	963231	Front Spring Tension Bracket				

Packer Panel

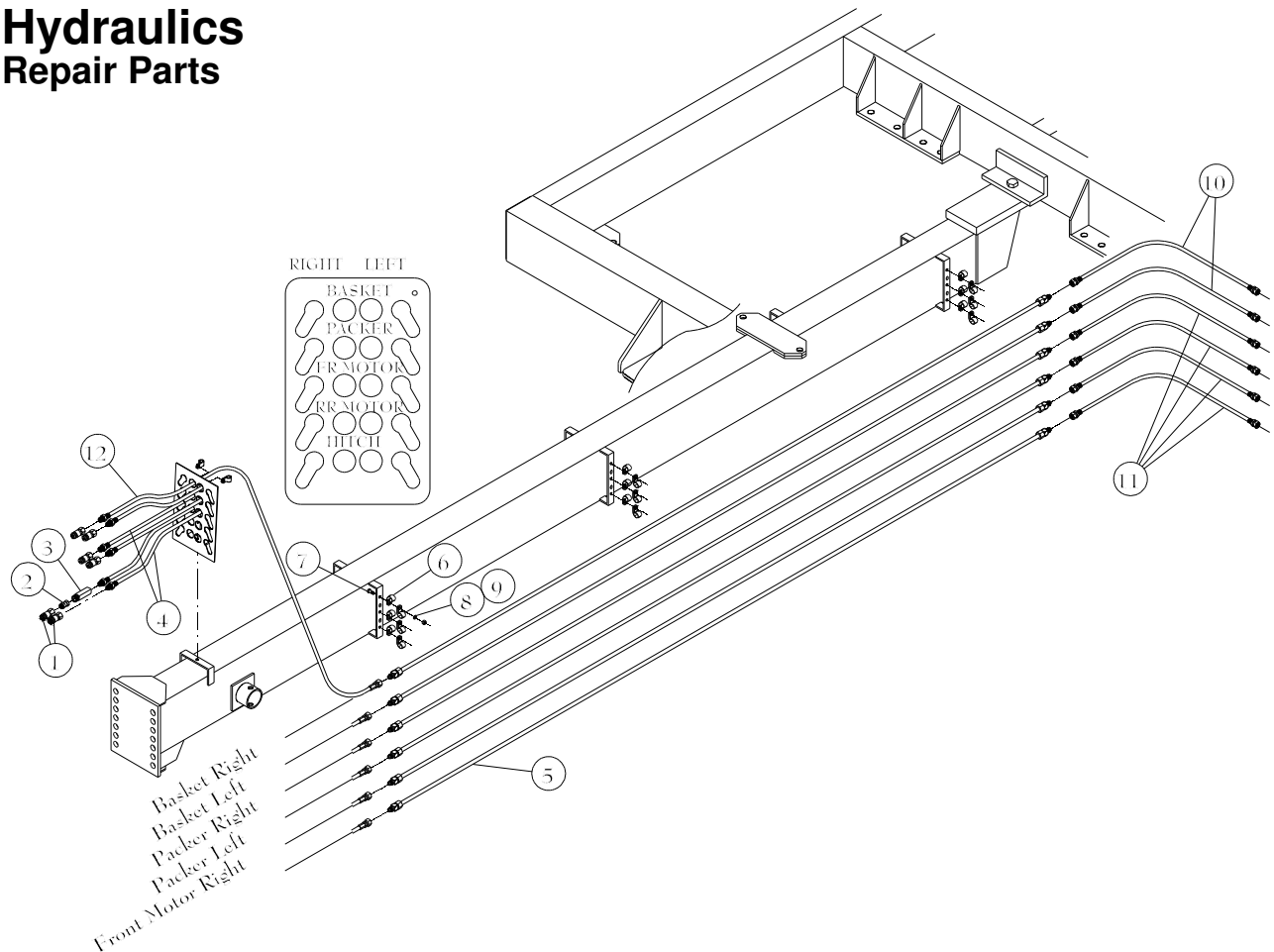
Repair Parts



Item	Qty	Part No.	Description
1	1	965566	Packer Panel
2	4	967232	Pivot Bracket
3	2	466599	Cylinder 2½" x 32"
4	2	966010	Cylinder Spacer
5	4	02307700	HHCS ¾" x 3"
6	2	01015700	Center Lock Nut ¾"
7	4	330316	Nylock Nut ¾"
8	32	335240	HHCS ½" x 1 ¾"
9	32	331363	Nylock Nut ½"
10	2	334466	HHCS ¾" x 6"
11	2	264077	Cover
12	20	338046	Clip Nut 3/8"
13	20	01017300	HHCS 3/8" x 1"
14	20	330894	Flat Washer 3/8"
15	20	330043	Lock Washer 3/8"

Hydraulics

Repair Parts

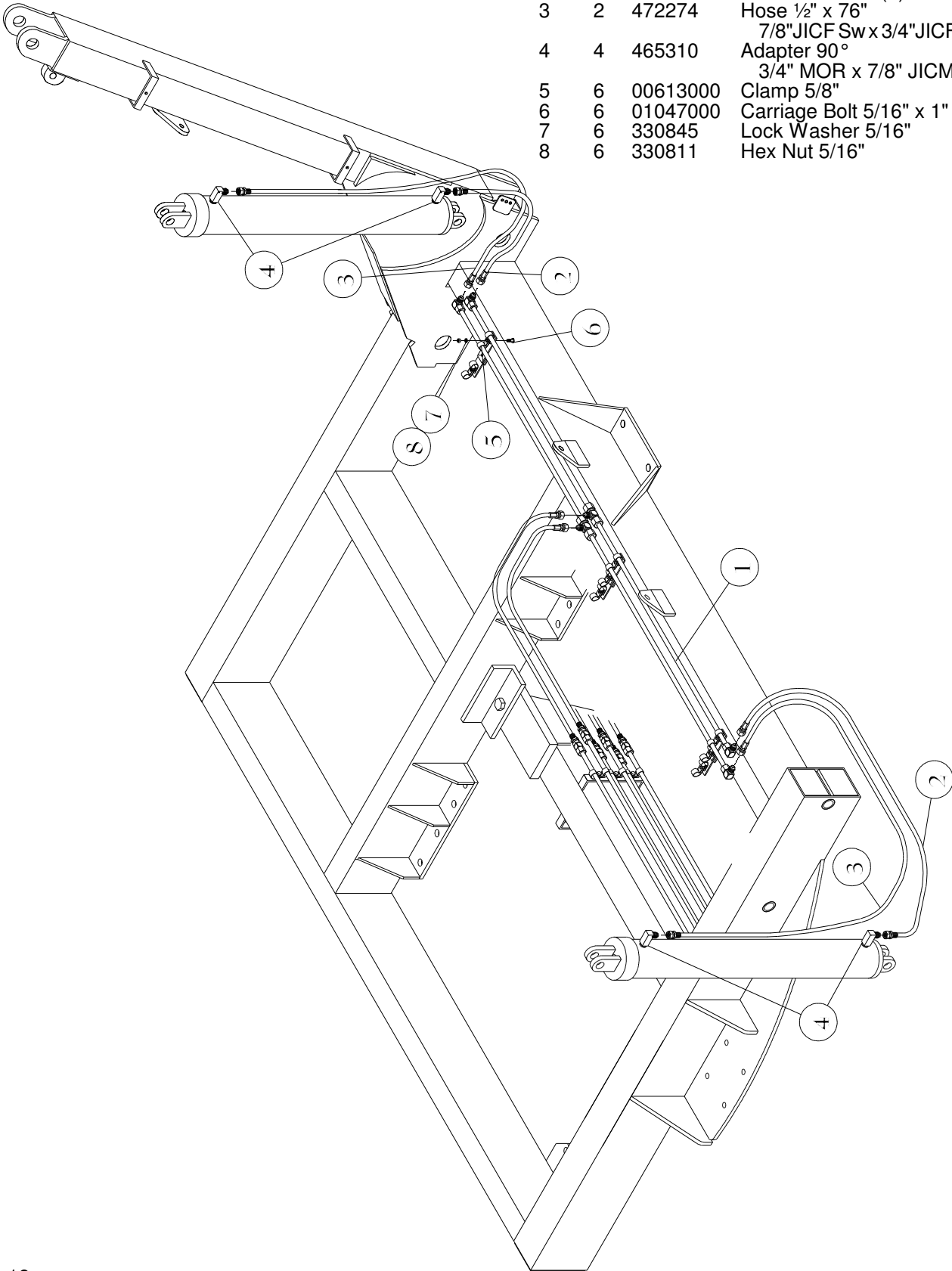


Item	Qty	Part No.	Description
1	6	465385	Coupler 3/4" FOR
2	1	466912	Adapter Straight 3/4" MOR x 1/2" NPTF
3	1	468363	Check Valve 1/2" NPTF
4	4	472233	Hose 3/8" x 114" 7/8" JICF Sw x 3/4" MOR
5	6	873174	Hydraulic Tube 5/8" x 146" 7/8" JICM Straight (2)
6	18	00613000	Clamp 5/8"
7	9	01017300	HHCS 3/8" x 1"
8	9	330043	Lock Washer 3/8"
9	9	330035	Hex Nut 3/8"
10	2	02109700	Hose 1/2" x 54" 7/8" JICF Sw (2)
11	4	472696	Hose 3/8" x 170" 7/8" JICF Sw (2)
12	2	472936	Hose 1/2" x 114" 7/8" JICF Sw x 3/4" MOR

Basket Hydraulics

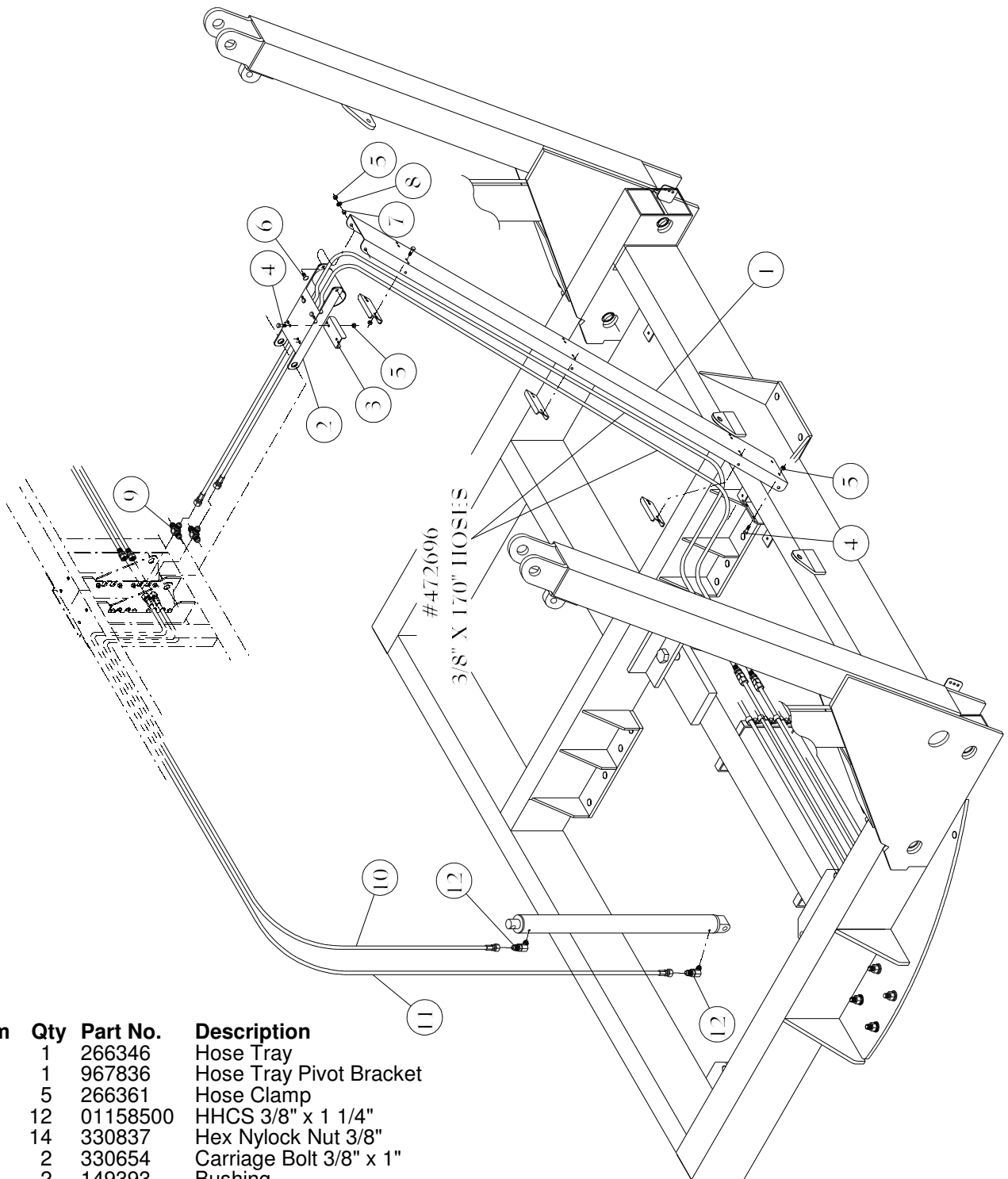
Repair Parts

Item	Qty	Part No.	Description
1	2	873190	Hydraulic Tube 5/8" x 90" 7/8" JICM (2)
2	2	472639	Hose 1/2" x 26" 7/8" JICF Sw (2)
3	2	472274	Hose 1/2" x 76" 7/8" JICF Sw x 3/4" JICF Sw
4	4	465310	Adapter 90° 3/4" MOR x 7/8" JICM
5	6	00613000	Clamp 5/8"
6	6	01047000	Carriage Bolt 5/16" x 1"
7	6	330845	Lock Washer 5/16"
8	6	330811	Hex Nut 5/16"



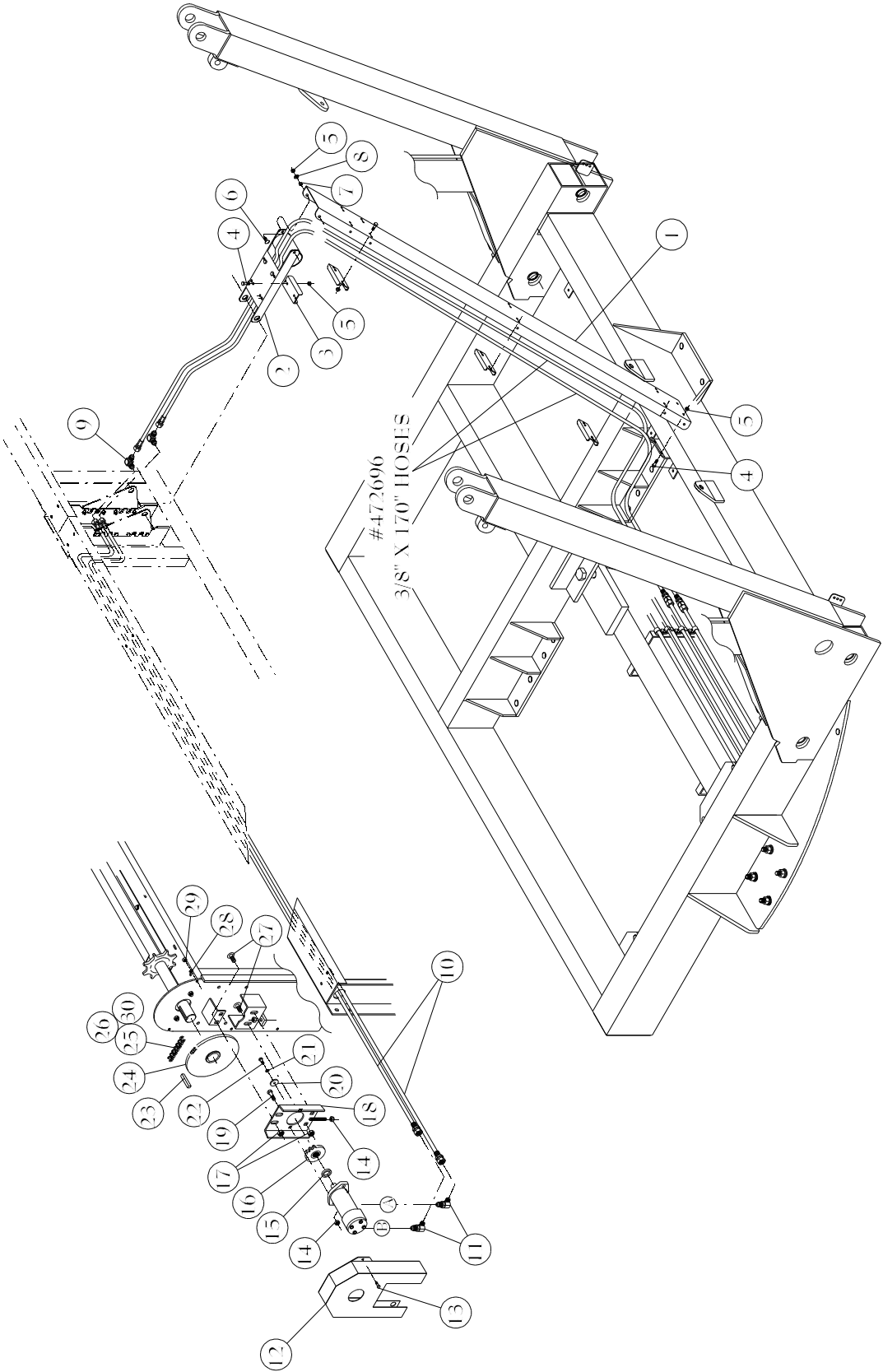
Packer Panel Hydraulics

Repair Parts



Item	Qty	Part No.	Description
1	1	266346	Hose Tray
2	1	967836	Hose Tray Pivot Bracket
3	5	266361	Hose Clamp
4	12	01158500	HHCS 3/8" x 1 1/4"
5	14	330837	Hex Nylock Nut 3/8"
6	2	330654	Carriage Bolt 3/8" x 1"
7	2	149393	Bushing
8	2	330894	Flat Washer 3/8"
9	2	00614800	Adapter Tee 7/8" JICM (3)
10	2	472670	Hose 3/8" x 192" 7/8" JICF Sw x 3/8" MP
11	2	472662	Hose 3/8" x 210" 7/8" JICF Sw x 3/8" MP
12	4	600080	Adapter 45° 3/8 NPTM x 3/8 NPTF Sw

Motor Hydraulics
Repair Parts



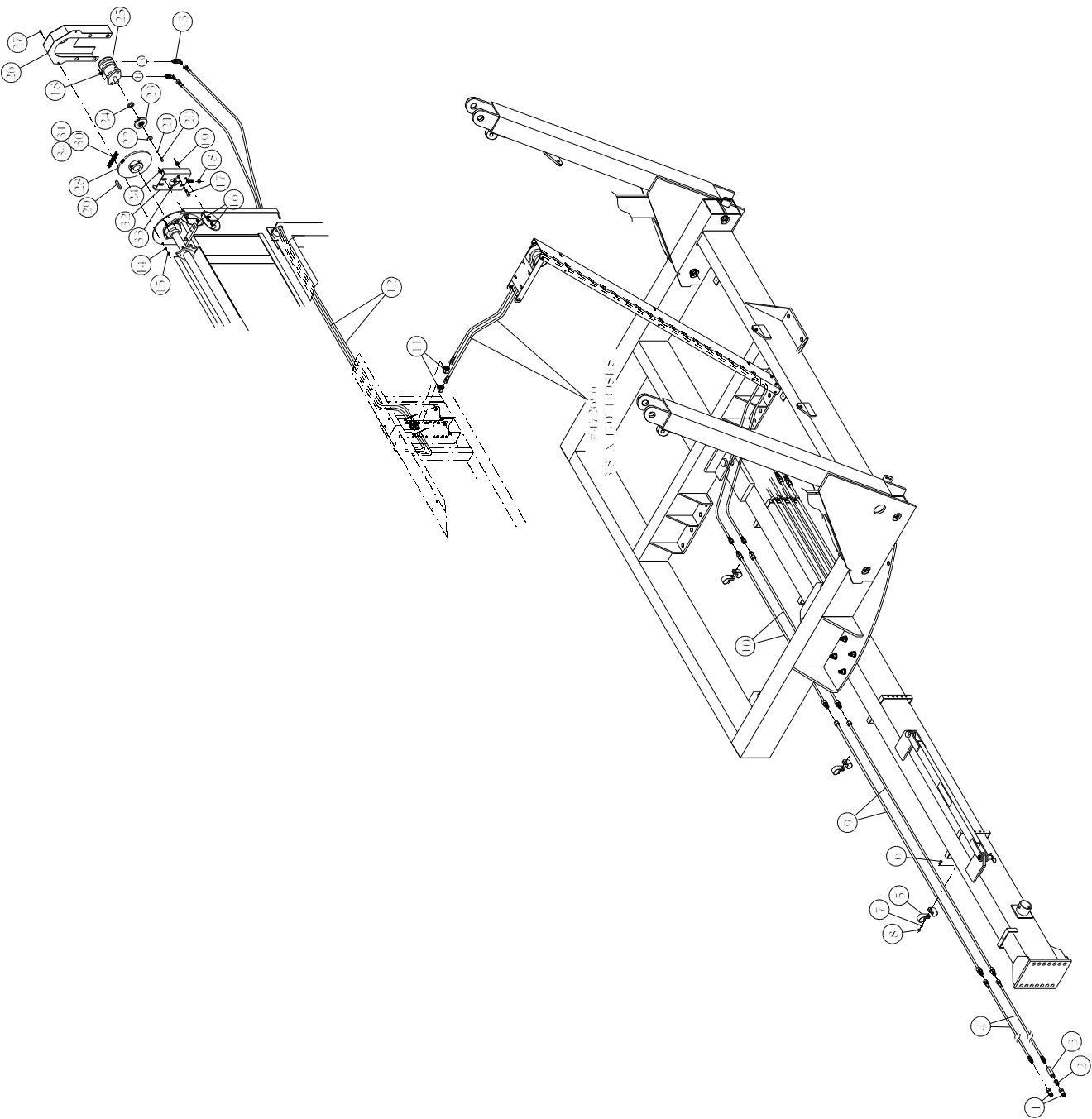
Motor Hydraulics

Repair Parts

Item	Qty	Part No.	Description	Item	Qty	Part No.	Description
1	1	266346	Hose Tray	15	1	152454	Motor Spacer
2	1	967836	Hose Tray Pivot Bracket	16	1	82359100	Sprocket #80 13T w/ 14T Splined Hub
3	5	266361	Hose Clamp	17	4	01572700	Nylock Nut 5/8"
4	12	01158500	HHCS 3/8" x 1 1/4"	18	1	964825	Motor Slide
5	14	330837	Hex Nylock Nut 3/8"	19	2	335240	HHCS 1/2" x 1 3/4"
6	2	330654	Carriage Bolt 3/8" x 1"	20	1	330183	Flat Washer 5/8"
7	2	149393	Bushing	21	1	330878	Lock Washer 5/8"
8	2	330894	Flat Washer 3/8"	22	1	338038	HHCS 5/8" x 1" UNF
9	2	00618900	Adapter 90° 7/8" JICM	23	1	13228200	Key 1/2" x 3"
10	2	472688	Hose 3/8" x 159" 7/8" JICF Sw	24	1	433383	Sprocket #80 30T -2" Hub
11	2	00542100	Adapter 45° 7/8" JICF Sw x 3/4" MOR	25	1	10743300	Chain #80 x 41 Pitch
12	1	965038	Chain Guard	26	1	00232900	Chain Connector #80
13	2	01010800	HHCS 5/16" x 1"	27	4	00665000	Carriage Bolt 5/8" x 1 1/2"
14	3	331363	Hex Nylock Nut 1/2"	28	2	330845	Lock Washer 5/16"
				29	2	330811	Hex Nut 5/16"
				30	1	00265900	Chain Offset #80

Dual Unload Hydraulics

Repair Parts

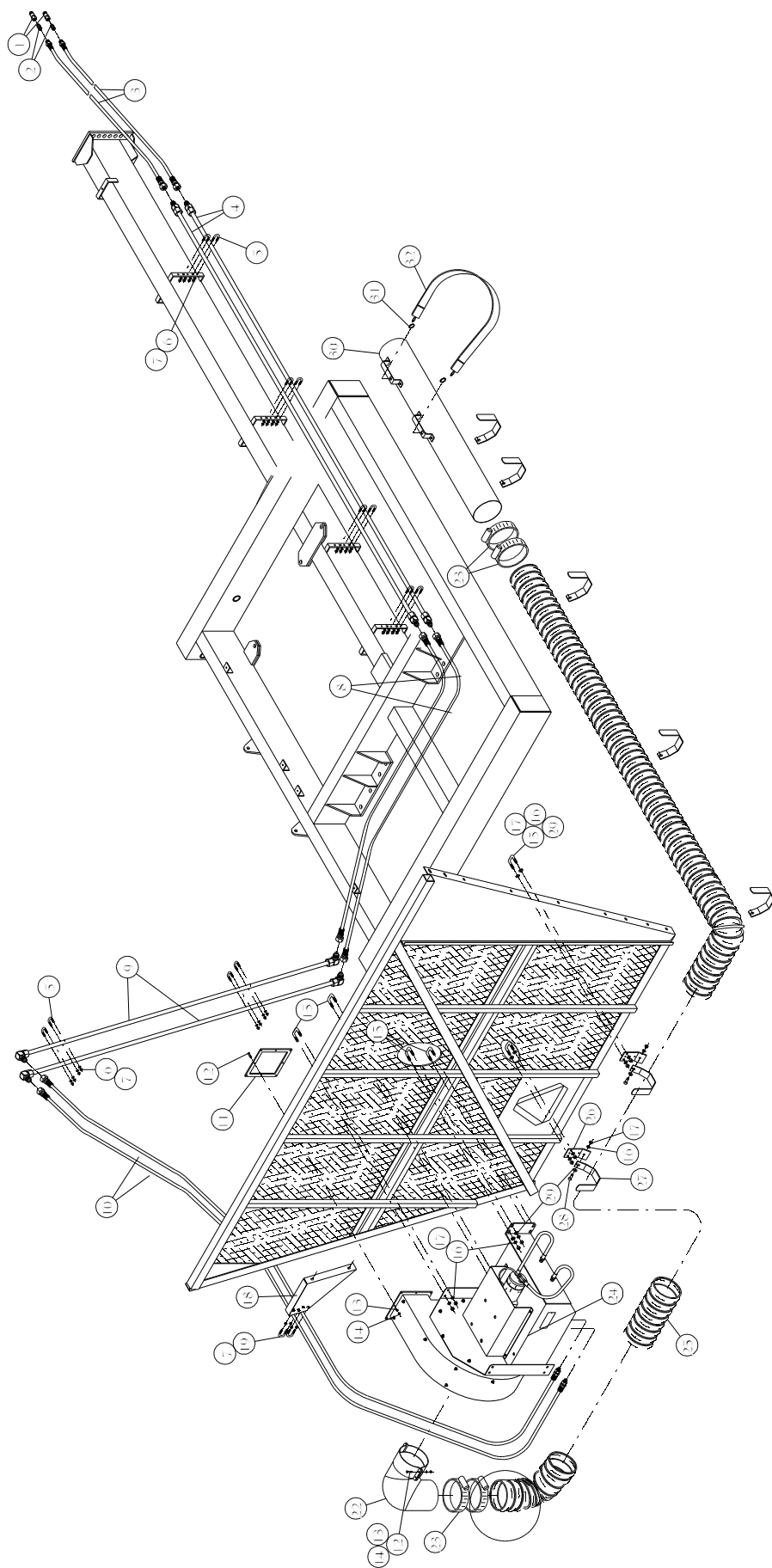


Dual Motor Hydraulics

Repair Parts

Item	Qty	Part No.	Description	Item	Qty	Part No.	Description
1	2	465385	Hyd Coupler 3/4" FOR	15	1	330811	Hex Nut 5/16"
2	1	466912	Adapter Straight 3/4" MOR x 1/2" NPT	16	4	00665000	Carriage Bolt 5/8" x 1 1/2"
3	1	468363	Hyd Check Valve 1/2" NPT	17	2	335240	HHCS 1/2" x 1 3/4"
4	2	472233	Hose 3/8" x 114" 3/4" MOR x 7/8" JICF Sw	18	3	331363	Nylock Nut 1/2"
5	6	00613000	Clamp 5/8"	19	4	01572700	Nylock Nut 5/8"
6	3	01017300	HHCS 3/8" x 1"	20	1	338038	HHCS 5/8" x 1" UNF
7	3	330043	Lock Washer 3/8"	21	1	330878	Lock Washer 5/8"
8	3	330035	Hex Nut 5/8"	22	1	330183	Flat Washer 5/8"
9	2	873356	Hyd Tube 5/8" x 104" 7/8" JICM (1 end)	23	1	82359100	Sprocket #80 13T 14T Splined Hub
10	2	82387200	Hyd Tube 5/8" x 42" 7/8" JICM (2)	24	1	152454	Motor Spacer
11	2	00618900	Adapter 90° 7/8" JICM (2)	25	1	472035	Hydraulic Motor
12	2	472688	Hose 3/8" x 159" 7/8" JICF Sw (2)			472381	Seal Kit
13	2	00542100	Adapter 45° 7/8" JICM x 3/4" MOR	26	1	965038	Chain Guard
14	1	330845	Lock Washer 5/16"	27	2	01010800	HHCS 5/16" x 1"
				28	1	433383	Sprocket #80 30T 2" Hub
				29	1	13228200	Key 1/2" x 3"
				30	1	10743300	Chain #80 x 41 Pitch
				31	1	00232900	Connector #80 Chain
				32	1	964825	Motor Slide
				33	1	330134	Hex Nut 1/2"
				34	1	00265900	Chain Offset #80

Boll Vac
Repair Parts

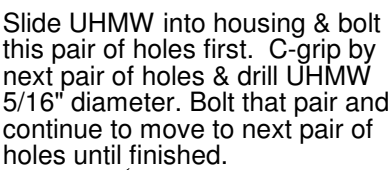


Boll Vac

Repair Parts

Item	Qty	Part No.	Description	Item	Qty	Part No.	Description
1	2	465385	Hyd Coupler 3/4" FOR	14	12	330811	Hex Nut 5/16"
2	2	466912	Adapter Straight 3/4" MOR x 1/2" NPTF	15	6	338145	U-Bolt 1/2" x 1 1/2" x 2 1/2"
3	2	472316	Hose 3/4" x 120" 1/2" MP x 1 1/16" JICF Sw	16	14	330142	Lock Washer 1/2"
4	2	873422	Hyd Tube 1" x 149" 90° 1 1/16" JICM 1 1/16" JICM Straight	17	14	330134	Hex Nut 1/2"
5	12	02196400	U-Bolt 3/8" x 1" x 2"	18	1	265595	Hose Bracket
6	24	330043	Lock Washer 3/8"	19	2	01034800	U-Bolt 3/8" x 1 1/4" x 2 1/4"
7	32	330035	Hex Nut 3/8"	20			
8	2	472324	Hose 3/4" x 140" 1 1/16" JICF Sw (2)	21			
9	2	873430	Hyd Tube 1" x 69" 90° 1 1/16" JICM	22	1	82531500	Vacuum Hose Elbow
10	2	472332	Hose 3/4" x 158" 1 1/16" JICF Sw x 3/4" MP	23	4	03461100	Hose Clamp 8" Worm Gear
11	1	967331	Fan Back-up	24	1	873331	Boll Vac
12	12	335448	HHCS 5/16" x 1 1/2"	25	1	03460300	Suction Hose 8" x 25'
13	12	330845	Lock Washer 5/16"	26	2	227264	Hanger Tab
				27	7	227256	Suction Hose Hanger
				28	2	01147800	HHCS 1/2" x 1 1/2"
				29	10	330159	Flat Washer 1/2"
				30	1	62614300	Suction Tube Assembly
				31	2	03489200	Split Ring
				32	1	03488400	Shoulder Strap 6'

Repair Parts

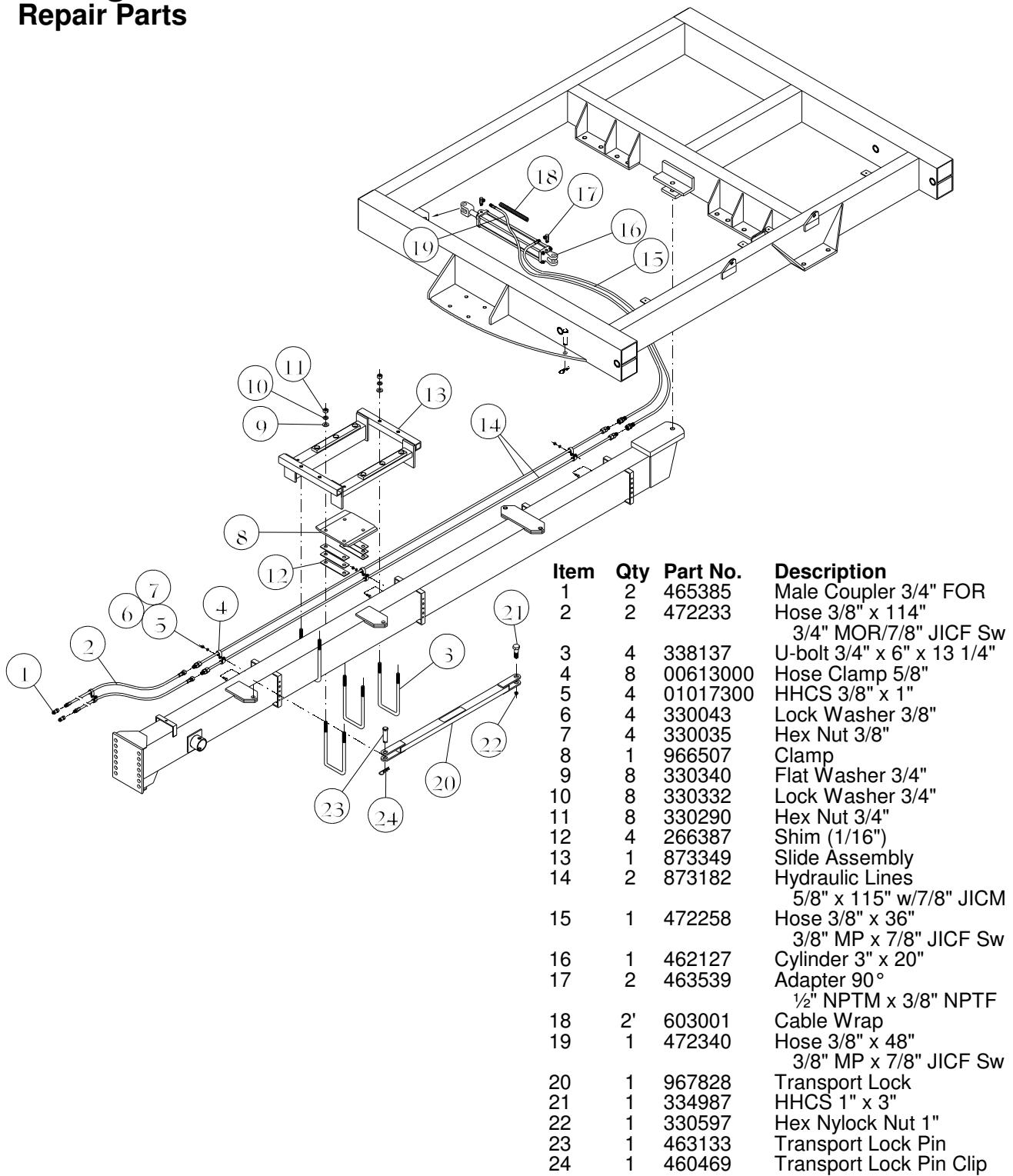


Boll Vac Fan & Hydraulics

Repair Parts

Item	Qty	Part No.	Description	Item	Qty	Part No.	Description
1	16	01047000	Carriage Bolt 5/16" x 1"	24	1	20515300	Fan Liner
2	16	330852	Flat Washer 5/16"	25	2	18149500	Bearing Plate
3	16	330845	Lock Washer 5/16"	26	4	335174	HHCS 3/4" x 2 1/2"
4	16	330811	Hex Nut 5/16"	27	2	03455300	Bearing 1 1/2" Pillow Block
5	1	967265	Vacuum Mount	28	1	11317500	Key 3/8" x 3"
6	4	01029800	HHCS 1/2" x 1"	29	1	17996000	Shaft 1.498" x 18"
7	4	330142	Lock Washer 1/2"	30	1	19183300	Key 3/8" x 1 1/2"
8	4	330159	Flat Washer 1/2"	31	1	03457900	L-Jaw Coupling 1 1/2" ID
9	4	330332	Lock Washer 3/4"	32	1	03462900	Coupling Insert
10	4	330290	Hex Nut 3/4"	33	1	03456100	L-Jaw Coupling 1" ID
11	4	01057900	HHCS 1/4" x 3/4"	34	1	471508	Hydraulic Motor
12	4	330050	Lock Washer 1/4"	35	1	03459500	Check Valve 400-S
13	4	332205	Hex Nut 1/4"	36	1	471474	Hose 1/4" x 16" -1/4" MP
14	1	18145300	Motor Cover	37	1	471482	Pipe Reducer 3/4" MP - 1/4" FP
15	16	330894	Flat Washer 3/8"	38	3	471490	Pipe Tee 3/4 MP - 3/4 F Sw
16	16	330837	Hex Nylock Nut 3/8"	39	1	03458700	Check Valve 1200-S
17	2	337022	Set Screw 3/8"-24 x 3/8" Cone Point	40	2	471466	Hose 3/4" x 36" -3/4" MP
18	1	82328600	Fan	41	2	600577	Drive Rivet #6 x 1/4"
19	1	18146100	Fan Washer	42	1	00694000	Serial Plate
20	1	330878	Lock Washer 5/8"	43	1	03475100	Pipe Nipple 1/4" x 1 1/2"
21	1	333336	HHCS 5/8" x 1 1/4" LH	44	8	335919	Carriage Bolt 3/8" x 1 1/4"
22	1	82495300	Fan Housing	45	4	02176600	Flat Washer 3/4" SAE
23	1	82307000	Fan Inlet				

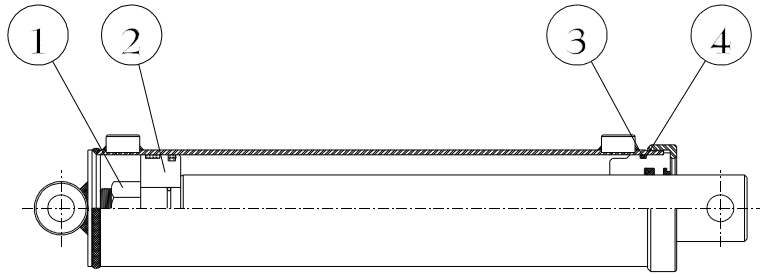
Swing Hitch Repair Parts



Hydraulic Cylinders

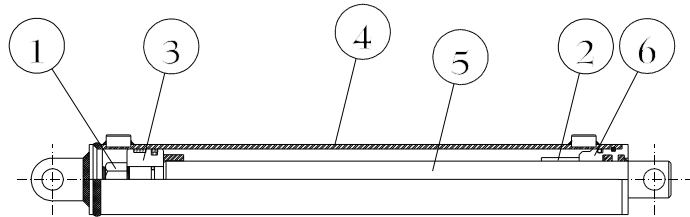
#472613 -Lift 5" x 43½" 2½" Ram

Item	Part No.	Description
1	461608	Lock Nut
2	472985	Piston
3	461533	O-Ring
4	461590	Back-up
	472373	Seal Kit



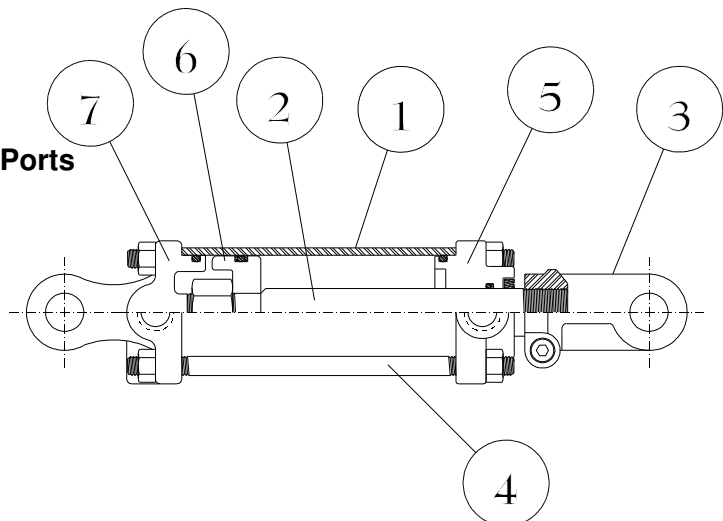
#466599 -Packer 2½" x 32" 1½" Ram

Item	Part No.	Description
1	460394	Lock Nut
2	471086	Spacer
3	471094	Piston
4	471060	Tube
5	471078	Rod
6	471052	Head
	471045	Seal Kit



#462127 -Swing Hitch 3" x 20" 1 1/4" Ram w/ 3/4-16 SAE Ports

Item	Part No.	Description
1	460998	Tube
2	460931	Rod
3	461483	Rod Clevis
4	461046	Tie Rod
5	460881	Head
6	460964	Piston
7	461038	Base
	461079	Seal Kit





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