Claims

1. A system comprising:

a housing running tool comprising:

an inner sleeve having a first mating surface configured to engage a second mating surface of a housing to rigidly couple the inner sleeve to an interior of the housing; and

an outer sleeve disposed about the inner sleeve and configured to support the inner sleeve in an axial direction, wherein the outer sleeve comprises a first mounting feature configured to engage a second mounting feature of the housing to couple the outer sleeve to an exterior of the housing such that substantially all torque applied to the housing running tool in a circumferential direction is transferred to the housing via the outer sleeve;

wherein the inner sleeve comprises a third mounting feature configured to selectively engage a fourth mounting feature of the outer sleeve via axial movement of the outer sleeve relative to the inner sleeve such that rotation of the outer sleeve drives the inner sleeve to rotate when the third mounting feature is engaged with the fourth mounting feature.

2. The system of claim 1, wherein the outer sleeve is configured to support the inner sleeve in the axial direction via contact between the inner sleeve and a retaining ring mounted to an interior surface of the outer sleeve.

3. The system of claim 1, wherein the first mounting feature comprises a key configured to selectively engage a slot of the second mounting feature via axial movement of the outer sleeve relative to the housing.

4. The system of claim 1, wherein the first mating surface comprises a first set of threads configured to interface with a second set of threads of the second mating surface.

5. The system of claim 1, wherein the third mounting feature is configured to selectively engage the fourth mounting feature via a key disposed in a slot. ~~axial movement of the outer sleeve relative to the inner sleeve.~~

6. The system of claim 5, wherein the third mounting feature comprises ~~a key~~ the key disposed on an exterior surface of the inner sleeve, the fourth mounting feature comprises ~~a slot~~ the slot disposed on an interior surface of the outer sleeve, and the key is configured to interface with the slot to block rotation of the inner sleeve relative to the outer sleeve when the key is disposed within the slot.

7. The system of claim 2, wherein an exterior surface of the retaining ring comprises threads configured to interface with corresponding threads on the interior surface of the outer sleeve to couple the retaining ring to the outer sleeve.

8. The system of claim 1, wherein the housing running tool is configured to move the inner and outer sleeves simultaneously around the interior and exterior of the housing.

9. The system of claim 1, comprising a retaining ring coupled to an interior surface of the outer sleeve, wherein the inner sleeve comprises a first coupling having the first mating surface configured to engage the second mating surface of the housing, the outer sleeve comprises a second coupling having the first mounting feature configured to engage the second mounting feature of the housing, the inner sleeve comprises a first shoulder portion configured to move an axial distance between the retaining ring and a second shoulder portion of the outer sleeve, the inner and outer sleeves rotationally couple to one another at a first position along the axial distance via the third and fourth mounting features of the inner and outer sleeves, the inner and outer sleeves rotationally uncouple from one another at a second position along the axial distance, and the outer sleeve is configured to move the housing via the second coupling without uncoupling the first coupling.

10. The system of claim 9, wherein rotation of the outer sleeve drives the housing to rotate when the first mounting feature is engaged with the second mounting feature.

11. The system of claim 10, wherein the first mounting feature comprises a key disposed on the interior surface of the outer sleeve, and the second mounting feature comprises a slot disposed on an exterior surface of the housing.

12. The system of claim 10, wherein the first mounting feature is configured to selectively engage the second mounting feature via axial movement of the outer sleeve relative to the housing.

13. The system of claim 9, wherein:

the first mating surface of the inner sleeve comprises an exterior threaded surface and the second mating surface of the housing comprises an interior threaded surface; and

the third mounting feature of the inner sleeve comprises a first key and the fourth mounting feature of the outer sleeve comprises a first slot.

14. The system of claim 13, wherein the outer sleeve comprises a second key configured to selectively engage a second slot within an exterior surface of the housing such that rotation of the outer sleeve drives the housing to rotate when the second key is engaged with the second slot.

15. The system of claim 14, wherein the second key is configured to selectively engage the second slot via axial movement of the outer sleeve relative to the housing.

16. The system of claim 13, wherein the first key is configured to selectively engage the first slot via axial movement of the outer sleeve relative to the inner sleeve.

17. The system of claim 13, wherein an exterior surface of the retaining ring comprises threads configured to interface with corresponding threads on the interior surface of the outer sleeve to couple the retaining ring to the outer sleeve.

18. The system of claim 13, wherein the retaining ring is configured to enable the inner sleeve to rotate with respect to the outer sleeve.

19. The system of claim 9, wherein the housing running tool is configured to engage the first and second mounting features while disengaging the third and fourth mounting features, and the housing running tool is configured to disengage the first and second mounting features while engaging the third and fourth mounting features.

20. The system of claim 9, wherein the housing running tool is configured to selectively engage the third and fourth mounting features to transfer torque between the outer sleeve and the inner sleeve, and the housing running tool is configured to selectively engage the first and second mounting features to transfer torque between the outer sleeve and the housing.

21. A system comprising:

a housing running tool comprising:

an inner sleeve comprising a first coupling having a first mating surface configured to engage a second mating surface of a housing;

an outer sleeve disposed about the inner sleeve, wherein the outer sleeve comprises a second coupling having a first mounting feature configured to engage a second mounting feature of the housing, and the inner sleeve

comprises a third mounting feature configured to engage a fourth mounting feature of the outer sleeve; and

a retaining ring coupled to an interior surface of the outer sleeve, wherein the inner sleeve comprises a first shoulder portion configured to move an axial distance between the retaining ring and a second shoulder portion of the outer sleeve, the inner and outer sleeves rotationally couple to one another at a first position along the axial distance via the third and fourth mounting features of the inner and outer sleeves, the inner and outer sleeves rotationally uncouple from one another at a second position along the axial distance, and the outer sleeve is configured to move the housing via the second coupling without uncoupling the first coupling.

22. The system of claim 21, wherein the third mounting feature is configured to selectively engage the fourth mounting feature via axial movement of the outer sleeve relative to the inner sleeve.