



XRP Robot Fork Lift Add-On



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updated 22. 6. 2024 | published 22. 6. 2024

Summary

A functional forklift add-on for the XRP Robot

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Tags: [forklift](#) [scoop](#) [sparkfun](#) [110scale](#) [scaledmodel](#) [xrp](#)
[xrprobotics](#)

Transform your XRP into a versatile lifting machine, perfect for creative play and practical tasks. It allows the robot to pick up, move, and stack objects with ease. This feature is useful for organizing small items or constructing simple structures, adding a practical element to your robot's capabilities. It could be wonderfully combined with the [mini warehouse](#) from [Wim V.](#)

If you encounter any issues when printing the fork lift add-on or need support, please feel free to let me know.

Happy printing :)

Required Parts

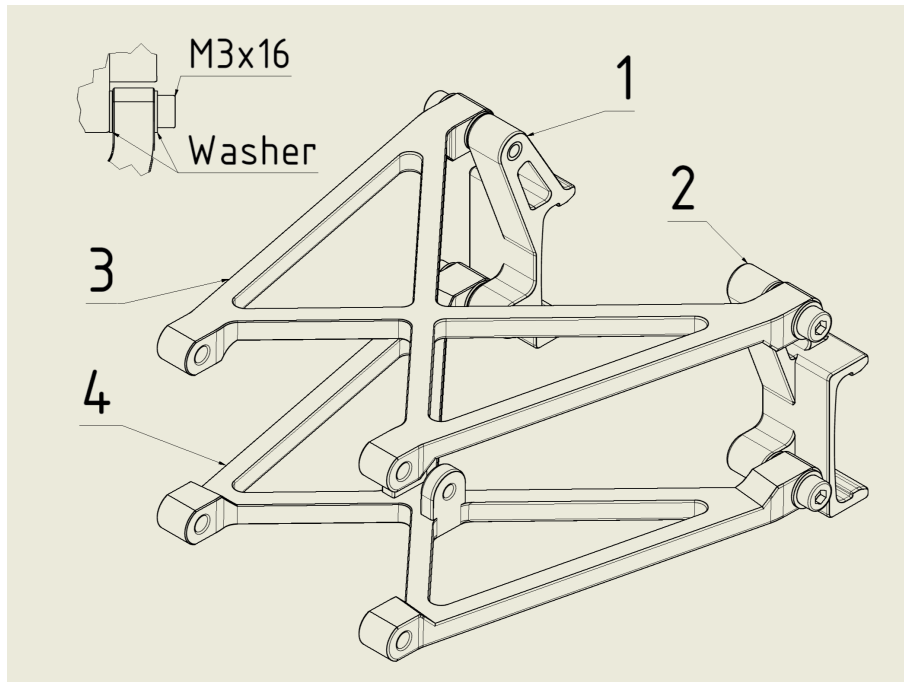
- printed parts
- 21x M3 washer (DIN 125-A)
- 10x M3x16 screws (DIN 912)

- 1x DGServo S05NF STD

How to Assemble

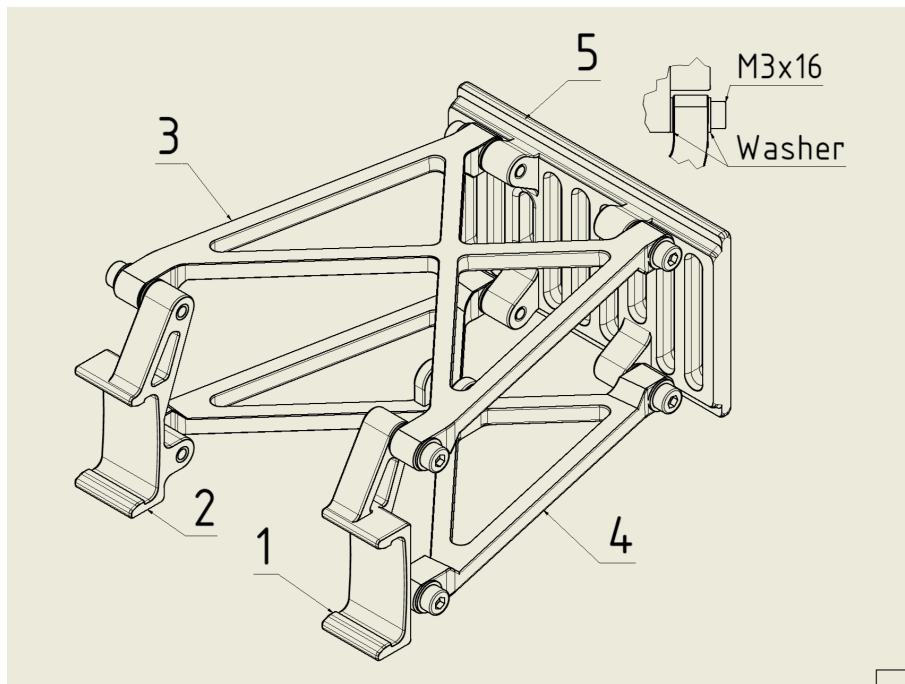
Step 1:

Screw the two upper sides of the arm mounts (1, 2) onto the arm (3). Place a washer between the arm mounts (1, 2), the arm (3) and the M3x16 screw to reduce friction between the parts. Then screw the arm with the servo attachment (4) onto the lower side of the arm mounts (1, 2).



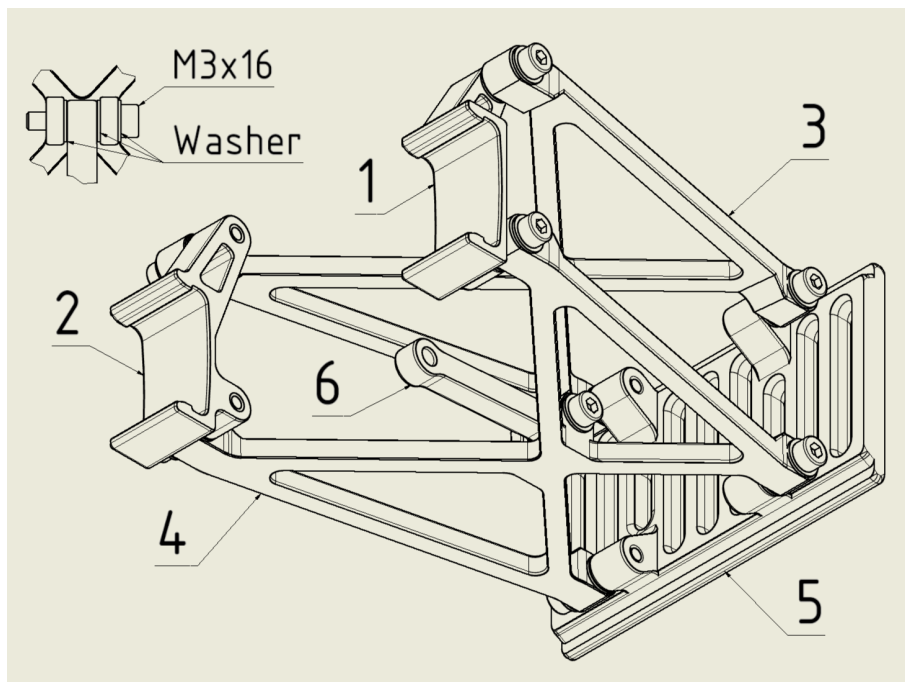
Step 2:

Screw the front (5) onto the upper arm (3) and the lower arm for the servo (4). Place a washer between the front (5), the arms (3, 4) and the screw heads to reduce friction.



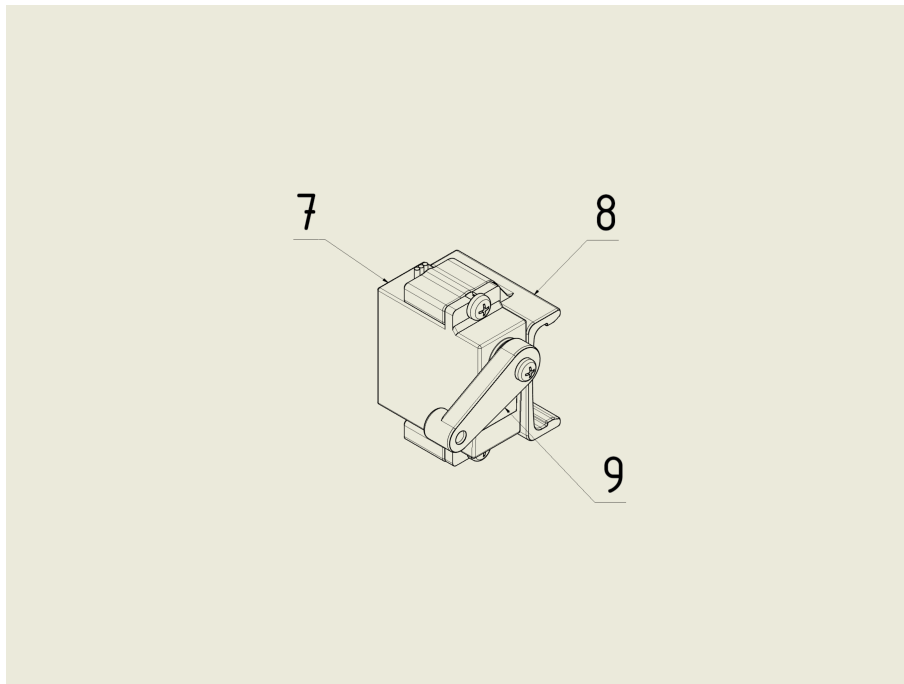
Step 3:

Screw the servo link (6) onto the lower arm (4). Place a washer between the servo link (6), the lower arm (4) and the screw head to reduce friction.



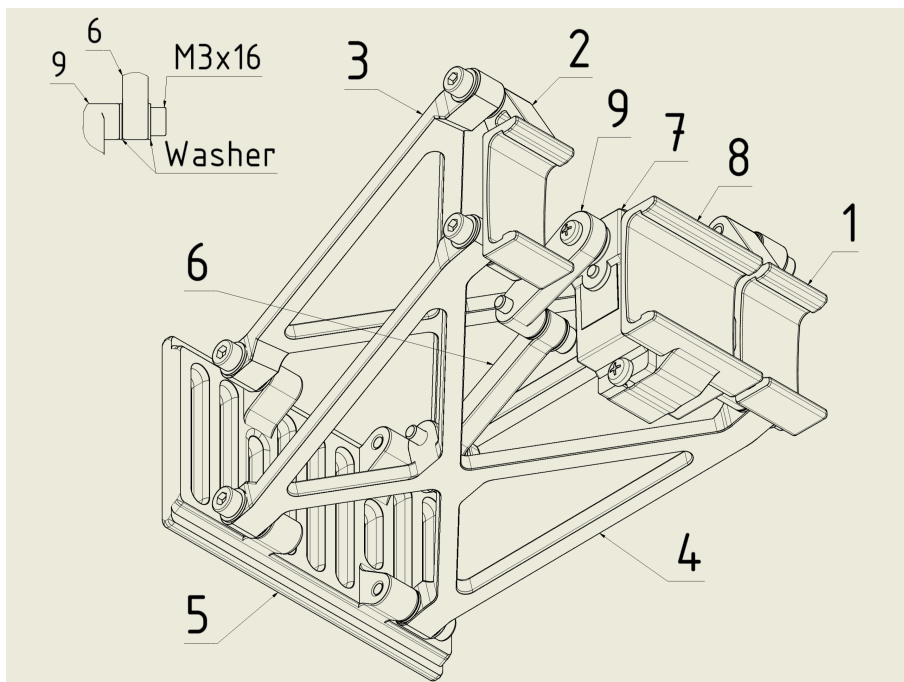
Step 4:

Screw the servo horn (9) onto the servo (7) and mount the servo onto the servo mount (8) using the screws that came with the servo.



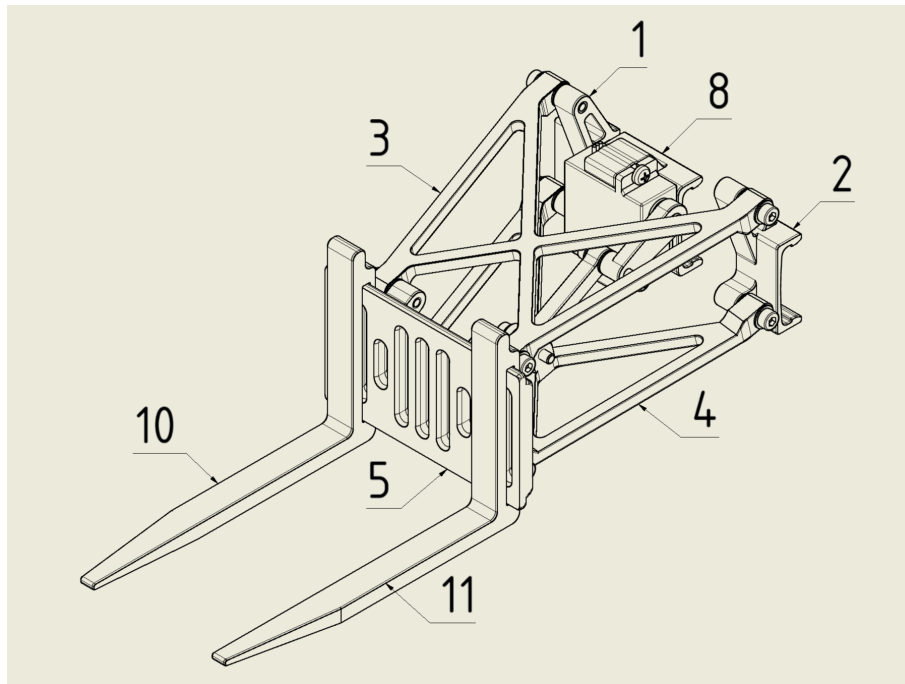
Step 5:

Screw the servo horn (9) onto the servo link (6). Place a washer between the servo horn (9), the servo link (6) and the screw head to reduce friction.



Step 6:

Slide the forks (10, 11) onto the front (5). The distance between both forks (10, 11) should be roughly 45 mm.



After assembling the forklift, you can now mount it on the front of your XRP robot. I wouldn't recommend putting it on the backside of the robot because it could easily tip over. Connect the servo to the controller PCB and adjust the servo horn position if needed.

Changelog

Date	Version	Type	Comment
2024-06-22	V1.0	Release	

Model files



Scaled Models

2 files



europallet_simplified_scaled-1-10_v1.stl



oilbarrel-200l_hollow_scaled-1-10_v1.stl



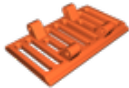
xrp-forklift_armmount_v1.stl



xrp-forklift_arm_v1.stl



xrp-forklift_armforservo_v1.stl



xrp-forklift_front_v1.stl



xrp-forklift_servolink_v1.stl



xrp-forklift_servomount_v1.stl



xrp-forklift_servohorn_v1.stl



xrp-forklift_forks_v1.stl

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