

PERFORMANCE FLYWHEELS



10-130

BILLET STEEL FLYWHEELS DISPLAY BOX PACKAGED

Hays Steel Flywheels are manufactured from certified billet material that will not break up under the stress of high RPM and severe punishment of racing. Available in weights up to 50 pounds for specialized applications, most Hays Flywheels are drilled with both the Borg & Beck and Long-Style clutch pattern. All flywheels are precision balanced to either neutral (internal) or Detroit (external) specifications and are certified under SFI spec 1.1.

BILLET ALUMINUM FLYWHEELS DISPLAY BOX PACKAGED

Hays Aluminum Flywheels, the favorite choice of many road racers, are also popular with the serious drag racer running a light car and large cubic inch motor. Machined from 7075 T-6 forged billet aluminum, this high strength alloy surpasses all material specs as to strength and centrifugal distortion. All Hays Aluminum Flywheels feature a replaceable steel or bronze heat shield friction surface and are drilled to accept either the Borg & Beck or Long-Style clutch pattern. The ring gear is securely mounted with welded tabs that are riveted to the flywheel to prevent spinning. These flywheels are supplied in neutral (internal) balance or Detroit (external) balance and are certified under SFI spec 1.1.



20-235

TECH TIP

When bolting the new flywheel to the back of the engine, make sure you do it to the factory specifications. Some literature differs, but we've found 75 lbs.-ft. to be the factory rating. Perform this procedure in a 3-staged pattern, tightening each bolt in a criss-cross pattern starting at 55 lbs.-ft., followed by 65 and finishing at 75.

TECH TIP

Q: What is the difference between Neutral (internal) Balance and Detroit (external) Balance Flywheels?

A: Neutral (internal) Balance engines and flywheels are each balanced as an individual unit. In other words, the engine and flywheel are in balance with or without the flywheel mounted to the crankshaft. A Factory Balanced (external), or Detroit Balanced engine uses the flywheel to balance the engine assembly. With the flywheel off of the engine, both the engine and flywheel are out of balance.

TECH TIP

Q: Should I use an aluminum or steel flywheel?

A: Aluminum flywheels with their lighter weight, are typically used in oval track and road race applications and are also popular in high-horsepower, light weight drag cars. These vehicles rely on engine horsepower to drive the wheels. Steel flywheels are used in applications that require additional engine torque for performance. A heavier flywheel can help acceleration from a standing start and keep the engine's RPM and power up through shifting. These are characteristics needed in street, most drag race and other high-torque applications such as tractor pulling.

TECH TIP

Removing the flywheel for resurfacing is a step often skipped during a clutch job, as it adds to the down time, but is absolutely critical in order to achieve optimum clutch performance. In addition, the pilot bushing and throw out bearing should be replaced with the new clutch.

PERFORMANCE FLYWHEELS

NOTE: PART NUMBERS HIGHLIGHTED IN YELLOW ARE ONLY AVAILABLE AS SPECIAL ORDER

| Year | APPLICATION | Notes | Ring Gear Teeth | Pressure Plate Pattern | | Steel Flywheel | | Aluminum Flywheel | |
|--|---|-------|-----------------|------------------------|----------------------------------|----------------|----------|-------------------|----------|
| | | | | 10.5" | 11" | Weight | Part No. | Weight | Part No. |
| AMC AMC AMC AMC AMC AMC AMC AMC | | | | | | | | | |
| 1966-71 | 343, 360, 390 | 2 | 164 | BB | | 30 | 16-030 | | |
| 1972-91 | 360, Includes JEEP | 1 | 164 | BB/D | BB/D | 30 | 16-130 | | |
| 1972-83 | 304 | 1 | 164 | BB/D | BB/D | 30 | 16-132 | | |
| 1972-79 | 401 | 1 | 164 | BB/D | BB/D | 30 | 16-134 | | |
| CHEVROLET CHEVROLET CHEVROLET | | | | | | | | | |
| 1998-00 | 5.7L LS-1 | 2 | 168 | BB/D | BB/D | | | 15 | 20-730 |
| 1997-98 | 5.7L V-8 LS-1 | 2 | 168 | N/A | Stock 12" B&B 11" Mark XII | 30 | 10-730 | | |
| 1986-93 | Small Block w/Small Journal | 1 | 153 | BB/D | | 30 | 10-530 | 15 | 20-530 |
| 1955-85 | All V8 with large bellhousing except 400 & 454 | 1 | 168 | BB/D | BB/L/MkXII | 30 | 10-630 | | |
| | | 2 | 168 | BB/D | BB/L/MkXII | 25 | 10-125 | | |
| | | 2 | 168 | BB/D | BB/L/MkXII | 30 | 10-130 | 15 | 20-130 |
| | | 2&3 | 168 | BB/D | BB/L/MkXII | 40 | 10-140 | | |
| 1963-85 | All V8 | 2 | 153 | BB/D | | 30 | 10-330 | 11 | 20-330 |
| | | 2&3 | 153 | BB/D | | 40 | 10-340 | | |
| 1970-78 | 400 | 1 | 168 | BB/D | BB/D/L | 30 | 10-132 | 15 | 20-132 |
| 1970-90 | 454 | 1 | 168 | BB/D | BB/D/L | 30 | 10-235 | 15 | 20-235 |
| | | 1&3 | 168 | BB/D | BB/D/L | 40 | 10-245 | | |
| 1991-Up | 454 H.O., 502 GEN V 1-Piece rear main seal Forged steel crank | 1 | 168 | BB/D | BB/D/L | 30 | 10-430 | | |
| PONTIAC PONTIAC PONTIAC PONTIAC | | | | | | | | | |
| 1998 | 5.7L V-8 LS-1 | 2 | 168 | N/A | Stock 12" B&B 11" Mark XII | 30 | 10-730 | 15 | 20-730 |
| 1976-85 | V8 w/small (not 455) register bore (2.49) | 2 | 166 | BB/D | BB/D/MkXII | 30 | 13-230 | | |
| 1964-76 | V8 w/large register bore (2.75) | 2 | 166 | BB/D | BB/D/MkXII | 30 | 13-130 | 15 | 23-130 |
| | | 3 | 166 | BB/D | BB/D/MkXII | 40 | 13-140 | | |
| MOPAR MOPAR MOPAR MOPAR MOPAR | | | | | | | | | |
| 1962-78 | 340, 360 361, 383, 413, 426 | 2&8 | 130 | BB/D | | 30 | 11-330 | | |
| | | 2&3 | 130 | BB/D | | 40 | 11-340 | | |
| 1967-71 | 440 | 2&8 | 143 | BB/D | BB/L/MkXII | 30 | 11-430 | 15 | 21-430 |
| 1966-72 | 426 Hemi (8-Bolt crank) | 2 | 143 | | BB/L/MkXII | 30 | 11-730 | | |
| FORD FORD FORD FORD FORD FORD | | | | | | | | | |
| 1994-04 | 4.6L (6-bolt crank) | 2 | 164 | D/L | L | 27 | 12-830 | | |
| 1994-04 | 4.6L/5.4L (8-bolt crank) | 2 | 164 | D | D | | | 14 | 22-830 |
| 1994-04 | 4.6L (6-bolt crank) | 2 | 164 | D/L | L | 28 | 12-835 | 14 | 22-835 |
| 1994-04 | 4.6L (6-bolt crank) | 2 | 164 | BB/D (GM)* | L | | | 14 | 22-840 |
| 1994-04 | 4.6L/5.4L (8-bolt crank) | 2 | 164 | BB/D (GM)* | L | | | 14 | 22-845 |
| 1981-95 | 5.0L, 302 | 1 | 157 | D (Ford) & BB/D (GM)* | | 28 | 12-540 | 14 | 22-540 |
| 1965-80 | 289, 302 | 1 | 157 | L & BB/D (GM)* | | 32 | 12-535 | | |
| 1965-80 | 289, 302, 351 C&W | 1&5 | 164 | | L | 30 | 12-735 | 15 | 22-735 |
| | | 1,3&5 | 164 | | L | 40 | 12-745 | | |
| 1965-80 | 289, 302, 351 C&W | 2 | 157 | | | 30 | 12-430 | | |
| 1965-80 | 289, 302, 351 C&W | 2&5 | 164 | | L/MarkXII | 30 | 12-630 | 15 | 22-630 |
| | | 2,3&5 | 164 | | L/MarkXII | 40 | 12-640 | | |
| 1965-72 | 352, 390,427, 428, 429, 460 | 2,3&5 | 184 | | L/MarkXII | 40 | 12-240 | 15 | 22-243 |
| | | 2,3&5 | 184 | | L/MarkXII | 50 | 12-250 | | |
| 1968-71 | 428 | 1,3&5 | 184 | | L/MarkXII | 40 | 12-345 | | |

- 1) "Detroit Balance" flywheel is externally balanced to stock (counterweighted) specs. 2) Neutral (zero) balanced flywheel for internal balancing.
 3) Flywheel thicker than stock, may require bellhousing spacing. Lakewood bellhousing will eliminate interference.
 5) Possible interference between ring gear and bellhousing. May require dial indicating the bellhousing.
 8) Certain 340, 360, 400 and 440 engines require a counter-balanced flywheel. All Hays flywheels for Mopars are neutral balanced and must be rebalanced for use with these engines. 9) Ring Gear located on rear face of flywheel.

D=DIAPHRAGM BB=BORG & BECK L=LONG

* GM bolt pattern

MARINE FLYWHEELS and PERFORMANCE FLEXPLATES



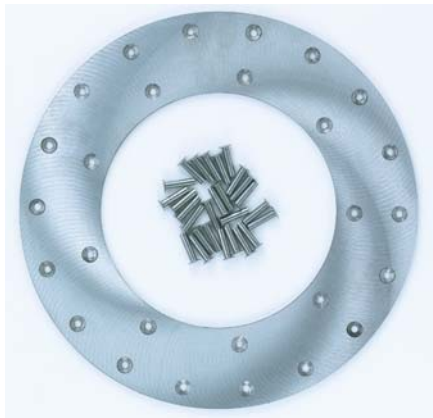
20-999

BILLET MARINE FLYWHEELS *DISPLAY BOX PACKAGED*
 Hays offers a complete line of flywheels designed for engines adapted to marine use. These flywheels are manufactured from the same high quality billet material and machined to the same standards as our high performance flywheels for automotive racing. Available in steel or aluminum for specific applications. (See Below).

MARINE MARINE MARINE MARINE MARINE

| Application | Engine | Ring Gear Teeth | Counter Balance | Accepts Dampener | Material | Part No. |
|-------------|----------|-----------------|-----------------|------------------|----------------|----------|
| Kiekhaefer | 396, 427 | 168(9) | No | Yes | Steel | 10-320 |
| Chevy | 350 | 168 | No | Yes | Aluminum 11 lb | 20-999 |

9) Ring Gear located on rear face of flywheel.



76-200

REPLACEMENT INSERTS FOR HAYS ALUMINUM FLYWHEELS

These inserts are made of high-quality steel or bronze, and are Blanchard ground for precision. Replaces all Hays steel or bronze flywheel inserts and are complete with rivets.

| | |
|-------------|--------|
| Steel, 11" | 76-200 |
| Bronze, 10" | 46-604 |
| Bronze, 11" | 46-602 |

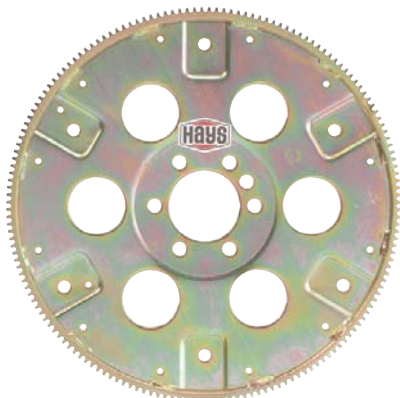
REPLACEMENT RING GEAR FOR CHEVROLET FLYWHEELS

168 Tooth, fits aluminum and steel flywheels. Part No. 46-656

HEAVY-DUTY FLEXPLATES

DISPLAY BOX PACKAGED

Hays Heavy-Duty Flexplates for high performance and competition Chevrolet engines are constructed of a thicker than stock steel plate, enabling them to withstand the stress of high-stall torque converters and high-RPM engines. While factory stock plates tend to crack around the crankshaft hub when punished under high torque and RPM conditions, the thicker Hays Flexplate handles the force. These H.D. flexplates are supplied with a ring gear that is securely welded in place and feature dual bolt patterns for use with either a Powerglide or Turbo-Hydromatic torque converter. All Hays Heavy-Duty Flexplates are zinc-dichromate plated to resist corrosion and are SFI certified under specification 29.1.



10-010