

# Instruction Sheet

## Kit Number: 52619200

### ELECTRIC CHUTE GEAR KIT



**WARNING:** FAILURE TO FOLLOW INSTRUCTIONS could result in personal injury and/or damage to unit.

Read, understand, and follow all safety practices in Operator's Manual before beginning.

### Package Contents

Check the contents of your kit for the parts listed below. Also see Figure 1.

Item	Description	Qty	AriensCo P/N
1	Helical Gear	1	09384600
2	Worm Drive	1	09384700
3	#12 x 3/4" Plastite Hex Screws	8*	06100232
4	MP NLGI 1 Lithium Grease	1	00979806

\* Not all screws may be used. Sufficient screws to repair either chute deflector cap or rotation assembly are included.

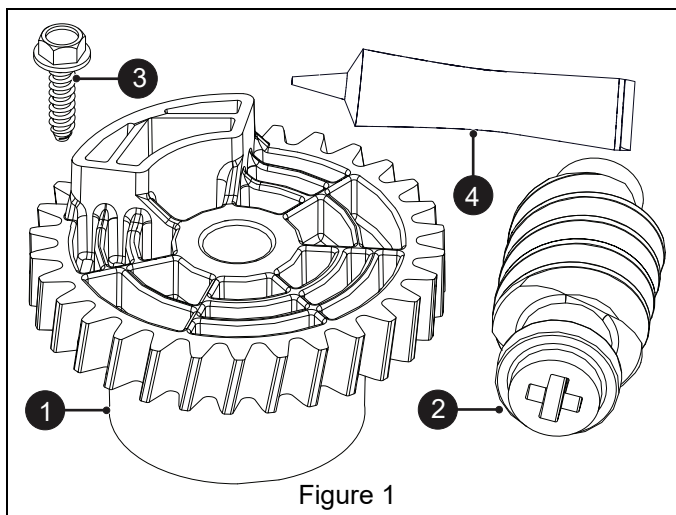


Figure 1

**NOTICE:** See *Chute Cap Deflector motor assembly Gears on page 6* for chute cap deflection motor assembly rebuild procedure.

### CHUTE ROTATION MOTOR ASSEMBLY GEARS

#### Removal

1. Stop engine. wait for all moving parts to stop and for hot parts to cool.
2. Remove key.
3. Disconnect chute deflector cable from chute rotation motor assembly cover. See Figure 2.

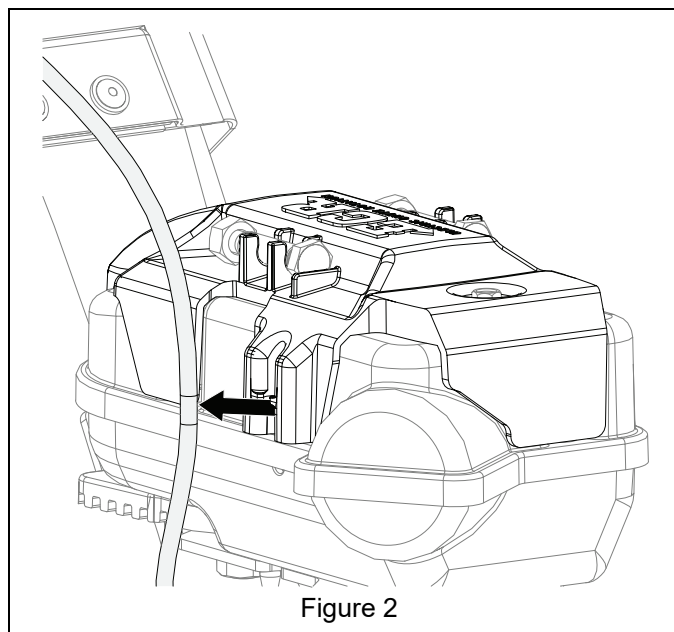
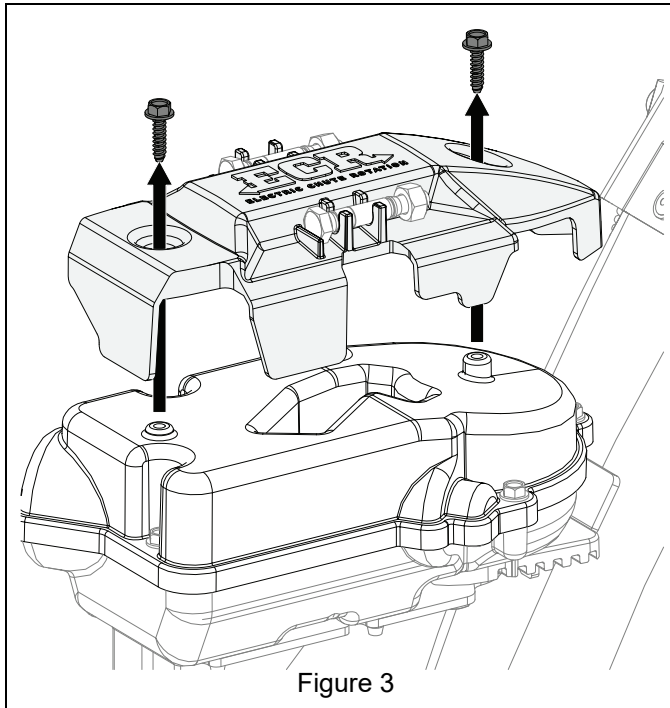
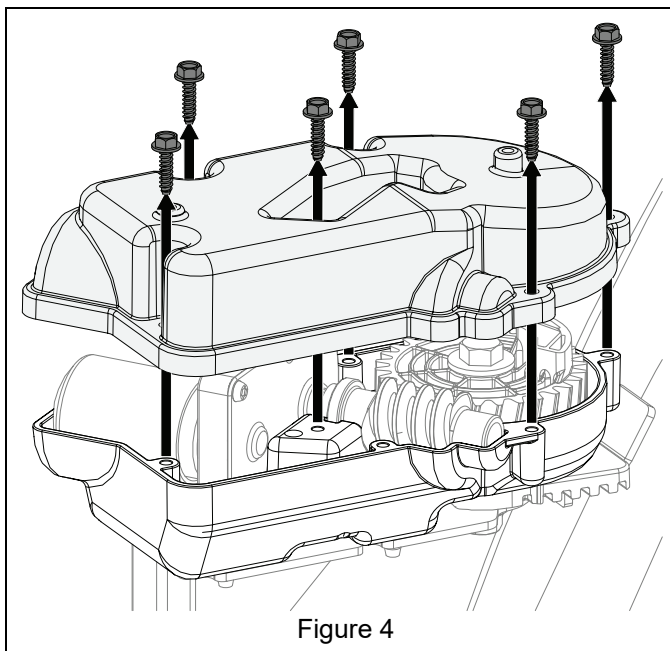


Figure 2

4. Remove and retain two tapping screws securing rotation motor assembly cover and remove and retain cover. See Figure 3.

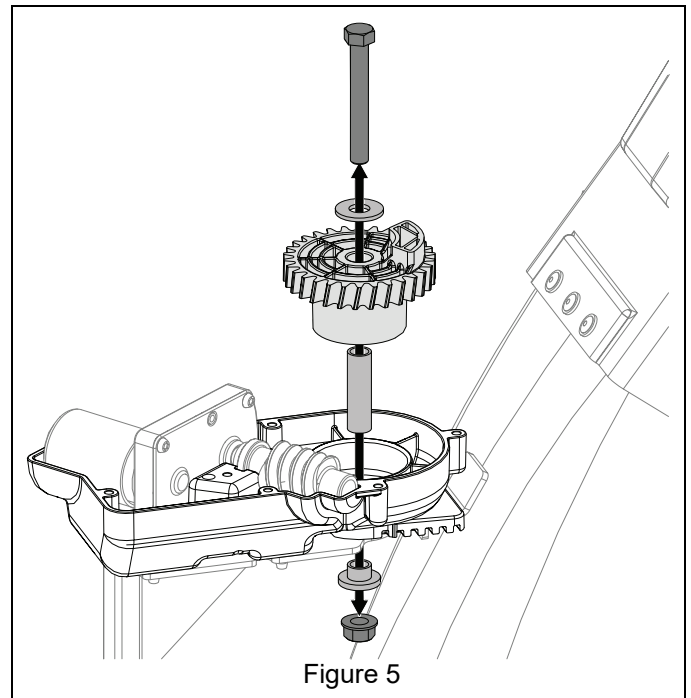


5. Remove and discard six tapping screws securing cap housing. Remove and retain cap housing. See Figure 4.

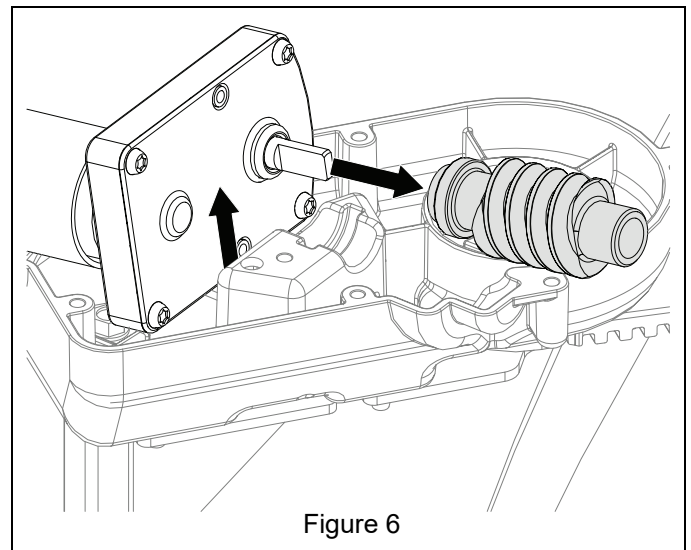


See Figure 5.

6. Remove and retain hex bolt, hex nut, flat washer and flange bushing securing helical gear to bottom gear case.
7. Remove helical gear and sleeve bushing. Remove and retain sleeve bushing from helical gear. Discard helical gear.

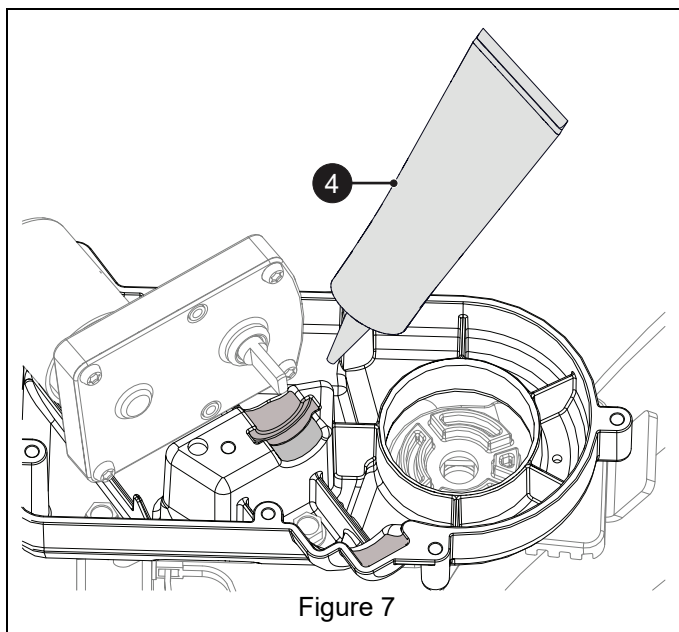


8. Tilt rotation motor up from gear case and remove and discard worm gear. See Figure 6.

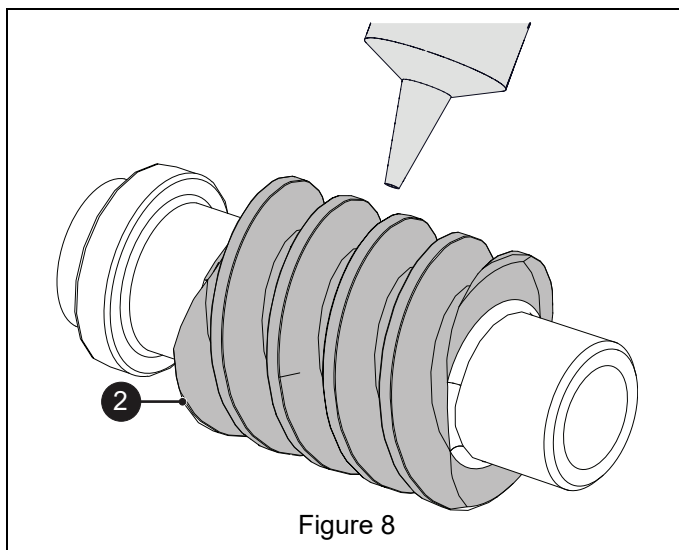


## INSTALLATION

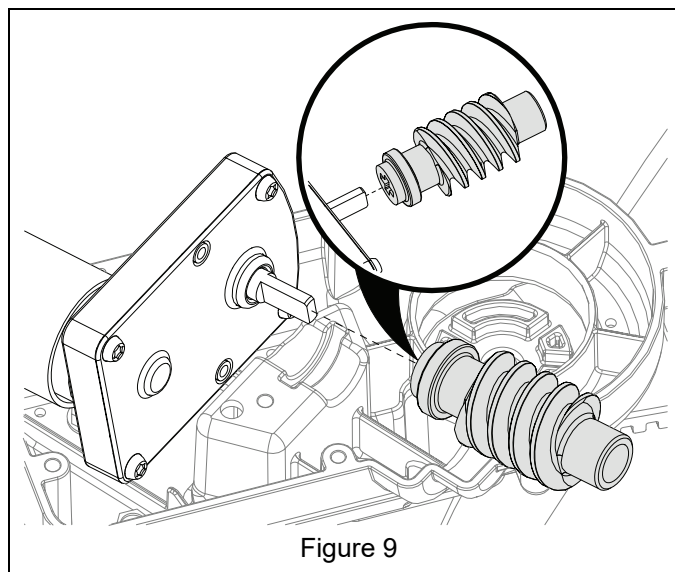
1. Clean bottom gear case of grease and debris.
2. Apply light coat of lithium grease (item 4) to worm gear pockets. See Figure 7.



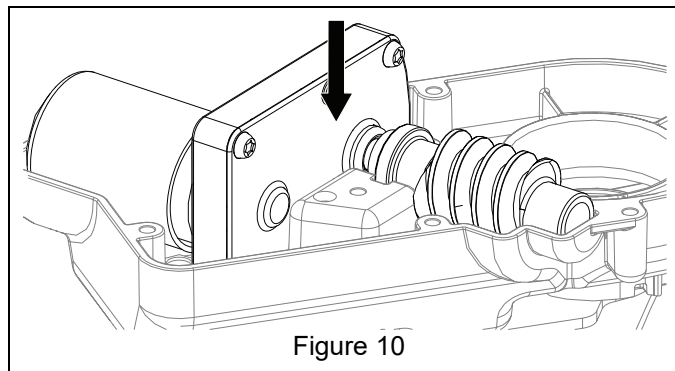
3. Apply light coat of lithium grease to contact area of worm gear (item 2) threads. See Figure 8.



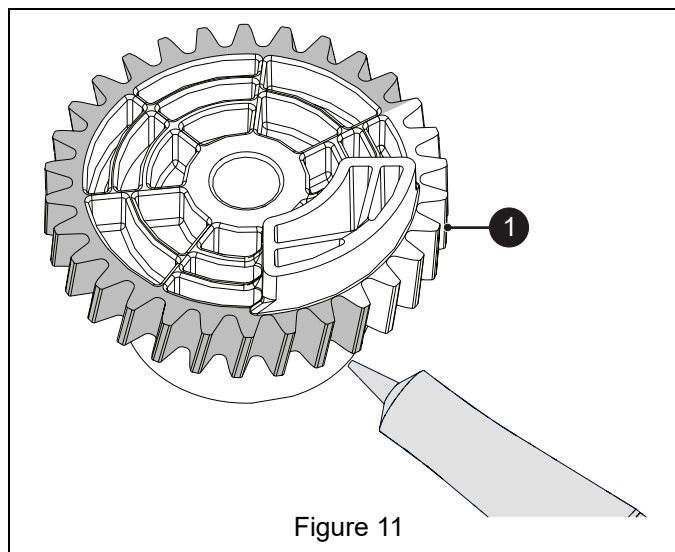
4. Install worm gear onto rotation motor shaft. See Figure 9.



5. Reinstall rotation motor and worm gear into bottom gear case. See Figure 10.



6. Apply light coat of lithium grease to gear teeth of helical gear (item 1) in area shown. See Figure 11.



7. Apply light coat of lithium grease to base of helical gear in area shown. See Figure 12.

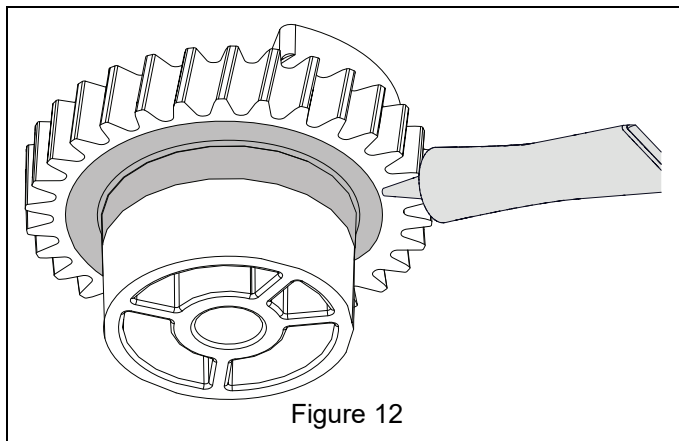


Figure 12

8. Install helical gear into bottom gear case. Ensure gear and chute adapter are indexed for proper orientation. See Figure 13.

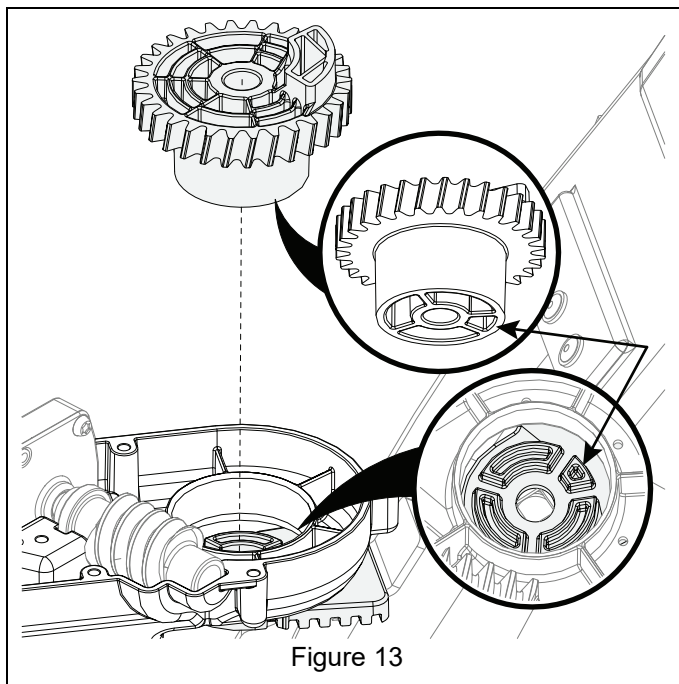


Figure 13

See Figure 14.

9. Insert sleeve bushing into helical gear.  
10. Retain helical gear with hex bolt, flat washer, flange bushing and hex nut removed earlier. Torque hardware to 20.3 N•m – 31.2 N•m (15 lb-ft – 23 lb-ft). DO NOT over tighten.

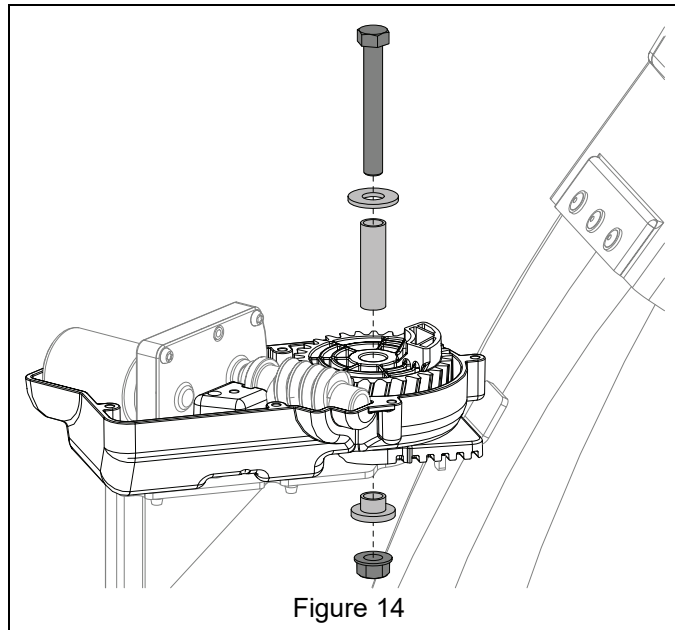


Figure 14

11. Clean grease and debris from cap housing.  
12. Apply light coat of lithium grease to cap housing worm gear pockets. See Figure 15.

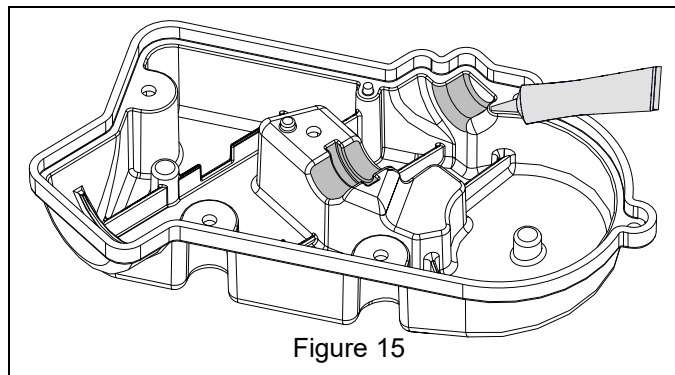
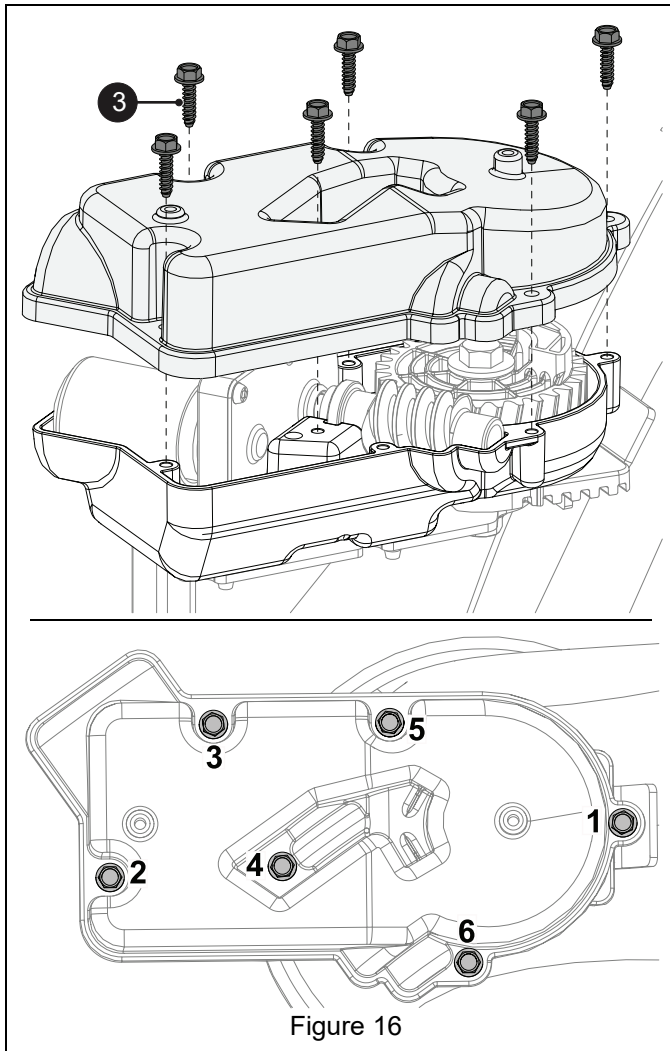
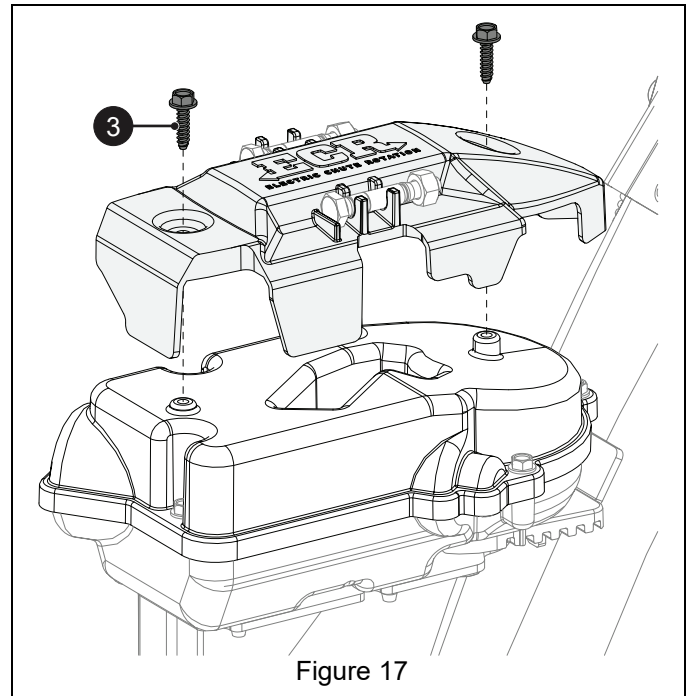


Figure 15

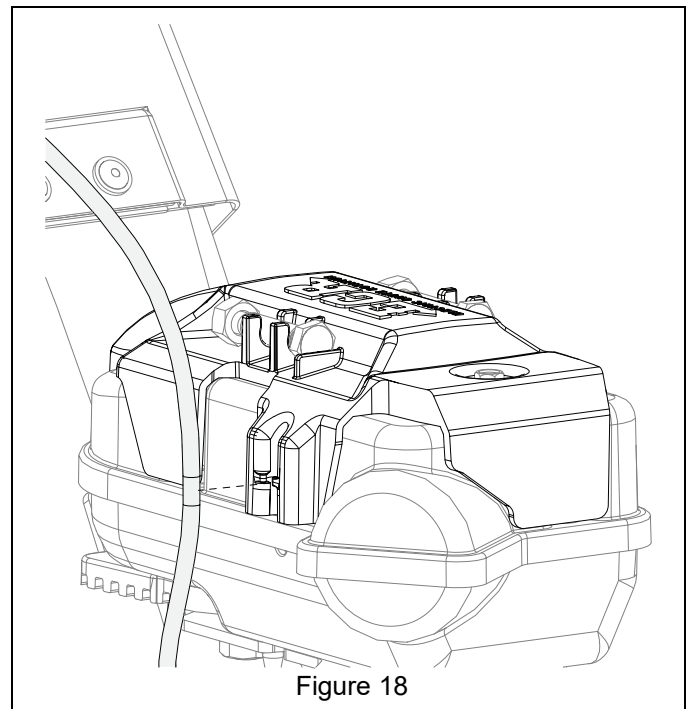
13. Reinstall cap housing using six Plastite hex tapping screws (item 3). Torque screws in sequence shown to 4.5 N•m – 6.8 N•m (40 lb-in – 60 lb-in). DO NOT over tighten. See Figure 16.



14. Reinstall rotation motor assembly cover using two Plastite hex tapping screws (item 3). Torque screws to 4.5 N•m – 6.8 N•m (40 lb-in – 60 lb-in). DO NOT over tighten. See Figure 17.



15. Reconnect chute deflector cable to chute rotation motor assembly cover. See Figure 18.



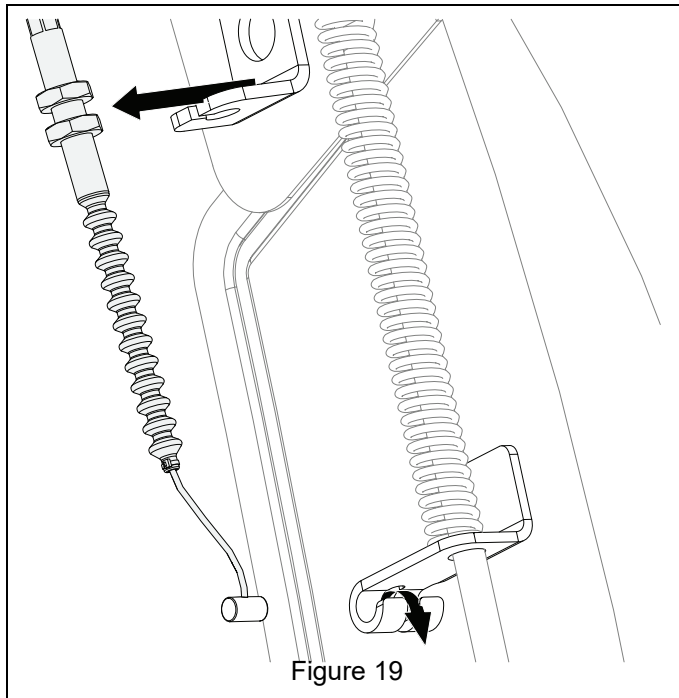
16. Move unit to a well-ventilated area.  
17. Start engine and verify that chute rotation control is working properly.



## CHUTE CAP DEFLECTOR MOTOR ASSEMBLY GEARS

### Removal

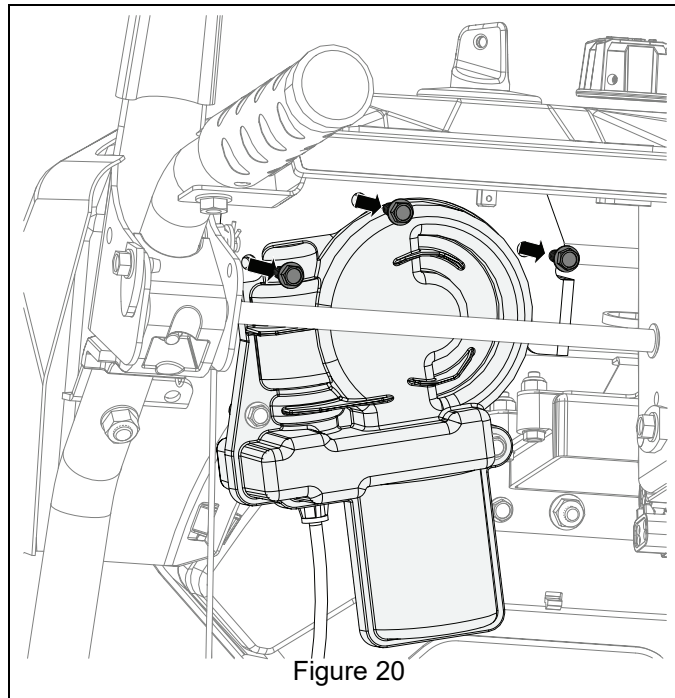
1. Stop engine. Wait for all moving parts to stop and for hot parts to cool.
2. Remove key.
3. Disconnect deflector cap cable from deflector cap and discharge chute brackets. See Figure 19.



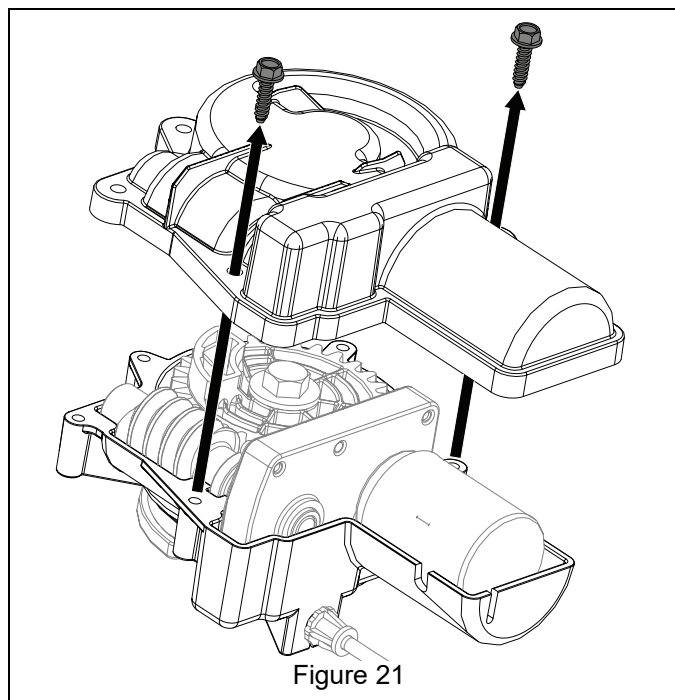
4. Disconnect deflector cap cable from chute rotation motor assembly and all j-hook cable guides between deflector cap and control panel.
5. Under control panel, disconnect deflector cap motor assembly electrical harness from main harness.

**NOTICE:** Deflector cap cable will remain with deflector motor assembly upon removal.

6. Remove and discard three tapping hex screws retaining deflector cap motor assembly to control panel. Remove and retain deflector cap motor assembly and cable. See Figure 20.

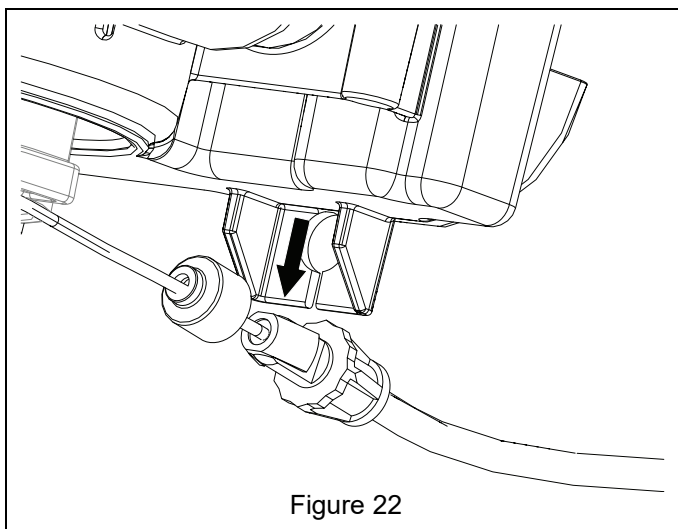


7. Remove and discard two tapping hex screws retaining deflector motor assembly cover and remove cover. Retain cover. See Figure 21.



See Figure 22.

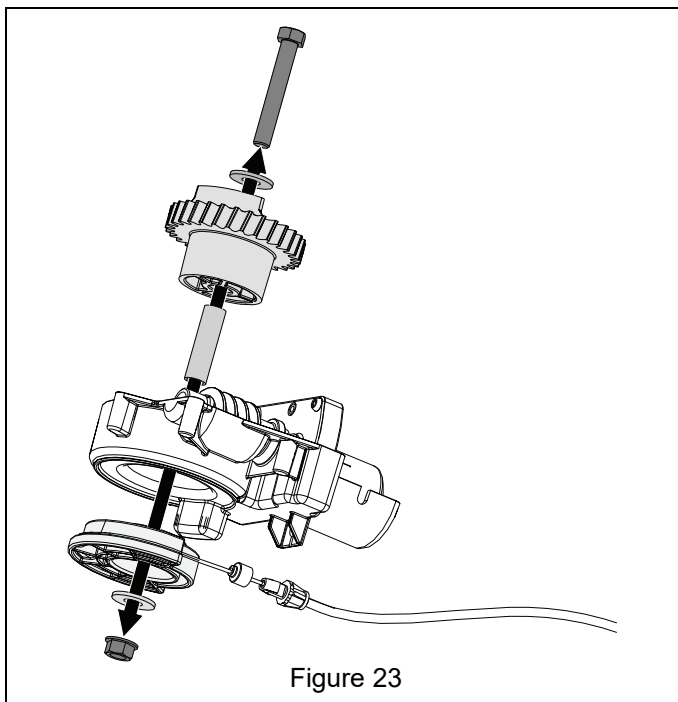
8. Pull back protective cover from cable.
9. Squeeze cable guide ends together and disconnect cable from gear case.



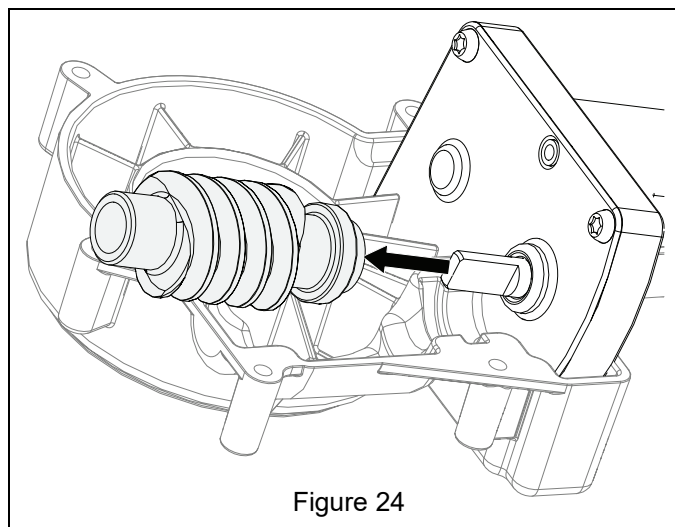
See Figure 23.

**NOTICE:** Observe cable-end location and cable routing in adapter for reassembly.

10. Remove and retain hex bolt, hex nut, flat washer and flange bushing securing helical gear and adapter to bottom gear case.
11. Remove and retain adapter, helical gear and sleeve bushing. Remove and retain sleeve bushing from helical gear. Discard helical gear.

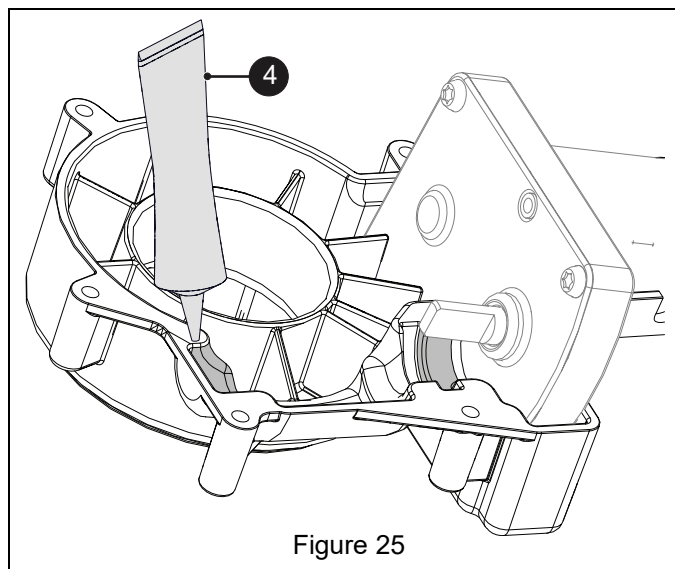


12. Tilt rotation motor up from gear case and remove and discard worm gear. See Figure 24.

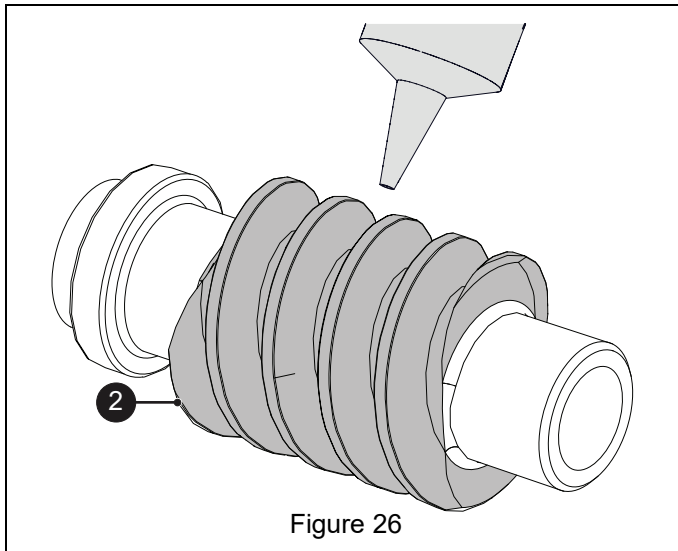


## INSTALLATION

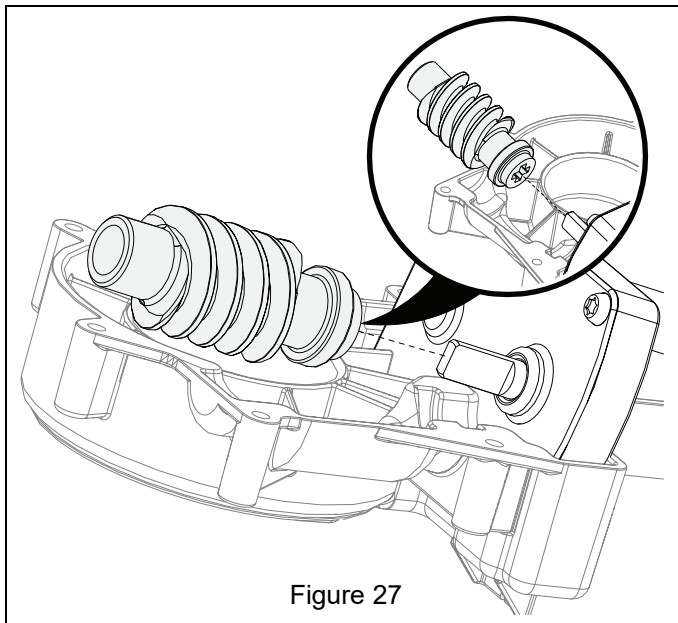
1. Clean bottom gear case of grease and debris.
2. Apply light coat of lithium grease (item 4) to worm gear pockets. See Figure 25.



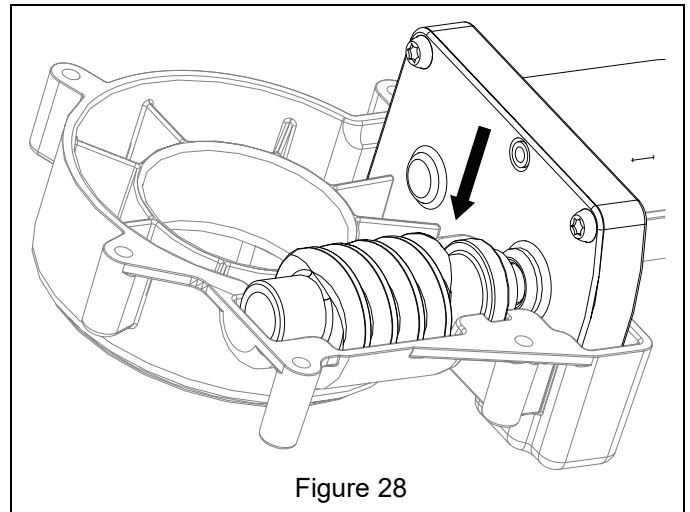
3. Apply light coat of lithium grease to contact area of worm gear (item 2) threads. See Figure 26.



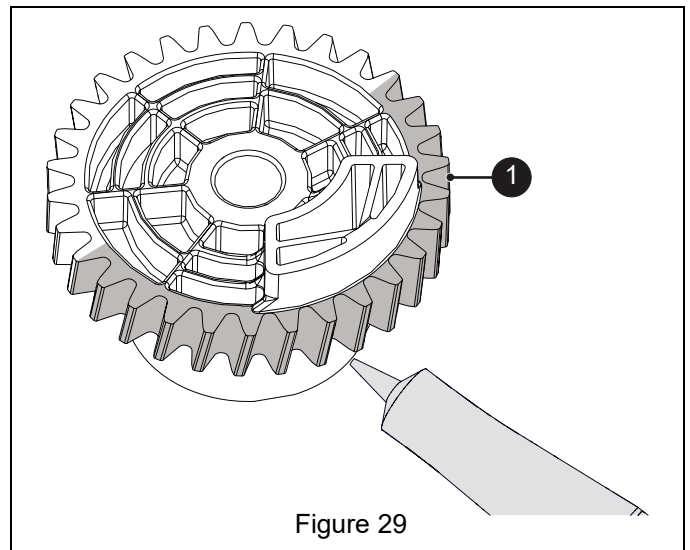
4. Install worm gear onto rotation motor shaft. See Figure 27.



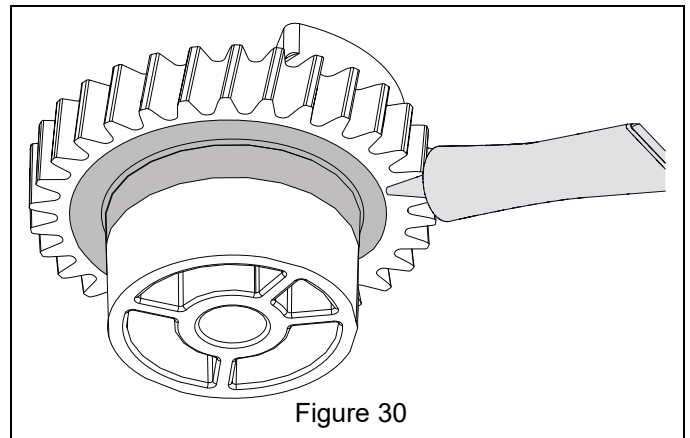
5. Reinstall rotation motor and worm gear into bottom gear case. See Figure 28.



6. Apply light coat of lithium grease to gear teeth of helical gear (item 1) in area shown. See Figure 29.



7. Apply light coat of lithium grease to base of helical gear in area shown. See Figure 30.





See Figure 31.

8. Install helical gear into bottom gear case. From under gear case position and hold adapter against helical gear.

Ensure that:

- gear and chute adapter are indexed for proper alignment.
- cable end is properly positioned in adapter retaining pocket and cable is correctly routed around adapter and not pinched.

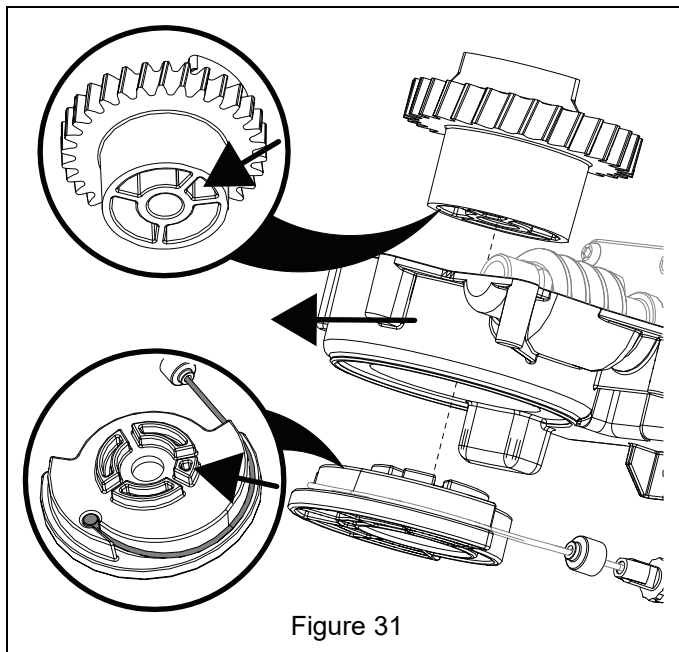


Figure 31

See Figure 32.

9. Insert sleeve bushing into helical gear.
10. Retain adapter and helical gear with hex bolt, flat washer, flange bushing and hex nut removed earlier. Torque hardware to 20.3 N•m – 31.2 N•m (15 lb-ft – 23 lb-ft). DO NOT over tighten.

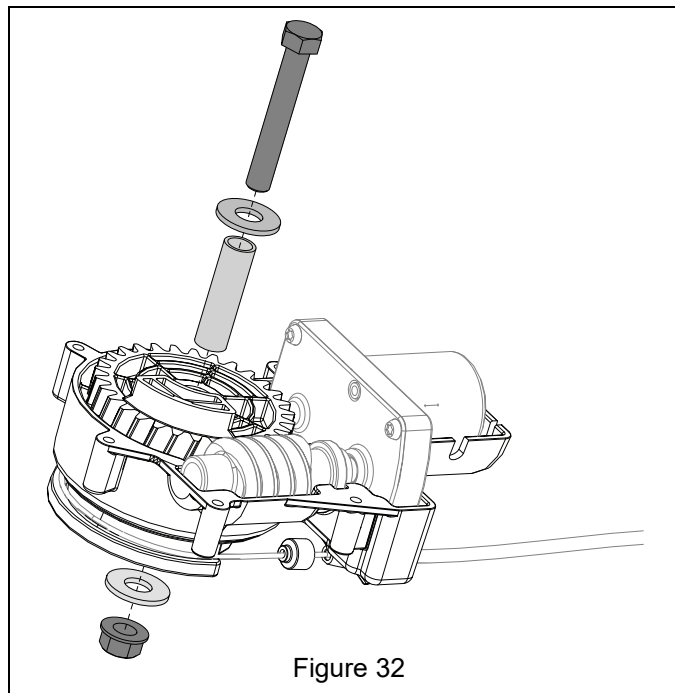


Figure 32

See Figure 33.

11. Squeeze cable guide ends together and snap cable back into gear case
12. Move protective cover back into position.

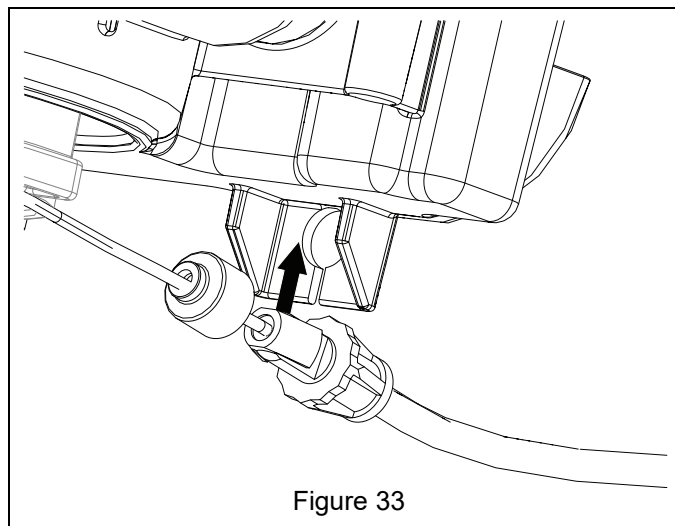


Figure 33

13. Clean grease and debris from gear top case.
14. Apply light coat of lithium grease to case housing worm gear pockets. See Figure 34.

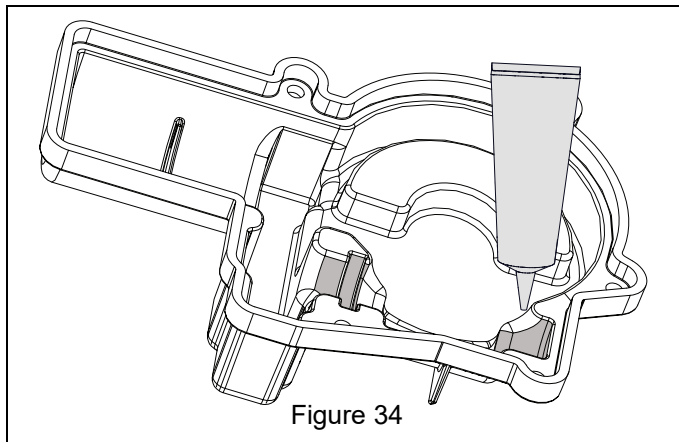


Figure 34

15. Reinstall top gear case onto bottom gear case. Ensure that electrical lead is properly positioned in notch in cover. Secure cover using two Plastite hex tapping screws (item 3). Torque screws to 4.5 N•m – 6.8 N•m (40 lb-in – 60 lb-in). DO NOT over tighten. See Figure 35.

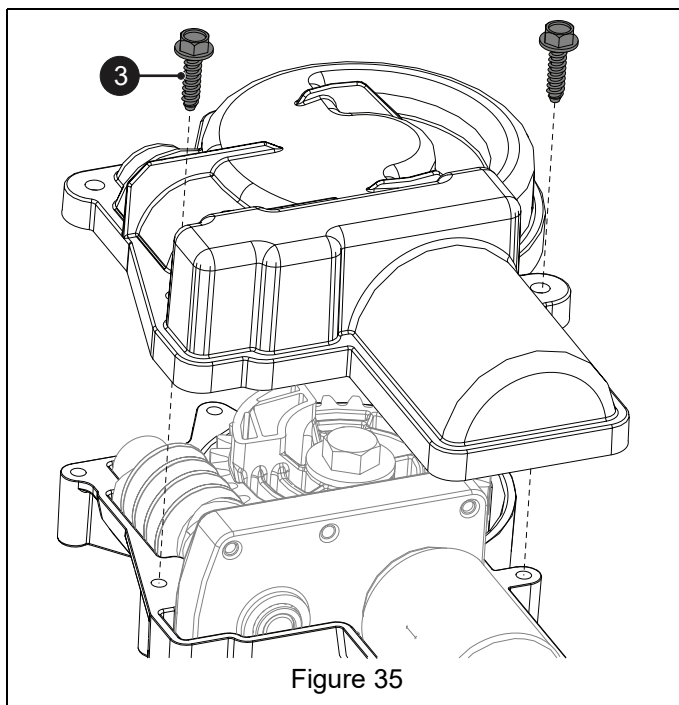


Figure 35

See Figure 36.

16. Reinstall gear case assembly into control panel. Secure assembly using three Plastite hex tapping screws (item 3). Torque screws to 4.5 N•m – 6.8 N•m (40 lb-in – 60 lb-in). DO NOT over tighten.
17. Under control panel, reconnect deflector cap motor assembly electrical harness to main harness.

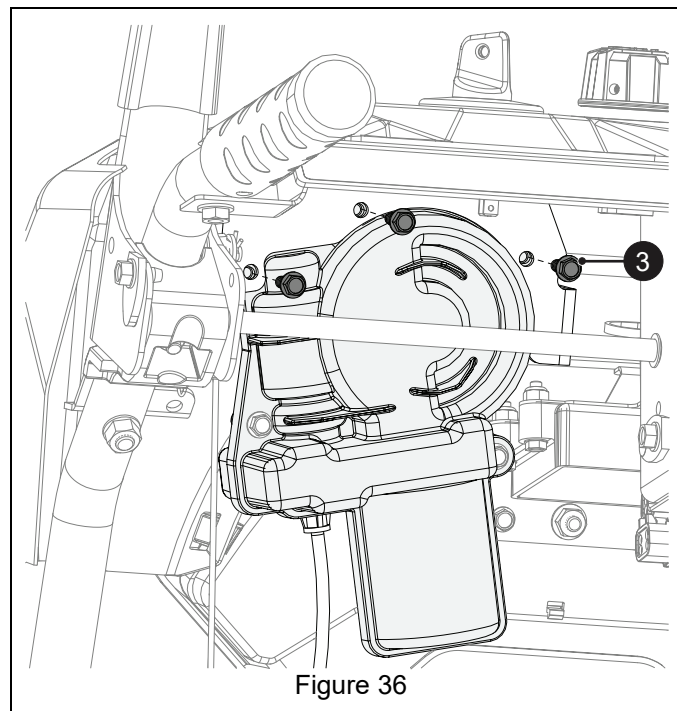


Figure 36

18. Reconnect deflector cap cable to deflector cap and discharge chute brackets. See Figure 37.

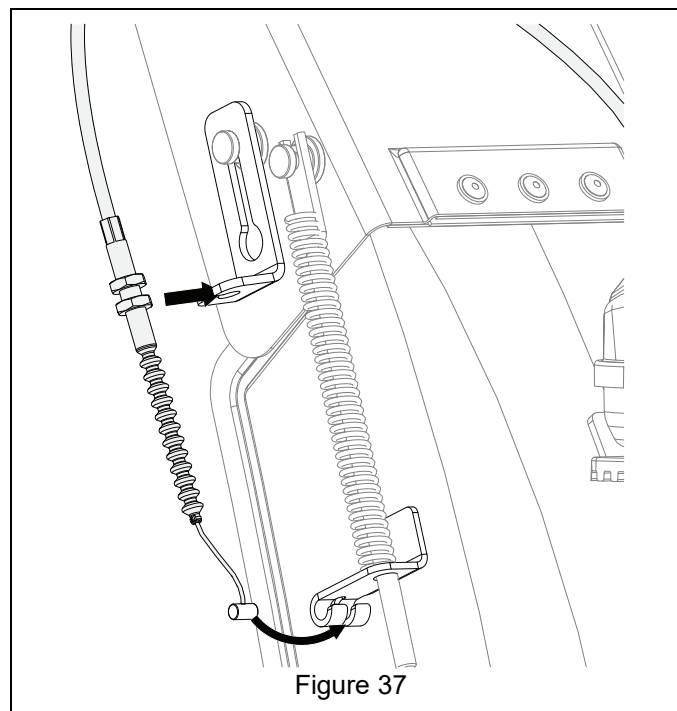
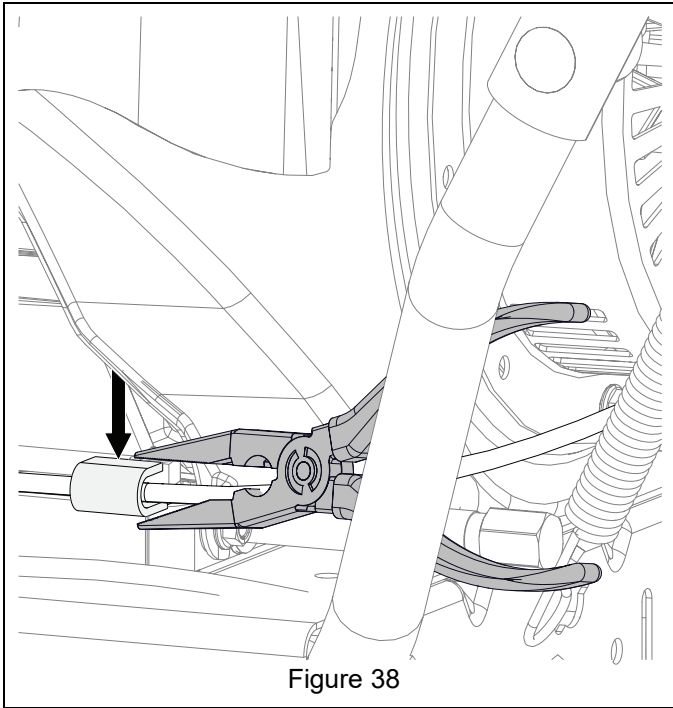


Figure 37

See Figure 38.

19. Route deflector cap cable through all clamps between deflector cap and control panel.
20. Ensure cable has sufficient slack, has flowing curves and is not binding, and tighten all j-hook cable guides.



21. Move unit to a well-ventilated area.
22. Start engine and verify that chute cap control is working properly.