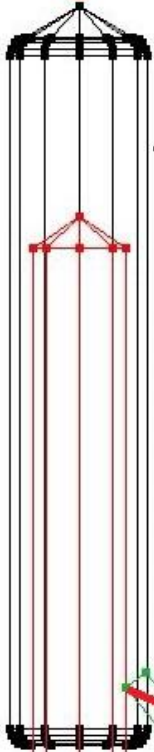
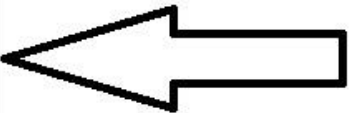


To make a gear retractable you need the following entries in the .tmd file:

Rotation Point



FrontGear

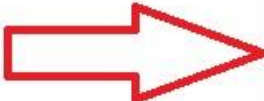


Scissors1

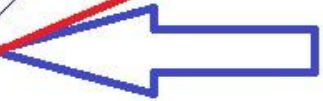


| | | | |
|--------|----------|-----------|-----------|
| Joint0 | 0.782100 | -0.099300 | -0.178700 |
| Joint2 | 0.954400 | -0.083500 | -0.208600 |
| Joint1 | 0.998000 | -0.083700 | -0.217900 |

FrontGear1



Scissors2



```
<[string8][object][rigidbody]
  <[string8][Name][FrontGear]>
  <[float64][Mass][0.3500]>
  <[tmvector3d][InertiaLength][ 0.168500 0.073600 0.166100]>
  <[tmvector3d][R0][ 0.9942 -0.091921 -0.0505 ]>
  <[tmmatrix3d][B0][ 1.0 0.0 0.0 0.0 1.0 0.0 0.0 0.0 1.0 ]>
>
<[string8][object][jointlinear]
  <[string8][Name][JointFuselageFrontGear]>
  <[tmvector3d][R0][ 1.0079 -0.089421 0.0163 ]>
  <[float64][Kfx][100000.0]>
  <[float64][Kfy][100000.0]>
  <[float64][Kfz][100000.0]>
  <[float64][Dfx][20.0]>
  <[float64][Dfy][20.0]>
  <[float64][Dfz][80.0]>
  <[float64][Ktx][2000.0]>
  <[float64][Kty][2000.0]>
  <[float64][Ktz][2000.0]>
  <[float64][Dtx][1.0]>
  <[float64][Dty][1.0]>
  <[float64][Dtz][1.0]>
  <[string8][Body0][Fuselage]>
  <[string8][Body1][FrontGear]>
  <[string8][Rotation0Control][ServoFrontGear.Output]> To retract the gear!
  <[tmvector3d][Rotation0Axis][ 0.0 0.997564 -0.069756 ]>
  <[float64][Rotation0Angle][1.6625]>
  <[float64][ForceMax][600.0]>
  <[float64][TorqueMax][600.0]>
>
<[string8][object][rigidbody]
  <[string8][Name][FrontGear1]>
  <[float64][Mass][0.3500]>
  <[tmvector3d][InertiaLength][ 0.168500 0.073600 0.166100]>
  <[tmvector3d][R0][ 0.9942 -0.091921 -0.2847 ]>
  <[tmmatrix3d][B0][ 1.0 0.0 0.0 0.0 1.0 0.0 0.0 0.0 1.0 ]>
>
```

```
<[string8][object][jointlinear]
  <[string8][Name][JointFrontGearFrontGear1]>
  <[tmvector3d][R0][ 1.0088 -0.092921 -0.1508 ]>
  <[float64][Kfx][50000.0]>
  <[float64][Kfy][50000.0]>
  <[float64][Kfz][2000.0]>
  <[float64][Dfx][0.2]>
  <[float64][Dfy][0.2]>
  <[float64][Dfz][150.0]>
  <[float64][Ktx][2000.0]>
  <[float64][Kty][2000.0]>
  <[float64][Ktz][200.0]>
  <[float64][Dtx][1.0]>
  <[float64][Dty][1.0]>
  <[float64][Dtz][0.2]>
  <[string8][Body0][FrontGear]>
  <[string8][Body1][FrontGear1]>
  <[float64][ForceMax][600.000000]>
  <[float64][TorqueMax][600.000000]>
  <[string8][Rotation1Control][ServoRudder.Output]>      To turn the gear left and right
  <[tmvector3d][Rotation1Axis][0.0000 0.0000 1.0000 ]>
  <[float64][Rotation1Angle][1.0]>
  <[tmvector3d][PreLoad][0.0 0.0 40.0]>
>
```

```
<[string8][object][wheelhull]
  <[string8][Name][FrontWheelHull]>
  <[float64][K][5000.000000]>
  <[float64][D][50.000000]>
  <[float64][Radius][0.06]>
  <[string8][Body][FrontGear1]>
  <[tmvector3d][R0][ 1.0193 -0.09157 -0.3017 ]>
  <[string8][BrakeControl][BrakeInput.Output]>
>
```

```
<[string8][object][servolinear]
  <[string8][Name][ServoFrontGear]>
  <[string8][Input][GearSequence.Output]>
  <[float64][Position][0.0]>
  <[float64][OutputSpeed][10.0]>
  <[float64array][InputPosition][ 0.0 0.8 1.0 ]>
  <[float64array][OutputPosition][ 0.0 1.0 1.0 ]>
>
```

```
<[string8array][ChannelInputNames][Throttle Aileron Elevator Rudder Flaps Wheel-Brake Retractable-Gear Smoke Cockpit Airbrake ]>
```

```
<[string8][object][receiveroutput]
  <[string8][Name][RetractsInput]>
  <[string8][Input][Receiver.Channel7]>
>
```

```
<[string8][object][rigidbodygraphics]
  <[string8][Name][FrontGear]>
  <[string8][GeometryList][ FrontGear ]>
  <[uint32][PositionID][FrontGear.R]>
  <[uint32][OrientationID][FrontGear.Q]>
>
```

```
<[string8][object][rigidbodygraphics]
  <[string8][Name][FrontGear1]>
  <[string8][GeometryList][ FrontGear1 ]>
  <[uint32][PositionID][FrontGear1.R]>
  <[uint32][OrientationID][FrontGear1.Q]>
>
```

```
<[string8][object][rotatingbodygraphics]
  <[string8][Name][FrontWheel]>
  <[string8][GeometryList][ FrontWheel]>
  <[uint32][PositionID][FrontGear1.R]>
  <[uint32][OrientationID][FrontGear1.Q]>
  <[uint32][AngleID][FrontWheelHull.RotationAngle]>
  <[tmvector3f][Axis][ 0.0 1.0 0.0 ]>
  <[tmvector3f][Pivot][ 1.019300 -0.077300 -0.301700]>
>
```

```
<[string8][object][torsionlinkgraphics]
  <[string8][Name][FrontGearScissors]>
  <[string8][Graphics0][FrontGear]>
  <[string8][Graphics1][FrontGear1]>
  <[tmvector3f][Joint0][0.983500 -0.099300 -0.178700 ]>
  <[tmvector3f][Joint2][ 0.954400 -0.083500 -0.208600 ]>
  <[tmvector3f][Joint1][ 0.998000 -0.083700 -0.217900 ]>
  <[tmvector3f][Axis][ 0.0 1.0 0.0 ]>
  <[string8][GeometryList][ FrontGearScissors ]>
  <[uint32][AttachTo][0]>
>
```

```
<[string8][object][torsionlinkgraphics]
  <[string8][Name][FrontGear1Scissors]>
  <[string8][Graphics0][FrontGear]>
  <[string8][Graphics1][FrontGear1]>
  <[tmvector3f][Joint0][0.983500 -0.099300 -0.178700 ]>
  <[tmvector3f][Joint2][ 0.954400 -0.083500 -0.208600 ]>
  <[tmvector3f][Joint1][ 0.998000 -0.083700 -0.217900 ]>
  <[tmvector3f][Axis][ 0.0 1.0 0.0 ]>
  <[string8][GeometryList][ FrontGear1Scissors ]>
  <[uint32][AttachTo][1]>
>
```