Claims

1. A unit combination (20) included in a work machine (10), comprising:

a first unit (30) which is a component of the work machine (10); and

a second unit (50) which is a component of the work machine (10), the second unit (50) being connectable to the first unit (30) through a pin (70) so as to be rotatable relatively to the first unit (30) about a rotation axis and detachable from the first unit (30), wherein:

the first unit (30) includes a first unit body (31) provided with a first pin hole (33) which allows the pin (70) to be inserted through the first pin hole (33) in a rotation-axis direction (Y) parallel to the rotation axis, a first contact member (41) having a first contact surface (41a) which has a shape extending along an arc having a center on a center axis (A1) of the first pin hole (33) when viewed in the rotation-axis direction (Y), and at least one fastening member (43) for fastening the first contact member (41) to the first unit body (31);

the second unit (50) includes a second unit body (51) provided with a second pin hole (53) which allows the pin (70) to be inserted through the second pin hole (53) in the rotation-axis direction (Y), and a second contact part (61) having a second contact surface (61a) which has a shape extending along an arc having a center on a center axis (A2) of the second pin hole (53) when viewed in the rotation-axis direction (Y), the second contact part (61) being contactable with the first contact surface (41a);

the fastening member (43) fastens the first contact member (41) to the first unit body (31) so as to allow a relative position of the first contact member (41) to the first unit body (31) to be adjusted in a direction orthogonal to the rotation-axis direction (Y); and

the first contact surface (41a) and the second contact surface (61a) are capable of mutual surface contact along the respective arcs;

characterized in that

a central angle of the arc formed by the first contact surface (41a) viewed in the rotation-axis direction (Y) is 90° or more.

2. The unit combination (20) included in the work machine (10) according to claim 1, wherein the first contact surface is a cut surface (41a) or a ground surface.

3. The unit combination (20) included in the work machine (10) according to claim 1 or 2, wherein the second contact surface (61a) is a cut surface or a ground surface.

4. The unit combination (20) included in the work machine (10) according to any one of claims 1 to 3, wherein the first contact member (41) is disposed on an outer side of

the first unit body (31) in the rotation-axis direction (Y).

5. The unit combination (20) included in the work machine (10) according to claim 4, wherein the first unit (30) further includes a contact member support part (35), which protrudes from the first unit body (31) to an outside of the first unit body (31) in the rotation-axis direction (Y) and disposed between the first unit body (31) and the first contact member (41) to thereby allow the first contact member (41) to be supported by the first unit body (31) through the contact member support part (35) at a position separated from the first unit body (31) outward in the rotation-axis direction (Y), and the second contact part (61) protrudes from the second unit body (51) to an outside of the second unit body (51) in the rotation-axis direction (Y) and disposed around the second pin hole (53).

6. The unit combination (20) included in the work machine (10) according to claim 5, wherein the contact member support part (35) supports the first contact member (41) at a position where the first contact member (41) is separated from the first unit body (31) outward in the rotation-axis direction (Y) to an extent of locating the second unit body (51) on an outer side of the first unit body (31) in the rotation-axis direction (Y) and allowing the second contact surface (61a) to come into contact with the first contact surface (41a) at a position on an outer side of the second unit body (51).

7. The unit combination (20) included in the work machine (10) according to any of claims 4 to 6, wherein the second contact part (61) has an outer peripheral surface having a radius of curvature that is smaller than a radius of curvature of an outer peripheral (51c1) surface of the second unit body (51), and the second contact surface (61a) is included in the outer peripheral surface of the second contact part (61).

8. The unit combination (20) included in the work machine (10) according to any one of claims 1 to 7, wherein one unit of the first unit (30) and the second unit (50) is a derricking unit that is capable of derricking with respect to the other unit of the first unit (30) and the second unit (50).

9. The unit combination (20) included in the work machine (10) according to claim 8, wherein the other unit is at least a part of a boom (13), and the derricking unit is at least a part of a jib (15) to be connected to a distal end of the boom (13) through the pin (70) capably of derricking with respect to the boom (13).