CHAPTER 9

GROUND HANDLING

<u>Section</u>	<u>Title</u>		<u>Page</u>
9-10	Ground Handling		9.1
	9-11	Ground Handling Wheels	9.1
	9-12	Moving Helicopter on Ground Handling Wheels	9.3
	9-13	Ground Handling Carts	9.3
	9-14	Ground Power Start	9.3
9-20	Trailering		9.4

25 OCT 2010 R66 Maintenance Manual Chapter 9 Ground Handling Page 9.i

Intentionally Blank

CHAPTER 9

GROUND HANDLING

9-10 Ground Handling

9-11 Ground Handling Wheels

Refer to R66 Illustrated Parts Catalog (IPC) Figure 9-1.

NOTE

R66 ground handling wheels are installed inboard of landing gear skid tubes. C063-5 (LH) and C063-6 (RH) ground handling wheel assemblies are not interchangeable. When wheels are installed and in locked position, both handles point aft.

CAUTION

Handle has a tendency to snap over when raising and lowering the helicopter. Grip handle firmly with both hands during operation.

CAUTION

Remain clear of landing gear skid tubes when helicopter is raised.

WARNING

Remove ground handling wheels for flight.

A. Installation

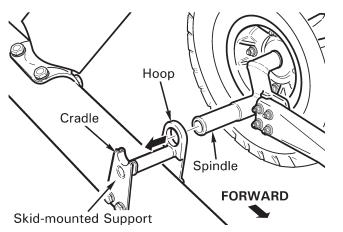
NOTE

Verify proper inflation of ground handling wheel tires. Maximum tire inflation pressure is 70 psi.

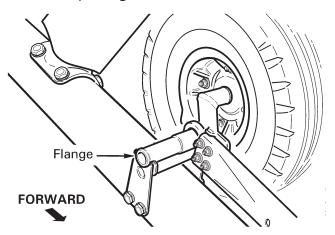
- 1. Extend ground handling wheel retractable handle by depressing locking pins and sliding handle out until pins engage outer holes. Verify security.
- 2. Refer to Figure 9-1. Hold ground handling wheel assembly inboard of skid with handle forward, wheel aft, and spindle pointed outboard. Insert spindle completely into skid-mounted support, then pull handle in rearward arc (raises helicopter) until handle is in locked position, parallel with the skid.
- 3. Repeat steps to install second wheel assembly. Helicopter will rest on skid toes.

25 OCT 2010 R66 Maintenance Manual Chapter 9 Ground Handling Page 9.1

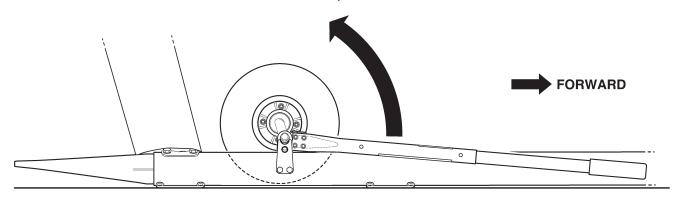
1. Insert spindle into skid-mounted support.



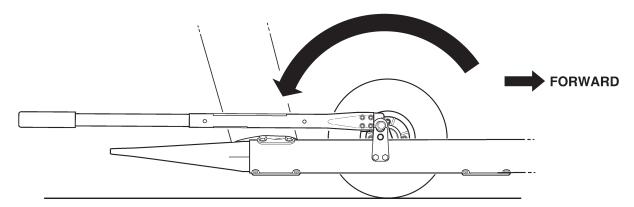
2. Verify flange is outboard of cradle.



3. Pull handle in rearward arc to raise helicopter.



4. Handle is in locked position when parallel with the skid.



NOTE

R66 ground handling wheels are installed inboard of landing gear skid tubes. C063-5 (LH) and C063-6 (RH) ground handling wheel assemblies are not interchangeable. When wheels are installed and in locked position, both handles point aft.

FIGURE 9-1 GROUND HANDLING WHEELS

Page 9.2 Chapter 9 Ground Handling R66 Maintenance Manual 25 OCT 2010

9-11 Ground Handling Wheels (continued)

B. Removal

- Refer to Figure 9-1. Pull ground handling wheel handle in forward arc (lowers helicopter) until handle is in unlocked position, parallel with the skid. Remove spindle from skid-mounted support and remove wheel assembly. Repeat step to remove second wheel assembly.
- 2. Retract handle by depressing locking pins and sliding handle in until pins engage inner holes. Verify security.

9-12 Moving Helicopter on Ground Handling Wheels

- 1. Position main rotor blades approximately fore and aft and apply rotor brake.
- 2. Install ground handling wheels per Section 9-11.
- 3. Verify ground handling area is free of foreign object debris.
- 4. Have one person pull down on tail rotor gearbox until skid tubes are parallel with the ground. During ground handling, balance helicopter to minimize wear on forward skid shoes and rear extensions.

NOTE

Steer helicopter by gripping the tail rotor gearbox, aft tailcone section, or inboard part of horizontal stabilizer between tailcone and vertical stabilizers.

CAUTION

Do not steer helicopter by gripping the tail rotor guard, vertical stabilizers, outboard part of horizontal stabilizer, tail rotor, tail rotor controls, or tail skid.

- 5. a. If moving helicopter forward, nose first: Open engine cowling door(s). Have one person (or two people) push on the engine door frame(s) forward ledge.
 - b. If moving helicopter backward, tail first: Have one person (or two people) push on either side of nose vent.

9-13 Ground Handling Carts

The R66 can be handled by one person using the MT950-1 Universal ground handling cart.

Product specifications, as well as MT950 Operating Instructions, Maintenance Manuals, and Illustrated Parts Catalogs are available on our website, www.robinsonheli.com, under the Customer Support tab.

9-14 Ground Power Start

See R66 Pilot's Operating Handbook (POH) Section 4.

SEP 2012 R66 Maintenance Manual Chapter 9 Ground Handling Page 9.3

9-20 Trailering

CAUTION

Trailering the R66 is not normally recommended. Most trailers large enough to accommodate the helicopter are designed for much heavier loads; the trailer's springs and shock absorbers will not function properly when lightly-loaded. Also, without support, the tailcone can resonate with trailer vibrations, subjecting the tailcone to greatly amplified loads.

If trailering is unavoidable, observe the following precautions:

- 1. Load trailer with ballast to an average weight the trailer is designed to carry.
- 2. Support the tailcone. Cushion support point(s) to prevent tailcone damage.
- 3. Perform one of the following options:
 - a. Remove main rotor blades per Section 62-10. Pack blades in shipping crate. See R66 Illustrated Parts Catalog [IPC] Figure 99-11.
 - b. Install main rotor blade supports per Section 10-13.
 - c. Fabricate blade supports to unload droop stops. Position supports inboard of blade extended tab. Cushion support points to prevent blade damage.
- 4. Restrain tail rotor to prevent teetering.
- 5. Fuel helicopter per Section 12-41.
- 6. Protect windshield, windows, rotor systems, and all fragile equipment from exposure to highway debris and subsequent damage.
- 7. After trailering, perform 100-hour maintenance and inspection per Section 5-45.

Page 9.4 Chapter 9 Ground Handling R66 Maintenance Manual SEP 2012