S.O.P. No. 645051 is a set of parts to add the rotating cable anchor to LSC-40 cars. The rotating cable anchors which have become standard on new LSC-40's have greatly reduced LSC-40 crawler cable breakage. Take advantage of this improvement now. This Service Bulletin should be used as a supplement to instruction drawing No. 436825 which is included in the set of parts.

### INSTALLATION INSTRUCTIONS

1) Before removing existing parts, mark the location on the car where the crawler cable is vertical as the crawler passes over the center of the car. (Note: Some cars may be a mirror image of the one shown.)

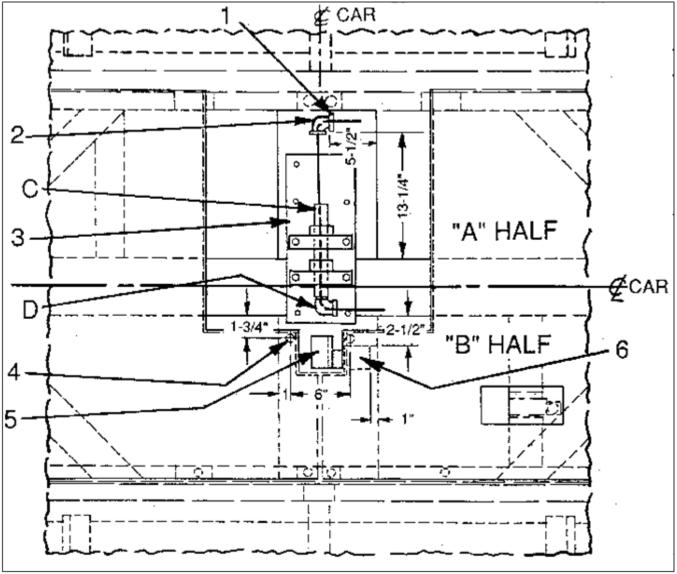


Figure 1 – Stationary anchor mounted in "A" half

- 2) Move crawler off car and turn "OFF" electrical power to the car.
- 3) Remove existing cable anchor and crawler stop actuator. Mark the position of the stop switch actuator to determine the new location of the actuator angle and actuator. The new actuator is made in such a way that the cable between the rotating and stationary anchor can pass under it if necessary.
- 4) Weld the new stop actuator angle (No. 436822 Key 6) at position indicated. Temporarily assemble the stop actuator (No. 436823 Key 5) to the angle to confirm that its location is correct. Then remove it for the time being.

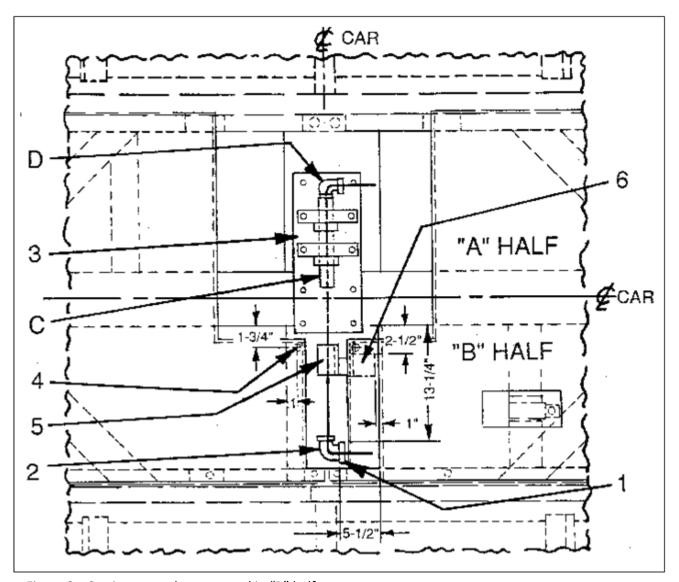


Figure 2 – Stationary anchor mounted in "B" half

- 5) Weld the bearing assembly anchor plate, (No. 436818 Key 3) in position. (Some shimming may be required to keep the plate level.)
- 6) Refer to Fig. 1 page 1, and Fig. 2 page 2. If the crawler cable passover position at the centerline of the car is in the "A" half of the car, the stationary anchor (Keys 1 and 2 together) should be mounted in the "B" half. If the passover is mounted on the plate so that the tube end "C" faces the stationary anchor. Weld the stationary anchor block (No.. 436824 Key 1) 13-1/4" from the edge of the center frame on the appropriate half of the LSC-40 car. This method of positioning the parts is used to get the greatest length of cable between the rotating and stationary anchor points. This greater length allows less strain on the cables as it twists.
- 7) Mount the bearings and cable anchor to the set of mounting holes in the anchor plate to locate the rotating anchor connector "D" closest to the vertical position. The pipe holding the rotating anchor is adjustable for exact location.
- 8) Adjust the pipe holding the rotating anchor connector to position the connector precisely under the vertical position of the crawler cable passover point in the center of the car. To adjust the pipe:
  - (a) loosen the locking screws on the bearings
  - (b) slide the anchor pipe to position the cable connector
  - (c) retighten the set screws on the bearings, to lock the pipe in position.
- 9) Mount the stationary cable connector (No. 113162 Key 2) to the stationary anchor block (No. 436824 Key 1.)
- 10) Weld pipe deck plates supports (No. 436821 Key 4) at positions indicated in Fig. 1 page 1.
- 11) Route the cable through the new anchor assembly and reconnect in the raceway on the car. Tighten the 90 degree connectors on the cable to prevent slippage.
- 12) Mount the stop switch actuator (No. 436823 Key 5) on the actuator angle (No. 436822 Key 6) so that the top of the actuator is 1/4" above the top of the rails on the car.
- 13) Turn "ON" electrical power to the car and observe the clearance between the crawler belly and the new stop actuator as the crawler is brought onto the car. The clearance should be from 1/4" to 3/8". Readjust as necessary. Note: Remember to turn "OFF" electrical power to the car before any adjustments are made.
- 14) Replace the deck plates on the LSC-40 car. Reworking of the deck plates may be necessary if the stationary anchor (No. 436824 Key 1, Fig. 2) is mounted on the "B" half of the car. Refer to Besser print No. 436825 for reworking details.



### SAFETY BULLETIN

This notice is issued to advise you that some previously accepted shop practices may not be keeping up with changing Federal and State Safety and Health Standards. Your current shop practices may not emphasize the need for proper precautions to insure safe operation and use of machines, tools, automatic loaders and allied equipment and/or warn against the use of certain solvents or other cleaning substances that are now considered unsafe or prohibited by law. Since many shop practices may not reflect current safety practice and procedures, particularly with regard to the safe operation of equipment, it is important that you review your practices to ensure compliance with Federal and State Safety and Health Standards.

### **IMPORTANT**

The operation of any machine or power-operated device can be extremely hazardous unless proper safety precautions are strictly observed. Observe the following safety precautions:

### **ALWAYS**:

- ✓ Be sure proper guarding is in place for all pinch, catch, shear, crush, and nip points.
- ✓ Be sure that all personnel are clear of the equipment before starting it.
- ✓ Be sure the equipment is properly grounded.
- ✓ Turn the main electrical panel off and lock it out in accordance with published lockout/tagout procedures prior to making adjustments, repairs, and maintenance.
- ✓ Wear appropriate protective equipment such as safety glasses, safety shoes, hearing protection, and hard hats.
- ✓ Keep chemical and flammable material away from electrical or operating equipment.
- ✓ Maintain a safe work area that is free from slipping and tripping hazards.
- ✓ Be sure appropriate safety devices are used when providing maintenance and repairs to all equipment.



### **NEVER**:

- ✓ Exceed the rated capacity of a machine or tool.
- ✓ Modify machinery in any way without prior written approval of the Besser Engineering Department.
- ✓ Operate equipment unless proper maintenance has been regularly performed.
- ✓ Operate any equipment if unusual or excessive noise or vibration occurs.
- ✓ Operate any equipment while any part of the body is in the proximity of potentially hazardous areas.
- ✓ Use any toxic flammable substance as a solvent cleaner.
- ✓ Allow the operation or repair of equipment by untrained personnel.
- ✓ Climb or stand on equipment when it is in operation.

It is important that you review Federal and State Safety and Health Standards on a continual basis. All shop supervisors, maintenance personnel, machine operators, tool operators, and any other person involved in the setup, operation, maintenance, repair or adjustment of Besserbuilt equipment should read and understand this bulletin and Federal and State Safety and Health Standards on which this bulletin is based.

