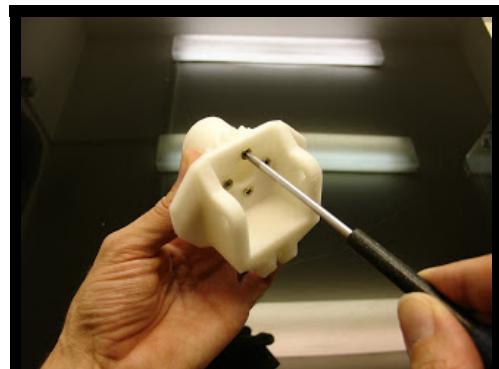


## Neck and Jaw

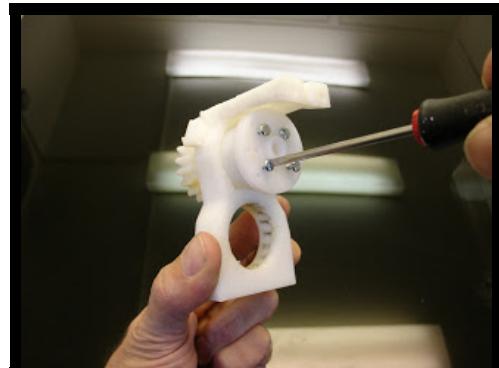
Assembly

### the neck and jaw

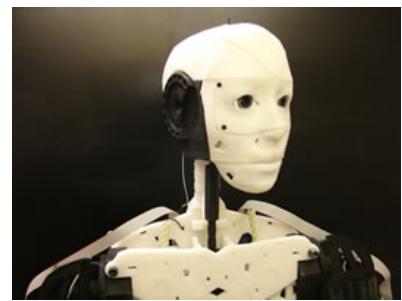
All right, you've got the torso assembled or almost. The assembly of the neck shouldn't be a too difficult task. None of the servo used need to be transformed, they can be set as is. That's pretty cool!



Glue or screw "MainGear" to "NeckHinge"



Use "GearHolder" and set "ServoGear" through it. Screw the actuator wheel sold with your HS-805BB servo to "ServoGear".



### HELP ME EXPERIMENT



### SEARCH

search here...

### MEMBER ACTIVITIES



Dwayne Williams uploaded a new picture: opencv\_fd\_1.jpg  
17 hours, 35 minutes ago



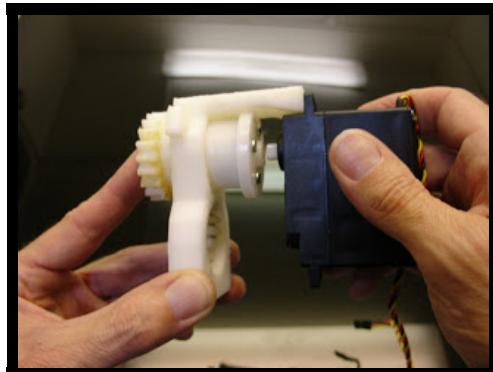
Rob is standing proud as a test bot for Grog. He is very pleased to be a part of enhancing the Inmoov Nation.



Fred uploaded a new picture: Possible spring for...  
1 day, 15 hours ago

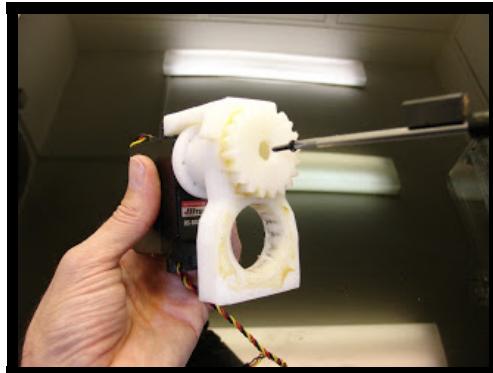


Maybe a possible spring for tendons?

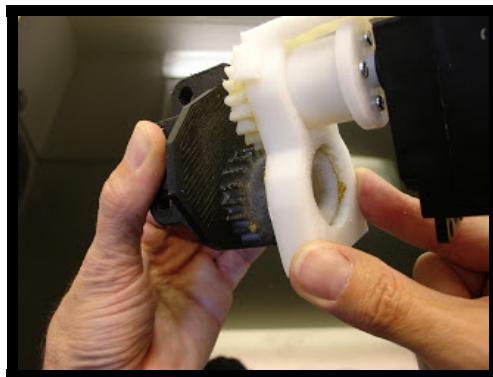


Use your Arduino board and set your HS-805BB servo to 90°.

Push it in the turntable.



This is a bit tricky but can be achieved using a magnet on your screwdriver. Using the screw delivered with the servo, you need to screw the turntable to the servo inside "ServoGear". Keep your servo at 90°.



Mount this assembly to the assembly "MainGear" and "NeckHinge" using some grease to ease the rotation. "GearHolder" should be aligned with "NeckHinge" and your servo should be still at 90°.



Fix the "LowBackRight" and "LowBackLeft" or "Temporary" to "GearHolder". This will be the back of the skull.



Jack Phillips posted an update 2 days, 11 hours ago

Head Connect to Torso. Using EZ Robot for programming interface for now. Printing arms and hands next. Not sure how to post video so here is the link.

<https://www.youtube.com/watch?v=czMIEDz9804&feature=c4-overview&list=UUNwlfeOZcu4UbOx3bcqjHQ>

v=czMIEDz9804&feature=c4-overview&list=UUNwlfeOZcu4UbOx3bcqjHQ



Gael Langevin posted an update 2 days, 16 hours ago

To Fred and others:

<https://groups.google.com/group/inmoov/attach/151d3d256a4108f0/spring%20tensioner1.jpg?part=4&authuser=0>

This is how I see a spring added to the retraction tendon. In this set up we avoid forcing on the servo either way of rotation and it also avoid losing tension in the tendons.



Fred uploaded a new picture: 69.jpg 3 days, 16 hours ago



Fred uploaded a new picture: 71.jpg 3 days, 16 hours ago



## FOLLOW ME

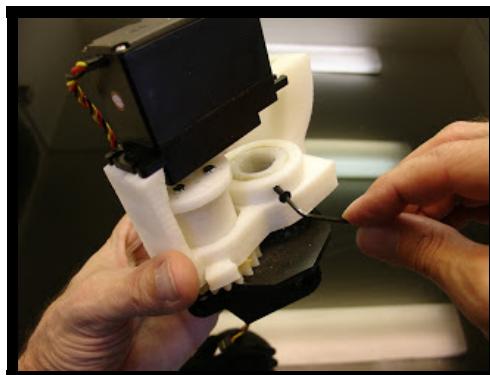
gael langevin

1 circle

413 followers

## RECENT POSTS

- InMoov prosthetic hand almost ready
- InMoov in Moscow, Geek Picnic
- InMoov on the New Yorker
- Wow InMoov Santa!



New wiring design for the hand

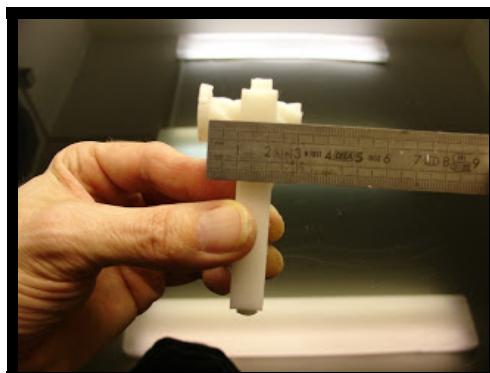
## RECENT COMMENTS

- Gael Langevin on Hand and Forarm
- Tom on Hand and Forarm
- InMoov » InMoov prosthetic hand almost ready on Default Hardware Map
- Gael Langevin on Hand and Forarm
- Tom on Hand and Forarm

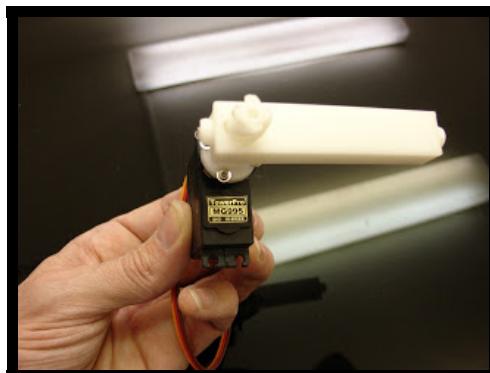
## ARCHIVES

- March 2014
- February 2014
- January 2014
- December 2013
- November 2013
- October 2013
- September 2013
- August 2013
- July 2013
- May 2013
- April 2013
- March 2013
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- January 2013
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## CATEGORIES



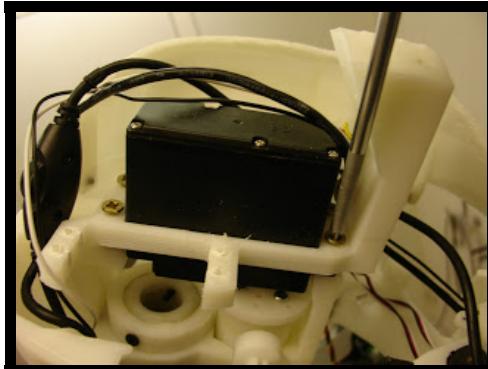
Now lets build the jaw. Take "JawPiston" and turn it inside "JawHinge" until you get 1cm offset between them.



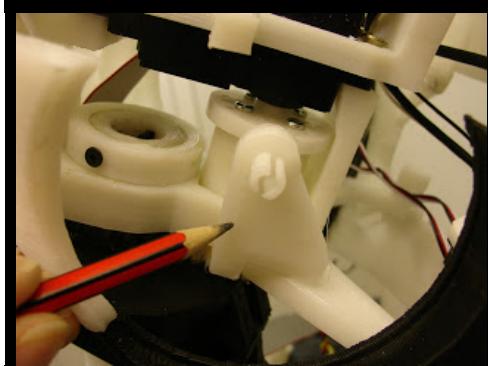
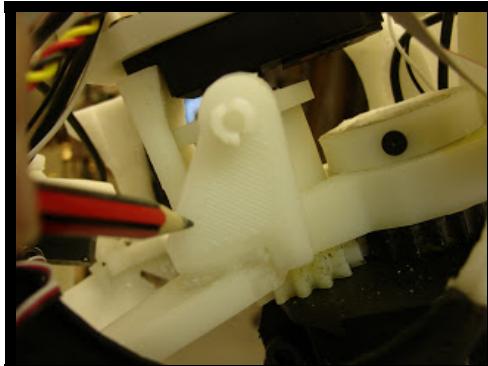
Mount screw this on the turntable of your HK15298 or similar servo. Set your servo at 0° with the arduino board. Keeping the 1cm offset, "JawHinge" should be mounted at a 90° angle compared to the servo.



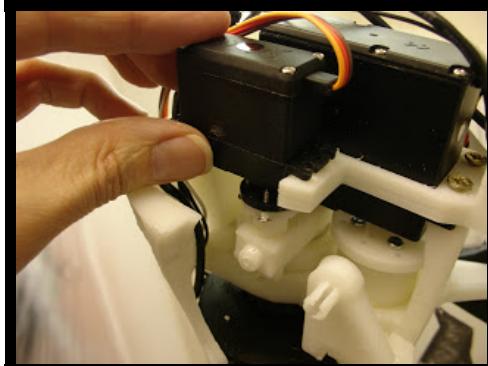
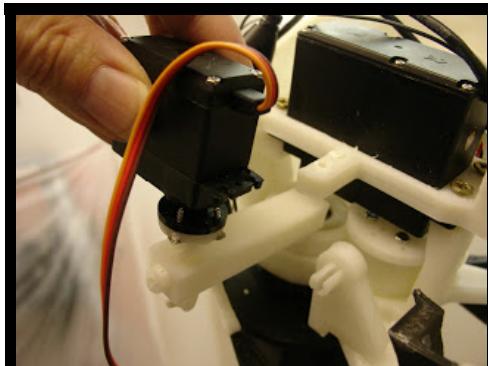
Mount screw "SkullServoFix" over the HS-805BB servo.



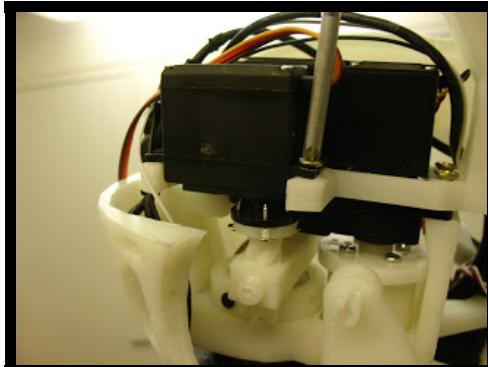
Put all 4 screws. Don't mind the wires on my pictures they come from cameras.



Glue with acetone the two "JawHolders" on both sides of whole assembly. It comes/fit on the "FaceHolders"



Now take your HK15298 assembly and slide it through.



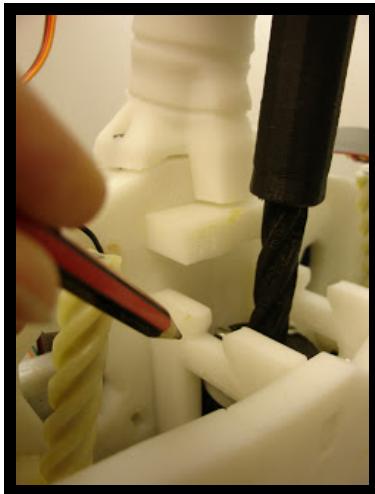
Put all 4 screws to fix your HK15298 servo.



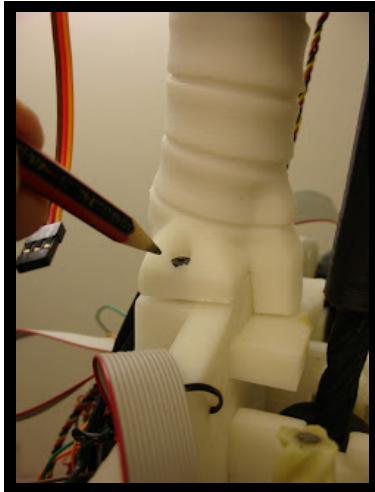
Remove the pre-support from "Jaw". My "Jaw" shown on this picture is only a half part. It was a previous test print I did. Your "Jaw" is one piece print.



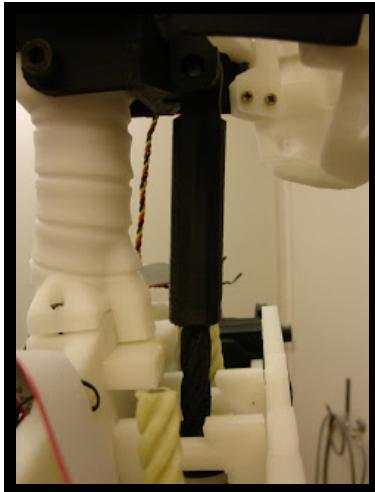
Screw "Jawsupport" to "Jaw". Make sure the flat surfaces of the "Jawsupport" are on the inside.



Fix in "ThroatHole". Mine looks different than yours. Sorry for this picture but "ThroatPiston" and "ThroatPistonBase" shouldn't be already mounted, it comes in the next steps.



Screw "Neck" to "ThroatHole".

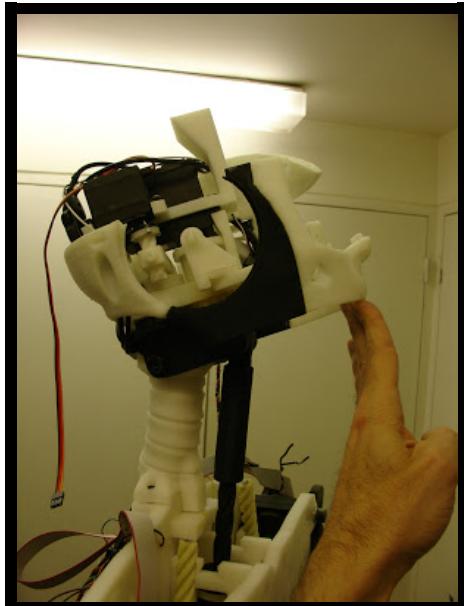


Fix "NeckHinge" to "Neck" with a 8mm bolt (or print one from the hand)

Assuming you have already fixed your HS-805BB servo in the Torso assembly. Set your servo at 90° with arduino board. Turn "ThroatPiston" and "ThroatPistonBase" in a matter to get "NeckHinge" straight flat.

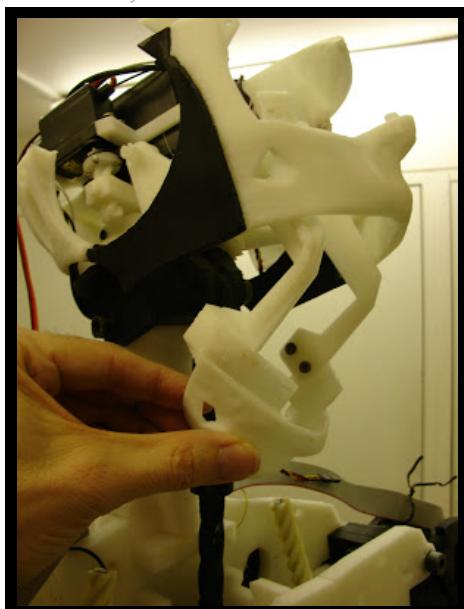


Screw "ThroatPiston" to its turntable keeping your servo at 90°.

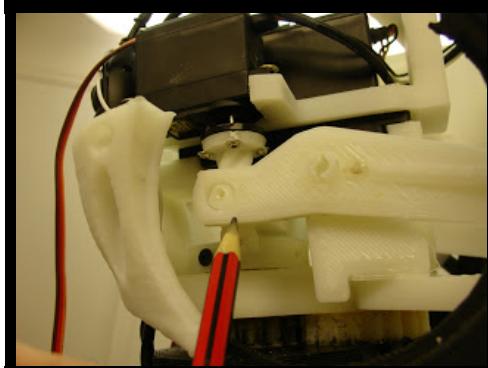
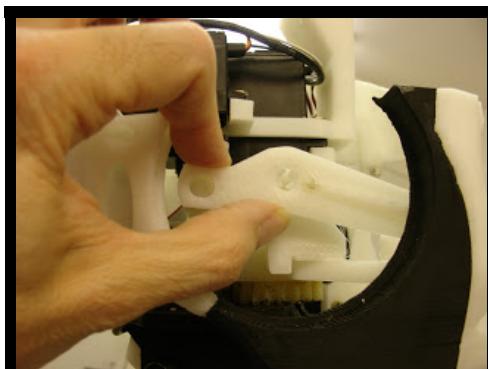


Fix "ThroatPistonBase" to "NeckHinge" with a 8mm bolt (or print one from the hand)

Now the whole head should be able to go up and down if the servo turns from 0 to 180. Make a test with the arduino. Run this test carefully.



Leaving the head up, Slide the jaw assembly in to the head.



Bring the "JawSupports" through and mount them to the "JawHinges" and "JawHolders"



Using washers, set screws in.

Run a test on the jaw mechanism with Arduino.

ATTENTION: the jaw servo can only turn from 0 to 20° (I think) if more it might break something.

Please Run your own test to check. (At the moment I write this I don't remember exactly to how much mine could go. When I will plug it again I will rectify this)

You can run the cables of your servos in the "Neck".

Now you should be set to move the head and the jaw through your Arduino.

Check [InMoov service Myrobotlab](#) for to get this added to your robot. Jaw is not yet implemented in InMoov service at this date 08/03/2013.

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