



# Logan Bell Housing PTO's

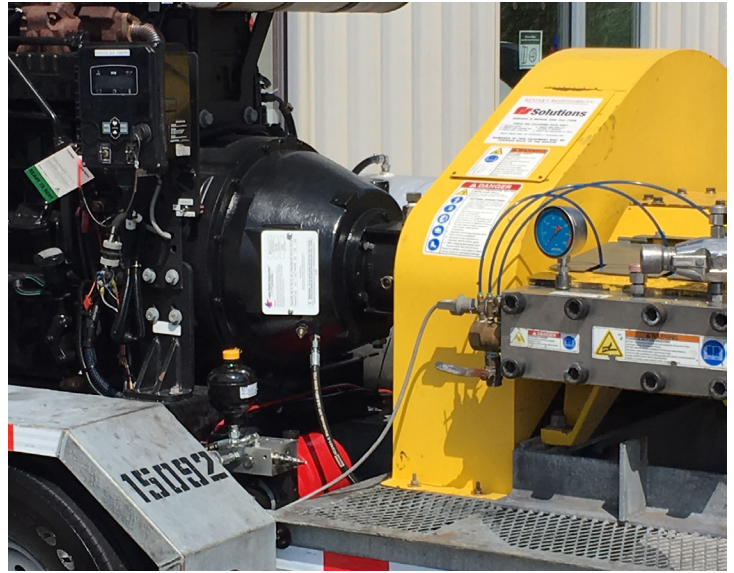
## Now available for Jet Stream Waterblasters

Logan self-adjusting, hydraulically actuated Bell Housing Power Take-Off (PTO) clutches have been standard equipment on OEM marine and mobile equipment for over 18 years. Thousands of Logan units are in the field, operating on airport snow blowers, highway and airport marking and runway rubber removal equipment, and more recently trailer mounted waterblasting equipment.

### Logan vs. Mechanical PTO's

The advantage of the Logan Clutch is its ability to engage and disengage the water jetter hydraulically, through push-button activation, eliminating the use of a mechanical hand lever or yoke type clutch engagement system, which dates back to the early 40's. Smooth, Logan softstart™ engagement eliminates clutch downtime due to over and under adjustment. And since the Logan clutch is self-adjusting, clutch engagement is smooth and consistent after hundreds of hours of use.

The mechanical clutch requires the operator to "hand engage" a clutch, which opens up the opportunity for untrained operators to slam the clutch into gear at high rpm's. Another mode of failure is when operators will over or under tighten the adjusting collar on mechanical clutch to the point where the clutch is too loose and slips to failure or is over tightened and never disengages. Unfortunately, this happens during operating conditions, forcing the water jetter to return to the rental yard, leading to unproductive downtime, inconsistent operation and the endless frustration of machine renters, service center owners, and mechanics.



Logan self-adjusting, hydraulically activated LC-314 Bell Housing PTO clutch installed on a Jetstream X Series Waterblaster



Mechanical PTO clutch with old-style lever arm



Water blasting contractors prefer the Logan Bell Housing PTO since it's push-button activation and self-adjusting disc pack simplifies machine operation





## Logan Self-Adjusting Bell Housing Power Take-Off (PTO) Clutches Now available for Jet Stream Waterblasters

### Jetstream / FS Solutions Rental Center Makes the Switch from Mechanical to Logan

*"Making the switch was easy", says Richard Alderson of the FS Solutions, Hammond Indiana Office, "we pulled the old Mechanical Clutch and drive ring, along with all of the linkages, levers and yoke, and replaced the clutch with a Logan RP 314 Series clutch." The Logan design uses the same shaft, drive ring and taper as the mechanical clutch, making the changeover relatively quick and easy. "All we had to do was install the Logan Bell Housing PTO Clutch, a power pack, and an on/off switch, and within a few hours we were ready for service" says Alderson. Logan Clutch would like to thank FS Solutions, of Hammond, IN for allowing them to retrofit the new self-adjusting PTO on the Jetstream X-Series unit.*

### Logan Push Button Actuation - Eliminates Mechanical Linkages

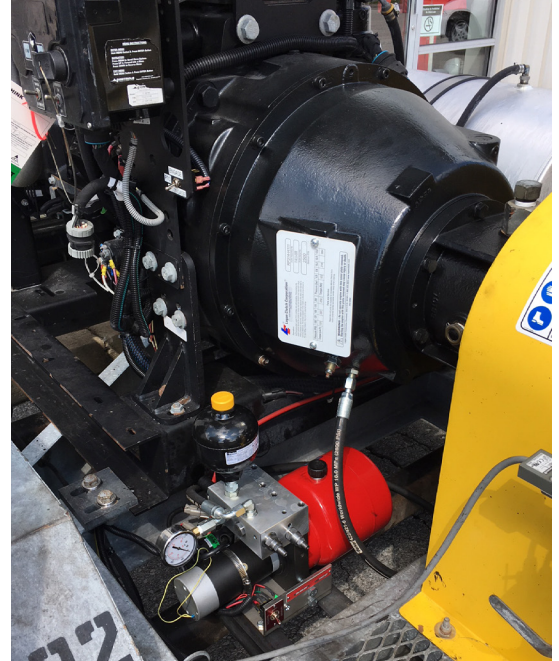
Logan clutches are simple to operate. Push-button activation engages the clutch from a control panel or remote operating device. Hydraulic or pneumatic pressure via the Logan hydraulic power pack and manifold, clamps the cylinder and piston inside the clutch, which then engages the friction and steel separator discs with a Logan SoftStart™ feature - smoothly engaging the clutch. When pressure is removed, release springs separate the clutch, giving it ample running clearance while disengaged. Push-button, remote activation from a control panel, or cab is now possible.



Logan self-adjusting, hydraulically activated Bell Housing PTO clutch installed on a Jetstream X Series Waterblaster



Push button activation from a control panel or device is now possible.  
Pictured above: Richard Alderson - Jetstream



Logan self-adjusting hydraulically activated Bell Housing PTO installed on a Jetstream X series waterblaster. The Logan supplied power pack is pictured just below the clutch. Remote activation is now possible from the engine control panel or a remote control device.