



**Service  
Bulletin**

**B0303012  
2003-07**

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**Subject:** Consumer Z Steering Cables / Cable Swivels/ Dampeners

**Affected Models:** CZ4815AA 968999219  
CZ4817KOA 968999220

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To further insure dependable operation and durability of the steering cables, the lower cable swivels have been improved. A kit has been developed consisting of two new swivels and instructions for installation. These swivels will be added to the dampener/cable end rework kits (539108798) and the part number will supersede to 539109337. The new swivels are recognizable as square rather than round.

The following can be used to recognize what reworks have already been accomplished.

Units with no previous rework performed will have white text on the dampeners and e-clips securing the deck idler spring swivels to the tensioning bracket. These units will require the new complete rework kit # 539109337 which includes all previous rework components as well as the new lower end cable swivels.

Units already reworked with original dampener/cable end kit will have blue text on the steering dampeners and cotter pins fastening the deck idler spring swivels to the tensioning bracket. On these units, if the lower cable swivels are round, only lower swivel kit # 539109335 is required.

**Parts Information:**

Complete rework kit (includes lower end swivels)	Part Number 539109337
Lower end cable swivel kit only	Part Number 539109335

**Note: If steering cables are damaged or broken, they must be ordered separately as they are not included in these kits**

**Warranty Information:**

Normal warranty applies. 45 minutes will be allowed for installation of 539109337 kits.  
15 minutes will be allowed for installation of 539109335 kits.

**DAMPENER AND CABLE END REPLACEMENT  
PART NO. 539109337  
FOR MODELS: CZ4815 (968999219)  
CZ4817 (968999220)**

**TOOLS NEEDED:**

Punch  
Hammer  
7/16" open end wrench  
5/32" hex allen wrench  
7/16" socket ratchet  
2- 11/16" open end wrench  
Wire cutters  
1/2" deep socket  
Pliers  
1/2" open end wrench  
Straight screwdriver  
Tape measure

**KIT CONTENTS:**

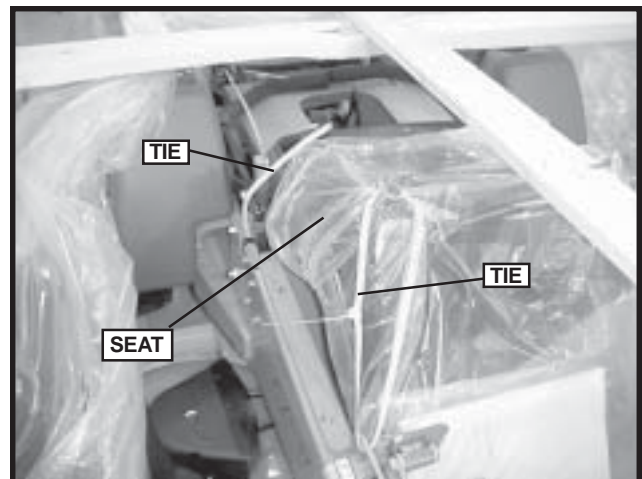
PART NO.	QTY.	DESCRIPTION
539108663	2	UPPER CABLE END
539108793	2	DAMPENER
539102431	3	PLASTIC TIE
539108884	10	NAIL, #10 X 3
539108883	1	SWIVEL
539990122	1	3/8 SAE WASHER
539990365	1	COTTER PIN
539108981	1	SCUFF GUARD
539109334	2	LOWER CABLE END

**UNPACKING:**

1. Using a punch and hammer drive the main nails thru the top of the crate so it can be removed without damaging the top of the crate.
4. To remove the seat, cut plastic ties (three) and remove the seat. See Figure 2



**FIGURE 1**



**FIGURE 2**

2. Set the crate top off to the side out of the way. Use a hammer to bend over any protruding nails from beneath the upper side of the crate.
3. Pull the plastic bag back out of the way so you can access the area between the fuel tank and console.
5. Fold the drive levers up and fold them into the neutral slots on both sides.
6. Flip the seat pan up so you have access to the cables and dampeners. See Figure 3.

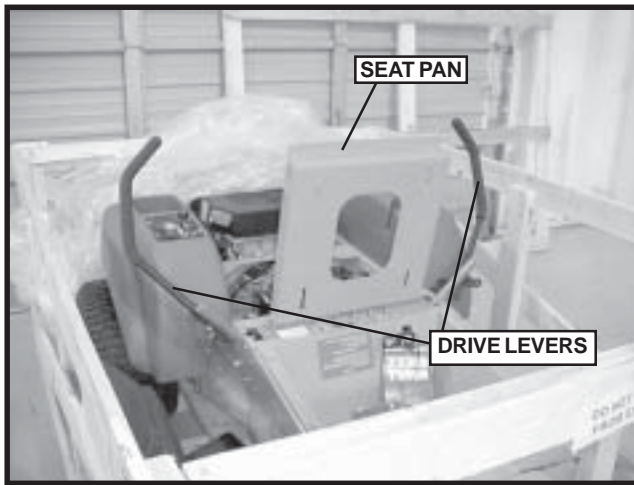


FIGURE 3

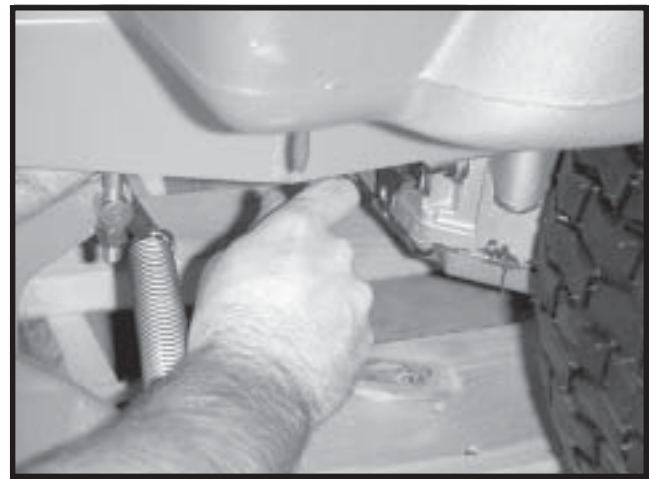


FIGURE 5

### REMOVING DAMPENERS:

1. Using a 7/16" open end wrench and a 5/32" hex allen wrench, remove the hardware fastening the dampener on the top side. Repeat on other side. See Figure 4.

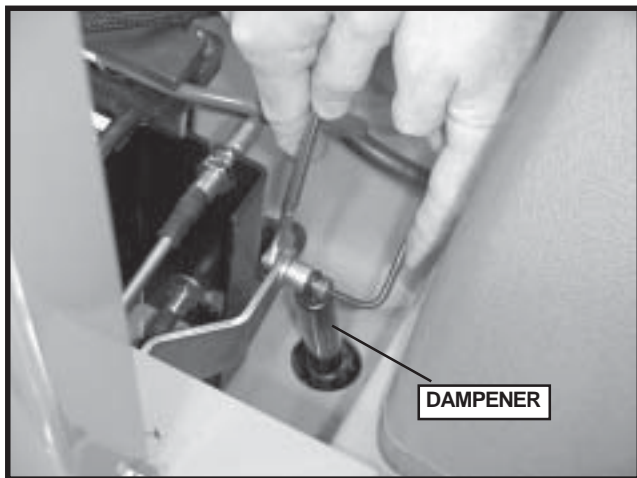


FIGURE 4

2. Using a 7/16" socket ratchet and a 5/32" hex allen wrench, remove the hardware fastening the dampener under the frame. Repeat on other side. See Figure 5.

### REMOVING LOWER CABLE CONTROL SWIVELS:

1. Reach under the side of the mower and remove the hairpin and the washer from the back-side of the IZT arm. See Figure 6. Repeat on the other side.

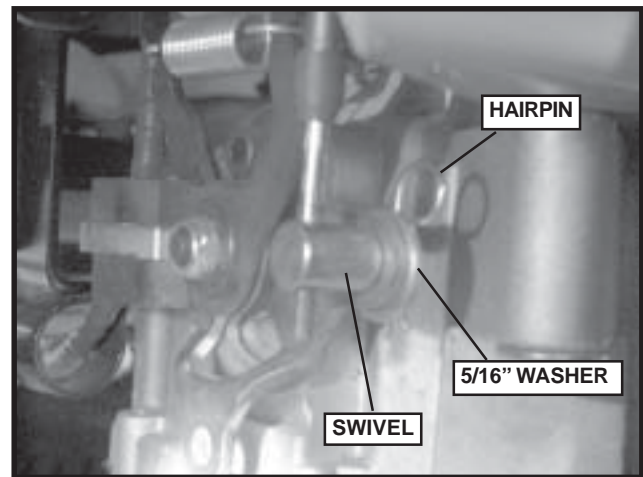


FIGURE 6

2. Being careful not to apply a side load to the cable, pull the swivel out of the IZT arm and remove the swivel from the cable end. Repeat on the other side.

### INSTALLING NEW LOWER CABLE END:

1. Thread the new lower cable end, Part No. 109334, onto the cable. The counterbored end must go first and the swivel threaded all of the way onto the cable until it bottoms out. The unthreaded portion of the cable will go into the lower cable end approximately 1/8". Repeat on the other side. See Figure 7.

2. Reinsert the lower cable end thru the IZT arm and reinstall the washer and the hairpin. See Figure 7. Repeat on the other side.  
Hairpin can be installed from the top or bottom.

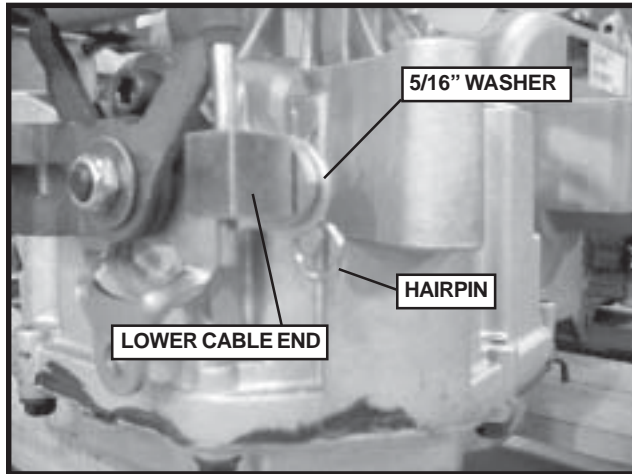


FIGURE 7

### REMOVING UPPER CABLE CONTROL SWIVELS:

1. Reach under the seat support and remove the hairpin and washer holding the swivel to the control brackets. See Figure 8. Repeat on other side.

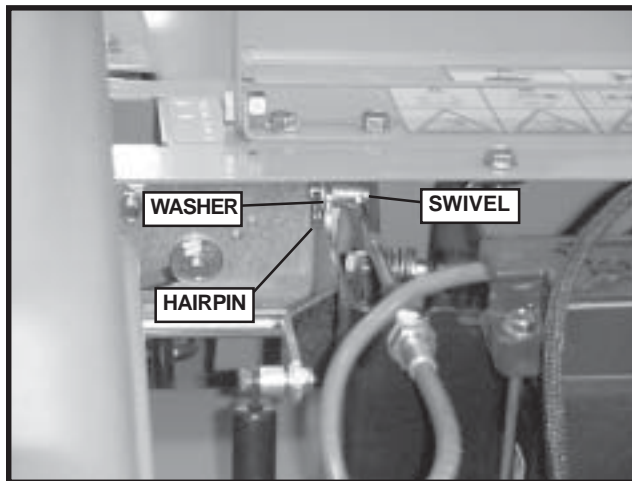


FIGURE 8

2. Using two 11/16" open end wrenches loosen the nuts holding the cable in place. Remove the cable out of the bracket. Repeat on other side. See Figure 9.

**NOTE:** Note the location of the nuts so when you reassemble they are approximately in the same location.



FIGURE 9

3. Being careful not to apply a side load to the end of the cable, pull the cable out so the control swivel is accessible and remove the swivel from the cable end. See Figure 10. Repeat on other side.

**NOTE:** Note the location of the swivel on the cable end, so you can install the new cable end to approximately the same position.

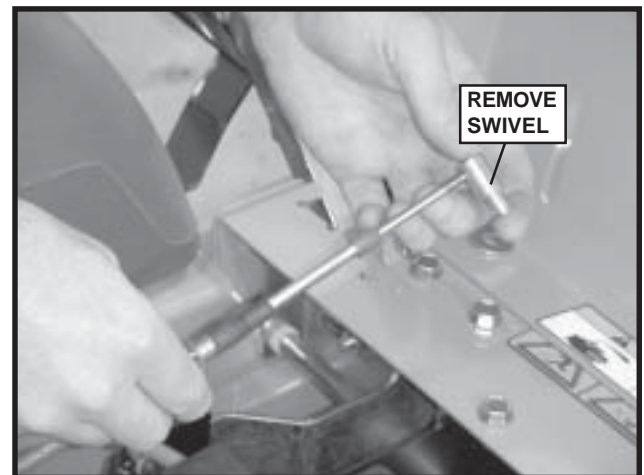


FIGURE 10

### INSTALLING NEW UPPER CABLE CONTROL SWIVELS:

1. Thread the new end onto the cable approximately to the same location as the old swivel. Repeat on other side. See Figure 11.



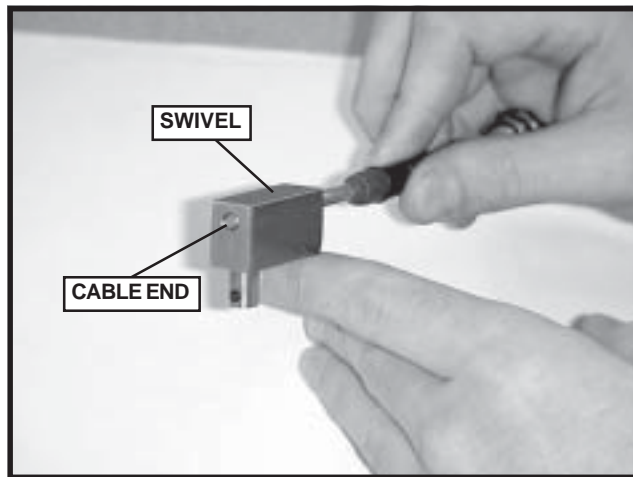


FIGURE 11

2. Route the cable back under the seat support. Repeat on other side.

**NOTE:** Use caution not to apply any side pressure from the black rubber guard to the end of the cable.  
See Figure 12.

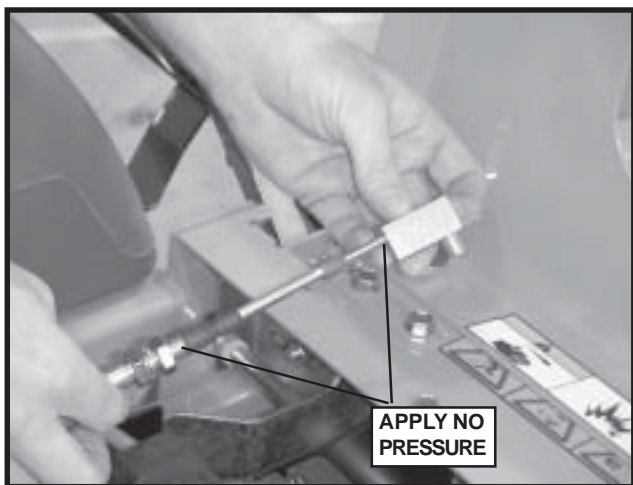


FIGURE 12

3. Using the two 11/16" open end wrenches, fasten the cable back to the bracket. Make sure the cable is all the way down into the slot on the bracket. Repeat on the other side.
4. With the drive lever in the neutral slot, turn the cable swivel until it lines up with the hole in the control bracket. Repeat on the other side.
5. Fasten the washer and hairpin to the new upper cable swivel. Repeat on other side.

## INSTALLING NEW DAMPENERS:

1. Using a 7/16" open end wrench and a 5/32" hex allen wrench, reinstall the new dampener to the control bracket on the top side. Repeat on other side. See Figure 13.

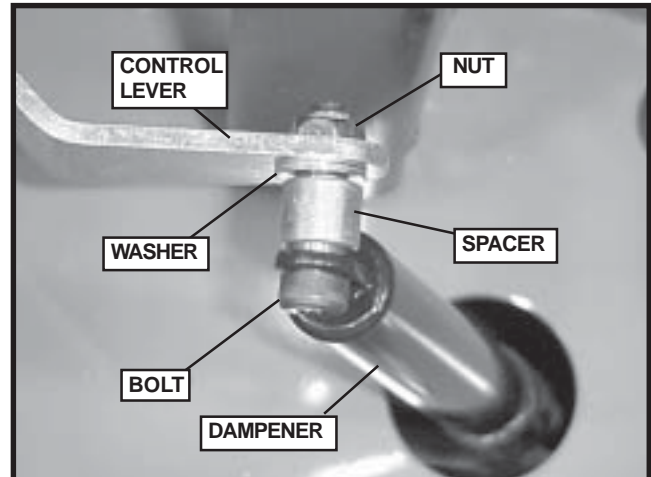


FIGURE 13

2. Using 7/16" socket ratchet and a 5/32" hex allen wrench, reinstall the new dampener on the bracket under the frame. Repeat on other side.

**NOTE:** Make sure the dampeners moves freely when the drive levers are moved forward and back.

## CHECK LIST:

1. Make sure the drive levers are bottoming out on the frame and not the cable when pushed all the way forward. See Figure 14.

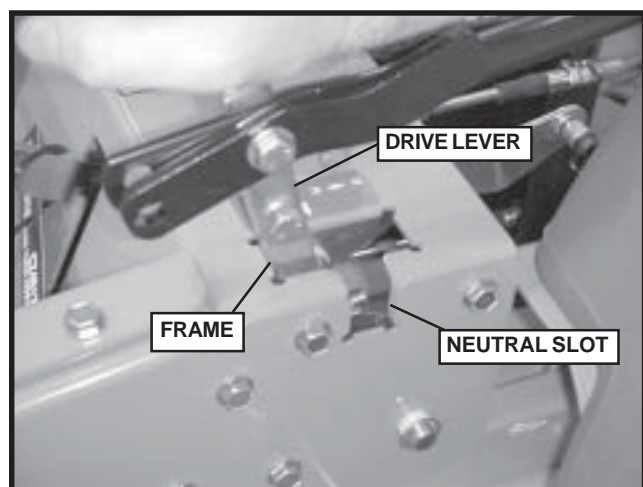
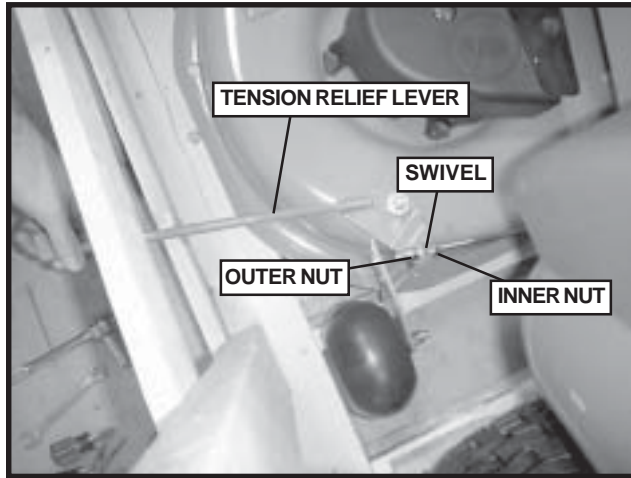


FIGURE 14

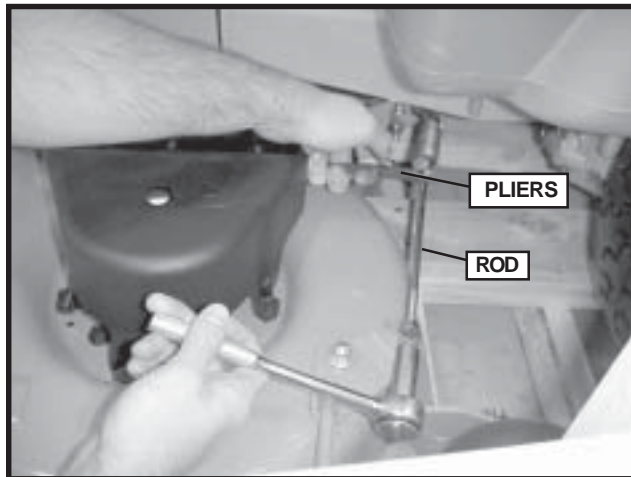
**CHANGING SWIVEL ON DECK TENSION LEVER:**

1. Fold the tension relief lever out to relieve the tension on the spring. See Figure 15.



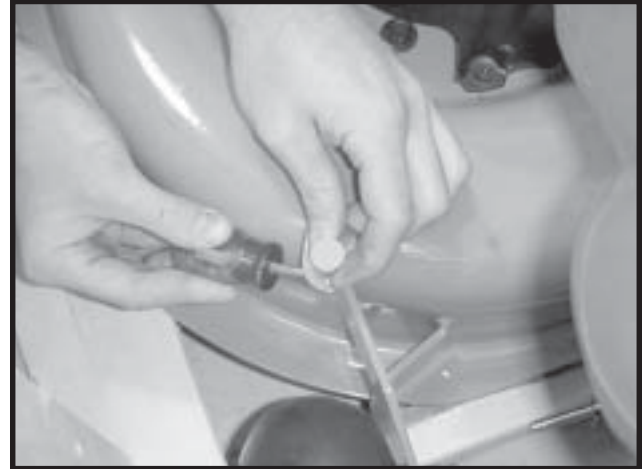
**FIGURE 15**

2. Using a 1/2" deep socket and pliers to hold the rod, remove the outer nut. See Figure 16.

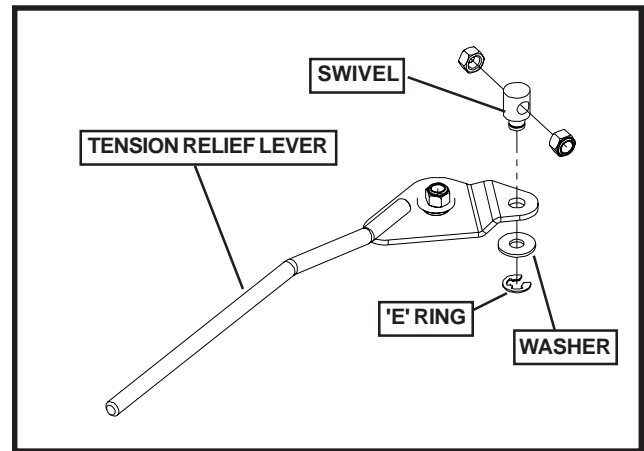


**FIGURE 16**

3. Using a straight edge screwdriver remove the e-ring on the bottom side of the swivel. See Figures 17 and 18.

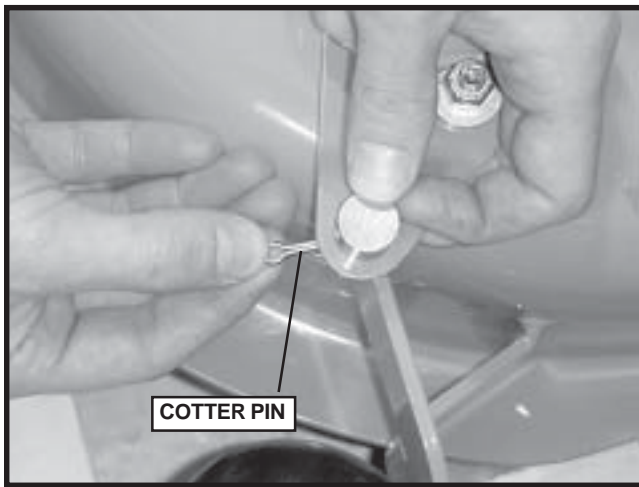


**FIGURE 17**



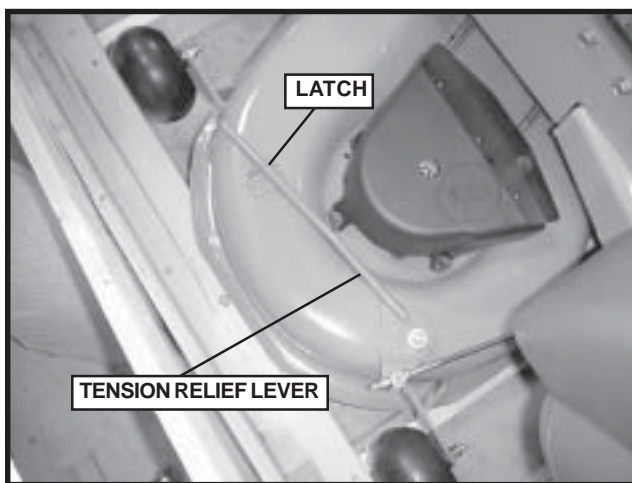
**FIGURE 18**

4. Remove the old swivel.
5. Install the new swivel thru the hole on the tension relief lever.
6. Place the 3/8" SAE washer on the bottom side of the swivel then insert the cotter pin. See Figure 19.



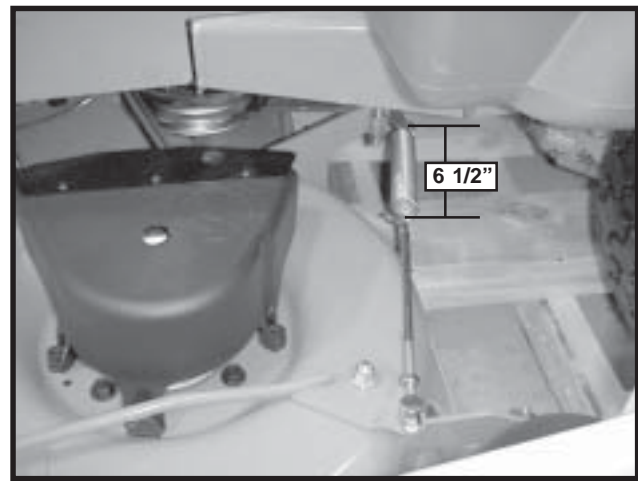
**FIGURE 19**

- Using the pliers, bend both legs on the cotter pin 90° back to retain the new swivel in the lever.
  - Insert the rod thru the hole in the swivel.
  - Fasten the outer nut back to the rod.
10. Fold the tension relief lever in to apply spring pressure and latch. See Figure 20.



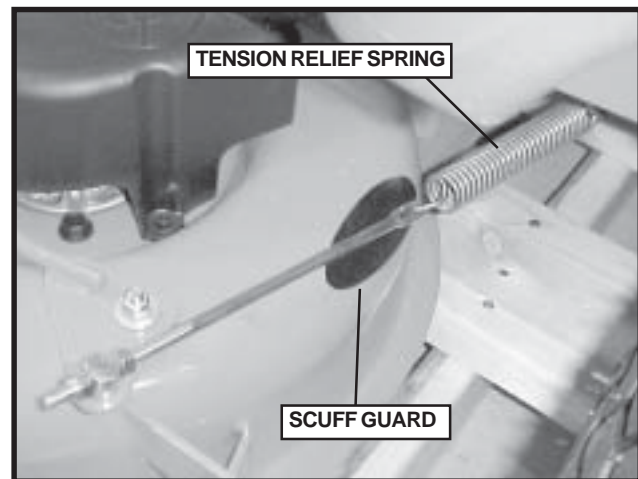
**FIGURE 20**

- Adjust the outer nut until the spring measures 6 1/2" from loop to loop. Then lock in place with the inner nut. See Figure 21.



**FIGURE 21**

- Align scuff guard on deck to keep the tension relief spring from rubbing on the mower deck. See Figure 22.



**FIGURE 22**

#### **REPACKAGING:**

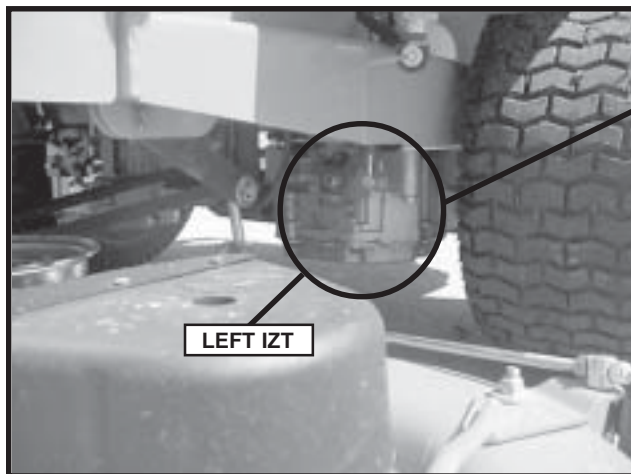
- Fold the seat pan down.
- Fold the drive levers in and down against the seat pan.
- Place the seat upside down on the seat pan.
- Fasten the seat down using the three plastic ties.
- Pull the plastic bag back over the unit.
- Install the top of the crate and nail in place.

**LOWER CABLE END REWORK**  
**PART NO. 539109335**  
**FOR MODELS: CZ4815 (968999219)**  
**CZ4817 (968999220)**

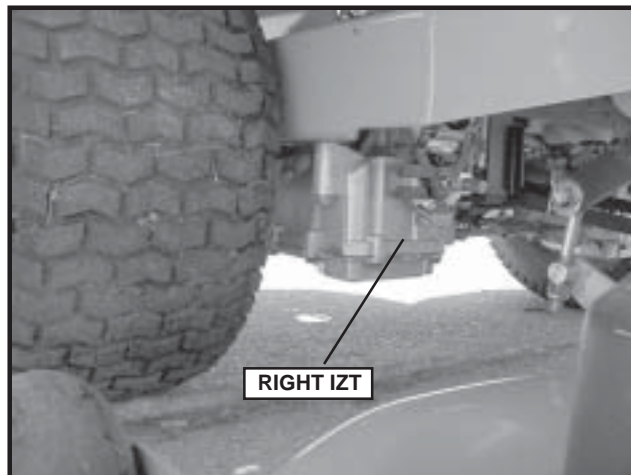
**KIT CONTENTS:**

PART NO.	QTY.	DESCRIPTION
539109334	2	LOWER CABLE END

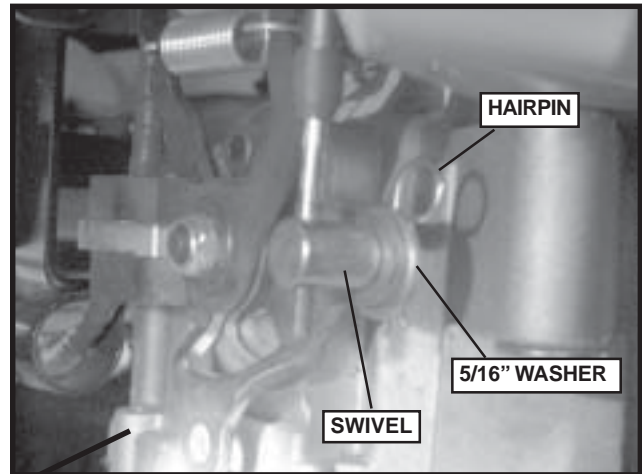
1. Crated units are more easily reworked if they are raised and secured in a safe position 2-3 feet off the ground.
2. Pull back the plastic on both sides of the mower so the lower cable ends are visible. See Figure 3. If your mower is un-crated, fold the drive levers into the operating position.



**FIGURE 1**



**FIGURE 2**

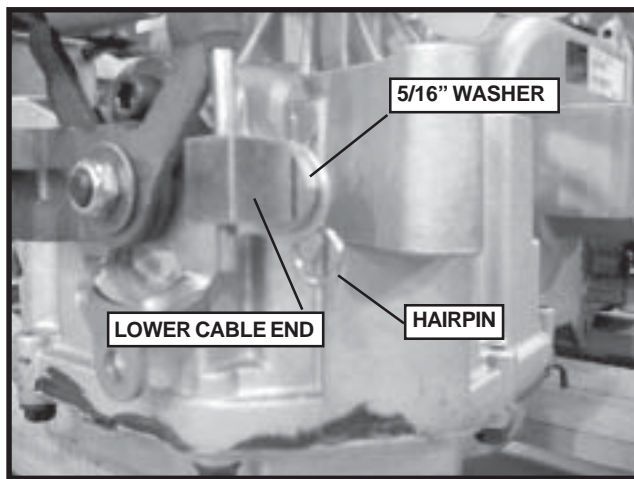


**FIGURE 3**

3. Remove the hairpin and the 5/16" flat washer from the back side of the IZT arm.
4. Remove the swivel from the IZT arm and unthread the swivel from the end of the cable.
5. Thread the new lower cable end, Part No. 109334, onto the cable. The counterbored end must go on the cable first. **The lower cable end needs to be threaded all the way onto the cable until it bottoms out.** The unthreaded portion of the cable will go into the lower cable end approximately 1/8".
6. Reinsert the lower cable end thru the IZT arm and reinstall the 5/16" washer and the hairpin.

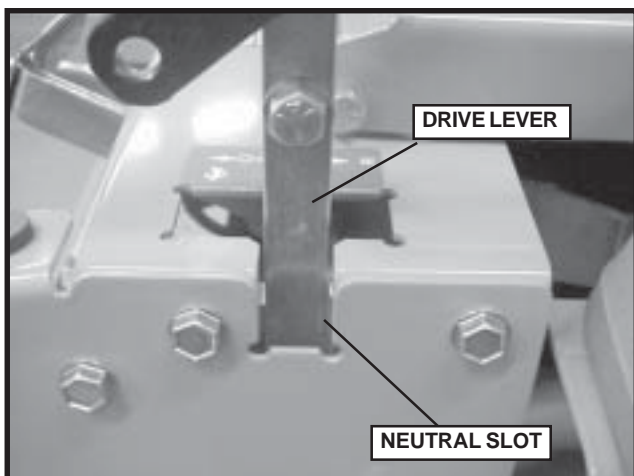
**NOTE:** To reinstall the hairpin on the right IZT, the deck should be in the lowest cutting position. Hairpin can be installed from the top or bottom





**FIGURE 4**

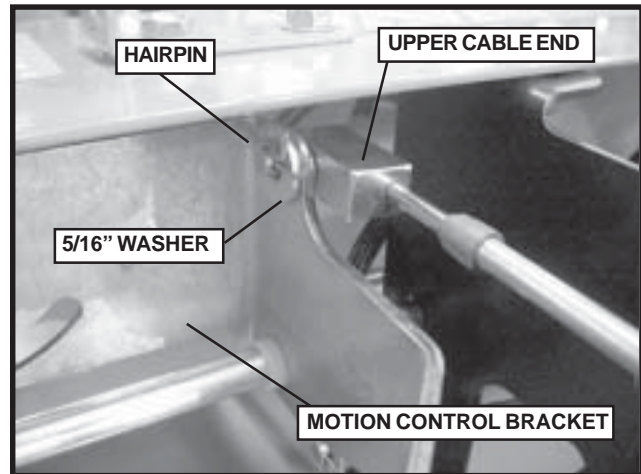
7. Move the plastic up so that the drive levers can be seen. Visually check the location of the drive lever to assure that it is in line with the neutral slot. See Figure 5. If it is not, proceed with the following steps. If it is in line with the neutral slot, skip to step 14.



**FIGURE 5**

8. Remove the hairpin and 5/16" washer from the upper cable end. The upper cable end can be accessed from the top under the seat pan. If the unit is secured in the air, it can also be accessed from the bottom on the back side of the console.

9. Remove the upper cable end from the motion control bracket. See Figure 6.



**FIGURE 6**

10. Place the drive levers so that they are in line with the neutral slot. See Figure 5. If your mower is un-crated, fold the drive levers out into the neutral position.
11. Adjust the upper cable end so that it will pass thru the hole in the motion control bracket.
12. Reinstall the 5/16" washer and hairpin.
13. Verify that the drive lever is still in-line with the neutral slot, (Figure 3) if it is not, repeat steps 8 thru 13. Repeat operation on opposite side.
14. Pull the plastic bag back over the mower.
15. The rework is now complete.