

## **2023 SkiDoo Summit X Turbo R tested stock and with Jaws turbo pipe and Y pipe, and with Hot Rod Sled Shop Torque Link reflashes**

Branko Dickhut, owner of Hotrod Sled Shop in eastern PA came to DTR to verify/optimize the new Jaws turbo pipe/ Ypipe combo and HRSS reflash tunes on Andrew Cooney's 2023 Summit X Turbo R. Andrew is a tech at KDK Sports SkiDoo in Rome NY, and had put 500 hard miles on the stock sled last season. We used 92.4 R+M/2 octane 3.6% ethanol fuel for baseline and stage 1 and 2 tests, then mixed that 50/50 with 110 octane race fuel (around 100 octane mix) for the higher boost tunes. All tests were begun with 110-120 degree F coolant. The Servo Valve % data refers to the position of the computer controlled valve that allows water to exit the dyno absorber. 100% is full load.

We tried back to back 10 second dyno sweeps like we did with the NA Etec 850 pipes, but in this case we gained no HP on tests two or more like we did on the NA version. The boosted engine puts way more CFM of hot exhaust through the pipes, creating greater temperature rise in the pipe and muffler than we experience with normally aspirated versions. In this case, 10-12 seconds at WOT at our altitude optimizes engine HP and beyond that, power stays the same (or less, if the engine begins to go into "protect the plastic" mode).

This was an all day session beginning with the stock exhaust—then switching to the amazing Jaws pipe and Y pipe, and then back to stock again. As we can see from the data DA changed during the day along with STP (standard temperature and pressure—60 degrees F, sea level dry air) correction factor. We should note that since the SkiDoo turbo system is altitude correcting (same as the other sled turbo systems) the STP correction factor is not precise. At 1100 ft DA today the stock engine made 187.6 CHP but the actual observed HP was 179.33. As we understand it, the ECU is designed to create enough boost pressure—adding @ 1/2 PSI per 1000' altitude increase—to approximately maintain sea level HP which in this case would be 179.33 actual HP at whatever altitude you ride at (on a 57.5degree day). Our dyno facility in Batavia, NY sits at @1000' altitude. But if our dyno was located in "mile high" Denver CO, (at @25 in hg actual baro pressure instead of @29 in hg here) on a 57.5 degree F day this same engine should still make @179.33 actual HP with boost added by the ECU. But the STP correction factor would be 1.20, which would give us about 215 STP CHP. So like all modern turbo sleds tested here, the Turbo R engine's CHP rating has benefited slightly from our 1000' altitude location. But since we're comparing all of the modern turbo engines on this same engine dyno, we can just enjoy the few extra, unearned HP!

Note that in our stock ECU dyno tests with both stock and Jaws exhaust, A/F ratio is nearly identical—just very slightly leaner with the Jaws exhaust. That indicates that the airflow is nearly identical so no added fuel is required for the added 18 HP. Reduced BSAC (Brake Specific Air Consumption—pounds of air per HP per hour) is a good thing.

Here is the 500 mile SummitX TurboR engine tested bone stock, and with HRSS Torque Link flashes 1-4.

### 2013 Summit X Turbo R, tested completely STOCK

| EngSpd<br>RPM | STPPwr<br>CHp | STPTrq<br>Clb-ft | AFRWB1<br>Ratio | AirInT<br>degF | DenAlt<br>Feet | STPCor<br>Factor | BoostP<br>psig | ServoV<br>% |
|---------------|---------------|------------------|-----------------|----------------|----------------|------------------|----------------|-------------|
| 6500          | 144.7         | 116.9            | 13.91           | 57.5           | 1119           | 1.04             | 3.8            | 70.8        |
| 6550          | 146.2         | 117.2            | 13.89           | 57.5           | 1119           | 1.04             | 3.8            | 70.6        |
| 6600          | 147.7         | 117.5            | 13.91           | 57.5           | 1119           | 1.04             | 3.8            | 70.4        |
| 6650          | 149.2         | 117.9            | 13.93           | 57.5           | 1119           | 1.04             | 3.8            | 70.1        |
| 6700          | 151.0         | 118.4            | 13.96           | 57.5           | 1119           | 1.04             | 3.8            | 69.7        |
| 6750          | 153.1         | 119.1            | 13.98           | 57.5           | 1119           | 1.04             | 3.8            | 69.4        |
| 6800          | 155.5         | 120.1            | 14.01           | 57.5           | 1119           | 1.04             | 3.9            | 69.2        |
| 6850          | 158.1         | 121.2            | 14.02           | 57.5           | 1119           | 1.04             | 3.9            | 68.9        |
| 6900          | 160.6         | 122.3            | 14.03           | 57.5           | 1119           | 1.04             | 3.9            | 68.6        |
| 6950          | 163.3         | 123.4            | 14.05           | 57.5           | 1119           | 1.04             | 3.9            | 68.3        |
| 7000          | 165.7         | 124.3            | 14.06           | 57.5           | 1119           | 1.04             | 4.0            | 67.9        |
| 7050          | 167.9         | 125.1            | 14.07           | 57.5           | 1119           | 1.04             | 4.0            | 67.4        |
| 7100          | 169.8         | 125.6            | 14.07           | 57.5           | 1119           | 1.04             | 4.0            | 67.0        |
| 7150          | 171.6         | 126.0            | 14.06           | 57.5           | 1119           | 1.04             | 4.0            | 66.4        |
| 7200          | 173.2         | 126.3            | 14.04           | 57.5           | 1119           | 1.04             | 4.0            | 65.9        |
| 7250          | 174.6         | 126.5            | 14.02           | 57.5           | 1119           | 1.04             | 3.9            | 65.1        |
| 7300          | 175.9         | 126.5            | 14.01           | 57.5           | 1119           | 1.04             | 3.9            | 64.4        |
| 7350          | 177.0         | 126.5            | 14.00           | 57.5           | 1119           | 1.04             | 3.9            | 63.8        |
| 7400          | 178.2         | 126.5            | 14.00           | 57.5           | 1119           | 1.04             | 3.9            | 63.4        |
| 7450          | 179.3         | 126.4            | 14.00           | 57.5           | 1119           | 1.04             | 3.8            | 62.8        |
| 7500          | 180.4         | 126.3            | 14.01           | 57.5           | 1120           | 1.04             | 3.8            | 61.9        |
| 7550          | 181.7         | 126.4            | 14.01           | 57.5           | 1121           | 1.04             | 3.8            | 61.3        |
| 7600          | 183.1         | 126.6            | 14.02           | 57.5           | 1121           | 1.04             | 3.8            | 60.8        |
| 7650          | 184.6         | 126.7            | 14.02           | 57.5           | 1123           | 1.04             | 3.7            | 60.1        |
| 7700          | 185.8         | 126.7            | 14.01           | 57.5           | 1124           | 1.04             | 3.7            | 59.3        |
| 7750          | 186.7         | 126.6            | 14.01           | 57.5           | 1124           | 1.04             | 3.6            | 58.5        |
| 7800          | 187.4         | 126.2            | 14.00           | 57.5           | 1125           | 1.04             | 3.5            | 57.7        |
| 7850          | 187.6         | 125.5            | 14.00           | 57.5           | 1125           | 1.04             | 3.5            | 56.8        |
| 7900          | 187.3         | 124.5            | 14.03           | 57.5           | 1125           | 1.04             | 3.4            | 55.7        |
| 7950          | 186.7         | 123.3            | 14.06           | 57.5           | 1125           | 1.04             | 3.4            | 54.8        |
| 8000          | 185.5         | 121.8            | 14.11           | 57.5           | 1126           | 1.04             | 3.4            | 53.9        |
| 8050          | 183.7         | 119.8            | 14.17           | 57.5           | 1125           | 1.04             | 3.5            | 52.7        |
| 8100          | 181.4         | 117.6            | 14.23           | 57.5           | 1125           | 1.04             | 3.5            | 51.5        |
| 8150          | 178.4         | 115.0            | 14.28           | 57.5           | 1124           | 1.04             | 3.6            | 49.8        |
| 8200          | 173.8         | 111.3            | 14.31           | 57.5           | 1123           | 1.04             | 3.6            | 47.1        |
| 8250          | 169.3         | 107.8            | 14.34           | 57.5           | 1124           | 1.04             | 3.8            | 44.0        |

### HRSS Stage 1 reflash

| EngSpd<br>RPM | STPPwr<br>CHp | STPTrq<br>Clb-ft | AFRWB1<br>Ratio | AirInT<br>degF | DenAlt<br>Feet | STPCor<br>Factor | BoostP<br>psig | ServoV<br>% |
|---------------|---------------|------------------|-----------------|----------------|----------------|------------------|----------------|-------------|
|---------------|---------------|------------------|-----------------|----------------|----------------|------------------|----------------|-------------|

|      |       |       |       |      |      |       |     |      |
|------|-------|-------|-------|------|------|-------|-----|------|
| 6750 | 165.6 | 128.9 | 14.46 | 64.2 | 1583 | 1.046 | 4.6 | 71.0 |
| 6800 | 166.1 | 128.3 | 14.41 | 64.2 | 1584 | 1.046 | 4.6 | 70.5 |
| 6850 | 167.2 | 128.2 | 14.40 | 64.2 | 1585 | 1.046 | 4.6 | 70.0 |
| 6900 | 168.7 | 128.4 | 14.41 | 64.2 | 1585 | 1.046 | 4.6 | 69.6 |
| 6950 | 170.5 | 128.8 | 14.42 | 64.2 | 1585 | 1.046 | 4.6 | 69.2 |
| 7000 | 172.3 | 129.3 | 14.44 | 64.2 | 1586 | 1.046 | 4.5 | 68.7 |
| 7050 | 174.1 | 129.7 | 14.44 | 64.2 | 1586 | 1.046 | 4.5 | 68.3 |
| 7100 | 175.9 | 130.1 | 14.43 | 64.2 | 1586 | 1.046 | 4.5 | 67.9 |
| 7150 | 177.6 | 130.5 | 14.39 | 64.2 | 1586 | 1.046 | 4.4 | 67.5 |
| 7200 | 179.4 | 130.9 | 14.35 | 64.2 | 1586 | 1.046 | 4.4 | 67.0 |
| 7250 | 181.1 | 131.2 | 14.31 | 64.3 | 1586 | 1.046 | 4.4 | 66.5 |
| 7300 | 182.7 | 131.5 | 14.27 | 64.3 | 1587 | 1.046 | 4.4 | 65.9 |
| 7350 | 184.1 | 131.6 | 14.26 | 64.3 | 1587 | 1.046 | 4.4 | 65.4 |
| 7400 | 185.4 | 131.6 | 14.25 | 64.3 | 1587 | 1.046 | 4.4 | 65.0 |
| 7450 | 186.5 | 131.4 | 14.24 | 64.3 | 1587 | 1.046 | 4.5 | 64.3 |
| 7500 | 187.6 | 131.4 | 14.24 | 64.3 | 1587 | 1.046 | 4.5 | 63.7 |
| 7550 | 188.8 | 131.3 | 14.23 | 64.3 | 1587 | 1.046 | 4.5 | 63.2 |
| 7600 | 190.1 | 131.4 | 14.22 | 64.3 | 1587 | 1.046 | 4.6 | 62.5 |
| 7650 | 191.4 | 131.4 | 14.21 | 64.3 | 1587 | 1.046 | 4.6 | 61.8 |
| 7700 | 192.8 | 131.5 | 14.20 | 64.3 | 1587 | 1.046 | 4.7 | 61.0 |
| 7750 | 194.0 | 131.5 | 14.19 | 64.3 | 1587 | 1.046 | 4.7 | 60.2 |
| 7800 | 194.8 | 131.1 | 14.18 | 64.3 | 1587 | 1.046 | 4.7 | 59.1 |
| 7850 | 195.0 | 130.5 | 14.19 | 64.3 | 1587 | 1.046 | 4.7 | 58.1 |
| 7900 | 194.8 | 129.5 | 14.20 | 64.3 | 1587 | 1.046 | 4.7 | 57.1 |
| 7950 | 193.3 | 127.7 | 14.22 | 64.3 | 1587 | 1.046 | 4.7 | 55.7 |
| 8000 | 191.2 | 125.6 | 14.25 | 64.3 | 1587 | 1.046 | 4.7 | 54.3 |
| 8050 | 188.7 | 123.1 | 14.27 | 64.3 | 1588 | 1.046 | 4.8 | 52.8 |
| 8100 | 185.2 | 120.1 | 14.30 | 64.3 | 1588 | 1.046 | 4.8 | 51.0 |
| 8150 | 180.6 | 116.4 | 14.33 | 64.3 | 1588 | 1.046 | 4.8 | 48.7 |
| 8200 | 174.4 | 111.7 | 14.35 | 64.3 | 1588 | 1.046 | 4.9 | 45.7 |
| 8250 | 167.5 | 106.6 | 14.36 | 64.3 | 1589 | 1.046 | 5.0 | 41.9 |

---



---

### HRSS Stage 2 reflash

| EngSpd | STPPwr | STPTRq | AFRWB1 | AirInT | DenAlt | STPCor | BoostP | ServoV |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| RPM    | CHp    | Clb-ft | Ratio  | degF   | Feet   | Factor | psig   | %      |
| 6800   | 174.3  | 134.6  | 14.56  | 63.4   | 1529   | 1.045  | 5.2    | 72.5   |
| 6850   | 175.2  | 134.3  | 14.53  | 63.4   | 1529   | 1.045  | 5.2    | 72.0   |
| 6900   | 176.4  | 134.3  | 14.50  | 63.4   | 1529   | 1.045  | 5.1    | 71.5   |
| 6950   | 177.8  | 134.4  | 14.48  | 63.4   | 1529   | 1.045  | 5.1    | 71.0   |
| 7000   | 179.5  | 134.7  | 14.45  | 63.4   | 1529   | 1.045  | 5.1    | 70.6   |
| 7050   | 181.2  | 135.0  | 14.43  | 63.4   | 1529   | 1.045  | 5.0    | 70.2   |
| 7100   | 183.0  | 135.4  | 14.41  | 63.4   | 1529   | 1.045  | 5.0    | 69.9   |
| 7150   | 184.9  | 135.8  | 14.37  | 63.4   | 1529   | 1.045  | 5.0    | 69.4   |
| 7200   | 186.6  | 136.1  | 14.34  | 63.4   | 1529   | 1.045  | 4.9    | 68.8   |
| 7250   | 188.2  | 136.3  | 14.31  | 63.4   | 1529   | 1.045  | 4.9    | 68.2   |
| 7300   | 189.5  | 136.4  | 14.29  | 63.4   | 1530   | 1.045  | 4.9    | 67.6   |

|      |       |       |       |      |      |       |     |      |
|------|-------|-------|-------|------|------|-------|-----|------|
| 7350 | 190.5 | 136.1 | 14.28 | 63.4 | 1530 | 1.045 | 4.9 | 66.7 |
| 7400 | 191.4 | 135.8 | 14.28 | 63.4 | 1531 | 1.045 | 4.8 | 66.1 |
| 7450 | 192.4 | 135.6 | 14.27 | 63.4 | 1531 | 1.045 | 4.9 | 65.5 |
| 7500 | 193.2 | 135.3 | 14.26 | 63.4 | 1531 | 1.045 | 4.9 | 64.7 |
| 7550 | 194.2 | 135.1 | 14.25 | 63.4 | 1530 | 1.045 | 4.9 | 64.1 |
| 7600 | 195.4 | 135.0 | 14.24 | 63.4 | 1530 | 1.045 | 5.0 | 63.3 |
| 7650 | 197.0 | 135.3 | 14.22 | 63.4 | 1529 | 1.045 | 5.1 | 62.5 |
| 7700 | 198.6 | 135.5 | 14.21 | 63.4 | 1528 | 1.045 | 5.2 | 61.8 |
| 7750 | 200.0 | 135.5 | 14.20 | 63.4 | 1529 | 1.045 | 5.3 | 61.1 |
| 7800 | 201.0 | 135.4 | 14.19 | 63.4 | 1528 | 1.045 | 5.4 | 60.2 |
| 7850 | 201.3 | 134.7 | 14.19 | 63.4 | 1528 | 1.045 | 5.4 | 59.1 |
| 7900 | 200.9 | 133.5 | 14.20 | 63.4 | 1528 | 1.045 | 5.4 | 58.0 |
| 7950 | 200.0 | 132.1 | 14.20 | 63.4 | 1529 | 1.045 | 5.5 | 56.9 |
| 8000 | 198.4 | 130.2 | 14.22 | 63.4 | 1529 | 1.045 | 5.5 | 55.7 |
| 8050 | 195.4 | 127.5 | 14.23 | 63.4 | 1530 | 1.045 | 5.5 | 54.1 |
| 8100 | 191.2 | 124.0 | 14.25 | 63.4 | 1530 | 1.045 | 5.6 | 52.2 |
| 8150 | 185.2 | 119.4 | 14.24 | 63.4 | 1531 | 1.045 | 5.6 | 49.7 |
| 8200 | 177.5 | 113.7 | 14.23 | 63.4 | 1531 | 1.045 | 5.7 | 46.1 |

---



---

### HRSS Stage 2.5 reflash

| EngSpd | STPPwr | STPTRq | AFRWB1 | AirInT | DenAlt | STPCor | BoostP | ServoV |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| RPM    | CHp    | Clb-ft | Ratio  | degF   | Feet   | Factor | psig   | %      |
| 6800   | 172.6  | 133.3  | 14.60  | 63.9   | 1562   | 1.045  | 5.0    | 71.2   |
| 6850   | 173.3  | 132.8  | 14.53  | 63.9   | 1562   | 1.045  | 4.9    | 71.0   |
| 6900   | 174.7  | 133.0  | 14.50  | 63.9   | 1562   | 1.045  | 4.8    | 70.8   |
| 6950   | 176.2  | 133.2  | 14.49  | 63.9   | 1562   | 1.045  | 4.8    | 70.6   |
| 7000   | 177.9  | 133.5  | 14.46  | 63.9   | 1562   | 1.045  | 4.8    | 70.2   |
| 7050   | 179.7  | 133.8  | 14.43  | 63.9   | 1562   | 1.045  | 4.8    | 69.7   |
| 7100   | 181.3  | 134.1  | 14.40  | 63.9   | 1562   | 1.045  | 4.8    | 69.2   |
| 7150   | 183.0  | 134.4  | 14.37  | 63.9   | 1562   | 1.045  | 4.8    | 68.8   |
| 7200   | 184.7  | 134.7  | 14.33  | 63.9   | 1562   | 1.045  | 4.8    | 68.3   |
| 7250   | 186.4  | 135.1  | 14.29  | 63.9   | 1562   | 1.045  | 4.8    | 67.7   |
| 7300   | 188.0  | 135.2  | 14.25  | 63.9   | 1562   | 1.045  | 4.8    | 67.0   |
| 7350   | 189.5  | 135.4  | 14.24  | 63.9   | 1562   | 1.045  | 4.9    | 66.6   |
| 7400   | 190.9  | 135.5  | 14.23  | 63.9   | 1562   | 1.045  | 5.0    | 66.2   |
| 7450   | 192.4  | 135.6  | 14.21  | 63.9   | 1563   | 1.045  | 5.2    | 65.8   |
| 7500   | 194.0  | 135.9  | 14.20  | 63.9   | 1563   | 1.045  | 5.4    | 65.4   |
| 7550   | 196.2  | 136.5  | 14.18  | 63.9   | 1563   | 1.045  | 5.6    | 65.0   |
| 7600   | 198.8  | 137.4  | 14.16  | 63.9   | 1563   | 1.045  | 5.9    | 64.7   |
| 7650   | 201.3  | 138.2  | 14.15  | 63.9   | 1562   | 1.045  | 6.0    | 64.5   |
| 7700   | 205.6  | 140.3  | 14.10  | 63.9   | 1562   | 1.045  | 6.3    | 63.7   |
| 7750   | 207.7  | 140.8  | 14.07  | 63.9   | 1562   | 1.045  | 6.4    | 63.2   |
| 7800   | 209.4  | 141.0  | 14.06  | 63.9   | 1563   | 1.045  | 6.4    | 62.7   |
| 7850   | 209.9  | 140.5  | 14.04  | 63.9   | 1563   | 1.045  | 6.5    | 61.2   |
| 7900   | 210.4  | 139.9  | 14.05  | 63.9   | 1563   | 1.045  | 6.5    | 60.4   |
| 7950   | 209.4  | 138.3  | 14.07  | 63.9   | 1563   | 1.045  | 6.5    | 59.1   |

|      |       |       |       |      |      |       |     |      |
|------|-------|-------|-------|------|------|-------|-----|------|
| 8000 | 207.4 | 136.2 | 14.08 | 63.9 | 1563 | 1.045 | 6.5 | 57.6 |
| 8050 | 204.6 | 133.5 | 14.08 | 63.9 | 1562 | 1.045 | 6.5 | 56.1 |
| 8100 | 199.8 | 129.5 | 14.07 | 63.9 | 1563 | 1.045 | 6.5 | 54.0 |
| 8150 | 194.1 | 125.1 | 14.06 | 63.9 | 1563 | 1.045 | 6.5 | 51.7 |
| 8200 | 186.5 | 119.5 | 14.07 | 63.9 | 1563 | 1.045 | 6.6 | 48.7 |

---

### HRSS Stage3 reflash

| EngSpd | STPPwr | STPTrq | AFRWB1 | AirInT | DenAlt | STPCor | BoostP | ServoV |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| RPM    | CHp    | Clb-ft | Ratio  | degF   | Feet   | Factor | psig   | %      |
| 6800   | 180.0  | 139.0  | 14.59  | 64     | 1583   | 1.046  | 5.9    | 73.1   |
| 6850   | 180.8  | 138.6  | 14.56  | 64     | 1583   | 1.046  | 5.8    | 72.9   |
| 6900   | 181.7  | 138.3  | 14.50  | 64     | 1583   | 1.046  | 5.8    | 72.5   |
| 6950   | 183.4  | 138.6  | 14.47  | 64     | 1583   | 1.046  | 5.8    | 72.3   |
| 7000   | 185.3  | 139.0  | 14.44  | 64     | 1584   | 1.046  | 5.8    | 72.0   |
| 7050   | 187.2  | 139.4  | 14.41  | 64     | 1584   | 1.046  | 5.8    | 71.6   |
| 7100   | 189.0  | 139.8  | 14.37  | 64     | 1584   | 1.046  | 5.8    | 71.1   |
| 7150   | 190.8  | 140.1  | 14.32  | 64     | 1584   | 1.046  | 5.8    | 70.6   |
| 7200   | 192.5  | 140.4  | 14.28  | 64     | 1584   | 1.046  | 5.8    | 70.1   |
| 7250   | 194.3  | 140.7  | 14.25  | 64     | 1584   | 1.046  | 5.9    | 69.7   |
| 7300   | 196.2  | 141.2  | 14.22  | 64     | 1584   | 1.046  | 6.0    | 69.3   |
| 7350   | 198.3  | 141.7  | 14.19  | 64     | 1584   | 1.046  | 6.2    | 69.0   |
| 7400   | 200.6  | 142.4  | 14.17  | 64     | 1585   | 1.046  | 6.4    | 68.7   |
| 7450   | 204.0  | 143.8  | 14.11  | 64     | 1585   | 1.046  | 6.7    | 68.4   |
| 7500   | 207.7  | 145.4  | 14.05  | 64     | 1585   | 1.046  | 7.0    | 68.2   |
| 7550   | 210.7  | 146.6  | 14.00  | 64     | 1585   | 1.046  | 7.1    | 68.1   |
| 7600   | 213.5  | 147.6  | 13.95  | 64     | 1584   | 1.046  | 7.3    | 67.9   |
| 7650   | 216.8  | 148.9  | 13.86  | 64     | 1584   | 1.046  | 7.5    | 67.6   |
| 7700   | 219.6  | 149.8  | 13.78  | 64     | 1583   | 1.046  | 7.7    | 67.1   |
| 7750   | 221.8  | 150.3  | 13.70  | 64     | 1583   | 1.046  | 7.9    | 66.5   |
| 7800   | 223.0  | 150.1  | 13.66  | 64     | 1582   | 1.046  | 8.0    | 65.4   |
| 7850   | 223.9  | 149.8  | 13.66  | 64     | 1582   | 1.046  | 8.0    | 64.7   |
| 7900   | 223.2  | 148.4  | 13.67  | 64     | 1582   | 1.046  | 8.0    | 63.1   |
| 7950   | 222.8  | 147.2  | 13.70  | 64     | 1582   | 1.046  | 8.0    | 62.0   |
| 8000   | 220.6  | 144.8  | 13.73  | 64     | 1582   | 1.046  | 8.0    | 60.3   |
| 8050   | 218.7  | 142.7  | 13.75  | 64     | 1582   | 1.046  | 8.0    | 58.9   |
| 8100   | 214.4  | 139.0  | 13.78  | 64     | 1582   | 1.046  | 8.1    | 56.8   |
| 8150   | 211.4  | 136.3  | 13.79  | 64     | 1583   | 1.046  | 8.2    | 55.4   |

---

### HRSS Stage 4 reflash

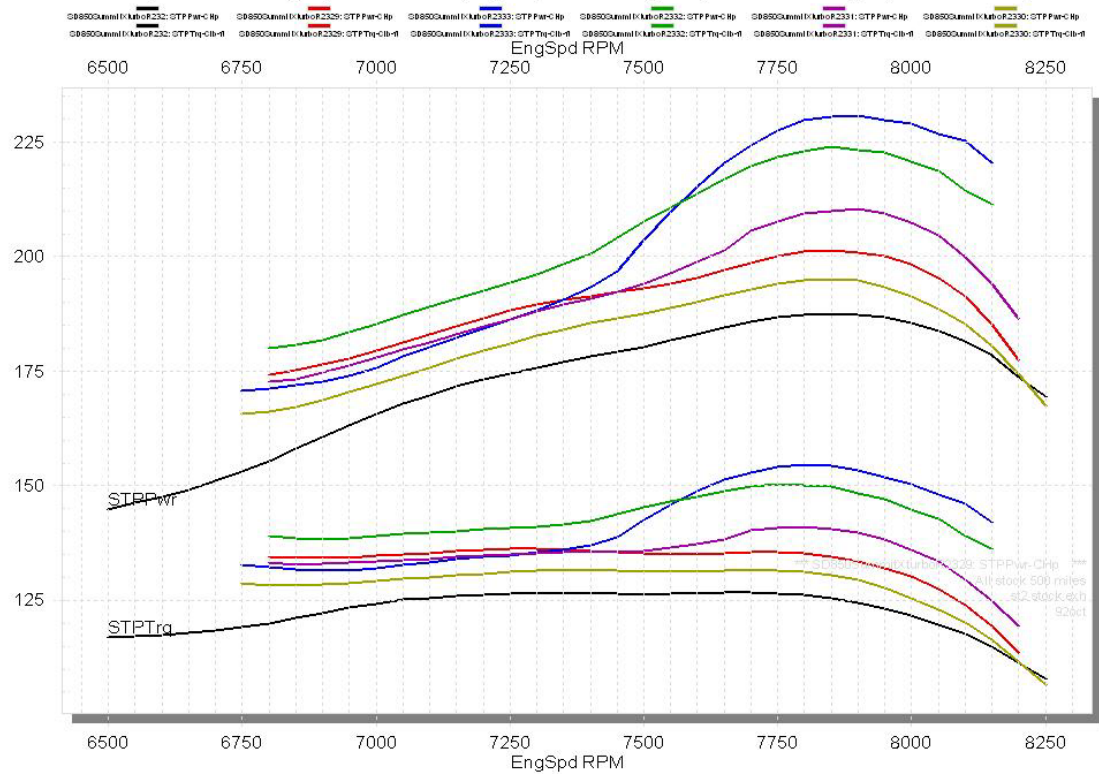
| EngSpd | STPPwr | STPTrq | AFRWB1 | AirInT | DenAlt | STPCor | BoostP | ServoV |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| RPM    | CHp    | Clb-ft | Ratio  | degF   | Feet   | Factor | psig   | %      |
| 6750   | 170.7  | 132.8  | 14.48  | 64     | 1574   | 1.046  | 4.7    | 72.0   |
| 6800   | 171.3  | 132.3  | 14.40  | 64     | 1574   | 1.046  | 4.6    | 71.6   |
| 6850   | 171.9  | 131.8  | 14.37  | 64     | 1574   | 1.046  | 4.6    | 71.2   |
| 6900   | 172.7  | 131.5  | 14.35  | 64     | 1574   | 1.046  | 4.6    | 70.8   |

|      |       |       |       |    |      |       |     |      |
|------|-------|-------|-------|----|------|-------|-----|------|
| 6950 | 174.0 | 131.5 | 14.34 | 64 | 1574 | 1.046 | 4.6 | 70.4 |
| 7000 | 175.9 | 131.9 | 14.35 | 64 | 1574 | 1.046 | 4.6 | 70.2 |
| 7050 | 178.2 | 132.7 | 14.35 | 64 | 1574 | 1.046 | 4.6 | 69.9 |
| 7100 | 180.2 | 133.3 | 14.35 | 64 | 1573 | 1.046 | 4.6 | 69.6 |
| 7150 | 182.4 | 133.9 | 14.32 | 64 | 1574 | 1.046 | 4.6 | 69.2 |
| 7200 | 184.3 | 134.5 | 14.29 | 64 | 1574 | 1.046 | 4.8 | 68.7 |
| 7250 | 186.2 | 134.9 | 14.25 | 64 | 1573 | 1.046 | 5.0 | 68.4 |
| 7300 | 188.2 | 135.4 | 14.21 | 64 | 1573 | 1.046 | 5.4 | 68.2 |
| 7350 | 190.5 | 136.1 | 14.16 | 64 | 1574 | 1.046 | 5.7 | 68.1 |
| 7400 | 193.2 | 137.1 | 14.10 | 64 | 1574 | 1.046 | 6.2 | 68.0 |
| 7450 | 196.7 | 138.7 | 14.02 | 64 | 1573 | 1.046 | 6.7 | 68.0 |
| 7500 | 203.7 | 142.6 | 13.87 | 64 | 1574 | 1.046 | 7.5 | 68.3 |
| 7550 | 209.6 | 145.8 | 13.79 | 64 | 1574 | 1.046 | 7.8 | 68.6 |
| 7600 | 215.3 | 148.8 | 13.73 | 64 | 1575 | 1.046 | 8.1 | 68.8 |
| 7650 | 220.3 | 151.3 | 13.66 | 64 | 1575 | 1.046 | 8.3 | 68.7 |
| 7700 | 224.2 | 152.9 | 13.59 | 64 | 1575 | 1.046 | 8.6 | 68.4 |
| 7750 | 227.5 | 154.1 | 13.51 | 64 | 1576 | 1.046 | 8.8 | 68.0 |
| 7800 | 229.7 | 154.7 | 13.43 | 64 | 1576 | 1.046 | 9.0 | 67.2 |
| 7850 | 230.6 | 154.3 | 13.40 | 64 | 1576 | 1.046 | 9.0 | 66.3 |
| 7900 | 230.7 | 153.3 | 13.41 | 64 | 1575 | 1.046 | 9.0 | 65.3 |
| 7950 | 229.7 | 151.8 | 13.45 | 64 | 1575 | 1.046 | 9.0 | 64.0 |
| 8000 | 228.9 | 150.3 | 13.50 | 64 | 1575 | 1.046 | 9.0 | 62.9 |
| 8050 | 226.9 | 148.0 | 13.56 | 64 | 1575 | 1.046 | 9.0 | 61.3 |
| 8100 | 225.2 | 146.0 | 13.61 | 64 | 1575 | 1.046 | 9.0 | 60.0 |
| 8150 | 220.3 | 142.0 | 13.65 | 64 | 1574 | 1.046 | 9.0 | 57.6 |

---

## 2023 SkiDoo SummitX TurboR w/ stock exhaust STP TORQUE and HORSEPOWER

Black Stock, Gold HRSS Stage 1, Red HRSS Stage 2, Purple HRSS Stage 2.5, Green HRSS Stage 3, Blue HRSS Stage 4



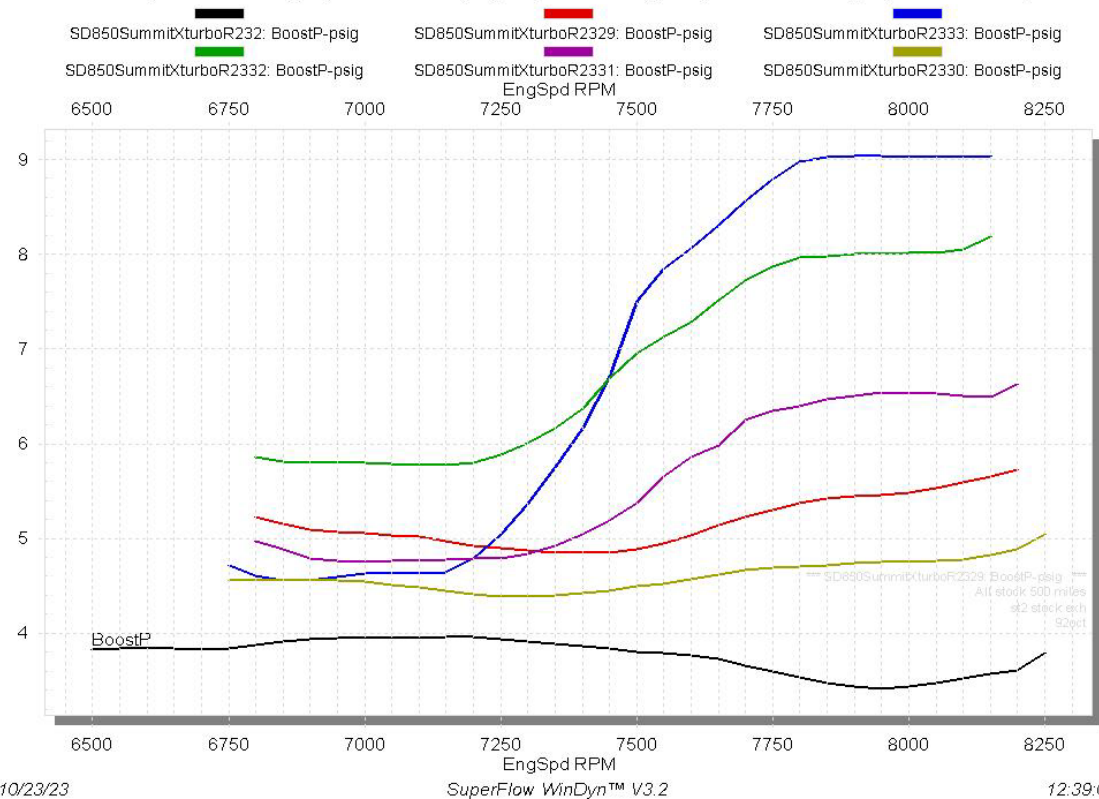
10/23/23

SuperFlow WinDyn™ V3.2

12:23:57

## 2023 SkiDoo SummitX TurboR w/ stock exhaust BOOST PSIG

Black Stock, Gold HRSS Stage 1, Red HRSS Stage 2, Purple HRSS Stage 2.5, Green HRSS Stage 3, Blue HRSS Stage 4



10/23/23

SuperFlow WinDyn™ V3.2

12:39:08

## Jaws pipe and Y pipe, with stock muffler

### Stock ECU

| EngSpd | STPPwr | STPTRq | AFRWB1 | AirInT | DenAlt | STPCor | BoostP | ServoV |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| RPM    | CHp    | Clb-ft | Ratio  | degF   | Feet   | Factor | psig   | %      |
| 6500   | 154.3  | 124.7  | 13.99  | 59.6   | 1232   | 1.04   | 4.0    | 72.9   |
| 6550   | 155.5  | 124.6  | 13.97  | 59.6   | 1232   | 1.04   | 4.0    | 72.5   |
| 6600   | 156.8  | 124.7  | 13.98  | 59.6   | 1232   | 1.04   | 3.9    | 72.1   |
| 6650   | 158.3  | 125.1  | 14.01  | 59.6   | 1232   | 1.04   | 3.9    | 71.7   |
| 6700   | 160.3  | 125.6  | 14.06  | 59.6   | 1232   | 1.04   | 3.9    | 71.4   |
| 6750   | 162.4  | 126.3  | 14.10  | 59.6   | 1232   | 1.04   | 3.9    | 71.2   |
| 6800   | 164.5  | 127.1  | 14.13  | 59.6   | 1232   | 1.04   | 3.9    | 71.0   |
| 6850   | 167.2  | 128.2  | 14.17  | 59.6   | 1232   | 1.04   | 4.0    | 70.8   |
| 6900   | 170.1  | 129.5  | 14.21  | 59.6   | 1232   | 1.04   | 4.0    | 70.7   |
| 6950   | 172.8  | 130.6  | 14.24  | 59.6   | 1233   | 1.04   | 4.0    | 70.6   |
| 7000   | 175.6  | 131.7  | 14.29  | 59.6   | 1233   | 1.04   | 4.0    | 70.4   |
| 7050   | 178.0  | 132.6  | 14.31  | 59.6   | 1233   | 1.04   | 4.0    | 70.1   |
| 7100   | 180.2  | 133.3  | 14.32  | 59.6   | 1233   | 1.04   | 4.0    | 69.7   |
| 7150   | 182.1  | 133.7  | 14.31  | 59.6   | 1233   | 1.04   | 4.0    | 69.4   |
| 7200   | 183.9  | 134.1  | 14.30  | 59.6   | 1233   | 1.04   | 4.0    | 69.0   |
| 7250   | 185.6  | 134.5  | 14.26  | 59.6   | 1233   | 1.04   | 4.0    | 68.4   |
| 7300   | 187.2  | 134.7  | 14.24  | 59.6   | 1233   | 1.04   | 4.0    | 67.9   |
| 7350   | 188.8  | 134.9  | 14.22  | 59.6   | 1233   | 1.04   | 4.0    | 67.3   |
| 7400   | 190.1  | 134.9  | 14.20  | 59.7   | 1233   | 1.04   | 4.0    | 66.6   |
| 7450   | 191.5  | 135.0  | 14.18  | 59.6   | 1233   | 1.04   | 3.9    | 66.0   |
| 7500   | 193.0  | 135.1  | 14.16  | 59.6   | 1233   | 1.04   | 3.9    | 65.5   |
| 7550   | 194.6  | 135.4  | 14.14  | 59.6   | 1233   | 1.04   | 3.9    | 64.8   |
| 7600   | 196.3  | 135.7  | 14.13  | 59.6   | 1233   | 1.04   | 3.8    | 64.2   |
| 7650   | 198.0  | 136.0  | 14.12  | 59.6   | 1232   | 1.04   | 3.7    | 63.7   |
| 7700   | 199.9  | 136.4  | 14.11  | 59.6   | 1233   | 1.04   | 3.7    | 63.1   |
| 7750   | 201.6  | 136.6  | 14.12  | 59.6   | 1233   | 1.04   | 3.6    | 62.5   |
| 7800   | 203.0  | 136.7  | 14.12  | 59.7   | 1233   | 1.04   | 3.6    | 61.7   |
| 7850   | 204.2  | 136.6  | 14.13  | 59.6   | 1233   | 1.04   | 3.6    | 61.0   |
| 7900   | 205.1  | 136.3  | 14.15  | 59.7   | 1233   | 1.04   | 3.5    | 60.3   |
| 7950   | 205.4  | 135.7  | 14.17  | 59.7   | 1233   | 1.04   | 3.6    | 59.4   |
| 8000   | 205.3  | 134.8  | 14.20  | 59.7   | 1233   | 1.04   | 3.6    | 58.6   |
| 8050   | 204.5  | 133.4  | 14.24  | 59.7   | 1233   | 1.04   | 3.6    | 57.5   |
| 8100   | 203.1  | 131.7  | 14.28  | 59.7   | 1234   | 1.04   | 3.6    | 56.3   |
| 8150   | 199.8  | 128.8  | 14.34  | 59.7   | 1234   | 1.04   | 3.6    | 54.3   |
| 8200   | 196.3  | 125.8  | 14.37  | 59.7   | 1234   | 1.04   | 3.5    | 52.4   |
| 8250   | 189.3  | 120.5  | 14.41  | 59.7   | 1234   | 1.04   | 3.5    | 48.7   |
| 8300   | 179.9  | 113.9  | 14.42  | 59.7   | 1236   | 1.04   | 3.6    | 43.7   |

---

### HRSS Stage J1

| EngSpd | STPPwr | STPTRq | AFRWB1 | AirInT | DenAlt | STPCor | BoostP | ServoV |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|--------|--------|--------|--------|--------|--------|--------|--------|--------|

| RPM  | CHp   | Clb-ft | Ratio | degF | Feet | Factor | psig | %    |
|------|-------|--------|-------|------|------|--------|------|------|
| 6750 | 174.5 | 135.7  | 14.37 | 62.6 | 1467 | 1.044  | 4.9  | 72.6 |
| 6800 | 174.8 | 135.0  | 14.30 | 62.6 | 1467 | 1.044  | 4.8  | 72.2 |
| 6850 | 175.6 | 134.7  | 14.29 | 62.6 | 1467 | 1.044  | 4.7  | 71.8 |
| 6900 | 177.0 | 134.7  | 14.32 | 62.6 | 1467 | 1.044  | 4.7  | 71.4 |
| 6950 | 178.5 | 134.9  | 14.34 | 62.6 | 1467 | 1.044  | 4.7  | 71.0 |
| 7000 | 180.2 | 135.2  | 14.36 | 62.6 | 1467 | 1.044  | 4.7  | 70.6 |
| 7050 | 181.8 | 135.5  | 14.37 | 62.6 | 1467 | 1.044  | 4.7  | 70.3 |
| 7100 | 183.7 | 135.9  | 14.37 | 62.6 | 1467 | 1.044  | 4.7  | 69.9 |
| 7150 | 185.6 | 136.3  | 14.35 | 62.6 | 1467 | 1.044  | 4.7  | 69.6 |
| 7200 | 187.5 | 136.8  | 14.32 | 62.6 | 1467 | 1.044  | 4.7  | 69.1 |
| 7250 | 189.3 | 137.1  | 14.28 | 62.6 | 1467 | 1.044  | 4.7  | 68.6 |
| 7300 | 190.7 | 137.2  | 14.26 | 62.6 | 1467 | 1.044  | 4.6  | 68.0 |
| 7350 | 191.9 | 137.1  | 14.24 | 62.6 | 1467 | 1.044  | 4.6  | 67.1 |
| 7400 | 193.0 | 137.0  | 14.23 | 62.6 | 1468 | 1.044  | 4.6  | 66.5 |
| 7450 | 194.3 | 137.0  | 14.22 | 62.6 | 1468 | 1.044  | 4.6  | 66.1 |
| 7500 | 195.8 | 137.1  | 14.21 | 62.6 | 1468 | 1.044  | 4.7  | 65.7 |
| 7550 | 197.3 | 137.3  | 14.19 | 62.6 | 1468 | 1.044  | 4.7  | 65.2 |
| 7600 | 199.8 | 138.1  | 14.16 | 62.6 | 1467 | 1.044  | 4.8  | 64.6 |
| 7650 | 202.3 | 138.9  | 14.14 | 62.6 | 1467 | 1.044  | 4.9  | 64.4 |
| 7700 | 205.3 | 140.0  | 14.12 | 62.6 | 1467 | 1.044  | 4.9  | 64.1 |
| 7750 | 208.1 | 141.0  | 14.11 | 62.6 | 1467 | 1.044  | 4.9  | 63.8 |
| 7800 | 210.7 | 141.9  | 14.10 | 62.6 | 1467 | 1.044  | 5.0  | 63.5 |
| 7850 | 213.3 | 142.7  | 14.09 | 62.6 | 1467 | 1.044  | 5.0  | 63.0 |
| 7900 | 215.4 | 143.2  | 14.10 | 62.6 | 1467 | 1.044  | 5.0  | 62.5 |
| 7950 | 217.0 | 143.4  | 14.12 | 62.6 | 1469 | 1.044  | 5.0  | 61.8 |
| 8000 | 218.0 | 143.1  | 14.15 | 62.6 | 1469 | 1.044  | 5.0  | 61.0 |
| 8050 | 218.5 | 142.6  | 14.19 | 62.6 | 1469 | 1.044  | 5.0  | 59.9 |
| 8100 | 217.9 | 141.3  | 14.23 | 62.6 | 1469 | 1.044  | 5.0  | 58.5 |
| 8150 | 216.6 | 139.6  | 14.26 | 62.6 | 1469 | 1.044  | 5.0  | 57.1 |
| 8200 | 212.4 | 136.0  | 14.29 | 62.6 | 1469 | 1.044  | 4.9  | 54.9 |
| 8250 | 203.5 | 129.5  | 14.31 | 62.6 | 1469 | 1.044  | 4.8  | 51.4 |
| 8300 | 186.5 | 118.0  | 14.30 | 62.6 | 1469 | 1.044  | 4.8  | 45.1 |

---



---

### HRSS Stage J2

| EngSpd | STPPwr | STPTRq | AFRWB1 | AirInT | DenAlt | STPCor | BoostP | ServoV |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| RPM    | CHp    | Clb-ft | Ratio  | degF   | Feet   | Factor | psig   | %      |
| 6800   | 176.1  | 136.0  | 14.33  | 62.9   | 1488   | 1.044  | 5.0    | 72.2   |
| 6850   | 177.0  | 135.7  | 14.31  | 62.9   | 1488   | 1.044  | 4.9    | 71.7   |
| 6900   | 178.0  | 135.5  | 14.32  | 62.9   | 1488   | 1.044  | 4.9    | 71.3   |
| 6950   | 179.4  | 135.5  | 14.36  | 62.9   | 1488   | 1.044  | 4.9    | 70.9   |
| 7000   | 180.9  | 135.8  | 14.39  | 62.9   | 1488   | 1.044  | 4.9    | 70.6   |
| 7050   | 182.7  | 136.1  | 14.41  | 62.9   | 1488   | 1.044  | 4.9    | 70.3   |
| 7100   | 184.5  | 136.4  | 14.41  | 62.9   | 1488   | 1.044  | 4.9    | 70.0   |
| 7150   | 186.4  | 136.9  | 14.38  | 62.9   | 1488   | 1.044  | 4.8    | 69.7   |
| 7200   | 188.4  | 137.4  | 14.34  | 62.9   | 1489   | 1.044  | 4.8    | 69.2   |

|      |       |       |       |      |      |       |     |      |
|------|-------|-------|-------|------|------|-------|-----|------|
| 7250 | 190.2 | 137.8 | 14.30 | 62.9 | 1489 | 1.044 | 4.8 | 68.5 |
| 7300 | 191.7 | 137.9 | 14.27 | 62.9 | 1489 | 1.044 | 4.8 | 67.8 |
| 7350 | 193.0 | 137.9 | 14.26 | 62.9 | 1489 | 1.044 | 4.8 | 67.2 |
| 7400 | 194.3 | 137.9 | 14.24 | 62.9 | 1489 | 1.044 | 4.9 | 66.8 |
| 7450 | 195.7 | 138.0 | 14.23 | 62.9 | 1489 | 1.044 | 5.0 | 66.4 |
| 7500 | 197.3 | 138.2 | 14.21 | 62.9 | 1490 | 1.044 | 5.1 | 65.9 |
| 7550 | 199.2 | 138.6 | 14.19 | 62.9 | 1488 | 1.044 | 5.2 | 65.6 |
| 7600 | 201.7 | 139.4 | 14.16 | 62.9 | 1488 | 1.044 | 5.3 | 65.3 |
| 7650 | 204.7 | 140.5 | 14.13 | 62.9 | 1488 | 1.044 | 5.4 | 65.2 |
| 7700 | 208.2 | 142.0 | 14.09 | 62.9 | 1488 | 1.044 | 5.5 | 65.1 |
| 7750 | 212.0 | 143.7 | 14.07 | 62.9 | 1488 | 1.044 | 5.5 | 64.8 |
| 7800 | 215.2 | 144.9 | 14.06 | 62.9 | 1488 | 1.044 | 5.6 | 64.5 |
| 7850 | 218.3 | 146.0 | 14.07 | 62.9 | 1488 | 1.044 | 5.6 | 63.8 |
| 7900 | 220.6 | 146.6 | 14.09 | 62.9 | 1488 | 1.044 | 5.7 | 63.1 |
| 7950 | 222.4 | 146.9 | 14.12 | 62.9 | 1488 | 1.044 | 5.7 | 62.3 |
| 8000 | 223.6 | 146.8 | 14.15 | 62.9 | 1488 | 1.044 | 5.7 | 61.4 |
| 8050 | 224.2 | 146.3 | 14.18 | 62.9 | 1488 | 1.044 | 5.7 | 60.4 |
| 8100 | 224.0 | 145.2 | 14.22 | 62.9 | 1488 | 1.044 | 5.7 | 59.2 |
| 8150 | 222.5 | 143.4 | 14.25 | 62.9 | 1488 | 1.044 | 5.7 | 57.8 |
| 8200 | 220.0 | 140.9 | 14.27 | 62.9 | 1490 | 1.044 | 5.6 | 56.3 |
| 8250 | 211.8 | 134.8 | 14.26 | 62.9 | 1490 | 1.044 | 5.4 | 53.0 |
| 8300 | 194.7 | 123.2 | 14.20 | 62.9 | 1492 | 1.044 | 5.3 | 47.0 |

---



---

### HRSS Stage J2.5

| EngSpd | STPPwr | STPTRq | AFRWB1 | AirInT | DenAlt | STPCor | BoostP | ServoV |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| RPM    | CHp    | Clb-ft | Ratio  | degF   | Feet   | Factor | psig   | %      |
| 6800   | 177.1  | 136.8  | 14.42  | 62.1   | 1436   | 1.043  | 4.9    | 72.5   |
| 6850   | 178.1  | 136.6  | 14.41  | 62.1   | 1436   | 1.043  | 4.8    | 72.2   |
| 6900   | 179.1  | 136.3  | 14.40  | 62.1   | 1436   | 1.043  | 4.8    | 71.8   |
| 6950   | 180.3  | 136.2  | 14.41  | 62.1   | 1436   | 1.043  | 4.7    | 71.3   |
| 7000   | 181.4  | 136.1  | 14.43  | 62.1   | 1436   | 1.043  | 4.7    | 70.8   |
| 7050   | 182.8  | 136.2  | 14.43  | 62.1   | 1436   | 1.043  | 4.7    | 70.4   |
| 7100   | 184.4  | 136.4  | 14.42  | 62.1   | 1436   | 1.043  | 4.7    | 70.0   |
| 7150   | 186.1  | 136.7  | 14.39  | 62.1   | 1436   | 1.043  | 4.7    | 69.5   |
| 7200   | 188.0  | 137.1  | 14.35  | 62.1   | 1436   | 1.043  | 4.7    | 69.0   |
| 7250   | 189.9  | 137.6  | 14.32  | 62.1   | 1436   | 1.043  | 4.7    | 68.5   |
| 7300   | 191.7  | 137.9  | 14.28  | 62.1   | 1437   | 1.043  | 4.7    | 67.7   |
| 7350   | 193.1  | 138.0  | 14.26  | 62.1   | 1437   | 1.043  | 4.8    | 67.2   |
| 7400   | 194.6  | 138.1  | 14.25  | 62.2   | 1437   | 1.043  | 4.9    | 66.7   |
| 7450   | 196.1  | 138.2  | 14.23  | 62.2   | 1437   | 1.043  | 4.9    | 66.5   |
| 7500   | 197.7  | 138.4  | 14.21  | 62.1   | 1437   | 1.043  | 5.0    | 66.2   |
| 7550   | 199.9  | 139.1  | 14.19  | 62.1   | 1437   | 1.043  | 5.2    | 65.9   |
| 7600   | 203.2  | 140.5  | 14.16  | 62.2   | 1437   | 1.043  | 5.3    | 65.8   |
| 7650   | 207.0  | 142.1  | 14.13  | 62.2   | 1437   | 1.043  | 5.4    | 65.7   |
| 7700   | 210.9  | 143.8  | 14.12  | 62.2   | 1437   | 1.043  | 5.5    | 65.7   |
| 7750   | 215.3  | 145.9  | 14.10  | 62.2   | 1438   | 1.043  | 5.6    | 65.4   |

|      |       |       |       |      |      |       |     |      |
|------|-------|-------|-------|------|------|-------|-----|------|
| 7800 | 218.2 | 147.0 | 14.09 | 62.2 | 1439 | 1.044 | 5.8 | 65.1 |
| 7850 | 221.1 | 147.9 | 14.08 | 62.2 | 1439 | 1.044 | 6.0 | 64.7 |
| 7900 | 223.8 | 148.8 | 14.08 | 62.2 | 1439 | 1.044 | 6.1 | 64.3 |
| 7950 | 226.6 | 149.7 | 14.11 | 62.2 | 1438 | 1.044 | 6.3 | 63.6 |
| 8000 | 229.1 | 150.4 | 14.15 | 62.2 | 1437 | 1.043 | 6.5 | 62.9 |
| 8050 | 231.0 | 150.7 | 14.19 | 62.2 | 1437 | 1.043 | 6.5 | 62.2 |
| 8100 | 231.9 | 150.3 | 14.23 | 62.2 | 1437 | 1.043 | 6.5 | 61.2 |
| 8150 | 231.7 | 149.3 | 14.25 | 62.1 | 1437 | 1.043 | 6.5 | 60.0 |
| 8200 | 229.6 | 147.0 | 14.26 | 62.1 | 1437 | 1.043 | 6.4 | 58.5 |
| 8250 | 224.4 | 142.8 | 14.26 | 62.1 | 1437 | 1.043 | 6.3 | 56.2 |
| 8300 | 212.5 | 134.5 | 14.24 | 62.2 | 1437 | 1.043 | 6.2 | 52.1 |

---

### HRSS Stage J3

| EngSpd | STPPwr | STPTrq | AFRWB1 | AirInT | DenAlt | STPCor | BoostP | ServoV |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| RPM    | CHp    | Clb-ft | Ratio  | degF   | Feet   | Factor | psig   | %      |
| 6500   | 163.9  | 132.4  | 14.08  | 60.8   | 1326   | 1.042  | 5.1    | 74.0   |
| 6550   | 165.2  | 132.5  | 14.08  | 60.8   | 1326   | 1.042  | 5.2    | 73.8   |
| 6600   | 166.8  | 132.7  | 14.09  | 60.8   | 1326   | 1.042  | 5.3    | 73.5   |
| 6650   | 168.6  | 133.2  | 14.12  | 60.8   | 1328   | 1.042  | 5.4    | 73.4   |
| 6700   | 170.8  | 133.9  | 14.15  | 60.8   | 1328   | 1.042  | 5.5    | 73.2   |
| 6750   | 173.8  | 135.3  | 14.20  | 60.8   | 1328   | 1.042  | 5.6    | 73.1   |
| 6800   | 177.6  | 137.1  | 14.25  | 60.8   | 1328   | 1.042  | 5.7    | 73.1   |
| 6850   | 181.2  | 139.0  | 14.29  | 60.8   | 1328   | 1.042  | 5.7    | 73.0   |
| 6900   | 184.3  | 140.3  | 14.31  | 60.8   | 1328   | 1.042  | 5.7    | 72.8   |
| 6950   | 187.0  | 141.3  | 14.33  | 60.8   | 1328   | 1.042  | 5.8    | 72.6   |
| 7000   | 189.3  | 142.1  | 14.34  | 60.8   | 1328   | 1.042  | 5.8    | 72.3   |
| 7050   | 191.6  | 142.7  | 14.34  | 60.8   | 1328   | 1.042  | 5.8    | 72.1   |
| 7100   | 193.8  | 143.3  | 14.32  | 60.8   | 1328   | 1.042  | 5.8    | 71.8   |
| 7150   | 196.1  | 144.0  | 14.29  | 60.8   | 1328   | 1.042  | 5.8    | 71.4   |
| 7200   | 198.1  | 144.5  | 14.27  | 60.8   | 1328   | 1.042  | 5.9    | 71.1   |
| 7250   | 200.1  | 144.9  | 14.24  | 60.8   | 1328   | 1.042  | 6.0    | 70.8   |
| 7300   | 202.0  | 145.3  | 14.22  | 60.8   | 1328   | 1.042  | 6.1    | 70.6   |
| 7350   | 204.3  | 146.0  | 14.18  | 60.8   | 1328   | 1.042  | 6.3    | 70.3   |
| 7400   | 207.0  | 146.9  | 14.12  | 60.8   | 1328   | 1.042  | 6.6    | 70.1   |
| 7450   | 210.5  | 148.4  | 14.05  | 60.8   | 1328   | 1.042  | 6.8    | 70.0   |
| 7500   | 213.8  | 149.7  | 14.00  | 60.8   | 1328   | 1.042  | 7.0    | 70.0   |
| 7550   | 217.8  | 151.5  | 13.93  | 60.8   | 1328   | 1.042  | 7.2    | 70.1   |
| 7600   | 222.4  | 153.7  | 13.86  | 60.8   | 1328   | 1.042  | 7.4    | 70.1   |
| 7650   | 227.8  | 156.4  | 13.79  | 60.8   | 1327   | 1.042  | 7.6    | 70.2   |
| 7700   | 232.1  | 158.3  | 13.74  | 60.8   | 1327   | 1.042  | 7.8    | 70.2   |
| 7750   | 237.8  | 161.2  | 13.68  | 60.8   | 1327   | 1.042  | 7.9    | 70.2   |
| 7800   | 243.2  | 163.8  | 13.63  | 60.8   | 1327   | 1.042  | 8.0    | 70.0   |
| 7850   | 247.6  | 165.6  | 13.61  | 60.8   | 1327   | 1.042  | 8.1    | 69.4   |
| 7900   | 250.0  | 166.2  | 13.63  | 60.8   | 1328   | 1.042  | 8.1    | 68.8   |
| 7950   | 251.6  | 166.2  | 13.66  | 60.8   | 1328   | 1.042  | 8.1    | 68.0   |
| 8000   | 252.0  | 165.4  | 13.71  | 60.8   | 1328   | 1.042  | 8.1    | 66.9   |

|      |       |       |       |      |      |       |     |      |
|------|-------|-------|-------|------|------|-------|-----|------|
| 8050 | 251.9 | 164.3 | 13.75 | 60.8 | 1328 | 1.042 | 8.1 | 65.9 |
| 8100 | 250.8 | 162.6 | 13.79 | 60.8 | 1329 | 1.042 | 8.1 | 64.6 |
| 8150 | 249.4 | 160.7 | 13.82 | 60.8 | 1330 | 1.042 | 8.0 | 63.4 |
| 8200 | 246.0 | 157.6 | 13.85 | 60.8 | 1330 | 1.042 | 8.0 | 61.7 |
| 8250 | 240.8 | 153.3 | 13.85 | 60.8 | 1330 | 1.042 | 7.9 | 59.5 |

---

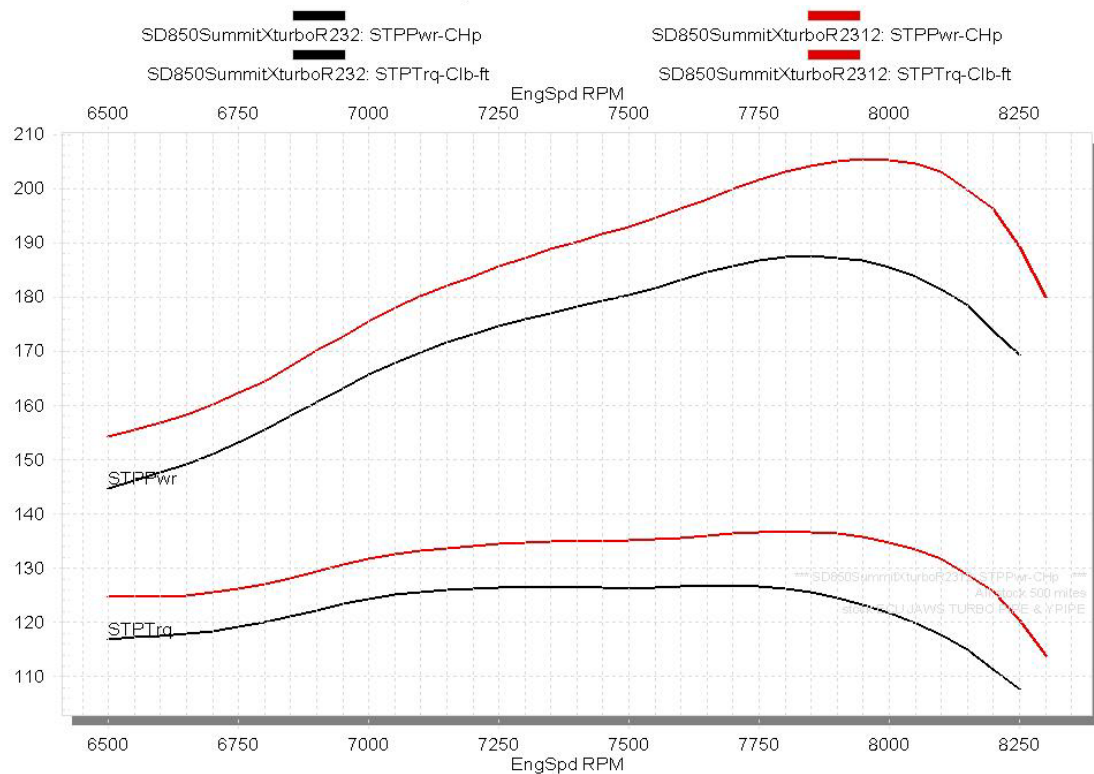
#### HRSS Stage J4

| EngSpd | STPPwr | STPTrq | AFRWB1 | AirInT | DenAlt | STPCor | BoostP | ServoV |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| RPM    | CHp    | Clb-ft | Ratio  | degF   | Feet   | Factor | psig   | %      |
| 6850   | 177.4  | 136.0  | 14.41  | 61.0   | 1347   | 1.042  | 4.7    | 72.4   |
| 6900   | 178.9  | 136.2  | 14.42  | 61.0   | 1346   | 1.042  | 4.8    | 72.3   |
| 6950   | 180.7  | 136.6  | 14.43  | 61.0   | 1346   | 1.042  | 4.8    | 72.1   |
| 7000   | 182.5  | 136.9  | 14.44  | 61.0   | 1347   | 1.042  | 4.8    | 71.7   |
| 7050   | 184.5  | 137.4  | 14.43  | 61.0   | 1347   | 1.042  | 4.7    | 71.4   |
| 7100   | 186.4  | 137.9  | 14.41  | 61.0   | 1345   | 1.042  | 4.7    | 70.9   |
| 7150   | 188.3  | 138.3  | 14.38  | 61.0   | 1345   | 1.042  | 4.7    | 70.4   |
| 7200   | 190.0  | 138.6  | 14.34  | 61.0   | 1345   | 1.042  | 4.8    | 69.9   |
| 7250   | 191.6  | 138.8  | 14.29  | 61.0   | 1345   | 1.042  | 5.0    | 69.5   |
| 7300   | 193.5  | 139.2  | 14.26  | 61.0   | 1345   | 1.042  | 5.3    | 69.2   |
| 7350   | 195.4  | 139.7  | 14.24  | 61.0   | 1345   | 1.042  | 5.6    | 69.1   |
| 7400   | 197.7  | 140.3  | 14.21  | 61.0   | 1345   | 1.042  | 5.9    | 69.0   |
| 7450   | 200.9  | 141.6  | 14.15  | 61.0   | 1345   | 1.042  | 6.4    | 69.1   |
| 7500   | 205.6  | 144.0  | 14.06  | 61.0   | 1345   | 1.042  | 6.9    | 69.3   |
| 7550   | 221.0  | 153.8  | 13.79  | 61.0   | 1345   | 1.042  | 7.8    | 70.5   |
| 7600   | 228.5  | 157.9  | 13.71  | 61.0   | 1345   | 1.042  | 7.9    | 70.9   |
| 7650   | 234.2  | 160.8  | 13.66  | 61.0   | 1344   | 1.042  | 8.0    | 71.1   |
| 7700   | 238.8  | 162.9  | 13.63  | 61.0   | 1344   | 1.042  | 8.1    | 71.1   |
| 7750   | 243.0  | 164.7  | 13.58  | 61.0   | 1344   | 1.042  | 8.4    | 71.1   |
| 7800   | 247.7  | 166.8  | 13.50  | 61.0   | 1343   | 1.042  | 8.7    | 70.9   |
| 7850   | 251.8  | 168.4  | 13.44  | 61.0   | 1343   | 1.042  | 9.0    | 70.8   |
| 7900   | 255.5  | 169.9  | 13.40  | 61.0   | 1341   | 1.042  | 9.1    | 70.5   |
| 7950   | 258.1  | 170.5  | 13.41  | 61.0   | 1341   | 1.042  | 9.1    | 70.0   |
| 8000   | 259.3  | 170.2  | 13.46  | 61.0   | 1341   | 1.042  | 9.0    | 69.0   |
| 8050   | 259.5  | 169.3  | 13.51  | 61.0   | 1342   | 1.042  | 9.0    | 67.9   |
| 8100   | 259.0  | 168.0  | 13.55  | 61.0   | 1342   | 1.042  | 9.0    | 66.8   |
| 8150   | 256.4  | 165.3  | 13.58  | 61.0   | 1342   | 1.042  | 9.0    | 65.0   |
| 8200   | 251.2  | 160.9  | 13.56  | 61.0   | 1344   | 1.042  | 9.0    | 62.6   |
| 8250   | 247.4  | 157.5  | 13.53  | 61.0   | 1344   | 1.042  | 9.0    | 60.8   |

---

## 2023 SkiDoo SummitX TurboR with stock ECU tune STP TORQUE AND HORSEPOWER

Black Stock exhaust, Red Jaws turbo exhaust and stock muffler



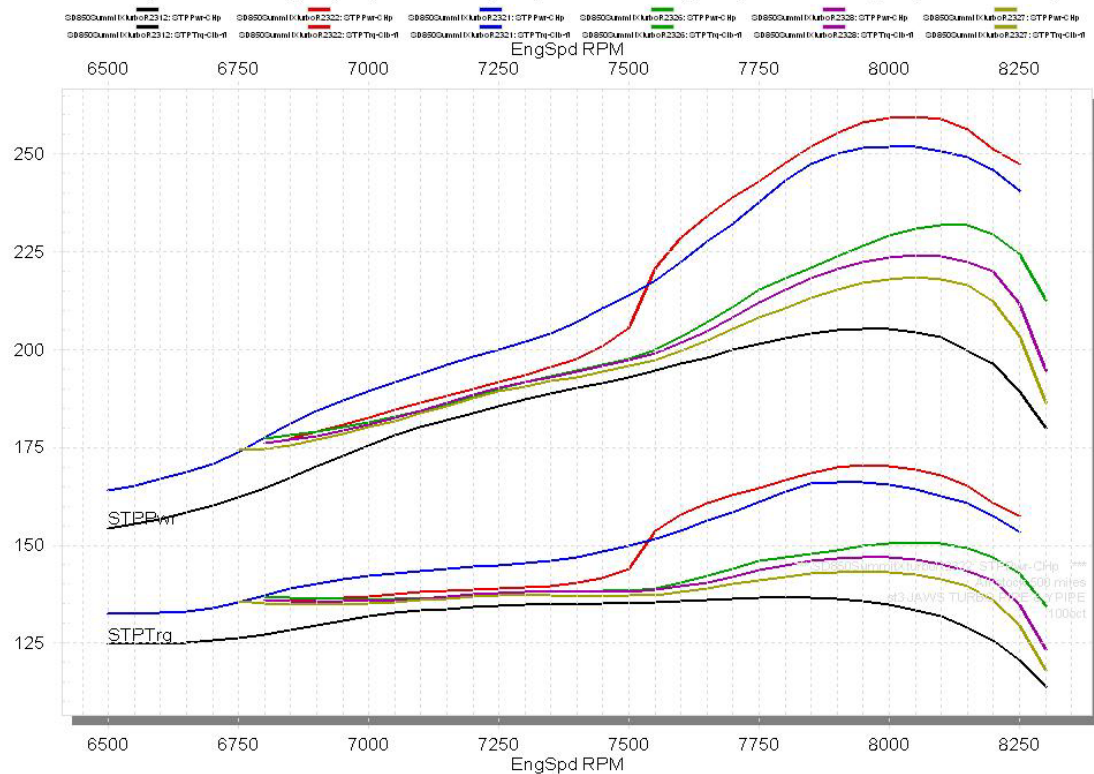
10/23/23

SuperFlow WinDyn™ V3.2

12:56:51

## 2023 SkiDoo SummitX TurboR w/ Jaws Pipe and Y and Stock Muffler STP TORQUE and HORSEPOWER

Black Stock ECU, Gold HRSS Stage J1, Purple HRSS Stage J2, Green HRSS Stage 2.5, Blue HRSS Stage J3, Red HRSS Stage J4



10/23/23

SuperFlow WinDyn™ V3.2

13:33:17

## 2023 SkiDoo SummitX TurboR w/ Jaws Pipe and Y and Stock Muffler BOOST PSIG

Black Stock ECU, Gold HRSS Stage J1, Purple HRSS Stage J2, Green HRSS Stage J2.5, Blue HRSS Stage J3, Red HRSS Stage J4

