



# **WISDOM INDUSTRIES, Ltd.**

## **IMPORTANT SAFETY BULLETIN**

**DATE: April 12, 2004**

**RIDE: GRAVITRON/STARSHIP 2000**

**SUBJECT: INSPECTION/ASSEMBLY/OPERATION  
PROCEDURE**

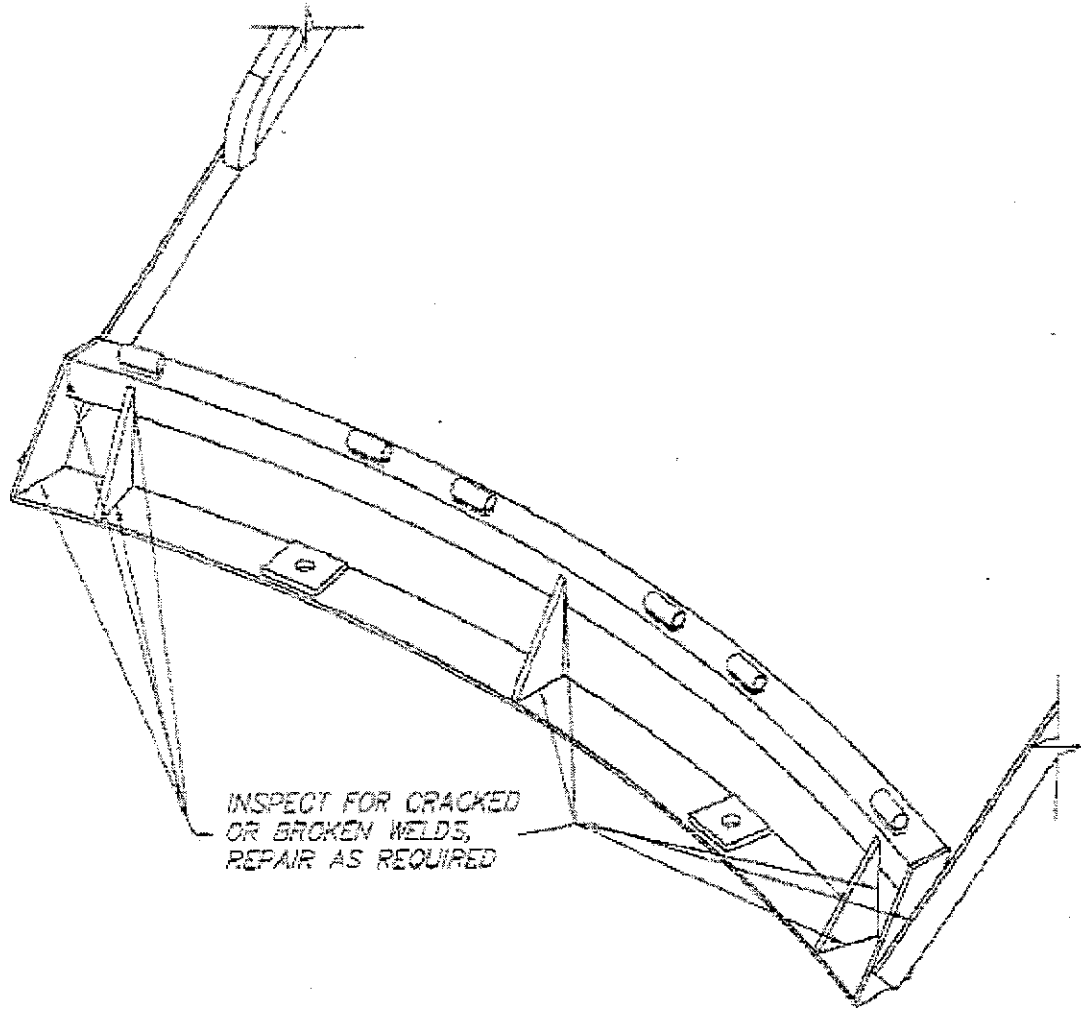
**COMPLIANCE: IMMEDIATE**

- 1) Inspect the welds and steel components of the internal frame of each panel for cracked or broken components.
  - ✓ If broken components or numerous repairs have been required contact Wisdom Industries, for information on proper repair procedure. Weld cracked or broken components with 7018 rod using good welding procedure.
- 2) Check platforms hinges for wear.
  - ✓ The best time to check the hinge for wear is when the wing is folded. Hinge bolts can be removed one at a time and the hinge checked for cracks or wear in the hinge. \*NOTE: If the hinge bolt can be easily turned with the wing down check that hinge for wear.
- 3) Check platform hinge bolts for wear.
  - ✓ Check that the 4 outer main hinge bolts are in good condition. The hinge bolts must be grade 8. After the ride is set up if any of the hinge bolts can be turned that hinge and bolt must be checked for wear.
- 4) Check that the platform hinge bolts are grade 8.
- 5) Check tire air pressure for 35 psi.
  - ✓ Air pressure must be within 5 psi on all 4 tires.

**\*Continued on next page**

- 6) Check wing level within  $\frac{3}{4}$  inch of main table.
  - ✓ Review procedure for checking wing level and shim wing if required.
- 7) Check bottom strap to seat angle gussets for missing or broken gussets.
  - ✓ If bottom strap to seat angle gussets are broken or have been welded several times, replace gussets.
- 8) Check condition of the underwing alignment bolts. These bolts must be  $\frac{7}{8}$  diameter.
- 9) Check condition of the fiberglass at the lower end of the panel. If a large amount of fiberglass is missing under the floor strap or on the vertical section just up from the floor strap this must be replaced.

**❖ NOTE: ATTACHED IS OUR 8/93 BULLETIN ON PROCEDURES FOR LEVELING OF GRAVITRON/STARSHIP 2000 TURNTABLE WINGS. SEE #6**



INSPECT FOR CRACKED  
OR BROKEN WELDS,  
REPAIR AS REQUIRED



**WISDOM INDUSTRIES** Merino, CO 80741

APPROVED BY:

TITLE:

**BOTTOM OF PANEL - WELD INSPECTION**

SCALE: QUARTER

DATE: 04/08/04

EQUIPMENT:

**GRAMTRON/STARSHIP**

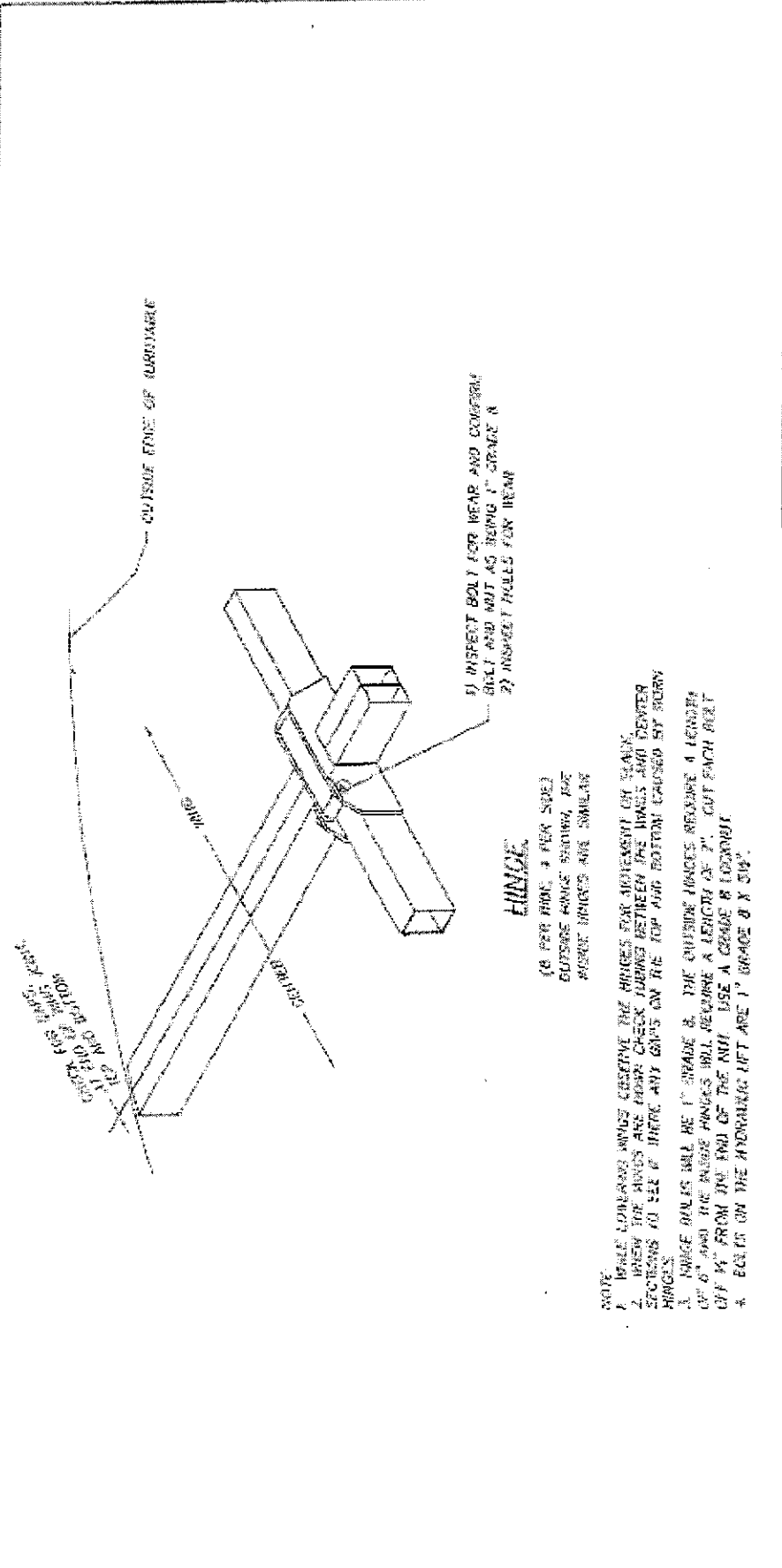
DRAWN BY:

JUR

DRAWING NUMBER:

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- 1) INSPECT BOLT FOR WEAR AND CORROSION
- 2) INSPECT NUT AS BEING 1" GRADE 8
- 3) INSPECT HOLES FOR WEAR

**HINGE**

10 PER HINGE 3 PER SIDE  
 OUTSIDE HINGE BOWING, FOR  
 INSIDE HINGE ARE SAME AS

- NOTE:**
1. WHILE LOWERING HINGE CHECK THE HINGE FOR MOVEMENT OR SLACK.
  2. WHEN THE HINGE IS DOWN CHECK FOR BOWING BETWEEN THE HINGE AND DOWER STOPS TO SEE IF THERE ARE GAPS ON THE TOP AND BOTTOM CAUSED BY BOWY HINGES.
  3. HINGE BOLTS WILL BE 1" GRADE 8. THE INSIDE HINGE BOWING A LENGTH OF 6" AND THE INSIDE HINGE WILL REQUIRE A LENGTH OF 7" CUT EACH BOLT OFF 1/2" FROM THE END OF THE NUT USE A GRADE 8 LOCKWASH.
  4. BOLTS ON THE HYDRAULIC LIFT ARE 1" GRADE 8 X 3/4".

**NOTE: BEFORE REMOVING ANY BOLTS INSURE THE TURNABLE IS SET UP ALL SUPPORTS AND TURNABLE BOLTS ARE IN PLACE AND SET UP A GOOD SUPPORT UNDER THAT SECTION THE BOLT IS TO BE REMOVED.**

<b>WISDOM INDUSTRIES</b>		Moline, CO 80/41	
SCALE: 1" = 1'-0"	DATE: 01/08/04	DESIGNED BY: JBR	REVISION:
PROJECT: HINGE INSPECTION		DRAWING NO: 70-043	
DESCRIPTION: GRAMMIGNON / TURNSHIP		ISSUED DATE: 7/0/04	