

# Modifying Buffers for the UFO

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The UFO is an attachment that connects to a 175 RPM buffer via the standard attachment clutch.

**YOU MUST USE ONLY A 175 RPM BUFFER RATED AT A MINIMUM OF 1 1/2 HP on a 20 amp circuit!**

**HIGHER RPM BUFFERS WILL VOID WARRANTY! BUFFERS WITH LESS HORSE POWER MAY FAIL!**

In order for the orbital action to occur, the housing of the UFO CANNOT TURN! It is prevented from turning by the dust collection pipe that is connected to the UFO and must extend through a hole that must be drilled in the buffer housing. The hole should be oversized to allow for clearance which will make it easy to install and remove the UFO from the buffer. A 2" bimetal hole saw will work to drill the buffer housing. Note on some buffers it will be necessary to remove the dust collection shroud on the bottom or drill through it.

The buffer will need to have a steel drive coupling between the motor and gearbox. The Ceno buffers come with this already installed. On other buffers it will be necessary to change the plastic coupling to a steel one. If you purchased the UFO without a buffer, a new drive coupler was included with it. You will need to take the top cover off your motor and remove the 4 motor screws. Next, lift the motor off the buffer housing.

Remove the rotor from the buffer. Remove the 6 screws from the gearbox and pull it off the buffer. The drive coupling is in the top of the gearbox.

Most buffers have a 10-1 gearbox. We recommend replacing this with an 11-1 gearbox (Part # BM13). This will reduce the speed and provide more power. The Ceno buffers come standard with an 11-1 gearbox.

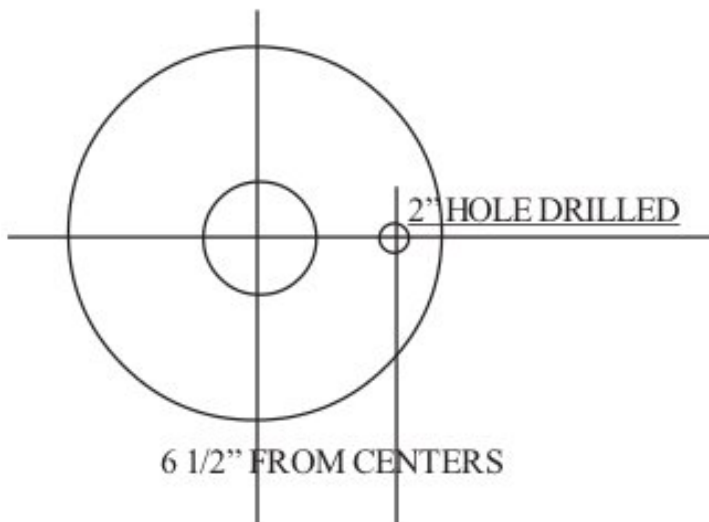
Install the gearbox with the steel coupling. Use a screwdriver or allen key through the bolt hole to align the screw holes. Tighten up the gearbox screws. When installing the rotor, you may have to rotate it several turns to get the coupling to line up. Make sure the rotor goes all the way into the bearing.

Reinstall the motor. On most buffers, there is a spring washer on top of the upper bearing. Use grease to hold this inside the top cover. Install the motor screws and top cover.

Make sure the motor turns over before plugging it in.

Before starting to sand run the buffer so the pad does not touch the floor. This allows the UFO to lock on the drive clutch seating it with the buffer. ALWAYS do this before using/running the unit. This will prevent gearbox damage and coupling breakage.

## Drilling the Hole in the Buffer



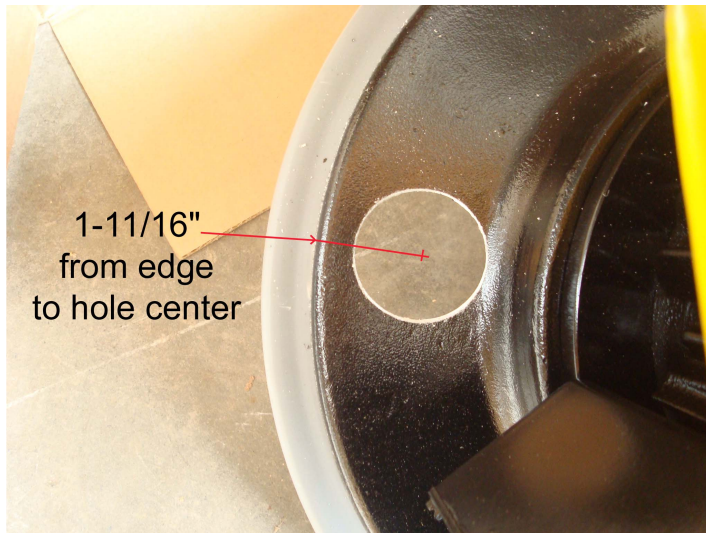
The hole in most buffers is drilled 6-1/2" from the center of the gearbox to the center of the hole. Due to the angled pipe on the UFO, some taller buffers may need the hole farther out.

See the next page for hole locations on some of the more common buffers.

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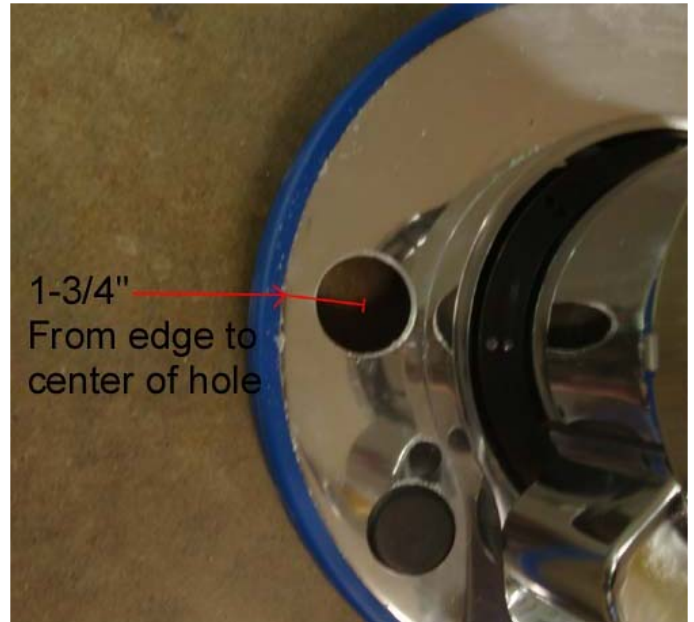
## Ceno & Pacific Buffers

To modify the Ceno buffer for a UFO, drill a pilot hole 1-11/16 from the edge of the housing. Use a 2-1/8 holesaw to drill out the aluminum. If it is a dust collection buffer, drill a pilot hole 1/8" in from the first, through the plastic baffle. From the bottom side, cut the baffle out with a 2-1/2" hole saw.



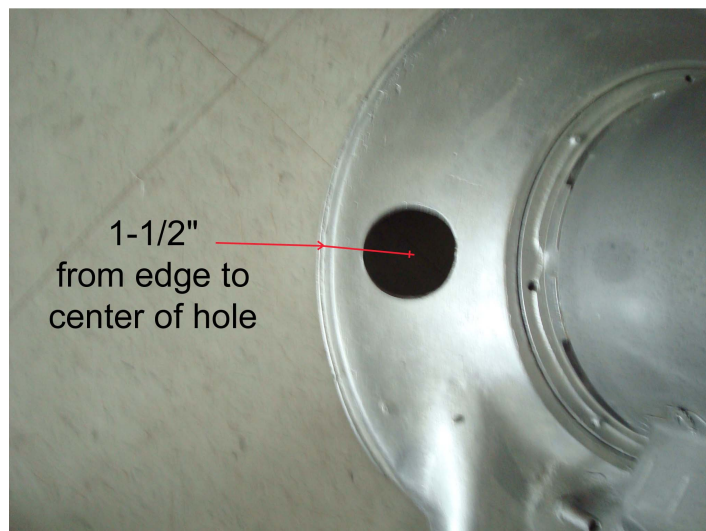
## Ceno Pro & Mercury Buffers

To modify the Ceno Pro buffer for a UFO, drill a pilot hole 1-3/4 from the edge of the housing. Use a 2-1/8 holesaw to drill out the aluminum.



## Mastercraft 17" Buffer

To modify the mastercraft, drill the 2-1/8" hole 1-1/2" in. Change the gearbox to a 11-1 instead of a 10-1. Drill out and tap the mounting bolt holes 12-24 in the new gearbox. Bolt it on with 12-24 × 1¼ socket head cap screws.



## Sander 1600 Buffer

To modify the Sander 1600, drill a 2" hole as close to the housing as possible. Change the gearbox to a 11-1 instead of a 10-1. Drill out and tap the mounting bolt holes 12-24 in the new gearbox. Bolt it on with 12-24 × 1 socket head cap screws.

