

# Nex-Gen Clutch

10.00", 10.50" & 11.00" 3 Lever Instructions  
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\*\*\* When disassembling the Nex-Gen Clutch unit, make sure not lose the small washer/shims from between the cover and flywheel. In addition to the large spacers there are (3) .010 and (2) .020: shims at each bolt/stud.

## Ring Height

- Should be at 1.650" - 1.660" measured through one/each of the 3 holes in the cover. (Pictured)
- Ring Height can be adjusted by shimming between the cover and flywheel.

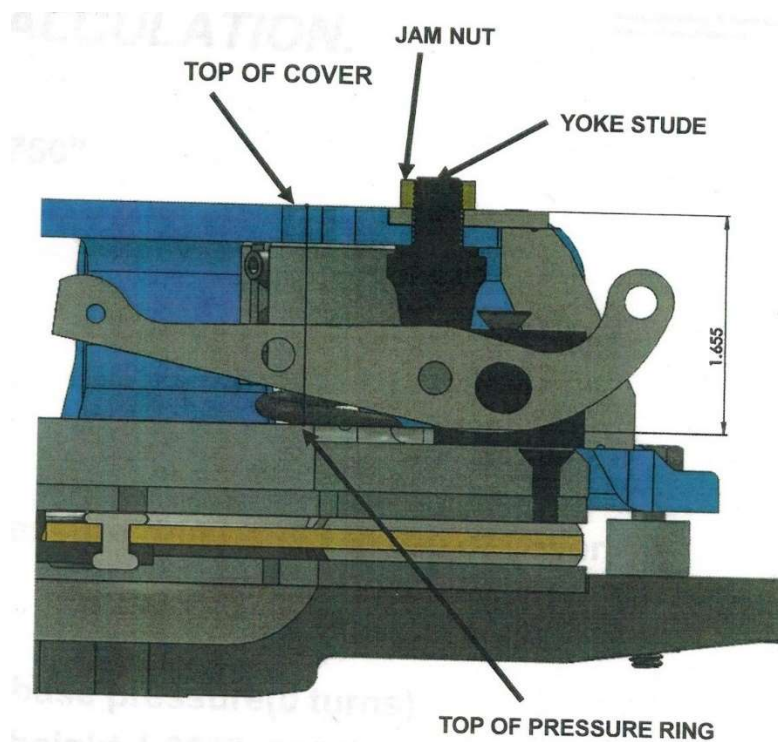


## Lever Height

- Should be .930" - .970" measured through one/each of the 3 holes in the cover. (Pictured)



Pictured below, you can see that when measuring the Ring height you are measuring from the top of the cover, down to the top of the pressure ring. Also, when measuring lever height you are measuring from the top of the cover down to the top side of the lever.



Adjusting Lever Height is done by loosening the Jam Nut on top of the cover and turning the Yoke Stud (with flat head top). Stock setting should be when the Yoke Stud is screwed all the way in when starting with a new .330" - .335" thick disc.

Units are sold new with .330" - .335" thick sintered iron discs.

\*\*\* Be sure to always keep the Jam Nut tight. You can use a small amount of Blue Loctite if desired.

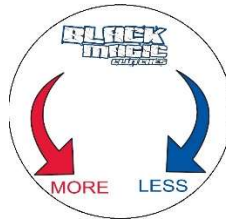
**Disc should be place with the raised hub up, towards the transmission.**

## Specifications and Design Information

### Spring Information / Base Pressure

- Free Length: 1.750"
- Rate of Pressure: 220 lbs per Inch or 55 lbs per 1/4 Inch
- Compressed/Solid Length: .850"
- Base Sheet Provided at 1/4 turn increments
- Maximum Turns: 9 Turns
- 336 lbs Total Pressure at Zero Turns
  - o \*\*\* We don't recommend more than 8.5 turns. If the adjuster backs completely out of the aluminum adjusters the unit must be taken apart and the adjusters must be rethreaded into the cups. Running the clutch with them fully backed out of the cups, it will damage them.

**Clockwise Removes Base - Counter Clockwise Adds Base.** To start turn all the way clockwise until fully loose. Turn Counter Clockwise until you start to feel slight resistance. Start counting from there.



### Counter Weight

- 1/4 Inch holes are located to the outside of the clutch unit to add counter weight.
- There is also an "in-board" counter weight hole on the inside of the lever (towards the hub)
  - o This hole can be used to slow the rate of applied pressure, but we recommend consulting with Cale Aronson for exact tuning information.
- Attached is an Applied Pressure Sheet showing the applied pressure in Lbs, over every 100 rpm.

### Disc Options

- 5135 (4-1 Ace): Most aggressive. Most commonly used in single disc lower horsepower door car type applications. This is the most popular in this type of clutch design.
- 5050 (5-1 Ace): Medium Aggression. When a lower horsepower or lighter vehicle application needs to lower the friction coefficient to widen the tuning window.
- 5191 (7-1 or 8-1 Ace): Least Aggressive. Most commonly used in Pro Billet applications and multiple disc units.

**BASE PRESSURE PER 1/4 TURN**

<b>TURNS OF BASE</b>	<b>LBS PRESSURE</b>
0.25	356.65
0.5	377.3
0.75	397.95
1	418.6
1.25	439.25
1.5	459.9
1.75	480.55
2	501.2
2.25	521.85
2.5	542.5
2.75	563.15
3	583.8
3.25	604.45
3.5	625.1
3.75	645.75
4	666.4
4.25	687.05
4.5	707.7
4.75	728.35
5	749
5.25	769.65
5.5	790.3
5.75	810.95
6	831.6
6.25	852.25
6.5	872.9
6.75	893.55
7	914.2
7.25	934.85
7.5	955.5
7.75	976.15
8	996.8
8.25	1017.45
8.5	1038.1
8.75	1058.75
9	1079.4

## Applied Counter Weight Pressure

GRAMS	lb per gram	10	15	20	25	30	35	40	45	50	55	60
4600	<u>10.64</u>	106.4	159.6	212.8	266.0	319.2	372.4	425.6	478.8	532.0	585.2	638.4
4700	<u>11.4</u>	114.0	171.0	228.0	285.0	342.0	399.0	456.0	513.0	570.0	627.0	684.0
4800	<u>11.78</u>	117.8	176.7	235.6	294.5	353.4	412.3	471.2	530.1	589.0	647.9	706.8
4900	<u>12.5</u>	125.0	187.5	250.0	312.5	375.0	437.5	500.0	562.5	625.0	687.5	750.0
5000	<u>13.11</u>	131.1	196.7	262.2	327.8	393.3	458.9	524.4	590.0	655.5	721.1	786.6
5100	<u>13.78</u>	137.8	206.7	275.6	344.5	413.4	482.3	551.2	620.1	689.0	757.9	826.8
5200	<u>14.4</u>	144.0	216.0	288.0	360.0	432.0	504.0	576.0	648.0	720.0	792.0	864.0
5300	<u>15.01</u>	150.1	225.2	300.2	375.3	450.3	525.4	600.4	675.5	750.5	825.6	900.6
5400	<u>15.73</u>	157.3	236.0	314.6	393.3	471.9	550.6	629.2	707.9	786.5	865.2	943.8
5500	<u>16.69</u>	166.9	250.4	333.8	417.3	500.7	584.2	667.6	751.1	834.5	918.0	1001.4
5600	<u>17.71</u>	177.1	265.7	354.2	442.8	531.3	619.9	708.4	797.0	885.5	974.1	1062.6
5700	<u>18.4</u>	184.0	276.0	368.0	460.0	552.0	644.0	736.0	828.0	920.0	1012.0	1104.0
5800	<u>19.21</u>	192.1	288.2	384.2	480.3	576.3	672.4	768.4	864.5	960.5	1056.6	1152.6
5900	<u>20.4</u>	204.0	306.0	408.0	510.0	612.0	714.0	816.0	918.0	1020.0	1122.0	1224.0
6000	<u>21.78</u>	217.8	326.7	435.6	544.5	653.4	762.3	871.2	980.1	1089.0	1197.9	1306.8
6100	<u>23.16</u>	231.6	347.4	463.2	579.0	694.8	810.6	926.4	1042.2	1158.0	1273.8	1389.6
6200	<u>24.66</u>	246.6	369.9	493.2	616.5	739.8	863.1	986.4	1109.7	1233.0	1356.3	1479.6
6300	<u>25.95</u>	259.5	389.3	519.0	648.8	778.5	908.3	1038.0	1167.8	1297.5	1427.3	1557.0
6400	<u>27.97</u>	279.7	419.6	559.4	699.3	839.1	979.0	1118.8	1258.7	1398.5	1538.4	1678.2
6500	<u>29.76</u>	297.6	446.4	595.2	744.0	892.8	1041.6	1190.4	1339.2	1488.0	1636.8	1785.6
6600	<u>32.02</u>	320.2	480.3	640.4	800.5	960.6	1120.7	1280.8	1440.9	1601.0	1761.1	1921.2
6700	<u>32.97</u>	329.7	494.6	659.4	824.3	989.1	1154.0	1318.8	1483.7	1648.5	1813.4	1978.2
6800	<u>33.73</u>	337.3	506.0	674.6	843.3	1011.9	1180.6	1349.2	1517.9	1686.5	1855.2	2023.8
6900	<u>34.64</u>	346.4	519.6	692.8	866.0	1039.2	1212.4	1385.6	1558.8	1732.0	1905.2	2078.4
7000	<u>35.45</u>	354.5	531.8	709.0	886.3	1063.5	1240.8	1418.0	1595.3	1772.5	1949.8	2127.0
7100	<u>36.5</u>	365.0	547.5	730.0	912.5	1095.0	1277.5	1460.0	1642.5	1825.0	2007.5	2190.0
7200	<u>37.85</u>	378.5	567.8	757.0	946.3	1135.5	1324.8	1514.0	1703.3	1892.5	2081.8	2271.0
7300	<u>39.61</u>	396.1	594.2	792.2	990.3	1188.3	1386.4	1584.4	1782.5	1980.5	2178.6	2376.6
7400	<u>40.42</u>	404.2	606.3	808.4	1010.5	1212.6	1414.7	1616.8	1818.9	2021.0	2223.1	2425.2
7500	<u>41.66</u>	416.6	624.9	833.2	1041.5	1249.8	1458.1	1666.4	1874.7	2083.0	2291.3	2499.6
7600	<u>42.8</u>	428.0	642.0	856.0	1070.0	1284.0	1498.0	1712.0	1926.0	2140.0	2354.0	2568.0
7700	<u>44.21</u>	442.1	663.2	884.2	1105.3	1326.3	1547.4	1768.4	1989.5	2210.5	2431.6	2652.6
7800	44.88	448.8	673.2	897.6	1122.0	1346.4	1570.8	1795.2	2019.6	2244.0	2468.4	2692.8
7900	46.92	469.2	703.8	938.4	1173.0	1407.6	1642.2	1876.8	2111.4	2346.0	2580.6	2815.2
8000	48.07	480.7	721.1	961.4	1201.8	1442.1	1682.5	1922.8	2163.2	2403.5	2643.9	2884.2
8100	49.26	492.6	738.9	985.2	1231.5	1477.8	1724.1	1970.4	2216.7	2463.0	2709.3	2955.6
8200	50.5	505.0	757.5	1010.0	1262.5	1515.0	1767.5	2020.0	2272.5	2525.0	2777.5	3030.0
8300	51.75	517.5	776.3	1035.0	1293.8	1552.5	1811.3	2070.0	2328.8	2587.5	2846.3	3105.0
8400	52.93	529.3	794.0	1058.6	1323.3	1587.9	1852.6	2117.2	2381.9	2646.5	2911.2	3175.8
8500	54.2	542.0	813.0	1084.0	1355.0	1626.0	1897.0	2168.0	2439.0	2710.0	2981.0	3252.0
8600	55.39	553.9	830.9	1107.8	1384.8	1661.7	1938.7	2215.6	2492.6	2769.5	3046.5	3323.4
8700	56.61	566.1	849.2	1132.2	1415.3	1698.3	1981.4	2264.4	2547.5	2830.5	3113.6	3396.6
8800	57.72	577.2	865.8	1154.4	1443.0	1731.6	2020.2	2308.8	2597.4	2886.0	3174.6	3463.2
8900	58.93	589.3	884.0	1178.6	1473.3	1767.9	2062.6	2357.2	2651.9	2946.5	3241.2	3535.8
9000	60.22	602.2	903.3	1204.4	1505.5	1806.6	2107.7	2408.8	2709.9	3011.0	3312.1	3613.2

For additional information or tuning assistance contact Cale Aronson with the contact details below.

The Nex-Gen Clutch was created by Cale Aronson and Aronson Motorsports. It is a modernized version of the traditional "Long Style" clutch that has been in drag racing use for more than 4 decades.

The Nex-Gen Cover is made from a forged 7075 aluminum alloy allowing for less overall height by design, adjustable lever height without the use of shims, better heat dissipation for better longevity and much more. The Pressure Ring utilizes 7075 grade Aluminum as well and features bolt on segmented heat shields that allow for maximized expansion and contraction of the heat shield surfaces which keeps the contact surfaces flatter, longer! These heat shields are also featured on the flywheel. In addition, the pressure ring features bolt through billet steel lever stands with triangulated design to ensure more strength and better pressure application.



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