



Warranty Work Rate Chart Pumps

Effective May 30, 2020

Issue	Work description	Add-on work	Suggested Kit to use	1911 Test Required	Total Hours to complete repair
Midship manifolded pumps - QMAX, QTWO, QfloPlus, QMAX-xs & QPAK					
Replace Gearbox	Remove and install a new or reworked unit		Dependent on pump type	Yes	8
Gearbox overhaul	Replace oil seals, bearings & gaskets	Requires gearbox removal step	Dependent on pump type	Yes	11
Oil leak at G series input shaft	Replace oil seal and associated gaskets		296-2540-00-0 & 046-5130-00-0	No	2
Oil leak at G series output shaft	Replace oil seal and associated gaskets		296-2540-00-0 & 546-3080-01-0 & 046-5130-01-0	No	2
Air leak at VPS shift	Change O-rings on gearbox shift		546-0370-53-0	No	3
Water leak on QMAX/QTWO/QMAX-XS	Replace mechanical seal	Requires gearbox removal step	Dependent on pump type	Yes	13
Water leak on QFLO/QPAK/DSD pumps	Replace mechanical seal	Requires gearbox removal step	Dependent on pump type	Yes	13
Water leak on QMAX/QTWO	Replace packing		296-0030-10-0 Large QSM 296-0010-10-0 Small QLF	No	4
Improve pump efficiency or damage to impellers	Repairing with new impellers & clearance rings only	Requires gearbox removal step	Dependent on pump type	Yes	16
Improve pump efficiency or damage to impellers	Installing a new impeller assembly	Requires gearbox removal step	Dependent on pump type	Yes	12
Worn G fork	Replace fork		546-1090-00-0 G Fork kit	No	4



Warranty Work Rate Chart Pumps

Effective May 30, 2020

Issue	Work description	Add-on work	Suggested Kit to use	1911 Test Required	Total Hours to complete repair
Midship non-manifolded pumps - 8FG, 8FK, DSD and MG					
Replace Gearbox	Remove and install a new or reworked unit		Dependent on pump type	Yes	7
Gearbox overhaul	Replace oil seals, bearings & gaskets	Requires gearbox removal step	Dependent on pump type	Yes	11
Air leak at VPS shift	Change O-rings on gearbox shift		546-0370-53-0	No	3
Water leak at seal	Replace mechanical seal		Dependent on pump type	Yes	8
Oil leak at G series input shaft	Replace oil seal and associated gaskets		296-2540-00-0 & 046-5130-00-0	No	3
Oil leak at G series output shaft	Replace oil seal and associated gaskets		296-2540-00-0 & 546-3080-01-0 & 046-5130-01-0	No	3
Leaky input/output oil seal - K Series	Replace		296-2680-00-0	No	2
Worn G fork	Replace fork		546-1090-00-0 G Fork kit	No	4
PTO non-manifolded pumps or Engine mounted pumps - AP, APS, CBP, 2CBP, MBP, RSD and PSD					
Water leak at mechanical seal	Replace mechanical seal		Dependent on pump type	Yes	7
Oil leak or gasket replacement	Replace gaskets & oil seals		Dependent on pump type	No	3
Gearbox overhaul	Drive unit Remove & Rework		Dependent on pump type	No	10
Improve pump efficiency or damage to impellers	Install new impeller and associated gaskets		Dependent on pump type	Yes	7
Stand Alone Drive units - MGA, RGA, LGA, LKA or XKA					
Gearbox overhaul	Replace oil seal, bearings & gaskets		Dependent on pump type	Yes	8
Air leak at VPS shift	Change O-rings on gearbox shift		546-0370-53-0	No	3
Oil leak at G series input shaft	Replace oil seal and associated gaskets		296-2540-00-0 & 046-5130-00-0	No	3
Oil leak at G series output shaft	Replace oil seal and associated gaskets		296-2540-00-0 & 546-3080-01-0 & 046-5130-01-0	No	3
Worn G fork	Replace fork		546-1090-00-0 G Fork kit	No	4