



Change List
From vMelee (NTSC 1.0)
To SD Remix 3.1

Misc. Changes

- New SD Remix-tailored title screen



- Character select screen has different coloration and "MELEE" on top left changed to "SD REMIX"



- C-Stick in single player modes performs smash attacks instead of controlling the camera.
- Tournament Mode replaced with Debug Mode.
- C-Stick in Debug's Develop Mode no longer toggles camera (thanks to Achilles)
- Default Item Frequency changed to 'Off'
- Rumble by default is set to "Off" for all players
- Default rules are 4-stock, 8 minutes, and friendly fire ON.
- All characters unlocked by default.
- All stages unlocked by default.
- Random Stage Select is unlocked by default.
- Default random select stage list is now:
 - Yoshi's Island N64 *
 - Dreamland N64
 - Final Destination
 - Battlefield
 - Fourside *
 - Green Greens
 - Pokemon Stadium
 - Fountain of Dreams
 - Yoshi's Story

* Recommended as counterpick by sdremix_troubleshooter

Stages

Dreamland

Whispy Woods no longer blows wind on characters.

Fourside

Turned into a neutral stage, similar to Smashville in Brawl.

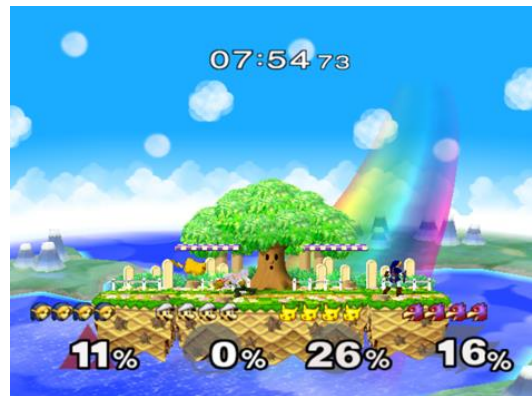
- ☉ Only one building (the Monotoli building) remains. It is a large width, similar to Battlefield or Final Destination
- ☉ A single platform exists above the building. It is held up by a crane and moves horizontally



Green Greens

Turned into a neutral stage, similar in build to Pokémon Stadium.

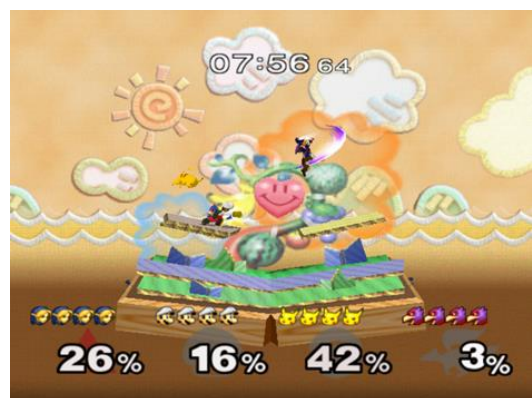
- ☉ All stage hazards removed
- ☉ The two stage gaps removed that used to hold stage hazard blocks
- ☉ Two platforms are situated in a similar fashion to Pokémon Stadium
- ☉ Whispy Woods no longer blows wind on characters.



Yoshi's Story 64

Turned into a neutral/counterpick stage with the removal of some stage elements.

- ☉ Cloud platforms removed
- ☉ Top platform removed



Characters

If there are attribute changes, there will be an attribute table listing all the changes. The table will simply list the attribute in the first column and the value in the second.

If there are any changes to any moves, those changes are reflected in the "Moves" table. The moves table has the following columns:

Name

This column will list the name of the move (i.e. Raptor Boost), followed by the move type on the next line (i.e. neutral air), followed by a graphic representation of the inputs required (assumes the character is facing right).

Speed

A list of speed changes (in frames, or 1/60th of a second) are listed here. The types of speeds include:

START

Stands for Start Up a.k.a. Windup. Refers to the time between a move being initiated and the move having an effect. For dodges, this refers to the amount of time vulnerable before the invulnerable state of the dodge. For attacks, it is the time before the first hitbox.

DUR

Stands for Duration. Refers to the total time that the move lasts.

COOL

Stands for Cooldown, a.k.a. Ending Lag. Refers to the time between the move's effect finishing and another action being available to begin, such as the length of time after an attack's hitboxes ceases that the character can move again. For dodges, this refers to the amount of time the character is vulnerable after the invulnerable state of the dodge.

LAND

Stands for Landing Lag. This occurs when a character in the middle of an aerial attack lands on the ground, resulting in a longer-than-usual landing animation.

IASA

Stands for Interruptible As Soon As. This is the time after which the move can be interrupted with another move.

CAN USE [move]

Some moves can only be cancelled into other moves after a certain amount of time.

Damage

This is the amount of damage the move deals. If there is no label, it is "Normal" damage, or damage it does to an unshielded opponent. If there is a label of "SHLD", that means the value refers to "Shield Damage", the amount of damage dealt to an opponent's shield.

Knockback

A list of speed changes (in frames, or 1/60th of a second) are listed here. The types of speeds include:

BASE

Stands for Base Knockback. Refers to the minimum amount of knockback the attack can deliver.

GROW

Stands for Knockback Growth a.k.a. Knockback Scaling. Refers to the factor that controls how much the knockback increases as damage increases.

SET

Stands for Set Knockback a.k.a. Weight-Dependent Set Knockback or Fixed Knockback. This is knockback that is the same regardless of damage and stale-move negation. It is still affected by weight, though.

ANGLE

This is the angle that the attack knocks the opponent in degrees. 361 is what is called the "Sakurai Angle" and the knockback angle depends on air/ground state and strength of knockback.

Other

These are anything else that are changed about the move.

Unchanged Characters

 **Fox**

 **Falco**

 **Sheik**

 **Marth**

 **Jigglypuff**

 **Peach**


















Captain Falcon

NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Straight Neutral attack From Jab				Previously, you could go straight to Mach Punch from this move, but now it always goes to Gentlemen Knee.
Mach Punch Neutral attack From Gentlemen Knee (repeat)				Can no longer be started from Straight. Must always follow Gentlemen Knee, so it always starts on the 4th button press.
Knee Smash Forward Air Air		3 -> 6 (late)	BASE: 30 -> 35	
Raptor Boost Side Special 	COOL: 44 -> 32 (in Air) LAND: 40 -> 30 (from Air)			Can avoid specialfall if move hits; in other words, can act after an aerial raptor if the move hits an opponent.
Falcon Dive Up Special 	LAND: 30 -> 28			The drift after somersault increased from .85 to 1.0.
Falcon Kick Down Special 	LAND: -44%			
Spot Dodge Ground Dodge 	COOL: 32 -> 28			













Ice Climbers

NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Pound Neutral Attack 				Range Increased
Upswing Neutral Attack From Pound 				Range Increased
Hammer Swing Forward tilt 				Range Increased
Hammer Spin Up tilt 				Range Increased
Shin Attack Down Tilt 	IASA: 29 -> 24	5 -> 6	GROW: 90 -> 80 ANGLE: 70 -> 30	Range Increased
Scoop Dash attack Run 				Range Increased
Ice Hammer Forward Smash 				Hitboxes last 1 more frame
Icicle Crasher Up Smash 				Range Increased
Icy Whirlwind Neutral Aerial Air 				Big range Increased Big hitbox size increase
Hammer Slam Forward Aerial Air 		10 -> 11 (hitbox 1)	ANGLE: 70 -> 270 (hitbox 1)	Hitbox 0 can now hit grounded opponents.
Reverse Swing Back Aerial Air 				Range Increased
Hammer Reach Up Aerial Air 	LAND: 32 -> 24			Range Increased
Hammer Ride Down Aerial Air 				Range Increased
Cold Headbutt Pummel During Grab 				Range Increased
Squall Hammer Side Special 				Hitboxes last an additional frame on Popo only





























Doctor Mario

ATTRIBUTE	VALUE
Weight	100 -> 101











NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Left Jab Neutral Attack 	CAN USE Right Cross: 14 -> 10			
Reflex Test Down Tilt 	IASA: 35 -> 25			
Slide Dash Attack Run 				Right foot has hitbox for entire active frames of move.
Defibrillator Forward Smash 				Hitboxes last 3 more frames
Dr. Kick Neutral Aerial Air 				Strong hit comes out earlier
Dr. Punch Forward Aerial Air 	DUR: 74 -> 49			
Grab Grab 				Slightly Bigger
Dash Grab Dash Grab Run 				Slightly Bigger
Super Jump Punch Up Special 	LAND: 30 -> 15			
Dr. Tornado Down Special 				Horizontal momentum in air: 0.5 -> 0.6 Each tap raises him: 1.2 -> 1.3 Maximum vertical momentum gained from tapping: 1.4 -> 1.7

Pikachu

ATTRIBUTE	VALUE
Friction	0.09 -> 0.07
Shield Size	12 -> 14












NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Pika Kick Forward Tilt  		+2		Variable damage, based on attack angle.
Tail Smack Up Tilt  		7 -> 9	GROW: 124 -> 104	
Tail Sweep Down Tilt  		7 -> 9		
Running Headbutt Dash Attack Run 	IASA: 50 -> 40			New animation
Thundershock Forward Smash  	START: 16 -> 12			
Tail Somersault Up Smash  		7 -> 11 (late)	BASE: 5 -> 20 (late) GROW: 48 -> 100 (late)	
Electric Flower Down Smash  			ANG: 220 -> 170	
Electric Drill Forward Aerial Air  	LAND: 20 -> 13 IASA: 40 -> 30	SHLD: 0 -> 3	BASE: 0 -> 38 GROW: 100 -> 32 SET: 30 -> 0 ANGLE: 361 -> 76	Can combo into grab/Usmash and connects better
Glider Back Aerial Air  	LAND: 30 -> 20	12 -> 14 (strong)	BASE: 20 -> 25 (strong)	Sweetspot hitboxes are more powerful
Tail Chop Up Aerial Air  	LAND: 26 -> 22			
Electric Screw Down Aerial Air  	START: 14 -> 10 LAND: 40 -> 25		GROW: 100 -> 80 ANGLE: 361 -> 35	
Electrocution Forward Throw From Grab 		2 -> 5 (last hit)	GROW: 110 (last hit)	
Electric Slam Down Throw From Grab 	IASA: 46 -> 38			
Forward Getup Roll Forward Getup Roll From Back Plant 				Invincibility Frames: 14 -> 19
Skull Bash Side Special  				Initial velocity: 1.4 -> 1.55
Thunder Down Special  	COOL: 35 -> 25	10 -> 12 (bolt)	BASE: 70 -> 0 (shockwave) GROW: 30 -> 100 (shockwave) SET: 0 -> 44 (shockwave) ANG: 170 -> 190 (shockwave)	Size: 1200 -> 1500 (shockwave)

ATTRIBUTE	VALUE
Air Mobility	0.0125 -> 0.0225

NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Straight Neutral Attack 	IASA: 18 -> 14			
Cannon Neutral Attack From Straight 	IASA: 30 -> 25		BASE: 15 -> 30 GROW: 100 -> 90	
Heel Kick Up Tilt 				Shin invincibility from frames 6-20
Earth Blaster Down Tilt 	IASA: 43 -> 36			
Cover Fire Up Smash 	COOL: 41 -> 47	2 (foot) 17 (explosion) SHLD: 12 (explosion) 10 (residual) SHLD: 0 (residual)	BASE: 0 (foot) GROW: 100 (foot) SET: 94 (foot) ANGLE: 140 (foot) BASE: 40 -> 50 (explosion) GROW: 88 (explosion) ANGLE: 90 (explosion) BASE: 50 (residual) GROW: 85 (residual) ANGLE: 90 (residual)	New Animation and Move Foot (Start): - Weak hitboxes around foot that pops upward toward cannon Explosion (Frames 13 to 16) - Samus pumps cannon upward - Shoots an explosion from cannon for a strong upward attack - Hitboxes cover Samus's cannon and body Residual (Frames 17 to 21) - Weaker residual hitboxes settle around the cannon - The body hitboxes disappear
Grappling Hook Grab Stand/Run/Extender 				Can now grab airborne opponents
Charge Shot Neutral Special  		+1 (all Levels) SHLD: = to level number		
Homing Missile Weak Side Special 	DUR: 110 -> 150			Deceleration point: 60 -> 80 Better Homing Value: 0.019198623 -> .2
Bomb Down Special 		4 -> 6	BASE: 10 -> 40 GROW: 45 -> 35 ANGLE: 361 -> 90	

Ganondorf














ATTRIBUTE	VALUE
Initial Dash Velocity	1.3 -> 1.33
Run Terminal Velocity	1.35 -> 1.38
Jump Startup Lag	6 -> 5
Landing Lag	5 -> 4

NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Warlock Shoryuken Up Tilt  	??	??	??	New Animation Basically a slowed down Gerudo Dragon Combo move at low % Kill move at high %
Iron Shoulder Dash Attack Run 				"True" invincibility on clean hit for 3 frames
Swooping Keese Neutral Aerial Air 				Kick hitboxes last +3 frames Kick 2 starts on frame 16 (from 20)
Thunder Drop Down Aerial Air  	LAND: 35 -> 32			
Grab Grab 				Slightly more disjointed
Dash Grab Dash Grab Run 				Slightly more disjointed
Gerudo Dragon Side Special  	COOL: 44 -> 32 (in Air)			
Dark Dive Up Special  	LAND: 30 -> 26			Horizontal Landing Momentum: .85 -> 1.15
Wizard's Foot Down Special  	LAND: -44%			
Spot Dodge Spot Dodge   	IASA: 32 -> 27			















Luigi

ATTRIBUTE	VALUE
Aerial Mobility	0.025 -> 0.035
Max Horizontal Air Velocity	0.68 -> 0.7132
Initial Dash Speed	1.3 -> 1.4
Short Hop to Apex	1.4 -> 1.5
Dash Length	11 -> 15

NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Plumber's Rump Neutral Attack From Right Jab 			BASE: 10 -> 50 GROW: 100 -> 80	
Plumber Kick Forward Tilt 			SET: 1 -> 0 (down angled)	
Heel Kick Down Tilt 	IASA: 35 -> 25	9 -> 12		Now harms shields ("Because why not")
Fist of Fear Dash Attack Run 		2 -> 4 (final hit)	ANGLE: 361 -> 280 (normal hits) BASE: 2 -> 60 (final hit)	
Trowel Stab Forward Smash 	IASA: 42 -> 38	+1		
Chop Chop Forward Aerial 	IASA: 33 -> 24			"Highly spammable. Hilarious"
Bicycle Kick Up Aerial 	START: 5 -> 4 DUR: 8 -> 11		ANGLE: 55 -> 65	
Screwdriver Kick Down Aerial 				Meteor Smash hitbox takes priority if overlap with other hitbox
Taunt Taunt			SET: 100 -> 166 ANGLE: 280 -> 290	Now spikes
Down the Drain Down Throw From Grab 			ANGLE: 110 -> 105	
Fireball Neutral Special 				Now ground/land cancelable
Green Missile Side Special 				Misfire rate: 1/8 -> 1/6
Super Jump Punch Up Special 		20 -> 22 (air sweetspot)	BASE: 58 -> 70 (air sweetspot) GROW: 72 -> 74 (air sweetspot)	Horizontal distance affected by tilt of control stick (Air Control): 2.0 -> 20.0 Aerial mobility in freefall: 0.6 -> 1.8
Luigi Cyclone Down Special 				Tap lift multiplier: 0.08 -> 0.24 Max vertical momentum from taps: 0.8 -> 1.8 Final hit crotch hitbox moved to head No longer needs to be "charged" by using it on stage. Works like Mario's Cyclone















Mario




















ATTRIBUTE	VALUE
Initial Dash Velocity	1.5 -> 1.626
Aerial Mobility	0.025 -> 0.0425
Maximum Horizontal Air Velocity	0.86 -> 0.94

NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Toe Kick Neutral Attack From Right Cross 			BASE: 10 -> 30 GROW: 100 -> 95	
Plumber Kick Forward Tilt 			ANGLE: 361 -> 30 (down angled) SET: 1 -> 0 (down angled)	
Uppercut Up Tilt 	IASA: 30 -> 26			
Leg Sweep Down Tilt 	IASA: 35 -> 24			
Slide Dash Attack Run 	IASA: 38 -> 34			
Fire Glove Forward Smash 		+1 (sourspot)		
Plumber's Boot Neutral Aerial Air 			BASE: 20 -> 25 (Clean) GROW: 100 -> 104 (Clean)	
Plunger Forward Aerial Air 	START: 18 -> 14 DUR: 74 -> 45 IASA: 60	15 -> 14		Autocancels on frame 58
Drop Kick Back Aerial Air 			GROW: 100 -> 105	
Bicycle Kick Up Aerial Air 	IASA: 30 -> 24		ANGLE: 55 -> 65 (frame 6)	
Drill Kick Down Aerial Air 	LAND: 23 -> 20 IASA: 38 -> 33			
Mario Tornado Down Special 				Horizontal Momentum (Air): 0.5 -> 1.4 Max Vertical Momentum Gained from tapping: 1.4 -> 1.55














Young Link

NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Slash Neutral Attack 	IASA: 20 -> 16			
Counter Slash Neutral Attack From Slash 	IASA: 17 -> 13			
Stab Neutral Attack From Counter Slash 			BASE: 10 -> 30	
Sword Chop Forward Tilt 			BASE: 5 -> 15 ANGLE: 361 -> 35	
Half Moon Swipe Up Tilt 	IASA: 32 -> 30	8 -> 9	BASE: 20 -> 50 GROW: 128 -> 100 ANGLE: 85	
Grass Cutter Down Tilt 	START: 14 -> 8		ANGLE: 280 -> 70 (hitbox 0 to 2, hilt to middle) ANGLE: 70 -> 280 (hitbox 3, the tip)	
Running Hack Dash Attack Run 	IASA: 40 -> 36		ANGLE: 361 -> 30	
Running Hack Dash Attack Run 	IASA: 40 -> 36		ANGLE: 361 -> 30	
Sword Slice Forward Smash 	IASA: 50 -> 40		BASE: 0, GROW: 100, SET: 40 ANGLE: 75 -> 361 (middle) ANGLE: 75 -> 10 (hilt) ANGLE: 75 -> 35 (lower end) ANGLE: 75 -> 361 (tip)	Can chain into Double Sword Slice 4 frames earlier
Double Sword Slice Forward Smash From Sword Slice 		12 -> 13		Bigger hitboxes
Triple Sword Swipe Up Smash 				First slash has reworked hitbox timer frame: 10 -> 5
Sword Sweep Down Smash 	IASA: 42 -> 37 (asynch)		ANGLE: 70 -> 30	Weaker hitboxes more uniform with strong hitbox
Hyllian Kick Neutral Aerial Air 			GROW: 100 -> 110 (clean) ANGLE: 361 -> 60 (late)	Late hitbox start frame: 6 -> 8
Spinning Sword	START: 14 -> 7	11 -> 13 (first hit)	BASE: 5 -> 22 (first hit) BASE: 0 -> 44 (second hit) GROW: 90 -> 70 (second hit)	Sweetspot hitbox duration: 3 -> 6

NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Forward Aerial Air  				
Double Kick Backward Aerial Air  			ANGLE: upward and away (both hits) SET: 40 (both hits)	Sweetspot hitbox duration: 3 -> 6
Sword Plant Down Aerial Air  	LAND: 50 -> 40		BASE: 40 -> 45 (verticals)	
Hookshot Grab 				Can grab airborne opponents
Running Hookshot Dash Grab Run 				Can grab airborne opponents
Kick Out Forward Throw From Grab 			BASE: 25 -> 45 ANGLE: 55 -> 27	
Reverse Kick Out Back Throw From Grab 			BASE: 24 -> 44	
Sword Launch Up Throw From Grab 			BASE: 18 -> 64 GROW: 230 -> 70	
Fire Bow Neutral Special 	COOL: 24 -> 18		BASE: 45 -> 60	Deals greater stun Size: 256 -> 512
Boomerang Side Special  	START: 27 -> 22			
Spin Attack Up Special  			ANGLE: 80 -> 32 (Grounded final hit)	Hitbox size increased to match animation Final hitbox increased
Backward Roll Backward Roll   	IASA: 37 -> 31			














ATTRIBUTE	VALUE
Friction	0.1 -> 0.08
Jump Startup Lag	6 -> 5
Initial Dash Velocity	1.3 -> 1.4

NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Counter Slash Neutral Attack From Slash 			Made like Brawl's Version	
Stab Neutral Attack From Counter Slash 		6 -> 5	BASE: 10 -> 50 GROW: 100 -> 70 ANGLE: 361 -> 30	
Sword Chop Forward Tilt 	START: 16 -> 11		BASE: 5 -> 20 ANGLE: 361 -> 30	
Half-Moon Swipe Up Tilt 	IASA: 32 -> 30	9 -> 13	BASE: 30 -> 38 GROW: +?	
Grass Cutter Down Tilt 	START: 14 -> 9			Outermost hitbox meteor smashes
Running Hack Dash Attack Run 	IASA: 40 -> 36		BASE: 10 -> 65 GROW: 100 -> 55	
Sword Slice Forward Smash 	IASA: 50 -> 40		GROW: +10 (at KO %)	
Triple Sword Swipe Up Smash 				"Should connect better" "Too confusing to post new stats"
Sword Sweep Down Smash 		13 -> 14 (first hit) 11 -> 16 (second hit)		
Hyllian Kick Neutral Aerial Air 		9 -> 13 (clean)		Late hit start frame: 6 -> 8
Spinning Sword Forward Aerial Air 		13 -> 14 (first hit)	BASE: 5 -> 25 (1st hit) BASE: 0 -> 30 (2nd hit) GROW: 90 -> 100 (2nd hit) ANGLE: 361 -> 25 (2nd hit)	No pause between hitboxes Second hit start frame: 30 -> 24
Double Kick			ANGLE: 361 -> 72 (first hit)	Second hit hitboxes slightly larger

NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Backward Aerial Air  				
Stab-Up Up Aerial Air  			GROW: 85 -> 95	
Sword Plant Down Aerial Air  			GROW: 80 -> 90 (initial impact)	
Hookshot Grab 				Can grab airborne opponents
Dash Hookshot Dash Grab Run 				Can grab airborne opponents
Kick Out Forward Throw From Grab 		3 -> 6	BASE: 25 -> 50 GROW: 110 -> 80 ANGLE: 55 -> 35	
Reverse Kick Out Backward Throw From Grab 		3 -> 6	BASE: 24 -> 51 GROW: 110 -> 86	
Sword Launch Up Throw From Grab 		2 -> 3	BASE: 24 -> 50 GROW: 230 -> 90 ANGLE: 90 -> 80	
Bow Neutral Special 			BASE: 8 -> 16 GROW: 50 -> 80 ANGLE: 70 -> 361	Hitboxes slightly larger Uncharged velocity: 1.3 -> 2.0 Charged velocity: 5.0 -> 7.5
Boomerang Side Special  	START: 27 -> 22	6 -> 8	ANGLE: 65 -> 140	"Phantom" boomerang sends vertically
Aerial Spin Attack Aerial Up Special Air  		4 -> 6 (final hit)		
Bomb Down Special  	IASA: 39 -> 34 (bomb pull)	4 -> 6		
Backward Roll Backward Roll   	IASA: 37 -> 31			

Donkey Kong

ATTRIBUTE	VALUE
Weight	114 -> 116
Shield Size	17.5 -> 21.875
Chest/Tie Hurtbox	Removed
General Attack Range	Increased to Marth Levels













NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Swipe Neutral Attack 				Sweetspot pulls opponents into DK
Uppercut Neutral Attack From Swipe 			ANGLE: Higher	Stronger at low percent
Backhand Slap Forward Tilt 		Increased		Slightly safer on shield
Spider Web Swipe Up Tilt 	START: -1 DUR: +2 IASA: 40 -> 36			Middle hitbox slightly stronger
Slouch Slap Down Tilt 	COOL: Better	Increased		
Konga Kick Dash Attack Run 	IASA: 55 -> 36			"Not terrible anymore"
Kong Klap Forward Smash 	IASA: 55 -> 50	SHLD: Increased		Safer on shield Much bigger hitboxes
Ape Applause Up Smash 		SHLD: Lots!	ANGLE: Vertical improved	Kills about 15% earlier
Twin Beat Down Smash 	IASA: 56 -> 51	SHLD: Exists		Significantly improved kill potential
Kong Whirl Neutral Aerial Air 			BASE: Stronger	Extremely large hitboxes
Hammer Knuckle Forward Aerial Air 	START: 25 -> 20		BASE: Slightly increased	

NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Back Kick Backward Aerial Air  			BASE: Increased	
Flying Headbutt Up Aerial Air  				Hitbox lasts one more frame
Flying Stomp Down Aerial Air  	DUR: 54 -> 44			Autocancels much earlier
Grab Grab 				Range greatly extended
Dash Grab Run 				Range Extended
Giant Punch Neutral Special 				No freefall on air punch No longer loses charge when hit from Spinning Kong Aerial shoulder punch much stronger
Headbutt Side Special  				Frames of invincibility on exit: 18 -> 1
Spinning Kong (Ground) Up Special  				Sweetspot hitbox in front easier to land but weaker Weak loop of hitboxes much safer Grounded Mobility: 0.025 -> 0.05
Spinning Kong (Air) Aerial Up Special Air  				Horizontal Velocity: 1.4 -> 1.75 Aerial Mobility: .05 -> .07
Hand Slap Down Special  	COOL: 20 -> 10		SET: 0	Ground bounces Tweaked knockback for better follow-ups
Getup Forward Roll Getup Forward Roll From Faceplant 				Invincibility Frames: 14 -> 19
Spot Dodge Spot Dodge   	IASA: 37 -> 32			






















ATTRIBUTE	VALUE
Aerial Mobility	0.028 -> 0.049
Weight	108 -> 111
Double Jump Armor Rating	120 -> 140








NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Dino Kick Forward Tilt 			GROW: 80 -> 85	
Tail Snap Up Tilt 		10 -> 11		Hitbox size increased
Tail Sweep Down Tilt 	COOL: Less IASA: 24 -> 21			
Noggin Knock Dash Attack Run			BASE: 15 -> 25 (sweetspot and sourspot)	
Noggin Floggin' Forward Smash 		16 -> 17		
Jumping Headbutt Up Smash 	COOL: Less IASA: 40 -> 36	14 -> 15	BASE: 26 -> 30	Hitboxes and head invincibility last one more frame
Double Tail Whip Down Smash 	COOL: Less IASA: 50 -> 47			
Yoshi's Kick Neutral Aerial Air				Outer foot hitbox increased to match actual foot size
Noggin Dunk Forward Aerial Air	START: 18 -> 15			
Tail Wag Backward Aerial Air		7 (hit 1) 6 (hit 2) 5 (hit 3) 4 -> 8 (hit 4)	BASE: 10 -> 40 (all hits) GROW: 100 -> 30 (hits 1 to 3) GROW: 100 -> 80 (hit 4) ANGLE: 60 (hits 1 to 3) ANGLE: 60 -> 70 (hit 4)	
Dino Flip Up Aerial Air	LAND: 19 -> 16			

NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Flutter Kick Down Aerial Air 	LAND: 26 -> 24			
Sticky Tongue Grab 	START: 18 -> 12 IASA: 79 -> 54			Can grab airborne opponents
Sticky Tongue (dash) Dash Grab Run 				Can grab airborne opponents Mouth hitbox is bigger Mouth hitboxes out for same duration as tongue hitboxes
Spit Out Forward Throw From Grab 		6 -> 8	BASE: 40 -> 15 GROW: 66 -> 100 ANGLE: 45 -> 30	
Spin 'n' Spit Backward Throw From Grab 		6 -> 7	BASE: 40 -> 55 ANGLE: 45 -> 35	
Spit Up Up Throw From Grab 	COOL: Decreased slightly IASA: 43 -> 33		BASE: 60 -> 76 GROW: 43 -> 70	
Egg Lay Neutral Special 				Damage Multiplier when egged: 0.5 -> 0.8 Enemy Invincibility Upon Breaking Out of egg (frames): 14 -> 1
Egg Roll Side Special 	COOL: 90 -> 40 Minimum length in egg roll (frames): 50 -> 0		Double hitbox size inside egg to better match egg shape	Gravity decreased slightly Initial horizontal boost: 0.0 -> 1.0 Removed free fall Egg gravity: 3.0 -> 2.4 Air Acceleration: 1.6 -> 1.84
Yoshi Bomb Down Special 	LAND: 40 -> 33	4	GROW: 100 SET: 110 ANGLE: 80	Grounded version has connecting hitbox into sweetspot on leap Size: 1000 X-offset: 2500 Y-offset: 1800
Parry Light Shield Technique From power shield or another parry   or 				Parry window increased from frames 1-6 to 1-9















ATTRIBUTE	VALUE
Friction	0.1 -> 0.07
Initial Dash Velocity	1.1 -> 1.25
Initial Run Velocity	1.1 -> 1.25
Jump Start-Up Lag	6 -> 5
Aerial Mobility	0.038 -> 0.064























NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Short Flash Neutral Attack 		2 -> 3 (final hit) SHLD: Exists (all hits)	BASE: 10 -> 20 (final hit) GROW: 100 -> 120 (final hit)	
Mystic Swipe Forward Tilt  	START: 12 -> 8			Outer hitbox extended to improve space control
Protective Sweep Up Tilt  	START: 11 -> 6			Attack starts on frame 9
Trip Down Tilt  	COOL: Less IASA: 30 -> 26		BASE: 20 -> 30	Hitbox out longer
Magical Push Dash Attack Run 		SHLD: Exists	BASE: 50 -> 70 (clean) BASE: 20 -> 30 (late)	
Shining Palm Forward Smash  				Reworked loop hitboxes
Power Sweep Up Smash  				Reworked hitbox ranges to connect better
Compass Spin Down Smash  		11 -> 12 (first hit)	GROW: 90 -> 95 (1st hit) GROW: 80 -> 85 (second hit)	Slightly longer 1st hit identical to Brawl's
Magic Spin Neutral Aerial Air 		SHLD: Exists	BASE: 40 -> 30 GROW: 130/120 -> 80	Larger hitboxes Range shifted slightly lower and inward Given electric effect to weaken crouch cancelling Landing hitbox added, which lasts 8 frames (4 on L-Cancel)
Condensed Blast Up Aerial Air  		13 -> 15	BASE: 0 -> 30 GROW: 120 -> 110	Hitbox matches explosion effect
Meteor Heel Down Aerial Air  		8 -> 15 (hitbox 0) 7 -> 13 (hitbox 1)	BASE: 0 -> 40 (hitbox 0) GROW: 100 -> 90 (hitbox 0)	Electric element added Lightening kick SFX added

NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
			BASE: 0 -> 30 (hitbox 1)	Given Brawl sweetspot and a weaker version for sourspot
Magical Hold Grab 				Grab frame: 12 -> 6
Magical Hold (dash) Dash Grab Run 				Grab frame: 12 -> 9 Grab boxes made lower to get short or crouching characters
Levitation Forward Throw From Grab 			GROW: 50 -> 60	
Reverse Levitation Backward Throw From Grab 			GROW: 60 -> 70	
Nayru's Love Neutral Special 			BASE: 50 -> 60 (final hit)	Larger hitboxes
Din's Fire Side Special 		3.0 -> 10.0 (initial) 0.17 -> 0.14 (damage growth)	ANGLE: Horizontal	Acceleration: 0.06 -> 0.12 Maximized angle of projectile movement Frame lag from release: 22 -> 7 Initial hitbox size multiplier: 0.3 -> 1.0 No longer causes freefall when used in the air
Farore's Wind Up Special 				Going into specialfall frame: 71 -> 32 Emergence duration (frames): 71 -> 32 Emergence has a hitbox with fire property



ATTRIBUTE	VALUE
Aerial Mobility	0.03 -> 0.05
Max Horizontal Air Velocity	0.9 -> 0.967











NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Slash Neutral Attack 		3 -> 4	BASE: 5 -> 30	Removed sourspot
Sharp Edge Forward Tilt 		+2 (sourspot)		Removed sourspot
Anti-Air Slash Up Tilt 	COOL: Less IASA: 40 -> 32	6 -> 10 (sourspots)	BASE: 20 -> 35 (sourspots) GROW: 100 -> 116 (sourspots) ANGLE: 361 -> 100 (strong sourspot) ANGLE: 361 -> 85 (tip sourspot)	Sound Effect: 33 -> 35 (sourspots)
Low Stab Down Tilt 		6 -> 12	BASE: 70 -> 90	Removed sourspot Sound Effect: 33 -> 35
Raid Chop Dash Attack Run 		6 -> 10	BASE: 35 -> 60 GROW: 60 -> 55 ANGLE: 361 -> 85	Removed sourspot Active frames to match animation: 12-16 -> 12-20
Dragon Killer Forward Smash 			BASE: 30 -> 60 GROW: 65 -> 70	Made tip (hitbox 3) slightly stronger
Flame Sword Up Smash 	IASA: 46	17	BASE: 73 GROW: 80 ANGLE: 90	New Animation Added horizontal range (like Marth's Brawl UpSmash) Added explosion effect on Sword of Seals Foot hitboxes draw into the sword
Whirlwind Blade Down Smash 		14 -> 16 (front sourspot) 8 -> 12 (back sourspot)	GROW: 70 -> 80 (front sweetspot) GROW: 68 -> 78 (back sweetspot)	
Double Slash Neutral Aerial Air 		8 -> 11	GROW: 80 -> 95	2nd hit is kill move Hitboxes made larger
Aerial Swipe Forward Aerial Air 		8 -> 9 (non-tipper)	ANGLE: 361 -> 67 (tipper)	One more active frame New tipper for high percent fun Sourspot hitboxes reworked for better comboability at all percents
About Face Backward Aerial Air 		9 -> 13 (Middle hitboxes)	GROW: 70 -> 100	One more active frame
Luna Slash Up Aerial Air 		9 -> 10 (sweetspot)	BASE: 35 -> 30 (sweetspot) GROW: 70 -> 55 (sweetspot) BASE: 10 -> 25 (sourspot)	One more active frame Sweetspot is hitboxes 1 to 3 Sourspot is hitbox 0




















NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
		6 -> 8 (sourspot)	GROW: 70 -> 55 (sourspot)	
Half Moon Down Aerial Air  	COOL: Decreased		BASE: 40 -> 60 GROW: 70 -> 80	Sweetspot has added fire effect Sweetspot now spikes Non-sweetspot now meteors
Flare Blade Neutral Special 		6 -> 7 (all hitboxes)		
Double Edge Dance (all) Side Special Various Inputs				Assimilate sourspots (tips not so weak now)
DED (St) Side Special  			ANGLE: Reworked to connect better	Aerial Vertical Boost: 1.2 -> 1.4
DED (2, High) Side Special From DED (St)  		5 -> 6		Can cancel into Double Edge Dance (Third, Any) 2 frames earlier
DED (2, Low) Side Special From DED (St)  		6 -> 4		
DED (3, High) Side Special From DED (2, Any)  		5 -> 7 (sourspot)		Meteor (hitbox 3) assimilated with strong hits
DED (3, Side) Side Special From DED (2, Any)  		10/8 -> 9 (all hitboxes)	BASE: 50 -> 64	
DED (3, Low) Side Special From DED (2, Any)  		SHLD: Lots!		
DED (F, High) Side Special From DED (3, Any)  		10 -> 13 (hitbox 3)		
DED (F, Side) Side Special From DED (3, Any)  		10 -> 13 (hitbox 3)		
DED (F, Low) Side Special From DED (3, Any)  		SHLD: Lots!		
Getup Forward Roll Getup Forward Roll From Backplant 				Invincibility now starts at beginning of animation (like rest of cast)



Mewtwo











ATTRIBUTE	VALUE
Initial Dash Velocity	1.4 -> 1.45
Weight	85 -> 106
Shield Size	16.25 -> 17.89
Hurtboxes on tail	Removed
Jump Start-Up Lag	5 -> 4





























NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Dark Flash Neutral Attack 	IASA: 29 -> 16			Outer hitbox enlarged to match GFX Can force jab reset on smaller characters Can jab cancel Attack hit frame: 8 -> 8-9
Tail Whip Forward Tilt 		8 -> 10	BASE: 10 -> 20	Removed tail sweetspot; all hitboxes are "strong"
Flip Up Tilt 		8 -> 10 (normal)	BASE: 0 -> 40 (frame 6) GROW: 115 -> 110 (frame 6) BASE: 60 -> 40 (normal) GROW: 114 -> 110 (normal)	Removed tail sweetspot
Tail Sweep Down Tilt 		8 -> 9 (sweetspot) 5 -> 7 (sourspot)		
Dark Torch Dash Attack Run 				Hitboxes larger
Shadow Blast Forward Smash 	IASA: 59 -> 43	12 -> 15 (sourspot)	GROW: 80 -> 90 (sourspot) BASE: 21 -> 30 (sweetspot) GROW: 75 -> 90 (sweetspot)	Larger hitboxes
Galaxy Force Up Smash 		10 -> 13 (final hit)		
Shadow Bomb Down Smash 		15 -> 17		
Body Spark Neutral Aerial Air 				Hitboxes size: 600 -> 850
Shadow Scratch Forward Aerial Air 	LAND: 25 -> 22			Frame 1 x0.25; starts higher up Hitbox lingers slightly longer Minor programming changes

NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Tail Flick Backward Aerial Air  	START: 12 -> 8 LAND: 28 -> 18			
Somersault Kick Up Aerial Air  	LAND: 20 -> 16 DUR: +2 START: -1		BASE: 0 -> 10	Tail hits full in an arc
Meteor Kick Down Aerial Air  	DUR: 57 -> 45 LAND: 28 -> 24 IASA: -10		ANGLE: 270 -> 290	Spikes instead of meteor (Maybe need to rename to Spike Kick? OLOLOLOLOL) Autocancel 10 frames earlier
Psychic Grab 				Outer range increased
Running Psychic Dash Grab Run 				Outer range increased
Shadow Cannon Forward Throw From Grab 			GROW: 100 -> 160	Shadow balls send further away Sound Effect: Mewtwo's taunt laugh
Shadow Ball Neutral Special 				Pre-change frames: 17 -> 10
Confusion Side Special  	COOL: -6 IASA: 55 -> 49			Opponent now goes into inescapable tumble state until hitting the ground They will hit ground standing, but Mewtwo will have frame advantage
Teleport Up Special  				Invincibility Start Frame: 8 -> 4
Disable Down Special  	START: 15 -> 9	1 -> 3	BASE: 100 -> 90 (airborne opponent) GROW: 100 -> 50 (airborne opponent)	Size: 600 -> 1600
Spot Dodge Spot Dodge   	DUR: 29 -> 27 IASA: 37 -> 29			














Mr. Game & Watch
















ATTRIBUTE	VALUE
Shield	10.75 -> 16.125
Weight	60 -> 75
Aerial Mobility	0.02 -> 0.045
Max Horizontal Air Velocity	1 -> 1.001
Dash Length	9 -> 13

NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Lion Forward Tilt 	IASA: Slightly lower			Hitbox data changed to Brawl's, but active frames still Melee's Slightly Stronger at low %
Flag Man Up Tilt 	START: 9 -> 6			
Manhole Down Tilt 			BASE: 80 -> 96 GROW: 40 -> 58 ANGLE: 361 -> 67	Sourspot hitbox adjusted to Brawl stats
Helmet Dash Attack Run 			ANGLE: Better for comboing	
Octopus Up Smash 	START: 24 -> 16 IASA: 40 -> 38	SHLD: Exists		"Absurdly stronger"
Vermin Down Smash 	IASA: 38 -> 33		BASE: 40 -> 50 GROW: Increased (Strong hitboxes)	Weak inner hitboxes much stronger
Parachute Neutral Aerial Air 	LAND: 15 -> 24			Can be L-Cancelled
Cement Factory Forward Aerial Air 	START: 10 -> 8 LAND: 25 -> 22		BASE: 50% GROW: Slightly higher	
Turtle Bridge Backward Aerial Air 	LAND: 18 -> 22	SHLD: 0 -> 2		Can be L-Cancelled
Spit Ball Sparky Up Aerial Air 			GROW: Less	First hit should connect better into second Second hit has larger hitboxes Second hit lingers to match airblow animation Can be L-Cancelled

NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Donkey Kong Jr. Down Aerial Air  	LAND: 20 -> 16			Slightly more disjointed Meteor hitbox duration: 1 -> 5 Ground hitbox can cause resets
Chef Neutral Special 				Land Cancellable No longer affects momentum Can spam sausages by pressing B (total number of sausages unaffected)
Judgment [2] Side Special  				Slightly safer on hit "Poisons" foe temporarily
Judgment [3] Side Special  				Safer on hit Resets momentum (but still does shield damage)
Judgment [4] Side Special  				Darkness added Strong move (meant for edgeguarding)
Judgment [5] Side Special  				Safer on hit
Judgment [7] Side Special  				Has slash element Similar to Marth's sourspot Forward Smash
Judgment [8] Side Special  			ANGLE: 80 -> 30	Sets up damage-racking Can gimp fastfallers
Oil Panic Down Special  	COOL: 11 -> 0			
Forward Roll Forward Roll    	IASA: 35 -> 28			
Backward Roll Backward Roll    	IASA: 35 -> 28			
Spot Dodge Spot Dodge   	IASA: 32 -> 22			

ATTRIBUTE	VALUE
Initial Dash Velocity	1.3 -> 1.425
Initial Run Velocity	1.4 -> 1.5
Aerial Mobility	0.04 -> 0.065
Max Aerial Horizontal Velocity	0.93 -> 0.9588













NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Kick Neutral Attack From Straight 			BASE: 16 -> 40	
Push Up Up Tilt  	COOL: Less IASA: 32 -> 24		BASE: 42 -> 55 GROW: 126 -> 100	
PK Shove Dash Attack Run 				Hitboxes duration (frames): 1 -> 4 Hitboxes link better Final hit can be followed up better
Home Run Swing Forward Smash  	COOL: Less IASA: 50 -> 42		GROW: 62 -> 72	
Around the World Up Smash  	IASA: 59 -> 49	9 -> 12 (Initial) 4 -> 7 (Yoyo Charge) SHLD: 0 -> 3 (Yoyo Charge) 6 -> 12 (Yoyo Swing)	BASE: 80 (Initial) GROW: 80 -> 84 (Initial) BASE: 20 -> 25 (Yoyo charge) GROW: Less (Yoyo charge) ANGLE: 85 -> 95 (Yoyo charge) BASE: 60 -> 40 (Uncharged Swing) GROW: 45 -> 102 (Uncharged Swing) BASE: 60 -> 30 (Charged Swing) GROW: 45 -> 92 (Charged Swing) ANGLE: 85 (Charged Swing)	Bigger Hitbox Doesn't Clank Article Removal Asynch Frame: 59 -> 49 Size: 500 -> 1000 (Initial hitbox) Size: 500 -> 1100 (Yoyo Charge) Size: 600 (Yoyo Swing)
Walk the Dog Down Smash  	START: 12 -> 8	11 -> 12 (Initial) 7 -> 12 (Walking)	BASE: 70 -> 50 (Initial) GROW: 80 -> 70 (Initial) ANGLE: 70 -> 25 (Initial) BASE: 20 -> 30 (Charging) GROW: 50 -> 70 (Charging) ANGLE: 80 -> 125 (Charging) BASE: 70 -> 50 (Walking) GROW: 60 -> 70 (Walking) ANGLE: 70 -> 25 (Walking)	Bigger hitbox Removed Clanking Size: 600 -> 1000 (Initial) Size: 600 -> 1100 (Charging) Size: 600 -> 1000 (Walking)
Ness Spin Neutral Aerial Air 	START: 5 -> 4 COOL: Less LAND: 22 -> 18 IASA: 36 -> 28	11 -> 13 (sweetspot)	BASE: 15 -> 20 (clean) BASE: 0 -> 5 (late)	
Flying PK Shove Forward Aerial Air  		SHLD: More	GROW: 135 -> 100 (normal hit) GROW: More (final hit)	Innermost hitbox has same knockback as electric hitbox





















NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
PX Drop Kick Backward Aerial Air  			ANGLE: 361 -> 32	Stronger hit Sweetspot lasts one more frame Sync frame: 2 -> 3
Jumping Headbutt Up Aerial Air  	IASA: 42 -> 34			
Meteor Kick Down Aerial Air  	START: 20 -> 10 LAND: 28 -> 18 COOL: Less			Autocancel frame: 30
Grab Grab 				Size: +200 X-offset: +300 Greatly increased horizontal range Active duration (frames): 2 -> 3
Grab (Running) Dash Grab Run 				Greatly increased horizontal range Active Duration (frames): 2 -> 3
PK Throw Forward Throw From Grab 			GROW: 10 -> 40	
Cowboy PK Throw Up Throw From Grab 			BASE: 105 -> 95	
PK Inferno Down Throw From Grab 			BASE: 90 -> 75 GROW: 30 -> 50 ANGLE: 70 -> 90	
PK Flash Neutral Special 	COOL: 25 -> 15		BASE: Can kill ~110% GROW: Can kill ~110%	Faster, more powerful, smaller No longer causes freefall Can go further horizontally Final Hit Size Multiplier: 1.7 -> 1.43 Hitbox matches explosion Horizontal momentum: 3.0 -> 16.0 Max rising height: 1.3 -> 1.4 Control sensitivity: 0.01 -> 0.05 Gravity: 0.02 -> 0.04 Detonation Timer: 20.0 -> 15.0
PK Fire Side Special 	START: 20 -> 14 LAND: 30 -> 5 IASA: 70 -> 48			Certain pillar hitboxes bigger New aerial trajectory
PK Thunder Up Special 		25 (sweetspot) 20 (normal)	BASE: 60 -> 83 (sweetspot) GROW: 70 -> 80 (sweetspot) BASE: 45 -> 55 (normal) GROW: 65 -> 70 (normal)	Deceleration rate: 0.072 -> 0.056 Turning control radius: 6.0 -> 8.0 3.0 increased travel distance but then decreased in 3.1. Overall effect: ?????
PSI Magnet Down Special 	START: 10 -> 2 COOL: 20 -> 0			Body Invincibility on frame 1 removed Forced held frames: 30.0 -> 20.0



Bowser

ATTRIBUTE	VALUE
Weight	117 -> 118
Initial Walk Velocity	0.03 -> 0.05
Walk Acceleration	0.05 -> 0.07
Max Walk Velocity	0.65 -> 0.8
Dash Speed	1.0 -> 1.15
Run Speed	1.5 -> 1.527
Maximum Aerial Speed	0.85 -> 1.0
Jump Startup Lag	8 -> 6
Shield Size	31.25 -> 32.75
Landing Lag	6 -> 4








NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Left Scratch Neutral Attack 	IASA: 21 -> 16		SET: Increased	Frame Window For Right Scratch: 24 -> 18
Koopa Knuckle Forward Tilt 	IASA: 56 -> 40 (up angled) IASA: 37 -> 32 (normal angled) IASA: 37 -> 32 (down angled)	+1 (normal angle, sourspot)		
Ceiling Scratch Up Tilt 	IASA: 50 -> 37			Hitbox lasts for 3 more frames
Floor Scratch Down Tilt 	IASA: 55 -> 46			Both swings significantly stronger
Horn Charge Dash Attack Run 	COOL: Significantly reduced IASA: 56 -> 40			
Hammer Head Forward Smash 	IASA: 66 -> 55	SHLD: 30		Slightly more disjointed Stronger at low %
Shell Shock Up Smash 	IASA: 53 -> 43			Much stronger at higher % (clean) Main hitboxes slightly more disjointed (clean) Late hit ground bounces Significantly disjointed hitbox (late) Hitboxes last 3 more frames (all)
Buzzsaw Down Smash 	COOL: Less IASA: 68 -> 63			Should connect slightly better
Gyroscope Neutral Aerial Air 			BASE: Stronger GROW: Much higher ANGLE: Lower	
Jump Slash Forward Aerial Air 	LAND: 30 -> 24	Increased	GROW: Slightly increased	
Spike Stretch Backward Aerial Air 	LAND: 35 -> 26	13 -> 15 (clean)		Very strong Late hit frame: 11 -> 14
Horn Toss Up Aerial Air 	DUR: 22 -> 16	17 -> 18		Significant increase in power

NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Scrub Brush -> Fire Claw Down Aerial Air  	DUR: 9 LAND: 22	16	BASE: 35 GROW: 108 ANGLE: 270	New Animation Swings his claw down to meteor opponents Has fire effect Has a hitbox attached to foot for greater range
Grab Grab 				Range increased significantly
Grab (Running) Dash Grab Run 				Range increased absurdly
Catapult Forward Throw From Grab 			GROW: Enough to KO at high %	
Reverse Throw Backward Throw From Grab 				Weaker at low % Much stronger at high %
Bowser Slam Down Throw From Grab 	IASA: 85 -> 72			
Fire Breath Neutral Special 	COOL: 30 -> 20			Cooldown has a bite hitbox for combos
Koopa Klaw Side Special 	START: 16 -> 12 IASA: 59 -> 48	SHLD: Huge		Slash hitbox moved further out (now is only tip) Grab range increased to the tip
Whirling Fortress Ground Up Special 			GROW: Slightly better (clean)	
Whirling Fortress (Air) Aerial Up Special 				Rises higher Significantly increased mobility
Bowser Bomb Down Special 	LAND: 60 -> 40	SHLD: 35 -> 16		Grounded version has hitbox on frame 11 to hit them into the falling part
Forward Roll Forward Roll   	DUR: 39 -> 30			
Backward Roll Backward Roll   	DUR: 39 -> 30			
Spot Dodge Spot Dodge  	DUR: 42 -> 34			

















ATTRIBUTE	VALUE
Friction	0.1 -> 0.06
Initial Run Velocity	1.72 -> 2.0
Max Air Velocity	0.85 -> 1.1






















NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Tail Smack Up Tilt 			BASE: +30	
Tail Sweep Down Tilt 			ANGLE: 35 -> 25	
Running Headbutt -> Rolling Headbutt Dash Attack Run	COOL: Less IASA: 50 -> 33	6 (late)	GROW: 70 -> 109 (clean) BASE: 10 (late) GROW: 123 (late) ANGLE: 30 (late)	New Animation Has a late hit
Thundershock Forward Smash 	START: 16 -> 10			Self-damage: 2 -> 1 Loop hitbox sizes: 200 Loop hitbox stats reworked to connect better
Spinning Mouse Down Smash 	IASA: 51 -> 41		GROW: 70 -> 90 ANGLE: 140 -> 160	
Electric Drill -> Electric Screwdriver Forward Aerial Air	START: 10 -> 5	2 -> 11	BASE: 0 -> 30 GROW: 100 -> 90 SET: 30 -> 0 ANGLE: 361 -> 50	Self-damage: 1 Only hits once
Glider -> Electric Glider Backward Aerial Air	COOL: Less IASA: 60 -> 50	9 -> 12 (clean)	GROW: 100 -> 125 (clean) ANGLE: 361 -> 32 (clean)	Self-damage: 1 Clean hit has electric element
Tail Chop Up Aerial Air			BASE: 100 -> 80	
Electric Screw Down Aerial Air	START: 10 -> 8 LAND: 26 -> 20	4 (landing)	GROW: 100 -> 80 (air) ANGLE: 361 -> 270 (air) BASE: 0 -> 60 (landing) GROW: 100 -> 30 (landing) SET: 30 -> 0 (landing) ANGLE: 361 -> 270 (landing)	Adjusted to better hit with landing hitbox Meteor smashes Self-damage on landing hit removed
Electric Shock Pummel From Grab				Self-damage removed

NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Electrocution Forward Throw From Grab 				Self-damage removed
Electric Slam Down Throw From Grab 			BASE: 60 -> 80 ANGLE: 60 -> 80	
Thunder Jolt Neutral Special 				Self-damage removed Velocity of aerial jolt: 1.5 -> 2.0
Skull Bash Side Special 				Self-damage removed
Quick Attack (misnomer) Up Special 				Self-damage removed
Thunder Down Special 	COOL: 35 -> 18		BASE: 50 (bolt) GROW: 55 -> 135 (bolt) ANGLE: 94 -> 361 (bolt)	Self-damage: 1
Getup Forward Roll Getup Forward Roll From Backplant 				Invincibility Frames: 14 -> 19


Kirby

ATTRIBUTE	VALUE
Friction	0.08 -> 0.06
Initial Run Velocity	1.4 -> 1.5
Initial Short Hop Vertical Velocity	1.5 -> 1.25
Aerial Mobility	0.04 -> 0.08
Aerial Stopping Mobility	0.02 -> 0.03
Max Horizontal Aerial Velocity	0.78 -> 0.975
Weight	70 -> 74
Ability lose chance	1/32 -> "Very Unlikely"

NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Spinning Kick Forward Tilt  			ANGLE: 361 -> 33	
Back Kick Up Tilt  	IASA: 30 -> 21			
Squish Kick Down Tilt  	IASA: 30 -> 21			
Fire Kirby Dash Attack Run 				Functions similar to Wizard's Foot Strong hit much stronger Weak hit hard to punish
Smash Kick Forward Smash  		13 -> 14 (late)	BASE: 24 -> 42 (clean) GROW: 96 -> 100 (clean) ANGLE: 361 -> 38 (Clean) BASE: 18 -> 26 (late) ANGLE: 75 -> 38 (late)	
Kirby Flip Kick Up Smash  			BASE: 20 -> 30 (non-sweetspot) GROW: 100 -> 118 (non-sweetspot) BASE: 10 -> 20 (sourspot)	Strong part lasts longer
Propeller Kick Down Smash  			ANGLE: 76 -> 361	
Twinkle Star Neutral Aerial Air 		10 -> 12 (part 2) 6 -> 8 (part 4)	BASE: 10 -> 20 GROW: 80 -> 100 ANGLE: 361 -> 40	Damage Progression: 12,10,8,6 -> 12,8
Spiral Kick	START: 10 -> 6 LAND: 20 -> 15			First 2 hits should connect better (same as Brawl)

NAME	SPEED	DAMAGE	KNOCKBACK	OTHER
Forward Aerial Air  				
Floating Flip Kick Up Aerial Air  				Timers changed to match animation: Starts 2 frames earlier Ends 3 frames later
Screw Driver Down Aerial Air  	START: 18 -> 12 LAND: 20 -> 15		ANGLE: 361 -> 84 (landing)	
Power Bomb Forward Throw From Grab 				Cannot be escaped
Brain Buster Backward Throw From Grab 	IASA: much faster			Cannot be escaped
Ninja Drop Up Throw From Grab 			GROW: 70 -> 100	
Victory Dance Down Throw From Grab 	IASA: 89 -> 69	7 -> 2 (final) 0 -> 1 (each stomp)	BASE: 40 -> 65 ANGLE: 90 -> 56	More frame advantage
Swallow Neutral Special 				Safe on use with 17 frames of advantage Aerial Inhale X-offset: 900 -> 1500 Grounded Inhale X-offset: 2900 -> 5500 Note: Grounded inhale ONLY valid if you start on the ground Opponent stuck in star (frames): 10 -> 40
Hammer (Ground) Side Special  	START: 22 -> 17	17 -> 23 SHLD: 0 -> 20	BASE: 50 -> 65 GROW: 50 -> 76	
Hammer (Air) Aerial Side Special Air  	IASA: 69 -> 58		BASE: 0 -> 60 GROW: 100 -> 70 ANGLE: 110 -> 361 (loop 1) ANGLE: 110 -> 30 (loop 2)	Hitbox sizes doubled
Final Cutter Up Special  		2 -> 4	BASE: 0 -> 80 SET: 100 -> 0	Slash down always has a hitbox
Stone Down Special  	START: 30 -> 15	SHLD: 0 -> 20	GROW: 55 -> 90	
Getup Attack Getup Attack From Backplant  or 				+5 frames of invincibility Invincibility glitch fixed