Electric Baskets (ST-18, ST-19E & ST-26E and ST-180)

WARNING

BEFORE operating these baskets, you must understand and follow the instructions in the 400540 Operator’s Manual. All baskets MUST have a copy of this manual, if one is not present with this basket; contact your local Spider Representative. ST-180 baskets must also have a copy of the 4624-01 Addendum to the Operator’s Manual. You must be properly trained, in good health, and authorized to operate the basket. Failure to comply with these instructions could result in serious injury or death.

These instructions are not all inclusive. It is impossible for Spider to know, review, and instruct on every possible way this equipment may be used, and on all possible hazardous situations. Any deviation from the instructions in this operator’s manual may jeopardize the safety of yourself and others, and/or result in damage to the equipment.

DAILY INSPECTION REQUIREMENTS

The following must be performed at the start of each work shift. If the basket/drum fails any part of the inspection, DO NOT USE until it has been repaired by a Spider certified technician.

INSPECTING THE FRAME

1. Thoroughly inspect frame for any cracks, bends, wear holes, excessive crushing, heat damage, or drilled holes.
2. Check all welds to ensure that they are not damaged.
3. Check transfer chain guard is intact and secure.
4. For the ST-180/ST-18, inspect that the gate locking screw moves freely with the aid of a standard screw driver. For the ST-19/ST-26 inspect to make sure all connecting hardware and components are present and properly assembled.
5. Top rail gate should open without excessive force.
6. Visual inspection of the tripod does not reveal any damaged such as being bent or cracked.
7. Check toe boards are complete and installed correctly.

INSPECTING THE WIRE ROPE

1. Inspect that the thimble is not crushed, bent and that the 5/8 Crosby shackle fits in the thimble.
2. Check that the wire rope is spooled properly on the drum. Improper spooling of the wire rope can lead to gaps in spooling of wire rope, leading to crossed layers, possible shape distortion, crushing of wire rope, prematurely shortening the life of the wire rope. While in operation, verify that the rope isn’t rusted, corroded, have broken wires, kinked, crushed or have wear areas.
3. Make certain that you have a minimum of 4 full wraps on the drum at the longest drop location.

DO NOT USE IF WIRE ROPE IS NOT SPOOLED NEATLY.

INSPECTING THE TENSION HOLDER/WIRE ROPE GUIDE

The tension holder is designed to keep the wire rope tight on the drum when you must slacken the rope from the rigging. It is necessary to keep the wire rope evenly spooled on the drum to ensure level winding and avoid wire rope damage. The wire rope guide stabilizes the suspended stage with a minimal adverse effect on the wire rope.
1. Visually inspect the rubber rollers daily and ensure it has a good hold on the wire rope.
2. If definite signs of wear are present, replace the tension holder.
3. Verify that the guide discs do not have excessive wear.
4. Inspect that there is no sign of wear on the top and bottom plate from the wire rope.
5. Inspect the guide discs for cracks, or any sign that the wire rope is cutting through them.

INSPECTING THE WIRE ROPE LEVEL WIND SYSTEM (TILT CONTROL)

The level wind spools the wire rope evenly on the drum when staging is suspended. It keeps the wire rope perpendicular to the drum by allowing the drum to tilt. A spring controls the amount of drum tilt. If the wire rope level wind system is not properly set on the Spider basket the wire rope will not wrap properly.
1. Check the upper and lower drum base do not reveal any cracks, elongated holes or crushing.
2. Check that both pivot pins rotate freely.
3. Operator should inspect the wire rope spooling on the drum to make sure it is stored neatly.

**MOTOR CONTROL SWITCH**

1. With the proper power supply connected to the stage, operate the switch in both directions and make sure the drum turns in the correct direction. Do not allow the wire rope to go slack on the drum when doing this.
2. With the basket suspend a couple of feet operate the hoist in either direction and release the handle to ensure it returns to a neutral position and the primary brake is engaged.
3. Examine the handle and control assembly to make sure it is secured and not damaged in a way that would prevent its correct use.

**ELECTRIC POWER SUPPLY**

1. Examine the plugs on the stage and the supply cord to make sure that they are the correct NEMA standard for the voltage being supplied. The plugs should be the correct voltage and amperage.
2. Examine the plugs and rubber boots for any signs of damage that might prevent correct use.
3. Inspect supply cord back to source and verify that cord is not damaged and ground is still intact.
4. Use as short a supply cord as necessary. Use wire no smaller than 10 gauge.
5. *If any charge is detected when contact is made with the basket, discontinue use immediately and thoroughly inspect all electrical components for continuity.*

**CONTROLLED DESCENT/EMERGENCY BRAKE (ST-180 Only)**

1. Inspect and verify that all components of the Controlled Descent mechanism are in place. Test the Controlled Descent feature by raising the basket about 4 feet off the ground. While facing the control box there are two red capped handles on the each side of the lower basket frame. Pull and hold the handle on the right side. While still holding this handle pull quickly on the left handle. This manually engages the motor and allows for the control descent to begin. Keep the right handle pulled as long as descent is required.
2. Inspect and verify that all components of the Emergency Brake Actuator are present. Only pull the pin in an emergency situation. Once the pin of the Emergency Brake has been activated, a Spider professional must inspect and service the unit accordingly.

**Optional:**

**INSPECTING THE ARC GUARD KITS**

The arc guard protects the suspension wire rope by greatly reducing the chances of accidental contact with a welding rod.

1. Inspect for damage on all component parts.
2. Inspect that the clear tubing and doors on the drum protector are clean so that you can inspect the wire rope when in use.

**INSPECTING THE WIRE ROPE INSULATOR**

The wire rope insulator helps protect the wire rope from carrying current by becoming a ground lead.

1. Inspect that there is no broken strands on the wire rope.
2. Ensure there are no kinks in the wire rope.
3. Verify that the insulator is not crack or broken.

**INSPECTING THE GROUND DOLLY**

The ground dolly allows the Spider basket to be rolled across smooth surfaces such as concrete or asphalt.

1. Verify the ground dolly is securely attached with proper hardware to the basket before raising it off the ground.
2. Inspect casters for damaged or broken pieces, and ensure all fasteners are installed and secured.

**Spider branch Local**

**Hoist Serial Number**

Inspection by _______________________________ Date ___________