

# Robinson Helicopter R22, R44, R66 Tow Assembly Instructions



[Fig.1]



[Fig.2]

**Position Mirror Here**



[Fig.3]



[Fig.4]

1. Carefully unpack contents of shipping carton(s) and locate the charger and battery. The battery may or may not be installed in the drill. Plug in the charger and charge the battery for at least one hour. You will need a 1/2" and two 7/16" boxed in wrenches and a 1/8" Allen wrench to assemble your tow.
2. **MILWAUKEE DRILL:** Locate the 1/2" drive shaft and insert the end with one machined flat fully 1" into the drill hub. Be sure the flat aligns with threaded set screw holes. **Apply blue thread lock to both set screws** and install **tightening securely** with a 1/8" Allen wrench being sure that they are centered on the flat of the drive shaft. Allow one-hour dry time before use. Install drill side handle into drill right or left side as needed. Failure to follow this assembly procedure will cause damage to drive shaft and drill and will not be covered under our warranty.
3. Look inside the handle tube end which inserts into the tug receiver to note the foam drive shaft alignment insert installed 6"- 8" inside. With the drive shaft installed in the drill, insert it into the expanded handle tube end and see that it slips through the center of the foam alignment insert (a light source at the end of handle is helpful) and push the drill into the handle as far as it will go noting that it fits squarely to the drill collar and that drive shaft is centered in the handle tube. Tighten compression clamp securely to prevent drill from rotating in handle tube. Screw side handle into drill left or right side as desired.
4. Install wheels onto axels and secure with 1/4" x 2" bolts and lock nuts. The wheel hubs are designed to be somewhat loose on the drive axel to protect the drive train gears and also aid in turning your tug. Air tires to **22-25 PSI** and maintain this air pressure at all times.
5. Install the main frame **[Fig.1]** onto red transmission mounting plate with 4- 5/16" X 3/4" bolts and flange nuts. Install casters **[Fig.2]** to main frame using 8- 5/16" X 3/4" bolts and flange nuts.
6. Be sure the stainless steel compression clamp is fit onto the tow handle receiver approx. 1/8" from the top. Install the battery into the drill and note that it "snaps" into place. Install the handle tube into the tug receiver fully to the black depth mark rotating as necessary or lightly "bumping" the drill trigger to engage the square drive socket. Tighten compression clamp snugly with drill in the position shown in **[Fig.3]**. **It is critical that this connection is always tight when the tow is in use.**
7. Assemble hydraulic jack handle by inserting upper section male end with ball lock into jack handle lower section and snap into place noting ball engages hole. Loosen locking knob located under jack pumping mechanism. Jack handle is slightly bent to clear handle tube. Insert assembled jack handle per **[Fig.4]** noting that it has engaged the square locking valve stem and bend is positioned away from white handle tube. Re-tighten locking knob.
8. In an open area familiarize yourself with the drill operation by slowly pulling drill trigger and assure that the tow drive wheels rotate in both directions using the forward/reverse switch located on drill handle. The trigger rheostat functions under load only. Practice operating the tow for several minutes to get the feel of it.
9. Lower tow wheels on helicopter skids. Position tow under helicopter with hydraulic jack in lowest position. If fitted with optional mirror, adjust to view tow pin under helicopter. Be sure that locking pin in lifting head is unscrewed to receive tow pin. Turn jack handle CW firmly. Pump jack handle to raise lifting arm onto tow pin. Raise helicopter skids no more than 2" off surface for best performance. Tighten locking pin in lifting head. Slowly pull drill trigger to tow. Reverse procedure to remove tow.
10. **NOTE:** Our tow is designed with the helicopter weight carefully positioned on the tow for maximum towing efficiency. It is highly maneuverable and will take practice to operate efficiently. Once mastered you will find that to hangar your bird in tight spaces couldn't be easier or more precise.
11. Avoid sudden starts and stops while towing as this can damage the transmission gears. For additional information on operation and care of your tow refer to "[Use and Care Guide](#)"

**NEVER LEAVE TOW ATTACHED TO HELICOPTER WHILE NOT IN USE!**

**Practice makes perfect! Thank you for buying our Minimax Helicopter Tow!**

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