KUBOTA 48" Rotary Mower

K-348-6 (For B-6000 Series only)

and K-348-7

48" Rotary Mower

No. 10177—2M—11-77—G. P.

Printed in U. S. A.

K-348-6 and K-348-7

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(Reference Pictures on outside rear cover)

★ Packing List and Hardware Bag Lists on inside rear cover

Please Record the Following:

Model No. .....

Serial No. .....

Date Purchased .....

Dealer's Name .....

Dealer's Address .....

Safety Precautions

The following precautions are suggested to help prevent accidents. Read this manual carefully to acquaint yourself with the rotary mower. Working with unfamiliar equipment or unfamiliar mowing conditions can lead to accidents.

TRACTOR RELATED SAFETY

1. Familiarize yourself with all controls before attempting to operate the tractor.
2. Never start the engine while standing beside the tractor. Always sit in the tractor seat while starting the engine.
3. Use care when operating on steep grades to maintain proper stability.
4. Keep the tractor in gear when going downhill.
5. Always keep the tractor brakes in good operating condition.
6. Always drive the tractor at speeds compatable with safety, especially when operating over rough ground, crossing ditches, slopes, or when turning.
7. If the front end tends to rise, install front end or front wheel weights. Do not continue to operate with a "light" front end.
8. Always bring the tractor to a complete stop and shut off the engine before getting off the tractor.
9. The operator should never get off while the tractor or machine are in motion.

EQUIPMENT RELATED SAFETY

1. Never allow passengers to ride on the mower or tractor.
2. Never leave the equipment in a raised position.
3. When operating P.T.O. - driven equipment, always shut off the engine and wait for the P.T.O. to stop turning before getting off the tractor and before disconnecting the equipment.
4. Never wear loose clothing when operating the power take-off, or around equipment that is rotating.
5. Never clean, adjust, lubricate, or unclog P.T.O. driven equipment with the tractor engine running.
6. Make sure the P.T.O. shield is installed when using P.T.O.-driven equipment, and always replace the P.T.O. shield if damaged.
7. Give complete and undivided attention to the job at hand.
8. Do not operate mower in vacinity of other persons.
9. Clear the work area of objects which might be picked up and thrown.
10. Disengage P.T.O. and shift into neutral before attempting to start tractor engine.
11. Disengage power to mower when transporting or when not in use.
12. Keep the tractor and mower in good operating condition and keep all shields in place.
13. The tractor and mower should be stopped and inspected for damage after striking a foreign object, and any damage be repaired before restarting and operating the mower.
14. Check the blade mounting bolts for proper tightness at frequent intervals.

Assembly Instructions

1. Remove all parts from the shipping carton and lay them out in an orderly fashion. (The mower mainshield and drive components have been assembled at the factory for customer convenience and ease of final assembly.) Elevate mainshield assembly by placing 6" - 8" blocks under runners. This will make wheel installation easier, later in the procedure.
2. Front Hitch: Attach front strut (5 & 6) on inside of hitch brackets with hitch pins (52) pointed to the center of the mower. Do not tighten hitch pins until rear brace has been assembled. Install rear brace (7) by attaching to mainshield with (10) 7/16 x 1 1/4 bolt, nut, and lockwasher and attaching to front strut with (53) 5/8 x 3 1/2 bolt, nut, and lockwasher. Securely tighten the bolts and hitch pins on the front hitch and rear brace assembly. (Figure 1)
3. Front Roller Wheel Assembly: Assemble front roller wheel brackets (20) and wheels (21) with grease bolt (46), flat washers (47) (washers go between bracket and wheel), and lock nut. Note: Grease bolts should be installed so that the grease zirks point toward the outside of the mower when assembly is mounted in position (this facilitates easier lubrication of wheels). Tighten grease bolt securely, but not so tight as to prevent the wheel from turning freely.

Mount the roller wheel assembly to the front of the mower with (55) 7/16 x 1 1/4 bolt, nut, and lockwasher and flat washers

(one on front side and one on backside of mower housing).

Note: Front roller wheel brackets are slotted for adjustment for desired mowing height. (Figure 1)

4. Gauge Wheel Assembly: (Caster Wheels) Assemble tire and wheel (19) and gauge wheel fork (18) with (28) 3/4 x 5 bolt, (29) 3/4" flat washer and (30) 3/4" lock nut. (Flat washers go between wheel and fork). Securely tighten bolt, but not so tight as to prevent the wheel from turning.

Insert gauge wheel fork assembly into gauge wheel main frame (16) securing assembly with set collars (17).

Mount gauge wheel main frame assembly on the outside edge of mainshield rib with (37) 7/16 x 1 1/2 bolt, nut, and lock washer.

Adjust gauge wheels to desired cutting height. Be sure when adjusting gauge wheels that the mower is level from left to right to attain a level cut. (Figure 2)

Driveline: Attach driveline (56) to gear box input shaft with 1/4" square key 1 1/2" lg. (60). Tighten allen head set screw to secure drive line.

Note: Recheck all bolts and fastners for tightness and check grease in gear box before final assembly can be complete.

Attaching Mower To Tractor

Attach tractor lift arms to mower hitch pins. Secure driveline to the tractor P.T.O. shaft. The K-348-6 mower driveline (25mm-10 spline yoke) utilizes a 3/16 x 3 1/2 cotter pin (58). The K-348-7 mower driveline (1 3/8 - 6 spline yoke) utilizes a quick attach pin to secure the driveline. Be sure the quick attach pin seats into the pin groove on the tractor P.T.O. shaft.

Attach adjustable 3rd link arm to the slotted mast of the mower. attach the anchor end of 3rd link to the tractor in the top hole of the bracket. (Figure 3)

The mower is now attached to the tractor. Now raise the mower with the tractor lift so that the tractor is carrying the mower weight. Adjust the anti-sway chains on the tractor lift arms, so the mower is centered behind the tractor. Snug the chains to eleminate any side sway of the mower.

K-348-6 and K-348-7

Operating Instructions

Tractor Operation

This mower is intended for lawn mowing. Although it is more than adequate for this type of mowing it is not intended for heavy weed or brush mowing or rough conditions.

Always operate PTO in second gear, 820 - 840 RPM. Recommended ground speed 1.5 to 4 MPH for most mowing conditions. If ground speed is too fast, a lower gear should be used to maintain the PTO RPM.

Belt Adjustment

The belt tension can be checked between the left rotor and center rotor (standing at rear of mower). This tension should be 4 to 6 pounds of force to deflect the belt 1/4". (Figure 4)

To adjust the belt, loosen the back nut on the I - bolt (51) and adjust I - bolt to attain the correct belt tension. After the belt tension has been set there is usually no need for further tensioning, due to the spring loaded arm. If belt slippage occurs usually two full turns of the nut on the I - bolt will be adequate to eliminate slippage. Always check belt tension after adjusting. Belt slippage usually occurs when an obstruction is encountered, or mowing heavy material at too high of ground

speed or a loose belt. Note: Do not over tension the belt because it may result in a shorter belt life and bearing life.

Mowing Grass

The mower should be run level and the uncut area kept to the left of mower traveling in a counter clock wise direction.

The front roller wheels should be adjusted so that they clear the ground on the level. They will then contact the ground on uneven terrain and help to prevent scalping.

On certain grasses or seasonal conditions it may appear that the mower is leaving a strip or wheel track. If this occurs reduce the ground speed by down shifting, and keeping the PTO speed at full or near full RPM. In tall or heavy grass it may be necessary to raise the mower to a higher cutting height and mow the grass once and then set the mower at the desired mowing height and remow, the area.

Lubrication

* Use a high quality multi-purpose lithium base grease for all lubrication points.
* Grease blade rotor bearings (six) every 8 hours of operation. (One or two shots of grease will be adequate.)
* Grease rear caster wheels and pivot bearings every 8 hours of operation.
* Grease front roller wheels every 8 hours of operation.
* Grease driveline shafts every 8 hours. In some cases grease zirks have not been provided because they do not always adequately lube all four sides of the shaft. If this is the case a smear of grease on each of the four sides of the shaft is adequate. Failure to keep driveline shafts greased and telescoping freely may result in damage to other driveline parts.
* Grease the driveline universal joints every 24 hours (One or two shots of grease will be adequate).

  Note: Do not over grease any lubrication point. Wipe excess grease from the parts as it will collect dirt and may cause premature failure.

Lubrication - Gear Box

The gear box lubricant is a high grade industrial type grease that is normally good for the lifetime of the gear box. Generally it is not necessary to add grease to the gear box, however due

to seal damage and subsequent leakage it maybe necessary to replenish the gear box with a good multi-purpose lithium grease.

Note: The gear box lubricant level should be checked before each operation. A check plus is provided on the side of the gear box, and lubricant should be with in 1/4" of check plug.
(The check plug hole also serves as the filler hole.)

Blade Replacement or Sharpening

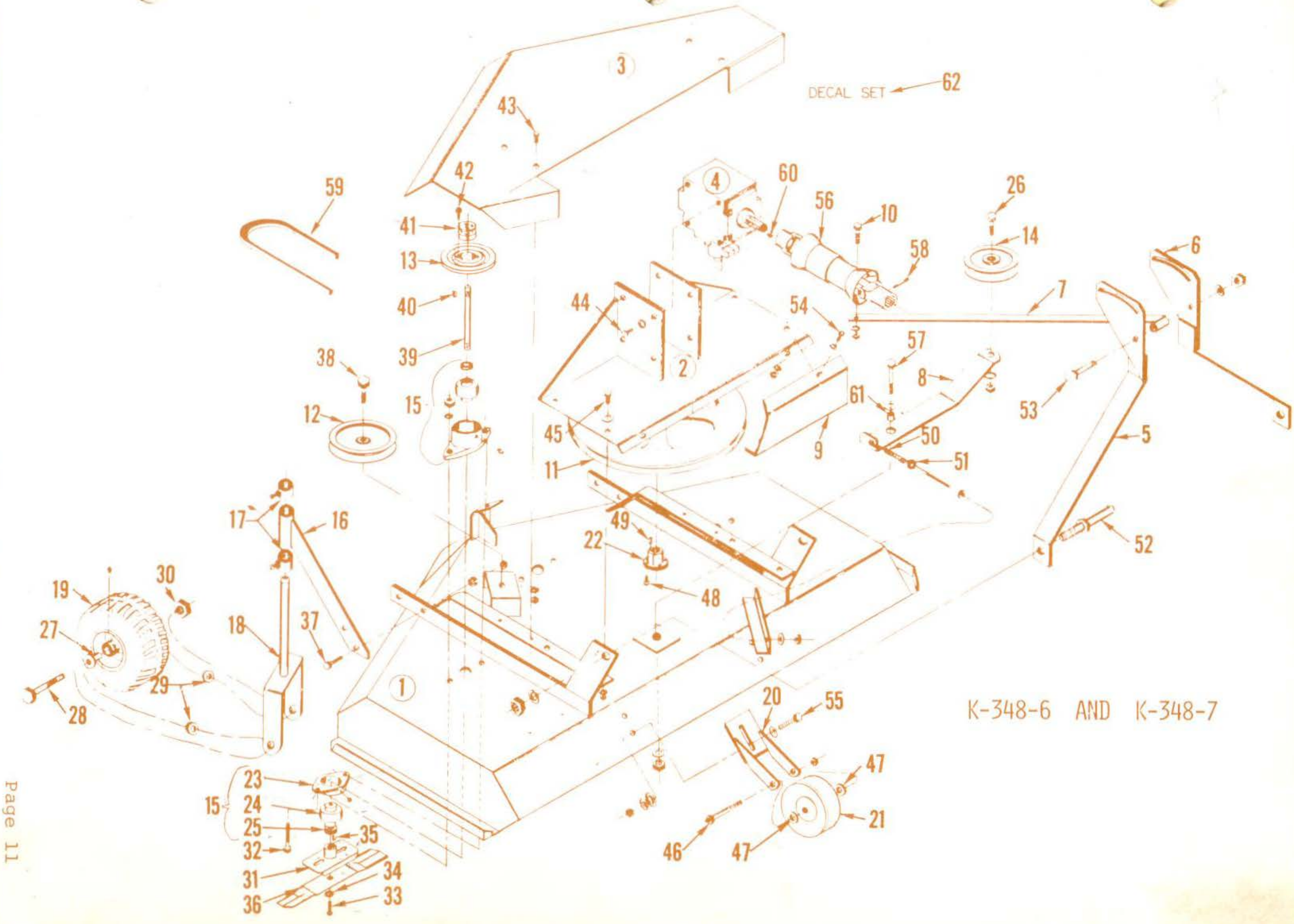
If the blades are removed for sharpening or replacement be sure that they are installed correctly. As to the direction, of rotation(counter clock wise looking from the top of the mower). Note: The cap screw that secures the blade has Left Hand thread.

When sharpening blades remove equal amounts off each cutting edge to maintain the balance. An unbalanced blade will cause excessive vibration. Sharp cutting edges will give the best mowing results by cutting instead of tearing the grass.

Belt Installation

To replace a drive belt it will be necessary to remove the front belt shield (9) and rear belt shield (3). Next loosen the I bolt (51) releasing the spring tension. Loosen or remove the four bolts (45) that secure the gear box mounting. To allow clearance for the belt to pass between the drive sheave hub and the belt tightner arm pivot bolt. Remove old belt. Slide

replacement belt between the drive sheave hub and the belt tightner arm pivot bolt. Secure the gear box mounting. Place the belt in the drive sheave groove, next place the belt on the flat tightner pulley (14), proceed around the left driven sheave, the center driven sheave, the backside idler(12) and then roll the belt on the right driven sheave. Adjust the belt tension by adjusting the I - bolt. (Usually 3/4" to 7/8" of exposed thread on the I- bolt will give the proper tension of 1/4" deflection with 4 to 6 pounds of force.) (Figure 5)



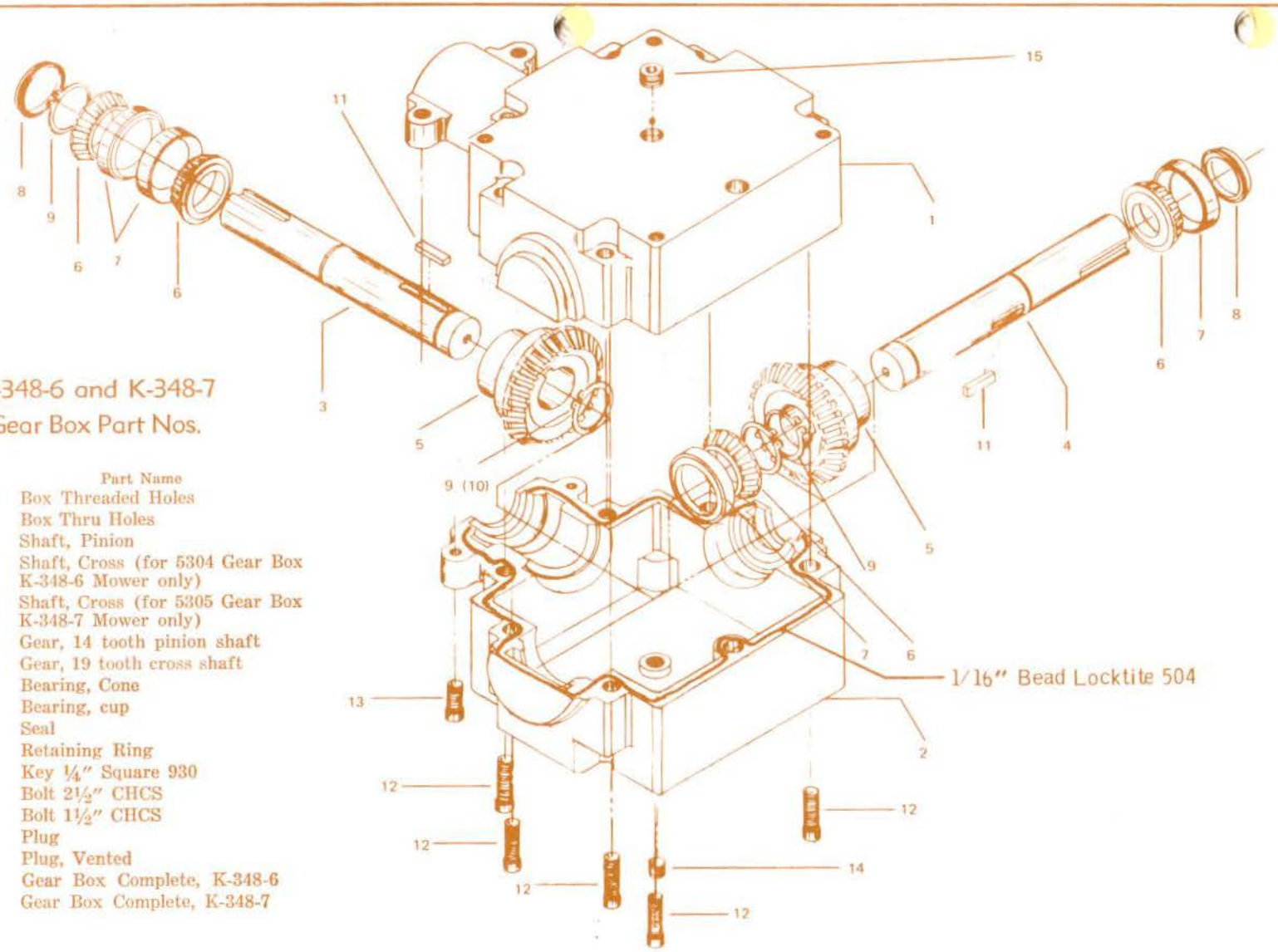
K-348-6 AND K-348-7

Reference No.	Part No.	Part Name	Requir No.
1	5301	Mainshield	1
2	5302	Gear box mounting	1
3	5303	Rear Belt Shield	1
4	5304	Gear Box K-348-6	1
	5305	Gear Box K-348-7	1
5	5246	Front Strut - Right	1
6	5245	Front Strut - Left	1
7	5306	Rear Brace	1
8	5307	Belt Tightner Arm	1
9	5308	Front Belt Shield	1
10		Hex Head Cap Screw H. T. - 7/16 - 14UNC - 1 1/4 - Nut and Lock Washer	1
11	5309	Sheave - 15.4 Pitch Dia. with Bushing (ref. #22) and Cap Screw (Ref. #48)	1
12	5252	Idler Pulley - 6" Flat	1
13	5205	Sheave Driven, Complete w/Hub and Socket Head; Cap Screws. (Ref. Nos. 13, 41, & 42)	3
	5205S	Sheave only	
14	5311	Belt Tightner Pulley - 5.5" Flat Idler	1
15	5312	Rotor Bearings	6
16	5316	Gauge Wheel Mainframe	2
17	5233	Set Collar - 4 Required	4
18	5232	Gauge Wheel Fork	2
19	5230	Tire and Wheel Complete w/Bushing	2
20	5318	Front Roller Wheel Brackets	2
21	6005	Wheel - Hard Rubber	2
22	5310	Bushing (1" w/1/4" Keyway)	1

23	5313	Housing	6
24	5314	Bearing	6
25	5315	Lock Collar	6
26		Hex Head Cap Screw, 5/8 - 11 UNC-2", Nut and Lock Washer	1
27	178	Bushing, Wheel - 2 Req. per Wheel	4
28	5231	Hex Head Cap Screw - H.T. - 3/4 - 10 UNC - 5" Lock Nut	2
29		3/4" Flat Washer	4
30	5325	Lock Nut - 3/4- 10 (Special)	2
31	5212	70080-00100 Knife Holder	3
32		Hex Head Cap Screw - H.T. - 7/16 - 14 UNC - 3", Lock Nut and Lock Washer	6
33	5251	Hex Head Cap Screw - H.T. - 3/8 x 16UNC - 1" Left Hand Thread and Lock Washer, 3/8 Left Hand , Ref. #34	3
34	5317	Lock Washer, 3/8 Left Hand (Special)	3
35	5209	Key 5/32 x 5/8 Woodruff	3
36	5319	70080-00450 Knife, 16 3/4" Lg.	3
37		Hex Head Cap Screw - 7/16 - 14 UNC - - 1 1/2" - Nut and Lock Washer	4
38		Hex Head Cap Screw - 1/2 - 13 UNC - 1 3/4" - Nut and Lock Washer	1
39	52062	Spindle Shaft - 7 3/16" Lg. 00463	3
40	5207	Key - 1/4 x 1 Woodruff	3
41	5257	Hub, Driven Sheave 70080-	3
42		Socket Head Cap Screw 5/16 - 18UNC - 5/8	6
43	5326	Self Tapping 5/16 - 18 - 3/4" Hex Head Cap Screw	4
44		Hex Head Cap Screw - H.T. - 3/8 - 16 UNC - 3/4 - with lock washer	8
45		Hex Head Cap Screw- H.T. - 5/16 - 18UNC - 1 Nut, Lock Washer, and Flat Washer	4

Pulley & Hub

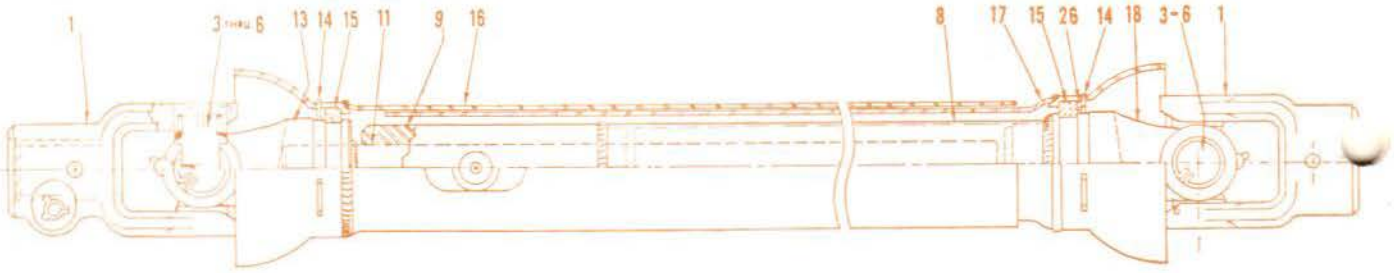
46	5320	Grease Bolt - Hex Head Cap Screw 1/2 - 13UNC x 3 1/2", and Lock Nut	2
47		Flat Washer - 1/2 std.	4
48		Hex Head Cap Screw - 1/4 - 20 UNC - 3/4"	2
49	5321	Key - 1/4 Sq. x 1	1
50	9628	Spring	1
51	5322	I - Bolt	1
52	C-111	Hitch Pin Catagory 1	2
53		Hex Head Cap Screw - H. T. - 5/8 - 11UNC - 3 1/2, Nut and Lock Washer	1
54		Hex Head Cap Screw - H. T. - 1/4 - 20 UNC - 3/4, Flat Washer, Nut, and Lock Washer	2
55		Hex Head Cap Screw - H.T. - 7/16 - 14 UNC - 1 1/4, 2 Flat Washers, Nut, and Lock WAsher	4
56	5323	Drive Line, Complete K-348-6	1
	5324	Drive Line, Complete K-348-7	1
57		Hex Head Cap Screw - H.T. - 5/8-11UNC - 2, Flat Washer, Nut, and Lock Washer	1
58		Cotter Pin, 3/16 x 3 1/2 (K-348-6 only)	1
59	5248	Belt 70080-00118	1
60	9641	Key - 1/4 Sq. x 1 1/2"	1
61	BR121	Bushing	1
62	5327	Decal Set	1



K-348-6 and K-348-7 Gear Box Part Nos.

Ref. No.	Part No.	Part Name
1	5010	Box Threaded Holes
2	5011	Box Thru Holes
3	5012	Shaft, Pinion
4	5013	Shaft, Cross (for 5304 Gear Box K-348-6 Mower only)
4	5014	Shaft, Cross (for 5305 Gear Box K-348-7 Mower only)
5	5015	Gear, 14 tooth pinion shaft
5	5016	Gear, 19 tooth cross shaft
6	5017	Bearing, Cone
7	5018	Bearing, cup
8	5019	Seal
9	5020	Retaining Ring
11	5021	Key ¼" Square 930
12	5022	Bolt 2½" CHCS
13	5023	Bolt 1½" CHCS
14	5024	Plug
15	5025	Plug, Vented
	5304	Gear Box Complete, K-348-6
	5305	Gear Box Complete, K-348-7

1. Disassemble gear box by removing 9-3/8 socket head bolts. Tap with plastic or wood hammer to break seal. Lay top half aside.
2. Lift both shafts out of lower case half.
3. Discard lubricant and clean both case halves. (Remove all hardened gasket material using knife, putty knife or equivalent.) Inspect castings.
4. Disassemble shaft assemblies as necessary to remove worn and broken parts. Spread retaining rings only far enough to clear shafts. Note: It will be necessary to remove one retainer ring on the pinion shaft to replace bearings or gears. Retaing rings need not be removed from cross shaft unless shaft is to be replaced.
5. Remove all hardened gasket material from bearing cups and seals. Replace seals if deformed or worn.
6. Place gears, bearings, seals, retaining rings and keys on shaft per diagram. Lay shafts in bottom casting taking care that seals are properly positioned (pinion shaft seal should be against front lip of casting.)
7. Lay 1/16" bead of gasket material (locktite 504) around casting per diagram.
8. Place top half of casting over bottom half and press down with hand. Take care not to disturb seals. Tighten bolts evenly to 15-20 ft. lb. torque.
9. Tap ends of shafts lightly with wood or plastic mallet to seat bearing against retaing rings.



K-348-6 and K-348-7

Driveline

Reference No.	Part No.	Description
1-26	5323	Driveline Complete K-348-6
	5324	Driveline Complete K-348-7
	5328	Driveline, Female Half Complete K-348-6 & K-348-7
	5329	Driveline, Male Half Complete K-348-6
	5330	Driveline, Male Half Complete K-348-7
1.	5331	Yoke, 1" Bore w/ 1/4" Keyway
	L-14-NYS-22l-A	Yoke, Quick Attach 1 3/8"
	5216	Yoke 25mm 10 Spline
3.	CPL-14-N	Repair Kit Incl. Cross, Brg., Cups, Seals, Grease Zirk and Snap Rings (Not Available as Seperate Parts)
8.	5332	Length of L-14 Tube
9.	0-2	Slip Sleeve
11.	5333	1" x 1 1/8" Shaft Long
13.	14160581	Weld Yoke for 1" x 1 1/8" Shaft
14.	1-1	Snap Ring
15.	1-3	Nylon Bearing
16.	5334	Shield, Male End (outer)
17.	5335	Shield, Female (inner)
18.	14260511	Weld Yoke for Tube
19.	330001	Push Pin for QA Yoke
20.	350001	Spring for Push Pin
21.	750000	Keeper for Push Pin
26.	1-2	Washer, Thrust
Not Ill.	5336	5/16 Allen Head Set Screw

K-348-6 and K-348-7

Packing List

1	Mainshield w/ Rotor Shaft and Blades Assembled, Gear Box Mounting and Drive Components, Front and Rear Belt Shields
1pr.	Front Hitch
1	Rear Brace
2	Gauge Wheel Main Frames (Rear)
2	Gauge Wheel Forks
2	Wheels (10.25 x 3.25)
2	Front Gauge Wheel Brackets
2	Wheels (1.75 x 6)
1	Drive Line (L-348-6 or K-348-7)
1	Hardware Bag

Hardware Bag Contents

2	Catagory 1 Hitch Pins	1	5/8 - 11 X 3-1/2 Cap Screw HHCSHT
1	5/8 - 11 Hex Nut	5	7/16 - 14 X 1-1/4 Cap Screw HHCSHT
1	5/8 Lockwasher	4	7/16 - 14 X 1-1/2 Cap Screw HHCSHT
13	7/16 - 14 Hex Nut	2	3/4 - 10 X 5 Cap Screw HHCSHT
13	7/16 Lock Washer	4	7/16 - 14 X 1-3/4 Cap Screw HHCSHT
2	3/4 - 10 Hex Nut	2	1/2 - 13 X 3-1/2 Grease Bolt
4	3/4 Flat Washer	2	1/2 - 13 Hex Lock Nut
4	7/16 Flat Washer	2	3/16 Chain (14 Links Lg.)
4	1/2 Flat Washer	4	Set Collar (1" L.D.)

KUBOTA® K-348-6 & K-348-7

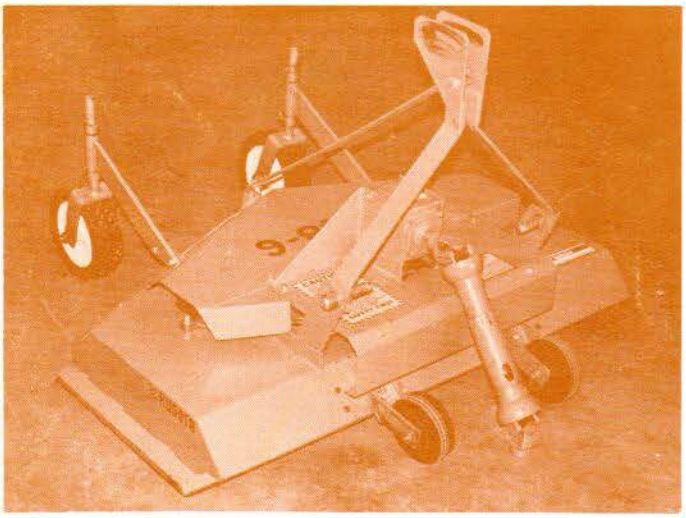


Figure No. 1

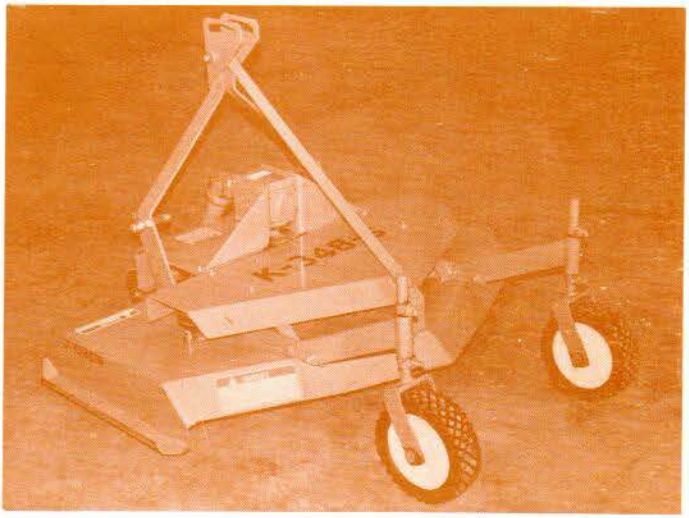
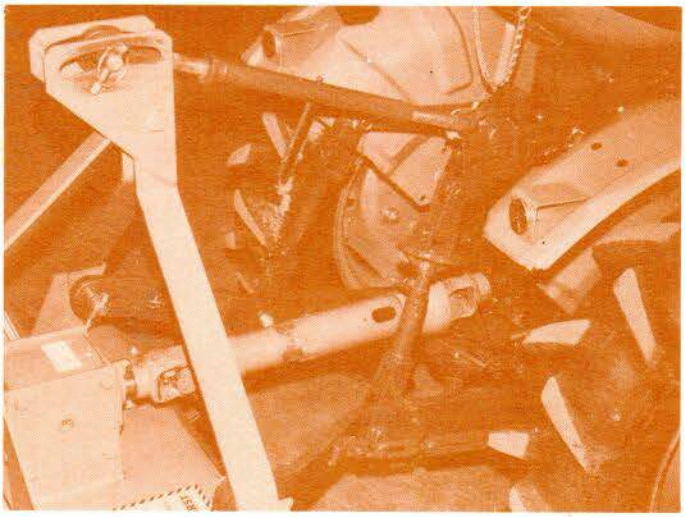


Figure No. 2



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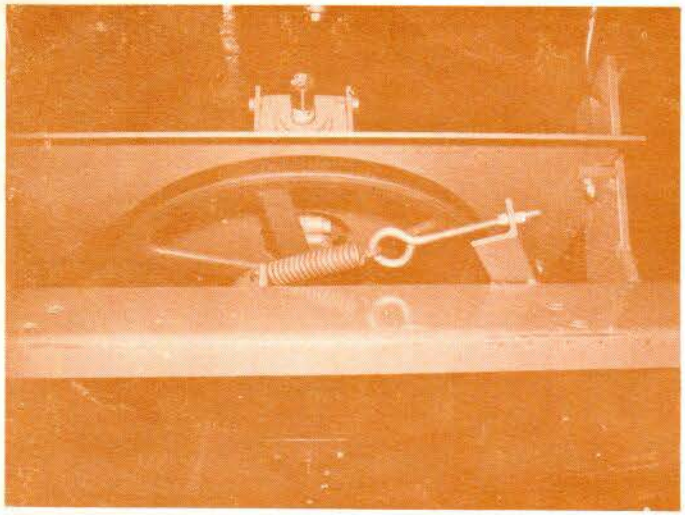


Figure No. 4

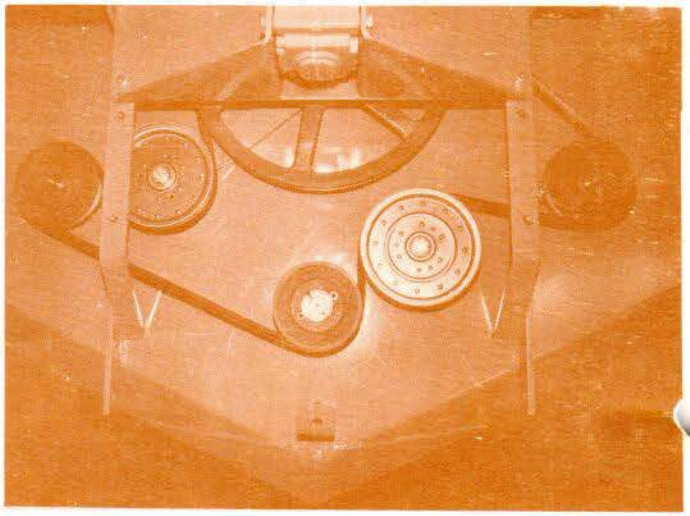


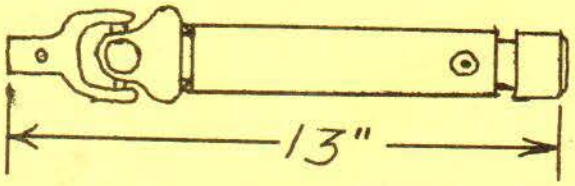
Figure No. 5

November 1, 1977

NOTICE

KUBOTA K-348-7 MODEL ONLY

Upon delivery of a K-348-7 48" Rotary mower, check the overall length of the **FEMALE** half of the driveline. The overall length **should not** exceed 13"! If measurement does exceed 13", there is a possibility of damage being caused to the K-348-7 while in the maximum raised position.



If measurement does exceed 13", contact your KUBOTA dealer or The Kubota Tractor Corporation, 300 West Carob, Compton, California 90220.

This notice applies to KUBOTA Model K-348-7 48" Rotary Mowers with serial numbers GG-1766, GH-1792 to and including GH-1916, GH-3017 to and including GH-3063, and GH-3065 to and including GH-3081.

KUBOTA®
TRACTOR CORPORATION

Bulletin No. P-811

Date 10/07/80

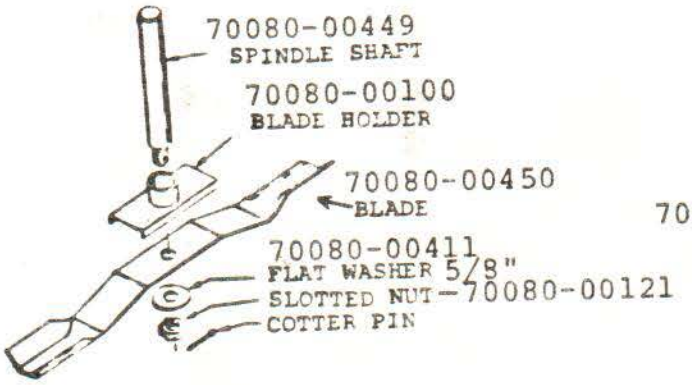
Authorization:

PARTS BULLETIN

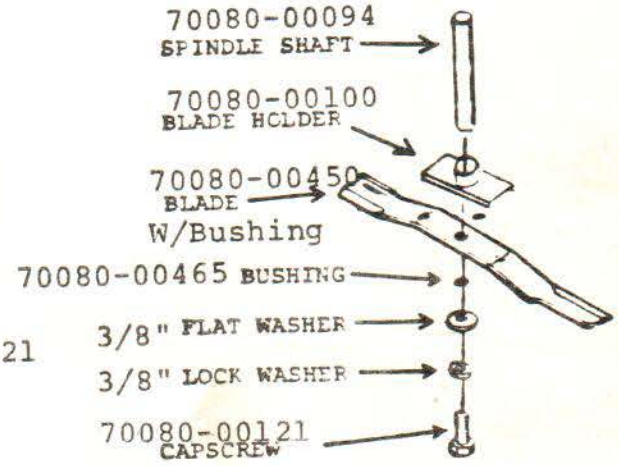
SUBJECT: B-348-6 and B-346-7 B-Series Rotary Mower Blade Spindle Parts

There have been numberous problems in ordering correct parts for the B-348 Mowers, Spindles. Below are drawing to elimate this situation.

CURRENT SPINDLE



PREVIOUS SPINDLE



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