

Dartron

Issuing Entity:
Dartron Industries, Inc

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Bulletin # PIB-5R-001

Release Date: March 27, 2006

Effective Date: N/A

Supersedes: N/A

Completion Date: N/A

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PRODUCT IMPROVEMENT

Ride Manufacturer: Dartron Industries, Inc.

Affected Production Dates: 2003,2004 & 2005

Ride Name: Zero Gravity

Affected Serial #'s 0301201-5R, 0302102-5R,

0303103-5R, 0303244-5R, 0307245-5R, 0310092-5R, 0312233-5R, 0403034-5R, 0404125-5R,

0510042-5R, 0510053-5R, 0511081-5R, 0512064-5R, 0502145-5R and 0503076-5R

Model # All

Abstract of Issue: To upgrade the commutator on the Zero Gravity

Reason for release: Current commutator shaft requires that the center column be removed prior to removing or working on the commutator.

Action to be taken: Replace the existing commutator shaft with a shaft and sleeve combination that will allow the commutator to be more readily accessed.

Detail of issue:

CAUTION: Remove all power from the ride and do not reconnect until all steps have been completed.

CAUTION: Do not work under a suspended load at any time.

NOTE: It is easier to do these operations with the ride completely racked. However, it may also be done with the ride completely set-up.

1. Begin by scribing an alignment mark on the column base and a corresponding mark on the top hub plate.
2. Disconnect the plug on the Center Light panel and remove.
3. Remove all the cables from the center column and tie into approximately 10-12 inch wrapped circles.
4. Disconnect the wires for the center light panel and the strobes from inside the junction box on hub. Make sure all wires are marked prior to removal.
5. Loosen the cord restraints for these wires on the side of the hub.
6. Feed the cords into the hub.

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7. Connect a Crane or Hoist to the top of the column using lifting straps through the holes in the top of the column.
8. Remove the bolts from the bottom of the column where it attaches to the hub.
9. Lift the Column out of the way.
10. Disconnect the two Commutator cords from inside junction box on hub. Make sure all wires are marked prior to removal.
11. Loosen the cord restraints for these two wires on the side of the hub.
12. Feed the cords into the hub.
13. Remove the r-keys and pin from inside the hub where they hold the commutator shaft on the top side.
14. Remove the cover plate from underneath the boom on the bottom side of the bearing base.
15. Remove 2 r-keys from the 2 vertical pins on the top bracket of the commutator from the bottom side.
16. Remove the Commutator assembly through the bottom of the bearing base on the boom.
17. Remove commutator shaft from inside the commutator with the 8 setscrews, 4 each on the top and bottom.
18. Install the new shaft Dartron provided hollow shaft inside the Commutator and tighten the setscrews to allow the Commutator to rest approximately 1-5/8" from bottom of the hollow shaft.
19. Install new internal shaft by holding it up from the bottom while a second person re-installs the pin through the top of the shaft inside the hub and uses the r-key to retain it in position.
20. Insert the Commutator cords through the tube and into hub.
21. Raise the Commutator into position and install the bottom pin through the alignment hole and place the provided keeper on the pin.
22. Re-install the two r-keys onto the vertical pins at the top of the Commutator on the bottom side.
23. Push the Commutator cords through the restraints on hub.
24. Install into the junction box on the side of the Hub as previously marked.
25. Replace cover on the bottom of the Bearing Base.
26. Install fish-strings into the restraints on the Hub and tie them to the corresponding cords on the bottom of the column.
27. Place the column to the Hub plate, being careful to align the scribe lines. Fish all electrical cord through the restraints in the hub.
28. Install all wires into previously marked spots within the junction box.
29. Replace cover onto the junction box.
30. Install all bolts between the Column and Hub. Torque to 180 ft/lbs.
31. Install the center light panel and plug in.
32. Reconnect all wires in the junction box on the center hub.