

# **NGP Clutch Kit Assembly Instructions**

#### **Universal Clutch Components**

- Assemble as shown in the first schematic figure, and ensure that the clutch yoke <sup>21</sup> is installed against the clutch jaw <sup>19</sup> according to the schematic for each assembly (either tight or with a 5/16" gap).
- It may be necessary to loosen the set screws on the pump's stroke adjustment pointer to slide the main shaft over to allow clutch spacer <sup>4</sup> to fit correctly. Be sure to re-tighten the set screws.
- Grease all fittings <sup>3</sup> daily during seasonal usage.

### Manual Clutch: NGP-xxxx-050

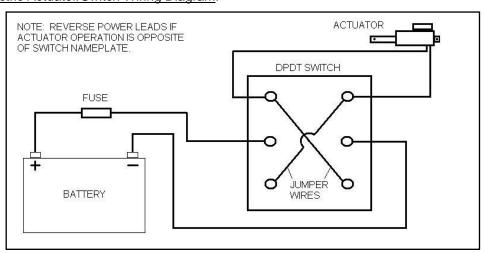
#### Conversion Kit # 115670

- Assemble as shown in the second schematic figure, and ensure that the shift rod <sup>23</sup> and pin assembly <sup>34-38</sup> are aligned with throw out cam <sup>29</sup> so that the clutch is smoothly engaged/disengaged.
- Place one end of the torsion spring <sup>27</sup> over the 5/16" x 1-1/2" bolt <sup>57</sup> after assembling the bolts to the mounting plate <sup>27</sup> and the other end against the ear on the throw out bracket <sup>28</sup>.

#### **Electric Clutch: NGP-xxxx-058**

#### Conversion Kit # 115672

- Assemble as shown in the third schematic figure be sure to note the required 5/16" gap between the yoke and clutch jaw when retracted.
- A double pole / double throw (DPDT) switch must be obtained and wired to the actuator <sup>48</sup>. The switch should be rated for 10A min., and can be either a sustaining or a momentary centering type.
- A 10 Amp fuse must be installed before the switch see the diagram below for connecting the switch and actuator.
- Electric Actuator/Switch Wiring Diagram:



## Hydraulic Clutch: NGP-xxxx-059

#### Conversion Kit # 115671

- Assemble as shown in the fourth schematic figure, and ensure that the jam nut <sup>22</sup> is fully threaded onto the shifter rod <sup>23</sup>.

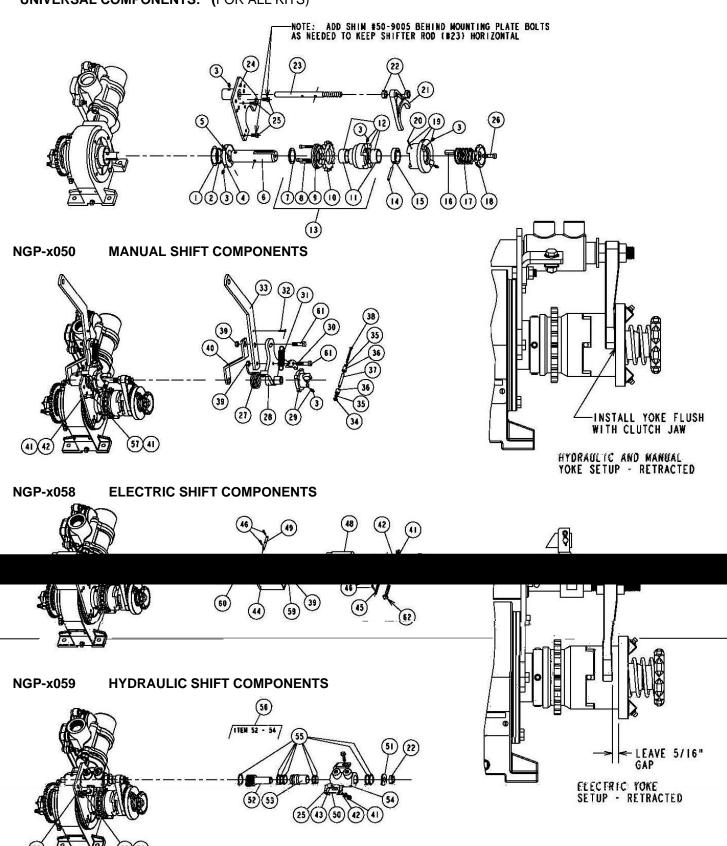
12-M-50 REV. 07/11

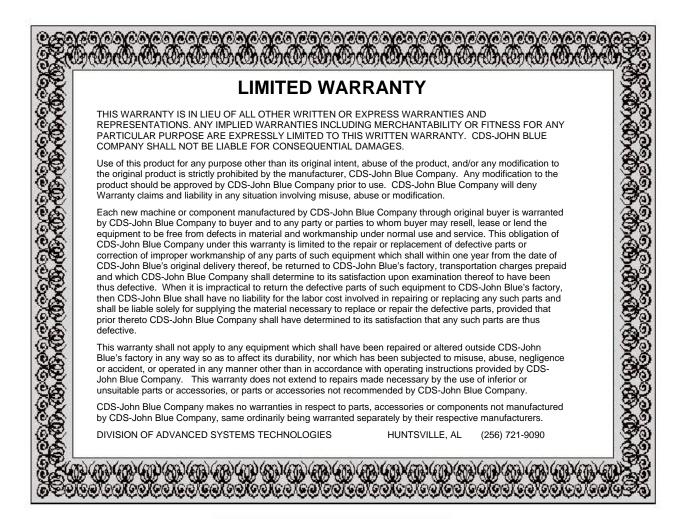
# Clutch Kit Parts List

ITEM	PART DESCRIPTION	PART #	-X050 MANUAL	-X058 ELEC.	-X059 HYD.
1	WASHER	115626-01	X	X	X
2	O-RING	S-316	X	X	X
3	GREASE FITTING	H-28	Х	Х	Х
4	CLUTCH SPACER	115639-01	Х	Х	Х
5	3" DOWEL PIN	115640-01	Х	Х	Χ
6	SHAFT EXTENSION	115638-01	Х	Х	Х
7	THRUST WASHER	115651-01	Х	X	X
8	1/4-20 X 1" SOCKET HEAD SCREW	90512	X	X	X
9	SPROCKET RETAINER	115632-01	X	Х	Х
10	CLUTCH SPROCKET 18T-RC50	115637-01	Х	Х	X
11	CLUTCH BEARING	115650-01	Х	Х	Х
12	CLUTCH CARRIER ASSY	115663-91	X	X	X
13	SPROCKET CARRIER ASSEMBLY	115664-91	X	X	X
14	2" DOWELL PIN	115194-01	X	X	X
15 16	CLUTCH COLLAR 3/8" SQ KEY	115641-01 115642-01	X	X	X
17	CLUTCH SPRING	108907-01	X	X	X
18	HAND WHEEL	A-50	X	X	X
19	CLUTCH JAW ASSEMBLY	115662-91	X	X	X
20	KEY RETAINER – ROLL PIN	S-4248	X	X	X
21	CLUTCH YOKE	115635-01	X	X	X
22	5/8" JAM NUT	92037	X	X	X
23	SHIFTER ROD	115643-01	X	X	X
24	CLUTCH MOUNTING PLATE	115993-91	Х	Х	Χ
25	5/16 X 1 HEX BOLT	90637	Х	Х	Х
26	3/8 X 1-1/4 HEX BOLT	90653	Х	Х	Х
27	TORSION SPRING	114165-01	Х	Х	Χ
28	BRACKET - THROW OUT	L-3007	Х		
29	CAM - THROW OUT	A-2757-A	Х		
30	PAWL - THROW OUT	A-2758-A	X		
31	SPRING – THROW OUT	F-48	Х		
32	COTTER PIN 5/32" X 1"	94010	X		
33	LEVER - THROW OUT	L-3064	X		
34	# 10 SQ NUT	92014	X		
35	WASHER	A-697	X		
36 37	CAM ROLLER ROLL PIN	A-2762 A-2763	X		
38	2-1/4 RD HEAD SCREW	90953	X		
39	3/8 NUT	92024	X		
40	HANDLE SUPPORT	115661-01	X		
41	5/16 – 18 HEX NUT	92020	X	Х	Х
42	5/16 LOCK WASHER	93023	X	X	X
43	5/16 FLAT WASHER	93010			X
44	MOUNT - ACTUATOR	115995-91		Х	
45	1-3/4" PIN	114002-01		Χ	
46	COTTER PIN 1/16 X ½"	94002		Х	
47	BRACKET - SHIFTER	114001-01		Х	
48	ELECTRIC ACTUATOR	114003-01		Х	
49	2" PIN	114594-01		Х	
50	BRACKET - CYLINDER	115998-01			Х
51	5/8 SAE FLAT WASHER	93016			X
52	PISTON	105463-01			X
53	CYLINDER	105449-01			X
54	HOUSING	105447-01			X
55	HYD CYLINDER REPAIR KIT	106531	+		KIT
56	HYD CYLINDER ASSEMBLY	113557-91			KIT
57	5/16 X 1-1/2 HEX BOLT	115158-01	Х		
58	3/8 X 1 HEX BOLT	90860		.,	X
59	3/8 LOCK WASHER	93024		X	Х
60	3/8 X 4-1/2 HEX BOLT	90667		Х	
61	3/8 X 1-1/2 HEX BOLT	90655	Х	.,	
62	5/16 X 1-3/4 SQ. HD BOLT	90554		Х	
N/S	PULLEY	A-2765	X		
N/S	ROPE – 12'	A-2766	X		

## **Clutch Kit Schematics**

UNIVERSAL COMPONENTS: (FOR ALL KITS)







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