

Installing the Searcher Hook to the Boom

Boom Tip Searcher Hook Installation, General Information

Installing the Searcher Hook to the Boom Tip of the 200-series SPYDERCRANE allows it to be used in areas of extremely limited vertical room such as mechanical space, or within large machinery.

This procedure only applies to the URW205 and URW295 as they are equipped with the Jib System, which includes the Searcher Hook.

This procedure requires extensive modification of your SPYDERCRANE. To install the Searcher Hook to the Boom Tip, you will need to remove the Sheave Assembly and remove/store the attached hook block and wire rope. You will not be able to use the SPYDERCRANE for conventional lifting operations until you re-install the Sheave Assembly.

When using the Searcher Hook with the Boom Tip, your SPYDERCRANE's maximum Rated Load Capacity will be limited to the lifting capacity of the Searcher Hook. You MUST use the Searcher Hook Load Chart.

Vehicle Start Condition

- ◆ 200-Series
- ◆ Deployed (any state)
- ◆ Boom Deployed, No Hook Block Installed
- ◆ Wire Rope stored/removed
- ◆ Jib System dismantled and removed

Personnel and Time Needed

- ◆ 1 Person
- ◆ Standard PPE
- ◆ <30 minutes

Tools and Equipment Needed

- ◆ 17mm, 19mm, 22mm, 24mm (x2) wrenches
- ◆ 12" prybar, or screwdriver
- ◆ Cable tie

To Remove the Wire Rope Socket and Boom Tip Sheave Assembly

1. Confirm 4-Part Hook Block and Wire Rope have been removed/stored.
2. Dismount and remove the Jib System.
3. If not already removed, remove Wire Rope Socket by removing 19mm Wire Rope Socket Pin Retention Bolt and Pin; making sure to support the Wire Rope Socket as the pin is removed to prevent the socket from falling to the ground.
4. Remove the 17mm Sheave Retaining Bolt and Washer (Fig. 1).
5. Push against the Sheave Pin with a long-shank screwdriver, or prybar, going from the Boom Tip's left-side to right side; leave the prybar in-place to support the Sheaves and Sheave Spacer when you remove the Sheave Pin (Fig. 2).
6. Carefully pull the prybar out, supporting the Wire Rope Guide, right-hand Sheave, then left-hand Sheave and Sheave Spacer as the prybar is removed.
7. With the Sheaves, Sheave Spacer, and pry bar removed, use an extended 8mm hex key (typically, a ratchet drive bit with a 12" extension) to unfasten and remove the Hook Block Guide Bolt and the guide itself.
8. The Boom Tip should now be empty of the Wire Rope Socket, Sheaves, Sheave Spacer, and Wire Rope Socket and Sheave Pins (Fig. 3).



Fig. 1) The Sheave Pin Retaining Bolt and Washer on the left-side of the Boom Tip.



Fig. 2) A prybar used to support the Sheave Assembly with the Sheave Pin removed.



Fig. 3) The Sheave Pin, Wire Rope Guide, right-hand Sheave, Hook Block and Bolt, left-hand Sheave, Spacer, Sheave Pin Retaining Bolt and Washer.

To Remove the Jib Hood

1. Remove the two 22mm bolts that hold the Jib Hood in-place (Fig. 4).
2. Remove the two 24mm jam nuts on the right side of the Jib Hood, hold the inner jam nut with one wrench while removing the outer jam nut with the other wrench (Fig. 5).
3. Remove the Jib Hood Alignment Pin and Washer.
4. Making sure that A2B Switch Extension Cord is hanging freely from its mounting inside the hood, carefully rotate the entire hood backwards until it is lying on top of the Boom.
5. Remove the Jib Hood Pin Retaining Bolt and both washers.
6. Remove the Jib Hood Pin and Jib Hood (a punch and mallet might be required to drift the pin out).
7. Cable-tie the A2B Weight to the end of the Boom A2B Switch



Fig. 4) The 22mm bolts that hold the Jib Hood in-place, indicated by the yellow circles.



Fig. 5) You will need two 24mm wrenches to remove the Jib Hood Alignment Pin Nuts.

To Remove the Searcher Hook Swivel

1. Remove Swivel Lock and safety-clip from Jib Tip
2. Remove the Jib Sheave Pin Retention Bolt and washers from Jib Sheave Pin.
3. Remove Jib Sheave Pin and Searcher Hook Swivel.

To Install the Searcher Hook

1. Install the Sheave Pin back into the Boom Tip, slipping it through the Searcher Hook Swivel so that the swivel is hanging in the middle of the installed Sheave Pin; use the Sheave Pin Retention Bolt and Washer to secure the pin.
2. Install the Wire Rope Socket Pin to the Sheave Pin; use the Wire Rope Socket Pin Retention Bolt to secure the pin.
3. Install the Searcher Hook and Shackle to the other end of the Searcher Hook Swivel (Fig. 6).



Fig. 6) The Search Hook installed to the boom of the URW295.