

## **User Guide** DeClMate





Part Number	Description	Quantity
am-3650	775 Vent Plate Spacer	2
am-3695	Output Shaft for DeCIMate	1
am-3694	45T 32DP .375 Hex Gear	1
am-0931	8x19x6 Flanged Bearing for CIM-sim	1
am-0028	3/8" Flanged Shielded Bearing (FR6ZZ)	1
am-3742	3/4" x .509" x 3/16" Spacer for DeCIMate	1
am-3743	1/4" x .172" x 3/4" Spacer for DeClMate	4
am-1441	BCHS M4-0.7 x 35 mm	4
am- 1435	M4-0.7 Nylock Nut	2
am-3692	DeCIMate Output Plate	1
am-3693	DeCIMate Motor Plate	1
am-3657	12T 32DP Pinion Gear	2
am-3775	RedLine Motor	2

Tools Needed	Part Number	
Arbor Press	15	
2.5 mm Allen Wrench	am-1288	



## DeCIMate (am-3745)

**Step 1**: Carefully press the 12T Pinion Gear (am-3657) onto the RedLine Motor (am-3775). Be sure to leave a small (~1/32" or 1mm) gap between the pinion and the output shaft bearing.



**Step 3:** Press the 3/4" x .509" x 3/16" Spacer (am-3742) into the DeCIMate Output Plate (am-3692) the same side as the counter bore. This will press into the bearing hole and meet up with the bearing.



**<u>Step 5</u>**: Slide the 45T gear (am-3694) onto the hex portion of the output shaft



**<u>Step 2</u>**: Press the 8x19x6 Flanged Bearing (am-0931) into the DeClMate Output Plate (am-3692). Flange is on the opposite of the counter bored holes.



**<u>Step 4</u>**: Place the Output Shaft for DeCIMate (am-3695) into the 8x19x6 Flanged Bearing that's in Output Plate. The hex portion goes on the same side of the flange.



<u>Step 6</u>: Press the 3/8" Flanged Bearing (am-0028) into DeCIMate Motor Plate (am-3693)





**<u>Step 7</u>**: Slide the motor plate onto the output shaft. The bearing flange goes in toward the gear.



**<u>Step 9</u>**: Flip the gearbox over and slide the two 775 Vent Plate Spacers (am-3650) onto the M4 screws. **Step 8**: Thread the four BCHS M4-0.7 (am-1441) into the output plate then through the <sup>1</sup>/<sub>4</sub>" Spacer (am-3743) all the way to the motor plate.



**Step 10**: Slide the two Redline motors with pinions into the gearbox assembly. Make sure the pinion is meshed with the 45t gear.



**Step 11**: Line up the M4 screws and the mounting holes on the motor. Tighten the m4 screws.



NOTE: Once the gearbox is assembled and attached, grease gears with Red Tacky Grease (am-2768)





Step 1: Carefully press the 12T Pinion Gear (am-3657) onto the RedLine Motor (am-3775). Be sure to leave a small (~1/32" or 1mm) gap between the pinion and the output shaft bearing



Step 3: Press the 3/4" x .509" x 3/16" Spacer (am-

3742) into the DeClMate Output Plate (am-3692) the same side as the counter bore. This will press

into the bearing hole and meet up with the bearing.

Step 2: Press the 8x19x6 Flanged Bearing (am-0931) into the DeClMate Output Plate (am-3692). Flange is on the opposite of the counter bored holes.



Step 4: Place the Output Shaft for DeCIMate (am-3695) into the 8x19x6 Flanged Bearing that's in Output Plate. The hex portion goes on the same side of the flange.

Step 5: Slide the 45T gear (am-3694) onto the hex portion of the output shaft



**Step 6**: Press the 1/4" Spacer (am-3743) into the 3d printed DeDIMate case.











**<u>Step 7</u>**: Place housing onto the partially assembled gearbox.



NOTE: Once the DeCIMate case is attached, grease gears with Red Tacky Grease (am-2768)

**<u>Step 9</u>**: Slide the motor plate onto the output shaft. The bearing flange goes in toward the gear.

**<u>Step 8</u>**: Press the 3/8" Flanged Bearing (am-0028) into DeCIMate Motor Plate (am-3693)



**Step 10**: Thread the four BCHS M4-0.7 (am-1441) into the output plate, through the DeCIMate Case, all the way to the motor plate.



**Step 11**: Flip the gearbox over and slide the two 775 Vent Plate Spacers (am-3650) onto the M4 screws.





**Step 12:** Insert both redline motors make sure the gears mesh properly. Line up the M4 screws and the mounting holes on the motor. Tighten the m4 screws.

