

Testing

- ☒ Redeem Tokens
- ☒ Redeem NFT
- ☒ Approve PositionManager NFT SC
- ☒ Approve SwapRouter SC
- ☒ Approve Infinity
- ☒ Swap for single input
- ☒ Swap for single output
- ☒ Mint New Position
- ☒ receive nft, transfer
- ☒ receive nft, safeTransfer
- ☒ receive nft, correct implementation
- ☒ receive nft, only owned position (within transfer)
- ☒ receive nft, awareness (deposit mapping)
- ☒ Decrease Liquidity
- ☒ Increase Liquidity
- ☒ Collect Fee (Withdraw: flase)

Transfer ERC20 and Redeem

Transaction Hash	Method	Block	Age	From	To	Amount	Token
0xaf194e8f074...	Redeem Token	62548465	15 secs ago	0x10A0DDb4...771bAb85F	OUT 0x0Fe168a8...EB4E2dca1	0.0001	(PoS) Tether... (USDT)
0xe39997f7f8f...	Transfer	62548309	5 mins ago	0x0Fe168a8...EB4E2dca1	IN 0x10A0DDb4...771bAb85F	0.0001	(PoS) Tether... (USDT)

Transfer ERC721 and Redeem

Transfer NFT Position to SC


From:

0x0Fe168a8CbB82b831B6C55eEa967e7CEB4E2dca1

Interacted With (To):

0xC36442b4a4522E871399CD717aBDD847Ab11FE88 (Uniswap V3: Positions NFT)

ERC-721 Tokens Transferred:



ERC-721 Token ID [2138290] Uniswap V3 P... (UNI-V3...)
From 0x0Fe168a8...EB4E2dca1 To 0xafc9c7A3...3ac0c52ca

Redeem with admin rights from SC

Swaps

Transaction Action:	Call Swap Exact Input Single Function by 0x7724C12D...0C57217cB on 0x10A0DDb4...771bAb85F
Sponsored:	
From:	0x7724C12D726F81a9BCeDA55D01A14460C57217cB
Interacted With (To):	0x10A0DDb46361b3F1d6405eFfc1Db96771bAb85F
ERC-20 Tokens Transferred: 2	<div> <div>All Transfers</div> <div>Net Transfers</div> </div> <div> <div>From 0x14E8018E...EFD9AeB4f To 0x10A0DDb4...771bAb85F For 0.117432 (\$0.12) (PoS) Tether... (USDT)</div> <div>From 0x10A0DDb4...771bAb85F To 0x14E8018E...EFD9AeB4f For 0.1 Frankencoin ... (ZCHF)</div> </div>

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Transaction Action:

Call

Swap Exact Output Single

Function by [0x7724C12D...0C57217cB](#) on [0x10A0DDB4...771bAb85F](#)

Sponsored:

From:

[0x7724C12D726F81a9BCeDA55D01A14460C57217cB](#)

Interacted With (To):

[0x10A0DDB46361b3F1d6405eFfc1Db96771bAb85F](#)

ERC-20 Tokens Transferred: 2

All Transfers

Net Transfers

From [0x14E8018E...EFD9AeB4f](#) To [0x10A0DDB4...771bAb85F](#) For 0.1 (\$0.10) (PoS) Tether... (USDT)

From [0x10A0DDB4...771bAb85F](#) To [0x14E8018E...EFD9AeB4f](#) For 0.085155522041926707 Frankencoin ... (ZCHF)

Create mint

Deployment No. 3 - 0xaACb94eC5eE4e6742aC4472Fd275569378F0A2B4

<https://polygonscan.com/tx/0x76d5bab286491193bb472fdf74783277526c00dc443d7d3b015ecdd939c95789>

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Function mintNewPosition

address token0

0x02567e4b14b25549331fCEe2B56c647A8bAB16FD

0x02567e4b...A8bAB16FD ↗

address token1

0xc2132D05D31c914a87C6611C10748AEb04B58e8F

Mapper: USDT Stablecoin ↗

uint24 fee

500

int24 tickLower

-274750

int24 tickUpper

-274730

uint256 amount0Desired

99999722519034483

Wei



uint256 amount1Desired

239241

Wei



uint256 amount0Min

0

Wei



uint256 amount1Min

0

Wei



From:

0x7724C12D726F81a9BCeDA55D01A14460C57217cB

Interacted With (To):

0xaACb94eC5eE4e6742aC4472Fd275569378F0A2B4

ERC-20 Tokens Transferred: 2

All Transfers

Net Transfers

From

0xaACb94eC...378F0A2B4

To

0x14E8018E...EFD9AeB4f

For

0.099999722519034483

Frankencoin ... (ZCHF)

From

0xaACb94eC...378F0A2B4

To

0x14E8018E...EFD9AeB4f

For

0.239241 (\$0.24)

(PoS) Tether... (USDT)

ERC-721 Tokens Transferred:

NFT

ERC-721 Token ID [2138398] Uniswap V3 P...(UNI-V3...)

From

Null: 0x000...000

To

0xaACb94eC...378F0A2B4

Receive NFT from EOA via SafeTransfer

This will test the correct implementation from ERC721 (IERC721Receiver, onERC721Received)

<https://polygonscan.com/tx/0xd5599599b8af6566cc0803f4a9f2131dbdef8a683fe2af4eb23c36ab1076399f>

From:

0x0Fe168a8CbB82b831B6C55eEa967e7CEB4E2dca1

Interacted With (To):

0xC36442b4a4522E871399CD717aBDD847Ab11FE88 (Uniswap V3: Positions NFT)

ERC-721 Tokens Transferred:

NFT

ERC-721 Token ID [2138290] Uniswap V3 P...(UNI-V3...)

From

0x0Fe168a8...EB4E2dca1

To

0xaACb94eC...378F0A2B4

LiquidityController awareness of Transferred ERC721

4. deposits

<input> (uint256)

2138290

Query

token0 address, token1 address, fee uint24, tickLower int24, tickUpper int24

[deposits(uint256) method Response]

>> token0 address : 0x02567e4b14b25549331fCEe2B56c647A8bAB16FD

>> token1 address : 0xc2132D05D31c914a87C6611C10748AEb04B58e8F

>> fee uint24 : 500

>> tickLower int24 : -274750

>> tickUpper int24 : -274730

Decrease Liquidity

6. decreaseLiquidity (0x8e5f5977)

2138290

32935523021219

0

0

Before

positions

2138290

0: uint96: nonce 0

```
1: address: operator 0x00000000000000000000000000000000
00000000
```

```
2: address: token0 0x02567e4b14b25549331fCEe2B56c647A8bA
    B16FD
```

```
3: address: token1 0xc2132D05D31c914a87C6611C10748AEb04B
    58e8F
```

```
4: uint24: fee 500
```

```
5: int24: tickLower -274750
```

```
6: int24: tickUpper -274730
```

7: uint128: liquidity 329355230212197

8: uint256: feeGrowthInside0LastX128 0

```
9: uint256: feeGrowthInside1LastX128 0
```

```
10: uint128: tokensOwed0 0
```

```
11: uint128: tokensOwed1 0
```

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After

Wondering?

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Transaction Receipt Event Logs

282

Address

0x14e8018eca8d65a1bf38b35512de03fed9aeb4f

Name

Burn (index_topic_1 address owner, index_topic_2 int24 tickLower, index_topic_3 int24 tickUpper, uint128 amount, uint256 amount0, uint256 amount1) View Source

Topics

0

0x0c396cd989a39f4459b5fa1aed6a9a8dcdbc45908acfd67e028cd568da98982c

1: owner

Dec

⇒

0xC36442b4a4522E871399CD717aBDD847Ab11FE88

2: tickLower

Dec

⇒

-274750

3: tickUpper

Dec

⇒

-274730

Data

amount: 32935523021219

amount0: 0

amount1: 35648

Dec

Hex

283

Address

0xc36442b4a4522e871399cd717abdd847ab11fe88 (Uniswap V3: Positions NFT)

Name

DecreaseLiquidity (index_topic_1 uint256 tokenId, uint128 liquidity, uint256 amount0, uint256 amount1) View Source

Topics

0

0x26f6a048ee9138f2c0ce266f322cb99228e8d619ae2bff30c67f8dcf9d2377b4

1: tokenId

Dec

⇒

2138290

Data

liquidity: 32935523021219

amount0: 0

amount1: 35648

Dec

Hex

284

Address

0xaacb94ec5ee4e6742ac4472fd275569378f0a2b4

Name

LiquidityDecreased (uint256 tokenId, uint256 amount0, uint256 amount1, uint256 liquidity) View Source

Topics

0

0xc79cb6614f7bcc31f0121c4db623a782836f42b2d8e5290a19340bdbc25032f7

Data

tokenId: 2138290

amount0: 0

amount1: 35648

liquidity: 32935523021219

Dec

Hex

285

Address

0x00 (Polygon: MATIC Token)

Name

LogFeeTransfer (index_topic_1 address token, index_topic_2 address f, index_topic_3 address to, uint256 amount, uint256 input1, uint256 input2, uint256 output1, uint256 output2) View Source

Topics

0

0x4dfe1bbcf077ddc3e01291eea2d5c70c2b422b415d95645b9adcfd678cb1d63

1: token

Dec

⇒

0x00

2: f

Dec

⇒

0x7724C12D726F81a9BCeDA55D01A14460C57217cB

3: to

Dec

⇒

0xb9EDE6f94D192073D8eaF85f8db677133d483249

Data

amount: 595371000000000

input1: 46012884045405487

input2: 2905234713418148526976

output1: 40059174045405487

output2: 2905240667128148526976

Dec

Hex

Increase Liquidity

<https://polygonscan.com/tx/0xcfece73327808255b7b219affb441c19aea27a566de463acfc1b57e4572812d0>

272

Address

0xc2132d05d31c914a87c6611c10748aeb04b58e8f (Mapper: USDT Stablecoin)

Name

Transfer (index_topic_1 address from, index_topic_2 address to, uint256 value) View Source

Topics

0

0xddf252ad1be2c89b69c2b068fc378daa952ba7f163c4a11628f55a4df523b3ef

1: from

Dec

⇒

0xaCb94eC5eE4e6742aC4472Fd275569378F0A2B4

2: to

Dec

⇒

0x14E8018EcA8D65A1bF38B35512DE03fEFD9AeB4f

Data

value : 35706

274

Address

0x14e8018eca8d65a1bf38b35512de03fed9aeb4f

Name

Mint (address sender, index_topic_1 address owner, index_topic_2 int24 tickLower, index_topic_3 int24 tickUpper, uint128 amount, uint256 amount0, uint256 amount1) View Source

Topics

0

0x7a53080ba414158be7ec69b987b5fb7d07dee101fe85488f0853ae16239d0bde

1: owner

Dec

⇒

0xC36442b4a4522E871399CD717aBDD847Ab11FE88

2: tickLower

Dec

⇒

-274750

3: tickUpper

Dec

⇒

-274730

Data

sender: 0xC36442b4a4522E871399CD717aBDD847Ab11FE88

amount: 32988906423604

amount0: 0

amount1: 35706

275

Address

0xc36442b4a4522e871399cd717abdd847ab11fe88 (Uniswap V3: Positions NFT)

Name

IncreaseLiquidity (index_topic_1 uint256 tokenId, uint128 liquidity, uint256 amount0, uint256 amount1) View Source

Topics

0

0x3067048beee31b25b2f1681f88dac838c8bba36af25bfb2b7cf7473a5847e35f

1: tokenId

Dec

⇒

2138290

Data

liquidity: 32988906423604

amount0: 0

amount1: 35706

276

Address

0xaacb94ec5ee4e6742ac4472fd275569378f0a2b4

Name

LiquidityIncreased (uint256 tokenId, uint256 amount0, uint256 amount1, uint256 liquidity) View Source

Topics

0

0x2d6edbed0a944a56e78d8ced0bc4794533b38938655f47c5a423559a1163b104

Data

tokenId: 2138290

amount0: 0

amount1: 35706

liquidity: 32988906423604

Collect Fee

https://polygonscan.com/tx/0xbacb64eaffc1438ddcbe8a8b817606995d4eee81924db2a8c3c524bbe418420#eventlog

5. collectFees (0x3a483cb0)

tokenId (uint256)

+

2138290

withdraw (bool)

false

Write

202

Address

0xaacb94ec5ee4e6742ac4472fd275569378f0a2b4

Name

CollectedFees (uint256 tokenId, uint256 amount0, uint256 amount1, bool withdrawal) View Source

Topics

0 0xeaa34316c1ac0ac2b8445632fef75dad91f846cc69c40a558ccfd6e5700bb79a

Data

tokenId : 2138290
amount0 : 0
amount1 : 35706
withdrawal : False

Dec

Hex

198

Address

0x14e8018eca8d65a1bf38b35512de03fed9aeb4f

Name

Burn (index_topic_1 address owner, index_topic_2 int24 tickLower, index_topic_3 int24 tickUpper, uint128 amount, uint256 amount0, uint256 amount1) View Source

Topics

0 0x0c396cd989a39f4459b5fa1aed6a9a8dcdbc45908acfd67e028cd568da98982c
1: owner Dec → 0xC36442b4a4522E871399CD717aBDD847Ab11FE88
2: tickLower Dec → -274750
3: tickUpper Dec → -274730

Data

amount : 0
amount0 : 0
amount1 : 0

Dec

Hex

199

Address

0xc2132d05d31c914a87c6611c10748aeb04b58e8f (Mapper: USDT Stablecoin)

Name

Transfer (index_topic_1 address from, index_topic_2 address to, uint256 value) View Source

Topics

0 0xdddf252ad1be2c89b69c2b068fc378daa952ba7f163c4a11628f55a4df523b3ef
1: from Dec → 0x14E8018EcA8D65A1bF38B35512DE03fEFD9AeB4f
2: to Dec → 0xaACb94eC5eE4e6742aC4472Fd275569378F0A2B4

Data

value : 35706

Dec

Hex