SERVICE	B201202054
BULLETIN	2012-03

Subject: Rider Drive System Does Not Function And Clutch Adjustment Does Not Help.

Models Affected:

96021001600, 96022001200, 96022001300, 96022001400, 96025000300, 96025000400, and 96026000100.

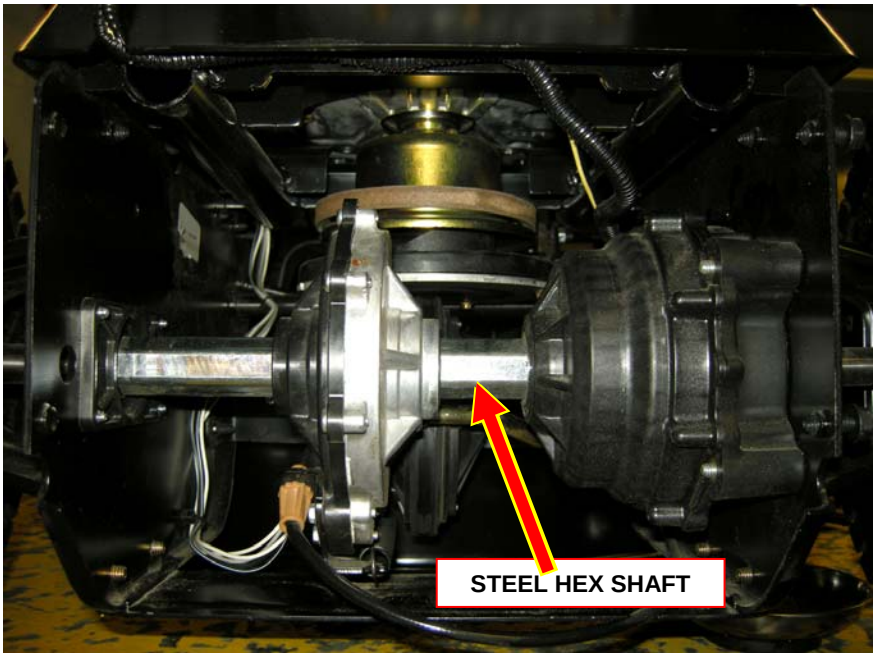
Serial numbers Affected:

All 2011 production serial numbers.

Service Information:

Replace the Primary Drive Service Kit part number **580393001.**

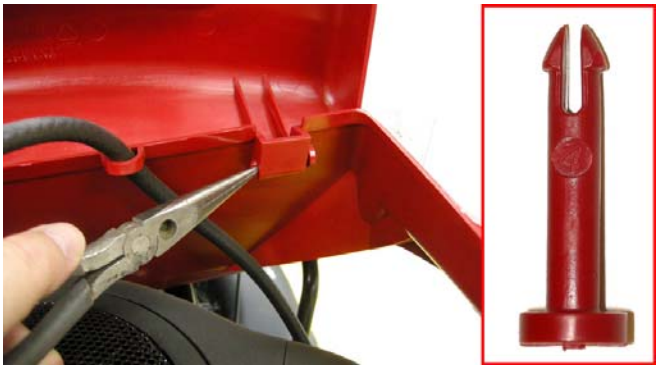
Before ordering parts check the hex shaft that goes through the primary reduction assembly. Early production smart riders had a steel hex shaft with a raw finish. A change was made during 2011 production to add a black Teflon® finish to the hex shaft. If the hex shaft does not have a black finish order a new hex tube service kit part number **580393101.** The Teflon® coated shaft will allow easier shifting. Riders with serial numbers before 030911L00XXXX should get the new hex shaft kit.



Installation Instructions:

1. Park the rider on a level surface where an overhead lift is available.
2. Remove the ignition key so the starter motor cannot be engaged.
3. Remove the spark plug wire from the spark plug.
4. Chock at least one front wheel and release the parking brake.

5. Raise the engine cover to access the hinge pins.

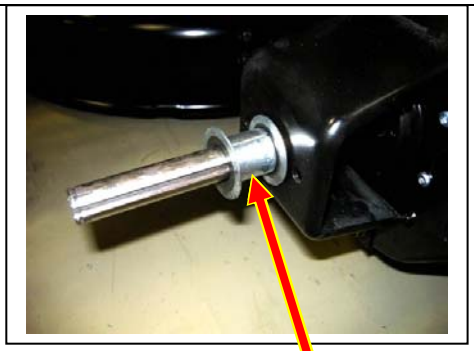


6. Use needle nose pliers of remove both hinge pins.

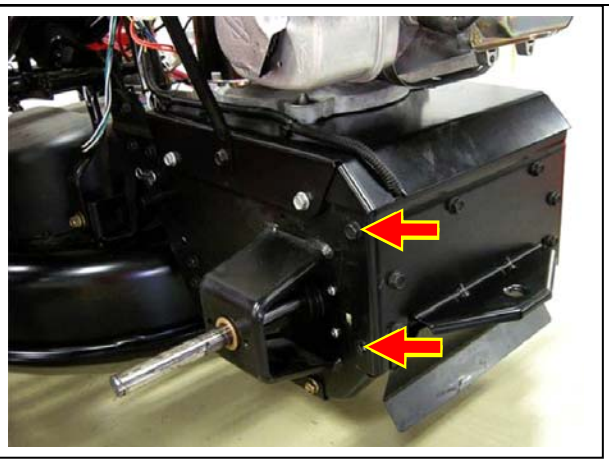
7. Install a lift strap between the engine and the control panel.

8. Make sure the strap is installed across the chassis tubes and does not damage any electrical wires or cables.

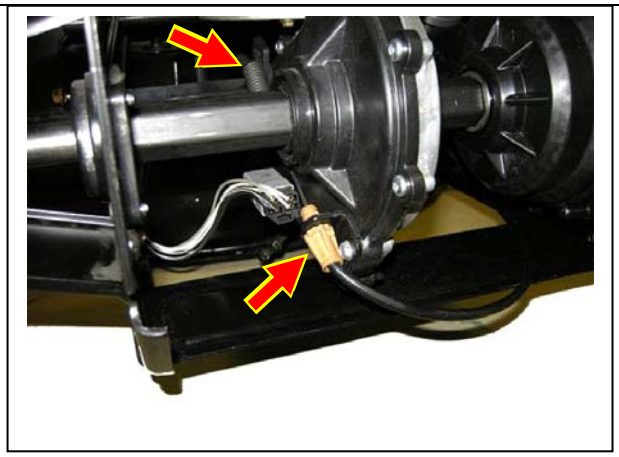
9. Remove both rear wheels.
Retain the parts for reassembly.



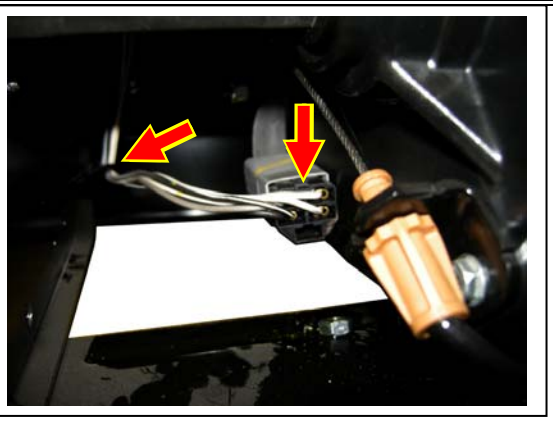
10. Remove the washers and the split spacer.



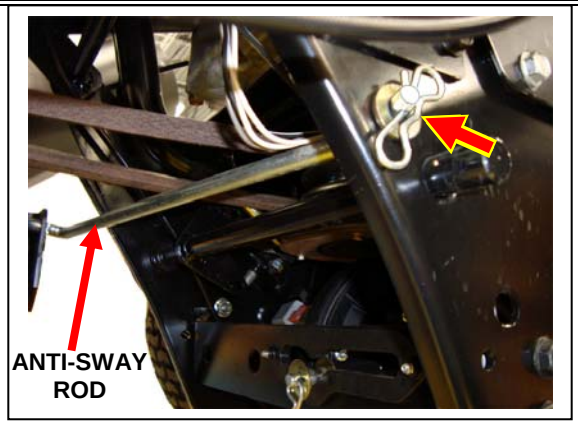
11. Remove the rear cover by removing two self tapping screws on each side.



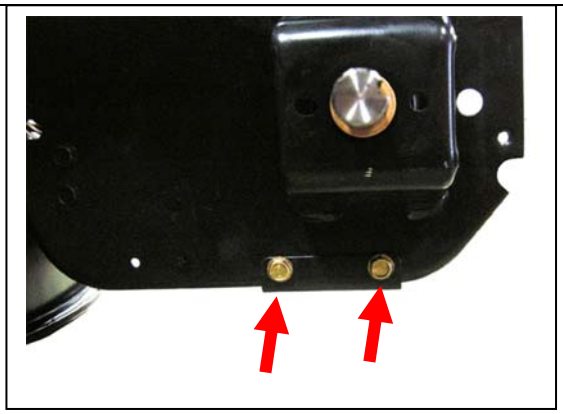
12. Remove the brake cable. Use needle nose pliers to remove the conduit clip and remove the spring from the brake lever.



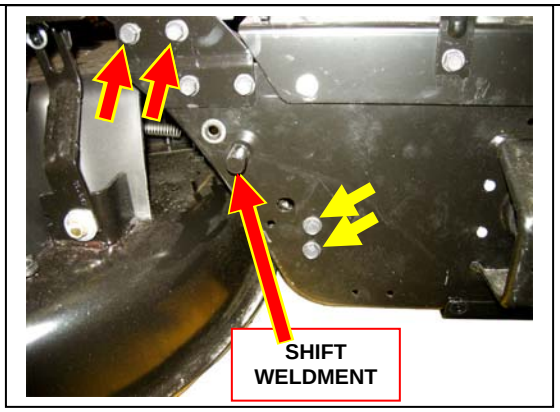
13. Remove the connector from the interlock switch. Remove the push in clip from the left weldment plate.



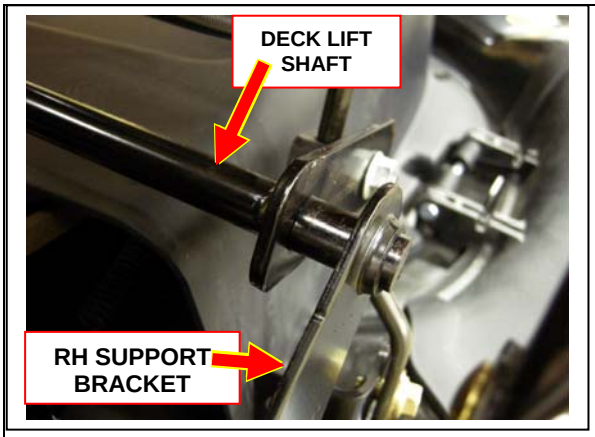
14. Remove the bowtie clip from the mower anti-sway rod.



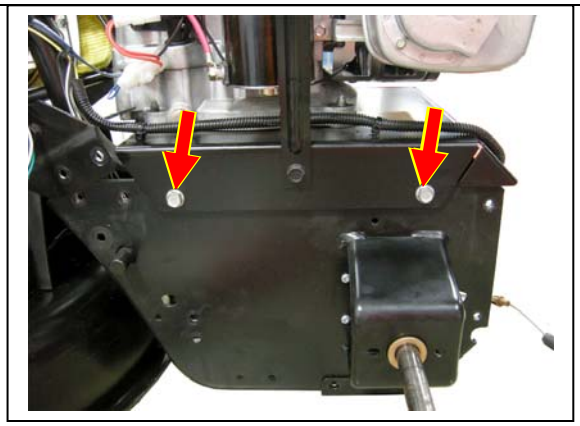
15. Remove two screws from the cross brace.
16. Lower rider to the ground.



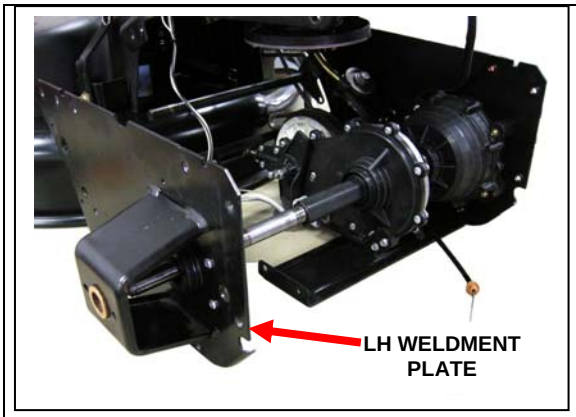
17. Remove two screws at LH support bracket.
18. Remove two screws at the front bracket (yellow arrows.)



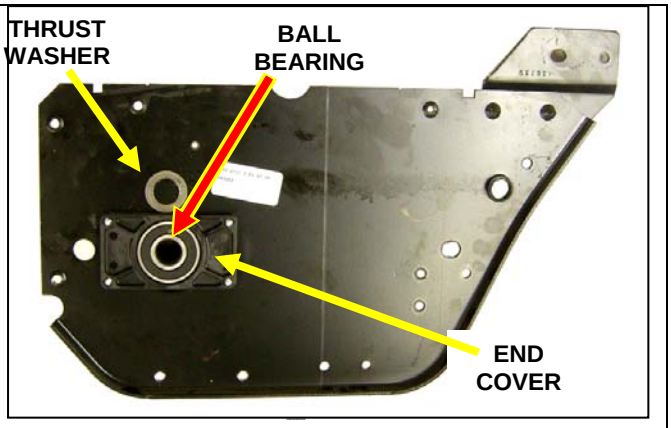
19. Pull the deck left shaft out of the opening in the RH support bracket.



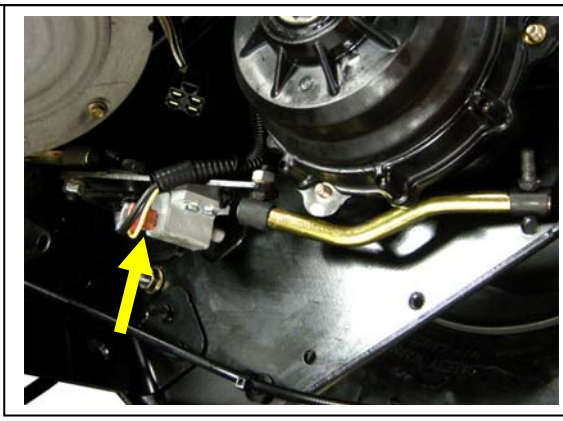
20. Remove the two screws on each side that hold the engine support plate to the axle weldments and chassis.



21. Raise the engine and chassis.
22. Remove the LH weldment plate from the transmission.



23. Find the thrust washer and the ball bearing.
If the ball bearing comes out of the end cover in the LH weldment during disassembly, place it back.

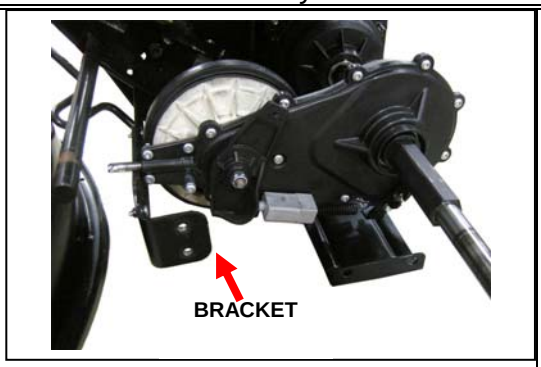


24. Depending on your work set-up you may not need to remove the harness from the ROS interlock switch on shift plate on right side in front of differential. You would need to cut the plastic tie.

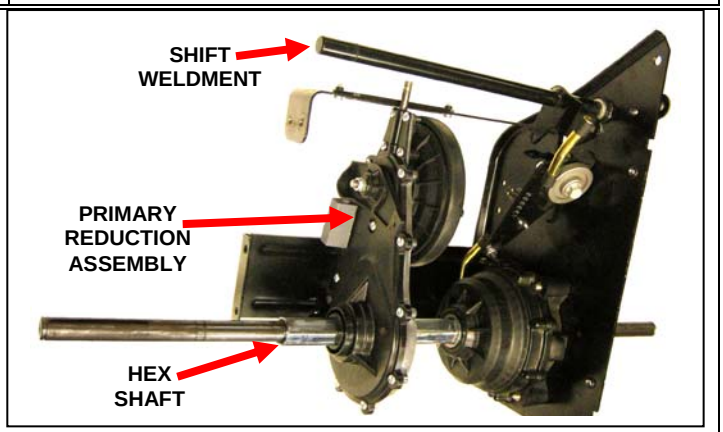
25. Remove the shift linkage from the primary reduction assembly. A thin 3/8” open end is needed for the stud on the linkage.

26. Remove the retainer spring, washers, and split spacer from the pin on the end of the first reduction assembly.

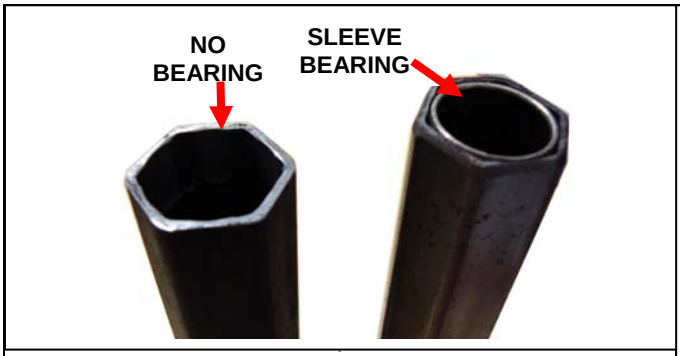
27. Retain the retainer spring, washers and split spacer for reassembly.



28. Deflect the front bracket show so the pin at the front of the primary reduction assembly can be removed from the track.



29. Remove the primary reduction assembly and the hex shaft.



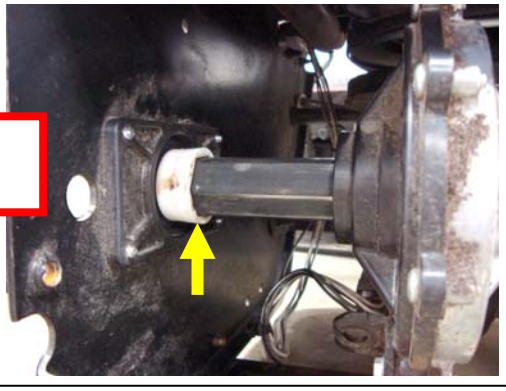
30. Inspect the hex shaft. If it doe not have the black finish it should be replaced with a 580393101 Hex Tube Service Kit. Note that one hex shaft has a sleeve bearing and the other hex shaft does not.

31. If there is a sleeve bearing in the hex shaft a 441715 thrust washer is assembled onto the left end. When there is no sleeve bearing in a hex shaft a 442501 hex tube cap is installed at the left end of the hex shaft.

32. Reverse the process to install the new primary reduction assembly. There are some additional comments to help with the reassembly.

33. Install the hex shaft into the opening in the differential.

EITHER
OR

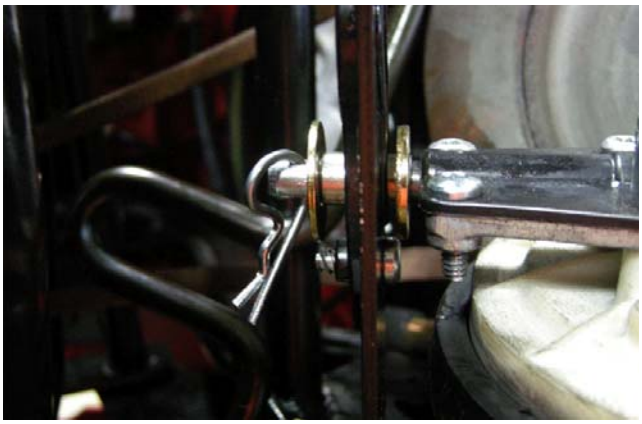


34. Install the thrust washer or the 442501 hex end cap at the end of the Teflon® coated hex shaft over the sleeve bearing.

35. When the hex end cap is installed with the shaft from the kit it will look like this.
Never install a thrust washer with the hex end cap.

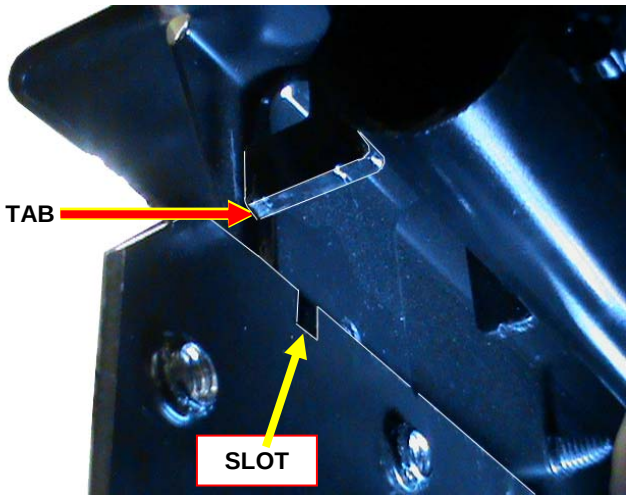
36. During reassembly watch the positions of the mower lift shaft, the shift weldment (steps 17 and 29) and the anti-sway rod (step 14). These need to be kept in positions that will allow reassembly.

* The mower lift shaft must be in the RH support bracket. See step 19.

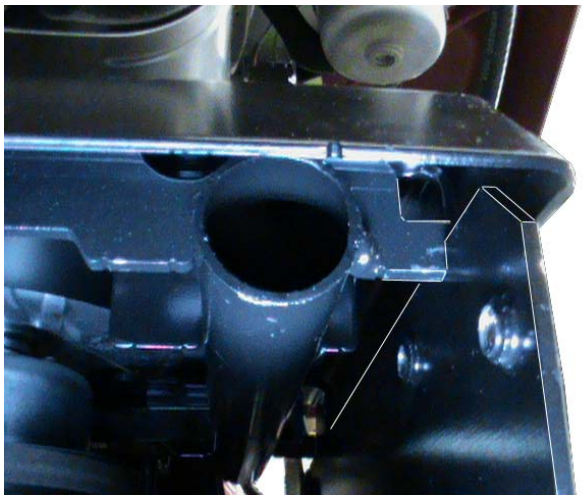


37. Here is another view of the hardware on the primary reduction assembly pin. This should help to install the washers and split spacer in the correct positions.

* See steps 26 and 27 for other views.



38. When assembling the LH Axle Support to the Chassis and the Engine Plate, there are tabs in the chassis that must fit into slots in the LH axle support weldment.



39. With the engine support plate, the chassis, and the LH and LR weldment plates together, it is possible to shift the chassis forwards and rearwards until the tabs fall into place in the slots of the weldment plates.

PARTS:

- Order and install the Primary Drive Service Kit part number **580393001.**

Parts included with 580393001 Primary Drive Service Kit		
QTY	**PART NUMBER**	**DESCRIPTION**
1	**443885**	**Primary Reduction Assembly**
1	**580392901**	**Instruction Sheet**

- The Hex Tube Service Kit part number **580393101** may also be needed. Verify the need for this part using information on the first page of this service bulletin.

Parts included with 580393101 Hex Tube Service Kit		
QTY	**PART NUMBER**	**DESCRIPTION**
1	**442953**	**Tube, Input, Hex**
1	**442501**	**Cap, Tube, Hex**

PARTS USED FOR REPAIR: Part number 580393001 Primary Drive Service Kit and if needed part number 580393101 Hex Tube Service Kit.

PICK UP & DELIVERY / SERVICE TRIP CHARGE: None or N/A

LABOR TIME: 8 units of labor (1 Unit = 6 minutes) All units including paperwork.