Dal Soggio Sphere

SPHERE HYDRAULIC CARTRIDGE is an innovative, high performance hydraulic cartridge for demanding racers by Dal Soggio. Excellent for offroad and motocross applications.

Why choose SPHERE?

The answer is very simple. This particular sealed and pressurized cartridge considerably increases precision and sensibility of the front end, giving better feel and bump absorption. The components are both high quality and built to be durable. With high quality coatings, precision in house machining, and settings developed to win you won’t be disappointed.

Which model of front fork is available?

SPHERE is available for all the following models and more to come: WP AER, 4CS, WP OPEN, SACHS, MARZOCCHI, SHOWA 49mm TAC And KAYABA PSF2

Inquire with N2Dirt about installation, springs, service, and settings.

Our Testing/Review With Motocross
DLC Coating

DLC coating (Diamond like Carbon) DLC coated inner tubes greatly reduces the friction, which provides smoother action over sharp impacts. The DLC coating is also harder and smoother than the standard chrome, and resists nicks from rocks that can create sharp nicks into surface which in turn cuts the oil seals that can turn into leaks.

Pricing includes removing and installing fork lugs. (some lugs may be damaged when removed and will need to be replaced).
Fork Overhaul/Rebuild

Front fork is completely disassembled, ultrasonic cleaned, and inspected. Worn parts are replaced, damaged shims are replaced in stock configurations (standard settings are retained). Front fork is reassembled using genuine parts and high quality racing fork oil.

Fork Revalve

Please fill out our rider data sheet HERE to determine what needs to be done, the fork is completely disassembled, cleaned and inspected. Worn parts are replaced, then modifications to the damping system are done based on our interpretation of what the rider needs. The fork is reassembled using genuine parts and oil level is set.
Hard Anodizing – Fork Tubes

Fork upper tubes anodized. Not a performance gain but this will make your bike stand out from others. We offer glossy black, clear, and matte black.

Kashima Coating – Shock Body

Kashima Coat is a proprietary hard anodizing process that involves lubricating molybdenum disulfide deposited via electrical induction into the billions of micro-pores on the surface of hard-anodized aluminum for better lubrication and less abrasion and wear. This can only be done in Japan so check with us for a core swap or plan on 6-8 weeks down time for shipping and treatment.

Price is with good core swap only.
Kyokote Fork Upper Tubes

For fork upper tubes, our proprietary Kyokote process is second to none. The Kyokote process is equal in low friction performance to Kashima, but exceeds Kashima performance in heat transfer and toughness. Kyokote is a polymer impregnated hard anodize. The aluminum tubes are hard anodized, then impregnated with a special teflon polymer blend and sealed resulting in a hard, low friction surface (coefficient of static friction less than 0.05) with high thermal conductivity and excellent toughness. Unlike Kashima, Kyocote is done locally for quick turn around and available in both black and clear (clear typically comes out grey-gold in color).

MXT LUCKY 4CS

MXT LUCKY 4CS System.

The new MXT Lucky System (Lucky) is the newest advancement for WP 4CS forks. The Lucky system is the result of innovative engineering and a commitment to bring riders the best value in the suspension market. Lucky Nichols, a professional suspension tuner, was discussing some long range fork projects with Jeremy Wilkey, and suggested that the existing MXT 4CS Asymmetrical kit could be “repackaged” with the new cartridges and hardware that MXT is currently producing. Major
enhancements include:

- Over a pound lighter than stock 4CS forks
- Increased cartridge volume to a 22mm diameter
- A redesigned Huck Valve
- New compression and rebound adjusters
- Quality machining to reduce friction
- DIY: Drop in ready system

As a pioneer of 4CS solutions, MXT has made many improvements to the stock system by building on the existing strengths. MXT continues to refine the 4CS product using solid in-house engineering based on rider feedback. Attention was given to make the 4CS forks “plush” while maintaining the control required to ride aggressively.

The Lucky forks exhibit better handlebar feel, steering response, and traction since they are lighter than stock. An increase in cartridge volume provides more control and support through the middle of the stroke. As an example, riders also notice the inherent stiffness of a stock 4CS fork. This is due to a valving set-up that requires stiff settings to control large fork movements, which produce frictional effects and forces created by cartridge pressurization. With the Lucky, the new 3 port mid-valve piston can be adjusted to improve the initial feel and reaction. The Lucky also includes the proven Huck Valve, designed to increase volume while allowing for additional pressure transfer parallel to the system. New adjusters were added to simplify tuning for the rider. Finally, attention was given to better machined bearings and pressurized seal surfaces to reduce friction.

Traditional stock bottoming control system is limited in that it can’t manage multiple speeds or accelerations inside its travel. Stock systems can be adjusted to provide good control for either low or high-speed bottoming, but doing so limits the ability to absorb the other. The MXT Huck Valve manages the limitations of typical bottoming control systems. The MXT
Huck Valve has speed sensitive bottoming control, by incorporating a pressure sensitive valving mechanism. This allows for both high entry speeds and low entry speeds effectively. MXT Huck Valve equipped forks allows the set-up to be plusher while not sacrificing the overall control of the fork.

Prototypes were made, dyno tested, and put to the track for real world testing. After excellent results from a diverse group of riders on various terrains, the Lucky 4CS System entered production and is ready to ship today.

MXT PSF2 DUAL SPRING CONVERSION

The MXT PSF2 conversion features dual springs, dual cartridges, the Huck Valve, and is “drop-in ready” with no modifications required.

Fits: Honda CRF450 2015-2016 PSF2 forks Suzuki RMZ250 2016-2017

MXT PSF2 features:

• Dual fork springs

• A redesigned Huck Valve

• New compression and rebound adjusters

• Quality machining to reduce friction
• DIY: This MXT PSF2 is designed to be drop in ready

Riders struggle to adjust stock PSF2 forks with traditional tuning, because the air system creates an inconsistent feel. As an example, a rider can become sensitive to the forks slightest internal pressure changes that occur during normal operation.

MXT engineered new internal components to improve rider experience and performance. The MXT PSF2 comes with new drop in dual cartridges, and dual coil springs. This unique solution provides maximum performance and consistent operation. Other features include ease of adjustment combined with the superior feel of the proven Huck Valve. The cartridges come standard with very broad and efficient leaf spring mid-valves, and sub-valve equipped compression adjusters. Finally, attention was given to better machining all around to reduce friction and to maximize weight savings over traditional spring forks.

Traditional stock bottoming control system is limited in that it can’t manage multiple speeds or accelerations inside its travel. Stock systems can be adjusted to provide good control for either low or high-speed bottoming, but doing so limits the ability to absorb the other. The MXT Huck Valve manages the limitations of typical bottoming control systems. The Huck Valve has speed sensitive bottoming control, by incorporating a pressure sensitive valving mechanism. This allows for both high entry speeds and low entry speeds effectively. MXT Huck Valve equipped forks allows the set-up to be plusher while not sacrificing the overall control of the fork.

With research and development complete, the MXT PSF2 can offer a true “works” solution with the least amount of weight while taking advantage of the trusted fork spring operation.
The new MXT XPLR Cartridge System (XPLR) is the result of innovative engineering and a commitment to bring riders the best value in the suspension market. Major enhancements include:

- 1.5 pounds lighter than a stock 4CS fork
- Huck Valve
- Leaf Spring Midvalve
- Dual cartridges
- DIY: This XPLR is drop in ready

The stock WP XPLR fork is a very low cost design that offers riders very soft suspension. In fact, riders who are more aggressive and attempt to push the stock forks at a higher than trail tour pace – find the forks too soft, unpredictable and easy to bottom. Due to the low cost design its very challenging to achieve a set-up that is firm enough for race pace, or even aggressive trail riding and yet soft enough to be comfortable. For this reason, we set out to develop a fork kit that would solve the issues by adding dual compression and rebound cartridges. These dual cartridges distribute valving equally between the both forks. Each side also has leaf spring midvalves, optimized pressure balance, and provides a broad performance profile for riders who expect a plush ride while maintaining excellent traction and control.
Traditional stock bottoming control system is limited in that it can’t manage multiple speeds or accelerations inside its travel. Stock systems can be adjusted to provide good control for either low or high-speed bottoming, but doing so limits the ability to absorb the other. The MXT Huck Valve manages the limitations of typical bottoming control systems. The Huck Valve has speed sensitive bottoming control, by incorporating a pressure sensitive valving mechanism. This allows for both high entry speeds and low entry speeds effectively. MXT Huck Valve equipped forks allows the set-up to be plusher while not sacrificing the overall control of the fork.

Bottom line, if you are looking for stronger suspension and better performance in the trails, this is one upgrade worth taking advantage of.

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N2dirt Works Shock with X-trig Adjuster and linkage

2015.5+ WP Works Shock Kit

N2Dirt shim settings rebuilt with ultra light racing oil on the Vacuum shock Bleeder.

X-trig Preload adjuster sold exclusively
MX-Tech 62mm TANK with 7075 Domed piston (Black, Blue, or Orange)

MX-Tech Triple Compression Adjuster (Blue, Orange, or Gunmetal)

Ultra Low friction DU piston band

Relay Arm chassis Knuckle with bearings and seals

High performance light Shock Spring

Shock Overhaul/Rebuild

The shock is completely disassembled, ultrasonic cleaned and inspected. Worn parts are replaced, damaged shims are replaced in stock configurations (standard settings are retained). The shock is then reassembled using genuine parts and high quality racing shock oil.