



MAINTENANCE, SERVICE AND REPAIR

A one-stop service to keep your plant and facility running at optimum efficiency.

RELY ON MOOG FOR GUARANTEED SERVICE, REPAIR AND SUPPORT

Repair Or Replace?

In most instances of machine downtime, repair is often the most cost effective remedial action. However, unless this repair is carried out to the same exacting standards as those governing the machine or component's original build, an economic approach can rapidly degenerate into a false economy.

Moog's CAD and analysis capabilities have given our experienced design engineers access to a vast array of testing capabilities, able to generate data that, in the past, could only be obtained from monitoring operational performance over extended periods of time. These capabilities give us a far deeper insight into how components interact with each other and how their day-to-day operation will be affected by varying degrees of process and environmental conditions.

It follows, therefore, that Moog is the only complete source of information with regards to any repair activity for Moog products.

Not only will Moog know the original design and test specifications of the product, they also know, through a great deal of testing, how the current performance relates to factors such as wear patterns, component fatigue, tolerances and revised performance capabilities.

Life testing and competitor analysis is a vital part of any product development programme. The ability of a supplier to make an assessment based on actual performance versus the original specification allows Moog to make the well informed and accurate judgements that are simply out of reach to third parties.

Not only can we interrogate these results and use them to gauge the cause of failure or wear, it can also suggest the best possible course of remedial action which, in some cases, could lead to an upgrade to a higher performing component.

Whether you chose to have an authentic repair or an upgrade and enhance, with Moog as part of your maintenance strategy, your decision will be proven, safe, reliable and very cost effective.

Why Choose Moog as Your Service Partner

- All products tested to original equipment specifications for both static and dynamic response
- Only original equipment specification parts used
- Comfort of having back up engineering staff available as support
- The security of a major international partner
- Repair capability extended to inspect, test and clean non Moog servovalves
- The ability to understand your systems beyond the servovalve
- Replacement of non Moog with new Moog for cost of repair
- Full dynamic performance report available
- 12 month warranty on repaired products



WHY MOOG WILL DELIVER MUCH MORE THAN A RAPID REPAIR

Recently, a late afternoon call was received by a member of the Moog sales team from a UK based steel coating mill. A machine used to lay a colour strip on steel had been producing a varying coating and was affecting quality. A customer had a spare Moog servovalve available but it was in need of testing, therefore, there was a clear need for a speedy response.

The Challenge

To test and verify a Moog servovalve using Moog Fastrack Priority Repair Service to enable the customer to continue production with minimum downtime.

The Solution

A member of the Moog support team was on site at 08:15 the following morning and brought the servovalve back to the UK remanufacturing centre in Tewkesbury, where the servovalve was tested to the original factory specification using Moog test rigs and Moog engineering expertise.



The Result

Although the Moog servovalve met Moog's stringent performance criteria, demonstrating world renowned Moog reliability, by understanding the customer's application and after analyzing the test results, the Moog engineers were able to ascertain that the machine performance could be enhanced by changing the internal specification of the servovalve to improve performance.

By using Moog Fastrack Priority Repair Service, the servovalve was back with the customer within 48 hours. In addition with the new enhancements, the customer's product quality was significantly improved.

WORLD CLASS SUPPORT

We offer a world class hydraulic remanufacturing centre for the repair of Moog servovalves and servo-proportional valves, including a Class 100,000 Clean Room with state of the art rigs for test and repair.

In addition to Moog servovalves, we are also able to service other Moog products including radial piston pumps, servoactuators, servodrives and servomotors. By choosing Moog you will benefit from a number of programs to help you manage your maintenance budget better, ensure maximum up-time of your machinery and schedule your maintenance plans.

MOOG YOUR 'ONE STOP' SERVICE

Moog's servovalve repair facility extends its capability to the vast range of MFB, EFB and other Moog servovalves as well as testing those of some competitor products. This enables you to rely on Moog as a single service centre, essentially a one-stop service. No other repair centre can offer so much.

Our facility is ATEX certified to be EN13980, the repair of intrinsically safe products, and have BS EN ISO 9001 Quality Management Approval.

- Moog Servovalves
- Servoactuators (electric and hydraulic)
- RKP - Radial Piston Pumps
- Servodrives and Servomotors



NEW - SERVICE PROGRAMS TO SUIT YOUR NEEDS

A number of programs are available to enable you to maximise your budget and machinery up-time.

- Extended Warranty - providing total warranty coverage for one full year (or the equivalent number of working hours) beyond the expiration date of your original product warranty
- Preventative Maintenance - a yearly scheduled examination and thorough testing of your Moog servovalves enabling you to plan your downtime. Can be extended to other Moog products
- Full Service - a comprehensive service contract including temporary replacement servovalves and three-day fast track priority or super-fast one-day service. The Full Service Program covers Moog and non Moog products and ensures an all inclusive service with a pre-defined fee. Particularly suitable for businesses operating a complex supply chain or that need longer term cost-management and forecasting



REMANUFACTURING

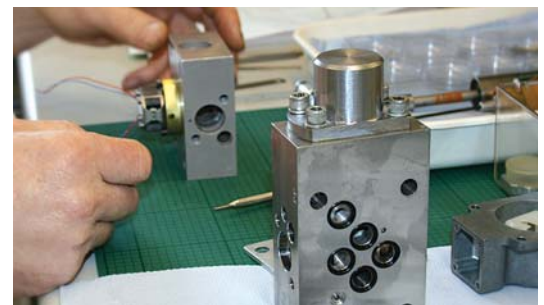
This is an enhancement of our standard repair services that includes restoration of older and obsolete Moog servovalves, Radial piston pumps and actuators to *as-new performance* levels, with extended warranty that applies to the entire product not only the repaired element. You can renew your original product with OEM parts to our latest specifications, while avoiding the cost of purchasing new equipment and unnecessary downtime. This new service also offers an opportunity to change industry practices and be more environmentally friendly, as fewer resources are consumed than when building a whole new part.



FAST TRACK PRIORITY REPAIR SERVICE

Our Fast Track Priority service is becoming increasingly popular and helps you combat expensive downtime pressures by providing a rapid transit through our remanufacture facilities. For a modest additional cost, you can benefit from increased customer profitability as a result of:-

- Predictable delivery performance
- Reduced need to stock excess spare units for non critical applications
- Reduced downtime
- Improved production



TRAINING

Recognising the importance of downtime to business, Moog has developed a series of courses in conjunction with their UK training partner, the National Fluid Power Centre to provide hands on training for those involved in the maintenance and use of servo controlled systems.

Course 1

- Effective Maintenance of Hydraulic Servo Systems: - covering the importance and desired levels of system cleanliness, and its effect on servovalves

Course 2

- Installation and Commissioning of Servovalves & Servo-proportional Valves - a practical hands-on course with focus on Moog valves



CONTAMINATION/FLUSHING

Moog can provide a service to assist you to assess and monitor your system cleanliness.

Servovalves are generally a critical component in the function and performance of a hydraulic system. Their performance and life is affected by the cleanliness of the system fluid.

- Reduce the necessity of servovalve repairs, and increase reliability of your system
- Reduce the wear of servovalves and increase reliability of associated components such as servoactuators
- Increase performance and consistency of your system over a period of time



SERVOVALVE TESTERS

Moog offers a range of servovalve testers for field use as a useful aid in commissioning, servicing and troubleshooting control systems that use servovalves. They provide the ability to separate the hydraulics from the electronics so that the servovalve functions can be checked remotely from the system electronics.



OIL SAMPLING

Moog provides an oil sampling service.

Hydraulic oil in a system performs many functions; it transmits power, lubricates, protects against wear and transfers heat, but also it transports debris. Over time the oil will start to degrade. The rate at which it degrades is dependant on many factors including oil temperature, size of reservoir, oil cycling:-

- Provide an early warning of the onset of lacquering where the oil starts to degrade
- Plan maintenance to avoid emergency shut-downs
- Enable operators to pin-point hot spots in the system



PRE-PAID OPTION

To speed up the process of returning your servovalve to Moog for test and repair, if required, a convenient bar-coded label is available upon application. We can also provide a base plate and mounting studs to protect the servovalve from contamination and damage during shipping. All that is required is for you to contact our courier to arrange collection of your valve.



LOCAL SUPPORT STARTS HERE.

Moog Service and Repair is only a click away.
For more information visit our web site.

Moog Controls Ltd
Industrial Group (Tewkesbury)
Ashchurch, Tewkesbury
Glos. GL20 8NA
Tel: +44 (0)1684 296600
Fax: +44 (0)1684 296760
service.uk@moog.com

www.moog.co.uk/industrial

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