

**WISDOM
INDUSTRIES, Ltd.**

SAFETY BULLETIN

DATE: APRIL 30, 2001

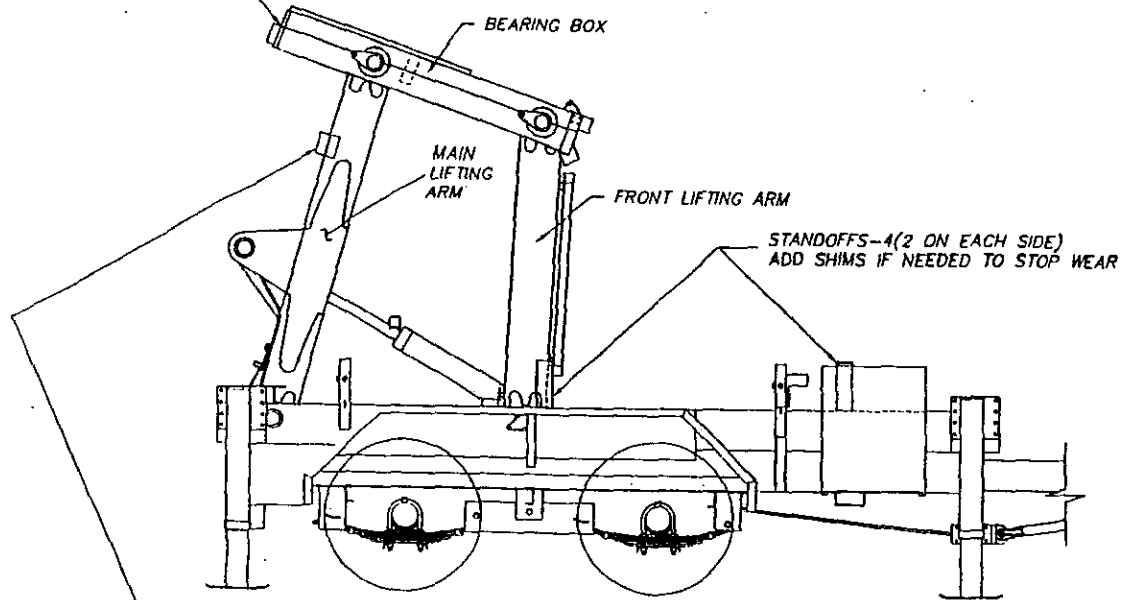
RIDE: TORNADO, WHIRLWIND, SPACE SLED

SUBJECT: MAIN LIFT ARM INSPECTION

COMPLIANCE DATE: IMMEDIATE

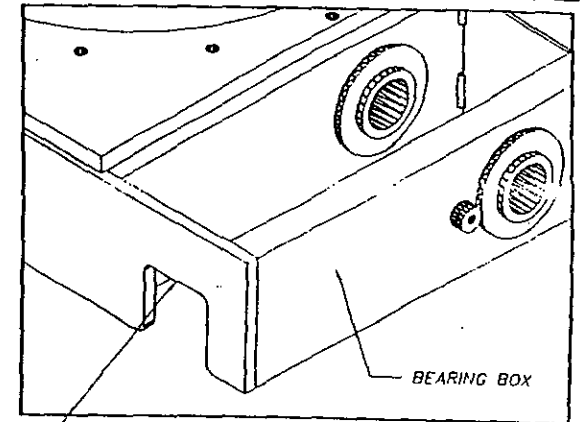
- 1) Inspect top edge of main lift arm for wear from lower edge of lift frame. (See Drawing)
- 2) If wear is noted block up standoffs until there is a 1/2" gap between the arm and lift frame.
- 3) If the surface of the tube is worn, inspect for cracks in tube and contact Wisdom for repair procedure.
- 4) Contact Wisdom Industries, Ltd. at (800) 634-6097 if you have any questions.

WEAR POINT FROM
LIFT FRAME




- 1) INSPECT TOP EDGE OF LIFTING ARM FOR WEAR FROM LOWER EDGE OF BEARING BOX. IF WEAR IS NOTED INSPECT FOR CRACKS IN TUBE AND CONTACT WISDOM FOR REPAIR PROCEDURE.
- 2) IF WEAR IS NOTED, BLOCK UP STANDOFFS UNTIL THERE IS 1/8" GAP BETWEEN THE ARM AND LIFT FRAME. CONTACT WISDOM INDUSTRIES IF YOU HAVE ANY QUESTIONS.

PASSENGER SIDE RAISED VIEW



NOTE: INSPECT TOP AND SIDES OF THE MAIN LIFTING ARM AS THEY PASS THROUGH THIS OPENING FOR WEAR AND CRACKS ON BOTH ARMS.

 WISDOM INDUSTRIES		Merino, CO 80741	
SCALE: 1/2" = 1'-0"	APPROVED BY:	DRAWN BY: JJR	
DATE: 05/01/01		REVISED	
DESCRIPTION SERVICE BULLETIN			
EQUIPMENT: TORNADO		DRAWING NUMBER 8T 230	



**WISDOM
INDUSTRIES, Ltd.**

SERVICE BULLETIN

DATE: APRIL 30, 2001

RIDE: TORNADO, WHIRLWIND, SPACE SLED

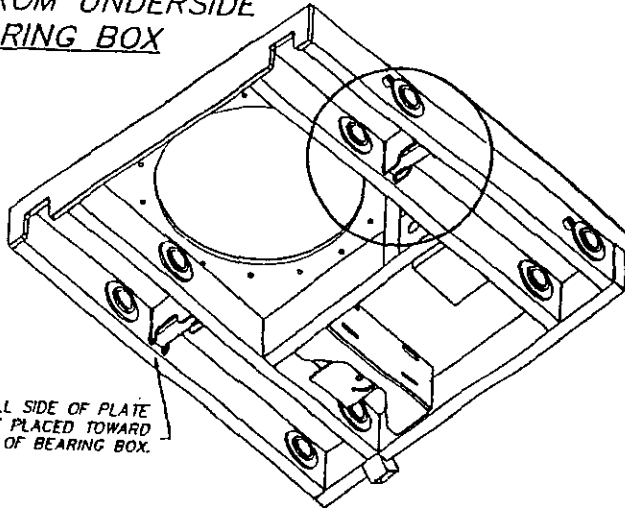
SUBJECT: LIFT FRAME REINFORCEMENT PLATES

INSPECTION DATE: IMMEDIATELY

INSTALLATION OF PLATES: 2 WEEKS WITHOUT
CRACKS, IMMEDIATELY WITH CRACKS

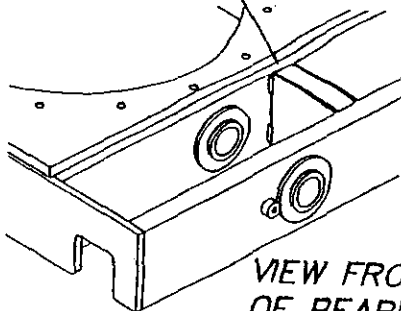
- 1) Inspect the frame near the 2 x 6 cross tube for cracks.
(See Drawing)
- 2) If cracks are found, grind the affected area and reweld with
7018 rod and install doubler plates prior to further operation.
- 3) If cracks are not found, inspect area daily for cracks prior to
operation.
- 4) If your unit does not have doubler plates, install doubler
plates.
- 5) Contact Wisdom Industries and the plates can be sent out. If
you have any questions, contact Wisdom Industries, Ltd. at
(800) 634-6097.

**VIEW FROM UNDERSIDE
OF BEARING BOX**

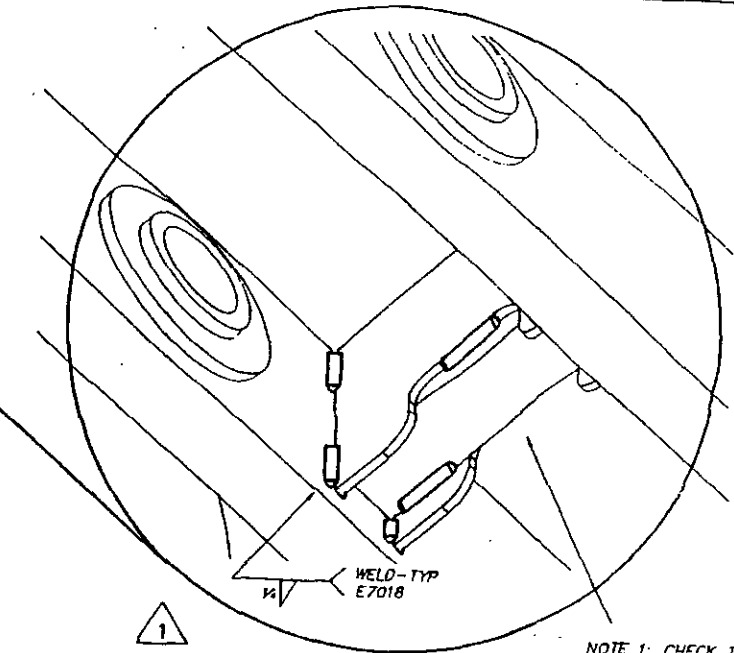


NOTE 3: SMALL SIDE OF PLATE
MUST BE PLACED TOWARD
THE OUTSIDE OF BEARING BOX.

NOTE 4: TOP OF PLATES MUST BE
FLUSH WITH TOP OF BEARING BOX.



**VIEW FROM TOPSIDE
OF BEARING BOX**



DETAIL OF PLATES

WELD-TYP
E7018

NOTE 1: CHECK THAT
CROSS TUBE DOES NOT
REST ON LIFTING ARM IN
THE DOWN POSITION. IF
IT DOES, ADD SHIMS TO
RAISE OFF OF LIFT ARM.

NOTE 2: NOTCH IS OFFSET
TO CLEAR LIFT ARM.
WATCH DURING
INSTALLATION

WISDOM INDUSTRIES		Merino, CO 80741	
SCALE: 1"=1'-0"	APPROVED BY:	DRAWN BY: CKW	
DATE: 08/04/99	<i>[Signature]</i>	REVISED	
DESCRIPTION: SERVICE BULLETIN			
EQUIPMENT: TORNADO		DRAWING NUMBER BT 305SB	

MAR 18, 2001 - 10:21:44 < L:\FORMADO\BT305SB.DWG >

02/28/2001 | ADDED WELD DETAIL, CHANGED NOTES FOR CLARITY

SWT



WISDOM INDUSTRIES, Ltd.

SAFETY ALERT

DATE: March 31, 2003

RIDE: Tornado/Whirlwind/Space Sled

SUBJECT: Check the torque of the main bearing attachment bolts.

COMPLIANCE: IMMEDIATE (TWO STAGES)

Stage 1

➤ **IMMEDIATELY, CHECK THE MAIN BEARING BOLTS FOR TIGHTNESS:**

1. Check all main bearing bolt torques.
 - a. 5/8 inch bolts torque to 150 foot pounds.
 - b. 1/2 inch bolts torque to 110 pounds.
2. Loose bolts must be removed, red 262 Locktite added to the threads, and torqued.

Stage 2

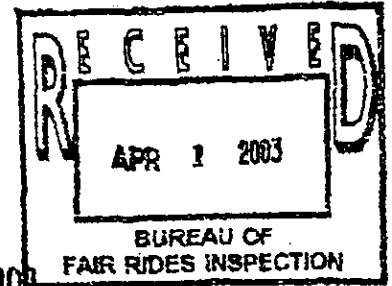
- **REPLACE THE MAIN BEARING BOLTS.**
➤ **BOLT SELECTION**

There have been two different bearings used on the Tornado. One bearing uses 5/8 inch bolts for both sides of the bearing attachment. The other bearing uses both 5/8 inch and 1/2 inch bolts. All bolts must be at least grade 8 or better.

1. Replace all bearing bolts with new grade 8 or better bolts and case hardened flat washer. Use red 262 Locktite for installation and torque to the above listed rating.
2. Remove old bolt.
3. Install new bolt with a grade 8 hardened flat washer.
4. Apply red 262 Locktite to the treads.
5. Torque the bolt to the above listed rating.

CHECK THE RIDE BOLTS ON A MONTHLY BASIS

REPORT ANY PROBLEMS OR DISCREPANCIES TO WISDOM INDUSTRIES, LTD.



April 1, 2003

State of Florida

To Whom It May Concern:

Concerning bolts to be changed because of Safety Alert Bulletin issued March 31, 2003,

Bearing 729H A10 (98 % of machines).

Inner race bolts are 5/8", fine thread, Allen lead bolts, and they are counter sunk. They are the upper inner circle holding the drum & sprocket to the bearing.

Outer race bolts are 1/2"-13 hex head, they are the lower, outer ring of bolts. Both bolt circles are located under the bearing table assembly.

Bearing 729C11

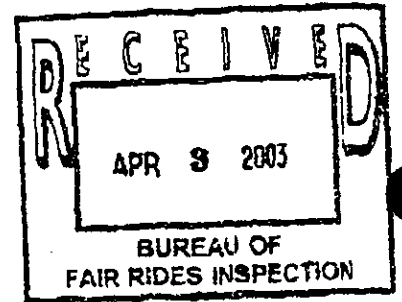
Both races use 5/8" inch, fine thread bolts.

If you have any further questions please call 1-800- 634-6097.

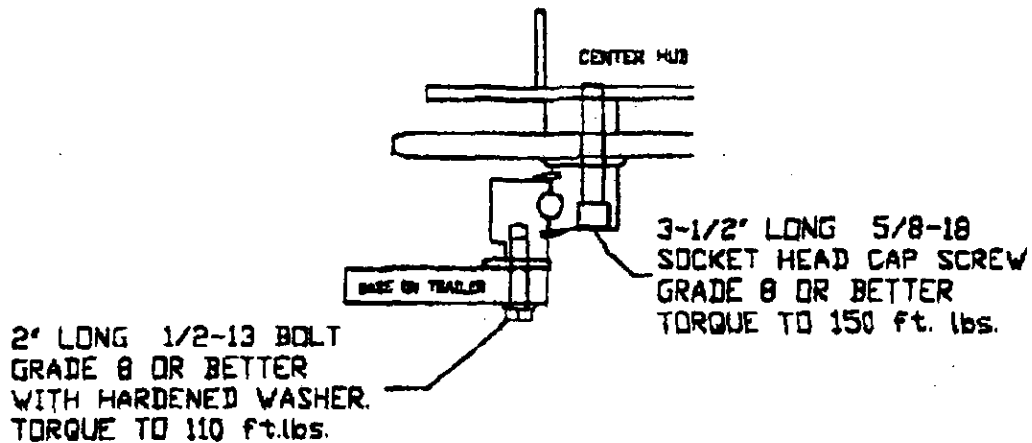
Charley Stahley

Shop Foreman

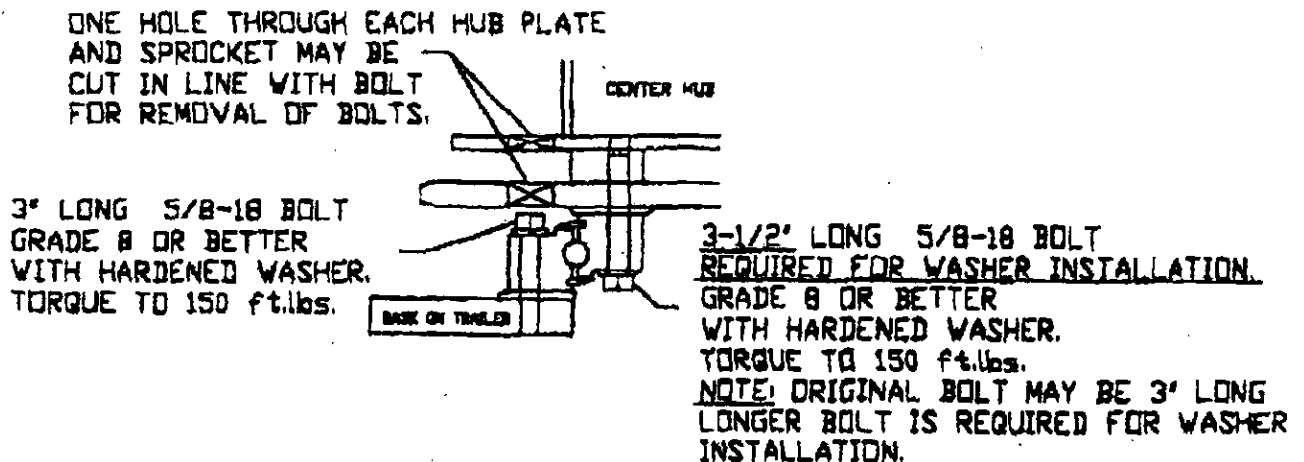
Wisdom Industries, Ltd.



TWO BEARING TYPES ON THE TORNADO-WHIRLWIND-SPACESLED



GEE-WIZZ STYLE BEARING



GRAVITRON STYLE BEARING