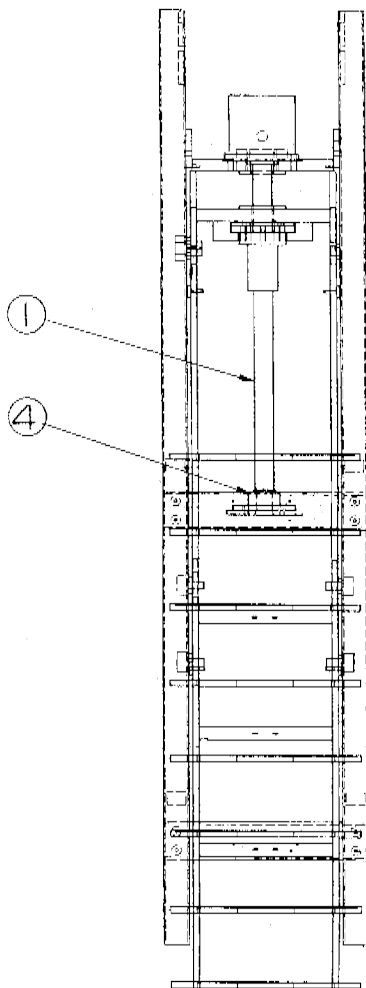
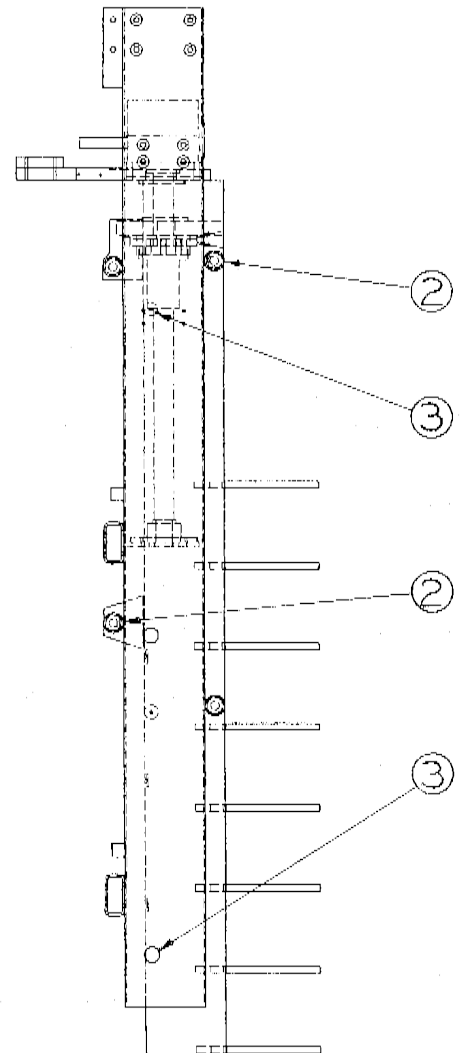


Procedure to Align Carriage and Ball Screw

1. Assemble ball screw per Besser drawing.
2. After assembly of ball screw, apply a light coat of linear lube Besser #090121.
3. Loosen cam followers (Det. #2) both front and back which are mounted in slots.
4. Back out nylon pucks (Det. #3) away from frame on both sides of the carriage.
5. Loosen lower bearing on ball screw (Det #4).
6. Then run ball screw up/down the whole length of screw to allow ball screw to find natural center.
7. Leave carriage in down position and readjust cam followers against side frame tubings.



8. Adjust nylon pucks out against side frame tubings and retighten.
9. Retighten lower bearing on ball screw.
10. Final check—run carriage up/down again to make sure carriage and ball screw are tracking straight and without any vibration or noise.
11. Before running in auto mode, check to make sure cam limit switch box and actuators are still actuating.

Procedure to Align Carriage and Ball Screw

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.

Procedure to Align Carriage and Ball Screw

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 Besser-built equipment should read and understand this bulletin and Federal and State Safety and Health Standards on which this bulletin is based.