Rigidbody Operators

bpy.ops.rigidbody.**bake_to_keyframes(*, frame_start=1, frame_end=250, step=1)**

Bake rigid body transformations of selected objects to keyframes

PARAMETERS:

- **frame_start** (*int in [0, 300000], (optional)*) – Start Frame, Start frame for baking
- **frame_end** (*int in [1, 300000], (optional)*) – End Frame, End frame for baking
- **step** (*int in [1, 120], (optional)*) – Frame Step, Frame Step

FILE:

startup/bl_operators/rigidbody.py:108

bpy.ops.rigidbody.**connect(*, con_type='FIXED', pivot_type='CENTER', connection_pattern='SELECTED_TO_ACTIVE')**

Create rigid body constraints between selected rigid bodies

PARAMETERS:

- **con_type** (*enum in ['FIXED', 'POINT', 'HINGE', 'SLIDER', 'PISTON', 'GENERIC', 'GENERIC_SPRING', 'MOTOR'], (optional)*) – Type, Type of generated constraint
  - `FIXED` Fixed – Glue rigid bodies together.
  - `POINT` Point – Constrain rigid bodies to move around common pivot point.
  - `HINGE` Hinge – Restrict rigid body rotation to one axis.
  - `SLIDER` Slider – Restrict rigid body translation to one axis.
  - `PISTON` Piston – Restrict rigid body translation and rotation to one axis.
  - `GENERIC` Generic – Restrict translation and rotation to specified axes.
  - `GENERIC_SPRING` Generic Spring – Restrict translation and rotation to specified axes with springs.
  - `MOTOR` Motor – Drive rigid body around or along an axis.
- **pivot_type** (*enum in ['CENTER', 'ACTIVE', 'SELECTED'], (optional)*) – Location, Constraint pivot location
  - `CENTER` Center – Pivot location is between the constrained rigid bodies.
  - `ACTIVE` Active – Pivot location is at the active object position.
  - `SELECTED` Selected – Pivot location is at the selected object position.
- **connection_pattern** (*enum in ['SELECTED_TO_ACTIVE', 'CHAIN_DISTANCE'], (optional)*) – Connection Pattern, Pattern used to connect objects
  - `SELECTED_TO_ACTIVE` Selected to Active – Connect selected objects to the active object.
  - `CHAIN_DISTANCE` Chain by Distance – Connect objects as a chain based on distance, starting at the active object.

FILE:

startup/bl_operators/rigidbody.py:270

bpy.ops.rigidbody.**constraint_add(*, type='FIXED')**

Add Rigid Body Constraint to active object

PARAMETERS:

type (enum in Rigidbody Constraint Type Items, (optional)) – Rigid Body Constraint Type

bpy.ops.rigidbody.**constraint_remove()**

Remove Rigid Body Constraint from Object

bpy.ops.rigidbody.**mass_calculate(*, material='DEFAULT', density=1.0)**

Automatically calculate mass values for Rigid Body Objects based on volume

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PARAMETERS:

- **material** (*enum in ['DEFAULT'], (optional)*) – Material Preset, Type of material that objects are made of (determines material density)
- **density** (*float in [1.17549e-38, inf], (optional)*) – Density, Density value (kg/m^3), allows custom value if the 'Custom' preset is used

bpy.ops.rigidbody.**object_add(*, type='ACTIVE')**

Add active object as Rigid Body

PARAMETERS:

type (enum in Rigidbody Object Type Items, (optional)) – Rigid Body Type

bpy.ops.rigidbody.**object_remove()**

Remove Rigid Body settings from Object

bpy.ops.rigidbody.**object_settings_copy()**

Copy Rigid Body settings from active object to selected

FILE:

startup/bl_operators/rigidbody.py:45

bpy.ops.rigidbody.**objects_add(*, type='ACTIVE')**

Add selected objects as Rigid Bodies

PARAMETERS:

type (enum in Rigidbody Object Type Items, (optional)) – Rigid Body Type

bpy.ops.rigidbody.**objects_remove()**

Remove selected objects from Rigid Body simulation

bpy.ops.rigidbody.**shape_change(*, type='MESH')**

Change collision shapes for selected Rigid Body Objects

PARAMETERS:

type (enum in Rigidbody Object Shape Items, (optional)) – Rigid Body Shape

bpy.ops.rigidbody.**world_add()**

Add Rigid Body simulation world to the current scene

bpy.ops.rigidbody.**world_remove()**

Remove Rigid Body simulation world from the current scene