

A-BOOM

BOOM ARM MOWER

INFORMATION & SERVICE BULLETINS

Manual P/N 02980499 (01/04)

Alamo Industrial

P. O. Drawer 549 Seguin, Texas 78155 830-372-3551 2004 Edition



BOOK INTRODUCTION INFORMATION & SERVICE BULLETINS

This Book is divided into two Sections

Section One - Technical Information Bulletins

- 1. **Technical Information Bulletins:** Information Bulletins are listed by Bulletin Number (Date). Example the oldest Bulletin will be listed first and the most recent bulletin will be listed last. Bulletin No. 021002 = first & second digits are the month, the third & fourth digits are the day of the month and the fifth & sixth digits are the year this means, the bulletin was written on Feb, 10, 2002. If more than one bulletin was written on that day the a dash with a number will added, example -1, -2 etc.
- 2. **Authorize Repairs:** Technical Information Bulletins **do not authorize** any repairs to be made under warranty or any other circumstance unless specifically instructed to do so.
- 3. **Bulletin Reference:** Some Technical Information Bulletins will refer to the corresponding Service Bulletins for repairs and some are for information only.
- 4. **Bulletin Instructions:** Technical Information Bulletins should have all the instructions as to what you need, but may not have all the information needed to make an installation complete. In some cases it may be required to refer to other manuals for more complete information, this should be suggested in the Technical Information Bulletin.
- 5. All Technical Information Bulletins printed in this Manual will void any previously printed Bulletin. Any changes in these bulletins are the final version as of the date of this manual.

Section Two - Service Bulletins

- 1. **Service Bulletin No:** Service Bulletins are listed by Bulletin Number (Date). Example the oldest Bulletin will be listed first and the most recent bulletin will be listed last. Bulletin No. 021004 = first & second digits are the Year, the third & fourth digits are the day of the month and the fifth & sixth digits are the month, this means the bulletin was written on Apr, 10, 2002. If more than one bulletin was written on that day the a dash with a number will added, example -1, -2 etc.
- 2. **Repairs:** Service Bulletins are intended to authorize only the repairs listed on It to be made under warranty or any other circumstance unless specifically instructed to do so.
- 3. **Parts:** This is the Rate at which compensation will be allowed under warranty for repair parts.
- 4. **Labor:** This is the amount of labor (hours) that are allowed to make this repair under warranty.
- 5. **Parts Disposition:** Service Bulletins list the disposition of any parts that are removed during the repair. If listed removed parts must be held awaiting return to factory if instructed to do so.
- 6. **Termination Date:** Service bulletins show a termination date, this is the date that the Bulletin will be discontinued, Any repairs must be made and all warranty applications filed by the listed date.
- 7. All Service Bulletins printed in this Manual will void any previously printed Bulletin. Any changes in these bulletins are the final version as of the date of this manual.

INDEX A-BOOM Section 1 Technical Information Bulletins

| Bulletin No. (Old No.) | Page | Date | Description |
|------------------------|--------|------------|--|
| | . 1-1 | | . Information Bulletins Introduction |
| 011095 (950001) | 1-2 | 01/10/95 | . King Post Attachment Components |
| 011895 | . 1-4 | . 01/18/95 | . Dipper Hose Modification, 28' Model |
| 012095 | . 1-5 | . 01/20/95 | . Flail Axe Head Pulley Fastening |
| 032295 | . 1-6 | . 03/22/95 | . Swing Cylinder Pin Bushings |
| 092895 | . 1-8 | . 09/28/95 | . Push - Pull Power Switch Failure |
| 120895 | . 1-10 | . 12/08/95 | . Crossover Tube Crack Repair |
| 121295 | . 1-12 | . 12/12/95 | . Turning Arm Bushing, Convert to Steel |
| 121395 | . 1-14 | . 12/13/95 | . Frame Rail Reinforcements Gusset Installation |
| 121495 | . 1-16 | . 12/14/95 | . Rotary Boom Head Crack Repair |
| 040896 | . 1-18 | . 04/08/96 | . Oil Leaking from New Hydraulic Cylinders |
| 042996 | . 1-19 | . 04/29/96 | . New Holland Tractor Dead Battery Problem |
| 100296 | . 1-20 | . 10/02/96 | . Logic Valve Seal Kit Update |
| 071897 (0711897A) | . 1-21 | . 07/18/97 | Remote Control Cable Update |
| 020199 | . 1-22 | . 02/01/99 | TS Tractor Hood to Frame Interference |
| 031000 | . 1-23 | . 03/10/00 | . TS Tractor Fuel Filter Change (New Holland) |
| 032200-2 | 1-24 | . 03/22/00 | . Frame Reservoir Bypass Retro-Fit Kit |
| 080300 | . 1-25 | 08/03/00 | . Spindle Oil Filler Kit (Rotary Head) |
| 080400 | . 1-26 | 08/04/00 | . Filter Maintenance Procedure for Add on Filter |
| 040901 | . 1-27 | 04/09/01 | . Rebuilt Parts Availability Change Notice |
| 041101 | . 1-28 | 04/11/01 | . Buzz Bar Head Drive Coupler Change |
| 101802 | . 1-29 | 10/18/02 | . Spindle Bearing Lubrication Change |
| 102103 | . 1-30 | 10/21/03 | . Lexan Shield Availability Non-Cab Tractors |
| 011304 | . 1-32 | 01/13/04 | . Driveline Update Kit |

INDEX A-BOOM Section 2 Service Bulletins

| Bulletin No. (Old No.) | Page | Date | Description |
|------------------------|------|------------|---|
| | 2-1 | | . Service Bulletin Introduction |
| 922804 (92-005) | 2-2 | 04/28/92 | . Blade Bolt Spacer, 50" & 60" Spider Pan |
| 922909 (92-009) | 2-3 | . 09/29/92 | . Crankshaft Pulley Adapter Spacers (56,66,7740) |
| 930410 (93-008) | 2-4 | . 10/04/93 | . Crankshaft Pulley Adapter Spacer (56,66,7740) |
| 940106 (940007) | 2-5 | . 06/01/94 | . Swing Cylinder. Bushing & Pin Replacement |
| 951701 (95002) | 2-6 | . 01/17/95 | . Dipper Pin Bushing at Hitch Post Replacement |
| 952203 (95006) | 2-7 | . 03/22/95 | . Turning Arm Pin Replacement |
| 950404 (940003) | 2-8 | . 01/04/94 | . Dipper Pin Replacement (replaced by # 950007) |
| 950404 (950007) | 2-8 | . 04/04/95 | . Dipper Pin Replacement (replaces old # 940003) |
| 952111 (950015) | 2-10 | . 11/21/95 | . Crankshaft Pulley Adapter Bolts (JD 62,63 & 6400) |
| 953011 (950016) | 2-11 | . 11/30/95 | . Dipper Cylinder Pin Replacement |
| 962703 (960003) | 2-12 | . 03/27/96 | . Frame Rail Reinforcement, LH Frame Rail |
| 970108 (970009A) | 2-13 | . 08/01/97 | . Blade Bolt Inspection / Recall (Bolt # 02782900) |
| 980106 (980004A) | 2-14 | . 06/01/98 | . Lockwasher and/or Brg Collar Missing f/ King Post |
| 990303 (990002A) | 2-15 | . 03/03/99 | . Crossmember Reinforcements Kit |
| 992704 (990003A) | 2-16 | . 04/27/99 | . New Holland T6640 & T7740 A/C Service Notice |
| 991911 (990005A) | 2-17 | . 11/19/99 | . New Holland TS Tractor Inspection Service Notice |
| 010607 (200102) | 2-18 | . 07/06/01 | . Buzz Bar Head Motor Drive Coupler Redesign |
| 021202 (021202) | 2-19 | . 02/12/02 | . Buzz Bar Head Motor Drive Coupler Update Kit |
| 030702 (1020703) | 2-20 | . 02/07/03 | . Blade Bolt Inspection / Recall (Bolt # 02782900) |

NOTES

SECTION 1

TECHNICAL INFORMATION BULLETINS

(This Book is divided into two Sections)

Section One - Technical Information Bulletins

- 1. **Technical Information Bulletins:** Information Bulletins are listed by Bulletin Number (Date). Example the oldest Bulletin will be listed first and the most recent bulletin will be listed last. Bulletin No. 021002 = first & second digits are the month, the third & fourth digits are the day of the month and the fifth & sixth digits are the year this means, the bulletin was written on Feb, 10, 2002. If more than one bulletin was written on that day the a dash with a number will added, example -1, -2 etc.
- 2. **Authorize Repairs:** Technical Information Bulletins **do not authorize** any repairs to be made under warranty or any other circumstance unless specifically instructed to do so.
- 3. **Bulletin Reference:** Some Technical Information Bulletins will refer to the corresponding Service Bulletins for repairs and some are for information only.
- 4. **Bulletin Instructions:** Technical Information Bulletins should have all the instructions as to what you need, but may not have all the information needed to make an installation complete. In some cases it may be required to refer to other manuals for more complete information, this should be suggested in the Technical Information Bulletin.
- 5. All Technical Information Bulletins printed in this Manual will void any previously printed Bulletins Any changes in these bulletins are the final version as of the date of this manual.



Alamo Industrial [™] Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

 Models:
 17', 20', 23' & 28' A-Boom - 17', 20' & 23' Versa Boom

 15' & 17' Minute Man - 17', 20' & 23' RMB
 Bulletin No:

 011095
 (old # 950001)

 Jan. 10, 1995

King Post Attachment:

Subject:

King post Attachment, A great deal of confusion exist regarding replacement parts for Alamo Industrial King Post. This bulletin should clarify which parts are currently being used in our King Post Assemblies. Refer to the Operators / Parts manual parts pages for exact part numbers.

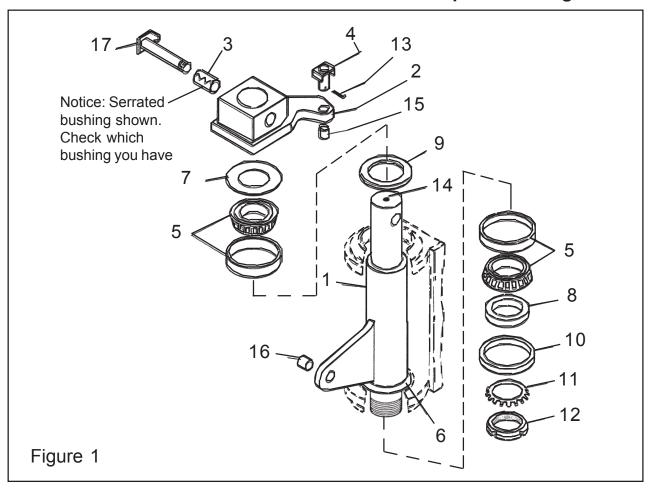
The current King Post at this time uses a Steel connex Bushing. The bushings in the king post lift cylinder lug and turning arm are Teflon. Chrome Plated Pins must be used with Teflon Bushings always.

Note: An optional rear swing turning arm is available with a steel swing cylinder bushing, however, a greasable turning arm pin must be used with it.

Parts:

| Item | Part No. | Qty | Description |
|------|----------|-----|--|
| 1. | 02956821 | 1 | King Pin w/ Bushing |
| 2. | 02967171 | 1 | Rear Turning Arm w/ Teflon Bushing |
| | 02956830 | ref | Rear Turning Arm w/ Steel Bushing |
| | 02967397 | 1 | Front Turning Arm w/ Teflon Bushing |
| | 02956831 | ref | Front Turning Arm w/ Steel Bushing |
| 3. | 02958345 | 1 | Bushing, Steel |
| 4. | 02966767 | 1 | Turning Arm Pin, Chrome use w/ Teflon Bushing Only |
| | 02960458 | ref | Turning Arm Pin, Greasable use w/ Steel Bushing Only |
| 5. | 02957008 | 2 | Bearing Cup and Cone Assembly |
| 6. | 02956882 | 1 | Ring, Bottom Bearing Seal |
| 7. | 02956941 | 1 | Ring, Top Bearing Seal |
| 8. | 02956818 | 1 | Bearing Support Collar |
| 9. | 02958636 | 1 | Seal |
| 10. | 02958637 | 1 | Seal |
| 11. | 02956838 | 1 | Lockwasher |
| 12. | 02956839 | 1 | Nut |

Information Bulletin 011095 Continued from previous Page



| Item | Part No. | Qty | Description |
|------|----------|-----|-----------------------------------|
| 13. | 00606000 | 1 | Cotter Pin |
| 14. | 00752176 | 1 | Grease Fitting |
| 15. | 02965548 | 1 | Bushing, Teflon 1-1/4" OD |
| | 02957501 | ref | Bushing, Steel 1-3/8" OD |
| 16. | 02959225 | 1 | Bushing |
| 17. | 02965538 | 1 | Main Pin Weldment (Non greasable) |
| | 02967490 | ref | Main Pin Weldment (Greasable) |

Parts:

If a customer orders a king post, P/N 02965545 with a solid steel bushing (P/N 02965536) and has an A-boom or Versa Boom with a rear swinging boom, he will be shipped a retro fit kit P/N 02967237. For a Minute Man or Rear Mount boom they need P/N 02968881 Kit.

TECHNICAL INFORMATION BULLETIN No. 011095



Alamo Industrial ™ Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| Models: | All 28' Booms | Bulletin No: 011895 | Date: |
|---------|---------------|------------------------|---------------|
| | | 011093 | Jan. 18, 1995 |

Dipper Hose Modification 28 ft. Model:

Subject:

All 28 Ft. Booms with Hydraulic Tubes inside the dipper. A Hose modification Kit has been developed for the field repair of 28' booms that have experienced short service life of the hydraulic hoses that connect the tubes of the lift section to the tubes inside of the dipper section.

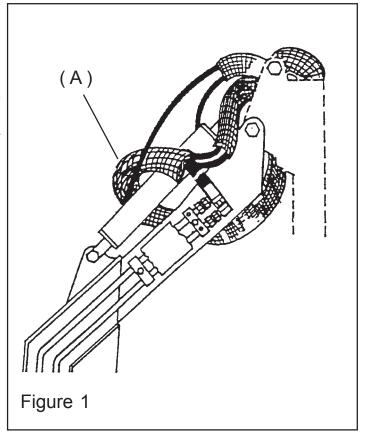
The affected hoses (A) could be any of the motor, tilt or extension hoses that are located inside the sleeving and attach to the tubes at the upper end of the dipper.

Parts:

The Kit P/N 02968304, Changes incorporated into the kit includes longer motor hoses that are made of different hose to prevent kinking when retracting the extension, longer tilt and extension hoses, longer sleeving, and a hose clamp arrangement to better position the hose bundle.

Procedure:

Installation instructions will be sent with the Kit. Modification instruction Sheet P/N 02968309 is the instruction sheet that will be sent.



This document does not authorize the repair or replacement of parts under warranty

A-BOOM



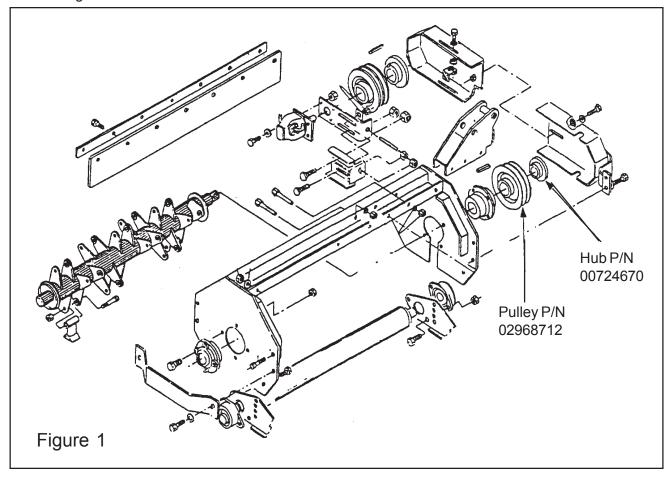
Alamo Industrial [™] Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| Models: | All Boom Mowers using Flail Axe Head | Bulletin No: 012095 | Date: |
|---------|--------------------------------------|------------------------|---------------|
| | | 012033 | Jan. 20, 1995 |

Pulley Fastening to Cutter Shaft of Flail Axe Head:

Subject:

A new method has been devised to secure the pulley to the cuttershaft. A new pulley, P/N 02968712 and a QD Pulley Hub P/N 00724670 has replaced the old pulley with setscrew, washer, lockwasher and bolt. The new pulley and hub are a keyed, taper lock design which will provide a better fit and longer service life for the shaft.



This document does not authorize the repair or replacement of parts under warranty

A-BOOM



Alamo Industrial [™] Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| Models: A-B | oom and Versa Boom | Bulletin No: 032295 | Date: Mar. 22, 1995 |
|-------------|--------------------|------------------------|----------------------------|
|-------------|--------------------|------------------------|----------------------------|

Swing Cylinder Pin Bushings:

Subject:

There have been a few scattered reports of retention problems involving the two pin bushings for the barrel end of the swing cylinder on the above listed machines.

The problem is caused by a slightly oversize bore for the bushing, allowing the bushing to work out of its bore during operation. Reports have been few and far between.

If one of the above listed models is experiencing this problem use the following procedure to correct the problem.

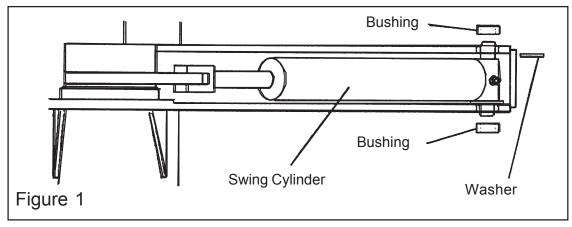
Procedure:

- 1. Replace the Teflon bushing (P/N 02965214) with the steel spring bushing (P/N 02959890).
- 2. Install a steel washer (P/N 00749946) between the top of the cylinder and the upper plate to limit pin movement if the clearance exceeds 1/4".
- 3. These changes will prevent loss of bushing and resultant boom sway during operation. Due to the short distance of travel and the low load these bushings will require lubrication.
- 4. Run and test repairs for operation.

Parts Required:

1 ea. P/N 02959890 Steel Bushing

1 ea. P/N 00749946 Steel Washer (if needed)



NOTES



Alamo Industrial Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| Models: All Hydraulic mowers using the 02964028 Push-Pull Switch | Bulletin No: | Date: |
|--|--------------|---------------|
| | 092895 | Sep. 28, 1995 |

Failures of the mower push-pull switch:

Alamo has recently received reports of failures of the referenced switch. The failures modes are:

- (a) Knob pulls off rod.
- (b) Rod and Knob pulls out of switch body.

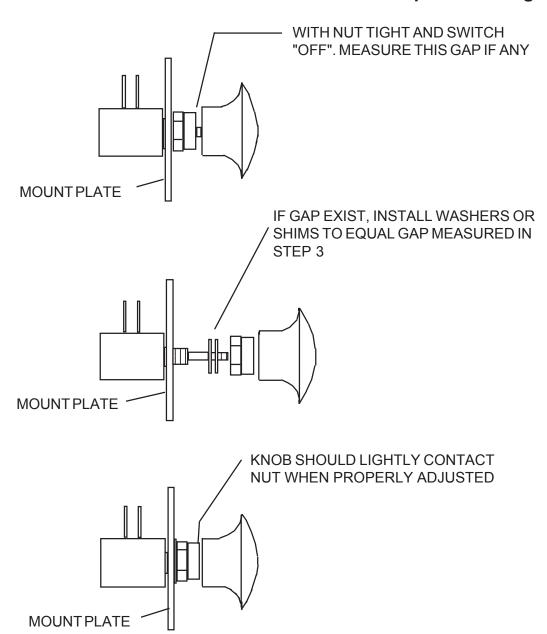
Test performed on numerous switches indicates that the (b) failures are due to excessive force being applied to the knob when shutting off the mower. Specifically, the knobs are usually roughly slapped to turn the mower off. After internal parts of the switch are damaged, the rod can then be pulled out easily. The (a) failures are due to the knobs not being securely tightened.

To prevent these failures from occurring, or to replace a damaged switch, use the following procedure to adjust the travel of the switch. (See attached diagram).

- 1. Install the switch body in the holder and tighten the nut.
- 2. Screw the Knob on the rod to the bottom of the thread, but do not overtighten. It will probably be necessary to hold the rod with pliers to get the knob tight, if you do use caution not to score the rod with the pliers.
- 3. Measure the distance (if any) between the knob and the nut. Record the measurement.
- 4. If a Gap exists between the knob and the nut, remove the knob.
- 5. Remove the nut and install the same thickness of flat washers that was measured in step 3. Install and tighten the nut> DO NOT install more washers than needed to take up the space. Flat Washer Part No. 00023500 or equivalent can be used.
- 6. Install the Knob, using Locktite or similar thread locking compound. Thread the knob on the rod all the way. Test to make sure that when the switch is "Off" (with rod pushed in) that the knob can not travel further into the switch.

Continued Next Page

Information Bulletin 092895 Continued from previous Page



TECHNICAL INFORMATION BULLETIN No. 092895

Contact:
Alamo Industrial
Technical Services Department
1502 East Walnut
Seguin, Texas 78155
Ph; 830-372-2708 Fax; 830-372-9603

This document does not authorize the repair or replacement of parts under warranty

A-BOOM



Alamo Industrial Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| Models: | A-Boom | Bulletin No: 120895 | Date: | |
|---------|--------|------------------------|--------------|--|
| | | (old # 1208) | Dec. 8, 1995 | |

Cracked Crossover Tube Repair Procedure:

Subject:

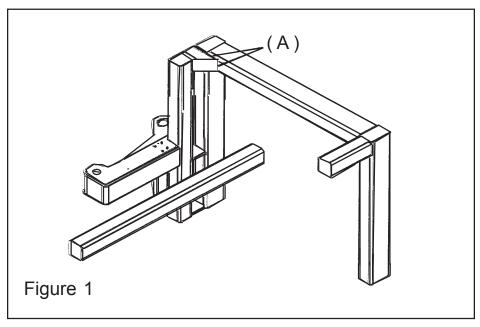
If cracks occur at points (A) Figure 1, use the following procedure to effect a satifactory repair on the frame crossover tube.

Important Note:

WARNING! 1.

WARNING: the tube being repaired contains hydraulic oil. Exercise the proper precautions as outlined in AWS A6.0-52. RECOMMENDED PROCEDURES TO BE FOLLOWED IN WELDING OR CUTTING CONTAINERS WHICH HELD COMBUSTIBLES.

WARNING: Welds made must be 100% in order for this procedure to be effective. DO NOT allow a person to perform this repair if their welding capabilities are questionable. The Welds must not allow Hydraulic fluid to leak when done.



Continued Next Page

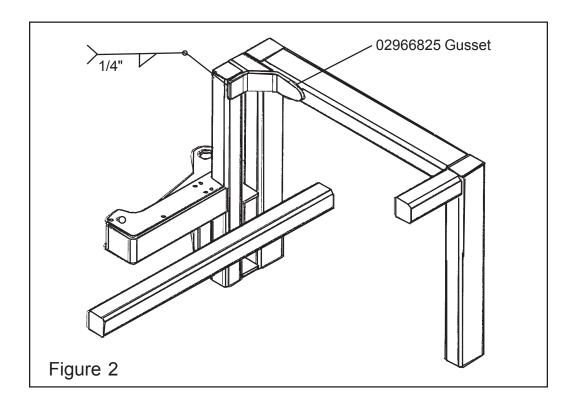
Information Bulletin 120895 Continued from previous Page

Parts Required:

1 ea of P/N 02966825 Formed Gusset

Procedure:

- 1. Inspect Installation to determine if adequate clearance is available to perform the necessary grinding and welding on the frame. It may be necessary to unbolt the frame and raise with a hoist to get adequate working room. Exercise prudent safety practices when lifting and blocking.
- 2. Prepare the cracks for welding. Grind a groove at the site of the crack(s) and clean the area to be welded.
- 3. Weld the cracks making 100% welds on the cracks.
- 4. After repairing the cracked areas, prepare the areas for the installation of the gusset P/N 02966825. the welds may have to ground so gusset will sit flat and square in area (A) figure 1.
- 5. Position the P/N 02966825 formed gusset as shown in Figure 2. Weld all around with 1/4" fillet weld.
- 6. Clean and paint all repair areas to prevent rust.
- 7. Reassemble any parts that were loosened or removed to make this repair.
- 8. Run and test mower and boom for operation, check for any leaks.



TECHNICAL INFORMATION BULLETIN No. 120895



Alamo Industrial Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| Models: | A-Boom, Versa Boom and Rear Mounted Boom | Bulletin No: 121295 | Date: |
|---------|--|------------------------|---------------|
| | | (old # 1212) | Dec. 12, 1995 |

Convert Turning Arm to Greasable, Steel Bushing:

Subject:

The Current production Booms are equipped with Teflon Bushings and Chrome Pins at the Swing Cylinder / Turning Arm connections. Some customers prefer greasable joints. Use the information provided in this bulletin to convert to a greasable, steel bushing arrangement.

There are three procedure types (methods) of repair that can be used. The method used depends on the condition of the bushing bore (A) on the turning arm. All procedures start with the mowing Head at rest on the floor (Ground) and all Hydraulic pressure relieved from system.

Procedure Type 1: No damage to bushing bore

Parts required for this Procedure:

1 ea. of P/N 02969988 Retro Fit Kit

- 1. Remove center pin and turning arm Pin (1). Move the swing cylinder out of the way.
- 2. Using a suitable driver, remove the old bushing (2) and install a new bushing P/N 02969987.
- 3. Replace two bushings in the cylinder clevis (3) with P/N 02959890 bushing, use suitable driver.
- 4. Align cyl. clevis with turning arm bore and install new P/N 02960458 Pin and cotter pin.
- 5. Lubricate pin, and test for proper operation.

Procedure Type 2: Slight damage to bushing bore (Diameter does not exceed 1-3/8")

Parts required for this Procedure:

1 ea. of P/N 02957501 Bushing, 1-3/8" OD

1 ea. of P/N 02960458 Pin, Turning Arm

2 ea. of P/N 02959890 Bushing

1 ea. of P/N 00606000 Cotter Pin

- 1. Remove center pin and turning arm Pin (1). Move the swing cylinder out of the way.
- 2. If Bushing bore cannot be drilled in place, the turning arm will have to be removed. If so remove the turning arm from the king post. See the Operators / Service Manual for Turning arm removal.
- 3. Bore or drill the hole for the bushing to 1-3/8"
- 4. Install the P/N 02957501 (1-3/8" OD Bushing), using a suitable driver.
- 5. Reinstall the turning arm on the king post. It may be advisable to replace the main pin bushing and/or main pin at the same time.
- 6. Replace two bushings in the cylinder clevis (3) with P/N 02959890 bushing, use suitable driver.
- 7. Align cyl. clevis with turning arm bore and install new P/N 02960458 Pin and cotter pin.
- 8. Lubricate pin, and test for proper operation.

Continued Next Page

Information Bulletin 121295 Continued from previous Page

Procedure Type 3: Bushing bore worn more than 1-3/8"

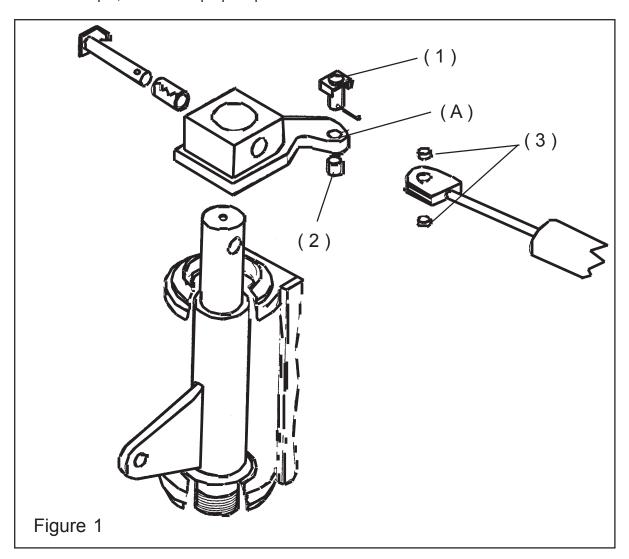
Parts required for this Procedure:

1 ea. of P/N 02956830 Rear Turning Arm or 1 ea. of P/N 02956831 Front Turning Arm

1 ea. of P/N 02960458 Pin, turning Arm 2 ea. of P/N 02959890 Bushing

1 ea. of P/N 00606000 Cotter Pin

- 1. Remove center pin and turning arm Pin (1). Move the swing cylinder out of the way.
- remove turning arm from king post.
- 3. Replace Turning Arm with new turning arm with steel bushing (use rear turning arm P/N 02956830 or front turning arm P/N 02956831, one or the other but not both).
- 4. Replace two bushings in the cylinder clevis (3) with P/N 02959890 bushing, use suitable driver.
- 5. Align cyl. clevis with turning arm bore and install new P/N 02960458 Pin and cotter pin.
- 6. Lubricate pin, and test for proper operation.



TECHNICAL INFORMATION BULLETIN No. 121295



Alamo Industrial [™] Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| Models: | A-Boom Mowers | Bulletin No: 121395 (Old # 1213) | Date: Dec. 13, 1995 |
|---------|---------------|--|----------------------------|
| | | (010 # 1210) | 200. 10, 1000 |

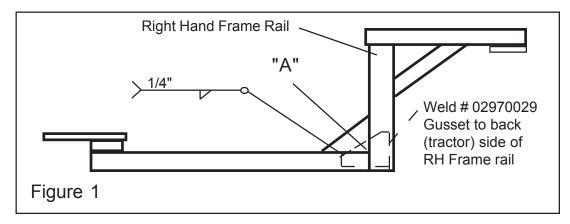
Frame Rail Gusset Modification:

Subject:

Repair Procedures for A-Boom RH Frame Rails cracking at Juncture of rear Horizontal Rail and Vertical Tube. If Cracks appear in the weld at Point "A" in Figure 1 use the following procedure to repair the rail.

Procedure:

- Check the portion of the rail to be repaired. Insure that there is adequate clearance between
 it, the tractor and mower frame to enable you to grind and weld the crack. If clearance is a
 problem it may be required to remove the frame rail. If it is required to remove the frame rail
 see Operators Assembly manual for procedures.
- 2. Grind a groove at the site of the crack and clean the area to be welded.
- 3. Weld the crack making 100% welds.
- 4. After repairing the crack. Prepare the area for installation of the Gusset (P/N 02970029).
- 5. Position the Gusset on the inside of the Right Hand frame rail as shown in figure 1. Weld all around with 1/4" fillet weld.
- 6. Clean and paint the are where repaired. Reassemble any parts removed, Run & Test.



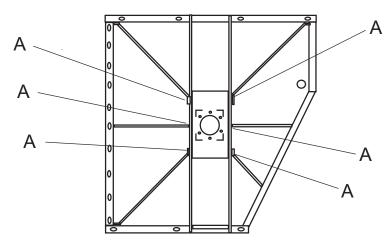
NOTES



Alamo Industrial Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| Models: Machete Boom Axe, Versa Boom, A-Boom, Slopemower | Bulletin No: | Date: |
|---|--------------|---------------|
| & Rear Mount Booms. | 121495 | Dec. 14, 1995 |

Repair Procedure for Welding Cracks in Boom Heads:



If cracks appear in the welds at points "A" as shown above, use the following procedures to repair head.

Parts Needed:

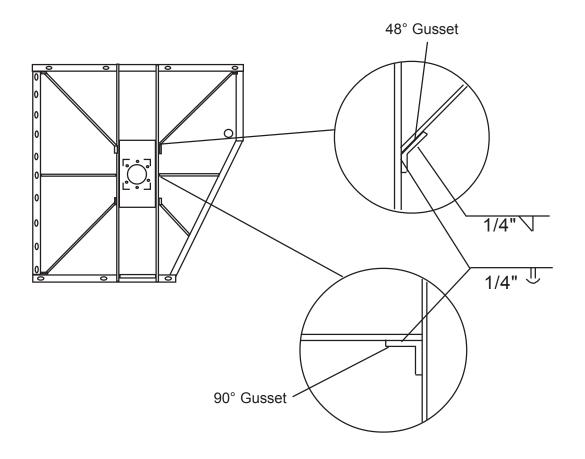
| Part No. | Qty | Description |
|----------|-----|-------------|
| 02970111 | 2 | 90° Gusset |
| 02970112 | 4 | 48° Gusset |

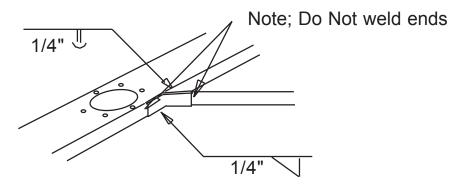
Welding Procedure:

- 1. Grind a groove at the site of the crack and clean the area to be welded.
- 2. Weld the crack making a 100% weld.
- 3. After repairing the cracks, prepare the sites for installation of the gussets.
- 4. Position the reinforcing bar gusset part no. 02970111 if 90° or part no. 02970112 if 48° over the X-Bar as shown in drawing next page. Weld with a 1/4" fillet weld on the bottom and an edge weld on top. DO NOT weld the ends.
- 5. Clean and paint the area.
- 6. Reassemble any parts that were removed.

Continued Next Page

Information Bulletin 121495 Continued from previous Page





TECHNICAL INFORMATION BULLETIN No. 121495

Contact:
Alamo Industrial
Technical Services Department
1502 East Walnut
Seguin, Texas 78155
Ph; 830-372-2708 Fax; 830-372-9603



Alamo Industrial [™] Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| Models: | All Models using Single Acting Hydraulic Cylinder | Bulletin No: | Date: | |
|---------|---|--------------|--------------|--|
| | | 040896 | Apr. 8, 1996 | |

Oil Leaking from new single Acting Hydraulic Cylinders:

There have been numerous cases of the dealers and customers replacing single acting hydraulic cylinders on new machines due to oil leakage out of the vent plug in the cylinder.

In many of these instances, no defect could be found in the cylinders. Further investigation has revealed that he manufacture of our cylinders is leaving oil in the cylinders after their testing. The Oil is left to help protect the interior of the cylinders during storage. When the cylinders are fully actuated, they are forcing this oil out the vent plug, causing what appears to be a leaking cylinder through the vent plug. Even the oil is cleaned off the cylinder after testing there is enough oil still inside the cylinder to bleed out when used.

If you have a New Cylinder that appears to be leaking from the vent plug, The oil should be cleaned off and unit ran for a few days to a week to determine if the Cylinder is leaking, or if it is the oil that was left in the cylinder to protect it. It has been found that in some cases it has taken as much as a week for this to appear that it is not leaking.

If after running and cycling the cylinder during operation and the cylinder continues to leak then the necessary repair should be performed.

Cylinders that are attracting dust around them is not considered to be leaking. This dust collecting around them is considered normal.

All Cylinder that are returned as leaking will be pressure tested for leakage to determine the condition of the Cylinder and its components.

This document does not authorize the repair or replacement of parts under warranty

A-BOOM



Alamo Industrial [™] Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| Models: Booms | All New Holland Tractors with Alamo Industrial Mounted | Bulletin No: | Date: |
|------------------|--|--------------|---------------|
| | | 042996 | Apr. 29, 1996 |

Dead Batteries on New tractors:

There have been several reports recently of dealers receiving machines with dead batteries, some of which could not be satisfactorily recharged. Please see the attached copy of a tag which is coming with the new tractors.

The "small electrical discharge" being mentioned amounts to a constant drain on the battery. If the battery cable (+ Post) is left connected for a long enough time with the tractor inactive, the battery will become sulfated (permanently damaged) and will not accept a charge. Sulfated batteries are not warranted through the battery manufacturer.

At present, the only alternative to removing the battery cable would to be install a battery disconnect switch in the negative cable, which would allow the battery to be easily isolated. These switches are available at most major tractor dealers. USE CAUTION when installing any thing on battery cables, disconnect the positive cable before installing disconnect switch and make sure after switch is installed that it is "OFF" before reconnecting Positive Cable.

ATTENTION! BATTERY CARE



Your new Tractor has electronics which cause a very small electrical demand on the battery. If the tractor in not in use for an extended period, disconnect battery to avoid damage by excessive discharge.

Recharge Battery if voltage is less than 12.3V (S.G. less than 1.140)
Lataa Akku uudelleen, jos jannite on alle 12.3V (ominaispaino alle 1.140)
Ricaricare la batteria se il voltaggio e inferiore a 12.3V (G.S. inferiore a 1.140)
Batteria recarregavel se a voltagem for inferior a 12.3V (Gravidade especifca inferior a 1.140)
Laddt de batterijweer op wanneer de voltage lager is dan 12.3V (S.G. Minder dan 1.140)
Recharger la batterie si la tension est inferieure a 12.3V (Densite inferieure a 1.140)
Batterie wieder aufladen. wenn spanning unter 12.3V (Spez gewicht unter 1.1.40 IST)
Recarcar la bateria si el voltage es inferior a 12.3V (S.G. inferior a 1.1.40)
Batteriet ma lades opp hvis spenningen er mindre enn 12.3V (Spesifikk vekt under 1.1.40)

Part No. 82001815



TECHNICAL INFORMATION BULLETIN No. 100296-1

Alamo Industrial Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| Models: All Mowers Using P/N 02960565 Motor Control valve | Bulletin No: 100296-1 | Date: |
|---|------------------------------|--------------|
| | | Oct. 2, 1996 |

Logic Valve Seal Kit:

Subject:

New Seal Kit used on Logic Valve Assembly P/N 02971267. In early 1996, changes were made to the Logic Valve used in the P/N 02960565 motor control valve used on a number of machines. The change were made to improve the service life of the seals. The seal grooves on the logic valve were widened and the backup rings were added to both O-Ring Seals. The Seal Kits were also changed to include the Back-Up Rings. the three O-Rings remained the same.

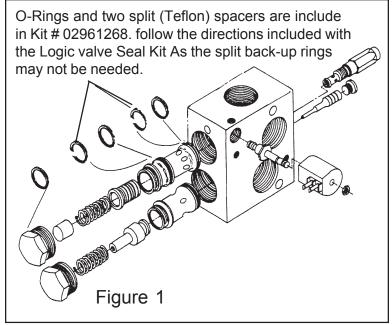
When using the Seal Kits to reseal the former Valves, the seal grooves are not wide enough to accept the O-Rings and the Back-up Rings. The Back-Up Rings will have to be discared and not used.

Parts Needed:

Qty 1 of P/N 02961268 Seal Kit

Procedure:

O-Rings and two split (Teflon) spacers are include in Kit # 02961268 follow the directions included with the Logic valve Seal Kit As the split back-up rings may not be needed.





Alamo Industrial Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| Models: All A-Boom, Versa Boom, Slopemower and Boom Axe Mowers | Bulletin No: 071897 | Date: |
|--|------------------------|---------------|
| | (Old # 0711897A) | Jul. 18, 1997 |

Remote Control Cable Update:

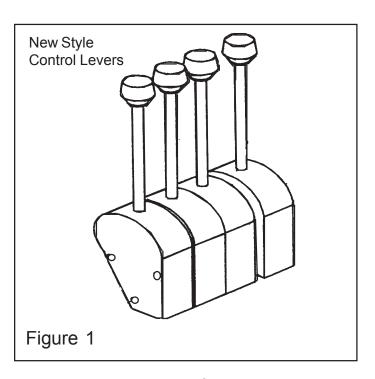
Early in October of 1996, the control valve remote operating system design for the mowers listed above was updated to facilitate much easier operation of the mower control functions. The retrofit Kit is available which can be used to update the former remote control system to the new design on those machines utilizing the old system. The old style controller is identified as a rectangular metal box utilizing a cable linkage system

Parts Needed:

Qty 1 of P/N 02971493 Retrofit Kit (contains the controller and all necessary mounting pieces). Qty 4 of P/N ----- Valve Cables (The Length of the cables must be specified when ordering). (Cable Length 48", 60", 72" or 102" Specify which is needed)

Procedure:

All the required Procedure instructions should be included in a instruction sheet that should be included in with the retrofit kit when ordered. Instruction Sheet P/N 02971261.





Alamo Industrial ™ Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

Models: All A-Boom Mowers

& All Machete Boom, MB21 & MB24 utilizing the New Holland TS Series Tractor

Bulletin No:

Date:

020199

Feb. 1, 1999

Hood to Frame Interference on TS Series Tractors:

On some occasions, it has been reported that the initial mount kit designs involving the installation of the current A-Boom or Machete Boom mowers to New Holland TS90, 100 or 110 tractors allowed the main frame cross over / cooling tube to interfere with the movement of the hood. This interference would not allow the hood to open to provide access to the required maintenance points of the tractor engine.

To compensate, the hood was required to be completely removed to perform the required maintenance procedures.

A spacer kit which lifts the frame to provide clearance between the hood and the cross / cooling tube enough to allow the hood to open to the first position is now available for all of the affected tractors.

The kit components should be installed per the instructions provided in the kit. likewise, all required hood components such as hinges, shocks & etc. should also be installed

Part Numbers required:

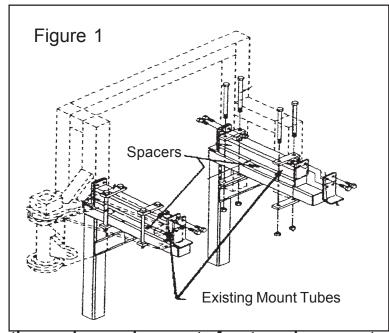
A-Boom: 2 WD kit No. 02974715

4 WD kit No. 02974739

Machete: 2 WD kit No. 02974351

4 WD Kit No. 02974741

NOTE: Claims for compensation for warrantable repairs should be filed in accordance with the Alamo Industrial warranty Guide procedures. This Bulletin does not authorized warranty repairs for this procedure.



This document does not authorize the repair or replacement of parts under warranty

A-BOOM



Alamo Industrial ™ Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| M | odels: | Models mounted on New Holland TS Series Tractors | Bulletin No: | Date: |
|---|--------|--|--------------|---------------|
| | | | 031000 | Mar. 10, 2000 |

New Holland TS Series Fuel Filter:

New Holland ships TS100 Tractors to Alamo Industrial with a #87801634 fuel filter installed.

New Holland has circulated a service bulletin stating that a longer or taller filter is the replacement part for the fuel filter and the filter should be changed at the recommended time.

Alamo Industrial TS Series mount kit components will interfere with the longer / taller filters.

Please continue using the #87801634 filter when replacing the fuel filter on the TS Series tractors equipped with the Alamo Industrial products. Alamo Industrial attachments do not stress or "Work" the tractor engines in a manner that would be considered extreme service. The part #87801434 fuel filter will provide adequate protection when the engine of a TS Series New Holland tractor is powering Alamo Industrial Side or Boom Mounted products.



TECHNICAL INFORMATION BULLETIN No. 032200-2

Alamo Industrial Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| Models: | A-Boom & Slope Mower Models | Bulletin No: 032200-2 | Date: |
|---------|-----------------------------|------------------------------|-----------------|
| | | (Old No. 032400 |) Mar. 22, 2000 |

Frame Reservoir Bypass Retro-Fit Kit:

In response to many request from customers and sales personnel, a retro-fit kit has been designed and made available to provide full hydraulic function without utilizing the mower frame as a hydraulic reservoir.

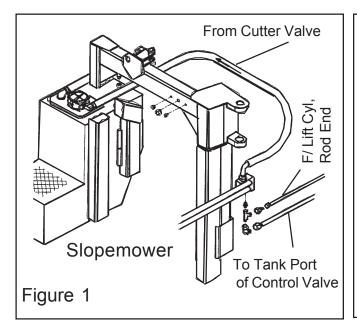
Kits will provide all the necessary fittings, hoses and instructions to implement the bypass of the frame tube from the control and motor functions to the return tank.

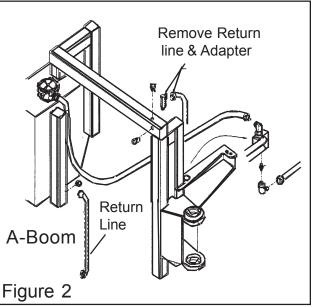
Should the bypass kit be requested, the following part numbers should be ordered from Alamo Industrial parts dept. to facilitate the installation

Parts / Retro Fit Kits:

Part No. Qty Description

02976010 1 Conversion Kit for **A-Boom Only** (See Figure 2) 02976015 1 Conversion Kit for **Slopemower Only** (See Figure 1)







Alamo Industrial ™ Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

Models: All Machete, A-Boom, Versa, Rear Mount, Slopemower, Brahma, EKII, Hydro 60, Hydro 72 & Hydro 15

All Hydraulic powered Rotary Mower heads that utilize the # 02960553B, 02960553C and 02968859A Spindle Assemblies.

Bulletin No:

080300

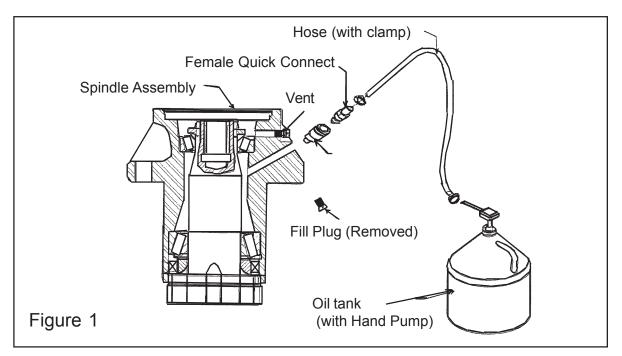
Aug. 3, 2000

Spindle Oil Filler Kit P/N 02976501:

A Spindle oil filler kit has been developed to provide accurate an easy fill of oil into the spindles used on all hydraulic powered mowers. The Oil filler Kit P/N 02976501 is available through Alamo Industrial Parts dept.

Installation requires the replacement of the fill plug with the female quick connect fitting. To fill the spindle, attach the hose and oil bottle to the spindle by utilizing the quick connect fittings, remove the vent plug and pump in the oil untill oil is seen at the vent plug opening, reinstall the vent plug and remove the bottle at the quick connect fitting. The female quick disconnect is designed to be left on the spindle in place of the fill plug.

Utilization of this spindle fill kit should decrease maintance time and failures by providing accurate oil fill of the spindle assembly.





Alamo Industrial ™ Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

Models: All Machete, A-boom, Versa Boom, Slopemower. Boom Mowers which utilize the Joystick operated control valve with the 02976069 oil Filter Kit installed.

Bulletin No: 080400

Date:

Aug. 4, 2000

Filter Maintenance Procedure:

The following Procedure should be followed to provide the correct maintenance of the 02976066 Filter assembly use as standard on the machete moddel boom and any mower using Joystick controlled hydraulic system, and filter as optional equipment.

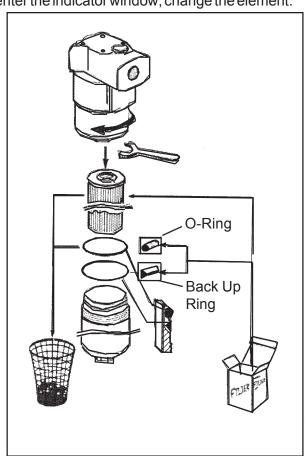
When to Change Filter:

Inspect the visual indicator when the system is operating at normal operating temperature and under normal flow conditions. When red starts to enter the indicator window, change the element.

This will occur prior to bypass by the filter.

Element Service Procedure:

- Shut System down a disable tractor so it cannot be started. Let Oil cool to a safe temperature.
- 2. Place a suitable container under the filter to catch any spillage.
- 3. Unscrew the filter bowl using the wrench flats at the bottom of bowl. Remove the bowl and drain the oil into the container.
- 4. Pull the element (P/N 02976067) off the adapter an discard it.
- 5. Remove the head to bowl seal and discard. Clean the seal area with a lint free cloth. Install the new seals as shown taking care not to cut the new seals.
- 6. Install the new element onto the element adapter boss.
- 7. Thoroughly clean the filter bowl and fill approximately one half full with clean oil.
- 8. Screw the Bowl onto the head. Torque the bowl to 30 ft. lbs.
- 9. Operate the system to expel any trapped air and check for leaks.
- 10. Check and fill the tractor oil level as required.





Alamo Industrial ™ Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| Models: | All Alamo Industrial Products are affected. | Bulletin No: | Date: |
|---------|---|--------------|--------------|
| | | 040901 | Apr. 9, 2001 |

Change in the availability of rebuilt components:

This bulletin has been published to inform you of a change in the availability of rebuilt parts. In the past, rebuilt components such as pumps and motors were available for use as spare parts. That will no longer be the case. The major factor in this decision was the lack of cores that are returned from the customer.

Since Alamo Industrial will no longer offer rebuilt parts an effort will be made to offer customers a complete parts listing of all components that are needed as service repairs. The most common service parts are pumps and motors will now be available for order through Alamo Industrial Customer Service Department. Likewise, a parts breakdown with Alamo Industrial part numbers will be provided. The Eaton Pumps and Motors, Danfoss Control Valves will be the first components available with such a parts breakdown.

It is Our intention to provide a better and more reliable service parts system. This transition will better suit customer, and provide more timely and efficient parts delivery.



Alamo Industrial [™] Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

Models: All Alamo Industrial Products using the

Buzz Bar Head are affected.

Bulletin No:

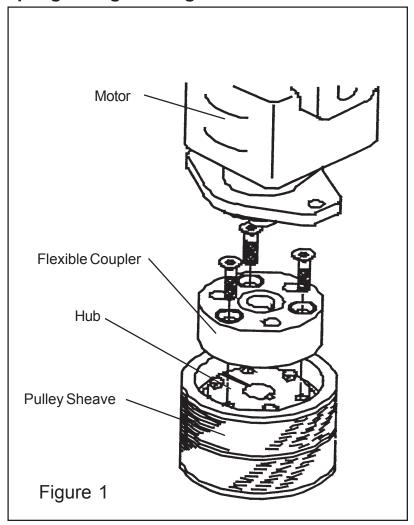
Date:

041101

Apr. 11, 2001

Buzz Bar Drive Coupling Design change:

There has been a design change to the drive coupler assembly for the Buzz bar Cutting Head. If a flexible coupler, Alamo Industrial P/N 02974245 (for Machete) or P/ N 02974246 (for A-Boom & Slopemower), are ordered they will be a different design. The new flexible coupler design will be molded rubber with metal inserts. The new molded rubber version will directly replace the machined design using the same part number. An installation drawing, that describes the assembly in detail, will be shipped if a new coupler is ordered. this bulletin is to inform you of the design change (see Figure 1) If there are further questions please contact Alamo Industrial's Technical Service Department.





Alamo Industrial [™] Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| Models: All Machete, A-Boom, Versa, Rear Mount, Slopemower, Brahma, EKII, Hydro 60, Hydro 72 & Hydro 15 | Bulletin No: | Date: |
|--|--------------|---------------|
| All Hydraulic powered Rotary Mower heads that utilize the # 02960553B, 02960553C and 02968859A Spindle Assemblies. | 101802 | Oct. 18, 2002 |

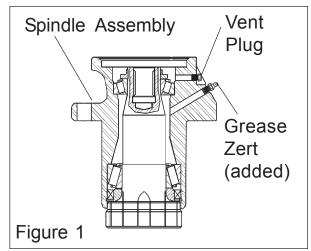
Spindle Bearing Lubrication Update:

Normal maintenance of the # 02960553B, 02960553C and 02968859A Spindle assemblies has included the addition of NLGI 000 grease to provide proper lubrication of the bearing assemblies. Due to repeated customer requests, this lubrication requirement has been changed to NLGI EP, # 2 Lithium Wheel Bearing Grease.

Implementation of this grease will allow improved lubrication especially to the top bearing as well as substantial improvement of the daily maintenance requirements.

Conversion:

- Remove the existing fill plug from the spindle housing and discard it. (this is the lower plug in figure 1)
- 2. Install a standard 1/4" fine thread grease zert into the fill plug port as shown in figure 1.
- 3. Remove the Vent plug (Top plug in figure 1)
- 4. Fill the housing with NLGI EP, # 2 Lithium Grease or equivalent from a standard grease gun until the new grease is seen in the vent plug hole. (Approximately 2 standard grease tubes will be required when Spindle Assembly is empty).
- 5. Clean off any excess or over flow grease and reinstall vent plug.
- 6. Maintain proper lubrication with 5 pumps of grease into the spindle every 8 hours of use. This will keep the Spindle bearings lubricated.
- 7. Always clean excess Grease away from Spindle after greasing Spindle.





Alamo Industrial ™ Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| Models: All Non-Cab Models with Expanded Metal Side Screens | Bulletin No: | Date: |
|--|--------------|---------------|
| Retro Fit Kit P/N 02980005 | 102103 | Oct. 21, 2003 |

Lexan® (Polycarbonate) Shield Upgrade Kit P/N 02980005: (field Install)

Alamo Industrial has designed a Lexan® (Polycarbonate) Shield that will install on the expanded metal screen currently used on the Non-Cab models. This is a retro fit kit that is designed to be customer installed over the expanded metal screen. The Lexan® Sheets will require trimming and the Holes will have to be drilled in the Lexan® sheets as well as through the existing expanded metal screen frame

Recommended Tools:

- 1. Jig Saw or Circular Saw (hand held or table) equipped with plastic cutting blade.
- 2. Electric Hand Drill, preferably a variable Speed Drill.
- 3. 3/8" and 1/4" High Speed Steel Drill Bit. (Drill bit should be sharp and in good condition).
- 4. Measuring Tape or other measuring device.
- 5. Hand Wrenches for tightening Bolts, do not use air tools to tighten bolts.
- 6. Straight edge and marker that will write on Lexan.

Lexan Shield Kit Components: (Retro-Fit Kit P/N 02980005 includes:

| Part No. | Qty | Description | Part No. | Qty | Description |
|----------|-----|------------------------|----------|-----|-----------------------|
| 02980003 | 1 | Lexan Sheet, Upper | 02970004 | 1 | Lexan Sheet, Lower |
| 0461600 | 20 | Bolt, Hex Head 1/4"-20 | 00024100 | 20 | Flatwasher, Std. 1/4" |
| 02980068 | 20 | Fender Washer, 1/4" | 32901C | 20 | Locknut, 1/4"-20 |

Protection of Lexan Sheets:

- 1. Do not remove protective sheet (Paper) from the Lexan® Sheet. This will protect it while you are working with it. You can drill through this protective sheet as well as cut through it.
- 2. There are two Lexan® Sheets sent, an upper and a lower. Identify these and mark them to designate front to rear, inside to outside because once you cut to size to match the existing Expanded Metal Screen, they cannot be turned around. Cutting these is permanent.

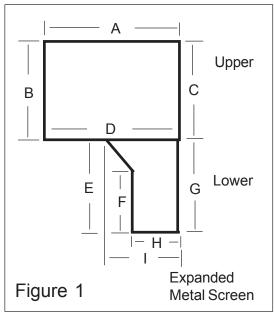
Installation Procedure:

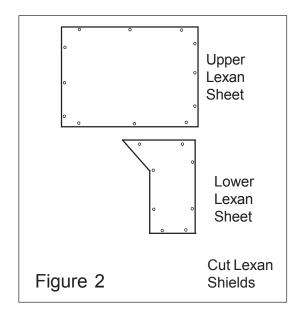
- 3. Use the measuring tape to get the measurements around your existing Expanded Metal Screen and write them down, Note there is an Upper and Lower section (See Figure 1).
- 4. Place the Lexan ® Sheets (Upper and Lower Sheets) on a clean work suface and transfer your measurements from step 1 to the the Lexan ® Sheets using a Pen or other marker. RE-CHECK your measurement and when certain they are correct. Cut the sheets out to match your measurements. Lightly sanding the cut edges will smooth them out and round the outer edge slightly helping to protect it. Sheets should look like sheets in Figure 2, note the holes will not be drilled in them yet.

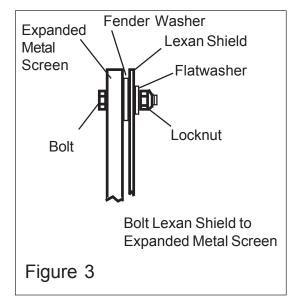
Continued Next Page

Information Bulletin 102103 Continued from previous Page

- 5. Securely clamp the cut Lexan sheets onto the expanded metal screen aligning the outer edges, this can be done upper or lower sheet first. Using a 3/8" drill bit drill the mounting holes through the lexan sheet in a pattern as in Figure 2. When drilling the holes in the Lexan Sheet use the drill to mark the metal frame of the expanded metal screen on all the holes. When all the holes are drilled into the lexan sheet and marked into the metal frame, remove the clamps and the lexan sheet.
- 6. Using a 1/4" Bit, drill the holes into the frame of the expanded metal screen with the Lexan removed. Note you drilled 3/8" holes in the Lexan and 1/4" holes in the frame work. This is so that the Lexan will not have a binding fit.
- 7. Install the Bolts as shown in Figure 3. 1 st. bolt through frame, 2 nd. install the fender washer, 3 rd. remove the protective cover sheet from the inner side and install the Lexan sheet, 4 th. install the Flatwasher, 5 th start the Locknuts onto the bolts but do not tighten them.
- 8. Once all the bolts, washers and nut are installed begin to tighten them. DO NOT over tighten these Locknuts and put the Lexan sheet in a bind which will crack it. Tighten the Nuts evenly and only snug them so the Lexan sheet will not move. Do this with the upper and lower Sheet. Then remove the protective cover from the outside of the sheet.







TECHNICAL INFORMATION BULLETIN No. 102103

This document does not authorize the repair or replacement of parts under warranty A-BOOM



TECHNICAL INFORMATION BULLETIN No. 011304

Alamo Industrial [™] Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| Models: All Machete Boom, Brahma & A-Boom Mounted on New Holland "TS" Series Tractors | Bulletin No: | Date: | |
|---|--------------|---------------|--|
| | 011304 | Jan. 13, 2004 | |

Driveline Update Kit:

Alamo Industrial has designed a new Driveline upgrade kit for units mounted on the New Holland "TS" Series Tractor, This kit will include all component required to install driveline and pump mount weldment. Some models the Hoses will have to be changed as well as the tank rail weldments and some will not have these changed. Always check the Insert Sheet that pertains to the model that the kit is ordered for.

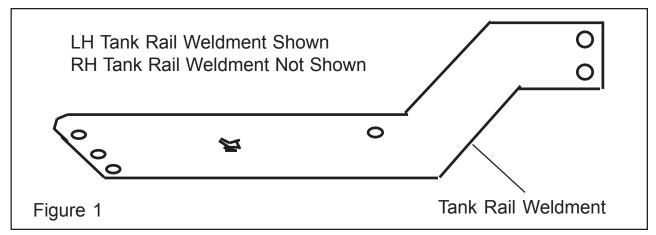
The Machete will need the Cylinder hoses changed, the Brahma will not need any hoses replaced, the A-Boom needs only the Suction Hose replaced.

The Machete and Brahma needs the tank rail weldments replaced and the A-Boom will not, the A-Boom will use the same tank rail weldments. Use the existing hardware to install new Tank Rails.

Kits will include Driveline, Pump Mount, Pump Mount Cover, Required Hardware (nuts Bolts, washers) and Insert Sheet with mounting instructions. Kit may include hoses and tank rail weldments depending on model. Use only the instruction Insert Sheet that is included with kit as all kits do not have the same parts.

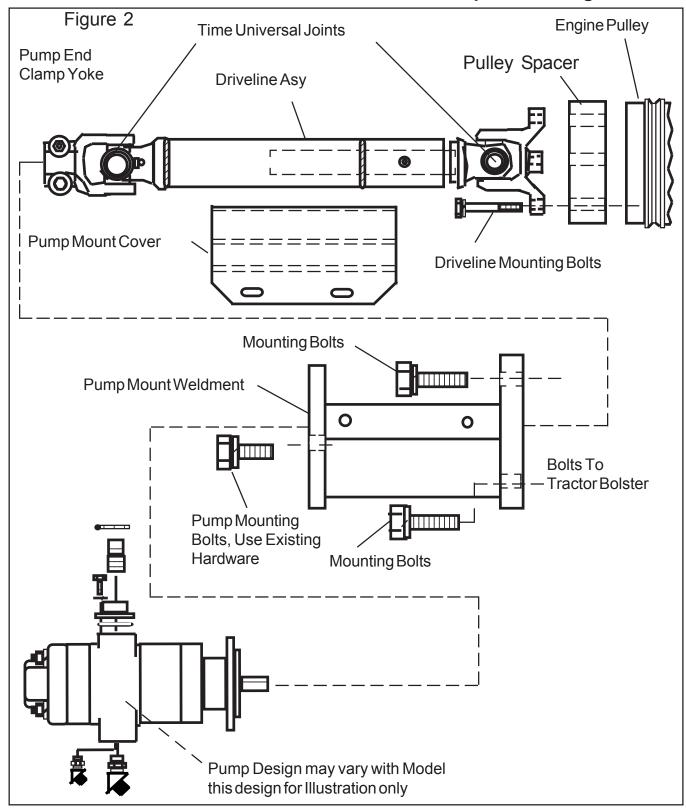
Klts Available:

| Model | Kit P/N | Insert Sheet |
|--------------|----------|--------------|
| Machete Boom | 02980404 | 02980638 |
| Brahma | 02980631 | 02980639 |
| A-Boom | 02980636 | 02980640 |



A-BOOM Continued Next Page

Information Bulletin 011304 Continued from previous Page



TECHNICAL INFORMATION BULLETIN No. 011304

This document does not authorize the repair or replacement of parts under warranty

NOTES

SECTION 2

SERVICE BULLETINS

(This Book is divided into two Sections)

Section Two - Service Bulletins

- 1. **Service Bulletin No:** Service Bulletins are listed by Bulletin Number (Date). Example the oldest Bulletin will be listed first and the most recent bulletin will be listed last. Bulletin No. 021004 = first & second digits are the Year, the third & fourth digits are the day of the month and the fifth & sixth digits are the month, this means the bulletin was written on Apr, 10, 2002. If more than one bulletin was written on that day the a dash with a number will added, example -1, -2 etc.
- 2. **Repairs:** Service Bulletins are intended to authorize only the repairs listed on It to be made under warranty or any other circumstance unless specifically instructed to do so.
- 3. **Parts:** This is the Rate at which compensation will be allowed under warranty for repair parts.
- 4. **Labor:** This is the amount of labor (hours) that are allowed to make this repair under warranty.
- 5. **Parts Disposition:** Service Bulletins list the disposition of any parts that are removed during the repair. If listed removed parts must be held awaiting return to factory if instructed to do so.
- 6. **Termination Date:** Service bulletins show a termination date, this is the date that the Bulletin will be discontinued, Any repairs must be made and all warranty applications filed by the listed date.
- 7. All Service Bulletins printed in this Manual will void any previously printed Bulletin. Any changes in these bulletins are the final version as of the date of this manual.



Alamo Industrial Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| | - Versa Boom - Versa Mower Pan Asy using Spider style rei 2964457 & 02964813 | Bulletin N 922804 (Old # 92- | | Date: Apr. 28, 1992 | |
|---------------------|--|------------------------------------|-------|-------------------------------|----------------|
| Parts: | Labor: 1.0 hr. at Dealer registered | Old Parts Disp No Returnable | | | nination Date: |
| 100 % at Dealer Net | Shop Rate | involved | raits | Juli. | JU, 1992 |

Blade Bolt Spacer For Spider Pan on 50" & 60" Head: Subject:

50" and 60" Blade Pan assemblies using the Spider style reinforcement plate. Assembly P/N 02964456, 02964457 & 02964813. To provide additional wear area for the blade bushing and to prevent blade bolt from bending.

Service Required:

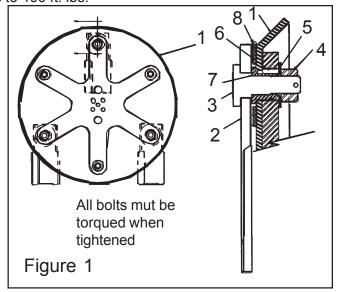
- 1. Remove blade pan assembly by removing the 4 socket head cap screws on the bottom of the pan.
- 2. Remove the roll pin and slotted hex nut which retain the blade bolt and blade.
- 3. Place wear spacer P/N 02965229 between the blade & pan for each blade (3 blades).
- 4. Reinstall blade and blade bolt, make certain to torque blade bolt nut to 400 ft. lbs. and reinstall the roll pin into blade bolt.
- 5. Place pan assembly back on mower and apply "Locktite" to socket head cap screws that retain Pan assembly to spindle. Torque these four bolts to 400 ft. lbs.
- 6. Run and test unit for operation.

| Parts | Involved: | (already on Head) |
|--------------|-----------|-------------------|
| | | (an oaa) on noaa, |

| Item | Part No. | Qty | Description |
|------|----------|-----|---------------------|
| 1. | | 1 | Pan Assembly |
| 2. | | 1 | Blade Set |
| 3. | 02964330 | 3 | Blade Bolt, Special |
| 4. | 00020900 | 3 | Nut, Slotted |
| 5. | 00755623 | 3 | Washer |
| 6. | 02964954 | 3 | Key |
| 7. | | 3 | Bushing, Keyed Bolt |
| | | | - · |

Parts Required: (order these parts)

Item Part No. Qty Description 8. 02965229 3 Wear Spacer



Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.



Alamo Industrial Technical Services Department 1502 East Walnut Sequin, Texas 78155 830-372-2708

Models: A-Boom - Versa Boom - Versa Mower - Boom Axe Slopemower and Interstater mounted on Ford 5640, 6640 & 7740 mounted prior to jul. 16, 1992 using front pump drivelines.

Bulletin No: 922909

(Old # 92-009)

Date:

Sep. 29, 1992

Parts:

Labor: 100 % at Dealer Net | 1.0 hr. at Dealer registered Shop Rate

Old Parts Disposition: No Returnable Parts involved

Termination Date:

Nov. 30, 1992

Pulley Adapter Mounting Bolts Ford 56, 66 & 7740 Tractors:

Subject:

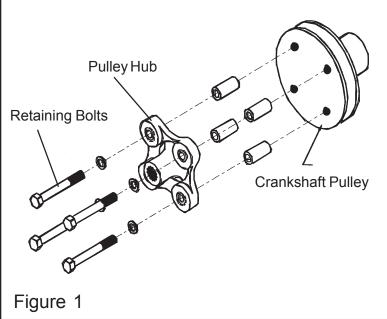
7/16" bolts holding Hub to Tractor Crankshaft Pulley found to need more engagement into pulley (longer bolts required).

Service Required:

- 1. Remove the four retaining bolts from Hub where it mounts to Tractor crankshaft Pulley. The old bolts were 3-1/4" long (P/N LH0B128B) the new replacement bolts need to be 3-1/2" long (P/N 02965355 longer bolts).
- Use "locktite on new bolts and install them into the hub and pulley, tighten the bolts to retain hub 2. to crankshaft pulley.
- 3. Run and test for operation.

Parts Required:

Part No. Qtv Description Bolts 3-1/2" long 02965355



Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.



Alamo Industrial Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

Models: A-Boom - Versa Boom - Versa Mower - Boom Axe Date: **Bulletin No:** Slopemower and Interstater mounted on Ford 5640, 6640 & 7740 930410 mounted prior to jul. 16, 1992 using front pump drivelines. Oct. 4, 1993 (Old # 93-008) Labor: Parts: Old Parts Disposition: **Termination Date:** 100 % at Dealer Net | 1.0 hr. at Dealer registered No Returnable Parts Dec. 5, 1993 Shop Rate involved

Pulley Adapter Spacers Ford 56, 66 & 7740 Tractors: Subject:

Spacers used in driveline between Hub and crankshaft pulley change. Spacers and bolts between hub and pulley on ford 5640, 6640 and 7740 tractors need to be longer.

Service Required: (Note the 5640 uses different spacer and bolts.)

- 1. Remove the four retaining bolts from Hub where it mounts to Tractor crankshaft Pulley, remove the 4 spacers P/N 107620. Discard these spacers they will not be used.
- 2. Using the existing 4 bolts P/N 02965355 (3-1/2 long) and lockwasher P/N 00022200, reinstall the hub using the new one piece spacer P/N 02966404. (6640 & 7740 Models Only)

Note: 5640 model tractor use Kit 02965750 instead of parts listed above in step 2, the kit will include

spacer and four new 4" bolts for the 5640 model Tractor. The procedure will be the same but the parts will be different.

 Parts Required:
 6640 & 7740

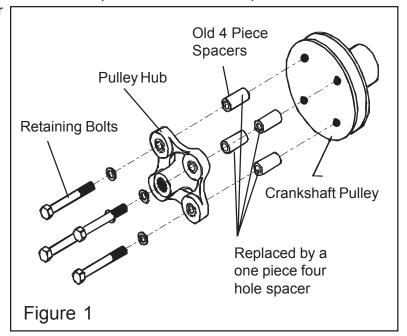
 Part No.
 Qty
 Description

 02965355
 4
 Bolts 3-1/2" long

 02966404
 1
 Spacer, 4 hole

Parts Required: 5640

Part No. Qty Description 02965750 1 Spacer Kit



Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.



Alamo Industrial Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| Models: A-Boom | | | | No: 0007) | Date: Jun. 1, 1994 |
|-------------------------------|---|---|--|---------------------|---------------------------|
| Parts: 100 % at Dealer Net | Labor: 0.7 hr. at Dealer registered Shop Rate | Old Parts Disp No Returnable involved | | | nination Date: 1, 1994 |

Swing Cylinder Bushing & Pin Replacement: Subject:

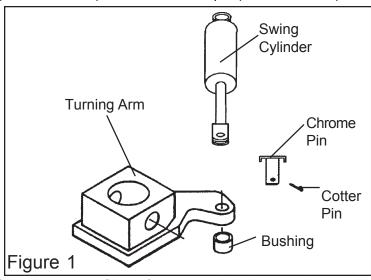
Premature wear of teflon coated swing cylinder bushing. To replace the swing cylinder bushing on unit built prior to June 1994 if premature wear in swing cylinder bushing occurs.

Service Required:

- 1. With Boom Arm extended outward and Head resting on the ground, Tractor secured in a safe manner. You will not have to remove any hydraulic lines to perform this repair.
- 2. Remove Swing cylinder pin, this is the old pin that connects it to the turning arm. The swing cylinder will pull away from turning arm far enough that only this end will have to be disconnected.
- 3. Using a suitable driver remove the old bushing from the turning arm.
- 4. Check the condition of the bore in the turning arm, if damaged repair or replace turning arm.
- 5. Install new bushing (P/N 02965548) using a suitable driver. Slide cylinder back and align the holes, insert the new chrome pin (P/N 02966767), install the cotter pin (P/N 00606000).
- 6. Run and test operation of unit.

Parts Required:

Part No. Qty Description 02966767 1 Chrome Pin 02965548 1 Bushing 00606000 1 Cotter Pin



Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.



Alamo Industrial Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| Models: A-Boom 17', 20' & 23' booms above S/N 03542 that use the teflon bushing P/N 02965548 | | | | No: 002) | Date: Jan. 17, 1995 |
|---|---|--|--|--------------------|----------------------------|
| Parts: 100 % at Dealer Net | Labor: 0.7 hr. at Dealer registered Shop Rate | Old Parts Disp hold removed P return | | | nination Date: 31, 1995 |

Dipper Pin Bushing at Hitch Post Replacement: Subject:

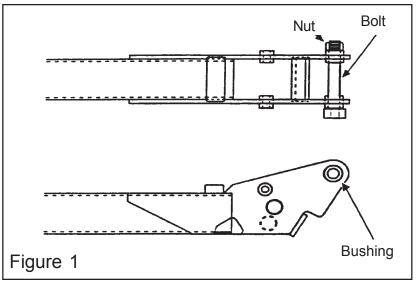
Short service life of the Teflon coated bushings (P/N 02965548) installed in the dipper at the hitch pot to dipper point. Units that have steel bushings at this point are not affected. Identification can be made by removing the Nut (P/N 02030300) from the bolt (P/N 02956972) and looking at the end of the bushing. Units in inventory should be reworked before delivery and units in service should be reworked at earliest opportunity. All Warranty applications must refer to this bulletin in the description.

Service Required:

- 1. Before disassembling anything, remove the Nut on pin and verify wether rework is required.
- 2. If rework is required, remove bolt and bearings. Replace bearings with P/N 02960650 bushings. Inspect bolt for damage. If damaged replace with new bolt.
- 3. Reassemble unit, lubricate and test for proper operation.

Parts Required:

Part No. Qty Description 02960650 2 Bushing 02956972 1 Bolt



Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.



Alamo Industrial Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| | Versa Boom S/N 03463 to 03570 | | | No: 006) | Date: Mar. 22, 1995 |
|-------------------------------|---|-------------------------------|-----------|--------------------|----------------------------|
| Parts: 100 % at Dealer Net | Labor: 0.5 hr. at Dealer registered Shop Rate | Old Parts Disp Scrap Parts | oosition: | | nination Date: 31, 1996 |

Turning Arm Pin & Bushing Replacement: Subject:

Replacement of the Turning Arm Pin and Bushings on certain A-Booms and Versa Booms. Some turning arm pins were not chamfered during machining during manufacturing process. This may result in damage to bushing during assembly and shorten bushing life. If pin is removed and it is not chamfered on the end it should be replaced. This repair should be done at the same time as work is done on service bulletin SB-951701 (old # SB950002) and SB-950404 (old # SB-950007).

Service Required:

- 1. Before disassembling anything, inspect the end of the turning arm pin (Cotter Pin End). If pin is chamfered and there is no excessive play in the bushing (felt by trying to move swing cylinder back and forth), no further action is required. If Pin is not chamfered go to step 2.
- 2. Remove cotter pin and turning arm pin.
- 3. Inspect bushing in turning arm and cylinder clevis. If any damage exist, replace the bushings using suitable drivers.
- 4. Install the new Bushings and the new chamfered pin, making certain all parts are aligned to

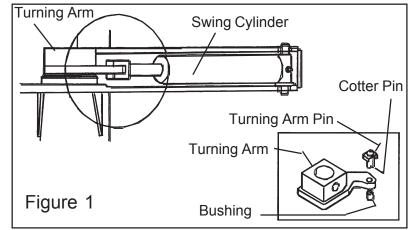
prevent damage to bushing. Install cotter pin.

5. Render the old pin unusable to prevent it from being used on another unit. Run and test unit.

Parts Required:

| Part No. | Qty | Description |
|----------|-----|-----------------|
| 02965214 | 2 | Bushing |
| 02965548 | 1 | Bushing |
| 02966767 | 1 | Turning Arm Pin |

00606000 1 Cotter Pin



Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.



Alamo Industrial Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| Models: A-Boom 03476, All 17', 20' & pin | 950404 | Date: Apr. 4, 1995 | | |
|--|--|--|--|---------------------------|
| Parts: 100 % at Dealer Net | Labor: 1.5 hrs. at Dealer registered Shop Rate | Old Parts Disp Retain Removed Recall | | nination Date: 1, 1995 |

Dipper Pin Replacement: Subject:

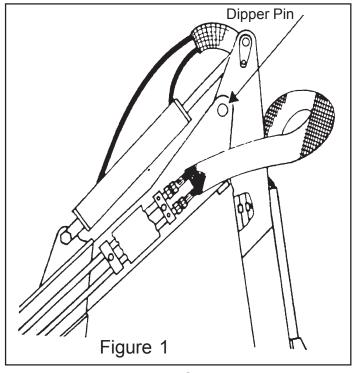
All Dipper Pins on above listed S/N units using Pin # 02966761. To Identify old Dipper Pin look at the end of the pin, if the Pin uses a Hex Nut and washer to retain it is the new style and will not require this service. Units in inventory should be reworked before delivery and units in service should be reworked at earliest opportunity. All Warranty applications must refer to this bulletin in the description.

Tools Needed:

- 1. Standard Hand Tools
- 2. Hoist or stand to support Dipper, stand should be approx 42" to 52" high.
- 3. Tap, 1/8" Pipe
- 4. Die grinder w/ carbide burr and a good dust mask.
- 5. Bushing and Pin drivers. Bushing is 1-1/2" OD X 1-1/4" ID, Pin is 1-1/4" OD X 6" long. It is advisable to use drivers slightly undersize and about at least 12" long.
- 6. Long Pry Bar, Approx 5" long.
- 7. Grease Gun.
- 8. Dial Calipers or other measuring device to check 1-1/2" bore.

Repair Procedure:

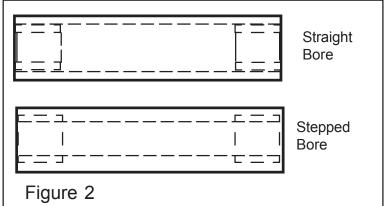
- 1. Wing the Boom to the side, extend the dipper, tilt head to level position and lower the head to the ground so that the dipper hinge pin area is accessible. Shut off Tractor Engine and secure tractor.
- 2. Using hoist or stand, support the dipper at the boom rest hook. Take measures to protect the paint and the tractor.
- 3. Remove the Bolt (P/N 02152800) and Nut (P/N 00750940) that retain the old Pin in dipper, this bolt and nut will not be reused.



Continued Next Page

Service Bulletin 950404 Continued from previous Page

- 4. Using a suitable driver, drive the old dipper pin out of its bore.
- 5. using the "Lift" control lever, lower the boom until there is enough clearance to remove the dipper bushings from the bore.
- 6. Inspect the dipper bore and determine whether the dipper has a "straight" or "stepped" bore.
- 7. IF BORE IS STRAIGHT: (See Figure 2)
 - a. Using suitable driver, drive out the old fiber bushings.
- b. Make sure that the bore is not less than 1.50" ID. Some distortion may have occurred near the ends of the bores during the welding process of manufacturing. The distortion should not extend more than 1/2" or so inside the bore. Use a die grinder with carbide burr or a reamer to remove any high spots from bore.
- c. Tap the bolt hole (that was used for the 5/16" bolt) using the 1/8" pipe tap
- d. Clean the bore of the foreign material and debris. Check for any burrs in ID of bore or any old grease.
- e. Install grease fitting in the lower tapped hole and install a pipe plug in the upper tapped hole.
- f. Install P/N 02966443 bushing, make certain that the separation in the bushing is in line with lower grease fitting.



8. IF BORE IS STEPPED: (See Figure 2)

- a. Remove old fiber bushings using a die grinder, chisel or other appropriate tool. Use dust mask and safety glasses when cutting fiber bushing.
 - b. Complete steps 7b, 7c, 7d. and 7e as outined in step 7.
 - c. Install two of steel bushing P/N 02969064
- 9. Remove fiber busings from boom ears using a suitable driver. Grind or file down any high spots in the bore. Install new 02960842 steel bushings.
- 10. It is advisable to enlist the aid of a second person to observe alignment of parts and give directions. keep clear of all pinch points when aligning dipper to boom. Re-align dipper bore to boom ears.
- 11. Install the dipper Pin P/N 02958591, taking care to keep aligned to prevent damage to pin. A long pry bar is helpful in making final adjustments by prying under the mower head. Install lockwasher and Nut, tighten the nut on pin.
- 12. Grease the Pin, Replace any componts that may have been removed and run to test for proper operation.

Parts Required:

| Part No. | Qty | Description | Part No. | Qty | Description |
|----------|-----|--------------------|------------|-----|------------------------------|
| 02958591 | 1 | Pin, Dipper | 02957089 | 1 | Lockwasher |
| 02921700 | 1 | Nut | 00003500 | 1 | Grease Fitting |
| 00752407 | 1 | Pipe Plug | 02966443 | 1 | Bushing (Straight Bore Only) |
| 02960842 | 2 | Bushing (Boom Ears |) 02969064 | 2 | Bushing (Stepped Bore Only |

SERVICE BULLETIN No. 950404

(This Bulletin cancels and replaces Bulletin No. 940003 from Jan. 1994)

Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.



Alamo Industrial Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

Models: A-Boom - Versa Boom Mowers and Flails mounted on John Deere 6200, 6300 or 6400 Tractor Shipped prior to Aug. 1995

Bulletin No: 952111 (Old # 950015)

Nov. 21, 1995

Parts:
100 % at Dealer Net Shop Rate

Old Parts Disposition: No Returnable Parts involved

No Returnable Parts involved

Mar. 31, 1996

Crank Shaft Pulley Mounting Bolts:

Subject:

The Bolt that secures the modified John Deere Pulley to the crankshaft may be too long, not allowing the pulley to be attached securely to the crankshaft and allowing the pulley to wobble.

Service Required:

- 1. Check to make certain Crankshaft Pulley is not loose or wobbling to determine if this procedure needs to be done.
- 1. Remove the four bolts (item 2) attaching the front drive line to the face of the Pulley (item 1). Collapse the driveshaft towards the front of the tractor far enough you can get to the Crankshaft pulley retaining bolt.
- 2. Remove the single bolt in the center of the pulley that secures it to the crankshaft (item 3).
- 3. Check the bolt length. It should be 1/2" UNC X 1-3/4" Long Grade 8. If the bolt is longer replace it with Bolt P/N 02891800
 - and torque to proper Torque setting as recommended by the Tractor manufacturer for this bolt.
- 4. Install the four bolts connecting driveline to the crankshaft pulley. Recheck all installation steps, make certain all bolts tightened and any removed components removed have been reinstalled. Run unit to test operation.

Parts Required:

Part No. Qty Description 02891800 1 Bolt

Figure 1

Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.



Alamo Industrial Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| 8.4 | _ | - 1 | - 1 | - | |
|-----|---|-----|-----|----|---|
| M | റ | a | ρ | ıs | i |

17', 20' & 23' A-Boom - Versa Boom - Rear Mounted Boom - 15' & 17' Minute Man Boom

Bulletin No:

953011

(Old # 950016)

Date:

Nov. 30, 1995

Parts:

Labor:

100 % at Dealer Net | 0.7 hr. at Dealer registered | Shop Rate

Old Parts Disposition:

Termination Date:

Scrap removed parts

Jun. 1, 1996

Dipper Cylinder Pin Replacement:

Subject:

Replace Old Pin P/N 02966936 dipper cylinder pin with New Pin P/N 02969980, P/N 02030300 Nut and P/N 00749946 Washer. **Mowers equiped with 02966936 dipper pin (old pin can be**

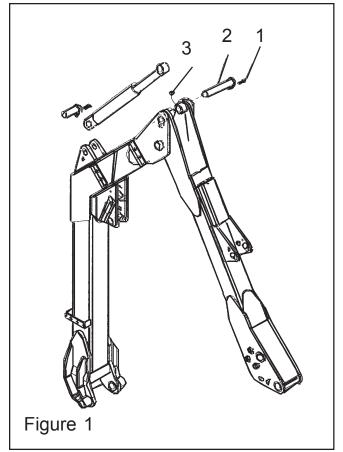
identified by absence of a nut on the end of the pin).

Service Required:

- Rest Head on the floor (or ground) with dipper cylinder accessible. Make certain all hydraulic pressure is relieved from Hoses and cylinder system.
- Secure and support dipper with hoist to prevent movement when pin to dipper cylinder is removed.
- 3. Replace the original pin P/N 02966936 with the new pin P/N 02969980, nut P/N 02030300 and washer P/N 00749946.
- 4 Tighten Nut and retaining bolt. Remove Hoist from dipper.
- 5. Run and test for operation

Parts Required:

| Part No. | Qty | Description |
|----------------------|-----|------------------------|
| 02969980 02020300 | 1 | Dipper Cyl. Pin Nut |
| 00749946 | 1 | Washer |



Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.



Alamo Industrial Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

 Models:
 A-Boom Mowers S/N 03791, 03820, 03859, 03913, 04023, 04025 & 04114
 Bulletin No: 962703 (Old # 960003)
 Date:

Parts:
100 % at Dealer Net Shop Rate

| Cot. 1, 1996 | Cot. 1, 199

Frame Rail Reinforcement, LH Frame Rail:

Subject:

Add Gusset to Left Frame rail of certain A-Booms and Machetes

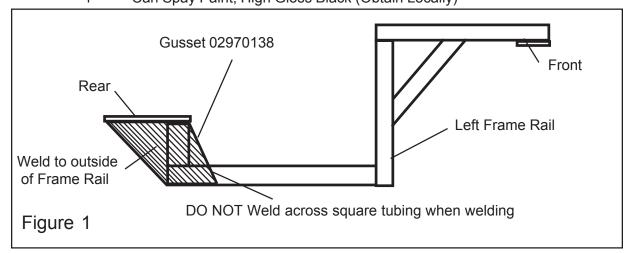
Service Required:

- Weld Gusset, P/N 02970138 to left frame rail as instructed on installation drawing which will be sent with Gusset when ordered.
- 2. When welding some thing on a square tube do not weld across the square tube, that will weaken the square tube. Always try to weld the length of the tube on the corners.
- 3. Paint Gusset and welded area.

Parts Required:

Part No. Qty Description 02970138 1 Gusset

1 Can Spay Paint, High Gloss Black (Obtain Locally)



Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.



Alamo Industrial Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

Models: A-Boom, Boom Axe Head 50" S/N 01112 & up, 60" S/ n 01167 & up - Versa Mower, 60" S/N 04438 & up, 72" S/N 04401 & up - Slope Mower head S/N 01020 & up - Machete rotary head S/n 01039 & up.

Date: **Bulletin No:** 970108

(Old # 970009A)

Aug. 1, 1997

Parts:

Labor: 100 % at Dealer Net 1.0 hrs. at Dealer registered Shop Rate

Old Parts Disposition:

Scrap Old Parts

Termination Date:

Aug. 31, 1997

Blade Bolt Inspection / Recall:

Subject:

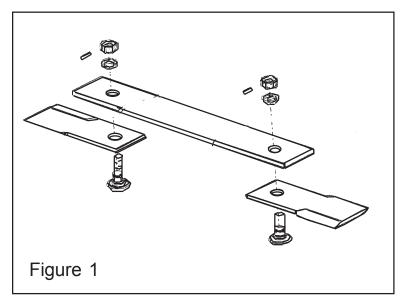
The Blade Bolt Nut Retaining Roll Pin Bore may be oversized and could allow the roll pin to become loose in the bore. The loose roll pin could therfore allow the blade bolt Nut to loose torque.

Service Required:

- Visually inspect and check the fit of the roll pin. If it is loose or has come loose replace the Blade Bolt, Blade Bolt Nut and Roll Pin on the above listed serial numbered units.
- 2. Torque the Blade Bolt to 600 ft. lbs. before installing the new Roll Pin.

Parts Required:

Part No. Qty Description 02782900 2 Blade Bolt 00020900 2 Nut 00023200 Roll Pin



Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.



Alamo Industrial Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

Models: A-Boom 17' S/N 04825 to 04831
23' S/N 04848

Bulletin No:
980106
(Old # 980004A)

Jun. 1, 1998

Possible Lockwasher on King Pin Post Missing: Subject:

Recent normal inspection has revealed the slip possibility that the units listed above may have been shipped without the bearing nut locking washer or the bearing support collar being installed to the king post.

Service Required:

1. Inspect the lower bearing area of the king post to ensure that the bearing nut lockwasher and bearing support collar are installed.

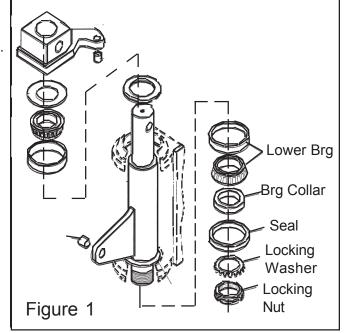
2. if the nut locking washer is fount to be missing. Inspect the seal and bearing area for damage.

Replace as neccesary

Install the support collar

3. Install the support collar and locking washer as required. To tightrn the nut tighten fully then back off at least 1/4 turn. Loosen the nut the additional amount required to align the lockwasher with the tabs on the locking washer with the notches of the nut. Bend the tab of the washer into the notch of the nut then stake the nut into place.

Parts Required: (If needed) Part No. Description Qty 02856839 Bearing Nut 1 02956838 1 Locking Washer Bearing Support Collar 02956818 1 Grease Seal 02956837 1



Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.



Alamo Industrial Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| A-Bo A-Bo | om 17' S/N 04150 to 05192 om 20' S/N 04697 to 05151 om 23' S/N 04755 to 05144 om 28' S/N 04790 to 05125 | | Bulletin N 990303 (Old # 9900 | Date: Mar. 3, 1999 |
|-----------------------------|--|--|--------------------------------------|---------------------------|
| Parts: 100 % at Dealer N | et Labor: 4.8 hrs. at Dealer registered Shop Rate | Old Parts Dispose No Returnable involved | • | nination Date: 1, 1999 |

Lower Cross Member Reinforcement Kit P/N 02974182: Subject:

Support gussets have been added to the lower crossmember frame support

Service Required:

- 1. Secure the tractor to facilitate a safe repair, (Engine off, Park brake on, Key Secured & etc..).
- 2. Using the hardware provided, line up the holes in the plates with the those in the tractor frame and attach the gusset plates to each side of the tractor over the lower crossmember as shown in the drawing provided with the kit. NOTE: The gusset is made at an exaggerated length to accommodate the possibility of varying distances between the crossmember and the tractor frame. Some trimming of the gusset may be required.
- 3. Utilize a continuous 1/4" weld to attach the bottom of the gusset to the lower crossmember between the two crossmember bolts on each side of the tractor as illustrated in figure 1 and in the assembly drawing provided with the kit. Weld both sides of gusset.
- 4. Torque the four mounting bolts that attach gussets to tractor frame to 300 ft. lbs. (407 Nm)
- 5. Clean the welded area and paint with high gloss Black paint.

Parts Required: (order Kit #02974182)

Part No. Qty Description

02974182 1 Support Gusset Kit

P/N 02974182 Kit includes

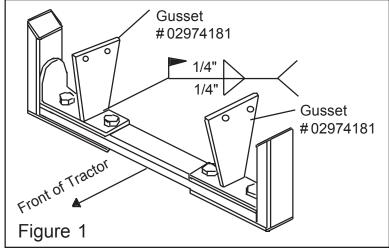
Part No. Qty Description 02974181 2 Rail Gusset

00000200 4 Nut

00003901 4 Lockwasher

02978600 4 Bolt

02977386 1 Instruction Drawing



Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.



Alamo Industrial Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| Models: New Holland tractors T7740 & T6640 (S/N Range listed below) New Holland Tractors with Alamo Industrial Units mounted on them (only S/N and model tractors listed below) | | | Bulletin No 992704 (Old # 9900 | | Date: Apr. 27, 1999 |
|---|---|--|--------------------------------------|---|----------------------------|
| Parts: 100 % at Dealer Net | Labor: 0 hr. (see New Holland Service Bulletin 399) | Old Parts Disp (see New Hollar Bulletin 399) | | l | nination Date: 30, 1999 |

New Holland T7740 & T6640 A/C Drier Campaign: Subject:

In order to increase customer satisfaction, New Holland is providing a new Air conditioner Receiver Drier Kit for the S/N units detailed in new Holland Service Campaign 399. The specifics to this bulletin are provided by the New Holland Bulletin, The purpose of this bulletin is only to inform you of the work that needs to be done per New Holland Bulletin and not to authorize any work on the behalf of Alamo Industrial or any of their affiliated companies. If in Question you should consult your New Holland Dealer for details of repairs.

Units Serial Numbers: (Model T 7740)

| 084228B | 084349B | 084350B | 084352B | 084359B | 084476B | 084549B | 084550B | 084570B | 084571B |
|---------|---------|---------|-----------|---------|---------|---------|---------|---------|---------|
| 084599B | 084627B | 084629B | 084632B | 084633B | 084635B | 084636B | 084647B | 084648B | 084652B |
| 084661B | 084800B | 084850B | 084964B | 084966B | 084967B | 085607B | 086462B | 086470B | 086471B |
| 086472B | 086503B | 086504B | 086505B | 086589B | 086648B | 086649B | | | |
| | | (Mo | odel T664 | 10) | | | | | |
| 084230B | 084351B | 084411B | 084412B | 084526B | 084529B | 084816B | 084818B | 084832B | 084833B |
| 084834B | 084847B | 084849B | 084963B | 084965B | 086484B | 086485B | 086486B | 086487B | 086488B |

Service Required:

See New Holland Service Campaign 399 for Service details.

Parts Required:

See New Holland Service Campaign 399 for Parts requirements

Special Note:

This Service Bulletin does not authorize any repairs on behalf of Alamo Industrial, its strictly to inform you of New Holland Service Campaign 399.

Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.



Alamo Industrial Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| Models: All New Holland TS Tractors w/ Cabs & S/N less than 115012B (date code 8L18) plus All New Holland TS Tractors with or without Cab & S/N less than 110026B (date code 8j09) | | | Bulletin No: 991911 (Old # 990005A) | | Date: Nov. 19, 1999 |
|--|------------------------|--|---|--|----------------------------|
| Parts: 100 % at Dealer Net | 0 hr. (see New Holland | Old Parts Disp (see New Hollar Bulletin 409) | | | nination Date: 30, 2000 |

New Holland TS Tractor Inspection Campaign:

Subject:

In order to increase customer satisfaction, New Holland is requesting inspection of some tractors (See S/N's listed below) detailed in new Holland Service Campaign 409. The specifics to this bulletin are provided by the New Holland Bulletin, The purpose of this bulletin is only to inform you of the work that needs to be done per New Holland Bulletin and not to authorize any work on the behalf of Alamo Industrial or any of their affiliated companies. If in Question you should consult your New Holland Dealer for details of repairs.

Units Serial Numbers:

All New Holland TS Tractors w/ Cabs & S/N less than 115012B (date code 8L18) plus All New Holland TS Tractors with or without Cab & S/N less than 110026B (date code 8j09)

Service Required:

See New Holland Service Campaign 409 for Service details.

Parts Required:

See New Holland Service Campaign 409 for Parts requirements

Special Note:

This Service Bulletin does not authorize any repairs on behalf of Alamo Industrial, its strictly to inform you of New Holland Service Campaign 409.

Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.



Machete Room A-Room & Slone Mower Models

SERVICE BULLETIN No. 010607

Alamo Industrial Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| Danta | Labam | 0115 4 | <u> </u> | 141 17 | · 4: D.4 |
|---------|--|-------------|----------|--------------------------|--------------|
| | with Buzz Bar I | Head Option | | 010607 (Old # 200102) | Jul. 6, 2001 |
| models. | macricic Boom, A-Boom a diope moner models | | • | Bulletin No: | Date: |

Buzz Bar Head Motor Coupler Re-Design:

Subject:

Models.

Failures of the Motor to drive spindle molded coupler require inspection of the drive system and possible replacement of the coupler parts.

Service Required: The Buzz bar drive system must be updated to the new molded rubber coupling design prior to the implementation of this Service Bulletin. Refer to Technical Information Bulletin 041101 is related to this Service Bulletin.

The drive system will require inspection and possible replacement to ensure proper alignment with the drive sheave.

There has been a design change to the drive coupler assembly for the Buzz bar Cutting Head. If a flexible coupler, Alamo Industrial P/N 02974245 (for Machete) or P/N 02974246 (for A-Boom & Slopemower), are ordered they will be a different design. The new flexible coupler design will be molded rubber with metal inserts. The new molded rubber version will directly replace the machined design using the same part number. An installation drawing, that describes the assembly in detail, will be shipped if a new coupler is ordered. This bulletin is to inform you of the design change. If there are further questions please contact Alamo Industrial's Technical Service Department.

Parts Required: Flexible Couple Repair Kits

Part No. Qty Description

02974245 1 Flexible Coupler Repair Kit. (For Machete Models)
 02974246 1 Flexible Coupler Repair Kit. (For All Other Models)

Kits above will include the required parts as well as the required Hardware, The Kits will also include an Instruction Sheet P/N 02977380 which has details on how to perform repairs.

Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.



Alamo Industrial Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| Models: A-Boon | n - Machete Boom & Slope M with Buzz Bar Head | Bulletin No 021202 | o: | Date: Feb. 12, 2002 | |
|-------------------------------|--|---|----------|----------------------------|------------------------------|
| Parts: 100 % at Dealer Net | Labor: 5.0 hrs. at Dealer registered Shop Rate | Old Parts Disp Hold All Parts fo under Warranty | r Return | | mination Date: / 20, 2002 |

Buzz Bar Head Motor Coupler Coupler Update Kit:

Subject:

Buzz Bar Motor to Spindle drive components may fail prematurely due to misalignment of the Motor and Spindle. Complete instructions for changing Buzz Bar motor to spindle components for Machete, A-Boom, Versa Boom, Slopemower & Rear Mount Boom units will be provided with each Kit.

Service Required: Use Information that is included with appropriate kit listed below, to change Drive Spindle, Motor Mount, and Motor Coupler components on all Buzz Bar Head Attachments for the Alamo Industrial Boom Models manufactured before Feb. 2002

Parts Required: Two Service Kits are available. (These are major Update Kits)

Part No. Qty Description

02978335 1 Coupler Drive Asy Repair Kit. (For Machete Models) 02978336 1 Coupler Drive Asy Repair Kit. (For All Other Models)

Kits above will include the required parts as well as the required Hardware, The Kits will also include an Instruction Sheet P/N 02978337 which has details on how to perform repairs. Read these instruction sheets completely before beginning any repairs. If any problems please contact Alamo Industrial Technical Service Department for further details.

NOTE: This Service Bulletin Printed this date Oct. 22, 2003 will void any other version of this service bulletin printed prior to this date. Termination date for this service Bulletin was May 20, 2002.

Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.



Alamo Industrial Technical Services Department 1502 East Walnut Seguin, Texas 78155 830-372-2708

| Models: Rotary Heads using Blade Bolt No. 02782900 with Date Code on Bolt of 11-02 & 02782900 Blade Bolts in Parts Stock with the 11-02 date code. | | | Bulletin N 020703 (Old #1020 | Date: Feb. 7, 2003 |
|--|---|---|------------------------------------|----------------------------|
| Parts: 100 % at Dealer Net | Labor: Will be evaluated on a case by case basis. | Old Parts Disp Hold All Parts fo under Warranty | r Return | mination Date: 15, 2003 |

Blade Bolt Inspection:

Subject:

Quality inspections revealed the potential for cracking of the Blade Bolt. Cracks are the result of manufacturing procedures and will be present on the bolts prior to installation on the mower. This is pertaining to a Date code which is stamped on the threaded end of the bolt, Date Code 11-02.

Service Required:

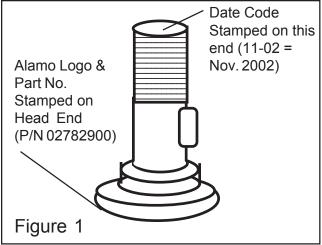
- 1. Inspect all Bolts in Parts stock and those on the effected mowers by checking the dated code on the Blade Bolt.
- 2. If Blade Bolts do not have the 11-02 date code no service will be required.
- 3. If the Date code 11-02 is there check the Bolt for any cracks in them, If the bolts are installed on the mower they will have to be removed to check.
- 4. If they check OK reinstall them and torque them to 600 ft. lbs. and reinstall roll pins.
- 5. If they have cracks replace them with new ones, install the new bolts and torque to 600 ft. lbs.

 Reinstall roll pin.

Parts Required:

Part No. Qty Description 02782900 a/r Blade Bolt

Note: Always check Date Code and Part Number of blade bolt before performing any repairs as described in this Service Bulletin as not all Blade will have the same date code. Only Blade bolts with 11-02 date code will be considered for warranty consideration.



Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.



A-BOOM
Technical Information Bulletin
and
Service Bulletin
Manual

Manual P/N 02980499 (01/04)