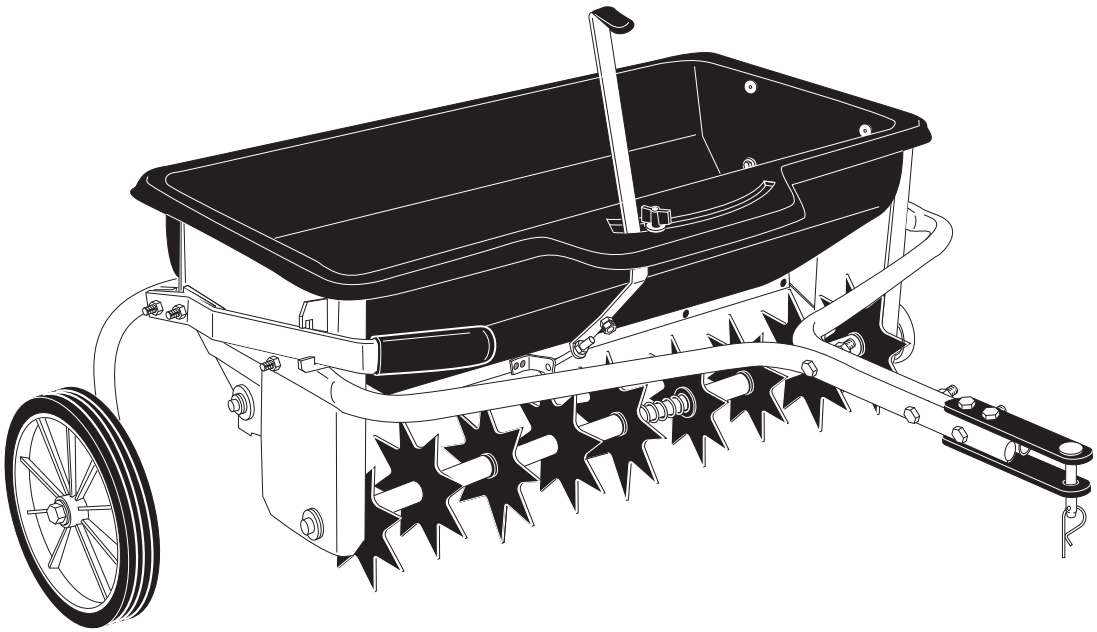
Owner's Manual

CRAFTSMAN®

32" SPIKER SPREADER

Model No. 486.24331

DO NOT RETURN TO STORE
For Missing Parts or Assembly
Questions Call 1-866-576-8388



CAUTION:
Before using this product, read this manual and follow all Safety Rules and Operating Instructions.

- Safety
- Assembly
- Operation
- Maintenance
- Parts

Sears, Roebuck and Co., Hoffman Estates, IL 60179 U.S.A.
www.sears.com/craftsman

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WARRANTY

ONE YEAR FULL WARRANTY

When operated and maintained according to the instructions supplied with it, if this Spiker Spreader fails due to a defect in material or workmanship within one year from the date of purchase, call 1-800-4-MY-HOME® to arrange for free repair (or replacement if repair proves impossible).

If this product is used for commercial or rental purposes, this warranty applies for only 90 days from the date of purchase.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Sears, Roebuck and Co., D817WA, Hoffman Estates, IL 60179

The model number and serial numbers will be found on a decal attached to the hitch tube. You should record both the serial number and the date of purchase and keep in a safe place for future reference.	MODEL NUMBER: 486.24331 SERIAL NUMBER: _____ DATE OF PURCHASE: _____

SAFETY

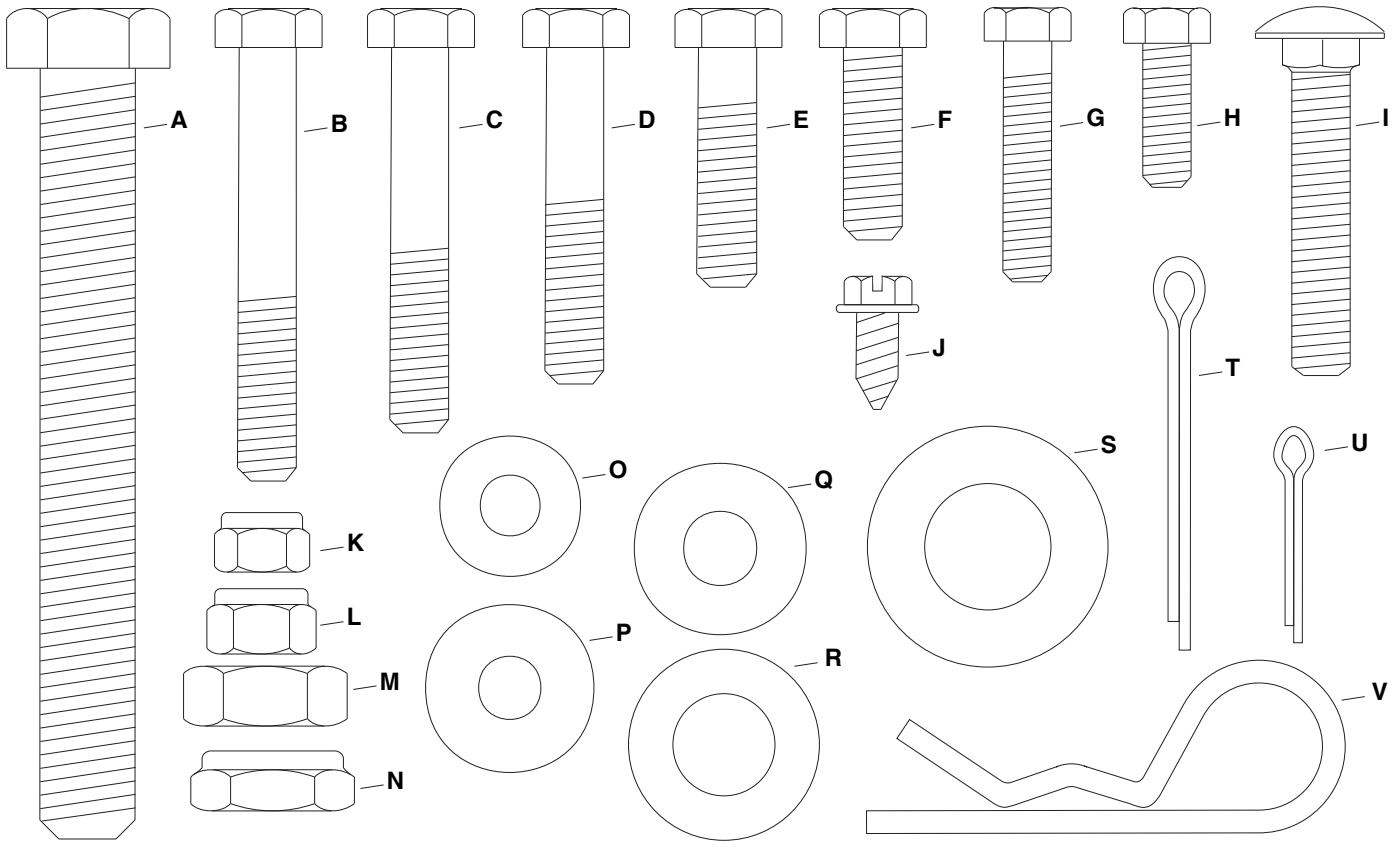
Any power equipment can cause injury if operated improperly or if the user does not understand how to operate the equipment. Exercise caution at all times, when using power equipment.

- Read this owner's manual before attempting to assemble or operate the spiker/spreader.
- Read the towing vehicle owner's manual and know how to operate the tractor before using the spiker/spreader attachment.
- Do not allow anyone to ride on or sit on the spiker/spreader.
- Never allow children to operate the tractor or spiker/spreader attachment.
- Do not allow adults to operate the tractor or spiker/spreader without proper instructions.
- Read the chemical label for instructions and cautions for handling and applying chemicals.
- Wear eye and hand protection when handling and using lawn chemicals.
- Always begin with the transmission in first (low) gear and gradually increase speed as conditions permit. Maximum towing speed - 10 M.P.H.
- Do not drive too close to a creek or ditch and be alert for holes and other hazards which could cause you to loose control of the tractor and spiker/spreader.
- Before operating the vehicle on any grade (hill) refer to the safety rules in the vehicle owner's manual concerning safe operation on slopes. **Stay off steep slopes!**
- Follow maintenance and lubrication instructions as outlined in this manual.

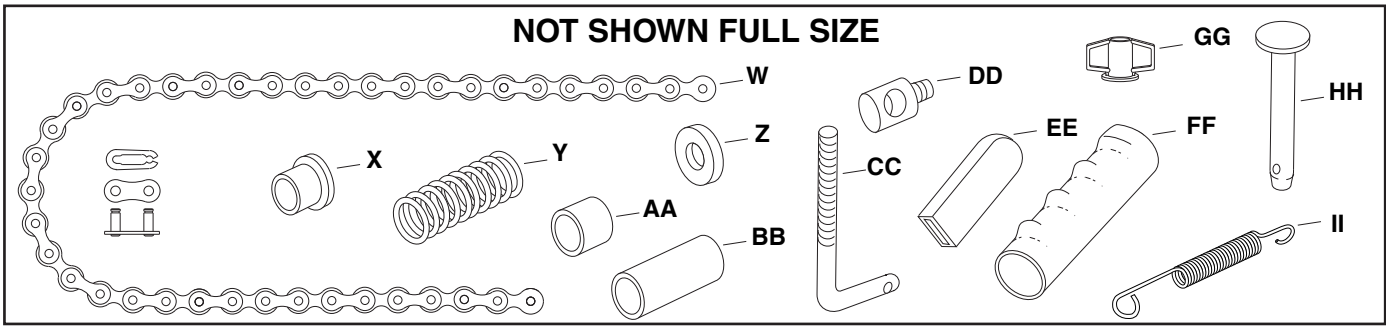
Look for this symbol to point out important safety precautions. It means — **Attention!! Become alert!! Your safety is involved.**

HARDWARE PACKAGE CONTENTS

SHOWN FULL SIZE



NOT SHOWN FULL SIZE

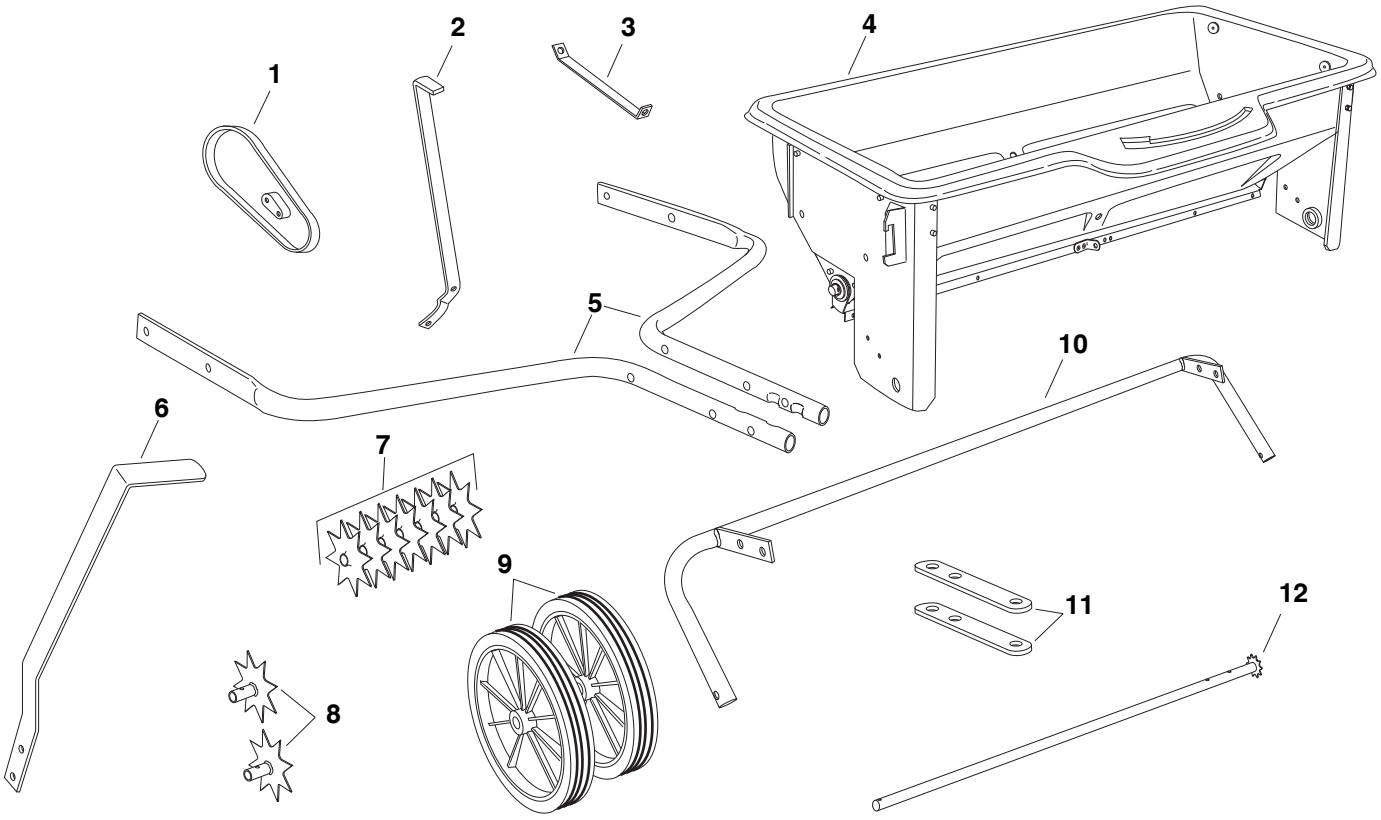


REF.	QTY.	DESCRIPTION	REF.	QTY.	DESCRIPTION
A	2	Hex Bolt, 1/2" x 4"	S	10	Flat Washer, 5/8"
B	3	Hex Bolt, 5/16" x 2-1/4"	T	3	Cotter Pin, 1/8" x 1-1/2"
C	2	Hex Bolt, 5/16" x 2"	U	1	Cotter Pin, 3/32" x 3/4"
D	2	Hex Bolt, 5/16" x 1-3/4"	V	1	Hair Cotter Pin, 1/8"
E	2	Hex Bolt, 5/16" x 1-1/2"	W	1	Chain with Connector
F	1	Hex Bolt, 5/16" x 1"	X	13	Flanged Bearing
G	1	Hex Bolt, 1/4" x 1 1/4"	Y	1	Compression Spring
H	1	Hex Bolt, 1/4" x 3/4"	Z	1	1/4" Thick Spacer
I	1	Carriage Bolt. 5/16" x 1-3/4"	AA	2	Short Spacer Tube
J	2	Self-Tapping Screw	BB	5	Long Spacer Tube
K	6	Nylock Hex Nut, 1/4"	CC	1	Flow Control Link
L	10	Nylock Hex Nut, 5/16"	DD	1	Ferrule
M	2	Jam Hex Nut, 1/2"	EE	1	Control Lever Grip
N	2	Nylock Jam Hex Nut, 1/2"	FF	1	Height Adjustment Grip
O	2	Flat Washer, 1/4"	GG	1	Plastic Wing Nut
P	2	Nylon Washer, 21/64"	HH	1	Flat Head Hitch Pin, 3/8"
Q	4	Flat Washer, 5/16"	II	1	Flow Plate Spring
R	4	Flat Washer, 1/2"			

ASSEMBLY

CARTON CONTENTS

1. Chain Cover
2. Flow Control Lever
3. Center Brace
4. Hopper Assembly
5. Hitch Tube (2)
6. Lift Handle
7. Spike Disk (7)
8. Drive Disk Assembly (2)
9. Wheel (2)
10. Transport Tube Assembly
11. Hitch Bracket (2)
12. Spiker Shaft Assembly



TOOLS REQUIRED FOR ASSEMBLY

(2) 7/16" Wrenches
(2) 1/2" Wrenches
(2) 3/4" or Adjustable Wrenches
(1) Screwdriver
(1) Pliers

- Remove all parts and hardware packages from the carton. Lay out all parts and hardware and identify using the illustrations on pages 3 and 4.

- Attach a hitch tube to the front hole in the right hand side of the hopper using a 5/16" x 1-1/2" hex bolt, a 5/16" flat washer and a 5/16" nylock hex nut. Assemble the bolt and washer from inside the hopper. **Do not tighten yet.** See figure 1.

- Repeat on the left hand side of the hopper.

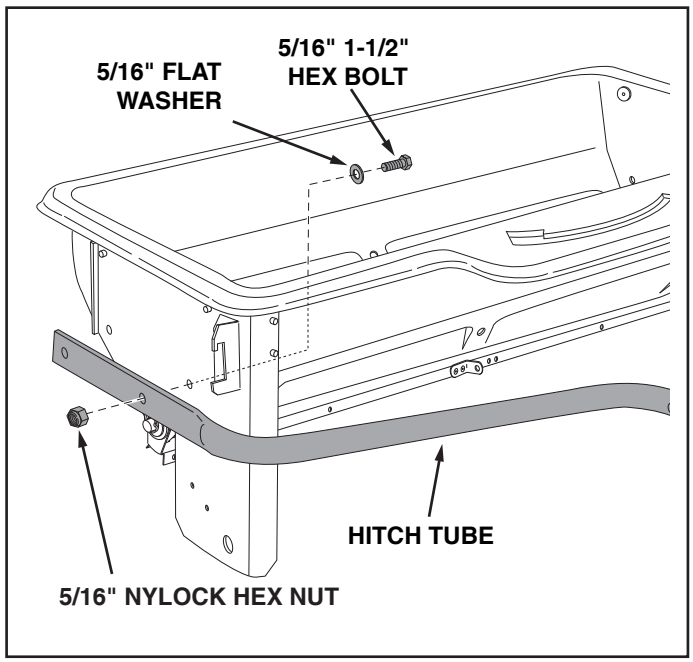


FIGURE 1

- Assemble the grip onto the lift handle. See figure 2.
- On the right side, insert a 5/16" x 1-3/4" hex bolt through a 5/16" flat washer and then through the rear hole in the hopper and the hitch tube. Assemble the transport tube and then the lift handle onto the bolt and secure with a 5/16" nylock hex nut. **Do not tighten yet.** See figure 2.
- Assemble a 5/16" x 1" hex bolt and 5/16" nylock hex nut to the bottom hole in the transport tube assembly and the lift handle. **Do not tighten yet.** See figure 2.

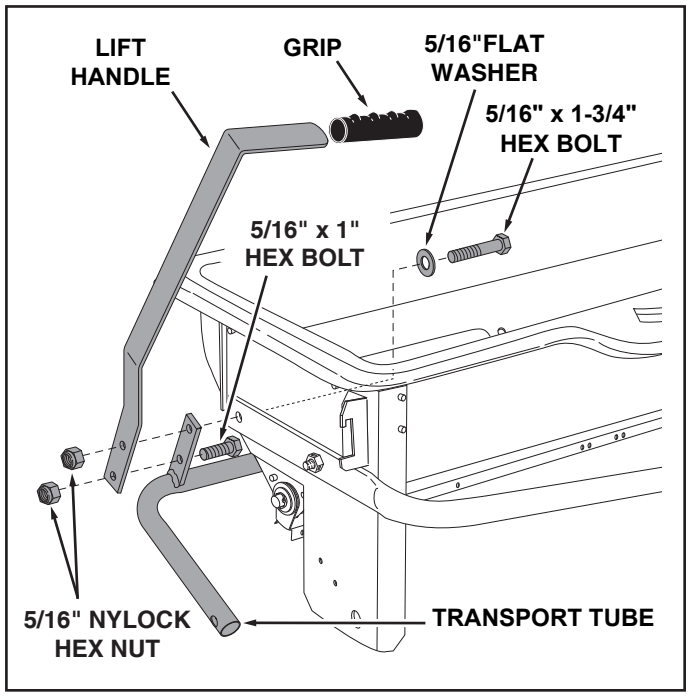


FIGURE 2

- On the left side, insert a 5/16" x 1-3/4" hex bolt through a 5/16" flat washer and then through the rear hole in the hopper and the hitch tube. Assemble the transport tube onto the bolt and secure it with a 5/16" nylock hex nut. **Do not tighten yet.** See figure 3.

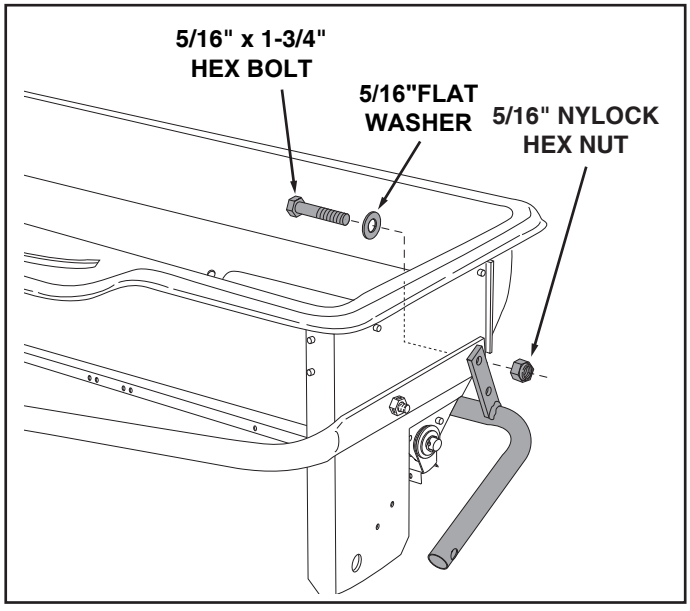


FIGURE 3

- Fasten the hitch tubes together using three 5/16" x 2-1/4" hex bolts and 5/16" nylock hex nuts. **Do not tighten yet.** See figure 4.

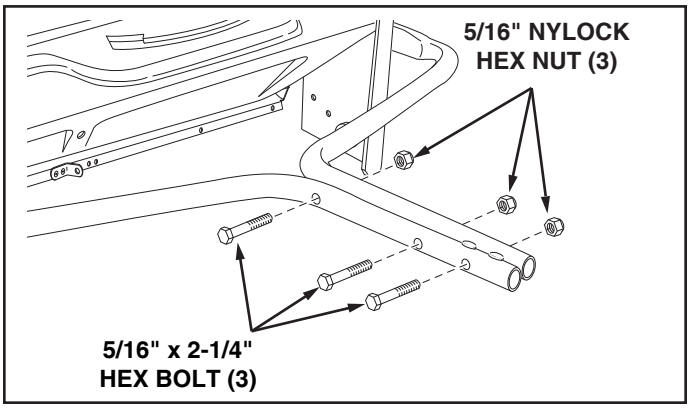


FIGURE 4

- Assemble the hitch brackets to the hitch tubes using two 5/16" x 2" hex bolts and 5/16" nylock hex nuts. **Do not tighten.** See figure 5.
- Assemble the hitch pin through the hitch brackets and secure with the hair cotter pin. See figure 5.

IMPORTANT: Do not collapse the flat ends of the hitch tubes when tightening the bolts in the next step.

- **Tighten, but do not overtighten** the two 5/16" x 1-1/2" hex bolts assembled in figure 1.
  Tighten, but do not overtighten the two 5/16" x 1-3/4" hex bolts assembled in figures 2 and 3. The lift handle must be able to pivot.
  Tighten the hex bolts assembled in figure 4 and 5.

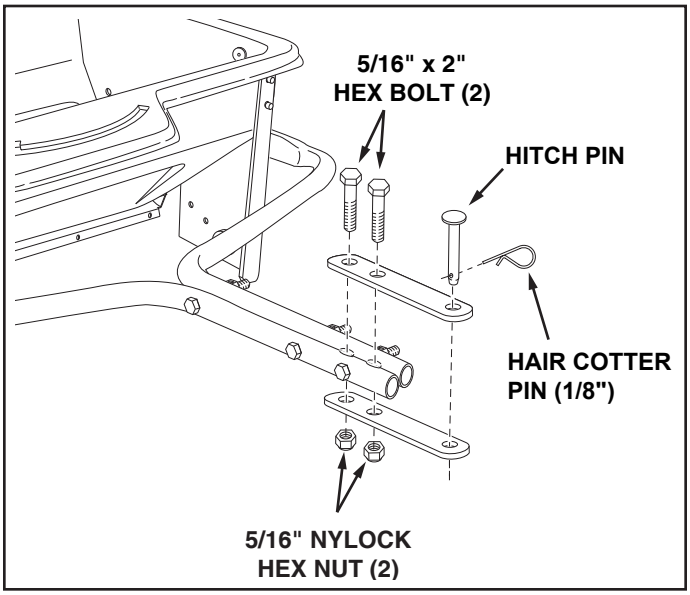


FIGURE 5

- Assemble a 1/2" flat washer, a wheel, another 1/2" flat washer and then a 1/2" jam nut onto a 1/2" x 4" hex bolt. Tighten the nut finger tight and then back off 1/4 to 1/2 turn. See figure 6.
- Assemble the bolt and wheel to the transport tube using a 1/2" nylock hex jam nut. **Tighten** the nut but don't collapse the tube. See figure 6.
- If the wheel does not spin freely, back off the nylock jam nut and then the plain jam nut 1/4 to 1/2 turn each.
- Assemble a wheel to the other side. See figure 6.

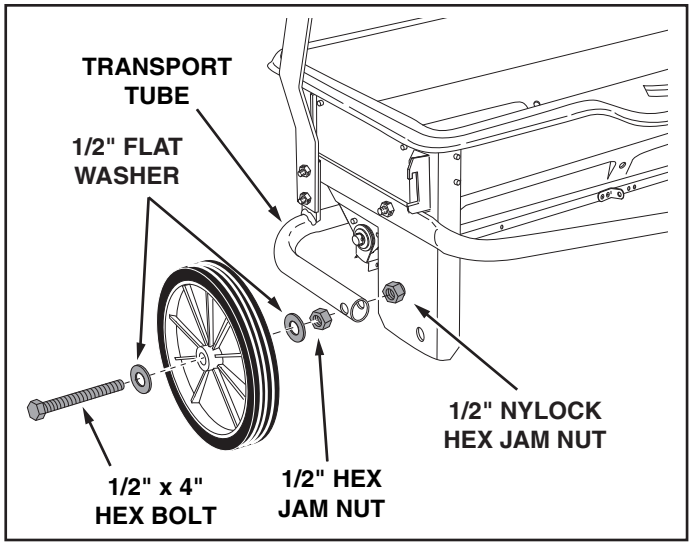


FIGURE 6

- Screw a 1/4" nylock hex nut all the way onto the flow control link. Assemble the ferrule onto the link and then start a 1/4" nylock hex nut one or two turns onto the link. See figure 7.
- Assemble the ferrule into the hole at the end of the flow control lever using a 1/4" nylock hex nut. **Tighten** the nut, leaving it loose enough that the ferrule can pivot freely. See figure 7.
- Assemble the grip onto the end of the flow control lever. See figure 7.

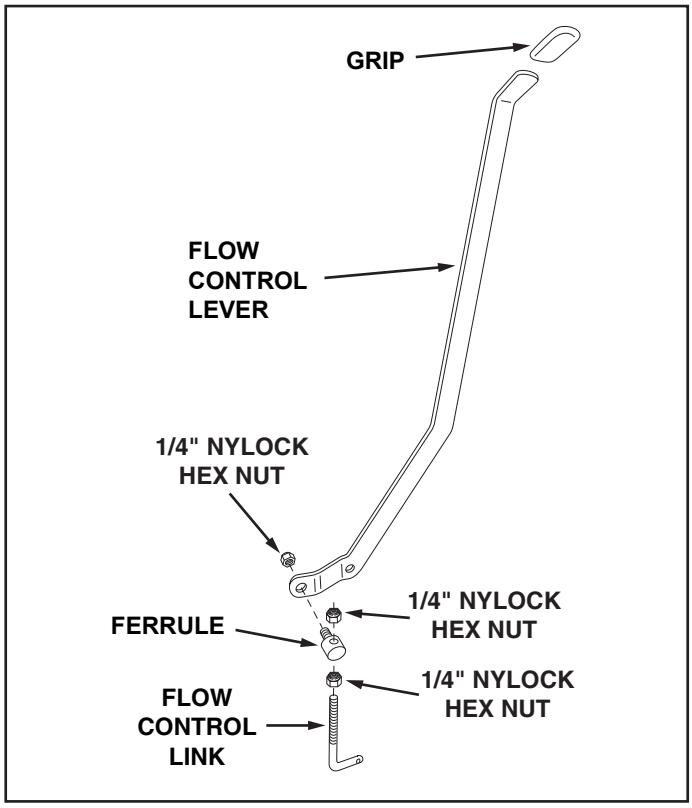


FIGURE 7

- Place the flow control lever into the slot in the hopper. See figure 8.
- Place the center brace into the hopper. Insert the 1/4" x 1-1/4" hex bolt through the center brace and the front of the hopper. Assemble a 1/4" flat washer, the flow control lever and a 1/4" nylock hex nut onto the bolt. **Do not tighten yet.** See figure 8.
- Insert the 1/4" x 3/4" hex bolt through the center brace and the rear of the hopper. Assemble a 1/4" flat washer and 1/4" nylock hex nut onto the bolt. **Tighten** both the front and rear bolts. See figure 8.

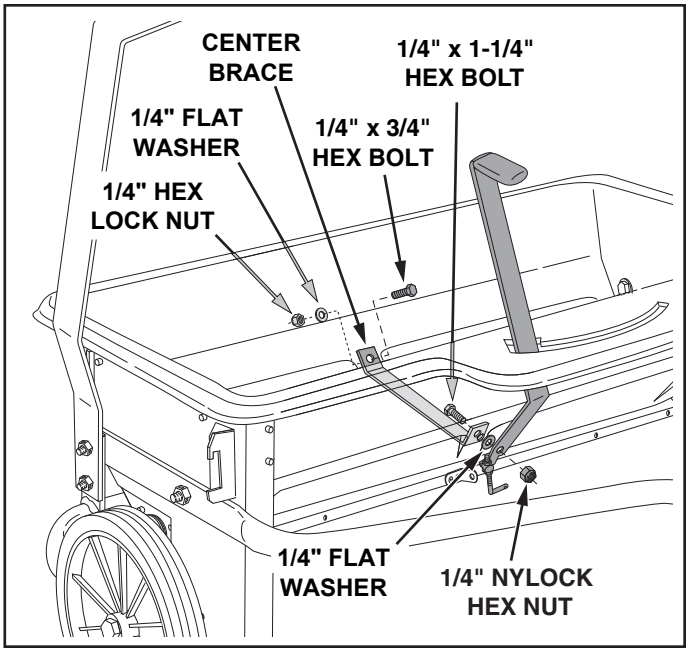


FIGURE 8

- Insert the 5/16" x 1-3/4" carriage bolt up through the slot and secure it with a nylon washer and the plastic wing nut. See figure 9.
- Move the lift handle into the locked position as shown in figure 9 and then tip the spreader back to rest on the wheels and the rear of the hopper.

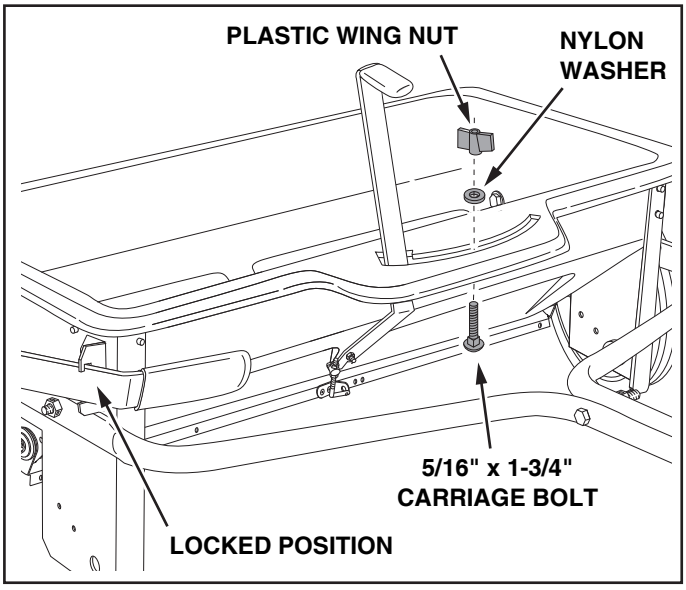


FIGURE 9

- Move the flow control lever as far as it will go to the "OFF" position. Push the feed plate back as far as it will go to the closed position. See figure 10.
- Place a nylon washer onto the bent end of the flow control link and then insert the link into the feed plate bracket. Secure it with a 3/32" x 3/4" cotter pin. See figure 10.
- Tighten the lower 1/4" nylock hex nut until it touches the bottom of the ferrule, then tighten the upper 1/4" nylock hex nut until it is snug against the top of the ferrule. See figure 10.
- Hook the open end of the spring into the feed plate. Place the closed end of the spring onto the end of the hex bolt in the flow control lever. Secure it with a 1/4" nylock hex nut. See figure 10.
- Open and close the feed plate using the flow control lever. Check to make sure the feed plate is closed completely when the lever is in the "OFF" position. If the feed plate does not close completely, adjust the 1/4" nylock hex nuts on the flow control link. See figure 10.

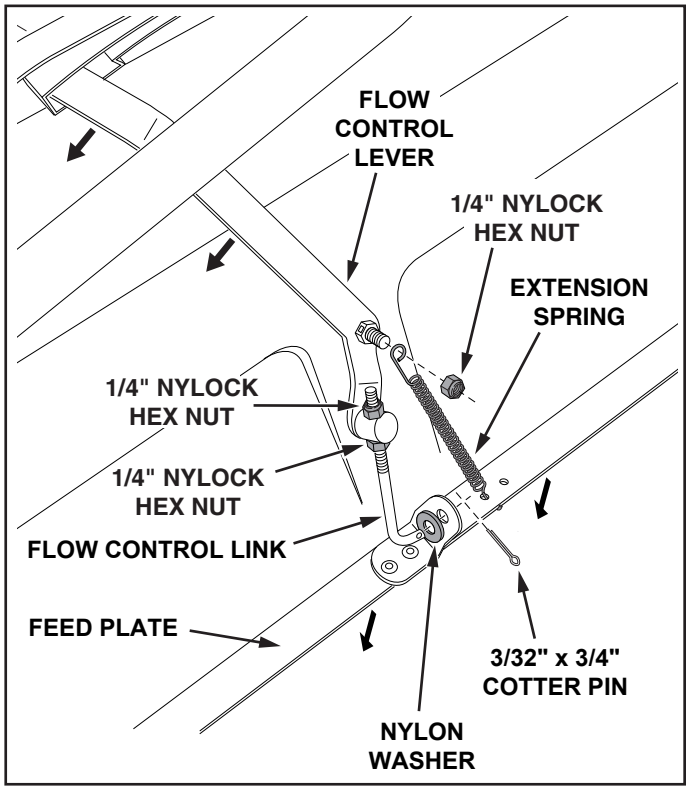


FIGURE 10

- Push two flange bearings into each of the drive disk assemblies. See figure 11.

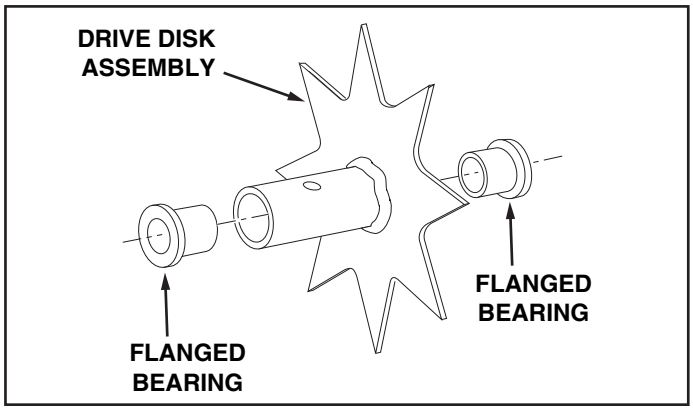


FIGURE 11

- Push a flange bearing into each of the seven drive disks, from the side shown in figure 12.

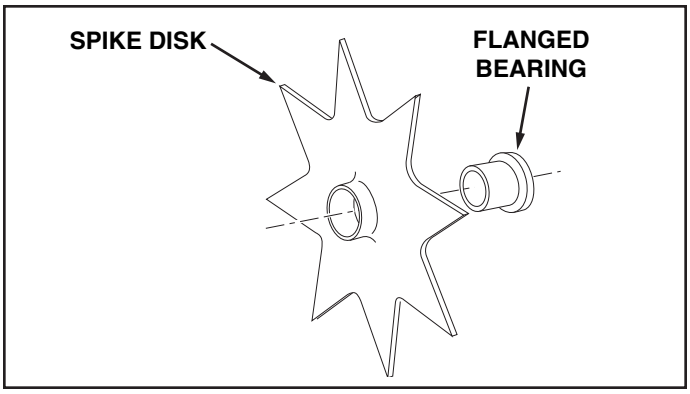


FIGURE 12

- Press flanged bearings into both of the end plates. See figure 13.
- **Place the 1/4" thick spacer onto the spike disk shaft** and then insert the shaft through the flanged bearing in the left hand end plate. See figure 13.

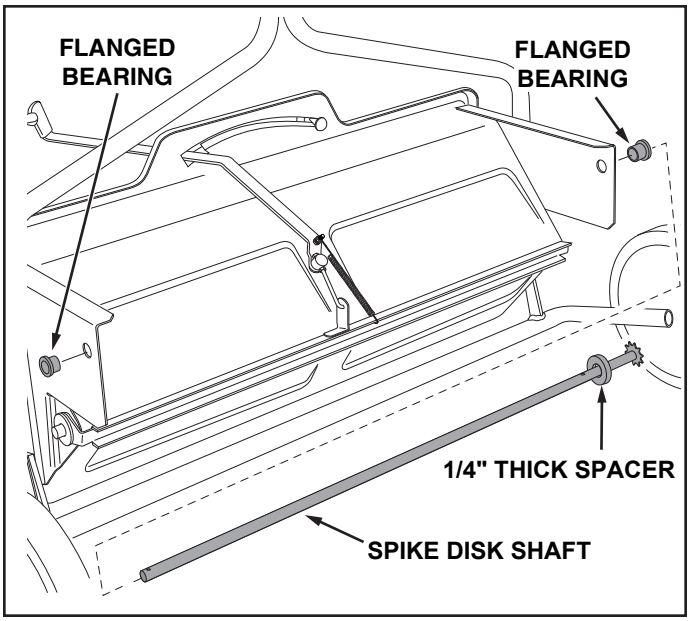


FIGURE 13

- Place a short spacer tube, a drive disk, a 5/8" flat washer, another drive disk and a second 5/8" flat washer onto the shaft. Fit the short spacer tube onto the flanged bearing in the end plate. See figure 14.

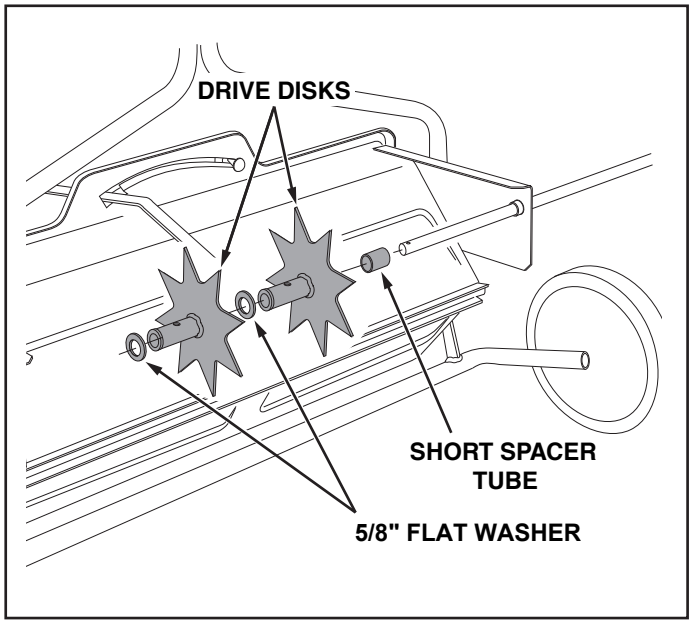


FIGURE 14

IMPORTANT: When assembling the spike disks, be sure they face in the direction shown in the instructions.

- Place two spike disks, separated by a long spacer tube, onto the shaft. Fit the long spacer tube onto the ends of the flanged bearings in the disks. See figure 15.

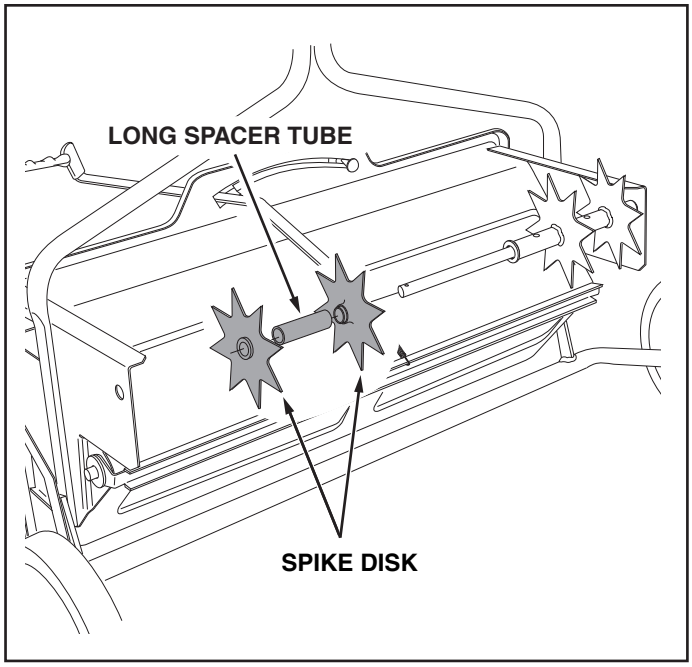


FIGURE 15

- Place a 5/8" flat washer, the compression spring and another 5/8" flat washer onto the shaft. See figure 16.

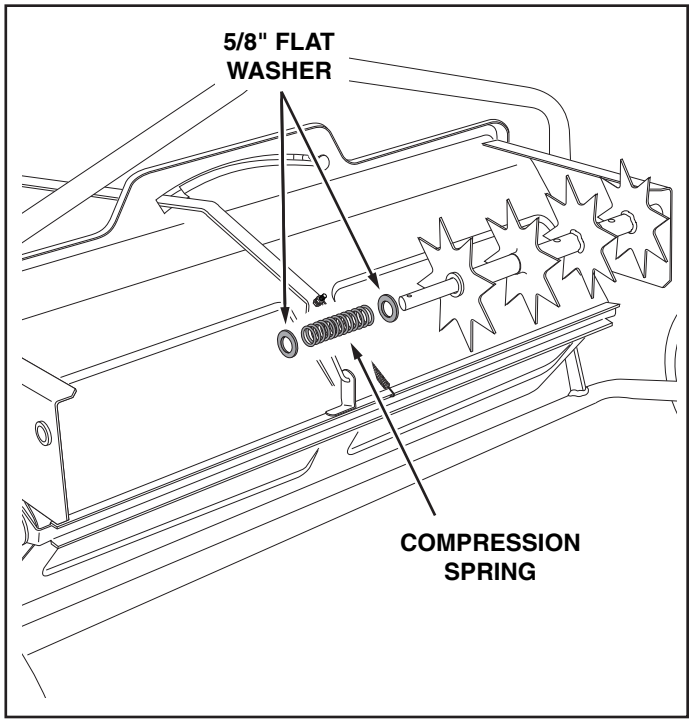


FIGURE 16

- Place two 5/8" flat washers separated by a long spacer tube onto the shaft. See figure 18.

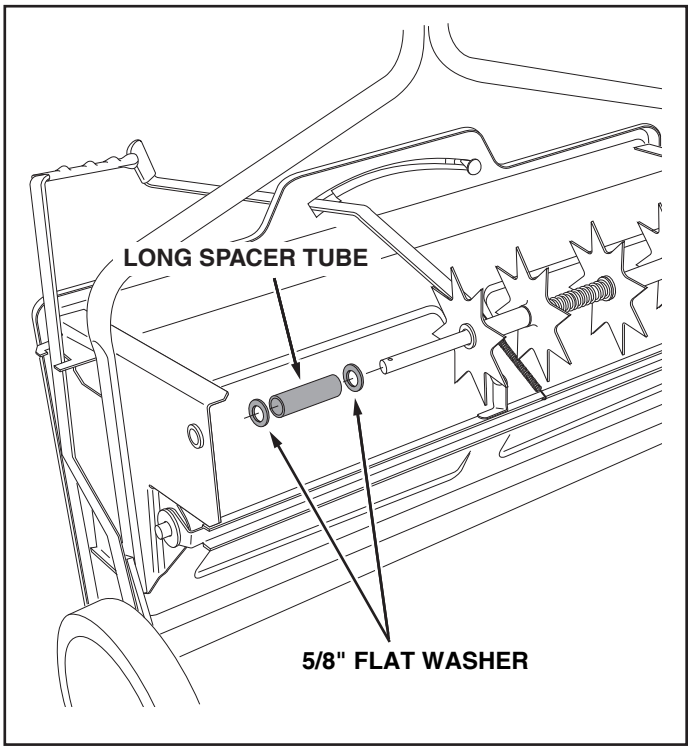


FIGURE 18

- Place two spike disks, separated by a long spacer tube, onto the shaft. Fit the long spacer tube onto the ends of the flanged bearings in the disks. See figure 17.

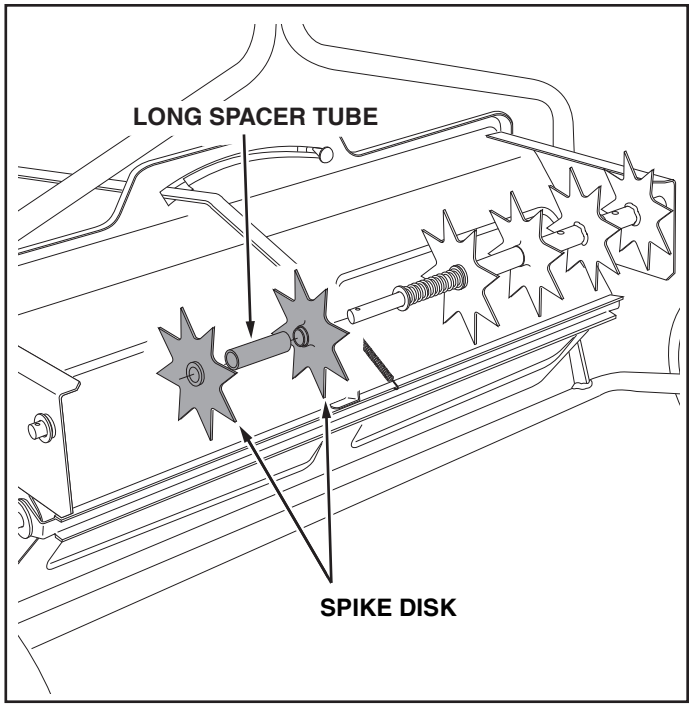


FIGURE 17

- Place two spike disks, separated by a long spacer tube, onto the shaft. Fit the long spacer tube onto the ends of the flanged bearings in the disks. See figure 19.

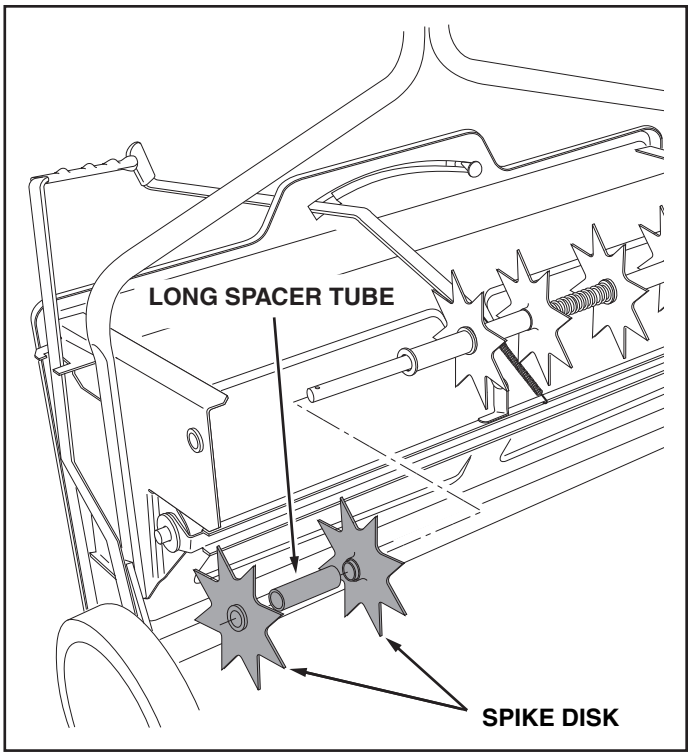


FIGURE 19

- Place two 5/8" flat washers separated by a long spacer tube onto the shaft. See figure 20.

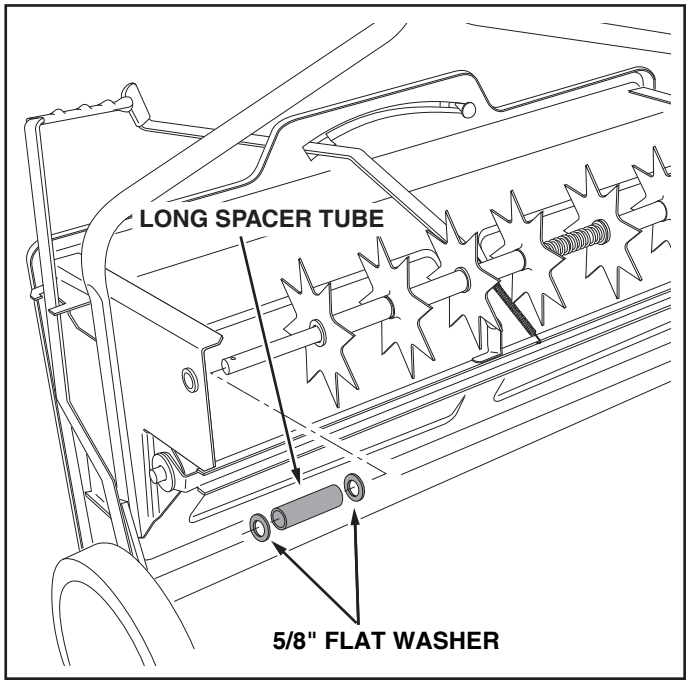


FIGURE 20

- Place a spike disk and a short spacer tube onto the shaft. Fit the short spacer tube onto the ends of the flanged bearings in the spike disk and in the end plate. Push the shaft on through the flanged bearing in the end plate. See figure 21.

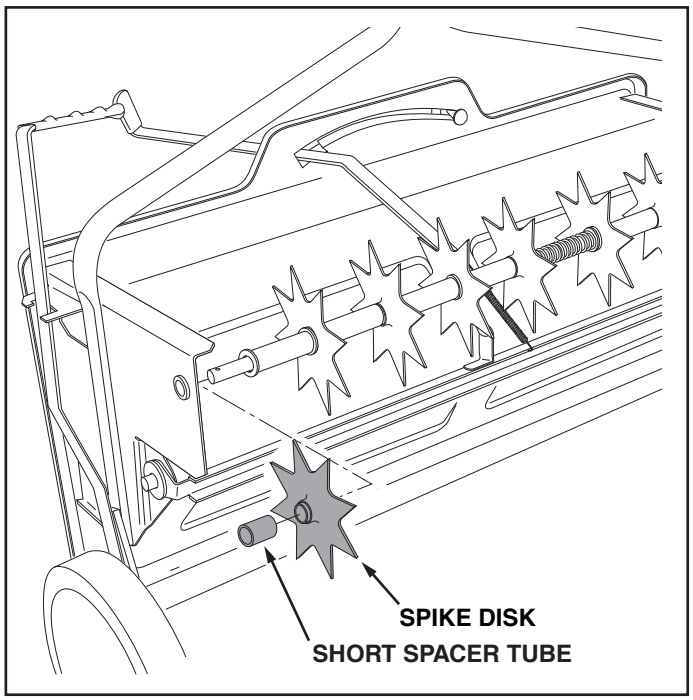


FIGURE 21

- Place a 5/8" flat washer onto the end of the spike disk shaft and secure the shaft with a 1/8" x 1-1/2" cotter pin. See figure 22.
- Fasten the two drive disks to the shaft using two 1/8" x 1-1/2" cotter pins. See figure 22.

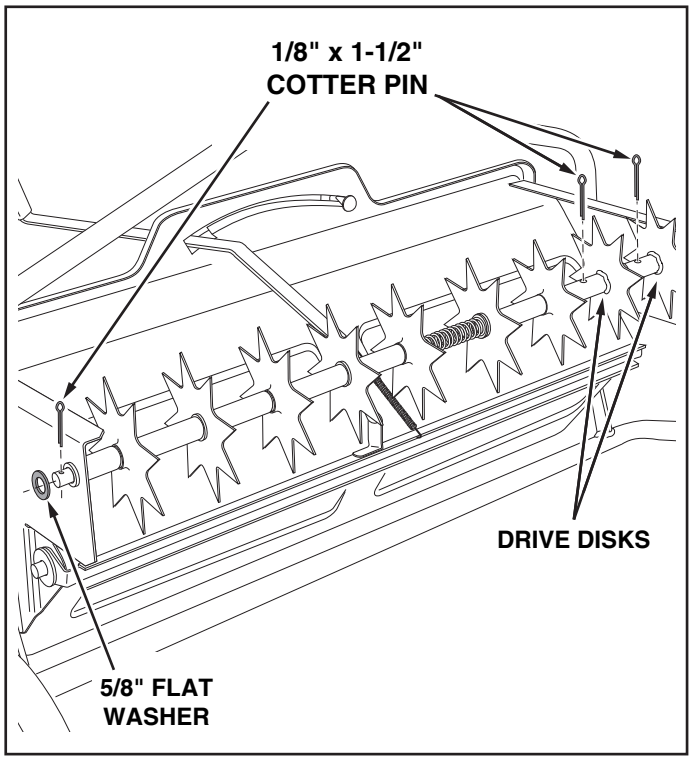


FIGURE 22

- Assemble the chain onto the two sprockets on the left side of the hopper. Fasten the ends of the chain together using the connecting link. See figure 23.
- Place the chain cover over the chain and fasten it to the hopper end plate using two self tapping screws. See figure 23.

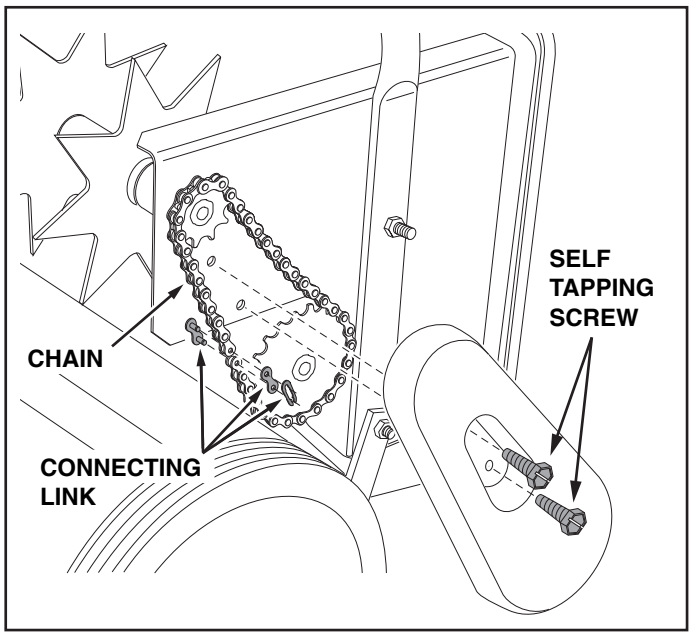
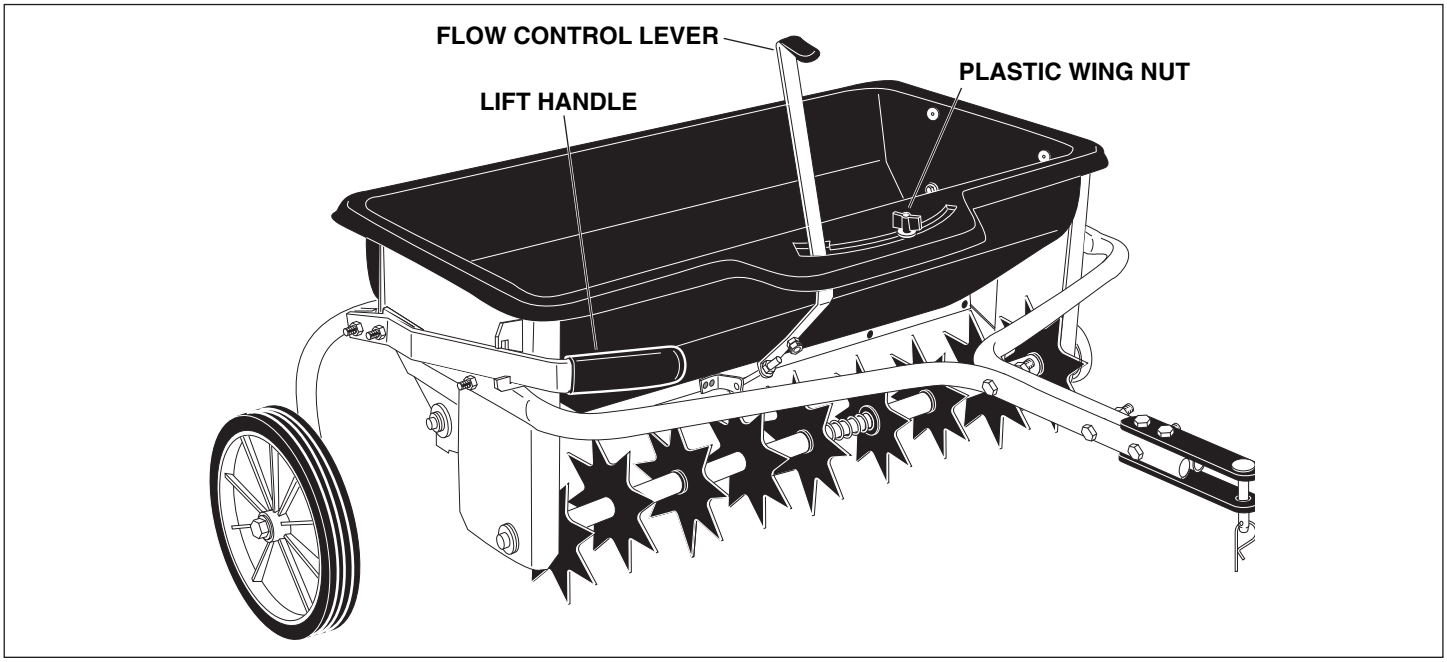


FIGURE 23

OPERATION

KNOW YOUR SPIKER SPREADER

Read this owner's manual and safety rules before operating your Spiker Spreader.
Compare the illustration below with your Spiker Spreader to familiarize yourself with the various controls and their locations.



FLOW CONTROL LEVER Opens and closes the flow plate at the bottom of the hopper.

LIFT HANDLE Raises the unit for transport or lowers it for spreading and aerating.

PLASTIC WING NUT Tightens at desired setting to control how far the flow control lever can open the flow plate.

HOW TO USE YOUR SPIKER/SPREADER

- Refer to the instruction label on the material package and to the instruction decal on your spreader to help determine the proper spreader setting and application rate. Also see the Setting Chart on page 13 of this manual for a general range of settings for commonly used materials.
- Determine the approximate square footage of the area to be covered and estimate the amount of fertilizer or seed required.
- Move the spreader to the area where application is to begin.

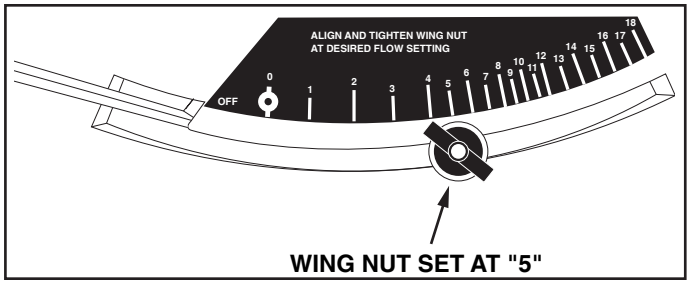


FIGURE 24

- Loosen the plastic wing nut and move it to the desired setting. Retighten the nut. See figure 24.
- Making sure the flow control lever is in the "OFF" position, fill the hopper, breaking up any lumps.
- Lower the aerator spikes to the operating position.
- Start the spreader in motion and then move the flow control lever to the "ON" position (against the plastic wing nut) as you travel across your lawn. The recommended towing speed is 3 m.p.h.
- Do not make sharp turns with spikes in the ground.
- Raise aerator spikes to transport position when crossing over concrete or other hard surfaces.
- Do not aerate if the ground is extremely hard or dry. If ground is too dry, sprinkle or water for one to two hours prior to use.
- Do not aerate if the ground is too wet (muddy).

IMPORTANT: Always place flow control lever in the "OFF" position to prevent excess fertilizer from being released when filling the spreader and when stopping or turning.

SETTING CHART

MATERIAL	Flow Rate Setting TYPE	At 3 M.P.H.
Fertilizer	Granular / Pelleted	5-6 / 6-7
Grass Seed	Fine / Coarse	5-6 / 7-8

3 M.P.H. is equivalent to traveling 100 feet in 23 seconds.

OPERATING TIPS

- To help prevent **granular** material from compacting and clogging the hopper, avoid unnecessary towing when the hopper flow plates are closed.
- Reduce the flow setting for speeds slower than 3 M.P.H. and increase the setting for higher speeds.
- To avoid misses or striping, overlap the previous wheel tracks by approximately 5" to 6".
- For easiest application, first apply material across both ends of the area. Two or three passes on each end are sufficient. Then apply material back and forth as shown. Use the end areas for turning around, shutting off the spreader as you enter the end areas and turning the spreader on again as your leave the end areas for your next pass. See figure 25.
- If lawn is odd shaped, spread a border around the edges and then spread between the border.
- Be careful when spreading around ornamental plants because weed control chemicals can damage these plants.

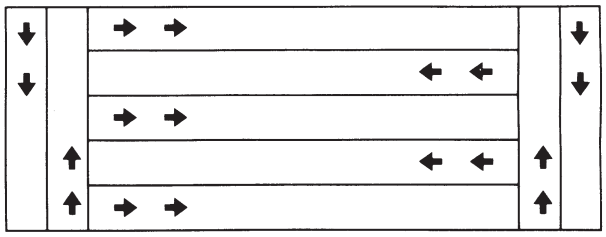


FIGURE 25

MAINTENANCE

CUSTOMER RESPONSIBILITIES

- Read and follow the maintenance schedule and the maintenance procedures listed in this section.

MAINTENANCE SCHEDULE Fill in dates as you complete regular service.	Before each use	After each use	Every year	Before storage	Service Dates										
Check for loose fasteners	X														
Lubrication			X												
Cleaning		X													

Spike points are sharp. Exercise caution when handling or working near spike disks.

LUBRICATION

- Apply a few drops of oil to wheels and to plastic bearings in spike disks and at end of spike axle.
- Remove chain cover, clean and oil drive chain.

CHECK FOR LOOSE FASTENERS

- Before each use make a thorough visual check of the spiker spreader for any bolts and nuts which may have loosened. Retighten any loose bolts and nuts.

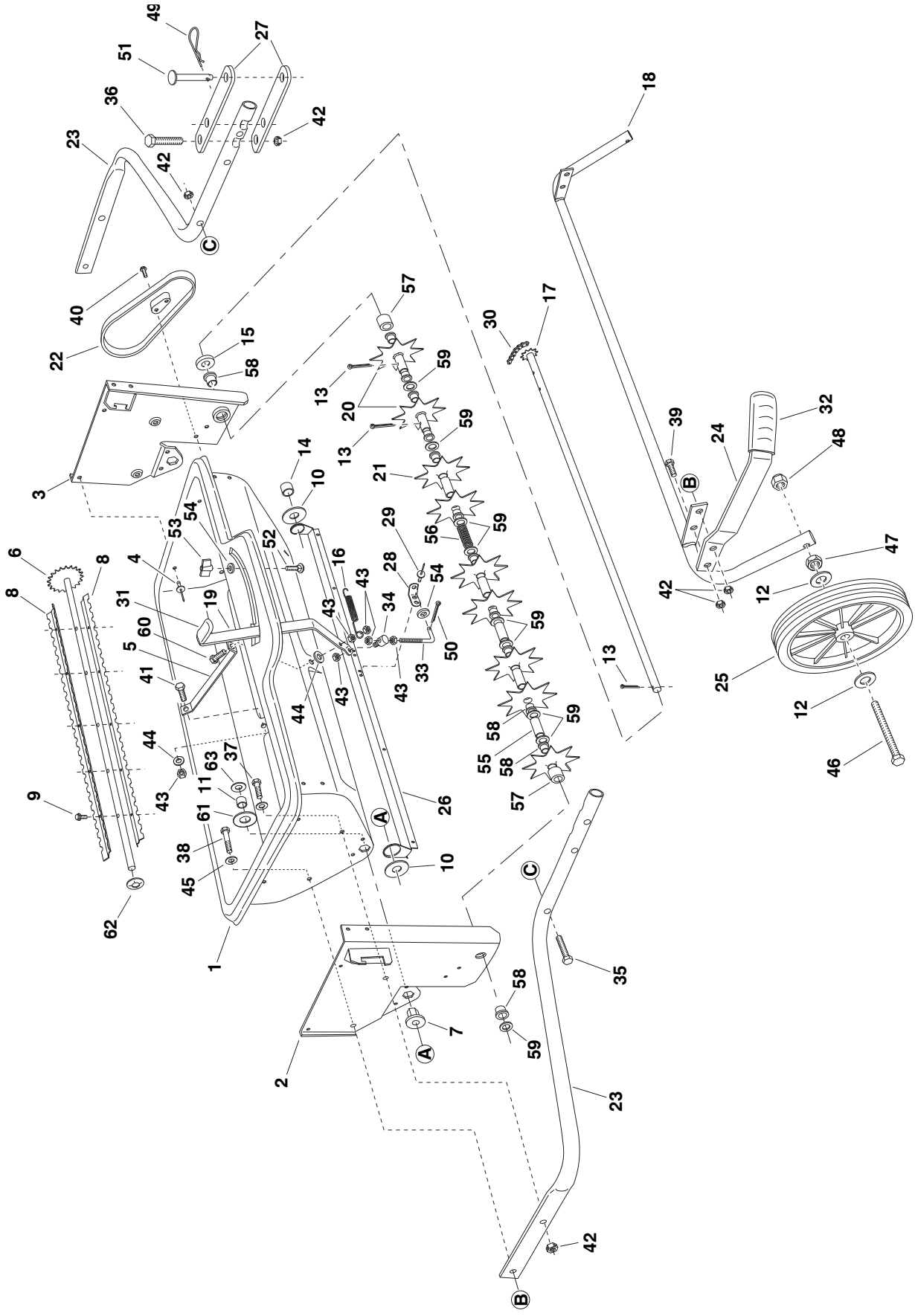
CLEANING

- Always empty spiker spreader after each use, storing leftover material in it's original bag.
- Wash the spiker spreader and dry thoroughly after each use.

STORAGE

- Empty the spiker spreader, storing leftover material in it's original bag.
- Apply a light coat of oil on exposed metal to help prevent rust.
- Wash the spiker spreader and dry thoroughly before storing.
- Store in a clean, dry area.

REPAIR PARTS FOR MODEL 486.24331



REPAIR PARTS FOR MODEL 486.24331

REF. NO.	PART NO.	QTY	DESCRIPTION
1	47931	1	Hopper
2	24736	1	End plate, Right Hand
3	24735	1	End plate, Left Hand
4	48418	12	Rivet, Pop
5	24747	1	Brace, Center
6	64104	1	Assembly, Agitator Shaft
7	47963	2	Bearing, Hex Flange
8	24739	2	Blade, Agitator
9	47978	10	Screw, Hex Washer Hd, #8-32
10	R19172410	2	Washer, 17/32" x 1-1/2" x 10 Ga.
11	46838	2	Spacer, .8" I.D.x1" O.D. x .50" Lg.
12	R19171616	4	Washer, 17/32" x 1" x 16 Ga.
13	43093	3	Pin, Cotter 1/8" x 1-1/2"
14	45133	1	Spacer, .5" I.D. x 1" O.D. x .59" Lg.
15	23520	1	Spacer, .66" I.D.x1.25" O.D. x .25"
16	47962	1	Spring, Flow Plate
17	64106	1	Assembly, Spiker Shaft
18	64107	1	Assembly, Transport Tube
19	24743	1	Lever, Flow Control
20	63956	2	Drive Disk
21	24332	7	Disk, Spike (7")
22	47953	1	Cover, Chain
23	47944	2	Tube, Hitch
24	24746	1	Lift, Handle
25	47961	2	Wheel, 10" x 1-5/8"
26	24741	1	Plate, Flow
27	23981	2	Bracket, Hitch
28	24539	1	Bracket, Feed Plate
29	728-3001	2	Rivet, Pop 5/32 (Stainless)
30	47960	1	Chain with Connector
31	43848	1	Grip, Control Arm .187" x .75"
32	43943	1	Grip, Height Adjustment 32"/38"
33	47959	1	Link, Flow Control
34	47969	1	Ferrule, 5/16" Thread x 1/4" Hole
35	43224	3	Bolt, Hex 5/16" x 2-1/4"
36	44180	2	Bolt, Hex 5/16" x 2"
37	43085	2	Bolt, Hex 5/16" x 1-1/2"
38	43084	2	Bolt, Hex 5/16" x 1-3/4"
39	43063	1	Bolt, Hex 5/16" x 1"
40	44731	2	Screw, Self Tapping 1/4" x 1"
41	43012	1	Bolt, Hex 1/4-20 x 3/4"
42	47810	10	Nut, Nylock Hex 5/16"
43	47189	6	Nut, Nylock Hex 1/4"
44	43088	2	Washer, Flat 1/4"
45	43081	4	Washer, Flat 5/16"
46	45100	2	Bolt, Hex 1/2" x 4" Full Thread
47	43019	2	Nut, Hex Jam 1/2"
48	48115	2	Nut, Nylock Hex Jam 1/2"
49	43343	1	Pin, Hair Cotter #4 (1/8")
50	44101	1	Pin, Cotter 3/32" x 3/4"
51	47623	1	Pin, Flat Head Hitch, 3/8" Dia.
52	44215	1	Bolt, Carriage 5/16" x 1-3/4"
53	712-0421	1	Nut, Plastic Wing 5/16"
54	1543-69	2	Washer, Nylon 21/64"
55	46524	5	Spacer Tube, Long
56	47777	1	Spring, Compression
57	46497	2	Spacer Tube, Short
58	741-0249	13	Bearing, Flanged PV80 .63 I.D.
59	R19212016	10	Washer, Flat 5/8" (21/32" x 1-1/4")
60	1509-90	1	Bolt, Hex 1/4-20 x 1-1/4"
61	48173	2	Washer, 13/16" x 1-1/2" x 1/16"
62	46557	1	Push Nut, 1/2"
63	44137	5	Washer, Flat .518 x 1 x.02
	48070	1	Owner's Manual

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