Diminished passing chords in all 12 major keys

Each blue chord is a diminished seventh (°7, also written dim7) that slips in between two chords. **Its root is a half step below the chord it goes to**, so the bass moves by half steps. The last column runs the other way, down from iii7 to ii7.

Major key	I → ♯I°7 → ii7	ii7 → ♯II°7 → iii7	IV → ♯IV°7 → I/5	V7 → ♯V°7 → vi7	iii7 → ♭III°7 → ii7
C no sharps or flats	C♯°7 → Dm7	D♯°7 → Em7	F♯°7 → C/G	G♯°7 → Am7	E♭°7 → Dm7
F 1 flat	F♯°7 → Gm7	G♯°7 → Am7	B°7 → F/C	C♯°7 → Dm7	A♭°7 → Gm7
B♭ 2 flats	B°7 → Cm7	C♯°7 → Dm7	E°7 → B♭/F	F♯°7 → Gm7	D♭°7 → Cm7
E♭ 3 flats	E°7 → Fm7	F♯°7 → Gm7	A°7 → E♭/B♭	B°7 → Cm7	G♭°7 → Fm7
A♭ 4 flats	A°7 → B♭m7	B°7 → Cm7	D°7 → A♭/E♭	E°7 → Fm7	B°7* → B♭m7
D♭ 5 flats	D°7 → E♭m7	E°7 → Fm7	G°7 → D♭/A♭	A°7 → B♭m7	E°7* → E♭m7
G♭ 6 flats	G°7 → A♭m7	A°7 → B♭m7	C°7 → G♭/D♭	D°7 → E♭m7	A°7* → A♭m7
B 5 sharps	C°7* → C♯m7	D°7* → D♯m7	F°7* → B/F♯	G°7* → G♯m7	D°7 → C♯m7
E 4 sharps	F°7* → F♯m7	G°7* → G♯m7	A♯°7 → E/B	C°7* → C♯m7	G°7 → F♯m7
A 3 sharps	A♯°7 → Bm7	C°7* → C♯m7	D♯°7 → A/E	F°7* → F♯m7	C°7 → Bm7
D 2 sharps	D♯°7 → Em7	F°7* → F♯m7	G♯°7 → D/A	A♯°7 → Bm7	F°7 → Em7
G 1 sharp	G♯°7 → Am7	A♯°7 → Bm7	C♯°7 → G/D	D♯°7 → Em7	B♭°7 → Am7

How to use it in C: C△7, C♯°7, Dm7, G7. The C♯°7 is A7(♭9) without the A, so it pulls into Dm7 the same way A7 does.
Only three diminished chords: C♯°7 = E°7 = G°7 = B♭°7 (same four notes), D♯°7 = F♯°7 = A°7 = C°7, and D°7 = F°7 = A♭°7 = B°7.
* Spelled the easy way: in B major, ♯II°7 is written D°7 instead of C double sharp °7. It is the same chord. **Flat keys first, then sharp keys.**