Service Bulletin

[1997-2]

Achieving Peak Hydraulic System Efficiency



<u>ARE YOU AWARE THAT</u>: Contaminated oil causes 70 percent of all hydraulic system failures. <u>AND THAT</u>: Oil analysis is a proven predictive and preventive maintenance tool. Good filtration is an essential part of a comprehensive and effective oil analysis program.

The multicheck fluid analysis program offered through Besser provides insight into the current condition of your hydraulic systems. Testing the hydraulic oil in each piece of equipment, (contained in the reservoir for the Multi-Spade Besser-Matic, LSC-40 Car and Crawler and the Cuber) will determine the condition of the oil. This type of analysis is a proven predictive and preventive maintenance tool.

Continuing with testing at predetermined intervals will provide historical data that can be tracked and used for determining when the oil should be completely replaced.

This test kit contains forms which require you to record information such as the date the sample was taken, the sample number and how many hours the oil and filter have been in service. The company performing the tests will send a complete, easy to read report about the sample, including particle counts, viscosity, wear metal and additive content, and a diagnostic statement. The report also contains:

- A graph of the actual ISO cleanliness and a plot of the target system cleanliness.
- Historical system analysis of the last four fluid samples (after this information is obtained).

Each kit contains four sample bottles with mailing boxes and tubes. A hand pump used in conjunction with the kit, is useful in retrieving samples of the hydraulic oil.

<u>Part No</u> .	Description
114546	Four Test Kits (Contains four sample bottles
	with mailing boxes and tubes).
114547	Oil Pump (Hand Operated).

WORK SAFELY: Be sure that the machinery is properly locked out before taking the oil samples from the hydraulic reservoir.



Service Bulletin

Achieving Peak Hydraulic System Efficiency

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:

<u>ALWAYS</u>:

- ✓ 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.



Service Bulletin

Achieving Peak Hydraulic System Efficiency

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.

