

OS900SPH and OS900SPS

SERVICE PROCEDURES

GENERAL SAFETY INSTRUCTIONS FOR ANY SERVICE OPERATION-

- 1- Pull spark plug wire
- 2- Remove fuel from engine.
- 3- Provide adequate and secure support to the machine when lifting or servicing any internal components.

MULE DRIVE BELT REPLACEMENT-

1. To gain access to the mule drive belt, remove the reel engagement spring on the mule drive side of the machine. This process is aided greatly with a pair of vise-grips, a 3 foot long piece of pipe, and safety glasses.
2. Clamp the vise-grips onto the spring and use the pipe as a lever against the rear drive wheel.
3. Once you start to lever the spring out of it's hole, then rotate the pipe on it's pivot point pulling the spring aside. Now that the spring is loose, release your vise-grips and we're on to the next step.
4. Remove the e-clip and washer retaining the rear wheel onto the machine. This is easily accomplished with a flat blade screw driver.
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6. Have someone help you rock the machine on it's side and place the rear wheel under the machine to serve as a jack stand for holding the machine up. Be sure to let the weight of the machine rest on the lower frame running under the transaxle.
7. Now that the machine is secure on it's makeshift stand, place the e-clip, washer and key in the wheel so you don't lose the parts.
8. Begin removing the two rear fasteners with a 3/8" wrench. These two fasteners must be completely removed from their holes.
9. Loosen the front fastener. It is not necessary to completely remove this one.
10. Remove the guard.
11. With the mule drive belt fully exposed, we first need to remove the front pulley.
12. Remove the attaching hardware holding the front pulley onto the intermediate drive shaft.
13. Remove the front pulley and key and set aside for now.
14. Now remove the fasteners holding the mule drive assembly onto the machine.
15. Remove the entire mule drive assembly. The belt will most likely still be looped around the transaxle pulley.
16. Free the belt from the transaxle pulley and position the mule drive assembly to gain access to the v-groove pulley's mounting hardware.

17. It is necessary to loosen this hardware so that the belt can be removed from the pulley. There is a keeper on the idler arm that prevents the belt from jumping out of the groove during operation.
18. Remove the old belt once the pulley is loose.
19. Install the new belt and re-tighten the hardware holding the pulley onto the idler arm
20. Loop the belt around the transaxle pulley and re-install the mule drive assembly into the machine.
21. Place the front pulley into the belt in preparation for re-installing the pulley.
22. Place the pulley back onto the intermediate shaft. Check the clearance of the front belt keepers. Tight enough to keep the belt in, loose enough that they don't rub.
23. Install the key. Don't forget!
24. Re-install hardware holding the front pulley on.
25. Replace belt guard.
26. Re-install rear drive wheel.
27. Insert key, install washer and e-clip

MAIN DRIVE BELT REPLACEMENT-

1. Remove the crank belt guard by removing the three screws attaching it.
2. Remove the reel belt guard by removing the two bolts attaching it.
3. Remove the Jackshaft pulley but do not remove the belt from the bottom pulley.
4. Remove the two carriage bolts holding the flange bearing for the intermediate drive shaft, and then remove the bearing from the shaft.
5. Disconnect the idler spring from the bolt next to the crankshaft pulley.
6. Remove the idler arm limiter bolt.
7. Roll the belt off of the engine pulley.
8. Slide the old belt off of the jackshaft and through the hole where the flange bearing was, this will allow it to be removed.
9. Slide the new belt in the hole in reverse of how the old was removed.
10. Once the belt is on the lower pulley of the intermediated drive shaft, then walk the belt onto the crankshaft pulley.
11. Re-assemble the machine in reverse order (steps 1-7)

REEL DRIVE BELT REPLACEMENT-

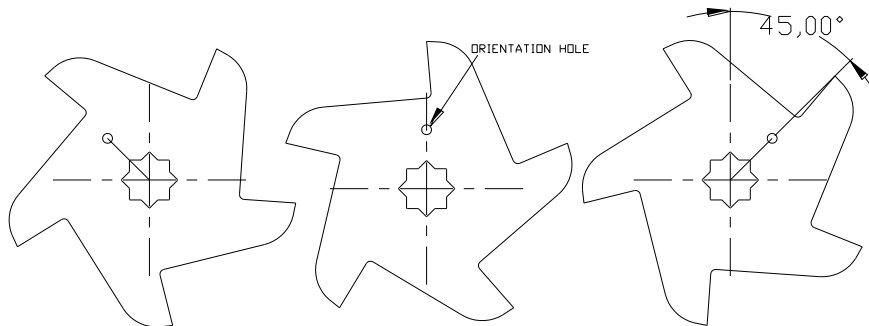
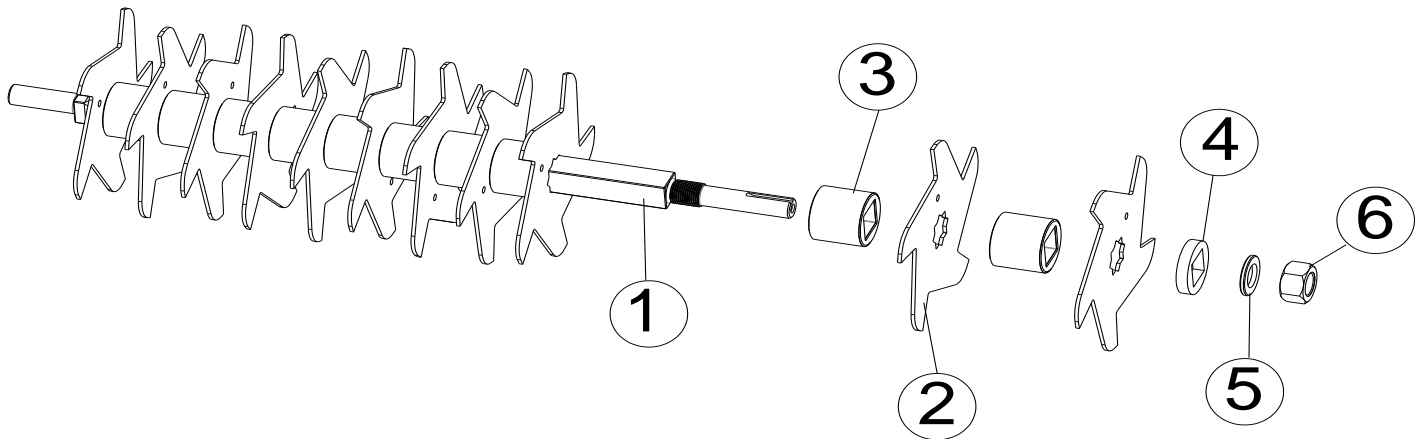
1. Remove the reel drive belt guard by removing the two screws holding it on.
2. Loosen the belt guides and slide them away from the belts
3. The belts should just walk right off of the pulleys.
4. Install new belts.
5. Re-position belt guides. They should be approximately 1/8" from belt when clutching pulley is engaged.
6. Re-install belt guard.

REEL ASSEMBLY REPLACEMENT-

1. Remove the reel drive belt guard by removing the two screws holding it on.
2. Loosen the belt guides and slide them away from the belts
3. The belts should just walk right off of the pulleys.
4. Remove the lower pulley from the reel assembly
5. At this point you can remove the hardware holding the flange bearings in the reel housing
6. With someone's help, lower the reel assembly from the machine.
7. Installing a new service reel assembly is the reverse of removal (Steps 1-6)

VERTI-CUT BLADE REPLACEMENT-

1. Follow all of the steps for reel assembly replacement to get the reel assembly out of the machine
2. You need to securely hold the reel assembly while loosening the nut that holds the assembly together.
3. Remove all of the blades and spacers from the reel shaft.
4. Stack everything back up per the illustrations below. Make sure the blades are oriented in the right direction and use the orientation hole in the blade to assist you.
5. Torque the 7/16"-14 Grade 8 nut to 120 ft.-lbs. Over-tightening can damage the reel shaft and cause excessive machine vibration.



EACH BLADE SHOULD BE ROTATED CLOCKWISE 45 DEGREES.
USE THE HOLE IN THE BLADE TO SET ORIENTATION.

REEL CLUTCH AND AUTO-DROP CABLE REPLACEMENT-

- 1- Cut and remove all ty-wraps securing the cable being replaced.
- 2- Remove the two cable springs from the clutch/auto-drop handle.
- 3- Remove the reel drive belt guard by removing the two screws holding it on.
- 4- Now remove the clevis pin from the clutch idler arm and also loosen and remove the nuts holding the cable barrel onto the clutch cable bracket on the side of the engine base.
- 5- Remove the clevis pin from the auto-drop bracket on the front of the seed box.
- 6- Remove the routing clamp holding the auto-drop cable to the side of the seed box.
- 7- At this point the only thing holding the cable assembly to the machine should be a 1/4"-20 bolt on the console. Remove this bolt and take the cable assembly from the machine and set aside.
- 8- To install a new cable assembly reverse steps 1-7